

Cover Page

Order ID : Q1574

Project ID : Ave L

Client : G Environmental

Lab Sample Number

Q1574-01
Q1574-02

Client Sample Number

WC1
WC1

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: 3/19/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1574

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

✓

QA Review Signature: KETAN PATEL

Date: 03/19/2025

LAB CHRONICLE

OrderID:	Q1574	OrderDate:	3/14/2025 11:25:00 AM
Client:	G Environmental	Project:	Ave L
Contact:	Gary Landis	Location:	I41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1574-01	WC1	SOIL	VOC-TCLVOA-10	8260D	03/12/25		03/17/25	03/14/25
Q1574-01RE	WC1RE	SOIL	VOC-TCLVOA-10	8260D	03/12/25		03/17/25	03/14/25

Hit Summary Sheet
SW-846

SDG No.: Q1574
Client: G Environmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	WC1							
Q1574-01	WC1	SOIL	Trichlorofluoromethane	1.20	J	1.20	5.10	ug/Kg
			Total Voc :	1.20				
			Total Concentration:	1.20				
Client ID:	WC1RE							
Q1574-01RE	WC1RE	SOIL	Trichlorofluoromethane	1.60	J	1.20	5.00	ug/Kg
Q1574-01RE	WC1RE	SOIL	Acetone	6.60	JQ	4.80	25.1	ug/Kg
			Total Voc :	8.20				
			Total Concentration:	8.20				



QC SUMMARY

Surrogate Summary

SDG No.: **Q1574**

Client: **G Environmental**

Analytical Method: **SW8260D**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1574-01	WC1	1,2-Dichloroethane-d4	50	49.0	98	70 (63)	130 (155)
		Dibromofluoromethane	50	53.6	107	70 (70)	130 (134)
		Toluene-d8	50	45.9	92	70 (74)	130 (123)
		4-Bromofluorobenzene	50	30.1	60 *	70 (38)	130 (136)
Q1574-01RE	WC1RE	1,2-Dichloroethane-d4	50	54.7	109	70 (63)	130 (155)
		Dibromofluoromethane	50	53.9	108	70 (70)	130 (134)
		Toluene-d8	50	46.9	94	70 (74)	130 (123)
		4-Bromofluorobenzene	50	32.8	66 *	70 (38)	130 (136)
VY0317SBL01	VY0317SBL01	1,2-Dichloroethane-d4	50	52.5	105	70 (63)	130 (155)
		Dibromofluoromethane	50	50.1	100	70 (70)	130 (134)
		Toluene-d8	50	48.2	96	70 (74)	130 (123)
		4-Bromofluorobenzene	50	41.1	82	70 (38)	130 (136)
VY0317SBS01	VY0317SBS01	1,2-Dichloroethane-d4	50	52.0	104	70 (63)	130 (155)
		Dibromofluoromethane	50	51.5	103	70 (70)	130 (134)
		Toluene-d8	50	50.2	100	70 (74)	130 (123)
		4-Bromofluorobenzene	50	50.7	101	70 (38)	130 (136)
VY0317SBSD01	VY0317SBSD01	1,2-Dichloroethane-d4	50	51.5	103	70 (63)	130 (155)
		Dibromofluoromethane	50	50.8	102	70 (70)	130 (134)
		Toluene-d8	50	50.3	101	70 (74)	130 (123)
		4-Bromofluorobenzene	50	50.3	101	70 (38)	130 (136)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1574

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021545.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0317SBS01	Dichlorodifluoromethane	20	19.3	ug/Kg	97			40 (64)	160 (136)	
	Chloromethane	20	19.8	ug/Kg	99			40 (70)	160 (130)	
	Vinyl chloride	20	21.2	ug/Kg	106			70 (72)	130 (129)	
	Bromomethane	20	20.4	ug/Kg	102			40 (58)	160 (141)	
	Chloroethane	20	23.1	ug/Kg	116			40 (69)	160 (130)	
	Trichlorofluoromethane	20	24.4	ug/Kg	122			40 (69)	160 (134)	
	1,1,2-Trichlorotrifluoroethane	20	21.4	ug/Kg	107			70 (81)	130 (123)	
	1,1-Dichloroethene	20	20.9	ug/Kg	104			70 (79)	130 (121)	
	Acetone	100	170	ug/Kg	170		*	40 (60)	160 (131)	
	Carbon disulfide	20	18.8	ug/Kg	94			40 (45)	160 (154)	
	Methyl tert-butyl Ether	20	21.6	ug/Kg	108			70 (77)	130 (129)	
	Methyl Acetate	20	22.9	ug/Kg	115			70 (69)	130 (149)	
	Methylene Chloride	20	21.1	ug/Kg	106			70 (56)	130 (174)	
	trans-1,2-Dichloroethene	20	19.9	ug/Kg	100			70 (80)	130 (123)	
	1,1-Dichloroethane	20	20.7	ug/Kg	104			70 (82)	130 (123)	
	Cyclohexane	20	19.0	ug/Kg	95			70 (76)	130 (122)	
	2-Butanone	100	140	ug/Kg	140			40 (69)	160 (131)	
	Carbon Tetrachloride	20	20.8	ug/Kg	104			70 (76)	130 (129)	
	cis-1,2-Dichloroethene	20	20.6	ug/Kg	103			70 (82)	130 (123)	
	Bromochloromethane	20	20.7	ug/Kg	104			70 (80)	130 (127)	
	Chloroform	20	21.3	ug/Kg	106			70 (82)	130 (125)	
	1,1,1-Trichloroethane	20	20.8	ug/Kg	104			70 (80)	130 (126)	
	Methylcyclohexane	20	19.3	ug/Kg	97			70 (77)	130 (123)	
	Benzene	20	20.9	ug/Kg	104			70 (84)	130 (121)	
	1,2-Dichloroethane	20	21.9	ug/Kg	110			70 (81)	130 (126)	
	Trichloroethene	20	20.9	ug/Kg	104			70 (83)	130 (122)	
	1,2-Dichloropropane	20	21.2	ug/Kg	106			70 (83)	130 (122)	
	Bromodichloromethane	20	21.3	ug/Kg	106			70 (82)	130 (123)	
	4-Methyl-2-Pentanone	100	120	ug/Kg	120			40 (70)	160 (135)	
	Toluene	20	20.7	ug/Kg	104			70 (83)	130 (122)	
	t-1,3-Dichloropropene	20	21.4	ug/Kg	107			70 (78)	130 (124)	
	cis-1,3-Dichloropropene	20	21.5	ug/Kg	108			70 (81)	130 (122)	
	1,1,2-Trichloroethane	20	22.3	ug/Kg	112			70 (82)	130 (125)	
	2-Hexanone	100	130	ug/Kg	130			40 (66)	160 (138)	
	Dibromochloromethane	20	22.1	ug/Kg	111			70 (79)	130 (125)	
	1,2-Dibromoethane	20	21.4	ug/Kg	107			70 (80)	130 (125)	
	Tetrachloroethene	20	24.4	ug/Kg	122			70 (83)	130 (125)	
	Chlorobenzene	20	20.6	ug/Kg	103			70 (84)	130 (122)	
	Ethyl Benzene	20	20.0	ug/Kg	100			70 (82)	130 (124)	
	m/p-Xylenes	40	40.8	ug/Kg	102			70 (83)	130 (124)	
	o-Xylene	20	20.1	ug/Kg	101			70 (83)	130 (123)	
	Styrene	20	20.5	ug/Kg	103			70 (82)	130 (124)	
	Bromoform	20	22.5	ug/Kg	113			70 (75)	130 (127)	
	Isopropylbenzene	20	19.9	ug/Kg	100			70 (82)	130 (124)	
	1,1,2,2-Tetrachloroethane	20	21.1	ug/Kg	106			70 (77)	130 (127)	
	1,3-Dichlorobenzene	20	20.0	ug/Kg	100			70 (83)	130 (122)	
	1,4-Dichlorobenzene	20	20.4	ug/Kg	102			70 (84)	130 (121)	
	1,2-Dichlorobenzene	20	21.0	ug/Kg	105			70 (83)	130 (124)	

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1574
Client: G Environmental
Analytical Method: SW8260D **Datafile :** VY021545.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0317SBS01	1,2-Dibromo-3-Chloropropane	20	20.9	ug/Kg	104			40 (66)	160 (134)	
	1,2,4-Trichlorobenzene	20	20.1	ug/Kg	101			70 (78)	130 (127)	
	1,2,3-Trichlorobenzene	20	20.8	ug/Kg	104			70 (70)	130 (137)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1574

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021546.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0317SBSD01	Dichlorodifluoromethane	20	16.2	ug/Kg	81	18		40 (64)	160 (136)	30 (20)
	Chloromethane	20	17.0	ug/Kg	85	15		40 (70)	160 (130)	30 (20)
	Vinyl chloride	20	18.2	ug/Kg	91	15		70 (72)	130 (129)	30 (20)
	Bromomethane	20	17.8	ug/Kg	89	14		40 (58)	160 (141)	30 (20)
	Chloroethane	20	18.4	ug/Kg	92	23		40 (69)	160 (130)	30 (20)
	Trichlorofluoromethane	20	17.8	ug/Kg	89	31	*	40 (69)	160 (134)	30 (20)
	1,1,2-Trichlorotrifluoroethane	20	17.9	ug/Kg	90	17		70 (81)	130 (123)	30 (20)
	1,1-Dichloroethene	20	17.0	ug/Kg	85	20		70 (79)	130 (121)	30 (20)
	Acetone	100	120	ug/Kg	120	34	*	40 (60)	160 (131)	30 (20)
	Carbon disulfide	20	15.7	ug/Kg	79	17		40 (45)	160 (154)	30 (20)
	Methyl tert-butyl Ether	20	17.9	ug/Kg	90	18		70 (77)	130 (129)	30 (20)
	Methyl Acetate	20	20.0	ug/Kg	100	14		70 (69)	130 (149)	30 (20)
	Methylene Chloride	20	18.1	ug/Kg	91	15		70 (56)	130 (174)	30 (20)
	trans-1,2-Dichloroethene	20	17.3	ug/Kg	86	15		70 (80)	130 (123)	30 (20)
	1,1-Dichloroethane	20	18.1	ug/Kg	91	13		70 (82)	130 (123)	30 (20)
	Cyclohexane	20	15.8	ug/Kg	79	18		70 (76)	130 (122)	30 (20)
	2-Butanone	100	100	ug/Kg	100	33	*	40 (69)	160 (131)	30 (20)
	Carbon Tetrachloride	20	17.5	ug/Kg	88	17		70 (76)	130 (129)	30 (20)
	cis-1,2-Dichloroethene	20	17.6	ug/Kg	88	16		70 (82)	130 (123)	30 (20)
	Bromochloromethane	20	20.0	ug/Kg	100	4		70 (80)	130 (127)	30 (20)
	Chloroform	20	18.1	ug/Kg	91	15		70 (82)	130 (125)	30 (20)
	1,1,1-Trichloroethane	20	17.5	ug/Kg	88	17		70 (80)	130 (126)	30 (20)
	Methylcyclohexane	20	16.1	ug/Kg	81	18		70 (77)	130 (123)	30 (20)
	Benzene	20	17.6	ug/Kg	88	17		70 (84)	130 (121)	30 (20)
	1,2-Dichloroethane	20	18.4	ug/Kg	92	18		70 (81)	130 (126)	30 (20)
	Trichloroethene	20	18.0	ug/Kg	90	14		70 (83)	130 (122)	30 (20)
	1,2-Dichloropropane	20	18.0	ug/Kg	90	16		70 (83)	130 (122)	30 (20)
	Bromodichloromethane	20	18.4	ug/Kg	92	14		70 (82)	130 (123)	30 (20)
	4-Methyl-2-Pentanone	100	95.8	ug/Kg	96	22		40 (70)	160 (135)	30 (20)
	Toluene	20	17.4	ug/Kg	87	18		70 (83)	130 (122)	30 (20)
	t-1,3-Dichloropropene	20	18.4	ug/Kg	92	15		70 (78)	130 (124)	30 (20)
	cis-1,3-Dichloropropene	20	18.2	ug/Kg	91	17		70 (81)	130 (122)	30 (20)
	1,1,2-Trichloroethane	20	19.2	ug/Kg	96	15		70 (82)	130 (125)	30 (20)
	2-Hexanone	100	100	ug/Kg	100	26		40 (66)	160 (138)	30 (20)
	Dibromochloromethane	20	18.7	ug/Kg	94	17		70 (79)	130 (125)	30 (20)
	1,2-Dibromoethane	20	18.2	ug/Kg	91	16		70 (80)	130 (125)	30 (20)
	Tetrachloroethene	20	20.6	ug/Kg	103	17		70 (83)	130 (125)	30 (20)
	Chlorobenzene	20	17.9	ug/Kg	90	13		70 (84)	130 (122)	30 (20)
	Ethyl Benzene	20	17.2	ug/Kg	86	15		70 (82)	130 (124)	30 (20)
	m/p-Xylenes	40	34.6	ug/Kg	86	17		70 (83)	130 (124)	30 (20)
	o-Xylene	20	17.4	ug/Kg	87	15		70 (83)	130 (123)	30 (20)
	Styrene	20	17.6	ug/Kg	88	16		70 (82)	130 (124)	30 (20)
	Bromoform	20	18.8	ug/Kg	94	18		70 (75)	130 (127)	30 (20)
	Isopropylbenzene	20	16.7	ug/Kg	84	17		70 (82)	130 (124)	30 (20)
	1,1,2,2-Tetrachloroethane	20	17.5	ug/Kg	88	19		70 (77)	130 (127)	30 (20)
	1,3-Dichlorobenzene	20	17.1	ug/Kg	86	15		70 (83)	130 (122)	30 (20)
	1,4-Dichlorobenzene	20	17.4	ug/Kg	87	16		70 (84)	130 (121)	30 (20)
	1,2-Dichlorobenzene	20	17.6	ug/Kg	88	18		70 (83)	130 (124)	30 (20)

() = LABORATORY INHOUSE LIMIT

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1574

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021546.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0317SBSD01	1,2-Dibromo-3-Chloropropane	20	18.1	ug/Kg	91	13		40 (66)	160 (134)	30 (20)
	1,2,4-Trichlorobenzene	20	17.1	ug/Kg	86	16		70 (78)	130 (127)	30 (20)
	1,2,3-Trichlorobenzene	20	17.8	ug/Kg	89	16		70 (70)	130 (137)	30 (20)

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0317SBL01

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q1574

SAS No.: Q1574 SDG NO.: Q1574

Lab File ID: VY021544.D

Lab Sample ID: VY0317SBL01

Date Analyzed: 03/17/2025

Time Analyzed: 10:39

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
VY0317SBS01	VY0317SBS01	VY021545.D	03/17/2025
VY0317SBSD01	VY0317SBSD01	VY021546.D	03/17/2025
WC1	Q1574-01	VY021549.D	03/17/2025
WC1RE	Q1574-01RE	VY021552.D	03/17/2025

COMMENTS: _____



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG NO.: Q1574
Lab File ID: VY021395.D BFB Injection Date: 03/04/2025
Instrument ID: MSVOA_Y BFB Injection Time: 08:52
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	54.3
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	1.4 (1.8) 1
174	50.0 - 100.0% of mass 95	77.8
175	5.0 - 9.0% of mass 174	6.6 (8.4) 1
176	95.0 - 101.0% of mass 174	75.7 (97.2) 1
177	5.0 - 9.0% of mass 176	5 (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
VSTDIC010	VSTDIC010	VY021397.D	03/04/2025	09:46
VSTDIC020	VSTDIC020	VY021398.D	03/04/2025	10:09
VSTDIC050	VSTDIC050	VY021399.D	03/04/2025	10:30
VSTDIC100	VSTDIC100	VY021400.D	03/04/2025	11:06
VSTDIC150	VSTDIC150	VY021401.D	03/04/2025	11:29
VSTDIC005	VSTDIC005	VY021403.D	03/04/2025	12:15



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

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG NO.: Q1574
Lab File ID: VY021542.D BFB Injection Date: 03/17/2025
Instrument ID: MSVOA_Y BFB Injection Time: 09:26
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	20.9
75	30.0 - 60.0% of mass 95	53.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	1 (1.2) 1
174	50.0 - 100.0% of mass 95	80.8
175	5.0 - 9.0% of mass 174	6.4 (7.9) 1
176	95.0 - 101.0% of mass 174	77.4 (95.8) 1
177	5.0 - 9.0% of mass 176	5.2 (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	VY021543.D	03/17/2025	10:04
VY0317SBL01	VY0317SBL01	VY021544.D	03/17/2025	10:39
VY0317SBS01	VY0317SBS01	VY021545.D	03/17/2025	12:49
VY0317SBSD01	VY0317SBSD01	VY021546.D	03/17/2025	13:12
WC1	Q1574-01	VY021549.D	03/17/2025	14:26
WC1RE	Q1574-01RE	VY021552.D	03/17/2025	15:55

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG NO.: Q1574
Lab File ID: VY021543.D Date Analyzed: 03/17/2025
Instrument ID: MSVOA_Y Time Analyzed: 10:04
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	202760	7.71	316994	8.62	284592	11.42
UPPER LIMIT	405520	8.207	633988	9.116	569184	11.92
LOWER LIMIT	101380	7.207	158497	8.116	142296	10.92
EPA SAMPLE NO.						
WC1	98896 *	7.71	155221 *	8.62	116517 *	11.41
WC1RE	140963	7.71	240910	8.62	190816	11.41
VY0317SBL01	272314	7.71	493002	8.62	420924	11.41
VY0317SBS01	209203	7.71	320346	8.62	284395	11.42
VY0317SBSD01	219903	7.71	338794	8.62	299964	11.41

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG NO.: Q1574
 Lab File ID: VY021543.D Date Analyzed: 03/17/2025
 Instrument ID: MSVOA_Y Time Analyzed: 10:04
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	146377	13.346				
UPPER LIMIT	292754	13.846				
LOWER LIMIT	73188.5	12.846				
EPA SAMPLE NO.						
WC1	33476 *	13.35				
WC1RE	59425 *	13.35				
VY0317SBL01	158203	13.35				
VY0317SBS01	146283	13.35				
VY0317SBSD01	155756	13.35				

IS4 = 1,4-Dichlorobenzene-d4

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

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



SAMPLE DATA

Report of Analysis

Client:	G Environmental	Date Collected:	03/12/25
Project:	Ave L	Date Received:	03/14/25
Client Sample ID:	WC1	SDG No.:	Q1574
Lab Sample ID:	Q1574-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	98
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
VY021549.D	1		03/17/25 14:26	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.20	U	1.20	5.10	ug/Kg
74-87-3	Chloromethane	1.20	U	1.20	5.10	ug/Kg
75-01-4	Vinyl Chloride	0.80	U	0.80	5.10	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.10	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.10	ug/Kg
75-69-4	Trichlorofluoromethane	1.20	J	1.20	5.10	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.10	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.10	ug/Kg
67-64-1	Acetone	4.80	UQ	4.80	25.4	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.74	U	0.74	5.10	ug/Kg
79-20-9	Methyl Acetate	1.60	U	1.60	5.10	ug/Kg
75-09-2	Methylene Chloride	3.60	U	3.60	10.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.87	U	0.87	5.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.81	U	0.81	5.10	ug/Kg
110-82-7	Cyclohexane	0.80	U	0.80	5.10	ug/Kg
78-93-3	2-Butanone	6.60	U	6.60	25.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.99	U	0.99	5.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.76	U	0.76	5.10	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.10	ug/Kg
67-66-3	Chloroform	0.85	U	0.85	5.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.95	U	0.95	5.10	ug/Kg
108-87-2	Methylcyclohexane	0.92	U	0.92	5.10	ug/Kg
71-43-2	Benzene	0.80	U	0.80	5.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.80	U	0.80	5.10	ug/Kg
79-01-6	Trichloroethene	0.82	U	0.82	5.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.92	U	0.92	5.10	ug/Kg
75-27-4	Bromodichloromethane	0.79	U	0.79	5.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	25.4	ug/Kg
108-88-3	Toluene	0.79	U	0.79	5.10	ug/Kg

Report of Analysis

Client:	G Environmental		Date Collected:	03/12/25	
Project:	Ave L		Date Received:	03/14/25	
Client Sample ID:	WC1		SDG No.:	Q1574	
Lab Sample ID:	Q1574-01		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	98	
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
VY021549.D	1		03/17/25 14:26	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.66	U	0.66	5.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.63	U	0.63	5.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.94	U	0.94	5.10	ug/Kg
591-78-6	2-Hexanone	3.80	U	3.80	25.4	ug/Kg
124-48-1	Dibromochloromethane	0.88	U	0.88	5.10	ug/Kg
106-93-4	1,2-Dibromoethane	0.89	U	0.89	5.10	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.10	ug/Kg
108-90-7	Chlorobenzene	0.92	U	0.92	5.10	ug/Kg
100-41-4	Ethyl Benzene	0.68	U	0.68	5.10	ug/Kg
179601-23-1	m/p-Xylenes	1.30	U	1.30	10.2	ug/Kg
95-47-6	o-Xylene	0.83	U	0.83	5.10	ug/Kg
100-42-5	Styrene	0.72	U	0.72	5.10	ug/Kg
75-25-2	Bromoform	0.87	U	0.87	5.10	ug/Kg
98-82-8	Isopropylbenzene	0.79	U	0.79	5.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.10	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.10	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.10	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.10	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.90	U	1.90	5.10	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.10	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.0		70 (63) - 130 (155)	98%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		70 (70) - 130 (134)	107%	SPK: 50
2037-26-5	Toluene-d8	45.9		70 (74) - 130 (123)	92%	SPK: 50
460-00-4	4-Bromofluorobenzene	30.1	*	70 (38) - 130 (136)	60%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	98900	7.707			
540-36-3	1,4-Difluorobenzene	155000	8.616			
3114-55-4	Chlorobenzene-d5	117000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	33500	13.347			



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

Report of Analysis

Client:	G Environmental		Date Collected:	03/12/25	
Project:	Ave L		Date Received:	03/14/25	
Client Sample ID:	WC1		SDG No.:	Q1574	
Lab Sample ID:	Q1574-01		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	98	
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
VY021549.D	1		03/17/25 14:26	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021549.D
 Acq On : 17 Mar 2025 14:26
 Operator : SY/MD
 Sample : Q1574-01
 Misc : 5.02g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 WC1

Quant Time: Mar 18 01:27:13 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

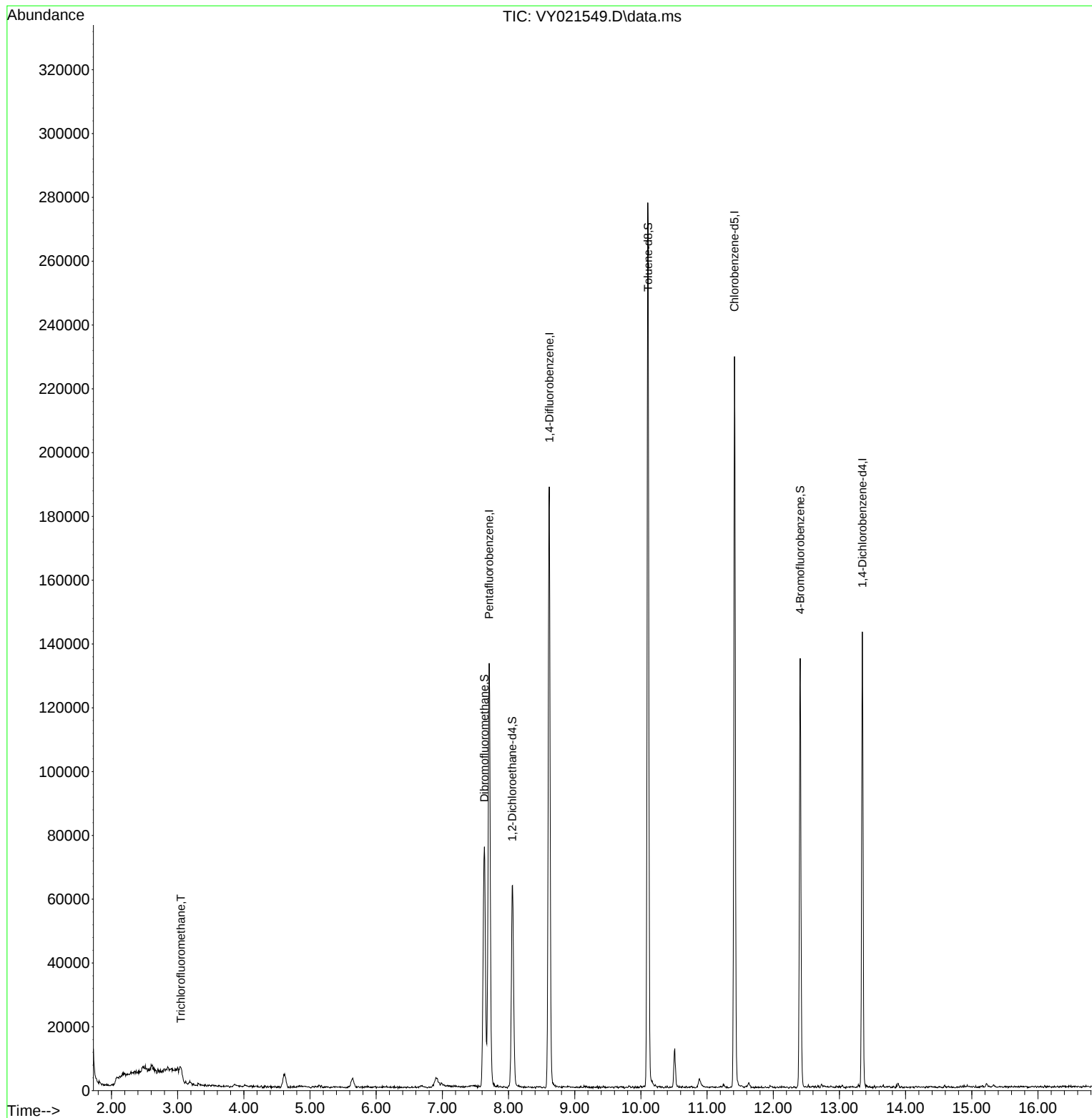
Internal Standards						
1) Pentafluorobenzene	7.707	168	98896	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	155221	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	116517	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	33476	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.055	65	51252	49.032	ug/l	-0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	=	98.060%
35) Dibromofluoromethane	7.634	113	54695	53.607	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	107.220%
50) Toluene-d8	10.109	98	177431	45.929	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	91.860%
62) 4-Bromofluorobenzene	12.408	95	39595	30.131	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	60.260%
Target Compounds						
7) Trichlorofluoromethane	3.050	101	2375	1.217	ug/l	# 80

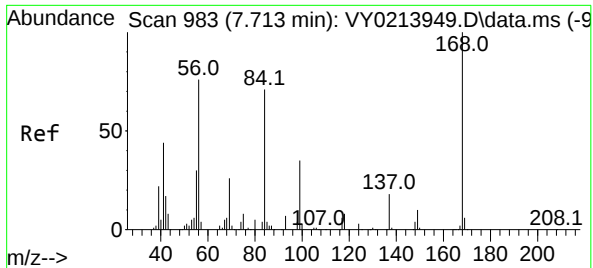
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021549.D
Acq On : 17 Mar 2025 14:26
Operator : SY/MD
Sample : Q1574-01
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
WC1

Quant Time: Mar 18 01:27:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

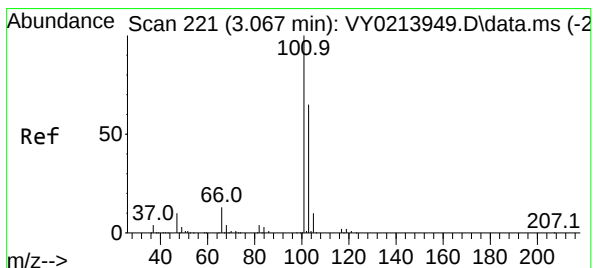
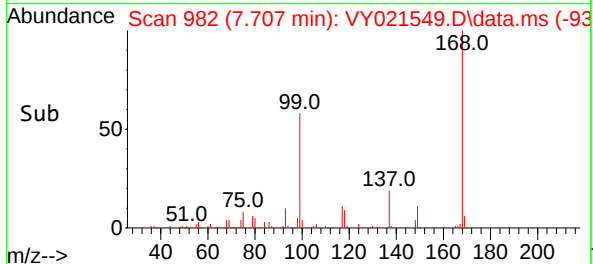
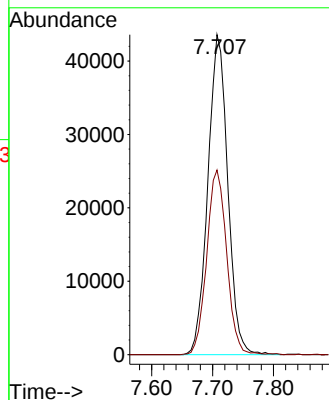
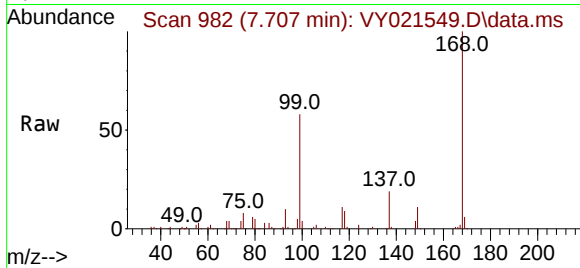




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021549.D
Acq: 17 Mar 2025 14:26

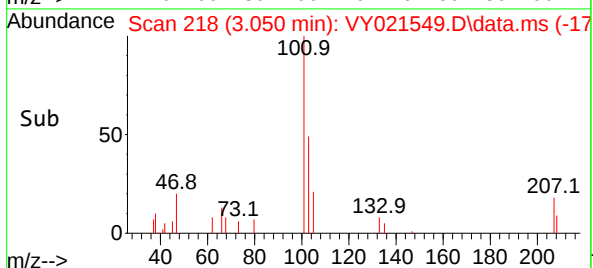
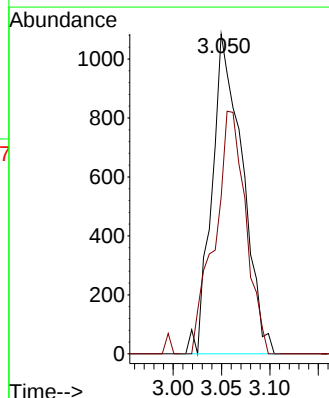
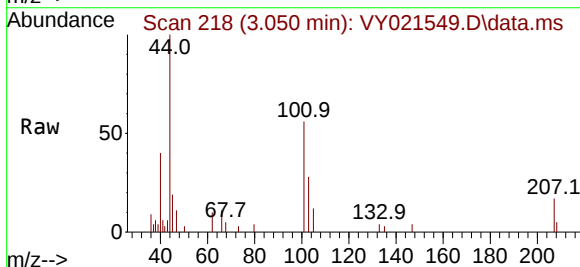
Instrument :
MSVOA_Y
ClientSampleId :
WC1

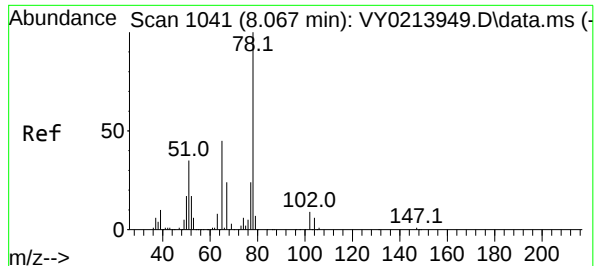
Tgt Ion:168 Resp: 98896
Ion Ratio Lower Upper
168 100
99 57.7 46.0 69.0



#7
Trichlorofluoromethane
Concen: 1.217 ug/l
RT: 3.050 min Scan# 218
Delta R.T. -0.018 min
Lab File: VY021549.D
Acq: 17 Mar 2025 14:26

Tgt Ion:101 Resp: 2375
Ion Ratio Lower Upper
101 100
103 49.0 51.7 77.5#





#33

1,2-Dichloroethane-d4

Concen: 49.032 ug/l

RT: 8.055 min Scan# 110

Delta R.T. -0.012 min

Lab File: VY021549.D

Acq: 17 Mar 2025 14:26

Instrument :

MSVOA_Y

ClientSampleId :

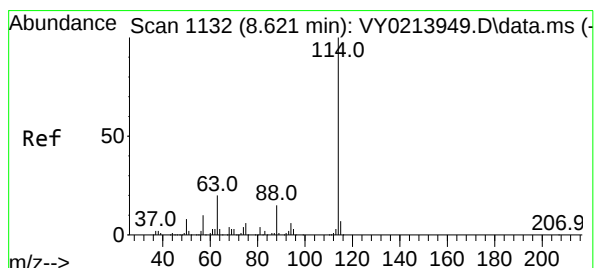
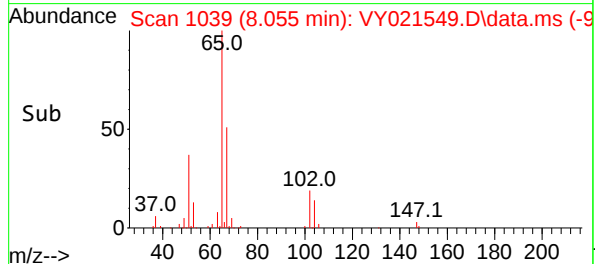
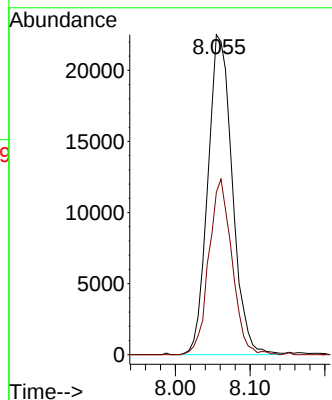
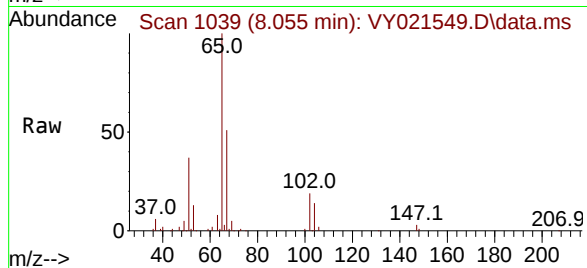
WC1

Tgt Ion: 65 Resp: 51252

Ion Ratio Lower Upper

65 100

67 51.8 0.0 102.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1131

Delta R.T. -0.006 min

Lab File: VY021549.D

Acq: 17 Mar 2025 14:26

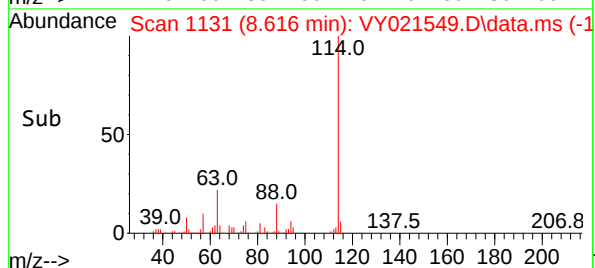
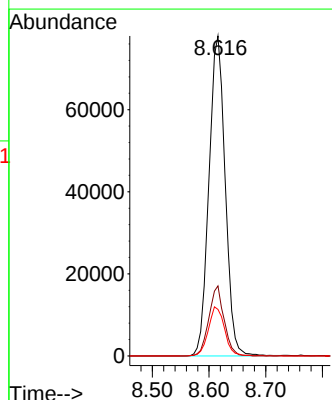
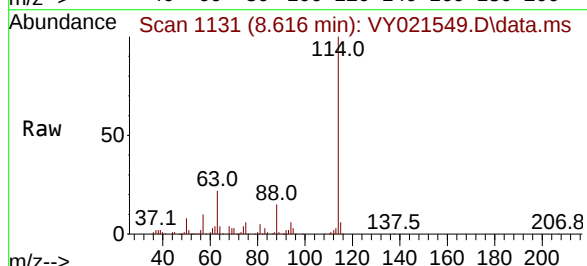
Tgt Ion: 114 Resp: 155221

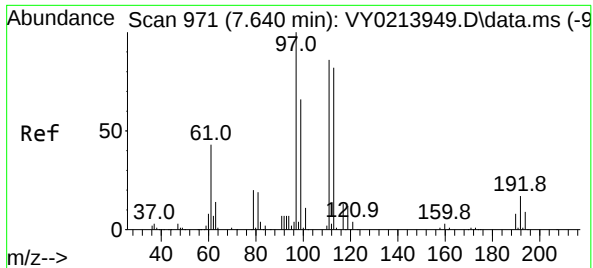
Ion Ratio Lower Upper

114 100

63 21.9 0.0 40.8

88 14.5 0.0 30.8





#35

Dibromofluoromethane

Concen: 53.607 ug/l

RT: 7.634 min Scan# 91

Delta R.T. -0.006 min

Lab File: VY021549.D

Acq: 17 Mar 2025 14:26

Instrument :

MSVOA_Y

ClientSampleId :

WC1

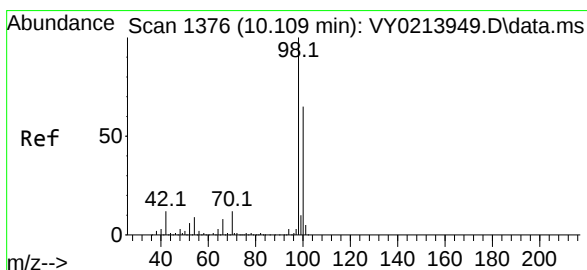
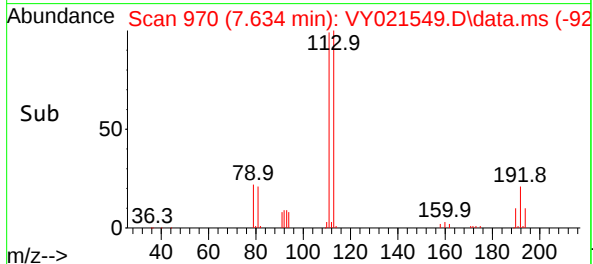
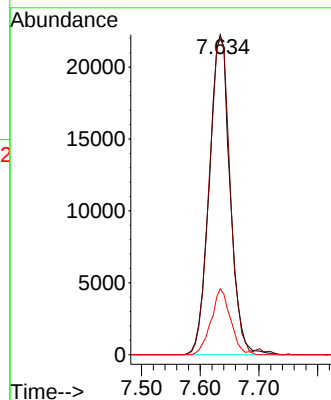
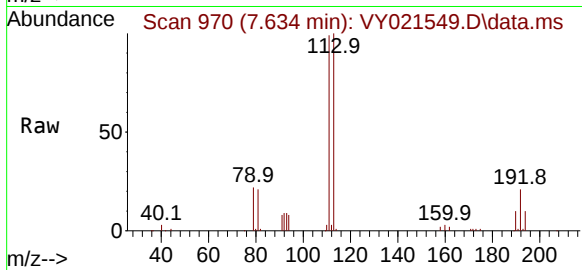
Tgt Ion:113 Resp: 54695

Ion Ratio Lower Upper

113 100

111 99.3 82.0 123.0

192 19.2 15.9 23.9



#50

Toluene-d8

Concen: 45.929 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021549.D

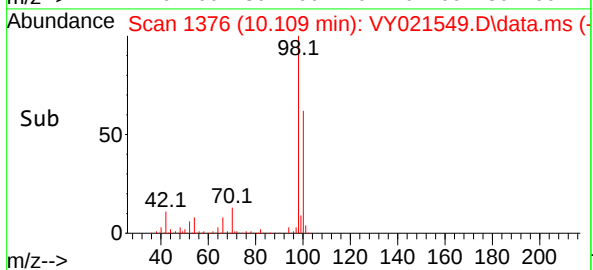
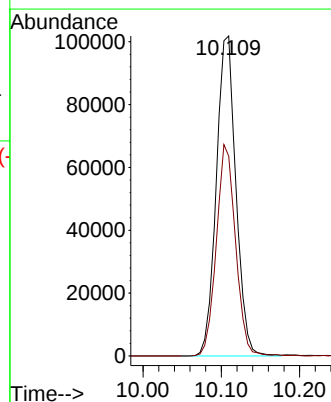
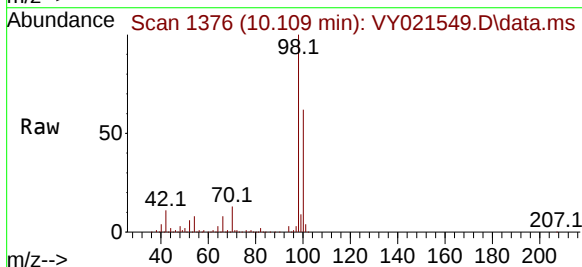
Acq: 17 Mar 2025 14:26

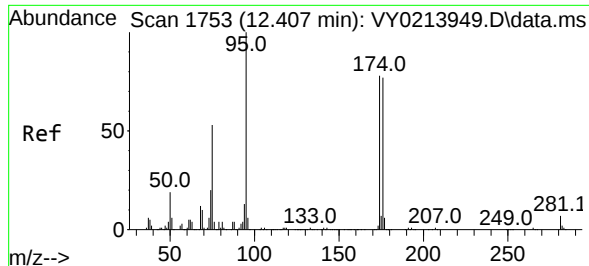
Tgt Ion: 98 Resp: 177431

Ion Ratio Lower Upper

98 100

100 64.8 52.1 78.1





#62

4-Bromofluorobenzene

Concen: 30.131 ug/l

RT: 12.408 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021549.D

Acq: 17 Mar 2025 14:26

Instrument :

MSVOA_Y

ClientSampleId :

WC1

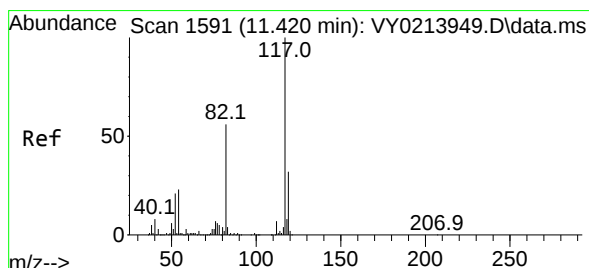
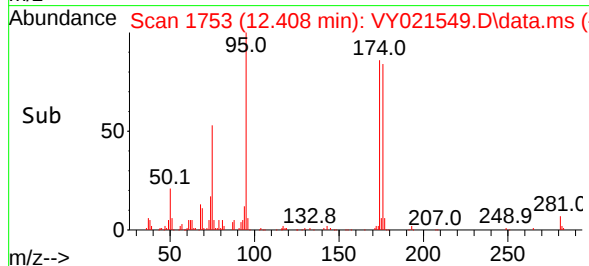
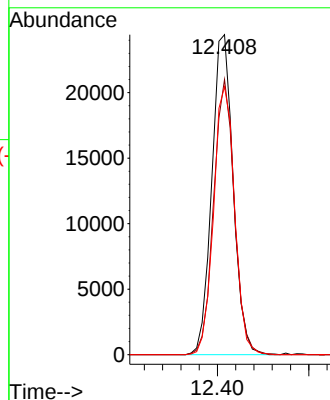
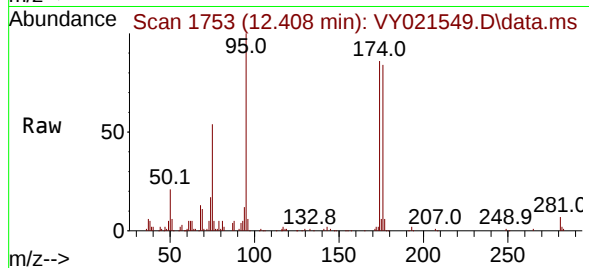
Tgt Ion: 95 Resp: 39595

Ion Ratio Lower Upper

95 100

174 83.4 0.0 165.0

176 82.7 0.0 160.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 1590

Delta R.T. -0.006 min

Lab File: VY021549.D

Acq: 17 Mar 2025 14:26

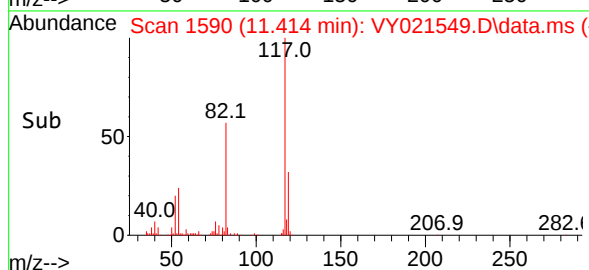
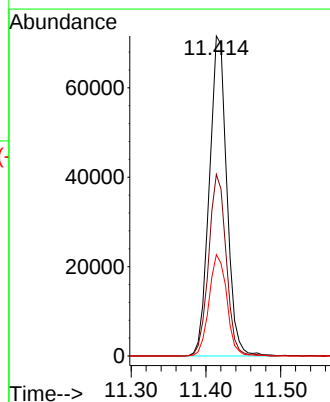
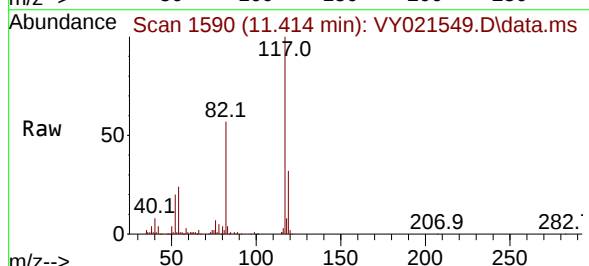
Tgt Ion: 117 Resp: 116517

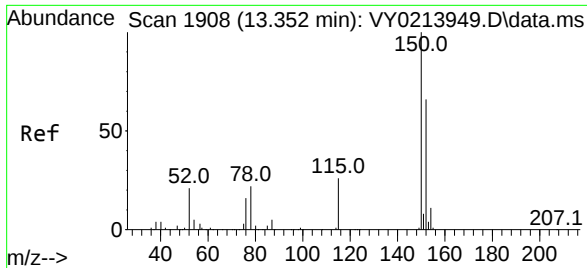
Ion Ratio Lower Upper

117 100

82 56.7 44.6 67.0

119 31.7 25.4 38.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.347 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021549.D

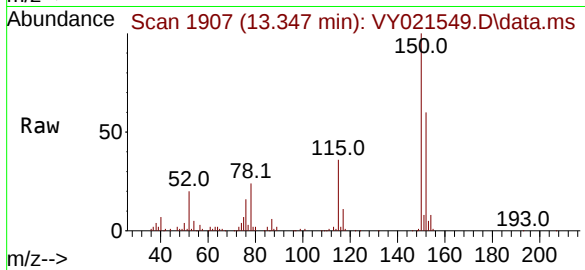
Acq: 17 Mar 2025 14:26

Instrument :

MSVOA_Y

ClientSampleId :

WC1



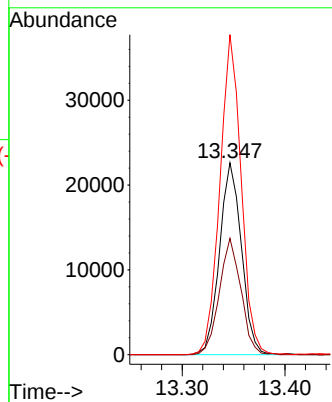
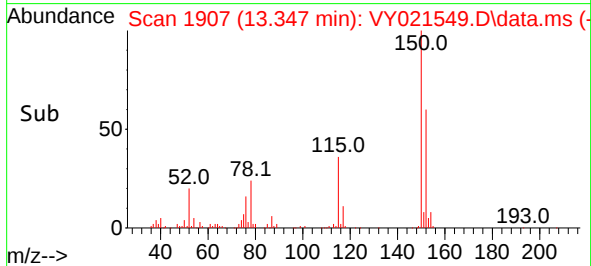
Tgt Ion:152 Resp: 33476

Ion Ratio Lower Upper

152 100

115 59.7 29.0 87.0

150 161.9 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021549.D
 Acq On : 17 Mar 2025 14:26
 Operator : SY/MD
 Sample : Q1574-01
 Misc : 5.02g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 WC1

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\82Y030425S.M

Title : SW846 8260

Signal : TIC: VY021549.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.080	52	59	61	rBV5	2440	5173	1.07%	0.218%
2	4.616	465	475	483	rVB6	4257	13531	2.81%	0.571%
3	5.647	635	644	652	rVB7	2951	8706	1.81%	0.367%
4	6.903	844	850	852	rBV3	2550	5160	1.07%	0.218%
5	7.634	960	970	976	rBV2	75232	185249	38.47%	7.816%
6	7.707	976	982	992	rVB	132093	297547	61.79%	12.554%
7	8.061	1027	1040	1054	rBV	63565	152936	31.76%	6.452%
8	8.616	1121	1131	1144	rBV	188509	378732	78.65%	15.979%
9	10.103	1368	1375	1385	rBV	277116	481520	100.00%	20.315%
10	10.512	1435	1442	1448	rBV2	12172	21013	4.36%	0.887%
11	10.884	1498	1503	1509	rBV6	2569	5959	1.24%	0.251%
12	11.414	1582	1590	1603	rBV	229087	372149	77.29%	15.701%
13	12.408	1743	1753	1763	rBV2	134723	227423	47.23%	9.595%
14	13.347	1900	1907	1915	rVB	142736	215123	44.68%	9.076%

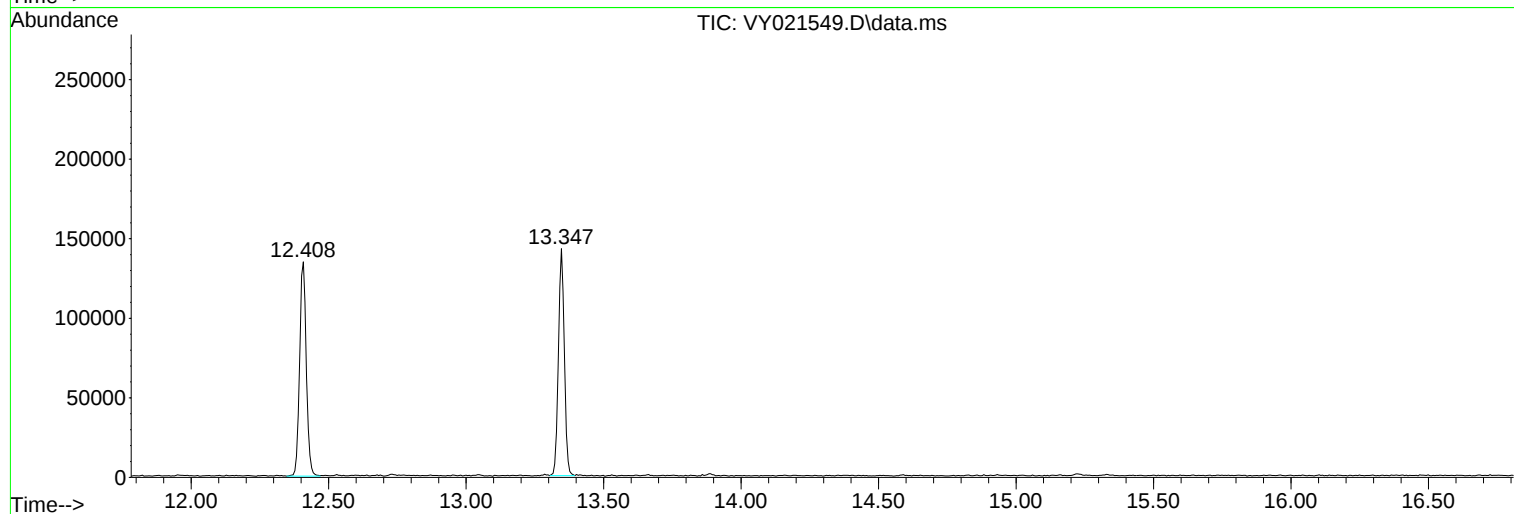
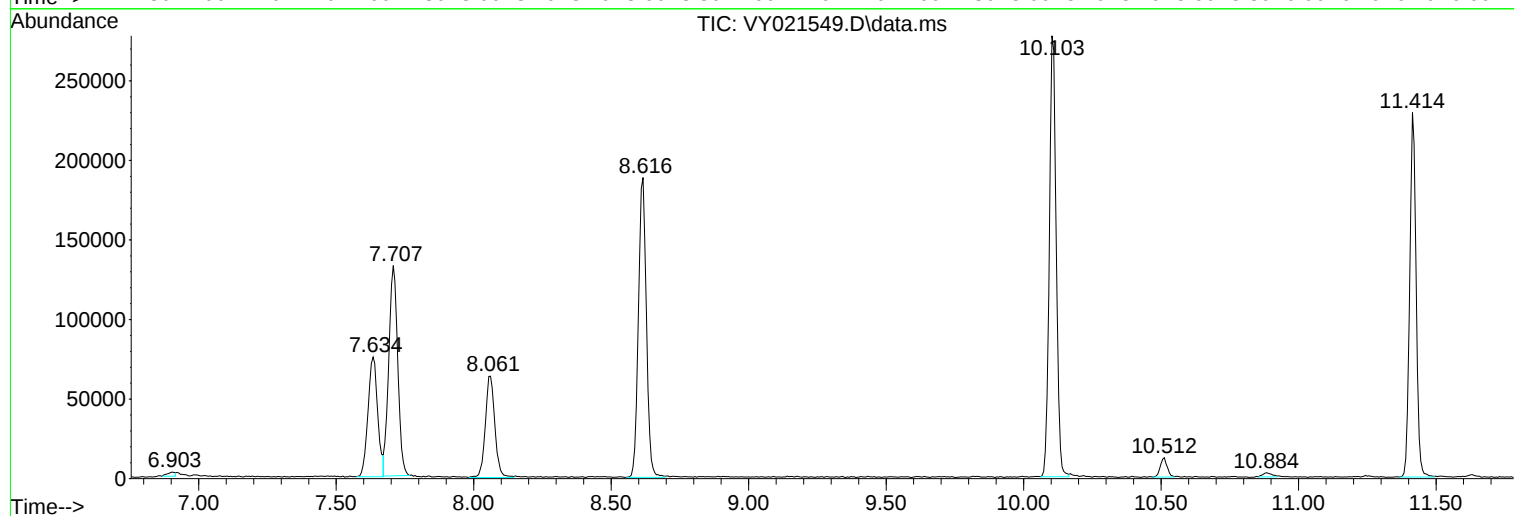
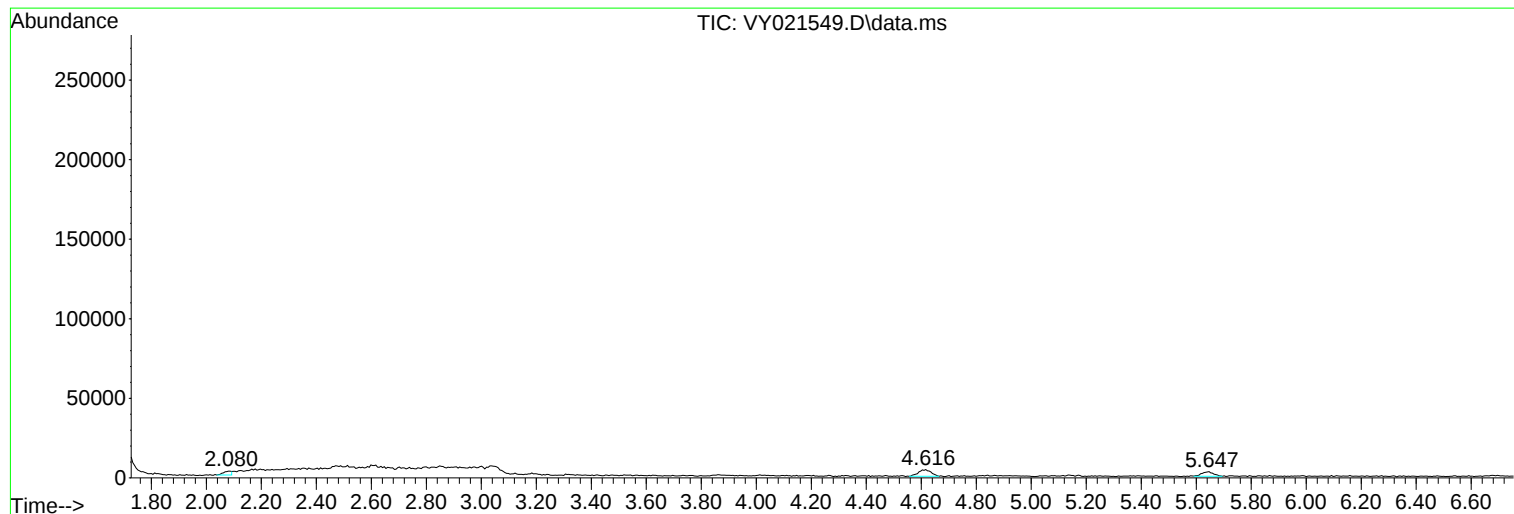
Sum of corrected areas: 2370221

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021549.D
Acq On : 17 Mar 2025 14:26
Operator : SY/MD
Sample : Q1574-01
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
WC1

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021549.D
Acq On : 17 Mar 2025 14:26
Operator : SY/MD
Sample : Q1574-01
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
WC1

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.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\VY031725\
Data File : VY021549.D
Acq On : 17 Mar 2025 14:26
Operator : SY/MD
Sample : Q1574-01
Misc : 5.02g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
WC1

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

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

Client:	G Environmental		Date Collected:	03/12/25	
Project:	Ave L		Date Received:	03/14/25	
Client Sample ID:	WC1RE		SDG No.:	Q1574	
Lab Sample ID:	Q1574-01RE		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	98	
Sample Wt/Vol:	5.08	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
VY021552.D	1		03/17/25 15:55	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	1.10	U	1.10	5.00	ug/Kg
74-87-3	Chloromethane	1.10	U	1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.79	U	0.79	5.00	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.00	ug/Kg
75-00-3	Chloroethane	1.30	U	1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	1.60	J	1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	1.10	U	1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	1.00	U	1.00	5.00	ug/Kg
67-64-1	Acetone	6.60	JQ	4.80	25.1	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.73	U	0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	1.50	U	1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	3.50	U	3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.86	U	0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.80	U	0.80	5.00	ug/Kg
110-82-7	Cyclohexane	0.79	U	0.79	5.00	ug/Kg
78-93-3	2-Butanone	6.60	U	6.60	25.1	ug/Kg
56-23-5	Carbon Tetrachloride	0.97	U	0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.75	U	0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	1.20	U	1.20	5.00	ug/Kg
67-66-3	Chloroform	0.84	U	0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.93	U	0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	0.91	U	0.91	5.00	ug/Kg
71-43-2	Benzene	0.79	U	0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.79	U	0.79	5.00	ug/Kg
79-01-6	Trichloroethene	0.81	U	0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.91	U	0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.78	U	0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	25.1	ug/Kg
108-88-3	Toluene	0.78	U	0.78	5.00	ug/Kg

Report of Analysis

Client:	G Environmental		Date Collected:	03/12/25	
Project:	Ave L		Date Received:	03/14/25	
Client Sample ID:	WC1RE		SDG No.:	Q1574	
Lab Sample ID:	Q1574-01RE		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	98	
Sample Wt/Vol:	5.08	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
VY021552.D	1		03/17/25 15:55	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.65	U	0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.62	U	0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	5.00	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	25.1	ug/Kg
124-48-1	Dibromochloromethane	0.87	U	0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.88	U	0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	0.91	U	0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.67	U	0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	10.0	ug/Kg
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/Kg
100-42-5	Styrene	0.71	U	0.71	5.00	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	54.7		70 (63) - 130 (155)	109%	SPK: 50
1868-53-7	Dibromofluoromethane	53.8		70 (70) - 130 (134)	108%	SPK: 50
2037-26-5	Toluene-d8	46.9		70 (74) - 130 (123)	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	32.8	*	70 (38) - 130 (136)	66%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	141000	7.707			
540-36-3	1,4-Difluorobenzene	241000	8.616			
3114-55-4	Chlorobenzene-d5	191000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	59400	13.346			



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

Report of Analysis

Client:	G Environmental	Date Collected:	03/12/25
Project:	Ave L	Date Received:	03/14/25
Client Sample ID:	WC1RE	SDG No.:	Q1574
Lab Sample ID:	Q1574-01RE	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	98
Sample Wt/Vol:	5.08	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021552.D	1		03/17/25 15:55	VY031725

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\VY031725\
 Data File : VY021552.D
 Acq On : 17 Mar 2025 15:55
 Operator : SY/MD
 Sample : Q1574-01RE
 Misc : 5.08g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 WC1RE

Quant Time: Mar 18 01:27:45 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

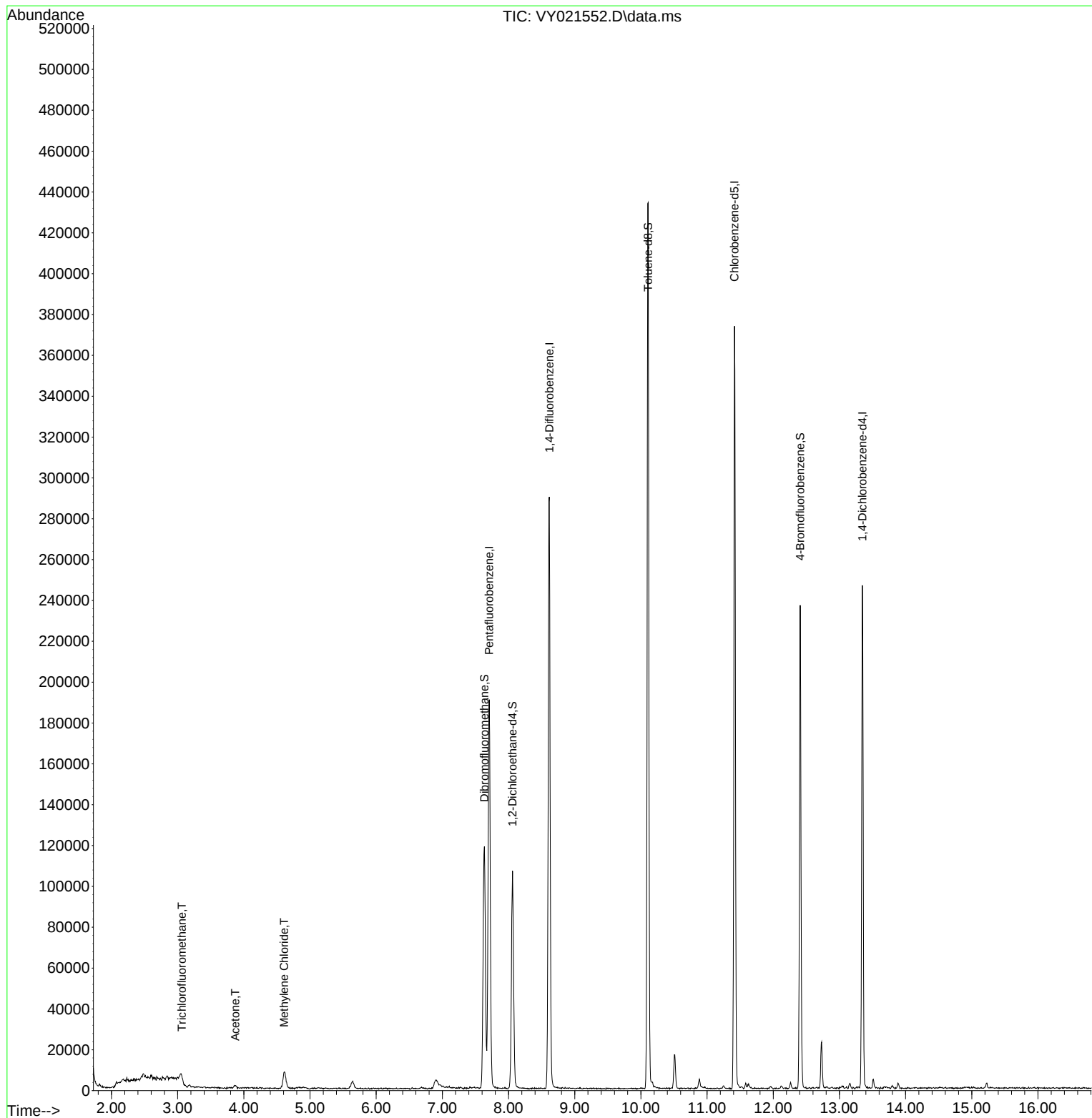
Internal Standards						
1) Pentafluorobenzene	7.707	168	140963	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	240910	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	190816	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	59425	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	81431	54.656	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 109.320%	
35) Dibromofluoromethane	7.634	113	85268	53.847	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 107.700%	
50) Toluene-d8	10.109	98	281376	46.929	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 93.860%	
62) 4-Bromofluorobenzene	12.408	95	66934	32.819	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 65.640%	
Target Compounds						
					Qvalue	
7) Trichlorofluoromethane	3.062	101	4547	1.635	ug/l #	81
16) Acetone	3.873	43	2142	6.592	ug/l #	89
20) Methylene Chloride	4.610	84	5855	3.432	ug/l #	91

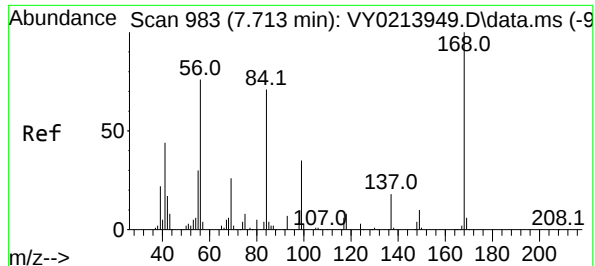
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021552.D
Acq On : 17 Mar 2025 15:55
Operator : SY/MD
Sample : Q1574-01RE
Misc : 5.08g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
WC1RE

Quant Time: Mar 18 01:27:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

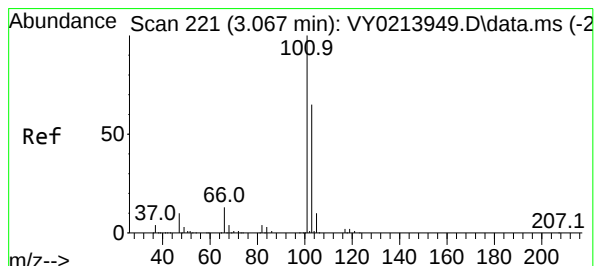
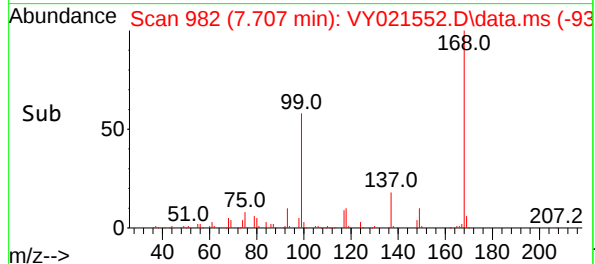
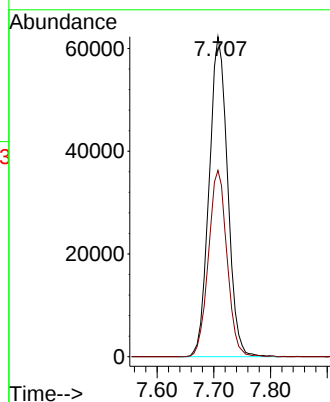
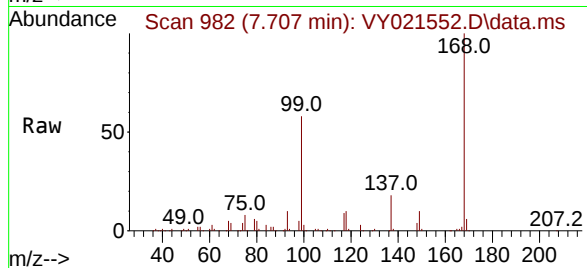




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021552.D
Acq: 17 Mar 2025 15:55

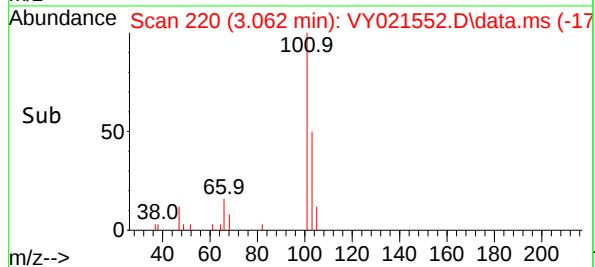
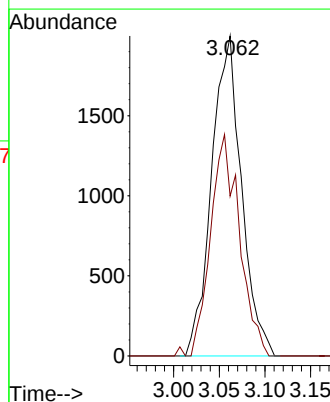
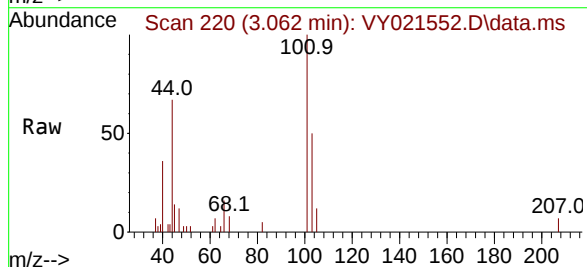
Instrument :
MSVOA_Y
ClientSampleId :
WC1RE

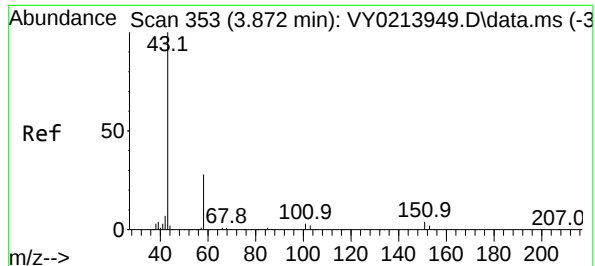
Tgt Ion:168 Resp: 140963
Ion Ratio Lower Upper
168 100
99 58.2 46.0 69.0



#7
Trichlorofluoromethane
Concen: 1.635 ug/l
RT: 3.062 min Scan# 220
Delta R.T. -0.006 min
Lab File: VY021552.D
Acq: 17 Mar 2025 15:55

Tgt Ion:101 Resp: 4547
Ion Ratio Lower Upper
101 100
103 49.9 51.7 77.5#





#16

Acetone

Concen: 6.592 ug/l

RT: 3.873 min Scan# 3

Delta R.T. 0.001 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

Instrument :

MSVOA_Y

ClientSampleId :

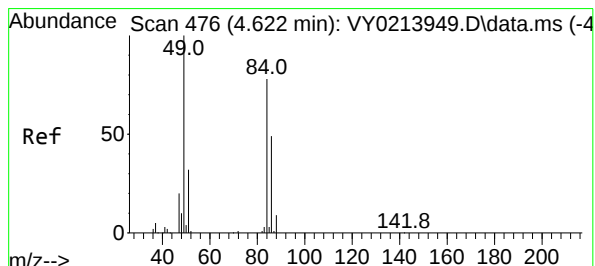
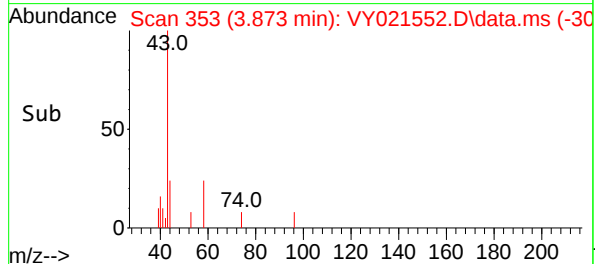
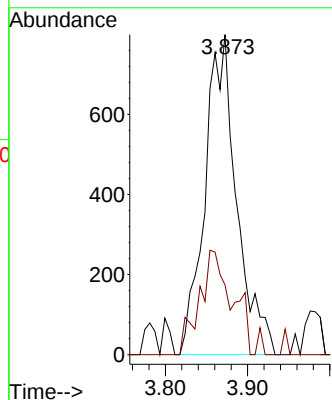
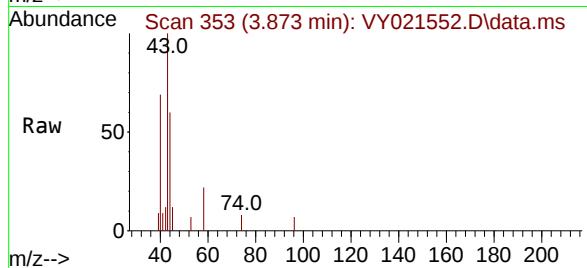
WC1RE

Tgt Ion: 43 Resp: 2142

Ion Ratio Lower Upper

43 100

58 21.8 22.1 33.1#



#20

Methylene Chloride

Concen: 3.432 ug/l

RT: 4.610 min Scan# 474

Delta R.T. -0.012 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

Tgt Ion: 84 Resp: 5855

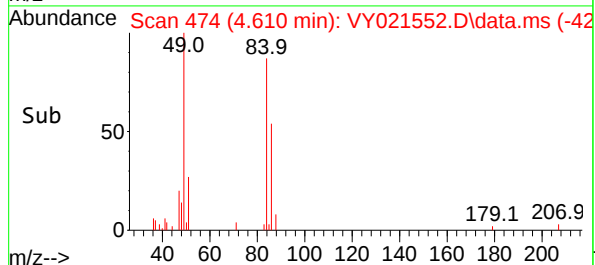
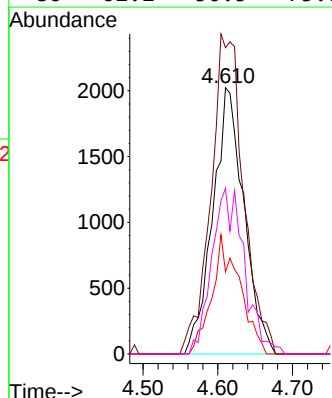
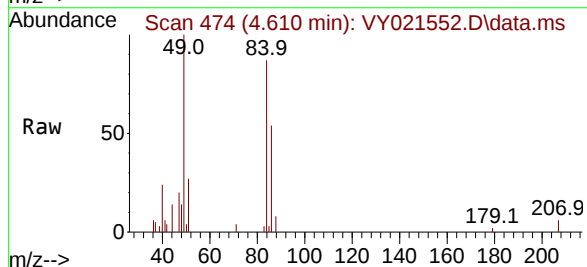
Ion Ratio Lower Upper

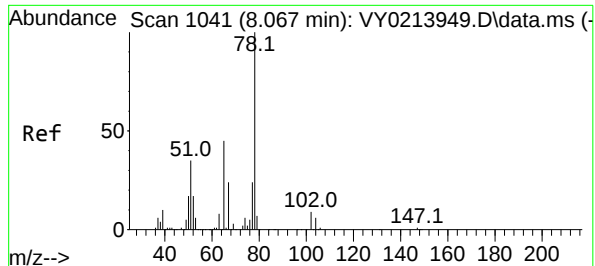
84 100

49 115.0 102.0 153.0

51 30.8 33.0 49.6#

86 62.2 50.5 75.7





#33

1,2-Dichloroethane-d4

Concen: 54.656 ug/l

RT: 8.061 min Scan# 110

Delta R.T. -0.006 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

Instrument :

MSVOA_Y

ClientSampleId :

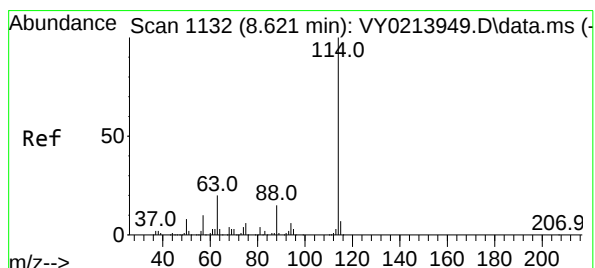
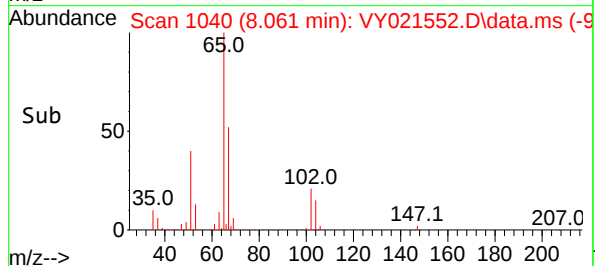
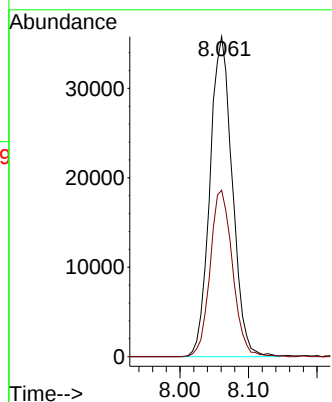
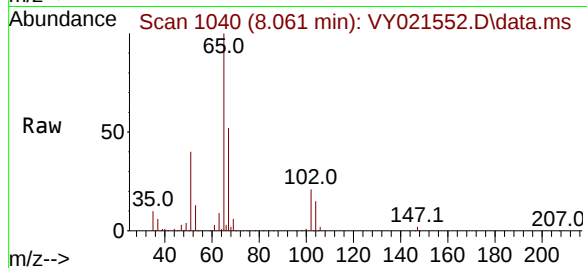
WC1RE

Tgt Ion: 65 Resp: 81431

Ion Ratio Lower Upper

65 100

67 52.1 0.0 102.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1131

Delta R.T. -0.006 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

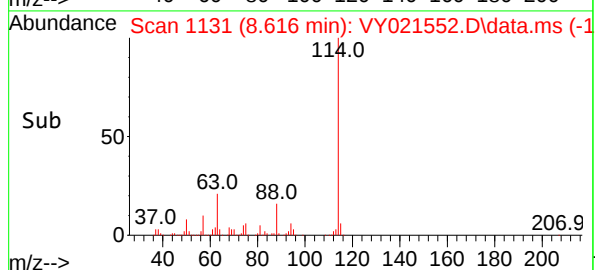
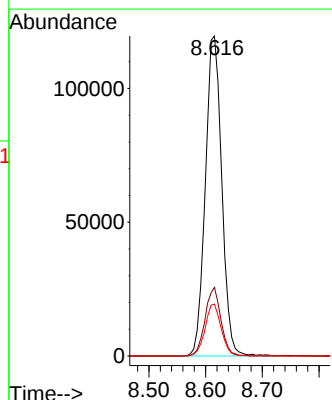
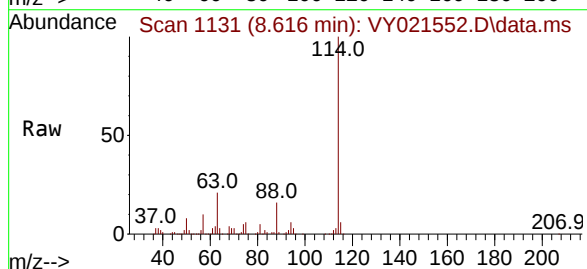
Tgt Ion: 114 Resp: 240910

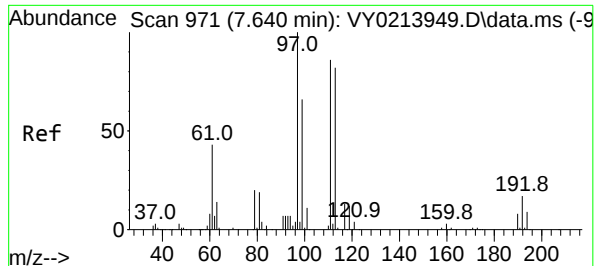
Ion Ratio Lower Upper

114 100

63 21.5 0.0 40.8

88 16.2 0.0 30.8





#35

Dibromofluoromethane

Concen: 53.847 ug/l

RT: 7.634 min Scan# 91

Delta R.T. -0.006 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

Instrument :

MSVOA_Y

ClientSampleId :

WC1RE

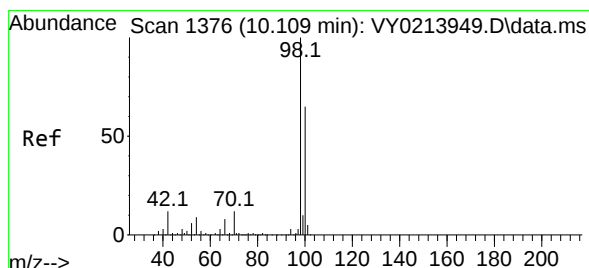
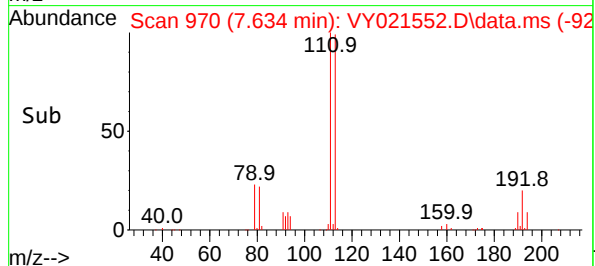
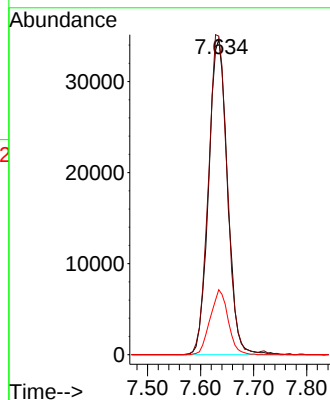
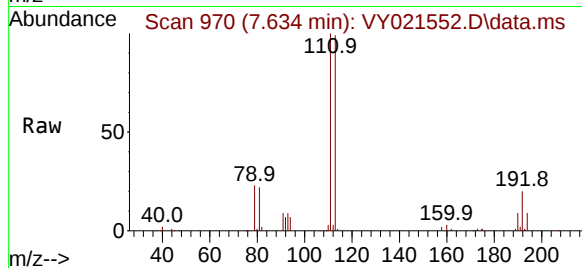
Tgt Ion:113 Resp: 85268

Ion Ratio Lower Upper

113 100

111 101.4 82.0 123.0

192 19.6 15.9 23.9



#50

Toluene-d8

Concen: 46.929 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021552.D

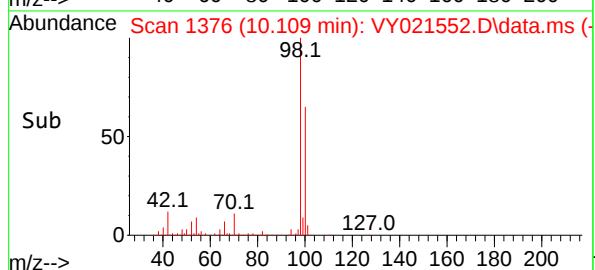
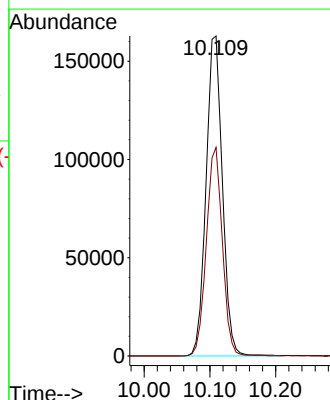
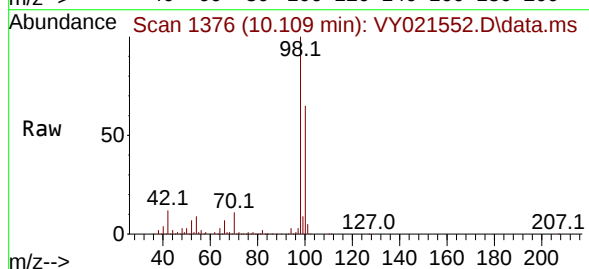
Acq: 17 Mar 2025 15:55

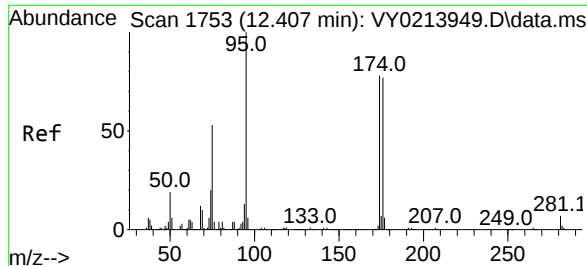
Tgt Ion: 98 Resp: 281376

Ion Ratio Lower Upper

98 100

100 64.0 52.1 78.1





#62

4-Bromofluorobenzene

Concen: 32.819 ug/l

RT: 12.408 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

Instrument :

MSVOA_Y

ClientSampleId :

WC1RE

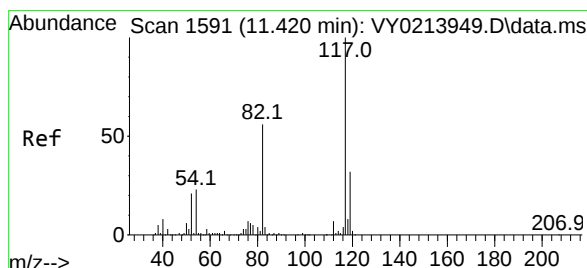
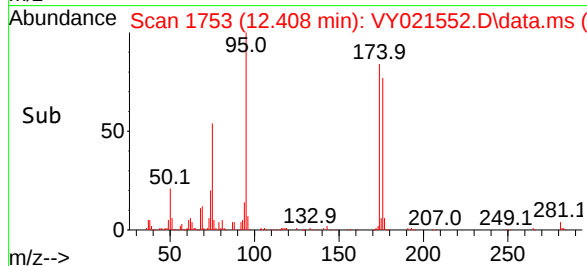
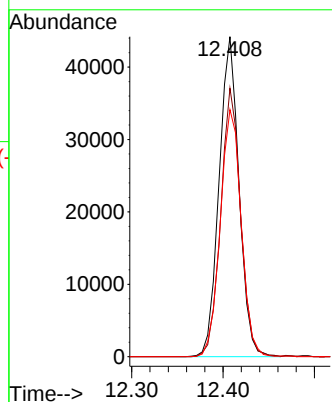
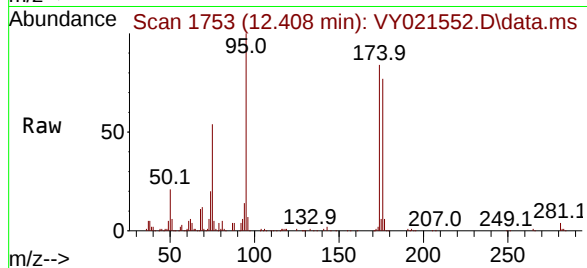
Tgt Ion: 95 Resp: 66934

Ion Ratio Lower Upper

95 100

174 83.7 0.0 165.0

176 81.2 0.0 160.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 1590

Delta R.T. -0.006 min

Lab File: VY021552.D

Acq: 17 Mar 2025 15:55

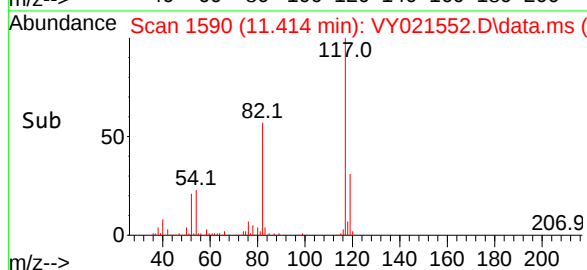
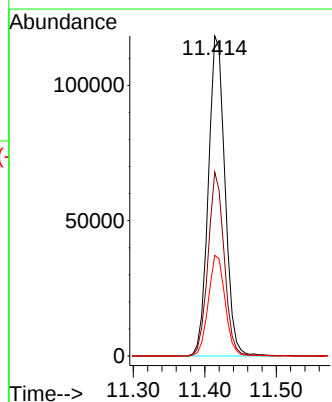
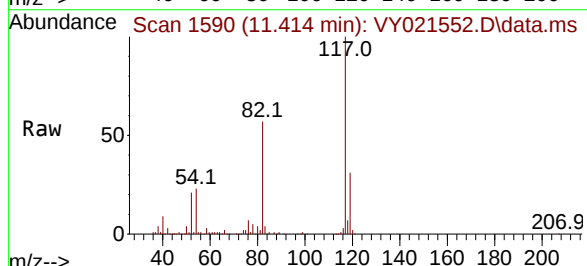
Tgt Ion: 117 Resp: 190816

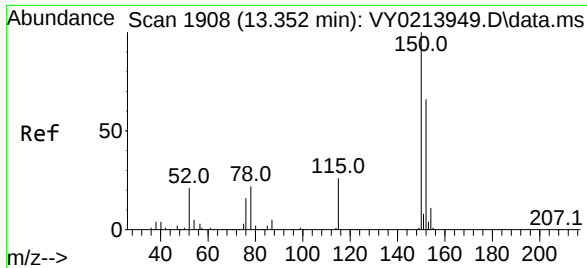
Ion Ratio Lower Upper

117 100

82 57.4 44.6 67.0

119 31.5 25.4 38.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.346 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021552.D

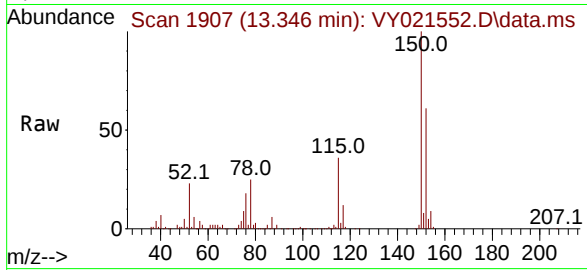
Acq: 17 Mar 2025 15:55

Instrument :

MSVOA_Y

ClientSampleId :

WC1RE



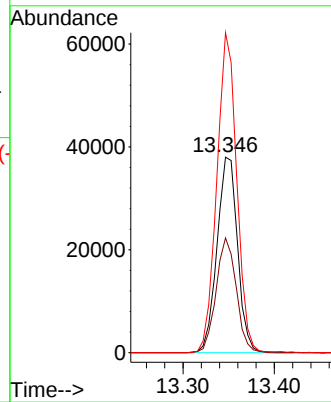
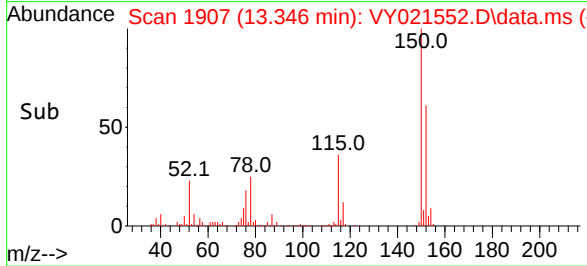
Tgt Ion:152 Resp: 59425

Ion Ratio Lower Upper

152 100

115 57.5 29.0 87.0

150 158.6 0.0 347.2





CALIBRATION SUMMARY



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG No.: Q1574
 Instrument ID: MSVOA_Y Calibration Date(s): 03/04/2025 03/04/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 12:15
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF010 = VY021397.D		RRF020 = VY021398.D		RRF050 = VY021399.D			
		RRF100 = VY021400.D		RRF150 = VY021401.D		RRF005 = VY021403.D			
COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF150	RRF005	RRF	% RSD	
Dichlorodifluoromethane	0.493	0.416	0.447	0.440	0.429	0.529	0.459	9.4	
Chloromethane	0.694	0.588	0.617	0.608	0.580	0.793	0.647	12.7	
Vinyl Chloride	0.762	0.639	0.691	0.706	0.665	0.778	0.707	7.7	
Bromomethane	0.555	0.450	0.468	0.483	0.468	0.641	0.511	14.4	
Chloroethane	0.505	0.427	0.460	0.458	0.432	0.521	0.467	8.2	
Trichlorofluoromethane	1.050	0.896	0.967	0.963	0.935	1.109	0.987	8	
1,1,2-Trichlorotrifluoroethane	0.600	0.507	0.538	0.542	0.525	0.668	0.563	10.7	
1,1-Dichloroethene	0.542	0.460	0.506	0.512	0.494	0.566	0.514	7.2	
Acetone	0.124	0.091	0.134	0.103	0.095	0.144	0.115	18.9	
Carbon Disulfide	1.705	1.425	1.631	1.618	1.546	1.732	1.610	7	
Methyl tert-butyl Ether	1.290	1.177	1.366	1.299	1.315	1.364	1.302	5.3	
Methyl Acetate	0.253	0.227	0.284	0.245	0.257	0.268	0.256	7.6	
Methylene Chloride	0.717	0.538	0.552	0.530	0.507	0.788	0.605	19.4	
trans-1,2-Dichloroethene	0.608	0.516	0.564	0.570	0.545	0.648	0.575	8.1	
1,1-Dichloroethane	1.124	0.955	1.050	1.035	0.991	1.179	1.056	7.9	
Cyclohexane	1.039	0.885	0.941	0.943	0.914	1.216	0.990	12.4	
2-Butanone	0.160	0.136	0.181	0.149	0.151	0.180	0.159	11.2	
Carbon Tetrachloride	0.627	0.538	0.587	0.595	0.579	0.625	0.592	5.6	
cis-1,2-Dichloroethene	0.675	0.592	0.654	0.658	0.639	0.702	0.653	5.6	
Bromochloromethane	0.481	0.423	0.467	0.426	0.380	0.478	0.443	9	
Chloroform	1.181	0.992	1.087	1.066	1.029	1.222	1.096	8.1	
1,1,1-Trichloroethane	1.063	0.894	0.978	0.983	0.953	1.151	1.004	9	
Methylcyclohexane	0.595	0.550	0.651	0.680	0.669	0.641	0.631	7.8	
Benzene	1.554	1.366	1.542	1.540	1.473	1.618	1.515	5.7	
1,2-Dichloroethane	0.446	0.386	0.436	0.414	0.408	0.453	0.424	6.1	
Trichloroethene	0.390	0.349	0.381	0.384	0.378	0.415	0.383	5.5	
1,2-Dichloropropane	0.371	0.333	0.368	0.358	0.347	0.388	0.361	5.3	
Bromodichloromethane	0.550	0.485	0.548	0.535	0.521	0.559	0.533	5	
4-Methyl-2-Pentanone	0.210	0.202	0.263	0.230	0.243	0.219	0.228	9.9	
Toluene	0.952	0.853	0.988	0.997	0.958	0.983	0.955	5.6	

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



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG No.: Q1574
 Instrument ID: MSVOA_Y Calibration Date(s): 03/04/2025 03/04/2025
 Heated Purge: (Y/N) Y Calibration Time(s): 09:46 12:15
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF010 = VY021397.D		RRF020 = VY021398.D		RRF050 = VY021399.D			
		RRF100 = VY021400.D		RRF150 = VY021401.D		RRF005 = VY021403.D			
COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF150	RRF005	RRF	% RSD	
t-1,3-Dichloropropene	0.447	0.420	0.499	0.495	0.495	0.461	0.470	6.8	
cis-1,3-Dichloropropene	0.544	0.498	0.587	0.579	0.566	0.570	0.557	5.8	
1,1,2-Trichloroethane	0.264	0.237	0.283	0.259	0.257	0.274	0.263	6	
2-Hexanone	0.135	0.129	0.182	0.156	0.163	0.139	0.151	13.1	
Dibromochloromethane	0.358	0.327	0.376	0.363	0.361	0.374	0.360	4.9	
1,2-Dibromoethane	0.246	0.226	0.262	0.248	0.247	0.258	0.248	5.1	
Tetrachloroethene	0.418	0.370	0.403	0.407	0.393	0.449	0.407	6.5	
Chlorobenzene	1.194	1.065	1.186	1.192	1.165	1.283	1.181	5.9	
Ethyl Benzene	2.005	1.825	2.135	2.209	2.146	2.115	2.072	6.7	
m/p-Xylenes	0.761	0.705	0.822	0.833	0.803	0.797	0.787	6	
o-Xylene	0.700	0.635	0.759	0.779	0.754	0.723	0.725	7.2	
Styrene	1.133	1.084	1.277	1.306	1.267	1.151	1.203	7.6	
Bromoform	0.227	0.213	0.250	0.237	0.238	0.235	0.233	5.3	
Isopropylbenzene	3.797	3.468	4.034	4.231	4.124	3.977	3.939	6.9	
1,1,2,2-Tetrachloroethane	0.712	0.637	0.727	0.667	0.690	0.737	0.695	5.4	
1,3-Dichlorobenzene	1.861	1.640	1.812	1.840	1.822	2.031	1.834	6.8	
1,4-Dichlorobenzene	1.820	1.624	1.782	1.783	1.764	1.989	1.794	6.5	
1,2-Dichlorobenzene	1.561	1.431	1.588	1.568	1.560	1.723	1.572	5.9	
1,2-Dibromo-3-Chloropropane	0.101	0.092	0.108	0.098	0.108	0.117	0.104	8.3	
1,2,4-Trichlorobenzene	0.723	0.735	0.908	0.926	0.994	0.864	0.859	12.7	
1,2,3-Trichlorobenzene	0.604	0.614	0.775	0.771	0.835	0.734	0.722	13	
1,2-Dichloroethane-d4	0.580	0.514	0.482	0.511	0.477	0.606	0.528	10	
Dibromofluoromethane	0.348	0.315	0.296	0.332	0.311	0.371	0.329	8.3	
Toluene-d8	1.276	1.179	1.135	1.289	1.203	1.384	1.244	7.2	
4-Bromofluorobenzene	0.424	0.394	0.386	0.433	0.405	0.498	0.423	9.6	

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

Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y030425S.M
 Title : SW846 8260
 Last Update : Wed Mar 05 12:42:45 2025
 Response Via : Initial Calibration

Calibration Files

5 =VY021403.D 10 =VY021397.D 20 =VY021398.D 50 =VY021399.D 100 =VY021400.D 150 =VY021401.D

	Compound	5	10	20	50	100	150	Avg	%RSD

1) I	Pentafluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.529	0.493	0.416	0.447	0.440	0.429	0.459	9.38
3) P	Chloromethane	0.793	0.694	0.588	0.617	0.608	0.580	0.647	12.70
4) C	Vinyl Chloride	0.778	0.762	0.639	0.691	0.706	0.665	0.707	7.70#
5) T	Bromomethane	0.641	0.555	0.450	0.468	0.483	0.468	0.511	14.40
6) T	Chloroethane	0.521	0.505	0.427	0.460	0.458	0.432	0.467	8.21
7) T	Trichlorofluor...	1.109	1.050	0.896	0.967	0.963	0.935	0.987	7.97
8) T	Diethyl Ether	0.301	0.280	0.249	0.283	0.264	0.263	0.273	6.77
9) T	1,1,2-Trichlor...	0.668	0.600	0.507	0.538	0.542	0.525	0.563	10.69
10) T	Methyl Iodide	0.492	0.562	0.515	0.632	0.628	0.606	0.573	10.39
11) T	Tert butyl alc...	0.061	0.049	0.036	0.038	0.030	0.033	0.041	28.30
12) CM	1,1-Dichloroet...	0.566	0.542	0.460	0.506	0.512	0.494	0.514	7.23#
13) T	Acrolein	0.054	0.051	0.043	0.005	0.004	0.004	0.027	92.94
14) T	Allyl chloride	0.883	0.851	0.744	0.842	0.847	0.813	0.830	5.72
15) T	Acrylonitrile	0.122	0.121	0.105	0.125	0.111	0.113	0.116	6.52
16) T	Acetone	0.144	0.124	0.091	0.134	0.103	0.095	0.115	18.92
17) T	Carbon Disulfide	1.732	1.705	1.425	1.631	1.618	1.546	1.610	6.95
18) T	Methyl Acetate	0.268	0.253	0.227	0.284	0.245	0.257	0.256	7.60
19) T	Methyl tert-bu...	1.364	1.289	1.177	1.366	1.299	1.315	1.302	5.30
20) T	Methylene Chlo...	0.788	0.717	0.538	0.552	0.530	0.507	0.605	19.37
21) T	trans-1,2-Dich...	0.648	0.608	0.516	0.564	0.570	0.545	0.575	8.12
22) T	Diisopropyl ether	1.846	1.824	1.675	1.851	1.798	1.738	1.789	3.87
23) T	Vinyl Acetate	1.014	0.996	0.937	1.110	1.032	1.035	1.021	5.55
24) P	1,1-Dichloroet...	1.179	1.124	0.955	1.050	1.035	0.991	1.056	7.88
25) T	2-Butanone	0.180	0.160	0.136	0.181	0.149	0.151	0.159	11.20
26) T	2,2-Dichloropr...	1.106	1.043	0.860	0.938	0.955	0.926	0.971	9.11
27) T	cis-1,2-Dichlo...	0.702	0.675	0.592	0.654	0.658	0.639	0.653	5.64
28) T	Bromochloromet...	0.478	0.481	0.423	0.467	0.426	0.380	0.443	8.99
29) T	Tetrahydrofuran	0.104	0.096	0.089	0.111	0.094	0.098	0.098	7.69
30) C	Chloroform	1.222	1.181	0.992	1.087	1.066	1.029	1.096	8.11#
31) T	Cyclohexane	1.216	1.039	0.885	0.941	0.943	0.914	0.990	12.38
32) T	1,1,1-Trichlor...	1.151	1.063	0.894	0.978	0.983	0.953	1.004	9.02
33) S	1,2-Dichloroet...	0.606	0.580	0.514	0.482	0.511	0.477	0.528	9.98
34) I	1,4-Difluorobenzene	-----ISTD-----							
35) S	Dibromofluorom...	0.371	0.348	0.315	0.296	0.332	0.311	0.329	8.31
36) T	1,1-Dichloropr...	0.549	0.528	0.462	0.518	0.525	0.504	0.514	5.73
37) T	Ethyl Acetate	0.242	0.225	0.206	0.248	0.220	0.225	0.227	6.72
38) T	Carbon Tetrach...	0.625	0.627	0.538	0.587	0.595	0.579	0.592	5.56
39) T	Methylcyclohexane	0.641	0.595	0.550	0.651	0.680	0.669	0.631	7.84
40) TM	Benzene	1.618	1.554	1.366	1.542	1.540	1.473	1.515	5.71
41) T	Methacrylonitrile	0.122	0.132	0.104	0.131	0.129	0.124	0.124	8.53
42) TM	1,2-Dichloroet...	0.453	0.446	0.386	0.436	0.414	0.408	0.424	6.07
43) T	Isopropyl Acetate	0.456	0.421	0.386	0.483	0.442	0.461	0.441	7.75
44) TM	Trichloroethene	0.415	0.390	0.349	0.381	0.384	0.378	0.383	5.51
45) C	1,2-Dichloropr...	0.388	0.371	0.333	0.368	0.358	0.347	0.361	5.33#
46) T	Dibromomethane	0.208	0.202	0.185	0.212	0.198	0.198	0.201	4.75
47) T	Bromodichlorom...	0.559	0.550	0.485	0.548	0.535	0.521	0.533	5.05
48) T	Methyl methacr...	0.187	0.183	0.184	0.229	0.212	0.222	0.203	10.14
49) T	1,4-Dioxane	0.002	0.002	0.002	0.002	0.002	0.002	0.002	10.05
50) S	Toluene-d8	1.384	1.276	1.179	1.135	1.289	1.203	1.244	7.24
51) T	4-Methyl-2-Pen...	0.219	0.210	0.202	0.263	0.230	0.243	0.228	9.85
52) CM	Toluene	0.983	0.952	0.853	0.988	0.997	0.958	0.955	5.56#
53) T	t-1,3-Dichloro...	0.461	0.447	0.420	0.499	0.495	0.495	0.470	6.82
54) T	cis-1,3-Dichlo...	0.570	0.544	0.498	0.587	0.579	0.566	0.557	5.84
55) T	1,1,2-Trichlor...	0.274	0.264	0.237	0.283	0.259	0.257	0.263	5.99
56) T	Ethyl methacry...	0.291	0.293	0.289	0.383	0.367	0.386	0.335	14.50

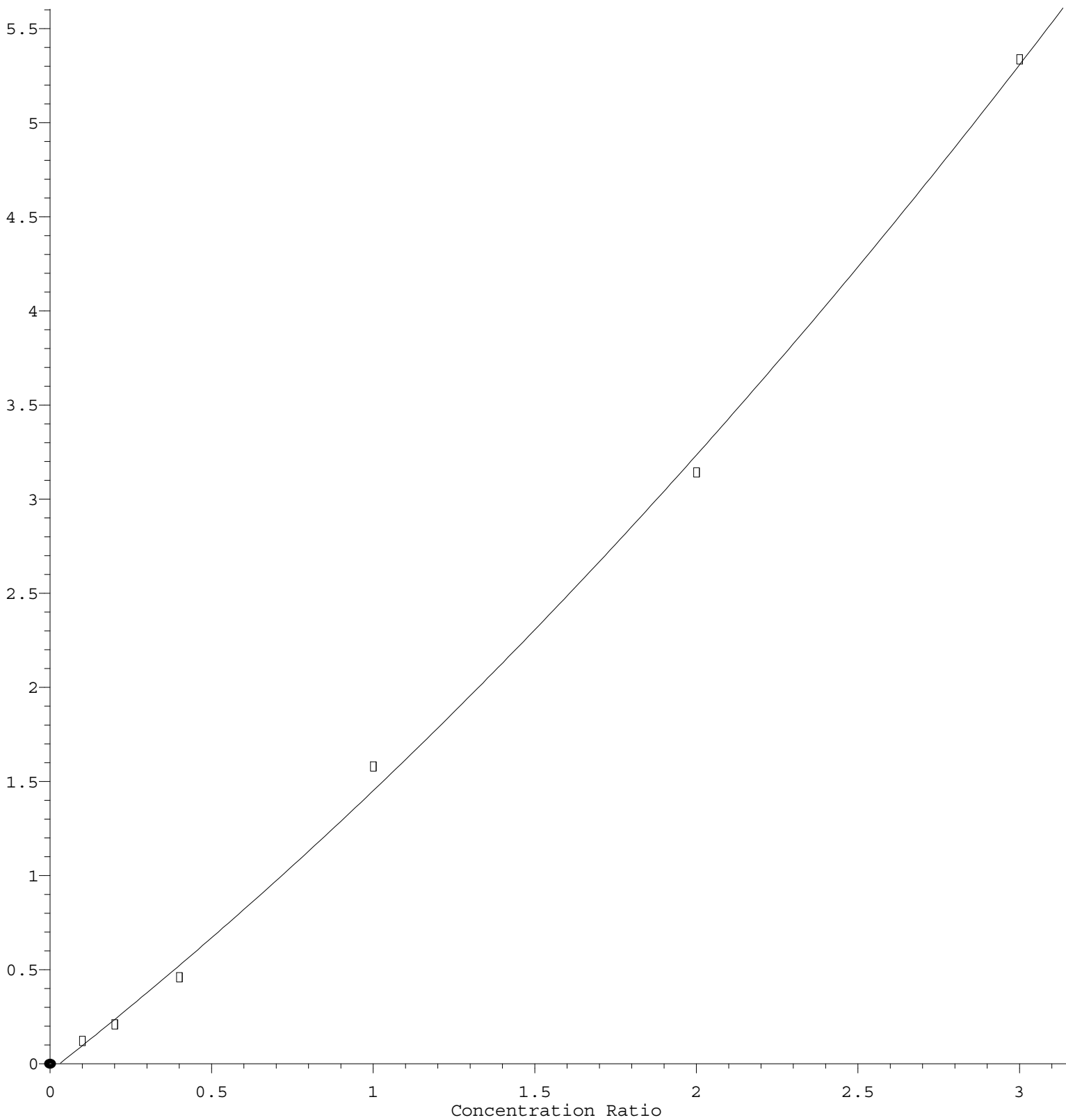
Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y030425S.M

57)	T	1,3-Dichloropr...	0.465	0.462	0.421	0.478	0.452	0.451	0.455	4.24
58)	T	2-Chloroethyl ...	0.136	0.135	0.139	0.174	0.162	0.181	0.155	13.30
59)	T	2-Hexanone	0.139	0.135	0.129	0.182	0.156	0.163	0.151	13.15
60)	T	Dibromochlorom...	0.374	0.358	0.327	0.376	0.363	0.361	0.360	4.92
61)	T	1,2-Dibromoethane	0.258	0.246	0.226	0.262	0.248	0.247	0.248	5.07
62)	S	4-Bromofluorob...	0.498	0.424	0.394	0.386	0.433	0.405	0.423	9.60
63)	I	Chlorobenzene-d5	-----ISTD-----							
64)	T	Tetrachloroethene	0.449	0.418	0.370	0.403	0.407	0.393	0.407	6.47
65)	PM	Chlorobenzene	1.283	1.194	1.065	1.186	1.192	1.165	1.181	5.93
66)	T	1,1,1,2-Tetrac...	0.449	0.420	0.377	0.421	0.423	0.414	0.417	5.61
67)	C	Ethyl Benzene	2.115	2.005	1.825	2.135	2.209	2.146	2.072	6.67#
68)	T	m/p-Xylenes	0.797	0.761	0.705	0.822	0.833	0.803	0.787	5.97
69)	T	o-Xylene	0.723	0.700	0.635	0.759	0.779	0.754	0.725	7.20
70)	T	Styrene	1.151	1.133	1.084	1.277	1.306	1.267	1.203	7.61
71)	P	Bromoform	0.235	0.227	0.213	0.250	0.237	0.238	0.233	5.28
72)	I	1,4-Dichlorobenzen...	-----ISTD-----							
73)	T	Isopropylbenzene	3.977	3.797	3.468	4.034	4.231	4.124	3.939	6.93
74)	T	N-amyl acetate	0.765	0.746	0.743	0.950	0.925	1.003	0.855	13.67
75)	P	1,1,2,2-Tetrac...	0.737	0.712	0.637	0.727	0.667	0.690	0.695	5.44
76)	T	1,2,3-Trichlor...	0.627	0.523	0.430	0.491	0.488	0.464	0.504	13.47
77)	T	Bromobenzene	0.982	0.928	0.823	0.926	0.936	0.933	0.921	5.67
78)	T	n-propylbenzene	4.979	4.605	4.262	4.905	5.046	4.904	4.783	6.20
79)	T	2-Chlorotoluene	2.922	2.707	2.449	2.741	2.824	2.768	2.735	5.82
80)	T	1,3,5-Trimethy...	3.307	3.096	2.895	3.256	3.373	3.277	3.201	5.49
81)	T	trans-1,4-Dich...	0.213	0.214	0.193	0.238	0.229	0.243	0.222	8.31
82)	T	4-Chlorotoluene	2.991	2.866	2.534	2.849	2.931	2.824	2.832	5.59
83)	T	tert-Butylbenzene	2.890	2.771	2.493	2.924	3.096	2.959	2.855	7.23
84)	T	1,2,4-Trimethy...	3.241	3.006	2.901	3.274	3.353	3.294	3.178	5.70
85)	T	sec-Butylbenzene	4.457	3.977	3.848	4.358	4.471	4.380	4.248	6.29
86)	T	p-Isopropyltol...	3.547	3.237	3.132	3.591	3.761	3.732	3.500	7.42
87)	T	1,3-Dichlorobe...	2.031	1.861	1.640	1.812	1.840	1.822	1.834	6.80
88)	T	1,4-Dichlorobe...	1.989	1.820	1.624	1.782	1.783	1.764	1.794	6.54
89)	T	n-Butylbenzene	3.269	2.837	2.867	3.387	3.535	3.497	3.232	9.55
90)	T	Hexachloroethane	0.840	0.746	0.649	0.729	0.759	0.757	0.747	8.24
91)	T	1,2-Dichlorobe...	1.723	1.561	1.431	1.588	1.568	1.560	1.572	5.92
92)	T	1,2-Dibromo-3-...	0.117	0.101	0.092	0.108	0.098	0.108	0.104	8.28
93)	T	1,2,4-Trichlor...	0.864	0.723	0.735	0.908	0.926	0.994	0.859	12.66
94)	T	Hexachlorobuta...	0.581	0.469	0.480	0.551	0.567	0.582	0.538	9.41
95)	T	Naphthalene	1.214	1.048	1.148	1.580	1.571	1.779	1.390	21.00
96)	T	1,2,3-Trichlor...	0.734	0.604	0.614	0.775	0.771	0.835	0.722	12.99

(#) = Out of Range

Naphthalene

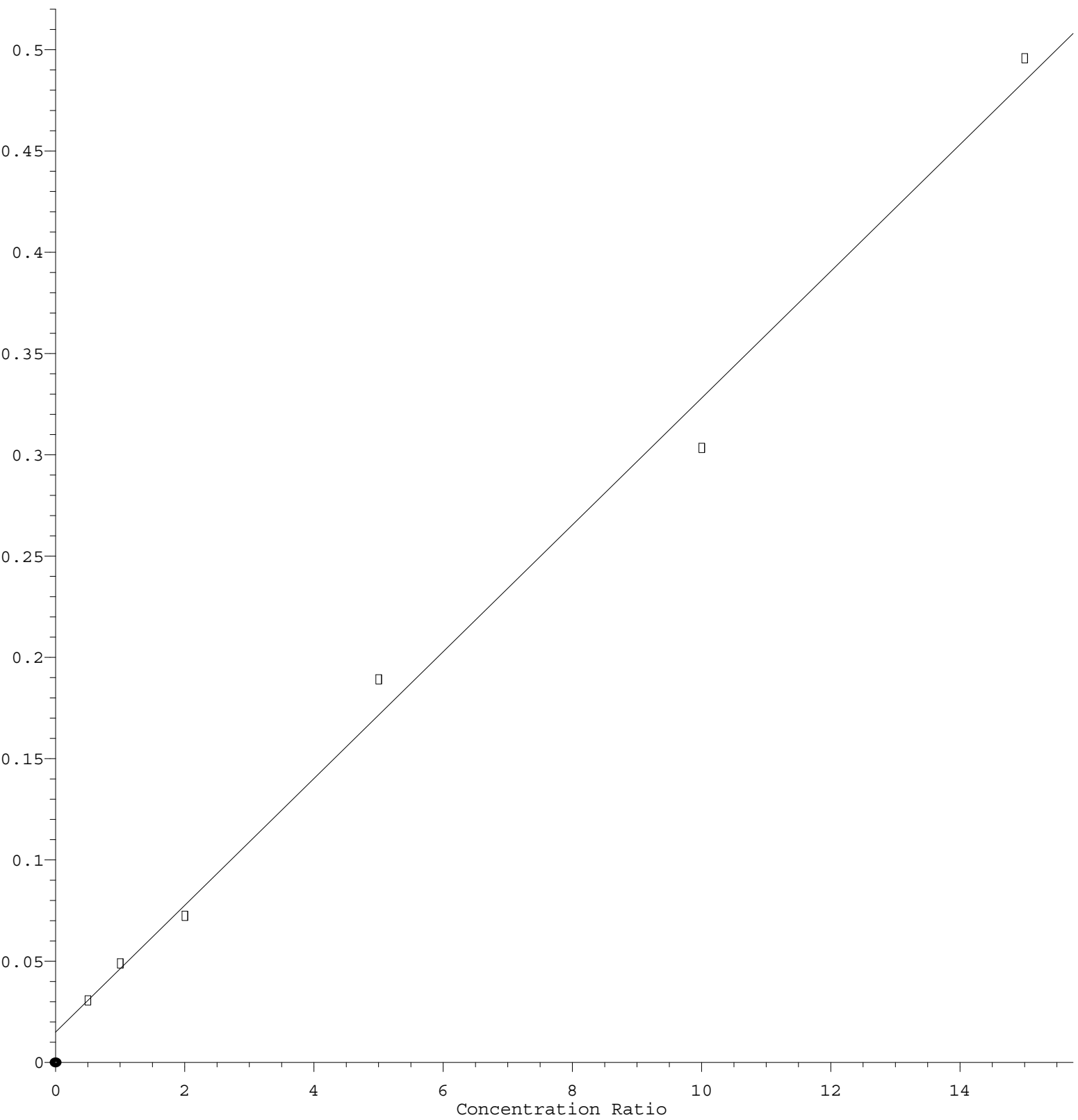
Response Ratio



$R = 1.461e-001 A^2 + 1.344e+000 A - 3.906e-002$
 Coef of Det (r^2) = 0.998562 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y030425S.M
 Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

Tert butyl alcohol

Response Ratio



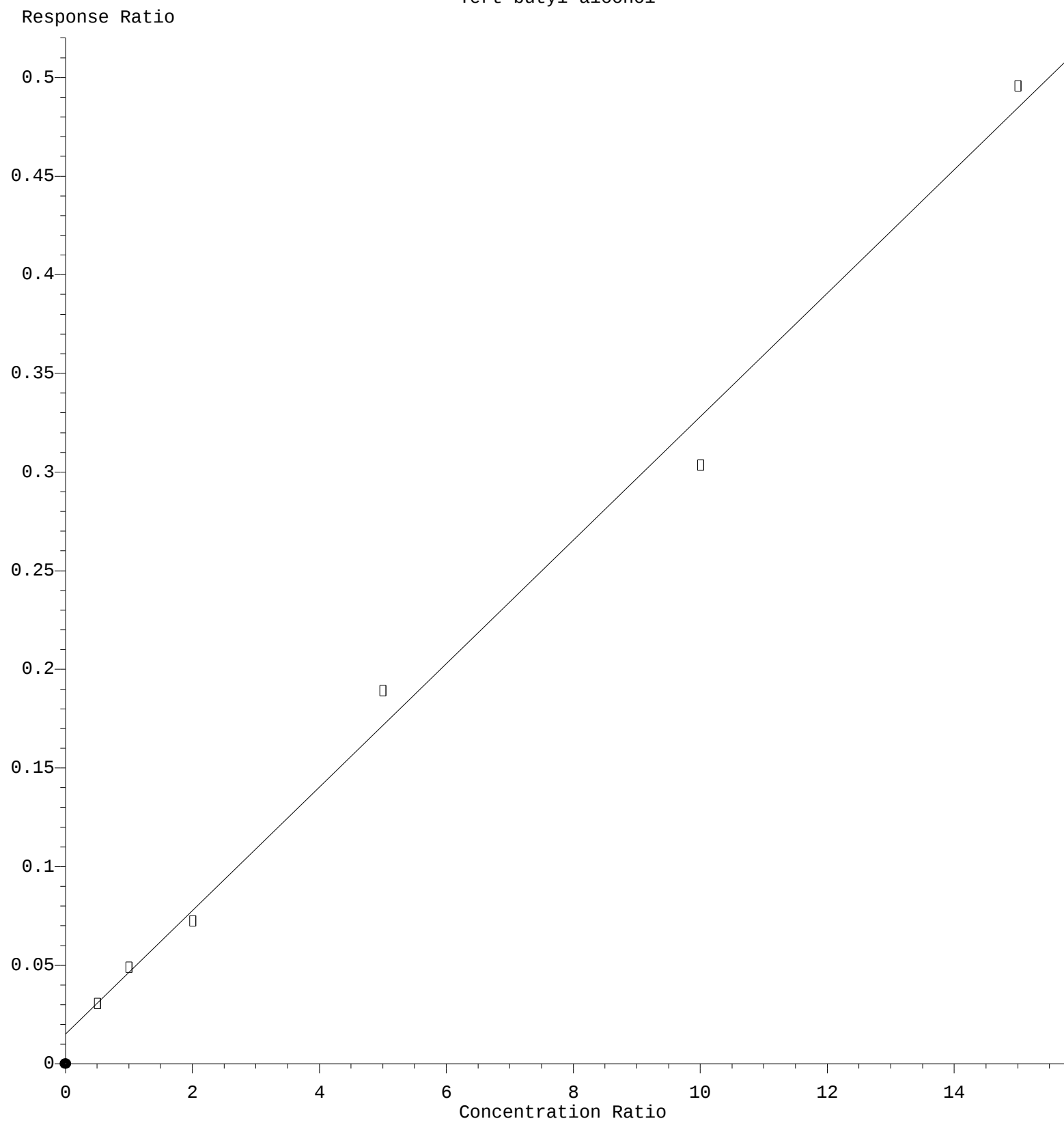
$$\text{Response} = 3.126\text{e-}002 * \text{Amt} + 1.549\text{e-}002$$

Coef of Det (r^2) = 0.993493 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA Y\methods\82Y030425S.M

Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

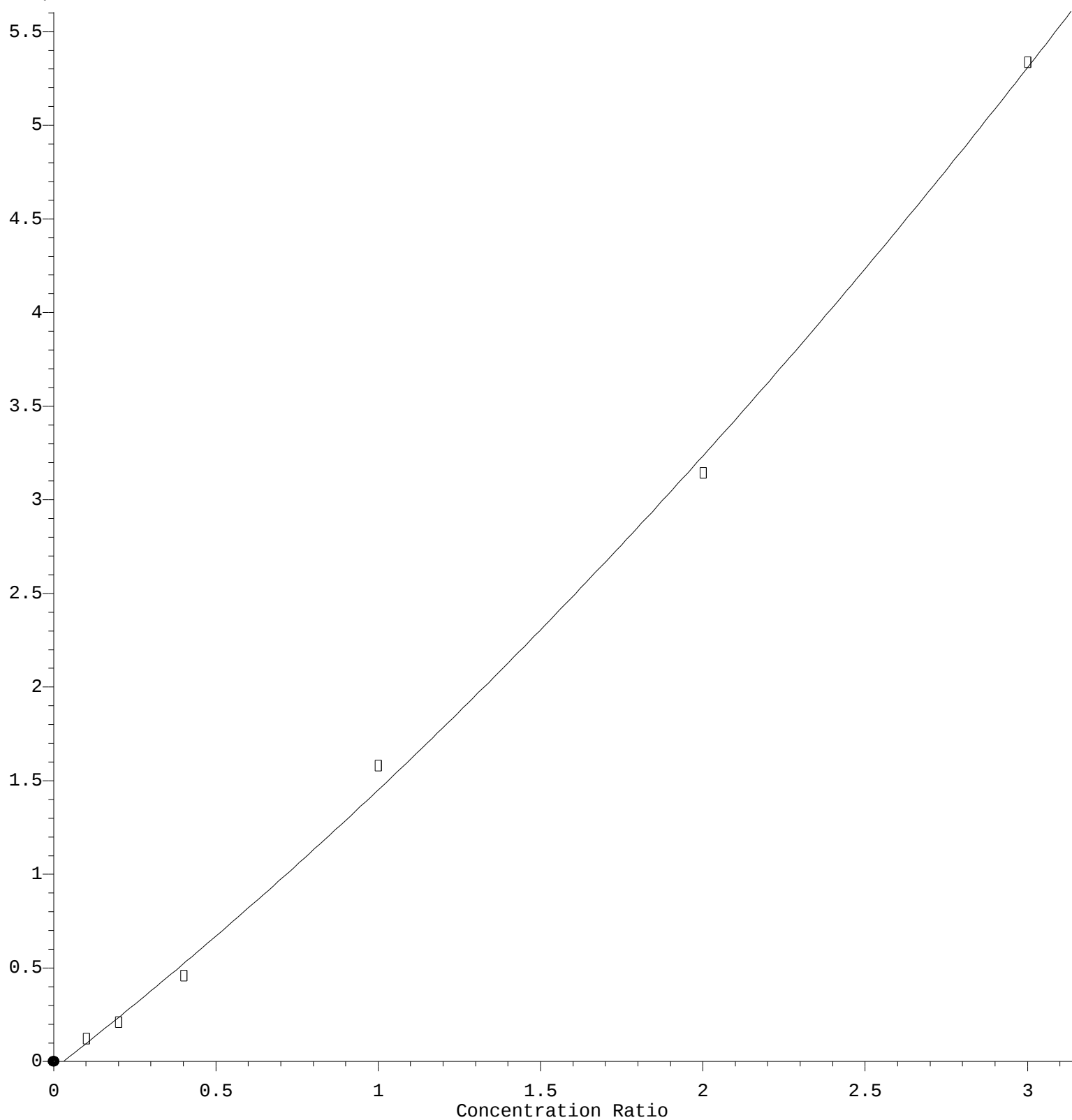
Tert butylalcohol



Response = $3.126 \times 10^{-2} \times \text{Amt} + 1.549 \times 10^{-2}$
 Coef of Det (r^2) = 0.993493 Curve Fit: Linear
 Method Name: Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

Naphthalene

Response Ratio



$R = 1.461e-001 A^2 + 1.344e+000 A - 3.906e-002$
Coef of Det (r^2) = 0.998562 Curve Fit: Quadratic
Method Name: Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Calibration Table Last Updated: Wed Mar 05 12:42:45 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021397.D
 Acq On : 04 Mar 2025 09:46
 Operator : SY/MD
 Sample : VSTDICC010
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.719	168	210415	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.621	114	334495	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	286225	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	137839	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	24408	10.975	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	21.960%#		
35) Dibromofluoromethane	7.640	113	23289	10.592	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	21.180%#		
50) Toluene-d8	10.109	98	85383	10.256	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	20.520%#		
62) 4-Bromofluorobenzene	12.407	95	28379	10.022	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	20.040%#		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	20733	10.737	ug/l	93
3) Chloromethane	2.074	50	29226	10.736	ug/l	100
4) Vinyl Chloride	2.208	62	32085	10.785	ug/l	95
5) Bromomethane	2.604	94	23372	10.870	ug/l	97
6) Chloroethane	2.744	64	21248	10.808	ug/l	95
7) Trichlorofluoromethane	3.067	101	44207	10.646	ug/l	97
8) Diethyl Ether	3.464	74	11802	10.256	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.823	101	25259	10.654	ug/l	98
10) Methyl Iodide	4.012	142	23638	9.809	ug/l	100
11) Tert butyl alcohol	4.872	59	10292m	53.545	ug/l	
12) 1,1-Dichloroethene	3.805	96	22821	10.558	ug/l	94
13) Acrolein	3.659	56	10792	95.404	ug/l	92
14) Allyl chloride	4.397	41	35815	10.253	ug/l	100
15) Acrylonitrile	5.073	53	25558	52.174	ug/l	99
16) Acetone	3.872	43	26021	53.644	ug/l	98
17) Carbon Disulfide	4.116	76	71755	10.593	ug/l	98
18) Methyl Acetate	4.397	43	10640	9.886	ug/l	95
19) Methyl tert-butyl Ether	5.128	73	54266	9.906	ug/l	99
20) Methylene Chloride	4.622	84	30170	11.849	ug/l	96
21) trans-1,2-Dichloroethene	5.128	96	25590	10.572	ug/l	90
22) Diisopropyl ether	6.030	45	76752	10.196	ug/l	96
23) Vinyl Acetate	5.969	43	209626	48.795	ug/l	99
24) 1,1-Dichloroethane	5.921	63	47303	10.647	ug/l	96
25) 2-Butanone	6.902	43	33631	50.121	ug/l	100
26) 2,2-Dichloropropane	6.890	77	43881	10.734	ug/l	100
27) cis-1,2-Dichloroethene	6.908	96	28406	10.330	ug/l	98
28) Bromochloromethane	7.250	49	20230	10.861	ug/l	99
29) Tetrahydrofuran	7.274	42	20096	48.513	ug/l	99
30) Chloroform	7.426	83	49699	10.773	ug/l	96
31) Cyclohexane	7.707	56	43729	10.499	ug/l #	91
32) 1,1,1-Trichloroethane	7.628	97	44743	10.592	ug/l	98
36) 1,1-Dichloropropene	7.841	75	35303	10.258	ug/l	99
37) Ethyl Acetate	6.994	43	15039	9.687	ug/l	99
38) Carbon Tetrachloride	7.823	117	41920	10.591	ug/l	98
39) Methylcyclohexane	9.109	83	39826	9.434	ug/l	94
40) Benzene	8.085	78	103944	10.253	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021397.D
 Acq On : 04 Mar 2025 09:46
 Operator : SY/MD
 Sample : VSTDICC010
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC010

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.219	41	8855m	10.472	ug/l	
42) 1,2-Dichloroethane	8.164	62	29851	10.525	ug/l	99
43) Isopropyl Acetate	8.201	43	28138	9.529	ug/l #	90
44) Trichloroethene	8.871	130	26077	10.179	ug/l	98
45) 1,2-Dichloropropane	9.146	63	24839	10.294	ug/l	96
46) Dibromomethane	9.237	93	13535	10.081	ug/l	99
47) Bromodichloromethane	9.426	83	36777	10.315	ug/l	97
48) Methyl methacrylate	9.225	41	12236	8.937	ug/l	99
49) 1,4-Dioxane	9.249	88	2337	177.344	ug/l #	87
51) 4-Methyl-2-Pentanone	9.999	43	70235	46.097	ug/l	100
52) Toluene	10.176	92	63716	9.968	ug/l	99
53) t-1,3-Dichloropropene	10.402	75	29928	9.528	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	36383	9.756	ug/l	96
55) 1,1,2-Trichloroethane	10.578	97	17683	10.069	ug/l	96
56) Ethyl methacrylate	10.444	69	19614	8.757	ug/l	99
57) 1,3-Dichloropropane	10.725	76	30899	10.151	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	45096	43.615	ug/l	100
59) 2-Hexanone	10.767	43	45211	44.876	ug/l	96
60) Dibromochloromethane	10.914	129	23922	9.936	ug/l	100
61) 1,2-Dibromoethane	11.017	107	16472	9.938	ug/l	96
64) Tetrachloroethene	10.652	164	23948	10.289	ug/l	97
65) Chlorobenzene	11.444	112	68332	10.110	ug/l	96
66) 1,1,1,2-Tetrachloroethane	11.523	131	24052	10.065	ug/l	99
67) Ethyl Benzene	11.523	91	114793	9.676	ug/l	97
68) m/p-Xylenes	11.633	106	87134	19.346	ug/l	98
69) o-Xylene	11.956	106	40080	9.655	ug/l	98
70) Styrene	11.974	104	64841	9.416	ug/l	99
71) Bromoform	12.139	173	12983	9.719	ug/l #	94
73) Isopropylbenzene	12.261	105	104663	9.639	ug/l	99
74) N-amyl acetate	12.072	43	20573	8.725	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	19638	10.249	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	14405m	10.371	ug/l	
77) Bromobenzene	12.535	156	25588	10.073	ug/l	99
78) n-propylbenzene	12.602	91	126938	9.626	ug/l	99
79) 2-Chlorotoluene	12.682	91	74631	9.898	ug/l	99
80) 1,3,5-Trimethylbenzene	12.743	105	85353	9.673	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	5896	9.650	ug/l	98
82) 4-Chlorotoluene	12.785	91	78997	10.118	ug/l	100
83) tert-Butylbenzene	13.005	119	76394	9.705	ug/l	98
84) 1,2,4-Trimethylbenzene	13.047	105	82865	9.458	ug/l	100
85) sec-Butylbenzene	13.182	105	109643	9.362	ug/l	100
86) p-Isopropyltoluene	13.297	119	89228	9.248	ug/l	100
87) 1,3-Dichlorobenzene	13.291	146	51307	10.147	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	50160	10.143	ug/l	97
89) n-Butylbenzene	13.620	91	78217	8.779	ug/l	100
90) Hexachloroethane	13.883	117	20579	9.998	ug/l	96
91) 1,2-Dichlorobenzene	13.663	146	43028	9.929	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.285	75	2787	9.710	ug/l	94
93) 1,2,4-Trichlorobenzene	14.925	180	19935	8.422	ug/l	97
94) Hexachlorobutadiene	15.029	225	12923	8.709	ug/l	98
95) Naphthalene	15.151	128	28894	9.071	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	16639	8.358	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021397.D
Acq On : 04 Mar 2025 09:46
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

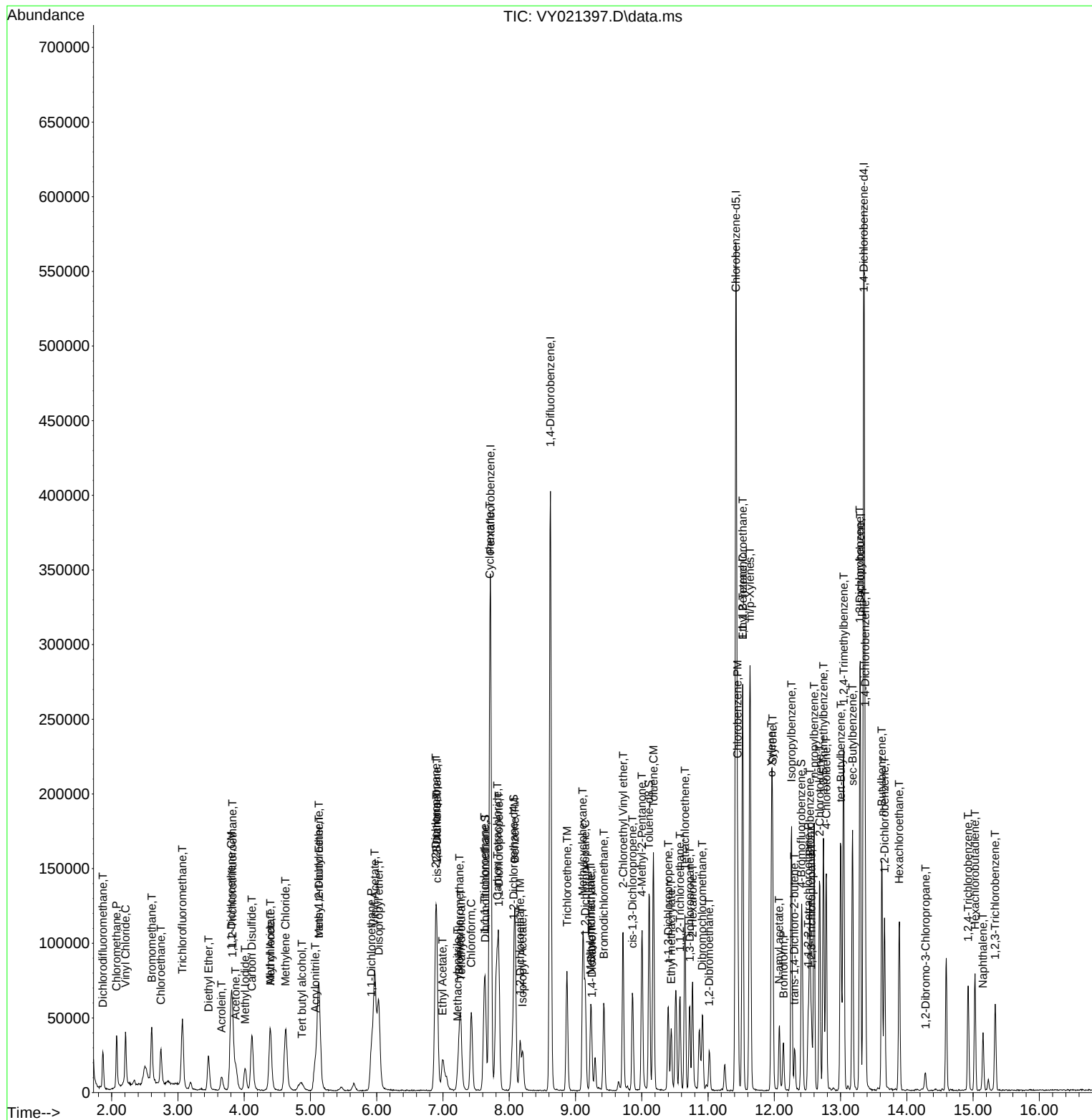
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021397.D
Acq On : 04 Mar 2025 09:46
Operator : SY/MD
Sample : VSTDIC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:57:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDICC020
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:58:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	234648	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	364702	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	318510	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	158359	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	48282	19.468	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	38.940%#		
35) Dibromofluoromethane	7.640	113	45904	19.149	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	38.300%#		
50) Toluene-d8	10.109	98	172011	18.951	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	37.900%#		
62) 4-Bromofluorobenzene	12.407	95	57456	18.609	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	37.220%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	39013	18.118	ug/l	99
3) Chloromethane	2.074	50	55232	18.193	ug/l	98
4) Vinyl Chloride	2.208	62	59949	18.070	ug/l	97
5) Bromomethane	2.598	94	42205	17.602	ug/l	97
6) Chloroethane	2.738	64	40060	18.272	ug/l	98
7) Trichlorofluoromethane	3.062	101	84097	18.161	ug/l	99
8) Diethyl Ether	3.458	74	23333	18.183	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.824	101	47597	18.003	ug/l	99
10) Methyl Iodide	4.007	142	48356	17.994	ug/l	99
11) Tert butyl alcohol	4.866	59	16988	91.100	ug/l	97
12) 1,1-Dichloroethene	3.799	96	43203	17.924	ug/l	96
13) Acrolein	3.659	56	20256	160.575	ug/l	90
14) Allyl chloride	4.397	41	69859	17.935	ug/l	99
15) Acrylonitrile	5.067	53	49390	90.413	ug/l	99
16) Acetone	3.872	43	42878	79.267	ug/l	97
17) Carbon Disulfide	4.110	76	133782	17.710	ug/l	98
18) Methyl Acetate	4.391	43	21340	17.780	ug/l	97
19) Methyl tert-butyl Ether	5.122	73	110487	18.085	ug/l	97
20) Methylene Chloride	4.628	84	50462	17.772	ug/l	97
21) trans-1,2-Dichloroethene	5.122	96	48412	17.935	ug/l	98
22) Diisopropyl ether	6.024	45	157248	18.732	ug/l	96
23) Vinyl Acetate	5.970	43	439671	91.773	ug/l	99
24) 1,1-Dichloroethane	5.921	63	89625	18.090	ug/l	98
25) 2-Butanone	6.902	43	63994	85.523	ug/l	92
26) 2,2-Dichloropropane	6.890	77	80697	17.702	ug/l	100
27) cis-1,2-Dichloroethene	6.896	96	55597	18.130	ug/l	99
28) Bromochloromethane	7.250	49	39711	19.118	ug/l	98
29) Tetrahydrofuran	7.274	42	41984	90.885	ug/l	98
30) Chloroform	7.427	83	93077	18.092	ug/l	98
31) Cyclohexane	7.707	56	83067	17.884	ug/l	96
32) 1,1,1-Trichloroethane	7.622	97	83884	17.807	ug/l	99
36) 1,1-Dichloropropene	7.841	75	67437	17.972	ug/l	98
37) Ethyl Acetate	6.988	43	30017m	17.733	ug/l	
38) Carbon Tetrachloride	7.823	117	78440	18.176	ug/l	99
39) Methylcyclohexane	9.115	83	80192	17.422	ug/l	100
40) Benzene	8.085	78	199273	18.027	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDICC020
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:58:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.225	41	15135	16.416	ug/l #	77
42) 1,2-Dichloroethane	8.164	62	56356	18.224	ug/l	100
43) Isopropyl Acetate	8.201	43	56260	17.474	ug/l #	87
44) Trichloroethene	8.865	130	50961	18.244	ug/l	97
45) 1,2-Dichloropropane	9.146	63	48565	18.460	ug/l	93
46) Dibromomethane	9.231	93	26972	18.426	ug/l	99
47) Bromodichloromethane	9.426	83	70770	18.205	ug/l	99
48) Methyl methacrylate	9.225	41	26835	17.976	ug/l	97
49) 1,4-Dioxane	9.237	88	5448	379.181	ug/l	94
51) 4-Methyl-2-Pentanone	9.999	43	147076	88.535	ug/l	99
52) Toluene	10.176	92	124450	17.858	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	61342	17.911	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	72678	17.873	ug/l	98
55) 1,1,2-Trichloroethane	10.572	97	34630	18.085	ug/l	98
56) Ethyl methacrylate	10.444	69	42134	17.253	ug/l	99
57) 1,3-Dichloropropane	10.719	76	61443	18.514	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	101217	89.786	ug/l	100
59) 2-Hexanone	10.768	43	94397	85.937	ug/l	98
60) Dibromochloromethane	10.914	129	47714	18.176	ug/l	98
61) 1,2-Dibromoethane	11.017	107	32927	18.220	ug/l	96
64) Tetrachloroethene	10.652	164	47121	18.193	ug/l	97
65) Chlorobenzene	11.444	112	135648	18.035	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.517	131	47998	18.050	ug/l	99
67) Ethyl Benzene	11.523	91	232468	17.609	ug/l	99
68) m/p-Xylenes	11.633	106	179664	35.847	ug/l	99
69) o-Xylene	11.956	106	80909	17.516	ug/l	98
70) Styrene	11.975	104	138147	18.027	ug/l	99
71) Bromoform	12.133	173	27186	18.288	ug/l #	99
73) Isopropylbenzene	12.255	105	219699	17.612	ug/l	99
74) N-amyl acetate	12.072	43	47062	17.372	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.511	83	40373	18.341	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	27215m	17.055	ug/l	
77) Bromobenzene	12.536	156	52163	17.874	ug/l	97
78) n-propylbenzene	12.596	91	269961	17.819	ug/l	99
79) 2-Chlorotoluene	12.682	91	155109	17.906	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	183398	18.091	ug/l	98
81) trans-1,4-Dichloro-2-b...	12.304	75	12253	17.456	ug/l	98
82) 4-Chlorotoluene	12.779	91	160509	17.893	ug/l	99
83) tert-Butylbenzene	12.999	119	157912	17.461	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	183733	18.254	ug/l	100
85) sec-Butylbenzene	13.182	105	243719	18.113	ug/l	100
86) p-Isopropyltoluene	13.298	119	198423	17.900	ug/l	99
87) 1,3-Dichlorobenzene	13.291	146	103878	17.882	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	102862	18.106	ug/l	100
89) n-Butylbenzene	13.621	91	181603	17.741	ug/l	99
90) Hexachloroethane	13.883	117	41098	17.379	ug/l	97
91) 1,2-Dichlorobenzene	13.663	146	90658	18.208	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	5850	17.741	ug/l	92
93) 1,2,4-Trichlorobenzene	14.925	180	46578	17.127	ug/l	100
94) Hexachlorobutadiene	15.029	225	30431	17.851	ug/l	98
95) Naphthalene	15.145	128	72734	17.845	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	38873	16.996	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021398.D
Acq On : 04 Mar 2025 10:09
Operator : SY/MD
Sample : VSTDICC020
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC020

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:58:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY021398.D
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDIC020
 Misc : 5.00g/5.0mL/MSVOA_Y/soil
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

MSVOA_Y

Client Sample Id :

VSTDIC020

Manual Integrations

APPROVED

Reviewed By : Mahesh Dadoda 03/06/2025
 Supervised By : Semsettin Yesilyurt 03/06/2025

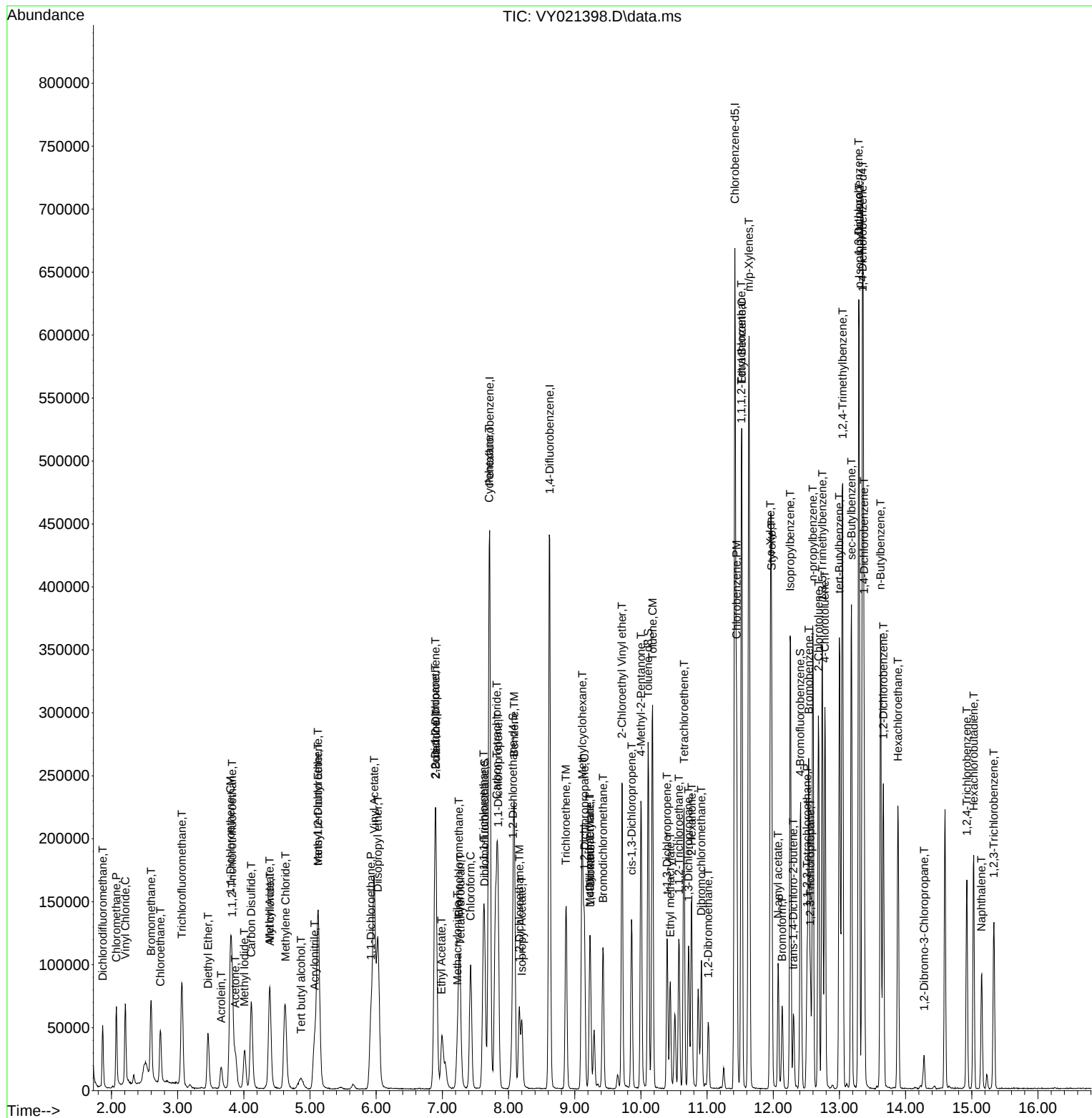
Quant Time: Mar 05 02:58:07 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Quant Title : SW846 8260

QLast Update : Wed Mar 05 02:30:51 2025

Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021399.D
 Acq On : 04 Mar 2025 10:30
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	235140	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.621	114	360221	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	321260	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	162486	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	113391	45.625	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	91.240%		
35) Dibromofluoromethane	7.640	113	106487	44.973	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	89.940%		
50) Toluene-d8	10.109	98	408759	45.594	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	91.180%		
62) 4-Bromofluorobenzene	12.407	95	139117	45.618	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	91.240%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	105206	48.756	ug/l	100
3) Chloromethane	2.074	50	145113	47.700	ug/l	100
4) Vinyl Chloride	2.208	62	162385	48.845	ug/l	100
5) Bromomethane	2.604	94	110008	45.784	ug/l	100
6) Chloroethane	2.738	64	108266	49.279	ug/l	100
7) Trichlorofluoromethane	3.067	101	227308	48.986	ug/l	100
8) Diethyl Ether	3.458	74	66509	51.720	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.830	101	126512	47.753	ug/l	100
10) Methyl Iodide	4.012	142	148683	55.210	ug/l	100
11) Tert butyl alcohol	4.872	59	44476	277.793	ug/l	100
12) 1,1-Dichloroethene	3.799	96	118986	49.262	ug/l	100
13) Acrolein	3.665	56	5354	42.354	ug/l	100
14) Allyl chloride	4.397	41	197932	50.708	ug/l	100
15) Acrylonitrile	5.067	53	146888	268.329	ug/l	100
16) Acetone	3.872	43	157979	291.440	ug/l	100
17) Carbon Disulfide	4.116	76	383514	50.664	ug/l	100
18) Methyl Acetate	4.390	43	66880	55.606	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	321178	52.463	ug/l	100
20) Methylene Chloride	4.622	84	129715	45.588	ug/l	100
21) trans-1,2-Dichloroethene	5.128	96	132731	49.068	ug/l	100
22) Diisopropyl ether	6.024	45	435305	51.747	ug/l	100
23) Vinyl Acetate	5.969	43	1305446	271.918	ug/l	100
24) 1,1-Dichloroethane	5.927	63	247003	49.750	ug/l	100
25) 2-Butanone	6.896	43	212274	283.093	ug/l	100
26) 2,2-Dichloropropane	6.890	77	220625	48.295	ug/l	100
27) cis-1,2-Dichloroethene	6.896	96	153891	50.078	ug/l	100
28) Bromochloromethane	7.250	49	109912	52.805	ug/l	100
29) Tetrahydrofuran	7.268	42	129976	280.779	ug/l	100
30) Chloroform	7.426	83	255675	49.593	ug/l	100
31) Cyclohexane	7.707	56	221181	47.519	ug/l	100
32) 1,1,1-Trichloroethane	7.622	97	230018	48.727	ug/l	100
36) 1,1-Dichloropropene	7.841	75	186577	50.340	ug/l	100
37) Ethyl Acetate	6.988	43	89317	53.423	ug/l	100
38) Carbon Tetrachloride	7.823	117	211310	49.573	ug/l	100
39) Methylcyclohexane	9.115	83	234520	51.585	ug/l	100
40) Benzene	8.085	78	555364	50.867	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021399.D
 Acq On : 04 Mar 2025 10:30
 Operator : SY/MD
 Sample : VSTDICCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.219	41	47147	51.774	ug/l	100
42) 1,2-Dichloroethane	8.164	62	157205	51.469	ug/l	100
43) Isopropyl Acetate	8.201	43	173913	54.689	ug/l	100
44) Trichloroethene	8.871	130	137378	49.793	ug/l	100
45) 1,2-Dichloropropane	9.146	63	132392	50.949	ug/l	100
46) Dibromomethane	9.237	93	76517	52.923	ug/l	100
47) Bromodichloromethane	9.426	83	197243	51.370	ug/l	100
48) Methyl methacrylate	9.225	41	82355	55.853	ug/l	100
49) 1,4-Dioxane	9.231	88	16238	1144.224	ug/l	100
51) 4-Methyl-2-Pentanone	9.999	43	472885	288.203	ug/l	100
52) Toluene	10.176	92	356029	51.723	ug/l	100
53) t-1,3-Dichloropropene	10.395	75	179810	53.154	ug/l	100
54) cis-1,3-Dichloropropene	9.859	75	211622	52.691	ug/l	100
55) 1,1,2-Trichloroethane	10.572	97	101913	53.886	ug/l	100
56) Ethyl methacrylate	10.444	69	137939	57.187	ug/l	100
57) 1,3-Dichloropropane	10.719	76	172259	52.551	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	313349	281.418	ug/l	100
59) 2-Hexanone	10.761	43	327200	301.583	ug/l	100
60) Dibromochloromethane	10.914	129	135595	52.296	ug/l	100
61) 1,2-Dibromoethane	11.017	107	94280	52.819	ug/l	100
64) Tetrachloroethene	10.652	164	129562	49.596	ug/l	100
65) Chlorobenzene	11.444	112	381086	50.233	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.517	131	135273	50.434	ug/l	100
67) Ethyl Benzene	11.523	91	685789	51.502	ug/l	100
68) m/p-Xylenes	11.633	106	528037	104.452	ug/l	100
69) o-Xylene	11.956	106	243863	52.341	ug/l	100
70) Styrene	11.974	104	410178	53.068	ug/l	100
71) Bromoform	12.133	173	80342	53.584	ug/l	100
73) Isopropylbenzene	12.255	105	655492	51.212	ug/l	100
74) N-amyl acetate	12.072	43	154403	55.547	ug/l	100
75) 1,1,2,2-Tetrachloroethane	12.511	83	118077	52.277	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	79840m	48.762	ug/l	
77) Bromobenzene	12.535	156	150460	50.247	ug/l	100
78) n-propylbenzene	12.596	91	797005	51.272	ug/l	100
79) 2-Chlorotoluene	12.682	91	445409	50.112	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	528974	50.855	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	38697	53.727	ug/l	100
82) 4-Chlorotoluene	12.779	91	462879	50.291	ug/l	100
83) tert-Butylbenzene	12.999	119	475042	51.194	ug/l	100
84) 1,2,4-Trimethylbenzene	13.047	105	531919	51.505	ug/l	100
85) sec-Butylbenzene	13.175	105	708040	51.284	ug/l	100
86) p-Isopropyltoluene	13.297	119	583517	51.302	ug/l	100
87) 1,3-Dichlorobenzene	13.291	146	294406	49.392	ug/l	100
88) 1,4-Dichlorobenzene	13.371	146	289572	49.675	ug/l	100
89) n-Butylbenzene	13.620	91	550274	52.392	ug/l	100
90) Hexachloroethane	13.883	117	118465	48.822	ug/l	100
91) 1,2-Dichlorobenzene	13.663	146	258078	50.517	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.279	75	17568	51.924	ug/l	100
93) 1,2,4-Trichlorobenzene	14.925	180	147587	52.891	ug/l	100
94) Hexachlorobutadiene	15.029	225	89592	51.220	ug/l	100
95) Naphthalene	15.151	128	256660	53.894	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	125962	53.673	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021399.D
Acq On : 04 Mar 2025 10:30
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 02:59:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

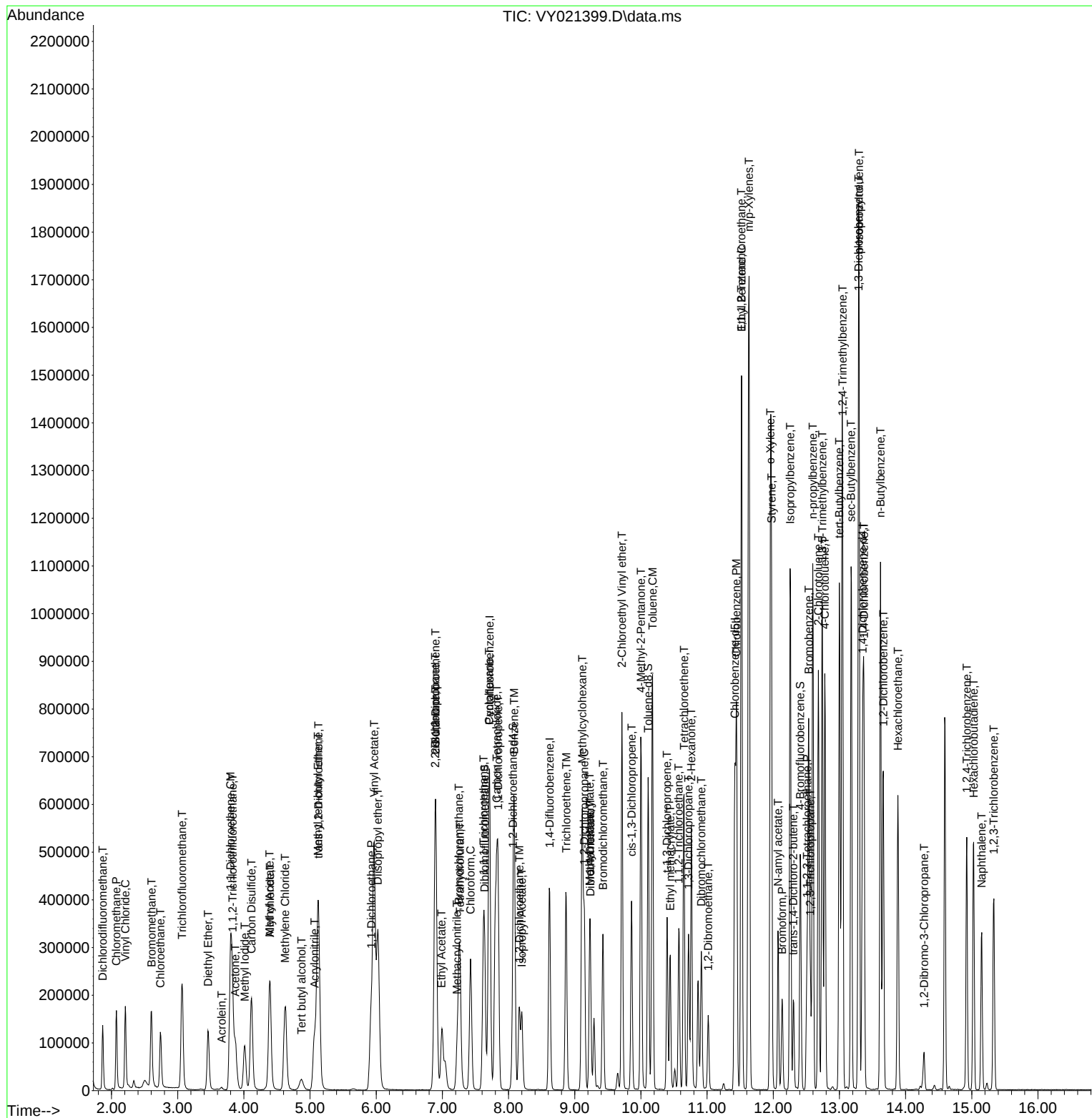
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICCC050

Manual Integrations

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021400.D
 Acq On : 04 Mar 2025 11:06
 Operator : SY/MD
 Sample : VSTDICC100
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By : Mahesh Dadoda 03/06/2025
 Supervised By : Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:00:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	244207	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	369748	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	325902	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	161237	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	249506	96.666	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 193.340%#			
35) Dibromofluoromethane	7.640	113	245300	100.930	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 201.860%#			
50) Toluene-d8	10.115	98	953319	103.596	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 207.200%#			
62) 4-Bromofluorobenzene	12.414	95	320008	102.231	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 204.460%#			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	214851	95.873	ug/l	98
3) Chloromethane	2.074	50	297027	94.011	ug/l	99
4) Vinyl Chloride	2.208	62	344887	99.889	ug/l	98
5) Bromomethane	2.598	94	236127	94.624	ug/l	99
6) Chloroethane	2.739	64	223479	97.944	ug/l	97
7) Trichlorofluoromethane	3.068	101	470472	97.624	ug/l	99
8) Diethyl Ether	3.464	74	129160	96.710	ug/l	96
9) 1,1,2-Trichlorotrifluo...	3.824	101	264663	96.189	ug/l	99
10) Methyl Iodide	4.013	142	306871	109.719	ug/l	100
11) Tert butyl alcohol	4.872	59	74090	460.479	ug/l	99
12) 1,1-Dichloroethene	3.799	96	250255	99.762	ug/l	99
13) Acrolein	3.659	56	10283	78.325	ug/l	89
14) Allyl chloride	4.397	41	413704	102.051	ug/l	99
15) Acrylonitrile	5.067	53	271919	478.287	ug/l	98
16) Acetone	3.872	43	252046	447.711	ug/l	94
17) Carbon Disulfide	4.116	76	790255	100.521	ug/l	100
18) Methyl Acetate	4.391	43	119905	95.992	ug/l	99
19) Methyl tert-butyl Ether	5.122	73	634643	99.817	ug/l	100
20) Methylene Chloride	4.628	84	258664	87.531	ug/l	98
21) trans-1,2-Dichloroethene	5.122	96	278418	99.104	ug/l	96
22) Diisopropyl ether	6.025	45	878111	100.510	ug/l	97
23) Vinyl Acetate	5.970	43	2520516	505.518	ug/l	100
24) 1,1-Dichloroethane	5.921	63	505607	98.056	ug/l	99
25) 2-Butanone	6.902	43	363091	466.248	ug/l	100
26) 2,2-Dichloropropane	6.890	77	466669	98.362	ug/l	99
27) cis-1,2-Dichloroethene	6.896	96	321461	100.724	ug/l	99
28) Bromochloromethane	7.250	49	208133	96.281	ug/l	99
29) Tetrahydrofuran	7.268	42	228343	474.960	ug/l	99
30) Chloroform	7.427	83	520812	97.270	ug/l	97
31) Cyclohexane	7.707	56	460568	95.275	ug/l	98
32) 1,1,1-Trichloroethane	7.628	97	480163	97.941	ug/l	100
36) 1,1-Dichloropropene	7.841	75	388384	102.089	ug/l	99
37) Ethyl Acetate	6.994	43	162380	94.621	ug/l	98
38) Carbon Tetrachloride	7.823	117	439762	100.510	ug/l	98
39) Methylcyclohexane	9.115	83	503172	107.827	ug/l	98
40) Benzene	8.085	78	1138841	101.621	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021400.D
 Acq On : 04 Mar 2025 11:06
 Operator : SY/MD
 Sample : VSTDICC100
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:00:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	95564	102.238	ug/l #	88
42) 1,2-Dichloroethane	8.164	62	305782	97.534	ug/l	100
43) Isopropyl Acetate	8.201	43	327171	100.231	ug/l	99
44) Trichloroethene	8.872	130	284312	100.395	ug/l	97
45) 1,2-Dichloropropane	9.146	63	264690	99.238	ug/l	97
46) Dibromomethane	9.237	93	146713	98.859	ug/l	100
47) Bromodichloromethane	9.426	83	395676	100.395	ug/l	99
48) Methyl methacrylate	9.225	41	156771	103.582	ug/l	100
49) 1,4-Dioxane	9.237	88	29902	2052.779	ug/l	97
51) 4-Methyl-2-Pentanone	10.006	43	850519	504.998	ug/l	100
52) Toluene	10.176	92	737467	104.377	ug/l	100
53) t-1,3-Dichloropropene	10.402	75	365825	105.356	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	428305	103.894	ug/l	99
55) 1,1,2-Trichloroethane	10.579	97	191894	98.848	ug/l	99
56) Ethyl methacrylate	10.444	69	271599	109.699	ug/l	98
57) 1,3-Dichloropropane	10.725	76	334146	99.311	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	600796	525.670	ug/l	100
59) 2-Hexanone	10.768	43	575211	516.516	ug/l	100
60) Dibromochloromethane	10.914	129	268359	100.834	ug/l	100
61) 1,2-Dibromoethane	11.024	107	183206	99.993	ug/l	99
64) Tetrachloroethene	10.652	164	265100	100.033	ug/l	97
65) Chlorobenzene	11.450	112	776963	100.956	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.524	131	275635	101.302	ug/l	99
67) Ethyl Benzene	11.524	91	1439764	106.585	ug/l	100
68) m/p-Xylenes	11.633	106	1085642	211.694	ug/l	99
69) o-Xylene	11.962	106	507619	107.399	ug/l	100
70) Styrene	11.975	104	851456	108.590	ug/l	99
71) Bromoform	12.139	173	154505	101.579	ug/l	99
73) Isopropylbenzene	12.261	105	1364499	107.432	ug/l	99
74) N-amyl acetate	12.078	43	298318	108.151	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.511	83	215229	96.028	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	157519m	96.949	ug/l	
77) Bromobenzene	12.536	156	301928	101.611	ug/l	99
78) n-propylbenzene	12.603	91	1627111	105.485	ug/l	100
79) 2-Chlorotoluene	12.688	91	910543	103.236	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	1087821	105.392	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.310	75	73701	103.120	ug/l	97
82) 4-Chlorotoluene	12.786	91	945021	103.470	ug/l	99
83) tert-Butylbenzene	13.005	119	998366	108.425	ug/l	98
84) 1,2,4-Trimethylbenzene	13.048	105	1081299	105.512	ug/l	99
85) sec-Butylbenzene	13.182	105	1441675	105.232	ug/l	99
86) p-Isopropyltoluene	13.298	119	1212941	107.466	ug/l	100
87) 1,3-Dichlorobenzene	13.291	146	593203	100.292	ug/l	100
88) 1,4-Dichlorobenzene	13.371	146	575089	99.419	ug/l	99
89) n-Butylbenzene	13.621	91	1139920	109.374	ug/l	99
90) Hexachloroethane	13.889	117	244664	101.612	ug/l	99
91) 1,2-Dichlorobenzene	13.663	146	505733	99.761	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	31708	94.443	ug/l	98
93) 1,2,4-Trichlorobenzene	14.925	180	298684	107.869	ug/l	98
94) Hexachlorobutadiene	15.029	225	182747	105.287	ug/l	100
95) Naphthalene	15.151	128	506570	97.607	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	248728	106.805	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021400.D
Acq On : 04 Mar 2025 11:06
Operator : SY/MD
Sample : VSTDICC100
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:00:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021401.D
 Acq On : 04 Mar 2025 11:29
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	266755	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	403017	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	355825	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	173358	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.067	65	382016	135.494	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 270.980%#	
35) Dibromofluoromethane	7.640	113	376382	142.080	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 284.160%#	
50) Toluene-d8	10.109	98	1454175	144.978	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 289.960%#	
62) 4-Bromofluorobenzene	12.408	95	489437	143.450	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 286.900%#	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	343152	140.181	ug/l	97
3) Chloromethane	2.074	50	464459	134.578	ug/l	99
4) Vinyl Chloride	2.208	62	532492	141.188	ug/l	99
5) Bromomethane	2.592	94	374688	137.459	ug/l	98
6) Chloroethane	2.739	64	345714	138.708	ug/l	97
7) Trichlorofluoromethane	3.062	101	748024	142.097	ug/l	99
8) Diethyl Ether	3.458	74	210548	144.324	ug/l	97
9) 1,1,2-Trichlorotrifluo...	3.824	101	419826	139.685	ug/l	99
10) Methyl Iodide	4.013	142	485205	158.816	ug/l	98
11) Tert butyl alcohol	4.872	59	132243	768.076	ug/l	100
12) 1,1-Dichloroethene	3.793	96	395483	144.329	ug/l	99
13) Acrolein	3.659	56	16610	115.824	ug/l	89
14) Allyl chloride	4.391	41	650795	146.966	ug/l	99
15) Acrylonitrile	5.061	53	454097	731.212	ug/l	99
16) Acetone	3.873	43	380537	618.814	ug/l	94
17) Carbon Disulfide	4.110	76	1237407	144.094	ug/l	100
18) Methyl Acetate	4.391	43	205359	150.507	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	1052192	151.501	ug/l	99
20) Methylene Chloride	4.622	84	405442	125.603	ug/l	97
21) trans-1,2-Dichloroethene	5.122	96	436290	142.173	ug/l	99
22) Diisopropyl ether	6.025	45	1390733	145.730	ug/l	96
23) Vinyl Acetate	5.964	43	4142519	760.601	ug/l	99
24) 1,1-Dichloroethane	5.921	63	793059	140.803	ug/l	99
25) 2-Butanone	6.896	43	604502	710.631	ug/l	99
26) 2,2-Dichloropropane	6.890	77	740961	142.975	ug/l	98
27) cis-1,2-Dichloroethene	6.896	96	511211	146.639	ug/l	98
28) Bromochloromethane	7.250	49	304092	128.781	ug/l	98
29) Tetrahydrofuran	7.262	42	392146	746.729	ug/l	99
30) Chloroform	7.427	83	823431	140.790	ug/l	98
31) Cyclohexane	7.707	56	731684	138.566	ug/l	97
32) 1,1,1-Trichloroethane	7.622	97	762807	142.442	ug/l	99
36) 1,1-Dichloropropene	7.841	75	609596	147.009	ug/l	99
37) Ethyl Acetate	6.988	43	271579	145.189	ug/l	99
38) Carbon Tetrachloride	7.823	117	700638	146.916	ug/l	100
39) Methylcyclohexane	9.109	83	808497	158.954	ug/l	99
40) Benzene	8.085	78	1781188	145.818	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021401.D
 Acq On : 04 Mar 2025 11:29
 Operator : SY/MD
 Sample : VSTDICC150
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VSTDICC150

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025

Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Quant Title : SW846 8260

QLast Update : Wed Mar 05 02:30:51 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	150455	147.676	ug/l #	92
42) 1,2-Dichloroethane	8.164	62	493103	144.299	ug/l	99
43) Isopropyl Acetate	8.201	43	557010	156.557	ug/l	99
44) Trichloroethene	8.866	130	456841	148.000	ug/l	96
45) 1,2-Dichloropropane	9.146	63	419433	144.273	ug/l	98
46) Dibromomethane	9.231	93	239577	148.107	ug/l	99
47) Bromodichloromethane	9.426	83	629944	146.641	ug/l	100
48) Methyl methacrylate	9.225	41	268043	162.482	ug/l	99
49) 1,4-Dioxane	9.231	88	51411	3238.027	ug/l	98
51) 4-Methyl-2-Pentanone	9.999	43	1468813	800.119	ug/l	99
52) Toluene	10.176	92	1158338	150.411	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	598438	158.120	ug/l	99
54) cis-1,3-Dichloropropene	9.859	75	684617	152.359	ug/l	99
55) 1,1,2-Trichloroethane	10.573	97	310174	146.586	ug/l	99
56) Ethyl methacrylate	10.444	69	466697	172.939	ug/l	99
57) 1,3-Dichloropropane	10.719	76	545711	148.802	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	1094099	878.264	ug/l	99
59) 2-Hexanone	10.762	43	983959	810.617	ug/l	100
60) Dibromochloromethane	10.914	129	436855	150.595	ug/l	99
61) 1,2-Dibromoethane	11.018	107	298827	149.635	ug/l	98
64) Tetrachloroethene	10.652	164	419107	144.847	ug/l	99
65) Chlorobenzene	11.444	112	1243163	147.949	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.517	131	442377	148.911	ug/l	100
67) Ethyl Benzene	11.524	91	2291269	155.358	ug/l	100
68) m/p-Xylenes	11.633	106	1713936	306.103	ug/l	99
69) o-Xylene	11.956	106	805321	156.057	ug/l	99
70) Styrene	11.975	104	1352252	157.956	ug/l	99
71) Bromoform	12.133	173	253882	152.878	ug/l #	98
73) Isopropylbenzene	12.255	105	2144893	157.067	ug/l	99
74) N-amyl acetate	12.072	43	521557	175.863	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.511	83	358734	148.865	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	241297m	138.129	ug/l	
77) Bromobenzene	12.536	156	485258	151.891	ug/l	98
78) n-propylbenzene	12.597	91	2550395	153.780	ug/l	100
79) 2-Chlorotoluene	12.682	91	1439597	151.808	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	1704391	153.582	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.310	75	126267	164.316	ug/l	95
82) 4-Chlorotoluene	12.779	91	1468603	149.554	ug/l	100
83) tert-Butylbenzene	12.999	119	1538803	155.433	ug/l	100
84) 1,2,4-Trimethylbenzene	13.048	105	1713052	155.470	ug/l	99
85) sec-Butylbenzene	13.182	105	2277976	154.650	ug/l	99
86) p-Isopropyltoluene	13.298	119	1940795	159.931	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	947577	149.004	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	917648	147.547	ug/l	99
89) n-Butylbenzene	13.621	91	1818773	162.308	ug/l	98
90) Hexachloroethane	13.883	117	393459	151.984	ug/l	99
91) 1,2-Dichlorobenzene	13.663	146	811529	148.890	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.279	75	56205	155.702	ug/l	97
93) 1,2,4-Trichlorobenzene	14.925	180	517199	173.726	ug/l	98
94) Hexachlorobutadiene	15.029	225	302517	162.105	ug/l	99
95) Naphthalene	15.151	128	925079	150.626	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	434430	173.503	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021401.D
Acq On : 04 Mar 2025 11:29
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

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

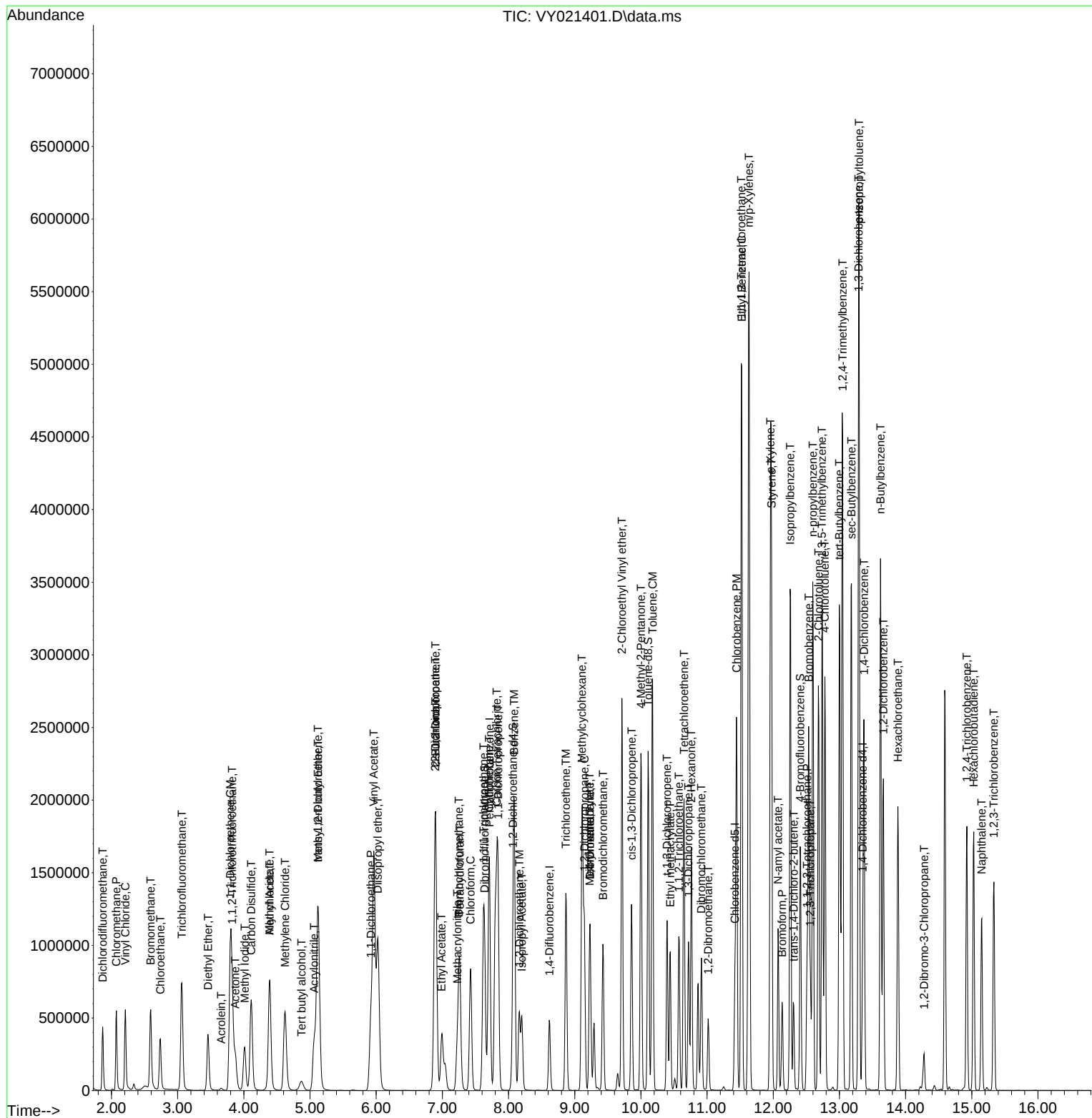
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021401.D
Acq On : 04 Mar 2025 11:29
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:01:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021403.D
 Acq On : 04 Mar 2025 12:15
 Operator : SY/MD
 Sample : VSTDICC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	245027	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	394876	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	337621	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	161080	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.067	65	14848	5.733	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	11.460%#
35) Dibromofluoromethane	7.634	113	14631	5.637	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	11.280%#
50) Toluene-d8	10.109	98	54665	5.562	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	11.120%#
62) 4-Bromofluorobenzene	12.408	95	19663	5.882	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	11.760%#

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	12951	5.760	ug/l	91
3) Chloromethane	2.074	50	19424	6.127	ug/l	98
4) Vinyl Chloride	2.208	62	19070	5.505	ug/l	99
5) Bromomethane	2.605	94	15706	6.273	ug/l	95
6) Chloroethane	2.745	64	12773	5.579	ug/l	98
7) Trichlorofluoromethane	3.068	101	27176	5.620	ug/l	99
8) Diethyl Ether	3.458	74	7381	5.508	ug/l	93
9) 1,1,2-Trichlorotrifluo...	3.824	101	16374	5.931	ug/l	99
10) Methyl Iodide	4.013	142	12057	4.296	ug/l	99
11) Tert butyl alcohol	4.872	59	7503	24.295	ug/l #	83
12) 1,1-Dichloroethene	3.800	96	13880	5.515	ug/l	97
13) Acrolein	3.653	56	6605	50.142	ug/l	93
14) Allyl chloride	4.385	41	21629	5.317	ug/l	99
15) Acrylonitrile	5.068	53	14939	26.189	ug/l	100
16) Acetone	3.879	43	17626	31.204	ug/l	99
17) Carbon Disulfide	4.110	76	42440	5.380	ug/l	99
18) Methyl Acetate	4.391	43	6561	5.235	ug/l	94
19) Methyl tert-butyl Ether	5.129	73	33420	5.239	ug/l	94
20) Methylene Chloride	4.629	84	19304	6.511	ug/l	97
21) trans-1,2-Dichloroethene	5.116	96	15868	5.629	ug/l	89
22) Diisopropyl ether	6.019	45	45242	5.161	ug/l	88
23) Vinyl Acetate	5.970	43	124260	24.838	ug/l	96
24) 1,1-Dichloroethane	5.921	63	28883	5.583	ug/l	97
25) 2-Butanone	6.903	43	22073	28.249	ug/l	96
26) 2,2-Dichloropropane	6.890	77	27105	5.694	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	17198	5.371	ug/l	93
28) Bromochloromethane	7.250	49	11718	5.403	ug/l	99
29) Tetrahydrofuran	7.274	42	12689	26.305	ug/l	99
30) Chloroform	7.427	83	29950	5.575	ug/l	99
31) Cyclohexane	7.701	56	29806	6.145	ug/l #	93
32) 1,1,1-Trichloroethane	7.622	97	28207	5.734	ug/l	95
36) 1,1-Dichloropropene	7.841	75	21694	5.340	ug/l	98
37) Ethyl Acetate	6.988	43	9539m	5.205	ug/l	
38) Carbon Tetrachloride	7.823	117	24674	5.281	ug/l	96
39) Methylcyclohexane	9.110	83	25312	5.079	ug/l	95
40) Benzene	8.085	78	63894	5.339	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021403.D
 Acq On : 04 Mar 2025 12:15
 Operator : SY/MD
 Sample : VSTDICC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 02:30:51 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.232	41	4825	4.834	ug/l #	91
42) 1,2-Dichloroethane	8.158	62	17906	5.348	ug/l	99
43) Isopropyl Acetate	8.201	43	18016	5.168	ug/l	97
44) Trichloroethene	8.872	130	16384	5.417	ug/l	98
45) 1,2-Dichloropropane	9.146	63	15302	5.372	ug/l	91
46) Dibromomethane	9.238	93	8211	5.181	ug/l	99
47) Bromodichloromethane	9.427	83	22083	5.247	ug/l	95
48) Methyl methacrylate	9.225	41	7383	4.568	ug/l	98
49) 1,4-Dioxane	9.231	88	1424	91.537	ug/l #	90
51) 4-Methyl-2-Pentanone	10.000	43	43306	24.077	ug/l	100
52) Toluene	10.176	92	38833	5.146	ug/l	96
53) t-1,3-Dichloropropene	10.396	75	18188	4.905	ug/l	96
54) cis-1,3-Dichloropropene	9.859	75	22504	5.111	ug/l	100
55) 1,1,2-Trichloroethane	10.573	97	10837	5.227	ug/l	97
56) Ethyl methacrylate	10.439	69	11475	4.340	ug/l	97
57) 1,3-Dichloropropane	10.719	76	18380	5.115	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	26908	22.045	ug/l	99
59) 2-Hexanone	10.762	43	27441	23.073	ug/l	97
60) Dibromochloromethane	10.914	129	14771	5.197	ug/l	96
61) 1,2-Dibromoethane	11.018	107	10188	5.207	ug/l	99
64) Tetrachloroethene	10.652	164	15148	5.518	ug/l	95
65) Chlorobenzene	11.444	112	43322	5.434	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.524	131	15173	5.383	ug/l	96
67) Ethyl Benzene	11.524	91	71391	5.102	ug/l	97
68) m/p-Xylenes	11.633	106	53829	10.132	ug/l	99
69) o-Xylene	11.957	106	24421	4.988	ug/l	100
70) Styrene	11.975	104	38858	4.784	ug/l	99
71) Bromoform	12.133	173	7934	5.035	ug/l #	96
73) Isopropylbenzene	12.255	105	64065	5.049	ug/l	98
74) N-amyl acetate	12.072	43	12319	4.470	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.505	83	11865	5.299	ug/l	95
76) 1,2,3-Trichloropropane	12.560	75	10101m	6.223	ug/l	
77) Bromobenzene	12.536	156	15812	5.327	ug/l	97
78) n-propylbenzene	12.597	91	80203	5.205	ug/l	99
79) 2-Chlorotoluene	12.682	91	47065	5.341	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	53272	5.166	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	3431	4.805	ug/l	92
82) 4-Chlorotoluene	12.780	91	48178	5.280	ug/l	100
83) tert-Butylbenzene	12.999	119	46550	5.060	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	52203	5.099	ug/l	98
85) sec-Butylbenzene	13.176	105	71799	5.246	ug/l	100
86) p-Isopropyltoluene	13.298	119	57131	5.067	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	32709	5.535	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	32045	5.545	ug/l	95
89) n-Butylbenzene	13.621	91	52654	5.057	ug/l	99
90) Hexachloroethane	13.883	117	13537	5.628	ug/l	95
91) 1,2-Dichlorobenzene	13.664	146	27758	5.481	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	1880	5.605	ug/l	86
93) 1,2,4-Trichlorobenzene	14.926	180	13925	5.034	ug/l	98
94) Hexachlorobutadiene	15.029	225	9351	5.393	ug/l	97
95) Naphthalene	15.151	128	19552	5.892	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	11822	5.081	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021403.D
Acq On : 04 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDICC005
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 03:02:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 02:30:51 2025
Response via : Initial Calibration

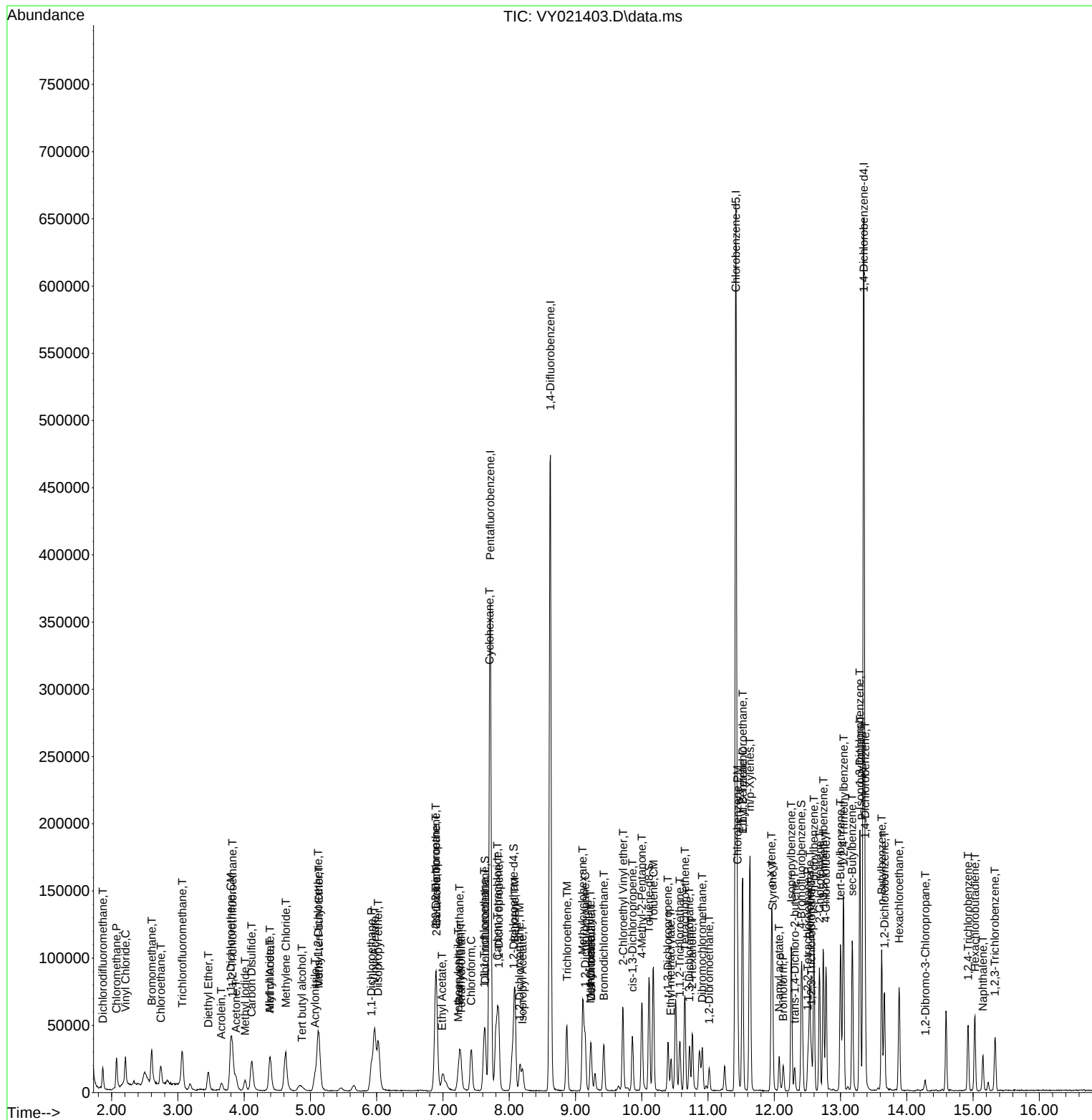
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC005

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Manual Integrations
 APPROVED

Reviewed By : Mahesh Dadoda 03/06/2025
 Supervised By : Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.713	168	227337	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.622	114	353570	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	304943	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	150512	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.067	65	119727	49.828	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery =	99.660%		
35) Dibromofluoromethane	7.640	113	118281	50.894	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	101.780%		
50) Toluene-d8	10.115	98	468697	53.263	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	106.520%		
62) 4-Bromofluorobenzene	12.414	95	154333	51.560	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	103.120%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	98287	47.113	ug/l	99
3) Chloromethane	2.074	50	144341	49.075	ug/l	99
4) Vinyl Chloride	2.214	62	161453	50.231	ug/l	97
5) Bromomethane	2.605	94	107517	46.283	ug/l	100
6) Chloroethane	2.745	64	103894	48.912	ug/l	98
7) Trichlorofluoromethane	3.068	101	219880	49.011	ug/l	99
8) Diethyl Ether	3.464	74	56729	45.628	ug/l	94
9) 1,1,2-Trichlorotrifluo...	3.824	101	123311	48.142	ug/l	99
10) Methyl Iodide	4.013	142	125851	48.336	ug/l	99
11) Tert butyl alcohol	4.866	59	33542	211.206	ug/l	96
12) 1,1-Dichloroethene	3.800	96	115418	49.424	ug/l	97
13) Acrolein	3.659	56	5504	45.035	ug/l	89
14) Allyl chloride	4.397	41	190579	50.500	ug/l	99
15) Acrylonitrile	5.068	53	115490	218.213	ug/l	99
16) Acetone	3.873	43	126338	241.068	ug/l	94
17) Carbon Disulfide	4.117	76	369324	50.464	ug/l	99
18) Methyl Acetate	4.391	43	51747	44.501	ug/l	100
19) Methyl tert-butyl Ether	5.122	73	267823	45.249	ug/l	100
20) Methylene Chloride	4.623	84	120803	43.913	ug/l	99
21) trans-1,2-Dichloroethene	5.129	96	125702	48.065	ug/l	99
22) Diisopropyl ether	6.031	45	393029	48.325	ug/l	96
23) Vinyl Acetate	5.970	43	1084996	233.756	ug/l	99
24) 1,1-Dichloroethane	5.927	63	231573	48.243	ug/l	99
25) 2-Butanone	6.903	43	161045	222.145	ug/l	99
26) 2,2-Dichloropropane	6.896	77	214717	48.615	ug/l	98
27) cis-1,2-Dichloroethene	6.896	96	144113	48.506	ug/l	100
28) Bromochloromethane	7.256	49	113096	56.200	ug/l	98
29) Tetrahydrofuran	7.268	42	95855	214.177	ug/l	99
30) Chloroform	7.427	83	238047	47.758	ug/l	95
31) Cyclohexane	7.707	56	214745	47.720	ug/l	99
32) 1,1,1-Trichloroethane	7.628	97	222274	48.703	ug/l	100
36) 1,1-Dichloropropene	7.841	75	177770	48.866	ug/l	99
37) Ethyl Acetate	6.994	43	69266	43.078	ug/l	99
38) Carbon Tetrachloride	7.823	117	204174	48.800	ug/l	98
39) Methylcyclohexane	9.116	83	230810	51.724	ug/l	98
40) Benzene	8.085	78	520202	48.542	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.250	41	45456m	51.920	ug/l	
42) 1,2-Dichloroethane	8.165	62	136088	45.393	ug/l	99
43) Isopropyl Acetate	8.201	43	134330	43.036	ug/l	99
44) Trichloroethene	8.872	130	130855	48.321	ug/l	99
45) 1,2-Dichloropropane	9.146	63	120606	47.287	ug/l	98
46) Dibromomethane	9.238	93	64447	45.413	ug/l	99
47) Bromodichloromethane	9.433	83	176210	46.755	ug/l	99
48) Methyl methacrylate	9.225	41	65433	45.652	ug/l	98
49) 1,4-Dioxane	9.238	88	12183	874.634	ug/l	97
51) 4-Methyl-2-Pentanone	10.006	43	349128	216.781	ug/l	100
52) Toluene	10.176	92	334342	49.486	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	157093	47.312	ug/l	97
54) cis-1,3-Dichloropropene	9.859	75	190151	48.236	ug/l	100
55) 1,1,2-Trichloroethane	10.579	97	83139	44.786	ug/l	98
56) Ethyl methacrylate	10.445	69	109629	46.305	ug/l	98
57) 1,3-Dichloropropane	10.725	76	148349	46.108	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.719	63	270898	247.869	ug/l	99
59) 2-Hexanone	10.768	43	238913	224.350	ug/l	100
60) Dibromochloromethane	10.914	129	117776	46.278	ug/l	99
61) 1,2-Dibromoethane	11.024	107	80473	45.932	ug/l	98
64) Tetrachloroethene	10.652	164	122018	49.207	ug/l	98
65) Chlorobenzene	11.451	112	350050	48.611	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.524	131	122471	48.104	ug/l	99
67) Ethyl Benzene	11.524	91	641534	50.757	ug/l	100
68) m/p-Xylenes	11.633	106	483835	100.830	ug/l	98
69) o-Xylene	11.963	106	225974	51.096	ug/l	99
70) Styrene	11.975	104	369770	50.400	ug/l	100
71) Bromoform	12.139	173	65305	45.886	ug/l #	100
73) Isopropylbenzene	12.261	105	618726	52.186	ug/l	100
74) N-amyl acetate	12.079	43	117390	45.591	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.511	83	92237	44.086	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	68229m	44.986	ug/l	
77) Bromobenzene	12.536	156	133678	48.194	ug/l	99
78) n-propylbenzene	12.603	91	752110	52.233	ug/l	100
79) 2-Chlorotoluene	12.688	91	415988	50.525	ug/l	98
80) 1,3,5-Trimethylbenzene	12.743	105	502113	52.113	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.310	75	30408	45.578	ug/l	98
82) 4-Chlorotoluene	12.786	91	427326	50.122	ug/l	100
83) tert-Butylbenzene	13.005	119	456314	53.088	ug/l	98
84) 1,2,4-Trimethylbenzene	13.048	105	492767	51.510	ug/l	100
85) sec-Butylbenzene	13.182	105	676621	52.908	ug/l	100
86) p-Isopropyltoluene	13.298	119	553730	52.556	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	269044	48.728	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	260977	48.331	ug/l	99
89) n-Butylbenzene	13.621	91	521532	53.606	ug/l	99
90) Hexachloroethane	13.889	117	112571	50.084	ug/l	99
91) 1,2-Dichlorobenzene	13.664	146	227078	47.985	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.285	75	13368	42.654	ug/l	97
93) 1,2,4-Trichlorobenzene	14.926	180	127655	49.388	ug/l	98
94) Hexachlorobutadiene	15.029	225	84554	52.186	ug/l	98
95) Naphthalene	15.151	128	196345	45.480	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	105737	48.639	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021404.D
Acq On : 04 Mar 2025 13:12
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY030425

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 03:21:56 2025
Response via : Initial Calibration

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

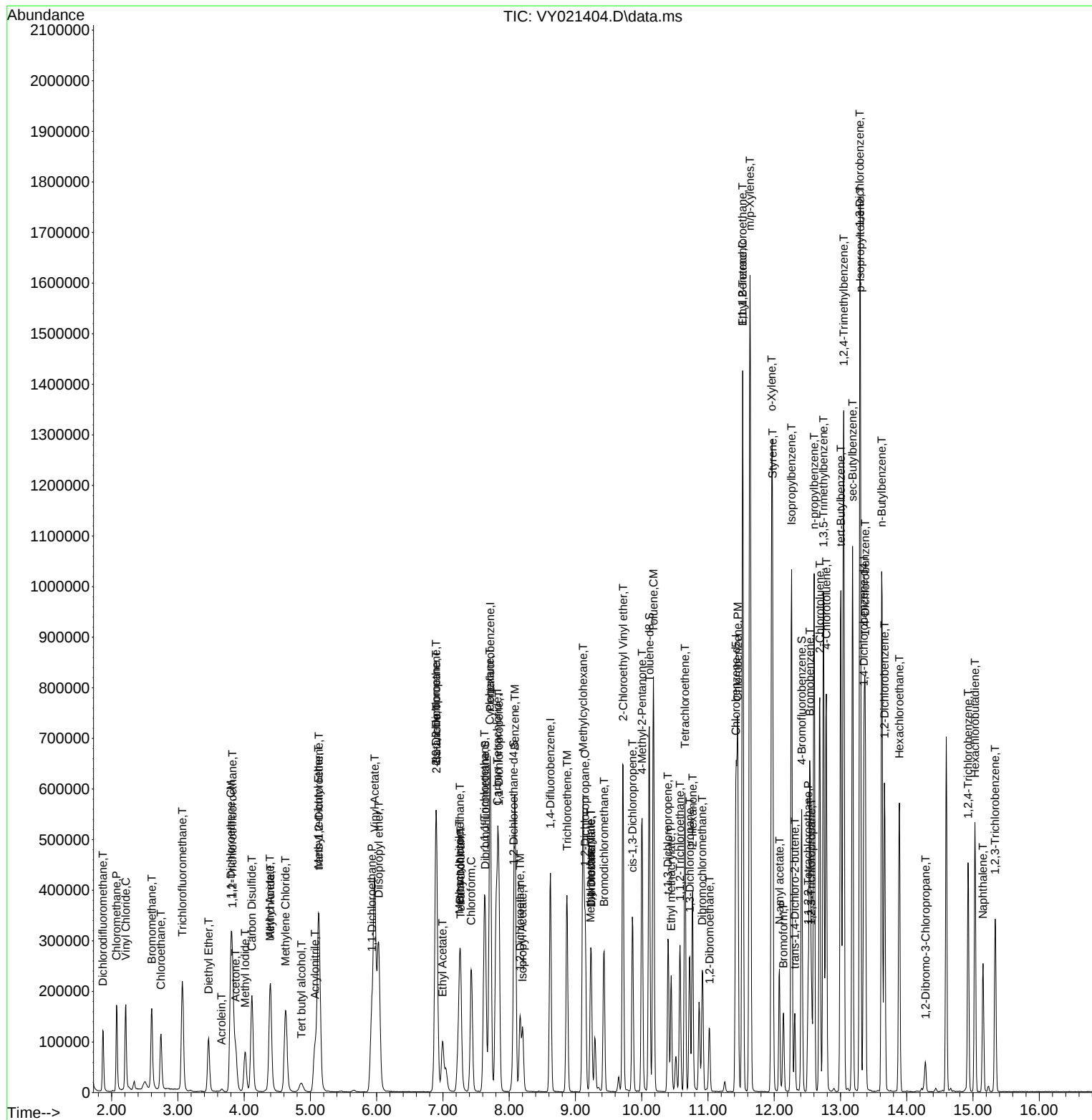
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
 Supervised By :Semsettin Yesilyurt 03/06/2025

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	0.459	0.432	5.9	93	0.00
3 P	Chloromethane	0.647	0.635	1.9	99	0.00
4 C	Vinyl Chloride	0.707	0.710	-0.4#	99	0.00
5 T	Bromomethane	0.511	0.473	7.4	98	0.00
6 T	Chloroethane	0.467	0.457	2.1	96	0.00
7 T	Trichlorofluoromethane	0.987	0.967	2.0	97	0.00
8 T	Diethyl Ether	0.273	0.250	8.4	85	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.542	3.7	97	0.00
10 T	Methyl Iodide	0.573	0.554	3.3	85	0.00
11 T	Tert butyl alcohol	0.041	0.030	26.8#	75	0.00
12 CM	1,1-Dichloroethene	0.514	0.508	1.2#	97	0.00
13 T	Acrolein	0.027	0.005	81.5#	103	0.00
14 T	Allyl chloride	0.830	0.838	-1.0	96	0.00
15 T	Acrylonitrile	0.116	0.102	12.1	79	0.00
16 T	Acetone	0.115	0.111	3.5	80	0.00
17 T	Carbon Disulfide	1.610	1.625	-0.9	96	0.00
18 T	Methyl Acetate	0.256	0.228	10.9	77	0.00
19 T	Methyl tert-butyl Ether	1.302	1.178	9.5	83	0.00
20 T	Methylene Chloride	0.605	0.531	12.2	93	0.00
21 T	trans-1,2-Dichloroethene	0.575	0.553	3.8	95	0.00
22 T	Diisopropyl ether	1.789	1.729	3.4	90	0.00
23 T	Vinyl Acetate	1.021	0.955	6.5	83	0.00
24 P	1,1-Dichloroethane	1.056	1.019	3.5	94	0.00
25 T	2-Butanone	0.159	0.142	10.7	76	0.00
26 T	2,2-Dichloropropane	0.971	0.944	2.8	97	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.634	2.9	94	0.00
28 T	Bromochloromethane	0.443	0.497	-12.2	103	0.00
29 T	Tetrahydrofuran	0.098	0.084	14.3	74	0.00
30 C	Chloroform	1.096	1.047	4.5#	93	0.00
31 T	Cyclohexane	0.990	0.945	4.5	97	0.00
32 T	1,1,1-Trichloroethane	1.004	0.978	2.6	97	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.527	0.2	106	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	98	0.00
35 S	Dibromofluoromethane	0.329	0.335	-1.8	111	0.00
36 T	1,1-Dichloropropene	0.514	0.503	2.1	95	0.00
37 T	Ethyl Acetate	0.227	0.196	13.7	78	0.00
38 T	Carbon Tetrachloride	0.592	0.577	2.5	97	0.00
39 T	Methylcyclohexane	0.631	0.653	-3.5	98	0.00
40 TM	Benzene	1.515	1.471	2.9	94	0.00
41 T	Methacrylonitrile	0.124	0.129	-4.0	96	0.03
42 TM	1,2-Dichloroethane	0.424	0.385	9.2	87	0.00
43 T	Isopropyl Acetate	0.441	0.380	13.8	77	0.00
44 TM	Trichloroethene	0.383	0.370	3.4	95	0.00
45 C	1,2-Dichloropropane	0.361	0.341	5.5#	91	0.00
46 T	Dibromomethane	0.201	0.182	9.5	84	0.00
47 T	Bromodichloromethane	0.533	0.498	6.6	89	0.00
48 T	Methyl methacrylate	0.203	0.185	8.9	79	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICSVY030425

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.002	0.002	0.0	75	0.00
50 S	Toluene-d8	1.244	1.326	-6.6	115	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.197	13.6	74	0.00
52 CM	Toluene	0.955	0.946	0.9#	94	0.00
53 T	t-1,3-Dichloropropene	0.470	0.444	5.5	87	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.538	3.4	90	0.00
55 T	1,1,2-Trichloroethane	0.263	0.235	10.6	82	0.00
56 T	Ethyl methacrylate	0.335	0.310	7.5	79	0.00
57 T	1,3-Dichloropropane	0.455	0.420	7.7	86	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.153	1.3	86	0.00
59 T	2-Hexanone	0.151	0.135	10.6	73	0.00
60 T	Dibromochloromethane	0.360	0.333	7.5	87	0.00
61 T	1,2-Dibromoethane	0.248	0.228	8.1	85	0.00
62 S	4-Bromofluorobenzene	0.423	0.436	-3.1	111	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
64 T	Tetrachloroethene	0.407	0.400	1.7	94	0.00
65 PM	Chlorobenzene	1.181	1.148	2.8	92	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.402	3.6	91	0.00
67 C	Ethyl Benzene	2.072	2.104	-1.5#	94	0.00
68 T	m/p-Xylenes	0.787	0.793	-0.8	92	0.00
69 T	o-Xylene	0.725	0.741	-2.2	93	0.00
70 T	Styrene	1.203	1.213	-0.8	90	0.00
71 P	Bromoform	0.233	0.214	8.2	81	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00
73 T	Isopropylbenzene	3.939	4.111	-4.4	94	0.00
74 T	N-amyl acetate	0.855	0.780	8.8	76	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.613	11.8	78	0.00
76 T	1,2,3-Trichloropropane	0.504	0.453	10.1	85	0.00
77 T	Bromobenzene	0.921	0.888	3.6	89	0.00
78 T	n-propylbenzene	4.783	4.997	-4.5	94	0.00
79 T	2-Chlorotoluene	2.735	2.764	-1.1	93	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.336	-4.2	95	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.202	9.0	79	0.00
82 T	4-Chlorotoluene	2.832	2.839	-0.2	92	0.00
83 T	tert-Butylbenzene	2.855	3.032	-6.2	96	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.274	-3.0	93	0.00
85 T	sec-Butylbenzene	4.248	4.495	-5.8	96	0.00
86 T	p-Isopropyltoluene	3.500	3.679	-5.1	95	0.00
87 T	1,3-Dichlorobenzene	1.834	1.788	2.5	91	0.00
88 T	1,4-Dichlorobenzene	1.794	1.734	3.3	90	0.00
89 T	n-Butylbenzene	3.232	3.465	-7.2	95	0.00
90 T	Hexachloroethane	0.747	0.748	-0.1	95	0.00
91 T	1,2-Dichlorobenzene	1.572	1.509	4.0	88	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.089	14.4	76	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.848	1.3	86	0.00
94 T	Hexachlorobutadiene	0.538	0.562	-4.5	94	0.00
95 T	Naphthalene	1.390	1.305	6.1	77	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021404.D
Acq On : 04 Mar 2025 13:12
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY030425

Quant Time: Mar 05 04:18:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 03:21:56 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.722	0.703	2.6	84	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICVVY030425

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	97	0.00
2 T	Dichlorodifluoromethane	50.000	47.113	5.8	93	0.00
3 P	Chloromethane	50.000	49.075	1.8	99	0.00
4 C	Vinyl Chloride	50.000	50.231	-0.5#	99	0.00
5 T	Bromomethane	50.000	46.283	7.4	98	0.00
6 T	Chloroethane	50.000	48.912	2.2	96	0.00
7 T	Trichlorofluoromethane	50.000	49.011	2.0	97	0.00
8 T	Diethyl Ether	50.000	45.628	8.7	85	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	48.142	3.7	97	0.00
10 T	Methyl Iodide	50.000	48.336	3.3	85	0.00
11 T	Tert butyl alcohol	250.000	211.206	15.5	75	0.00
12 CM	1,1-Dichloroethene	50.000	49.424	1.2#	97	0.00
13 T	Acrolein	250.000	45.035	82.0#	103	0.00
14 T	Allyl chloride	50.000	50.500	-1.0	96	0.00
15 T	Acrylonitrile	250.000	218.213	12.7	79	0.00
16 T	Acetone	250.000	241.068	3.6	80	0.00
17 T	Carbon Disulfide	50.000	50.464	-0.9	96	0.00
18 T	Methyl Acetate	50.000	44.501	11.0	77	0.00
19 T	Methyl tert-butyl Ether	50.000	45.249	9.5	83	0.00
20 T	Methylene Chloride	50.000	43.913	12.2	93	0.00
21 T	trans-1,2-Dichloroethene	50.000	48.065	3.9	95	0.00
22 T	Diisopropyl ether	50.000	48.325	3.3	90	0.00
23 T	Vinyl Acetate	250.000	233.756	6.5	83	0.00
24 P	1,1-Dichloroethane	50.000	48.243	3.5	94	0.00
25 T	2-Butanone	250.000	222.145	11.1	76	0.00
26 T	2,2-Dichloropropane	50.000	48.615	2.8	97	0.00
27 T	cis-1,2-Dichloroethene	50.000	48.506	3.0	94	0.00
28 T	Bromochloromethane	50.000	56.200	-12.4	103	0.00
29 T	Tetrahydrofuran	250.000	214.177	14.3	74	0.00
30 C	Chloroform	50.000	47.758	4.5#	93	0.00
31 T	Cyclohexane	50.000	47.720	4.6	97	0.00
32 T	1,1,1-Trichloroethane	50.000	48.703	2.6	97	0.00
33 S	1,2-Dichloroethane-d4	50.000	49.828	0.3	106	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	98	0.00
35 S	Dibromofluoromethane	50.000	50.894	-1.8	111	0.00
36 T	1,1-Dichloropropene	50.000	48.866	2.3	95	0.00
37 T	Ethyl Acetate	50.000	43.078	13.8	78	0.00
38 T	Carbon Tetrachloride	50.000	48.800	2.4	97	0.00
39 T	Methylcyclohexane	50.000	51.724	-3.4	98	0.00
40 TM	Benzene	50.000	48.542	2.9	94	0.00
41 T	Methacrylonitrile	50.000	51.920	-3.8	96	0.03
42 TM	1,2-Dichloroethane	50.000	45.393	9.2	87	0.00
43 T	Isopropyl Acetate	50.000	43.036	13.9	77	0.00
44 TM	Trichloroethene	50.000	48.321	3.4	95	0.00
45 C	1,2-Dichloropropane	50.000	47.287	5.4#	91	0.00
46 T	Dibromomethane	50.000	45.413	9.2	84	0.00
47 T	Bromodichloromethane	50.000	46.755	6.5	89	0.00
48 T	Methyl methacrylate	50.000	45.652	8.7	79	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 ICSVY030425

Quant Time: Mar 05 04:18:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 03:21:56 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	874.634	12.5	75	0.00
50 S	Toluene-d8	50.000	53.263	-6.5	115	0.00
51 T	4-Methyl-2-Pentanone	250.000	216.781	13.3	74	0.00
52 CM	Toluene	50.000	49.486	1.0#	94	0.00
53 T	t-1,3-Dichloropropene	50.000	47.312	5.4	87	0.00
54 T	cis-1,3-Dichloropropene	50.000	48.236	3.5	90	0.00
55 T	1,1,2-Trichloroethane	50.000	44.786	10.4	82	0.00
56 T	Ethyl methacrylate	50.000	46.305	7.4	79	0.00
57 T	1,3-Dichloropropane	50.000	46.108	7.8	86	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	247.869	0.9	86	0.00
59 T	2-Hexanone	250.000	224.350	10.3	73	0.00
60 T	Dibromochloromethane	50.000	46.278	7.4	87	0.00
61 T	1,2-Dibromoethane	50.000	45.932	8.1	85	0.00
62 S	4-Bromofluorobenzene	50.000	51.560	-3.1	111	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	95	0.00
64 T	Tetrachloroethene	50.000	49.207	1.6	94	0.00
65 PM	Chlorobenzene	50.000	48.611	2.8	92	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	48.104	3.8	91	0.00
67 C	Ethyl Benzene	50.000	50.757	-1.5#	94	0.00
68 T	m/p-Xylenes	100.000	100.830	-0.8	92	0.00
69 T	o-Xylene	50.000	51.096	-2.2	93	0.00
70 T	Styrene	50.000	50.400	-0.8	90	0.00
71 P	Bromoform	50.000	45.886	8.2	81	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	93	0.00
73 T	Isopropylbenzene	50.000	52.186	-4.4	94	0.00
74 T	N-amyl acetate	50.000	45.591	8.8	76	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	44.086	11.8	78	0.00
76 T	1,2,3-Trichloropropane	50.000	44.986	10.0	85	0.00
77 T	Bromobenzene	50.000	48.194	3.6	89	0.00
78 T	n-propylbenzene	50.000	52.233	-4.5	94	0.00
79 T	2-Chlorotoluene	50.000	50.525	-1.0	93	0.00
80 T	1,3,5-Trimethylbenzene	50.000	52.113	-4.2	95	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	45.578	8.8	79	0.00
82 T	4-Chlorotoluene	50.000	50.122	-0.2	92	0.00
83 T	tert-Butylbenzene	50.000	53.088	-6.2	96	0.00
84 T	1,2,4-Trimethylbenzene	50.000	51.510	-3.0	93	0.00
85 T	sec-Butylbenzene	50.000	52.908	-5.8	96	0.00
86 T	p-Isopropyltoluene	50.000	52.556	-5.1	95	0.00
87 T	1,3-Dichlorobenzene	50.000	48.728	2.5	91	0.00
88 T	1,4-Dichlorobenzene	50.000	48.331	3.3	90	0.00
89 T	n-Butylbenzene	50.000	53.606	-7.2	95	0.00
90 T	Hexachloroethane	50.000	50.084	-0.2	95	0.00
91 T	1,2-Dichlorobenzene	50.000	47.985	4.0	88	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	42.654	14.7	76	0.00
93 T	1,2,4-Trichlorobenzene	50.000	49.388	1.2	86	0.00
94 T	Hexachlorobutadiene	50.000	52.186	-4.4	94	0.00
95 T	Naphthalene	50.000	45.480	9.0	77	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021404.D
Acq On : 04 Mar 2025 13:12
Operator : SY/MD
Sample : VSTDICV050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
ICVVY030425

Quant Time: Mar 05 04:18:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 03:21:56 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.639	2.7	84	0.00

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG No.: Q1574

Instrument ID: MSVOA_Y Calibration Date/Time: 03/17/2025 10:04

Lab File ID: VY021543.D Init. Calib. Date(s): 03/04/2025 03/04/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 12:15

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.459	0.388		-15.47	20
Chloromethane	0.647	0.610	0.1	-5.72	20
Vinyl Chloride	0.707	0.691		-2.26	20
Bromomethane	0.511	0.493		-3.52	20
Chloroethane	0.467	0.508		8.78	20
Trichlorofluoromethane	0.987	1.063		7.7	20
1,1,2-Trichlorotrifluoroethane	0.563	0.527		-6.39	20
1,1-Dichloroethene	0.514	0.483		-6.03	20
Acetone	0.115	0.135		17.39	20
Carbon Disulfide	1.610	1.478		-8.2	20
Methyl tert-butyl Ether	1.302	1.287		-1.15	20
Methyl Acetate	0.256	0.301		17.58	20
Methylene Chloride	0.605	0.566		-6.45	20
trans-1,2-Dichloroethene	0.575	0.570		-0.87	20
1,1-Dichloroethane	1.056	1.074	0.1	1.71	20
Cyclohexane	0.990	0.843		-14.85	20
2-Butanone	0.159	0.162		1.89	20
Carbon Tetrachloride	0.592	0.567		-4.22	20
cis-1,2-Dichloroethene	0.653	0.661		1.23	20
Bromochloromethane	0.443	0.460		3.84	20
Chloroform	1.096	1.133		3.38	20
1,1,1-Trichloroethane	1.004	0.987		-1.69	20
Methylcyclohexane	0.631	0.575		-8.88	20
Benzene	1.515	1.513		-0.13	20
1,2-Dichloroethane	0.424	0.425		0.24	20
Trichloroethene	0.383	0.386		0.78	20
1,2-Dichloropropane	0.361	0.363		0.55	20
Bromodichloromethane	0.533	0.548		2.81	20
4-Methyl-2-Pentanone	0.228	0.223		-2.19	20
Toluene	0.955	0.970		1.57	20
t-1,3-Dichloropropene	0.470	0.480		2.13	20
cis-1,3-Dichloropropene	0.557	0.569		2.15	20
1,1,2-Trichloroethane	0.263	0.267		1.52	20
2-Hexanone	0.151	0.156		3.31	20
Dibromochloromethane	0.360	0.372		3.33	20
1,2-Dibromoethane	0.248	0.247		-0.4	20
Tetrachloroethene	0.407	0.445		9.34	20
Chlorobenzene	1.181	1.180	0.3	-0.09	20

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



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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: GENV01

Lab Code: CHEM Case No.: Q1574 SAS No.: Q1574 SDG No.: Q1574

Instrument ID: MSVOA_Y Calibration Date/Time: 03/17/2025 10:04

Lab File ID: VY021543.D Init. Calib. Date(s): 03/04/2025 03/04/2025

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:46 12:15

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

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Ethyl Benzene	2.072	2.035		-1.79	20
m/p-Xylenes	0.787	0.790		0.38	20
o-Xylene	0.725	0.739		1.93	20
Styrene	1.203	1.247		3.66	20
Bromoform	0.233	0.237	0.1	1.72	20
Isopropylbenzene	3.939	3.757		-4.62	20
1,1,2,2-Tetrachloroethane	0.695	0.635	0.3	-8.63	20
1,3-Dichlorobenzene	1.834	1.769		-3.54	20
1,4-Dichlorobenzene	1.794	1.732		-3.46	20
1,2-Dichlorobenzene	1.572	1.531		-2.61	20
1,2-Dibromo-3-Chloropropane	0.104	0.094		-9.61	20
1,2,4-Trichlorobenzene	0.859	0.849		-1.16	20
1,2,3-Trichlorobenzene	0.722	0.702		-2.77	20
1,2-Dichloroethane-d4	0.528	0.578		9.47	20
Dibromofluoromethane	0.329	0.359		9.12	20
Toluene-d8	1.244	1.327		6.67	20
4-Bromofluorobenzene	0.423	0.453		7.09	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\VY031725\
 Data File : VY021543.D
 Acq On : 17 Mar 2025 10:04
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
 Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:25:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	202760	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	316994	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	284592	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	146377	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	117123	54.652	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 109.300%			
35) Dibromofluoromethane	7.628	113	113806	54.619	ug/l	-0.01
Spiked Amount 50.000	Range 54 - 147		Recovery = 109.240%			
50) Toluene-d8	10.109	98	420713	53.327	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 106.660%			
62) 4-Bromofluorobenzene	12.408	95	143652	53.529	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 107.060%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	78694	42.294	ug/l	99
3) Chloromethane	2.068	50	123688	47.150	ug/l	99
4) Vinyl Chloride	2.202	62	140113	48.876	ug/l	99
5) Bromomethane	2.592	94	99981	48.256	ug/l	96
6) Chloroethane	2.732	64	103009	54.374	ug/l	97
7) Trichlorofluoromethane	3.056	101	215620	53.888	ug/l	100
8) Diethyl Ether	3.452	74	53338	48.101	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.818	101	106834	46.765	ug/l	99
10) Methyl Iodide	4.007	142	124518	53.621	ug/l	99
11) Tert butyl alcohol	4.860	59	31658	224.948	ug/l #	72
12) 1,1-Dichloroethene	3.787	96	97850	46.980	ug/l	99
13) Acrolein	3.647	56	4830	44.310	ug/l	96
14) Allyl chloride	4.385	41	167786	49.849	ug/l	99
15) Acrylonitrile	5.055	53	118882	251.849	ug/l	98
16) Acetone	3.866	43	136587	292.215	ug/l	93
17) Carbon Disulfide	4.104	76	299726	45.919	ug/l	99
18) Methyl Acetate	4.378	43	61046	58.861	ug/l	98
19) Methyl tert-butyl Ether	5.116	73	261000	49.441	ug/l	98
20) Methylene Chloride	4.610	84	114800	46.789	ug/l	97
21) trans-1,2-Dichloroethene	5.110	96	115537	49.533	ug/l	98
22) Diisopropyl ether	6.018	45	373560	51.499	ug/l	97
23) Vinyl Acetate	5.957	43	1022573	247.011	ug/l	100
24) 1,1-Dichloroethane	5.915	63	217791	50.872	ug/l	99
25) 2-Butanone	6.890	43	164512	254.434	ug/l	100
26) 2,2-Dichloropropane	6.884	77	194593	49.399	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	134048	50.587	ug/l	100
28) Bromochloromethane	7.244	49	93223	51.940	ug/l	99
29) Tetrahydrofuran	7.262	42	97254	243.642	ug/l	100
30) Chloroform	7.421	83	229797	51.691	ug/l	97
31) Cyclohexane	7.701	56	171004	42.606	ug/l	98
32) 1,1,1-Trichloroethane	7.616	97	200093	49.157	ug/l	99
36) 1,1-Dichloropropene	7.835	75	155070	47.545	ug/l	99
37) Ethyl Acetate	6.982	43	68986	47.855	ug/l	99
38) Carbon Tetrachloride	7.817	117	179817	47.938	ug/l	97
39) Methylcyclohexane	9.109	83	182137	45.526	ug/l	97
40) Benzene	8.079	78	479503	49.907	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021543.D
 Acq On : 17 Mar 2025 10:04
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VSTDCCC050

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025

Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:25:44 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Quant Title : SW846 8260

QLast Update : Wed Mar 05 12:42:45 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.226	41	38219	48.691	ug/l	98
42) 1,2-Dichloroethane	8.158	62	134781	50.145	ug/l	100
43) Isopropyl Acetate	8.195	43	130651	46.687	ug/l #	88
44) Trichloroethene	8.865	130	122227	50.343	ug/l	96
45) 1,2-Dichloropropane	9.140	63	115016	50.298	ug/l	99
46) Dibromomethane	9.231	93	64119	50.395	ug/l	99
47) Bromodichloromethane	9.420	83	173717	51.412	ug/l	99
48) Methyl methacrylate	9.219	41	62651	48.754	ug/l	98
49) 1,4-Dioxane	9.231	88	12174	974.832	ug/l #	91
51) 4-Methyl-2-Pentanone	9.999	43	353932	245.121	ug/l	100
52) Toluene	10.170	92	307502	50.765	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	152295	51.159	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	180480	51.065	ug/l	99
55) 1,1,2-Trichloroethane	10.572	97	84781	50.940	ug/l	98
56) Ethyl methacrylate	10.438	69	108506	51.119	ug/l	98
57) 1,3-Dichloropropane	10.719	76	144738	50.176	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	260004	265.351	ug/l	99
59) 2-Hexanone	10.761	43	247738	259.480	ug/l	100
60) Dibromochloromethane	10.914	129	117860	51.655	ug/l	99
61) 1,2-Dibromoethane	11.018	107	78195	49.781	ug/l	100
64) Tetrachloroethene	10.646	164	126523	54.672	ug/l	98
65) Chlorobenzene	11.444	112	335773	49.962	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.517	131	118632	49.929	ug/l	99
67) Ethyl Benzene	11.517	91	579226	49.104	ug/l	99
68) m/p-Xylenes	11.627	106	449457	100.363	ug/l	99
69) o-Xylene	11.956	106	210292	50.951	ug/l	99
70) Styrene	11.969	104	354884	51.830	ug/l	100
71) Bromoform	12.133	173	67566	50.869	ug/l	100
73) Isopropylbenzene	12.255	105	549868	47.688	ug/l	99
74) N-amyl acetate	12.072	43	111196	44.405	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	92907	45.660	ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	71820m	48.691	ug/l	
77) Bromobenzene	12.536	156	131058	48.584	ug/l	97
78) n-propylbenzene	12.597	91	673747	48.113	ug/l	99
79) 2-Chlorotoluene	12.682	91	385124	48.098	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	456798	48.749	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	30057	46.324	ug/l	98
82) 4-Chlorotoluene	12.779	91	405388	48.892	ug/l	100
83) tert-Butylbenzene	12.999	119	404180	48.351	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	455769	48.988	ug/l	99
85) sec-Butylbenzene	13.176	105	592299	47.622	ug/l	98
86) p-Isopropyltoluene	13.292	119	501218	48.916	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	258938	48.223	ug/l	100
88) 1,4-Dichlorobenzene	13.365	146	253569	48.286	ug/l	100
89) n-Butylbenzene	13.621	91	459452	48.559	ug/l	99
90) Hexachloroethane	13.883	117	102762	47.011	ug/l	97
91) 1,2-Dichlorobenzene	13.663	146	224133	48.701	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	13772	45.184	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	124226	49.419	ug/l	99
94) Hexachlorobutadiene	15.023	225	78569	49.862	ug/l	99
95) Naphthalene	15.145	128	196640	46.684	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	102815	48.631	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021543.D
Acq On : 17 Mar 2025 10:04
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:25:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

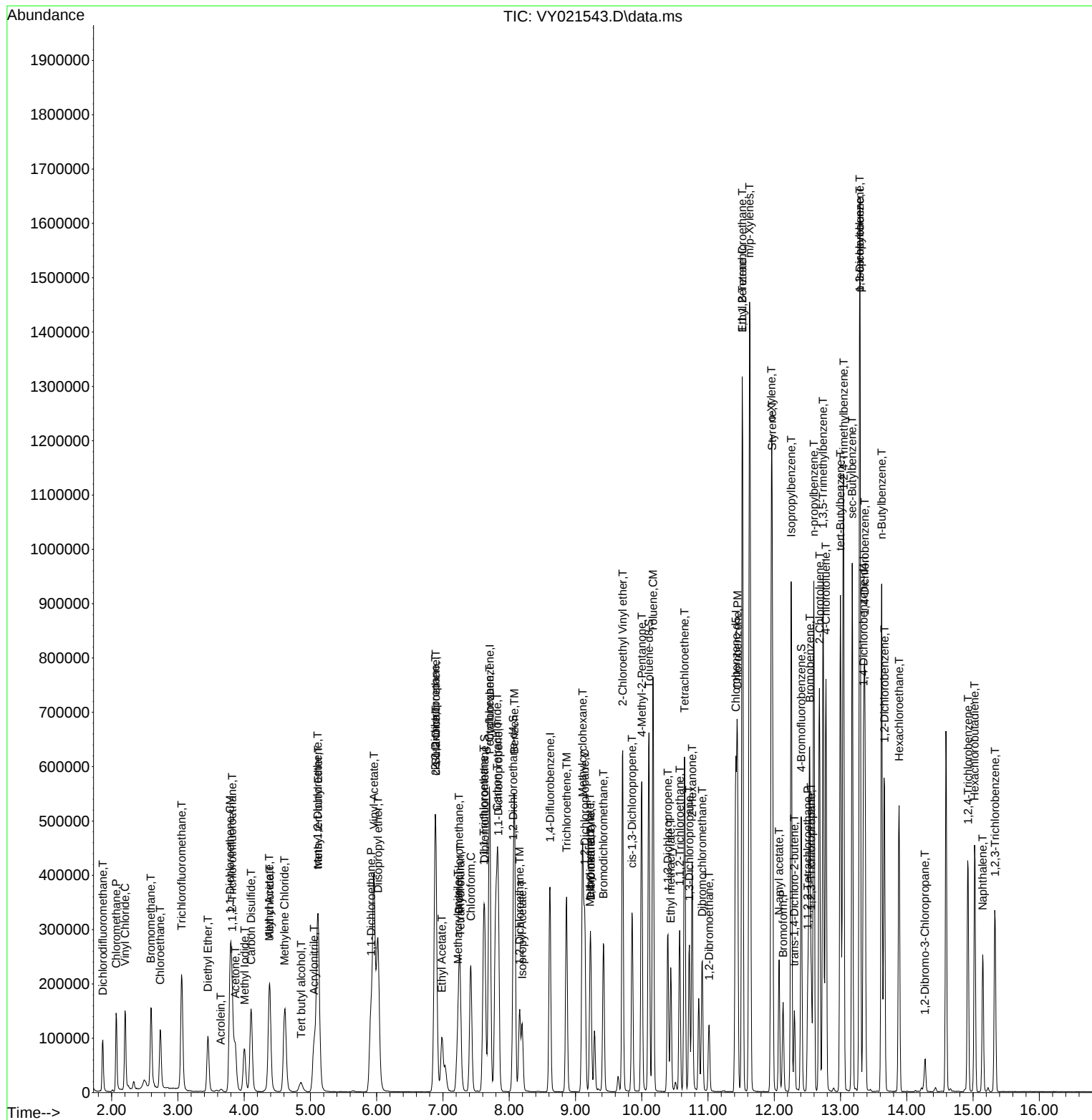
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021543.D
Acq On : 17 Mar 2025 10:04
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:25:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021543.D
 Acq On : 17 Mar 2025 10:04
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 18 01:25:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	1.000	1.000	0.0	86	0.00
2 T	Dichlorodifluoromethane	0.459	0.388	15.5	75	0.00
3 P	Chloromethane	0.647	0.610	5.7	85	0.00
4 C	Vinyl Chloride	0.707	0.691	2.3#	86	0.00
5 T	Bromomethane	0.511	0.493	3.5	91	-0.01
6 T	Chloroethane	0.467	0.508	-8.8	95	0.00
7 T	Trichlorofluoromethane	0.987	1.063	-7.7	95	-0.01
8 T	Diethyl Ether	0.273	0.263	3.7	80	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.527	6.4	84	-0.01
10 T	Methyl Iodide	0.573	0.614	-7.2	84	0.00
11 T	Tert butyl alcohol	0.041	0.031	24.4	71	-0.01
12 CM	1,1-Dichloroethene	0.514	0.483	6.0#	82	-0.01
13 T	Acrolein	0.027	0.005	81.5#	90	-0.02
14 T	Allyl chloride	0.830	0.828	0.2	85	-0.01
15 T	Acrylonitrile	0.116	0.117	-0.9	81	-0.01
16 T	Acetone	0.115	0.135	-17.4	86	0.00
17 T	Carbon Disulfide	1.610	1.478	8.2	78	-0.01
18 T	Methyl Acetate	0.256	0.301	-17.6	91	-0.01
19 T	Methyl tert-butyl Ether	1.302	1.287	1.2	81	0.00
20 T	Methylene Chloride	0.605	0.566	6.4	89	-0.01
21 T	trans-1,2-Dichloroethene	0.575	0.570	0.9	87	-0.02
22 T	Diisopropyl ether	1.789	1.842	-3.0	86	0.00
23 T	Vinyl Acetate	1.021	1.009	1.2	78	-0.01
24 P	1,1-Dichloroethane	1.056	1.074	-1.7	88	-0.01
25 T	2-Butanone	0.159	0.162	-1.9	77	0.00
26 T	2,2-Dichloropropane	0.971	0.960	1.1	88	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.661	-1.2	87	0.00
28 T	Bromochloromethane	0.443	0.460	-3.8	85	0.00
29 T	Tetrahydrofuran	0.098	0.096	2.0	75	0.00
30 C	Chloroform	1.096	1.133	-3.4#	90	0.00
31 T	Cyclohexane	0.990	0.843	14.8	77	0.00
32 T	1,1,1-Trichloroethane	1.004	0.987	1.7	87	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.578	-9.5	103	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	88	0.00
35 S	Dibromofluoromethane	0.329	0.359	-9.1	107	-0.01
36 T	1,1-Dichloropropene	0.514	0.489	4.9	83	0.00
37 T	Ethyl Acetate	0.227	0.218	4.0	77	0.00
38 T	Carbon Tetrachloride	0.592	0.567	4.2	85	0.00
39 T	Methylcyclohexane	0.631	0.575	8.9	78	0.00
40 TM	Benzene	1.515	1.513	0.1	86	0.00
41 T	Methacrylonitrile	0.124	0.121	2.4	81	0.00
42 TM	1,2-Dichloroethane	0.424	0.425	-0.2	86	0.00
43 T	Isopropyl Acetate	0.441	0.412	6.6	75	0.00
44 TM	Trichloroethene	0.383	0.386	-0.8	89	0.00
45 C	1,2-Dichloropropane	0.361	0.363	-0.6#	87	0.00
46 T	Dibromomethane	0.201	0.202	-0.5	84	0.00
47 T	Bromodichloromethane	0.533	0.548	-2.8	88	0.00
48 T	Methyl methacrylate	0.203	0.198	2.5	76	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021543.D
 Acq On : 17 Mar 2025 10:04
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 18 01:25:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	0.002	0.002	0.0	75	0.00
50 S	Toluene-d8	1.244	1.327	-6.7	103	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.223	2.2	75	0.00
52 CM	Toluene	0.955	0.970	-1.6#	86	0.00
53 T	t-1,3-Dichloropropene	0.470	0.480	-2.1	85	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.569	-2.2	85	0.00
55 T	1,1,2-Trichloroethane	0.263	0.267	-1.5	83	0.00
56 T	Ethyl methacrylate	0.335	0.342	-2.1	79	0.00
57 T	1,3-Dichloropropane	0.455	0.457	-0.4	84	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.164	-5.8	83	0.00
59 T	2-Hexanone	0.151	0.156	-3.3	76	0.00
60 T	Dibromochloromethane	0.360	0.372	-3.3	87	0.00
61 T	1,2-Dibromoethane	0.248	0.247	0.4	83	0.00
62 S	4-Bromofluorobenzene	0.423	0.453	-7.1	103	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	89	0.00
64 T	Tetrachloroethene	0.407	0.445	-9.3	98	0.00
65 PM	Chlorobenzene	1.181	1.180	0.1	88	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.417	0.0	88	0.00
67 C	Ethyl Benzene	2.072	2.035	1.8#	84	0.00
68 T	m/p-Xylenes	0.787	0.790	-0.4	85	0.00
69 T	o-Xylene	0.725	0.739	-1.9	86	0.00
70 T	Styrene	1.203	1.247	-3.7	87	0.00
71 P	Bromoform	0.233	0.237	-1.7	84	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	0.00
73 T	Isopropylbenzene	3.939	3.757	4.6	84	0.00
74 T	N-amyl acetate	0.855	0.760	11.1	72	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.635	8.6	79	0.00
76 T	1,2,3-Trichloropropane	0.504	0.491	2.6	90	0.00
77 T	Bromobenzene	0.921	0.895	2.8	87	0.00
78 T	n-propylbenzene	4.783	4.603	3.8	85	0.00
79 T	2-Chlorotoluene	2.735	2.631	3.8	86	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.121	2.5	86	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.205	7.7	78	0.00
82 T	4-Chlorotoluene	2.832	2.769	2.2	88	0.00
83 T	tert-Butylbenzene	2.855	2.761	3.3	85	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.114	2.0	86	0.00
85 T	sec-Butylbenzene	4.248	4.046	4.8	84	0.00
86 T	p-Isopropyltoluene	3.500	3.424	2.2	86	0.00
87 T	1,3-Dichlorobenzene	1.834	1.769	3.5	88	0.00
88 T	1,4-Dichlorobenzene	1.794	1.732	3.5	88	0.00
89 T	n-Butylbenzene	3.232	3.139	2.9	83	0.00
90 T	Hexachloroethane	0.747	0.702	6.0	87	0.00
91 T	1,2-Dichlorobenzene	1.572	1.531	2.6	87	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.094	9.6	78	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.849	1.2	84	0.00
94 T	Hexachlorobutadiene	0.538	0.537	0.2	88	0.00
95 T	Naphthalene	1.390	1.343	3.4	77	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021543.D
Acq On : 17 Mar 2025 10:04
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Mar 18 01:25:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	0.722	0.702	2.8	82	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021543.D
 Acq On : 17 Mar 2025 10:04
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 18 01:25:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Pentafluorobenzene	50.000	50.000	0.0	86	0.00
2 T	Dichlorodifluoromethane	50.000	42.294	15.4	75	0.00
3 P	Chloromethane	50.000	47.150	5.7	85	0.00
4 C	Vinyl Chloride	50.000	48.876	2.2#	86	0.00
5 T	Bromomethane	50.000	48.256	3.5	91	-0.01
6 T	Chloroethane	50.000	54.374	-8.7	95	0.00
7 T	Trichlorofluoromethane	50.000	53.888	-7.8	95	-0.01
8 T	Diethyl Ether	50.000	48.101	3.8	80	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	46.765	6.5	84	-0.01
10 T	Methyl Iodide	50.000	53.621	-7.2	84	0.00
11 T	Tert butyl alcohol	250.000	224.948	10.0	71	-0.01
12 CM	1,1-Dichloroethene	50.000	46.980	6.0#	82	-0.01
13 T	Acrolein	250.000	44.310	82.3#	90	-0.02
14 T	Allyl chloride	50.000	49.849	0.3	85	-0.01
15 T	Acrylonitrile	250.000	251.849	-0.7	81	-0.01
16 T	Acetone	250.000	292.215	-16.9	86	0.00
17 T	Carbon Disulfide	50.000	45.919	8.2	78	-0.01
18 T	Methyl Acetate	50.000	58.861	-17.7	91	-0.01
19 T	Methyl tert-butyl Ether	50.000	49.441	1.1	81	0.00
20 T	Methylene Chloride	50.000	46.789	6.4	89	-0.01
21 T	trans-1,2-Dichloroethene	50.000	49.533	0.9	87	-0.02
22 T	Diisopropyl ether	50.000	51.499	-3.0	86	0.00
23 T	Vinyl Acetate	250.000	247.011	1.2	78	-0.01
24 P	1,1-Dichloroethane	50.000	50.872	-1.7	88	-0.01
25 T	2-Butanone	250.000	254.434	-1.8	77	0.00
26 T	2,2-Dichloropropane	50.000	49.399	1.2	88	0.00
27 T	cis-1,2-Dichloroethene	50.000	50.587	-1.2	87	0.00
28 T	Bromochloromethane	50.000	51.940	-3.9	85	0.00
29 T	Tetrahydrofuran	250.000	243.642	2.5	75	0.00
30 C	Chloroform	50.000	51.691	-3.4#	90	0.00
31 T	Cyclohexane	50.000	42.606	14.8	77	0.00
32 T	1,1,1-Trichloroethane	50.000	49.157	1.7	87	0.00
33 S	1,2-Dichloroethane-d4	50.000	54.652	-9.3	103	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	88	0.00
35 S	Dibromofluoromethane	50.000	54.619	-9.2	107	-0.01
36 T	1,1-Dichloropropene	50.000	47.545	4.9	83	0.00
37 T	Ethyl Acetate	50.000	47.855	4.3	77	0.00
38 T	Carbon Tetrachloride	50.000	47.938	4.1	85	0.00
39 T	Methylcyclohexane	50.000	45.526	8.9	78	0.00
40 TM	Benzene	50.000	49.907	0.2	86	0.00
41 T	Methacrylonitrile	50.000	48.691	2.6	81	0.00
42 TM	1,2-Dichloroethane	50.000	50.145	-0.3	86	0.00
43 T	Isopropyl Acetate	50.000	46.687	6.6	75	0.00
44 TM	Trichloroethene	50.000	50.343	-0.7	89	0.00
45 C	1,2-Dichloropropane	50.000	50.298	-0.6#	87	0.00
46 T	Dibromomethane	50.000	50.395	-0.8	84	0.00
47 T	Bromodichloromethane	50.000	51.412	-2.8	88	0.00
48 T	Methyl methacrylate	50.000	48.754	2.5	76	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021543.D
 Acq On : 17 Mar 2025 10:04
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 18 01:25:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	1,4-Dioxane	1000.000	974.832	2.5	75	0.00
50 S	Toluene-d8	50.000	53.327	-6.7	103	0.00
51 T	4-Methyl-2-Pentanone	250.000	245.121	2.0	75	0.00
52 CM	Toluene	50.000	50.765	-1.5#	86	0.00
53 T	t-1,3-Dichloropropene	50.000	51.159	-2.3	85	0.00
54 T	cis-1,3-Dichloropropene	50.000	51.065	-2.1	85	0.00
55 T	1,1,2-Trichloroethane	50.000	50.940	-1.9	83	0.00
56 T	Ethyl methacrylate	50.000	51.119	-2.2	79	0.00
57 T	1,3-Dichloropropane	50.000	50.176	-0.4	84	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	265.351	-6.1	83	0.00
59 T	2-Hexanone	250.000	259.480	-3.8	76	0.00
60 T	Dibromochloromethane	50.000	51.655	-3.3	87	0.00
61 T	1,2-Dibromoethane	50.000	49.781	0.4	83	0.00
62 S	4-Bromofluorobenzene	50.000	53.529	-7.1	103	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	89	0.00
64 T	Tetrachloroethene	50.000	54.672	-9.3	98	0.00
65 PM	Chlorobenzene	50.000	49.962	0.1	88	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	49.929	0.1	88	0.00
67 C	Ethyl Benzene	50.000	49.104	1.8#	84	0.00
68 T	m/p-Xylenes	100.000	100.363	-0.4	85	0.00
69 T	o-Xylene	50.000	50.951	-1.9	86	0.00
70 T	Styrene	50.000	51.830	-3.7	87	0.00
71 P	Bromoform	50.000	50.869	-1.7	84	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	90	0.00
73 T	Isopropylbenzene	50.000	47.688	4.6	84	0.00
74 T	N-ethyl acetate	50.000	44.405	11.2	72	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	45.660	8.7	79	0.00
76 T	1,2,3-Trichloropropane	50.000	48.691	2.6	90	0.00
77 T	Bromobenzene	50.000	48.584	2.8	87	0.00
78 T	n-propylbenzene	50.000	48.113	3.8	85	0.00
79 T	2-Chlorotoluene	50.000	48.098	3.8	86	0.00
80 T	1,3,5-Trimethylbenzene	50.000	48.749	2.5	86	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	46.324	7.4	78	0.00
82 T	4-Chlorotoluene	50.000	48.892	2.2	88	0.00
83 T	tert-Butylbenzene	50.000	48.351	3.3	85	0.00
84 T	1,2,4-Trimethylbenzene	50.000	48.988	2.0	86	0.00
85 T	sec-Butylbenzene	50.000	47.622	4.8	84	0.00
86 T	p-Isopropyltoluene	50.000	48.916	2.2	86	0.00
87 T	1,3-Dichlorobenzene	50.000	48.223	3.6	88	0.00
88 T	1,4-Dichlorobenzene	50.000	48.286	3.4	88	0.00
89 T	n-Butylbenzene	50.000	48.559	2.9	83	0.00
90 T	Hexachloroethane	50.000	47.011	6.0	87	0.00
91 T	1,2-Dichlorobenzene	50.000	48.701	2.6	87	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	45.184	9.6	78	0.00
93 T	1,2,4-Trichlorobenzene	50.000	49.419	1.2	84	0.00
94 T	Hexachlorobutadiene	50.000	49.862	0.3	88	0.00
95 T	Naphthalene	50.000	46.684	6.6	77	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021543.D
Acq On : 17 Mar 2025 10:04
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Mar 18 01:25:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
96 T	1,2,3-Trichlorobenzene	50.000	48.631	2.7	82	0.00

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



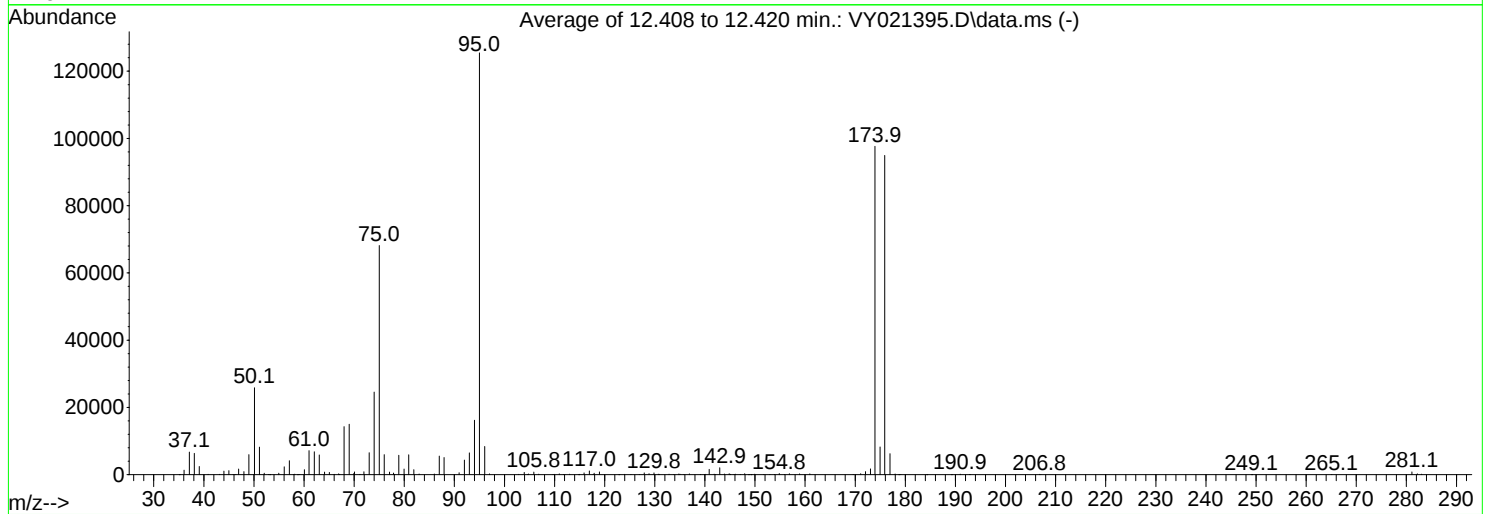
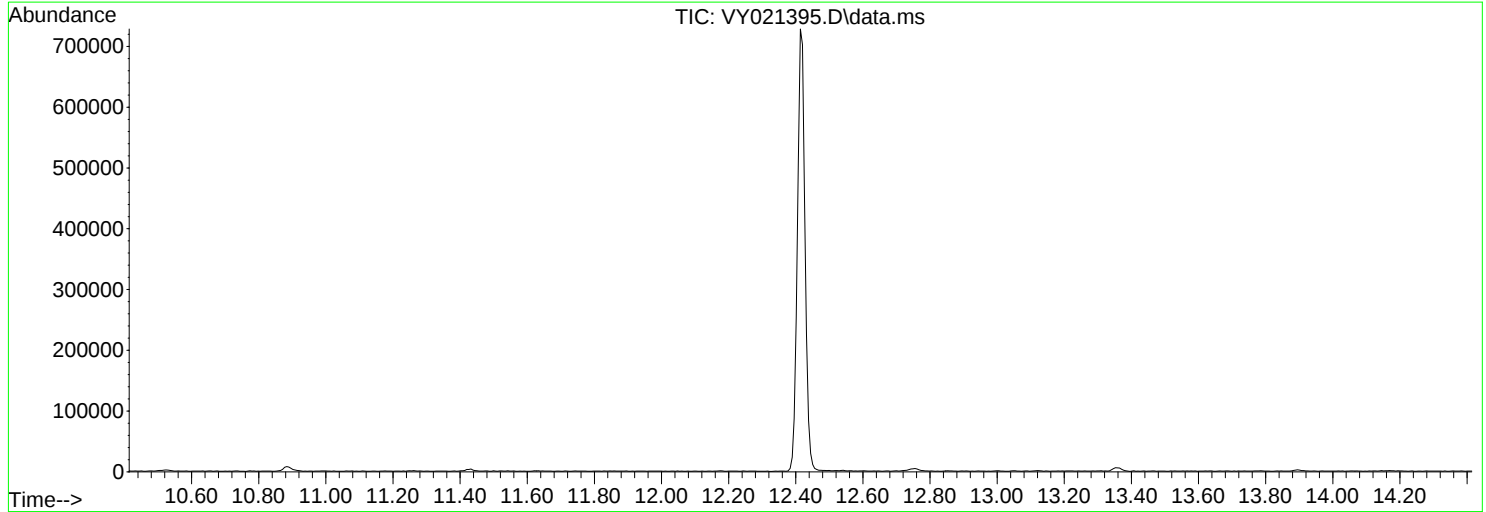
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021395.D
Acq On : 04 Mar 2025 08:52
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Title : SW846 8260
Last Update : Wed Mar 05 12:42:45 2025



AutoFind: Scans 1753, 1754, 1755; Background Corrected with Scan 1745

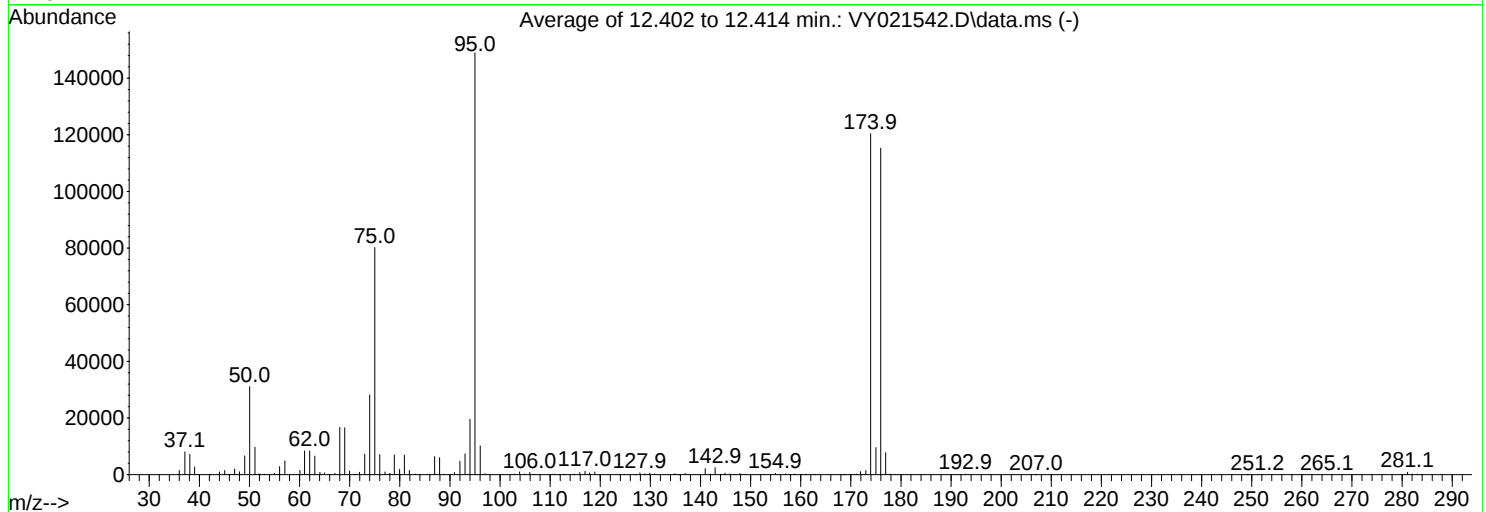
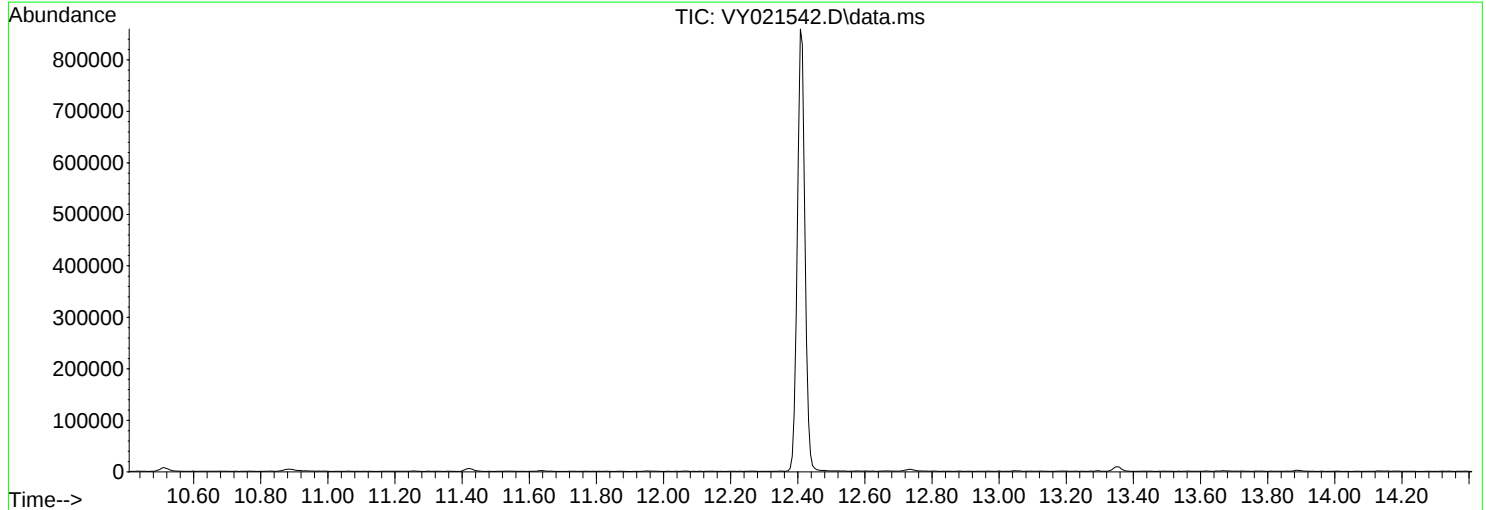
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	20.6	25853	PASS
75	95	30	60	54.3	68152	PASS
95	95	100	100	100.0	125459	PASS
96	95	5	9	6.7	8382	PASS
173	174	0.00	2	1.8	1721	PASS
174	95	50	100	77.8	97645	PASS
175	174	5	9	8.4	8226	PASS
176	174	95	101	97.2	94957	PASS
177	176	5	9	6.6	6262	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021542.D
Acq On : 17 Mar 2025 09:26
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Title : SW846 8260
Last Update : Wed Mar 05 12:42:45 2025



AutoFind: Scans 1752, 1753, 1754; Background Corrected with Scan 1744

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	31101	PASS
75	95	30	60	53.8	80184	PASS
95	95	100	100	100.0	148955	PASS
96	95	5	9	6.8	10182	PASS
173	174	0.00	2	1.2	1478	PASS
174	95	50	100	80.8	120405	PASS
175	174	5	9	7.9	9550	PASS
176	174	95	101	95.8	115325	PASS
177	176	5	9	6.7	7771	PASS

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave L	Date Received:	
Client Sample ID:	VY0317SBL01	SDG No.:	Q1574
Lab Sample ID:	VY0317SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021544.D	1		03/17/25 10:39	VY031725

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave L	Date Received:	
Client Sample ID:	VY0317SBL01	SDG No.:	Q1574
Lab Sample ID:	VY0317SBL01	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
VY021544.D	1		03/17/25 10:39	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	0.65	U	0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.62	U	0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.92	U	0.92	5.00	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.87	U	0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	0.88	U	0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	1.10	U	1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	0.91	U	0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.67	U	0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	10.0	ug/Kg
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/Kg
100-42-5	Styrene	0.71	U	0.71	5.00	ug/Kg
75-25-2	Bromoform	0.86	U	0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	0.78	U	0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.20	U	1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	1.70	U	1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	1.60	U	1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	1.50	U	1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	1.80	U	1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3.00	U	3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3.20	U	3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.5		70 (63) - 130 (155)	105%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		70 (70) - 130 (134)	100%	SPK: 50
2037-26-5	Toluene-d8	48.2		70 (74) - 130 (123)	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	41.1		70 (38) - 130 (136)	82%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	272000	7.707			
540-36-3	1,4-Difluorobenzene	493000	8.616			
3114-55-4	Chlorobenzene-d5	421000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	158000	13.347			

Report of Analysis

Client:	G Environmental			Date Collected:	
Project:	Ave L			Date Received:	
Client Sample ID:	VY0317SBL01			SDG No.:	Q1574
Lab Sample ID:	VY0317SBL01			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
VY021544.D	1		03/17/25 10:39	VY031725

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\VY031725\
 Data File : VY021544.D
 Acq On : 17 Mar 2025 10:39
 Operator : SY/MD
 Sample : VY0317SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0317SBL01

Quant Time: Mar 18 01:26:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	272314	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	493002	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	420924	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	158203	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	151236	52.545	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	105.100%
35) Dibromofluoromethane	7.634	113	162364	50.103	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.200%
50) Toluene-d8	10.109	98	591441	48.203	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.400%
62) 4-Bromofluorobenzene	12.408	95	171451	41.079	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	82.160%

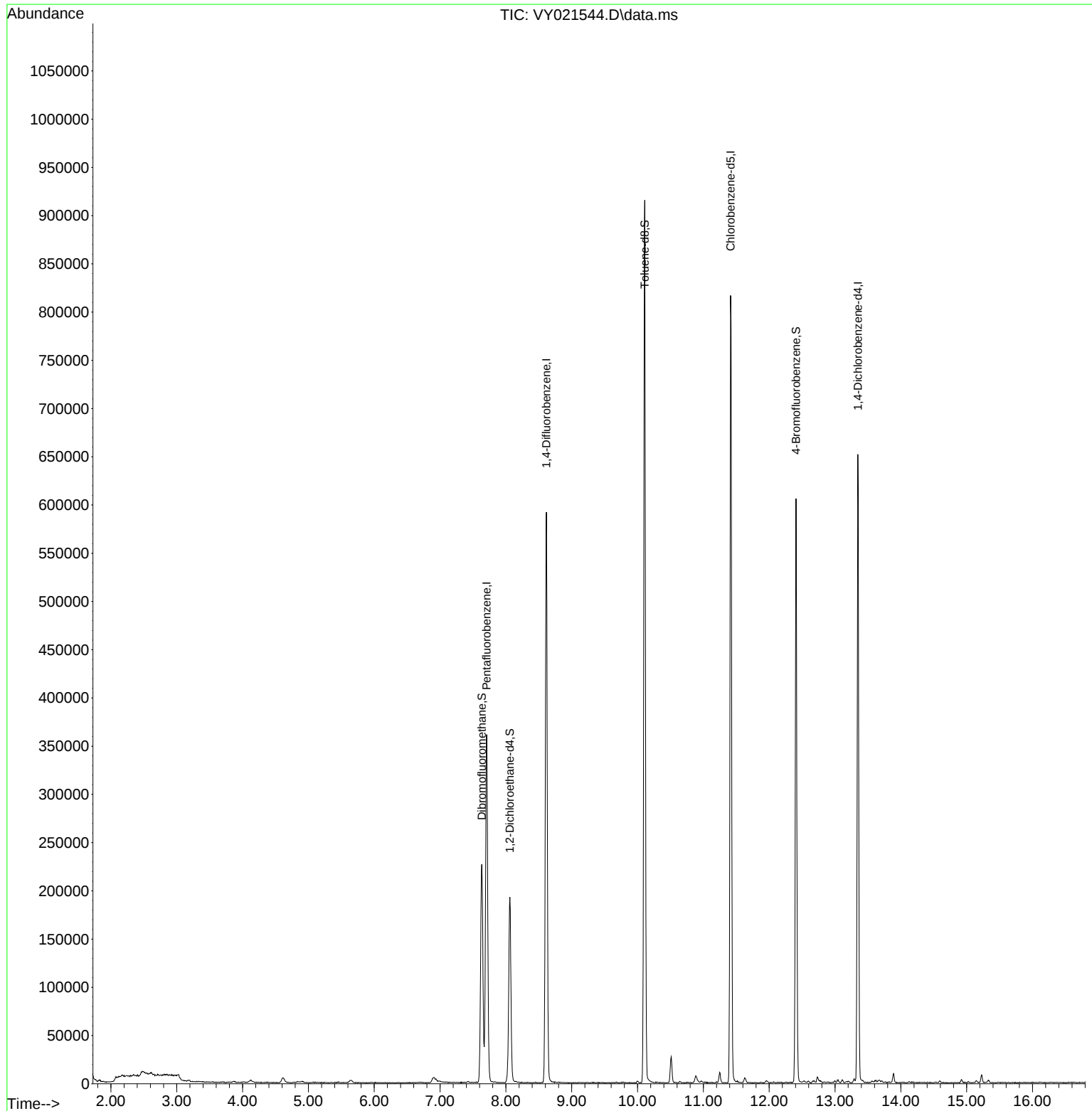
Target Compounds	Qvalue

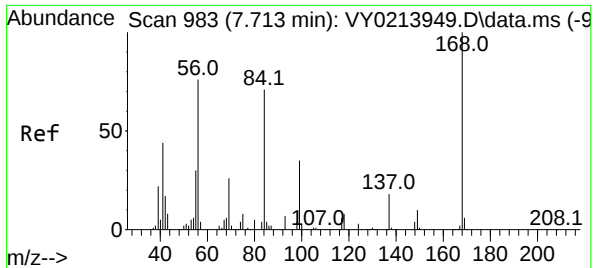
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021544.D
Acq On : 17 Mar 2025 10:39
Operator : SY/MD
Sample : VY0317SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBL01

Quant Time: Mar 18 01:26:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

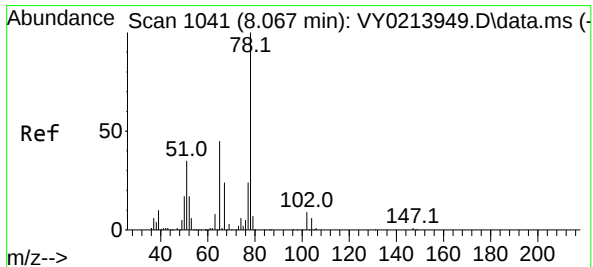
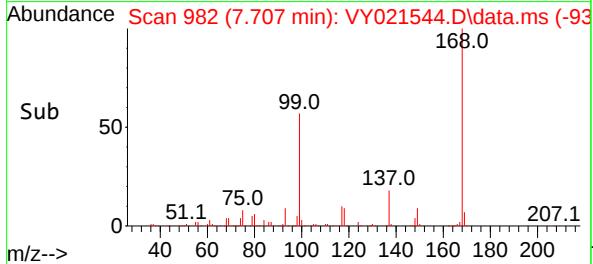
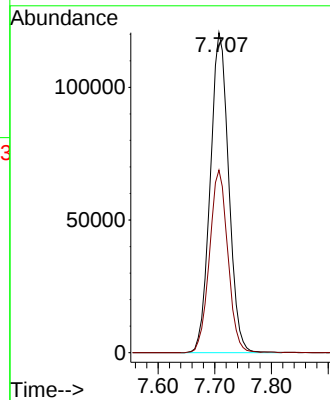
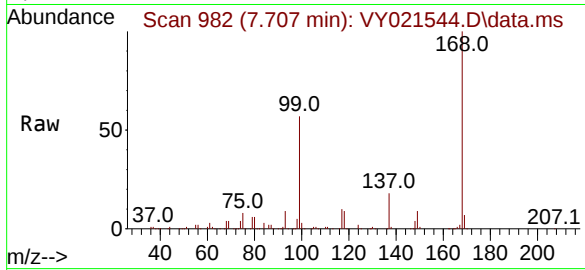




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021544.D
Acq: 17 Mar 2025 10:39

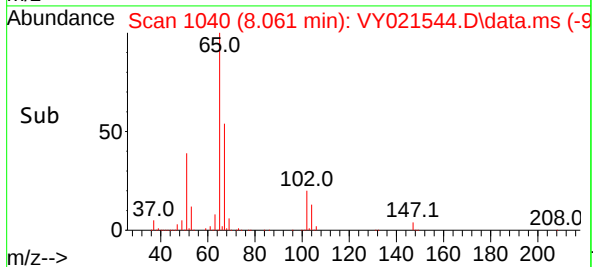
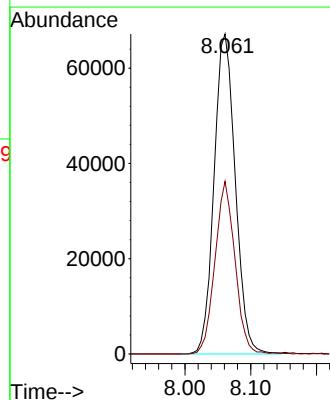
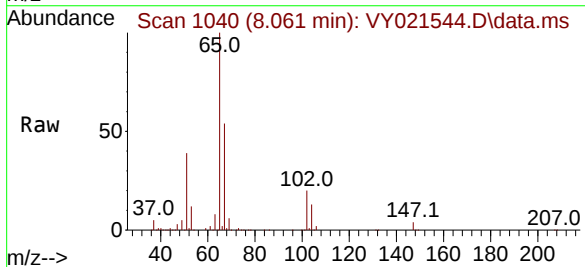
Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBL01

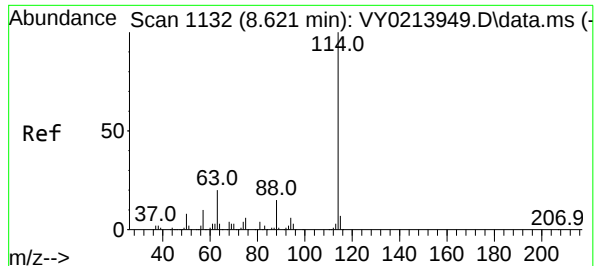
Tgt Ion:168 Resp: 272314
Ion Ratio Lower Upper
168 100
99 57.0 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 52.545 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021544.D
Acq: 17 Mar 2025 10:39

Tgt Ion: 65 Resp: 151236
Ion Ratio Lower Upper
65 100
67 50.8 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.616 min Scan# 1132

Delta R.T. -0.006 min

Lab File: VY021544.D

Acq: 17 Mar 2025 10:39

Instrument :

MSVOA_Y

ClientSampleId :

VY0317SBL01

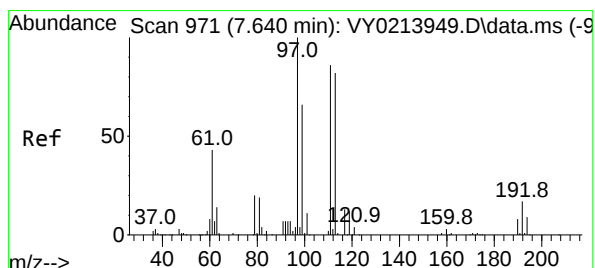
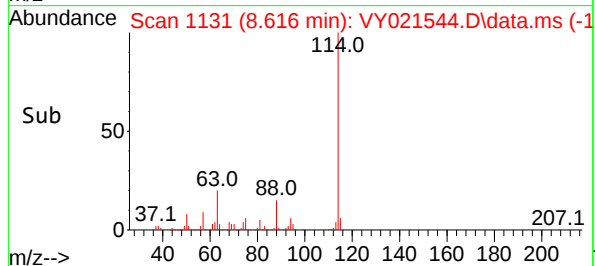
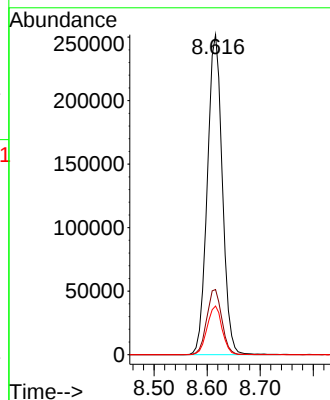
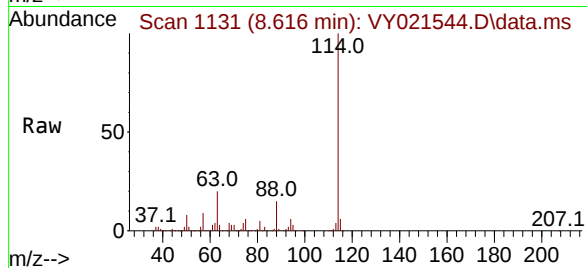
Tgt Ion:114 Resp: 493002

Ion Ratio Lower Upper

114 100

63 20.4 0.0 40.8

88 15.2 0.0 30.8



#35

Dibromofluoromethane

Concen: 50.103 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021544.D

Acq: 17 Mar 2025 10:39

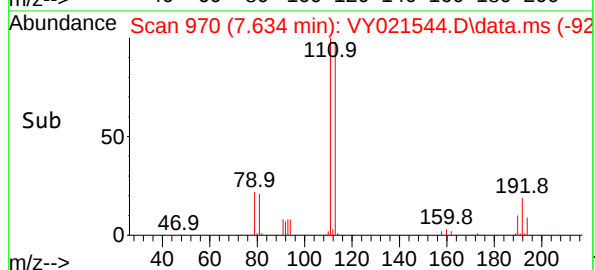
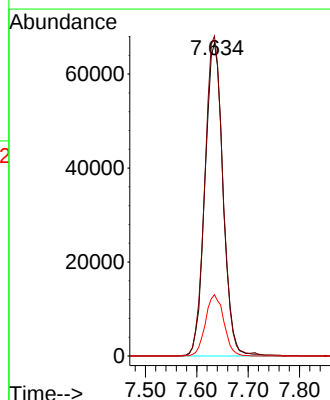
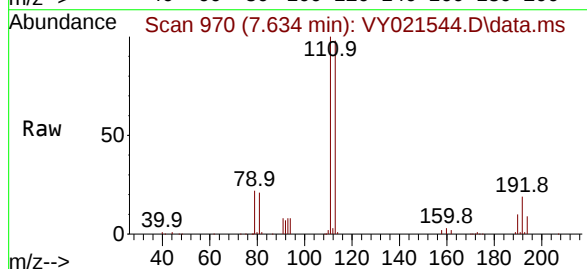
Tgt Ion:113 Resp: 162364

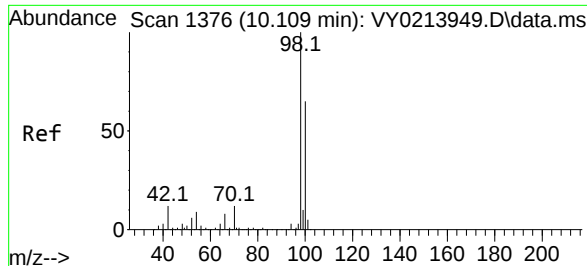
Ion Ratio Lower Upper

113 100

111 102.3 82.0 123.0

192 19.9 15.9 23.9





#50

Toluene-d8

Concen: 48.203 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021544.D

Acq: 17 Mar 2025 10:39

Instrument :

MSVOA_Y

ClientSampleId :

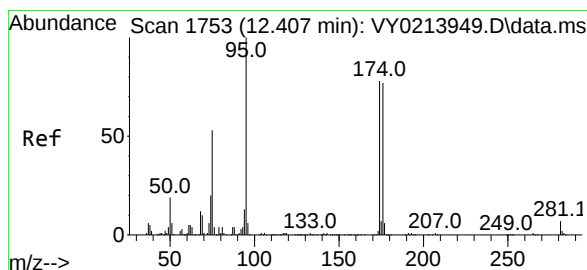
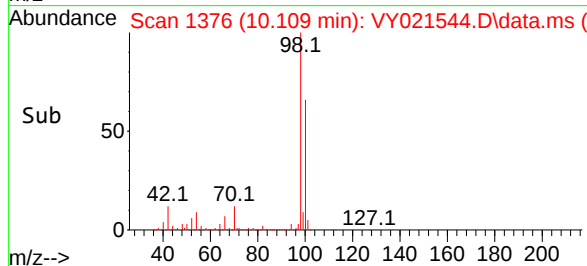
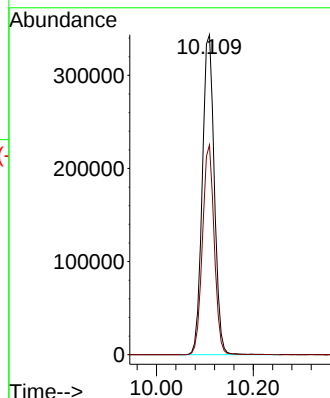
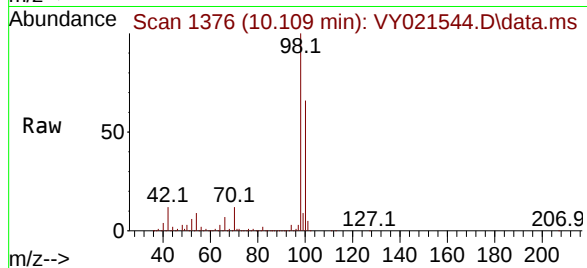
VY0317SBL01

Tgt Ion: 98 Resp: 591441

Ion Ratio Lower Upper

98 100

100 64.2 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 41.079 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021544.D

Acq: 17 Mar 2025 10:39

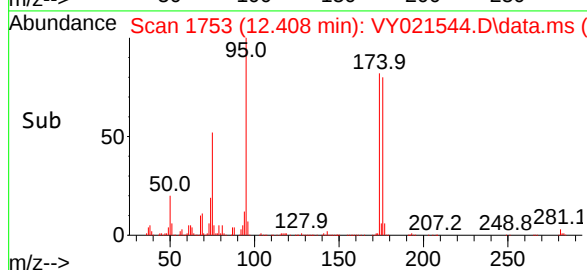
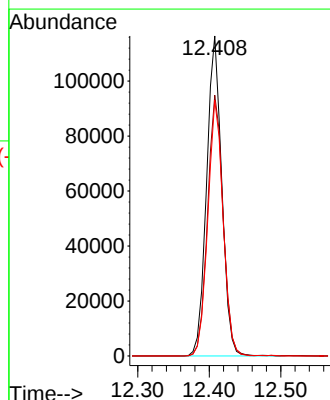
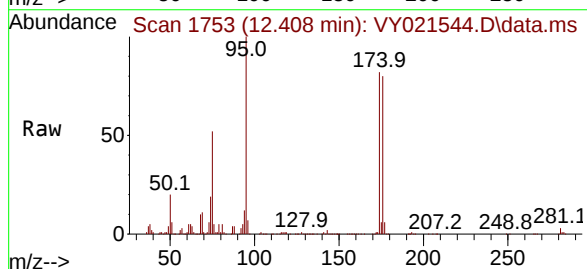
Tgt Ion: 95 Resp: 171451

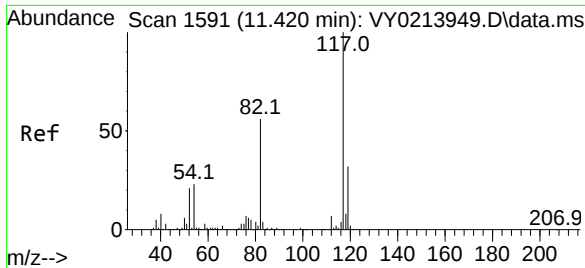
Ion Ratio Lower Upper

95 100

174 83.5 0.0 165.0

176 80.3 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY021544.D

Acq: 17 Mar 2025 10:39

Instrument :

MSVOA_Y

ClientSampleId :

VY0317SBL01

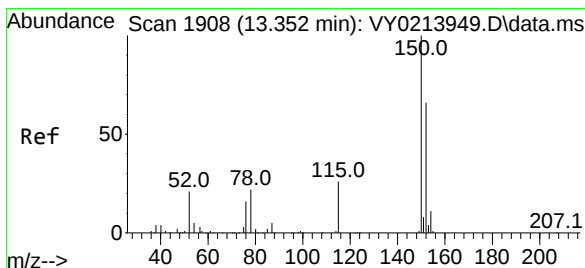
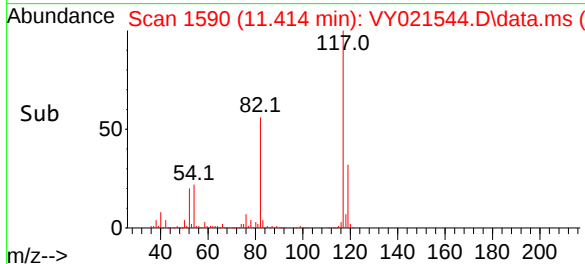
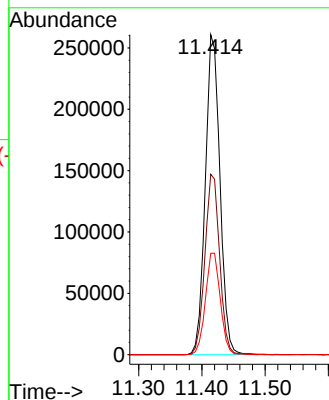
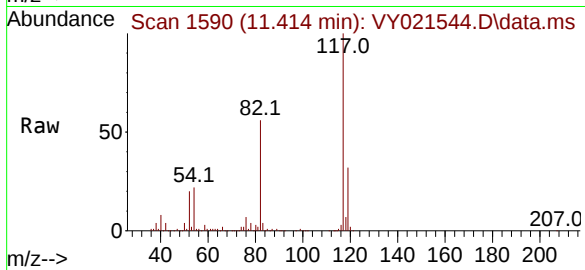
Tgt Ion:117 Resp: 420924

Ion Ratio Lower Upper

117 100

82 56.4 44.6 67.0

119 31.7 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.347 min Scan# 1907

Delta R.T. -0.006 min

Lab File: VY021544.D

Acq: 17 Mar 2025 10:39

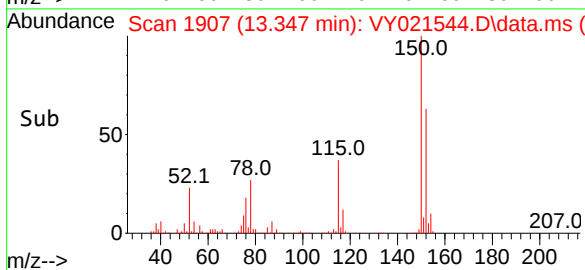
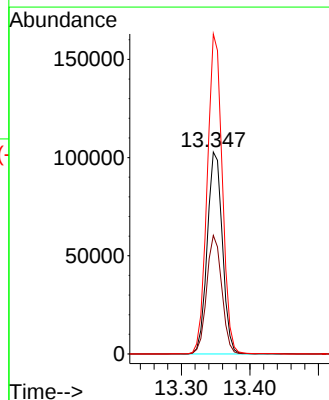
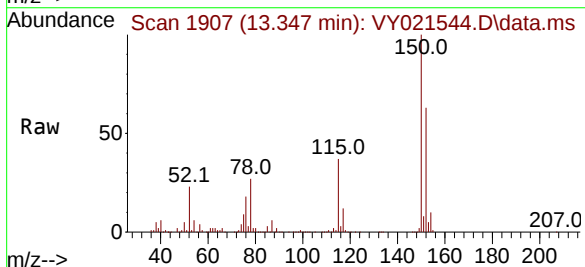
Tgt Ion:152 Resp: 158203

Ion Ratio Lower Upper

152 100

115 58.7 29.0 87.0

150 157.5 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021544.D
Acq On : 17 Mar 2025 10:39
Operator : SY/MD
Sample : VY0317SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBL01

Integration Parameters: RTEINT.P

Integrator: RTE

Smoothing : ON

Sampling : 1

Start Thrs: 0.2

Stop Thrs : 0

Filtering: 5

Min Area: 3 % of largest Peak

Max Peaks: 100

Peak Location: TOP

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

Peak separation: 5

Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M

Title : SW846 8260

Signal : TIC: VY021544.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.909	840	851	854	rBV3	5510	16941	1.06%	0.213%
2	7.634	960	970	976	rBV	225948	552926	34.76%	6.961%
3	7.707	976	982	995	rVB	360132	814631	51.20%	10.255%
4	8.061	1029	1040	1052	rBV	192099	449469	28.25%	5.658%
5	8.616	1121	1131	1145	rBV	591476	1168708	73.46%	14.713%
6	10.109	1367	1376	1396	rBV	915093	1590924	100.00%	20.028%
7	10.512	1435	1442	1449	rVB	26716	49257	3.10%	0.620%
8	10.884	1496	1503	1512	rBV3	7083	17666	1.11%	0.222%
9	11.249	1558	1563	1570	rVB3	10795	18480	1.16%	0.233%
10	11.414	1583	1590	1603	rBV	816209	1336405	84.00%	16.824%
11	12.408	1743	1753	1764	rBV	605578	943278	59.29%	11.875%
12	13.347	1901	1907	1918	rBV	649321	984750	61.90%	12.397%

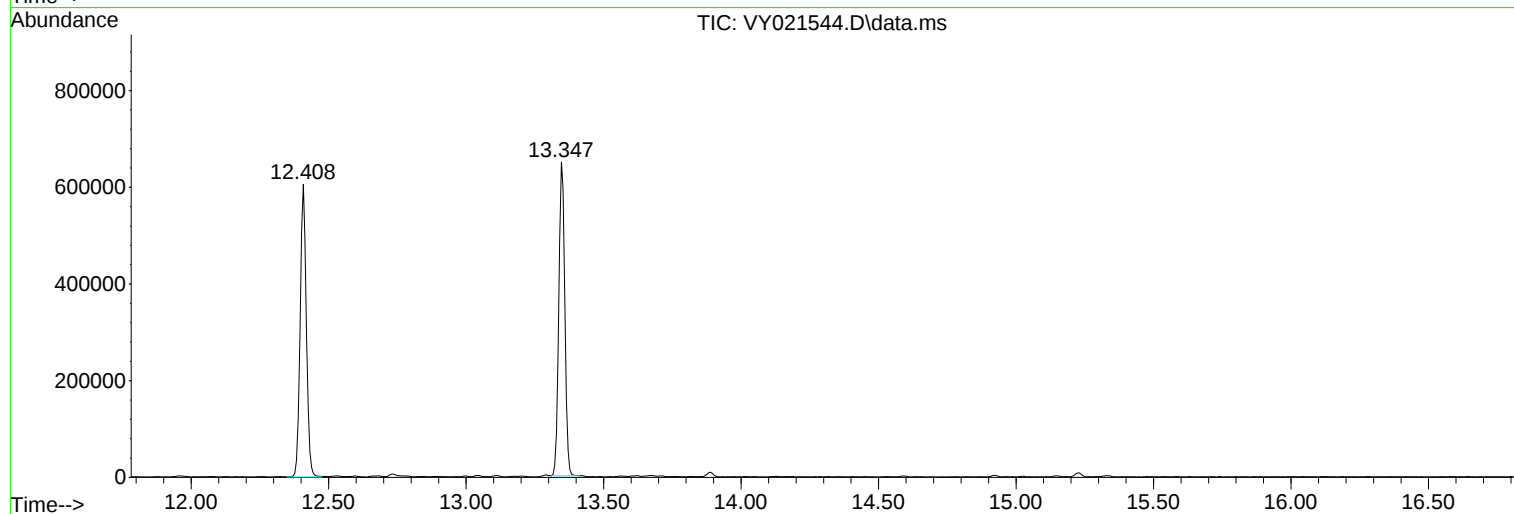
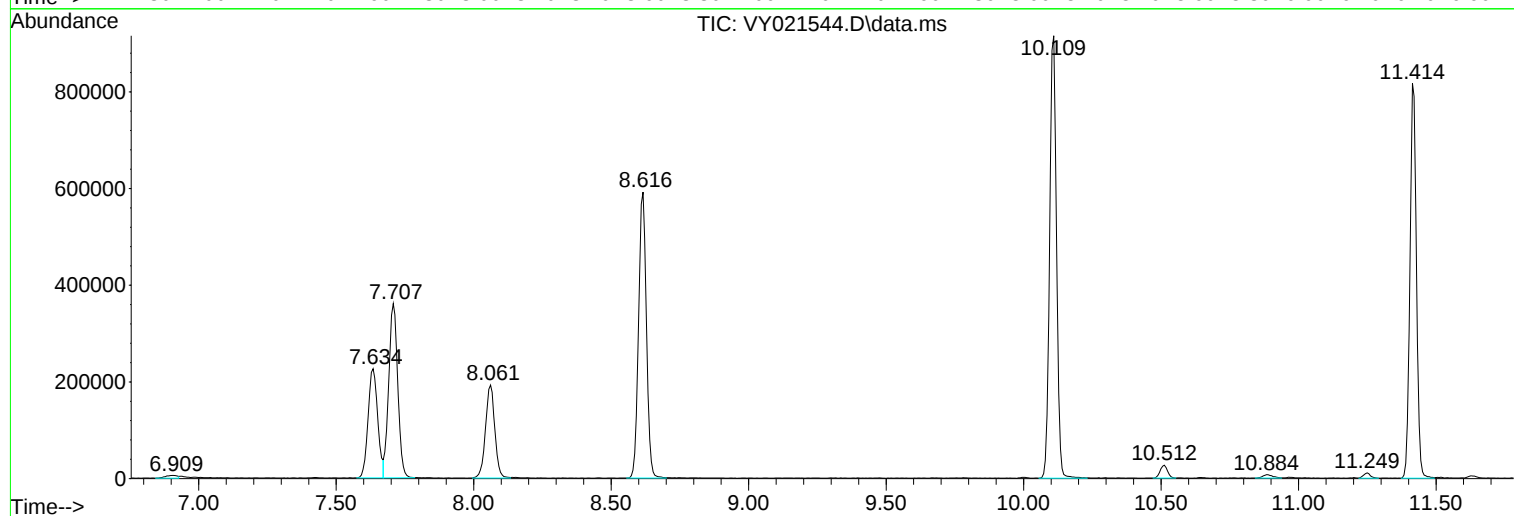
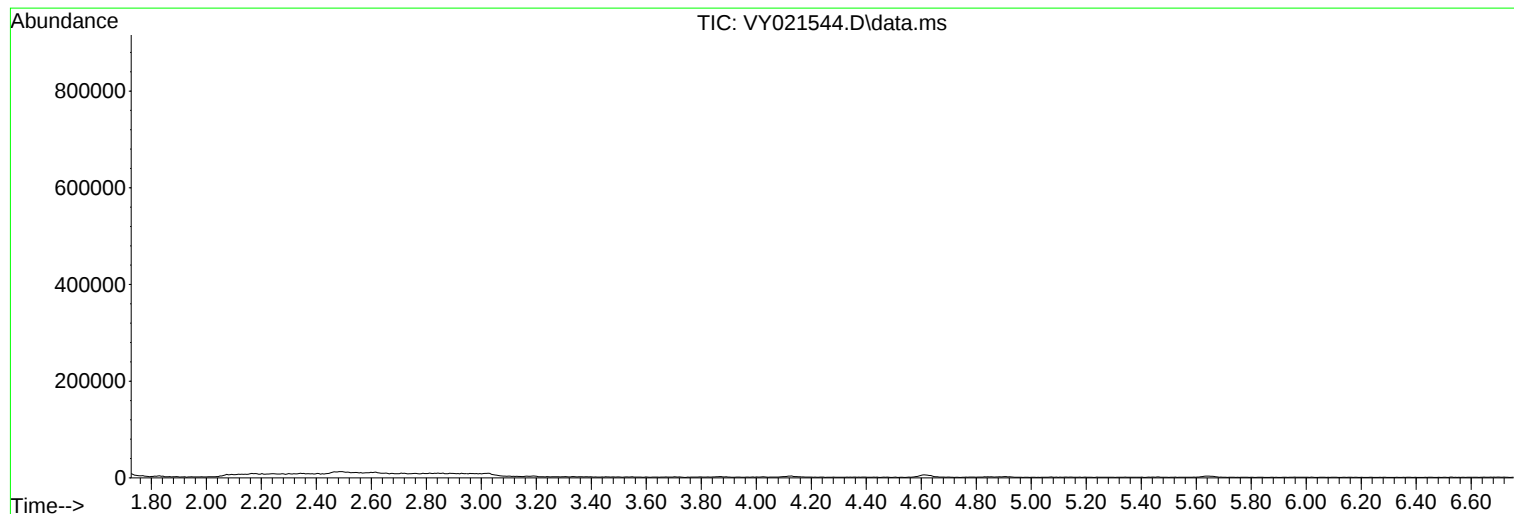
Sum of corrected areas: 7943435

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021544.D
Acq On : 17 Mar 2025 10:39
Operator : SY/MD
Sample : VY0317SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021544.D
Acq On : 17 Mar 2025 10:39
Operator : SY/MD
Sample : VY0317SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.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\VY031725\
Data File : VY021544.D
Acq On : 17 Mar 2025 10:39
Operator : SY/MD
Sample : VY0317SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave L	Date Received:	
Client Sample ID:	VY0317SBS01	SDG No.:	Q1574
Lab Sample ID:	VY0317SBS01	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
VY021545.D	1		03/17/25 12:49	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	19.3		1.10	5.00	ug/Kg
74-87-3	Chloromethane	19.8		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	21.2		0.79	5.00	ug/Kg
74-83-9	Bromomethane	20.4		1.10	5.00	ug/Kg
75-00-3	Chloroethane	23.1		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	24.4		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	21.4		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	20.9		1.00	5.00	ug/Kg
67-64-1	Acetone	170		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	18.8		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	21.6		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	22.9		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	21.1		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.9		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.7		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	19.0		0.79	5.00	ug/Kg
78-93-3	2-Butanone	140		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	20.8		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.6		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	20.7		1.20	5.00	ug/Kg
67-66-3	Chloroform	21.3		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.8		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	19.3		0.91	5.00	ug/Kg
71-43-2	Benzene	20.9		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	21.9		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	20.9		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	21.2		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	21.3		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	120		3.60	25.0	ug/Kg
108-88-3	Toluene	20.7		0.78	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave L	Date Received:	
Client Sample ID:	VY0317SBS01	SDG No.:	Q1574
Lab Sample ID:	VY0317SBS01	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
VY021545.D	1		03/17/25 12:49	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	21.4		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	21.5		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	22.3		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	130		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	22.1		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	21.4		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	24.4		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	20.6		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	20.0		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	40.8		1.20	10.0	ug/Kg
95-47-6	o-Xylene	20.1		0.82	5.00	ug/Kg
100-42-5	Styrene	20.5		0.71	5.00	ug/Kg
75-25-2	Bromoform	22.5		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	19.9		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	21.1		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	20.0		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	20.4		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	21.0		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	20.9		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	20.1		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	20.8		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.0		70 (63) - 130 (155)	104%	SPK: 50
1868-53-7	Dibromofluoromethane	51.5		70 (70) - 130 (134)	103%	SPK: 50
2037-26-5	Toluene-d8	50.2		70 (74) - 130 (123)	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.7		70 (38) - 130 (136)	101%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	209000	7.707			
540-36-3	1,4-Difluorobenzene	320000	8.616			
3114-55-4	Chlorobenzene-d5	284000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	146000	13.347			

Report of Analysis

Client:	G Environmental		Date Collected:	
Project:	Ave L		Date Received:	
Client Sample ID:	VY0317SBS01		SDG No.:	Q1574
Lab Sample ID:	VY0317SBS01		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
VY021545.D	1		03/17/25 12:49	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021545.D
 Acq On : 17 Mar 2025 12:49
 Operator : SY/MD
 Sample : VY0317SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0317SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
 Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:12 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	209203	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	320346	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	284395	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	146283	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.061	65	114896	51.962	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 103.920%	
35) Dibromofluoromethane	7.634	113	108339	51.451	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 102.900%	
50) Toluene-d8	10.109	98	399912	50.160	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 100.320%	
62) 4-Bromofluorobenzene	12.408	95	137449	50.682	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 101.360%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	37082	19.316	ug/l	98
3) Chloromethane	2.068	50	53477	19.758	ug/l	100
4) Vinyl Chloride	2.202	62	62796	21.231	ug/l	98
5) Bromomethane	2.586	94	43503	20.350	ug/l	97
6) Chloroethane	2.733	64	45193	23.121	ug/l	98
7) Trichlorofluoromethane	3.056	101	100773	24.409	ug/l	98
8) Diethyl Ether	3.452	74	27395	23.944	ug/l	97
9) 1,1,2-Trichlorotrifluo...	3.812	101	50420	21.391	ug/l	99
10) Methyl Iodide	4.001	142	49997	20.867	ug/l	100
11) Tert butyl alcohol	4.848	59	22139	144.485	ug/l #	72
12) 1,1-Dichloroethene	3.787	96	44961	20.922	ug/l	94
13) Acrolein	3.653	56	15875	141.152	ug/l	93
14) Allyl chloride	4.379	41	71393	20.558	ug/l	99
15) Acrylonitrile	5.055	53	56534	116.078	ug/l	96
16) Acetone	3.866	43	80850	167.644	ug/l	92
17) Carbon Disulfide	4.104	76	126355	18.762	ug/l	98
18) Methyl Acetate	4.385	43	24489	22.885	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	117760	21.620	ug/l	96
20) Methylene Chloride	4.616	84	53421	21.102	ug/l	99
21) trans-1,2-Dichloroethene	5.110	96	47977	19.935	ug/l	97
22) Diisopropyl ether	6.019	45	158451	21.171	ug/l	97
23) Vinyl Acetate	5.958	43	459261	107.522	ug/l	100
24) 1,1-Dichloroethane	5.915	63	91270	20.662	ug/l	97
25) 2-Butanone	6.890	43	92278	138.321	ug/l	100
26) 2,2-Dichloropropane	6.884	77	84157	20.706	ug/l	100
27) cis-1,2-Dichloroethene	6.890	96	56414	20.634	ug/l	99
28) Bromochloromethane	7.244	49	38379	20.724	ug/l	99
29) Tetrahydrofuran	7.256	42	47999	116.545	ug/l	99
30) Chloroform	7.421	83	97771	21.316	ug/l	96
31) Cyclohexane	7.701	56	78880	19.048	ug/l	94
32) 1,1,1-Trichloroethane	7.616	97	87249	20.774	ug/l	99
36) 1,1-Dichloropropene	7.835	75	67987	20.627	ug/l	99
37) Ethyl Acetate	6.982	43	33708	23.138	ug/l	98
38) Carbon Tetrachloride	7.817	117	78935	20.823	ug/l	98
39) Methylcyclohexane	9.109	83	78157	19.331	ug/l	97
40) Benzene	8.079	78	203296	20.938	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021545.D
 Acq On : 17 Mar 2025 12:49
 Operator : SY/MD
 Sample : VY0317SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0317SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
 Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:12 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.220	41	16991	21.420	ug/l #	92
42) 1,2-Dichloroethane	8.158	62	59580	21.935	ug/l	100
43) Isopropyl Acetate	8.195	43	62162	21.981	ug/l	98
44) Trichloroethene	8.866	130	51285	20.902	ug/l	99
45) 1,2-Dichloropropane	9.140	63	48890	21.157	ug/l	94
46) Dibromomethane	9.231	93	28568	22.218	ug/l	97
47) Bromodichloromethane	9.420	83	72821	21.326	ug/l	98
48) Methyl methacrylate	9.219	41	27932	21.509	ug/l	95
49) 1,4-Dioxane	9.231	88	6499	514.962	ug/l	98
51) 4-Methyl-2-Pentanone	10.000	43	170370	116.758	ug/l	98
52) Toluene	10.170	92	126742	20.705	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	64374	21.398	ug/l	98
54) cis-1,3-Dichloropropene	9.853	75	76790	21.500	ug/l	97
55) 1,1,2-Trichloroethane	10.573	97	37559	22.331	ug/l	97
56) Ethyl methacrylate	10.438	69	46681	21.762	ug/l	99
57) 1,3-Dichloropropane	10.719	76	63718	21.858	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	115671	116.815	ug/l	99
59) 2-Hexanone	10.762	43	128877	133.573	ug/l	98
60) Dibromochloromethane	10.914	129	50969	22.105	ug/l	97
61) 1,2-Dibromoethane	11.018	107	34040	21.444	ug/l	98
64) Tetrachloroethene	10.646	164	56528	24.444	ug/l	95
65) Chlorobenzene	11.444	112	138094	20.562	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.518	131	49463	20.832	ug/l	98
67) Ethyl Benzene	11.518	91	236170	20.035	ug/l	100
68) m/p-Xylenes	11.627	106	182629	40.809	ug/l	100
69) o-Xylene	11.957	106	82830	20.082	ug/l	96
70) Styrene	11.969	104	140028	20.465	ug/l	99
71) Bromoform	12.133	173	29832	22.476	ug/l #	99
73) Isopropylbenzene	12.255	105	229585	19.924	ug/l	99
74) N-amyl acetate	12.072	43	52463	20.964	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	42965	21.129	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	27346m	18.551	ug/l	
77) Bromobenzene	12.536	156	54044	20.047	ug/l	100
78) n-propylbenzene	12.597	91	278424	19.895	ug/l	100
79) 2-Chlorotoluene	12.682	91	158371	19.791	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	189235	20.208	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.304	75	13093	20.192	ug/l	98
82) 4-Chlorotoluene	12.780	91	166075	20.042	ug/l	100
83) tert-Butylbenzene	12.999	119	165804	19.848	ug/l	98
84) 1,2,4-Trimethylbenzene	13.042	105	187285	20.143	ug/l	99
85) sec-Butylbenzene	13.176	105	249213	20.050	ug/l	99
86) p-Isopropyltoluene	13.292	119	207009	20.216	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	107290	19.994	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	107122	20.412	ug/l	99
89) n-Butylbenzene	13.621	91	188538	19.939	ug/l	100
90) Hexachloroethane	13.883	117	43899	20.096	ug/l	100
91) 1,2-Dichlorobenzene	13.657	146	96554	20.993	ug/l	98
92) 1,2-Dibromo-3-Chloropr...	14.279	75	6381	20.949	ug/l	95
93) 1,2,4-Trichlorobenzene	14.919	180	50586	20.137	ug/l	97
94) Hexachlorobutadiene	15.029	225	33597	21.335	ug/l	98
95) Naphthalene	15.145	128	80499	20.966	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	43848	20.753	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021545.D
Acq On : 17 Mar 2025 12:49
Operator : SY/MD
Sample : VY0317SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBS01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

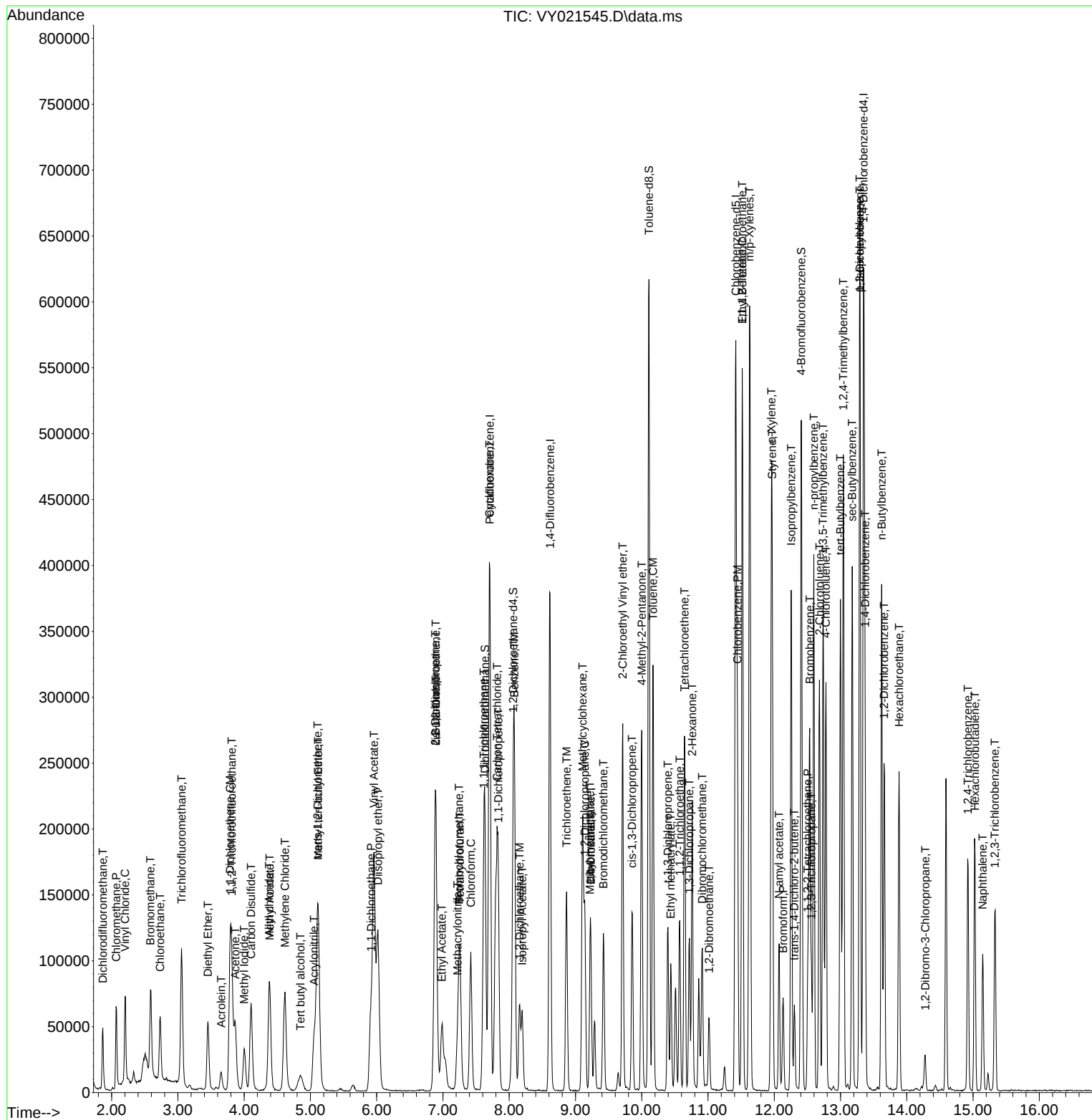
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021545.D
Acq On : 17 Mar 2025 12:49
Operator : SY/MD
Sample : VY0317SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBS01

Manual Integrations

Reviewed By :Mahesh Dadoda 03/18/2025
Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration



Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave L	Date Received:	
Client Sample ID:	VY0317SBSD01	SDG No.:	Q1574
Lab Sample ID:	VY0317SBSD01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021546.D	1		03/17/25 13:12	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	16.2		1.10	5.00	ug/Kg
74-87-3	Chloromethane	17.0		1.10	5.00	ug/Kg
75-01-4	Vinyl Chloride	18.2		0.79	5.00	ug/Kg
74-83-9	Bromomethane	17.8		1.10	5.00	ug/Kg
75-00-3	Chloroethane	18.4		1.30	5.00	ug/Kg
75-69-4	Trichlorofluoromethane	17.8		1.20	5.00	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	17.9		1.10	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	17.0		1.00	5.00	ug/Kg
67-64-1	Acetone	120		4.70	25.0	ug/Kg
75-15-0	Carbon Disulfide	15.7		1.10	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	17.9		0.73	5.00	ug/Kg
79-20-9	Methyl Acetate	20.0		1.50	5.00	ug/Kg
75-09-2	Methylene Chloride	18.1		3.50	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	17.3		0.86	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	18.1		0.80	5.00	ug/Kg
110-82-7	Cyclohexane	15.8		0.79	5.00	ug/Kg
78-93-3	2-Butanone	100		6.50	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	17.5		0.97	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	17.6		0.75	5.00	ug/Kg
74-97-5	Bromochloromethane	20.0		1.20	5.00	ug/Kg
67-66-3	Chloroform	18.1		0.84	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	17.5		0.93	5.00	ug/Kg
108-87-2	Methylcyclohexane	16.1		0.91	5.00	ug/Kg
71-43-2	Benzene	17.6		0.79	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	18.4		0.79	5.00	ug/Kg
79-01-6	Trichloroethene	18.0		0.81	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	18.0		0.91	5.00	ug/Kg
75-27-4	Bromodichloromethane	18.4		0.78	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	95.8		3.60	25.0	ug/Kg
108-88-3	Toluene	17.4		0.78	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Ave L	Date Received:	
Client Sample ID:	VY0317SBSD01	SDG No.:	Q1574
Lab Sample ID:	VY0317SBSD01	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
VY021546.D	1		03/17/25 13:12	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
10061-02-6	t-1,3-Dichloropropene	18.4		0.65	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	18.2		0.62	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.2		0.92	5.00	ug/Kg
591-78-6	2-Hexanone	100		3.70	25.0	ug/Kg
124-48-1	Dibromochloromethane	18.7		0.87	5.00	ug/Kg
106-93-4	1,2-Dibromoethane	18.2		0.88	5.00	ug/Kg
127-18-4	Tetrachloroethene	20.6		1.10	5.00	ug/Kg
108-90-7	Chlorobenzene	17.9		0.91	5.00	ug/Kg
100-41-4	Ethyl Benzene	17.2		0.67	5.00	ug/Kg
179601-23-1	m/p-Xylenes	34.6		1.20	10.0	ug/Kg
95-47-6	o-Xylene	17.4		0.82	5.00	ug/Kg
100-42-5	Styrene	17.6		0.71	5.00	ug/Kg
75-25-2	Bromoform	18.8		0.86	5.00	ug/Kg
98-82-8	Isopropylbenzene	16.7		0.78	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	17.5		1.20	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	17.1		1.70	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	17.4		1.60	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	17.6		1.50	5.00	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	18.1		1.80	5.00	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	17.1		3.00	5.00	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	17.8		3.20	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	51.5		70 (63) - 130 (155)	103%	SPK: 50
1868-53-7	Dibromofluoromethane	50.8		70 (70) - 130 (134)	102%	SPK: 50
2037-26-5	Toluene-d8	50.3		70 (74) - 130 (123)	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		70 (38) - 130 (136)	101%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	220000	7.707			
540-36-3	1,4-Difluorobenzene	339000	8.616			
3114-55-4	Chlorobenzene-d5	300000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	156000	13.346			

Report of Analysis

Client:	G Environmental		Date Collected:	
Project:	Ave L		Date Received:	
Client Sample ID:	VY0317SBSD01		SDG No.:	Q1574
Lab Sample ID:	VY0317SBSD01		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
VY021546.D	1		03/17/25 13:12	VY031725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021546.D
 Acq On : 17 Mar 2025 13:12
 Operator : SY/MD
 Sample : VY0317SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0317SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
 Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	7.707	168	219903	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	338794	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	299964	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	155756	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	119661	51.484	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 102.960%			
35) Dibromofluoromethane	7.634	113	113056	50.767	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 101.540%			
50) Toluene-d8	10.103	98	423789	50.260	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 100.520%			
62) 4-Bromofluorobenzene	12.408	95	144304	50.312	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 100.620%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	32776	16.242	ug/l	96
3) Chloromethane	2.068	50	48277	16.969	ug/l	96
4) Vinyl Chloride	2.202	62	56684	18.232	ug/l	97
5) Bromomethane	2.586	94	39983	17.793	ug/l	95
6) Chloroethane	2.732	64	37764	18.380	ug/l	96
7) Trichlorofluoromethane	3.056	101	77327	17.819	ug/l	100
8) Diethyl Ether	3.452	74	21452	17.838	ug/l	95
9) 1,1,2-Trichlorotrifluo...	3.818	101	44271	17.868	ug/l	99
10) Methyl Iodide	4.001	142	44913	17.833	ug/l	98
11) Tert butyl alcohol	4.848	59	18906	112.736	ug/l #	72
12) 1,1-Dichloroethene	3.787	96	38423	17.010	ug/l	97
13) Acrolein	3.653	56	12750	107.850	ug/l	88
14) Allyl chloride	4.379	41	62873	17.223	ug/l	100
15) Acrylonitrile	5.055	53	48687	95.102	ug/l	100
16) Acetone	3.866	43	60240	118.831	ug/l	97
17) Carbon Disulfide	4.104	76	110858	15.660	ug/l	100
18) Methyl Acetate	4.385	43	22532	20.032	ug/l	97
19) Methyl tert-butyl Ether	5.110	73	102683	17.935	ug/l	99
20) Methylene Chloride	4.610	84	48160	18.098	ug/l	96
21) trans-1,2-Dichloroethene	5.110	96	43723	17.284	ug/l	90
22) Diisopropyl ether	6.018	45	141879	18.035	ug/l	99
23) Vinyl Acetate	5.958	43	406268	90.487	ug/l	100
24) 1,1-Dichloroethane	5.909	63	84110	18.115	ug/l	99
25) 2-Butanone	6.896	43	73617	104.980	ug/l	97
26) 2,2-Dichloropropane	6.884	77	74511	17.441	ug/l	98
27) cis-1,2-Dichloroethene	6.890	96	50556	17.592	ug/l	99
28) Bromochloromethane	7.244	49	38964	20.017	ug/l	99
29) Tetrahydrofuran	7.262	42	40955	94.603	ug/l	99
30) Chloroform	7.421	83	87417	18.131	ug/l	100
31) Cyclohexane	7.701	56	68851	15.817	ug/l	98
32) 1,1,1-Trichloroethane	7.616	97	77460	17.546	ug/l	100
36) 1,1-Dichloropropene	7.835	75	58932	16.906	ug/l	99
37) Ethyl Acetate	6.988	43	29067	18.866	ug/l	99
38) Carbon Tetrachloride	7.817	117	70130	17.493	ug/l	97
39) Methylcyclohexane	9.109	83	68897	16.113	ug/l	95
40) Benzene	8.079	78	180505	17.578	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
 Data File : VY021546.D
 Acq On : 17 Mar 2025 13:12
 Operator : SY/MD
 Sample : VY0317SBSD01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0317SBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
 Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:32 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 05 12:42:45 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Methacrylonitrile	7.213	41	15342	18.288	ug/l #	91
42) 1,2-Dichloroethane	8.158	62	52817	18.386	ug/l	100
43) Isopropyl Acetate	8.195	43	56333	18.835	ug/l #	89
44) Trichloroethene	8.866	130	46598	17.958	ug/l	98
45) 1,2-Dichloropropane	9.140	63	43905	17.965	ug/l	98
46) Dibromomethane	9.231	93	25495	18.749	ug/l	98
47) Bromodichloromethane	9.420	83	66316	18.364	ug/l	99
48) Methyl methacrylate	9.219	41	25101	18.276	ug/l	99
49) 1,4-Dioxane	9.225	88	5377	402.858	ug/l	95
51) 4-Methyl-2-Pentanone	9.999	43	147807	95.779	ug/l	98
52) Toluene	10.170	92	112662	17.402	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	58681	18.444	ug/l	99
54) cis-1,3-Dichloropropene	9.853	75	68654	18.175	ug/l	99
55) 1,1,2-Trichloroethane	10.573	97	34138	19.192	ug/l	95
56) Ethyl methacrylate	10.438	69	41358	18.231	ug/l	98
57) 1,3-Dichloropropane	10.713	76	58475	18.967	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	109668	104.722	ug/l	99
59) 2-Hexanone	10.762	43	104581	102.489	ug/l	98
60) Dibromochloromethane	10.914	129	45717	18.747	ug/l	99
61) 1,2-Dibromoethane	11.018	107	30558	18.202	ug/l	99
64) Tetrachloroethene	10.646	164	50211	20.585	ug/l	96
65) Chlorobenzene	11.444	112	126601	17.873	ug/l	94
66) 1,1,1,2-Tetrachloroethane	11.518	131	44474	17.759	ug/l	98
67) Ethyl Benzene	11.518	91	213408	17.165	ug/l	99
68) m/p-Xylenes	11.627	106	163262	34.588	ug/l	99
69) o-Xylene	11.956	106	75909	17.449	ug/l	100
70) Styrene	11.969	104	126980	17.595	ug/l	99
71) Bromoform	12.133	173	26283	18.774	ug/l #	100
73) Isopropylbenzene	12.255	105	204413	16.660	ug/l	99
74) N-amyl acetate	12.072	43	46299	17.376	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	37964	17.534	ug/l	99
76) 1,2,3-Trichloropropane	12.554	75	28030m	17.859	ug/l	
77) Bromobenzene	12.530	156	49501	17.245	ug/l	100
78) n-propylbenzene	12.597	91	248018	16.645	ug/l	99
79) 2-Chlorotoluene	12.682	91	141192	16.572	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	168556	16.905	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	11299	16.366	ug/l	98
82) 4-Chlorotoluene	12.779	91	152135	17.243	ug/l	100
83) tert-Butylbenzene	12.999	119	149468	16.804	ug/l	100
84) 1,2,4-Trimethylbenzene	13.042	105	169665	17.138	ug/l	98
85) sec-Butylbenzene	13.176	105	219555	16.590	ug/l	99
86) p-Isopropyltoluene	13.292	119	184520	16.924	ug/l	99
87) 1,3-Dichlorobenzene	13.285	146	97835	17.123	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	97134	17.383	ug/l	99
89) n-Butylbenzene	13.615	91	168493	16.736	ug/l	99
90) Hexachloroethane	13.877	117	39160	16.836	ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	86355	17.634	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	5870	18.099	ug/l	100
93) 1,2,4-Trichlorobenzene	14.919	180	45729	17.096	ug/l	96
94) Hexachlorobutadiene	15.023	225	29255	17.448	ug/l	98
95) Naphthalene	15.145	128	74445	18.488	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	39971	17.768	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021546.D
Acq On : 17 Mar 2025 13:12
Operator : SY/MD
Sample : VY0317SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBSD01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration

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

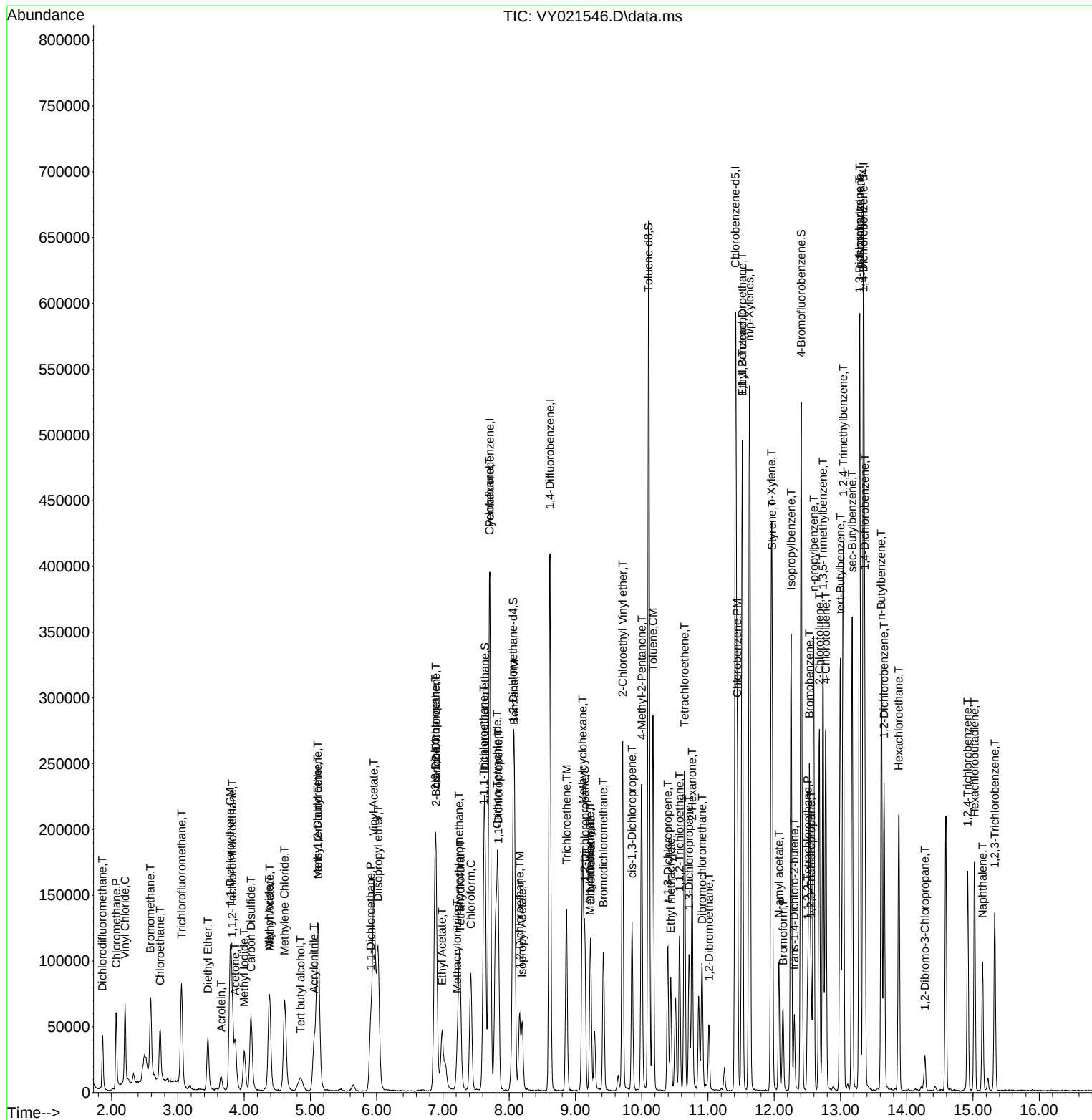
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031725\
Data File : VY021546.D
Acq On : 17 Mar 2025 13:12
Operator : SY/MD
Sample : VY0317SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0317SBSD01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/18/2025
Supervised By :Semsettin Yesilyurt 03/18/2025

Quant Time: Mar 18 01:26:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration



Manual Integration Report

Sequence:

VY030425

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC010	VY021397.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:34 PM	SAM	3/6/2025 3:00:08 PM	Peak Integrated by Software
VSTDICC010	VY021397.D	Methacrylonitrile	MMDadoda	3/6/2025 2:55:34 PM	SAM	3/6/2025 3:00:08 PM	Peak Integrated by Software
VSTDICC010	VY021397.D	Tert butyl alcohol	MMDadoda	3/6/2025 2:55:34 PM	SAM	3/6/2025 3:00:08 PM	Peak Integrated by Software
VSTDICC020	VY021398.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:33 PM	SAM	3/6/2025 3:00:07 PM	Peak Integrated by Software
VSTDICC020	VY021398.D	Ethyl Acetate	MMDadoda	3/6/2025 2:55:33 PM	SAM	3/6/2025 3:00:07 PM	Peak Integrated by Software
VSTDICCC050	VY021399.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:35 PM	SAM	3/6/2025 3:00:06 PM	Peak Integrated by Software
VSTDICC100	VY021400.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:49 PM	SAM	3/6/2025 3:00:09 PM	Peak Integrated by Software
VSTDICC150	VY021401.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:42 PM	SAM	3/6/2025 3:00:14 PM	Peak Integrated by Software
VSTDICC005	VY021403.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:43 PM	SAM	3/6/2025 3:00:17 PM	Peak Integrated by Software
VSTDICC005	VY021403.D	Ethyl Acetate	MMDadoda	3/6/2025 2:55:43 PM	SAM	3/6/2025 3:00:17 PM	Peak Integrated by Software
VSTDICV050	VY021404.D	1,2,3-Trichloropropane	MMDadoda	3/6/2025 2:55:47 PM	SAM	3/6/2025 3:00:16 PM	Peak Integrated by Software
VSTDICV050	VY021404.D	Methacrylonitrile	MMDadoda	3/6/2025 2:55:47 PM	SAM	3/6/2025 3:00:16 PM	Peak Integrated by Software



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

Manual Integration Report

Sequence:

VY030425

Instrument

MSVOA_y

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:

vy031725

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY021543.D	1,2,3-Trichloropropane	MMDadoda	3/18/2025 1:55:58 PM	SAM	3/18/2025 1:57:56 PM	Peak Integrated by Software
VY0317SBS01	VY021545.D	1,2,3-Trichloropropane	MMDadoda	3/18/2025 1:55:59 PM	SAM	3/18/2025 1:57:56 PM	Peak Integrated by Software
VY0317SBSD01	VY021546.D	1,2,3-Trichloropropane	MMDadoda	3/18/2025 1:56:01 PM	SAM	3/18/2025 1:57:58 PM	Peak Integrated by Software
VSTDCCC050	VY021554.D	1,2,3-Trichloropropane	MMDadoda	3/18/2025 1:56:02 PM	SAM	3/18/2025 1:58:01 PM	Peak Integrated by Software

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QCBatch ID # VY030425

Review By	Mahesh Dadoda	Review On	3/5/2025 12:14:39 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/5/2025 12:18:08 PM		
SubDirectory	VY030425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk		VP133216			
Initial Calibration Stds		VP133207,VP133208,VP133209,VP133210,VP133211,VP133212			
CCC		VP133214,VP133215			
Internal Standard/PEM		VP131783			
ICV/I.BLK		VP133213			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021395.D	04 Mar 2025 08:52	SY/MD	Ok
2	VSTDIC005	VY021396.D	04 Mar 2025 09:23	SY/MD	Not Ok
3	VSTDIC010	VY021397.D	04 Mar 2025 09:46	SY/MD	Ok,M
4	VSTDIC020	VY021398.D	04 Mar 2025 10:09	SY/MD	Ok,M
5	VSTDIC050	VY021399.D	04 Mar 2025 10:30	SY/MD	Ok,M
6	VSTDIC100	VY021400.D	04 Mar 2025 11:06	SY/MD	Ok,M
7	VSTDIC150	VY021401.D	04 Mar 2025 11:29	SY/MD	Ok,M
8	VIBLK	VY021402.D	04 Mar 2025 11:52	SY/MD	Ok
9	VSTDIC005	VY021403.D	04 Mar 2025 12:15	SY/MD	Ok,M
10	VSTDICV050	VY021404.D	04 Mar 2025 13:12	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY031725

Review By	Mahesh Dadoda	Review On	3/18/2025 1:56:06 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/18/2025 1:58:06 PM
SubDirectory	VY031725	HP Acquire Method	HP Processing Method 82y030425s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133309		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133310,VP133311 VP131783		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021542.D	17 Mar 2025 09:26	SY/MD	Ok
2	VSTDCCC050	VY021543.D	17 Mar 2025 10:04	SY/MD	Ok,M
3	VY0317SBL01	VY021544.D	17 Mar 2025 10:39	SY/MD	Ok
4	VY0317SBS01	VY021545.D	17 Mar 2025 12:49	SY/MD	Ok,M
5	VY0317SBSD01	VY021546.D	17 Mar 2025 13:12	SY/MD	Ok,M
6	Q1585-01	VY021547.D	17 Mar 2025 13:39	SY/MD	ReRun
7	Q1581-01	VY021548.D	17 Mar 2025 14:03	SY/MD	Not Ok
8	Q1574-01	VY021549.D	17 Mar 2025 14:26	SY/MD	ReRun
9	Q1585-01RE	VY021550.D	17 Mar 2025 15:08	SY/MD	Confirms
10	Q1581-01	VY021551.D	17 Mar 2025 15:32	SY/MD	Not Ok
11	Q1574-01RE	VY021552.D	17 Mar 2025 15:55	SY/MD	Confirms
12	VY0317SBS02	VY021553.D	17 Mar 2025 16:18	SY/MD	Not Ok
13	VSTDCCC050	VY021554.D	17 Mar 2025 16:40	SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY030425

Review By	Mahesh Dadoda	Review On	3/5/2025 12:14:39 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/5/2025 12:18:08 PM		
SubDirectory	VY030425	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk	VP133216
Initial Calibration Stds	VP133207,VP133208,VP133209,VP133210,VP133211,VP133212
CCC	VP133214,VP133215
Internal Standard/PEM	VP131783
ICV/I.BLK	VP133213
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021395.D	04 Mar 2025 08:52		SY/MD	Ok
2	VSTDICC005	VSTDICC005	VY021396.D	04 Mar 2025 09:23	not used	SY/MD	Not Ok
3	VSTDICC010	VSTDICC010	VY021397.D	04 Mar 2025 09:46		SY/MD	Ok,M
4	VSTDICC020	VSTDICC020	VY021398.D	04 Mar 2025 10:09	Comp.#11 is on Linear Regression	SY/MD	Ok,M
5	VSTDICCC050	VSTDICCC050	VY021399.D	04 Mar 2025 10:30	Comp.#95 is on Quadratic Regression	SY/MD	Ok,M
6	VSTDICC100	VSTDICC100	VY021400.D	04 Mar 2025 11:06		SY/MD	Ok,M
7	VSTDICC150	VSTDICC150	VY021401.D	04 Mar 2025 11:29	Method fail for comp.#13	SY/MD	Ok,M
8	VIBLK	VIBLK	VY021402.D	04 Mar 2025 11:52		SY/MD	Ok
9	VSTDICC005	VSTDICC005	VY021403.D	04 Mar 2025 12:15		SY/MD	Ok,M
10	VSTDICV050	ICVVY030425	VY021404.D	04 Mar 2025 13:12		SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY031725

Review By	Maresh Dadoda	Review On	3/18/2025 1:56:06 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/18/2025 1:58:06 PM
SubDirectory	VY031725	HP Acquire Method	HP Processing Method 82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133309
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133310,VP133311 VP131783

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021542.D	17 Mar 2025 09:26		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY021543.D	17 Mar 2025 10:04		SY/MD	Ok,M
3	VY0317SBL01	VY0317SBL01	VY021544.D	17 Mar 2025 10:39		SY/MD	Ok
4	VY0317SBS01	VY0317SBS01	VY021545.D	17 Mar 2025 12:49		SY/MD	Ok,M
5	VY0317SBSD01	VY0317SBSD01	VY021546.D	17 Mar 2025 13:12		SY/MD	Ok,M
6	Q1585-01	OK-02-03142025	VY021547.D	17 Mar 2025 13:39	Internal Standard Fail;Surrogate Fail	SY/MD	ReRun
7	Q1581-01	TR-06-031425	VY021548.D	17 Mar 2025 14:03	Not purge	SY/MD	Not Ok
8	Q1574-01	WC1	VY021549.D	17 Mar 2025 14:26	Internal Standard Fail	SY/MD	ReRun
9	Q1585-01RE	OK-02-03142025RE	VY021550.D	17 Mar 2025 15:08	Internal Standard Fail	SY/MD	Confirms
10	Q1581-01	TR-06-031425	VY021551.D	17 Mar 2025 15:32	Not purge	SY/MD	Not Ok
11	Q1574-01RE	WC1RE	VY021552.D	17 Mar 2025 15:55	Internal Standard Fail	SY/MD	Confirms
12	VY0317SBS02	VY0317SBS02	VY021553.D	17 Mar 2025 16:18	Not Required	SY/MD	Not Ok
13	VSTDCCC050	VSTDCCC050EC	VY021554.D	17 Mar 2025 16:40		SY/MD	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/17/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:20
In Date: 03/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 105
Time OUT: 08:35
Out Date: 03/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC:LB135036

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
Q1569-01	TAP-IDW-SOIL-031325-01	1	1.14	11.74	12.88	10.13	76.6	
Q1569-04	TAP-IDW-SOIL-031325-02	2	1.16	10.92	12.08	9.16	73.3	
Q1572-01	C0AC9	3	1.12	10.23	11.35	8.25	69.7	
Q1572-02	C0014	4	1.15	10.41	11.56	9.32	78.5	
Q1572-03	C0015	5	1.18	10.05	11.23	9.22	80.0	
Q1572-04	C0016	6	1.15	9.00	10.15	7.3	68.3	
Q1572-05	C0017	7	1.14	10.49	11.63	8.97	74.6	
Q1572-06	C0018	8	1.15	9.91	11.06	8.68	76.0	
Q1572-07	C0019	9	1.16	10.15	11.31	8.17	69.1	
Q1572-08	C0020	10	1.13	10.26	11.39	8.8	74.8	
Q1572-09	C0021	11	1.15	10.40	11.55	8.11	66.9	
Q1572-10	C0022	12	1.15	10.39	11.54	8.00	65.9	
Q1572-11	C0023	13	1.14	10.46	11.6	9.91	83.8	
Q1572-12	C0024	14	1.13	10.28	11.41	8.82	74.8	
Q1572-13	C0025	15	1.12	10.22	11.34	8.92	76.3	
Q1572-14	C0026	16	1.19	10.23	11.42	8.82	74.6	
Q1572-15	C0027	17	1.12	10.48	11.6	8.85	73.8	
Q1572-16	C0028	18	1.15	10.11	11.26	9.52	82.8	
Q1573-01	C0AC4	19	1.19	10.51	11.7	8.81	72.5	
Q1573-02	C0AC5	20	1.16	11.03	12.19	8.16	63.5	
Q1573-03	C0AC6	21	1.14	10.38	11.52	7.66	62.8	
Q1573-04	C0AC8	22	1.16	10.28	11.44	7.25	59.2	
Q1573-05	C0029	23	1.18	10.60	11.78	7.09	55.8	
Q1573-06	C0030	24	1.13	10.13	11.26	8.17	69.5	
Q1573-07	C0031	25	1.19	10.24	11.43	8.1	67.5	
Q1573-08	C0032	26	1.15	10.08	11.23	6.7	55.1	
Q1573-09	C0033	27	1.13	10.27	11.4	7.76	64.6	
Q1573-10	C0034	28	1.14	10.42	11.56	9.7	82.1	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 3/17/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:20
In Date: 03/14/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN-1

OVENTEMP OUT Celsius(°C): 105
Time OUT: 08:35
Out Date: 03/15/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLIDS-OVEN

QC:LB135036

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
Q1573-11	C0035	29	1.19	11.25	12.44	9.97	78.0	
Q1574-01	WC1	30	1.11	10.31	11.42	11.21	98.0	
Q1578-01	JEC817T-1-1	31	1.00	1.00	2.00	2.00	100.0	pile
Q1578-02	JEC817T-1-2	32	1.00	1.00	2.00	2.00	100.0	pile
Q1579-01	BC271189-1-1	33	1.00	1.00	2.00	2.00	100.0	pile
Q1579-02	BC271189-1-2	34	1.00	1.00	2.00	2.00	100.0	pile
Q1579-03	BC271038-1-1	35	1.00	1.00	2.00	2.00	100.0	pile
Q1579-04	BC271038-1-2	36	1.00	1.00	2.00	2.00	100.0	pile
Q1581-01	TR-06-031425	37	1.14	10.08	11.22	10.54	93.3	
Q1581-02	TR-06-031425-E2	38	1.18	10.18	11.36	10.64	92.9	
Q1584-05	SVOC-GPC-BLANK	39	1.00	1.00	2.00	2.00	100.0	
Q1584-06	PEST-GPC-BLANK	40	1.00	1.00	2.00	2.00	100.0	
Q1584-07	PEST-GPC-BLANK-SPIKE	41	1.00	1.00	2.00	2.00	100.0	
Q1584-08	PCB-GPC-BLANK	42	1.00	1.00	2.00	2.00	100.0	
Q1584-09	PCB-GPC-BLANK-SPIKE	43	1.00	1.00	2.00	2.00	100.0	
Q1584-10	SVOC-GPC2-BLANK	44	1.00	1.00	2.00	2.00	100.0	
Q1584-11	PEST-GPC2-BLANK	45	1.00	1.00	2.00	2.00	100.0	
Q1584-12	PEST-GPC2-BLANK-SPIKE	46	1.00	1.00	2.00	2.00	100.0	
Q1584-13	PCB-GPC2-BLANK	47	1.00	1.00	2.00	2.00	100.0	
Q1584-14	PCB-GPC2-BLANK-SPIKE	48	1.00	1.00	2.00	2.00	100.0	
Q1585-01	OK-02-03142025	49	1.14	10.43	11.57	11.27	97.1	
Q1585-02	OK-02-03142025-E2	50	1.13	10.27	11.4	10.89	95.0	

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

WORKLIST(Hardcopy Internal Chain)

135036

WorkList Name : %1-031425 WorkList ID : 188269 Department : Wet-Chemistry Date : 03-14-2025 08:28:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1569-01	TAP-IDW-SOIL-031325-01	Solid	Percent Solids	Cool 4 deg C	WEST04	I33	03/13/2025	Chemtech -SO
Q1569-04	TAP-IDW-SOIL-031325-02	Solid	Percent Solids	Cool 4 deg C	WEST04	I33	03/13/2025	Chemtech -SO
Q1572-01	C0AC9	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-02	C0O14	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-03	C0O15	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-04	C0O16	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-05	C0O17	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-06	C0O18	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-07	C0O19	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-08	C0O20	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-09	C0O21	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-10	C0O22	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-11	C0O23	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-12	C0O24	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-13	C0O25	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-14	C0O26	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-15	C0O27	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1572-16	C0O28	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/12/2025	Chemtech -SO
Q1573-01	C0AC4	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-02	C0AC5	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-03	C0AC6	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO

Date/Time 03/14/25 16:10
 Raw Sample Received by: SP WPC
 Raw Sample Relinquished by: JTCsm
 Date/Time 03/14/25 17:30
 Raw Sample Received by: JTCsm
 Raw Sample Relinquished by: SP WPC

WORKLIST(Hardcopy Internal Chain)

135036

WorkList Name : %1-031425 WorkList ID : 188269 Department : Wet-Chemistry Date : 03-14-2025 08:28:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1573-04	C0AC8	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-05	C0O29	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-06	C0O30	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-07	C0O31	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-08	C0O32	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-09	C0O33	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-10	C0O34	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1573-11	C0O35	Solid	Percent Solids	Cool 4 deg C	TETR16	I31	03/11/2025	Chemtech -SO
Q1574-01	WC1	Solid	Percent Solids	Cool 4 deg C	GENV01	I41	03/11/2025	Chemtech -SO
Q1578-01	JEC817T-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/12/2025	Chemtech -SO
Q1578-02	JEC817T-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-01	BC271189-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-02	BC271189-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-03	BC271038-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1579-04	BC271038-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	I41	03/14/2025	Chemtech -SO
Q1581-01	TR-06-031425	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO
Q1581-02	TR-06-031425-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO
Q1584-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO

Date/Time 03/14/25 16:10 Date/Time 03/14/25 17:30
 Raw Sample Received by: SS WCC Raw Sample Received by: STCm
 Raw Sample Relinquished by: STCm Raw Sample Relinquished by: SS WCC

WORKLIST(Hardcopy Internal Chain)

WB 135036

WorkList Name : %1-031425 WorkList ID : 188269 Department : Wet-Chemistry Date : 03-14-2025 08:28:30

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1584-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1584-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	F11	03/14/2025	Chemtech -SO
Q1585-01	OK-02-03142025	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO
Q1585-02	OK-02-03142025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	I41	03/14/2025	Chemtech -SO

Date/Time 03/14/25 16:10
 Raw Sample Received by: JB muel
 Raw Sample Relinquished by: IT (SM)

Date/Time 03/14/25 17:30
 Raw Sample Received by: IT (SM)
 Raw Sample Relinquished by: JB muel

Prep Standard - Chemical Standard Summary

Order ID : Q1574

Test : VOC-TCLVOA-10

Prepbatch ID :

Sequence ID/Qc Batch ID: vy031725,

Standard ID :

VP131767,VP131783,VP132035,VP132036,VP132098,VP133175,VP133178,VP133179,VP133309,VP133310,VP133311,

Chemical ID :

V13391,V13466,V13706,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14613,V14614,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14744,V14754,V14809,V14814,V14842,W3112,

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
218	BFB, 25PPM	VP131767	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
11/27/2024								

FROM 0.50000ml of V13391 + 49.50000ml of V14154 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1917	8260 Internal standard 50 ppm	VP131783	11/22/2024	05/18/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
11/27/2024								

FROM 0.02000ml of V14289 + 9.98000ml of V14154 = Final Quantity: 10.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1810	8260 Working Std(2-CVE)-800ppm	VP132035	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/12/2024
<u>FROM</u> 1.00000ml of V14630 + 1.00000ml of V14631 + 1.00000ml of V14632 + 1.00000ml of V14633 + 46.00000ml of V14614 = Final Quantity: 50.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1811	8260 Working Std(2-CVE)-500ppm	VP132036	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 12/12/2024
<u>FROM</u> 7.50000ml of V14614 + 12.50000ml of VP132035 = Final Quantity: 20.000 ml								

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
252	8260 Working STD (BCM)-First source, 100PPM	VP132098	12/12/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/19/2024

FROM 1.25000ml of V13466 + 23.75000ml of V14614 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
249	8260 Surrogate, 100PPM	VP133175	02/27/2025	08/27/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								03/04/2025

FROM 0.10000ml of V13706 + 24.90000ml of V14613 = Final Quantity: 25.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
257	8260 Calibration Working STD Mix-First source, 160PPM	VP133178	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/04/2025
<u>FROM</u>	0.40000ml of V14842 + 1.00000ml of V14175 + 1.00000ml of V14176 + 1.00000ml of V14433 + 1.00000ml of V14439 + 1.00000ml of V14521 + 1.00000ml of V14522 + 1.00000ml of V14724 + 1.00000ml of V14744 + 1.00000ml of V14754 + 1.00000ml of V14809 + 1.00000ml of V14814 + 1.50000ml of V14722 + 1.50000ml of V14723 + 10.60000ml of V14613 = Final Quantity: 25.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
244	8260 Calibration Working STD Mix-First source, 100PPM	VP133179	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 03/04/2025
<u>FROM</u> 5.62500ml of V14613 + 9.37500ml of VP133178 = Final Quantity: 15.000 ml								

VOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
732	BFB TUNE CHECK - SOIL	VP133309	03/17/2025	03/18/2025	Romaben Patel	None	None	Maresh Dadoda
								03/19/2025

FROM 4.99800ml of W3112 + 0.00200ml of VP131767 = Final Quantity: 5.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
773	50 PPB CCC, 8260-SOIL	VP133310	03/17/2025	03/18/2025	Romaben Patel	None	None	Maresh Dadoda
								03/19/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133175 + 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
773	50 PPB CCC, 8260-SOIL	VP133311	03/17/2025	03/18/2025	Romaben Patel	None	None	Mahesh Dadoda 03/19/2025
<u>FROM</u>	4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133175 + 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 ml							

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30067 / BFB tuneing solution	A0191805	11/22/2025	11/22/2024 / SAM	01/13/2023 / SAM	V13391

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30225 / VOA Mix, bromochloromethane, 2000ug/mL, P&TM, 1mL/ampul	A0193071	06/12/2025	12/12/2024 / SAM	01/27/2023 / SAM	V13466

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	02/27/2026	02/27/2025 / SAM	04/12/2023 / SAM	V13706

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	05/18/2025	11/18/2024 / pedro	02/06/2024 / SAM	V14154

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14175

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95317 / Universal VOA Mega Mix (Min order = 5)	021624	07/10/2025	01/10/2025 / SAM	02/20/2024 / SAM	V14176

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555581 / Custom Standard, 8260 Internal Std [CS 5179-1]	A0210184	11/22/2025	11/22/2024 / SAM	04/15/2024 / SAM	V14289

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14433

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30489 / VOA Mix, 8260B Acetates Mix, P&TM, 1mL	A0209618	07/10/2025	01/10/2025 / SAM	08/15/2024 / SAM	V14439

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14521

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95319 / Revised Additions Mix (Min = 5)	091724	07/10/2025	01/10/2025 / SAM	09/18/2024 / SAM	V14522

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	08/27/2025	02/27/2025 / SAM	11/26/2024 / SAM	V14613

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	06/10/2025	12/10/2024 / SAM	11/26/2024 / SAM	V14614

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14630

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14631

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14632

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	06/10/2025	12/10/2024 / SAM	12/06/2024 / SAM	V14633

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14722

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14723

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30006 / VOA Mix, CLP method Calibration Std #1 ketones 5000uq/ml, PTM, 1ml	A02110618	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14724

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	08/27/2025	02/27/2025 / SAM	12/17/2024 / SAM	V14744

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	05/31/2031	01/10/2025 / SAM	12/17/2024 / SAM	V14754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14809

LOTS

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555408 / Custom Standard, Vinyl Acetate Standard w/ Grav [CS 5066-6] TWO SEPARATE	A0220471	07/10/2025	01/10/2025 / SAM	01/08/2025 / SAM	V14814

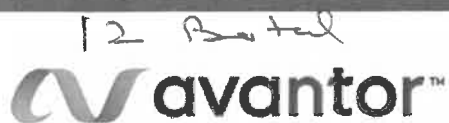
LOTS

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0217535	08/27/2025	02/27/2025 / SAM	01/21/2025 / SAM	V14842

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

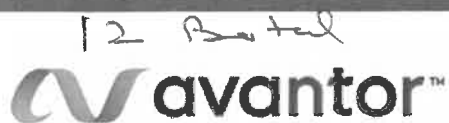
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory, Research, or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



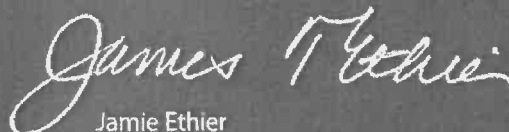
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

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Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory, Research, or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality



CERTIFIED WEIGHT REPORT

Part Number: **95317**
Lot Number: **021624**
Description: **Universal VOA Megamix**
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 8UTB

Solvent(s): **Methanol**
Lot# **EG359-USQ12**

Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty
0.021 Flask Uncertainty

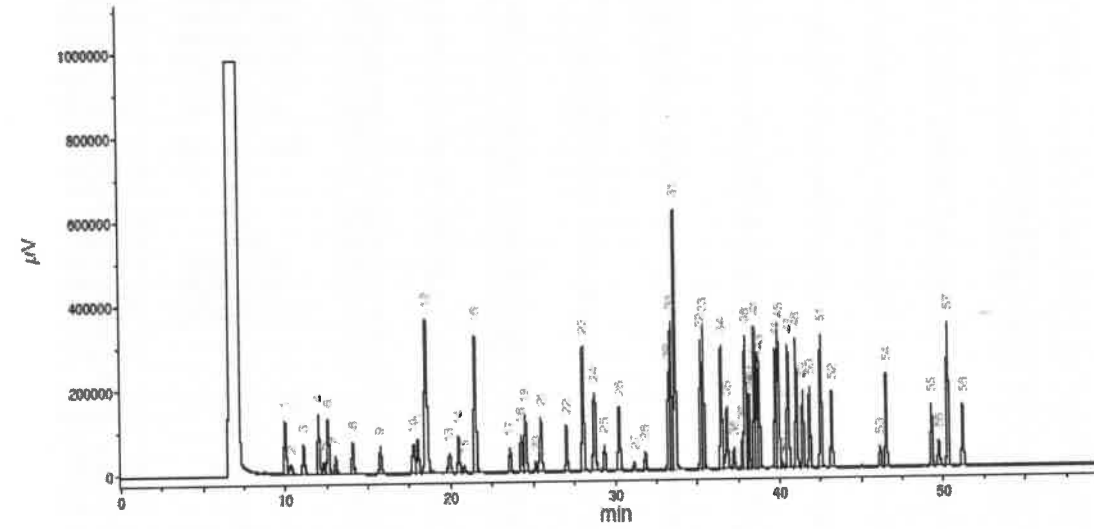
Formulated By:	<i>Prashant Chauhan</i>	021624
	Prashant Chauhan	DATE
Reviewed By:	<i>Pedro L. Rentes</i>	021624
	Pedro L. Rentes	DATE

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information			
														(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50
	Part Number	Number	Factor	Vol. (mL)	Conc.(µg/mL)	Conc.(µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)				
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	or-rat 2400mg/kg	
2. Allyl chloride (3-Chloropropene)	(0325)	102395	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	or-rat 700mg/kg	
3. Carbon disulphide	(0060)	MKCR8581	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	or-rat 1200mg/kg	
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A	
5. trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A	
6. Diethyl ether	(0153)	IK18CA5000K	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A	
7. Ethyl methacrylate	(0381)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	N/A	
8. Iodomethane	(0489)	5HBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm (28mg/m3/8H) (skin)	or-rat 14800mg/kg	
9. 2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	or-rat 70mg/kg	
10. Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H) (skin)	or-rat 1200mg/kg	
11. Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm (35mg/m3/8H) (skin)	or-rat 277mg/kg	
12. Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	or-rat 7872mg/kg	
13. Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H) (skin)	or-rat 700mg/kg	
14. 2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	or-rat 7200mg/kg	
15. Perfluorooctane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A	
16. 1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7800mg/m3/8H)	or-rat 43g/kg	
17. Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	or-rat 916mg/kg	
18. Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	or-rat 840mg/kg	
19. cis-1,2-Dichloroethane	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A	
20. trans-1,2-Dichloroethane	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	or-rat 1235mg/kg	
21. Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	or-rat 820mg/kg	
22. 1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.6	22.9	75-35-4	1 ppm (4mg/m3/8H)	or-rat 200mg/kg	
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	or-rat 930mg/kg	
24. Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	or-rat 2350mg/kg	
25. Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-68-3	50 ppm (240mg/m3) (CL)	or-rat 900mg/kg	
26. Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-95-3	N/A	or-rat 105mg/kg	
27. 1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	or-rat 725mg/kg	
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A	
29. Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg	
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	or-rat 10300mg/kg	
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg	
32. 1,2-Dibromomethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	or-rat 108mg/kg	
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-08-2	50 ppm (8H)	or-rat 870mg/kg	
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2002.0	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg	
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	un-rat 3600mg/kg	
36. 1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-56-6	N/A	N/A	
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A	
38. trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A	
39. Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	29.7	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-rat 82mg/kg	
40. 1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	or-rat 670mg/kg	
41. 1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H) (skin)	or-rat 800mg/kg	
42. 1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H) (skin)	or-rat 836mg/kg	
43. Trichloroethene	35161	112322	0.05	5.00	40029.0	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	or-rat 2400mg/kg	
44. 1,2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (50mg/m3/8H)	or-rat 149.6mg/kg	
45. Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.7	22.9	71-43-2	1 ppm	or-rat 4694mg/kg	
46. Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A	
47. n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	or-rat >2000mg/kg	
48. Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	99-87-6	N/A	or-rat 4750mg/kg	
49. p-Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg	
50. Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg	
51. Styrene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-98-3	200 ppm	or-rat 5000mg/kg	
52. Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	87-61-6	N/A	or-rat 1390mg/kg	
53. 1,2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	120-82-1	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg	
54. 1,2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.8	23.0	95-63-6	N/A	or-rat 5g/kg	
55. 1,2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-57-8	N/A	or-rat 5000mg/kg	
56. 1,3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-38-3	100 ppm (435mg/m3/8H)	or-rat 5g/kg	
57. m-Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	98-06-6	N/A	N/A	
58. tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	or-rat 2240mg/kg	
59. sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-90-7	75 ppm (350mg/m3/8H)	or-rat 2290mg/kg	
60. Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg	
61. 2-Chlorotoluene	35163	101923	0.05	5.00	40000.3	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	or-rat 2100mg/kg	
62. 4-Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000											

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethane	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.46
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Hitroprene	25.46
22	cis-1,3-Dichloropropane	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropane	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	35.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.48
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-3-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.74
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2023

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
P302,332	If on skin, wash with soap and water	P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1 TWA 200 ppm
Skin notation	TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.	
Personal protective equipment	Respiratory protection Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.	

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions to avoid	Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions.	- Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



CERTIFIED WEIGHT REPORT

Part Number: **95317**
Lot Number: **021624**
Description: **Universal VOA Megamix**
69 components
Expiration Date: 021627
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 8UTB

Solvent(s): **Methanol**
Lot#: **EG359-USQ12**

Weight(s) shown below were combined and diluted to (mL): **100.0** **0.021** Balance Uncertainty: **5E-05** Flask Uncertainty: **0.021**

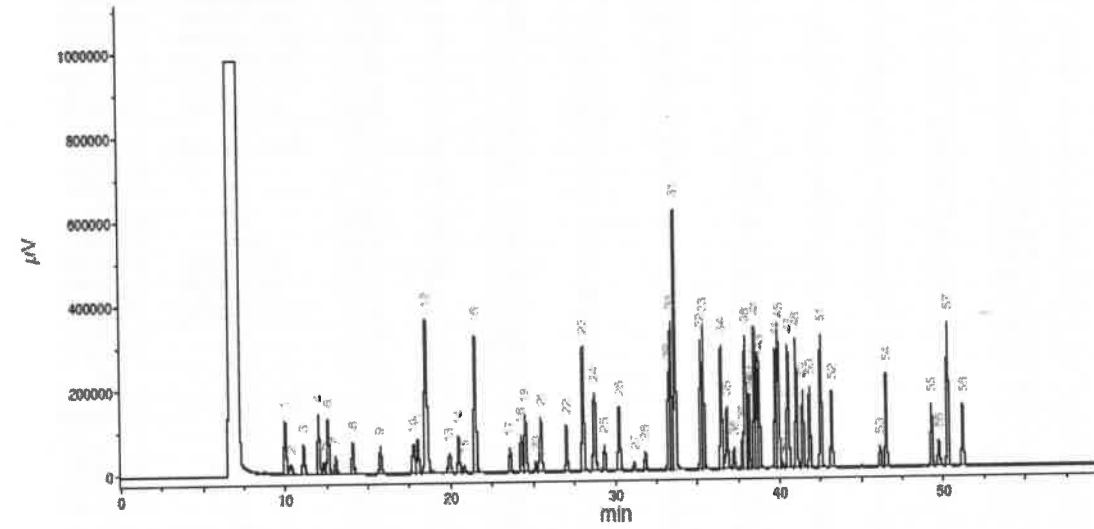
		021624
Formulated By:	Prashant Chauhan	DATE
		021624
Reviewed By:	Pedro L. Rentes	DATE

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information			
														(Solvent Safety Info. On Attached pg.)			
														Part Number	Number	Factor	Vol. (mL)
Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	or-rat 2400mg/kg	
Allyl chloride (3-Chloropropene)	(0325)	102396	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	107-05-1	1 ppm (3mg/m3/8H)	or-rat 700mg/kg	
Carbon disulfide	(0060)	MKCR8581	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	or-rat 1200mg/kg	
cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	8.5	1476-11-5	N/A	N/A	
trans-1,4-Dichloro-2-butene	(0486)	MKBP6041V	NA	NA	NA	2000	96.5	0.2	NA	0.20731	0.20748	2001.7	8.4	110-57-6	N/A	N/A	
Diethyl ether	(0153)	IK18CA5000K	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	60-29-7	N/A	N/A	
Ethyl methacrylate	(0381)	06126PK	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20230	2002.3	8.2	97-63-2	N/A	N/A	
Iodomethane	(0489)	5HBF8718V	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20121	2001.5	8.2	74-88-4	5 ppm (28mg/m3/8H) (skin)	or-rat 70mg/kg	
2-Methyl-1-propanol	(0445)	15241EB	NA	NA	NA	2000	99.5	0.2	NA	0.20106	0.20120	2001.4	8.1	78-83-1	50 ppm (150mg/m3/8H)	or-rat 3480mg/kg	
Methacrylonitrile	(0442)	00427ET	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20221	2001.4	8.2	126-98-7	1 ppm (3mg/m3/8H) (skin)	or-rat 1200mg/kg	
Methyl acrylate	(1075)	SHBK0679	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20040	2001.5	8.1	96-33-3	10 ppm (35mg/m3/8H) (skin)	or-rat 277mg/kg	
Methyl methacrylate	(0404)	MKBW5137V	NA	NA	NA	2000	99.9	0.2	NA	0.20025	0.20041	2001.6	8.1	80-62-6	100 ppm (410mg/m3/8H)	or-rat 7872mg/kg	
Nitrobenzene	(0228)	01213TV	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20220	2001.3	8.2	98-95-3	1 ppm (5mg/m3/8H) (skin)	or-rat 700mg/kg	
2-Nitropropane	(0461)	14002JX	NA	NA	NA	2000	97.3	0.2	NA	0.20560	0.20577	2001.6	8.3	79-46-9	10 ppm (35mg/m3/8H)	or-rat 720mg/kg	
Pentachloroethane	(0450)	HGA01	NA	NA	NA	2000	98	0.2	NA	0.20413	0.20430	2001.6	8.3	76-01-7	N/A	N/A	
1,1,2-Trichlorotrifluoroethane	(0474)	18930	NA	NA	NA	2000	99	0.2	NA	0.20207	0.20225	2001.8	8.2	76-13-1	1000 ppm (7800mg/m3/8H)	or-rat 43g/kg	
Bromodichloromethane	35171	101623	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-27-4	N/A	or-rat 910mg/kg	
Dibromochloromethane	35171	101623	0.05	5.00	40002.1	2000	NA	NA	0.017	NA	NA	1999.6	23.0	124-48-1	N/A	or-rat 840mg/kg	
cis-1,2-Dichloroethane	35171	101623	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	22.9	156-59-2	N/A	N/A	
trans-1,2-Dichloroethane	35171	101623	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	23.0	156-60-5	N/A	N/A	
Methylene chloride	35171	101623	0.05	5.00	40002.8	2000	NA	NA	0.017	NA	NA	1999.6	22.9	75-09-2	500 ppm	or-rat 820mg/kg	
1,1-Dichloroethene	32251	102023	0.10	10.00	20001.6	2000	NA	NA	0.042	NA	NA	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	or-rat 200mg/kg	
Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	or-rat 930mg/kg	
Carbon tetrachloride	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	56-23-5	2 ppm (12.6mg/m3/8H)	or-rat 2350mg/kg	
Chloroform	95321	020724	0.10	10.00	20024.0	2000	NA	NA	0.042	NA	NA	2001.9	20.5	67-66-3	50 ppm (240mg/m3) (CL)	or-rat 900mg/kg	
Dibromomethane	95321	020724	0.10	10.00	20002.9	2000	NA	NA	0.042	NA	NA	1999.8	20.5	74-85-3	N/A	or-rat 105mg/kg	
1,1-Dichloroethane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-34-3	100 ppm	or-rat 725mg/kg	
2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	N/A	N/A	
Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg	
1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	or-rat 10300mg/kg	
1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg	
1,2-Dibromomethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.7	22.9	106-93-4	20 ppm (8H)	or-rat 108mg/kg	
1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	107-08-2	50 ppm (8H)	or-rat 870mg/kg	
1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2000.2	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg	
1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	un-rat 3600mg/kg	
1,1-Dichloropropane	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	2000.1	22.9	563-56-6	N/A	N/A	
cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.0	23.0	10061-01-5	N/A	N/A	
trans-1,3-Dichloropropene	35161	112322	0.05	5.00	40017.8	2000	NA	NA	0.017	NA	NA	2000.4	23.0	10061-02-6	N/A	N/A	
Hexachloro-1,3-butadiene	35161	112322	0.05	5.00	40021.9	2000	NA	NA	0.017	NA	NA	2000.6	22.9	87-68-3	0.02 ppm (0.24mg/m3/8H)	or-rat 82mg/kg	
1,1,1,2-Tetrachloroethane	35161	112322	0.05	5.00	40011.9	2000	NA	NA	0.017	NA	NA	2000.1	22.9	630-20-6	N/A	or-rat 670mg/kg	
1,1,2,2-Tetrachloroethane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	1999.9	22.9	79-34-5	5 ppm (35mg/m3/8H) (skin)	or-rat 800mg/kg	
1,1,2-Trichloroethane	35161	112322	0.05	5.00	40006.6	2000	NA	NA	0.017	NA	NA	1999.8	23.0	79-00-5	10 ppm (46mg/m3/8H) (skin)	or-rat 836mg/kg	
2,3-Trichloropropane	35161	112322	0.05	5.00	40007.5	2000	NA	NA	0.017	NA	NA	2000.9	22.9	79-01-6	50 ppm (270mg/m3/8H)	or-rat 2400mg/kg	
Benzene	35162	050823	0.05	5.00	40005.0	2000	NA	NA	0.017	NA	NA	1999.9	22.9	96-18-4	10 ppm (50mg/m3/8H)	or-rat 149.6mg/kg	
Bromobenzene	35162	050823	0.05	5.00	40006.9	2000	NA	NA	0.017	NA	NA	1999.8	22.9	104-51-8	1 ppm	or-rat 4694mg/kg	
n-Butyl benzene	35162	050823	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	108-98-1	N/A	or-rat 2699mg/kg	
Ethyl benzene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	104-51-8	N/A	N/A	
Isopropyl toluene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-41-4	100 ppm (435mg/m3/8H)	or-rat >2000mg/kg	
Naphthalene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.8	22.9	99-87-6	N/A	or-rat 4750mg/kg	
Styrene	35162	050823	0.05	5.00	40004.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	91-20-3	10 ppm (50mg/m3/8H)	or-rat 490mg/kg	
Toluene	35162	050823	0.05	5.00	40006.2	2000	NA	NA	0.017	NA	NA	1999.7	22.9	100-42-5	100 ppm	or-rat 5000mg/kg	
2,3-Trichlorobenzene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	108-98-3	200 ppm	or-rat 5000mg/kg	
2,4-Trichlorobenzene	35162	050823	0.05	5.00	40006.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	87-61-6	N/A	or-rat 1390mg/kg	
2,4-Trimethylbenzene	35162	050823	0.05	5.00	40001.6	2000	NA	NA	0.017	NA	NA	1999.8	22.9	120-82-1	5 ppm (CL) (40mg/m3)	or-rat 750mg/kg	
3,5-Trimethylbenzene	35162	050823	0.05	5.00	40006.7	2000	NA	NA	0.017	NA	NA	1999.8	22.9	95-63-6	N/A	or-rat 5g/kg	
Xylene	35162	050823	0.05	5.00	40005.8	2000	NA	NA	0.017	NA	NA	1999.8	22.9	106-67-8	N/A	or-rat 5000mg/kg	
tert-Butyl benzene	35163	101923	0.05	5.00	40001.2	2000	NA	NA	0.017	NA	NA	1999.6	22.9	98-06-6	100 ppm (435mg/m3/8H)	or-rat 5g/kg	
sec-Butyl benzene	35163	101923	0.05	5.00	40002.4	2000	NA	NA	0.017	NA	NA	1999.6	22.9	135-98-8	N/A	N/A	
Chlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-49-8	75 ppm (350mg/m3/8H)	or-rat 2240mg/kg	
Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	108-90-7	75 ppm (350mg/m3/8H)	or-rat 2290mg/kg	
Chlorotoluene	35163	101923	0.05	5.00	40003.3	2000	NA	NA	0.017	NA	NA	1999.5	22.9	95-49-8	50 ppm (250mg/m3/8H)	or-rat 3900mg/kg	
2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	106-43-4	N/A	or-rat 2100mg/kg	
3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.7	22.9	96-50-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg	
4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.1					

Run 16, "P95317 L021624 [2000µg/mL in MeOH]"

Run Length: 60.00 min, 35998 points at 10 points/second.
Created: Sat, Feb 17, 2024 at 8:56:46 AM.
Sampled: Sequence "021624-GC5M1", Method "GC5-M1".
Analyzed using Method "GC5-M1".

Comments
GC5-M1 Analysis by Candice Warren
Column ID SPB-Vocol 105 meter X 0.53mm X 3.0µm film thickness
Flow rates: Total flow=290mL/min., Helium (carrier)=10mL/min.,
Helium(make-up)=10mL/min., Hydrogen(make-up)=40mL/min., Air(make-up)=230mL/min.
Oven Profile: Temp. 1=35°C (Time 1=10 min.), Temp 2=200°C (Time 2=8.75 min.),
Rate = 4°C/min., Total run time=60 min. Injector temp.=200°C, FID Temp.=200°C.
FID Signal = Edaq Channel 1
Standard injection = 0.5µL, Range=3



Peak #	Name	FID RT (min.)
1	Ether	9.97
2	1,1,2-Trichloro-1,2,2-trifluoroethane	10.33
3	1,1-Dichloroethane	11.10
4	Acetonitrile	12.00
5	Iodomethane	12.31
6	Allyl chloride	12.56
7	Carbon disulfide/Methylene chloride	13.04
8	trans-1,2-Dichloroethane	14.07
9	1,1-Dichloroethane	15.74
10	2,2-Dichloropropane	17.24
11	cis-1,2-Dichloroethane	18.00
12	Methacrylonitrile/methyl acrylate/Chloroform	18.46
13	Isobutane/1,1,1-Trichloroethane	19.01
14	1,1-Dichloropropane	20.46
15	Carbon tetrachloride	20.79
16	Benzene/1,2-Dichloroethane	21.49
17	Trichloroethane	23.58
18	1,2-Dichloropropane	24.38
19	Methyl methacrylate	24.52
20	Bromochloromethane	25.13
21	Dibromomethane/2-Hydropropane	25.46
22	cis-1,3-Dichloropropane	27.02
23	Toluene	28.05
24	Ethyl methacrylate/trans-1,3-Dichloropropane	28.73
25	1,1,2-Trichloroethane	29.34
26	Tetrachloroethene/1,3-Dichloropropane	30.24
27	Dibromochloromethane	31.16
28	1,2-Dibromomethane	31.84
29	Chlorobenzene	33.26
30	Ethylbenzene/1,1,1,2-Tetrachloroethane	33.40
31	m-Xylene/p-Xylene	33.66
32	o-Xylene	35.22
33	Styrene	35.39
34	Isopropylbenzene/Bromoforn	36.18
35	cis-1,4-Dichloro-3-butene	36.80
36	1,1,2,2-Tetrachloroethane	37.23
37	1,2,3-Trichloropropane	37.77
38	n-Propylbenzene	37.93
39	trans-1,4-Dichloro-3-butene	38.05
40	Bromobenzene	38.14
41	1,3,5-Trimethylbenzene	38.80
42	2-Chlorotoluene	38.82
43	4-Chlorotoluene	38.77
44	tert-Butylbenzene	39.74
45	1,2,4-Trimethylbenzene	39.91
46	Pentachloroethane	40.17
47	sec-Butylbenzene	40.52
48	p-Isopropyltoluene	41.02
49	1,3-Dichlorobenzene	41.42
50	1,4-Dichlorobenzene	41.83
51	n-Butylbenzene	42.53
52	1,2-Dichlorobenzene	43.18
53	1,2-Dibromo-3-chloropropane	46.12
54	Nitrobenzene	46.46
55	1,2,4-Trichlorobenzene	49.26
56	Hexachlorobutadiene	49.72
57	Naphthalene	50.26
58	1,2,3-Trichlorobenzene	51.16

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr. Hamden CT, 06514	Emergency Telephone International	1-352-323-3500
		Date Prepared/Revised	January 1, 2023

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
P302,332	If on skin, wash with soap and water	P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))			% (optional)
Methanol	METHYL ALCOHOL	CAS#: 67-56-1	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage Conditions	Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1 TWA 200 ppm
Skin notation	TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.	
Personal protective equipment	Respiratory protection. Handle with gloves. Gloves must be inspected prior to use. Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.	

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions to avoid	Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions.	- Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC. DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM



Dec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

Weight(s) shown below were combined and diluted to (mL):

10.0

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

Formulated By:	Justin Dippold	DATE	091424
Reviewed By:	Pedro L. Rentas	DATE	091424

Expanded Uncertainty (+/-) (µg/mL)	Actual Conc (µg/mL)	Actual Weight (g)	Target Weight (g)	Purity (%)	Uncertainty (%)	Nominal Conc (µg/mL)	Lot Number	RM#	Compound
52.5	5008.9	0.05175	0.05186	97	0.5	5000	103755V10F	5	Acrolein

OSHA PEL (TWA)	CAS#	107-02-8	52.5	0.1 ppm	ori-rat 46mg/kg
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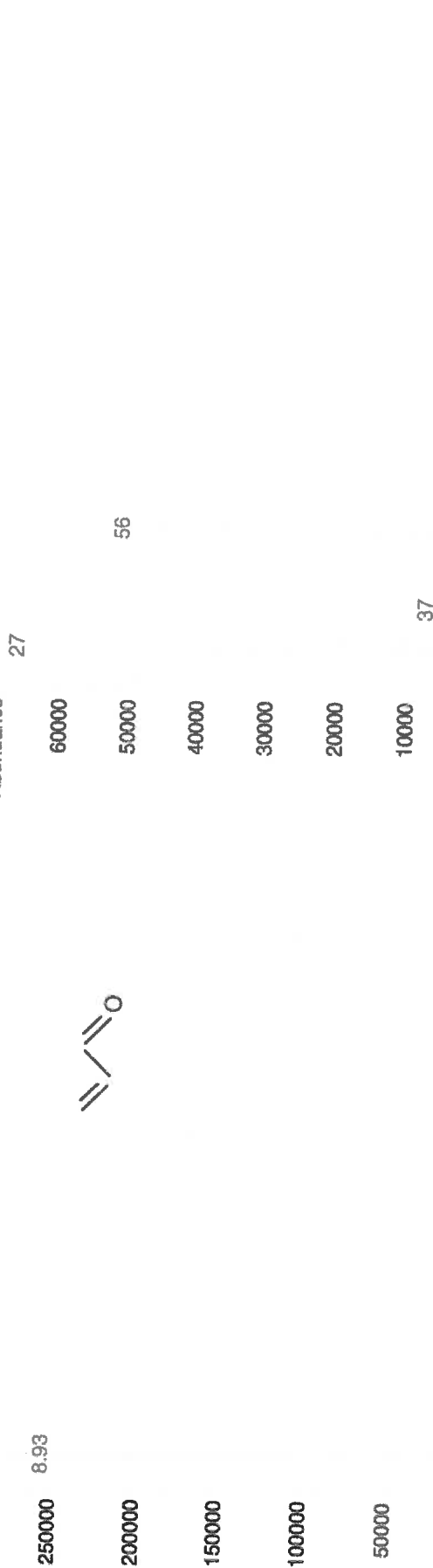
Method: GC/MSD-1, Detector: Mass Selective Detector (Scan mode). Columns: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 0min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas, NOTE: Due to the instability of acrolein in solution, all solutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

Abundance

Abundance

Scan 232 (8.927 min): [BSB2]79005.D



- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



Certified Reference Material CRM



Rec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

Weight(s) shown below were combined and diluted to (mL):

10.0

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	CAS#	OSHA PEL (TWA)	LD50
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1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	ori-rat 46mg/kg
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Method: GC/MSD-1, Detector: Mass Selective Detector (Scan mode). Columns: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 0min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas, NOTE: Due to the instability of acrolein in solution, all solutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

Scan 232 (8.927 min): [BSB2]79005.D

Abundance

27

250000

8.93

200000

56

150000

40000

30000

100000

20000

50000

10000

Time-->

0

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->

0

20

30

40

50

60

70

80

85

119

158

169

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
 * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
 * Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
 * All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
 * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



See 1216124
20 vial

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Solvent(s): Lot#
Methanol EJ143-US

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

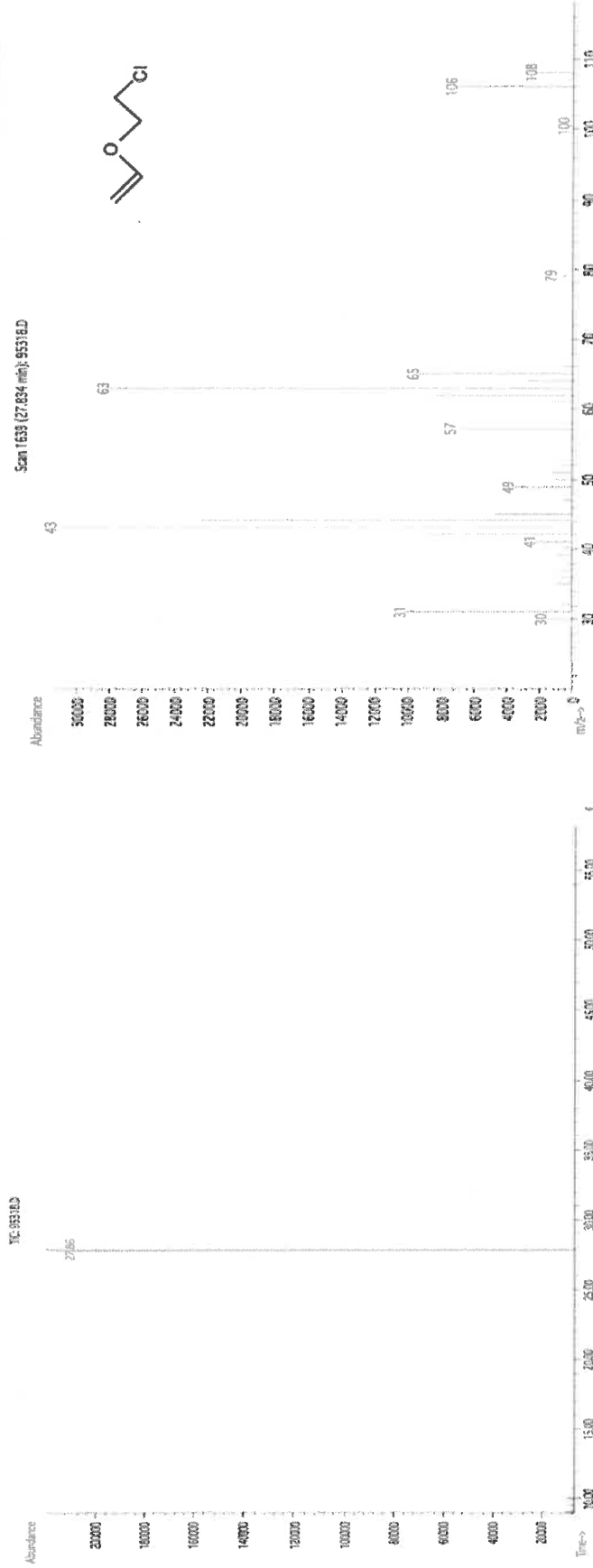
✓ 14630 to
✓ 14649

Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)
1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8 N/A or-rat 250mg/kg

Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp = 220°C. Analyst: Candice Warren.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

Manufacturer's Name	ABSOLUTE STANDARDS INC	Emergency Telephone USA & CANADA	1-800-535-5053
Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
P302,332	If on skin, wash with soap and water	P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1	67-56-1	TWA 200 ppm
Skin notation			TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.			
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions to avoid	Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions.	- Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



CERTIFIED WEIGHT REPORT

Part Number:
Lot Number:
Description:

95318
120524
2-Chloroethyl vinyl ether

Solvent(s): Lot#
Methanol EJ143-US

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test ID#:

120527
Refrigerate (4 °C)
10000
6UTB

Weight(s) shown below were combined and diluted to (mL):

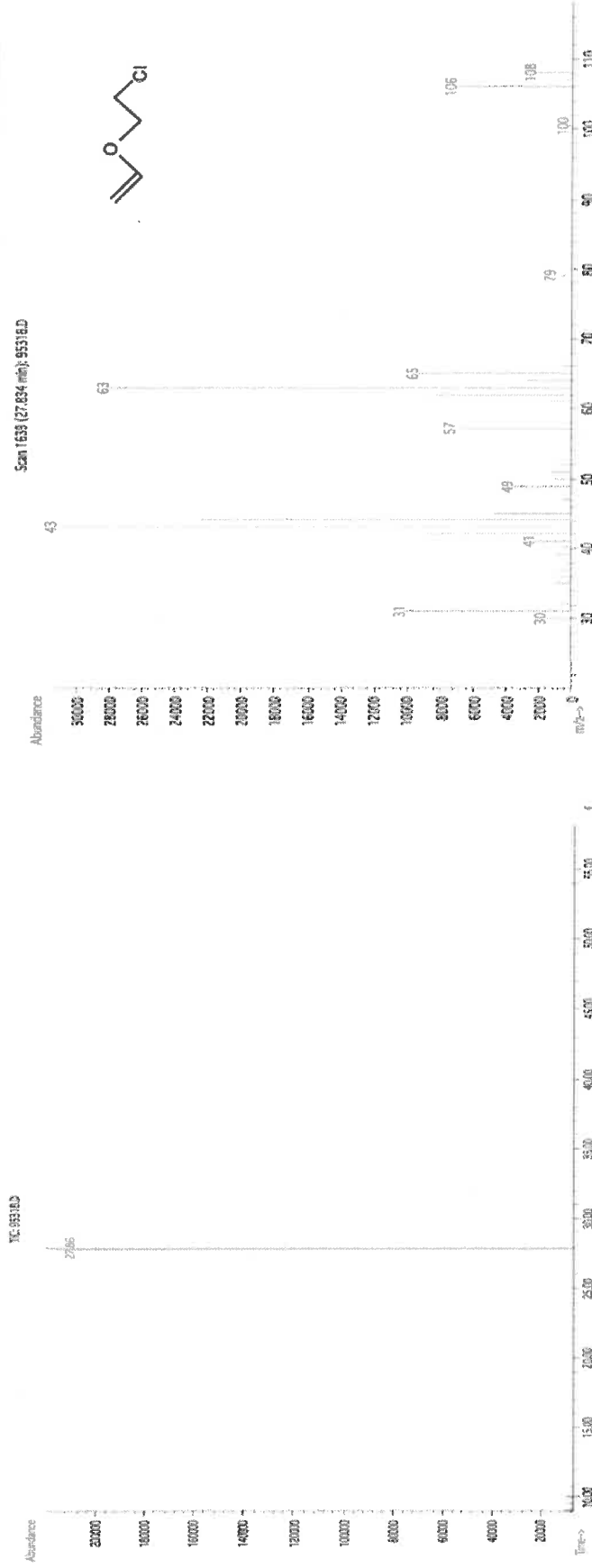
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By: Prashant Chauhan 120524 DATE
Reviewed By: Pedro L. Rentas 120524 DATE

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information	
										(Solvent Safety Info. On Attached pg.)	LD50

1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg
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Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp. = 220°C. Analyst: Candice Warren.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Safety Data Sheet (SDS)

GHS/OSHA Compliant

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Address	44 Rossotto Dr.	Emergency Telephone International	1-352-323-3500
	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
P302,332	If on skin, wash with soap and water	P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1	67-56-1	TWA 200 ppm
Skin notation			TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.			
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions to avoid	Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions.	- Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Dec 12/16/24
20 vial

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Solvent(s): Lot#
Methanol EJ143-US

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL):

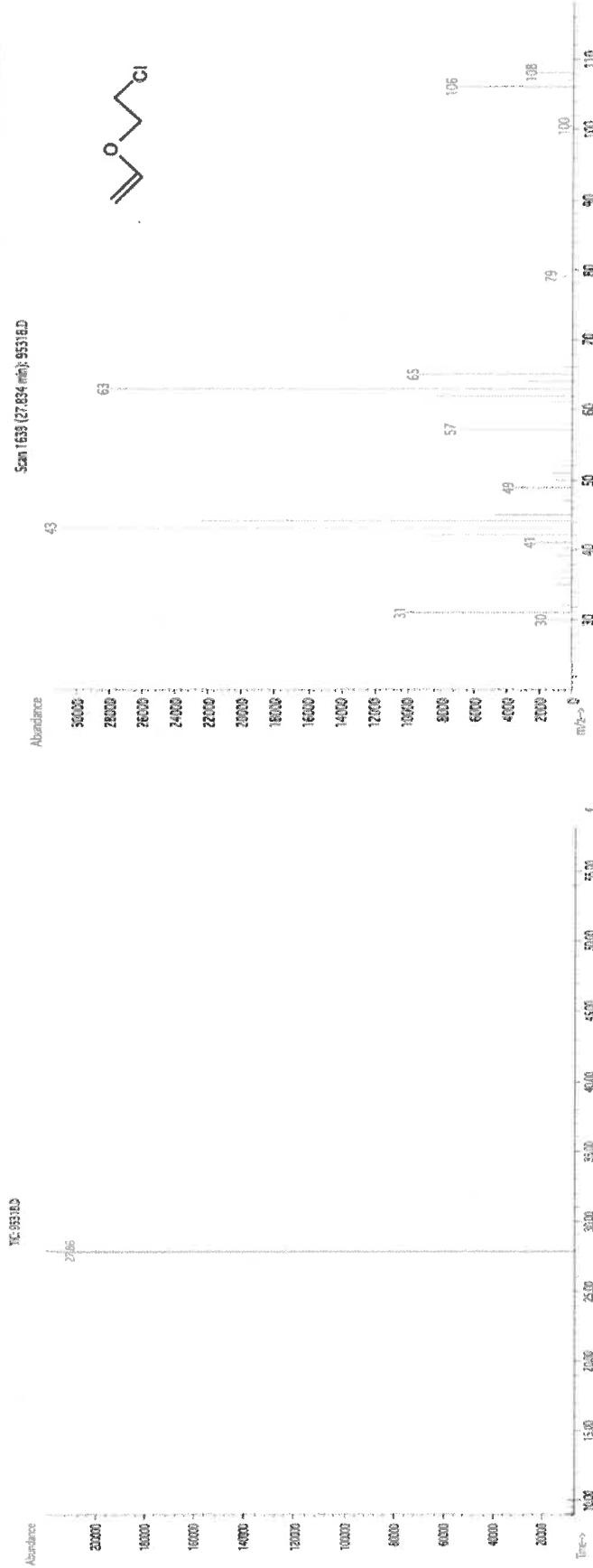
5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By: Prashant Chauhan 120524
Reviewed By: Pedro L. Rentas 120524

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information	
										(Solvent Safety Info. On Attached pg.)	LD50

1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg
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Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp = 220°C. Analyst: Candice Warren.



* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
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Safety Data Sheet (SDS)

GHS/OSHA Compliant

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	Hamden CT, 06514	Date Prepared/Revised	January 1, 2024

Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H225	Highly Flammable Liquid and Vapor	H301, 311, 331	Toxic if swallowed, skin contact, inhaled
H370	Cause damage to organs	H351	Suspected of causing cancer
P271	Use in ventilated area	P280	Use gloves, eye protection/face shield
P302,332	If on skin, wash with soap and water	P305,351,338	If in eyes, remove contacts, rinse with water



Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1	67-56-1	TWA 200 ppm
Skin notation			TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.			
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
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LD50 Oral - rat - 5,628 mg/kg
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Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

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LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

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Dec 12/16/24
20 vial

CERTIFIED WEIGHT REPORT

Part Number: 95318
Lot Number: 120524
Description: 2-Chloroethyl vinyl ether

Solvent(s): Lot#
Methanol EJ143-US

Expiration Date: 120527
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 10000
NIST Test ID#: 6UTB

✓ 14630 to
✓ 14649

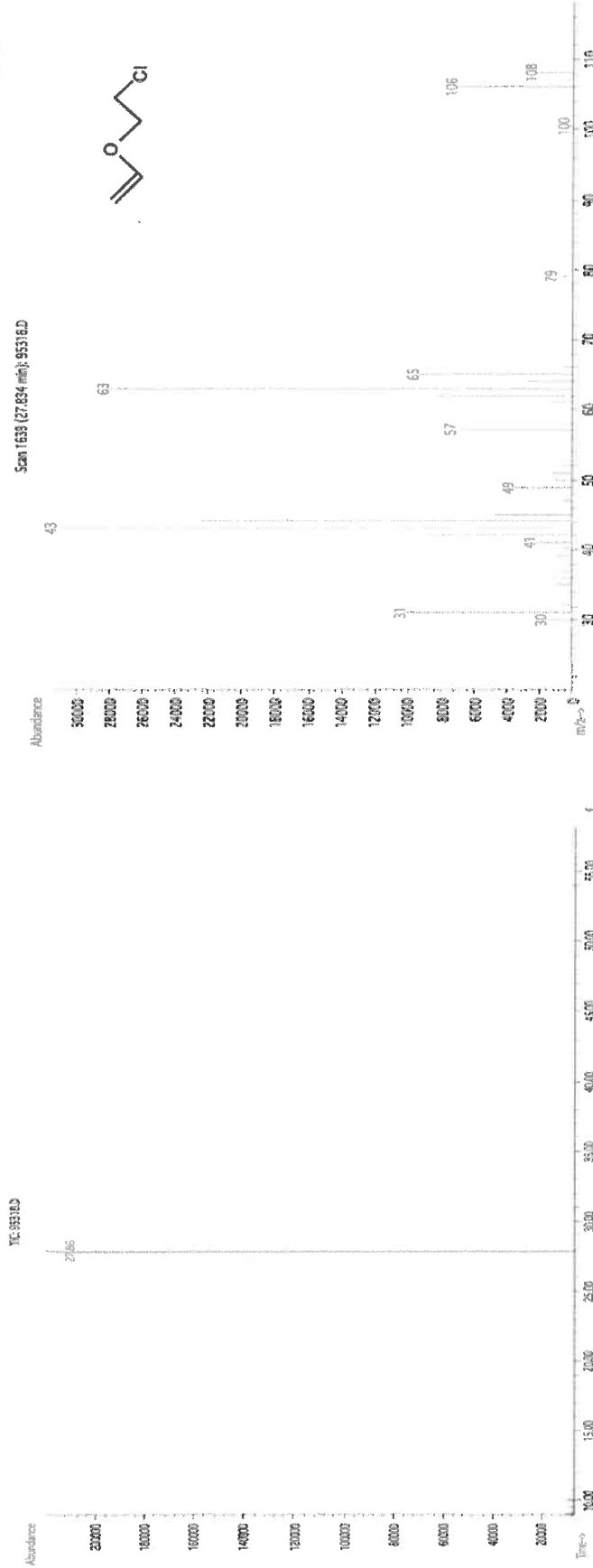
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50
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1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg
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Method: GC6MSD-1.M. Detector: MSD. Column: (60m X 0.25mm X 1.5 µm). Oven Profile: Temp 1 = 35°C (Time 1=10min.), Temp 2 = 200°C (Time 2=8.75 min.), Rate = 4°C/min., Injector B Temp = 200°C, Detector B Temp. = 220°C. Analyst: Candice Warren.



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* Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
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Safety Data Sheet (SDS)

GHS/OSHA Compliant

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Section II - Hazards Identification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

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Signal Word: DANGER

Section III - Composition

Components (Specific Chemical Identity; Common Name(s))		% (optional)
Methanol	METHYL ALCOHOL	> 97

See Certified Weight Report For Other Analytes Present At Trace Quantities.

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move to safe area.
If inhaled	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash with soap and water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

Flammability	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protective equipment for fire	Wear self contained breathing apparatus for fire fighting if necessary.

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Clean up	Contain spillage, and then collect and place in container for disposal according to local regulations (see section 13).

Section VII. HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use ventilation. Keep away from sources of ignition. No smoking. Prevent the build up of electrostatic charge.
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Methanol	67-56-1	67-56-1	TWA 200 ppm
Skin notation			TWA 200 ppm
Potential for skin absorption, ingestion and inhalation.			
Personal protective equipment	Respiratory protection	Handle with gloves. Gloves must be inspected prior to use.	Eye protection.
Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling the product.			

Section IX - Physical/Chemical Characteristics

Boiling Point	65°C	Specific Gravity (H ₂ O = 1)	0.79
Vapor Pressure (mm Hg)	96	Melting Point	-98°C
Vapor Density (AIR = 1)	1.11	Evaporation rate (Butyl Acetate = 1)	4.6
Solubility in Water	COMPLETE		
Appearance and Odor	CLEAR, COLORLESS LIQUID WITH CHARACTERISTIC PUNGENT ODOR.		

Section X. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Vapours may form explosive mixture with air.
Conditions to avoid	Heat, flames, sparks, extreme temperature and sunlight.
Materials to avoid	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
Hazardous decomposition products formed under fire conditions.	- Carbon oxides

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - rat - 5,628 mg/kg
LC50 Inhalation - rat - 4 h - 64000 ppm
LD50 Dermal - rabbit - 15,800 mg/kg
Toxic if absorbed through skin. Causes skin irritation.
Eye damage/eye irritation
Toxic if inhaled. Causes respiratory tract irritation.
Toxic if swallowed.

Section XII. ECOLOGICAL INFORMATION FOR REPORTABLE QUANTITY OF 5000 lbs.

LC50 15,400 mg/l - 96 h
EC50 24,500.00 mg/l - 48 h
EC100 10,000.00 mg/l - 24 h

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)	IATA
UN number: 1230 Class: 3 Packing group: II	UN number: 1230 Class: 3 Packing group: II
Proper shipping name: Methanol	Proper shipping name: Methanol

Section XV. REGULATORY INFORMATION

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section XVI. Misc. INFORMATION

The information in this Material Safety Data Sheet meets the requirements of the United States Occupational Safety and Health Act and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and Global Harmonized System (GHS). This document is intended only as a guide to the appropriate precautionary handling of the material by trained personnel, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and dangers of this chemical for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, ABSOLUTE STANDARDS INC. cannot warn of all the potential dangers of use or interaction with other chemicals or substances. ABSOLUTE STANDARDS INC. warrants that the chemical meets the specifications set forth on the label. ABSOLUTE STANDARDS INC DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR APPLICATION. The user should recognize that this product can cause severe injury or death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Absolute Standards Inc. will periodically revise this Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30067 **Lot No.:** A0191805

Description : 4-Bromofluorobenzene Standard

4-Bromofluorobenzene Standard 2,500µg/mL, P&T Methanol,
1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	2,483.9 µg/mL	+/- 139.5488

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

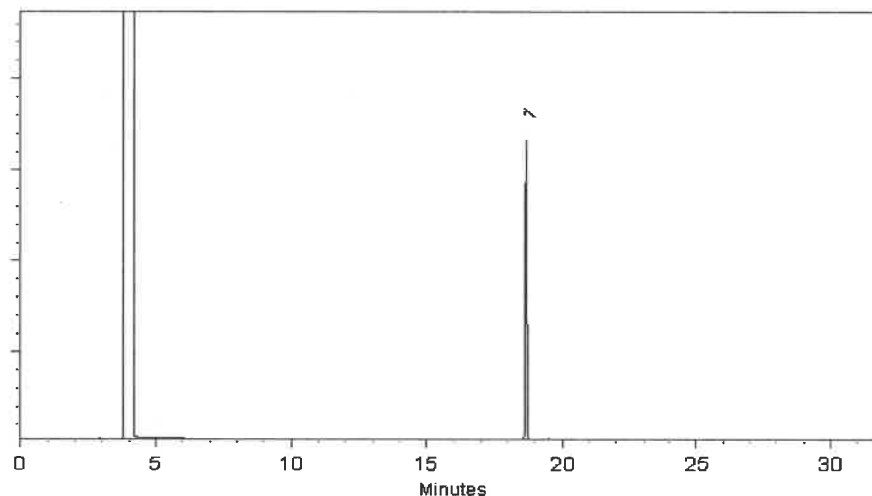
FID

Split Vent:

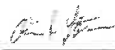
40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Alicia Leathers - Operation Technician I

Date Mixed: 17-Nov-2022

Balance Serial # B251644995


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Nov-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30225 **Lot No.:** A0193071

Description : Bromochloromethane Standard
Bromochloromethane 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Bromochloromethane	74-97-5	00008541	99%	2,018.0 µg/mL	+/- 113.3890

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

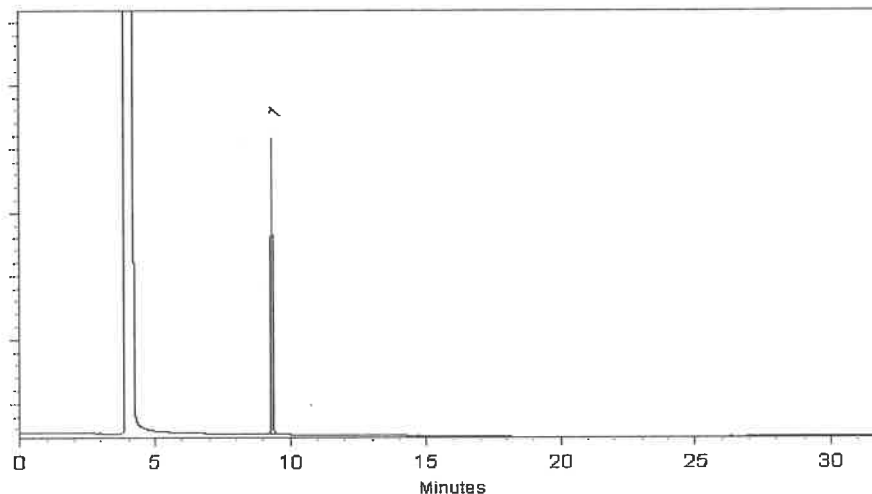
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckar - Mix Technician

Date Mixed: 29-Dec-2022 Balance Serial # B707717271


Christie Mills - Operations Tech II - ARM QC

Date Passed: 03-Jan-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

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gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555582 **Lot No.:** A0196865

Description : Custom 8260A/B Surrogate Mix
Custom 8260A/B Surrogate Mix 25,000µg/mL, P&T Methanol,
1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dichloroethane-d4	17060-07-0	PR-32845	99%	25,036.0 µg/mL	+/- 1,417.9179
2	1-Bromo-4-fluorobenzene (BFB)	460-00-4	184975	99%	25,132.0 µg/mL	+/- 1,423.3549
3	Dibromofluoromethane	1868-53-7	022013	99%	25,040.0 µg/mL	+/- 1,418.1445
4	Toluene-d8	2037-26-5	PR-33397	99%	25,028.0 µg/mL	+/- 1,417.4648

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2023

Balance: 1127510105

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix
8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

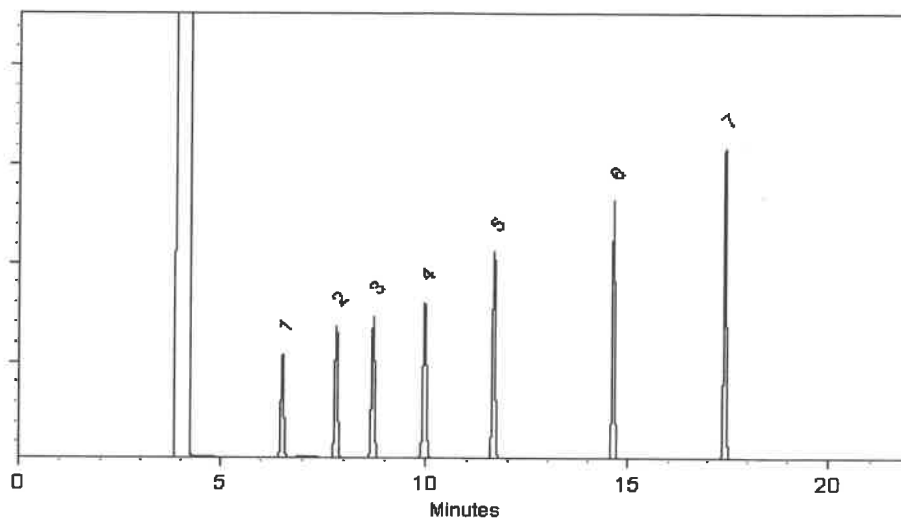
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30489 **Lot No.:** A0209618

Description : 8260B Acetates Mix
8260B Acetates Mix 2,000 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Methyl acetate	79-20-9	SHBP3100	99%	2,019.3 µg/mL	+/- 69.7974
2	Vinyl acetate	108-05-4	RP231030CTH	98%	2,016.8 µg/mL	+/- 69.7112
3	Ethyl acetate	141-78-6	SHBQ9682	99%	2,010.7 µg/mL	+/- 69.4979
4	Isopropyl acetate	108-21-4	BCCG7069	99%	2,016.0 µg/mL	+/- 69.6822
5	Propyl acetate	109-60-4	P8XLN	99%	2,008.0 µg/mL	+/- 69.4057
6	Butyl acetate	123-86-4	SHBP6314	99%	2,007.3 µg/mL	+/- 69.3826
7	Amyl acetate	628-63-7	41325/1	97%	2,004.7 µg/mL	+/- 69.2905

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this

reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

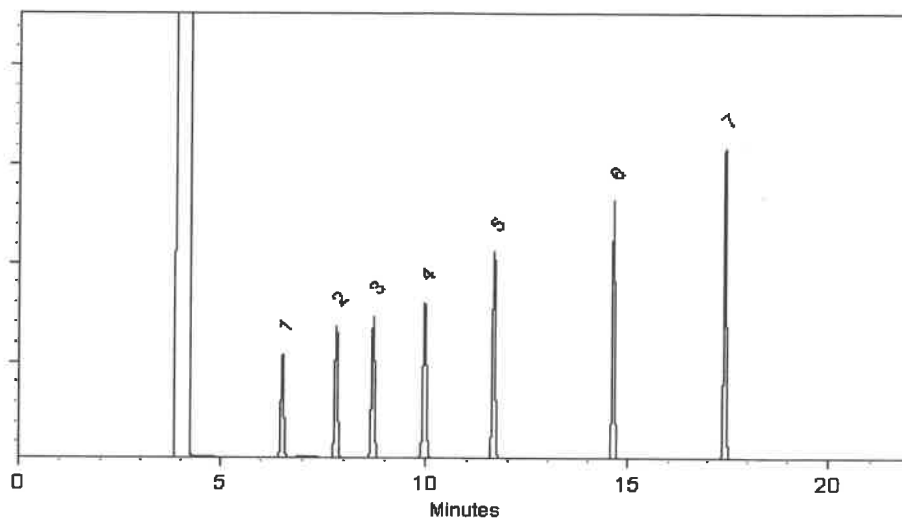
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 28-Mar-2024

Balance Serial # B707717271

Dillon Murphy
Dillon Murphy - Operations Technician I

Date Passed: 01-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



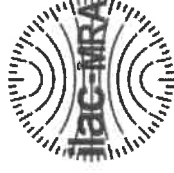
110 Benner Circle
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 555581 **Lot No.:** A0210184

Description: Custom 8260 Internal Standard Mix

Custom 8260 Internal Standard Mix 25,000µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	25,212.0 µg/mL	+/- 1,427.8857
2	1,4-Difluorobenzene	540-36-3	MKCS8657	99%	25,220.0 µg/mL	+/- 1,428.3388
3	Chlorobenzene-d5	3114-55-4	PR-31132	99%	25,116.0 µg/mL	+/- 1,422.4487
4	Pentafluorobenzene	363-72-4	MKCR9383	99%	25,180.0 µg/mL	+/- 1,426.0734

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

John Friedline - Operations Technician I

Date Mixed: 11-Apr-2024

Balance: 11275.10105



Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis
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V14697-to-14726



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618
Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

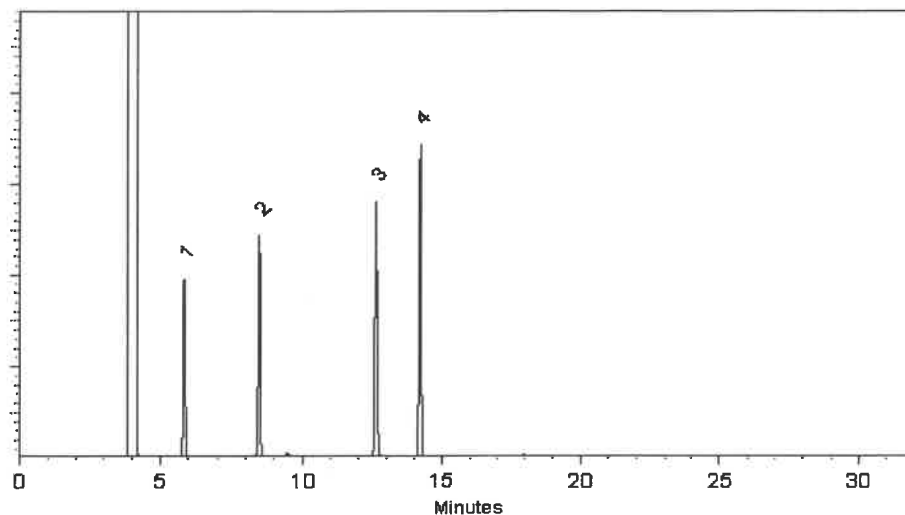
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

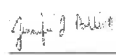


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618
Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

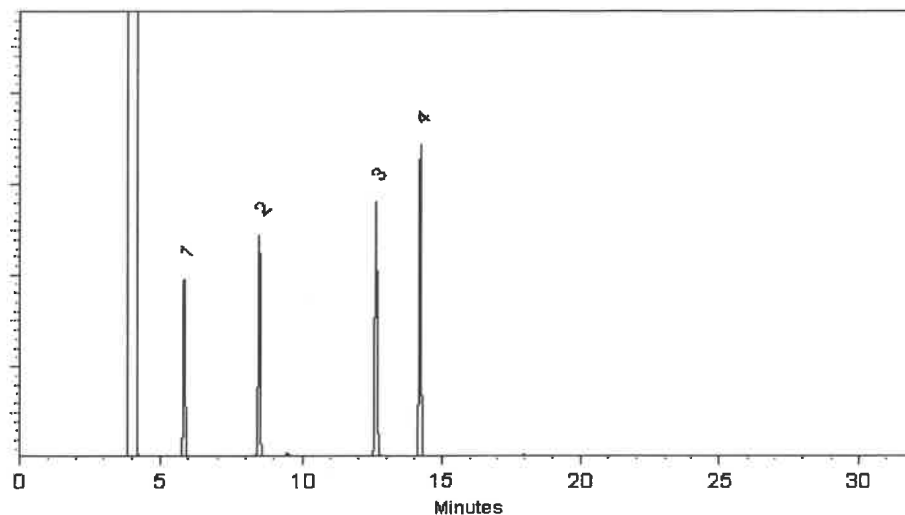
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

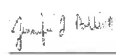


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30006 **Lot No.:** A0210618
Description : VOA Calibration Mix #1
VOA Calibration Mix #1 5,000µg/mL, P&T Methanol/Water(90:10), 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : July 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBQ8504	99%	5,014.8 µg/mL	+/- 173.2883
2	2-Butanone (MEK)	78-93-3	SHBQ4704	99%	5,012.4 µg/mL	+/- 173.2054
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP9200	99%	5,011.6 µg/mL	+/- 173.1777
4	2-Hexanone	591-78-6	MKCQ6663	99%	5,013.0 µg/mL	+/- 173.2261

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

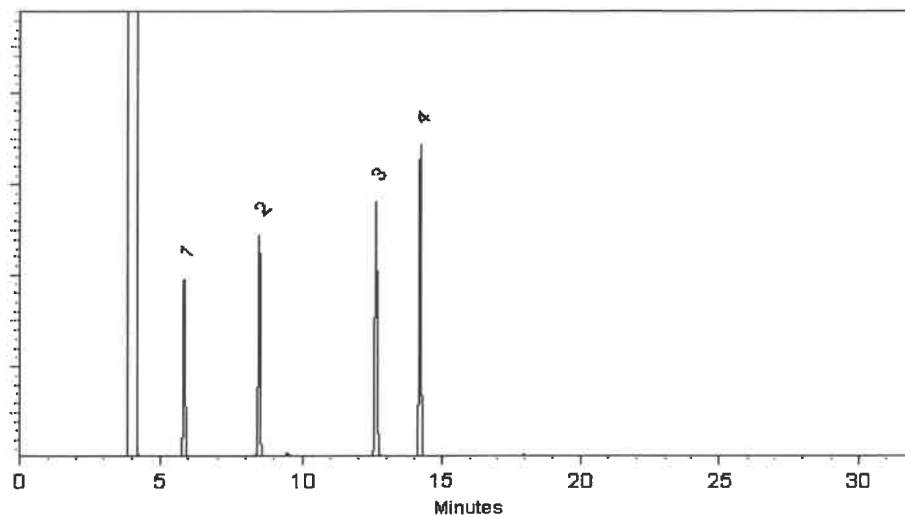
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

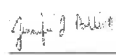


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Dakota Parson - Operations Technician I

Date Mixed: 22-Apr-2024

Balance Serial # B707717271


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-Apr-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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V14727 to
V14756



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826

Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2031 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

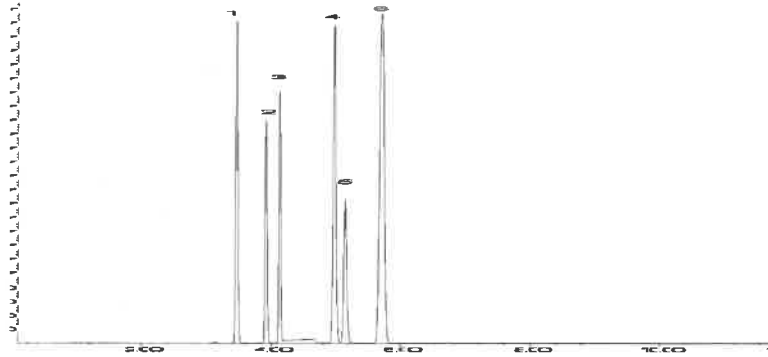
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckal - Mix Technician

Date Mixed: 23-Sep-2024

Balance Serial # B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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30 ml
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis
chromatographic plus

V14727 to
V14756



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30042 **Lot No.:** A0216826
Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2031 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12)	75-71-8	00022922	99%	2,000.9 µg/mL	+/- 112.4144
2	Chloromethane (methyl chloride)	74-87-3	00022694	99%	2,000.7 µg/mL	+/- 112.3998
3	Vinyl chloride	75-01-4	00015559	99%	2,000.3 µg/mL	+/- 112.3779
4	Bromomethane (methyl bromide)	74-83-9	00017022	99%	2,001.8 µg/mL	+/- 112.4650
5	Chloroethane (ethyl chloride)	75-00-3	107-401039114-1	99%	2,000.1 µg/mL	+/- 112.3700
6	Trichlorofluoromethane (CFC-11)	75-69-4	MKCJ8658	99%	2,000.7 µg/mL	+/- 112.3992

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

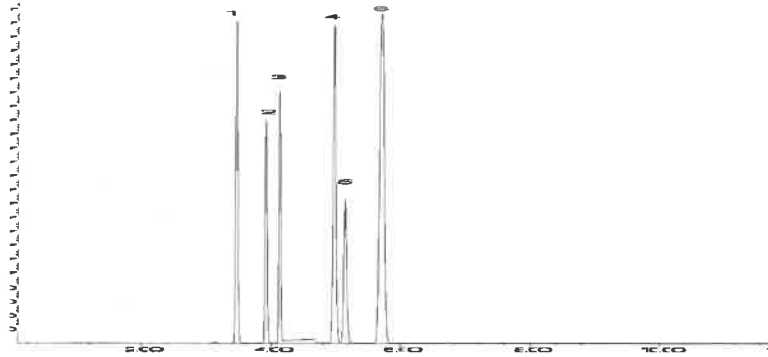
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckal - Mix Technician

Date Mixed: 23-Sep-2024

Balance Serial # B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

✓ 14842 to 14846



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30470 **Lot No.:** A0217535
Description : tert-Butanol Standard
tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

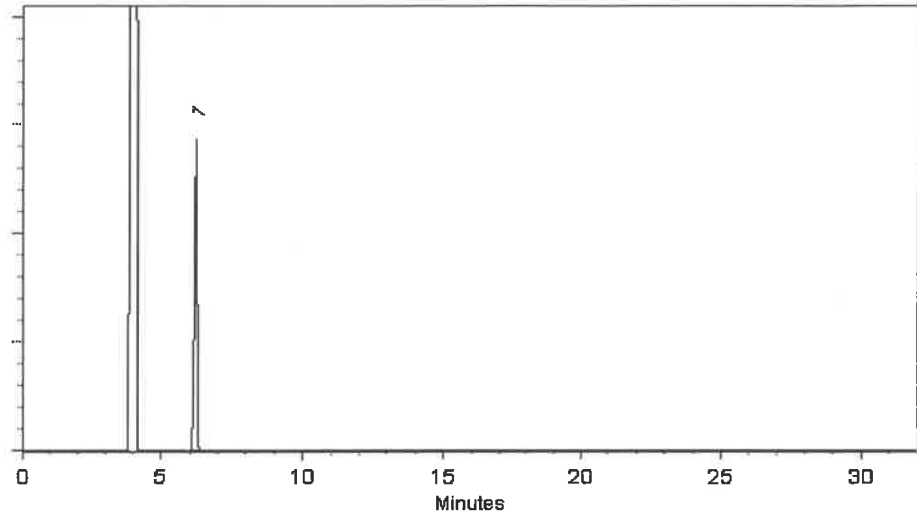
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

A. O. E.
Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024

Balance Serial # B251644995

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

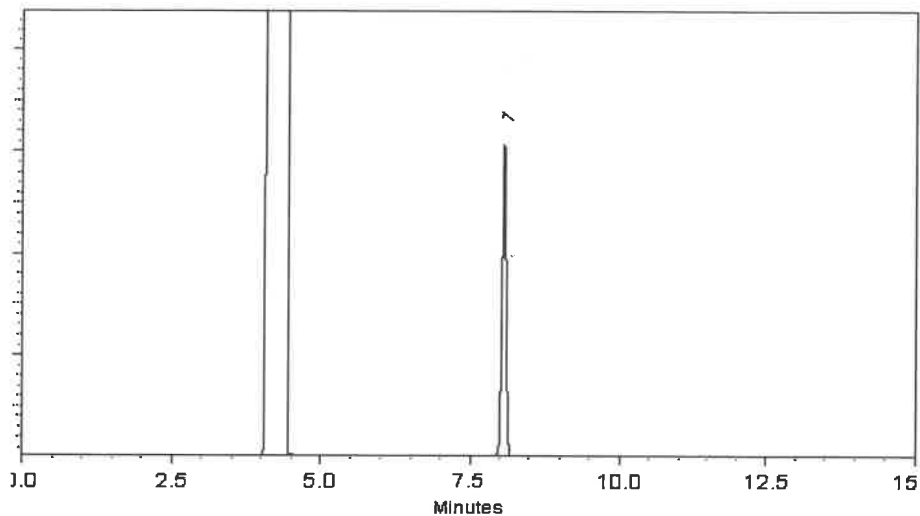
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By: Jennifer Pollock at 7:12 am, Jan 05, 2025

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

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Handling Notes:

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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

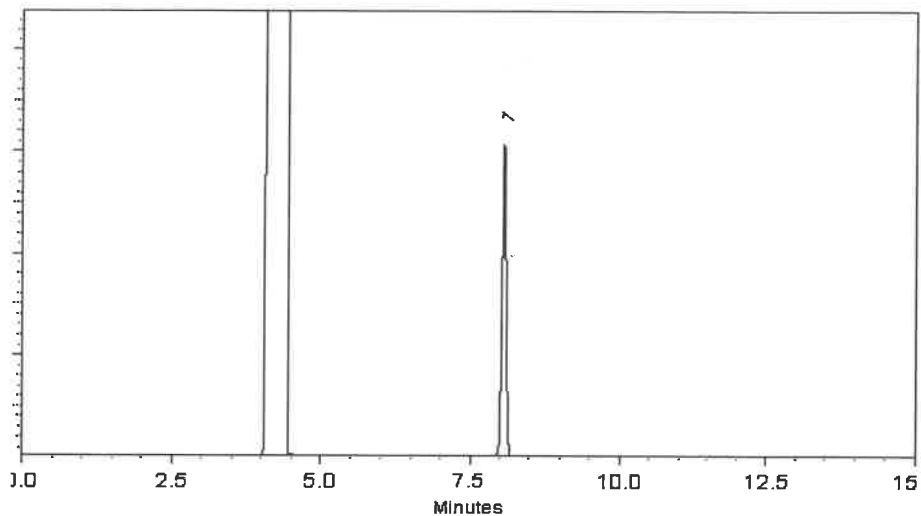
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 2025

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (µeq/g)	≤ 0.3	0.2
Titration Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory, Research, or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Geop Inc
ADDRESS: 8 CARRIAGE
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Ave L
PROJECT NO.: LOCATION:
PROJECT MANAGER: GL
e-mail:
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Geop Inc PO#:
ADDRESS: 8 CARRIAGE
CITY: Succasunna STATE: NJ ZIP: 07876
ATTENTION: PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): STANDARD DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

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

1. TCU metals
2. THL metals
3. PCRA
4. VOC
5. BTEX
6. PCB
7. PH
8. Isotobility
9. EPH

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	WC1	501	X		3/13/25	1255	2	X	X	X	X	X	X	X	X		
2.																	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>3/14/25 1110</u>	RECEIVED BY: <u>[Signature]</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>21.2</u> °C
RELINQUISHED BY SAMPLER: 2.	DATE/TIME:	RECEIVED BY: 2.	Comments:
RELINQUISHED BY SAMPLER: 3.	DATE/TIME:	RECEIVED BY: 3.	Comments:

Page ____ of CLIENT: ☐ Hand Delivered ☐ Other Shipment Complete ☐ YES ☐ NO

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488



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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1574 GENV01
Client Name : G Environmental
Client Contact : Gary Landis
Invoice Name : G Environmental
Invoice Contact : Gary Landis

Order Date : 3/14/2025 11:25:00 AM
Project Name : Ave L
Receive DateTime : 3/14/2025 3:00:00 PM
Purchase Order :

Project Mgr :
Report Type : ~~Level 1~~ *Results only*
EDD Type : Excel NJ
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1574-01	WC1	Solid	03/12/2025	12:55	VOC-TCLVOA-10		8260D		10 Bus. Days

Relinquished By : 

Date / Time : 3/14/25 11:50

Received By : 

Date / Time : 3/14/25 11:50

Storage Area : VOA Refridgerator Room