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Cover Page

Order ID : O1232

Project ID : NYCDDC Phase II SCI Arthur Kill Road CEQR

Client : Louis Berger U.S., Inc., A WSP Company

Lab Sample Number	Client Sample Number
O1232-01	B-P17A
O1232-02	B-P17B
O1232-03	WC-17
O1232-04	B-P18A
O1232-05	B-P18B
O1232-06	B-P19A
O1232-07	B-P19B
O1232-08	B-P35A
O1232-09	B-P35B
O1232-10	DUP01

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: 9/13/2023

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Louis Berger U.S., Inc., A WSP Company
Project Name: NYCDDC Phase II SCI Arthur Kill Road CEQR
Project # N/A
Chemtech Project # O1232
Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:
10 Solid samples were received on 01/19/2023.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-PAH, SVOC-TCL BNA -20, TCLP Extraction, TCLP ICP Metals, TCLP Mercury, TCLP METALS 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, which is 30 meters, 0.25 mm id, 1.4 um df, Restek Cat. #13868. The Trap was supplied by Supelco, VOCARB 3000, ATOMAX XYZ Concentrator.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 except for B-P35B [1,2-Dichloroethane-d4 - 193%], B-P35BRE [1 and2-Dichloroethane-d4 - 183%].
The Internal Standards Areas met the acceptable requirements except for B-P35B and B-P35BRE the failure sample in surrogate and Internal standard was reanalyzed to confirm the failure as per method and reported while,

For B-P19B VIAL A analyzed but internal standard fail as a corrective action VIAL B analyzed but did not purge therefore VIAL A reported as final analysis.

The Retention Times were acceptable for all samples.
The RPD met criteria .
The Blank Spike met requirements for all samples .
The Blank Spike Duplicate met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.

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The %RSD is greater than 15% in the Initial Calibration method (82Y011623S.M) for Methylene Chloride,1,2-Dichloroethane-d4,Toluene-d8 these compounds are passing on Linear Regression.
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:
This data Package has been revised to correct the Client ID of sample O1232-01, O1232-02, O1232-04, O1232-05, O1232-06, O1232-07, O1232-08, O1232-09 as per client request.
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 <15% 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 > 15% 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_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **O1232**

	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 Castody	✓
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	✓

1st Level QA Review Signature: **SOHIL JODHANI** **Date:** **09/13/2023**

2nd Level QA Review Signature: _____ **Date:** _____

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LAB CHRONICLE

OrderID:	O1232	**OrderDate:**	1/19/2023 1:44:00 PM
Client:	Louis Berger U.S., Inc., A WSP Company	**Project:**	NYCDDC Phase II SCI Arthur Kill Road CEQR
Contact:	Jonathan Ganz	**Location:**	N11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
O1232-01	**B-P17A**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	
O1232-02	**B-P17B**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	
O1232-04	**B-P18A**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/23/23	
O1232-05	**B-P18B**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	
O1232-06	**B-P19A**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/23/23	
O1232-07	**B-P19B**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	
O1232-08	**B-P35A**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	
O1232-09	**B-P35B**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	
O1232-09RE	**B-P35BRE**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/23/23	
O1232-10	**DUP01**	**SOIL**			**01/18/23**			**01/19/23**
			VOC-TCLVOA-10	8260D			01/20/23	

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Hit Summary Sheet
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**B-P17A**								
O1232-01	B-P17A	SOIL	unknown10.947	*	5.60	J	0	0	ug/Kg
			Total Tics :		5.60				
			Total Concentration:		5.60				
Client ID:	**B-P18A**								
O1232-04	B-P18A	SOIL	unknown10.947	*	12.6	J	0	0	ug/Kg
			Total Tics :		12.6				
			Total Concentration:		12.6				
Client ID:	**B-P18B**								
O1232-05	B-P18B	SOIL	Benzene		1.80	J	0.72	5.40	ug/Kg
O1232-05	B-P18B	SOIL	Toluene		1.10	J	0.69	5.40	ug/Kg
			Total Voc :		2.90				
			Total Concentration:		2.90				
Client ID:	**B-P19A**								
O1232-06	B-P19A	SOIL	Acetone		18.2	J	13.6	28.0	ug/Kg
			Total Voc :		18.2				
O1232-06	B-P19A	SOIL	unknown10.947	*	8.50	J	0	0	ug/Kg
			Total Tics :		8.50				
			Total Concentration:		26.7				
Client ID:	**B-P19B**								
O1232-07	B-P19B	SOIL	Acetone		24.1	J	13.8	28.3	ug/Kg
			Total Voc :		24.1				
			Total Concentration:		24.1				
Client ID:	**DUP01**								
O1232-10	DUP01	SOIL	Benzene		3.30	J	0.73	5.50	ug/Kg
O1232-10	DUP01	SOIL	Toluene		1.80	J	0.70	5.50	ug/Kg
			Total Voc :		5.10				
			Total Concentration:		5.10				

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QC SUMMARY

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Surrogate Summary

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Qual	Limits Low	Limits High
O1232-01	B-P17A	1,2-Dichloroethane-d4	50	71.1	142		50	163
		Dibromofluoromethane	50	57.9	116		54	147
		Toluene-d8	50	65.9	132		58	134
		4-Bromofluorobenzene	50	54.9	110		30	143
O1232-02	B-P17B	1,2-Dichloroethane-d4	50	64.9	130		50	163
		Dibromofluoromethane	50	55.9	112		54	147
		Toluene-d8	50	65.0	130		58	134
		4-Bromofluorobenzene	50	49.7	99		30	143
O1232-04	B-P18A	1,2-Dichloroethane-d4	50	75.6	151		50	163
		Dibromofluoromethane	50	55.2	110		54	147
		Toluene-d8	50	65.5	131		58	134
		4-Bromofluorobenzene	50	53.7	107		30	143
O1232-05	B-P18B	1,2-Dichloroethane-d4	50	69.3	139		50	163
		Dibromofluoromethane	50	55.4	111		54	147
		Toluene-d8	50	64.9	130		58	134
		4-Bromofluorobenzene	50	52.6	105		30	143
O1232-06	B-P19A	1,2-Dichloroethane-d4	50	77.5	155		50	163
		Dibromofluoromethane	50	57.0	114		54	147
		Toluene-d8	50	65.8	132		58	134
		4-Bromofluorobenzene	50	53.9	108		30	143
O1232-07	B-P19B	1,2-Dichloroethane-d4	50	55.1	110		50	163
		Dibromofluoromethane	50	54.4	109		54	147
		Toluene-d8	50	64.4	129		58	134
		4-Bromofluorobenzene	50	41.6	83		30	143
O1232-08	B-P35A	1,2-Dichloroethane-d4	50	67.8	136		50	163
		Dibromofluoromethane	50	55.9	112		54	147
		Toluene-d8	50	65.5	131		58	134
		4-Bromofluorobenzene	50	53.0	106		30	143
O1232-09	B-P35B	1,2-Dichloroethane-d4	50	96.7	193	*	50	163
		Dibromofluoromethane	50	64.9	130		54	147
		Toluene-d8	50	67.0	134		58	134
		4-Bromofluorobenzene	50	56.6	113		30	143
O1232-09RE	B-P35BRE	1,2-Dichloroethane-d4	50	91.6	183	*	50	163
		Dibromofluoromethane	50	59.8	120		54	147
		Toluene-d8	50	66.2	132		58	134
		4-Bromofluorobenzene	50	53.3	107		30	143
O1232-10	DUP01	1,2-Dichloroethane-d4	50	74.6	149		50	163
		Dibromofluoromethane	50	57.2	114		54	147
		Toluene-d8	50	66.1	132		58	134
		4-Bromofluorobenzene	50	53.7	107		30	143
VY0120SBL01	VY0120SBL01	1,2-Dichloroethane-d4	50	69.0	138		50	163
		Dibromofluoromethane	50	56.2	112		54	147
		Toluene-d8	50	65.7	131		58	134
		4-Bromofluorobenzene	50	53.6	107		30	143
VY0120SBS01	VY0120SBS01	1,2-Dichloroethane-d4	50	46.6	93		50	163
		Dibromofluoromethane	50	45.1	90		54	147
		Toluene-d8	50	47.4	95		58	134
		4-Bromofluorobenzene	50	44.4	89		30	143
VY0120SBSD01	VY0120SBSD01	1,2-Dichloroethane-d4	50	45.5	91		50	163
		Dibromofluoromethane	50	46.2	92		54	147
		Toluene-d8	50	48.7	97		58	134
		4-Bromofluorobenzene	50	44.8	90		30	143

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Surrogate Summary

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
VY0123SBL01	VY0123SBL01	1,2-Dichloroethane-d4	50	52.7	105	50	163
		Dibromofluoromethane	50	45.4	91	54	147
		Toluene-d8	50	47.0	94	58	134
		4-Bromofluorobenzene	50	41.2	82	30	143
VY0123SBS01	VY0123SBS01	1,2-Dichloroethane-d4	50	49.4	99	50	163
		Dibromofluoromethane	50	46.3	93	54	147
		Toluene-d8	50	48.5	97	58	134
		4-Bromofluorobenzene	50	44.5	89	30	143

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D **Datafile :** VY012282.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VY0120SBS01	Dichlorodifluoromethane	20	20.1	ug/Kg	101			64	136	
	Chloromethane	20	19.9	ug/Kg	100			70	130	
	Vinyl chloride	20	19.6	ug/Kg	98			72	129	
	Bromomethane	20	20.2	ug/Kg	101			58	141	
	Chloroethane	20	20.1	ug/Kg	101			69	130	
	Trichlorofluoromethane	20	19.2	ug/Kg	96			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.5	ug/Kg	103			81	123	
	1,1-Dichloroethene	20	20.2	ug/Kg	101			79	121	
	Acetone	100	91.9	ug/Kg	92			60	131	
	Carbon disulfide	20	19.9	ug/Kg	100			45	154	
	Methyl tert-butyl Ether	20	19.7	ug/Kg	99			77	129	
	Methyl Acetate	20	19.6	ug/Kg	98			69	149	
	Methylene Chloride	20	16.6	ug/Kg	83			39	175	
	trans-1,2-Dichloroethene	20	20.3	ug/Kg	102			80	123	
	1,1-Dichloroethane	20	20.6	ug/Kg	103			82	123	
	Cyclohexane	20	20.2	ug/Kg	101			76	122	
	2-Butanone	100	100	ug/Kg	100			69	131	
	Carbon Tetrachloride	20	18.9	ug/Kg	95			76	129	
	cis-1,2-Dichloroethene	20	20.6	ug/Kg	103			82	123	
	Bromochloromethane	20	20.5	ug/Kg	103			62	134	
	Chloroform	20	20.1	ug/Kg	101			82	125	
	1,1,1-Trichloroethane	20	19.3	ug/Kg	97			80	126	
	Methylcyclohexane	20	20.0	ug/Kg	100			77	123	
	Benzene	20	20.3	ug/Kg	102			84	121	
	1,2-Dichloroethane	20	19.2	ug/Kg	96			81	126	
	Trichloroethene	20	20.0	ug/Kg	100			83	122	
	1,2-Dichloropropane	20	21.3	ug/Kg	106			83	122	
	Bromodichloromethane	20	19.7	ug/Kg	99			82	123	
	4-Methyl-2-Pentanone	100	100	ug/Kg	100			70	135	
	Toluene	20	20.0	ug/Kg	100			83	122	
	t-1,3-Dichloropropene	20	19.8	ug/Kg	99			78	124	
	cis-1,3-Dichloropropene	20	19.9	ug/Kg	100			81	122	
	1,1,2-Trichloroethane	20	20.2	ug/Kg	101			82	125	
	2-Hexanone	100	100	ug/Kg	100			66	138	
	Dibromochloromethane	20	19.9	ug/Kg	100			79	125	
	1,2-Dibromoethane	20	20.1	ug/Kg	101			80	125	
	Tetrachloroethene	20	21.5	ug/Kg	108			83	125	
	Chlorobenzene	20	19.9	ug/Kg	100			84	122	
	Ethyl Benzene	20	19.9	ug/Kg	100			82	124	
	m/p-Xylenes	40	40.1	ug/Kg	100			83	124	
	o-Xylene	20	20.0	ug/Kg	100			83	123	
	Styrene	20	20.1	ug/Kg	101			82	124	
	Bromoform	20	20.0	ug/Kg	100			75	127	
	Isopropylbenzene	20	20.2	ug/Kg	101			82	124	
	1,1,2,2-Tetrachloroethane	20	20.8	ug/Kg	104			77	127	
	1,3-Dichlorobenzene	20	20.0	ug/Kg	100			83	122	
	1,4-Dichlorobenzene	20	19.6	ug/Kg	98			84	121	
	1,2-Dichlorobenzene	20	19.9	ug/Kg	100			83	124	
	1,2-Dibromo-3-Chloropropane	20	19.7	ug/Kg	99			66	134	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D **Datafile :** VY012282.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VY0120SBS01	1,2,4-Trichlorobenzene	20	18.8	ug/Kg	94			78	127	
	1,2,3-Trichlorobenzene	20	18.7	ug/Kg	94			70	137	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D **Datafile :** VY012283.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VY0120SBSD01	Dichlorodifluoromethane	20	20.8	ug/Kg	104	3		64	136	20
	Chloromethane	20	20.9	ug/Kg	104	4		70	130	20
	Vinyl chloride	20	20.8	ug/Kg	104	6		72	129	20
	Bromomethane	20	19.9	ug/Kg	100	1		58	141	20
	Chloroethane	20	20.4	ug/Kg	102	1		69	130	20
	Trichlorofluoromethane	20	19.6	ug/Kg	98	2		69	134	20
	1,1,2-Trichlorotrifluoroethane	20	20.9	ug/Kg	104	1		81	123	20
	1,1-Dichloroethene	20	20.6	ug/Kg	103	2		79	121	20
	Acetone	100	85.8	ug/Kg	86	7		60	131	20
	Carbon disulfide	20	20.4	ug/Kg	102	2		45	154	20
	Methyl tert-butyl Ether	20	19.3	ug/Kg	97	2		77	129	20
	Methyl Acetate	20	19.9	ug/Kg	100	2		69	149	20
	Methylene Chloride	20	17.1	ug/Kg	86	4		39	175	20
	trans-1,2-Dichloroethene	20	20.9	ug/Kg	104	2		80	123	20
	1,1-Dichloroethane	20	21.0	ug/Kg	105	2		82	123	20
	Cyclohexane	20	21.0	ug/Kg	105	4		76	122	20
	2-Butanone	100	99.5	ug/Kg	100	0		69	131	20
	Carbon Tetrachloride	20	19.5	ug/Kg	98	3		76	129	20
	cis-1,2-Dichloroethene	20	20.8	ug/Kg	104	1		82	123	20
	Bromochloromethane	20	20.1	ug/Kg	101	2		62	134	20
	Chloroform	20	19.9	ug/Kg	100	1		82	125	20
	1,1,1-Trichloroethane	20	19.7	ug/Kg	99	2		80	126	20
	Methylcyclohexane	20	21.5	ug/Kg	108	8		77	123	20
	Benzene	20	20.9	ug/Kg	104	2		84	121	20
	1,2-Dichloroethane	20	19.1	ug/Kg	96	0		81	126	20
	Trichloroethene	20	20.9	ug/Kg	104	4		83	122	20
	1,2-Dichloropropane	20	22.0	ug/Kg	110	4		83	122	20
	Bromodichloromethane	20	19.9	ug/Kg	100	1		82	123	20
	4-Methyl-2-Pentanone	100	100	ug/Kg	100	0		70	135	20
	Toluene	20	20.4	ug/Kg	102	2		83	122	20
	t-1,3-Dichloropropene	20	19.9	ug/Kg	100	1		78	124	20
	cis-1,3-Dichloropropene	20	20.7	ug/Kg	104	4		81	122	20
	1,1,2-Trichloroethane	20	20.0	ug/Kg	100	1		82	125	20
	2-Hexanone	100	98.5	ug/Kg	99	1		66	138	20
	Dibromochloromethane	20	19.9	ug/Kg	100	0		79	125	20
	1,2-Dibromoethane	20	20.2	ug/Kg	101	0		80	125	20
	Tetrachloroethene	20	21.6	ug/Kg	108	0		83	125	20
	Chlorobenzene	20	20.6	ug/Kg	103	3		84	122	20
	Ethyl Benzene	20	20.5	ug/Kg	103	3		82	124	20
	m/p-Xylenes	40	40.9	ug/Kg	102	2		83	124	20
	o-Xylene	20	20.4	ug/Kg	102	2		83	123	20
	Styrene	20	20.6	ug/Kg	103	2		82	124	20
	Bromoform	20	19.9	ug/Kg	100	0		75	127	20
	Isopropylbenzene	20	20.9	ug/Kg	104	3		82	124	20
	1,1,2,2-Tetrachloroethane	20	20.4	ug/Kg	102	2		77	127	20
	1,3-Dichlorobenzene	20	20.4	ug/Kg	102	2		83	122	20
	1,4-Dichlorobenzene	20	20.4	ug/Kg	102	4		84	121	20
	1,2-Dichlorobenzene	20	20.3	ug/Kg	102	2		83	124	20
	1,2-Dibromo-3-Chloropropane	20	18.7	ug/Kg	94	5		66	134	20

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D **Datafile :** VY012283.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VY0120SBSD01	1,2,4-Trichlorobenzene	20	18.8	ug/Kg	94	0		78	127	20
	1,2,3-Trichlorobenzene	20	18.6	ug/Kg	93	1		70	137	20

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D **Datafile :** VY012309.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VY0123SBS01	Dichlorodifluoromethane	20	21.2	ug/Kg	106			64	136	
	Chloromethane	20	19.7	ug/Kg	99			70	130	
	Vinyl chloride	20	20.0	ug/Kg	100			72	129	
	Bromomethane	20	21.0	ug/Kg	105			58	141	
	Chloroethane	20	20.8	ug/Kg	104			69	130	
	Trichlorofluoromethane	20	21.2	ug/Kg	106			69	134	
	1,1,2-Trichlorotrifluoroethane	20	20.8	ug/Kg	104			81	123	
	1,1-Dichloroethene	20	20.6	ug/Kg	103			79	121	
	Acetone	100	87.9	ug/Kg	88			60	131	
	Carbon disulfide	20	20.2	ug/Kg	101			45	154	
	Methyl tert-butyl Ether	20	19.4	ug/Kg	97			77	129	
	Methyl Acetate	20	18.3	ug/Kg	92			69	149	
	Methylene Chloride	20	15.2	ug/Kg	76			39	175	
	trans-1,2-Dichloroethene	20	20.1	ug/Kg	101			80	123	
	1,1-Dichloroethane	20	20.5	ug/Kg	103			82	123	
	Cyclohexane	20	20.2	ug/Kg	101			76	122	
	2-Butanone	100	92.3	ug/Kg	92			69	131	
	Carbon Tetrachloride	20	20.7	ug/Kg	104			76	129	
	cis-1,2-Dichloroethene	20	20.5	ug/Kg	103			82	123	
	Bromochloromethane	20	19.2	ug/Kg	96			62	134	
	Chloroform	20	20.4	ug/Kg	102			82	125	
	1,1,1-Trichloroethane	20	20.7	ug/Kg	104			80	126	
	Methylcyclohexane	20	20.8	ug/Kg	104			77	123	
	Benzene	20	20.5	ug/Kg	103			84	121	
	1,2-Dichloroethane	20	20.2	ug/Kg	101			81	126	
	Trichloroethene	20	20.1	ug/Kg	101			83	122	
	1,2-Dichloropropane	20	20.3	ug/Kg	102			83	122	
	Bromodichloromethane	20	20.3	ug/Kg	102			82	123	
	4-Methyl-2-Pentanone	100	93.5	ug/Kg	94			70	135	
	Toluene	20	20.4	ug/Kg	102			83	122	
	t-1,3-Dichloropropene	20	19.6	ug/Kg	98			78	124	
	cis-1,3-Dichloropropene	20	20.1	ug/Kg	101			81	122	
	1,1,2-Trichloroethane	20	19.6	ug/Kg	98			82	125	
	2-Hexanone	100	92.0	ug/Kg	92			66	138	
	Dibromochloromethane	20	19.7	ug/Kg	99			79	125	
	1,2-Dibromoethane	20	19.3	ug/Kg	97			80	125	
	Tetrachloroethene	20	21.0	ug/Kg	105			83	125	
	Chlorobenzene	20	20.2	ug/Kg	101			84	122	
	Ethyl Benzene	20	20.3	ug/Kg	102			82	124	
	m/p-Xylenes	40	41.2	ug/Kg	103			83	124	
	o-Xylene	20	20.0	ug/Kg	100			83	123	
	Styrene	20	20.4	ug/Kg	102			82	124	
	Bromoform	20	19.1	ug/Kg	96			75	127	
	Isopropylbenzene	20	20.6	ug/Kg	103			82	124	
	1,1,2,2-Tetrachloroethane	20	19.3	ug/Kg	97			77	127	
	1,3-Dichlorobenzene	20	19.8	ug/Kg	99			83	122	
	1,4-Dichlorobenzene	20	19.5	ug/Kg	98			84	121	
	1,2-Dichlorobenzene	20	19.4	ug/Kg	97			83	124	
	1,2-Dibromo-3-Chloropropane	20	18.7	ug/Kg	94			66	134	

CHEMTECH

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: O1232

Client: Louis Berger U.S., Inc., A WSP Company

Analytical Method: SW8260D **Datafile :** VY012309.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
VY0123SBS01	1,2,4-Trichlorobenzene	20	17.9	ug/Kg	90			78	127	
	1,2,3-Trichlorobenzene	20	17.2	ug/Kg	86			70	137	

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0120SBL01

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012281.D Lab Sample ID: VY0120SBL01

Date Analyzed: 01/20/2023 Time Analyzed: 11:32

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
VY0120SBS01	VY0120SBS01	VY012282.D	01/20/2023
VY0120SBSD01	VY0120SBSD01	VY012283.D	01/20/2023
B-P17A	O1232-01	VY012292.D	01/20/2023
B-P17B	O1232-02	VY012293.D	01/20/2023
B-P18B	O1232-05	VY012295.D	01/20/2023
B-P19B	O1232-07	VY012297.D	01/20/2023
B-P35A	O1232-08	VY012298.D	01/20/2023
B-P35B	O1232-09	VY012299.D	01/20/2023
DUP01	O1232-10	VY012300.D	01/20/2023
VY0123SBS01	VY0123SBS01	VY012309.D	01/23/2023
B-P18A	O1232-04	VY012311.D	01/23/2023
B-P19A	O1232-06	VY012312.D	01/23/2023
B-P35BRE	O1232-09RE	VY012314.D	01/23/2023

COMMENTS:

Raw Data: **VY012193.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012193.D BFB Injection Date: 01/16/2023

Instrument ID: MSVOA_Y BFB Injection Time: 09:00

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	17.8
75	30.0 - 60.0% of mass 95	54.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	1 (1.1) 1
174	50.0 - 100.0% of mass 95	88.4
175	5.0 - 9.0% of mass 174	6.7 (7.6) 1
176	95.0 - 101.0% of mass 174	85.2 (96.4) 1
177	5.0 - 9.0% of mass 176	5.9 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC005	VSTDICC005	VY012194.D	01/16/2023	12:17
VSTDICC010	VSTDICC010	VY012195.D	01/16/2023	13:03
VSTDICC020	VSTDICC020	VY012196.D	01/16/2023	13:26
VSTDICCC050	VSTDICCC050	VY012197.D	01/16/2023	13:48
VSTDICC100	VSTDICC100	VY012198.D	01/16/2023	14:11
VSTDICC150	VSTDICC150	VY012199.D	01/16/2023	14:34

Raw Data: **VY012279.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012279.D BFB Injection Date: 01/20/2023

Instrument ID: MSVOA_Y BFB Injection Time: 09:50

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	16.4
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	1 (1.1) 1
174	50.0 - 100.0% of mass 95	90.2
175	5.0 - 9.0% of mass 174	6.6 (7.3) 1
176	95.0 - 101.0% of mass 174	86.4 (95.8) 1
177	5.0 - 9.0% of mass 176	6 (7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY012280.D	01/20/2023	10:34
VY0120SBL01	VY0120SBL01	VY012281.D	01/20/2023	11:32
VY0120SBS01	VY0120SBS01	VY012282.D	01/20/2023	11:55
VY0120SBSD01	VY0120SBSD01	VY012283.D	01/20/2023	12:18
B-P17A	O1232-01	VY012292.D	01/20/2023	15:49
B-P17B	O1232-02	VY012293.D	01/20/2023	16:13
B-P18B	O1232-05	VY012295.D	01/20/2023	17:00
B-P19B	O1232-07	VY012297.D	01/20/2023	17:46
B-P35A	O1232-08	VY012298.D	01/20/2023	18:10
B-P35B	O1232-09	VY012299.D	01/20/2023	18:33
DUP01	O1232-10	VY012300.D	01/20/2023	18:57

Raw Data: **VY012306.D**

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012306.D BFB Injection Date: 01/23/2023

Instrument ID: MSVOA_Y BFB Injection Time: 10:03

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	17.7
75	30.0 - 60.0% of mass 95	54.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	1 (1.1) 1
174	50.0 - 100.0% of mass 95	90.6
175	5.0 - 9.0% of mass 174	6.3 (7) 1
176	95.0 - 101.0% of mass 174	87.1 (96.1) 1
177	5.0 - 9.0% of mass 176	5.8 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY012307.D	01/23/2023	12:09
VY0123SBL01	VY0123SBL01	VY012308.D	01/23/2023	13:04
VY0123SBS01	VY0123SBS01	VY012309.D	01/23/2023	13:27
B-P18A	O1232-04	VY012311.D	01/23/2023	14:14
B-P19A	O1232-06	VY012312.D	01/23/2023	14:37
B-P35BRE	O1232-09RE	VY012314.D	01/23/2023	15:24

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012280.D Date Analyzed: 01/20/2023

Instrument ID: MSVOA_Y Time Analyzed: 10:34

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	233023		7.79	353084		8.69	315640		11.49
UPPER LIMIT	466046		8.289	706168		9.191	631280		11.989
LOWER LIMIT	116512		7.289	176542		8.191	157820		10.989
EPA SAMPLE NO.									
B-P17A	188143		7.79	315261		8.69	309525		11.49
B-P17B	128819		7.79	208628		8.69	194650		11.49
B-P18B	205706		7.79	345925		8.69	328400		11.49
B-P19B	63421	*	7.79	93969	*	8.69	80473	*	11.49
B-P35A	188384		7.79	314014		8.69	302134		11.49
B-P35B	37522	*	7.79	64399	*	8.69	69318	*	11.49
DUP01	151828		7.79	252877		8.69	249786		11.49
VY0120SBL01	217392		7.79	360969		8.69	344609		11.49
VY0120SBS01	218108		7.79	336761		8.69	305655		11.49
VY0120SBSD01	226848		7.79	340849		8.69	308539		11.49

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

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012280.D Date Analyzed: 01/20/2023

Instrument ID: MSVOA_Y Time Analyzed: 10:34

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

	IS4 AREA #		RT #				
12 HOUR STD	156820		13.428				
UPPER LIMIT	313640		13.928				
LOWER LIMIT	78410		12.928				
EPA SAMPLE NO.							
B-P17A	144924		13.43				
B-P17B	86164		13.43				
B-P18B	154191		13.43				
B-P19B	33154	*	13.43				
B-P35A	140878		13.43				
B-P35B	33340	*	13.43				
DUP01	114034		13.43				
VY0120SBL01	161157		13.43				
VY0120SBS01	155958		13.43				
VY0120SBSD01	155933		13.43				

IS4 = 1,4-Dichlorobenzene-d4

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

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012307.D Date Analyzed: 01/23/2023

Instrument ID: MSVOA_Y Time Analyzed: 12:09

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	179464	7.79	268117	8.69	243165	11.49
UPPER LIMIT	358928	8.289	536234	9.191	486330	11.99
LOWER LIMIT	89732	7.289	134059	8.191	121583	10.99
EPA SAMPLE NO.						
B-P18A	170252	7.79	283949	8.69	275020	11.49
B-P19A	142002	7.79	235758	8.69	228539	11.49
B-P35BRE	39101 *	7.79	65182 *	8.69	65342 *	11.49
VY0123SBL01	162197	7.79	255207	8.69	227538	11.49
VY0123SBS01	173816	7.79	263834	8.69	239765	11.49

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.

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG NO.: O1232

Lab File ID: VY012307.D Date Analyzed: 01/23/2023

Instrument ID: MSVOA_Y Time Analyzed: 12:09

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

	IS4 AREA #	RT #				
12 HOUR STD	123436	13.428				
UPPER LIMIT	246872	13.928				
LOWER LIMIT	61718	12.928				
EPA SAMPLE NO.						
B-P18A	125590	13.43				
B-P19A	107729	13.43				
B-P35BRE	29180 *	13.43				
VY0123SBL01	110055	13.43				
VY0123SBS01	122385	13.43				

IS4 = 1,4-Dichlorobenzene-d4

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

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

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SAMPLE DATA

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P17A	SDG No.:	O1232
Lab Sample ID:	O1232-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.4
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
VY012292.D	1		01/20/23 15:49	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.96	U	0.96	5.60	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.60	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.60	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.60	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.81	U	0.81	5.60	ug/Kg
75-35-4	1,1-Dichloroethene	0.96	U	0.96	5.60	ug/Kg
67-64-1	Acetone	13.6	U	13.6	28.0	ug/Kg
75-15-0	Carbon Disulfide	0.84	U	0.84	5.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.00	U	1.00	5.60	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.60	ug/Kg
75-09-2	Methylene Chloride	6.70	U	6.70	11.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.76	U	0.76	5.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.78	U	0.78	5.60	ug/Kg
110-82-7	Cyclohexane	0.94	U	0.94	5.60	ug/Kg
78-93-3	2-Butanone	8.10	U	8.10	28.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.88	U	0.88	5.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.76	U	0.76	5.60	ug/Kg
74-97-5	Bromochloromethane	0.91	U	0.91	5.60	ug/Kg
67-66-3	Chloroform	0.75	U	0.75	5.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.84	U	0.84	5.60	ug/Kg
108-87-2	Methylcyclohexane	0.89	U	0.89	5.60	ug/Kg
71-43-2	Benzene	0.74	U	0.74	5.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.94	U	0.94	5.60	ug/Kg
79-01-6	Trichloroethene	0.82	U	0.82	5.60	ug/Kg
78-87-5	1,2-Dichloropropane	0.73	U	0.73	5.60	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.10	U	5.10	28.0	ug/Kg
108-88-3	Toluene	0.70	U	0.70	5.60	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.83	U	0.83	5.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.79	U	0.79	5.60	ug/Kg

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P17A	SDG No.:	O1232
Lab Sample ID:	O1232-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.4
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
VY012292.D	1		01/20/23 15:49	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.96	U	0.96	5.60	ug/Kg
591-78-6	2-Hexanone	5.20	U	5.20	28.0	ug/Kg
124-48-1	Dibromochloromethane	0.84	U	0.84	5.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.84	U	0.84	5.60	ug/Kg
127-18-4	Tetrachloroethene	0.85	U	0.85	5.60	ug/Kg
108-90-7	Chlorobenzene	0.73	U	0.73	5.60	ug/Kg
100-41-4	Ethyl Benzene	0.78	U	0.78	5.60	ug/Kg
179601-23-1	m/p-Xylenes	1.70	U	1.70	11.2	ug/Kg
95-47-6	o-Xylene	0.88	U	0.88	5.60	ug/Kg
100-42-5	Styrene	0.88	U	0.88	5.60	ug/Kg
75-25-2	Bromoform	0.91	U	0.91	5.60	ug/Kg
98-82-8	Isopropylbenzene	0.81	U	0.81	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	0.75	U	0.75	5.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.70	U	0.70	5.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.72	U	0.72	5.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	71.1		50 - 163	142%	SPK: 50
1868-53-7	Dibromofluoromethane	57.9		54 - 147	116%	SPK: 50
2037-26-5	Toluene-d8	65.9		58 - 134	132%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.9		30 - 143	110%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	188000	7.789			
540-36-3	1,4-Difluorobenzene	315000	8.691			
3114-55-4	Chlorobenzene-d5	310000	11.49			
3855-82-1	1,4-Dichlorobenzene-d4	145000	13.428			
TENTATIVE IDENTIFIED COMPOUNDS						
	unknown10.947	5.60	J		10.9	ug/Kg

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P17A	SDG No.:	O1232
Lab Sample ID:	O1232-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.4
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
VY012292.D	1		01/20/23 15:49	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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\VY012023\
Data File : VY012292.D
Acq On : 20 Jan 2023 15:49
Operator : KP/MD
Sample : 01232-01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Quant Time: Jan 23 02:21:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

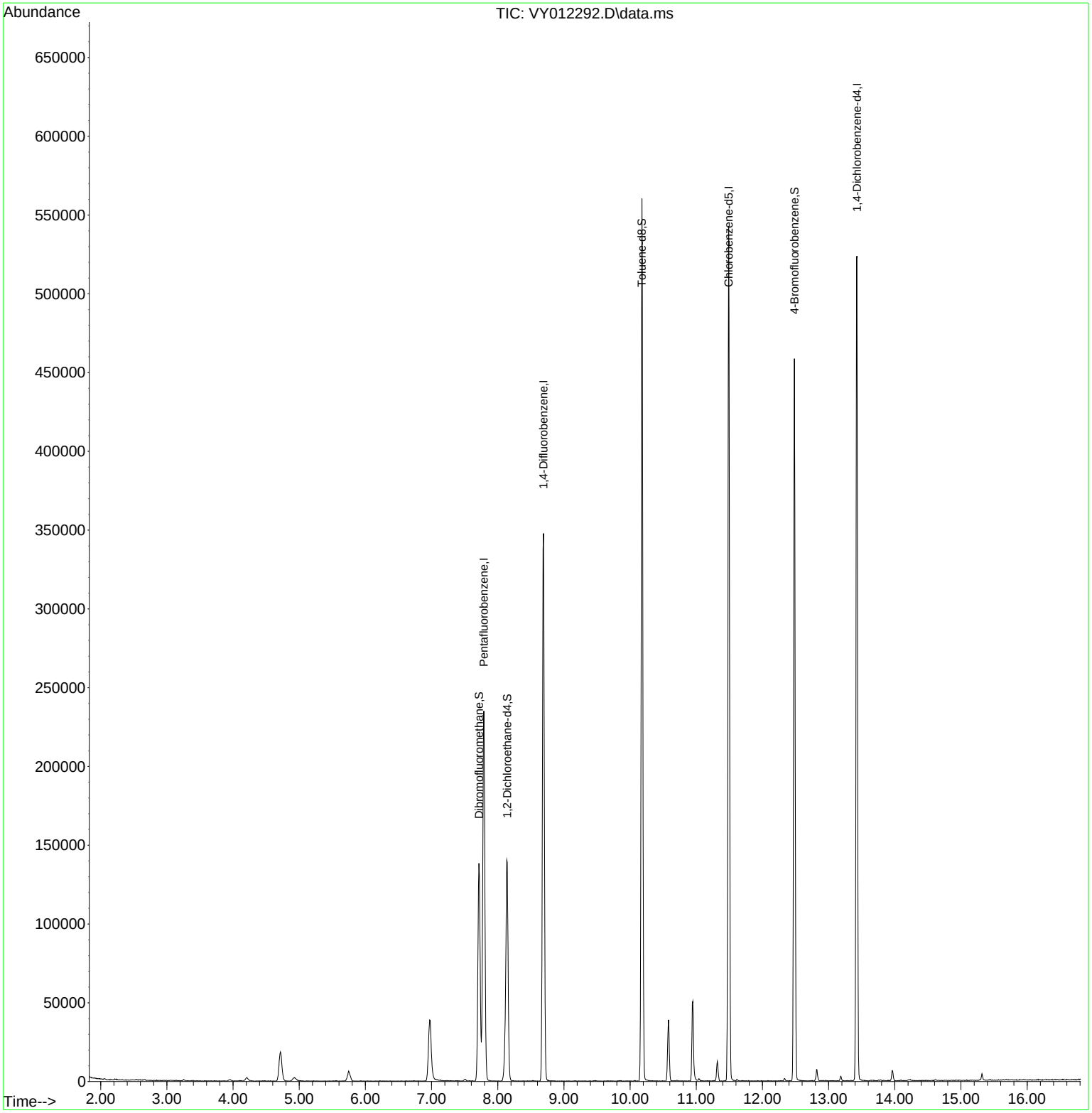
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	188143	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	315261	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	309525	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	144924	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	108253	71.073	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 142.140%			
35) Dibromofluoromethane	7.716	113	96638	57.891	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 115.780%			
50) Toluene-d8	10.179	98	373368	65.934	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 131.860%			
62) 4-Bromofluorobenzene	12.483	95	129119	54.869	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 109.740%			
Target Compounds						Qvalue

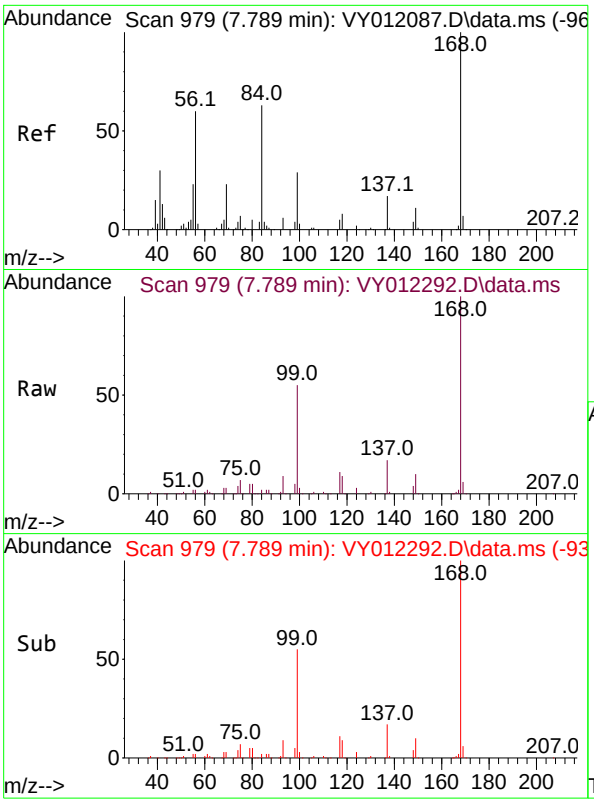
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012292.D
Acq On : 20 Jan 2023 15:49
Operator : KP/MD
Sample : 01232-01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Quant Time: Jan 23 02:21:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



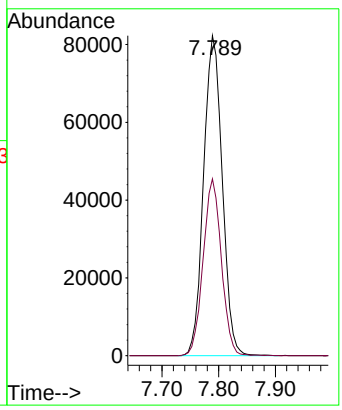


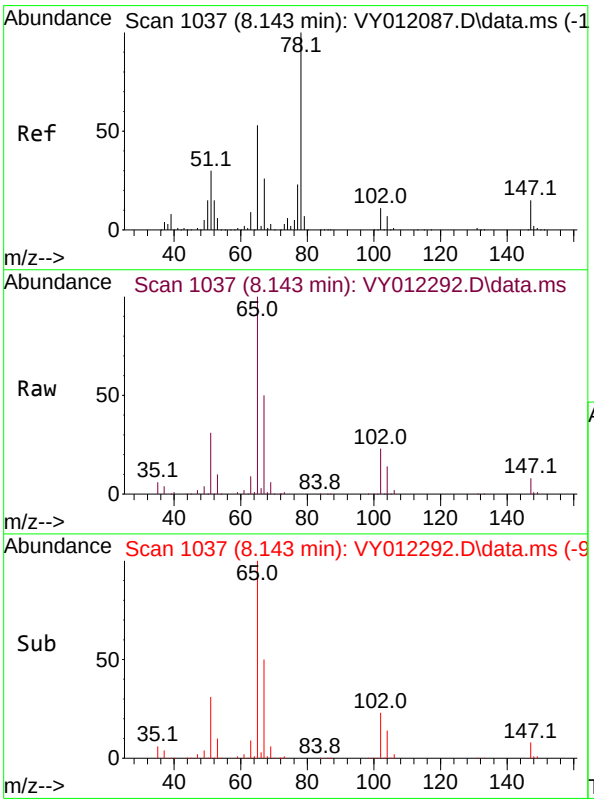
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. 0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Tgt Ion:168 Resp: 188143

Ion	Ratio	Lower	Upper
168	100		
99	55.3	44.0	66.0

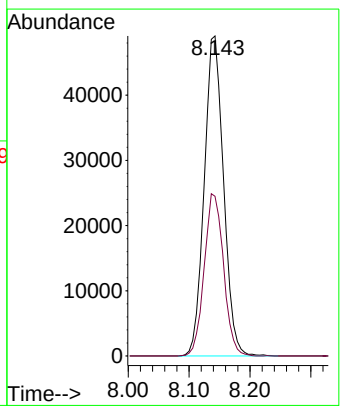


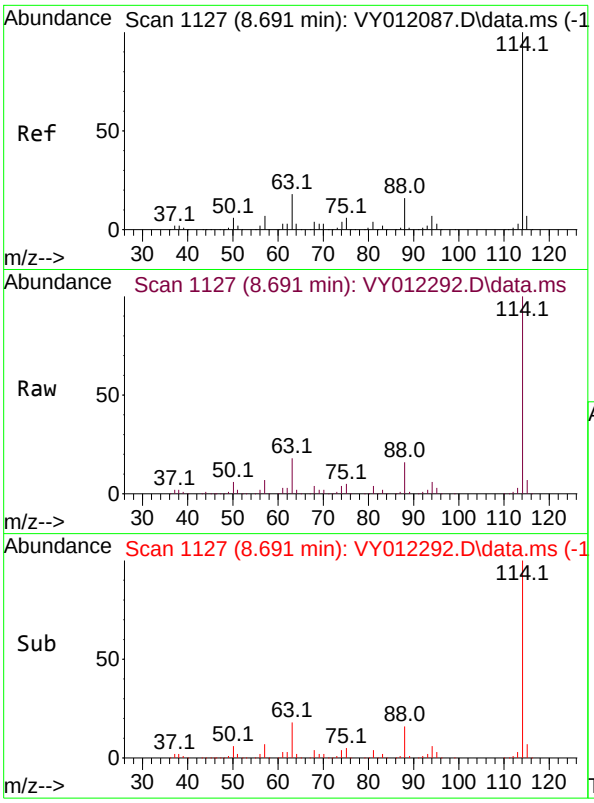


#33
1,2-Dichloroethane-d4
Concen: 71.073 ug/l
RT: 8.143 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Tgt Ion: 65 Resp: 108253

Ion	Ratio	Lower	Upper
65	100		
67	50.7	0.0	103.2



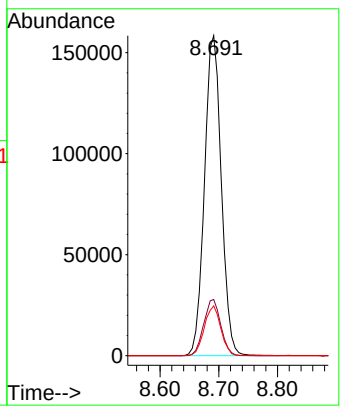


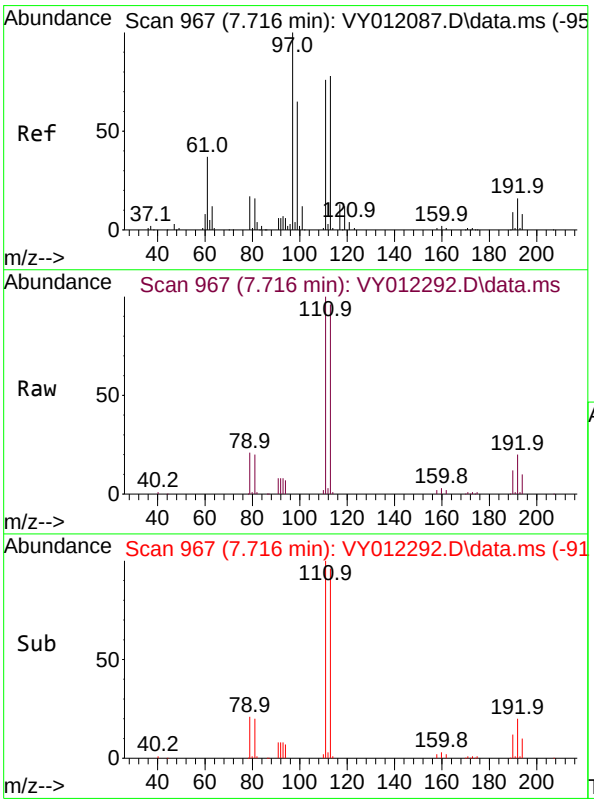
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Tgt Ion:114 Resp: 315261

Ion	Ratio	Lower	Upper
114	100		
63	17.6	0.0	39.6
88	15.6	0.0	32.2

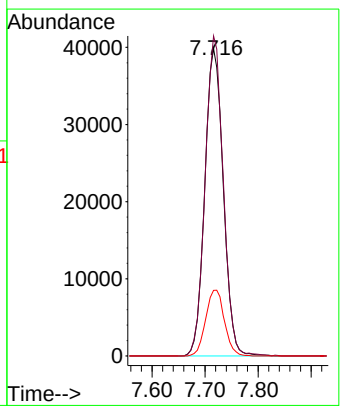


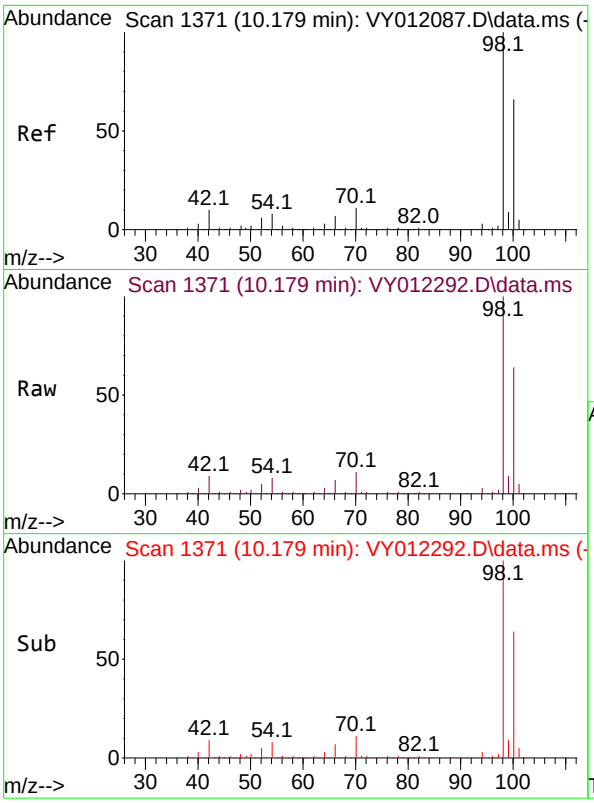


#35
Dibromofluoromethane
Concen: 57.891 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Tgt Ion:113 Resp: 96638

Ion	Ratio	Lower	Upper
113	100		
111	101.9	83.0	124.4
192	21.6	16.0	24.0



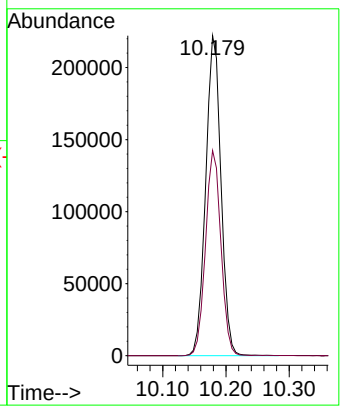


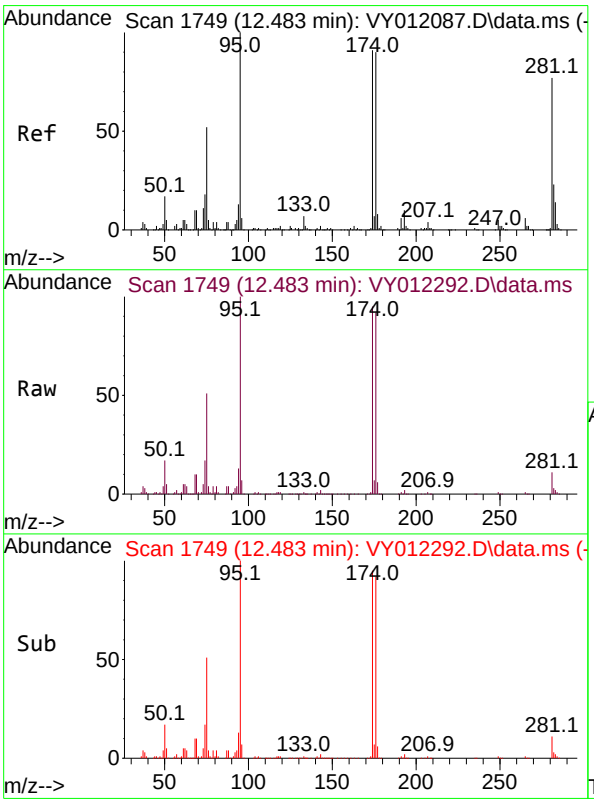
#50
Toluene-d8
Concen: 65.934 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Tgt Ion: 98 Resp: 373368

Ion	Ratio	Lower	Upper
98	100		
100	64.4	51.9	77.9

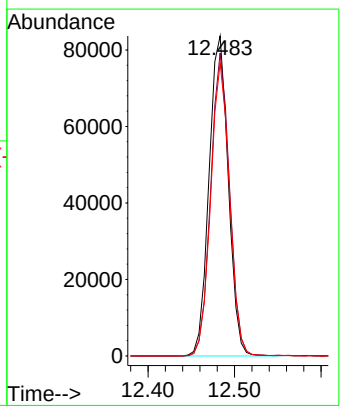


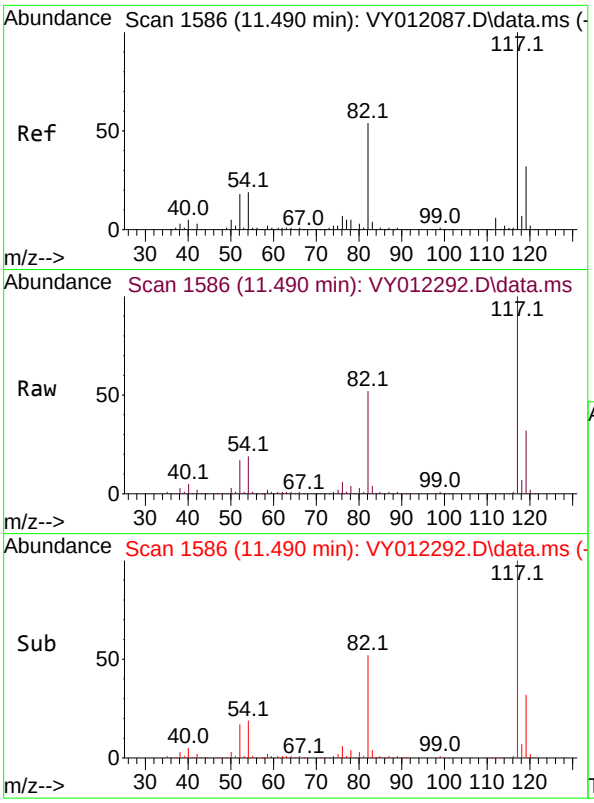


#62
4-Bromofluorobenzene
Concen: 54.869 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Tgt Ion: 95 Resp: 129119

Ion	Ratio	Lower	Upper
95	100		
174	92.9	0.0	172.0
176	90.0	0.0	167.6



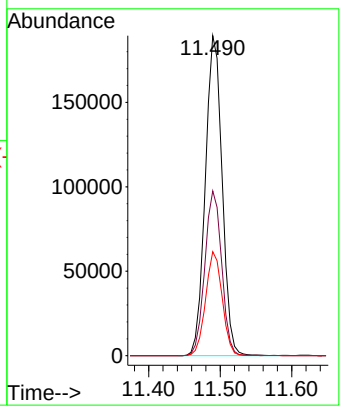


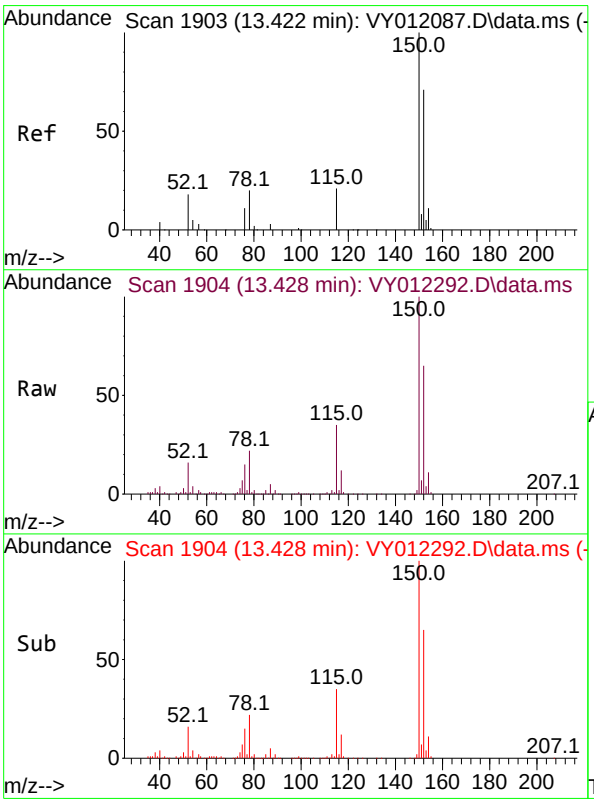
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.490 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Tgt Ion:117 Resp: 309525

Ion	Ratio	Lower	Upper
117	100		
82	51.5	44.8	67.2
119	32.5	25.4	38.2

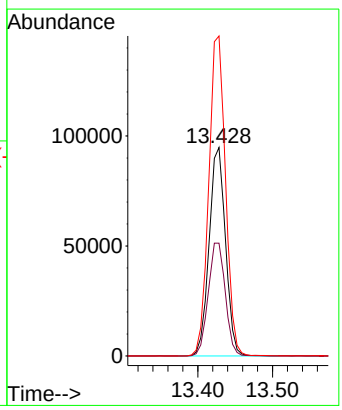




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012292.D
Acq: 20 Jan 2023 15:49

Tgt Ion:152 Resp: 144924

Ion	Ratio	Lower	Upper
152	100		
115	56.4	29.1	87.3
150	156.7	0.0	342.6



Sample Results: **VY012292.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012292.D
Acq On : 20 Jan 2023 15:49
Operator : KP/MD
Sample : 01232-01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012292.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	465	475	490	rBV2	18519	56400	5.97%	0.996%
2	5.747	635	644	655	rVB3	6500	19149	2.03%	0.338%
3	6.972	834	845	858	rBV2	38869	119080	12.60%	2.102%
4	7.716	955	967	973	rBV	138304	329344	34.85%	5.814%
5	7.789	973	979	992	rVB	234658	529265	56.01%	9.344%
6	8.137	1022	1036	1049	rBV2	140351	349500	36.99%	6.170%
7	8.691	1118	1127	1139	rBV	347590	694643	73.51%	12.263%
8	10.179	1363	1371	1381	rBV	560095	944918	100.00%	16.681%
9	10.581	1429	1437	1445	rBV	38886	68001	7.20%	1.200%
10	10.947	1491	1497	1509	rBV	50578	88400	9.36%	1.561%
11	11.319	1552	1558	1565	rVB	12451	20630	2.18%	0.364%
12	11.490	1579	1586	1599	rBV	542605	875926	92.70%	15.463%
13	12.483	1741	1749	1760	rBV2	458361	721526	76.36%	12.738%
14	12.819	1798	1804	1811	rBV	7278	11854	1.25%	0.209%
15	13.428	1893	1904	1916	rBV	523610	824553	87.26%	14.556%
16	13.965	1986	1992	1998	rVB2	6548	11312	1.20%	0.200%

Sum of corrected areas: 5664501

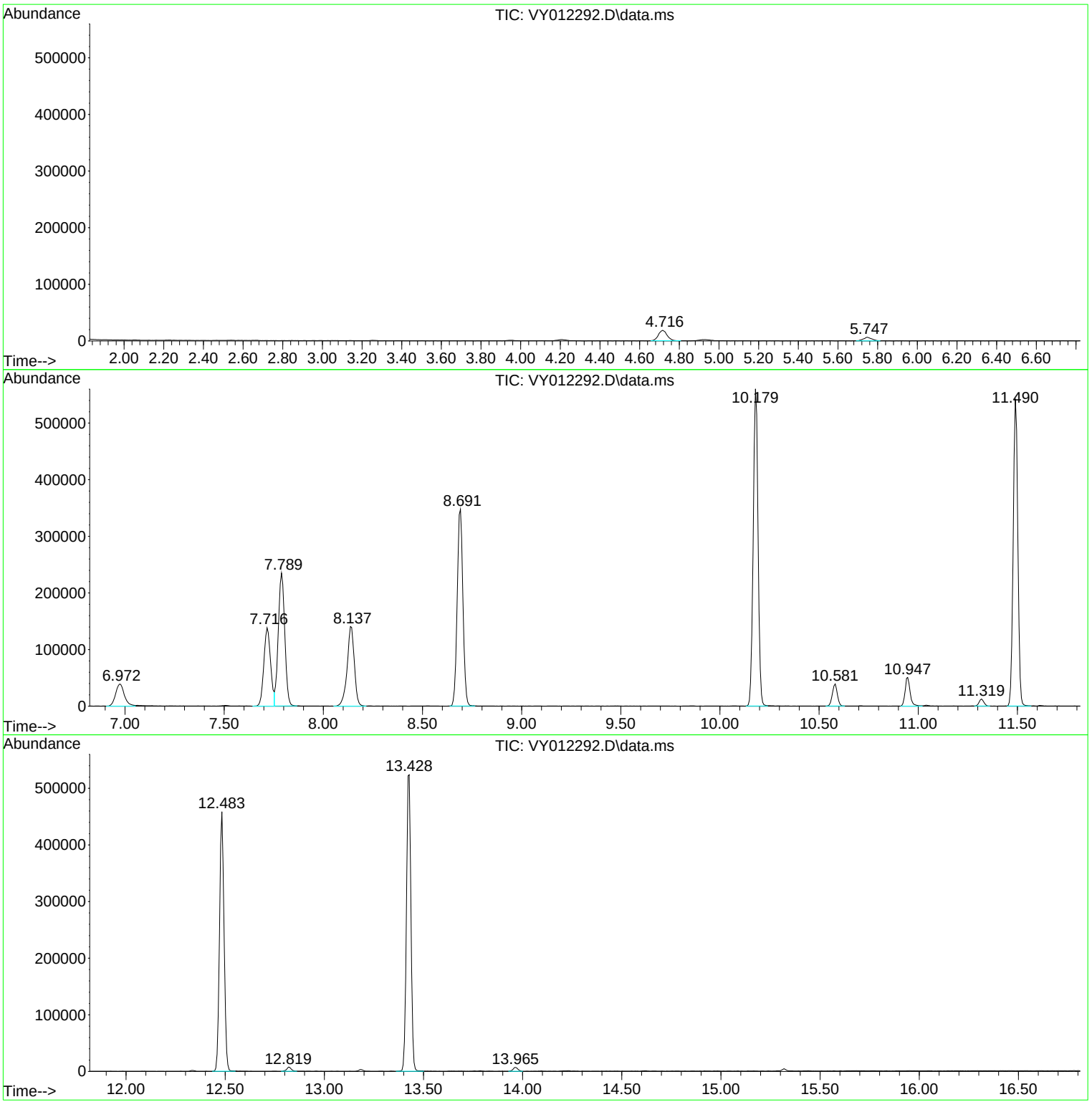
Sample Results: **VY012292.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012292.D
Acq On : 20 Jan 2023 15:49
Operator : KP/MD
Sample : 01232-01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Sample Results: **VY012292.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012292.D
Acq On : 20 Jan 2023 15:49
Operator : KP/MD
Sample : 01232-01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

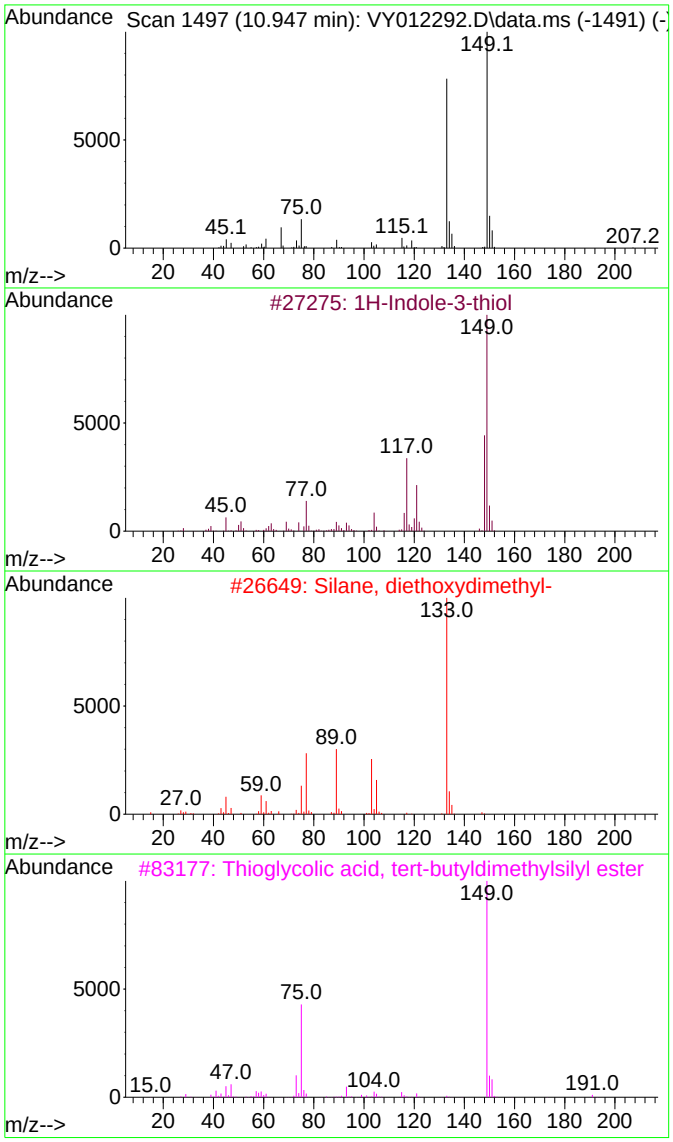
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

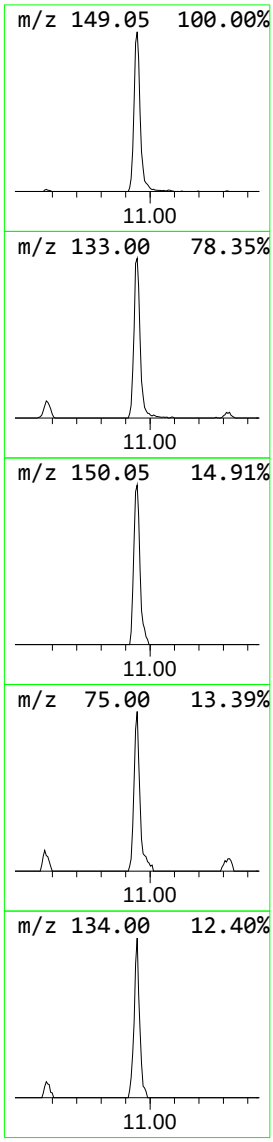
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 unknown10.947 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.947	5.05 ug/l	88400	Chlorobenzene-d5	11.490

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indole-3-thiol	149	C8H7NS	000480-94-4	35
2	Silane, diethoxydimethyl-	148	C6H16O2Si	000078-62-6	35
3	Thioglycolic acid, tert-butyldim...	206	C8H18O2SSi	1000476-01-2	32
4	Benzeneacetaldehyde, 2-methoxy-....	178	C11H14O2	053155-90-1	32
5	1,2,4-Triazole, 3,5-dithioxo-	133	C2H3N3S2	005650-03-3	25





Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012292.D
Acq On : 20 Jan 2023 15:49
Operator : KP/MD
Sample : 01232-01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown10.947	10.947	5.0	ug/l	88400	3	11.490	875926	50.0

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P17B	SDG No.:	O1232
Lab Sample ID:	O1232-02	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	86.9
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
VY012293.D	1		01/20/23 16:13	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.99	U	0.99	5.80	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.80	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.80	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.80	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.80	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.80	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.83	U	0.83	5.80	ug/Kg
75-35-4	1,1-Dichloroethene	0.99	U	0.99	5.80	ug/Kg
67-64-1	Acetone	14.0	U	14.0	28.8	ug/Kg
75-15-0	Carbon Disulfide	0.86	U	0.86	5.80	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.10	U	1.10	5.80	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.80	ug/Kg
75-09-2	Methylene Chloride	6.90	U	6.90	11.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.78	U	0.78	5.80	ug/Kg
75-34-3	1,1-Dichloroethane	0.81	U	0.81	5.80	ug/Kg
110-82-7	Cyclohexane	0.97	U	0.97	5.80	ug/Kg
78-93-3	2-Butanone	8.40	U	8.40	28.8	ug/Kg
56-23-5	Carbon Tetrachloride	0.91	U	0.91	5.80	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.78	U	0.78	5.80	ug/Kg
74-97-5	Bromochloromethane	0.93	U	0.93	5.80	ug/Kg
67-66-3	Chloroform	0.77	U	0.77	5.80	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.86	U	0.86	5.80	ug/Kg
108-87-2	Methylcyclohexane	0.92	U	0.92	5.80	ug/Kg
71-43-2	Benzene	0.76	U	0.76	5.80	ug/Kg
107-06-2	1,2-Dichloroethane	0.97	U	0.97	5.80	ug/Kg
79-01-6	Trichloroethene	0.84	U	0.84	5.80	ug/Kg
78-87-5	1,2-Dichloropropane	0.75	U	0.75	5.80	ug/Kg
75-27-4	Bromodichloromethane	0.81	U	0.81	5.80	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.30	U	5.30	28.8	ug/Kg
108-88-3	Toluene	0.72	U	0.72	5.80	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.85	U	0.85	5.80	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.82	U	0.82	5.80	ug/Kg

Raw Data: **VY012293.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P17B	SDG No.:	O1232
Lab Sample ID:	O1232-02	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	86.9
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
VY012293.D	1		01/20/23 16:13	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.99	U	0.99	5.80	ug/Kg
591-78-6	2-Hexanone	5.40	U	5.40	28.8	ug/Kg
124-48-1	Dibromochloromethane	0.86	U	0.86	5.80	ug/Kg
106-93-4	1,2-Dibromoethane	0.86	U	0.86	5.80	ug/Kg
127-18-4	Tetrachloroethene	0.87	U	0.87	5.80	ug/Kg
108-90-7	Chlorobenzene	0.75	U	0.75	5.80	ug/Kg
100-41-4	Ethyl Benzene	0.81	U	0.81	5.80	ug/Kg
179601-23-1	m/p-Xylenes	1.70	U	1.70	11.5	ug/Kg
95-47-6	o-Xylene	0.91	U	0.91	5.80	ug/Kg
100-42-5	Styrene	0.91	U	0.91	5.80	ug/Kg
75-25-2	Bromoform	0.93	U	0.93	5.80	ug/Kg
98-82-8	Isopropylbenzene	0.83	U	0.83	5.80	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.80	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.77	U	0.77	5.80	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.72	U	0.72	5.80	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.74	U	0.74	5.80	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.80	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.80	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.20	U	1.20	5.80	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	64.9		50 - 163	130%	SPK: 50
1868-53-7	Dibromofluoromethane	55.9		54 - 147	112%	SPK: 50
2037-26-5	Toluene-d8	65.0		58 - 134	130%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.7		30 - 143	99%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	129000	7.789			
540-36-3	1,4-Difluorobenzene	209000	8.691			
3114-55-4	Chlorobenzene-d5	195000	11.49			
3855-82-1	1,4-Dichlorobenzene-d4	86200	13.428			

Raw Data: **VY012293.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P17B	SDG No.:	O1232
Lab Sample ID:	O1232-02	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	86.9
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
VY012293.D	1		01/20/23 16:13	VY012023

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\VY012023\
Data File : VY012293.D
Acq On : 20 Jan 2023 16:13
Operator : KP/MD
Sample : 01232-02
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Quant Time: Jan 23 02:21:47 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

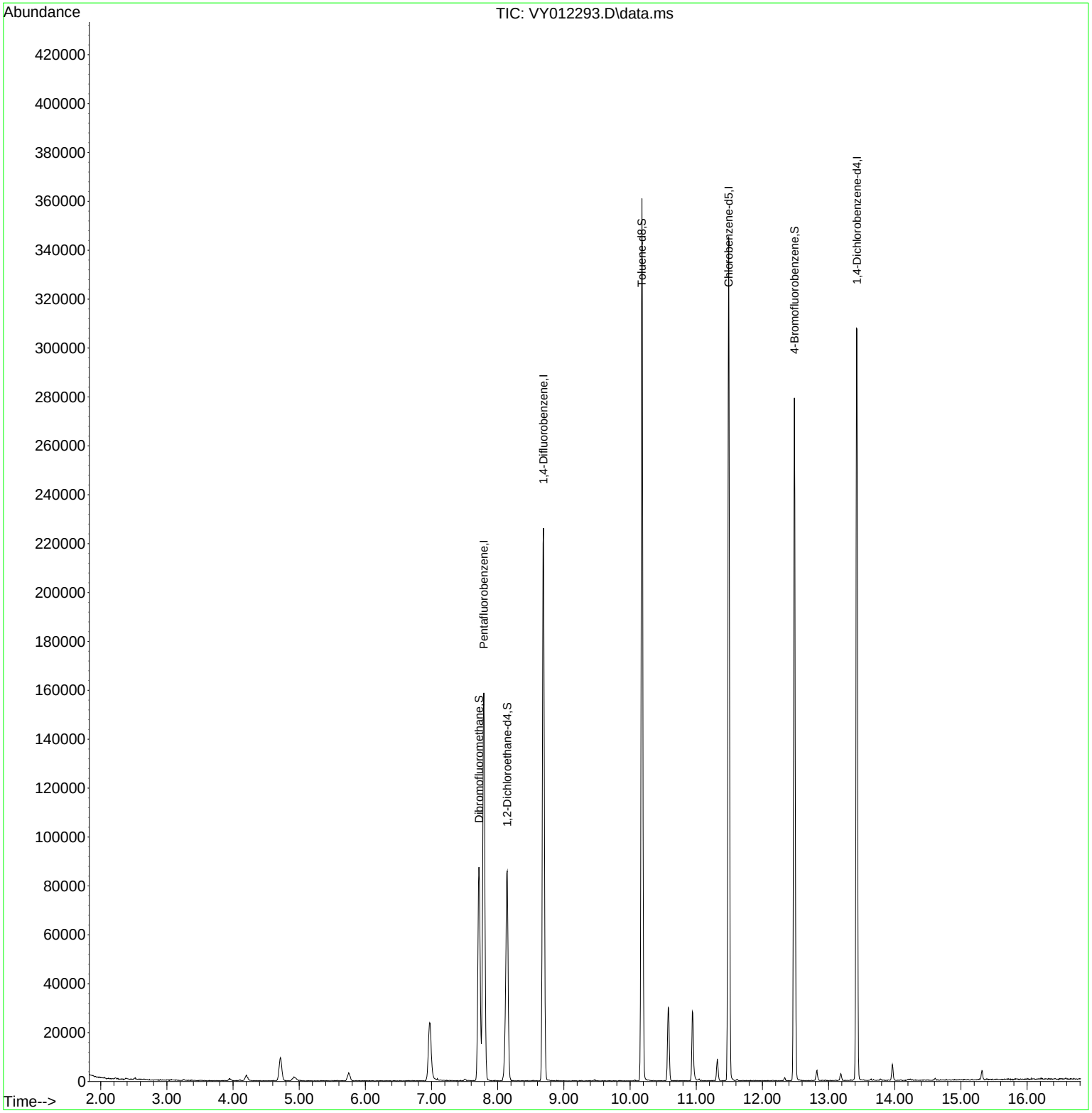
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	128819	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	208628	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	194650	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	86164	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	68078	64.932	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 129.860%			
35) Dibromofluoromethane	7.716	113	61725	55.876	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 111.760%			
50) Toluene-d8	10.179	98	243713	64.971	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 129.940%			
62) 4-Bromofluorobenzene	12.483	95	77411	49.709	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 99.420%			
Target Compounds						Qvalue

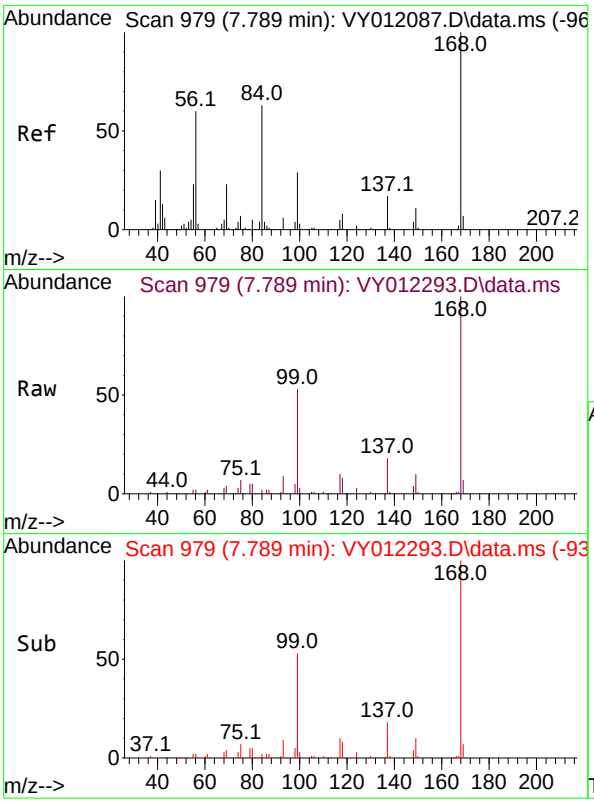
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012293.D
Acq On : 20 Jan 2023 16:13
Operator : KP/MD
Sample : 01232-02
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Quant Time: Jan 23 02:21:47 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



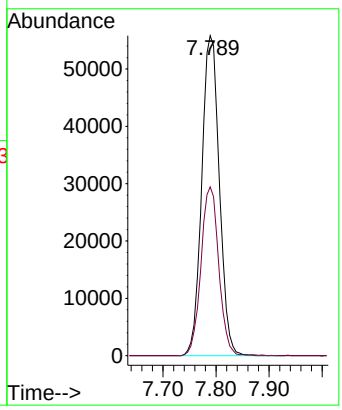


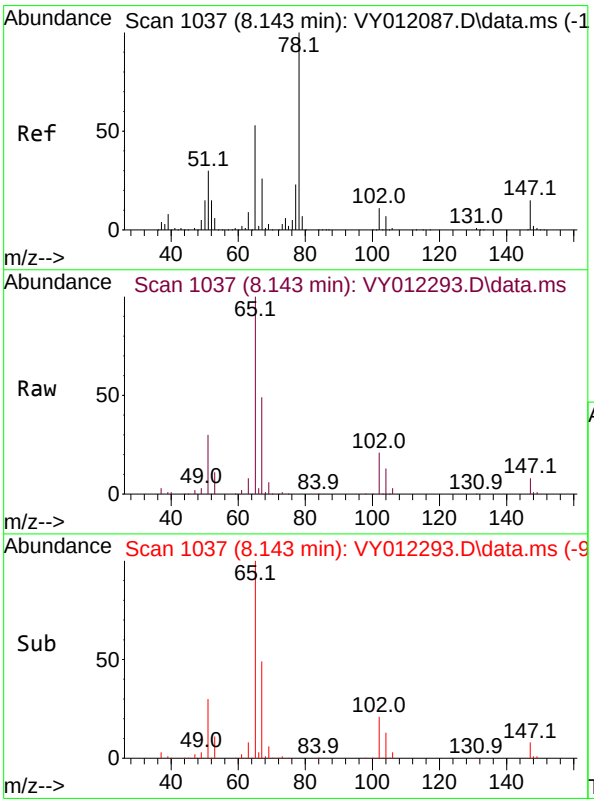
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. 0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Tgt Ion:168 Resp: 128819

Ion	Ratio	Lower	Upper
168	100		
99	52.7	44.0	66.0

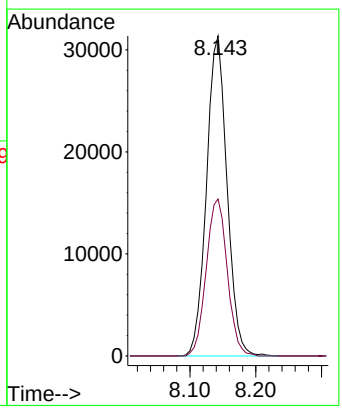


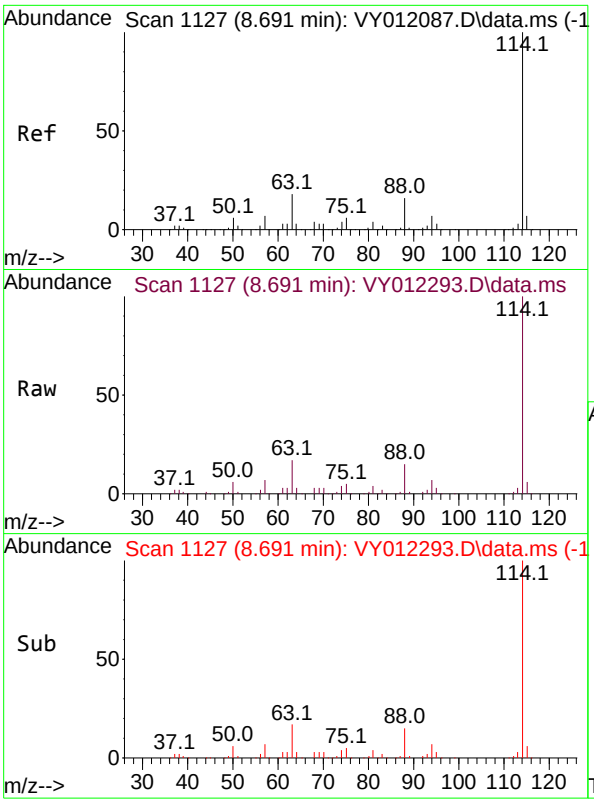


#33
1,2-Dichloroethane-d4
Concen: 64.932 ug/l
RT: 8.143 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Tgt Ion: 65 Resp: 68078

Ion	Ratio	Lower	Upper
65	100		
67	50.3	0.0	103.2



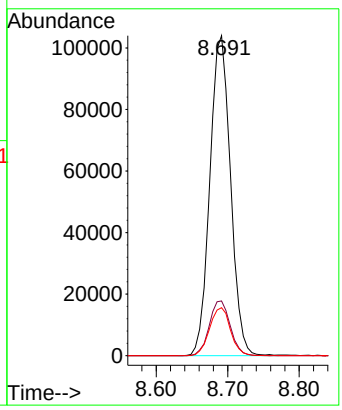


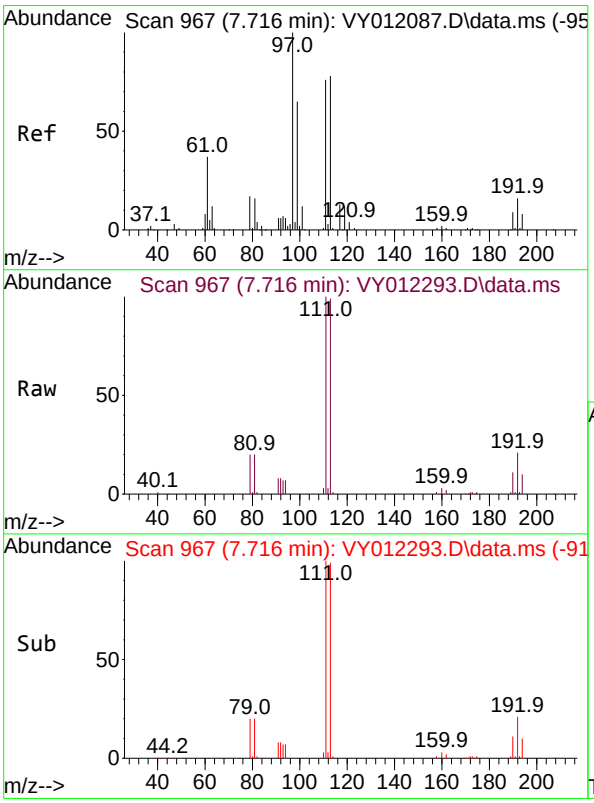
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Tgt Ion:114 Resp: 208628

Ion	Ratio	Lower	Upper
114	100		
63	17.1	0.0	39.6
88	15.0	0.0	32.2

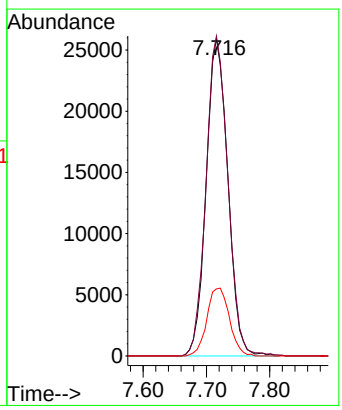


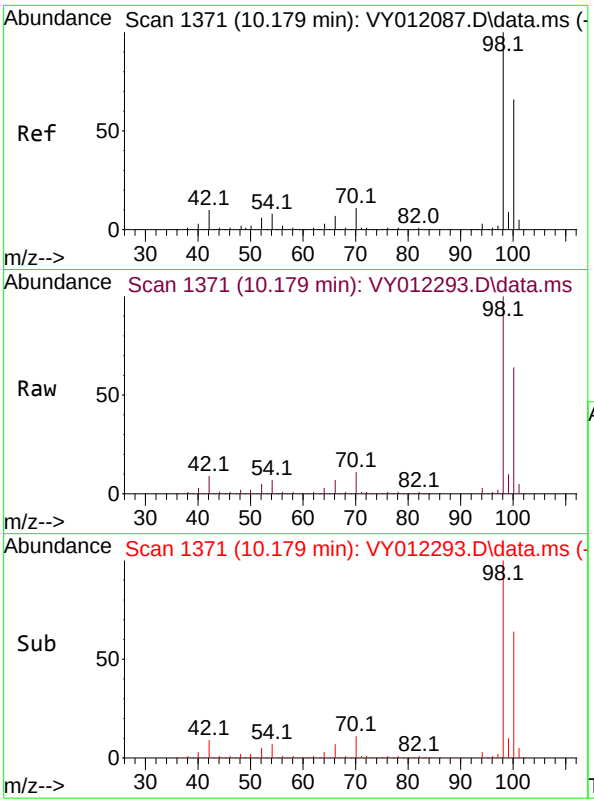


#35
Dibromofluoromethane
Concen: 55.876 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Tgt Ion:113 Resp: 61725

Ion	Ratio	Lower	Upper
113	100		
111	101.9	83.0	124.4
192	22.2	16.0	24.0



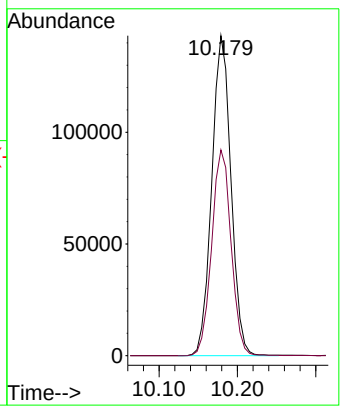


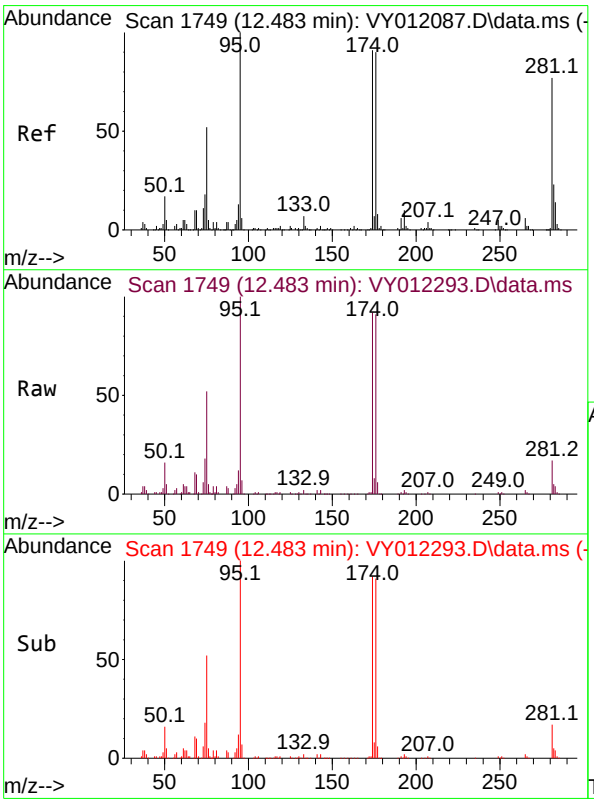
#50
Toluene-d8
Concen: 64.971 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Tgt Ion: 98 Resp: 243713

Ion	Ratio	Lower	Upper
98	100		
100	65.0	51.9	77.9

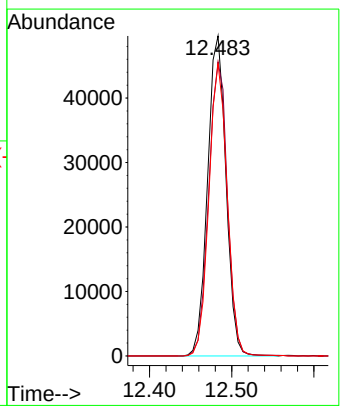


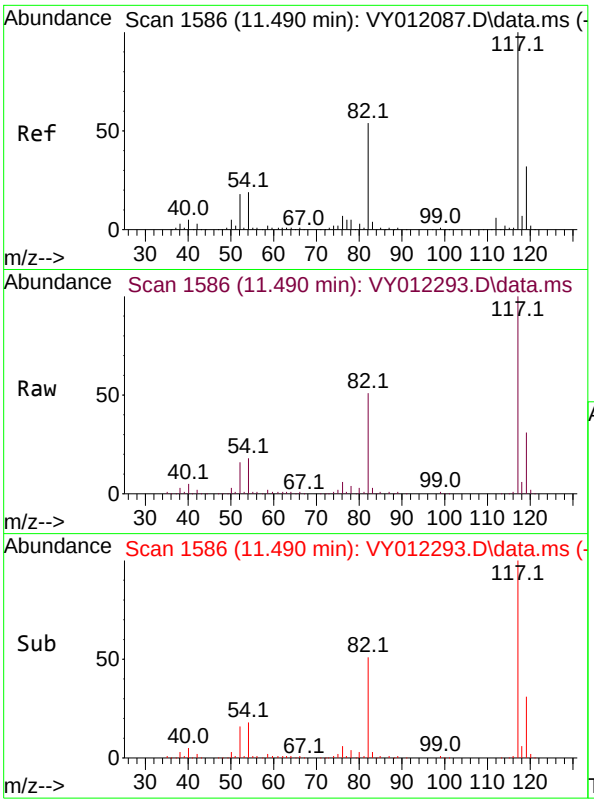


#62
4-Bromofluorobenzene
Concen: 49.709 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Tgt Ion: 95 Resp: 77411

Ion	Ratio	Lower	Upper
95	100		
174	93.3	0.0	172.0
176	90.7	0.0	167.6



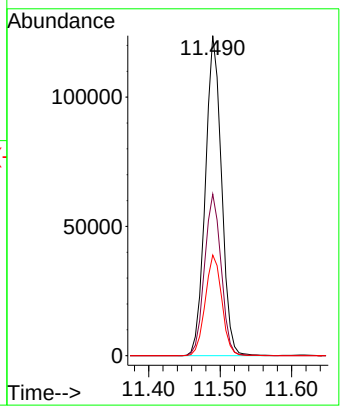


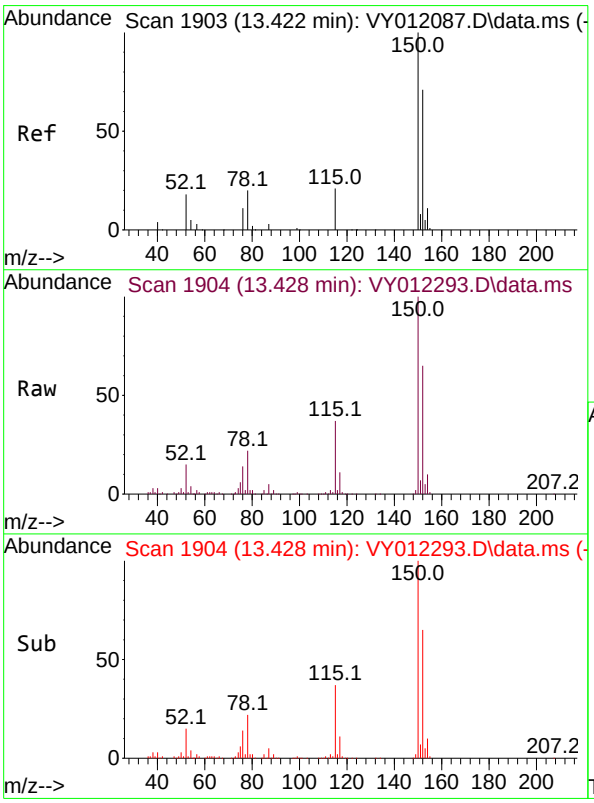
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.490 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Tgt Ion:117 Resp: 194650

Ion	Ratio	Lower	Upper
117	100		
82	50.5	44.8	67.2
119	31.5	25.4	38.2

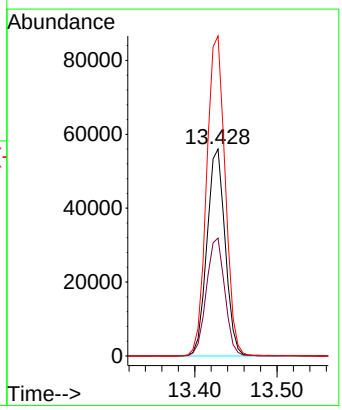




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012293.D
Acq: 20 Jan 2023 16:13

Tgt Ion:152 Resp: 86164

Ion	Ratio	Lower	Upper
152	100		
115	57.6	29.1	87.3
150	157.7	0.0	342.6



Sample Results: **VY012293.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012293.D
Acq On : 20 Jan 2023 16:13
Operator : KP/MD
Sample : 01232-02
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012293.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.204	381	391	400	rBV	2350	6616	1.07%	0.183%
2	4.716	464	475	487	rVB2	9593	28463	4.61%	0.787%
3	4.918	500	508	520	rVB3	1653	6240	1.01%	0.173%
4	5.747	636	644	655	rVB3	3354	9414	1.52%	0.260%
5	6.972	832	845	862	rBV	23878	76240	12.34%	2.108%
6	7.716	956	967	973	rBV	87360	210772	34.12%	5.828%
7	7.789	973	979	989	rVB	158327	359044	58.12%	9.927%
8	8.143	1024	1037	1047	rVB2	85695	216161	34.99%	5.977%
9	8.691	1118	1127	1137	rBV	226018	456989	73.98%	12.635%
10	10.179	1363	1371	1382	rBV	360866	617754	100.00%	17.080%
11	10.575	1429	1436	1444	rBV	30090	55053	8.91%	1.522%
12	10.941	1491	1496	1508	rBV	28413	49971	8.09%	1.382%
13	11.319	1552	1558	1566	rVB2	9019	14987	2.43%	0.414%
14	11.490	1579	1586	1600	rVB	345265	549307	88.92%	15.188%
15	12.483	1741	1749	1759	rBV2	279282	452545	73.26%	12.512%
16	12.825	1799	1805	1815	rVB2	4172	6830	1.11%	0.189%
17	13.422	1893	1903	1913	rBV	307685	489631	79.26%	13.538%
18	13.965	1986	1992	2001	rVB2	6608	10779	1.74%	0.298%

Sum of corrected areas: 3616796

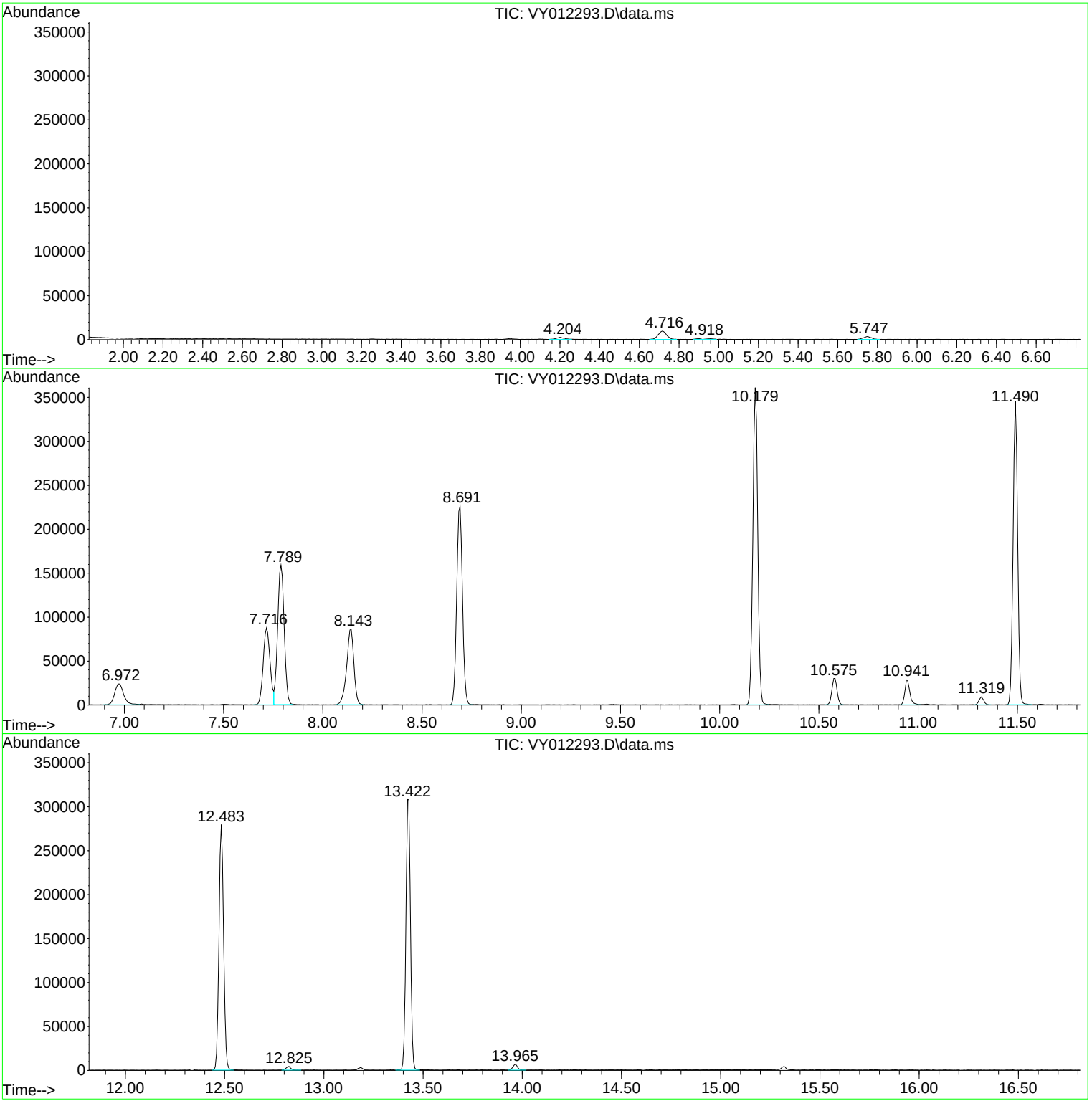
Sample Results: **VY012293.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012293.D
Acq On : 20 Jan 2023 16:13
Operator : KP/MD
Sample : 01232-02
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012293.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012293.D
Acq On : 20 Jan 2023 16:13
Operator : KP/MD
Sample : 01232-02
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012293.D
Acq On : 20 Jan 2023 16:13
Operator : KP/MD
Sample : 01232-02
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 16 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-17B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P18A	SDG No.:	O1232
Lab Sample ID:	O1232-04	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	87.5
Sample Wt/Vol:	5.05 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
VY012311.D	1		01/23/23 14:14	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.97	U	0.97	5.70	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.70	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.70	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.70	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.70	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.70	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.81	U	0.81	5.70	ug/Kg
75-35-4	1,1-Dichloroethene	0.97	U	0.97	5.70	ug/Kg
67-64-1	Acetone	13.8	U	13.8	28.3	ug/Kg
75-15-0	Carbon Disulfide	0.85	U	0.85	5.70	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.10	U	1.10	5.70	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.70	ug/Kg
75-09-2	Methylene Chloride	6.70	U	6.70	11.3	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.77	U	0.77	5.70	ug/Kg
75-34-3	1,1-Dichloroethane	0.79	U	0.79	5.70	ug/Kg
110-82-7	Cyclohexane	0.95	U	0.95	5.70	ug/Kg
78-93-3	2-Butanone	8.20	U	8.20	28.3	ug/Kg
56-23-5	Carbon Tetrachloride	0.89	U	0.89	5.70	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.77	U	0.77	5.70	ug/Kg
74-97-5	Bromochloromethane	0.92	U	0.92	5.70	ug/Kg
67-66-3	Chloroform	0.76	U	0.76	5.70	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.85	U	0.85	5.70	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.70	ug/Kg
71-43-2	Benzene	0.75	U	0.75	5.70	ug/Kg
107-06-2	1,2-Dichloroethane	0.95	U	0.95	5.70	ug/Kg
79-01-6	Trichloroethene	0.83	U	0.83	5.70	ug/Kg
78-87-5	1,2-Dichloropropane	0.74	U	0.74	5.70	ug/Kg
75-27-4	Bromodichloromethane	0.79	U	0.79	5.70	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.20	U	5.20	28.3	ug/Kg
108-88-3	Toluene	0.71	U	0.71	5.70	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.84	U	0.84	5.70	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.80	U	0.80	5.70	ug/Kg

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P18A	SDG No.:	O1232
Lab Sample ID:	O1232-04	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	87.5
Sample Wt/Vol:	5.05 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
VY012311.D	1		01/23/23 14:14	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.97	U	0.97	5.70	ug/Kg
591-78-6	2-Hexanone	5.30	U	5.30	28.3	ug/Kg
124-48-1	Dibromochloromethane	0.85	U	0.85	5.70	ug/Kg
106-93-4	1,2-Dibromoethane	0.85	U	0.85	5.70	ug/Kg
127-18-4	Tetrachloroethene	0.86	U	0.86	5.70	ug/Kg
108-90-7	Chlorobenzene	0.74	U	0.74	5.70	ug/Kg
100-41-4	Ethyl Benzene	0.79	U	0.79	5.70	ug/Kg
179601-23-1	m/p-Xylenes	1.70	U	1.70	11.3	ug/Kg
95-47-6	o-Xylene	0.89	U	0.89	5.70	ug/Kg
100-42-5	Styrene	0.89	U	0.89	5.70	ug/Kg
75-25-2	Bromoform	0.92	U	0.92	5.70	ug/Kg
98-82-8	Isopropylbenzene	0.81	U	0.81	5.70	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.70	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.76	U	0.76	5.70	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.71	U	0.71	5.70	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.72	U	0.72	5.70	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.70	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.70	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.70	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	75.6		50 - 163	151%	SPK: 50
1868-53-7	Dibromofluoromethane	55.2		54 - 147	110%	SPK: 50
2037-26-5	Toluene-d8	65.5		58 - 134	131%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.7		30 - 143	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	170000	7.789			
540-36-3	1,4-Difluorobenzene	284000	8.691			
3114-55-4	Chlorobenzene-d5	275000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	126000	13.428			
TENTATIVE IDENTIFIED COMPOUNDS						
	unknown10.947	12.6	J		10.9	ug/Kg

Raw Data: **VY012311.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P18A	SDG No.:	O1232
Lab Sample ID:	O1232-04	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	87.5
Sample Wt/Vol:	5.05 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
VY012311.D	1		01/23/23 14:14	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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\VY012323\
Data File : VY012311.D
Acq On : 23 Jan 2023 14:14
Operator : KP/MD
Sample : 01232-04
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Quant Time: Jan 23 15:16:12 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

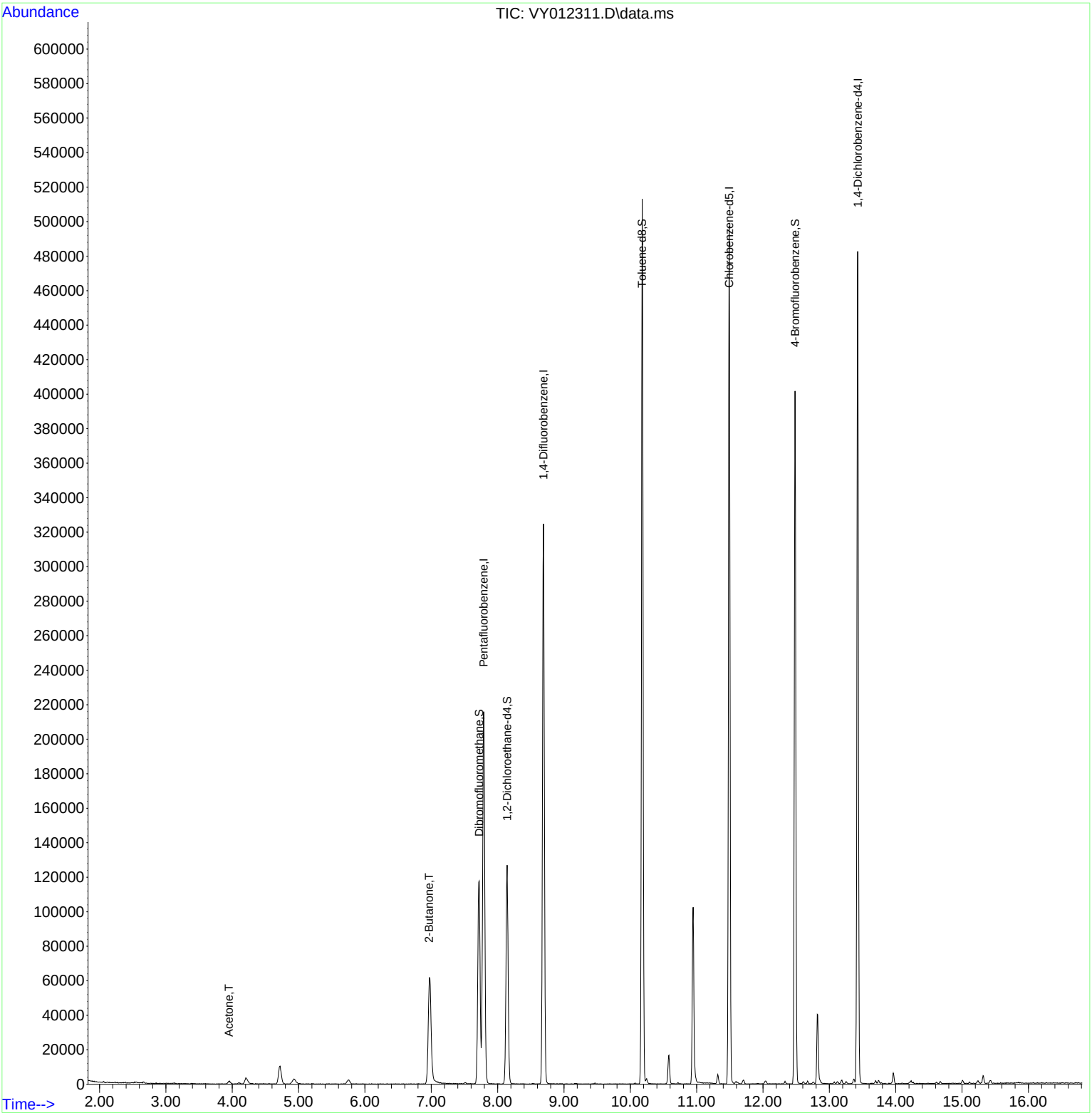
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	170252	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	283949	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	275020	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	125590	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	103789	75.557	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 151.120%			
35) Dibromofluoromethane	7.722	113	83042	55.232	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 110.460%			
50) Toluene-d8	10.179	98	334138	65.483	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 130.960%			
62) 4-Bromofluorobenzene	12.483	95	113735	53.662	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 107.320%			
Target Compounds						Qvalue
16) Acetone	3.948	43	2855	6.022	ug/l	96
25) 2-Butanone	6.966	43	3110	5.942	ug/l #	72

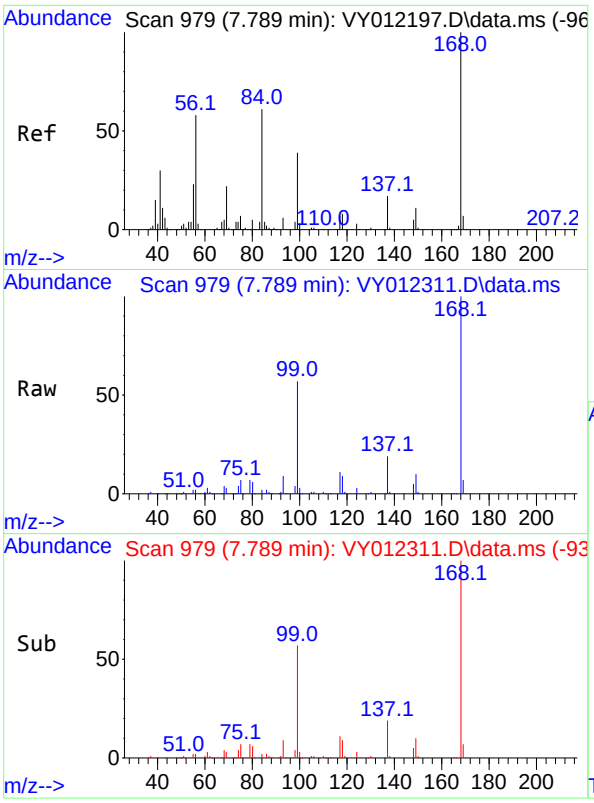
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012311.D
Acq On : 23 Jan 2023 14:14
Operator : KP/MD
Sample : 01232-04
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Quant Time: Jan 23 15:16:12 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



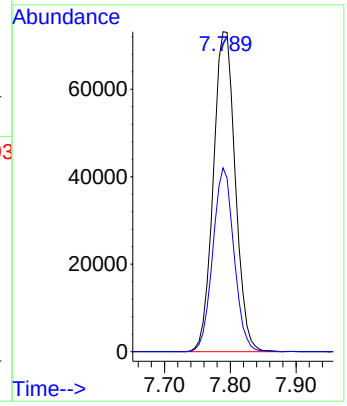


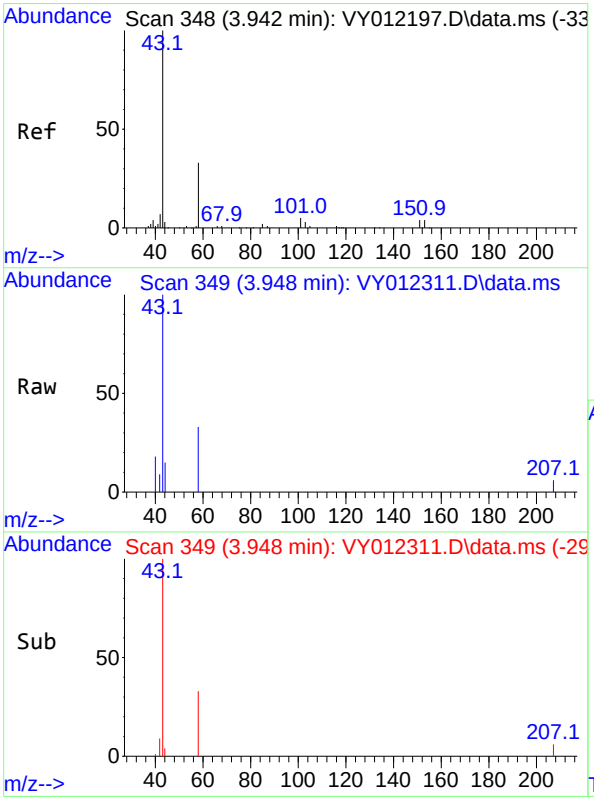
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Tgt Ion:168 Resp: 170252

Ion	Ratio	Lower	Upper
168	100		
99	57.5	44.0	66.0

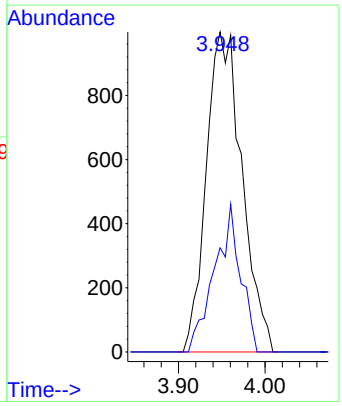


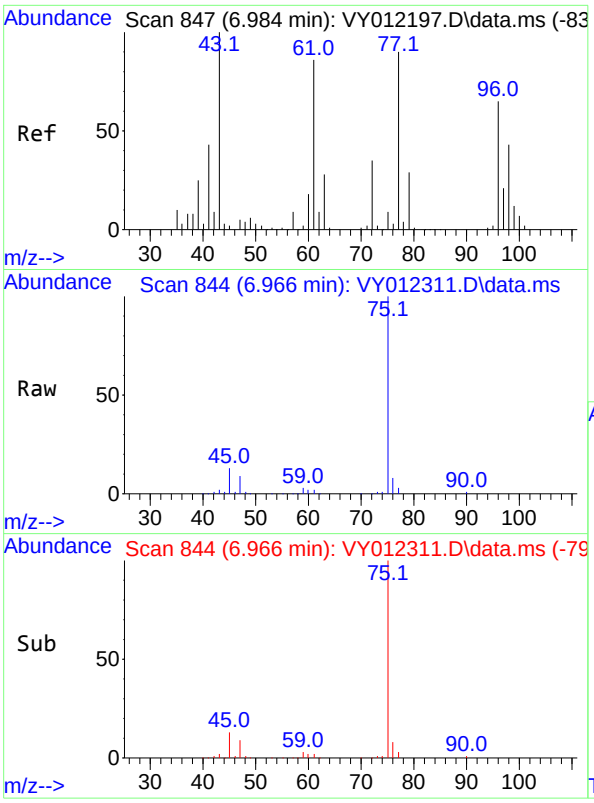


#16
Acetone
Concen: 6.022 ug/l
RT: 3.948 min Scan# 349
Delta R.T. 0.006 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Tgt Ion: 43 Resp: 2855

Ion	Ratio	Lower	Upper
43	100		
58	32.6	27.9	41.9



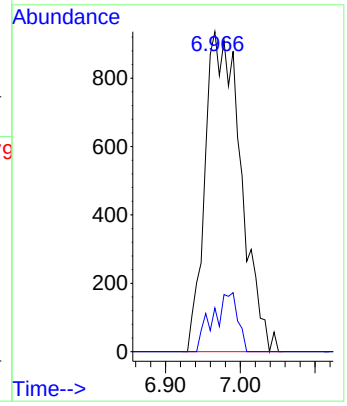


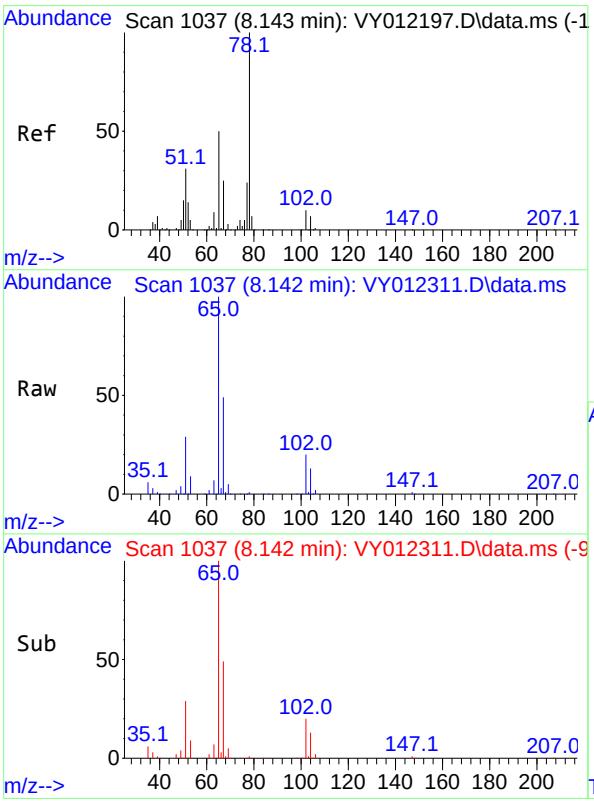
#25
2-Butanone
Concen: 5.942 ug/l
RT: 6.966 min Scan# 84
Delta R.T. -0.018 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Tgt Ion: 43 Resp: 3110

Ion	Ratio	Lower	Upper
43	100		
72	13.7	22.6	34.0#

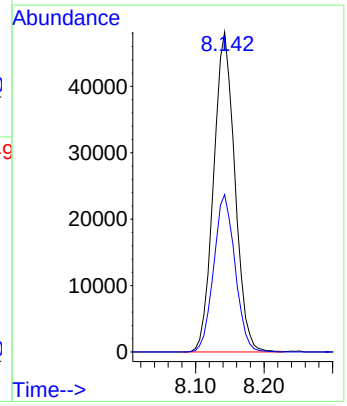


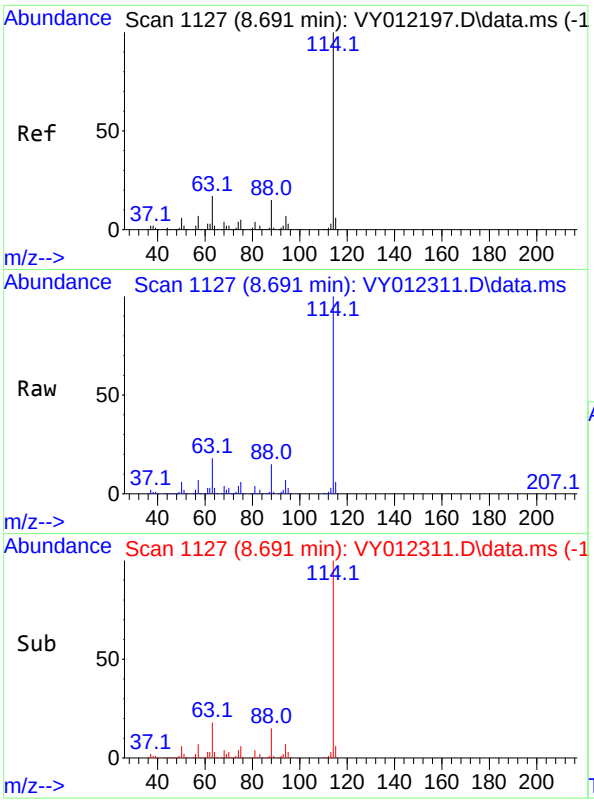


#33
1,2-Dichloroethane-d4
Concen: 75.557 ug/l
RT: 8.142 min Scan# 1037
Delta R.T. -0.001 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Tgt Ion: 65 Resp: 103789

Ion	Ratio	Lower	Upper
65	100		
67	49.4	0.0	103.2



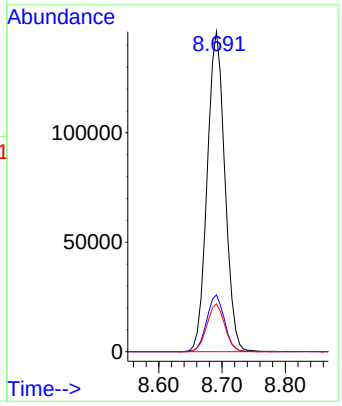


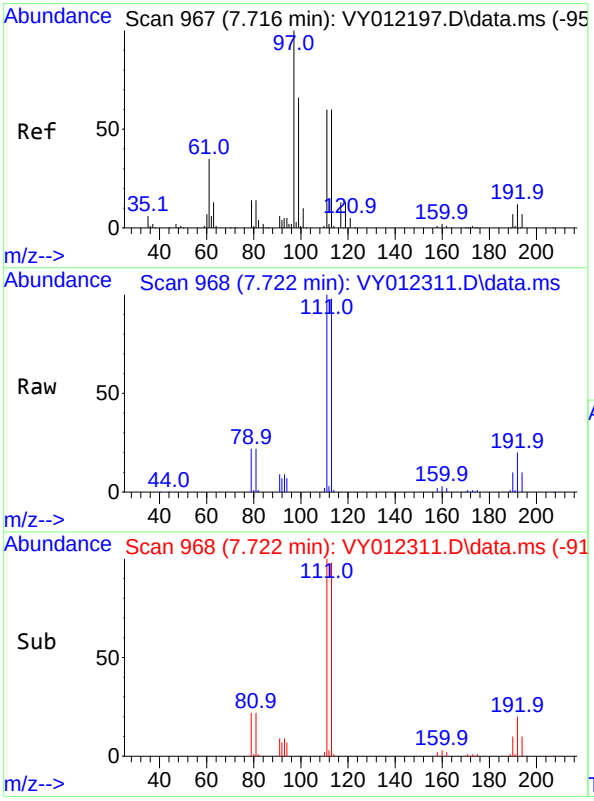
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Tgt Ion:114 Resp: 283949

Ion	Ratio	Lower	Upper
114	100		
63	17.8	0.0	39.6
88	14.9	0.0	32.2

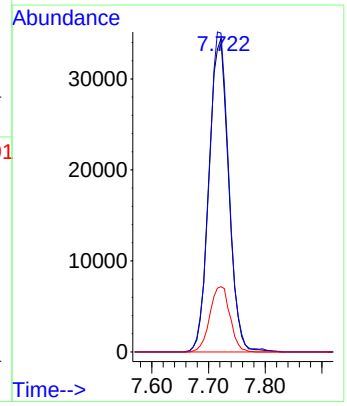


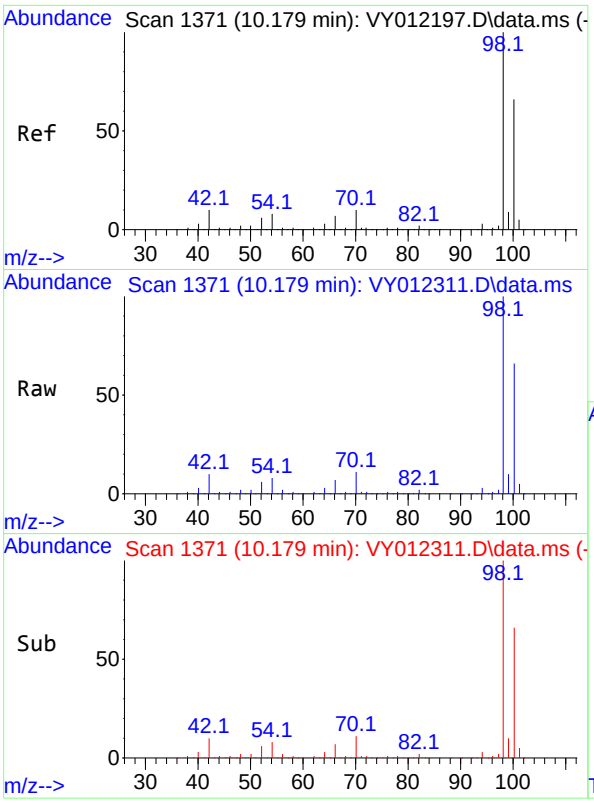


#35
Dibromofluoromethane
Concen: 55.232 ug/l
RT: 7.722 min Scan# 968
Delta R.T. 0.006 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Tgt Ion:113 Resp: 83042

Ion	Ratio	Lower	Upper
113	100		
111	102.5	83.0	124.4
192	21.3	16.0	24.0



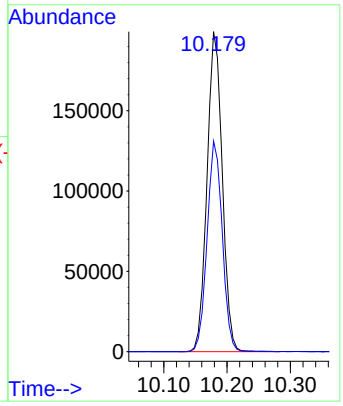


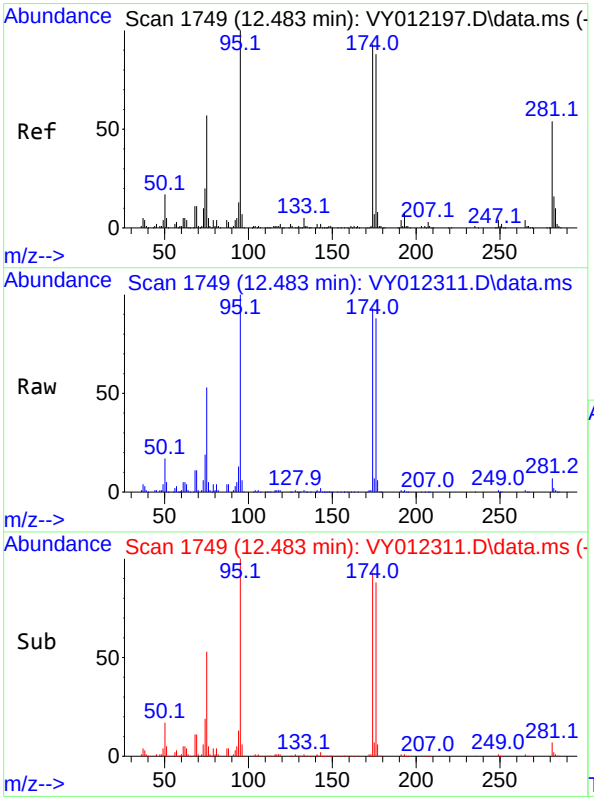
#50
Toluene-d8
Concen: 65.483 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Tgt Ion: 98 Resp: 334138

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.9	77.9

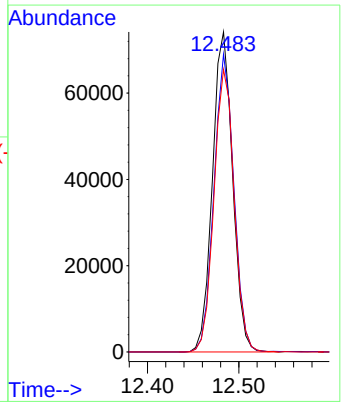


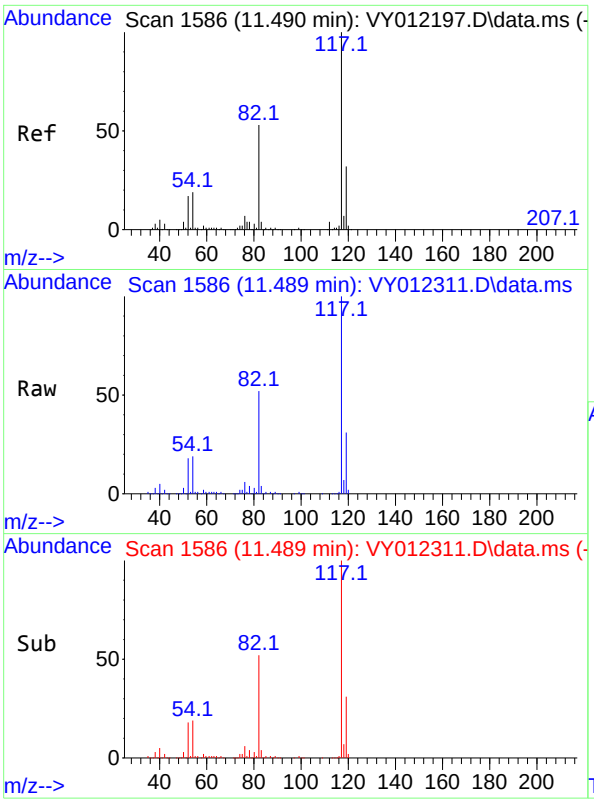


#62
4-Bromofluorobenzene
Concen: 53.662 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Tgt Ion: 95 Resp: 113735

Ion	Ratio	Lower	Upper
95	100		
174	91.9	0.0	172.0
176	88.5	0.0	167.6



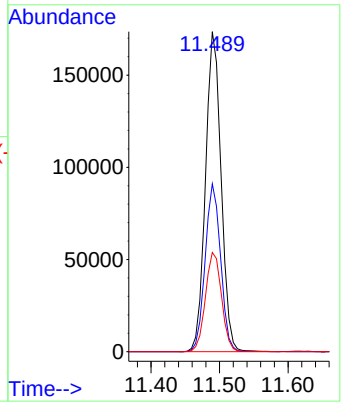


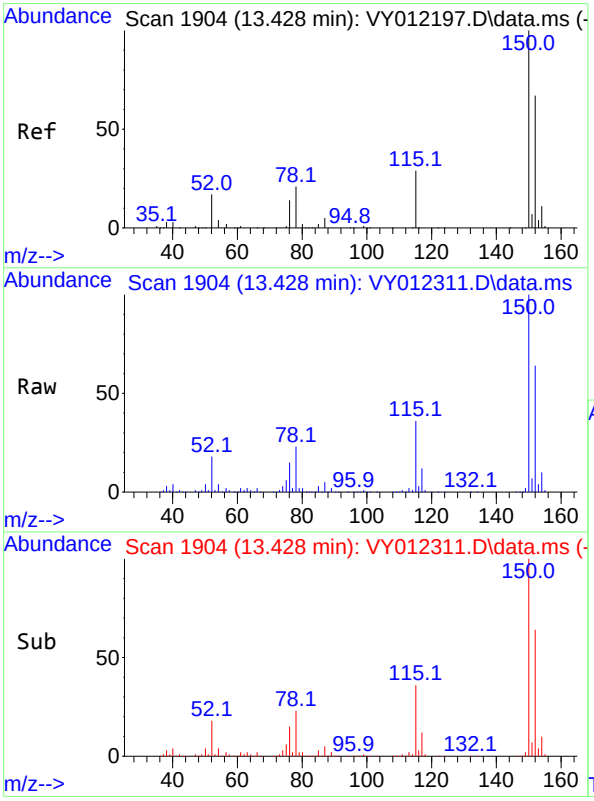
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Tgt Ion:117 Resp: 275020

Ion	Ratio	Lower	Upper
117	100		
82	52.5	44.8	67.2
119	31.0	25.4	38.2

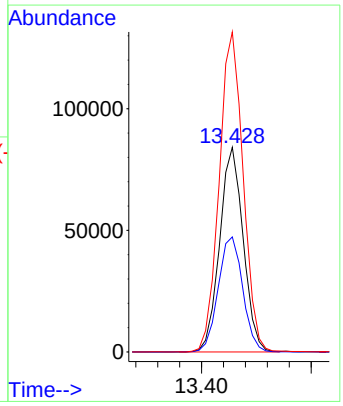




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012311.D
Acq: 23 Jan 2023 14:14

Tgt Ion:152 Resp: 125590

Ion	Ratio	Lower	Upper
152	100		
115	58.5	29.1	87.3
150	159.1	0.0	342.6



Sample Results: **VY012311.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012311.D
Acq On : 23 Jan 2023 14:14
Operator : KP/MD
Sample : 01232-04
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012311.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.204	382	391	404	rBV	3486	10543	1.23%	0.201%
2	4.722	465	476	489	rBV2	10373	30810	3.60%	0.587%
3	4.930	498	510	522	rBV3	2940	11032	1.29%	0.210%
4	6.972	833	845	865	rBV	61655	193288	22.56%	3.685%
5	7.722	956	968	973	rBV	117531	286765	33.46%	5.467%
6	7.789	973	979	993	rVB	215618	491991	57.41%	9.380%
7	8.142	1026	1037	1050	rBV	126762	277473	32.38%	5.290%
8	8.691	1118	1127	1138	rBV	324475	631549	73.70%	12.041%
9	10.179	1363	1371	1379	rBV	512731	856946	100.00%	16.338%
10	10.581	1430	1437	1444	rBV	16439	29249	3.41%	0.558%
11	10.947	1490	1497	1509	rBV	102368	176097	20.55%	3.357%
12	11.319	1553	1558	1564	rVB	5416	8674	1.01%	0.165%
13	11.489	1579	1586	1598	rBV	497234	792291	92.46%	15.105%
14	12.483	1742	1749	1759	rBV2	401520	632256	73.78%	12.054%
15	12.818	1798	1804	1818	rBV	40270	68089	7.95%	1.298%
16	13.428	1897	1904	1914	rVB	482108	738624	86.19%	14.082%
17	13.965	1986	1992	1998	rVB2	6156	9441	1.10%	0.180%

Sum of corrected areas: 5245118

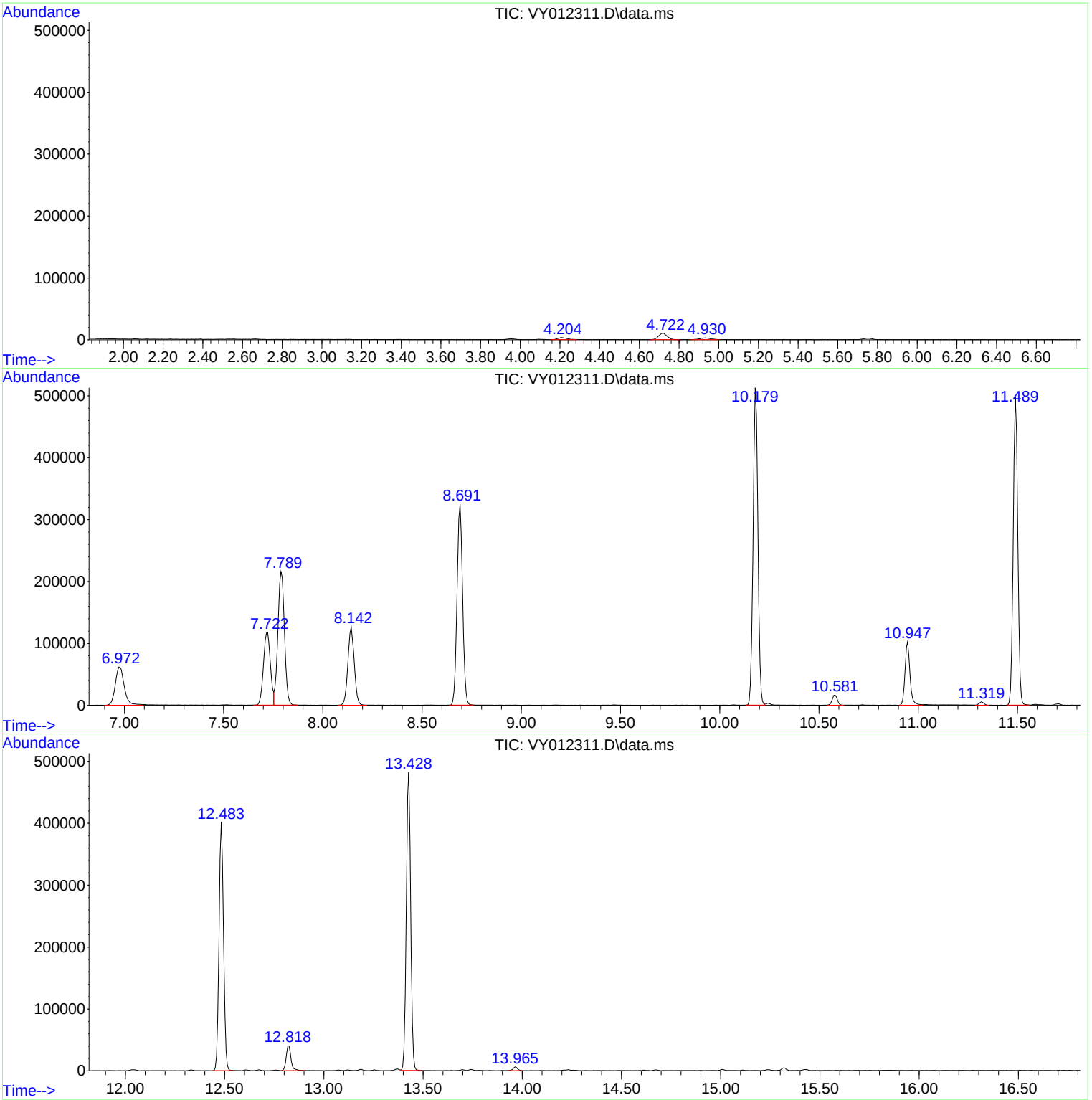
Sample Results: **VY012311.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012311.D
Acq On : 23 Jan 2023 14:14
Operator : KP/MD
Sample : 01232-04
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012311.D
Acq On : 23 Jan 2023 14:14
Operator : KP/MD
Sample : 01232-04
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

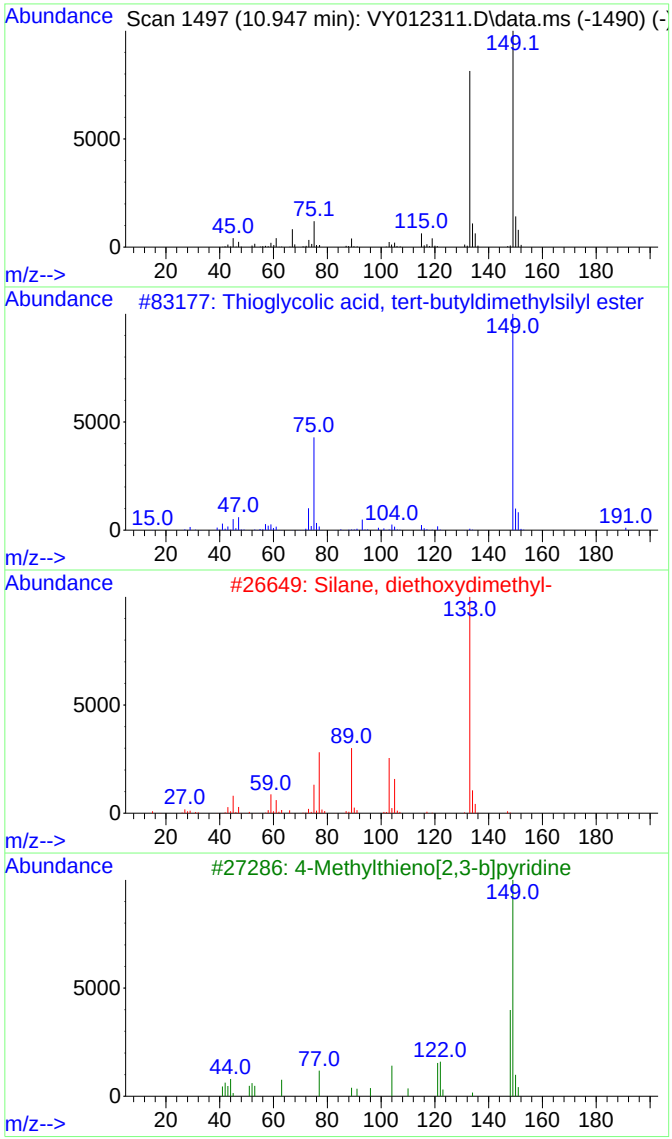
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

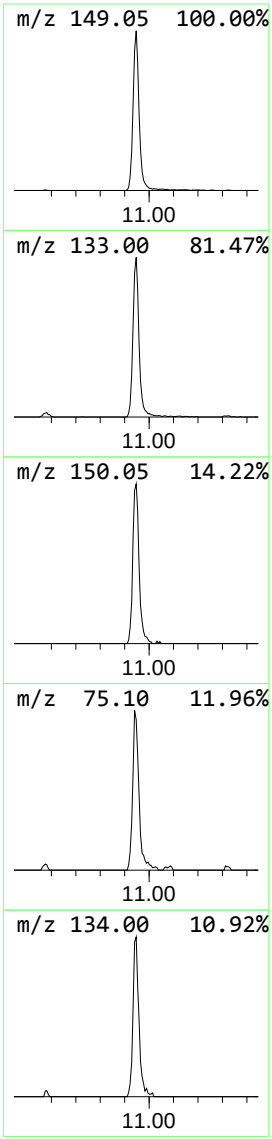
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 unknown10.947 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.947	11.11 ug/l	176097	Chlorobenzene-d5	11.489

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thioglycolic acid, tert-butyldim...	206	C8H18O2SSi	1000476-01-2	35
2	Silane, diethoxydimethyl-	148	C6H16O2Si	000078-62-6	25
3	4-Methylthieno[2,3-b]pyridine	149	C8H7NS	013362-81-7	25
4	4-(Methylthio)benzonitrile	149	C8H7NS	021382-98-9	25
5	4-Ethylbenzoic acid, 2,2-dimethy...	220	C14H20O2	1000293-49-5	23





Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012311.D
Acq On : 23 Jan 2023 14:14
Operator : KP/MD
Sample : 01232-04
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown10.947	10.947	11.1	ug/l	176097	3	11.489	792291	50.0

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P18B	SDG No.:	O1232
Lab Sample ID:	O1232-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.4
Sample Wt/Vol:	5.03 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
VY012295.D	1		01/20/23 17:00	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.94	U	0.94	5.40	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.40	ug/Kg
75-01-4	Vinyl Chloride	0.99	U	0.99	5.40	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.40	ug/Kg
75-00-3	Chloroethane	0.97	U	0.97	5.40	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.40	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.78	U	0.78	5.40	ug/Kg
75-35-4	1,1-Dichloroethene	0.94	U	0.94	5.40	ug/Kg
67-64-1	Acetone	13.3	U	13.3	27.2	ug/Kg
75-15-0	Carbon Disulfide	0.82	U	0.82	5.40	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.00	U	1.00	5.40	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.40	ug/Kg
75-09-2	Methylene Chloride	6.50	U	6.50	10.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.74	U	0.74	5.40	ug/Kg
75-34-3	1,1-Dichloroethane	0.76	U	0.76	5.40	ug/Kg
110-82-7	Cyclohexane	0.91	U	0.91	5.40	ug/Kg
78-93-3	2-Butanone	7.90	U	7.90	27.2	ug/Kg
56-23-5	Carbon Tetrachloride	0.86	U	0.86	5.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.74	U	0.74	5.40	ug/Kg
74-97-5	Bromochloromethane	0.88	U	0.88	5.40	ug/Kg
67-66-3	Chloroform	0.73	U	0.73	5.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.82	U	0.82	5.40	ug/Kg
108-87-2	Methylcyclohexane	0.87	U	0.87	5.40	ug/Kg
71-43-2	Benzene	1.80	J	0.72	5.40	ug/Kg
107-06-2	1,2-Dichloroethane	0.91	U	0.91	5.40	ug/Kg
79-01-6	Trichloroethene	0.79	U	0.79	5.40	ug/Kg
78-87-5	1,2-Dichloropropane	0.71	U	0.71	5.40	ug/Kg
75-27-4	Bromodichloromethane	0.76	U	0.76	5.40	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.00	U	5.00	27.2	ug/Kg
108-88-3	Toluene	1.10	J	0.69	5.40	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.80	U	0.80	5.40	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.77	U	0.77	5.40	ug/Kg

Raw Data: **VY012295.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P18B	SDG No.:	O1232
Lab Sample ID:	O1232-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.4
Sample Wt/Vol:	5.03 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
VY012295.D	1		01/20/23 17:00	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.94	U	0.94	5.40	ug/Kg
591-78-6	2-Hexanone	5.10	U	5.10	27.2	ug/Kg
124-48-1	Dibromochloromethane	0.82	U	0.82	5.40	ug/Kg
106-93-4	1,2-Dibromoethane	0.82	U	0.82	5.40	ug/Kg
127-18-4	Tetrachloroethene	0.83	U	0.83	5.40	ug/Kg
108-90-7	Chlorobenzene	0.71	U	0.71	5.40	ug/Kg
100-41-4	Ethyl Benzene	0.76	U	0.76	5.40	ug/Kg
179601-23-1	m/p-Xylenes	1.60	U	1.60	10.9	ug/Kg
95-47-6	o-Xylene	0.86	U	0.86	5.40	ug/Kg
100-42-5	Styrene	0.86	U	0.86	5.40	ug/Kg
75-25-2	Bromoform	0.88	U	0.88	5.40	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.40	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.40	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.73	U	0.73	5.40	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.69	U	0.69	5.40	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.70	U	0.70	5.40	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.30	U	1.30	5.40	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.40	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.40	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	69.3		50 - 163	139%	SPK: 50
1868-53-7	Dibromofluoromethane	55.4		54 - 147	111%	SPK: 50
2037-26-5	Toluene-d8	64.9		58 - 134	130%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.6		30 - 143	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	206000	7.789			
540-36-3	1,4-Difluorobenzene	346000	8.691			
3114-55-4	Chlorobenzene-d5	328000	11.49			
3855-82-1	1,4-Dichlorobenzene-d4	154000	13.428			

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P18B	SDG No.:	O1232
Lab Sample ID:	O1232-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.4
Sample Wt/Vol:	5.03 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
VY012295.D	1		01/20/23 17:00	VY012023

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\VY012023\
Data File : VY012295.D
Acq On : 20 Jan 2023 17:00
Operator : KP/MD
Sample : 01232-05
Misc : 5.03g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Quant Time: Jan 23 02:22:40 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

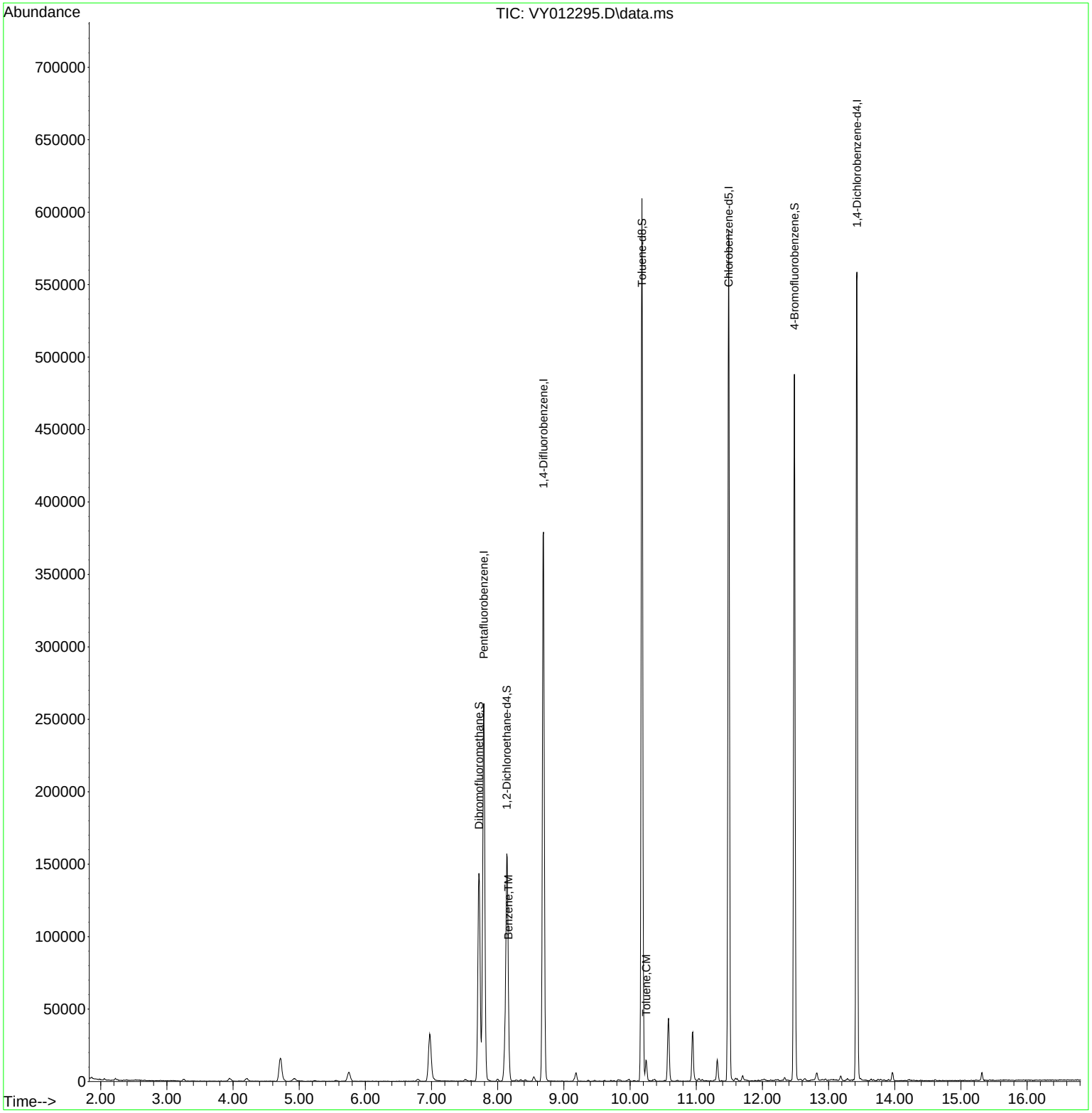
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	205706	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	345925	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	328400	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	154191	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.137	65	115508	69.258	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 138.520%			
35) Dibromofluoromethane	7.716	113	101521	55.425	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 110.860%			
50) Toluene-d8	10.179	98	403901	64.936	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 129.880%			
62) 4-Bromofluorobenzene	12.483	95	135818	52.600	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 105.200%			
Target Compounds						Qvalue
40) Benzene	8.161	78	15186	1.690	ug/l	99
52) Toluene	10.246	92	6148	1.028	ug/l	100

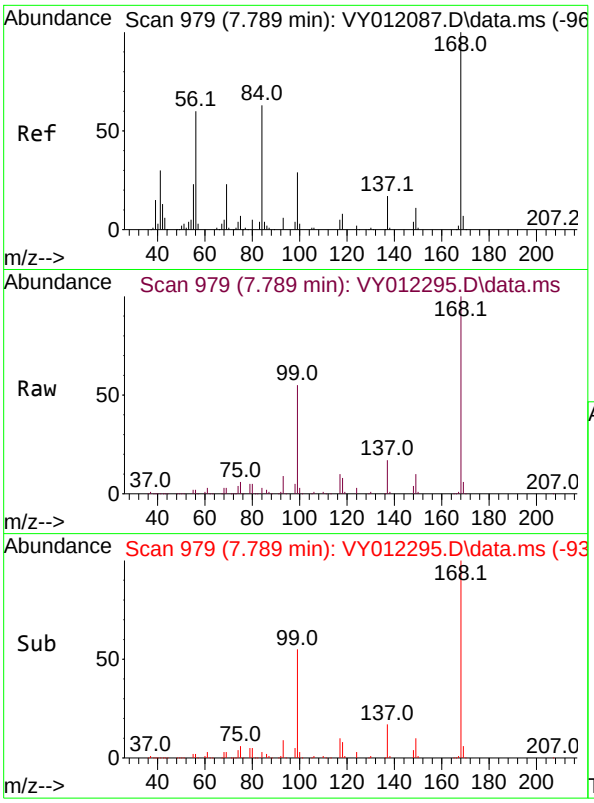
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012295.D
Acq On : 20 Jan 2023 17:00
Operator : KP/MD
Sample : 01232-05
Misc : 5.03g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Quant Time: Jan 23 02:22:40 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



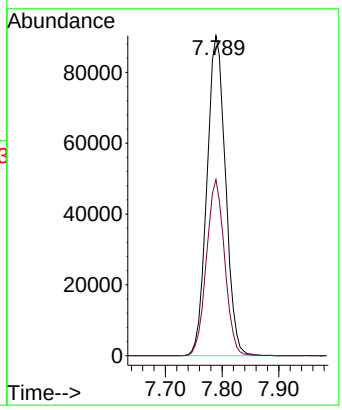


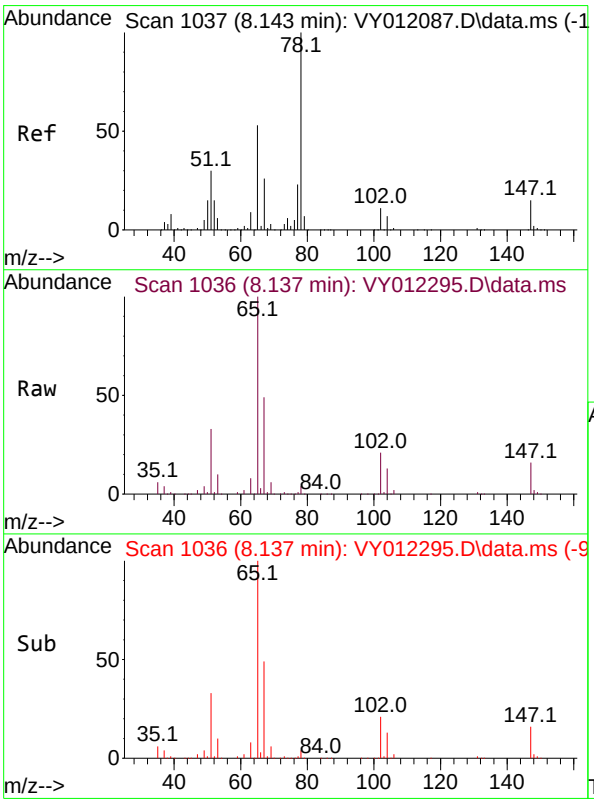
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. 0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Tgt Ion:168 Resp: 205706

Ion	Ratio	Lower	Upper
168	100		
99	55.0	44.0	66.0

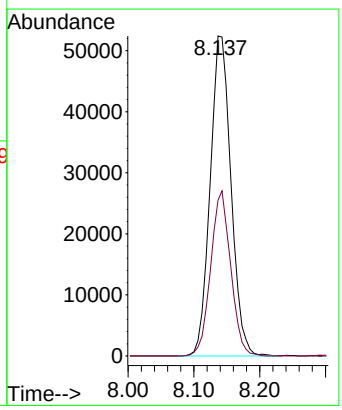


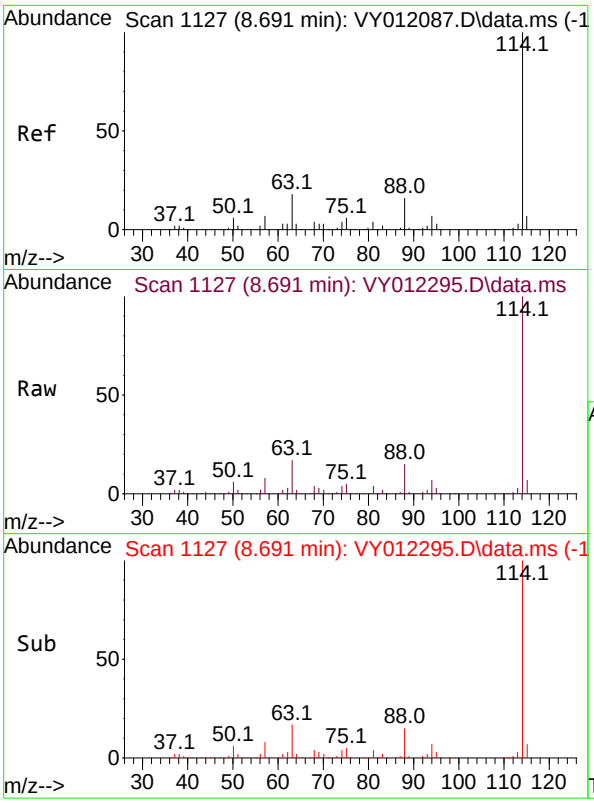


#33
1,2-Dichloroethane-d4
Concen: 69.258 ug/l
RT: 8.137 min Scan# 1036
Delta R.T. -0.006 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Tgt Ion: 65 Resp: 115508

Ion	Ratio	Lower	Upper
65	100		
67	49.5	0.0	103.2



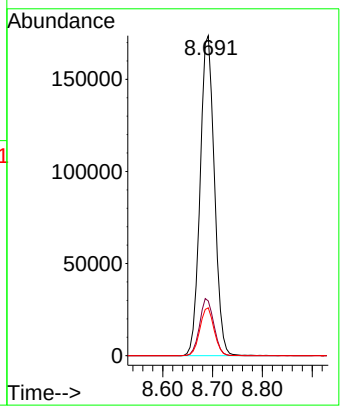


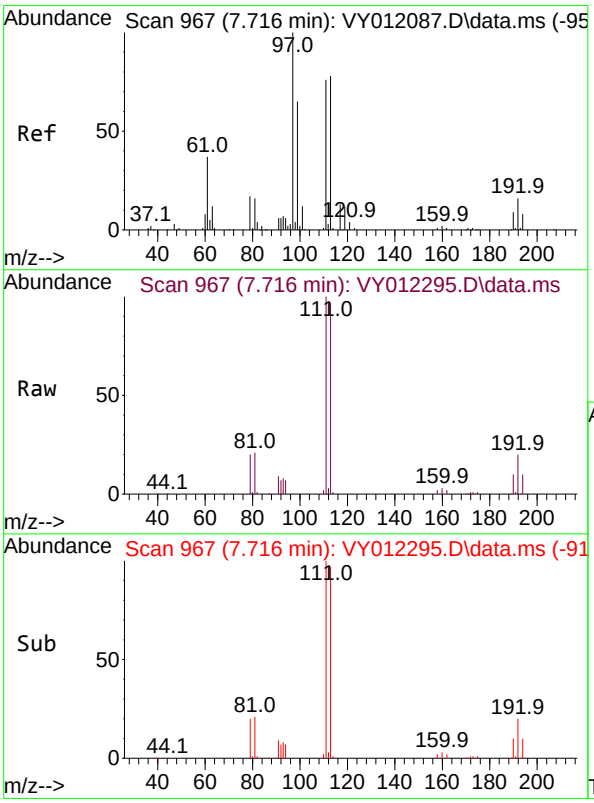
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Tgt Ion:114 Resp: 345925

Ion	Ratio	Lower	Upper
114	100		
63	17.1	0.0	39.6
88	15.0	0.0	32.2

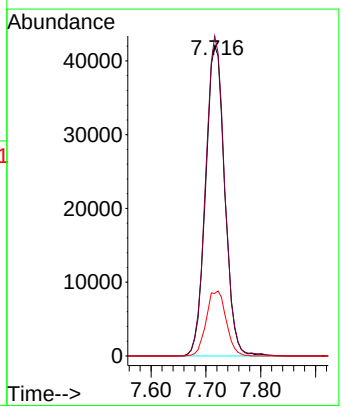


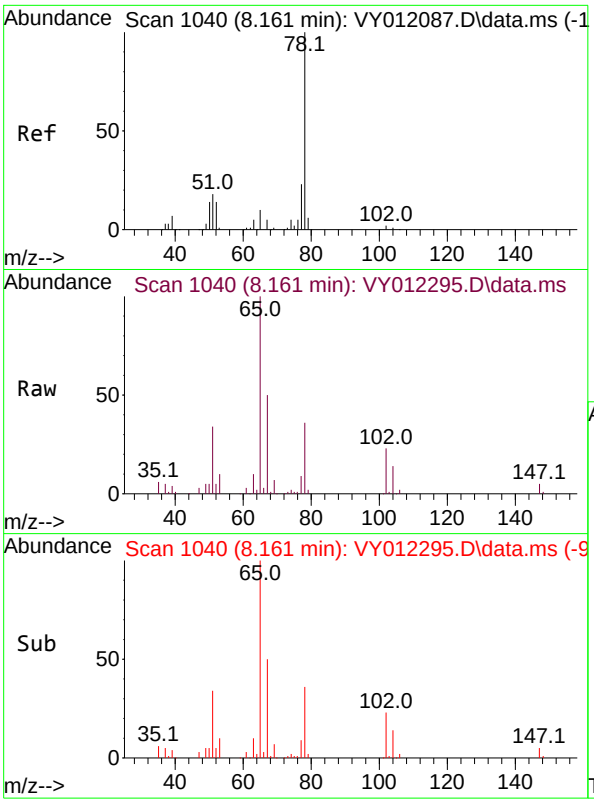


#35
Dibromofluoromethane
Concen: 55.425 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Tgt Ion:113 Resp: 101521

Ion	Ratio	Lower	Upper
113	100		
111	102.7	83.0	124.4
192	21.8	16.0	24.0



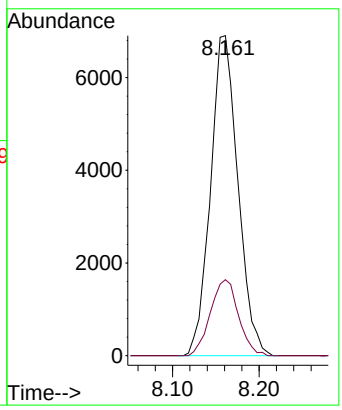


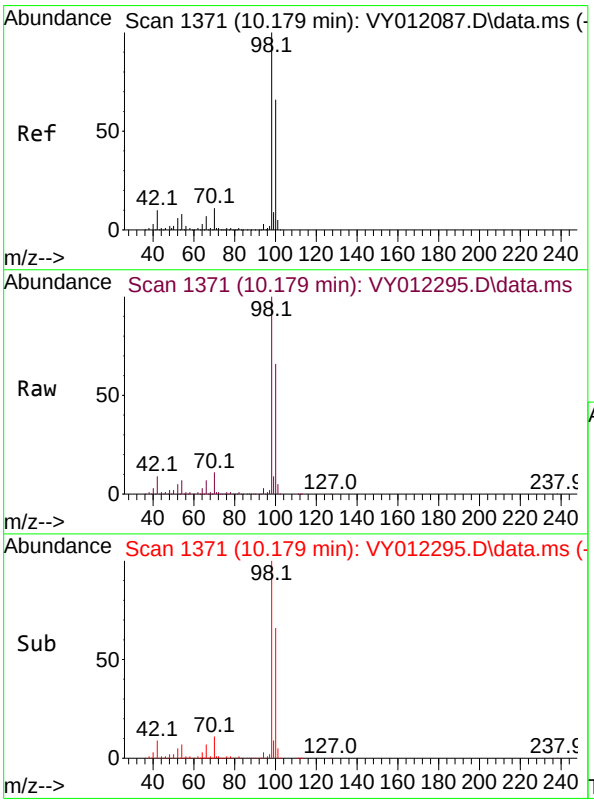
#40
Benzene
Concen: 1.690 ug/l
RT: 8.161 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Tgt Ion: 78 Resp: 15186

Ion	Ratio	Lower	Upper
78	100		
77	23.7	18.6	27.8

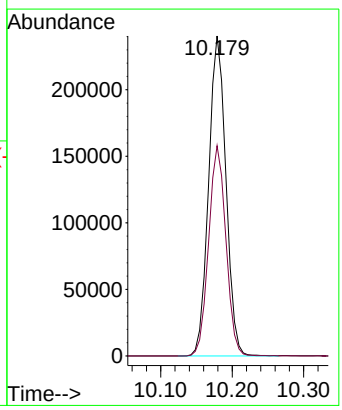


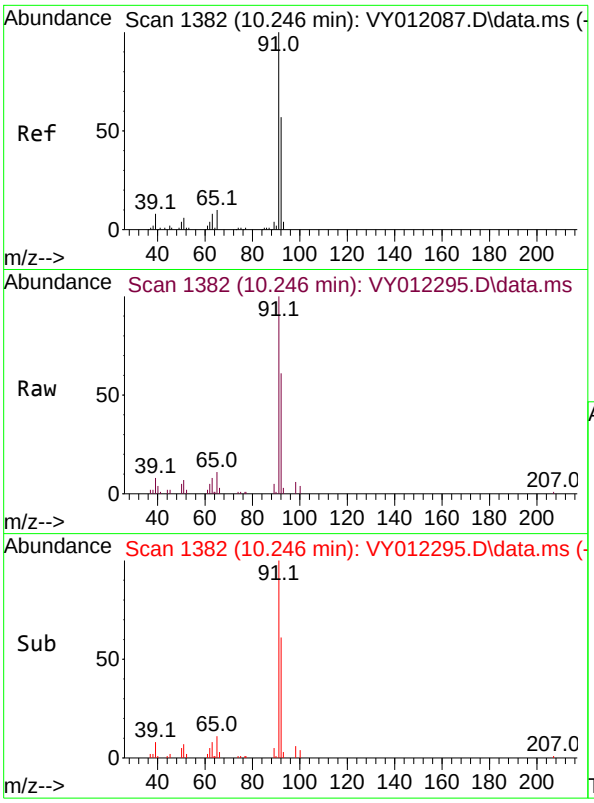


#50
Toluene-d8
Concen: 64.936 ug/l
RT: 10.179 min Scan# 1371
Delta R.T. -0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Tgt Ion: 98 Resp: 403901

Ion	Ratio	Lower	Upper
98	100		
100	65.5	51.9	77.9



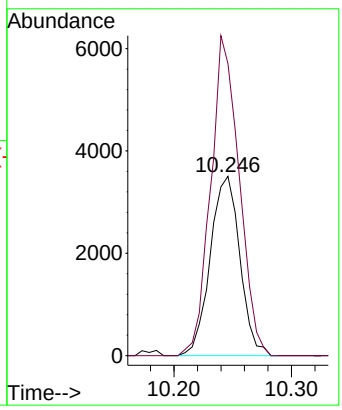


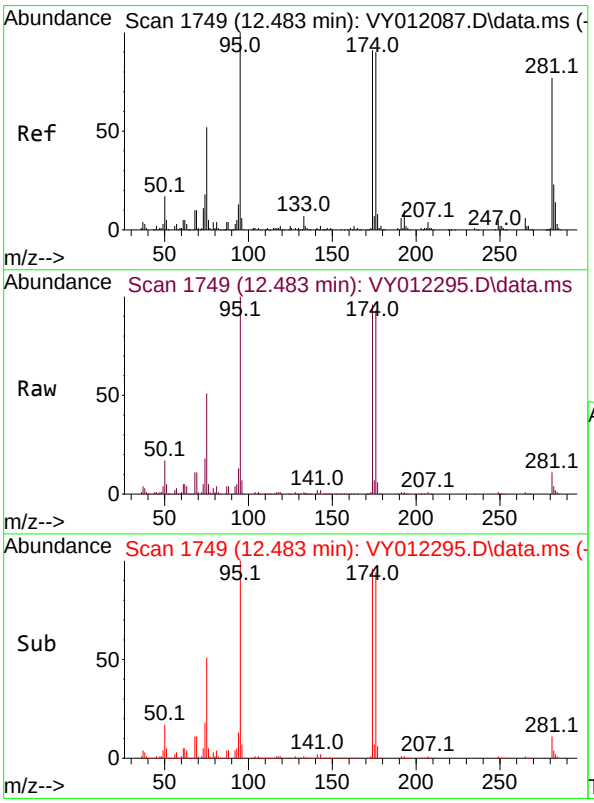
#52
Toluene
Concen: 1.028 ug/l
RT: 10.246 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Tgt Ion: 92 Resp: 6148

Ion	Ratio	Lower	Upper
92	100		
91	171.4	137.4	206.0

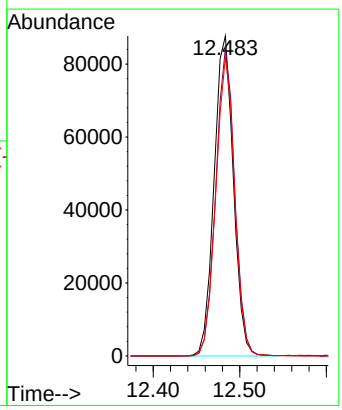


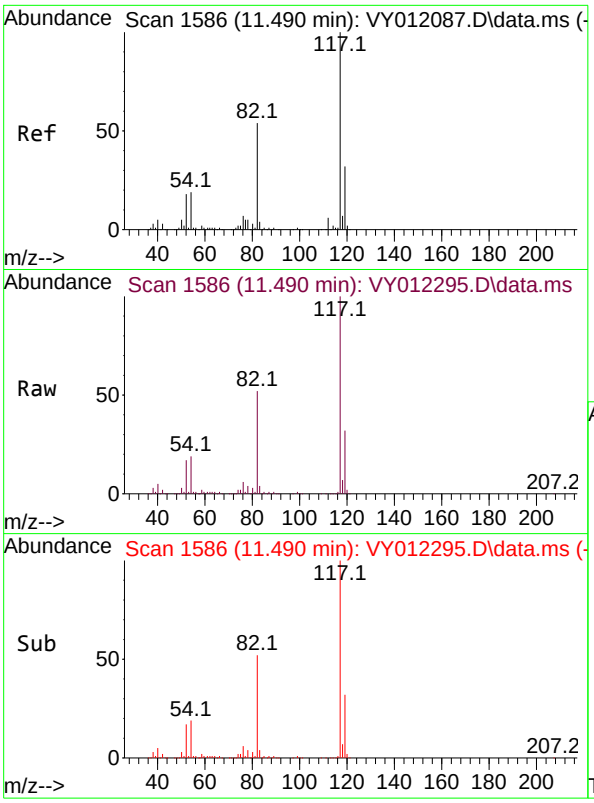


#62
4-Bromofluorobenzene
Concen: 52.600 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Tgt Ion: 95 Resp: 135818

Ion	Ratio	Lower	Upper
95	100		
174	94.4	0.0	172.0
176	91.2	0.0	167.6



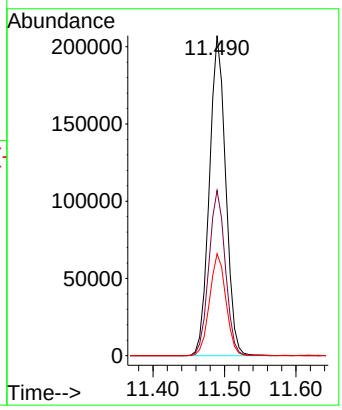


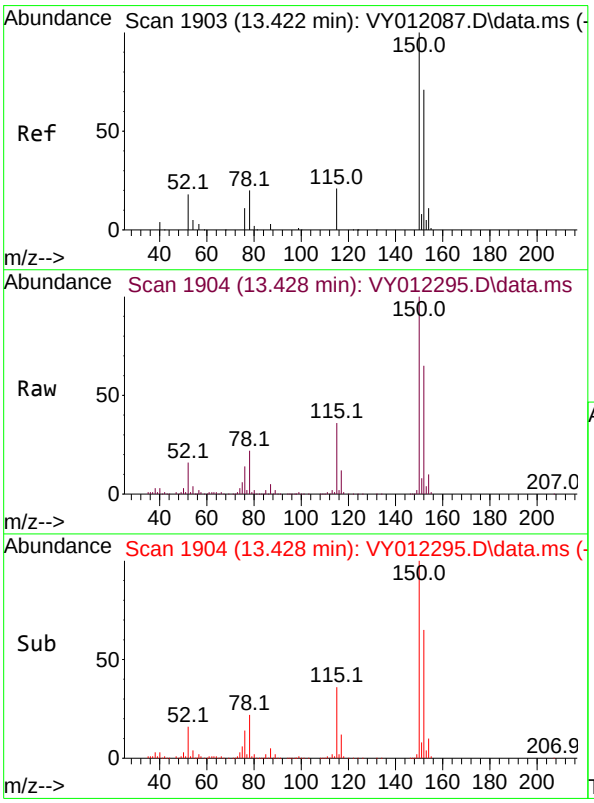
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.490 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Tgt Ion:117 Resp: 328400

Ion	Ratio	Lower	Upper
117	100		
82	51.7	44.8	67.2
119	31.9	25.4	38.2

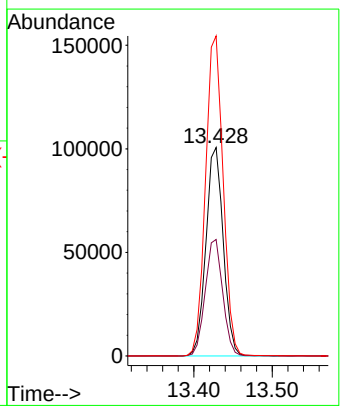




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012295.D
Acq: 20 Jan 2023 17:00

Tgt Ion:152 Resp: 154191

Ion	Ratio	Lower	Upper
152	100		
115	56.5	29.1	87.3
150	156.1	0.0	342.6



Sample Results: **VY012295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012295.D
Acq On : 20 Jan 2023 17:00
Operator : KP/MD
Sample : 01232-05
Misc : 5.03g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012295.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	464	475	489	rBV3	15933	50953	4.96%	0.836%
2	5.753	634	645	656	rBV3	6262	19169	1.86%	0.314%
3	6.972	833	845	861	rBV	32645	99812	9.71%	1.637%
4	7.716	957	967	973	rBV2	143437	348952	33.94%	5.723%
5	7.789	973	979	993	rVB	260372	585033	56.90%	9.594%
6	8.137	1022	1036	1050	rVB3	157022	416571	40.52%	6.832%
7	8.691	1118	1127	1140	rBV	378895	761676	74.08%	12.491%
8	9.185	1198	1208	1215	rBV3	5860	13273	1.29%	0.218%
9	10.179	1363	1371	1378	rBV	609160	1028171	100.00%	16.862%
10	10.240	1378	1381	1389	rVB	14256	24682	2.40%	0.405%
11	10.581	1430	1437	1448	rVB	43480	79310	7.71%	1.301%
12	10.947	1488	1497	1506	rBV	33803	59988	5.83%	0.984%
13	11.319	1552	1558	1564	rVB	14783	24992	2.43%	0.410%
14	11.490	1579	1586	1598	rBV	587119	933963	90.84%	15.317%
15	12.483	1742	1749	1759	rBB2	487142	768870	74.78%	12.609%
16	12.819	1798	1804	1813	rVB3	5017	10523	1.02%	0.173%
17	13.428	1897	1904	1912	rBV	557464	871659	84.78%	14.295%

Sum of corrected areas: 6097597

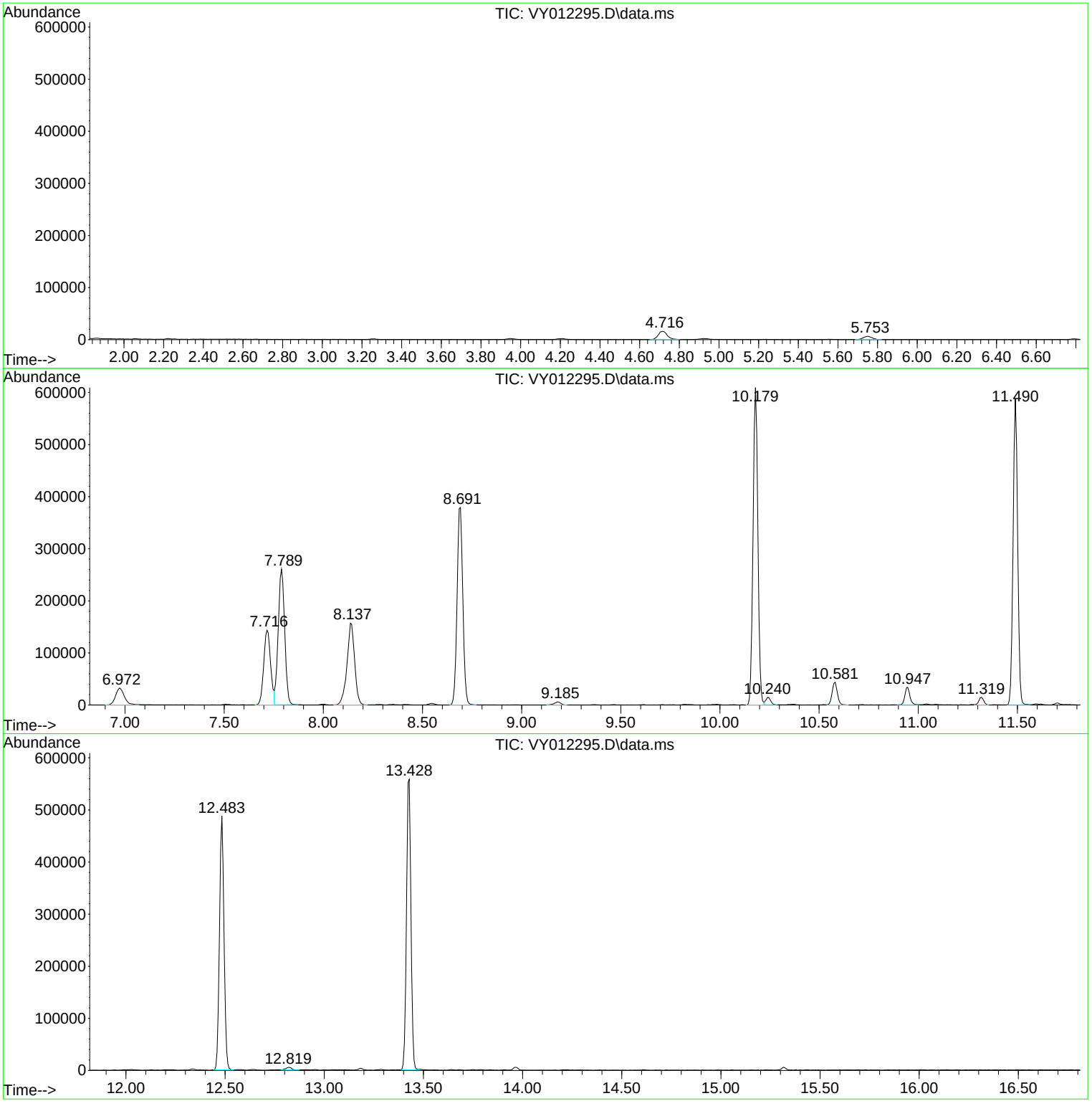
Sample Results: **VY012295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012295.D
Acq On : 20 Jan 2023 17:00
Operator : KP/MD
Sample : 01232-05
Misc : 5.03g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012295.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012295.D
Acq On : 20 Jan 2023 17:00
Operator : KP/MD
Sample : 01232-05
Misc : 5.03g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012295.D
Acq On : 20 Jan 2023 17:00
Operator : KP/MD
Sample : 01232-05
Misc : 5.03g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-18B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P19A	SDG No.:	O1232
Lab Sample ID:	O1232-06	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	88.2
Sample Wt/Vol:	5.07 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
VY012312.D	1		01/23/23 14:37	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.96	U	0.96	5.60	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.60	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.60	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.60	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.60	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.60	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.81	U	0.81	5.60	ug/Kg
75-35-4	1,1-Dichloroethene	0.96	U	0.96	5.60	ug/Kg
67-64-1	Acetone	18.2	J	13.6	28.0	ug/Kg
75-15-0	Carbon Disulfide	0.84	U	0.84	5.60	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.00	U	1.00	5.60	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.60	ug/Kg
75-09-2	Methylene Chloride	6.70	U	6.70	11.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.76	U	0.76	5.60	ug/Kg
75-34-3	1,1-Dichloroethane	0.78	U	0.78	5.60	ug/Kg
110-82-7	Cyclohexane	0.94	U	0.94	5.60	ug/Kg
78-93-3	2-Butanone	8.10	U	8.10	28.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.88	U	0.88	5.60	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.76	U	0.76	5.60	ug/Kg
74-97-5	Bromochloromethane	0.91	U	0.91	5.60	ug/Kg
67-66-3	Chloroform	0.75	U	0.75	5.60	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.84	U	0.84	5.60	ug/Kg
108-87-2	Methylcyclohexane	0.89	U	0.89	5.60	ug/Kg
71-43-2	Benzene	0.74	U	0.74	5.60	ug/Kg
107-06-2	1,2-Dichloroethane	0.94	U	0.94	5.60	ug/Kg
79-01-6	Trichloroethene	0.82	U	0.82	5.60	ug/Kg
78-87-5	1,2-Dichloropropane	0.73	U	0.73	5.60	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.60	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.10	U	5.10	28.0	ug/Kg
108-88-3	Toluene	0.70	U	0.70	5.60	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.83	U	0.83	5.60	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.79	U	0.79	5.60	ug/Kg

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P19A	SDG No.:	O1232
Lab Sample ID:	O1232-06	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	88.2
Sample Wt/Vol:	5.07 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
VY012312.D	1		01/23/23 14:37	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.96	U	0.96	5.60	ug/Kg
591-78-6	2-Hexanone	5.20	U	5.20	28.0	ug/Kg
124-48-1	Dibromochloromethane	0.84	U	0.84	5.60	ug/Kg
106-93-4	1,2-Dibromoethane	0.84	U	0.84	5.60	ug/Kg
127-18-4	Tetrachloroethene	0.85	U	0.85	5.60	ug/Kg
108-90-7	Chlorobenzene	0.73	U	0.73	5.60	ug/Kg
100-41-4	Ethyl Benzene	0.78	U	0.78	5.60	ug/Kg
179601-23-1	m/p-Xylenes	1.70	U	1.70	11.2	ug/Kg
95-47-6	o-Xylene	0.88	U	0.88	5.60	ug/Kg
100-42-5	Styrene	0.88	U	0.88	5.60	ug/Kg
75-25-2	Bromoform	0.91	U	0.91	5.60	ug/Kg
98-82-8	Isopropylbenzene	0.81	U	0.81	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	0.75	U	0.75	5.60	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.70	U	0.70	5.60	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.72	U	0.72	5.60	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.60	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.60	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.60	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	77.5		50 - 163	155%	SPK: 50
1868-53-7	Dibromofluoromethane	57.0		54 - 147	114%	SPK: 50
2037-26-5	Toluene-d8	65.8		58 - 134	132%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.9		30 - 143	108%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	142000	7.789			
540-36-3	1,4-Difluorobenzene	236000	8.691			
3114-55-4	Chlorobenzene-d5	229000	11.49			
3855-82-1	1,4-Dichlorobenzene-d4	108000	13.428			
TENTATIVE IDENTIFIED COMPOUNDS						
	unknown10.947	8.50	J		10.9	ug/Kg

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P19A	SDG No.:	O1232
Lab Sample ID:	O1232-06	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	88.2
Sample Wt/Vol:	5.07 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
VY012312.D	1		01/23/23 14:37	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)

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\VY012323\
Data File : VY012312.D
Acq On : 23 Jan 2023 14:37
Operator : KP/MD
Sample : 01232-06
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Quant Time: Jan 23 15:16:21 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	142002	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	235758	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	228539	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	107729	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	88682	77.507	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 155.020%			
35) Dibromofluoromethane	7.716	113	71176	57.017	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 114.040%			
50) Toluene-d8	10.179	98	278739	65.814	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 131.620%			
62) 4-Bromofluorobenzene	12.483	95	94907	53.931	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 107.860%			
Target Compounds						Qvalue
16) Acetone	3.954	43	6424	16.246	ug/l	95
25) 2-Butanone	6.978	43	2329	5.335	ug/l #	62

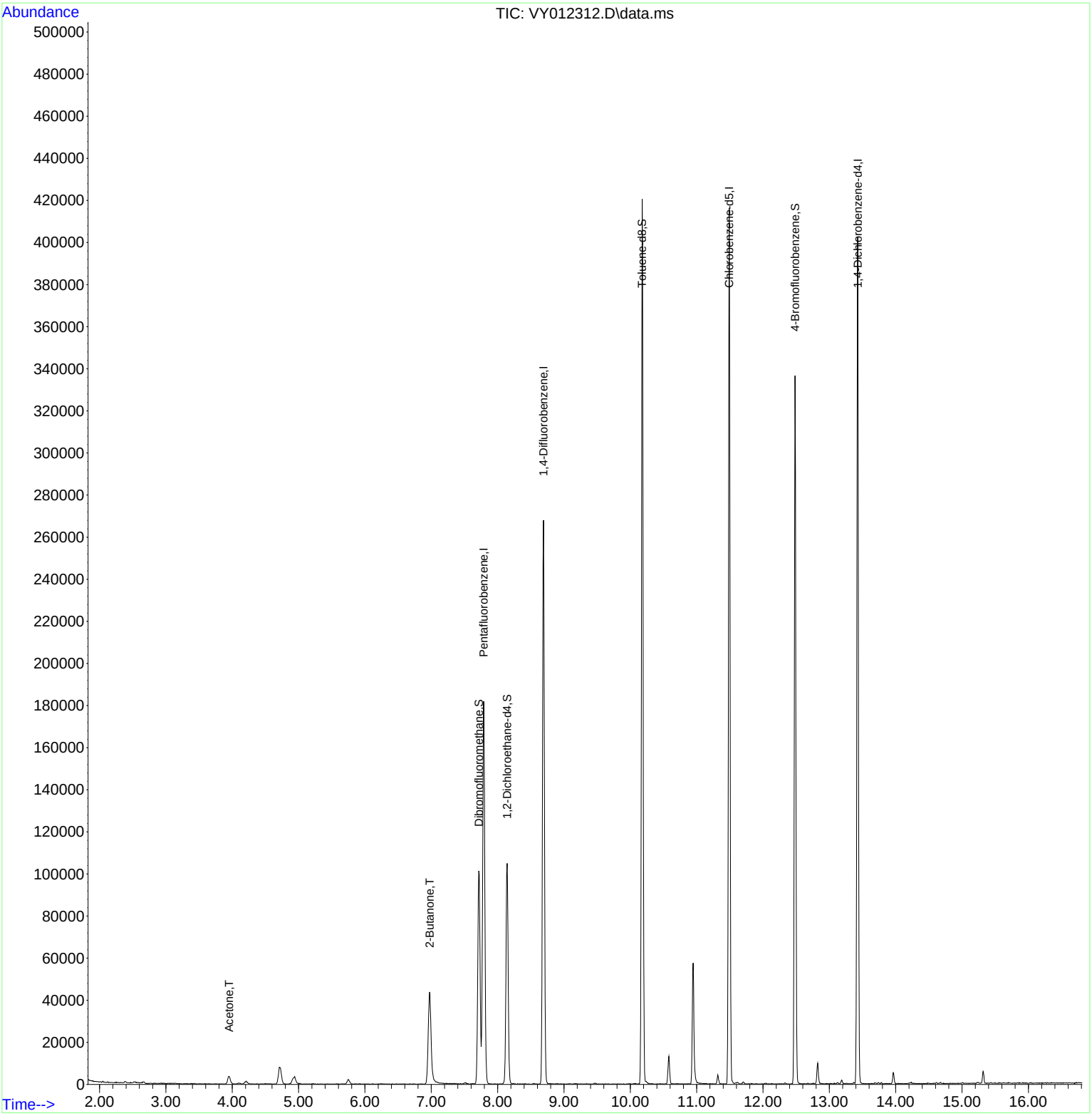
(#) = qualifier out of range (m) = manual integration (+) = signals summed

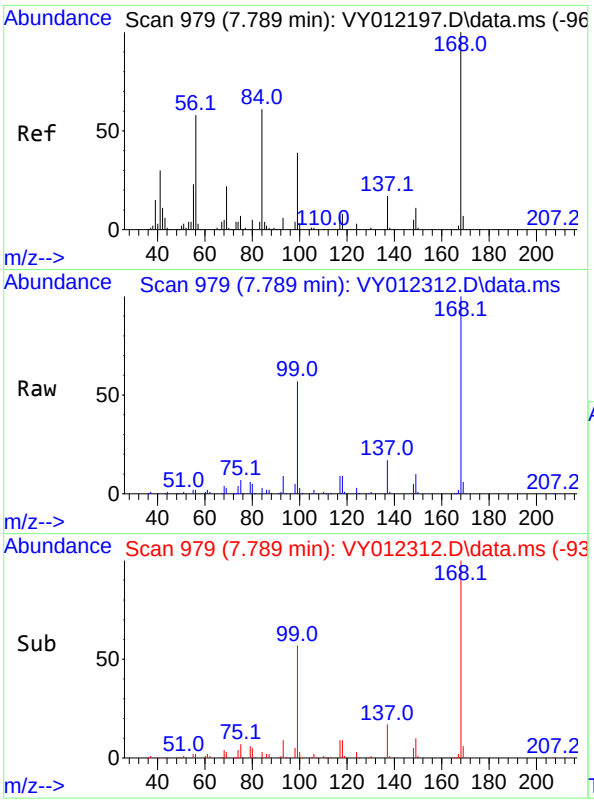
Sample Results: **VY012312.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012312.D
Acq On : 23 Jan 2023 14:37
Operator : KP/MD
Sample : 01232-06
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Quant Time: Jan 23 15:16:21 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



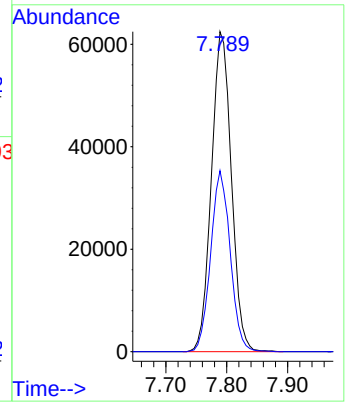


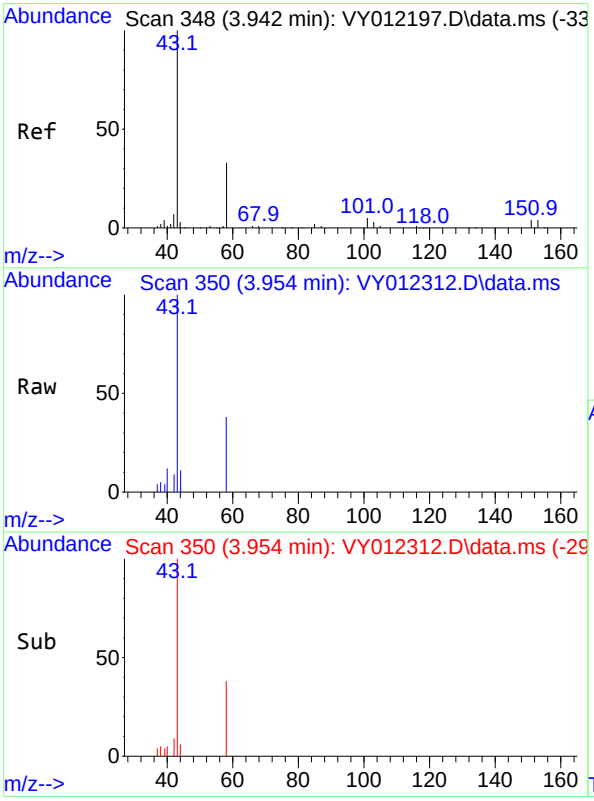
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Tgt Ion:168 Resp: 142002

Ion	Ratio	Lower	Upper
168	100		
99	56.6	44.0	66.0

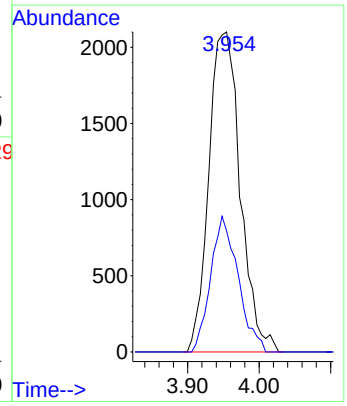


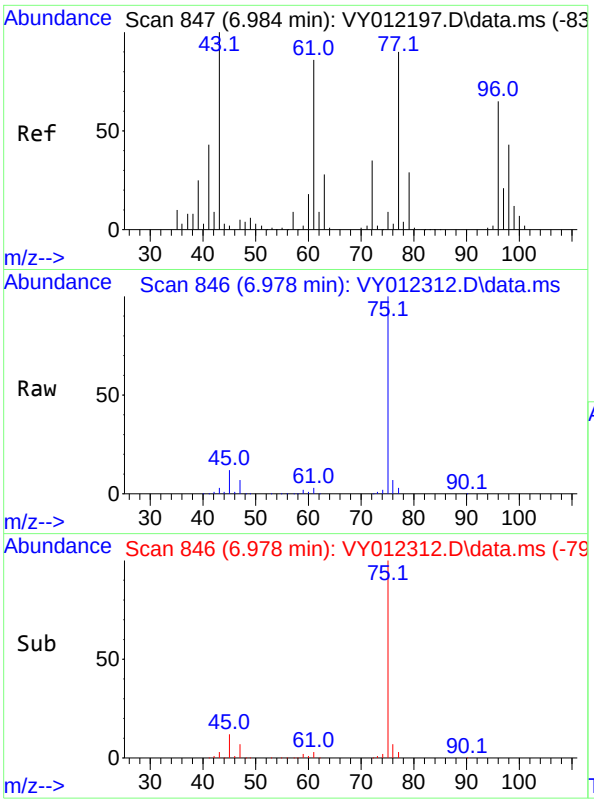


#16
Acetone
Concen: 16.246 ug/l
RT: 3.954 min Scan# 350
Delta R.T. 0.012 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Tgt Ion: 43 Resp: 6424

Ion	Ratio	Lower	Upper
43	100		
58	37.8	27.9	41.9



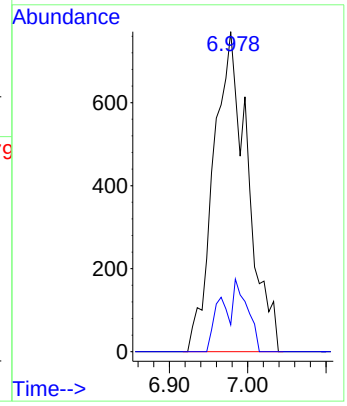


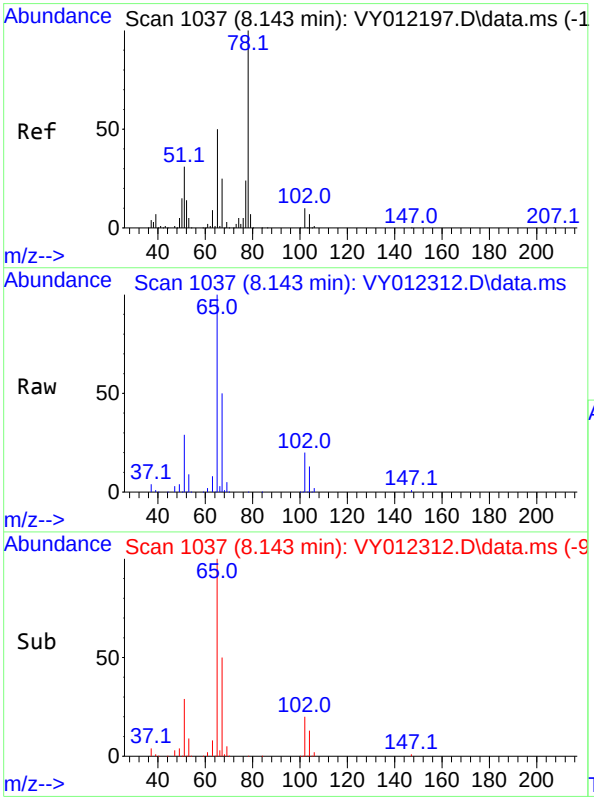
#25
2-Butanone
Concen: 5.335 ug/l
RT: 6.978 min Scan# 84
Delta R.T. -0.006 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Tgt Ion: 43 Resp: 2329

Ion	Ratio	Lower	Upper
43	100		
72	8.4	22.6	34.0#

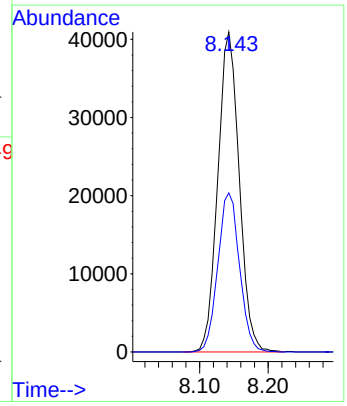


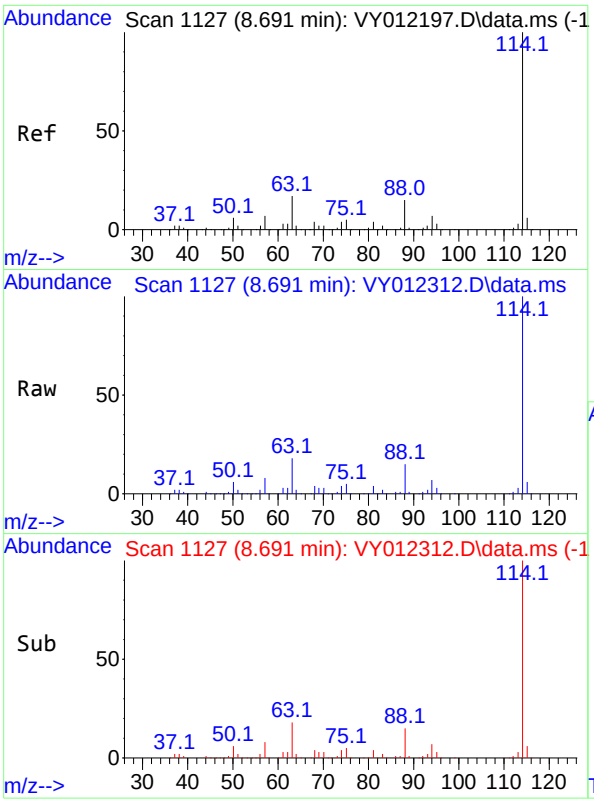


#33
1,2-Dichloroethane-d4
Concen: 77.507 ug/l
RT: 8.143 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Tgt Ion: 65 Resp: 88682

Ion	Ratio	Lower	Upper
65	100		
67	50.3	0.0	103.2



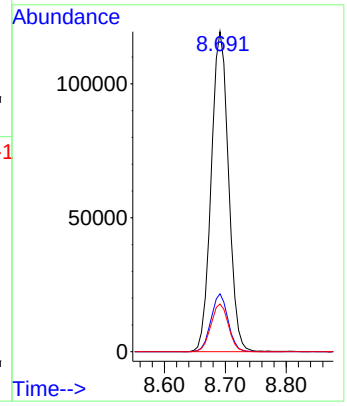


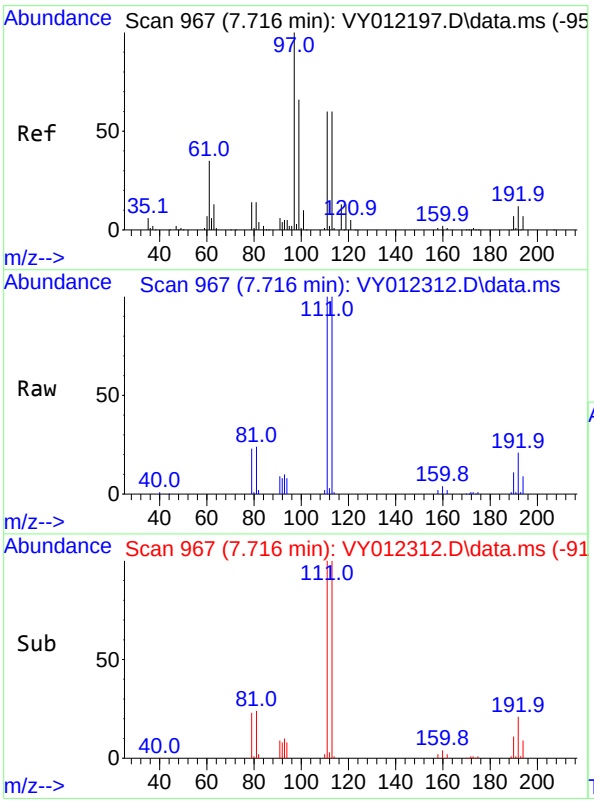
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Tgt Ion:114 Resp: 235758

Ion	Ratio	Lower	Upper
114	100		
63	18.1	0.0	39.6
88	14.9	0.0	32.2

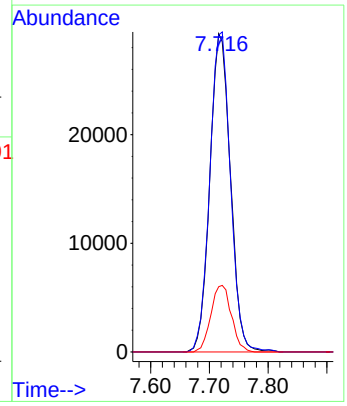


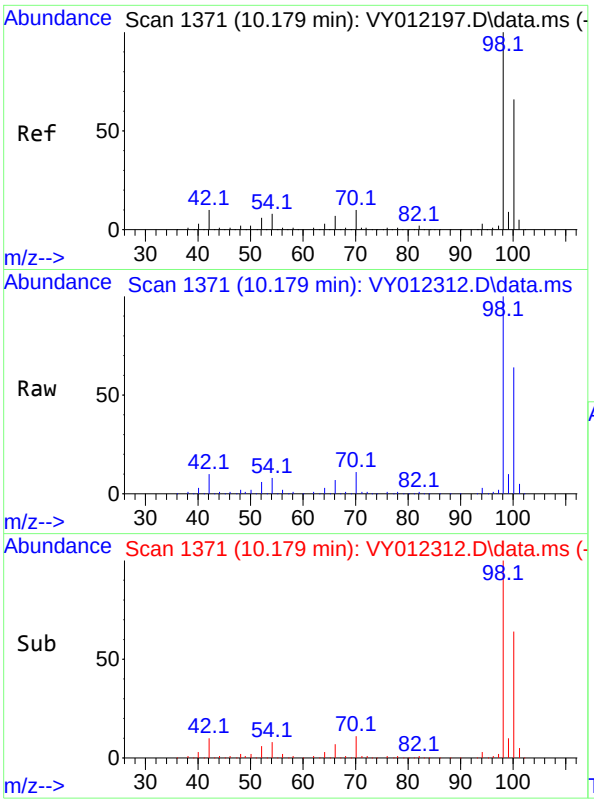


#35
Dibromofluoromethane
Concen: 57.017 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Tgt Ion:113 Resp: 71176

Ion	Ratio	Lower	Upper
113	100		
111	101.0	83.0	124.4
192	20.9	16.0	24.0



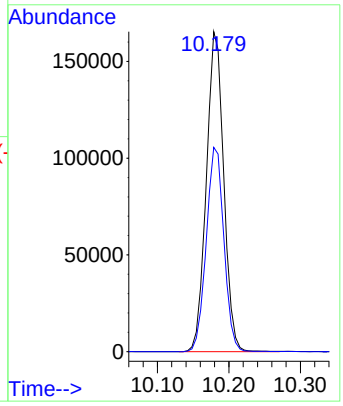


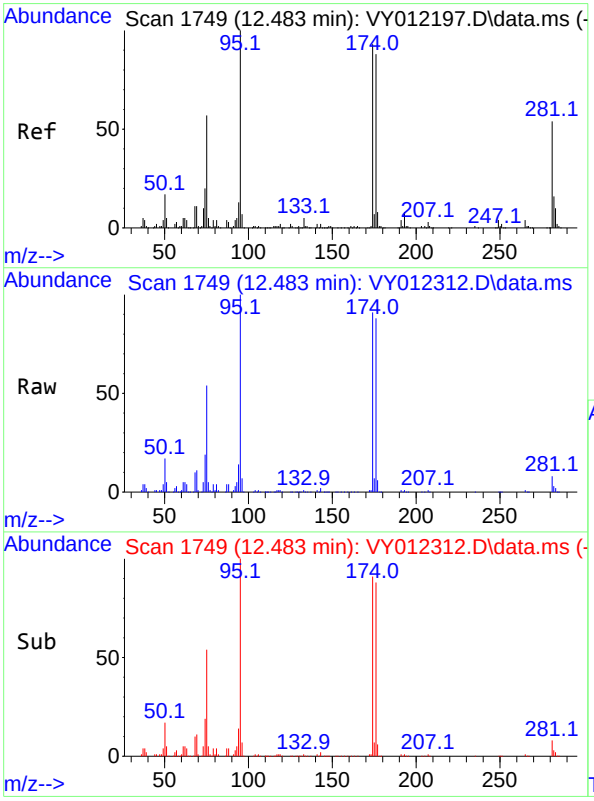
#50
Toluene-d8
Concen: 65.814 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Tgt Ion: 98 Resp: 278739

Ion	Ratio	Lower	Upper
98	100		
100	64.9	51.9	77.9

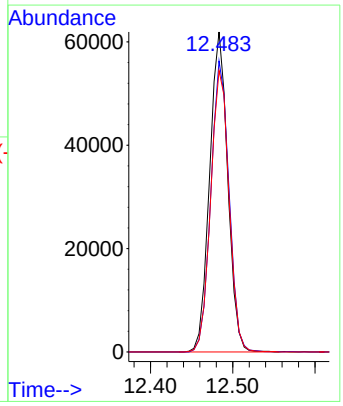


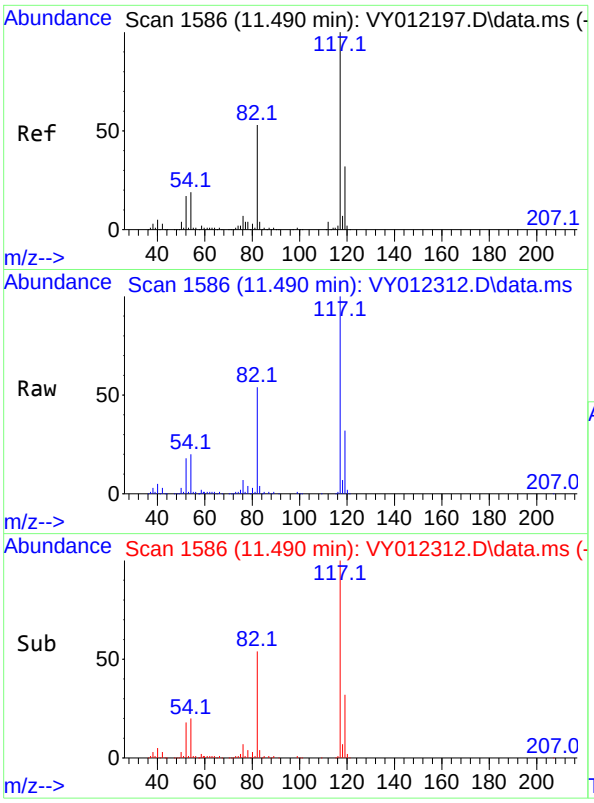


#62
4-Bromofluorobenzene
Concen: 53.931 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Tgt Ion: 95 Resp: 94907

Ion	Ratio	Lower	Upper
95	100		
174	91.0	0.0	172.0
176	89.4	0.0	167.6



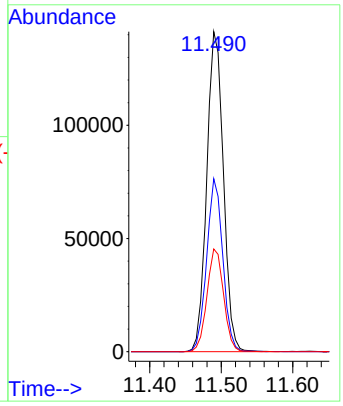


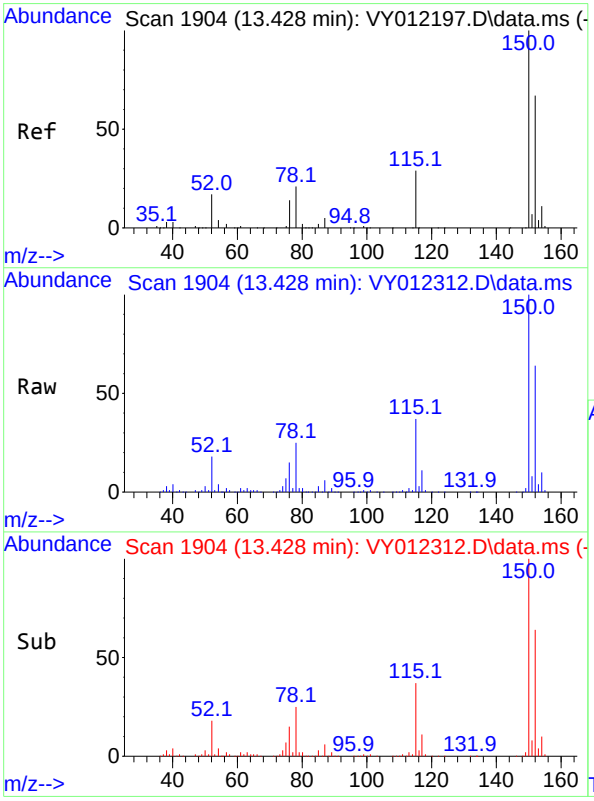
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.490 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Tgt Ion:117 Resp: 228539

Ion	Ratio	Lower	Upper
117	100		
82	54.1	44.8	67.2
119	32.1	25.4	38.2

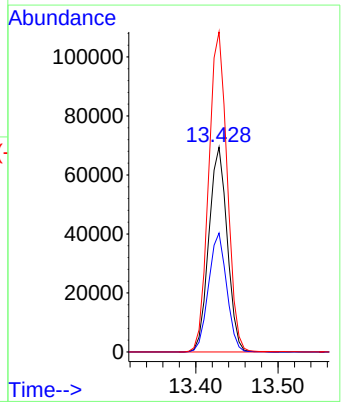




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012312.D
Acq: 23 Jan 2023 14:37

Tgt Ion:152 Resp: 107729

Ion	Ratio	Lower	Upper
152	100		
115	57.4	29.1	87.3
150	157.3	0.0	342.6



Sample Results: **VY012312.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012312.D
Acq On : 23 Jan 2023 14:37
Operator : KP/MD
Sample : 01232-06
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012312.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.948	341	349	362	rBV	3728	10990	1.54%	0.256%
2	4.710	465	474	487	rVB2	8070	25902	3.63%	0.604%
3	4.942	497	512	520	rBV3	3566	12654	1.77%	0.295%
4	6.978	834	846	861	rBV	43655	134663	18.85%	3.139%
5	7.716	956	967	973	rBV	101243	244327	34.21%	5.696%
6	7.789	973	979	994	rVB	181825	409955	57.40%	9.557%
7	8.143	1023	1037	1050	rVB	104899	234722	32.86%	5.472%
8	8.691	1118	1127	1140	rBV	267818	525886	73.63%	12.260%
9	10.179	1364	1371	1379	rBV	420430	714257	100.00%	16.651%
10	10.581	1431	1437	1443	rVB	13049	22122	3.10%	0.516%
11	10.947	1491	1497	1507	rBV	57412	100304	14.04%	2.338%
12	11.490	1579	1586	1599	rBV	416160	663686	92.92%	15.472%
13	12.483	1742	1749	1760	rBV2	336508	531455	74.41%	12.390%
14	12.825	1797	1805	1813	rBV	9899	16562	2.32%	0.386%
15	13.428	1897	1904	1911	rBV	402117	625044	87.51%	14.572%
16	13.965	1986	1992	1999	rVB2	5322	8762	1.23%	0.204%
17	15.318	2210	2214	2219	rVB	5591	8205	1.15%	0.191%

Sum of corrected areas: 4289496

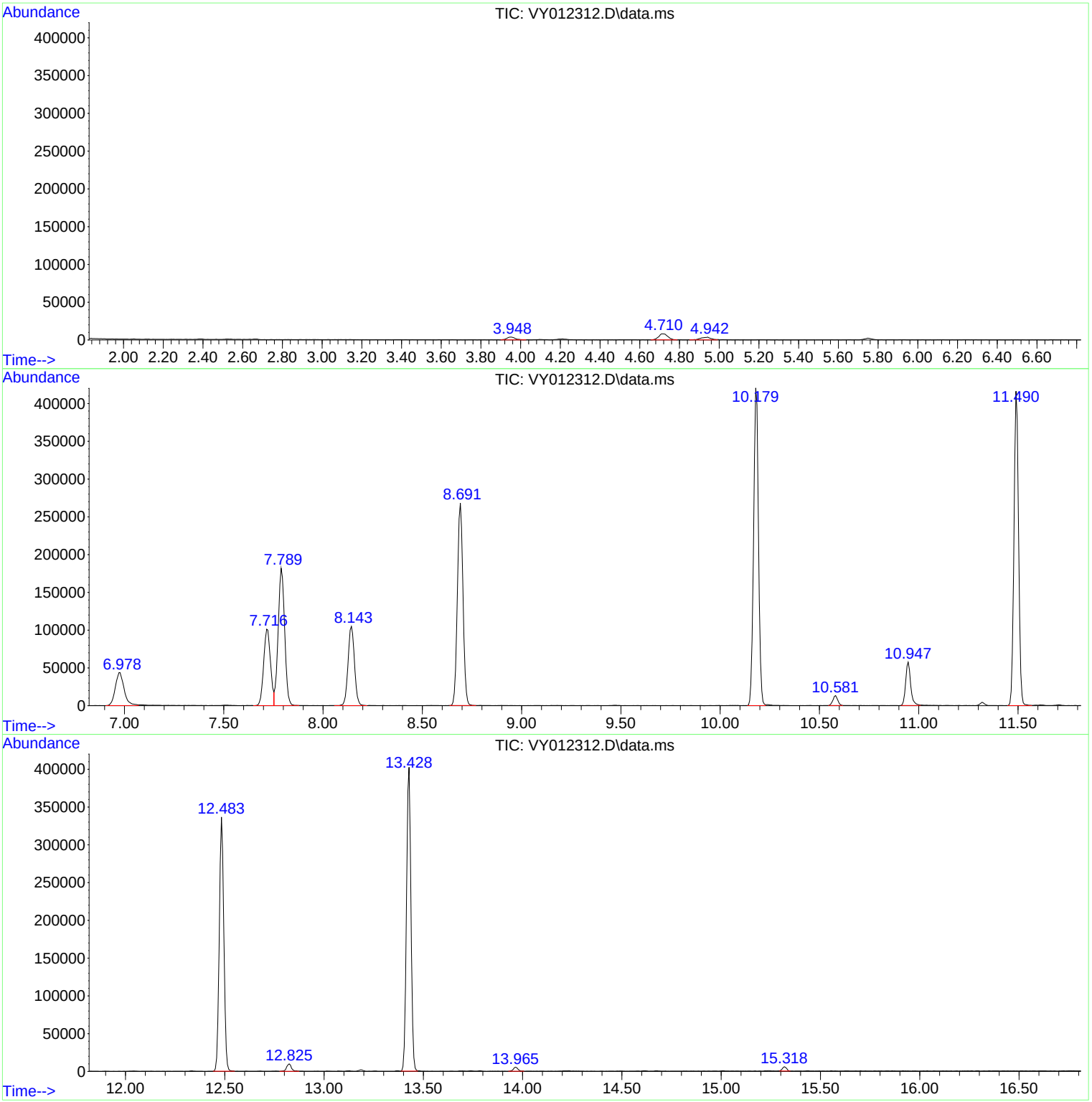
Sample Results: **VY012312.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012312.D
Acq On : 23 Jan 2023 14:37
Operator : KP/MD
Sample : 01232-06
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012312.D
Acq On : 23 Jan 2023 14:37
Operator : KP/MD
Sample : 01232-06
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

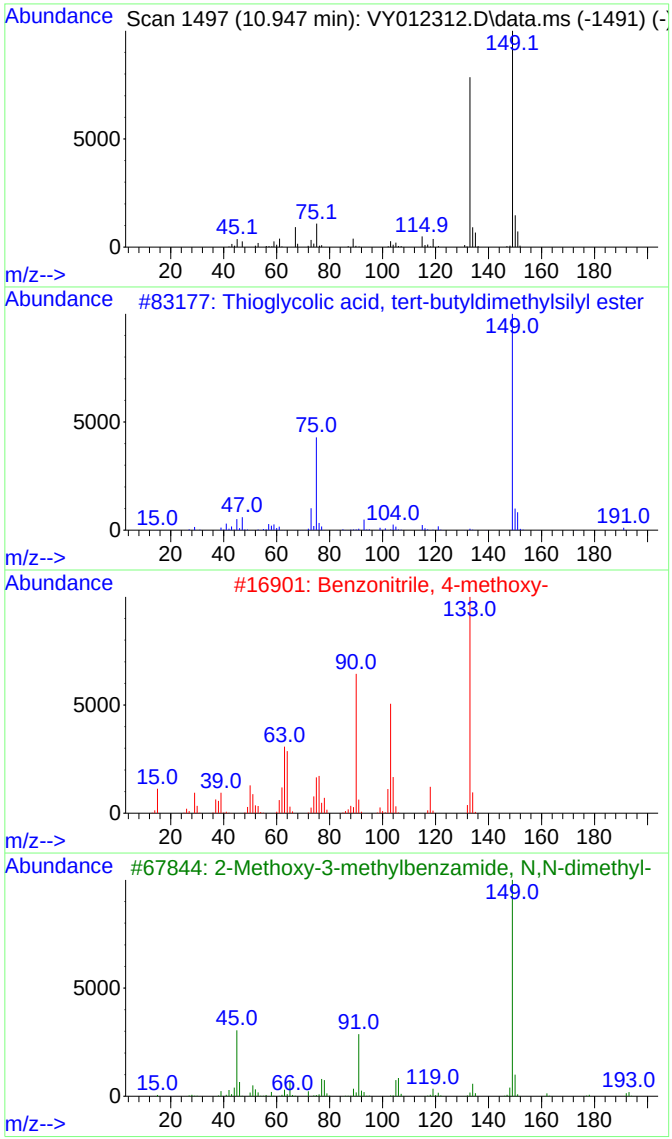
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

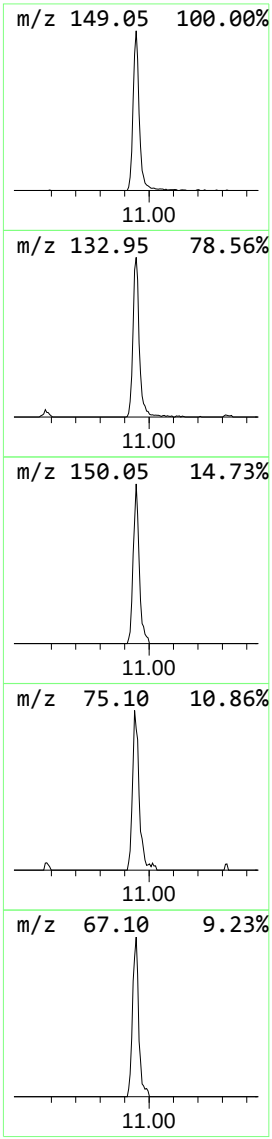
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 unknown10.947 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.947	7.56 ug/l	100304	Chlorobenzene-d5	11.490

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thioglycolic acid, tert-butyldim...	206	C8H18O2SSi	1000476-01-2	25
2	Benzonitrile, 4-methoxy-	133	C8H7NO	000874-90-8	25
3	2-Methoxy-3-methylbenzamide, N,N...	193	C11H15NO2	1369798-01-5	23
4	1H-Indole-3-thiol	149	C8H7NS	000480-94-4	17
5	1,2-Benzenediol, O,O'-di(4-ethyl...	374	C24H22O4	1000325-97-5	17





Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012312.D
Acq On : 23 Jan 2023 14:37
Operator : KP/MD
Sample : 01232-06
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown10.947	10.947	7.6	ug/l	100304	3	11.490	663686	50.0

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P19B	SDG No.:	O1232
Lab Sample ID:	O1232-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	88
Sample Wt/Vol:	5.02 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
VY012297.D	1		01/20/23 17:46	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.97	U	0.97	5.70	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.70	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.70	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.70	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.70	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.70	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.81	U	0.81	5.70	ug/Kg
75-35-4	1,1-Dichloroethene	0.97	U	0.97	5.70	ug/Kg
67-64-1	Acetone	24.1	J	13.8	28.3	ug/Kg
75-15-0	Carbon Disulfide	0.85	U	0.85	5.70	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.10	U	1.10	5.70	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.70	ug/Kg
75-09-2	Methylene Chloride	6.70	U	6.70	11.3	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.77	U	0.77	5.70	ug/Kg
75-34-3	1,1-Dichloroethane	0.79	U	0.79	5.70	ug/Kg
110-82-7	Cyclohexane	0.95	U	0.95	5.70	ug/Kg
78-93-3	2-Butanone	8.20	U	8.20	28.3	ug/Kg
56-23-5	Carbon Tetrachloride	0.89	U	0.89	5.70	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.77	U	0.77	5.70	ug/Kg
74-97-5	Bromochloromethane	0.92	U	0.92	5.70	ug/Kg
67-66-3	Chloroform	0.76	U	0.76	5.70	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.85	U	0.85	5.70	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.70	ug/Kg
71-43-2	Benzene	0.75	U	0.75	5.70	ug/Kg
107-06-2	1,2-Dichloroethane	0.95	U	0.95	5.70	ug/Kg
79-01-6	Trichloroethene	0.83	U	0.83	5.70	ug/Kg
78-87-5	1,2-Dichloropropane	0.74	U	0.74	5.70	ug/Kg
75-27-4	Bromodichloromethane	0.79	U	0.79	5.70	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.20	U	5.20	28.3	ug/Kg
108-88-3	Toluene	0.71	U	0.71	5.70	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.84	U	0.84	5.70	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.80	U	0.80	5.70	ug/Kg

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P19B	SDG No.:	O1232
Lab Sample ID:	O1232-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	88
Sample Wt/Vol:	5.02 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
VY012297.D	1		01/20/23 17:46	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.97	U	0.97	5.70	ug/Kg
591-78-6	2-Hexanone	5.30	U	5.30	28.3	ug/Kg
124-48-1	Dibromochloromethane	0.85	U	0.85	5.70	ug/Kg
106-93-4	1,2-Dibromoethane	0.85	U	0.85	5.70	ug/Kg
127-18-4	Tetrachloroethene	0.86	U	0.86	5.70	ug/Kg
108-90-7	Chlorobenzene	0.74	U	0.74	5.70	ug/Kg
100-41-4	Ethyl Benzene	0.79	U	0.79	5.70	ug/Kg
179601-23-1	m/p-Xylenes	1.70	U	1.70	11.3	ug/Kg
95-47-6	o-Xylene	0.89	U	0.89	5.70	ug/Kg
100-42-5	Styrene	0.89	U	0.89	5.70	ug/Kg
75-25-2	Bromoform	0.92	U	0.92	5.70	ug/Kg
98-82-8	Isopropylbenzene	0.81	U	0.81	5.70	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.70	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.76	U	0.76	5.70	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.71	U	0.71	5.70	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.72	U	0.72	5.70	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.70	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.10	U	1.10	5.70	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.70	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.1		50 - 163	110%	SPK: 50
1868-53-7	Dibromofluoromethane	54.4		54 - 147	109%	SPK: 50
2037-26-5	Toluene-d8	64.4		58 - 134	129%	SPK: 50
460-00-4	4-Bromofluorobenzene	41.6		30 - 143	83%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	63400	7.789			
540-36-3	1,4-Difluorobenzene	94000	8.691			
3114-55-4	Chlorobenzene-d5	80500	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	33200	13.428			

Raw Data: **VY012297.D**

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P19B	SDG No.:	O1232
Lab Sample ID:	O1232-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	88
Sample Wt/Vol:	5.02 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
VY012297.D	1		01/20/23 17:46	VY012023

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\VY012023\
Data File : VY012297.D
Acq On : 20 Jan 2023 17:46
Operator : KP/MD
Sample : 01232-07
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Quant Time: Jan 23 02:23:43 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

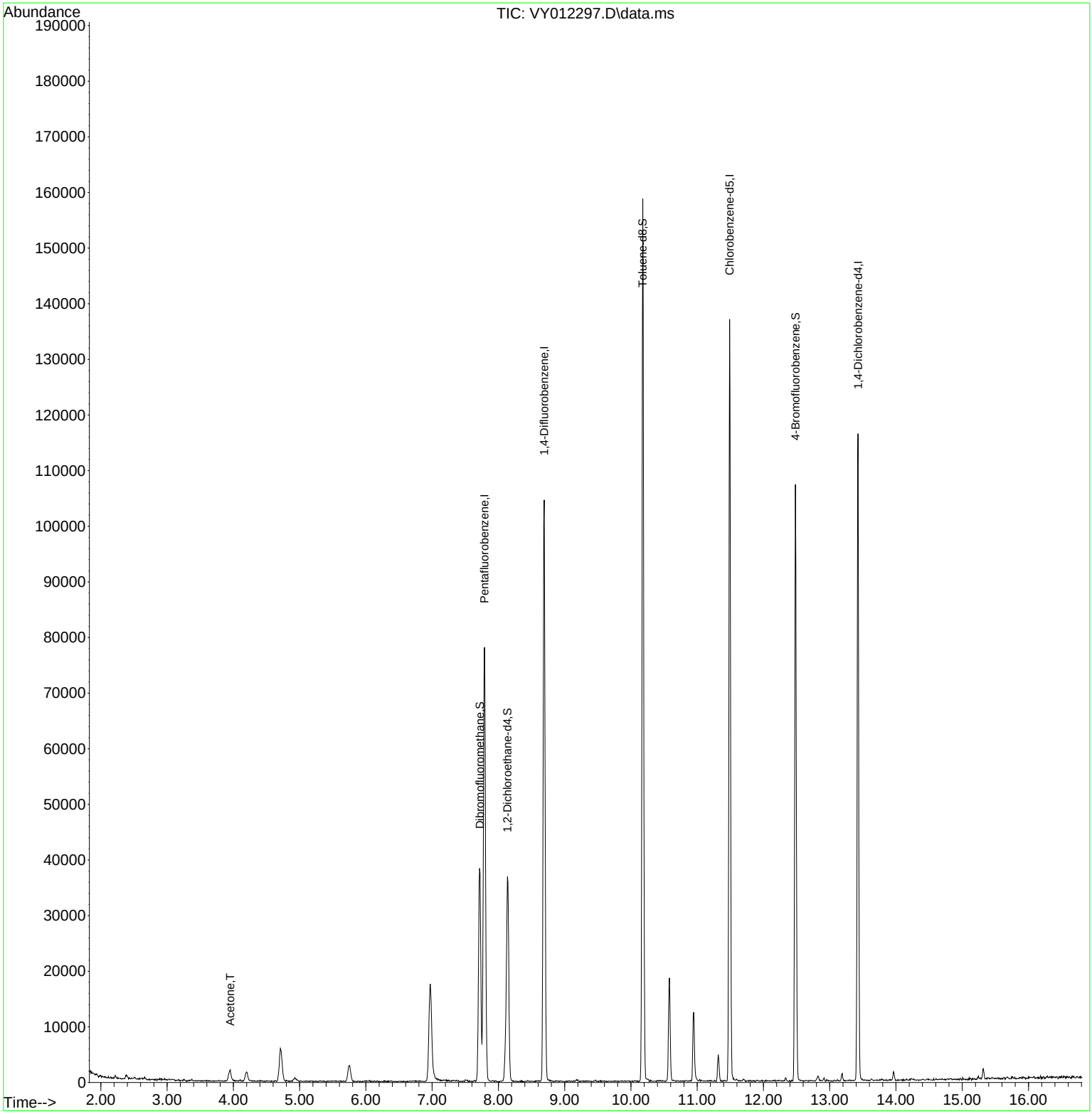
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	63421	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	93969	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	80473	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	33154	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.136	65	28763	55.117	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 110.240%			
35) Dibromofluoromethane	7.722	113	27052	54.369	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 108.740%			
50) Toluene-d8	10.179	98	108824	64.369	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 128.740%			
62) 4-Bromofluorobenzene	12.483	95	29180	41.602	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 83.200%			
Target Compounds						Qvalue
16) Acetone	3.954	43	3758	21.280	ug/l	90

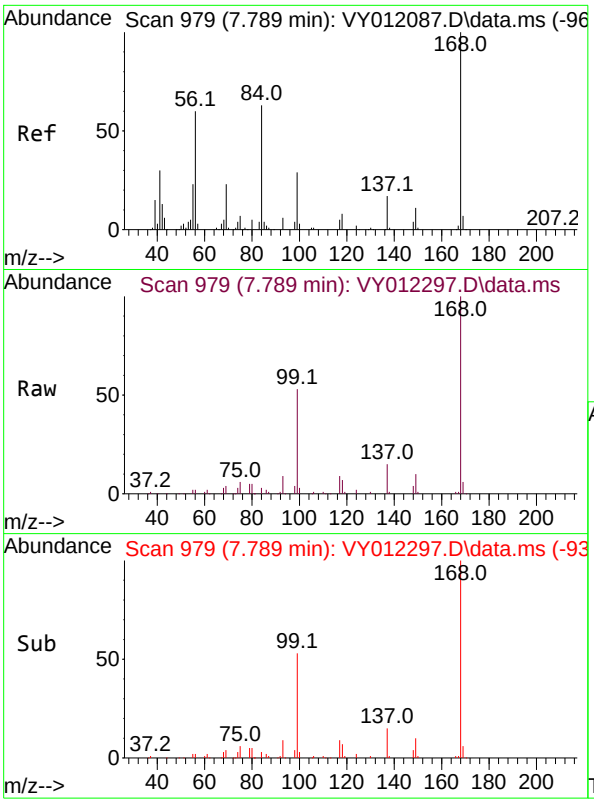
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012297.D
Acq On : 20 Jan 2023 17:46
Operator : KP/MD
Sample : 01232-07
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Quant Time: Jan 23 02:23:43 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



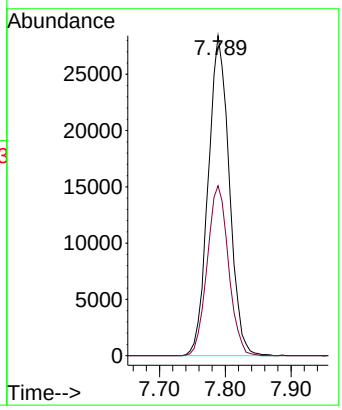


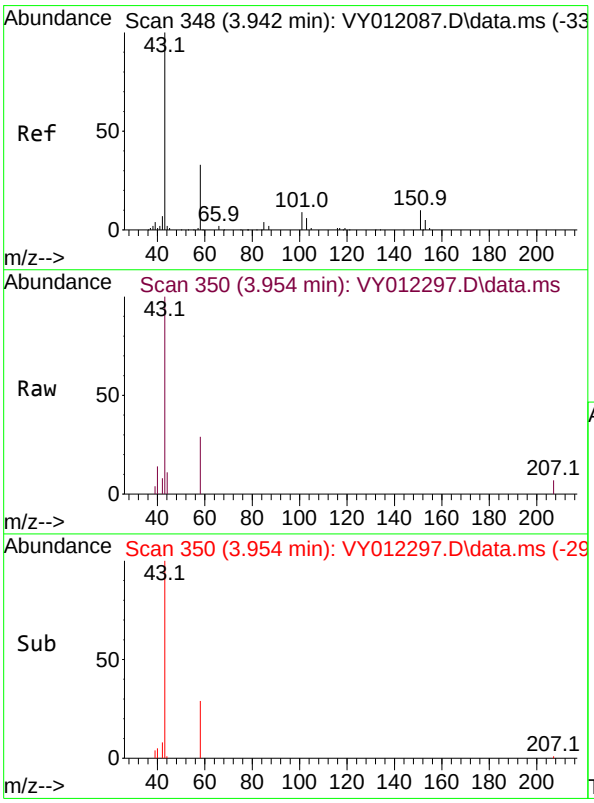
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Tgt Ion:168 Resp: 63421

Ion	Ratio	Lower	Upper
168	100		
99	53.1	44.0	66.0

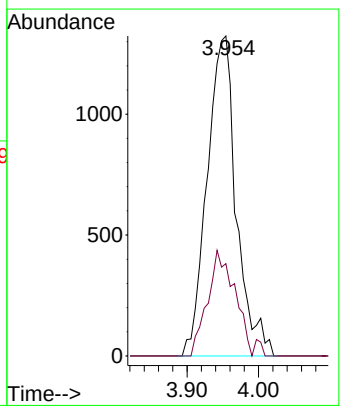


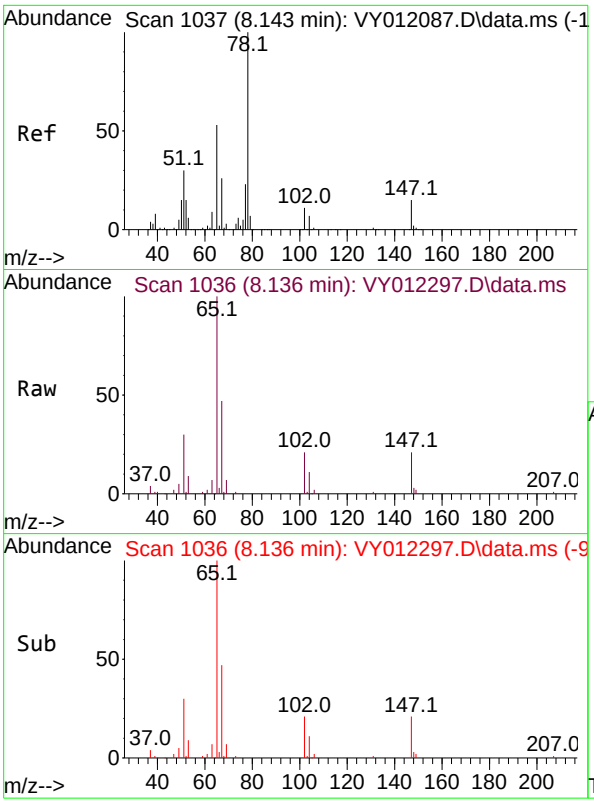


#16
Acetone
Concen: 21.280 ug/l
RT: 3.954 min Scan# 350
Delta R.T. 0.012 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Tgt Ion: 43 Resp: 3758

Ion	Ratio	Lower	Upper
43	100		
58	28.9	27.9	41.9



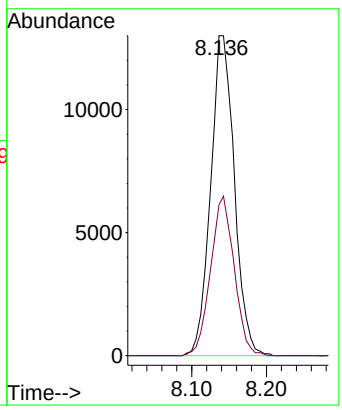


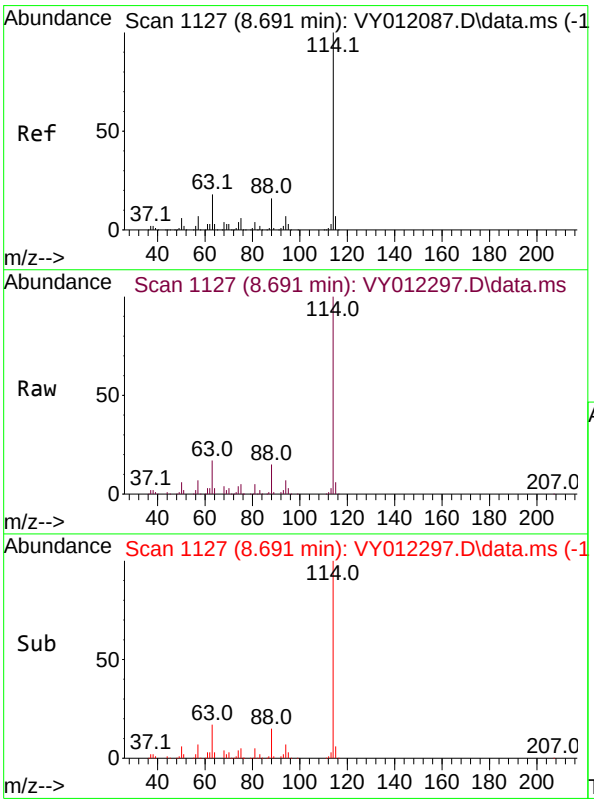
#33
1,2-Dichloroethane-d4
Concen: 55.117 ug/l
RT: 8.136 min Scan# 1
Delta R.T. -0.007 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Tgt Ion: 65 Resp: 28763

Ion	Ratio	Lower	Upper
65	100		
67	49.7	0.0	103.2

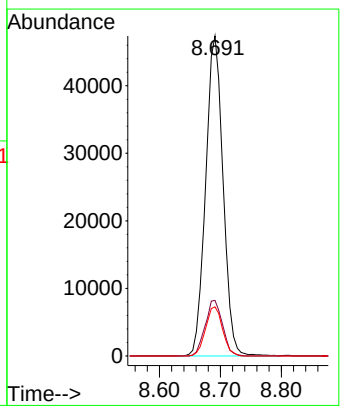


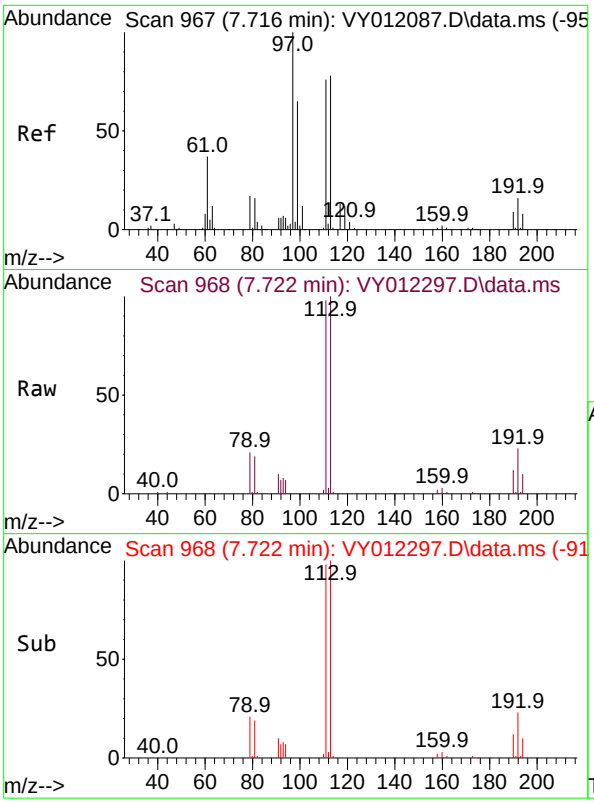


#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 1127
Delta R.T. 0.000 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Tgt Ion:114 Resp: 93969

Ion	Ratio	Lower	Upper
114	100		
63	17.3	0.0	39.6
88	15.4	0.0	32.2



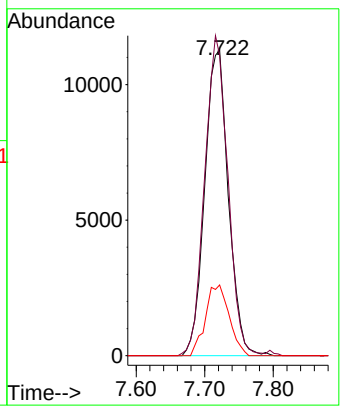


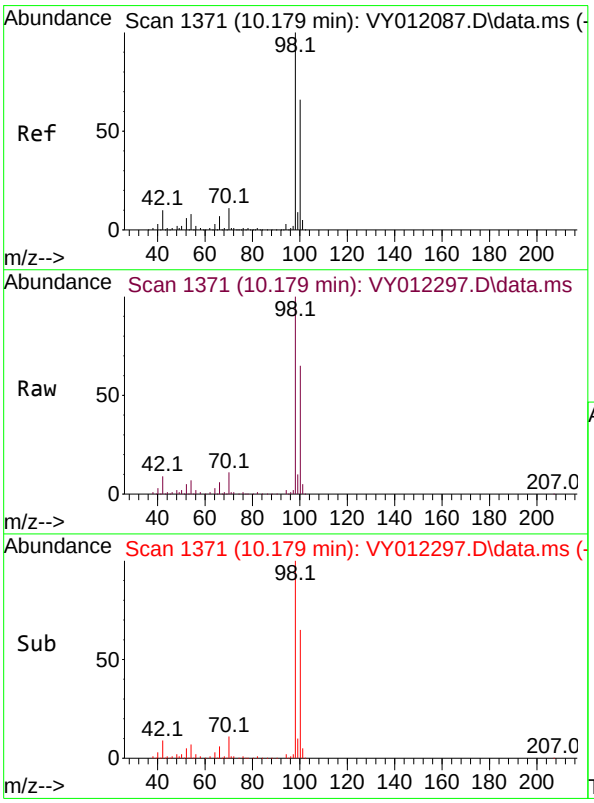
#35
Dibromofluoromethane
Concen: 54.369 ug/l
RT: 7.722 min Scan# 9
Delta R.T. 0.006 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Tgt Ion:113 Resp: 27052

Ion	Ratio	Lower	Upper
113	100		
111	102.6	83.0	124.4
192	23.2	16.0	24.0

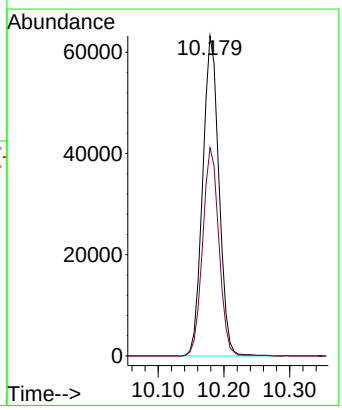


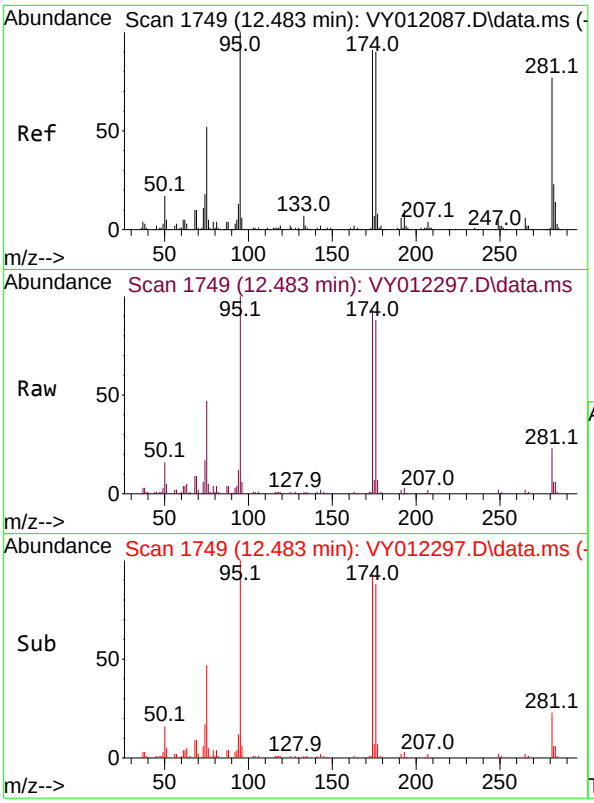


#50
Toluene-d8
Concen: 64.369 ug/l
RT: 10.179 min Scan# 1371
Delta R.T. -0.000 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Tgt Ion: 98 Resp: 108824

Ion	Ratio	Lower	Upper
98	100		
100	65.1	51.9	77.9



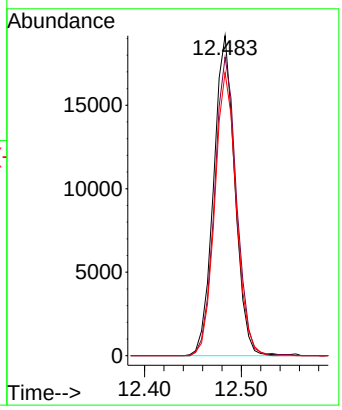


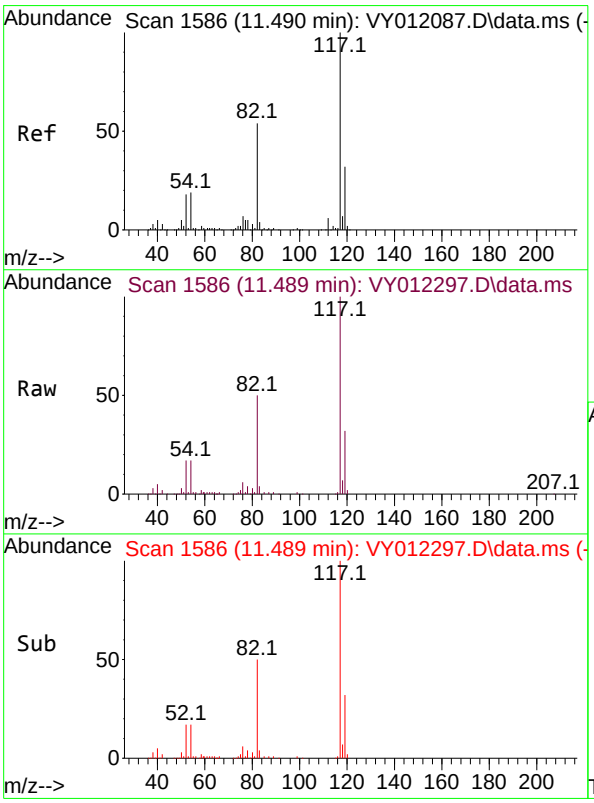
#62
4-Bromofluorobenzene
Concen: 41.602 ug/l
RT: 12.483 min Scan# 1
Delta R.T. 0.000 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Tgt Ion: 95 Resp: 29180

Ion	Ratio	Lower	Upper
95	100		
174	96.9	0.0	172.0
176	89.7	0.0	167.6

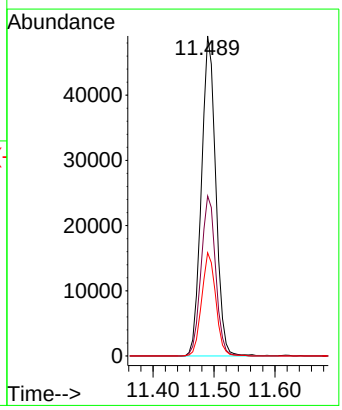


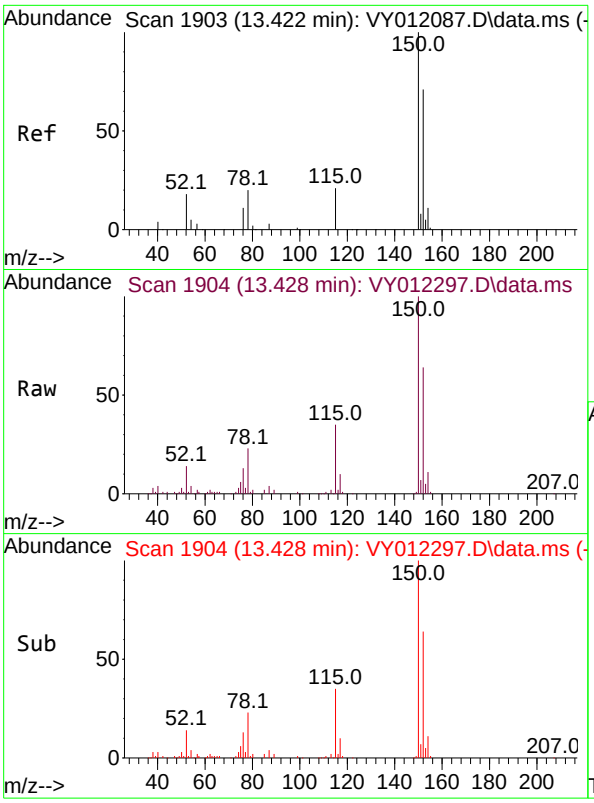


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1586
Delta R.T. -0.001 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Tgt Ion:117 Resp: 80473

Ion	Ratio	Lower	Upper
117	100		
82	50.0	44.8	67.2
119	32.2	25.4	38.2



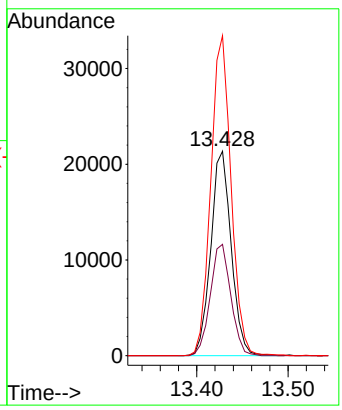


#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1
Delta R.T. 0.006 min
Lab File: VY012297.D
Acq: 20 Jan 2023 17:46

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Tgt Ion:152 Resp: 33154

Ion	Ratio	Lower	Upper
152	100		
115	54.7	29.1	87.3
150	155.6	0.0	342.6



Sample Results: **VY012297.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012297.D
Acq On : 20 Jan 2023 17:46
Operator : KP/MD
Sample : 01232-07
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012297.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.954	339	350	356	rBV2	2035	5479	2.01%	0.346%
2	4.198	382	390	397	rBV3	1652	4459	1.63%	0.281%
3	4.710	465	474	487	rVB4	5941	18009	6.59%	1.136%
4	5.753	635	645	654	rBV4	2909	8850	3.24%	0.558%
5	6.972	835	845	858	rBV	17406	52999	19.40%	3.344%
6	7.716	957	967	973	rBV	38293	92806	33.97%	5.856%
7	7.789	973	979	993	rVB2	77997	177078	64.82%	11.174%
8	8.136	1025	1036	1047	rBV3	36669	94683	34.66%	5.975%
9	8.691	1116	1127	1136	rBV	104577	206473	75.58%	13.029%
10	10.179	1363	1371	1379	rBV	158680	273199	100.00%	17.240%
11	10.581	1427	1437	1444	rBV2	18692	33876	12.40%	2.138%
12	10.947	1491	1497	1509	rBV	12350	22211	8.13%	1.402%
13	11.319	1553	1558	1564	rBV	4832	8254	3.02%	0.521%
14	11.489	1579	1586	1599	rBV	136960	224954	82.34%	14.196%
15	12.483	1742	1749	1758	rBV2	107282	176874	64.74%	11.161%
16	13.428	1894	1904	1914	rBV	116344	181566	66.46%	11.458%
17	15.318	2209	2214	2218	rBV2	1864	2910	1.07%	0.184%

Sum of corrected areas: 1584680

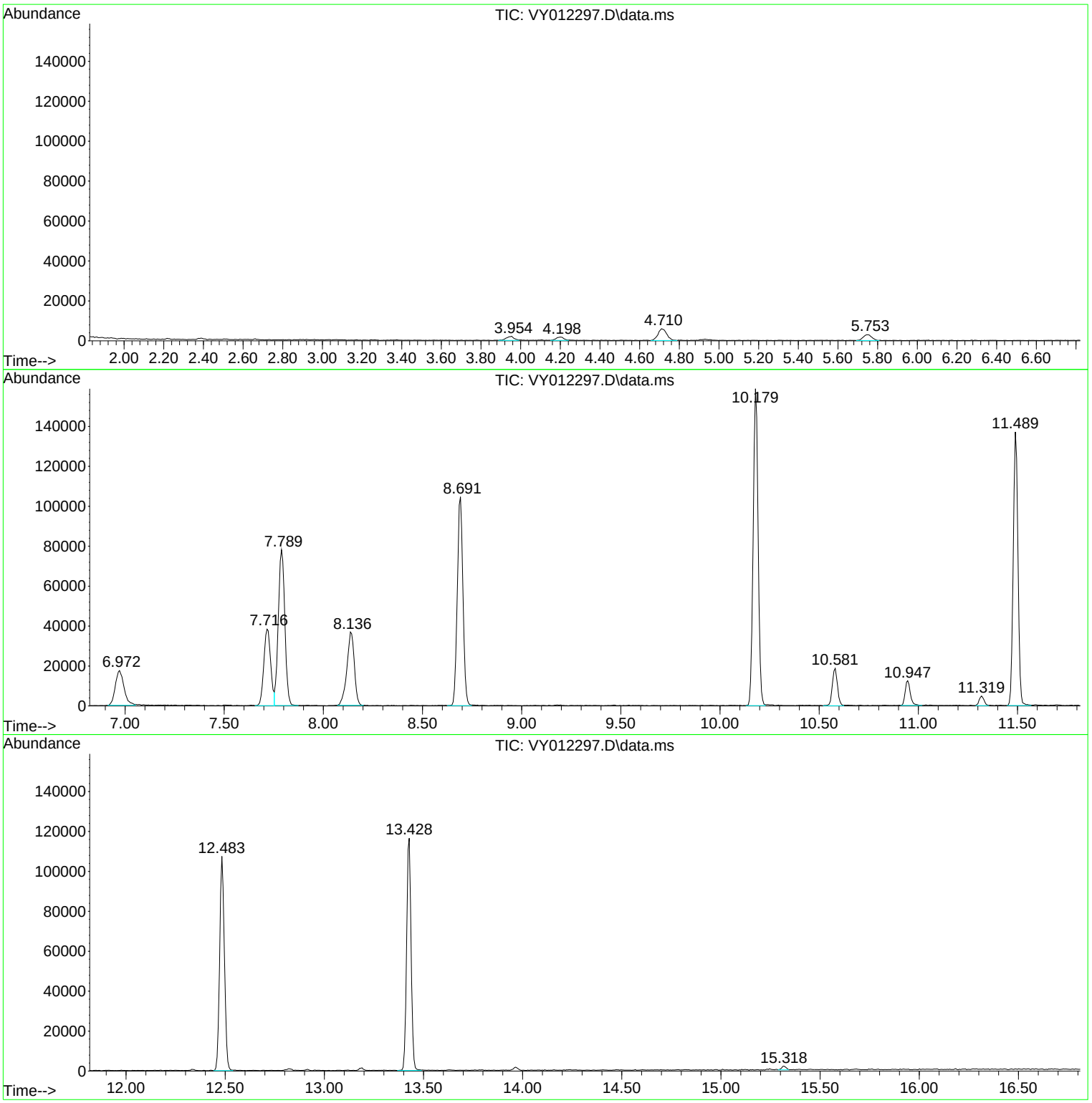
Sample Results: **VY012297.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012297.D
Acq On : 20 Jan 2023 17:46
Operator : KP/MD
Sample : 01232-07
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012297.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012297.D
Acq On : 20 Jan 2023 17:46
Operator : KP/MD
Sample : 01232-07
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012297.D
Acq On : 20 Jan 2023 17:46
Operator : KP/MD
Sample : 01232-07
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-19B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35A	SDG No.:	O1232
Lab Sample ID:	O1232-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.3
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
VY012298.D	1		01/20/23 18:10	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.94	U	0.94	5.50	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.50	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.50	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.50	ug/Kg
75-00-3	Chloroethane	0.97	U	0.97	5.50	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.50	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.79	U	0.79	5.50	ug/Kg
75-35-4	1,1-Dichloroethene	0.94	U	0.94	5.50	ug/Kg
67-64-1	Acetone	13.4	U	13.4	27.4	ug/Kg
75-15-0	Carbon Disulfide	0.82	U	0.82	5.50	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.00	U	1.00	5.50	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.50	ug/Kg
75-09-2	Methylene Chloride	6.50	U	6.50	11.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.74	U	0.74	5.50	ug/Kg
75-34-3	1,1-Dichloroethane	0.77	U	0.77	5.50	ug/Kg
110-82-7	Cyclohexane	0.92	U	0.92	5.50	ug/Kg
78-93-3	2-Butanone	8.00	U	8.00	27.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	5.50	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.74	U	0.74	5.50	ug/Kg
74-97-5	Bromochloromethane	0.89	U	0.89	5.50	ug/Kg
67-66-3	Chloroform	0.73	U	0.73	5.50	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.82	U	0.82	5.50	ug/Kg
108-87-2	Methylcyclohexane	0.88	U	0.88	5.50	ug/Kg
71-43-2	Benzene	0.72	U	0.72	5.50	ug/Kg
107-06-2	1,2-Dichloroethane	0.92	U	0.92	5.50	ug/Kg
79-01-6	Trichloroethene	0.80	U	0.80	5.50	ug/Kg
78-87-5	1,2-Dichloropropane	0.71	U	0.71	5.50	ug/Kg
75-27-4	Bromodichloromethane	0.77	U	0.77	5.50	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.00	U	5.00	27.4	ug/Kg
108-88-3	Toluene	0.69	U	0.69	5.50	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.81	U	0.81	5.50	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.78	U	0.78	5.50	ug/Kg

Raw Data: **VY012298.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35A	SDG No.:	O1232
Lab Sample ID:	O1232-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.3
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
VY012298.D	1		01/20/23 18:10	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.94	U	0.94	5.50	ug/Kg
591-78-6	2-Hexanone	5.10	U	5.10	27.4	ug/Kg
124-48-1	Dibromochloromethane	0.82	U	0.82	5.50	ug/Kg
106-93-4	1,2-Dibromoethane	0.82	U	0.82	5.50	ug/Kg
127-18-4	Tetrachloroethene	0.83	U	0.83	5.50	ug/Kg
108-90-7	Chlorobenzene	0.71	U	0.71	5.50	ug/Kg
100-41-4	Ethyl Benzene	0.77	U	0.77	5.50	ug/Kg
179601-23-1	m/p-Xylenes	1.60	U	1.60	11.0	ug/Kg
95-47-6	o-Xylene	0.87	U	0.87	5.50	ug/Kg
100-42-5	Styrene	0.87	U	0.87	5.50	ug/Kg
75-25-2	Bromoform	0.89	U	0.89	5.50	ug/Kg
98-82-8	Isopropylbenzene	0.79	U	0.79	5.50	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.50	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.73	U	0.73	5.50	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.69	U	0.69	5.50	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.70	U	0.70	5.50	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.50	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.50	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.50	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	67.8		50 - 163	136%	SPK: 50
1868-53-7	Dibromofluoromethane	55.9		54 - 147	112%	SPK: 50
2037-26-5	Toluene-d8	65.5		58 - 134	131%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.0		30 - 143	106%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	188000	7.789			
540-36-3	1,4-Difluorobenzene	314000	8.691			
3114-55-4	Chlorobenzene-d5	302000	11.49			
3855-82-1	1,4-Dichlorobenzene-d4	141000	13.428			

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35A	SDG No.:	O1232
Lab Sample ID:	O1232-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.3
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
VY012298.D	1		01/20/23 18:10	VY012023

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\VY012023\
Data File : VY012298.D
Acq On : 20 Jan 2023 18:10
Operator : KP/MD
Sample : 01232-08
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Quant Time: Jan 23 02:24:06 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

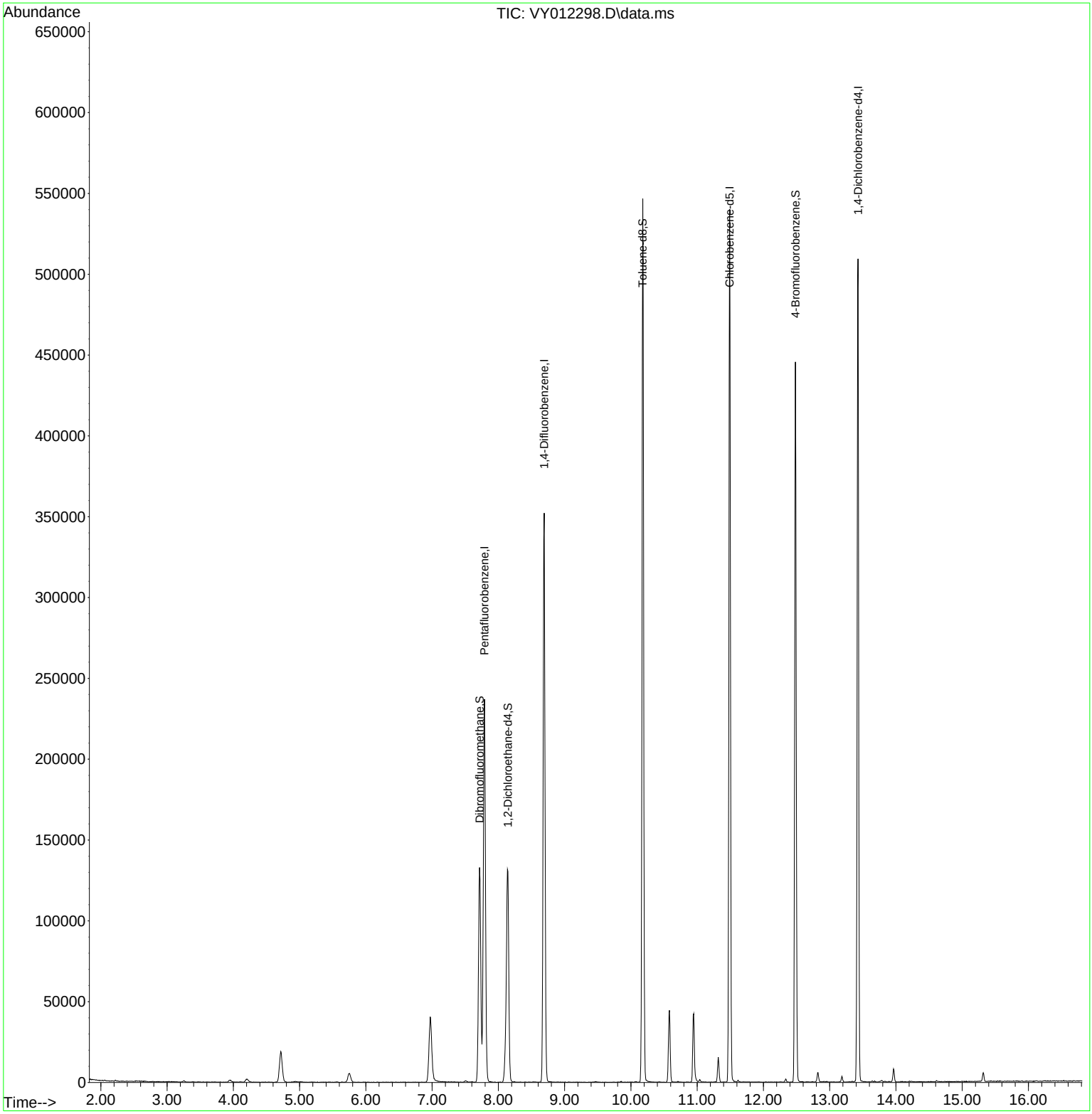
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	188384	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	314014	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	302134	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	140878	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	103754	67.849	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 135.700%			
35) Dibromofluoromethane	7.716	113	92951	55.903	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 111.800%			
50) Toluene-d8	10.179	98	369520	65.483	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 130.960%			
62) 4-Bromofluorobenzene	12.483	95	124270	53.018	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 106.040%			
Target Compounds						Qvalue

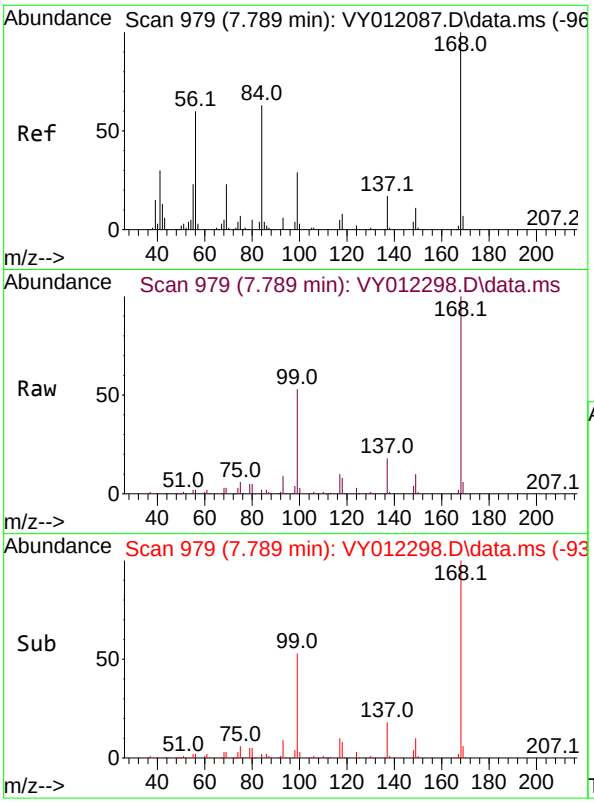
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012298.D
Acq On : 20 Jan 2023 18:10
Operator : KP/MD
Sample : 01232-08
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Quant Time: Jan 23 02:24:06 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



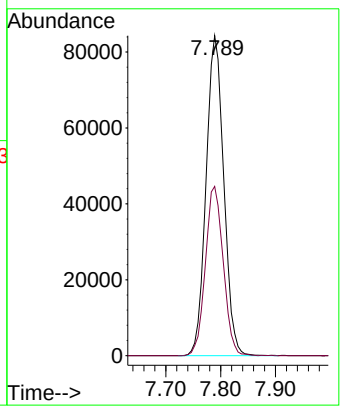


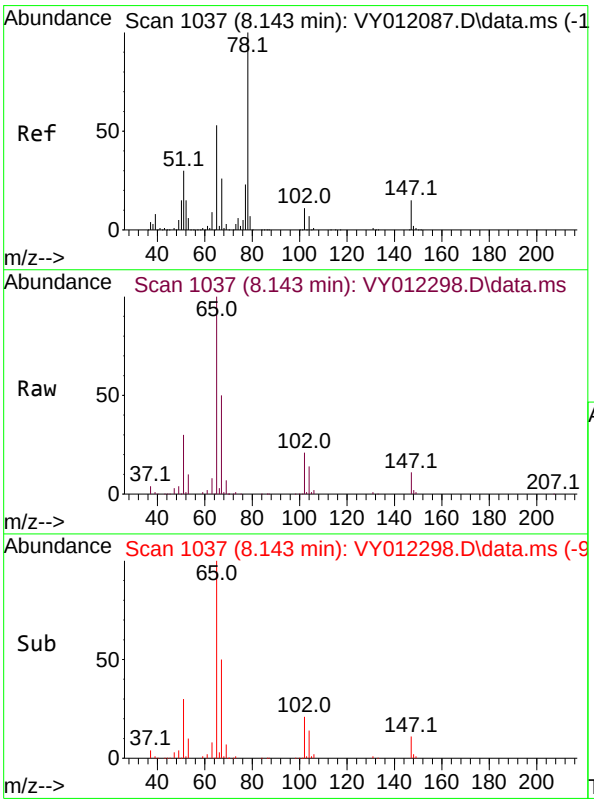
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. 0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Tgt Ion:168 Resp: 188384

Ion	Ratio	Lower	Upper
168	100		
99	52.9	44.0	66.0

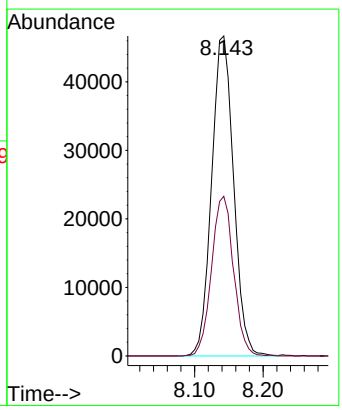


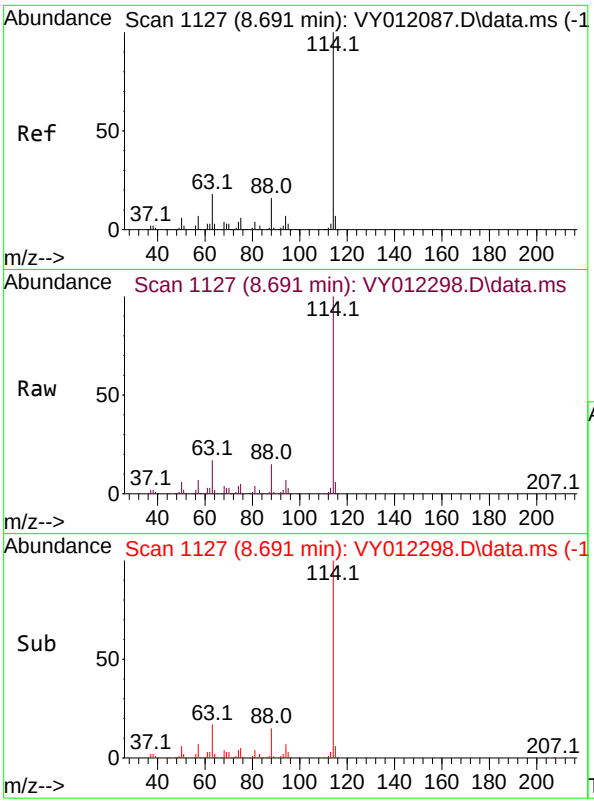


#33
1,2-Dichloroethane-d4
Concen: 67.849 ug/l
RT: 8.143 min Scan# 1037
Delta R.T. -0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Tgt Ion: 65 Resp: 103754

Ion	Ratio	Lower	Upper
65	100		
67	50.0	0.0	103.2



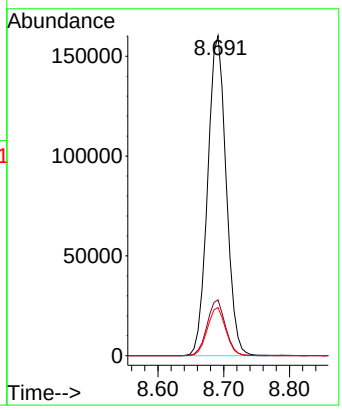


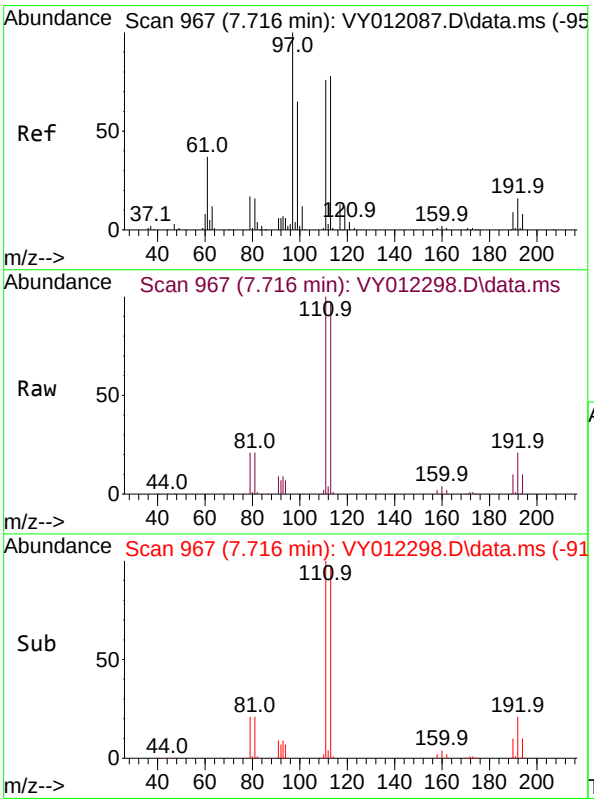
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Tgt Ion:114 Resp: 314014

Ion	Ratio	Lower	Upper
114	100		
63	17.4	0.0	39.6
88	15.0	0.0	32.2

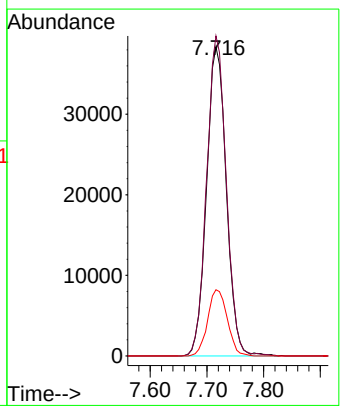


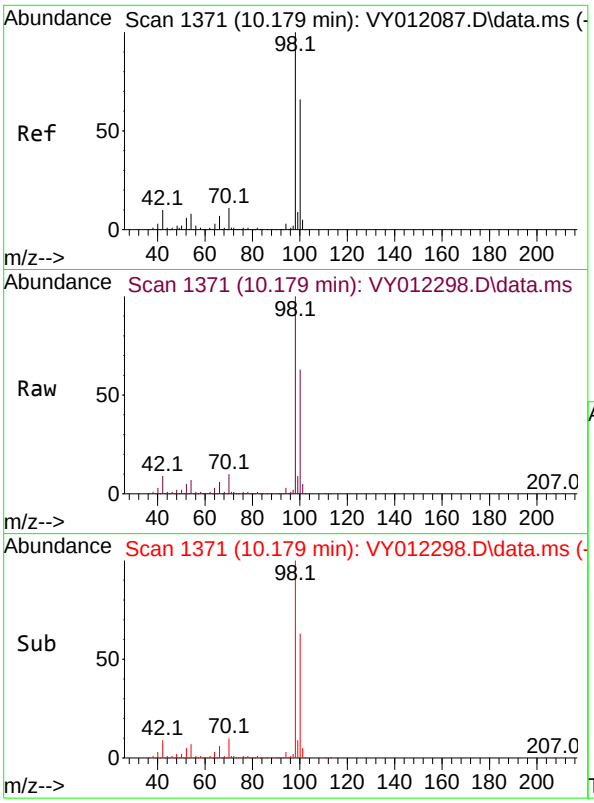


#35
Dibromofluoromethane
Concen: 55.903 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Tgt Ion:113 Resp: 92951

Ion	Ratio	Lower	Upper
113	100		
111	102.8	83.0	124.4
192	21.3	16.0	24.0



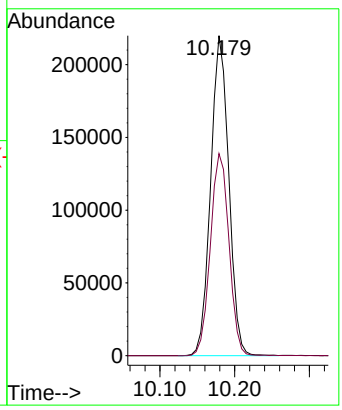


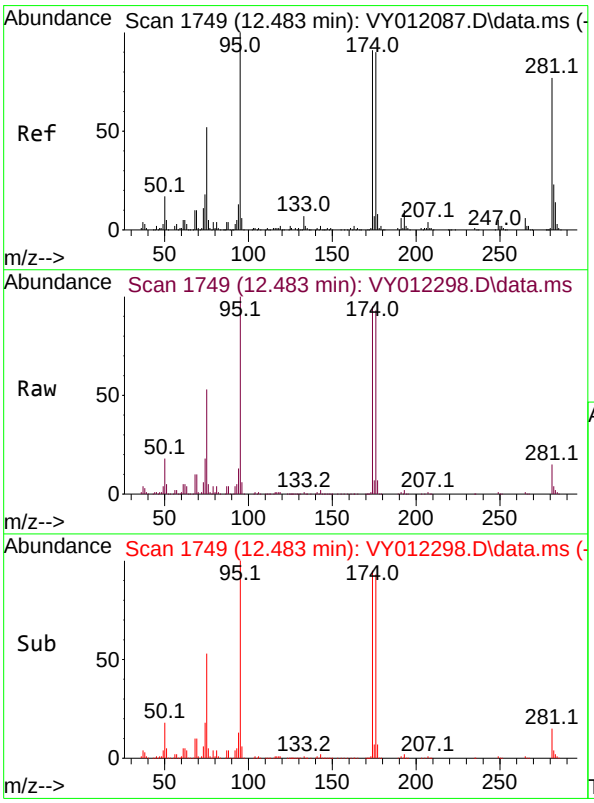
#50
Toluene-d8
Concen: 65.483 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Tgt Ion: 98 Resp: 369520

Ion	Ratio	Lower	Upper
98	100		
100	64.9	51.9	77.9

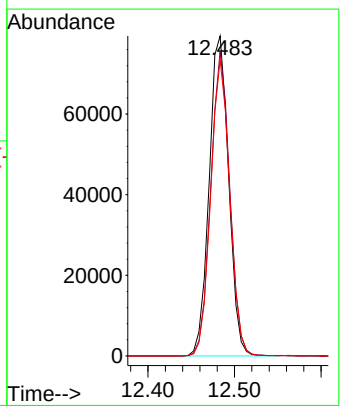


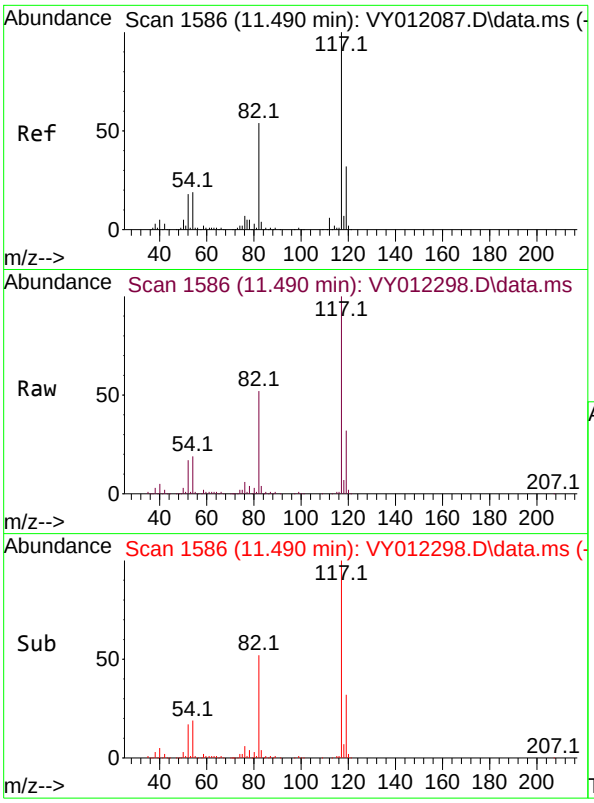


#62
4-Bromofluorobenzene
Concen: 53.018 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Tgt Ion: 95 Resp: 124270

Ion	Ratio	Lower	Upper
95	100		
174	92.7	0.0	172.0
176	90.1	0.0	167.6



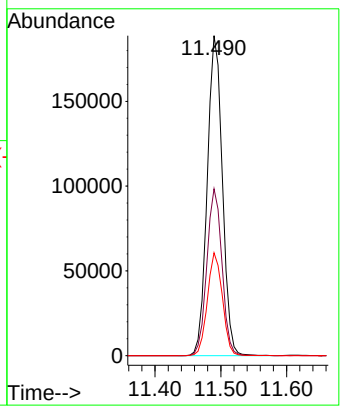


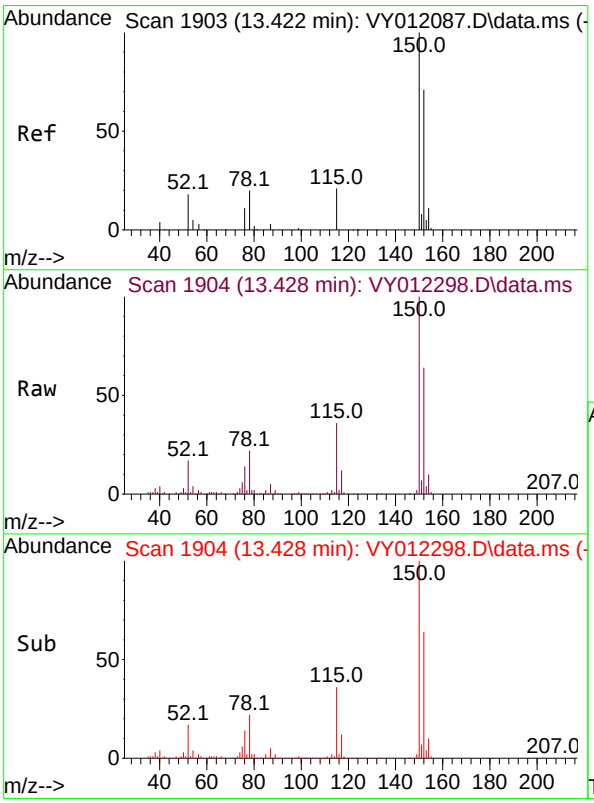
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.490 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Tgt Ion:117 Resp: 302134

Ion	Ratio	Lower	Upper
117	100		
82	52.2	44.8	67.2
119	32.2	25.4	38.2

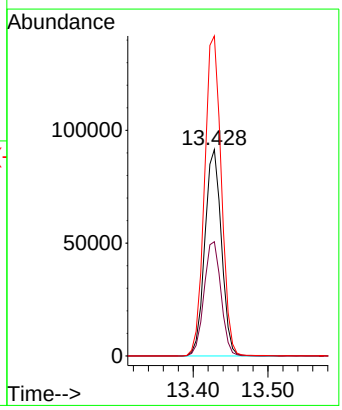




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012298.D
Acq: 20 Jan 2023 18:10

Tgt Ion:152 Resp: 140878

Ion	Ratio	Lower	Upper
152	100		
115	56.4	29.1	87.3
150	157.0	0.0	342.6



Sample Results: **VY012298.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012298.D
Acq On : 20 Jan 2023 18:10
Operator : KP/MD
Sample : 01232-08
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012298.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	464	475	486	rBV2	19124	57317	6.13%	1.029%
2	5.753	635	645	654	rVB3	5367	16100	1.72%	0.289%
3	6.972	835	845	858	rBV	40353	119030	12.73%	2.137%
4	7.716	955	967	973	rBV	132909	319638	34.19%	5.738%
5	7.789	973	979	993	rVB	236837	529825	56.67%	9.512%
6	8.137	1023	1036	1050	rVB2	131771	343986	36.79%	6.175%
7	8.691	1118	1127	1138	rBV	351975	684592	73.23%	12.290%
8	10.179	1363	1371	1386	rBV	546424	934891	100.00%	16.784%
9	10.581	1430	1437	1444	rBV	44345	79181	8.47%	1.422%
10	10.947	1491	1497	1507	rBV	42212	74327	7.95%	1.334%
11	11.319	1553	1558	1566	rVB	15559	24491	2.62%	0.440%
12	11.490	1577	1586	1597	rBV	539934	857836	91.76%	15.400%
13	12.483	1742	1749	1762	rBV2	445557	713335	76.30%	12.806%
14	12.825	1798	1805	1810	rBV2	5819	9691	1.04%	0.174%
15	13.428	1897	1904	1914	rVB	508717	793473	84.87%	14.245%
16	13.965	1986	1992	1998	rVB2	7982	12496	1.34%	0.224%

Sum of corrected areas: 5570209

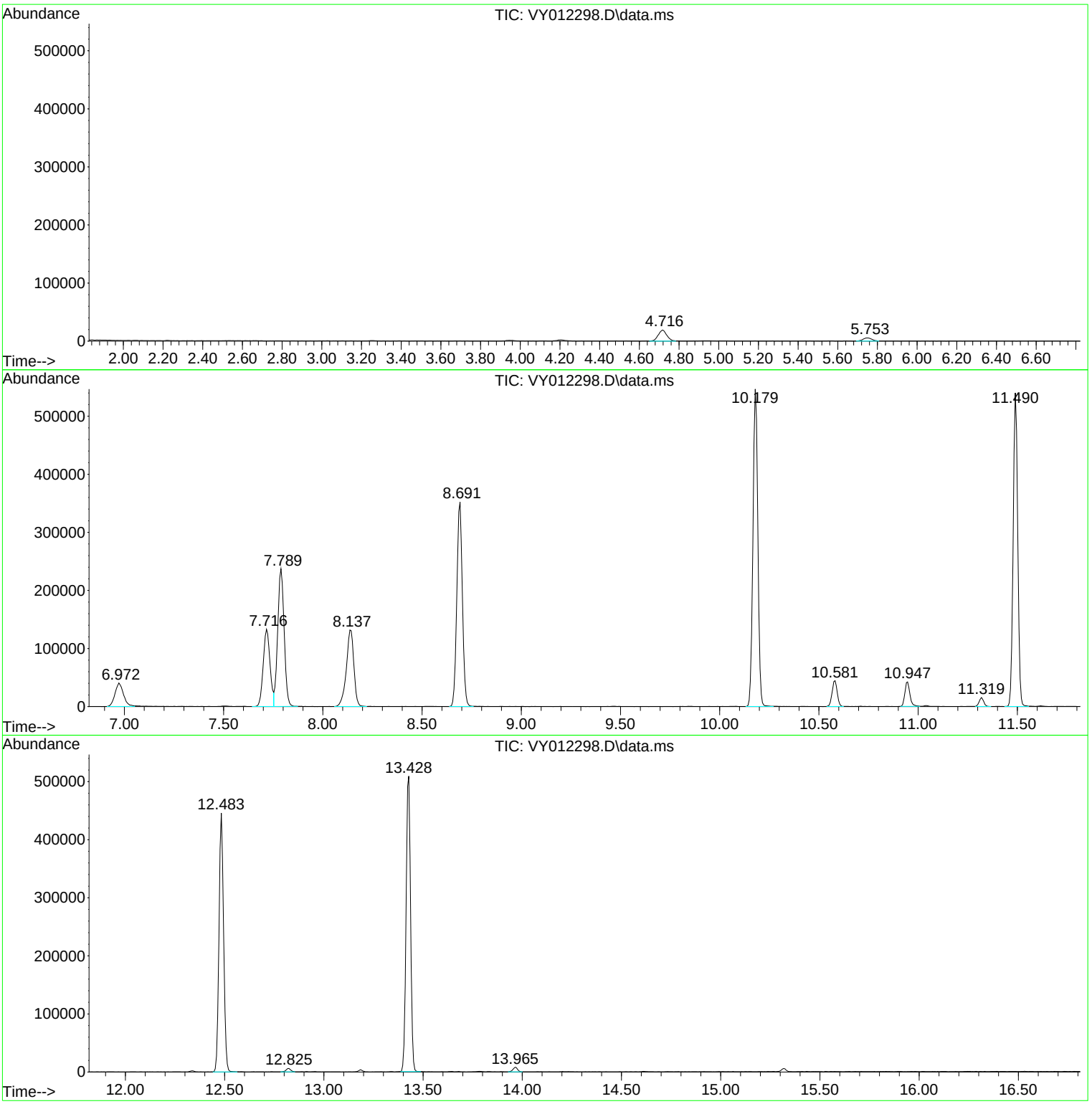
Sample Results: **VY012298.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012298.D
Acq On : 20 Jan 2023 18:10
Operator : KP/MD
Sample : 01232-08
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012298.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012298.D
Acq On : 20 Jan 2023 18:10
Operator : KP/MD
Sample : 01232-08
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012298.D
Acq On : 20 Jan 2023 18:10
Operator : KP/MD
Sample : 01232-08
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35A

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35B	SDG No.:	O1232
Lab Sample ID:	O1232-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.3
Sample Wt/Vol:	5.07 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
VY012299.D	1		01/20/23 18:33	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.91	U	0.91	5.30	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.30	ug/Kg
75-01-4	Vinyl Chloride	0.96	U	0.96	5.30	ug/Kg
74-83-9	Bromomethane	1.20	U	1.20	5.30	ug/Kg
75-00-3	Chloroethane	0.94	U	0.94	5.30	ug/Kg
75-69-4	Trichlorofluoromethane	1.00	U	1.00	5.30	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.76	U	0.76	5.30	ug/Kg
75-35-4	1,1-Dichloroethene	0.91	U	0.91	5.30	ug/Kg
67-64-1	Acetone	12.9	U	12.9	26.4	ug/Kg
75-15-0	Carbon Disulfide	0.79	U	0.79	5.30	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.98	U	0.98	5.30	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	5.30	ug/Kg
75-09-2	Methylene Chloride	6.30	U	6.30	10.6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.72	U	0.72	5.30	ug/Kg
75-34-3	1,1-Dichloroethane	0.74	U	0.74	5.30	ug/Kg
110-82-7	Cyclohexane	0.89	U	0.89	5.30	ug/Kg
78-93-3	2-Butanone	7.70	U	7.70	26.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.84	U	0.84	5.30	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.72	U	0.72	5.30	ug/Kg
74-97-5	Bromochloromethane	0.86	U	0.86	5.30	ug/Kg
67-66-3	Chloroform	0.71	U	0.71	5.30	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.79	U	0.79	5.30	ug/Kg
108-87-2	Methylcyclohexane	0.85	U	0.85	5.30	ug/Kg
71-43-2	Benzene	0.70	U	0.70	5.30	ug/Kg
107-06-2	1,2-Dichloroethane	0.89	U	0.89	5.30	ug/Kg
79-01-6	Trichloroethene	0.77	U	0.77	5.30	ug/Kg
78-87-5	1,2-Dichloropropane	0.69	U	0.69	5.30	ug/Kg
75-27-4	Bromodichloromethane	0.74	U	0.74	5.30	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.80	U	4.80	26.4	ug/Kg
108-88-3	Toluene	0.67	U	0.67	5.30	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.78	U	0.78	5.30	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.75	U	0.75	5.30	ug/Kg

Raw Data: **VY012299.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35B	SDG No.:	O1232
Lab Sample ID:	O1232-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.3
Sample Wt/Vol:	5.07 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
VY012299.D	1		01/20/23 18:33	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.91	U	0.91	5.30	ug/Kg
591-78-6	2-Hexanone	4.90	U	4.90	26.4	ug/Kg
124-48-1	Dibromochloromethane	0.79	U	0.79	5.30	ug/Kg
106-93-4	1,2-Dibromoethane	0.79	U	0.79	5.30	ug/Kg
127-18-4	Tetrachloroethene	0.80	U	0.80	5.30	ug/Kg
108-90-7	Chlorobenzene	0.69	U	0.69	5.30	ug/Kg
100-41-4	Ethyl Benzene	0.74	U	0.74	5.30	ug/Kg
179601-23-1	m/p-Xylenes	1.60	U	1.60	10.6	ug/Kg
95-47-6	o-Xylene	0.84	U	0.84	5.30	ug/Kg
100-42-5	Styrene	0.84	U	0.84	5.30	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.30	ug/Kg
98-82-8	Isopropylbenzene	0.76	U	0.76	5.30	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.30	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.71	U	0.71	5.30	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.67	U	0.67	5.30	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.68	U	0.68	5.30	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.30	U	1.30	5.30	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.99	U	0.99	5.30	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.30	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	96.7	*	50 - 163	193%	SPK: 50
1868-53-7	Dibromofluoromethane	64.9		54 - 147	130%	SPK: 50
2037-26-5	Toluene-d8	67.0		58 - 134	134%	SPK: 50
460-00-4	4-Bromofluorobenzene	56.6		30 - 143	113%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	37500	7.789			
540-36-3	1,4-Difluorobenzene	64400	8.691			
3114-55-4	Chlorobenzene-d5	69300	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	33300	13.428			

Raw Data: **VY012299.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35B	SDG No.:	O1232
Lab Sample ID:	O1232-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.3
Sample Wt/Vol:	5.07 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
VY012299.D	1		01/20/23 18:33	VY012023

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\VY012023\
Data File : VY012299.D
Acq On : 20 Jan 2023 18:33
Operator : KP/MD
Sample : 01232-09
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Quant Time: Jan 23 02:24:29 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

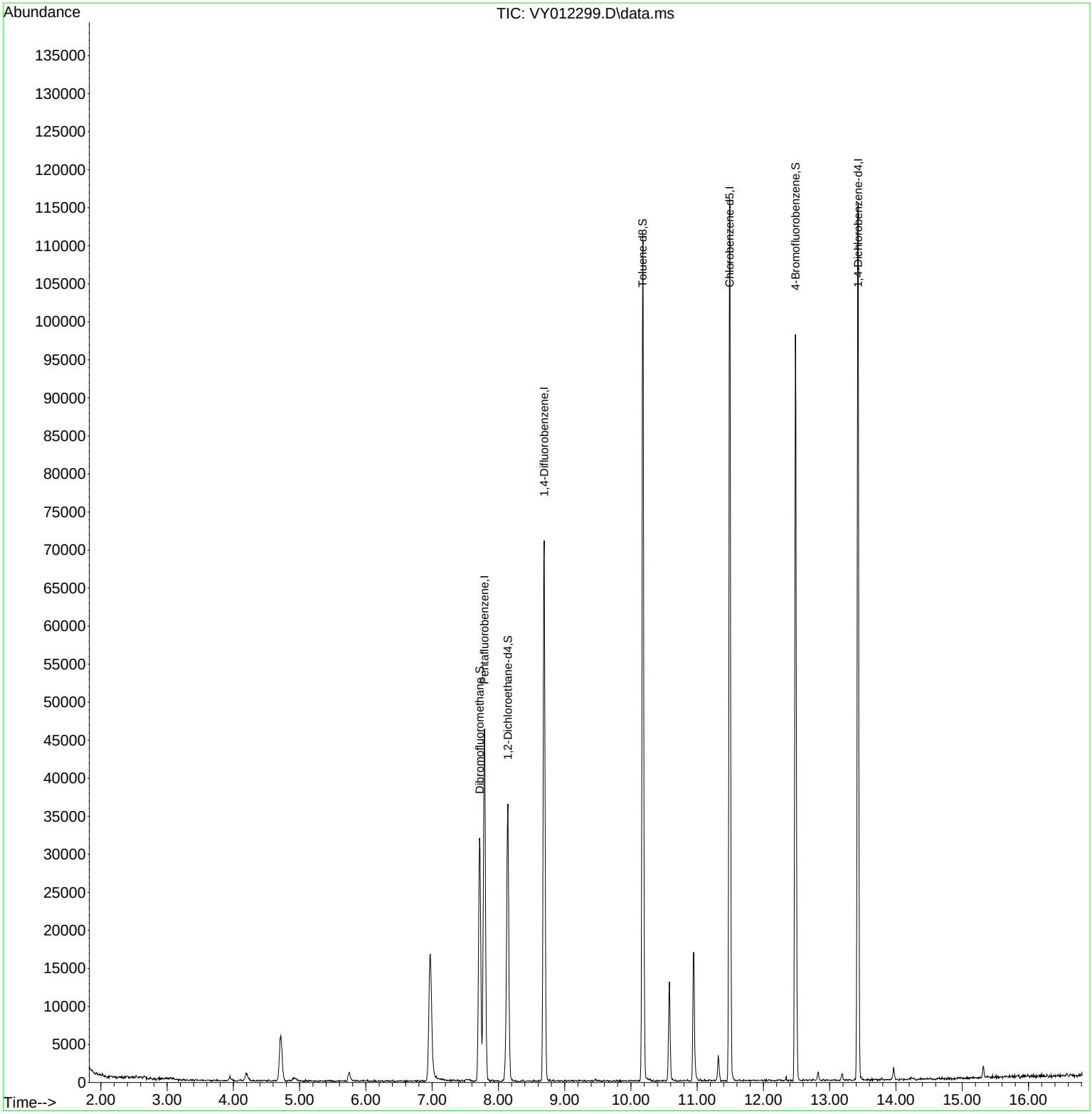
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	37522	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	64399	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	69318	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	33340	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	28941	96.728	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 193.460%#			
35) Dibromofluoromethane	7.716	113	22145	64.943	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 129.880%			
50) Toluene-d8	10.179	98	77406	66.988	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 133.980%			
62) 4-Bromofluorobenzene	12.483	95	27205	56.595	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 113.200%			
Target Compounds						Qvalue

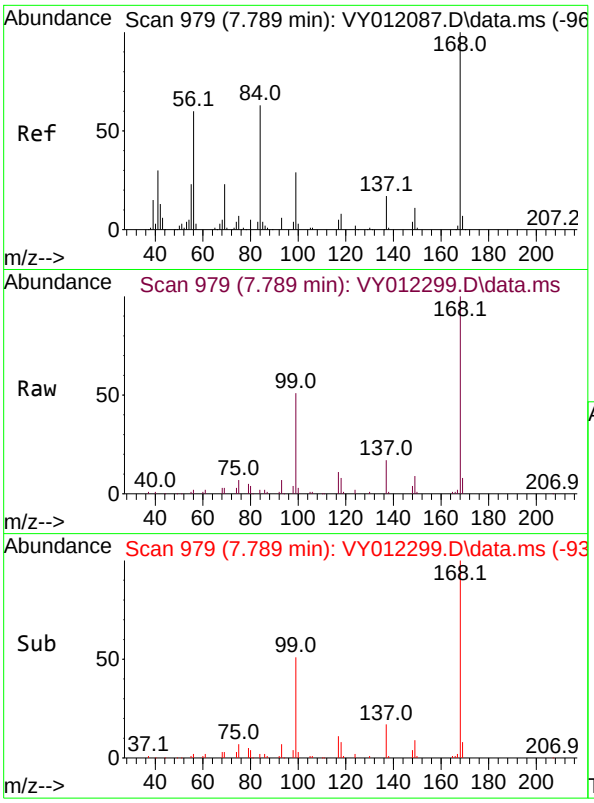
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012299.D
Acq On : 20 Jan 2023 18:33
Operator : KP/MD
Sample : 01232-09
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Quant Time: Jan 23 02:24:29 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



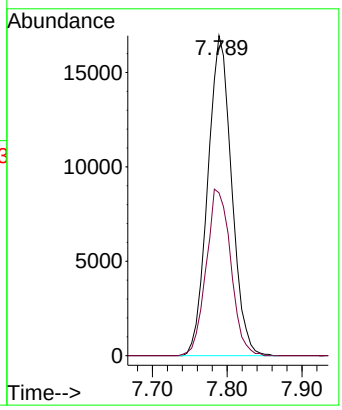


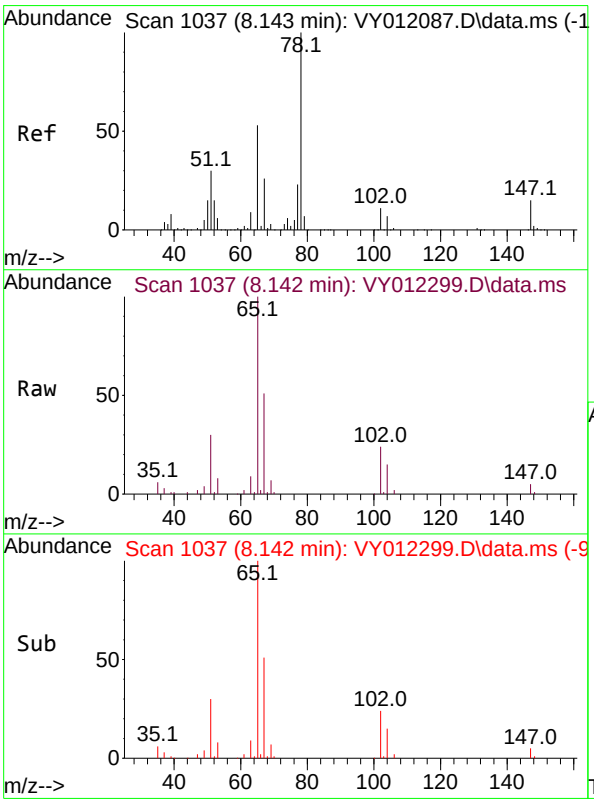
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Tgt Ion:168 Resp: 37522

Ion	Ratio	Lower	Upper
168	100		
99	50.9	44.0	66.0

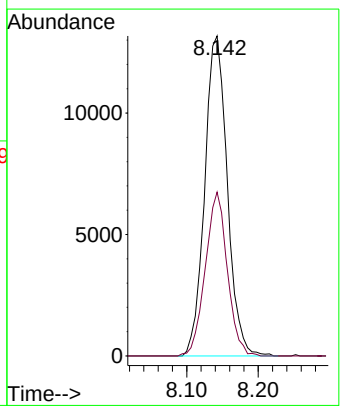


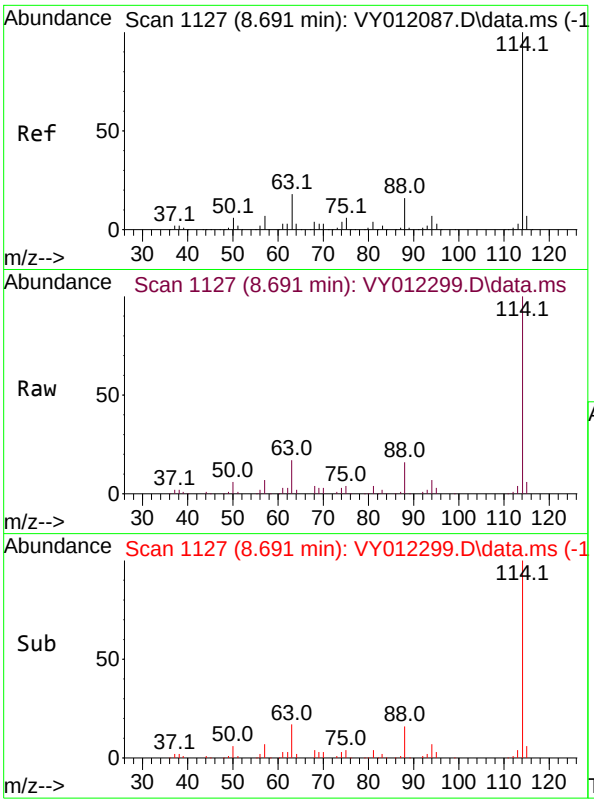


#33
1,2-Dichloroethane-d4
Concen: 96.728 ug/l
RT: 8.142 min Scan# 1037
Delta R.T. -0.001 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Tgt Ion: 65 Resp: 28941

Ion	Ratio	Lower	Upper
65	100		
67	49.8	0.0	103.2



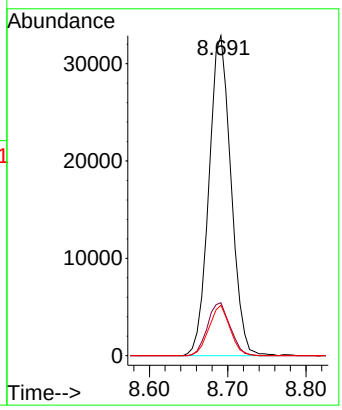


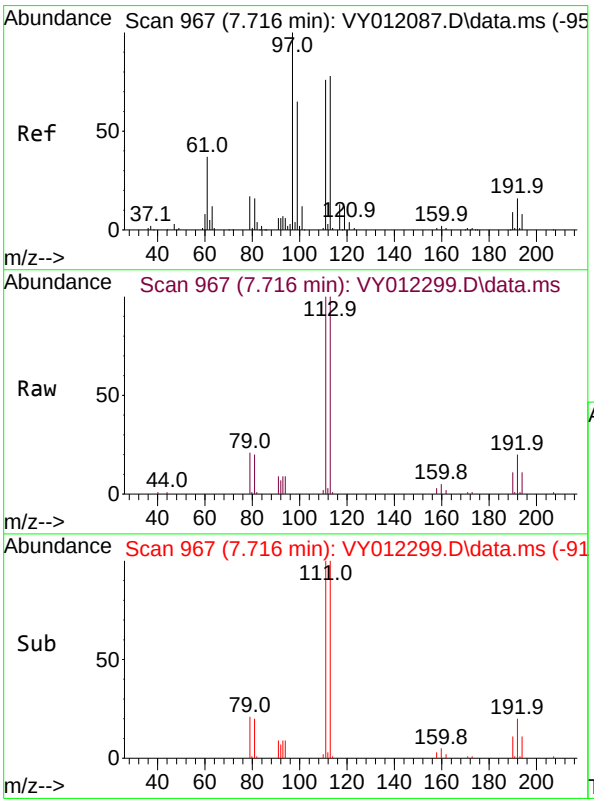
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Tgt Ion:114 Resp: 64399

Ion	Ratio	Lower	Upper
114	100		
63	16.5	0.0	39.6
88	15.8	0.0	32.2

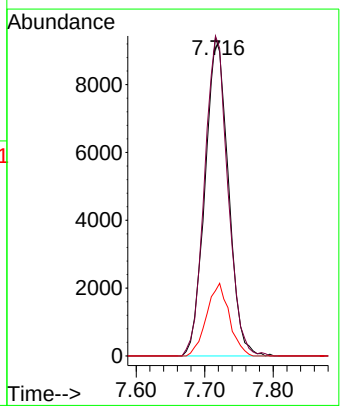


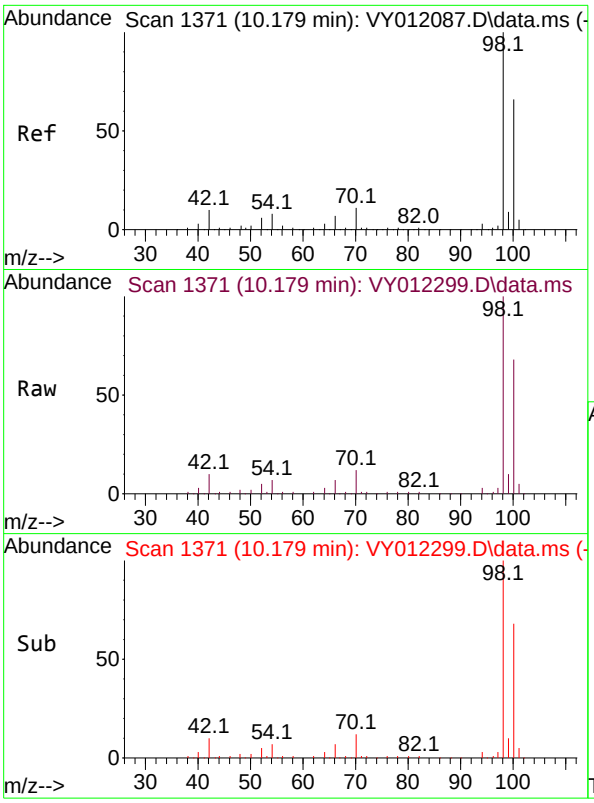


#35
Dibromofluoromethane
Concen: 64.943 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Tgt Ion:113 Resp: 22145

Ion	Ratio	Lower	Upper
113	100		
111	100.6	83.0	124.4
192	22.3	16.0	24.0



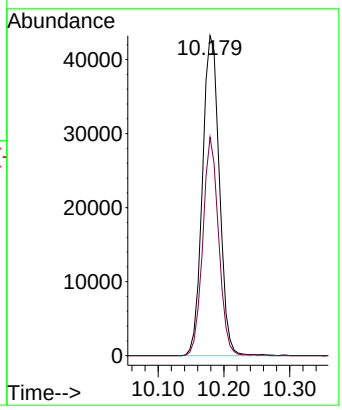


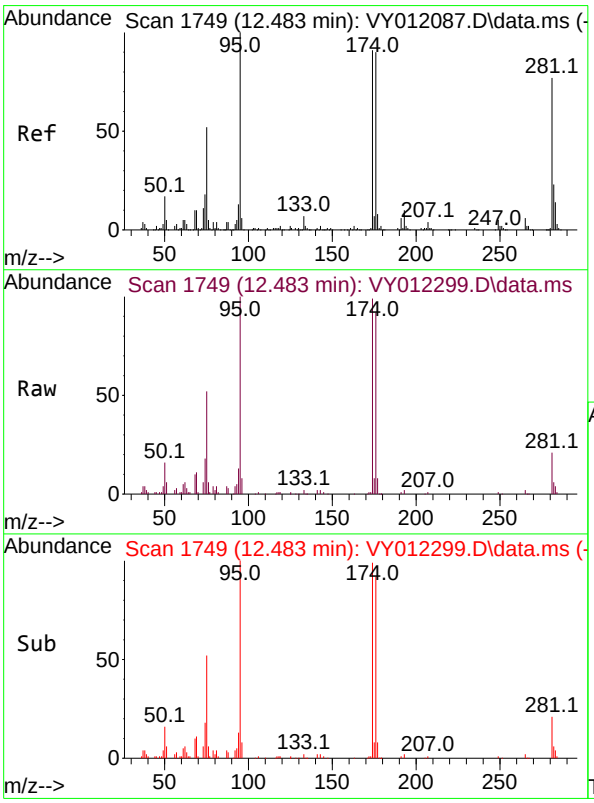
#50
Toluene-d8
Concen: 66.988 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Tgt Ion: 98 Resp: 77406

Ion	Ratio	Lower	Upper
98	100		
100	63.9	51.9	77.9

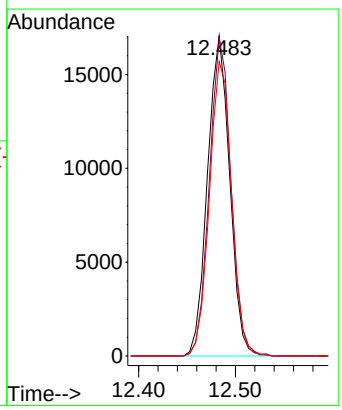


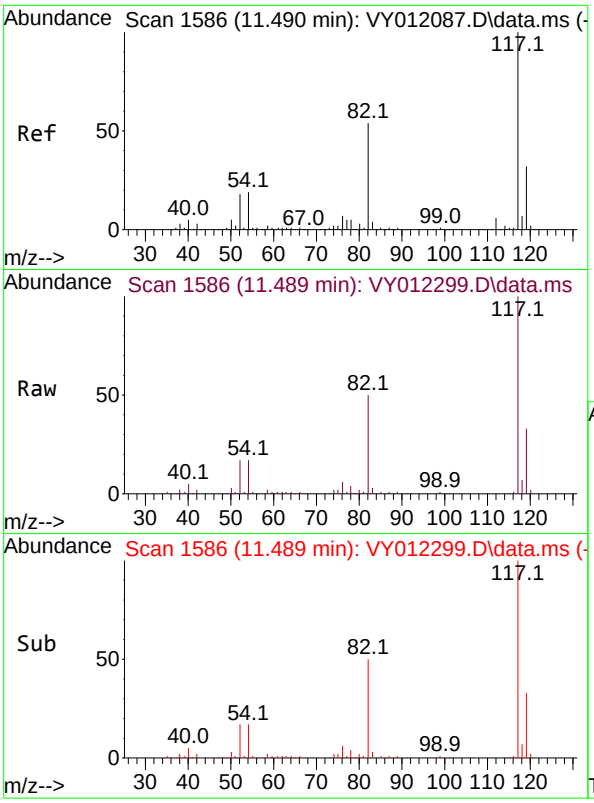


#62
4-Bromofluorobenzene
Concen: 56.595 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Tgt Ion: 95 Resp: 27205

Ion	Ratio	Lower	Upper
95	100		
174	97.2	0.0	172.0
176	91.3	0.0	167.6



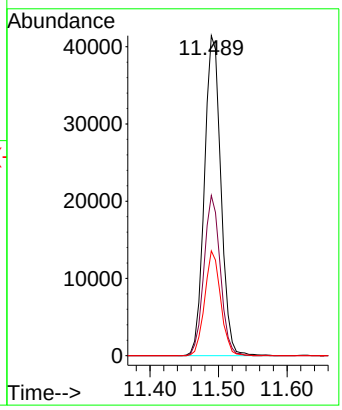


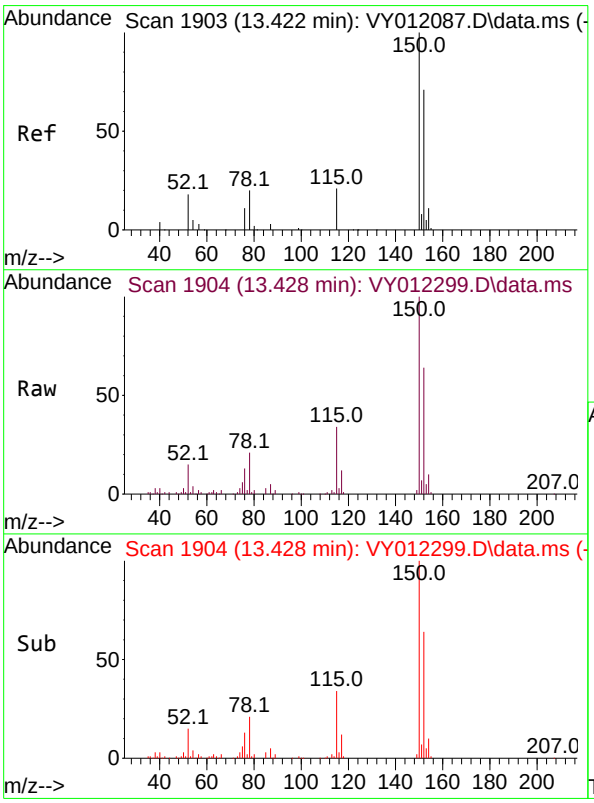
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Tgt Ion:117 Resp: 69318

Ion	Ratio	Lower	Upper
117	100		
82	50.0	44.8	67.2
119	32.8	25.4	38.2

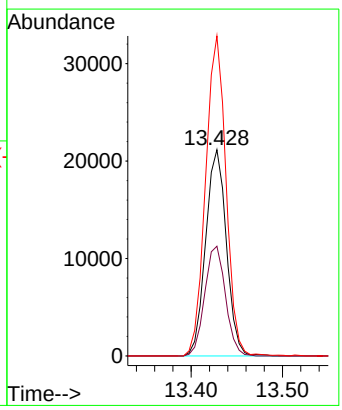




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012299.D
Acq: 20 Jan 2023 18:33

Tgt Ion:152 Resp: 33340

Ion	Ratio	Lower	Upper
152	100		
115	53.3	29.1	87.3
150	152.4	0.0	342.6



Sample Results: **VY012299.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012299.D
Acq On : 20 Jan 2023 18:33
Operator : KP/MD
Sample : 01232-09
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012299.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	465	475	489	rVB2	6033	18361	9.50%	1.455%
2	5.753	639	645	653	rBV6	1182	3083	1.60%	0.244%
3	6.972	834	845	859	rBV	16650	51377	26.59%	4.071%
4	7.716	958	967	973	rBV2	31917	75004	38.82%	5.943%
5	7.789	973	979	987	rVB2	46092	102945	53.28%	8.157%
6	8.142	1026	1037	1053	rVB2	36466	84248	43.60%	6.675%
7	8.691	1119	1127	1139	rVB	71081	139492	72.20%	11.053%
8	10.179	1364	1371	1381	rBV	111413	192939	99.86%	15.287%
9	10.581	1430	1437	1444	rBV	12928	21477	11.12%	1.702%
10	10.947	1491	1497	1509	rVB2	16878	29087	15.05%	2.305%
11	11.319	1549	1558	1564	rVB	3378	5758	2.98%	0.456%
12	11.489	1579	1586	1598	rBV	116066	193210	100.00%	15.309%
13	12.483	1743	1749	1759	rBV2	98202	161484	83.58%	12.795%
14	13.428	1897	1904	1910	rBV	115149	179099	92.70%	14.191%
15	13.965	1987	1992	1997	rVB2	1542	2331	1.21%	0.185%
16	15.318	2209	2214	2218	rBV3	1476	2179	1.13%	0.173%

Sum of corrected areas: 1262074

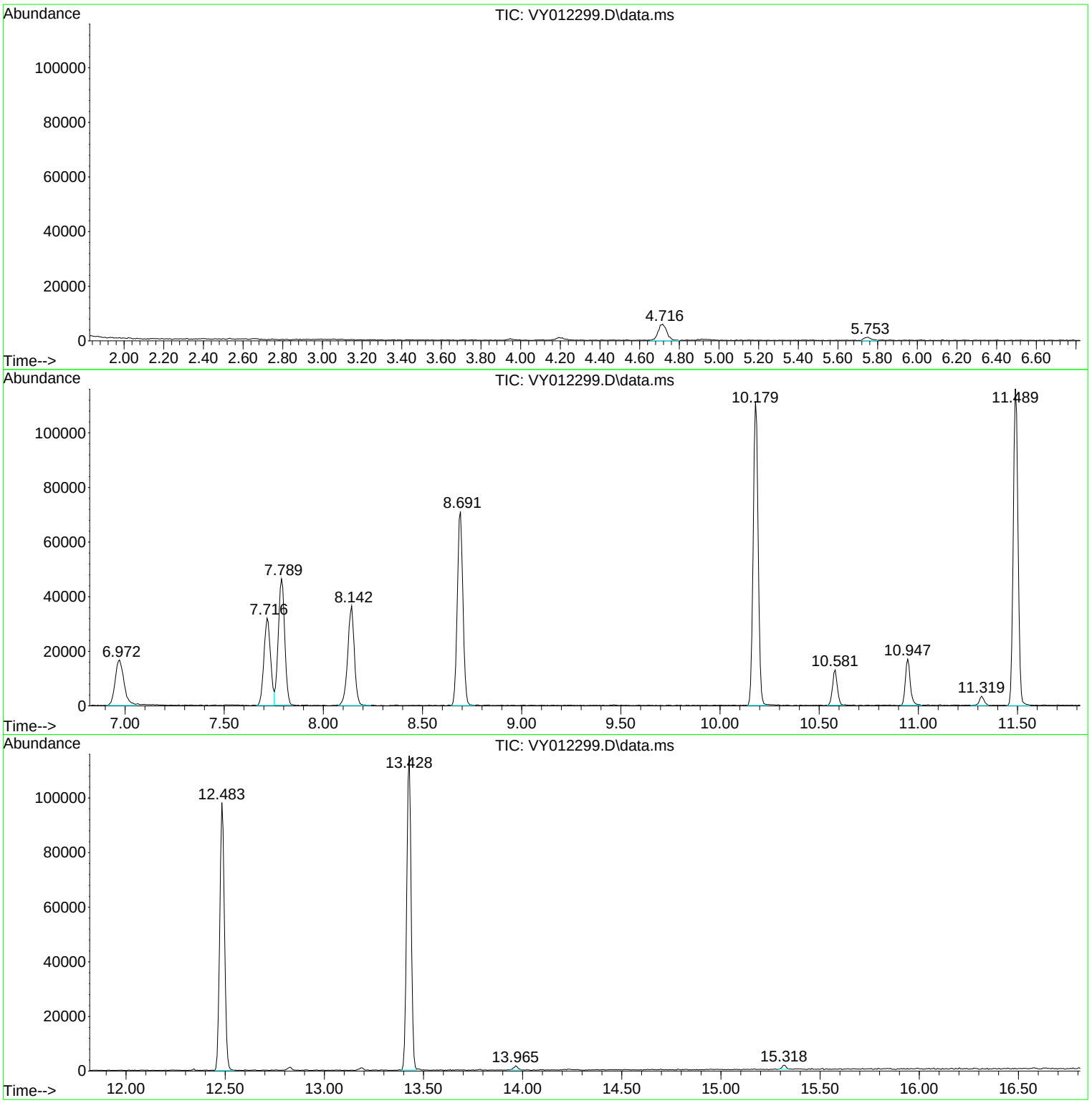
Sample Results: **VY012299.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012299.D
Acq On : 20 Jan 2023 18:33
Operator : KP/MD
Sample : 01232-09
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012299.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012299.D
Acq On : 20 Jan 2023 18:33
Operator : KP/MD
Sample : 01232-09
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012299.D
Acq On : 20 Jan 2023 18:33
Operator : KP/MD
Sample : 01232-09
Misc : 5.07g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35B

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35BRE	SDG No.:	O1232
Lab Sample ID:	O1232-09RE	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.3
Sample Wt/Vol:	5.05 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
VY012314.D	1		01/23/23 15:24	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.91	U	0.91	5.30	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.30	ug/Kg
75-01-4	Vinyl Chloride	0.97	U	0.97	5.30	ug/Kg
74-83-9	Bromomethane	1.20	U	1.20	5.30	ug/Kg
75-00-3	Chloroethane	0.94	U	0.94	5.30	ug/Kg
75-69-4	Trichlorofluoromethane	1.00	U	1.00	5.30	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.76	U	0.76	5.30	ug/Kg
75-35-4	1,1-Dichloroethene	0.91	U	0.91	5.30	ug/Kg
67-64-1	Acetone	12.9	U	12.9	26.5	ug/Kg
75-15-0	Carbon Disulfide	0.80	U	0.80	5.30	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.99	U	0.99	5.30	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	5.30	ug/Kg
75-09-2	Methylene Chloride	6.30	U	6.30	10.6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.72	U	0.72	5.30	ug/Kg
75-34-3	1,1-Dichloroethane	0.74	U	0.74	5.30	ug/Kg
110-82-7	Cyclohexane	0.89	U	0.89	5.30	ug/Kg
78-93-3	2-Butanone	7.70	U	7.70	26.5	ug/Kg
56-23-5	Carbon Tetrachloride	0.84	U	0.84	5.30	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.72	U	0.72	5.30	ug/Kg
74-97-5	Bromochloromethane	0.86	U	0.86	5.30	ug/Kg
67-66-3	Chloroform	0.71	U	0.71	5.30	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.80	U	0.80	5.30	ug/Kg
108-87-2	Methylcyclohexane	0.85	U	0.85	5.30	ug/Kg
71-43-2	Benzene	0.70	U	0.70	5.30	ug/Kg
107-06-2	1,2-Dichloroethane	0.89	U	0.89	5.30	ug/Kg
79-01-6	Trichloroethene	0.77	U	0.77	5.30	ug/Kg
78-87-5	1,2-Dichloropropane	0.69	U	0.69	5.30	ug/Kg
75-27-4	Bromodichloromethane	0.74	U	0.74	5.30	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.90	U	4.90	26.5	ug/Kg
108-88-3	Toluene	0.67	U	0.67	5.30	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.79	U	0.79	5.30	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.75	U	0.75	5.30	ug/Kg

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35BRE	SDG No.:	O1232
Lab Sample ID:	O1232-09RE	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.3
Sample Wt/Vol:	5.05 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
VY012314.D	1		01/23/23 15:24	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.91	U	0.91	5.30	ug/Kg
591-78-6	2-Hexanone	5.00	U	5.00	26.5	ug/Kg
124-48-1	Dibromochloromethane	0.80	U	0.80	5.30	ug/Kg
106-93-4	1,2-Dibromoethane	0.80	U	0.80	5.30	ug/Kg
127-18-4	Tetrachloroethene	0.81	U	0.81	5.30	ug/Kg
108-90-7	Chlorobenzene	0.69	U	0.69	5.30	ug/Kg
100-41-4	Ethyl Benzene	0.74	U	0.74	5.30	ug/Kg
179601-23-1	m/p-Xylenes	1.60	U	1.60	10.6	ug/Kg
95-47-6	o-Xylene	0.84	U	0.84	5.30	ug/Kg
100-42-5	Styrene	0.84	U	0.84	5.30	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.30	ug/Kg
98-82-8	Isopropylbenzene	0.76	U	0.76	5.30	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.30	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.71	U	0.71	5.30	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.67	U	0.67	5.30	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.68	U	0.68	5.30	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.30	U	1.30	5.30	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.30	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.30	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	91.6	*	50 - 163	183%	SPK: 50
1868-53-7	Dibromofluoromethane	59.8		54 - 147	120%	SPK: 50
2037-26-5	Toluene-d8	66.2		58 - 134	132%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.3		30 - 143	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	39100	7.789			
540-36-3	1,4-Difluorobenzene	65200	8.691			
3114-55-4	Chlorobenzene-d5	65300	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	29200	13.428			

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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	B-P35BRE	SDG No.:	O1232
Lab Sample ID:	O1232-09RE	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.3
Sample Wt/Vol:	5.05 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
VY012314.D	1		01/23/23 15:24	VY012323

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\VY012323\
Data File : VY012314.D
Acq On : 23 Jan 2023 15:24
Operator : KP/MD
Sample : 01232-09RE
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35BRE

Quant Time: Jan 23 15:56:52 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

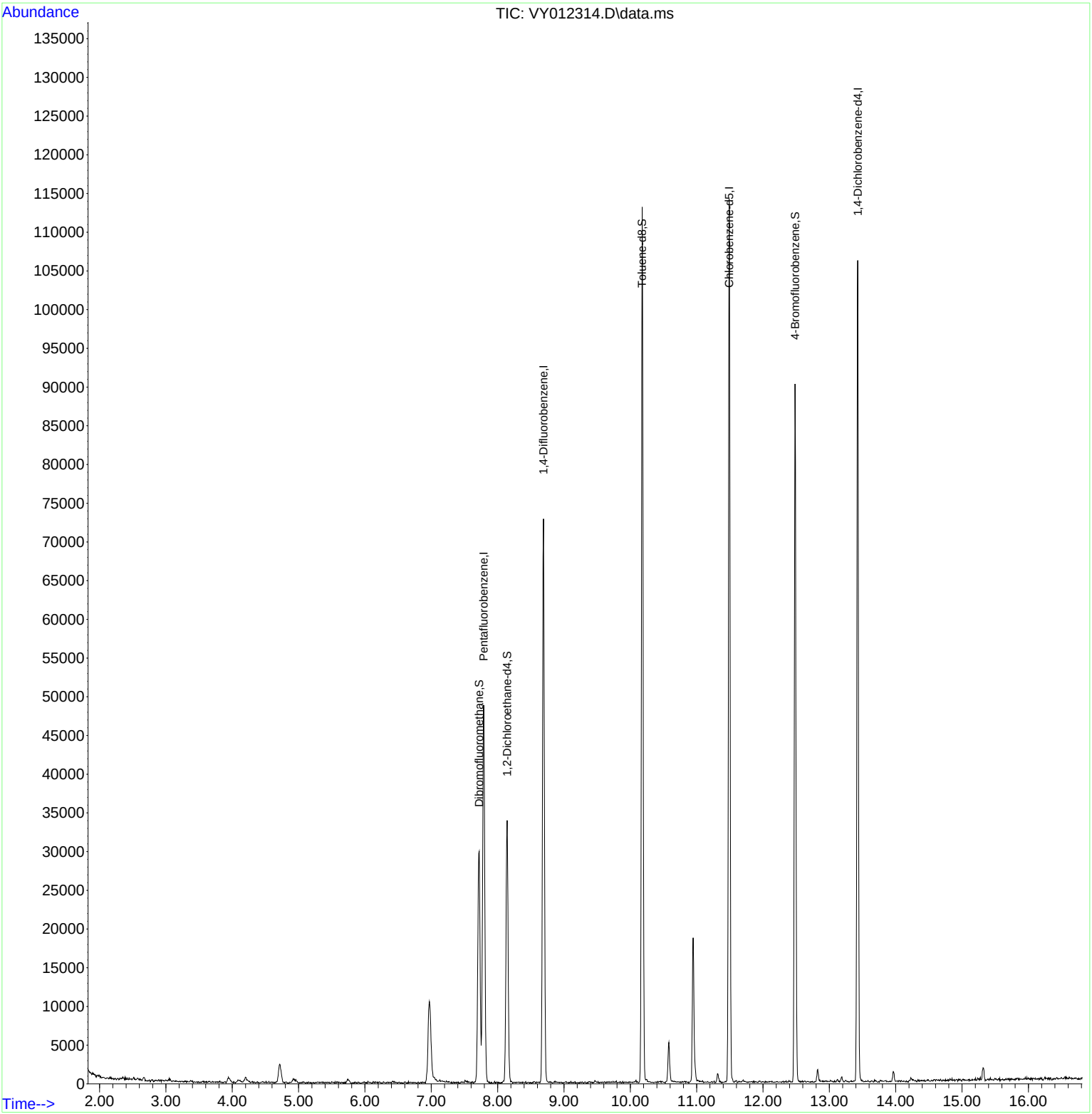
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	39101	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	65182	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	65342	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	29180	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	28631	91.612	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 183.220%#			
35) Dibromofluoromethane	7.722	113	20626	59.761	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 119.520%			
50) Toluene-d8	10.179	98	77474	66.189	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 132.380%			
62) 4-Bromofluorobenzene	12.483	95	25929	53.293	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 106.580%			
Target Compounds						Qvalue

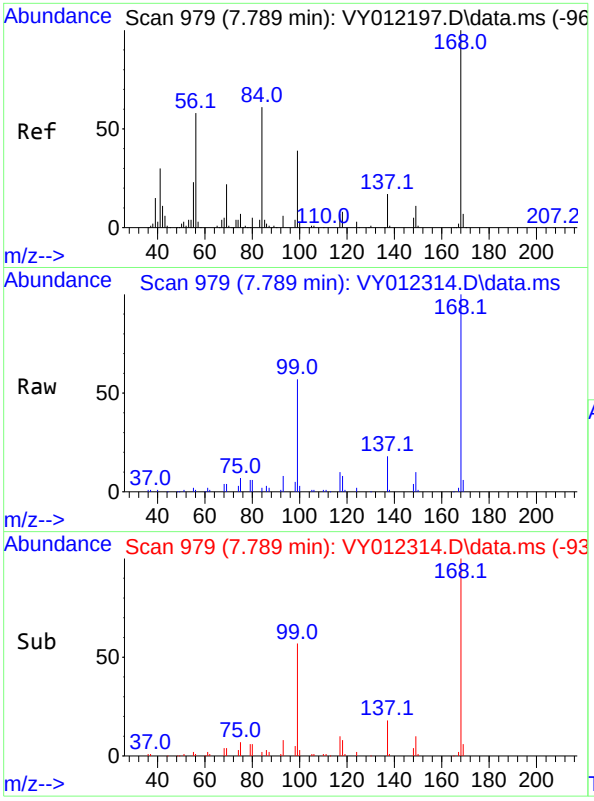
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012314.D
Acq On : 23 Jan 2023 15:24
Operator : KP/MD
Sample : 01232-09RE
Misc : 5.05g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35BRE

Quant Time: Jan 23 15:56:52 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



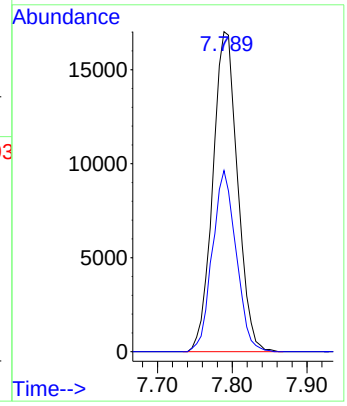


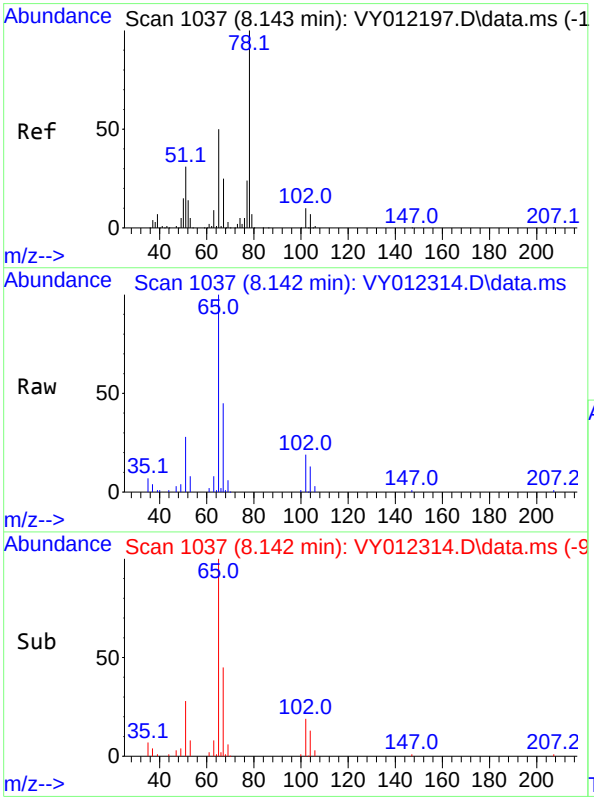
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35BRE

Tgt Ion:168 Resp: 39101

Ion	Ratio	Lower	Upper
168	100		
99	56.6	44.0	66.0

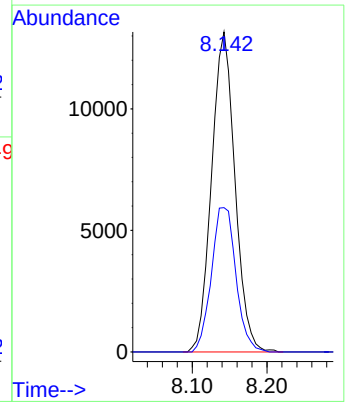


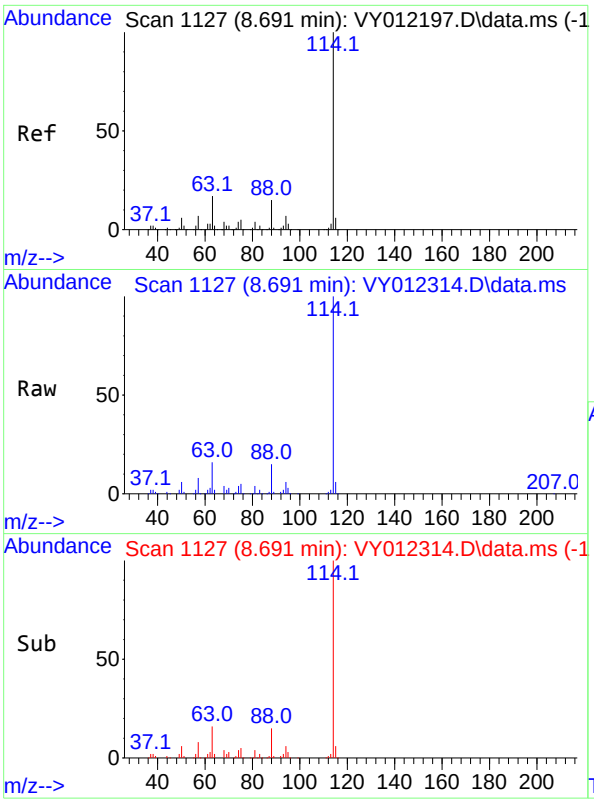


#33
1,2-Dichloroethane-d4
Concen: 91.612 ug/l
RT: 8.142 min Scan# 1037
Delta R.T. -0.001 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Tgt Ion: 65 Resp: 28631

Ion	Ratio	Lower	Upper
65	100		
67	47.3	0.0	103.2



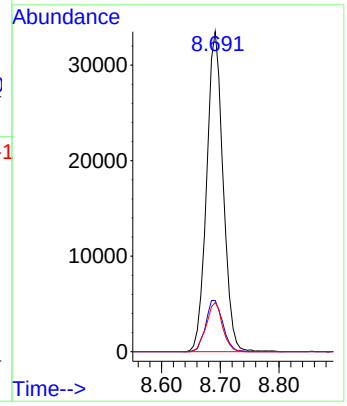


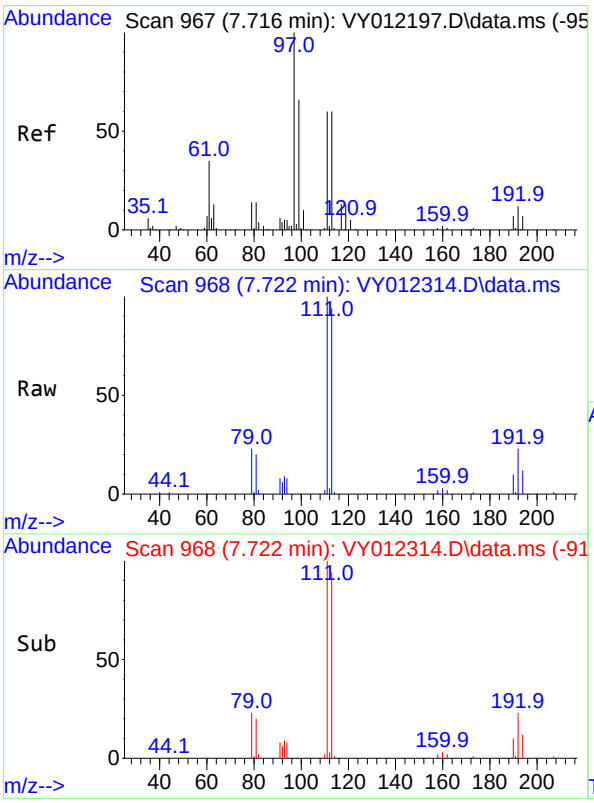
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35BRE

Tgt Ion:114 Resp: 65182

Ion	Ratio	Lower	Upper
114	100		
63	16.0	0.0	39.6
88	15.4	0.0	32.2

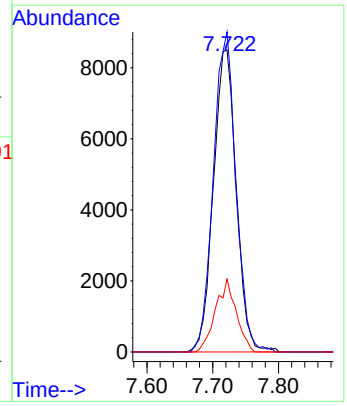


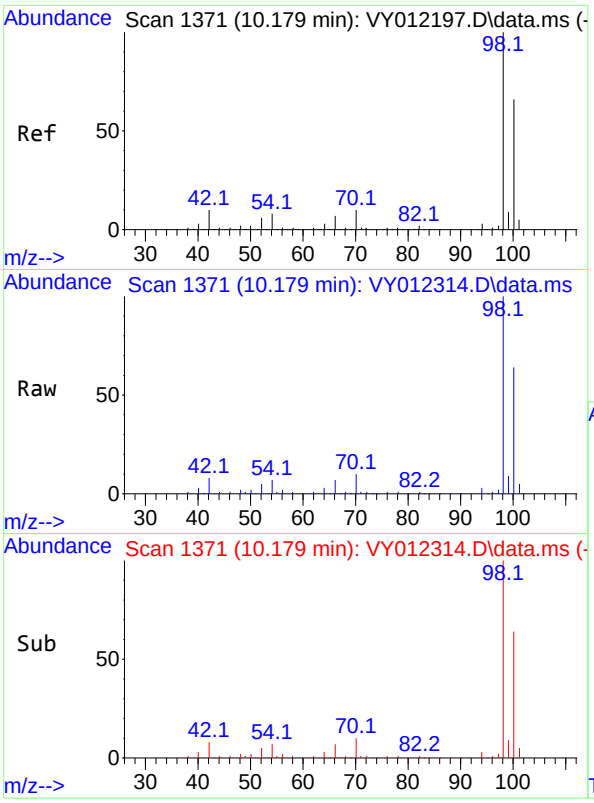


#35
Dibromofluoromethane
Concen: 59.761 ug/l
RT: 7.722 min Scan# 968
Delta R.T. 0.006 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Tgt Ion:113 Resp: 20626

Ion	Ratio	Lower	Upper
113	100		
111	104.1	83.0	124.4
192	21.9	16.0	24.0



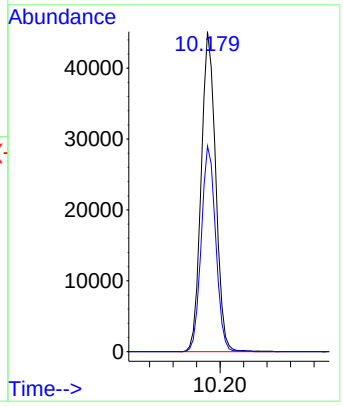


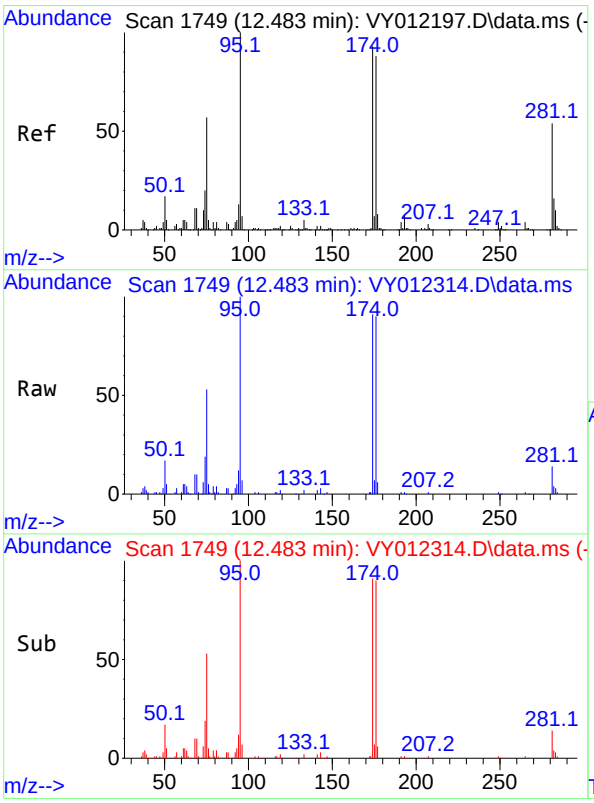
#50
Toluene-d8
Concen: 66.189 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35BRE

Tgt Ion: 98 Resp: 77474

Ion	Ratio	Lower	Upper
98	100		
100	64.0	51.9	77.9

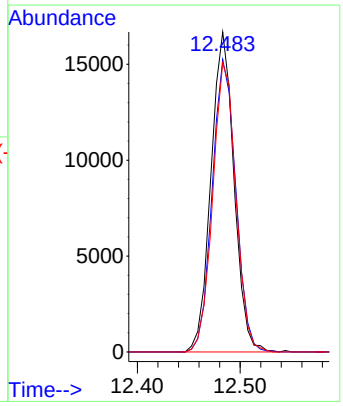


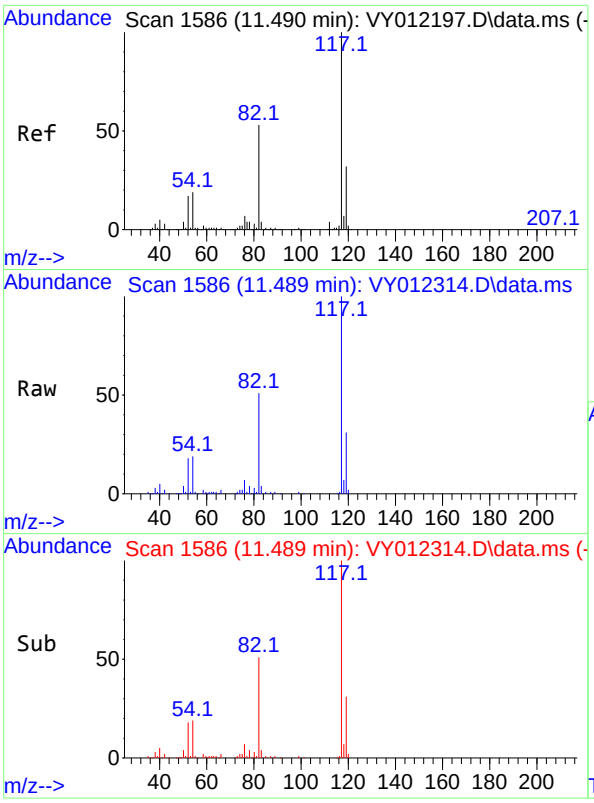


#62
4-Bromofluorobenzene
Concen: 53.293 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Tgt Ion: 95 Resp: 25929

Ion	Ratio	Lower	Upper
95	100		
174	93.6	0.0	172.0
176	90.9	0.0	167.6



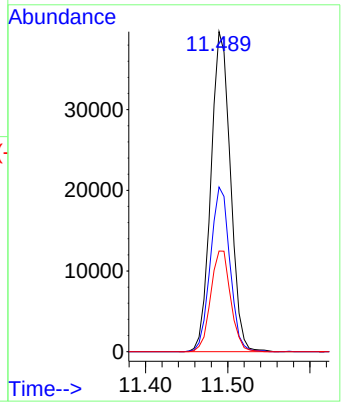


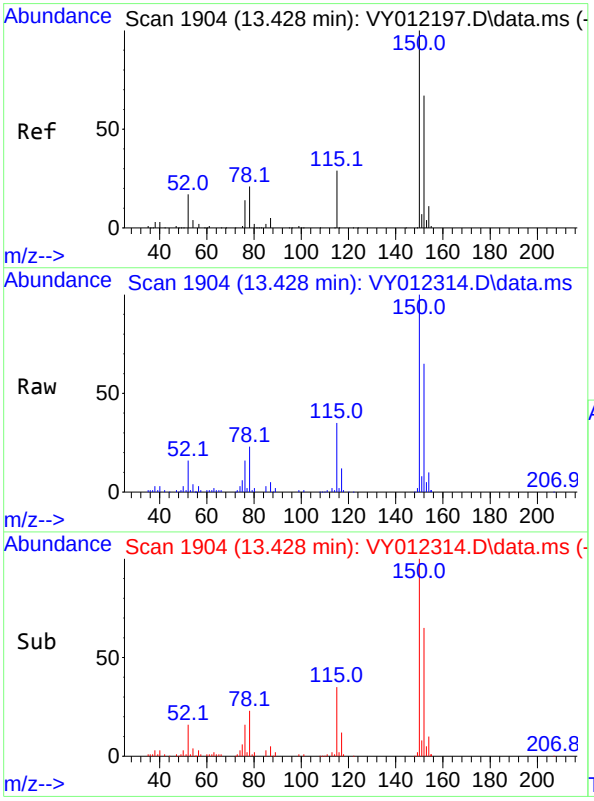
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Instrument :
MSVOA_Y
ClientSampleId :
B-P-35BRE

Tgt Ion:117 Resp: 65342

Ion	Ratio	Lower	Upper
117	100		
82	51.4	44.8	67.2
119	31.4	25.4	38.2

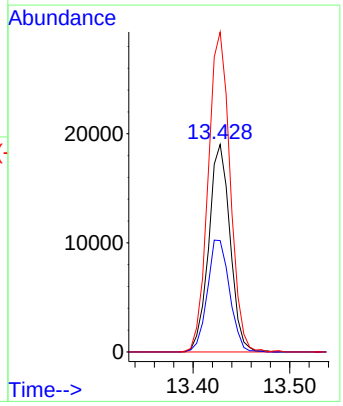




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012314.D
Acq: 23 Jan 2023 15:24

Tgt Ion:152 Resp: 29180

Ion	Ratio	Lower	Upper
152	100		
115	56.2	29.1	87.3
150	158.6	0.0	342.6



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Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	DUP01	SDG No.:	O1232
Lab Sample ID:	O1232-10	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	90.1
Sample Wt/Vol:	5.01 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
VY012300.D	1		01/20/23 18:57	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.95	U	0.95	5.50	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.50	ug/Kg
75-01-4	Vinyl Chloride	1.00	U	1.00	5.50	ug/Kg
74-83-9	Bromomethane	1.30	U	1.30	5.50	ug/Kg
75-00-3	Chloroethane	0.99	U	0.99	5.50	ug/Kg
75-69-4	Trichlorofluoromethane	1.10	U	1.10	5.50	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.80	U	0.80	5.50	ug/Kg
75-35-4	1,1-Dichloroethene	0.95	U	0.95	5.50	ug/Kg
67-64-1	Acetone	13.5	U	13.5	27.7	ug/Kg
75-15-0	Carbon Disulfide	0.83	U	0.83	5.50	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.00	U	1.00	5.50	ug/Kg
79-20-9	Methyl Acetate	1.40	U	1.40	5.50	ug/Kg
75-09-2	Methylene Chloride	6.60	U	6.60	11.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.75	U	0.75	5.50	ug/Kg
75-34-3	1,1-Dichloroethane	0.78	U	0.78	5.50	ug/Kg
110-82-7	Cyclohexane	0.93	U	0.93	5.50	ug/Kg
78-93-3	2-Butanone	8.10	U	8.10	27.7	ug/Kg
56-23-5	Carbon Tetrachloride	0.88	U	0.88	5.50	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.75	5.50	ug/Kg
74-97-5	Bromochloromethane	0.90	U	0.90	5.50	ug/Kg
67-66-3	Chloroform	0.74	U	0.74	5.50	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.83	U	0.83	5.50	ug/Kg
108-87-2	Methylcyclohexane	0.89	U	0.89	5.50	ug/Kg
71-43-2	Benzene	3.30	J	0.73	5.50	ug/Kg
107-06-2	1,2-Dichloroethane	0.93	U	0.93	5.50	ug/Kg
79-01-6	Trichloroethene	0.81	U	0.81	5.50	ug/Kg
78-87-5	1,2-Dichloropropane	0.72	U	0.72	5.50	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.50	ug/Kg
108-10-1	4-Methyl-2-Pentanone	5.10	U	5.10	27.7	ug/Kg
108-88-3	Toluene	1.80	J	0.70	5.50	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.82	U	0.82	5.50	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.79	U	0.79	5.50	ug/Kg

Raw Data: **VY012300.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	DUP01	SDG No.:	O1232
Lab Sample ID:	O1232-10	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	90.1
Sample Wt/Vol:	5.01 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
VY012300.D	1		01/20/23 18:57	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.95	U	0.95	5.50	ug/Kg
591-78-6	2-Hexanone	5.20	U	5.20	27.7	ug/Kg
124-48-1	Dibromochloromethane	0.83	U	0.83	5.50	ug/Kg
106-93-4	1,2-Dibromoethane	0.83	U	0.83	5.50	ug/Kg
127-18-4	Tetrachloroethene	0.84	U	0.84	5.50	ug/Kg
108-90-7	Chlorobenzene	0.72	U	0.72	5.50	ug/Kg
100-41-4	Ethyl Benzene	0.78	U	0.78	5.50	ug/Kg
179601-23-1	m/p-Xylenes	1.60	U	1.60	11.1	ug/Kg
95-47-6	o-Xylene	0.88	U	0.88	5.50	ug/Kg
100-42-5	Styrene	0.88	U	0.88	5.50	ug/Kg
75-25-2	Bromoform	0.90	U	0.90	5.50	ug/Kg
98-82-8	Isopropylbenzene	0.80	U	0.80	5.50	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.30	U	1.30	5.50	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.74	U	0.74	5.50	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.70	U	0.70	5.50	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.71	U	0.71	5.50	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.40	U	1.40	5.50	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	1.00	U	1.00	5.50	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.10	U	1.10	5.50	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	74.6		50 - 163	149%	SPK: 50
1868-53-7	Dibromofluoromethane	57.2		54 - 147	114%	SPK: 50
2037-26-5	Toluene-d8	66.1		58 - 134	132%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.7		30 - 143	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	152000	7.789			
540-36-3	1,4-Difluorobenzene	253000	8.691			
3114-55-4	Chlorobenzene-d5	250000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	114000	13.428			

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	01/18/23
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	01/19/23
Client Sample ID:	DUP01	SDG No.:	O1232
Lab Sample ID:	O1232-10	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	90.1
Sample Wt/Vol:	5.01 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
VY012300.D	1		01/20/23 18:57	VY012023

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\VY012023\
Data File : VY012300.D
Acq On : 20 Jan 2023 18:57
Operator : KP/MD
Sample : 01232-10
Misc : 5.01g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Quant Time: Jan 23 02:24:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	151828	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	252877	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	249786	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	114034	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	91460	74.610	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 149.220%			
35) Dibromofluoromethane	7.716	113	76531	57.156	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 114.320%			
50) Toluene-d8	10.179	98	300250	66.114	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 132.220%			
62) 4-Bromofluorobenzene	12.483	95	101406	53.723	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 107.440%			
Target Compounds						Qvalue
40) Benzene	8.161	78	19495	2.968	ug/l	96
52) Toluene	10.246	92	7177	1.641	ug/l	90

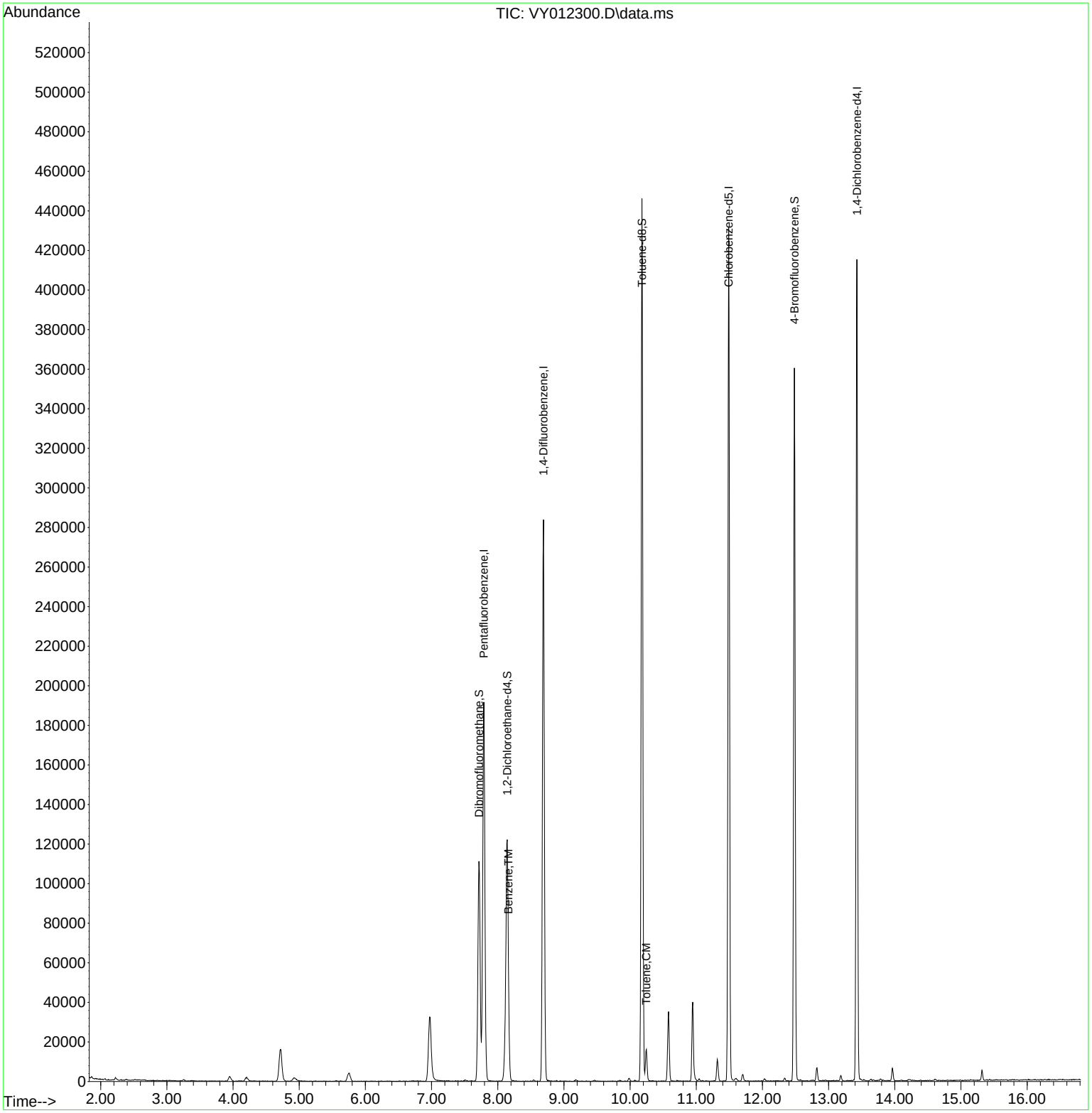
(#) = qualifier out of range (m) = manual integration (+) = signals summed

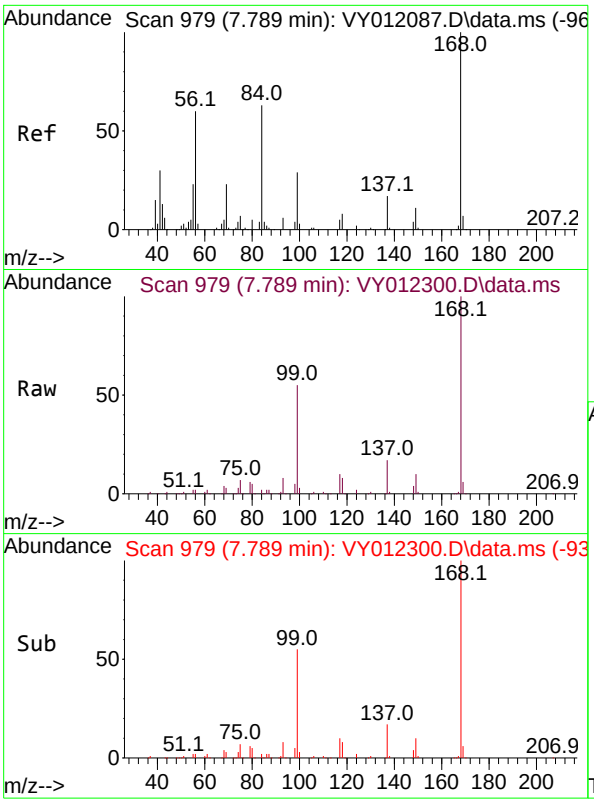
Sample Results: **VY012300.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012300.D
Acq On : 20 Jan 2023 18:57
Operator : KP/MD
Sample : 01232-10
Misc : 5.01g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Quant Time: Jan 23 02:24:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



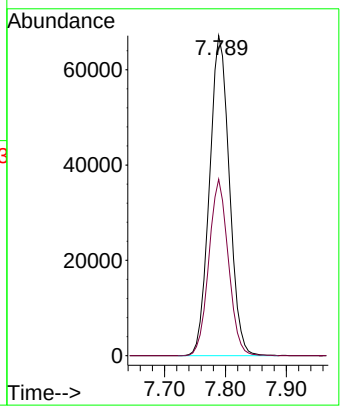


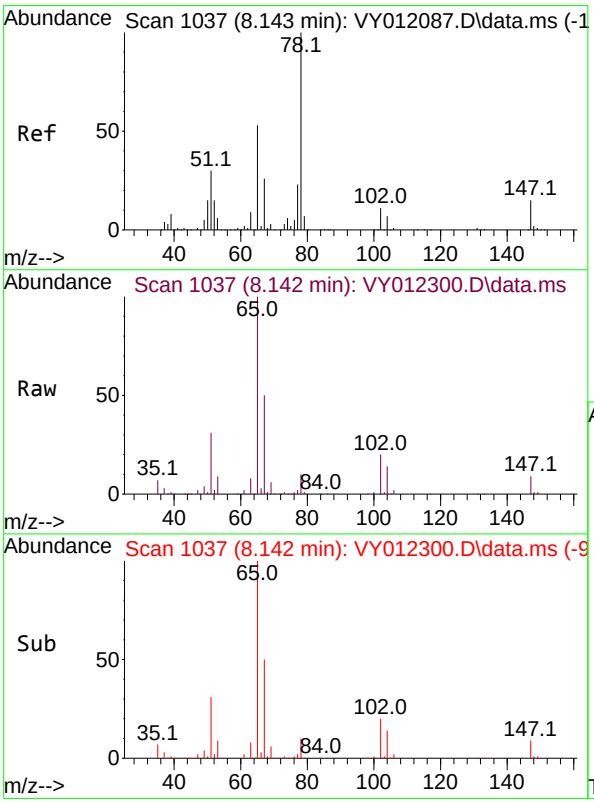
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Tgt Ion:168 Resp: 151828

Ion	Ratio	Lower	Upper
168	100		
99	55.2	44.0	66.0

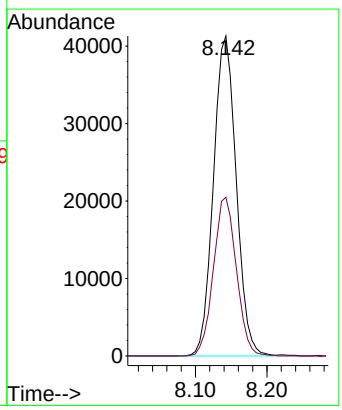


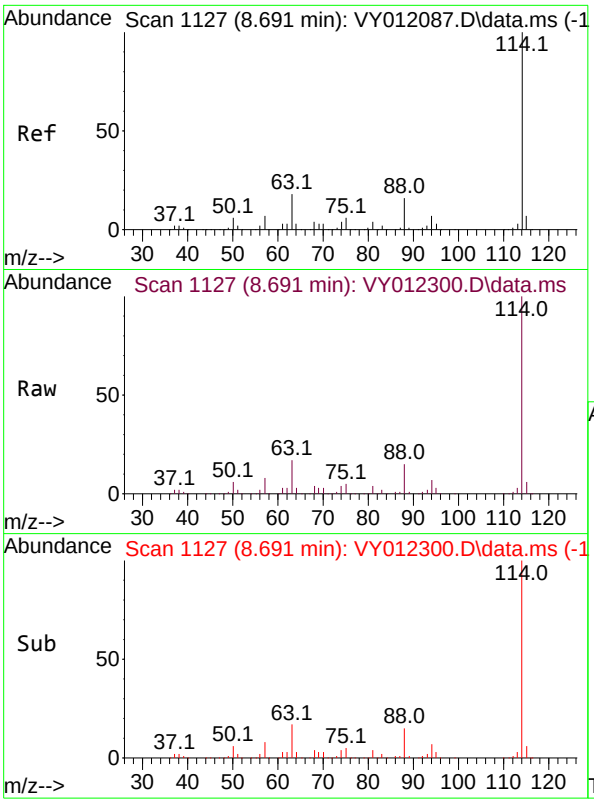


#33
1,2-Dichloroethane-d4
Concen: 74.610 ug/l
RT: 8.142 min Scan# 1037
Delta R.T. -0.001 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Tgt Ion: 65 Resp: 91460

Ion	Ratio	Lower	Upper
65	100		
67	50.0	0.0	103.2



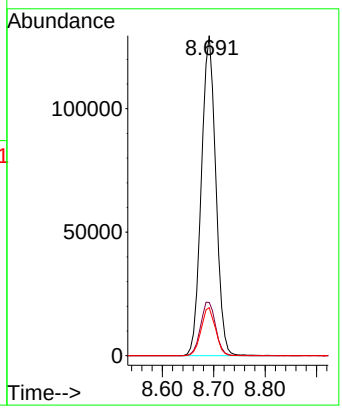


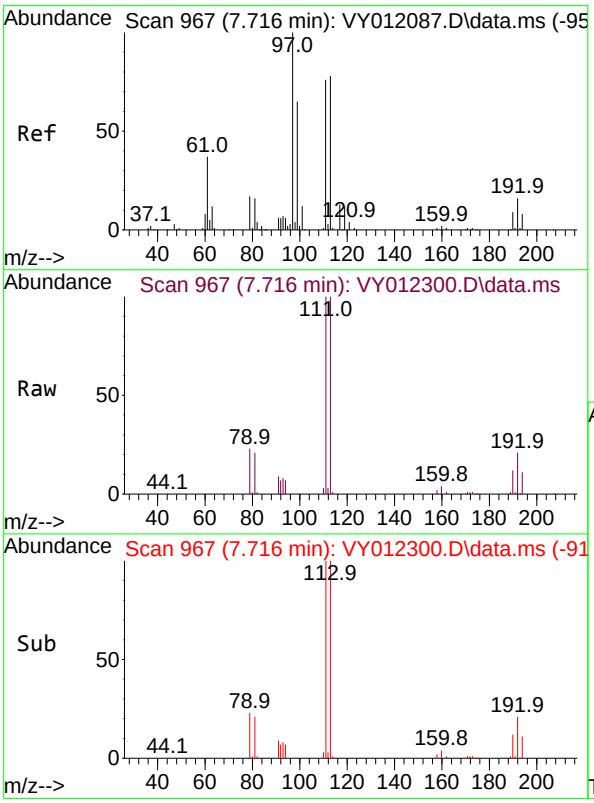
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Tgt Ion:114 Resp: 252877

Ion	Ratio	Lower	Upper
114	100		
63	16.6	0.0	39.6
88	15.0	0.0	32.2

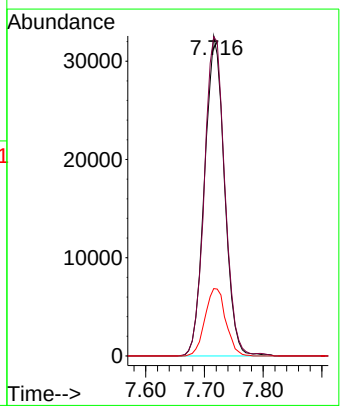


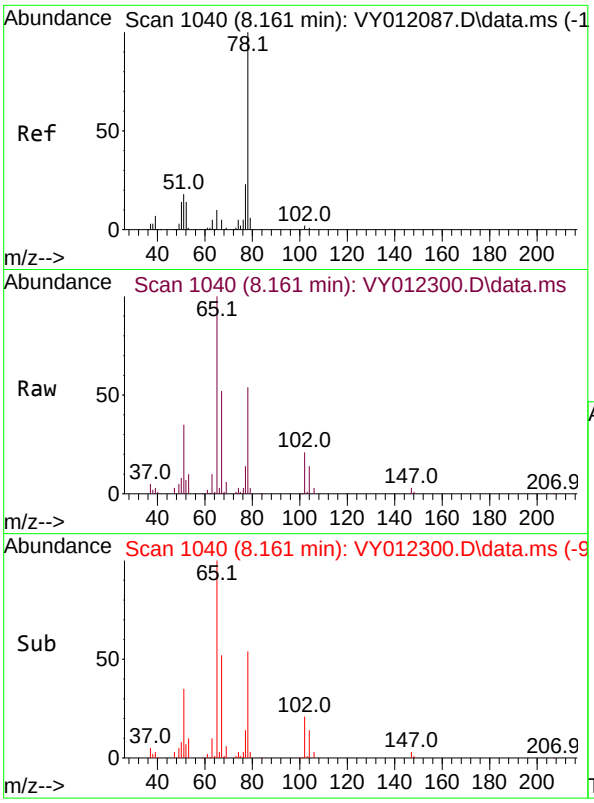


#35
Dibromofluoromethane
Concen: 57.156 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Tgt Ion:113 Resp: 76531

Ion	Ratio	Lower	Upper
113	100		
111	102.2	83.0	124.4
192	22.0	16.0	24.0



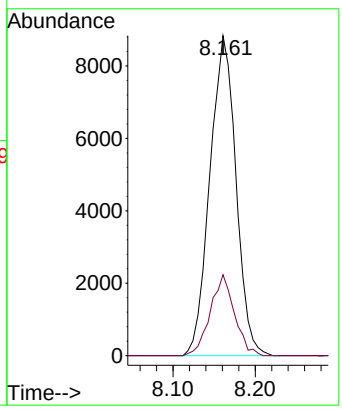


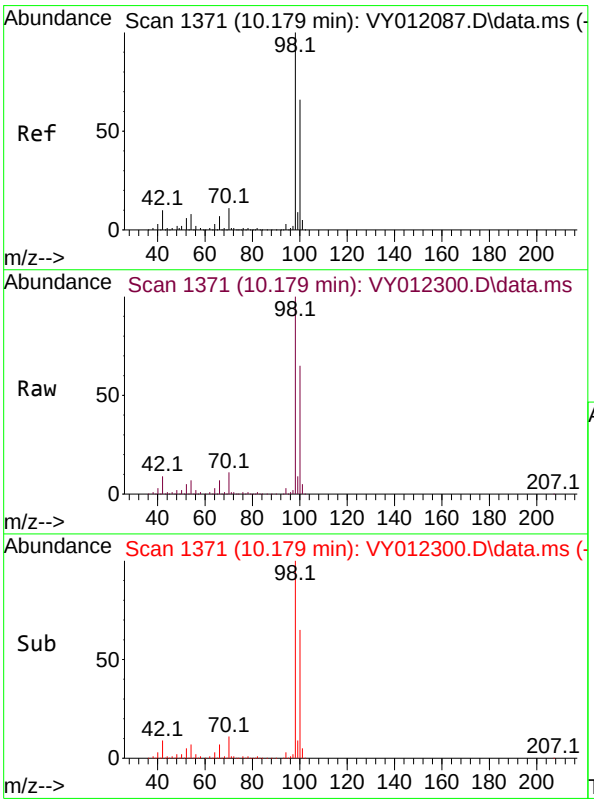
#40
Benzene
Concen: 2.968 ug/l
RT: 8.161 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Tgt Ion: 78 Resp: 19495

Ion	Ratio	Lower	Upper
78	100		
77	25.3	18.6	27.8

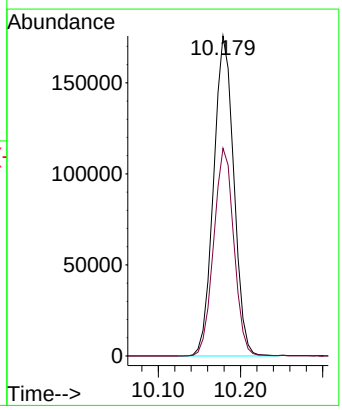


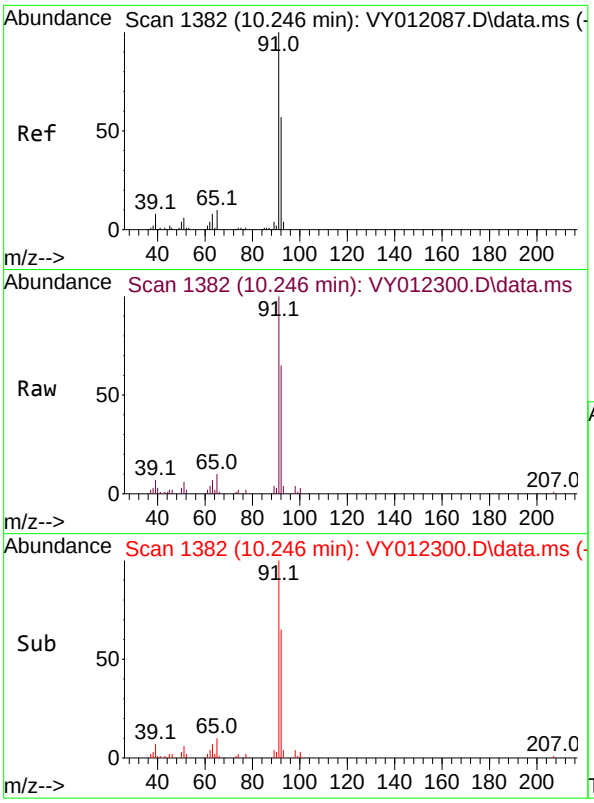


#50
Toluene-d8
Concen: 66.114 ug/l
RT: 10.179 min Scan# 1371
Delta R.T. -0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Tgt Ion: 98 Resp: 300250

Ion	Ratio	Lower	Upper
98	100		
100	64.8	51.9	77.9



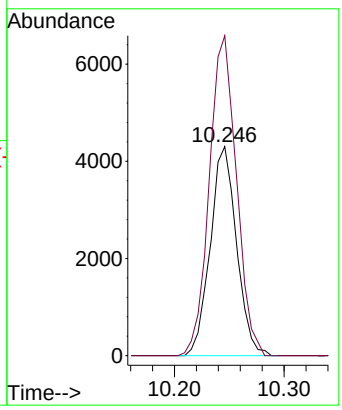


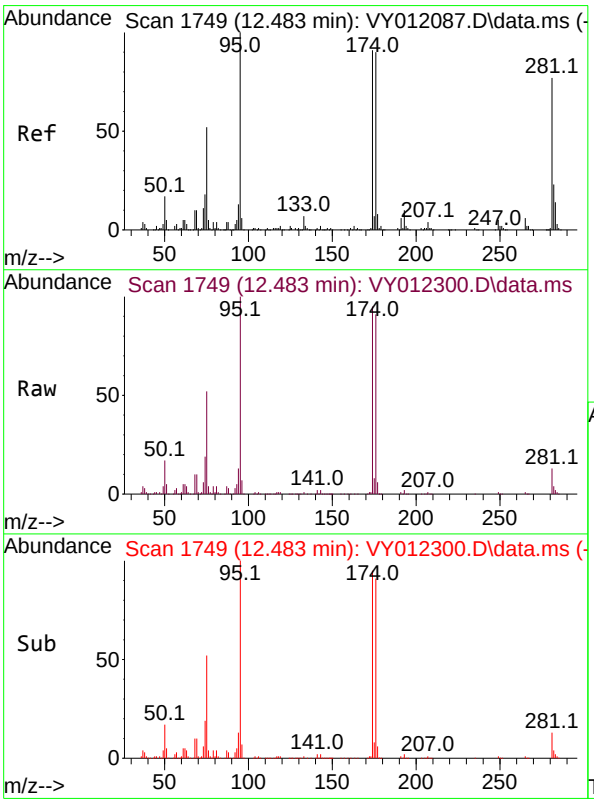
#52
Toluene
Concen: 1.641 ug/l
RT: 10.246 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Tgt Ion: 92 Resp: 7177

Ion	Ratio	Lower	Upper
92	100		
91	157.9	137.4	206.0

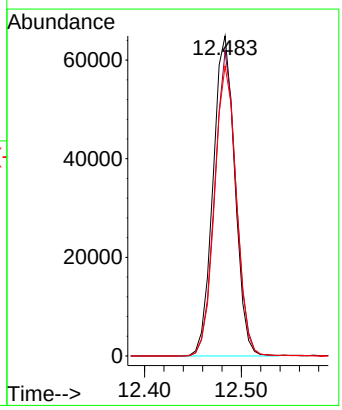


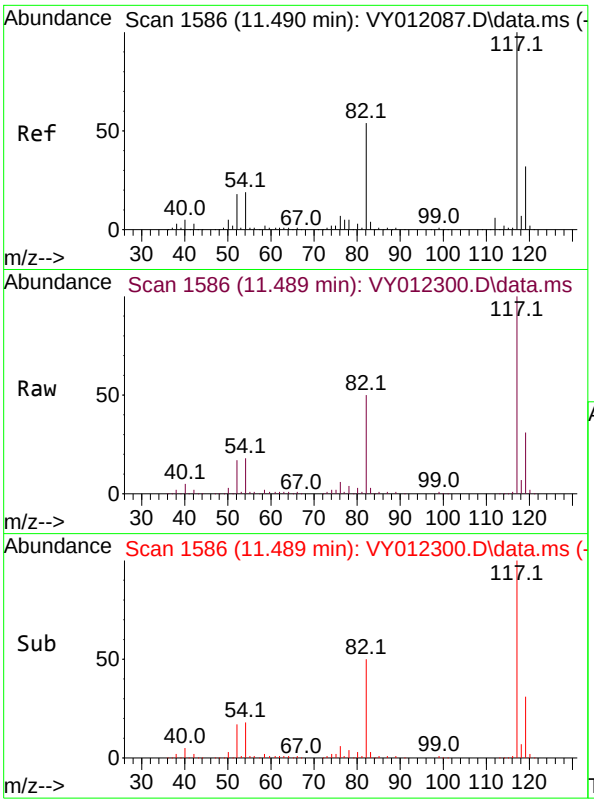


#62
4-Bromofluorobenzene
Concen: 53.723 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Tgt Ion: 95 Resp: 101406

Ion	Ratio	Lower	Upper
95	100		
174	93.3	0.0	172.0
176	91.2	0.0	167.6



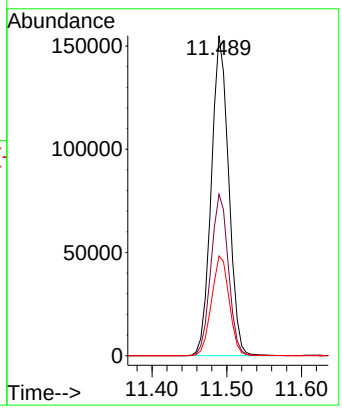


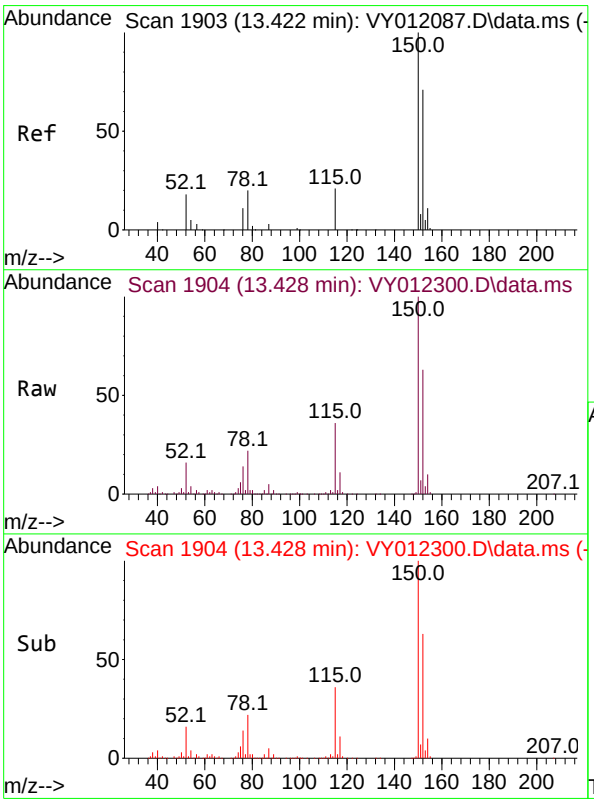
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Tgt Ion:117 Resp: 249786

Ion	Ratio	Lower	Upper
117	100		
82	50.4	44.8	67.2
119	31.2	25.4	38.2

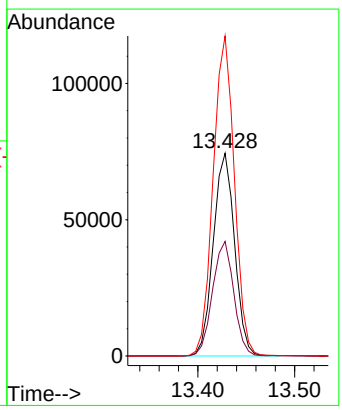




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012300.D
Acq: 20 Jan 2023 18:57

Tgt Ion:152 Resp: 114034

Ion	Ratio	Lower	Upper
152	100		
115	56.5	29.1	87.3
150	157.2	0.0	342.6



Sample Results: **VY012300.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012300.D
Acq On : 20 Jan 2023 18:57
Operator : KP/MD
Sample : 01232-10
Misc : 5.01g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012300.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	460	475	490	rBV2	16112	50274	6.61%	1.085%
2	5.753	636	645	656	rVB3	4230	13173	1.73%	0.284%
3	6.972	832	845	864	rBV	32598	101935	13.41%	2.200%
4	7.716	957	967	973	rBV	111238	264842	34.84%	5.717%
5	7.789	973	979	993	rVB	191465	429644	56.52%	9.274%
6	8.142	1023	1037	1049	rBV3	121984	329142	43.30%	7.105%
7	8.691	1115	1127	1137	rBV	283877	556776	73.25%	12.018%
8	10.179	1363	1371	1378	rBV	446017	760118	100.00%	16.407%
9	10.246	1378	1382	1389	rVB	15949	27532	3.62%	0.594%
10	10.581	1429	1437	1445	rBV	35121	60928	8.02%	1.315%
11	10.947	1491	1497	1509	rBV	39888	67203	8.84%	1.451%
12	11.319	1552	1558	1565	rVB	10911	18603	2.45%	0.402%
13	11.489	1578	1586	1599	rBV	431484	704137	92.64%	15.199%
14	12.483	1742	1749	1760	rBV2	360306	584016	76.83%	12.606%
15	12.825	1799	1805	1811	rBV3	6611	11157	1.47%	0.241%
16	13.428	1897	1904	1911	rBV	414637	642857	84.57%	13.876%
17	13.965	1985	1992	1998	rVB2	6422	10509	1.38%	0.227%

Sum of corrected areas: 4632846

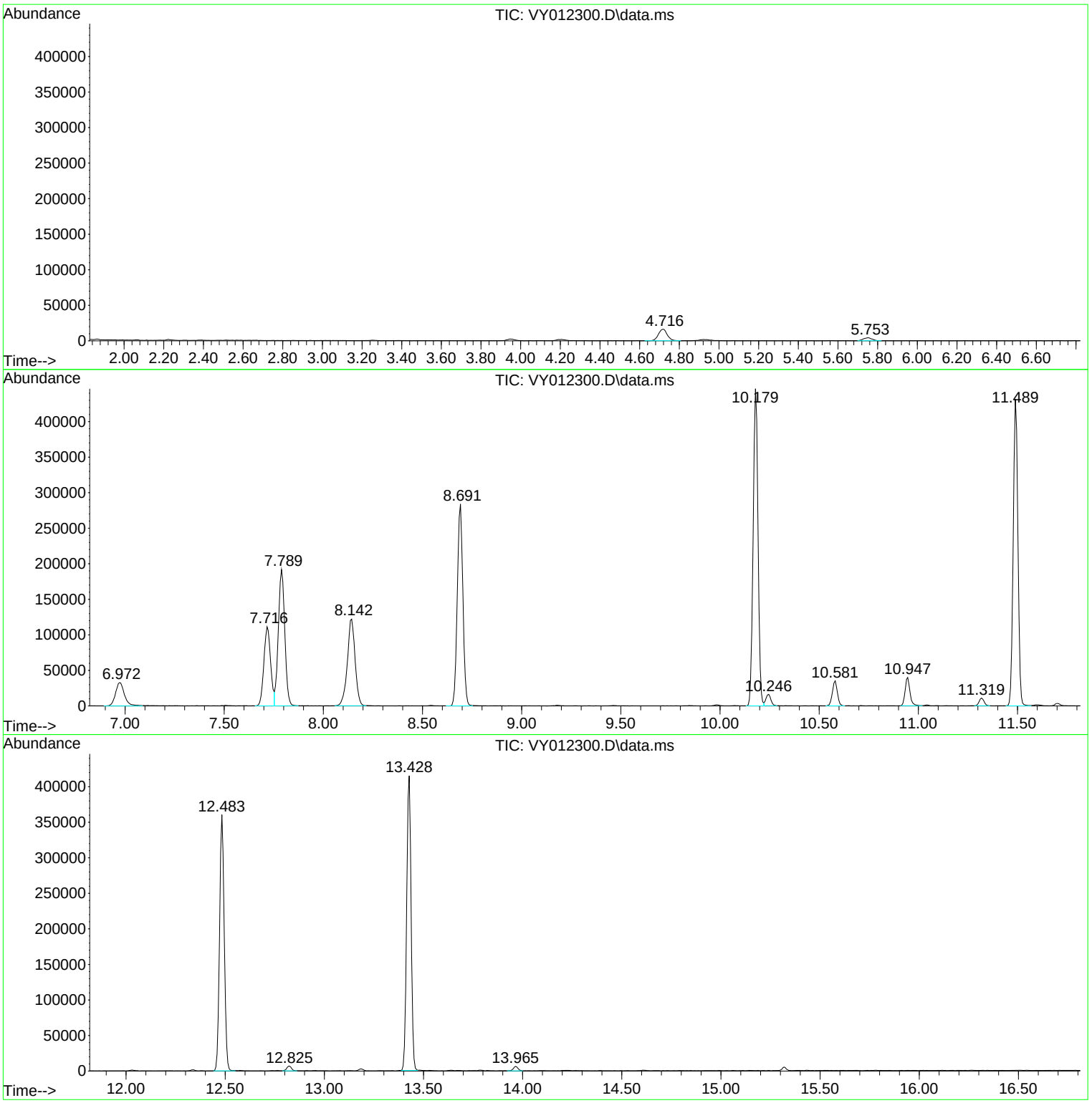
Sample Results: **VY012300.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012300.D
Acq On : 20 Jan 2023 18:57
Operator : KP/MD
Sample : 01232-10
Misc : 5.01g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012300.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012300.D
Acq On : 20 Jan 2023 18:57
Operator : KP/MD
Sample : 01232-10
Misc : 5.01g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012300.D
Acq On : 20 Jan 2023 18:57
Operator : KP/MD
Sample : 01232-10
Misc : 5.01g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
DUP01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

CHEMTECH

CALIBRATION SUMMARY

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Instrument ID: MSVOA_Y Calibration Date(s): 01/16/2023 01/16/2023

Heated Purge: (Y/N) Y Calibration Time(s): 12:17 14:34

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

LAB FILE ID: RRF005 = VY012194.D RRF010 = VY012195.D RRF020 = VY012196.D
RRF050 = VY012197.D RRF100 = VY012198.D RRF150 = VY012199.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.456	0.520	0.486	0.372	0.410	0.378	0.437	13.8
Chloromethane	0.452	0.440	0.400	0.368	0.389	0.372	0.403	8.7
Vinyl Chloride	0.503	0.508	0.479	0.435	0.464	0.436	0.471	6.8
Bromomethane	0.428	0.398	0.355	0.334	0.352	0.317	0.364	11.4
Chloroethane	0.324	0.324	0.310	0.287	0.310	0.288	0.307	5.3
Trichlorofluoromethane	0.951	0.994	0.945	0.842	0.929	0.853	0.919	6.5
1,1,2-Trichlorotrifluoroethane	0.454	0.481	0.455	0.407	0.457	0.430	0.447	5.7
1,1-Dichloroethene	0.470	0.477	0.459	0.438	0.469	0.443	0.459	3.4
Acetone	0.111	0.149	0.123	0.154	0.149	0.150	0.139	12.9
Carbon Disulfide	1.466	1.490	1.413	1.343	1.443	1.367	1.420	4
Methyl tert-butyl Ether	1.159	1.395	1.250	1.280	1.325	1.273	1.280	6.1
Methyl Acetate	0.308	0.340	0.287	0.301	0.308	0.326	0.312	6
Methylene Chloride	1.174	1.020	0.736	0.570	0.559	0.513	0.762	36.1
trans-1,2-Dichloroethene	0.519	0.543	0.512	0.495	0.519	0.487	0.512	3.9
1,1-Dichloroethane	0.804	0.812	0.772	0.760	0.805	0.759	0.785	3.1
Cyclohexane	0.845	0.795	0.707	0.633	0.713	0.681	0.729	10.6
2-Butanone	0.125	0.175	0.143	0.157	0.156	0.166	0.154	11.5
Carbon Tetrachloride	0.600	0.615	0.594	0.552	0.583	0.543	0.581	4.9
cis-1,2-Dichloroethene	0.571	0.583	0.555	0.548	0.582	0.538	0.563	3.3
Bromochloromethane	0.214	0.177	0.160	0.159	0.160	0.158	0.171	12.8
Chloroform	0.940	0.997	0.912	0.900	0.952	0.860	0.927	5.1
1,1,1-Trichloroethane	0.932	0.969	0.901	0.885	0.950	0.868	0.918	4.3
Methylcyclohexane	0.549	0.566	0.556	0.514	0.564	0.550	0.550	3.4
Benzene	1.354	1.375	1.297	1.237	1.289	1.239	1.299	4.4
1,2-Dichloroethane	0.404	0.453	0.413	0.408	0.414	0.389	0.413	5.2
Trichloroethene	0.404	0.405	0.395	0.372	0.387	0.366	0.388	4.2
1,2-Dichloropropane	0.267	0.288	0.268	0.261	0.277	0.266	0.271	3.6
Bromodichloromethane	0.437	0.488	0.460	0.446	0.468	0.440	0.457	4.2
4-Methyl-2-Pentanone	0.165	0.218	0.193	0.199	0.195	0.211	0.197	9.3
Toluene	0.875	0.896	0.872	0.840	0.877	0.828	0.865	3
t-1,3-Dichloropropene	0.454	0.501	0.478	0.475	0.488	0.470	0.478	3.3
cis-1,3-Dichloropropene	0.492	0.547	0.514	0.508	0.525	0.500	0.514	3.8
1,1,2-Trichloroethane	0.252	0.286	0.255	0.254	0.253	0.246	0.258	5.5

* 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.

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Instrument ID: MSVOA_Y Calibration Date(s): 01/16/2023 01/16/2023

Heated Purge: (Y/N) Y Calibration Time(s): 12:17 14:34

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

LAB FILE ID: RRF005 = VY012194.D RRF010 = VY012195.D RRF020 = VY012196.D
RRF050 = VY012197.D RRF100 = VY012198.D RRF150 = VY012199.D

COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
2-Hexanone	0.115	0.166	0.145	0.158	0.153	0.163	0.150	12.5
Dibromochloromethane	0.321	0.369	0.345	0.343	0.344	0.328	0.342	4.8
1,2-Dibromoethane	0.233	0.273	0.247	0.247	0.250	0.243	0.249	5.4
Tetrachloroethene	0.461	0.494	0.468	0.451	0.447	0.417	0.456	5.6
Chlorobenzene	1.097	1.064	1.013	0.990	1.013	0.961	1.023	4.8
Ethyl Benzene	1.877	1.892	1.821	1.791	1.838	1.752	1.828	2.9
m/p-Xylenes	0.732	0.752	0.730	0.711	0.726	0.687	0.723	3.1
o-Xylene	0.706	0.715	0.695	0.680	0.692	0.654	0.690	3.1
Styrene	1.140	1.203	1.157	1.149	1.167	1.106	1.154	2.8
Bromoform	0.227	0.272	0.250	0.249	0.242	0.240	0.247	6
Isopropylbenzene	3.672	3.672	3.604	3.501	3.715	3.469	3.605	2.8
1,1,2,2-Tetrachloroethane	0.544	0.622	0.546	0.563	0.561	0.572	0.568	5
1,3-Dichlorobenzene	1.837	1.799	1.736	1.665	1.725	1.591	1.726	5.2
1,4-Dichlorobenzene	1.888	1.818	1.695	1.642	1.705	1.577	1.721	6.6
1,2-Dichlorobenzene	1.660	1.639	1.521	1.485	1.511	1.422	1.540	6
1,2-Dibromo-3-Chloropropane	0.103	0.133	0.116	0.116	0.115	0.121	0.117	8.3
1,2,4-Trichlorobenzene	1.049	0.995	0.986	0.932	0.977	0.980	0.987	3.8
1,2,3-Trichlorobenzene	0.870	0.862	0.864	0.798	0.837	0.862	0.849	3.3
1,2-Dichloroethane-d4	0.533	0.551	0.498	0.409	0.409	0.388	0.465	15.3
Dibromofluoromethane	0.292	0.291	0.289	0.241	0.242	0.233	0.265	10.8
Toluene-d8	1.242	1.188	1.195	0.890	0.892	0.859	1.044	17.3
4-Bromofluorobenzene	0.425	0.419	0.403	0.333	0.336	0.323	0.373	12.7

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

Response Factor Report GCVOA_Y

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
Method File : 82Y011623S.M
Title : SW846 8260
Last Update : Tue Jan 17 04:31:47 2023
Response Via : Continuing Calibration

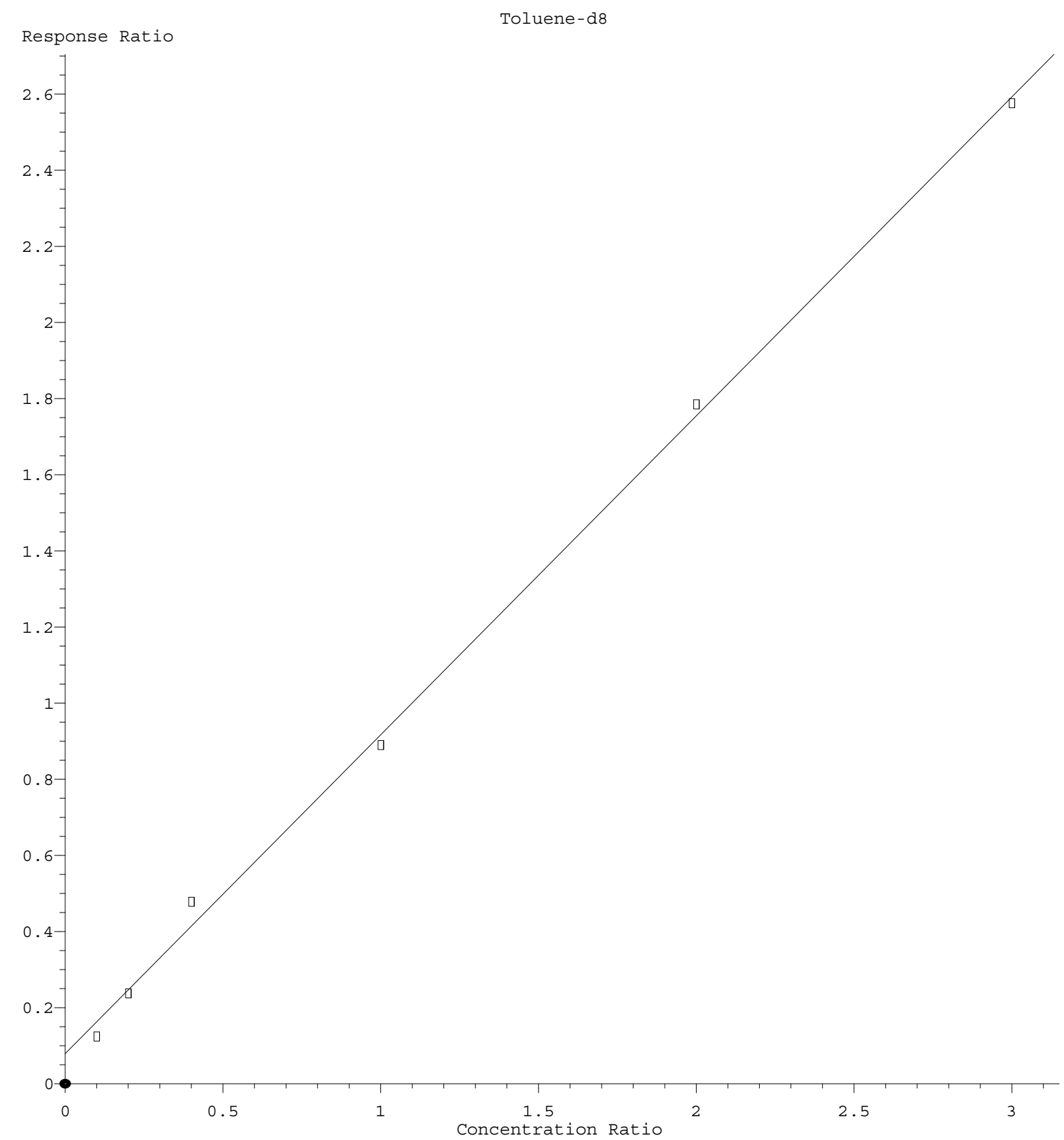
Calibration Files
5 =VY012194.D 10 =VY012195.D 20 =VY012196.D 50 =VY012197.D 100 =VY012198.D 150 =VY012199.D

		Compound	5	10	20	50	100	150	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	T	Dichlorodifluo...	0.456	0.520	0.486	0.372	0.410	0.378	0.437	13.76
3)	P	Chloromethane	0.452	0.440	0.400	0.368	0.389	0.372	0.403	8.70
4)	C	Vinyl Chloride	0.503	0.508	0.479	0.435	0.464	0.436	0.471	6.76#
5)	T	Bromomethane	0.428	0.398	0.355	0.334	0.352	0.317	0.364	11.36
6)	T	Chloroethane	0.324	0.324	0.310	0.287	0.310	0.288	0.307	5.29
7)	T	Trichlorofluor...	0.951	0.994	0.945	0.842	0.929	0.853	0.919	6.50
8)	T	Diethyl Ether	0.274	0.303	0.267	0.260	0.274	0.264	0.273	5.61
9)	T	1,1,2-Trichlor...	0.454	0.481	0.455	0.407	0.457	0.430	0.447	5.70
10)	T	Methyl Iodide	0.644	0.678	0.682	0.684	0.725	0.666	0.680	3.92
11)	T	Tert butyl alc...	0.069	0.078	0.051	0.046	0.047	0.048	0.057	23.99
12)	CM	1,1-Dichloroet...	0.470	0.477	0.459	0.438	0.469	0.443	0.459	3.42#
13)	T	Acrolein	0.030	0.033	0.028	0.016	0.017	0.017	0.023	32.27
14)	T	Allyl chloride	0.567	0.579	0.544	0.544	0.595	0.578	0.568	3.60
15)	T	Acrylonitrile	0.108	0.134	0.115	0.117	0.119	0.123	0.119	7.44
16)	T	Acetone	0.111	0.149	0.123	0.154	0.149	0.150	0.139	12.86
17)	T	Carbon Disulfide	1.466	1.490	1.413	1.343	1.443	1.367	1.420	4.03
18)	T	Methyl Acetate	0.308	0.340	0.287	0.301	0.308	0.326	0.312	5.98
19)	T	Methyl tert-bu...	1.159	1.395	1.250	1.280	1.324	1.273	1.280	6.13
20)	T	Methylene Chlo...	1.174	1.020	0.736	0.570	0.559	0.513	0.762	36.05
21)	T	trans-1,2-Dich...	0.519	0.543	0.512	0.495	0.519	0.487	0.512	3.90
22)	T	Diisopropyl ether	1.121	1.184	1.109	1.098	1.166	1.115	1.132	3.05
23)	T	Vinyl Acetate	0.617	0.755	0.693	0.704	0.732	0.731	0.705	6.90
24)	P	1,1-Dichloroet...	0.804	0.812	0.772	0.760	0.805	0.759	0.785	3.10
25)	T	2-Butanone	0.125	0.175	0.143	0.157	0.156	0.166	0.154	11.49
26)	T	2,2-Dichloropr...	0.871	0.909	0.840	0.812	0.875	0.808	0.852	4.62
27)	T	cis-1,2-Dichlo...	0.571	0.583	0.555	0.548	0.582	0.538	0.563	3.33
28)	T	Bromochloromet...	0.214	0.177	0.160	0.159	0.160	0.158	0.171	12.81
29)	T	Tetrahydrofuran	0.069	0.095	0.080	0.085	0.085	0.092	0.084	11.05
30)	C	Chloroform	0.940	0.997	0.912	0.900	0.952	0.860	0.927	5.08#
31)	T	Cyclohexane	0.845	0.795	0.707	0.633	0.713	0.681	0.729	10.64
32)	T	1,1,1-Trichlor...	0.932	0.969	0.901	0.885	0.950	0.868	0.918	4.30
33)	S	1,2-Dichloroet...	0.533	0.551	0.498	0.409	0.409	0.388	0.465	15.35
34)	I	1,4-Difluorobenzene	----------ISTD----------							
35)	S	Dibromofluorom...	0.292	0.291	0.289	0.241	0.242	0.233	0.265	10.77
36)	T	1,1-Dichloropr...	0.467	0.478	0.452	0.426	0.447	0.431	0.450	4.48
37)	T	Ethyl Acetate	0.173	0.223	0.200	0.196	0.191	0.206	0.198	8.28
38)	T	Carbon Tetrach...	0.600	0.615	0.594	0.552	0.583	0.543	0.581	4.88
39)	T	Methylcyclohexane	0.549	0.566	0.556	0.514	0.564	0.550	0.550	3.41
40)	TM	Benzene	1.354	1.375	1.297	1.237	1.289	1.239	1.299	4.41
41)	T	Methacrylonitrile	0.121	0.127	0.113	0.120	0.106	0.112	0.117	6.44
42)	TM	1,2-Dichloroet...	0.404	0.453	0.413	0.408	0.414	0.389	0.413	5.23
43)	T	Isopropyl Acetate	0.318	0.405	0.361	0.369	0.371	0.391	0.369	8.08
44)	TM	Trichloroethene	0.404	0.405	0.395	0.372	0.387	0.366	0.388	4.19
45)	C	1,2-Dichloropr...	0.267	0.288	0.268	0.261	0.277	0.266	0.271	3.60#
46)	T	Dibromomethane	0.175	0.197	0.182	0.179	0.181	0.175	0.181	4.42
47)	T	Bromodichlorom...	0.437	0.488	0.460	0.446	0.468	0.440	0.457	4.24
48)	T	Methyl methacr...	0.140	0.182	0.161	0.176	0.173	0.188	0.170	10.02
49)	T	1,4-Dioxane	0.002	0.003	0.002	0.003	0.002	0.003	0.002	8.65
50)	S	Toluene-d8	1.242	1.188	1.195	0.890	0.892	0.859	1.044	17.33
51)	T	4-Methyl-2-Pen...	0.165	0.218	0.193	0.199	0.195	0.211	0.197	9.33
52)	CM	Toluene	0.875	0.896	0.872	0.840	0.877	0.828	0.865	2.95#
53)	T	t-1,3-Dichloro...	0.454	0.501	0.478	0.475	0.488	0.470	0.478	3.33
54)	T	cis-1,3-Dichlo...	0.492	0.547	0.514	0.508	0.525	0.500	0.514	3.84
55)	T	1,1,2-Trichlor...	0.252	0.286	0.255	0.254	0.253	0.246	0.258	5.52
56)	T	Ethyl methacry...	0.291	0.358	0.333	0.346	0.349	0.352	0.338	7.24

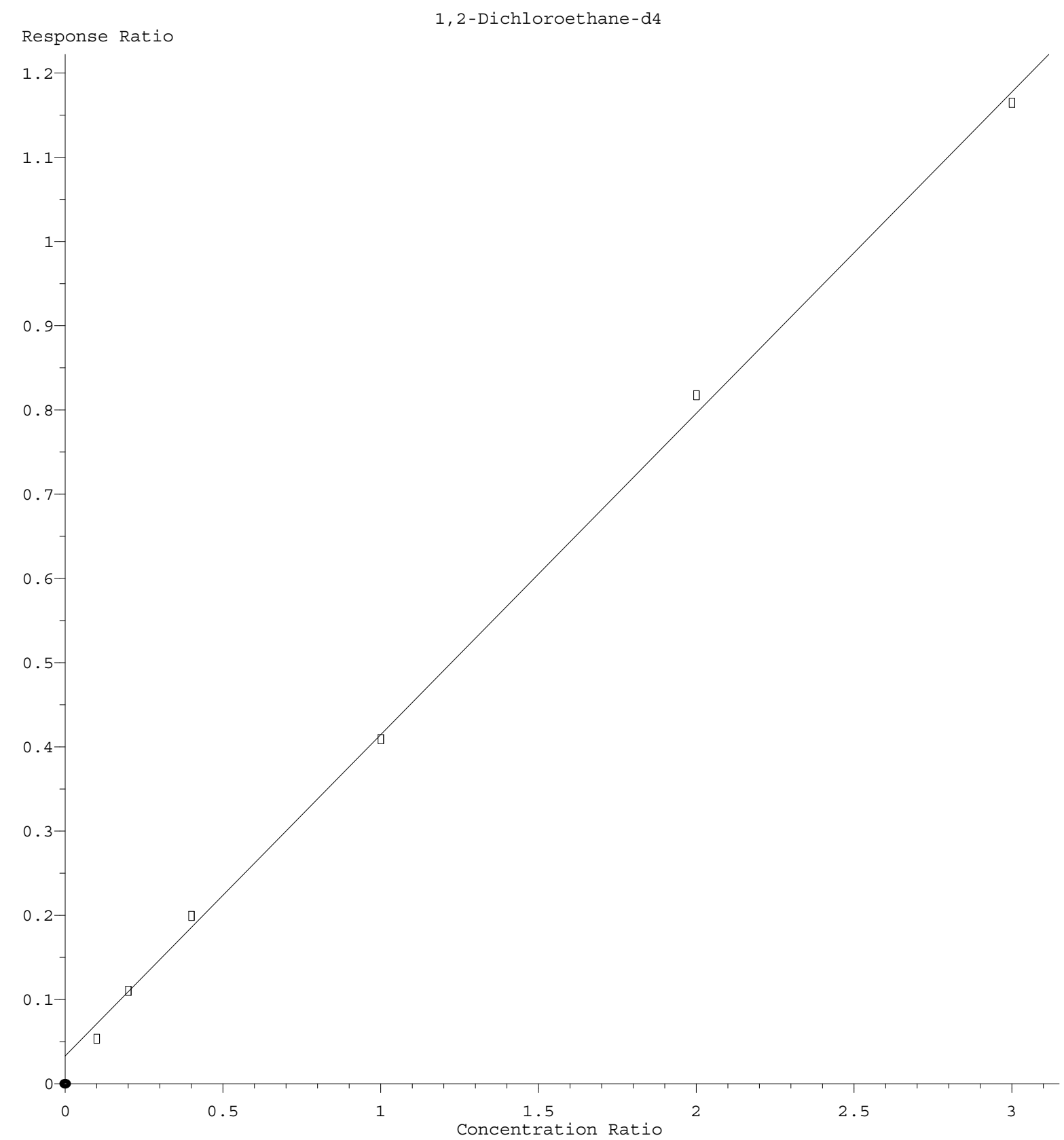
Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
Method File : 82Y011623S.M

57)	T	1,3-Dichloropr...	0.407	0.450	0.422	0.415	0.423	0.408	0.421	3.76
58)	T	2-Chloroethyl ...	0.110	0.122	0.112	0.108	0.107	0.112	0.112	4.60
59)	T	2-Hexanone	0.115	0.166	0.145	0.158	0.153	0.163	0.150	12.46
60)	T	Dibromochlorom...	0.321	0.369	0.345	0.343	0.344	0.328	0.342	4.83
61)	T	1,2-Dibromoethane	0.233	0.273	0.247	0.247	0.250	0.243	0.249	5.42
62)	S	4-Bromofluorob...	0.425	0.419	0.403	0.333	0.336	0.323	0.373	12.69
63)	I	Chlorobenzene-d5	----------ISTD----------							
64)	T	Tetrachloroethene	0.461	0.494	0.468	0.451	0.447	0.417	0.456	5.62
65)	PM	Chlorobenzene	1.097	1.064	1.013	0.990	1.013	0.961	1.023	4.85
66)	T	1,1,1,2-Tetrac...	0.385	0.408	0.386	0.385	0.387	0.366	0.386	3.48
67)	C	Ethyl Benzene	1.877	1.892	1.821	1.791	1.838	1.752	1.828	2.86#
68)	T	m/p-Xylenes	0.732	0.752	0.730	0.711	0.726	0.687	0.723	3.06
69)	T	o-Xylene	0.706	0.715	0.695	0.680	0.692	0.654	0.690	3.11
70)	T	Styrene	1.140	1.203	1.157	1.149	1.167	1.106	1.154	2.75
71)	P	Bromoform	0.227	0.272	0.250	0.249	0.242	0.240	0.247	5.98
72)	I	1,4-Dichlorobenzen...	----------ISTD----------							
73)	T	Isopropylbenzene	3.672	3.672	3.604	3.501	3.715	3.469	3.605	2.78
74)	T	N-amyl acetate	0.623	0.723	0.679	0.715	0.733	0.767	0.707	7.06
75)	P	1,1,2,2-Tetrac...	0.544	0.622	0.546	0.563	0.561	0.572	0.568	5.04
76)	T	1,2,3-Trichlor...	0.431	0.480	0.512	0.506	0.407	0.422	0.460	9.84
77)	T	Bromobenzene	0.915	0.905	0.848	0.852	0.868	0.817	0.868	4.27
78)	T	n-propylbenzene	4.376	4.340	4.225	4.025	4.313	4.034	4.219	3.67
79)	T	2-Chlorotoluene	2.464	2.470	2.365	2.302	2.432	2.281	2.385	3.45
80)	T	1,3,5-Trimethy...	3.234	3.280	3.154	3.016	3.184	2.937	3.134	4.20
81)	T	trans-1,4-Dich...	0.199	0.240	0.215	0.226	0.228	0.231	0.223	6.49
82)	T	4-Chlorotoluene	2.668	2.582	2.486	2.396	2.539	2.363	2.506	4.58
83)	T	tert-Butylbenzene	2.795	2.812	2.788	2.576	2.822	2.599	2.732	4.13
84)	T	1,2,4-Trimethy...	3.086	3.216	3.127	3.023	3.173	2.921	3.091	3.46
85)	T	sec-Butylbenzene	4.118	3.978	3.912	3.704	3.952	3.672	3.889	4.39
86)	T	p-Isopropyltol...	3.530	3.526	3.446	3.241	3.457	3.188	3.398	4.33
87)	T	1,3-Dichlorobe...	1.837	1.799	1.736	1.665	1.725	1.591	1.725	5.16
88)	T	1,4-Dichlorobe...	1.888	1.818	1.695	1.642	1.705	1.577	1.721	6.64
89)	T	n-Butylbenzene	3.091	3.013	2.958	2.800	2.993	2.813	2.945	3.93
90)	T	Hexachloroethane	0.666	0.635	0.623	0.580	0.607	0.569	0.613	5.89
91)	T	1,2-Dichlorobe...	1.660	1.639	1.521	1.485	1.511	1.422	1.540	5.98
92)	T	1,2-Dibromo-3-...	0.103	0.133	0.116	0.116	0.115	0.121	0.117	8.27
93)	T	1,2,4-Trichlor...	1.049	0.995	0.986	0.932	0.977	0.980	0.987	3.79
94)	T	Hexachlorobuta...	0.663	0.617	0.612	0.546	0.572	0.554	0.594	7.52
95)	T	Naphthalene	1.826	1.918	1.918	1.932	1.976	2.113	1.947	4.87
96)	T	1,2,3-Trichlor...	0.870	0.862	0.864	0.798	0.837	0.862	0.849	3.25

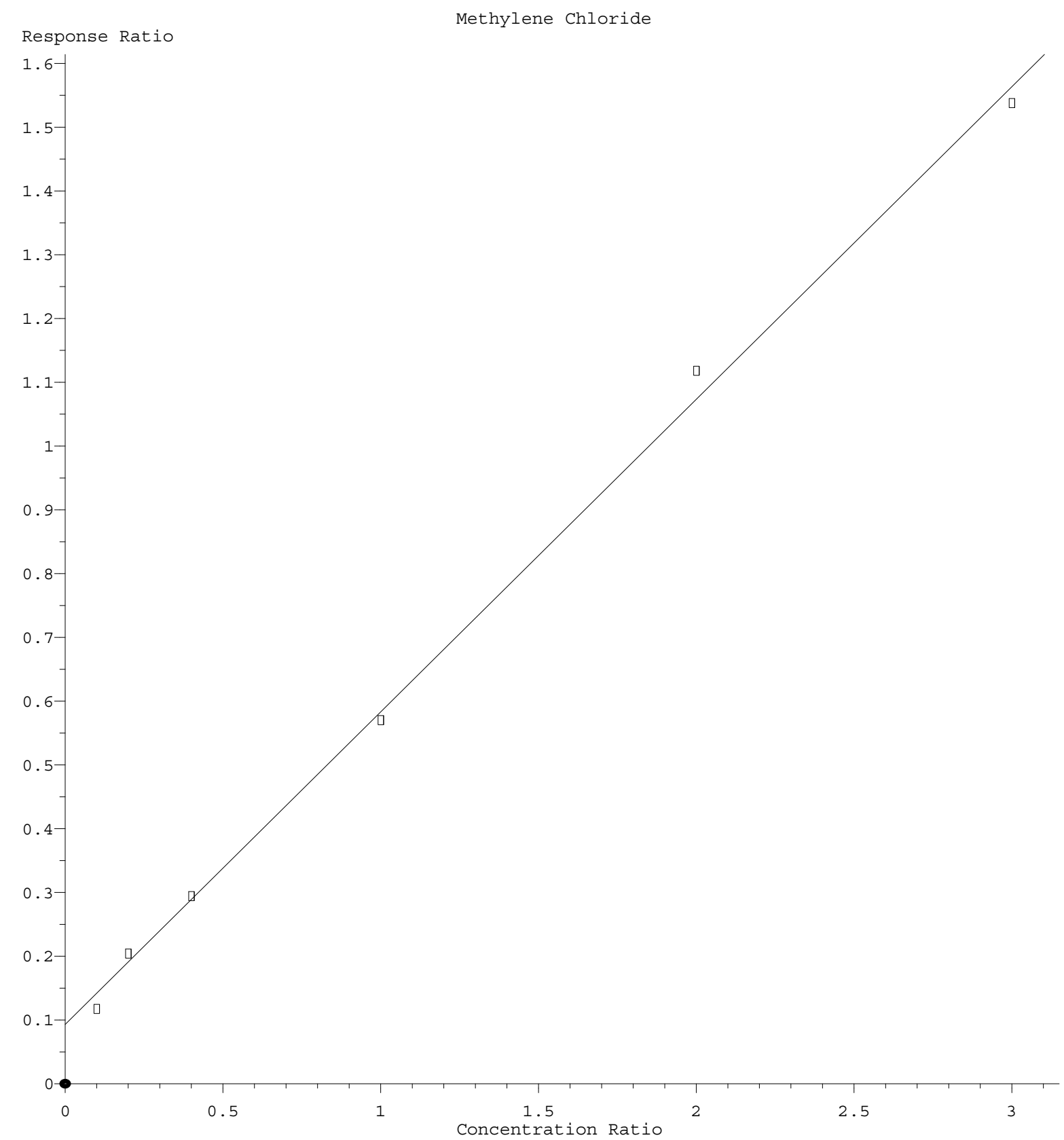
(#) = Out of Range



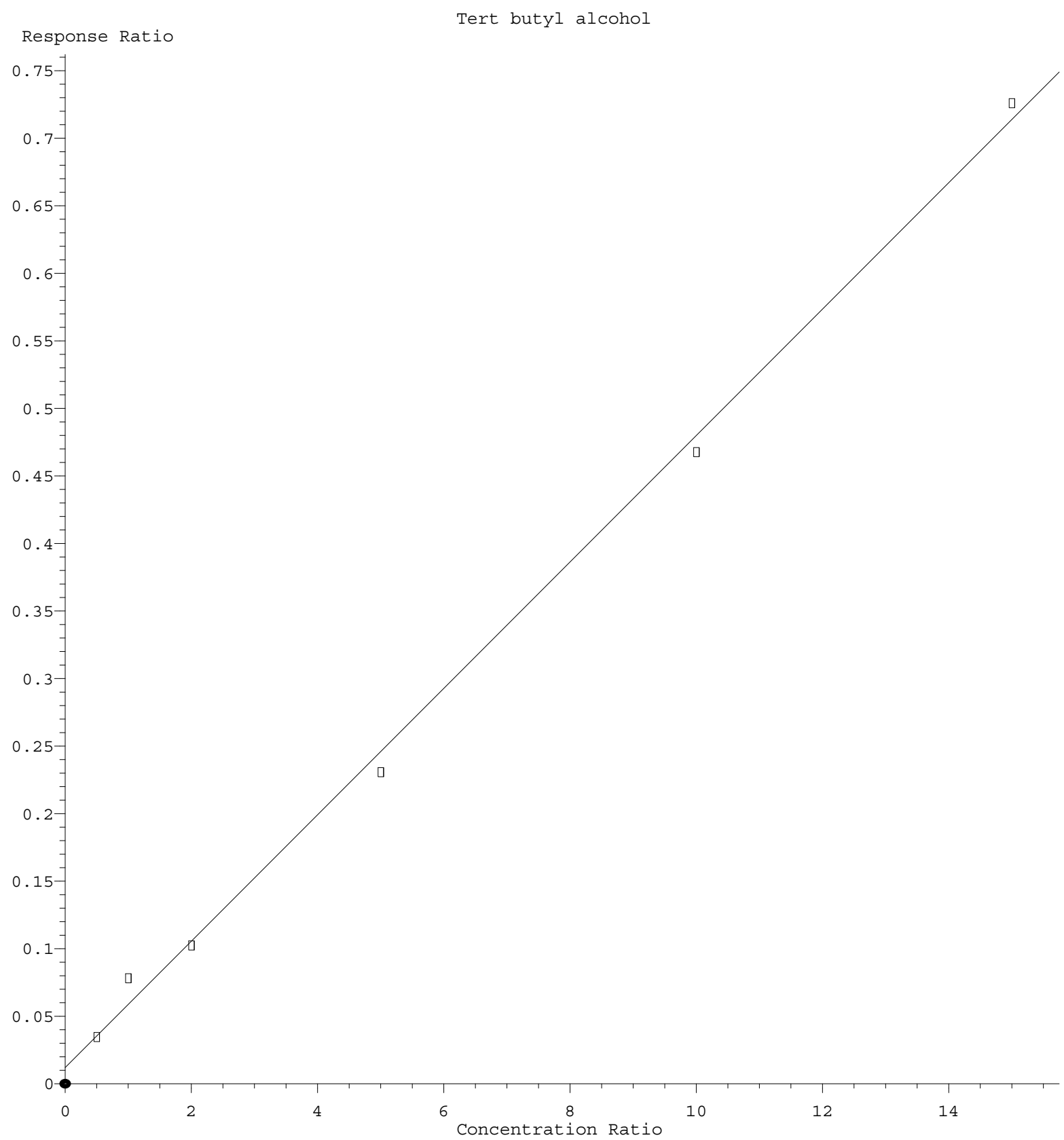
Response = 8.378e-001 * Amt + 7.946e-002
Coef of Det (r^2) = 0.998402 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y011623S.M
Calibration Table Last Updated: Tue Jan 17 04:31:47 2023



Response = 3.819e-001 * Amt + 3.259e-002
Coef of Det (r^2) = 0.998815 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y011623S.M
Calibration Table Last Updated: Tue Jan 17 04:31:47 2023



Response = 4.905e-001 * Amt + 9.259e-002
Coef of Det (r^2) = 0.997759 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y011623S.M
Calibration Table Last Updated: Tue Jan 17 04:31:47 2023



Response = 4.676e-002 * Amt + 1.211e-002
Coef of Det (r^2) = 0.997521 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y011623S.M
Calibration Table Last Updated: Tue Jan 17 04:31:47 2023

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012194.D
Acq On : 16 Jan 2023 12:17
Operator : KP/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 16 14:01:24 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Krupa Patel
01/17/2023

Supervised By :Mahesh Dadoda
01/17/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	7.789	168	200893	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	8.691	114	304921	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.490	117	272553	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	137512	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.143	65	10716	4.747	ug/l		0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 9.500%#				
35) Dibromofluoromethane	7.716	113	8898	4.440	ug/l		0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 8.880%#				
50) Toluene-d8	10.179	98	37867	4.787	ug/l		0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 9.580%#				
62) 4-Bromofluorobenzene	12.483	95	12960	4.687	ug/l		0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 9.380%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.906	85	9165	5.096	ug/l		93
3) Chloromethane	2.119	50	9071	5.492	ug/l		99
4) Vinyl Chloride	2.253	62	10104	5.175	ug/l	#	87
5) Bromomethane	2.656	94	8600	5.758	ug/l		100
6) Chloroethane	2.796	64	6503	5.027	ug/l		98
7) Trichlorofluoromethane	3.131	101	19104	4.911	ug/l		100
8) Diethyl Ether	3.528	74	5502	4.620	ug/l		85
9) 1,1,2-Trichlorotrifluo...	3.906	101	9113	4.550	ug/l		91
10) Methyl Iodide	4.095	142	12934	4.764	ug/l		96
11) Tert butyl alcohol	4.942	59	6948	20.737	ug/l	#	83
12) 1,1-Dichloroethene	3.881	96	9448	4.812	ug/l		92
13) Acrolein	3.735	56	2970	20.378	ug/l		98
14) Allyl chloride	4.479	41	11396	4.306	ug/l	#	87
15) Acrylonitrile	5.161	53	10828	19.352	ug/l		98
16) Acetone	3.942	43	11134	20.967	ug/l		97
17) Carbon Disulfide	4.198	76	29451	5.320	ug/l		99
18) Methyl Acetate	4.473	43	6181	4.046	ug/l	#	84
19) Methyl tert-butyl Ether	5.222	73	23274	4.027	ug/l		95
20) Methylene Chloride	4.723	84	23580	8.529	ug/l		87
21) trans-1,2-Dichloroethene	5.222	96	10431	4.801	ug/l		97
22) Diisopropyl ether	6.119	45	22514	4.135	ug/l		96
23) Vinyl Acetate	6.064	43	61979	18.811	ug/l	#	92
24) 1,1-Dichloroethane	6.021	63	16146	4.458	ug/l		92
25) 2-Butanone	6.990	43	12535	17.892	ug/l		92
26) 2,2-Dichloropropane	6.978	77	17496	4.478	ug/l		96
27) cis-1,2-Dichloroethene	6.984	96	11473	4.624	ug/l		93
28) Bromochloromethane	7.332	49	4295	4.691	ug/l	#	70
29) Tetrahydrofuran	7.350	42	6919	16.919	ug/l	#	78
30) Chloroform	7.502	83	18879	4.573	ug/l		100
31) Cyclohexane	7.783	56	16974	5.230	ug/l	#	73
32) 1,1,1-Trichloroethane	7.698	97	18722	4.669	ug/l		99
36) 1,1-Dichloropropene	7.917	75	14234	4.681	ug/l		99
37) Ethyl Acetate	7.076	43	5288	3.248	ug/l	#	94
38) Carbon Tetrachloride	7.899	117	18285	4.738	ug/l		95
39) Methylcyclohexane	9.185	83	16733	4.607	ug/l		94
40) Benzene	8.161	78	41296	4.661	ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012194.D
Acq On : 16 Jan 2023 12:17
Operator : KP/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 16 14:01:24 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Krupa Patel
01/17/2023

Supervised By :Mahesh Dadoda
01/17/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.301	41	3696m	4.174	ug/l		
42) 1,2-Dichloroethane	8.234	62	12309	4.388	ug/l		99
43) Isopropyl Acetate	8.271	43	9694	3.553	ug/l	#	93
44) Trichloroethene	8.941	130	12327	4.765	ug/l		93
45) 1,2-Dichloropropane	9.216	63	8132	4.119	ug/l		98
46) Dibromomethane	9.307	93	5345	4.301	ug/l		95
47) Bromodichloromethane	9.496	83	13332	4.219	ug/l		99
48) Methyl methacrylate	9.295	41	4284	3.505	ug/l		86
49) 1,4-Dioxane	9.295	88	1306	75.886	ug/l		88
51) 4-Methyl-2-Pentanone	10.069	43	25129	17.309	ug/l		97
52) Toluene	10.246	92	26692	4.551	ug/l		99
53) t-1,3-Dichloropropene	10.465	75	13856	4.215	ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	15002	4.218	ug/l		96
55) 1,1,2-Trichloroethane	10.642	97	7693	4.286	ug/l		91
56) Ethyl methacrylate	10.508	69	8879	3.776	ug/l		94
57) 1,3-Dichloropropane	10.795	76	12399	4.186	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.783	63	16764	19.491	ug/l		91
59) 2-Hexanone	10.831	43	17541	17.207	ug/l		91
60) Dibromochloromethane	10.984	129	9802	4.142	ug/l		100
61) 1,2-Dibromoethane	11.087	107	7090	4.127	ug/l		97
64) Tetrachloroethene	10.721	164	12555	4.702	ug/l		96
65) Chlorobenzene	11.520	112	29902	4.804	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.593	131	10495	4.367	ug/l		95
67) Ethyl Benzene	11.593	91	51147	4.597	ug/l		97
68) m/p-Xylenes	11.703	106	39906	9.145	ug/l		99
69) o-Xylene	12.032	106	19253	4.634	ug/l		94
70) Styrene	12.050	104	31073	4.403	ug/l		99
71) Bromoform	12.209	173	6191	4.054	ug/l	#	99
73) Isopropylbenzene	12.331	105	50493	4.640	ug/l		100
74) N-amyl acetate	12.148	43	8569	3.815	ug/l		93
75) 1,1,2,2-Tetrachloroethane	12.581	83	7474	4.083	ug/l		97
76) 1,2,3-Trichloropropane	12.636	75	5927m	3.775	ug/l		
77) Bromobenzene	12.611	156	12586	4.850	ug/l		88
78) n-propylbenzene	12.672	91	60181	4.738	ug/l		98
79) 2-Chlorotoluene	12.758	91	33883	4.663	ug/l		96
80) 1,3,5-Trimethylbenzene	12.819	105	44469	4.765	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.380	75	2730	3.861	ug/l		90
82) 4-Chlorotoluene	12.861	91	36685	4.827	ug/l		97
83) tert-Butylbenzene	13.075	119	38430	4.700	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	42436	4.594	ug/l		99
85) sec-Butylbenzene	13.258	105	56632	4.818	ug/l		97
86) p-Isopropyltoluene	13.373	119	48543	4.767	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	25260	4.856	ug/l		99
88) 1,4-Dichlorobenzene	13.447	146	25962	4.996	ug/l		94
89) n-Butylbenzene	13.703	91	42501	4.817	ug/l		97
90) Hexachloroethane	13.965	117	9164	4.851	ug/l		96
91) 1,2-Dichlorobenzene	13.745	146	22831	4.926	ug/l		97
92) 1,2-Dibromo-3-Chloropr...	14.361	75	1417	3.895	ug/l		89
93) 1,2,4-Trichlorobenzene	15.007	180	14422	4.991	ug/l		98
94) Hexachlorobutadiene	15.117	225	9112	5.227	ug/l		99
95) Naphthalene	15.245	128	25109	4.391	ug/l		99
96) 1,2,3-Trichlorobenzene	15.428	180	11970	4.765	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012194.D
Acq On : 16 Jan 2023 12:17
Operator : KP/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 :Krupa Patel
01/17/2023

Supervised By :Mahesh Dadoda
01/17/2023

Quant Time: Jan 16 14:01:24 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

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

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012194.D
Acq On : 16 Jan 2023 12:17
Operator : KP/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

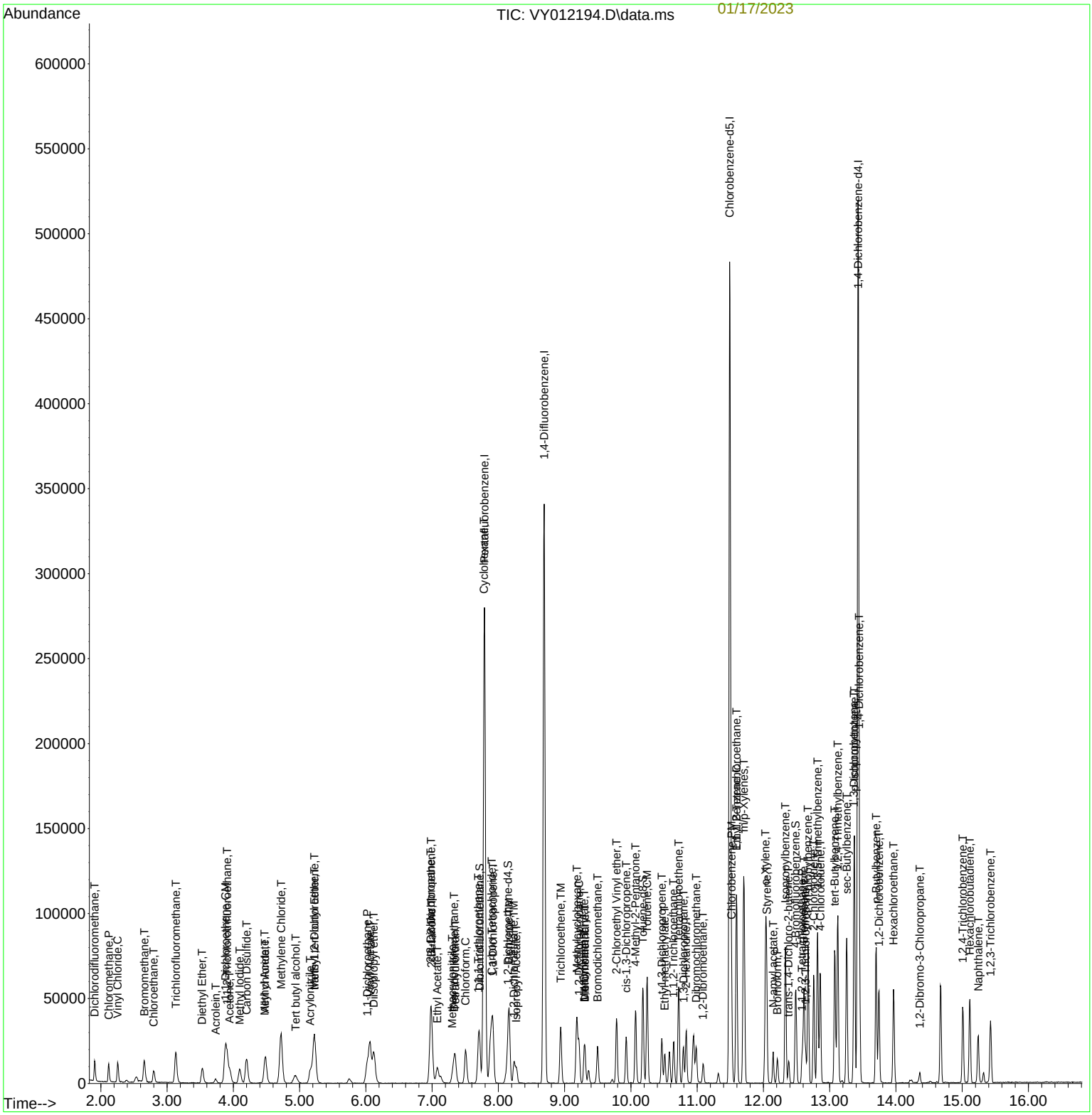
Quant Time: Jan 16 14:01:24 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Krupa Patel
01/17/2023

Supervised By :Mahesh Dadoda
01/17/2023



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012195.D
Acq On : 16 Jan 2023 13:03
Operator : KP/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:04:17 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	7.789	168	179162	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	8.691	114	273419	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.490	117	253670	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	130330	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.136	65	19761	9.816	ug/l		0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 19.640%#				
35) Dibromofluoromethane	7.716	113	15889	8.841	ug/l		0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 17.680%#				
50) Toluene-d8	10.179	98	64948	9.156	ug/l		0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 18.320%#				
62) 4-Bromofluorobenzene	12.483	95	22919	9.244	ug/l		0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 18.480%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.906	85	18625	11.613	ug/l		96
3) Chloromethane	2.113	50	15769	10.705	ug/l		97
4) Vinyl Chloride	2.253	62	18212	10.459	ug/l		97
5) Bromomethane	2.650	94	14250	10.698	ug/l		95
6) Chloroethane	2.796	64	11597	10.053	ug/l		97
7) Trichlorofluoromethane	3.131	101	35633	10.272	ug/l		99
8) Diethyl Ether	3.534	74	10843	10.209	ug/l		81
9) 1,1,2-Trichlorotrifluo...	3.906	101	17248	9.657	ug/l		95
10) Methyl Iodide	4.095	142	24311	10.041	ug/l		93
11) Tert butyl alcohol	4.948	59	13988	46.813	ug/l	#	84
12) 1,1-Dichloroethene	3.875	96	17081	9.755	ug/l		96
13) Acrolein	3.735	56	5886	45.284	ug/l		100
14) Allyl chloride	4.479	41	20763	8.796	ug/l	#	84
15) Acrylonitrile	5.161	53	24075	48.247	ug/l		99
16) Acetone	3.948	43	26670	56.316	ug/l		96
17) Carbon Disulfide	4.198	76	53401	10.816	ug/l		100
18) Methyl Acetate	4.479	43	12168	8.932	ug/l	#	85
19) Methyl tert-butyl Ether	5.222	73	49973	9.696	ug/l		92
20) Methylene Chloride	4.716	84	36560	14.827	ug/l		87
21) trans-1,2-Dichloroethene	5.216	96	19455	10.041	ug/l		87
22) Diisopropyl ether	6.119	45	42426	8.737	ug/l	#	87
23) Vinyl Acetate	6.064	43	135296	46.044	ug/l	#	90
24) 1,1-Dichloroethane	6.021	63	29079	9.003	ug/l		99
25) 2-Butanone	6.990	43	31276	50.056	ug/l		92
26) 2,2-Dichloropropane	6.984	77	32554	9.343	ug/l		98
27) cis-1,2-Dichloroethene	6.990	96	20908	9.448	ug/l		96
28) Bromochloromethane	7.332	49	6358	7.786	ug/l	#	70
29) Tetrahydrofuran	7.350	42	17073	46.812	ug/l	#	79
30) Chloroform	7.502	83	35715	9.700	ug/l		100
31) Cyclohexane	7.783	56	28490	9.843	ug/l	#	91
32) 1,1,1-Trichloroethane	7.704	97	34735	9.713	ug/l		98
36) 1,1-Dichloropropene	7.917	75	26128	9.583	ug/l		98
37) Ethyl Acetate	7.076	43	12194	8.353	ug/l	#	91
38) Carbon Tetrachloride	7.899	117	33643	9.722	ug/l		94
39) Methylcyclohexane	9.185	83	30952	9.503	ug/l		93
40) Benzene	8.161	78	75207	9.466	ug/l		96

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012195.D
Acq On : 16 Jan 2023 13:03
Operator : KP/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED
Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:04:17 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.320	41	6918m	8.713	ug/l		
42) 1,2-Dichloroethane	8.240	62	24799	9.859	ug/l		98
43) Isopropyl Acetate	8.271	43	22151	9.054	ug/l	#	95
44) Trichloroethene	8.941	130	22136	9.542	ug/l		98
45) 1,2-Dichloropropane	9.216	63	15739	8.891	ug/l		96
46) Dibromomethane	9.307	93	10763	9.658	ug/l		95
47) Bromodichloromethane	9.496	83	26678	9.415	ug/l	#	99
48) Methyl methacrylate	9.295	41	9928	9.059	ug/l		85
49) 1,4-Dioxane	9.301	88	3007	194.855	ug/l		90
51) 4-Methyl-2-Pentanone	10.069	43	59640	45.813	ug/l		95
52) Toluene	10.246	92	48980	9.314	ug/l		98
53) t-1,3-Dichloropropene	10.465	75	27411	9.299	ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	29935	9.387	ug/l		98
55) 1,1,2-Trichloroethane	10.648	97	15639	9.716	ug/l		94
56) Ethyl methacrylate	10.508	69	19575	9.284	ug/l		95
57) 1,3-Dichloropropane	10.788	76	24616	9.267	ug/l		97
58) 2-Chloroethyl Vinyl ether	9.783	63	33235	43.094	ug/l	#	87
59) 2-Hexanone	10.831	43	45470	49.742	ug/l		95
60) Dibromochloromethane	10.984	129	20184	9.511	ug/l		99
61) 1,2-Dibromoethane	11.087	107	14942	9.699	ug/l		98
64) Tetrachloroethene	10.721	164	25078	10.092	ug/l		93
65) Chlorobenzene	11.520	112	53973	9.316	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.593	131	20709	9.259	ug/l		97
67) Ethyl Benzene	11.593	91	95965	9.267	ug/l		98
68) m/p-Xylenes	11.703	106	76335	18.795	ug/l		99
69) o-Xylene	12.032	106	36291	9.384	ug/l		96
70) Styrene	12.044	104	61017	9.289	ug/l		100
71) Bromoform	12.209	173	13782	9.698	ug/l	#	96
73) Isopropylbenzene	12.331	105	95710	9.281	ug/l		98
74) N-amyl acetate	12.148	43	18834	8.846	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.581	83	16214	9.347	ug/l		97
76) 1,2,3-Trichloropropane	12.630	75	12519m	8.413	ug/l		
77) Bromobenzene	12.611	156	23583	9.588	ug/l		93
78) n-propylbenzene	12.672	91	113127	9.397	ug/l		98
79) 2-Chlorotoluene	12.758	91	64375	9.348	ug/l		97
80) 1,3,5-Trimethylbenzene	12.812	105	85494	9.666	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.380	75	6257	9.338	ug/l		94
82) 4-Chlorotoluene	12.855	91	67299	9.344	ug/l		97
83) tert-Butylbenzene	13.075	119	73291	9.457	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	83829	9.574	ug/l		100
85) sec-Butylbenzene	13.251	105	103678	9.307	ug/l		96
86) p-Isopropyltoluene	13.373	119	91914	9.524	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	46882	9.509	ug/l		100
88) 1,4-Dichlorobenzene	13.447	146	47386	9.621	ug/l		98
89) n-Butylbenzene	13.696	91	78545	9.392	ug/l		96
90) Hexachloroethane	13.965	117	16559	9.249	ug/l		96
91) 1,2-Dichlorobenzene	13.739	146	42720	9.726	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.355	75	3464	10.047	ug/l		94
93) 1,2,4-Trichlorobenzene	15.007	180	25931	9.469	ug/l		97
94) Hexachlorobutadiene	15.117	225	16082	9.733	ug/l		99
95) Naphthalene	15.239	128	49982	9.223	ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	22473	9.439	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012195.D
Acq On : 16 Jan 2023 13:03
Operator : KP/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:04:17 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

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

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

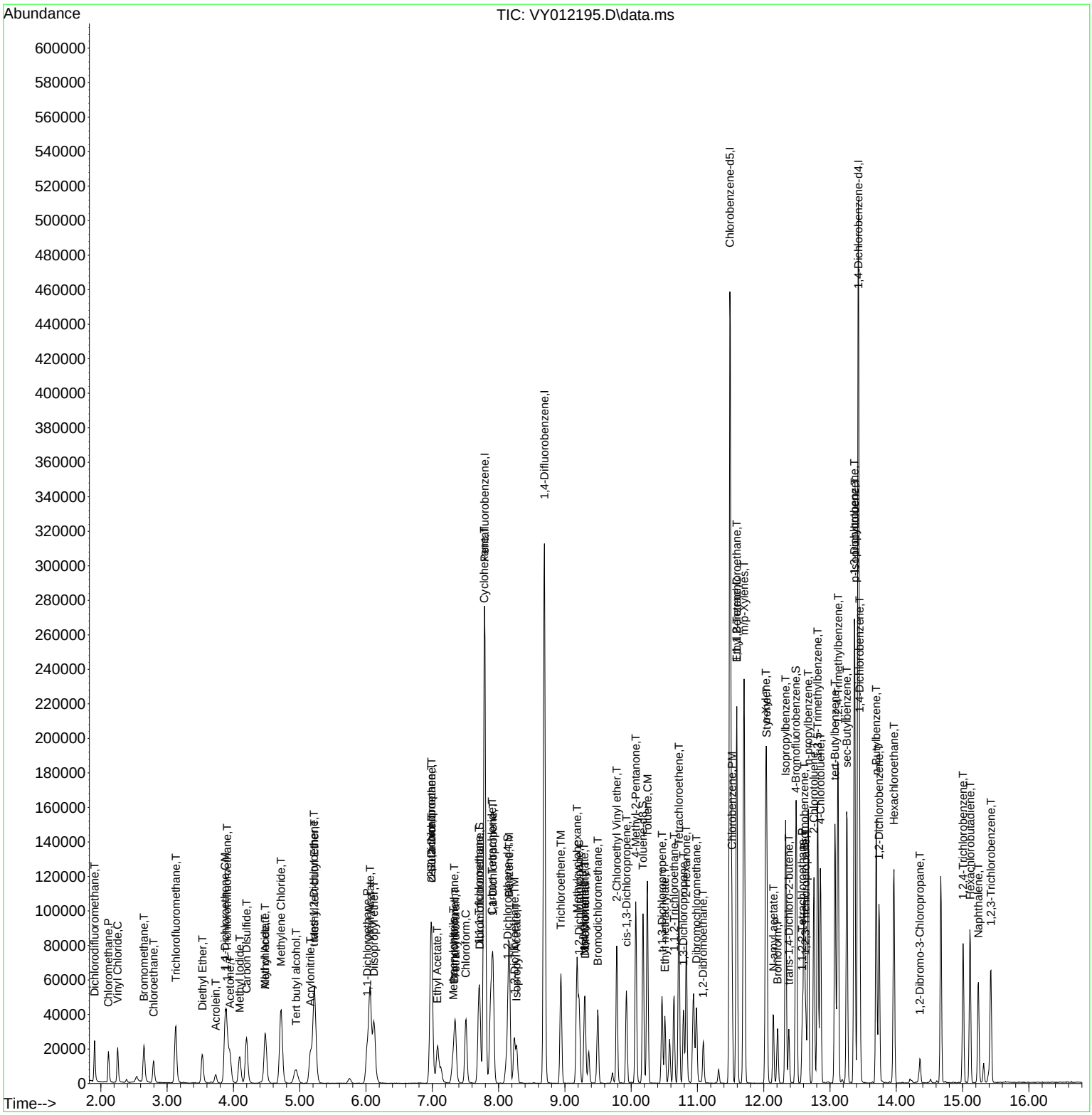
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012195.D
Acq On : 16 Jan 2023 13:03
Operator : KP/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 16 14:04:17 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012196.D
Acq On : 16 Jan 2023 13:26
Operator : KP/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:04:35 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	188894	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	281893	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	259662	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	134252	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	37644	17.735	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	35.480%#		
35) Dibromofluoromethane	7.716	113	32639	17.616	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	35.240%#		
50) Toluene-d8	10.179	98	134756	18.426	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery =	36.860%#		
62) 4-Bromofluorobenzene	12.483	95	45453	17.781	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery =	35.560%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	36719	21.715	ug/l	96
3) Chloromethane	2.113	50	30242	19.473	ug/l	96
4) Vinyl Chloride	2.253	62	36178	19.706	ug/l	97
5) Bromomethane	2.643	94	26810	19.091	ug/l	98
6) Chloroethane	2.790	64	23391	19.231	ug/l	98
7) Trichlorofluoromethane	3.125	101	71374	19.515	ug/l	96
8) Diethyl Ether	3.533	74	20155	17.999	ug/l	83
9) 1,1,2-Trichlorotrifluo...	3.905	101	34344	18.238	ug/l	95
10) Methyl Iodide	4.088	142	51510	20.178	ug/l	94
11) Tert butyl alcohol	4.954	59	19339	61.386	ug/l	100
12) 1,1-Dichloroethene	3.869	96	34672	18.781	ug/l	96
13) Acrolein	3.722	56	10501	76.627	ug/l	97
14) Allyl chloride	4.478	41	41126	16.525	ug/l #	82
15) Acrylonitrile	5.161	53	43466	82.619	ug/l	99
16) Acetone	3.948	43	46355	92.840	ug/l	98
17) Carbon Disulfide	4.198	76	106761	20.509	ug/l	98
18) Methyl Acetate	4.478	43	21701	15.109	ug/l #	87
19) Methyl tert-butyl Ether	5.222	73	94460	17.384	ug/l	94
20) Methylene Chloride	4.716	84	55580	21.380	ug/l	88
21) trans-1,2-Dichloroethene	5.216	96	38668	18.929	ug/l	89
22) Diisopropyl ether	6.118	45	83784	16.365	ug/l #	88
23) Vinyl Acetate	6.057	43	261729	84.482	ug/l #	92
24) 1,1-Dichloroethane	6.021	63	58306	17.122	ug/l	96
25) 2-Butanone	6.984	43	54065	82.071	ug/l	92
26) 2,2-Dichloropropane	6.984	77	63472	17.277	ug/l	99
27) cis-1,2-Dichloroethene	6.984	96	41930	17.971	ug/l	94
28) Bromochloromethane	7.332	49	12104	14.059	ug/l #	71
29) Tetrahydrofuran	7.344	42	30262	78.700	ug/l #	81
30) Chloroform	7.508	83	68927	17.756	ug/l	93
31) Cyclohexane	7.789	56	53452	17.516	ug/l #	85
32) 1,1,1-Trichloroethane	7.703	97	68110	18.065	ug/l	97
36) 1,1-Dichloropropene	7.917	75	50950	18.125	ug/l	97
37) Ethyl Acetate	7.069	43	22554	14.985	ug/l #	97
38) Carbon Tetrachloride	7.899	117	67004	18.780	ug/l	100
39) Methylcyclohexane	9.185	83	62705	18.673	ug/l	92
40) Benzene	8.161	78	146247	17.854	ug/l	98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012196.D
Acq On : 16 Jan 2023 13:26
Operator : KP/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED
Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:04:35 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.313	41	12760m	15.588	ug/l		
42) 1,2-Dichloroethane	8.234	62	46555	17.952	ug/l		99
43) Isopropyl Acetate	8.270	43	40673	16.125	ug/l	#	93
44) Trichloroethene	8.941	130	44526	18.616	ug/l		97
45) 1,2-Dichloropropane	9.215	63	30183	16.538	ug/l		95
46) Dibromomethane	9.307	93	20496	17.839	ug/l		95
47) Bromodichloromethane	9.496	83	51858	17.751	ug/l		98
48) Methyl methacrylate	9.295	41	18174	16.085	ug/l	#	82
49) 1,4-Dioxane	9.295	88	5292	332.615	ug/l		94
51) 4-Methyl-2-Pentanone	10.069	43	108911	81.146	ug/l		95
52) Toluene	10.240	92	98367	18.142	ug/l		99
53) t-1,3-Dichloropropene	10.465	75	53860	17.722	ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	57907	17.612	ug/l		98
55) 1,1,2-Trichloroethane	10.642	97	28772	17.338	ug/l		98
56) Ethyl methacrylate	10.508	69	37529	17.264	ug/l		95
57) 1,3-Dichloropropane	10.788	76	47594	17.379	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.782	63	63331	79.649	ug/l		89
59) 2-Hexanone	10.831	43	81493	86.470	ug/l		95
60) Dibromochloromethane	10.983	129	38881	17.770	ug/l		100
61) 1,2-Dibromoethane	11.087	107	27891	17.561	ug/l		99
64) Tetrachloroethene	10.721	164	48592	19.103	ug/l		96
65) Chlorobenzene	11.514	112	105251	17.748	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.587	131	40105	17.516	ug/l		97
67) Ethyl Benzene	11.593	91	189107	17.841	ug/l		97
68) m/p-Xylenes	11.703	106	151588	36.462	ug/l		99
69) o-Xylene	12.032	106	72199	18.239	ug/l		99
70) Styrene	12.044	104	120134	17.866	ug/l		99
71) Bromoform	12.209	173	26017	17.884	ug/l	#	98
73) Isopropylbenzene	12.331	105	193545	18.219	ug/l		99
74) N-amyl acetate	12.142	43	36459	16.625	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.581	83	29327	16.412	ug/l		99
76) 1,2,3-Trichloropropane	12.629	75	27470m	17.920	ug/l		
77) Bromobenzene	12.611	156	45561	17.982	ug/l		92
78) n-propylbenzene	12.672	91	226889	18.296	ug/l		98
79) 2-Chlorotoluene	12.757	91	127009	17.904	ug/l		96
80) 1,3,5-Trimethylbenzene	12.812	105	169371	18.589	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.379	75	11564	16.754	ug/l		97
82) 4-Chlorotoluene	12.855	91	133493	17.992	ug/l		98
83) tert-Butylbenzene	13.074	119	149692	18.751	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	167914	18.618	ug/l		98
85) sec-Butylbenzene	13.251	105	210069	18.307	ug/l		97
86) p-Isopropyltoluene	13.367	119	185077	18.618	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	93243	18.359	ug/l		99
88) 1,4-Dichlorobenzene	13.446	146	91032	17.943	ug/l		99
89) n-Butylbenzene	13.696	91	158867	18.442	ug/l		97
90) Hexachloroethane	13.965	117	33471	18.149	ug/l		94
91) 1,2-Dichlorobenzene	13.739	146	81657	18.047	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.355	75	6205	17.471	ug/l		95
93) 1,2,4-Trichlorobenzene	15.007	180	52932	18.764	ug/l		98
94) Hexachlorobutadiene	15.117	225	32885	19.321	ug/l		100
95) Naphthalene	15.239	128	102999	18.450	ug/l		99
96) 1,2,3-Trichlorobenzene	15.428	180	46421	18.927	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012196.D
Acq On : 16 Jan 2023 13:26
Operator : KP/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:04:35 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

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

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

ICAL Form

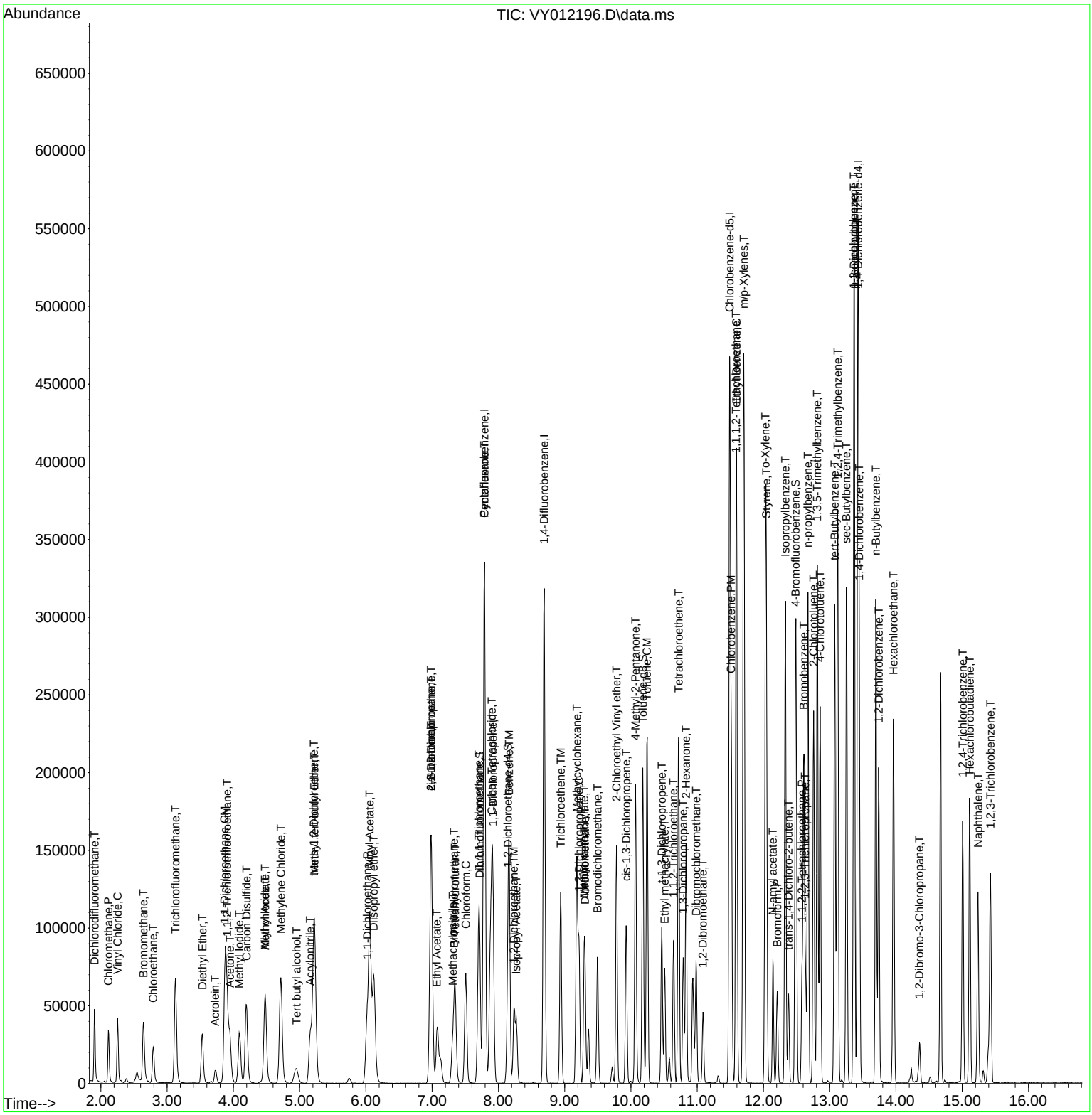
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012196.D
Acq On : 16 Jan 2023 13:26
Operator : KP/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 16 14:04:35 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012197.D
Acq On : 16 Jan 2023 13:48
Operator : KP/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:05:34 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	191097	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	290797	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	264349	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	135964	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	78185	36.411	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 72.820%			
35) Dibromofluoromethane	7.716	113	70070	36.660	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 73.320%			
50) Toluene-d8	10.179	98	258797	34.304	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 68.600%			
62) 4-Bromofluorobenzene	12.483	95	96876	36.737	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 73.480%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	71105	41.565	ug/l	100
3) Chloromethane	2.113	50	70310	44.752	ug/l	98
4) Vinyl Chloride	2.253	62	83041	44.711	ug/l	98
5) Bromomethane	2.650	94	63798	44.905	ug/l	96
6) Chloroethane	2.796	64	54875	44.596	ug/l	96
7) Trichlorofluoromethane	3.125	101	160880	43.481	ug/l	99
8) Diethyl Ether	3.528	74	49618	43.800	ug/l	81
9) 1,1,2-Trichlorotrifluo...	3.899	101	77841	40.860	ug/l	94
10) Methyl Iodide	4.095	142	130616	50.576	ug/l	94
11) Tert butyl alcohol	4.954	59	44074	138.287	ug/l	97
12) 1,1-Dichloroethene	3.875	96	83711	44.821	ug/l	92
13) Acrolein	3.729	56	15519	111.938	ug/l	99
14) Allyl chloride	4.479	41	103883	41.261	ug/l #	83
15) Acrylonitrile	5.161	53	111889	210.223	ug/l	99
16) Acetone	3.942	43	147434	291.878	ug/l	97
17) Carbon Disulfide	4.198	76	256609	48.728	ug/l	97
18) Methyl Acetate	4.479	43	57492	39.567	ug/l #	89
19) Methyl tert-butyl Ether	5.222	73	244618	44.499	ug/l	93
20) Methylene Chloride	4.716	84	108941	41.422	ug/l	88
21) trans-1,2-Dichloroethene	5.222	96	94558	45.754	ug/l	89
22) Diisopropyl ether	6.119	45	209847	40.517	ug/l #	90
23) Vinyl Acetate	6.058	43	672550	214.587	ug/l #	93
24) 1,1-Dichloroethane	6.021	63	145139	42.129	ug/l	98
25) 2-Butanone	6.984	43	150321	225.559	ug/l #	87
26) 2,2-Dichloropropane	6.984	77	155087	41.729	ug/l	99
27) cis-1,2-Dichloroethene	6.990	96	104740	44.373	ug/l	94
28) Bromochloromethane	7.338	49	30470	34.984	ug/l #	73
29) Tetrahydrofuran	7.344	42	81443	209.361	ug/l #	83
30) Chloroform	7.509	83	171905	43.774	ug/l	98
31) Cyclohexane	7.789	56	120988	39.190	ug/l	89
32) 1,1,1-Trichloroethane	7.704	97	169110	44.336	ug/l	97
36) 1,1-Dichloropropene	7.917	75	123810	42.696	ug/l	98
37) Ethyl Acetate	7.076	43	57067	36.754	ug/l #	94
38) Carbon Tetrachloride	7.905	117	160502	43.608	ug/l	97
39) Methylcyclohexane	9.185	83	149602	43.187	ug/l	94
40) Benzene	8.161	78	359633	42.560	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012197.D
Acq On : 16 Jan 2023 13:48
Operator : KP/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED
Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:05:34 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.326	41	35041m	41.495	ug/l		
42) 1,2-Dichloroethane	8.234	62	118518	44.301	ug/l		99
43) Isopropyl Acetate	8.271	43	107287	41.232	ug/l	#	94
44) Trichloroethene	8.941	130	108272	43.882	ug/l		99
45) 1,2-Dichloropropane	9.216	63	75802	40.261	ug/l		97
46) Dibromomethane	9.307	93	51976	43.853	ug/l		96
47) Bromodichloromethane	9.496	83	129678	43.029	ug/l		100
48) Methyl methacrylate	9.295	41	51213	43.938	ug/l		92
49) 1,4-Dioxane	9.295	88	14993	913.493	ug/l	#	85
51) 4-Methyl-2-Pentanone	10.069	43	288706	208.518	ug/l		96
52) Toluene	10.246	92	244243	43.668	ug/l		99
53) t-1,3-Dichloropropene	10.465	75	138171	44.071	ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	147746	43.560	ug/l		98
55) 1,1,2-Trichloroethane	10.642	97	74005	43.231	ug/l		97
56) Ethyl methacrylate	10.508	69	100550	44.839	ug/l		94
57) 1,3-Dichloropropane	10.789	76	120715	42.729	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.783	63	157504	192.021	ug/l	#	89
59) 2-Hexanone	10.831	43	229234	235.786	ug/l		95
60) Dibromochloromethane	10.984	129	99798	44.215	ug/l		99
61) 1,2-Dibromoethane	11.087	107	71778	43.809	ug/l		100
64) Tetrachloroethene	10.721	164	119318	46.076	ug/l		96
65) Chlorobenzene	11.514	112	261736	43.353	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.593	131	101825	43.685	ug/l		97
67) Ethyl Benzene	11.593	91	473326	43.862	ug/l		98
68) m/p-Xylenes	11.703	106	375824	88.796	ug/l		100
69) o-Xylene	12.032	106	179706	44.593	ug/l		99
70) Styrene	12.044	104	303772	44.375	ug/l		99
71) Bromoform	12.209	173	65777	44.414	ug/l	#	99
73) Isopropylbenzene	12.331	105	476002	44.244	ug/l		99
74) N-amyl acetate	12.142	43	97264	43.792	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.581	83	76529	42.287	ug/l		99
76) 1,2,3-Trichloropropane	12.630	75	68816m	44.328	ug/l		
77) Bromobenzene	12.611	156	115869	45.156	ug/l		92
78) n-propylbenzene	12.672	91	547297	43.577	ug/l		99
79) 2-Chlorotoluene	12.758	91	312943	43.560	ug/l		97
80) 1,3,5-Trimethylbenzene	12.813	105	410117	44.445	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.380	75	30675	43.882	ug/l		97
82) 4-Chlorotoluene	12.855	91	325814	43.360	ug/l		97
83) tert-Butylbenzene	13.075	119	350229	43.319	ug/l		98
84) 1,2,4-Trimethylbenzene	13.123	105	411062	45.003	ug/l		99
85) sec-Butylbenzene	13.251	105	503621	43.338	ug/l		98
86) p-Isopropyltoluene	13.367	119	440685	43.772	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	226393	44.015	ug/l		99
88) 1,4-Dichlorobenzene	13.447	146	223234	43.447	ug/l		99
89) n-Butylbenzene	13.697	91	380743	43.641	ug/l		98
90) Hexachloroethane	13.965	117	78888	42.237	ug/l		95
91) 1,2-Dichlorobenzene	13.739	146	201950	44.072	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.355	75	15833	44.018	ug/l		92
93) 1,2,4-Trichlorobenzene	15.007	180	126784	44.379	ug/l		99
94) Hexachlorobutadiene	15.111	225	74231	43.065	ug/l		97
95) Naphthalene	15.239	128	262749	46.473	ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	108472	43.671	ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012197.D
Acq On : 16 Jan 2023 13:48
Operator : KP/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:05:34 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

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

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

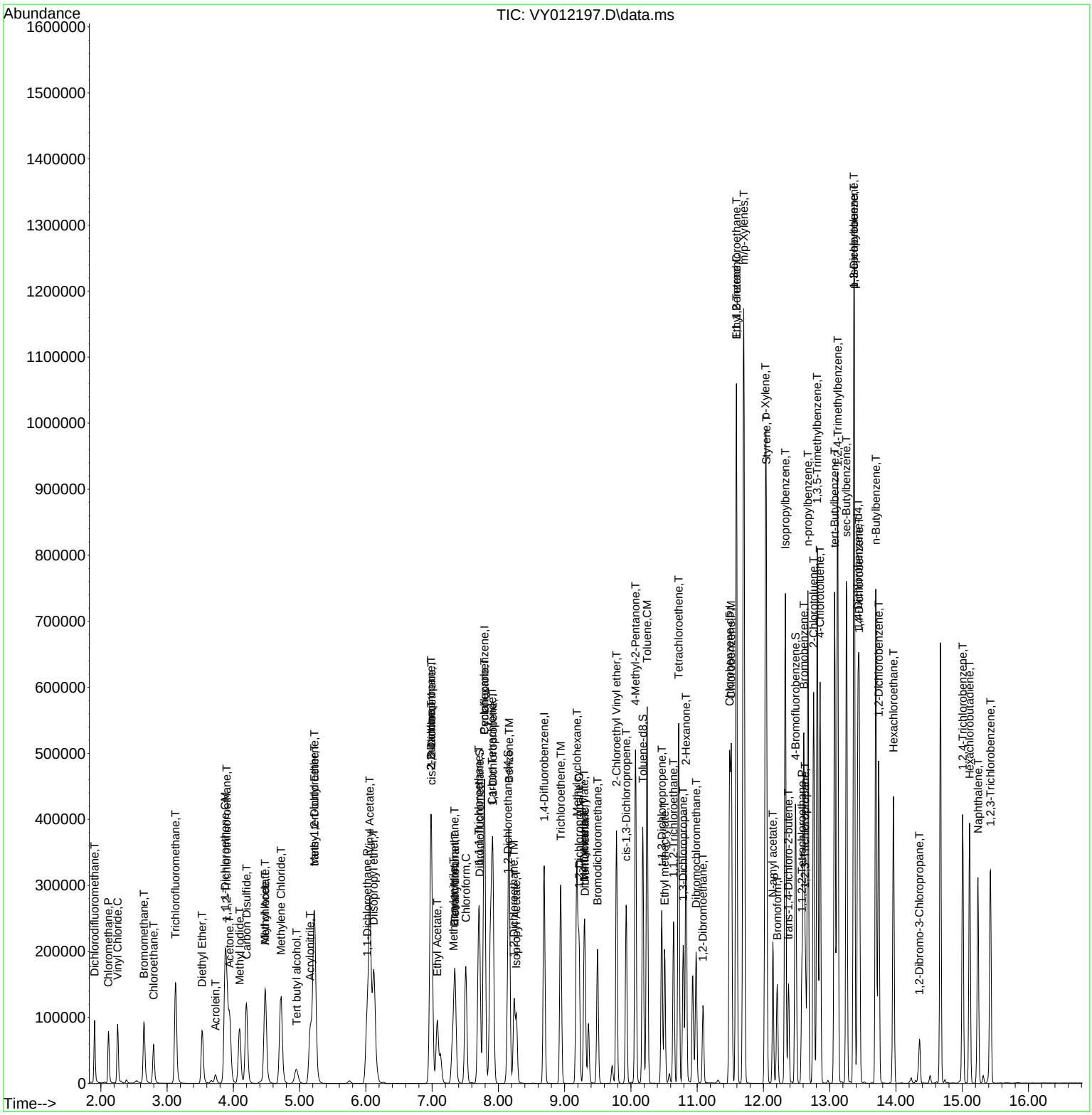
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012197.D
Acq On : 16 Jan 2023 13:48
Operator : KP/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 16 14:05:34 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012198.D
Acq On : 16 Jan 2023 14:11
Operator : KP/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:40:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	180015	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	280506	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	260191	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	128840	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	147153	72.749	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 145.500%			
35) Dibromofluoromethane	7.716	113	135949	73.736	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 147.480%#			
50) Toluene-d8	10.179	98	500641	68.796	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 137.600%			
62) 4-Bromofluorobenzene	12.483	95	188707	74.186	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 148.380%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	147624	91.606	ug/l	98
3) Chloromethane	2.113	50	140031	94.615	ug/l	99
4) Vinyl Chloride	2.253	62	167204	95.569	ug/l	99
5) Bromomethane	2.643	94	126864	94.792	ug/l	97
6) Chloroethane	2.790	64	111623	96.299	ug/l	99
7) Trichlorofluoromethane	3.125	101	334439	95.952	ug/l	100
8) Diethyl Ether	3.527	74	98594	92.391	ug/l	81
9) 1,1,2-Trichlorotrifluo...	3.899	101	164492	91.660	ug/l	95
10) Methyl Iodide	4.094	142	260950	107.263	ug/l	95
11) Tert butyl alcohol	4.948	59	84169	280.347	ug/l	99
12) 1,1-Dichloroethene	3.869	96	168695	95.884	ug/l	96
13) Acrolein	3.723	56	29827	228.386	ug/l	98
14) Allyl chloride	4.478	41	214121	90.281	ug/l #	85
15) Acrylonitrile	5.161	53	214918	428.657	ug/l	99
16) Acetone	3.942	43	267421	562.010	ug/l	99
17) Carbon Disulfide	4.192	76	519621	104.745	ug/l	100
18) Methyl Acetate	4.478	43	110784	80.938	ug/l #	89
19) Methyl tert-butyl Ether	5.222	73	476858	92.085	ug/l	94
20) Methylene Chloride	4.716	84	201264	81.237	ug/l	87
21) trans-1,2-Dichloroethene	5.222	96	186962	96.035	ug/l	91
22) Diisopropyl ether	6.118	45	419710	86.025	ug/l #	91
23) Vinyl Acetate	6.057	43	1318064	446.437	ug/l #	93
24) 1,1-Dichloroethane	6.015	63	289955	89.345	ug/l	98
25) 2-Butanone	6.984	43	281214	447.942	ug/l #	88
26) 2,2-Dichloropropane	6.978	77	314909	89.947	ug/l	99
27) cis-1,2-Dichloroethene	6.984	96	209464	94.202	ug/l	95
28) Bromochloromethane	7.338	49	57714	70.343	ug/l #	74
29) Tetrahydrofuran	7.344	42	153367	418.522	ug/l #	84
30) Chloroform	7.502	83	342901	92.692	ug/l	99
31) Cyclohexane	7.783	56	256653	88.252	ug/l	93
32) 1,1,1-Trichloroethane	7.703	97	342159	95.226	ug/l	98
36) 1,1-Dichloropropene	7.917	75	250642	89.605	ug/l	97
37) Ethyl Acetate	7.069	43	107256	71.612	ug/l #	95
38) Carbon Tetrachloride	7.899	117	327048	92.117	ug/l	97
39) Methylcyclohexane	9.185	83	316505	94.720	ug/l	94
40) Benzene	8.161	78	723211	88.726	ug/l	99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012198.D
Acq On : 16 Jan 2023 14:11
Operator : KP/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED
Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:40:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.307	41	59303m	72.802 ug/l		
42) 1,2-Dichloroethane	8.240	62	232352	90.038 ug/l		99
43) Isopropyl Acetate	8.270	43	208105	82.911 ug/l	#	94
44) Trichloroethene	8.941	130	216924	91.144 ug/l		96
45) 1,2-Dichloropropane	9.215	63	155318	85.522 ug/l		99
46) Dibromomethane	9.307	93	101311	88.613 ug/l		96
47) Bromodichloromethane	9.496	83	262819	90.407 ug/l		100
48) Methyl methacrylate	9.289	41	96997	86.272 ug/l		90
49) 1,4-Dioxane	9.295	88	27239	1720.503 ug/l		94
51) 4-Methyl-2-Pentanone	10.069	43	548265	410.512 ug/l		95
52) Toluene	10.246	92	491959	91.183 ug/l		99
53) t-1,3-Dichloropropene	10.465	75	273523	90.444 ug/l		100
54) cis-1,3-Dichloropropene	9.929	75	294668	90.065 ug/l		99
55) 1,1,2-Trichloroethane	10.642	97	141810	85.879 ug/l		96
56) Ethyl methacrylate	10.508	69	195851	90.541 ug/l		95
57) 1,3-Dichloropropane	10.788	76	237386	87.110 ug/l		99
58) 2-Chloroethyl Vinyl ether	9.782	63	300641	379.973 ug/l		90
59) 2-Hexanone	10.831	43	428264	456.665 ug/l		96
60) Dibromochloromethane	10.983	129	193231	88.751 ug/l		100
61) 1,2-Dibromoethane	11.087	107	140109	88.652 ug/l		100
64) Tetrachloroethene	10.721	164	232458	91.200 ug/l		96
65) Chlorobenzene	11.520	112	527034	88.691 ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.593	131	201129	87.667 ug/l		97
67) Ethyl Benzene	11.593	91	956614	90.065 ug/l		99
68) m/p-Xylenes	11.703	106	755232	181.290 ug/l		99
69) o-Xylene	12.032	106	360023	90.764 ug/l		100
70) Styrene	12.044	104	607373	90.143 ug/l		99
71) Bromoform	12.209	173	125922	86.383 ug/l	#	99
73) Isopropylbenzene	12.331	105	957293	93.900 ug/l		99
74) N-amyl acetate	12.142	43	188961	89.782 ug/l		96
75) 1,1,2,2-Tetrachloroethane	12.581	83	144479	84.248 ug/l		99
76) 1,2,3-Trichloropropane	12.636	75	104951m	71.342 ug/l		
77) Bromobenzene	12.611	156	223708	92.004 ug/l		93
78) n-propylbenzene	12.672	91	1111374	93.384 ug/l		98
79) 2-Chlorotoluene	12.757	91	626555	92.035 ug/l		97
80) 1,3,5-Trimethylbenzene	12.812	105	820490	93.834 ug/l		100
81) trans-1,4-Dichloro-2-b...	12.379	75	58824	88.804 ug/l		98
82) 4-Chlorotoluene	12.855	91	654235	91.882 ug/l		97
83) tert-Butylbenzene	13.074	119	727156	94.912 ug/l		100
84) 1,2,4-Trimethylbenzene	13.123	105	817581	94.458 ug/l		98
85) sec-Butylbenzene	13.257	105	1018287	92.471 ug/l		98
86) p-Isopropyltoluene	13.373	119	890750	93.367 ug/l		100
87) 1,3-Dichlorobenzene	13.367	146	444490	91.196 ug/l		99
88) 1,4-Dichlorobenzene	13.446	146	439397	90.246 ug/l		99
89) n-Butylbenzene	13.696	91	771352	93.301 ug/l		98
90) Hexachloroethane	13.965	117	156350	88.338 ug/l		93
91) 1,2-Dichlorobenzene	13.739	146	389265	89.647 ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.355	75	29625	86.917 ug/l		96
93) 1,2,4-Trichlorobenzene	15.007	180	251814	93.017 ug/l		99
94) Hexachlorobutadiene	15.111	225	147339	90.205 ug/l		99
95) Naphthalene	15.239	128	509187	95.041 ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	215596	91.599 ug/l		100

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012198.D
Acq On : 16 Jan 2023 14:11
Operator : KP/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:40:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

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

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

ICAL Form

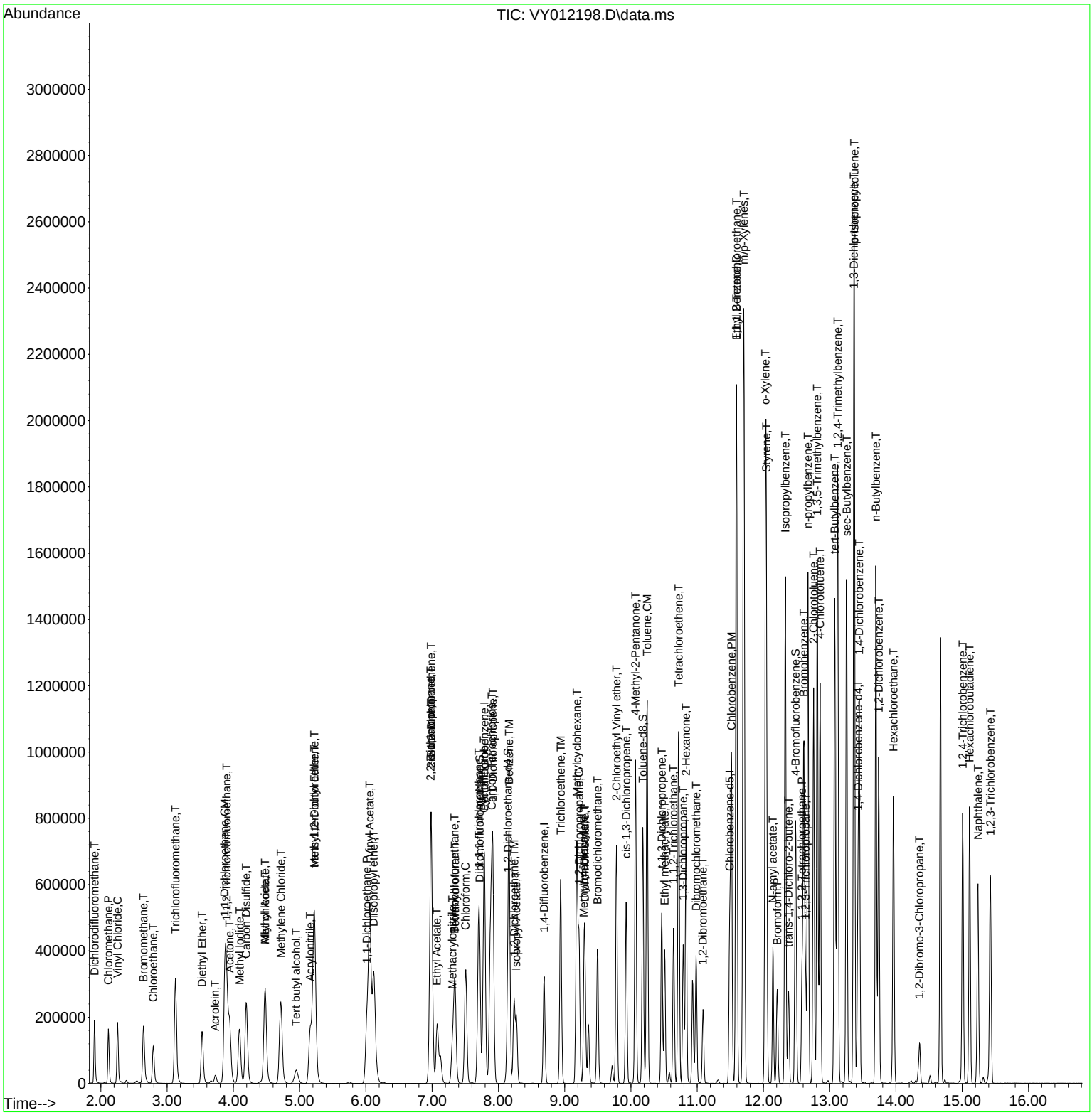
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012198.D
Acq On : 16 Jan 2023 14:11
Operator : KP/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 16 14:40:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012199.D
Acq On : 16 Jan 2023 14:34
Operator : KP/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:46:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	7.789	168	208490	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	8.691	114	318048	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.489	117	292116	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	146569	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.142	65	242775	103.630	ug/l		0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 207.260%#				
35) Dibromofluoromethane	7.716	113	222675	106.519	ug/l		0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 213.040%#				
50) Toluene-d8	10.179	98	819241	99.288	ug/l		0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 198.580%#				
62) 4-Bromofluorobenzene	12.483	95	307749	106.704	ug/l		0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 213.400%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.906	85	236192	126.549	ug/l		98
3) Chloromethane	2.113	50	232374	135.565	ug/l		100
4) Vinyl Chloride	2.253	62	272679	134.568	ug/l		98
5) Bromomethane	2.631	94	198439	128.022	ug/l		99
6) Chloroethane	2.784	64	180282	134.290	ug/l		96
7) Trichlorofluoromethane	3.125	101	533290	132.107	ug/l		98
8) Diethyl Ether	3.527	74	165049	133.541	ug/l		84
9) 1,1,2-Trichlorotrifluo...	3.899	101	268729	129.293	ug/l		95
10) Methyl Iodide	4.088	142	416311	147.752	ug/l		96
11) Tert butyl alcohol	4.960	59	151339	435.229	ug/l		98
12) 1,1-Dichloroethene	3.869	96	276973	135.927	ug/l		96
13) Acrolein	3.729	56	53521	353.840	ug/l		99
14) Allyl chloride	4.479	41	361209	131.498	ug/l	#	88
15) Acrylonitrile	5.161	53	384331	661.861	ug/l		99
16) Acetone	3.948	43	469424	851.799	ug/l		99
17) Carbon Disulfide	4.192	76	855111	148.831	ug/l		100
18) Methyl Acetate	4.479	43	204053	128.718	ug/l		90
19) Methyl tert-butyl Ether	5.222	73	796131	132.743	ug/l		94
20) Methylene Chloride	4.716	84	320606	111.734	ug/l		87
21) trans-1,2-Dichloroethene	5.222	96	304371	134.991	ug/l		91
22) Diisopropyl ether	6.118	45	697127	123.370	ug/l	#	92
23) Vinyl Acetate	6.058	43	2286941	668.808	ug/l		94
24) 1,1-Dichloroethane	6.015	63	474899	126.347	ug/l		98
25) 2-Butanone	6.984	43	519829	714.939	ug/l		90
26) 2,2-Dichloropropane	6.978	77	505656	124.704	ug/l		100
27) cis-1,2-Dichloroethene	6.984	96	336451	130.646	ug/l		95
28) Bromochloromethane	7.332	49	98630	103.794	ug/l	#	79
29) Tetrahydrofuran	7.344	42	287280	676.886	ug/l	#	86
30) Chloroform	7.508	83	538200	125.615	ug/l		99
31) Cyclohexane	7.783	56	425687	126.383	ug/l		94
32) 1,1,1-Trichloroethane	7.704	97	542606	130.388	ug/l		98
36) 1,1-Dichloropropene	7.917	75	410936	129.569	ug/l		98
37) Ethyl Acetate	7.069	43	196810	115.895	ug/l	#	95
38) Carbon Tetrachloride	7.899	117	517769	128.622	ug/l		100
39) Methylcyclohexane	9.185	83	524437	138.422	ug/l		94
40) Benzene	8.161	78	1182619	127.962	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012199.D
Acq On : 16 Jan 2023 14:34
Operator : KP/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED
Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:46:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
41) Methacrylonitrile	7.319	41	107306m	116.183 ug/l		
42) 1,2-Dichloroethane	8.234	62	371025	126.804 ug/l		99
43) Isopropyl Acetate	8.271	43	372712	130.965 ug/l	#	96
44) Trichloroethene	8.941	130	349231	129.414 ug/l		97
45) 1,2-Dichloropropane	9.215	63	253972	123.336 ug/l		100
46) Dibromomethane	9.307	93	167217	128.994 ug/l		97
47) Bromodichloromethane	9.496	83	420287	127.509 ug/l		99
48) Methyl methacrylate	9.295	41	179364	140.701 ug/l		94
49) 1,4-Dioxane	9.301	88	49394	2751.617 ug/l		92
51) 4-Methyl-2-Pentanone	10.069	43	1004437	663.296 ug/l		96
52) Toluene	10.246	92	789842	129.115 ug/l		99
53) t-1,3-Dichloropropene	10.465	75	448355	130.755 ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	477227	128.646 ug/l		99
55) 1,1,2-Trichloroethane	10.642	97	234468	125.232 ug/l		98
56) Ethyl methacrylate	10.508	69	335819	136.922 ug/l		96
57) 1,3-Dichloropropane	10.788	76	389713	126.127 ug/l		99
58) 2-Chloroethyl Vinyl ether	9.782	63	534173	595.437 ug/l		92
59) 2-Hexanone	10.831	43	776109	729.892 ug/l		95
60) Dibromochloromethane	10.983	129	313051	126.812 ug/l		99
61) 1,2-Dibromoethane	11.087	107	231425	129.146 ug/l		100
64) Tetrachloroethene	10.721	164	365089	127.581 ug/l		98
65) Chlorobenzene	11.514	112	842151	126.231 ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.593	131	320565	124.456 ug/l		98
67) Ethyl Benzene	11.593	91	1535729	128.786 ug/l		99
68) m/p-Xylenes	11.703	106	1203720	257.369 ug/l		100
69) o-Xylene	12.032	106	573468	128.775 ug/l		99
70) Styrene	12.044	104	969563	128.172 ug/l		99
71) Bromoform	12.209	173	210448	128.591 ug/l	#	99
73) Isopropylbenzene	12.331	105	1525295	131.518 ug/l		98
74) N-amyl acetate	12.142	43	337381	140.911 ug/l		96
75) 1,1,2,2-Tetrachloroethane	12.581	83	251588	128.959 ug/l		99
76) 1,2,3-Trichloropropane	12.636	75	185709m	110.969 ug/l		
77) Bromobenzene	12.611	156	359084	129.816 ug/l		94
78) n-propylbenzene	12.672	91	1773957	131.028 ug/l		99
79) 2-Chlorotoluene	12.758	91	1002816	129.487 ug/l		99
80) 1,3,5-Trimethylbenzene	12.812	105	1291608	129.845 ug/l		100
81) trans-1,4-Dichloro-2-b...	12.380	75	101588	134.812 ug/l		98
82) 4-Chlorotoluene	12.855	91	1039235	128.298 ug/l		98
83) tert-Butylbenzene	13.075	119	1142627	131.102 ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	1284295	130.431 ug/l		99
85) sec-Butylbenzene	13.257	105	1614796	128.903 ug/l		98
86) p-Isopropyltoluene	13.373	119	1401783	129.160 ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	699605	126.175 ug/l		100
88) 1,4-Dichlorobenzene	13.446	146	693311	125.172 ug/l		99
89) n-Butylbenzene	13.696	91	1236807	131.506 ug/l		99
90) Hexachloroethane	13.965	117	250097	124.213 ug/l		94
91) 1,2-Dichlorobenzene	13.739	146	625273	126.581 ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.355	75	53324	137.523 ug/l		91
93) 1,2,4-Trichlorobenzene	15.007	180	430955	139.935 ug/l		99
94) Hexachlorobutadiene	15.111	225	243621	131.110 ug/l		99
95) Naphthalene	15.239	128	929118	152.445 ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	379033	141.558 ug/l		99

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012199.D
Acq On : 16 Jan 2023 14:34
Operator : KP/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 14:46:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

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

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

ICAL Form

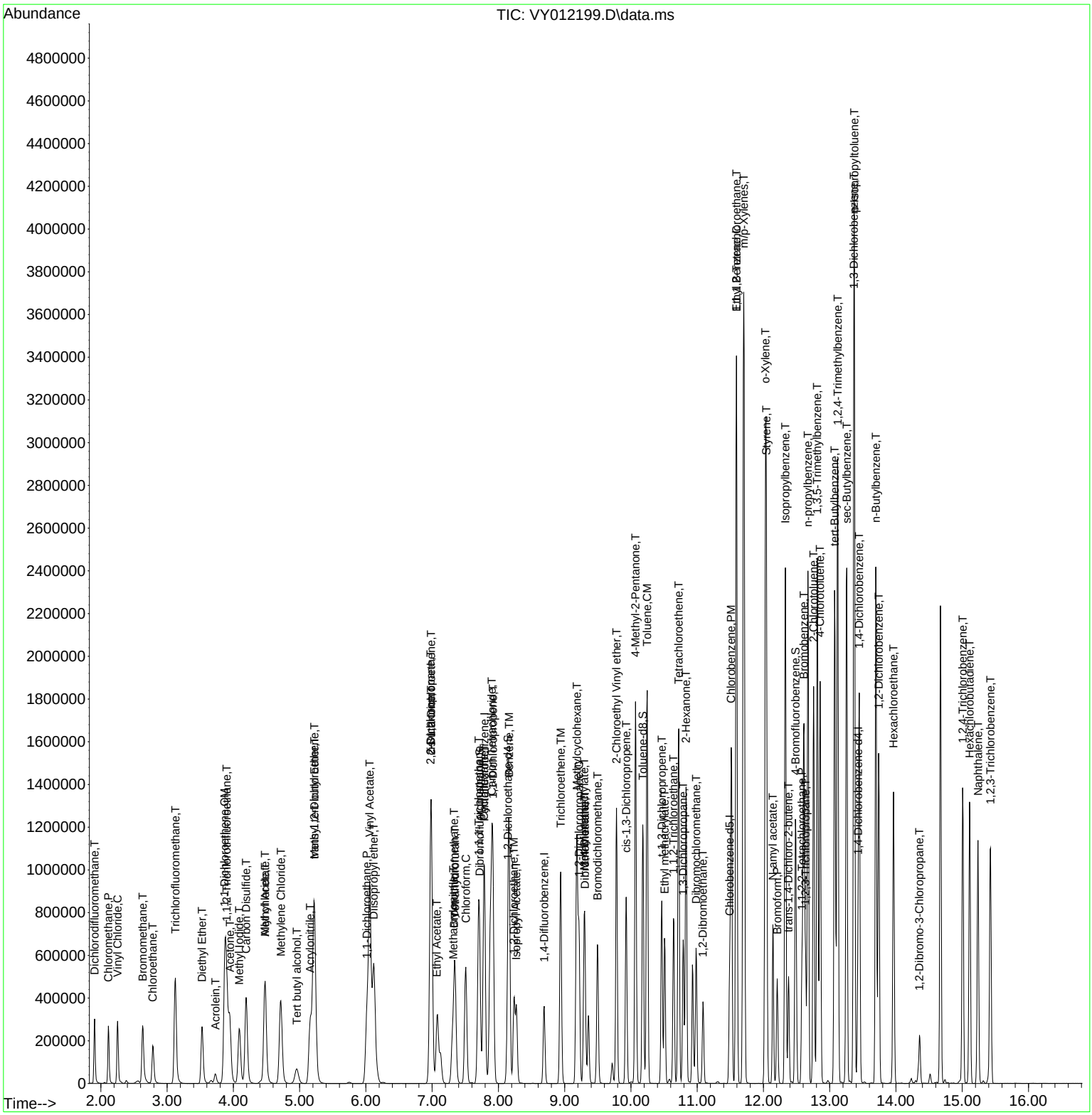
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012199.D
Acq On : 16 Jan 2023 14:34
Operator : KP/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 16 14:46:59 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 13:57:37 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012201.D
Acq On : 16 Jan 2023 15:21
Operator : KP/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY011623

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 17:31:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 14:54:53 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	7.789	168	216305	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	8.691	114	328603	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.489	117	299858	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	152120	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.142	65	84654	46.978	ug/l		0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 93.960%				
35) Dibromofluoromethane	7.716	113	80172	46.077	ug/l		0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 92.160%				
50) Toluene-d8	10.179	98	291922	48.273	ug/l		0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 96.540%				
62) 4-Bromofluorobenzene	12.483	95	110178	44.919	ug/l		0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 89.840%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.906	85	85653	45.312	ug/l		98
3) Chloromethane	2.113	50	84630	48.497	ug/l		100
4) Vinyl Chloride	2.253	62	97140	47.692	ug/l		99
5) Bromomethane	2.650	94	77703	49.343	ug/l		95
6) Chloroethane	2.796	64	63518	47.816	ug/l		98
7) Trichlorofluoromethane	3.125	101	183805	46.237	ug/l		99
8) Diethyl Ether	3.527	74	56332	47.622	ug/l		85
9) 1,1,2-Trichlorotrifluo...	3.899	101	94826	49.012	ug/l		96
10) Methyl Iodide	4.094	142	125295	42.614	ug/l		96
11) Tert butyl alcohol	4.948	59	50188	235.151	ug/l		99
12) 1,1-Dichloroethene	3.875	96	97427	49.041	ug/l		99
13) Acrolein	3.729	56	17145	169.677	ug/l		98
14) Allyl chloride	4.485	41	127247	51.802	ug/l	#	89
15) Acrylonitrile	5.161	53	131152	253.831	ug/l		100
16) Acetone	3.942	43	155900	258.836	ug/l		97
17) Carbon Disulfide	4.198	76	301549	49.073	ug/l		100
18) Methyl Acetate	4.478	43	67457	50.051	ug/l	#	90
19) Methyl tert-butyl Ether	5.222	73	272026	49.120	ug/l		95
20) Methylene Chloride	4.716	84	126255	50.066	ug/l		89
21) trans-1,2-Dichloroethene	5.216	96	109342	49.322	ug/l		91
22) Diisopropyl ether	6.118	45	252934	51.649	ug/l	#	93
23) Vinyl Acetate	6.057	43	797164	261.229	ug/l	#	94
24) 1,1-Dichloroethane	6.021	63	170311	50.139	ug/l		99
25) 2-Butanone	6.984	43	171393	257.755	ug/l		94
26) 2,2-Dichloropropane	6.984	77	176514	47.870	ug/l		100
27) cis-1,2-Dichloroethene	6.984	96	118726	48.756	ug/l		95
28) Bromochloromethane	7.332	49	35409	47.732	ug/l	#	79
29) Tetrahydrofuran	7.350	42	95941	262.673	ug/l	#	86
30) Chloroform	7.502	83	192807	48.085	ug/l		97
31) Cyclohexane	7.783	56	150989	47.876	ug/l		91
32) 1,1,1-Trichloroethane	7.697	97	191163	48.157	ug/l		98
36) 1,1-Dichloropropene	7.917	75	145114	49.073	ug/l		98
37) Ethyl Acetate	7.069	43	65145	49.973	ug/l	#	95
38) Carbon Tetrachloride	7.899	117	180637	47.298	ug/l		99
39) Methylcyclohexane	9.185	83	184773	51.131	ug/l		94
40) Benzene	8.161	78	416552	48.806	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012201.D
Acq On : 16 Jan 2023 15:21
Operator : KP/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 16 17:31:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 14:54:53 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY011623

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.313	41	36022m	39.088	ug/l		
42) 1,2-Dichloroethane	8.234	62	129058	47.498	ug/l		99
43) Isopropyl Acetate	8.270	43	125793	51.866	ug/l	#	96
44) Trichloroethene	8.941	130	123908	48.572	ug/l		97
45) 1,2-Dichloropropane	9.215	63	90190	50.643	ug/l		100
46) Dibromomethane	9.307	93	58454	49.029	ug/l		96
47) Bromodichloromethane	9.496	83	148143	49.362	ug/l		99
48) Methyl methacrylate	9.295	41	57741	51.670	ug/l		91
49) 1,4-Dioxane	9.295	88	15364	945.728	ug/l		93
51) 4-Methyl-2-Pentanone	10.069	43	338592	261.813	ug/l		96
52) Toluene	10.246	92	277243	48.787	ug/l		100
53) t-1,3-Dichloropropene	10.465	75	155374	49.495	ug/l		98
54) cis-1,3-Dichloropropene	9.929	75	168268	49.773	ug/l		98
55) 1,1,2-Trichloroethane	10.642	97	83848	49.500	ug/l		99
56) Ethyl methacrylate	10.508	69	113265	50.968	ug/l		96
57) 1,3-Dichloropropane	10.788	76	138713	50.143	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.782	63	179333	243.884	ug/l		92
59) 2-Hexanone	10.831	43	262402	266.500	ug/l		97
60) Dibromochloromethane	10.983	129	109437	48.711	ug/l		100
61) 1,2-Dibromoethane	11.087	107	81193	49.674	ug/l		100
64) Tetrachloroethene	10.721	164	132743	48.514	ug/l		98
65) Chlorobenzene	11.520	112	298202	48.605	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.593	131	111694	48.232	ug/l		98
67) Ethyl Benzene	11.593	91	544154	49.627	ug/l		100
68) m/p-Xylenes	11.703	106	427541	98.617	ug/l		99
69) o-Xylene	12.032	106	202399	48.878	ug/l		98
70) Styrene	12.044	104	340188	49.169	ug/l		100
71) Bromoform	12.209	173	72390	48.927	ug/l	#	99
73) Isopropylbenzene	12.331	105	546764	49.845	ug/l		99
74) N-amyl acetate	12.142	43	112607	52.369	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.581	83	88544	51.247	ug/l		99
76) 1,2,3-Trichloropropane	12.636	75	62061m	34.629	ug/l		
77) Bromobenzene	12.611	156	127976	48.485	ug/l		94
78) n-propylbenzene	12.672	91	636818	49.612	ug/l		99
79) 2-Chlorotoluene	12.757	91	359521	49.538	ug/l		99
80) 1,3,5-Trimethylbenzene	12.812	105	470393	49.330	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.379	75	34474	50.780	ug/l		98
82) 4-Chlorotoluene	12.855	91	373651	49.014	ug/l		99
83) tert-Butylbenzene	13.074	119	415947	50.048	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	465404	49.490	ug/l		99
85) sec-Butylbenzene	13.251	105	587183	49.623	ug/l		98
86) p-Isopropyltoluene	13.373	119	514435	49.759	ug/l		100
87) 1,3-Dichlorobenzene	13.367	146	254156	48.414	ug/l		99
88) 1,4-Dichlorobenzene	13.446	146	252556	48.240	ug/l		99
89) n-Butylbenzene	13.696	91	452372	50.492	ug/l		99
90) Hexachloroethane	13.958	117	91082	48.802	ug/l		93
91) 1,2-Dichlorobenzene	13.739	146	222981	47.603	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.355	75	17233	48.263	ug/l		93
93) 1,2,4-Trichlorobenzene	15.007	180	148260	49.397	ug/l		99
94) Hexachlorobutadiene	15.111	225	89257	49.393	ug/l		99
95) Naphthalene	15.239	128	294228	49.666	ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	125958	48.769	ug/l		98

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012201.D
Acq On : 16 Jan 2023 15:21
Operator : KP/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY011623

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023

Quant Time: Jan 16 17:31:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 14:54:53 2023
Response via : Initial Calibration

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

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

ICAL Form

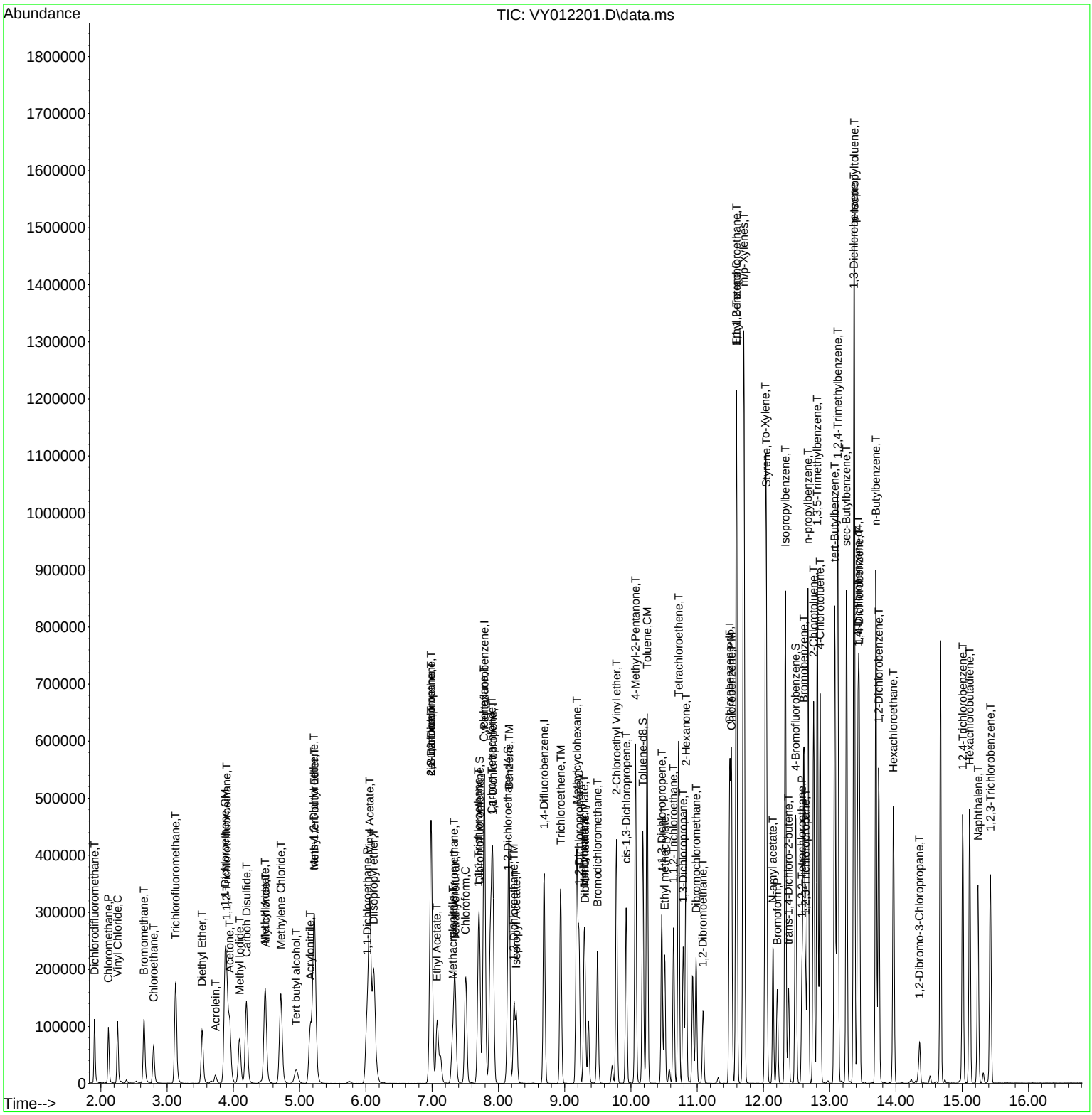
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012201.D
Acq On : 16 Jan 2023 15:21
Operator : KP/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 16 17:31:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 14:54:53 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY011623

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/17/2023
Supervised By :Mahesh Dadoda 01/17/2023



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012201.D
Acq On : 16 Jan 2023 15:21
Operator : KP/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY011623

Quant Time: Jan 16 17:31:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 14:54:53 2023
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	113	0.00
2	T	Dichlorodifluoromethane	0.437	0.396	9.4	120	0.00
3	P	Chloromethane	0.403	0.391	3.0	120	0.00
4	C	Vinyl Chloride	0.471	0.449	4.7#	117	0.00
5	T	Bromomethane	0.364	0.359	1.4	122	0.00
6	T	Chloroethane	0.307	0.294	4.2	116	0.00
7	T	Trichlorofluoromethane	0.919	0.850	7.5	114	0.00
8	T	Diethyl Ether	0.273	0.260	4.8	114	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.447	0.438	2.0	122	0.00
10	T	Methyl Iodide	0.680	0.579	14.9	96	0.00
11	T	Tert butyl alcohol	0.057	0.046	19.3	114	0.00
12	CM	1,1-Dichloroethene	0.459	0.450	2.0#	116	0.00
13	T	Acrolein	0.023	0.016	30.4#	110	0.00
14	T	Allyl chloride	0.568	0.588	-3.5	122	0.00
15	T	Acrylonitrile	0.119	0.121	-1.7	117	0.00
16	T	Acetone	0.139	0.144	-3.6	106	0.00
17	T	Carbon Disulfide	1.420	1.394	1.8	118	0.00
18	T	Methyl Acetate	0.312	0.312	0.0	117	0.00
19	T	Methyl tert-butyl Ether	1.280	1.258	1.7	111	0.00
20	T	Methylene Chloride	0.762	0.584	23.4	116	0.00
21	T	trans-1,2-Dichloroethene	0.512	0.505	1.4	116	0.00
22	T	Diisopropyl ether	1.132	1.169	-3.3	121	0.00
23	T	Vinyl Acetate	0.705	0.737	-4.5	119	0.00
24	P	1,1-Dichloroethane	0.785	0.787	-0.3	117	0.00
25	T	2-Butanone	0.154	0.158	-2.6	114	0.00
26	T	2,2-Dichloropropane	0.852	0.816	4.2	114	0.00
27	T	cis-1,2-Dichloroethene	0.563	0.549	2.5	113	0.00
28	T	Bromochloromethane	0.171	0.164	4.1	116	0.00
29	T	Tetrahydrofuran	0.084	0.089	-6.0	118	0.00
30	C	Chloroform	0.927	0.891	3.9#	112	0.00
31	T	Cyclohexane	0.729	0.698	4.3	125	0.00
32	T	1,1,1-Trichloroethane	0.918	0.884	3.7	113	0.00
33	S	1,2-Dichloroethane-d4	0.465	0.391	15.9	108	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	113	0.00
35	S	Dibromofluoromethane	0.265	0.244	7.9	114	0.00
36	T	1,1-Dichloropropene	0.450	0.442	1.8	117	0.00
37	T	Ethyl Acetate	0.198	0.198	0.0	114	0.00
38	T	Carbon Tetrachloride	0.581	0.550	5.3	113	0.00
39	T	Methylcyclohexane	0.550	0.562	-2.2	124	0.00
40	TM	Benzene	1.299	1.268	2.4	116	0.00
41	T	Methacrylonitrile	0.117	0.110	6.0	103	-0.01
42	TM	1,2-Dichloroethane	0.413	0.393	4.8	109	0.00
43	T	Isopropyl Acetate	0.369	0.383	-3.8	117	0.00
44	TM	Trichloroethene	0.388	0.377	2.8	114	0.00
45	C	1,2-Dichloropropane	0.271	0.274	-1.1#	119	0.00
46	T	Dibromomethane	0.181	0.178	1.7	112	0.00
47	T	Bromodichloromethane	0.457	0.451	1.3	114	0.00
48	T	Methyl methacrylate	0.170	0.176	-3.5	113	0.00

ICAL Form

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ClientSampleId :
ICVVY011623

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Quant Title : SW846 8260
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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	102	0.00
50	S	Toluene-d8	1.044	0.888	14.9	113	0.00
51	T	4-Methyl-2-Pentanone	0.197	0.206	-4.6	117	0.00
52	CM	Toluene	0.865	0.844	2.4#	114	0.00
53	T	t-1,3-Dichloropropene	0.478	0.473	1.0	112	0.00
54	T	cis-1,3-Dichloropropene	0.514	0.512	0.4	114	0.00
55	T	1,1,2-Trichloroethane	0.258	0.255	1.2	113	0.00
56	T	Ethyl methacrylate	0.338	0.345	-2.1	113	0.00
57	T	1,3-Dichloropropane	0.421	0.422	-0.2	115	0.00
58	T	2-Chloroethyl Vinyl ether	0.112	0.109	2.7	114	0.00
59	T	2-Hexanone	0.150	0.160	-6.7	114	0.00
60	T	Dibromochloromethane	0.342	0.333	2.6	110	0.00
61	T	1,2-Dibromoethane	0.249	0.247	0.8	113	0.00
62	S	4-Bromofluorobenzene	0.373	0.335	10.2	114	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	113	0.00
64	T	Tetrachloroethene	0.456	0.443	2.9	111	0.00
65	PM	Chlorobenzene	1.023	0.994	2.8	114	0.00
66	T	1,1,1,2-Tetrachloroethane	0.386	0.372	3.6	110	0.00
67	C	Ethyl Benzene	1.828	1.815	0.7#	115	0.00
68	T	m/p-Xylenes	0.723	0.713	1.4	114	0.00
69	T	o-Xylene	0.690	0.675	2.2	113	0.00
70	T	Styrene	1.154	1.134	1.7	112	0.00
71	P	Bromoform	0.247	0.241	2.4	110	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00
73	T	Isopropylbenzene	3.605	3.594	0.3	115	0.00
74	T	N-amyl acetate	0.707	0.740	-4.7	116	0.00
75	P	1,1,2,2-Tetrachloroethane	0.568	0.582	-2.5	116	0.00
76	T	1,2,3-Trichloropropane	0.460	0.408	11.3	90	0.00
77	T	Bromobenzene	0.868	0.841	3.1	110	0.00
78	T	n-propylbenzene	4.219	4.186	0.8	116	0.00
79	T	2-Chlorotoluene	2.385	2.363	0.9	115	0.00
80	T	1,3,5-Trimethylbenzene	3.134	3.092	1.3	115	0.00
81	T	trans-1,4-Dichloro-2-butene	0.223	0.227	-1.8	112	0.00
82	T	4-Chlorotoluene	2.506	2.456	2.0	115	0.00
83	T	tert-Butylbenzene	2.732	2.734	-0.1	119	0.00
84	T	1,2,4-Trimethylbenzene	3.091	3.059	1.0	113	0.00
85	T	sec-Butylbenzene	3.889	3.860	0.7	117	0.00
86	T	p-Isopropyltoluene	3.398	3.382	0.5	117	0.00
87	T	1,3-Dichlorobenzene	1.725	1.671	3.1	112	0.00
88	T	1,4-Dichlorobenzene	1.721	1.660	3.5	113	0.00
89	T	n-Butylbenzene	2.945	2.974	-1.0	119	0.00
90	T	Hexachloroethane	0.613	0.599	2.3	115	0.00
91	T	1,2-Dichlorobenzene	1.540	1.466	4.8	110	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.117	0.113	3.4	109	0.00
93	T	1,2,4-Trichlorobenzene	0.987	0.975	1.2	117	0.00
94	T	Hexachlorobutadiene	0.594	0.587	1.2	120	0.00
95	T	Naphthalene	1.947	1.934	0.7	112	0.00

ICAL Form

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Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY011623

Quant Time: Jan 16 17:31:27 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Mon Jan 16 14:54:53 2023
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	0.849	0.828	2.5	116	0.00

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

Evaluate Continuing Calibration Report

ICAL Form

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Operator : KP/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
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Instrument :
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Quant Time: Jan 16 17:31:27 2023
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Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	50.000	50.000	0.0	113	0.00
2	T	Dichlorodifluoromethane	50.000	45.312	9.4	120	0.00
3	P	Chloromethane	50.000	48.497	3.0	120	0.00
4	C	Vinyl Chloride	50.000	47.692	4.6#	117	0.00
5	T	Bromomethane	50.000	49.343	1.3	122	0.00
6	T	Chloroethane	50.000	47.816	4.4	116	0.00
7	T	Trichlorofluoromethane	50.000	46.237	7.5	114	0.00
8	T	Diethyl Ether	50.000	47.622	4.8	114	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	49.012	2.0	122	0.00
10	T	Methyl Iodide	50.000	42.614	14.8	96	0.00
11	T	Tert butyl alcohol	250.000	235.151	5.9	114	0.00
12	CM	1,1-Dichloroethene	50.000	49.041	1.9#	116	0.00
13	T	Acrolein	250.000	169.677	32.1#	110	0.00
14	T	Allyl chloride	50.000	51.802	-3.6	122	0.00
15	T	Acrylonitrile	250.000	253.831	-1.5	117	0.00
16	T	Acetone	250.000	258.836	-3.5	106	0.00
17	T	Carbon Disulfide	50.000	49.073	1.9	118	0.00
18	T	Methyl Acetate	50.000	50.051	-0.1	117	0.00
19	T	Methyl tert-butyl Ether	50.000	49.120	1.8	111	0.00
20	T	Methylene Chloride	50.000	50.066	-0.1	116	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.322	1.4	116	0.00
22	T	Diisopropyl ether	50.000	51.649	-3.3	121	0.00
23	T	Vinyl Acetate	250.000	261.229	-4.5	119	0.00
24	P	1,1-Dichloroethane	50.000	50.139	-0.3	117	0.00
25	T	2-Butanone	250.000	257.755	-3.1	114	0.00
26	T	2,2-Dichloropropane	50.000	47.870	4.3	114	0.00
27	T	cis-1,2-Dichloroethene	50.000	48.756	2.5	113	0.00
28	T	Bromochloromethane	50.000	47.732	4.5	116	0.00
29	T	Tetrahydrofuran	250.000	262.673	-5.1	118	0.00
30	C	Chloroform	50.000	48.085	3.8#	112	0.00
31	T	Cyclohexane	50.000	47.876	4.2	125	0.00
32	T	1,1,1-Trichloroethane	50.000	48.157	3.7	113	0.00
33	S	1,2-Dichloroethane-d4	50.000	46.978	6.0	108	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	113	0.00
35	S	Dibromofluoromethane	50.000	46.077	7.8	114	0.00
36	T	1,1-Dichloropropene	50.000	49.073	1.9	117	0.00
37	T	Ethyl Acetate	50.000	49.973	0.1	114	0.00
38	T	Carbon Tetrachloride	50.000	47.298	5.4	113	0.00
39	T	Methylcyclohexane	50.000	51.131	-2.3	124	0.00
40	TM	Benzene	50.000	48.806	2.4	116	0.00
41	T	Methacrylonitrile	50.000	39.088	21.8	103	-0.01
42	TM	1,2-Dichloroethane	50.000	47.498	5.0	109	0.00
43	T	Isopropyl Acetate	50.000	51.866	-3.7	117	0.00
44	TM	Trichloroethene	50.000	48.572	2.9	114	0.00
45	C	1,2-Dichloropropane	50.000	50.643	-1.3#	119	0.00
46	T	Dibromomethane	50.000	49.029	1.9	112	0.00
47	T	Bromodichloromethane	50.000	49.362	1.3	114	0.00
48	T	Methyl methacrylate	50.000	51.670	-3.3	113	0.00

ICAL Form

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
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Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	1,4-Dioxane	1000.000	945.728	5.4	102	0.00
50	S	Toluene-d8	50.000	48.273	3.5	113	0.00
51	T	4-Methyl-2-Pentanone	250.000	261.813	-4.7	117	0.00
52	CM	Toluene	50.000	48.787	2.4#	114	0.00
53	T	t-1,3-Dichloropropene	50.000	49.495	1.0	112	0.00
54	T	cis-1,3-Dichloropropene	50.000	49.773	0.5	114	0.00
55	T	1,1,2-Trichloroethane	50.000	49.500	1.0	113	0.00
56	T	Ethyl methacrylate	50.000	50.968	-1.9	113	0.00
57	T	1,3-Dichloropropane	50.000	50.143	-0.3	115	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	243.884	2.4	114	0.00
59	T	2-Hexanone	250.000	266.500	-6.6	114	0.00
60	T	Dibromochloromethane	50.000	48.711	2.6	110	0.00
61	T	1,2-Dibromoethane	50.000	49.674	0.7	113	0.00
62	S	4-Bromofluorobenzene	50.000	44.919	10.2	114	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	113	0.00
64	T	Tetrachloroethene	50.000	48.514	3.0	111	0.00
65	PM	Chlorobenzene	50.000	48.605	2.8	114	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	48.232	3.5	110	0.00
67	C	Ethyl Benzene	50.000	49.627	0.7#	115	0.00
68	T	m/p-Xylenes	100.000	98.617	1.4	114	0.00
69	T	o-Xylene	50.000	48.878	2.2	113	0.00
70	T	Styrene	50.000	49.169	1.7	112	0.00
71	P	Bromoform	50.000	48.927	2.1	110	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	112	0.00
73	T	Isopropylbenzene	50.000	49.845	0.3	115	0.00
74	T	N-amyl acetate	50.000	52.369	-4.7	116	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	51.247	-2.5	116	0.00
76	T	1,2,3-Trichloropropane	50.000	34.629	30.7#	90	0.00
77	T	Bromobenzene	50.000	48.485	3.0	110	0.00
78	T	n-propylbenzene	50.000	49.612	0.8	116	0.00
79	T	2-Chlorotoluene	50.000	49.538	0.9	115	0.00
80	T	1,3,5-Trimethylbenzene	50.000	49.330	1.3	115	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	50.780	-1.6	112	0.00
82	T	4-Chlorotoluene	50.000	49.014	2.0	115	0.00
83	T	tert-Butylbenzene	50.000	50.048	-0.1	119	0.00
84	T	1,2,4-Trimethylbenzene	50.000	49.490	1.0	113	0.00
85	T	sec-Butylbenzene	50.000	49.623	0.8	117	0.00
86	T	p-Isopropyltoluene	50.000	49.759	0.5	117	0.00
87	T	1,3-Dichlorobenzene	50.000	48.414	3.2	112	0.00
88	T	1,4-Dichlorobenzene	50.000	48.240	3.5	113	0.00
89	T	n-Butylbenzene	50.000	50.492	-1.0	119	0.00
90	T	Hexachloroethane	50.000	48.802	2.4	115	0.00
91	T	1,2-Dichlorobenzene	50.000	47.603	4.8	110	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	48.263	3.5	109	0.00
93	T	1,2,4-Trichlorobenzene	50.000	49.397	1.2	117	0.00
94	T	Hexachlorobutadiene	50.000	49.393	1.2	120	0.00
95	T	Naphthalene	50.000	49.666	0.7	112	0.00

ICAL Form

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	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.769	2.5	116	0.00

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Instrument ID: MSVOA_Y Calibration Date/Time: 01/20/2023 10:34

Lab File ID: VY012280.D Init. Calib. Date(s): 01/16/2023 01/16/2023

Heated Purge: (Y/N) Y Init. Calib. Time(s): 12:17 14:34

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.437	0.401		-8.24	20
Chloromethane	0.403	0.385	0.1	-4.47	20
Vinyl Chloride	0.471	0.465		-1.27	20
Bromomethane	0.364	0.323		-11.26	20
Chloroethane	0.307	0.297		-3.26	20
Trichlorofluoromethane	0.919	0.886		-3.59	20
1,1,2-Trichlorotrifluoroethane	0.447	0.475		6.26	20
1,1-Dichloroethene	0.459	0.477		3.92	20
Acetone	0.139	0.153		10.07	20
Carbon Disulfide	1.420	1.446		1.83	20
Methyl tert-butyl Ether	1.280	1.266		-1.09	20
Methyl Acetate	0.312	0.310		-0.64	20
Methylene Chloride	0.762	0.537		-29.53	20
trans-1,2-Dichloroethene	0.512	0.536		4.69	20
1,1-Dichloroethane	0.785	0.839	0.1	6.88	20
Cyclohexane	0.729	0.760		4.25	20
2-Butanone	0.154	0.167		8.44	20
Carbon Tetrachloride	0.581	0.573		-1.38	20
cis-1,2-Dichloroethene	0.563	0.583		3.55	20
Bromochloromethane	0.171	0.168		-1.75	20
Chloroform	0.927	0.938		1.19	20
1,1,1-Trichloroethane	0.918	0.916		-0.22	20
Methylcyclohexane	0.550	0.596		8.36	20
Benzene	1.299	1.351		4	20
1,2-Dichloroethane	0.413	0.398		-3.63	20
Trichloroethene	0.388	0.411		5.93	20
1,2-Dichloropropane	0.271	0.298		9.96	20
Bromodichloromethane	0.457	0.465		1.75	20
4-Methyl-2-Pentanone	0.197	0.204		3.55	20
Toluene	0.865	0.890		2.89	20
t-1,3-Dichloropropene	0.478	0.490		2.51	20
cis-1,3-Dichloropropene	0.514	0.531		3.31	20
1,1,2-Trichloroethane	0.258	0.269		4.26	20
2-Hexanone	0.150	0.164		9.33	20
Dibromochloromethane	0.342	0.347		1.46	20
1,2-Dibromoethane	0.249	0.250		0.4	20
Tetrachloroethene	0.456	0.510		11.84	20
Chlorobenzene	1.023	1.059	0.3	3.52	20
Ethyl Benzene	1.828	1.910		4.49	20

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Instrument ID: MSVOA_Y Calibration Date/Time: 01/20/2023 10:34

Lab File ID: VY012280.D Init. Calib. Date(s): 01/16/2023 01/16/2023

Heated Purge: (Y/N) Y Init. Calib. Time(s): 12:17 14:34

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
m/p-Xylenes	0.723	0.756		4.56	20
o-Xylene	0.690	0.723		4.78	20
Styrene	1.154	1.209		4.77	20
Bromoform	0.247	0.253	0.1	2.43	20
Isopropylbenzene	3.605	3.889		7.88	20
1,1,2,2-Tetrachloroethane	0.568	0.602	0.3	5.99	20
1,3-Dichlorobenzene	1.726	1.771		2.61	20
1,4-Dichlorobenzene	1.721	1.750		1.68	20
1,2-Dichlorobenzene	1.540	1.565		1.62	20
1,2-Dibromo-3-Chloropropane	0.117	0.119		1.71	20
1,2,4-Trichlorobenzene	0.987	1.016		2.94	20
1,2,3-Trichlorobenzene	0.849	0.879		3.53	20
1,2-Dichloroethane-d4	0.465	0.380		-18.28	20
Dibromofluoromethane	0.265	0.247		-6.79	20
Toluene-d8	1.044	0.901		-13.7	20
4-Bromofluorobenzene	0.373	0.334		-10.46	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\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	233023	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	353084	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	315640	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	156820	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	88437	45.427	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 90.860%			
35) Dibromofluoromethane	7.722	113	87384	46.740	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 93.480%			
50) Toluene-d8	10.179	98	318015	49.008	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 98.020%			
62) 4-Bromofluorobenzene	12.483	95	118014	44.778	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 89.560%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	93471	45.900	ug/l	98
3) Chloromethane	2.113	50	89822	47.780	ug/l	99
4) Vinyl Chloride	2.253	62	108290	49.352	ug/l	98
5) Bromomethane	2.656	94	75228	44.344	ug/l	93
6) Chloroethane	2.796	64	69283	48.414	ug/l	99
7) Trichlorofluoromethane	3.131	101	206544	48.229	ug/l	97
8) Diethyl Ether	3.534	74	63958	50.189	ug/l	83
9) 1,1,2-Trichlorotrifluo...	3.899	101	110757	53.139	ug/l	95
10) Methyl Iodide	4.094	142	149395	47.165	ug/l	98
11) Tert butyl alcohol	4.991	59	44502	191.260	ug/l #	88
12) 1,1-Dichloroethene	3.875	96	111174	51.946	ug/l	95
13) Acrolein	3.735	56	15937	176.277	ug/l	98
14) Allyl chloride	4.485	41	146083	55.204	ug/l	92
15) Acrylonitrile	5.167	53	138474	248.775	ug/l	100
16) Acetone	3.960	43	178186	274.612	ug/l	100
17) Carbon Disulfide	4.198	76	337001	50.908	ug/l	100
18) Methyl Acetate	4.485	43	72335	49.819	ug/l	92
19) Methyl tert-butyl Ether	5.222	73	295083	49.461	ug/l	97
20) Methylene Chloride	4.716	84	125199	45.335	ug/l	88
21) trans-1,2-Dichloroethene	5.222	96	124950	52.319	ug/l	93
22) Diisopropyl ether	6.118	45	292850	55.510	ug/l #	93
23) Vinyl Acetate	6.058	43	877824	267.023	ug/l	94
24) 1,1-Dichloroethane	6.021	63	195590	53.450	ug/l	98
25) 2-Butanone	6.984	43	194842	271.997	ug/l	92
26) 2,2-Dichloropropane	6.984	77	198974	50.089	ug/l	99
27) cis-1,2-Dichloroethene	6.984	96	135771	51.755	ug/l	95
28) Bromochloromethane	7.338	49	39181	49.027	ug/l #	78
29) Tetrahydrofuran	7.350	42	100877	256.373	ug/l	89
30) Chloroform	7.508	83	218671	50.623	ug/l	100
31) Cyclohexane	7.789	56	177088	52.123	ug/l	89
32) 1,1,1-Trichloroethane	7.704	97	213530	49.932	ug/l	98
36) 1,1-Dichloropropene	7.923	75	164644	51.818	ug/l	98
37) Ethyl Acetate	7.076	43	70928	50.637	ug/l #	94
38) Carbon Tetrachloride	7.899	117	202275	49.292	ug/l	97
39) Methylcyclohexane	9.185	83	210339	54.170	ug/l	95
40) Benzene	8.161	78	477053	52.019	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.313	41	40986	49.780	ug/l	#	100
42) 1,2-Dichloroethane	8.234	62	140644	48.173	ug/l		99
43) Isopropyl Acetate	8.277	43	134483	51.605	ug/l	#	94
44) Trichloroethene	8.941	130	144972	52.889	ug/l		99
45) 1,2-Dichloropropane	9.216	63	105198	54.974	ug/l		99
46) Dibromomethane	9.307	93	65137	50.846	ug/l		96
47) Bromodichloromethane	9.496	83	164107	50.890	ug/l		98
48) Methyl methacrylate	9.295	41	61696	51.381	ug/l		91
49) 1,4-Dioxane	9.313	88	16812	963.108	ug/l	#	90
51) 4-Methyl-2-Pentanone	10.069	43	360254	259.249	ug/l		96
52) Toluene	10.246	92	314088	51.439	ug/l		99
53) t-1,3-Dichloropropene	10.465	75	172966	51.279	ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	187623	51.650	ug/l		98
55) 1,1,2-Trichloroethane	10.648	97	95037	52.215	ug/l		96
56) Ethyl methacrylate	10.508	69	125570	52.588	ug/l		94
57) 1,3-Dichloropropane	10.788	76	155722	52.388	ug/l		99
58) 2-Chloroethyl Vinyl ether	9.782	63	191307	242.130	ug/l		92
59) 2-Hexanone	10.831	43	289437	273.576	ug/l		94
60) Dibromochloromethane	10.983	129	122444	50.722	ug/l		99
61) 1,2-Dibromoethane	11.087	107	88427	50.349	ug/l		99
64) Tetrachloroethene	10.721	164	160936	55.877	ug/l		97
65) Chlorobenzene	11.520	112	334346	51.771	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.593	131	126255	51.794	ug/l		99
67) Ethyl Benzene	11.593	91	602832	52.230	ug/l		99
68) m/p-Xylenes	11.703	106	477323	104.595	ug/l		98
69) o-Xylene	12.032	106	228168	52.346	ug/l		97
70) Styrene	12.044	104	381745	52.416	ug/l		99
71) Bromoform	12.209	173	79993	51.363	ug/l	#	98
73) Isopropylbenzene	12.331	105	609939	53.938	ug/l		99
74) N-amyl acetate	12.142	43	120046	54.155	ug/l		95
75) 1,1,2,2-Tetrachloroethane	12.581	83	94410	53.005	ug/l		100
76) 1,2,3-Trichloropropane	12.636	75	73468m	50.948	ug/l		
77) Bromobenzene	12.611	156	141384	51.959	ug/l		93
78) n-propylbenzene	12.672	91	708449	53.538	ug/l		99
79) 2-Chlorotoluene	12.758	91	396616	53.011	ug/l		99
80) 1,3,5-Trimethylbenzene	12.812	105	519812	52.878	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.380	75	37535	53.632	ug/l		98
82) 4-Chlorotoluene	12.855	91	410535	52.238	ug/l		98
83) tert-Butylbenzene	13.075	119	456679	53.302	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	509270	52.532	ug/l		98
85) sec-Butylbenzene	13.257	105	651013	53.368	ug/l		98
86) p-Isopropyltoluene	13.373	119	563725	52.893	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	277665	51.307	ug/l		100
88) 1,4-Dichlorobenzene	13.446	146	274380	50.838	ug/l		99
89) n-Butylbenzene	13.696	91	493877	53.472	ug/l		99
90) Hexachloroethane	13.965	117	102918	53.491	ug/l		94
91) 1,2-Dichlorobenzene	13.739	146	245431	50.825	ug/l		100
92) 1,2-Dibromo-3-Chloropr...	14.361	75	18706	50.818	ug/l		93
93) 1,2,4-Trichlorobenzene	15.013	180	159284	51.480	ug/l		99
94) Hexachlorobutadiene	15.117	225	97935	52.571	ug/l		99
95) Naphthalene	15.239	128	317566	51.999	ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	137823	51.763	ug/l		100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

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

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

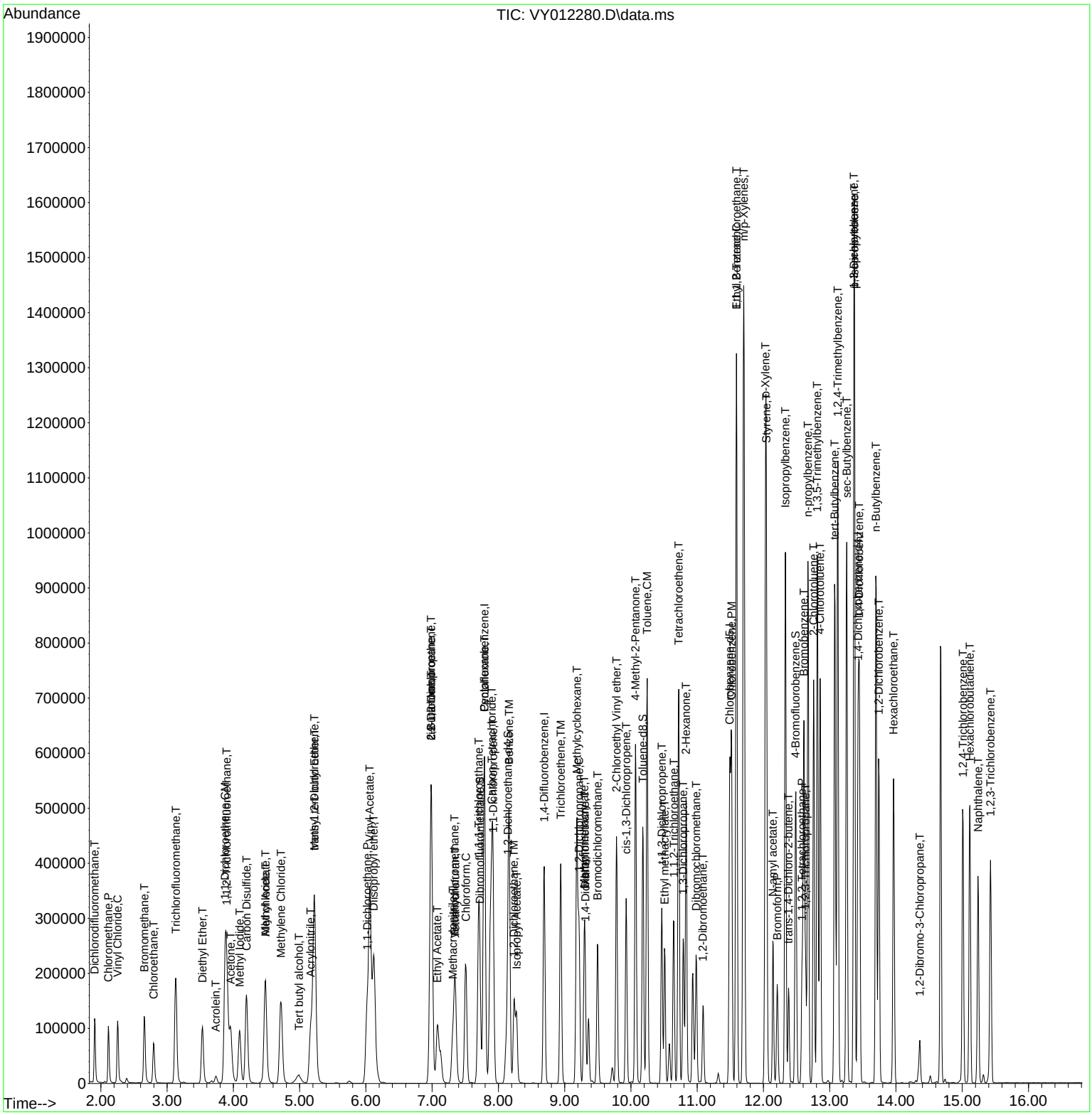
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023



Sample Results: **VY012280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	122	0.00
2	T	Dichlorodifluoromethane	0.437	0.401	8.2	131	0.00
3	P	Chloromethane	0.403	0.385	4.5	128	0.00
4	C	Vinyl Chloride	0.471	0.465	1.3#	130	0.00
5	T	Bromomethane	0.364	0.323	11.3	118	0.00
6	T	Chloroethane	0.307	0.297	3.3	126	0.00
7	T	Trichlorofluoromethane	0.919	0.886	3.6	128	0.00
8	T	Diethyl Ether	0.273	0.274	-0.4	129	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.447	0.475	-6.3	142	0.00
10	T	Methyl Iodide	0.680	0.641	5.7	114	0.00
11	T	Tert butyl alcohol	0.057	0.038	33.3#	101	0.04
12	CM	1,1-Dichloroethene	0.459	0.477	-3.9#	133	0.00
13	T	Acrolein	0.023	0.014	39.1#	103	0.00
14	T	Allyl chloride	0.568	0.627	-10.4	141	0.00
15	T	Acrylonitrile	0.119	0.119	0.0	124	0.00
16	T	Acetone	0.139	0.153	-10.1	121	0.02
17	T	Carbon Disulfide	1.420	1.446	-1.8	131	0.00
18	T	Methyl Acetate	0.312	0.310	0.6	126	0.01
19	T	Methyl tert-butyl Ether	1.280	1.266	1.1	121	0.00
20	T	Methylene Chloride	0.762	0.537	29.5#	115	0.00
21	T	trans-1,2-Dichloroethene	0.512	0.536	-4.7	132	0.00
22	T	Diisopropyl ether	1.132	1.257	-11.0	140	0.00
23	T	Vinyl Acetate	0.705	0.753	-6.8	131	0.00
24	P	1,1-Dichloroethane	0.785	0.839	-6.9	135	0.00
25	T	2-Butanone	0.154	0.167	-8.4	130	0.00
26	T	2,2-Dichloropropane	0.852	0.854	-0.2	128	0.00
27	T	cis-1,2-Dichloroethene	0.563	0.583	-3.6	130	0.00
28	T	Bromochloromethane	0.171	0.168	1.8	129	0.00
29	T	Tetrahydrofuran	0.084	0.087	-3.6	124	0.00
30	C	Chloroform	0.927	0.938	-1.2#	127	0.00
31	T	Cyclohexane	0.729	0.760	-4.3	146	0.00
32	T	1,1,1-Trichloroethane	0.918	0.916	0.2	126	0.00
33	S	1,2-Dichloroethane-d4	0.465	0.380	18.3	113	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	121	0.00
35	S	Dibromofluoromethane	0.265	0.247	6.8	125	0.00
36	T	1,1-Dichloropropene	0.450	0.466	-3.6	133	0.00
37	T	Ethyl Acetate	0.198	0.201	-1.5	124	0.00
38	T	Carbon Tetrachloride	0.581	0.573	1.4	126	0.00
39	T	Methylcyclohexane	0.550	0.596	-8.4	141	0.00
40	TM	Benzene	1.299	1.351	-4.0	133	0.00
41	T	Methacrylonitrile	0.117	0.116	0.9	117	-0.01
42	TM	1,2-Dichloroethane	0.413	0.398	3.6	119	0.00
43	T	Isopropyl Acetate	0.369	0.381	-3.3	125	0.00
44	TM	Trichloroethene	0.388	0.411	-5.9	134	0.00
45	C	1,2-Dichloropropane	0.271	0.298	-10.0#	139	0.00
46	T	Dibromomethane	0.181	0.184	-1.7	125	0.00
47	T	Bromodichloromethane	0.457	0.465	-1.8	127	0.00
48	T	Methyl methacrylate	0.170	0.175	-2.9	120	0.00

Sample Results: **VY012280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	112	0.02
50	S	Toluene-d8	1.044	0.901	13.7	123	0.00
51	T	4-Methyl-2-Pentanone	0.197	0.204	-3.6	125	0.00
52	CM	Toluene	0.865	0.890	-2.9#	129	0.00
53	T	t-1,3-Dichloropropene	0.478	0.490	-2.5	125	0.00
54	T	cis-1,3-Dichloropropene	0.514	0.531	-3.3	127	0.00
55	T	1,1,2-Trichloroethane	0.258	0.269	-4.3	128	0.00
56	T	Ethyl methacrylate	0.338	0.356	-5.3	125	0.00
57	T	1,3-Dichloropropane	0.421	0.441	-4.8	129	0.00
58	T	2-Chloroethyl Vinyl ether	0.112	0.108	3.6	121	0.00
59	T	2-Hexanone	0.150	0.164	-9.3	126	0.00
60	T	Dibromochloromethane	0.342	0.347	-1.5	123	0.00
61	T	1,2-Dibromoethane	0.249	0.250	-0.4	123	0.00
62	S	4-Bromofluorobenzene	0.373	0.334	10.5	122	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	119	0.00
64	T	Tetrachloroethene	0.456	0.510	-11.8	135	0.00
65	PM	Chlorobenzene	1.023	1.059	-3.5	128	0.00
66	T	1,1,1,2-Tetrachloroethane	0.386	0.400	-3.6	124	0.00
67	C	Ethyl Benzene	1.828	1.910	-4.5#	127	0.00
68	T	m/p-Xylenes	0.723	0.756	-4.6	127	0.00
69	T	o-Xylene	0.690	0.723	-4.8	127	0.00
70	T	Styrene	1.154	1.209	-4.8	126	0.00
71	P	Bromoform	0.247	0.253	-2.4	122	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	115	0.00
73	T	Isopropylbenzene	3.605	3.889	-7.9	128	0.00
74	T	N-amyl acetate	0.707	0.766	-8.3	123	0.00
75	P	1,1,2,2-Tetrachloroethane	0.568	0.602	-6.0	123	0.00
76	T	1,2,3-Trichloropropane	0.460	0.468	-1.7	107	0.00
77	T	Bromobenzene	0.868	0.902	-3.9	122	0.00
78	T	n-propylbenzene	4.219	4.518	-7.1	129	0.00
79	T	2-Chlorotoluene	2.385	2.529	-6.0	127	0.00
80	T	1,3,5-Trimethylbenzene	3.134	3.315	-5.8	127	0.00
81	T	trans-1,4-Dichloro-2-butene	0.223	0.239	-7.2	122	0.00
82	T	4-Chlorotoluene	2.506	2.618	-4.5	126	0.00
83	T	tert-Butylbenzene	2.732	2.912	-6.6	130	0.00
84	T	1,2,4-Trimethylbenzene	3.091	3.247	-5.0	124	0.00
85	T	sec-Butylbenzene	3.889	4.151	-6.7	129	0.00
86	T	p-Isopropyltoluene	3.398	3.595	-5.8	128	0.00
87	T	1,3-Dichlorobenzene	1.725	1.771	-2.7	123	0.00
88	T	1,4-Dichlorobenzene	1.721	1.750	-1.7	123	0.00
89	T	n-Butylbenzene	2.945	3.149	-6.9	130	0.00
90	T	Hexachloroethane	0.613	0.656	-7.0	130	0.00
91	T	1,2-Dichlorobenzene	1.540	1.565	-1.6	122	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.117	0.119	-1.7	118	0.00
93	T	1,2,4-Trichlorobenzene	0.987	1.016	-2.9	126	0.00
94	T	Hexachlorobutadiene	0.594	0.625	-5.2	132	0.00
95	T	Naphthalene	1.947	2.025	-4.0	121	0.00

Sample Results: **VY012280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	0.849	0.879	-3.5	127	0.00

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

Sample Results: **VY012280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	122	0.00
2	T	Dichlorodifluoromethane	50.000	45.900	8.2	131	0.00
3	P	Chloromethane	50.000	47.780	4.4	128	0.00
4	C	Vinyl Chloride	50.000	49.352	1.3#	130	0.00
5	T	Bromomethane	50.000	44.344	11.3	118	0.00
6	T	Chloroethane	50.000	48.414	3.2	126	0.00
7	T	Trichlorofluoromethane	50.000	48.229	3.5	128	0.00
8	T	Diethyl Ether	50.000	50.189	-0.4	129	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	53.139	-6.3	142	0.00
10	T	Methyl Iodide	50.000	47.165	5.7	114	0.00
11	T	Tert butyl alcohol	250.000	191.260	23.5	101	0.04
12	CM	1,1-Dichloroethene	50.000	51.946	-3.9#	133	0.00
13	T	Acrolein	250.000	176.277	29.5#	103	0.00
14	T	Allyl chloride	50.000	55.204	-10.4	141	0.00
15	T	Acrylonitrile	250.000	248.775	0.5	124	0.00
16	T	Acetone	250.000	274.612	-9.8	121	0.02
17	T	Carbon Disulfide	50.000	50.908	-1.8	131	0.00
18	T	Methyl Acetate	50.000	49.819	0.4	126	0.01
19	T	Methyl tert-butyl Ether	50.000	49.461	1.1	121	0.00
20	T	Methylene Chloride	50.000	45.335	9.3	115	0.00
21	T	trans-1,2-Dichloroethene	50.000	52.319	-4.6	132	0.00
22	T	Diisopropyl ether	50.000	55.510	-11.0	140	0.00
23	T	Vinyl Acetate	250.000	267.023	-6.8	131	0.00
24	P	1,1-Dichloroethane	50.000	53.450	-6.9	135	0.00
25	T	2-Butanone	250.000	271.997	-8.8	130	0.00
26	T	2,2-Dichloropropane	50.000	50.089	-0.2	128	0.00
27	T	cis-1,2-Dichloroethene	50.000	51.755	-3.5	130	0.00
28	T	Bromochloromethane	50.000	49.027	1.9	129	0.00
29	T	Tetrahydrofuran	250.000	256.373	-2.5	124	0.00
30	C	Chloroform	50.000	50.623	-1.2#	127	0.00
31	T	Cyclohexane	50.000	52.123	-4.2	146	0.00
32	T	1,1,1-Trichloroethane	50.000	49.932	0.1	126	0.00
33	S	1,2-Dichloroethane-d4	50.000	45.427	9.1	113	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	121	0.00
35	S	Dibromofluoromethane	50.000	46.740	6.5	125	0.00
36	T	1,1-Dichloropropene	50.000	51.818	-3.6	133	0.00
37	T	Ethyl Acetate	50.000	50.637	-1.3	124	0.00
38	T	Carbon Tetrachloride	50.000	49.292	1.4	126	0.00
39	T	Methylcyclohexane	50.000	54.170	-8.3	141	0.00
40	TM	Benzene	50.000	52.019	-4.0	133	0.00
41	T	Methacrylonitrile	50.000	49.780	0.4	117	-0.01
42	TM	1,2-Dichloroethane	50.000	48.173	3.7	119	0.00
43	T	Isopropyl Acetate	50.000	51.605	-3.2	125	0.00
44	TM	Trichloroethene	50.000	52.889	-5.8	134	0.00
45	C	1,2-Dichloropropane	50.000	54.974	-9.9#	139	0.00
46	T	Dibromomethane	50.000	50.846	-1.7	125	0.00
47	T	Bromodichloromethane	50.000	50.890	-1.8	127	0.00
48	T	Methyl methacrylate	50.000	51.381	-2.8	120	0.00

Sample Results: **VY012280.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	963.108	3.7	112	0.02
50	S	Toluene-d8	50.000	49.008	2.0	123	0.00
51	T	4-Methyl-2-Pentanone	250.000	259.249	-3.7	125	0.00
52	CM	Toluene	50.000	51.439	-2.9#	129	0.00
53	T	t-1,3-Dichloropropene	50.000	51.279	-2.6	125	0.00
54	T	cis-1,3-Dichloropropene	50.000	51.650	-3.3	127	0.00
55	T	1,1,2-Trichloroethane	50.000	52.215	-4.4	128	0.00
56	T	Ethyl methacrylate	50.000	52.588	-5.2	125	0.00
57	T	1,3-Dichloropropane	50.000	52.388	-4.8	129	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	242.130	3.1	121	0.00
59	T	2-Hexanone	250.000	273.576	-9.4	126	0.00
60	T	Dibromochloromethane	50.000	50.722	-1.4	123	0.00
61	T	1,2-Dibromoethane	50.000	50.349	-0.7	123	0.00
62	S	4-Bromofluorobenzene	50.000	44.778	10.4	122	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	119	0.00
64	T	Tetrachloroethene	50.000	55.877	-11.8	135	0.00
65	PM	Chlorobenzene	50.000	51.771	-3.5	128	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	51.794	-3.6	124	0.00
67	C	Ethyl Benzene	50.000	52.230	-4.5#	127	0.00
68	T	m/p-Xylenes	100.000	104.595	-4.6	127	0.00
69	T	o-Xylene	50.000	52.346	-4.7	127	0.00
70	T	Styrene	50.000	52.416	-4.8	126	0.00
71	P	Bromoform	50.000	51.363	-2.7	122	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	115	0.00
73	T	Isopropylbenzene	50.000	53.938	-7.9	128	0.00
74	T	N-amyl acetate	50.000	54.155	-8.3	123	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	53.005	-6.0	123	0.00
76	T	1,2,3-Trichloropropane	50.000	50.948	-1.9	107	0.00
77	T	Bromobenzene	50.000	51.959	-3.9	122	0.00
78	T	n-propylbenzene	50.000	53.538	-7.1	129	0.00
79	T	2-Chlorotoluene	50.000	53.011	-6.0	127	0.00
80	T	1,3,5-Trimethylbenzene	50.000	52.878	-5.8	127	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	53.632	-7.3	122	0.00
82	T	4-Chlorotoluene	50.000	52.238	-4.5	126	0.00
83	T	tert-Butylbenzene	50.000	53.302	-6.6	130	0.00
84	T	1,2,4-Trimethylbenzene	50.000	52.532	-5.1	124	0.00
85	T	sec-Butylbenzene	50.000	53.368	-6.7	129	0.00
86	T	p-Isopropyltoluene	50.000	52.893	-5.8	128	0.00
87	T	1,3-Dichlorobenzene	50.000	51.307	-2.6	123	0.00
88	T	1,4-Dichlorobenzene	50.000	50.838	-1.7	123	0.00
89	T	n-Butylbenzene	50.000	53.472	-6.9	130	0.00
90	T	Hexachloroethane	50.000	53.491	-7.0	130	0.00
91	T	1,2-Dichlorobenzene	50.000	50.825	-1.7	122	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	50.818	-1.6	118	0.00
93	T	1,2,4-Trichlorobenzene	50.000	51.480	-3.0	126	0.00
94	T	Hexachlorobutadiene	50.000	52.571	-5.1	132	0.00
95	T	Naphthalene	50.000	51.999	-4.0	121	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012280.D
Acq On : 20 Jan 2023 10:34
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 02:14:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	51.763	-3.5	127	0.00

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Instrument ID: MSVOA_Y Calibration Date/Time: 01/23/2023 12:09

Lab File ID: VY012307.D Init. Calib. Date(s): 01/16/2023 01/16/2023

Heated Purge: (Y/N) Y Init. Calib. Time(s): 12:17 14:34

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.437	0.387		-11.44	20
Chloromethane	0.403	0.377	0.1	-6.45	20
Vinyl Chloride	0.471	0.462		-1.91	20
Bromomethane	0.364	0.354		-2.75	20
Chloroethane	0.307	0.305		-0.65	20
Trichlorofluoromethane	0.919	0.884		-3.81	20
1,1,2-Trichlorotrifluoroethane	0.447	0.440		-1.57	20
1,1-Dichloroethene	0.459	0.454		-1.09	20
Acetone	0.139	0.146		5.04	20
Carbon Disulfide	1.420	1.365		-3.87	20
Methyl tert-butyl Ether	1.280	1.242		-2.97	20
Methyl Acetate	0.312	0.292		-6.41	20
Methylene Chloride	0.762	0.518		-32.02	20
trans-1,2-Dichloroethene	0.512	0.505		-1.37	20
1,1-Dichloroethane	0.785	0.778	0.1	-0.89	20
Cyclohexane	0.729	0.682		-6.45	20
2-Butanone	0.154	0.146		-5.2	20
Carbon Tetrachloride	0.581	0.569		-2.07	20
cis-1,2-Dichloroethene	0.563	0.549		-2.66	20
Bromochloromethane	0.171	0.159		-7.02	20
Chloroform	0.927	0.919		-0.86	20
1,1,1-Trichloroethane	0.918	0.900		-1.96	20
Methylcyclohexane	0.550	0.560		1.82	20
Benzene	1.299	1.299		0	20
1,2-Dichloroethane	0.413	0.406		-1.7	20
Trichloroethene	0.388	0.383		-1.29	20
1,2-Dichloropropane	0.271	0.274		1.11	20
Bromodichloromethane	0.457	0.456		-0.22	20
4-Methyl-2-Pentanone	0.197	0.186		-5.58	20
Toluene	0.865	0.875		1.16	20
t-1,3-Dichloropropene	0.478	0.466		-2.51	20
cis-1,3-Dichloropropene	0.514	0.511		-0.58	20
1,1,2-Trichloroethane	0.258	0.247		-4.26	20
2-Hexanone	0.150	0.147		-2	20
Dibromochloromethane	0.342	0.329		-3.8	20
1,2-Dibromoethane	0.249	0.239		-4.02	20
Tetrachloroethene	0.456	0.461		1.1	20
Chlorobenzene	1.023	1.005	0.3	-1.76	20
Ethyl Benzene	1.828	1.852		1.31	20

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

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: loui01

Lab Code: CHEM Case No.: O1232 SAS No.: O1232 SDG No.: O1232

Instrument ID: MSVOA_Y Calibration Date/Time: 01/23/2023 12:09

Lab File ID: VY012307.D Init. Calib. Date(s): 01/16/2023 01/16/2023

Heated Purge: (Y/N) Y Init. Calib. Time(s): 12:17 14:34

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
m/p-Xylenes	0.723	0.728		0.69	20
o-Xylene	0.690	0.693		0.44	20
Styrene	1.154	1.171		1.47	20
Bromoform	0.247	0.234	0.1	-5.26	20
Isopropylbenzene	3.605	3.679		2.05	20
1,1,2,2-Tetrachloroethane	0.568	0.540	0.3	-4.93	20
1,3-Dichlorobenzene	1.726	1.693		-1.91	20
1,4-Dichlorobenzene	1.721	1.678		-2.5	20
1,2-Dichlorobenzene	1.540	1.496		-2.86	20
1,2-Dibromo-3-Chloropropane	0.117	0.110		-5.98	20
1,2,4-Trichlorobenzene	0.987	0.948		-3.95	20
1,2,3-Trichlorobenzene	0.849	0.816		-3.89	20
1,2-Dichloroethane-d4	0.465	0.425		-8.6	20
Dibromofluoromethane	0.265	0.258		-2.64	20
Toluene-d8	1.044	0.958		-8.24	20
4-Bromofluorobenzene	0.373	0.357		-4.29	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\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	179464	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	268117	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.490	117	243165	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	123436	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	76295	51.399	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 102.800%			
35) Dibromofluoromethane	7.716	113	69285	48.803	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 97.600%			
50) Toluene-d8	10.179	98	256759	52.407	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 104.820%			
62) 4-Bromofluorobenzene	12.483	95	95780	47.859	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 95.720%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	69479	44.301	ug/l	98
3) Chloromethane	2.119	50	67723	46.776	ug/l	97
4) Vinyl Chloride	2.253	62	82884	49.046	ug/l	99
5) Bromomethane	2.656	94	63593	48.672	ug/l	98
6) Chloroethane	2.796	64	54695	49.627	ug/l	96
7) Trichlorofluoromethane	3.131	101	158656	48.104	ug/l	99
8) Diethyl Ether	3.528	74	46336	47.213	ug/l	83
9) 1,1,2-Trichlorotrifluo...	3.906	101	79039	49.238	ug/l	96
10) Methyl Iodide	4.095	142	110551	45.318	ug/l	96
11) Tert butyl alcohol	4.954	59	36722	205.849	ug/l	99
12) 1,1-Dichloroethene	3.875	96	81481	49.434	ug/l	98
13) Acrolein	3.729	56	18162	279.360	ug/l	99
14) Allyl chloride	4.479	41	102863	50.472	ug/l #	87
15) Acrylonitrile	5.161	53	101474	236.709	ug/l	100
16) Acetone	3.948	43	131213	262.569	ug/l	98
17) Carbon Disulfide	4.198	76	244963	48.048	ug/l	100
18) Methyl Acetate	4.479	43	52468	46.921	ug/l #	88
19) Methyl tert-butyl Ether	5.222	73	222836	48.498	ug/l	94
20) Methylene Chloride	4.716	84	92884	43.325	ug/l	88
21) trans-1,2-Dichloroethene	5.222	96	90614	49.265	ug/l	90
22) Diisopropyl ether	6.119	45	204071	50.226	ug/l #	94
23) Vinyl Acetate	6.058	43	607035	239.760	ug/l #	93
24) 1,1-Dichloroethane	6.021	63	139701	49.571	ug/l	98
25) 2-Butanone	6.984	43	131032	237.510	ug/l #	89
26) 2,2-Dichloropropane	6.978	77	148983	48.698	ug/l	99
27) cis-1,2-Dichloroethene	6.990	96	98436	48.722	ug/l	95
28) Bromochloromethane	7.338	49	28598	46.464	ug/l #	75
29) Tetrahydrofuran	7.344	42	70189	231.617	ug/l #	83
30) Chloroform	7.509	83	164858	49.555	ug/l	96
31) Cyclohexane	7.789	56	122450	46.797	ug/l	88
32) 1,1,1-Trichloroethane	7.704	97	161495	49.034	ug/l	98
36) 1,1-Dichloropropene	7.917	75	120453	49.923	ug/l	97
37) Ethyl Acetate	7.076	43	48859	45.935	ug/l #	95
38) Carbon Tetrachloride	7.899	117	152603	48.972	ug/l	96
39) Methylcyclohexane	9.185	83	150160	50.927	ug/l	95
40) Benzene	8.161	78	348196	50.001	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.307	41	25854m	41.353	ug/l		
42) 1,2-Dichloroethane	8.234	62	108837	49.092	ug/l		100
43) Isopropyl Acetate	8.271	43	93314	47.155	ug/l	#	93
44) Trichloroethene	8.941	130	102774	49.376	ug/l		99
45) 1,2-Dichloropropane	9.216	63	73571	50.630	ug/l		98
46) Dibromomethane	9.307	93	46970	48.284	ug/l		97
47) Bromodichloromethane	9.496	83	122193	49.901	ug/l		99
48) Methyl methacrylate	9.295	41	43293	47.481	ug/l		87
49) 1,4-Dioxane	9.295	88	12643	953.804	ug/l		89
51) 4-Methyl-2-Pentanone	10.069	43	248846	235.827	ug/l		95
52) Toluene	10.246	92	234512	50.577	ug/l		98
53) t-1,3-Dichloropropene	10.465	75	124919	48.771	ug/l		100
54) cis-1,3-Dichloropropene	9.929	75	136892	49.627	ug/l		98
55) 1,1,2-Trichloroethane	10.648	97	66121	47.841	ug/l		97
56) Ethyl methacrylate	10.508	69	89434	49.324	ug/l		94
57) 1,3-Dichloropropane	10.795	76	111623	49.453	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.783	63	140673	234.467	ug/l		90
59) 2-Hexanone	10.831	43	196678	244.812	ug/l		95
60) Dibromochloromethane	10.990	129	88104	48.062	ug/l		99
61) 1,2-Dibromoethane	11.087	107	64171	48.117	ug/l		97
64) Tetrachloroethene	10.721	164	111986	50.470	ug/l		98
65) Chlorobenzene	11.520	112	244267	49.096	ug/l		100
66) 1,1,1,2-Tetrachloroethane	11.593	131	93076	49.563	ug/l		97
67) Ethyl Benzene	11.593	91	450227	50.634	ug/l		99
68) m/p-Xylenes	11.703	106	354184	100.744	ug/l		99
69) o-Xylene	12.032	106	168467	50.169	ug/l		99
70) Styrene	12.044	104	284630	50.730	ug/l		99
71) Bromoform	12.209	173	56800	47.341	ug/l	#	100
73) Isopropylbenzene	12.331	105	454081	51.015	ug/l		99
74) N-amyl acetate	12.148	43	81251	46.567	ug/l		93
75) 1,1,2,2-Tetrachloroethane	12.587	83	66707	47.580	ug/l		99
76) 1,2,3-Trichloropropane	12.636	75	52206m	45.995	ug/l		
77) Bromobenzene	12.611	156	103987	48.551	ug/l		92
78) n-propylbenzene	12.672	91	530629	50.946	ug/l		98
79) 2-Chlorotoluene	12.758	91	295033	50.099	ug/l		98
80) 1,3,5-Trimethylbenzene	12.819	105	394911	51.038	ug/l		100
81) trans-1,4-Dichloro-2-b...	12.380	75	26584	48.258	ug/l		96
82) 4-Chlorotoluene	12.855	91	309484	50.031	ug/l		98
83) tert-Butylbenzene	13.081	119	339903	50.402	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	384515	50.390	ug/l		99
85) sec-Butylbenzene	13.258	105	491026	51.140	ug/l		98
86) p-Isopropyltoluene	13.373	119	427935	51.011	ug/l		100
87) 1,3-Dichlorobenzene	13.367	146	208955	49.053	ug/l		100
88) 1,4-Dichlorobenzene	13.453	146	207144	48.760	ug/l		99
89) n-Butylbenzene	13.703	91	371565	51.110	ug/l		98
90) Hexachloroethane	13.965	117	74537	49.217	ug/l		95
91) 1,2-Dichlorobenzene	13.745	146	184613	48.571	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.361	75	13546	46.753	ug/l		97
93) 1,2,4-Trichlorobenzene	15.013	180	117033	48.054	ug/l		98
94) Hexachlorobutadiene	15.117	225	71499	48.760	ug/l		99
95) Naphthalene	15.239	128	228440	47.522	ug/l		100
96) 1,2,3-Trichlorobenzene	15.428	180	100753	48.075	ug/l		98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/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 :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

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

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

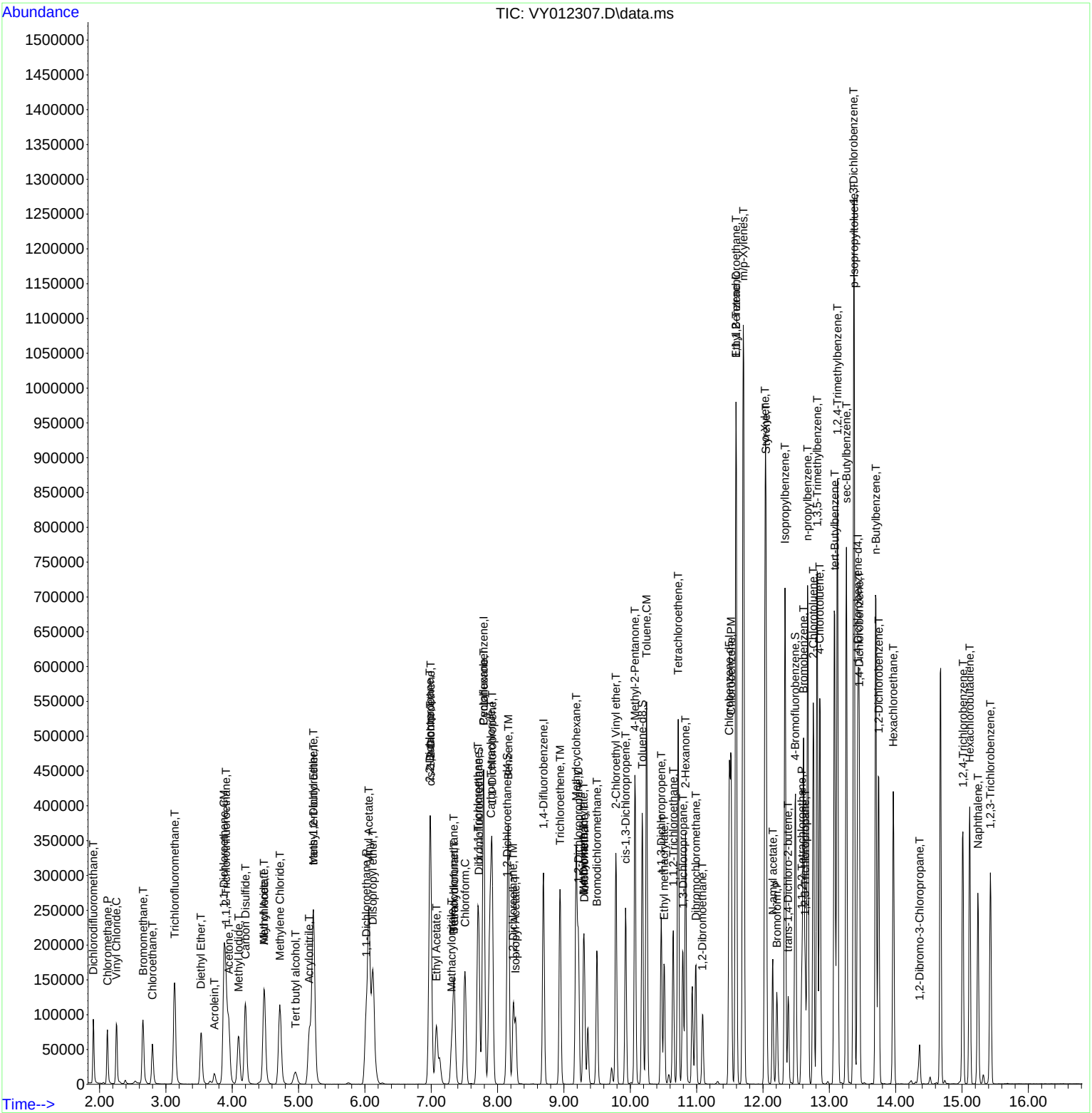
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023



Sample Results: **VY012307.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	0.437	0.387	11.4	98	0.00
3	P	Chloromethane	0.403	0.377	6.5	96	0.00
4	C	Vinyl Chloride	0.471	0.462	1.9#	100	0.00
5	T	Bromomethane	0.364	0.354	2.7	100	0.00
6	T	Chloroethane	0.307	0.305	0.7	100	0.00
7	T	Trichlorofluoromethane	0.919	0.884	3.8	99	0.00
8	T	Diethyl Ether	0.273	0.258	5.5	93	0.00
9	T	1,1,2-Trichlorotrifluoroeth	0.447	0.440	1.6	102	0.00
10	T	Methyl Iodide	0.680	0.616	9.4	85	0.00
11	T	Tert butyl alcohol	0.057	0.041	28.1#	83	0.00
12	CM	1,1-Dichloroethene	0.459	0.454	1.1#	97	0.00
13	T	Acrolein	0.023	0.020	13.0	117	0.00
14	T	Allyl chloride	0.568	0.573	-0.9	99	0.00
15	T	Acrylonitrile	0.119	0.113	5.0	91	0.00
16	T	Acetone	0.139	0.146	-5.0	89	0.00
17	T	Carbon Disulfide	1.420	1.365	3.9	95	0.00
18	T	Methyl Acetate	0.312	0.292	6.4	91	0.00
19	T	Methyl tert-butyl Ether	1.280	1.242	3.0	91	0.00
20	T	Methylene Chloride	0.762	0.518	32.0#	85	0.00
21	T	trans-1,2-Dichloroethene	0.512	0.505	1.4	96	0.00
22	T	Diisopropyl ether	1.132	1.137	-0.4	97	0.00
23	T	Vinyl Acetate	0.705	0.676	4.1	90	0.00
24	P	1,1-Dichloroethane	0.785	0.778	0.9	96	0.00
25	T	2-Butanone	0.154	0.146	5.2	87	0.00
26	T	2,2-Dichloropropane	0.852	0.830	2.6	96	0.00
27	T	cis-1,2-Dichloroethene	0.563	0.548	2.7	94	0.00
28	T	Bromochloromethane	0.171	0.159	7.0	94	0.00
29	T	Tetrahydrofuran	0.084	0.078	7.1	86	0.00
30	C	Chloroform	0.927	0.919	0.9#	96	0.00
31	T	Cyclohexane	0.729	0.682	6.4	101	0.00
32	T	1,1,1-Trichloroethane	0.918	0.900	2.0	95	0.00
33	S	1,2-Dichloroethane-d4	0.465	0.425	8.6	98	0.00
34	I	1,4-Difluorobenzene	1.000	1.000	0.0	92	0.00
35	S	Dibromofluoromethane	0.265	0.258	2.6	99	0.00
36	T	1,1-Dichloropropene	0.450	0.449	0.2	97	0.00
37	T	Ethyl Acetate	0.198	0.182	8.1	86	0.00
38	T	Carbon Tetrachloride	0.581	0.569	2.1	95	0.00
39	T	Methylcyclohexane	0.550	0.560	-1.8	100	0.00
40	TM	Benzene	1.299	1.299	0.0	97	0.00
41	T	Methacrylonitrile	0.117	0.096	17.9	74	-0.02
42	TM	1,2-Dichloroethane	0.413	0.406	1.7	92	0.00
43	T	Isopropyl Acetate	0.369	0.348	5.7	87	0.00
44	TM	Trichloroethene	0.388	0.383	1.3	95	0.00
45	C	1,2-Dichloropropane	0.271	0.274	-1.1#	97	0.00
46	T	Dibromomethane	0.181	0.175	3.3	90	0.00
47	T	Bromodichloromethane	0.457	0.456	0.2	94	0.00
48	T	Methyl methacrylate	0.170	0.161	5.3	85	0.00

Sample Results: **VY012307.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	84	0.00
50	S	Toluene-d8	1.044	0.958	8.2	99	0.00
51	T	4-Methyl-2-Pentanone	0.197	0.186	5.6	86	0.00
52	CM	Toluene	0.865	0.875	-1.2#	96	0.00
53	T	t-1,3-Dichloropropene	0.478	0.466	2.5	90	0.00
54	T	cis-1,3-Dichloropropene	0.514	0.511	0.6	93	0.00
55	T	1,1,2-Trichloroethane	0.258	0.247	4.3	89	0.00
56	T	Ethyl methacrylate	0.338	0.334	1.2	89	0.00
57	T	1,3-Dichloropropane	0.421	0.416	1.2	92	0.00
58	T	2-Chloroethyl Vinyl ether	0.112	0.105	6.3	89	0.00
59	T	2-Hexanone	0.150	0.147	2.0	86	0.00
60	T	Dibromochloromethane	0.342	0.329	3.8	88	0.00
61	T	1,2-Dibromoethane	0.249	0.239	4.0	89	0.00
62	S	4-Bromofluorobenzene	0.373	0.357	4.3	99	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
64	T	Tetrachloroethene	0.456	0.461	-1.1	94	0.00
65	PM	Chlorobenzene	1.023	1.005	1.8	93	0.00
66	T	1,1,1,2-Tetrachloroethane	0.386	0.383	0.8	91	0.00
67	C	Ethyl Benzene	1.828	1.852	-1.3#	95	0.00
68	T	m/p-Xylenes	0.723	0.728	-0.7	94	0.00
69	T	o-Xylene	0.690	0.693	-0.4	94	0.00
70	T	Styrene	1.154	1.171	-1.5	94	0.00
71	P	Bromoform	0.247	0.234	5.3	86	0.00
72	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	0.00
73	T	Isopropylbenzene	3.605	3.679	-2.1	95	0.00
74	T	N-amyl acetate	0.707	0.658	6.9	84	0.00
75	P	1,1,2,2-Tetrachloroethane	0.568	0.540	4.9	87	0.00
76	T	1,2,3-Trichloropropane	0.460	0.423	8.0	76	0.00
77	T	Bromobenzene	0.868	0.842	3.0	90	0.00
78	T	n-propylbenzene	4.219	4.299	-1.9	97	0.00
79	T	2-Chlorotoluene	2.385	2.390	-0.2	94	0.00
80	T	1,3,5-Trimethylbenzene	3.134	3.199	-2.1	96	0.00
81	T	trans-1,4-Dichloro-2-butene	0.223	0.215	3.6	87	0.00
82	T	4-Chlorotoluene	2.506	2.507	-0.0	95	0.00
83	T	tert-Butylbenzene	2.732	2.754	-0.8	97	0.00
84	T	1,2,4-Trimethylbenzene	3.091	3.115	-0.8	94	0.00
85	T	sec-Butylbenzene	3.889	3.978	-2.3	97	0.00
86	T	p-Isopropyltoluene	3.398	3.467	-2.0	97	0.00
87	T	1,3-Dichlorobenzene	1.725	1.693	1.9	92	0.00
88	T	1,4-Dichlorobenzene	1.721	1.678	2.5	93	0.00
89	T	n-Butylbenzene	2.945	3.010	-2.2	98	0.00
90	T	Hexachloroethane	0.613	0.604	1.5	94	0.00
91	T	1,2-Dichlorobenzene	1.540	1.496	2.9	91	0.00
92	T	1,2-Dibromo-3-Chloropropane	0.117	0.110	6.0	86	0.00
93	T	1,2,4-Trichlorobenzene	0.987	0.948	4.0	92	0.00
94	T	Hexachlorobutadiene	0.594	0.579	2.5	96	0.00
95	T	Naphthalene	1.947	1.851	4.9	87	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	0.849	0.816	3.9	93	0.00

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

Sample Results: **VY012307.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	44.301	11.4	98	0.00
3	P	Chloromethane	50.000	46.776	6.4	96	0.00
4	C	Vinyl Chloride	50.000	49.046	1.9#	100	0.00
5	T	Bromomethane	50.000	48.672	2.7	100	0.00
6	T	Chloroethane	50.000	49.627	0.7	100	0.00
7	T	Trichlorofluoromethane	50.000	48.104	3.8	99	0.00
8	T	Diethyl Ether	50.000	47.213	5.6	93	0.00
9	T	1,1,2-Trichlorotrifluoroeth	50.000	49.238	1.5	102	0.00
10	T	Methyl Iodide	50.000	45.318	9.4	85	0.00
11	T	Tert butyl alcohol	250.000	205.849	17.7	83	0.00
12	CM	1,1-Dichloroethene	50.000	49.434	1.1#	97	0.00
13	T	Acrolein	250.000	279.360	-11.7	117	0.00
14	T	Allyl chloride	50.000	50.472	-0.9	99	0.00
15	T	Acrylonitrile	250.000	236.709	5.3	91	0.00
16	T	Acetone	250.000	262.569	-5.0	89	0.00
17	T	Carbon Disulfide	50.000	48.048	3.9	95	0.00
18	T	Methyl Acetate	50.000	46.921	6.2	91	0.00
19	T	Methyl tert-butyl Ether	50.000	48.498	3.0	91	0.00
20	T	Methylene Chloride	50.000	43.325	13.3	85	0.00
21	T	trans-1,2-Dichloroethene	50.000	49.265	1.5	96	0.00
22	T	Diisopropyl ether	50.000	50.226	-0.5	97	0.00
23	T	Vinyl Acetate	250.000	239.760	4.1	90	0.00
24	P	1,1-Dichloroethane	50.000	49.571	0.9	96	0.00
25	T	2-Butanone	250.000	237.510	5.0	87	0.00
26	T	2,2-Dichloropropane	50.000	48.698	2.6	96	0.00
27	T	cis-1,2-Dichloroethene	50.000	48.722	2.6	94	0.00
28	T	Bromochloromethane	50.000	46.464	7.1	94	0.00
29	T	Tetrahydrofuran	250.000	231.617	7.4	86	0.00
30	C	Chloroform	50.000	49.555	0.9#	96	0.00
31	T	Cyclohexane	50.000	46.797	6.4	101	0.00
32	T	1,1,1-Trichloroethane	50.000	49.034	1.9	95	0.00
33	S	1,2-Dichloroethane-d4	50.000	51.399	-2.8	98	0.00
34	I	1,4-Difluorobenzene	50.000	50.000	0.0	92	0.00
35	S	Dibromofluoromethane	50.000	48.803	2.4	99	0.00
36	T	1,1-Dichloropropene	50.000	49.923	0.2	97	0.00
37	T	Ethyl Acetate	50.000	45.935	8.1	86	0.00
38	T	Carbon Tetrachloride	50.000	48.972	2.1	95	0.00
39	T	Methylcyclohexane	50.000	50.927	-1.9	100	0.00
40	TM	Benzene	50.000	50.001	-0.0	97	0.00
41	T	Methacrylonitrile	50.000	41.353	17.3	74	-0.02
42	TM	1,2-Dichloroethane	50.000	49.092	1.8	92	0.00
43	T	Isopropyl Acetate	50.000	47.155	5.7	87	0.00
44	TM	Trichloroethene	50.000	49.376	1.2	95	0.00
45	C	1,2-Dichloropropane	50.000	50.630	-1.3#	97	0.00
46	T	Dibromomethane	50.000	48.284	3.4	90	0.00
47	T	Bromodichloromethane	50.000	49.901	0.2	94	0.00
48	T	Methyl methacrylate	50.000	47.481	5.0	85	0.00

Sample Results: **VY012307.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	953.804	4.6	84	0.00
50	S	Toluene-d8	50.000	52.407	-4.8	99	0.00
51	T	4-Methyl-2-Pentanone	250.000	235.827	5.7	86	0.00
52	CM	Toluene	50.000	50.577	-1.2#	96	0.00
53	T	t-1,3-Dichloropropene	50.000	48.771	2.5	90	0.00
54	T	cis-1,3-Dichloropropene	50.000	49.627	0.7	93	0.00
55	T	1,1,2-Trichloroethane	50.000	47.841	4.3	89	0.00
56	T	Ethyl methacrylate	50.000	49.324	1.4	89	0.00
57	T	1,3-Dichloropropane	50.000	49.453	1.1	92	0.00
58	T	2-Chloroethyl Vinyl ether	250.000	234.467	6.2	89	0.00
59	T	2-Hexanone	250.000	244.812	2.1	86	0.00
60	T	Dibromochloromethane	50.000	48.062	3.9	88	0.00
61	T	1,2-Dibromoethane	50.000	48.117	3.8	89	0.00
62	S	4-Bromofluorobenzene	50.000	47.859	4.3	99	0.00
63	I	Chlorobenzene-d5	50.000	50.000	0.0	92	0.00
64	T	Tetrachloroethene	50.000	50.470	-0.9	94	0.00
65	PM	Chlorobenzene	50.000	49.096	1.8	93	0.00
66	T	1,1,1,2-Tetrachloroethane	50.000	49.563	0.9	91	0.00
67	C	Ethyl Benzene	50.000	50.634	-1.3#	95	0.00
68	T	m/p-Xylenes	100.000	100.744	-0.7	94	0.00
69	T	o-Xylene	50.000	50.169	-0.3	94	0.00
70	T	Styrene	50.000	50.730	-1.5	94	0.00
71	P	Bromoform	50.000	47.341	5.3	86	0.00
72	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	91	0.00
73	T	Isopropylbenzene	50.000	51.015	-2.0	95	0.00
74	T	N-amyl acetate	50.000	46.567	6.9	84	0.00
75	P	1,1,2,2-Tetrachloroethane	50.000	47.580	4.8	87	0.00
76	T	1,2,3-Trichloropropane	50.000	45.995	8.0	76	0.00
77	T	Bromobenzene	50.000	48.551	2.9	90	0.00
78	T	n-propylbenzene	50.000	50.946	-1.9	97	0.00
79	T	2-Chlorotoluene	50.000	50.099	-0.2	94	0.00
80	T	1,3,5-Trimethylbenzene	50.000	51.038	-2.1	96	0.00
81	T	trans-1,4-Dichloro-2-butene	50.000	48.258	3.5	87	0.00
82	T	4-Chlorotoluene	50.000	50.031	-0.1	95	0.00
83	T	tert-Butylbenzene	50.000	50.402	-0.8	97	0.00
84	T	1,2,4-Trimethylbenzene	50.000	50.390	-0.8	94	0.00
85	T	sec-Butylbenzene	50.000	51.140	-2.3	97	0.00
86	T	p-Isopropyltoluene	50.000	51.011	-2.0	97	0.00
87	T	1,3-Dichlorobenzene	50.000	49.053	1.9	92	0.00
88	T	1,4-Dichlorobenzene	50.000	48.760	2.5	93	0.00
89	T	n-Butylbenzene	50.000	51.110	-2.2	98	0.00
90	T	Hexachloroethane	50.000	49.217	1.6	94	0.00
91	T	1,2-Dichlorobenzene	50.000	48.571	2.9	91	0.00
92	T	1,2-Dibromo-3-Chloropropane	50.000	46.753	6.5	86	0.00
93	T	1,2,4-Trichlorobenzene	50.000	48.054	3.9	92	0.00
94	T	Hexachlorobutadiene	50.000	48.760	2.5	96	0.00
95	T	Naphthalene	50.000	47.522	5.0	87	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012307.D
Acq On : 23 Jan 2023 12:09
Operator : KP/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Jan 23 15:08:58 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
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	48.075	3.8	93	0.00

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

CHEMTECH

QC SAMPLE DATA

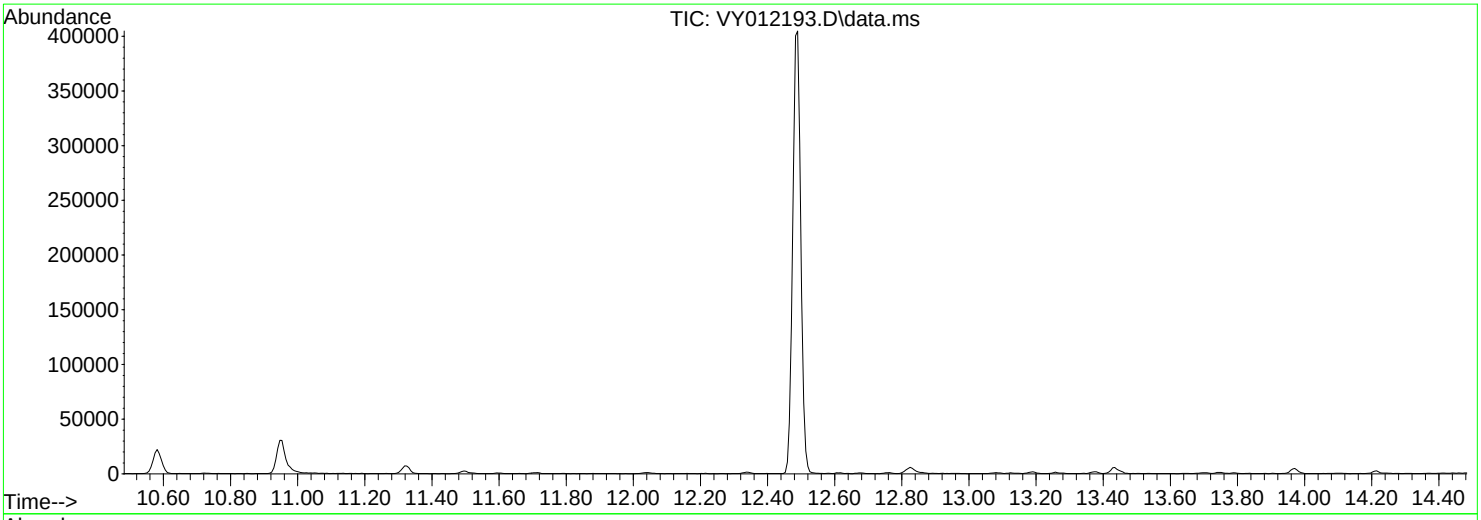
Sample Results: **VY012193.D**

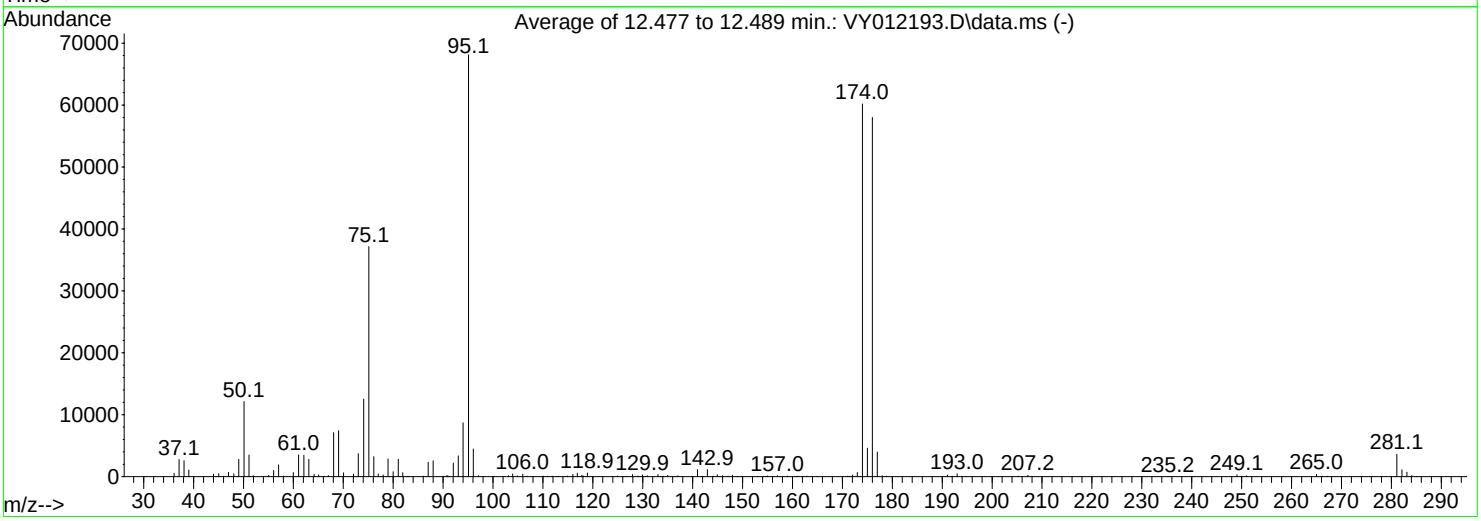
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY011623\
Data File : VY012193.D
Acq On : 16 Jan 2023 09:00
Operator : KP/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Title : SW846 8260
Last Update : Tue Jan 17 04:31:47 2023





AutoFind: Scans 1748, 1749, 1750; Background Corrected with Scan 1741

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	12122	PASS
75	95	30	60	54.6	37163	PASS
95	95	100	100	100.0	68115	PASS
96	95	5	9	6.6	4471	PASS
173	174	0.00	2	1.1	684	PASS
174	95	50	100	88.4	60187	PASS
175	174	5	9	7.6	4593	PASS
176	174	95	101	96.4	58008	PASS
177	176	5	9	6.9	3994	PASS

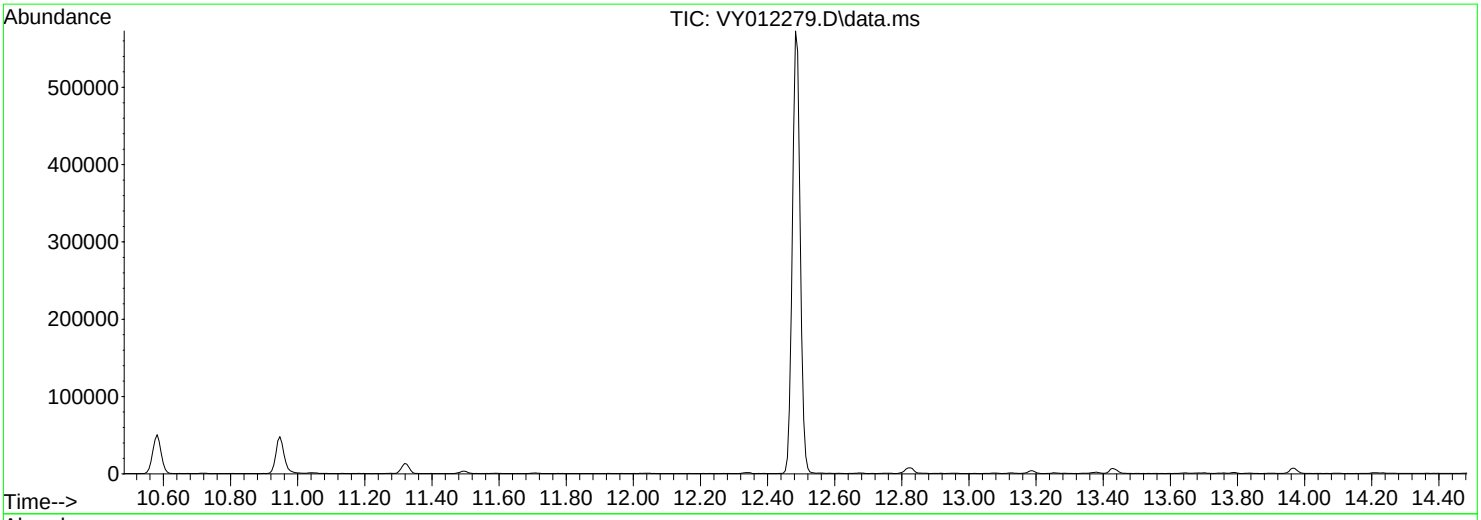
Sample Results: **VY012279.D**

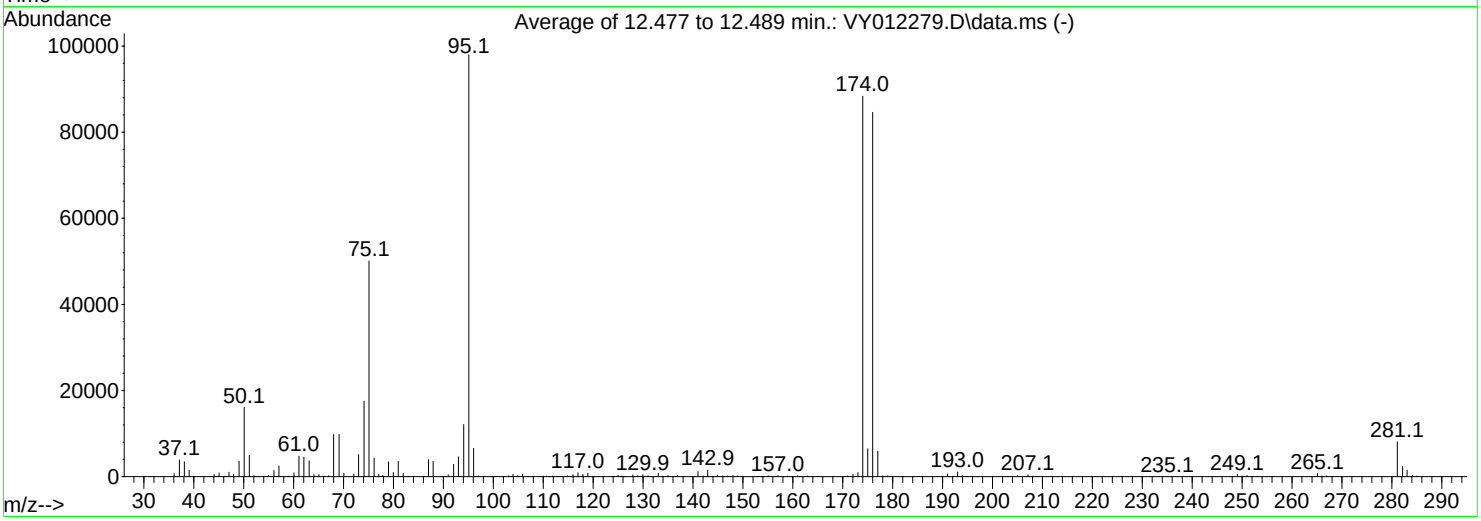
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012279.D
Acq On : 20 Jan 2023 09:50
Operator : KP/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Title : SW846 8260
Last Update : Tue Jan 17 04:31:47 2023





AutoFind: Scans 1748, 1749, 1750; Background Corrected with Scan 1740

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.4	16076	PASS
75	95	30	60	51.1	50091	PASS
95	95	100	100	100.0	97957	PASS
96	95	5	9	6.7	6584	PASS
173	174	0.00	2	1.1	961	PASS
174	95	50	100	90.2	88357	PASS
175	174	5	9	7.3	6464	PASS
176	174	95	101	95.8	84621	PASS
177	176	5	9	7.0	5907	PASS

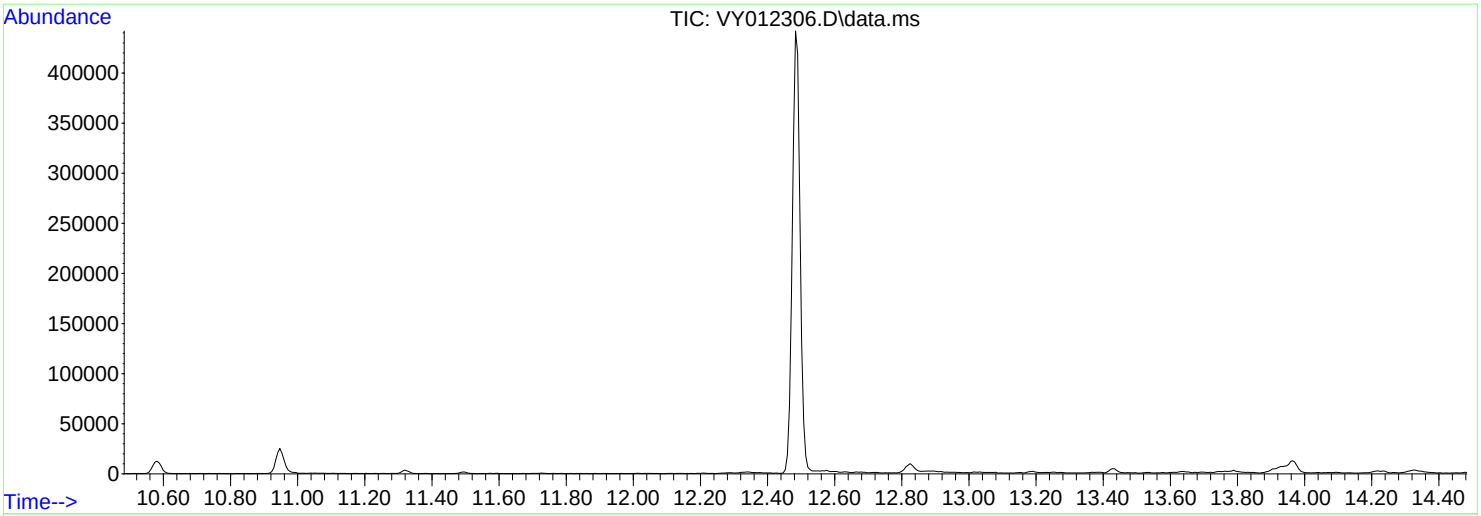
Sample Results: **VY012306.D**

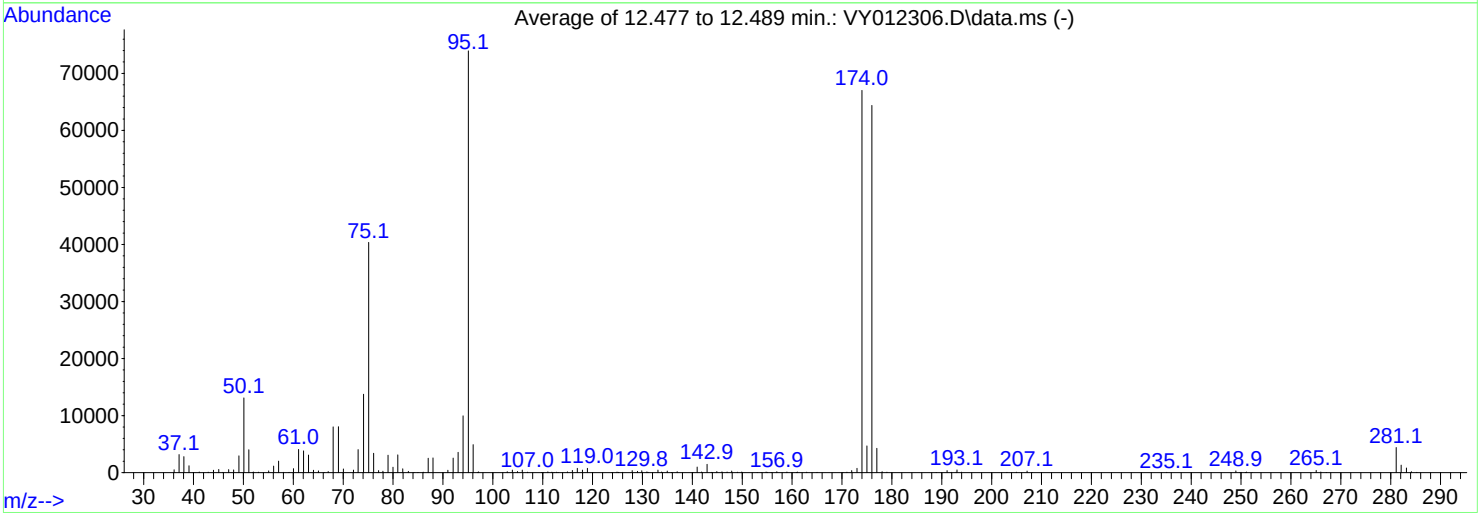
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012306.D
Acq On : 23 Jan 2023 10:03
Operator : KP/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Title : SW846 8260
Last Update : Tue Jan 17 04:31:47 2023





AutoFind: Scans 1748, 1749, 1750; Background Corrected with Scan 1740

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	13090	PASS
75	95	30	60	54.6	40355	PASS
95	95	100	100	100.0	73947	PASS
96	95	5	9	6.6	4899	PASS
173	174	0.00	2	1.1	765	PASS
174	95	50	100	90.6	67019	PASS
175	174	5	9	7.0	4689	PASS
176	174	95	101	96.1	64389	PASS
177	176	5	9	6.6	4278	PASS

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBL01	SDG No.:	O1232
Lab Sample ID:	VY0120SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012281.D	1		01/20/23 11:32	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.86	U	0.86	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.91	U	0.91	5.00	ug/Kg
74-83-9	Bromomethane	1.20	U	1.20	5.00	ug/Kg
75-00-3	Chloroethane	0.89	U	0.89	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	0.97	U	0.97	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.72	U	0.72	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
67-64-1	Acetone	12.2	U	12.2	25.0	ug/Kg
75-15-0	Carbon Disulfide	0.75	U	0.75	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.93	U	0.93	5.00	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	5.00	ug/Kg
75-09-2	Methylene Chloride	6.00	U	6.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.68	U	0.68	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.70	U	0.70	5.00	ug/Kg
110-82-7	Cyclohexane	0.84	U	0.84	5.00	ug/Kg
78-93-3	2-Butanone	7.30	U	7.30	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.79	U	0.79	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.68	U	0.68	5.00	ug/Kg
74-97-5	Bromochloromethane	0.81	U	0.81	5.00	ug/Kg
67-66-3	Chloroform	0.67	U	0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.75	U	0.75	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.80	U	0.80	5.00	ug/Kg
71-43-2	Benzene	0.66	U	0.66	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.84	U	0.84	5.00	ug/Kg
79-01-6	Trichloroethene	0.73	U	0.73	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.65	U	0.65	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.70	U	0.70	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.60	U	4.60	25.0	ug/Kg
108-88-3	Toluene	0.63	U	0.63	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.74	U	0.74	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.71	U	0.71	5.00	ug/Kg

Raw Data: **VY012281.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBL01	SDG No.:	O1232
Lab Sample ID:	VY0120SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012281.D	1		01/20/23 11:32	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.86	U	0.86	5.00	ug/Kg
591-78-6	2-Hexanone	4.70	U	4.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.75	U	0.75	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.75	U	0.75	5.00	ug/Kg
127-18-4	Tetrachloroethene	0.76	U	0.76	5.00	ug/Kg
108-90-7	Chlorobenzene	0.65	U	0.65	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.70	U	0.70	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.50	U	1.50	10.0	ug/Kg
95-47-6	o-Xylene	0.79	U	0.79	5.00	ug/Kg
100-42-5	Styrene	0.79	U	0.79	5.00	ug/Kg
75-25-2	Bromoform	0.81	U	0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.72	U	0.72	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.67	U	0.67	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.63	U	0.63	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.64	U	0.64	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.20	U	1.20	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.94	U	0.94	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.00	U	1.00	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	69.0		50 - 163	138%	SPK: 50
1868-53-7	Dibromofluoromethane	56.2		54 - 147	112%	SPK: 50
2037-26-5	Toluene-d8	65.7		58 - 134	131%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.6		30 - 143	107%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	217000	7.789			
540-36-3	1,4-Difluorobenzene	361000	8.691			
3114-55-4	Chlorobenzene-d5	345000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	161000	13.428			

Raw Data: **VY012281.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBL01	SDG No.:	O1232
Lab Sample ID:	VY0120SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012281.D	1		01/20/23 11:32	VY012023

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\VY012023\
Data File : VY012281.D
Acq On : 20 Jan 2023 11:32
Operator : KP/MD
Sample : VY0120SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Quant Time: Jan 23 02:15:49 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

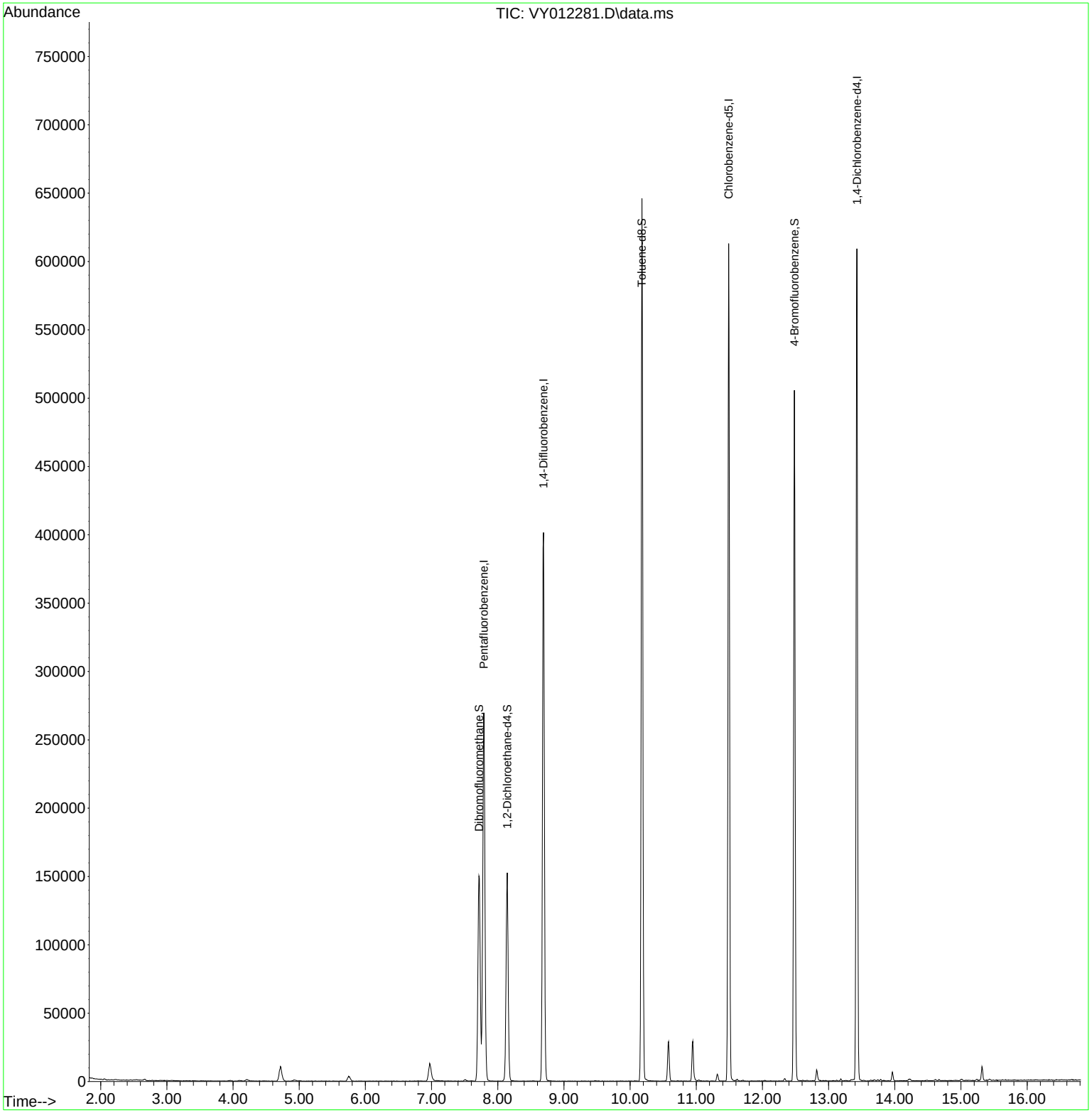
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	217392	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	360969	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	344609	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	161157	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	121702	69.037	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 138.080%			
35) Dibromofluoromethane	7.716	113	107474	56.230	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 112.460%			
50) Toluene-d8	10.179	98	426222	65.723	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 131.440%			
62) 4-Bromofluorobenzene	12.483	95	144304	53.557	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 107.120%			
Target Compounds						Qvalue

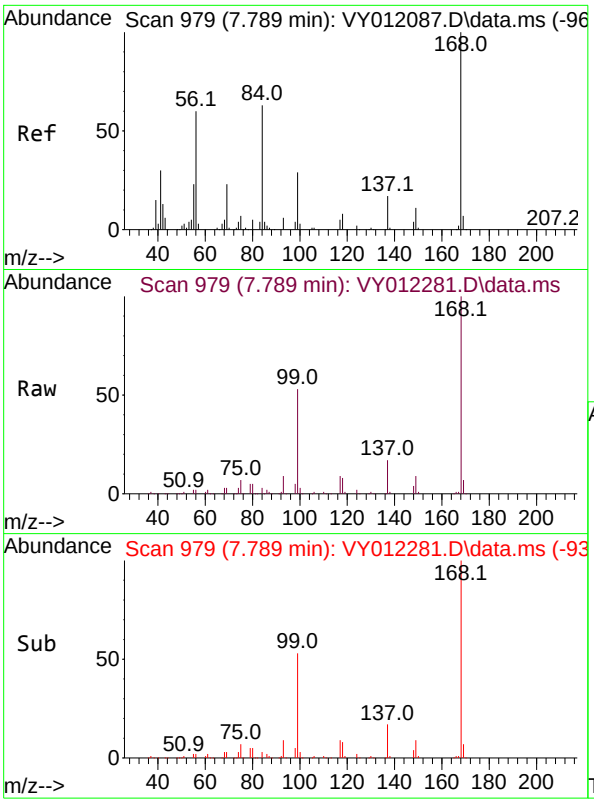
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012281.D
Acq On : 20 Jan 2023 11:32
Operator : KP/MD
Sample : VY0120SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Quant Time: Jan 23 02:15:49 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



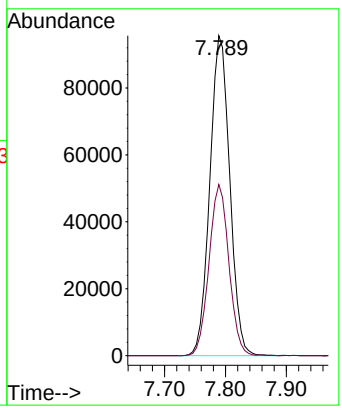


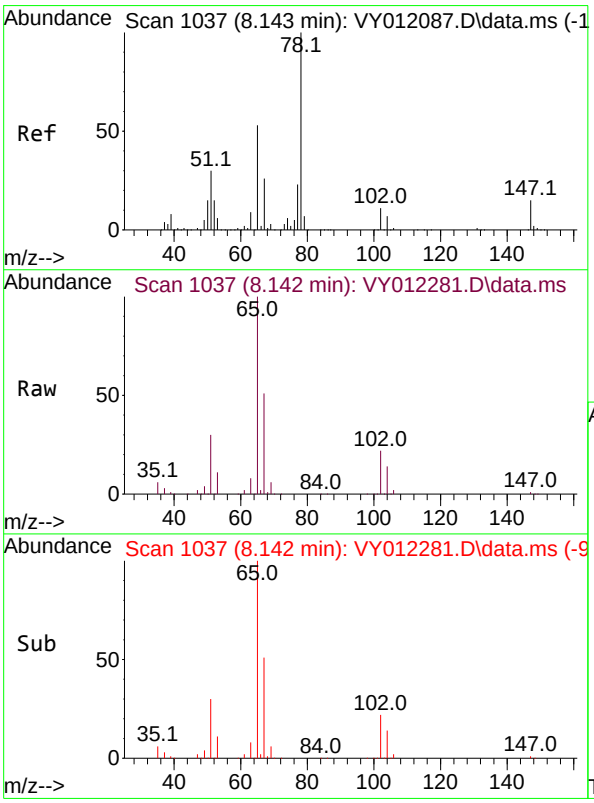
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Tgt Ion:168 Resp: 217392

Ion	Ratio	Lower	Upper
168	100		
99	53.5	44.0	66.0

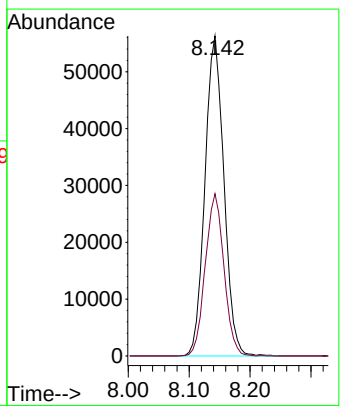


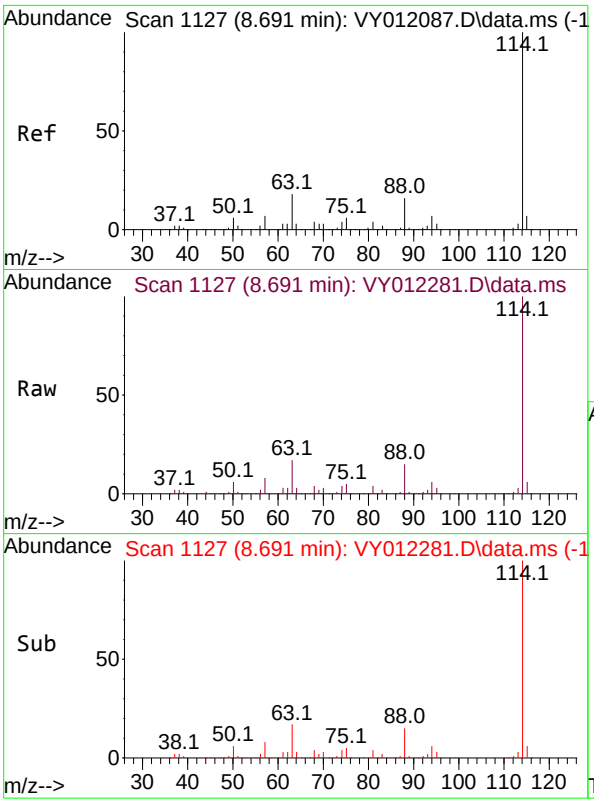


#33
1,2-Dichloroethane-d4
Concen: 69.037 ug/l
RT: 8.142 min Scan# 1037
Delta R.T. -0.001 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Tgt Ion: 65 Resp: 121702

Ion	Ratio	Lower	Upper
65	100		
67	50.0	0.0	103.2



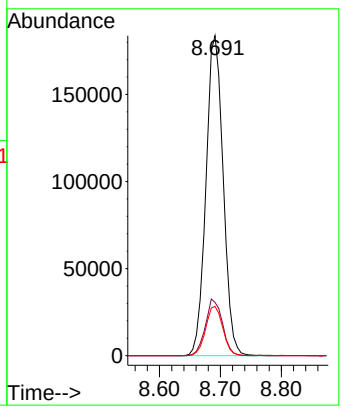


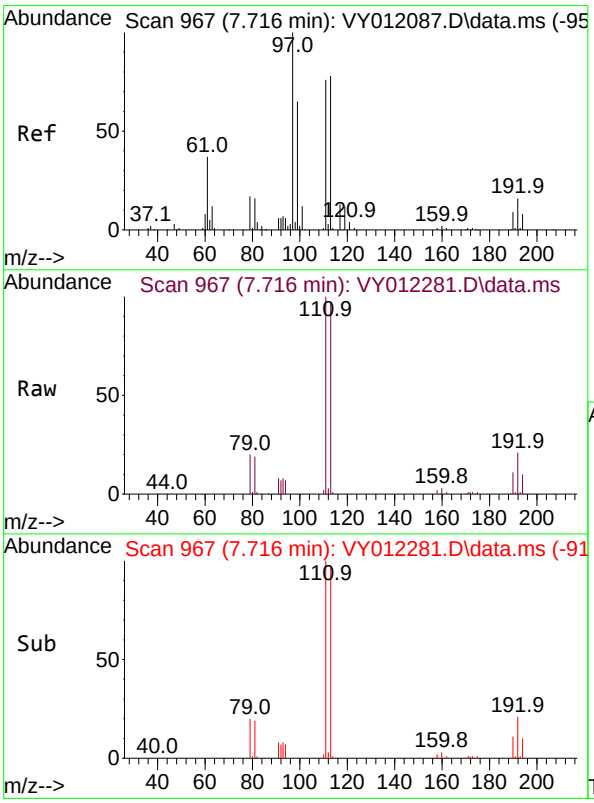
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. 0.000 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Tgt Ion:114 Resp: 360969

Ion	Ratio	Lower	Upper
114	100		
63	16.6	0.0	39.6
88	15.4	0.0	32.2

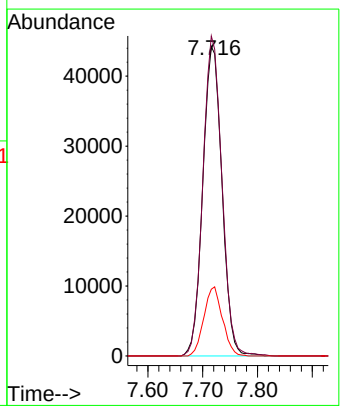


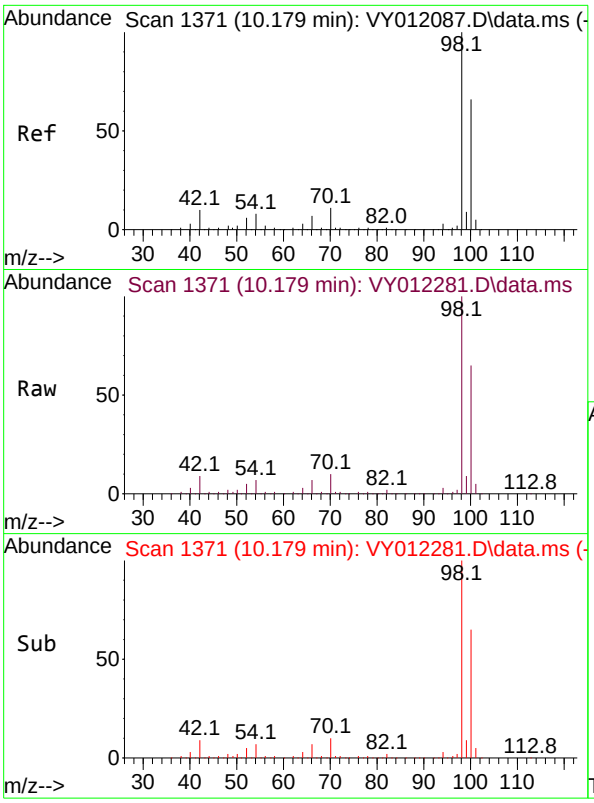


#35
Dibromofluoromethane
Concen: 56.230 ug/l
RT: 7.716 min Scan# 967
Delta R.T. -0.000 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Tgt Ion:113 Resp: 107474

Ion	Ratio	Lower	Upper
113	100		
111	102.4	83.0	124.4
192	21.6	16.0	24.0



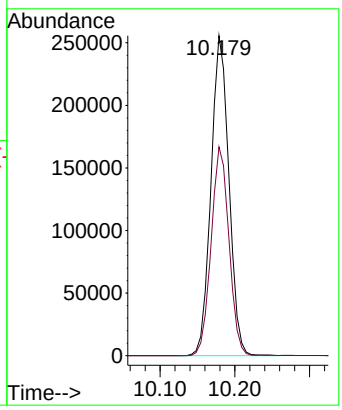


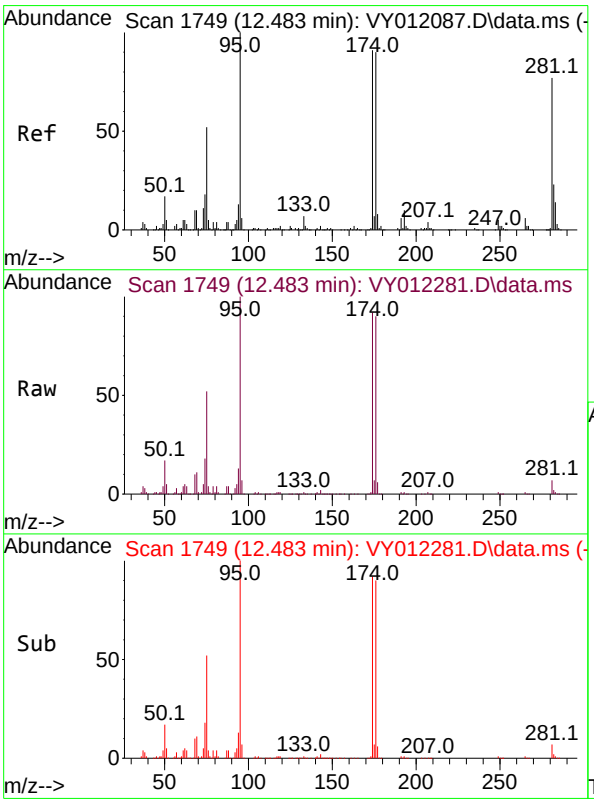
#50
Toluene-d8
Concen: 65.723 ug/l
RT: 10.179 min Scan# 1
Delta R.T. -0.000 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Tgt Ion: 98 Resp: 426222

Ion	Ratio	Lower	Upper
98	100		
100	65.1	51.9	77.9

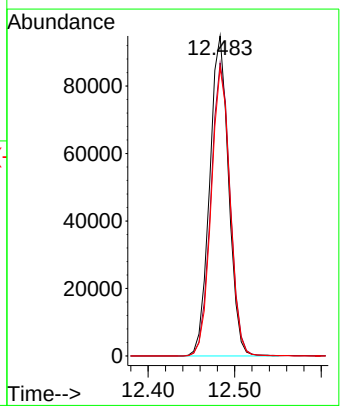


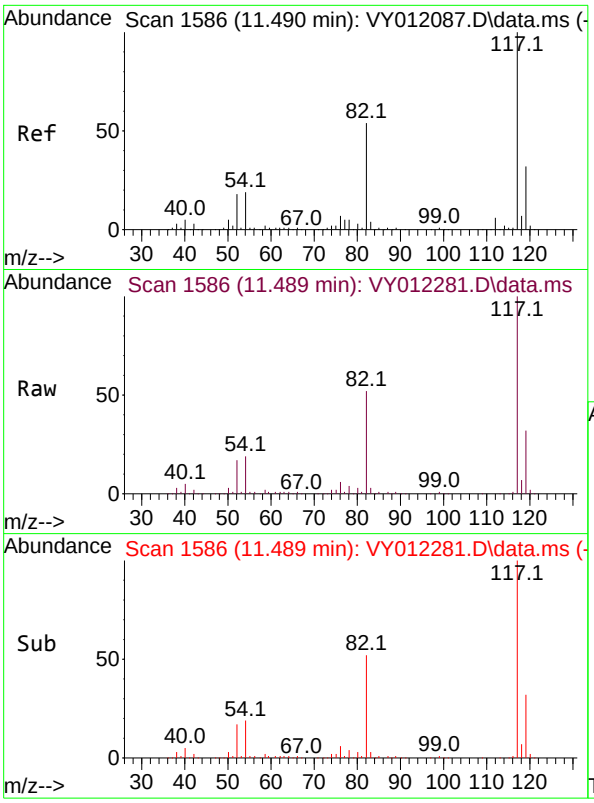


#62
4-Bromofluorobenzene
Concen: 53.557 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. 0.000 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Tgt Ion: 95 Resp: 144304

Ion	Ratio	Lower	Upper
95	100		
174	92.6	0.0	172.0
176	89.2	0.0	167.6



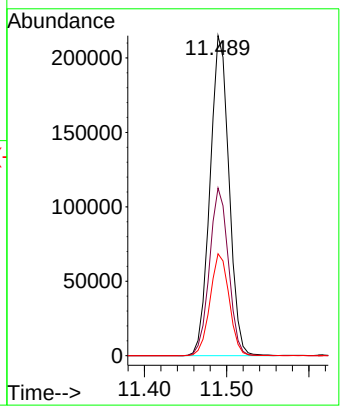


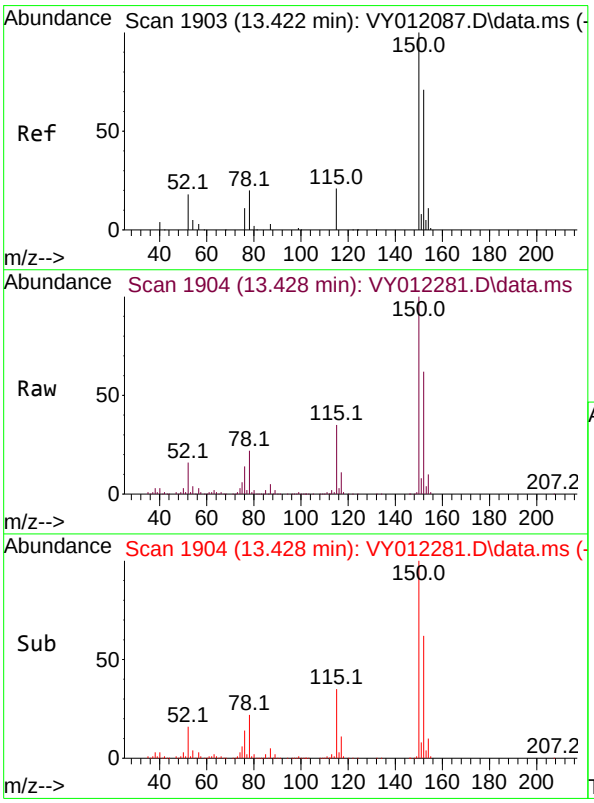
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Tgt Ion:117 Resp: 344609

Ion	Ratio	Lower	Upper
117	100		
82	52.4	44.8	67.2
119	31.9	25.4	38.2

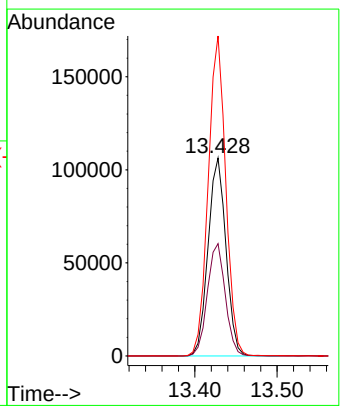




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012281.D
Acq: 20 Jan 2023 11:32

Tgt Ion:152 Resp: 161157

Ion	Ratio	Lower	Upper
152	100		
115	56.8	29.1	87.3
150	158.4	0.0	342.6



Sample Results: **VY012281.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012281.D
Acq On : 20 Jan 2023 11:32
Operator : KP/MD
Sample : VY0120SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012281.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	465	475	489	rVB	10811	30861	2.86%	0.509%
2	6.972	834	845	856	rBV	12996	37460	3.47%	0.618%
3	7.716	956	967	973	rBV	150134	364988	33.83%	6.017%
4	7.789	973	979	995	rVB	269461	611373	56.67%	10.079%
5	8.142	1023	1037	1048	rBV	152509	330905	30.67%	5.455%
6	8.691	1118	1127	1138	rBV	401429	793150	73.52%	13.076%
7	10.179	1363	1371	1380	rBV	645742	1078850	100.00%	17.787%
8	10.581	1430	1437	1445	rBV	28916	51143	4.74%	0.843%
9	10.947	1490	1497	1507	rBV	29011	49676	4.60%	0.819%
10	11.489	1579	1586	1600	rBV	612728	978571	90.71%	16.133%
11	12.483	1742	1749	1759	rBV2	505340	786409	72.89%	12.965%
12	12.818	1798	1804	1812	rBV	8197	13691	1.27%	0.226%
13	13.428	1897	1904	1916	rVB	608791	922961	85.55%	15.216%
14	15.318	2207	2214	2221	rBV	10167	15493	1.44%	0.255%

Sum of corrected areas: 6065531

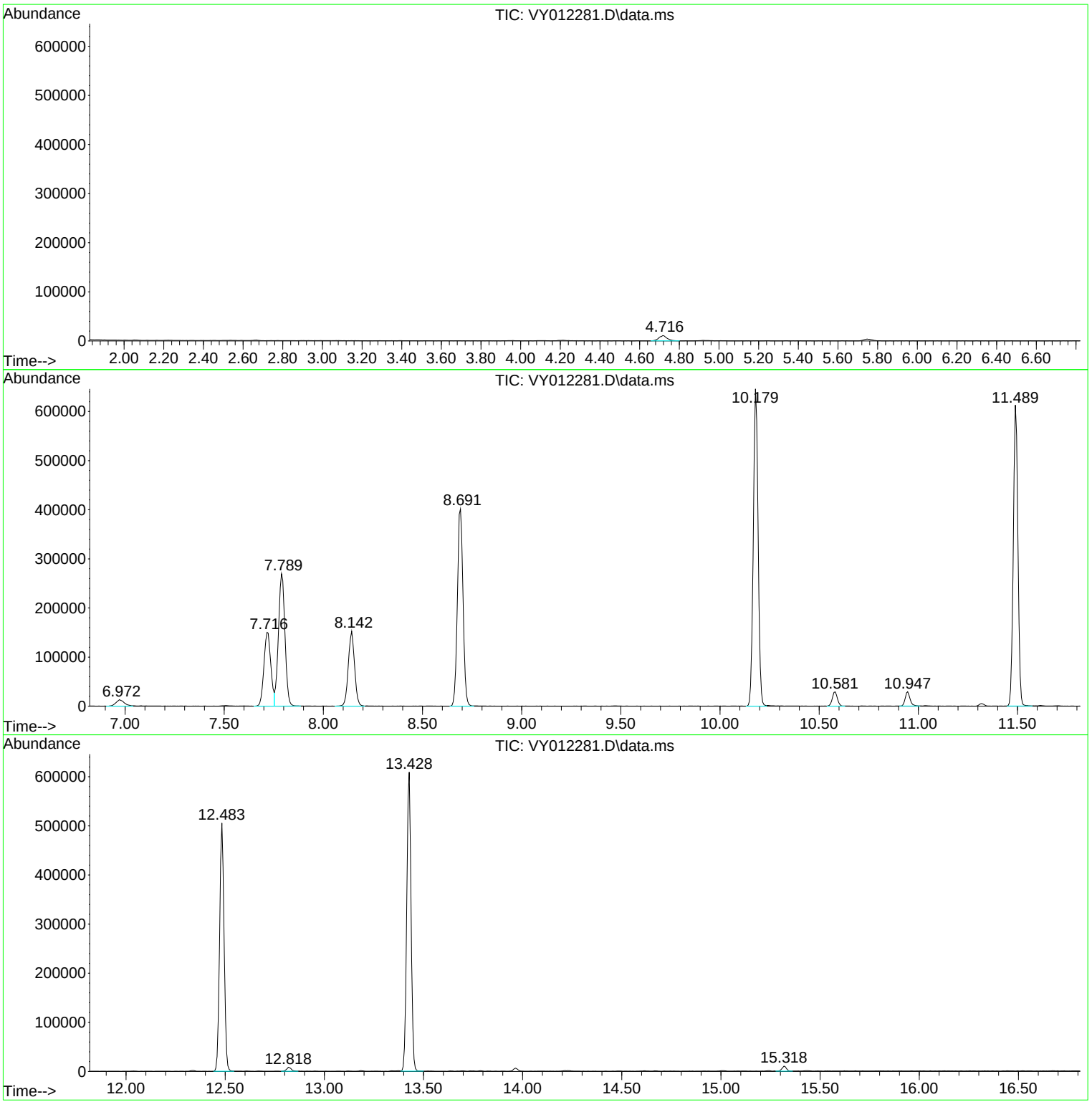
Sample Results: **VY012281.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012281.D
Acq On : 20 Jan 2023 11:32
Operator : KP/MD
Sample : VY0120SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012281.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012281.D
Acq On : 20 Jan 2023 11:32
Operator : KP/MD
Sample : VY0120SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012023\
Data File : VY012281.D
Acq On : 20 Jan 2023 11:32
Operator : KP/MD
Sample : VY0120SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0123SBL01	SDG No.:	O1232
Lab Sample ID:	VY0123SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012308.D	1		01/23/23 13:04	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	0.86	U	0.86	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.91	U	0.91	5.00	ug/Kg
74-83-9	Bromomethane	1.20	U	1.20	5.00	ug/Kg
75-00-3	Chloroethane	0.89	U	0.89	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	0.97	U	0.97	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	0.72	U	0.72	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
67-64-1	Acetone	12.2	U	12.2	25.0	ug/Kg
75-15-0	Carbon Disulfide	0.75	U	0.75	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.93	U	0.93	5.00	ug/Kg
79-20-9	Methyl Acetate	1.30	U	1.30	5.00	ug/Kg
75-09-2	Methylene Chloride	6.00	U	6.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.68	U	0.68	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.70	U	0.70	5.00	ug/Kg
110-82-7	Cyclohexane	0.84	U	0.84	5.00	ug/Kg
78-93-3	2-Butanone	7.30	U	7.30	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.79	U	0.79	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.68	U	0.68	5.00	ug/Kg
74-97-5	Bromochloromethane	0.81	U	0.81	5.00	ug/Kg
67-66-3	Chloroform	0.67	U	0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.75	U	0.75	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.80	U	0.80	5.00	ug/Kg
71-43-2	Benzene	0.66	U	0.66	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.84	U	0.84	5.00	ug/Kg
79-01-6	Trichloroethene	0.73	U	0.73	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.65	U	0.65	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.70	U	0.70	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.60	U	4.60	25.0	ug/Kg
108-88-3	Toluene	0.63	U	0.63	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.74	U	0.74	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.71	U	0.71	5.00	ug/Kg

Raw Data: **VY012308.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0123SBL01	SDG No.:	O1232
Lab Sample ID:	VY0123SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012308.D	1		01/23/23 13:04	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	0.86	U	0.86	5.00	ug/Kg
591-78-6	2-Hexanone	4.70	U	4.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.75	U	0.75	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.75	U	0.75	5.00	ug/Kg
127-18-4	Tetrachloroethene	0.76	U	0.76	5.00	ug/Kg
108-90-7	Chlorobenzene	0.65	U	0.65	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.70	U	0.70	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.50	U	1.50	10.0	ug/Kg
95-47-6	o-Xylene	0.79	U	0.79	5.00	ug/Kg
100-42-5	Styrene	0.79	U	0.79	5.00	ug/Kg
75-25-2	Bromoform	0.81	U	0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.72	U	0.72	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	0.67	U	0.67	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	0.63	U	0.63	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	0.64	U	0.64	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.20	U	1.20	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	0.94	U	0.94	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	1.00	U	1.00	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.7		50 - 163	105%	SPK: 50
1868-53-7	Dibromofluoromethane	45.4		54 - 147	91%	SPK: 50
2037-26-5	Toluene-d8	47.0		58 - 134	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	41.2		30 - 143	82%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	162000	7.789			
540-36-3	1,4-Difluorobenzene	255000	8.691			
3114-55-4	Chlorobenzene-d5	228000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	110000	13.428			

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0123SBL01	SDG No.:	O1232
Lab Sample ID:	VY0123SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012308.D	1		01/23/23 13:04	VY012323

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\VY012323\
Data File : VY012308.D
Acq On : 23 Jan 2023 13:04
Operator : KP/MD
Sample : VY0123SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Quant Time: Jan 23 14:21:45 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	162197	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	255207	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	227538	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	110055	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	70582	52.713	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 105.420%			
35) Dibromofluoromethane	7.721	113	61363	45.410	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 90.820%			
50) Toluene-d8	10.178	98	221191	46.981	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 93.960%			
62) 4-Bromofluorobenzene	12.483	95	78432	41.173	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 82.340%			
Target Compounds						Qvalue

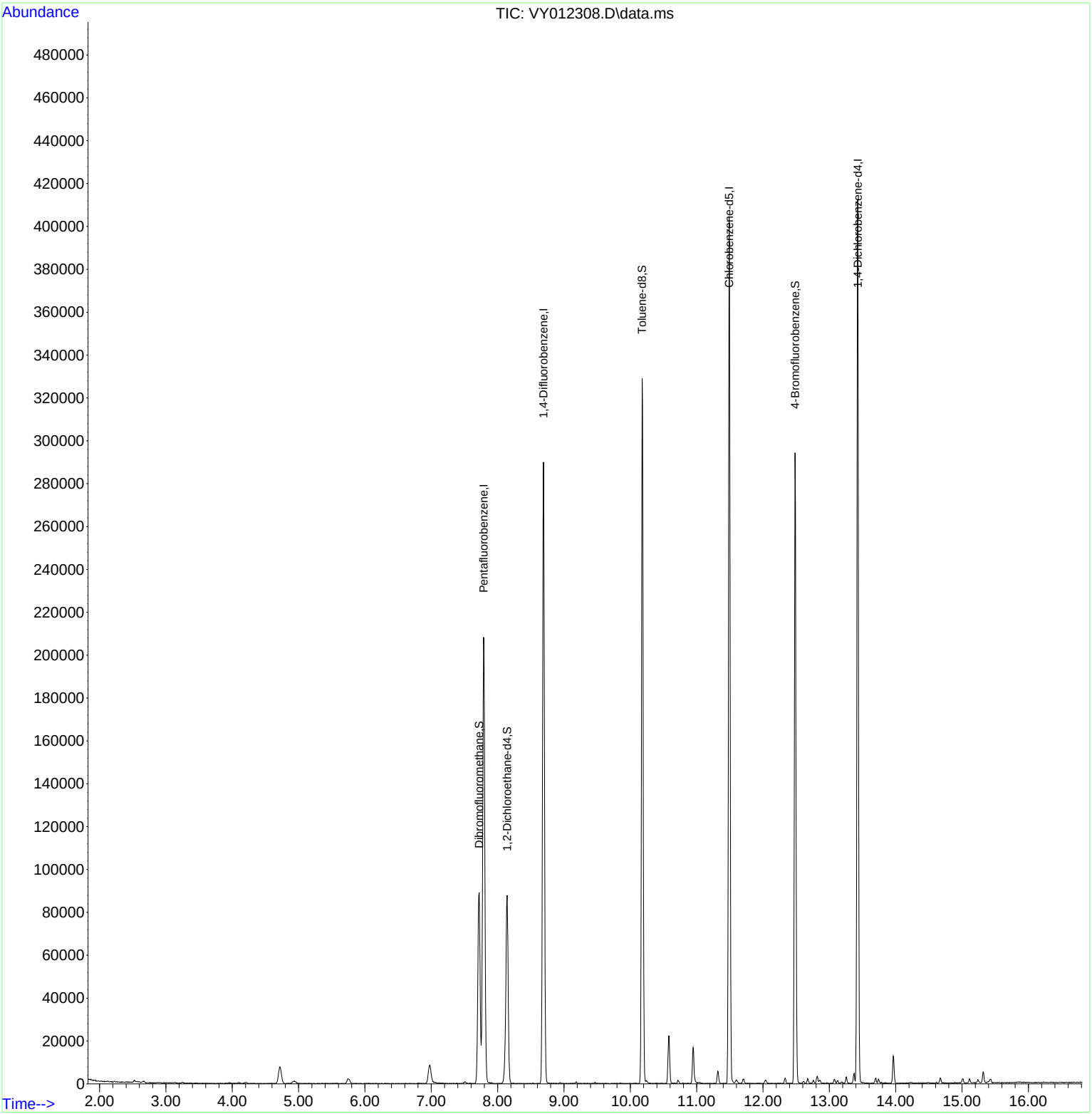
(#) = qualifier out of range (m) = manual integration (+) = signals summed

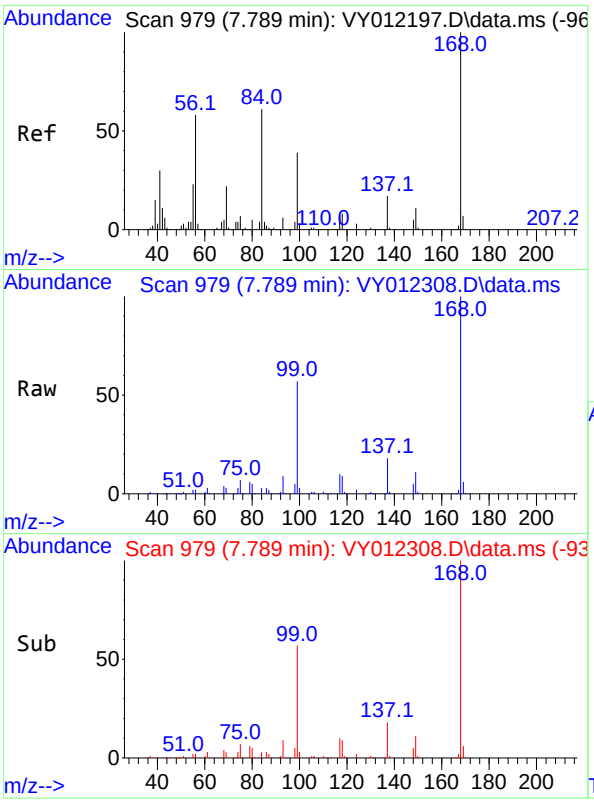
Sample Results: **VY012308.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012308.D
Acq On : 23 Jan 2023 13:04
Operator : KP/MD
Sample : VY0123SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Quant Time: Jan 23 14:21:45 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration



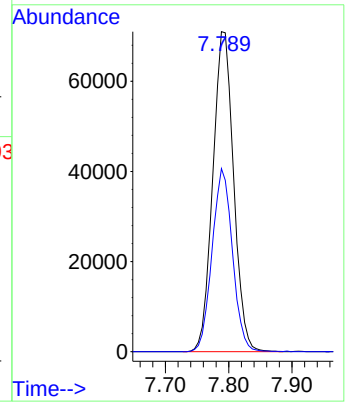


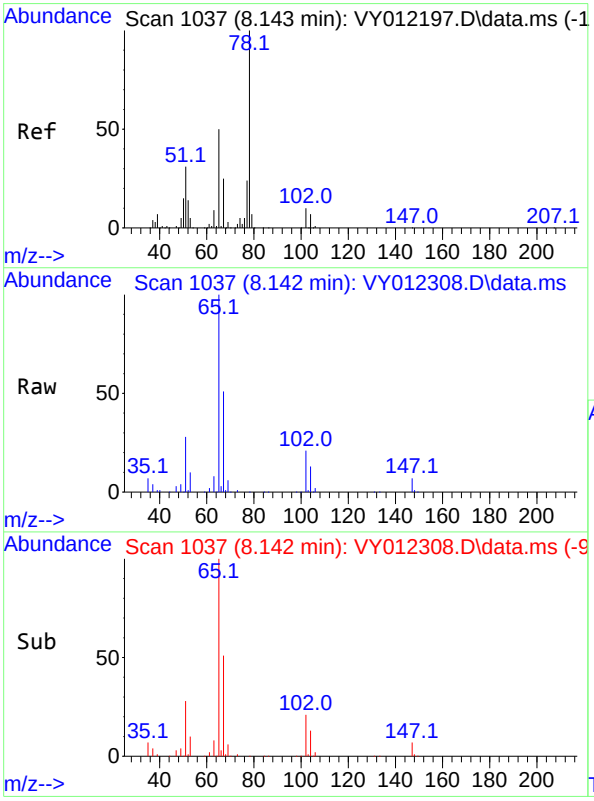
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.789 min Scan# 9
Delta R.T. -0.000 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Tgt Ion:168 Resp: 162197

Ion	Ratio	Lower	Upper
168	100		
99	57.2	44.0	66.0

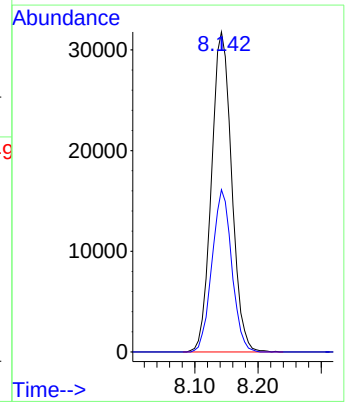


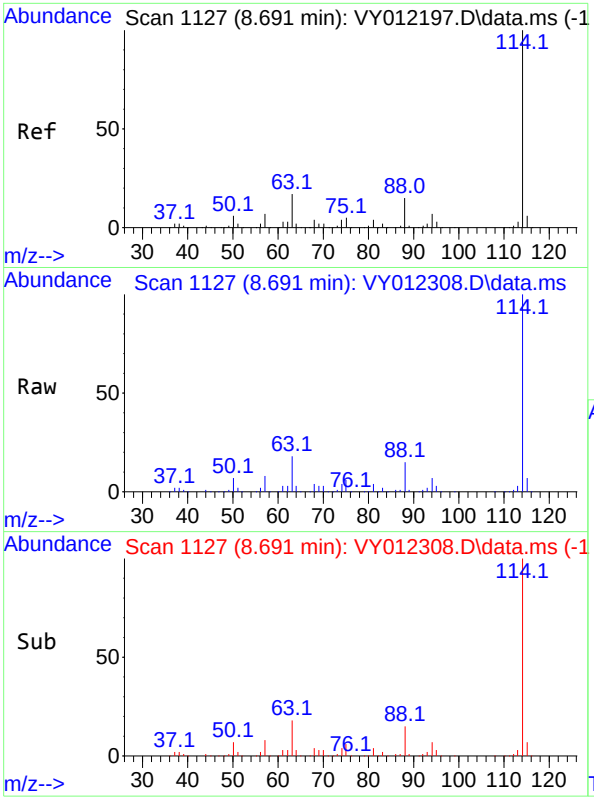


#33
1,2-Dichloroethane-d4
Concen: 52.713 ug/l
RT: 8.142 min Scan# 1037
Delta R.T. -0.001 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Tgt Ion: 65 Resp: 70582

Ion	Ratio	Lower	Upper
65	100		
67	49.5	0.0	103.2



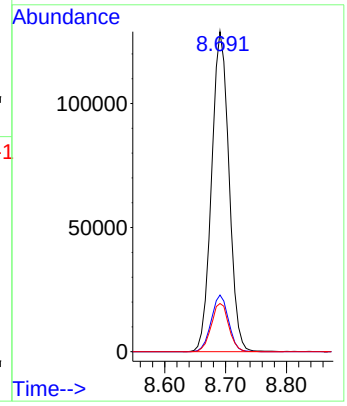


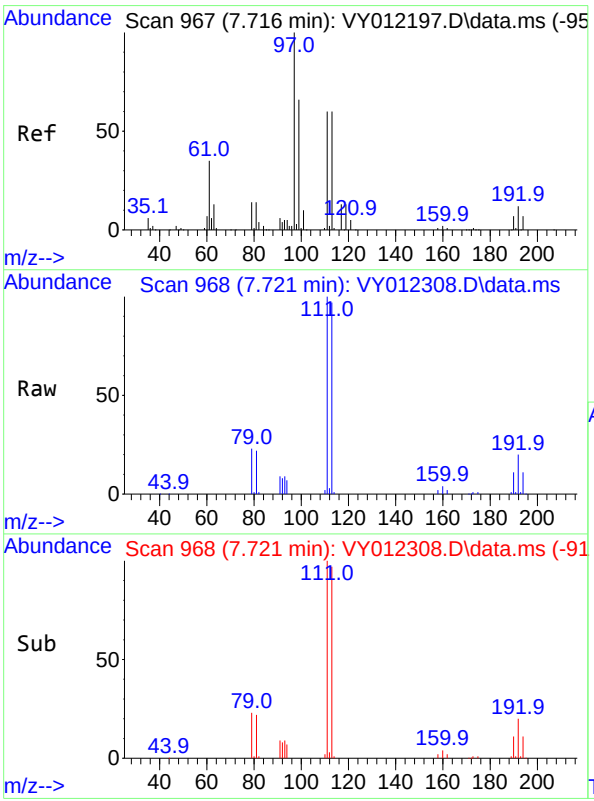
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.691 min Scan# 11
Delta R.T. -0.000 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Tgt Ion:114 Resp: 255207

Ion	Ratio	Lower	Upper
114	100		
63	17.7	0.0	39.6
88	15.1	0.0	32.2

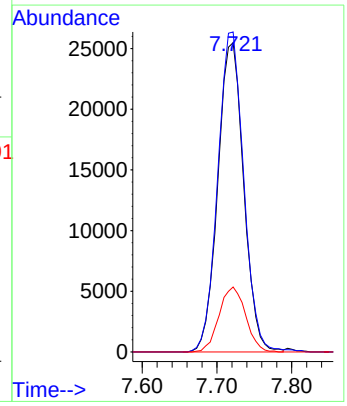


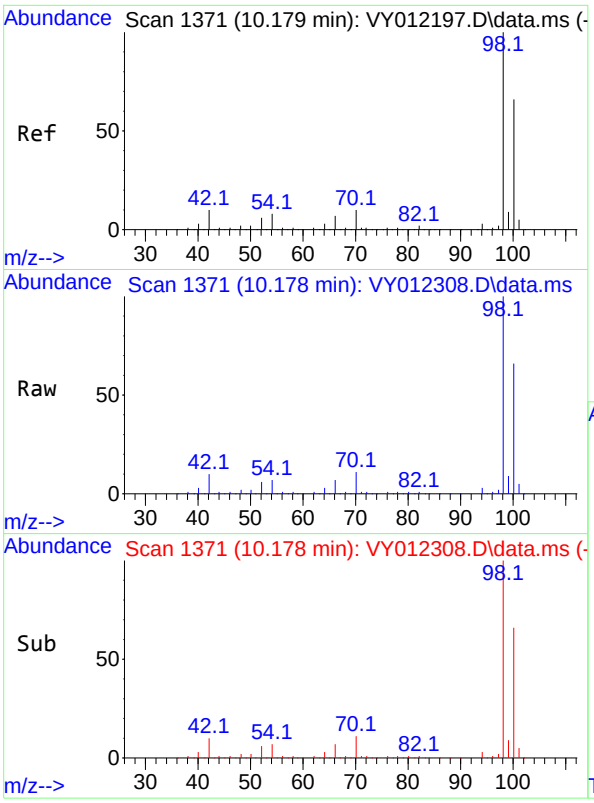


#35
Dibromofluoromethane
Concen: 45.410 ug/l
RT: 7.721 min Scan# 968
Delta R.T. 0.005 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Tgt Ion:113 Resp: 61363

Ion	Ratio	Lower	Upper
113	100		
111	103.9	83.0	124.4
192	21.5	16.0	24.0



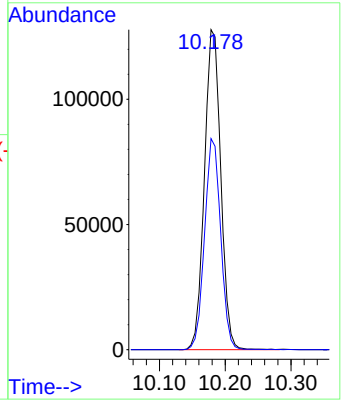


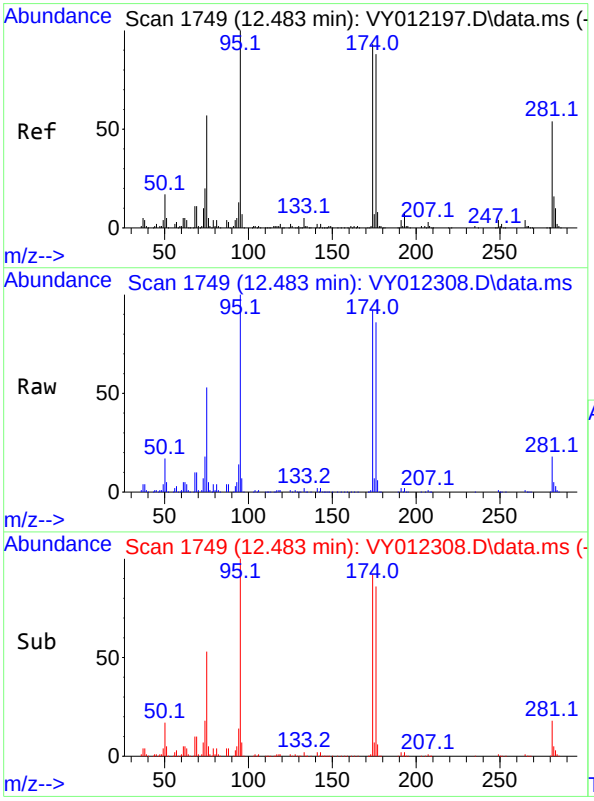
#50
Toluene-d8
Concen: 46.981 ug/l
RT: 10.178 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Tgt Ion: 98 Resp: 221191

Ion	Ratio	Lower	Upper
98	100		
100	64.9	51.9	77.9

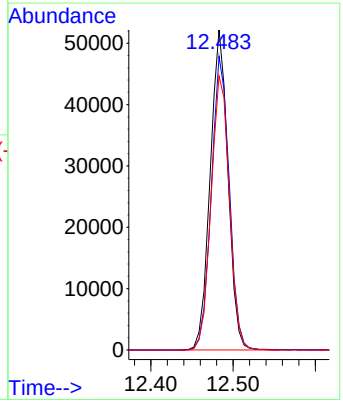


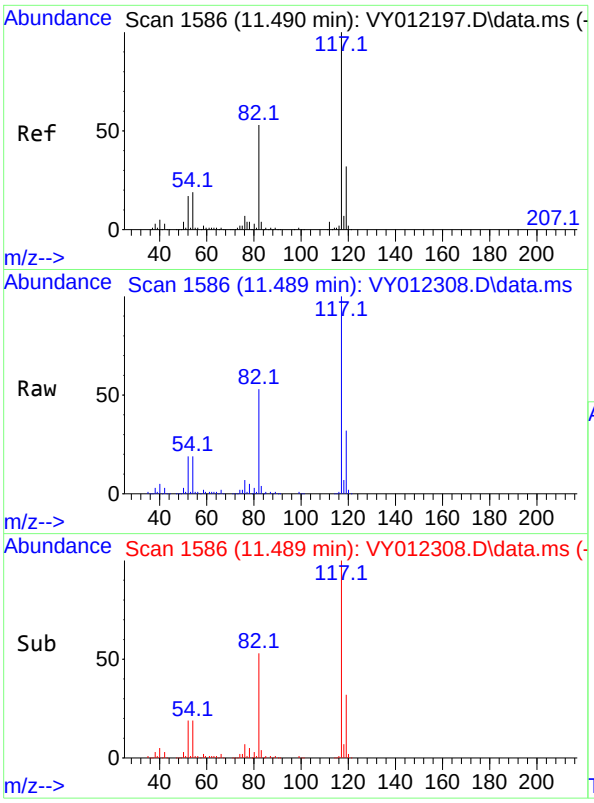


#62
4-Bromofluorobenzene
Concen: 41.173 ug/l
RT: 12.483 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Tgt Ion: 95 Resp: 78432

Ion	Ratio	Lower	Upper
95	100		
174	92.6	0.0	172.0
176	87.8	0.0	167.6



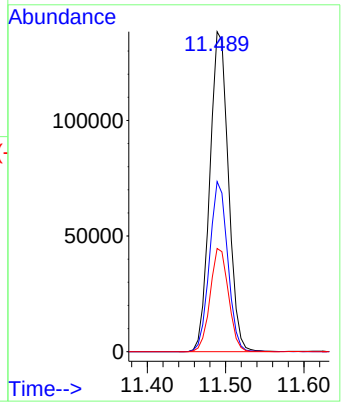


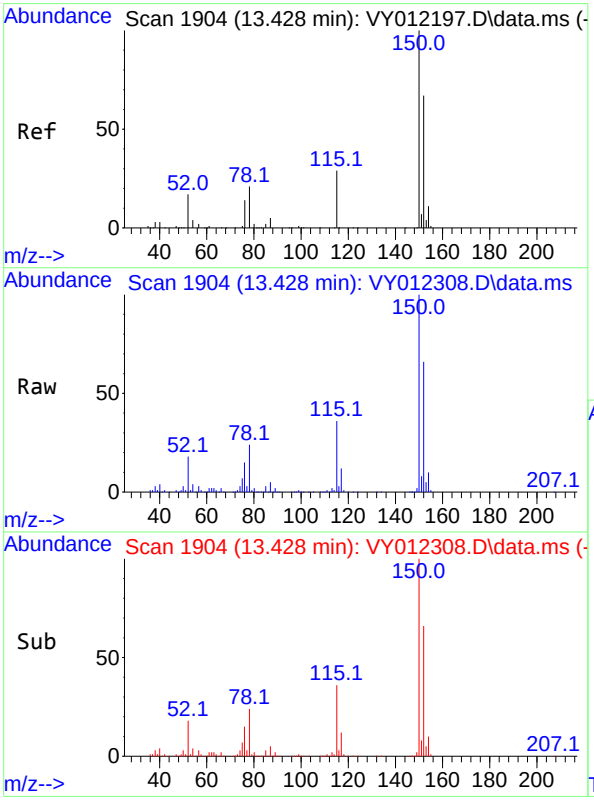
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.489 min Scan# 1
Delta R.T. -0.001 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Tgt Ion:117 Resp: 227538

Ion	Ratio	Lower	Upper
117	100		
82	53.2	44.8	67.2
119	32.3	25.4	38.2

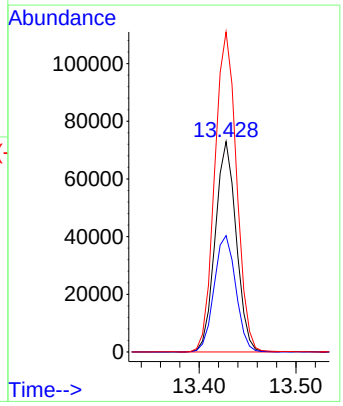




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.428 min Scan# 1904
Delta R.T. 0.006 min
Lab File: VY012308.D
Acq: 23 Jan 2023 13:04

Tgt Ion:152 Resp: 110055

Ion	Ratio	Lower	Upper
152	100		
115	57.2	29.1	87.3
150	158.2	0.0	342.6



Sample Results: **VY012308.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012308.D
Acq On : 23 Jan 2023 13:04
Operator : KP/MD
Sample : VY0123SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

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\82Y011623S.M
Title : SW846 8260

Signal : TIC: VY012308.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.716	466	475	486	rVB3	7760	23990	3.65%	0.603%
2	5.740	635	643	655	rVB5	2184	6744	1.03%	0.170%
3	6.978	835	846	855	rBV3	8634	26764	4.07%	0.673%
4	7.721	958	968	973	rBV	88989	214151	32.59%	5.386%
5	7.789	973	979	992	rVB	207872	468537	71.30%	11.783%
6	8.142	1021	1037	1050	rBV2	87800	213281	32.46%	5.364%
7	8.691	1118	1127	1140	rBV	289905	569029	86.60%	14.311%
8	10.178	1364	1371	1379	rBV	328890	564010	85.83%	14.184%
9	10.581	1431	1437	1444	rVB	22192	38821	5.91%	0.976%
10	10.947	1491	1497	1508	rBV	16569	29125	4.43%	0.732%
11	11.318	1552	1558	1564	rBV2	5859	10151	1.54%	0.255%
12	11.489	1579	1586	1598	rBV	404362	657109	100.00%	16.526%
13	12.483	1742	1749	1760	rBV2	294047	476844	72.57%	11.992%
14	13.373	1889	1895	1898	rBV2	4470	6625	1.01%	0.167%
15	13.428	1898	1904	1913	rVB	412141	642404	97.76%	16.156%
16	13.964	1986	1992	2000	rBV	12686	20506	3.12%	0.516%
17	15.318	2209	2214	2222	rVB2	5105	8188	1.25%	0.206%

Sum of corrected areas: 3976279

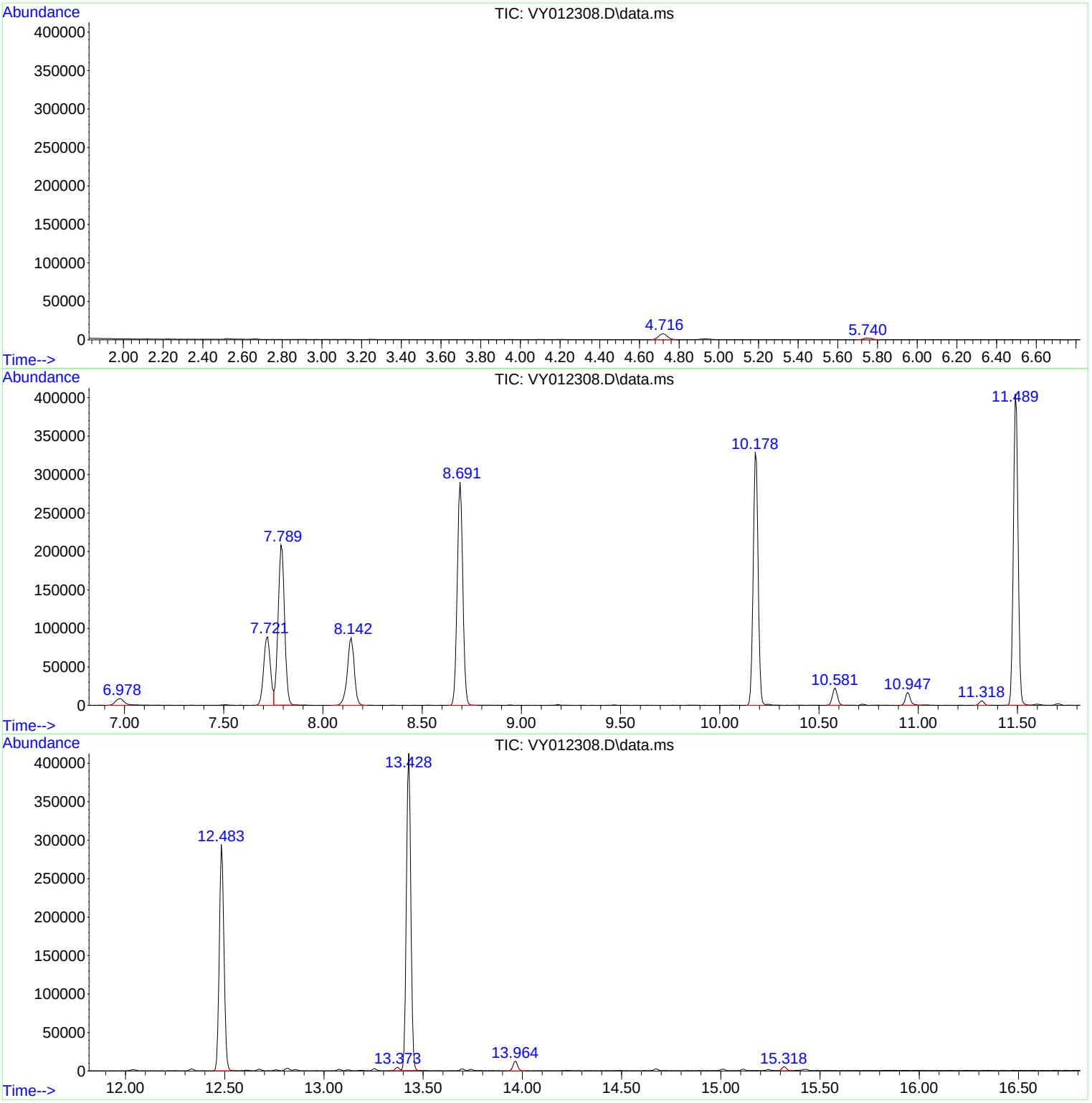
Sample Results: **VY012308.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012308.D
Acq On : 23 Jan 2023 13:04
Operator : KP/MD
Sample : VY0123SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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



Library Search Compound Report

Sample Results: **VY012308.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012308.D
Acq On : 23 Jan 2023 13:04
Operator : KP/MD
Sample : VY0123SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.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\VY012323\
Data File : VY012308.D
Acq On : 23 Jan 2023 13:04
Operator : KP/MD
Sample : VY0123SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260

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

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

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBS01	SDG No.:	O1232
Lab Sample ID:	VY0120SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012282.D	1		01/20/23 11:55	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	20.1		0.86	5.00	ug/Kg
74-87-3	Chloromethane	19.9		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	19.6		0.91	5.00	ug/Kg
74-83-9	Bromomethane	20.2		1.20	5.00	ug/Kg
75-00-3	Chloroethane	20.1		0.89	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	19.2		0.97	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.5		0.72	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.2		0.86	5.00	ug/Kg
67-64-1	Acetone	91.9		12.2	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.9		0.75	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.7		0.93	5.00	ug/Kg
79-20-9	Methyl Acetate	19.6		1.30	5.00	ug/Kg
75-09-2	Methylene Chloride	16.6		6.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.3		0.68	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.6		0.70	5.00	ug/Kg
110-82-7	Cyclohexane	20.2		0.84	5.00	ug/Kg
78-93-3	2-Butanone	100		7.30	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	18.9		0.79	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.6		0.68	5.00	ug/Kg
74-97-5	Bromochloromethane	20.5		0.81	5.00	ug/Kg
67-66-3	Chloroform	20.1		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.3		0.75	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.0		0.80	5.00	ug/Kg
71-43-2	Benzene	20.3		0.66	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.2		0.84	5.00	ug/Kg
79-01-6	Trichloroethene	20.0		0.73	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	21.3		0.65	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.7		0.70	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		4.60	25.0	ug/Kg
108-88-3	Toluene	20.0		0.63	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.8		0.74	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.9		0.71	5.00	ug/Kg

Raw Data: **VY012282.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBS01	SDG No.:	O1232
Lab Sample ID:	VY0120SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012282.D	1		01/20/23 11:55	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	20.2		0.86	5.00	ug/Kg
591-78-6	2-Hexanone	100		4.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.9		0.75	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	20.1		0.75	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.5		0.76	5.00	ug/Kg
108-90-7	Chlorobenzene	19.9		0.65	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.9		0.70	5.00	ug/Kg
179601-23-1	m/p-Xylenes	40.1		1.50	10.0	ug/Kg
95-47-6	o-Xylene	20.0		0.79	5.00	ug/Kg
100-42-5	Styrene	20.1		0.79	5.00	ug/Kg
75-25-2	Bromoform	20.0		0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	20.2		0.72	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	20.8		1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	20.0		0.67	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.6		0.63	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	19.9		0.64	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	19.7		1.20	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	18.8		0.94	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	18.7		1.00	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	46.7		50 - 163	93%	SPK: 50
1868-53-7	Dibromofluoromethane	45.1		54 - 147	90%	SPK: 50
2037-26-5	Toluene-d8	47.3		58 - 134	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.4		30 - 143	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	218000	7.789			
540-36-3	1,4-Difluorobenzene	337000	8.691			
3114-55-4	Chlorobenzene-d5	306000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	156000	13.428			

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBS01	SDG No.:	O1232
Lab Sample ID:	VY0120SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012282.D	1		01/20/23 11:55	VY012023

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\VY012023\
Data File : VY012282.D
Acq On : 20 Jan 2023 11:55
Operator : KP/MD
Sample : VY0120SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 23 02:16:22 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	218108	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	336761	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	305655	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	155958	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.142	65	84814	46.650	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 93.300%			
35) Dibromofluoromethane	7.716	113	80442	45.112	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 90.220%			
50) Toluene-d8	10.179	98	293956	47.349	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 94.700%			
62) 4-Bromofluorobenzene	12.483	95	111521	44.365	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 88.740%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	38342	20.116	ug/l	98
3) Chloromethane	2.113	50	35089	19.942	ug/l	94
4) Vinyl Chloride	2.253	62	40286	19.615	ug/l	100
5) Bromomethane	2.643	94	32144	20.243	ug/l	95
6) Chloroethane	2.790	64	26883	20.070	ug/l	97
7) Trichlorofluoromethane	3.125	101	76976	19.204	ug/l	98
8) Diethyl Ether	3.527	74	23812	19.964	ug/l	84
9) 1,1,2-Trichlorotrifluo...	3.893	101	39896	20.450	ug/l	95
10) Methyl Iodide	4.088	142	48445	16.340	ug/l	97
11) Tert butyl alcohol	4.942	59	35080	159.032	ug/l #	92
12) 1,1-Dichloroethene	3.869	96	40418	20.177	ug/l	96
13) Acrolein	3.729	56	11994	134.171	ug/l	93
14) Allyl chloride	4.478	41	51483	20.785	ug/l #	90
15) Acrylonitrile	5.167	53	53541	102.767	ug/l	100
16) Acetone	3.948	43	55792	91.864	ug/l	100
17) Carbon Disulfide	4.192	76	123336	19.905	ug/l	100
18) Methyl Acetate	4.478	43	26677	19.630	ug/l #	88
19) Methyl tert-butyl Ether	5.216	73	109792	19.662	ug/l	98
20) Methylene Chloride	4.722	84	55657	16.576	ug/l #	86
21) trans-1,2-Dichloroethene	5.216	96	45467	20.340	ug/l	91
22) Diisopropyl ether	6.118	45	107251	21.720	ug/l #	95
23) Vinyl Acetate	6.057	43	318744	103.588	ug/l #	92
24) 1,1-Dichloroethane	6.015	63	70669	20.633	ug/l	97
25) 2-Butanone	6.984	43	69243	103.273	ug/l #	88
26) 2,2-Dichloropropane	6.978	77	73551	19.782	ug/l	100
27) cis-1,2-Dichloroethene	6.984	96	50683	20.641	ug/l	95
28) Bromochloromethane	7.338	49	15357	20.530	ug/l #	76
29) Tetrahydrofuran	7.350	42	38708	105.101	ug/l #	86
30) Chloroform	7.508	83	81202	20.084	ug/l	95
31) Cyclohexane	7.783	56	64106	20.159	ug/l	87
32) 1,1,1-Trichloroethane	7.703	97	77205	19.288	ug/l	98
36) 1,1-Dichloropropene	7.917	75	59528	19.643	ug/l	98
37) Ethyl Acetate	7.076	43	27065	20.259	ug/l #	96
38) Carbon Tetrachloride	7.899	117	73968	18.899	ug/l	98
39) Methylcyclohexane	9.185	83	74196	20.034	ug/l	93
40) Benzene	8.161	78	177550	20.299	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012282.D
Acq On : 20 Jan 2023 11:55
Operator : KP/MD
Sample : VY0120SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 23 02:16:22 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.325	41	16818m	21.417	ug/l		
42) 1,2-Dichloroethane	8.234	62	53404	19.178	ug/l		100
43) Isopropyl Acetate	8.270	43	50175	20.187	ug/l		94
44) Trichloroethene	8.941	130	52365	20.030	ug/l		97
45) 1,2-Dichloropropane	9.215	63	38962	21.348	ug/l		96
46) Dibromomethane	9.307	93	24370	19.945	ug/l		94
47) Bromodichloromethane	9.496	83	60519	19.677	ug/l		96
48) Methyl methacrylate	9.295	41	22772	19.884	ug/l		91
49) 1,4-Dioxane	9.295	88	6776	406.991	ug/l		87
51) 4-Methyl-2-Pentanone	10.069	43	135480	102.221	ug/l		96
52) Toluene	10.246	92	116451	19.996	ug/l		100
53) t-1,3-Dichloropropene	10.465	75	63680	19.794	ug/l		97
54) cis-1,3-Dichloropropene	9.929	75	68874	19.879	ug/l		99
55) 1,1,2-Trichloroethane	10.642	97	35093	20.215	ug/l		96
56) Ethyl methacrylate	10.508	69	45466	19.964	ug/l		93
57) 1,3-Dichloropropane	10.788	76	58090	20.490	ug/l		97
58) 2-Chloroethyl Vinyl ether	9.782	63	78438	104.088	ug/l		91
59) 2-Hexanone	10.831	43	100956	100.049	ug/l		94
60) Dibromochloromethane	10.983	129	45907	19.938	ug/l		99
61) 1,2-Dibromoethane	11.087	107	33687	20.111	ug/l		99
64) Tetrachloroethene	10.721	164	59994	21.510	ug/l		97
65) Chlorobenzene	11.520	112	124285	19.873	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.593	131	47574	20.154	ug/l		98
67) Ethyl Benzene	11.593	91	222446	19.902	ug/l		98
68) m/p-Xylenes	11.703	106	177137	40.084	ug/l		98
69) o-Xylene	12.032	106	84260	19.962	ug/l		97
70) Styrene	12.044	104	141497	20.063	ug/l		98
71) Bromoform	12.209	173	30089	19.951	ug/l	#	99
73) Isopropylbenzene	12.331	105	227486	20.228	ug/l		100
74) N-amyl acetate	12.142	43	43591	19.774	ug/l		94
75) 1,1,2,2-Tetrachloroethane	12.581	83	36800	20.775	ug/l		98
76) 1,2,3-Trichloropropane	12.629	75	26464m	18.454	ug/l		
77) Bromobenzene	12.611	156	54243	20.045	ug/l		91
78) n-propylbenzene	12.672	91	265996	20.213	ug/l		98
79) 2-Chlorotoluene	12.757	91	149028	20.029	ug/l		97
80) 1,3,5-Trimethylbenzene	12.812	105	198326	20.286	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.379	75	13987	20.096	ug/l		98
82) 4-Chlorotoluene	12.855	91	157374	20.136	ug/l		99
83) tert-Butylbenzene	13.074	119	166861	19.583	ug/l		100
84) 1,2,4-Trimethylbenzene	13.123	105	193317	20.051	ug/l		99
85) sec-Butylbenzene	13.251	105	244891	20.186	ug/l		99
86) p-Isopropyltoluene	13.373	119	209952	19.808	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	107588	19.990	ug/l		99
88) 1,4-Dichlorobenzene	13.446	146	105305	19.619	ug/l		100
89) n-Butylbenzene	13.696	91	181839	19.797	ug/l		98
90) Hexachloroethane	13.958	117	37979	19.848	ug/l		94
91) 1,2-Dichlorobenzene	13.739	146	95744	19.937	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.361	75	7229	19.747	ug/l		99
93) 1,2,4-Trichlorobenzene	15.007	180	57893	18.814	ug/l		99
94) Hexachlorobutadiene	15.117	225	36369	19.631	ug/l		99
95) Naphthalene	15.239	128	109965	18.106	ug/l		99
96) 1,2,3-Trichlorobenzene	15.428	180	49394	18.654	ug/l		99

Sample Results: **VY012282.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012282.D
Acq On : 20 Jan 2023 11:55
Operator : KP/MD
Sample : VY0120SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Quant Time: Jan 23 02:16:22 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

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

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

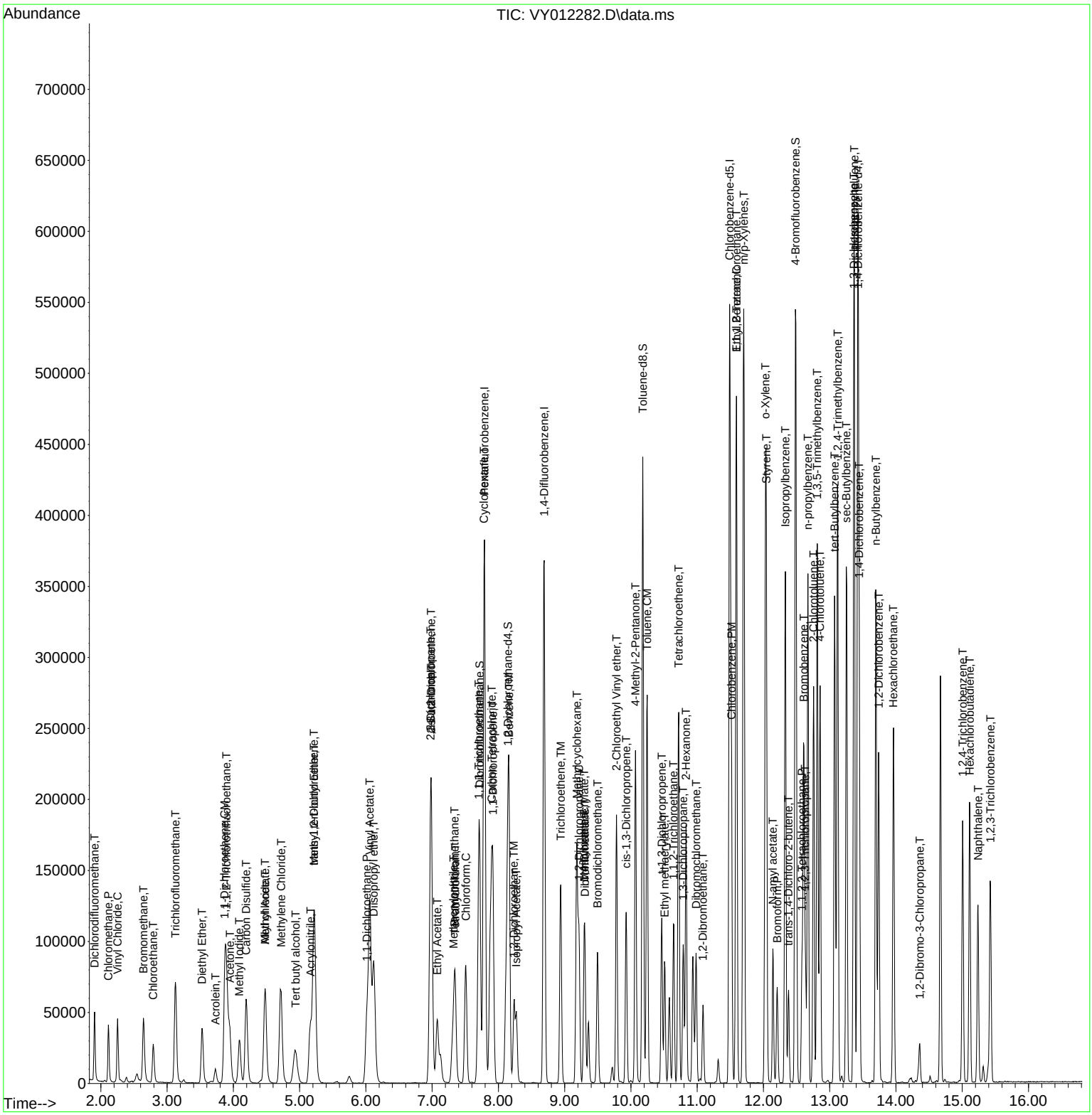
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012282.D
Acq On : 20 Jan 2023 11:55
Operator : KP/MD
Sample : VY0120SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 23 02:16:22 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023



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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0123SBS01	SDG No.:	O1232
Lab Sample ID:	VY0123SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012309.D	1		01/23/23 13:27	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	21.2		0.86	5.00	ug/Kg
74-87-3	Chloromethane	19.7		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	20.0		0.91	5.00	ug/Kg
74-83-9	Bromomethane	21.0		1.20	5.00	ug/Kg
75-00-3	Chloroethane	20.8		0.89	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	21.2		0.97	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.8		0.72	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.6		0.86	5.00	ug/Kg
67-64-1	Acetone	87.9		12.2	25.0	ug/Kg
75-15-0	Carbon Disulfide	20.2		0.75	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.4		0.93	5.00	ug/Kg
79-20-9	Methyl Acetate	18.3		1.30	5.00	ug/Kg
75-09-2	Methylene Chloride	15.2		6.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.1		0.68	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.5		0.70	5.00	ug/Kg
110-82-7	Cyclohexane	20.2		0.84	5.00	ug/Kg
78-93-3	2-Butanone	92.3		7.30	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.7		0.79	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.5		0.68	5.00	ug/Kg
74-97-5	Bromochloromethane	19.2		0.81	5.00	ug/Kg
67-66-3	Chloroform	20.4		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.7		0.75	5.00	ug/Kg
108-87-2	Methylcyclohexane	20.8		0.80	5.00	ug/Kg
71-43-2	Benzene	20.5		0.66	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.2		0.84	5.00	ug/Kg
79-01-6	Trichloroethene	20.1		0.73	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.3		0.65	5.00	ug/Kg
75-27-4	Bromodichloromethane	20.3		0.70	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	93.5		4.60	25.0	ug/Kg
108-88-3	Toluene	20.4		0.63	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.6		0.74	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	20.1		0.71	5.00	ug/Kg

Raw Data: **VY012309.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0123SBS01	SDG No.:	O1232
Lab Sample ID:	VY0123SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012309.D	1		01/23/23 13:27	VY012323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	19.6		0.86	5.00	ug/Kg
591-78-6	2-Hexanone	92.0		4.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.7		0.75	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	19.3		0.75	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.0		0.76	5.00	ug/Kg
108-90-7	Chlorobenzene	20.2		0.65	5.00	ug/Kg
100-41-4	Ethyl Benzene	20.3		0.70	5.00	ug/Kg
179601-23-1	m/p-Xylenes	41.2		1.50	10.0	ug/Kg
95-47-6	o-Xylene	20.0		0.79	5.00	ug/Kg
100-42-5	Styrene	20.4		0.79	5.00	ug/Kg
75-25-2	Bromoform	19.1		0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	20.6		0.72	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.3		1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.8		0.67	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.5		0.63	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	19.4		0.64	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	18.7		1.20	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	17.9		0.94	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	17.2		1.00	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.4		50 - 163	99%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		54 - 147	93%	SPK: 50
2037-26-5	Toluene-d8	48.5		58 - 134	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.5		30 - 143	89%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	174000	7.789			
540-36-3	1,4-Difluorobenzene	264000	8.691			
3114-55-4	Chlorobenzene-d5	240000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	122000	13.428			

Raw Data: **VY012309.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0123SBS01	SDG No.:	O1232
Lab Sample ID:	VY0123SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012309.D	1		01/23/23 13:27	VY012323

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\VY012323\
Data File : VY012309.D
Acq On : 23 Jan 2023 13:27
Operator : KP/MD
Sample : VY0123SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023

Quant Time: Jan 23 14:21:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	7.789	168	173816	50.000	ug/l		0.00
34) 1,4-Difluorobenzene	8.691	114	263834	50.000	ug/l		0.00
63) Chlorobenzene-d5	11.489	117	239765	50.000	ug/l		0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	122385	50.000	ug/l		0.00
System Monitoring Compounds							
33) 1,2-Dichloroethane-d4	8.142	65	71211	49.378	ug/l		0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 98.760%				
35) Dibromofluoromethane	7.716	113	64658	46.283	ug/l		0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 92.560%				
50) Toluene-d8	10.179	98	235197	48.457	ug/l		0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 96.920%				
62) 4-Bromofluorobenzene	12.483	95	87711	44.538	ug/l		0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 89.080%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.906	85	32166	21.176	ug/l		100
3) Chloromethane	2.113	50	27646	19.715	ug/l		100
4) Vinyl Chloride	2.253	62	32814	20.048	ug/l		100
5) Bromomethane	2.643	94	26557	20.987	ug/l		94
6) Chloroethane	2.790	64	22163	20.763	ug/l		97
7) Trichlorofluoromethane	3.125	101	67664	21.182	ug/l		99
8) Diethyl Ether	3.534	74	18286	19.237	ug/l		83
9) 1,1,2-Trichlorotrifluo...	3.899	101	32345	20.804	ug/l		96
10) Methyl Iodide	4.088	142	39679	16.794	ug/l		94
11) Tert butyl alcohol	4.948	59	18555	101.197	ug/l		98
12) 1,1-Dichloroethene	3.875	96	32897	20.607	ug/l		92
13) Acrolein	3.729	56	8344	112.220	ug/l		98
14) Allyl chloride	4.485	41	38754	19.633	ug/l	#	81
15) Acrylonitrile	5.161	53	40478	97.491	ug/l		99
16) Acetone	3.942	43	42563	87.940	ug/l		99
17) Carbon Disulfide	4.192	76	99699	20.191	ug/l		99
18) Methyl Acetate	4.479	43	19810	18.291	ug/l	#	86
19) Methyl tert-butyl Ether	5.222	73	86293	19.391	ug/l		95
20) Methylene Chloride	4.716	84	41944	15.162	ug/l		86
21) trans-1,2-Dichloroethene	5.222	96	35823	20.109	ug/l		92
22) Diisopropyl ether	6.118	45	80346	20.417	ug/l	#	93
23) Vinyl Acetate	6.064	43	238749	97.363	ug/l	#	92
24) 1,1-Dichloroethane	6.015	63	56023	20.525	ug/l		96
25) 2-Butanone	6.984	43	49303	92.271	ug/l		92
26) 2,2-Dichloropropane	6.984	77	61534	20.767	ug/l		97
27) cis-1,2-Dichloroethene	6.984	96	40072	20.478	ug/l		94
28) Bromochloromethane	7.332	49	11445	19.199	ug/l	#	74
29) Tetrahydrofuran	7.344	42	27236	92.797	ug/l	#	82
30) Chloroform	7.508	83	65855	20.439	ug/l		97
31) Cyclohexane	7.789	56	51309	20.246	ug/l	#	88
32) 1,1,1-Trichloroethane	7.704	97	65953	20.676	ug/l		98
36) 1,1-Dichloropropene	7.917	75	48525	20.438	ug/l		97
37) Ethyl Acetate	7.069	43	19622	18.747	ug/l	#	96
38) Carbon Tetrachloride	7.905	117	63470	20.699	ug/l		94
39) Methylcyclohexane	9.185	83	60427	20.827	ug/l		93
40) Benzene	8.161	78	140142	20.451	ug/l		100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012309.D
Acq On : 23 Jan 2023 13:27
Operator : KP/MD
Sample : VY0123SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 23 14:21:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.326	41	11768m	19.128	ug/l		
42) 1,2-Dichloroethane	8.234	62	44045	20.189	ug/l		98
43) Isopropyl Acetate	8.271	43	36162	18.570	ug/l	#	92
44) Trichloroethene	8.941	130	41238	20.134	ug/l		99
45) 1,2-Dichloropropane	9.215	63	29066	20.327	ug/l		99
46) Dibromomethane	9.307	93	18803	19.643	ug/l		97
47) Bromodichloromethane	9.496	83	48976	20.325	ug/l		95
48) Methyl methacrylate	9.295	41	16759	18.679	ug/l		90
49) 1,4-Dioxane	9.301	88	4860	372.597	ug/l		89
51) 4-Methyl-2-Pentanone	10.069	43	97064	93.479	ug/l		95
52) Toluene	10.246	92	93058	20.396	ug/l		99
53) t-1,3-Dichloropropene	10.465	75	49338	19.575	ug/l		99
54) cis-1,3-Dichloropropene	9.929	75	54503	20.079	ug/l		97
55) 1,1,2-Trichloroethane	10.648	97	26694	19.628	ug/l		91
56) Ethyl methacrylate	10.508	69	34449	19.307	ug/l		93
57) 1,3-Dichloropropane	10.788	76	44679	20.116	ug/l		100
58) 2-Chloroethyl Vinyl ether	9.782	63	58076	98.370	ug/l	#	89
59) 2-Hexanone	10.831	43	72746	92.020	ug/l		95
60) Dibromochloromethane	10.983	129	35540	19.702	ug/l		100
61) 1,2-Dibromoethane	11.093	107	25288	19.269	ug/l		98
64) Tetrachloroethene	10.721	164	45972	21.013	ug/l		97
65) Chlorobenzene	11.520	112	98876	20.155	ug/l		98
66) 1,1,1,2-Tetrachloroethane	11.593	131	37687	20.353	ug/l		97
67) Ethyl Benzene	11.593	91	177709	20.269	ug/l		98
68) m/p-Xylenes	11.703	106	142838	41.205	ug/l		98
69) o-Xylene	12.032	106	66157	19.981	ug/l		99
70) Styrene	12.044	104	112594	20.352	ug/l		99
71) Bromoform	12.209	173	22551	19.062	ug/l	#	99
73) Isopropylbenzene	12.331	105	182160	20.641	ug/l		99
74) N-amyl acetate	12.142	43	31380	18.139	ug/l		92
75) 1,1,2,2-Tetrachloroethane	12.581	83	26871	19.331	ug/l		98
76) 1,2,3-Trichloropropane	12.636	75	19966m	17.742	ug/l		
77) Bromobenzene	12.611	156	42185	19.865	ug/l		91
78) n-propylbenzene	12.672	91	212478	20.575	ug/l		98
79) 2-Chlorotoluene	12.758	91	118468	20.290	ug/l		98
80) 1,3,5-Trimethylbenzene	12.812	105	158399	20.647	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.380	75	10873	19.907	ug/l		99
82) 4-Chlorotoluene	12.855	91	122032	19.897	ug/l		97
83) tert-Butylbenzene	13.075	119	138763	20.753	ug/l		99
84) 1,2,4-Trimethylbenzene	13.123	105	155866	20.601	ug/l		99
85) sec-Butylbenzene	13.257	105	196179	20.607	ug/l		97
86) p-Isopropyltoluene	13.373	119	172287	20.714	ug/l		100
87) 1,3-Dichlorobenzene	13.367	146	83543	19.780	ug/l		100
88) 1,4-Dichlorobenzene	13.446	146	82032	19.476	ug/l		99
89) n-Butylbenzene	13.696	91	144797	20.088	ug/l		98
90) Hexachloroethane	13.965	117	30286	20.170	ug/l		97
91) 1,2-Dichlorobenzene	13.739	146	73295	19.449	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.361	75	5374	18.707	ug/l		97
93) 1,2,4-Trichlorobenzene	15.007	180	43247	17.910	ug/l		98
94) Hexachlorobutadiene	15.117	225	28131	19.349	ug/l		98
95) Naphthalene	15.239	128	78286	16.426	ug/l		99
96) 1,2,3-Trichlorobenzene	15.428	180	35677	17.170	ug/l		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012309.D
Acq On : 23 Jan 2023 13:27
Operator : KP/MD
Sample : VY0123SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023

Quant Time: Jan 23 14:21:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

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

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

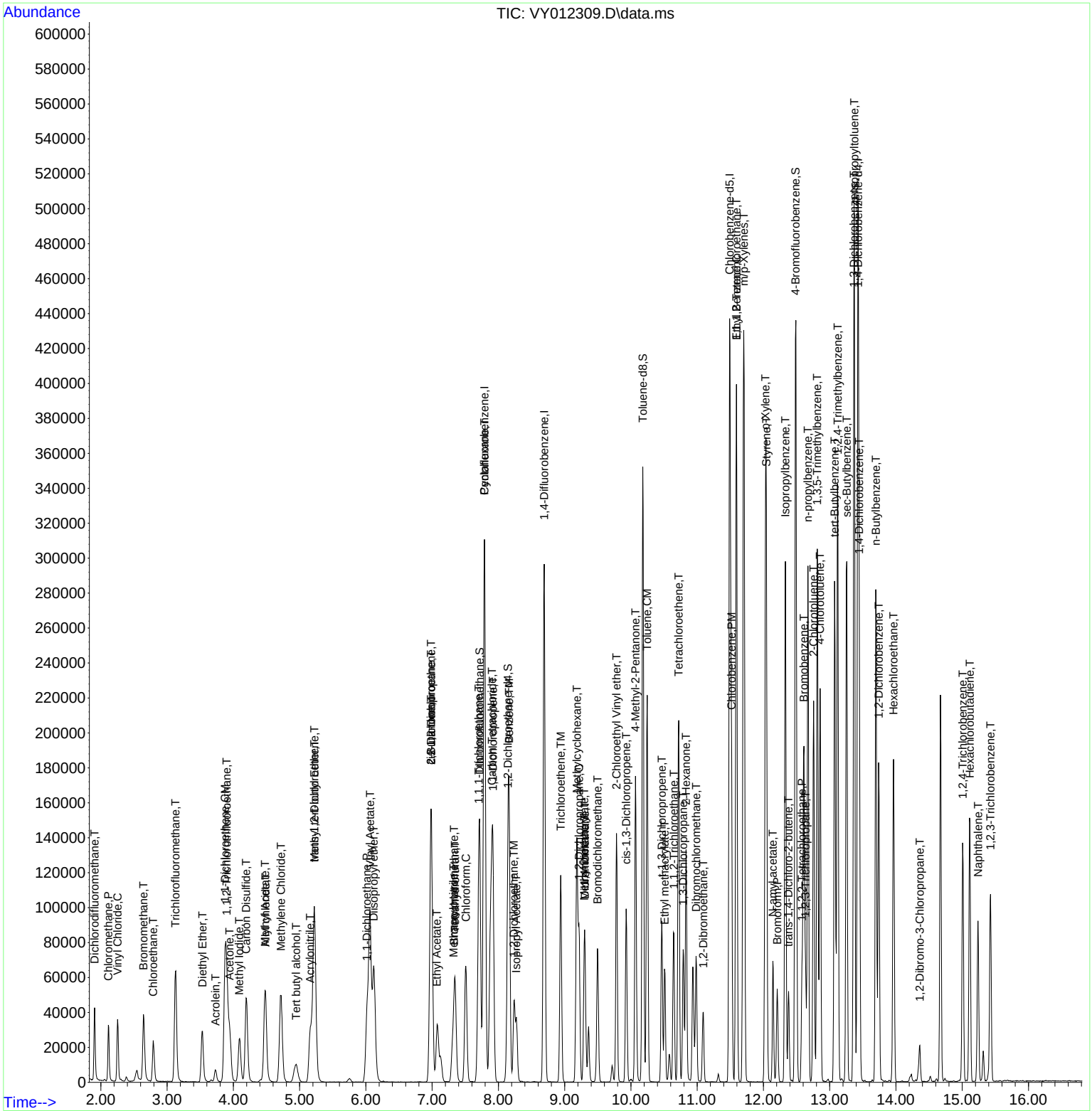
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012323\
Data File : VY012309.D
Acq On : 23 Jan 2023 13:27
Operator : KP/MD
Sample : VY0123SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 23 14:21:55 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0123SBS01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/24/2023
Supervised By :Mahesh Dadoda 01/25/2023



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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBSD01	SDG No.:	O1232
Lab Sample ID:	VY0120SBSD01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012283.D	1		01/20/23 12:18	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	20.8		0.86	5.00	ug/Kg
74-87-3	Chloromethane	20.9		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	20.8		0.91	5.00	ug/Kg
74-83-9	Bromomethane	19.9		1.20	5.00	ug/Kg
75-00-3	Chloroethane	20.4		0.89	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	19.6		0.97	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	20.9		0.72	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.6		0.86	5.00	ug/Kg
67-64-1	Acetone	85.8		12.2	25.0	ug/Kg
75-15-0	Carbon Disulfide	20.4		0.75	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.3		0.93	5.00	ug/Kg
79-20-9	Methyl Acetate	19.9		1.30	5.00	ug/Kg
75-09-2	Methylene Chloride	17.1		6.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.9		0.68	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	21.0		0.70	5.00	ug/Kg
110-82-7	Cyclohexane	21.0		0.84	5.00	ug/Kg
78-93-3	2-Butanone	99.5		7.30	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.5		0.79	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.8		0.68	5.00	ug/Kg
74-97-5	Bromochloromethane	20.1		0.81	5.00	ug/Kg
67-66-3	Chloroform	19.9		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.7		0.75	5.00	ug/Kg
108-87-2	Methylcyclohexane	21.5		0.80	5.00	ug/Kg
71-43-2	Benzene	20.9		0.66	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.1		0.84	5.00	ug/Kg
79-01-6	Trichloroethene	20.9		0.73	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	22.0		0.65	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.9		0.70	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		4.60	25.0	ug/Kg
108-88-3	Toluene	20.4		0.63	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.9		0.74	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	20.7		0.71	5.00	ug/Kg

Raw Data: **VY012283.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBSD01	SDG No.:	O1232
Lab Sample ID:	VY0120SBSD01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012283.D	1		01/20/23 12:18	VY012023

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	20.0		0.86	5.00	ug/Kg
591-78-6	2-Hexanone	98.5		4.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.9		0.75	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	20.2		0.75	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.6		0.76	5.00	ug/Kg
108-90-7	Chlorobenzene	20.6		0.65	5.00	ug/Kg
100-41-4	Ethyl Benzene	20.5		0.70	5.00	ug/Kg
179601-23-1	m/p-Xylenes	40.9		1.50	10.0	ug/Kg
95-47-6	o-Xylene	20.4		0.79	5.00	ug/Kg
100-42-5	Styrene	20.6		0.79	5.00	ug/Kg
75-25-2	Bromoform	19.9		0.81	5.00	ug/Kg
98-82-8	Isopropylbenzene	20.9		0.72	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	20.4		1.10	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	20.4		0.67	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.4		0.63	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.3		0.64	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	18.7		1.20	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	18.8		0.94	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	18.6		1.00	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	45.5		50 - 163	91%	SPK: 50
1868-53-7	Dibromofluoromethane	46.2		54 - 147	92%	SPK: 50
2037-26-5	Toluene-d8	48.7		58 - 134	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.8		30 - 143	90%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	227000	7.789			
540-36-3	1,4-Difluorobenzene	341000	8.691			
3114-55-4	Chlorobenzene-d5	309000	11.489			
3855-82-1	1,4-Dichlorobenzene-d4	156000	13.428			

Raw Data: **VY012283.D**

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

Report of Analysis

Client:	Louis Berger U.S., Inc., A WSP Company	Date Collected:	
Project:	NYCDDC Phase II SCI Arthur Kill Road CEQR	Date Received:	
Client Sample ID:	VY0120SBSD01	SDG No.:	O1232
Lab Sample ID:	VY0120SBSD01	Matrix:	SOIL
Analytical Method:	SW8260	% 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
VY012283.D	1		01/20/23 12:18	VY012023

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\VY012023\
Data File : VY012283.D
Acq On : 20 Jan 2023 12:18
Operator : KP/MD
Sample : VY0120SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 23 06:07:04 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBSD01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.789	168	226848	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.691	114	340849	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.489	117	308539	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.428	152	155933	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.143	65	86275	45.532	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 91.060%			
35) Dibromofluoromethane	7.716	113	83421	46.222	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 92.440%			
50) Toluene-d8	10.179	98	305350	48.719	ug/l	0.00
Spiked Amount 50.000	Range 49 - 140		Recovery = 97.440%			
62) 4-Bromofluorobenzene	12.483	95	113977	44.799	ug/l	0.00
Spiked Amount 50.000	Range 25 - 144		Recovery = 89.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.906	85	41210	20.788	ug/l	99
3) Chloromethane	2.113	50	38299	20.927	ug/l	98
4) Vinyl Chloride	2.253	62	44417	20.793	ug/l	99
5) Bromomethane	2.644	94	32835	19.882	ug/l	96
6) Chloroethane	2.790	64	28412	20.395	ug/l	95
7) Trichlorofluoromethane	3.125	101	81545	19.560	ug/l	99
8) Diethyl Ether	3.527	74	24280	19.572	ug/l	85
9) 1,1,2-Trichlorotrifluo...	3.899	101	42441	20.917	ug/l	96
10) Methyl Iodide	4.088	142	55677	18.056	ug/l	98
11) Tert butyl alcohol	4.948	59	32793	141.626	ug/l #	91
12) 1,1-Dichloroethene	3.869	96	42948	20.614	ug/l	92
13) Acrolein	3.729	56	11241	117.085	ug/l	98
14) Allyl chloride	4.479	41	54771	21.261	ug/l #	92
15) Acrylonitrile	5.155	53	54189	100.003	ug/l	99
16) Acetone	3.942	43	54185	85.780	ug/l	98
17) Carbon Disulfide	4.192	76	131323	20.378	ug/l	99
18) Methyl Acetate	4.479	43	28064	19.855	ug/l	92
19) Methyl tert-butyl Ether	5.216	73	111872	19.262	ug/l	96
20) Methylene Chloride	4.716	84	59066	17.106	ug/l	89
21) trans-1,2-Dichloroethene	5.222	96	48584	20.897	ug/l	90
22) Diisopropyl ether	6.112	45	111231	21.658	ug/l #	90
23) Vinyl Acetate	6.064	43	328016	102.495	ug/l #	93
24) 1,1-Dichloroethane	6.021	63	74811	21.001	ug/l	96
25) 2-Butanone	6.984	43	69394	99.510	ug/l	92
26) 2,2-Dichloropropane	6.978	77	76441	19.767	ug/l	100
27) cis-1,2-Dichloroethene	6.984	96	53071	20.781	ug/l	94
28) Bromochloromethane	7.338	49	15632	20.093	ug/l #	79
29) Tetrahydrofuran	7.350	42	38757	101.180	ug/l #	85
30) Chloroform	7.508	83	83850	19.940	ug/l	99
31) Cyclohexane	7.789	56	69457	21.000	ug/l	91
32) 1,1,1-Trichloroethane	7.704	97	81819	19.653	ug/l	98
36) 1,1-Dichloropropene	7.917	75	63457	20.688	ug/l	98
37) Ethyl Acetate	7.070	43	27226	20.135	ug/l #	94
38) Carbon Tetrachloride	7.905	117	77245	19.499	ug/l	98
39) Methylcyclohexane	9.185	83	80734	21.538	ug/l	95
40) Benzene	8.161	78	184654	20.858	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012283.D
Acq On : 20 Jan 2023 12:18
Operator : KP/MD
Sample : VY0120SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 23 06:07:04 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBSD01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) Methacrylonitrile	7.319	41	16526m	20.792	ug/l		
42) 1,2-Dichloroethane	8.234	62	53908	19.127	ug/l		99
43) Isopropyl Acetate	8.271	43	50842	20.210	ug/l		95
44) Trichloroethene	8.941	130	55199	20.861	ug/l		94
45) 1,2-Dichloropropane	9.215	63	40710	22.038	ug/l		98
46) Dibromomethane	9.301	93	24856	20.099	ug/l		95
47) Bromodichloromethane	9.496	83	62089	19.945	ug/l		100
48) Methyl methacrylate	9.295	41	23784	20.519	ug/l		93
49) 1,4-Dioxane	9.301	88	6514	386.562	ug/l		95
51) 4-Methyl-2-Pentanone	10.069	43	134557	100.307	ug/l		94
52) Toluene	10.246	92	120131	20.380	ug/l		99
53) t-1,3-Dichloropropene	10.465	75	64686	19.866	ug/l		98
54) cis-1,3-Dichloropropene	9.929	75	72447	20.660	ug/l		99
55) 1,1,2-Trichloroethane	10.642	97	35149	20.005	ug/l		96
56) Ethyl methacrylate	10.508	69	45634	19.797	ug/l		93
57) 1,3-Dichloropropane	10.788	76	59444	20.716	ug/l		98
58) 2-Chloroethyl Vinyl ether	9.782	63	78605	103.058	ug/l		91
59) 2-Hexanone	10.831	43	100609	98.509	ug/l		94
60) Dibromochloromethane	10.983	129	46295	19.866	ug/l		99
61) 1,2-Dibromoethane	11.087	107	34284	20.221	ug/l		98
64) Tetrachloroethene	10.721	164	60942	21.646	ug/l		95
65) Chlorobenzene	11.514	112	129808	20.562	ug/l		99
66) 1,1,1,2-Tetrachloroethane	11.587	131	49644	20.834	ug/l		98
67) Ethyl Benzene	11.593	91	231265	20.498	ug/l		98
68) m/p-Xylenes	11.703	106	182477	40.906	ug/l		99
69) o-Xylene	12.026	106	87111	20.445	ug/l		96
70) Styrene	12.044	104	147001	20.649	ug/l		99
71) Bromoform	12.209	173	30352	19.937	ug/l	#	99
73) Isopropylbenzene	12.331	105	235157	20.914	ug/l		99
74) N-amyl acetate	12.142	43	43943	19.936	ug/l		92
75) 1,1,2,2-Tetrachloroethane	12.581	83	36132	20.401	ug/l		99
76) 1,2,3-Trichloropropane	12.636	75	33247m	23.187	ug/l		
77) Bromobenzene	12.611	156	55835	20.636	ug/l		93
78) n-propylbenzene	12.672	91	276552	21.018	ug/l		98
79) 2-Chlorotoluene	12.758	91	155111	20.850	ug/l		97
80) 1,3,5-Trimethylbenzene	12.812	105	204610	20.933	ug/l		99
81) trans-1,4-Dichloro-2-b...	12.380	75	14658	21.063	ug/l		95
82) 4-Chlorotoluene	12.855	91	160219	20.503	ug/l		97
83) tert-Butylbenzene	13.075	119	172697	20.271	ug/l		100
84) 1,2,4-Trimethylbenzene	13.123	105	199431	20.689	ug/l		99
85) sec-Butylbenzene	13.251	105	253471	20.897	ug/l		98
86) p-Isopropyltoluene	13.367	119	218746	20.641	ug/l		99
87) 1,3-Dichlorobenzene	13.367	146	109958	20.434	ug/l		100
88) 1,4-Dichlorobenzene	13.446	146	109323	20.371	ug/l		99
89) n-Butylbenzene	13.696	91	189825	20.669	ug/l		98
90) Hexachloroethane	13.965	117	39839	20.824	ug/l		95
91) 1,2-Dichlorobenzene	13.739	146	97474	20.300	ug/l		99
92) 1,2-Dibromo-3-Chloropr...	14.355	75	6862	18.748	ug/l		93
93) 1,2,4-Trichlorobenzene	15.007	180	57945	18.834	ug/l		99
94) Hexachlorobutadiene	15.111	225	37114	20.036	ug/l		98
95) Naphthalene	15.239	128	107806	17.753	ug/l		99
96) 1,2,3-Trichlorobenzene	15.428	180	49149	18.564	ug/l		99

Sample Results: **VY012283.D**

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012283.D
Acq On : 20 Jan 2023 12:18
Operator : KP/MD
Sample : VY0120SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBSD01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023

Quant Time: Jan 23 06:07:04 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

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

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

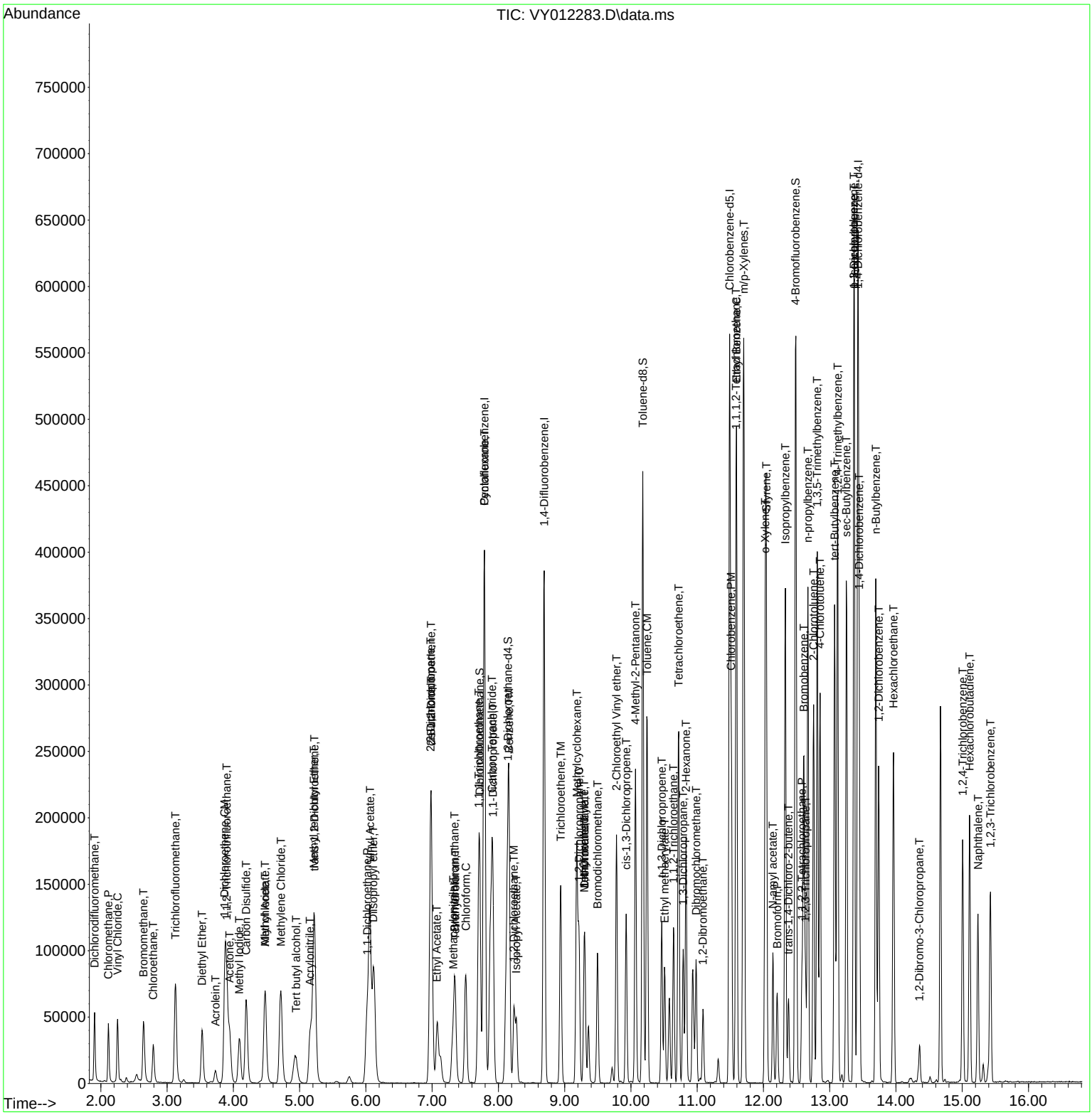
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY012023\
Data File : VY012283.D
Acq On : 20 Jan 2023 12:18
Operator : KP/MD
Sample : VY0120SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 23 06:07:04 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y011623S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 17 04:31:47 2023
Response via : Initial Calibration

Instrument :
MSVOA_Y
ClientSampleId :
VY0120SBSD01

Manual Integrations APPROVED

Reviewed By :Krupa Patel 01/23/2023
Supervised By :Mahesh Dadoda 01/25/2023



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

Manual Integration Report

Sequence:	VY011623	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC005	VY012194.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:36:38 AM	MMDadoda	1/17/2023 2:38:20 PM	Peak Integrated by Software
VSTDICC005	VY012194.D	Methacrylonitrile	Krupa	1/17/2023 8:36:38 AM	MMDadoda	1/17/2023 2:38:20 PM	Peak Integrated by Software
VSTDICC010	VY012195.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:36:42 AM	MMDadoda	1/17/2023 2:38:21 PM	Peak Integrated by Software
VSTDICC010	VY012195.D	Methacrylonitrile	Krupa	1/17/2023 8:36:42 AM	MMDadoda	1/17/2023 2:38:21 PM	Peak Integrated by Software
VSTDICC020	VY012196.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:36:46 AM	MMDadoda	1/17/2023 2:38:23 PM	Peak Integrated by Software
VSTDICC020	VY012196.D	Methacrylonitrile	Krupa	1/17/2023 8:36:46 AM	MMDadoda	1/17/2023 2:38:23 PM	Peak Integrated by Software
VSTDICCC050	VY012197.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:36:50 AM	MMDadoda	1/17/2023 2:38:26 PM	Peak Integrated by Software
VSTDICCC050	VY012197.D	Methacrylonitrile	Krupa	1/17/2023 8:36:50 AM	MMDadoda	1/17/2023 2:38:26 PM	Peak Integrated by Software
VSTDICC100	VY012198.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:39:09 AM	MMDadoda	1/17/2023 2:38:27 PM	Peak Integrated by Software
VSTDICC100	VY012198.D	Methacrylonitrile	Krupa	1/17/2023 8:39:09 AM	MMDadoda	1/17/2023 2:38:27 PM	Peak Integrated by Software
VSTDICC150	VY012199.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:39:13 AM	MMDadoda	1/17/2023 2:38:27 PM	Peak Integrated by Software
VSTDICC150	VY012199.D	Methacrylonitrile	Krupa	1/17/2023 8:39:13 AM	MMDadoda	1/17/2023 2:38:27 PM	Peak Integrated by Software
VSTDICV050	VY012201.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:39:19 AM	MMDadoda	1/17/2023 2:38:31 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VY011623	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICV050	VY012201.D	Methacrylonitrile	Krupa	1/17/2023 8:39:19 AM	MMDadoda	1/17/2023 2:38:31 PM	Peak Integrated by Software
VSTDCCC050	VY012211.D	1,2,3-Trichloropropane	Krupa	1/17/2023 8:39:38 AM	MMDadoda	1/17/2023 2:38:36 PM	Peak Integrated by Software
VSTDCCC050	VY012211.D	Methacrylonitrile	Krupa	1/17/2023 8:39:38 AM	MMDadoda	1/17/2023 2:38:36 PM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VY012023	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY012280.D	1,2,3-Trichloropropane	Krupa	1/23/2023 9:25:09 AM	MMdadoda	1/25/2023 12:41:41 AM	Peak Integrated by Software
VY0120SBS01	VY012282.D	1,2,3-Trichloropropane	Krupa	1/23/2023 9:25:12 AM	MMdadoda	1/25/2023 12:41:55 AM	Peak Integrated by Software
VY0120SBS01	VY012282.D	Methacrylonitrile	Krupa	1/23/2023 9:25:12 AM	MMdadoda	1/25/2023 12:41:55 AM	Peak Integrated by Software
VY0120SBSD01	VY012283.D	1,2,3-Trichloropropane	Krupa	1/23/2023 9:25:16 AM	MMdadoda	1/25/2023 12:41:58 AM	Peak Integrated by Software
VY0120SBSD01	VY012283.D	Methacrylonitrile	Krupa	1/23/2023 9:25:16 AM	MMdadoda	1/25/2023 12:41:58 AM	Peak Integrated by Software
VSTDCCC050	VY012305.D	1,2,3-Trichloropropane	Krupa	1/23/2023 9:25:20 AM	MMdadoda	1/25/2023 12:42:02 AM	Peak Integrated by Software
VSTDCCC050	VY012305.D	Methacrylonitrile	Krupa	1/23/2023 9:25:20 AM	MMdadoda	1/25/2023 12:42:02 AM	Peak Integrated by Software

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

Manual Integration Report

Sequence:	VY012323	Instrument	MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VY0123SBS01	VY012309.D	1,2,3-Trichloropropane	Krupa	1/24/2023 9:22:32 AM	MMDadoda	1/25/2023 3:08:37 PM	Peak Integrated by Software
VY0123SBS01	VY012309.D	Methacrylonitrile	Krupa	1/24/2023 9:22:32 AM	MMDadoda	1/25/2023 3:08:37 PM	Peak Integrated by Software
VSTDCCC050	VY012329.D	1,2,3-Trichloropropane	Krupa	1/24/2023 9:22:41 AM	MMDadoda	1/25/2023 3:08:44 PM	Peak Integrated by Software
VSTDCCC050	VY012329.D	Methacrylonitrile	Krupa	1/24/2023 9:22:41 AM	MMDadoda	1/25/2023 3:08:44 PM	Peak Integrated by Software

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY011623

Review By	Krupa Patel	Review On	1/17/2023 2:36:16 PM		
Supervise By	Mahesh Dadoda	Supervise On	1/17/2023 2:38:16 PM		
SubDirectory	VY011623	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP117988
Initial Calibration Stds	VP117989,VP117990,VP117991,VP117992,VP117993,VP117994
CCC	VP117996
Internal Standard/PEM	VP116738
ICV/I.BLK	VP117995
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY012193.D	16 Jan 2023 09:00	KP/MD	Ok
2	VSTDICC005	VY012194.D	16 Jan 2023 12:17	KP/MD	Ok,M
3	VSTDICC010	VY012195.D	16 Jan 2023 13:03	KP/MD	Ok,M
4	VSTDICC020	VY012196.D	16 Jan 2023 13:26	KP/MD	Ok,M
5	VSTDICCC050	VY012197.D	16 Jan 2023 13:48	KP/MD	Ok,M
6	VSTDICC100	VY012198.D	16 Jan 2023 14:11	KP/MD	Ok,M
7	VSTDICC150	VY012199.D	16 Jan 2023 14:34	KP/MD	Ok,M
8	VIBLK	VY012200.D	16 Jan 2023 14:58	KP/MD	Ok
9	VSTDICV050	VY012201.D	16 Jan 2023 15:21	KP/MD	Ok,M
10	VY0116SBL01	VY012202.D	16 Jan 2023 16:21	KP/MD	Ok
11	O1100-05	VY012203.D	16 Jan 2023 16:45	KP/MD	Ok
12	VY0116SBS01	VY012204.D	16 Jan 2023 17:08	KP/MD	Ok,M
13	VY0116SBSD01	VY012205.D	16 Jan 2023 17:31	KP/MD	Ok,M
14	O1159-01	VY012206.D	16 Jan 2023 17:55	KP/MD	Ok
15	O1160-01	VY012207.D	16 Jan 2023 18:18	KP/MD	Ok
16	O1125-01RE	VY012208.D	16 Jan 2023 18:42	KP/MD	Confirms
17	O1157-01	VY012209.D	16 Jan 2023 19:05	KP/MD	Not Ok
18	O1133-08	VY012210.D	16 Jan 2023 19:29	KP/MD	Ok
19	VSTDCCC050	VY012211.D	16 Jan 2023 19:51	KP/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012023

Review By	Mahesh Dadoda	Review On	1/25/2023 12:42:14 AM				
Supervise By	Krupa Patel	Supervise On	1/25/2023 4:39:05 AM				
SubDirectory	VY012023	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m		

STD. NAME	STD REF.#
Tune/Reschk	VP118245
Initial Calibration Stds	
CCC	VP118243,VP118244
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY012279.D	20 Jan 2023 09:50	KP/MD	Ok
2	VSTDCCC050	VY012280.D	20 Jan 2023 10:34	KP/MD	Ok,M
3	VY0120SBL01	VY012281.D	20 Jan 2023 11:32	KP/MD	Ok
4	VY0120SBS01	VY012282.D	20 Jan 2023 11:55	KP/MD	Ok,M
5	VY0120SBSD01	VY012283.D	20 Jan 2023 12:18	KP/MD	Ok,M
6	O1190-02	VY012284.D	20 Jan 2023 12:42	KP/MD	Ok
7	O1190-05RE	VY012285.D	20 Jan 2023 13:05	KP/MD	Confirms
8	O1190-06	VY012286.D	20 Jan 2023 13:29	KP/MD	Ok
9	O1190-09	VY012287.D	20 Jan 2023 13:52	KP/MD	Ok
10	O1190-10	VY012288.D	20 Jan 2023 14:16	KP/MD	Ok
11	O1190-11	VY012289.D	20 Jan 2023 14:39	KP/MD	Ok
12	O1220-01	VY012290.D	20 Jan 2023 15:02	KP/MD	Ok
13	O1220-04	VY012291.D	20 Jan 2023 15:26	KP/MD	Ok
14	O1232-01	VY012292.D	20 Jan 2023 15:49	KP/MD	Ok
15	O1232-02	VY012293.D	20 Jan 2023 16:13	KP/MD	Ok
16	O1232-04	VY012294.D	20 Jan 2023 16:36	KP/MD	Not Ok
17	O1232-05	VY012295.D	20 Jan 2023 17:00	KP/MD	Ok
18	O1232-06	VY012296.D	20 Jan 2023 17:23	KP/MD	ReRun
19	O1232-07	VY012297.D	20 Jan 2023 17:46	KP/MD	Ok
20	O1232-08	VY012298.D	20 Jan 2023 18:10	KP/MD	Ok
21	O1232-09	VY012299.D	20 Jan 2023 18:33	KP/MD	ReRun
22	O1232-10	VY012300.D	20 Jan 2023 18:57	KP/MD	Ok
23	O1244-02	VY012301.D	20 Jan 2023 19:20	KP/MD	Not Ok

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012023

Review By	Mahesh Dadoda	Review On	1/25/2023 12:42:14 AM		
Supervise By	Krupa Patel	Supervise On	1/25/2023 4:39:05 AM		
SubDirectory	VY012023	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118245
Initial Calibration Stds	
CCC	VP118243,VP118244
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

24	O1252-01	VY012302.D	20 Jan 2023 19:43	KP/MD	Ok
25	O1239-01	VY012303.D	20 Jan 2023 20:07	KP/MD	Ok
26	O1237-02	VY012304.D	20 Jan 2023 20:30	KP/MD	Not Ok
27	VSTDCCC050	VY012305.D	20 Jan 2023 20:53	KP/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012323

Review By		Review On			
Supervise By		Supervise On			
SubDirectory	VY012323	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118120
Initial Calibration Stds	
CCC	VP118124,VP118125
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY012306.D	23 Jan 2023 10:03	KP/MD	Ok
2	VSTDCCC050	VY012307.D	23 Jan 2023 12:09	KP/MD	Ok,NR
3	VY0123SBL01	VY012308.D	23 Jan 2023 13:04	KP/MD	Ok
4	VY0123SBS01	VY012309.D	23 Jan 2023 13:27	KP/MD	Ok,M
5	VY0123SBSD01	VY012310.D	23 Jan 2023 13:50	KP/MD	Ok,M
6	O1232-04	VY012311.D	23 Jan 2023 14:14	KP/MD	Ok
7	O1232-06	VY012312.D	23 Jan 2023 14:37	KP/MD	Ok
8	O1232-07	VY012313.D	23 Jan 2023 15:01	KP/MD	Not Ok
9	O1232-09RE	VY012314.D	23 Jan 2023 15:24	KP/MD	Confirms
10	O1233-07	VY012315.D	23 Jan 2023 15:48	KP/MD	Ok
11	O1233-08RE	VY012316.D	23 Jan 2023 16:11	KP/MD	Confirms
12	O1244-02	VY012317.D	23 Jan 2023 16:34	KP/MD	Ok
13	O1251-05	VY012318.D	23 Jan 2023 16:58	KP/MD	ReRun
14	O1251-06	VY012319.D	23 Jan 2023 17:21	KP/MD	Ok
15	O1251-11	VY012320.D	23 Jan 2023 17:45	KP/MD	ReRun
16	O1251-12	VY012321.D	23 Jan 2023 18:08	KP/MD	ReRun
17	O1237-02	VY012322.D	23 Jan 2023 18:31	KP/MD	Not Ok
18	O1254-01	VY012323.D	23 Jan 2023 18:55	KP/MD	ReRun
19	O1253-01	VY012324.D	23 Jan 2023 19:18	KP/MD	ReRun
20	O1243-01	VY012325.D	23 Jan 2023 19:42	KP/MD	Ok
21	O1243-03	VY012326.D	23 Jan 2023 20:05	KP/MD	ReRun
22	O1243-05	VY012327.D	23 Jan 2023 20:29	KP/MD	Ok
23	O1243-07	VY012328.D	23 Jan 2023 20:52	KP/MD	ReRun

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012323

Review By		Review On			
Supervise By		Supervise On			
SubDirectory	VY012323	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118120
Initial Calibration Stds	
CCC	VP118124,VP118125
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

24	VSTDCCC050	VY012329.D	23 Jan 2023 21:15	KP/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY011623

Review By	Krupa Patel	Review On	1/17/2023 2:36:16 PM		
Supervise By	Mahesh Dadoda	Supervise On	1/17/2023 2:38:16 PM		
SubDirectory	VY011623	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP117988
Initial Calibration Stds	VP117989,VP117990,VP117991,VP117992,VP117993,VP117994
CCC	VP117996
Internal Standard/PEM	VP116738
ICV/I.BLK	VP117995
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY012193.D	16 Jan 2023 09:00		KP/MD	Ok
2	VSTDICC005	VSTDICC005	VY012194.D	16 Jan 2023 12:17		KP/MD	Ok,M
3	VSTDICC010	VSTDICC010	VY012195.D	16 Jan 2023 13:03		KP/MD	Ok,M
4	VSTDICC020	VSTDICC020	VY012196.D	16 Jan 2023 13:26		KP/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VY012197.D	16 Jan 2023 13:48		KP/MD	Ok,M
6	VSTDICC100	VSTDICC100	VY012198.D	16 Jan 2023 14:11		KP/MD	Ok,M
7	VSTDICC150	VSTDICC150	VY012199.D	16 Jan 2023 14:34		KP/MD	Ok,M
8	VIBLK	VIBLK	VY012200.D	16 Jan 2023 14:58		KP/MD	Ok
9	VSTDICV050	ICVVY011623	VY012201.D	16 Jan 2023 15:21		KP/MD	Ok,M
10	VY0116SBL01	VY0116SBL01	VY012202.D	16 Jan 2023 16:21		KP/MD	Ok
11	O1100-05	WASTE	VY012203.D	16 Jan 2023 16:45	Vial A	KP/MD	Ok
12	VY0116SBS01	VY0116SBS01	VY012204.D	16 Jan 2023 17:08		KP/MD	Ok,M
13	VY0116SBSD01	VY0116SBSD01	VY012205.D	16 Jan 2023 17:31		KP/MD	Ok,M
14	O1159-01	TP-E	VY012206.D	16 Jan 2023 17:55	Vial A	KP/MD	Ok
15	O1160-01	B-04-SB02	VY012207.D	16 Jan 2023 18:18	Vial A	KP/MD	Ok
16	O1125-01RE	B-04-SB01RE	VY012208.D	16 Jan 2023 18:42	Vial B, ISTD Fail	KP/MD	Confirms
17	O1157-01	TR-4-011323	VY012209.D	16 Jan 2023 19:05	Vial A, Not purged well	KP/MD	Not Ok
18	O1133-08	TOT-VOC	VY012210.D	16 Jan 2023 19:29	Vial A	KP/MD	Ok
19	VSTDCCC050	VSTDCCC050EC	VY012211.D	16 Jan 2023 19:51		KP/MD	Ok,M

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY011623

Review By	Krupa Patel	Review On	1/17/2023 2:36:16 PM		
Supervise By	Mahesh Dadoda	Supervise On	1/17/2023 2:38:16 PM		
SubDirectory	VY011623	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP117988
Initial Calibration Stds	VP117989,VP117990,VP117991,VP117992,VP117993,VP117994
CCC	VP117996
Internal Standard/PEM	VP116738
ICV/I.BLK	VP117995
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

M : Manual Integration

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012023

Review By	Mahesh Dadoda	Review On	1/25/2023 12:42:14 AM		
Supervise By	Krupa Patel	Supervise On	1/25/2023 4:39:05 AM		
SubDirectory	VY012023	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118245
Initial Calibration Stds	
CCC	VP118243,VP118244
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY012279.D	20 Jan 2023 09:50		KP/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY012280.D	20 Jan 2023 10:34		KP/MD	Ok,M
3	VY0120SBL01	VY0120SBL01	VY012281.D	20 Jan 2023 11:32		KP/MD	Ok
4	VY0120SBS01	VY0120SBS01	VY012282.D	20 Jan 2023 11:55		KP/MD	Ok,M
5	VY0120SBSD01	VY0120SBSD01	VY012283.D	20 Jan 2023 12:18		KP/MD	Ok,M
6	O1190-02	PE-1D	VY012284.D	20 Jan 2023 12:42	Vial B	KP/MD	Ok
7	O1190-05RE	PE-4RE	VY012285.D	20 Jan 2023 13:05	Vial B, Surrogate Fail	KP/MD	Confirms
8	O1190-06	PE-5	VY012286.D	20 Jan 2023 13:29	Vial B	KP/MD	Ok
9	O1190-09	PE-8	VY012287.D	20 Jan 2023 13:52	Vial B	KP/MD	Ok
10	O1190-10	PE-9	VY012288.D	20 Jan 2023 14:16	Vial B	KP/MD	Ok
11	O1190-11	PE-10	VY012289.D	20 Jan 2023 14:39	Vial B	KP/MD	Ok
12	O1220-01	MH-8	VY012290.D	20 Jan 2023 15:02	Vial A	KP/MD	Ok
13	O1220-04	TP-G	VY012291.D	20 Jan 2023 15:26	Vial A	KP/MD	Ok
14	O1232-01	B-P17A	VY012292.D	20 Jan 2023 15:49	Vial A	KP/MD	Ok
15	O1232-02	B-P17B	VY012293.D	20 Jan 2023 16:13	Vial A	KP/MD	Ok
16	O1232-04	B-P18A	VY012294.D	20 Jan 2023 16:36	Vial A, Not Purge	KP/MD	Not Ok
17	O1232-05	B-P18B	VY012295.D	20 Jan 2023 17:00	Vial A	KP/MD	Ok
18	O1232-06	B-P19A	VY012296.D	20 Jan 2023 17:23	Vial A, ISTD Fail	KP/MD	ReRun
19	O1232-07	B-P19B	VY012297.D	20 Jan 2023 17:46	Vial A, ISTD Fail	KP/MD	Ok

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012023

Review By	Mahesh Dadoda	Review On	1/25/2023 12:42:14 AM		
Supervise By	Krupa Patel	Supervise On	1/25/2023 4:39:05 AM		
SubDirectory	VY012023	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118245
Initial Calibration Stds	
CCC	VP118243,VP118244
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

20	O1232-08	B-P35A	VY012298.D	20 Jan 2023 18:10	Vial A	KP/MD	Ok
21	O1232-09	B-P35B	VY012299.D	20 Jan 2023 18:33	Vial A, ISTD Fail	KP/MD	ReRun
22	O1232-10	DUP01	VY012300.D	20 Jan 2023 18:57	Vial A	KP/MD	Ok
23	O1244-02	VNJ-223	VY012301.D	20 Jan 2023 19:20	Vial A, Not Purge	KP/MD	Not Ok
24	O1252-01	MH-9	VY012302.D	20 Jan 2023 19:43	Vial A	KP/MD	Ok
25	O1239-01	BORING-3	VY012303.D	20 Jan 2023 20:07	Vial A	KP/MD	Ok
26	O1237-02	3A	VY012304.D	20 Jan 2023 20:30	Vial A, Not Purge	KP/MD	Not Ok
27	VSTDCCC050	VSTDCCC050EC	VY012305.D	20 Jan 2023 20:53		KP/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012323

Review By		Review On			
Supervise By		Supervise On			
SubDirectory	VY012323	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118120
Initial Calibration Stds	
CCC	VP118124,VP118125
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY012306.D	23 Jan 2023 10:03		KP/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY012307.D	23 Jan 2023 12:09		KP/MD	Ok,NR
3	VY0123SBL01	VY0123SBL01	VY012308.D	23 Jan 2023 13:04		KP/MD	Ok
4	VY0123SBS01	VY0123SBS01	VY012309.D	23 Jan 2023 13:27		KP/MD	Ok,M
5	VY0123SBSD01	VY0123SBSD01	VY012310.D	23 Jan 2023 13:50		KP/MD	Ok,M
6	O1232-04	B-P18A	VY012311.D	23 Jan 2023 14:14	Vial B	KP/MD	Ok
7	O1232-06	B-P19A	VY012312.D	23 Jan 2023 14:37	Vial B	KP/MD	Ok
8	O1232-07	B-P19B	VY012313.D	23 Jan 2023 15:01	Vial B, Not purged well	KP/MD	Not Ok
9	O1232-09RE	B-P35BRE	VY012314.D	23 Jan 2023 15:24	Vial B, ISTD Fail and surr fail	KP/MD	Confirms
10	O1233-07	B-P37B	VY012315.D	23 Jan 2023 15:48	Vial B, Internal Standard and Surrogate Fail	KP/MD	Ok
11	O1233-08RE	B-P38ARE	VY012316.D	23 Jan 2023 16:11	Vial B, Surrogate fail;Internal standard fail	KP/MD	Confirms
12	O1244-02	VNJ-223	VY012317.D	23 Jan 2023 16:34	Vial A	KP/MD	Ok
13	O1251-05	TOT-VOC-1	VY012318.D	23 Jan 2023 16:58	Vial A, ISTD Fail	KP/MD	ReRun
14	O1251-06	TOT-VOC-2	VY012319.D	23 Jan 2023 17:21	Vial A	KP/MD	Ok
15	O1251-11	TOT-VOC-3	VY012320.D	23 Jan 2023 17:45	Vial A, ISTD Fail	KP/MD	ReRun
16	O1251-12	TOT-VOC-4	VY012321.D	23 Jan 2023 18:08	Vial A, ISTD Fail	KP/MD	ReRun
17	O1237-02	3A	VY012322.D	23 Jan 2023 18:31	Vial B, Not Purge	KP/MD	Not Ok
18	O1254-01	HR-04-012023	VY012323.D	23 Jan 2023 18:55	Vial A, ISTD Fail	KP/MD	ReRun

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Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QCBatch ID # VY012323

Review By		Review On			
Supervise By		Supervise On			
SubDirectory	VY012323	HP Acquire Method	MSVOA_Y	HP Processing Method	82y011623s.m

STD. NAME	STD REF.#
Tune/Reschk	VP118120
Initial Calibration Stds	
CCC	VP118124,VP118125
Internal Standard/PEM	VP116738
ICV/I.BLK	
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	O1253-01	SU-04-012023	VY012324.D	23 Jan 2023 19:18	Vial A, Surrogate Fail	KP/MD	ReRun
20	O1243-01	TJRC-11823-B4-0-10	VY012325.D	23 Jan 2023 19:42	Vial A	KP/MD	Ok
21	O1243-03	TJRC-11823-B4-10-20	VY012326.D	23 Jan 2023 20:05	Vial A, Surrogate Fail	KP/MD	ReRun
22	O1243-05	TJRC-011923-B4-20-30	VY012327.D	23 Jan 2023 20:29	Vial A	KP/MD	Ok
23	O1243-07	TJRC-011923-B4-30-40	VY012328.D	23 Jan 2023 20:52	Vial A, ISTD Fail	KP/MD	ReRun
24	VSTDCCC050	VSTDCCC050EC	VY012329.D	23 Jan 2023 21:15		KP/MD	Ok,M

M : Manual Integration

CHEMTECH

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC: LB123747

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
O1229-01	OK-02-011923	1	1.12	8.72	9.84	8.73	87.3	
O1229-02	OK-02-011923-EPH-2	2	1.12	8.72	9.84	8.73	87.3	
O1230-01	BBC	3	1.15	8.45	9.6	9.47	98.5	
O1231-01	BBC	4	1.19	8.53	9.72	9.57	98.2	
O1232-01	B-P-17A	18	1.15	8.78	9.93	9.00	89.4	
O1232-02	B-P-17B	19	1.15	8.41	9.56	8.46	86.9	
O1232-03	WC-17	20	1.13	8.64	9.77	9.03	91.4	
O1232-04	B-P-18A	21	1.13	8.57	9.7	8.63	87.5	
O1232-05	B-P-18B	22	1.15	8.83	9.98	9.22	91.4	
O1232-06	B-P-19A	23	1.12	8.57	9.69	8.68	88.2	
O1232-07	B-P-19B	24	1.18	8.35	9.53	8.53	88.0	
O1232-08	B-P-35A	25	1.13	8.62	9.75	9.00	91.3	
O1232-09	B-P-35B	26	1.17	8.53	9.7	9.13	93.3	
O1232-10	DUP01	27	1.15	8.80	9.95	9.08	90.1	
O1233-02	B-P34A	28	1.13	8.76	9.89	8.6	85.3	
O1233-03	B-P34B	29	1.13	8.71	9.84	9.03	90.7	
O1233-04	B-P36A	30	1.16	8.75	9.91	9.00	89.6	
O1233-05	B-P36B	31	1.13	8.84	9.97	9.12	90.4	
O1233-06	B-P37A	32	1.18	8.60	9.78	8.74	87.9	
O1233-07	B-P37B	33	1.18	8.38	9.56	8.18	83.5	
O1233-08	B-P38A	34	1.12	8.66	9.78	8.85	89.3	
O1233-09	B-P38B	35	1.15	8.81	9.96	8.26	80.7	
O1233-10	WC-38	36	1.18	8.59	9.77	8.47	84.9	
O1233-11	B-P38C	37	1.15	8.82	9.97	8.73	85.9	
O1234-01	EO-02-11923	5	1.14	8.82	9.96	8.72	85.9	
O1234-02	EO-02-11923	6	1.12	8.54	9.66	8.48	86.2	
O1235-04	12X52	7	1.12	7.08	8.2	6.57	77.0	
O1235-05	12X53	8	1.16	5.17	6.33	5.91	91.9	

CHEMTECH

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC: LB123747

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
O1235-06	12X54	9	1.11	8.50	9.61	5.73	54.4	
O1235-07	12X55	10	1.13	8.43	9.56	7.14	71.3	
O1237-01	COMP-1-2-3A	11	1.18	8.72	9.9	9.24	92.4	
O1237-02	3A	12	1.13	8.44	9.57	9.33	97.2	
O1238-01	RBRB22281-OILY-DEBRIS	13	1.00	1.00	2.00	2.00	100.0	OILY DEBRIS
O1239-01	BORING-3	14	1.17	8.73	9.9	8.29	81.6	
O1239-03	BORING-3-EPH-2	15	1.13	8.64	9.77	8.31	83.1	
O1240-01	TR-05-011923	16	1.18	8.50	9.68	8.38	84.7	
O1240-02	TR-05-011923-EPH-2	17	1.17	8.67	9.84	8.73	87.2	
O1241-01	34326-FRONT	38	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-02	34326-BACK	39	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-03	34327-FRONT	40	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-04	34327-BACK	41	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-05	34328-FRONT	42	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-06	34328BACK	43	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-07	343269-FRONT	44	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1241-08	34329-BACK	45	1.00	1.00	2.00	2.00	100.0	PILC REEL
O1243-01	TJRC-11823-B4-0-10	60	1.12	8.65	9.77	8.54	85.8	
O1243-02	TJRC-11823-B4-0-10	61	1.14	8.45	9.59	8.02	81.4	
O1243-03	TJRC-11823-B4-10-20	62	1.15	8.81	9.96	8.85	87.4	
O1243-04	TJRC-11823-B4-10-20	63	1.17	8.57	9.74	8.16	81.6	
O1243-05	TJRC-11923-B4-20-30	64	1.15	8.75	9.9	8.28	81.5	
O1243-06	TJRC-11923-B4-20-30	65	1.13	8.70	9.83	8.43	83.9	
O1243-07	TJRC-11923-B4-30-40	66	1.16	8.77	9.93	8.29	81.3	
O1243-08	TJRC-11923-B4-30-40	67	1.14	8.83	9.97	8.47	83.0	
O1244-01	VNJ-223	46	1.12	8.62	9.74	8.59	86.7	
O1244-02	VNJ-223	47	1.16	8.80	9.96	8.62	84.8	
O1248-05	SVOC-GPC-BLANK	50	1.00	1.00	2.00	2.00	100.0	

CHEMTECH

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
Out Date: 01/21/2023
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC: LB123747

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
O1248-06	PEST-GPC-BLANK	51	1.00	1.00	2.00	2.00	100.0	
O1248-07	PEST-GPC-BLANK-SPIKE	52	1.00	1.00	2.00	2.00	100.0	
O1248-08	PCB-GPC-BLANK	53	1.00	1.00	2.00	2.00	100.0	
O1248-09	PCB-GPC-BLANK-SPIKE	54	1.00	1.00	2.00	2.00	100.0	
O1248-10	SVOC-GPC2-BLANK	55	1.00	1.00	2.00	2.00	100.0	
O1248-11	PEST-GPC2-BLANK	56	1.00	1.00	2.00	2.00	100.0	
O1248-12	PEST-GPC2-BLANK-SPIKE	57	1.00	1.00	2.00	2.00	100.0	
O1248-13	PCB-GCP2-BLANK	58	1.00	1.00	2.00	2.00	100.0	
O1248-14	PCB-GCP2-BLANK-SPIKE	59	1.00	1.00	2.00	2.00	100.0	
O1251-01	COMP-1	68	1.13	8.43	9.56	8.44	86.7	
O1251-03	EPH-1	69	1.11	8.51	9.62	8.47	86.5	
O1251-05	TOT-VOC-1	70	1.00	1.00	2.00	2.00	100.0	no jar
O1251-06	TOT-VOC-2	71	1.00	1.00	2.00	2.00	100.0	no jar
O1251-07	COMP-2	72	1.12	8.74	9.86	8.75	87.3	
O1251-09	EPH-2	73	1.14	8.80	9.94	8.8	87.0	
O1251-11	TOT-VOC-3	74	1.00	1.00	2.00	2.00	100.0	no jar
O1251-12	TOT-VOC-4	75	1.00	1.00	2.00	2.00	100.0	no jar
O1252-01	MH-9	48	1.14	8.84	9.98	9.47	94.2	
O1252-02	MH-9-EPH	49	1.12	8.46	9.58	8.67	89.2	
O1253-01	SU-04-012023	79	1.12	8.47	9.59	8.99	92.9	
O1253-02	SU-04-012023-EPH-2	80	1.18	8.69	9.87	9.17	91.9	
O1254-01	HR-04-012023	81	1.13	8.66	9.79	9.09	91.9	
O1254-02	HR-04-012023-EPH-2	82	1.16	8.69	9.85	8.95	89.6	
O1255-01	BORING-1	76	1.18	8.61	9.79	8.32	82.9	
O1255-03	BORING-1-EPH-2	77	1.11	8.78	9.89	8.35	82.5	
O1256-01	OR-02-012023	83	1.15	8.81	9.96	9.09	90.1	
O1256-02	OR-02-012023-EPH-2	84	1.1	8.87	9.97	8.66	85.2	

CHEMTECH

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 1/23/2023

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 01/20/2023
Weight Check 1.0g: 1.00
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OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:30
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Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: %SOLIDS-OVEN

QC: LB123747

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
O1258-01	WASTE-VOA-2	78	1.12	8.58	9.7	8.62	87.4	

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

WORKLIST(Hardcopy Internal Chain)

VB 123747

WorkList Name : %1-012023 **WorkList ID :** 166715 **Department :** Wet-Chemistry **Date :** 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/24/2023	Solid	O1229-01	Percent Solids	Cool 4 deg C	PSEG05	N11	OK-02-011923	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1229-02	Percent Solids	Cool 4 deg C	PSEG05	N11	OK-02-011923-EPH-2	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1230-01	Percent Solids	Cool 4 deg C	EART12	N11	BBC	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1231-01	Percent Solids	Cool 4 deg C	EART12	N11	BBC	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1232-01	Percent Solids	Cool 4 deg C	loui01	N11	B-P-17A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-02	Percent Solids	Cool 4 deg C	loui01	N11	B-P-17B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-03	Percent Solids	Cool 4 deg C	loui01	N11	WC-17	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-04	Percent Solids	Cool 4 deg C	loui01	N11	B-P-18A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-05	Percent Solids	Cool 4 deg C	loui01	N11	B-P-18B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-06	Percent Solids	Cool 4 deg C	loui01	N11	B-P-19A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-07	Percent Solids	Cool 4 deg C	loui01	N11	B-P-19B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-08	Percent Solids	Cool 4 deg C	loui01	N11	B-P-35A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-09	Percent Solids	Cool 4 deg C	loui01	N11	B-P-35B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1232-10	Percent Solids	Cool 4 deg C	loui01	N11	DUP01	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-02	Percent Solids	Cool 4 deg C	loui01	N11	B-P34A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-03	Percent Solids	Cool 4 deg C	loui01	N11	B-P34B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-04	Percent Solids	Cool 4 deg C	loui01	N11	B-P36A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-05	Percent Solids	Cool 4 deg C	loui01	N11	B-P36B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-06	Percent Solids	Cool 4 deg C	loui01	N11	B-P37A	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-07	Percent Solids	Cool 4 deg C	loui01	N11	B-P37B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-08	Percent Solids	Cool 4 deg C	loui01	N11	B-P38A	01/18/2023	Chemtech -SO

Date/Time 01.20.23 15:45

Raw Sample Received by: JD (WC)

Raw Sample Relinquished by: JD (CSM)

Date/Time 01.20.23 17:25

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JD (WC)

123747

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-012023 **WorkList ID :** 166715 **Department :** Wet-Chemistry **Date :** 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/26/2023	Solid	O1233-09	Percent Solids	Cool 4 deg C	loui01	N11	B-P38B	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-10	Percent Solids	Cool 4 deg C	loui01	N11	WC-38	01/18/2023	Chemtech -SO
01/26/2023	Solid	O1233-11	Percent Solids	Cool 4 deg C	loui01	N11	B-P38C	01/18/2023	Chemtech -SO
01/24/2023	Solid	O1234-01	Percent Solids	Cool 4 deg C	PSEG05	N11	EO-02-11923	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1234-02	Percent Solids	Cool 4 deg C	PSEG05	N11	EO-02-11923	01/19/2023	Chemtech -SO
01/28/2023	Solid	O1235-04	Percent Solids	Cool 4 deg C	ATCE02	N11	12X52	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1235-05	Percent Solids	Cool 4 deg C	ATCE02	N11	12X53	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1235-06	Percent Solids	Cool 4 deg C	ATCE02	N11	12X54	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1235-07	Percent Solids	Cool 4 deg C	ATCE02	N11	12X55	01/18/2023	Chemtech -SO
01/24/2023	Solid	O1237-01	Percent Solids	Cool 4 deg C	PSEG03	N12	COMP-1-2-3A	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1237-02	Percent Solids	Cool 4 deg C	PSEG03	N12	3A	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1238-01	Percent Solids	Cool 4 deg C	PSEG03	N12	RBRB22281-OILY-DEBRIS	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1239-01	Percent Solids	Cool 4 deg C	PSEG03	N12	BORING-3	01/19/2023	Chemtech -SO
01/26/2023	Solid	O1239-03	Percent Solids	Cool 4 deg C	PSEG03	N12	BORING-3-EPH-2	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1240-01	Percent Solids	Cool 4 deg C	PSEG05	N12	TR-05-011923	01/19/2023	Chemtech -SO
01/24/2023	Solid	O1240-02	Percent Solids	Cool 4 deg C	PSEG05	N12	TR-05-011923-EPH-2	01/19/2023	Chemtech -SO
01/27/2023	Solid	O1241-01	Percent Solids	Cool 4 deg C	PSEG03	N11	34326-FRONT	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-02	Percent Solids	Cool 4 deg C	PSEG03	N11	34326-BACK	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-03	Percent Solids	Cool 4 deg C	PSEG03	N11	34327-FRONT	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-04	Percent Solids	Cool 4 deg C	PSEG03	N11	34327-BACK	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-05	Percent Solids	Cool 4 deg C	PSEG03	N11	34328-FRONT	01/20/2023	Chemtech -SO

Date/Time 01.20.23 15:45

Raw Sample Received by: JP (WC)

Raw Sample Relinquished by: JD CSM)

Date/Time 01.20.23 17:25

Raw Sample Received by: JD CSM)

Raw Sample Relinquished by: JP (WC)

UB 123747

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-012023 **WorkList ID :** 166715 **Department :** Wet-Chemistry **Date :** 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/27/2023	Solid	O1241-06	Percent Solids	Cool 4 deg C	PSEG03	N11	34328BACK	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-07	Percent Solids	Cool 4 deg C	PSEG03	N11	343269-FRONT	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1241-08	Percent Solids	Cool 4 deg C	PSEG03	N11	34329-BACK	01/20/2023	Chemtech -SO
01/28/2023	Solid	O1243-01	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-0-10	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1243-02	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-0-10	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1243-03	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-10-20	01/18/2023	Chemtech -SO
01/28/2023	Solid	O1243-04	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-10-20	01/18/2023	Chemtech -SO
01/29/2023	Solid	O1243-05	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-20-30	01/19/2023	Chemtech -SO
01/29/2023	Solid	O1243-06	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-20-30	01/19/2023	Chemtech -SO
01/29/2023	Solid	O1243-07	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-30-40	01/19/2023	Chemtech -SO
01/29/2023	Solid	O1243-08	Percent Solids	Cool 4 deg C	ENTE01	N11	TJRC-11823-B4-30-40	01/19/2023	Chemtech -SO
01/27/2023	Solid	O1244-01	Percent Solids	Cool 4 deg C	PSEG03	N11	VNJ-223	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1244-02	Percent Solids	Cool 4 deg C	PSEG03	N11	VNJ-223	01/20/2023	Chemtech -SO
01/23/2023	Solid	O1248-05	Percent Solids	Cool 4 deg C	CHEM02	N11	SVOC-GPC-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-06	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-07	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC-BLANK-SPIKE	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-08	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GPC-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-09	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GPC-BLANK-SPIKE	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-10	Percent Solids	Cool 4 deg C	CHEM02	N11	SVOC-GPC2-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-11	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC2-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-12	Percent Solids	Cool 4 deg C	CHEM02	N11	PEST-GPC2-BLANK-SPIKE	01/13/2023	Chemtech -SO

Date/Time 01.20.23 15:45

Raw Sample Received by: JP (WC)

Raw Sample Relinquished by: JD CSM

Date/Time 01.20.23 17:25

Raw Sample Received by: JD CSM

Raw Sample Relinquished by: JP (WC)

1P223747

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-012023 **WorkList ID :** 166715 **Department :** Wet-Chemistry **Date :** 01-20-2023 09:10:27

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
01/23/2023	Solid	O1248-13	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GCP2-BLANK	01/13/2023	Chemtech -SO
01/23/2023	Solid	O1248-14	Percent Solids	Cool 4 deg C	CHEM02	N11	PCB-GCP2-BLANK-SPIKE	01/13/2023	Chemtech -SO
01/25/2023	Solid	O1251-01	Percent Solids	Cool 4 deg C	SOUN03	N11	COMP-1	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-03	Percent Solids	Cool 4 deg C	SOUN03	N11	EPH-1	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-05	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-1	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-06	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-07	Percent Solids	Cool 4 deg C	SOUN03	N11	COMP-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-09	Percent Solids	Cool 4 deg C	SOUN03	N11	EPH-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-11	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-3	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1251-12	Percent Solids	Cool 4 deg C	SOUN03	N11	TOT-VOC-4	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1252-01	Percent Solids	Cool 4 deg C	PSEG03	N11	MH-9	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1252-02	Percent Solids	Cool 4 deg C	PSEG03	N11	MH-9-EPH	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1253-01	Percent Solids	Cool 4 deg C	PSEG05	N13	SU-04-012023	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1253-02	Percent Solids	Cool 4 deg C	PSEG05	N13	SU-04-012023-EPH-2	01/20/2023	Chemtech -SO
01/26/2023	Solid	O1254-01	Percent Solids	Cool 4 deg C	PSEG05	N11	HR-04-012023	01/20/2023	Chemtech -SO
01/26/2023	Solid	O1254-02	Percent Solids	Cool 4 deg C	PSEG05	N11	HR-04-012023-EPH-2	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1255-01	Percent Solids	Cool 4 deg C	PSEG03	N11	BORING-1	01/20/2023	Chemtech -SO
01/27/2023	Solid	O1255-03	Percent Solids	Cool 4 deg C	PSEG03	N11	BORING-1-EPH-2	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1256-01	Percent Solids	Cool 4 deg C	PSEG05	N11	OR-02-012023	01/20/2023	Chemtech -SO
01/25/2023	Solid	O1256-02	Percent Solids	Cool 4 deg C	PSEG05	N11	OR-02-012023-EPH-2	01/20/2023	Chemtech -SO
01/23/2023	Solid	O1258-01	Percent Solids	Cool 4 deg C	RMJE02	N11	WASTE-VOA-2	01/20/2023	Chemtech -SO

Date/Time 01.20.23 15:45
Raw Sample Received by: JP (WC)
Raw Sample Relinquished by: JD CSM

Date/Time 01.20.23 17:25
Raw Sample Received by: JD CSM
Raw Sample Relinquished by: JP (WC)

CHEMTECH

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: 01232/33

COC Number:

CLIENT INFORMATION

COMPANY: Louis Berger dba WSP USA Inc.
ADDRESS: 350 Mt. Kemble Ave
CITY Morristown STATE: NJ ZIP: 07962
ATTENTION: Jonathan Ganz (Jon.Ganz@wsp.com)
PHONE: 212-612-7995 FAX:

PROJECT INFORMATION

PROJECT NAME: HWR1140A PCSMP Ph II SCI
PROJECT #: 31202661.297 Task 02 LOCATION: Staten Island
PROJECT MANAGER: Jon Ganz
E-MAIL: Jon.Ganz@wsp.com
PHONE: 212-612-7995 FAX:

BILLING INFORMATION

BILL TO: Louis Berger PO# 31202661.297 Task 02
ADDRESS: 350 Mt. Kemble Ave
CITY: Morristown STATE: NJ ZIP: 07962
ATTENTION: Jon Ganz PHONE: 212-612-7995

DATA TURNAROUND INFORMATION

FAX:_____DAYS
HARD COPY:_____DAYS*
EDD See Contract Rates below DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

TCL VOC - 2 days
TCL SVOC - 5 days
PAH - 5 days
TPH GRO/DRO - 3 days
TAL Metals - 5 Days
PCBs and Pesticides - 5 Day
TCLP RCRA Metals - 5 Day
RCRA Characteristics and Paint Filter - 3 Days

DATA DELIVERABLE INFORMATION

☐ RESEULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other_____

Level 2

☐ EDD Format_____

ANALYSIS

1	2	3	4	5	6	7	8	9
TCL VOC (8260C)	TCL SVOC (8270C/625)	TCL Pest (8081A/608)	PCB (3550B, 8082/608)	TAL Metals (7471A and 6010B)	PCBs (8082), PAHs (8270)	TCLP Metals (RCRA 8) EPA 1311/ 6010B	RCRA Char- EPA 9012B/9034, 1030/1010A, 9045C, 9095B	TPH-DRO/GRO (8015B), Paint Filter Test (EPA 9095B)

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	B-P17A	soil		X	1/18/23	0950	1	X	X	X	X	X					
2.	B-P17B	soil		X	1/18/23	1005	1	X	X	X	X	X					
3.	WC17	soil	X		1/18/23	1010	1						X	X	X	X	
4.	B-P18A			X	1/18/23	1025		X	X	X	X	X					
5.	B-P18B			X	1/18/23	1045		X	X	X	X	X					
6.	B-P19A			X	1/18/23	1125		X	X	X	X	X					
7.	B-P19B			X	1/18/23	1135		X	X	X	X	X					
8.	B-P35A			X	1/18/23	1225		X	X	X	X	X					
9.	B-P35B			X	1/18/23	1245		X	X	X	X	X					
10.	DUP01			X	—	—		X	X	X	X	X					

PRESERVATIVES (E-ICE)

COMMENTS <-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

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

	DATE/TIME		
1. RELINQUISHED BY SAMPLER	1/19/23	1. RECEIVED BY	1333 1-19-23
2. RELINQUISHED BY	DATE/TIME	2. RECEIVED BY	
3. RELINQUISHED BY	DATE/TIME 1806 1-19-23	3. RECEIVED FOR LAB BY	—

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 3.0
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?:_____
Comments:

Page 1 of 3

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: 01232/33

COC Number:

CLIENT INFORMATION

COMPANY: Louis Berger dba WSP USA Inc.
ADDRESS: 350 Mt. Kemble Ave
CITY Morristown STATE: NJ ZIP: 07962
ATTENTION: Jonathan Ganz (Jon.Ganz@wsp.com)
PHONE: 212-612-7995 FAX:

PROJECT INFORMATION

PROJECT NAME: HWR1140A PCSMP Ph II SCI
PROJECT #: 31202661.297 Task 02 LOCATION: Staten Island
PROJECT MANAGER: Jon Ganz
E-MAIL: Jon.Ganz@wsp.com
PHONE: 212-612-7995 FAX:

BILLING INFORMATION

BILL TO: Louis Berger PO# 31202661.297 Task 02
ADDRESS: 350 Mt. Kemble Ave
CITY: Morristown STATE: NJ ZIP: 07962
ATTENTION: Jon Ganz PHONE: 212-612-7995

DATA TURNAROUND INFORMATION

FAX:_____DAYS
HARD COPY:_____DAYS*
EDD See Contract Rates below DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

TCL VOC - 2 days
TCL SVOC - 5 days
PAH - 5 days
TPH GRO/DRO - 3 days
TAL Metals - 5 Days
PCBs and Pesticides - 5 Day
TCLP RCRA Metals - 5 Day
RCRA Characteristics and Paint Fitler - 3 Days

DATA DELIVERABLE INFORMATION

❑ RESEULTS ONLY ❑ USEPA CLP
❑ RESULTS + QC ❑ New York State ASP "B"
❑ New Jersey REDUCED ❑ New York State ASP "A"
❑ New Jersey CLP ❑ Other_____

Level 2

❑ EDD Format_____

ANALYSIS

1	2	3	4	5	6	7	8	9
TCL VOC (8260C)	TCL SVOC (8270C/625)	TCL Pest (8081A/608)	PCB (3550B, 8082/608)	TAL Metals (7471A and 6010B)	PCBs (8082), PAHs (8270)	TCLP Metals (RCRA 8) EPA 1311/ 6010B	RCRA Char- EPA 9012B/9034, 1030/1010A, 9045C, 9095B	TPH-DRO/GRO (8015B), Paint Filter Test (EPA 9095B)

PRESERVATIVES

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	1	2	3	4	5	6	7	8	9	COMMENTS
1.	FB01	Field Blank			1/18/23	1205	2	X	X	X	X	X					HCl Preservative
2.	B-P34A	soil		X	1/18/23	2115	1	X	X	X	X	X					Ice Preservative
3.	B-P34B	soil		X	1/18/23	2140	1	X	X	X	X	X					
4.	B-P36A			X		2210	1	X	X	X	X	X					
5.	B-P36B			X		2225	1	X	X	X	X	X					
6.	B-P37A			X		2300	1	X	X	X	X	X					
7.	B-P37B			X		2315	1	X	X	X	X	X					
8.	B-38A			X		2345	1	X	X	X	X	X					
9.	B-P38B			X		2355	1	X	X	X	X	X					
10.	~~WC38~~ WC38		X			2355	1						X	X	X	X	

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

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	1/19/23	1. 1333 1.19.23
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.		2.
RELINQUISHED BY	DATE/TIME 1855	RECEIVED FOR LAB BY
3.	1-19-23	3.

Conditions of bottles or coolers at receipt: ❑ Compliant ❑ Non Compliant ❑ Cooler Temp 3.0
MeOH extraction requires an additional 4oz. Jar for percent solid ❑ Ice in Cooler?:_____
Comments:

SHIPPED VIA: CLIENT: ❑ Hand Delivered ❑ Overnight
CHEMTECH: ❑ Picked Up ❑ Overnight

Shipment Complete ❑ YES ❑ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: 01232/33

COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Louis Berger dba WSP USA Inc.	PROJECT NAME: HWR1140A PCSMP Ph II SCI	BILL TO: Louis Berger PO# 31202661.297 Task 02
ADDRESS: 350 Mt. Kemble Ave	PROJECT #: 31202661.297 Task 02 LOCATION: Staten Island	ADDRESS: 350 Mt. Kemble Ave
CITY Morristown STATE: NJ ZIP: 07962	PROJECT MANAGER: Jon Ganz	CITY: Morristown STATE: NJ ZIP: 07962
ATTENTION: Jonathan Ganz (Jon.Ganz@wsp.com)	E-MAIL: Jon.Ganz@wsp.com	ATTENTION: Jon Ganz PHONE: 212-612-7995
PHONE: 212-612-7995 FAX:	PHONE: 212-612-7995 FAX:	

DATA TURNAROUND INFORMATION

FAX:_____ DAYS
HARD COPY:_____DAYS*
EDD See Contract Rates below DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

TCL VOC - 2 days
TCL SVOC - 5 days
PAH - 5 days
TPH GRO/DRO - 3 days
TAL Metals - 5 Days
PCBs and Pesticides - 5 Day
TCLP RCRA Metals - 5 Day
RCRA Characteristics and Paint Filter - 3 Days

DATA DELIVERABLE INFORMATION

- ❑ RESEULTS ONLY
- ❑ RESULTS + QC
- ❑ New Jersey REDUCED
- ❑ New Jersey CLP
- ❑ USEPA CLP
- ❑ New York State ASP "B"
- ❑ New York State ASP "A"
- ❑ Other_____

Level 2

❑ EDD Format_____

ANALYSIS

1	2	3	4	5	6	7	8	9
TCL VOC (8260C)	TCL SVOC (8270C/625)	TCL Pest (8081A/608)	PCB (3550B, 8082/608)	TAL Metals (7471A and 6010B)	PCBs (8082), PAHs (8270)	TCLP Metals (RCRA 8) EPA 1311/ 6010B	RCRA Char- EPA 9012B/9034, 1030/1010A, 9045C, 9095B	TPH-DRO/GRO (8015B), Paint Filter Test (EPA 9095B)

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	B-P38C	SOIL		X	1/18/23	2350	1	X	X	X	X	X					
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

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

	RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY	DATE/TIME
1.		1/19/23		1333 1-19-23
2.	RELINQUISHED BY	DATE/TIME	RECEIVED BY	
3.	RELINQUISHED BY	DATE/TIME 1800 1-19-23	RECEIVED FOR LAB BY	

Conditions of bottles or coolers at receipt: ❑ Compliant ❑ Non Compliant ❑ Cooler Temp 3.0
MeOH extraction requires an additional 4oz. Jar for percent solid ❑ Ice in Cooler?:_____
Comments:

Page 3 of 3

SHIPPED VIA: CLIENT: ❑ Hand Delivered ❑ Overnight
CHEMTECH: ❑ Picked Up ❑ Overnight

Shipment Complete ❑ YES ❑ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255422
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-23-16

CHEMTECH

LOGIN REPORT/SAMPLE TRANSFER

Order ID : O1232 loui01
Client Name : Louis Berger U.S., Inc., A V
Client Contact : Jonathan Ganz
Invoice Name : Louis Berger U.S., Inc., A V
Invoice Contact : Jonathan Ganz

Order Date : 1/19/2023 1:44:00 PM
Project Name : NYCDDC Phase II SCI Artl
Receive DateTime : 1/19/2023 ~~12:00:00 AM~~ 18:05
Purchase Order :

Project Mgr :
Report Type : Level 1
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
O1232-01	B-P-17A	Solid	01/18/2023	09:50					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-02	B-P-17B	Solid	01/18/2023	10:05					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-04	B-P-18A	Solid	01/18/2023	10:25					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-05	B-P-18B	Solid	01/18/2023	10:45					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-06	B-P-19A	Solid	01/18/2023	11:25					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-07	B-P-19B	Solid	01/18/2023	11:35					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-08	B-P-35A	Solid	01/18/2023	12:25					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-09	B-P-35B	Solid	01/18/2023	12:45					
					VOC-TCLVOA-10		8260D		2 Bus. Days
O1232-10	DUP01	Solid	01/18/2023	00:00					

CHEMTECH

LOGIN REPORT/SAMPLE TRANSFER

Order ID : O1232 loui01
Client Name : Louis Berger U.S., Inc., A V
Client Contact : Jonathan Ganz
Invoice Name : Louis Berger U.S., Inc., A V
Invoice Contact : Jonathan Ganz

Order Date : 1/19/2023 1:44:00 PM
Project Name : NYCDDC Phase II SCI Artl
Receive DateTime : 1/19/2023 ~~12:00:00~~ AM
Purchase Order : 18:05

Project Mgr :
Report Type : Level 1
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOC-TCLVOA-10		8260D	2 Bus. Days	

JAN samples

storedin VOA FRZ # 02

Relinguished By : CL
Date / Time : 1/20/23 9:20

Received By : [signature]
Date / Time : 1/20/23 9:20

Storage Area : VOA Refridgerator Room