

Cover Page

Order ID : Q2074

Project ID : South River WM Replacement

Client : CDM Smith

Lab Sample Number

Q2074-01
Q2074-02
Q2074-03
Q2074-04
Q2074-05
Q2074-06
Q2074-07
Q2074-08

Client Sample Number

TP-12
TP-7
TP-15
TP-20
TP-38
TP-19
TP-40
TP-18

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

Signature : _____

Date: 5/26/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

CDM Smith

Project Name: South River WM Replacement

Project # N/A

Order ID # Q2074

Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 05/16/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Herbicide, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_Y were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868. The analysis of VOC-TCLVOA-10 was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria.

The Blank Spike for {VY0522SBS01} with File ID: VY022382.D met requirements for all samples except for Bromomethane[173%], Chloroethane[143%] are failing high but no positive hit in associate sample therefore no corrective action taken.

The Blank Spike Duplicate for {VY0522SBSD01} with File ID: VY022383.D met requirements for all samples except for Bromomethane[167%], Chloroethane[142%] are failing high but no positive hit in associate sample therefore no corrective action taken. The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration File ID VY022380.D met the requirements except for Bromomethane and Chloroethane are failing high but no positive hit in associate sample therefore no corrective action taken.



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The Tuning criteria met requirements.

E. Additional Comments:

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.

The soil samples results are based on a dry weight basis.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is >20 % for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2074

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 05/26/2025

LAB CHRONICLE

OrderID:	Q2074	OrderDate:	5/16/2025 3:13:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	L31,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2074-01	TP-12	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-02	TP-7	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-03	TP-15	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-04	TP-20	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-05	TP-38	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-06	TP-19	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-07	TP-40	SOIL	VOC-TCLVOA-10	8260D	05/15/25		05/22/25	05/16/25
Q2074-08	TP-18	SOIL	VOC-TCLVOA-10	8260D	05/16/25		05/22/25	05/16/25

Hit Summary Sheet
SW-846

SDG No.: Q2074
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	TP-12							
Q2074-01	TP-12	SOIL	Acetone	27.5		4.10	21.9	ug/Kg
			Total Voc :	27.5				
Q2074-01	TP-12	SOIL	11H-Dibenzo[b,e][1,4]diazepin *	11.0	J	0	0	ug/Kg
			Total Tics :	11.0				
			Total Concentration:	38.5				
Client ID:	TP-20							
Q2074-04	TP-20	SOIL	Acetone	32.2		3.70	19.5	ug/Kg
			Total Voc :	32.2				
			Total Concentration:	32.2				
Client ID:	TP-38							
Q2074-05	TP-38	SOIL	Toluene	0.97	J	0.61	3.90	ug/Kg
			Total Voc :	0.97				
Q2074-05	TP-38	SOIL	Butane, 2-methyl- *	11.0	J	0	0	ug/Kg
			Total Tics :	11.0				
			Total Concentration:	12.0				
Client ID:	TP-19							
Q2074-06	TP-19	SOIL	Acetone	11.3	J	3.80	20.3	ug/Kg
Q2074-06	TP-19	SOIL	Benzene	1.70	J	0.64	4.10	ug/Kg
			Total Voc :	13.0				
			Total Concentration:	13.0				
Client ID:	TP-40							
Q2074-07	TP-40	SOIL	Acetone	14.3	J	4.40	23.2	ug/Kg
			Total Voc :	14.3				
			Total Concentration:	14.3				
Client ID:	TP-18							
Q2074-08	TP-18	SOIL	Acetone	53.0		5.30	27.8	ug/Kg
			Total Voc :	53.0				
			Total Concentration:	53.0				



QC SUMMARY

Surrogate Summary

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q2074-01	TP-12	1,2-Dichloroethane-d4	50	48.7	97	63	155
		Dibromofluoromethane	50	50.7	101	70	134
		Toluene-d8	50	48.7	97	74	123
		4-Bromofluorobenzene	50	40.3	81	38	136
Q2074-02	TP-7	1,2-Dichloroethane-d4	50	47.6	95	63	155
		Dibromofluoromethane	50	50.0	100	70	134
		Toluene-d8	50	48.5	97	74	123
		4-Bromofluorobenzene	50	39.7	79	38	136
Q2074-03	TP-15	1,2-Dichloroethane-d4	50	45.2	90	63	155
		Dibromofluoromethane	50	49.5	99	70	134
		Toluene-d8	50	48.2	96	74	123
		4-Bromofluorobenzene	50	37.1	74	38	136
Q2074-04	TP-20	1,2-Dichloroethane-d4	50	49.9	100	63	155
		Dibromofluoromethane	50	50.7	101	70	134
		Toluene-d8	50	49.3	99	74	123
		4-Bromofluorobenzene	50	40.1	80	38	136
Q2074-05	TP-38	1,2-Dichloroethane-d4	50	47.5	95	63	155
		Dibromofluoromethane	50	50.7	101	70	134
		Toluene-d8	50	49.0	98	74	123
		4-Bromofluorobenzene	50	39.7	79	38	136
Q2074-06	TP-19	1,2-Dichloroethane-d4	50	46.6	93	63	155
		Dibromofluoromethane	50	49.7	99	70	134
		Toluene-d8	50	48.0	96	74	123
		4-Bromofluorobenzene	50	33.7	67	38	136
Q2074-07	TP-40	1,2-Dichloroethane-d4	50	46.7	93	63	155
		Dibromofluoromethane	50	49.0	98	70	134
		Toluene-d8	50	47.7	95	74	123
		4-Bromofluorobenzene	50	36.5	73	38	136
Q2074-08	TP-18	1,2-Dichloroethane-d4	50	46.9	94	63	155
		Dibromofluoromethane	50	48.5	97	70	134
		Toluene-d8	50	47.9	96	74	123
		4-Bromofluorobenzene	50	37.3	75	38	136
VY0522SBL01	VY0522SBL01	1,2-Dichloroethane-d4	50	48.9	98	63	155
		Dibromofluoromethane	50	49.8	100	70	134
		Toluene-d8	50	48.7	97	74	123
		4-Bromofluorobenzene	50	39.5	79	38	136
VY0522SBS01	VY0522SBS01	1,2-Dichloroethane-d4	50	48.4	97	63	155
		Dibromofluoromethane	50	50.3	101	70	134
		Toluene-d8	50	50.3	101	74	123
		4-Bromofluorobenzene	50	47.7	95	38	136
VY0522SBSD01	VY0522SBSD01	1,2-Dichloroethane-d4	50	50.4	101	63	155
		Dibromofluoromethane	50	51.0	102	70	134
		Toluene-d8	50	49.9	100	74	123
		4-Bromofluorobenzene	50	47.1	94	38	136

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022382.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0522SBS01	Dichlorodifluoromethane	20	19.6	ug/Kg	98			64	136	
	Chloromethane	20	23.3	ug/Kg	117			70	130	
	Vinyl chloride	20	24.9	ug/Kg	125			72	129	
	Bromomethane	20	34.5	ug/Kg	173		*	58	141	
	Chloroethane	20	28.5	ug/Kg	143		*	69	130	
	Trichlorofluoromethane	20	23.4	ug/Kg	117			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.9	ug/Kg	104			81	123	
	1,1-Dichloroethene	20	20.5	ug/Kg	103			79	121	
	Acetone	100	110	ug/Kg	110			60	131	
	Carbon disulfide	20	19.3	ug/Kg	97			45	154	
	Methyl tert-butyl Ether	20	19.6	ug/Kg	98			77	129	
	Methyl Acetate	20	16.6	ug/Kg	83			69	149	
	Methylene Chloride	20	19.0	ug/Kg	95			56	174	
	trans-1,2-Dichloroethene	20	19.7	ug/Kg	99			80	123	
	1,1-Dichloroethane	20	19.4	ug/Kg	97			82	123	
	Cyclohexane	20	18.7	ug/Kg	94			76	122	
	2-Butanone	100	95.4	ug/Kg	95			69	131	
	Carbon Tetrachloride	20	19.8	ug/Kg	99			76	129	
	cis-1,2-Dichloroethene	20	19.9	ug/Kg	100			82	123	
	Bromochloromethane	20	18.6	ug/Kg	93			80	127	
	Chloroform	20	20.1	ug/Kg	101			82	125	
	1,1,1-Trichloroethane	20	19.5	ug/Kg	98			80	126	
	Methylcyclohexane	20	19.2	ug/Kg	96			77	123	
	Benzene	20	19.5	ug/Kg	98			84	121	
	1,2-Dichloroethane	20	19.1	ug/Kg	96			81	126	
	Trichloroethene	20	20.1	ug/Kg	101			83	122	
	1,2-Dichloropropane	20	19.1	ug/Kg	96			83	122	
	Bromodichloromethane	20	19.3	ug/Kg	97			82	123	
	4-Methyl-2-Pentanone	100	88.9	ug/Kg	89			70	135	
	Toluene	20	19.4	ug/Kg	97			83	122	
	t-1,3-Dichloropropene	20	18.5	ug/Kg	93			78	124	
	cis-1,3-Dichloropropene	20	18.8	ug/Kg	94			81	122	
	1,1,2-Trichloroethane	20	19.6	ug/Kg	98			82	125	
	2-Hexanone	100	89.5	ug/Kg	90			66	138	
	Dibromochloromethane	20	19.9	ug/Kg	100			79	125	
	1,2-Dibromoethane	20	19.6	ug/Kg	98			80	125	
	Tetrachloroethene	20	19.9	ug/Kg	100			83	125	
	Chlorobenzene	20	19.7	ug/Kg	99			84	122	
	Ethyl Benzene	20	18.7	ug/Kg	94			82	124	
	m/p-Xylenes	40	38.0	ug/Kg	95			83	124	
	o-Xylene	20	18.8	ug/Kg	94			83	123	
	Styrene	20	19.0	ug/Kg	95			82	124	
	Bromoform	20	19.2	ug/Kg	96			75	127	
	Isopropylbenzene	20	19.3	ug/Kg	97			82	124	
	1,1,2,2-Tetrachloroethane	20	19.8	ug/Kg	99			77	127	
	1,3-Dichlorobenzene	20	18.9	ug/Kg	95			83	122	
	1,4-Dichlorobenzene	20	19.0	ug/Kg	95			84	121	
	1,2-Dichlorobenzene	20	19.1	ug/Kg	96			83	124	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022382.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VY0522SBS01	1,2-Dibromo-3-Chloropropane	20	19.6	ug/Kg	98			66	134	
	1,2,4-Trichlorobenzene	20	19.5	ug/Kg	98			78	127	
	1,2,3-Trichlorobenzene	20	19.2	ug/Kg	96			70	137	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022383.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0522SBSD01	Dichlorodifluoromethane	20	20.2	ug/Kg	101	3		64	136	20
	Chloromethane	20	23.2	ug/Kg	116	1		70	130	20
	Vinyl chloride	20	25.4	ug/Kg	127	2		72	129	20
	Bromomethane	20	33.4	ug/Kg	167	4	*	58	141	20
	Chloroethane	20	28.3	ug/Kg	142	1	*	69	130	20
	Trichlorofluoromethane	20	21.1	ug/Kg	106	10		69	134	20
	1,1,2-Trichlorotrifluoroethane	20	21.3	ug/Kg	106	2		81	123	20
	1,1-Dichloroethene	20	20.8	ug/Kg	104	1		79	121	20
	Acetone	100	93.4	ug/Kg	93	17		60	131	20
	Carbon disulfide	20	19.7	ug/Kg	99	2		45	154	20
	Methyl tert-butyl Ether	20	21.1	ug/Kg	106	8		77	129	20
	Methyl Acetate	20	19.3	ug/Kg	97	16		69	149	20
	Methylene Chloride	20	19.0	ug/Kg	95	0		56	174	20
	trans-1,2-Dichloroethene	20	20.1	ug/Kg	101	2		80	123	20
	1,1-Dichloroethane	20	20.3	ug/Kg	102	5		82	123	20
	Cyclohexane	20	18.8	ug/Kg	94	0		76	122	20
	2-Butanone	100	97.2	ug/Kg	97	2		69	131	20
	Carbon Tetrachloride	20	19.5	ug/Kg	98	1		76	129	20
	cis-1,2-Dichloroethene	20	20.7	ug/Kg	104	4		82	123	20
	Bromochloromethane	20	20.3	ug/Kg	102	9		80	127	20
	Chloroform	20	20.7	ug/Kg	104	3		82	125	20
	1,1,1-Trichloroethane	20	20.5	ug/Kg	103	5		80	126	20
	Methylcyclohexane	20	19.6	ug/Kg	98	2		77	123	20
	Benzene	20	20.1	ug/Kg	101	3		84	121	20
	1,2-Dichloroethane	20	20.3	ug/Kg	102	6		81	126	20
	Trichloroethene	20	20.3	ug/Kg	102	1		83	122	20
	1,2-Dichloropropane	20	19.7	ug/Kg	99	3		83	122	20
	Bromodichloromethane	20	19.9	ug/Kg	100	3		82	123	20
	4-Methyl-2-Pentanone	100	97.6	ug/Kg	98	10		70	135	20
	Toluene	20	19.4	ug/Kg	97	0		83	122	20
	t-1,3-Dichloropropene	20	19.4	ug/Kg	97	4		78	124	20
	cis-1,3-Dichloropropene	20	19.7	ug/Kg	99	5		81	122	20
	1,1,2-Trichloroethane	20	20.8	ug/Kg	104	6		82	125	20
	2-Hexanone	100	95.7	ug/Kg	96	6		66	138	20
	Dibromochloromethane	20	20.4	ug/Kg	102	2		79	125	20
	1,2-Dibromoethane	20	20.2	ug/Kg	101	3		80	125	20
	Tetrachloroethene	20	20.9	ug/Kg	104	4		83	125	20
	Chlorobenzene	20	20.4	ug/Kg	102	3		84	122	20
	Ethyl Benzene	20	19.6	ug/Kg	98	4		82	124	20
	m/p-Xylenes	40	39.7	ug/Kg	99	4		83	124	20
	o-Xylene	20	19.8	ug/Kg	99	5		83	123	20
	Styrene	20	19.9	ug/Kg	100	5		82	124	20
	Bromoform	20	20.8	ug/Kg	104	8		75	127	20
	Isopropylbenzene	20	19.7	ug/Kg	99	2		82	124	20
	1,1,2,2-Tetrachloroethane	20	21.1	ug/Kg	106	7		77	127	20
	1,3-Dichlorobenzene	20	19.8	ug/Kg	99	4		83	122	20
	1,4-Dichlorobenzene	20	20.0	ug/Kg	100	5		84	121	20
	1,2-Dichlorobenzene	20	20.2	ug/Kg	101	5		83	124	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2074

Client: CDM Smith

Analytical Method: SW8260D

Datafile : VY022383.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0522SBSD01	1,2-Dibromo-3-Chloropropane	20	21.4	ug/Kg	107	9		66	134	20
	1,2,4-Trichlorobenzene	20	20.0	ug/Kg	100	2		78	127	20
	1,2,3-Trichlorobenzene	20	20.4	ug/Kg	102	6		70	137	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0522SBL01

Lab Name: CHEMTECH

Contract: CAMP02

Lab Code: CHEM Case No.: Q2074

SAS No.: Q2074 SDG NO.: Q2074

Lab File ID: VY022381.D

Lab Sample ID: VY0522SBL01

Date Analyzed: 05/22/2025

Time Analyzed: 09:07

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

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY0522SBS01	VY0522SBS01	VY022382.D	05/22/2025
VY0522SBSD01	VY0522SBSD01	VY022383.D	05/22/2025
TP-12	Q2074-01	VY022389.D	05/22/2025
TP-7	Q2074-02	VY022390.D	05/22/2025
TP-15	Q2074-03	VY022391.D	05/22/2025
TP-20	Q2074-04	VY022392.D	05/22/2025
TP-38	Q2074-05	VY022393.D	05/22/2025
TP-19	Q2074-06	VY022394.D	05/22/2025
TP-40	Q2074-07	VY022395.D	05/22/2025
TP-18	Q2074-08	VY022396.D	05/22/2025

COMMENTS: _____



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
Lab File ID: VY022252.D BFB Injection Date: 05/15/2025
Instrument ID: MSVOA_Y BFB Injection Time: 07:52
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24
75	30.0 - 60.0% of mass 95	55.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.7 (0.9) 1
174	50.0 - 100.0% of mass 95	80.5
175	5.0 - 9.0% of mass 174	5.9 (7.3) 1
176	95.0 - 101.0% of mass 174	77.5 (96.3) 1
177	5.0 - 9.0% of mass 176	5.3 (6.8) 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
VSTDIC005	VSTDIC005	VY022253.D	05/15/2025	09:46
VSTDIC010	VSTDIC010	VY022254.D	05/15/2025	10:16
VSTDIC020	VSTDIC020	VY022255.D	05/15/2025	10:39
VSTDIC050	VSTDIC050	VY022256.D	05/15/2025	11:02
VSTDIC100	VSTDIC100	VY022257.D	05/15/2025	11:24
VSTDIC150	VSTDIC150	VY022258.D	05/15/2025	11:47



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: CAMP02
Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
Lab File ID: VY022379.D BFB Injection Date: 05/22/2025
Instrument ID: MSVOA_Y BFB Injection Time: 08:05
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.1
75	30.0 - 60.0% of mass 95	57.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1.1 (1.3) 1
174	50.0 - 100.0% of mass 95	86.1
175	5.0 - 9.0% of mass 174	6.4 (7.5) 1
176	95.0 - 101.0% of mass 174	83.8 (97.4) 1
177	5.0 - 9.0% of mass 176	5.5 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY022380.D	05/22/2025	08:35
VY0522SBL01	VY0522SBL01	VY022381.D	05/22/2025	09:07
VY0522SBS01	VY0522SBS01	VY022382.D	05/22/2025	09:36
VY0522SBSD01	VY0522SBSD01	VY022383.D	05/22/2025	09:59
TP-12	Q2074-01	VY022389.D	05/22/2025	12:35
TP-7	Q2074-02	VY022390.D	05/22/2025	12:58
TP-15	Q2074-03	VY022391.D	05/22/2025	13:22
TP-20	Q2074-04	VY022392.D	05/22/2025	13:45
TP-38	Q2074-05	VY022393.D	05/22/2025	14:09
TP-19	Q2074-06	VY022394.D	05/22/2025	14:32
TP-40	Q2074-07	VY022395.D	05/22/2025	14:55
TP-18	Q2074-08	VY022396.D	05/22/2025	15:19

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
 Lab File ID: VY022380.D Date Analyzed: 05/22/2025
 Instrument ID: MSVOA_Y Time Analyzed: 08:35
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	161495	7.72	274168	8.62	235238	11.42
UPPER LIMIT	322990	8.22	548336	9.122	470476	11.92
LOWER LIMIT	80747.5	7.22	137084	8.122	117619	10.92
EPA SAMPLE NO.						
TP-12	252950	7.72	432513	8.62	349129	11.42
TP-7	245848	7.72	434620	8.62	349949	11.43
TP-15	266999	7.72	463257	8.62	360854	11.43
TP-20	243454	7.72	431875	8.62	349983	11.43
TP-38	242112	7.72	427478	8.62	344204	11.42
TP-19	231559	7.72	398601	8.62	296277	11.42
TP-40	163884	7.72	278478	8.62	213324	11.42
TP-18	236909	7.72	424090	8.62	327971	11.42
VY0522SBL01	263712	7.72	465826	8.62	376365	11.42
VY0522SBS01	174604	7.72	293942	8.62	250842	11.42
VY0522SBSD01	165702	7.71	283052	8.62	236945	11.42

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG NO.: Q2074
 Lab File ID: VY022380.D Date Analyzed: 05/22/2025
 Instrument ID: MSVOA_Y Time Analyzed: 08:35
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	110586	13.353				
UPPER LIMIT	221172	13.853				
LOWER LIMIT	55293	12.853				
EPA SAMPLE NO.						
TP-12	130898	13.35				
TP-7	127586	13.35				
TP-15	125655	13.35				
TP-20	131238	13.35				
TP-38	128188	13.35				
TP-19	94056	13.35				
TP-40	75609	13.35				
TP-18	117014	13.35				
VY0522SBL01	137350	13.35				
VY0522SBS01	118480	13.35				
VY0522SBSD01	112772	13.35				

IS4 = 1,4-Dichlorobenzene-d4

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

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

* Values outside of QC limits.



SAMPLE DATA

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-12	SDG No.:	Q2074
Lab Sample ID:	Q2074-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.5
Sample Wt/Vol:	6.84 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022389.D	1		05/22/25 12:35	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.00	U	1.00	4.40	ug/Kg
74-87-3	Chloromethane	1.00	U	1.00	4.40	ug/Kg
75-01-4	Vinyl Chloride	0.69	U	0.69	4.40	ug/Kg
74-83-9	Bromomethane	0.94	UQ	0.94	4.40	ug/Kg
75-00-3	Chloroethane	1.10	UQ	1.10	4.40	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.40	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.93	U	0.93	4.40	ug/Kg
75-35-4	1,1-Dichloroethene	0.88	U	0.88	4.40	ug/Kg
67-64-1	Acetone	27.5		4.10	21.9	ug/Kg
75-15-0	Carbon Disulfide	0.93	U	0.93	4.40	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.64	U	0.64	4.40	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	4.40	ug/Kg
75-09-2	Methylene Chloride	3.10	U	3.10	8.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.75	U	0.75	4.40	ug/Kg
75-34-3	1,1-Dichloroethane	0.70	U	0.70	4.40	ug/Kg
110-82-7	Cyclohexane	0.69	U	0.69	4.40	ug/Kg
78-93-3	2-Butanone	5.70	U	5.70	21.9	ug/Kg
56-23-5	Carbon Tetrachloride	0.85	U	0.85	4.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.66	U	0.66	4.40	ug/Kg
74-97-5	Bromochloromethane	1.00	U	1.00	4.40	ug/Kg
67-66-3	Chloroform	0.74	U	0.74	4.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.81	U	0.81	4.40	ug/Kg
108-87-2	Methylcyclohexane	0.80	U	0.80	4.40	ug/Kg
71-43-2	Benzene	0.69	U	0.69	4.40	ug/Kg
107-06-2	1,2-Dichloroethane	0.69	U	0.69	4.40	ug/Kg
79-01-6	Trichloroethene	0.71	U	0.71	4.40	ug/Kg
78-87-5	1,2-Dichloropropane	0.80	U	0.80	4.40	ug/Kg
75-27-4	Bromodichloromethane	0.68	U	0.68	4.40	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.10	U	3.10	21.9	ug/Kg
108-88-3	Toluene	0.68	U	0.68	4.40	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-12	SDG No.:	Q2074
Lab Sample ID:	Q2074-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.5
Sample Wt/Vol:	6.84	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	Level :	LOW
Prep Method :	ID : 0.25		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022389.D	1		05/22/25 12:35	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.57	U	0.57	4.40	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.54	U	0.54	4.40	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.81	U	0.81	4.40	ug/Kg
591-78-6	2-Hexanone	3.20	U	3.20	21.9	ug/Kg
124-48-1	Dibromochloromethane	0.76	U	0.76	4.40	ug/Kg
106-93-4	1,2-Dibromoethane	0.77	U	0.77	4.40	ug/Kg
127-18-4	Tetrachloroethene	0.92	U	0.92	4.40	ug/Kg
108-90-7	Chlorobenzene	0.80	U	0.80	4.40	ug/Kg
100-41-4	Ethyl Benzene	0.59	U	0.59	4.40	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.80	ug/Kg
95-47-6	o-Xylene	0.72	U	0.72	4.40	ug/Kg
100-42-5	Styrene	0.62	U	0.62	4.40	ug/Kg
75-25-2	Bromoform	0.75	U	0.75	4.40	ug/Kg
98-82-8	Isopropylbenzene	0.68	U	0.68	4.40	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.40	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.50	U	1.50	4.40	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.40	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.40	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.60	U	1.60	4.40	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.60	U	2.60	4.40	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.80	U	2.80	4.40	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	48.7	63 - 155	97%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7	70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	48.7	74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.3	38 - 136	81%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	253000	7.719
540-36-3	1,4-Difluorobenzene	433000	8.622
3114-55-4	Chlorobenzene-d5	349000	11.42
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.352

TENTATIVE IDENTIFIED COMPOUNDS



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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-12	SDG No.:	Q2074
Lab Sample ID:	Q2074-01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	83.5
Sample Wt/Vol:	6.84	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022389.D	1		05/22/25 12:35	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
013450-73-2	11H-Dibenzo[b,e][1,4]diazepin-11-o	11.0	J		13.9	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022389.D
 Acq On : 22 May 2025 12:35
 Operator : SY/MD
 Sample : Q2074-01
 Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-12

Quant Time: May 23 03:36:16 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

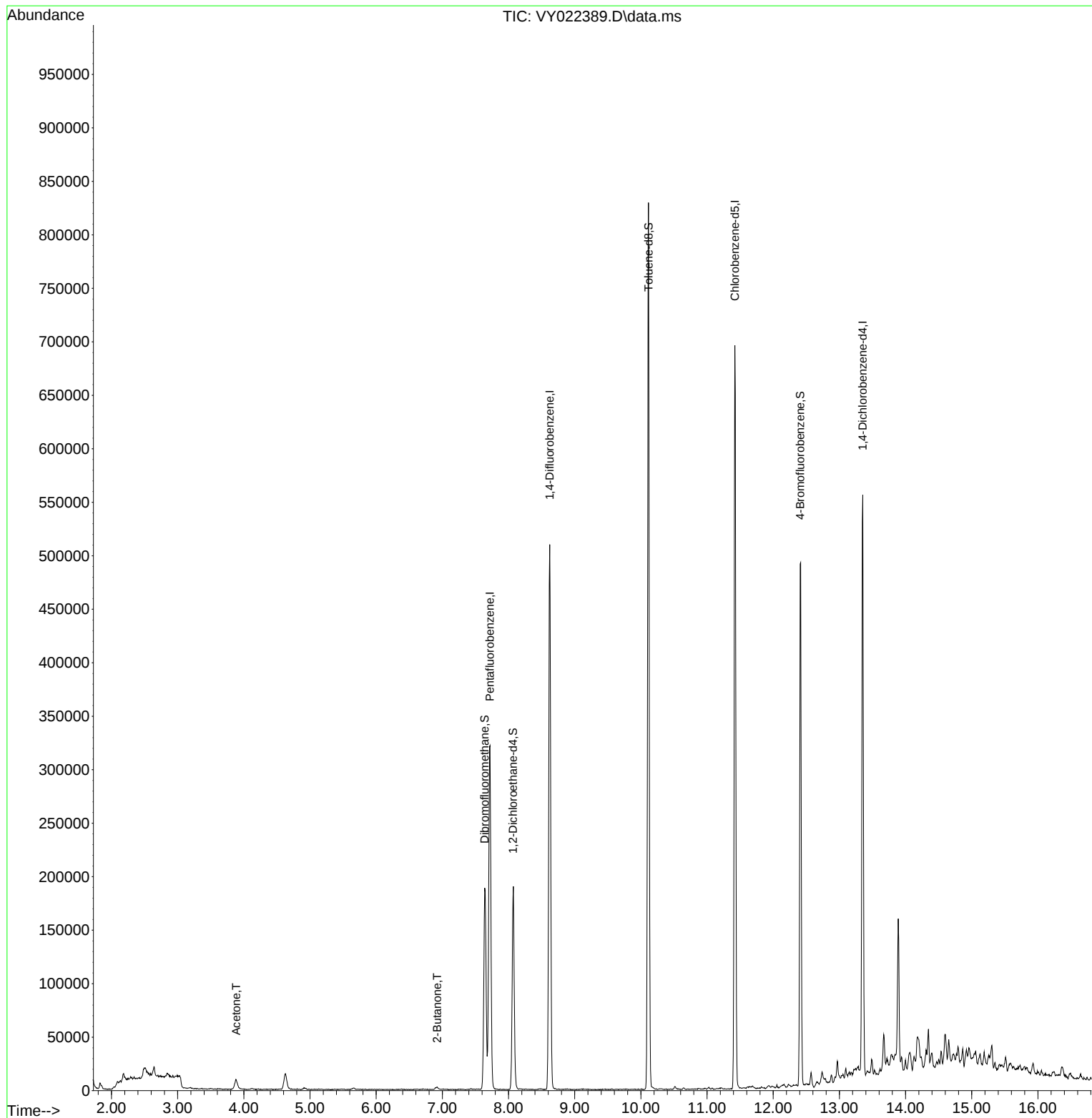
Internal Standards						
1) Pentafluorobenzene	7.719	168	252950	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	432513	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	349129	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	130898	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	134665	48.712	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	97.420%
35) Dibromofluoromethane	7.640	113	130934	50.720	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.440%
50) Toluene-d8	10.115	98	514682	48.680	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.360%
62) 4-Bromofluorobenzene	12.408	95	135002	40.285	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.580%
Target Compounds						
					Qvalue	
16) Acetone	3.885	43	16297	31.439	ug/l	95
25) 2-Butanone	6.921	43	3551	4.095	ug/l	97

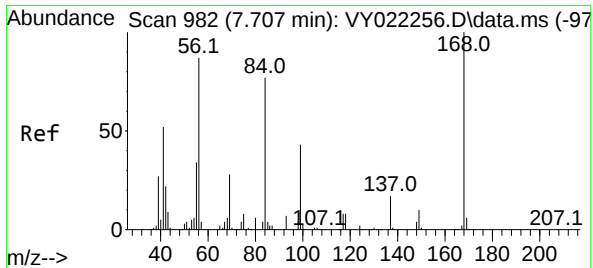
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

Quant Time: May 23 03:36:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

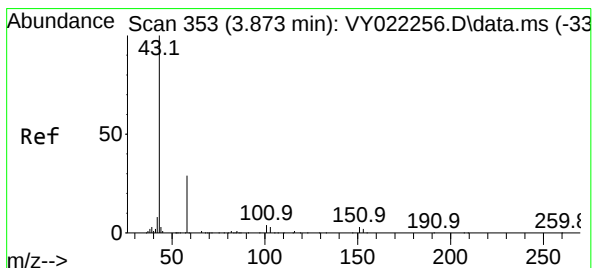
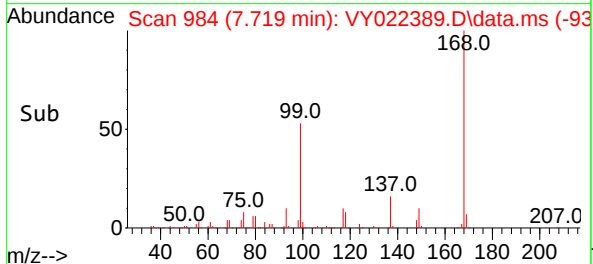
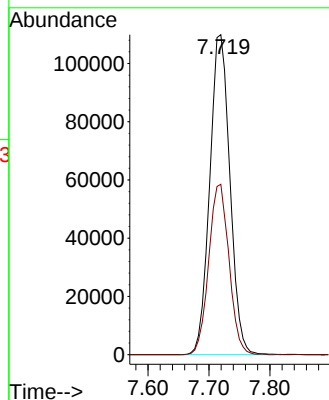
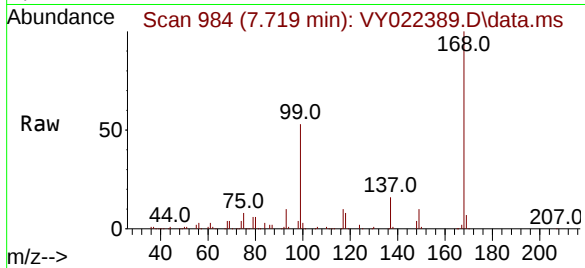




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022389.D
Acq: 22 May 2025 12:35

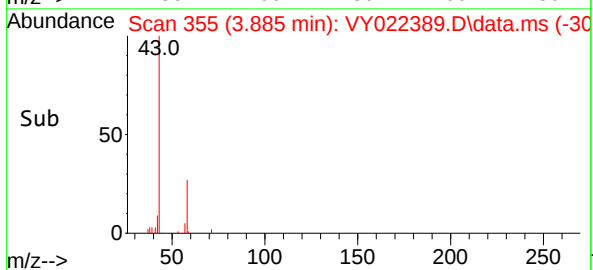
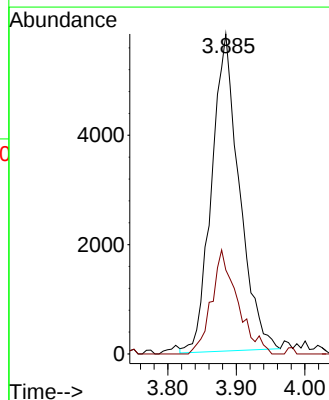
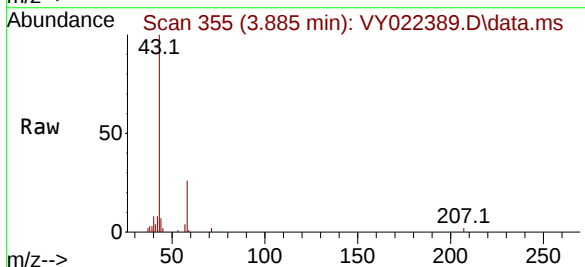
Instrument :
MSVOA_Y
ClientSampleId :
TP-12

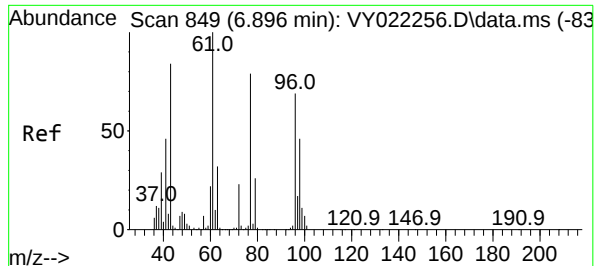
Tgt Ion:168 Resp: 252950
Ion Ratio Lower Upper
168 100
99 53.3 44.2 66.4



#16
Acetone
Concen: 31.439 ug/l
RT: 3.885 min Scan# 355
Delta R.T. 0.012 min
Lab File: VY022389.D
Acq: 22 May 2025 12:35

Tgt Ion: 43 Resp: 16297
Ion Ratio Lower Upper
43 100
58 26.7 23.6 35.4





#25

2-Butanone

Concen: 4.095 ug/l

RT: 6.921 min Scan# 849

Delta R.T. 0.024 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

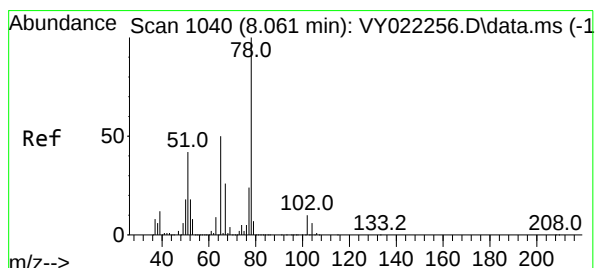
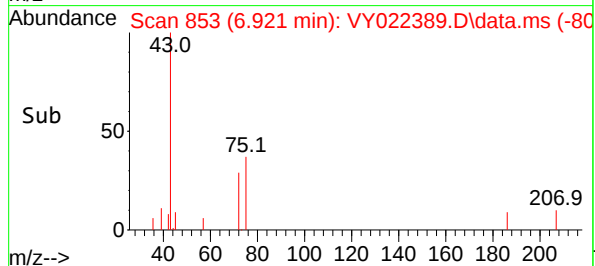
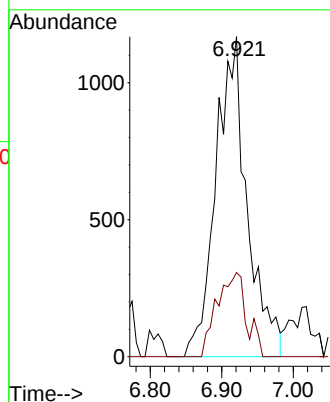
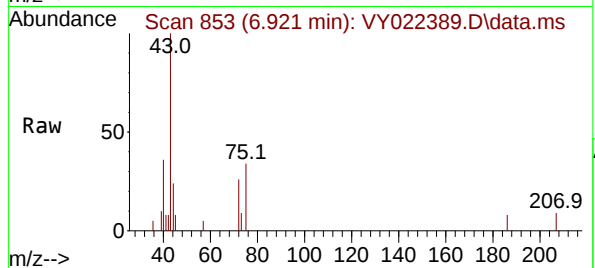
TP-12

Tgt Ion: 43 Resp: 3551

Ion Ratio Lower Upper

43 100

72 26.3 22.1 33.1



#33

1,2-Dichloroethane-d4

Concen: 48.712 ug/l

RT: 8.067 min Scan# 1041

Delta R.T. 0.006 min

Lab File: VY022389.D

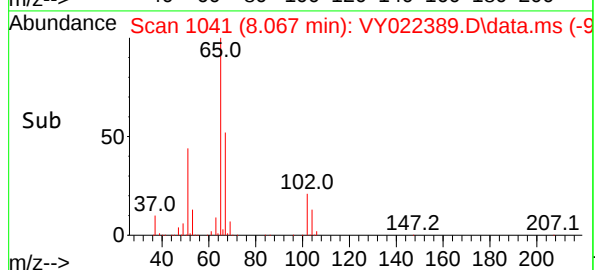
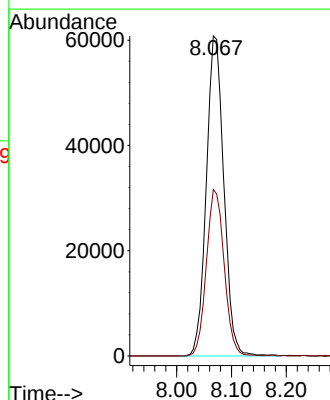
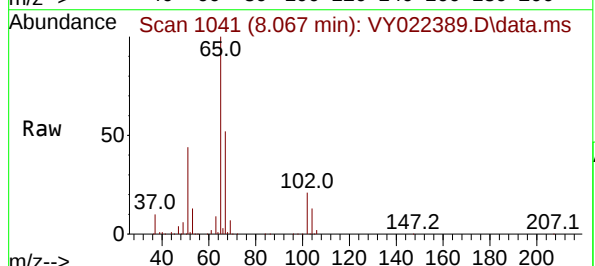
Acq: 22 May 2025 12:35

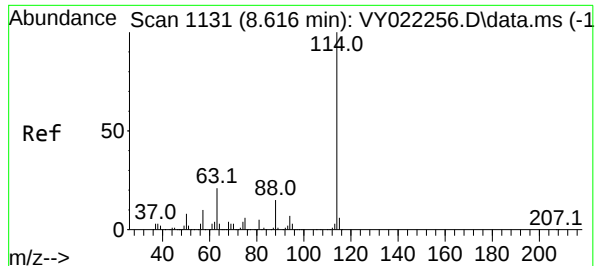
Tgt Ion: 65 Resp: 134665

Ion Ratio Lower Upper

65 100

67 52.9 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

TP-12

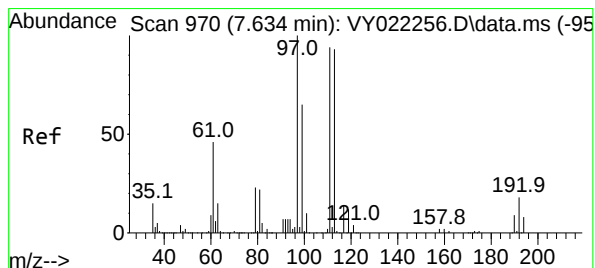
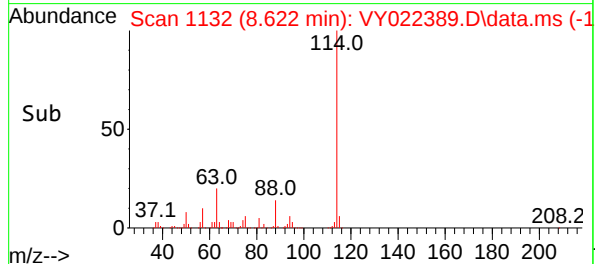
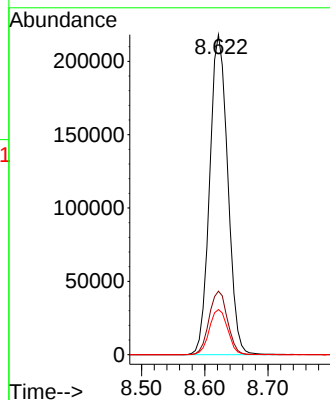
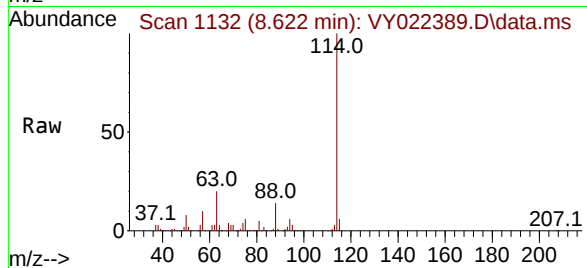
Tgt Ion:114 Resp: 432513

Ion Ratio Lower Upper

114 100

63 19.8 0.0 41.0

88 14.1 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.720 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

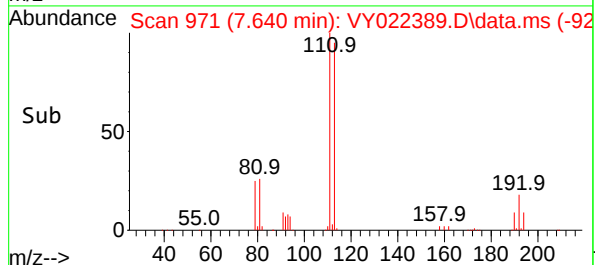
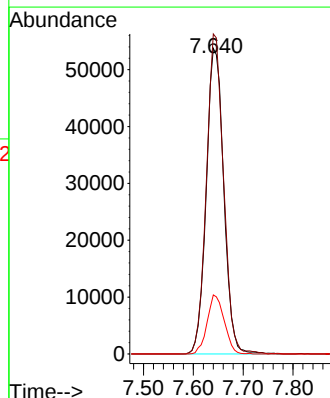
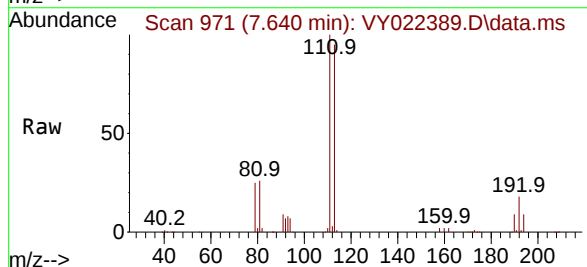
Tgt Ion:113 Resp: 130934

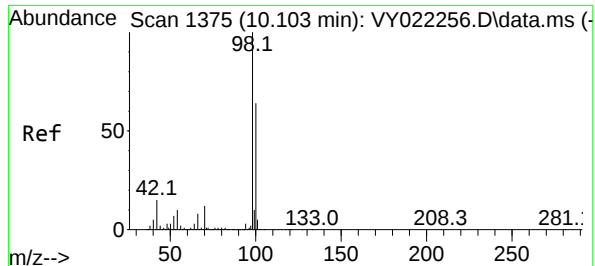
Ion Ratio Lower Upper

113 100

111 102.7 82.6 123.8

192 18.8 15.2 22.8





#50

Toluene-d8

Concen: 48.680 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

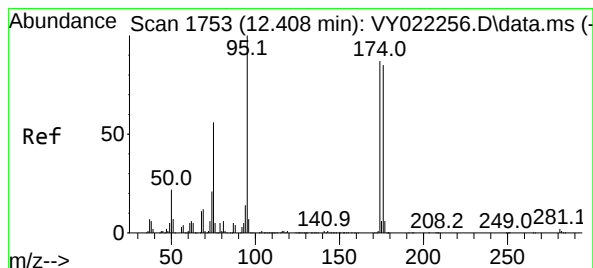
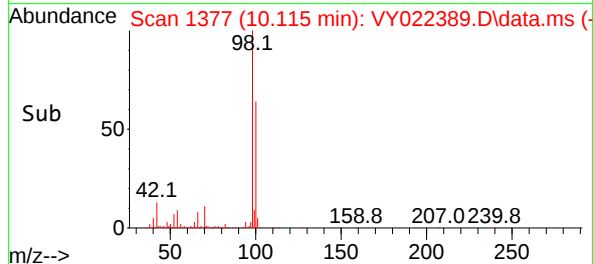
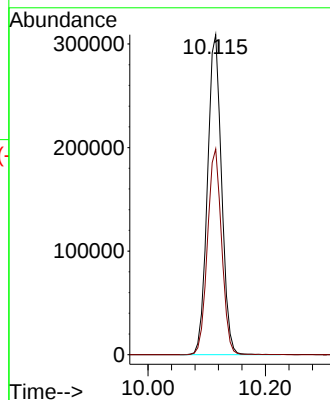
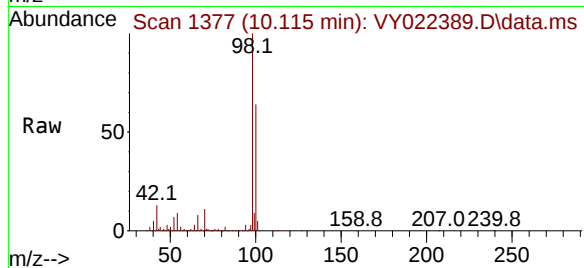
TP-12

Tgt Ion: 98 Resp: 514682

Ion Ratio Lower Upper

98 100

100 64.6 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 40.285 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. -0.000 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

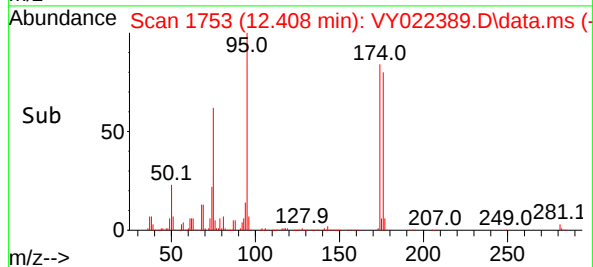
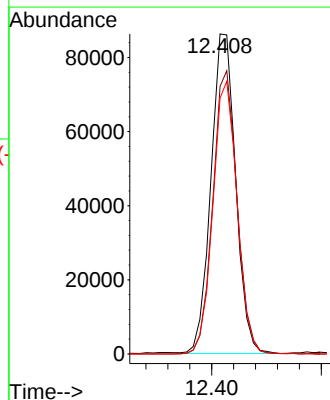
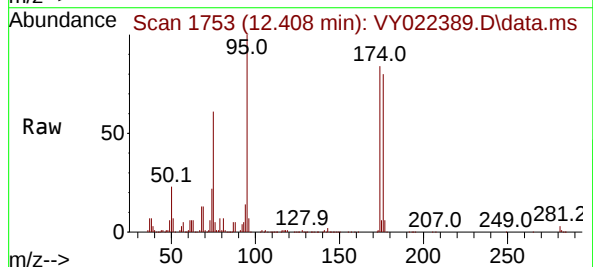
Tgt Ion: 95 Resp: 135002

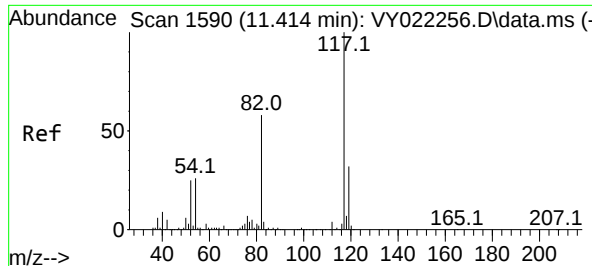
Ion Ratio Lower Upper

95 100

174 86.7 0.0 166.8

176 83.8 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 117

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

Instrument :

MSVOA_Y

ClientSampleId :

TP-12

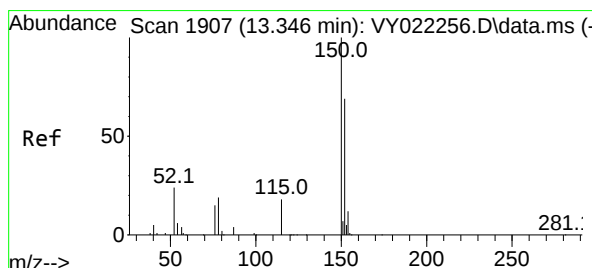
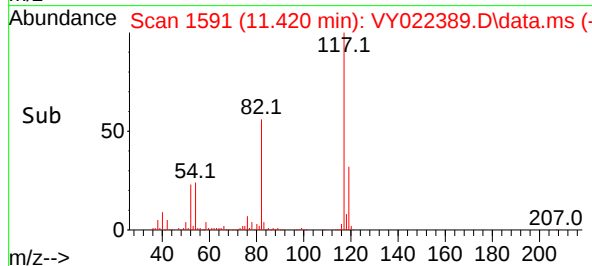
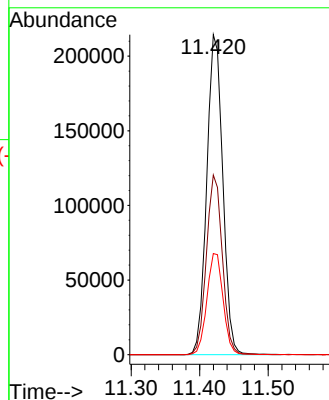
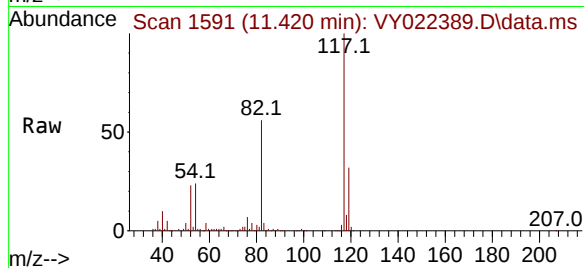
Tgt Ion:117 Resp: 349129

Ion Ratio Lower Upper

117 100

82 56.2 46.6 70.0

119 31.6 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022389.D

Acq: 22 May 2025 12:35

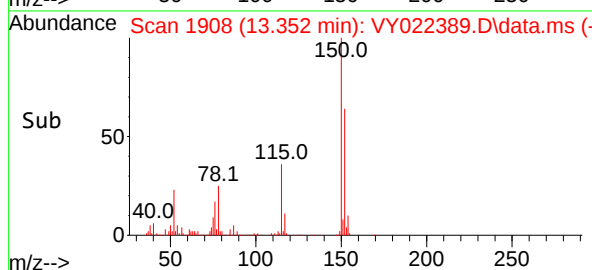
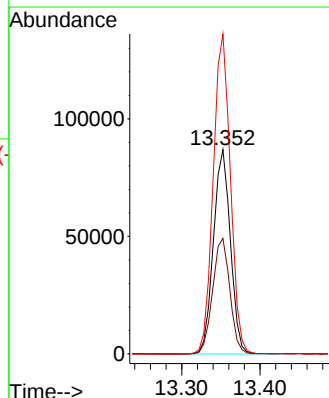
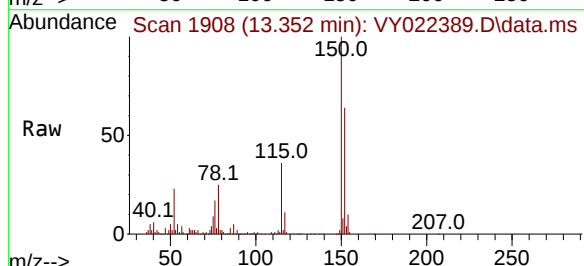
Tgt Ion:152 Resp: 130898

Ion Ratio Lower Upper

152 100

115 57.4 29.4 88.2

150 158.1 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022389.D
 Acq On : 22 May 2025 12:35
 Operator : SY/MD
 Sample : Q2074-01
 Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-12

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Title : SW846 8260

Signal : TIC: VY022389.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.184	70	76	78	rBV3	8076	14949	1.07%	0.191%
2	3.879	344	354	367	rBV2	9207	28128	2.01%	0.360%
3	4.628	467	477	486	rBV3	14642	44818	3.21%	0.573%
4	7.640	961	971	977	rBV	188307	447663	32.02%	5.728%
5	7.719	977	984	995	rVB	320978	747358	53.46%	9.562%
6	8.073	1032	1042	1054	rBV	190004	407115	29.12%	5.209%
7	8.622	1122	1132	1144	rBV	509438	1016409	72.70%	13.004%
8	10.115	1367	1377	1385	rBV	829009	1398047	100.00%	17.887%
9	11.420	1584	1591	1603	rBV	695226	1133147	81.05%	14.498%
10	12.414	1747	1754	1762	rBV	489369	781250	55.88%	9.996%
11	12.572	1776	1780	1787	rVB3	13781	23530	1.68%	0.301%
12	12.737	1800	1807	1814	rBV9	11632	30396	2.17%	0.389%
13	12.968	1841	1845	1853	rVB4	15847	24464	1.75%	0.313%
14	13.352	1901	1908	1915	rVB	542540	856977	61.30%	10.964%
15	13.487	1926	1930	1935	rVB4	13775	21428	1.53%	0.274%
16	13.670	1954	1960	1965	rBV5	33907	63805	4.56%	0.816%
17	13.889	1991	1996	2001	rVB2	133753	215421	15.41%	2.756%
18	14.066	2019	2025	2031	rVB6	16770	43513	3.11%	0.557%
19	14.127	2031	2035	2039	rBV5	12852	26399	1.89%	0.338%
20	14.182	2039	2044	2051	rVV8	22709	63585	4.55%	0.814%
21	14.310	2060	2065	2067	rBV5	15464	24993	1.79%	0.320%
22	14.346	2067	2071	2074	rVV3	35166	53419	3.82%	0.683%
23	14.395	2075	2079	2087	rVB10	13597	27746	1.98%	0.355%
24	14.535	2099	2102	2106	rVB4	11632	14903	1.07%	0.191%
25	14.596	2106	2112	2117	rBV4	27532	59743	4.27%	0.764%
26	14.651	2118	2121	2127	rVB3	20374	30515	2.18%	0.390%
27	14.791	2142	2144	2149	rVB5	14723	19789	1.42%	0.253%
28	14.864	2153	2156	2159	rVB4	16423	20469	1.46%	0.262%
29	14.919	2159	2165	2168	rBV6	15743	32060	2.29%	0.410%
30	14.956	2169	2171	2176	rVB5	10156	16137	1.15%	0.206%
31	15.127	2193	2199	2204	rVB8	10522	20540	1.47%	0.263%
32	15.188	2205	2209	2216	rBV9	12149	20109	1.44%	0.257%
33	15.303	2225	2228	2232	rVB	20956	30913	2.21%	0.396%
34	15.511	2260	2262	2266	rVB5	13031	17697	1.27%	0.226%
35	15.925	2326	2330	2336	rVB8	9942	18516	1.32%	0.237%
36	16.358	2397	2401	2408	rVB9	8783	19985	1.43%	0.256%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Title : SW846 8260

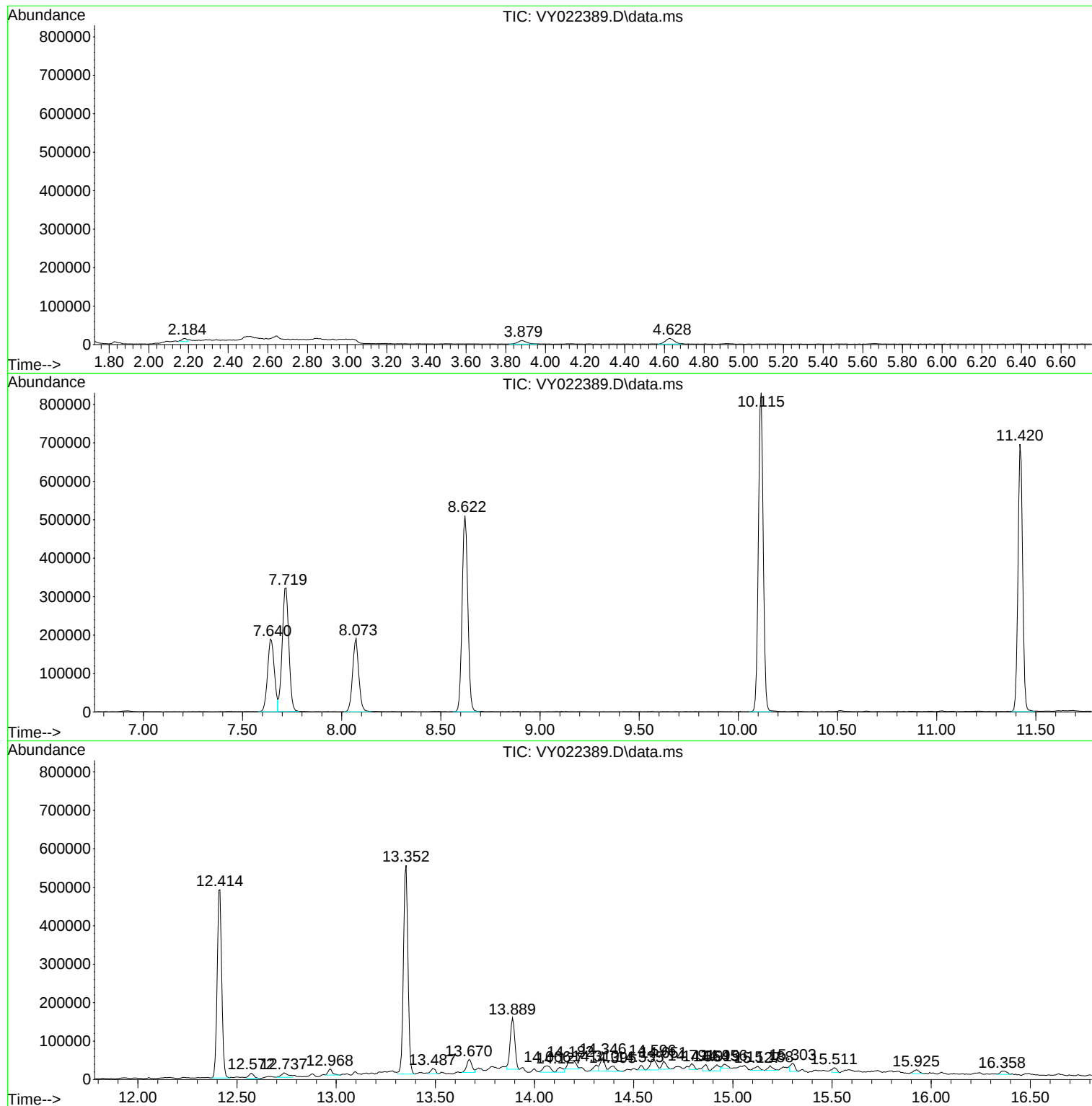
Sum of corrected areas: 7815936

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

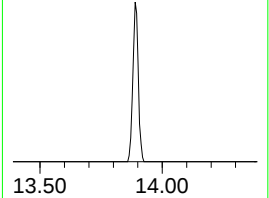
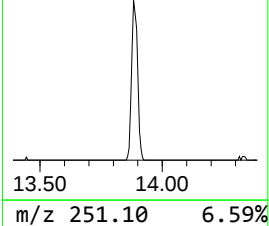
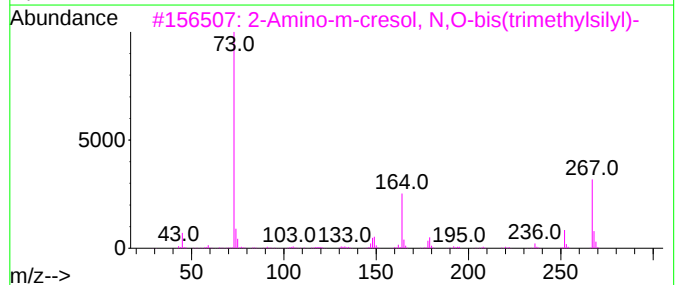
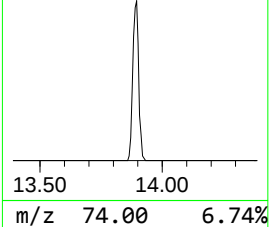
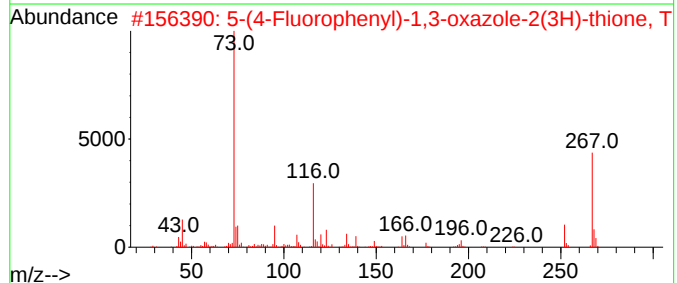
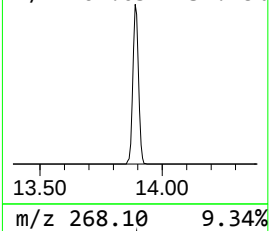
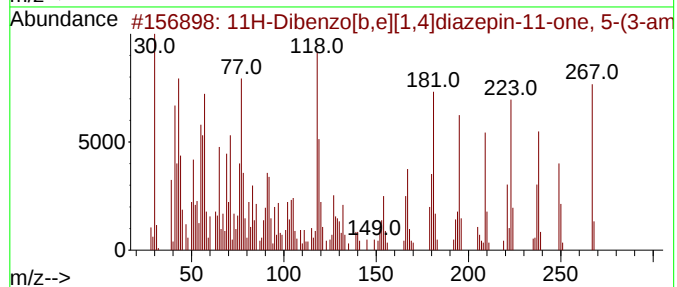
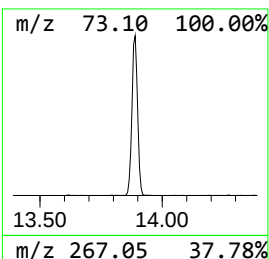
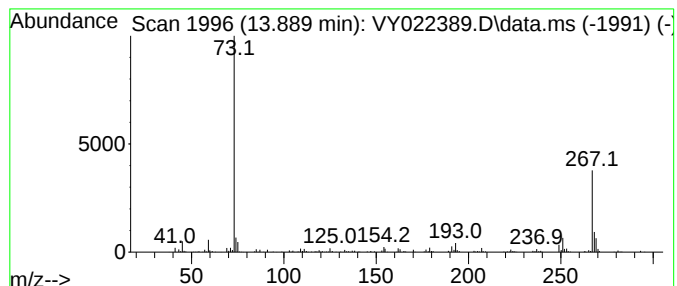
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

Peak Number 1 11H-Dibenzo[b,e][1,4]diazep... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.889	12.57 ug/l	215421	1,4-Dichlorobenzene-d4	13.352

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	95
2			5-(4-Fluorophenyl)-1,3-oxazole-2...	267	C12H14FNOSSi	1000497-07-6	53
3			2-Amino-m-cresol, N,O-bis(trimet...	267	C13H25NOSi2	1000449-77-1	53
4			Benzeneethanamine, N-methyl-.bet...	311	C15H29NO2Si2	029522-18-7	50
5			Benzeneethanamine, N-[(pentaflu...	475	C21H26F5NO2Si2	055429-85-1	42



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022389.D
Acq On : 22 May 2025 12:35
Operator : SY/MD
Sample : Q2074-01
Misc : 6.84g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-12

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
11H-Dibenzo[b,e...	13.889	12.6	ug/l	215421	4	13.352	856977	50.0

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-7	SDG No.:	Q2074
Lab Sample ID:	Q2074-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.7
Sample Wt/Vol:	7.18 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022390.D	1		05/22/25 12:58	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.90	U	0.90	3.90	ug/Kg
74-87-3	Chloromethane	0.90	U	0.90	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.62	U	0.62	3.90	ug/Kg
74-83-9	Bromomethane	0.84	UQ	0.84	3.90	ug/Kg
75-00-3	Chloroethane	0.99	UQ	0.99	3.90	ug/Kg
75-69-4	Trichlorofluoromethane	0.95	U	0.95	3.90	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	3.90	ug/Kg
75-35-4	1,1-Dichloroethene	0.79	U	0.79	3.90	ug/Kg
67-64-1	Acetone	3.70	U	3.70	19.6	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.57	U	0.57	3.90	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	3.90	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	7.90	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.68	U	0.68	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	3.90	ug/Kg
110-82-7	Cyclohexane	0.62	U	0.62	3.90	ug/Kg
78-93-3	2-Butanone	5.10	U	5.10	19.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.59	U	0.59	3.90	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	3.90	ug/Kg
67-66-3	Chloroform	0.66	U	0.66	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.73	U	0.73	3.90	ug/Kg
108-87-2	Methylcyclohexane	0.71	U	0.71	3.90	ug/Kg
71-43-2	Benzene	0.62	U	0.62	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
79-01-6	Trichloroethene	0.64	U	0.64	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.71	U	0.71	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.61	U	0.61	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.80	U	2.80	19.6	ug/Kg
108-88-3	Toluene	0.61	U	0.61	3.90	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-7	SDG No.:	Q2074
Lab Sample ID:	Q2074-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.7
Sample Wt/Vol:	7.18 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022390.D	1		05/22/25 12:58	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.51	U	0.51	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.49	U	0.49	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
591-78-6	2-Hexanone	2.90	U	2.90	19.6	ug/Kg
124-48-1	Dibromochloromethane	0.68	U	0.68	3.90	ug/Kg
106-93-4	1,2-Dibromoethane	0.69	U	0.69	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.82	U	0.82	3.90	ug/Kg
108-90-7	Chlorobenzene	0.71	U	0.71	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.53	U	0.53	3.90	ug/Kg
179601-23-1	m/p-Xylenes	0.97	U	0.97	7.90	ug/Kg
95-47-6	o-Xylene	0.64	U	0.64	3.90	ug/Kg
100-42-5	Styrene	0.56	U	0.56	3.90	ug/Kg
75-25-2	Bromoform	0.68	U	0.68	3.90	ug/Kg
98-82-8	Isopropylbenzene	0.61	U	0.61	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.95	U	0.95	3.90	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.30	U	1.30	3.90	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.20	U	1.20	3.90	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.10	U	1.10	3.90	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	3.90	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.30	U	2.30	3.90	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	3.90	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	47.6		63 - 155	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	48.5		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.7		38 - 136	79%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	246000	7.719			
540-36-3	1,4-Difluorobenzene	435000	8.622			
3114-55-4	Chlorobenzene-d5	350000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-7	SDG No.:	Q2074
Lab Sample ID:	Q2074-02	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	88.7
Sample Wt/Vol:	7.18 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022390.D	1		05/22/25 12:58	VY052225

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_Y\Data\VY052225\
 Data File : VY022390.D
 Acq On : 22 May 2025 12:58
 Operator : SY/MD
 Sample : Q2074-02
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-7

Quant Time: May 23 03:36:38 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	245848	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	434620	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.426	117	349949	50.000	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.353	152	127586	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	127834	47.577	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	95.160%
35) Dibromofluoromethane	7.646	113	129846	50.055	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.100%
50) Toluene-d8	10.115	98	515620	48.533	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.060%
62) 4-Bromofluorobenzene	12.414	95	133711	39.706	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	79.420%

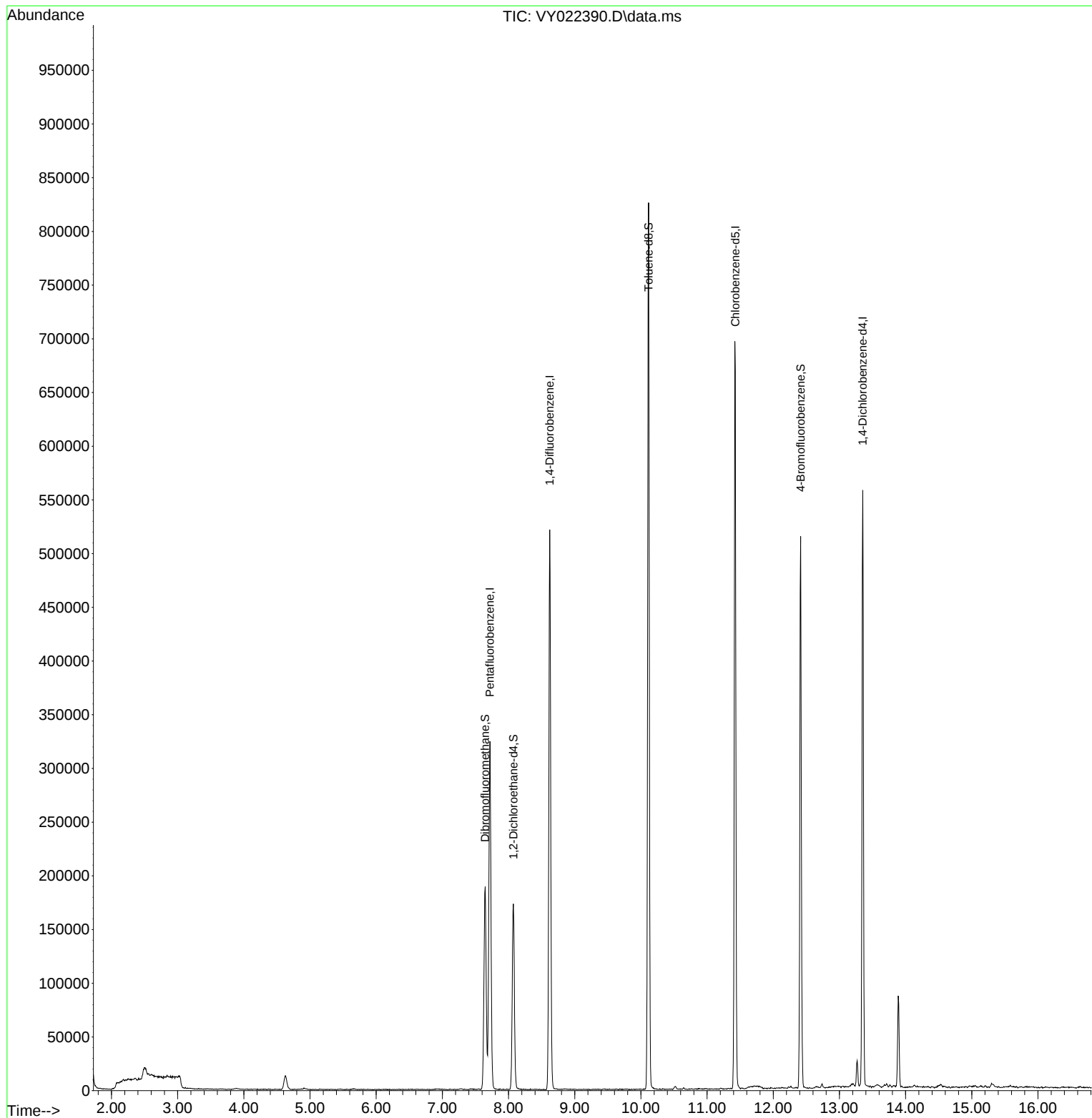
Target Compounds	Qvalue

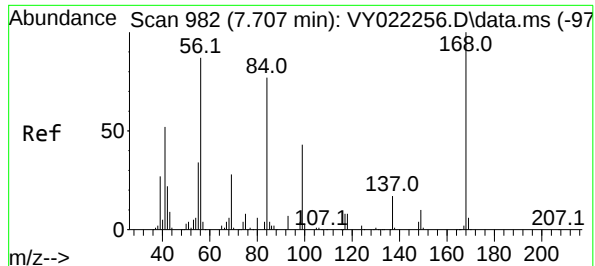
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Time: May 23 03:36:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

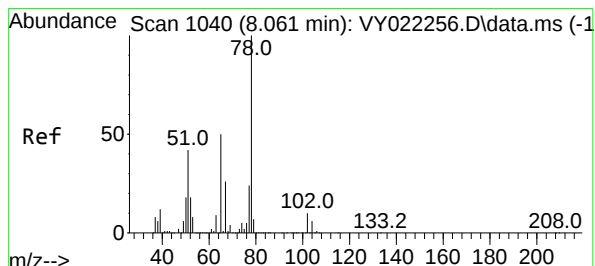
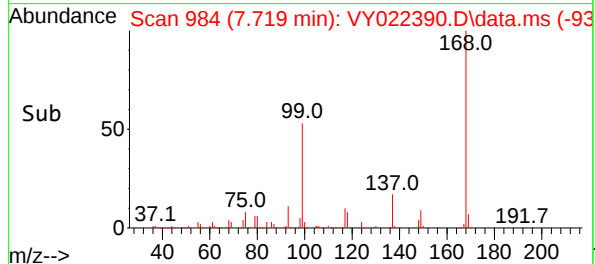
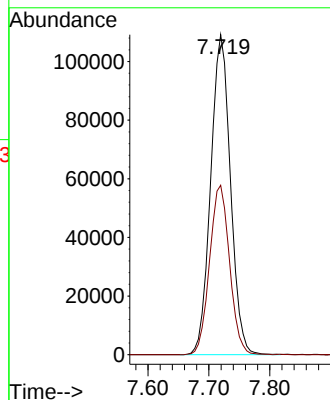
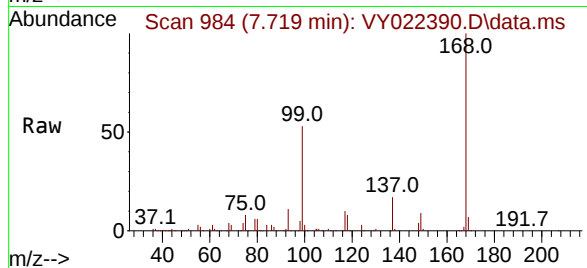




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 982
Delta R.T. 0.012 min
Lab File: VY022390.D
Acq: 22 May 2025 12:58

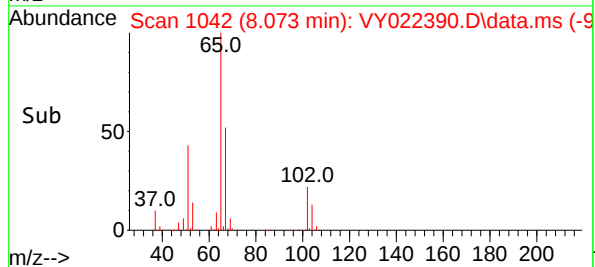
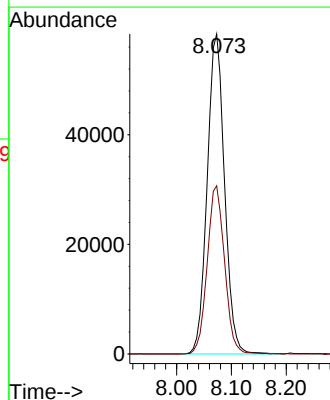
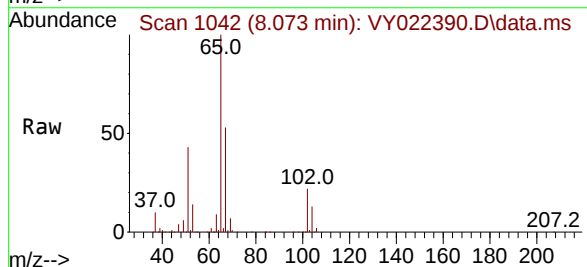
Instrument :
MSVOA_Y
ClientSampleId :
TP-7

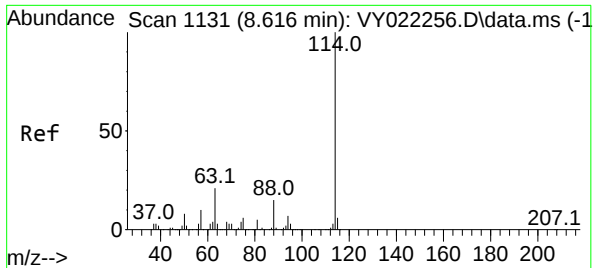
Tgt Ion:168 Resp: 245848
Ion Ratio Lower Upper
168 100
99 52.9 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 47.577 ug/l
RT: 8.073 min Scan# 1042
Delta R.T. 0.012 min
Lab File: VY022390.D
Acq: 22 May 2025 12:58

Tgt Ion: 65 Resp: 127834
Ion Ratio Lower Upper
65 100
67 52.7 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

Instrument :

MSVOA_Y

ClientSampleId :

TP-7

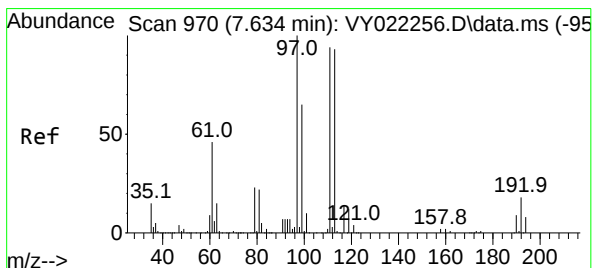
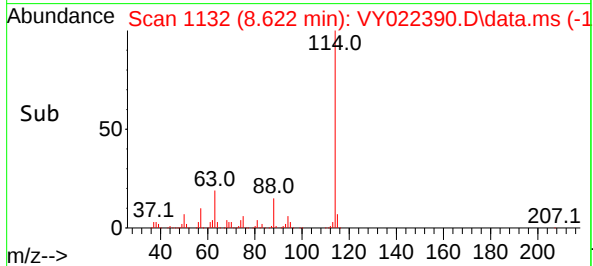
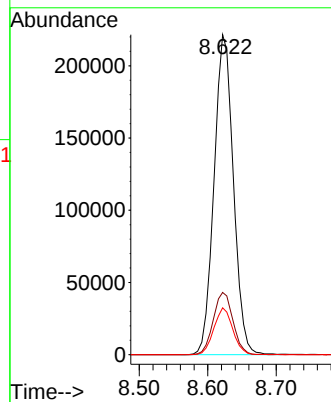
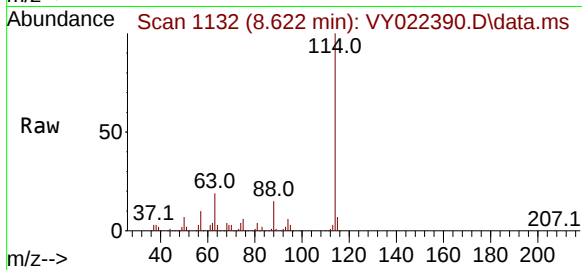
Tgt Ion:114 Resp: 434620

Ion Ratio Lower Upper

114 100

63 19.4 0.0 41.0

88 14.6 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.055 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

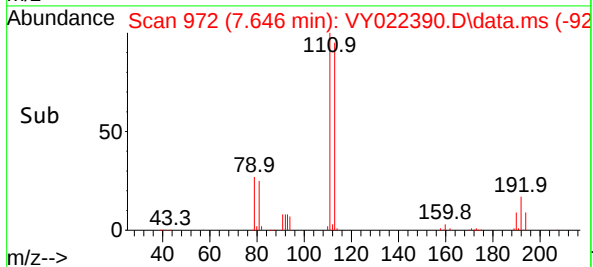
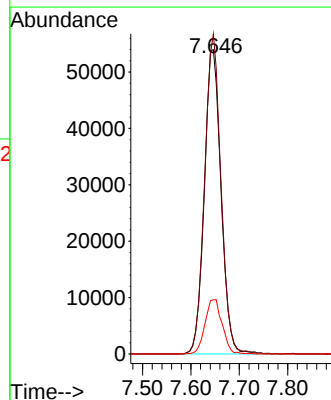
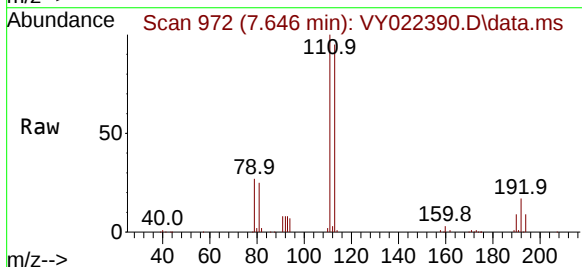
Tgt Ion:113 Resp: 129846

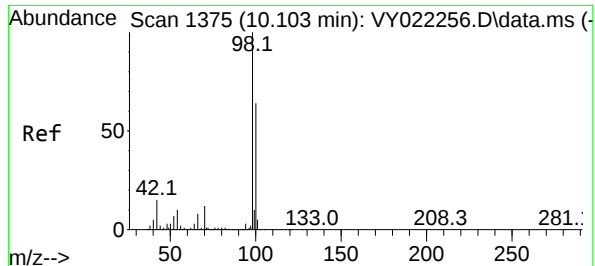
Ion Ratio Lower Upper

113 100

111 102.5 82.6 123.8

192 18.3 15.2 22.8





#50

Toluene-d8

Concen: 48.533 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

Instrument :

MSVOA_Y

ClientSampleId :

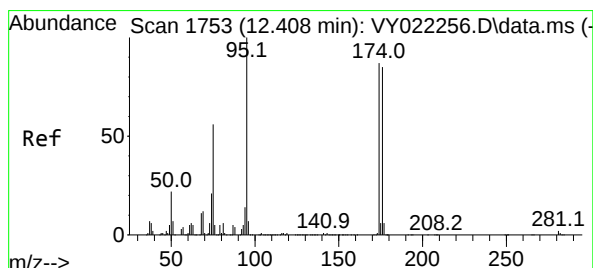
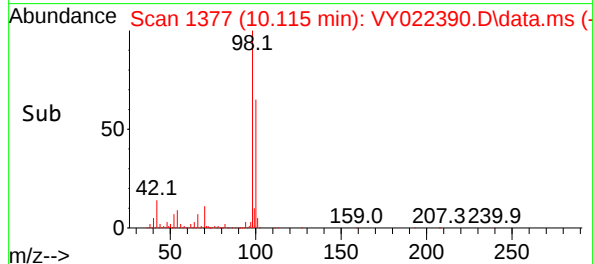
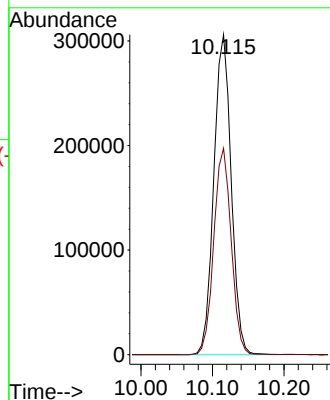
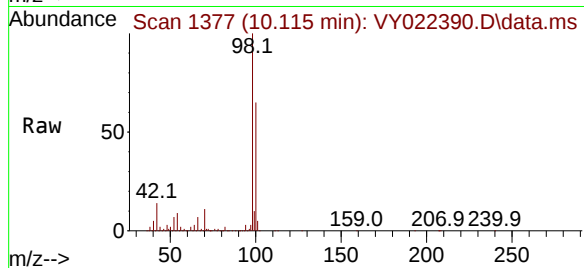
TP-7

Tgt Ion: 98 Resp: 515620

Ion Ratio Lower Upper

98 100

100 64.7 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 39.706 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022390.D

Acq: 22 May 2025 12:58

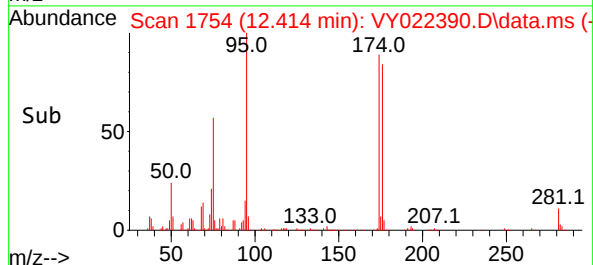
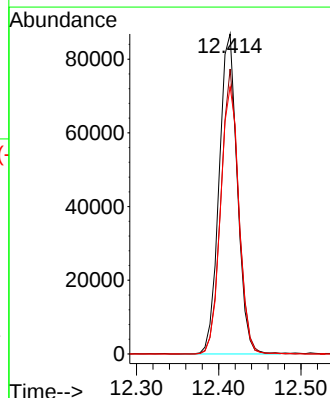
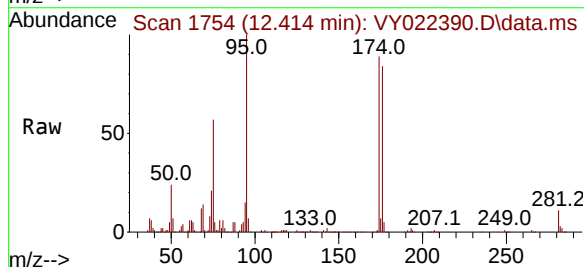
Tgt Ion: 95 Resp: 133711

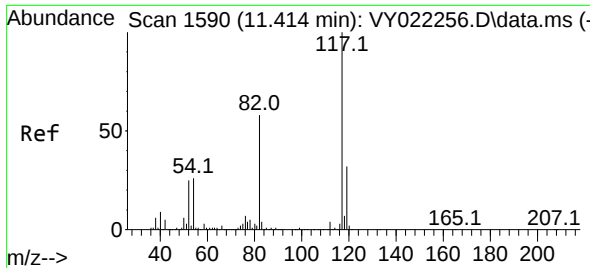
Ion Ratio Lower Upper

95 100

174 86.2 0.0 166.8

176 84.4 0.0 160.8

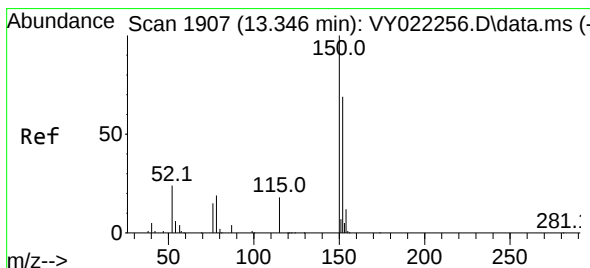
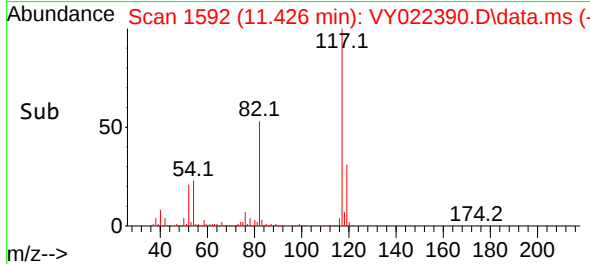
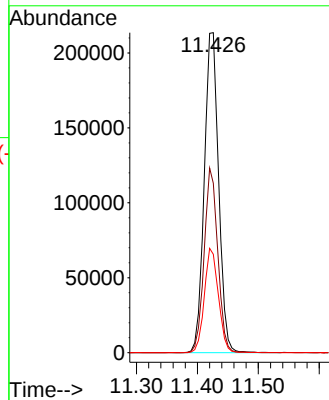
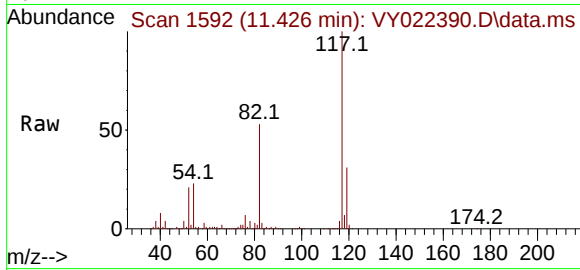




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.426 min Scan# 117
Delta R.T. 0.012 min
Lab File: VY022390.D
Acq: 22 May 2025 12:58

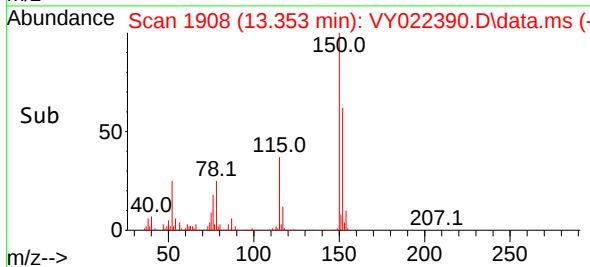
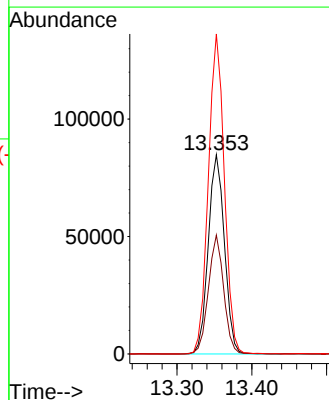
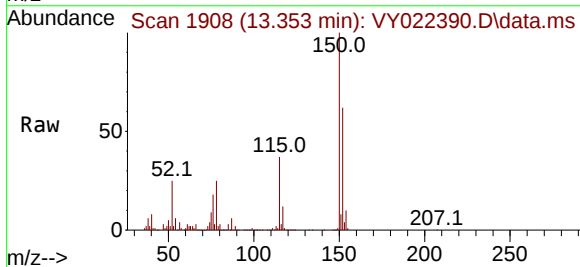
Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Tgt Ion	Ratio	Lower	Upper
117	100		
82	53.0	46.6	70.0
119	30.8	25.8	38.6



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.353 min Scan# 1908
Delta R.T. 0.006 min
Lab File: VY022390.D
Acq: 22 May 2025 12:58

Tgt Ion	Ratio	Lower	Upper
152	100		
115	56.8	29.4	88.2
150	159.0	0.0	353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022390.D
 Acq On : 22 May 2025 12:58
 Operator : SY/MD
 Sample : Q2074-02
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-7

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022390.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.099	50	62	65	rBV6	5970	20626	1.47%	0.293%
2	2.507	120	129	135	rBV3	10684	39270	2.80%	0.557%
3	4.629	467	477	488	rBV3	13008	41388	2.95%	0.587%
4	7.646	961	972	978	rBV2	188844	451859	32.25%	6.412%
5	7.719	978	984	998	rVB	323889	721020	51.46%	10.232%
6	8.073	1033	1042	1052	rBV	172761	383969	27.40%	5.449%
7	8.622	1123	1132	1143	rBV	521415	1017950	72.65%	14.446%
8	10.115	1369	1377	1393	rBV	825468	1401187	100.00%	19.885%
9	11.420	1584	1591	1605	rVB	696115	1135668	81.05%	16.117%
10	12.414	1747	1754	1762	rBV2	513786	826172	58.96%	11.724%
11	13.267	1889	1894	1899	rBV2	23564	35333	2.52%	0.501%
12	13.353	1899	1908	1920	rVB	554889	834154	59.53%	11.838%
13	13.889	1989	1996	2002	rVB2	84889	137999	9.85%	1.958%

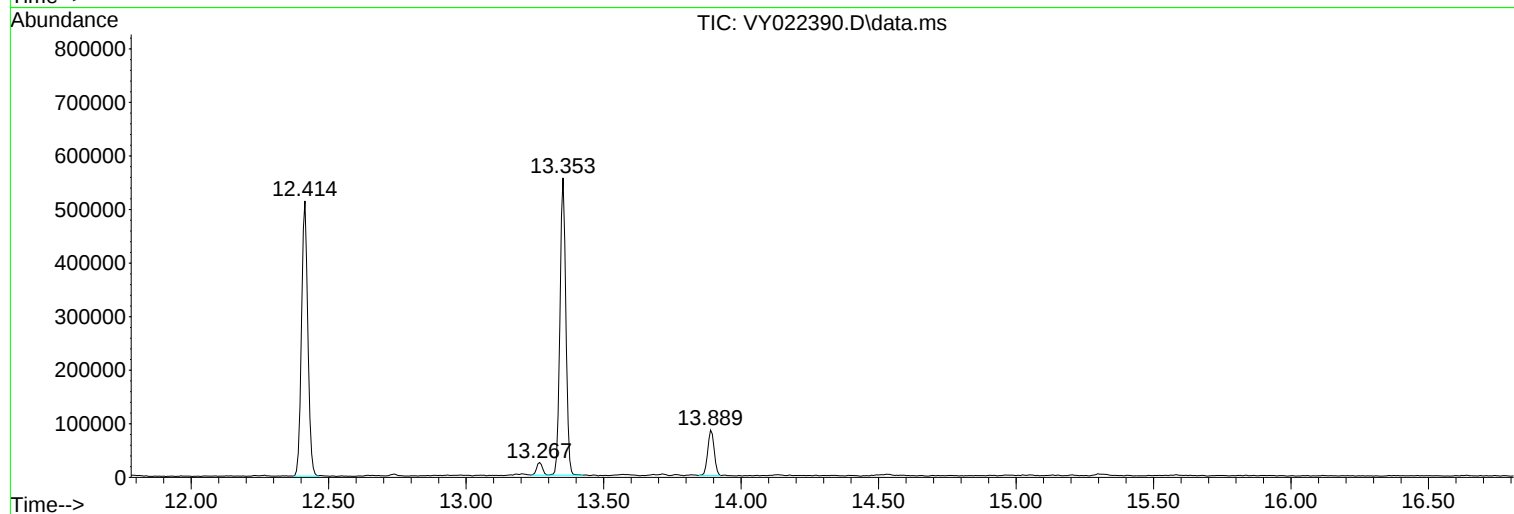
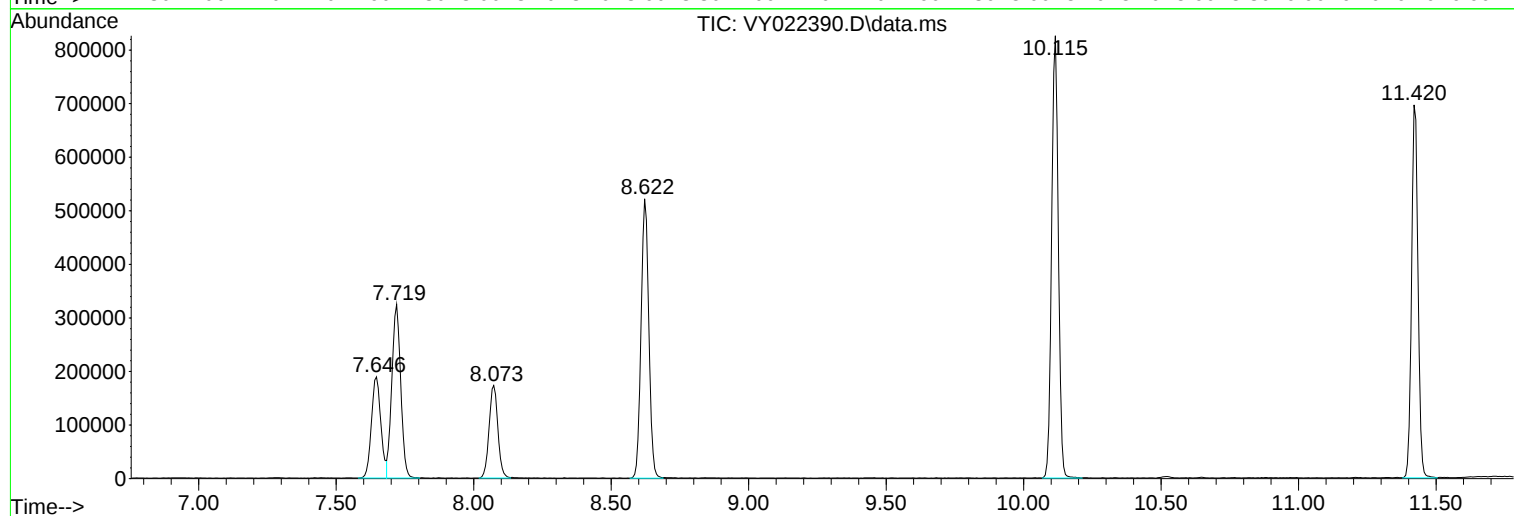
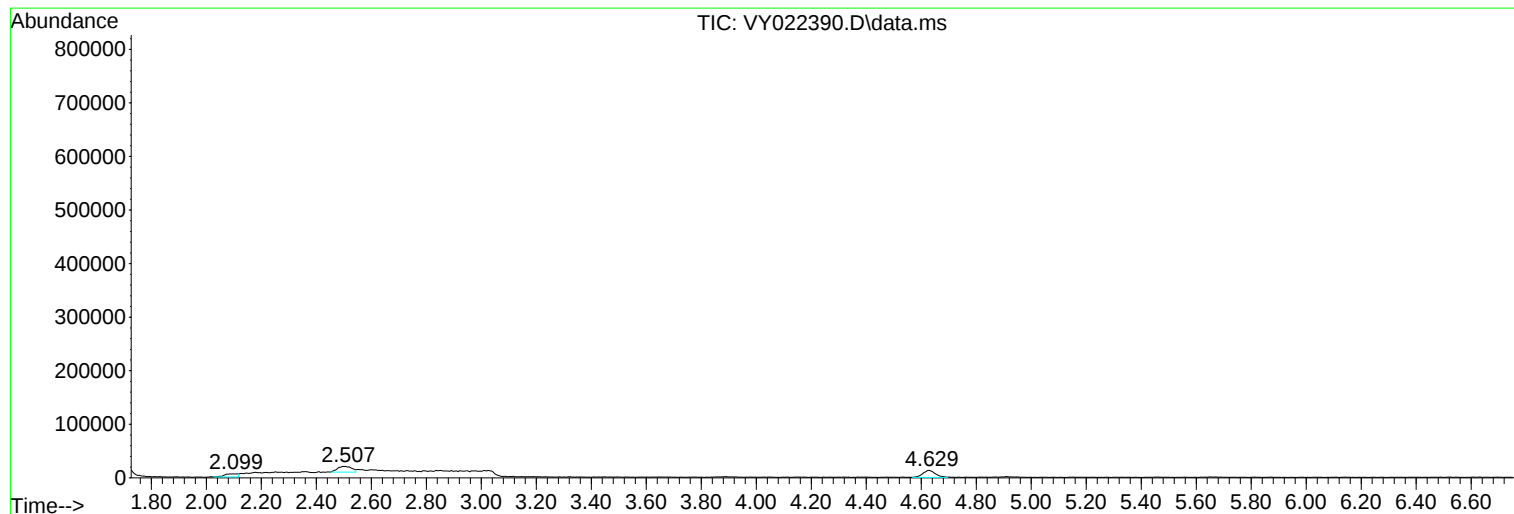
Sum of corrected areas: 7046595

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022390.D
Acq On : 22 May 2025 12:58
Operator : SY/MD
Sample : Q2074-02
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-7

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-15	SDG No.:	Q2074
Lab Sample ID:	Q2074-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.4 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022391.D	1		05/22/25 13:22	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.00	U	1.00	4.50	ug/Kg
74-87-3	Chloromethane	1.00	U	1.00	4.50	ug/Kg
75-01-4	Vinyl Chloride	0.71	U	0.71	4.50	ug/Kg
74-83-9	Bromomethane	0.96	UQ	0.96	4.50	ug/Kg
75-00-3	Chloroethane	1.10	UQ	1.10	4.50	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.50	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.95	U	0.95	4.50	ug/Kg
75-35-4	1,1-Dichloroethene	0.90	U	0.90	4.50	ug/Kg
67-64-1	Acetone	4.30	U	4.30	22.4	ug/Kg
75-15-0	Carbon Disulfide	0.95	U	0.95	4.50	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.66	U	0.66	4.50	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	4.50	ug/Kg
75-09-2	Methylene Chloride	3.20	U	3.20	9.00	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.77	U	0.77	4.50	ug/Kg
75-34-3	1,1-Dichloroethane	0.72	U	0.72	4.50	ug/Kg
110-82-7	Cyclohexane	0.71	U	0.71	4.50	ug/Kg
78-93-3	2-Butanone	5.90	U	5.90	22.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	4.50	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.67	U	0.67	4.50	ug/Kg
74-97-5	Bromochloromethane	1.00	U	1.00	4.50	ug/Kg
67-66-3	Chloroform	0.75	U	0.75	4.50	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.84	U	0.84	4.50	ug/Kg
108-87-2	Methylcyclohexane	0.82	U	0.82	4.50	ug/Kg
71-43-2	Benzene	0.71	U	0.71	4.50	ug/Kg
107-06-2	1,2-Dichloroethane	0.71	U	0.71	4.50	ug/Kg
79-01-6	Trichloroethene	0.73	U	0.73	4.50	ug/Kg
78-87-5	1,2-Dichloropropane	0.82	U	0.82	4.50	ug/Kg
75-27-4	Bromodichloromethane	0.70	U	0.70	4.50	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.20	U	3.20	22.4	ug/Kg
108-88-3	Toluene	0.70	U	0.70	4.50	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-15	SDG No.:	Q2074
Lab Sample ID:	Q2074-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.4 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022391.D	1		05/22/25 13:22	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.58	U	0.58	4.50	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.56	U	0.56	4.50	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.83	U	0.83	4.50	ug/Kg
591-78-6	2-Hexanone	3.30	U	3.30	22.4	ug/Kg
124-48-1	Dibromochloromethane	0.78	U	0.78	4.50	ug/Kg
106-93-4	1,2-Dibromoethane	0.79	U	0.79	4.50	ug/Kg
127-18-4	Tetrachloroethene	0.94	U	0.94	4.50	ug/Kg
108-90-7	Chlorobenzene	0.82	U	0.82	4.50	ug/Kg
100-41-4	Ethyl Benzene	0.60	U	0.60	4.50	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	9.00	ug/Kg
95-47-6	o-Xylene	0.74	U	0.74	4.50	ug/Kg
100-42-5	Styrene	0.64	U	0.64	4.50	ug/Kg
75-25-2	Bromoform	0.77	U	0.77	4.50	ug/Kg
98-82-8	Isopropylbenzene	0.70	U	0.70	4.50	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.50	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.50	U	1.50	4.50	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.50	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.50	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.70	U	1.70	4.50	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.70	U	2.70	4.50	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.90	U	2.90	4.50	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.2		63 - 155	90%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		70 - 134	99%	SPK: 50
2037-26-5	Toluene-d8	48.2		74 - 123	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.1		38 - 136	74%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	267000	7.72			
540-36-3	1,4-Difluorobenzene	463000	8.622			
3114-55-4	Chlorobenzene-d5	361000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	126000	13.353			



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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-15	SDG No.:	Q2074
Lab Sample ID:	Q2074-03	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	87
Sample Wt/Vol:	6.4	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022391.D	1		05/22/25 13:22	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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_Y\Data\VY052225\
 Data File : VY022391.D
 Acq On : 22 May 2025 13:22
 Operator : SY/MD
 Sample : Q2074-03
 Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-15

Quant Time: May 23 03:37:00 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.720	168	266999	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	463257	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.426	117	360854	50.000	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.353	152	125655	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	132004	45.237	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	90.480%
35) Dibromofluoromethane	7.646	113	136878	49.504	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	99.000%
50) Toluene-d8	10.115	98	545447	48.166	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.340%
62) 4-Bromofluorobenzene	12.414	95	133077	37.075	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	74.160%

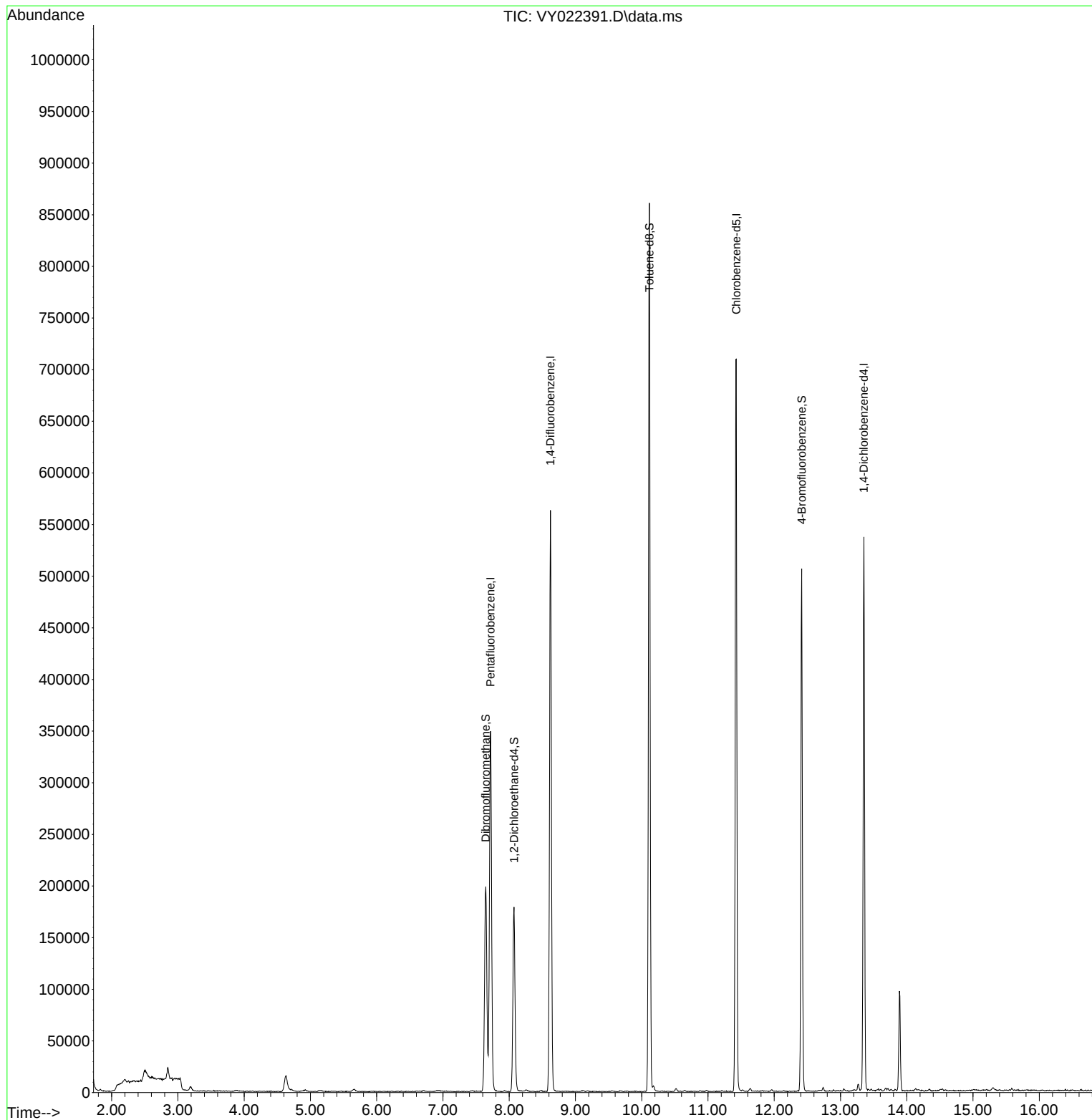
Target Compounds	Qvalue

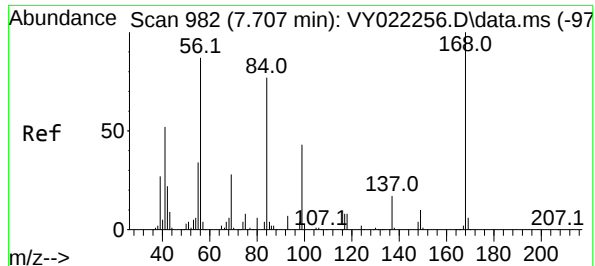
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Time: May 23 03:37:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

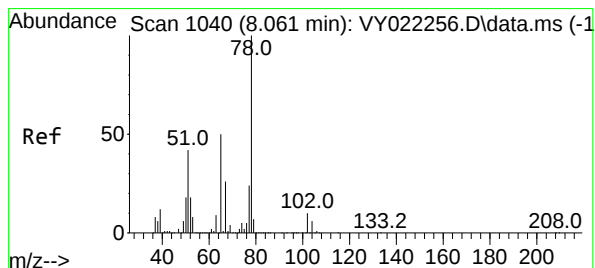
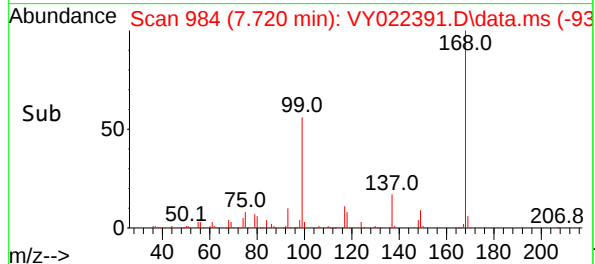
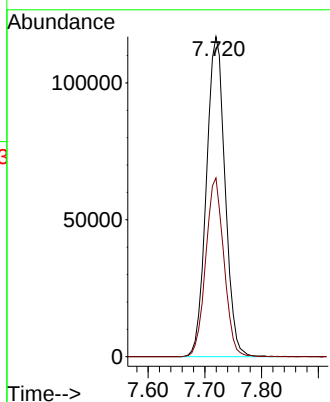
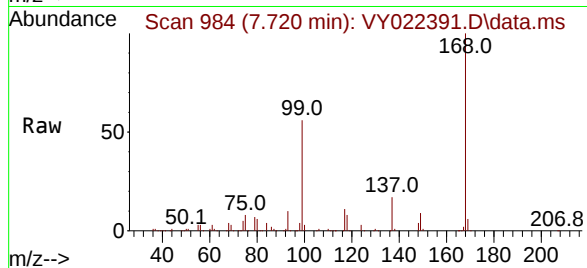




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.720 min Scan# 982
Delta R.T. 0.013 min
Lab File: VY022391.D
Acq: 22 May 2025 13:22

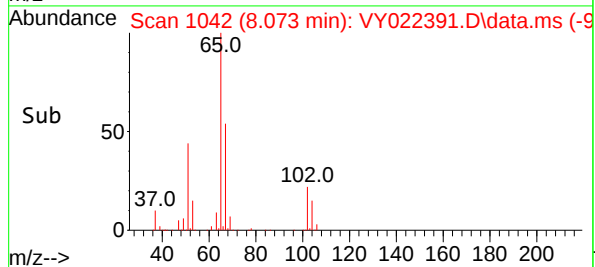
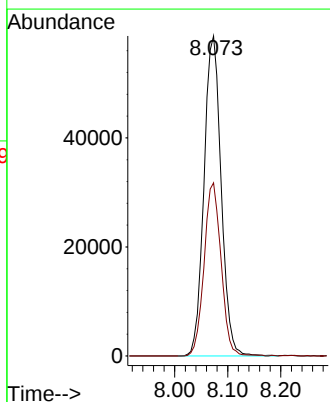
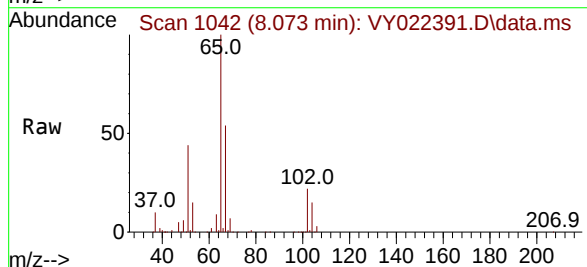
Instrument :
MSVOA_Y
ClientSampleId :
TP-15

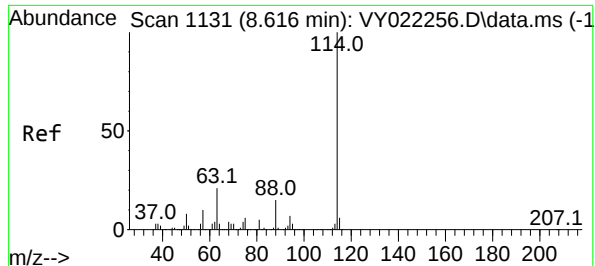
Tgt Ion:168 Resp: 266999
Ion Ratio Lower Upper
168 100
99 55.8 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 45.237 ug/l
RT: 8.073 min Scan# 1042
Delta R.T. 0.012 min
Lab File: VY022391.D
Acq: 22 May 2025 13:22

Tgt Ion: 65 Resp: 132004
Ion Ratio Lower Upper
65 100
67 53.4 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

Instrument :

MSVOA_Y

ClientSampleId :

TP-15

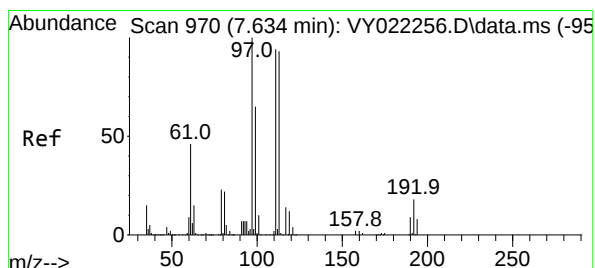
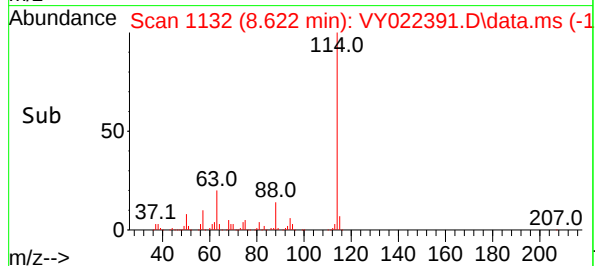
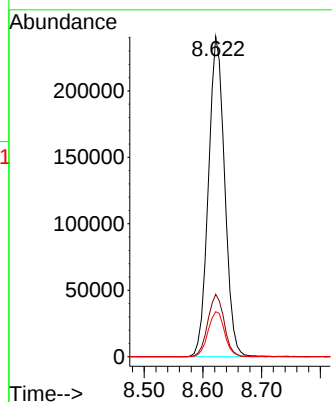
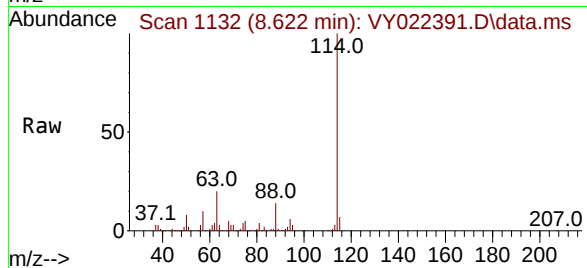
Tgt Ion:114 Resp: 463257

Ion Ratio Lower Upper

114 100

63 19.5 0.0 41.0

88 14.0 0.0 29.4



#35

Dibromofluoromethane

Concen: 49.504 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

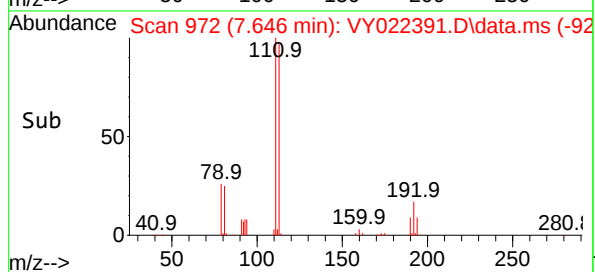
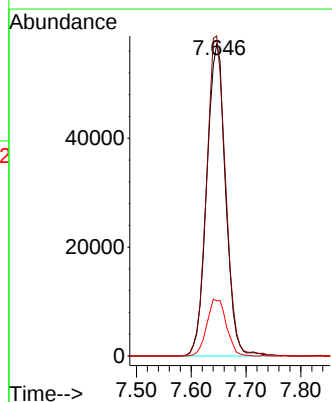
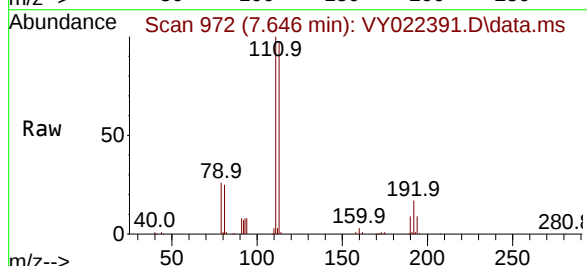
Tgt Ion:113 Resp: 136878

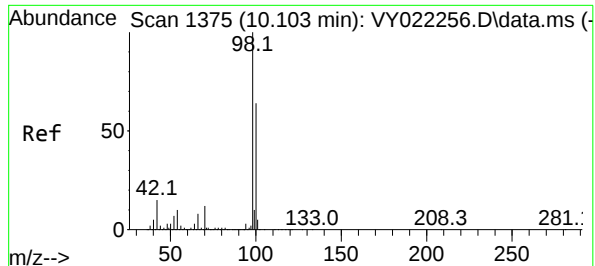
Ion Ratio Lower Upper

113 100

111 103.7 82.6 123.8

192 18.8 15.2 22.8





#50

Toluene-d8

Concen: 48.166 ug/l

RT: 10.115 min Scan# 1375

Delta R.T. 0.012 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

Instrument :

MSVOA_Y

ClientSampleId :

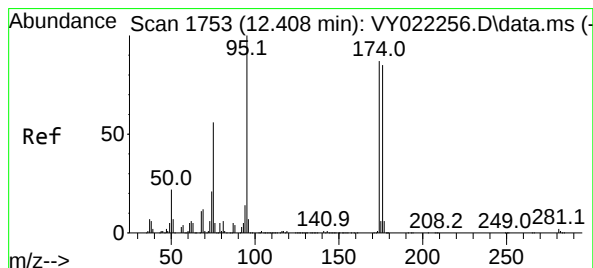
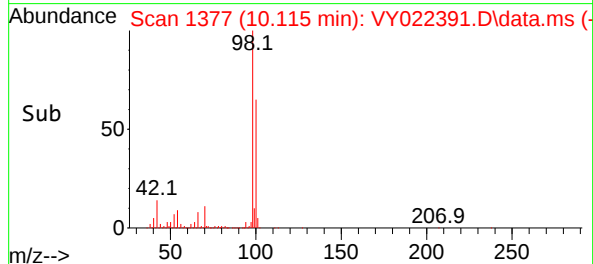
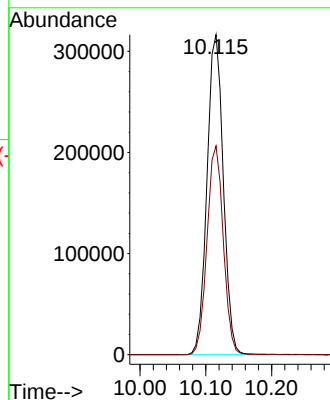
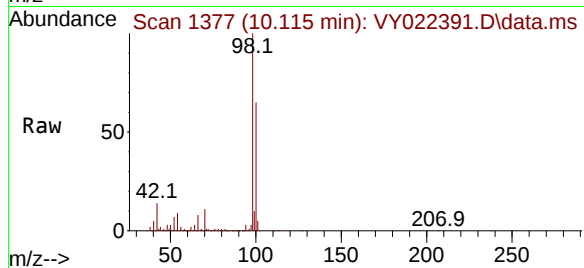
TP-15

Tgt Ion: 98 Resp: 545447

Ion Ratio Lower Upper

98 100

100 65.1 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 37.075 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

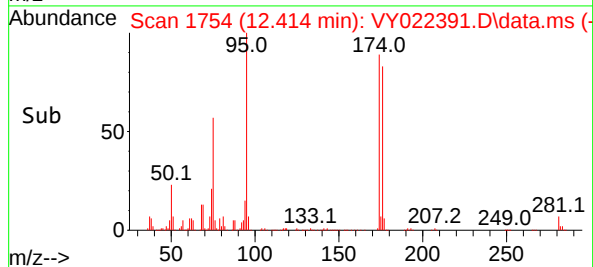
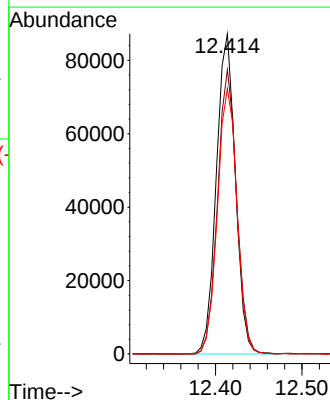
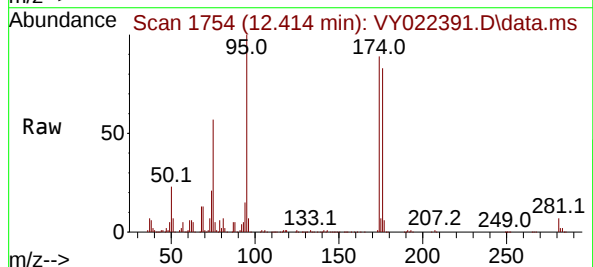
Tgt Ion: 95 Resp: 133077

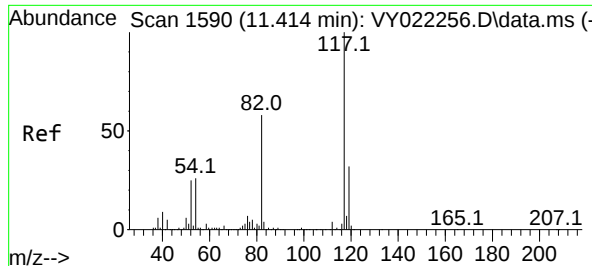
Ion Ratio Lower Upper

95 100

174 89.2 0.0 166.8

176 85.3 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 117

Delta R.T. 0.012 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

Instrument :

MSVOA_Y

ClientSampleId :

TP-15

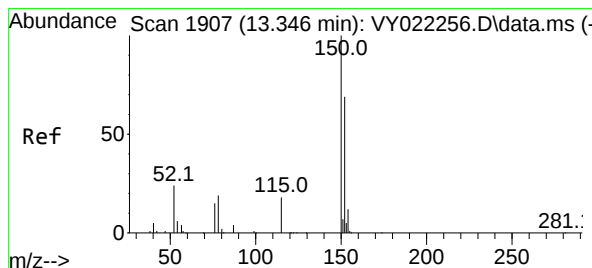
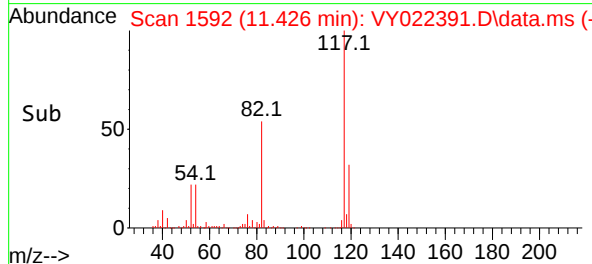
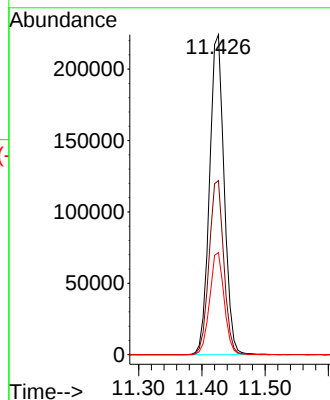
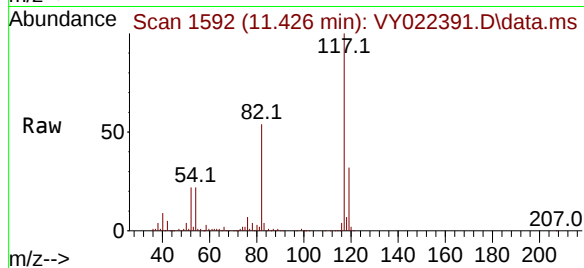
Tgt Ion:117 Resp: 360854

Ion Ratio Lower Upper

117 100

82 54.4 46.6 70.0

119 31.9 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022391.D

Acq: 22 May 2025 13:22

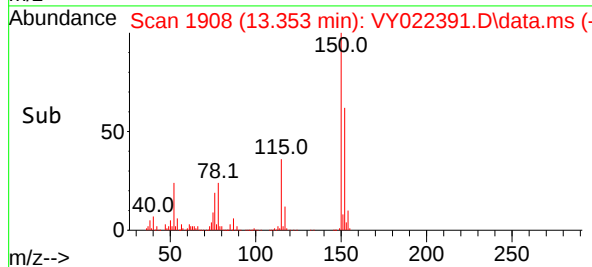
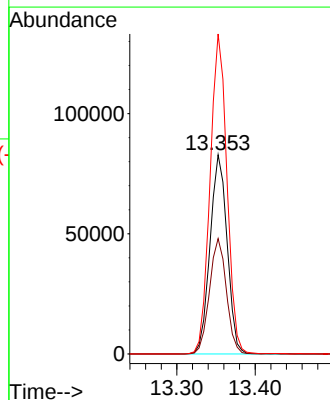
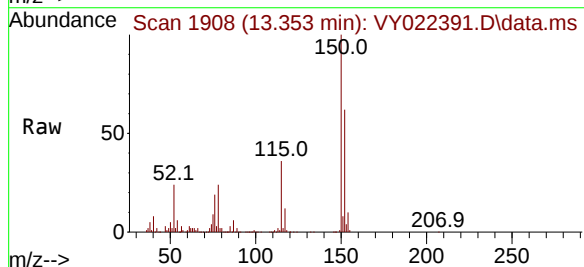
Tgt Ion:152 Resp: 125655

Ion Ratio Lower Upper

152 100

115 57.2 29.4 88.2

150 158.0 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022391.D
 Acq On : 22 May 2025 13:22
 Operator : SY/MD
 Sample : Q2074-03
 Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-15

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022391.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.123	53	66	68	rBV8	6664	25660	1.73%	0.351%
2	2.507	119	129	141	rBV6	11117	50404	3.40%	0.689%
3	2.848	180	185	191	rVB4	10782	19363	1.31%	0.265%
4	4.635	466	478	488	rBV3	15388	53534	3.61%	0.731%
5	7.646	960	972	978	rBV	198210	480934	32.45%	6.571%
6	7.720	978	984	997	rVB	348429	785755	53.02%	10.735%
7	8.073	1031	1042	1052	rBV	178728	400254	27.01%	5.468%
8	8.622	1124	1132	1144	rBV	562668	1081995	73.00%	14.782%
9	10.115	1368	1377	1385	rBV	860408	1482105	100.00%	20.249%
10	11.426	1581	1592	1605	rBV	709330	1168032	78.81%	15.958%
11	12.414	1746	1754	1763	rBV	505972	801221	54.06%	10.946%
12	13.353	1898	1908	1917	rVV	535760	814991	54.99%	11.134%
13	13.889	1989	1996	2003	rVB	96613	155272	10.48%	2.121%

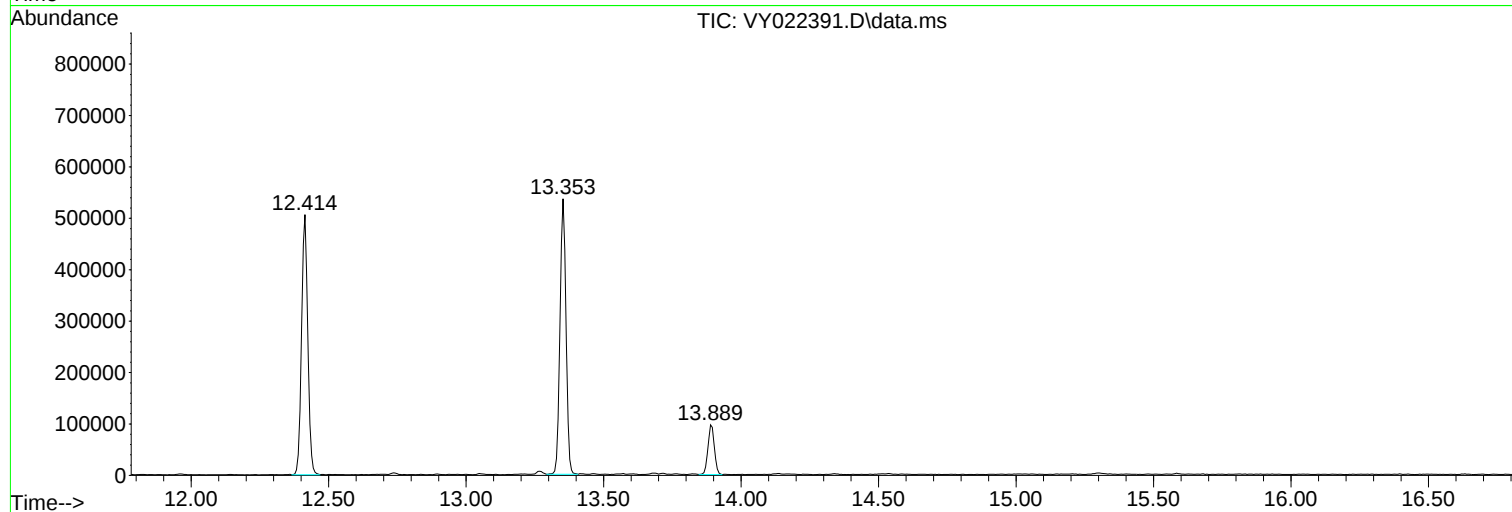
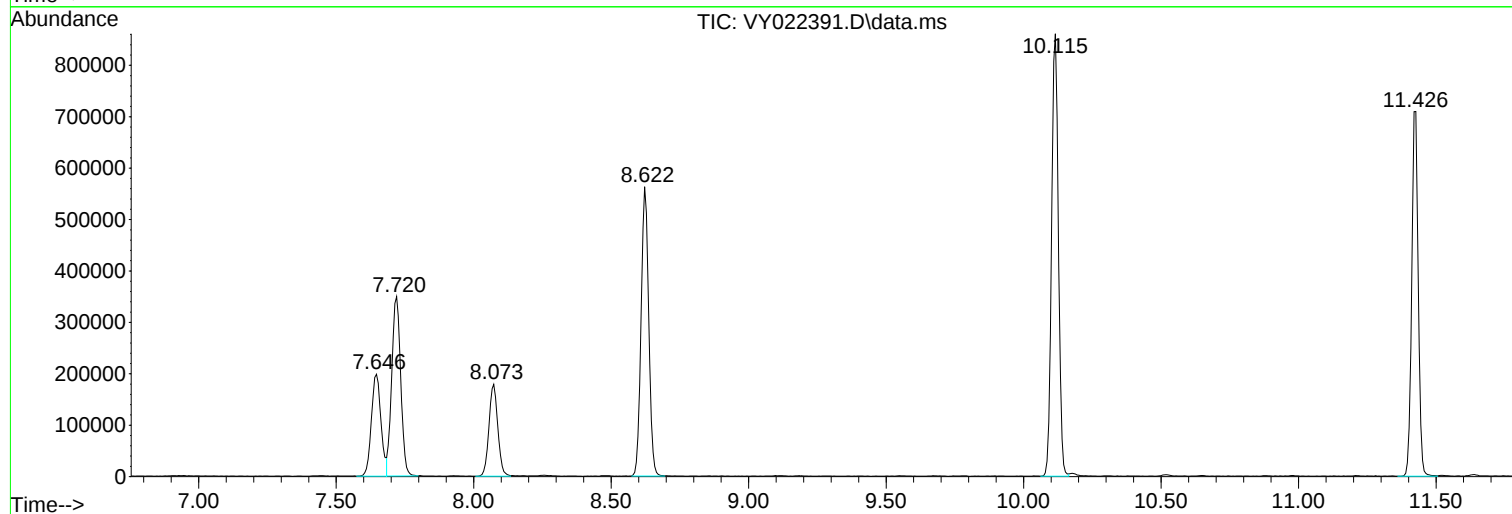
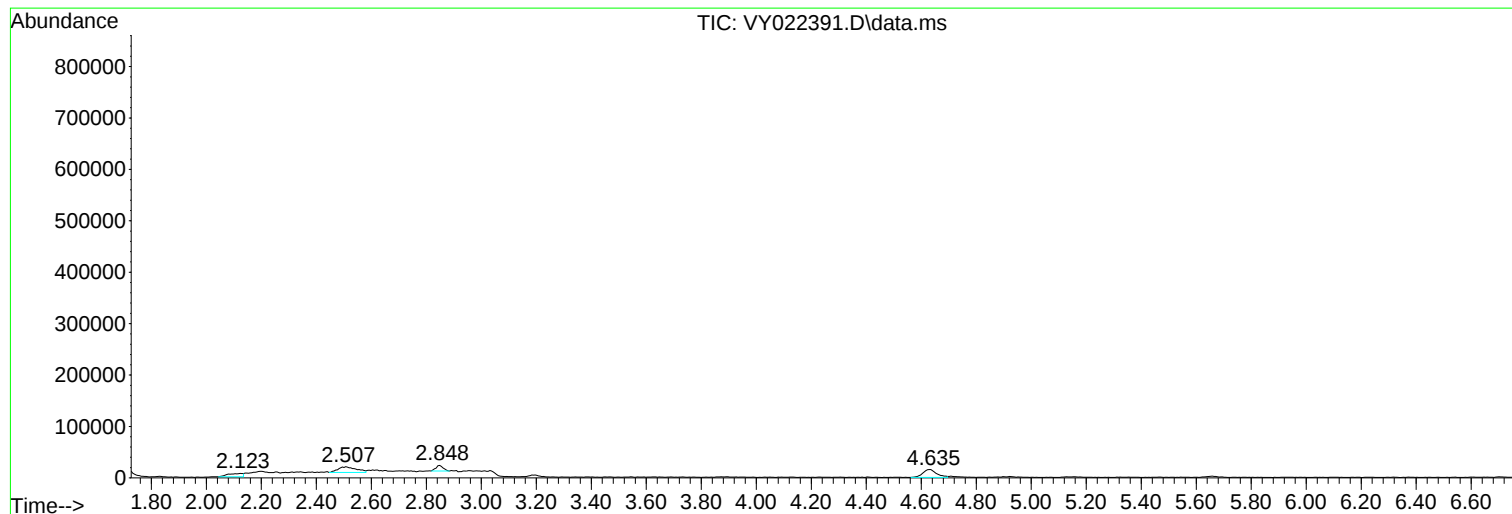
Sum of corrected areas: 7319520

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022391.D
Acq On : 22 May 2025 13:22
Operator : SY/MD
Sample : Q2074-03
Misc : 6.40g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-15

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-20	SDG No.:	Q2074
Lab Sample ID:	Q2074-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.3
Sample Wt/Vol:	7.61 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022392.D	1		05/22/25 13:45	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.89	U	0.89	3.90	ug/Kg
74-87-3	Chloromethane	0.89	U	0.89	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.62	U	0.62	3.90	ug/Kg
74-83-9	Bromomethane	0.83	UQ	0.83	3.90	ug/Kg
75-00-3	Chloroethane	0.98	UQ	0.98	3.90	ug/Kg
75-69-4	Trichlorofluoromethane	0.94	U	0.94	3.90	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	3.90	ug/Kg
75-35-4	1,1-Dichloroethene	0.78	U	0.78	3.90	ug/Kg
67-64-1	Acetone	32.2		3.70	19.5	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.57	U	0.57	3.90	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	3.90	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	7.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.67	U	0.67	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
110-82-7	Cyclohexane	0.62	U	0.62	3.90	ug/Kg
78-93-3	2-Butanone	5.10	U	5.10	19.5	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.58	U	0.58	3.90	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	3.90	ug/Kg
67-66-3	Chloroform	0.65	U	0.65	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
108-87-2	Methylcyclohexane	0.71	U	0.71	3.90	ug/Kg
71-43-2	Benzene	0.62	U	0.62	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
79-01-6	Trichloroethene	0.63	U	0.63	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.71	U	0.71	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.61	U	0.61	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.80	U	2.80	19.5	ug/Kg
108-88-3	Toluene	0.61	U	0.61	3.90	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-20	SDG No.:	Q2074
Lab Sample ID:	Q2074-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.3
Sample Wt/Vol:	7.61 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022392.D	1		05/22/25 13:45	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.51	U	0.51	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.48	U	0.48	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
591-78-6	2-Hexanone	2.90	U	2.90	19.5	ug/Kg
124-48-1	Dibromochloromethane	0.68	U	0.68	3.90	ug/Kg
106-93-4	1,2-Dibromoethane	0.69	U	0.69	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.82	U	0.82	3.90	ug/Kg
108-90-7	Chlorobenzene	0.71	U	0.71	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.52	U	0.52	3.90	ug/Kg
179601-23-1	m/p-Xylenes	0.97	U	0.97	7.80	ug/Kg
95-47-6	o-Xylene	0.64	U	0.64	3.90	ug/Kg
100-42-5	Styrene	0.55	U	0.55	3.90	ug/Kg
75-25-2	Bromoform	0.67	U	0.67	3.90	ug/Kg
98-82-8	Isopropylbenzene	0.61	U	0.61	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.94	U	0.94	3.90	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.30	U	1.30	3.90	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.20	U	1.20	3.90	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.10	U	1.10	3.90	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	3.90	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.30	U	2.30	3.90	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	3.90	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.8		63 - 155	100%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	49.3		74 - 123	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.2		38 - 136	80%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	243000	7.719			
540-36-3	1,4-Difluorobenzene	432000	8.622			
3114-55-4	Chlorobenzene-d5	350000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	131000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-20	SDG No.:	Q2074
Lab Sample ID:	Q2074-04	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	84.3
Sample Wt/Vol:	7.61 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022392.D	1		05/22/25 13:45	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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_Y\Data\VY052225\
 Data File : VY022392.D
 Acq On : 22 May 2025 13:45
 Operator : SY/MD
 Sample : Q2074-04
 Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-20

Quant Time: May 23 03:37:22 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

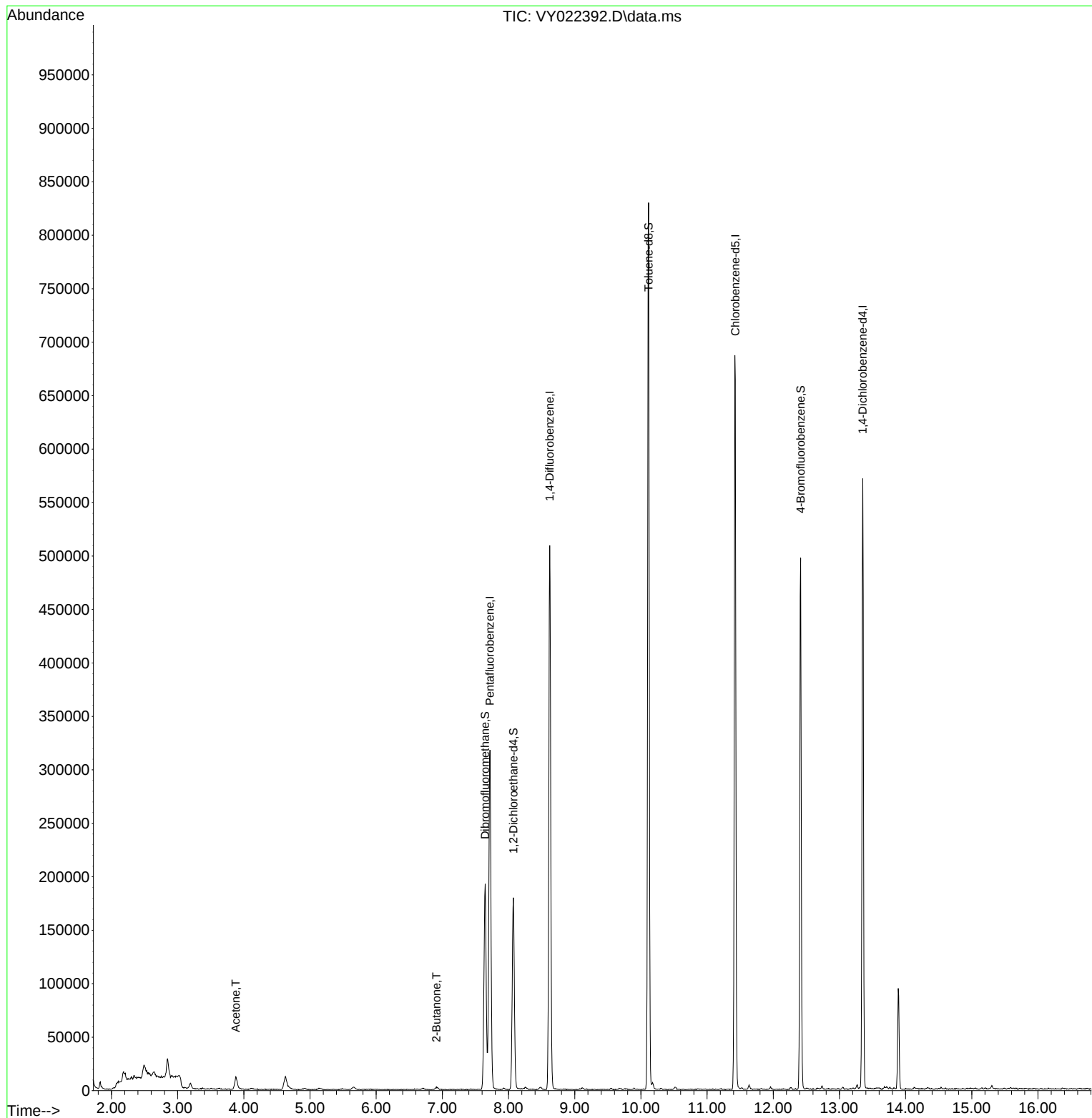
Internal Standards						
1) Pentafluorobenzene	7.719	168	243454	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	431875	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.426	117	349983	50.000	ug/l	0.01
72) 1,4-Dichlorobenzene-d4	13.353	152	131238	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	132631	49.848	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	99.700%
35) Dibromofluoromethane	7.646	113	130701	50.705	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.400%
50) Toluene-d8	10.115	98	520772	49.329	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	98.660%
62) 4-Bromofluorobenzene	12.414	95	134355	40.151	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.300%
Target Compounds						
16) Acetone	3.879	43	20631	41.353	ug/l	95
25) 2-Butanone	6.909	43	3046	3.650	ug/l	96

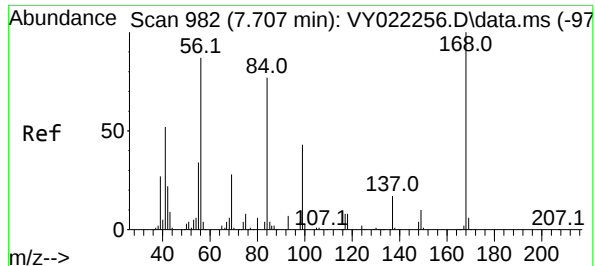
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Time: May 23 03:37:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

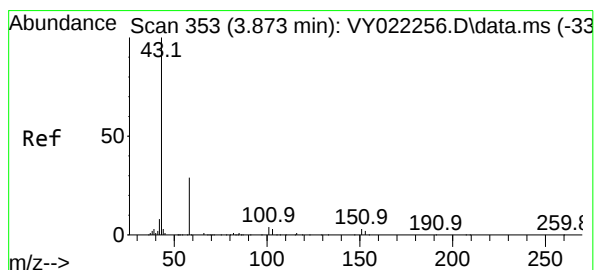
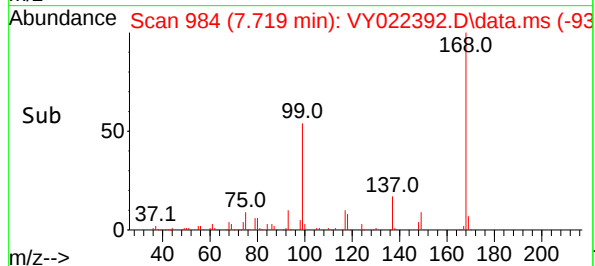
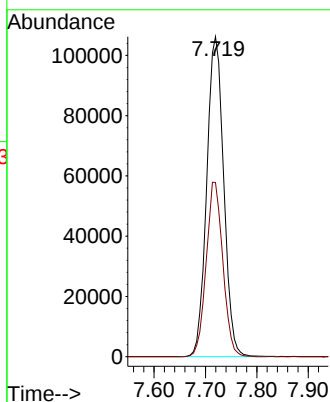
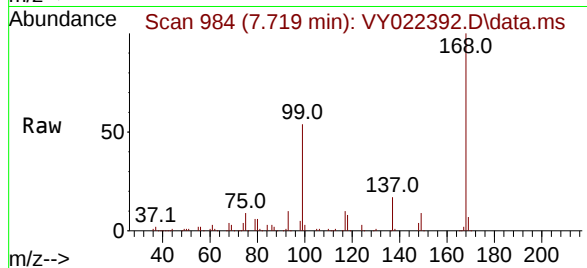




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022392.D
Acq: 22 May 2025 13:45

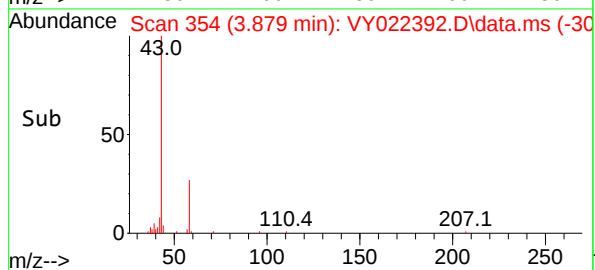
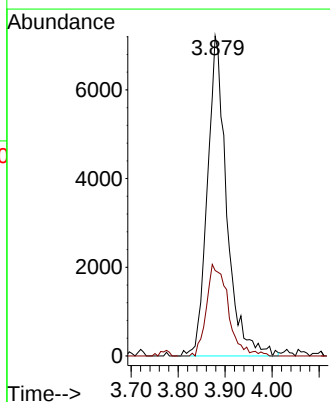
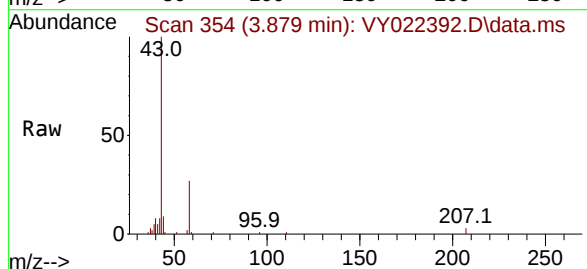
Instrument :
MSVOA_Y
ClientSampleId :
TP-20

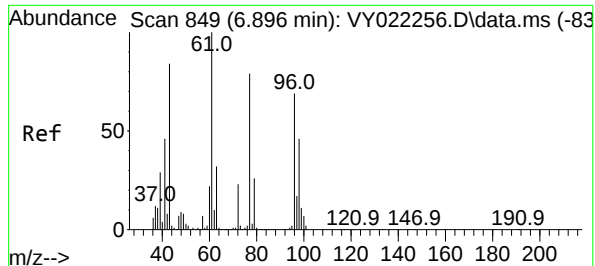
Tgt Ion:168 Resp: 243454
Ion Ratio Lower Upper
168 100
99 54.4 44.2 66.4



#16
Acetone
Concen: 41.353 ug/l
RT: 3.879 min Scan# 354
Delta R.T. 0.006 min
Lab File: VY022392.D
Acq: 22 May 2025 13:45

Tgt Ion: 43 Resp: 20631
Ion Ratio Lower Upper
43 100
58 26.7 23.6 35.4





#25

2-Butanone

Concen: 3.650 ug/l

RT: 6.909 min Scan# 8

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

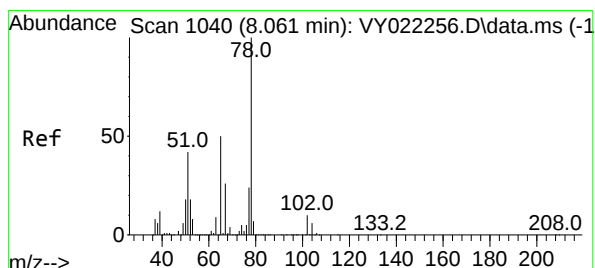
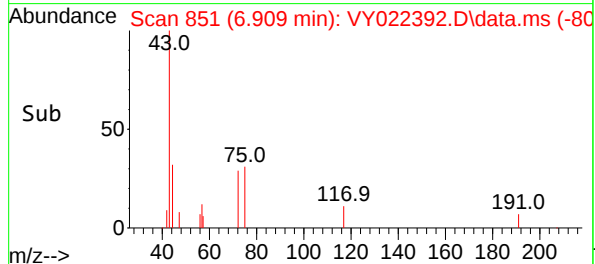
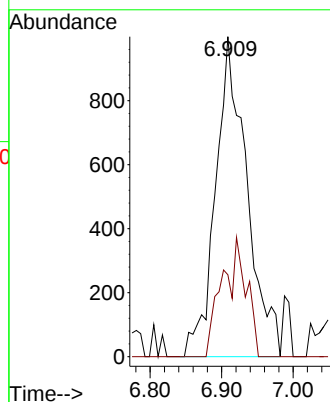
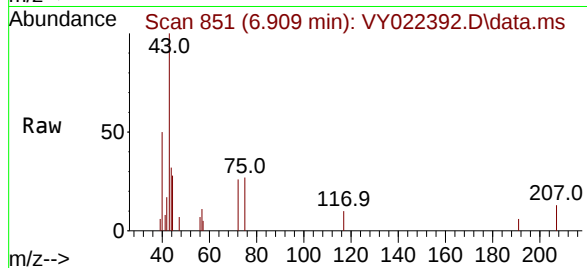
TP-20

Tgt Ion: 43 Resp: 3046

Ion Ratio Lower Upper

43 100

72 25.6 22.1 33.1



#33

1,2-Dichloroethane-d4

Concen: 49.848 ug/l

RT: 8.073 min Scan# 1042

Delta R.T. 0.012 min

Lab File: VY022392.D

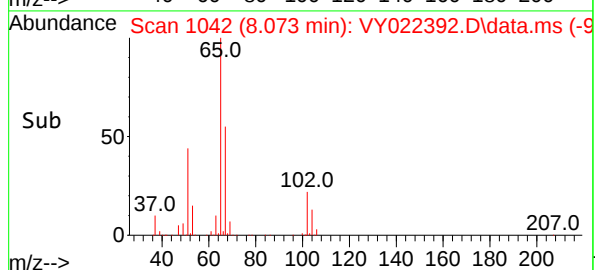
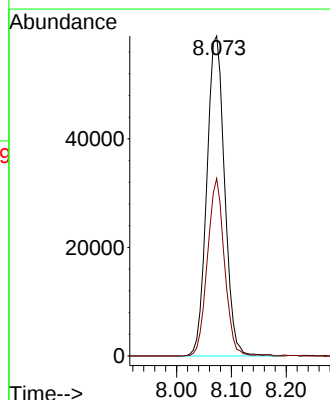
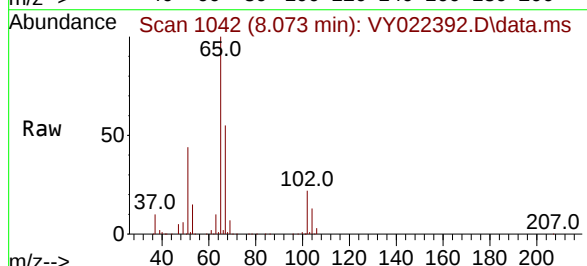
Acq: 22 May 2025 13:45

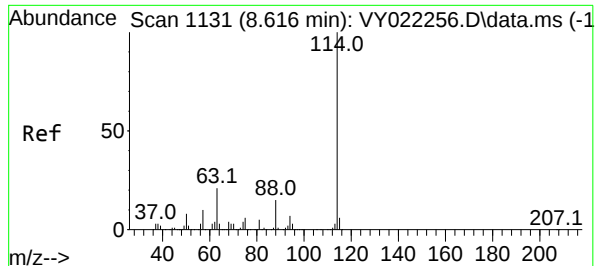
Tgt Ion: 65 Resp: 132631

Ion Ratio Lower Upper

65 100

67 52.9 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

TP-20

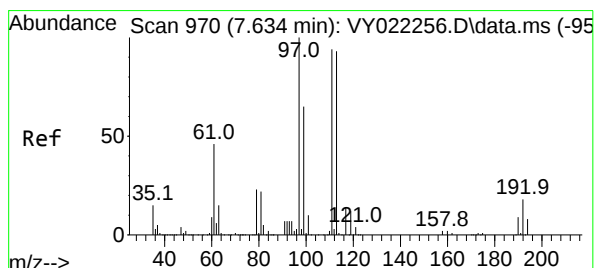
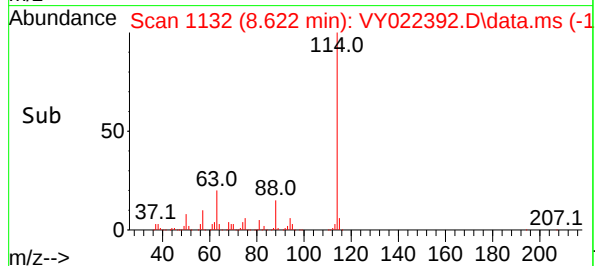
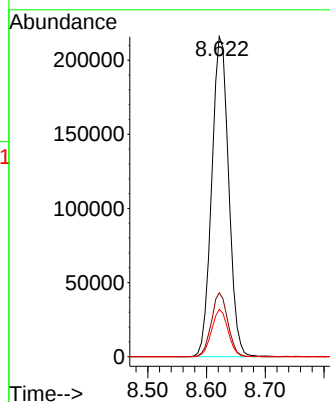
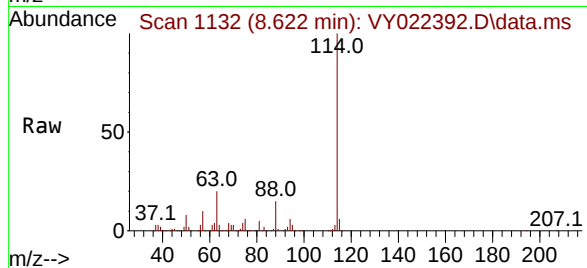
Tgt Ion:114 Resp: 431875

Ion Ratio Lower Upper

114 100

63 20.0 0.0 41.0

88 14.8 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.705 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

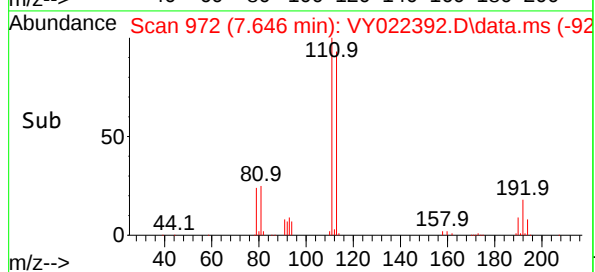
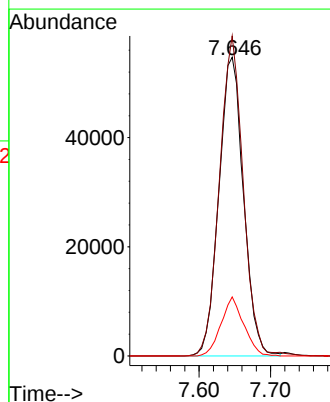
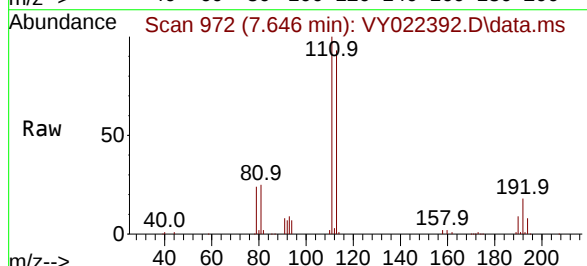
Tgt Ion:113 Resp: 130701

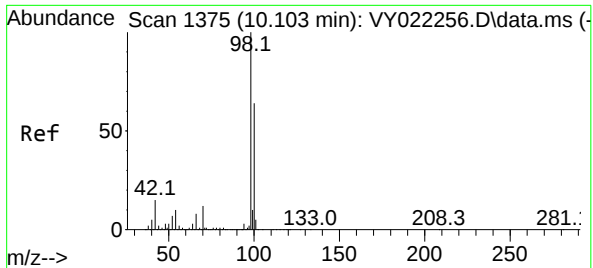
Ion Ratio Lower Upper

113 100

111 103.7 82.6 123.8

192 18.3 15.2 22.8

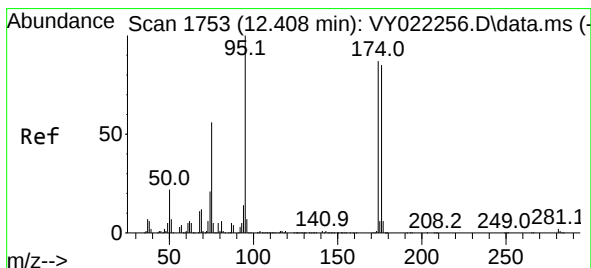
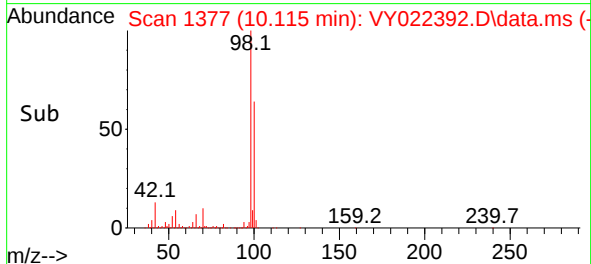
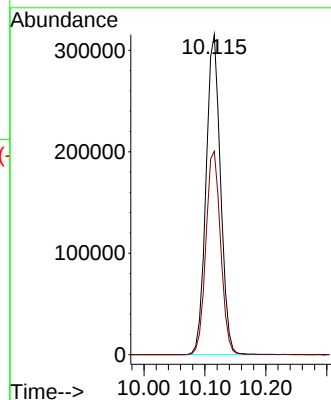
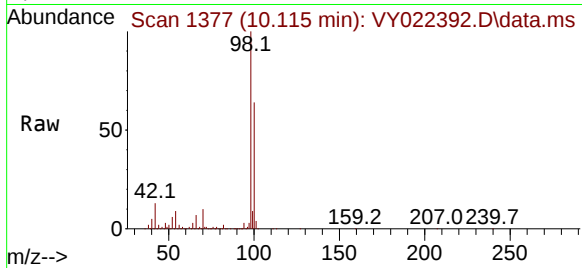




#50
Toluene-d8
Concen: 49.329 ug/l
RT: 10.115 min Scan# 11
Delta R.T. 0.012 min
Lab File: VY022392.D
Acq: 22 May 2025 13:45

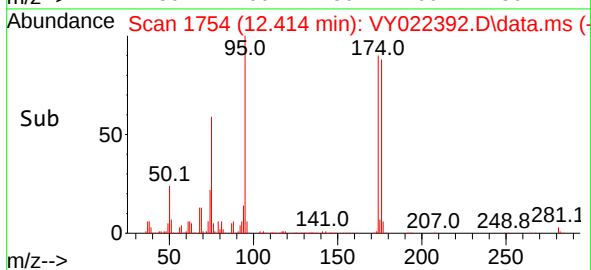
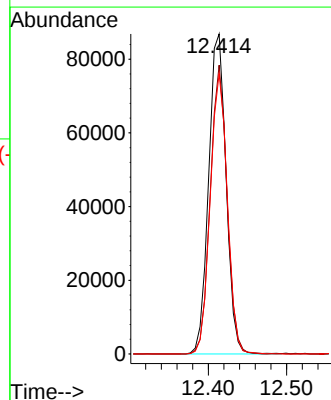
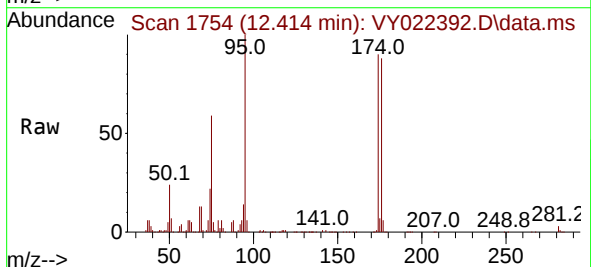
Instrument :
MSVOA_Y
ClientSampleId :
TP-20

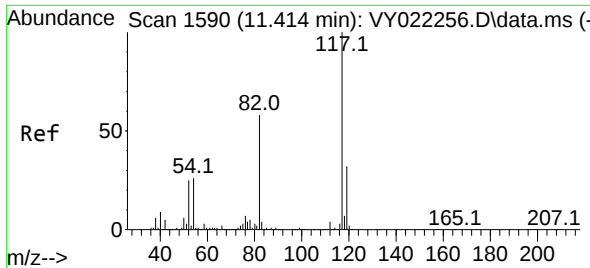
Tgt Ion: 98 Resp: 520772
Ion Ratio Lower Upper
98 100
100 64.6 51.8 77.8



#62
4-Bromofluorobenzene
Concen: 40.151 ug/l
RT: 12.414 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VY022392.D
Acq: 22 May 2025 13:45

Tgt Ion: 95 Resp: 134355
Ion Ratio Lower Upper
95 100
174 86.6 0.0 166.8
176 85.8 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 11

Delta R.T. 0.012 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

Instrument :

MSVOA_Y

ClientSampleId :

TP-20

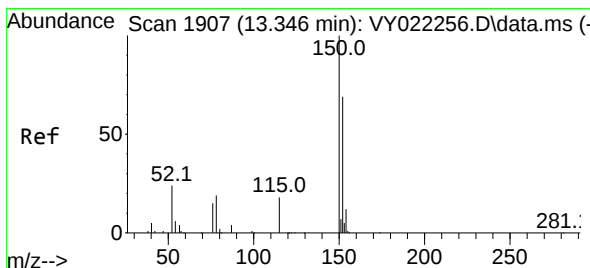
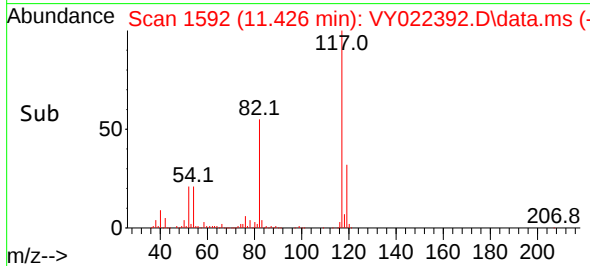
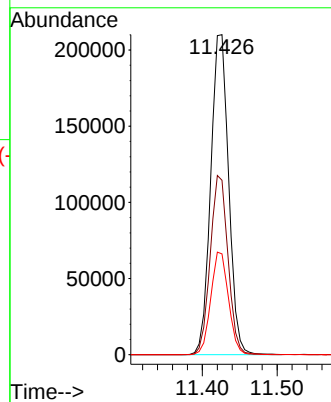
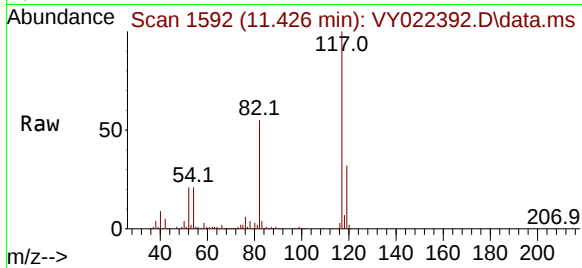
Tgt Ion:117 Resp: 349983

Ion Ratio Lower Upper

117 100

82 54.5 46.6 70.0

119 31.5 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022392.D

Acq: 22 May 2025 13:45

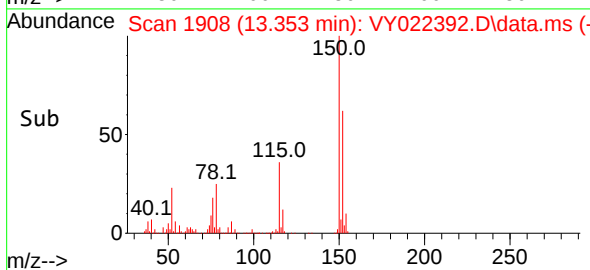
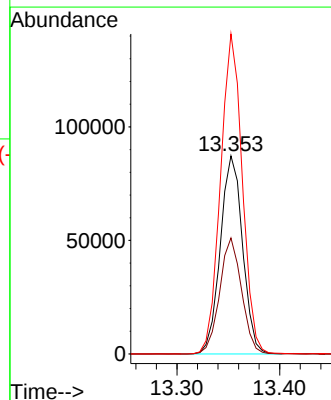
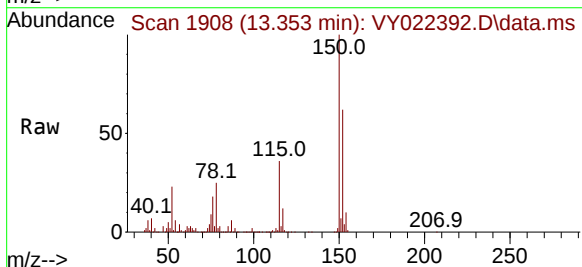
Tgt Ion:152 Resp: 131238

Ion Ratio Lower Upper

152 100

115 57.5 29.4 88.2

150 158.0 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022392.D
 Acq On : 22 May 2025 13:45
 Operator : SY/MD
 Sample : Q2074-04
 Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-20

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022392.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.184	70	76	78	rBV	9270	17769	1.27%	0.252%
2	2.489	120	126	132	rBV3	11084	30781	2.20%	0.436%
3	2.848	178	185	192	rVB2	17453	40922	2.92%	0.580%
4	3.879	342	354	365	rBV2	11875	33952	2.42%	0.481%
5	4.629	465	477	483	rBV3	12294	37142	2.65%	0.526%
6	7.646	962	972	978	rBV	191941	457678	32.67%	6.484%
7	7.719	978	984	994	rVB	316302	713363	50.93%	10.107%
8	8.073	1032	1042	1053	rBV	179491	399700	28.54%	5.663%
9	8.622	1123	1132	1145	rBV	508895	1010434	72.14%	14.315%
10	10.115	1369	1377	1385	rBV	829253	1400704	100.00%	19.844%
11	11.420	1584	1591	1604	rBV	686678	1137347	81.20%	16.113%
12	12.414	1747	1754	1765	rBV	496895	775511	55.37%	10.987%
13	13.353	1898	1908	1916	rBV	570565	853546	60.94%	12.093%
14	13.889	1990	1996	2007	rVB2	94462	149604	10.68%	2.120%

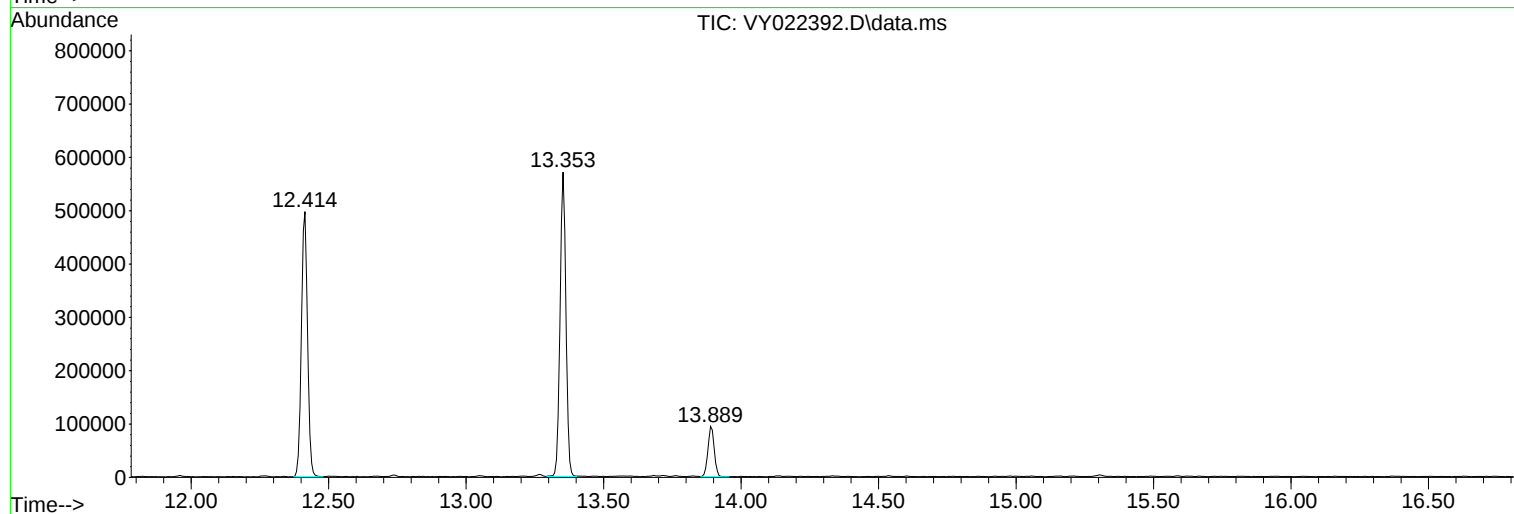
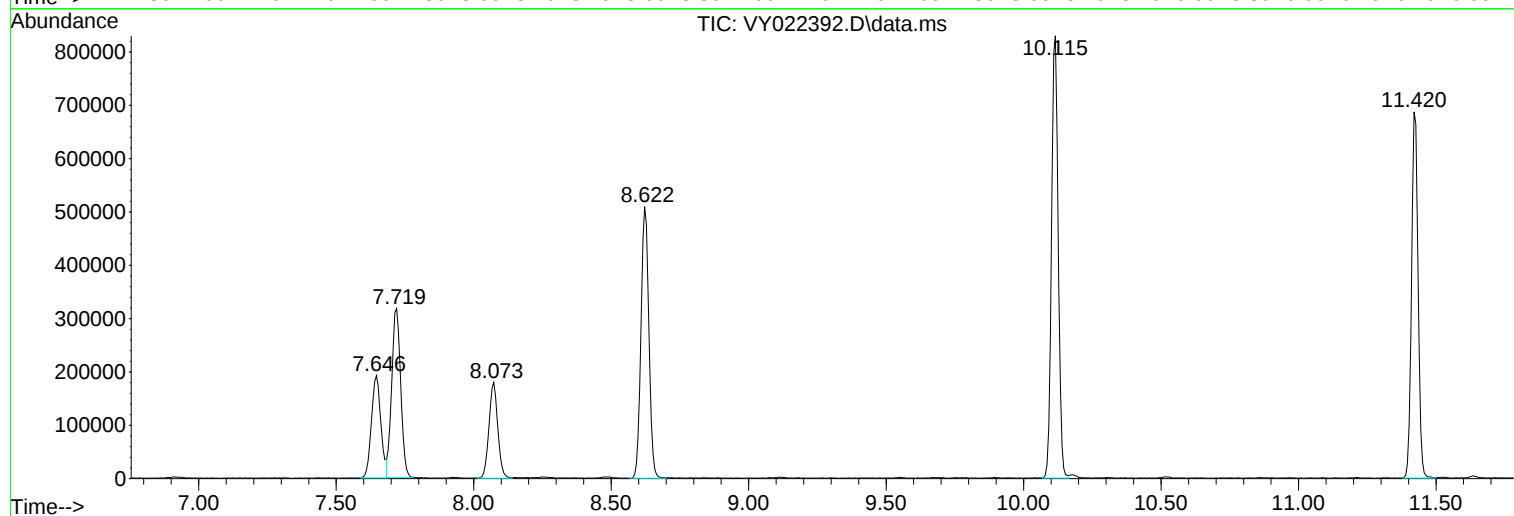
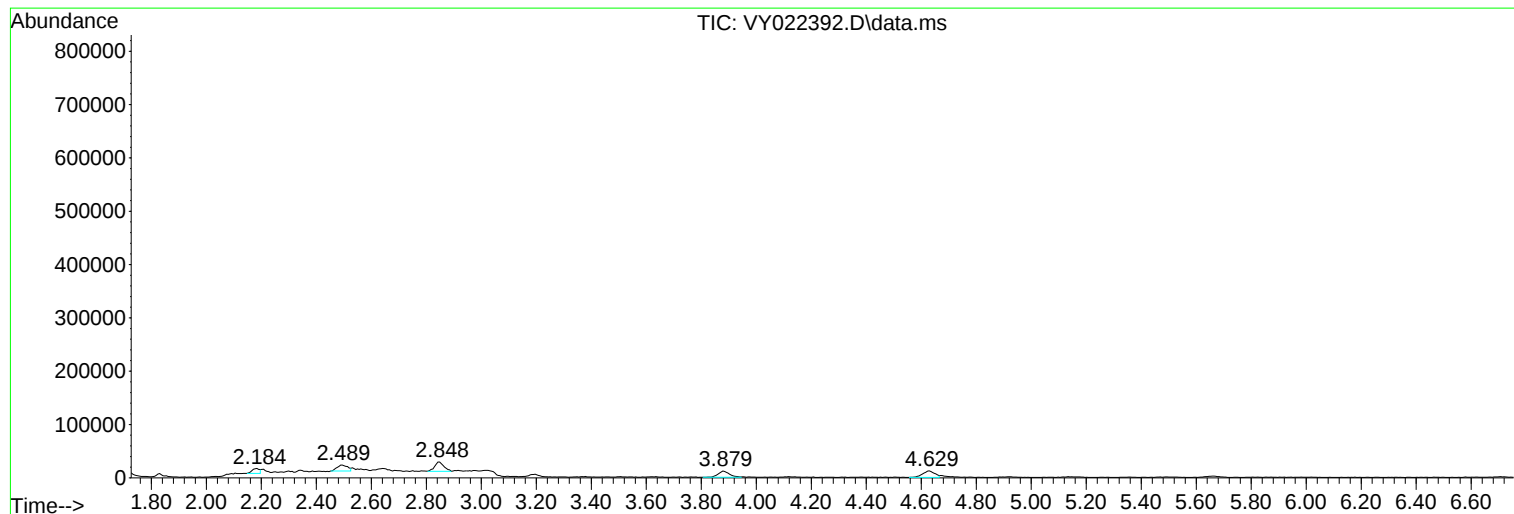
Sum of corrected areas: 7058453

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022392.D
Acq On : 22 May 2025 13:45
Operator : SY/MD
Sample : Q2074-04
Misc : 7.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-20

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-38	SDG No.:	Q2074
Lab Sample ID:	Q2074-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	81.9
Sample Wt/Vol:	7.77 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022393.D	1		05/22/25 14:09	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.90	U	0.90	3.90	ug/Kg
74-87-3	Chloromethane	0.90	U	0.90	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.62	U	0.62	3.90	ug/Kg
74-83-9	Bromomethane	0.84	UQ	0.84	3.90	ug/Kg
75-00-3	Chloroethane	0.99	UQ	0.99	3.90	ug/Kg
75-69-4	Trichlorofluoromethane	0.95	U	0.95	3.90	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	3.90	ug/Kg
75-35-4	1,1-Dichloroethene	0.79	U	0.79	3.90	ug/Kg
67-64-1	Acetone	3.70	U	3.70	19.6	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.57	U	0.57	3.90	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	3.90	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	7.90	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.68	U	0.68	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	3.90	ug/Kg
110-82-7	Cyclohexane	0.62	U	0.62	3.90	ug/Kg
78-93-3	2-Butanone	5.10	U	5.10	19.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.59	U	0.59	3.90	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	3.90	ug/Kg
67-66-3	Chloroform	0.66	U	0.66	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.73	U	0.73	3.90	ug/Kg
108-87-2	Methylcyclohexane	0.72	U	0.72	3.90	ug/Kg
71-43-2	Benzene	0.62	U	0.62	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	3.90	ug/Kg
79-01-6	Trichloroethene	0.64	U	0.64	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.72	U	0.72	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.61	U	0.61	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.80	U	2.80	19.6	ug/Kg
108-88-3	Toluene	0.97	J	0.61	3.90	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-38	SDG No.:	Q2074
Lab Sample ID:	Q2074-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	81.9
Sample Wt/Vol:	7.77	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10
GC Column:	RXI-624	Level :	LOW
Prep Method :	ID : 0.25		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022393.D	1		05/22/25 14:09	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.51	U	0.51	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.49	U	0.49	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	3.90	ug/Kg
591-78-6	2-Hexanone	2.90	U	2.90	19.6	ug/Kg
124-48-1	Dibromochloromethane	0.68	U	0.68	3.90	ug/Kg
106-93-4	1,2-Dibromoethane	0.69	U	0.69	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.83	U	0.83	3.90	ug/Kg
108-90-7	Chlorobenzene	0.72	U	0.72	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.53	U	0.53	3.90	ug/Kg
179601-23-1	m/p-Xylenes	0.97	U	0.97	7.90	ug/Kg
95-47-6	o-Xylene	0.64	U	0.64	3.90	ug/Kg
100-42-5	Styrene	0.56	U	0.56	3.90	ug/Kg
75-25-2	Bromoform	0.68	U	0.68	3.90	ug/Kg
98-82-8	Isopropylbenzene	0.61	U	0.61	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.95	U	0.95	3.90	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.30	U	1.30	3.90	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.20	U	1.20	3.90	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.10	U	1.10	3.90	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	3.90	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.30	U	2.30	3.90	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	3.90	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	47.5	63 - 155	95%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7	70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	49.0	74 - 123	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.7	38 - 136	79%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	242000	7.72
540-36-3	1,4-Difluorobenzene	427000	8.622
3114-55-4	Chlorobenzene-d5	344000	11.42
3855-82-1	1,4-Dichlorobenzene-d4	128000	13.353

TENTATIVE IDENTIFIED COMPOUNDS



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

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-38	SDG No.:	Q2074
Lab Sample ID:	Q2074-05	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	81.9
Sample Wt/Vol:	7.77	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022393.D	1		05/22/25 14:09	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000078-78-4	Butane, 2-methyl-	11.0	J		2.85	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022393.D
 Acq On : 22 May 2025 14:09
 Operator : SY/MD
 Sample : Q2074-05
 Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-38

Quant Time: May 23 03:37:42 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

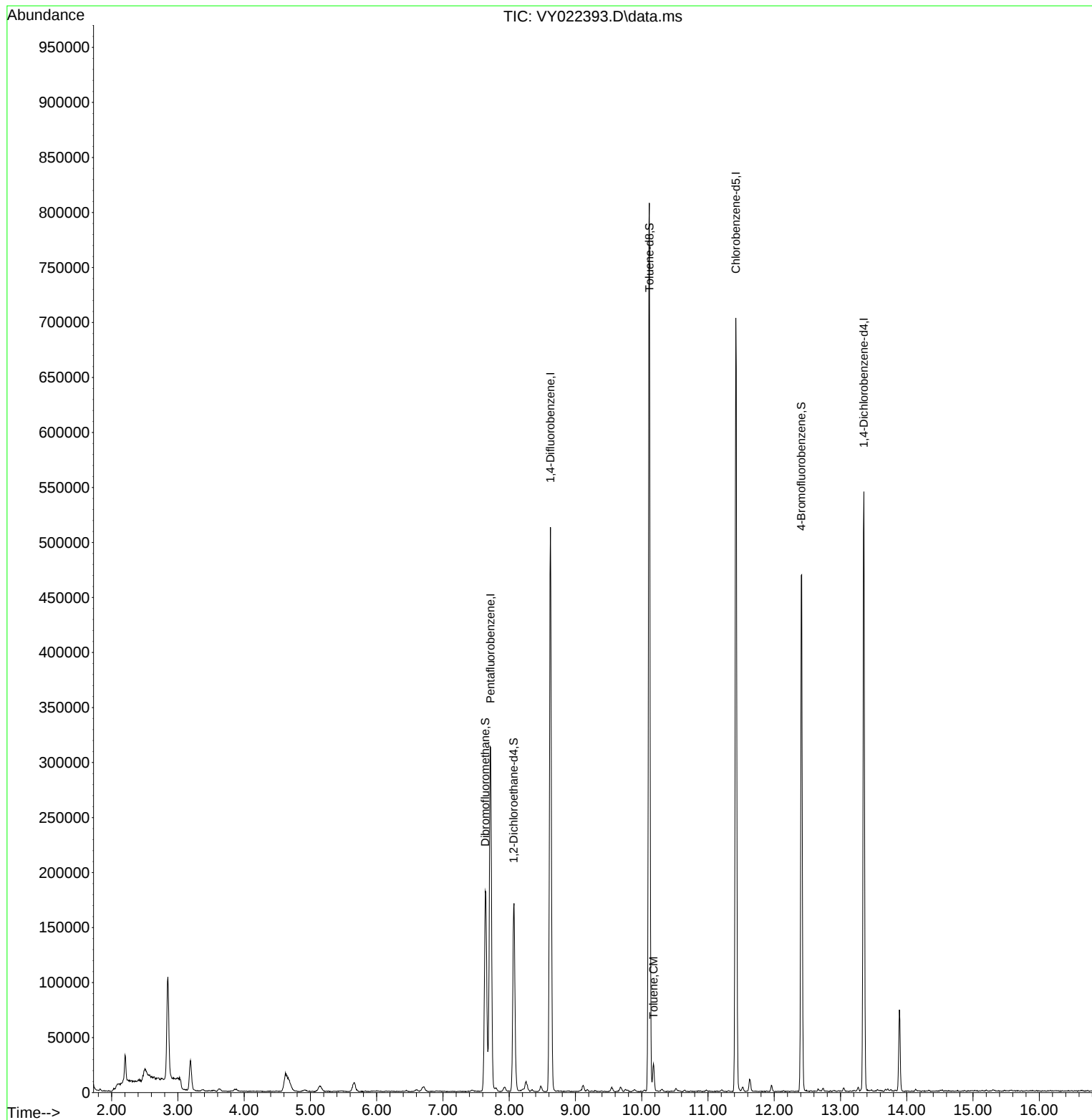
Internal Standards						
1) Pentafluorobenzene	7.720	168	242112	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	427478	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	344204	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	128188	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	125709	47.508	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	95.020%
35) Dibromofluoromethane	7.640	113	129435	50.730	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.460%
50) Toluene-d8	10.115	98	512091	49.006	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	98.020%
62) 4-Bromofluorobenzene	12.408	95	131623	39.739	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	79.480%
Target Compounds						
52) Toluene	10.176	92	9715	1.231	ug/l	Qvalue 99

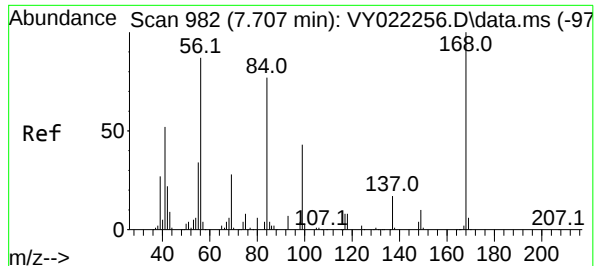
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Time: May 23 03:37:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

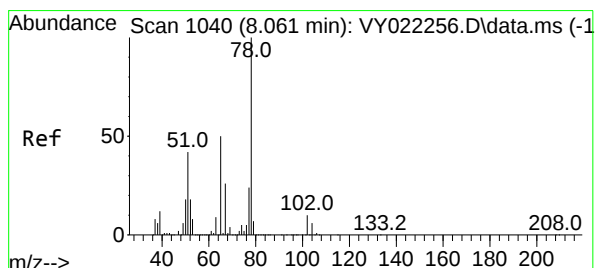
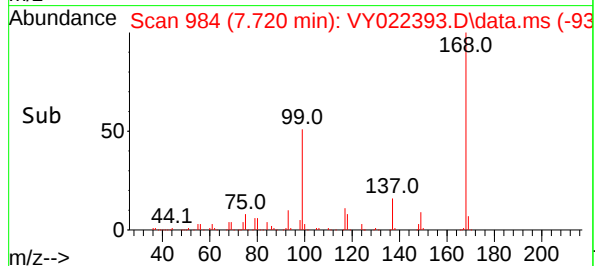
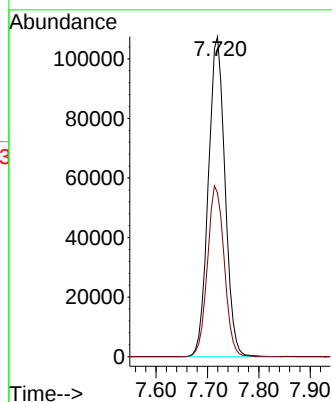
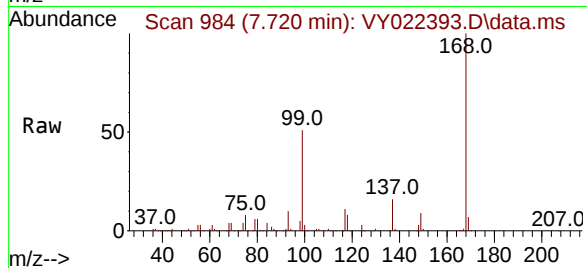




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.720 min Scan# 982
Delta R.T. 0.013 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

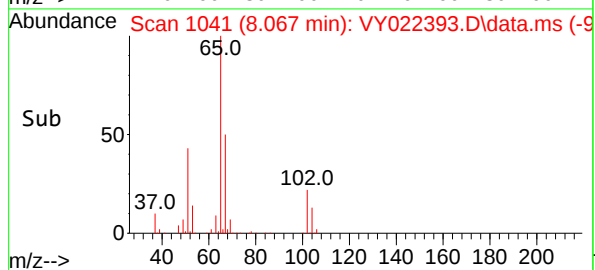
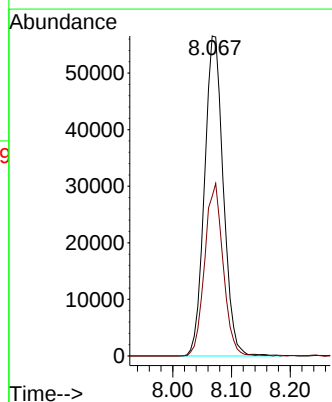
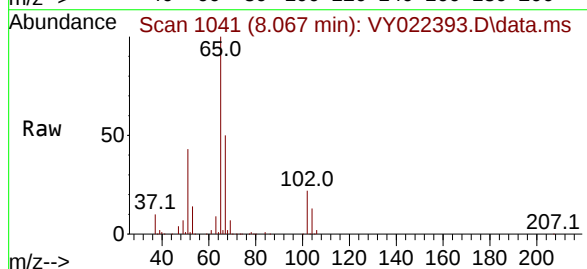
Instrument :
MSVOA_Y
ClientSampleId :
TP-38

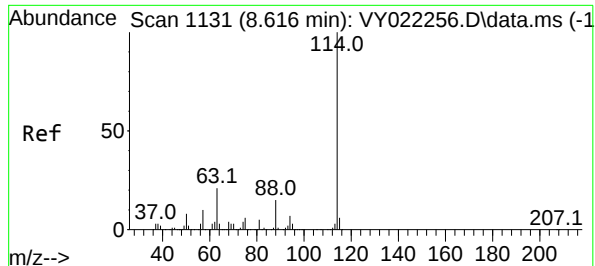
Tgt Ion:168 Resp: 242112
Ion Ratio Lower Upper
168 100
99 51.1 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 47.508 ug/l
RT: 8.067 min Scan# 1041
Delta R.T. 0.006 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

Tgt Ion: 65 Resp: 125709
Ion Ratio Lower Upper
65 100
67 52.8 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022393.D

Acq: 22 May 2025 14:09

Instrument :

MSVOA_Y

ClientSampleId :

TP-38

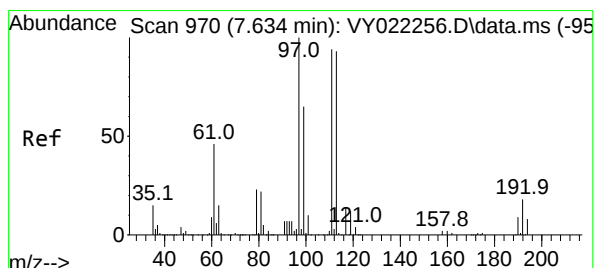
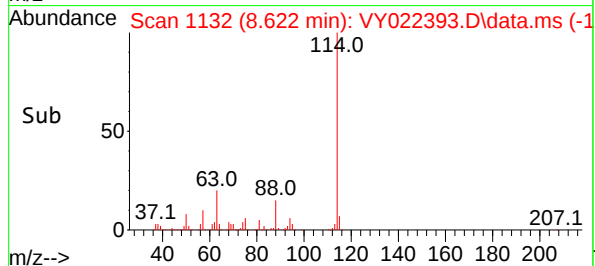
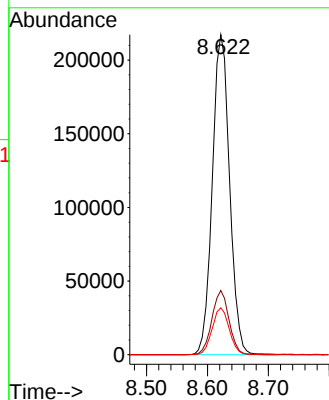
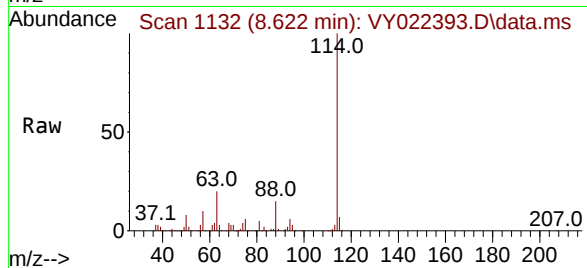
Tgt Ion:114 Resp: 427478

Ion Ratio Lower Upper

114 100

63 20.1 0.0 41.0

88 14.7 0.0 29.4



#35

Dibromofluoromethane

Concen: 50.730 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY022393.D

Acq: 22 May 2025 14:09

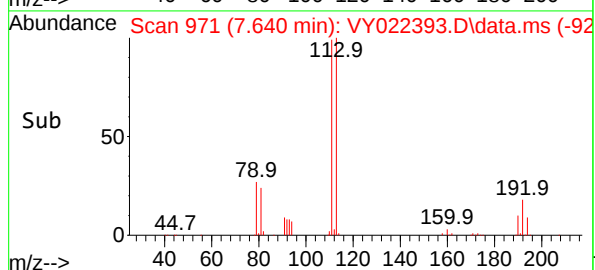
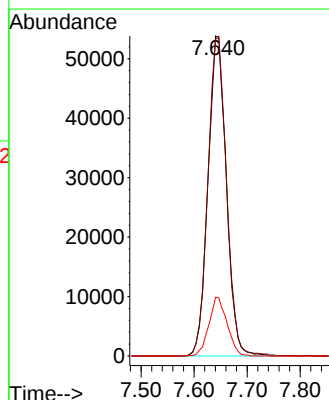
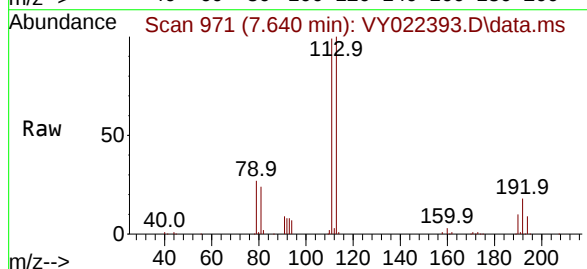
Tgt Ion:113 Resp: 129435

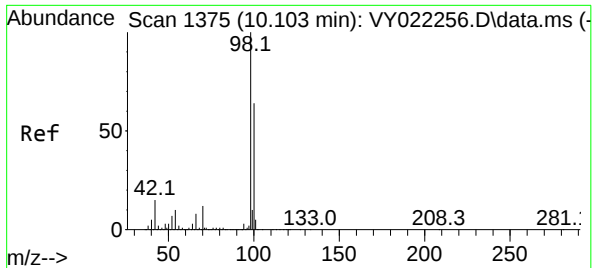
Ion Ratio Lower Upper

113 100

111 100.8 82.6 123.8

192 18.2 15.2 22.8

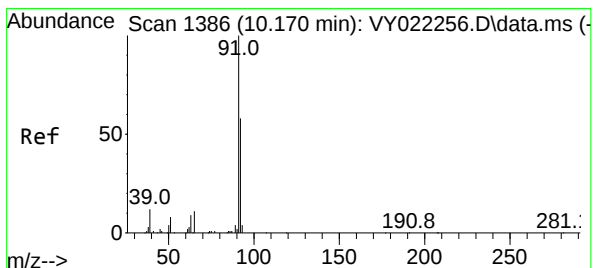
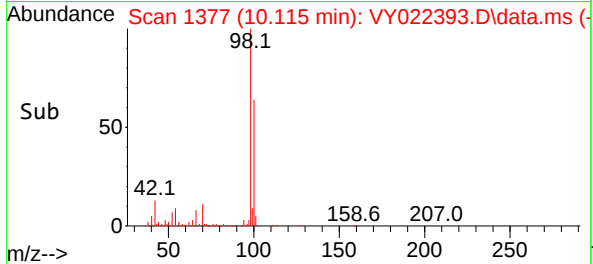
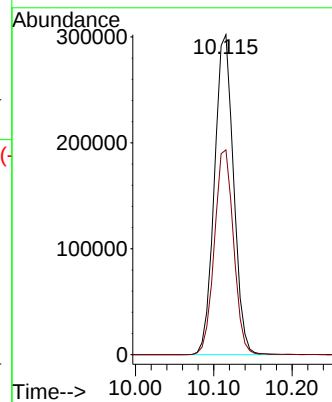
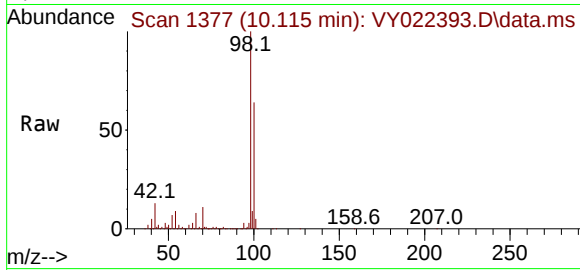




#50
Toluene-d8
Concen: 49.006 ug/l
RT: 10.115 min Scan# 1377
Delta R.T. 0.012 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

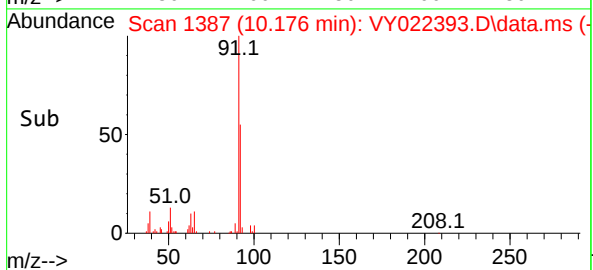
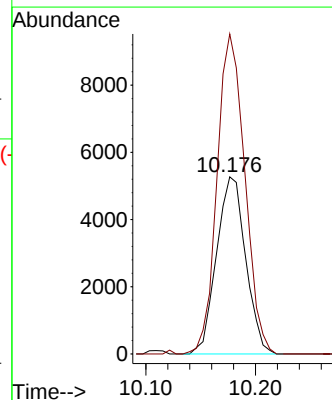
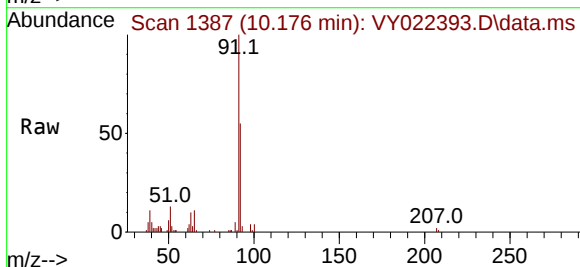
Instrument :
MSVOA_Y
ClientSampleId :
TP-38

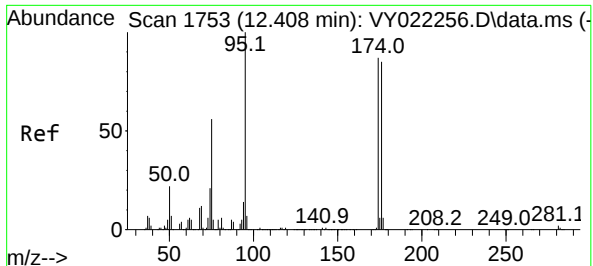
Tgt Ion: 98 Resp: 512091
Ion Ratio Lower Upper
98 100
100 64.4 51.8 77.8



#52
Toluene
Concen: 1.231 ug/l
RT: 10.176 min Scan# 1387
Delta R.T. 0.006 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

Tgt Ion: 92 Resp: 9715
Ion Ratio Lower Upper
92 100
91 172.5 139.1 208.7

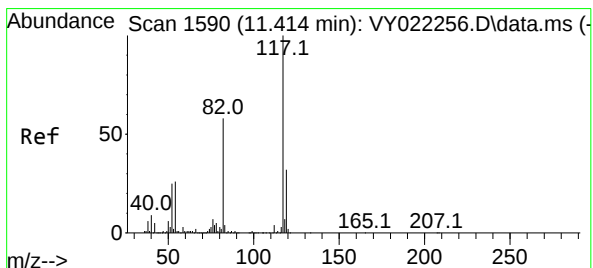
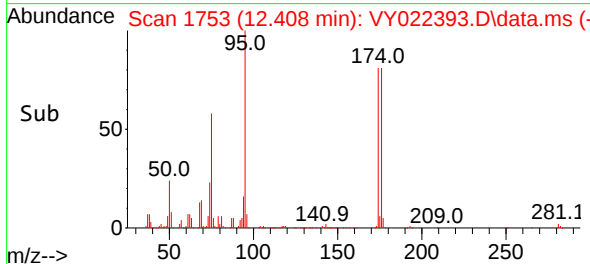
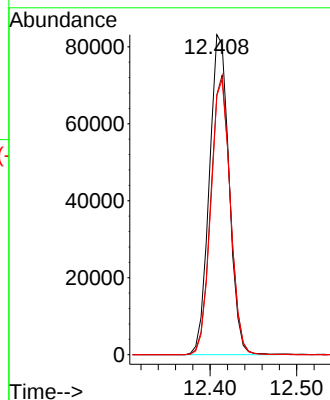
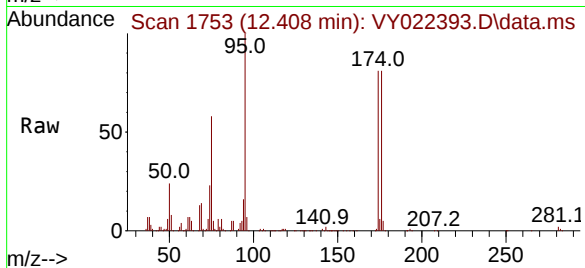




#62
4-Bromofluorobenzene
Concen: 39.739 ug/l
RT: 12.408 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

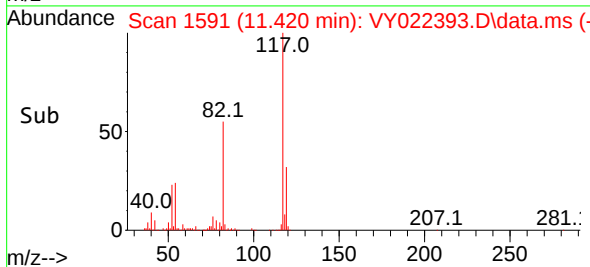
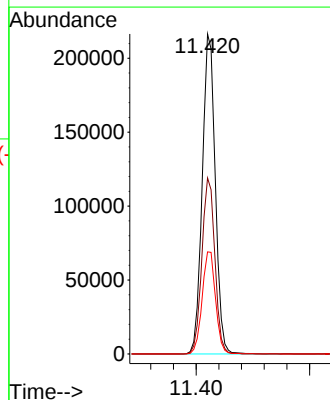
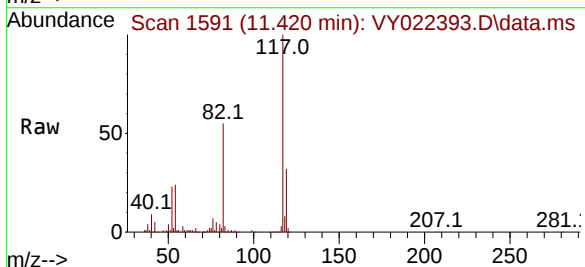
Instrument :
MSVOA_Y
ClientSampleId :
TP-38

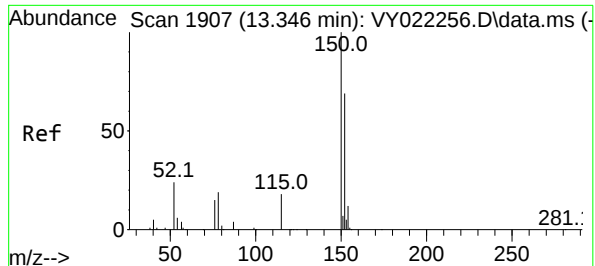
Tgt Ion: 95 Resp: 131623
Ion Ratio Lower Upper
95 100
174 86.1 0.0 166.8
176 84.5 0.0 160.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.420 min Scan# 1591
Delta R.T. 0.006 min
Lab File: VY022393.D
Acq: 22 May 2025 14:09

Tgt Ion: 117 Resp: 344204
Ion Ratio Lower Upper
117 100
82 55.0 46.6 70.0
119 31.9 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 19

Delta R.T. 0.006 min

Lab File: VY022393.D

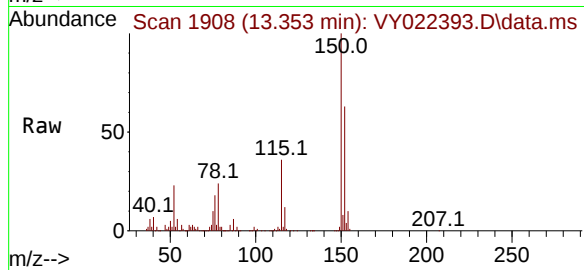
Acq: 22 May 2025 14:09

Instrument :

MSVOA_Y

ClientSampleId :

TP-38



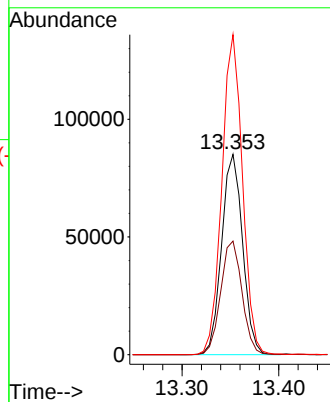
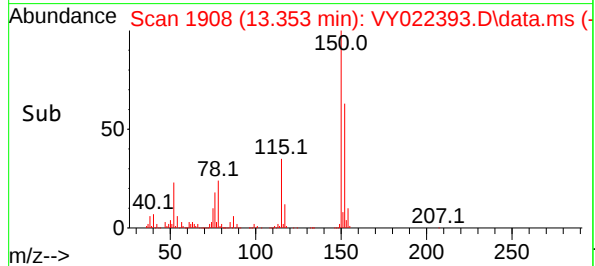
Tgt Ion:152 Resp: 128188

Ion Ratio Lower Upper

152 100

115 57.7 29.4 88.2

150 156.9 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022393.D
 Acq On : 22 May 2025 14:09
 Operator : SY/MD
 Sample : Q2074-05
 Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-38

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022393.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.202	72	79	84	rBV	25351	43636	3.15%	0.596%
2	2.501	121	128	137	rBV8	10231	38251	2.76%	0.522%
3	2.848	178	185	197	rVB	92539	201872	14.59%	2.756%
4	3.190	233	241	255	rVB2	27656	67012	4.84%	0.915%
5	4.623	466	476	482	rBV2	16687	55454	4.01%	0.757%
6	5.141	548	561	572	rBV6	5245	20797	1.50%	0.284%
7	5.659	635	646	655	rBV4	8185	25759	1.86%	0.352%
8	7.640	962	971	977	rBV	181959	438213	31.66%	5.982%
9	7.713	977	983	994	rVB	311318	722276	52.19%	9.860%
10	8.073	1033	1042	1054	rBV	170766	385527	27.86%	5.263%
11	8.256	1059	1072	1081	rVB2	9208	28651	2.07%	0.391%
12	8.622	1121	1132	1147	rBV	512925	1006449	72.72%	13.739%
13	10.115	1369	1377	1384	rBV	807085	1383987	100.00%	18.893%
14	10.176	1384	1387	1400	rVB	25098	42995	3.11%	0.587%
15	11.420	1584	1591	1602	rBV	703210	1124020	81.22%	15.344%
16	11.627	1619	1625	1635	rVB3	10951	20377	1.47%	0.278%
17	12.414	1746	1754	1763	rBV	469759	766591	55.39%	10.465%
18	13.353	1898	1908	1916	rBV	544727	834934	60.33%	11.398%
19	13.889	1990	1996	2004	rVB2	74030	118583	8.57%	1.619%

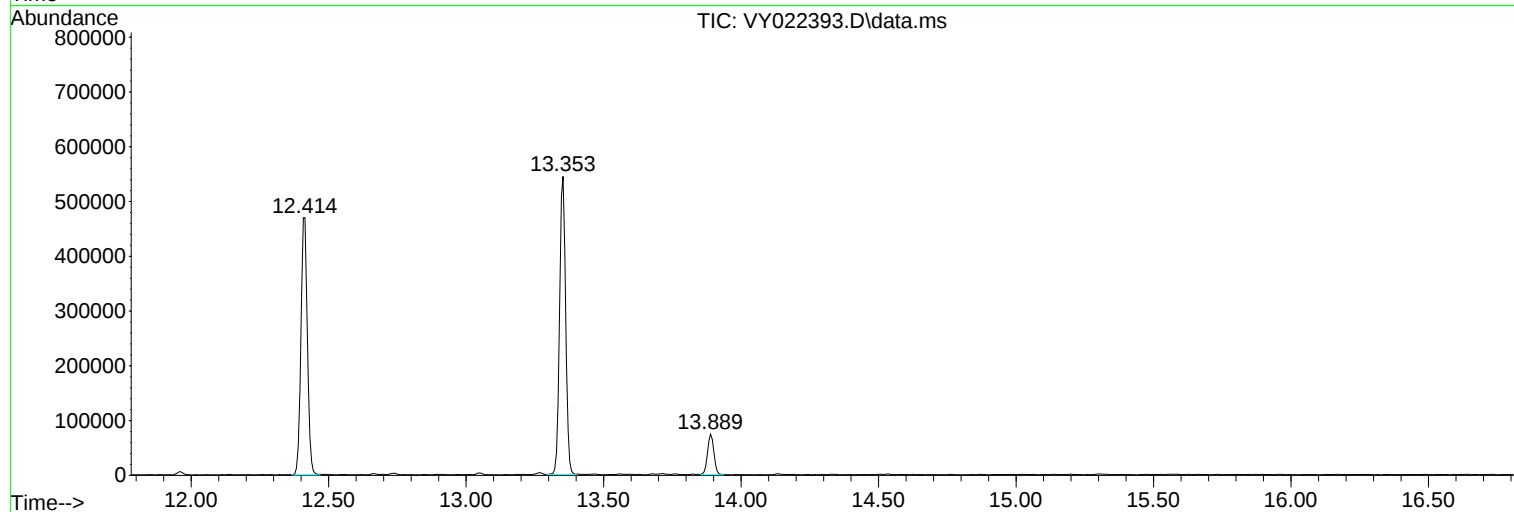
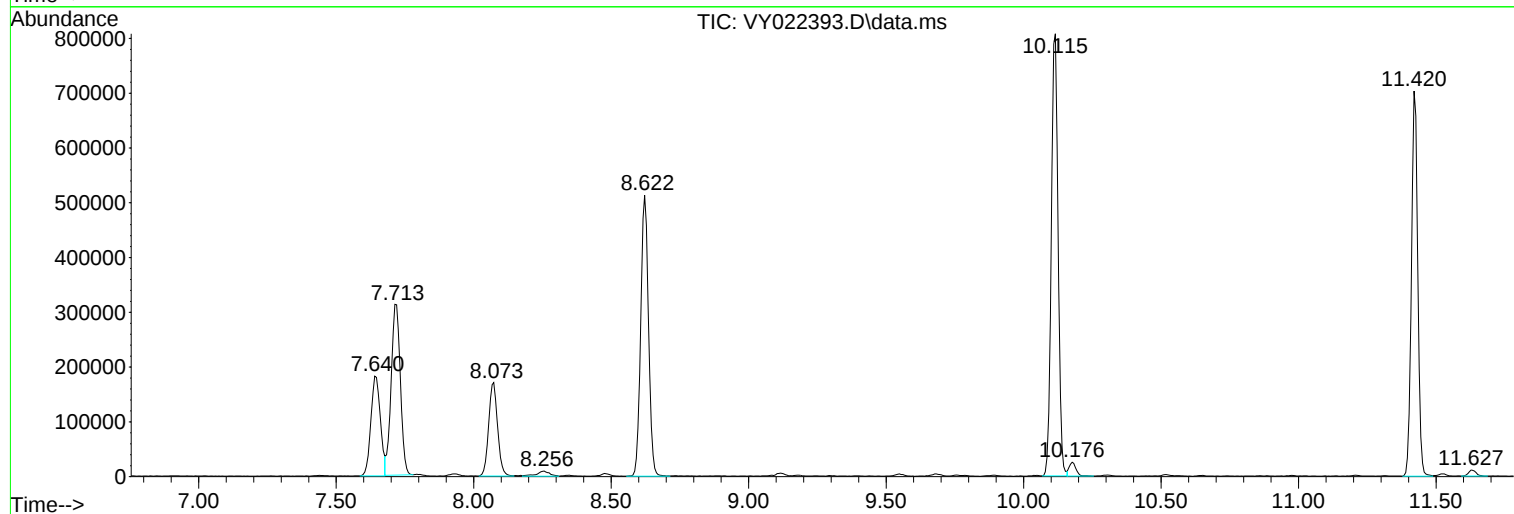
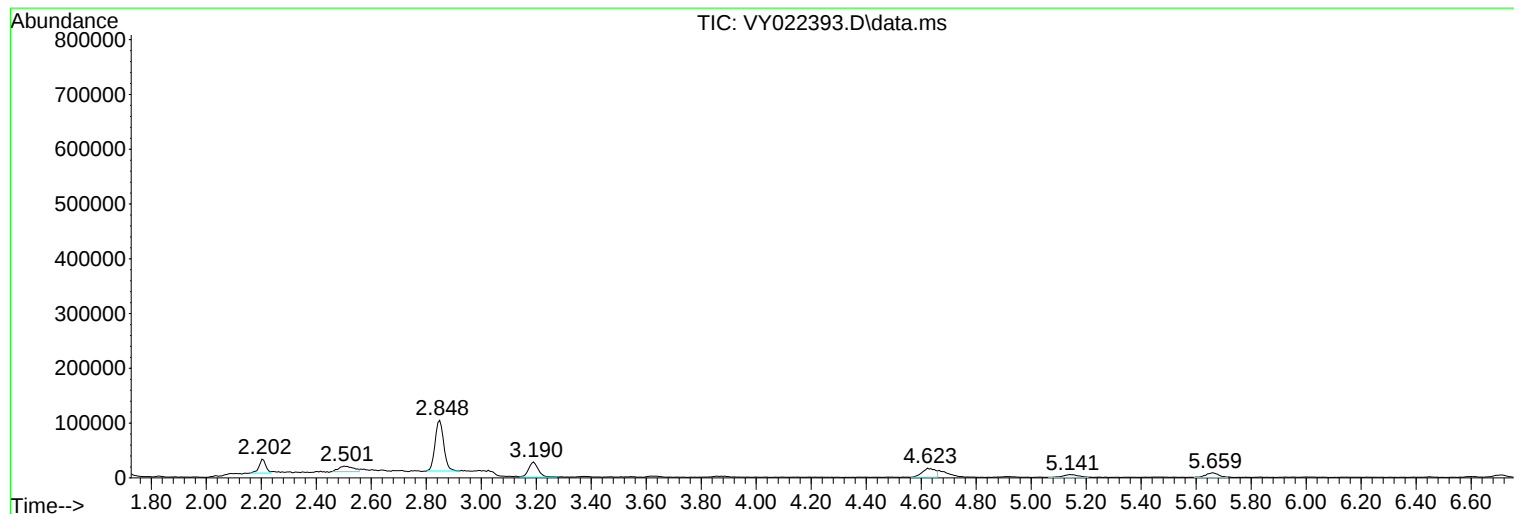
Sum of corrected areas: 7325384

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

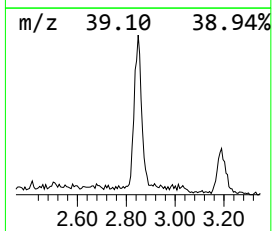
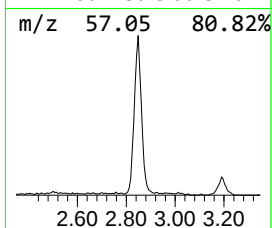
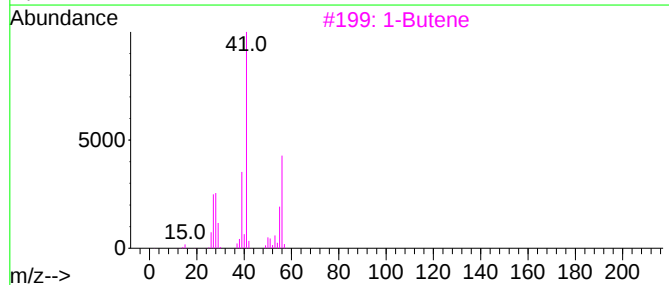
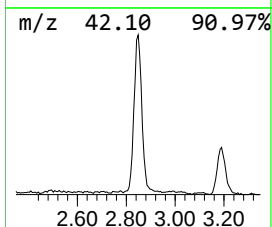
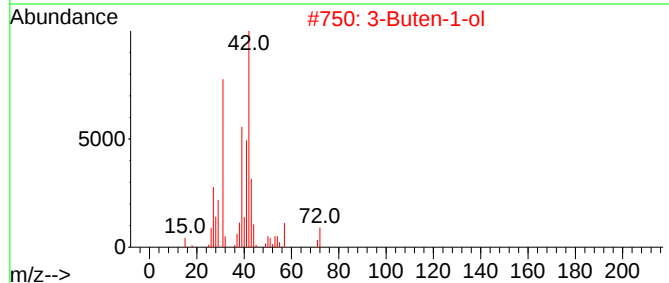
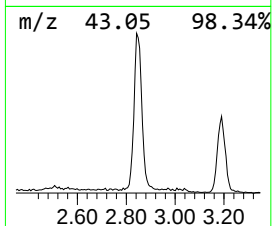
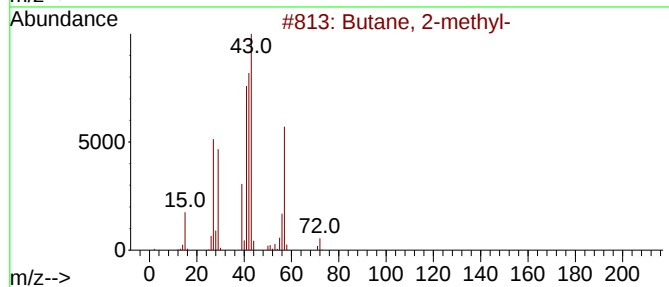
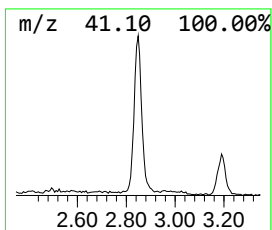
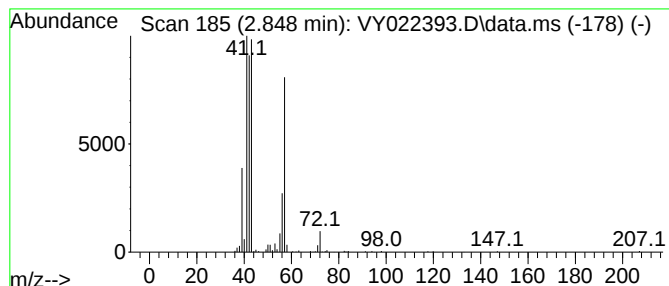
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.848	13.97 ug/l	201872	Pentafluorobenzene	7.720

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butane, 2-methyl-	72	C5H12	000078-78-4	64
2			3-Buten-1-ol	72	C4H8O	000627-27-0	28
3			1-Butene	56	C4H8	000106-98-9	27
4			1-Propene, 2-methyl-	56	C4H8	000115-11-7	22
5			1,1-Diisobutoxy-butane	202	C12H26O2	013002-16-9	17



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022393.D
Acq On : 22 May 2025 14:09
Operator : SY/MD
Sample : Q2074-05
Misc : 7.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-38

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Butane, 2-methyl-	2.848	14.0	ug/l	201872	1	7.720	722276	50.0

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-19	SDG No.:	Q2074
Lab Sample ID:	Q2074-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	85.9
Sample Wt/Vol:	7.18 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022394.D	1		05/22/25 14:32	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.92	U	0.92	4.10	ug/Kg
74-87-3	Chloromethane	0.92	U	0.92	4.10	ug/Kg
75-01-4	Vinyl Chloride	0.64	U	0.64	4.10	ug/Kg
74-83-9	Bromomethane	0.87	UQ	0.87	4.10	ug/Kg
75-00-3	Chloroethane	1.00	UQ	1.00	4.10	ug/Kg
75-69-4	Trichlorofluoromethane	0.98	U	0.98	4.10	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.86	U	0.86	4.10	ug/Kg
75-35-4	1,1-Dichloroethene	0.81	U	0.81	4.10	ug/Kg
67-64-1	Acetone	11.3	J	3.80	20.3	ug/Kg
75-15-0	Carbon Disulfide	0.86	U	0.86	4.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.59	U	0.59	4.10	ug/Kg
79-20-9	Methyl Acetate	1.20	U	1.20	4.10	ug/Kg
75-09-2	Methylene Chloride	2.90	U	2.90	8.10	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.70	U	0.70	4.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.65	U	0.65	4.10	ug/Kg
110-82-7	Cyclohexane	0.64	U	0.64	4.10	ug/Kg
78-93-3	2-Butanone	5.30	U	5.30	20.3	ug/Kg
56-23-5	Carbon Tetrachloride	0.79	U	0.79	4.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	4.10	ug/Kg
74-97-5	Bromochloromethane	0.93	U	0.93	4.10	ug/Kg
67-66-3	Chloroform	0.68	U	0.68	4.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.75	U	0.75	4.10	ug/Kg
108-87-2	Methylcyclohexane	0.74	U	0.74	4.10	ug/Kg
71-43-2	Benzene	1.70	J	0.64	4.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.64	U	0.64	4.10	ug/Kg
79-01-6	Trichloroethene	0.66	U	0.66	4.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.74	U	0.74	4.10	ug/Kg
75-27-4	Bromodichloromethane	0.63	U	0.63	4.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2.90	U	2.90	20.3	ug/Kg
108-88-3	Toluene	0.63	U	0.63	4.10	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-19	SDG No.:	Q2074
Lab Sample ID:	Q2074-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	85.9
Sample Wt/Vol:	7.18	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022394.D	1		05/22/25 14:32	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.53	U	0.53	4.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	4.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.75	U	0.75	4.10	ug/Kg
591-78-6	2-Hexanone	3.00	U	3.00	20.3	ug/Kg
124-48-1	Dibromochloromethane	0.71	U	0.71	4.10	ug/Kg
106-93-4	1,2-Dibromoethane	0.71	U	0.71	4.10	ug/Kg
127-18-4	Tetrachloroethene	0.85	U	0.85	4.10	ug/Kg
108-90-7	Chlorobenzene	0.74	U	0.74	4.10	ug/Kg
100-41-4	Ethyl Benzene	0.54	U	0.54	4.10	ug/Kg
179601-23-1	m/p-Xylenes	1.00	U	1.00	8.10	ug/Kg
95-47-6	o-Xylene	0.66	U	0.66	4.10	ug/Kg
100-42-5	Styrene	0.58	U	0.58	4.10	ug/Kg
75-25-2	Bromoform	0.70	U	0.70	4.10	ug/Kg
98-82-8	Isopropylbenzene	0.63	U	0.63	4.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.98	U	0.98	4.10	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.40	U	1.40	4.10	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.30	U	1.30	4.10	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.20	U	1.20	4.10	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.50	U	1.50	4.10	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.40	U	2.40	4.10	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.60	U	2.60	4.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.6		63 - 155	93%	SPK: 50
1868-53-7	Dibromofluoromethane	49.7		70 - 134	99%	SPK: 50
2037-26-5	Toluene-d8	48.0		74 - 123	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	33.7		38 - 136	67%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	232000	7.719			
540-36-3	1,4-Difluorobenzene	399000	8.622			
3114-55-4	Chlorobenzene-d5	296000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	94100	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-19	SDG No.:	Q2074
Lab Sample ID:	Q2074-06	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	85.9
Sample Wt/Vol:	7.18 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022394.D	1		05/22/25 14:32	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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_Y\Data\VY052225\
 Data File : VY022394.D
 Acq On : 22 May 2025 14:32
 Operator : SY/MD
 Sample : Q2074-06
 Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-19

Quant Time: May 23 03:38:04 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

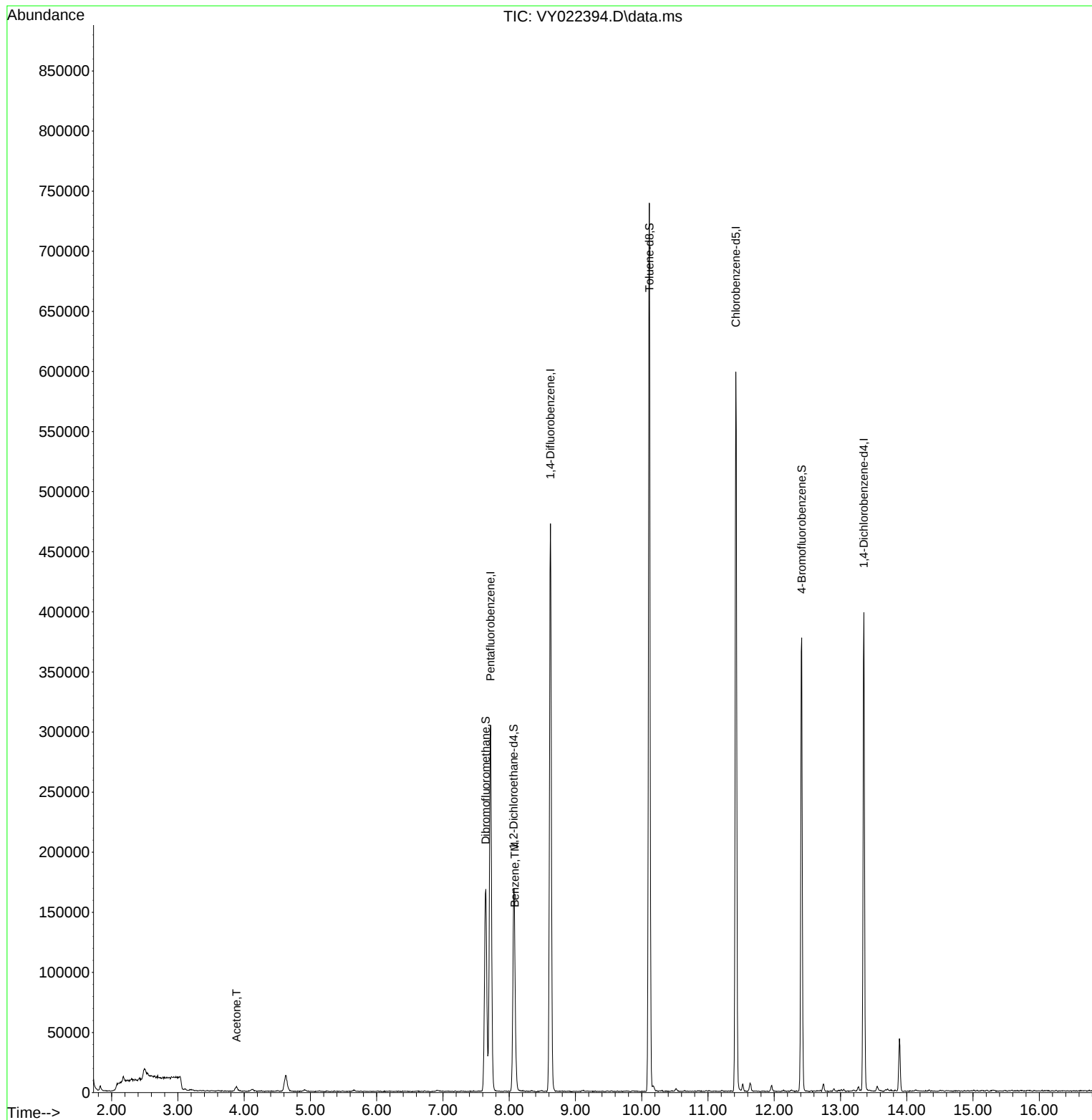
Internal Standards						
1) Pentafluorobenzene	7.719	168	231559	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	398601	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	296277	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	94056	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	117822	46.557	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	93.120%
35) Dibromofluoromethane	7.646	113	118230	49.696	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	99.400%
50) Toluene-d8	10.115	98	467756	48.006	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.020%
62) 4-Bromofluorobenzene	12.414	95	103960	33.661	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	67.320%
Target Compounds						
16) Acetone	3.885	43	6639	13.991	ug/l #	86
40) Benzene	8.085	78	23915	2.059	ug/l	94

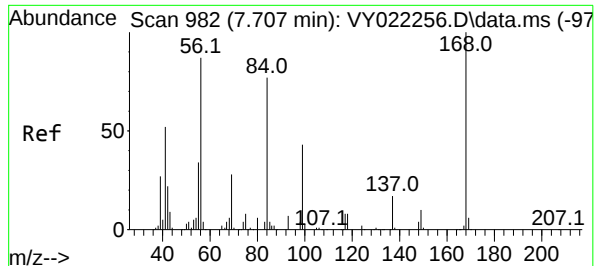
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Time: May 23 03:38:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

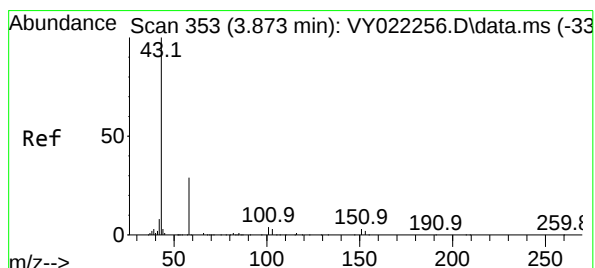
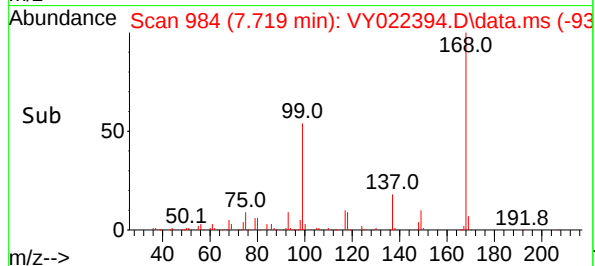
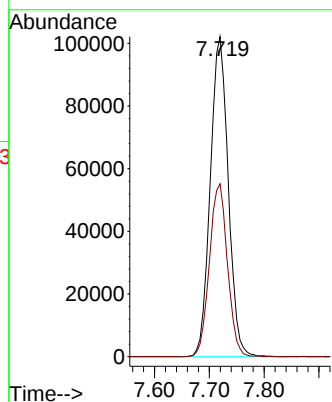
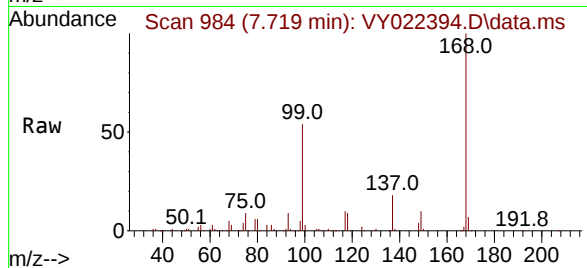




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022394.D
Acq: 22 May 2025 14:32

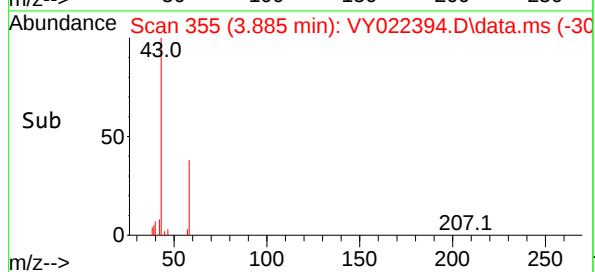
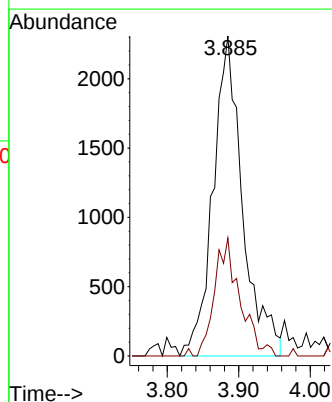
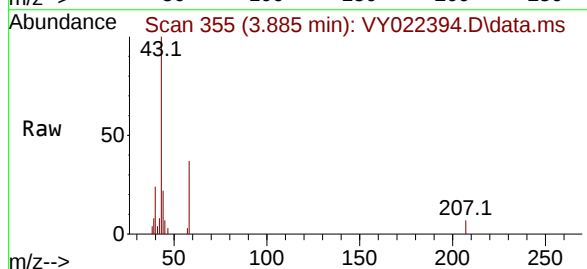
Instrument :
MSVOA_Y
ClientSampleId :
TP-19

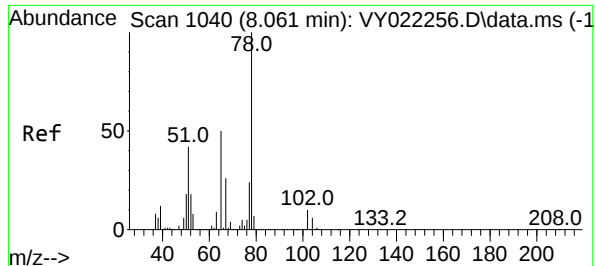
Tgt Ion:168 Resp: 231559
Ion Ratio Lower Upper
168 100
99 54.0 44.2 66.4



#16
Acetone
Concen: 13.991 ug/l
RT: 3.885 min Scan# 355
Delta R.T. 0.012 min
Lab File: VY022394.D
Acq: 22 May 2025 14:32

Tgt Ion: 43 Resp: 6639
Ion Ratio Lower Upper
43 100
58 36.9 23.6 35.4#





#33

1,2-Dichloroethane-d4

Concen: 46.557 ug/l

RT: 8.067 min Scan# 110

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

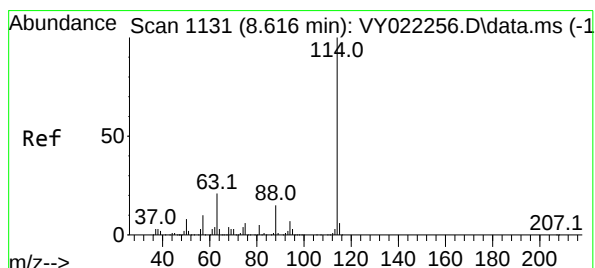
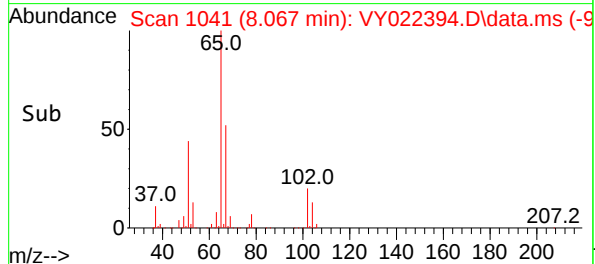
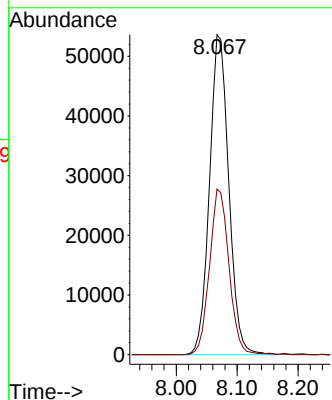
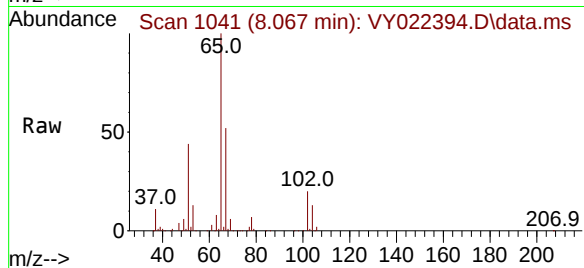
TP-19

Tgt Ion: 65 Resp: 117822

Ion Ratio Lower Upper

65 100

67 52.2 0.0 104.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1132

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

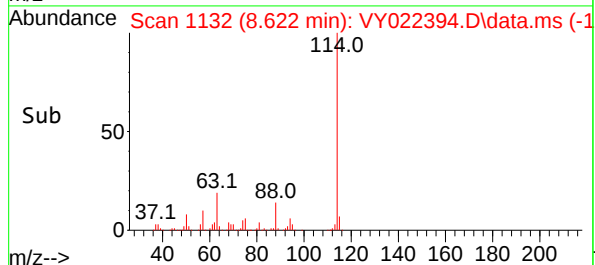
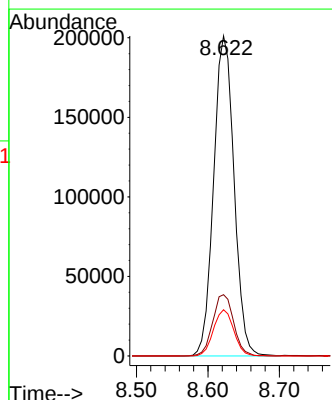
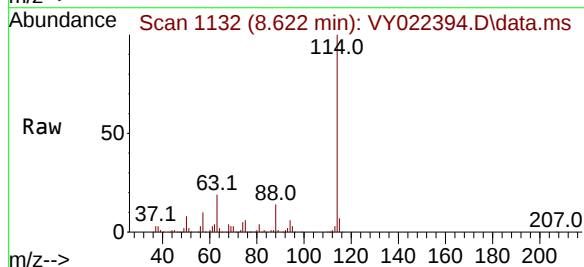
Tgt Ion: 114 Resp: 398601

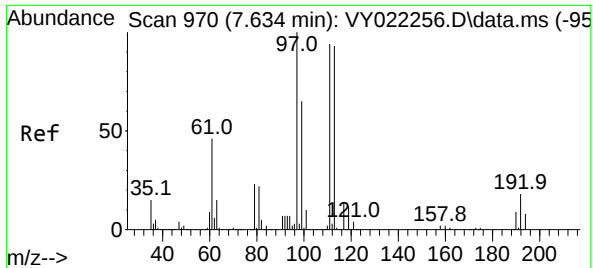
Ion Ratio Lower Upper

114 100

63 19.1 0.0 41.0

88 14.5 0.0 29.4





#35

Dibromofluoromethane

Concen: 49.696 ug/l

RT: 7.646 min Scan# 91

Delta R.T. 0.012 min

Lab File: VY022394.D

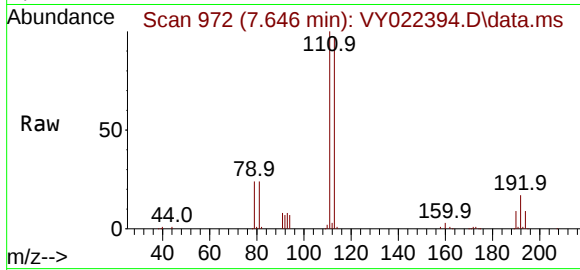
Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

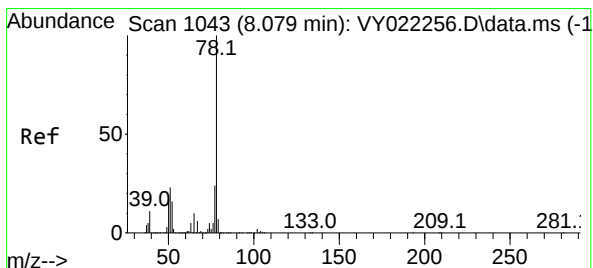
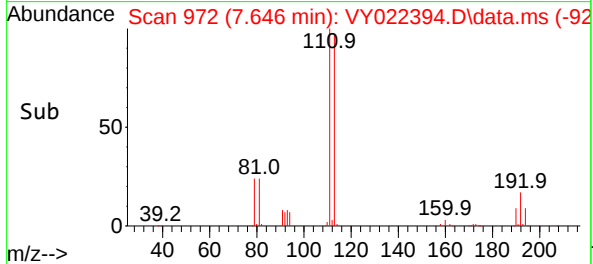
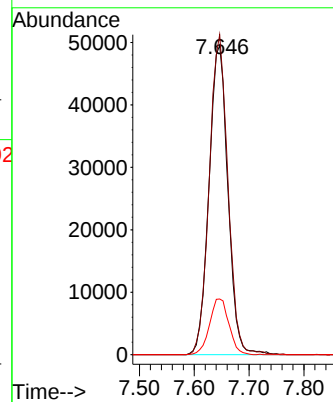
ClientSampleId :

TP-19



Tgt Ion:113 Resp: 118230

Ion	Ratio	Lower	Upper
113	100		
111	102.5	82.6	123.8
192	18.5	15.2	22.8



#40

Benzene

Concen: 2.059 ug/l

RT: 8.085 min Scan# 1044

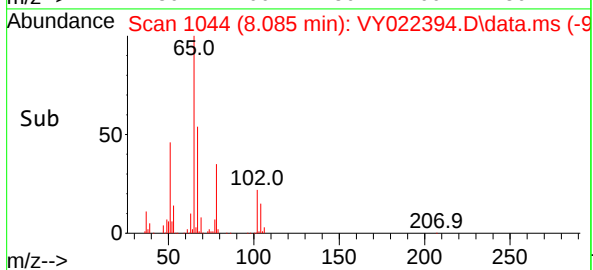
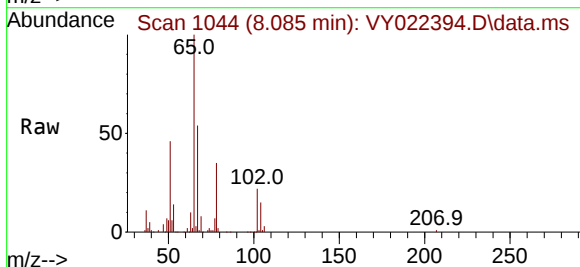
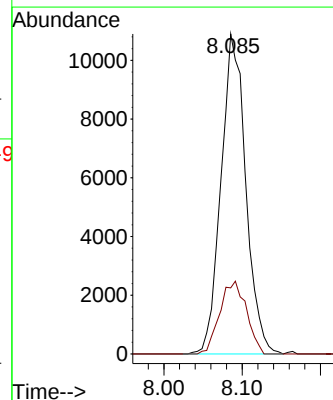
Delta R.T. 0.006 min

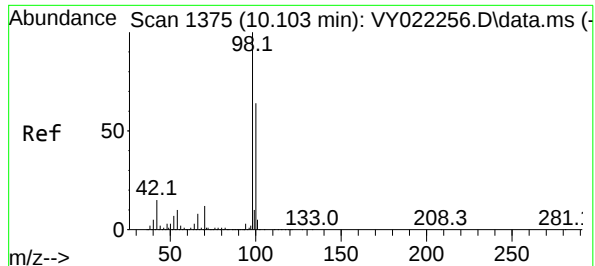
Lab File: VY022394.D

Acq: 22 May 2025 14:32

Tgt Ion: 78 Resp: 23915

Ion	Ratio	Lower	Upper
78	100		
77	20.7	18.9	28.3





#50

Toluene-d8

Concen: 48.006 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

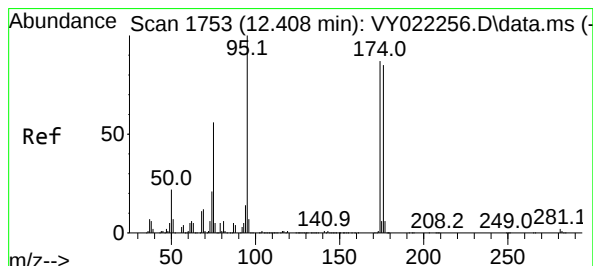
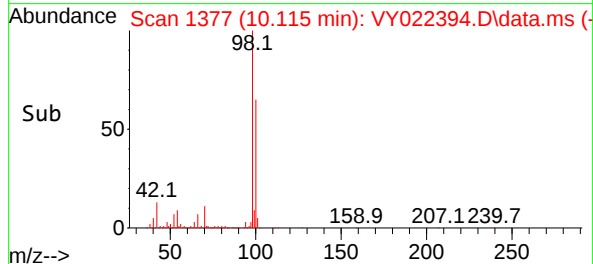
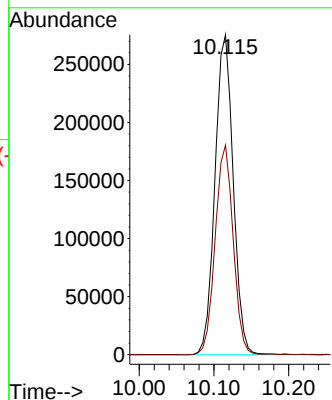
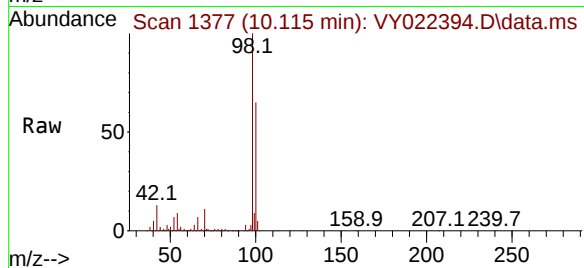
TP-19

Tgt Ion: 98 Resp: 467756

Ion Ratio Lower Upper

98 100

100 64.7 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 33.661 ug/l

RT: 12.414 min Scan# 1754

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

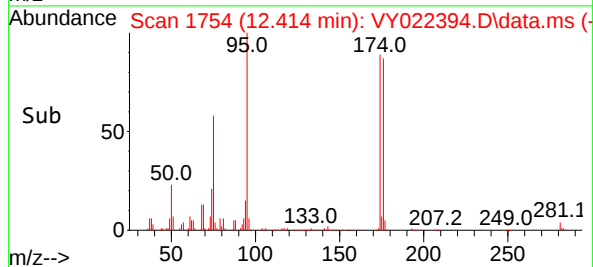
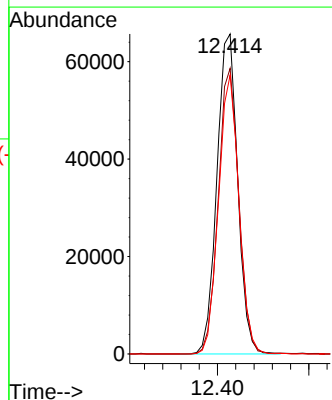
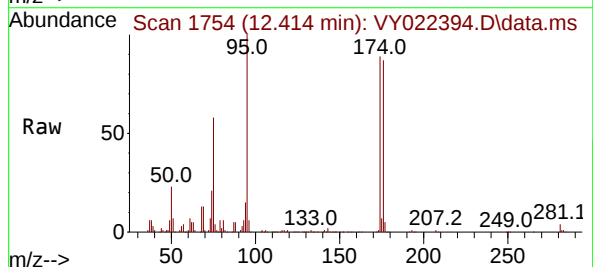
Tgt Ion: 95 Resp: 103960

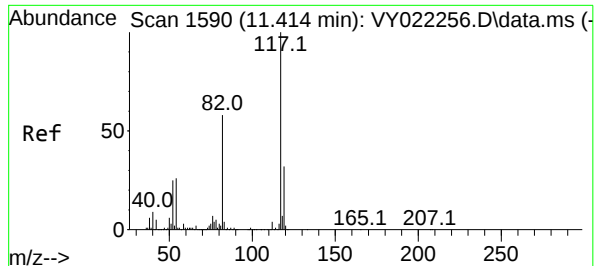
Ion Ratio Lower Upper

95 100

174 88.2 0.0 166.8

176 85.4 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

Instrument :

MSVOA_Y

ClientSampleId :

TP-19

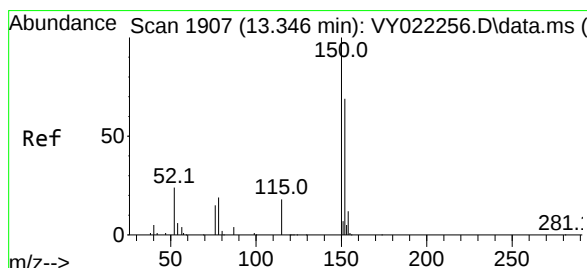
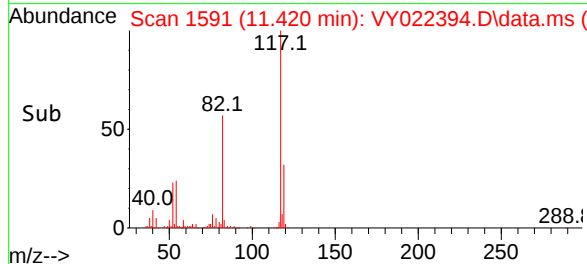
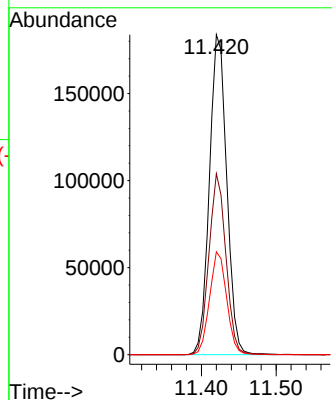
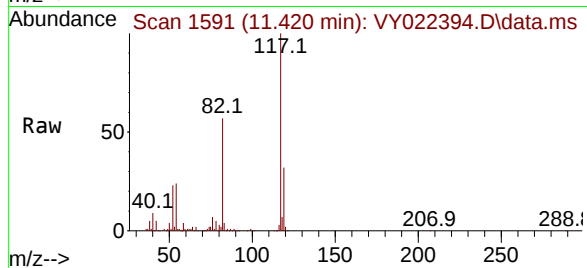
Tgt Ion:117 Resp: 296277

Ion Ratio Lower Upper

117 100

82 56.6 46.6 70.0

119 32.2 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022394.D

Acq: 22 May 2025 14:32

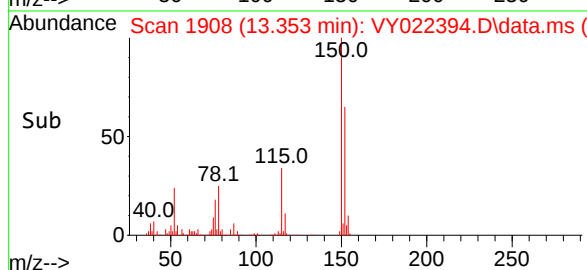
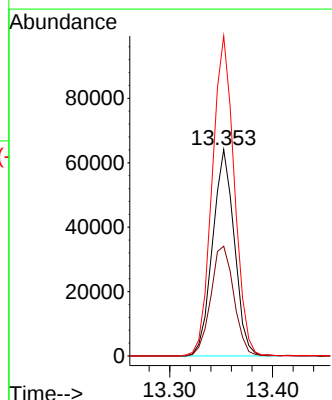
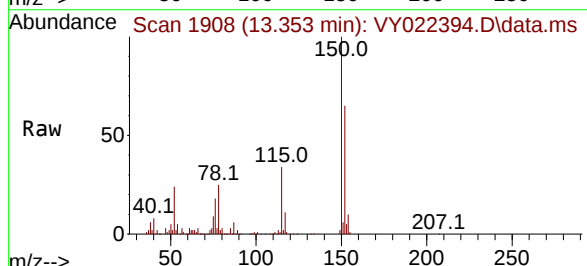
Tgt Ion:152 Resp: 94056

Ion Ratio Lower Upper

152 100

115 56.6 29.4 88.2

150 157.5 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022394.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.495	121	127	132	rBV2	8240	22571	1.78%	0.375%
2	4.622	466	476	487	rBV3	13279	41800	3.30%	0.694%
3	7.646	961	972	977	rBV	168091	400416	31.63%	6.648%
4	7.719	977	984	995	rVB	304080	689026	54.43%	11.440%
5	8.073	1031	1042	1055	rBV2	168745	404911	31.99%	6.723%
6	8.622	1123	1132	1144	rBV	472562	932566	73.67%	15.484%
7	10.115	1369	1377	1384	rBV	739115	1265797	100.00%	21.017%
8	11.420	1584	1591	1603	rBV	598637	964469	76.19%	16.013%
9	11.633	1620	1626	1631	rBV3	6964	13314	1.05%	0.221%
10	12.414	1746	1754	1765	rVB	377178	609796	48.17%	10.125%
11	13.353	1901	1908	1919	rBV	397725	606832	47.94%	10.075%
12	13.889	1990	1996	2005	rVB	43885	71359	5.64%	1.185%

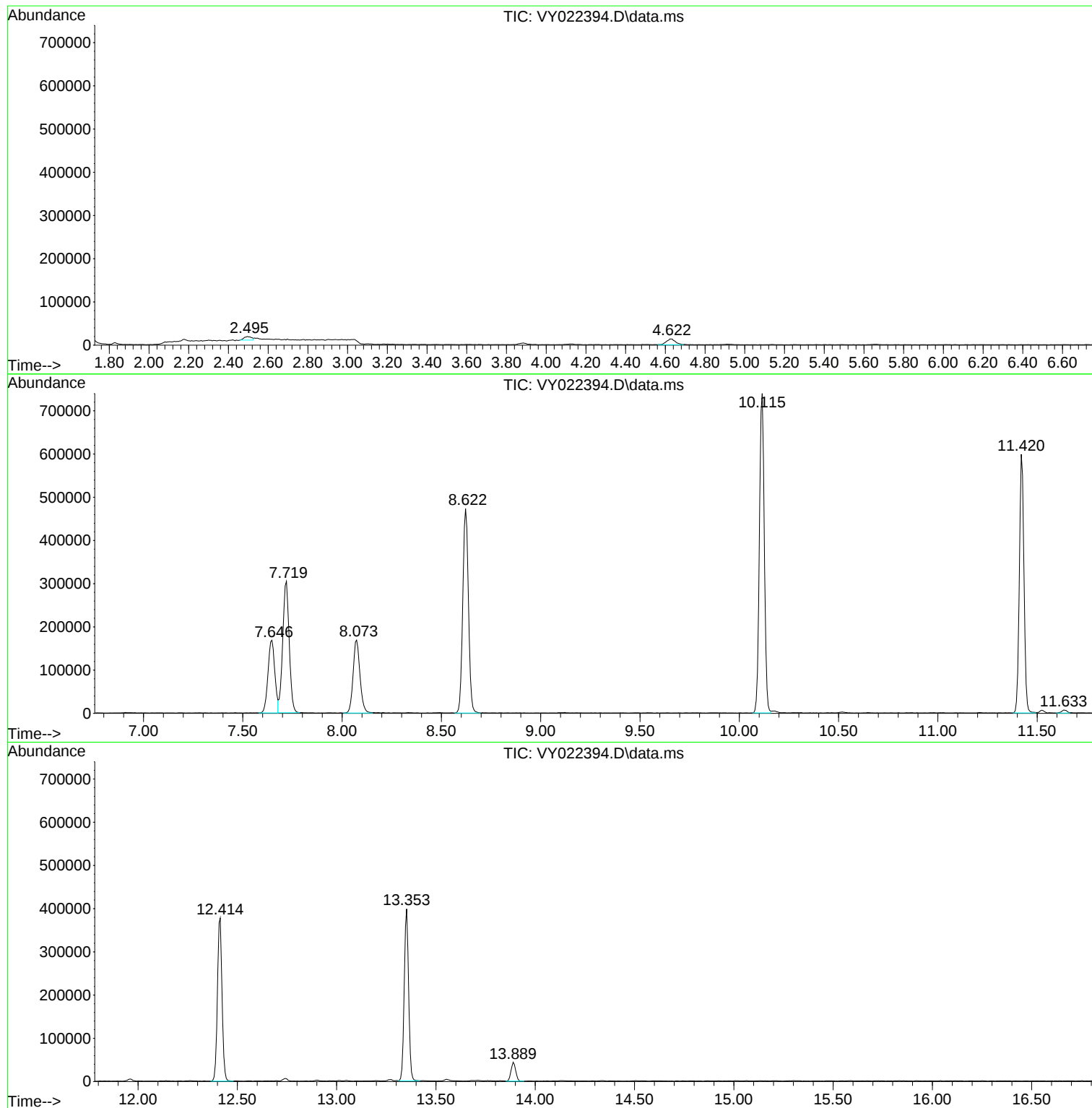
Sum of corrected areas: 6022857

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022394.D
Acq On : 22 May 2025 14:32
Operator : SY/MD
Sample : Q2074-06
Misc : 7.18g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-19

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-40	SDG No.:	Q2074
Lab Sample ID:	Q2074-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.2
Sample Wt/Vol:	6.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022395.D	1		05/22/25 14:55	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	4.60	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	4.60	ug/Kg
75-01-4	Vinyl Chloride	0.73	U	0.73	4.60	ug/Kg
74-83-9	Bromomethane	0.99	UQ	0.99	4.60	ug/Kg
75-00-3	Chloroethane	1.20	UQ	1.20	4.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	4.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.98	U	0.98	4.60	ug/Kg
75-35-4	1,1-Dichloroethene	0.93	U	0.93	4.60	ug/Kg
67-64-1	Acetone	14.3	J	4.40	23.2	ug/Kg
75-15-0	Carbon Disulfide	0.98	U	0.98	4.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.68	U	0.68	4.60	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	4.60	ug/Kg
75-09-2	Methylene Chloride	3.30	U	3.30	9.30	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.80	U	0.80	4.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.74	U	0.74	4.60	ug/Kg
110-82-7	Cyclohexane	0.73	U	0.73	4.60	ug/Kg
78-93-3	2-Butanone	6.10	U	6.10	23.2	ug/Kg
56-23-5	Carbon Tetrachloride	0.90	U	0.90	4.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.70	U	0.70	4.60	ug/Kg
74-97-5	Bromochloromethane	1.10	U	1.10	4.60	ug/Kg
67-66-3	Chloroform	0.78	U	0.78	4.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.86	U	0.86	4.60	ug/Kg
108-87-2	Methylcyclohexane	0.84	U	0.84	4.60	ug/Kg
71-43-2	Benzene	0.73	U	0.73	4.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.73	U	0.73	4.60	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	4.60	ug/Kg
78-87-5	1,2-Dichloropropane	0.84	U	0.84	4.60	ug/Kg
75-27-4	Bromodichloromethane	0.72	U	0.72	4.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.30	U	3.30	23.2	ug/Kg
108-88-3	Toluene	0.72	U	0.72	4.60	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-40	SDG No.:	Q2074
Lab Sample ID:	Q2074-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.2
Sample Wt/Vol:	6.04	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOC-TCLVOA-10
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022395.D	1		05/22/25 14:55	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	4.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.58	U	0.58	4.60	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.85	U	0.85	4.60	ug/Kg
591-78-6	2-Hexanone	3.40	U	3.40	23.2	ug/Kg
124-48-1	Dibromochloromethane	0.81	U	0.81	4.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.82	U	0.82	4.60	ug/Kg
127-18-4	Tetrachloroethene	0.97	U	0.97	4.60	ug/Kg
108-90-7	Chlorobenzene	0.84	U	0.84	4.60	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	4.60	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	9.30	ug/Kg
95-47-6	o-Xylene	0.76	U	0.76	4.60	ug/Kg
100-42-5	Styrene	0.66	U	0.66	4.60	ug/Kg
75-25-2	Bromoform	0.80	U	0.80	4.60	ug/Kg
98-82-8	Isopropylbenzene	0.72	U	0.72	4.60	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	4.60	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.60	U	1.60	4.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.40	U	1.40	4.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.30	U	1.30	4.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.70	U	1.70	4.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.80	U	2.80	4.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.00	U	3.00	4.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.7		63 - 155	93%	SPK: 50
1868-53-7	Dibromofluoromethane	49.0		70 - 134	98%	SPK: 50
2037-26-5	Toluene-d8	47.7		74 - 123	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	36.5		38 - 136	73%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	164000	7.719			
540-36-3	1,4-Difluorobenzene	278000	8.622			
3114-55-4	Chlorobenzene-d5	213000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	75600	13.352			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/15/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-40	SDG No.:	Q2074
Lab Sample ID:	Q2074-07	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	89.2
Sample Wt/Vol:	6.04	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022395.D	1		05/22/25 14:55	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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_Y\Data\VY052225\
 Data File : VY022395.D
 Acq On : 22 May 2025 14:55
 Operator : SY/MD
 Sample : Q2074-07
 Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-40

Quant Time: May 23 03:38:26 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

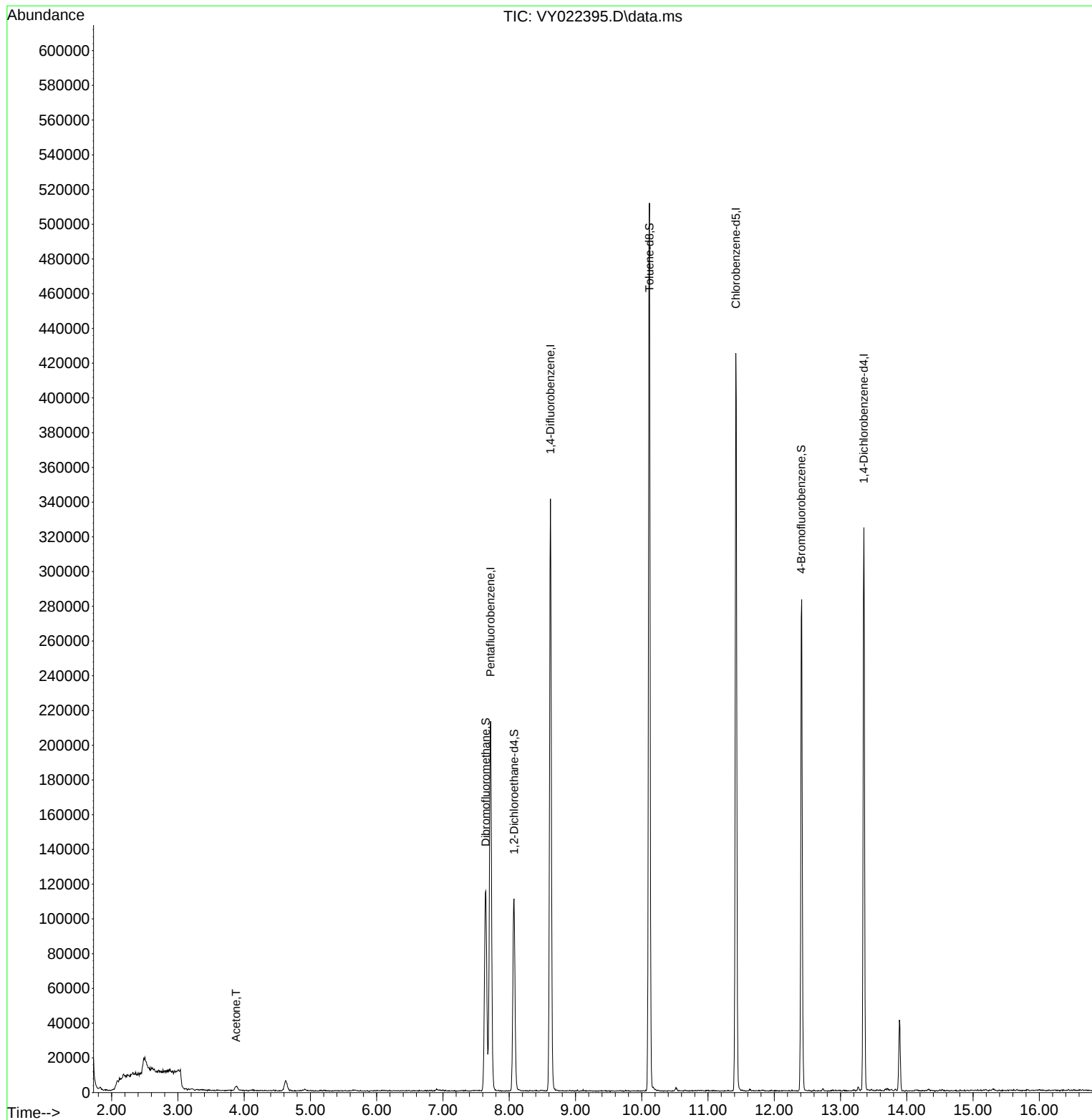
Internal Standards						
1) Pentafluorobenzene	7.719	168	163884	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	278478	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	213324	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	75609	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	83592	46.671	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	93.340%
35) Dibromofluoromethane	7.646	113	81440	48.998	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	98.000%
50) Toluene-d8	10.115	98	324899	47.728	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	95.460%
62) 4-Bromofluorobenzene	12.407	95	78682	36.466	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	72.940%
Target Compounds						
16) Acetone	3.879	43	5169	15.391	ug/l	Qvalue # 88

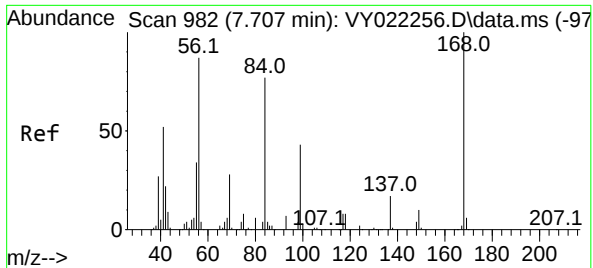
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Time: May 23 03:38:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

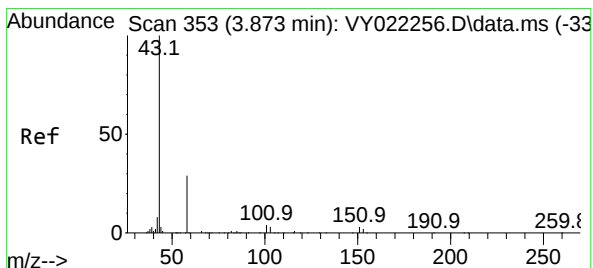
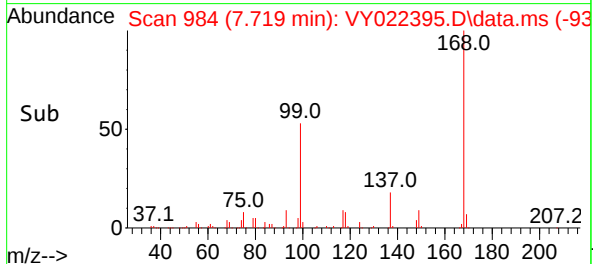
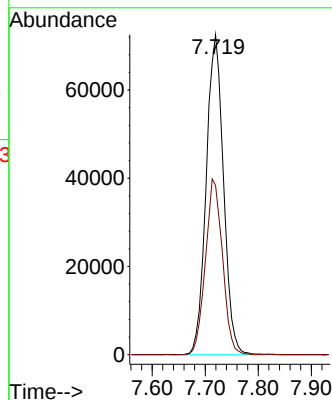
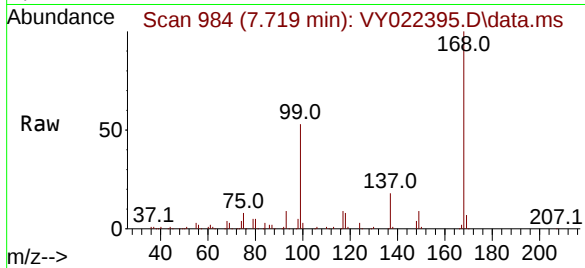




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 984
Delta R.T. 0.012 min
Lab File: VY022395.D
Acq: 22 May 2025 14:55

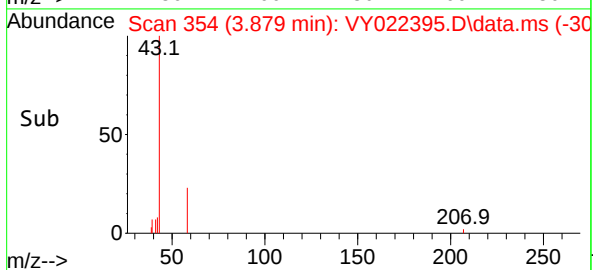
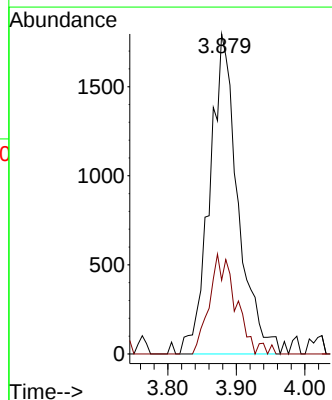
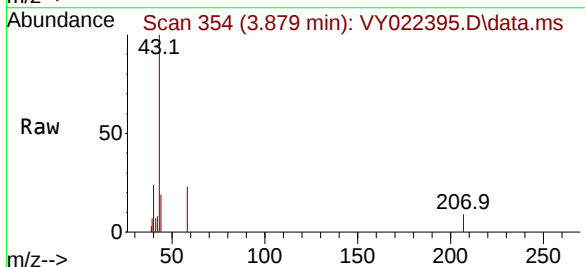
Instrument :
MSVOA_Y
ClientSampleId :
TP-40

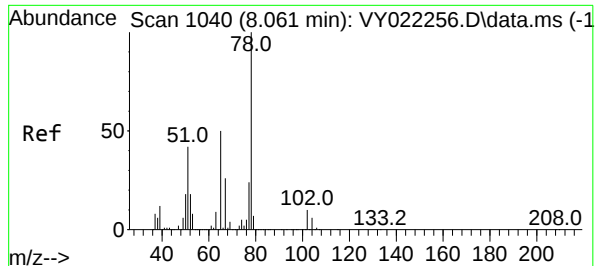
Tgt Ion:168 Resp: 163884
Ion Ratio Lower Upper
168 100
99 52.9 44.2 66.4



#16
Acetone
Concen: 15.391 ug/l
RT: 3.879 min Scan# 354
Delta R.T. 0.006 min
Lab File: VY022395.D
Acq: 22 May 2025 14:55

Tgt Ion: 43 Resp: 5169
Ion Ratio Lower Upper
43 100
58 23.1 23.6 35.4#





#33

1,2-Dichloroethane-d4

Concen: 46.671 ug/l

RT: 8.073 min Scan# 1040

Delta R.T. 0.012 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

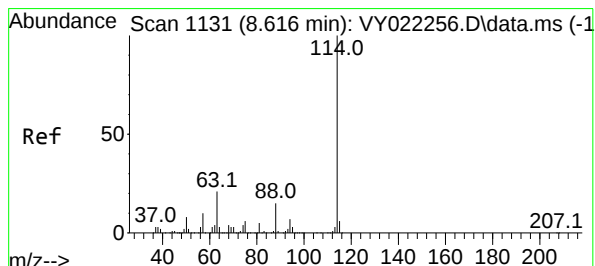
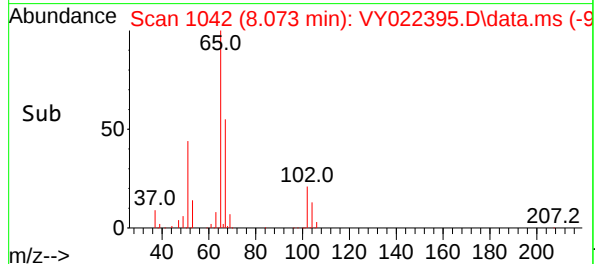
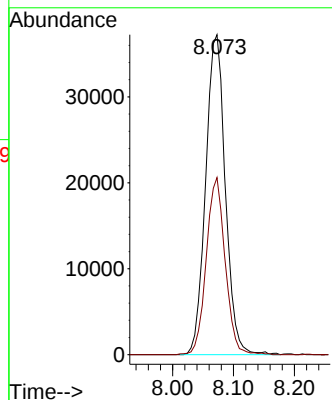
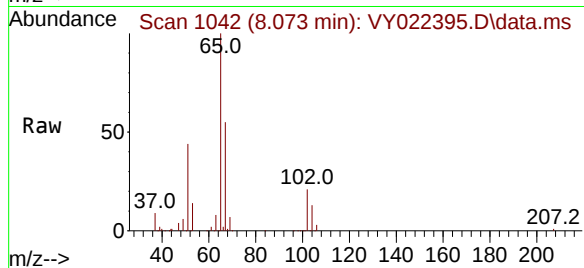
TP-40

Tgt Ion: 65 Resp: 83592

Ion Ratio Lower Upper

65 100

67 53.2 0.0 104.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1132

Delta R.T. 0.006 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

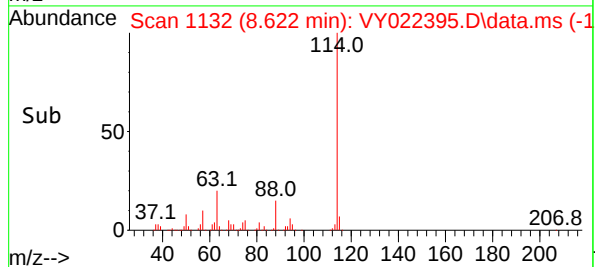
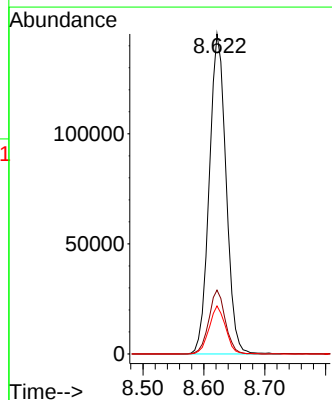
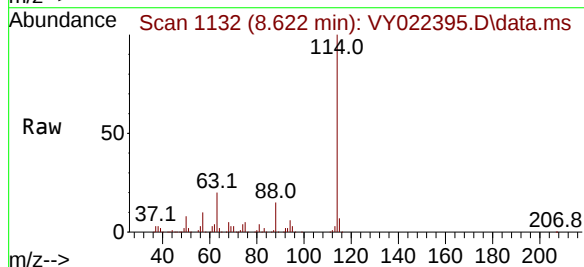
Tgt Ion: 114 Resp: 278478

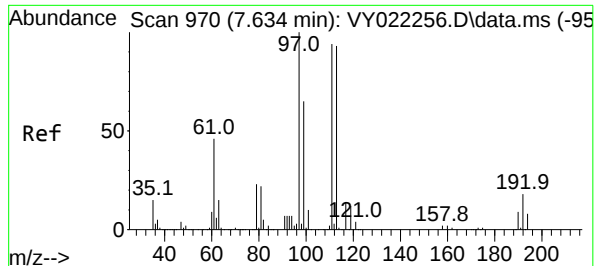
Ion Ratio Lower Upper

114 100

63 19.9 0.0 41.0

88 15.0 0.0 29.4





#35

Dibromofluoromethane

Concen: 48.998 ug/l

RT: 7.646 min Scan# 91

Delta R.T. 0.012 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

TP-40

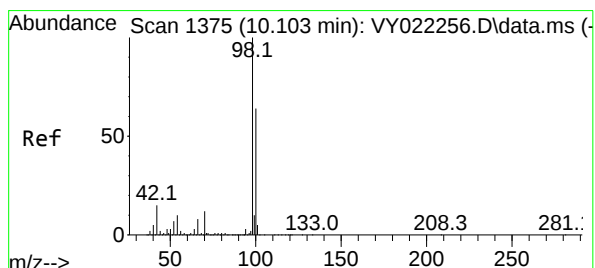
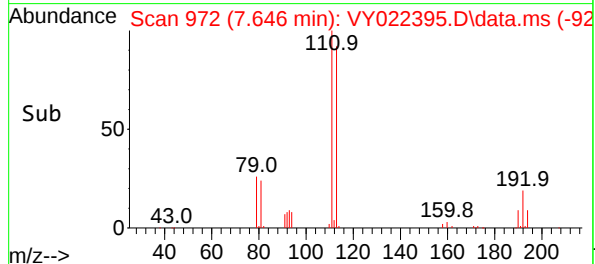
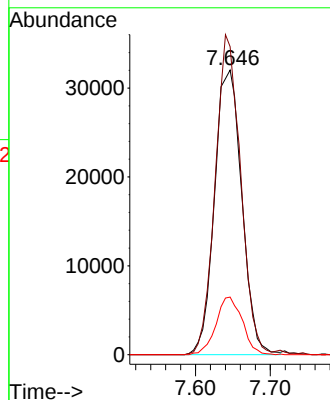
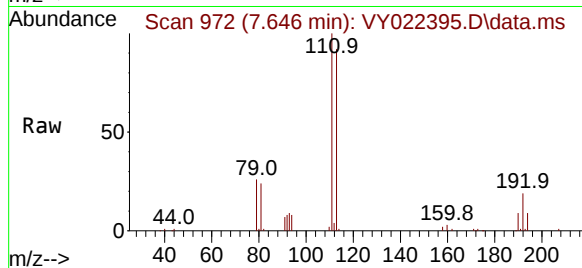
Tgt Ion:113 Resp: 81440

Ion Ratio Lower Upper

113 100

111 104.2 82.6 123.8

192 19.6 15.2 22.8



#50

Toluene-d8

Concen: 47.728 ug/l

RT: 10.115 min Scan# 1377

Delta R.T. 0.012 min

Lab File: VY022395.D

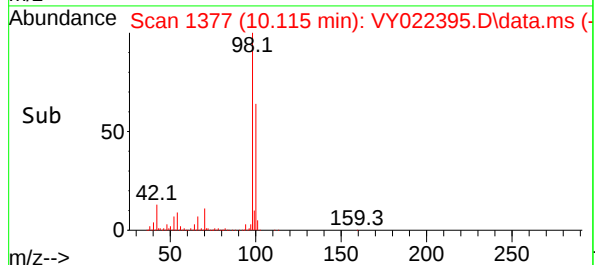
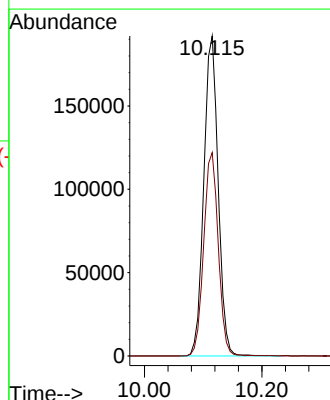
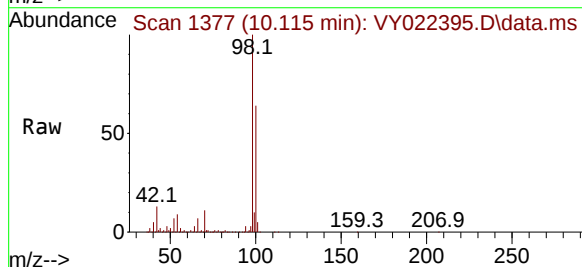
Acq: 22 May 2025 14:55

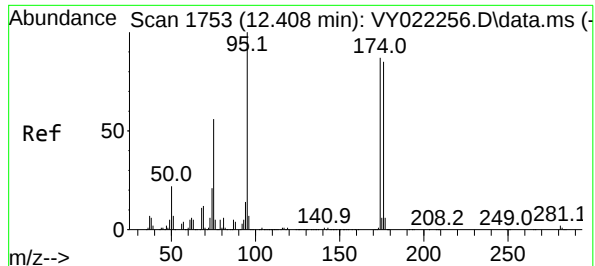
Tgt Ion: 98 Resp: 324899

Ion Ratio Lower Upper

98 100

100 64.4 51.8 77.8





#62

4-Bromofluorobenzene

Concen: 36.466 ug/l

RT: 12.407 min Scan# 1753

Delta R.T. -0.000 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

TP-40

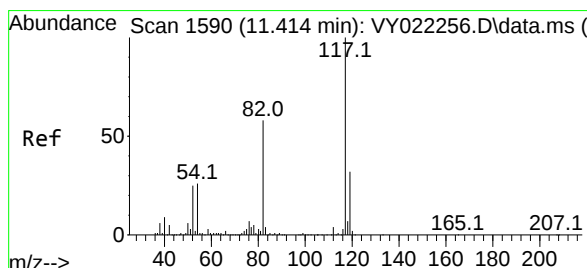
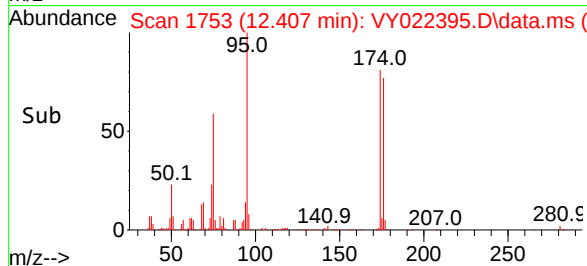
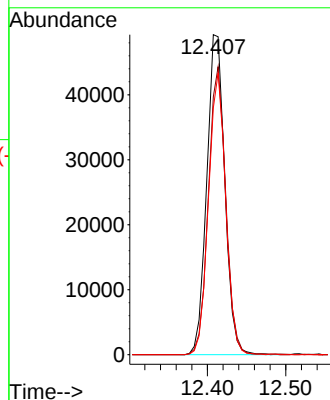
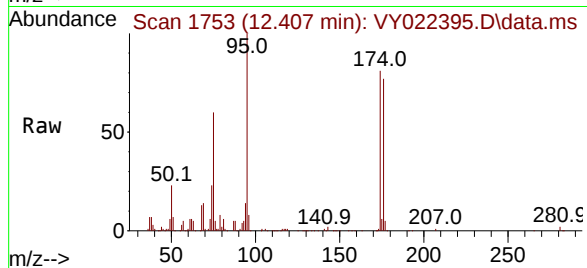
Tgt Ion: 95 Resp: 78682

Ion Ratio Lower Upper

95 100

174 87.1 0.0 166.8

176 83.9 0.0 160.8



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 1591

Delta R.T. 0.006 min

Lab File: VY022395.D

Acq: 22 May 2025 14:55

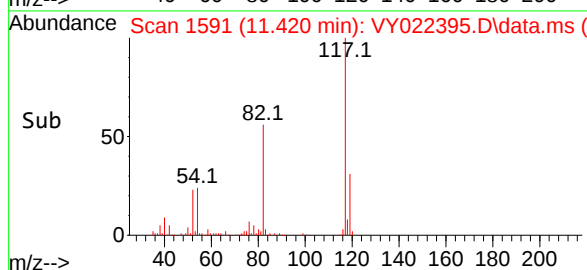
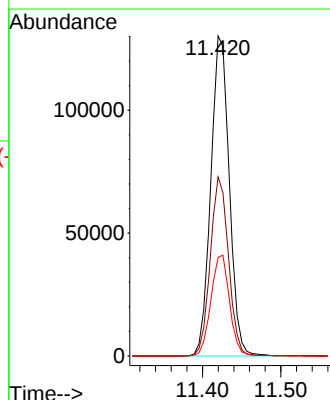
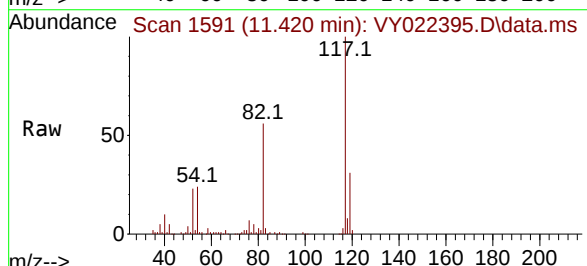
Tgt Ion: 117 Resp: 213324

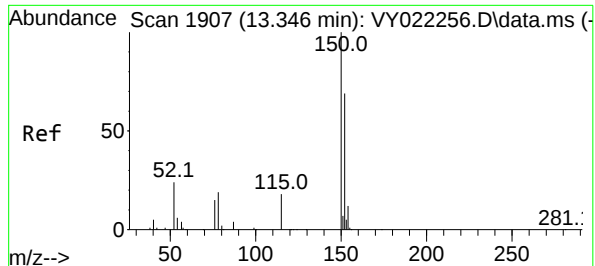
Ion Ratio Lower Upper

117 100

82 56.0 46.6 70.0

119 30.8 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022395.D

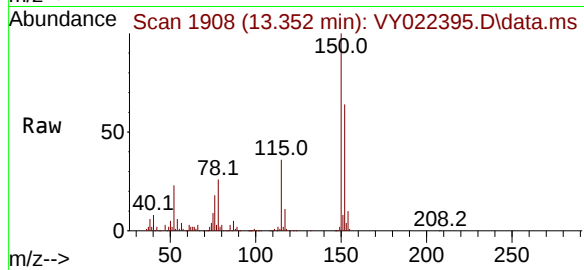
Acq: 22 May 2025 14:55

Instrument :

MSVOA_Y

ClientSampleId :

TP-40



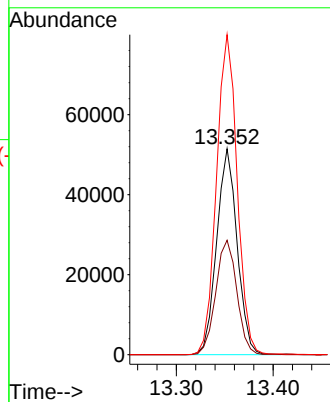
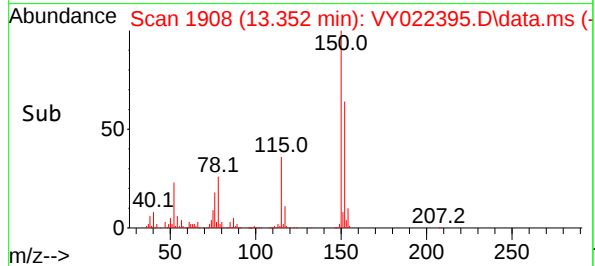
Tgt Ion:152 Resp: 75609

Ion Ratio Lower Upper

152 100

115 57.3 29.4 88.2

150 157.1 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022395.D
 Acq On : 22 May 2025 14:55
 Operator : SY/MD
 Sample : Q2074-07
 Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-40

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022395.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.086	52	60	63	rBV3	5123	13387	1.53%	0.311%
2	2.482	120	125	126	rBV5	8652	12436	1.42%	0.289%
3	4.628	467	477	486	rBV4	5907	18635	2.12%	0.433%
4	7.646	962	972	977	rBV	115241	282015	32.13%	6.548%
5	7.719	977	984	995	rVB	212621	492650	56.12%	11.439%
6	8.073	1030	1042	1053	rBV	110657	248574	28.32%	5.772%
7	8.622	1121	1132	1145	rBV	341033	656420	74.78%	15.242%
8	10.115	1369	1377	1385	rBV	511191	877795	100.00%	20.382%
9	11.420	1584	1591	1603	rVB	424613	691740	78.80%	16.062%
10	12.414	1744	1754	1763	rBV	283190	458537	52.24%	10.647%
11	13.352	1901	1908	1916	rVB	323831	488428	55.64%	11.341%
12	13.889	1990	1996	2003	rVB2	40867	66011	7.52%	1.533%

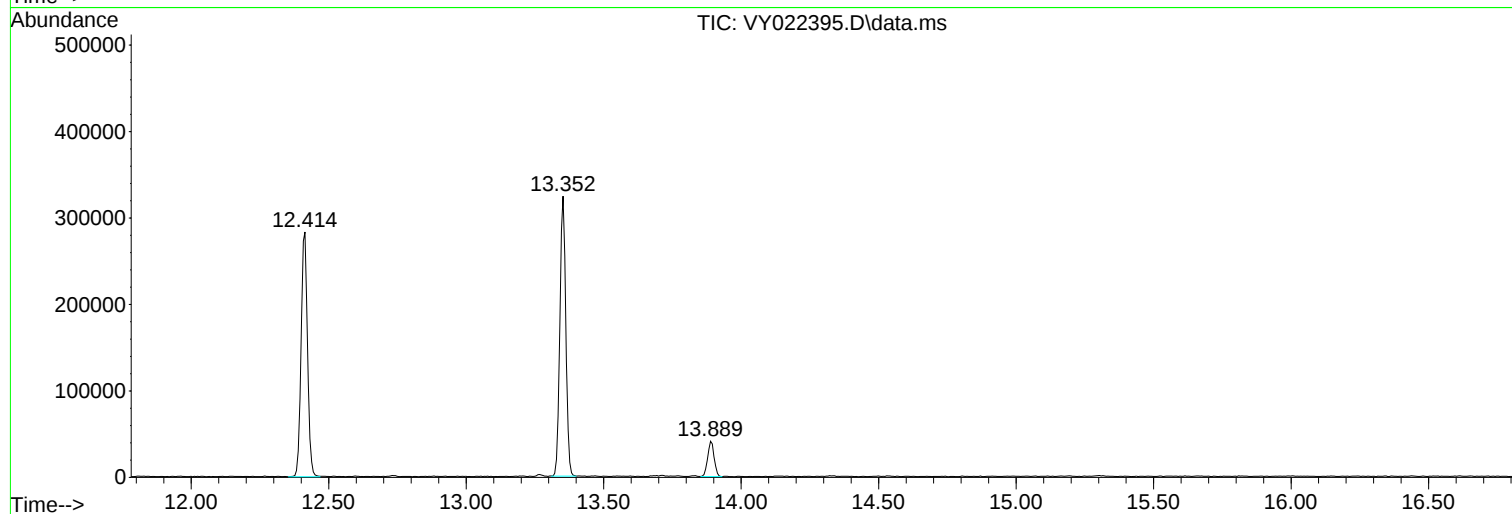
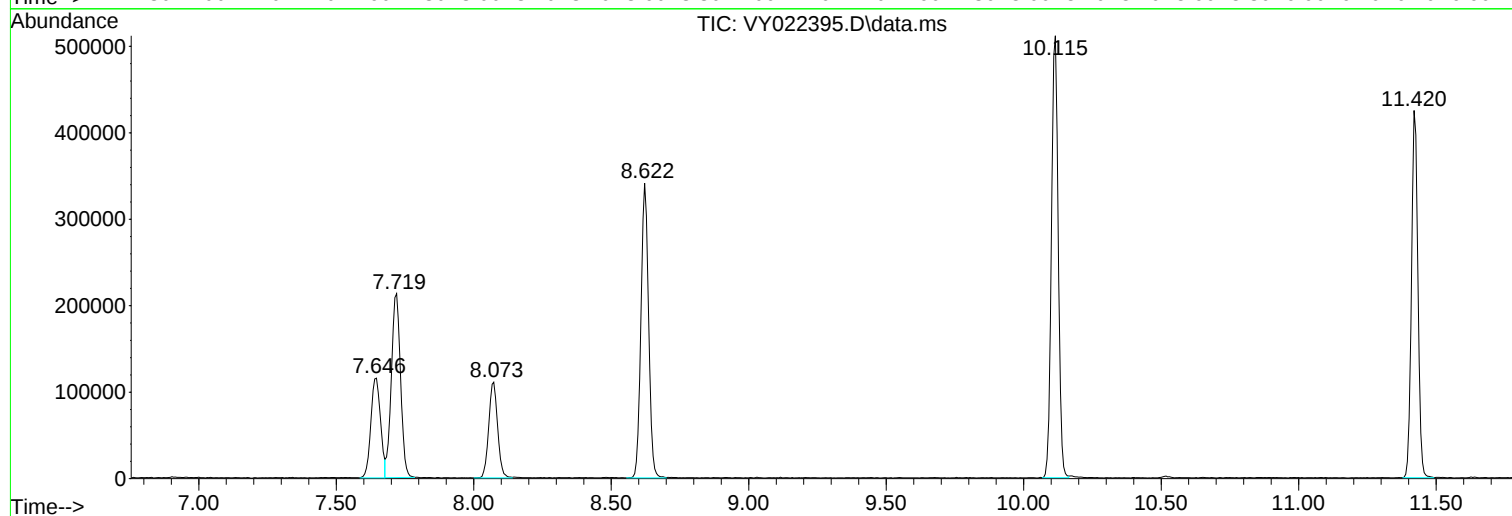
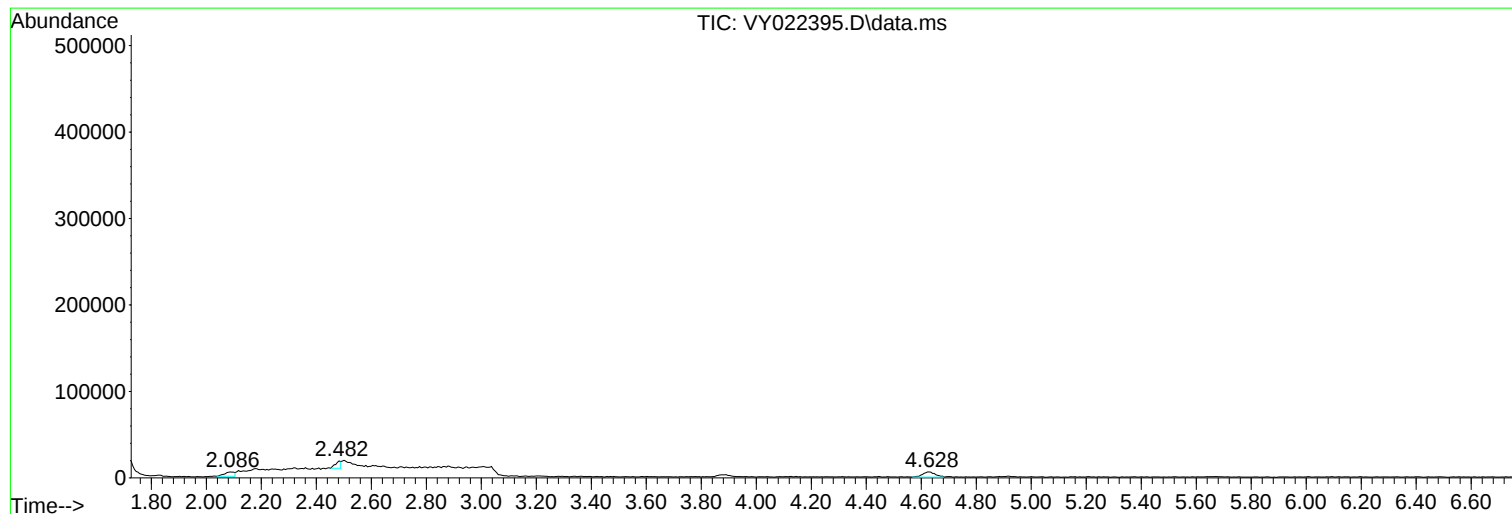
Sum of corrected areas: 4306628

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022395.D
Acq On : 22 May 2025 14:55
Operator : SY/MD
Sample : Q2074-07
Misc : 6.04g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 17 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-40

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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Report of Analysis

Client:	CDM Smith	Date Collected:	05/16/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-18	SDG No.:	Q2074
Lab Sample ID:	Q2074-08	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	78
Sample Wt/Vol:	5.77 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022396.D	1		05/22/25 15:19	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.30	U	1.30	5.60	ug/Kg
74-87-3	Chloromethane	1.30	U	1.30	5.60	ug/Kg
75-01-4	Vinyl Chloride	0.88	U	0.88	5.60	ug/Kg
74-83-9	Bromomethane	1.20	UQ	1.20	5.60	ug/Kg
75-00-3	Chloroethane	1.40	UQ	1.40	5.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.30	U	1.30	5.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.20	U	1.20	5.60	ug/Kg
75-35-4	1,1-Dichloroethene	1.10	U	1.10	5.60	ug/Kg
67-64-1	Acetone	53.0		5.30	27.8	ug/Kg
75-15-0	Carbon Disulfide	1.20	U	1.20	5.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.81	U	0.81	5.60	ug/Kg
79-20-9	Methyl Acetate	1.70	U	1.70	5.60	ug/Kg
75-09-2	Methylene Chloride	3.90	U	3.90	11.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.96	U	0.96	5.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.89	U	0.89	5.60	ug/Kg
110-82-7	Cyclohexane	0.88	U	0.88	5.60	ug/Kg
78-93-3	2-Butanone	7.30	U	7.30	27.8	ug/Kg
56-23-5	Carbon Tetrachloride	1.10	U	1.10	5.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.83	U	0.83	5.60	ug/Kg
74-97-5	Bromochloromethane	1.30	U	1.30	5.60	ug/Kg
67-66-3	Chloroform	0.93	U	0.93	5.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	1.00	U	1.00	5.60	ug/Kg
108-87-2	Methylcyclohexane	1.00	U	1.00	5.60	ug/Kg
71-43-2	Benzene	0.88	U	0.88	5.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.88	U	0.88	5.60	ug/Kg
79-01-6	Trichloroethene	0.90	U	0.90	5.60	ug/Kg
78-87-5	1,2-Dichloropropane	1.00	U	1.00	5.60	ug/Kg
75-27-4	Bromodichloromethane	0.87	U	0.87	5.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.00	U	4.00	27.8	ug/Kg
108-88-3	Toluene	0.87	U	0.87	5.60	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	05/16/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-18	SDG No.:	Q2074
Lab Sample ID:	Q2074-08	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	78
Sample Wt/Vol:	5.77 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022396.D	1		05/22/25 15:19	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.72	U	0.72	5.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.69	U	0.69	5.60	ug/Kg
79-00-5	1,1,2-Trichloroethane	1.00	U	1.00	5.60	ug/Kg
591-78-6	2-Hexanone	4.10	U	4.10	27.8	ug/Kg
124-48-1	Dibromochloromethane	0.97	U	0.97	5.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.98	U	0.98	5.60	ug/Kg
127-18-4	Tetrachloroethene	1.20	U	1.20	5.60	ug/Kg
108-90-7	Chlorobenzene	1.00	U	1.00	5.60	ug/Kg
100-41-4	Ethyl Benzene	0.74	U	0.74	5.60	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	11.1	ug/Kg
95-47-6	o-Xylene	0.91	U	0.91	5.60	ug/Kg
100-42-5	Styrene	0.79	U	0.79	5.60	ug/Kg
75-25-2	Bromoform	0.96	U	0.96	5.60	ug/Kg
98-82-8	Isopropylbenzene	0.87	U	0.87	5.60	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.60	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.90	U	1.90	5.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.70	U	1.70	5.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.60	U	1.60	5.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2.00	U	2.00	5.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.30	U	3.30	5.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.50	U	3.50	5.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.9		63 - 155	94%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		70 - 134	97%	SPK: 50
2037-26-5	Toluene-d8	47.9		74 - 123	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.3		38 - 136	75%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	237000	7.719			
540-36-3	1,4-Difluorobenzene	424000	8.622			
3114-55-4	Chlorobenzene-d5	328000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	117000	13.352			

Report of Analysis

Client:	CDM Smith	Date Collected:	05/16/25
Project:	South River WM Replacement	Date Received:	05/16/25
Client Sample ID:	TP-18	SDG No.:	Q2074
Lab Sample ID:	Q2074-08	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	78
Sample Wt/Vol:	5.77 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022396.D	1		05/22/25 15:19	VY052225

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_Y\Data\VY052225\
 Data File : VY022396.D
 Acq On : 22 May 2025 15:19
 Operator : SY/MD
 Sample : Q2074-08
 Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 TP-18

Quant Time: May 23 03:38:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

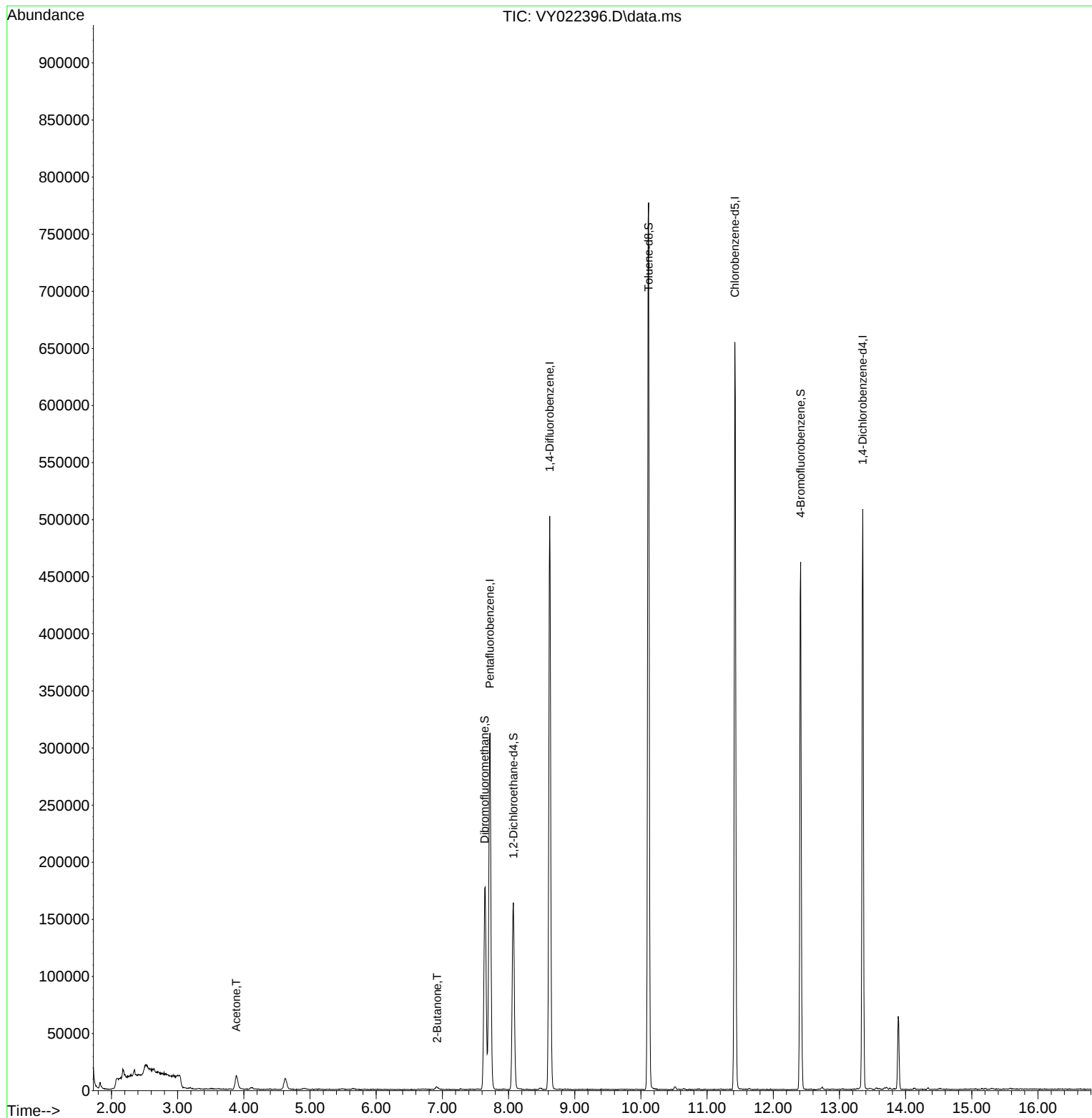
Internal Standards						
1) Pentafluorobenzene	7.719	168	236909	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	424090	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	327971	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	117014	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	121510	46.930	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	93.860%
35) Dibromofluoromethane	7.640	113	122812	48.519	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	97.040%
50) Toluene-d8	10.115	98	496981	47.940	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	95.880%
62) 4-Bromofluorobenzene	12.414	95	122403	37.251	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	74.500%
Target Compounds						
16) Acetone	3.885	43	23151	47.686	ug/l	98
25) 2-Butanone	6.921	43	4170	5.135	ug/l #	85

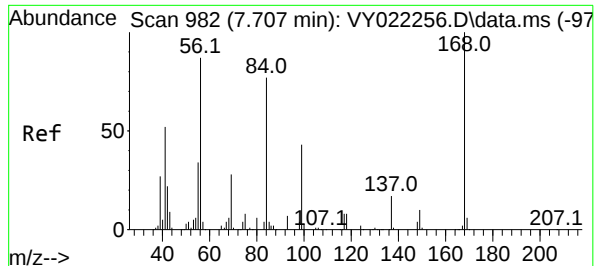
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Time: May 23 03:38:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

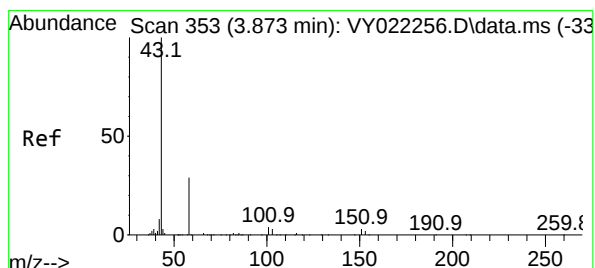
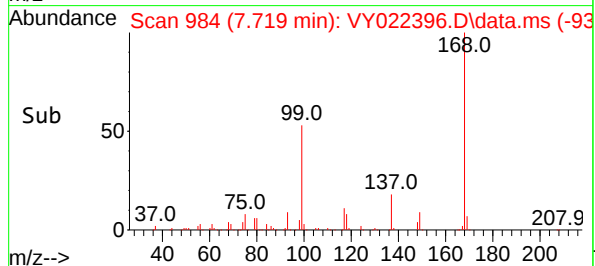
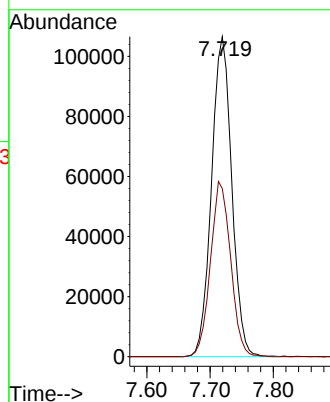
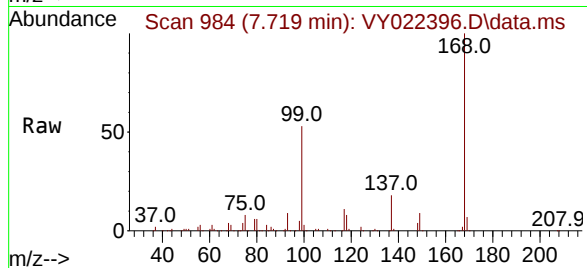




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 91
Delta R.T. 0.012 min
Lab File: VY022396.D
Acq: 22 May 2025 15:19

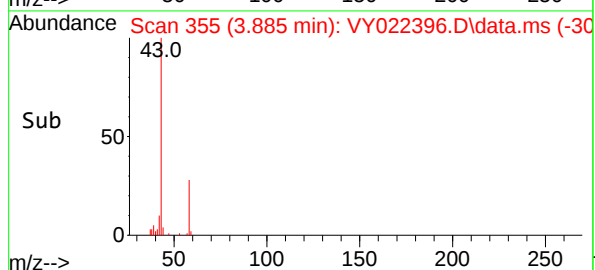
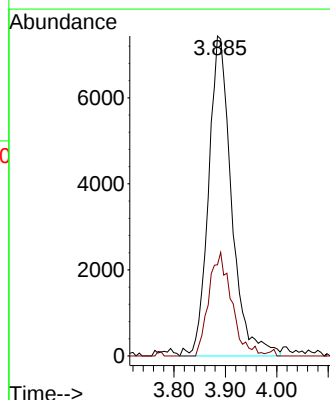
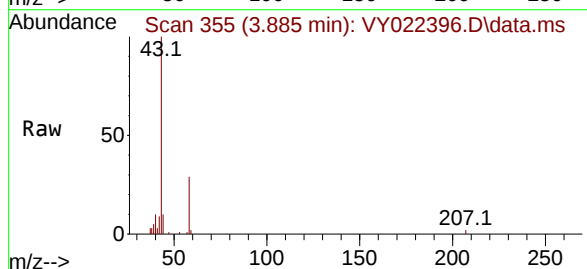
Instrument :
MSVOA_Y
ClientSampleId :
TP-18

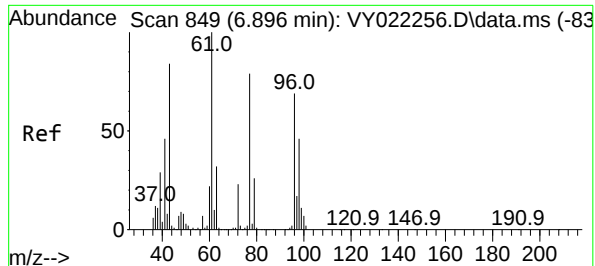
Tgt Ion:168 Resp: 236909
Ion Ratio Lower Upper
168 100
99 52.6 44.2 66.4



#16
Acetone
Concen: 47.686 ug/l
RT: 3.885 min Scan# 355
Delta R.T. 0.012 min
Lab File: VY022396.D
Acq: 22 May 2025 15:19

Tgt Ion: 43 Resp: 23151
Ion Ratio Lower Upper
43 100
58 28.5 23.6 35.4





#25

2-Butanone

Concen: 5.135 ug/l

RT: 6.921 min Scan# 8

Delta R.T. 0.024 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

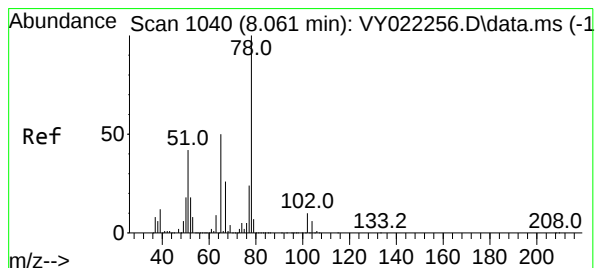
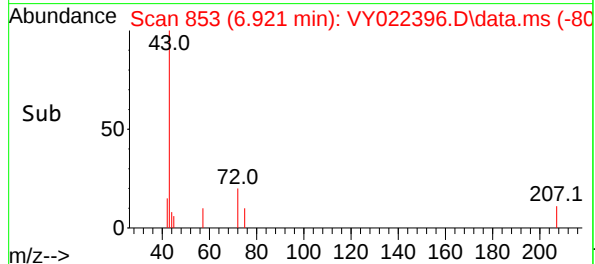
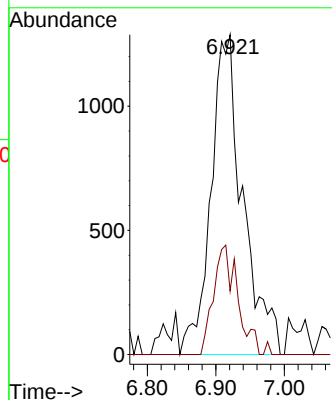
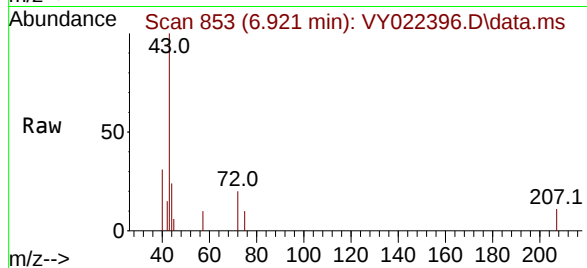
TP-18

Tgt Ion: 43 Resp: 4170

Ion Ratio Lower Upper

43 100

72 19.9 22.1 33.1#



#33

1,2-Dichloroethane-d4

Concen: 46.930 ug/l

RT: 8.073 min Scan# 1042

Delta R.T. 0.012 min

Lab File: VY022396.D

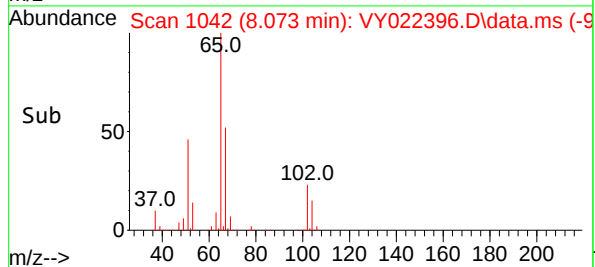
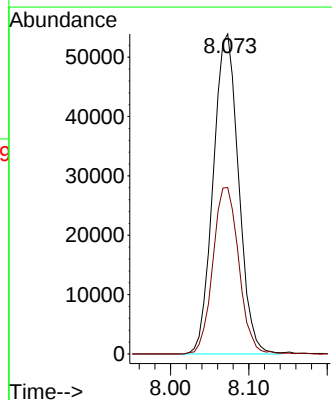
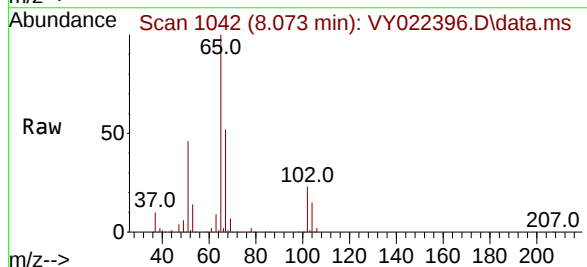
Acq: 22 May 2025 15:19

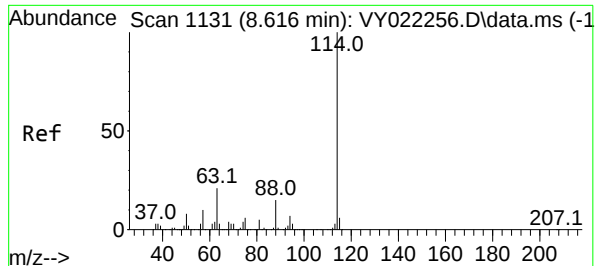
Tgt Ion: 65 Resp: 121510

Ion Ratio Lower Upper

65 100

67 53.1 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

TP-18

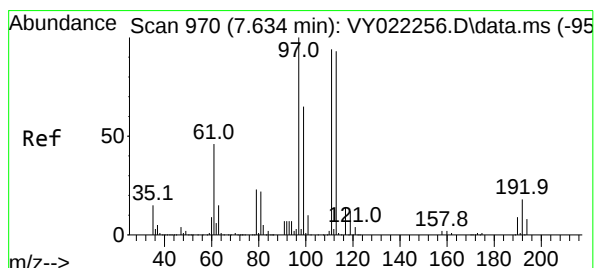
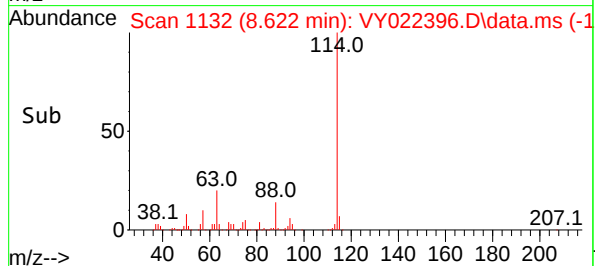
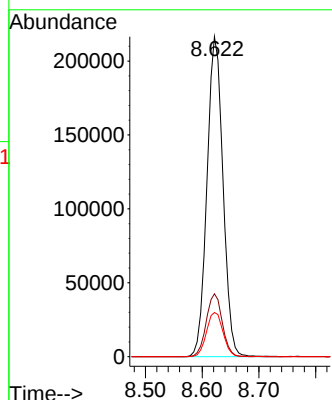
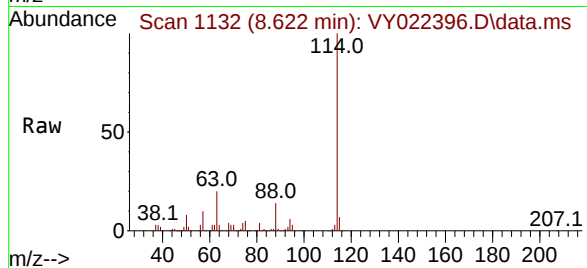
Tgt Ion:114 Resp: 424090

Ion Ratio Lower Upper

114 100

63 19.6 0.0 41.0

88 13.8 0.0 29.4



#35

Dibromofluoromethane

Concen: 48.519 ug/l

RT: 7.640 min Scan# 971

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

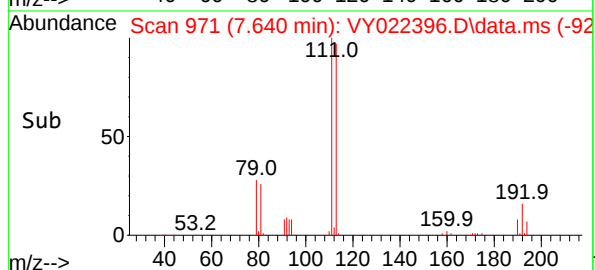
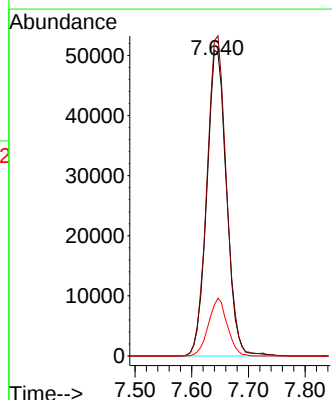
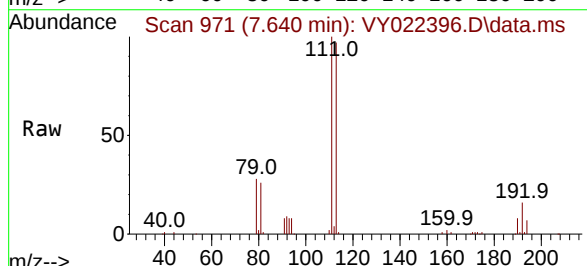
Tgt Ion:113 Resp: 122812

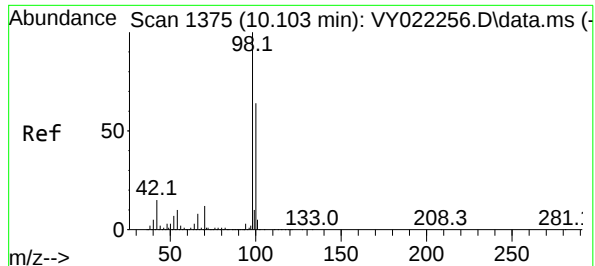
Ion Ratio Lower Upper

113 100

111 103.7 82.6 123.8

192 18.0 15.2 22.8

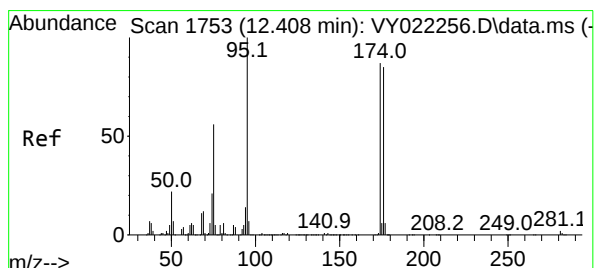
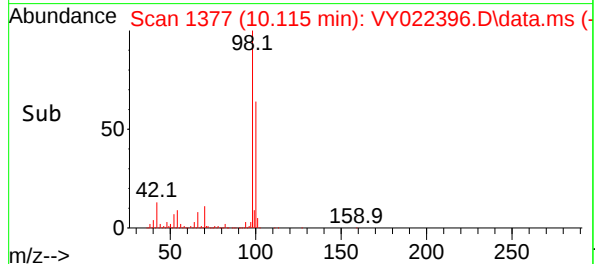
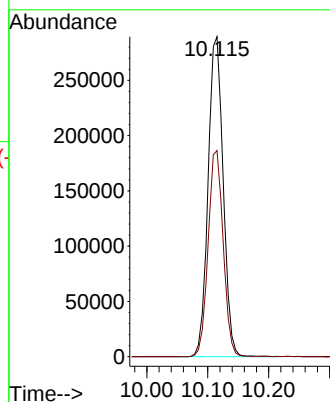
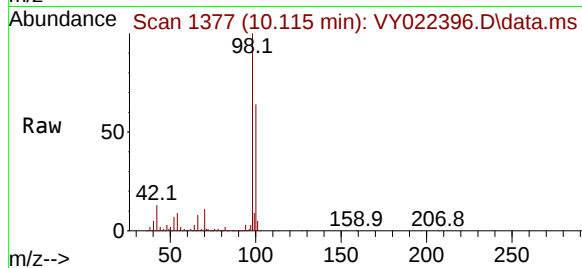




#50
Toluene-d8
Concen: 47.940 ug/l
RT: 10.115 min Scan# 11
Delta R.T. 0.012 min
Lab File: VY022396.D
Acq: 22 May 2025 15:19

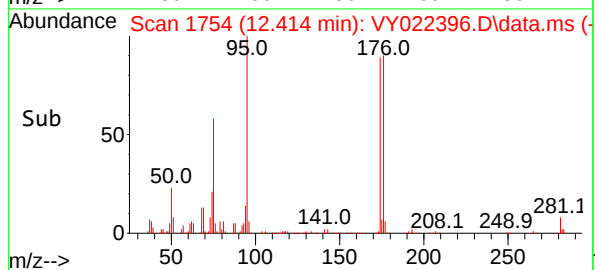
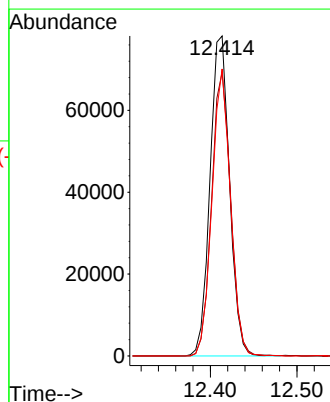
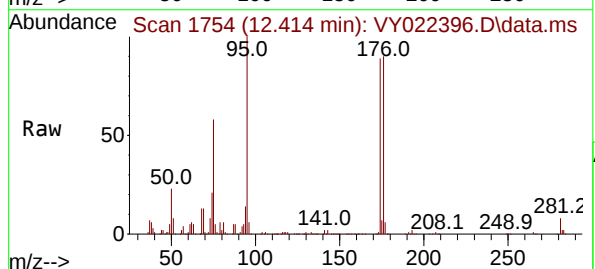
Instrument :
MSVOA_Y
ClientSampleId :
TP-18

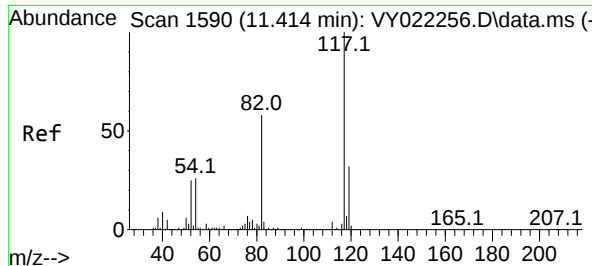
Tgt Ion: 98 Resp: 496981
Ion Ratio Lower Upper
98 100
100 64.3 51.8 77.8



#62
4-Bromofluorobenzene
Concen: 37.251 ug/l
RT: 12.414 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VY022396.D
Acq: 22 May 2025 15:19

Tgt Ion: 95 Resp: 122403
Ion Ratio Lower Upper
95 100
174 86.5 0.0 166.8
176 84.8 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

Instrument :

MSVOA_Y

ClientSampleId :

TP-18

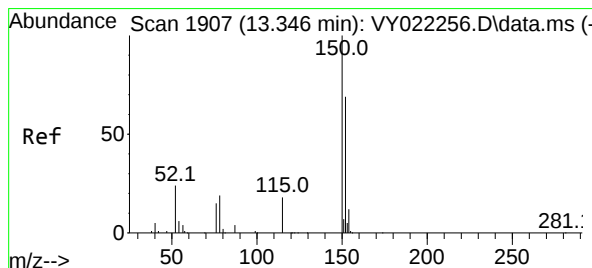
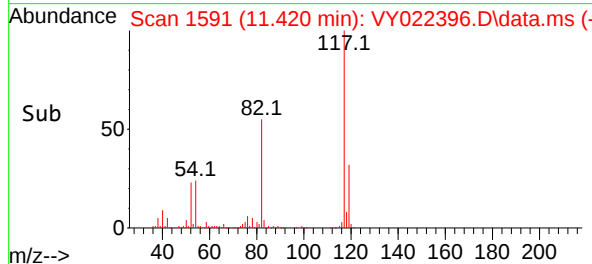
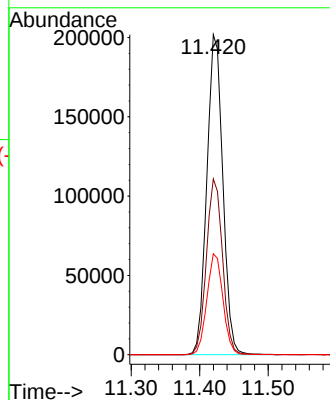
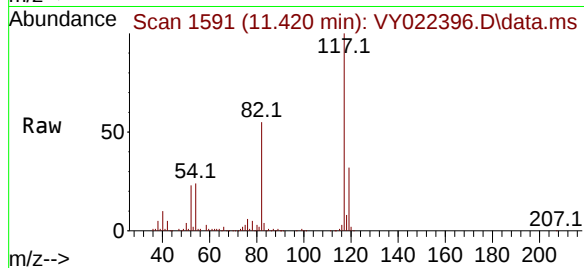
Tgt Ion:117 Resp: 327971

Ion Ratio Lower Upper

117 100

82 54.9 46.6 70.0

119 31.5 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022396.D

Acq: 22 May 2025 15:19

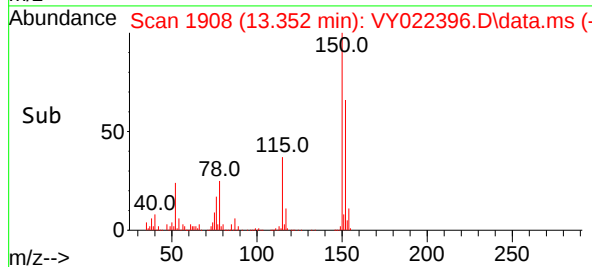
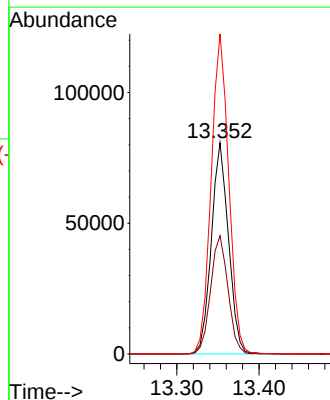
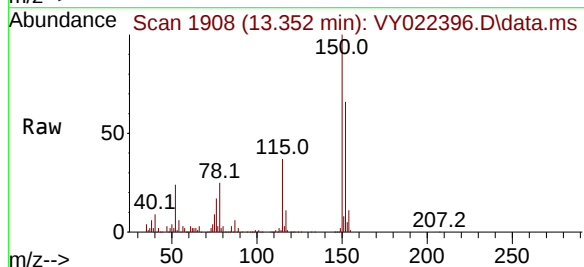
Tgt Ion:152 Resp: 117014

Ion Ratio Lower Upper

152 100

115 56.8 29.4 88.2

150 155.2 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Filtering: 5

Sampling : 1

Min Area: 3 % of largest Peak

Start Thrs: 0.2

Max Peaks: 100

Stop Thrs : 0

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022396.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.086	45	60	63	rBV6	9678	29336	2.18%	0.444%
2	2.172	70	74	78	rBV4	8470	14556	1.08%	0.220%
3	3.885	346	355	366	rBV	11969	35743	2.66%	0.541%
4	4.622	466	476	488	rBV2	9669	31713	2.36%	0.480%
5	7.646	962	972	977	rBV2	177135	421053	31.33%	6.378%
6	7.719	977	984	999	rVB	312144	711722	52.96%	10.781%
7	8.073	1031	1042	1053	rBV	163854	372626	27.73%	5.644%
8	8.622	1122	1132	1143	rBV	502205	988644	73.56%	14.975%
9	10.115	1368	1377	1390	rBV	776765	1343963	100.00%	20.358%
10	11.420	1584	1591	1603	rBV	654565	1061231	78.96%	16.075%
11	12.414	1745	1754	1763	rBV2	462086	734381	54.64%	11.124%
12	13.352	1896	1908	1916	rBV	507812	755129	56.19%	11.438%
13	13.889	1990	1996	2005	rVB2	64076	101688	7.57%	1.540%

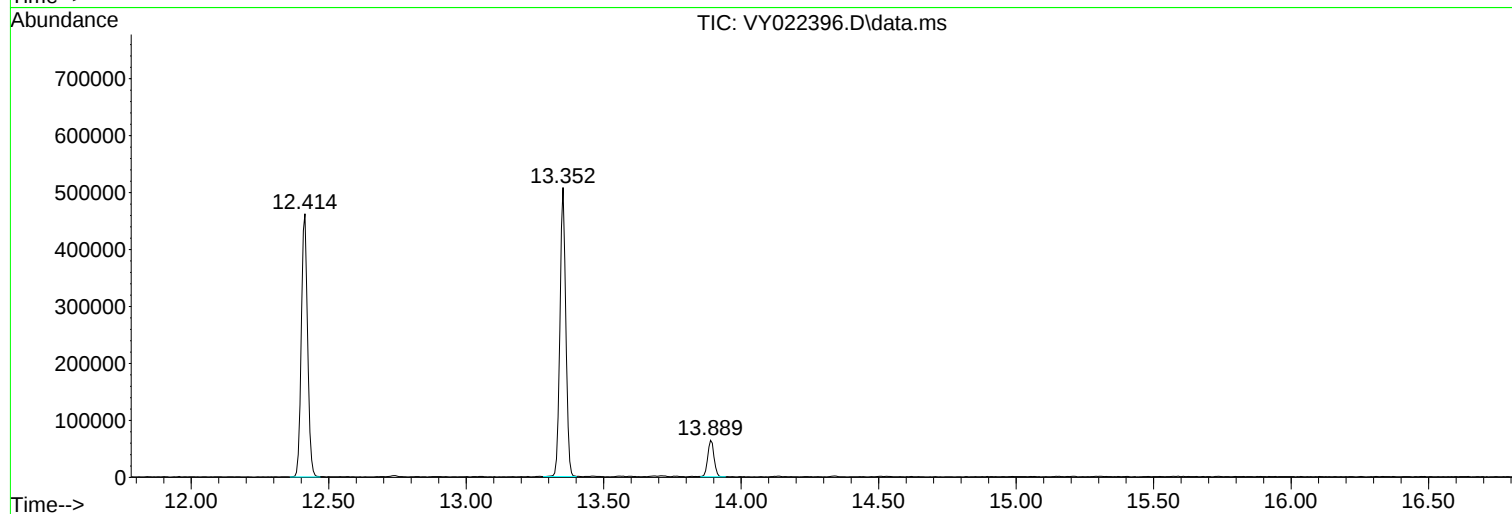
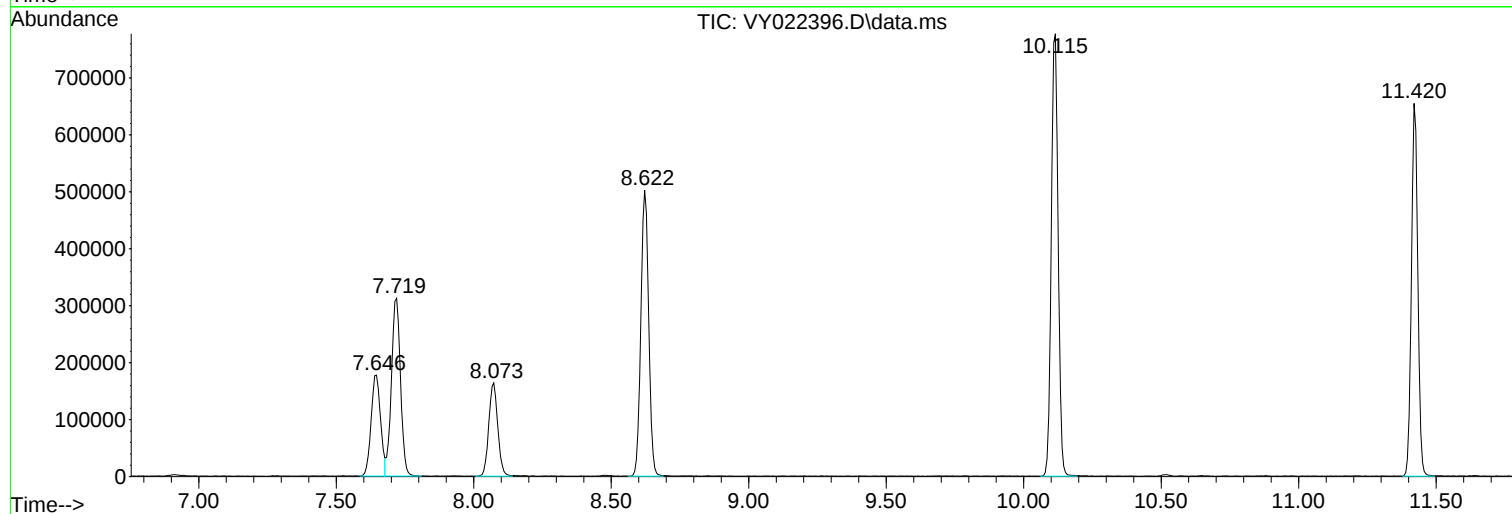
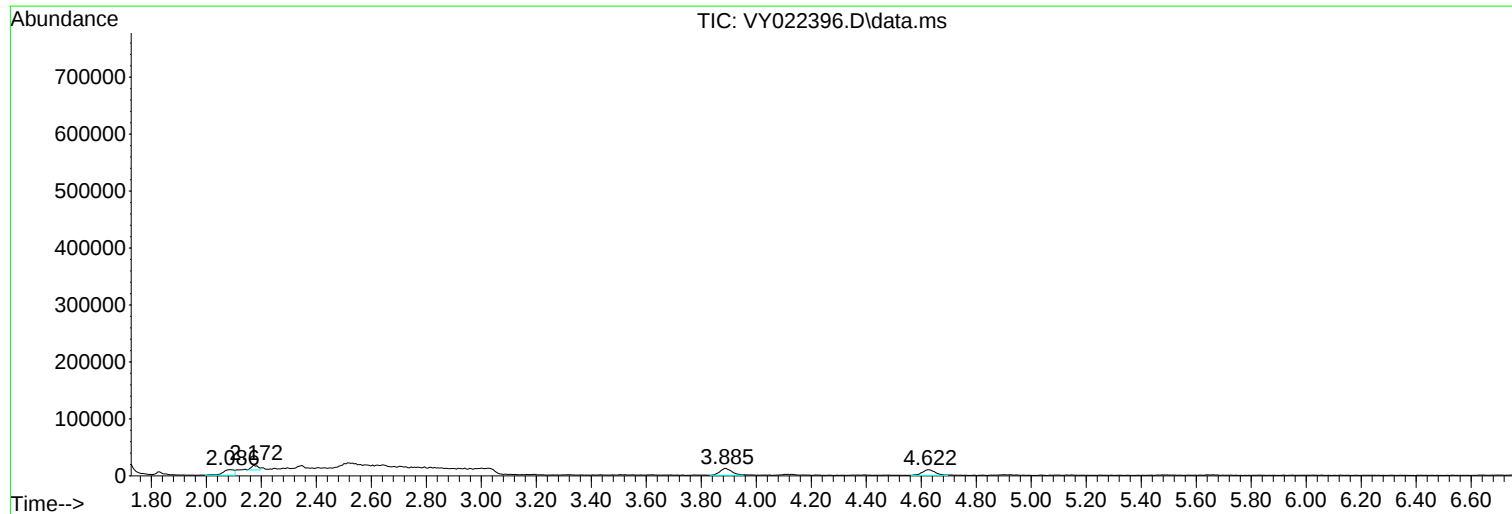
Sum of corrected areas: 6601785

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022396.D
Acq On : 22 May 2025 15:19
Operator : SY/MD
Sample : Q2074-08
Misc : 5.77g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
TP-18

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
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CALIBRATION SUMMARY



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074
 Instrument ID: MSVOA_Y Calibration Date(s): 05/15/2025 05/15/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 11:47
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF005 = VY022253.D	RRF010 = VY022254.D	RRF020 = VY022255.D	RRF050 = VY022256.D	RRF100 = VY022257.D	RRF150 = VY022258.D		
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Dichlorodifluoromethane	0.546	0.587	0.541	0.507	0.470	0.479	0.522	8.5
Chloromethane	1.212	1.237	1.153	1.042	1.046	0.894	1.097	11.7
Vinyl Chloride	1.265	1.317	1.264	1.210	1.190	1.110	1.226	5.9
Bromomethane	1.107	1.033	1.058	0.877	0.955	0.959	0.998	8.3
Chloroethane	0.751	0.814	0.796	0.756	0.733	0.727	0.763	4.6
Trichlorofluoromethane	1.254	1.292	1.260	1.214	1.211	1.217	1.241	2.6
1,1,2-Trichlorotrifluoroethane	0.548	0.577	0.544	0.538	0.507	0.520	0.539	4.5
1,1-Dichloroethene	0.545	0.544	0.540	0.539	0.518	0.523	0.535	2.2
Acetone	0.126	0.114	0.096	0.093	0.094	0.092	0.102	13.6
Carbon Disulfide	1.768	1.822	1.764	1.753	1.679	1.679	1.744	3.2
Methyl tert-butyl Ether	1.463	1.523	1.393	1.459	1.504	1.507	1.475	3.2
Methyl Acetate	0.349	0.308	0.286	0.302	0.346	0.347	0.323	8.6
Methylene Chloride	0.797	0.811	0.646	0.597	0.570	0.552	0.662	17.3
trans-1,2-Dichloroethene	0.577	0.609	0.603	0.592	0.580	0.581	0.590	2.2
1,1-Dichloroethane	1.112	1.136	1.099	1.117	1.093	1.082	1.106	1.7
Cyclohexane	1.300	1.191	1.077	1.055	0.998	1.011	1.105	10.6
2-Butanone	0.180	0.181	0.158	0.161	0.174	0.174	0.171	5.6
Carbon Tetrachloride	0.485	0.524	0.494	0.516	0.509	0.524	0.509	3.2
cis-1,2-Dichloroethene	0.662	0.687	0.668	0.691	0.687	0.693	0.681	1.9
Bromochloromethane	0.463	0.484	0.467	0.473	0.469	0.476	0.472	1.6
Chloroform	1.032	1.079	1.067	1.079	1.054	1.057	1.061	1.7
1,1,1-Trichloroethane	1.007	0.997	0.960	0.969	0.944	0.964	0.974	2.4
Methylcyclohexane	0.664	0.678	0.645	0.670	0.639	0.667	0.660	2.3
Benzene	1.369	1.462	1.435	1.499	1.482	1.496	1.457	3.4
1,2-Dichloroethane	0.381	0.399	0.378	0.402	0.403	0.402	0.394	2.9
Trichloroethene	0.358	0.366	0.361	0.371	0.356	0.363	0.362	1.5
1,2-Dichloropropane	0.337	0.361	0.344	0.357	0.354	0.355	0.351	2.6
Bromodichloromethane	0.466	0.494	0.476	0.506	0.504	0.504	0.492	3.4
4-Methyl-2-Pentanone	0.238	0.247	0.230	0.253	0.275	0.275	0.253	7.4
Toluene	0.871	0.924	0.890	0.944	0.947	0.961	0.923	3.8

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



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074
 Instrument ID: MSVOA_Y Calibration Date(s): 05/15/2025 05/15/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 11:47
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF005 = VY022253.D		RRF010 = VY022254.D		RRF020 = VY022255.D		
		RRF050 = VY022256.D		RRF100 = VY022257.D		RRF150 = VY022258.D		
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
t-1,3-Dichloropropene	0.464	0.473	0.457	0.487	0.498	0.499	0.480	3.7
cis-1,3-Dichloropropene	0.523	0.548	0.535	0.562	0.562	0.568	0.550	3.2
1,1,2-Trichloroethane	0.241	0.243	0.232	0.243	0.248	0.249	0.243	2.4
2-Hexanone	0.167	0.167	0.151	0.166	0.183	0.185	0.170	7.4
Dibromochloromethane	0.296	0.314	0.298	0.323	0.329	0.330	0.315	4.9
1,2-Dibromoethane	0.221	0.228	0.214	0.227	0.234	0.232	0.226	3.2
Tetrachloroethene	0.474	0.481	0.470	0.474	0.446	0.429	0.462	4.4
Chlorobenzene	1.112	1.110	1.106	1.154	1.143	1.143	1.128	1.9
Ethyl Benzene	2.014	2.043	2.049	2.175	2.173	2.222	2.113	4.1
m/p-Xylenes	0.749	0.770	0.763	0.818	0.825	0.852	0.796	5.2
o-Xylene	0.704	0.741	0.723	0.768	0.782	0.802	0.753	4.9
Styrene	1.182	1.214	1.210	1.303	1.335	1.380	1.270	6.3
Bromoform	0.202	0.214	0.194	0.209	0.219	0.217	0.209	4.5
Isopropylbenzene	4.157	4.192	4.100	4.197	4.028	4.181	4.142	1.6
1,1,2,2-Tetrachloroethane	0.656	0.647	0.581	0.628	0.645	0.666	0.637	4.8
1,3-Dichlorobenzene	1.757	1.774	1.715	1.838	1.839	1.914	1.806	4
1,4-Dichlorobenzene	1.759	1.765	1.706	1.750	1.723	1.720	1.737	1.4
1,2-Dichlorobenzene	1.526	1.520	1.479	1.534	1.520	1.523	1.517	1.3
1,2-Dibromo-3-Chloropropane	0.107	0.104	0.093	0.100	0.109	0.104	0.103	5.7
1,2,4-Trichlorobenzene	0.860	0.845	0.848	0.900	0.904	0.902	0.876	3.2
1,2,3-Trichlorobenzene	0.753	0.721	0.702	0.752	0.777	0.756	0.743	3.6
1,2-Dichloroethane-d4	0.547	0.559	0.527	0.541	0.545	0.560	0.546	2.2
Dibromofluoromethane	0.294	0.294	0.294	0.301	0.297	0.310	0.298	2.2
Toluene-d8	1.224	1.200	1.195	1.230	1.214	1.272	1.222	2.3
4-Bromofluorobenzene	0.390	0.386	0.368	0.387	0.387	0.407	0.387	3.3

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y051525S.M
 Title : SW846 8260
 Last Update : Fri May 16 01:42:09 2025
 Response Via : Initial Calibration

Calibration Files

5 =VY022253.D 10 =VY022254.D 20 =VY022255.D 50 =VY022256.D 100 =VY022257.D 150 =VY022258.D

	Compound	5	10	20	50	100	150	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.546	0.587	0.541	0.507	0.470	0.479	0.522	8.51
3) P	Chloromethane	1.212	1.237	1.153	1.042	1.046	0.894	1.097	11.72
4) C	Vinyl Chloride	1.265	1.317	1.264	1.210	1.190	1.110	1.226	5.91#
5) T	Bromomethane	1.107	1.033	1.058	0.877	0.955	0.959	0.998	8.33
6) T	Chloroethane	0.751	0.814	0.796	0.756	0.733	0.727	0.763	4.56
7) T	Trichlorofluor...	1.254	1.292	1.260	1.214	1.211	1.217	1.241	2.64
8) T	Diethyl Ether	0.305	0.320	0.283	0.294	0.295	0.291	0.298	4.33
9) T	1,1,2-Trichlor...	0.548	0.577	0.544	0.538	0.507	0.520	0.539	4.50
10) T	Methyl Iodide	0.559	0.586	0.620	0.687	0.651	0.638	0.624	7.35
11) T	Tert butyl alc...	0.045	0.045	0.037	0.039	0.042	0.042	0.042	7.70
12) CM	1,1-Dichloroet...	0.545	0.544	0.540	0.539	0.518	0.523	0.535	2.17#
13) T	Acrolein	0.068	0.068	0.057	0.056	0.058	0.058	0.061	8.63
14) T	Allyl chloride	0.888	0.967	0.949	0.959	0.932	0.931	0.938	3.00
15) T	Acrylonitrile	0.123	0.126	0.115	0.120	0.127	0.126	0.123	3.79
16) T	Acetone	0.126	0.114	0.096	0.093	0.094	0.092	0.102	13.64
17) T	Carbon Disulfide	1.768	1.822	1.764	1.753	1.679	1.679	1.744	3.20
18) T	Methyl Acetate	0.349	0.308	0.286	0.302	0.346	0.347	0.323	8.55
19) T	Methyl tert-bu...	1.463	1.523	1.393	1.459	1.504	1.507	1.475	3.22
20) T	Methylene Chlo...	0.797	0.811	0.646	0.597	0.570	0.552	0.662	17.28
21) T	trans-1,2-Dich...	0.577	0.609	0.603	0.592	0.580	0.581	0.590	2.22
22) T	Diisopropyl ether	1.947	2.009	1.937	1.986	2.003	2.001	1.980	1.57
23) T	Vinyl Acetate	1.214	1.225	1.134	1.174	1.214	1.218	1.196	2.99
24) P	1,1-Dichloroet...	1.112	1.136	1.099	1.117	1.093	1.082	1.106	1.73
25) T	2-Butanone	0.180	0.181	0.158	0.161	0.174	0.174	0.171	5.60
26) T	2,2-Dichloropr...	0.994	1.024	0.971	0.987	0.961	0.968	0.984	2.33
27) T	cis-1,2-Dichlo...	0.662	0.687	0.668	0.691	0.687	0.693	0.681	1.91
28) T	Bromochloromet...	0.463	0.484	0.467	0.473	0.469	0.476	0.472	1.62
29) T	Tetrahydrofuran	0.105	0.116	0.102	0.107	0.116	0.116	0.110	5.98
30) C	Chloroform	1.032	1.079	1.067	1.079	1.054	1.057	1.061	1.66#
31) T	Cyclohexane	1.300	1.191	1.077	1.055	0.998	1.011	1.105	10.63
32) T	1,1,1-Trichlor...	1.007	0.997	0.960	0.969	0.944	0.964	0.974	2.43
33) S	1,2-Dichloroet...	0.547	0.559	0.527	0.541	0.545	0.560	0.546	2.24
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...	0.294	0.294	0.294	0.301	0.297	0.310	0.298	2.17
36) T	1,1-Dichloropr...	0.474	0.502	0.488	0.505	0.484	0.496	0.492	2.39
37) T	Ethyl Acetate	0.253	0.231	0.219	0.234	0.240	0.241	0.237	4.87
38) T	Carbon Tetrach...	0.485	0.524	0.494	0.516	0.509	0.524	0.509	3.18
39) T	Methylcyclohexane	0.664	0.678	0.645	0.670	0.639	0.667	0.660	2.30
40) TM	Benzene	1.369	1.462	1.435	1.499	1.482	1.496	1.457	3.37
41) T	Methacrylonitrile	0.153	0.182	0.148	0.158	0.148	0.152	0.157	8.18
42) TM	1,2-Dichloroet...	0.381	0.399	0.378	0.402	0.403	0.402	0.394	2.86
43) T	Isopropyl Acetate	0.510	0.527	0.480	0.514	0.534	0.530	0.516	3.83
44) TM	Trichloroethene	0.358	0.366	0.361	0.371	0.356	0.363	0.362	1.48
45) C	1,2-Dichloropr...	0.337	0.361	0.344	0.357	0.354	0.355	0.351	2.58#
46) T	Dibromomethane	0.189	0.192	0.180	0.189	0.193	0.194	0.189	2.59
47) T	Bromodichlorom...	0.466	0.494	0.476	0.506	0.504	0.504	0.492	3.42
48) T	Methyl methacr...	0.228	0.238	0.224	0.240	0.259	0.259	0.241	6.19
49) T	1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	4.33
50) S	Toluene-d8	1.224	1.200	1.195	1.230	1.214	1.272	1.222	2.26
51) T	4-Methyl-2-Pen...	0.238	0.247	0.230	0.253	0.275	0.275	0.253	7.43
52) CM	Toluene	0.871	0.924	0.890	0.944	0.947	0.961	0.923	3.82#
53) T	t-1,3-Dichloro...	0.464	0.473	0.457	0.487	0.498	0.499	0.480	3.71
54) T	cis-1,3-Dichlo...	0.523	0.548	0.535	0.562	0.562	0.568	0.550	3.22
55) T	1,1,2-Trichlor...	0.241	0.243	0.232	0.243	0.248	0.249	0.243	2.42
56) T	Ethyl methacry...	0.370	0.362	0.354	0.381	0.398	0.403	0.378	5.26

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y051525S.M

57)	T	1,3-Dichloropr...	0.418	0.436	0.413	0.438	0.442	0.440	0.431	2.80
58)	T	2-Chloroethyl ...	0.141	0.150	0.144	0.183	0.197	0.203	0.170	16.60
59)	T	2-Hexanone	0.167	0.167	0.151	0.166	0.183	0.185	0.170	7.38
60)	T	Dibromochlorom...	0.296	0.314	0.298	0.323	0.329	0.330	0.315	4.88
61)	T	1,2-Dibromoethane	0.221	0.228	0.214	0.227	0.234	0.232	0.226	3.22
62)	S	4-Bromofluorob...	0.390	0.386	0.368	0.387	0.387	0.407	0.387	3.25
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.474	0.481	0.470	0.474	0.446	0.429	0.462	4.37
65)	PM	Chlorobenzene	1.112	1.110	1.106	1.154	1.143	1.143	1.128	1.87
66)	T	1,1,1,2-Tetrac...	0.373	0.377	0.372	0.394	0.399	0.411	0.388	4.14
67)	C	Ethyl Benzene	2.014	2.043	2.049	2.175	2.173	2.222	2.113	4.13#
68)	T	m/p-Xylenes	0.749	0.770	0.763	0.818	0.825	0.852	0.796	5.16
69)	T	o-Xylene	0.704	0.741	0.723	0.768	0.782	0.802	0.753	4.93
70)	T	Styrene	1.182	1.214	1.210	1.303	1.335	1.380	1.270	6.28
71)	P	Bromoform	0.202	0.214	0.194	0.209	0.219	0.217	0.209	4.53
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	4.157	4.192	4.100	4.197	4.028	4.181	4.142	1.60
74)	T	N-amyl acetate	1.195	1.173	1.114	1.159	1.235	1.232	1.185	3.91
75)	P	1,1,2,2-Tetrac...	0.656	0.647	0.581	0.628	0.645	0.666	0.637	4.77
76)	T	1,2,3-Trichlor...	0.522	0.467	0.516	0.501	0.521	0.514	0.507	4.12
77)	T	Bromobenzene	0.887	0.885	0.848	0.895	0.889	0.904	0.885	2.17
78)	T	n-propylbenzene	5.031	5.047	4.904	5.127	4.865	5.006	4.996	1.93
79)	T	2-Chlorotoluene	2.715	2.786	2.694	2.804	2.704	2.772	2.746	1.71
80)	T	1,3,5-Trimethy...	3.393	3.386	3.275	3.410	3.251	3.349	3.344	1.98
81)	T	trans-1,4-Dich...	0.269	0.260	0.241	0.237	0.246	0.248	0.250	4.80
82)	T	4-Chlorotoluene	2.801	2.829	2.744	2.907	2.797	2.867	2.824	2.02
83)	T	tert-Butylbenzene	3.037	2.974	2.900	3.029	2.879	3.014	2.972	2.29
84)	T	1,2,4-Trimethy...	3.189	3.349	3.206	3.413	3.329	3.431	3.319	3.07
85)	T	sec-Butylbenzene	4.390	4.461	4.318	4.573	4.307	4.421	4.412	2.24
86)	T	p-Isopropyltol...	3.598	3.610	3.573	3.818	3.754	3.911	3.710	3.72
87)	T	1,3-Dichlorobe...	1.757	1.774	1.715	1.838	1.839	1.914	1.806	3.96
88)	T	1,4-Dichlorobe...	1.759	1.765	1.706	1.750	1.723	1.720	1.737	1.39
89)	T	n-Butylbenzene	3.419	3.500	3.490	3.668	3.452	3.533	3.510	2.47
90)	T	Hexachloroethane	0.773	0.759	0.736	0.761	0.726	0.740	0.749	2.36
91)	T	1,2-Dichlorobe...	1.526	1.520	1.479	1.534	1.520	1.523	1.517	1.27
92)	T	1,2-Dibromo-3-...	0.107	0.104	0.093	0.100	0.109	0.104	0.103	5.68
93)	T	1,2,4-Trichlor...	0.860	0.845	0.848	0.900	0.904	0.902	0.876	3.23
94)	T	Hexachlorobuta...	0.511	0.485	0.496	0.502	0.474	0.464	0.489	3.56
95)	T	Naphthalene	1.704	1.579	1.527	1.653	1.778	1.737	1.663	5.78
96)	T	1,2,3-Trichlor...	0.753	0.721	0.702	0.752	0.777	0.756	0.743	3.64

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022253.D
 Acq On : 15 May 2025 09:46
 Operator : SY/MD
 Sample : VSTDICC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:20:25 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	276170	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	470488	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	385399	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	174003	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	15118	5.009	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	10.020%#		
35) Dibromofluoromethane	7.634	113	13854	4.933	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	9.860%#		
50) Toluene-d8	10.109	98	57575	5.006	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	10.020%#		
62) 4-Bromofluorobenzene	12.408	95	18328	5.028	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	10.060%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	15071	5.230	ug/l	96
3) Chloromethane	2.068	50	33477	5.523	ug/l	100
4) Vinyl Chloride	2.208	62	34943	5.159	ug/l	96
5) Bromomethane	2.598	94	30561	5.543	ug/l	99
6) Chloroethane	2.739	64	20741	4.923	ug/l	97
7) Trichlorofluoromethane	3.056	101	34641	5.052	ug/l	98
8) Diethyl Ether	3.458	74	8435	5.126	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.824	101	15124	5.081	ug/l	95
10) Methyl Iodide	4.013	142	15449	4.484	ug/l	99
11) Tert butyl alcohol	4.879	59	6159	26.722	ug/l #	100
12) 1,1-Dichloroethene	3.787	96	15064	5.099	ug/l	93
13) Acrolein	3.653	56	9366	27.796	ug/l	94
14) Allyl chloride	4.385	41	24537	4.737	ug/l	94
15) Acrylonitrile	5.061	53	17036	25.125	ug/l	100
16) Acetone	3.879	43	17340	30.639	ug/l	91
17) Carbon Disulfide	4.110	76	48817	5.068	ug/l	99
18) Methyl Acetate	4.391	43	9639m	5.597	ug/l	
19) Methyl tert-butyl Ether	5.128	73	40392	4.959	ug/l	97
20) Methylene Chloride	4.610	84	22002	6.016	ug/l	93
21) trans-1,2-Dichloroethene	5.110	96	15943	4.889	ug/l	85
22) Diisopropyl ether	6.025	45	53760	4.915	ug/l	97
23) Vinyl Acetate	5.964	43	167594	25.361	ug/l	96
24) 1,1-Dichloroethane	5.921	63	30712	5.026	ug/l	97
25) 2-Butanone	6.903	43	24805	26.203	ug/l	91
26) 2,2-Dichloropropane	6.884	77	27440	5.048	ug/l	97
27) cis-1,2-Dichloroethene	6.896	96	18276	4.857	ug/l	98
28) Bromochloromethane	7.250	49	12774	4.901	ug/l	98
29) Tetrahydrofuran	7.268	42	14502	23.811	ug/l	93
30) Chloroform	7.421	83	28505	4.863	ug/l	94
31) Cyclohexane	7.701	56	35904	5.880	ug/l #	89
32) 1,1,1-Trichloroethane	7.622	97	27801	5.170	ug/l	96
36) 1,1-Dichloropropene	7.841	75	22314	4.824	ug/l	97
37) Ethyl Acetate	6.994	43	11910	5.352	ug/l	96
38) Carbon Tetrachloride	7.823	117	22826	4.768	ug/l	98
39) Methylcyclohexane	9.109	83	31218	5.024	ug/l	98
40) Benzene	8.085	78	64430	4.699	ug/l	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022253.D
 Acq On : 15 May 2025 09:46
 Operator : SY/MD
 Sample : VSTDICC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:20:25 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.244	41	7201m	4.422	ug/l	
42) 1,2-Dichloroethane	8.158	62	17934	4.837	ug/l	97
43) Isopropyl Acetate	8.201	43	23979	4.941	ug/l	99
44) Trichloroethene	8.872	130	16852	4.943	ug/l	95
45) 1,2-Dichloropropane	9.146	63	15855	4.796	ug/l	95
46) Dibromomethane	9.238	93	8879	4.980	ug/l	92
47) Bromodichloromethane	9.427	83	21906	4.736	ug/l #	95
48) Methyl methacrylate	9.225	41	10729	4.727	ug/l	98
49) 1,4-Dioxane	9.244	88	1962	97.404	ug/l #	78
51) 4-Methyl-2-Pentanone	10.000	43	55880	23.464	ug/l	97
52) Toluene	10.170	92	41001	4.722	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	21842	4.839	ug/l	100
54) cis-1,3-Dichloropropene	9.859	75	24609	4.758	ug/l	97
55) 1,1,2-Trichloroethane	10.573	97	11333	4.964	ug/l #	89
56) Ethyl methacrylate	10.438	69	17420	4.898	ug/l	98
57) 1,3-Dichloropropane	10.725	76	19684	4.852	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.713	63	33215	20.807	ug/l	100
59) 2-Hexanone	10.762	43	39307	24.617	ug/l	100
60) Dibromochloromethane	10.914	129	13908	4.693	ug/l	98
61) 1,2-Dibromoethane	11.018	107	10391	4.883	ug/l	94
64) Tetrachloroethene	10.652	164	18255	5.125	ug/l	96
65) Chlorobenzene	11.444	112	42844	4.927	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	14385	4.812	ug/l	99
67) Ethyl Benzene	11.524	91	77606	4.766	ug/l	99
68) m/p-Xylenes	11.633	106	57721	9.407	ug/l	99
69) o-Xylene	11.957	106	27130	4.673	ug/l	99
70) Styrene	11.975	104	45556	4.652	ug/l	99
71) Bromoform	12.133	173	7799	4.834	ug/l #	94
73) Isopropylbenzene	12.255	105	72325	5.017	ug/l	98
74) N-amyl acetate	12.072	43	20793	5.043	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.511	83	11422	5.152	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	9076m	2.960	ug/l	
77) Bromobenzene	12.536	156	15441	5.015	ug/l	97
78) n-propylbenzene	12.597	91	87533	5.034	ug/l	98
79) 2-Chlorotoluene	12.682	91	47245	4.944	ug/l	97
80) 1,3,5-Trimethylbenzene	12.737	105	59031	5.073	ug/l	98
81) trans-1,4-Dichloro-2-b...	12.310	75	4676	5.373	ug/l	97
82) 4-Chlorotoluene	12.780	91	48737	4.959	ug/l	98
83) tert-Butylbenzene	12.999	119	52841	5.109	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	55488	4.804	ug/l	97
85) sec-Butylbenzene	13.176	105	76384	4.975	ug/l	97
86) p-Isopropyltoluene	13.292	119	62608	4.849	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	30564	4.863	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	30610	5.063	ug/l	96
89) n-Butylbenzene	13.621	91	59485	4.869	ug/l	99
90) Hexachloroethane	13.883	117	13445	5.158	ug/l	96
91) 1,2-Dichlorobenzene	13.664	146	26556	5.030	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.279	75	1865	5.217	ug/l	98
93) 1,2,4-Trichlorobenzene	14.926	180	14961	4.906	ug/l	94
94) Hexachlorobutadiene	15.029	225	8887	5.226	ug/l	99
95) Naphthalene	15.151	128	29654	5.124	ug/l	98
96) 1,2,3-Trichlorobenzene	15.334	180	13097	5.063	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022253.D
Acq On : 15 May 2025 09:46
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:20:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

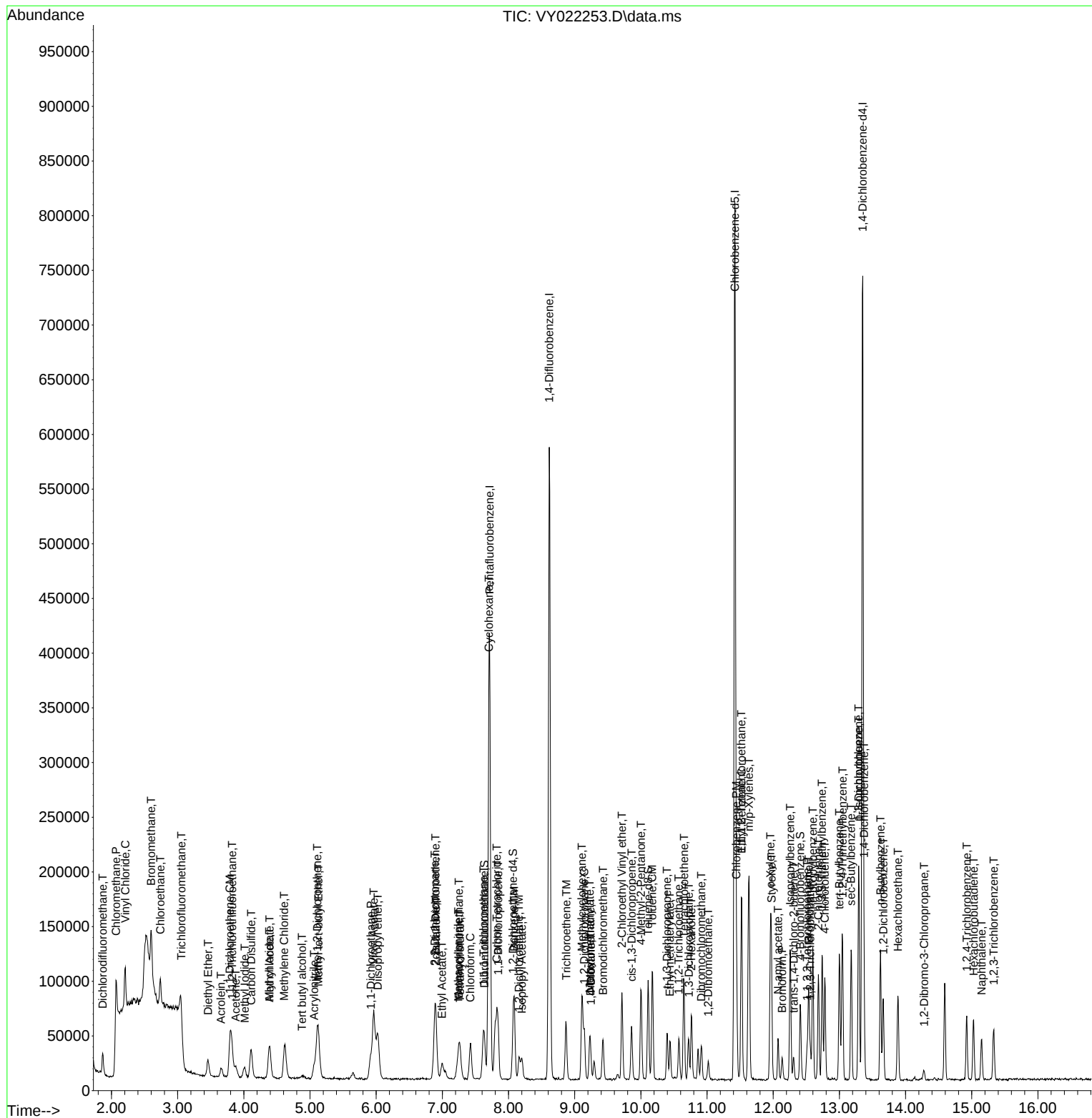
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022253.D
Acq On : 15 May 2025 09:46
Operator : SY/MD
Sample : VSTDIC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:20:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022254.D
 Acq On : 15 May 2025 10:16
 Operator : SY/MD
 Sample : VSTDICC010
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:21:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	265034	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	446109	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	377211	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	171972	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	29608	10.222	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	20.440%#		
35) Dibromofluoromethane	7.634	113	26242	9.856	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	19.720%#		
50) Toluene-d8	10.109	98	107048	9.816	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	19.640%#		
62) 4-Bromofluorobenzene	12.408	95	34423	9.959	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	19.920%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	31097	11.245	ug/l	99
3) Chloromethane	2.068	50	65589	11.275	ug/l	98
4) Vinyl Chloride	2.202	62	69800	10.739	ug/l	95
5) Bromomethane	2.592	94	54773	10.352	ug/l	99
6) Chloroethane	2.732	64	43122	10.665	ug/l	99
7) Trichlorofluoromethane	3.056	101	68501	10.410	ug/l	99
8) Diethyl Ether	3.458	74	16945	10.730	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.812	101	30591	10.708	ug/l	99
10) Methyl Iodide	4.007	142	31088	9.402	ug/l	97
11) Tert butyl alcohol	4.878	59	12043	54.446	ug/l #	100
12) 1,1-Dichloroethene	3.793	96	28831	10.170	ug/l	95
13) Acrolein	3.659	56	17927	55.439	ug/l	96
14) Allyl chloride	4.378	41	51275	10.315	ug/l	99
15) Acrylonitrile	5.061	53	33277	51.139	ug/l	100
16) Acetone	3.879	43	30229	55.657	ug/l	100
17) Carbon Disulfide	4.104	76	96591	10.448	ug/l	97
18) Methyl Acetate	4.385	43	16338	9.886	ug/l	94
19) Methyl tert-butyl Ether	5.116	73	80714	10.326	ug/l	96
20) Methylene Chloride	4.622	84	42991	12.250	ug/l	95
21) trans-1,2-Dichloroethene	5.116	96	32258	10.309	ug/l	98
22) Diisopropyl ether	6.018	45	106493	10.145	ug/l	94
23) Vinyl Acetate	5.964	43	324651	51.192	ug/l	100
24) 1,1-Dichloroethane	5.915	63	60198	10.265	ug/l	97
25) 2-Butanone	6.896	43	48022	52.859	ug/l	98
26) 2,2-Dichloropropane	6.890	77	54264	10.403	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	36403	10.081	ug/l	98
28) Bromochloromethane	7.244	49	25664	10.259	ug/l	98
29) Tetrahydrofuran	7.274	42	30684	52.498	ug/l	98
30) Chloroform	7.421	83	57172	10.163	ug/l	100
31) Cyclohexane	7.701	56	63155	10.778	ug/l	95
32) 1,1,1-Trichloroethane	7.622	97	52856	10.242	ug/l	99
36) 1,1-Dichloropropene	7.835	75	44817	10.219	ug/l	97
37) Ethyl Acetate	6.994	43	20624	9.774	ug/l	97
38) Carbon Tetrachloride	7.817	117	46772	10.303	ug/l	97
39) Methylcyclohexane	9.109	83	60489	10.266	ug/l	98
40) Benzene	8.079	78	130423	10.032	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022254.D
 Acq On : 15 May 2025 10:16
 Operator : SY/MD
 Sample : VSTDICC010
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:21:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.250	41	16228m	10.510	ug/l	
42) 1,2-Dichloroethane	8.158	62	35565	10.115	ug/l	100
43) Isopropyl Acetate	8.201	43	47020	10.217	ug/l	98
44) Trichloroethene	8.865	130	32655	10.101	ug/l	99
45) 1,2-Dichloropropane	9.140	63	32172	10.264	ug/l	93
46) Dibromomethane	9.231	93	17134	10.135	ug/l	99
47) Bromodichloromethane	9.426	83	44045	10.042	ug/l	96
48) Methyl methacrylate	9.225	41	21202	9.851	ug/l	98
49) 1,4-Dioxane	9.231	88	3930	205.769	ug/l #	75
51) 4-Methyl-2-Pentanone	9.999	43	110396	48.889	ug/l	100
52) Toluene	10.170	92	82453	10.015	ug/l	96
53) t-1,3-Dichloropropene	10.396	75	42158	9.849	ug/l	96
54) cis-1,3-Dichloropropene	9.859	75	48923	9.976	ug/l	96
55) 1,1,2-Trichloroethane	10.572	97	21720	10.033	ug/l	97
56) Ethyl methacrylate	10.438	69	32286	9.574	ug/l	98
57) 1,3-Dichloropropane	10.719	76	38908	10.115	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.713	63	66700	44.066	ug/l	100
59) 2-Hexanone	10.761	43	74432	49.162	ug/l	99
60) Dibromochloromethane	10.914	129	28002	9.965	ug/l	99
61) 1,2-Dibromoethane	11.018	107	20378	10.099	ug/l	99
64) Tetrachloroethene	10.646	164	36274	10.404	ug/l	99
65) Chlorobenzene	11.444	112	83730	9.839	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.517	131	28441	9.721	ug/l	97
67) Ethyl Benzene	11.517	91	154155	9.672	ug/l	97
68) m/p-Xylenes	11.627	106	116113	19.334	ug/l	99
69) o-Xylene	11.956	106	55896	9.837	ug/l	96
70) Styrene	11.969	104	91569	9.553	ug/l	99
71) Bromoform	12.133	173	16151	10.228	ug/l #	95
73) Isopropylbenzene	12.255	105	144186	10.120	ug/l	99
74) N-amyl acetate	12.072	43	40345	9.901	ug/l	99
75) 1,1,1,2,2-Tetrachloroethane	12.505	83	22243	10.152	ug/l	96
76) 1,2,3-Trichloropropane	12.560	75	16056m	5.297	ug/l	
77) Bromobenzene	12.536	156	30445	10.005	ug/l	99
78) n-propylbenzene	12.597	91	173575	10.101	ug/l	100
79) 2-Chlorotoluene	12.682	91	95815	10.146	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	116461	10.126	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	8934	10.388	ug/l	94
82) 4-Chlorotoluene	12.779	91	97309	10.018	ug/l	99
83) tert-Butylbenzene	12.999	119	102274	10.005	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	115175	10.088	ug/l	99
85) sec-Butylbenzene	13.176	105	153443	10.112	ug/l	100
86) p-Isopropyltoluene	13.291	119	124147	9.728	ug/l	100
87) 1,3-Dichlorobenzene	13.285	146	61011	9.822	ug/l	98
88) 1,4-Dichlorobenzene	13.365	146	60723	10.163	ug/l	97
89) n-Butylbenzene	13.621	91	120371	9.970	ug/l	99
90) Hexachloroethane	13.883	117	26089	10.127	ug/l	97
91) 1,2-Dichlorobenzene	13.663	146	52282	10.020	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	3588	10.155	ug/l	99
93) 1,2,4-Trichlorobenzene	14.925	180	29073	9.646	ug/l	99
94) Hexachlorobutadiene	15.023	225	16686	9.927	ug/l	98
95) Naphthalene	15.145	128	54307	9.495	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	24790	9.696	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022254.D
Acq On : 15 May 2025 10:16
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:21:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

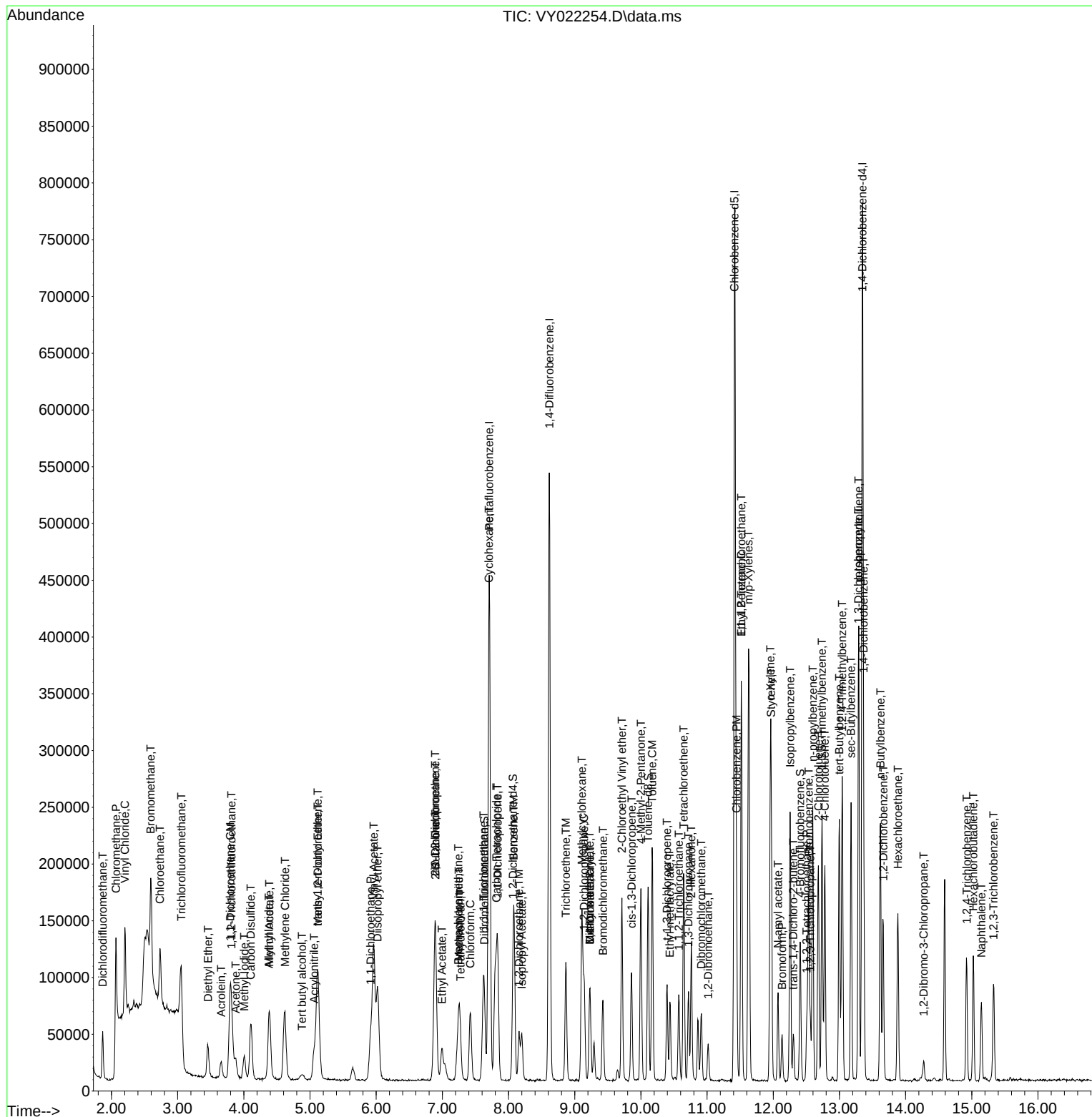
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022254.D
Acq On : 15 May 2025 10:16
Operator : SY/MD
Sample : VSTDIC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:21:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022255.D
 Acq On : 15 May 2025 10:39
 Operator : SY/MD
 Sample : VSTDICC020
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:22:12 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	262008	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	439816	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	370072	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	172509	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	55221	19.284	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	38.560%#		
35) Dibromofluoromethane	7.634	113	51670	19.683	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	39.360%#		
50) Toluene-d8	10.109	98	210206	19.552	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	39.100%#		
62) 4-Bromofluorobenzene	12.408	95	64706	18.988	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	37.980%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	56737	20.753	ug/l	99
3) Chloromethane	2.068	50	120819	21.008	ug/l	97
4) Vinyl Chloride	2.202	62	132511	20.623	ug/l	96
5) Bromomethane	2.592	94	110855	21.194	ug/l	99
6) Chloroethane	2.732	64	83451	20.877	ug/l	99
7) Trichlorofluoromethane	3.050	101	132029	20.295	ug/l	97
8) Diethyl Ether	3.458	74	29651	18.993	ug/l	98
9) 1,1,2-Trichlorotrifluo...	3.812	101	57012	20.187	ug/l	98
10) Methyl Iodide	4.001	142	65018	19.891	ug/l	98
11) Tert butyl alcohol	4.872	59	19585	89.565	ug/l #	100
12) 1,1-Dichloroethene	3.787	96	56630	20.206	ug/l	98
13) Acrolein	3.653	56	30106	94.178	ug/l	91
14) Allyl chloride	4.385	41	99483	20.244	ug/l	100
15) Acrylonitrile	5.061	53	60119	93.456	ug/l	100
16) Acetone	3.873	43	50198	93.491	ug/l	96
17) Carbon Disulfide	4.104	76	184860	20.228	ug/l	99
18) Methyl Acetate	4.391	43	29969	18.344	ug/l	96
19) Methyl tert-butyl Ether	5.116	73	145976	18.890	ug/l	100
20) Methylene Chloride	4.616	84	67687	19.510	ug/l	99
21) trans-1,2-Dichloroethene	5.116	96	63174	20.422	ug/l	97
22) Diisopropyl ether	6.019	45	202960	19.558	ug/l	99
23) Vinyl Acetate	5.958	43	594019	94.748	ug/l	99
24) 1,1-Dichloroethane	5.915	63	115217	19.873	ug/l	99
25) 2-Butanone	6.896	43	82768	92.157	ug/l	93
26) 2,2-Dichloropropane	6.890	77	101725	19.727	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	70008	19.611	ug/l	98
28) Bromochloromethane	7.244	49	48933	19.787	ug/l	100
29) Tetrahydrofuran	7.262	42	53229	92.122	ug/l	98
30) Chloroform	7.421	83	111815	20.107	ug/l	98
31) Cyclohexane	7.695	56	112876	19.486	ug/l	97
32) 1,1,1-Trichloroethane	7.616	97	100618	19.721	ug/l	100
36) 1,1-Dichloropropene	7.835	75	85789	19.841	ug/l	99
37) Ethyl Acetate	6.988	43	38482	18.497	ug/l	99
38) Carbon Tetrachloride	7.817	117	86871	19.410	ug/l	98
39) Methylcyclohexane	9.109	83	113511	19.540	ug/l	98
40) Benzene	8.079	78	252507	19.700	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022255.D
 Acq On : 15 May 2025 10:39
 Operator : SY/MD
 Sample : VSTDICC020
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:22:12 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.213	41	26008m	17.085	ug/l	
42) 1,2-Dichloroethane	8.158	62	66525	19.192	ug/l	99
43) Isopropyl Acetate	8.201	43	84532	18.631	ug/l	97
44) Trichloroethene	8.866	130	63438	19.904	ug/l	96
45) 1,2-Dichloropropane	9.140	63	60438	19.557	ug/l	100
46) Dibromomethane	9.231	93	31752	19.050	ug/l	99
47) Bromodichloromethane	9.426	83	83823	19.385	ug/l	96
48) Methyl methacrylate	9.219	41	39387	18.563	ug/l	99
49) 1,4-Dioxane	9.237	88	7312	388.323	ug/l	93
51) 4-Methyl-2-Pentanone	9.999	43	202454	90.940	ug/l	99
52) Toluene	10.170	92	156498	19.281	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	80413	19.056	ug/l	98
54) cis-1,3-Dichloropropene	9.853	75	94074	19.458	ug/l	99
55) 1,1,2-Trichloroethane	10.573	97	40872	19.149	ug/l	99
56) Ethyl methacrylate	10.438	69	62193	18.706	ug/l	97
57) 1,3-Dichloropropane	10.713	76	72715	19.175	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.707	63	126240	84.595	ug/l	99
59) 2-Hexanone	10.762	43	132496	88.766	ug/l	100
60) Dibromochloromethane	10.914	129	52353	18.898	ug/l	98
61) 1,2-Dibromoethane	11.012	107	37735	18.969	ug/l	99
64) Tetrachloroethene	10.646	164	69548	20.332	ug/l	98
65) Chlorobenzene	11.438	112	163725	19.610	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	55078	19.189	ug/l	98
67) Ethyl Benzene	11.518	91	303375	19.402	ug/l	99
68) m/p-Xylenes	11.627	106	225990	38.355	ug/l	100
69) o-Xylene	11.956	106	106998	19.194	ug/l	100
70) Styrene	11.969	104	179114	19.048	ug/l	99
71) Bromoform	12.133	173	28788	18.582	ug/l #	98
73) Isopropylbenzene	12.255	105	282895	19.795	ug/l	100
74) N-amyl acetate	12.072	43	76841	18.799	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	40064	18.228	ug/l	97
76) 1,2,3-Trichloropropane	12.554	75	35574m	11.701	ug/l	
77) Bromobenzene	12.530	156	58515	19.170	ug/l	99
78) n-propylbenzene	12.597	91	338383	19.630	ug/l	99
79) 2-Chlorotoluene	12.682	91	185872	19.621	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	225966	19.587	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	16653	19.302	ug/l	97
82) 4-Chlorotoluene	12.779	91	189350	19.433	ug/l	100
83) tert-Butylbenzene	12.999	119	200101	19.515	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	221194	19.315	ug/l	98
85) sec-Butylbenzene	13.176	105	297975	19.576	ug/l	100
86) p-Isopropyltoluene	13.292	119	246569	19.261	ug/l	99
87) 1,3-Dichlorobenzene	13.285	146	118336	18.991	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	117705	19.638	ug/l	99
89) n-Butylbenzene	13.615	91	240857	19.887	ug/l	99
90) Hexachloroethane	13.877	117	50762	19.643	ug/l	98
91) 1,2-Dichlorobenzene	13.657	146	102077	19.502	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	6387	18.021	ug/l	98
93) 1,2,4-Trichlorobenzene	14.919	180	58490	19.346	ug/l	99
94) Hexachlorobutadiene	15.023	225	34228	20.301	ug/l	100
95) Naphthalene	15.145	128	105350	18.362	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	48444	18.888	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022255.D
Acq On : 15 May 2025 10:39
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:22:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration

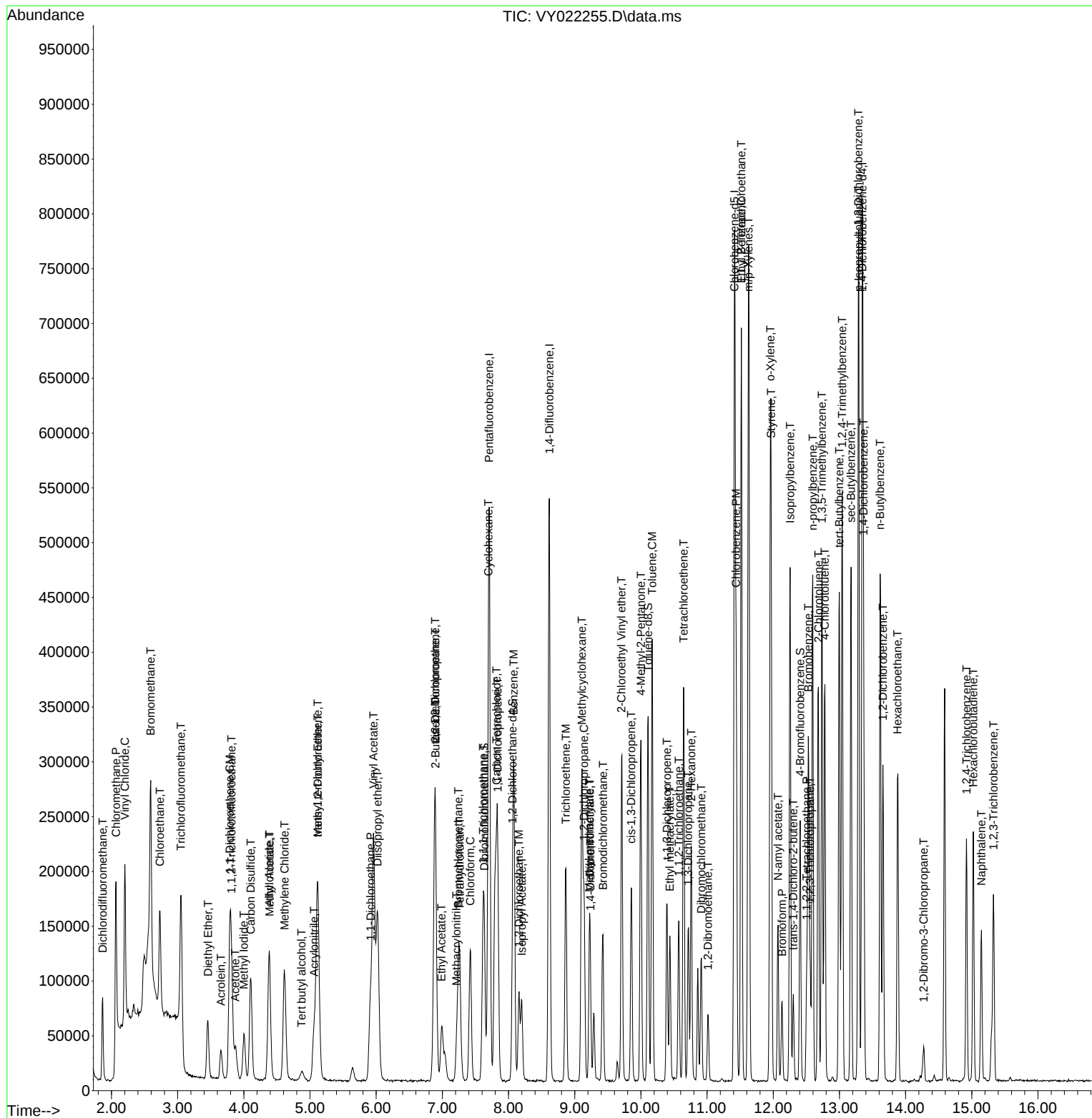
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022256.D
 Acq On : 15 May 2025 11:02
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:23:10 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	267598	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	439323	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	377571	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	180358	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	144713	49.481	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	98.960%		
35) Dibromofluoromethane	7.634	113	132404	50.495	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	100.980%		
50) Toluene-d8	10.103	98	540296	50.311	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	100.620%		
62) 4-Bromofluorobenzene	12.408	95	169827	49.891	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	99.780%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	135726	48.608	ug/l	100
3) Chloromethane	2.062	50	278892	47.481	ug/l	100
4) Vinyl Chloride	2.202	62	323792	49.341	ug/l	100
5) Bromomethane	2.592	94	234736	43.941	ug/l	100
6) Chloroethane	2.732	64	202370	49.569	ug/l	100
7) Trichlorofluoromethane	3.050	101	324887	48.898	ug/l	100
8) Diethyl Ether	3.452	74	78670	49.338	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.818	101	144018	49.930	ug/l	100
10) Methyl Iodide	4.007	142	183918	55.091	ug/l	100
11) Tert butyl alcohol	4.872	59	51598	231.036	ug/l #	100
12) 1,1-Dichloroethene	3.787	96	144103	50.344	ug/l	100
13) Acrolein	3.653	56	75423	231.010	ug/l	100
14) Allyl chloride	4.379	41	256499	51.106	ug/l	100
15) Acrylonitrile	5.061	53	160496	244.283	ug/l	100
16) Acetone	3.873	43	124421	226.888	ug/l	100
17) Carbon Disulfide	4.104	76	468979	50.244	ug/l	100
18) Methyl Acetate	4.385	43	80820	48.436	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	390412	49.466	ug/l	100
20) Methylene Chloride	4.616	84	159764	45.087	ug/l	100
21) trans-1,2-Dichloroethene	5.110	96	158544	50.181	ug/l	100
22) Diisopropyl ether	6.019	45	531560	50.152	ug/l	100
23) Vinyl Acetate	5.958	43	1570214	245.223	ug/l	100
24) 1,1-Dichloroethane	5.915	63	298823	50.465	ug/l	100
25) 2-Butanone	6.896	43	215828	235.291	ug/l	100
26) 2,2-Dichloropropane	6.884	77	264141	50.153	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	184842	50.698	ug/l	100
28) Bromochloromethane	7.244	49	126541	50.100	ug/l	100
29) Tetrahydrofuran	7.262	42	142772	241.931	ug/l	100
30) Chloroform	7.421	83	288708	50.831	ug/l	100
31) Cyclohexane	7.701	56	282375	47.728	ug/l	100
32) 1,1,1-Trichloroethane	7.616	97	259382	49.777	ug/l	100
36) 1,1-Dichloropropene	7.835	75	221943	51.388	ug/l	100
37) Ethyl Acetate	6.988	43	102924	49.529	ug/l	100
38) Carbon Tetrachloride	7.817	117	226903	50.754	ug/l	100
39) Methylcyclohexane	9.109	83	294336	50.726	ug/l	100
40) Benzene	8.079	78	658644	51.442	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022256.D
 Acq On : 15 May 2025 11:02
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:23:10 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.220	41	69476m	45.691	ug/l	
42) 1,2-Dichloroethane	8.158	62	176425	50.954	ug/l	100
43) Isopropyl Acetate	8.195	43	225628	49.785	ug/l	100
44) Trichloroethene	8.866	130	162802	51.138	ug/l	100
45) 1,2-Dichloropropane	9.140	63	156870	50.819	ug/l	100
46) Dibromomethane	9.231	93	82994	49.849	ug/l	100
47) Bromodichloromethane	9.420	83	222159	51.435	ug/l	100
48) Methyl methacrylate	9.219	41	105390	49.726	ug/l	100
49) 1,4-Dioxane	9.231	88	18027	958.446	ug/l	100
51) 4-Methyl-2-Pentanone	9.999	43	556123	250.085	ug/l	100
52) Toluene	10.170	92	414584	51.134	ug/l	100
53) t-1,3-Dichloropropene	10.390	75	213993	50.768	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	246990	51.143	ug/l	100
55) 1,1,2-Trichloroethane	10.573	97	106676	50.036	ug/l	100
56) Ethyl methacrylate	10.438	69	167259	50.364	ug/l	100
57) 1,3-Dichloropropane	10.719	76	192275	50.759	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.707	63	403074	270.408	ug/l	100
59) 2-Hexanone	10.762	43	365111	244.881	ug/l	100
60) Dibromochloromethane	10.908	129	141896	51.278	ug/l	100
61) 1,2-Dibromoethane	11.012	107	99822	50.236	ug/l	100
64) Tetrachloroethene	10.646	164	178854	51.249	ug/l	100
65) Chlorobenzene	11.438	112	435874	51.169	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.518	131	148798	50.811	ug/l	100
67) Ethyl Benzene	11.518	91	821168	51.473	ug/l	100
68) m/p-Xylenes	11.627	106	617646	102.746	ug/l	100
69) o-Xylene	11.950	106	289897	50.971	ug/l	100
70) Styrene	11.969	104	491792	51.260	ug/l	100
71) Bromoform	12.133	173	78794	49.849	ug/l #	100
73) Isopropylbenzene	12.255	105	756905	50.657	ug/l	100
74) N-amyl acetate	12.066	43	209097	48.930	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.505	83	113234	49.277	ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	90281m	28.402	ug/l	
77) Bromobenzene	12.530	156	161475	50.599	ug/l	100
78) n-propylbenzene	12.597	91	924664	51.306	ug/l	100
79) 2-Chlorotoluene	12.676	91	505684	51.058	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	615033	50.991	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	42692	47.331	ug/l	100
82) 4-Chlorotoluene	12.773	91	524270	51.464	ug/l	100
83) tert-Butylbenzene	12.999	119	546231	50.952	ug/l	100
84) 1,2,4-Trimethylbenzene	13.042	105	615550	51.410	ug/l	100
85) sec-Butylbenzene	13.176	105	824725	51.825	ug/l	100
86) p-Isopropyltoluene	13.292	119	688561	51.446	ug/l	100
87) 1,3-Dichlorobenzene	13.285	146	331536	50.890	ug/l	100
88) 1,4-Dichlorobenzene	13.365	146	315598	50.363	ug/l	100
89) n-Butylbenzene	13.615	91	661532	52.245	ug/l	100
90) Hexachloroethane	13.877	117	137225	50.791	ug/l	100
91) 1,2-Dichlorobenzene	13.657	146	276666	50.558	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	18039	48.682	ug/l	100
93) 1,2,4-Trichlorobenzene	14.919	180	162275	51.338	ug/l	100
94) Hexachlorobutadiene	15.023	225	90452	51.313	ug/l	100
95) Naphthalene	15.145	128	298075	49.692	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	135673	50.596	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022256.D
Acq On : 15 May 2025 11:02
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:23:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

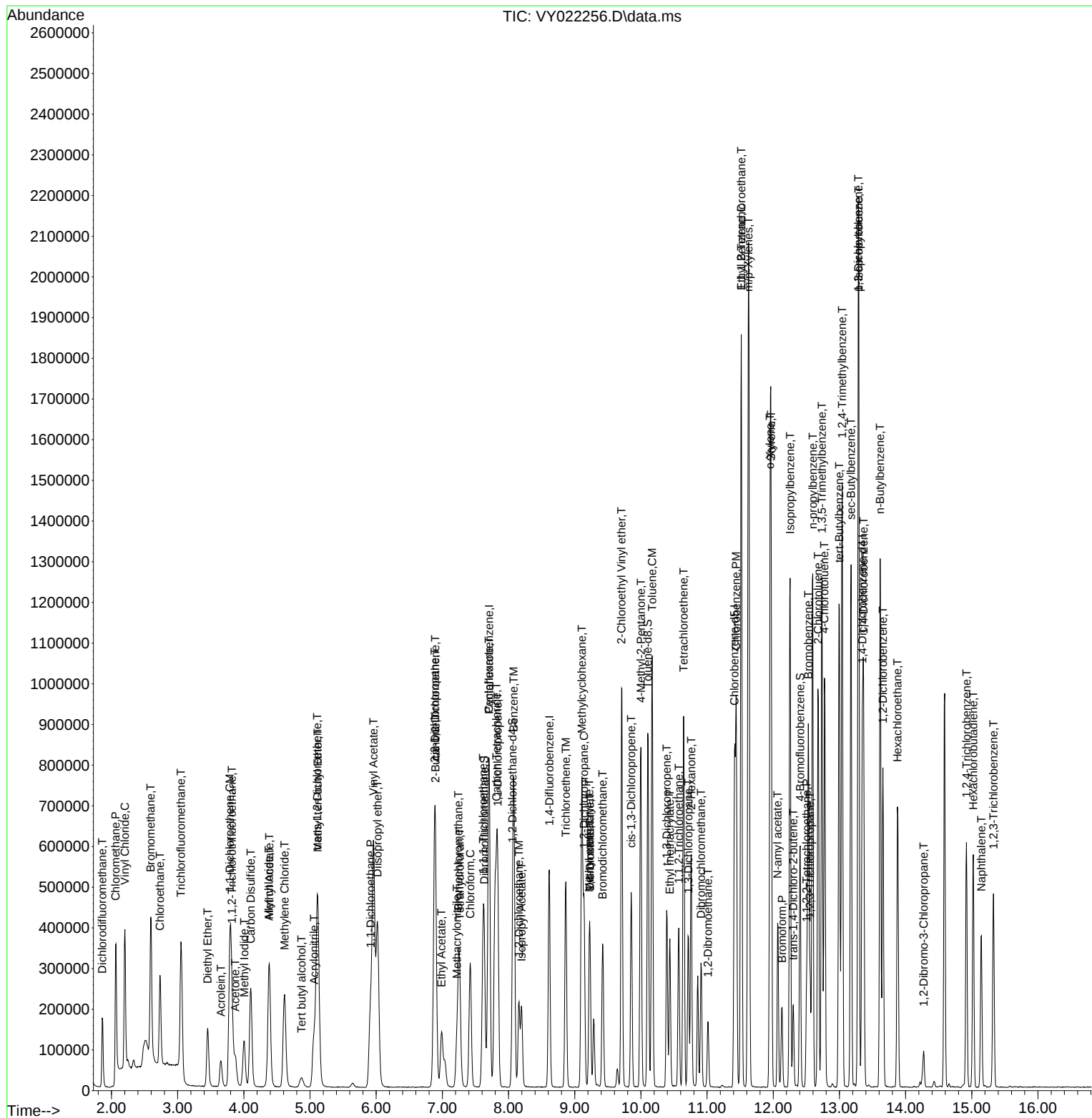
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022256.D
 Acq On : 15 May 2025 11:02
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Quant Time: May 16 01:23:10 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022257.D
 Acq On : 15 May 2025 11:24
 Operator : SY/MD
 Sample : VSTDICC100
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:24:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	268393	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	443341	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	385348	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	189780	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	292533	99.729	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 199.460%#			
35) Dibromofluoromethane	7.634	113	262995	99.389	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 198.780%#			
50) Toluene-d8	10.103	98	1076035	99.289	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 198.580%#			
62) 4-Bromofluorobenzene	12.408	95	343397	99.968	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 199.940%#			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	252438	90.138	ug/l	99
3) Chloromethane	2.062	50	561441	95.302	ug/l	100
4) Vinyl Chloride	2.202	62	639001	97.085	ug/l	96
5) Bromomethane	2.586	94	512452	95.642	ug/l	98
6) Chloroethane	2.732	64	393556	96.113	ug/l	99
7) Trichlorofluoromethane	3.049	101	650265	97.581	ug/l	100
8) Diethyl Ether	3.452	74	158375	99.031	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.812	101	272288	94.120	ug/l	99
10) Methyl Iodide	4.000	142	349345	104.334	ug/l	100
11) Tert butyl alcohol	4.872	59	112593	502.655	ug/l #	100
12) 1,1-Dichloroethene	3.787	96	277897	96.798	ug/l	97
13) Acrolein	3.653	56	156649	478.373	ug/l	99
14) Allyl chloride	4.378	41	500514	99.429	ug/l	100
15) Acrylonitrile	5.055	53	340325	516.458	ug/l	99
16) Acetone	3.872	43	252327	458.767	ug/l	99
17) Carbon Disulfide	4.104	76	901081	96.251	ug/l	99
18) Methyl Acetate	4.385	43	185837	111.043	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	807404	101.997	ug/l	98
20) Methylene Chloride	4.610	84	305912	86.076	ug/l	98
21) trans-1,2-Dichloroethene	5.116	96	311460	98.288	ug/l	97
22) Diisopropyl ether	6.018	45	1075035	101.128	ug/l	99
23) Vinyl Acetate	5.957	43	3259000	507.456	ug/l	100
24) 1,1-Dichloroethane	5.915	63	586479	98.750	ug/l	99
25) 2-Butanone	6.890	43	467301	507.932	ug/l	97
26) 2,2-Dichloropropane	6.884	77	515990	97.682	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	368826	100.861	ug/l	100
28) Bromochloromethane	7.244	49	251676	99.349	ug/l	100
29) Tetrahydrofuran	7.262	42	312286	527.609	ug/l	100
30) Chloroform	7.421	83	565823	99.326	ug/l	98
31) Cyclohexane	7.701	56	535839	90.301	ug/l	99
32) 1,1,1-Trichloroethane	7.616	97	506927	96.995	ug/l	100
36) 1,1-Dichloropropene	7.835	75	429153	98.465	ug/l	99
37) Ethyl Acetate	6.982	43	213152	101.642	ug/l	99
38) Carbon Tetrachloride	7.817	117	451589	100.097	ug/l	98
39) Methylcyclohexane	9.109	83	566259	96.704	ug/l	98
40) Benzene	8.079	78	1313733	101.677	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022257.D
 Acq On : 15 May 2025 11:24
 Operator : SY/MD
 Sample : VSTDICC100
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:24:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.219	41	131157m	85.474	ug/l	
42) 1,2-Dichloroethane	8.158	62	356974	102.165	ug/l	100
43) Isopropyl Acetate	8.195	43	473430	103.517	ug/l	99
44) Trichloroethene	8.865	130	315543	98.218	ug/l	97
45) 1,2-Dichloropropane	9.140	63	314179	100.858	ug/l	98
46) Dibromomethane	9.231	93	170712	101.606	ug/l	99
47) Bromodichloromethane	9.420	83	446829	102.514	ug/l	99
48) Methyl methacrylate	9.219	41	229512	107.308	ug/l	100
49) 1,4-Dioxane	9.231	88	37780	1990.455	ug/l	98
51) 4-Methyl-2-Pentanone	9.999	43	1218685	543.068	ug/l	100
52) Toluene	10.170	92	839400	102.593	ug/l	99
53) t-1,3-Dichloropropene	10.390	75	441672	103.832	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	498023	102.190	ug/l	99
55) 1,1,2-Trichloroethane	10.572	97	219460	102.005	ug/l	99
56) Ethyl methacrylate	10.438	69	353013	105.335	ug/l	98
57) 1,3-Dichloropropane	10.719	76	391514	102.420	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	872907	580.295	ug/l	99
59) 2-Hexanone	10.761	43	809288	537.872	ug/l	100
60) Dibromochloromethane	10.908	129	292143	104.616	ug/l	99
61) 1,2-Dibromoethane	11.011	107	207266	103.362	ug/l	99
64) Tetrachloroethene	10.646	164	343677	96.489	ug/l	99
65) Chlorobenzene	11.438	112	881086	101.346	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.517	131	307866	103.007	ug/l	99
67) Ethyl Benzene	11.517	91	1674355	102.836	ug/l	99
68) m/p-Xylenes	11.627	106	1271299	207.213	ug/l	100
69) o-Xylene	11.956	106	602390	103.777	ug/l	99
70) Styrene	11.969	104	1028498	105.038	ug/l	100
71) Bromoform	12.133	173	168679	104.561	ug/l #	99
73) Isopropylbenzene	12.255	105	1528857	97.241	ug/l	99
74) N-amyl acetate	12.066	43	468707	104.235	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	244830	101.255	ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	197600m	59.078	ug/l	
77) Bromobenzene	12.529	156	337329	100.456	ug/l	99
78) n-propylbenzene	12.597	91	1846449	97.365	ug/l	100
79) 2-Chlorotoluene	12.676	91	1026401	98.488	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	1233838	97.216	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	93252	98.251	ug/l	98
82) 4-Chlorotoluene	12.779	91	1061772	99.052	ug/l	99
83) tert-Butylbenzene	12.999	119	1092617	96.859	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	1263612	100.297	ug/l	100
85) sec-Butylbenzene	13.176	105	1634720	97.623	ug/l	100
86) p-Isopropyltoluene	13.291	119	1424684	101.161	ug/l	99
87) 1,3-Dichlorobenzene	13.285	146	697868	101.803	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	654104	99.199	ug/l	99
89) n-Butylbenzene	13.615	91	1310061	98.327	ug/l	99
90) Hexachloroethane	13.877	117	275652	96.961	ug/l	100
91) 1,2-Dichlorobenzene	13.657	146	576915	100.192	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	41275	105.859	ug/l	95
93) 1,2,4-Trichlorobenzene	14.919	180	342939	103.107	ug/l	100
94) Hexachlorobutadiene	15.023	225	180060	97.075	ug/l	100
95) Naphthalene	15.145	128	674950	106.935	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	294823	104.488	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022257.D
Acq On : 15 May 2025 11:24
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:24:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

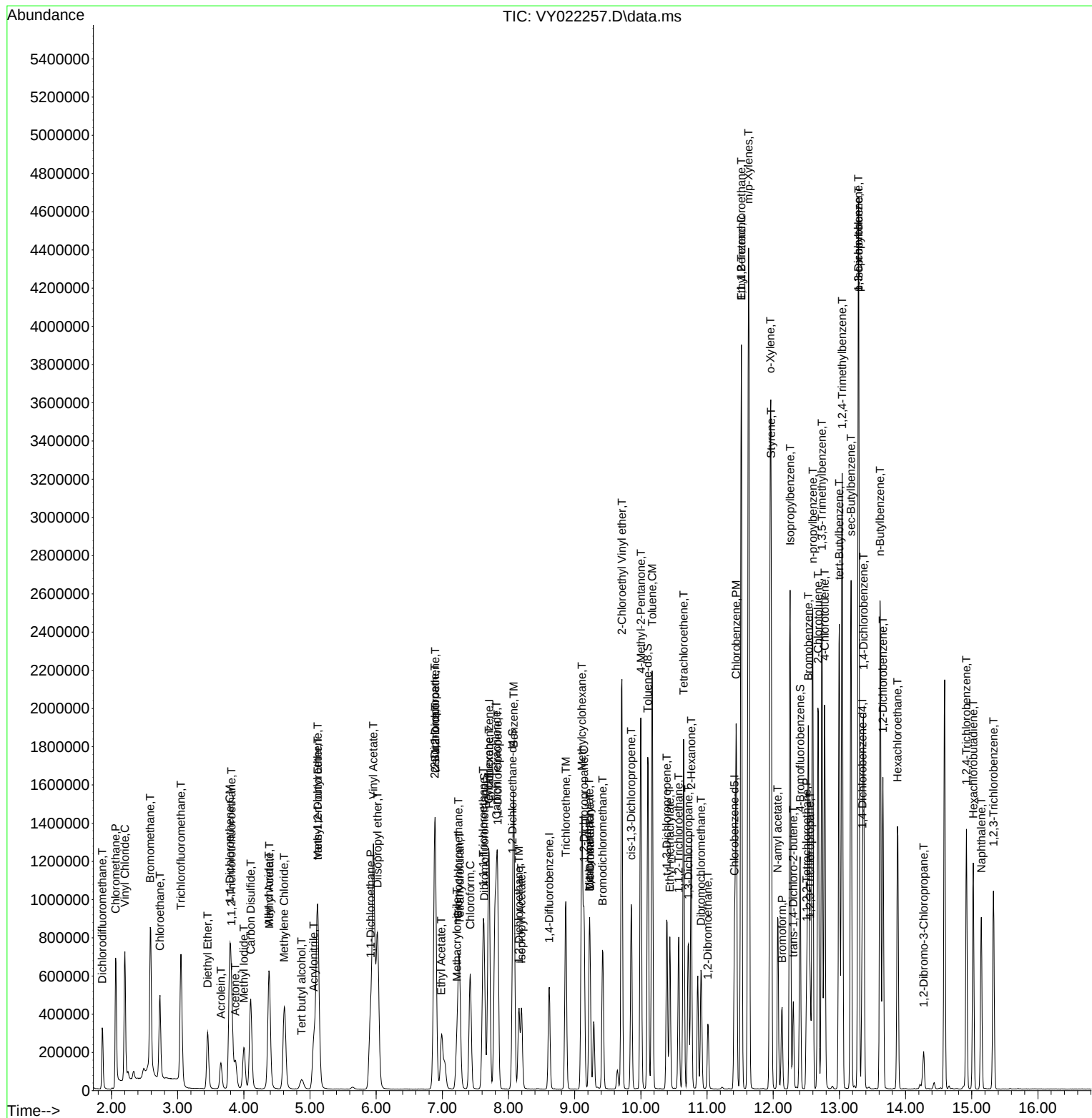
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022257.D
Acq On : 15 May 2025 11:24
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:24:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022258.D
 Acq On : 15 May 2025 11:47
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:25:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	271027	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	442917	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	389769	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	187978	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	455385	153.739	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 307.480%#			
35) Dibromofluoromethane	7.634	113	412318	155.969	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 311.940%#			
50) Toluene-d8	10.103	98	1689714	156.065	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 312.120%#			
62) 4-Bromofluorobenzene	12.402	95	541367	157.751	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 315.500%#			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	389593	137.760	ug/l	100
3) Chloromethane	2.068	50	727243	122.246	ug/l	99
4) Vinyl Chloride	2.202	62	902596	135.801	ug/l	97
5) Bromomethane	2.586	94	780107	144.182	ug/l	99
6) Chloroethane	2.727	64	590870	142.898	ug/l	98
7) Trichlorofluoromethane	3.050	101	989291	147.013	ug/l	99
8) Diethyl Ether	3.452	74	236216	146.270	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.812	101	422397	144.588	ug/l	100
10) Methyl Iodide	4.001	142	518980	153.489	ug/l	98
11) Tert butyl alcohol	4.866	59	172549	762.834	ug/l #	100
12) 1,1-Dichloroethene	3.787	96	425285	146.697	ug/l	97
13) Acrolein	3.653	56	237291	717.595	ug/l	98
14) Allyl chloride	4.379	41	756728	148.866	ug/l	100
15) Acrylonitrile	5.055	53	512850	770.708	ug/l	100
16) Acetone	3.873	43	375443	675.976	ug/l	99
17) Carbon Disulfide	4.104	76	1365378	144.429	ug/l	100
18) Methyl Acetate	4.385	43	282084	166.915	ug/l	99
19) Methyl tert-butyl Ether	5.116	73	1225258	153.279	ug/l	98
20) Methylene Chloride	4.616	84	448817	125.059	ug/l	99
21) trans-1,2-Dichloroethene	5.110	96	472143	147.547	ug/l	99
22) Diisopropyl ether	6.019	45	1626927	151.557	ug/l	99
23) Vinyl Acetate	5.958	43	4953644	763.831	ug/l	100
24) 1,1-Dichloroethane	5.915	63	879785	146.697	ug/l	99
25) 2-Butanone	6.890	43	708010	762.091	ug/l	98
26) 2,2-Dichloropropane	6.884	77	787195	147.575	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	563503	152.601	ug/l	100
28) Bromochloromethane	7.244	49	387221	151.369	ug/l	100
29) Tetrahydrofuran	7.262	42	472224	790.072	ug/l	100
30) Chloroform	7.421	83	859317	149.381	ug/l	98
31) Cyclohexane	7.701	56	821784	137.144	ug/l	98
32) 1,1,1-Trichloroethane	7.616	97	784014	148.554	ug/l	99
36) 1,1-Dichloropropene	7.835	75	658871	151.316	ug/l	99
37) Ethyl Acetate	6.982	43	320686	153.067	ug/l	99
38) Carbon Tetrachloride	7.817	117	696139	154.450	ug/l	100
39) Methylcyclohexane	9.110	83	886329	151.510	ug/l	98
40) Benzene	8.079	78	1987535	153.973	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022258.D
 Acq On : 15 May 2025 11:47
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:25:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:19:39 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.220	41	202603m	132.161	ug/l	
42) 1,2-Dichloroethane	8.159	62	534517	153.124	ug/l	99
43) Isopropyl Acetate	8.195	43	704366	154.159	ug/l #	89
44) Trichloroethene	8.866	130	481990	150.171	ug/l	96
45) 1,2-Dichloropropane	9.140	63	472217	151.736	ug/l	97
46) Dibromomethane	9.231	93	258087	153.757	ug/l	99
47) Bromodichloromethane	9.420	83	669834	153.824	ug/l	99
48) Methyl methacrylate	9.219	41	344147	161.060	ug/l	99
49) 1,4-Dioxane	9.231	88	61019	3217.888	ug/l	95
51) 4-Methyl-2-Pentanone	10.000	43	1829015	815.822	ug/l	99
52) Toluene	10.170	92	1276917	156.216	ug/l	99
53) t-1,3-Dichloropropene	10.390	75	663513	156.134	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	754493	154.963	ug/l	99
55) 1,1,2-Trichloroethane	10.573	97	330716	153.863	ug/l	99
56) Ethyl methacrylate	10.439	69	535897	160.058	ug/l	99
57) 1,3-Dichloropropane	10.719	76	584253	152.987	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	1350536	898.675	ug/l	99
59) 2-Hexanone	10.762	43	1227881	816.860	ug/l	99
60) Dibromochloromethane	10.908	129	438666	157.237	ug/l	99
61) 1,2-Dibromoethane	11.012	107	308529	154.008	ug/l	99
64) Tetrachloroethene	10.646	164	501627	139.237	ug/l	100
65) Chlorobenzene	11.438	112	1336594	151.997	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.518	131	480525	158.952	ug/l	100
67) Ethyl Benzene	11.518	91	2598027	157.756	ug/l	99
68) m/p-Xylenes	11.627	106	1992413	321.066	ug/l	99
69) o-Xylene	11.957	106	937727	159.714	ug/l	99
70) Styrene	11.969	104	1613798	162.944	ug/l	100
71) Bromoform	12.133	173	254251	155.818	ug/l #	99
73) Isopropylbenzene	12.255	105	2357568	151.387	ug/l	100
74) N-amyl acetate	12.066	43	694999	156.041	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	375378	156.735	ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	289968m	87.525	ug/l	
77) Bromobenzene	12.530	156	509579	153.206	ug/l	99
78) n-propylbenzene	12.591	91	2822794	150.276	ug/l	100
79) 2-Chlorotoluene	12.676	91	1563003	151.415	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	1888432	150.219	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	139931	148.846	ug/l	99
82) 4-Chlorotoluene	12.774	91	1616520	152.250	ug/l	99
83) tert-Butylbenzene	12.993	119	1699962	152.144	ug/l	100
84) 1,2,4-Trimethylbenzene	13.042	105	1934641	155.030	ug/l	100
85) sec-Butylbenzene	13.176	105	2493393	150.330	ug/l	100
86) p-Isopropyltoluene	13.292	119	2205275	158.088	ug/l	99
87) 1,3-Dichlorobenzene	13.286	146	1079479	158.981	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	969874	148.497	ug/l	99
89) n-Butylbenzene	13.615	91	1992554	150.985	ug/l	99
90) Hexachloroethane	13.877	117	417341	148.208	ug/l	99
91) 1,2-Dichlorobenzene	13.658	146	858733	150.565	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	58383	151.172	ug/l	99
93) 1,2,4-Trichlorobenzene	14.919	180	508537	154.361	ug/l	99
94) Hexachlorobutadiene	15.023	225	261832	142.514	ug/l	100
95) Naphthalene	15.139	128	979369	156.653	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	426231	152.509	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022258.D
Acq On : 15 May 2025 11:47
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:25:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:19:39 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022258.D
 Acq On : 15 May 2025 11:47
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VSTDICC150

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

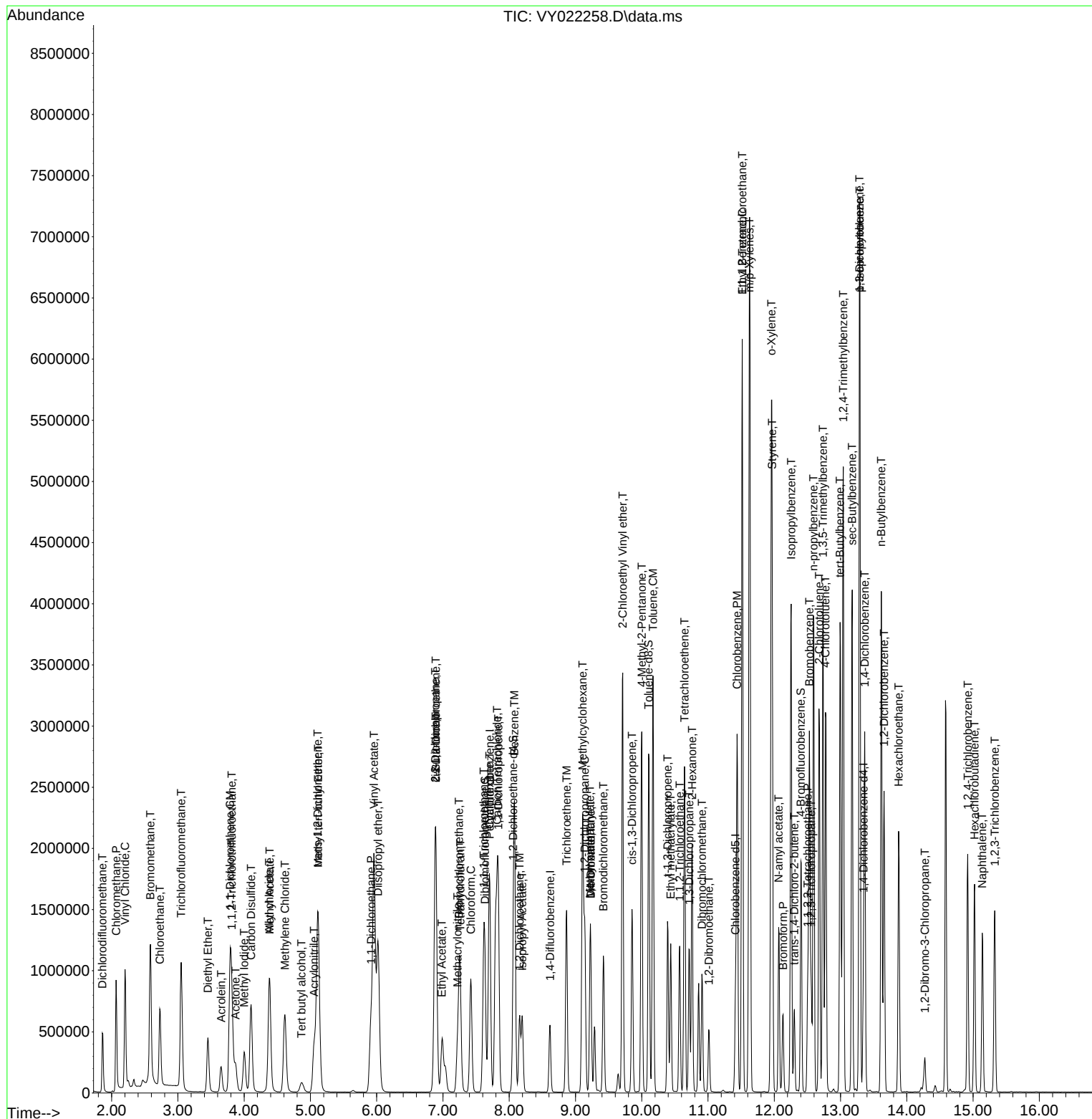
Quant Time: May 16 01:25:09 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Quant Title : SW846 8260

QLast Update : Fri May 16 01:19:39 2025

Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022260.D
 Acq On : 15 May 2025 13:20
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY051525

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:47:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	252715	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	428969	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	375548	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	178387	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	143909	52.104	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 104.200%			
35) Dibromofluoromethane	7.634	113	132263	51.658	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 103.320%			
50) Toluene-d8	10.109	98	537188	51.229	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 102.460%			
62) 4-Bromofluorobenzene	12.408	95	169575	51.020	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 102.040%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	130352	49.432	ug/l	97
3) Chloromethane	2.068	50	270248	48.719	ug/l	98
4) Vinyl Chloride	2.202	62	316755	51.111	ug/l	99
5) Bromomethane	2.598	94	244611	48.486	ug/l	99
6) Chloroethane	2.732	64	205247	53.234	ug/l	99
7) Trichlorofluoromethane	3.056	101	321098	51.174	ug/l	99
8) Diethyl Ether	3.458	74	78386	52.055	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.818	101	140460	51.564	ug/l	100
10) Methyl Iodide	4.007	142	156397	49.606	ug/l	99
11) Tert butyl alcohol	4.872	59	55922	265.144	ug/l #	100
12) 1,1-Dichloroethene	3.793	96	139180	51.487	ug/l	98
13) Acrolein	3.653	56	73495	238.362	ug/l	98
14) Allyl chloride	4.378	41	250342	52.817	ug/l	100
15) Acrylonitrile	5.055	53	164507	265.134	ug/l	99
16) Acetone	3.872	43	130848	252.660	ug/l	99
17) Carbon Disulfide	4.104	76	456302	51.765	ug/l	99
18) Methyl Acetate	4.385	43	97091	59.461	ug/l	98
19) Methyl tert-butyl Ether	5.116	73	395753	53.096	ug/l	99
20) Methylene Chloride	4.610	84	158275	47.298	ug/l	92
21) trans-1,2-Dichloroethene	5.110	96	153819	51.552	ug/l	98
22) Diisopropyl ether	6.018	45	521343	52.085	ug/l	99
23) Vinyl Acetate	5.957	43	1530507	253.098	ug/l	99
24) 1,1-Dichloroethane	5.915	63	288933	51.668	ug/l	97
25) 2-Butanone	6.896	43	221702	255.929	ug/l	97
26) 2,2-Dichloropropane	6.884	77	259587	52.191	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	180695	52.479	ug/l	100
28) Bromochloromethane	7.250	49	124761	52.305	ug/l	99
29) Tetrahydrofuran	7.262	42	147603	264.847	ug/l	99
30) Chloroform	7.421	83	283264	52.810	ug/l	100
31) Cyclohexane	7.701	56	271949	48.673	ug/l	99
32) 1,1,1-Trichloroethane	7.616	97	253549	51.523	ug/l	99
36) 1,1-Dichloropropene	7.835	75	212786	50.457	ug/l	99
37) Ethyl Acetate	6.982	43	102740	50.633	ug/l	98
38) Carbon Tetrachloride	7.817	117	220636	50.543	ug/l	98
39) Methylcyclohexane	9.109	83	283373	50.015	ug/l	98
40) Benzene	8.079	78	646289	51.696	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022260.D
 Acq On : 15 May 2025 13:20
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY051525

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
 Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:47:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.244	41	72143m	53.599	ug/l	
42) 1,2-Dichloroethane	8.158	62	175241	51.834	ug/l	100
43) Isopropyl Acetate	8.195	43	227521	51.415	ug/l #	89
44) Trichloroethene	8.865	130	156468	50.335	ug/l	96
45) 1,2-Dichloropropane	9.140	63	154975	51.417	ug/l	99
46) Dibromomethane	9.231	93	83597	51.423	ug/l	100
47) Bromodichloromethane	9.426	83	221446	52.508	ug/l	99
48) Methyl methacrylate	9.219	41	106283	51.357	ug/l	98
49) 1,4-Dioxane	9.231	88	18521	1008.479	ug/l	95
51) 4-Methyl-2-Pentanone	9.999	43	567722	261.463	ug/l	99
52) Toluene	10.170	92	406420	51.337	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	211790	51.458	ug/l	98
54) cis-1,3-Dichloropropene	9.853	75	244811	51.916	ug/l	100
55) 1,1,2-Trichloroethane	10.572	97	106464	51.142	ug/l	99
56) Ethyl methacrylate	10.438	69	164207	50.639	ug/l	99
57) 1,3-Dichloropropane	10.719	76	191889	51.880	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	394587	271.104	ug/l	100
59) 2-Hexanone	10.761	43	375224	257.738	ug/l	100
60) Dibromochloromethane	10.914	129	141652	52.425	ug/l	99
61) 1,2-Dibromoethane	11.018	107	99783	51.428	ug/l	99
64) Tetrachloroethene	10.646	164	162818	46.905	ug/l	99
65) Chlorobenzene	11.444	112	422170	49.827	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.517	131	144636	49.656	ug/l	99
67) Ethyl Benzene	11.517	91	794978	50.100	ug/l	99
68) m/p-Xylenes	11.627	106	604420	101.087	ug/l	99
69) o-Xylene	11.956	106	286712	50.682	ug/l	98
70) Styrene	11.969	104	481621	50.471	ug/l	99
71) Bromoform	12.133	173	80216	51.022	ug/l #	100
73) Isopropylbenzene	12.255	105	738398	49.964	ug/l	100
74) N-amyl acetate	12.072	43	210510	49.805	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	120599	53.062	ug/l	97
76) 1,2,3-Trichloropropane	12.560	75	96804m	53.564	ug/l	
77) Bromobenzene	12.536	156	155843	49.374	ug/l	97
78) n-propylbenzene	12.596	91	896555	50.296	ug/l	100
79) 2-Chlorotoluene	12.682	91	491073	50.130	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	592100	49.632	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	43921	49.231	ug/l	99
82) 4-Chlorotoluene	12.779	91	510451	50.661	ug/l	100
83) tert-Butylbenzene	12.999	119	527140	49.715	ug/l	100
84) 1,2,4-Trimethylbenzene	13.042	105	598450	50.535	ug/l	99
85) sec-Butylbenzene	13.176	105	787000	50.000	ug/l	100
86) p-Isopropyltoluene	13.291	119	664795	50.219	ug/l	99
87) 1,3-Dichlorobenzene	13.291	146	320357	49.718	ug/l	100
88) 1,4-Dichlorobenzene	13.365	146	307847	49.669	ug/l	98
89) n-Butylbenzene	13.621	91	631222	50.402	ug/l	100
90) Hexachloroethane	13.883	117	132281	49.502	ug/l	100
91) 1,2-Dichlorobenzene	13.657	146	270373	49.954	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	18335	50.028	ug/l	98
93) 1,2,4-Trichlorobenzene	14.919	180	152548	48.794	ug/l	99
94) Hexachlorobutadiene	15.023	225	83287	47.770	ug/l	99
95) Naphthalene	15.145	128	287276	48.421	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	127466	48.060	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022260.D
Acq On : 15 May 2025 13:20
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY051525

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:47:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

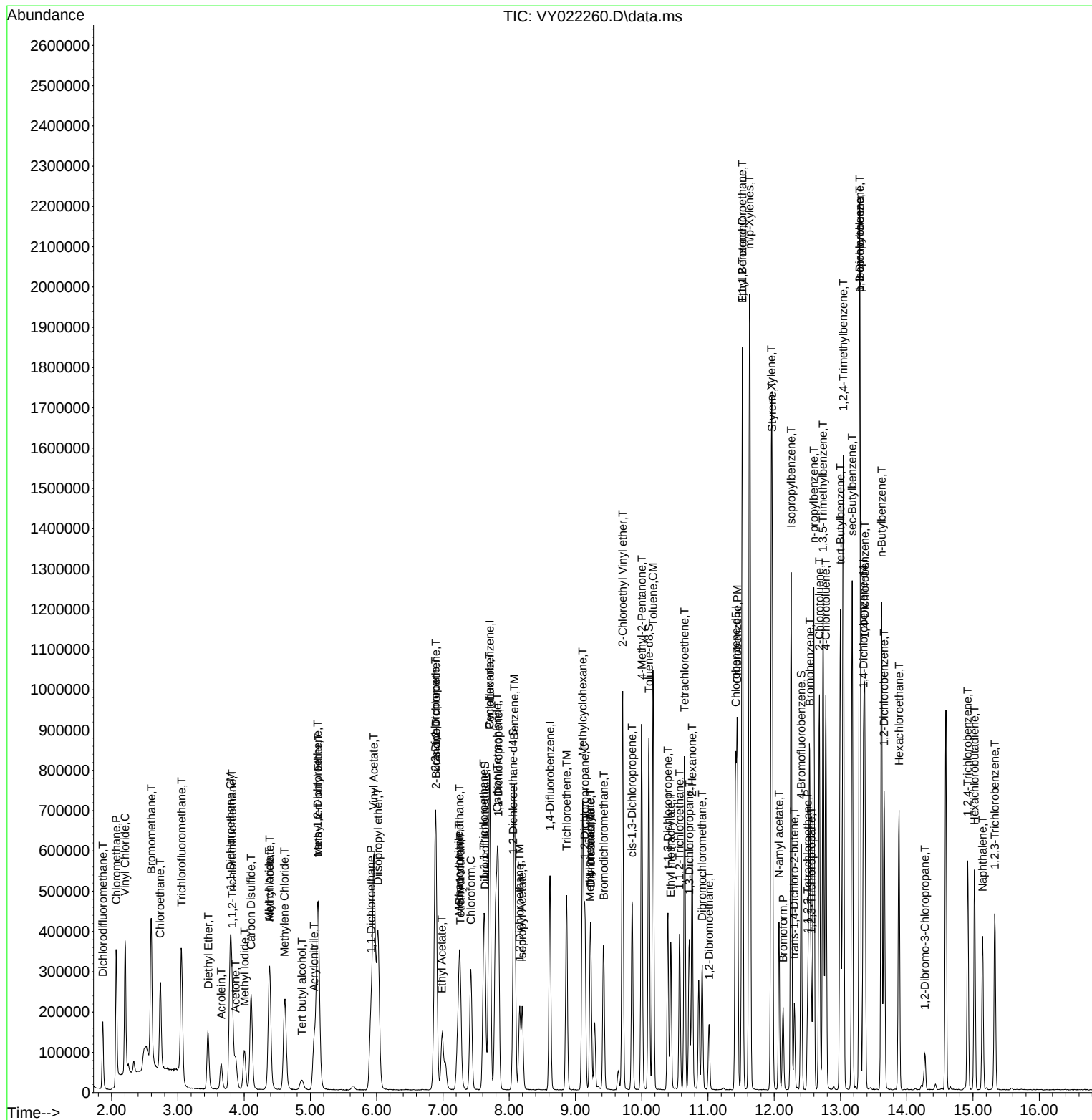
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022260.D
Acq On : 15 May 2025 13:20
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVY051525

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 05/16/2025
Supervised By :Semsettin Yesilyurt 05/16/2025

Quant Time: May 16 01:47:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022260.D
 Acq On : 15 May 2025 13:20
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY051525

Quant Time: May 16 01:47:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	94	0.00
2 T	Dichlorodifluoromethane	0.522	0.516	1.1	96	0.00
3 P	Chloromethane	1.097	1.069	2.6	97	0.00
4 C	Vinyl Chloride	1.226	1.253	-2.2#	98	0.00
5 T	Bromomethane	0.998	0.968	3.0	104	0.00
6 T	Chloroethane	0.763	0.812	-6.4	101	0.00
7 T	Trichlorofluoromethane	1.241	1.271	-2.4	99	0.00
8 T	Diethyl Ether	0.298	0.310	-4.0	100	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.539	0.556	-3.2	98	0.00
10 T	Methyl Iodide	0.624	0.619	0.8	85	0.00
11 T	Tert butyl alcohol	0.042	0.044	-4.8	108	0.00
12 CM	1,1-Dichloroethene	0.535	0.551	-3.0#	97	0.00
13 T	Acrolein	0.061	0.058	4.9	97	0.00
14 T	Allyl chloride	0.938	0.991	-5.7	98	0.00
15 T	Acrylonitrile	0.123	0.130	-5.7	102	0.00
16 T	Acetone	0.102	0.104	-2.0	105	0.00
17 T	Carbon Disulfide	1.744	1.806	-3.6	97	0.00
18 T	Methyl Acetate	0.323	0.384	-18.9	120	0.00
19 T	Methyl tert-butyl Ether	1.475	1.566	-6.2	101	0.00
20 T	Methylene Chloride	0.662	0.626	5.4	99	0.00
21 T	trans-1,2-Dichloroethene	0.590	0.609	-3.2	97	0.00
22 T	Diisopropyl ether	1.980	2.063	-4.2	98	0.00
23 T	Vinyl Acetate	1.196	1.211	-1.3	97	0.00
24 P	1,1-Dichloroethane	1.106	1.143	-3.3	97	0.00
25 T	2-Butanone	0.171	0.175	-2.3	103	0.00
26 T	2,2-Dichloropropane	0.984	1.027	-4.4	98	0.00
27 T	cis-1,2-Dichloroethene	0.681	0.715	-5.0	98	0.00
28 T	Bromochloromethane	0.472	0.494	-4.7	99	0.00
29 T	Tetrahydrofuran	0.110	0.117	-6.4	103	0.00
30 C	Chloroform	1.061	1.121	-5.7#	98	0.00
31 T	Cyclohexane	1.105	1.076	2.6	96	0.00
32 T	1,1,1-Trichloroethane	0.974	1.003	-3.0	98	0.00
33 S	1,2-Dichloroethane-d4	0.546	0.569	-4.2	99	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
35 S	Dibromofluoromethane	0.298	0.308	-3.4	100	0.00
36 T	1,1-Dichloropropene	0.492	0.496	-0.8	96	0.00
37 T	Ethyl Acetate	0.237	0.240	-1.3	100	0.00
38 T	Carbon Tetrachloride	0.509	0.514	-1.0	97	0.00
39 T	Methylcyclohexane	0.660	0.661	-0.2	96	0.00
40 TM	Benzene	1.457	1.507	-3.4	98	0.00
41 T	Methacrylonitrile	0.157	0.168	-7.0	104	0.02
42 TM	1,2-Dichloroethane	0.394	0.409	-3.8	99	0.00
43 T	Isopropyl Acetate	0.516	0.530	-2.7	101	0.00
44 TM	Trichloroethene	0.362	0.365	-0.8	96	0.00
45 C	1,2-Dichloropropane	0.351	0.361	-2.8#	99	0.00
46 T	Dibromomethane	0.189	0.195	-3.2	101	0.00
47 T	Bromodichloromethane	0.492	0.516	-4.9	100	0.00
48 T	Methyl methacrylate	0.241	0.248	-2.9	101	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022260.D
 Acq On : 15 May 2025 13:20
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICSVY051525

Quant Time: May 16 01:47:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.002	0.002	0.0	103	0.00
50 S	Toluene-d8	1.222	1.252	-2.5	99	0.00
51 T	4-Methyl-2-Pentanone	0.253	0.265	-4.7	102	0.00
52 CM	Toluene	0.923	0.947	-2.6#	98	0.00
53 T	t-1,3-Dichloropropene	0.480	0.494	-2.9	99	0.00
54 T	cis-1,3-Dichloropropene	0.550	0.571	-3.8	99	0.00
55 T	1,1,2-Trichloroethane	0.243	0.248	-2.1	100	0.00
56 T	Ethyl methacrylate	0.378	0.383	-1.3	98	0.00
57 T	1,3-Dichloropropane	0.431	0.447	-3.7	100	0.00
58 T	2-Chloroethyl Vinyl ether	0.170	0.184	-8.2	98	0.00
59 T	2-Hexanone	0.170	0.175	-2.9	103	0.00
60 T	Dibromochloromethane	0.315	0.330	-4.8	100	0.00
61 T	1,2-Dibromoethane	0.226	0.233	-3.1	100	0.00
62 S	4-Bromofluorobenzene	0.387	0.395	-2.1	100	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
64 T	Tetrachloroethene	0.462	0.434	6.1	91	0.00
65 PM	Chlorobenzene	1.128	1.124	0.4	97	0.00
66 T	1,1,1,2-Tetrachloroethane	0.388	0.385	0.8	97	0.00
67 C	Ethyl Benzene	2.113	2.117	-0.2#	97	0.00
68 T	m/p-Xylenes	0.796	0.805	-1.1	98	0.00
69 T	o-Xylene	0.753	0.763	-1.3	99	0.00
70 T	Styrene	1.270	1.282	-0.9	98	0.00
71 P	Bromoform	0.209	0.214	-2.4	102	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
73 T	Isopropylbenzene	4.142	4.139	0.1	98	0.00
74 T	N-amyl acetate	1.185	1.180	0.4	101	0.00
75 P	1,1,2,2-Tetrachloroethane	0.637	0.676	-6.1	107	0.00
76 T	1,2,3-Trichloropropane	0.507	0.543	-7.1	107	0.00
77 T	Bromobenzene	0.885	0.874	1.2	97	0.00
78 T	n-propylbenzene	4.996	5.026	-0.6	97	0.00
79 T	2-Chlorotoluene	2.746	2.753	-0.3	97	0.00
80 T	1,3,5-Trimethylbenzene	3.344	3.319	0.7	96	0.00
81 T	trans-1,4-Dichloro-2-butene	0.250	0.246	1.6	103	0.00
82 T	4-Chlorotoluene	2.824	2.861	-1.3	97	0.00
83 T	tert-Butylbenzene	2.972	2.955	0.6	97	0.00
84 T	1,2,4-Trimethylbenzene	3.319	3.355	-1.1	97	0.00
85 T	sec-Butylbenzene	4.412	4.412	0.0	95	0.00
86 T	p-Isopropyltoluene	3.710	3.727	-0.5	97	0.00
87 T	1,3-Dichlorobenzene	1.806	1.796	0.6	97	0.00
88 T	1,4-Dichlorobenzene	1.737	1.726	0.6	98	0.00
89 T	n-Butylbenzene	3.510	3.538	-0.8	95	0.00
90 T	Hexachloroethane	0.749	0.742	0.9	96	0.00
91 T	1,2-Dichlorobenzene	1.517	1.516	0.1	98	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.103	0.103	0.0	102	0.00
93 T	1,2,4-Trichlorobenzene	0.876	0.855	2.4	94	0.00
94 T	Hexachlorobutadiene	0.489	0.467	4.5	92	0.00
95 T	Naphthalene	1.663	1.610	3.2	96	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022260.D
Acq On : 15 May 2025 13:20
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY051525

Quant Time: May 16 01:47:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.743	0.715	3.8	94	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022260.D
 Acq On : 15 May 2025 13:20
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY051525

Quant Time: May 16 01:47:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	94	0.00
2 T	Dichlorodifluoromethane	50.000	49.432	1.1	96	0.00
3 P	Chloromethane	50.000	48.719	2.6	97	0.00
4 C	Vinyl Chloride	50.000	51.111	-2.2#	98	0.00
5 T	Bromomethane	50.000	48.486	3.0	104	0.00
6 T	Chloroethane	50.000	53.234	-6.5	101	0.00
7 T	Trichlorofluoromethane	50.000	51.174	-2.3	99	0.00
8 T	Diethyl Ether	50.000	52.055	-4.1	100	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	51.564	-3.1	98	0.00
10 T	Methyl Iodide	50.000	49.606	0.8	85	0.00
11 T	Tert butyl alcohol	250.000	265.144	-6.1	108	0.00
12 CM	1,1-Dichloroethene	50.000	51.487	-3.0#	97	0.00
13 T	Acrolein	250.000	238.362	4.7	97	0.00
14 T	Allyl chloride	50.000	52.817	-5.6	98	0.00
15 T	Acrylonitrile	250.000	265.134	-6.1	102	0.00
16 T	Acetone	250.000	252.660	-1.1	105	0.00
17 T	Carbon Disulfide	50.000	51.765	-3.5	97	0.00
18 T	Methyl Acetate	50.000	59.461	-18.9	120	0.00
19 T	Methyl tert-butyl Ether	50.000	53.096	-6.2	101	0.00
20 T	Methylene Chloride	50.000	47.298	5.4	99	0.00
21 T	trans-1,2-Dichloroethene	50.000	51.552	-3.1	97	0.00
22 T	Diisopropyl ether	50.000	52.085	-4.2	98	0.00
23 T	Vinyl Acetate	250.000	253.098	-1.2	97	0.00
24 P	1,1-Dichloroethane	50.000	51.668	-3.3	97	0.00
25 T	2-Butanone	250.000	255.929	-2.4	103	0.00
26 T	2,2-Dichloropropane	50.000	52.191	-4.4	98	0.00
27 T	cis-1,2-Dichloroethene	50.000	52.479	-5.0	98	0.00
28 T	Bromochloromethane	50.000	52.305	-4.6	99	0.00
29 T	Tetrahydrofuran	250.000	264.847	-5.9	103	0.00
30 C	Chloroform	50.000	52.810	-5.6#	98	0.00
31 T	Cyclohexane	50.000	48.673	2.7	96	0.00
32 T	1,1,1-Trichloroethane	50.000	51.523	-3.0	98	0.00
33 S	1,2-Dichloroethane-d4	50.000	52.104	-4.2	99	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	98	0.00
35 S	Dibromofluoromethane	50.000	51.658	-3.3	100	0.00
36 T	1,1-Dichloropropene	50.000	50.457	-0.9	96	0.00
37 T	Ethyl Acetate	50.000	50.633	-1.3	100	0.00
38 T	Carbon Tetrachloride	50.000	50.543	-1.1	97	0.00
39 T	Methylcyclohexane	50.000	50.015	-0.0	96	0.00
40 TM	Benzene	50.000	51.696	-3.4	98	0.00
41 T	Methacrylonitrile	50.000	53.599	-7.2	104	0.02
42 TM	1,2-Dichloroethane	50.000	51.834	-3.7	99	0.00
43 T	Isopropyl Acetate	50.000	51.415	-2.8	101	0.00
44 TM	Trichloroethene	50.000	50.335	-0.7	96	0.00
45 C	1,2-Dichloropropane	50.000	51.417	-2.8#	99	0.00
46 T	Dibromomethane	50.000	51.423	-2.8	101	0.00
47 T	Bromodichloromethane	50.000	52.508	-5.0	100	0.00
48 T	Methyl methacrylate	50.000	51.357	-2.7	101	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
 Data File : VY022260.D
 Acq On : 15 May 2025 13:20
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICSVY051525

Quant Time: May 16 01:47:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	1008.479	-0.8	103	0.00
50 S	Toluene-d8	50.000	51.229	-2.5	99	0.00
51 T	4-Methyl-2-Pentanone	250.000	261.463	-4.6	102	0.00
52 CM	Toluene	50.000	51.337	-2.7#	98	0.00
53 T	t-1,3-Dichloropropene	50.000	51.458	-2.9	99	0.00
54 T	cis-1,3-Dichloropropene	50.000	51.916	-3.8	99	0.00
55 T	1,1,2-Trichloroethane	50.000	51.142	-2.3	100	0.00
56 T	Ethyl methacrylate	50.000	50.639	-1.3	98	0.00
57 T	1,3-Dichloropropane	50.000	51.880	-3.8	100	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	271.104	-8.4	98	0.00
59 T	2-Hexanone	250.000	257.738	-3.1	103	0.00
60 T	Dibromochloromethane	50.000	52.425	-4.8	100	0.00
61 T	1,2-Dibromoethane	50.000	51.428	-2.9	100	0.00
62 S	4-Bromofluorobenzene	50.000	51.020	-2.0	100	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	99	0.00
64 T	Tetrachloroethene	50.000	46.905	6.2	91	0.00
65 PM	Chlorobenzene	50.000	49.827	0.3	97	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	49.656	0.7	97	0.00
67 C	Ethyl Benzene	50.000	50.100	-0.2#	97	0.00
68 T	m/p-Xylenes	100.000	101.087	-1.1	98	0.00
69 T	o-Xylene	50.000	50.682	-1.4	99	0.00
70 T	Styrene	50.000	50.471	-0.9	98	0.00
71 P	Bromoform	50.000	51.022	-2.0	102	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	99	0.00
73 T	Isopropylbenzene	50.000	49.964	0.1	98	0.00
74 T	N-amyl acetate	50.000	49.805	0.4	101	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	53.062	-6.1	107	0.00
76 T	1,2,3-Trichloropropane	50.000	53.564	-7.1	107	0.00
77 T	Bromobenzene	50.000	49.374	1.3	97	0.00
78 T	n-propylbenzene	50.000	50.296	-0.6	97	0.00
79 T	2-Chlorotoluene	50.000	50.130	-0.3	97	0.00
80 T	1,3,5-Trimethylbenzene	50.000	49.632	0.7	96	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	49.231	1.5	103	0.00
82 T	4-Chlorotoluene	50.000	50.661	-1.3	97	0.00
83 T	tert-Butylbenzene	50.000	49.715	0.6	97	0.00
84 T	1,2,4-Trimethylbenzene	50.000	50.535	-1.1	97	0.00
85 T	sec-Butylbenzene	50.000	50.000	0.0	95	0.00
86 T	p-Isopropyltoluene	50.000	50.219	-0.4	97	0.00
87 T	1,3-Dichlorobenzene	50.000	49.718	0.6	97	0.00
88 T	1,4-Dichlorobenzene	50.000	49.669	0.7	98	0.00
89 T	n-Butylbenzene	50.000	50.402	-0.8	95	0.00
90 T	Hexachloroethane	50.000	49.502	1.0	96	0.00
91 T	1,2-Dichlorobenzene	50.000	49.954	0.1	98	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	50.028	-0.1	102	0.00
93 T	1,2,4-Trichlorobenzene	50.000	48.794	2.4	94	0.00
94 T	Hexachlorobutadiene	50.000	47.770	4.5	92	0.00
95 T	Naphthalene	50.000	48.421	3.2	96	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022260.D
Acq On : 15 May 2025 13:20
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY051525

Quant Time: May 16 01:47:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.060	3.9	94	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02

Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074

Instrument ID: MSVOA_Y Calibration Date/Time: 05/22/2025 08:35

Lab File ID: VY022380.D Init. Calib. Date(s): 05/15/2025 05/15/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 11:47

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.522	0.512		-1.92	20
Chloromethane	1.097	1.093	0.1	-0.46	20
Vinyl Chloride	1.226	1.451		18.35	20
Bromomethane	0.998	1.202		20.44	20
Chloroethane	0.763	0.992		30.01	20
Trichlorofluoromethane	1.241	1.338		7.82	20
1,1,2-Trichlorotrifluoroethane	0.539	0.600		11.32	20
1,1-Dichloroethene	0.535	0.576		7.66	20
Acetone	0.102	0.096		-5.88	20
Carbon Disulfide	1.744	1.805		3.5	20
Methyl tert-butyl Ether	1.475	1.522		3.19	20
Methyl Acetate	0.323	0.304		-5.88	20
Methylene Chloride	0.662	0.614		-7.25	20
trans-1,2-Dichloroethene	0.590	0.630		6.78	20
1,1-Dichloroethane	1.106	1.155	0.1	4.43	20
Cyclohexane	1.105	1.072		-2.99	20
2-Butanone	0.171	0.154		-9.94	20
Carbon Tetrachloride	0.509	0.548		7.66	20
cis-1,2-Dichloroethene	0.681	0.741		8.81	20
Bromochloromethane	0.472	0.490		3.81	20
Chloroform	1.061	1.157		9.05	20
1,1,1-Trichloroethane	0.974	1.054		8.21	20
Methylcyclohexane	0.660	0.694		5.15	20
Benzene	1.457	1.548		6.25	20
1,2-Dichloroethane	0.394	0.396		0.51	20
Trichloroethene	0.362	0.385		6.35	20
1,2-Dichloropropane	0.351	0.362		3.13	20
Bromodichloromethane	0.492	0.514		4.47	20
4-Methyl-2-Pentanone	0.253	0.230		-9.09	20
Toluene	0.923	0.978		5.96	20
t-1,3-Dichloropropene	0.480	0.478		-0.42	20
cis-1,3-Dichloropropene	0.550	0.565		2.73	20
1,1,2-Trichloroethane	0.243	0.246		1.24	20
2-Hexanone	0.170	0.151		-11.18	20
Dibromochloromethane	0.315	0.330		4.76	20
1,2-Dibromoethane	0.226	0.236		4.43	20
Tetrachloroethene	0.462	0.502		8.66	20
Chlorobenzene	1.128	1.194	0.3	5.85	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: CAMP02
 Lab Code: CHEM Case No.: Q2074 SAS No.: Q2074 SDG No.: Q2074
 Instrument ID: MSVOA_Y Calibration Date/Time: 05/22/2025 08:35
 Lab File ID: VY022380.D Init. Calib. Date(s): 05/15/2025 05/15/2025
 Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 11:47
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	2.113	2.234		5.73	20
m/p-Xylenes	0.796	0.849		6.66	20
o-Xylene	0.753	0.791		5.05	20
Styrene	1.270	1.325		4.33	20
Bromoform	0.209	0.212	0.1	1.43	20
Isopropylbenzene	4.142	4.432		7	20
1,1,2,2-Tetrachloroethane	0.637	0.657	0.3	3.14	20
1,3-Dichlorobenzene	1.806	1.920		6.31	20
1,4-Dichlorobenzene	1.737	1.831		5.41	20
1,2-Dichlorobenzene	1.517	1.600		5.47	20
1,2-Dibromo-3-Chloropropane	0.103	0.104		0.97	20
1,2,4-Trichlorobenzene	0.876	0.937		6.96	20
1,2,3-Trichlorobenzene	0.743	0.779		4.84	20
1,2-Dichloroethane-d4	0.546	0.561		2.75	20
Dibromofluoromethane	0.298	0.318		6.71	20
Toluene-d8	1.222	1.298		6.22	20
4-Bromofluorobenzene	0.387	0.387		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_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:30:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.720	168	161495	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	274168	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	235238	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	110586	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	90668	51.370	ug/l	0.01
Spiked Amount 50.000	Range 50 - 163		Recovery = 102.740%			
35) Dibromofluoromethane	7.646	113	87280	53.337	ug/l	0.01
Spiked Amount 50.000	Range 54 - 147		Recovery = 106.680%			
50) Toluene-d8	10.115	98	355941	53.110	ug/l	0.01
Spiked Amount 50.000	Range 58 - 134		Recovery = 106.220%			
62) 4-Bromofluorobenzene	12.408	95	105997	49.898	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 99.800%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.873	85	82650	49.047	ug/l	99
3) Chloromethane	2.074	50	176433	49.773	ug/l	96
4) Vinyl Chloride	2.208	62	234408	59.188	ug/l	97
5) Bromomethane	2.605	94	194171	60.227	ug/l	96
6) Chloroethane	2.745	64	160268	65.048	ug/l	98
7) Trichlorofluoromethane	3.068	101	216108	53.896	ug/l	95
8) Diethyl Ether	3.470	74	48567	50.471	ug/l	94
9) 1,1,2-Trichlorotrifluo...	3.824	101	96945	55.692	ug/l	98
10) Methyl Iodide	4.019	142	112522	55.849	ug/l	99
11) Tert butyl alcohol	4.885	59	30628	227.243	ug/l #	100
12) 1,1-Dichloroethene	3.799	96	93099	53.894	ug/l	96
13) Acrolein	3.665	56	21575	109.497	ug/l	98
14) Allyl chloride	4.397	41	143029	47.221	ug/l	94
15) Acrylonitrile	5.074	53	96693	243.864	ug/l	100
16) Acetone	3.879	43	77883	235.333	ug/l	99
17) Carbon Disulfide	4.117	76	291563	51.759	ug/l	98
18) Methyl Acetate	4.403	43	49022	46.981	ug/l	94
19) Methyl tert-butyl Ether	5.135	73	245795	51.604	ug/l	96
20) Methylene Chloride	4.629	84	99182	46.380	ug/l	95
21) trans-1,2-Dichloroethene	5.135	96	101691	53.333	ug/l	91
22) Diisopropyl ether	6.031	45	310912	48.607	ug/l	97
23) Vinyl Acetate	5.976	43	899140	232.677	ug/l	98
24) 1,1-Dichloroethane	5.927	63	186582	52.212	ug/l	98
25) 2-Butanone	6.909	43	124712	225.284	ug/l	99
26) 2,2-Dichloropropane	6.896	77	172279	54.202	ug/l	99
27) cis-1,2-Dichloroethene	6.903	96	119734	54.417	ug/l	97
28) Bromochloromethane	7.256	49	79145	51.923	ug/l	94
29) Tetrahydrofuran	7.274	42	80994	227.418	ug/l	94
30) Chloroform	7.433	83	186842	54.509	ug/l	99
31) Cyclohexane	7.713	56	173130	48.489	ug/l	95
32) 1,1,1-Trichloroethane	7.628	97	170179	54.115	ug/l	99
36) 1,1-Dichloropropene	7.848	75	141766	52.597	ug/l	98
37) Ethyl Acetate	6.994	43	57919	44.661	ug/l	96
38) Carbon Tetrachloride	7.829	117	150177	53.827	ug/l	98
39) Methylcyclohexane	9.122	83	190360	52.569	ug/l	94
40) Benzene	8.091	78	424335	53.106	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VSTDCCC050

Manual Integrations

APPROVED

Reviewed By :John Carlone 05/23/2025

Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:30:47 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Quant Title : SW846 8260

QLast Update : Fri May 16 01:42:09 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.256	41	39078m	45.426	ug/l	
42) 1,2-Dichloroethane	8.171	62	108617	50.267	ug/l	100
43) Isopropyl Acetate	8.207	43	128391	45.395	ug/l #	85
44) Trichloroethene	8.878	130	105676	53.190	ug/l	98
45) 1,2-Dichloropropane	9.152	63	99132	51.460	ug/l	95
46) Dibromomethane	9.238	93	53943	51.917	ug/l	99
47) Bromodichloromethane	9.433	83	140915	52.278	ug/l	100
48) Methyl methacrylate	9.231	41	58854	44.496	ug/l	93
49) 1,4-Dioxane	9.238	88	11678	994.901	ug/l	88
51) 4-Methyl-2-Pentanone	10.006	43	315171	227.107	ug/l	96
52) Toluene	10.176	92	268178	53.002	ug/l	100
53) t-1,3-Dichloropropene	10.402	75	131043	49.816	ug/l	97
54) cis-1,3-Dichloropropene	9.865	75	154811	51.367	ug/l	96
55) 1,1,2-Trichloroethane	10.579	97	67471	50.711	ug/l	98
56) Ethyl methacrylate	10.445	69	101892	49.163	ug/l	95
57) 1,3-Dichloropropane	10.725	76	121474	51.386	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.719	63	247160	265.693	ug/l	97
59) 2-Hexanone	10.768	43	206922	222.384	ug/l	95
60) Dibromochloromethane	10.920	129	90531	52.423	ug/l	99
61) 1,2-Dibromoethane	11.024	107	64690	52.166	ug/l	100
64) Tetrachloroethene	10.652	164	118077	54.305	ug/l	97
65) Chlorobenzene	11.451	112	280913	52.931	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.524	131	94462	51.774	ug/l	99
67) Ethyl Benzene	11.524	91	525554	52.876	ug/l	99
68) m/p-Xylenes	11.633	106	399310	106.617	ug/l	96
69) o-Xylene	11.963	106	186099	52.518	ug/l	96
70) Styrene	11.975	104	311800	52.163	ug/l	98
71) Bromoform	12.139	173	49753	50.521	ug/l #	98
73) Isopropylbenzene	12.261	105	490162	53.502	ug/l	100
74) N-amyl acetate	12.078	43	119696	45.682	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	72647	51.561	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	55147m	49.223	ug/l	
77) Bromobenzene	12.542	156	102872	52.574	ug/l	97
78) n-propylbenzene	12.603	91	595455	53.885	ug/l	100
79) 2-Chlorotoluene	12.688	91	318579	52.461	ug/l	99
80) 1,3,5-Trimethylbenzene	12.743	105	390755	52.837	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	25898	46.827	ug/l	96
82) 4-Chlorotoluene	12.786	91	325243	52.070	ug/l	99
83) tert-Butylbenzene	13.005	119	353926	53.844	ug/l	98
84) 1,2,4-Trimethylbenzene	13.048	105	389894	53.109	ug/l	100
85) sec-Butylbenzene	13.182	105	534707	54.800	ug/l	100
86) p-Isopropyltoluene	13.298	119	450850	54.938	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	212275	53.142	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	202502	52.704	ug/l	99
89) n-Butylbenzene	13.621	91	429840	55.365	ug/l	100
90) Hexachloroethane	13.883	117	87959	53.097	ug/l	100
91) 1,2-Dichlorobenzene	13.664	146	176961	52.741	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	11556	50.863	ug/l	93
93) 1,2,4-Trichlorobenzene	14.926	180	103673	53.492	ug/l	98
94) Hexachlorobutadiene	15.029	225	57263	52.980	ug/l	99
95) Naphthalene	15.151	128	187535	50.990	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	86200	52.428	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022380.D
Acq On : 22 May 2025 08:35
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:30:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

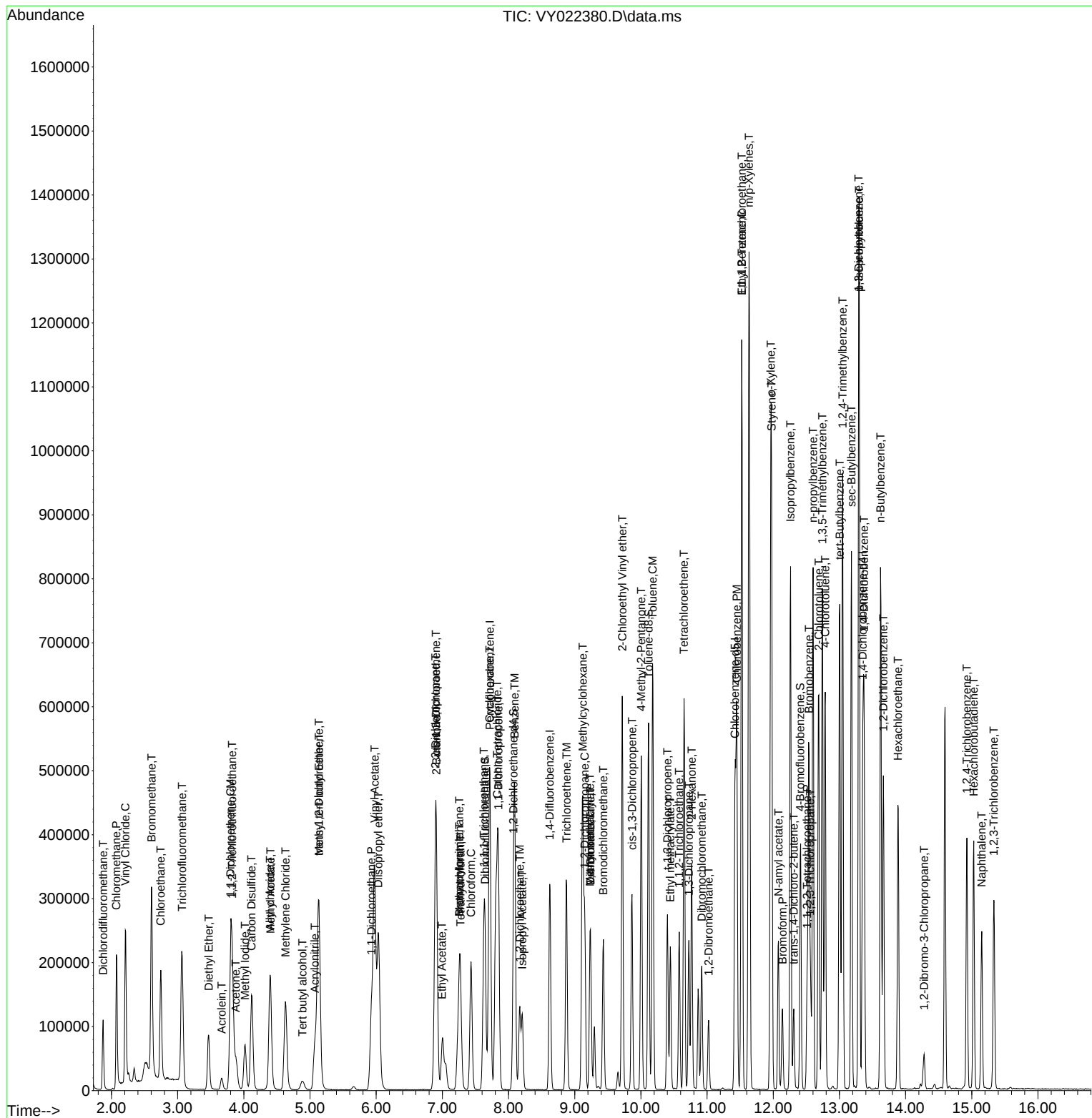
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDCCC050

Manual Integrations APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:30:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: May 23 03:30:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	60	0.01
2 T	Dichlorodifluoromethane	0.522	0.512	1.9	61	0.01
3 P	Chloromethane	1.097	1.092	0.5	63	0.01
4 C	Vinyl Chloride	1.226	1.451	-18.4#	72	0.00
5 T	Bromomethane	0.998	1.202	-20.4	83	0.01
6 T	Chloroethane	0.763	0.992	-30.0#	79	0.01
7 T	Trichlorofluoromethane	1.241	1.338	-7.8	67	0.02
8 T	Diethyl Ether	0.298	0.301	-1.0	62	0.02
9 T	1,1,2-Trichlorotrifluoroeth	0.539	0.600	-11.3	67	0.00
10 T	Methyl Iodide	0.624	0.697	-11.7	61	0.01
11 T	Tert butyl alcohol	0.042	0.038	9.5	59	0.01
12 CM	1,1-Dichloroethene	0.535	0.576	-7.7#	65	0.01
13 T	Acrolein	0.061	0.027	55.7#	29#	0.01
14 T	Allyl chloride	0.938	0.886	5.5	56	0.02
15 T	Acrylonitrile	0.123	0.120	2.4	60	0.01
16 T	Acetone	0.102	0.096	5.9	63	0.00
17 T	Carbon Disulfide	1.744	1.805	-3.5	62	0.01
18 T	Methyl Acetate	0.323	0.304	5.9	61	0.02
19 T	Methyl tert-butyl Ether	1.475	1.522	-3.2	63	0.02
20 T	Methylene Chloride	0.662	0.614	7.3	62	0.01
21 T	trans-1,2-Dichloroethene	0.590	0.630	-6.8	64	0.02
22 T	Diisopropyl ether	1.980	1.925	2.8	58	0.01
23 T	Vinyl Acetate	1.196	1.114	6.9	57	0.02
24 P	1,1-Dichloroethane	1.106	1.155	-4.4	62	0.01
25 T	2-Butanone	0.171	0.154	9.9	58	0.01
26 T	2,2-Dichloropropane	0.984	1.067	-8.4	65	0.01
27 T	cis-1,2-Dichloroethene	0.681	0.741	-8.8	65	0.01
28 T	Bromochloromethane	0.472	0.490	-3.8	63	0.01
29 T	Tetrahydrofuran	0.110	0.100	9.1	57	0.01
30 C	Chloroform	1.061	1.157	-9.0#	65	0.01
31 T	Cyclohexane	1.105	1.072	3.0	61	0.01
32 T	1,1,1-Trichloroethane	0.974	1.054	-8.2	66	0.01
33 S	1,2-Dichloroethane-d4	0.546	0.561	-2.7	63	0.01
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	62	0.00
35 S	Dibromofluoromethane	0.298	0.318	-6.7	66	0.01
36 T	1,1-Dichloropropene	0.492	0.517	-5.1	64	0.01
37 T	Ethyl Acetate	0.237	0.211	11.0	56	0.00
38 T	Carbon Tetrachloride	0.509	0.548	-7.7	66	0.01
39 T	Methylcyclohexane	0.660	0.694	-5.2	65	0.01
40 TM	Benzene	1.457	1.548	-6.2	64	0.01
41 T	Methacrylonitrile	0.157	0.143	8.9	56	0.04
42 TM	1,2-Dichloroethane	0.394	0.396	-0.5	62	0.01
43 T	Isopropyl Acetate	0.516	0.468	9.3	57	0.01
44 TM	Trichloroethene	0.362	0.385	-6.4	65	0.01
45 C	1,2-Dichloropropane	0.351	0.362	-3.1#	63	0.01
46 T	Dibromomethane	0.189	0.197	-4.2	65	0.00
47 T	Bromodichloromethane	0.492	0.514	-4.5	63	0.01
48 T	Methyl methacrylate	0.241	0.215	10.8	56	0.01

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: May 23 03:30:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.002	0.002	0.0	65	0.00
50 S	Toluene-d8	1.222	1.298	-6.2	66	0.01
51 T	4-Methyl-2-Pentanone	0.253	0.230	9.1	57	0.00
52 CM	Toluene	0.923	0.978	-6.0#	65	0.00
53 T	t-1,3-Dichloropropene	0.480	0.478	0.4	61	0.01
54 T	cis-1,3-Dichloropropene	0.550	0.565	-2.7	63	0.01
55 T	1,1,2-Trichloroethane	0.243	0.246	-1.2	63	0.00
56 T	Ethyl methacrylate	0.378	0.372	1.6	61	0.00
57 T	1,3-Dichloropropane	0.431	0.443	-2.8	63	0.00
58 T	2-Chloroethyl Vinyl ether	0.170	0.180	-5.9	61	0.01
59 T	2-Hexanone	0.170	0.151	11.2	57	0.00
60 T	Dibromochloromethane	0.315	0.330	-4.8	64	0.01
61 T	1,2-Dibromoethane	0.226	0.236	-4.4	65	0.01
62 S	4-Bromofluorobenzene	0.387	0.387	0.0	62	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	62	0.00
64 T	Tetrachloroethene	0.462	0.502	-8.7	66	0.00
65 PM	Chlorobenzene	1.128	1.194	-5.9	64	0.01
66 T	1,1,1,2-Tetrachloroethane	0.388	0.402	-3.6	63	0.00
67 C	Ethyl Benzene	2.113	2.234	-5.7#	64	0.00
68 T	m/p-Xylenes	0.796	0.849	-6.7	65	0.00
69 T	o-Xylene	0.753	0.791	-5.0	64	0.01
70 T	Styrene	1.270	1.325	-4.3	63	0.00
71 P	Bromoform	0.209	0.212	-1.4	63	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	61	0.00
73 T	Isopropylbenzene	4.142	4.432	-7.0	65	0.00
74 T	N-amyl acetate	1.185	1.082	8.7	57	0.01
75 P	1,1,2,2-Tetrachloroethane	0.637	0.657	-3.1	64	0.00
76 T	1,2,3-Trichloropropane	0.507	0.499	1.6	61	0.00
77 T	Bromobenzene	0.885	0.930	-5.1	64	0.01
78 T	n-propylbenzene	4.996	5.385	-7.8	64	0.00
79 T	2-Chlorotoluene	2.746	2.881	-4.9	63	0.01
80 T	1,3,5-Trimethylbenzene	3.344	3.533	-5.7	64	0.00
81 T	trans-1,4-Dichloro-2-butene	0.250	0.234	6.4	61	0.00
82 T	4-Chlorotoluene	2.824	2.941	-4.1	62	0.01
83 T	tert-Butylbenzene	2.972	3.200	-7.7	65	0.00
84 T	1,2,4-Trimethylbenzene	3.319	3.526	-6.2	63	0.00
85 T	sec-Butylbenzene	4.412	4.835	-9.6	65	0.00
86 T	p-Isopropyltoluene	3.710	4.077	-9.9	65	0.00
87 T	1,3-Dichlorobenzene	1.806	1.920	-6.3	64	0.00
88 T	1,4-Dichlorobenzene	1.737	1.831	-5.4	64	0.00
89 T	n-Butylbenzene	3.510	3.887	-10.7	65	0.00
90 T	Hexachloroethane	0.749	0.795	-6.1	64	0.00
91 T	1,2-Dichlorobenzene	1.517	1.600	-5.5	64	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.103	0.104	-1.0	64	0.00
93 T	1,2,4-Trichlorobenzene	0.876	0.937	-7.0	64	0.00
94 T	Hexachlorobutadiene	0.489	0.518	-5.9	63	0.00
95 T	Naphthalene	1.663	1.696	-2.0	63	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022380.D
Acq On : 22 May 2025 08:35
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: May 23 03:30:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.743	0.779	-4.8	64	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: May 23 03:30:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	60	0.01
2 T	Dichlorodifluoromethane	50.000	49.047	1.9	61	0.01
3 P	Chloromethane	50.000	49.773	0.5	63	0.01
4 C	Vinyl Chloride	50.000	59.188	-18.4#	72	0.00
5 T	Bromomethane	50.000	60.227	-20.5	83	0.01
6 T	Chloroethane	50.000	65.048	-30.1#	79	0.01
7 T	Trichlorofluoromethane	50.000	53.896	-7.8	67	0.02
8 T	Diethyl Ether	50.000	50.471	-0.9	62	0.02
9 T	1,1,2-Trichlorotrifluoroeth	50.000	55.692	-11.4	67	0.00
10 T	Methyl Iodide	50.000	55.849	-11.7	61	0.01
11 T	Tert butyl alcohol	250.000	227.243	9.1	59	0.01
12 CM	1,1-Dichloroethene	50.000	53.894	-7.8#	65	0.01
13 T	Acrolein	250.000	109.497	56.2#	29	0.01
14 T	Allyl chloride	50.000	47.221	5.6	56	0.02
15 T	Acrylonitrile	250.000	243.864	2.5	60	0.01
16 T	Acetone	250.000	235.333	5.9	63	0.00
17 T	Carbon Disulfide	50.000	51.759	-3.5	62	0.01
18 T	Methyl Acetate	50.000	46.981	6.0	61	0.02
19 T	Methyl tert-butyl Ether	50.000	51.604	-3.2	63	0.02
20 T	Methylene Chloride	50.000	46.380	7.2	62	0.01
21 T	trans-1,2-Dichloroethene	50.000	53.333	-6.7	64	0.02
22 T	Diisopropyl ether	50.000	48.607	2.8	58	0.01
23 T	Vinyl Acetate	250.000	232.677	6.9	57	0.02
24 P	1,1-Dichloroethane	50.000	52.212	-4.4	62	0.01
25 T	2-Butanone	250.000	225.284	9.9	58	0.01
26 T	2,2-Dichloropropane	50.000	54.202	-8.4	65	0.01
27 T	cis-1,2-Dichloroethene	50.000	54.417	-8.8	65	0.01
28 T	Bromochloromethane	50.000	51.923	-3.8	63	0.01
29 T	Tetrahydrofuran	250.000	227.418	9.0	57	0.01
30 C	Chloroform	50.000	54.509	-9.0#	65	0.01
31 T	Cyclohexane	50.000	48.489	3.0	61	0.01
32 T	1,1,1-Trichloroethane	50.000	54.115	-8.2	66	0.01
33 S	1,2-Dichloroethane-d4	50.000	51.370	-2.7	63	0.01
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	62	0.00
35 S	Dibromofluoromethane	50.000	53.337	-6.7	66	0.01
36 T	1,1-Dichloropropene	50.000	52.597	-5.2	64	0.01
37 T	Ethyl Acetate	50.000	44.661	10.7	56	0.00
38 T	Carbon Tetrachloride	50.000	53.827	-7.7	66	0.01
39 T	Methylcyclohexane	50.000	52.569	-5.1	65	0.01
40 TM	Benzene	50.000	53.106	-6.2	64	0.01
41 T	Methacrylonitrile	50.000	45.426	9.1	56	0.04
42 TM	1,2-Dichloroethane	50.000	50.267	-0.5	62	0.01
43 T	Isopropyl Acetate	50.000	45.395	9.2	57	0.01
44 TM	Trichloroethene	50.000	53.190	-6.4	65	0.01
45 C	1,2-Dichloropropane	50.000	51.460	-2.9#	63	0.01
46 T	Dibromomethane	50.000	51.917	-3.8	65	0.00
47 T	Bromodichloromethane	50.000	52.278	-4.6	63	0.01
48 T	Methyl methacrylate	50.000	44.496	11.0	56	0.01

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022380.D
 Acq On : 22 May 2025 08:35
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: May 23 03:30:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	994.901	0.5	65	0.00
50 S	Toluene-d8	50.000	53.110	-6.2	66	0.01
51 T	4-Methyl-2-Pentanone	250.000	227.107	9.2	57	0.00
52 CM	Toluene	50.000	53.002	-6.0#	65	0.00
53 T	t-1,3-Dichloropropene	50.000	49.816	0.4	61	0.01
54 T	cis-1,3-Dichloropropene	50.000	51.367	-2.7	63	0.01
55 T	1,1,2-Trichloroethane	50.000	50.711	-1.4	63	0.00
56 T	Ethyl methacrylate	50.000	49.163	1.7	61	0.00
57 T	1,3-Dichloropropane	50.000	51.386	-2.8	63	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	265.693	-6.3	61	0.01
59 T	2-Hexanone	250.000	222.384	11.0	57	0.00
60 T	Dibromochloromethane	50.000	52.423	-4.8	64	0.01
61 T	1,2-Dibromoethane	50.000	52.166	-4.3	65	0.01
62 S	4-Bromofluorobenzene	50.000	49.898	0.2	62	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	62	0.00
64 T	Tetrachloroethene	50.000	54.305	-8.6	66	0.00
65 PM	Chlorobenzene	50.000	52.931	-5.9	64	0.01
66 T	1,1,1,2-Tetrachloroethane	50.000	51.774	-3.5	63	0.00
67 C	Ethyl Benzene	50.000	52.876	-5.8#	64	0.00
68 T	m/p-Xylenes	100.000	106.617	-6.6	65	0.00
69 T	o-Xylene	50.000	52.518	-5.0	64	0.01
70 T	Styrene	50.000	52.163	-4.3	63	0.00
71 P	Bromoform	50.000	50.521	-1.0	63	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	61	0.00
73 T	Isopropylbenzene	50.000	53.502	-7.0	65	0.00
74 T	N-amyl acetate	50.000	45.682	8.6	57	0.01
75 P	1,1,2,2-Tetrachloroethane	50.000	51.561	-3.1	64	0.00
76 T	1,2,3-Trichloropropane	50.000	49.223	1.6	61	0.00
77 T	Bromobenzene	50.000	52.574	-5.1	64	0.01
78 T	n-propylbenzene	50.000	53.885	-7.8	64	0.00
79 T	2-Chlorotoluene	50.000	52.461	-4.9	63	0.01
80 T	1,3,5-Trimethylbenzene	50.000	52.837	-5.7	64	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	46.827	6.3	61	0.00
82 T	4-Chlorotoluene	50.000	52.070	-4.1	62	0.01
83 T	tert-Butylbenzene	50.000	53.844	-7.7	65	0.00
84 T	1,2,4-Trimethylbenzene	50.000	53.109	-6.2	63	0.00
85 T	sec-Butylbenzene	50.000	54.800	-9.6	65	0.00
86 T	p-Isopropyltoluene	50.000	54.938	-9.9	65	0.00
87 T	1,3-Dichlorobenzene	50.000	53.142	-6.3	64	0.00
88 T	1,4-Dichlorobenzene	50.000	52.704	-5.4	64	0.00
89 T	n-Butylbenzene	50.000	55.365	-10.7	65	0.00
90 T	Hexachloroethane	50.000	53.097	-6.2	64	0.00
91 T	1,2-Dichlorobenzene	50.000	52.741	-5.5	64	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	50.863	-1.7	64	0.00
93 T	1,2,4-Trichlorobenzene	50.000	53.492	-7.0	64	0.00
94 T	Hexachlorobutadiene	50.000	52.980	-6.0	63	0.00
95 T	Naphthalene	50.000	50.990	-2.0	63	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022380.D
Acq On : 22 May 2025 08:35
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: May 23 03:30:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	52.428	-4.9	64	0.00

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



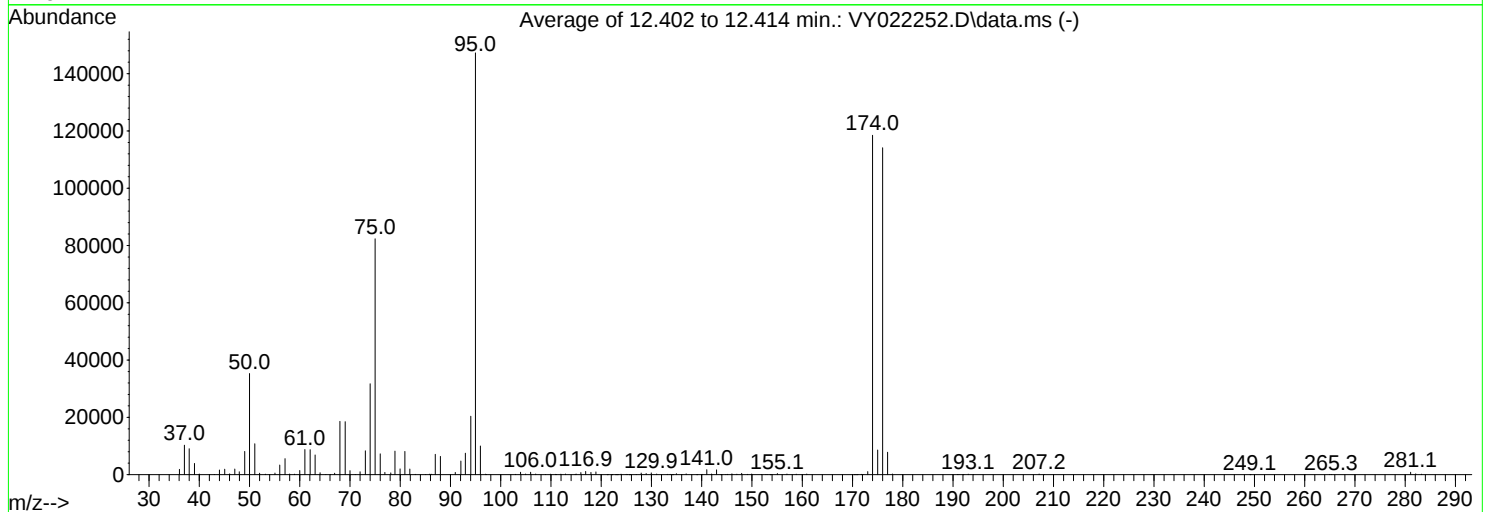
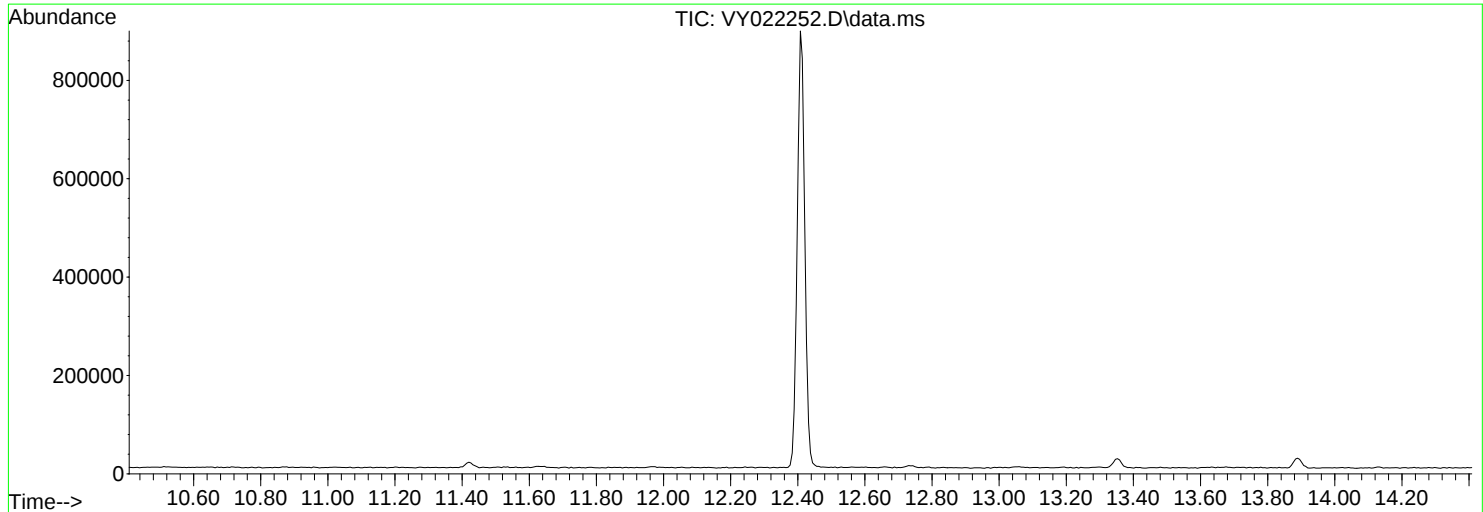
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY051525\
Data File : VY022252.D
Acq On : 15 May 2025 07:52
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Title : SW846 8260
Last Update : Fri May 16 01:42:09 2025



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1745

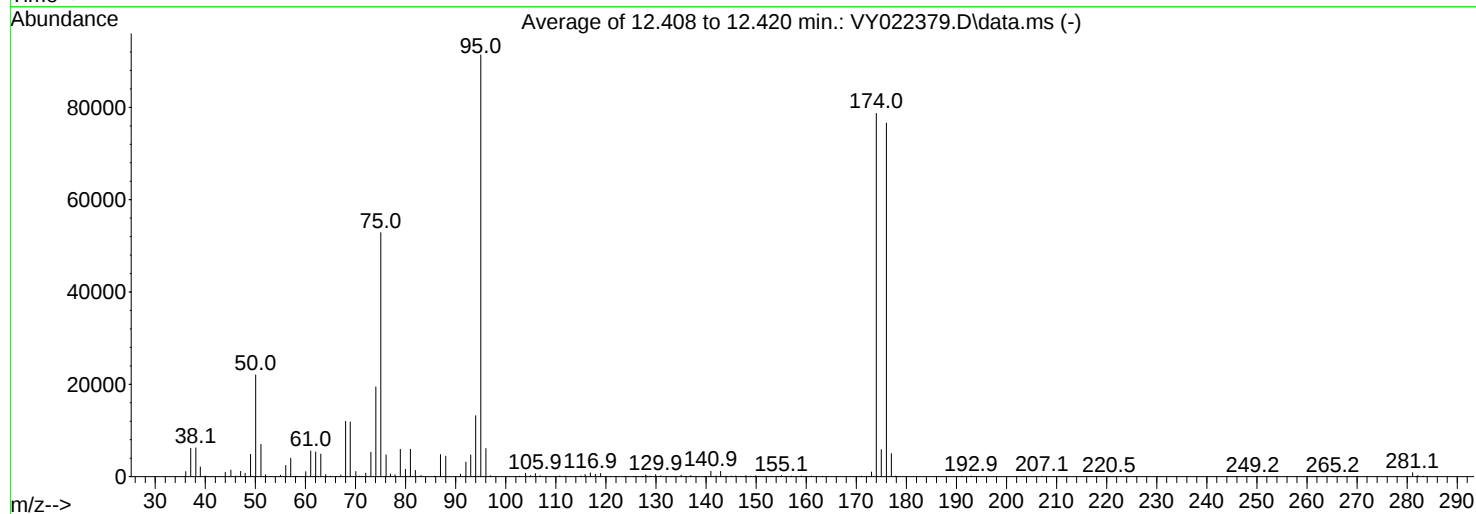
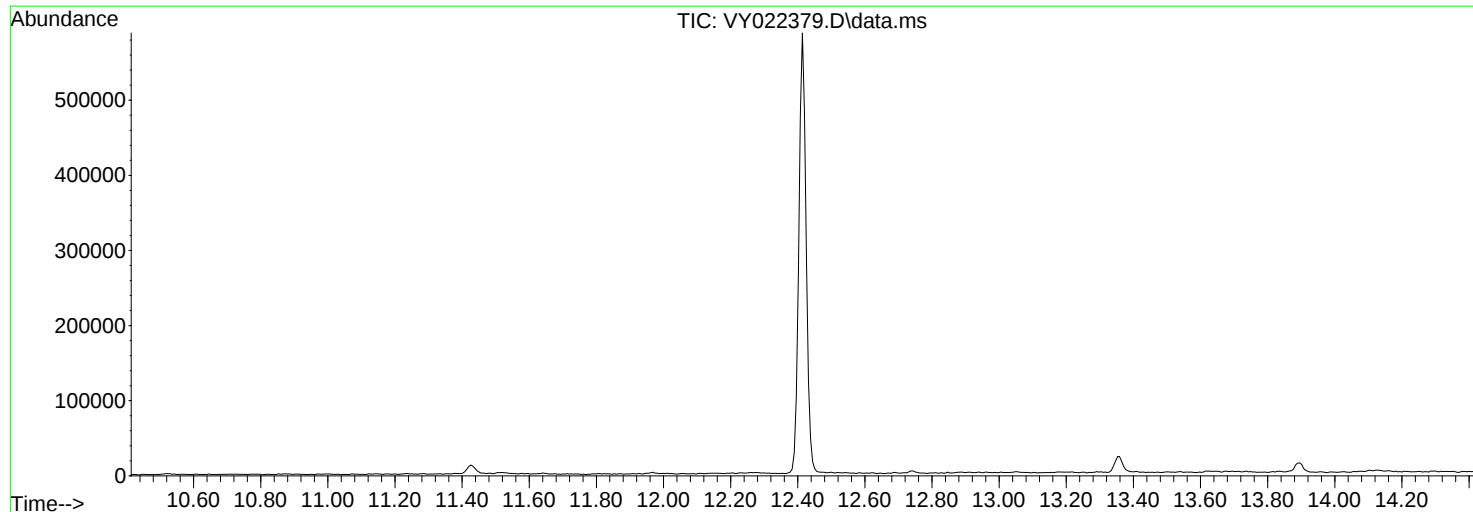
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	35318	PASS
75	95	30	60	55.9	82344	PASS
95	95	100	100	100.0	147275	PASS
96	95	5	9	6.8	9993	PASS
173	174	0.00	2	0.9	1042	PASS
174	95	50	100	80.5	118504	PASS
175	174	5	9	7.3	8635	PASS
176	174	95	101	96.3	114157	PASS
177	176	5	9	6.8	7810	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022379.D
Acq On : 22 May 2025 08:05
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Title : SW846 8260
Last Update : Fri May 16 01:42:09 2025



AutoFind: Scans 1753, 1754, 1755; Background Corrected with Scan 1743

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.1	22056	PASS
75	95	30	60	57.8	52859	PASS
95	95	100	100	100.0	91380	PASS
96	95	5	9	6.7	6119	PASS
173	174	0.00	2	1.3	1000	PASS
174	95	50	100	86.1	78696	PASS
175	174	5	9	7.5	5864	PASS
176	174	95	101	97.4	76611	PASS
177	176	5	9	6.5	4987	PASS

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBL01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
	ID :	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022381.D	1		05/22/25 09:07	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.79	U	0.79	5.00	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.00	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	1.20	U	1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.00	ug/Kg
67-64-1	Acetone	4.70	U	4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.73	U	0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	1.50	U	1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	3.50	U	3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.80	U	0.80	5.00	ug/Kg
110-82-7	Cyclohexane	0.79	U	0.79	5.00	ug/Kg
78-93-3	2-Butanone	6.50	U	6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.97	U	0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.00	ug/Kg
67-66-3	Chloroform	0.84	U	0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.93	U	0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.00	ug/Kg
71-43-2	Benzene	0.79	U	0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.79	U	0.79	5.00	ug/Kg
79-01-6	Trichloroethene	0.81	U	0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.91	U	0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	25.0	ug/Kg
108-88-3	Toluene	0.78	U	0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBL01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022381.D	1		05/22/25 09:07	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.65	U	0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.62	U	0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	5.00	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.87	U	0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.88	U	0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	0.91	U	0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.67	U	0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	10.0	ug/Kg
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/Kg
100-42-5	Styrene	0.71	U	0.71	5.00	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.9		63 - 155	98%	SPK: 50
1868-53-7	Dibromofluoromethane	49.8		70 - 134	100%	SPK: 50
2037-26-5	Toluene-d8	48.7		74 - 123	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.5		38 - 136	79%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	264000	7.719			
540-36-3	1,4-Difluorobenzene	466000	8.622			
3114-55-4	Chlorobenzene-d5	376000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	137000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBL01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBL01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Final Vol:	5000
Prep Method :	ID : 0.25	Test:	VOC-TCLVOA-10
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022381.D	1		05/22/25 09:07	VY052225

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_Y\Data\VY052225\
 Data File : VY022381.D
 Acq On : 22 May 2025 09:07
 Operator : SY/MD
 Sample : VY0522SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBL01

Quant Time: May 23 03:31:42 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	263712	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	465826	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	376365	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	137350	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	140906	48.890	ug/l	0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	97.780%
35) Dibromofluoromethane	7.646	113	138461	49.800	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	99.600%
50) Toluene-d8	10.115	98	554254	48.674	ug/l	0.01
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.340%
62) 4-Bromofluorobenzene	12.408	95	142658	39.525	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	79.060%

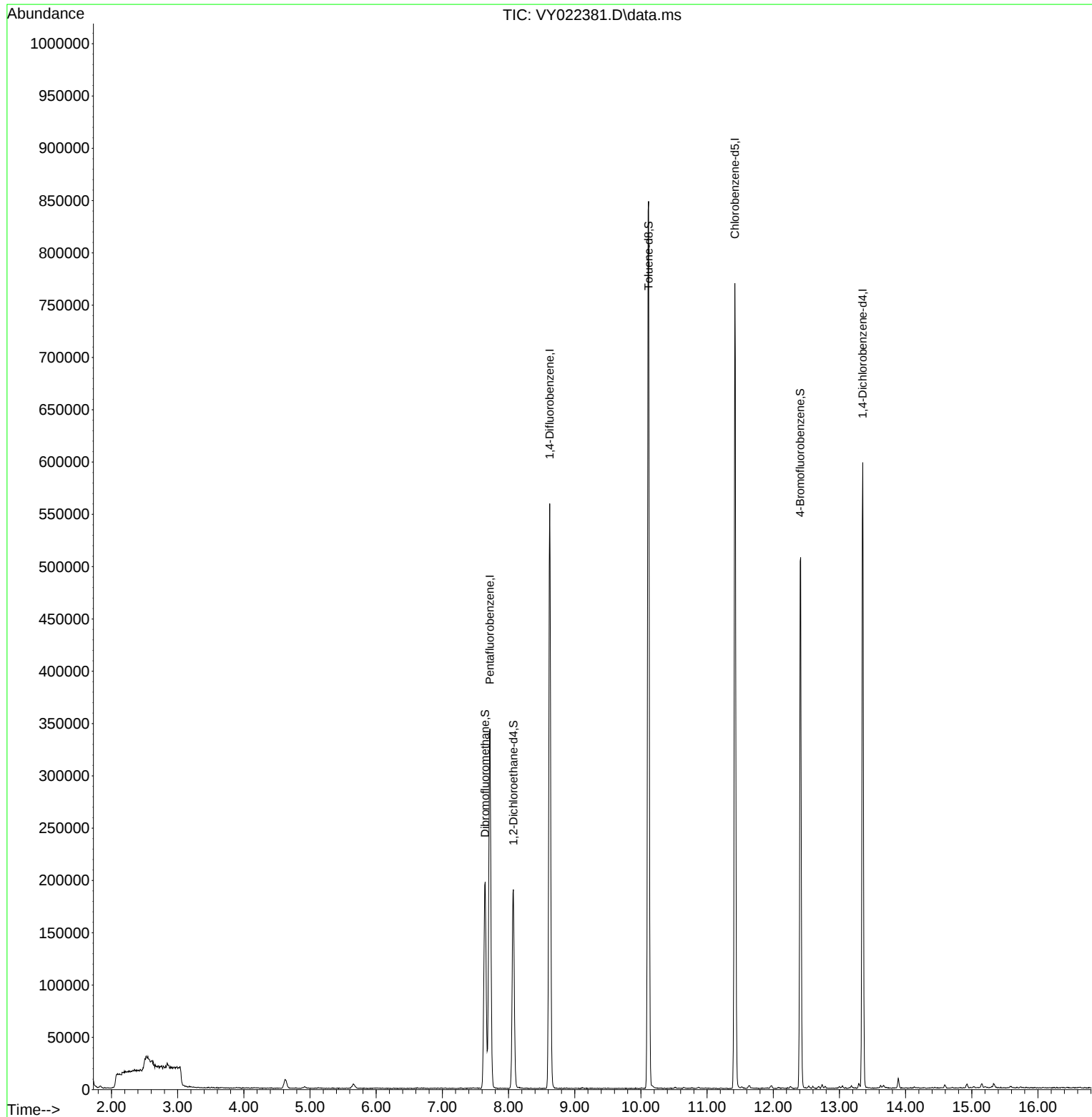
Target Compounds	Qvalue

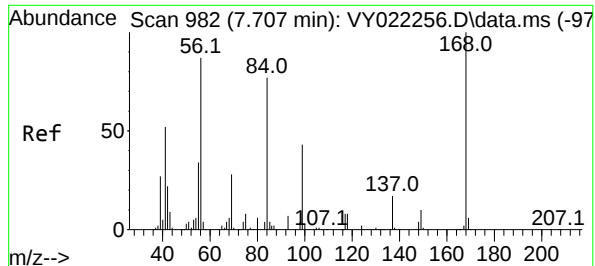
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Time: May 23 03:31:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

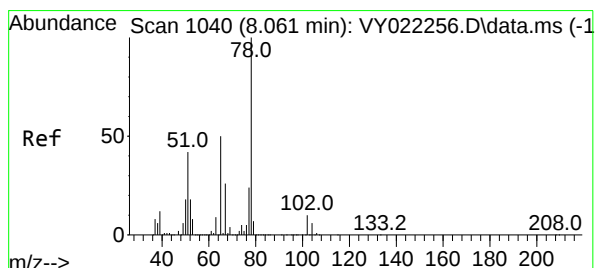
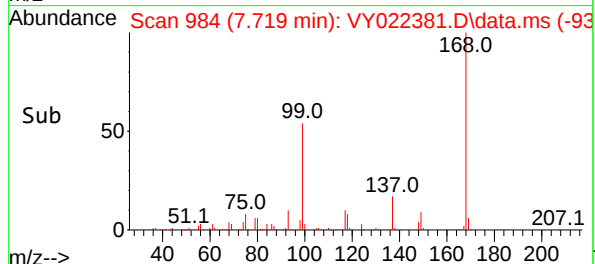
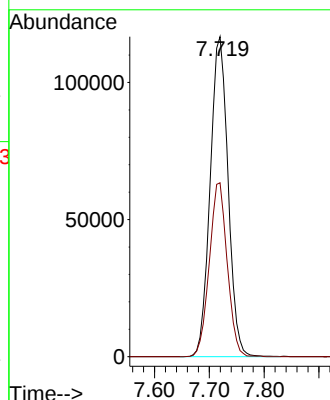
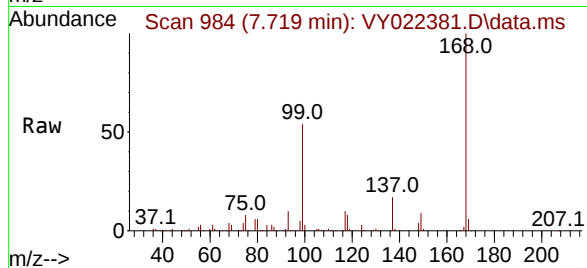




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.719 min Scan# 91
Delta R.T. 0.012 min
Lab File: VY022381.D
Acq: 22 May 2025 09:07

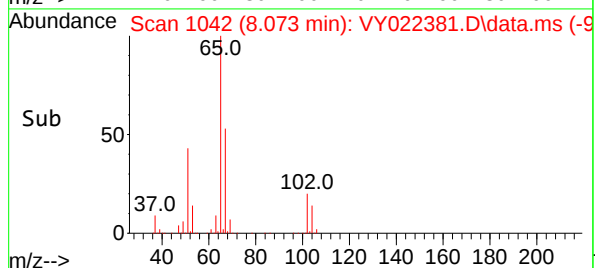
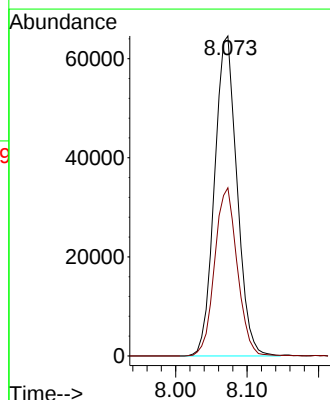
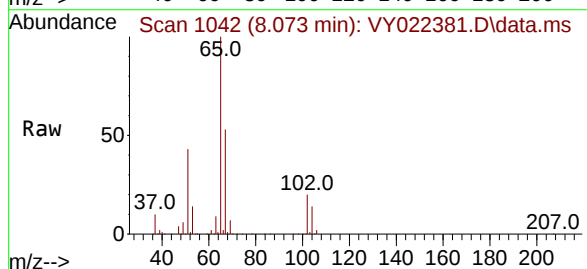
Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

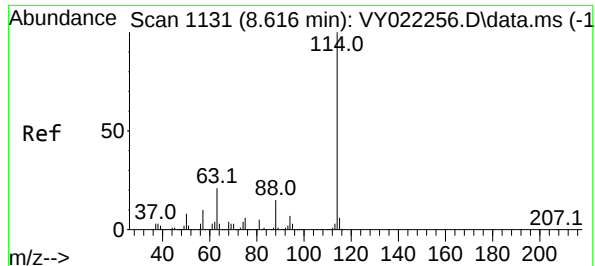
Tgt Ion:168 Resp: 263712
Ion Ratio Lower Upper
168 100
99 54.4 44.2 66.4



#33
1,2-Dichloroethane-d4
Concen: 48.890 ug/l
RT: 8.073 min Scan# 1042
Delta R.T. 0.012 min
Lab File: VY022381.D
Acq: 22 May 2025 09:07

Tgt Ion: 65 Resp: 140906
Ion Ratio Lower Upper
65 100
67 53.0 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.622 min Scan# 1131

Delta R.T. 0.006 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

Instrument :

MSVOA_Y

ClientSampleId :

VY0522SBL01

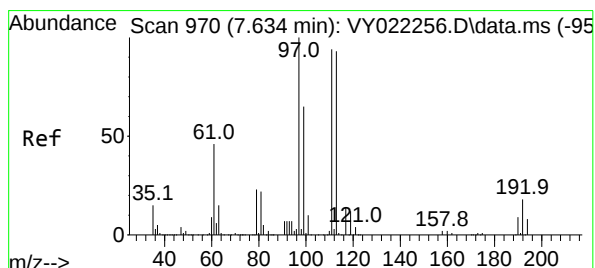
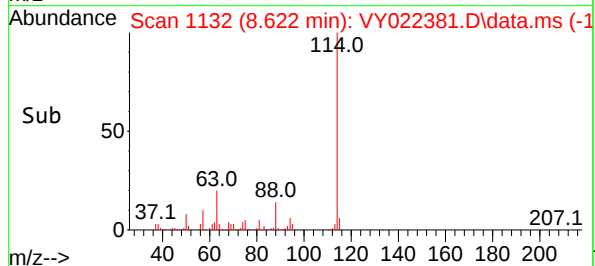
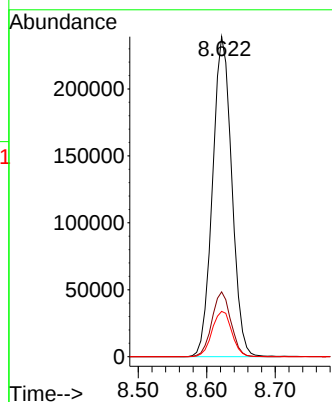
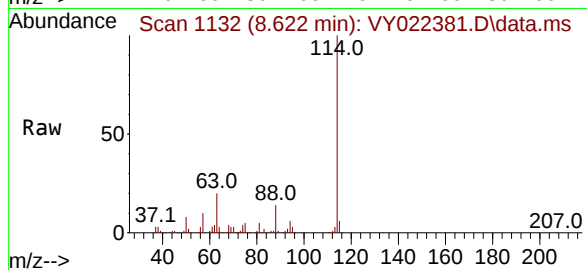
Tgt Ion:114 Resp: 465826

Ion Ratio Lower Upper

114 100

63 20.2 0.0 41.0

88 14.1 0.0 29.4



#35

Dibromofluoromethane

Concen: 49.800 ug/l

RT: 7.646 min Scan# 972

Delta R.T. 0.012 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

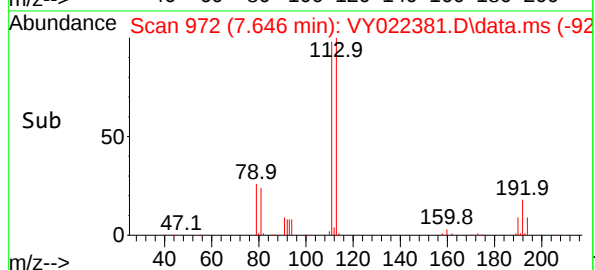
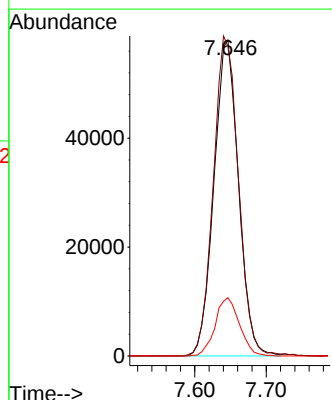
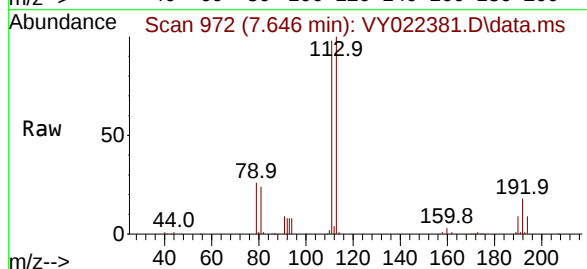
Tgt Ion:113 Resp: 138461

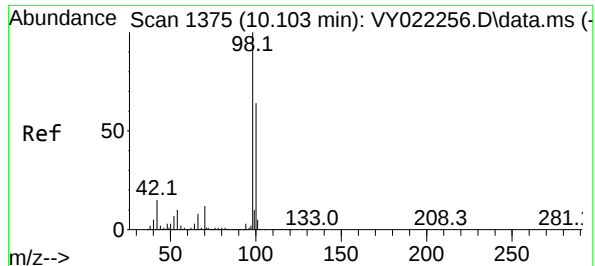
Ion Ratio Lower Upper

113 100

111 103.6 82.6 123.8

192 18.2 15.2 22.8





#50

Toluene-d8

Concen: 48.674 ug/l

RT: 10.115 min Scan# 1

Delta R.T. 0.012 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

Instrument :

MSVOA_Y

ClientSampleId :

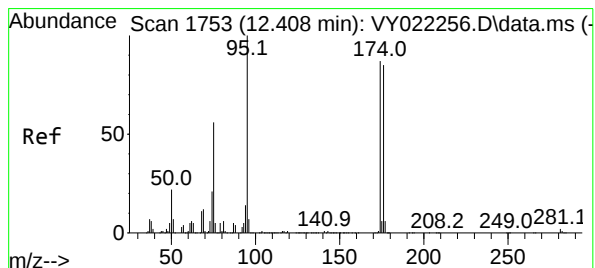
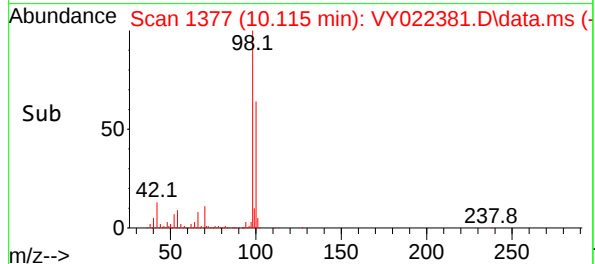
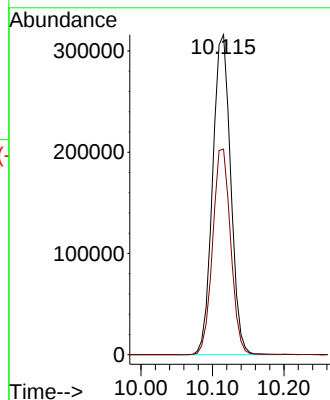
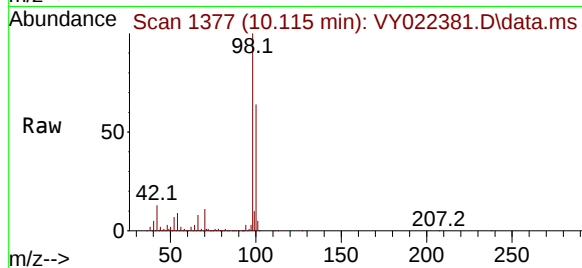
VY0522SBL01

Tgt Ion: 98 Resp: 554254

Ion Ratio Lower Upper

98 100

100 64.2 51.8 77.8



#62

4-Bromofluorobenzene

Concen: 39.525 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

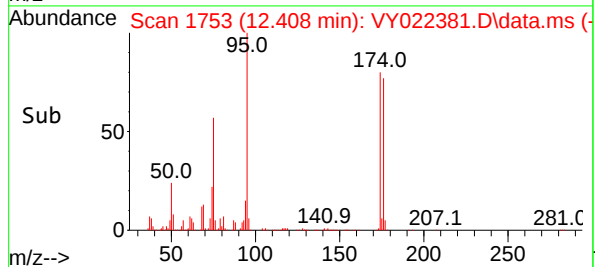
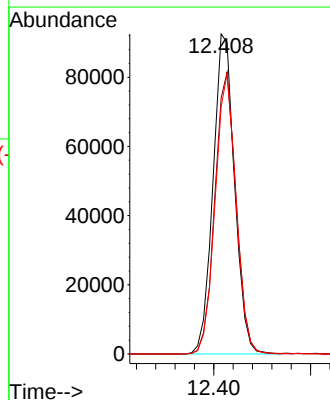
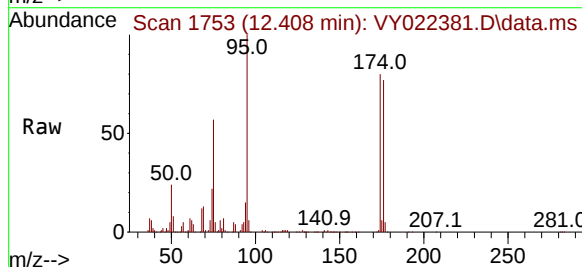
Tgt Ion: 95 Resp: 142658

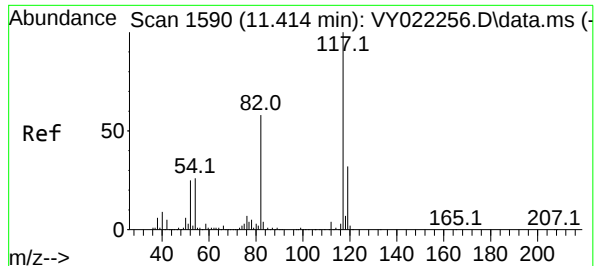
Ion Ratio Lower Upper

95 100

174 86.8 0.0 166.8

176 85.2 0.0 160.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

Instrument :

MSVOA_Y

ClientSampleId :

VY0522SBL01

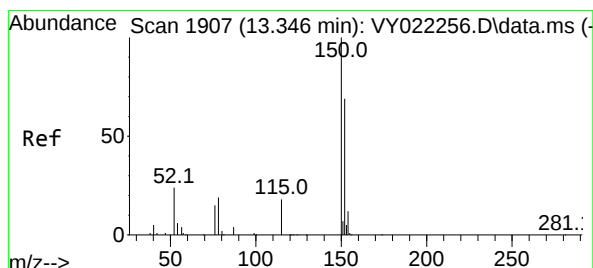
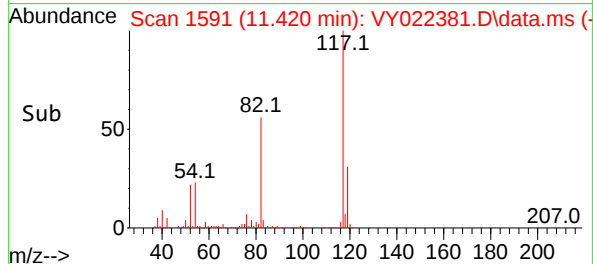
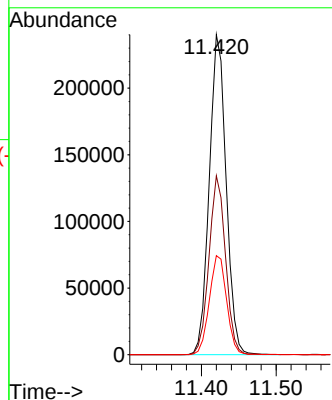
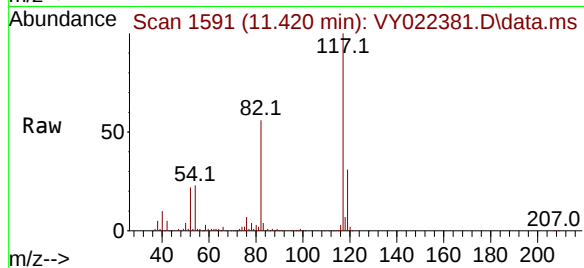
Tgt Ion:117 Resp: 376365

Ion Ratio Lower Upper

117 100

82 55.9 46.6 70.0

119 31.0 25.8 38.6



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY022381.D

Acq: 22 May 2025 09:07

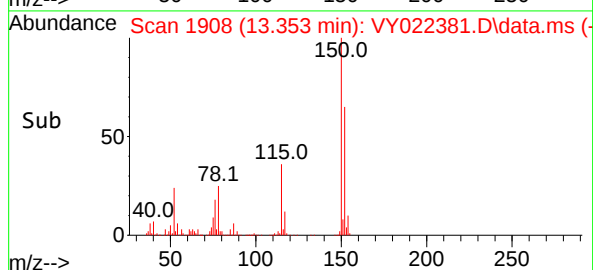
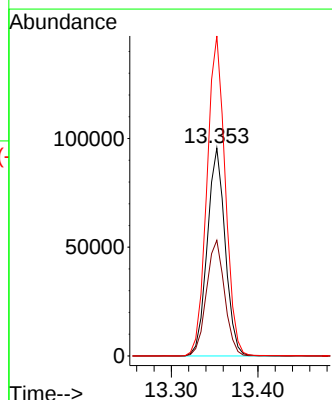
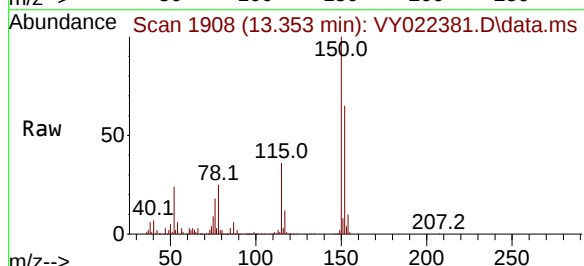
Tgt Ion:152 Resp: 137350

Ion Ratio Lower Upper

152 100

115 56.5 29.4 88.2

150 157.1 0.0 353.8



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M

Title : SW846 8260

Signal : TIC: VY022381.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.080	46	59	60	rBV5	13183	26197	1.74%	0.361%
2	4.622	466	476	486	rBV2	8616	26540	1.77%	0.366%
3	7.646	962	972	977	rBV	197533	474258	31.57%	6.539%
4	7.719	977	984	994	rVB	343189	786755	52.38%	10.848%
5	8.073	1031	1042	1053	rBV	190297	421547	28.07%	5.812%
6	8.622	1124	1132	1145	rVB	558969	1092880	72.76%	15.069%
7	10.115	1369	1377	1385	rBV	848017	1502036	100.00%	20.711%
8	11.420	1583	1591	1604	rBV	769811	1222504	81.39%	16.856%
9	12.414	1747	1754	1763	rBV	507460	807002	53.73%	11.127%
10	13.353	1902	1908	1916	rVB	597669	892776	59.44%	12.310%

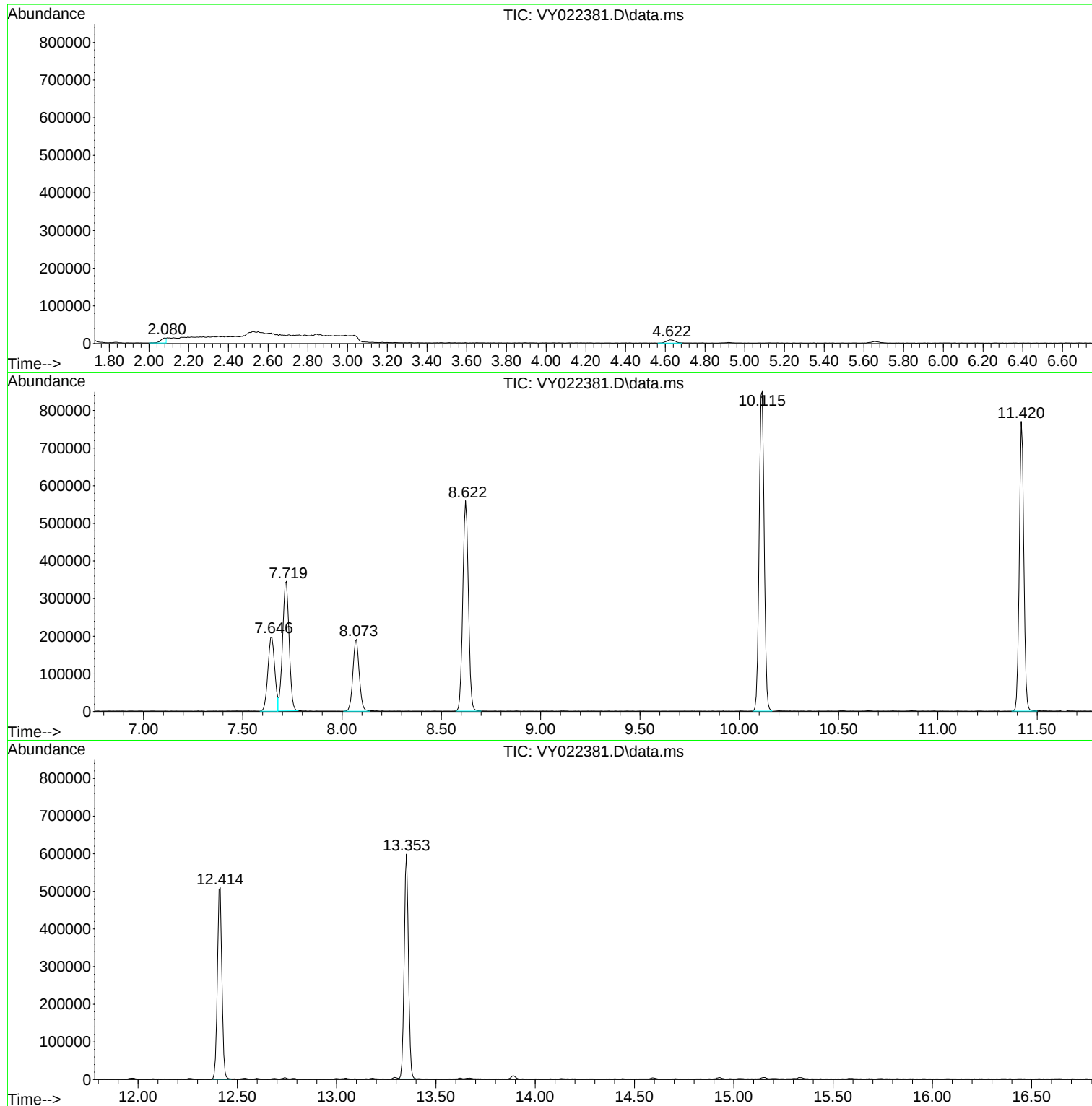
Sum of corrected areas: 7252495

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

No Library Search Compounds Detected

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022381.D
Acq On : 22 May 2025 09:07
Operator : SY/MD
Sample : VY0522SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260

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

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

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBS01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022382.D	1		05/22/25 09:36	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	19.6		1.10	5.00	ug/Kg
74-87-3	Chloromethane	23.3		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	24.9		0.79	5.00	ug/Kg
74-83-9	Bromomethane	34.5		1.10	5.00	ug/Kg
75-00-3	Chloroethane	28.5		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	23.4		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.9		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.5		1.00	5.00	ug/Kg
67-64-1	Acetone	110		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.3		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.6		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	16.6		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	19.0		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.7		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	19.4		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	18.7		0.79	5.00	ug/Kg
78-93-3	2-Butanone	95.4		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.8		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.9		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	18.6		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.1		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.5		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	19.2		0.91	5.00	ug/Kg
71-43-2	Benzene	19.5		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.1		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.1		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.1		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.3		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	88.9		3.60	25.0	ug/Kg
108-88-3	Toluene	19.4		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBS01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022382.D	1		05/22/25 09:36	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	18.5		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	18.8		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.6		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	89.5		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.9		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	19.6		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.9		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	19.7		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	18.7		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	38.0		1.20	10.0	ug/Kg
95-47-6	o-Xylene	18.8		0.82	5.00	ug/Kg
100-42-5	Styrene	19.0		0.71	5.00	ug/Kg
75-25-2	Bromoform	19.2		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.3		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.8		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	18.9		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.0		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	19.1		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	19.6		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	19.5		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	19.2		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.4		63 - 155	97%	SPK: 50
1868-53-7	Dibromofluoromethane	50.3		70 - 134	101%	SPK: 50
2037-26-5	Toluene-d8	50.3		74 - 123	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.7		38 - 136	95%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	175000	7.719			
540-36-3	1,4-Difluorobenzene	294000	8.622			
3114-55-4	Chlorobenzene-d5	251000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	118000	13.353			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBS01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBS01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022382.D	1		05/22/25 09:36	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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_Y\Data\VY052225\
 Data File : VY022382.D
 Acq On : 22 May 2025 09:36
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	174604	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.622	114	293942	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	250842	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	118480	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	92313	48.376	ug/l	0.01
Spiked Amount 50.000	Range 50 - 163		Recovery =	96.760%		
35) Dibromofluoromethane	7.646	113	88232	50.291	ug/l	0.01
Spiked Amount 50.000	Range 54 - 147		Recovery =	100.580%		
50) Toluene-d8	10.115	98	361670	50.334	ug/l	0.01
Spiked Amount 50.000	Range 58 - 134		Recovery =	100.660%		
62) 4-Bromofluorobenzene	12.414	95	108691	47.724	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	95.440%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	35700	19.595	ug/l	100
3) Chloromethane	2.074	50	89428	23.334	ug/l	96
4) Vinyl Chloride	2.208	62	106584	24.892	ug/l	98
5) Bromomethane	2.598	94	120242	34.496	ug/l	100
6) Chloroethane	2.739	64	75963	28.516	ug/l	99
7) Trichlorofluoromethane	3.056	101	101302	23.367	ug/l	96
8) Diethyl Ether	3.464	74	20744	19.939	ug/l	92
9) 1,1,2-Trichlorotrifluo...	3.824	101	39378	20.923	ug/l	99
10) Methyl Iodide	4.013	142	39404	18.090	ug/l	98
11) Tert butyl alcohol	4.891	59	13893	95.339	ug/l #	100
12) 1,1-Dichloroethene	3.793	96	38242	20.476	ug/l	94
13) Acrolein	3.665	56	11668	54.771	ug/l	97
14) Allyl chloride	4.397	41	57800	17.650	ug/l	93
15) Acrylonitrile	5.067	53	41413	96.604	ug/l	99
16) Acetone	3.885	43	37784	105.597	ug/l	96
17) Carbon Disulfide	4.116	76	117567	19.304	ug/l	99
18) Methyl Acetate	4.403	43	18733	16.605	ug/l #	89
19) Methyl tert-butyl Ether	5.128	73	100940	19.601	ug/l	98
20) Methylene Chloride	4.629	84	43819	18.952	ug/l	90
21) trans-1,2-Dichloroethene	5.122	96	40647	19.717	ug/l	95
22) Diisopropyl ether	6.031	45	124864	18.055	ug/l	98
23) Vinyl Acetate	5.970	43	370765	88.742	ug/l	96
24) 1,1-Dichloroethane	5.927	63	75035	19.421	ug/l	99
25) 2-Butanone	6.909	43	57111	95.421	ug/l	95
26) 2,2-Dichloropropane	6.890	77	69084	20.103	ug/l	100
27) cis-1,2-Dichloroethene	6.902	96	47248	19.861	ug/l	97
28) Bromochloromethane	7.256	49	30609	18.573	ug/l	96
29) Tetrahydrofuran	7.280	42	35533	92.280	ug/l	94
30) Chloroform	7.433	83	74530	20.111	ug/l	99
31) Cyclohexane	7.713	56	72006	18.653	ug/l	95
32) 1,1,1-Trichloroethane	7.628	97	66206	19.472	ug/l	99
36) 1,1-Dichloropropene	7.847	75	56933	19.702	ug/l	99
37) Ethyl Acetate	6.994	43	26743	19.234	ug/l	97
38) Carbon Tetrachloride	7.829	117	59138	19.771	ug/l	97
39) Methylcyclohexane	9.116	83	74349	19.151	ug/l	97
40) Benzene	8.091	78	167114	19.508	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022382.D
 Acq On : 22 May 2025 09:36
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.232	41	14142	15.333	ug/l #	82
42) 1,2-Dichloroethane	8.171	62	44204	19.081	ug/l	98
43) Isopropyl Acetate	8.207	43	52844	17.427	ug/l	98
44) Trichloroethene	8.872	130	42833	20.109	ug/l	96
45) 1,2-Dichloropropane	9.152	63	39408	19.081	ug/l	97
46) Dibromomethane	9.237	93	22173	19.905	ug/l	97
47) Bromodichloromethane	9.433	83	55825	19.317	ug/l	98
48) Methyl methacrylate	9.231	41	24395	17.203	ug/l	94
49) 1,4-Dioxane	9.250	88	5019	398.826	ug/l	89
51) 4-Methyl-2-Pentanone	10.006	43	132300	88.920	ug/l	96
52) Toluene	10.176	92	105474	19.443	ug/l	98
53) t-1,3-Dichloropropene	10.402	75	52289	18.540	ug/l	100
54) cis-1,3-Dichloropropene	9.865	75	60767	18.806	ug/l	95
55) 1,1,2-Trichloroethane	10.579	97	27910	19.566	ug/l	99
56) Ethyl methacrylate	10.445	69	41592	18.718	ug/l	95
57) 1,3-Dichloropropane	10.725	76	50921	20.091	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	80535	80.750	ug/l	97
59) 2-Hexanone	10.768	43	89261	89.478	ug/l	95
60) Dibromochloromethane	10.920	129	36931	19.947	ug/l	100
61) 1,2-Dibromoethane	11.024	107	26053	19.596	ug/l	99
64) Tetrachloroethene	10.652	164	46204	19.928	ug/l	96
65) Chlorobenzene	11.450	112	111687	19.735	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.524	131	36492	18.757	ug/l	98
67) Ethyl Benzene	11.524	91	198411	18.720	ug/l	99
68) m/p-Xylenes	11.633	106	151710	37.987	ug/l	97
69) o-Xylene	11.963	106	71140	18.827	ug/l	100
70) Styrene	11.975	104	121069	18.995	ug/l	97
71) Bromoform	12.139	173	20171	19.208	ug/l #	99
73) Isopropylbenzene	12.261	105	189456	19.302	ug/l	100
74) N-amyl acetate	12.078	43	47777	17.019	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.511	83	29957	19.845	ug/l	98
76) 1,2,3-Trichloropropane	12.560	75	22658m	18.877	ug/l	
77) Bromobenzene	12.536	156	39583	18.881	ug/l	98
78) n-propylbenzene	12.603	91	229385	19.375	ug/l	100
79) 2-Chlorotoluene	12.682	91	120979	18.594	ug/l	98
80) 1,3,5-Trimethylbenzene	12.743	105	149426	18.859	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	10636	17.950	ug/l	97
82) 4-Chlorotoluene	12.780	91	123043	18.386	ug/l	99
83) tert-Butylbenzene	12.999	119	134904	19.156	ug/l	97
84) 1,2,4-Trimethylbenzene	13.048	105	147645	18.771	ug/l	99
85) sec-Butylbenzene	13.182	105	202478	19.368	ug/l	100
86) p-Isopropyltoluene	13.298	119	166855	18.977	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	80701	18.857	ug/l	98
88) 1,4-Dichlorobenzene	13.371	146	78194	18.995	ug/l	99
89) n-Butylbenzene	13.621	91	160206	19.260	ug/l	100
90) Hexachloroethane	13.883	117	33947	19.127	ug/l	98
91) 1,2-Dichlorobenzene	13.663	146	68652	19.098	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	4780	19.637	ug/l	99
93) 1,2,4-Trichlorobenzene	14.925	180	40453	19.482	ug/l	99
94) Hexachlorobutadiene	15.029	225	21731	18.766	ug/l	98
95) Naphthalene	15.151	128	76320	19.368	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	33805	19.191	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022382.D
Acq On : 22 May 2025 09:36
Operator : SY/MD
Sample : VY0522SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBS01

Manual Integrations
APPROVED

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

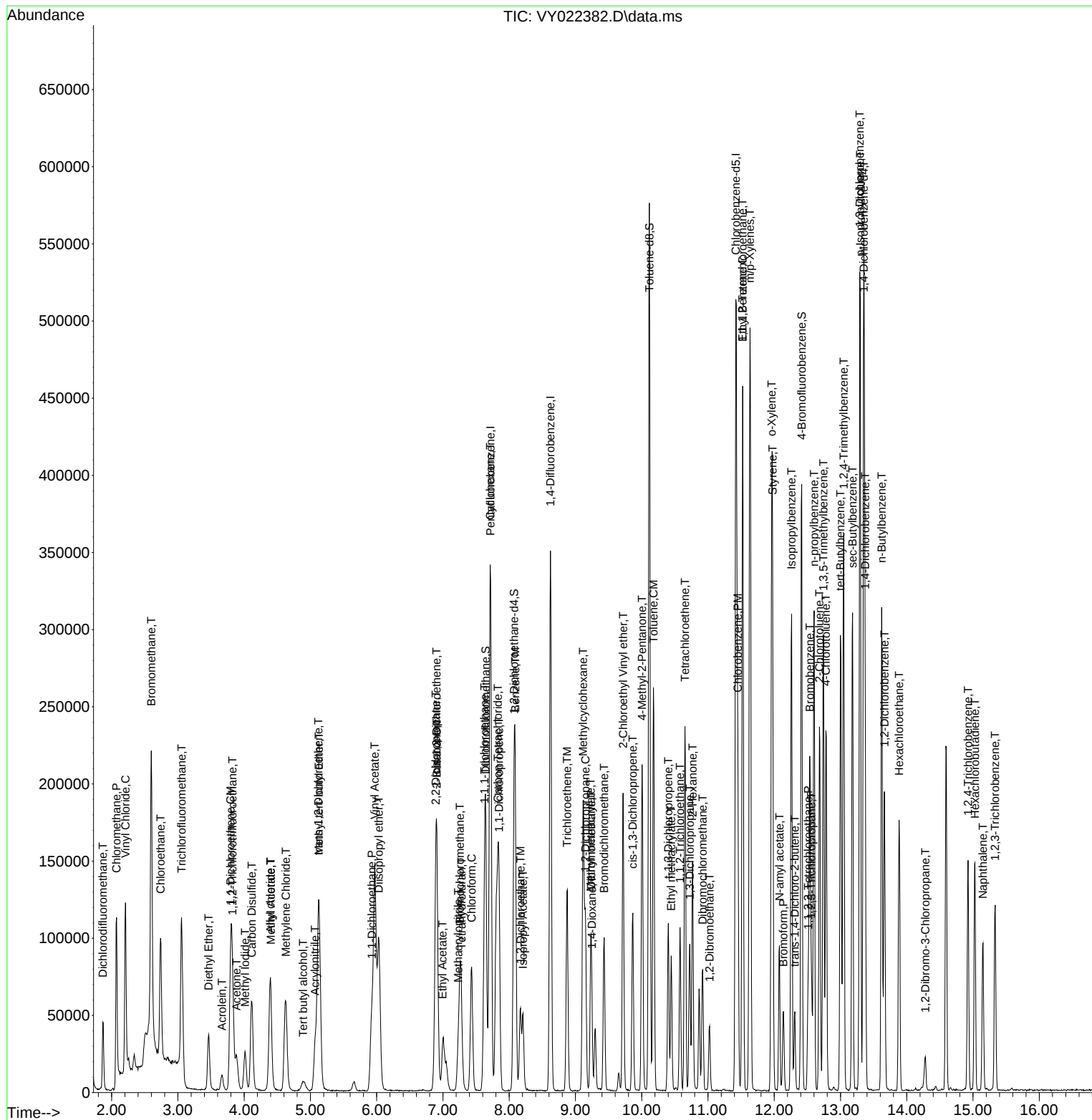
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022382.D
Acq On : 22 May 2025 09:36
Operator : SY/MD
Sample : VY0522SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/soil
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBS01

Manual Integrations
APPROVED

Reviewed By : John Carlone 05/23/2025
Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration



Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBSD01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
	ID :	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022383.D	1		05/22/25 09:59	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	20.2		1.10	5.00	ug/Kg
74-87-3	Chloromethane	23.2		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	25.4		0.79	5.00	ug/Kg
74-83-9	Bromomethane	33.4		1.10	5.00	ug/Kg
75-00-3	Chloroethane	28.3		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	21.1		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	21.3		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.8		1.00	5.00	ug/Kg
67-64-1	Acetone	93.4		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.7		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	21.1		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	19.3		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	19.0		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.1		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.3		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	18.8		0.79	5.00	ug/Kg
78-93-3	2-Butanone	97.2		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.5		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.7		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	20.3		1.20	5.00	ug/Kg
67-66-3	Chloroform	20.7		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.5		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	19.6		0.91	5.00	ug/Kg
71-43-2	Benzene	20.1		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.3		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.3		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	19.7		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.9		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	97.6		3.60	25.0	ug/Kg
108-88-3	Toluene	19.4		0.78	5.00	ug/Kg

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBSD01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Test:	VOC-TCLVOA-10
	ID :	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022383.D	1		05/22/25 09:59	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	19.4		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.7		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	20.8		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	95.7		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.4		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	20.2		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	20.9		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	20.4		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.6		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	39.7		1.20	10.0	ug/Kg
95-47-6	o-Xylene	19.8		0.82	5.00	ug/Kg
100-42-5	Styrene	19.9		0.71	5.00	ug/Kg
75-25-2	Bromoform	20.8		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.7		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	21.1		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.8		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.0		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.2		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	21.4		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	20.0		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	20.4		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	50.4		63 - 155	101%	SPK: 50
1868-53-7	Dibromofluoromethane	51.0		70 - 134	102%	SPK: 50
2037-26-5	Toluene-d8	49.9		74 - 123	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		38 - 136	94%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	166000	7.713			
540-36-3	1,4-Difluorobenzene	283000	8.621			
3114-55-4	Chlorobenzene-d5	237000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	113000	13.352			

Report of Analysis

Client:	CDM Smith	Date Collected:	
Project:	South River WM Replacement	Date Received:	
Client Sample ID:	VY0522SBSD01	SDG No.:	Q2074
Lab Sample ID:	VY0522SBSD01	Matrix:	SOIL
Analytical Method:	8260D	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY022383.D	1		05/22/25 09:59	VY052225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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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_Y\Data\VY052225\
 Data File : VY022383.D
 Acq On : 22 May 2025 09:59
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBS01

Manual Integrations
 APPROVED

Reviewed By :John Carlone 05/23/2025
 Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	165702	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.621	114	283052	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	236945	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	112772	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.073	65	91305	50.418	ug/l	0.01
Spiked Amount 50.000	Range 50 - 163		Recovery = 100.840%			
35) Dibromofluoromethane	7.640	113	86124	50.978	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 101.960%			
50) Toluene-d8	10.115	98	344960	49.856	ug/l	0.01
Spiked Amount 50.000	Range 58 - 134		Recovery = 99.720%			
62) 4-Bromofluorobenzene	12.413	95	103227	47.068	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 94.140%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.866	85	34872	20.169	ug/l	98
3) Chloromethane	2.068	50	84322	23.184	ug/l	98
4) Vinyl Chloride	2.208	62	103245	25.408	ug/l	96
5) Bromomethane	2.598	94	110601	33.435	ug/l	100
6) Chloroethane	2.738	64	71548	28.302	ug/l	97
7) Trichlorofluoromethane	3.055	101	86964	21.138	ug/l	98
8) Diethyl Ether	3.464	74	20593	20.857	ug/l	95
9) 1,1,2-Trichlorotrifluo...	3.823	101	38058	21.308	ug/l	99
10) Methyl Iodide	4.006	142	40873	19.772	ug/l	99
11) Tert butyl alcohol	4.884	59	14857	107.432	ug/l #	100
12) 1,1-Dichloroethene	3.793	96	36929	20.835	ug/l	85
13) Acrolein	3.659	56	11544	57.100	ug/l	90
14) Allyl chloride	4.384	41	56854	18.294	ug/l	94
15) Acrylonitrile	5.073	53	42184	103.689	ug/l	98
16) Acetone	3.884	43	31709	93.380	ug/l	94
17) Carbon Disulfide	4.116	76	114095	19.740	ug/l	99
18) Methyl Acetate	4.396	43	20711	19.345	ug/l	95
19) Methyl tert-butyl Ether	5.128	73	102955	21.066	ug/l	95
20) Methylene Chloride	4.622	84	41710	19.009	ug/l	92
21) trans-1,2-Dichloroethene	5.122	96	39375	20.126	ug/l	92
22) Diisopropyl ether	6.030	45	125231	19.081	ug/l	94
23) Vinyl Acetate	5.969	43	381544	96.228	ug/l	95
24) 1,1-Dichloroethane	5.927	63	74250	20.250	ug/l	99
25) 2-Butanone	6.908	43	55203	97.189	ug/l	100
26) 2,2-Dichloropropane	6.896	77	65151	19.977	ug/l	100
27) cis-1,2-Dichloroethene	6.896	96	46809	20.734	ug/l	96
28) Bromochloromethane	7.256	49	31798	20.331	ug/l	99
29) Tetrahydrofuran	7.268	42	37375	102.279	ug/l	92
30) Chloroform	7.432	83	72756	20.687	ug/l	99
31) Cyclohexane	7.713	56	69034	18.844	ug/l	96
32) 1,1,1-Trichloroethane	7.628	97	66078	20.479	ug/l	99
36) 1,1-Dichloropropene	7.847	75	54364	19.537	ug/l	98
37) Ethyl Acetate	6.994	43	27223	20.333	ug/l	97
38) Carbon Tetrachloride	7.823	117	56279	19.539	ug/l	97
39) Methylcyclohexane	9.115	83	73130	19.561	ug/l	93
40) Benzene	8.091	78	166008	20.124	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
 Data File : VY022383.D
 Acq On : 22 May 2025 09:59
 Operator : SY/MD
 Sample : VY0522SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0522SBS01

Manual Integrations
 APPROVED

Reviewed By : John Carlone 05/23/2025
 Supervised By : Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 16 01:42:09 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.231	41	13388	15.074	ug/l #	75
42) 1,2-Dichloroethane	8.164	62	45353	20.330	ug/l	100
43) Isopropyl Acetate	8.207	43	55775	19.101	ug/l	98
44) Trichloroethene	8.871	130	41551	20.257	ug/l	98
45) 1,2-Dichloropropane	9.146	63	39131	19.675	ug/l	98
46) Dibromomethane	9.237	93	22317	20.805	ug/l	97
47) Bromodichloromethane	9.432	83	55379	19.900	ug/l	96
48) Methyl methacrylate	9.231	41	24767	18.137	ug/l	93
49) 1,4-Dioxane	9.237	88	5070	418.379	ug/l	93
51) 4-Methyl-2-Pentanone	10.005	43	139840	97.604	ug/l	97
52) Toluene	10.176	92	101209	19.375	ug/l	99
53) t-1,3-Dichloropropene	10.401	75	52641	19.383	ug/l	99
54) cis-1,3-Dichloropropene	9.865	75	61287	19.697	ug/l	96
55) 1,1,2-Trichloroethane	10.578	97	28589	20.813	ug/l	97
56) Ethyl methacrylate	10.444	69	42404	19.818	ug/l	94
57) 1,3-Dichloropropane	10.725	76	50499	20.692	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.719	63	83817	87.274	ug/l	97
59) 2-Hexanone	10.767	43	91893	95.660	ug/l	96
60) Dibromochloromethane	10.920	129	36293	20.356	ug/l	99
61) 1,2-Dibromoethane	11.017	107	25923	20.248	ug/l	100
64) Tetrachloroethene	10.651	164	45749	20.889	ug/l	97
65) Chlorobenzene	11.450	112	108867	20.365	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.523	131	36887	20.072	ug/l	99
67) Ethyl Benzene	11.523	91	196186	19.596	ug/l	99
68) m/p-Xylenes	11.633	106	149849	39.722	ug/l	96
69) o-Xylene	11.956	106	70807	19.838	ug/l	96
70) Styrene	11.974	104	119807	19.899	ug/l	97
71) Bromoform	12.133	173	20642	20.810	ug/l #	97
73) Isopropylbenzene	12.261	105	184158	19.712	ug/l	100
74) N-amyl acetate	12.072	43	50559	18.922	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	30272	21.069	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	23203m	20.309	ug/l	
77) Bromobenzene	12.535	156	39924	20.008	ug/l	99
78) n-propylbenzene	12.602	91	222841	19.775	ug/l	100
79) 2-Chlorotoluene	12.682	91	120348	19.434	ug/l	98
80) 1,3,5-Trimethylbenzene	12.742	105	148179	19.648	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	11117	19.711	ug/l	95
82) 4-Chlorotoluene	12.779	91	122004	19.154	ug/l	96
83) tert-Butylbenzene	12.999	119	135145	20.161	ug/l	96
84) 1,2,4-Trimethylbenzene	13.047	105	146449	19.562	ug/l	98
85) sec-Butylbenzene	13.181	105	198914	19.991	ug/l	99
86) p-Isopropyltoluene	13.297	119	162649	19.435	ug/l	98
87) 1,3-Dichlorobenzene	13.291	146	80601	19.787	ug/l	98
88) 1,4-Dichlorobenzene	13.370	146	78462	20.025	ug/l	99
89) n-Butylbenzene	13.620	91	155438	19.633	ug/l	100
90) Hexachloroethane	13.883	117	33072	19.577	ug/l	96
91) 1,2-Dichlorobenzene	13.663	146	69239	20.236	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	4955	21.386	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	39517	19.994	ug/l	97
94) Hexachlorobutadiene	15.029	225	20733	18.811	ug/l	99
95) Naphthalene	15.144	128	76999	20.530	ug/l	100
96) 1,2,3-Trichlorobenzene	15.333	180	34249	20.427	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022383.D
Acq On : 22 May 2025 09:59
Operator : SY/MD
Sample : VY0522SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBSD01

Manual Integrations
APPROVED

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

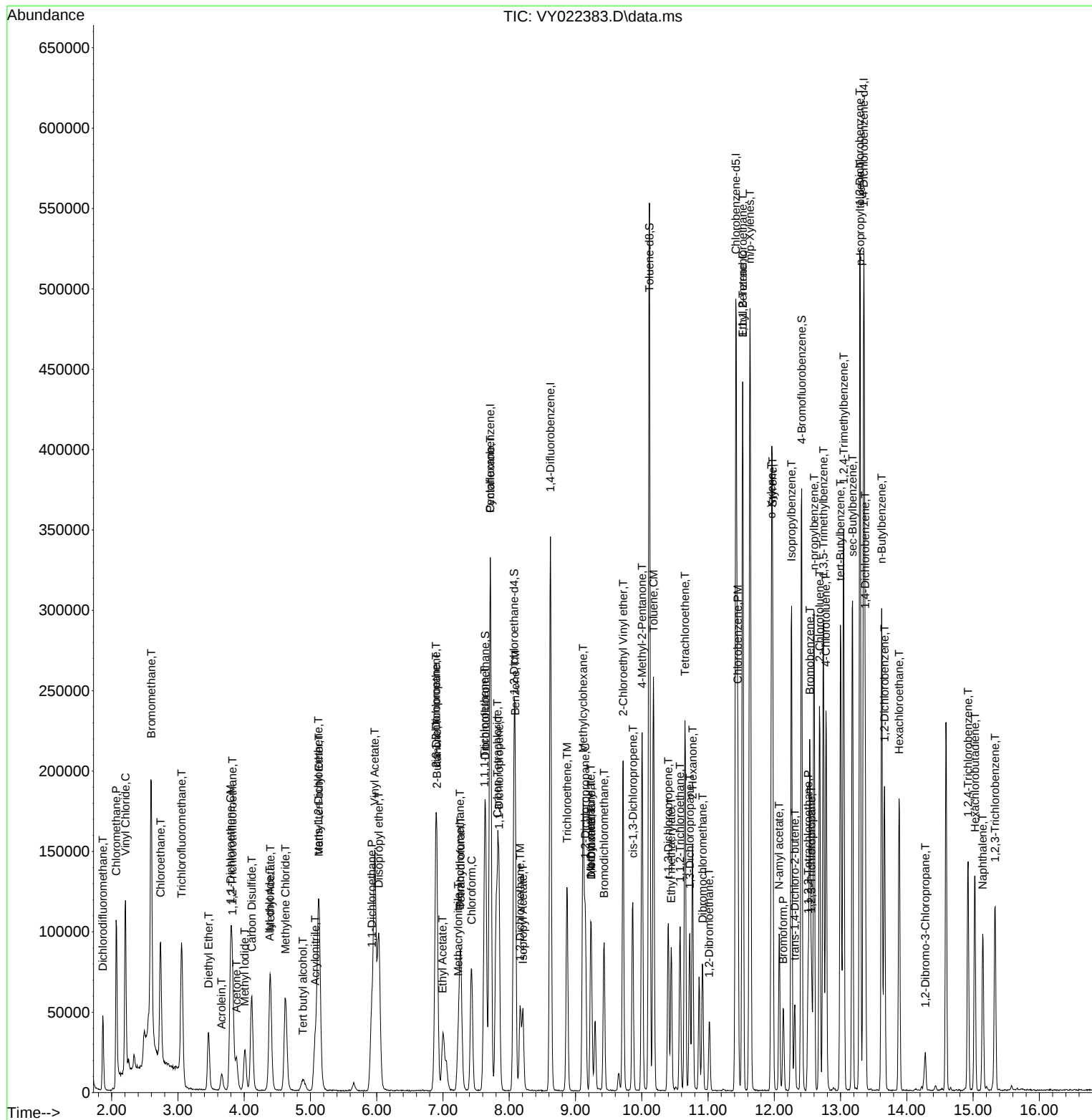
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY052225\
Data File : VY022383.D
Acq On : 22 May 2025 09:59
Operator : SY/MD
Sample : VY0522SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0522SBSD01

Manual Integrations APPROVED

Reviewed By :John Carlone 05/23/2025
Supervised By :Mahesh Dadoda 05/23/2025

Quant Time: May 23 03:32:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y051525S.M
Quant Title : SW846 8260
QLast Update : Fri May 16 01:42:09 2025
Response via : Initial Calibration



Manual Integration Report

Sequence:	VY051525	Instrument	MSVOA_y
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDIC005	VY022253.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:35 AM	Sam	5/16/2025 11:50:51 AM	Peak Integrated by Software
VSTDIC005	VY022253.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:35 AM	Sam	5/16/2025 11:50:51 AM	Peak Integrated by Software
VSTDIC005	VY022253.D	Methyl Acetate	MMDadoda	5/16/2025 11:48:35 AM	Sam	5/16/2025 11:50:51 AM	Peak Integrated by Software
VSTDIC010	VY022254.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:33 AM	Sam	5/16/2025 11:50:49 AM	Peak Integrated by Software
VSTDIC010	VY022254.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:33 AM	Sam	5/16/2025 11:50:49 AM	Peak Integrated by Software
VSTDIC020	VY022255.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:32 AM	Sam	5/16/2025 11:50:48 AM	Peak Integrated by Software
VSTDIC020	VY022255.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:32 AM	Sam	5/16/2025 11:50:48 AM	Peak Integrated by Software
VSTDICCC050	VY022256.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:30 AM	Sam	5/16/2025 11:50:46 AM	Peak Integrated by Software
VSTDICCC050	VY022256.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:30 AM	Sam	5/16/2025 11:50:46 AM	Peak Integrated by Software
VSTDIC100	VY022257.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:28 AM	Sam	5/16/2025 11:50:45 AM	Peak Integrated by Software
VSTDIC100	VY022257.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:28 AM	Sam	5/16/2025 11:50:45 AM	Peak Integrated by Software
VSTDIC150	VY022258.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:27 AM	Sam	5/16/2025 11:50:43 AM	Peak Integrated by Software
VSTDIC150	VY022258.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:27 AM	Sam	5/16/2025 11:50:43 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

VY051525

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VY022260.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:25 AM	Sam	5/16/2025 11:50:42 AM	Peak Integrated by Software
VSTDICV050	VY022260.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:25 AM	Sam	5/16/2025 11:50:42 AM	Peak Integrated by Software
VSTDCCC050	VY022275.D	1,2,3-Trichloropropane	MMDadoda	5/16/2025 11:48:21 AM	Sam	5/16/2025 11:50:27 AM	Peak Integrated by Software
VSTDCCC050	VY022275.D	Methacrylonitrile	MMDadoda	5/16/2025 11:48:21 AM	Sam	5/16/2025 11:50:27 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

vy052225

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY022380.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:46 AM	MMDadoda	5/23/2025 4:07:00 PM	Peak Integrated by Software
VY0522SBS01	VY022382.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:50 AM	MMDadoda	5/23/2025 4:07:01 PM	Peak Integrated by Software
VY0522SBSD0 1	VY022383.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:54 AM	MMDadoda	5/23/2025 4:07:02 PM	Peak Integrated by Software
VSTDCCC050	VY022405.D	1,2,3-Trichloropropane	JOHN	5/23/2025 11:04:59 AM	MMDadoda	5/23/2025 4:07:04 PM	Peak Integrated by Software
VSTDCCC050	VY022405.D	Methacrylonitrile	JOHN	5/23/2025 11:04:59 AM	MMDadoda	5/23/2025 4:07:04 PM	Peak Integrated by Software

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY051525

Review By	Maresh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133916			
Initial Calibration Stds		VP133918,VP133919,VP133920,VP133921,VP133922,VP133923			
CCC		VP133925			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133924			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY022252.D	15 May 2025 07:52	SY/MD	Ok
2	VSTDICC005	VY022253.D	15 May 2025 09:46	SY/MD	Ok,M
3	VSTDICC010	VY022254.D	15 May 2025 10:16	SY/MD	Ok,M
4	VSTDICC020	VY022255.D	15 May 2025 10:39	SY/MD	Ok,M
5	VSTDICCC050	VY022256.D	15 May 2025 11:02	SY/MD	Ok,M
6	VSTDICC100	VY022257.D	15 May 2025 11:24	SY/MD	Ok,M
7	VSTDICC150	VY022258.D	15 May 2025 11:47	SY/MD	Ok,M
8	VIBLK	VY022259.D	15 May 2025 12:34	SY/MD	Ok
9	VSTDICV050	VY022260.D	15 May 2025 13:20	SY/MD	Ok,M
10	VY0515SBL01	VY022261.D	15 May 2025 13:44	SY/MD	Ok
11	VY0515SBS01	VY022262.D	15 May 2025 14:07	SY/MD	Ok,M
12	VY0515SBSD01	VY022263.D	15 May 2025 14:29	SY/MD	Ok,M
13	Q1984-01	VY022264.D	15 May 2025 15:12	SY/MD	Ok
14	Q1984-03	VY022265.D	15 May 2025 15:35	SY/MD	Ok
15	Q1984-05	VY022266.D	15 May 2025 15:59	SY/MD	Ok
16	Q1984-07	VY022267.D	15 May 2025 16:22	SY/MD	ReRun
17	Q1984-09	VY022268.D	15 May 2025 16:46	SY/MD	Not Ok
18	Q1984-11	VY022269.D	15 May 2025 17:09	SY/MD	Not Ok
19	Q1984-13	VY022270.D	15 May 2025 17:33	SY/MD	Not Ok
20	Q1984-15	VY022271.D	15 May 2025 17:56	SY/MD	ReRun
21	Q1982-04	VY022272.D	15 May 2025 18:19	SY/MD	Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY051525

Review By	Maresh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133916			
Initial Calibration Stds		VP133918,VP133919,VP133920,VP133921,VP133922,VP133923			
CCC		VP133925			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133924			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q1982-05	VY022273.D	15 May 2025 18:43	SY/MD	Ok
23	Q1982-06	VY022274.D	15 May 2025 19:06	SY/MD	Ok
24	VSTDCCC050	VY022275.D	15 May 2025 19:52	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM		
Supervise By	Mahesh Dadoda	Supervise On	5/23/2025 4:07:06 PM		
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP134001			
CCC		VP134002,VP134003			
Internal Standard/PEM		VP133934			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY022379.D	22 May 2025 08:05	SY/MD	Ok
2	VSTDCCC050	VY022380.D	22 May 2025 08:35	SY/MD	Ok,M
3	VY0522SBL01	VY022381.D	22 May 2025 09:07	SY/MD	Ok
4	VY0522SBS01	VY022382.D	22 May 2025 09:36	SY/MD	Ok,M
5	VY0522SBSD01	VY022383.D	22 May 2025 09:59	SY/MD	Ok,M
6	Q2087-03RE	VY022384.D	22 May 2025 10:38	SY/MD	Confirms
7	Q2101-03	VY022385.D	22 May 2025 11:01	SY/MD	Ok
8	Q2097-11RE	VY022386.D	22 May 2025 11:25	SY/MD	Confirms
9	Q2102-01	VY022387.D	22 May 2025 11:48	SY/MD	Ok
10	Q2104-01RE	VY022388.D	22 May 2025 12:11	SY/MD	Confirms
11	Q2074-01	VY022389.D	22 May 2025 12:35	SY/MD	Ok
12	Q2074-02	VY022390.D	22 May 2025 12:58	SY/MD	Ok
13	Q2074-03	VY022391.D	22 May 2025 13:22	SY/MD	Ok
14	Q2074-04	VY022392.D	22 May 2025 13:45	SY/MD	Ok
15	Q2074-05	VY022393.D	22 May 2025 14:09	SY/MD	Ok
16	Q2074-06	VY022394.D	22 May 2025 14:32	SY/MD	Ok
17	Q2074-07	VY022395.D	22 May 2025 14:55	SY/MD	Ok
18	Q2074-08	VY022396.D	22 May 2025 15:19	SY/MD	Ok
19	Q2100-01	VY022397.D	22 May 2025 15:42	SY/MD	ReRun
20	Q2100-02	VY022398.D	22 May 2025 16:06	SY/MD	Ok
21	Q2100-03	VY022399.D	22 May 2025 16:29	SY/MD	Not Ok

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QCBatch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM		
Supervise By	Mahesh Dadoda	Supervise On	5/23/2025 4:07:06 PM		
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME	STD REF.#				
Tune/Reschk Initial Calibration Stds	VP134001				
CCC	VP134002,VP134003				
Internal Standard/PEM	VP133934				
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q2100-04	VY022400.D	22 May 2025 16:53	SY/MD	Ok
23	Q2112-01	VY022401.D	22 May 2025 17:16	SY/MD	ReRun
24	Q2109-03	VY022402.D	22 May 2025 17:40	SY/MD	Ok
25	Q2075-06	VY022403.D	22 May 2025 18:03	SY/MD	Dilution
26	VIBLK	VY022404.D	22 May 2025 18:26	SY/MD	Ok
27	VSTDCCC050	VY022405.D	22 May 2025 18:49	SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY051525

Review By	Mahesh Dadoda	Review On	5/16/2025 11:49:17 AM
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y HP Processing Method 82y051525s.m

STD. NAME	STD REF.#
Tune/Reschk	VP133916
Initial Calibration Stds	VP133918,VP133919,VP133920,VP133921,VP133922,VP133923
CCC	VP133925
Internal Standard/PEM	VP131783
ICV/I.BLK	VP133924
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY022252.D	15 May 2025 07:52		SY/MD	Ok
2	VSTDIC005	VSTDIC005	VY022253.D	15 May 2025 09:46		SY/MD	Ok,M
3	VSTDIC010	VSTDIC010	VY022254.D	15 May 2025 10:16		SY/MD	Ok,M
4	VSTDIC020	VSTDIC020	VY022255.D	15 May 2025 10:39		SY/MD	Ok,M
5	VSTDIC050	VSTDIC050	VY022256.D	15 May 2025 11:02		SY/MD	Ok,M
6	VSTDIC100	VSTDIC100	VY022257.D	15 May 2025 11:24		SY/MD	Ok,M
7	VSTDIC150	VSTDIC150	VY022258.D	15 May 2025 11:47		SY/MD	Ok,M
8	VIBLK	VIBLK	VY022259.D	15 May 2025 12:34		SY/MD	Ok
9	VSTDICV050	ICVVY051525	VY022260.D	15 May 2025 13:20		SY/MD	Ok,M
10	VY0515SBL01	VY0515SBL01	VY022261.D	15 May 2025 13:44		SY/MD	Ok
11	VY0515SBS01	VY0515SBS01	VY022262.D	15 May 2025 14:07		SY/MD	Ok,M
12	VY0515SBSD01	VY0515SBSD01	VY022263.D	15 May 2025 14:29		SY/MD	Ok,M
13	Q1984-01	OU4-PCS-TC-33-05072	VY022264.D	15 May 2025 15:12	vial-A	SY/MD	Ok
14	Q1984-03	OU4-PCS-TC-34-05072	VY022265.D	15 May 2025 15:35	vial-A	SY/MD	Ok
15	Q1984-05	OU4-PCS-TC-35-05072	VY022266.D	15 May 2025 15:59	vial-A	SY/MD	Ok
16	Q1984-07	OU4-TS-24-050725	VY022267.D	15 May 2025 16:22	vial-A Surrogate fail	SY/MD	ReRun
17	Q1984-09	OU4-TS-25-050725	VY022268.D	15 May 2025 16:46	vial-A Surrogate fail	SY/MD	Not Ok
18	Q1984-11	OU4-TS-26-050725	VY022269.D	15 May 2025 17:09	vial-A Surrogate fail	SY/MD	Not Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY051525

Review By	Mahesh Dadoda	Review On	5/16/2025 11:49:17 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	5/16/2025 11:51:38 AM		
SubDirectory	VY051525	HP Acquire Method	MSVOA_Y	HP Processing Method	82y051525s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133916			
Initial Calibration Stds		VP133918,VP133919,VP133920,VP133921,VP133922,VP133923			
CCC		VP133925			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133924			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

19	Q1984-13	OU4-TS-27-050725	VY022270.D	15 May 2025 17:33	vial-A Surrogate fail	SY/MD	Not Ok
20	Q1984-15	OU4-TS-28-050725	VY022271.D	15 May 2025 17:56	vial-A Surrogate fail	SY/MD	ReRun
21	Q1982-04	TP-4	VY022272.D	15 May 2025 18:19	vial-A	SY/MD	Ok
22	Q1982-05	TP-5	VY022273.D	15 May 2025 18:43	vial-A	SY/MD	Ok
23	Q1982-06	TP-6	VY022274.D	15 May 2025 19:06	vial-A	SY/MD	Ok
24	VSTDCCC050	VSTDCCC050EC	VY022275.D	15 May 2025 19:52		SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM
Supervise By	Maresh Dadoda	Supervise On	5/23/2025 4:07:06 PM
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y HP Processing Method 82y051525s.m

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP134001
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP134002,VP134003 VP133934

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY022379.D	22 May 2025 08:05		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY022380.D	22 May 2025 08:35		SY/MD	Ok,M
3	VY0522SBL01	VY0522SBL01	VY022381.D	22 May 2025 09:07		SY/MD	Ok
4	VY0522SBS01	VY0522SBS01	VY022382.D	22 May 2025 09:36		SY/MD	Ok,M
5	VY0522SBSD01	VY0522SBSD01	VY022383.D	22 May 2025 09:59		SY/MD	Ok,M
6	Q2087-03RE	NB-08-05202025RE	VY022384.D	22 May 2025 10:38	vial-B ,Internal Standard Fail	SY/MD	Confirms
7	Q2101-03	TP-1-MHE-VOC	VY022385.D	22 May 2025 11:01	vial-B	SY/MD	Ok
8	Q2097-11RE	RT3419RE	VY022386.D	22 May 2025 11:25	vial-B ,Internal Standard Fail	SY/MD	Confirms
9	Q2102-01	LAW-25-0077	VY022387.D	22 May 2025 11:48	vial-B	SY/MD	Ok
10	Q2104-01RE	TR-06-052125RE	VY022388.D	22 May 2025 12:11	vial-B ,Internal Standard Fail; Surrogate Fail	SY/MD	Confirms
11	Q2074-01	TP-12	VY022389.D	22 May 2025 12:35	vial-A	SY/MD	Ok
12	Q2074-02	TP-7	VY022390.D	22 May 2025 12:58	vial-A	SY/MD	Ok
13	Q2074-03	TP-15	VY022391.D	22 May 2025 13:22	vial-A	SY/MD	Ok
14	Q2074-04	TP-20	VY022392.D	22 May 2025 13:45	vial-A	SY/MD	Ok
15	Q2074-05	TP-38	VY022393.D	22 May 2025 14:09	vial-A	SY/MD	Ok
16	Q2074-06	TP-19	VY022394.D	22 May 2025 14:32	vial-A	SY/MD	Ok
17	Q2074-07	TP-40	VY022395.D	22 May 2025 14:55	vial-A	SY/MD	Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY052225

Review By	John Carlone	Review On	5/23/2025 11:05:57 AM
Supervise By	Maresh Dadoda	Supervise On	5/23/2025 4:07:06 PM
SubDirectory	VY052225	HP Acquire Method	MSVOA_Y HP Processing Method 82y051525s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP134001		
CCC	VP134002,VP134003		
Internal Standard/PEM	VP133934		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

18	Q2074-08	TP-18	VY022396.D	22 May 2025 15:19	vial-A	SY/MD	Ok
19	Q2100-01	TP-16	VY022397.D	22 May 2025 15:42	vial-A ,Internal Standard Fail	SY/MD	ReRun
20	Q2100-02	TP-22	VY022398.D	22 May 2025 16:06	vial-A	SY/MD	Ok
21	Q2100-03	TP-21	VY022399.D	22 May 2025 16:29	vial-A ,Not purge	SY/MD	Not Ok
22	Q2100-04	TP-45	VY022400.D	22 May 2025 16:53	vial-A	SY/MD	Ok
23	Q2112-01	EO-03-05222025	VY022401.D	22 May 2025 17:16	vial-A ,Internal Standard Fail	SY/MD	ReRun
24	Q2109-03	TP-02-MHF-VOC	VY022402.D	22 May 2025 17:40	vial-A	SY/MD	Ok
25	Q2075-06	SS-MW1-11.5	VY022403.D	22 May 2025 18:03	vial-A ,Need MeOH	SY/MD	Dilution
26	VIBLK	VIBLK	VY022404.D	22 May 2025 18:26		SY/MD	Ok
27	VSTDCCC050	VSTDCCC050EC	VY022405.D	22 May 2025 18:49		SY/MD	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 5/20/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:10
In Date: 05/19/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:22
Out Date: 05/20/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB135825

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
Q1984-19	OU4-TB01-050725	1	1.00	1.00	2.00	2.00	100.0	T.B.
Q2074-01	TP-12	2	1.18	10.28	11.46	9.76	83.5	
Q2074-02	TP-7	3	1.18	10.15	11.33	10.18	88.7	
Q2074-03	TP-15	4	1.13	10.33	11.46	10.12	87.0	
Q2074-04	TP-20	5	1.12	10.65	11.77	10.1	84.3	
Q2074-05	TP-38	6	1.18	10.19	11.37	9.53	81.9	
Q2074-06	TP-19	7	1.16	10.12	11.28	9.85	85.9	
Q2074-07	TP-40	8	1.14	9.89	11.03	9.96	89.2	
Q2074-08	TP-18	9	1.15	10.16	11.31	9.07	78.0	
Q2075-01	SS-10	10	1.16	10.56	11.72	9.59	79.8	
Q2075-02	SS-910	11	1.17	10.05	11.22	9.34	81.3	
Q2075-03	SS-11	12	1.18	10.51	11.69	10.37	87.4	
Q2075-04	Q2075-03MS	13	1.18	10.51	11.69	10.37	87.4	
Q2075-05	Q2075-03MSD	14	1.18	10.51	11.69	10.37	87.4	
Q2075-06	SS-MW1-11.5	15	1.14	10.00	11.14	10.24	91.0	
Q2076-01	OILY-DEBRIS	16	1.00	1.00	2.00	2.00	100.0	oily-debris
Q2080-01	PL-HRH-COMP-01	17	1.13	10.62	11.75	10.32	86.5	
Q2080-02	PL-HRH-VOC-01	18	1.17	10.22	11.39	9.6	82.5	
Q2080-03	PL-HRH-01	19	1.12	10.77	11.89	10.16	83.9	
Q2080-04	PL-HRH-02	20	1.16	10.40	11.56	9.82	83.3	
Q2080-05	PL-HRH-03	21	1.15	10.00	11.15	9.43	82.8	
Q2080-07	PL-HRH-COMP-02	22	1.19	10.46	11.65	9.62	80.6	
Q2080-08	PL-HRH-VOC-02	23	1.14	10.76	11.9	9.8	80.5	
Q2080-09	PL-HRH-04	24	1.16	10.70	11.86	9.55	78.4	
Q2080-10	PL-HRH-05	25	1.19	10.43	11.62	9.52	79.9	
Q2080-11	PL-HRH-06	26	1.13	10.74	11.87	10.2	84.5	
Q2081-01	CAULK	27	1.00	1.00	2.00	2.00	100.0	caluk

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

WORKLIST(Hardcopy Internal Chain)

W 135825

WorkList Name : %1-051925 WorkList ID : 189586 Department : Wet-Chemistry Date : 05-19-2025 08:23:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1984-19	OU4-TB01-050725	Solid	Percent Solids	Cool 4 deg C	NOBI03	L41	05/07/2025	Chemtech -SO
Q2074-01	TP-12	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-02	TP-7	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-03	TP-15	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-04	TP-20	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-05	TP-38	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-06	TP-19	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-07	TP-40	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2074-08	TP-18	Solid	Percent Solids	Cool 4 deg C	CAMP02	L31	05/16/2025	Chemtech -SO
Q2075-01	SS-10	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/15/2025	Chemtech -SO
Q2075-02	SS-910	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/15/2025	Chemtech -SO
Q2075-03	SS-11	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/15/2025	Chemtech -SO
Q2075-04	Q2075-03MS	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/15/2025	Chemtech -SO
Q2075-05	Q2075-03MSD	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/15/2025	Chemtech -SO
Q2075-06	SS-MW1-11.5	Solid	Percent Solids	Cool 4 deg C	CAMP02	L41	05/15/2025	Chemtech -SO
Q2076-01	OILY-DEBRIS	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-01	PL-HRH-COMP-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-02	PL-HRH-VOC-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-03	PL-HRH-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-04	PL-HRH-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-05	PL-HRH-03	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO

Date/Time 05-19-25 15:35 Date/Time 05-19-25 17:15
Raw Sample Received by: [Signature] Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature] Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

135825

WorkList Name : %1-051925 WorkList ID : 189586 Department : Wet-Chemistry Date : 05-19-2025 08:23:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2080-07	PL-HRH-COMP-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-08	PL-HRH-VOC-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-09	PL-HRH-04	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-10	PL-HRH-05	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2080-11	PL-HRH-06	Solid	Percent Solids	Cool 4 deg C	PSEG03	L31	05/19/2025	Chemtech -SO
Q2081-01	CAULK	Solid	Percent Solids	Cool 4 deg C	ATCE02	L31	05/19/2025	Chemtech -SO

151255

Date/Time 05-19-25
 Raw Sample Received by: SP
 Raw Sample Relinquished by: SP

Date/Time 05-19-25
 Raw Sample Received by: CP
 Raw Sample Relinquished by: SP



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: CDM SMITH
ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS
PHONE: 732 590 4679 FAX: 732 225 7851

CLIENT PROJECT INFORMATION

PROJECT NAME: SOUTH RIVER WM REPLACEMENT
PROJECT NO.: LOCATION: SOUTH RIVER, NJ
PROJECT MANAGER: MARCIE ENCINAS
e-mail: ENCINASMA@CDMSMITH.COM
PHONE: 732 590 4679 FAX: 732 225 7851

CLIENT BILLING INFORMATION

BILL TO: CDM SMITH PO#: ADDRESS: 110 FIELDCREST AVE #8 6TH FLOOR
CITY EDISON STATE: NJ ZIP: 08837
ATTENTION: MARCIE ENCINAS PHONE: 732 590 4679

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☒ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other _____
☐ EDD FORMAT _____

TCL VOC
TCL SVOC
TAL METALS
PCB
PESTICIDES
HERBICIDES
DRO/GRO

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	TP-12	SOIL		X	5/15/25	0800	6	X	X	X	X	X	X	X			E
2.	TP-7	SOIL		X	5/15/25	0920	6	X	X	X	X	X	X	X			E
3.	TP-15	SOIL		X	5/15/25	1035	6	X	X	X	X	X	X	X			E
4.	TP-20	SOIL		X	5/15/25	1115	6	X	X	X	X	X	X	X			E
5.	TP-38	SOIL		X	5/15/25	1200	6	X	X	X	X	X	X	X			E
6.	TP-19	SOIL		X	5/15/25	1415	6	X	X	X	X	X	X	X			E
7.	TP-40	SOIL		X	5/15/25	1450	6	X	X	X	X	X	X	X			E
8.	TP-18	SOIL		X	5/16/25	1010	6	X	X	X	X	X	X	X			E
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <i>[Signature]</i>	DATE/TIME: 5/16/25 1500	RECEIVED BY: 1. <i>[Signature]</i> 1500	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3-1 °C
RELINQUISHED BY SAMPLER: 2. <i>[Signature]</i>	DATE/TIME:	RECEIVED BY: 2. <i>[Signature]</i> 1625	Comments:
RELINQUISHED BY SAMPLER: 3. <i>[Signature]</i>	DATE/TIME: 1759 5-16-25	RECEIVED BY: 3. <i>[Signature]</i>	Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2074	CAMP02	Order Date : 5/16/2025 3:13:00 PM	Project Mgr :
Client Name : CDM Smith		Project Name : South River WM Replacem	Report Type : Level 1 NJ Reduced/
Client Contact : Marcie Ann Encinas		Receive DateTime : 5/16/2025 12:00:00 AM	EDD Type : EXCEL NOCLEANUP
Invoice Name : CDM Smith		Purchase Order : 17:39	Hard Copy Date :
Invoice Contact : Marcie Ann Encinas			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q2074-01	TP-12	Solid	05/16/2025	08:00					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-02	TP-7	Solid	05/16/2025	09:20					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-03	TP-15	Solid	05/16/2025	10:35					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-04	TP-20	Solid	05/16/2025	11:15					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-05	TP-38	Solid	05/16/2025	12:00					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-06	TP-19	Solid	05/16/2025	14:15					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-07	TP-40	Solid	05/16/2025	14:50					
			05/15/2025		VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2074-08	TP-18	Solid	05/16/2025	10:10					



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2074	CAMP02	Order Date : 5/16/2025 3:13:00 PM	Project Mgr :
Client Name : CDM Smith		Project Name : South River WM Replacem	Report Type : Level++ NJ Reduced/
Client Contact : Marcie Ann Encinas		Receive DateTime : 5/16/2025 12:00:00 AM	EDD Type : EXCEL NOCLEANUP
Invoice Name : CDM Smith		Purchase Order : 1739	Hard Copy Date :
Invoice Contact : Marcie Ann Encinas			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOC-TCLVOA-10		8260D		10 Bus. Days

Relinquished By :
Date / Time : 5/19/25 11:30

Received By :
Date / Time : 05/19/25 11:30 2886
222
Storage Area : VOA Refridgerator Room