

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

LAB CHRONICLE

OrderID:	Q1463	OrderDate:	2/27/2025 3:25:00 PM
Client:	G Environmental	Project:	Fisal
Contact:	Gary Landis	Location:	H31,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1463-01	T1	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-02	T2	SOIL	VOCMS Group2	8260D	02/27/25		03/11/25	02/27/25
Q1463-03	T3	SOIL	VOCMS Group2	8260D	02/27/25		03/07/25	02/27/25
Q1463-04	T4	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-05	T5	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-06	T6	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-07	T7	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-08	T8	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-09	T9	SOIL	VOCMS Group2	8260D	02/27/25		03/06/25	02/27/25
Q1463-10	T10	SOIL	VOCMS Group2	8260D	02/27/25		03/07/25	02/27/25

Hit Summary Sheet
SW-846

SDG No.: Q1463
Client: G Environmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	T2							
Q1463-02	T2	SOIL	Methylene Chloride	11.6		2.90	8.40	ug/Kg
Q1463-02	T2	SOIL	Toluene	6.60		0.56	4.20	ug/Kg
Q1463-02	T2	SOIL	Ethyl Benzene	1.40	J	0.52	4.20	ug/Kg
Q1463-02	T2	SOIL	m/p-Xylenes	9.20		1.10	8.40	ug/Kg
Q1463-02	T2	SOIL	o-Xylene	3.50	J	0.59	4.20	ug/Kg
			Total Voc :			32.3		
Q1463-02	T2	SOIL	Dimethyl ether	* 90.1	J	0	0	ug/Kg
Q1463-02	T2	SOIL	Boric acid, trimethyl ester	* 100	J	0	0	ug/Kg
Q1463-02	T2	SOIL	Bis(2-chloroethyl) sulfone	* 7.50	J	0	0	ug/Kg
Q1463-02	T2	SOIL	Benzene, 1,4-difluoro-	* 15.8	J	0	0	ug/Kg
Q1463-02	T2	SOIL	Benzene, 1-ethyl-3-methyl-	* 4.50	J	0	0	ug/Kg
Q1463-02	T2	SOIL	1,3,5-Trimethylbenzene	* 1.80	J	0.54	4.20	ug/Kg
Q1463-02	T2	SOIL	1,2,4-Trimethylbenzene	* 3.10	J	1.10	4.20	ug/Kg
Q1463-02	T2	SOIL	Naphthalene	* 2.10	J	1.20	4.20	ug/Kg
Q1463-02	T2	SOIL	Methyl Iodide	* 6.90	J	0.67	4.20	ug/Kg
			Total Tics :			232		
			Total Concentration:			264		
Client ID:	T3							
Q1463-03	T3	SOIL	Benzene	6.00		0.74	5.10	ug/Kg
Q1463-03	T3	SOIL	Toluene	11.8		0.69	5.10	ug/Kg
Q1463-03	T3	SOIL	Tetrachloroethene	1.50	J	0.91	5.10	ug/Kg
Q1463-03	T3	SOIL	Ethyl Benzene	3.50	J	0.63	5.10	ug/Kg
Q1463-03	T3	SOIL	m/p-Xylenes	18.6		1.40	10.2	ug/Kg
Q1463-03	T3	SOIL	o-Xylene	8.70		0.72	5.10	ug/Kg
			Total Voc :			50.1		
Q1463-03	T3	SOIL	Octane	* 5.10	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Dimethyl ether	* 57.8	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Boric acid, trimethyl ester	* 61.4	J	0	0	ug/Kg
Q1463-03	T3	SOIL	.beta.-Pinene	* 8.20	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Heptane	* 7.90	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Pentane, 2,2,4-trimethyl-	* 21.2	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Pentane, 2,3,4-trimethyl-	* 14.3	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Hexane, 3-methyl-	* 7.10	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Heptane, 3-methyl-	* 5.70	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Benzene, 1-ethyl-2-methyl-	* 9.80	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Hexane, 2,3,4-trimethyl-	* 21.7	J	0	0	ug/Kg

Hit Summary Sheet
SW-846

SDG No.: Q1463

Client: G Environmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q1463-03	T3	SOIL	Benzene, 1-methyl-4-propyl-	* 8.80	J	0	0	ug/Kg
Q1463-03	T3	SOIL	10-Methylnonadecane	* 6.40	J	0	0	ug/Kg
Q1463-03	T3	SOIL	Methylcyclohexane	* 4.80	J	0.89	5.10	ug/Kg
Q1463-03	T3	SOIL	Isopropylbenzene	* 1.40	J	0.69	5.10	ug/Kg
Q1463-03	T3	SOIL	n-propylbenzene	* 1.40	J	0.65	5.10	ug/Kg
Q1463-03	T3	SOIL	1,3,5-Trimethylbenzene	* 4.10	J	0.65	5.10	ug/Kg
Q1463-03	T3	SOIL	1,2,4-Trimethylbenzene	* 7.20	J	1.40	5.10	ug/Kg
Q1463-03	T3	SOIL	Naphthalene	* 2.80	J	1.50	5.10	ug/Kg
Total Tics :				257				
Total Concentration:				307				
Client ID:	T4							
Q1463-04	T4	SOIL	Butane, 2,2,3,3-tetramethyl-	* 5.10	J	0	0	ug/Kg
Q1463-04	T4	SOIL	Methylcyclohexane	* 0.96	J	0.76	4.40	ug/Kg
Total Tics :				6.06				
Total Concentration:				6.06				
Client ID:	T5							
Q1463-05	T5	SOIL	11H-Dibenzo[b,e][1,4]diazepin	* 5.00	J	0	0	ug/Kg
Total Tics :				5.00				
Total Concentration:				5.00				



QC SUMMARY

Surrogate Summary

SDG No.: **Q1463**

Client: **G Environmental**

Analytical Method: **SW8260D**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1463-01	T1	1,2-Dichloroethane-d4	50	63.3	127	70 (63)	130 (155)
		Dibromofluoromethane	50	52.5	105	70 (70)	130 (134)
		Toluene-d8	50	40.3	81	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.1	84	70 (38)	130 (136)
Q1463-02	T2	1,2-Dichloroethane-d4	50	39.8	80	70 (63)	130 (155)
		Dibromofluoromethane	50	37.3	75	70 (70)	130 (134)
		Toluene-d8	50	47.1	94	70 (74)	130 (123)
		4-Bromofluorobenzene	50	37.1	74	70 (38)	130 (136)
Q1463-03	T3	1,2-Dichloroethane-d4	50	38.9	78	70 (63)	130 (155)
		Dibromofluoromethane	50	35.2	70	70 (70)	130 (134)
		Toluene-d8	50	47.7	95	70 (74)	130 (123)
		4-Bromofluorobenzene	50	33.4	67 *	70 (38)	130 (136)
Q1463-04	T4	1,2-Dichloroethane-d4	50	57.4	115	70 (63)	130 (155)
		Dibromofluoromethane	50	50.0	100	70 (70)	130 (134)
		Toluene-d8	50	48.6	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	39.2	78	70 (38)	130 (136)
Q1463-05	T5	1,2-Dichloroethane-d4	50	59.8	120	70 (63)	130 (155)
		Dibromofluoromethane	50	52.0	104	70 (70)	130 (134)
		Toluene-d8	50	48.6	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	41.9	84	70 (38)	130 (136)
Q1463-06	T6	1,2-Dichloroethane-d4	50	60.4	121	70 (63)	130 (155)
		Dibromofluoromethane	50	51.6	103	70 (70)	130 (134)
		Toluene-d8	50	42.0	84	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.2	84	70 (38)	130 (136)
Q1463-07	T7	1,2-Dichloroethane-d4	50	60.5	121	70 (63)	130 (155)
		Dibromofluoromethane	50	51.4	103	70 (70)	130 (134)
		Toluene-d8	50	43.8	88	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.9	86	70 (38)	130 (136)
Q1463-08	T8	1,2-Dichloroethane-d4	50	48.8	98	70 (63)	130 (155)
		Dibromofluoromethane	50	48.3	97	70 (70)	130 (134)
		Toluene-d8	50	42.3	85	70 (74)	130 (123)
		4-Bromofluorobenzene	50	34.7	69 *	70 (38)	130 (136)
Q1463-09	T9	1,2-Dichloroethane-d4	50	61.3	123	70 (63)	130 (155)
		Dibromofluoromethane	50	51.5	103	70 (70)	130 (134)
		Toluene-d8	50	47.5	95	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.0	84	70 (38)	130 (136)
Q1463-10	T10	1,2-Dichloroethane-d4	50	55.5	111	70 (63)	130 (155)
		Dibromofluoromethane	50	50.7	101	70 (70)	130 (134)
		Toluene-d8	50	48.1	96	70 (74)	130 (123)
		4-Bromofluorobenzene	50	43.1	86	70 (38)	130 (136)
VY0306SBL01	VY0306SBL01	1,2-Dichloroethane-d4	50	58.5	117	70 (63)	130 (155)
		Dibromofluoromethane	50	51.1	102	70 (70)	130 (134)
		Toluene-d8	50	48.6	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	43.6	87	70 (38)	130 (136)
VY0306SBS01	VY0306SBS01	1,2-Dichloroethane-d4	50	53.2	106	70 (63)	130 (155)
		Dibromofluoromethane	50	50.1	100	70 (70)	130 (134)
		Toluene-d8	50	49.5	99	70 (74)	130 (123)
		4-Bromofluorobenzene	50	50.8	102	70 (38)	130 (136)
VY0306SBSD01	VY0306SBSD01	1,2-Dichloroethane-d4	50	55.0	110	70 (63)	130 (155)
		Dibromofluoromethane	50	52.0	104	70 (70)	130 (134)

() = LABORATORY INHOUSE LIMIT

Surrogate Summary

SDG No.: **Q1463**

Client: **G Environmental**

Analytical Method: **SW8260D**

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
VY0306SBSD01	VY0306SBSD01	Toluene-d8	50	51.4	103	70 (74)	130 (123)
		4-Bromofluorobenzene	50	52.6	105	70 (38)	130 (136)
VY0307SBL01	VY0307SBL01	1,2-Dichloroethane-d4	50	55.4	111	70 (63)	130 (155)
		Dibromofluoromethane	50	50.2	100	70 (70)	130 (134)
		Toluene-d8	50	48.5	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	40.1	80	70 (38)	130 (136)
VY0307SBS01	VY0307SBS01	1,2-Dichloroethane-d4	50	53.1	106	70 (63)	130 (155)
		Dibromofluoromethane	50	52.0	104	70 (70)	130 (134)
		Toluene-d8	50	51.9	104	70 (74)	130 (123)
		4-Bromofluorobenzene	50	50.9	102	70 (38)	130 (136)
VY0311SBL01	VY0311SBL01	1,2-Dichloroethane-d4	50	53.3	107	70 (63)	130 (155)
		Dibromofluoromethane	50	50.4	101	70 (70)	130 (134)
		Toluene-d8	50	48.5	97	70 (74)	130 (123)
		4-Bromofluorobenzene	50	42.5	85	70 (38)	130 (136)
VY0311SBS01	VY0311SBS01	1,2-Dichloroethane-d4	50	52.4	105	70 (63)	130 (155)
		Dibromofluoromethane	50	52.9	106	70 (70)	130 (134)
		Toluene-d8	50	52.2	104	70 (74)	130 (123)
		4-Bromofluorobenzene	50	52.5	105	70 (38)	130 (136)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1463

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021428.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0306SBS01	Chloromethane	20	20.3	ug/Kg	102			40 (70)	160 (130)	
	Vinyl chloride	20	20.0	ug/Kg	100			70 (72)	130 (129)	
	Bromomethane	20	21.8	ug/Kg	109			40 (58)	160 (141)	
	Chloroethane	20	21.0	ug/Kg	105			40 (69)	160 (130)	
	Tert butyl alcohol	100	95.8	ug/Kg	96			70 (24)	130 (175)	
	1,1-Dichloroethene	20	19.1	ug/Kg	96			70 (79)	130 (121)	
	Acetone	100	79.7	ug/Kg	80			40 (60)	160 (131)	
	Carbon disulfide	20	18.7	ug/Kg	94			40 (45)	160 (154)	
	Methyl tert-butyl Ether	20	20.0	ug/Kg	100			70 (77)	130 (129)	
	Methylene Chloride	20	19.3	ug/Kg	97			70 (56)	130 (174)	
	trans-1,2-Dichloroethene	20	19.1	ug/Kg	96			70 (80)	130 (123)	
	1,1-Dichloroethane	20	20.2	ug/Kg	101			70 (82)	130 (123)	
	2-Butanone	100	93.5	ug/Kg	94			40 (69)	160 (131)	
	Carbon Tetrachloride	20	18.5	ug/Kg	93			70 (76)	130 (129)	
	cis-1,2-Dichloroethene	20	19.7	ug/Kg	99			70 (82)	130 (123)	
	Chloroform	20	20.1	ug/Kg	101			70 (82)	130 (125)	
	1,1,1-Trichloroethane	20	19.2	ug/Kg	96			70 (80)	130 (126)	
	Benzene	20	19.4	ug/Kg	97			70 (84)	130 (121)	
	1,2-Dichloroethane	20	20.2	ug/Kg	101			70 (81)	130 (126)	
	Trichloroethene	20	18.8	ug/Kg	94			70 (83)	130 (122)	
	1,2-Dichloropropane	20	20.2	ug/Kg	101			70 (83)	130 (122)	
	Bromodichloromethane	20	19.8	ug/Kg	99			70 (82)	130 (123)	
	4-Methyl-2-Pentanone	100	100	ug/Kg	100			40 (70)	160 (135)	
	Toluene	20	19.2	ug/Kg	96			70 (83)	130 (122)	
	t-1,3-Dichloropropene	20	19.6	ug/Kg	98			70 (78)	130 (124)	
	cis-1,3-Dichloropropene	20	19.2	ug/Kg	96			70 (81)	130 (122)	
	1,1,2-Trichloroethane	20	20.0	ug/Kg	100			70 (82)	130 (125)	
	2-Hexanone	100	98.1	ug/Kg	98			40 (66)	160 (138)	
	Dibromochloromethane	20	20.0	ug/Kg	100			70 (79)	130 (125)	
	Tetrachloroethene	20	18.3	ug/Kg	92			70 (83)	130 (125)	
	Chlorobenzene	20	18.6	ug/Kg	93			70 (84)	130 (122)	
	Ethyl Benzene	20	17.8	ug/Kg	89			70 (82)	130 (124)	
	m/p-Xylenes	40	36.6	ug/Kg	92			70 (83)	130 (124)	
	o-Xylene	20	18.2	ug/Kg	91			70 (83)	130 (123)	
	Styrene	20	18.6	ug/Kg	93			70 (82)	130 (124)	
	Bromoform	20	18.8	ug/Kg	94			70 (75)	130 (127)	
	1,1,2,2-Tetrachloroethane	20	18.8	ug/Kg	94			70 (77)	130 (127)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1463

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021429.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0306SBSD01	Chloromethane	20	20.8	ug/Kg	104	2		40 (70)	160 (130)	30 (20)
	Vinyl chloride	20	21.0	ug/Kg	105	5		70 (72)	130 (129)	30 (20)
	Bromomethane	20	20.9	ug/Kg	104	5		40 (58)	160 (141)	30 (20)
	Chloroethane	20	22.2	ug/Kg	111	6		40 (69)	160 (130)	30 (20)
	Tert butyl alcohol	100	110	ug/Kg	110	14		70 (24)	130 (175)	30 (20)
	1,1-Dichloroethene	20	20.1	ug/Kg	101	5		70 (79)	130 (121)	30 (20)
	Acetone	100	83.1	ug/Kg	83	4		40 (60)	160 (131)	30 (20)
	Carbon disulfide	20	19.5	ug/Kg	98	4		40 (45)	160 (154)	30 (20)
	Methyl tert-butyl Ether	20	20.4	ug/Kg	102	2		70 (77)	130 (129)	30 (20)
	Methylene Chloride	20	20.4	ug/Kg	102	5		70 (56)	130 (174)	30 (20)
	trans-1,2-Dichloroethene	20	20.1	ug/Kg	101	5		70 (80)	130 (123)	30 (20)
	1,1-Dichloroethane	20	20.5	ug/Kg	103	2		70 (82)	130 (123)	30 (20)
	2-Butanone	100	95.3	ug/Kg	95	1		40 (69)	160 (131)	30 (20)
	Carbon Tetrachloride	20	18.7	ug/Kg	94	1		70 (76)	130 (129)	30 (20)
	cis-1,2-Dichloroethene	20	20.2	ug/Kg	101	2		70 (82)	130 (123)	30 (20)
	Chloroform	20	21.3	ug/Kg	106	5		70 (82)	130 (125)	30 (20)
	1,1,1-Trichloroethane	20	20.0	ug/Kg	100	4		70 (80)	130 (126)	30 (20)
	Benzene	20	19.9	ug/Kg	100	3		70 (84)	130 (121)	30 (20)
	1,2-Dichloroethane	20	20.4	ug/Kg	102	1		70 (81)	130 (126)	30 (20)
	Trichloroethene	20	19.0	ug/Kg	95	1		70 (83)	130 (122)	30 (20)
	1,2-Dichloropropane	20	20.5	ug/Kg	103	2		70 (83)	130 (122)	30 (20)
	Bromodichloromethane	20	20.2	ug/Kg	101	2		70 (82)	130 (123)	30 (20)
	4-Methyl-2-Pentanone	100	100	ug/Kg	100	0		40 (70)	160 (135)	30 (20)
	Toluene	20	19.7	ug/Kg	99	3		70 (83)	130 (122)	30 (20)
	t-1,3-Dichloropropene	20	19.4	ug/Kg	97	1		70 (78)	130 (124)	30 (20)
	cis-1,3-Dichloropropene	20	19.5	ug/Kg	98	2		70 (81)	130 (122)	30 (20)
	1,1,2-Trichloroethane	20	20.4	ug/Kg	102	2		70 (82)	130 (125)	30 (20)
	2-Hexanone	100	96.5	ug/Kg	97	1		40 (66)	160 (138)	30 (20)
	Dibromochloromethane	20	19.9	ug/Kg	100	0		70 (79)	130 (125)	30 (20)
	Tetrachloroethene	20	18.8	ug/Kg	94	2		70 (83)	130 (125)	30 (20)
	Chlorobenzene	20	19.2	ug/Kg	96	3		70 (84)	130 (122)	30 (20)
	Ethyl Benzene	20	18.6	ug/Kg	93	4		70 (82)	130 (124)	30 (20)
	m/p-Xylenes	40	37.8	ug/Kg	95	3		70 (83)	130 (124)	30 (20)
	o-Xylene	20	18.8	ug/Kg	94	3		70 (83)	130 (123)	30 (20)
	Styrene	20	19.5	ug/Kg	98	5		70 (82)	130 (124)	30 (20)
	Bromoform	20	19.6	ug/Kg	98	4		70 (75)	130 (127)	30 (20)
	1,1,2,2-Tetrachloroethane	20	19.0	ug/Kg	95	1		70 (77)	130 (127)	30 (20)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1463

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021453.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0307SBS01	Chloromethane	20	20.2	ug/Kg	101			40 (70)	160 (130)	
	Vinyl chloride	20	20.7	ug/Kg	104			70 (72)	130 (129)	
	Bromomethane	20	20.6	ug/Kg	103			40 (58)	160 (141)	
	Chloroethane	20	21.5	ug/Kg	108			40 (69)	160 (130)	
	Tert butyl alcohol	100	110	ug/Kg	110			70 (24)	130 (175)	
	1,1-Dichloroethene	20	19.4	ug/Kg	97			70 (79)	130 (121)	
	Acetone	100	120	ug/Kg	120			40 (60)	160 (131)	
	Carbon disulfide	20	18.9	ug/Kg	95			40 (45)	160 (154)	
	Methyl tert-butyl Ether	20	19.4	ug/Kg	97			70 (77)	130 (129)	
	Methylene Chloride	20	20.6	ug/Kg	103			70 (56)	130 (174)	
	trans-1,2-Dichloroethene	20	19.6	ug/Kg	98			70 (80)	130 (123)	
	1,1-Dichloroethane	20	19.7	ug/Kg	99			70 (82)	130 (123)	
	2-Butanone	100	110	ug/Kg	110			40 (69)	160 (131)	
	Carbon Tetrachloride	20	19.4	ug/Kg	97			70 (76)	130 (129)	
	cis-1,2-Dichloroethene	20	19.0	ug/Kg	95			70 (82)	130 (123)	
	Chloroform	20	19.9	ug/Kg	100			70 (82)	130 (125)	
	1,1,1-Trichloroethane	20	19.7	ug/Kg	99			70 (80)	130 (126)	
	Benzene	20	19.5	ug/Kg	98			70 (84)	130 (121)	
	1,2-Dichloroethane	20	19.8	ug/Kg	99			70 (81)	130 (126)	
	Trichloroethene	20	19.1	ug/Kg	96			70 (83)	130 (122)	
	1,2-Dichloropropane	20	20.0	ug/Kg	100			70 (83)	130 (122)	
	Bromodichloromethane	20	19.6	ug/Kg	98			70 (82)	130 (123)	
	4-Methyl-2-Pentanone	100	100	ug/Kg	100			40 (70)	160 (135)	
	Toluene	20	19.6	ug/Kg	98			70 (83)	130 (122)	
	t-1,3-Dichloropropene	20	19.5	ug/Kg	98			70 (78)	130 (124)	
	cis-1,3-Dichloropropene	20	19.2	ug/Kg	96			70 (81)	130 (122)	
	1,1,2-Trichloroethane	20	19.7	ug/Kg	99			70 (82)	130 (125)	
	2-Hexanone	100	110	ug/Kg	110			40 (66)	160 (138)	
	Dibromochloromethane	20	19.4	ug/Kg	97			70 (79)	130 (125)	
	Tetrachloroethene	20	19.6	ug/Kg	98			70 (83)	130 (125)	
	Chlorobenzene	20	19.0	ug/Kg	95			70 (84)	130 (122)	
	Ethyl Benzene	20	19.1	ug/Kg	96			70 (82)	130 (124)	
	m/p-Xylenes	40	38.9	ug/Kg	97			70 (83)	130 (124)	
	o-Xylene	20	19.1	ug/Kg	96			70 (83)	130 (123)	
	Styrene	20	19.3	ug/Kg	97			70 (82)	130 (124)	
	Bromoform	20	20.1	ug/Kg	101			70 (75)	130 (127)	
	1,1,2,2-Tetrachloroethane	20	19.6	ug/Kg	98			70 (77)	130 (127)	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1463

Client: G Environmental

Analytical Method: SW8260D

Datafile : VY021476.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY0311SBS01	Chloromethane	20	19.6	ug/Kg	98			40 (70)	160 (130)	
	Vinyl chloride	20	19.8	ug/Kg	99			70 (72)	130 (129)	
	Bromomethane	20	19.4	ug/Kg	97			40 (58)	160 (141)	
	Chloroethane	20	21.4	ug/Kg	107			40 (69)	160 (130)	
	Tert butyl alcohol	100	79.8	ug/Kg	80			70 (24)	130 (175)	
	1,1-Dichloroethene	20	18.1	ug/Kg	91			70 (79)	130 (121)	
	Acetone	100	120	ug/Kg	120			40 (60)	160 (131)	
	Carbon disulfide	20	17.6	ug/Kg	88			40 (45)	160 (154)	
	Methyl tert-butyl Ether	20	17.2	ug/Kg	86			70 (77)	130 (129)	
	Methylene Chloride	20	18.1	ug/Kg	91			70 (56)	130 (174)	
	trans-1,2-Dichloroethene	20	17.9	ug/Kg	90			70 (80)	130 (123)	
	1,1-Dichloroethane	20	18.6	ug/Kg	93			70 (82)	130 (123)	
	2-Butanone	100	99.2	ug/Kg	99			40 (69)	160 (131)	
	Carbon Tetrachloride	20	18.0	ug/Kg	90			70 (76)	130 (129)	
	cis-1,2-Dichloroethene	20	18.2	ug/Kg	91			70 (82)	130 (123)	
	Chloroform	20	19.1	ug/Kg	96			70 (82)	130 (125)	
	1,1,1-Trichloroethane	20	18.5	ug/Kg	93			70 (80)	130 (126)	
	Benzene	20	18.3	ug/Kg	92			70 (84)	130 (121)	
	1,2-Dichloroethane	20	17.9	ug/Kg	90			70 (81)	130 (126)	
	Trichloroethene	20	18.6	ug/Kg	93			70 (83)	130 (122)	
	1,2-Dichloropropane	20	18.2	ug/Kg	91			70 (83)	130 (122)	
	Bromodichloromethane	20	18.6	ug/Kg	93			70 (82)	130 (123)	
	4-Methyl-2-Pentanone	100	87.8	ug/Kg	88			40 (70)	160 (135)	
	Toluene	20	18.2	ug/Kg	91			70 (83)	130 (122)	
	t-1,3-Dichloropropene	20	18.1	ug/Kg	91			70 (78)	130 (124)	
	cis-1,3-Dichloropropene	20	18.0	ug/Kg	90			70 (81)	130 (122)	
	1,1,2-Trichloroethane	20	18.4	ug/Kg	92			70 (82)	130 (125)	
	2-Hexanone	100	97.6	ug/Kg	98			40 (66)	160 (138)	
	Dibromochloromethane	20	18.0	ug/Kg	90			70 (79)	130 (125)	
	Tetrachloroethene	20	19.5	ug/Kg	98			70 (83)	130 (125)	
	Chlorobenzene	20	17.9	ug/Kg	90			70 (84)	130 (122)	
	Ethyl Benzene	20	17.5	ug/Kg	88			70 (82)	130 (124)	
	m/p-Xylenes	40	36.0	ug/Kg	90			70 (83)	130 (124)	
	o-Xylene	20	17.5	ug/Kg	88			70 (83)	130 (123)	
	Styrene	20	17.8	ug/Kg	89			70 (82)	130 (124)	
	Bromoform	20	17.8	ug/Kg	89			70 (75)	130 (127)	
	1,1,2,2-Tetrachloroethane	20	16.6	ug/Kg	83			70 (77)	130 (127)	

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0306SBL01

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q1463

SAS No.: Q1463 SDG NO.: Q1463

Lab File ID: VY021427.D

Lab Sample ID: VY0306SBL01

Date Analyzed: 03/06/2025

Time Analyzed: 11:59

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
VY0306SBS01	VY0306SBS01	VY021428.D	03/06/2025
VY0306SBSD01	VY0306SBSD01	VY021429.D	03/06/2025
T1	Q1463-01	VY021441.D	03/06/2025
T5	Q1463-05	VY021442.D	03/06/2025
T4	Q1463-04	VY021443.D	03/06/2025
T6	Q1463-06	VY021444.D	03/06/2025
T7	Q1463-07	VY021445.D	03/06/2025
T8	Q1463-08	VY021446.D	03/06/2025
T9	Q1463-09	VY021447.D	03/06/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0307SBL01

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q1463

SAS No.: Q1463 SDG NO.: Q1463

Lab File ID: VY021452.D

Lab Sample ID: VY0307SBL01

Date Analyzed: 03/07/2025

Time Analyzed: 10:35

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
VY0307SBS01	VY0307SBS01	VY021453.D	03/07/2025
T3	Q1463-03	VY021455.D	03/07/2025
T10	Q1463-10	VY021458.D	03/07/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY0311SBL01

Lab Name: CHEMTECH

Contract: GENV01

Lab Code: CHEM Case No.: Q1463

SAS No.: Q1463 SDG NO.: Q1463

Lab File ID: VY021475.D

Lab Sample ID: VY0311SBL01

Date Analyzed: 03/11/2025

Time Analyzed: 10:12

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
VY0311SBS01	VY0311SBS01	VY021476.D	03/11/2025
T2	Q1463-02	VY021478.D	03/11/2025

COMMENTS: _____



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
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



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
Lab File ID: VY021425.D BFB Injection Date: 03/06/2025
Instrument ID: MSVOA_Y BFB Injection Time: 09:39
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	21.2
75	30.0 - 60.0% of mass 95	54
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.9 (1.1) 1
174	50.0 - 100.0% of mass 95	82.3
175	5.0 - 9.0% of mass 174	6.2 (7.5) 1
176	95.0 - 101.0% of mass 174	79.6 (96.8) 1
177	5.0 - 9.0% of mass 176	5.7 (7.1) 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	VY021426.D	03/06/2025	10:10
VY0306SBL01	VY0306SBL01	VY021427.D	03/06/2025	11:59
VY0306SBS01	VY0306SBS01	VY021428.D	03/06/2025	12:33
VY0306SBSD01	VY0306SBSD01	VY021429.D	03/06/2025	12:55
T1	Q1463-01	VY021441.D	03/06/2025	17:46
T5	Q1463-05	VY021442.D	03/06/2025	18:09
T4	Q1463-04	VY021443.D	03/06/2025	18:33
T6	Q1463-06	VY021444.D	03/06/2025	18:56
T7	Q1463-07	VY021445.D	03/06/2025	19:20
T8	Q1463-08	VY021446.D	03/06/2025	19:43
T9	Q1463-09	VY021447.D	03/06/2025	20:06



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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
Lab File ID: VY021450.D BFB Injection Date: 03/07/2025
Instrument ID: MSVOA_Y BFB Injection Time: 09:27
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	20.7
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	6.3
173	Less than 2.0% of mass 174	1.3 (1.6) 1
174	50.0 - 100.0% of mass 95	81.7
175	5.0 - 9.0% of mass 174	6.7 (8.1) 1
176	95.0 - 101.0% of mass 174	77.6 (95) 1
177	5.0 - 9.0% of mass 176	5.3 (6.9) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY021451.D	03/07/2025	09:59
VY0307SBL01	VY0307SBL01	VY021452.D	03/07/2025	10:35
VY0307SBS01	VY0307SBS01	VY021453.D	03/07/2025	12:03
T3	Q1463-03	VY021455.D	03/07/2025	12:55
T10	Q1463-10	VY021458.D	03/07/2025	14:05



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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: GENV01
Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
Lab File ID: VY021473.D BFB Injection Date: 03/11/2025
Instrument ID: MSVOA_Y BFB Injection Time: 09:00
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	53
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.9 (1.1) 1
174	50.0 - 100.0% of mass 95	84.5
175	5.0 - 9.0% of mass 174	6.4 (7.6) 1
176	95.0 - 101.0% of mass 174	80.4 (95.2) 1
177	5.0 - 9.0% of mass 176	5.4 (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	VY021474.D	03/11/2025	09:42
VY0311SBL01	VY0311SBL01	VY021475.D	03/11/2025	10:12
VY0311SBS01	VY0311SBS01	VY021476.D	03/11/2025	11:03
T2	Q1463-02	VY021478.D	03/11/2025	12:01

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
 Lab File ID: VY021426.D Date Analyzed: 03/06/2025
 Instrument ID: MSVOA_Y Time Analyzed: 10:10
 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	228274	7.71	348529	8.61	321426	11.41
UPPER LIMIT	456548	8.207	697058	9.11	642852	11.914
LOWER LIMIT	114137	7.207	174265	8.11	160713	10.914
EPA SAMPLE NO.						
T1	222165	7.71	418468	8.62	361430	11.41
T4	230232	7.71	423986	8.62	354306	11.41
T5	226372	7.71	418613	8.62	362578	11.41
T6	224114	7.71	420682	8.62	363546	11.41
T7	227977	7.71	432286	8.62	378072	11.41
T8	214937	7.71	365717	8.62	278068	11.41
T9	211507	7.71	387107	8.62	337914	11.41
VY0306SBL01	249443	7.71	460921	8.62	405928	11.42
VY0306SBS01	200172	7.71	318431	8.62	292608	11.42
VY0306SBSD01	197190	7.71	317024	8.62	284896	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.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
 Lab File ID: VY021426.D Date Analyzed: 03/06/2025
 Instrument ID: MSVOA_Y Time Analyzed: 10:10
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	168733	13.346				
UPPER LIMIT	337466	13.846				
LOWER LIMIT	84366.5	12.846				
EPA SAMPLE NO.						
T1	139247	13.35				
T4	121402	13.35				
T5	131867	13.35				
T6	137758	13.35				
T7	143977	13.35				
T8	93699	13.35				
T9	129134	13.35				
VY0306SBL01	156000	13.35				
VY0306SBS01	152176	13.35				
VY0306SBSD01	145541	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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
 Lab File ID: VY021451.D Date Analyzed: 03/07/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:59
 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	212653	7.71	324643	8.62	291936	11.42
UPPER LIMIT	425306	8.207	649286	9.116	583872	11.92
LOWER LIMIT	106327	7.207	162322	8.116	145968	10.92
EPA SAMPLE NO.						
T3	305147	7.68	465424	8.60	350362	11.43
T10	289637	7.71	520171	8.62	457030	11.41
VY0307SBL01	247432	7.71	455944	8.62	386511	11.42
VY0307SBS01	219868	7.71	343563	8.62	301562	11.42

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

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

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
 Lab File ID: VY021451.D Date Analyzed: 03/07/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:59
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	151541	13.353				
UPPER LIMIT	303082	13.853				
LOWER LIMIT	75770.5	12.853				
EPA SAMPLE NO.						
T3	111224	13.36				
T10	176291	13.35				
VY0307SBL01	140975	13.35				
VY0307SBS01	152803	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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: GENV01
 Lab Code: CHEM Case No.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
 Lab File ID: VY021474.D Date Analyzed: 03/11/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:42
 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	243763	7.71	363423	8.62	331214	11.42
UPPER LIMIT	487526	8.207	726846	9.116	662428	11.92
LOWER LIMIT	121882	7.207	181712	8.116	165607	10.92
EPA SAMPLE NO.						
T2	302993	7.68	461439	8.60	363901	11.43
VY0311SBL01	266206	7.71	468026	8.62	406786	11.41
VY0311SBS01	225793	7.71	350967	8.61	312829	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.: Q1463 SAS No.: Q1463 SDG NO.: Q1463
 Lab File ID: VY021474.D Date Analyzed: 03/11/2025
 Instrument ID: MSVOA_Y Time Analyzed: 09:42
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	170654	13.346				
UPPER LIMIT	341308	13.846				
LOWER LIMIT	85327	12.846				
EPA SAMPLE NO.						
T2	129475	13.35				
VY0311SBL01	157191	13.35				
VY0311SBS01	162394	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:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T1	SDG No.:	Q1463
Lab Sample ID:	Q1463-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.1
Sample Wt/Vol:	6.09	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group2

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021441.D	1		03/06/25 17:46	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.00	U	1.00	4.40	ug/Kg
75-01-4	Vinyl Chloride	0.67	U	0.67	4.40	ug/Kg
74-83-9	Bromomethane	0.90	U	0.90	4.40	ug/Kg
75-00-3	Chloroethane	0.88	U	0.88	4.40	ug/Kg
75-65-0	Tert butyl alcohol	13.6	U	13.6	21.8	ug/Kg
75-35-4	1,1-Dichloroethene	0.68	U	0.68	4.40	ug/Kg
67-64-1	Acetone	5.40	U	5.40	21.8	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	4.40	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.58	U	0.58	4.40	ug/Kg
75-09-2	Methylene Chloride	3.00	U	3.00	8.70	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.73	U	0.73	4.40	ug/Kg
75-34-3	1,1-Dichloroethane	0.55	U	0.55	4.40	ug/Kg
78-93-3	2-Butanone	5.00	U	5.00	21.8	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	4.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.53	U	0.53	4.40	ug/Kg
67-66-3	Chloroform	0.58	U	0.58	4.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.68	U	0.68	4.40	ug/Kg
71-43-2	Benzene	0.63	U	0.63	4.40	ug/Kg
107-06-2	1,2-Dichloroethane	0.53	U	0.53	4.40	ug/Kg
79-01-6	Trichloroethene	0.65	U	0.65	4.40	ug/Kg
78-87-5	1,2-Dichloropropane	0.58	U	0.58	4.40	ug/Kg
75-27-4	Bromodichloromethane	0.49	U	0.49	4.40	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.80	U	3.80	21.8	ug/Kg
108-88-3	Toluene	0.58	U	0.58	4.40	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.52	U	0.52	4.40	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	4.40	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.73	U	0.73	4.40	ug/Kg
591-78-6	2-Hexanone	4.20	U	4.20	21.8	ug/Kg
124-48-1	Dibromochloromethane	0.57	U	0.57	4.40	ug/Kg
127-18-4	Tetrachloroethene	0.78	U	0.78	4.40	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T1	SDG No.:	Q1463
Lab Sample ID:	Q1463-01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.1
Sample Wt/Vol:	6.09 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021441.D	1		03/06/25 17:46	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.65	U	0.65	4.40	ug/Kg
100-41-4	Ethyl Benzene	0.54	U	0.54	4.40	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	8.70	ug/Kg
95-47-6	o-Xylene	0.61	U	0.61	4.40	ug/Kg
100-42-5	Styrene	0.52	U	0.52	4.40	ug/Kg
75-25-2	Bromoform	0.71	U	0.71	4.40	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.96	U	0.96	4.40	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	63.3		70 (63) - 130 (155)	127%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		70 (70) - 130 (134)	105%	SPK: 50
2037-26-5	Toluene-d8	40.3		70 (74) - 130 (123)	81%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.1		70 (38) - 130 (136)	84%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	222000	7.707			
540-36-3	1,4-Difluorobenzene	418000	8.616			
3114-55-4	Chlorobenzene-d5	361000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	139000	13.347			

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\VY030625\
 Data File : VY021441.D
 Acq On : 06 Mar 2025 17:46
 Operator : SY/MD
 Sample : Q1463-01
 Misc : 6.09g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T1

Quant Time: Mar 07 00:41:52 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	222165	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	418468	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	361430	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	139247	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	148589	63.279	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	126.560%
35) Dibromofluoromethane	7.634	113	144278	52.452	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	104.900%
50) Toluene-d8	10.109	98	419298	40.260	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	80.520%
62) 4-Bromofluorobenzene	12.408	95	149255	42.130	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	84.260%

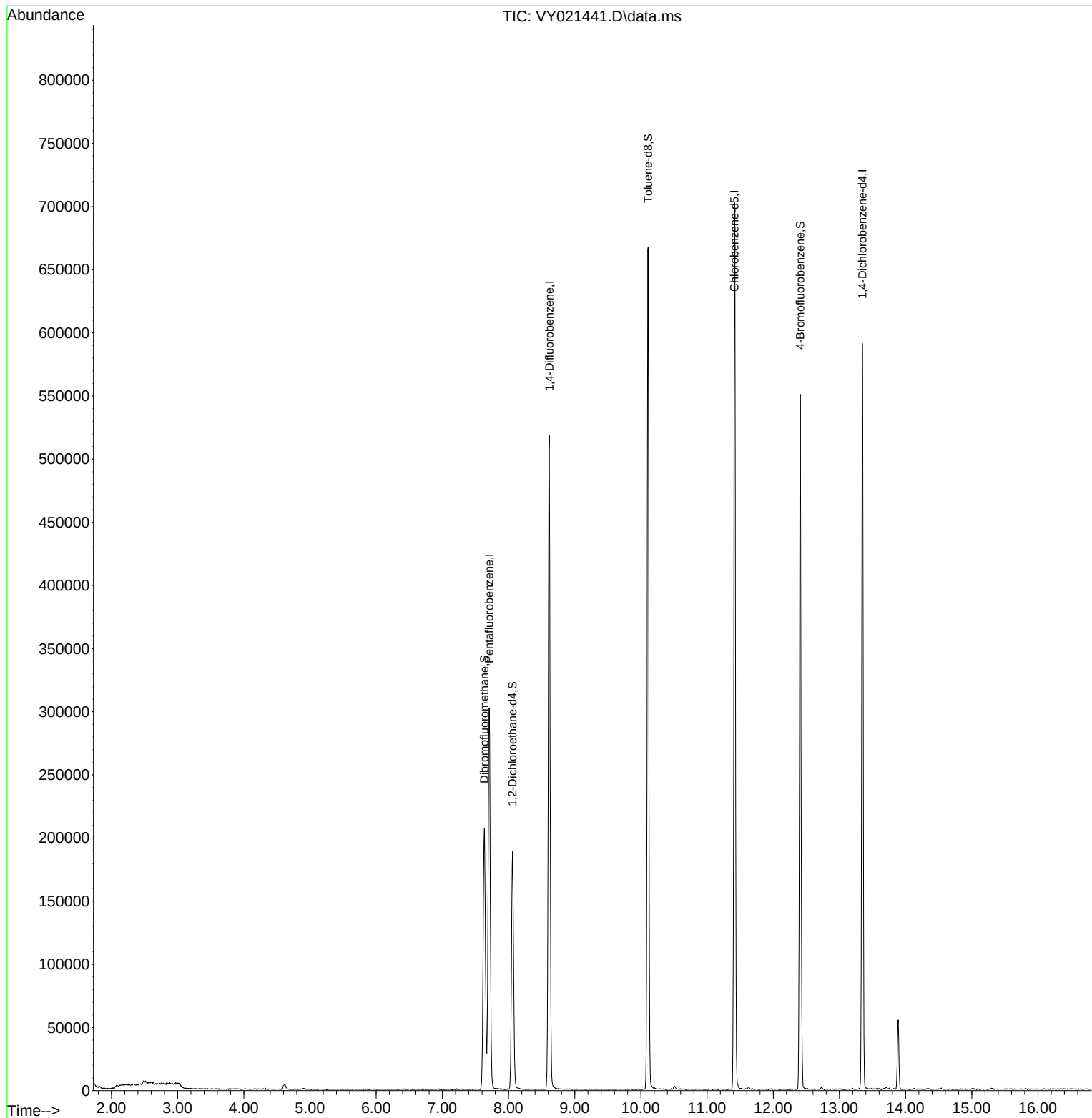
Target Compounds	Qvalue

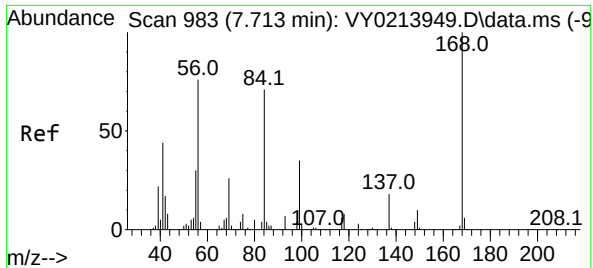
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021441.D
Acq On : 06 Mar 2025 17:46
Operator : SY/MD
Sample : Q1463-01
Misc : 6.09g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T1

Quant Time: Mar 07 00:41:52 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

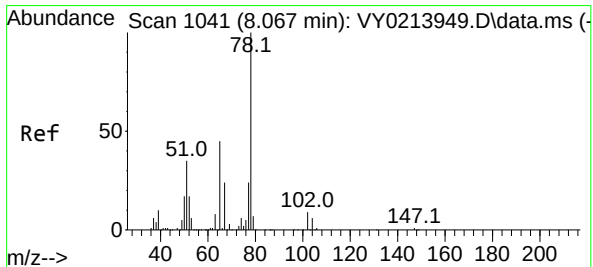
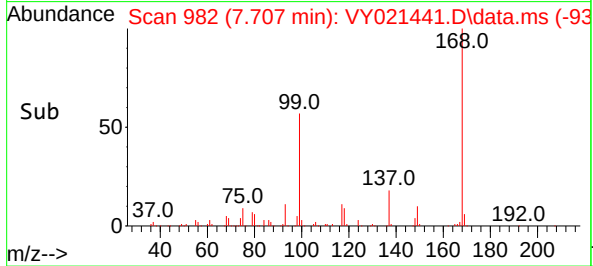
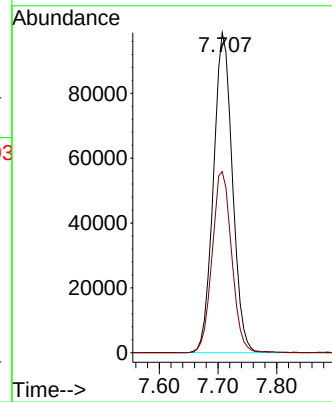
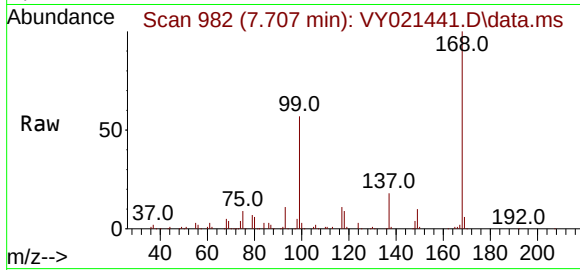




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021441.D
Acq: 06 Mar 2025 17:46

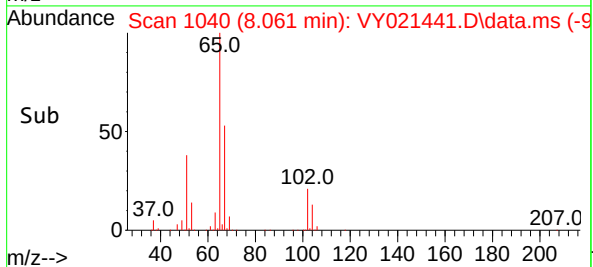
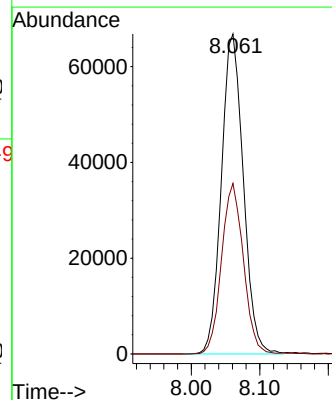
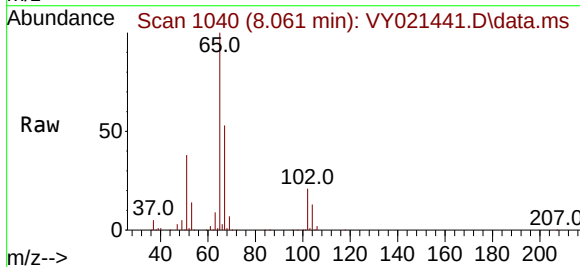
Instrument :
MSVOA_Y
ClientSampleId :
T1

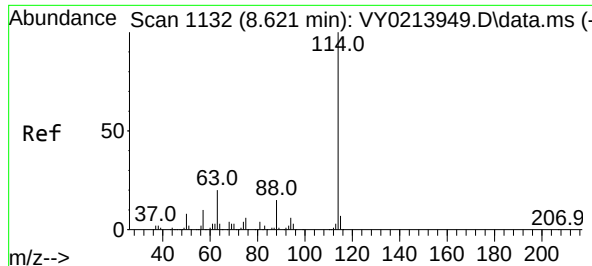
Tgt Ion:168 Resp: 222165
Ion Ratio Lower Upper
168 100
99 56.6 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 63.279 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021441.D
Acq: 06 Mar 2025 17:46

Tgt Ion: 65 Resp: 148589
Ion Ratio Lower Upper
65 100
67 53.1 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: VY021441.D

Acq: 06 Mar 2025 17:46

Instrument :

MSVOA_Y

ClientSampleId :

T1

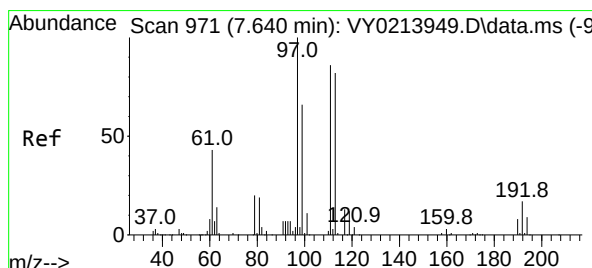
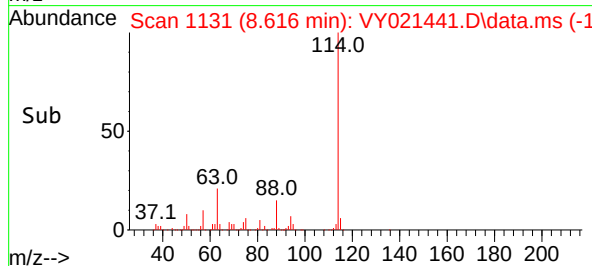
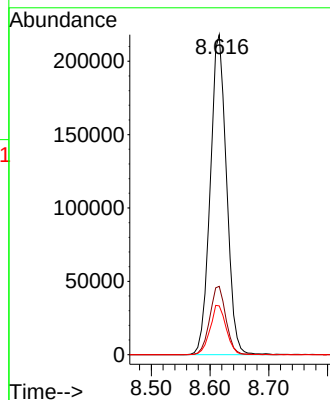
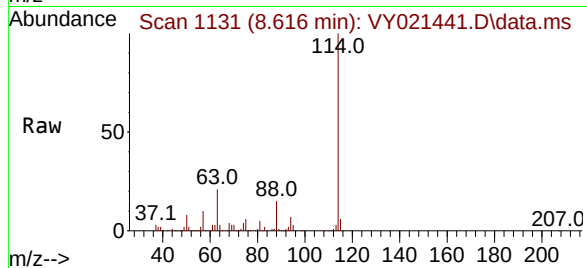
Tgt Ion:114 Resp: 418468

Ion Ratio Lower Upper

114 100

63 21.3 0.0 40.8

88 15.2 0.0 30.8



#35

Dibromofluoromethane

Concen: 52.452 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021441.D

Acq: 06 Mar 2025 17:46

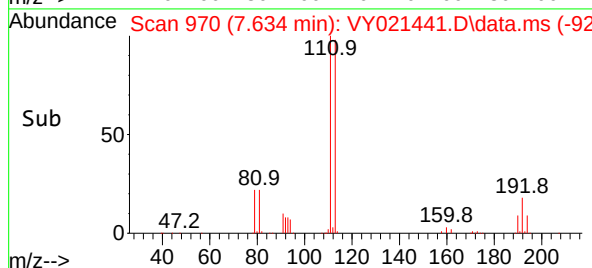
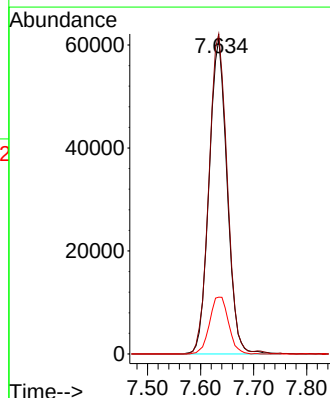
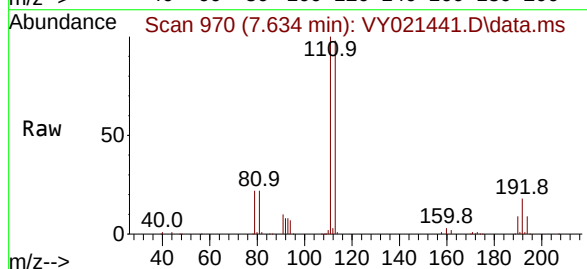
Tgt Ion:113 Resp: 144278

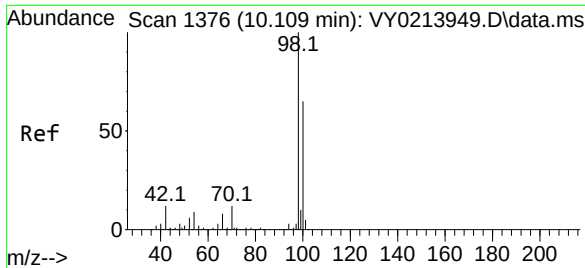
Ion Ratio Lower Upper

113 100

111 102.5 82.0 123.0

192 19.0 15.9 23.9





#50

Toluene-d8

Concen: 40.260 ug/l

RT: 10.109 min Scan# 1

Delta R.T. 0.000 min

Lab File: VY021441.D

Acq: 06 Mar 2025 17:46

Instrument :

MSVOA_Y

ClientSampleId :

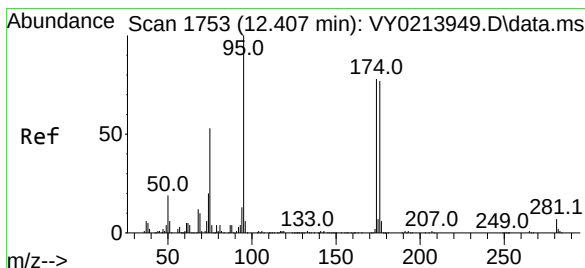
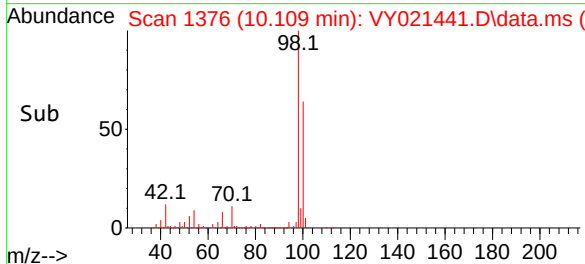
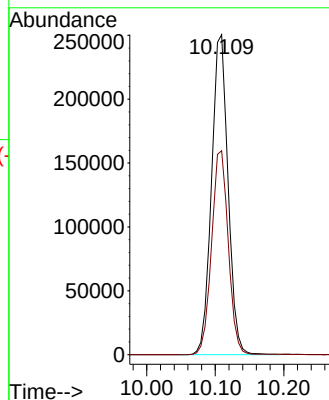
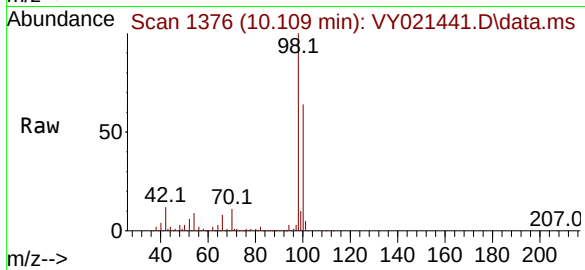
T1

Tgt Ion: 98 Resp: 419298

Ion Ratio Lower Upper

98 100

100 64.4 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 42.130 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021441.D

Acq: 06 Mar 2025 17:46

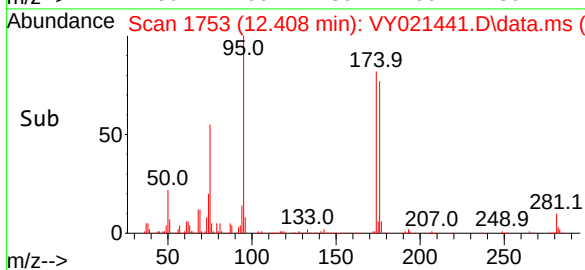
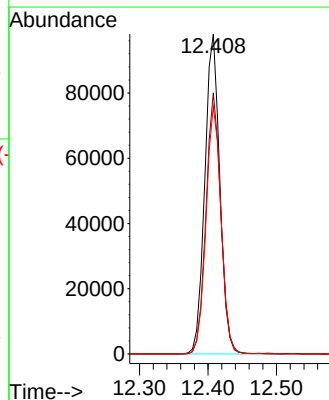
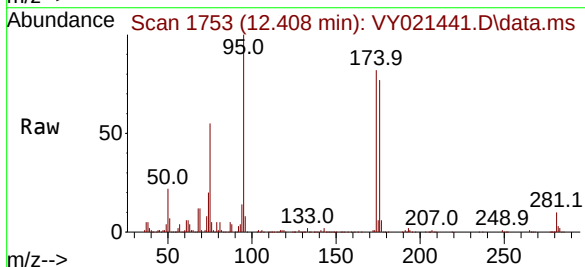
Tgt Ion: 95 Resp: 149255

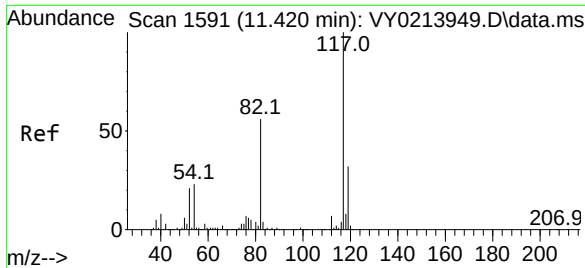
Ion Ratio Lower Upper

95 100

174 81.2 0.0 165.0

176 78.1 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: VY021441.D

Acq: 06 Mar 2025 17:46

Instrument :

MSVOA_Y

ClientSampleId :

T1

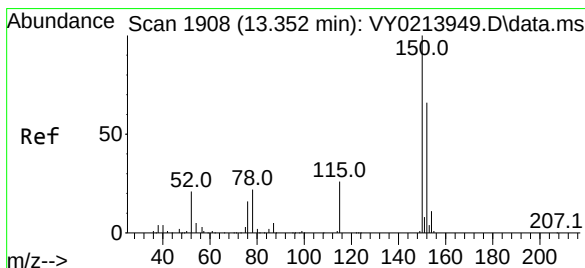
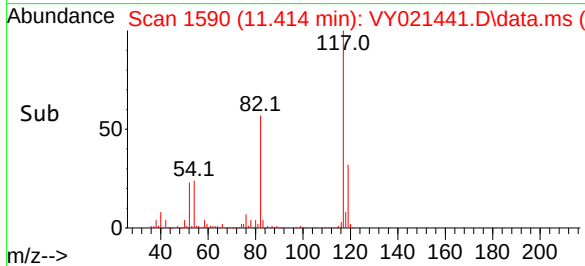
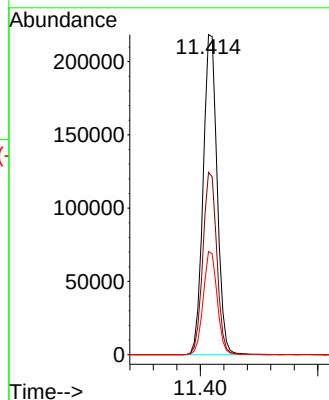
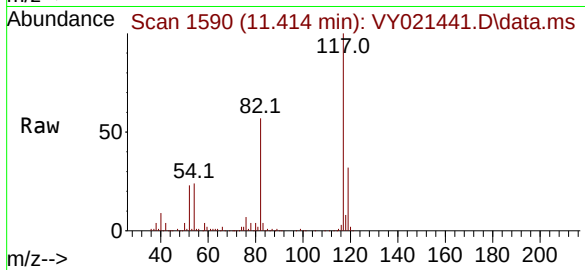
Tgt Ion:117 Resp: 361430

Ion Ratio Lower Upper

117 100

82 57.0 44.6 67.0

119 32.3 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: VY021441.D

Acq: 06 Mar 2025 17:46

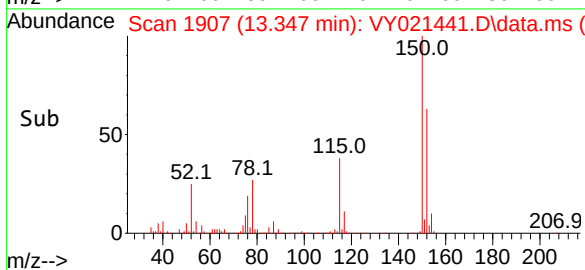
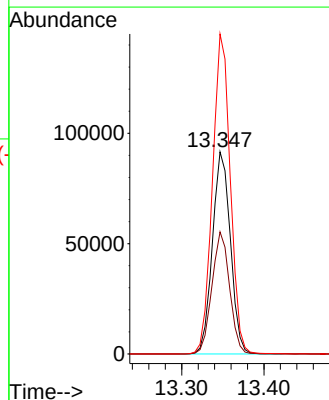
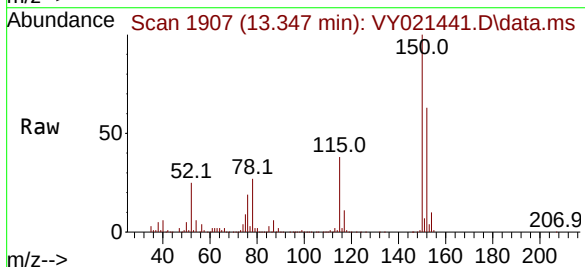
Tgt Ion:152 Resp: 139247

Ion Ratio Lower Upper

152 100

115 59.4 29.0 87.0

150 156.6 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021441.D
Acq On : 06 Mar 2025 17:46
Operator : SY/MD
Sample : Q1463-01
Misc : 6.09g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T1

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: VY021441.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.634	960	970	976	rBV	207157	496975	42.82%	7.317%
2	7.707	976	982	995	rVB	301551	683209	58.87%	10.060%
3	8.061	1029	1040	1060	rBV	188663	421544	36.32%	6.207%
4	8.616	1122	1131	1143	rBV	517781	1011640	87.17%	14.895%
5	10.109	1368	1376	1390	rBV	666404	1138831	98.13%	16.768%
6	11.414	1581	1590	1603	rBV	702077	1160529	100.00%	17.088%
7	12.408	1746	1753	1765	rVB2	550146	899906	77.54%	13.250%
8	13.347	1900	1907	1916	rBV	590193	887870	76.51%	13.073%
9	13.889	1989	1996	2003	rVB	55142	91170	7.86%	1.342%

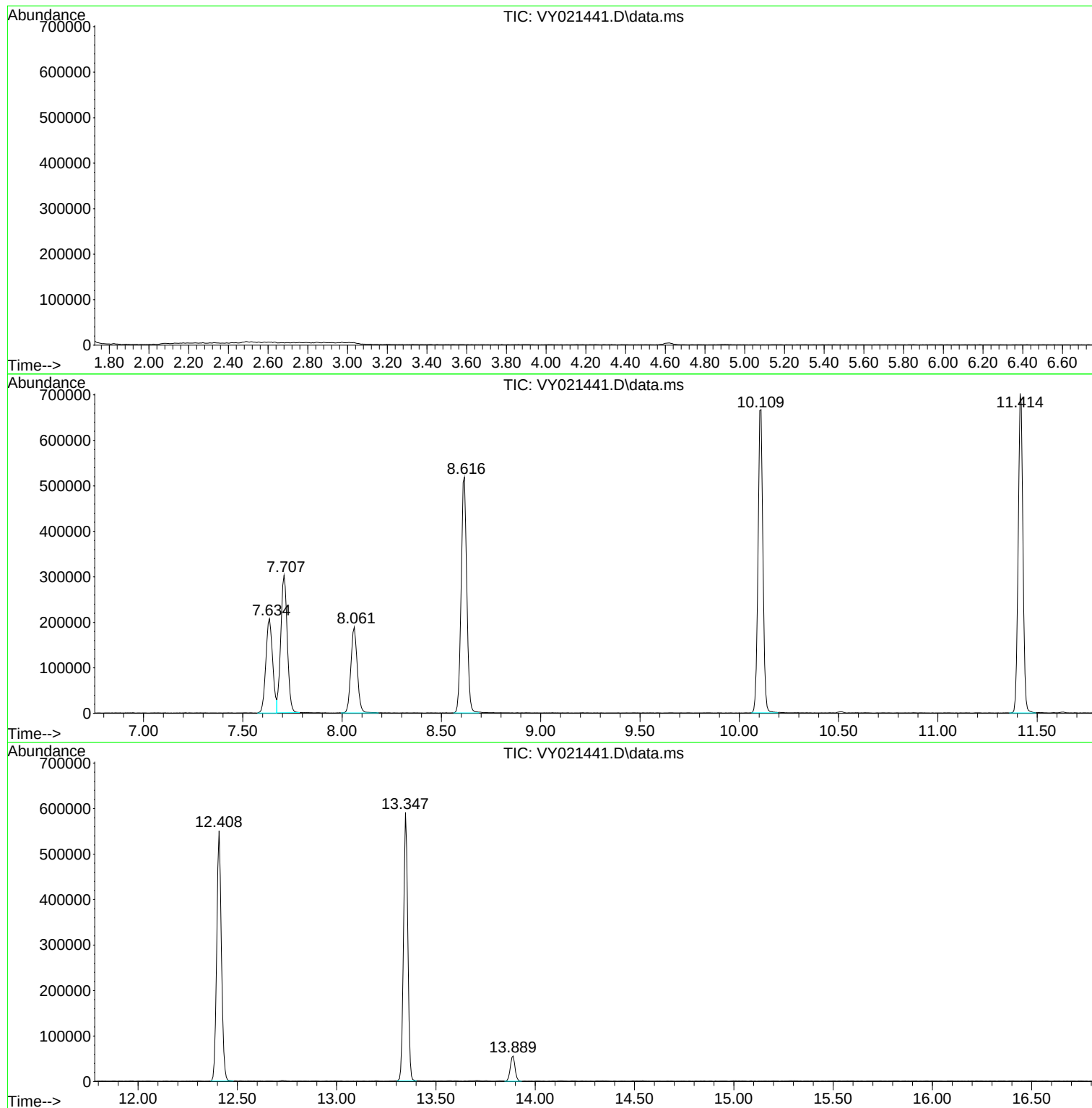
Sum of corrected areas: 6791674

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021441.D
Acq On : 06 Mar 2025 17:46
Operator : SY/MD
Sample : Q1463-01
Misc : 6.09g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T1

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\VY030625\
Data File : VY021441.D
Acq On : 06 Mar 2025 17:46
Operator : SY/MD
Sample : Q1463-01
Misc : 6.09g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T1

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\VY030625\
Data File : VY021441.D
Acq On : 06 Mar 2025 17:46
Operator : SY/MD
Sample : Q1463-01
Misc : 6.09g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T1

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:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T2	SDG No.:	Q1463
Lab Sample ID:	Q1463-02	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.5
Sample Wt/Vol:	6.31	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group2

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021478.D	1		03/11/25 12:01	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	0.97	U	0.97	4.20	ug/Kg
75-01-4	Vinyl Chloride	0.65	U	0.65	4.20	ug/Kg
74-83-9	Bromomethane	0.86	U	0.86	4.20	ug/Kg
75-00-3	Chloroethane	0.85	U	0.85	4.20	ug/Kg
75-65-0	Tert butyl alcohol	13.1	U	13.1	21.0	ug/Kg
75-35-4	1,1-Dichloroethene	0.65	U	0.65	4.20	ug/Kg
67-64-1	Acetone	5.20	U	5.20	21.0	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	4.20	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.56	U	0.56	4.20	ug/Kg
75-09-2	Methylene Chloride	11.6		2.90	8.40	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.70	U	0.70	4.20	ug/Kg
75-34-3	1,1-Dichloroethane	0.53	U	0.53	4.20	ug/Kg
78-93-3	2-Butanone	4.80	U	4.80	21.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.73	U	0.73	4.20	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.51	U	0.51	4.20	ug/Kg
67-66-3	Chloroform	0.56	U	0.56	4.20	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.65	U	0.65	4.20	ug/Kg
71-43-2	Benzene	0.60	U	0.60	4.20	ug/Kg
107-06-2	1,2-Dichloroethane	0.51	U	0.51	4.20	ug/Kg
79-01-6	Trichloroethene	0.63	U	0.63	4.20	ug/Kg
78-87-5	1,2-Dichloropropane	0.55	U	0.55	4.20	ug/Kg
75-27-4	Bromodichloromethane	0.47	U	0.47	4.20	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	21.0	ug/Kg
108-88-3	Toluene	6.60		0.56	4.20	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.50	4.20	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.48	U	0.48	4.20	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.70	U	0.70	4.20	ug/Kg
591-78-6	2-Hexanone	4.00	U	4.00	21.0	ug/Kg
124-48-1	Dibromochloromethane	0.55	U	0.55	4.20	ug/Kg
127-18-4	Tetrachloroethene	0.75	U	0.75	4.20	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T2	SDG No.:	Q1463
Lab Sample ID:	Q1463-02	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.5
Sample Wt/Vol:	6.31 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021478.D	1		03/11/25 12:01	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.62	U	0.62	4.20	ug/Kg
100-41-4	Ethyl Benzene	1.40	J	0.52	4.20	ug/Kg
179601-23-1	m/p-Xylenes	9.20		1.10	8.40	ug/Kg
95-47-6	o-Xylene	3.50	J	0.59	4.20	ug/Kg
100-42-5	Styrene	0.50	U	0.50	4.20	ug/Kg
75-25-2	Bromoform	0.68	U	0.68	4.20	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.92	U	0.92	4.20	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	39.8		70 (63) - 130 (155)	80%	SPK: 50
1868-53-7	Dibromofluoromethane	37.3		70 (70) - 130 (134)	75%	SPK: 50
2037-26-5	Toluene-d8	47.1		70 (74) - 130 (123)	94%	SPK: 50
460-00-4	4-Bromofluorobenzene	37.1		70 (38) - 130 (136)	74%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	303000	7.683			
540-36-3	1,4-Difluorobenzene	461000	8.603			
3114-55-4	Chlorobenzene-d5	364000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	129000	13.353			
TENTATIVE IDENTIFIED COMPOUNDS						
000115-10-6	Dimethyl ether	90.1	J		2.00	ug/Kg
000471-03-4	Bis(2-chloroethyl) sulfone	7.50	J		2.49	ug/Kg
74-88-4	Methyl Iodide	6.90	J		3.87	ug/Kg
000121-43-7	Boric acid, trimethyl ester	100	J		6.38	ug/Kg
000540-36-3	Benzene, 1,4-difluoro-	15.8	J		8.72	ug/Kg
000620-14-4	Benzene, 1-ethyl-3-methyl-	4.50	J		12.7	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	1.80	J		12.7	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3.10	J		13.0	ug/Kg
91-20-3	Naphthalene	2.10	J		15.2	ug/Kg

Report of Analysis

Client:	G Environmental		Date Collected:	02/27/25	
Project:	Fisal		Date Received:	02/27/25	
Client Sample ID:	T2		SDG No.:	Q1463	
Lab Sample ID:	Q1463-02		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	94.5	
Sample Wt/Vol:	6.31	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group2	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021478.D	1		03/11/25 12:01	vy031125

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

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021478.D
 Acq On : 11 Mar 2025 12:01
 Operator : SY/MD
 Sample : Q1463-02
 Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T2

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 06:43:47 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	7.683	168	302993m	50.000	ug/l	-0.03
34) 1,4-Difluorobenzene	8.603	114	461439m	50.000	ug/l	-0.02
63) Chlorobenzene-d5	11.426	117	363901	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	129475	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.049	65	127510m	39.816	ug/l	-0.02
Spiked Amount 50.000	Range 50 - 163		Recovery =	79.640%		
35) Dibromofluoromethane	7.622	113	113022m	37.263	ug/l	-0.02
Spiked Amount 50.000	Range 54 - 147		Recovery =	74.520%		
50) Toluene-d8	10.103	98	541391m	47.142	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	94.280%		
62) 4-Bromofluorobenzene	12.414	95	144941	37.103	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery =	74.200%		
Target Compounds						
					Qvalue	
10) Methyl Iodide	3.866	142	28491	8.210	ug/l	94
20) Methylene Chloride	4.525	84	50714m	13.832	ug/l	
52) Toluene	10.170	92	69898m	7.927	ug/l	
67) Ethyl Benzene	11.524	91	25136	1.667	ug/l	94
68) m/p-Xylenes	11.639	106	63055	11.011	ug/l	99
69) o-Xylene	11.956	106	22273	4.220	ug/l	100
80) 1,3,5-Trimethylbenzene	12.743	105	17440	2.104	ug/l	100
84) 1,2,4-Trimethylbenzene	13.048	105	30286	3.680	ug/l	99
95) Naphthalene	15.151	128	3892	2.557	ug/l #	87

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

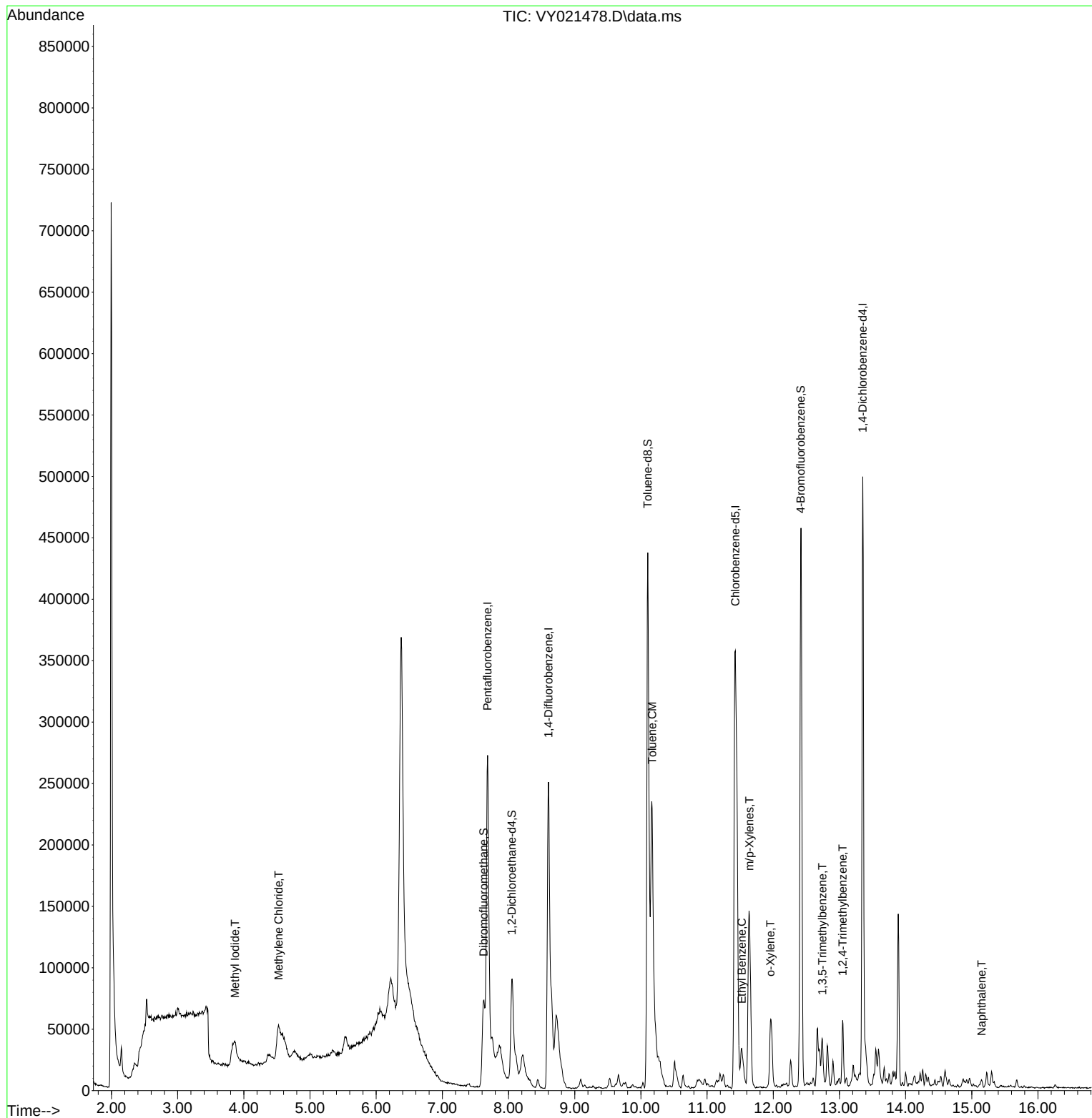
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Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

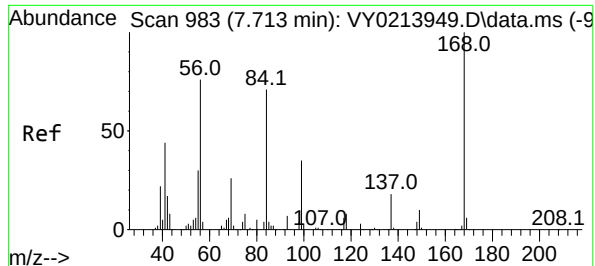
Instrument :
MSVOA_Y
ClientSampleId :
T2

Manual Integrations
APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

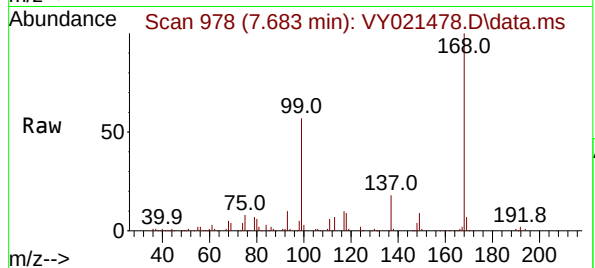
Quant Time: Mar 12 06:43:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration





#1
Pentafluorobenzene
Concen: 50.000 ug/l m
RT: 7.683 min Scan# 91
Delta R.T. -0.030 min
Lab File: VY021478.D
Acq: 11 Mar 2025 12:01

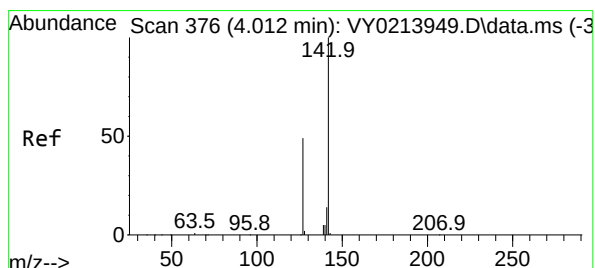
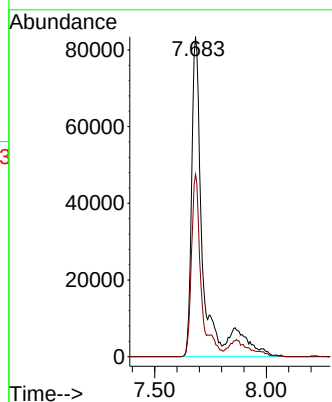
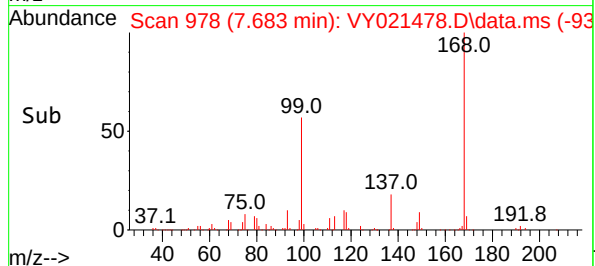
Instrument :
MSVOA_Y
ClientSampleId :
T2



Tgt Ion:168 Resp: 30299
Ion Ratio Lower Upper
168 100
99 57.0 46.0 69.0

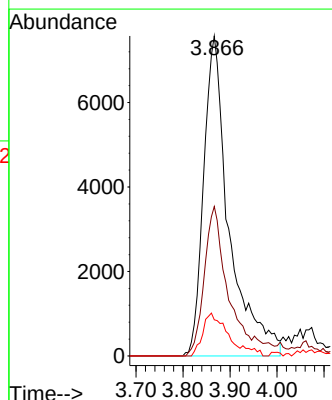
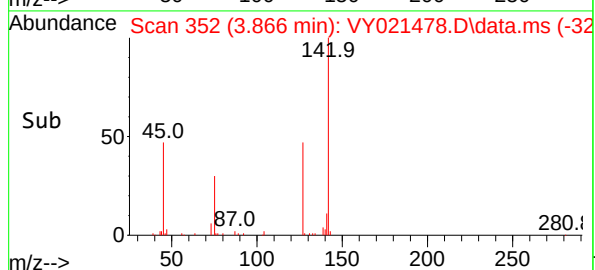
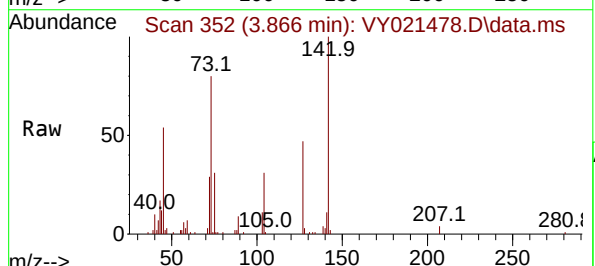
Manual Integrations
APPROVED

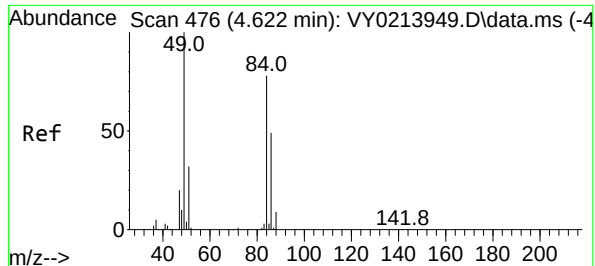
Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025



#10
Methyl Iodide
Concen: 8.210 ug/l
RT: 3.866 min Scan# 352
Delta R.T. -0.146 min
Lab File: VY021478.D
Acq: 11 Mar 2025 12:01

Tgt Ion:142 Resp: 28491
Ion Ratio Lower Upper
142 100
127 45.3 39.1 58.7
141 12.1 11.8 17.6





#20

Methylene Chloride

Concen: 13.832 ug/l m

RT: 4.525 min Scan# 4

Delta R.T. -0.097 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

Instrument :

MSVOA_Y

ClientSampleId :

T2

Tgt Ion: 84 Resp: 50714

Ion Ratio Lower Upper

84 100

49 120.9 102.0 153.0

51 42.4 33.0 49.6

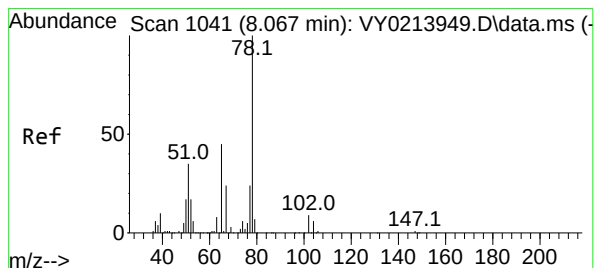
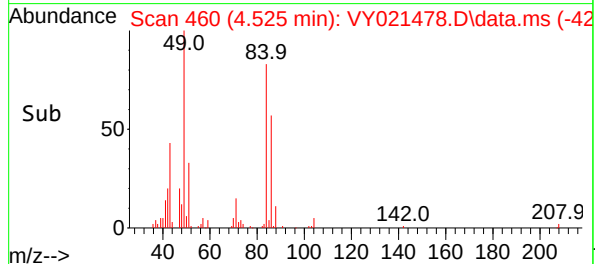
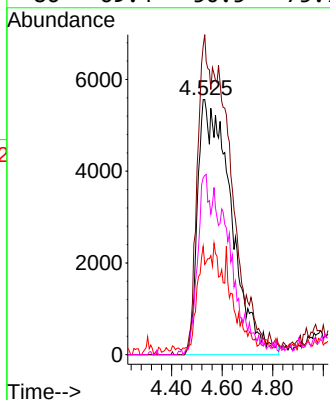
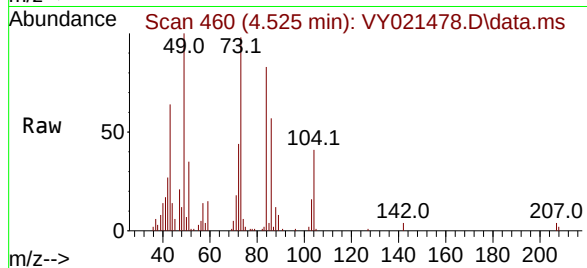
86 69.4 50.5 75.7

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025



#33

1,2-Dichloroethane-d4

Concen: 39.816 ug/l m

RT: 8.049 min Scan# 1038

Delta R.T. -0.018 min

Lab File: VY021478.D

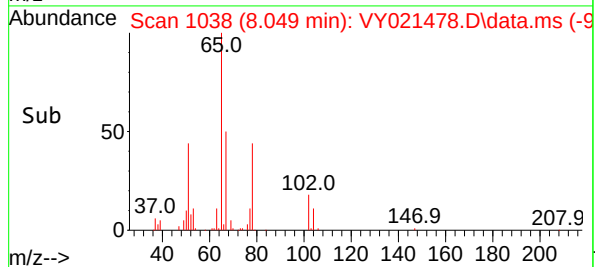
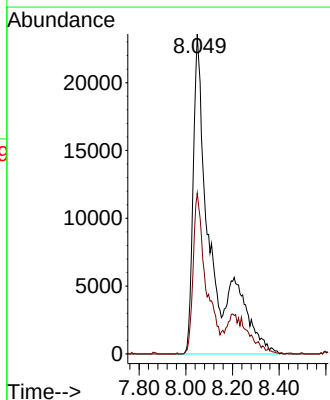
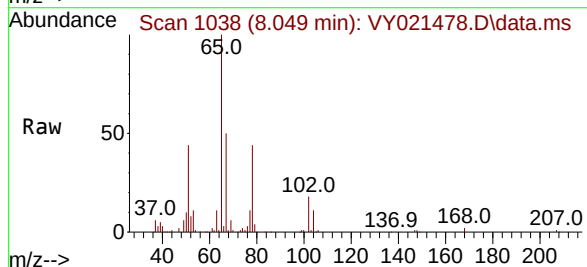
Acq: 11 Mar 2025 12:01

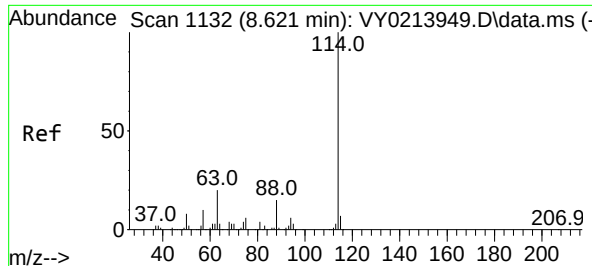
Tgt Ion: 65 Resp: 127510

Ion Ratio Lower Upper

65 100

67 35.9 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l m

RT: 8.603 min Scan# 1132

Delta R.T. -0.018 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

Instrument :

MSVOA_Y

ClientSampleId :

T2

Tgt Ion:114 Resp: 461439

Ion Ratio Lower Upper

114 100

63 19.4 0.0 40.8

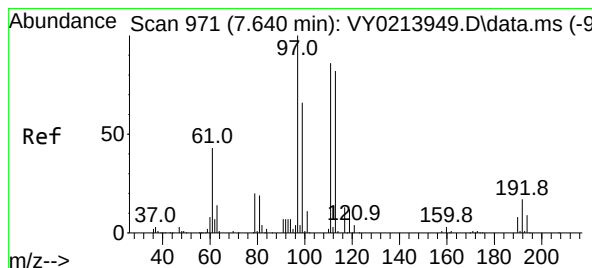
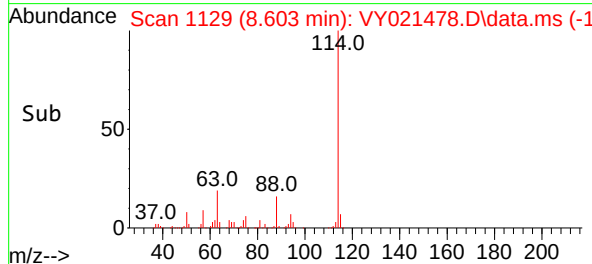
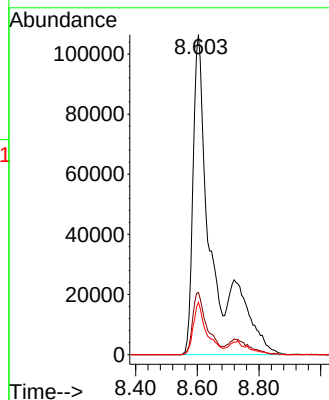
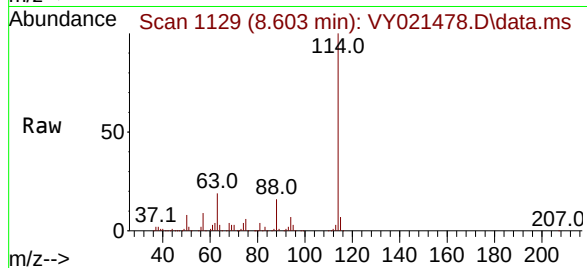
88 16.3 0.0 30.8

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025



#35

Dibromofluoromethane

Concen: 37.263 ug/l m

RT: 7.622 min Scan# 968

Delta R.T. -0.018 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

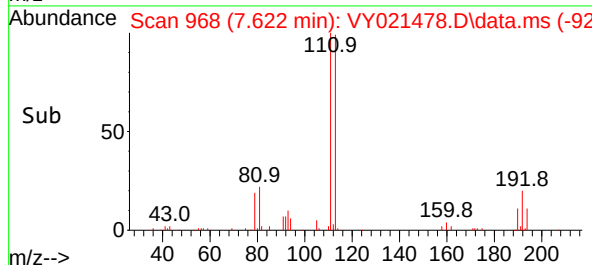
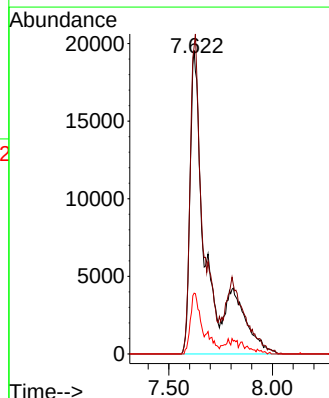
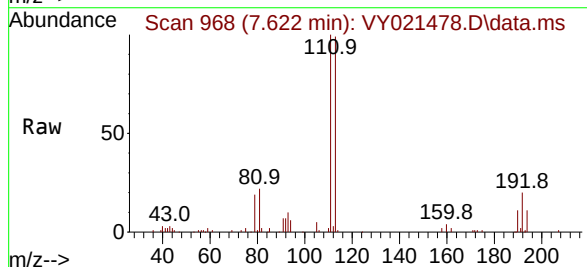
Tgt Ion:113 Resp: 113022

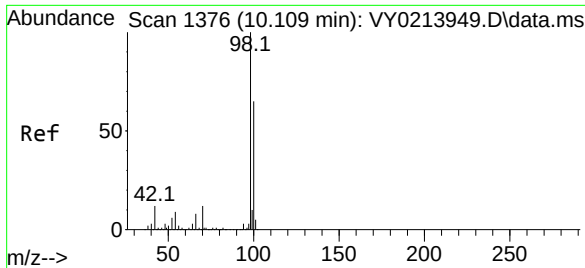
Ion Ratio Lower Upper

113 100

111 74.3 82.0 123.0#

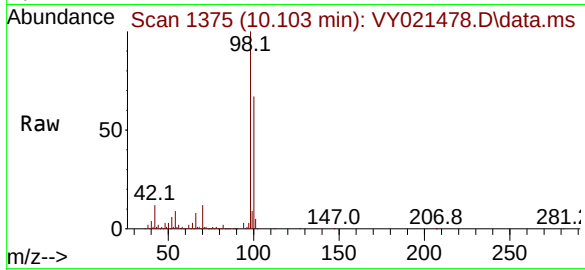
192 11.3 15.9 23.9#





#50
Toluene-d8
Concen: 47.142 ug/l m
RT: 10.103 min Scan# 1375
Delta R.T. -0.006 min
Lab File: VY021478.D
Acq: 11 Mar 2025 12:01

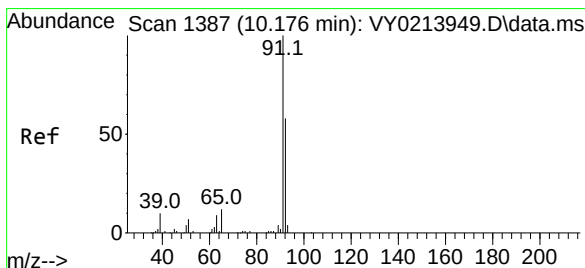
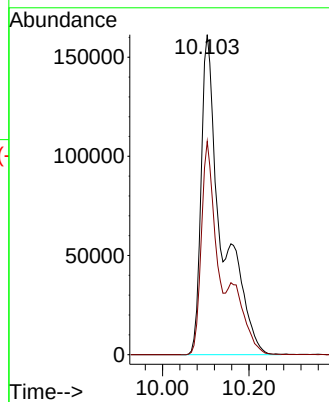
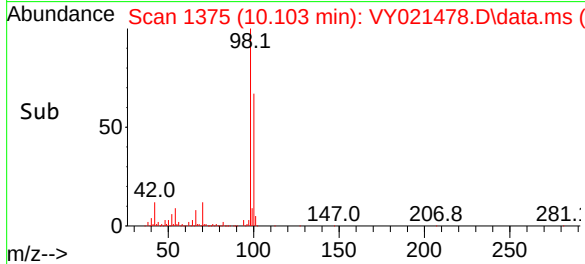
Instrument :
MSVOA_Y
ClientSampleId :
T2



Tgt Ion: 98 Resp: 54139
Ion Ratio Lower Upper
98 100
100 47.4 52.1 78.1

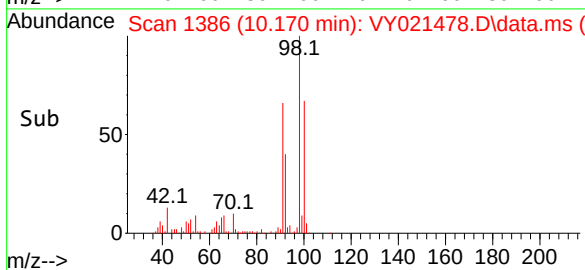
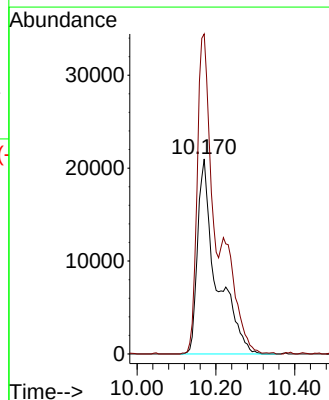
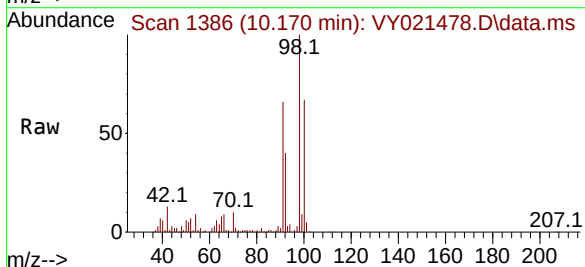
Manual Integrations
APPROVED

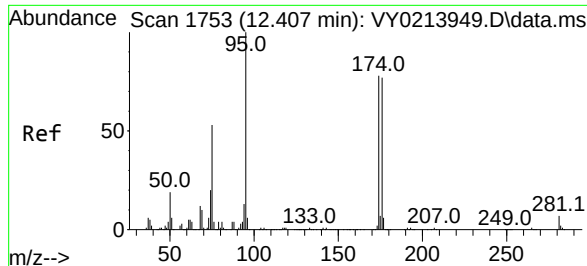
Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025



#52
Toluene
Concen: 7.927 ug/l m
RT: 10.170 min Scan# 1386
Delta R.T. -0.006 min
Lab File: VY021478.D
Acq: 11 Mar 2025 12:01

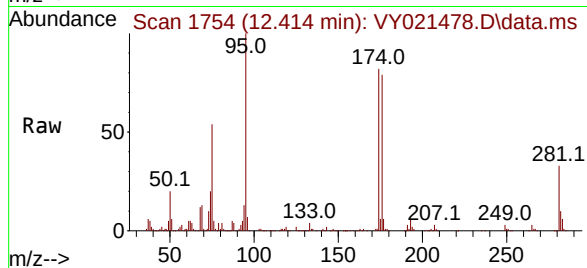
Tgt Ion: 92 Resp: 69898
Ion Ratio Lower Upper
92 100
91 123.1 138.2 207.2





#62
4-Bromofluorobenzene
Concen: 37.103 ug/l
RT: 12.414 min Scan# 1754
Delta R.T. 0.006 min
Lab File: VY021478.D
Acq: 11 Mar 2025 12:01

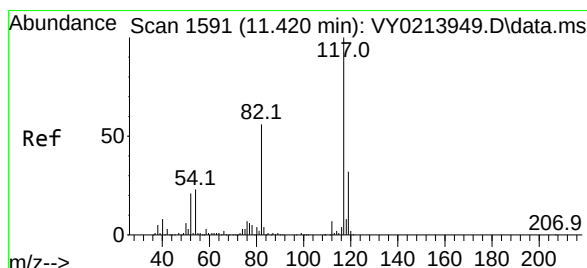
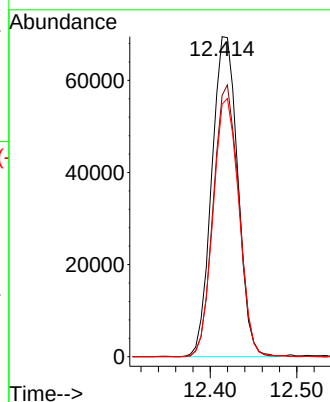
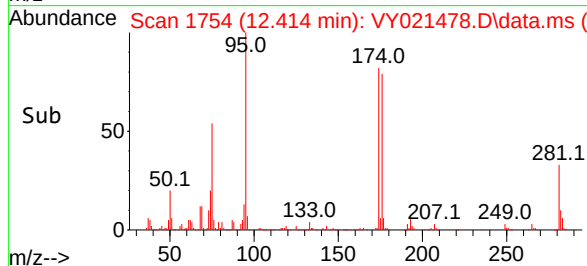
Instrument :
MSVOA_Y
ClientSampleId :
T2



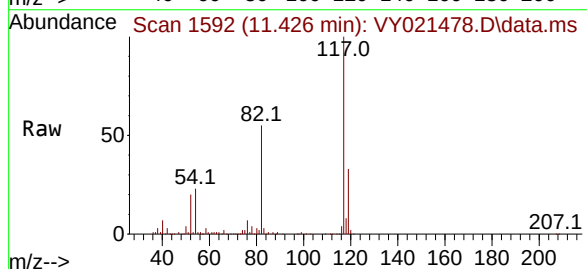
Tgt Ion: 95 Resp: 14494
Ion Ratio Lower Upper
95 100
174 83.2 0.0 165.0
176 80.4 0.0 160.0

Manual Integrations
APPROVED

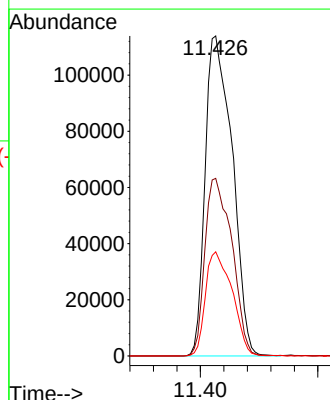
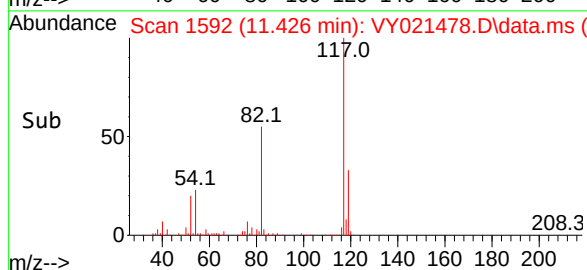
Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

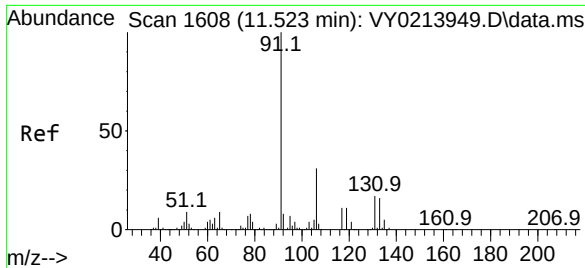


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.426 min Scan# 1592
Delta R.T. 0.006 min
Lab File: VY021478.D
Acq: 11 Mar 2025 12:01



Tgt Ion:117 Resp: 363901
Ion Ratio Lower Upper
117 100
82 55.5 44.6 67.0
119 32.5 25.4 38.0





#67

Ethyl Benzene

Concen: 1.667 ug/l

RT: 11.524 min Scan# 1608

Delta R.T. 0.000 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

Instrument :

MSVOA_Y

ClientSampleId :

T2

Tgt Ion: 91 Resp: 25130

Ion Ratio Lower Upper

91 100

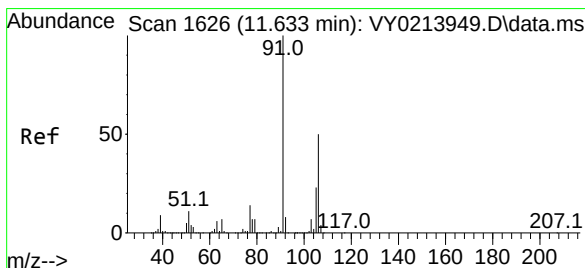
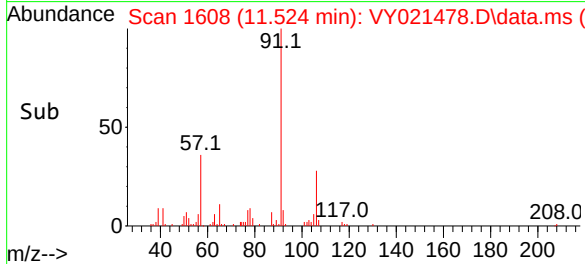
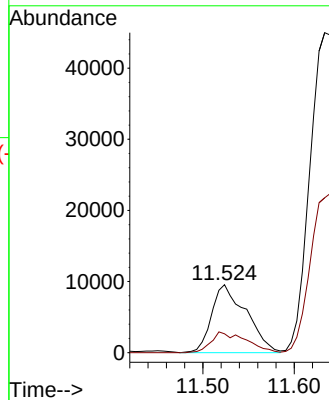
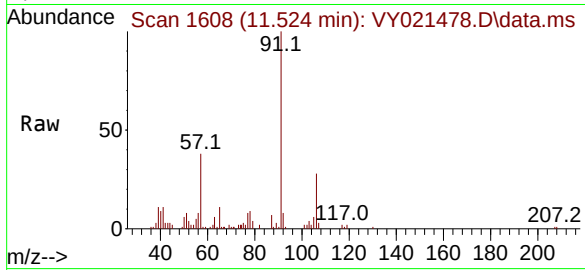
106 27.7 24.6 36.8

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025



#68

m/p-Xylenes

Concen: 11.011 ug/l

RT: 11.639 min Scan# 1627

Delta R.T. 0.006 min

Lab File: VY021478.D

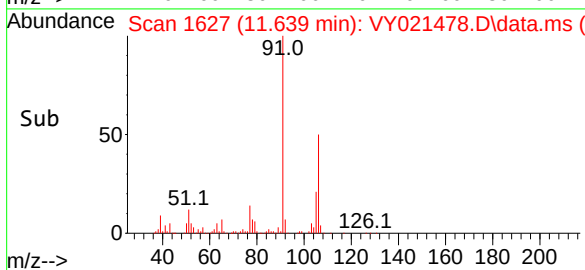
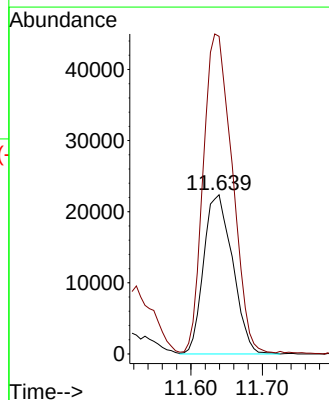
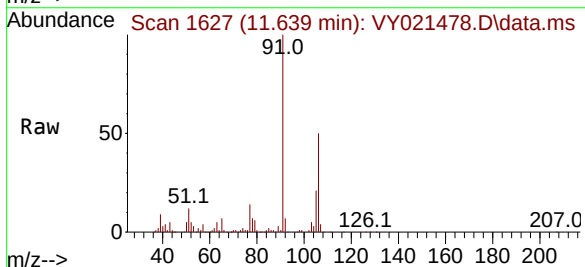
Acq: 11 Mar 2025 12:01

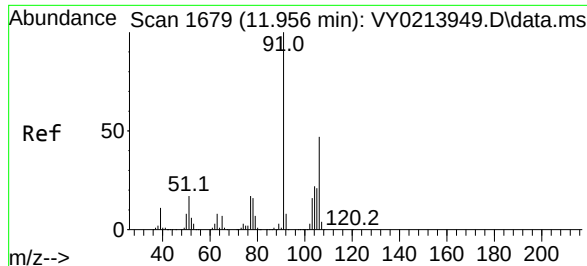
Tgt Ion:106 Resp: 63055

Ion Ratio Lower Upper

106 100

91 199.9 161.7 242.5





#69

o-Xylene

Concen: 4.220 ug/l

RT: 11.956 min Scan# 1

Delta R.T. 0.000 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

Instrument :

MSVOA_Y

ClientSampleId :

T2

Tgt Ion:106 Resp: 2227

Ion Ratio Lower Upper

106 100

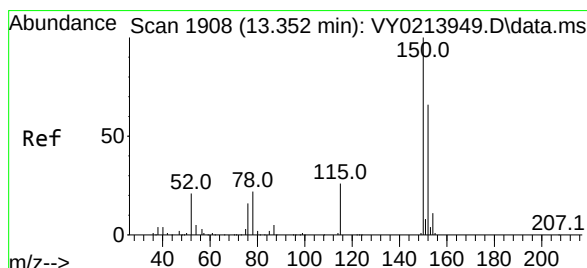
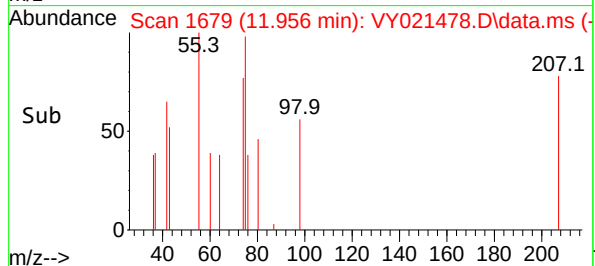
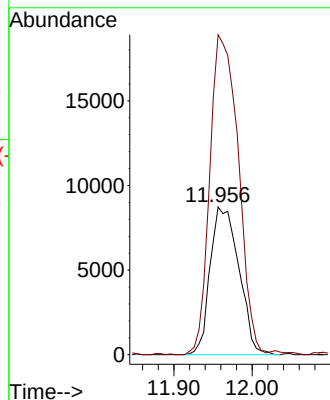
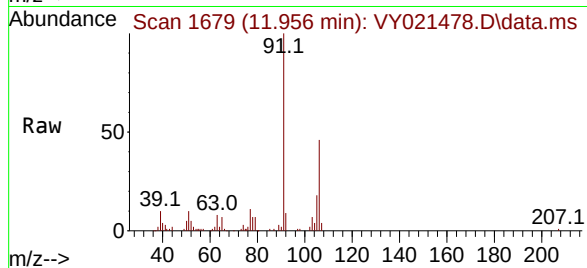
91 214.7 107.6 322.8

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.353 min Scan# 1908

Delta R.T. 0.000 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

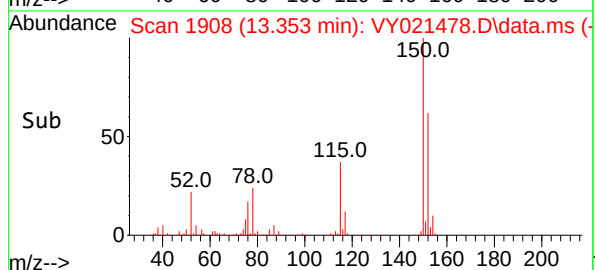
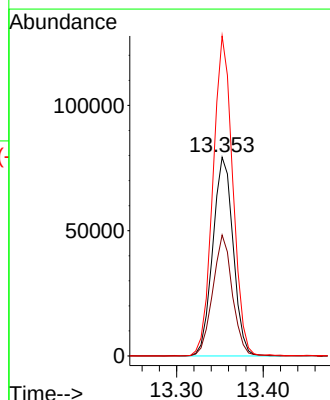
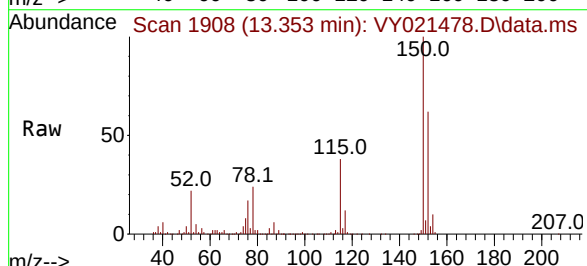
Tgt Ion:152 Resp: 129475

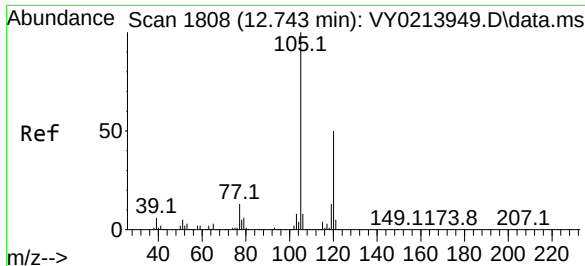
Ion Ratio Lower Upper

152 100

115 59.0 29.0 87.0

150 156.6 0.0 347.2





#80

1,3,5-Trimethylbenzene

Concen: 2.104 ug/l

RT: 12.743 min Scan# 1808

Delta R.T. 0.000 min

Lab File: VY021478.D

Acq: 11 Mar 2025 12:01

Instrument :

MSVOA_Y

ClientSampleId :

T2

Tgt Ion:105 Resp: 17440

Ion Ratio Lower Upper

105 100

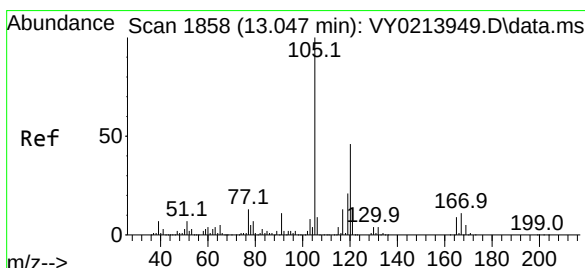
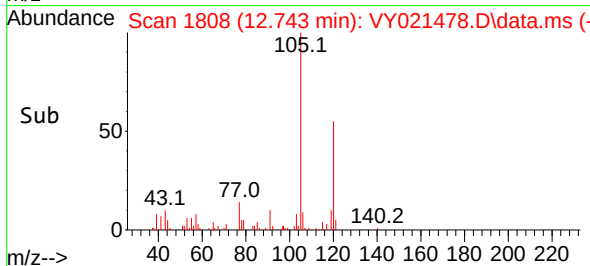
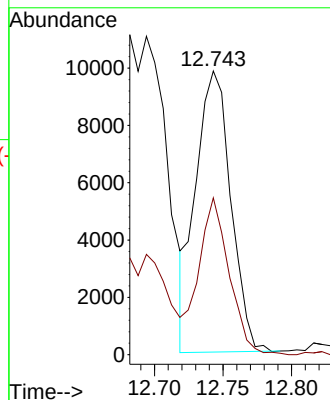
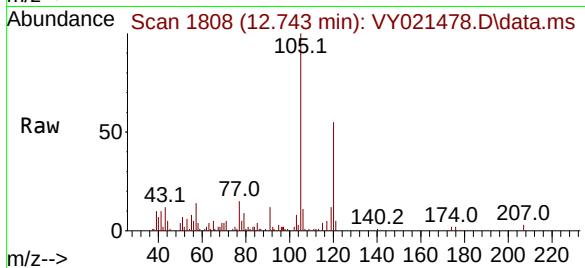
120 49.0 24.6 73.6

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025



#84

1,2,4-Trimethylbenzene

Concen: 3.680 ug/l

RT: 13.048 min Scan# 1858

Delta R.T. 0.000 min

Lab File: VY021478.D

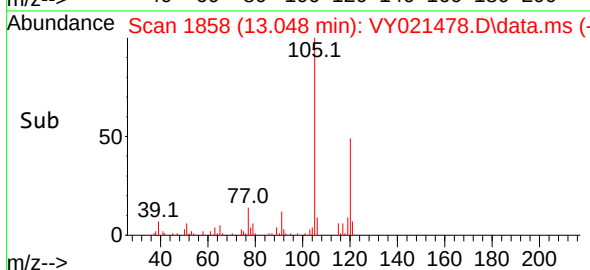
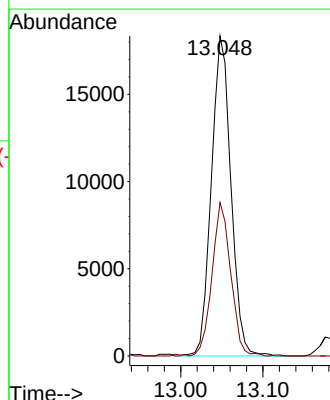
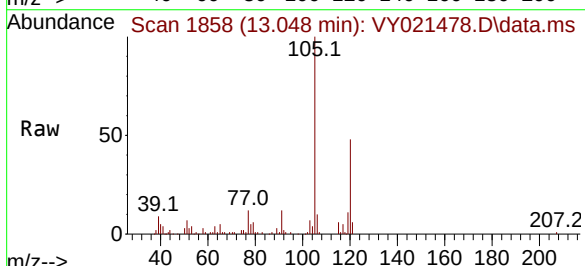
Acq: 11 Mar 2025 12:01

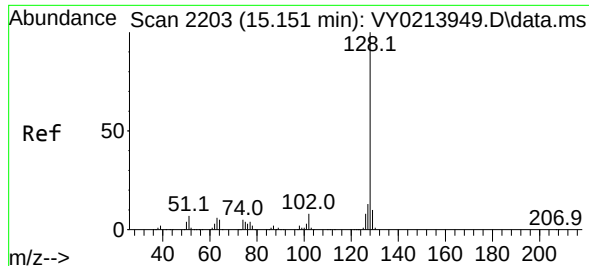
Tgt Ion:105 Resp: 30286

Ion Ratio Lower Upper

105 100

120 45.8 22.7 68.1





#95

Naphthalene

Concen: 2.557 ug/l

RT: 15.151 min Scan# 21

Delta R.T. 0.000 min

Lab File: VY021478.D

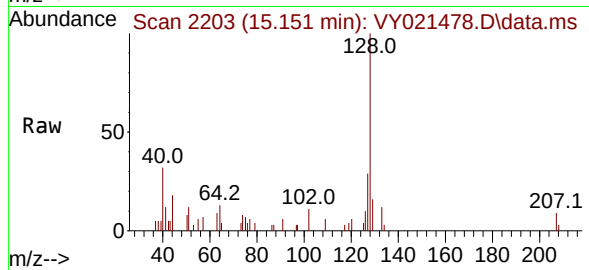
Acq: 11 Mar 2025 12:01

Instrument :

MSVOA_Y

ClientSampleId :

T2

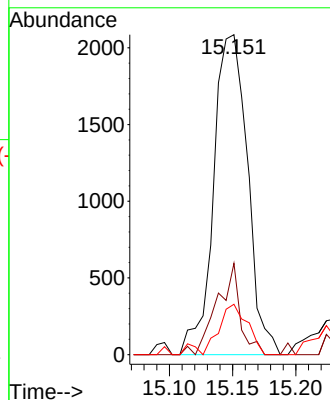
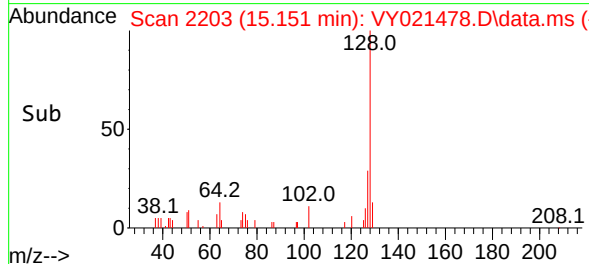


Tgt Ion:	128	Resp:	389
Ion	Ratio	Lower	Upper
128	100		
127	19.5	10.6	15.8
129	14.2	8.6	13.0

Manual Integrations

APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021478.D
 Acq On : 11 Mar 2025 12:01
 Operator : SY/MD
 Sample : Q1463-02
 Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T2

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: VY021478.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.995	40	45	66	rBV	719774	1311221	87.08%	11.064%
2	2.147	67	70	80	rVB	24770	47273	3.14%	0.399%
3	2.348	94	103	110	rBV3	10903	43243	2.87%	0.365%
4	2.489	110	126	127	rBV4	29176	108845	7.23%	0.918%
5	2.531	130	133	138	rVV3	21695	38456	2.55%	0.324%
6	3.830	340	346	347	rBV2	15296	25315	1.68%	0.214%
7	4.525	452	460	466	rBV8	25236	91325	6.06%	0.771%
8	6.378	753	764	800	rVB2	317123	1505794	100.00%	12.705%
9	7.628	958	969	971	rBV2	70663	184070	12.22%	1.553%
10	7.683	972	978	987	rVB	236939	610004	40.51%	5.147%
11	8.055	1030	1039	1055	rBV2	80507	278613	18.50%	2.351%
12	8.213	1059	1065	1079	rVB7	20087	75222	5.00%	0.635%
13	8.603	1120	1129	1142	rBV	249494	800006	53.13%	6.750%
14	8.719	1143	1148	1178	rVB2	59478	301917	20.05%	2.547%
15	9.091	1199	1209	1214	rBV7	7289	18030	1.20%	0.152%
16	9.530	1272	1281	1286	rBV4	7886	18345	1.22%	0.155%
17	9.658	1297	1302	1310	rVB3	9525	19282	1.28%	0.163%
18	10.103	1367	1375	1381	rBV	435665	1026662	68.18%	8.663%
19	10.164	1381	1385	1399	rVB2	211857	614751	40.83%	5.187%
20	10.512	1435	1442	1457	rVB	21781	65818	4.37%	0.555%
21	10.640	1457	1463	1472	rBV3	10403	22073	1.47%	0.186%
22	11.194	1551	1554	1558	rVV2	10994	20120	1.34%	0.170%
23	11.243	1559	1562	1568	rVB3	9890	17985	1.19%	0.152%
24	11.426	1582	1592	1603	rBV	356591	1172949	77.90%	9.897%
25	11.524	1603	1608	1619	rVV3	32650	105676	7.02%	0.892%
26	11.633	1619	1626	1642	rVB	144176	405347	26.92%	3.420%
27	11.963	1668	1680	1692	rBV3	55899	155978	10.36%	1.316%
28	12.261	1724	1729	1739	rVB3	21788	44398	2.95%	0.375%
29	12.420	1746	1755	1764	rBV2	454368	925130	61.44%	7.806%
30	12.670	1790	1796	1799	rBV	46937	95200	6.32%	0.803%
31	12.737	1803	1807	1814	rVV2	38328	80848	5.37%	0.682%
32	12.816	1815	1820	1828	rVB	32474	63014	4.18%	0.532%
33	12.901	1828	1834	1841	rBV	20052	36177	2.40%	0.305%
34	13.048	1853	1858	1864	rBV	51399	83896	5.57%	0.708%
35	13.206	1873	1884	1888	rBV2	17059	39193	2.60%	0.331%
36	13.353	1902	1908	1927	rVB	495504	888595	59.01%	7.498%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

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

37	13.548	1936	1940	1944	rVV	27351	51893	3.45%	0.438%
38	13.590	1944	1947	1956	rVB4	28156	54858	3.64%	0.463%
39	13.676	1956	1961	1965	rBV5	12994	19428	1.29%	0.164%
40	13.810	1978	1983	1985	rBV4	10234	15486	1.03%	0.131%
41	13.889	1990	1996	2003	rVB2	139808	232711	15.45%	1.964%
42	13.999	2010	2014	2020	rVB4	10890	16789	1.11%	0.142%
43	14.133	2030	2036	2041	rBV5	7478	16640	1.11%	0.140%
44	14.261	2053	2057	2060	rVB	12621	18170	1.21%	0.153%
45	14.596	2107	2112	2118	rBV2	12914	26873	1.78%	0.227%
46	15.145	2192	2202	2208	rBV4	6240	15067	1.00%	0.127%
47	15.224	2208	2215	2222	rBV2	12161	24110	1.60%	0.203%
48	15.297	2222	2227	2232	rBV2	11300	18947	1.26%	0.160%

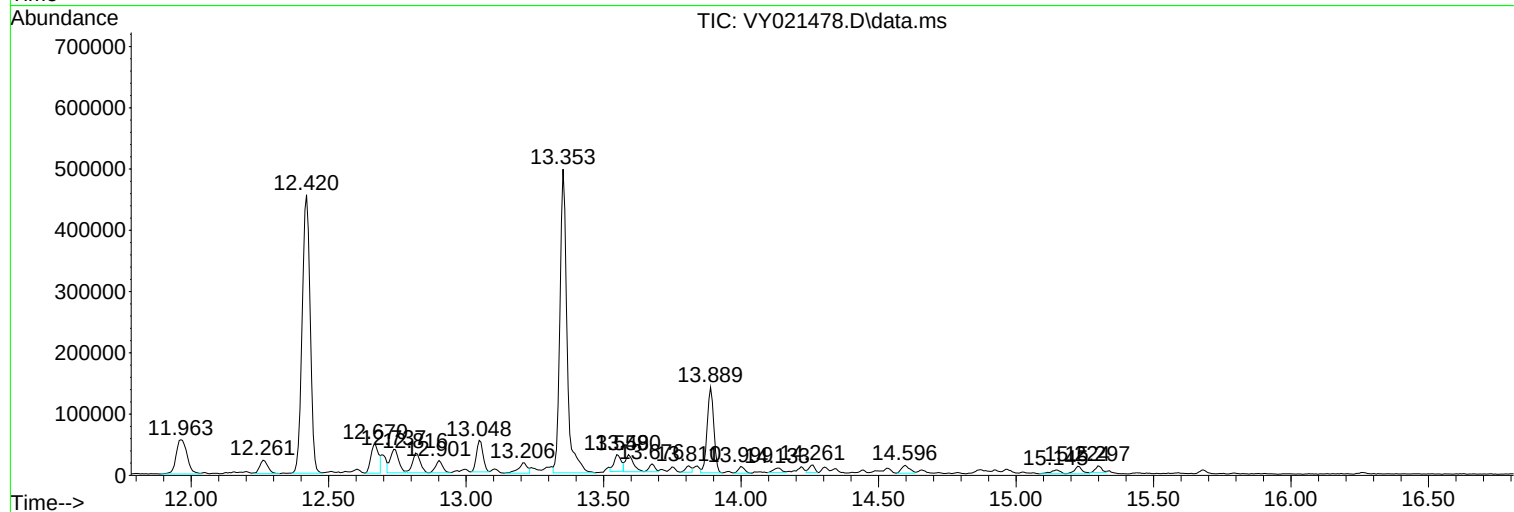
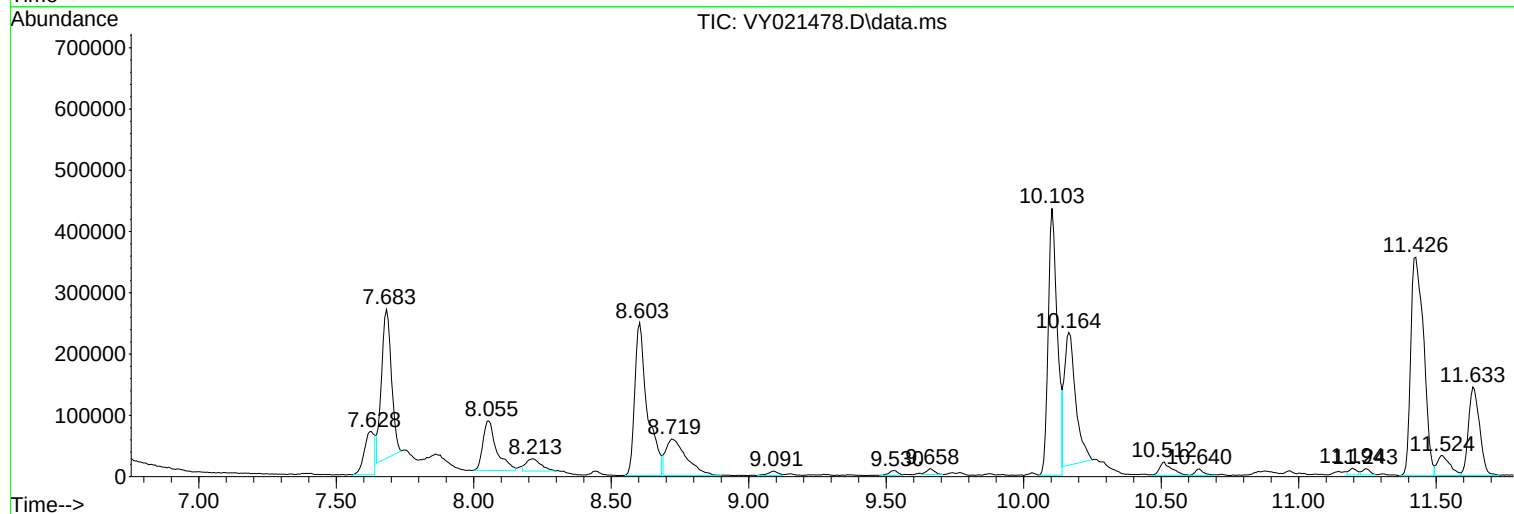
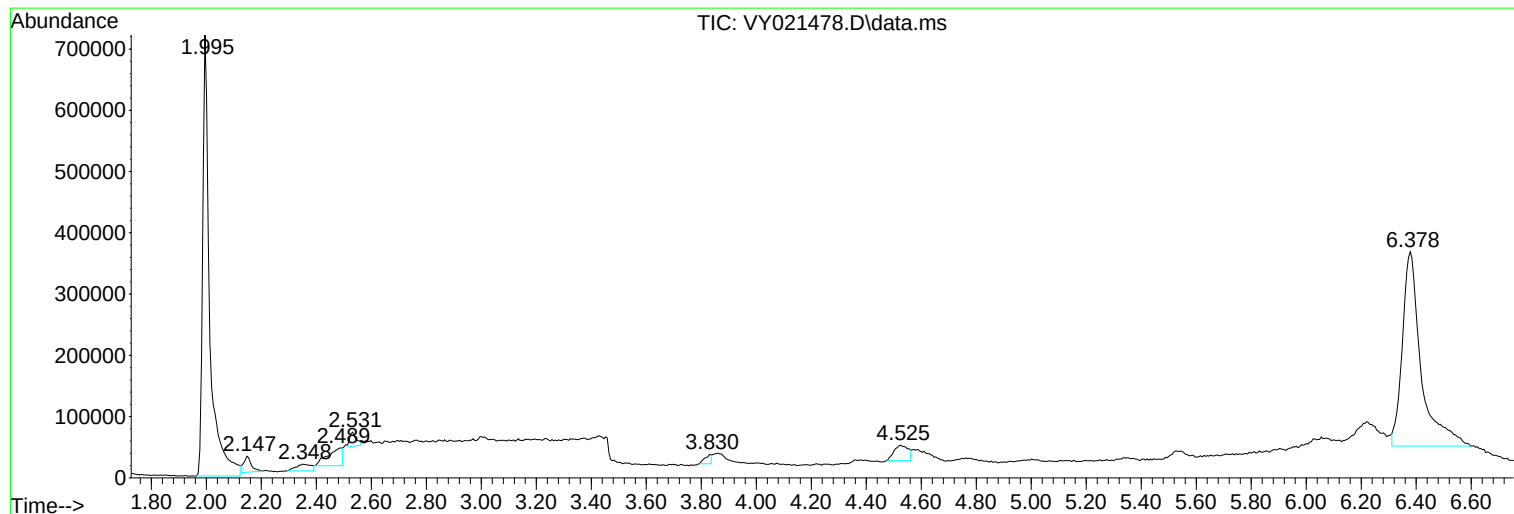
Sum of corrected areas: 11851743

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

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\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

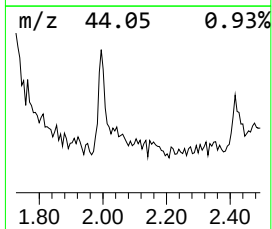
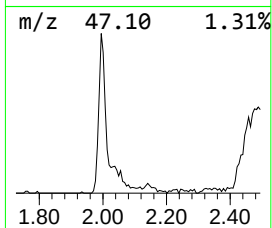
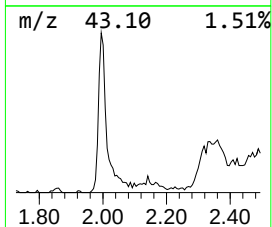
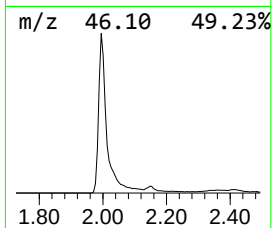
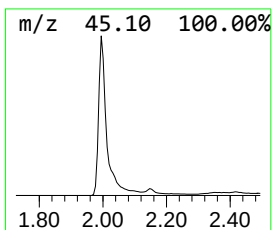
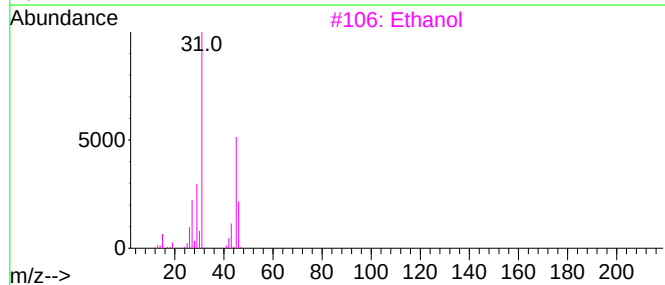
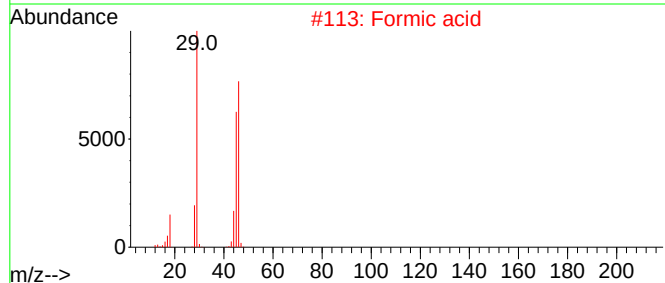
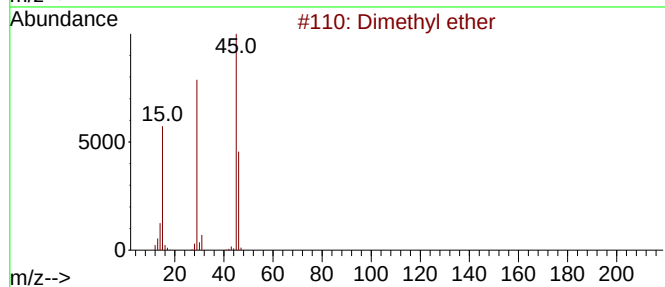
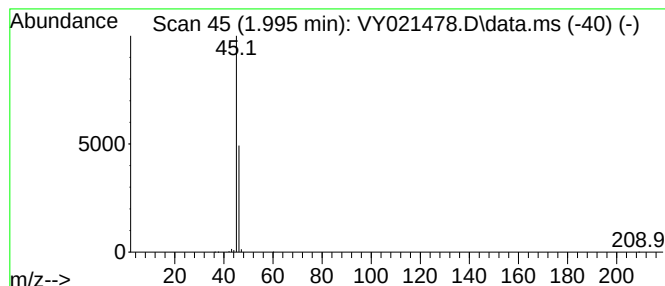
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Quant Title : SW846 8260

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

Peak Number 1 Dimethyl ether Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.995	107.48 ug/l	1311220	Pentafluorobenzene	7.683

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dimethyl ether	46	C2H6O	000115-10-6	90
2			Formic acid	46	CH2O2	000064-18-6	7
3			Ethanol	46	C2H6O	000064-17-5	7
4			Oxalic acid	90	C2H2O4	000144-62-7	4
5			Methane, nitroso-	45	CH3NO	000865-40-7	3



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

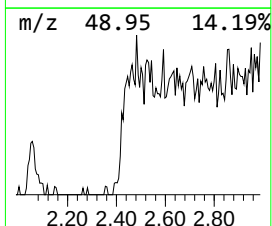
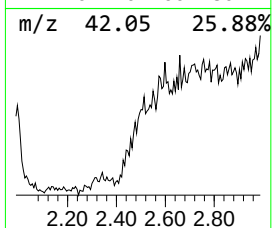
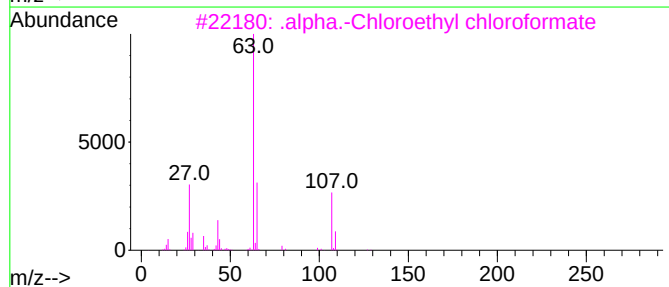
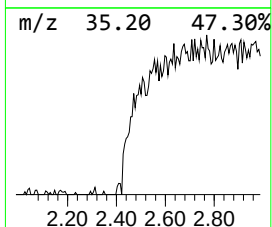
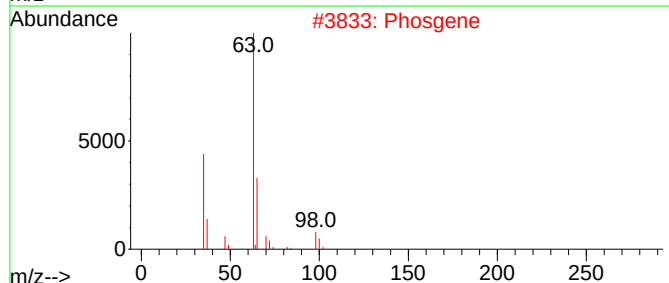
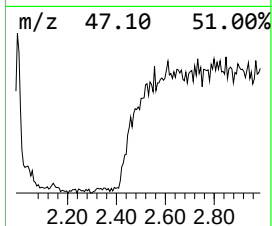
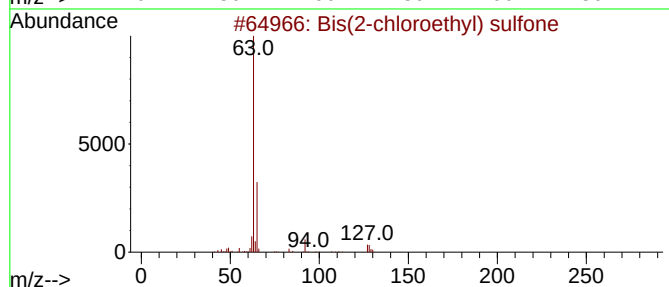
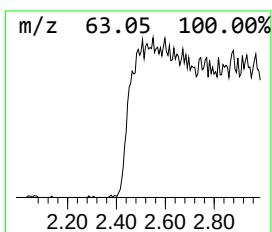
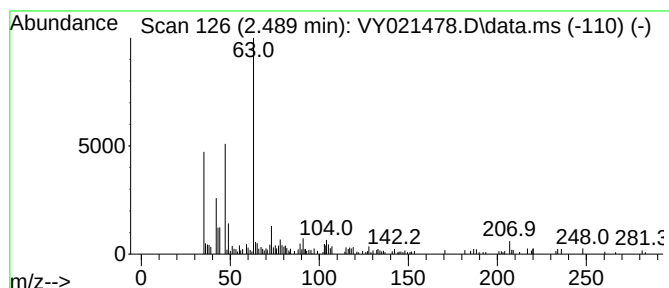
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

Peak Number 2 Bis(2-chloroethyl) sulfone Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.489	8.92 ug/l	108845	Pentafluorobenzene	7.683

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Bis(2-chloroethyl) sulfone	190	C4H8Cl2O2S	000471-03-4	50
2			Phosgene	98	CCl2O	000075-44-5	40
3			.alpha.-Chloroethyl chloroformate	142	C3H4Cl2O2	050893-53-3	25
4			Ethanol, 2-chloro-, phosphite (3:1)	268	C6H12Cl3O3P	000140-08-9	9
5			Carmustine	213	C5H9Cl2N3O2	000154-93-8	9



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

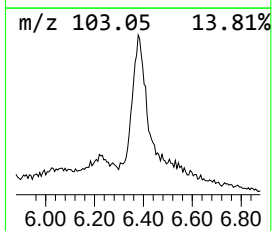
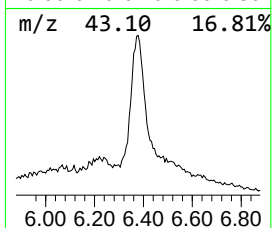
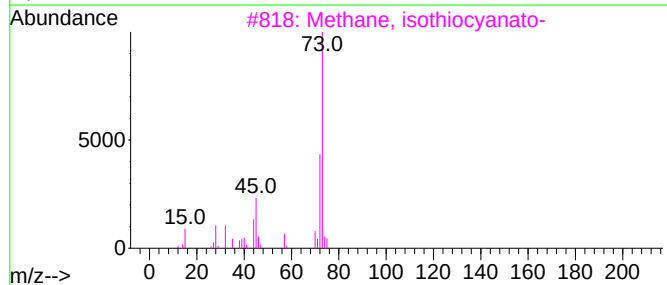
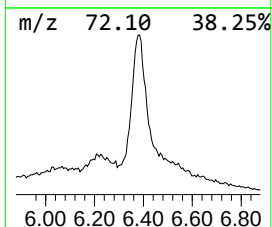
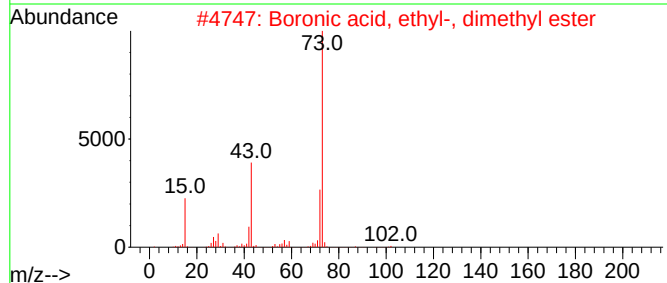
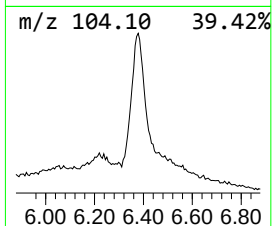
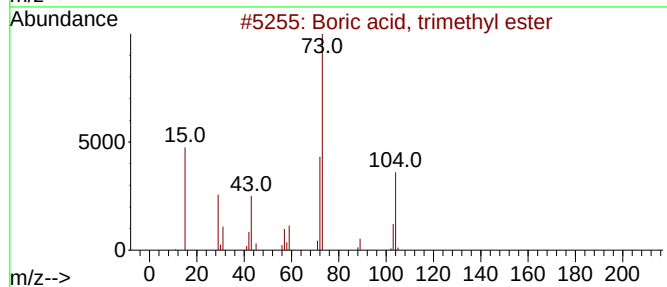
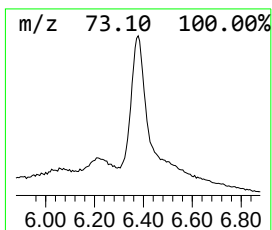
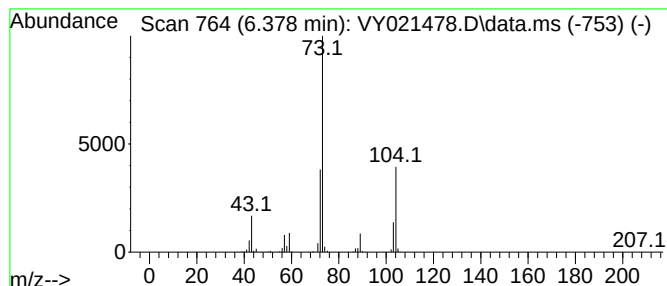
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Quant Title : SW846 8260

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

Peak Number 3 Boric acid, trimethyl ester Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.378	123.43 ug/l	1505790	Pentafluorobenzene	7.683

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Boric acid, trimethyl ester	104	C3H9B03	000121-43-7	91
2			Boronic acid, ethyl-, dimethyl e...	102	C4H11B02	007318-82-3	23
3			Methane, isothiocyanato-	73	C2H3NS	000556-61-6	9
4			Borane, dimethoxy-	74	C2H7B02	004542-61-4	5
5			Guanidine, methyl-	73	C2H7N3	000471-29-4	5



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

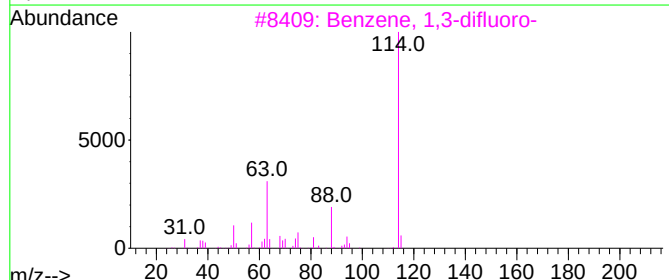
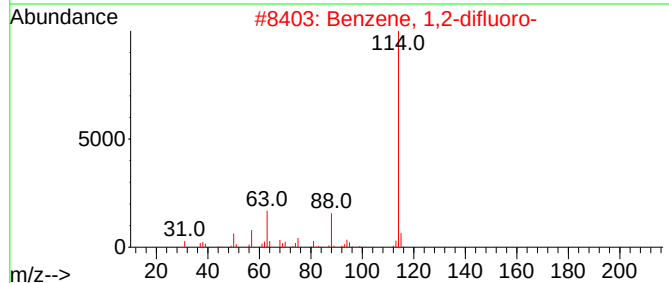
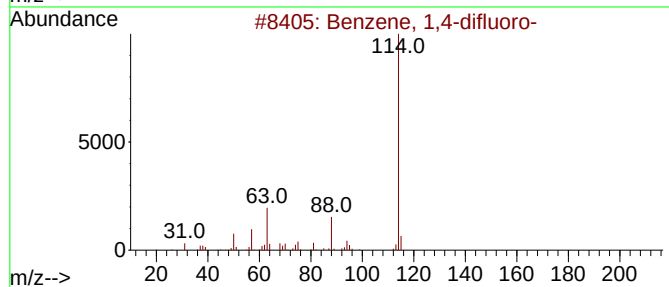
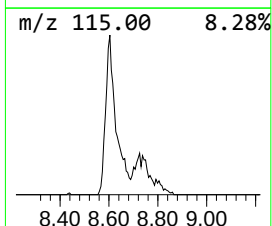
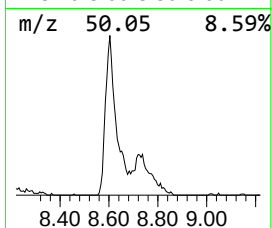
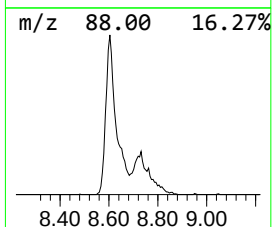
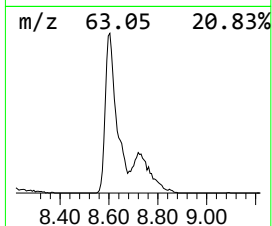
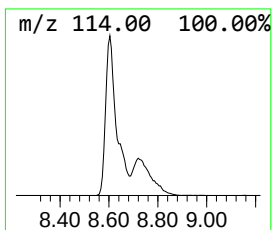
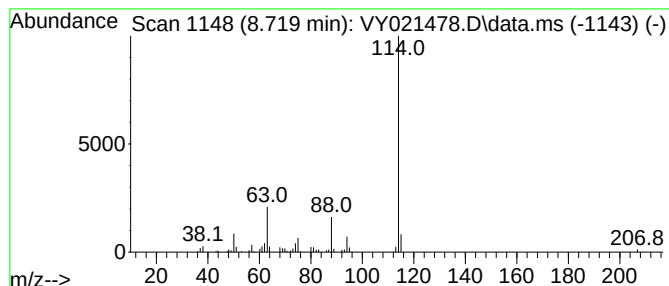
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

Peak Number 4 Benzene, 1,4-difluoro- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.719	18.87 ug/l	301917	1,4-Difluorobenzene	8.603

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1,4-difluoro-	114	C6H4F2	000540-36-3	94
2			Benzene, 1,2-difluoro-	114	C6H4F2	000367-11-3	91
3			Benzene, 1,3-difluoro-	114	C6H4F2	000372-18-9	91
4			Morpholine-4-carboxylic acid 2,6...	391	C12H11Br2N04	1000274-22-3	42
5			3,3,3-Trimethoxypropionitrile	145	C6H11N03	1000430-62-1	28



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

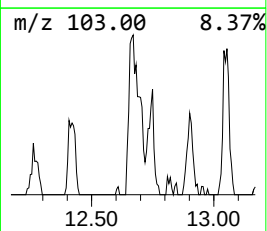
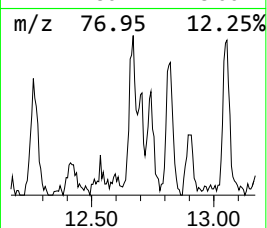
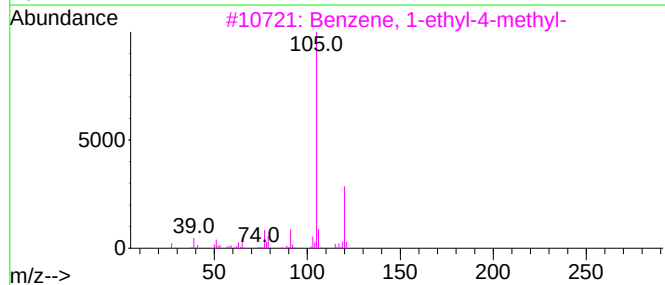
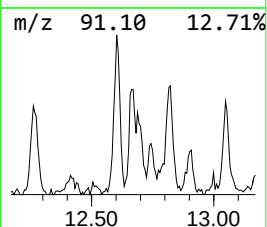
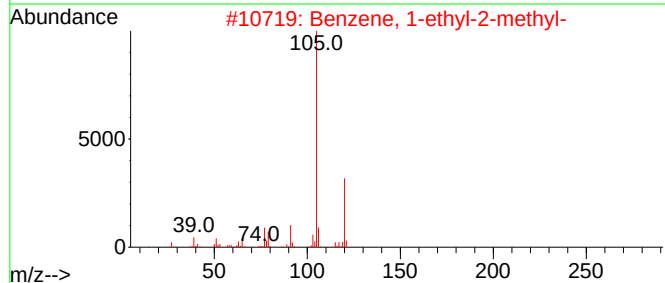
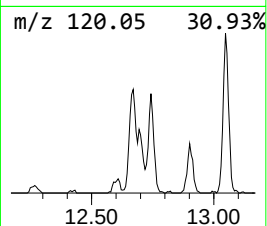
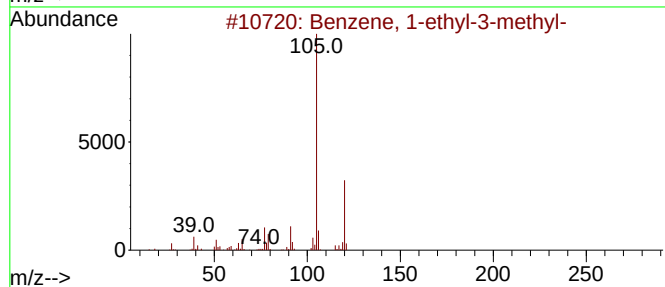
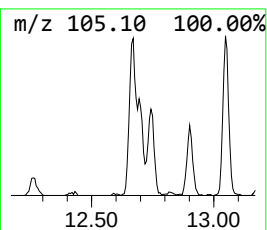
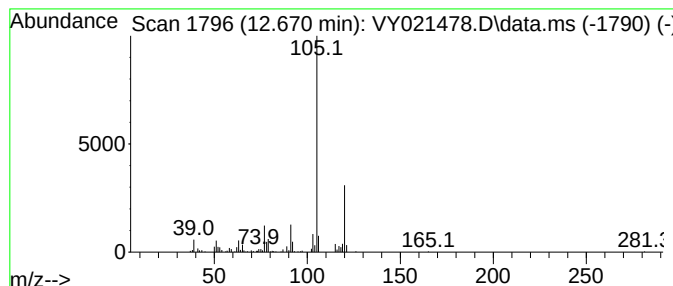
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

Peak Number 5 Benzene, 1-ethyl-3-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.670	5.36 ug/l	95200	1,4-Dichlorobenzene-d4	13.352

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
2			Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
3			Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
4			Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	90
5			Mesitylene	120	C9H12	000108-67-8	90



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021478.D
Acq On : 11 Mar 2025 12:01
Operator : SY/MD
Sample : Q1463-02
Misc : 6.31g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T2

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
Dimethyl ether	1.995	107.5	ug/l	1311220	1	7.683	610004	50.0
Bis(2-chloroeth...	2.489	8.9	ug/l	108845	1	7.683	610004	50.0
Boric acid, tri...	6.378	123.4	ug/l	1505790	1	7.683	610004	50.0
Benzene, 1,4-di...	8.719	18.9	ug/l	301917	2	8.603	800006	50.0
Benzene, 1-ethy...	12.670	5.4	ug/l	95200	4	13.352	888595	50.0

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T3	SDG No.:	Q1463
Lab Sample ID:	Q1463-03	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.7
Sample Wt/Vol:	5.45	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group2

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021455.D	1		03/07/25 12:55	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.20	U	1.20	5.10	ug/Kg
75-01-4	Vinyl Chloride	0.79	U	0.79	5.10	ug/Kg
74-83-9	Bromomethane	1.10	U	1.10	5.10	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.10	ug/Kg
75-65-0	Tert butyl alcohol	16.0	U	16.0	25.6	ug/Kg
75-35-4	1,1-Dichloroethene	0.80	U	0.80	5.10	ug/Kg
67-64-1	Acetone	6.40	U	6.40	25.6	ug/Kg
75-15-0	Carbon Disulfide	1.30	U	1.30	5.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.69	U	0.69	5.10	ug/Kg
75-09-2	Methylene Chloride	3.50	U	3.50	10.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.86	U	0.86	5.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.64	U	0.64	5.10	ug/Kg
78-93-3	2-Butanone	5.80	U	5.80	25.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.89	U	0.89	5.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.62	U	0.62	5.10	ug/Kg
67-66-3	Chloroform	0.69	U	0.69	5.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.80	U	0.80	5.10	ug/Kg
71-43-2	Benzene	6.00		0.74	5.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.62	U	0.62	5.10	ug/Kg
79-01-6	Trichloroethene	0.77	U	0.77	5.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.68	U	0.68	5.10	ug/Kg
75-27-4	Bromodichloromethane	0.57	U	0.57	5.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.40	U	4.40	25.6	ug/Kg
108-88-3	Toluene	11.8		0.69	5.10	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.61	U	0.61	5.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.58	U	0.58	5.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.86	U	0.86	5.10	ug/Kg
591-78-6	2-Hexanone	4.90	U	4.90	25.6	ug/Kg
124-48-1	Dibromochloromethane	0.66	U	0.66	5.10	ug/Kg
127-18-4	Tetrachloroethene	1.50	J	0.91	5.10	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T3	SDG No.:	Q1463
Lab Sample ID:	Q1463-03	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.7
Sample Wt/Vol:	5.45	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021455.D	1		03/07/25 12:55	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.76	U	0.76	5.10	ug/Kg
100-41-4	Ethyl Benzene	3.50	J	0.63	5.10	ug/Kg
179601-23-1	m/p-Xylenes	18.6		1.40	10.2	ug/Kg
95-47-6	o-Xylene	8.70		0.72	5.10	ug/Kg
100-42-5	Styrene	0.61	U	0.61	5.10	ug/Kg
75-25-2	Bromoform	0.83	U	0.83	5.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	38.9		70 (63) - 130 (155)	78%	SPK: 50
1868-53-7	Dibromofluoromethane	35.2		70 (70) - 130 (134)	70%	SPK: 50
2037-26-5	Toluene-d8	47.7		70 (74) - 130 (123)	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	33.3	*	70 (38) - 130 (136)	67%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	305000	7.683			
540-36-3	1,4-Difluorobenzene	465000	8.603			
3114-55-4	Chlorobenzene-d5	350000	11.426			
3855-82-1	1,4-Dichlorobenzene-d4	111000	13.359			
TENTATIVE IDENTIFIED COMPOUNDS						
000115-10-6	Dimethyl ether	57.8	J		2.00	ug/Kg
000121-43-7	Boric acid, trimethyl ester	61.4	J		6.37	ug/Kg
000589-34-4	Hexane, 3-methyl-	7.10	J		7.88	ug/Kg
000540-84-1	Pentane, 2,2,4-trimethyl-	21.2	J		8.22	ug/Kg
000142-82-5	Heptane	7.90	J		8.45	ug/Kg
108-87-2	Methylcyclohexane	4.80	J		9.09	ug/Kg
000565-75-3	Pentane, 2,3,4-trimethyl-	14.3	J		9.53	ug/Kg
000921-47-1	Hexane, 2,3,4-trimethyl-	21.7	J		9.66	ug/Kg
000589-81-1	Heptane, 3-methyl-	5.70	J		9.87	ug/Kg
000111-65-9	Octane	5.10	J		10.3	ug/Kg
98-82-8	Isopropylbenzene	1.40	J		12.3	ug/Kg
103-65-1	n-propylbenzene	1.40	J		12.6	ug/Kg
000611-14-3	Benzene, 1-ethyl-2-methyl-	9.80	J		12.7	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	4.10	J		12.7	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T3	SDG No.:	Q1463
Lab Sample ID:	Q1463-03	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	89.7
Sample Wt/Vol:	5.45 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021455.D	1		03/07/25 12:55	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000127-91-3	.beta.-Pinene	8.20	J		12.8	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	7.20	J		13.1	ug/Kg
056862-62-5	10-Methylnonadecane	6.40	J		13.2	ug/Kg
001074-55-1	Benzene, 1-methyl-4-propyl-	8.80	J		13.6	ug/Kg
91-20-3	Naphthalene	2.80	J		15.1	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021455.D
 Acq On : 07 Mar 2025 12:55
 Operator : SY/MD
 Sample : Q1463-03
 Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T3

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 22:00:39 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	7.683	168	305147m	50.000	ug/l	-0.03
34) 1,4-Difluorobenzene	8.603	114	465424m	50.000	ug/l	-0.02
63) Chlorobenzene-d5	11.426	117	350362	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.359	152	111224	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.055	65	125328m	38.859	ug/l	-0.01
Spiked Amount 50.000	Range 50 - 163		Recovery =	77.720%		
35) Dibromofluoromethane	7.634	113	107812m	35.241	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery =	70.480%		
50) Toluene-d8	10.103	98	552784m	47.722	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery =	95.440%		
62) 4-Bromofluorobenzene	12.420	95	131390	33.346	ug/l	0.01
Spiked Amount 50.000	Range 30 - 143		Recovery =	66.700%		
Target Compounds						Qvalue
39) Methylcyclohexane	9.085	83	27700	4.716	ug/l	96
40) Benzene	8.061	78	83204	5.898	ug/l	99
52) Toluene	10.170	92	102690m	11.546	ug/l	
64) Tetrachloroethene	10.646	164	4127	1.449	ug/l	96
67) Ethyl Benzene	11.524	91	49798	3.429	ug/l	98
68) m/p-Xylenes	11.633	106	100473	18.224	ug/l	98
69) o-Xylene	11.963	106	43016	8.466	ug/l	99
73) Isopropylbenzene	12.267	105	12235	1.396	ug/l	89
78) n-propylbenzene	12.609	91	14148	1.330	ug/l	95
80) 1,3,5-Trimethylbenzene	12.743	105	28702	4.031	ug/l	98
84) 1,2,4-Trimethylbenzene	13.054	105	49540	7.008	ug/l	98
95) Naphthalene	15.145	128	4032	2.785	ug/l	94

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

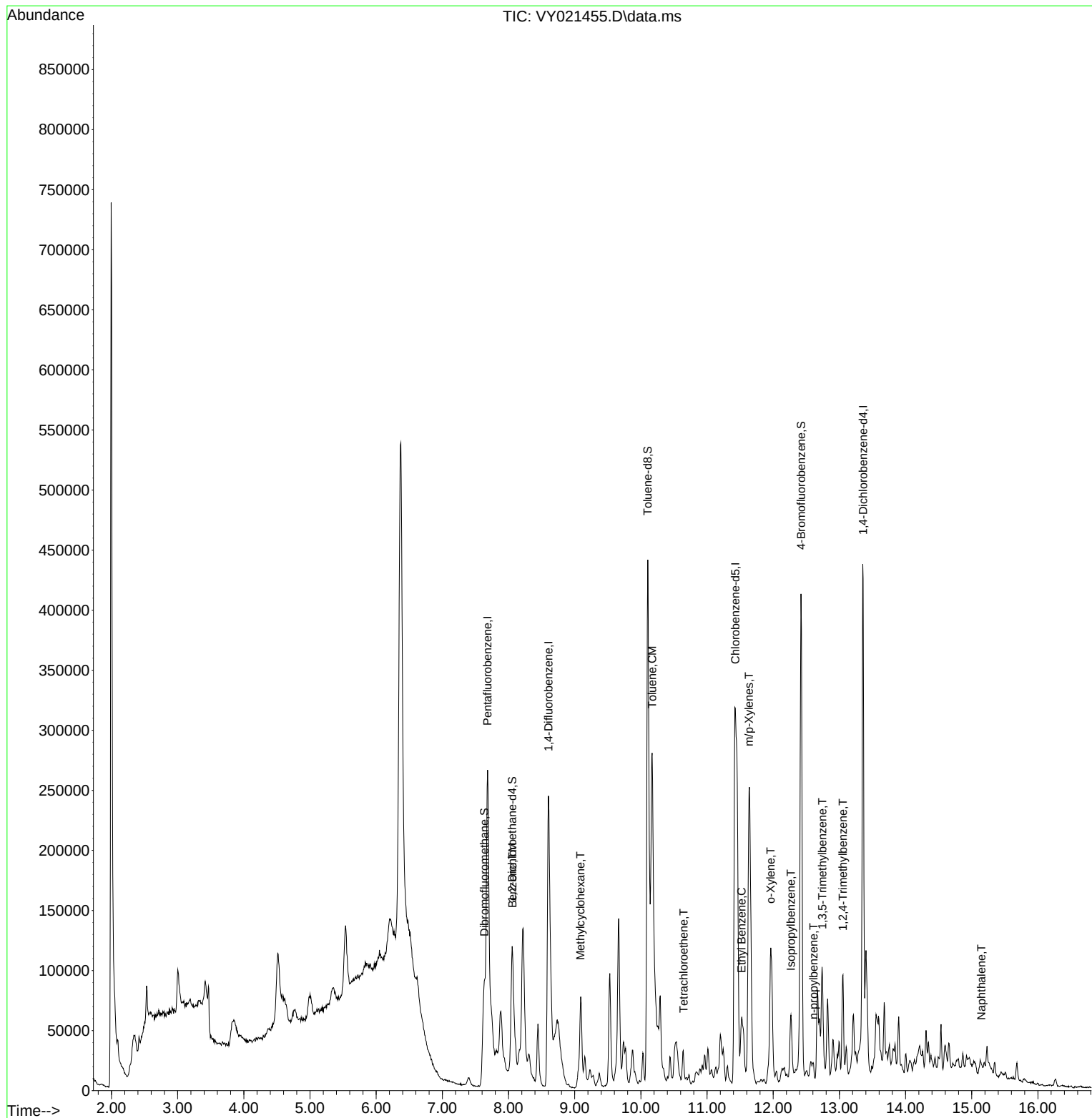
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Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

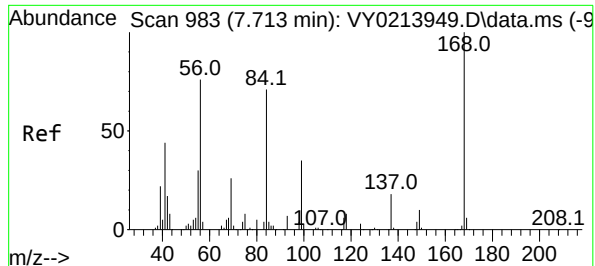
Instrument :
MSVOA_Y
ClientSampleId :
T3

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025

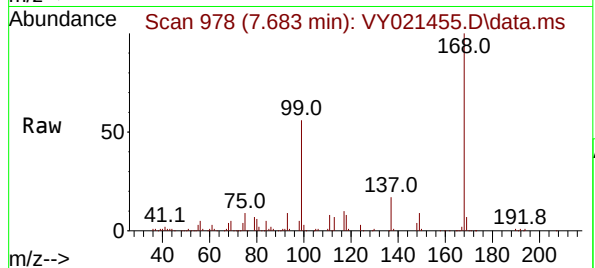
Quant Time: Mar 07 22:00:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260
QLast Update : Wed Mar 05 12:42:45 2025
Response via : Initial Calibration





#1
Pentafluorobenzene
Concen: 50.000 ug/l m
RT: 7.683 min Scan# 91
Delta R.T. -0.030 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

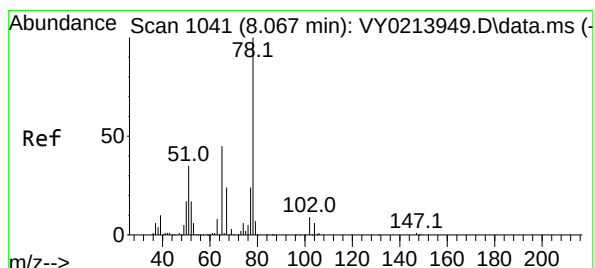
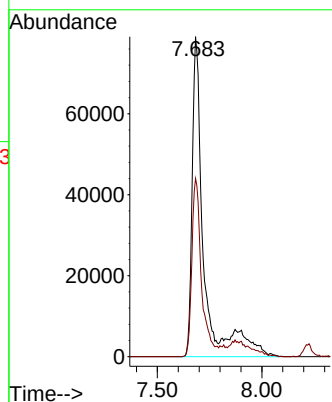
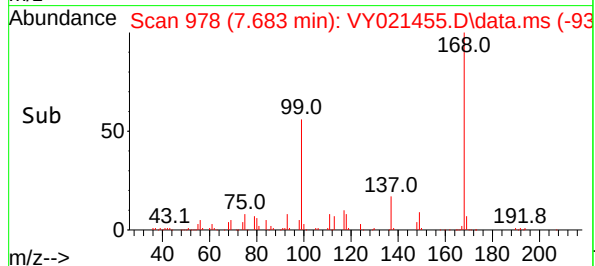
Instrument :
MSVOA_Y
ClientSampleId :
T3



Tgt Ion: 168 Resp: 30514
Ion Ratio Lower Upper
168 100
99 55.7 46.0 69.0

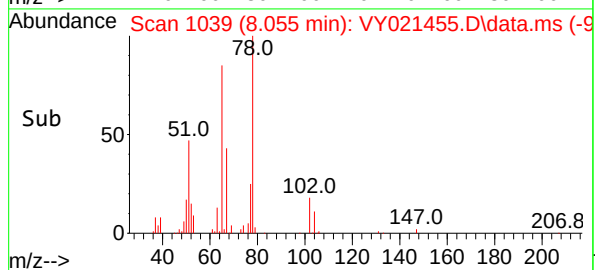
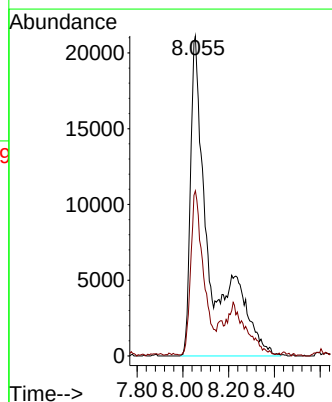
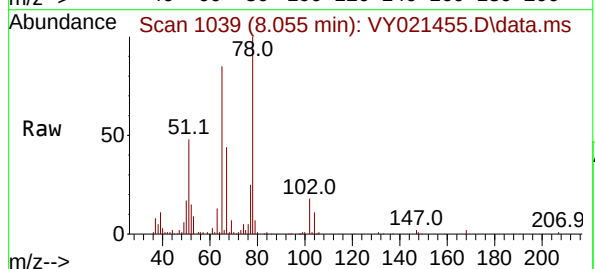
Manual Integrations
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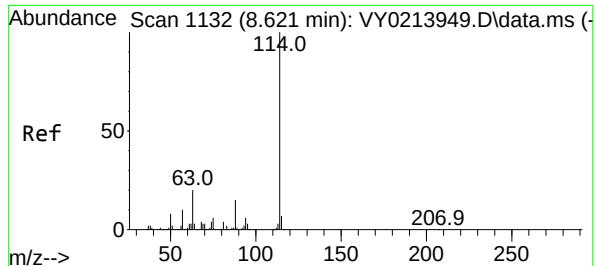
Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025



#33
1,2-Dichloroethane-d4
Concen: 38.859 ug/l m
RT: 8.055 min Scan# 1039
Delta R.T. -0.012 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

Tgt Ion: 65 Resp: 125328
Ion Ratio Lower Upper
65 100
67 33.7 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l m

RT: 8.603 min Scan# 1132

Delta R.T. -0.018 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

Instrument :

MSVOA_Y

ClientSampleId :

T3

Tgt Ion:114 Resp: 465424

Ion Ratio Lower Upper

114 100

63 20.4 0.0 40.8

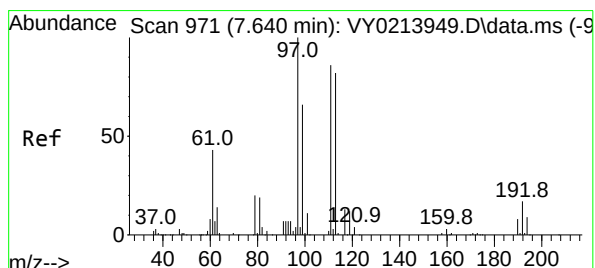
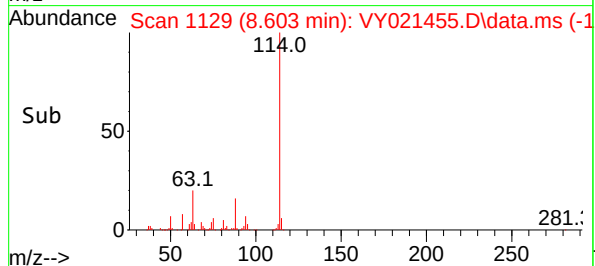
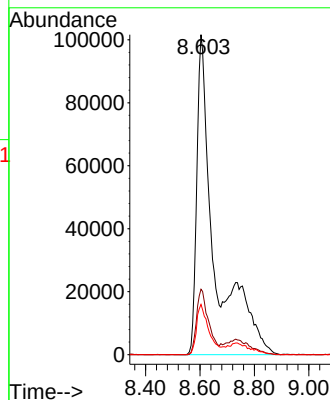
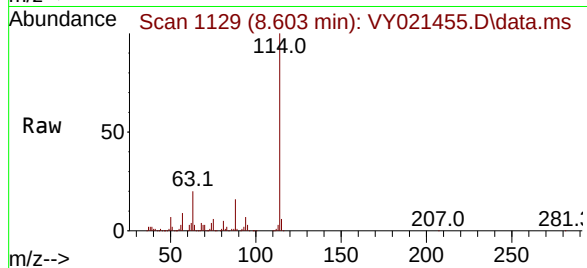
88 15.7 0.0 30.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025

Supervised By :Semsettin Yesilyurt 03/11/2025



#35

Dibromofluoromethane

Concen: 35.241 ug/l m

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

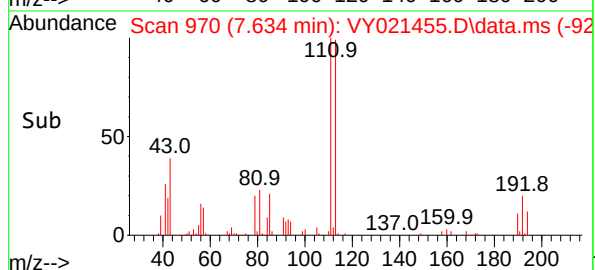
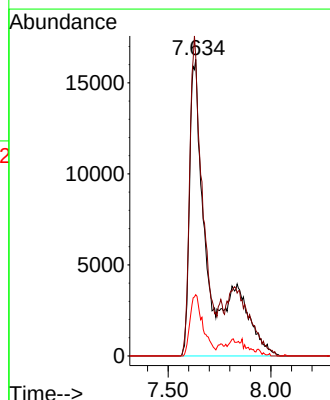
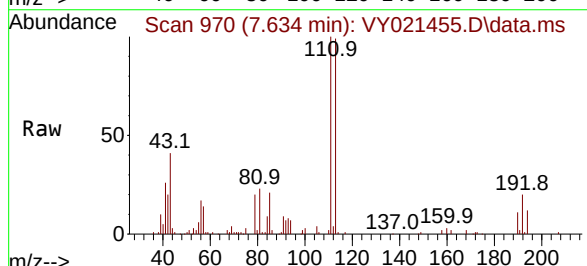
Tgt Ion:113 Resp: 107812

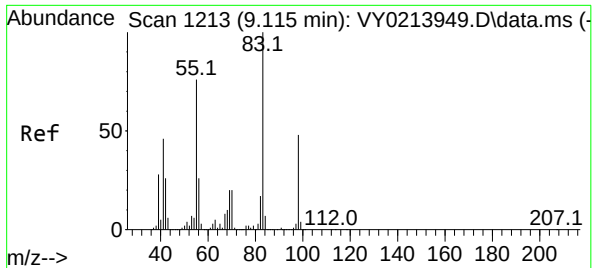
Ion Ratio Lower Upper

113 100

111 71.1 82.0 123.0#

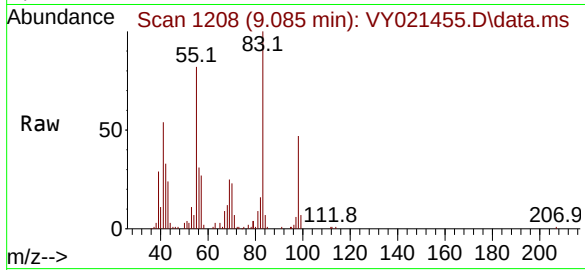
192 13.8 15.9 23.9#





#39
Methylcyclohexane
Concen: 4.716 ug/l
RT: 9.085 min Scan# 11
Delta R.T. -0.030 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

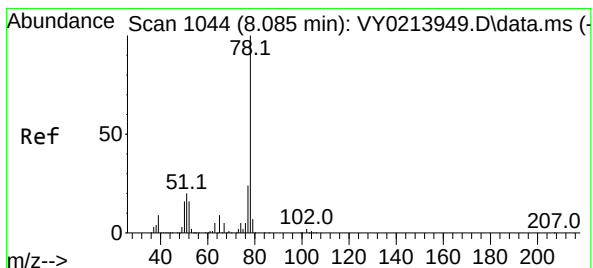
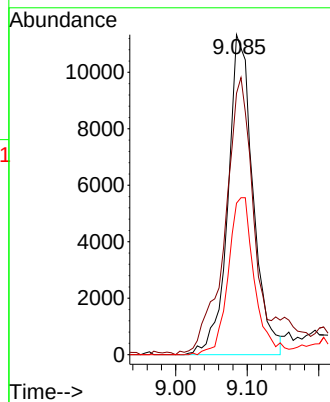
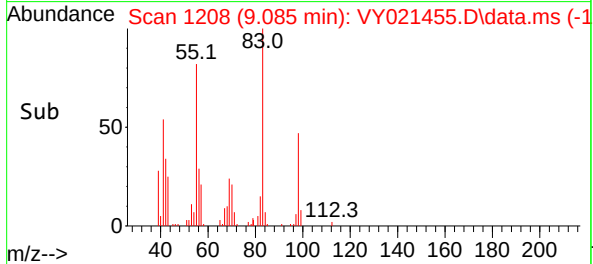
Instrument :
MSVOA_Y
ClientSampleId :
T3



Tgt Ion: 83 Resp: 27700
Ion Ratio Lower Upper
83 100
55 80.6 60.7 91.1
98 47.4 38.6 57.8

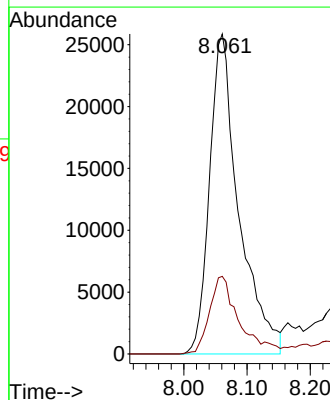
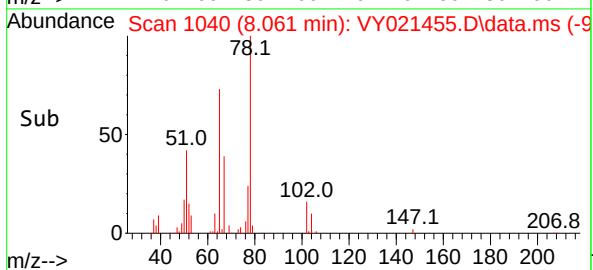
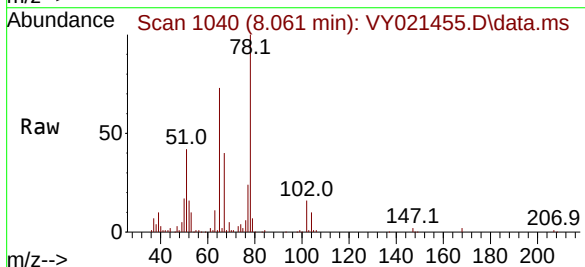
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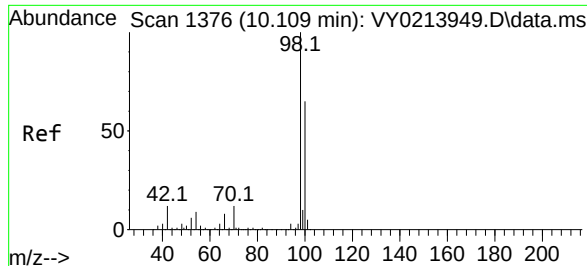
Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025



#40
Benzene
Concen: 5.898 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.024 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

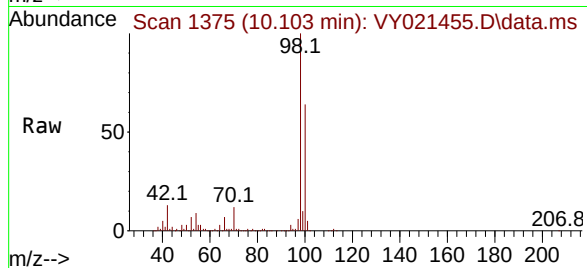
Tgt Ion: 78 Resp: 83204
Ion Ratio Lower Upper
78 100
77 24.2 19.0 28.4





#50
Toluene-d8
Concen: 47.722 ug/l m
RT: 10.103 min Scan# 1376
Delta R.T. -0.006 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

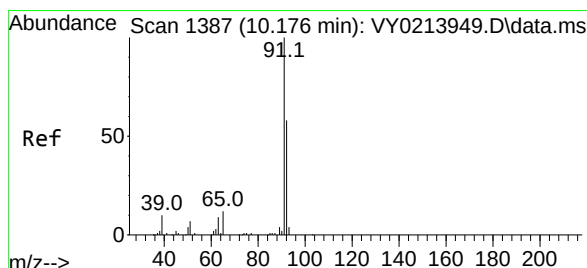
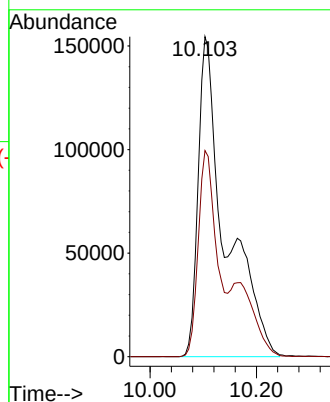
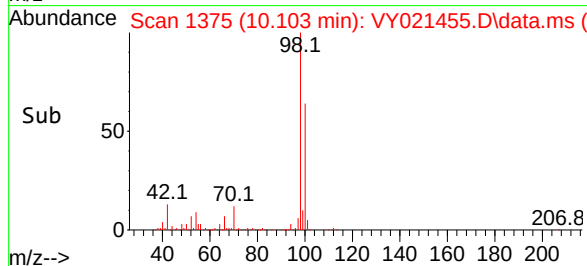
Instrument :
MSVOA_Y
ClientSampleId :
T3



Tgt Ion: 98 Resp: 552784
Ion Ratio Lower Upper
98 100
100 44.1 52.1 78.1

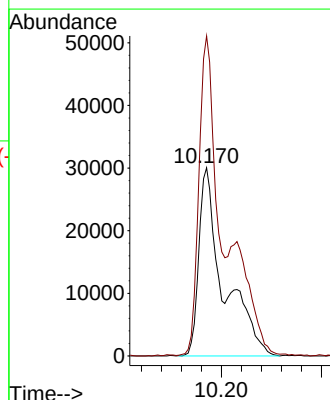
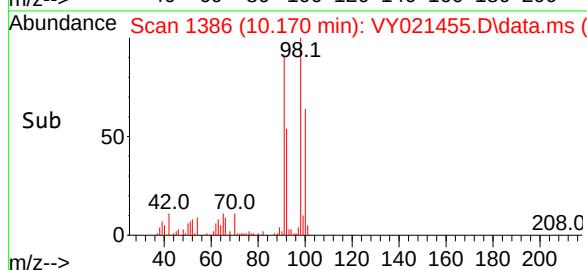
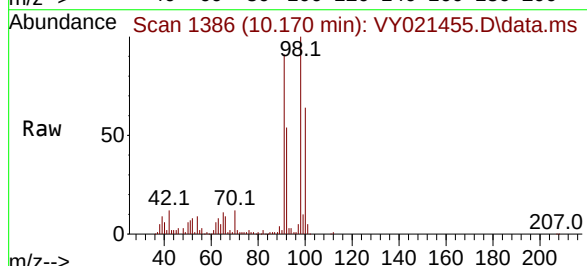
Manual Integrations
APPROVED

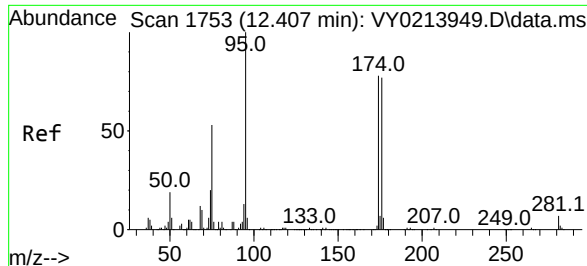
Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025



#52
Toluene
Concen: 11.546 ug/l m
RT: 10.170 min Scan# 1386
Delta R.T. -0.006 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

Tgt Ion: 92 Resp: 102690
Ion Ratio Lower Upper
92 100
91 116.6 138.2 207.2





#62

4-Bromofluorobenzene

Concen: 33.346 ug/l

RT: 12.420 min Scan# 1755

Delta R.T. 0.013 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

Instrument :

MSVOA_Y

ClientSampleId :

T3

Tgt Ion: 95 Resp: 131390

Ion Ratio Lower Upper

95 100

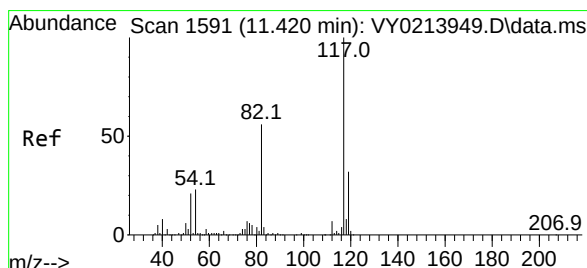
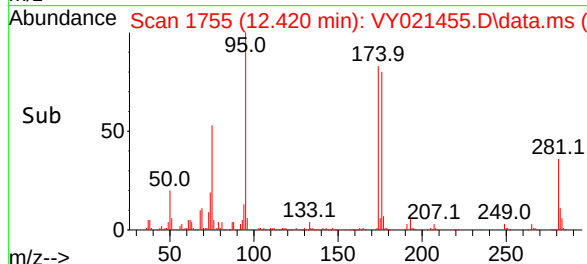
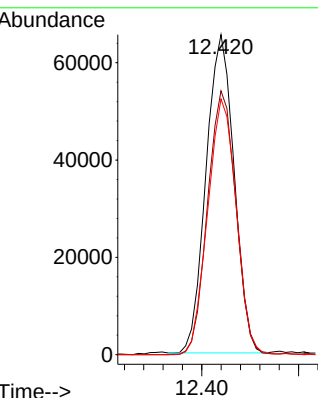
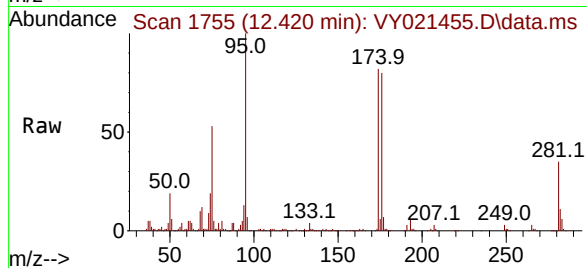
174 84.0 0.0 165.0

176 82.0 0.0 160.0

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.426 min Scan# 1592

Delta R.T. 0.006 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

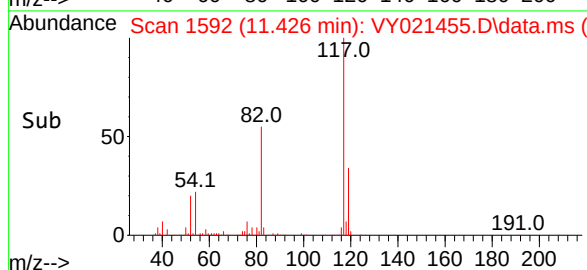
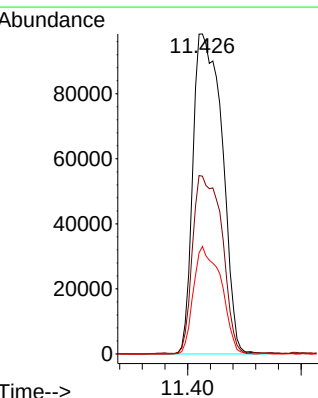
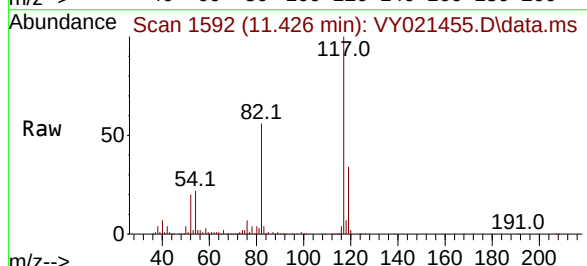
Tgt Ion:117 Resp: 350362

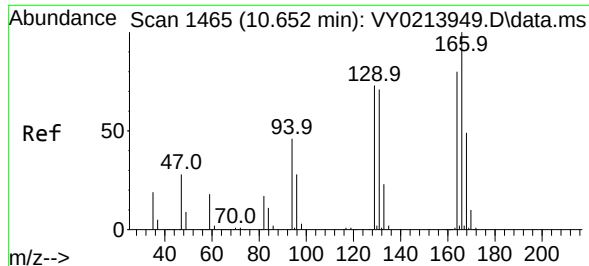
Ion Ratio Lower Upper

117 100

82 55.3 44.6 67.0

119 33.6 25.4 38.0





#64

Tetrachloroethene

Concen: 1.449 ug/l

RT: 10.646 min Scan# 1465

Delta R.T. -0.006 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

Instrument :

MSVOA_Y

ClientSampleId :

T3

Tgt Ion:164 Resp: 412

Ion Ratio Lower Upper

164 100

166 127.0 100.4 150.6

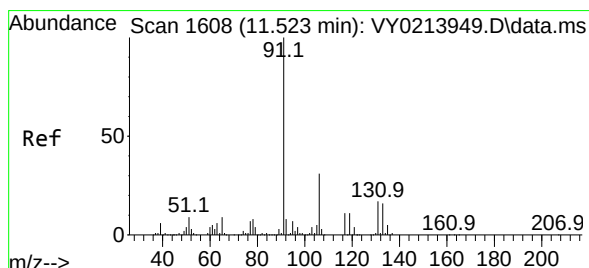
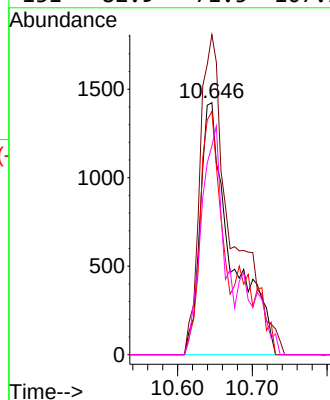
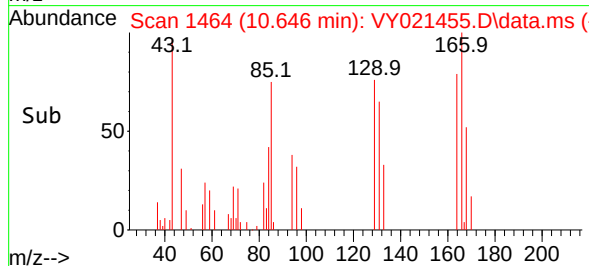
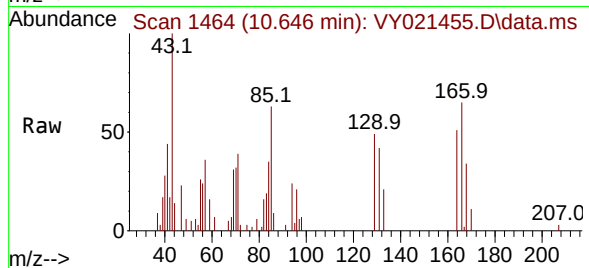
129 96.5 73.8 110.8

131 82.9 71.5 107.3

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025



#67

Ethyl Benzene

Concen: 3.429 ug/l

RT: 11.524 min Scan# 1608

Delta R.T. 0.000 min

Lab File: VY021455.D

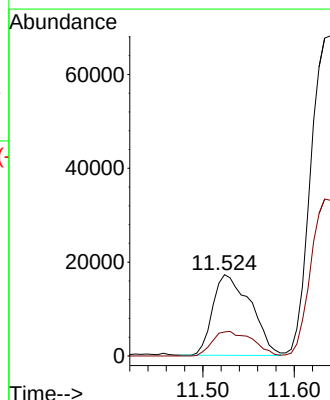
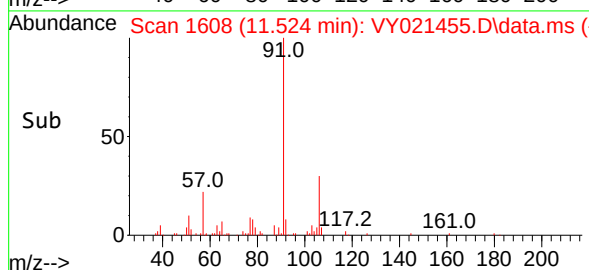
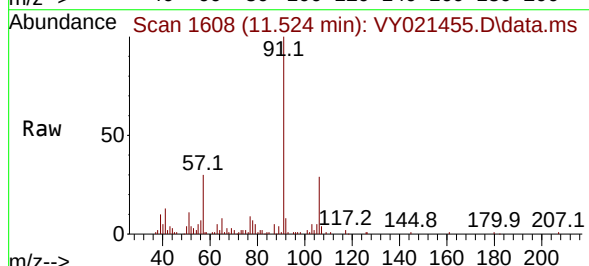
Acq: 07 Mar 2025 12:55

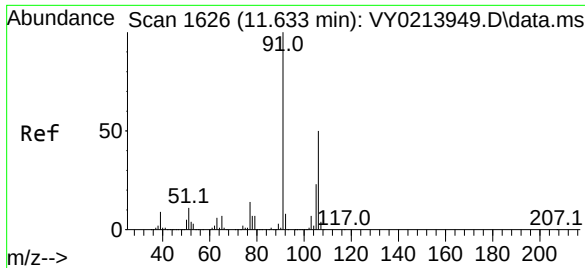
Tgt Ion: 91 Resp: 49798

Ion Ratio Lower Upper

91 100

106 29.7 24.6 36.8





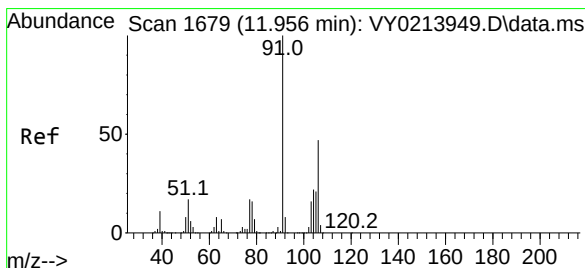
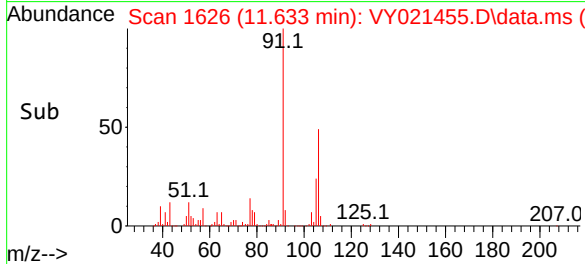
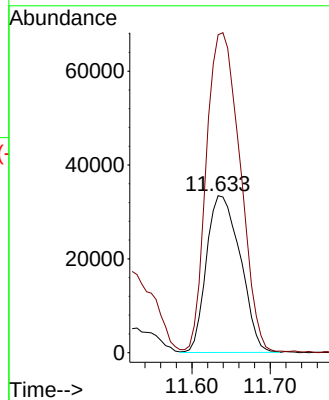
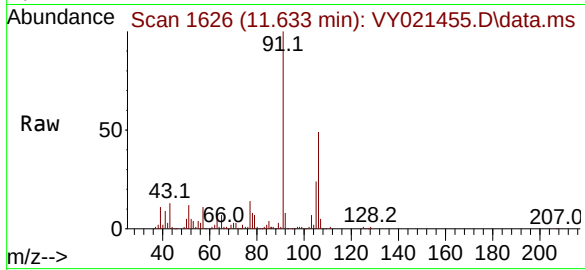
#68
m/p-Xylenes
Concen: 18.224 ug/l
RT: 11.633 min Scan# 1626
Delta R.T. 0.000 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

Instrument :
MSVOA_Y
ClientSampleId :
T3

Tgt Ion:106 Resp: 10047
Ion Ratio Lower Upper
106 100
91 204.4 161.7 242.5

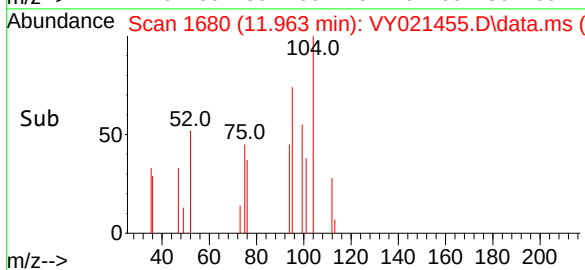
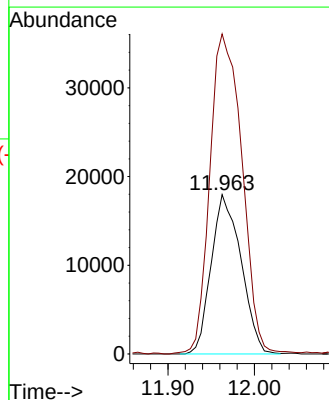
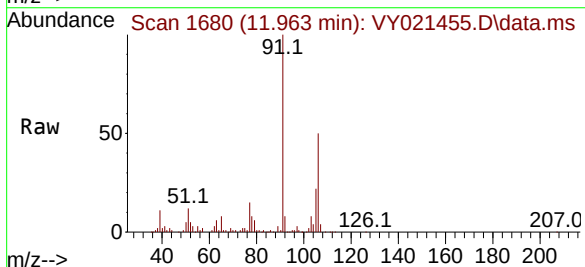
Manual Integrations
APPROVED

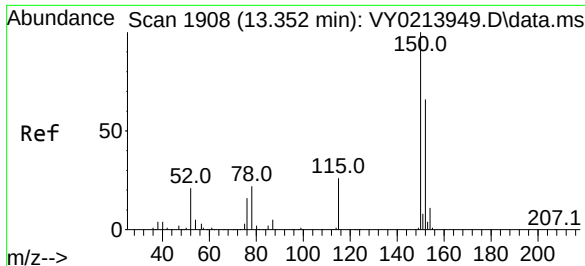
Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025



#69
o-Xylene
Concen: 8.466 ug/l
RT: 11.963 min Scan# 1680
Delta R.T. 0.006 min
Lab File: VY021455.D
Acq: 07 Mar 2025 12:55

Tgt Ion:106 Resp: 43016
Ion Ratio Lower Upper
106 100
91 216.2 107.6 322.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.359 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

Instrument :

MSVOA_Y

ClientSampleId :

T3

Tgt Ion:152 Resp: 111224

Ion Ratio Lower Upper

152 100

115 58.9 29.0 87.0

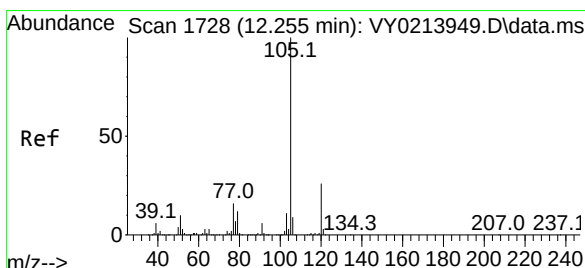
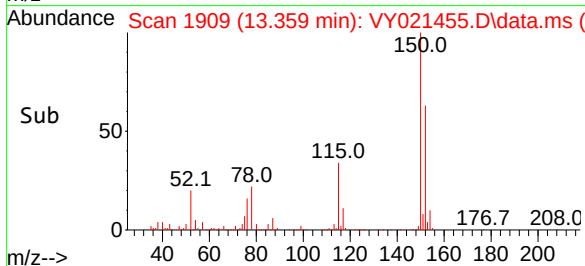
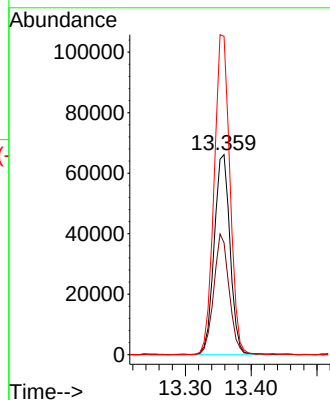
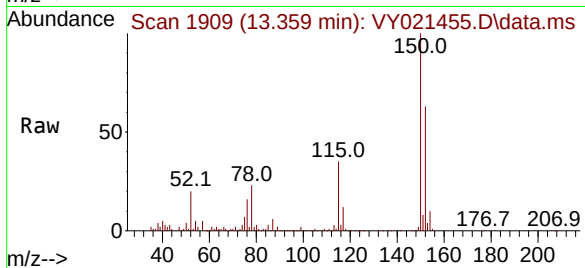
150 159.0 0.0 347.2

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025

Supervised By :Semsettin Yesilyurt 03/11/2025



#73

Isopropylbenzene

Concen: 1.396 ug/l

RT: 12.267 min Scan# 1730

Delta R.T. 0.013 min

Lab File: VY021455.D

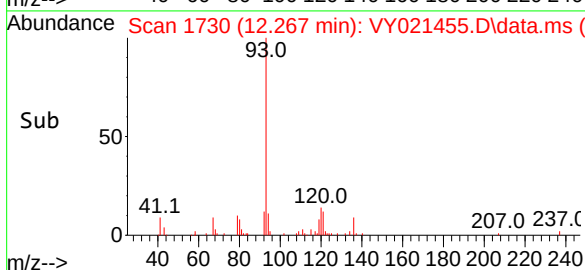
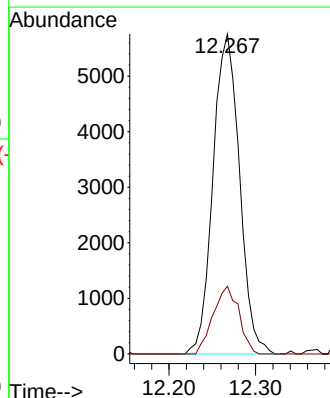
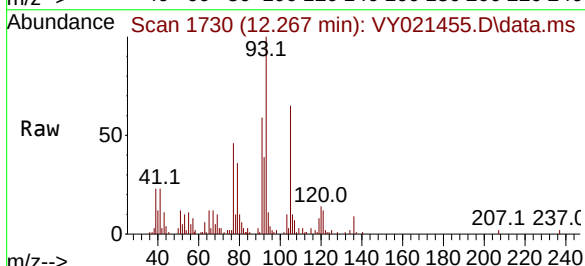
Acq: 07 Mar 2025 12:55

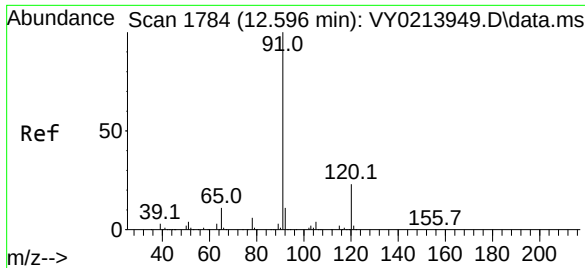
Tgt Ion:105 Resp: 12235

Ion Ratio Lower Upper

105 100

120 20.5 13.1 39.3





#78

n-propylbenzene

Concen: 1.330 ug/l

RT: 12.609 min Scan# 1786

Delta R.T. 0.013 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

Instrument :

MSVOA_Y

ClientSampleId :

T3

Tgt Ion: 91 Resp: 1414

Ion Ratio Lower Upper

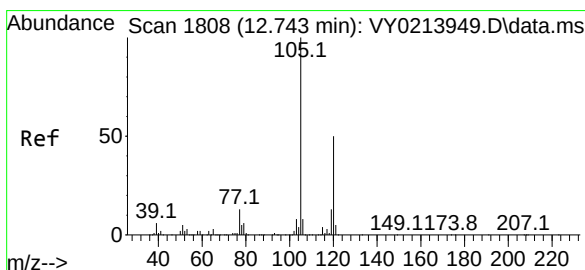
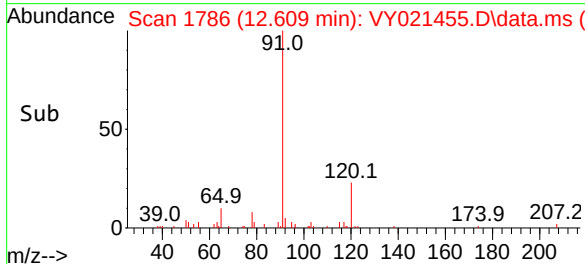
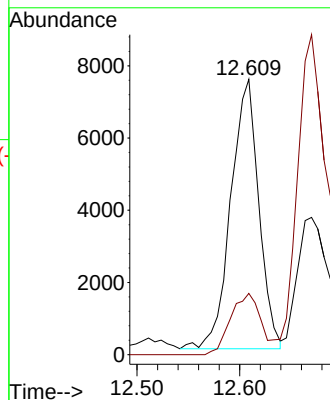
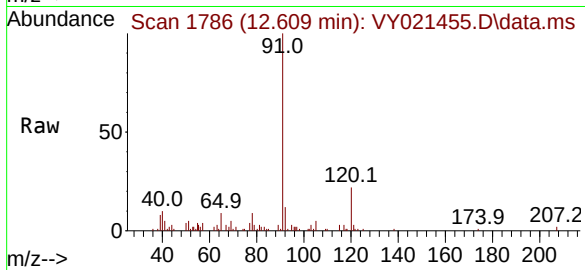
91 100

120 24.7 11.3 33.8

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025



#80

1,3,5-Trimethylbenzene

Concen: 4.031 ug/l

RT: 12.743 min Scan# 1808

Delta R.T. 0.000 min

Lab File: VY021455.D

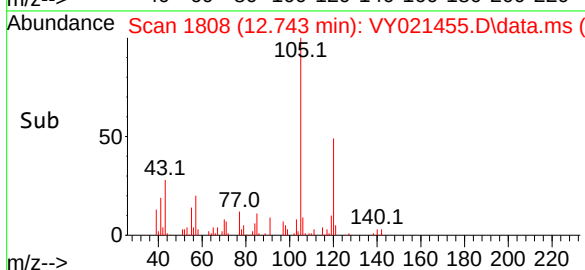
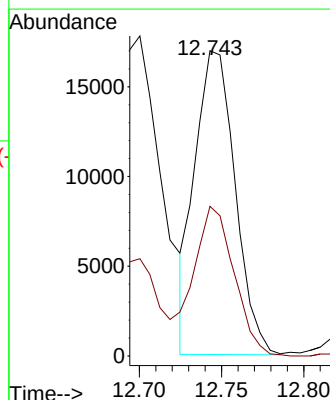
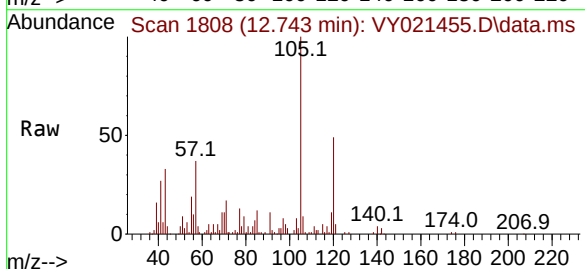
Acq: 07 Mar 2025 12:55

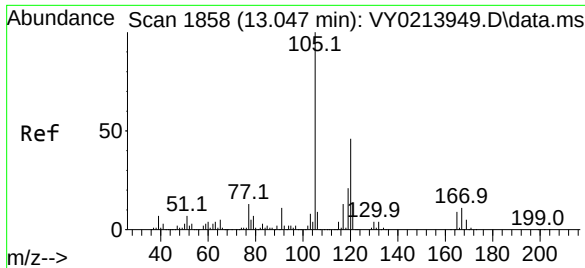
Tgt Ion:105 Resp: 28702

Ion Ratio Lower Upper

105 100

120 50.5 24.6 73.6





#84

1,2,4-Trimethylbenzene

Concen: 7.008 ug/l

RT: 13.054 min Scan# 11

Delta R.T. 0.006 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

Instrument :

MSVOA_Y

ClientSampleId :

T3

Tgt Ion:105 Resp: 49540

Ion Ratio Lower Upper

105 100

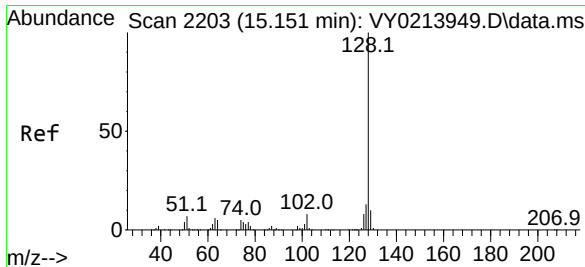
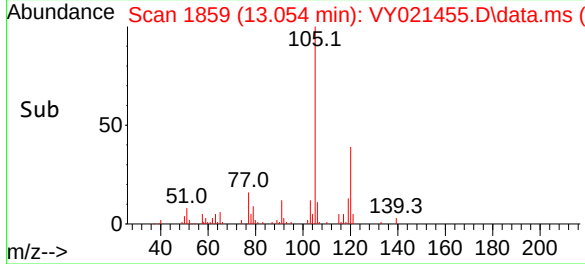
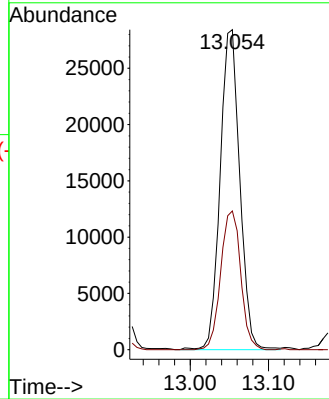
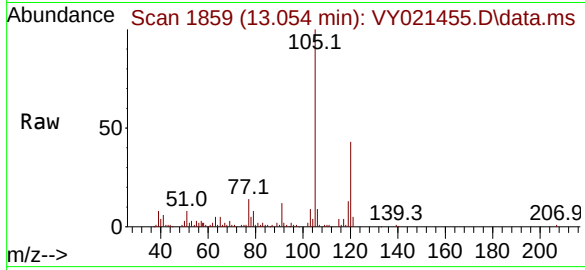
120 44.2 22.7 68.1

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025

Supervised By :Semsettin Yesilyurt 03/11/2025



#95

Naphthalene

Concen: 2.785 ug/l

RT: 15.145 min Scan# 2202

Delta R.T. -0.006 min

Lab File: VY021455.D

Acq: 07 Mar 2025 12:55

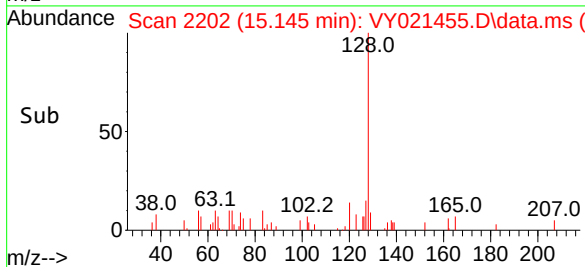
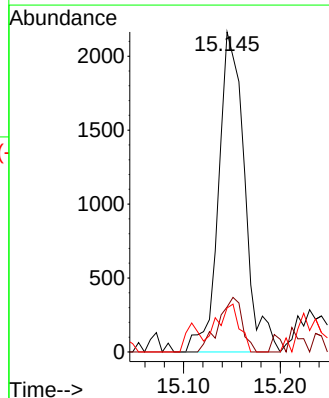
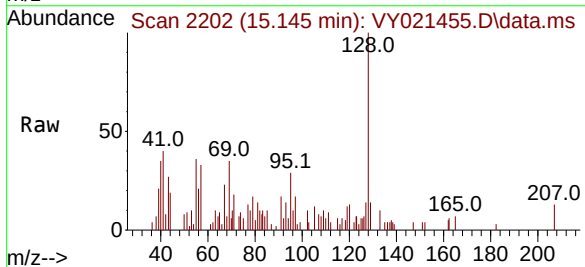
Tgt Ion:128 Resp: 4032

Ion Ratio Lower Upper

128 100

127 15.5 10.6 15.8

129 12.9 8.6 13.0



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021455.D
 Acq On : 07 Mar 2025 12:55
 Operator : SY/MD
 Sample : Q1463-03
 Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T3

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: VY021455.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.995	40	45	59	rBV	735837	1368098	94.05%	8.629%
2	2.336	88	101	103	rBV4	32509	98060	6.74%	0.619%
3	2.416	111	114	117	rBV3	11895	16861	1.16%	0.106%
4	2.531	129	133	138	rBV	30795	50293	3.46%	0.317%
5	3.001	206	210	219	rBV3	32473	80987	5.57%	0.511%
6	4.513	452	458	467	rBV6	46257	146849	10.10%	0.926%
7	6.372	753	763	779	rVB2	400046	1454655	100.00%	9.175%
8	7.402	924	932	940	rVB9	6260	18933	1.30%	0.119%
9	7.683	958	978	996	rBV3	263341	1210809	83.24%	7.637%
10	7.884	1005	1011	1027	rVB5	49697	167854	11.54%	1.059%
11	8.055	1030	1039	1052	rBV2	103511	327923	22.54%	2.068%
12	8.164	1053	1057	1058	rVV2	11897	16184	1.11%	0.102%
13	8.219	1058	1066	1076	rVB2	111043	320604	22.04%	2.022%
14	8.445	1096	1103	1115	rVB2	51661	119344	8.20%	0.753%
15	8.603	1120	1129	1141	rBV	241633	774968	53.28%	4.888%
16	9.091	1194	1209	1215	rBV3	76006	204683	14.07%	1.291%
17	9.152	1215	1219	1226	rVV2	20428	40873	2.81%	0.258%
18	9.231	1226	1232	1236	rVV2	8380	17065	1.17%	0.108%
19	9.372	1246	1255	1262	rVB5	10579	25761	1.77%	0.162%
20	9.530	1270	1281	1291	rBV	93780	216698	14.90%	1.367%
21	9.664	1291	1303	1310	rBV	135010	328247	22.57%	2.070%
22	9.737	1310	1315	1318	rBV2	21984	40638	2.79%	0.256%
23	9.872	1329	1337	1351	rVB3	27919	86774	5.97%	0.547%
24	10.030	1357	1363	1368	rBV	24205	42660	2.93%	0.269%
25	10.103	1368	1375	1381	rBV	432914	1039861	71.49%	6.559%
26	10.170	1381	1386	1399	rVV	266979	886381	60.93%	5.591%
27	10.292	1402	1406	1413	rVB2	60707	114970	7.90%	0.725%
28	10.438	1425	1430	1436	rBV2	18010	28575	1.96%	0.180%
29	10.536	1436	1446	1457	rVB5	31823	125382	8.62%	0.791%
30	10.640	1457	1463	1468	rBV4	24593	41776	2.87%	0.264%
31	10.841	1490	1496	1501	rBV5	8407	25427	1.75%	0.160%
32	10.963	1512	1516	1520	rVV2	22614	46971	3.23%	0.296%
33	11.012	1520	1524	1529	rVV2	28006	59058	4.06%	0.373%
34	11.066	1530	1533	1538	rVV5	10648	22513	1.55%	0.142%
35	11.133	1539	1544	1547	rVV6	12832	28200	1.94%	0.178%
36	11.201	1547	1555	1560	rVV5	39953	114480	7.87%	0.722%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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

37	11.243	1560	1562	1568	rVV3	28445	48141	3.31%	0.304%
38	11.310	1568	1573	1584	rVB	14445	31677	2.18%	0.200%
39	11.420	1584	1591	1603	rBV	313067	1145441	78.74%	7.225%
40	11.524	1603	1608	1618	rVV2	54933	195823	13.46%	1.235%
41	11.639	1618	1627	1644	rVB	246946	753247	51.78%	4.751%
42	11.963	1668	1680	1690	rBV	112861	339634	23.35%	2.142%
43	12.048	1690	1694	1699	rVB3	8898	16645	1.14%	0.105%
44	12.133	1702	1708	1710	rBV6	10667	21363	1.47%	0.135%
45	12.267	1723	1730	1737	rBV2	51609	114865	7.90%	0.725%
46	12.420	1747	1755	1764	rVB2	400785	837997	57.61%	5.286%
47	12.566	1774	1779	1782	rBV6	12070	24131	1.66%	0.152%
48	12.670	1790	1796	1799	rBV	73472	143804	9.89%	0.907%
49	12.737	1803	1807	1815	rVV3	89495	186666	12.83%	1.177%
50	12.822	1815	1821	1827	rVB	63309	120292	8.27%	0.759%
51	12.901	1827	1834	1841	rBV	29170	66957	4.60%	0.422%
52	12.969	1841	1845	1846	rBV3	13840	15369	1.06%	0.097%
53	12.993	1846	1849	1853	rVB	22462	33995	2.34%	0.214%
54	13.054	1853	1859	1864	rBV	78178	131688	9.05%	0.831%
55	13.103	1864	1867	1873	rVB4	22438	35437	2.44%	0.224%
56	13.212	1877	1885	1889	rBV2	45062	93695	6.44%	0.591%
57	13.353	1894	1908	1913	rBV	415056	751753	51.68%	4.742%
58	13.401	1913	1916	1928	rVB2	101506	224525	15.43%	1.416%
59	13.554	1932	1941	1946	rBV2	45064	129471	8.90%	0.817%
60	13.676	1957	1961	1965	rBV2	47647	67186	4.62%	0.424%
61	13.755	1970	1974	1978	rVB3	16478	24888	1.71%	0.157%
62	13.810	1979	1983	1986	rVV4	11898	21311	1.47%	0.134%
63	13.840	1986	1988	1992	rVV3	16763	18048	1.24%	0.114%
64	13.895	1992	1997	2002	rVB2	40314	62565	4.30%	0.395%
65	14.005	2010	2015	2019	rBV4	15723	23862	1.64%	0.151%
66	14.066	2019	2025	2031	rBV4	9464	24935	1.71%	0.157%
67	14.133	2031	2036	2039	rBV7	9142	17498	1.20%	0.110%
68	14.212	2040	2049	2054	rBV7	14550	44556	3.06%	0.281%
69	14.310	2060	2065	2068	rBV2	30492	47827	3.29%	0.302%
70	14.346	2068	2071	2074	rVV3	20646	30383	2.09%	0.192%
71	14.383	2075	2077	2083	rVV5	10028	15866	1.09%	0.100%
72	14.535	2098	2102	2107	rVB2	37536	52096	3.58%	0.329%
73	14.596	2107	2112	2118	rBV6	20214	50776	3.49%	0.320%
74	14.651	2118	2121	2128	rVB3	20629	36154	2.49%	0.228%
75	14.865	2152	2156	2160	rBV4	11710	15576	1.07%	0.098%
76	15.127	2194	2199	2205	rBV7	11162	27560	1.89%	0.174%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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

77	15.230	2212	2216	2231	rVB4	22296	56792	3.90%	0.358%
78	15.346	2231	2235	2241	rVB6	11245	18544	1.27%	0.117%
79	15.681	2285	2290	2297	rVB9	14639	25801	1.77%	0.163%

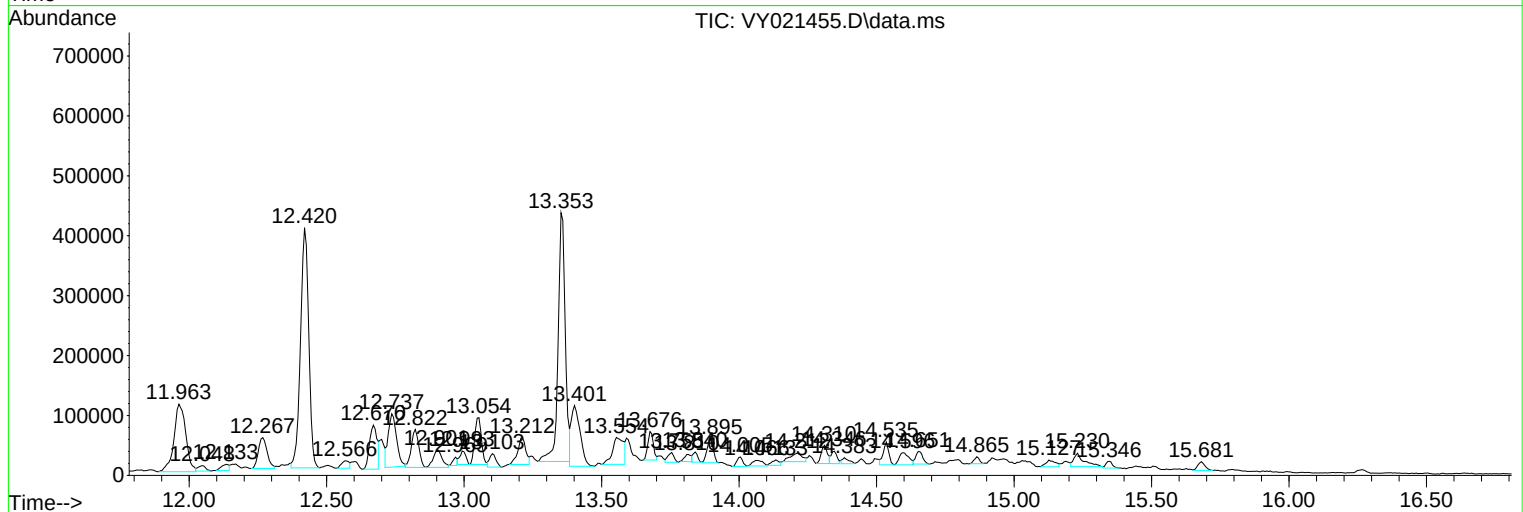
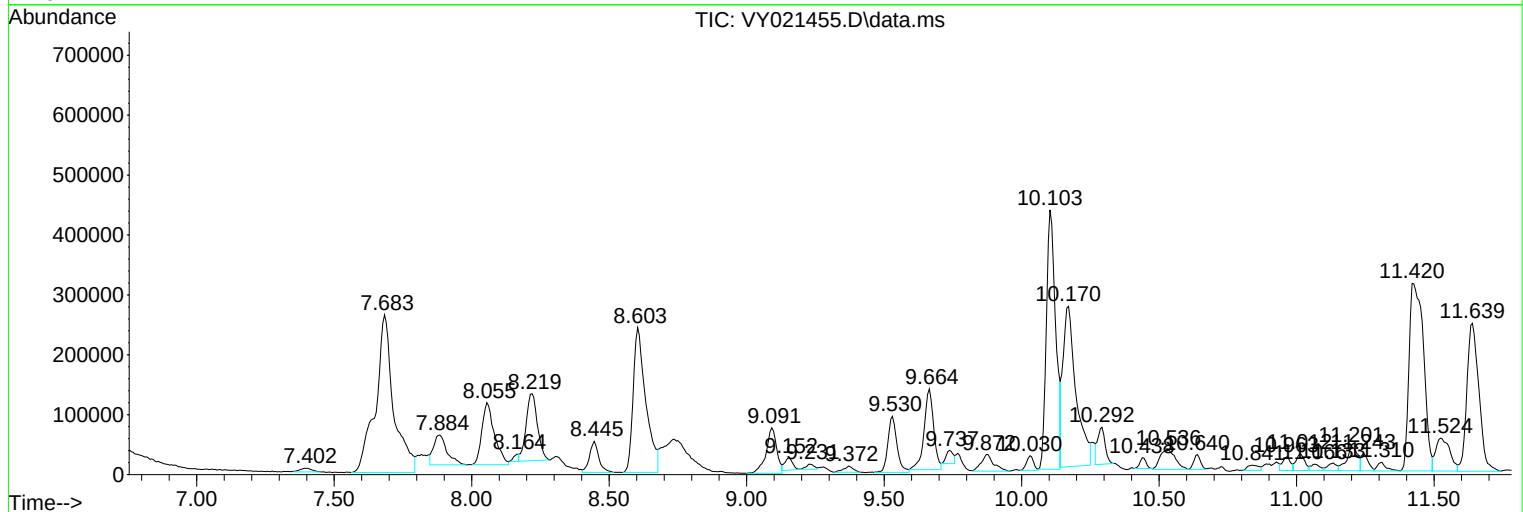
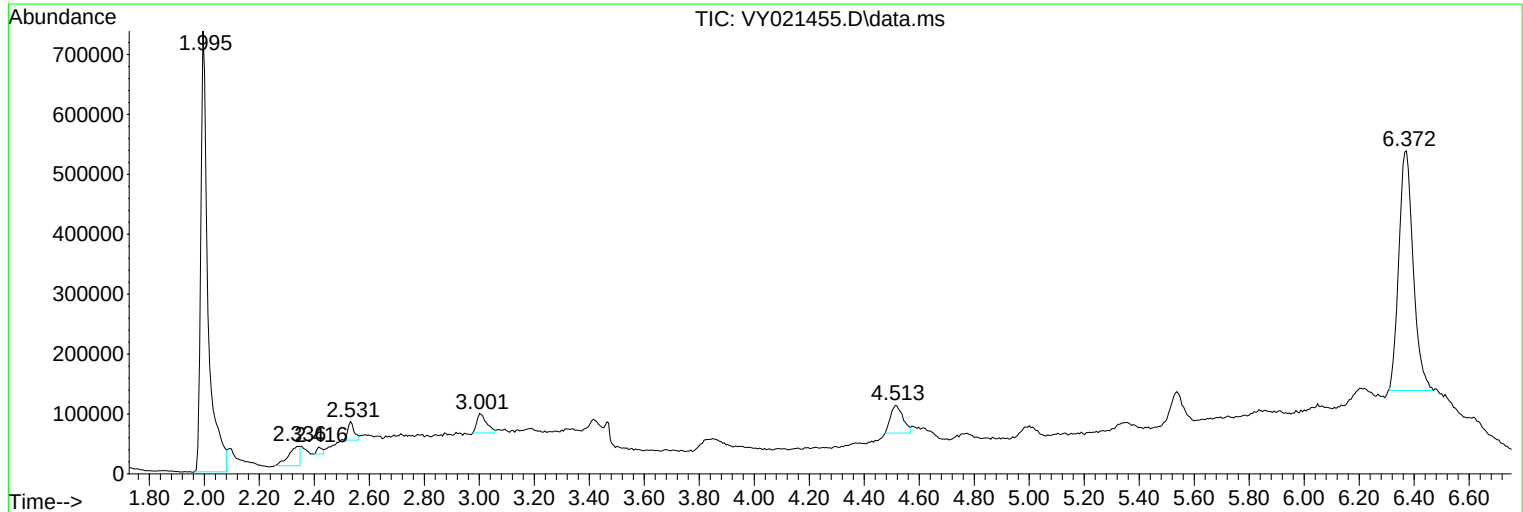
Sum of corrected areas: 15854255

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SoIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

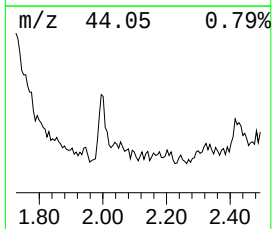
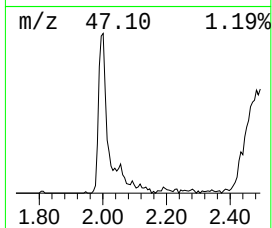
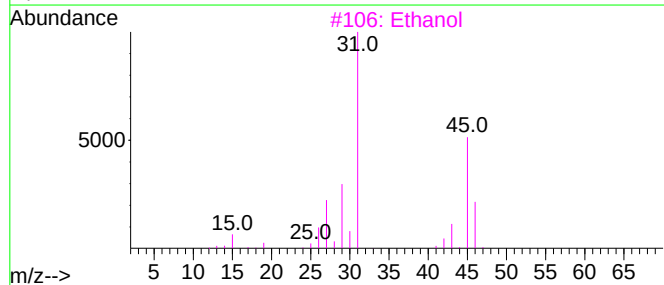
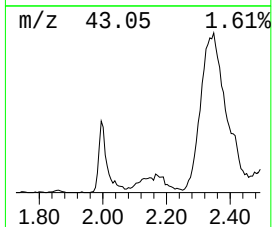
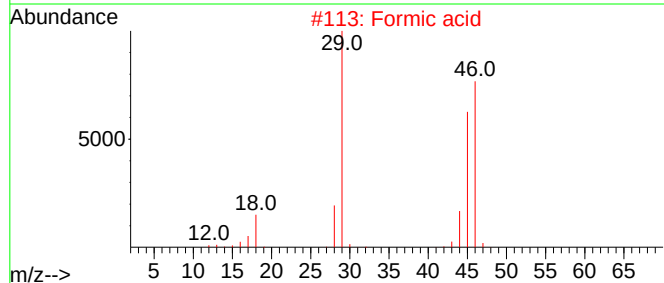
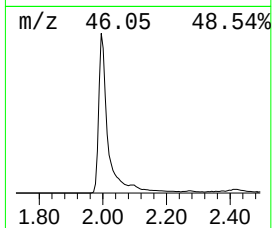
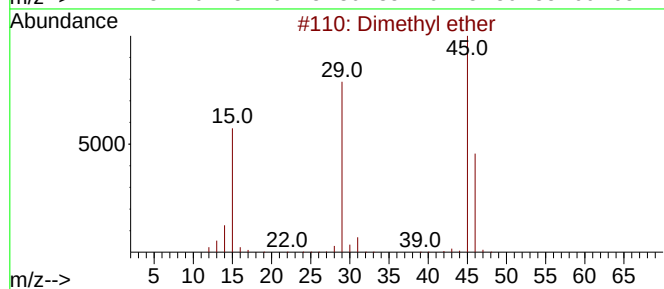
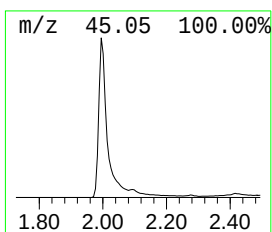
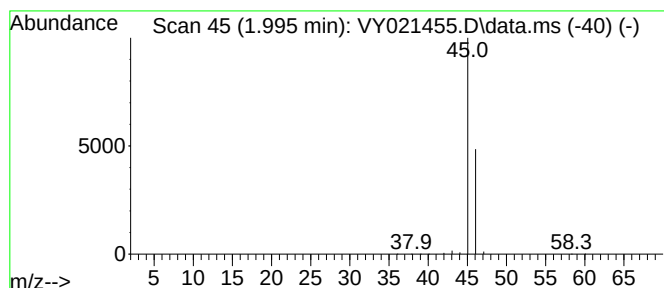
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Quant Title : SW846 8260

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

Peak Number 1 Dimethyl ether Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.995	56.50 ug/l	1368100	Pentafluorobenzene	7.683

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Dimethyl ether	46	C2H6O	000115-10-6	90
2		Formic acid	46	CH2O2	000064-18-6	7
3		Ethanol	46	C2H6O	000064-17-5	7
4		Oxalic acid	90	C2H2O4	000144-62-7	4
5		Methane, nitroso-	45	CH3NO	000865-40-7	3



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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

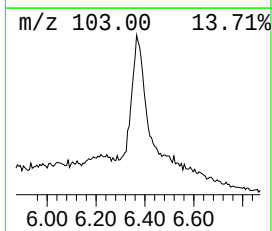
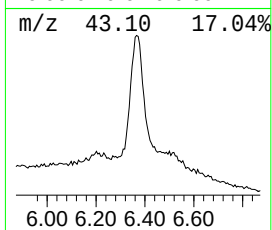
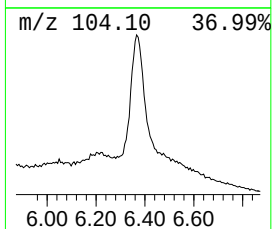
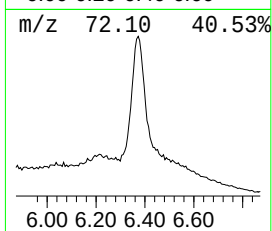
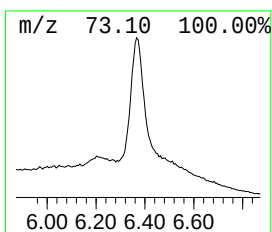
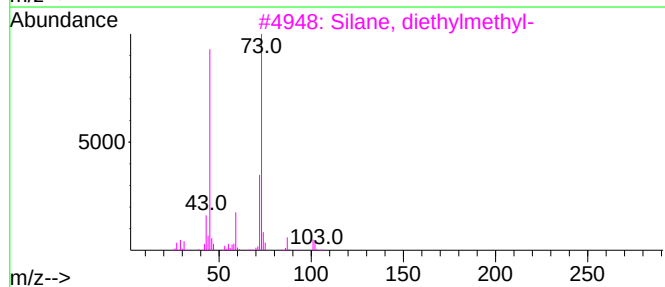
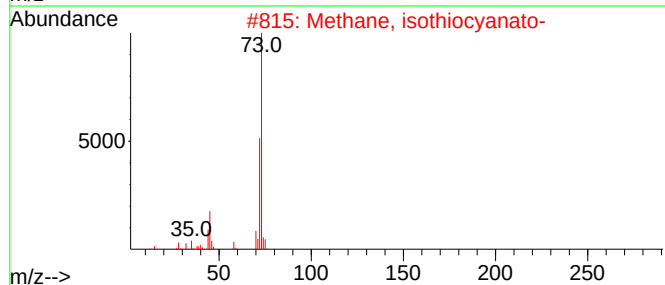
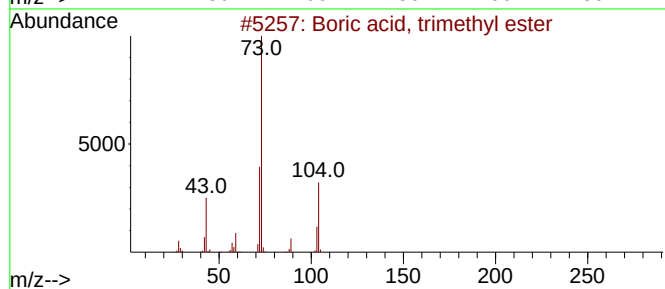
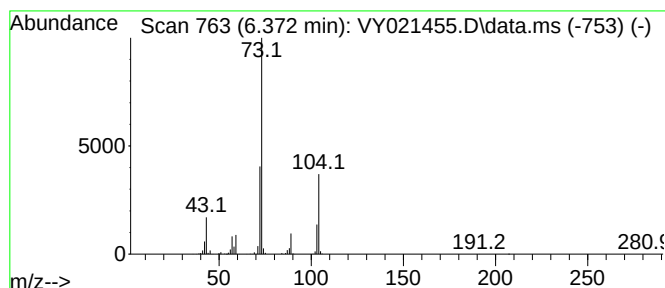
TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

Peak Number 3 Boric acid, trimethyl ester Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.372	60.07 ug/l	1454660	Pentafluorobenzene	7.683

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Boric acid, trimethyl ester	104	C3H9B03	000121-43-7	91
2			Methane, isothiocyanato-	73	C2H3NS	000556-61-6	9
3			Silane, diethylmethyl-	102	C5H14Si	000760-32-7	7
4			Boronic acid, ethyl-, dimethyl e...	102	C4H11B02	007318-82-3	7
5			Borane, dimethoxy-	74	C2H7B02	004542-61-4	5



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SoIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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

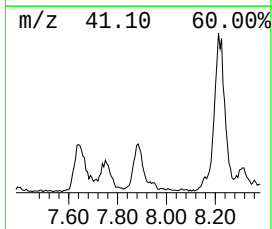
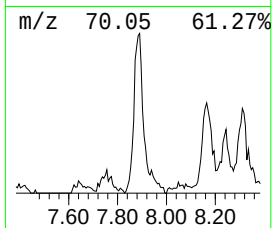
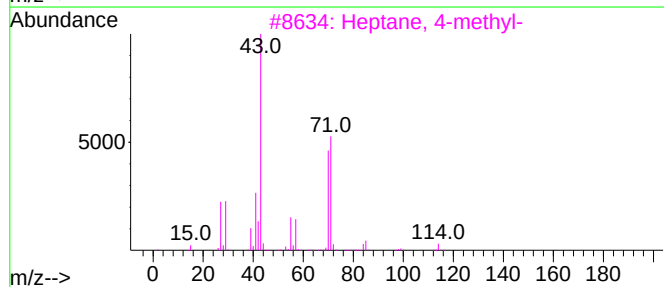
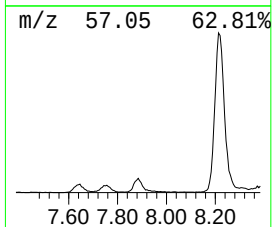
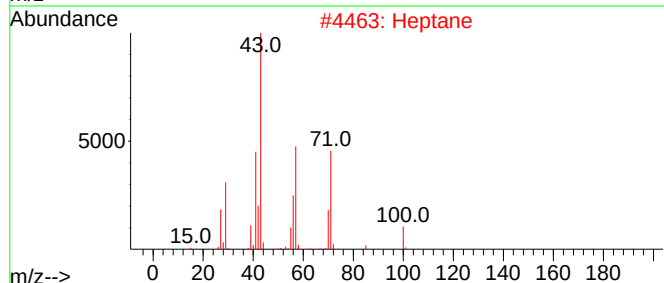
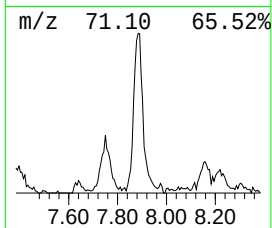
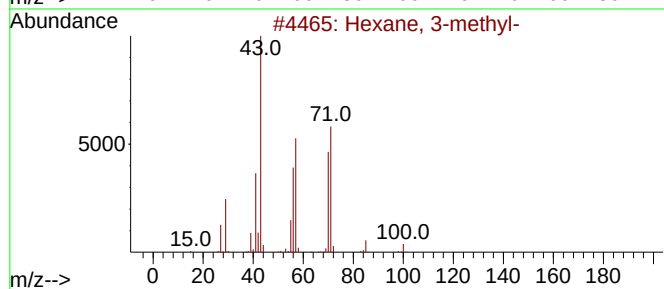
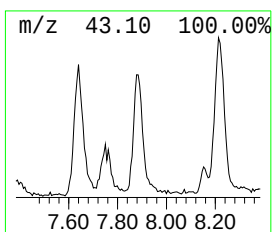
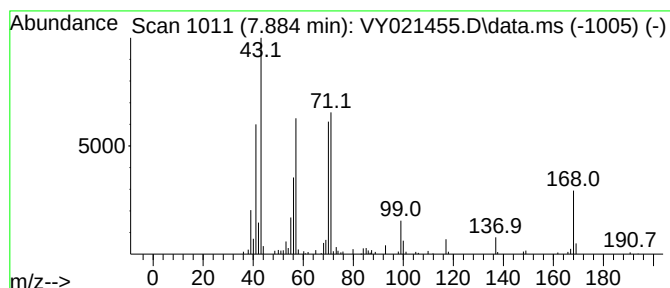
TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

Peak Number 4 Hexane, 3-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.884	6.93 ug/l	167854	Pentafluorobenzene	7.683

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexane, 3-methyl-	100	C7H16	000589-34-4	64
2			Heptane	100	C7H16	000142-82-5	46
3			Heptane, 4-methyl-	114	C8H18	000589-53-7	43
4			Carbonic acid, isobutyl 2-methyl...	188	C10H20O3	1000331-39-8	40
5			Hexane, 3-ethyl-4-methyl-	128	C9H20	003074-77-9	38



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

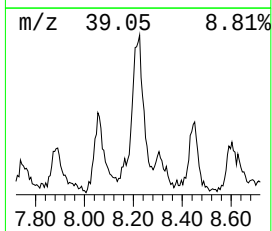
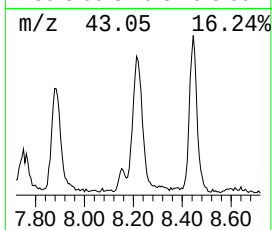
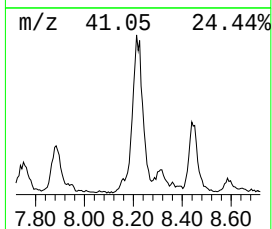
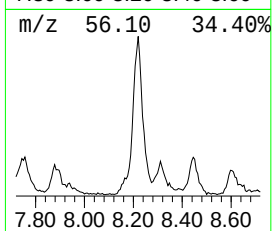
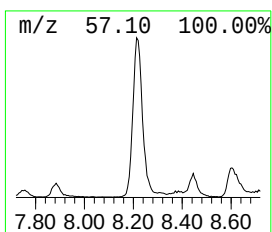
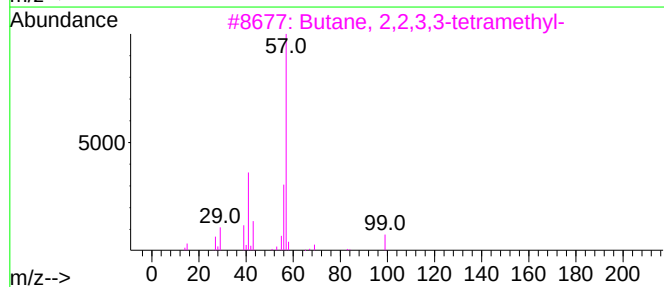
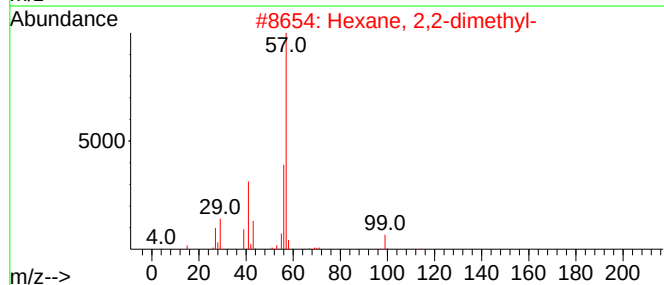
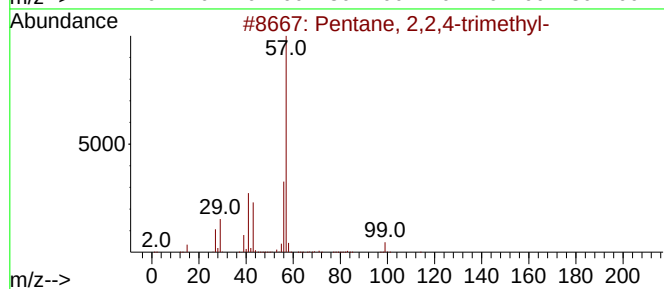
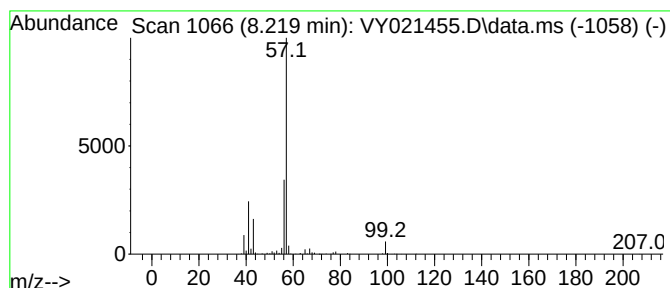
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Quant Title : SW846 8260

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

Peak Number 5 Pentane, 2,2,4-trimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.219	20.68 ug/l	320604	1,4-Difluorobenzene	8.603

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	64
2			Hexane, 2,2-dimethyl-	114	C8H18	000590-73-8	64
3			Butane, 2,2,3,3-tetramethyl-	114	C8H18	000594-82-1	50
4			Pentane, 2,2,4,4-tetramethyl-	128	C9H20	001070-87-7	42
5			Heptane, 2,2,4,6,6-pentamethyl-	170	C12H26	013475-82-6	38



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SoIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

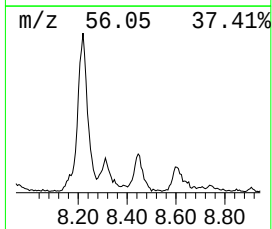
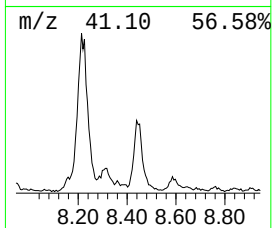
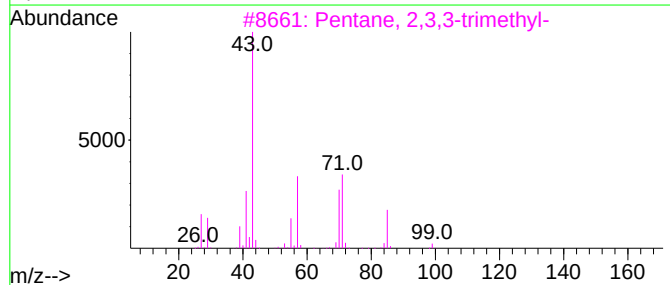
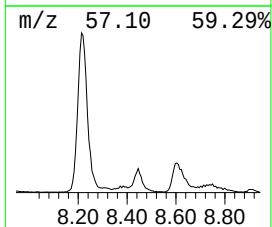
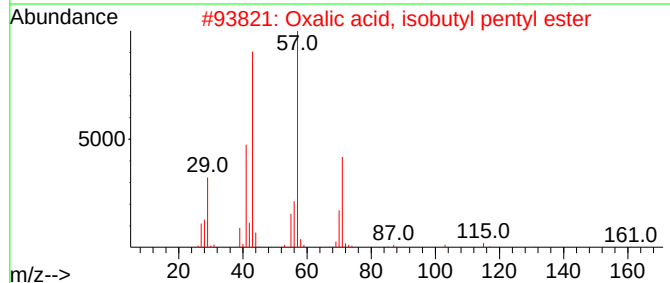
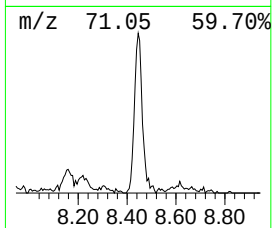
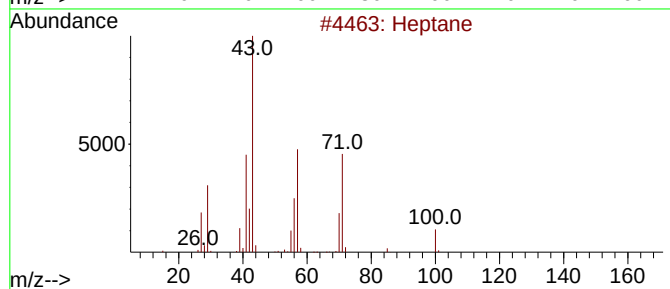
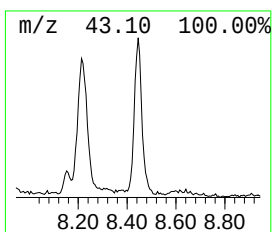
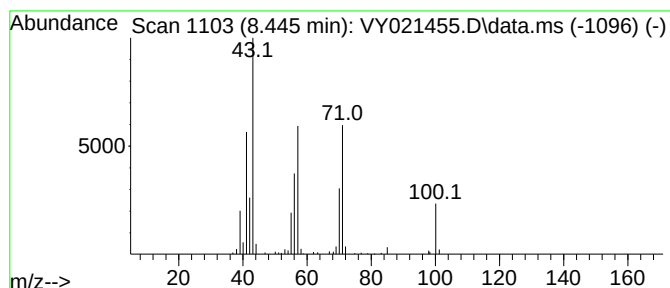
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Quant Title : SW846 8260

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

Peak Number 6 Heptane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.445	7.70 ug/l	119344	1,4-Difluorobenzene	8.603

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Heptane	100	C7H16	000142-82-5	78
2		Oxalic acid, isobutyl pentyl ester	216	C11H20O4	1000309-37-0	50
3		Pentane, 2,3,3-trimethyl-	114	C8H18	000560-21-4	47
4		Hexane, 3-methyl-	100	C7H16	000589-34-4	47
5		1-Trifluoroacetoxy-2-methylpentane	198	C8H13F3O2	155089-96-6	40



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

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

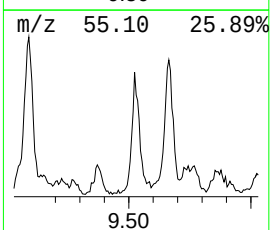
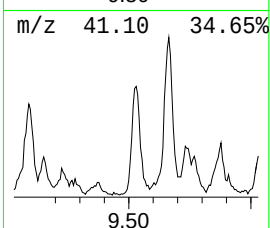
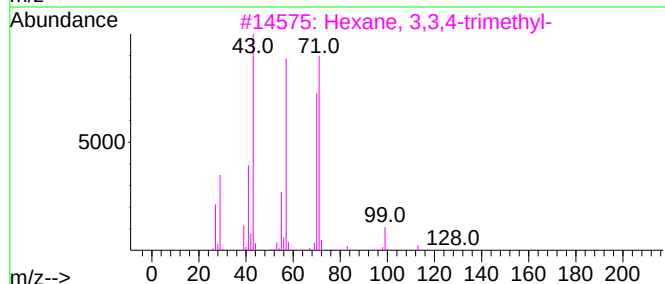
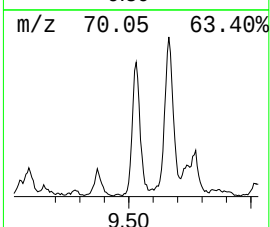
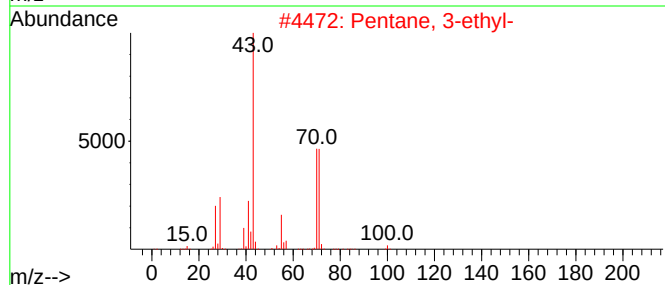
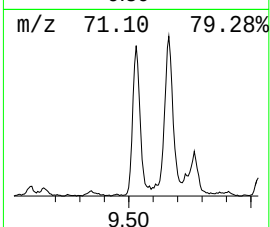
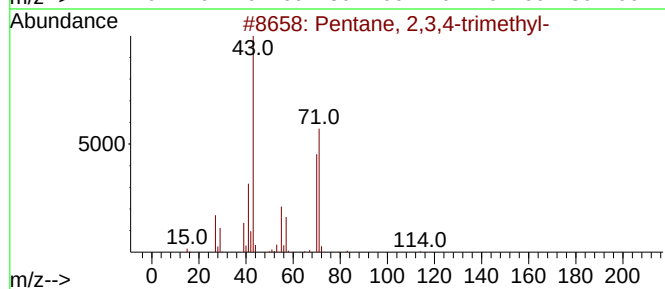
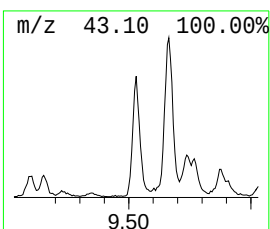
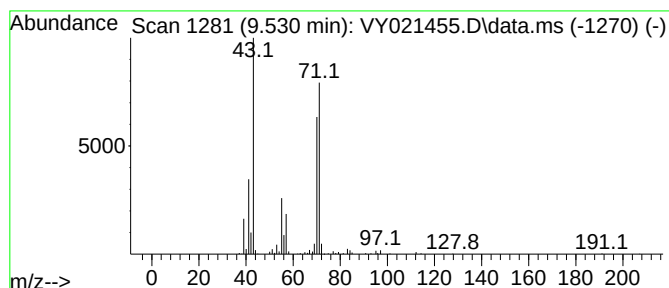
TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

Peak Number 7 Pentane, 2,3,4-trimethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.530	13.98 ug/l	216698	1,4-Difluorobenzene	8.603

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Pentane, 2,3,4-trimethyl-	114	C8H18	000565-75-3	91
2			Pentane, 3-ethyl-	100	C7H16	000617-78-7	78
3			Hexane, 3,3,4-trimethyl-	128	C9H20	016747-31-2	72
4			Diisoamyl ether	158	C10H22O	000544-01-4	64
5			Propanoic acid, 2-methyl-, 3-met...	158	C9H18O2	002050-01-3	56



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SoIL/B
ALS Vial : 6 Sample Multiplier: 1

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

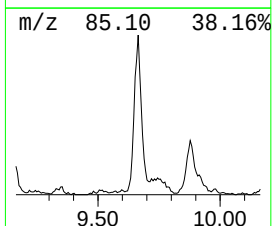
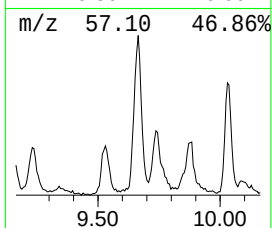
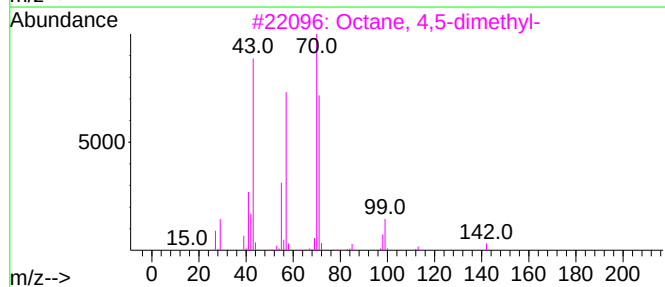
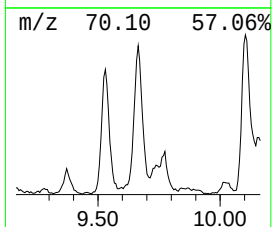
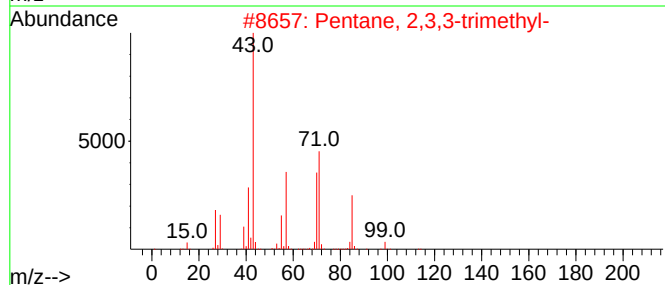
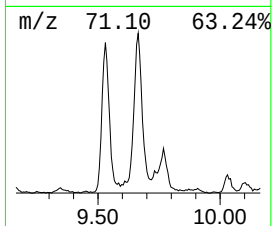
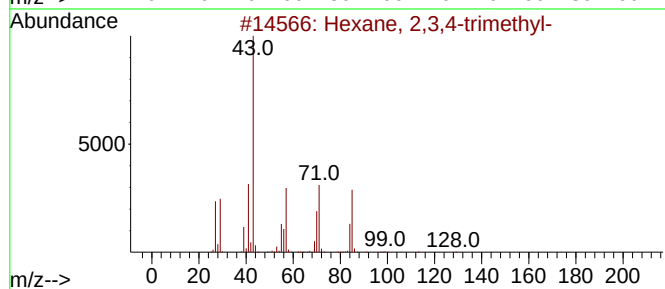
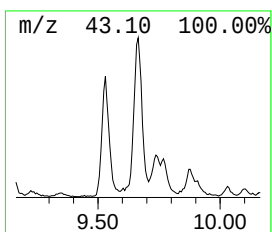
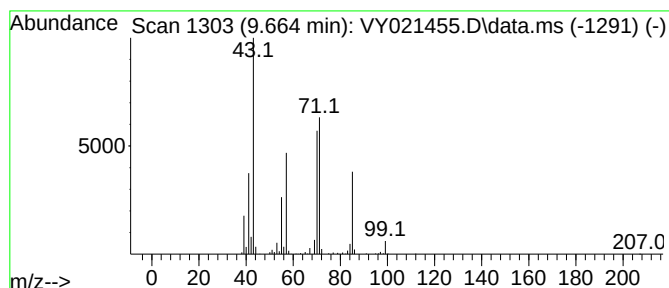
TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

Peak Number 8 Hexane, 2,3,4-trimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.664	21.18 ug/l	328247	1,4-Difluorobenzene	8.603

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	64
2			Pentane, 2,3,3-trimethyl-	114	C8H18	000560-21-4	59
3			Octane, 4,5-dimethyl-	142	C10H22	015869-96-2	50
4			Diisooamyl ether	158	C10H22O	000544-01-4	47
5			Pentane, 2,3,4-trimethyl-	114	C8H18	000565-75-3	47



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SoIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

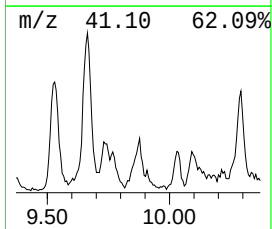
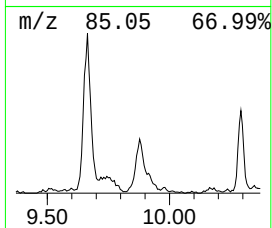
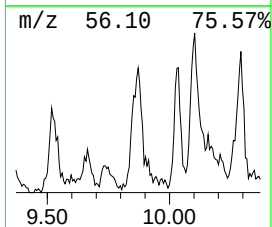
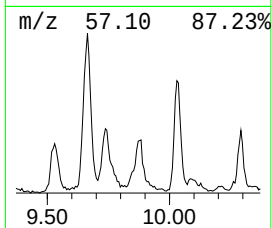
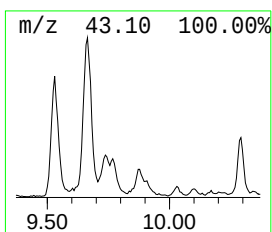
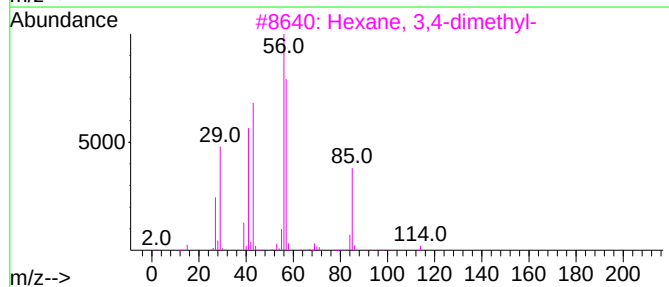
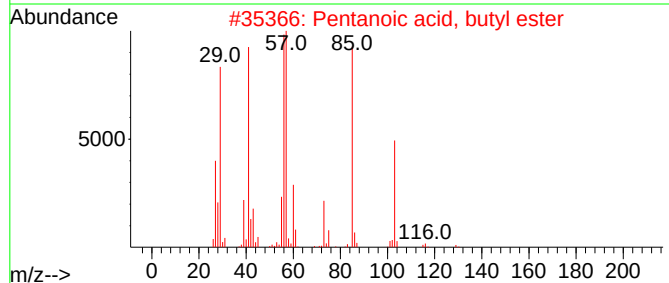
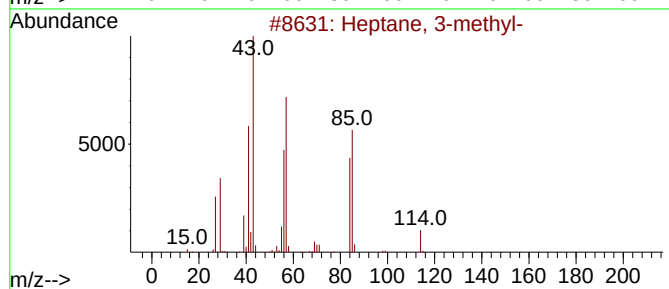
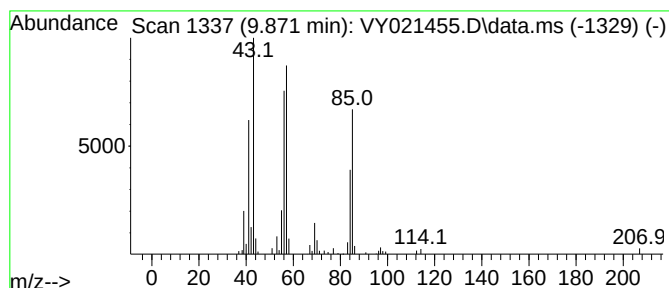
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Quant Title : SW846 8260

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

Peak Number 9 Heptane, 3-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.871	5.60 ug/l	86774	1,4-Difluorobenzene	8.603

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heptane, 3-methyl-	114	C8H18	000589-81-1	59
2			Pentanoic acid, butyl ester	158	C9H18O2	000591-68-4	50
3			Hexane, 3,4-dimethyl-	114	C8H18	000583-48-2	50
4			Butanoic acid, 3-methyl-, butyl ...	158	C9H18O2	000109-19-3	50
5			1-Pentanol, 2-methyl-, acetate	144	C8H16O2	007789-99-3	50



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

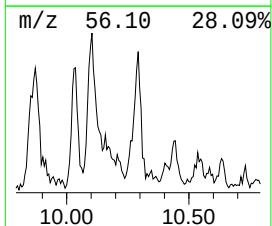
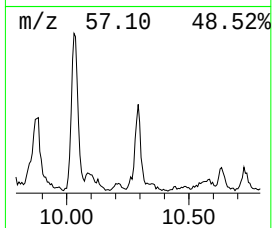
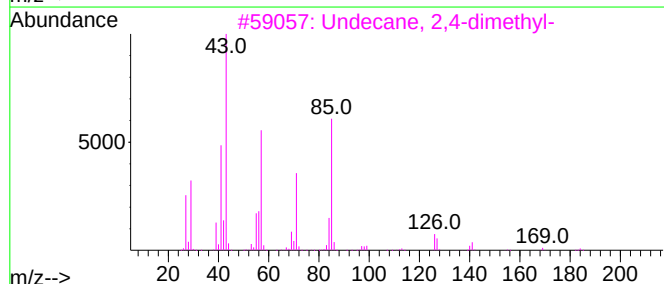
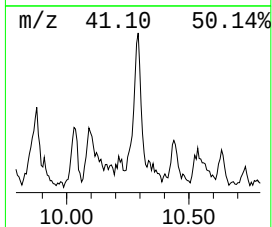
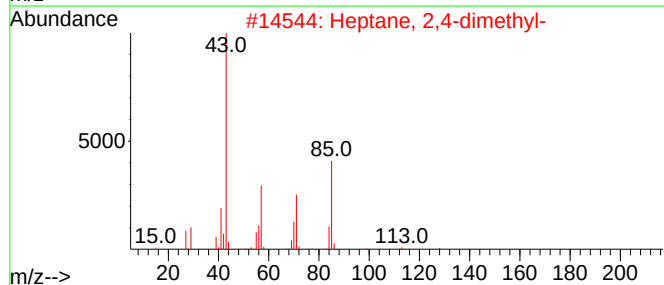
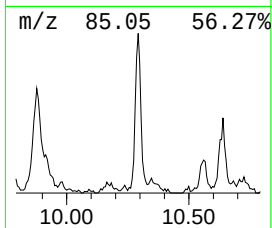
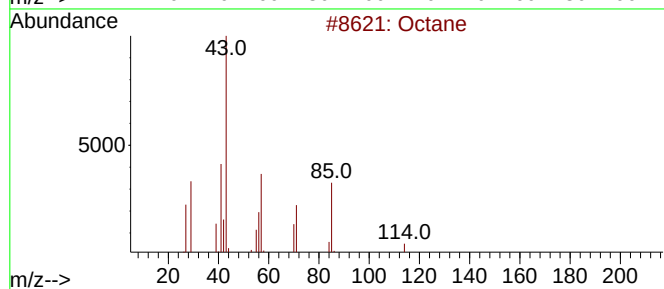
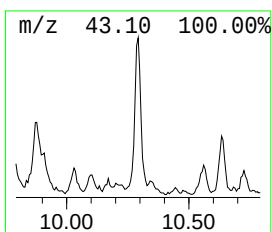
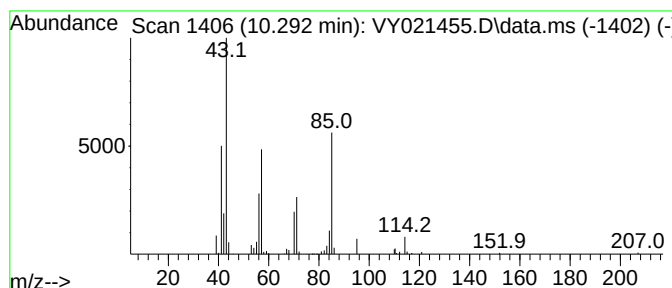
Instrument :
MSVOA_Y
ClientSampleId :
T3

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

Peak Number 10 Octane Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD		R.T.	
10.292	5.02 ug/l	114970	Chlorobenzene-d5		11.426	
Hit# of 5	Tentative ID		MW	MolForm	CAS#	Qual
1	Octane		114	C8H18	000111-65-9	81
2	Heptane, 2,4-dimethyl-		128	C9H20	002213-23-2	59
3	Undecane, 2,4-dimethyl-		184	C13H28	017312-80-0	53
4	Hexane, 1-(hexyloxy)-2-methyl-		200	C13H28O	074421-17-3	53
5	Oxalic acid, diisohexyl ester		258	C14H26O4	1010309-32-9	50



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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

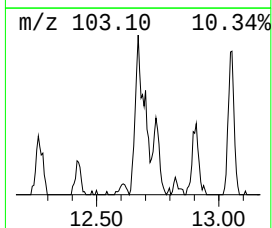
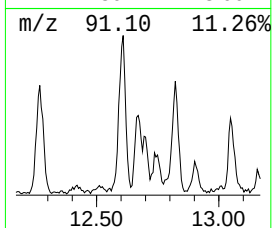
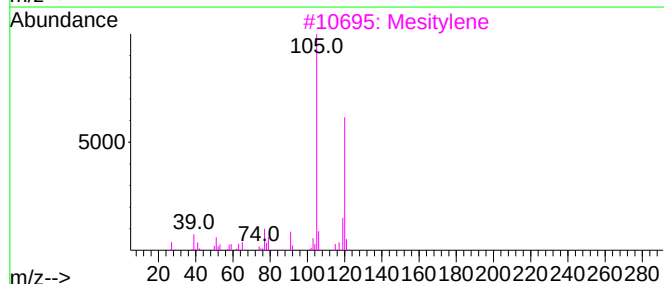
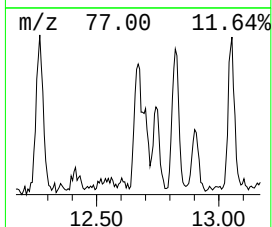
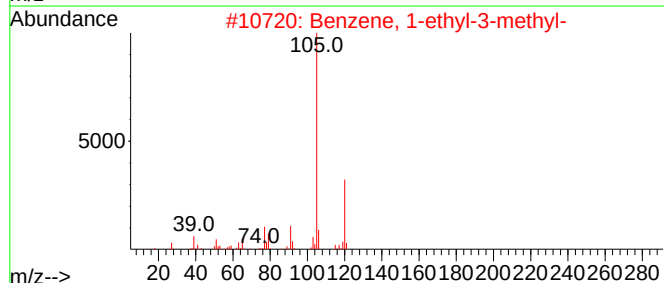
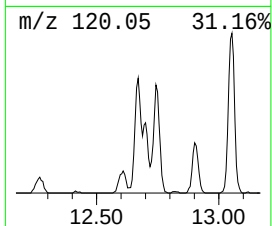
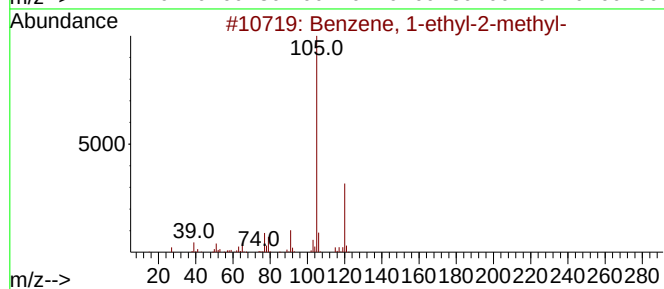
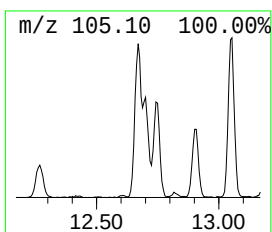
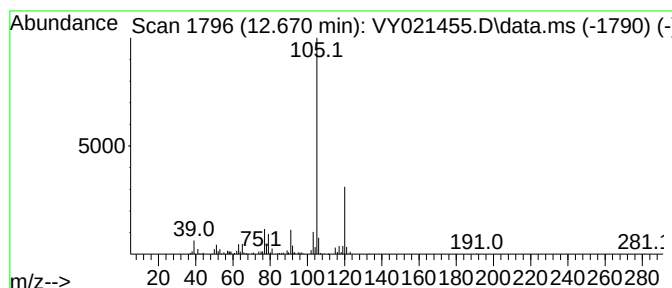
TIC Library : C:\Database\NIST20.L

TIC Integration Parameters: LSCINT.P

Peak Number 12 Benzene, 1-ethyl-2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.670	9.56 ug/l	143804	1,4-Dichlorobenzene-d4	13.359

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2			Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
3			Mesitylene	120	C9H12	000108-67-8	91
4			Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
5			Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	90



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

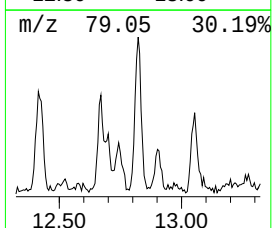
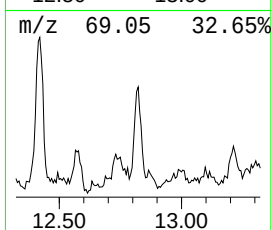
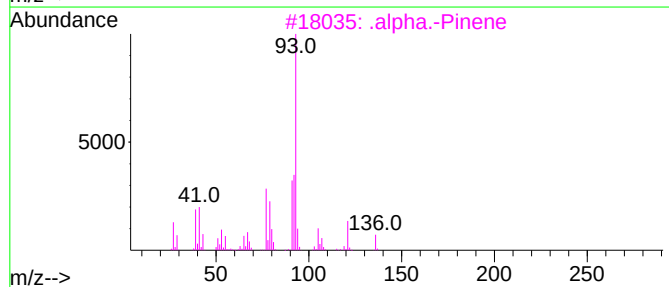
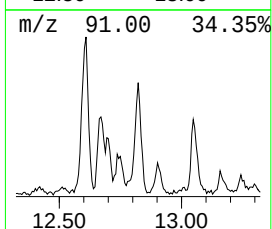
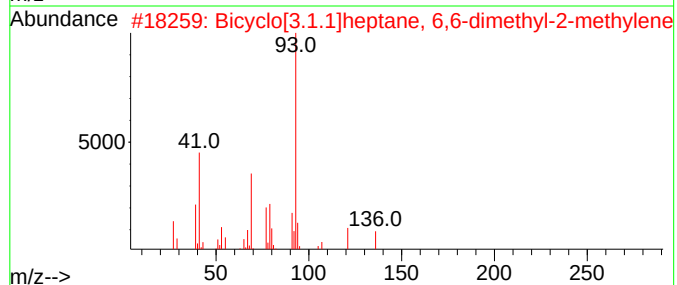
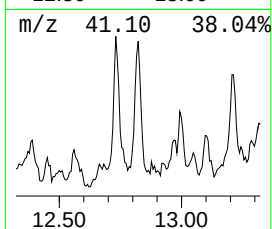
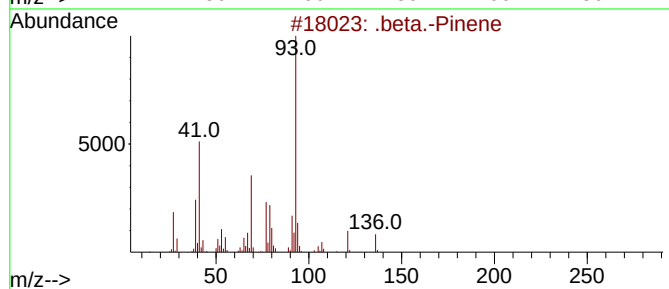
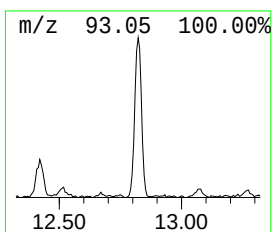
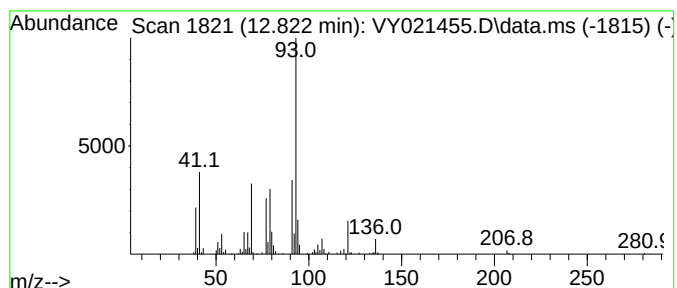
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Quant Title : SW846 8260

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

Peak Number 13 .beta.-Pinene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.822	8.00 ug/l	120292	1,4-Dichlorobenzene-d4	13.359

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.		.beta.-Pinene	136	C10H16	000127-91-3	94
2	Bicyclo[3.1.1]heptane, 6,6-dimet...			136	C10H16	018172-67-3	91
3	.alpha.-Pinene			136	C10H16	000080-56-8	90
4	Tricyclo[2.2.1.0(2,6)]heptane, 1...			136	C10H16	000508-32-7	86
5	Cyclohexane, 1-methylene-4-(1-me...			136	C10H16	000499-97-8	83



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

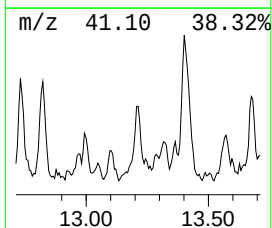
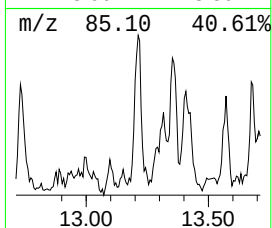
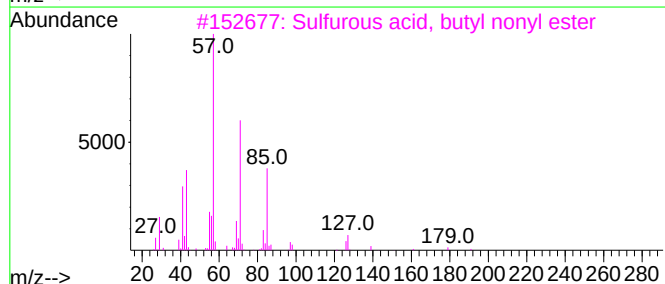
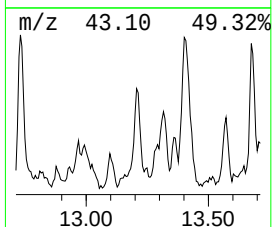
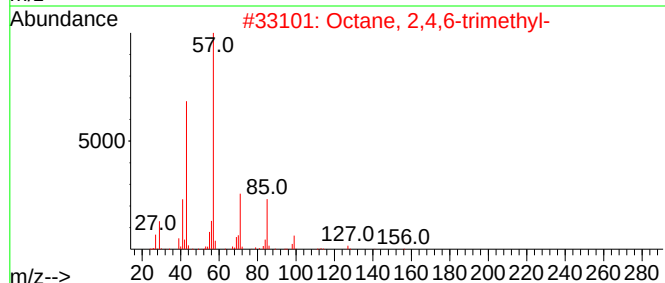
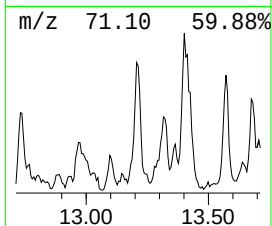
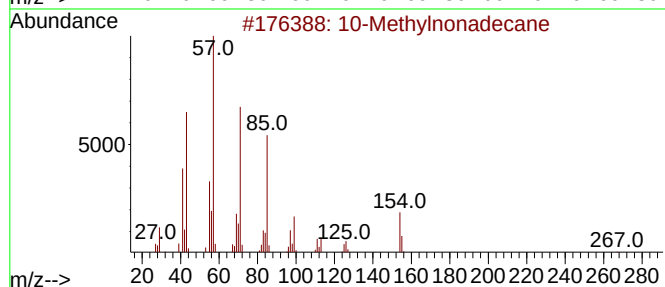
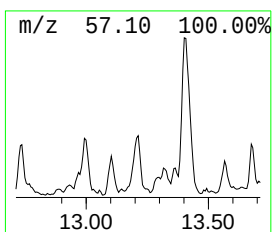
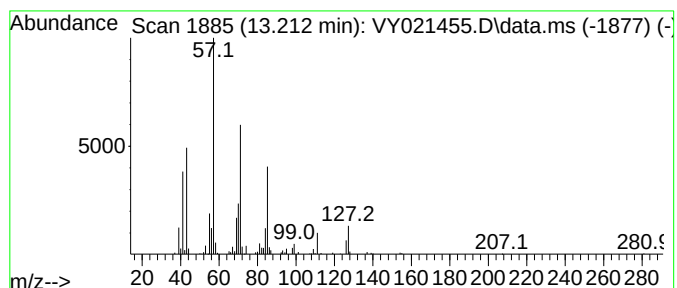
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Quant Title : SW846 8260

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

Peak Number 14 10-Methylnonadecane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.212	6.23 ug/l	93695	1,4-Dichlorobenzene-d4	13.359

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			10-Methylnonadecane	282	C20H42	056862-62-5	59
2			Octane, 2,4,6-trimethyl-	156	C11H24	062016-37-9	59
3			Sulfurous acid, butyl nonyl ester	264	C13H28O3S	1000309-17-6	59
4			Decane, 2,3,5-trimethyl-	184	C13H28	062238-11-3	59
5			Nonane, 3,7-dimethyl-	156	C11H24	017302-32-8	59



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

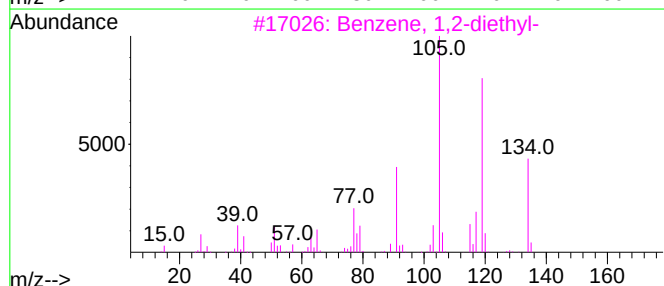
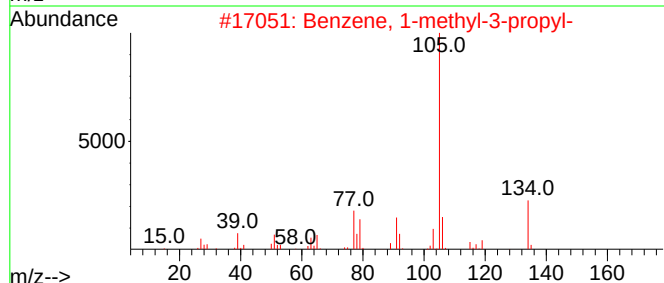
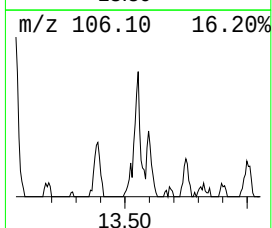
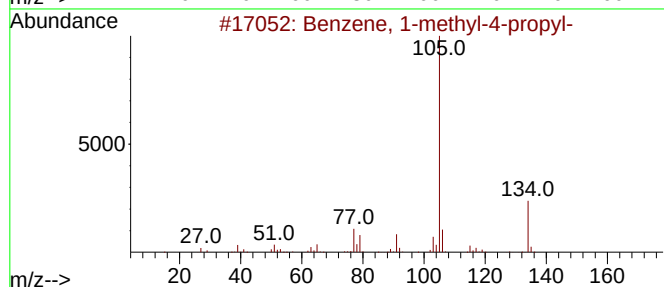
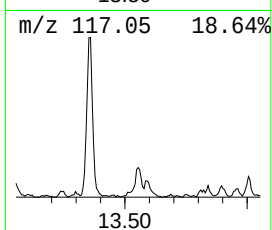
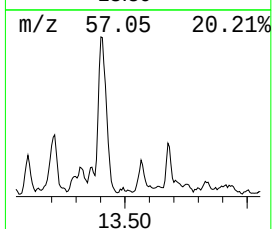
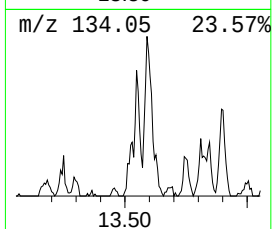
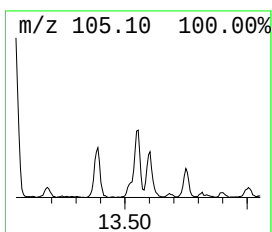
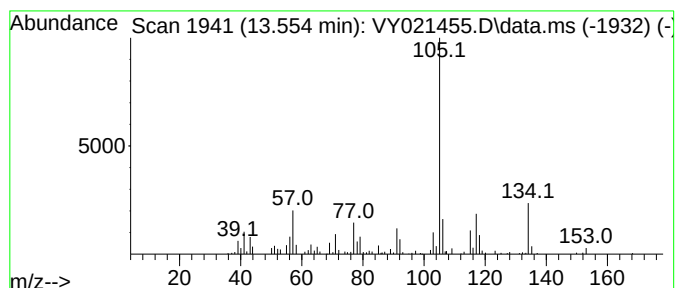
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Quant Title : SW846 8260

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

Peak Number 15 Benzene, 1-methyl-4-propyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.554	8.61 ug/l	129471	1,4-Dichlorobenzene-d4	13.359

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzene, 1-methyl-4-propyl-	134	C10H14	001074-55-1	76
2			Benzene, 1-methyl-3-propyl-	134	C10H14	001074-43-7	70
3			Benzene, 1,2-diethyl-	134	C10H14	000135-01-3	62
4			Benzene, 1-methyl-2-propyl-	134	C10H14	001074-17-5	58
5			Benzene, (1-methylpropyl)-	134	C10H14	000135-98-8	58



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021455.D
Acq On : 07 Mar 2025 12:55
Operator : SY/MD
Sample : Q1463-03
Misc : 5.45g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T3

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
Dimethyl ether	1.995	56.5	ug/l	1368100	1	7.683	1210810	50.0
Boric acid, tri...	6.372	60.1	ug/l	1454660	1	7.683	1210810	50.0
Hexane, 3-methyl-	7.884	6.9	ug/l	167854	1	7.683	1210810	50.0
Pentane, 2,2,4-...	8.219	20.7	ug/l	320604	2	8.603	774968	50.0
Heptane	8.445	7.7	ug/l	119344	2	8.603	774968	50.0
Pentane, 2,3,4-...	9.530	14.0	ug/l	216698	2	8.603	774968	50.0
Hexane, 2,3,4-t...	9.664	21.2	ug/l	328247	2	8.603	774968	50.0
Heptane, 3-methyl-	9.871	5.6	ug/l	86774	2	8.603	774968	50.0
Octane	10.292	5.0	ug/l	114970	3	11.426	1145440	50.0
Benzene, 1-ethy...	12.670	9.6	ug/l	143804	4	13.359	751753	50.0
.beta.-Pinene	12.822	8.0	ug/l	120292	4	13.359	751753	50.0
10-Methylnonade...	13.212	6.2	ug/l	93695	4	13.359	751753	50.0
Benzene, 1-meth...	13.554	8.6	ug/l	129471	4	13.359	751753	50.0

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T4	SDG No.:	Q1463
Lab Sample ID:	Q1463-04	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.1
Sample Wt/Vol:	6.12	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group2

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021443.D	1		03/06/25 18:33	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.00	U	1.00	4.40	ug/Kg
75-01-4	Vinyl Chloride	0.68	U	0.68	4.40	ug/Kg
74-83-9	Bromomethane	0.90	U	0.90	4.40	ug/Kg
75-00-3	Chloroethane	0.89	U	0.89	4.40	ug/Kg
75-65-0	Tert butyl alcohol	13.7	U	13.7	21.9	ug/Kg
75-35-4	1,1-Dichloroethene	0.68	U	0.68	4.40	ug/Kg
67-64-1	Acetone	5.50	U	5.50	21.9	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	4.40	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.59	U	0.59	4.40	ug/Kg
75-09-2	Methylene Chloride	3.00	U	3.00	8.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.74	U	0.74	4.40	ug/Kg
75-34-3	1,1-Dichloroethane	0.55	U	0.55	4.40	ug/Kg
78-93-3	2-Butanone	5.00	U	5.00	21.9	ug/Kg
56-23-5	Carbon Tetrachloride	0.76	U	0.76	4.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.54	U	0.54	4.40	ug/Kg
67-66-3	Chloroform	0.59	U	0.59	4.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.68	U	0.68	4.40	ug/Kg
71-43-2	Benzene	0.63	U	0.63	4.40	ug/Kg
107-06-2	1,2-Dichloroethane	0.54	U	0.54	4.40	ug/Kg
79-01-6	Trichloroethene	0.66	U	0.66	4.40	ug/Kg
78-87-5	1,2-Dichloropropane	0.58	U	0.58	4.40	ug/Kg
75-27-4	Bromodichloromethane	0.49	U	0.49	4.40	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.80	U	3.80	21.9	ug/Kg
108-88-3	Toluene	0.59	U	0.59	4.40	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.53	U	0.53	4.40	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.50	U	0.50	4.40	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.74	U	0.74	4.40	ug/Kg
591-78-6	2-Hexanone	4.20	U	4.20	21.9	ug/Kg
124-48-1	Dibromochloromethane	0.57	U	0.57	4.40	ug/Kg
127-18-4	Tetrachloroethene	0.78	U	0.78	4.40	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T4	SDG No.:	Q1463
Lab Sample ID:	Q1463-04	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.1
Sample Wt/Vol:	6.12 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021443.D	1		03/06/25 18:33	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.65	U	0.65	4.40	ug/Kg
100-41-4	Ethyl Benzene	0.54	U	0.54	4.40	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	8.80	ug/Kg
95-47-6	o-Xylene	0.61	U	0.61	4.40	ug/Kg
100-42-5	Styrene	0.53	U	0.53	4.40	ug/Kg
75-25-2	Bromoform	0.71	U	0.71	4.40	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.97	U	0.97	4.40	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	57.4		70 (63) - 130 (155)	115%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		70 (70) - 130 (134)	100%	SPK: 50
2037-26-5	Toluene-d8	48.7		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.2		70 (38) - 130 (136)	78%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	230000	7.707			
540-36-3	1,4-Difluorobenzene	424000	8.616			
3114-55-4	Chlorobenzene-d5	354000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	121000	13.347			
TENTATIVE IDENTIFIED COMPOUNDS						
000594-82-1	Butane, 2,2,3,3-tetramethyl-	5.10	J		8.24	ug/Kg
108-87-2	Methylcyclohexane	0.96	J		9.10	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021443.D
 Acq On : 06 Mar 2025 18:33
 Operator : SY/MD
 Sample : Q1463-04
 Misc : 6.12g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T4

Quant Time: Mar 07 00:42:17 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)

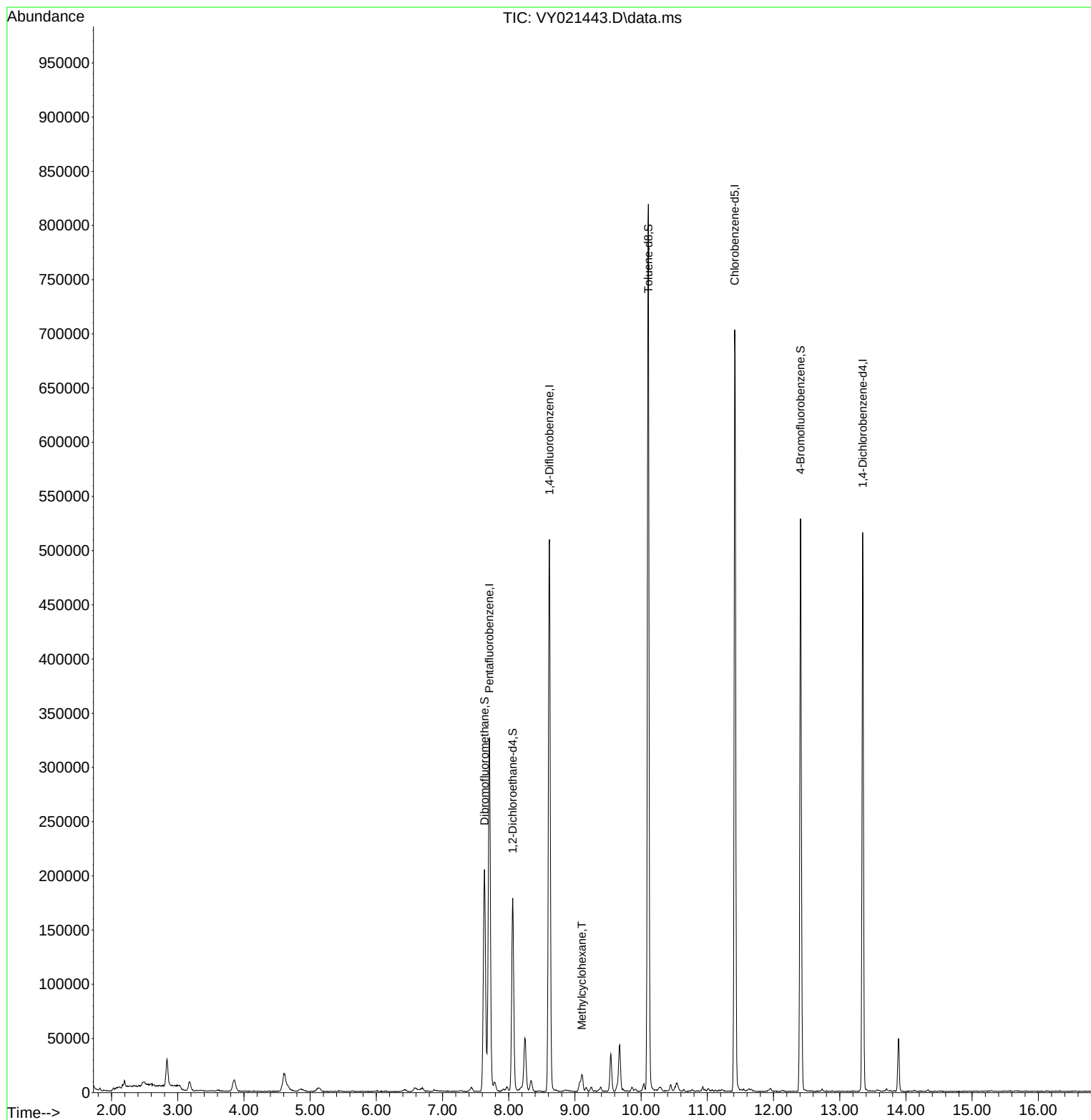
Internal Standards						
1) Pentafluorobenzene	7.707	168	230232	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	423986	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	354306	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	121402	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	139775	57.440	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	114.880%
35) Dibromofluoromethane	7.634	113	139499	50.055	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.100%
50) Toluene-d8	10.109	98	513394	48.653	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.300%
62) 4-Bromofluorobenzene	12.408	95	140842	39.238	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	78.480%
Target Compounds						
						Qvalue
39) Methylcyclohexane	9.103	83	5873	1.098	ug/l #	86

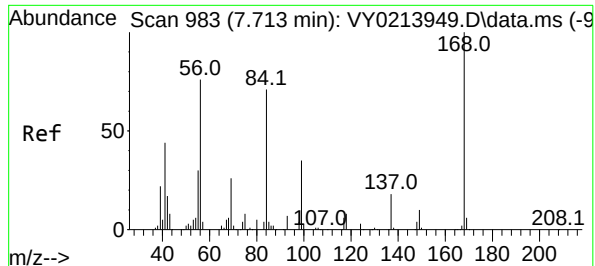
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021443.D
Acq On : 06 Mar 2025 18:33
Operator : SY/MD
Sample : Q1463-04
Misc : 6.12g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T4

Quant Time: Mar 07 00:42:17 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

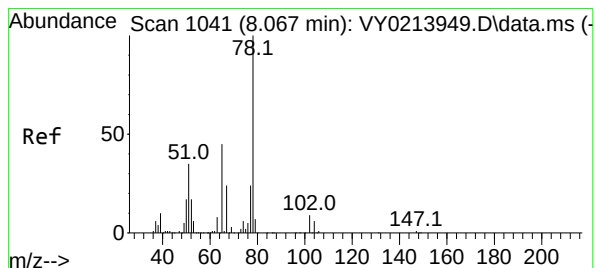
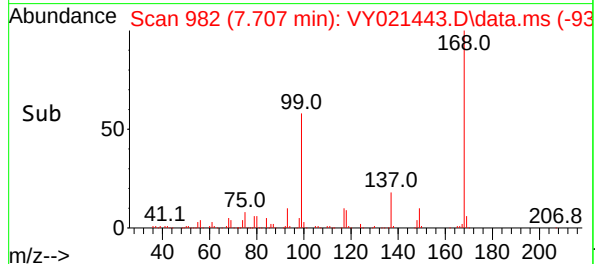
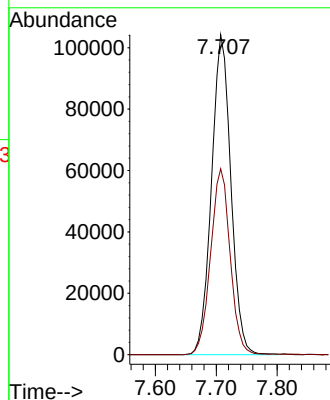
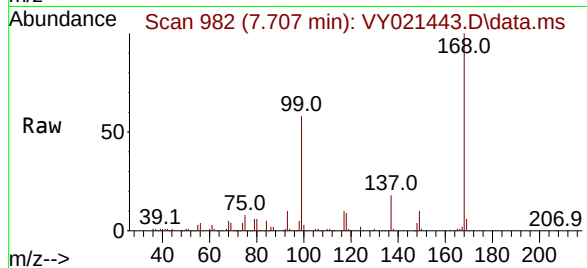




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 99
Delta R.T. -0.006 min
Lab File: VY021443.D
Acq: 06 Mar 2025 18:33

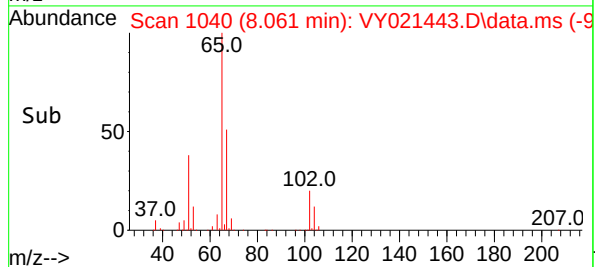
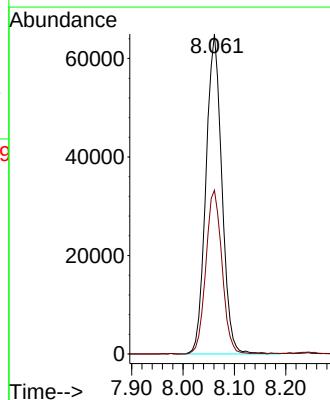
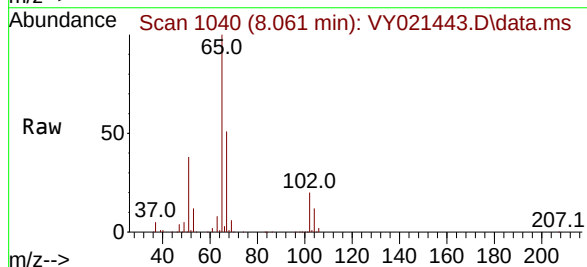
Instrument :
MSVOA_Y
ClientSampleId :
T4

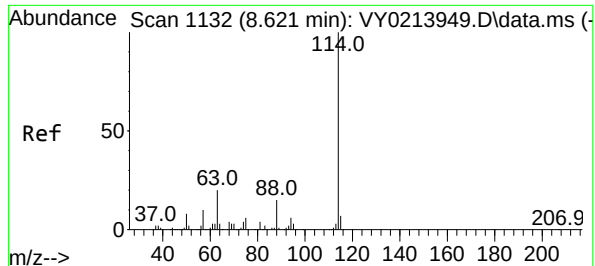
Tgt Ion:168 Resp: 230232
Ion Ratio Lower Upper
168 100
99 58.1 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 57.440 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021443.D
Acq: 06 Mar 2025 18:33

Tgt Ion: 65 Resp: 139775
Ion Ratio Lower Upper
65 100
67 51.9 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: VY021443.D

Acq: 06 Mar 2025 18:33

Instrument :

MSVOA_Y

ClientSampleId :

T4

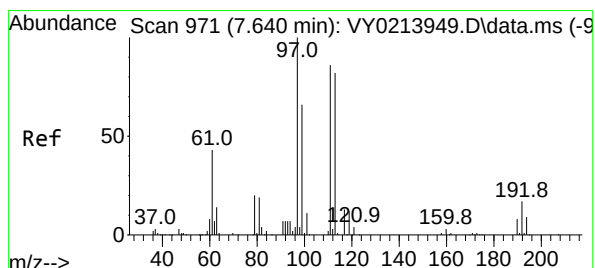
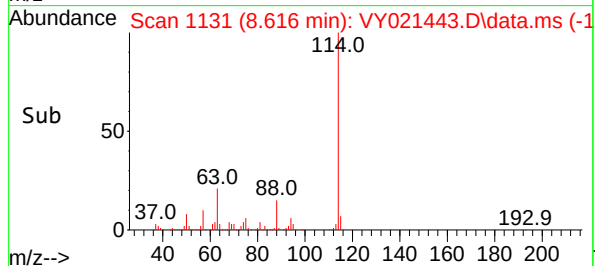
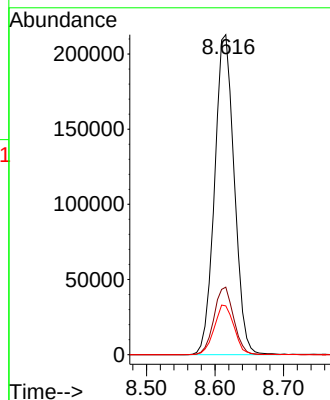
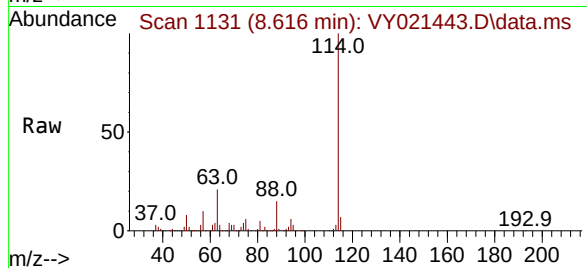
Tgt Ion:114 Resp: 423986

Ion Ratio Lower Upper

114 100

63 21.1 0.0 40.8

88 15.3 0.0 30.8



#35

Dibromofluoromethane

Concen: 50.055 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021443.D

Acq: 06 Mar 2025 18:33

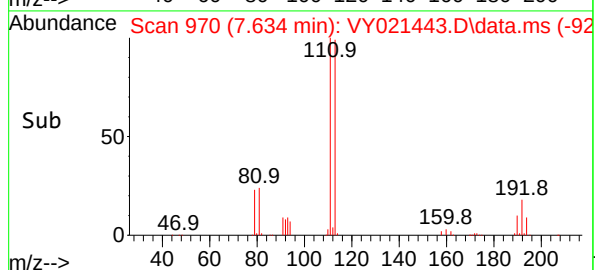
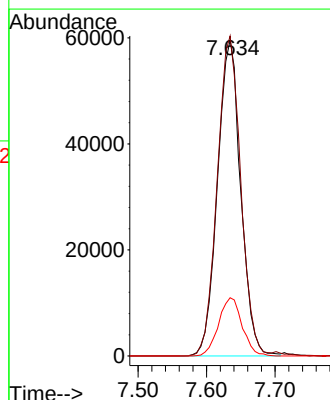
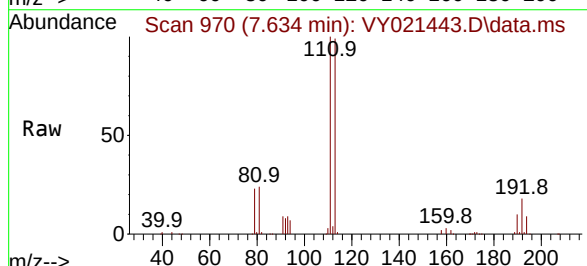
Tgt Ion:113 Resp: 139499

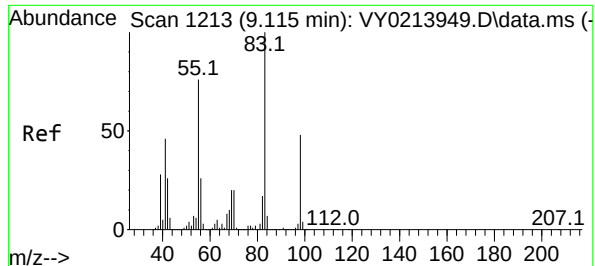
Ion Ratio Lower Upper

113 100

111 103.5 82.0 123.0

192 18.8 15.9 23.9





#39

Methylcyclohexane

Concen: 1.098 ug/l

RT: 9.103 min Scan# 1211

Delta R.T. -0.012 min

Lab File: VY021443.D

Acq: 06 Mar 2025 18:33

Instrument :

MSVOA_Y

ClientSampleId :

T4

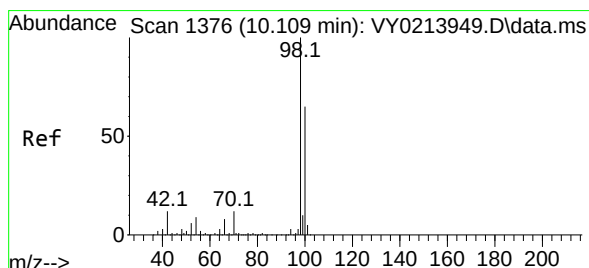
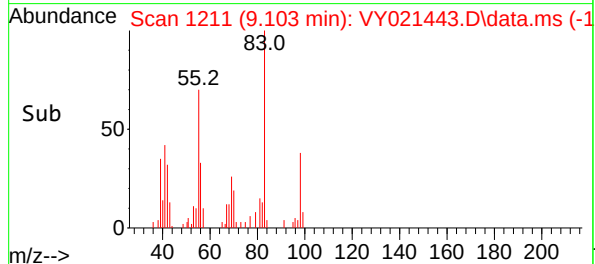
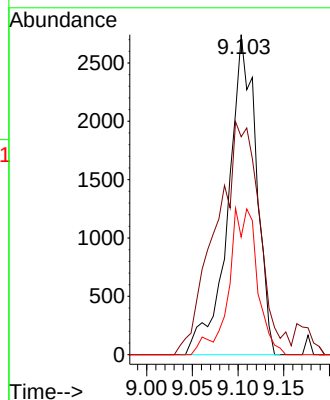
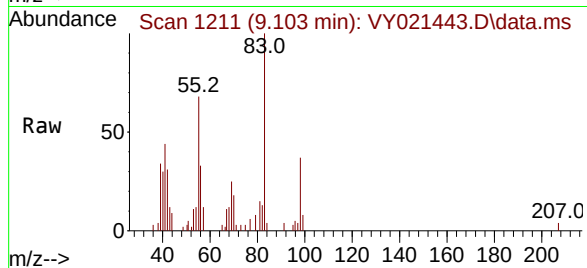
Tgt Ion: 83 Resp: 5873

Ion Ratio Lower Upper

83 100

55 65.4 60.7 91.1

98 36.8 38.6 57.8#



#50

Toluene-d8

Concen: 48.653 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021443.D

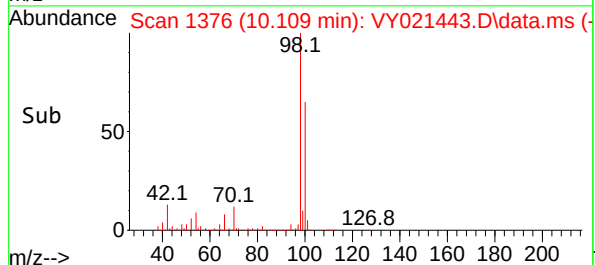
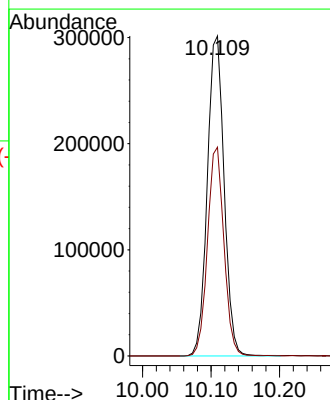
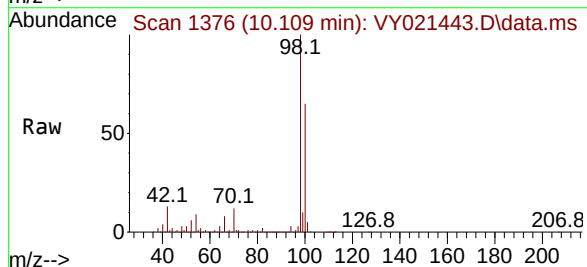
Acq: 06 Mar 2025 18:33

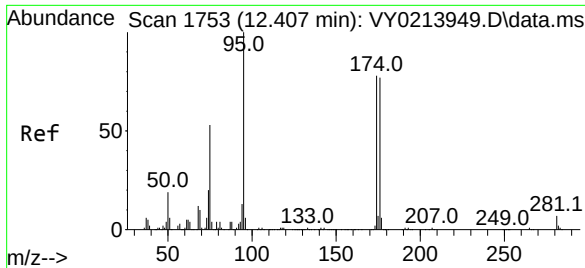
Tgt Ion: 98 Resp: 513394

Ion Ratio Lower Upper

98 100

100 64.1 52.1 78.1





#62

4-Bromofluorobenzene

Concen: 39.238 ug/l

RT: 12.408 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021443.D

Acq: 06 Mar 2025 18:33

Instrument :

MSVOA_Y

ClientSampleId :

T4

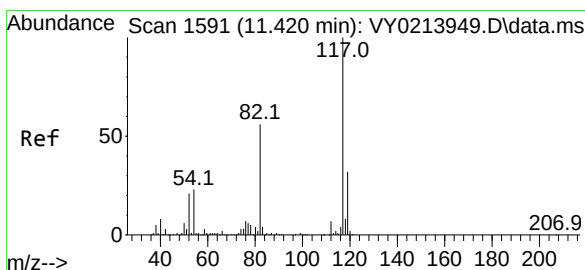
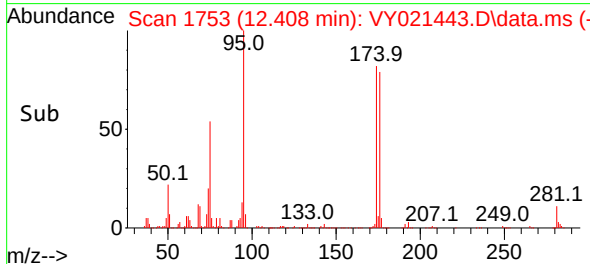
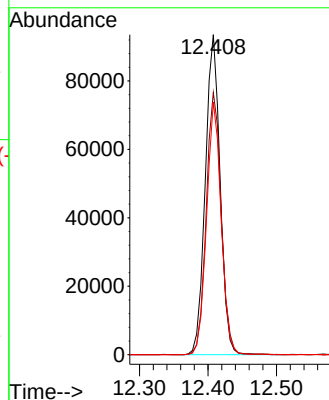
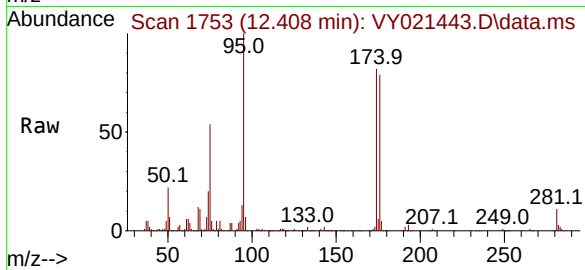
Tgt Ion: 95 Resp: 140842

Ion Ratio Lower Upper

95 100

174 82.7 0.0 165.0

176 77.6 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: VY021443.D

Acq: 06 Mar 2025 18:33

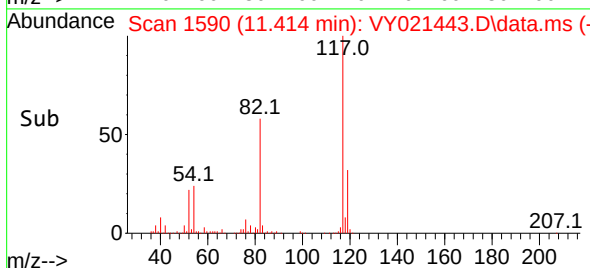
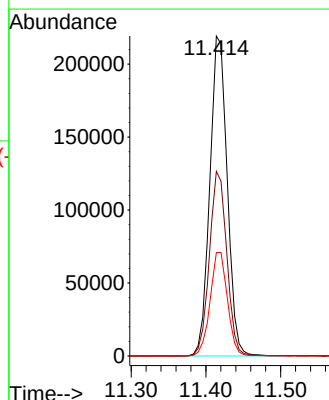
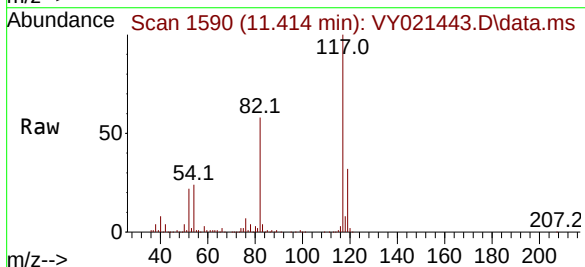
Tgt Ion: 117 Resp: 354306

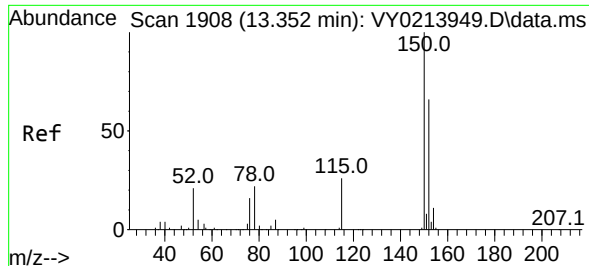
Ion Ratio Lower Upper

117 100

82 57.7 44.6 67.0

119 32.3 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: VY021443.D

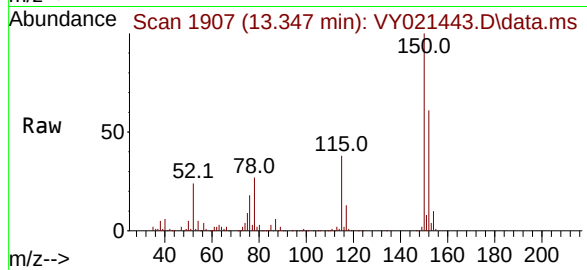
Acq: 06 Mar 2025 18:33

Instrument :

MSVOA_Y

ClientSampleId :

T4



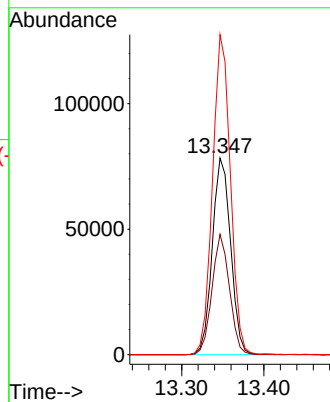
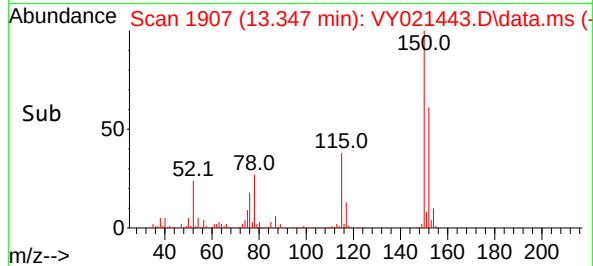
Tgt Ion:152 Resp: 121402

Ion Ratio Lower Upper

152 100

115 58.3 29.0 87.0

150 158.7 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021443.D
 Acq On : 06 Mar 2025 18:33
 Operator : SY/MD
 Sample : Q1463-04
 Misc : 6.12g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T4

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: VY021443.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.836	176	183	192	rBV2	24999	55177	3.93%	0.736%
2	3.178	231	239	246	rBV2	7938	19392	1.38%	0.259%
3	3.854	340	350	361	rVB3	10595	35498	2.53%	0.473%
4	4.604	462	473	495	rBV4	16185	68070	4.85%	0.907%
5	7.634	959	970	976	rBV	204748	487416	34.70%	6.498%
6	7.707	976	982	992	rVV	326159	738691	52.58%	9.848%
7	7.781	992	994	1004	rVB5	8160	17906	1.27%	0.239%
8	8.061	1031	1040	1052	rVB	177495	384317	27.36%	5.124%
9	8.244	1061	1070	1079	rVB	47931	118148	8.41%	1.575%
10	8.335	1079	1085	1095	rVB5	10064	24092	1.71%	0.321%
11	8.616	1121	1131	1143	rBV	509135	1024542	72.93%	13.659%
12	9.103	1199	1211	1218	rBV6	15864	52022	3.70%	0.694%
13	9.542	1275	1283	1292	rVB2	34175	68033	4.84%	0.907%
14	9.677	1292	1305	1312	rBV2	42542	98526	7.01%	1.314%
15	10.109	1368	1376	1391	rVB	817655	1404855	100.00%	18.729%
16	10.542	1437	1447	1459	rVB10	7624	24080	1.71%	0.321%
17	11.414	1583	1590	1602	rBV	702754	1145267	81.52%	15.268%
18	12.408	1745	1753	1762	rBV2	528566	876183	62.37%	11.681%
19	13.347	1898	1907	1915	rBV	515570	779481	55.48%	10.392%
20	13.889	1989	1996	2004	rBV	48819	79250	5.64%	1.057%

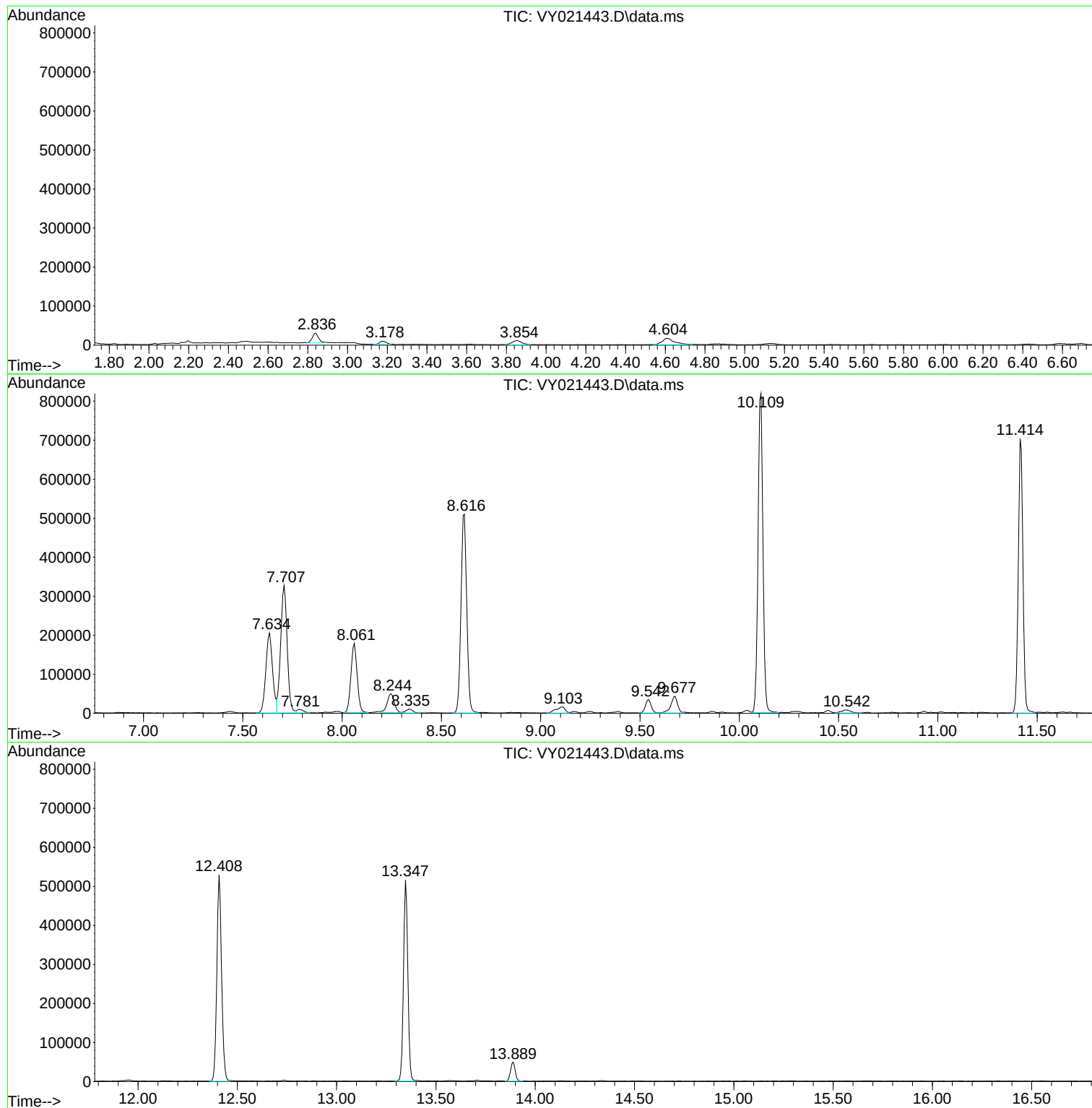
Sum of corrected areas: 7500946

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021443.D
Acq On : 06 Mar 2025 18:33
Operator : SY/MD
Sample : Q1463-04
Misc : 6.12g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T4

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\VY030625\
Data File : VY021443.D
Acq On : 06 Mar 2025 18:33
Operator : SY/MD
Sample : Q1463-04
Misc : 6.12g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T4

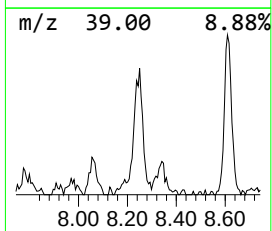
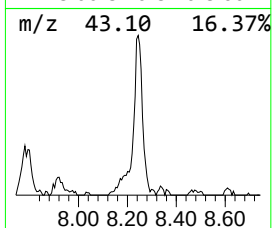
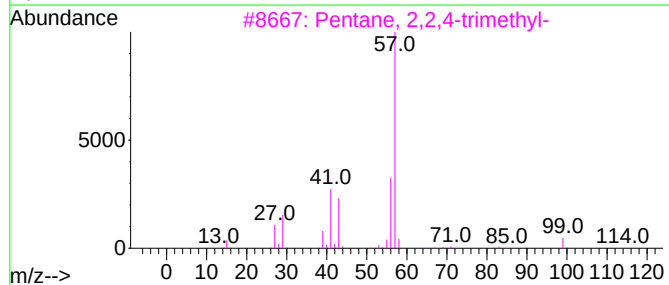
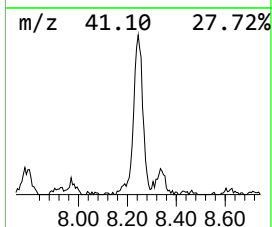
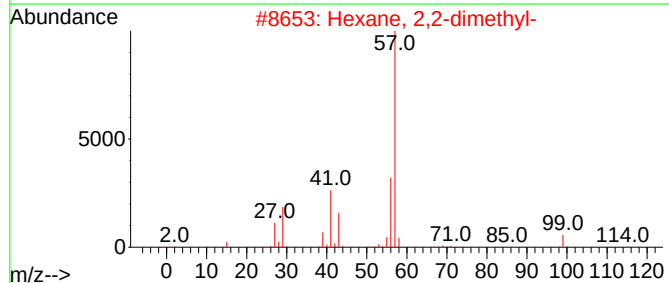
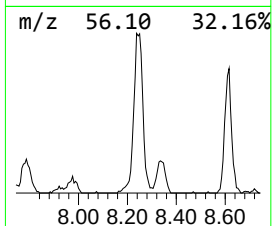
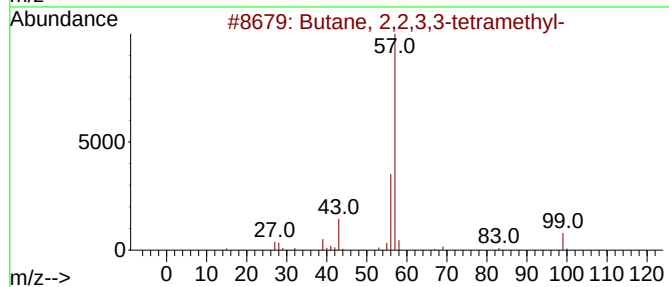
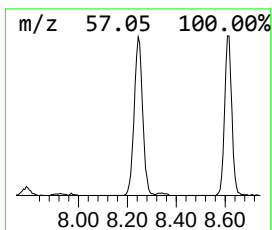
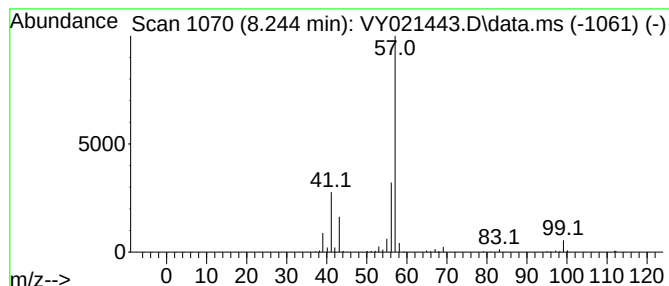
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

Peak Number 1 Butane, 2,2,3,3-tetramethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.244	5.77 ug/l	118148	1,4-Difluorobenzene	8.616

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Butane, 2,2,3,3-tetramethyl-	114	C8H18	000594-82-1	72
2			Hexane, 2,2-dimethyl-	114	C8H18	000590-73-8	72
3			Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	72
4			Hexane, 2,2,4-trimethyl-	128	C9H20	016747-26-5	59
5			Pentane, 2,2,4,4-tetramethyl-	128	C9H20	001070-87-7	45



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021443.D
Acq On : 06 Mar 2025 18:33
Operator : SY/MD
Sample : Q1463-04
Misc : 6.12g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 20 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T4

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
Butane, 2,2,3,3...	8.244	5.8	ug/l	118148	2	8.616	1024540	50.0

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T5	SDG No.:	Q1463
Lab Sample ID:	Q1463-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.9
Sample Wt/Vol:	7.01	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group2

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021442.D	1		03/06/25 18:09	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	0.90	U	0.90	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.60	U	0.60	3.90	ug/Kg
74-83-9	Bromomethane	0.80	U	0.80	3.90	ug/Kg
75-00-3	Chloroethane	0.78	U	0.78	3.90	ug/Kg
75-65-0	Tert butyl alcohol	12.1	U	12.1	19.4	ug/Kg
75-35-4	1,1-Dichloroethene	0.61	U	0.61	3.90	ug/Kg
67-64-1	Acetone	4.80	U	4.80	19.4	ug/Kg
75-15-0	Carbon Disulfide	0.99	U	0.99	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.52	U	0.52	3.90	ug/Kg
75-09-2	Methylene Chloride	2.60	U	2.60	7.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.65	U	0.65	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.49	U	0.49	3.90	ug/Kg
78-93-3	2-Butanone	4.40	U	4.40	19.4	ug/Kg
56-23-5	Carbon Tetrachloride	0.68	U	0.68	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.47	U	0.47	3.90	ug/Kg
67-66-3	Chloroform	0.52	U	0.52	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.61	U	0.61	3.90	ug/Kg
71-43-2	Benzene	0.56	U	0.56	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.47	U	0.47	3.90	ug/Kg
79-01-6	Trichloroethene	0.58	U	0.58	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.51	U	0.51	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.43	U	0.43	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.40	U	3.40	19.4	ug/Kg
108-88-3	Toluene	0.52	U	0.52	3.90	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.47	U	0.47	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.44	U	0.44	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.65	U	0.65	3.90	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	19.4	ug/Kg
124-48-1	Dibromochloromethane	0.50	U	0.50	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.69	U	0.69	3.90	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T5	SDG No.:	Q1463
Lab Sample ID:	Q1463-05	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	91.9
Sample Wt/Vol:	7.01	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021442.D	1		03/06/25 18:09	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.57	U	0.57	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.48	U	0.48	3.90	ug/Kg
179601-23-1	m/p-Xylenes	1.00	U	1.00	7.80	ug/Kg
95-47-6	o-Xylene	0.54	U	0.54	3.90	ug/Kg
100-42-5	Styrene	0.47	U	0.47	3.90	ug/Kg
75-25-2	Bromoform	0.63	U	0.63	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.85	U	0.85	3.90	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	59.8		70 (63) - 130 (155)	120%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		70 (70) - 130 (134)	104%	SPK: 50
2037-26-5	Toluene-d8	48.6		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	41.9		70 (38) - 130 (136)	84%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	226000	7.707			
540-36-3	1,4-Difluorobenzene	419000	8.616			
3114-55-4	Chlorobenzene-d5	363000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	132000	13.347			
TENTATIVE IDENTIFIED COMPOUNDS						
013450-73-2	11H-Dibenzo[b,e][1,4]diazepin-11-o	5.00	J		13.9	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021442.D
 Acq On : 06 Mar 2025 18:09
 Operator : SY/MD
 Sample : Q1463-05
 Misc : 7.01g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T5

Quant Time: Mar 07 00:42:04 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	226372	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	418613	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	362578	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	131867	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	143010	59.771	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	119.540%
35) Dibromofluoromethane	7.634	113	142977	51.961	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	103.920%
50) Toluene-d8	10.103	98	506571	48.622	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.240%
62) 4-Bromofluorobenzene	12.408	95	148435	41.884	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	83.760%

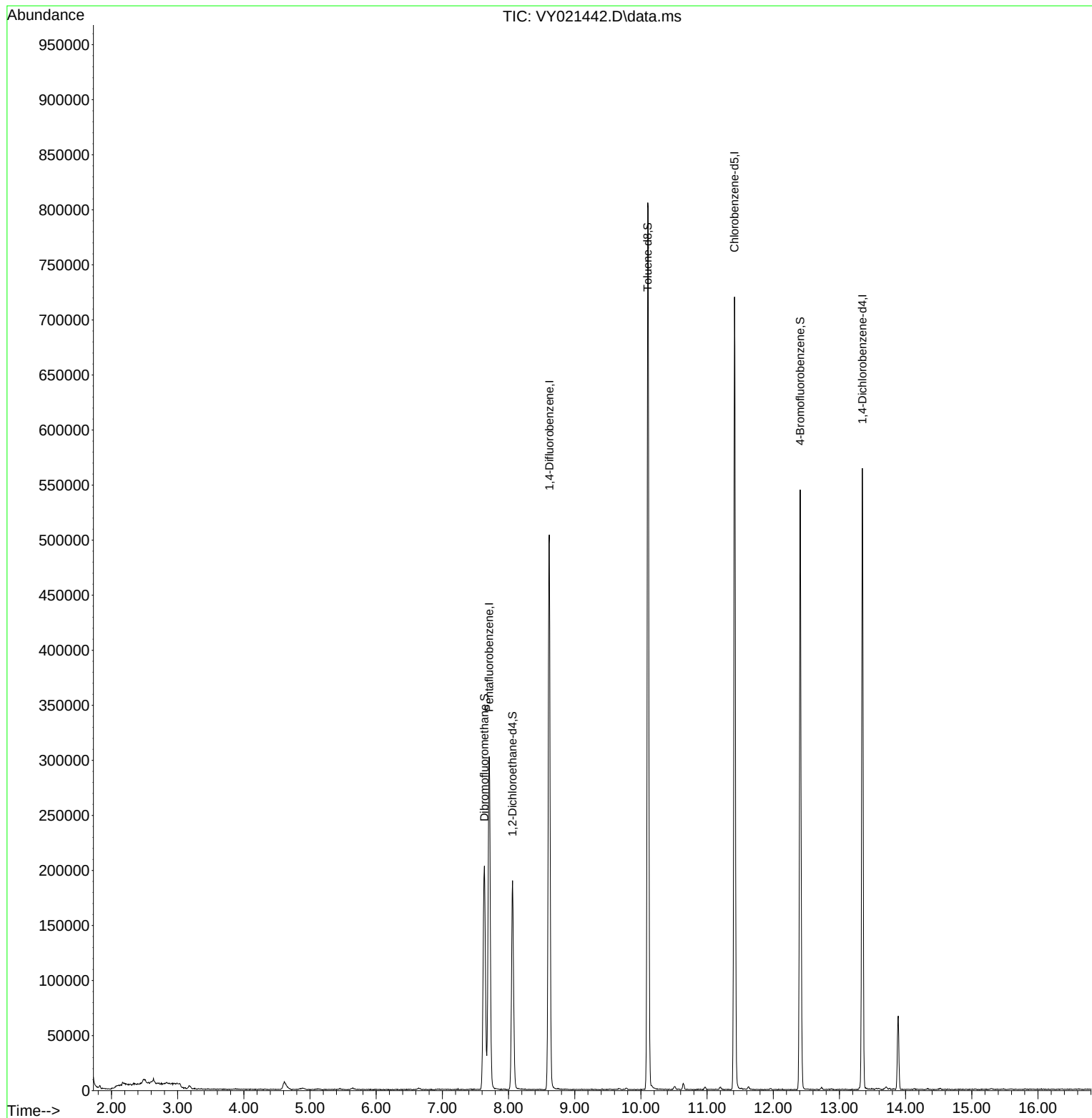
Target Compounds	Qvalue

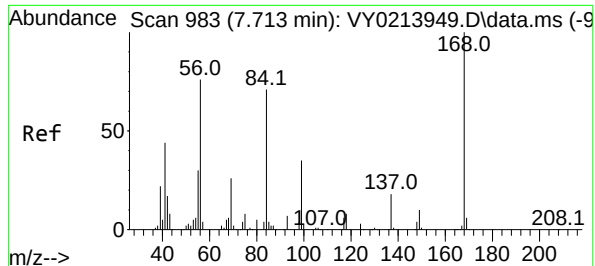
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021442.D
Acq On : 06 Mar 2025 18:09
Operator : SY/MD
Sample : Q1463-05
Misc : 7.01g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T5

Quant Time: Mar 07 00:42:04 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

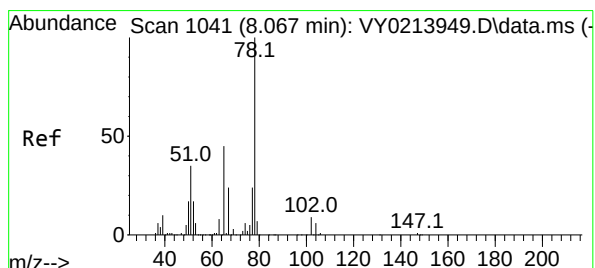
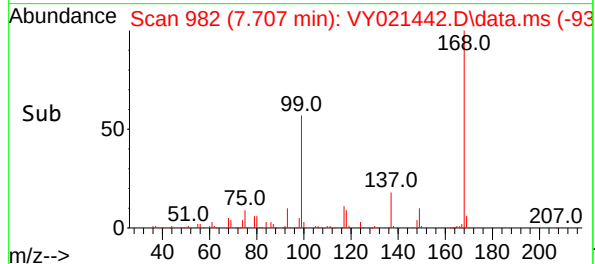
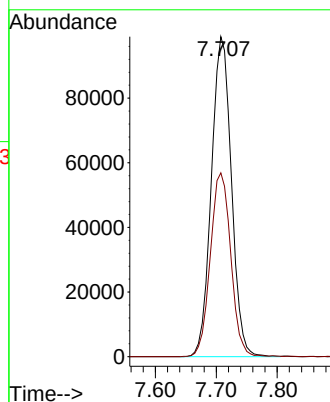
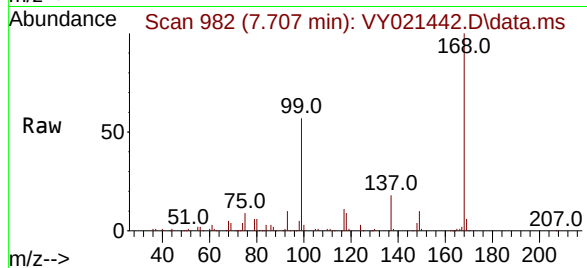




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021442.D
Acq: 06 Mar 2025 18:09

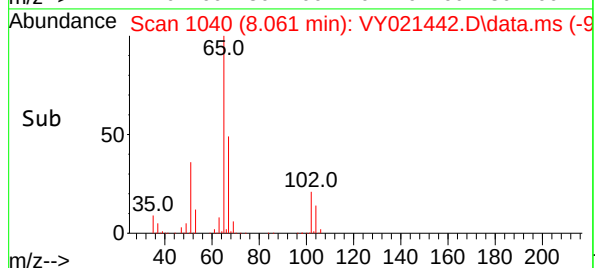
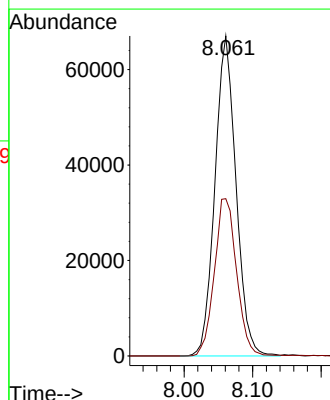
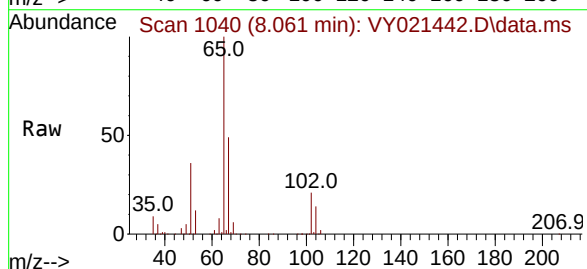
Instrument :
MSVOA_Y
ClientSampleId :
T5

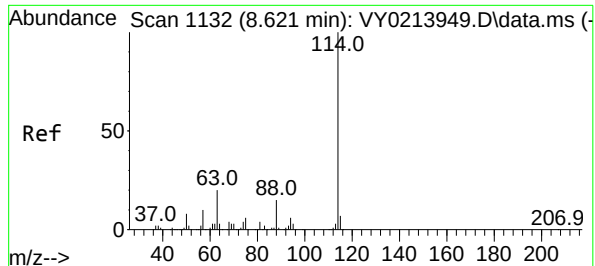
Tgt Ion:168 Resp: 226372
Ion Ratio Lower Upper
168 100
99 57.4 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 59.771 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021442.D
Acq: 06 Mar 2025 18:09

Tgt Ion: 65 Resp: 143010
Ion Ratio Lower Upper
65 100
67 52.0 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: VY021442.D

Acq: 06 Mar 2025 18:09

Instrument :

MSVOA_Y

ClientSampleId :

T5

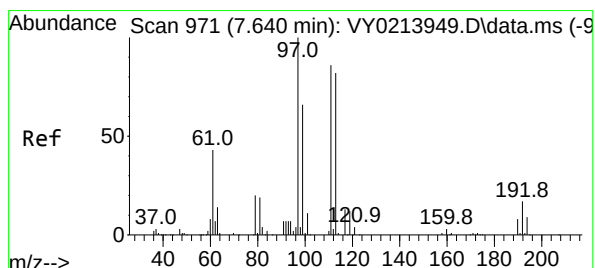
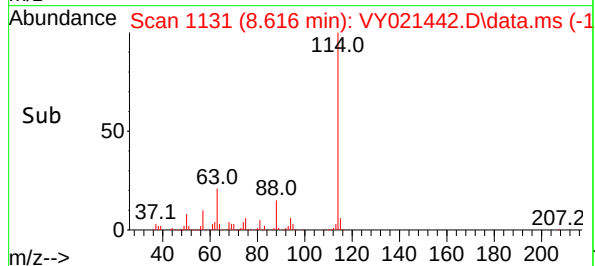
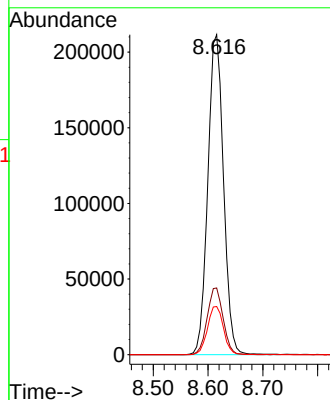
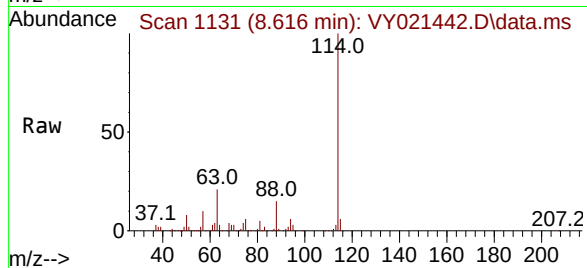
Tgt Ion:114 Resp: 418613

Ion Ratio Lower Upper

114 100

63 20.9 0.0 40.8

88 15.0 0.0 30.8



#35

Dibromofluoromethane

Concen: 51.961 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021442.D

Acq: 06 Mar 2025 18:09

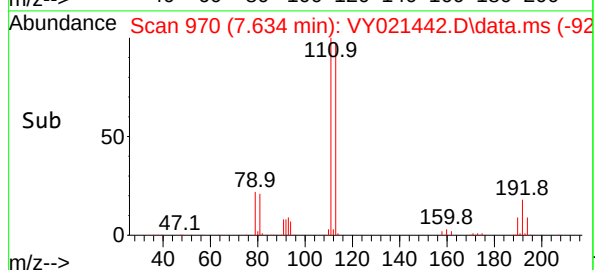
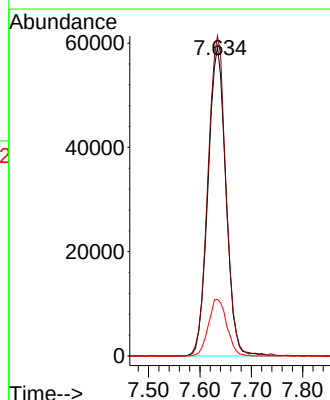
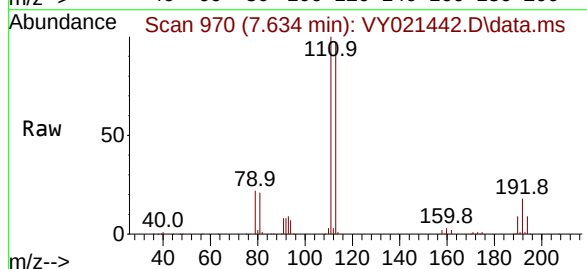
Tgt Ion:113 Resp: 142977

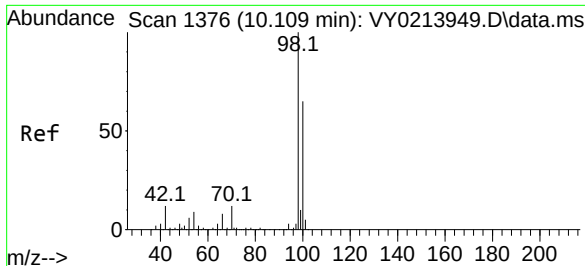
Ion Ratio Lower Upper

113 100

111 104.1 82.0 123.0

192 18.8 15.9 23.9

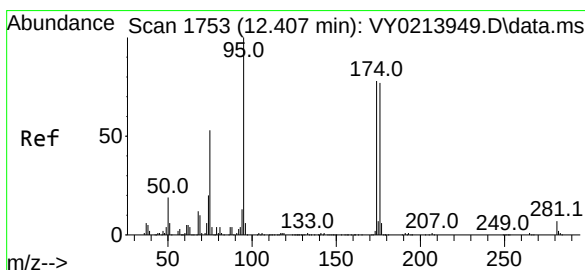
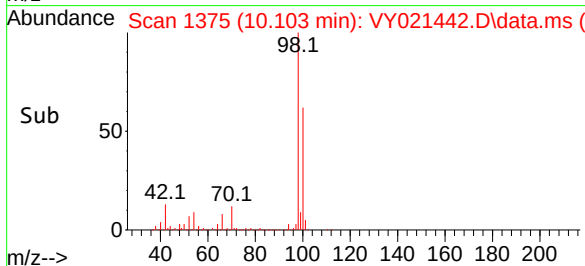
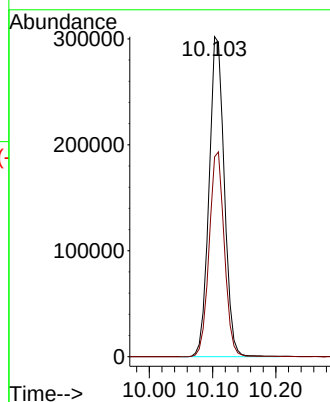
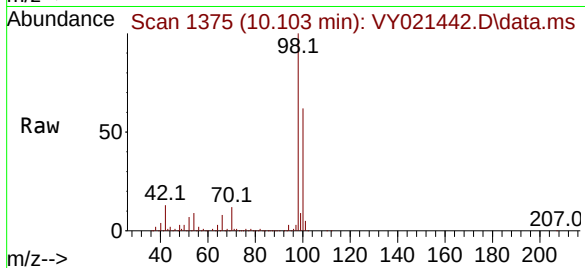




#50
Toluene-d8
Concen: 48.622 ug/l
RT: 10.103 min Scan# 11
Delta R.T. -0.006 min
Lab File: VY021442.D
Acq: 06 Mar 2025 18:09

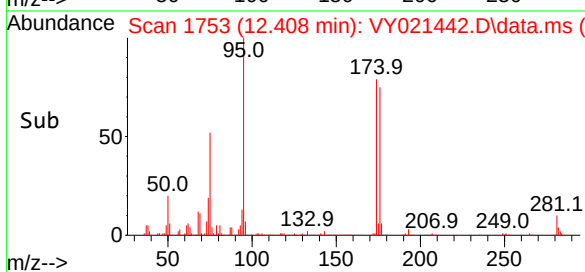
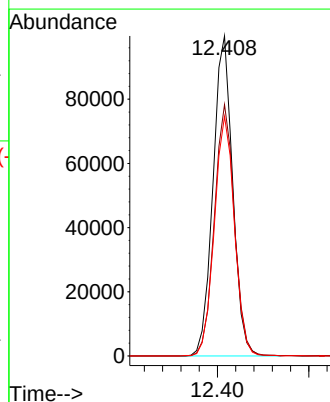
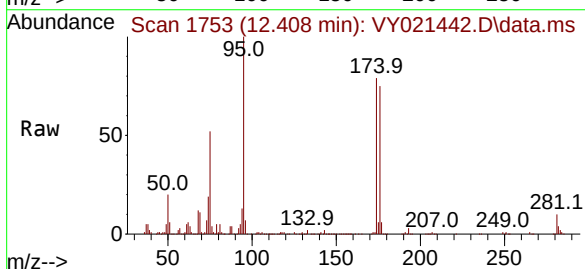
Instrument :
MSVOA_Y
ClientSampleId :
T5

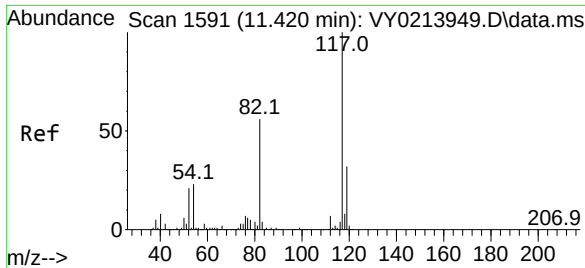
Tgt Ion: 98 Resp: 506571
Ion Ratio Lower Upper
98 100
100 63.7 52.1 78.1



#62
4-Bromofluorobenzene
Concen: 41.884 ug/l
RT: 12.408 min Scan# 1753
Delta R.T. 0.000 min
Lab File: VY021442.D
Acq: 06 Mar 2025 18:09

Tgt Ion: 95 Resp: 148435
Ion Ratio Lower Upper
95 100
174 80.3 0.0 165.0
176 76.7 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: VY021442.D

Acq: 06 Mar 2025 18:09

Instrument :

MSVOA_Y

ClientSampleId :

T5

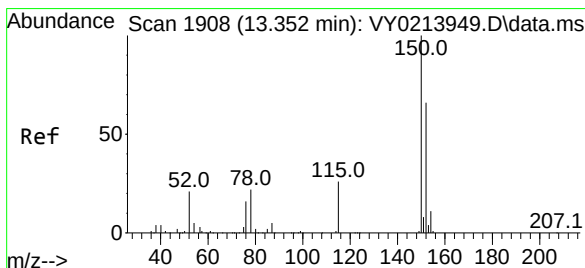
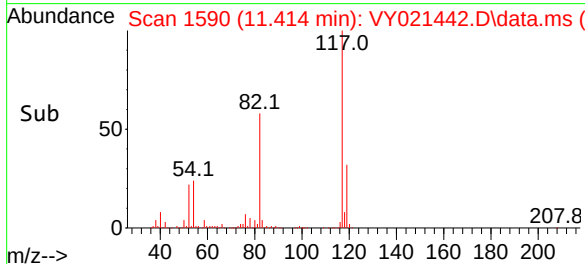
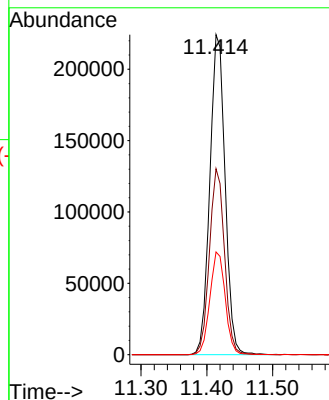
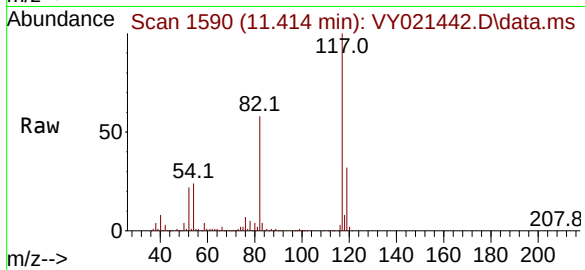
Tgt Ion:117 Resp: 362578

Ion Ratio Lower Upper

117 100

82 58.1 44.6 67.0

119 32.1 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: VY021442.D

Acq: 06 Mar 2025 18:09

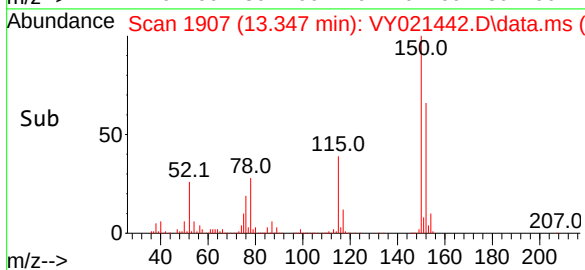
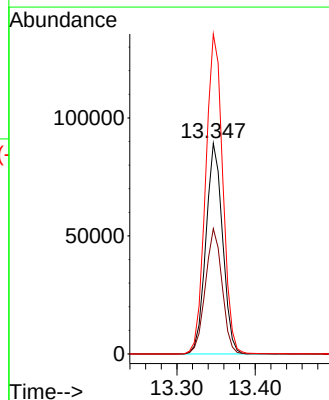
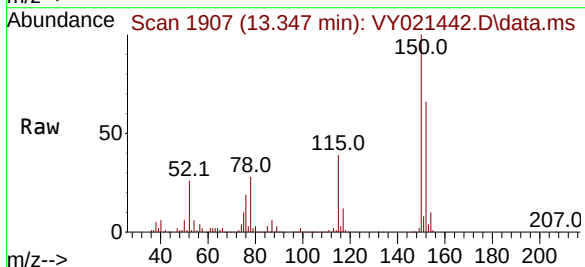
Tgt Ion:152 Resp: 131867

Ion Ratio Lower Upper

152 100

115 59.4 29.0 87.0

150 155.6 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021442.D
Acq On : 06 Mar 2025 18:09
Operator : SY/MD
Sample : Q1463-05
Misc : 7.01g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T5

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: VY021442.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.610	465	474	488	rBV4	7076	24869	1.82%	0.354%
2	7.634	960	970	976	rBV	202963	493204	36.06%	7.019%
3	7.707	976	982	995	rVB	301777	695089	50.82%	9.892%
4	8.061	1029	1040	1053	rBV	189880	409431	29.93%	5.827%
5	8.616	1120	1131	1147	rBV	503996	1013463	74.10%	14.423%
6	10.103	1368	1375	1384	rBV	805419	1367769	100.00%	19.465%
7	11.414	1582	1590	1604	rBV	720046	1166175	85.26%	16.596%
8	12.408	1745	1753	1765	rBV2	545055	901469	65.91%	12.829%
9	13.347	1895	1907	1917	rBV	564410	845691	61.83%	12.035%
10	13.889	1989	1996	2002	rBV2	66855	109753	8.02%	1.562%

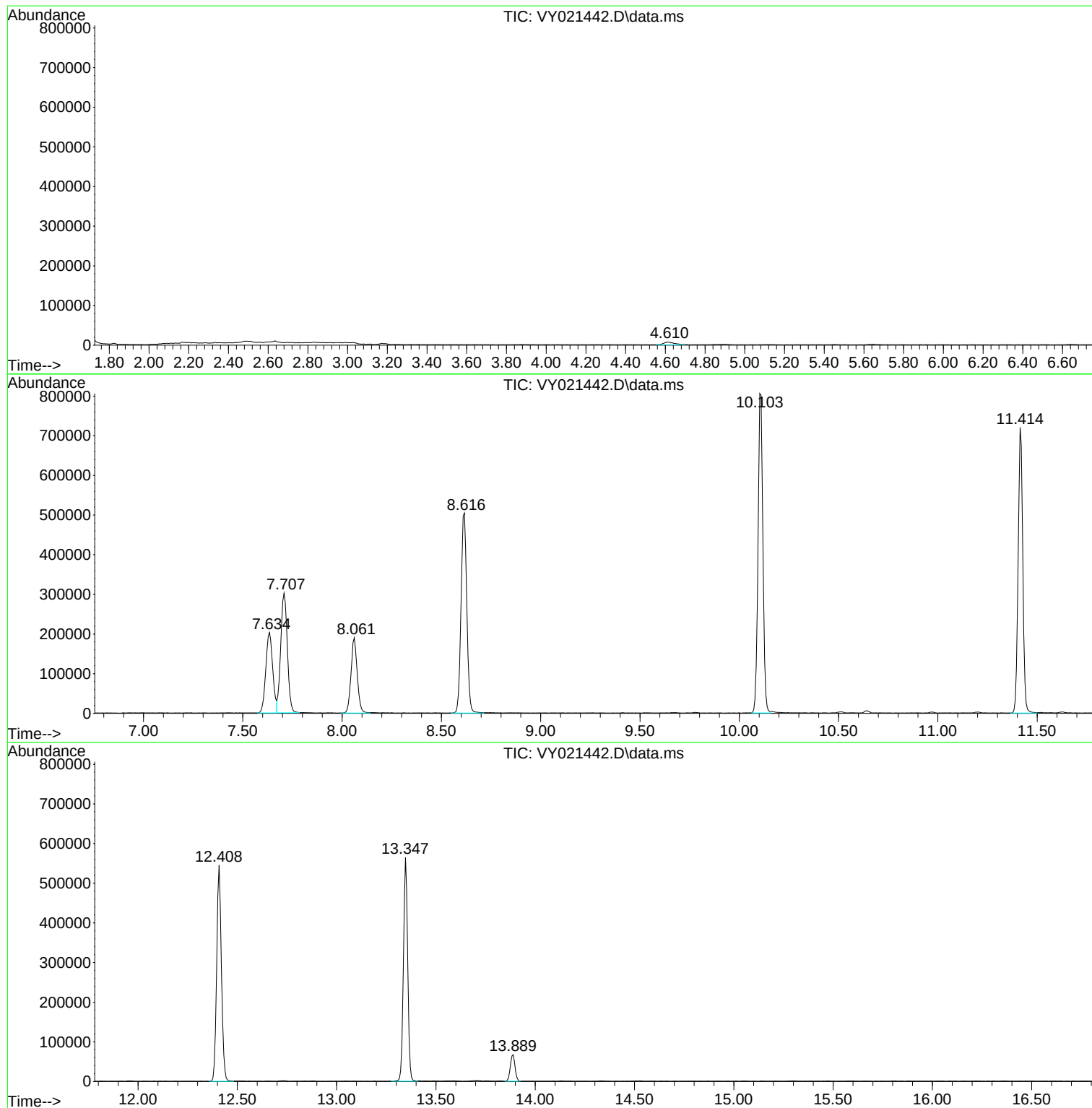
Sum of corrected areas: 7026913

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021442.D
Acq On : 06 Mar 2025 18:09
Operator : SY/MD
Sample : Q1463-05
Misc : 7.01g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T5

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\VY030625\
Data File : VY021442.D
Acq On : 06 Mar 2025 18:09
Operator : SY/MD
Sample : Q1463-05
Misc : 7.01g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T5

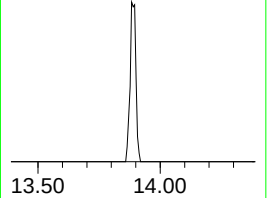
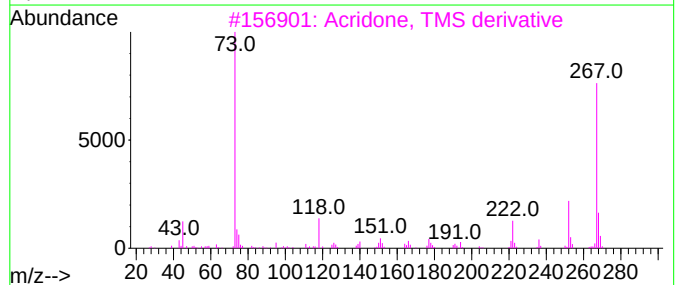
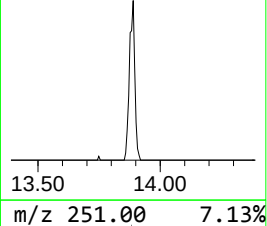
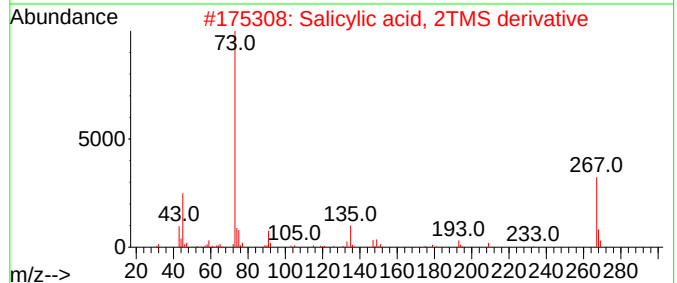
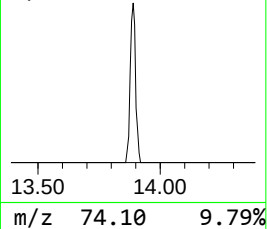
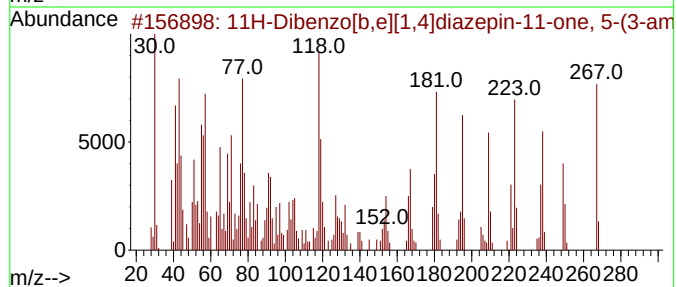
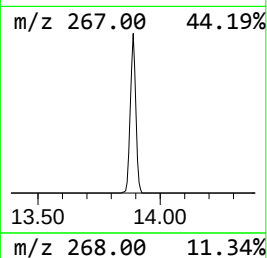
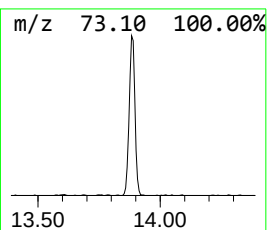
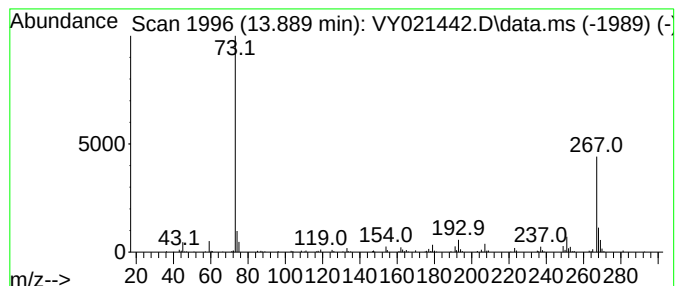
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
Quant Title : SW846 8260

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

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.889	6.49 ug/l	109753	1,4-Dichlorobenzene-d4	13.347

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	95
2			Salicylic acid, 2TMS derivative	282	C13H22O3Si2	003789-85-3	64
3			Acridone, TMS derivative	267	C16H17NOSi	1000478-16-0	64
4			5-(4-Fluorophenyl)-1,3-oxazole-2...	267	C12H14FN0SSi	1000497-07-6	64
5			9-Acridinol, trimethylsilyl ether	267	C16H17NOSi	1000463-65-5	64



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021442.D
Acq On : 06 Mar 2025 18:09
Operator : SY/MD
Sample : Q1463-05
Misc : 7.01g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 19 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T5

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
11H-Dibenzo[b,e...	13.889	6.5	ug/l	109753	4	13.347	845691	50.0

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T6	SDG No.:	Q1463
Lab Sample ID:	Q1463-06	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.6
Sample Wt/Vol:	6.41	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021444.D	1		03/06/25 18:56	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	0.96	U	0.96	4.10	ug/Kg
75-01-4	Vinyl Chloride	0.63	U	0.63	4.10	ug/Kg
74-83-9	Bromomethane	0.85	U	0.85	4.10	ug/Kg
75-00-3	Chloroethane	0.83	U	0.83	4.10	ug/Kg
75-65-0	Tert butyl alcohol	12.9	U	12.9	20.6	ug/Kg
75-35-4	1,1-Dichloroethene	0.64	U	0.64	4.10	ug/Kg
67-64-1	Acetone	5.10	U	5.10	20.6	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	4.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.55	U	0.55	4.10	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	8.20	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.69	U	0.69	4.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.52	U	0.52	4.10	ug/Kg
78-93-3	2-Butanone	4.70	U	4.70	20.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.72	U	0.72	4.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	4.10	ug/Kg
67-66-3	Chloroform	0.55	U	0.55	4.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.64	U	0.64	4.10	ug/Kg
71-43-2	Benzene	0.59	U	0.59	4.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.50	U	0.50	4.10	ug/Kg
79-01-6	Trichloroethene	0.62	U	0.62	4.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.54	U	0.54	4.10	ug/Kg
75-27-4	Bromodichloromethane	0.46	U	0.46	4.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	20.6	ug/Kg
108-88-3	Toluene	0.55	U	0.55	4.10	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.49	U	0.49	4.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.47	U	0.47	4.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.69	U	0.69	4.10	ug/Kg
591-78-6	2-Hexanone	3.90	U	3.90	20.6	ug/Kg
124-48-1	Dibromochloromethane	0.54	U	0.54	4.10	ug/Kg
127-18-4	Tetrachloroethene	0.73	U	0.73	4.10	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T6	SDG No.:	Q1463
Lab Sample ID:	Q1463-06	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.6
Sample Wt/Vol:	6.41	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	ID :	0.25
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOCMS Group2

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021444.D	1		03/06/25 18:56	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.61	U	0.61	4.10	ug/Kg
100-41-4	Ethyl Benzene	0.51	U	0.51	4.10	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.20	ug/Kg
95-47-6	o-Xylene	0.58	U	0.58	4.10	ug/Kg
100-42-5	Styrene	0.49	U	0.49	4.10	ug/Kg
75-25-2	Bromoform	0.67	U	0.67	4.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.91	U	0.91	4.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	60.4		70 (63) - 130 (155)	121%	SPK: 50
1868-53-7	Dibromofluoromethane	51.6		70 (70) - 130 (134)	103%	SPK: 50
2037-26-5	Toluene-d8	42.0		70 (74) - 130 (123)	84%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.2		70 (38) - 130 (136)	84%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	224000	7.707			
540-36-3	1,4-Difluorobenzene	421000	8.615			
3114-55-4	Chlorobenzene-d5	364000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	138000	13.346			

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\VY030625\
 Data File : VY021444.D
 Acq On : 06 Mar 2025 18:56
 Operator : SY/MD
 Sample : Q1463-06
 Misc : 6.41g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T6

Quant Time: Mar 07 00:42:32 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	224114	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	420682	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	363546	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	137758	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.060	65	143059	60.394	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	120.780%
35) Dibromofluoromethane	7.634	113	142620	51.577	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	103.160%
50) Toluene-d8	10.109	98	439828	42.009	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	84.020%
62) 4-Bromofluorobenzene	12.407	95	150442	42.242	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	84.480%

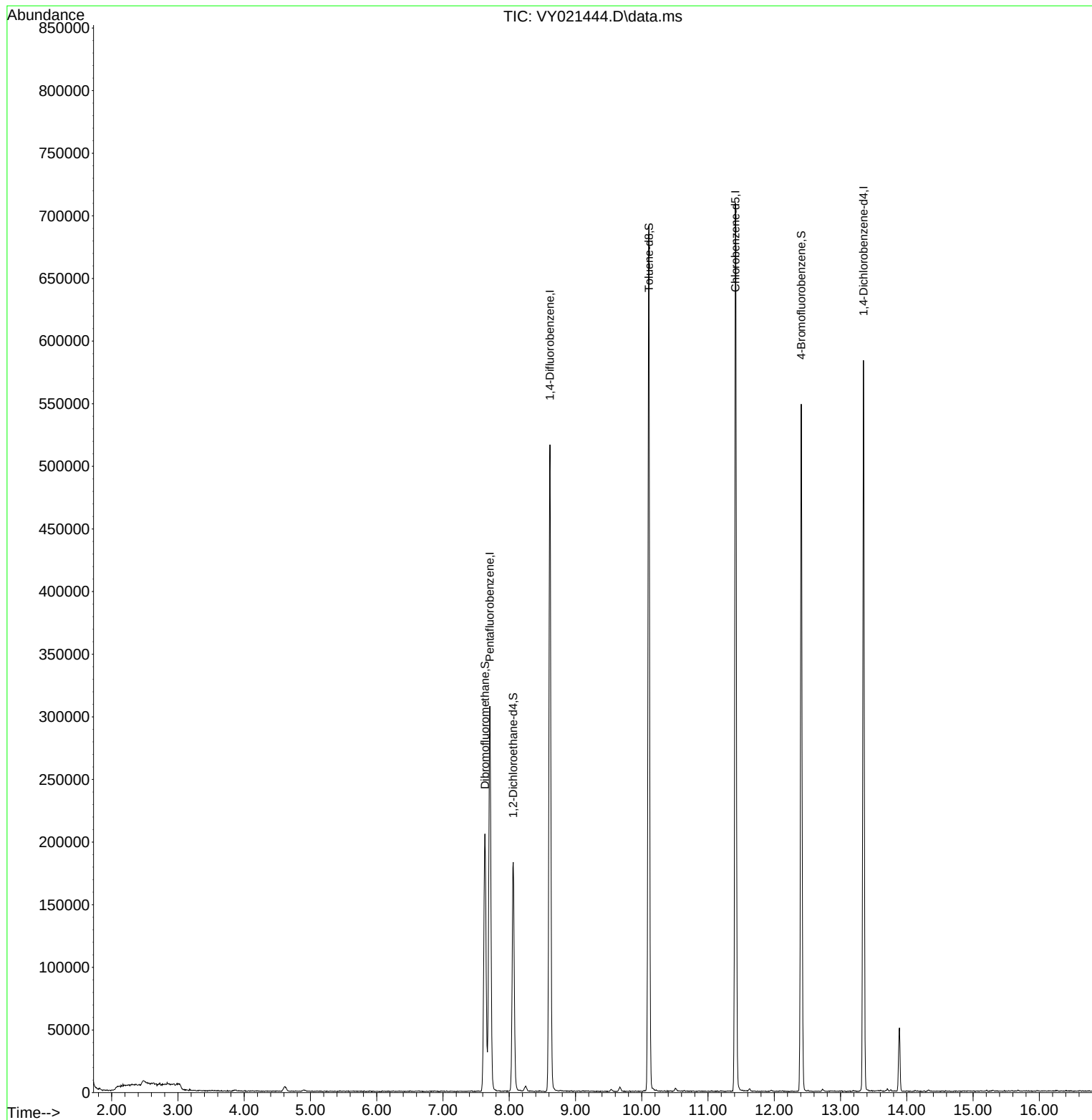
Target Compounds	Qvalue

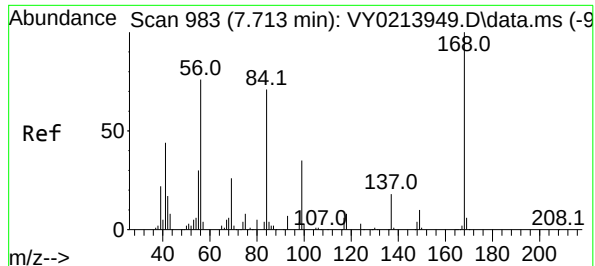
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021444.D
Acq On : 06 Mar 2025 18:56
Operator : SY/MD
Sample : Q1463-06
Misc : 6.41g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T6

Quant Time: Mar 07 00:42:32 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

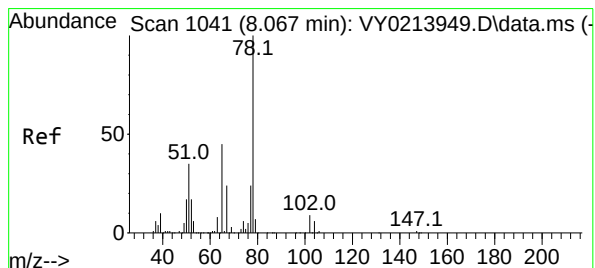
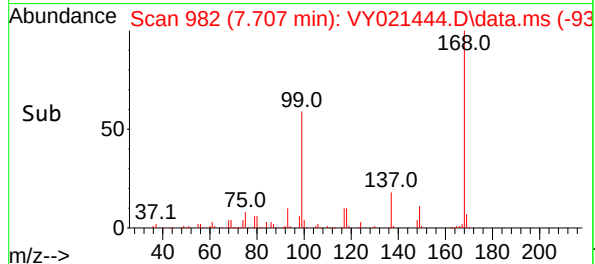
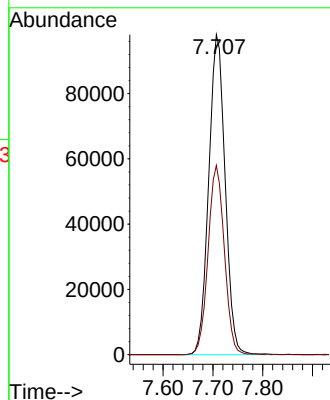
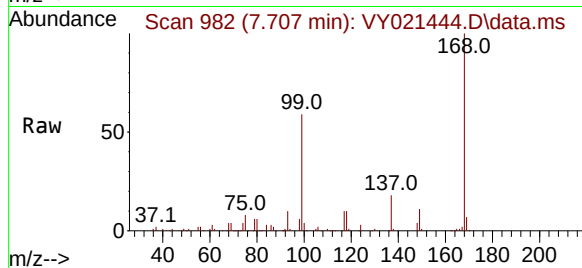




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021444.D
Acq: 06 Mar 2025 18:56

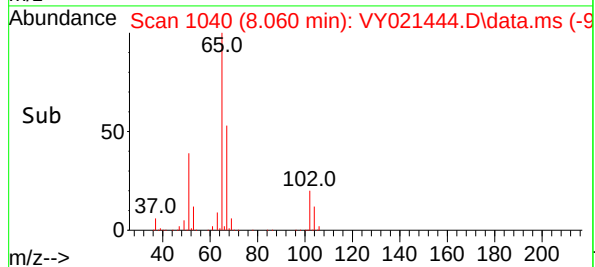
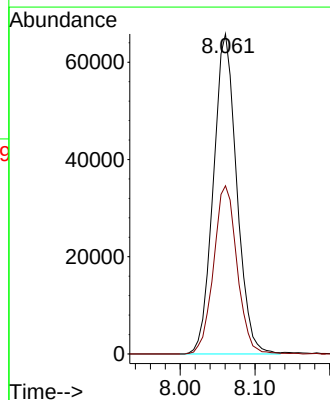
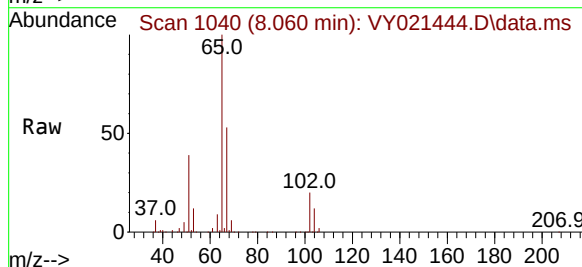
Instrument :
MSVOA_Y
ClientSampleId :
T6

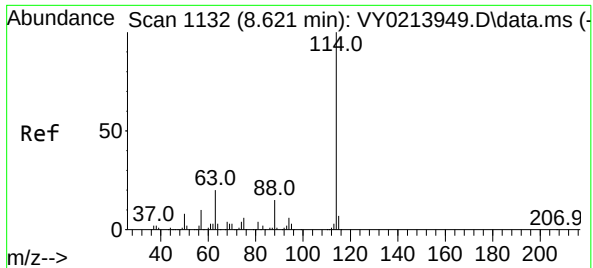
Tgt Ion:168 Resp: 224114
Ion Ratio Lower Upper
168 100
99 59.2 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 60.394 ug/l
RT: 8.060 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021444.D
Acq: 06 Mar 2025 18:56

Tgt Ion: 65 Resp: 143059
Ion Ratio Lower Upper
65 100
67 52.9 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.615 min Scan# 1132

Delta R.T. -0.006 min

Lab File: VY021444.D

Acq: 06 Mar 2025 18:56

Instrument :

MSVOA_Y

ClientSampleId :

T6

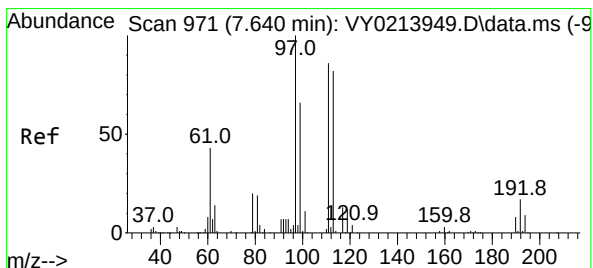
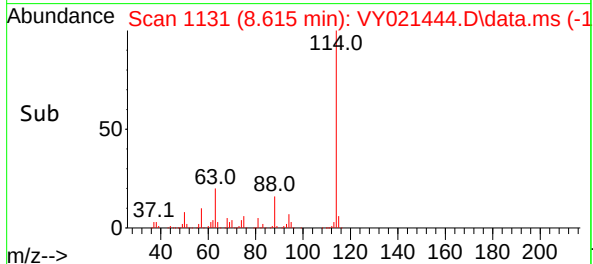
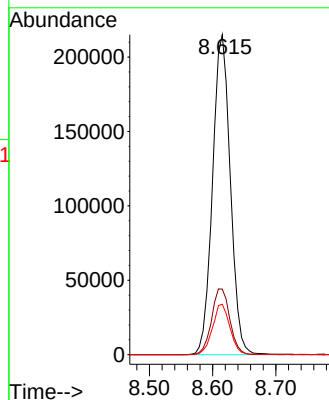
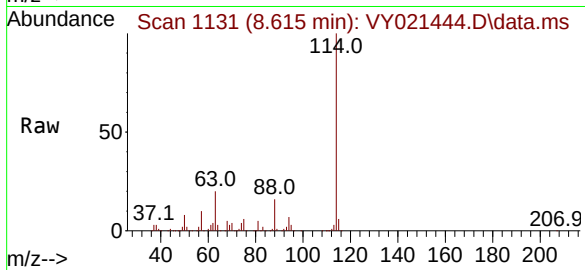
Tgt Ion:114 Resp: 420682

Ion Ratio Lower Upper

114 100

63 20.5 0.0 40.8

88 15.7 0.0 30.8



#35

Dibromofluoromethane

Concen: 51.577 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021444.D

Acq: 06 Mar 2025 18:56

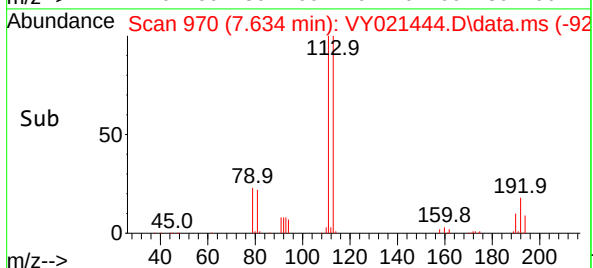
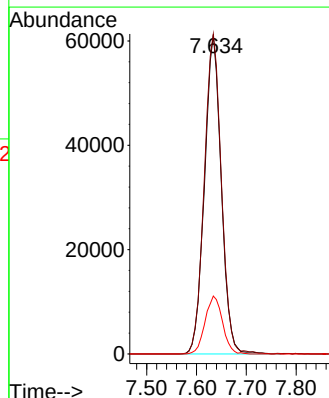
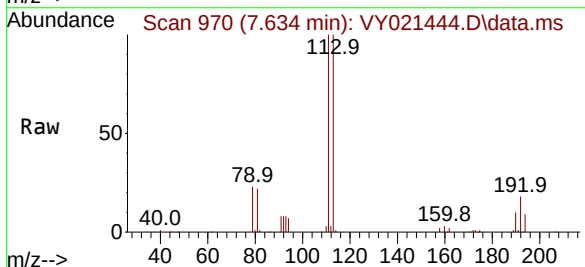
Tgt Ion:113 Resp: 142620

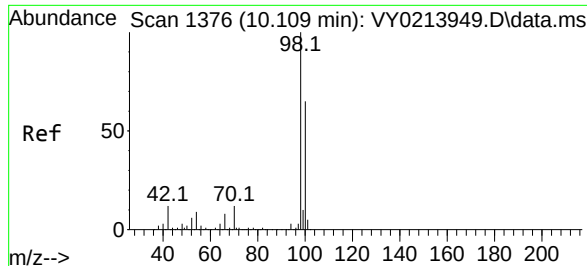
Ion Ratio Lower Upper

113 100

111 102.4 82.0 123.0

192 18.8 15.9 23.9





#50

Toluene-d8

Concen: 42.009 ug/l

RT: 10.109 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021444.D

Acq: 06 Mar 2025 18:56

Instrument :

MSVOA_Y

ClientSampleId :

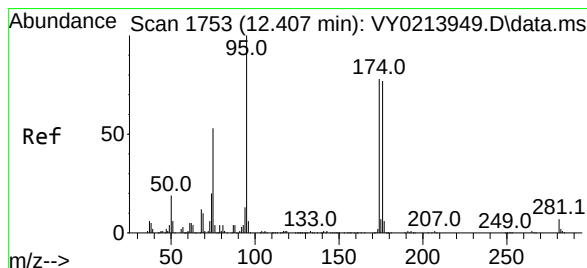
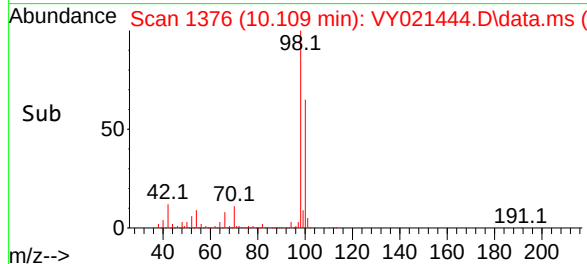
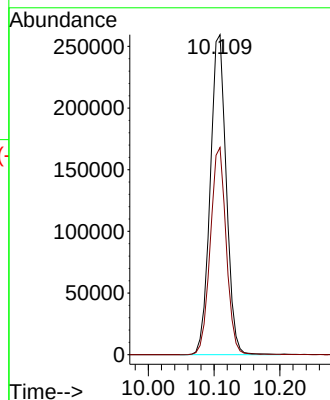
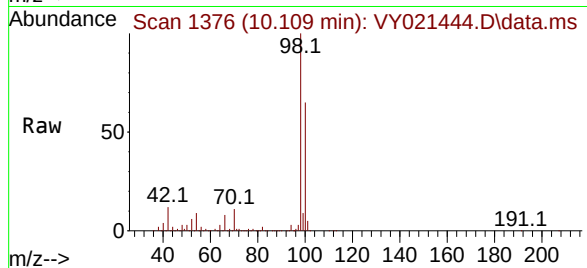
T6

Tgt Ion: 98 Resp: 439828

Ion Ratio Lower Upper

98 100

100 64.3 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 42.242 ug/l

RT: 12.407 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021444.D

Acq: 06 Mar 2025 18:56

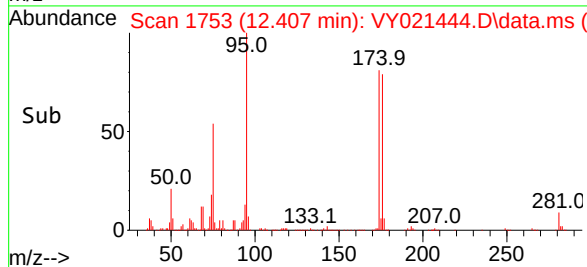
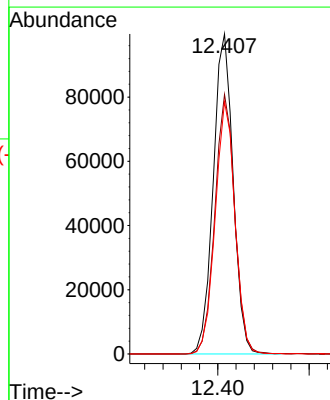
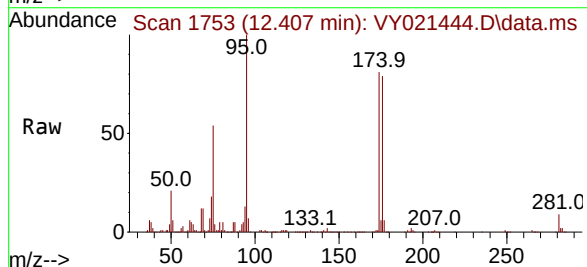
Tgt Ion: 95 Resp: 150442

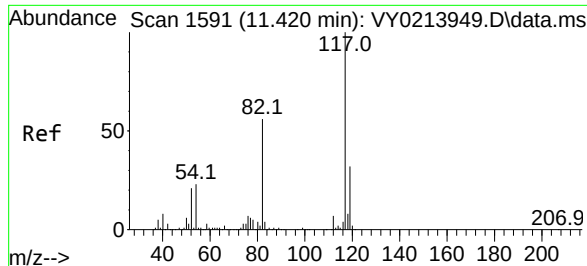
Ion Ratio Lower Upper

95 100

174 81.4 0.0 165.0

176 78.6 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: VY021444.D

Acq: 06 Mar 2025 18:56

Instrument :

MSVOA_Y

ClientSampleId :

T6

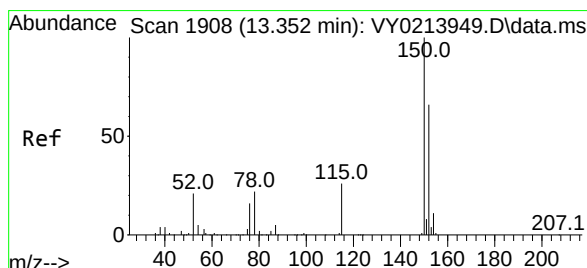
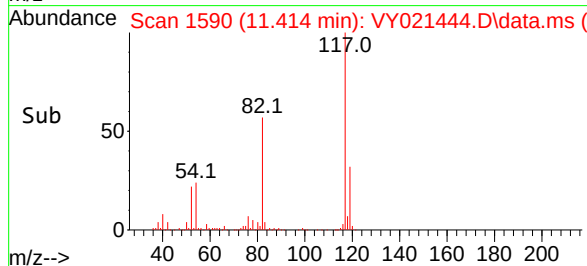
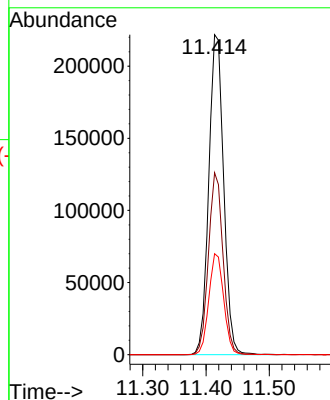
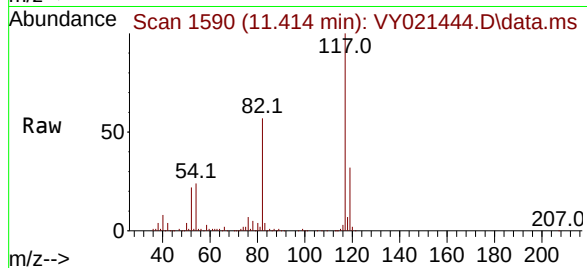
Tgt Ion:117 Resp: 363546

Ion Ratio Lower Upper

117 100

82 56.8 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: VY021444.D

Acq: 06 Mar 2025 18:56

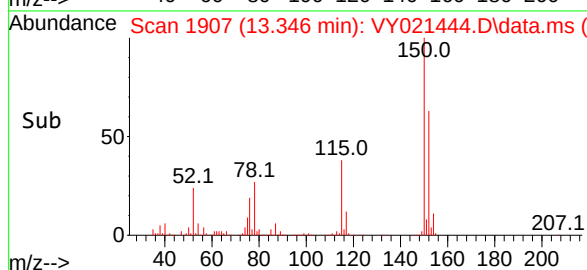
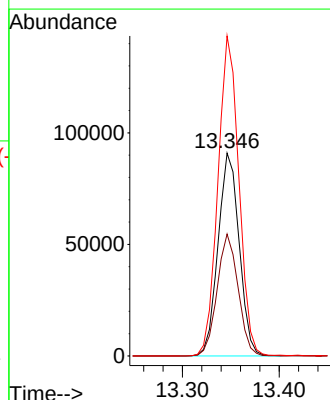
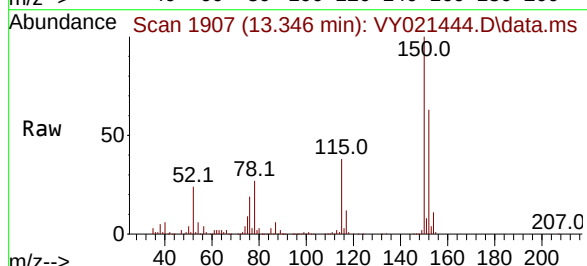
Tgt Ion:152 Resp: 137758

Ion Ratio Lower Upper

152 100

115 59.7 29.0 87.0

150 156.4 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021444.D
Acq On : 06 Mar 2025 18:56
Operator : SY/MD
Sample : Q1463-06
Misc : 6.41g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T6

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: VY021444.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.616	467	475	485	rBV7	3885	11978	1.01%	0.175%
2	7.634	960	970	976	rBV	205581	493030	41.52%	7.223%
3	7.707	976	982	1000	rVB	307437	698954	58.86%	10.240%
4	8.061	1030	1040	1052	rBV	182822	406175	34.21%	5.951%
5	8.615	1120	1131	1146	rBV	516474	1021055	85.99%	14.959%
6	10.109	1366	1376	1384	rBV	690828	1187400	100.00%	17.396%
7	11.414	1583	1590	1602	rBV	709211	1160477	97.73%	17.002%
8	12.407	1745	1753	1765	rBV2	548708	882745	74.34%	12.933%
9	13.346	1897	1907	1917	rBV	583550	882864	74.35%	12.934%
10	13.889	1990	1996	2004	rVB2	50680	81003	6.82%	1.187%

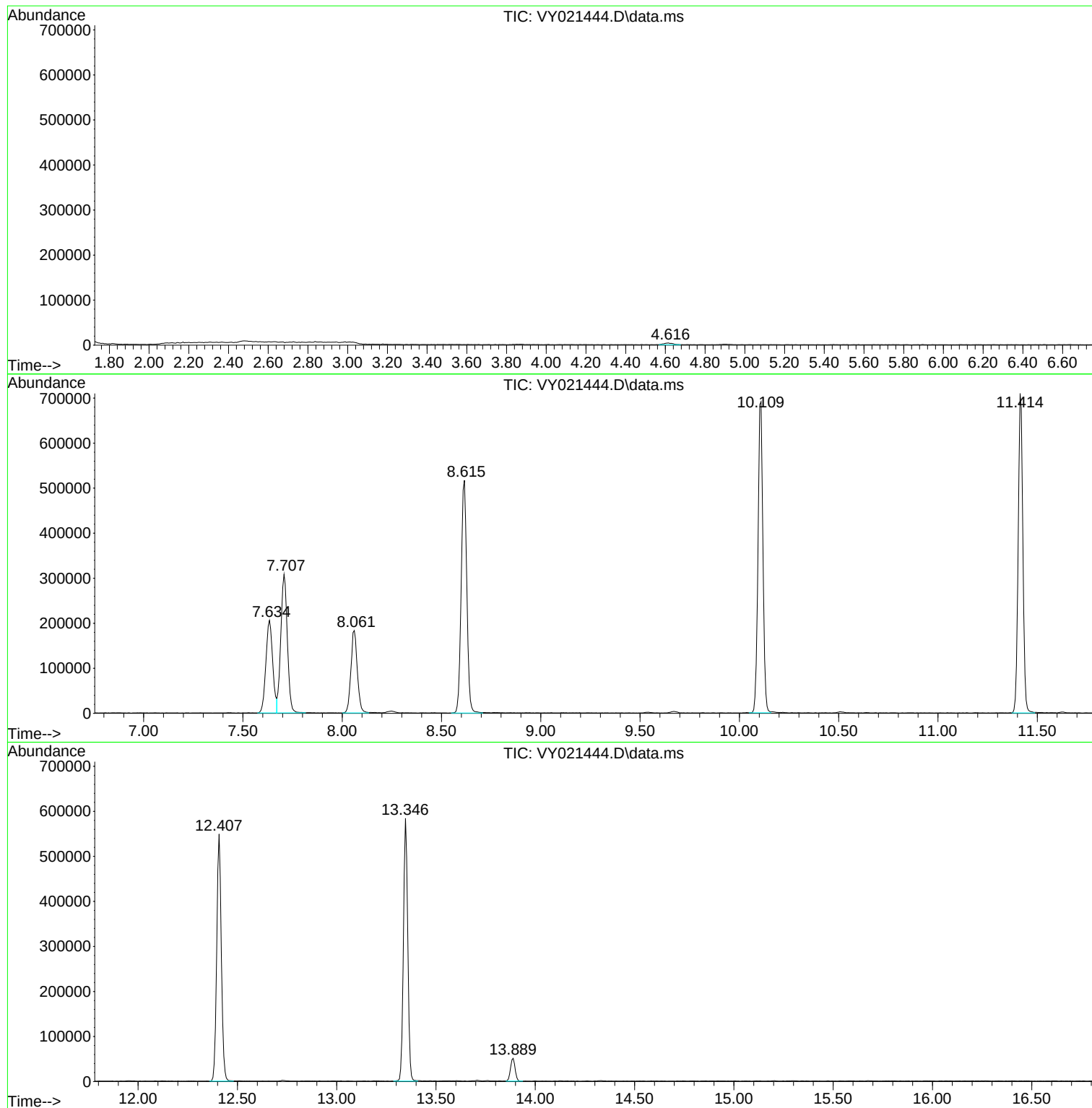
Sum of corrected areas: 6825681

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021444.D
Acq On : 06 Mar 2025 18:56
Operator : SY/MD
Sample : Q1463-06
Misc : 6.41g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T6

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\VY030625\
Data File : VY021444.D
Acq On : 06 Mar 2025 18:56
Operator : SY/MD
Sample : Q1463-06
Misc : 6.41g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T6

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\VY030625\
Data File : VY021444.D
Acq On : 06 Mar 2025 18:56
Operator : SY/MD
Sample : Q1463-06
Misc : 6.41g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 21 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T6

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:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T7	SDG No.:	Q1463
Lab Sample ID:	Q1463-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.2
Sample Wt/Vol:	6.15 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021445.D	1		03/06/25 19:20	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.00	U	1.00	4.30	ug/Kg
75-01-4	Vinyl Chloride	0.66	U	0.66	4.30	ug/Kg
74-83-9	Bromomethane	0.89	U	0.89	4.30	ug/Kg
75-00-3	Chloroethane	0.87	U	0.87	4.30	ug/Kg
75-65-0	Tert butyl alcohol	13.5	U	13.5	21.6	ug/Kg
75-35-4	1,1-Dichloroethene	0.67	U	0.67	4.30	ug/Kg
67-64-1	Acetone	5.40	U	5.40	21.6	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	4.30	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.58	U	0.58	4.30	ug/Kg
75-09-2	Methylene Chloride	2.90	U	2.90	8.60	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.72	U	0.72	4.30	ug/Kg
75-34-3	1,1-Dichloroethane	0.54	U	0.54	4.30	ug/Kg
78-93-3	2-Butanone	4.90	U	4.90	21.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.75	U	0.75	4.30	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.53	U	0.53	4.30	ug/Kg
67-66-3	Chloroform	0.58	U	0.58	4.30	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.67	U	0.67	4.30	ug/Kg
71-43-2	Benzene	0.62	U	0.62	4.30	ug/Kg
107-06-2	1,2-Dichloroethane	0.53	U	0.53	4.30	ug/Kg
79-01-6	Trichloroethene	0.65	U	0.65	4.30	ug/Kg
78-87-5	1,2-Dichloropropane	0.57	U	0.57	4.30	ug/Kg
75-27-4	Bromodichloromethane	0.48	U	0.48	4.30	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.80	U	3.80	21.6	ug/Kg
108-88-3	Toluene	0.58	U	0.58	4.30	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.52	U	0.52	4.30	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.49	U	0.49	4.30	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.72	U	0.72	4.30	ug/Kg
591-78-6	2-Hexanone	4.10	U	4.10	21.6	ug/Kg
124-48-1	Dibromochloromethane	0.56	U	0.56	4.30	ug/Kg
127-18-4	Tetrachloroethene	0.77	U	0.77	4.30	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T7	SDG No.:	Q1463
Lab Sample ID:	Q1463-07	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	94.2
Sample Wt/Vol:	6.15 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021445.D	1		03/06/25 19:20	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.64	U	0.64	4.30	ug/Kg
100-41-4	Ethyl Benzene	0.54	U	0.54	4.30	ug/Kg
179601-23-1	m/p-Xylenes	1.20	U	1.20	8.60	ug/Kg
95-47-6	o-Xylene	0.60	U	0.60	4.30	ug/Kg
100-42-5	Styrene	0.52	U	0.52	4.30	ug/Kg
75-25-2	Bromoform	0.70	U	0.70	4.30	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.95	U	0.95	4.30	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	60.5		70 (63) - 130 (155)	121%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		70 (70) - 130 (134)	103%	SPK: 50
2037-26-5	Toluene-d8	43.8		70 (74) - 130 (123)	88%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.9		70 (38) - 130 (136)	86%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	228000	7.707			
540-36-3	1,4-Difluorobenzene	432000	8.616			
3114-55-4	Chlorobenzene-d5	378000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	144000	13.346			

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\VY030625\
 Data File : VY021445.D
 Acq On : 06 Mar 2025 19:20
 Operator : SY/MD
 Sample : Q1463-07
 Misc : 6.15g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T7

Quant Time: Mar 07 00:42:42 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	227977	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	432286	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	378072	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	143977	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	145770	60.496	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	121.000%
35) Dibromofluoromethane	7.634	113	146121	51.424	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	102.840%
50) Toluene-d8	10.109	98	470875	43.767	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	87.540%
62) 4-Bromofluorobenzene	12.408	95	156881	42.867	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	85.740%

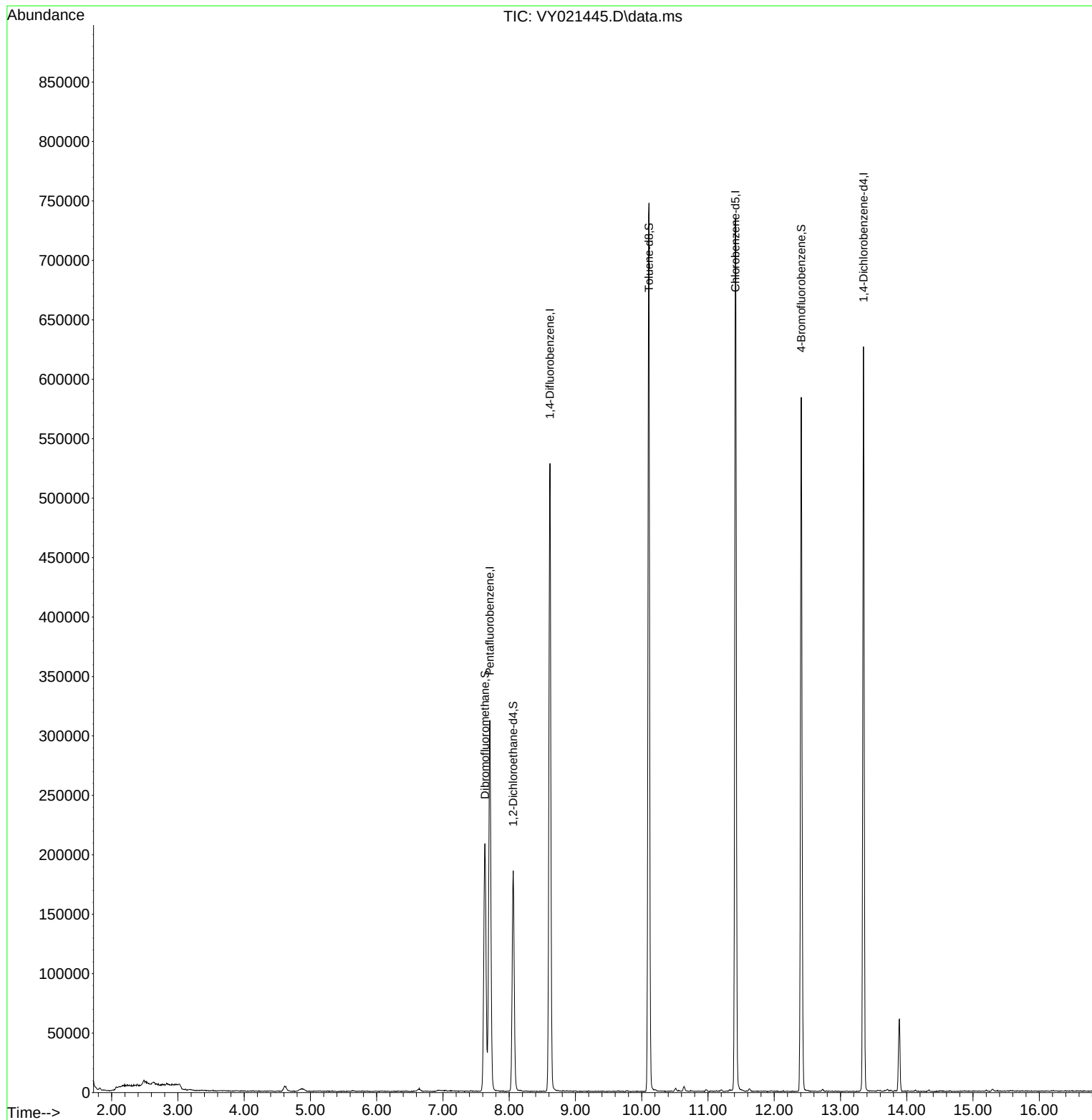
Target Compounds	Qvalue

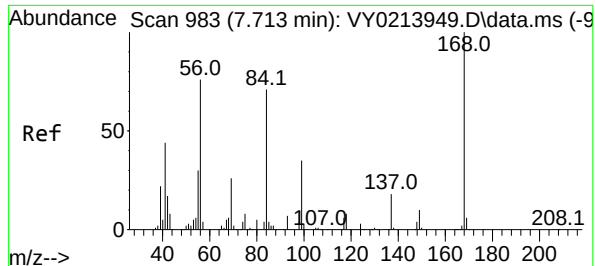
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021445.D
Acq On : 06 Mar 2025 19:20
Operator : SY/MD
Sample : Q1463-07
Misc : 6.15g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T7

Quant Time: Mar 07 00:42:42 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

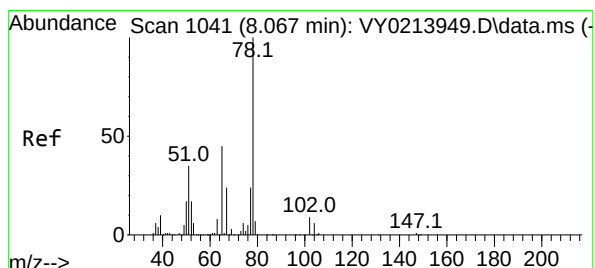
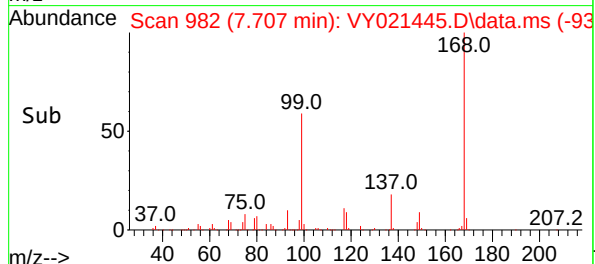
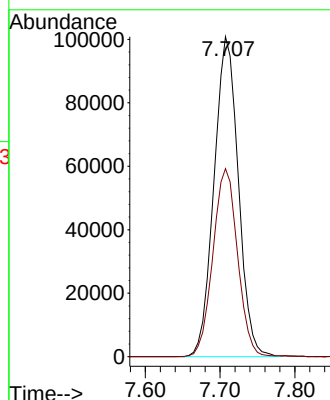
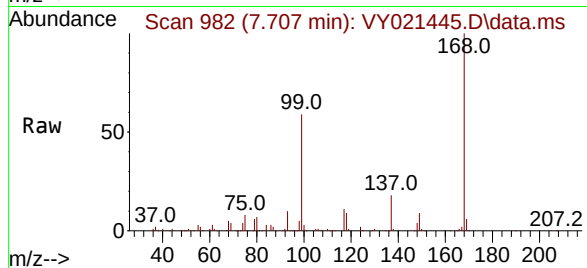




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021445.D
Acq: 06 Mar 2025 19:20

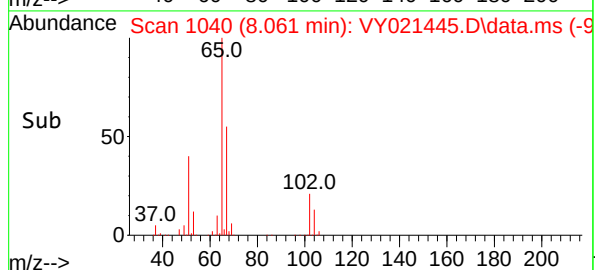
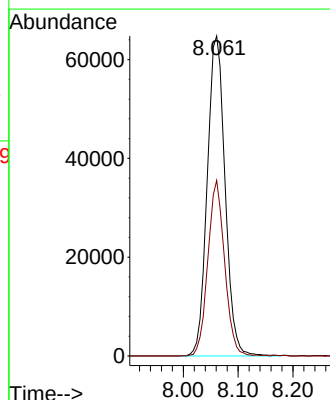
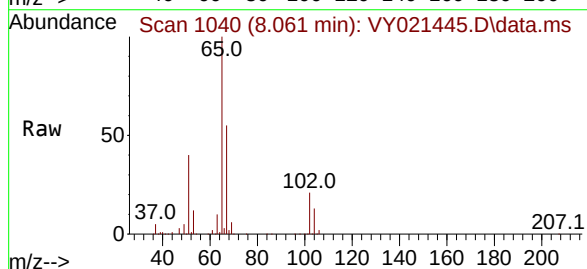
Instrument :
MSVOA_Y
ClientSampleId :
T7

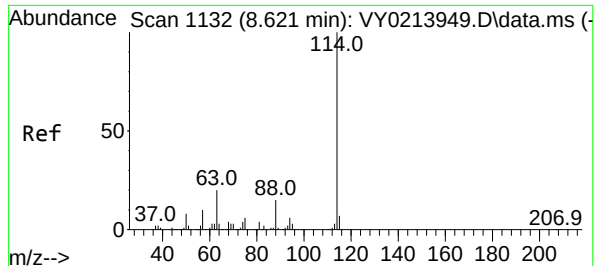
Tgt Ion:168 Resp: 227977
Ion Ratio Lower Upper
168 100
99 58.7 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 60.496 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021445.D
Acq: 06 Mar 2025 19:20

Tgt Ion: 65 Resp: 145770
Ion Ratio Lower Upper
65 100
67 51.7 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: VY021445.D

Acq: 06 Mar 2025 19:20

Instrument :

MSVOA_Y

ClientSampleId :

T7

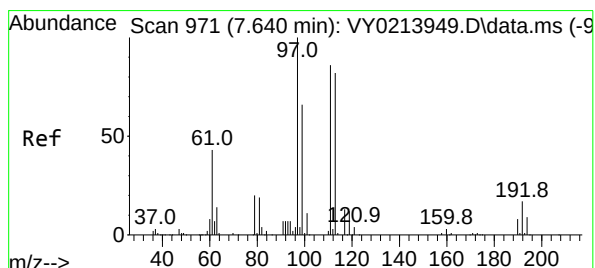
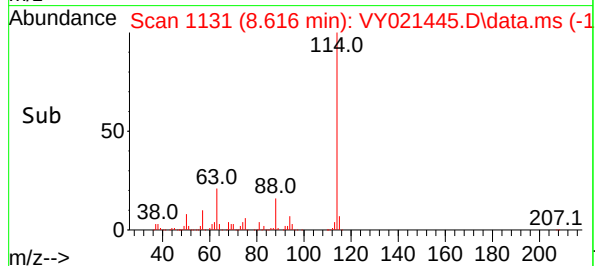
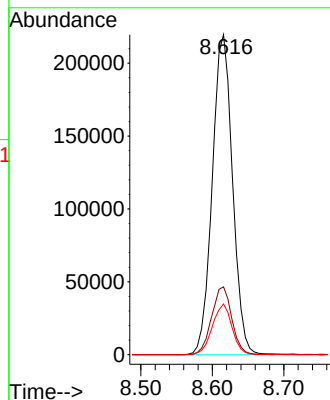
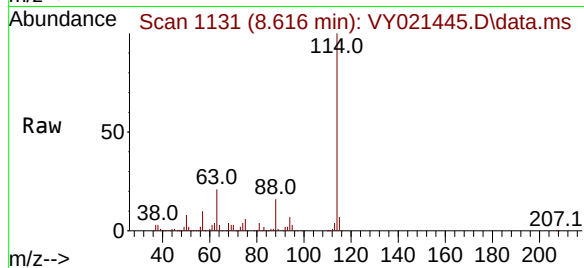
Tgt Ion:114 Resp: 432286

Ion Ratio Lower Upper

114 100

63 21.2 0.0 40.8

88 15.9 0.0 30.8



#35

Dibromofluoromethane

Concen: 51.424 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021445.D

Acq: 06 Mar 2025 19:20

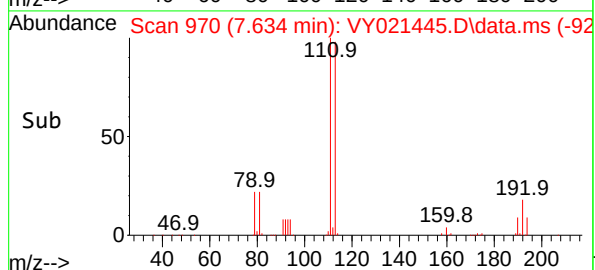
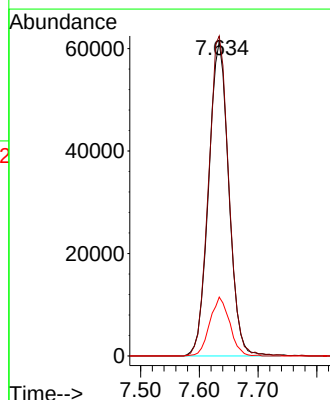
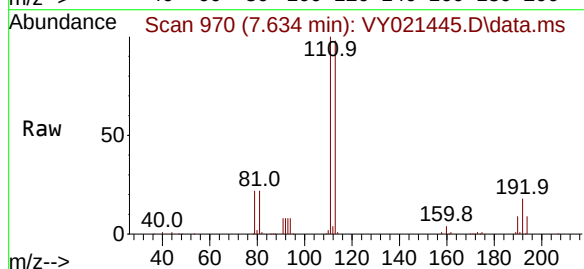
Tgt Ion:113 Resp: 146121

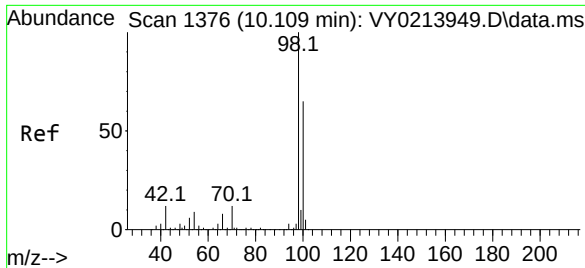
Ion Ratio Lower Upper

113 100

111 102.3 82.0 123.0

192 18.4 15.9 23.9





#50

Toluene-d8

Concen: 43.767 ug/l

RT: 10.109 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021445.D

Acq: 06 Mar 2025 19:20

Instrument :

MSVOA_Y

ClientSampleId :

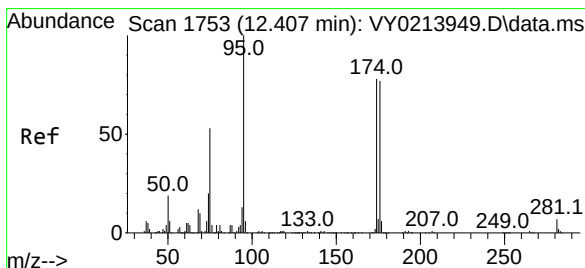
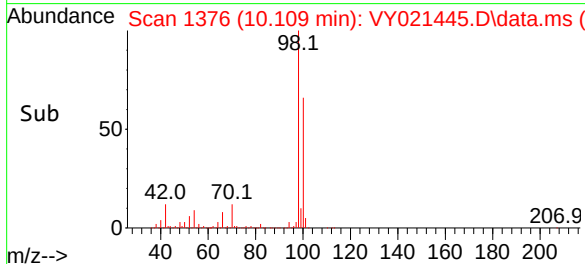
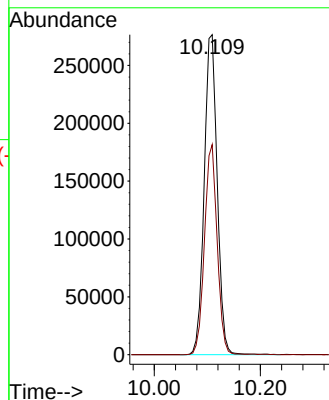
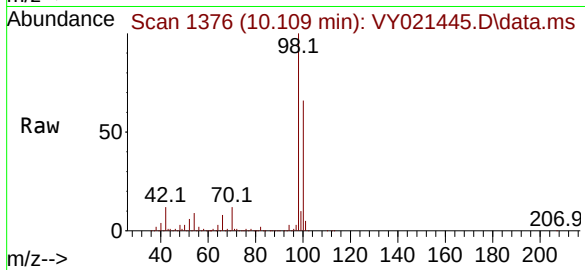
T7

Tgt Ion: 98 Resp: 470875

Ion Ratio Lower Upper

98 100

100 63.9 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 42.867 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021445.D

Acq: 06 Mar 2025 19:20

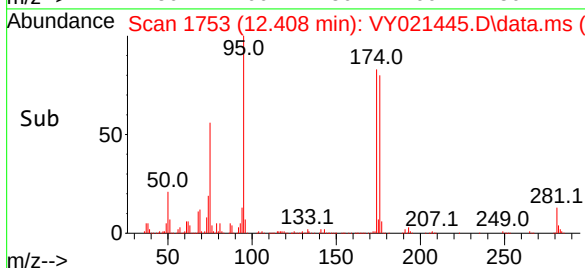
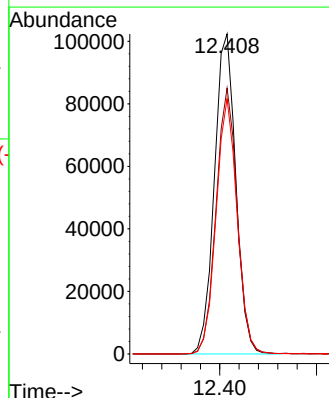
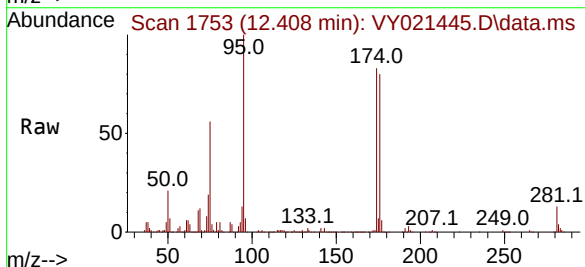
Tgt Ion: 95 Resp: 156881

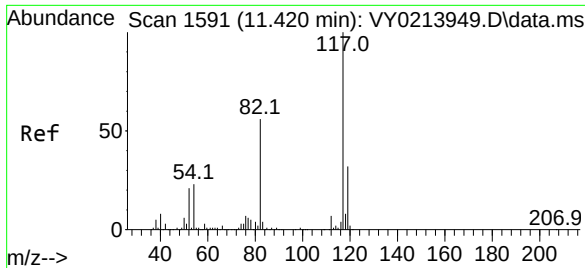
Ion Ratio Lower Upper

95 100

174 82.0 0.0 165.0

176 78.5 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 117

Delta R.T. -0.006 min

Lab File: VY021445.D

Acq: 06 Mar 2025 19:20

Instrument :

MSVOA_Y

ClientSampleId :

T7

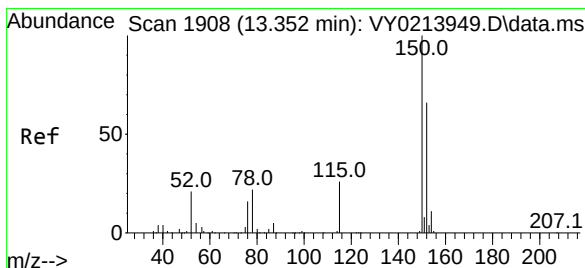
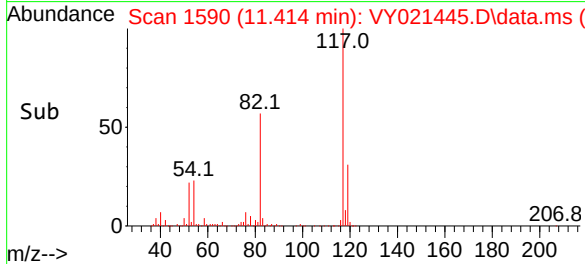
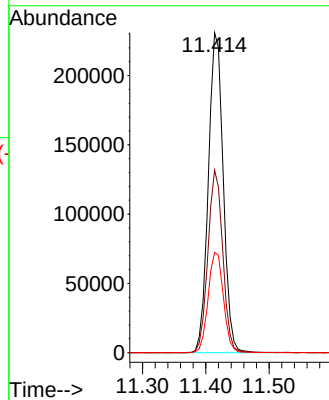
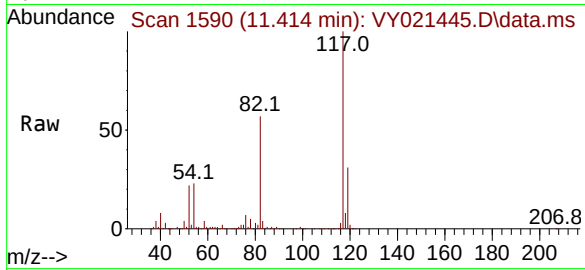
Tgt Ion:117 Resp: 378072

Ion Ratio Lower Upper

117 100

82 57.1 44.6 67.0

119 31.3 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: VY021445.D

Acq: 06 Mar 2025 19:20

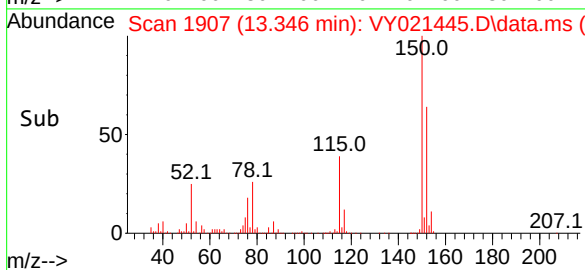
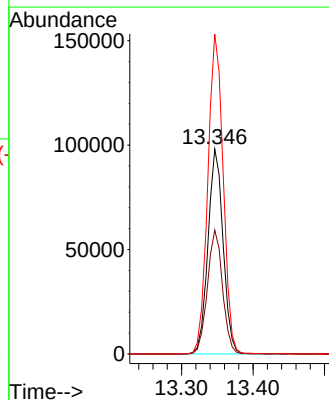
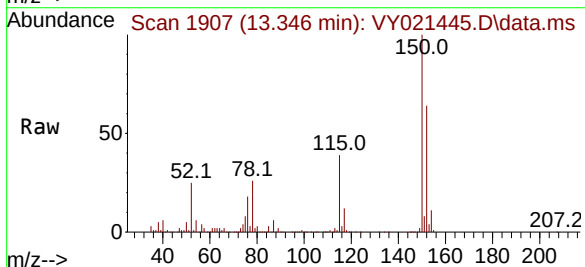
Tgt Ion:152 Resp: 143977

Ion Ratio Lower Upper

152 100

115 60.6 29.0 87.0

150 158.5 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021445.D
Acq On : 06 Mar 2025 19:20
Operator : SY/MD
Sample : Q1463-07
Misc : 6.15g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T7

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: VY021445.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.634	957	970	976	rBV	208479	501986	39.18%	7.023%
2	7.707	976	982	997	rVB	311794	709515	55.38%	9.927%
3	8.061	1029	1040	1052	rBV	185623	408784	31.91%	5.719%
4	8.616	1120	1131	1145	rBV	528163	1042854	81.40%	14.590%
5	10.109	1368	1376	1387	rBV	747224	1281137	100.00%	17.924%
6	11.414	1581	1590	1603	rBV	733640	1210493	94.49%	16.936%
7	12.408	1744	1753	1764	rBV2	583906	962288	75.11%	13.463%
8	13.346	1895	1907	1920	rBV	626559	929709	72.57%	13.007%
9	13.889	1990	1996	2002	rVB2	60698	100860	7.87%	1.411%

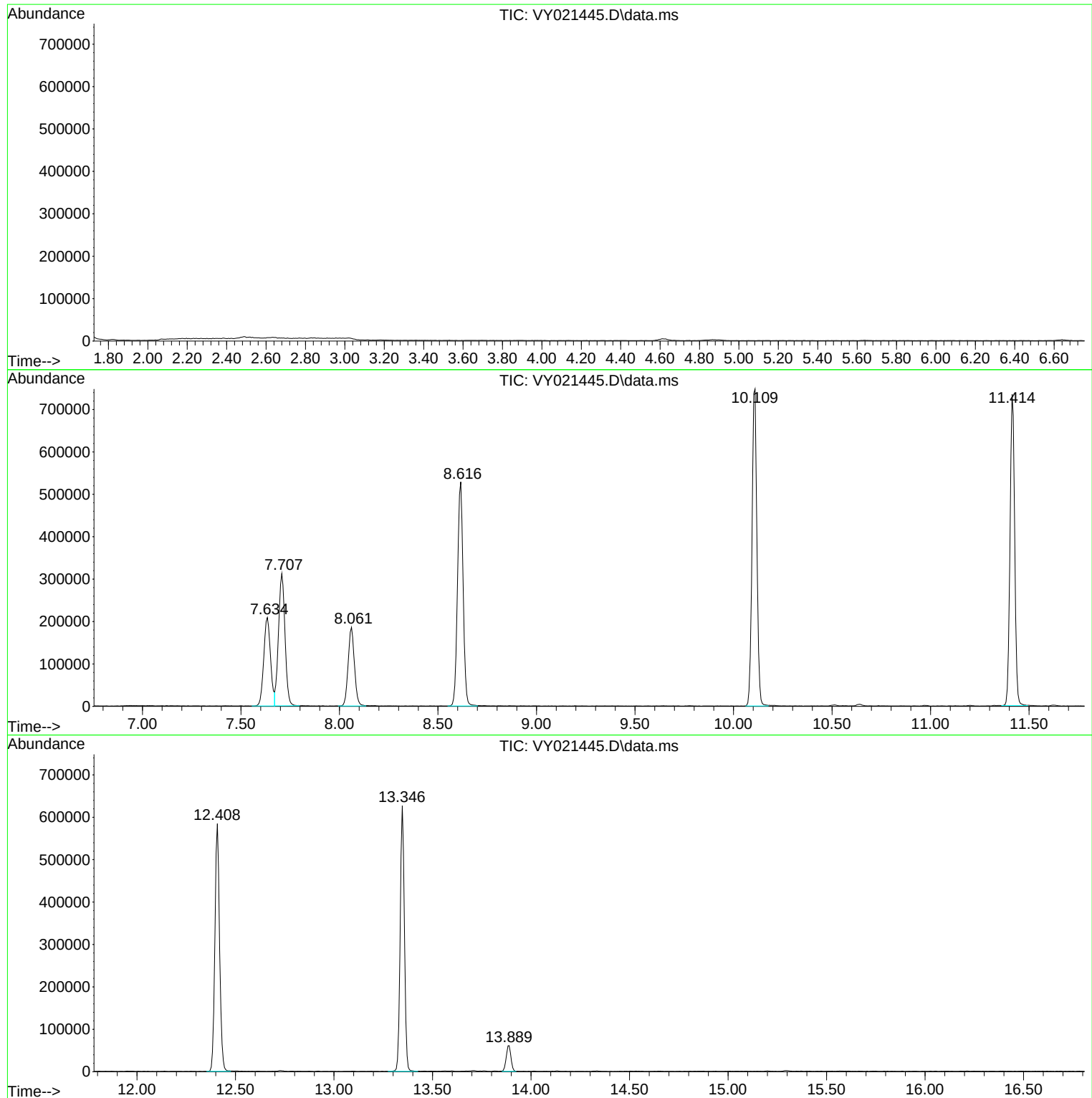
Sum of corrected areas: 7147626

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021445.D
Acq On : 06 Mar 2025 19:20
Operator : SY/MD
Sample : Q1463-07
Misc : 6.15g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T7

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\VY030625\
Data File : VY021445.D
Acq On : 06 Mar 2025 19:20
Operator : SY/MD
Sample : Q1463-07
Misc : 6.15g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T7

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\VY030625\
Data File : VY021445.D
Acq On : 06 Mar 2025 19:20
Operator : SY/MD
Sample : Q1463-07
Misc : 6.15g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 22 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T7

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

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T8	SDG No.:	Q1463
Lab Sample ID:	Q1463-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.2
Sample Wt/Vol:	6.85 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021446.D	1		03/06/25 19:43	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	0.91	U	0.91	3.90	ug/Kg
75-01-4	Vinyl Chloride	0.60	U	0.60	3.90	ug/Kg
74-83-9	Bromomethane	0.81	U	0.81	3.90	ug/Kg
75-00-3	Chloroethane	0.79	U	0.79	3.90	ug/Kg
75-65-0	Tert butyl alcohol	12.2	U	12.2	19.6	ug/Kg
75-35-4	1,1-Dichloroethene	0.61	U	0.61	3.90	ug/Kg
67-64-1	Acetone	4.90	U	4.90	19.6	ug/Kg
75-15-0	Carbon Disulfide	1.00	U	1.00	3.90	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.52	U	0.52	3.90	ug/Kg
75-09-2	Methylene Chloride	2.70	U	2.70	7.80	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.66	U	0.66	3.90	ug/Kg
75-34-3	1,1-Dichloroethane	0.49	U	0.49	3.90	ug/Kg
78-93-3	2-Butanone	4.40	U	4.40	19.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.68	U	0.68	3.90	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.48	U	0.48	3.90	ug/Kg
67-66-3	Chloroform	0.52	U	0.52	3.90	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.61	U	0.61	3.90	ug/Kg
71-43-2	Benzene	0.56	U	0.56	3.90	ug/Kg
107-06-2	1,2-Dichloroethane	0.48	U	0.48	3.90	ug/Kg
79-01-6	Trichloroethene	0.59	U	0.59	3.90	ug/Kg
78-87-5	1,2-Dichloropropane	0.52	U	0.52	3.90	ug/Kg
75-27-4	Bromodichloromethane	0.44	U	0.44	3.90	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.40	U	3.40	19.6	ug/Kg
108-88-3	Toluene	0.52	U	0.52	3.90	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.47	U	0.47	3.90	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.45	U	0.45	3.90	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.66	U	0.66	3.90	ug/Kg
591-78-6	2-Hexanone	3.80	U	3.80	19.6	ug/Kg
124-48-1	Dibromochloromethane	0.51	U	0.51	3.90	ug/Kg
127-18-4	Tetrachloroethene	0.70	U	0.70	3.90	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T8	SDG No.:	Q1463
Lab Sample ID:	Q1463-08	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.2
Sample Wt/Vol:	6.85 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021446.D	1		03/06/25 19:43	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.58	U	0.58	3.90	ug/Kg
100-41-4	Ethyl Benzene	0.49	U	0.49	3.90	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	7.80	ug/Kg
95-47-6	o-Xylene	0.55	U	0.55	3.90	ug/Kg
100-42-5	Styrene	0.47	U	0.47	3.90	ug/Kg
75-25-2	Bromoform	0.63	U	0.63	3.90	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.86	U	0.86	3.90	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.8		70 (63) - 130 (155)	98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.3		70 (70) - 130 (134)	97%	SPK: 50
2037-26-5	Toluene-d8	42.3		70 (74) - 130 (123)	85%	SPK: 50
460-00-4	4-Bromofluorobenzene	34.7	*	70 (38) - 130 (136)	69%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	215000	7.707			
540-36-3	1,4-Difluorobenzene	366000	8.615			
3114-55-4	Chlorobenzene-d5	278000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	93700	13.346			

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\VY030625\
 Data File : VY021446.D
 Acq On : 06 Mar 2025 19:43
 Operator : SY/MD
 Sample : Q1463-08
 Misc : 6.85g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T8

Quant Time: Mar 07 00:42:54 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	214937	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.615	114	365717	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	278068	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	93699	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	110772	48.761	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	97.520%
35) Dibromofluoromethane	7.634	113	116073	48.285	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	96.580%
50) Toluene-d8	10.109	98	385363	42.338	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	84.680%
62) 4-Bromofluorobenzene	12.407	95	107342	34.670	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	69.340%

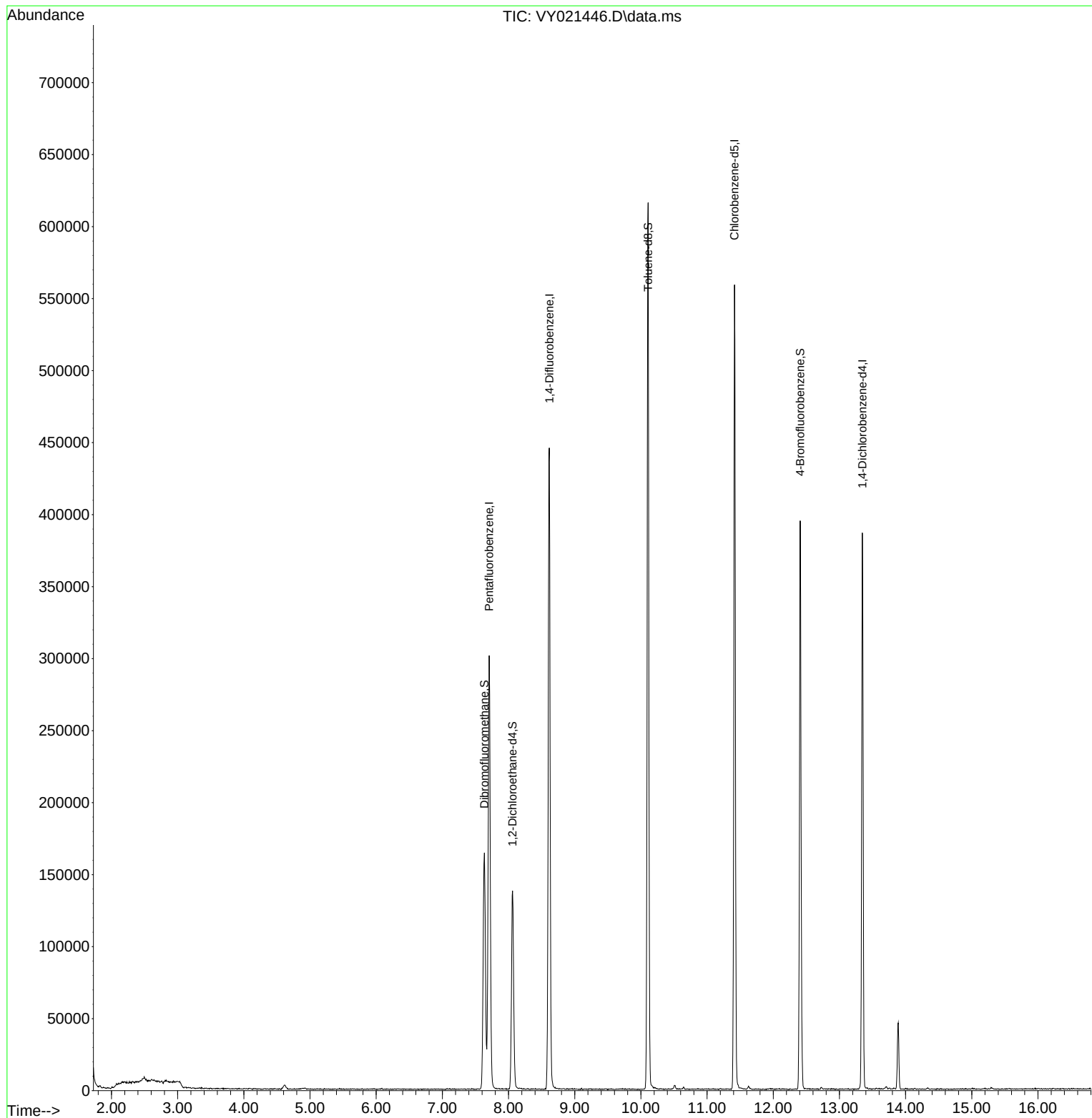
Target Compounds	Qvalue

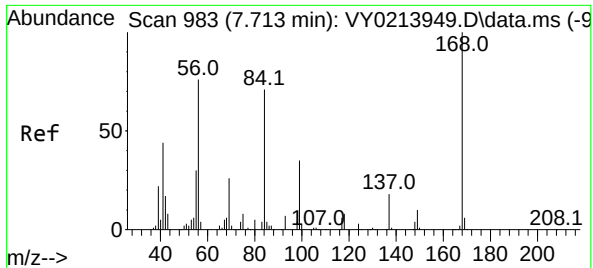
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021446.D
Acq On : 06 Mar 2025 19:43
Operator : SY/MD
Sample : Q1463-08
Misc : 6.85g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T8

Quant Time: Mar 07 00:42:54 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

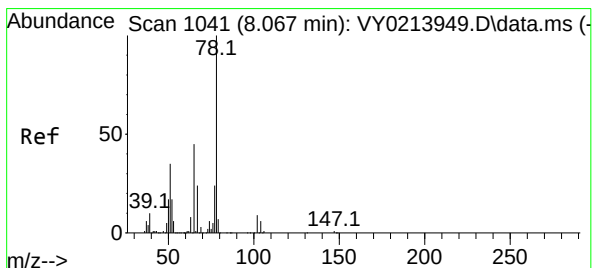
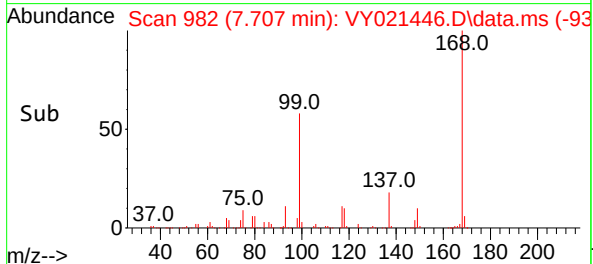
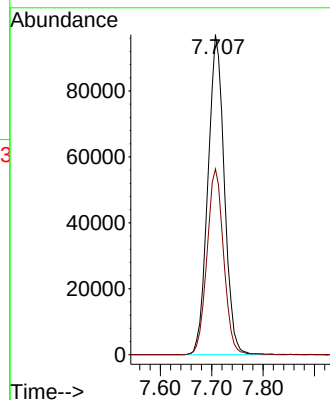
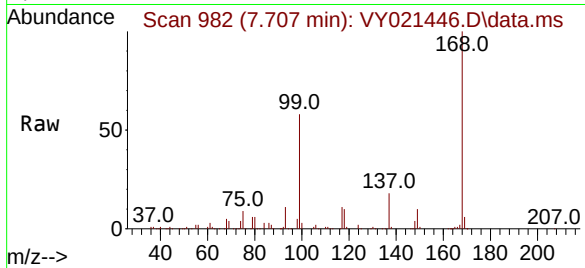




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021446.D
Acq: 06 Mar 2025 19:43

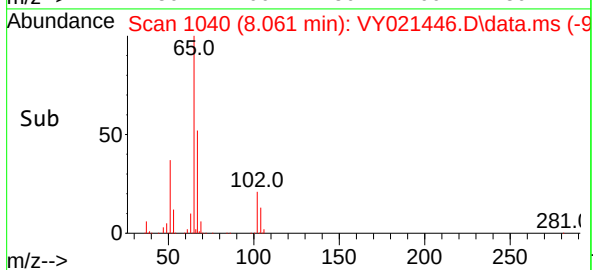
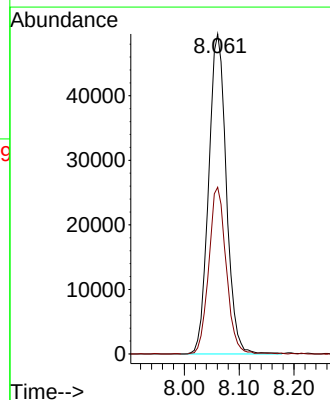
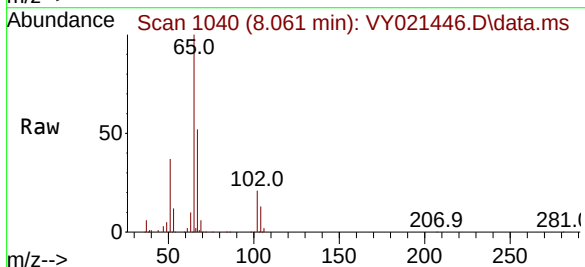
Instrument :
MSVOA_Y
ClientSampleId :
T8

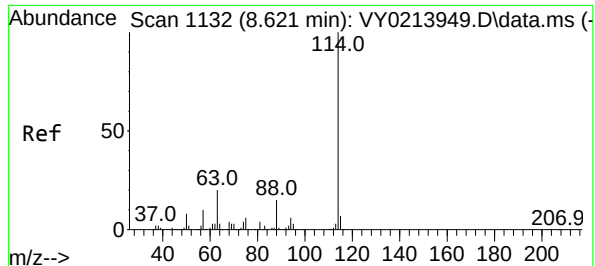
Tgt Ion:168 Resp: 214937
Ion Ratio Lower Upper
168 100
99 58.1 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 48.761 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021446.D
Acq: 06 Mar 2025 19:43

Tgt Ion: 65 Resp: 110772
Ion Ratio Lower Upper
65 100
67 51.1 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.615 min Scan# 1132

Delta R.T. -0.006 min

Lab File: VY021446.D

Acq: 06 Mar 2025 19:43

Instrument :

MSVOA_Y

ClientSampleId :

T8

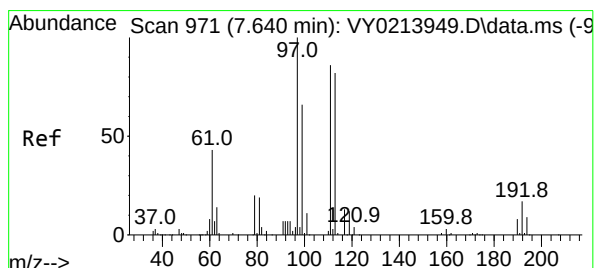
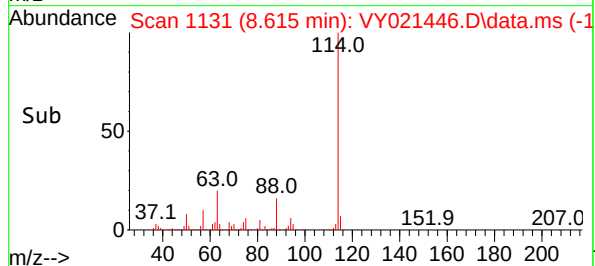
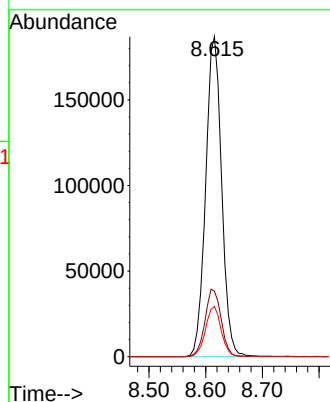
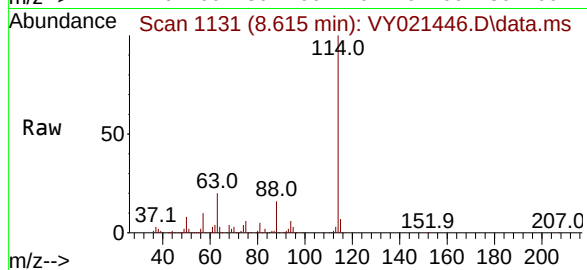
Tgt Ion:114 Resp: 365717

Ion Ratio Lower Upper

114 100

63 20.5 0.0 40.8

88 15.6 0.0 30.8



#35

Dibromofluoromethane

Concen: 48.285 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021446.D

Acq: 06 Mar 2025 19:43

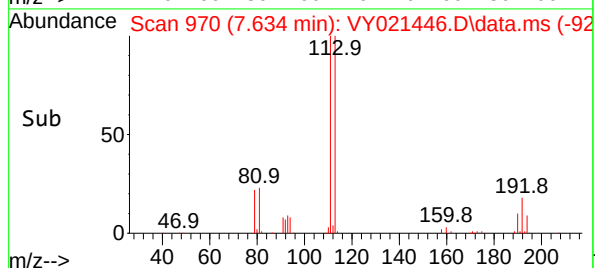
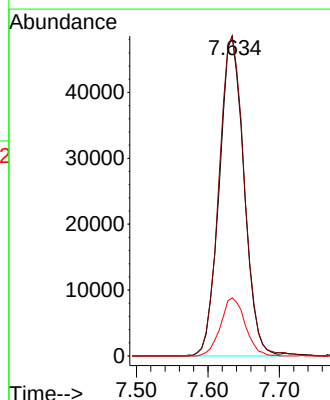
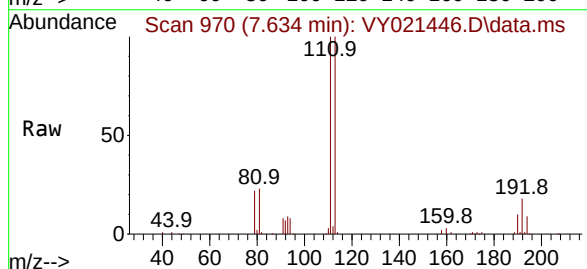
Tgt Ion:113 Resp: 116073

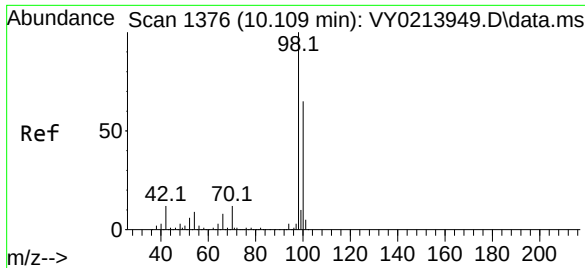
Ion Ratio Lower Upper

113 100

111 102.6 82.0 123.0

192 18.2 15.9 23.9





#50

Toluene-d8

Concen: 42.338 ug/l

RT: 10.109 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021446.D

Acq: 06 Mar 2025 19:43

Instrument :

MSVOA_Y

ClientSampleId :

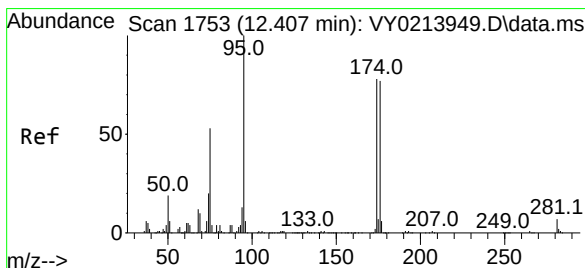
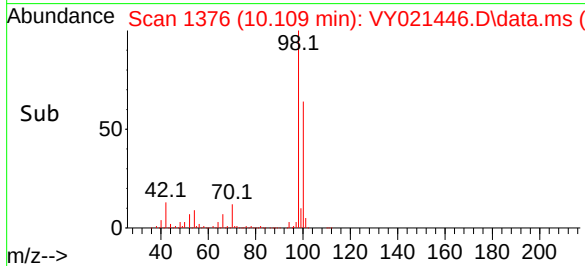
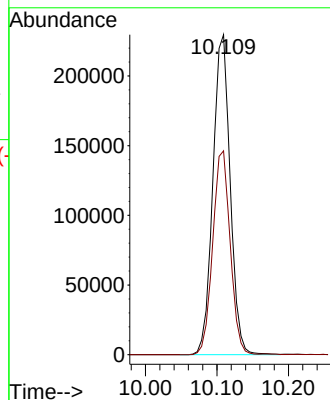
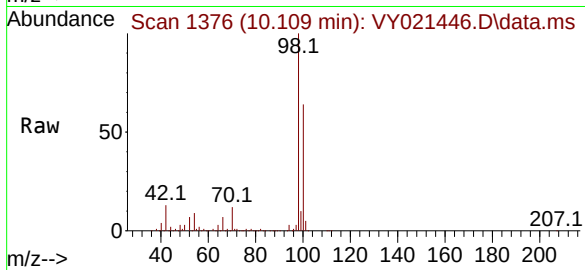
T8

Tgt Ion: 98 Resp: 385363

Ion Ratio Lower Upper

98 100

100 64.6 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 34.670 ug/l

RT: 12.407 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021446.D

Acq: 06 Mar 2025 19:43

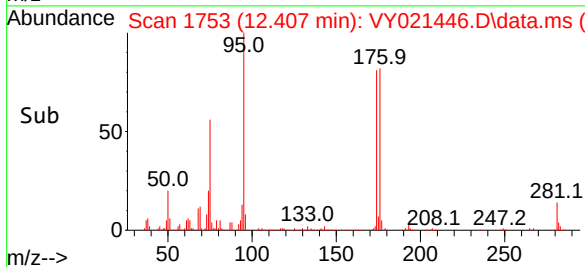
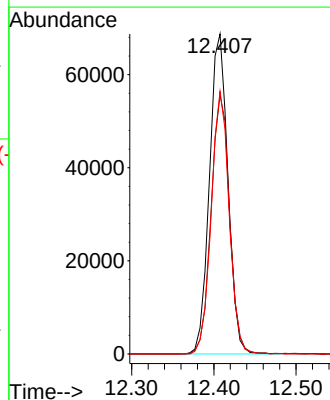
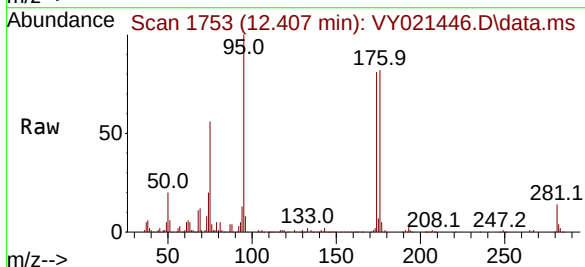
Tgt Ion: 95 Resp: 107342

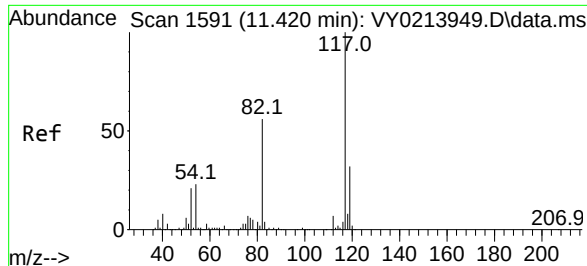
Ion Ratio Lower Upper

95 100

174 80.9 0.0 165.0

176 79.5 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.414 min Scan# 117

Delta R.T. -0.006 min

Lab File: VY021446.D

Acq: 06 Mar 2025 19:43

Instrument :

MSVOA_Y

ClientSampleId :

T8

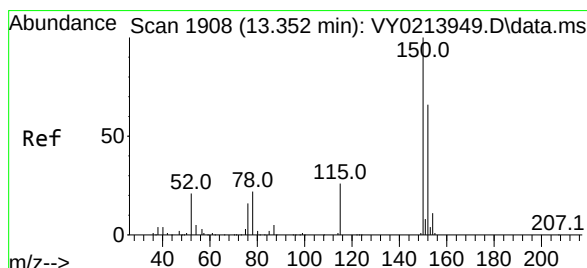
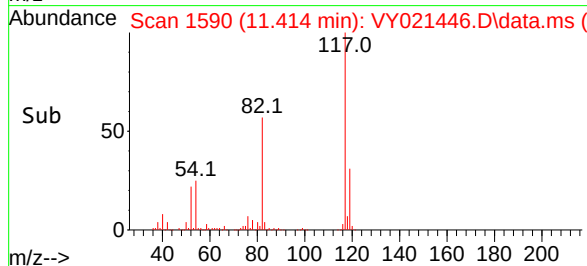
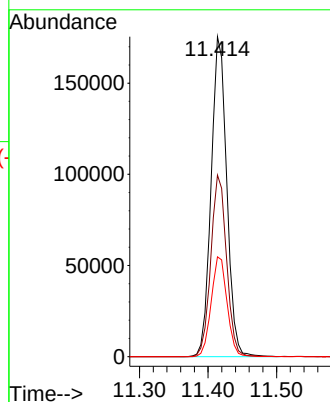
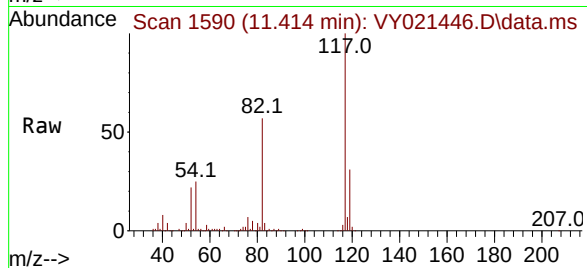
Tgt Ion:117 Resp: 278068

Ion Ratio Lower Upper

117 100

82 56.8 44.6 67.0

119 31.2 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: VY021446.D

Acq: 06 Mar 2025 19:43

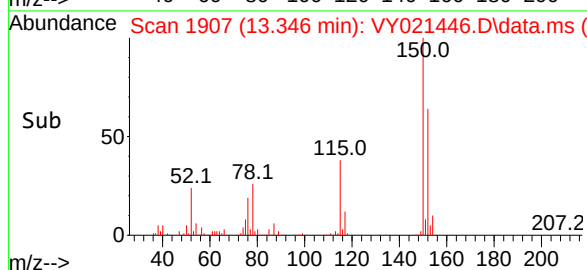
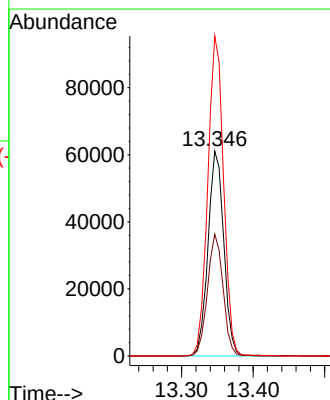
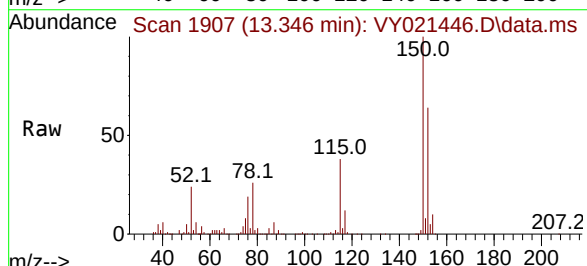
Tgt Ion:152 Resp: 93699

Ion Ratio Lower Upper

152 100

115 58.6 29.0 87.0

150 156.0 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021446.D
Acq On : 06 Mar 2025 19:43
Operator : SY/MD
Sample : Q1463-08
Misc : 6.85g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T8

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: VY021446.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.634	958	970	976	rBV	164224	399233	37.95%	7.192%
2	7.707	976	982	997	rVB	300794	667543	63.45%	12.026%
3	8.061	1030	1040	1055	rBV	137835	312275	29.68%	5.626%
4	8.615	1122	1131	1145	rBV	445285	884871	84.10%	15.941%
5	10.109	1367	1376	1389	rBV	615563	1052111	100.00%	18.954%
6	11.414	1582	1590	1601	rBV	558788	898705	85.42%	16.190%
7	12.407	1745	1753	1763	rBV2	394857	667108	63.41%	12.018%
8	13.346	1898	1907	1916	rBV	386281	594056	56.46%	10.702%
9	13.889	1989	1996	2002	rVB2	46101	74983	7.13%	1.351%

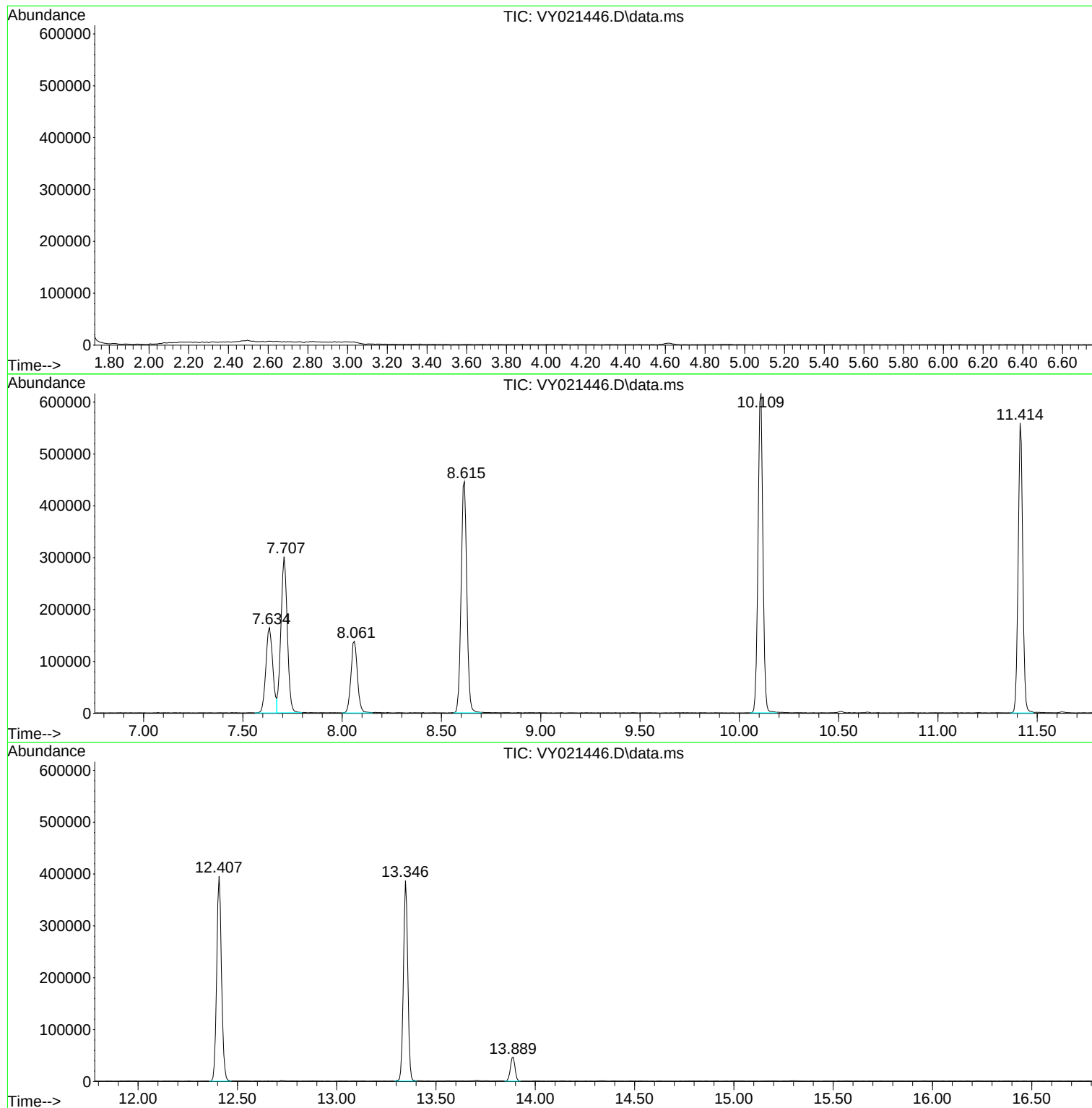
Sum of corrected areas: 5550885

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021446.D
Acq On : 06 Mar 2025 19:43
Operator : SY/MD
Sample : Q1463-08
Misc : 6.85g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T8

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\VY030625\
Data File : VY021446.D
Acq On : 06 Mar 2025 19:43
Operator : SY/MD
Sample : Q1463-08
Misc : 6.85g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T8

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\VY030625\
Data File : VY021446.D
Acq On : 06 Mar 2025 19:43
Operator : SY/MD
Sample : Q1463-08
Misc : 6.85g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T8

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

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T9	SDG No.:	Q1463
Lab Sample ID:	Q1463-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.5
Sample Wt/Vol:	6.48	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021447.D	1		03/06/25 20:06	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	0.96	U	0.96	4.10	ug/Kg
75-01-4	Vinyl Chloride	0.64	U	0.64	4.10	ug/Kg
74-83-9	Bromomethane	0.85	U	0.85	4.10	ug/Kg
75-00-3	Chloroethane	0.83	U	0.83	4.10	ug/Kg
75-65-0	Tert butyl alcohol	12.9	U	12.9	20.6	ug/Kg
75-35-4	1,1-Dichloroethene	0.64	U	0.64	4.10	ug/Kg
67-64-1	Acetone	5.10	U	5.10	20.6	ug/Kg
75-15-0	Carbon Disulfide	1.10	U	1.10	4.10	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.55	U	0.55	4.10	ug/Kg
75-09-2	Methylene Chloride	2.80	U	2.80	8.30	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.69	U	0.69	4.10	ug/Kg
75-34-3	1,1-Dichloroethane	0.52	U	0.52	4.10	ug/Kg
78-93-3	2-Butanone	4.70	U	4.70	20.6	ug/Kg
56-23-5	Carbon Tetrachloride	0.72	U	0.72	4.10	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.50	U	0.50	4.10	ug/Kg
67-66-3	Chloroform	0.55	U	0.55	4.10	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.64	U	0.64	4.10	ug/Kg
71-43-2	Benzene	0.59	U	0.59	4.10	ug/Kg
107-06-2	1,2-Dichloroethane	0.50	U	0.50	4.10	ug/Kg
79-01-6	Trichloroethene	0.62	U	0.62	4.10	ug/Kg
78-87-5	1,2-Dichloropropane	0.54	U	0.54	4.10	ug/Kg
75-27-4	Bromodichloromethane	0.46	U	0.46	4.10	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.60	U	3.60	20.6	ug/Kg
108-88-3	Toluene	0.55	U	0.55	4.10	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.50	U	0.50	4.10	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.47	U	0.47	4.10	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.69	U	0.69	4.10	ug/Kg
591-78-6	2-Hexanone	4.00	U	4.00	20.6	ug/Kg
124-48-1	Dibromochloromethane	0.54	U	0.54	4.10	ug/Kg
127-18-4	Tetrachloroethene	0.73	U	0.73	4.10	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T9	SDG No.:	Q1463
Lab Sample ID:	Q1463-09	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	93.5
Sample Wt/Vol:	6.48 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021447.D	1		03/06/25 20:06	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.61	U	0.61	4.10	ug/Kg
100-41-4	Ethyl Benzene	0.51	U	0.51	4.10	ug/Kg
179601-23-1	m/p-Xylenes	1.10	U	1.10	8.30	ug/Kg
95-47-6	o-Xylene	0.58	U	0.58	4.10	ug/Kg
100-42-5	Styrene	0.50	U	0.50	4.10	ug/Kg
75-25-2	Bromoform	0.67	U	0.67	4.10	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.91	U	0.91	4.10	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	61.3		70 (63) - 130 (155)	123%	SPK: 50
1868-53-7	Dibromofluoromethane	51.5		70 (70) - 130 (134)	103%	SPK: 50
2037-26-5	Toluene-d8	47.5		70 (74) - 130 (123)	95%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.0		70 (38) - 130 (136)	84%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	212000	7.707			
540-36-3	1,4-Difluorobenzene	387000	8.616			
3114-55-4	Chlorobenzene-d5	338000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	129000	13.346			

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\VY030625\
 Data File : VY021447.D
 Acq On : 06 Mar 2025 20:06
 Operator : SY/MD
 Sample : Q1463-09
 Misc : 6.48g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T9

Quant Time: Mar 07 00:43:06 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	211507	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	387107	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	337914	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	129134	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	136932	61.253	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	122.500%
35) Dibromofluoromethane	7.634	113	130951	51.464	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	102.920%
50) Toluene-d8	10.103	98	457447	47.481	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	94.960%
62) 4-Bromofluorobenzene	12.408	95	137652	42.003	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	84.000%

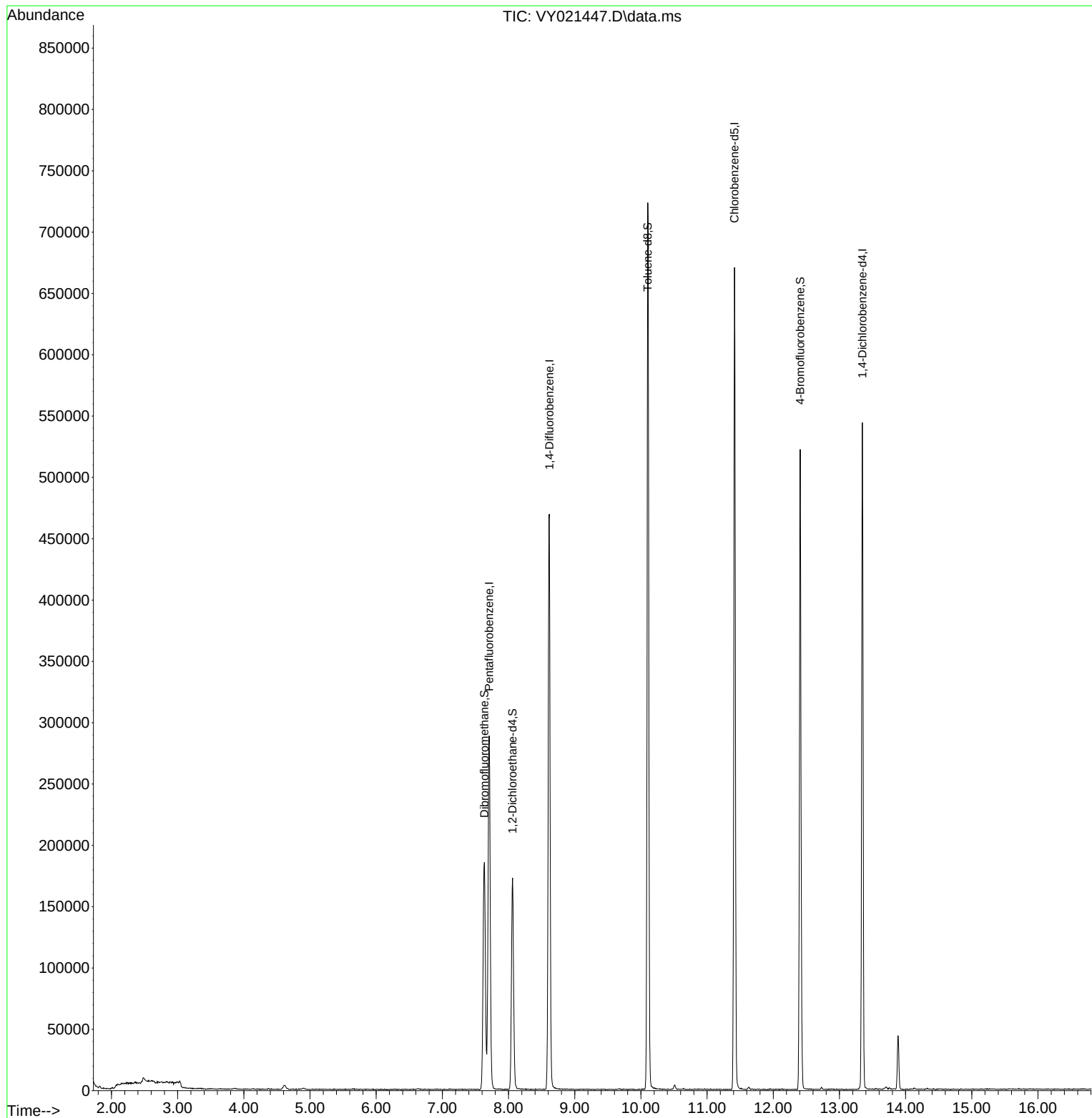
Target Compounds	Qvalue

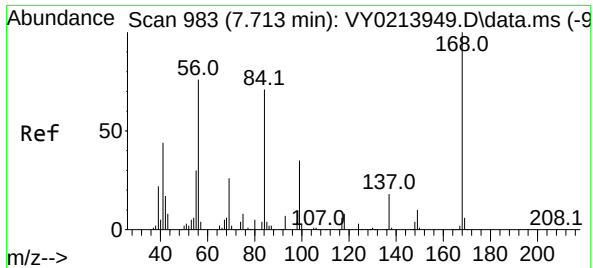
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021447.D
Acq On : 06 Mar 2025 20:06
Operator : SY/MD
Sample : Q1463-09
Misc : 6.48g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T9

Quant Time: Mar 07 00:43:06 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

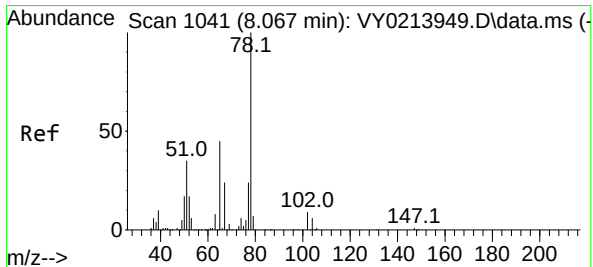
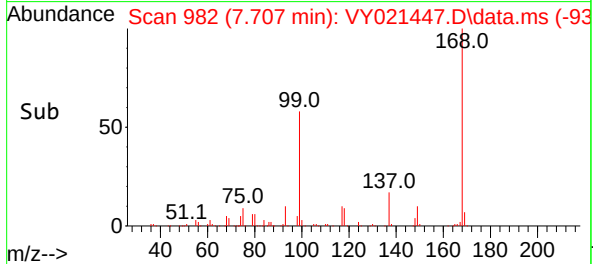
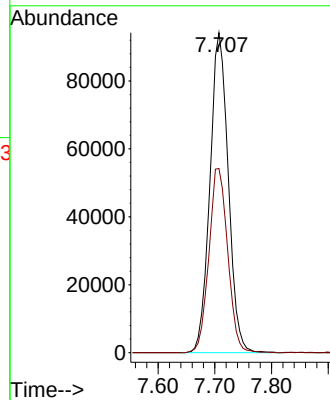
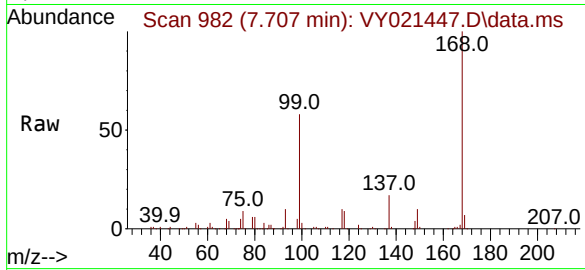




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021447.D
Acq: 06 Mar 2025 20:06

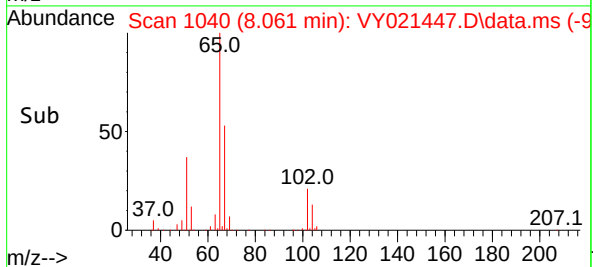
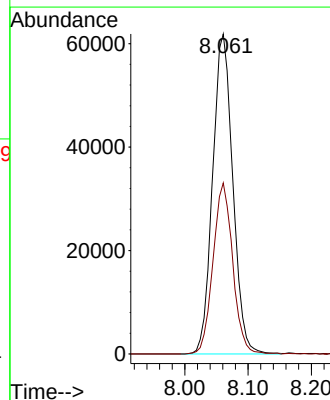
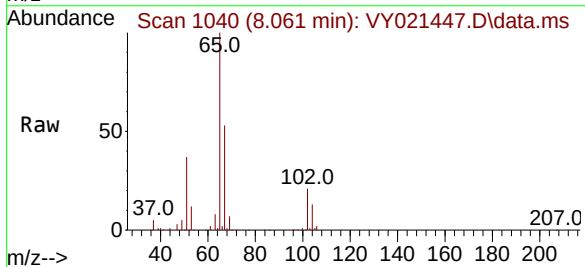
Instrument :
MSVOA_Y
ClientSampleId :
T9

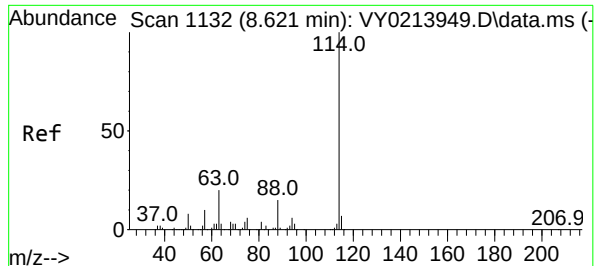
Tgt Ion:168 Resp: 211507
Ion Ratio Lower Upper
168 100
99 57.5 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 61.253 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021447.D
Acq: 06 Mar 2025 20:06

Tgt Ion: 65 Resp: 136932
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# 1132

Delta R.T. -0.006 min

Lab File: VY021447.D

Acq: 06 Mar 2025 20:06

Instrument :

MSVOA_Y

ClientSampleId :

T9

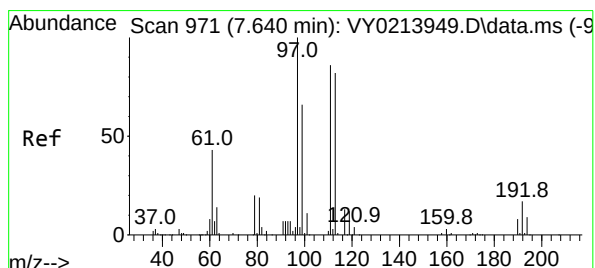
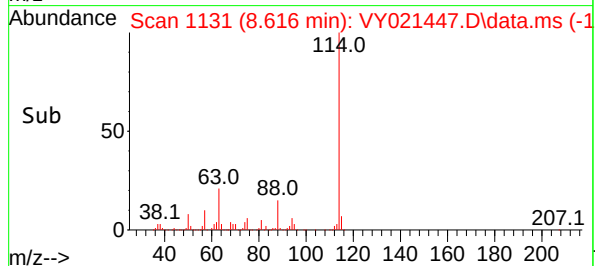
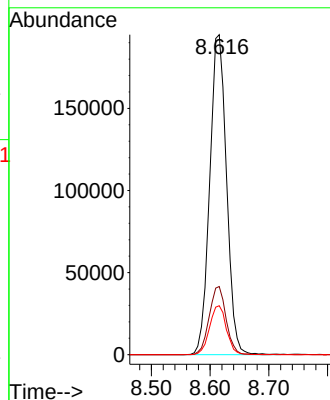
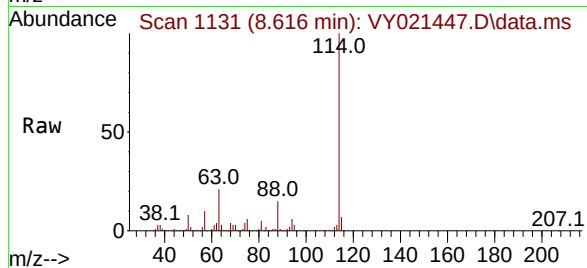
Tgt Ion:114 Resp: 387107

Ion Ratio Lower Upper

114 100

63 21.3 0.0 40.8

88 15.3 0.0 30.8



#35

Dibromofluoromethane

Concen: 51.464 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021447.D

Acq: 06 Mar 2025 20:06

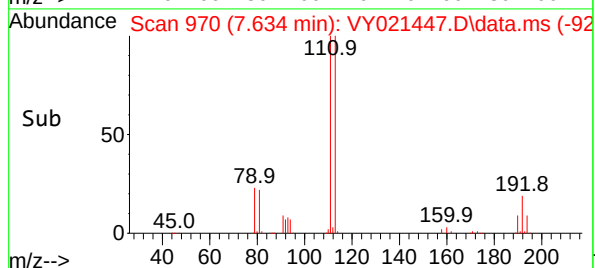
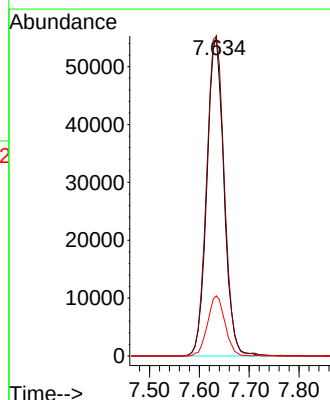
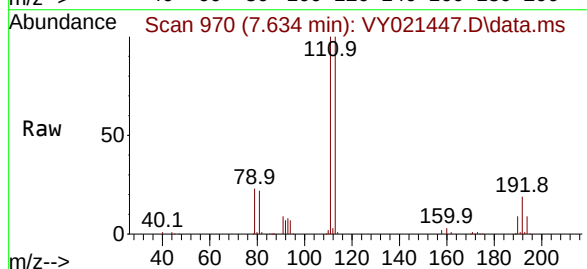
Tgt Ion:113 Resp: 130951

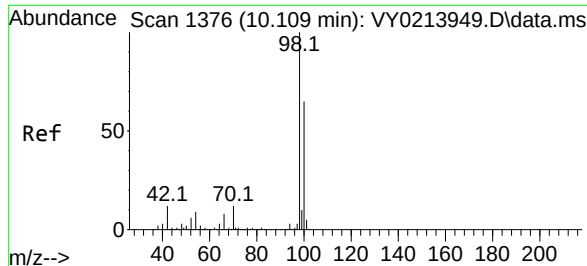
Ion Ratio Lower Upper

113 100

111 104.3 82.0 123.0

192 19.3 15.9 23.9





#50

Toluene-d8

Concen: 47.481 ug/l

RT: 10.103 min Scan# 11

Delta R.T. -0.006 min

Lab File: VY021447.D

Acq: 06 Mar 2025 20:06

Instrument :

MSVOA_Y

ClientSampleId :

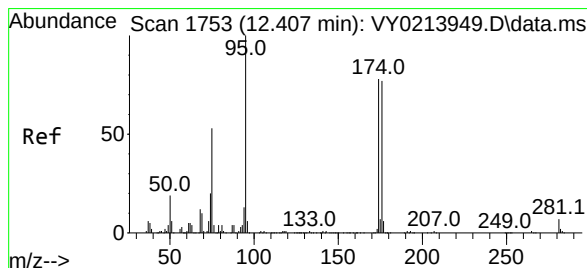
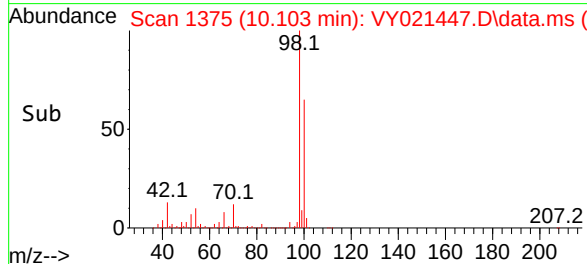
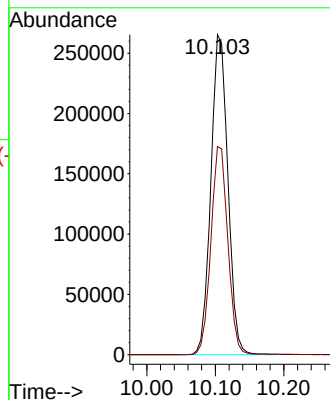
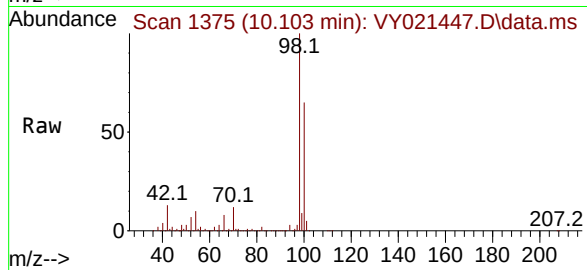
T9

Tgt Ion: 98 Resp: 457447

Ion Ratio Lower Upper

98 100

100 64.8 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 42.003 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021447.D

Acq: 06 Mar 2025 20:06

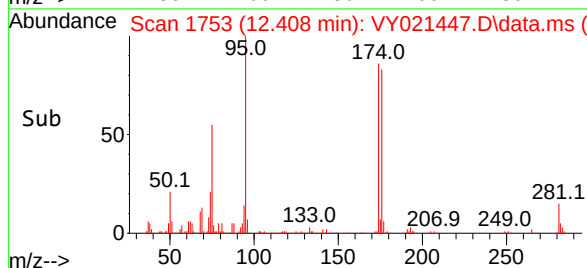
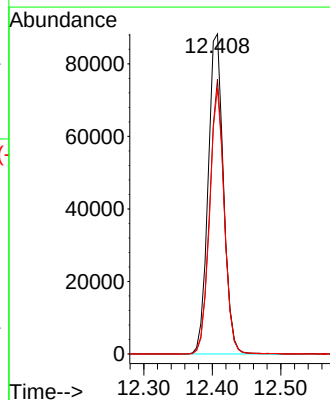
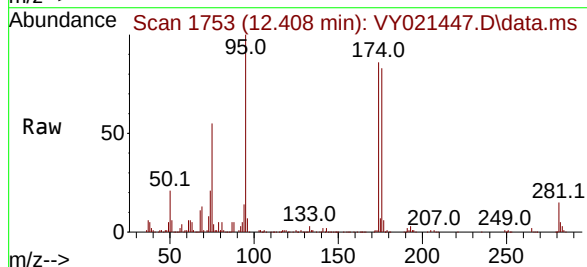
Tgt Ion: 95 Resp: 137652

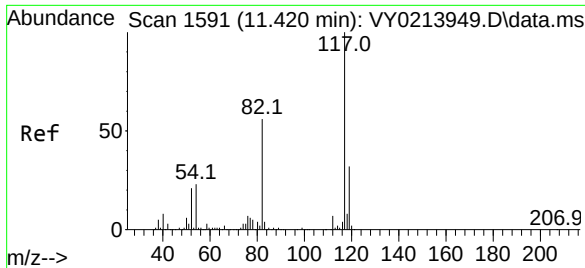
Ion Ratio Lower Upper

95 100

174 81.4 0.0 165.0

176 78.8 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: VY021447.D

Acq: 06 Mar 2025 20:06

Instrument :

MSVOA_Y

ClientSampleId :

T9

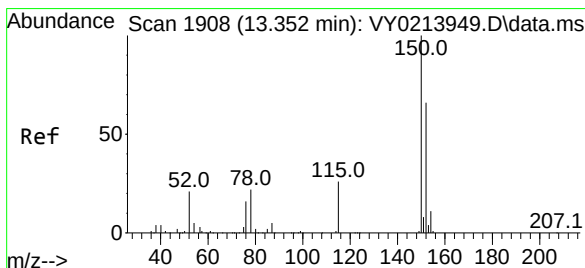
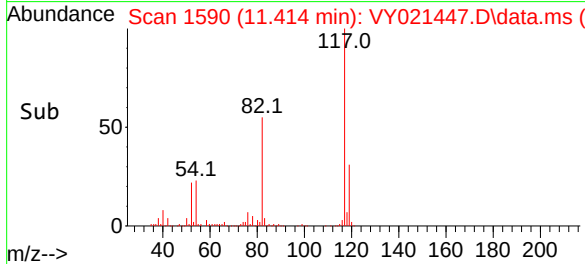
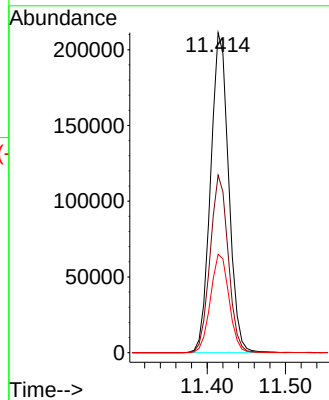
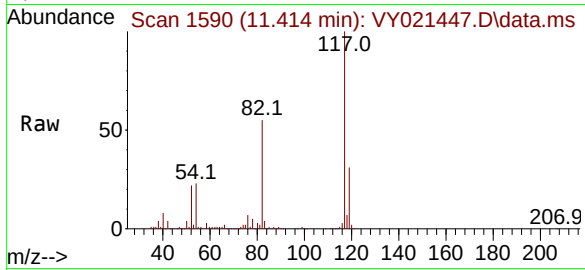
Tgt Ion:117 Resp: 337914

Ion Ratio Lower Upper

117 100

82 55.5 44.6 67.0

119 30.8 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: VY021447.D

Acq: 06 Mar 2025 20:06

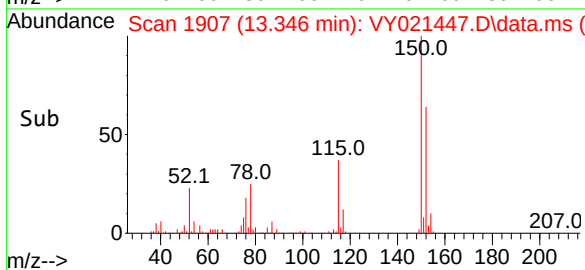
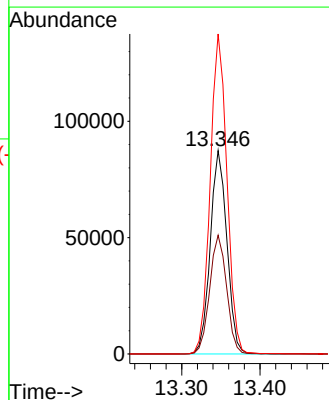
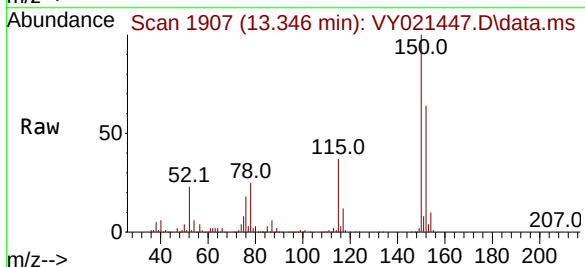
Tgt Ion:152 Resp: 129134

Ion Ratio Lower Upper

152 100

115 59.4 29.0 87.0

150 157.8 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021447.D
Acq On : 06 Mar 2025 20:06
Operator : SY/MD
Sample : Q1463-09
Misc : 6.48g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T9

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: VY021447.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.634	957	970	976	rBV	185530	456475	36.65%	6.988%
2	7.707	976	982	993	rVB	287715	654093	52.52%	10.014%
3	8.061	1030	1040	1052	rBV	172610	384850	30.90%	5.892%
4	8.616	1122	1131	1144	rBV	468730	936744	75.22%	14.341%
5	10.103	1368	1375	1385	rBV	722816	1245356	100.00%	19.066%
6	11.414	1582	1590	1604	rBV	670372	1082622	86.93%	16.575%
7	12.408	1746	1753	1767	rBV2	521902	873057	70.11%	13.366%
8	13.346	1898	1907	1921	rBV	543453	825756	66.31%	12.642%
9	13.883	1989	1995	2003	rVB2	43659	72875	5.85%	1.116%

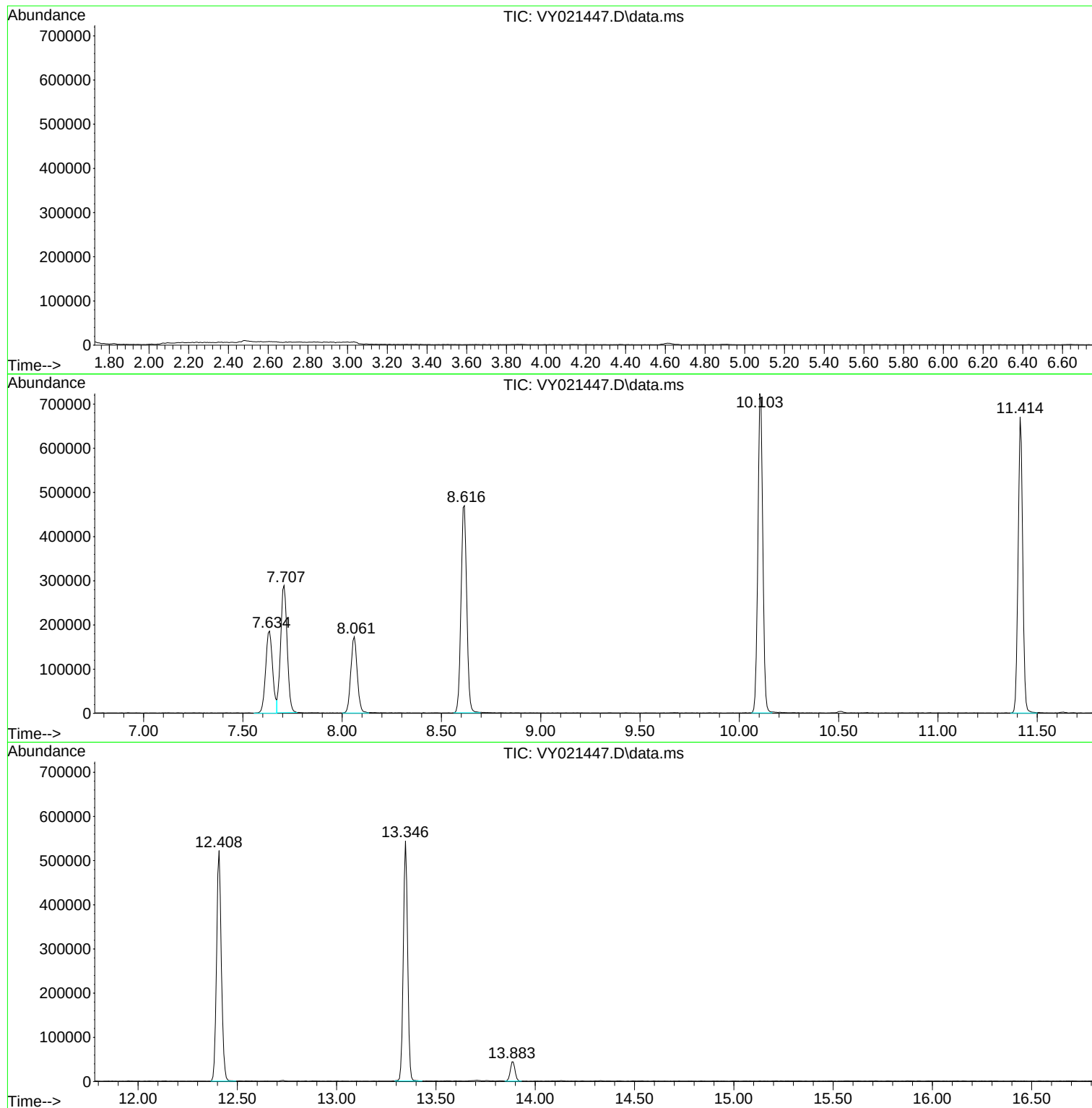
Sum of corrected areas: 6531828

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021447.D
Acq On : 06 Mar 2025 20:06
Operator : SY/MD
Sample : Q1463-09
Misc : 6.48g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T9

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\VY030625\
Data File : VY021447.D
Acq On : 06 Mar 2025 20:06
Operator : SY/MD
Sample : Q1463-09
Misc : 6.48g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T9

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\VY030625\
Data File : VY021447.D
Acq On : 06 Mar 2025 20:06
Operator : SY/MD
Sample : Q1463-09
Misc : 6.48g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 24 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T9

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

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T10	SDG No.:	Q1463
Lab Sample ID:	Q1463-10	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	92.8
Sample Wt/Vol:	7.05	Units: g	Final Vol: 5000 uL
Soil Aliquot Vol:		uL	Test: VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level : LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021458.D	1		03/07/25 14:05	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	0.89	U	0.89	3.80	ug/Kg
75-01-4	Vinyl Chloride	0.59	U	0.59	3.80	ug/Kg
74-83-9	Bromomethane	0.79	U	0.79	3.80	ug/Kg
75-00-3	Chloroethane	0.77	U	0.77	3.80	ug/Kg
75-65-0	Tert butyl alcohol	11.9	U	11.9	19.1	ug/Kg
75-35-4	1,1-Dichloroethene	0.60	U	0.60	3.80	ug/Kg
67-64-1	Acetone	4.80	U	4.80	19.1	ug/Kg
75-15-0	Carbon Disulfide	0.98	U	0.98	3.80	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.51	U	0.51	3.80	ug/Kg
75-09-2	Methylene Chloride	2.60	U	2.60	7.60	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.64	U	0.64	3.80	ug/Kg
75-34-3	1,1-Dichloroethane	0.48	U	0.48	3.80	ug/Kg
78-93-3	2-Butanone	4.30	U	4.30	19.1	ug/Kg
56-23-5	Carbon Tetrachloride	0.66	U	0.66	3.80	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.47	U	0.47	3.80	ug/Kg
67-66-3	Chloroform	0.51	U	0.51	3.80	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.60	U	0.60	3.80	ug/Kg
71-43-2	Benzene	0.55	U	0.55	3.80	ug/Kg
107-06-2	1,2-Dichloroethane	0.47	U	0.47	3.80	ug/Kg
79-01-6	Trichloroethene	0.57	U	0.57	3.80	ug/Kg
78-87-5	1,2-Dichloropropane	0.50	U	0.50	3.80	ug/Kg
75-27-4	Bromodichloromethane	0.43	U	0.43	3.80	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3.30	U	3.30	19.1	ug/Kg
108-88-3	Toluene	0.51	U	0.51	3.80	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.46	U	0.46	3.80	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.44	U	0.44	3.80	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.64	U	0.64	3.80	ug/Kg
591-78-6	2-Hexanone	3.70	U	3.70	19.1	ug/Kg
124-48-1	Dibromochloromethane	0.50	U	0.50	3.80	ug/Kg
127-18-4	Tetrachloroethene	0.68	U	0.68	3.80	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	02/27/25
Project:	Fisal	Date Received:	02/27/25
Client Sample ID:	T10	SDG No.:	Q1463
Lab Sample ID:	Q1463-10	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	92.8
Sample Wt/Vol:	7.05 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021458.D	1		03/07/25 14:05	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.57	U	0.57	3.80	ug/Kg
100-41-4	Ethyl Benzene	0.47	U	0.47	3.80	ug/Kg
179601-23-1	m/p-Xylenes	1.00	U	1.00	7.60	ug/Kg
95-47-6	o-Xylene	0.53	U	0.53	3.80	ug/Kg
100-42-5	Styrene	0.46	U	0.46	3.80	ug/Kg
75-25-2	Bromoform	0.62	U	0.62	3.80	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	0.84	U	0.84	3.80	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.5		70 (63) - 130 (155)	111%	SPK: 50
1868-53-7	Dibromofluoromethane	50.7		70 (70) - 130 (134)	101%	SPK: 50
2037-26-5	Toluene-d8	48.1		70 (74) - 130 (123)	96%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.1		70 (38) - 130 (136)	86%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	290000	7.707			
540-36-3	1,4-Difluorobenzene	520000	8.616			
3114-55-4	Chlorobenzene-d5	457000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	176000	13.346			

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\VY030725\
 Data File : VY021458.D
 Acq On : 07 Mar 2025 14:05
 Operator : SY/MD
 Sample : Q1463-10
 Misc : 7.05g/5.0mL/MSVOA_Y/SOIL/B
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 T10

Quant Time: Mar 07 22:01:18 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	289637	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	520171	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	457030	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	176291	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	169958	55.518	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	111.040%
35) Dibromofluoromethane	7.634	113	173484	50.739	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	101.480%
50) Toluene-d8	10.109	98	622506	48.085	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.160%
62) 4-Bromofluorobenzene	12.408	95	189635	43.063	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	86.120%

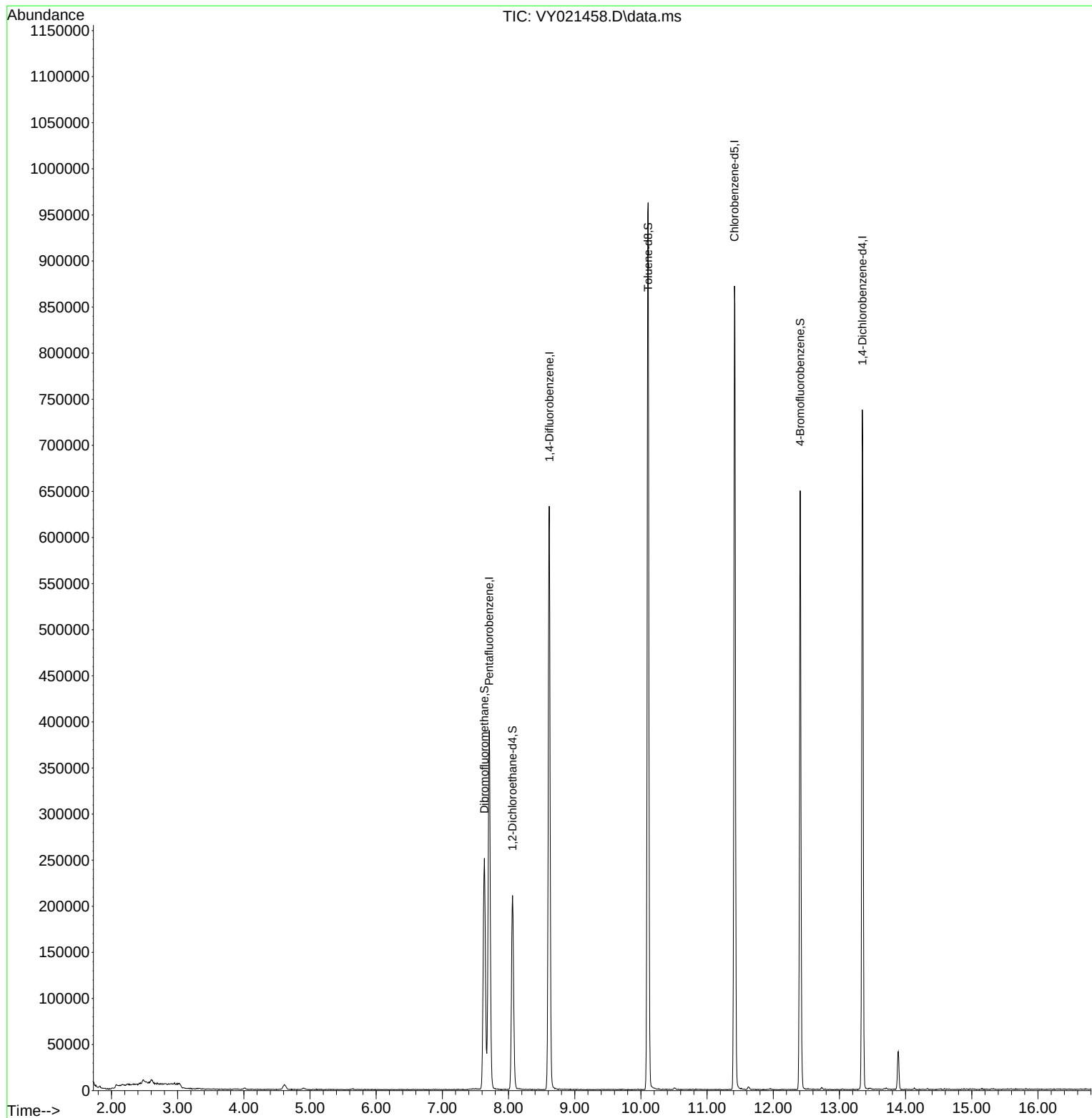
Target Compounds	Qvalue

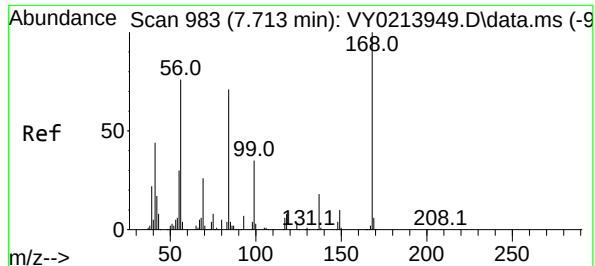
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021458.D
Acq On : 07 Mar 2025 14:05
Operator : SY/MD
Sample : Q1463-10
Misc : 7.05g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T10

Quant Time: Mar 07 22:01:18 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

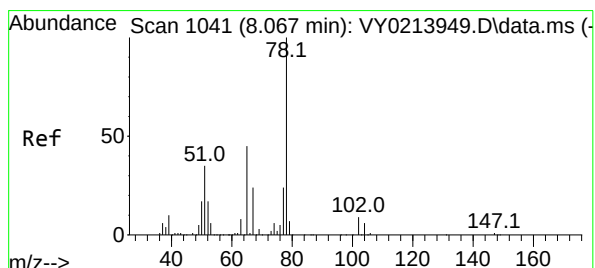
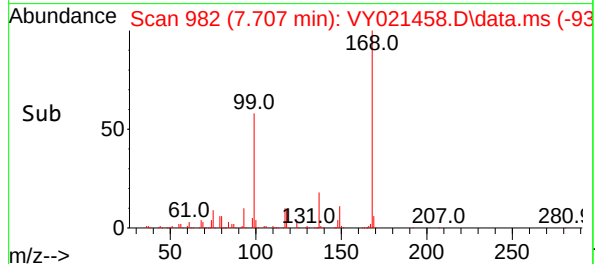
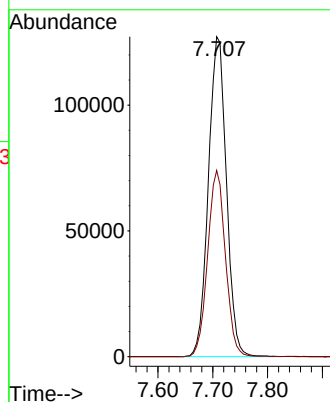
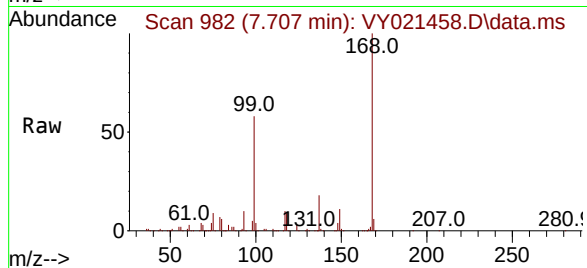




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021458.D
Acq: 07 Mar 2025 14:05

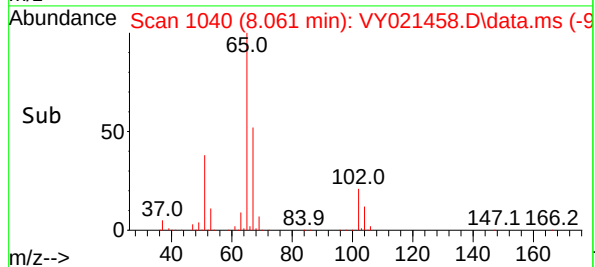
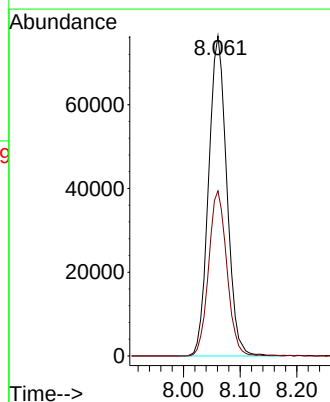
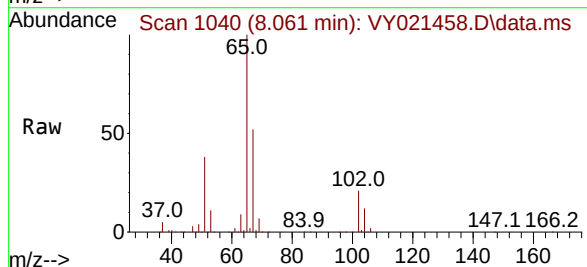
Instrument :
MSVOA_Y
ClientSampleId :
T10

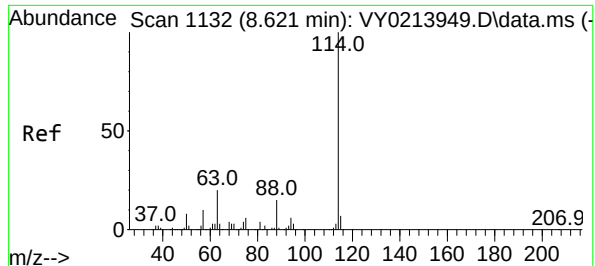
Tgt Ion:168 Resp: 289637
Ion Ratio Lower Upper
168 100
99 58.2 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 55.518 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021458.D
Acq: 07 Mar 2025 14:05

Tgt Ion: 65 Resp: 169958
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# 1132

Delta R.T. -0.006 min

Lab File: VY021458.D

Acq: 07 Mar 2025 14:05

Instrument :

MSVOA_Y

ClientSampleId :

T10

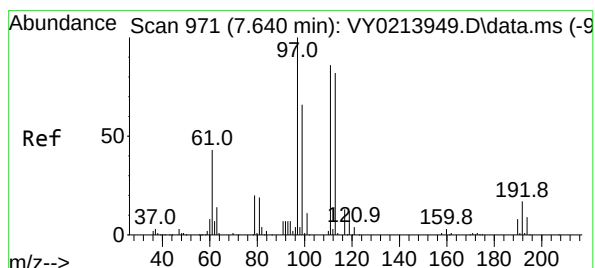
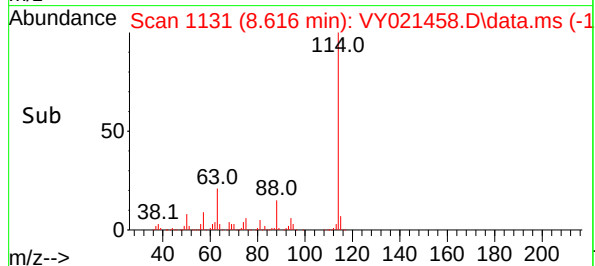
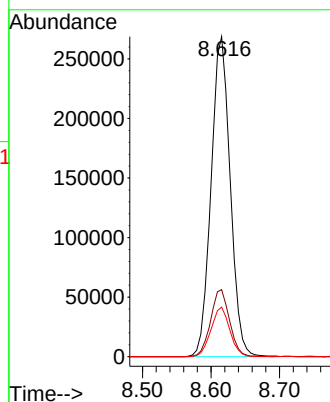
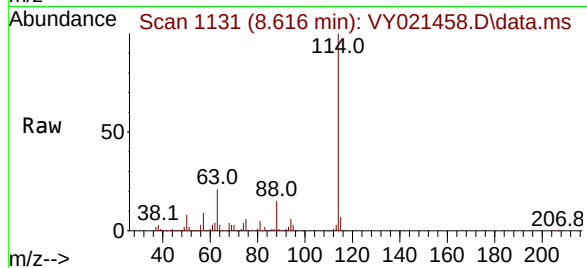
Tgt Ion:114 Resp: 520171

Ion Ratio Lower Upper

114 100

63 21.0 0.0 40.8

88 15.5 0.0 30.8



#35

Dibromofluoromethane

Concen: 50.739 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021458.D

Acq: 07 Mar 2025 14:05

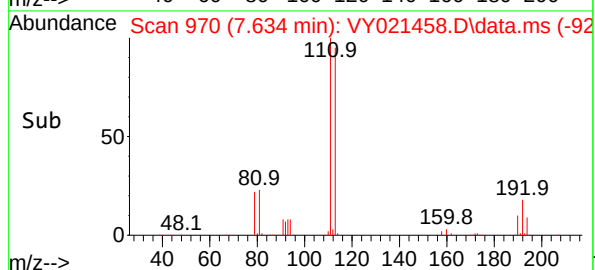
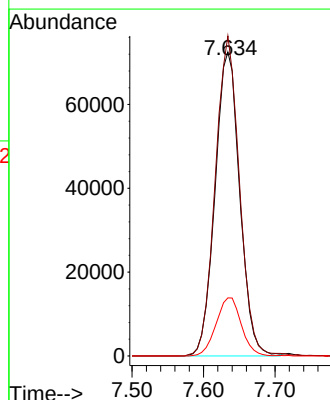
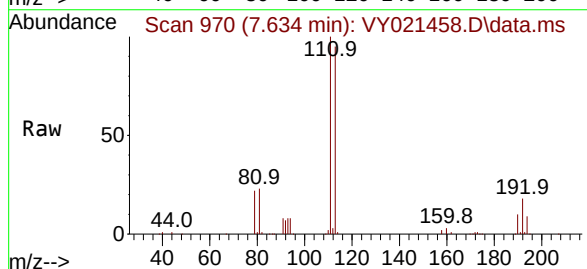
Tgt Ion:113 Resp: 173484

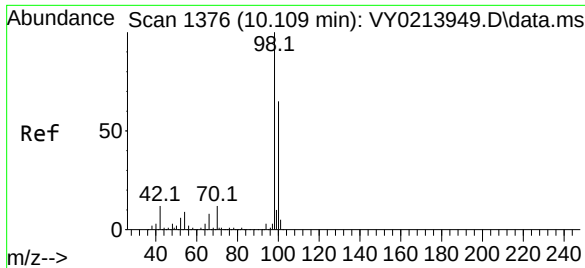
Ion Ratio Lower Upper

113 100

111 103.6 82.0 123.0

192 19.6 15.9 23.9





#50

Toluene-d8

Concen: 48.085 ug/l

RT: 10.109 min Scan# 1

Delta R.T. 0.000 min

Lab File: VY021458.D

Acq: 07 Mar 2025 14:05

Instrument :

MSVOA_Y

ClientSampleId :

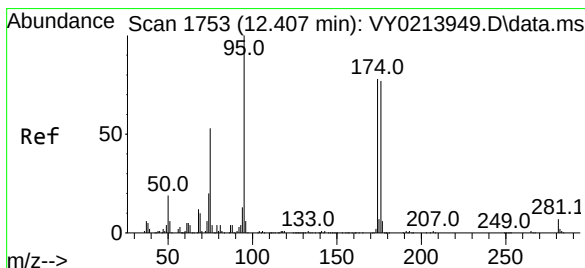
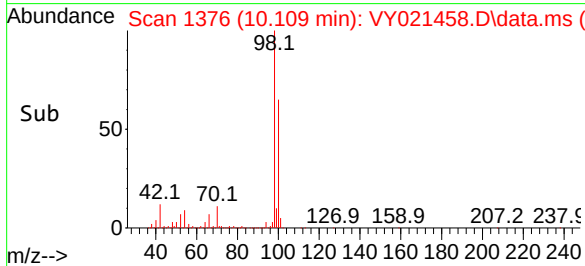
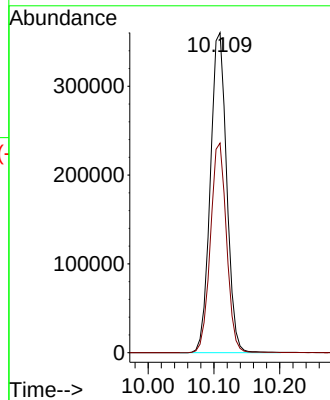
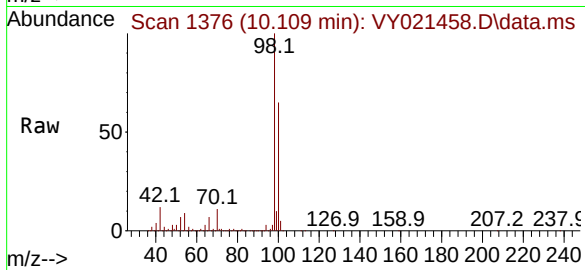
T10

Tgt Ion: 98 Resp: 622506

Ion Ratio Lower Upper

98 100

100 64.6 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 43.063 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021458.D

Acq: 07 Mar 2025 14:05

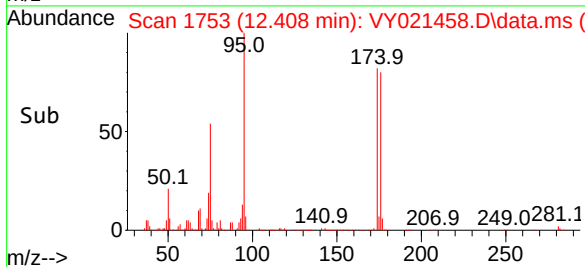
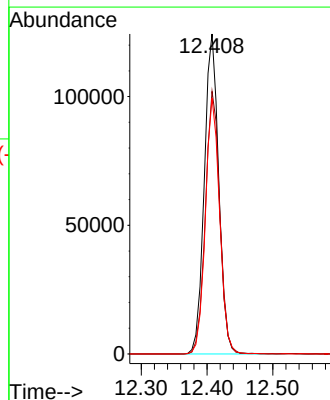
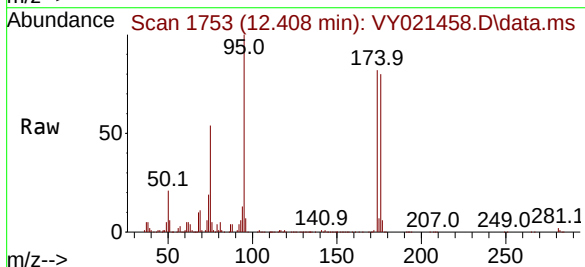
Tgt Ion: 95 Resp: 189635

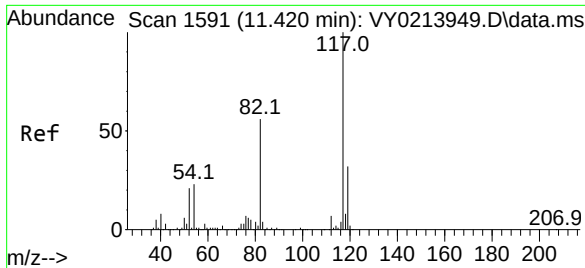
Ion Ratio Lower Upper

95 100

174 82.3 0.0 165.0

176 78.9 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: VY021458.D

Acq: 07 Mar 2025 14:05

Instrument :

MSVOA_Y

ClientSampleId :

T10

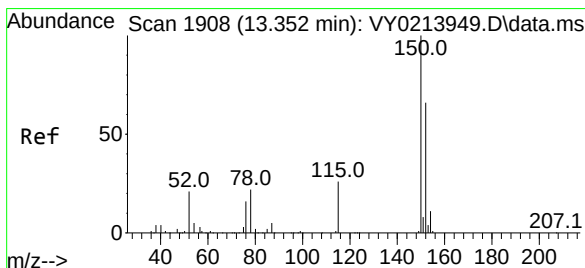
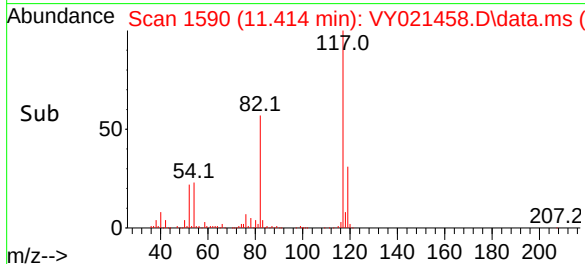
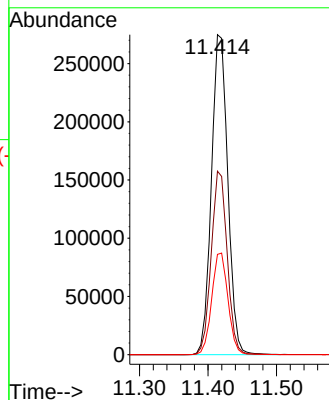
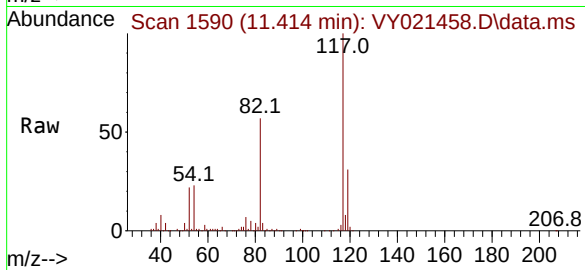
Tgt Ion:117 Resp: 457030

Ion Ratio Lower Upper

117 100

82 57.3 44.6 67.0

119 31.3 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: VY021458.D

Acq: 07 Mar 2025 14:05

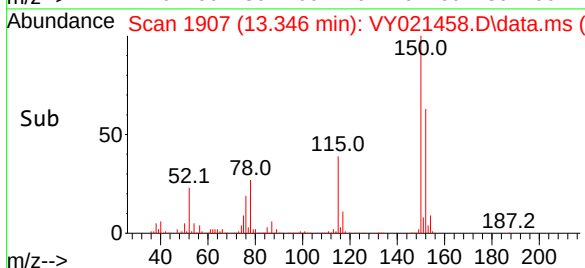
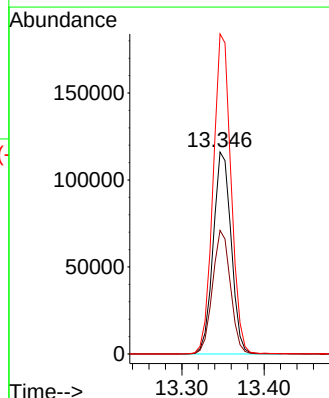
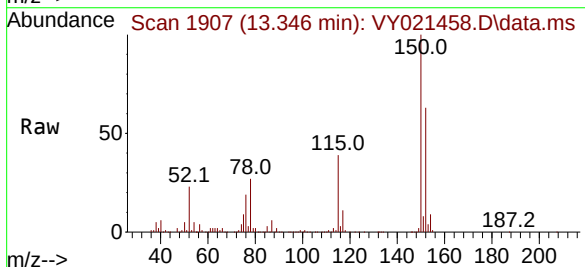
Tgt Ion:152 Resp: 176291

Ion Ratio Lower Upper

152 100

115 61.0 29.0 87.0

150 157.9 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021458.D
Acq On : 07 Mar 2025 14:05
Operator : SY/MD
Sample : Q1463-10
Misc : 7.05g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T10

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: VY021458.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	7.634	960	970	976	rBV	250474	595079	35.32%	6.989%
2	7.707	976	982	996	rVB	388801	877016	52.06%	10.300%
3	8.061	1031	1040	1051	rBV	210357	472971	28.08%	5.555%
4	8.616	1119	1131	1145	rBV	633063	1237650	73.47%	14.536%
5	10.109	1367	1376	1396	rBV	962130	1684619	100.00%	19.786%
6	11.414	1582	1590	1605	rBV	871915	1445326	85.80%	16.975%
7	12.408	1746	1753	1767	rBV	649453	1010986	60.01%	11.874%
8	13.346	1896	1907	1921	rBV	737599	1121391	66.57%	13.171%
9	13.889	1989	1996	2003	rVB2	41198	69268	4.11%	0.814%

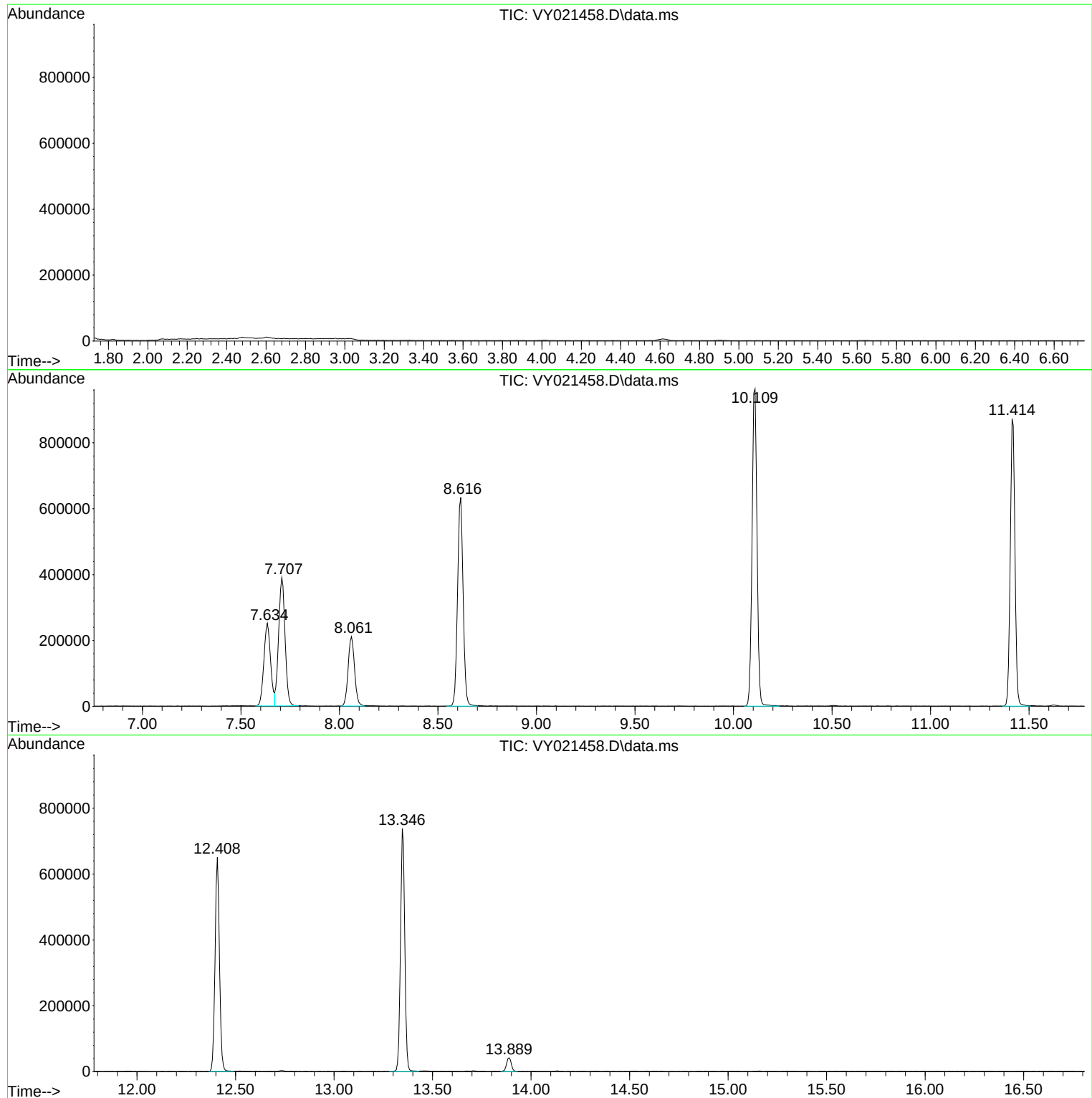
Sum of corrected areas: 8514306

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021458.D
Acq On : 07 Mar 2025 14:05
Operator : SY/MD
Sample : Q1463-10
Misc : 7.05g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T10

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\VY030725\
Data File : VY021458.D
Acq On : 07 Mar 2025 14:05
Operator : SY/MD
Sample : Q1463-10
Misc : 7.05g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T10

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\VY030725\
Data File : VY021458.D
Acq On : 07 Mar 2025 14:05
Operator : SY/MD
Sample : Q1463-10
Misc : 7.05g/5.0mL/MSVOA_Y/SOIL/B
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
T10

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



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.: Q1463 SAS No.: Q1463 SDG No.: Q1463
 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				
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				
Tert butyl alcohol	0.049	0.036	0.038	0.030	0.033	0.061	0.041	28.3				
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				
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				
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				
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				
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				
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				
Tetrachloroethene	0.418	0.370	0.403	0.407	0.393	0.449	0.407	6.5				

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



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.: Q1463 SAS No.: Q1463 SDG No.: Q1463
 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
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
1,1,2,2-Tetrachloroethane	0.712	0.637	0.727	0.667	0.690	0.737	0.695	5.4
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

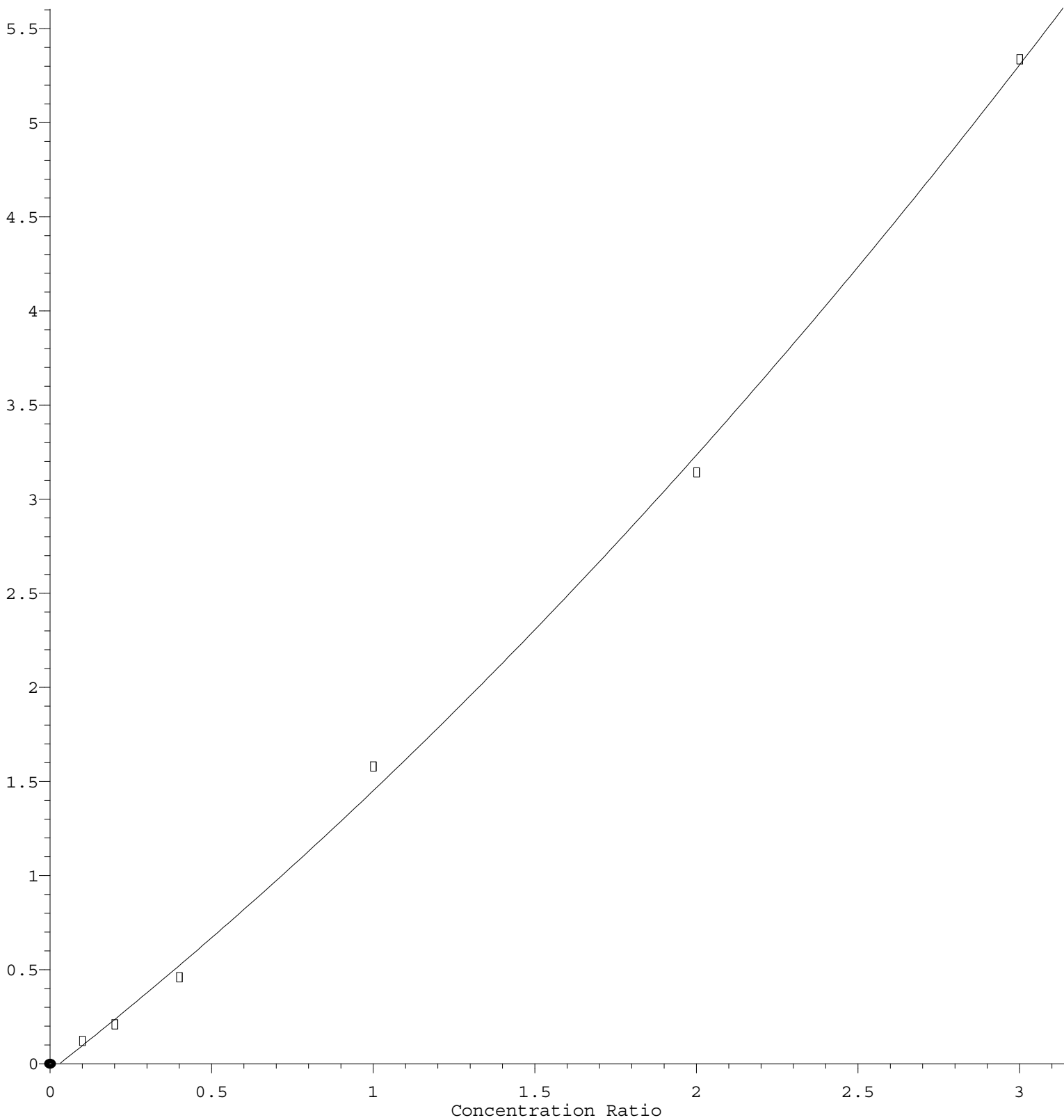
Method Path : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\
 Method File : 82Y030425S.M

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

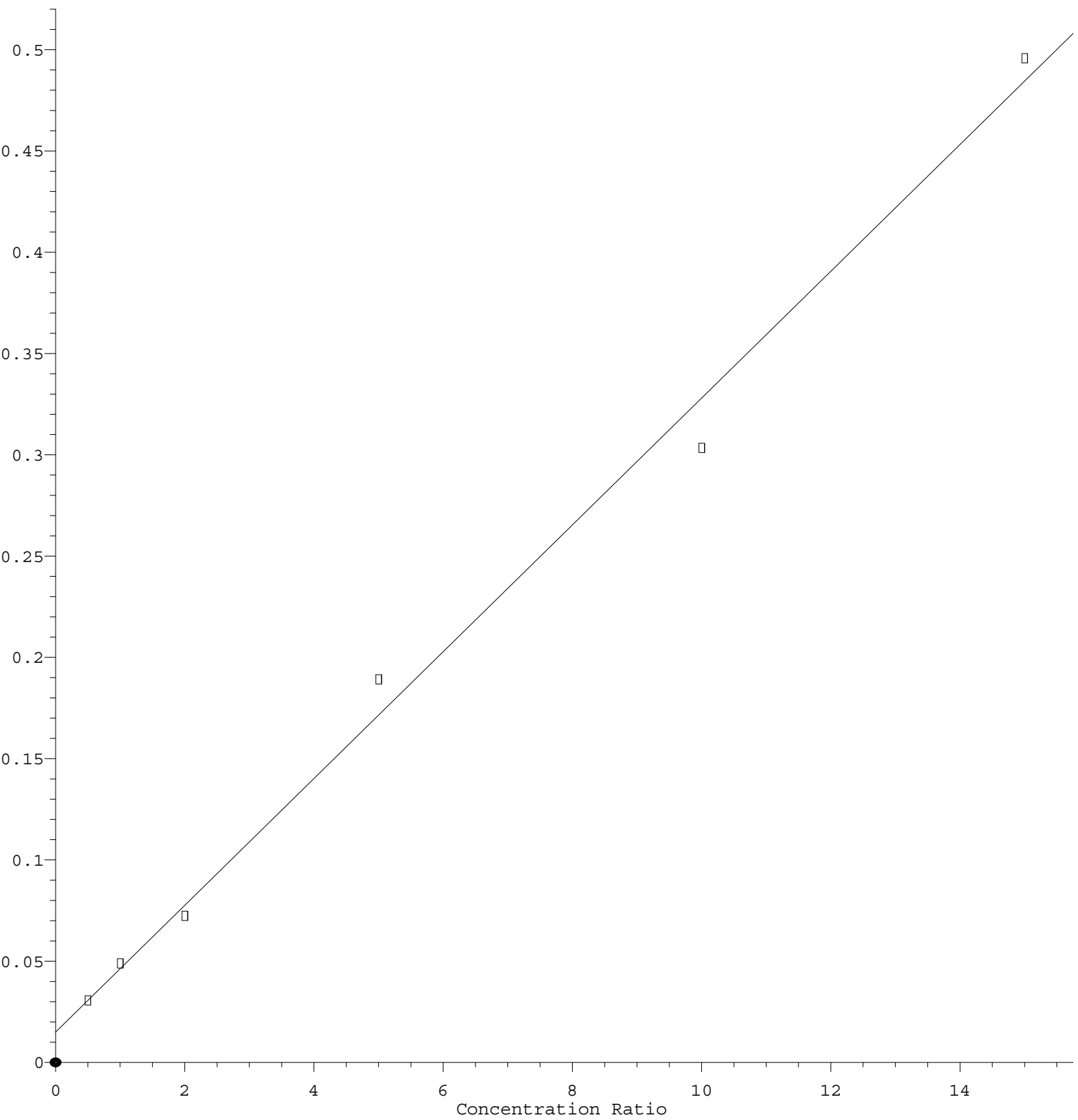
Response Ratio



$R = 1.461e-001 A^2 + 1.344e+000 A - 3.906e-002$
 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



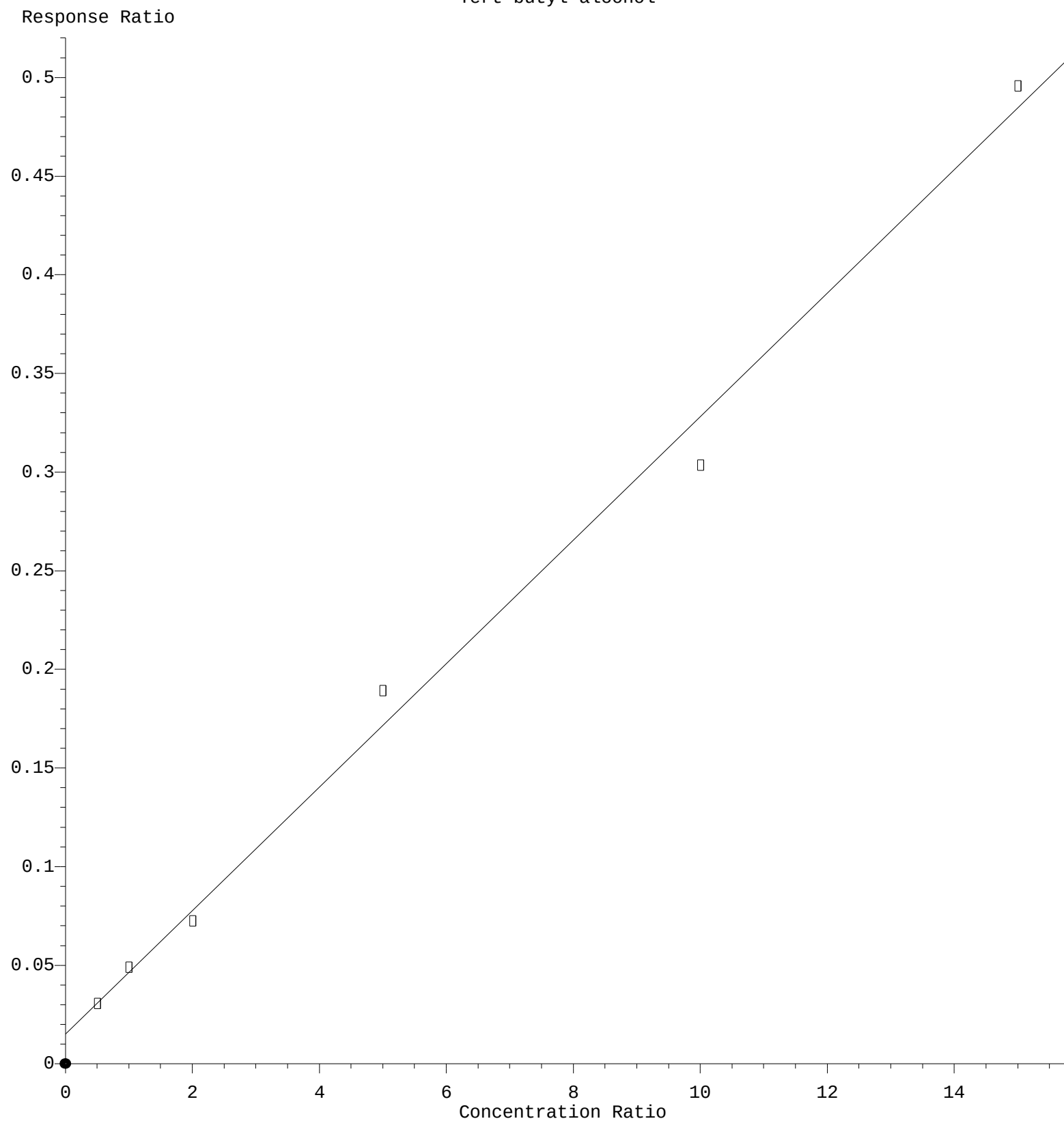
$$\text{Response} = 3.126\text{e-}002 * \text{Amt} + 1.549\text{e-}002$$

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

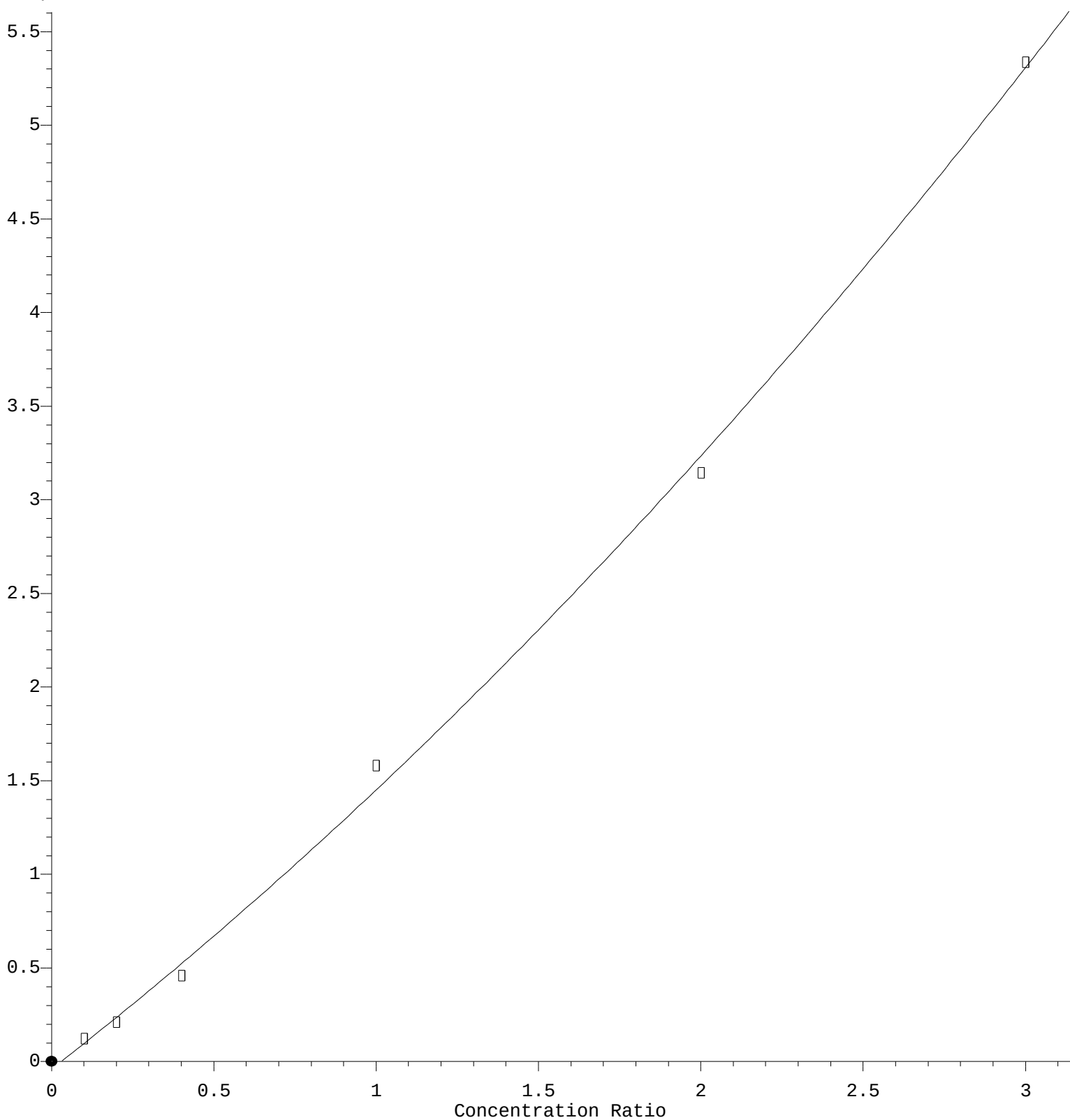
Tert butylalcohol



Response = 3.126e-002 * Amt + 1.549e-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

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)

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

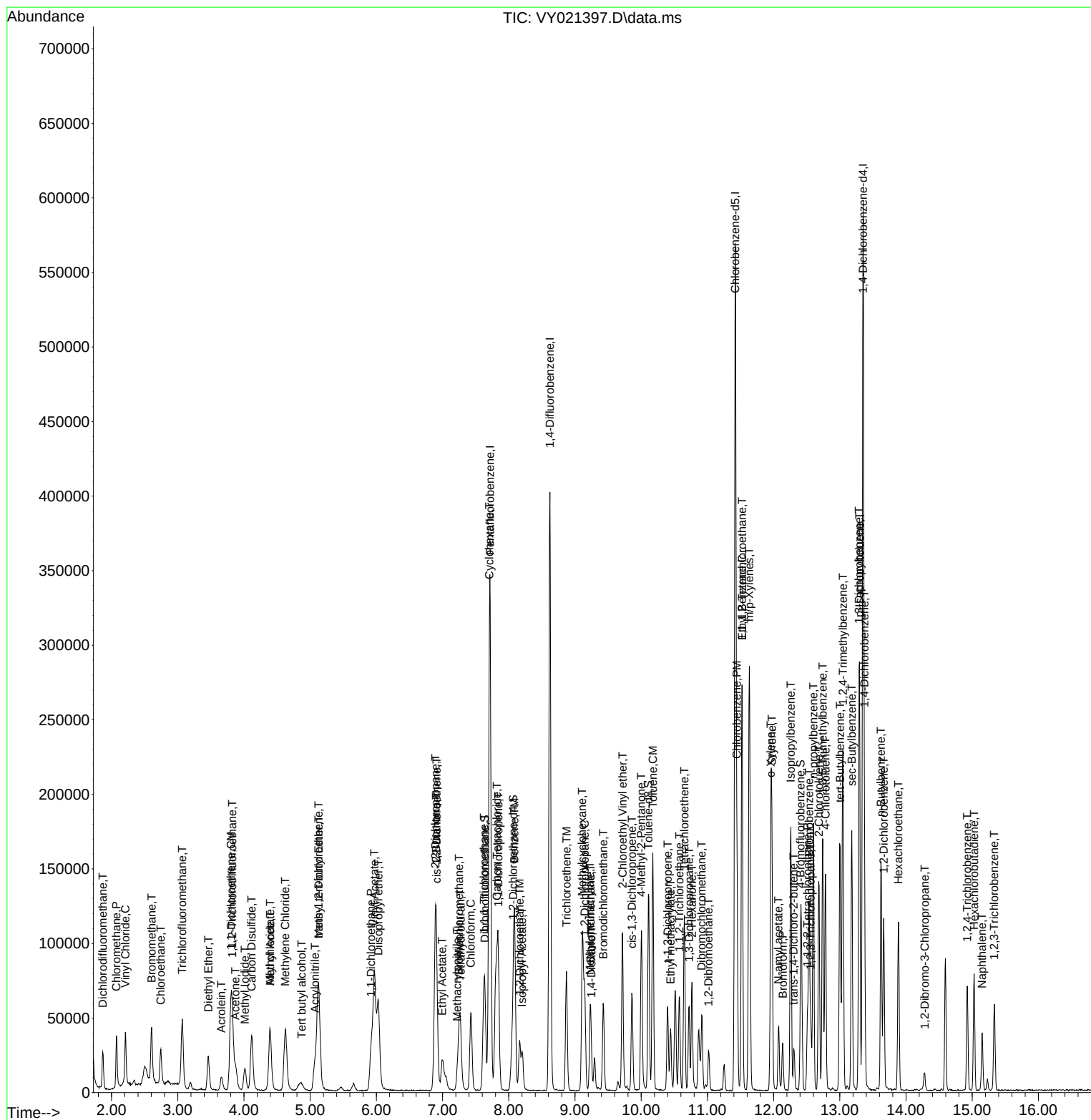
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021397.D
Acq On : 04 Mar 2025 09:46
Operator : SY/MD
Sample : VSTDICC010
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

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



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)

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

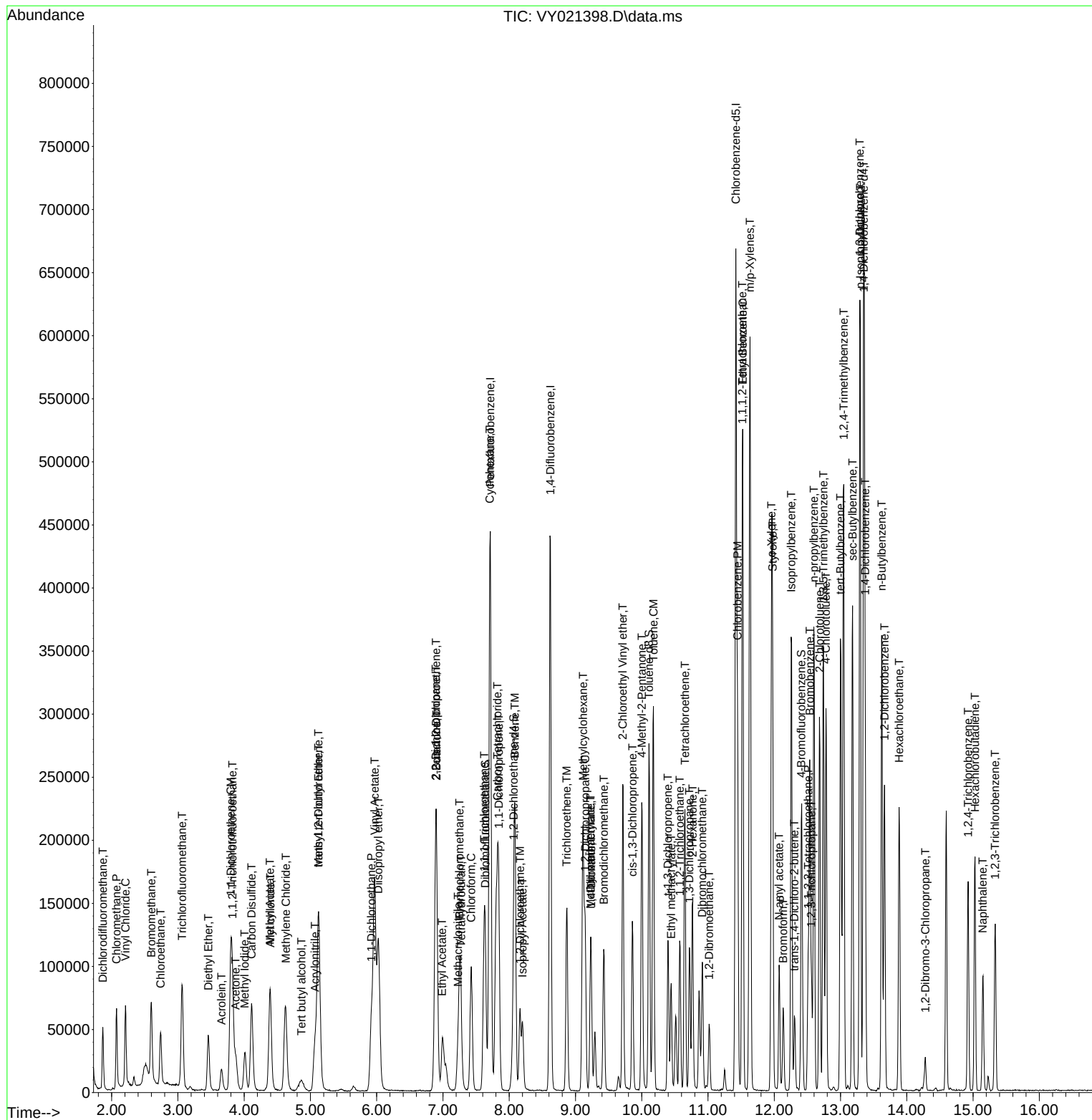
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY021398.D
 Data File : VY021398.D
 Acq On : 04 Mar 2025 10:09
 Operator : SY/MD
 Sample : VSTDIC020
 Misc : 5.00g/5.0mL/MSVOA_Y/soil
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDIC020

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

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 : 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)

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

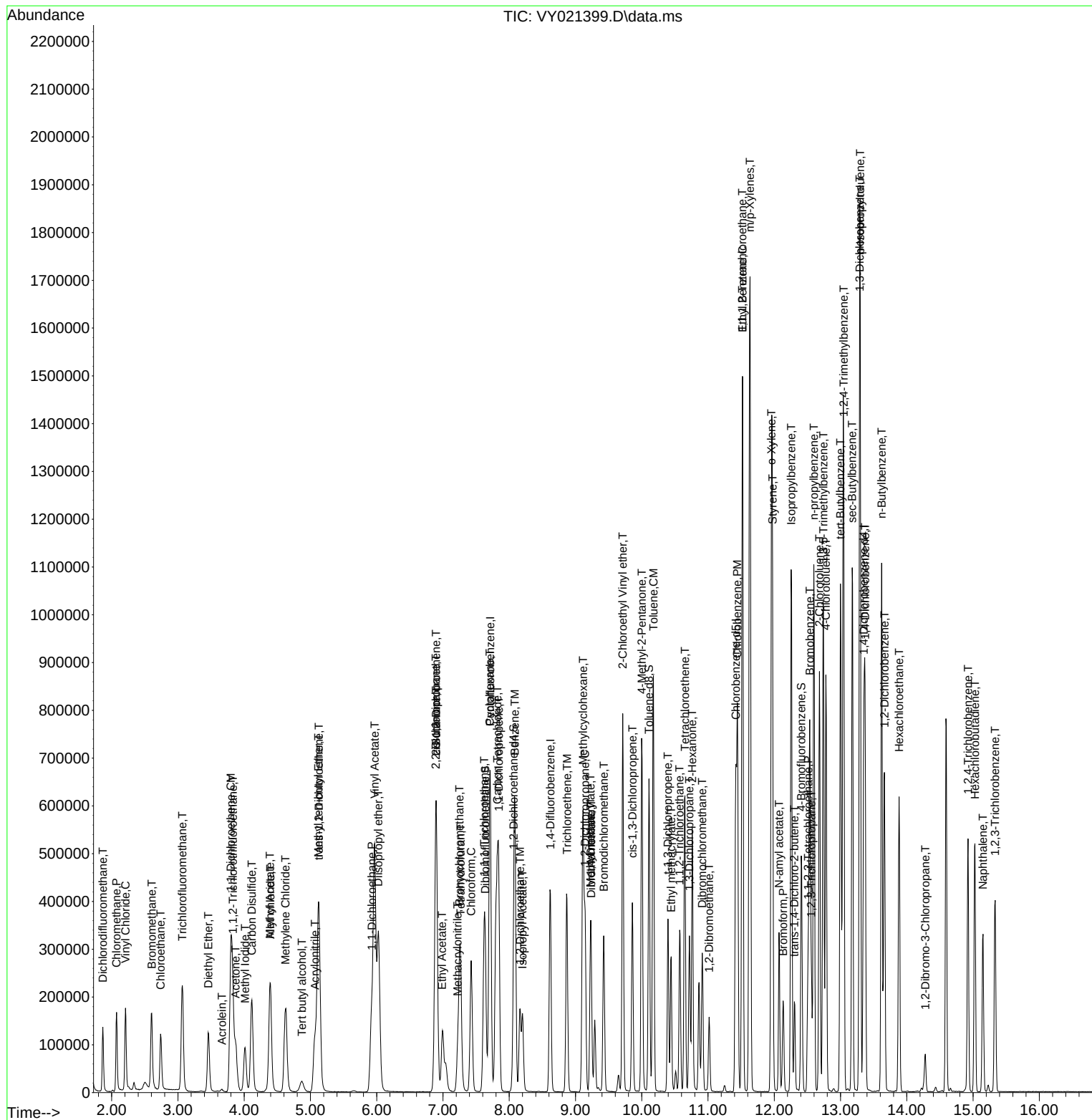
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021399.D
Acq On : 04 Mar 2025 10:30
Operator : SY/MD
Sample : VSTDICCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

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



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

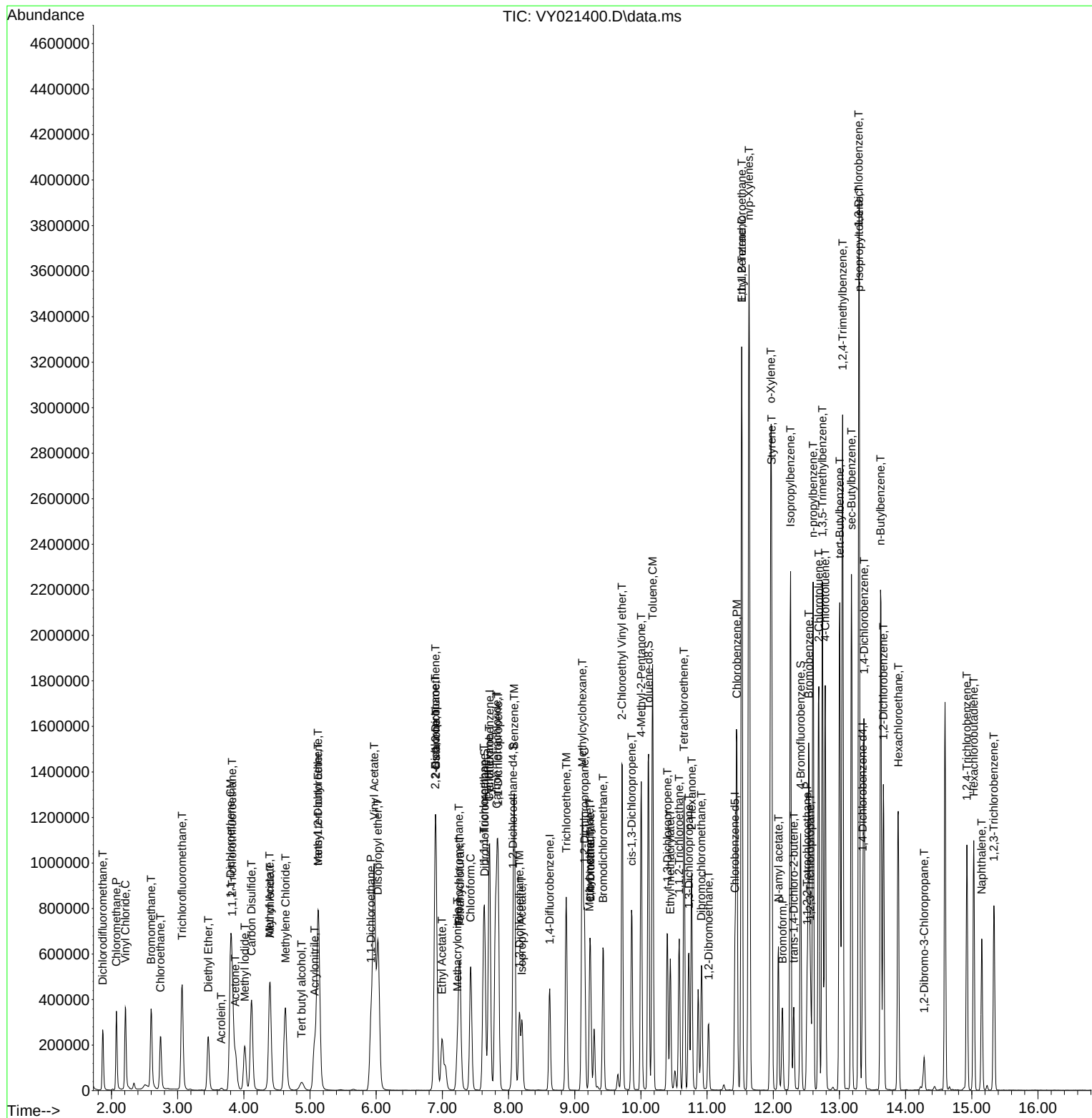
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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)

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

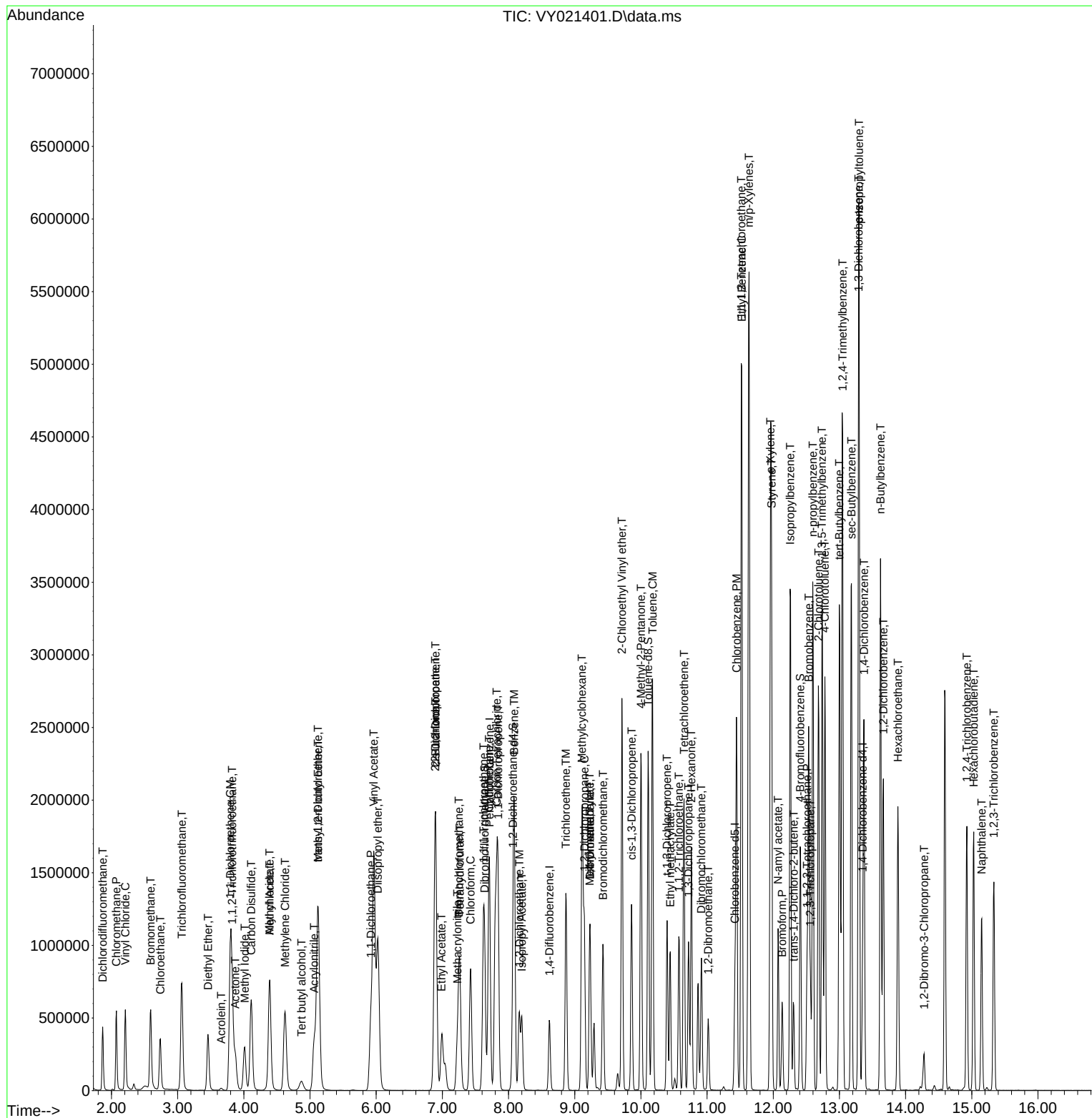
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
Data File : VY021401.D
Acq On : 04 Mar 2025 11:29
Operator : SY/MD
Sample : VSTDICC150
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDICC150

Manual Integrations

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)

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021403.D
 Acq On : 04 Mar 2025 12:15
 Operator : SY/MD
 Sample : VSTDIC005
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :

MSVOA_Y

Client Sample Id :

VSTDIC005

Manual Integrations

APPROVED

Reviewed By : Mahesh Dadoda 03/06/2025

Supervised By : Semsettin Yesilyurt 03/06/2025

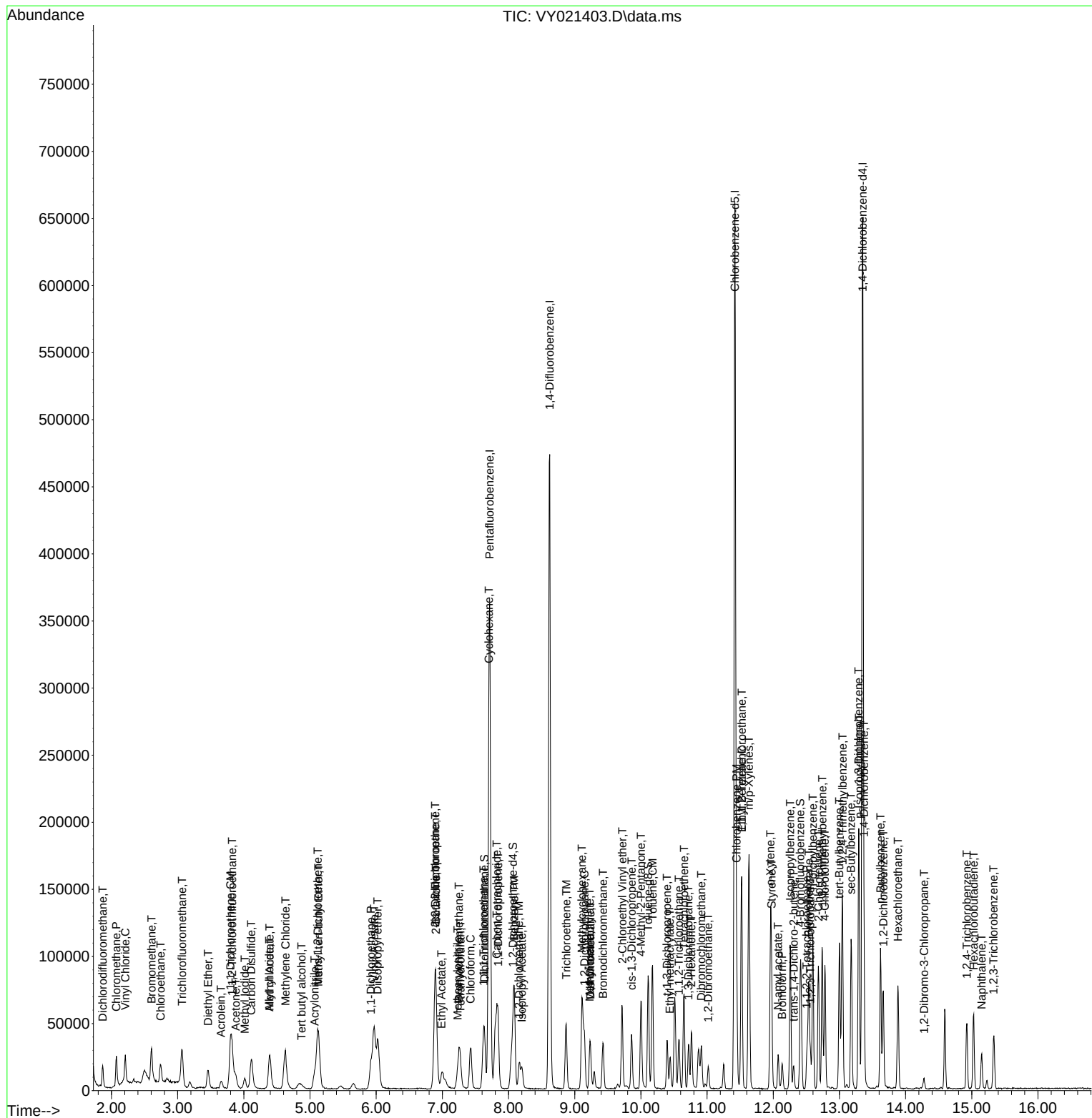
Quant Time: Mar 05 03:02:01 2025

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



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)

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

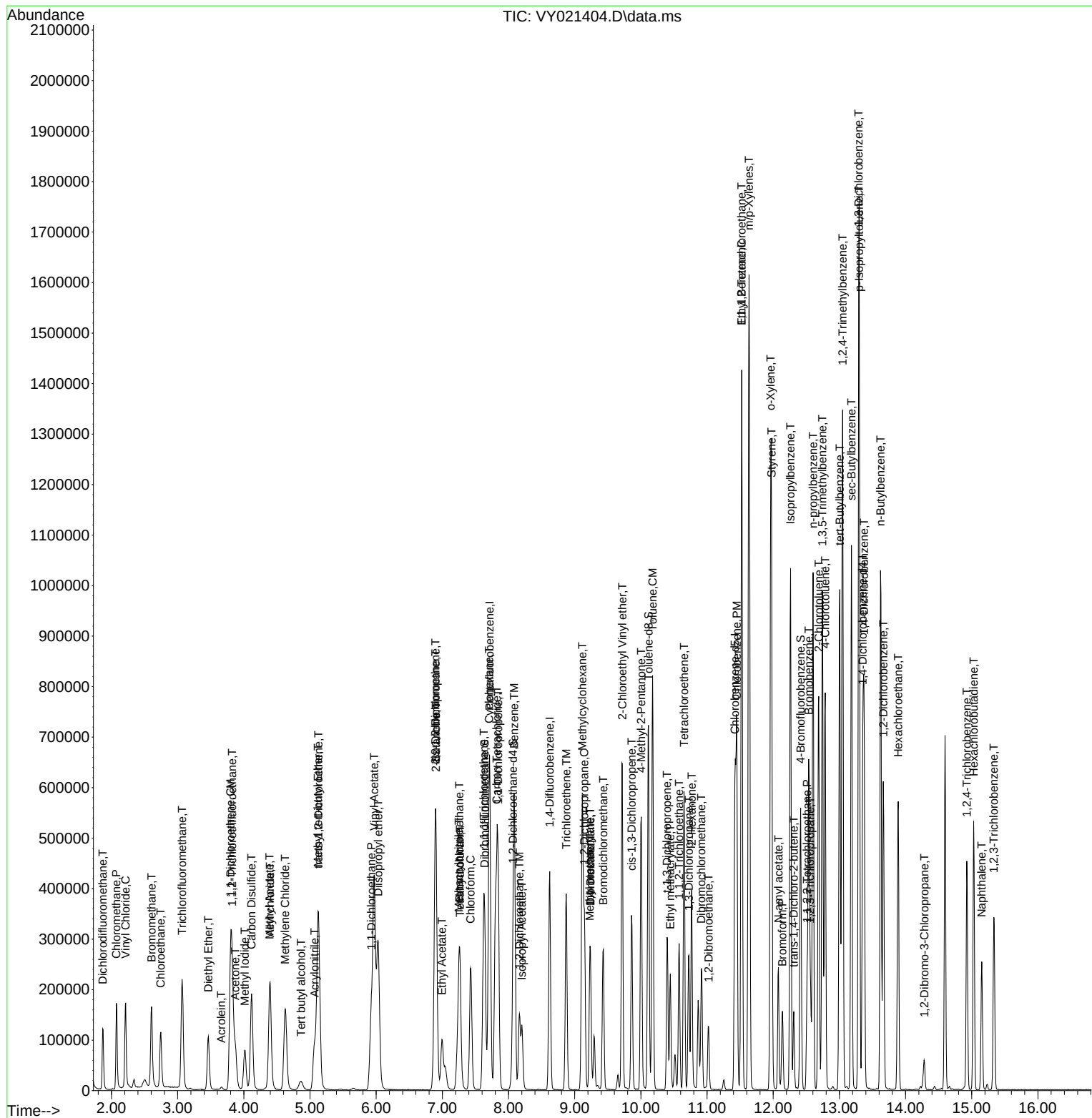
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030425\
 Data File : VY021404.D
 Acq On : 04 Mar 2025 13:12
 Operator : SY/MD
 Sample : VSTDICV050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 11 Sample Multiplier: 1

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.: Q1463 SAS No.: Q1463 SDG No.: Q1463

Instrument ID: MSVOA_Y Calibration Date/Time: 03/06/2025 10:10

Lab File ID: VY021426.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
Chloromethane	0.647	0.644	0.1	-0.46	20
Vinyl Chloride	0.707	0.731		3.39	20
Bromomethane	0.511	0.498		-2.54	20
Chloroethane	0.467	0.503		7.71	20
Tert butyl alcohol	0.041	0.037		-9.76	20
1,1-Dichloroethene	0.514	0.484		-5.84	20
Acetone	0.115	0.095		-17.39	20
Carbon Disulfide	1.610	1.552		-3.6	20
Methyl tert-butyl Ether	1.302	1.385		6.38	20
Methylene Chloride	0.605	0.568		-6.12	20
trans-1,2-Dichloroethene	0.575	0.563		-2.09	20
1,1-Dichloroethane	1.056	1.061	0.1	0.47	20
2-Butanone	0.159	0.160		0.63	20
Carbon Tetrachloride	0.592	0.577		-2.53	20
cis-1,2-Dichloroethene	0.653	0.658		0.77	20
Chloroform	1.096	1.107		1	20
1,1,1-Trichloroethane	1.004	0.973		-3.09	20
Benzene	1.515	1.544		1.91	20
1,2-Dichloroethane	0.424	0.447		5.43	20
Trichloroethene	0.383	0.378		-1.3	20
1,2-Dichloropropane	0.361	0.373		3.32	20
Bromodichloromethane	0.533	0.559		4.88	20
4-Methyl-2-Pentanone	0.228	0.266		16.67	20
Toluene	0.955	0.975		2.09	20
t-1,3-Dichloropropene	0.470	0.512		8.94	20
cis-1,3-Dichloropropene	0.557	0.587		5.39	20
1,1,2-Trichloroethane	0.263	0.285		8.36	20
2-Hexanone	0.151	0.180		19.2	20
Dibromochloromethane	0.360	0.391		8.61	20
Tetrachloroethene	0.407	0.384		-5.65	20
Chlorobenzene	1.181	1.160	0.3	-1.78	20
Ethyl Benzene	2.072	2.064		-0.39	20
m/p-Xylenes	0.787	0.784		-0.38	20
o-Xylene	0.725	0.733		1.1	20
Styrene	1.203	1.259		4.66	20
Bromoform	0.233	0.247	0.1	6.01	20
1,1,2,2-Tetrachloroethane	0.695	0.694	0.3	-0.14	20
1,2-Dichloroethane-d4	0.528	0.564		6.82	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.: Q1463 SAS No.: Q1463 SDG No.: Q1463

Instrument ID: MSVOA_Y Calibration Date/Time: 03/06/2025 10:10

Lab File ID: VY021426.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
Dibromofluoromethane	0.329	0.349		6.08	20
Toluene-d8	1.244	1.310		5.3	20
4-Bromofluorobenzene	0.423	0.469		10.88	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\VY030625\
 Data File : VY021426.D
 Acq On : 06 Mar 2025 10:10
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VSTDCCC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
 Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:38:31 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	228274	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.610	114	348529	50.000	ug/l	-0.01
63) Chlorobenzene-d5	11.414	117	321426	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	168733	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	128835	53.398	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 106.800%			
35) Dibromofluoromethane	7.634	113	121683	53.115	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 106.240%			
50) Toluene-d8	10.103	98	456517	52.629	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 105.260%			
62) 4-Bromofluorobenzene	12.408	95	163454	55.397	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 110.800%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	91968	43.903	ug/l	96
3) Chloromethane	2.068	50	147009	49.777	ug/l	100
4) Vinyl Chloride	2.202	62	166975	51.736	ug/l	100
5) Bromomethane	2.592	94	113687	48.738	ug/l	100
6) Chloroethane	2.733	64	114896	53.870	ug/l	98
7) Trichlorofluoromethane	3.056	101	222462	49.383	ug/l	99
8) Diethyl Ether	3.452	74	64391	51.579	ug/l	100
9) 1,1,2-Trichlorotrifluo...	3.812	101	119686	46.535	ug/l	98
10) Methyl Iodide	4.007	142	134207	51.334	ug/l	100
11) Tert butyl alcohol	4.866	59	42449	272.642	ug/l	100
12) 1,1-Dichloroethene	3.787	96	110585	47.161	ug/l	99
13) Acrolein	3.653	56	6322	51.516	ug/l	86
14) Allyl chloride	4.379	41	186983	49.343	ug/l	100
15) Acrylonitrile	5.055	53	145349	273.503	ug/l	98
16) Acetone	3.873	43	108373	205.940	ug/l	95
17) Carbon Disulfide	4.104	76	354351	48.220	ug/l	98
18) Methyl Acetate	4.385	43	67392	57.717	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	316217	53.206	ug/l	98
20) Methylene Chloride	4.616	84	129572	46.907	ug/l	98
21) trans-1,2-Dichloroethene	5.110	96	128481	48.926	ug/l	97
22) Diisopropyl ether	6.019	45	430531	52.719	ug/l	96
23) Vinyl Acetate	5.958	43	1272788	273.089	ug/l	100
24) 1,1-Dichloroethane	5.915	63	242268	50.264	ug/l	100
25) 2-Butanone	6.890	43	182935	251.304	ug/l	100
26) 2,2-Dichloropropane	6.884	77	202350	45.627	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	150170	50.337	ug/l	98
28) Bromochloromethane	7.244	49	107278	53.090	ug/l	97
29) Tetrahydrofuran	7.256	42	127276	283.216	ug/l	100
30) Chloroform	7.415	83	252791	50.508	ug/l	98
31) Cyclohexane	7.701	56	202739	44.867	ug/l	99
32) 1,1,1-Trichloroethane	7.616	97	222183	48.483	ug/l	99
36) 1,1-Dichloropropene	7.835	75	175296	48.883	ug/l	99
37) Ethyl Acetate	6.982	43	90495	57.095	ug/l	97
38) Carbon Tetrachloride	7.817	117	200999	48.736	ug/l	99
39) Methylcyclohexane	9.109	83	213278	48.487	ug/l	98
40) Benzene	8.079	78	538095	50.938	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021426.D
 Acq On : 06 Mar 2025 10:10
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

MSVOA_Y

ClientSampleId :

VSTDCCC050

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025

Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:38:31 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	46184	53.514	ug/l #	92
42) 1,2-Dichloroethane	8.152	62	155915	52.759	ug/l	99
43) Isopropyl Acetate	8.195	43	171475	55.731	ug/l #	87
44) Trichloroethene	8.866	130	131758	49.358	ug/l	100
45) 1,2-Dichloropropane	9.140	63	130077	51.738	ug/l	96
46) Dibromomethane	9.231	93	76964	55.018	ug/l	98
47) Bromodichloromethane	9.420	83	194661	52.398	ug/l	99
48) Methyl methacrylate	9.219	41	78849	55.808	ug/l	96
49) 1,4-Dioxane	9.231	88	17549	1278.089	ug/l	99
51) 4-Methyl-2-Pentanone	10.000	43	464408	292.531	ug/l	99
52) Toluene	10.170	92	339723	51.010	ug/l	98
53) t-1,3-Dichloropropene	10.390	75	178453	54.523	ug/l	98
54) cis-1,3-Dichloropropene	9.853	75	204560	52.641	ug/l	100
55) 1,1,2-Trichloroethane	10.573	97	99287	54.258	ug/l	98
56) Ethyl methacrylate	10.438	69	135282	57.967	ug/l	98
57) 1,3-Dichloropropane	10.713	76	172201	54.296	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.707	63	326106	302.700	ug/l	99
59) 2-Hexanone	10.762	43	313862	298.994	ug/l	99
60) Dibromochloromethane	10.908	129	136186	54.286	ug/l	98
61) 1,2-Dibromoethane	11.012	107	94094	54.483	ug/l	99
64) Tetrachloroethene	10.646	164	123553	47.271	ug/l	99
65) Chlorobenzene	11.444	112	372978	49.139	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	133738	49.836	ug/l	99
67) Ethyl Benzene	11.518	91	663345	49.791	ug/l	100
68) m/p-Xylenes	11.627	106	504274	99.700	ug/l	98
69) o-Xylene	11.956	106	235466	50.512	ug/l	100
70) Styrene	11.969	104	404739	52.337	ug/l	100
71) Bromoform	12.133	173	79480	52.982	ug/l #	99
73) Isopropylbenzene	12.255	105	621268	46.741	ug/l	99
74) N-amyl acetate	12.072	43	157019	54.396	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	117052	49.905	ug/l	99
76) 1,2,3-Trichloropropane	12.554	75	86639m	50.955	ug/l	
77) Bromobenzene	12.530	156	146642	47.159	ug/l	99
78) n-propylbenzene	12.597	91	761668	47.185	ug/l	100
79) 2-Chlorotoluene	12.682	91	434018	47.022	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	513200	47.512	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	38754	51.814	ug/l	96
82) 4-Chlorotoluene	12.780	91	451424	47.230	ug/l	99
83) tert-Butylbenzene	12.999	119	458801	47.613	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	516598	48.169	ug/l	100
85) sec-Butylbenzene	13.176	105	672802	46.928	ug/l	99
86) p-Isopropyltoluene	13.292	119	562725	47.642	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	288529	46.614	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	286896	47.394	ug/l	98
89) n-Butylbenzene	13.621	91	530559	48.645	ug/l	100
90) Hexachloroethane	13.883	117	115729	45.929	ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	256501	48.350	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	17841	50.779	ug/l	97
93) 1,2,4-Trichlorobenzene	14.925	180	144430	49.844	ug/l	98
94) Hexachlorobutadiene	15.029	225	87656	48.258	ug/l	100
95) Naphthalene	15.145	128	254945	51.817	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	125217	51.380	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021426.D
Acq On : 06 Mar 2025 10:10
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:38:31 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)

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

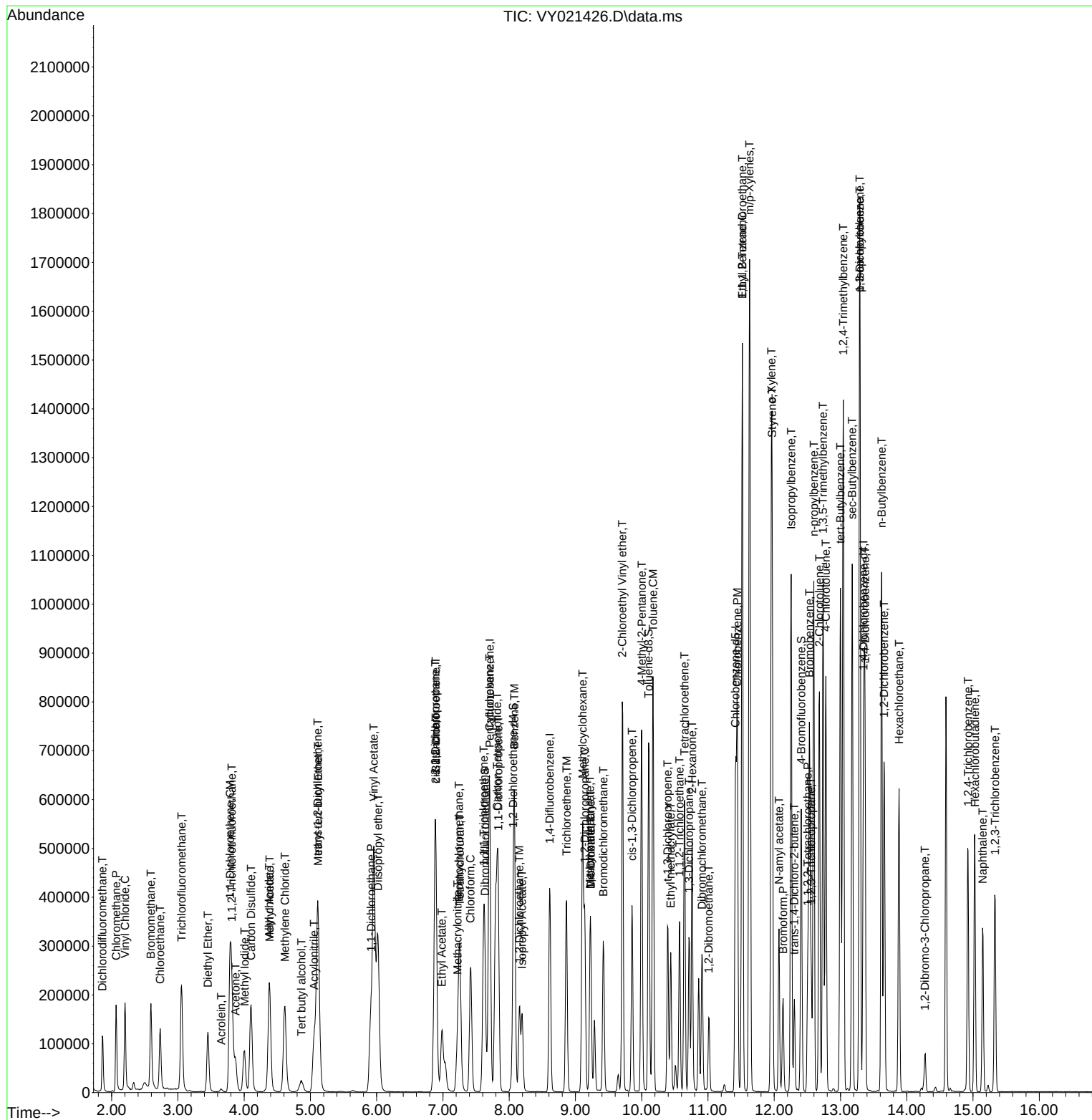
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021426.D
Acq On : 06 Mar 2025 10:10
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/soil
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:38:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y030425S.M
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021426.D
 Acq On : 06 Mar 2025 10:10
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 07 00:38:31 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	97	0.00
2 T	Dichlorodifluoromethane	0.459	0.403	12.2	87	0.00
3 P	Chloromethane	0.647	0.644	0.5	101	0.00
4 C	Vinyl Chloride	0.707	0.731	-3.4#	103	0.00
5 T	Bromomethane	0.511	0.498	2.5	103	-0.01
6 T	Chloroethane	0.467	0.503	-7.7	106	0.00
7 T	Trichlorofluoromethane	0.987	0.975	1.2	98	-0.01
8 T	Diethyl Ether	0.273	0.282	-3.3	97	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.524	6.9	95	-0.02
10 T	Methyl Iodide	0.573	0.588	-2.6	90	0.00
11 T	Tert butyl alcohol	0.041	0.037	9.8	95	0.00
12 CM	1,1-Dichloroethene	0.514	0.484	5.8#	93	-0.01
13 T	Acrolein	0.027	0.006	77.8#	118	-0.01
14 T	Allyl chloride	0.830	0.819	1.3	94	-0.02
15 T	Acrylonitrile	0.116	0.127	-9.5	99	-0.01
16 T	Acetone	0.115	0.095	17.4	69	0.00
17 T	Carbon Disulfide	1.610	1.552	3.6	92	-0.01
18 T	Methyl Acetate	0.256	0.295	-15.2	101	0.00
19 T	Methyl tert-butyl Ether	1.302	1.385	-6.4	98	0.00
20 T	Methylene Chloride	0.605	0.568	6.1	100	0.00
21 T	trans-1,2-Dichloroethene	0.575	0.563	2.1	97	-0.02
22 T	Diisopropyl ether	1.789	1.886	-5.4	99	0.00
23 T	Vinyl Acetate	1.021	1.115	-9.2	97	-0.01
24 P	1,1-Dichloroethane	1.056	1.061	-0.5	98	-0.01
25 T	2-Butanone	0.159	0.160	-0.6	86	0.00
26 T	2,2-Dichloropropane	0.971	0.886	8.8	92	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.658	-0.8	98	0.00
28 T	Bromochloromethane	0.443	0.470	-6.1	98	0.00
29 T	Tetrahydrofuran	0.098	0.112	-14.3	98	-0.01
30 C	Chloroform	1.096	1.107	-1.0#	99	-0.01
31 T	Cyclohexane	0.990	0.888	10.3	92	0.00
32 T	1,1,1-Trichloroethane	1.004	0.973	3.1	97	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.564	-6.8	114	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	97	-0.01
35 S	Dibromofluoromethane	0.329	0.349	-6.1	114	0.00
36 T	1,1-Dichloropropene	0.514	0.503	2.1	94	0.00
37 T	Ethyl Acetate	0.227	0.260	-14.5	101	0.00
38 T	Carbon Tetrachloride	0.592	0.577	2.5	95	0.00
39 T	Methylcyclohexane	0.631	0.612	3.0	91	0.00
40 TM	Benzene	1.515	1.544	-1.9	97	0.00
41 T	Methacrylonitrile	0.124	0.133	-7.3	98	0.00
42 TM	1,2-Dichloroethane	0.424	0.447	-5.4	99	-0.01
43 T	Isopropyl Acetate	0.441	0.492	-11.6	99	0.00
44 TM	Trichloroethene	0.383	0.378	1.3	96	0.00
45 C	1,2-Dichloropropane	0.361	0.373	-3.3#	98	0.00
46 T	Dibromomethane	0.201	0.221	-10.0	101	0.00
47 T	Bromodichloromethane	0.533	0.559	-4.9	99	0.00
48 T	Methyl methacrylate	0.203	0.226	-11.3	96	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021426.D
 Acq On : 06 Mar 2025 10:10
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 07 00:38:31 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	0.003	-50.0#	108	0.00
50 S	Toluene-d8	1.244	1.310	-5.3	112	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.266	-16.7	98	0.00
52 CM	Toluene	0.955	0.975	-2.1#	95	0.00
53 T	t-1,3-Dichloropropene	0.470	0.512	-8.9	99	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.587	-5.4	97	0.00
55 T	1,1,2-Trichloroethane	0.263	0.285	-8.4	97	0.00
56 T	Ethyl methacrylate	0.335	0.388	-15.8	98	0.00
57 T	1,3-Dichloropropane	0.455	0.494	-8.6	100	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.187	-20.6	104	0.00
59 T	2-Hexanone	0.151	0.180	-19.2	96	0.00
60 T	Dibromochloromethane	0.360	0.391	-8.6	100	0.00
61 T	1,2-Dibromoethane	0.248	0.270	-8.9	100	0.00
62 S	4-Bromofluorobenzene	0.423	0.469	-10.9	117	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
64 T	Tetrachloroethene	0.407	0.384	5.7	95	0.00
65 PM	Chlorobenzene	1.181	1.160	1.8	98	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.416	0.2	99	0.00
67 C	Ethyl Benzene	2.072	2.064	0.4#	97	0.00
68 T	m/p-Xylenes	0.787	0.784	0.4	95	0.00
69 T	o-Xylene	0.725	0.733	-1.1	97	0.00
70 T	Styrene	1.203	1.259	-4.7	99	0.00
71 P	Bromoform	0.233	0.247	-6.0	99	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00
73 T	Isopropylbenzene	3.939	3.682	6.5	95	0.00
74 T	N-amyl acetate	0.855	0.931	-8.9	102	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.694	0.1	99	0.00
76 T	1,2,3-Trichloropropane	0.504	0.513	-1.8	109	0.00
77 T	Bromobenzene	0.921	0.869	5.6	97	0.00
78 T	n-propylbenzene	4.783	4.514	5.6	96	0.00
79 T	2-Chlorotoluene	2.735	2.572	6.0	97	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.041	5.0	97	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.230	-3.6	100	0.00
82 T	4-Chlorotoluene	2.832	2.675	5.5	98	0.00
83 T	tert-Butylbenzene	2.855	2.719	4.8	97	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.062	3.7	97	0.00
85 T	sec-Butylbenzene	4.248	3.987	6.1	95	0.00
86 T	p-Isopropyltoluene	3.500	3.335	4.7	96	0.00
87 T	1,3-Dichlorobenzene	1.834	1.710	6.8	98	0.00
88 T	1,4-Dichlorobenzene	1.794	1.700	5.2	99	0.00
89 T	n-Butylbenzene	3.232	3.144	2.7	96	0.00
90 T	Hexachloroethane	0.747	0.686	8.2	98	0.00
91 T	1,2-Dichlorobenzene	1.572	1.520	3.3	99	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.106	-1.9	102	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.856	0.3	98	0.00
94 T	Hexachlorobutadiene	0.538	0.519	3.5	98	0.00
95 T	Naphthalene	1.390	1.511	-8.7	99	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021426.D
Acq On : 06 Mar 2025 10:10
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Mar 07 00:38:31 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	0.742	-2.8	99	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021426.D
 Acq On : 06 Mar 2025 10:10
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 07 00:38:31 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	97	0.00
2 T	Dichlorodifluoromethane	50.000	43.903	12.2	87	0.00
3 P	Chloromethane	50.000	49.777	0.4	101	0.00
4 C	Vinyl Chloride	50.000	51.736	-3.5#	103	0.00
5 T	Bromomethane	50.000	48.738	2.5	103	-0.01
6 T	Chloroethane	50.000	53.870	-7.7	106	0.00
7 T	Trichlorofluoromethane	50.000	49.383	1.2	98	-0.01
8 T	Diethyl Ether	50.000	51.579	-3.2	97	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	46.535	6.9	95	-0.02
10 T	Methyl Iodide	50.000	51.334	-2.7	90	0.00
11 T	Tert butyl alcohol	250.000	272.642	-9.1	95	0.00
12 CM	1,1-Dichloroethene	50.000	47.161	5.7#	93	-0.01
13 T	Acrolein	250.000	51.516	79.4#	118	-0.01
14 T	Allyl chloride	50.000	49.343	1.3	94	-0.02
15 T	Acrylonitrile	250.000	273.503	-9.4	99	-0.01
16 T	Acetone	250.000	205.940	17.6	69	0.00
17 T	Carbon Disulfide	50.000	48.220	3.6	92	-0.01
18 T	Methyl Acetate	50.000	57.717	-15.4	101	0.00
19 T	Methyl tert-butyl Ether	50.000	53.206	-6.4	98	0.00
20 T	Methylene Chloride	50.000	46.907	6.2	100	0.00
21 T	trans-1,2-Dichloroethene	50.000	48.926	2.1	97	-0.02
22 T	Diisopropyl ether	50.000	52.719	-5.4	99	0.00
23 T	Vinyl Acetate	250.000	273.089	-9.2	97	-0.01
24 P	1,1-Dichloroethane	50.000	50.264	-0.5	98	-0.01
25 T	2-Butanone	250.000	251.304	-0.5	86	0.00
26 T	2,2-Dichloropropane	50.000	45.627	8.7	92	0.00
27 T	cis-1,2-Dichloroethene	50.000	50.337	-0.7	98	0.00
28 T	Bromochloromethane	50.000	53.090	-6.2	98	0.00
29 T	Tetrahydrofuran	250.000	283.216	-13.3	98	-0.01
30 C	Chloroform	50.000	50.508	-1.0#	99	-0.01
31 T	Cyclohexane	50.000	44.867	10.3	92	0.00
32 T	1,1,1-Trichloroethane	50.000	48.483	3.0	97	0.00
33 S	1,2-Dichloroethane-d4	50.000	53.398	-6.8	114	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	97	-0.01
35 S	Dibromofluoromethane	50.000	53.115	-6.2	114	0.00
36 T	1,1-Dichloropropene	50.000	48.883	2.2	94	0.00
37 T	Ethyl Acetate	50.000	57.095	-14.2	101	0.00
38 T	Carbon Tetrachloride	50.000	48.736	2.5	95	0.00
39 T	Methylcyclohexane	50.000	48.487	3.0	91	0.00
40 TM	Benzene	50.000	50.938	-1.9	97	0.00
41 T	Methacrylonitrile	50.000	53.514	-7.0	98	0.00
42 TM	1,2-Dichloroethane	50.000	52.759	-5.5	99	-0.01
43 T	Isopropyl Acetate	50.000	55.731	-11.5	99	0.00
44 TM	Trichloroethene	50.000	49.358	1.3	96	0.00
45 C	1,2-Dichloropropane	50.000	51.738	-3.5#	98	0.00
46 T	Dibromomethane	50.000	55.018	-10.0	101	0.00
47 T	Bromodichloromethane	50.000	52.398	-4.8	99	0.00
48 T	Methyl methacrylate	50.000	55.808	-11.6	96	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021426.D
 Acq On : 06 Mar 2025 10:10
 Operator : SY/MD
 Sample : VSTDCCC050
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 LabSampleId :
 VSTDCCC050

Quant Time: Mar 07 00:38:31 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	1278.089	-27.8#	108	0.00
50 S	Toluene-d8	50.000	52.629	-5.3	112	0.00
51 T	4-Methyl-2-Pentanone	250.000	292.531	-17.0	98	0.00
52 CM	Toluene	50.000	51.010	-2.0#	95	0.00
53 T	t-1,3-Dichloropropene	50.000	54.523	-9.0	99	0.00
54 T	cis-1,3-Dichloropropene	50.000	52.641	-5.3	97	0.00
55 T	1,1,2-Trichloroethane	50.000	54.258	-8.5	97	0.00
56 T	Ethyl methacrylate	50.000	57.967	-15.9	98	0.00
57 T	1,3-Dichloropropane	50.000	54.296	-8.6	100	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	302.700	-21.1	104	0.00
59 T	2-Hexanone	250.000	298.994	-19.6	96	0.00
60 T	Dibromochloromethane	50.000	54.286	-8.6	100	0.00
61 T	1,2-Dibromoethane	50.000	54.483	-9.0	100	0.00
62 S	4-Bromofluorobenzene	50.000	55.397	-10.8	117	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	100	0.00
64 T	Tetrachloroethene	50.000	47.271	5.5	95	0.00
65 PM	Chlorobenzene	50.000	49.139	1.7	98	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	49.836	0.3	99	0.00
67 C	Ethyl Benzene	50.000	49.791	0.4#	97	0.00
68 T	m/p-Xylenes	100.000	99.700	0.3	95	0.00
69 T	o-Xylene	50.000	50.512	-1.0	97	0.00
70 T	Styrene	50.000	52.337	-4.7	99	0.00
71 P	Bromoform	50.000	52.982	-6.0	99	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	104	0.00
73 T	Isopropylbenzene	50.000	46.741	6.5	95	0.00
74 T	N-amyl acetate	50.000	54.396	-8.8	102	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	49.905	0.2	99	0.00
76 T	1,2,3-Trichloropropane	50.000	50.955	-1.9	109	0.00
77 T	Bromobenzene	50.000	47.159	5.7	97	0.00
78 T	n-propylbenzene	50.000	47.185	5.6	96	0.00
79 T	2-Chlorotoluene	50.000	47.022	6.0	97	0.00
80 T	1,3,5-Trimethylbenzene	50.000	47.512	5.0	97	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	51.814	-3.6	100	0.00
82 T	4-Chlorotoluene	50.000	47.230	5.5	98	0.00
83 T	tert-Butylbenzene	50.000	47.613	4.8	97	0.00
84 T	1,2,4-Trimethylbenzene	50.000	48.169	3.7	97	0.00
85 T	sec-Butylbenzene	50.000	46.928	6.1	95	0.00
86 T	p-Isopropyltoluene	50.000	47.642	4.7	96	0.00
87 T	1,3-Dichlorobenzene	50.000	46.614	6.8	98	0.00
88 T	1,4-Dichlorobenzene	50.000	47.394	5.2	99	0.00
89 T	n-Butylbenzene	50.000	48.645	2.7	96	0.00
90 T	Hexachloroethane	50.000	45.929	8.1	98	0.00
91 T	1,2-Dichlorobenzene	50.000	48.350	3.3	99	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	50.779	-1.6	102	0.00
93 T	1,2,4-Trichlorobenzene	50.000	49.844	0.3	98	0.00
94 T	Hexachlorobutadiene	50.000	48.258	3.5	98	0.00
95 T	Naphthalene	50.000	51.817	-3.6	99	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021426.D
Acq On : 06 Mar 2025 10:10
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
LabSampleId :
VSTDCCC050

Quant Time: Mar 07 00:38:31 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	51.380	-2.8	99	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.: Q1463 SAS No.: Q1463 SDG No.: Q1463

Instrument ID: MSVOA_Y Calibration Date/Time: 03/07/2025 09:59

Lab File ID: VY021451.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
Chloromethane	0.647	0.662	0.1	2.32	20
Vinyl Chloride	0.707	0.776		9.76	20
Bromomethane	0.511	0.511		0	20
Chloroethane	0.467	0.546		16.92	20
Tert butyl alcohol	0.041	0.030		-26.83	20
1,1-Dichloroethene	0.514	0.513		-0.19	20
Acetone	0.115	0.121		5.22	20
Carbon Disulfide	1.610	1.632		1.37	20
Methyl tert-butyl Ether	1.302	1.304		0.15	20
Methylene Chloride	0.605	0.575		-4.96	20
trans-1,2-Dichloroethene	0.575	0.587		2.09	20
1,1-Dichloroethane	1.056	1.095	0.1	3.69	20
2-Butanone	0.159	0.163		2.52	20
Carbon Tetrachloride	0.592	0.617		4.22	20
cis-1,2-Dichloroethene	0.653	0.675		3.37	20
Chloroform	1.096	1.152		5.11	20
1,1,1-Trichloroethane	1.004	1.033		2.89	20
Benzene	1.515	1.595		5.28	20
1,2-Dichloroethane	0.424	0.448		5.66	20
Trichloroethene	0.383	0.395		3.13	20
1,2-Dichloropropane	0.361	0.384		6.37	20
Bromodichloromethane	0.533	0.567		6.38	20
4-Methyl-2-Pentanone	0.228	0.236		3.51	20
Toluene	0.955	1.025		7.33	20
t-1,3-Dichloropropene	0.470	0.503		7.02	20
cis-1,3-Dichloropropene	0.557	0.592		6.28	20
1,1,2-Trichloroethane	0.263	0.278		5.7	20
2-Hexanone	0.151	0.163		7.95	20
Dibromochloromethane	0.360	0.381		5.83	20
Tetrachloroethene	0.407	0.413		1.47	20
Chlorobenzene	1.181	1.219	0.3	3.22	20
Ethyl Benzene	2.072	2.220		7.14	20
m/p-Xylenes	0.787	0.846		7.5	20
o-Xylene	0.725	0.771		6.34	20
Styrene	1.203	1.319		9.64	20
Bromoform	0.233	0.240	0.1	3	20
1,1,2,2-Tetrachloroethane	0.695	0.681	0.3	-2.01	20
1,2-Dichloroethane-d4	0.528	0.557		5.49	20

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



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.: Q1463 SAS No.: Q1463 SDG No.: Q1463

Instrument ID: MSVOA_Y Calibration Date/Time: 03/07/2025 09:59

Lab File ID: VY021451.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
Dibromofluoromethane	0.329	0.352		6.99	20
Toluene-d8	1.244	1.351		8.6	20
4-Bromofluorobenzene	0.423	0.461		8.98	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\VY030725\
 Data File : VY021451.D
 Acq On : 07 Mar 2025 09:59
 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 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 21:59:36 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	212653	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	324643	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	291936	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.353	152	151541	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.061	65	118388	52.673	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 105.340%	
35) Dibromofluoromethane	7.634	113	114359	53.591	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 107.180%	
50) Toluene-d8	10.109	98	438551	54.278	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 108.560%	
62) 4-Bromofluorobenzene	12.408	95	149818	54.511	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 109.020%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	92952	47.633	ug/l	97
3) Chloromethane	2.068	50	140754	51.160	ug/l	97
4) Vinyl Chloride	2.208	62	165102	54.913	ug/l	95
5) Bromomethane	2.598	94	108731	50.038	ug/l	93
6) Chloroethane	2.739	64	116189	58.478	ug/l	98
7) Trichlorofluoromethane	3.062	101	247591	58.999	ug/l	99
8) Diethyl Ether	3.458	74	57438	49.389	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.818	101	122660	51.194	ug/l	98
10) Methyl Iodide	4.007	142	130359	53.524	ug/l	98
11) Tert butyl alcohol	4.872	59	32170	217.181	ug/l #	72
12) 1,1-Dichloroethene	3.793	96	109132	49.960	ug/l	100
13) Acrolein	3.653	56	4140	36.213	ug/l	94
14) Allyl chloride	4.385	41	182499	51.698	ug/l	99
15) Acrylonitrile	5.061	53	122735	247.916	ug/l	100
16) Acetone	3.873	43	128966	263.075	ug/l	92
17) Carbon Disulfide	4.104	76	347050	50.695	ug/l	100
18) Methyl Acetate	4.385	43	59587	54.782	ug/l	97
19) Methyl tert-butyl Ether	5.116	73	277390	50.102	ug/l	99
20) Methylene Chloride	4.616	84	122314	47.532	ug/l	96
21) trans-1,2-Dichloroethene	5.116	96	124741	50.991	ug/l	98
22) Diisopropyl ether	6.019	45	405674	53.324	ug/l	99
23) Vinyl Acetate	5.958	43	1124928	259.094	ug/l	99
24) 1,1-Dichloroethane	5.915	63	232909	51.872	ug/l	99
25) 2-Butanone	6.896	43	173030	255.158	ug/l	95
26) 2,2-Dichloropropane	6.884	77	210852	51.037	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	143612	51.675	ug/l	100
28) Bromochloromethane	7.244	49	95177	50.561	ug/l	98
29) Tetrahydrofuran	7.262	42	104576	249.797	ug/l	99
30) Chloroform	7.421	83	244896	52.525	ug/l	98
31) Cyclohexane	7.701	56	208697	49.578	ug/l	99
32) 1,1,1-Trichloroethane	7.616	97	219670	51.456	ug/l	100
36) 1,1-Dichloropropene	7.835	75	176927	52.968	ug/l	98
37) Ethyl Acetate	6.982	43	75156	50.906	ug/l	99
38) Carbon Tetrachloride	7.817	117	200378	52.161	ug/l	96
39) Methylcyclohexane	9.109	83	220328	53.775	ug/l	99
40) Benzene	8.079	78	517955	52.639	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021451.D
 Acq On : 07 Mar 2025 09:59
 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 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 21:59:36 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	38383	47.747	ug/l #	93
42) 1,2-Dichloroethane	8.158	62	145297	52.784	ug/l	100
43) Isopropyl Acetate	8.195	43	143719	50.147	ug/l #	85
44) Trichloroethene	8.866	130	128256	51.581	ug/l	98
45) 1,2-Dichloropropane	9.140	63	124539	53.180	ug/l	98
46) Dibromomethane	9.231	93	68675	52.704	ug/l	98
47) Bromodichloromethane	9.420	83	184182	53.225	ug/l	99
48) Methyl methacrylate	9.219	41	69586	52.875	ug/l	98
49) 1,4-Dioxane	9.225	88	13340	1043.032	ug/l	95
51) 4-Methyl-2-Pentanone	9.999	43	383449	259.306	ug/l	99
52) Toluene	10.170	92	332775	53.643	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	163450	53.613	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	192260	53.116	ug/l	97
55) 1,1,2-Trichloroethane	10.573	97	90308	52.982	ug/l	96
56) Ethyl methacrylate	10.438	69	115815	53.277	ug/l	99
57) 1,3-Dichloropropane	10.719	76	154604	52.334	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	273061	272.111	ug/l	100
59) 2-Hexanone	10.762	43	264611	270.623	ug/l	98
60) Dibromochloromethane	10.914	129	123851	53.002	ug/l	99
61) 1,2-Dibromoethane	11.018	107	83526	51.922	ug/l	98
64) Tetrachloroethene	10.646	164	120667	50.830	ug/l	99
65) Chlorobenzene	11.444	112	355846	51.617	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.518	131	127708	52.396	ug/l	99
67) Ethyl Benzene	11.524	91	648101	53.561	ug/l	100
68) m/p-Xylenes	11.627	106	493806	107.493	ug/l	99
69) o-Xylene	11.956	106	224944	53.130	ug/l	98
70) Styrene	11.969	104	385006	54.815	ug/l	100
71) Bromoform	12.133	173	70056	51.417	ug/l #	99
73) Isopropylbenzene	12.255	105	612734	51.329	ug/l	100
74) N-amyl acetate	12.072	43	130532	50.351	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.511	83	103195	48.988	ug/l	99
76) 1,2,3-Trichloropropane	12.560	75	78892m	51.663	ug/l	
77) Bromobenzene	12.536	156	138017	49.420	ug/l	100
78) n-propylbenzene	12.597	91	756235	52.163	ug/l	100
79) 2-Chlorotoluene	12.682	91	421941	50.900	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	508497	52.417	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	32800	48.829	ug/l	99
82) 4-Chlorotoluene	12.779	91	432838	50.423	ug/l	99
83) tert-Butylbenzene	12.999	119	450950	52.108	ug/l	99
84) 1,2,4-Trimethylbenzene	13.048	105	505770	52.510	ug/l	99
85) sec-Butylbenzene	13.176	105	665822	51.710	ug/l	99
86) p-Isopropyltoluene	13.292	119	559380	52.732	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	277327	49.887	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	272960	50.207	ug/l	99
89) n-Butylbenzene	13.621	91	528248	53.928	ug/l	100
90) Hexachloroethane	13.883	117	113792	50.283	ug/l	98
91) 1,2-Dichlorobenzene	13.663	146	239550	50.277	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	15548	49.273	ug/l	91
93) 1,2,4-Trichlorobenzene	14.925	180	133987	51.485	ug/l	98
94) Hexachlorobutadiene	15.029	225	86118	52.790	ug/l	99
95) Naphthalene	15.145	128	219063	49.826	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	112240	51.280	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021451.D
Acq On : 07 Mar 2025 09:59
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 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 21:59:36 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)

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

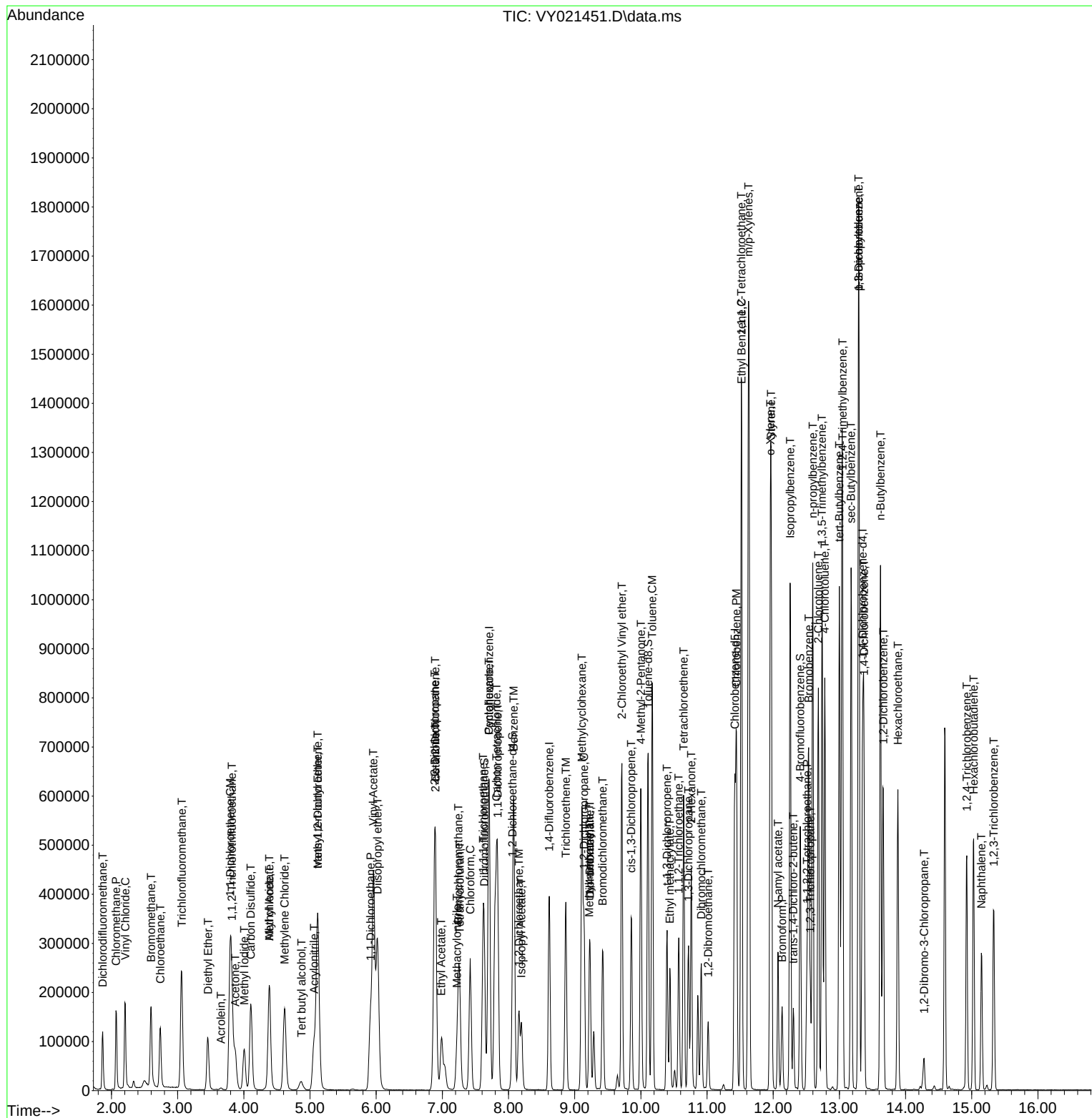
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021451.D
Acq On : 07 Mar 2025 09:59
Operator : SY/MD
Sample : VSTDCCC050
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations

Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 21:59:36 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\VY030725\
 Data File : VY021451.D
 Acq On : 07 Mar 2025 09:59
 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 07 21:59:36 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	90	0.00
2 T	Dichlorodifluoromethane	0.459	0.437	4.8	88	0.00
3 P	Chloromethane	0.647	0.662	-2.3	97	0.00
4 C	Vinyl Chloride	0.707	0.776	-9.8#	102	0.00
5 T	Bromomethane	0.511	0.511	0.0	99	0.00
6 T	Chloroethane	0.467	0.546	-16.9	107	0.00
7 T	Trichlorofluoromethane	0.987	1.164	-17.9	109	0.00
8 T	Diethyl Ether	0.273	0.270	1.1	86	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.577	-2.5	97	-0.01
10 T	Methyl Iodide	0.573	0.613	-7.0	88	0.00
11 T	Tert butyl alcohol	0.041	0.030	26.8#	72	0.00
12 CM	1,1-Dichloroethene	0.514	0.513	0.2#	92	0.00
13 T	Acrolein	0.027	0.004	85.2#	77	-0.01
14 T	Allyl chloride	0.830	0.858	-3.4	92	-0.01
15 T	Acrylonitrile	0.116	0.115	0.9	84	0.00
16 T	Acetone	0.115	0.121	-5.2	82	0.00
17 T	Carbon Disulfide	1.610	1.632	-1.4	90	-0.01
18 T	Methyl Acetate	0.256	0.280	-9.4	89	0.00
19 T	Methyl tert-butyl Ether	1.302	1.304	-0.2	86	0.00
20 T	Methylene Chloride	0.605	0.575	5.0	94	0.00
21 T	trans-1,2-Dichloroethene	0.575	0.587	-2.1	94	-0.01
22 T	Diisopropyl ether	1.789	1.908	-6.7	93	0.00
23 T	Vinyl Acetate	1.021	1.058	-3.6	86	-0.01
24 P	1,1-Dichloroethane	1.056	1.095	-3.7	94	-0.01
25 T	2-Butanone	0.159	0.163	-2.5	82	0.00
26 T	2,2-Dichloropropane	0.971	0.992	-2.2	96	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.675	-3.4	93	0.00
28 T	Bromochloromethane	0.443	0.448	-1.1	87	0.00
29 T	Tetrahydrofuran	0.098	0.098	0.0	80	0.00
30 C	Chloroform	1.096	1.152	-5.1#	96	0.00
31 T	Cyclohexane	0.990	0.981	0.9	94	0.00
32 T	1,1,1-Trichloroethane	1.004	1.033	-2.9	96	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.557	-5.5	104	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	90	0.00
35 S	Dibromofluoromethane	0.329	0.352	-7.0	107	0.00
36 T	1,1-Dichloropropene	0.514	0.545	-6.0	95	0.00
37 T	Ethyl Acetate	0.227	0.232	-2.2	84	0.00
38 T	Carbon Tetrachloride	0.592	0.617	-4.2	95	0.00
39 T	Methylcyclohexane	0.631	0.679	-7.6	94	0.00
40 TM	Benzene	1.515	1.595	-5.3	93	0.00
41 T	Methacrylonitrile	0.124	0.118	4.8	81	0.00
42 TM	1,2-Dichloroethane	0.424	0.448	-5.7	92	0.00
43 T	Isopropyl Acetate	0.441	0.443	-0.5	83	0.00
44 TM	Trichloroethene	0.383	0.395	-3.1	93	0.00
45 C	1,2-Dichloropropane	0.361	0.384	-6.4#	94	0.00
46 T	Dibromomethane	0.201	0.212	-5.5	90	0.00
47 T	Bromodichloromethane	0.533	0.567	-6.4	93	0.00
48 T	Methyl methacrylate	0.203	0.214	-5.4	84	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021451.D
 Acq On : 07 Mar 2025 09:59
 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 07 21:59:36 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	82	0.00
50 S	Toluene-d8	1.244	1.351	-8.6	107	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.236	-3.5	81	0.00
52 CM	Toluene	0.955	1.025	-7.3#	93	0.00
53 T	t-1,3-Dichloropropene	0.470	0.503	-7.0	91	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.592	-6.3	91	0.00
55 T	1,1,2-Trichloroethane	0.263	0.278	-5.7	89	0.00
56 T	Ethyl methacrylate	0.335	0.357	-6.6	84	0.00
57 T	1,3-Dichloropropane	0.455	0.476	-4.6	90	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.168	-8.4	87	0.00
59 T	2-Hexanone	0.151	0.163	-7.9	81	0.00
60 T	Dibromochloromethane	0.360	0.381	-5.8	91	0.00
61 T	1,2-Dibromoethane	0.248	0.257	-3.6	89	0.00
62 S	4-Bromofluorobenzene	0.423	0.461	-9.0	108	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00
64 T	Tetrachloroethene	0.407	0.413	-1.5	93	0.00
65 PM	Chlorobenzene	1.181	1.219	-3.2	93	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.437	-4.8	94	0.00
67 C	Ethyl Benzene	2.072	2.220	-7.1#	95	0.00
68 T	m/p-Xylenes	0.787	0.846	-7.5	94	0.00
69 T	o-Xylene	0.725	0.771	-6.3	92	0.00
70 T	Styrene	1.203	1.319	-9.6	94	0.00
71 P	Bromoform	0.233	0.240	-3.0	87	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00
73 T	Isopropylbenzene	3.939	4.043	-2.6	93	0.00
74 T	N-amyl acetate	0.855	0.861	-0.7	85	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.681	2.0	87	0.00
76 T	1,2,3-Trichloropropane	0.504	0.521	-3.4	99	0.00
77 T	Bromobenzene	0.921	0.911	1.1	92	0.00
78 T	n-propylbenzene	4.783	4.990	-4.3	95	0.00
79 T	2-Chlorotoluene	2.735	2.784	-1.8	95	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.356	-4.8	96	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.216	2.7	85	0.00
82 T	4-Chlorotoluene	2.832	2.856	-0.8	94	0.00
83 T	tert-Butylbenzene	2.855	2.976	-4.2	95	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.338	-5.0	95	0.00
85 T	sec-Butylbenzene	4.248	4.394	-3.4	94	0.00
86 T	p-Isopropyltoluene	3.500	3.691	-5.5	96	0.00
87 T	1,3-Dichlorobenzene	1.834	1.830	0.2	94	0.00
88 T	1,4-Dichlorobenzene	1.794	1.801	-0.4	94	0.00
89 T	n-Butylbenzene	3.232	3.486	-7.9	96	0.00
90 T	Hexachloroethane	0.747	0.751	-0.5	96	0.00
91 T	1,2-Dichlorobenzene	1.572	1.581	-0.6	93	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.103	1.0	89	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.884	-2.9	91	0.00
94 T	Hexachlorobutadiene	0.538	0.568	-5.6	96	0.00
95 T	Naphthalene	1.390	1.446	-4.0	85	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021451.D
Acq On : 07 Mar 2025 09:59
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 07 21:59:36 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	0.741	-2.6	89	0.00

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021451.D
 Acq On : 07 Mar 2025 09:59
 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 07 21:59:36 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	90	0.00
2 T	Dichlorodifluoromethane	50.000	47.633	4.7	88	0.00
3 P	Chloromethane	50.000	51.160	-2.3	97	0.00
4 C	Vinyl Chloride	50.000	54.913	-9.8#	102	0.00
5 T	Bromomethane	50.000	50.038	-0.1	99	0.00
6 T	Chloroethane	50.000	58.478	-17.0	107	0.00
7 T	Trichlorofluoromethane	50.000	58.999	-18.0	109	0.00
8 T	Diethyl Ether	50.000	49.389	1.2	86	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	51.194	-2.4	97	-0.01
10 T	Methyl Iodide	50.000	53.524	-7.0	88	0.00
11 T	Tert butyl alcohol	250.000	217.181	13.1	72	0.00
12 CM	1,1-Dichloroethene	50.000	49.960	0.1#	92	0.00
13 T	Acrolein	250.000	36.213	85.5#	77	-0.01
14 T	Allyl chloride	50.000	51.698	-3.4	92	-0.01
15 T	Acrylonitrile	250.000	247.916	0.8	84	0.00
16 T	Acetone	250.000	263.075	-5.0	82	0.00
17 T	Carbon Disulfide	50.000	50.695	-1.4	90	-0.01
18 T	Methyl Acetate	50.000	54.782	-9.6	89	0.00
19 T	Methyl tert-butyl Ether	50.000	50.102	-0.2	86	0.00
20 T	Methylene Chloride	50.000	47.532	4.9	94	0.00
21 T	trans-1,2-Dichloroethene	50.000	50.991	-2.0	94	-0.01
22 T	Diisopropyl ether	50.000	53.324	-6.6	93	0.00
23 T	Vinyl Acetate	250.000	259.094	-3.6	86	-0.01
24 P	1,1-Dichloroethane	50.000	51.872	-3.7	94	-0.01
25 T	2-Butanone	250.000	255.158	-2.1	82	0.00
26 T	2,2-Dichloropropane	50.000	51.037	-2.1	96	0.00
27 T	cis-1,2-Dichloroethene	50.000	51.675	-3.3	93	0.00
28 T	Bromochloromethane	50.000	50.561	-1.1	87	0.00
29 T	Tetrahydrofuran	250.000	249.797	0.1	80	0.00
30 C	Chloroform	50.000	52.525	-5.0#	96	0.00
31 T	Cyclohexane	50.000	49.578	0.8	94	0.00
32 T	1,1,1-Trichloroethane	50.000	51.456	-2.9	96	0.00
33 S	1,2-Dichloroethane-d4	50.000	52.673	-5.3	104	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	90	0.00
35 S	Dibromofluoromethane	50.000	53.591	-7.2	107	0.00
36 T	1,1-Dichloropropene	50.000	52.968	-5.9	95	0.00
37 T	Ethyl Acetate	50.000	50.906	-1.8	84	0.00
38 T	Carbon Tetrachloride	50.000	52.161	-4.3	95	0.00
39 T	Methylcyclohexane	50.000	53.775	-7.5	94	0.00
40 TM	Benzene	50.000	52.639	-5.3	93	0.00
41 T	Methacrylonitrile	50.000	47.747	4.5	81	0.00
42 TM	1,2-Dichloroethane	50.000	52.784	-5.6	92	0.00
43 T	Isopropyl Acetate	50.000	50.147	-0.3	83	0.00
44 TM	Trichloroethene	50.000	51.581	-3.2	93	0.00
45 C	1,2-Dichloropropane	50.000	53.180	-6.4#	94	0.00
46 T	Dibromomethane	50.000	52.704	-5.4	90	0.00
47 T	Bromodichloromethane	50.000	53.225	-6.5	93	0.00
48 T	Methyl methacrylate	50.000	52.875	-5.8	84	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021451.D
 Acq On : 07 Mar 2025 09:59
 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 07 21:59:36 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	1043.032	-4.3	82	0.00
50 S	Toluene-d8	50.000	54.278	-8.6	107	0.00
51 T	4-Methyl-2-Pentanone	250.000	259.306	-3.7	81	0.00
52 CM	Toluene	50.000	53.643	-7.3#	93	0.00
53 T	t-1,3-Dichloropropene	50.000	53.613	-7.2	91	0.00
54 T	cis-1,3-Dichloropropene	50.000	53.116	-6.2	91	0.00
55 T	1,1,2-Trichloroethane	50.000	52.982	-6.0	89	0.00
56 T	Ethyl methacrylate	50.000	53.277	-6.6	84	0.00
57 T	1,3-Dichloropropane	50.000	52.334	-4.7	90	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	272.111	-8.8	87	0.00
59 T	2-Hexanone	250.000	270.623	-8.2	81	0.00
60 T	Dibromochloromethane	50.000	53.002	-6.0	91	0.00
61 T	1,2-Dibromoethane	50.000	51.922	-3.8	89	0.00
62 S	4-Bromofluorobenzene	50.000	54.511	-9.0	108	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	91	0.00
64 T	Tetrachloroethene	50.000	50.830	-1.7	93	0.00
65 PM	Chlorobenzene	50.000	51.617	-3.2	93	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	52.396	-4.8	94	0.00
67 C	Ethyl Benzene	50.000	53.561	-7.1#	95	0.00
68 T	m/p-Xylenes	100.000	107.493	-7.5	94	0.00
69 T	o-Xylene	50.000	53.130	-6.3	92	0.00
70 T	Styrene	50.000	54.815	-9.6	94	0.00
71 P	Bromoform	50.000	51.417	-2.8	87	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	93	0.00
73 T	Isopropylbenzene	50.000	51.329	-2.7	93	0.00
74 T	N-ethyl acetate	50.000	50.351	-0.7	85	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	48.988	2.0	87	0.00
76 T	1,2,3-Trichloropropane	50.000	51.663	-3.3	99	0.00
77 T	Bromobenzene	50.000	49.420	1.2	92	0.00
78 T	n-propylbenzene	50.000	52.163	-4.3	95	0.00
79 T	2-Chlorotoluene	50.000	50.900	-1.8	95	0.00
80 T	1,3,5-Trimethylbenzene	50.000	52.417	-4.8	96	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	48.829	2.3	85	0.00
82 T	4-Chlorotoluene	50.000	50.423	-0.8	94	0.00
83 T	tert-Butylbenzene	50.000	52.108	-4.2	95	0.00
84 T	1,2,4-Trimethylbenzene	50.000	52.510	-5.0	95	0.00
85 T	sec-Butylbenzene	50.000	51.710	-3.4	94	0.00
86 T	p-Isopropyltoluene	50.000	52.732	-5.5	96	0.00
87 T	1,3-Dichlorobenzene	50.000	49.887	0.2	94	0.00
88 T	1,4-Dichlorobenzene	50.000	50.207	-0.4	94	0.00
89 T	n-Butylbenzene	50.000	53.928	-7.9	96	0.00
90 T	Hexachloroethane	50.000	50.283	-0.6	96	0.00
91 T	1,2-Dichlorobenzene	50.000	50.277	-0.6	93	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	49.273	1.5	89	0.00
93 T	1,2,4-Trichlorobenzene	50.000	51.485	-3.0	91	0.00
94 T	Hexachlorobutadiene	50.000	52.790	-5.6	96	0.00
95 T	Naphthalene	50.000	49.826	0.3	85	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021451.D
Acq On : 07 Mar 2025 09:59
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 07 21:59:36 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	51.280	-2.6	89	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.: Q1463 SAS No.: Q1463 SDG No.: Q1463

Instrument ID: MSVOA_Y Calibration Date/Time: 03/11/2025 09:42

Lab File ID: VY021474.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
Chloromethane	0.647	0.619	0.1	-4.33	20
Vinyl Chloride	0.707	0.717		1.41	20
Bromomethane	0.511	0.467		-8.61	20
Chloroethane	0.467	0.485		3.85	20
Tert butyl alcohol	0.041	0.033		-19.51	20
1,1-Dichloroethene	0.514	0.478		-7	20
Acetone	0.115	0.100		-13.04	20
Carbon Disulfide	1.610	1.485		-7.76	20
Methyl tert-butyl Ether	1.302	1.276		-2	20
Methylene Chloride	0.605	0.529		-12.56	20
trans-1,2-Dichloroethene	0.575	0.544		-5.39	20
1,1-Dichloroethane	1.056	0.992	0.1	-6.06	20
2-Butanone	0.159	0.150		-5.66	20
Carbon Tetrachloride	0.592	0.586		-1.01	20
cis-1,2-Dichloroethene	0.653	0.626		-4.14	20
Chloroform	1.096	1.037		-5.38	20
1,1,1-Trichloroethane	1.004	0.951		-5.28	20
Benzene	1.515	1.491		-1.58	20
1,2-Dichloroethane	0.424	0.423		-0.24	20
Trichloroethene	0.383	0.375		-2.09	20
1,2-Dichloropropane	0.361	0.356		-1.38	20
Bromodichloromethane	0.533	0.534		0.19	20
4-Methyl-2-Pentanone	0.228	0.243		6.58	20
Toluene	0.955	0.954		-0.1	20
t-1,3-Dichloropropene	0.470	0.485		3.19	20
cis-1,3-Dichloropropene	0.557	0.562		0.9	20
1,1,2-Trichloroethane	0.263	0.268		1.9	20
2-Hexanone	0.151	0.166		9.93	20
Dibromochloromethane	0.360	0.368		2.22	20
Tetrachloroethene	0.407	0.400		-1.72	20
Chlorobenzene	1.181	1.133	0.3	-4.06	20
Ethyl Benzene	2.072	2.033		-1.88	20
m/p-Xylenes	0.787	0.775		-1.52	20
o-Xylene	0.725	0.727		0.28	20
Styrene	1.203	1.227		2	20
Bromoform	0.233	0.241	0.1	3.43	20
1,1,2,2-Tetrachloroethane	0.695	0.661	0.3	-4.89	20
1,2-Dichloroethane-d4	0.528	0.407		-22.92	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.: Q1463 SAS No.: Q1463 SDG No.: Q1463

Instrument ID: MSVOA_Y Calibration Date/Time: 03/11/2025 09:42

Lab File ID: VY021474.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
Dibromofluoromethane	0.329	0.262		-20.36	20
Toluene-d8	1.244	0.971		-21.94	20
4-Bromofluorobenzene	0.423	0.342		-19.15	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\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 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 :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 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	243763	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	363423	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	331214	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	170654	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.061	65	99275	38.532	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	77.060%
35) Dibromofluoromethane	7.634	113	95332	39.907	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	79.820%
50) Toluene-d8	10.109	98	352803	39.006	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	78.020%
62) 4-Bromofluorobenzene	12.408	95	124309	40.403	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.800%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.867	85	98364	43.973	ug/l	97
3) Chloromethane	2.068	50	150856	47.834	ug/l	98
4) Vinyl Chloride	2.202	62	174765	50.709	ug/l	100
5) Bromomethane	2.592	94	113739	45.662	ug/l	95
6) Chloroethane	2.733	64	118189	51.893	ug/l	95
7) Trichlorofluoromethane	3.056	101	240284	49.950	ug/l	99
8) Diethyl Ether	3.452	74	62964	47.231	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.818	101	128513	46.792	ug/l	99
10) Methyl Iodide	4.007	142	146826	52.592	ug/l	99
11) Tert butyl alcohol	4.866	59	40478	240.812	ug/l	99
12) 1,1-Dichloroethene	3.787	96	116565	46.552	ug/l	97
13) Acrolein	3.653	56	4875	37.200	ug/l	85
14) Allyl chloride	4.385	41	190284	47.024	ug/l	100
15) Acrylonitrile	5.055	53	140620	247.791	ug/l	99
16) Acetone	3.873	43	121409	216.052	ug/l	95
17) Carbon Disulfide	4.104	76	362072	46.140	ug/l	99
18) Methyl Acetate	4.385	43	70320	56.398	ug/l	99
19) Methyl tert-butyl Ether	5.116	73	310956	48.996	ug/l	99
20) Methylene Chloride	4.616	84	128918	43.705	ug/l	94
21) trans-1,2-Dichloroethene	5.110	96	132644	47.301	ug/l	93
22) Diisopropyl ether	6.019	45	418935	48.039	ug/l	98
23) Vinyl Acetate	5.958	43	1222965	245.726	ug/l	99
24) 1,1-Dichloroethane	5.915	63	241734	46.967	ug/l	99
25) 2-Butanone	6.890	43	182977	235.390	ug/l	100
26) 2,2-Dichloropropane	6.884	77	220877	46.640	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	152664	47.921	ug/l	98
28) Bromochloromethane	7.244	49	103206	47.829	ug/l	99
29) Tetrahydrofuran	7.262	42	121085	252.319	ug/l	99
30) Chloroform	7.421	83	252820	47.304	ug/l	99
31) Cyclohexane	7.701	56	213401	44.226	ug/l	99
32) 1,1,1-Trichloroethane	7.616	97	231730	47.353	ug/l	100
36) 1,1-Dichloropropene	7.835	75	182671	48.852	ug/l	99
37) Ethyl Acetate	6.982	43	83257	50.376	ug/l	99
38) Carbon Tetrachloride	7.817	117	212962	49.521	ug/l	99
39) Methylcyclohexane	9.109	83	225796	49.229	ug/l	99
40) Benzene	8.079	78	541879	49.194	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 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 :Romaben Patel 03/12/2025

Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 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	50642	56.275	ug/l #	89
42) 1,2-Dichloroethane	8.158	62	153676	49.870	ug/l	99
43) Isopropyl Acetate	8.195	43	158523	49.410	ug/l	99
44) Trichloroethene	8.866	130	136201	48.932	ug/l	97
45) 1,2-Dichloropropane	9.140	63	129356	49.342	ug/l	97
46) Dibromomethane	9.231	93	74006	50.735	ug/l	99
47) Bromodichloromethane	9.420	83	194205	50.133	ug/l	100
48) Methyl methacrylate	9.219	41	77638	52.699	ug/l	99
49) 1,4-Dioxane	9.231	88	16834	1175.771	ug/l	94
51) 4-Methyl-2-Pentanone	9.999	43	442138	267.090	ug/l	100
52) Toluene	10.170	92	346735	49.929	ug/l	100
53) t-1,3-Dichloropropene	10.396	75	176129	51.607	ug/l	97
54) cis-1,3-Dichloropropene	9.859	75	204113	50.373	ug/l	97
55) 1,1,2-Trichloroethane	10.573	97	97475	51.085	ug/l	97
56) Ethyl methacrylate	10.438	69	131351	53.976	ug/l	98
57) 1,3-Dichloropropane	10.719	76	168838	51.054	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	311957	277.699	ug/l	99
59) 2-Hexanone	10.762	43	300779	274.788	ug/l	100
60) Dibromochloromethane	10.914	129	133595	51.071	ug/l	99
61) 1,2-Dibromoethane	11.018	107	92057	51.119	ug/l	99
64) Tetrachloroethene	10.646	164	132468	49.184	ug/l	99
65) Chlorobenzene	11.444	112	375353	47.990	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	135325	48.937	ug/l	99
67) Ethyl Benzene	11.518	91	673462	49.057	ug/l	99
68) m/p-Xylenes	11.633	106	513472	98.518	ug/l	98
69) o-Xylene	11.956	106	240732	50.116	ug/l	99
70) Styrene	11.969	104	406424	51.002	ug/l	100
71) Bromoform	12.133	173	79790	51.617	ug/l #	100
73) Isopropylbenzene	12.255	105	647673	48.180	ug/l	100
74) N-amyl acetate	12.072	43	147238	50.434	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	112883	47.586	ug/l	98
76) 1,2,3-Trichloropropane	12.560	75	87128m	50.666	ug/l	
77) Bromobenzene	12.536	156	151714	48.241	ug/l	97
78) n-propylbenzene	12.597	91	790513	48.420	ug/l	100
79) 2-Chlorotoluene	12.682	91	444946	47.664	ug/l	100
80) 1,3,5-Trimethylbenzene	12.737	105	536685	49.127	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	35896	47.453	ug/l	99
82) 4-Chlorotoluene	12.780	91	457984	47.377	ug/l	99
83) tert-Butylbenzene	12.999	119	474686	48.707	ug/l	99
84) 1,2,4-Trimethylbenzene	13.042	105	533222	49.160	ug/l	100
85) sec-Butylbenzene	13.176	105	707877	48.819	ug/l	99
86) p-Isopropyltoluene	13.292	119	593071	49.646	ug/l	99
87) 1,3-Dichlorobenzene	13.292	146	298049	47.610	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	293985	48.018	ug/l	98
89) n-Butylbenzene	13.621	91	552449	50.082	ug/l	99
90) Hexachloroethane	13.883	117	120490	47.280	ug/l	100
91) 1,2-Dichlorobenzene	13.663	146	261963	48.823	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.279	75	17946	50.503	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	156265	53.321	ug/l	99
94) Hexachlorobutadiene	15.029	225	93232	50.750	ug/l	99
95) Naphthalene	15.145	128	266062	53.275	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	131614	53.397	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021474.D
Acq On : 11 Mar 2025 09:42
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 :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:22:40 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

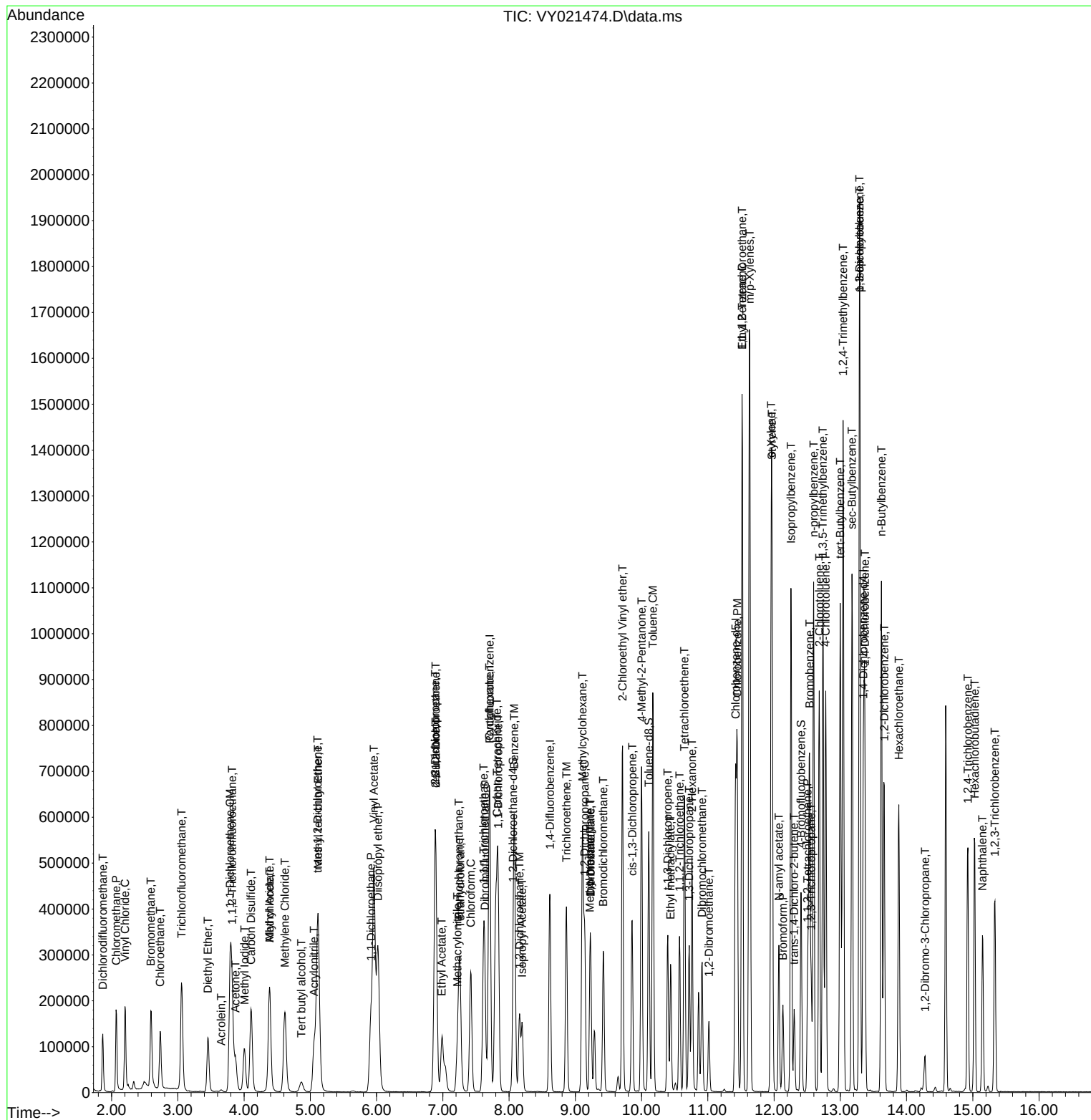
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Instrument :
MSVOA_Y
ClientSampleId :
VSTDCCC050

Manual Integrations

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 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 12 01:22:40 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	104	0.00
2 T	Dichlorodifluoromethane	0.459	0.404	12.0	93	0.00
3 P	Chloromethane	0.647	0.619	4.3	104	0.00
4 C	Vinyl Chloride	0.707	0.717	-1.4#	108	0.00
5 T	Bromomethane	0.511	0.467	8.6	103	-0.01
6 T	Chloroethane	0.467	0.485	-3.9	109	0.00
7 T	Trichlorofluoromethane	0.987	0.986	0.1	106	-0.01
8 T	Diethyl Ether	0.273	0.258	5.5	95	0.00
9 T	1,1,2-Trichlorotrifluoroeth	0.563	0.527	6.4	102	-0.01
10 T	Methyl Iodide	0.573	0.602	-5.1	99	0.00
11 T	Tert butyl alcohol	0.041	0.033	19.5	91	0.00
12 CM	1,1-Dichloroethene	0.514	0.478	7.0#	98	-0.01
13 T	Acrolein	0.027	0.004	85.2#	91	-0.01
14 T	Allyl chloride	0.830	0.781	5.9	96	-0.01
15 T	Acrylonitrile	0.116	0.115	0.9	96	-0.01
16 T	Acetone	0.115	0.100	13.0	77	0.00
17 T	Carbon Disulfide	1.610	1.485	7.8	94	-0.01
18 T	Methyl Acetate	0.256	0.288	-12.5	105	0.00
19 T	Methyl tert-butyl Ether	1.302	1.276	2.0	97	0.00
20 T	Methylene Chloride	0.605	0.529	12.6	99	0.00
21 T	trans-1,2-Dichloroethene	0.575	0.544	5.4	100	-0.02
22 T	Diisopropyl ether	1.789	1.719	3.9	96	0.00
23 T	Vinyl Acetate	1.021	1.003	1.8	94	-0.01
24 P	1,1-Dichloroethane	1.056	0.992	6.1	98	-0.01
25 T	2-Butanone	0.159	0.150	5.7	86	0.00
26 T	2,2-Dichloropropane	0.971	0.906	6.7	100	0.00
27 T	cis-1,2-Dichloroethene	0.653	0.626	4.1	99	0.00
28 T	Bromochloromethane	0.443	0.423	4.5	94	0.00
29 T	Tetrahydrofuran	0.098	0.099	-1.0	93	0.00
30 C	Chloroform	1.096	1.037	5.4#	99	0.00
31 T	Cyclohexane	0.990	0.875	11.6	96	0.00
32 T	1,1,1-Trichloroethane	1.004	0.951	5.3	101	0.00
33 S	1,2-Dichloroethane-d4	0.528	0.407	22.9	88	0.00
34 I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
35 S	Dibromofluoromethane	0.329	0.262	20.4	90	0.00
36 T	1,1-Dichloropropene	0.514	0.503	2.1	98	0.00
37 T	Ethyl Acetate	0.227	0.229	-0.9	93	0.00
38 T	Carbon Tetrachloride	0.592	0.586	1.0	101	0.00
39 T	Methylcyclohexane	0.631	0.621	1.6	96	0.00
40 TM	Benzene	1.515	1.491	1.6	98	0.00
41 T	Methacrylonitrile	0.124	0.139	-12.1	107	0.00
42 TM	1,2-Dichloroethane	0.424	0.423	0.2	98	0.00
43 T	Isopropyl Acetate	0.441	0.436	1.1	91	0.00
44 TM	Trichloroethene	0.383	0.375	2.1	99	0.00
45 C	1,2-Dichloropropane	0.361	0.356	1.4#	98	0.00
46 T	Dibromomethane	0.201	0.204	-1.5	97	0.00
47 T	Bromodichloromethane	0.533	0.534	-0.2	98	0.00
48 T	Methyl methacrylate	0.203	0.214	-5.4	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 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 12 01:22:40 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	104	0.00
50 S	Toluene-d8	1.244	0.971	21.9	86	0.00
51 T	4-Methyl-2-Pentanone	0.228	0.243	-6.6	93	0.00
52 CM	Toluene	0.955	0.954	0.1#	97	0.00
53 T	t-1,3-Dichloropropene	0.470	0.485	-3.2	98	0.00
54 T	cis-1,3-Dichloropropene	0.557	0.562	-0.9	96	0.00
55 T	1,1,2-Trichloroethane	0.263	0.268	-1.9	96	0.00
56 T	Ethyl methacrylate	0.335	0.361	-7.8	95	0.00
57 T	1,3-Dichloropropane	0.455	0.465	-2.2	98	0.00
58 T	2-Chloroethyl Vinyl ether	0.155	0.172	-11.0	100	0.00
59 T	2-Hexanone	0.151	0.166	-9.9	92	0.00
60 T	Dibromochloromethane	0.360	0.368	-2.2	99	0.00
61 T	1,2-Dibromoethane	0.248	0.253	-2.0	98	0.00
62 S	4-Bromofluorobenzene	0.423	0.342	19.1	89	0.00
63 I	Chlorobenzene-d5	1.000	1.000	0.0	103	0.00
64 T	Tetrachloroethene	0.407	0.400	1.7	102	0.00
65 PM	Chlorobenzene	1.181	1.133	4.1	98	0.00
66 T	1,1,1,2-Tetrachloroethane	0.417	0.409	1.9	100	0.00
67 C	Ethyl Benzene	2.072	2.033	1.9#	98	0.00
68 T	m/p-Xylenes	0.787	0.775	1.5	97	0.00
69 T	o-Xylene	0.725	0.727	-0.3	99	0.00
70 T	Styrene	1.203	1.227	-2.0	99	0.00
71 P	Bromoform	0.233	0.241	-3.4	99	0.00
72 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00
73 T	Isopropylbenzene	3.939	3.795	3.7	99	0.00
74 T	N-amyl acetate	0.855	0.863	-0.9	95	0.00
75 P	1,1,2,2-Tetrachloroethane	0.695	0.661	4.9	96	0.00
76 T	1,2,3-Trichloropropane	0.504	0.511	-1.4	109	0.00
77 T	Bromobenzene	0.921	0.889	3.5	101	0.00
78 T	n-propylbenzene	4.783	4.632	3.2	99	0.00
79 T	2-Chlorotoluene	2.735	2.607	4.7	100	0.00
80 T	1,3,5-Trimethylbenzene	3.201	3.145	1.7	101	0.00
81 T	trans-1,4-Dichloro-2-butene	0.222	0.210	5.4	93	0.00
82 T	4-Chlorotoluene	2.832	2.684	5.2	99	0.00
83 T	tert-Butylbenzene	2.855	2.782	2.6	100	0.00
84 T	1,2,4-Trimethylbenzene	3.178	3.125	1.7	100	0.00
85 T	sec-Butylbenzene	4.248	4.148	2.4	100	0.00
86 T	p-Isopropyltoluene	3.500	3.475	0.7	102	0.00
87 T	1,3-Dichlorobenzene	1.834	1.747	4.7	101	0.00
88 T	1,4-Dichlorobenzene	1.794	1.723	4.0	102	0.00
89 T	n-Butylbenzene	3.232	3.237	-0.2	100	0.00
90 T	Hexachloroethane	0.747	0.706	5.5	102	0.00
91 T	1,2-Dichlorobenzene	1.572	1.535	2.4	102	0.00
92 T	1,2-Dibromo-3-Chloropropane	0.104	0.105	-1.0	102	0.00
93 T	1,2,4-Trichlorobenzene	0.859	0.916	-6.6	106	0.00
94 T	Hexachlorobutadiene	0.538	0.546	-1.5	104	0.00
95 T	Naphthalene	1.390	1.559	-12.2	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021474.D
Acq On : 11 Mar 2025 09:42
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 12 01:22:40 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	0.771	-6.8	104	0.00

(#) = Out of Range

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 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 12 01:22:40 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	104	0.00
2 T	Dichlorodifluoromethane	50.000	43.973	12.1	93	0.00
3 P	Chloromethane	50.000	47.834	4.3	104	0.00
4 C	Vinyl Chloride	50.000	50.709	-1.4#	108	0.00
5 T	Bromomethane	50.000	45.662	8.7	103	-0.01
6 T	Chloroethane	50.000	51.893	-3.8	109	0.00
7 T	Trichlorofluoromethane	50.000	49.950	0.1	106	-0.01
8 T	Diethyl Ether	50.000	47.231	5.5	95	0.00
9 T	1,1,2-Trichlorotrifluoroeth	50.000	46.792	6.4	102	-0.01
10 T	Methyl Iodide	50.000	52.592	-5.2	99	0.00
11 T	Tert butyl alcohol	250.000	240.812	3.7	91	0.00
12 CM	1,1-Dichloroethene	50.000	46.552	6.9#	98	-0.01
13 T	Acrolein	250.000	37.200	85.1#	91	-0.01
14 T	Allyl chloride	50.000	47.024	6.0	96	-0.01
15 T	Acrylonitrile	250.000	247.791	0.9	96	-0.01
16 T	Acetone	250.000	216.052	13.6	77	0.00
17 T	Carbon Disulfide	50.000	46.140	7.7	94	-0.01
18 T	Methyl Acetate	50.000	56.398	-12.8	105	0.00
19 T	Methyl tert-butyl Ether	50.000	48.996	2.0	97	0.00
20 T	Methylene Chloride	50.000	43.705	12.6	99	0.00
21 T	trans-1,2-Dichloroethene	50.000	47.301	5.4	100	-0.02
22 T	Diisopropyl ether	50.000	48.039	3.9	96	0.00
23 T	Vinyl Acetate	250.000	245.726	1.7	94	-0.01
24 P	1,1-Dichloroethane	50.000	46.967	6.1	98	-0.01
25 T	2-Butanone	250.000	235.390	5.8	86	0.00
26 T	2,2-Dichloropropane	50.000	46.640	6.7	100	0.00
27 T	cis-1,2-Dichloroethene	50.000	47.921	4.2	99	0.00
28 T	Bromochloromethane	50.000	47.829	4.3	94	0.00
29 T	Tetrahydrofuran	250.000	252.319	-0.9	93	0.00
30 C	Chloroform	50.000	47.304	5.4#	99	0.00
31 T	Cyclohexane	50.000	44.226	11.5	96	0.00
32 T	1,1,1-Trichloroethane	50.000	47.353	5.3	101	0.00
33 S	1,2-Dichloroethane-d4	50.000	38.532	22.9	88	0.00
34 I	1,4-Difluorobenzene	50.000	50.000	0.0	101	0.00
35 S	Dibromofluoromethane	50.000	39.907	20.2	90	0.00
36 T	1,1-Dichloropropene	50.000	48.852	2.3	98	0.00
37 T	Ethyl Acetate	50.000	50.376	-0.8	93	0.00
38 T	Carbon Tetrachloride	50.000	49.521	1.0	101	0.00
39 T	Methylcyclohexane	50.000	49.229	1.5	96	0.00
40 TM	Benzene	50.000	49.194	1.6	98	0.00
41 T	Methacrylonitrile	50.000	56.275	-12.5	107	0.00
42 TM	1,2-Dichloroethane	50.000	49.870	0.3	98	0.00
43 T	Isopropyl Acetate	50.000	49.410	1.2	91	0.00
44 TM	Trichloroethene	50.000	48.932	2.1	99	0.00
45 C	1,2-Dichloropropane	50.000	49.342	1.3#	98	0.00
46 T	Dibromomethane	50.000	50.735	-1.5	97	0.00
47 T	Bromodichloromethane	50.000	50.133	-0.3	98	0.00
48 T	Methyl methacrylate	50.000	52.699	-5.4	94	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021474.D
 Acq On : 11 Mar 2025 09:42
 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 12 01:22:40 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	1175.771	-17.6	104	0.00
50 S	Toluene-d8	50.000	39.006	22.0	86	0.00
51 T	4-Methyl-2-Pentanone	250.000	267.090	-6.8	93	0.00
52 CM	Toluene	50.000	49.929	0.1#	97	0.00
53 T	t-1,3-Dichloropropene	50.000	51.607	-3.2	98	0.00
54 T	cis-1,3-Dichloropropene	50.000	50.373	-0.7	96	0.00
55 T	1,1,2-Trichloroethane	50.000	51.085	-2.2	96	0.00
56 T	Ethyl methacrylate	50.000	53.976	-8.0	95	0.00
57 T	1,3-Dichloropropane	50.000	51.054	-2.1	98	0.00
58 T	2-Chloroethyl Vinyl ether	250.000	277.699	-11.1	100	0.00
59 T	2-Hexanone	250.000	274.788	-9.9	92	0.00
60 T	Dibromochloromethane	50.000	51.071	-2.1	99	0.00
61 T	1,2-Dibromoethane	50.000	51.119	-2.2	98	0.00
62 S	4-Bromofluorobenzene	50.000	40.403	19.2	89	0.00
63 I	Chlorobenzene-d5	50.000	50.000	0.0	103	0.00
64 T	Tetrachloroethene	50.000	49.184	1.6	102	0.00
65 PM	Chlorobenzene	50.000	47.990	4.0	98	0.00
66 T	1,1,1,2-Tetrachloroethane	50.000	48.937	2.1	100	0.00
67 C	Ethyl Benzene	50.000	49.057	1.9#	98	0.00
68 T	m/p-Xylenes	100.000	98.518	1.5	97	0.00
69 T	o-Xylene	50.000	50.116	-0.2	99	0.00
70 T	Styrene	50.000	51.002	-2.0	99	0.00
71 P	Bromoform	50.000	51.617	-3.2	99	0.00
72 I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	105	0.00
73 T	Isopropylbenzene	50.000	48.180	3.6	99	0.00
74 T	N-ethyl acetate	50.000	50.434	-0.9	95	0.00
75 P	1,1,2,2-Tetrachloroethane	50.000	47.586	4.8	96	0.00
76 T	1,2,3-Trichloropropane	50.000	50.666	-1.3	109	0.00
77 T	Bromobenzene	50.000	48.241	3.5	101	0.00
78 T	n-propylbenzene	50.000	48.420	3.2	99	0.00
79 T	2-Chlorotoluene	50.000	47.664	4.7	100	0.00
80 T	1,3,5-Trimethylbenzene	50.000	49.127	1.7	101	0.00
81 T	trans-1,4-Dichloro-2-butene	50.000	47.453	5.1	93	0.00
82 T	4-Chlorotoluene	50.000	47.377	5.2	99	0.00
83 T	tert-Butylbenzene	50.000	48.707	2.6	100	0.00
84 T	1,2,4-Trimethylbenzene	50.000	49.160	1.7	100	0.00
85 T	sec-Butylbenzene	50.000	48.819	2.4	100	0.00
86 T	p-Isopropyltoluene	50.000	49.646	0.7	102	0.00
87 T	1,3-Dichlorobenzene	50.000	47.610	4.8	101	0.00
88 T	1,4-Dichlorobenzene	50.000	48.018	4.0	102	0.00
89 T	n-Butylbenzene	50.000	50.082	-0.2	100	0.00
90 T	Hexachloroethane	50.000	47.280	5.4	102	0.00
91 T	1,2-Dichlorobenzene	50.000	48.823	2.4	102	0.00
92 T	1,2-Dibromo-3-Chloropropane	50.000	50.503	-1.0	102	0.00
93 T	1,2,4-Trichlorobenzene	50.000	53.321	-6.6	106	0.00
94 T	Hexachlorobutadiene	50.000	50.750	-1.5	104	0.00
95 T	Naphthalene	50.000	53.275	-6.5	104	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021474.D
Acq On : 11 Mar 2025 09:42
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 12 01:22:40 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	53.397	-6.8	104	0.00

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



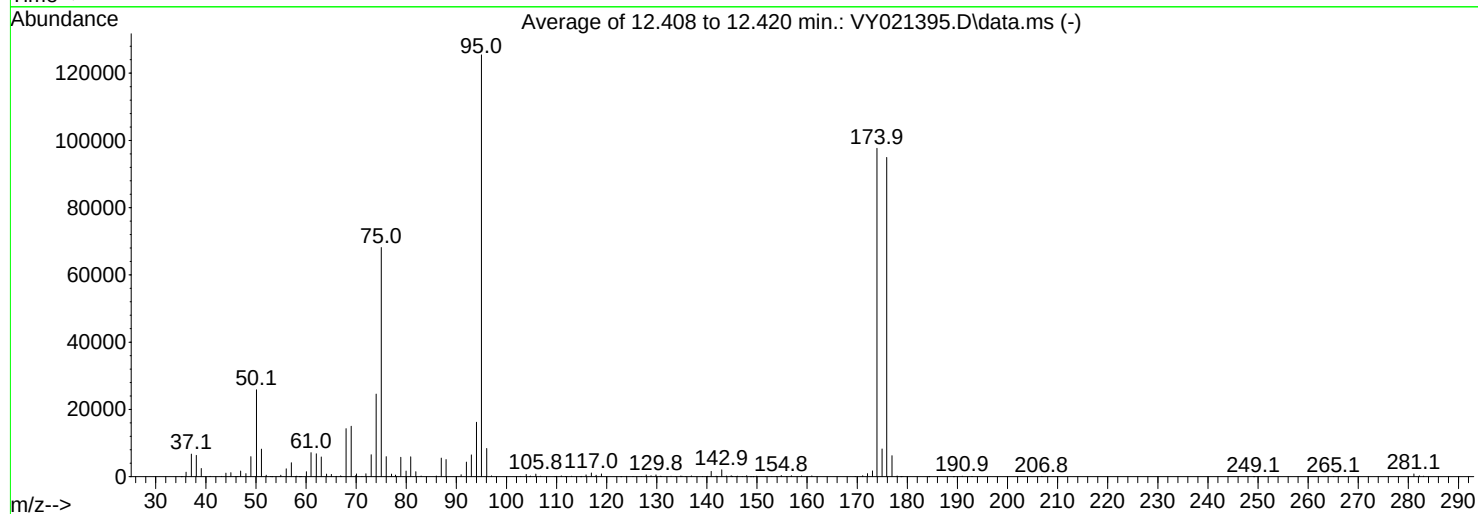
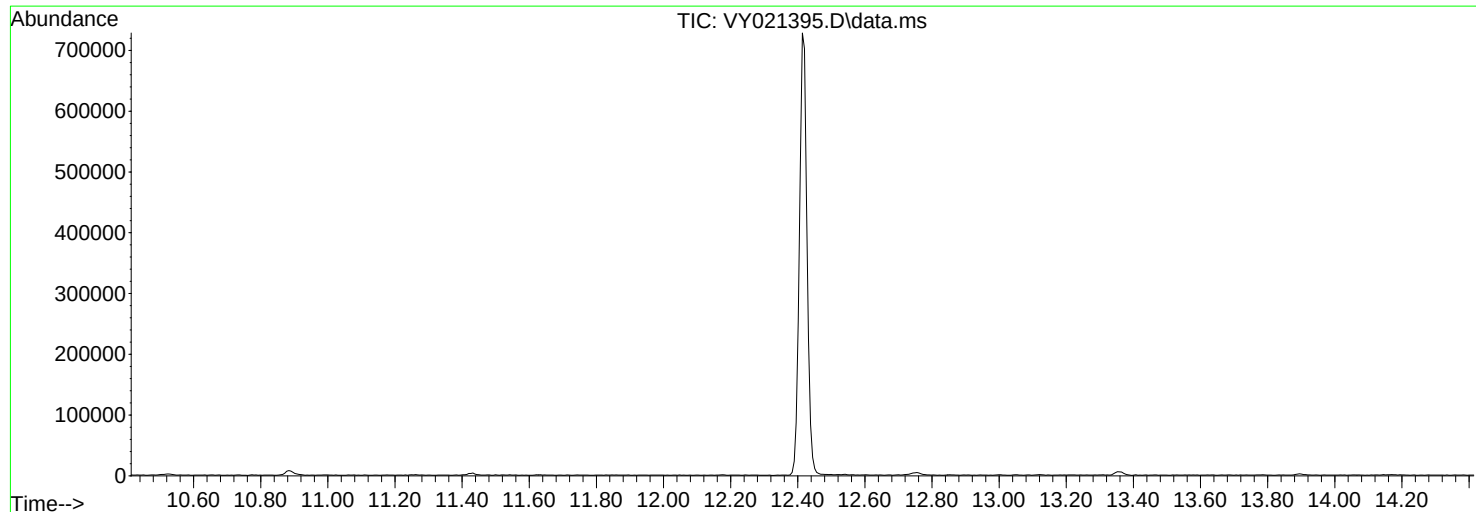
QC SAMPLE DATA

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

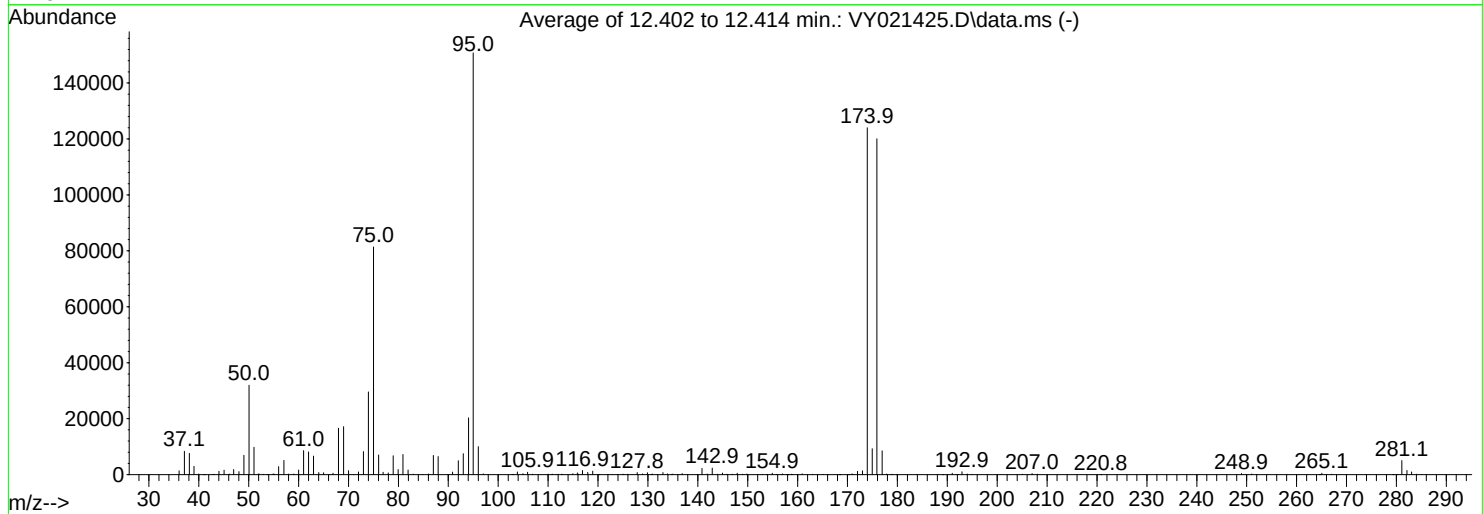
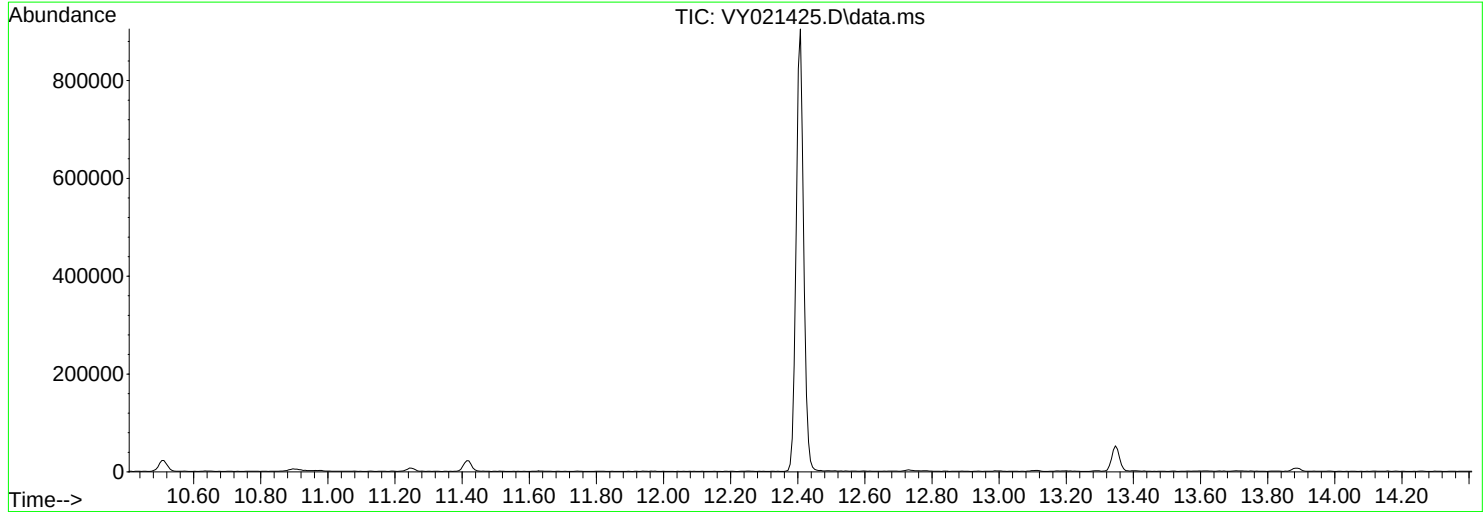
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	20.6	25853	PASS
75	95	30	60	54.3	68152	PASS
95	95	100	100	100.0	125459	PASS
96	95	5	9	6.7	8382	PASS
173	174	0.00	2	1.8	1721	PASS
174	95	50	100	77.8	97645	PASS
175	174	5	9	8.4	8226	PASS
176	174	95	101	97.2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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021425.D
Acq On : 06 Mar 2025 09:39
Operator : SY/MD
Sample : BFB
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 2 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 1743

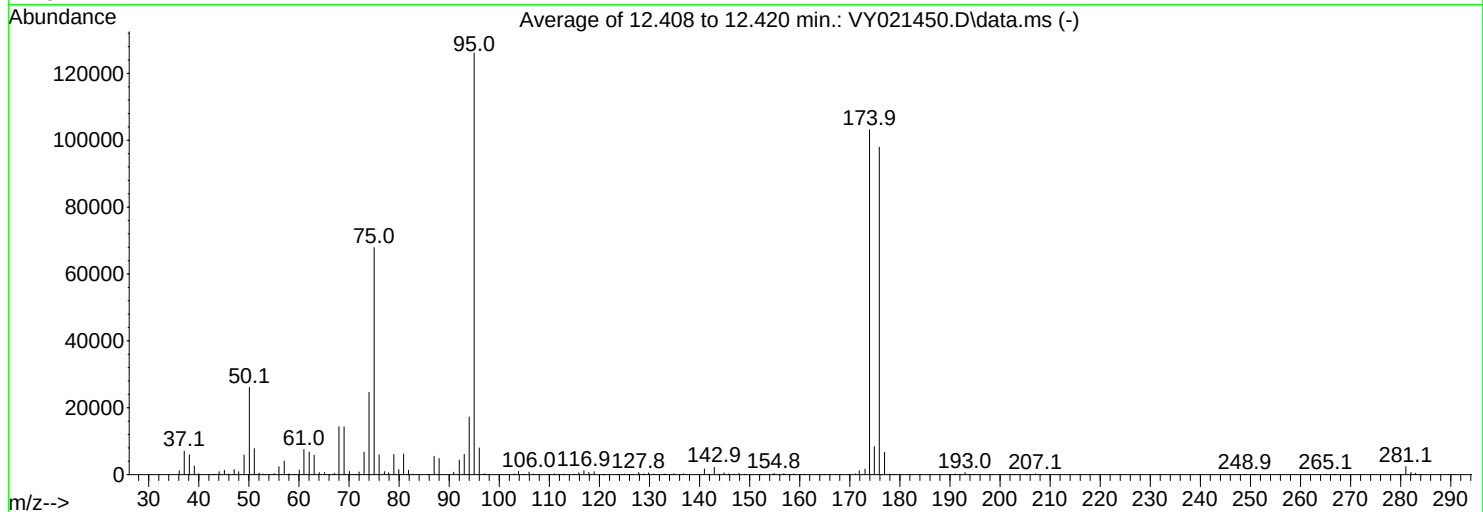
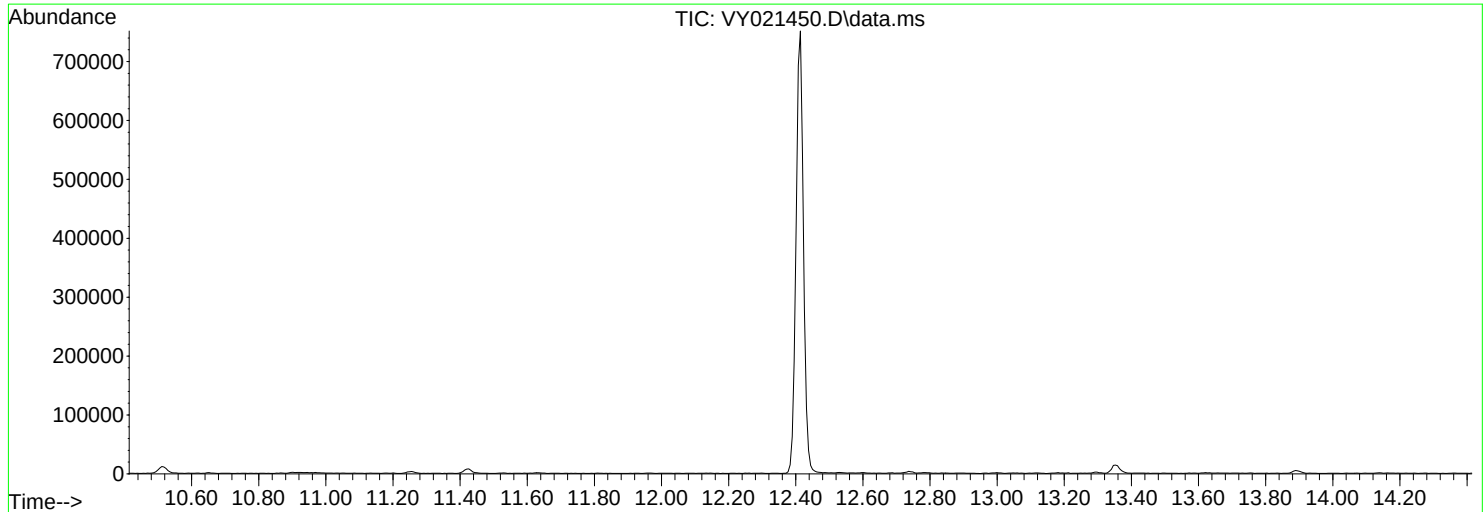
Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	15	40	21.2	31960	PASS
75	95	30	60	54.0	81405	PASS
95	95	100	100	100.0	150795	PASS
96	95	5	9	6.6	10000	PASS
173	174	0.00	2	1.1	1384	PASS
174	95	50	100	82.3	124032	PASS
175	174	5	9	7.5	9302	PASS
176	174	95	101	96.8	120088	PASS
177	176	5	9	7.1	8525	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021450.D
Acq On : 07 Mar 2025 09:27
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

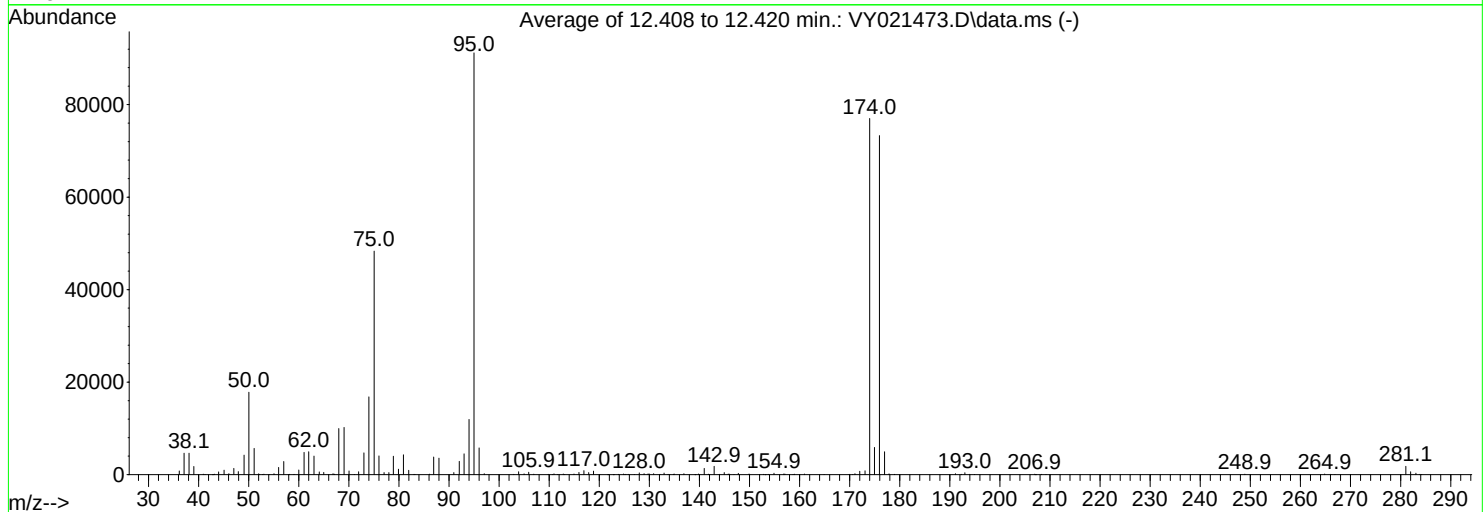
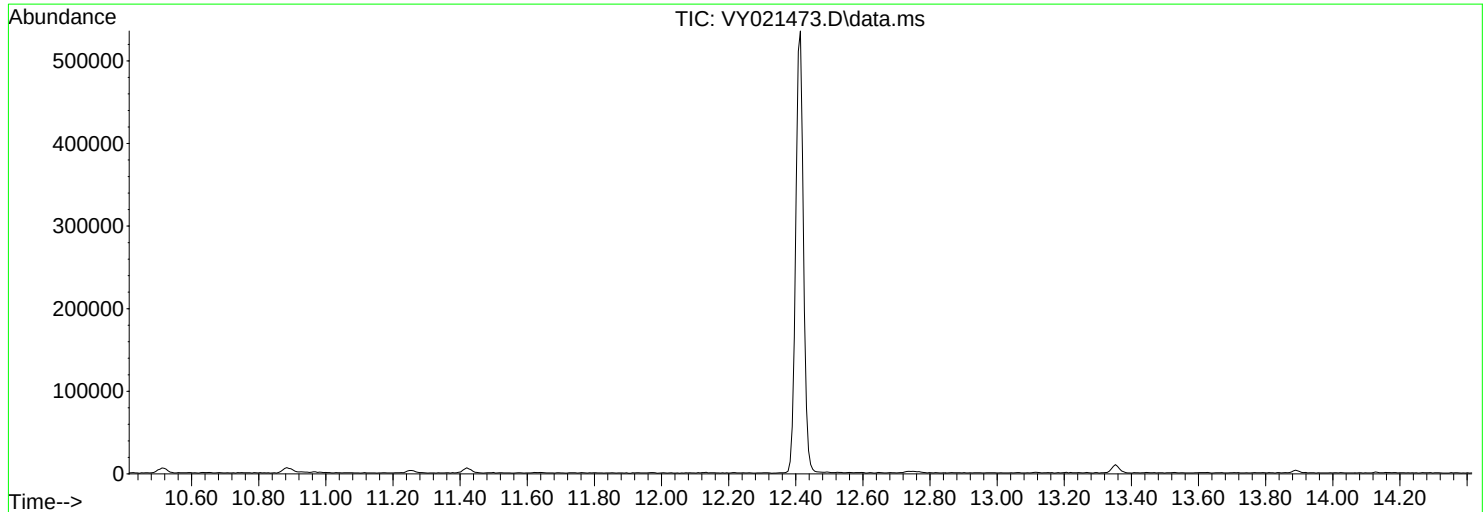
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.7	26077	PASS
75	95	30	60	53.8	67880	PASS
95	95	100	100	100.0	126147	PASS
96	95	5	9	6.3	7984	PASS
173	174	0.00	2	1.6	1692	PASS
174	95	50	100	81.7	103099	PASS
175	174	5	9	8.1	8396	PASS
176	174	95	101	95.0	97952	PASS
177	176	5	9	6.9	6713	PASS

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021473.D
Acq On : 11 Mar 2025 09:00
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 Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	17820	PASS
75	95	30	60	53.0	48325	PASS
95	95	100	100	100.0	91197	PASS
96	95	5	9	6.3	5773	PASS
173	174	0.00	2	1.1	826	PASS
174	95	50	100	84.5	77027	PASS
175	174	5	9	7.6	5877	PASS
176	174	95	101	95.2	73301	PASS
177	176	5	9	6.7	4938	PASS

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0306SBL01	SDG No.:	Q1463
Lab Sample ID:	VY0306SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021427.D	1		03/06/25 11:59	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.20	U	1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.77	U	0.77	5.00	ug/Kg
74-83-9	Bromomethane	1.00	U	1.00	5.00	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	15.6	U	15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	0.78	U	0.78	5.00	ug/Kg
67-64-1	Acetone	6.20	U	6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.30	U	1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.67	U	0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	3.40	U	3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.84	U	0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	5.00	ug/Kg
78-93-3	2-Butanone	5.70	U	5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	5.00	ug/Kg
67-66-3	Chloroform	0.67	U	0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.78	U	0.78	5.00	ug/Kg
71-43-2	Benzene	0.72	U	0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.61	U	0.61	5.00	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.66	U	0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.56	U	0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.40	U	4.40	25.0	ug/Kg
108-88-3	Toluene	0.67	U	0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.57	U	0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.84	U	0.84	5.00	ug/Kg
591-78-6	2-Hexanone	4.80	U	4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.65	U	0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	0.89	U	0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0306SBL01	SDG No.:	Q1463
Lab Sample ID:	VY0306SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
GC Column:	RXI-624	Final Vol:	5000
Prep Method :	ID : 0.25	Test:	VOCMS Group2
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021427.D	1		03/06/25 11:59	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.74	U	0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	10.0	ug/Kg
95-47-6	o-Xylene	0.70	U	0.70	5.00	ug/Kg
100-42-5	Styrene	0.60	U	0.60	5.00	ug/Kg
75-25-2	Bromoform	0.81	U	0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	58.4		70 (63) - 130 (155)	117%	SPK: 50
1868-53-7	Dibromofluoromethane	51.2		70 (70) - 130 (134)	102%	SPK: 50
2037-26-5	Toluene-d8	48.6		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.6		70 (38) - 130 (136)	87%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	249000	7.707			
540-36-3	1,4-Difluorobenzene	461000	8.616			
3114-55-4	Chlorobenzene-d5	406000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	156000	13.352			

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\VY030625\
 Data File : VY021427.D
 Acq On : 06 Mar 2025 11:59
 Operator : SY/MD
 Sample : VY0306SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBL01

Quant Time: Mar 07 00:38:51 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	249443	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	460921	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	405928	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	156000	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	154096	58.448	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	116.900%
35) Dibromofluoromethane	7.634	113	154971	51.151	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	102.300%
50) Toluene-d8	10.109	98	558007	48.643	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.280%
62) 4-Bromofluorobenzene	12.408	95	170007	43.568	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	87.140%

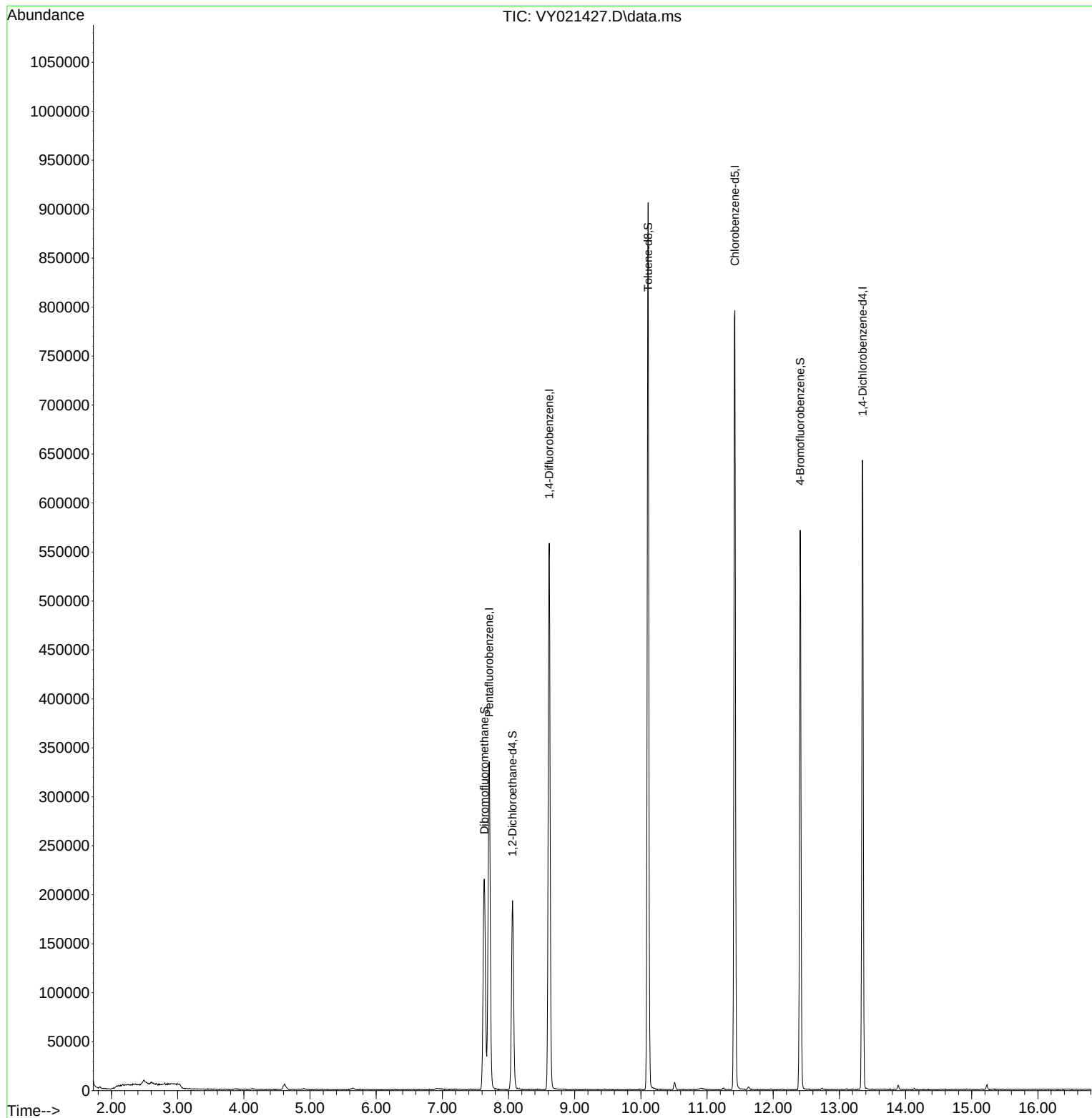
Target Compounds	Qvalue

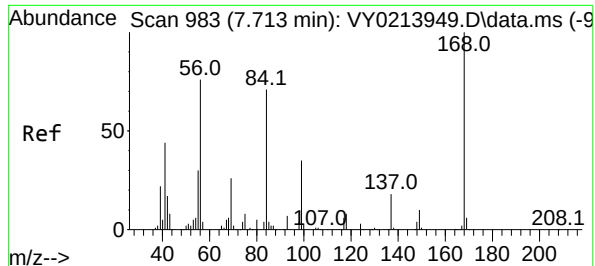
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021427.D
Acq On : 06 Mar 2025 11:59
Operator : SY/MD
Sample : VY0306SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBL01

Quant Time: Mar 07 00:38:51 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# 9

Delta R.T. -0.006 min

Lab File: VY021427.D

Acq: 06 Mar 2025 11:59

Instrument :

MSVOA_Y

ClientSampleId :

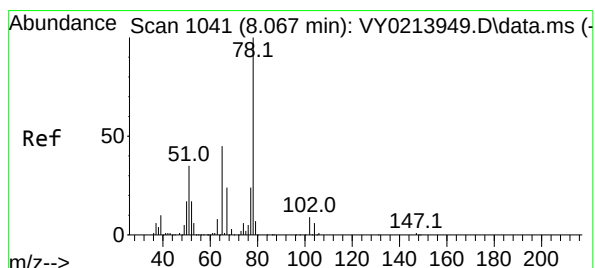
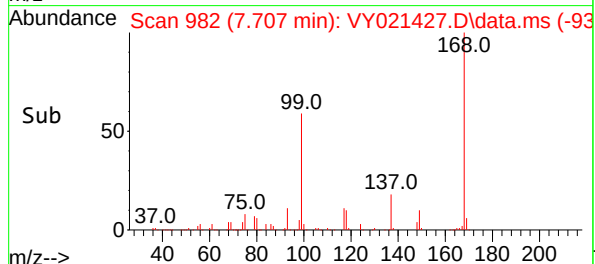
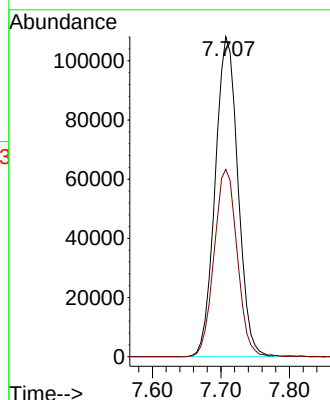
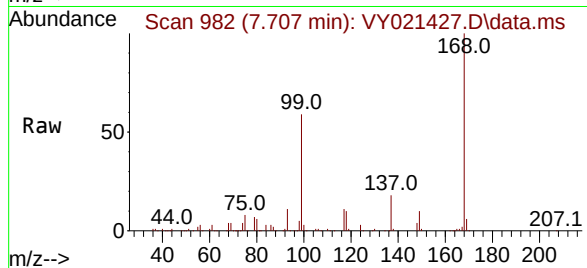
VY0306SBL01

Tgt Ion:168 Resp: 249443

Ion Ratio Lower Upper

168 100

99 58.6 46.0 69.0



#33

1,2-Dichloroethane-d4

Concen: 58.448 ug/l

RT: 8.061 min Scan# 1040

Delta R.T. -0.006 min

Lab File: VY021427.D

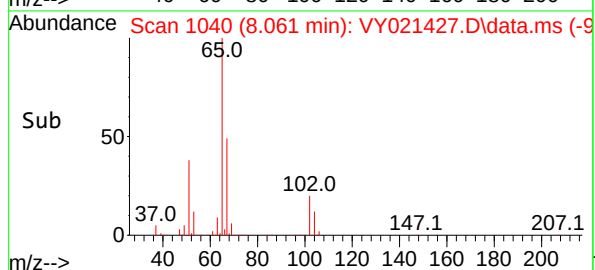
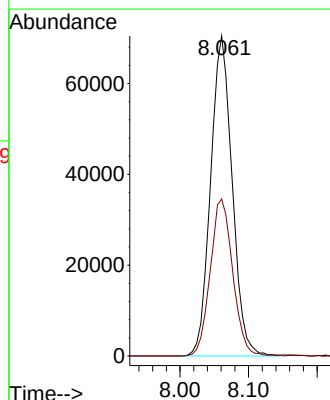
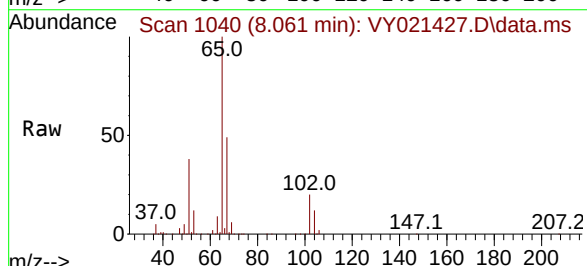
Acq: 06 Mar 2025 11:59

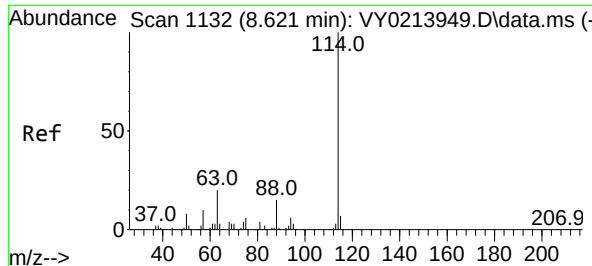
Tgt Ion: 65 Resp: 154096

Ion Ratio Lower Upper

65 100

67 51.0 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: VY021427.D

Acq: 06 Mar 2025 11:59

Instrument :

MSVOA_Y

ClientSampleId :

VY0306SBL01

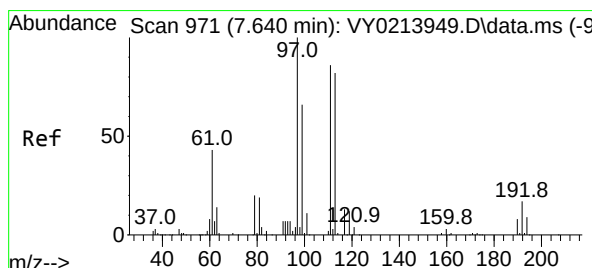
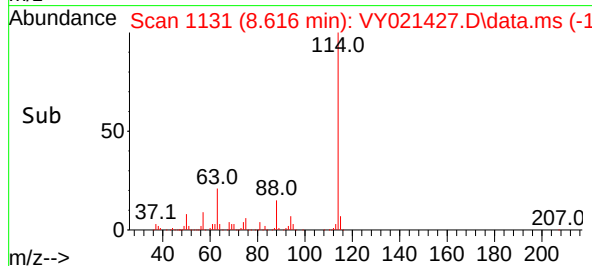
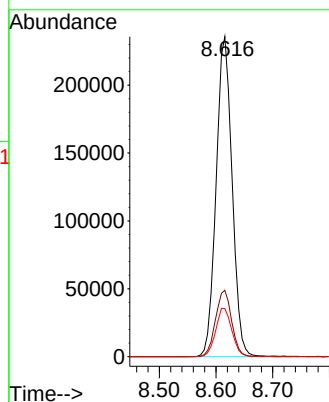
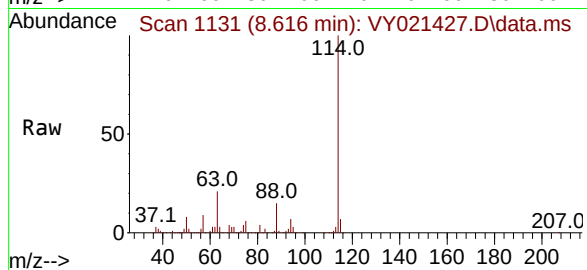
Tgt Ion:114 Resp: 460921

Ion Ratio Lower Upper

114 100

63 20.8 0.0 40.8

88 15.1 0.0 30.8



#35

Dibromofluoromethane

Concen: 51.151 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021427.D

Acq: 06 Mar 2025 11:59

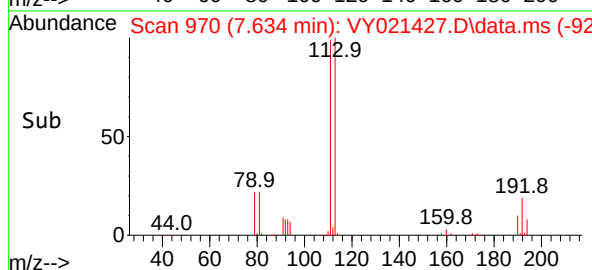
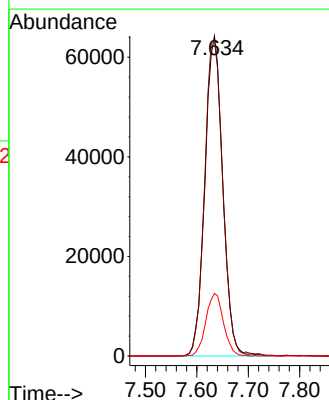
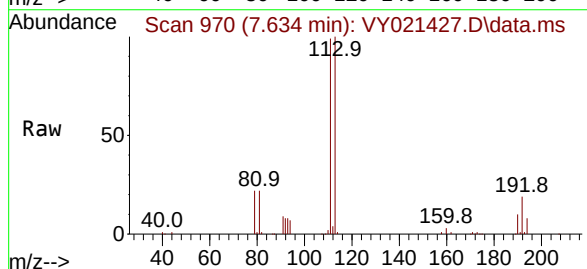
Tgt Ion:113 Resp: 154971

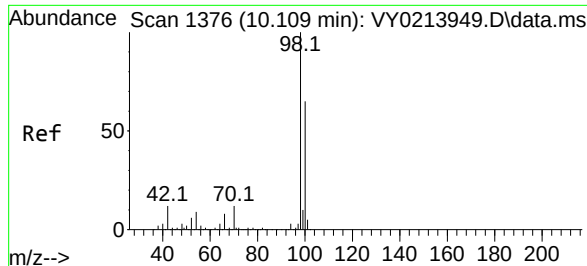
Ion Ratio Lower Upper

113 100

111 100.9 82.0 123.0

192 19.3 15.9 23.9





#50

Toluene-d8

Concen: 48.643 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021427.D

Acq: 06 Mar 2025 11:59

Instrument :

MSVOA_Y

ClientSampleId :

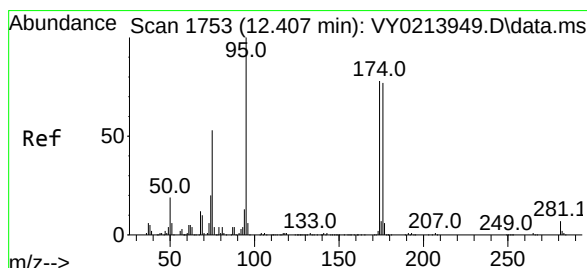
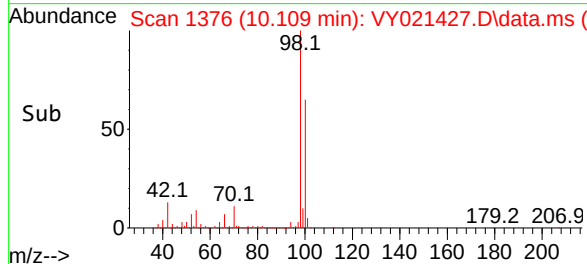
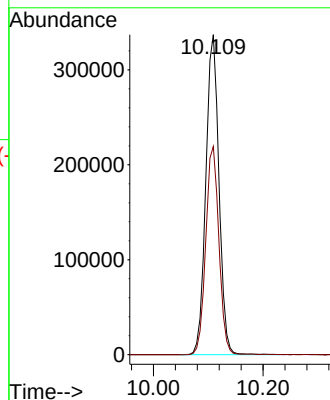
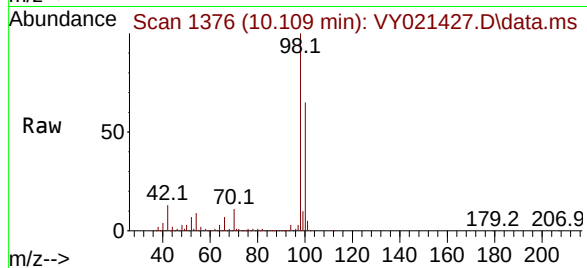
VY0306SBL01

Tgt Ion: 98 Resp: 558007

Ion Ratio Lower Upper

98 100

100 65.3 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 43.568 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021427.D

Acq: 06 Mar 2025 11:59

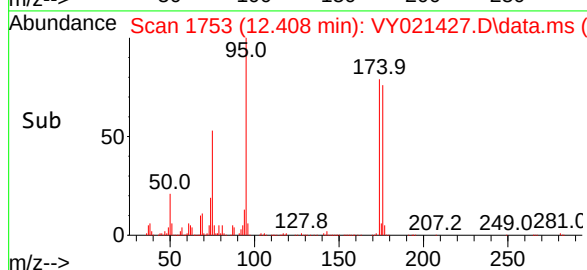
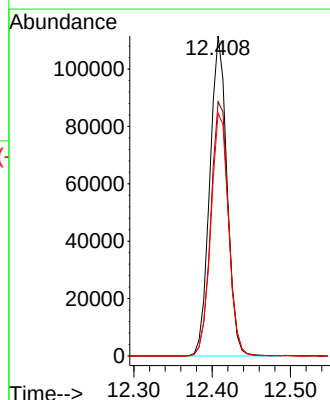
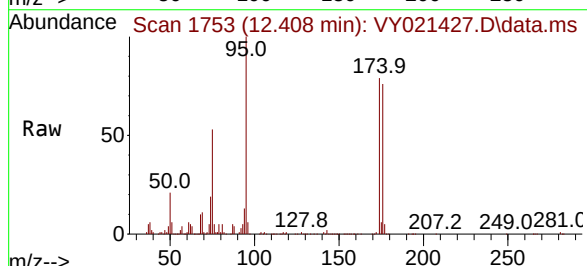
Tgt Ion: 95 Resp: 170007

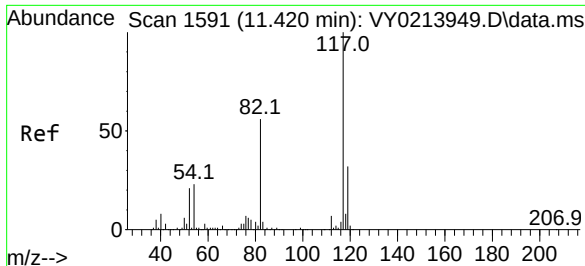
Ion Ratio Lower Upper

95 100

174 81.5 0.0 165.0

176 77.8 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 1591

Delta R.T. 0.000 min

Lab File: VY021427.D

Acq: 06 Mar 2025 11:59

Instrument :

MSVOA_Y

ClientSampleId :

VY0306SBL01

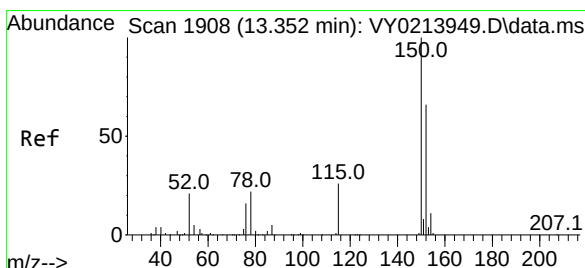
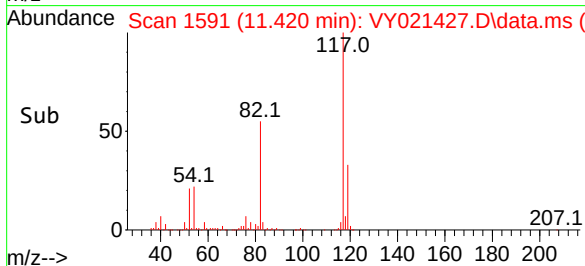
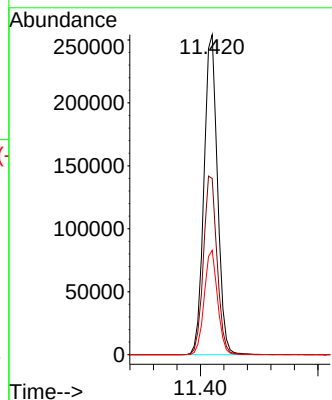
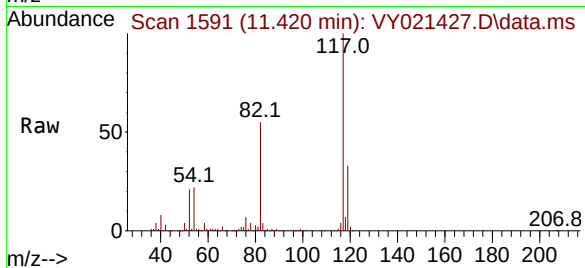
Tgt Ion:117 Resp: 405928

Ion Ratio Lower Upper

117 100

82 55.0 44.6 67.0

119 32.6 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.000 min

Lab File: VY021427.D

Acq: 06 Mar 2025 11:59

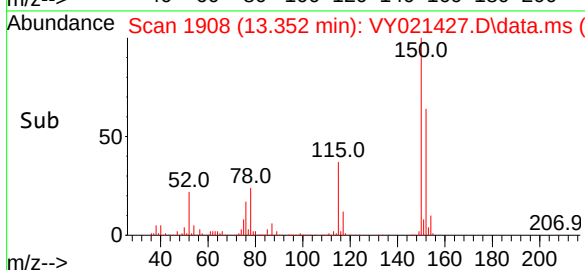
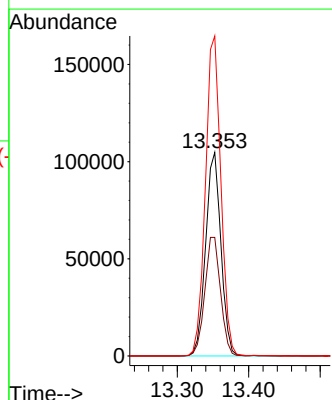
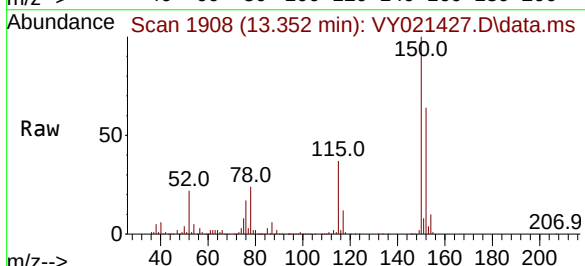
Tgt Ion:152 Resp: 156000

Ion Ratio Lower Upper

152 100

115 59.9 29.0 87.0

150 158.2 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021427.D
Acq On : 06 Mar 2025 11:59
Operator : SY/MD
Sample : VY0306SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBL01

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: VY021427.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.495	117	127	132	rBV5	5042	16150	1.07%	0.213%
2	4.616	465	475	485	rBV4	5719	17642	1.17%	0.233%
3	7.634	960	970	976	rBV2	214988	528018	34.88%	6.966%
4	7.707	976	982	996	rVB	334308	771072	50.93%	10.172%
5	8.061	1027	1040	1051	rBV	193021	432772	28.59%	5.709%
6	8.616	1122	1131	1144	rBV	557966	1109058	73.26%	14.631%
7	10.109	1367	1376	1386	rBV	905768	1513956	100.00%	19.973%
8	11.420	1581	1591	1605	rBV	795449	1300163	85.88%	17.152%
9	12.408	1746	1753	1762	rBV	571400	896843	59.24%	11.831%
10	13.346	1900	1907	1915	rBV	642349	994480	65.69%	13.120%

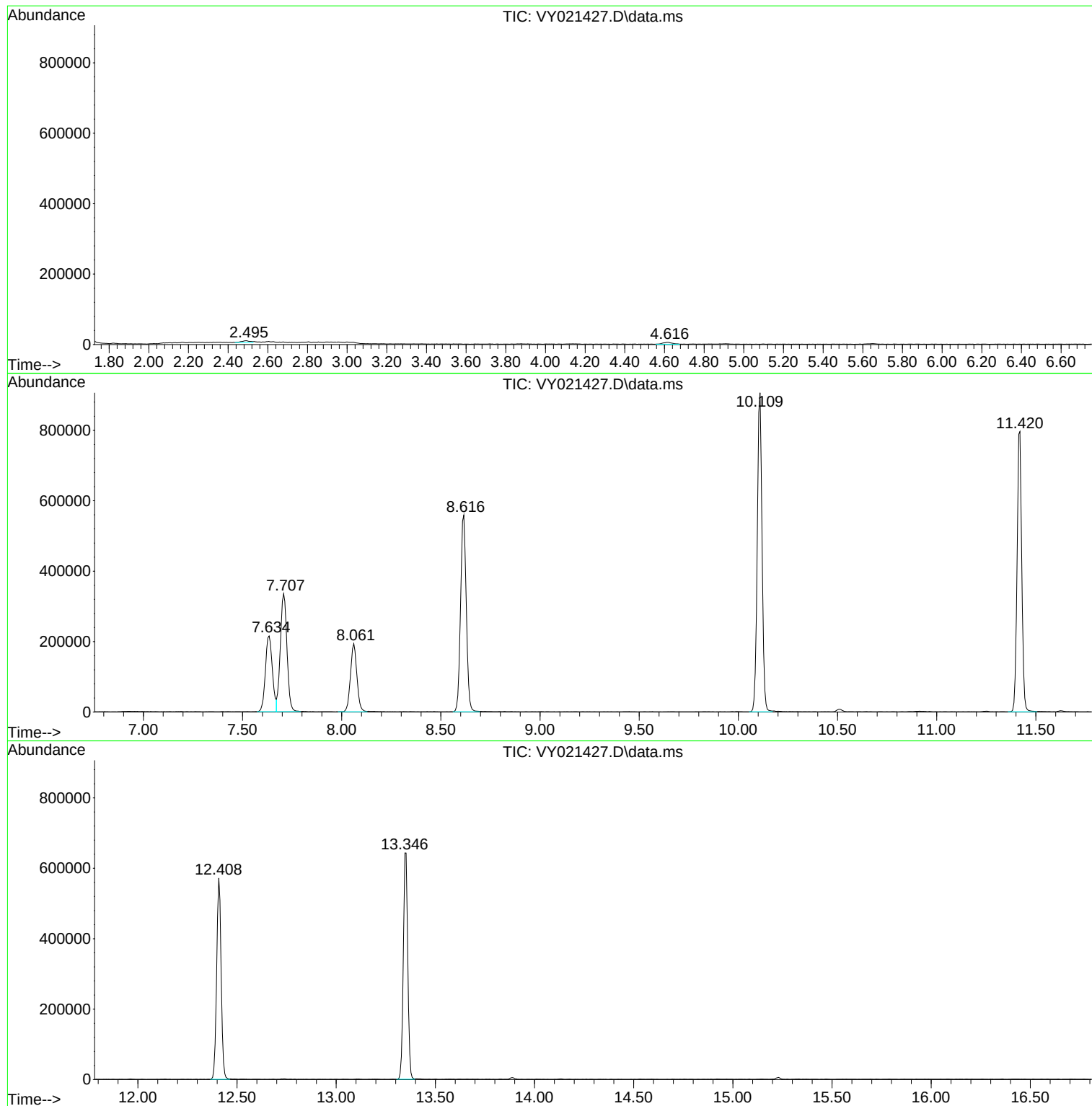
Sum of corrected areas: 7580154

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021427.D
Acq On : 06 Mar 2025 11:59
Operator : SY/MD
Sample : VY0306SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBL01

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\VY030625\
Data File : VY021427.D
Acq On : 06 Mar 2025 11:59
Operator : SY/MD
Sample : VY0306SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBL01

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\VY030625\
Data File : VY021427.D
Acq On : 06 Mar 2025 11:59
Operator : SY/MD
Sample : VY0306SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBL01

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0307SBL01	SDG No.:	Q1463
Lab Sample ID:	VY0307SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021452.D	1		03/07/25 10:35	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.20	U	1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.77	U	0.77	5.00	ug/Kg
74-83-9	Bromomethane	1.00	U	1.00	5.00	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	15.6	U	15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	0.78	U	0.78	5.00	ug/Kg
67-64-1	Acetone	6.20	U	6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.30	U	1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.67	U	0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	3.40	U	3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.84	U	0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	5.00	ug/Kg
78-93-3	2-Butanone	5.70	U	5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	5.00	ug/Kg
67-66-3	Chloroform	0.67	U	0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.78	U	0.78	5.00	ug/Kg
71-43-2	Benzene	0.72	U	0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.61	U	0.61	5.00	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.66	U	0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.56	U	0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.40	U	4.40	25.0	ug/Kg
108-88-3	Toluene	0.67	U	0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.57	U	0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.84	U	0.84	5.00	ug/Kg
591-78-6	2-Hexanone	4.80	U	4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.65	U	0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	0.89	U	0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0307SBL01	SDG No.:	Q1463
Lab Sample ID:	VY0307SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021452.D	1		03/07/25 10:35	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.74	U	0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	10.0	ug/Kg
95-47-6	o-Xylene	0.70	U	0.70	5.00	ug/Kg
100-42-5	Styrene	0.60	U	0.60	5.00	ug/Kg
75-25-2	Bromoform	0.81	U	0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.4		70 (63) - 130 (155)	111%	SPK: 50
1868-53-7	Dibromofluoromethane	50.2		70 (70) - 130 (134)	100%	SPK: 50
2037-26-5	Toluene-d8	48.5		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	40.1		70 (38) - 130 (136)	80%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	247000	7.707			
540-36-3	1,4-Difluorobenzene	456000	8.616			
3114-55-4	Chlorobenzene-d5	387000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	141000	13.352			

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\VY030725\
 Data File : VY021452.D
 Acq On : 07 Mar 2025 10:35
 Operator : SY/MD
 Sample : VY0307SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0307SBL01

Quant Time: Mar 07 21:59:55 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	247432	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	455944	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	386511	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.352	152	140975	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	144872	55.396	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	110.800%
35) Dibromofluoromethane	7.634	113	150461	50.204	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.400%
50) Toluene-d8	10.109	98	550853	48.544	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	97.080%
62) 4-Bromofluorobenzene	12.408	95	154713	40.081	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	80.160%

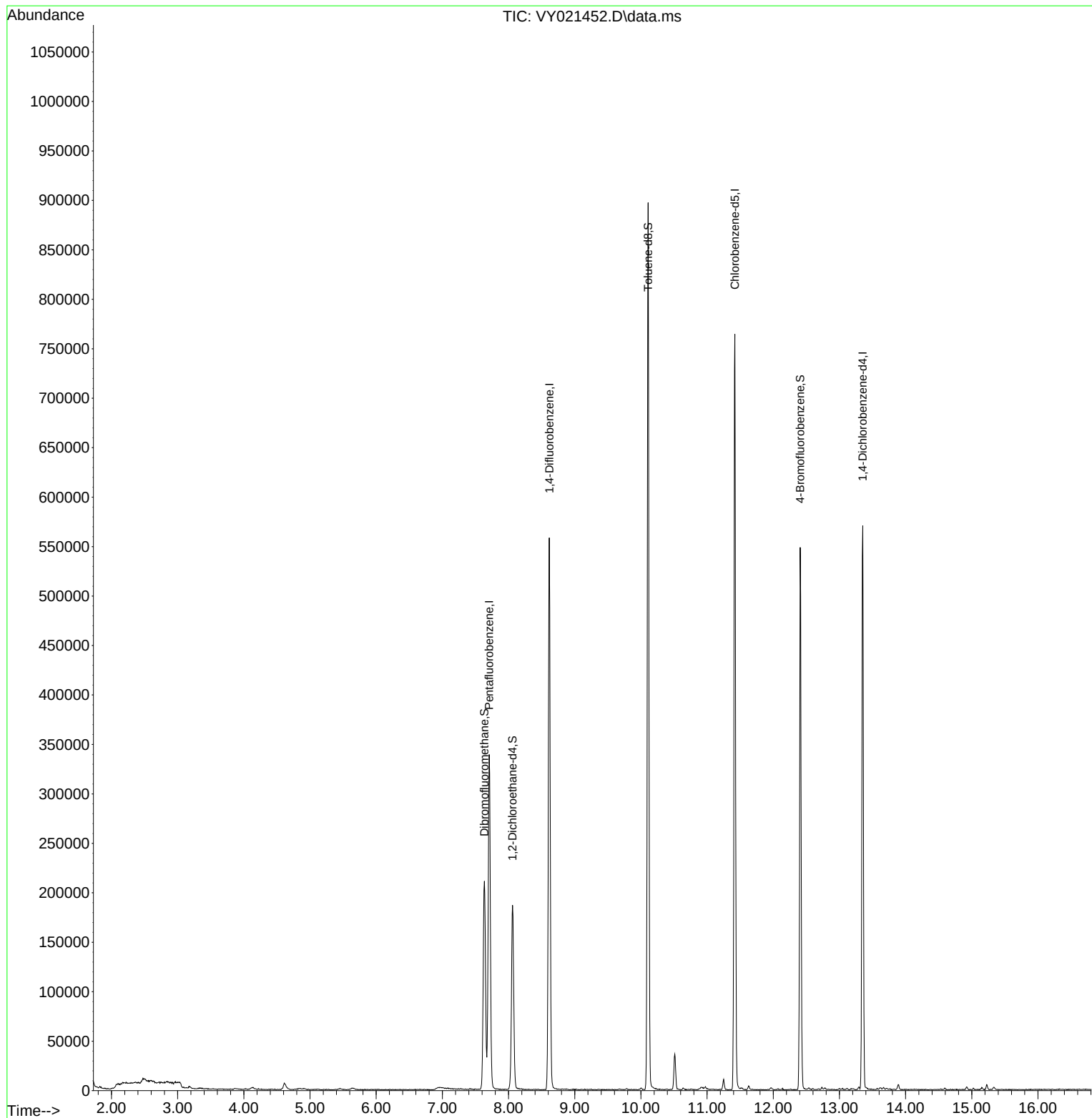
Target Compounds	Qvalue

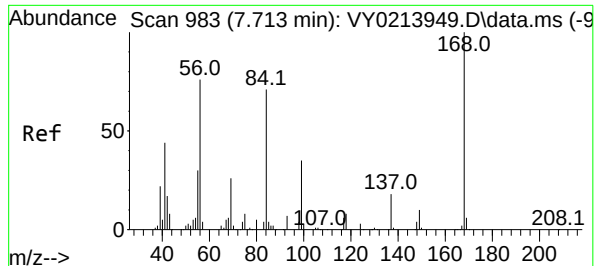
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021452.D
Acq On : 07 Mar 2025 10:35
Operator : SY/MD
Sample : VY0307SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0307SBL01

Quant Time: Mar 07 21:59:55 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

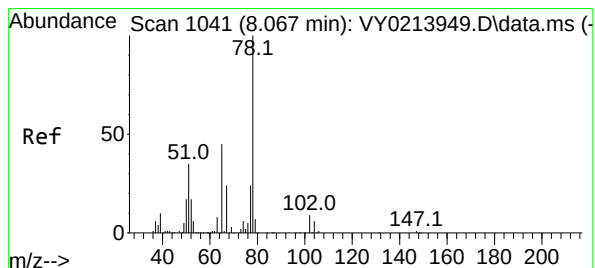
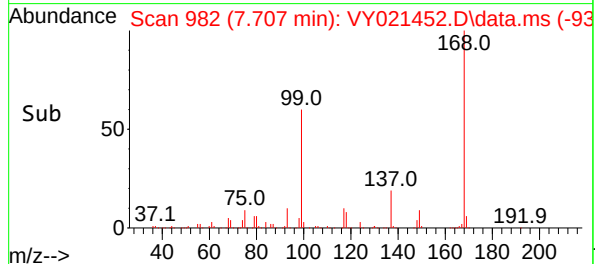
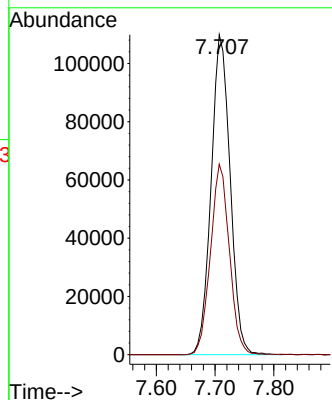
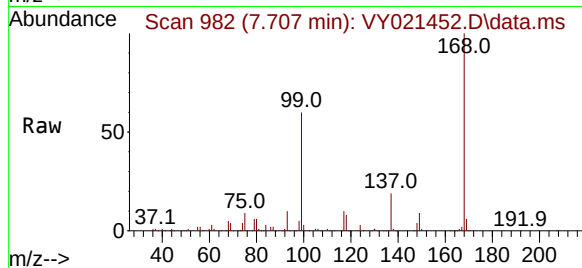




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021452.D
Acq: 07 Mar 2025 10:35

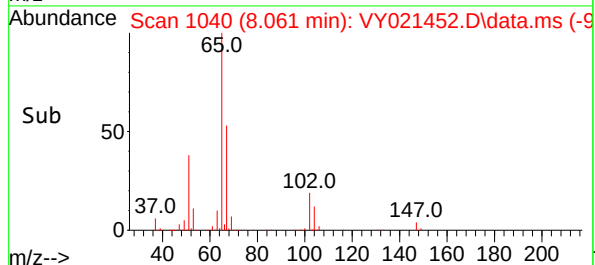
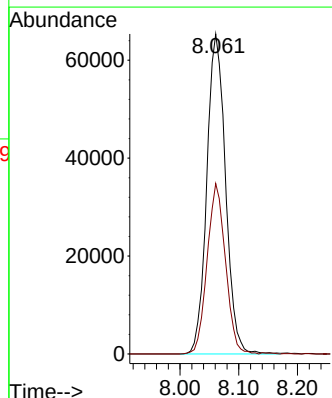
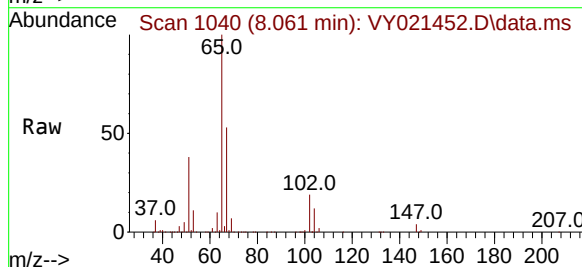
Instrument :
MSVOA_Y
ClientSampleId :
VY0307SBL01

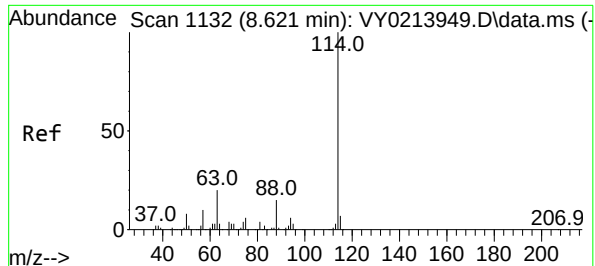
Tgt Ion:168 Resp: 247432
Ion Ratio Lower Upper
168 100
99 59.5 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 55.396 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021452.D
Acq: 07 Mar 2025 10:35

Tgt Ion: 65 Resp: 144872
Ion Ratio Lower Upper
65 100
67 52.0 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: VY021452.D

Acq: 07 Mar 2025 10:35

Instrument :

MSVOA_Y

ClientSampleId :

VY0307SBL01

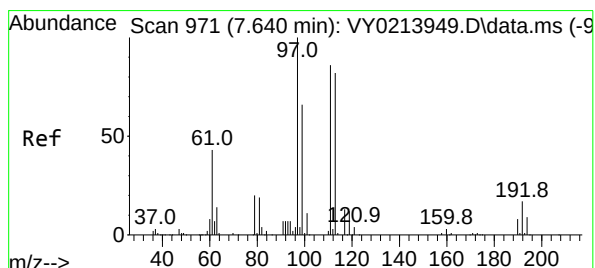
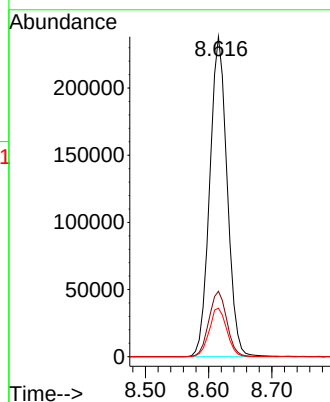
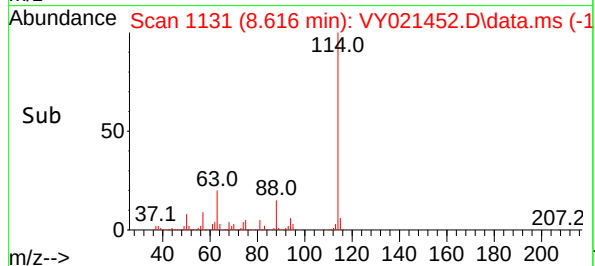
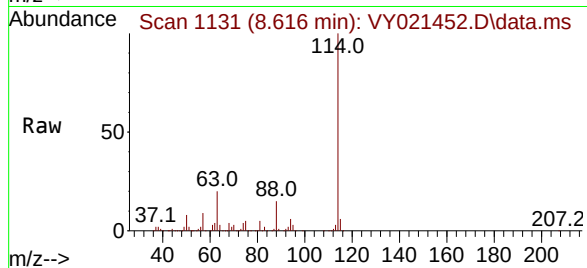
Tgt Ion:114 Resp: 455944

Ion Ratio Lower Upper

114 100

63 20.4 0.0 40.8

88 15.1 0.0 30.8



#35

Dibromofluoromethane

Concen: 50.204 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021452.D

Acq: 07 Mar 2025 10:35

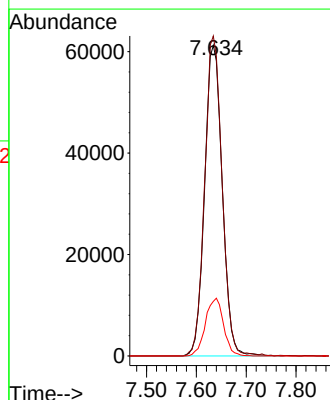
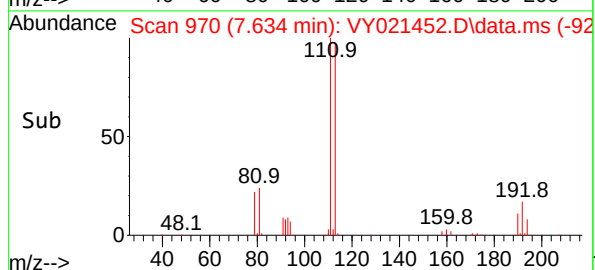
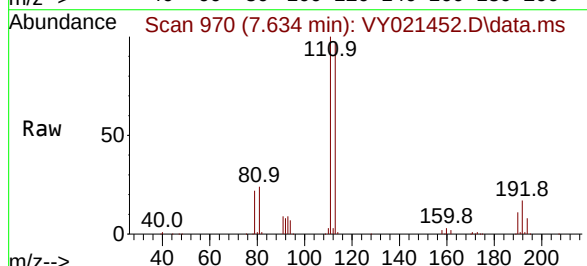
Tgt Ion:113 Resp: 150461

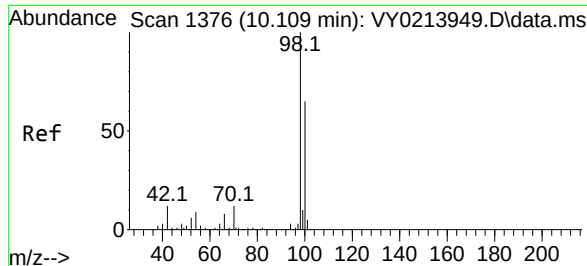
Ion Ratio Lower Upper

113 100

111 101.6 82.0 123.0

192 19.1 15.9 23.9





#50

Toluene-d8

Concen: 48.544 ug/l

RT: 10.109 min Scan# 11

Delta R.T. 0.000 min

Lab File: VY021452.D

Acq: 07 Mar 2025 10:35

Instrument :

MSVOA_Y

ClientSampleId :

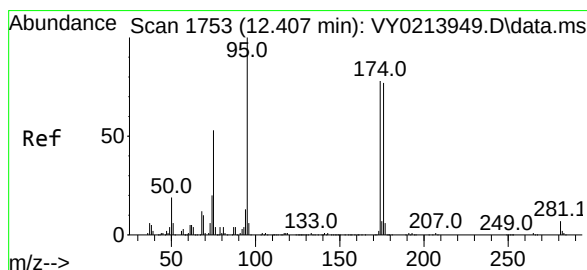
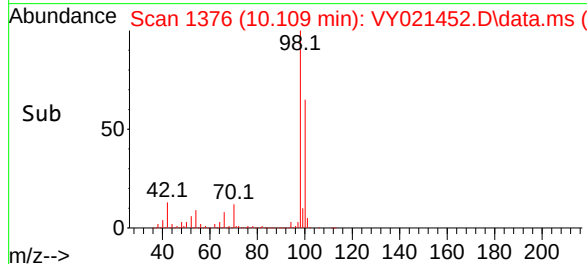
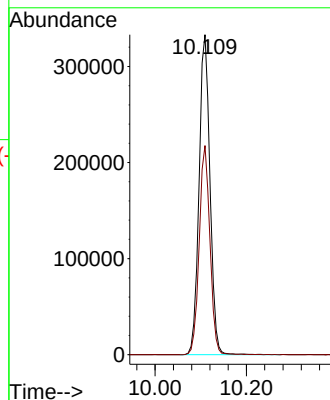
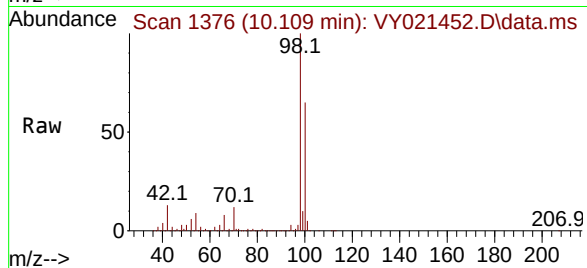
VY0307SBL01

Tgt Ion: 98 Resp: 550853

Ion Ratio Lower Upper

98 100

100 64.1 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 40.081 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021452.D

Acq: 07 Mar 2025 10:35

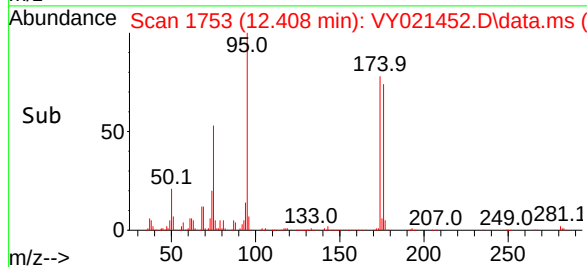
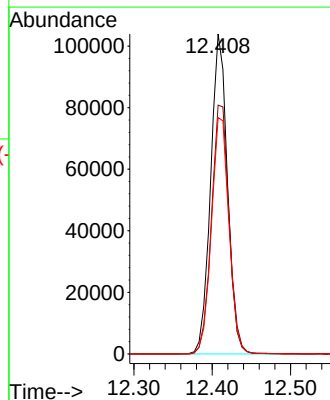
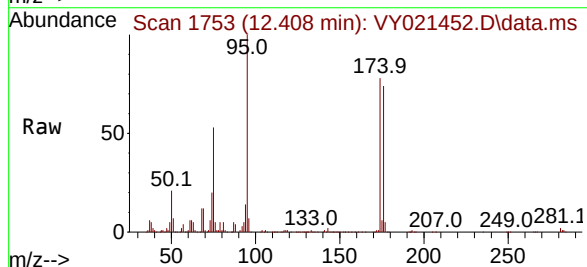
Tgt Ion: 95 Resp: 154713

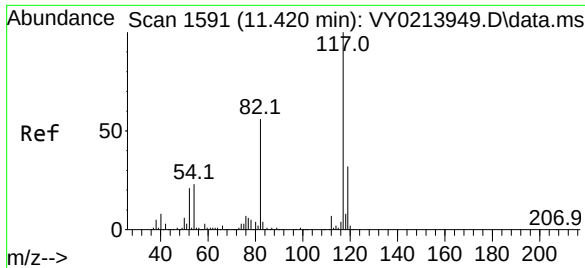
Ion Ratio Lower Upper

95 100

174 82.0 0.0 165.0

176 77.4 0.0 160.0





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.420 min Scan# 1591

Delta R.T. 0.000 min

Lab File: VY021452.D

Acq: 07 Mar 2025 10:35

Instrument :

MSVOA_Y

ClientSampleId :

VY0307SBL01

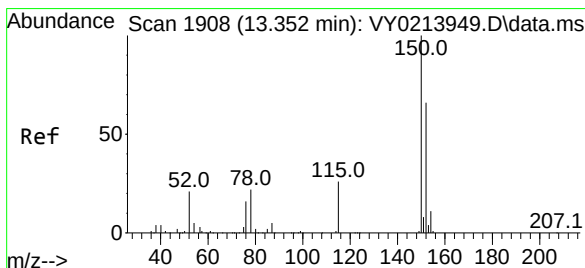
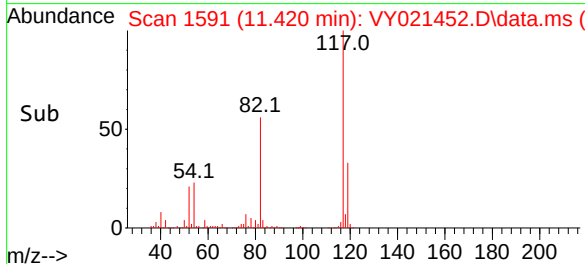
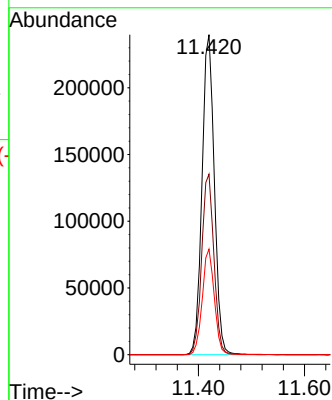
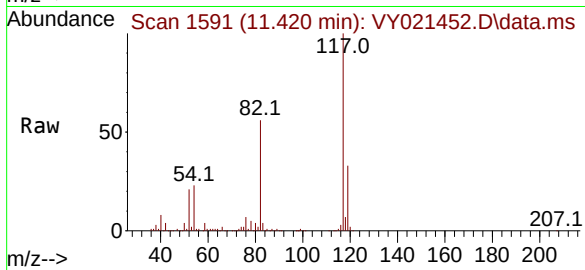
Tgt Ion:117 Resp: 386511

Ion Ratio Lower Upper

117 100

82 56.4 44.6 67.0

119 33.0 25.4 38.0



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.352 min Scan# 1908

Delta R.T. 0.000 min

Lab File: VY021452.D

Acq: 07 Mar 2025 10:35

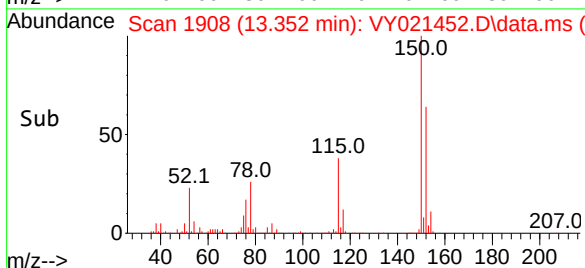
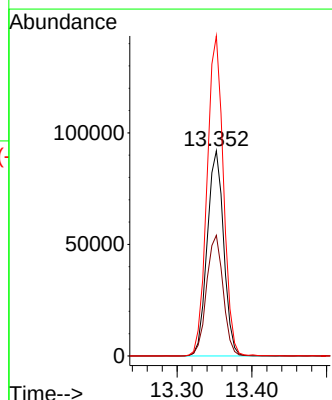
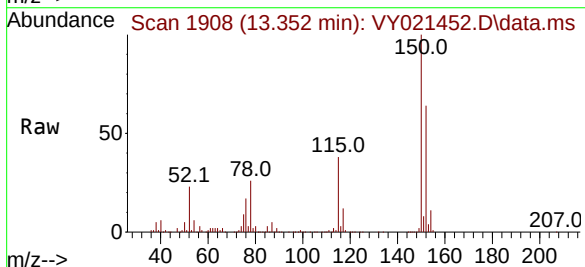
Tgt Ion:152 Resp: 140975

Ion Ratio Lower Upper

152 100

115 59.2 29.0 87.0

150 155.2 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021452.D
 Acq On : 07 Mar 2025 10:35
 Operator : SY/MD
 Sample : VY0307SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0307SBL01

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: VY021452.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.610	465	474	489	rBV5	6713	21614	1.45%	0.292%
2	7.634	959	970	976	rBV2	210541	513351	34.43%	6.943%
3	7.707	976	982	999	rVB	338300	768555	51.55%	10.395%
4	8.061	1029	1040	1052	rBV	185995	434924	29.17%	5.883%
5	8.616	1122	1131	1147	rBV	557975	1093393	73.33%	14.789%
6	10.109	1368	1376	1394	rBV	896710	1490983	100.00%	20.166%
7	10.512	1435	1442	1448	rBV2	35644	66019	4.43%	0.893%
8	11.249	1558	1563	1568	rBV3	10282	15899	1.07%	0.215%
9	11.420	1583	1591	1604	rBV	763696	1240793	83.22%	16.782%
10	12.408	1746	1753	1763	rBV	548094	859551	57.65%	11.626%
11	13.352	1901	1908	1915	rBV	569422	888398	59.58%	12.016%

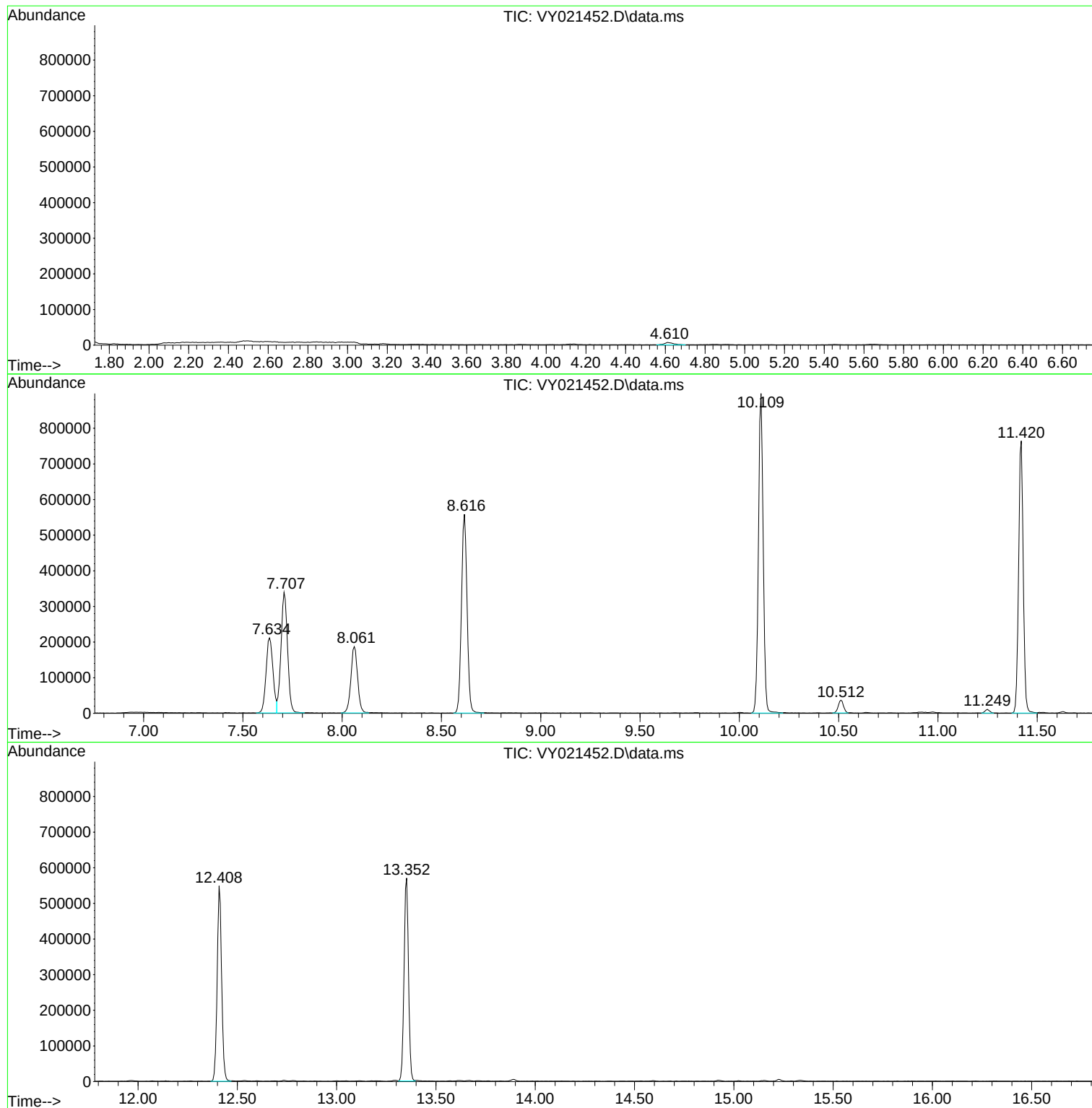
Sum of corrected areas: 7393480

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021452.D
Acq On : 07 Mar 2025 10:35
Operator : SY/MD
Sample : VY0307SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0307SBL01

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\VY030725\
Data File : VY021452.D
Acq On : 07 Mar 2025 10:35
Operator : SY/MD
Sample : VY0307SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0307SBL01

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\VY030725\
Data File : VY021452.D
Acq On : 07 Mar 2025 10:35
Operator : SY/MD
Sample : VY0307SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0307SBL01

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

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0311SBL01	SDG No.:	Q1463
Lab Sample ID:	VY0311SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021475.D	1		03/11/25 10:12	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	1.20	U	1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	0.77	U	0.77	5.00	ug/Kg
74-83-9	Bromomethane	1.00	U	1.00	5.00	ug/Kg
75-00-3	Chloroethane	1.00	U	1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	15.6	U	15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	0.78	U	0.78	5.00	ug/Kg
67-64-1	Acetone	6.20	U	6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	1.30	U	1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	0.67	U	0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	3.40	U	3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	0.84	U	0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	0.63	U	0.63	5.00	ug/Kg
78-93-3	2-Butanone	5.70	U	5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	0.87	U	0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	0.61	U	0.61	5.00	ug/Kg
67-66-3	Chloroform	0.67	U	0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	0.78	U	0.78	5.00	ug/Kg
71-43-2	Benzene	0.72	U	0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	0.61	U	0.61	5.00	ug/Kg
79-01-6	Trichloroethene	0.75	U	0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	0.66	U	0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	0.56	U	0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	4.40	U	4.40	25.0	ug/Kg
108-88-3	Toluene	0.67	U	0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	0.60	U	0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	0.57	U	0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	0.84	U	0.84	5.00	ug/Kg
591-78-6	2-Hexanone	4.80	U	4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	0.65	U	0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	0.89	U	0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0311SBL01	SDG No.:	Q1463
Lab Sample ID:	VY0311SBL01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021475.D	1		03/11/25 10:12	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	0.74	U	0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	0.62	U	0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	1.40	U	1.40	10.0	ug/Kg
95-47-6	o-Xylene	0.70	U	0.70	5.00	ug/Kg
100-42-5	Styrene	0.60	U	0.60	5.00	ug/Kg
75-25-2	Bromoform	0.81	U	0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	1.10	U	1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.3		70 (63) - 130 (155)	107%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		70 (70) - 130 (134)	101%	SPK: 50
2037-26-5	Toluene-d8	48.5		70 (74) - 130 (123)	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.5		70 (38) - 130 (136)	85%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	266000	7.707			
540-36-3	1,4-Difluorobenzene	468000	8.616			
3114-55-4	Chlorobenzene-d5	407000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	157000	13.346			

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\VY031125\
 Data File : VY021475.D
 Acq On : 11 Mar 2025 10:12
 Operator : SY/MD
 Sample : VY0311SBL01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBL01

Quant Time: Mar 12 01:23:02 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	266206	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	468026	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	406786	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	157191	50.000	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	150026	53.321	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	106.640%
35) Dibromofluoromethane	7.634	113	155103	50.417	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	100.840%
50) Toluene-d8	10.109	98	564540	48.466	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	96.940%
62) 4-Bromofluorobenzene	12.408	95	168454	42.515	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	85.020%

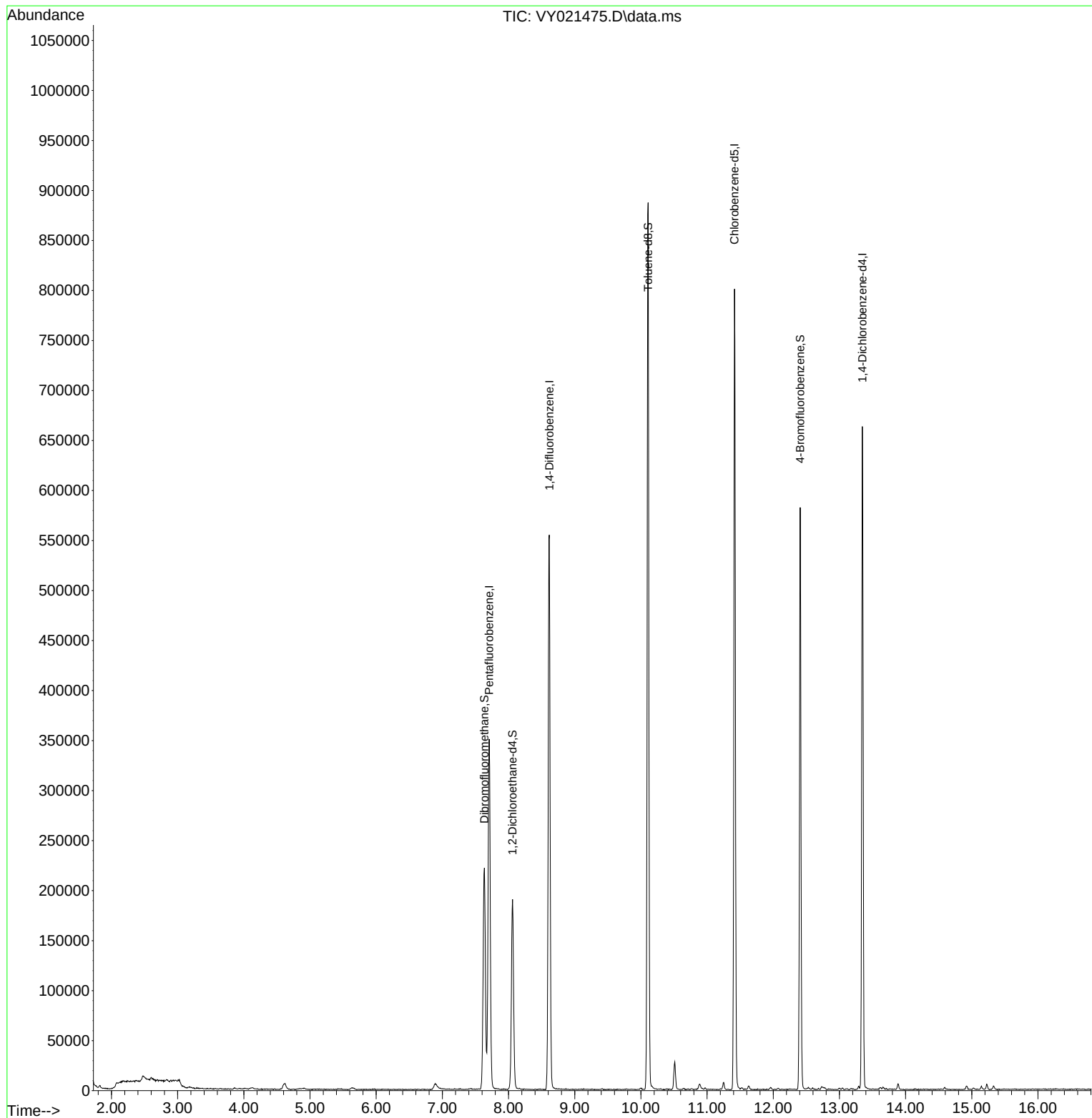
Target Compounds	Qvalue

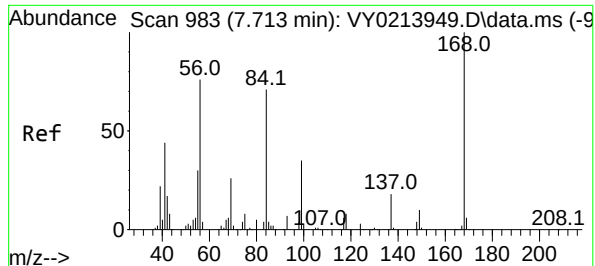
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

Quant Time: Mar 12 01:23:02 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

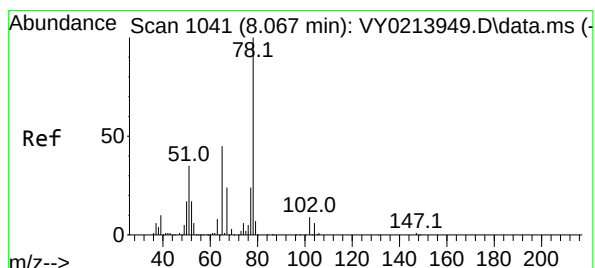
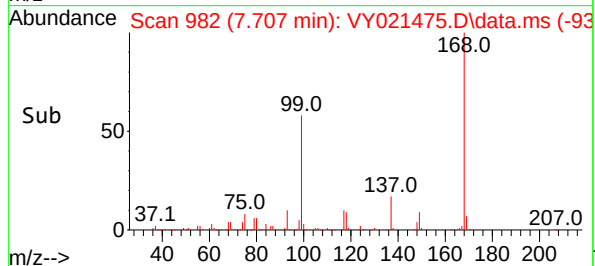
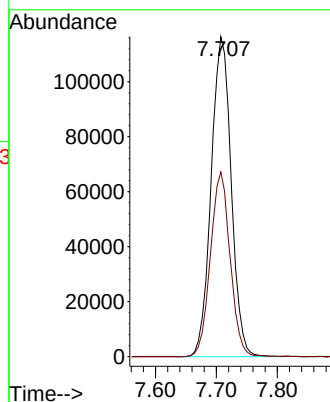
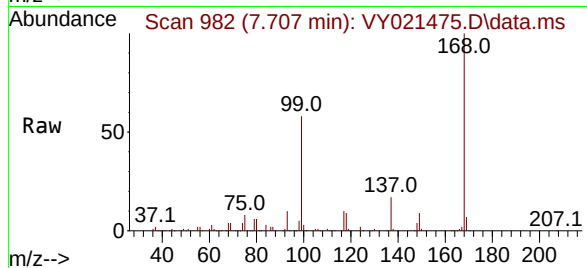




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.707 min Scan# 91
Delta R.T. -0.006 min
Lab File: VY021475.D
Acq: 11 Mar 2025 10:12

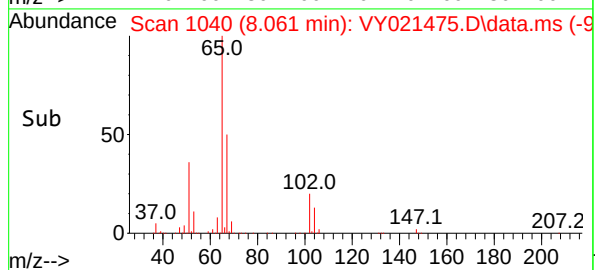
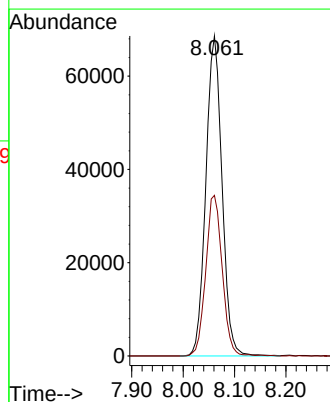
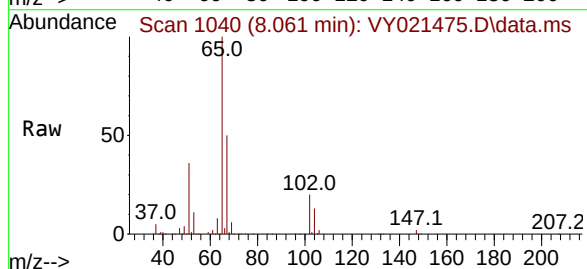
Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

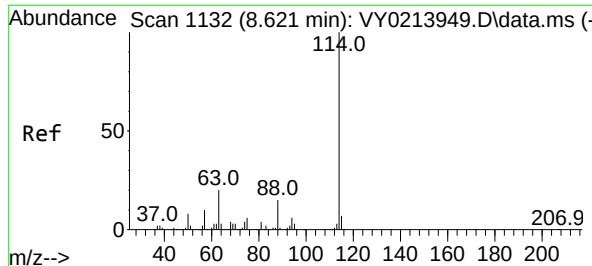
Tgt Ion:168 Resp: 266206
Ion Ratio Lower Upper
168 100
99 57.7 46.0 69.0



#33
1,2-Dichloroethane-d4
Concen: 53.321 ug/l
RT: 8.061 min Scan# 1040
Delta R.T. -0.006 min
Lab File: VY021475.D
Acq: 11 Mar 2025 10:12

Tgt Ion: 65 Resp: 150026
Ion Ratio Lower Upper
65 100
67 51.1 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: VY021475.D

Acq: 11 Mar 2025 10:12

Instrument :

MSVOA_Y

ClientSampleId :

VY0311SBL01

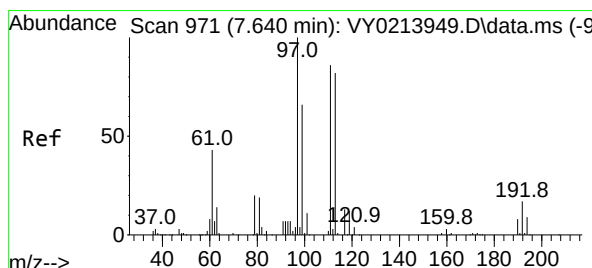
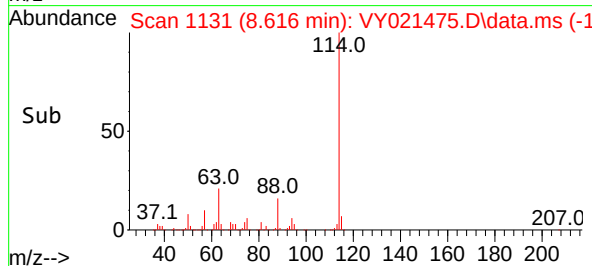
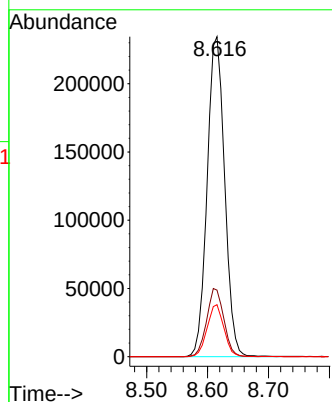
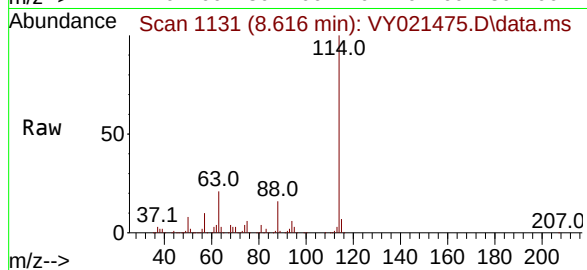
Tgt Ion:114 Resp: 468026

Ion Ratio Lower Upper

114 100

63 20.8 0.0 40.8

88 16.3 0.0 30.8



#35

Dibromofluoromethane

Concen: 50.417 ug/l

RT: 7.634 min Scan# 970

Delta R.T. -0.006 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

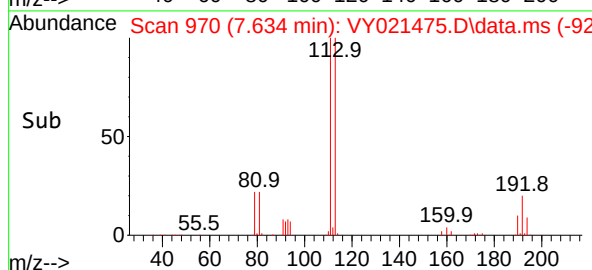
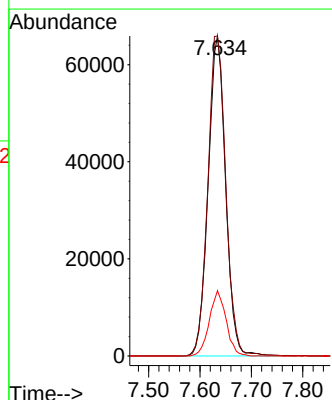
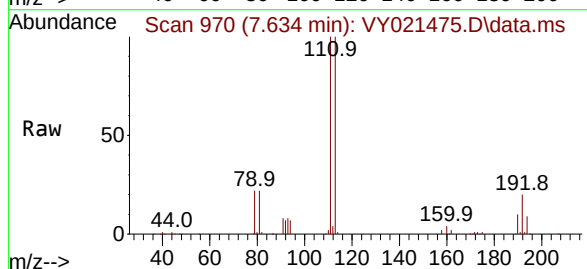
Tgt Ion:113 Resp: 155103

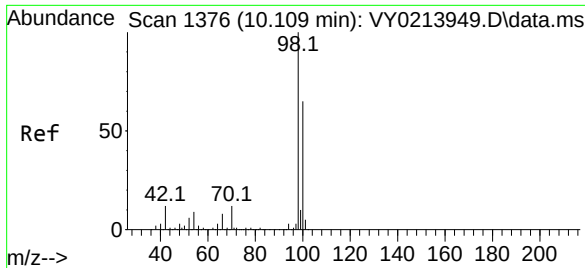
Ion Ratio Lower Upper

113 100

111 103.3 82.0 123.0

192 19.6 15.9 23.9





#50

Toluene-d8

Concen: 48.466 ug/l

RT: 10.109 min Scan# 1376

Delta R.T. 0.000 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

Instrument :

MSVOA_Y

ClientSampleId :

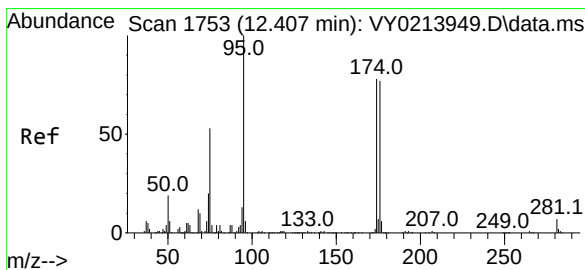
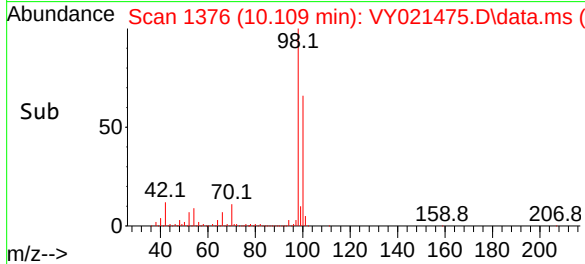
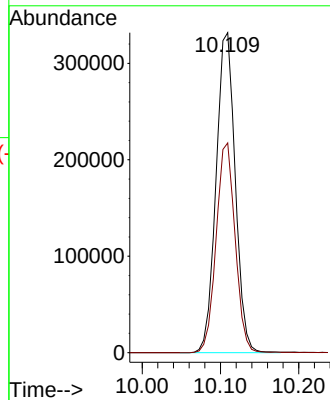
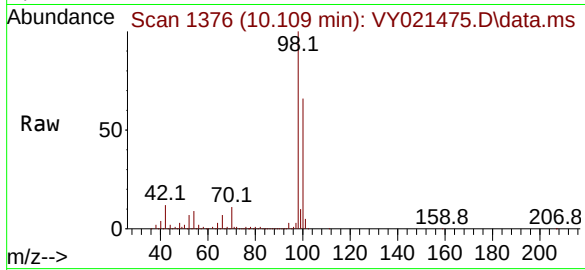
VY0311SBL01

Tgt Ion: 98 Resp: 564540

Ion Ratio Lower Upper

98 100

100 65.0 52.1 78.1



#62

4-Bromofluorobenzene

Concen: 42.515 ug/l

RT: 12.408 min Scan# 1753

Delta R.T. 0.000 min

Lab File: VY021475.D

Acq: 11 Mar 2025 10:12

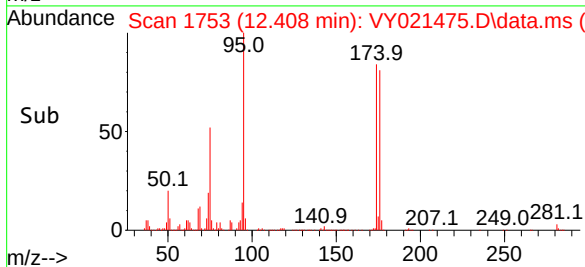
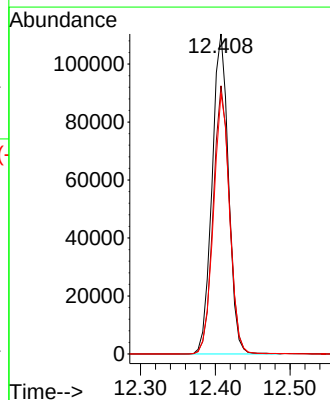
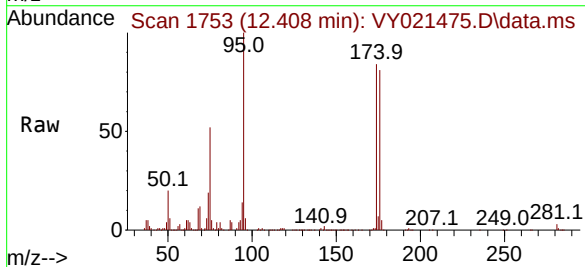
Tgt Ion: 95 Resp: 168454

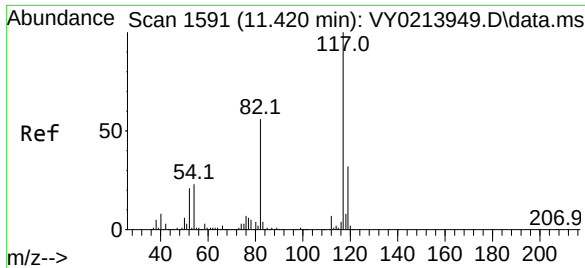
Ion Ratio Lower Upper

95 100

174 83.1 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: VY021475.D

Acq: 11 Mar 2025 10:12

Instrument :

MSVOA_Y

ClientSampleId :

VY0311SBL01

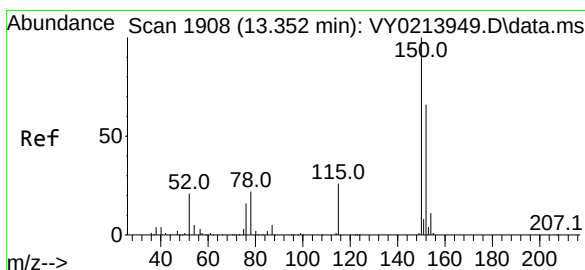
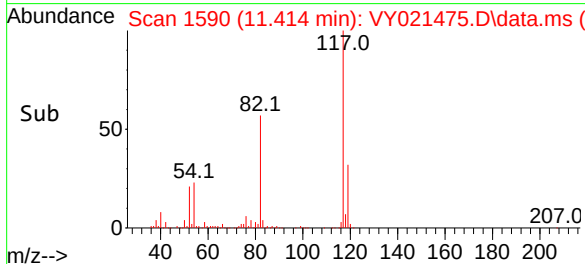
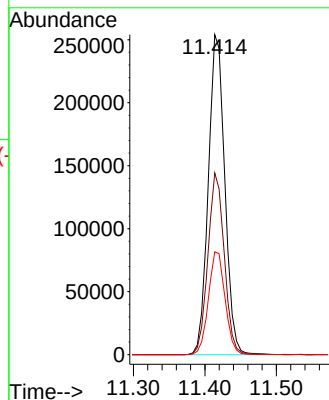
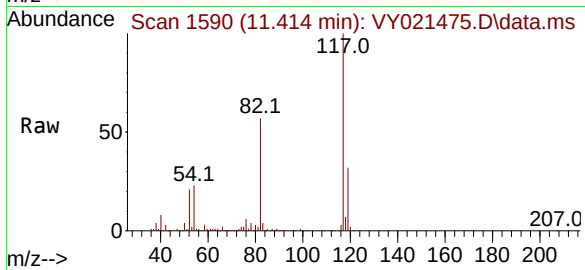
Tgt Ion:117 Resp: 406786

Ion Ratio Lower Upper

117 100

82 56.8 44.6 67.0

119 32.1 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: VY021475.D

Acq: 11 Mar 2025 10:12

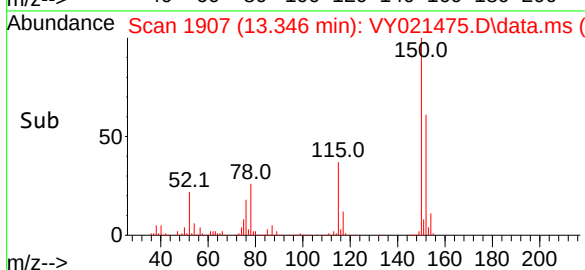
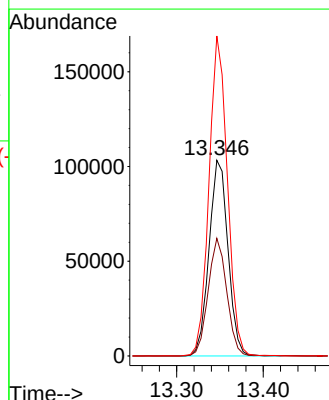
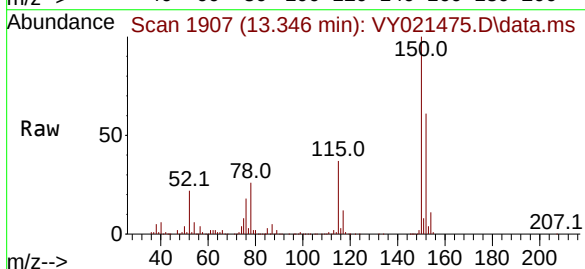
Tgt Ion:152 Resp: 157191

Ion Ratio Lower Upper

152 100

115 59.1 29.0 87.0

150 158.4 0.0 347.2



Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

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: VY021475.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	48	59	62	rBV5	5881	15838	1.04%	0.207%
2	7.634	959	970	976	rBV	221263	533509	35.06%	6.959%
3	7.707	976	982	996	rVB	349729	797482	52.41%	10.402%
4	8.061	1027	1040	1051	rBV	190394	436972	28.72%	5.700%
5	8.616	1122	1131	1146	rBV	554486	1117631	73.45%	14.578%
6	10.109	1366	1376	1384	rBV	886650	1521614	100.00%	19.848%
7	10.512	1434	1442	1455	rVB2	27465	51790	3.40%	0.676%
8	11.414	1579	1590	1604	rBV	800721	1294088	85.05%	16.880%
9	12.408	1745	1753	1764	rBV	581940	909363	59.76%	11.862%
10	13.346	1900	1907	1920	rVB	662019	988037	64.93%	12.888%

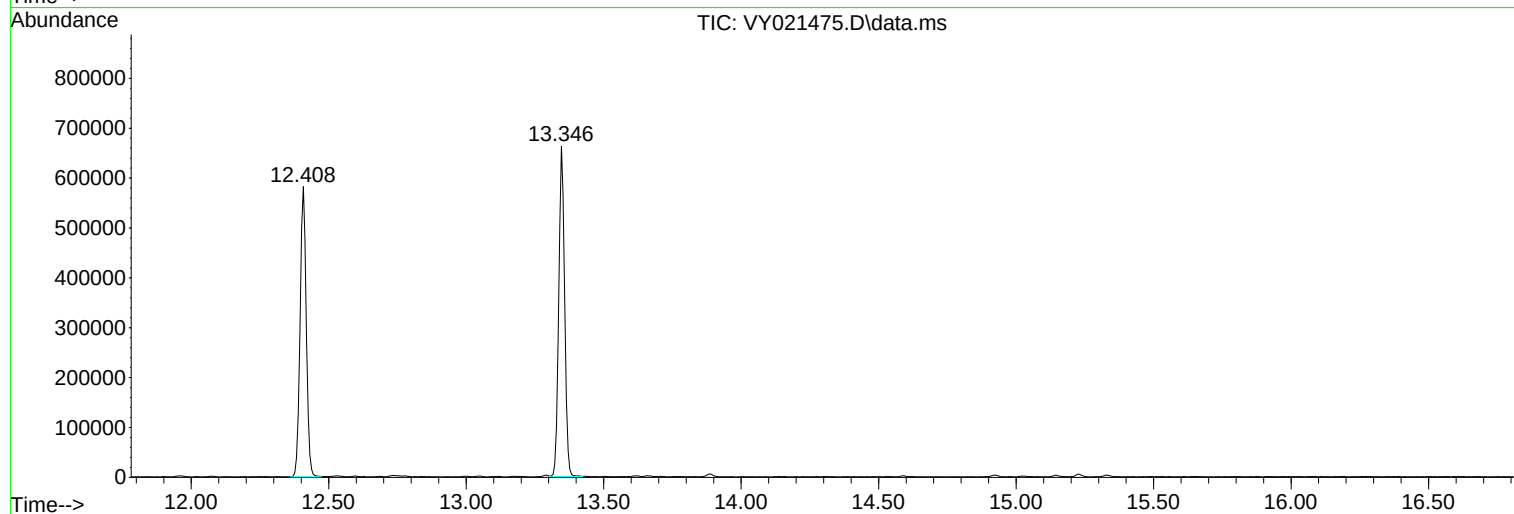
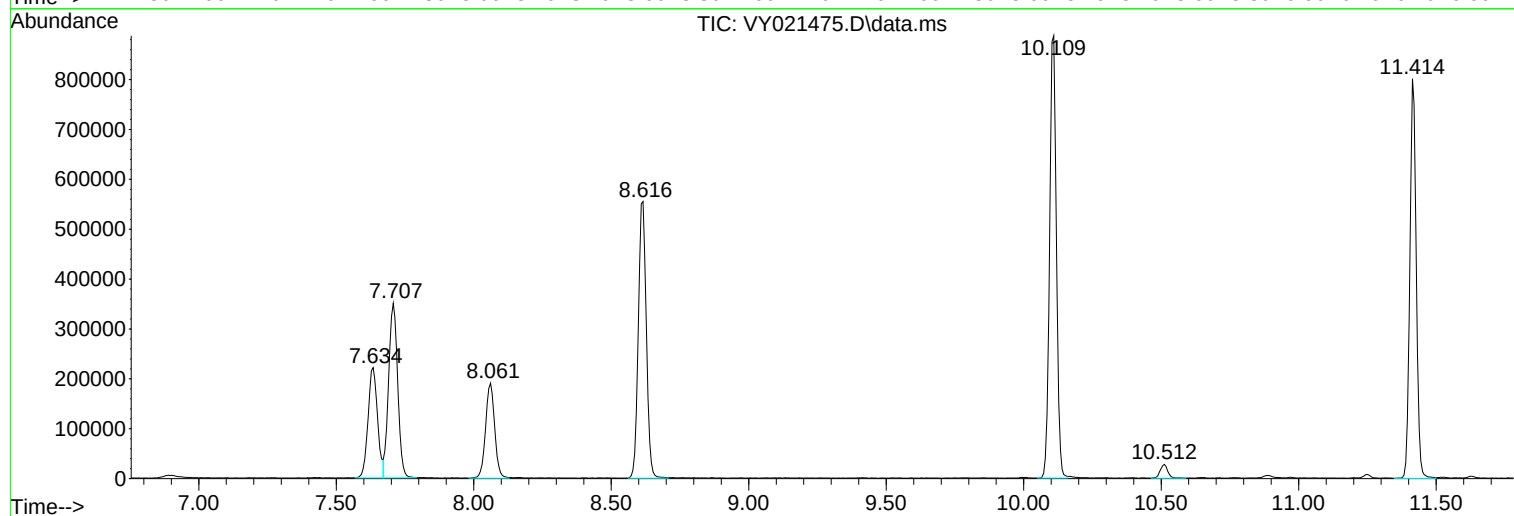
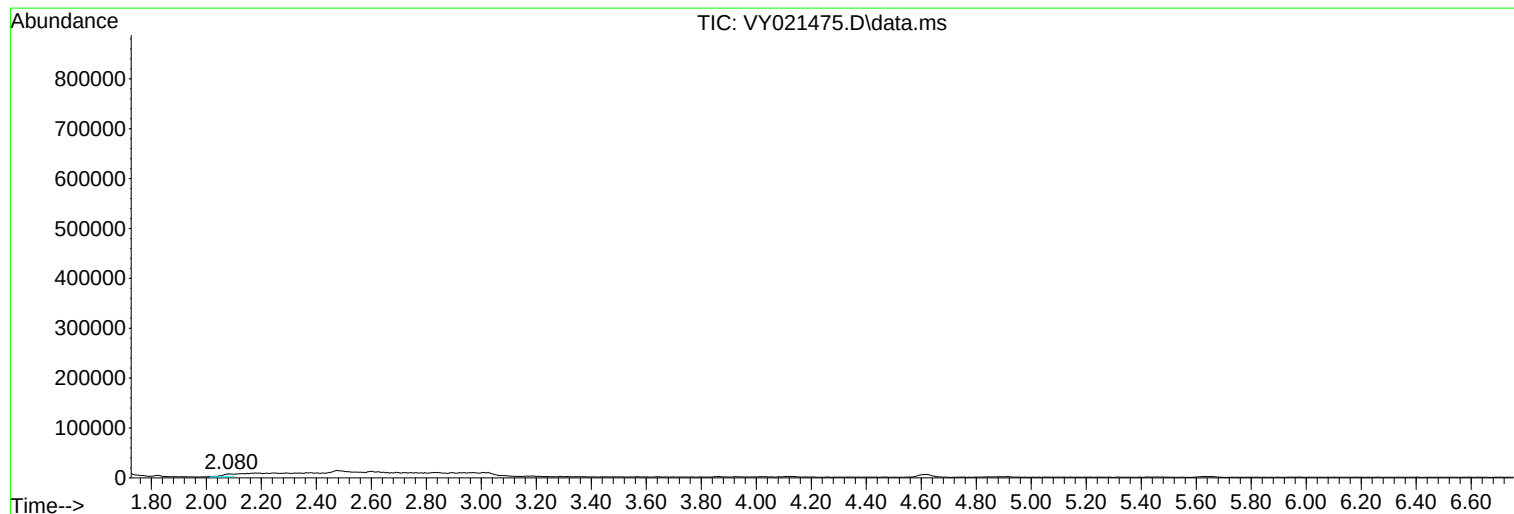
Sum of corrected areas: 7666324

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

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\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

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\VY031125\
Data File : VY021475.D
Acq On : 11 Mar 2025 10:12
Operator : SY/MD
Sample : VY0311SBL01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBL01

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:	Fisal	Date Received:	
Client Sample ID:	VY0306SBS01	SDG No.:	Q1463
Lab Sample ID:	VY0306SBS01	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
VY021428.D	1		03/06/25 12:33	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	20.3		1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	20.0		0.77	5.00	ug/Kg
74-83-9	Bromomethane	21.8		1.00	5.00	ug/Kg
75-00-3	Chloroethane	21.0		1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	95.8		15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	19.1		0.78	5.00	ug/Kg
67-64-1	Acetone	79.7		6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	18.7		1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	20.0		0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	19.3		3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.1		0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.2		0.63	5.00	ug/Kg
78-93-3	2-Butanone	93.5		5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	18.5		0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.7		0.61	5.00	ug/Kg
67-66-3	Chloroform	20.1		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.2		0.78	5.00	ug/Kg
71-43-2	Benzene	19.4		0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.2		0.61	5.00	ug/Kg
79-01-6	Trichloroethene	18.8		0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.2		0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.8		0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		4.40	25.0	ug/Kg
108-88-3	Toluene	19.2		0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.6		0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.2		0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	20.0		0.84	5.00	ug/Kg
591-78-6	2-Hexanone	98.1		4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	20.0		0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	18.3		0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0306SBS01	SDG No.:	Q1463
Lab Sample ID:	VY0306SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021428.D	1		03/06/25 12:33	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	18.6		0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	17.8		0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	36.6		1.40	10.0	ug/Kg
95-47-6	o-Xylene	18.2		0.70	5.00	ug/Kg
100-42-5	Styrene	18.6		0.60	5.00	ug/Kg
75-25-2	Bromoform	18.8		0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	18.8		1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.2		70 (63) - 130 (155)	106%	SPK: 50
1868-53-7	Dibromofluoromethane	50.1		70 (70) - 130 (134)	100%	SPK: 50
2037-26-5	Toluene-d8	49.5		70 (74) - 130 (123)	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.8		70 (38) - 130 (136)	102%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	200000	7.707			
540-36-3	1,4-Difluorobenzene	318000	8.616			
3114-55-4	Chlorobenzene-d5	293000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	152000	13.346			

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\VY030625\
 Data File : VY021428.D
 Acq On : 06 Mar 2025 12:33
 Operator : SY/MD
 Sample : VY0306SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
 Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:03 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	200172	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	318431	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	292608	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	152176	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	112611	53.226	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 106.460%			
35) Dibromofluoromethane	7.634	113	104961	50.146	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 100.300%			
50) Toluene-d8	10.109	98	392444	49.519	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 99.040%			
62) 4-Bromofluorobenzene	12.408	95	136984	50.814	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 101.620%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.867	85	33007	17.969	ug/l	94
3) Chloromethane	2.068	50	52532	20.284	ug/l	98
4) Vinyl Chloride	2.202	62	56741	20.049	ug/l	96
5) Bromomethane	2.592	94	44636	21.822	ug/l	98
6) Chloroethane	2.733	64	39312	21.019	ug/l	98
7) Trichlorofluoromethane	3.056	101	79025	20.005	ug/l	96
8) Diethyl Ether	3.452	74	22647	20.687	ug/l	92
9) 1,1,2-Trichlorotrifluo...	3.818	101	44869	19.895	ug/l	96
10) Methyl Iodide	4.007	142	41886	18.270	ug/l	99
11) Tert butyl alcohol	4.866	59	15090	95.800	ug/l	100
12) 1,1-Dichloroethene	3.781	96	39325	19.125	ug/l	93
13) Acrolein	3.647	56	17379	161.496	ug/l	92
14) Allyl chloride	4.385	41	63708	19.172	ug/l	100
15) Acrylonitrile	5.061	53	47217	101.322	ug/l	99
16) Acetone	3.879	43	36769	79.681	ug/l	90
17) Carbon Disulfide	4.104	76	120251	18.661	ug/l	99
18) Methyl Acetate	4.385	43	21063	20.572	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	104134	19.981	ug/l	95
20) Methylene Chloride	4.616	84	46665	19.265	ug/l	99
21) trans-1,2-Dichloroethene	5.110	96	44042	19.126	ug/l	94
22) Diisopropyl ether	6.019	45	146814	20.501	ug/l	99
23) Vinyl Acetate	5.964	43	414075	101.317	ug/l	99
24) 1,1-Dichloroethane	5.915	63	85556	20.243	ug/l	99
25) 2-Butanone	6.896	43	59669	93.477	ug/l	100
26) 2,2-Dichloropropane	6.884	77	69379	17.840	ug/l	99
27) cis-1,2-Dichloroethene	6.890	96	51434	19.661	ug/l	98
28) Bromochloromethane	7.244	49	36673	20.697	ug/l	98
29) Tetrahydrofuran	7.268	42	40269	102.187	ug/l	99
30) Chloroform	7.421	83	88331	20.126	ug/l	100
31) Cyclohexane	7.701	56	73140	18.459	ug/l	96
32) 1,1,1-Trichloroethane	7.616	97	77342	19.246	ug/l	99
36) 1,1-Dichloropropene	7.835	75	61060	18.637	ug/l	99
37) Ethyl Acetate	6.982	43	28431	19.633	ug/l	99
38) Carbon Tetrachloride	7.817	117	69637	18.481	ug/l	96
39) Methylcyclohexane	9.109	83	71256	17.731	ug/l	95
40) Benzene	8.079	78	186841	19.359	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021428.D
 Acq On : 06 Mar 2025 12:33
 Operator : SY/MD
 Sample : VY0306SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
 Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:03 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	16604m	21.058	ug/l	
42) 1,2-Dichloroethane	8.158	62	54457	20.169	ug/l	99
43) Isopropyl Acetate	8.195	43	55820	19.857	ug/l #	88
44) Trichloroethene	8.866	130	45767	18.765	ug/l	94
45) 1,2-Dichloropropane	9.140	63	46505	20.246	ug/l	96
46) Dibromomethane	9.231	93	26168	20.474	ug/l	97
47) Bromodichloromethane	9.420	83	67190	19.796	ug/l	98
48) Methyl methacrylate	9.219	41	24974	19.347	ug/l	99
49) 1,4-Dioxane	9.225	88	5504	438.744	ug/l #	91
51) 4-Methyl-2-Pentanone	10.000	43	146138	100.753	ug/l	98
52) Toluene	10.170	92	117027	19.233	ug/l	99
53) t-1,3-Dichloropropene	10.396	75	58703	19.631	ug/l	100
54) cis-1,3-Dichloropropene	9.859	75	68234	19.219	ug/l	97
55) 1,1,2-Trichloroethane	10.573	97	33464	20.016	ug/l	98
56) Ethyl methacrylate	10.438	69	41900	19.651	ug/l	97
57) 1,3-Dichloropropane	10.719	76	58893	20.324	ug/l	100
58) 2-Chloroethyl Vinyl ether	9.713	63	107422	109.136	ug/l	98
59) 2-Hexanone	10.762	43	94061	98.075	ug/l	98
60) Dibromochloromethane	10.914	129	45747	19.959	ug/l	98
61) 1,2-Dibromoethane	11.018	107	31502	19.965	ug/l	100
64) Tetrachloroethene	10.646	164	43645	18.343	ug/l	99
65) Chlorobenzene	11.444	112	128656	18.619	ug/l	97
66) 1,1,1,2-Tetrachloroethane	11.518	131	45244	18.520	ug/l	99
67) Ethyl Benzene	11.518	91	216170	17.824	ug/l	99
68) m/p-Xylenes	11.633	106	168512	36.598	ug/l	100
69) o-Xylene	11.957	106	77025	18.151	ug/l	100
70) Styrene	11.969	104	130672	18.561	ug/l	99
71) Bromoform	12.133	173	25622	18.762	ug/l #	97
73) Isopropylbenzene	12.255	105	205378	17.133	ug/l	100
74) N-amyl acetate	12.072	43	47083	18.086	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	39820	18.824	ug/l	100
76) 1,2,3-Trichloropropane	12.560	75	28901m	18.847	ug/l	
77) Bromobenzene	12.536	156	49192	17.541	ug/l	99
78) n-propylbenzene	12.597	91	254198	17.461	ug/l	100
79) 2-Chlorotoluene	12.682	91	146854	17.642	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	173931	17.854	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	12183	18.061	ug/l	96
82) 4-Chlorotoluene	12.780	91	154146	17.882	ug/l	100
83) tert-Butylbenzene	12.999	119	149456	17.198	ug/l	100
84) 1,2,4-Trimethylbenzene	13.048	105	173214	17.908	ug/l	98
85) sec-Butylbenzene	13.176	105	224638	17.373	ug/l	100
86) p-Isopropyltoluene	13.292	119	186440	17.502	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	98755	17.691	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	98346	18.014	ug/l	99
89) n-Butylbenzene	13.621	91	171737	17.459	ug/l	99
90) Hexachloroethane	13.883	117	39531	17.395	ug/l	100
91) 1,2-Dichlorobenzene	13.664	146	87199	18.225	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.279	75	6144	19.390	ug/l	92
93) 1,2,4-Trichlorobenzene	14.925	180	45266	17.321	ug/l	98
94) Hexachlorobutadiene	15.029	225	29954	18.285	ug/l	99
95) Naphthalene	15.145	128	71743	18.264	ug/l	99
96) 1,2,3-Trichlorobenzene	15.334	180	38134	17.350	ug/l	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021428.D
Acq On : 06 Mar 2025 12:33
Operator : SY/MD
Sample : VY0306SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBS01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:03 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)

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

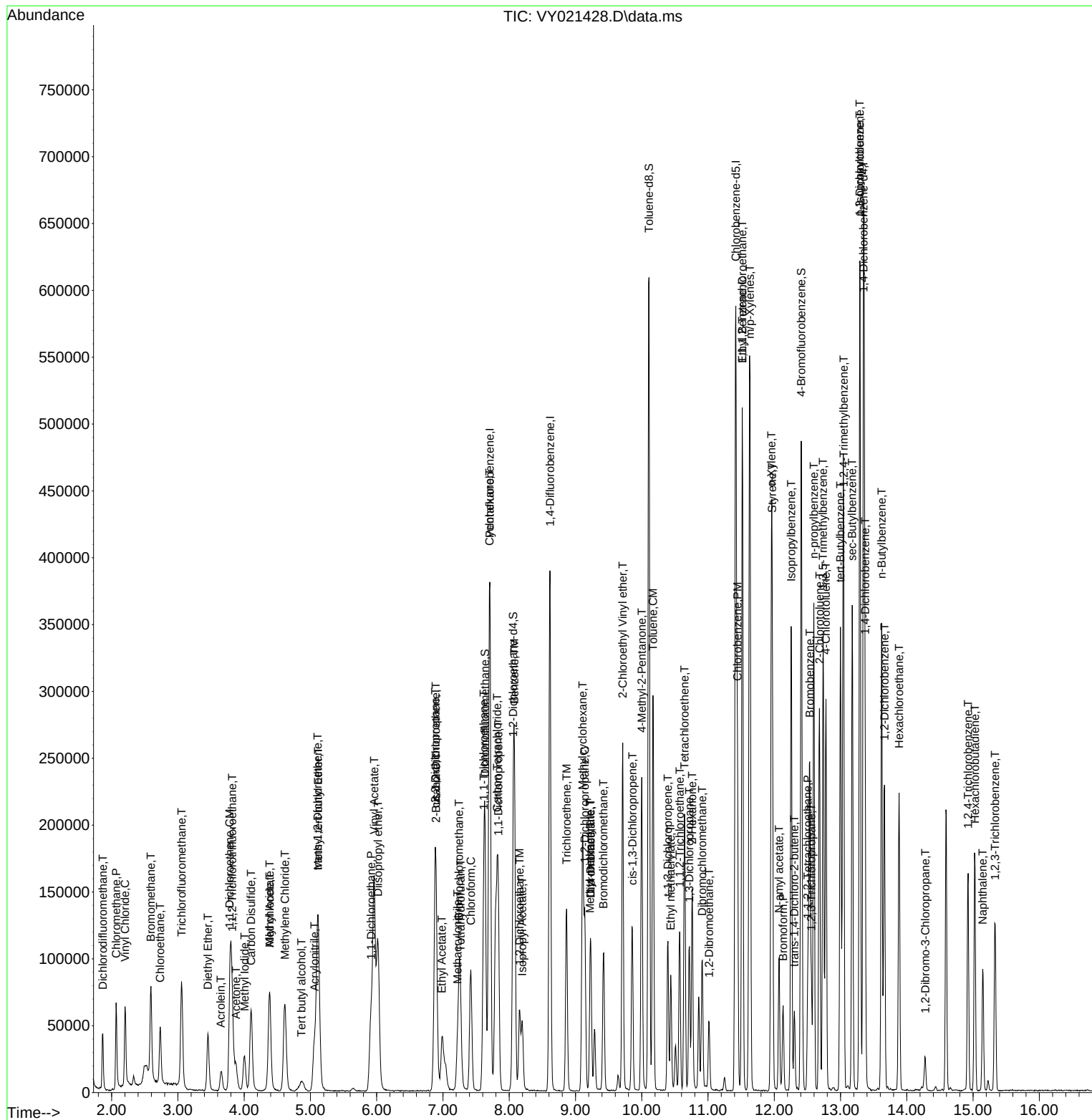
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021428.D
 Acq On : 06 Mar 2025 12:33
 Operator : SY/MD
 Sample : VY0306SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/soil
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBS01

Manual Integrations APPROVED

Reviewed By : Mahesh Dadoda 03/07/2025
 Supervised By : Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:03 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:	Fisal		Date Received:	
Client Sample ID:	VY0307SBS01		SDG No.:	Q1463
Lab Sample ID:	VY0307SBS01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021453.D	1		03/07/25 12:03	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	20.2		1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	20.7		0.77	5.00	ug/Kg
74-83-9	Bromomethane	20.6		1.00	5.00	ug/Kg
75-00-3	Chloroethane	21.5		1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	110		15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	19.4		0.78	5.00	ug/Kg
67-64-1	Acetone	120		6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	18.9		1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.4		0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	20.6		3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.6		0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	19.7		0.63	5.00	ug/Kg
78-93-3	2-Butanone	110		5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.4		0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.0		0.61	5.00	ug/Kg
67-66-3	Chloroform	19.9		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.7		0.78	5.00	ug/Kg
71-43-2	Benzene	19.5		0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.8		0.61	5.00	ug/Kg
79-01-6	Trichloroethene	19.1		0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.0		0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	19.6		0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		4.40	25.0	ug/Kg
108-88-3	Toluene	19.6		0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.5		0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.2		0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	19.7		0.84	5.00	ug/Kg
591-78-6	2-Hexanone	110		4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.4		0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.6		0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0307SBS01	SDG No.:	Q1463
Lab Sample ID:	VY0307SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021453.D	1		03/07/25 12:03	VY030725

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	19.0		0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.1		0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	38.9		1.40	10.0	ug/Kg
95-47-6	o-Xylene	19.1		0.70	5.00	ug/Kg
100-42-5	Styrene	19.3		0.60	5.00	ug/Kg
75-25-2	Bromoform	20.1		0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.6		1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	53.1		70 (63) - 130 (155)	106%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		70 (70) - 130 (134)	104%	SPK: 50
2037-26-5	Toluene-d8	51.9		70 (74) - 130 (123)	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.9		70 (38) - 130 (136)	102%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	220000	7.707			
540-36-3	1,4-Difluorobenzene	344000	8.616			
3114-55-4	Chlorobenzene-d5	302000	11.42			
3855-82-1	1,4-Dichlorobenzene-d4	153000	13.346			

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\VY030725\
 Data File : VY021453.D
 Acq On : 07 Mar 2025 12:03
 Operator : SY/MD
 Sample : VY0307SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0307SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 22:00:05 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	219868	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	343563	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.420	117	301562	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	152803	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	123341	53.076	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 106.160%			
35) Dibromofluoromethane	7.634	113	117478	52.021	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 104.040%			
50) Toluene-d8	10.109	98	444032	51.930	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 103.860%			
62) 4-Bromofluorobenzene	12.408	95	148084	50.913	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 101.820%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.867	85	39418	19.537	ug/l	94
3) Chloromethane	2.068	50	57411	20.182	ug/l	98
4) Vinyl Chloride	2.202	62	64302	20.685	ug/l	96
5) Bromomethane	2.592	94	46339	20.625	ug/l	96
6) Chloroethane	2.732	64	44175	21.504	ug/l	97
7) Trichlorofluoromethane	3.056	101	94934	21.880	ug/l	95
8) Diethyl Ether	3.452	74	23849	19.834	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.818	101	49349	19.921	ug/l	99
10) Methyl Iodide	4.007	142	48739	19.355	ug/l	100
11) Tert butyl alcohol	4.872	59	18258	108.044	ug/l	99
12) 1,1-Dichloroethene	3.787	96	43870	19.424	ug/l	97
13) Acrolein	3.647	56	16580	140.270	ug/l	95
14) Allyl chloride	4.385	41	70258	19.249	ug/l	99
15) Acrylonitrile	5.061	53	50908	99.456	ug/l	98
16) Acetone	3.866	43	58595	115.604	ug/l	96
17) Carbon Disulfide	4.104	76	133704	18.890	ug/l	99
18) Methyl Acetate	4.385	43	23025	20.473	ug/l	100
19) Methyl tert-butyl Ether	5.116	73	110998	19.390	ug/l	99
20) Methylene Chloride	4.616	84	54760	20.582	ug/l	95
21) trans-1,2-Dichloroethene	5.116	96	49678	19.641	ug/l	95
22) Diisopropyl ether	6.018	45	157929	20.078	ug/l	99
23) Vinyl Acetate	5.957	43	450639	100.386	ug/l	99
24) 1,1-Dichloroethane	5.915	63	91407	19.690	ug/l	99
25) 2-Butanone	6.896	43	75161	107.199	ug/l	99
26) 2,2-Dichloropropane	6.884	77	82994	19.429	ug/l	98
27) cis-1,2-Dichloroethene	6.896	96	54488	18.963	ug/l	98
28) Bromochloromethane	7.244	49	37442	19.238	ug/l	99
29) Tetrahydrofuran	7.262	42	44158	102.018	ug/l	97
30) Chloroform	7.421	83	95944	19.903	ug/l	99
31) Cyclohexane	7.701	56	82128	18.870	ug/l	97
32) 1,1,1-Trichloroethane	7.616	97	86978	19.705	ug/l	99
36) 1,1-Dichloropropene	7.835	75	68637	19.417	ug/l	98
37) Ethyl Acetate	6.982	43	31592	20.220	ug/l	97
38) Carbon Tetrachloride	7.817	117	79070	19.449	ug/l	96
39) Methylcyclohexane	9.109	83	81593	18.818	ug/l	99
40) Benzene	8.079	78	202793	19.475	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021453.D
 Acq On : 07 Mar 2025 12:03
 Operator : SY/MD
 Sample : VY0307SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0307SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 22:00:05 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	17773m	20.892	ug/l	
42) 1,2-Dichloroethane	8.158	62	57755	19.826	ug/l	100
43) Isopropyl Acetate	8.195	43	59917	19.755	ug/l #	87
44) Trichloroethene	8.865	130	50339	19.130	ug/l	99
45) 1,2-Dichloropropane	9.140	63	49619	20.021	ug/l	97
46) Dibromomethane	9.231	93	27131	19.675	ug/l	99
47) Bromodichloromethane	9.426	83	71823	19.613	ug/l	99
48) Methyl methacrylate	9.219	41	27630	19.839	ug/l	98
49) 1,4-Dioxane	9.237	88	5803	428.740	ug/l	95
51) 4-Methyl-2-Pentanone	9.999	43	157126	100.404	ug/l	98
52) Toluene	10.170	92	128919	19.637	ug/l	98
53) t-1,3-Dichloropropene	10.396	75	62838	19.476	ug/l	97
54) cis-1,3-Dichloropropene	9.859	75	73636	19.223	ug/l	96
55) 1,1,2-Trichloroethane	10.573	97	35572	19.720	ug/l	96
56) Ethyl methacrylate	10.438	69	44620	19.396	ug/l	100
57) 1,3-Dichloropropane	10.719	76	60936	19.491	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.713	63	107568	101.290	ug/l	99
59) 2-Hexanone	10.762	43	109553	105.872	ug/l	98
60) Dibromochloromethane	10.914	129	47870	19.358	ug/l	99
61) 1,2-Dibromoethane	11.018	107	33437	19.641	ug/l	97
64) Tetrachloroethene	10.646	164	48058	19.598	ug/l	98
65) Chlorobenzene	11.444	112	135015	18.959	ug/l	100
66) 1,1,1,2-Tetrachloroethane	11.517	131	48814	19.388	ug/l	100
67) Ethyl Benzene	11.517	91	238496	19.081	ug/l	99
68) m/p-Xylenes	11.627	106	184669	38.916	ug/l	99
69) o-Xylene	11.956	106	83621	19.120	ug/l	99
70) Styrene	11.969	104	140205	19.324	ug/l	99
71) Bromoform	12.133	173	28337	20.134	ug/l #	98
73) Isopropylbenzene	12.255	105	227722	18.919	ug/l	100
74) N-amyl acetate	12.072	43	49116	18.789	ug/l	99
75) 1,1,2,2-Tetrachloroethane	12.505	83	41732	19.647	ug/l	100
76) 1,2,3-Trichloropropane	12.554	75	30660m	19.912	ug/l	
77) Bromobenzene	12.536	156	51851	18.413	ug/l	98
78) n-propylbenzene	12.597	91	280785	19.208	ug/l	100
79) 2-Chlorotoluene	12.682	91	159129	19.038	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	187183	19.136	ug/l	100
81) trans-1,4-Dichloro-2-b...	12.304	75	13174	19.450	ug/l	95
82) 4-Chlorotoluene	12.779	91	166239	19.206	ug/l	100
83) tert-Butylbenzene	12.999	119	163102	18.691	ug/l	98
84) 1,2,4-Trimethylbenzene	13.048	105	185591	19.109	ug/l	100
85) sec-Butylbenzene	13.176	105	249181	19.192	ug/l	100
86) p-Isopropyltoluene	13.292	119	202582	18.939	ug/l	100
87) 1,3-Dichlorobenzene	13.292	146	105372	18.798	ug/l	99
88) 1,4-Dichlorobenzene	13.371	146	104875	19.131	ug/l	98
89) n-Butylbenzene	13.621	91	186240	18.856	ug/l	99
90) Hexachloroethane	13.883	117	43553	19.087	ug/l	98
91) 1,2-Dichlorobenzene	13.663	146	91257	18.995	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.273	75	6311	19.835	ug/l	90
93) 1,2,4-Trichlorobenzene	14.925	180	47173	17.977	ug/l	97
94) Hexachlorobutadiene	15.029	225	31456	19.123	ug/l	99
95) Naphthalene	15.151	128	74806	18.887	ug/l	100
96) 1,2,3-Trichlorobenzene	15.334	180	39961	18.107	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
Data File : VY021453.D
Acq On : 07 Mar 2025 12:03
Operator : SY/MD
Sample : VY0307SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0307SBS01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 22:00:05 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)

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

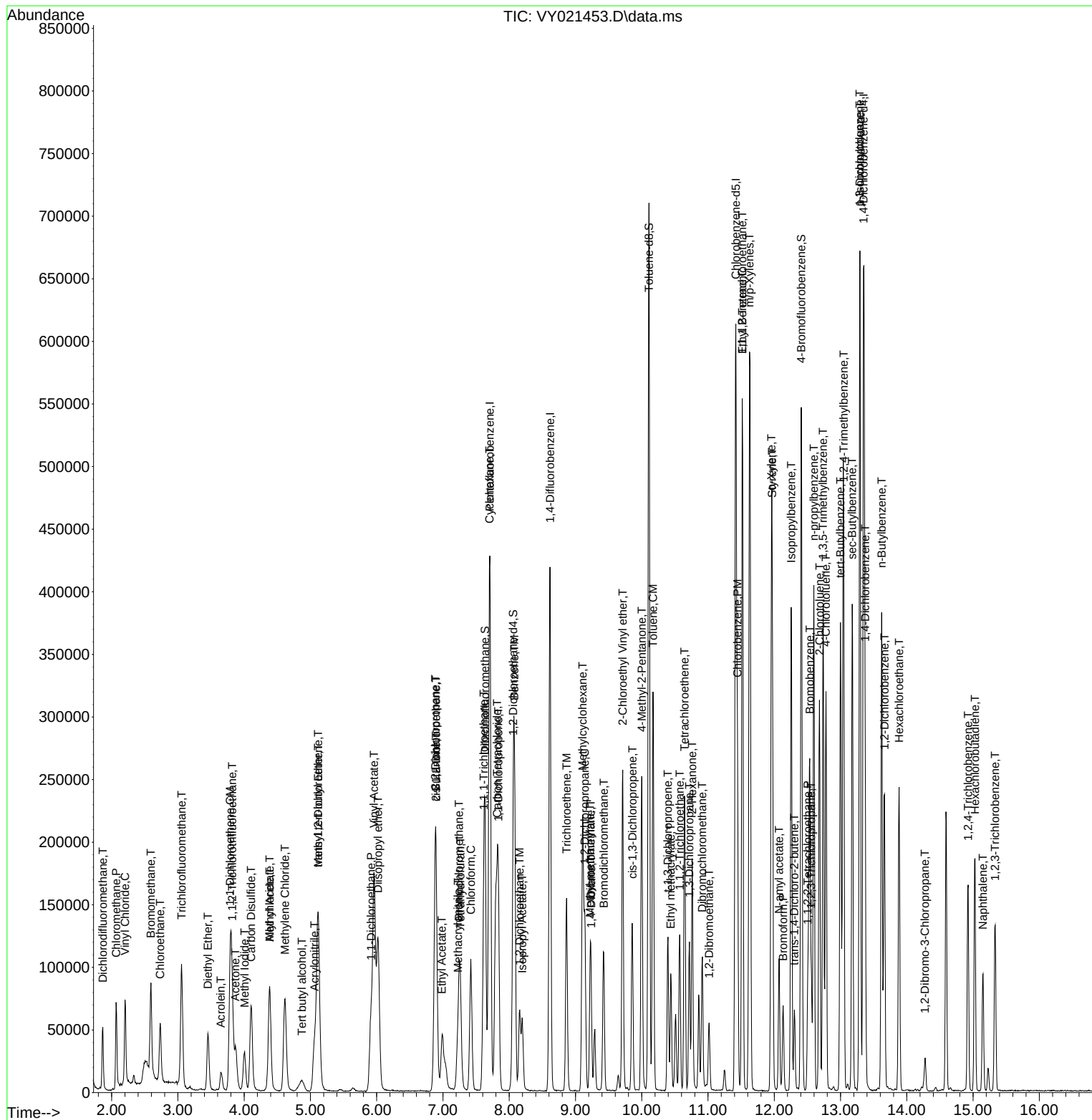
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030725\
 Data File : VY021453.D
 Acq On : 07 Mar 2025 12:03
 Operator : SY/MD
 Sample : VY0307SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0307SBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/11/2025
 Supervised By :Semsettin Yesilyurt 03/11/2025

Quant Time: Mar 07 22:00:05 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:	Fisal	Date Received:	
Client Sample ID:	VY0311SBS01	SDG No.:	Q1463
Lab Sample ID:	VY0311SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021476.D	1		03/11/25 11:03	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	19.6		1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	19.8		0.77	5.00	ug/Kg
74-83-9	Bromomethane	19.4		1.00	5.00	ug/Kg
75-00-3	Chloroethane	21.4		1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	79.8		15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	18.1		0.78	5.00	ug/Kg
67-64-1	Acetone	120		6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	17.6		1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	17.2		0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	18.1		3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	17.9		0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	18.6		0.63	5.00	ug/Kg
78-93-3	2-Butanone	99.2		5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	18.0		0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	18.2		0.61	5.00	ug/Kg
67-66-3	Chloroform	19.1		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	18.5		0.78	5.00	ug/Kg
71-43-2	Benzene	18.3		0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	17.9		0.61	5.00	ug/Kg
79-01-6	Trichloroethene	18.6		0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	18.2		0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	18.6		0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	87.8		4.40	25.0	ug/Kg
108-88-3	Toluene	18.2		0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	18.1		0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	18.0		0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	18.4		0.84	5.00	ug/Kg
591-78-6	2-Hexanone	97.6		4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	18.0		0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.5		0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0311SBS01	SDG No.:	Q1463
Lab Sample ID:	VY0311SBS01	Matrix:	SOIL
Analytical Method:	SW8260	% Solid:	100
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group2
GC Column:	RXI-624 ID : 0.25	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021476.D	1		03/11/25 11:03	vy031125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	17.9		0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	17.5		0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	36.0		1.40	10.0	ug/Kg
95-47-6	o-Xylene	17.5		0.70	5.00	ug/Kg
100-42-5	Styrene	17.8		0.60	5.00	ug/Kg
75-25-2	Bromoform	17.8		0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	16.6		1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	52.4		70 (63) - 130 (155)	105%	SPK: 50
1868-53-7	Dibromofluoromethane	52.9		70 (70) - 130 (134)	106%	SPK: 50
2037-26-5	Toluene-d8	52.2		70 (74) - 130 (123)	104%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.5		70 (38) - 130 (136)	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	226000	7.707			
540-36-3	1,4-Difluorobenzene	351000	8.609			
3114-55-4	Chlorobenzene-d5	313000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	162000	13.346			

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\VY031125\
 Data File : VY021476.D
 Acq On : 11 Mar 2025 11:03
 Operator : SY/MD
 Sample : VY0311SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBS01

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 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	225793	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.609	114	350967	50.000	ug/l	-0.01
63) Chlorobenzene-d5	11.414	117	312829	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.346	152	162394	50.000	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.055	65	125150	52.441	ug/l	-0.01
Spiked Amount	50.000	Range	50 - 163	Recovery	= 104.880%	
35) Dibromofluoromethane	7.634	113	122087	52.921	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	= 105.840%	
50) Toluene-d8	10.103	98	456082	52.214	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 104.420%	
62) 4-Bromofluorobenzene	12.407	95	155886	52.465	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 104.920%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.861	85	36522	17.626	ug/l	98
3) Chloromethane	2.068	50	57141	19.560	ug/l	98
4) Vinyl Chloride	2.202	62	63319	19.835	ug/l	96
5) Bromomethane	2.586	94	44828	19.429	ug/l	96
6) Chloroethane	2.732	64	45130	21.392	ug/l	98
7) Trichlorofluoromethane	3.049	101	92591	20.780	ug/l	98
8) Diethyl Ether	3.452	74	21657	17.538	ug/l	99
9) 1,1,2-Trichlorotrifluo...	3.811	101	44702	17.571	ug/l	97
10) Methyl Iodide	4.000	142	49215	19.031	ug/l	99
11) Tert butyl alcohol	4.848	59	14756	79.754	ug/l #	72
12) 1,1-Dichloroethene	3.781	96	41993	18.105	ug/l	93
13) Acrolein	3.653	56	14894	122.699	ug/l	92
14) Allyl chloride	4.378	41	67368	17.973	ug/l	99
15) Acrylonitrile	5.055	53	47717	90.776	ug/l	98
16) Acetone	3.860	43	60913	117.024	ug/l	93
17) Carbon Disulfide	4.098	76	128022	17.612	ug/l	100
18) Methyl Acetate	4.385	43	21593	18.696	ug/l	97
19) Methyl tert-butyl Ether	5.110	73	101276	17.228	ug/l	97
20) Methylene Chloride	4.610	84	49393	18.077	ug/l	98
21) trans-1,2-Dichloroethene	5.104	96	46396	17.862	ug/l	98
22) Diisopropyl ether	6.018	45	149058	18.453	ug/l	94
23) Vinyl Acetate	5.957	43	402758	87.365	ug/l	99
24) 1,1-Dichloroethane	5.909	63	88873	18.641	ug/l	99
25) 2-Butanone	6.884	43	71454	99.237	ug/l	95
26) 2,2-Dichloropropane	6.878	77	79429	18.107	ug/l	98
27) cis-1,2-Dichloroethene	6.884	96	53763	18.219	ug/l	99
28) Bromochloromethane	7.238	49	39070	19.547	ug/l	99
29) Tetrahydrofuran	7.262	42	38712	87.089	ug/l	99
30) Chloroform	7.414	83	94319	19.052	ug/l	92
31) Cyclohexane	7.695	56	74535	16.676	ug/l	93
32) 1,1,1-Trichloroethane	7.610	97	83652	18.454	ug/l	99
36) 1,1-Dichloropropene	7.829	75	64167	17.769	ug/l	98
37) Ethyl Acetate	6.975	43	28552	17.889	ug/l	97
38) Carbon Tetrachloride	7.811	117	74788	18.008	ug/l	99
39) Methylcyclohexane	9.109	83	74823	16.892	ug/l	98
40) Benzene	8.073	78	194135	18.250	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
 Data File : VY021476.D
 Acq On : 11 Mar 2025 11:03
 Operator : SY/MD
 Sample : VY0311SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0311SBS01

Manual Integrations
 APPROVED

Reviewed By :Romaben Patel 03/12/2025
 Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 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	15407m	17.728	ug/l	
42) 1,2-Dichloroethane	8.152	62	53330	17.921	ug/l	98
43) Isopropyl Acetate	8.195	43	53006	17.108	ug/l #	89
44) Trichloroethene	8.865	130	49991	18.597	ug/l	100
45) 1,2-Dichloropropane	9.140	63	46136	18.223	ug/l	97
46) Dibromomethane	9.225	93	26271	18.649	ug/l	100
47) Bromodichloromethane	9.420	83	69491	18.575	ug/l	100
48) Methyl methacrylate	9.219	41	24238	17.036	ug/l	98
49) 1,4-Dioxane	9.219	88	5395	390.187	ug/l #	95
51) 4-Methyl-2-Pentanone	9.999	43	140438	87.848	ug/l	98
52) Toluene	10.170	92	122381	18.248	ug/l	99
53) t-1,3-Dichloropropene	10.390	75	59746	18.127	ug/l	97
54) cis-1,3-Dichloropropene	9.853	75	70322	17.971	ug/l	97
55) 1,1,2-Trichloroethane	10.572	97	33841	18.365	ug/l	96
56) Ethyl methacrylate	10.438	69	40054	17.044	ug/l	99
57) 1,3-Dichloropropane	10.719	76	57273	17.933	ug/l	99
58) 2-Chloroethyl Vinyl ether	9.707	63	99189	91.430	ug/l	98
59) 2-Hexanone	10.761	43	103124	97.556	ug/l	99
60) Dibromochloromethane	10.908	129	45567	18.038	ug/l	99
61) 1,2-Dibromoethane	11.011	107	31157	17.915	ug/l	99
64) Tetrachloroethene	10.646	164	49633	19.511	ug/l	95
65) Chlorobenzene	11.438	112	132210	17.897	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.517	131	47893	18.337	ug/l	99
67) Ethyl Benzene	11.517	91	226668	17.481	ug/l	98
68) m/p-Xylenes	11.627	106	177439	36.046	ug/l	100
69) o-Xylene	11.956	106	79371	17.495	ug/l	98
70) Styrene	11.969	104	133951	17.797	ug/l	99
71) Bromoform	12.133	173	25988	17.800	ug/l #	97
73) Isopropylbenzene	12.255	105	218412	17.074	ug/l	99
74) N-amyl acetate	12.072	43	44220	15.917	ug/l	96
75) 1,1,2,2-Tetrachloroethane	12.505	83	37463	16.596	ug/l	97
76) 1,2,3-Trichloropropane	12.554	75	32127m	19.633	ug/l	
77) Bromobenzene	12.535	156	52645	17.591	ug/l	97
78) n-propylbenzene	12.596	91	266301	17.141	ug/l	99
79) 2-Chlorotoluene	12.682	91	154633	17.407	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	183525	17.654	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.304	75	11100	15.420	ug/l	98
82) 4-Chlorotoluene	12.779	91	163638	17.789	ug/l	100
83) tert-Butylbenzene	12.999	119	159271	17.174	ug/l	99
84) 1,2,4-Trimethylbenzene	13.041	105	179459	17.387	ug/l	99
85) sec-Butylbenzene	13.176	105	236192	17.117	ug/l	100
86) p-Isopropyltoluene	13.291	119	197171	17.345	ug/l	99
87) 1,3-Dichlorobenzene	13.285	146	104308	17.510	ug/l	99
88) 1,4-Dichlorobenzene	13.365	146	103420	17.751	ug/l	99
89) n-Butylbenzene	13.621	91	182353	17.372	ug/l	99
90) Hexachloroethane	13.883	117	41489	17.108	ug/l	99
91) 1,2-Dichlorobenzene	13.657	146	90389	17.703	ug/l	99
92) 1,2-Dibromo-3-Chloropr...	14.273	75	5802	17.158	ug/l	96
93) 1,2,4-Trichlorobenzene	14.925	180	50841	18.230	ug/l	99
94) Hexachlorobutadiene	15.023	225	32185	18.411	ug/l	98
95) Naphthalene	15.145	128	73881	17.695	ug/l	100
96) 1,2,3-Trichlorobenzene	15.328	180	42109	17.953	ug/l	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021476.D
Acq On : 11 Mar 2025 11:03
Operator : SY/MD
Sample : VY0311SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBS01

Manual Integrations
APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 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)

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

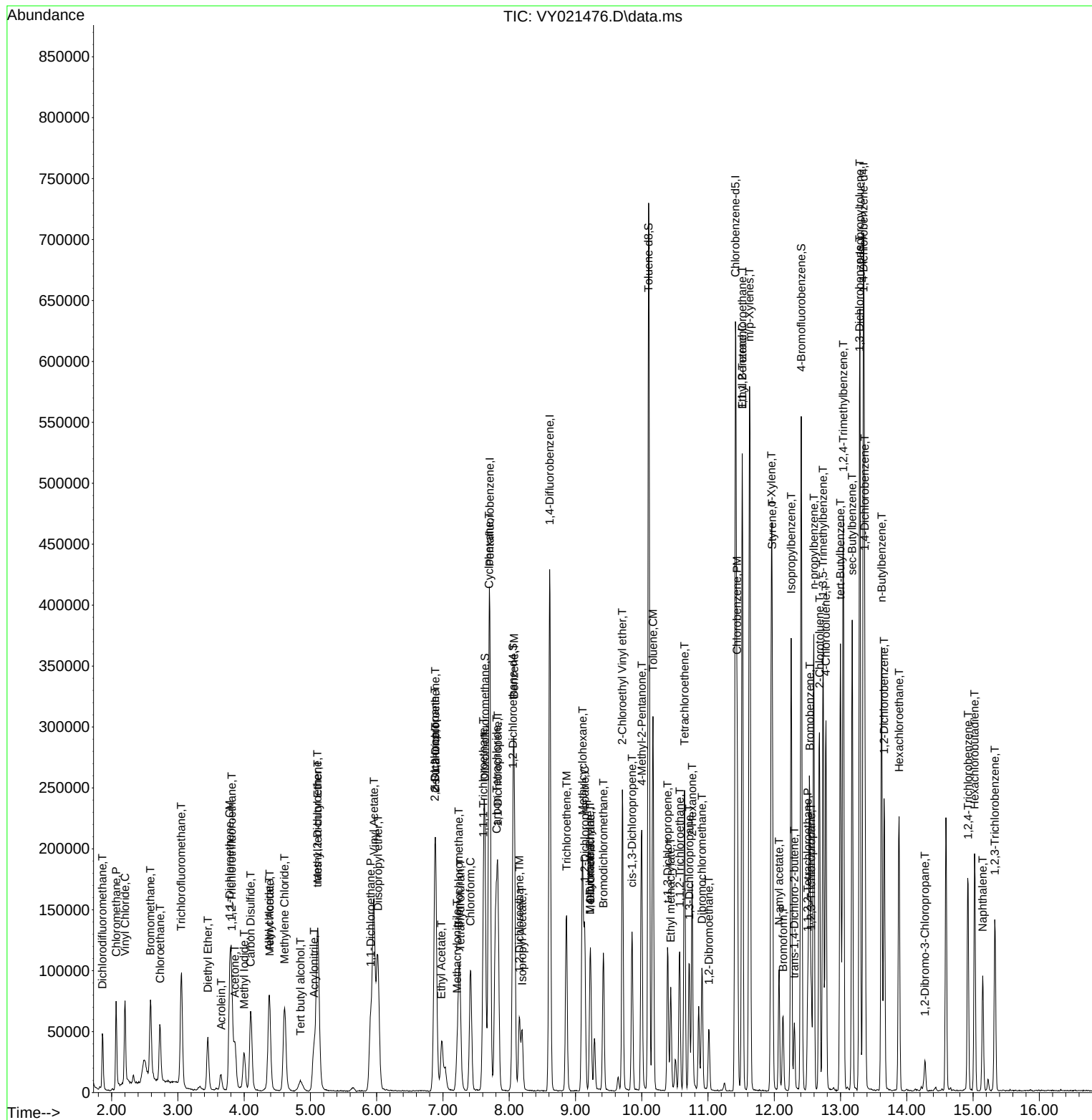
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY031125\
Data File : VY021476.D
Acq On : 11 Mar 2025 11:03
Operator : SY/MD
Sample : VY0311SBS01
Misc : 5.00g/5.0mL/MSVOA_Y/soil
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0311SBS01

Manual Integrations
APPROVED

Reviewed By :Romaben Patel 03/12/2025
Supervised By :Mahesh Dadoda 03/12/2025

Quant Time: Mar 12 01:23:14 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:	Fisal		Date Received:	
Client Sample ID:	VY0306SBSD01		SDG No.:	Q1463
Lab Sample ID:	VY0306SBSD01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group2
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY021429.D	1		03/06/25 12:55	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
74-87-3	Chloromethane	20.8		1.20	5.00	ug/Kg
75-01-4	Vinyl Chloride	21.0		0.77	5.00	ug/Kg
74-83-9	Bromomethane	20.9		1.00	5.00	ug/Kg
75-00-3	Chloroethane	22.2		1.00	5.00	ug/Kg
75-65-0	Tert butyl alcohol	110		15.6	25.0	ug/Kg
75-35-4	1,1-Dichloroethene	20.1		0.78	5.00	ug/Kg
67-64-1	Acetone	83.1		6.20	25.0	ug/Kg
75-15-0	Carbon Disulfide	19.5		1.30	5.00	ug/Kg
1634-04-4	Methyl tert-butyl Ether	20.4		0.67	5.00	ug/Kg
75-09-2	Methylene Chloride	20.4		3.40	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	20.1		0.84	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.5		0.63	5.00	ug/Kg
78-93-3	2-Butanone	95.3		5.70	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	18.7		0.87	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.2		0.61	5.00	ug/Kg
67-66-3	Chloroform	21.3		0.67	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	20.0		0.78	5.00	ug/Kg
71-43-2	Benzene	19.9		0.72	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.4		0.61	5.00	ug/Kg
79-01-6	Trichloroethene	19.0		0.75	5.00	ug/Kg
78-87-5	1,2-Dichloropropane	20.5		0.66	5.00	ug/Kg
75-27-4	Bromodichloromethane	20.2		0.56	5.00	ug/Kg
108-10-1	4-Methyl-2-Pentanone	100		4.40	25.0	ug/Kg
108-88-3	Toluene	19.7		0.67	5.00	ug/Kg
10061-02-6	t-1,3-Dichloropropene	19.4		0.60	5.00	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	19.5		0.57	5.00	ug/Kg
79-00-5	1,1,2-Trichloroethane	20.4		0.84	5.00	ug/Kg
591-78-6	2-Hexanone	96.5		4.80	25.0	ug/Kg
124-48-1	Dibromochloromethane	19.9		0.65	5.00	ug/Kg
127-18-4	Tetrachloroethene	18.8		0.89	5.00	ug/Kg

Report of Analysis

Client:	G Environmental	Date Collected:	
Project:	Fisal	Date Received:	
Client Sample ID:	VY0306SBSD01	SDG No.:	Q1463
Lab Sample ID:	VY0306SBSD01	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
VY021429.D	1		03/06/25 12:55	VY030625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
108-90-7	Chlorobenzene	19.2		0.74	5.00	ug/Kg
100-41-4	Ethyl Benzene	18.6		0.62	5.00	ug/Kg
179601-23-1	m/p-Xylenes	37.8		1.40	10.0	ug/Kg
95-47-6	o-Xylene	18.8		0.70	5.00	ug/Kg
100-42-5	Styrene	19.5		0.60	5.00	ug/Kg
75-25-2	Bromoform	19.6		0.81	5.00	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	19.0		1.10	5.00	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	55.0		70 (63) - 130 (155)	110%	SPK: 50
1868-53-7	Dibromofluoromethane	52.0		70 (70) - 130 (134)	104%	SPK: 50
2037-26-5	Toluene-d8	51.4		70 (74) - 130 (123)	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.6		70 (38) - 130 (136)	105%	SPK: 50
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	197000	7.707			
540-36-3	1,4-Difluorobenzene	317000	8.616			
3114-55-4	Chlorobenzene-d5	285000	11.414			
3855-82-1	1,4-Dichlorobenzene-d4	146000	13.347			

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\VY030625\
 Data File : VY021429.D
 Acq On : 06 Mar 2025 12:55
 Operator : SY/MD
 Sample : VY0306SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
 Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:22 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	197190	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.616	114	317024	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.414	117	284896	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.347	152	145541	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.061	65	114552	54.963	ug/l	0.00
Spiked Amount 50.000	Range 50 - 163		Recovery = 109.920%			
35) Dibromofluoromethane	7.634	113	108456	52.046	ug/l	0.00
Spiked Amount 50.000	Range 54 - 147		Recovery = 104.100%			
50) Toluene-d8	10.103	98	405827	51.435	ug/l	0.00
Spiked Amount 50.000	Range 58 - 134		Recovery = 102.860%			
62) 4-Bromofluorobenzene	12.408	95	141225	52.620	ug/l	0.00
Spiked Amount 50.000	Range 30 - 143		Recovery = 105.240%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.861	85	35558	19.650	ug/l	96
3) Chloromethane	2.068	50	52949	20.755	ug/l	96
4) Vinyl Chloride	2.202	62	58685	21.049	ug/l	99
5) Bromomethane	2.586	94	42039	20.863	ug/l	95
6) Chloroethane	2.733	64	40824	22.158	ug/l	94
7) Trichlorofluoromethane	3.056	101	80838	20.774	ug/l	96
8) Diethyl Ether	3.452	74	22347	20.722	ug/l	98
9) 1,1,2-Trichlorotrifluo...	3.812	101	43988	19.799	ug/l	99
10) Methyl Iodide	4.001	142	44089	19.522	ug/l	100
11) Tert butyl alcohol	4.860	59	17013	113.220	ug/l #	72
12) 1,1-Dichloroethene	3.787	96	40773	20.129	ug/l	98
13) Acrolein	3.653	56	17122	161.514	ug/l	96
14) Allyl chloride	4.385	41	65445	19.993	ug/l	98
15) Acrylonitrile	5.055	53	48263	105.132	ug/l	99
16) Acetone	3.867	43	37789	83.130	ug/l	92
17) Carbon Disulfide	4.104	76	123987	19.532	ug/l	100
18) Methyl Acetate	4.385	43	21520	21.336	ug/l	98
19) Methyl tert-butyl Ether	5.116	73	104712	20.396	ug/l	99
20) Methylene Chloride	4.616	84	48615	20.374	ug/l	93
21) trans-1,2-Dichloroethene	5.110	96	45523	20.068	ug/l	91
22) Diisopropyl ether	6.019	45	148861	21.102	ug/l	97
23) Vinyl Acetate	5.958	43	418814	104.026	ug/l	98
24) 1,1-Dichloroethane	5.915	63	85283	20.483	ug/l	98
25) 2-Butanone	6.890	43	59932	95.309	ug/l	97
26) 2,2-Dichloropropane	6.884	77	70954	18.521	ug/l	98
27) cis-1,2-Dichloroethene	6.890	96	51954	20.160	ug/l	99
28) Bromochloromethane	7.244	49	33556	19.224	ug/l	98
29) Tetrahydrofuran	7.256	42	40277	103.753	ug/l	99
30) Chloroform	7.415	83	91972	21.273	ug/l	96
31) Cyclohexane	7.701	56	73337	18.788	ug/l	96
32) 1,1,1-Trichloroethane	7.616	97	79136	19.991	ug/l	99
36) 1,1-Dichloropropene	7.835	75	62244	19.082	ug/l	98
37) Ethyl Acetate	6.988	43	29173	20.235	ug/l	97
38) Carbon Tetrachloride	7.817	117	70264	18.730	ug/l	98
39) Methylcyclohexane	9.110	83	72710	18.173	ug/l	99
40) Benzene	8.079	78	190921	19.869	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021429.D
 Acq On : 06 Mar 2025 12:55
 Operator : SY/MD
 Sample : VY0306SBS01
 Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
 Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:22 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	7.214	41	15276	19.460	ug/l	95
42) 1,2-Dichloroethane	8.152	62	54960	20.446	ug/l	99
43) Isopropyl Acetate	8.195	43	54803	19.581	ug/l #	88
44) Trichloroethene	8.866	130	46195	19.025	ug/l	93
45) 1,2-Dichloropropane	9.140	63	46832	20.478	ug/l	95
46) Dibromomethane	9.231	93	25456	20.006	ug/l	98
47) Bromodichloromethane	9.420	83	68125	20.160	ug/l	99
48) Methyl methacrylate	9.219	41	24350	18.947	ug/l	95
49) 1,4-Dioxane	9.225	88	5487	439.330	ug/l #	93
51) 4-Methyl-2-Pentanone	10.000	43	145575	100.811	ug/l	98
52) Toluene	10.170	92	119217	19.680	ug/l	100
53) t-1,3-Dichloropropene	10.390	75	57714	19.386	ug/l	100
54) cis-1,3-Dichloropropene	9.853	75	68787	19.461	ug/l	98
55) 1,1,2-Trichloroethane	10.573	97	33986	20.418	ug/l	94
56) Ethyl methacrylate	10.439	69	41790	19.686	ug/l	98
57) 1,3-Dichloropropane	10.719	76	59572	20.650	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.713	63	105149	107.301	ug/l	98
59) 2-Hexanone	10.762	43	92172	96.532	ug/l	98
60) Dibromochloromethane	10.908	129	45450	19.918	ug/l	100
61) 1,2-Dibromoethane	11.012	107	31489	20.045	ug/l	100
64) Tetrachloroethene	10.646	164	43602	18.821	ug/l	97
65) Chlorobenzene	11.438	112	128907	19.161	ug/l	99
66) 1,1,1,2-Tetrachloroethane	11.518	131	45704	19.215	ug/l	98
67) Ethyl Benzene	11.518	91	220217	18.649	ug/l	99
68) m/p-Xylenes	11.627	106	169502	37.809	ug/l	98
69) o-Xylene	11.957	106	77803	18.830	ug/l	99
70) Styrene	11.969	104	133689	19.504	ug/l	99
71) Bromoform	12.127	173	26030	19.577	ug/l #	100
73) Isopropylbenzene	12.255	105	208083	18.150	ug/l	99
74) N-amyl acetate	12.066	43	47561	19.102	ug/l	98
75) 1,1,2,2-Tetrachloroethane	12.505	83	38365	18.963	ug/l	98
76) 1,2,3-Trichloropropane	12.554	75	28008m	19.097	ug/l	
77) Bromobenzene	12.530	156	50969	19.003	ug/l	100
78) n-propylbenzene	12.597	91	256602	18.429	ug/l	100
79) 2-Chlorotoluene	12.682	91	149480	18.776	ug/l	99
80) 1,3,5-Trimethylbenzene	12.737	105	171567	18.415	ug/l	99
81) trans-1,4-Dichloro-2-b...	12.298	75	11197	17.356	ug/l	94
82) 4-Chlorotoluene	12.780	91	153440	18.612	ug/l	99
83) tert-Butylbenzene	12.999	119	155498	18.709	ug/l	97
84) 1,2,4-Trimethylbenzene	13.042	105	175877	19.013	ug/l	99
85) sec-Butylbenzene	13.176	105	227701	18.413	ug/l	100
86) p-Isopropyltoluene	13.292	119	187268	18.381	ug/l	100
87) 1,3-Dichlorobenzene	13.286	146	98798	18.505	ug/l	98
88) 1,4-Dichlorobenzene	13.365	146	99121	18.984	ug/l	99
89) n-Butylbenzene	13.621	91	171306	18.209	ug/l	99
90) Hexachloroethane	13.877	117	39511	18.179	ug/l	97
91) 1,2-Dichlorobenzene	13.658	146	87985	19.228	ug/l	100
92) 1,2-Dibromo-3-Chloropr...	14.279	75	5795	19.122	ug/l	96
93) 1,2,4-Trichlorobenzene	14.919	180	46812	18.729	ug/l	97
94) Hexachlorobutadiene	15.023	225	30717	19.606	ug/l	96
95) Naphthalene	15.145	128	72201	19.111	ug/l	99
96) 1,2,3-Trichlorobenzene	15.328	180	39613	18.844	ug/l	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
Data File : VY021429.D
Acq On : 06 Mar 2025 12:55
Operator : SY/MD
Sample : VY0306SBSD01
Misc : 5.00g/5.0mL/MSVOA_Y/SOIL
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :
VY0306SBSD01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 03/07/2025
Supervised By :Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:22 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)

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

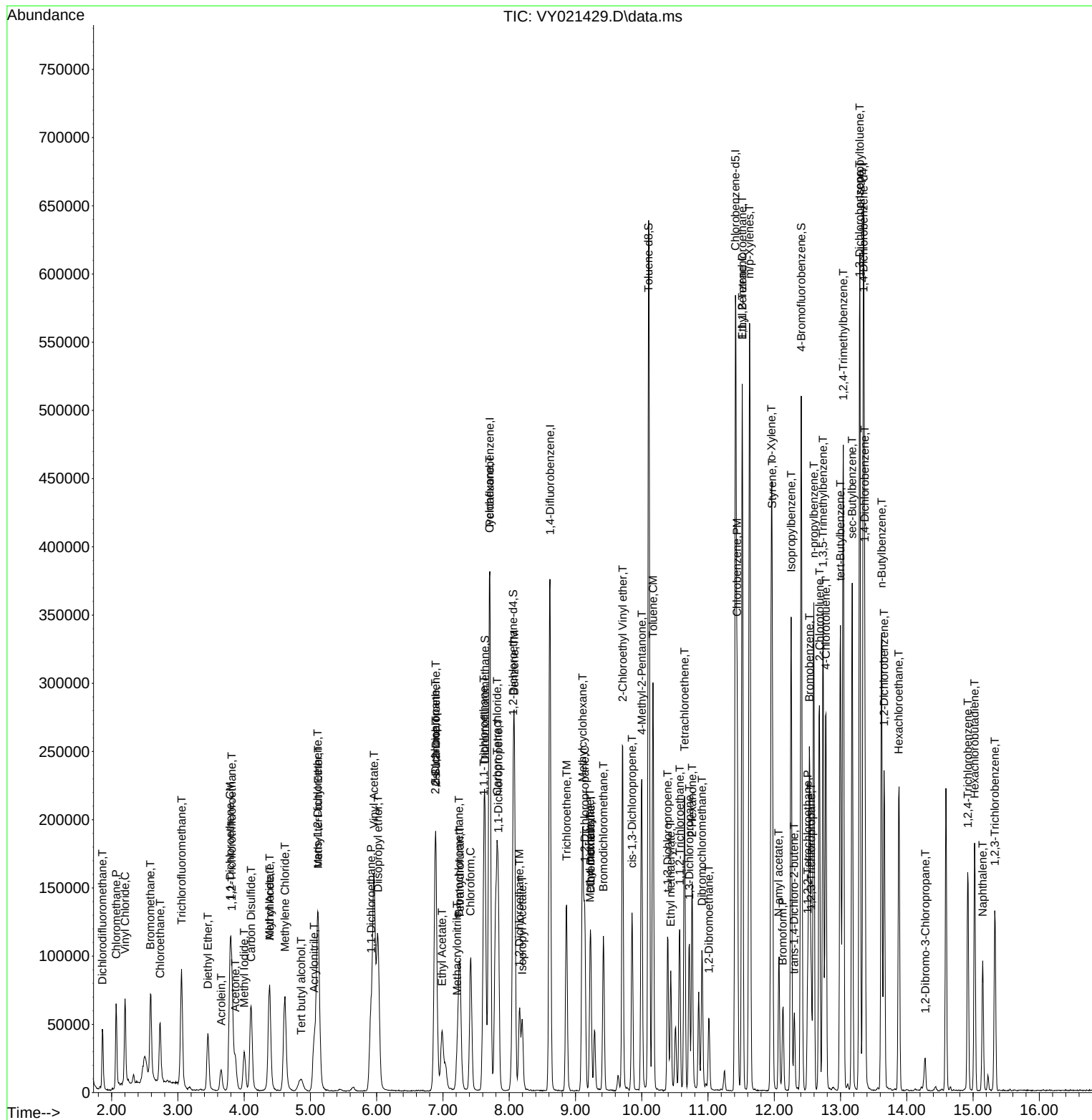
Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY030625\
 Data File : VY021429.D
 Acq On : 06 Mar 2025 12:55
 Operator : SY/MD
 Sample : VY0306SBSD01
 Misc : 5.00g/5.0mL/MSVOA_Y/soil
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :
 VY0306SBSD01

Manual Integrations APPROVED

Reviewed By : Mahesh Dadoda 03/07/2025
 Supervised By : Semsettin Yesilyurt 03/07/2025

Quant Time: Mar 07 00:39:22 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:

vy030625

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY021426.D	1,2,3-Trichloropropane	MMDadoda	3/7/2025 1:32:05 PM	SAM	3/7/2025 1:32:48 PM	Peak Integrated by Software
VY0306SBS01	VY021428.D	1,2,3-Trichloropropane	MMDadoda	3/7/2025 1:32:09 PM	SAM	3/7/2025 1:32:48 PM	Peak Integrated by Software
VY0306SBS01	VY021428.D	Methacrylonitrile	MMDadoda	3/7/2025 1:32:09 PM	SAM	3/7/2025 1:32:48 PM	Peak Integrated by Software
VY0306SBSD01	VY021429.D	1,2,3-Trichloropropane	MMDadoda	3/7/2025 1:32:03 PM	SAM	3/7/2025 1:32:48 PM	Peak Integrated by Software
VSTDCCC050	VY021449.D	1,2,3-Trichloropropane	MMDadoda	3/7/2025 1:31:54 PM	SAM	3/7/2025 1:32:50 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

vy030725

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY021451.D	1,2,3-Trichloropropane	MMDadod a	3/11/2025 2:51:32 PM	SAM	3/11/2025 2:52:15 PM	Peak Integrated by Software
VY0307SBS01	VY021453.D	1,2,3-Trichloropropane	MMDadod a	3/11/2025 2:51:33 PM	SAM	3/11/2025 2:52:16 PM	Peak Integrated by Software
VY0307SBS01	VY021453.D	Methacrylonitrile	MMDadod a	3/11/2025 2:51:33 PM	SAM	3/11/2025 2:52:16 PM	Peak Integrated by Software
Q1463-03	VY021455.D	1,2-Dichloroethane-d4	MMDadod a	3/11/2025 2:51:36 PM	SAM	3/11/2025 2:52:21 PM	Peak Integrated by Software
Q1463-03	VY021455.D	1,4-Difluorobenzene	MMDadod a	3/11/2025 2:51:36 PM	SAM	3/11/2025 2:52:21 PM	Peak Integrated by Software
Q1463-03	VY021455.D	Dibromofluoromethane	MMDadod a	3/11/2025 2:51:36 PM	SAM	3/11/2025 2:52:21 PM	Peak Integrated by Software
Q1463-03	VY021455.D	Pentafluorobenzene	MMDadod a	3/11/2025 2:51:36 PM	SAM	3/11/2025 2:52:21 PM	Peak Integrated by Software
Q1463-03	VY021455.D	Toluene	MMDadod a	3/11/2025 2:51:36 PM	SAM	3/11/2025 2:52:21 PM	Peak Integrated by Software
Q1463-03	VY021455.D	Toluene-d8	MMDadod a	3/11/2025 2:51:36 PM	SAM	3/11/2025 2:52:21 PM	Peak Integrated by Software
VSTDCCC050	VY021472.D	1,2,3-Trichloropropane	MMDadod a	3/11/2025 2:51:41 PM	SAM	3/11/2025 2:52:26 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

vy031125

Instrument

MSVOA_y

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC050	VY021474.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:41:38 PM	MMDadoda	3/12/2025 3:16:21 PM	Peak Integrated by Software
VY0311SBS01	VY021476.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:41:42 PM	MMDadoda	3/12/2025 3:16:22 PM	Peak Integrated by Software
VY0311SBS01	VY021476.D	Methacrylonitrile	Romaben	3/12/2025 2:41:42 PM	MMDadoda	3/12/2025 3:16:22 PM	Peak Integrated by Software
Q1463-02	VY021478.D	1,2-Dichloroethane-d4	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
Q1463-02	VY021478.D	1,4-Difluorobenzene	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
Q1463-02	VY021478.D	Dibromofluoromethane	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
Q1463-02	VY021478.D	Methylene Chloride	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
Q1463-02	VY021478.D	Pentafluorobenzene	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
Q1463-02	VY021478.D	Toluene	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
Q1463-02	VY021478.D	Toluene-d8	Romaben	3/12/2025 2:41:50 PM	MMDadoda	3/12/2025 3:16:25 PM	Peak Integrated by Software
VSTDCCC050	VY021499.D	1,2,3-Trichloropropane	Romaben	3/12/2025 2:42:03 PM	MMDadoda	3/12/2025 3:16:30 PM	Peak Integrated by Software

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	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 # VY030625

Review By	Mahesh Dadoda	Review On	3/7/2025 1:32:16 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/7/2025 1:32:53 PM
SubDirectory	VY030625	HP Acquire Method	HP Processing Method 82y030425s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133223		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133224,VP133225 VP131783		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021425.D	06 Mar 2025 09:39	SY/MD	Ok
2	VSTDCCC050	VY021426.D	06 Mar 2025 10:10	SY/MD	Ok,M
3	VY0306SBL01	VY021427.D	06 Mar 2025 11:59	SY/MD	Ok
4	VY0306SBS01	VY021428.D	06 Mar 2025 12:33	SY/MD	Ok,M
5	VY0306SBSD01	VY021429.D	06 Mar 2025 12:55	SY/MD	Ok,M
6	Q1489-05	VY021430.D	06 Mar 2025 13:28	SY/MD	Ok
7	Q1489-01	VY021431.D	06 Mar 2025 13:52	SY/MD	Not Ok
8	Q1421-09	VY021432.D	06 Mar 2025 14:15	SY/MD	Ok
9	Q1479-01	VY021433.D	06 Mar 2025 14:39	SY/MD	Ok
10	Q1479-02	VY021434.D	06 Mar 2025 15:02	SY/MD	ReRun
11	Q1488-01	VY021435.D	06 Mar 2025 15:25	SY/MD	Ok
12	Q1488-03	VY021436.D	06 Mar 2025 15:49	SY/MD	Ok
13	Q1488-05	VY021437.D	06 Mar 2025 16:12	SY/MD	Ok
14	Q1488-07	VY021438.D	06 Mar 2025 16:36	SY/MD	Not Ok
15	Q1488-09	VY021439.D	06 Mar 2025 16:59	SY/MD	ReRun
16	Q1488-11	VY021440.D	06 Mar 2025 17:22	SY/MD	Not Ok
17	Q1463-01	VY021441.D	06 Mar 2025 17:46	SY/MD	Ok
18	Q1463-05	VY021442.D	06 Mar 2025 18:09	SY/MD	Ok
19	Q1463-04	VY021443.D	06 Mar 2025 18:33	SY/MD	Ok
20	Q1463-06	VY021444.D	06 Mar 2025 18:56	SY/MD	Ok
21	Q1463-07	VY021445.D	06 Mar 2025 19:20	SY/MD	Ok

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QCBatch ID # VY030625

Review By	Mahesh Dadoda	Review On	3/7/2025 1:32:16 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/7/2025 1:32:53 PM
SubDirectory	VY030625	HP Acquire Method	HP Processing Method 82y030425s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133223		
CCC	VP133224,VP133225		
Internal Standard/PEM	VP131783		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

22	Q1463-08	VY021446.D	06 Mar 2025 19:43	SY/MD	Ok
23	Q1463-09	VY021447.D	06 Mar 2025 20:06	SY/MD	Ok
24	Q1463-10	VY021448.D	06 Mar 2025 20:30	SY/MD	ReRun
25	VSTDCCC050	VY021449.D	06 Mar 2025 21:15	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QCBatch ID # VY030725

Review By	Mahesh Dadoda	Review On	3/11/2025 2:51:48 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/11/2025 2:52:31 PM		
SubDirectory	VY030725	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP133232			
CCC		VP133233,VP133234			
Internal Standard/PEM		VP131783			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021450.D	07 Mar 2025 09:27	SY/MD	Ok
2	VSTDCCC050	VY021451.D	07 Mar 2025 09:59	SY/MD	Ok,M
3	VY0307SBL01	VY021452.D	07 Mar 2025 10:35	SY/MD	Ok
4	VY0307SBS01	VY021453.D	07 Mar 2025 12:03	SY/MD	Ok,M
5	VY0307SBSD01	VY021454.D	07 Mar 2025 12:26	SY/MD	Ok,M
6	Q1463-03	VY021455.D	07 Mar 2025 12:55	SY/MD	Ok,M
7	Q1479-02	VY021456.D	07 Mar 2025 13:18	SY/MD	Ok,M
8	Q1463-02	VY021457.D	07 Mar 2025 13:42	SY/MD	ReRun
9	Q1463-10	VY021458.D	07 Mar 2025 14:05	SY/MD	Ok
10	Q1488-07	VY021459.D	07 Mar 2025 14:28	SY/MD	Ok,M
11	Q1488-09	VY021460.D	07 Mar 2025 14:52	SY/MD	Ok
12	Q1488-11	VY021461.D	07 Mar 2025 15:15	SY/MD	Ok
13	Q1514-01	VY021462.D	07 Mar 2025 15:39	SY/MD	ReRun
14	Q1514-03	VY021463.D	07 Mar 2025 16:02	SY/MD	ReRun
15	Q1514-05	VY021464.D	07 Mar 2025 16:25	SY/MD	ReRun
16	Q1515-02	VY021465.D	07 Mar 2025 16:49	SY/MD	Ok
17	Q1507-01	VY021466.D	07 Mar 2025 17:12	SY/MD	Not Ok
18	Q1508-01	VY021467.D	07 Mar 2025 17:36	SY/MD	ReRun
19	Q1494-05	VY021468.D	07 Mar 2025 17:59	SY/MD	Ok
20	Q1494-03	VY021469.D	07 Mar 2025 18:23	SY/MD	Ok
21	Q1494-07	VY021470.D	07 Mar 2025 18:46	SY/MD	Ok

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY030725

Review By	Mahesh Dadoda	Review On	3/11/2025 2:51:48 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/11/2025 2:52:31 PM		
SubDirectory	VY030725	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP133232			
CCC		VP133233,VP133234			
Internal Standard/PEM		VP131783			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q1490-01	VY021471.D	07 Mar 2025 19:09	SY/MD	Not Ok
23	VSTDCCC050	VY021472.D	07 Mar 2025 19:32	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Maresh Dadoda	Review On	3/12/2025 3:16:35 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y
		HP Processing Method	82y030425s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133241		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133242,VP133243 VP131783		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VY021473.D	11 Mar 2025 09:00	SY/MD	Ok
2	VSTDCCC050	VY021474.D	11 Mar 2025 09:42	SY/MD	Ok,M
3	VY0311SBL01	VY021475.D	11 Mar 2025 10:12	SY/MD	Ok
4	VY0311SBS01	VY021476.D	11 Mar 2025 11:03	SY/MD	Ok,M
5	VY0311SBSD01	VY021477.D	11 Mar 2025 11:26	SY/MD	Ok,M
6	Q1463-02	VY021478.D	11 Mar 2025 12:01	SY/MD	Ok,M
7	Q1507-01	VY021479.D	11 Mar 2025 12:24	SY/MD	Not Ok
8	Q1514-05	VY021480.D	11 Mar 2025 12:48	SY/MD	Ok
9	Q1514-03	VY021481.D	11 Mar 2025 13:11	SY/MD	Ok
10	Q1514-01	VY021482.D	11 Mar 2025 13:35	SY/MD	Ok
11	Q1515-02	VY021483.D	11 Mar 2025 13:58	SY/MD	Not Ok
12	Q1508-01RE	VY021484.D	11 Mar 2025 14:21	SY/MD	Confirms
13	Q1535-01	VY021485.D	11 Mar 2025 14:45	SY/MD	Not Ok
14	Q1524-01	VY021486.D	11 Mar 2025 15:08	SY/MD	ReRun
15	Q1524-02	VY021487.D	11 Mar 2025 15:32	SY/MD	ReRun
16	Q1494-05	VY021488.D	11 Mar 2025 15:55	SY/MD	Not Ok
17	Q1524-01RE	VY021489.D	11 Mar 2025 16:18	SY/MD	Confirms
18	Q1524-02RE	VY021490.D	11 Mar 2025 16:42	SY/MD	Confirms
19	Q1494-03	VY021491.D	11 Mar 2025 17:05	SY/MD	Not Ok
20	Q1494-07	VY021492.D	11 Mar 2025 17:29	SY/MD	Not Ok
21	Q1508-01	VY021493.D	11 Mar 2025 17:52	SY/MD	Not Ok

Instrument ID: **MSVOA_Y**

Daily Analysis Runlog For Sequence/QCBatch ID # VY031125

Review By	Mahesh Dadoda	Review On	3/12/2025 3:16:35 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM		
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP133241			
CCC		VP133242,VP133243			
Internal Standard/PEM		VP131783			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q1534-02	VY021494.D	11 Mar 2025 18:16	SY/MD	Ok
23	Q1534-08	VY021495.D	11 Mar 2025 18:39	SY/MD	Ok
24	Q1534-14	VY021496.D	11 Mar 2025 19:02	SY/MD	Ok
25	Q1534-20	VY021497.D	11 Mar 2025 19:26	SY/MD	Ok
26	VY0311SBS02	VY021498.D	11 Mar 2025 19:49	SY/MD	Not Ok
27	VSTDCCC050	VY021499.D	11 Mar 2025 20:11	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 # VY030625

Review By	Maresh Dadoda	Review On	3/7/2025 1:32:16 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/7/2025 1:32:53 PM
SubDirectory	VY030625	HP Acquire Method	HP Processing Method 82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133223
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133224,VP133225 VP131783

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021425.D	06 Mar 2025 09:39		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY021426.D	06 Mar 2025 10:10		SY/MD	Ok,M
3	VY0306SBL01	VY0306SBL01	VY021427.D	06 Mar 2025 11:59		SY/MD	Ok
4	VY0306SBS01	VY0306SBS01	VY021428.D	06 Mar 2025 12:33		SY/MD	Ok,M
5	VY0306SBSD01	VY0306SBSD01	VY021429.D	06 Mar 2025 12:55		SY/MD	Ok,M
6	Q1489-05	TP-2	VY021430.D	06 Mar 2025 13:28	vial-B	SY/MD	Ok
7	Q1489-01	TP-1	VY021431.D	06 Mar 2025 13:52	vial-B Not purge	SY/MD	Not Ok
8	Q1421-09	P001-CLAY-CF02-01	VY021432.D	06 Mar 2025 14:15	vial-B	SY/MD	Ok
9	Q1479-01	P5	VY021433.D	06 Mar 2025 14:39	vial-B	SY/MD	Ok
10	Q1479-02	DSP2	VY021434.D	06 Mar 2025 15:02	vial-A Internal Standard Fail	SY/MD	ReRun
11	Q1488-01	ENV-101-SB01	VY021435.D	06 Mar 2025 15:25	vial-A	SY/MD	Ok
12	Q1488-03	ENV-101-SB02	VY021436.D	06 Mar 2025 15:49	vial-A	SY/MD	Ok
13	Q1488-05	ENV-102-SB01	VY021437.D	06 Mar 2025 16:12	vial-A	SY/MD	Ok
14	Q1488-07	ENV-102-SB02	VY021438.D	06 Mar 2025 16:36	vial-A Not purge	SY/MD	Not Ok
15	Q1488-09	ENV-104-SB01	VY021439.D	06 Mar 2025 16:59	vial-A Internal Standard Fail	SY/MD	ReRun
16	Q1488-11	ENV-104-SB02	VY021440.D	06 Mar 2025 17:22	vial-A Not purge	SY/MD	Not Ok
17	Q1463-01	T1	VY021441.D	06 Mar 2025 17:46	vial-B	SY/MD	Ok
18	Q1463-05	T5	VY021442.D	06 Mar 2025 18:09	vial-B	SY/MD	Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY030625

Review By	Maresh Dadoda	Review On	3/7/2025 1:32:16 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/7/2025 1:32:53 PM
SubDirectory	VY030625	HP Acquire Method	HP Processing Method 82y030425s.m
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	VP133223		
CCC	VP133224,VP133225		
Internal Standard/PEM	VP131783		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	Q1463-04	T4	VY021443.D	06 Mar 2025 18:33	Vial-B	SY/MD	Ok
20	Q1463-06	T6	VY021444.D	06 Mar 2025 18:56	Vial-A	SY/MD	Ok
21	Q1463-07	T7	VY021445.D	06 Mar 2025 19:20	Vial-A	SY/MD	Ok
22	Q1463-08	T8	VY021446.D	06 Mar 2025 19:43	Vial-A	SY/MD	Ok
23	Q1463-09	T9	VY021447.D	06 Mar 2025 20:06	Vial-A	SY/MD	Ok
24	Q1463-10	T10	VY021448.D	06 Mar 2025 20:30	Vial-A Internal Standard Fail; Surrogate Fail	SY/MD	ReRun
25	VSTDCCC050	VSTDCCC050EC	VY021449.D	06 Mar 2025 21:15		SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY030725

Review By	Mahesh Dadoda	Review On	3/11/2025 2:51:48 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/11/2025 2:52:31 PM		
SubDirectory	VY030725	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133232
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133233,VP133234 VP131783

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021450.D	07 Mar 2025 09:27		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY021451.D	07 Mar 2025 09:59		SY/MD	Ok,M
3	VY0307SBL01	VY0307SBL01	VY021452.D	07 Mar 2025 10:35		SY/MD	Ok
4	VY0307SBS01	VY0307SBS01	VY021453.D	07 Mar 2025 12:03		SY/MD	Ok,M
5	VY0307SBSD01	VY0307SBSD01	VY021454.D	07 Mar 2025 12:26	BSD Failed Low for com.#73,87,88	SY/MD	Ok,M
6	Q1463-03	T3	VY021455.D	07 Mar 2025 12:55	vial-B	SY/MD	Ok,M
7	Q1479-02	DSP2	VY021456.D	07 Mar 2025 13:18	vial-B	SY/MD	Ok,M
8	Q1463-02	T2	VY021457.D	07 Mar 2025 13:42	vial-A Internal standard fail	SY/MD	ReRun
9	Q1463-10	T10	VY021458.D	07 Mar 2025 14:05	vial-B	SY/MD	Ok
10	Q1488-07	ENV-102-SB02	VY021459.D	07 Mar 2025 14:28	vial-B	SY/MD	Ok,M
11	Q1488-09	ENV-104-SB01	VY021460.D	07 Mar 2025 14:52	Vial-B	SY/MD	Ok
12	Q1488-11	ENV-104-SB02	VY021461.D	07 Mar 2025 15:15	Vial-B Internal standard fail	SY/MD	Ok
13	Q1514-01	ENV-105-SB01	VY021462.D	07 Mar 2025 15:39	Vial-A BSD failed Low	SY/MD	ReRun
14	Q1514-03	ENV-105-SB02	VY021463.D	07 Mar 2025 16:02	Vial-A BSD failed Low	SY/MD	ReRun
15	Q1514-05	ENV-103-SB01	VY021464.D	07 Mar 2025 16:25	Vial-A BSD failed Low	SY/MD	ReRun
16	Q1515-02	AU-06-030625-E2	VY021465.D	07 Mar 2025 16:49	Vial-A Internal standard fail;Surrogate fail	SY/MD	Ok
17	Q1507-01	50-MIDDLESEX-AVE	VY021466.D	07 Mar 2025 17:12	Vial-A Not purge	SY/MD	Not Ok

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY030725

Review By	Mahesh Dadoda	Review On	3/11/2025 2:51:48 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/11/2025 2:52:31 PM		
SubDirectory	VY030725	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP133232			
CCC		VP133233,VP133234			
Internal Standard/PEM		VP131783			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

18	Q1508-01	RBR251372	VY021467.D	07 Mar 2025 17:36	Vial-A Internal standard fail	SY/MD	ReRun
19	Q1494-05	SOIL	VY021468.D	07 Mar 2025 17:59	Vial-A Internal standard fail	SY/MD	Ok
20	Q1494-03	ASPHALT-SOIL	VY021469.D	07 Mar 2025 18:23	Vial-A Internal standard fail	SY/MD	Ok
21	Q1494-07	SOIL-COMP	VY021470.D	07 Mar 2025 18:46	Vial-A Internal standard fail	SY/MD	Ok
22	Q1490-01	CLAY-SLUDGE-DRUM	VY021471.D	07 Mar 2025 19:09	Vial-A Not purge	SY/MD	Not Ok
23	VSTDCCC050	VSTDCCC050EC	VY021472.D	07 Mar 2025 19:32		SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Maresh Dadoda	Review On	3/12/2025 3:16:35 PM
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y HP Processing Method 82y030425s.m

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	VP133241
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	VP133242,VP133243 VP131783

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VY021473.D	11 Mar 2025 09:00		SY/MD	Ok
2	VSTDCCC050	VSTDCCC050	VY021474.D	11 Mar 2025 09:42		SY/MD	Ok,M
3	VY0311SBL01	VY0311SBL01	VY021475.D	11 Mar 2025 10:12		SY/MD	Ok
4	VY0311SBS01	VY0311SBS01	VY021476.D	11 Mar 2025 11:03		SY/MD	Ok,M
5	VY0311SBSD01	VY0311SBSD01	VY021477.D	11 Mar 2025 11:26		SY/MD	Ok,M
6	Q1463-02	T2	VY021478.D	11 Mar 2025 12:01	Vial-B	SY/MD	Ok,M
7	Q1507-01	50-MIDDLESEX-AVE	VY021479.D	11 Mar 2025 12:24	Vial-B Not purge	SY/MD	Not Ok
8	Q1514-05	ENV-103-SB01	VY021480.D	11 Mar 2025 12:48	Vial-B	SY/MD	Ok
9	Q1514-03	ENV-105-SB02	VY021481.D	11 Mar 2025 13:11	Vial-B	SY/MD	Ok
10	Q1514-01	ENV-105-SB01	VY021482.D	11 Mar 2025 13:35	Vial-B	SY/MD	Ok
11	Q1515-02	AU-06-030625-E2	VY021483.D	11 Mar 2025 13:58	Vial-B Not purge	SY/MD	Not Ok
12	Q1508-01RE	RBR251372RE	VY021484.D	11 Mar 2025 14:21	Vial-B Internal Standard Fail; Surrogate Fail	SY/MD	Confirms
13	Q1535-01	SU-03-03102025	VY021485.D	11 Mar 2025 14:45	Vial-A Not purge	SY/MD	Not Ok
14	Q1524-01	72-11930-343-COMP	VY021486.D	11 Mar 2025 15:08	Vial-A ISTD Fail	SY/MD	ReRun
15	Q1524-02	VNJ-241	VY021487.D	11 Mar 2025 15:32	Vial-A ISTD Fail	SY/MD	ReRun
16	Q1494-05	SOIL	VY021488.D	11 Mar 2025 15:55	Vial-B Not purge	SY/MD	Not Ok
17	Q1524-01RE	72-11930-343-COMPRI	VY021489.D	11 Mar 2025 16:18	Vial-B ISTD Fail	SY/MD	Confirms

Instrument ID: MSVOA_Y

Daily Analysis Runlog For Sequence/QC Batch ID # VY031125

Review By	Mahesh Dadoda	Review On	3/12/2025 3:16:35 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	3/12/2025 3:17:58 PM		
SubDirectory	VY031125	HP Acquire Method	MSVOA_Y	HP Processing Method	82y030425s.m
STD. NAME		STD REF.#			
Tune/Reschk Initial Calibration Stds		VP133241			
CCC		VP133242,VP133243			
Internal Standard/PEM		VP131783			
ICV/I.BLK					
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

18	Q1524-02RE	VNJ-241RE	VY021490.D	11 Mar 2025 16:42	Vial-B ISTD Fail	SY/MD	Confirms
19	Q1494-03	ASPHALT-SOIL	VY021491.D	11 Mar 2025 17:05	Vial-B Not purge	SY/MD	Not Ok
20	Q1494-07	SOIL-COMP	VY021492.D	11 Mar 2025 17:29	Vial-B Not purge	SY/MD	Not Ok
21	Q1508-01	RBR251372	VY021493.D	11 Mar 2025 17:52	Not purge	SY/MD	Not Ok
22	Q1534-02	OR-363-VOC-16	VY021494.D	11 Mar 2025 18:16	Vial-A	SY/MD	Ok
23	Q1534-08	OR-363-VOC-17	VY021495.D	11 Mar 2025 18:39	Vial-A	SY/MD	Ok
24	Q1534-14	OR-363-VOC-18	VY021496.D	11 Mar 2025 19:02	Vial-A	SY/MD	Ok
25	Q1534-20	OR-363-VOC-19	VY021497.D	11 Mar 2025 19:26	Vial-A	SY/MD	Ok
26	VY0311SBS02	VY0311SBS02	VY021498.D	11 Mar 2025 19:49	Not Required	SY/MD	Not Ok
27	VSTDCCC050	VSTDCCC050EC	VY021499.D	11 Mar 2025 20:11		SY/MD	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/28/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:30
In Date: 02/27/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:27
Out Date: 02/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB134830

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
Q1433-01	K084-1A	1	1.14	8.53	9.67	8.22	83.0	
Q1433-02	K084-1B	2	1.15	8.57	9.72	4.33	37.1	
Q1433-04	K084-2A	3	1.15	8.50	9.65	9.3	95.9	
Q1433-05	K084-2B	4	1.16	8.76	9.92	8.54	84.2	
Q1433-07	K084-3A	5	1.12	8.51	9.63	8.98	92.4	
Q1433-08	K084-3B	6	1.16	8.76	9.92	7.93	77.3	
Q1433-10	K084-4A	7	1.14	8.64	9.78	8.67	87.2	
Q1434-01	K084-4B	8	1.16	8.71	9.87	7.42	71.9	
Q1434-03	K084-5A	9	1.15	8.36	9.51	8.86	92.2	
Q1434-04	K084-5B	10	1.15	8.74	9.89	8.3	81.8	
Q1434-06	K084-6B	11	1.16	8.63	9.79	7.2	70.0	
Q1434-08	K084-7A	12	1.19	8.66	9.85	8.36	82.8	
Q1434-09	K084-7B	13	1.15	8.83	9.98	7.3	69.6	
Q1436-01	K084-8A	14	1.17	8.58	9.75	8.31	83.2	
Q1436-04	K084-9A	15	1.16	8.44	9.6	7.74	78.0	
Q1436-07	K084-10A	16	1.19	8.46	9.65	8.28	83.8	
Q1436-10	K084-11A	17	1.18	8.43	9.61	8.78	90.2	
Q1437-03	K084-12A	18	1.16	8.72	9.88	7.66	74.5	
Q1437-06	K084-13A	19	1.19	8.43	9.62	7.93	80.0	
Q1437-09	K084-14A	20	1.15	8.69	9.84	7.89	77.6	
Q1437-09D	K084-14ADUP	21	1.16	8.70	9.86	7.9	77.5	
Q1438-02	K084-15B	22	1.12	8.70	9.82	7.54	73.8	
Q1438-04	K084-16B	23	1.16	8.40	9.56	7.77	78.7	
Q1438-06	K084-DUP1	24	1.55	8.00	9.55	8.16	82.6	
Q1438-07	K084-DUP2	25	1.16	8.75	9.91	7.07	67.5	
Q1438-08	K084-DUP3	26	1.13	8.48	9.61	8.29	84.4	
Q1438-10	K084-DUP5	27	1.15	8.81	9.96	8.18	79.8	
Q1451-01	VNJ208	48	1.00	1.00	2.00	2.00	100.0	CONCRETE sample

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/28/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:30
In Date: 02/27/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:27
Out Date: 02/28/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB134830

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
Q1453-01	MOO-25-0061	28	1.17	8.53	9.7	9.24	94.6	
Q1454-03	LAW-25-0043	47	1.00	1.00	2.00	2.00	100.0	oil sample
Q1457-01	HR-0-02272025	29	1.15	8.40	9.55	9.02	93.7	
Q1457-02	HR-0-02272025-E2	30	1.17	8.59	9.76	9.19	93.4	
Q1458-01	SP-SOIL	31	1.15	8.79	9.94	8.92	88.4	
Q1458-02	SP-SOIL-VOC	32	1.13	8.67	9.8	9.33	94.6	
Q1460-01	60270	33	1.15	8.48	9.63	9.39	97.2	
Q1461-01	KMH391J-1-1	34	1.00	1.00	2.00	2.00	100.0	oilc
Q1461-02	KMH391J-1-2	35	1.00	1.00	2.00	2.00	100.0	oilc
Q1463-01	TP1	36	1.12	8.70	9.82	9.31	94.1	
Q1463-02	TP2	37	1.13	8.70	9.83	9.35	94.5	
Q1463-03	TP3	38	1.18	8.37	9.55	8.69	89.7	
Q1463-04	TP4	39	1.15	8.60	9.75	9.16	93.1	
Q1463-05	TP5	40	1.13	8.44	9.57	8.89	91.9	
Q1463-05D	TP5DUP	41	1.14	8.45	9.59	8.9	91.8	
Q1463-06	TP6	42	1.13	8.68	9.81	9.34	94.6	
Q1463-07	TP7	43	1.16	8.56	9.72	9.22	94.2	
Q1463-08	TP8	44	1.15	8.82	9.97	9.37	93.2	
Q1463-09	TP9	45	1.15	8.67	9.82	9.26	93.5	
Q1463-10	TP10	46	1.13	8.86	9.99	9.35	92.8	
Q1464-01	COMP-1	49	1.13	8.64	9.77	5.87	54.9	
Q1464-02	COMP-2	50	1.00	1.00	2.00	2.00	100.0	debris
Q1464-03	KMA920X-1-1	51	1.00	1.00	2.00	2.00	100.0	oilc
Q1464-04	KMA920X-1-2	52	1.00	1.00	2.00	2.00	100.0	oilc
Q1465-01	ST-OILY-DEBRIS	53	1.00	1.00	2.00	2.00	100.0	debris
Q1465-02	W11-6327	54	1.00	1.00	2.00	2.00	100.0	oil sample

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

WORKLIST(Hardcopy Internal Chain)

134830

WorkList Name : %1-022725

WorkList ID : 187919

Department : Wet-Chemistry

Date : 02-27-2025 08:22:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1463-01	TP1	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-02	TP2	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-03	TP3	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-04	TP4	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-05	TP5	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-06	TP6	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-07	TP7	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-08	TP8	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-09	TP9	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1463-10	TP10	Solid	Percent Solids	Cool 4 deg C	GENV01	H31	02/27/2025	Chemtech -SO
Q1433-01	K084-1A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-02	K084-1B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-04	K084-2A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-05	K084-2B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-07	K084-3A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-08	K084-3B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-08	K084-DUP3	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-10	K084-DUP5	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-06	K084-13A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-09	K084-14A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-02	K084-15B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO

Date/Time 02/27/25 16:15

Raw Sample Received by: JP WOC

Raw Sample Relinquished by: JP WOC

Date/Time 02/27/25

Raw Sample Received by: JP WOC

Raw Sample Relinquished by: JP WOC

WORKLIST(Hardcopy Internal Chain)

134830

WorkList Name : %1-022725

WorkList ID : 187919

Department : Wet-Chemistry

Date : 02-27-2025 08:22:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1438-04	K084-16B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-06	K084-DUP1	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1438-07	K084-DUP2	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-09	K084-7B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-01	K084-8A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-04	K084-9A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-07	K084-10A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1436-10	K084-11A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1437-03	K084-12A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1433-10	K084-4A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-01	K084-4B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-03	K084-5A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-04	K084-5B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-06	K084-6B	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1434-08	K084-7A	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1451-01	VNJ208	Solid	Percent Solids	Cool 4 deg C	ATCE02	H11	02/25/2025	Chemtech -SO
Q1453-01	MOO-25-0061	Solid	Percent Solids	Cool 4 deg C	PSEG03	H41	02/27/2025	Chemtech -SO
Q1454-03	LAW-25-0043	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1458-01	SP-SOIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1458-02	SP-SOIL-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1460-01	60270	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO

Date/Time 02/27/25 16:15
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 02/27/25 17:35
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

134830

WorkList Name : %1-022725

WorkList ID : 187919

Department : Wet-Chemistry

Date : 02-27-2025 08:22:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1465-01	ST-OILY-DEBRIS	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1465-02	W11-6327	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1461-01	KMH391J-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1461-02	KMH391J-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1464-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1464-02	COMP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1464-03	KMA920X-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1464-04	KMA920X-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H31	02/27/2025	Chemtech -SO
Q1457-01	HR-0-02272025	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	02/27/2025	Chemtech -SO
Q1457-02	HR-0-02272025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	H31	02/27/2025	Chemtech -SO

Date/Time 02/27/25 16:15

Raw Sample Received by: SA WOC

Raw Sample Relinquished by: SA SM

Date/Time

02/27/25

Raw Sample Received by:

SA SM

Raw Sample Relinquished by:

SA WOC

WORKLIST(Hardcopy Internal Chain)

UB

WorkList Name : corrosivity q1464

WorkList ID : 187947

Department : Wet-Chemistry

Date : 02-28-2025 07:38:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1442-01	280	Solid	Corrosivity	Cool 4 deg C	PSEG03	N31	02/26/2025	9045D
Q1442-02	281	Solid	Corrosivity	Cool 4 deg C	PSEG03	N31	02/26/2025	9045D
Q1443-01	3733	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	02/26/2025	9045D
Q1447-02	WC1	Solid	Corrosivity	Cool 4 deg C	GENV01	H33	02/23/2025	9045D
Q1453-01	MOO-25-0061	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	02/27/2025	9045D
Q1458-03	SP-SOIL	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	02/27/2025	9045D
Q1464-01	COMP-1	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	02/27/2025	9045D
Q1464-02	COMP-2	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	02/27/2025	9045D
Q1465-01	ST-OILY-DEBRIS	Solid	Corrosivity	Cool 4 deg C	PSEG03	H31	02/27/2025	9045D

02/28/25

Date/Time

Raw Sample Received by: SB YOC

Raw Sample Relinquished by: CP SM

Date/Time

Raw Sample Received by: CP SM

Raw Sample Relinquished by: SB YOC

Prep Standard - Chemical Standard Summary

Order ID : Q1463

Test : VOCMS Group2

Prepbatch ID :

Sequence ID/Qc Batch ID: VY022825,vy030625,vy030725,vy031125,

Standard ID :

VP130432,VP131767,VP131783,VP132035,VP132036,VP132098,VP132613,VP132614,VP133036,VP133037,VP133175,VP133178,VP133179,VP133182,VP133183,VP133184,VP133223,VP133224,VP133225,VP133232,VP133233,VP133234,VP133241,VP133242,VP133243,

Chemical ID :

V13391,V13446,V13466,V13706,V13707,V14145,V14154,V14175,V14176,V14289,V14433,V14439,V14521,V14522,V14613,V14614,V14624,V14630,V14631,V14632,V14633,V14722,V14723,V14724,V14744,V14754,V14756,V14801,V14809,V14814,V14842,V14872,V14873,V14874,V14875,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>
249	8260 Surrogate, 100PPM	VP130432	09/20/2024	02/28/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								09/26/2024

FROM 0.10000ml of V13707 + 24.90000ml of V14145 = 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>
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

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>
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	Maresh Dadoda
								12/12/2024

FROM 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

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>
1811	8260 Working Std(2-CVE)-500ppm	VP132036	12/10/2024	06/10/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda
								12/12/2024

FROM 7.50000ml of V14614 + 12.50000ml of VP132035 = Final Quantity: 20.000 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>
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

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>
257	8260 Calibration Working STD Mix-First source, 160PPM	VP132613	01/20/2025	02/28/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 01/29/2025
<u>FROM</u>	0.40000ml of V13446 + 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 V14722 + 1.00000ml of V14754 + 1.00000ml of V14756 + 1.00000ml of V14801 + 1.00000ml of V14814 + 1.50000ml of V14723 + 1.50000ml of V14724 + 10.60000ml of V14624 = 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	VP132614	01/20/2025	02/28/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 01/29/2025
<u>FROM</u>	5.62500ml of V14624 + 9.37500ml of VP132613 = Final Quantity: 15.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
51	8260 Working STD (Acrolein) -first source, 800PPM	VP133036	02/14/2025	03/13/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 02/18/2025
<u>FROM</u> 1.00000ml of V14872 + 1.00000ml of V14873 + 1.00000ml of V14874 + 1.00000ml of V14875 + 21.00000ml of V14624 = 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>
56	8260 Working STD (Acrolein) -first source, 500PPM	VP133037	02/14/2025	03/13/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 02/18/2025
<u>FROM</u> 5.62500ml of V14624 + 9.37500ml of VP133036 = 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>
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	Maresh Dadoda
								03/04/2025

FROM 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

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>
244	8260 Calibration Working STD Mix-First source, 100PPM	VP133179	02/27/2025	03/31/2025	Semsettin Yesilyurt	None	None	Maresh Dadoda 03/04/2025

FROM 5.62500ml of V14613 + 9.37500ml of VP133178 = Final Quantity: 15.000 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>
732	BFB TUNE CHECK - SOIL	VP133182	02/28/2025	03/01/2025	Amit Patel	None	None	Maresh Dadoda 03/04/2025

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	VP133183	02/28/2025	02/28/2025	Amit Patel	None	None	Mahesh Dadoda 03/04/2025
FROM 4.98000ml of W3112 + 0.00250ml of VP130432 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP132614 + 0.00250ml of VP133037 + 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	VP133184	02/28/2025	02/28/2025	Amit Patel	None	None	Mahesh Dadoda 03/04/2025
<u>FROM</u>	4.98000ml of W3112 + 0.00250ml of VP130432 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP132614 + 0.00250ml of VP133037 + 0.00250ml of VP133175 + 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 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	VP133223	03/06/2025	03/07/2025	Romaben Patel	None	None	Maresh Dadoda
								03/07/2025

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	VP133224	03/06/2025	03/07/2025	Romaben Patel	None	None	Maresh Dadoda
								03/07/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 0.00250ml of VP133175
+ 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 ml

[illegible]

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
732	BFB TUNE CHECK - SOIL	VP133232	03/07/2025	03/08/2025	Amit Patel	None	None	Romaben Patel 03/11/2025
<u>FROM</u> 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	VP133233	03/07/2025	03/08/2025	Amit Patel	None	None	Romaben Patel 03/11/2025
<u>FROM</u>	4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 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	VP133234	03/07/2025	03/08/2025	Amit Patel	None	None	Romaben Patel 03/11/2025
<u>FROM</u>	4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 0.00250ml of VP133175 + 0.00250ml of VP133179 + 0.00500ml of VP131783 = Final Quantity: 5.000 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	VP133241	03/11/2025	03/12/2025	Amit Patel	None	None	Romaben Patel
								03/11/2025

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	VP133242	03/11/2025	03/12/2025	Amit Patel	None	None	Romaben Patel
								03/11/2025

FROM 4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 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	VP133243	03/11/2025	03/12/2025	Amit Patel	None	None	Romaben Patel 03/11/2025
<u>FROM</u>	4.98000ml of W3112 + 0.00250ml of VP132036 + 0.00250ml of VP132098 + 0.00250ml of VP133037 + 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	30470 / VOA Stock Solution, tert-butanol std, 1mL, P&TM	A0181905	02/28/2025	01/10/2025 / SAM	01/23/2023 / SAM	V13446

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 #
Restek	555582 / Custom Mixture, 8260 A/B Surrogate Mix [CS 5179-2]	A0196865	06/10/2025	06/10/2024 / SAM	04/12/2023 / SAM	V13707

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	02/28/2025	08/29/2024 / SAM	02/06/2024 / SAM	V14145

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	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

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

CHEMICAL RECEIPT LOG BOOK

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

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 #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	23I0762004	07/13/2025	01/13/2025 / SAM	11/26/2024 / SAM	V14624

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ 2-Chloroethyl vinyl ether	120524	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

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

CHEMICAL RECEIPT LOG BOOK

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	30042 / VOA Mix,500 series method 502.2 Calibration Std #1 gases, 2000uq/ml, PTM, 1ml	A0216826	07/10/2025	01/10/2025 / SAM	12/17/2024 / SAM	V14756

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	A0220563	06/30/2026	01/10/2025 / SAM	01/08/2025 / SAM	V14801

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	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 #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14872

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14874

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	91980 / Acrolin Std (Min = 5)	021325	03/13/2025	02/14/2025 / SAM	02/14/2025 / SAM	V14875

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 23I0762004
Manufactured Date: 2023-08-11
Expiration Date: 2026-08-10
Revision No.: 0

Certificate of Analysis

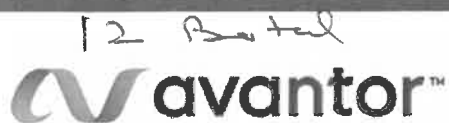
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.01
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

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

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

Ken Koehnlein
Sr. Manager, Quality Assurance

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



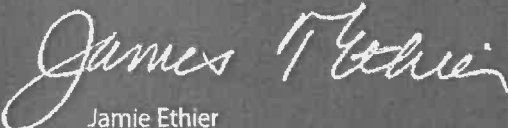
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

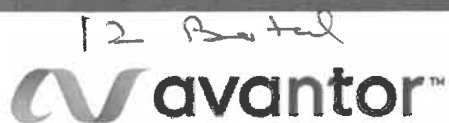
Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (μeq/g)	≤ 0.3	0.2
Titration Base (μeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms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

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

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


Jamie Ethier
Vice President Global Quality

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



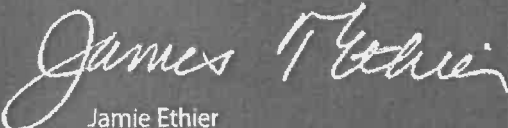
Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

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



5 J14



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Lot#
Water 072324Q

✓ 14872 to
✓ 14876

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

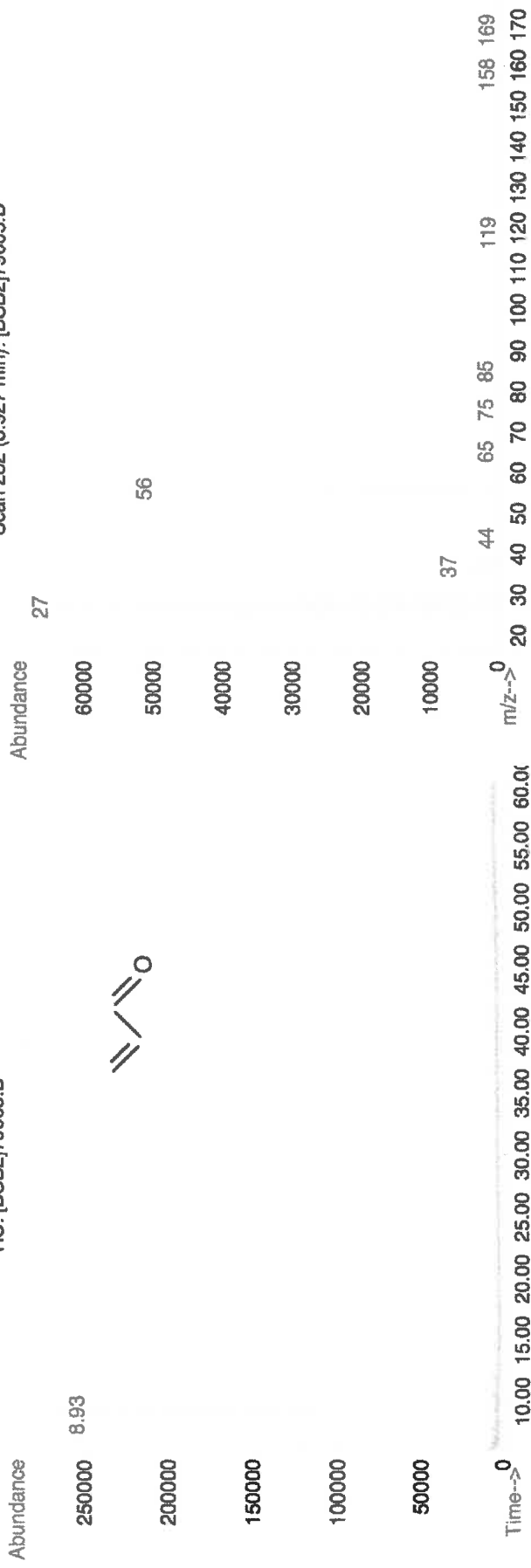
SDS Information			
Expanded			
Compound	Uncertainty	(Solvent Safety Info. On Attached pg.)	LDSO
	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)

1. Acrolein	5	103755V10F	5000	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-rat 46mg/kg

Method: GC6MSD-1. Detector: Mass Selective Detector (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

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



• 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 WATER

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

Section II - Hazards Identification

P271 Use in ventilated area	P302,332 If on skin, wash with soap and water	H315 Causes skin and eye irritation.	P280 Use gloves, eye protection/face shield	P305,351,338 If in eyes, remove contacts, rinse with water
Signal Word: DANGER				



See Certified Weight Report For Other Analytes Present At Trace Quantities.
INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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.
Hazardous Decomposition products
Carbon oxides

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
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

Water
CAS#: 7732-18-5
TWA: 500 ppm
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	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		NA		
Appearance and Odor		CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.		

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

NA

Conditions to avoid

NA

Materials to avoid

NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat

NA

LC50 Inhalation - Rat

NA

LD50 Dermal - Guinea pig

NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50

NA

EC50

NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

Proper shipping name: Water

IATA

Not dangerous goods

Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 users 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 J14



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

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

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Solvent(s): Lot#
Water 072324Q

✓ 14872 to
✓ 14876

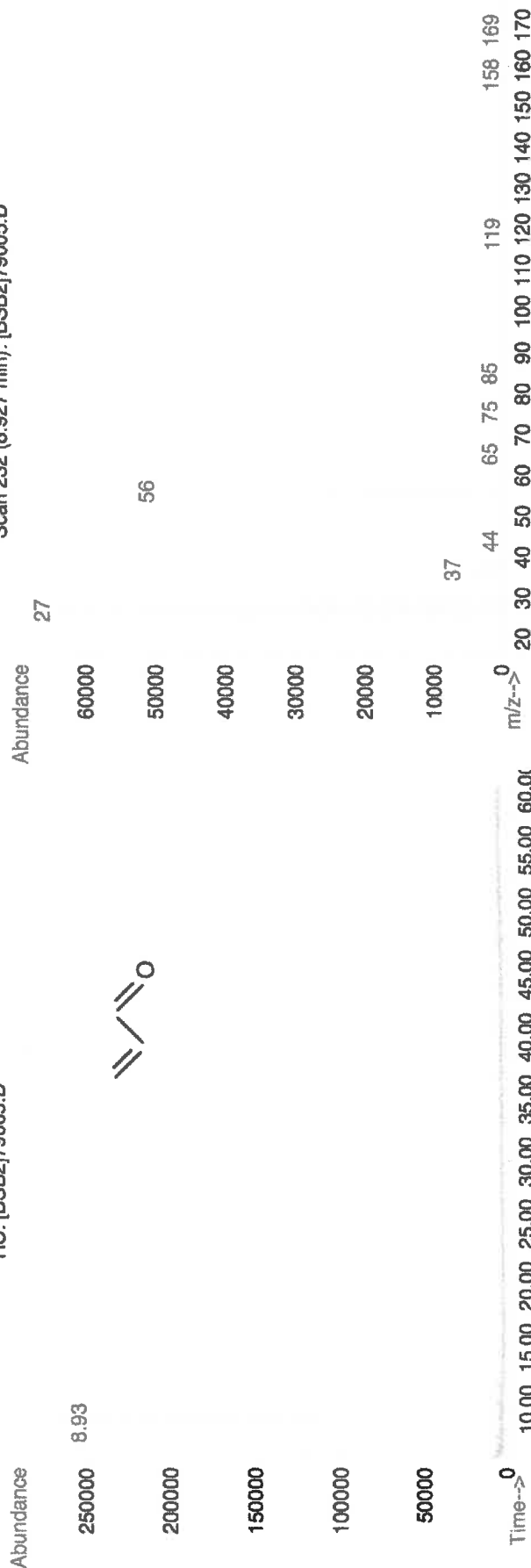
Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

SDS Information			
Expanded			
Compound	Uncertainty	(Solvent Safety Info. On Attached pg.)	LD50
	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)

1. Acrolein 5 103755V10F 5000 0.05166 0.05178 5011.8 52.6 107-02-8 0.1 ppm ori-rat 46mg/kg

Method: GC6MSD-1, Detector: Mass Selective Detector (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D



• 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 WATER

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

Section II - Hazards Identification

P271	Use in ventilated area	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	H315
P302,332	If on skin, wash with soap and water	Causes skin and eye irritation.	P280
		Use gloves, eye protection/face shield	P305,351,338
		If in eyes, remove contacts, rinse with water	

Signal Word: DANGER



See Certified Weight Report For Other Analytes Present At Trace Quantities.
INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

General advice
If inhaled
If in case of skin contact
If in case of eye contact
If swallowed

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

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Protective equipment for fire
Hazardous Decomposition products

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Environmental precautions
Clean up

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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
Storage Conditions

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.
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

Water
CAS#: 7732-18-5
TWA: 500 ppm

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	100°C
Specific Gravity (H2O = 1)	
Melting Point	1

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		
Appearance and Odor				

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
NA

Conditions to avoid
NA

Materials to avoid
NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat
NA

LC50 Inhalation - Rat
NA

LD50 Dermal - Guinea pig
NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50
NA

EC50
NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 users 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 JUL



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

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

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Solvent(s): Lot#
Water 072324Q

✓ 14872 to
✓ 14876

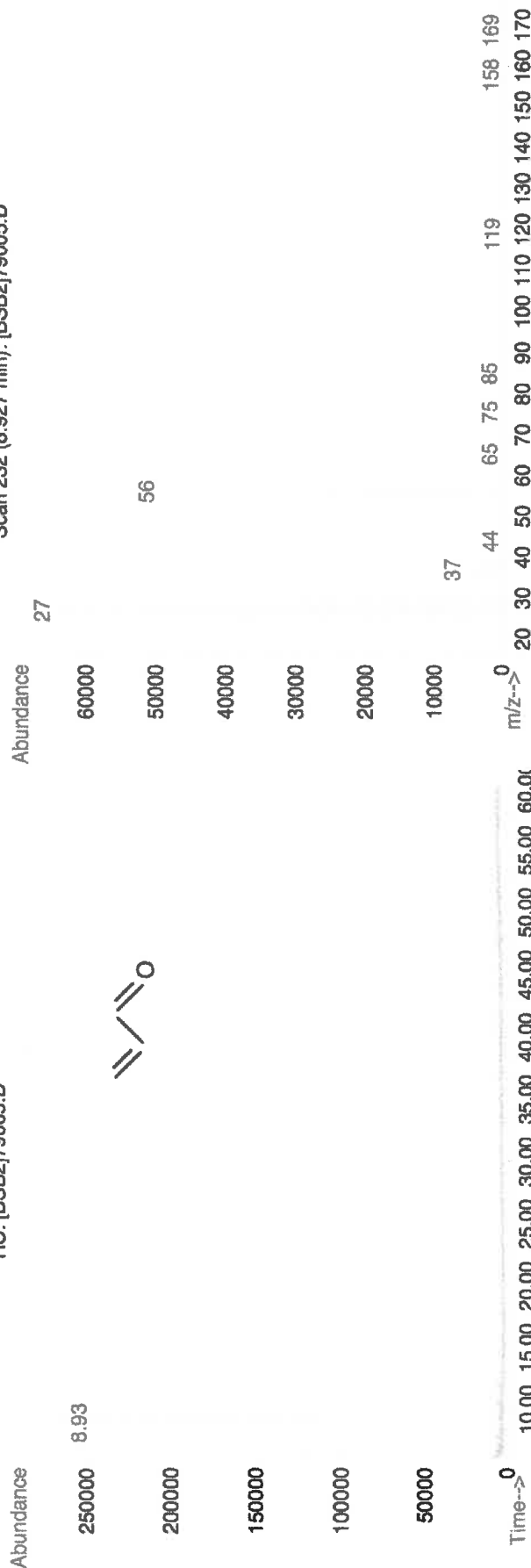
Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

SDS Information			
Expanded			
Compound	Uncertainty	(Solvent Safety Info. On Attached pg.)	LDSO
	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)

1. Acrolein	5	103755V10F	5000	0.05166	0.05178	5011.8	52.6	107-02-8	0.1 ppm	ori-rat 46mg/kg

Method: GC6MSD-1. Detector: Mass Selective Detector (Scan mode). Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness). Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C. Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D



• 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 WATER

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

Section II - Hazards Identification

P271	Use in ventilated area	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water		P280	Use gloves, eye protection/face shield
			P305,351,338	If in eyes, remove contacts, rinse with water

Signal Word: DANGER



See Certified Weight Report For Other Analytes Present At Trace Quantities.
INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

Suitable extinguishing media
Protective equipment for fire
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Wear self contained breathing apparatus for fire fighting if necessary.
Carbon oxides

Section VI. ACCIDENTAL RELEASE MEASURES

Personal precautions
Environmental precautions
Clean up
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Vapours accumulate to form explosive concentrations.
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
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
Storage Conditions
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.
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

Water
CAS#: 7732-18-5
TWA: 500 ppm
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	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		
Appearance and Odor				

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
NA

Conditions to avoid
NA

Materials to avoid
NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat
NA

LC50 Inhalation - Rat
NA

LD50 Dermal - Guinea pig
NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50
NA

EC50
NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 users 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 Material Safety Data Sheet. If you have any questions, please call Technical Service at 1-203-281-2917 for assistance.



Certified Reference Material CRM

5 JUL



CERTIFIED WEIGHT REPORT

Part Number: 91980
Lot Number: 021325
Description: Acrolein

Expiration Date: 031325
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 5000
NIST Test ID#: 6UTB

Solvent(s): Water
Lot# 072324Q

✓ 14872 to
✓ 14876

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Weight(s) shown below were combined and diluted to (mL): 10.0

Formulated By:	Anthony Mahoney	021325	DATE
Reviewed By:	Pedro L. Rentas	021325	DATE

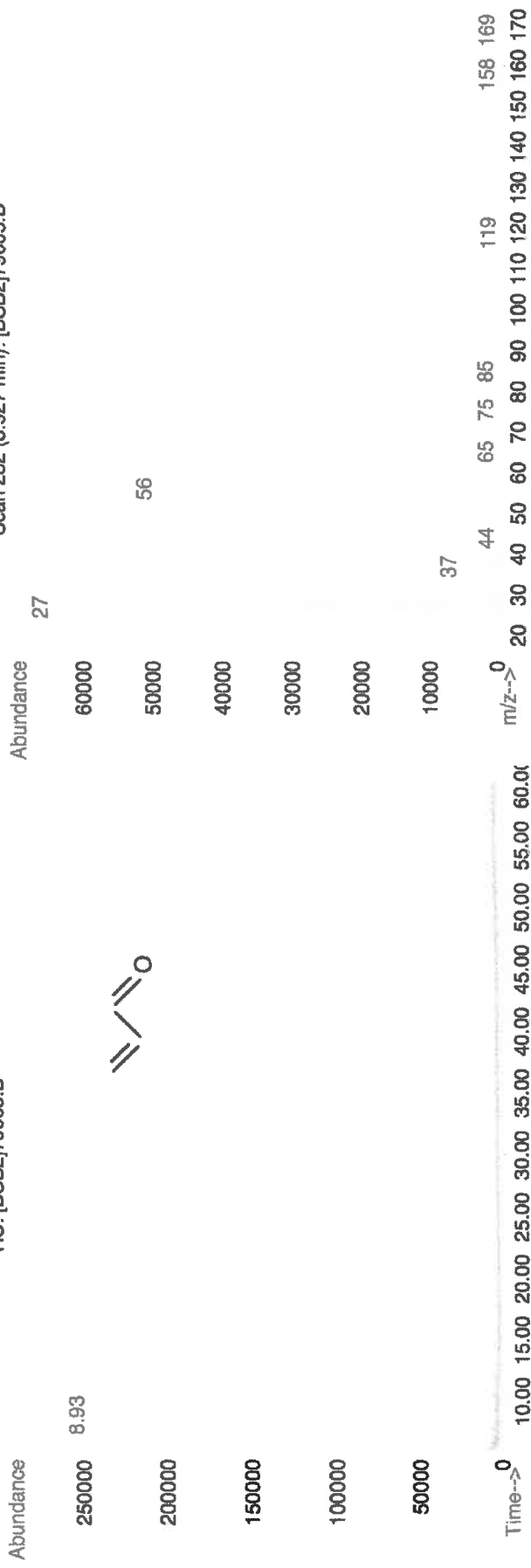
Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	CAS#	OSHA PEL (TWA)	LDSO

1. Acrolein 5 10375SV10F 5000 97 0.5 0.05166 0.05178 5011.8 52.6 107-02-8 0.1 ppm ori-rat 46mg/kg

Method: GC6MSD-1, Detector: Mass Selective Detector (Scan mode), Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Oven Profile: Temp. 1 = 35°C (Time 1 = 10min.), Temp. 2 = 200°C (Time 2 = 8.75 min.), Rate = 4°C/min., Injector Temp. = 200°C, Detector Temp. = 220°C, Analyst: Pedro Rentas. NOTE: Due to the instability of acrolein in solution, all solutions of acrolein, and any dilutions thereof, should be used immediately. Long term storage is not recommended. Please contact our technical department if further information is required.

TIC: [BSB2]79005.D

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



• 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 WATER

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

Section II - Hazards Identification

P271	Use in ventilated area	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	H315	Causes skin and eye irritation.
P302,332	If on skin, wash with soap and water		P280	Use gloves, eye protection/face shield
			P305,351,338	If in eyes, remove contacts, rinse with water

Signal Word: DANGER



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, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
If in case of skin contact
Wash with soap and water. Consult a physician.
If in case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Do NOT induce vomiting. Rinse mouth with water. Consult a physician.

Section V. FIREFIGHTING MEASURES

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.
Hazardous Decomposition products
Carbon oxides

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
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

Water
CAS#: 7732-18-5
TWA: 500 ppm
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	100°C	Specific Gravity (H2O = 1)	1
Vapor Pressure (mm Hg)		Melting Point	

Vapor Density (AIR = 1)		NA	Evaporation rate (Butyl Acetate = 1)	0°C
Solubility in Water		Completely miscible		
Appearance and Odor				

CLEAR, COLORLESS LIQUID WITH SLIGHT CHEMICAL ODOR.

Section X. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
NA

Conditions to avoid
NA

Materials to avoid
NA

Hazardous decomposition products - No data available

Section XI. TOXICOLOGICAL INFORMATION

LD50 Oral - Rat
NA

LC50 Inhalation - Rat
NA

LD50 Dermal - Guinea pig
NA

Causes skin irritation.

Eye irritation

Section XII. ECOLOGICAL INFORMATION

LC50
NA

EC50
NA

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods
Proper shipping name: Water

IATA
Not dangerous goods
Proper shipping name: Water

Section XV. REGULATORY INFORMATION

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 users 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 Material 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**

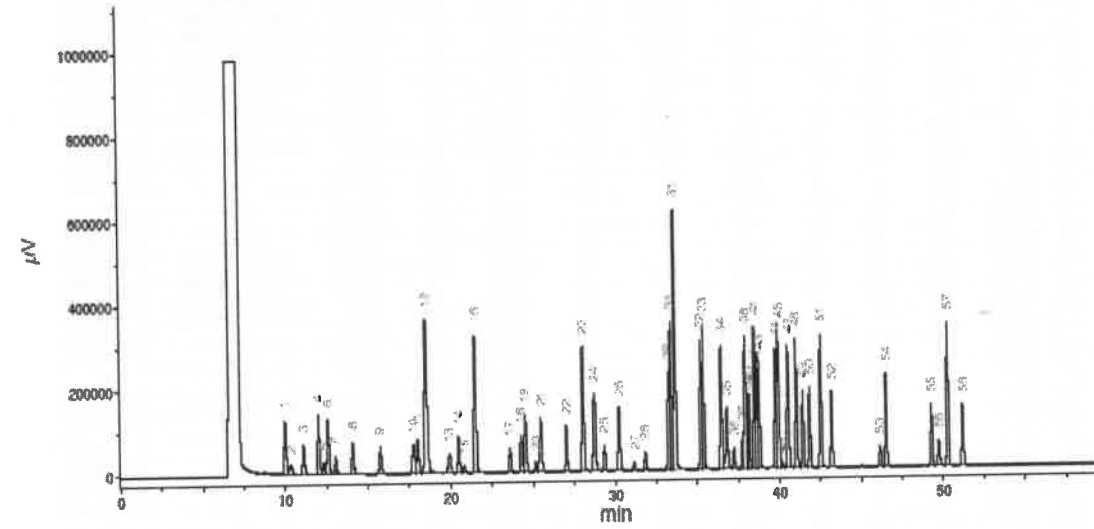
		021624
Formulated By:	Prashant Chauhan	DATE
		021624
Reviewed By:	Pedro L. Rentes	DATE

Compound	(RM#)	Lot	Di.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded	SDS Information		
	Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette (mL)	Weight(g)	Weight(g)	Conc (µg/mL)	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	or-rat 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 disulfide	(0060)	MKCR8561	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20023	2001.6	8.1	75-15-0	4 ppm (12mg/m3) (skin)	or-rat 1200mg/kg
4. cis-1,4-Dichloro-2-butene	(1196)	14718EF	NA	NA	NA	2000	95	0.2	NA	0.21058	0.21069	2001.1	6.5	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	or-rat 14800mg/kg
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 70mg/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 240mg/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 780mg/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 720mg/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	74-85-3	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	N/A	or-rat 108mg/kg
28. 2,2-Dichloropropane	95321	020724	0.10	10.00	20003.4	2000	NA	NA	0.042	NA	NA	1999.8	20.4	594-20-7	100 ppm	or-rat 725mg/kg
29. Tetrachloroethane	95321	020724	0.10	10.00	20201.1	2000	NA	NA	0.042	NA	NA	1999.8	20.4	584-20-7	N/A	N/A
30. 1,1,1-Trichloroethane	95321	020724	0.10	10.00	20003.0	2000	NA	NA	0.042	NA	NA	2019.6	20.8	127-18-4	25 ppm (170mg/m3/8H) (final)	or-rat 2629mg/kg
31. 1,2-Dibromo-3-chloropropane	35161	112322	0.05	5.00	40016.5	2000	NA	NA	0.017	NA	NA	1999.8	20.5	71-55-6	350 ppm (1900mg/m3/8H)	or-rat 10300mg/kg
32. 1,2-Dibromomethane	35161	112322	0.05	5.00	40024.8	2000	NA	NA	0.017	NA	NA	2000.3	22.9	96-12-6	0.001 ppm	or-rat 170mg/kg
33. 1,2-Dichloroethane	35161	112322	0.05	5.00	40018.0	2000	NA	NA	0.017	NA	NA	2000.4	22.9	106-93-4	20 ppm (8H)	or-rat 108mg/kg
34. 1,2-Dichloropropane	35161	112322	0.05	5.00	40051.0	2000	NA	NA	0.017	NA	NA	2000.2	22.9	107-08-2	50 ppm (8H)	or-rat 870mg/kg
35. 1,3-Dichloropropane	35161	112322	0.05	5.00	40005.9	2000	NA	NA	0.017	NA	NA	2000.2	22.9	78-57-5	75 ppm (350mg/m3/8H)	or-rat 1947mg/kg
36. 1,1-Dichloropropene	35161	112322	0.05	5.00	40012.1	2000	NA	NA	0.017	NA	NA	1999.8	22.9	142-28-9	N/A	un-rat 3600mg/kg
37. cis-1,3-Dichloropropene	35161	112322	0.05	5.00	40010.0	2000	NA	NA	0.017	NA	NA	2000.1	29.7	563-56-6	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	10061-01-5	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	or-rat 2699mg/kg
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	106-38-3	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	1999.6	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	40003.3	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	NA	NA	0.017	NA	NA	1999.7	22.9	541-73-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.7	22.9	95-50-1	75 ppm (450mg/m3/8H)	or-rat 900mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.6				

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	37.99
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**

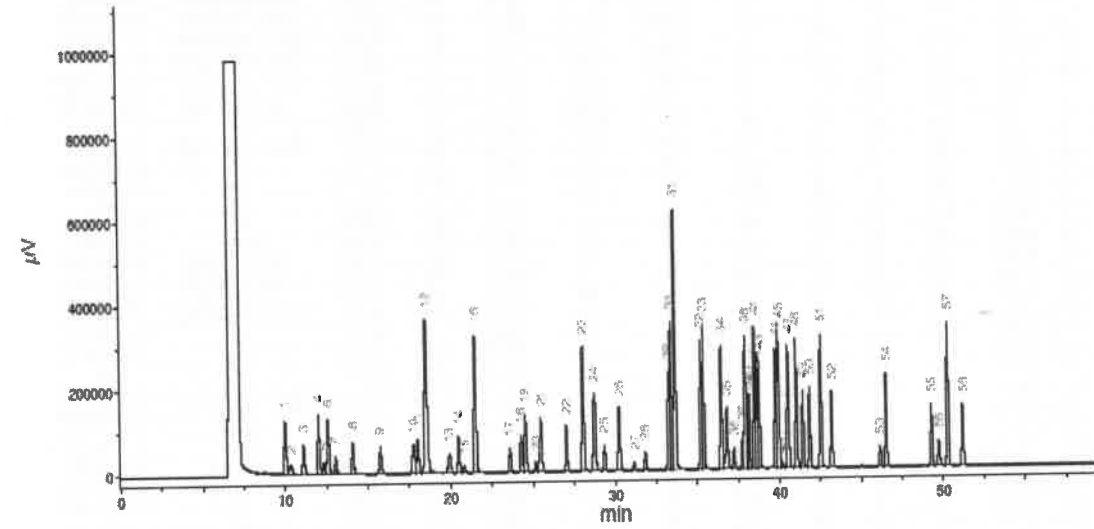
Formulated By: <i>Prashant Chauhan</i>		021624
Reviewed By: <i>Pedro L. Rentes</i>		021624
		DATE

Compound	(RM#)	Lot Number	Di. Factor	Initial Vol. (mL)	Initial Conc. (µg/mL)	Nominal Conc. (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette (mL)	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
														CAS#	OSHA PEL (TWA)	LD50
1. Acetonitrile	(0324)	021644	NA	NA	NA	2000	99.99	0.2	NA	0.20007	0.20020	2001.3	8.1	75-05-8	40 ppm (70mg/m3/8H)	or-rat 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 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
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)	MKBP6041F	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	or-rat 14800mg/kg
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 70mg/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 3480mg/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 780mg/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 43mg/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 910mg/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	22.9	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	1999.7	20.4	75-35-4	1 ppm (4mg/m3/8H)	or-rat 200mg/kg
23. Bromoform	95321	020724	0.10	10.00	20003.2	2000	NA	NA	0.042	NA	NA	1999.8	20.5	75-25-2	0.5 ppm (5mg/m3) (skin)	or-rat 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	20004.0	2000	NA	NA	0.042	NA	NA	1999.8	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	74-85-3	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) (flnal)	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	2000.2	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	22.9	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	22.9	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	80 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	1999.8	22.9	106-98-3	200 ppm	or-rat 5000mg/kg
52. Toluene	35162	050823	0.05	5.00	40003.1	2000	NA	NA	0.017	NA	NA	1999.7	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	1999.6	22.9	106-67-8	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	40003.3	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	NA	NA	0.017	NA	NA	1999.7	22.9	541-73-1	50 ppm (300mg/m3) (CL)	or-rat 500mg/kg
63. 1,2-Dichlorobenzene	35163	101923	0.05	5.00	40003.8	2000	NA	NA	0.017	NA	NA	1999.6	23.0	96-46-7	78 ppm (450mg/m3/8H)	or-rat 900mg/kg
64. 1,3-Dichlorobenzene	35163	101923	0.05	5.00	40001.7	2000	NA	NA	0.017	NA	NA	1999.7	23.0	108-65-1	50 ppm (245mg/m3/8H)	or-rat 1400mg/kg
65. 1,4-Dichlorobenzene	35163	101923	0.05	5.00	40001.8	2000	NA	NA	0.017	NA	NA	1999.7	23.0	106-46-7	N/A	or-rat 8040mg/kg

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	36.48
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 Reference Material CRM



Dec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

10.0

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

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

1. Acrolein	5	103755V10F	5000	97	0.5	0.05186	0.05175	5008.9	52.5	107-02-8	0.1 ppm	ori-rat 46mg/kg

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

TIC: [BSB2]79005.D

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

Abundance

27

250000

8.93

200000

C=CC=O

50000

56

150000

40000

30000

20000

50000

10000

37

Time-->

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->

0

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

44 65 75 85 119 158 169

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
 * Standards are prepared gravimetrically using balances that are calibrated 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



Dec 09/17/24

CERTIFIED WEIGHT REPORT

Part Number:

91980

Lot Number:

091424

Description:

Acrolein

Solvent(s):

Water

Lot#

072324Q

Expiration Date:

101424

Recommended Storage:

Refrigerate (4 °C)

Nominal Concentration (µg/mL):

5000

NIST Test ID#:

6UTB

5E-05 Balance Uncertainty

0.001 Flask Uncertainty

10.0

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

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

1. Acrolein	5	103755V10F	5000	97	0.5	0.05166	0.05175	5008.9	52.5	107-02-8	0.1 ppm	ori-rat 46mg/kg

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

TIC: [BSB2]79005.D

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

Abundance

27

250000

8.93

200000

56

150000

40000

30000

100000

20000

50000

10000

Time-->

10.00 15.00 20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00

m/z-->

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

37

44

65

75

85

119

158

169

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
 * Standards are prepared gravimetrically using balances that are calibrated 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

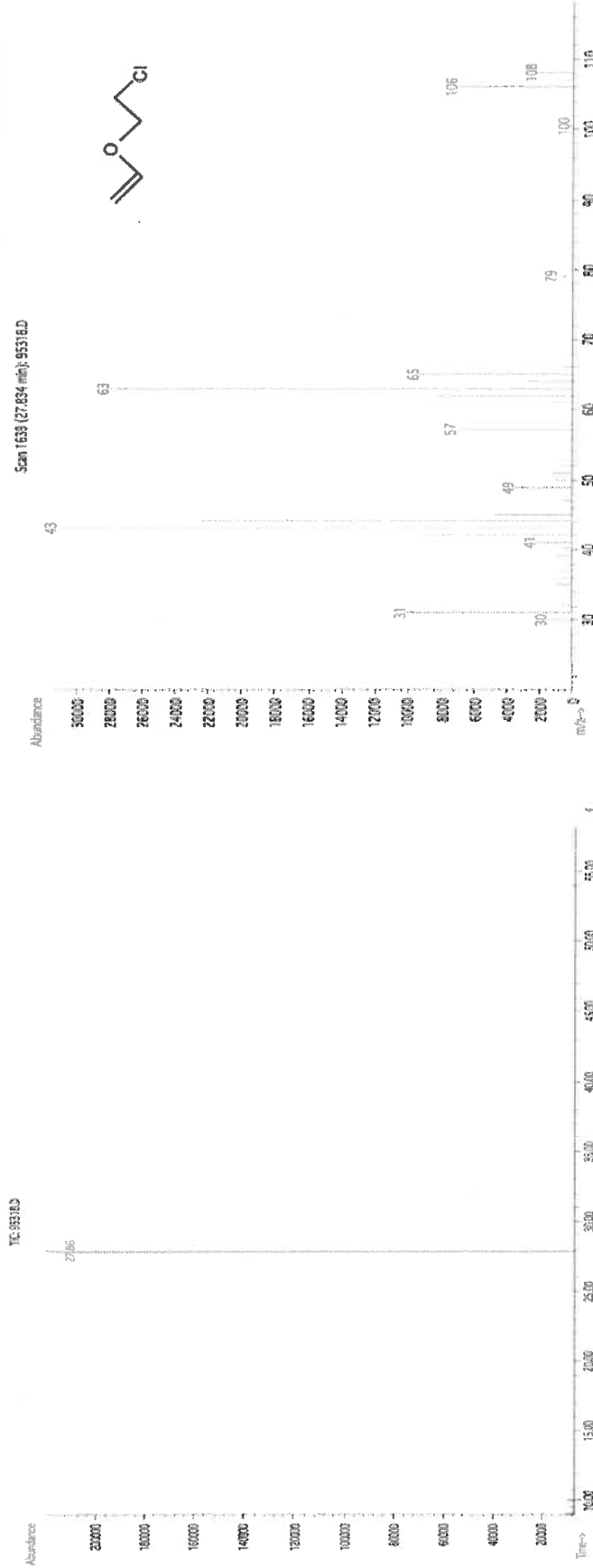
✓ 14630 to
✓ 14649

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.



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

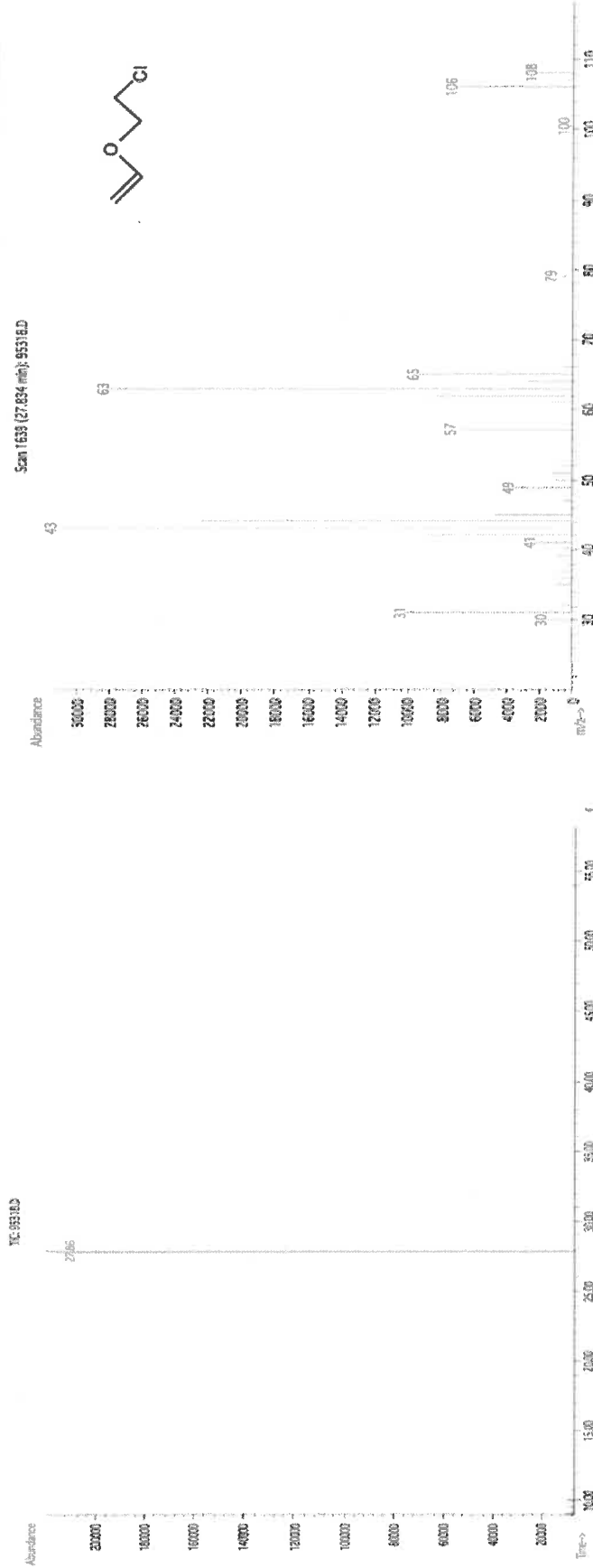
Weight(s) shown below were combined and diluted to (mL):

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)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50

1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg

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



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

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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



Dec 12/16/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

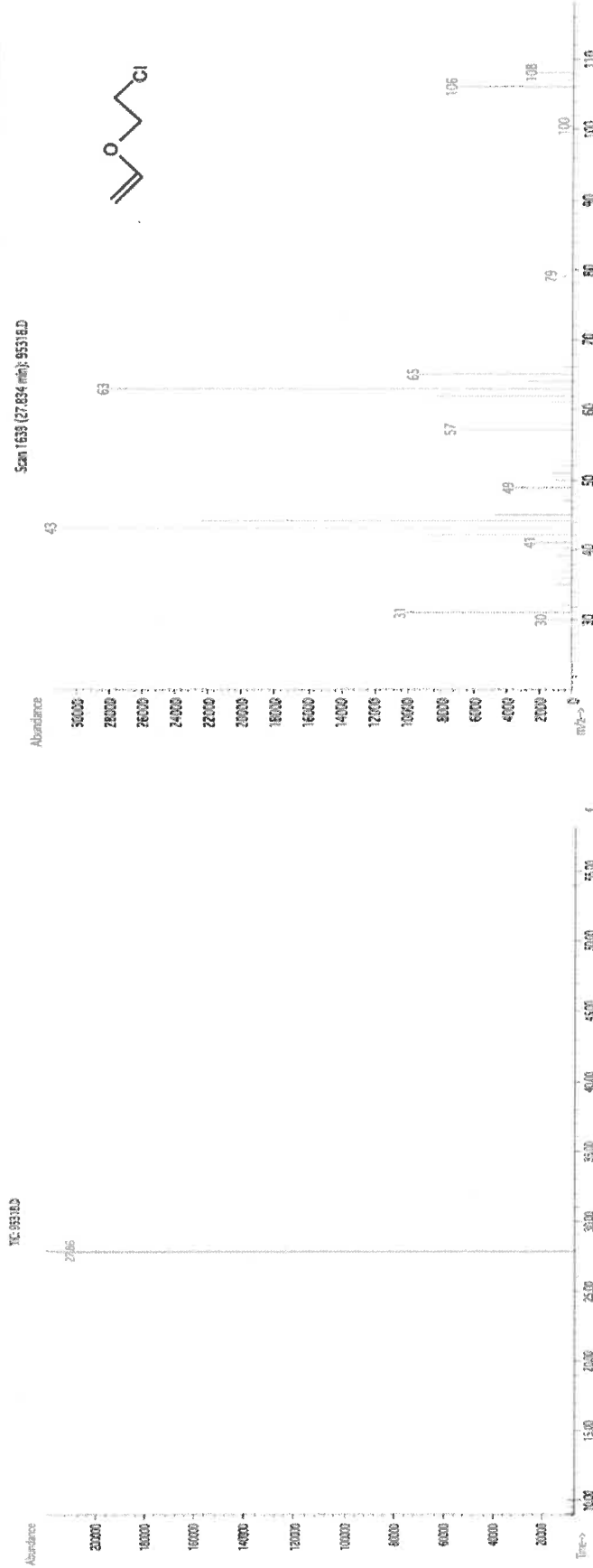
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50

1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg

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



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

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

Section XV. REGULATORY INFORMATION

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

Section XVI. Misc. INFORMATION

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



Dec 12/6/24
20 vial

CERTIFIED WEIGHT REPORT

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

Solvent(s): Lot#
Methanol EJ143-US

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

✓ 14630 to
✓ 14649

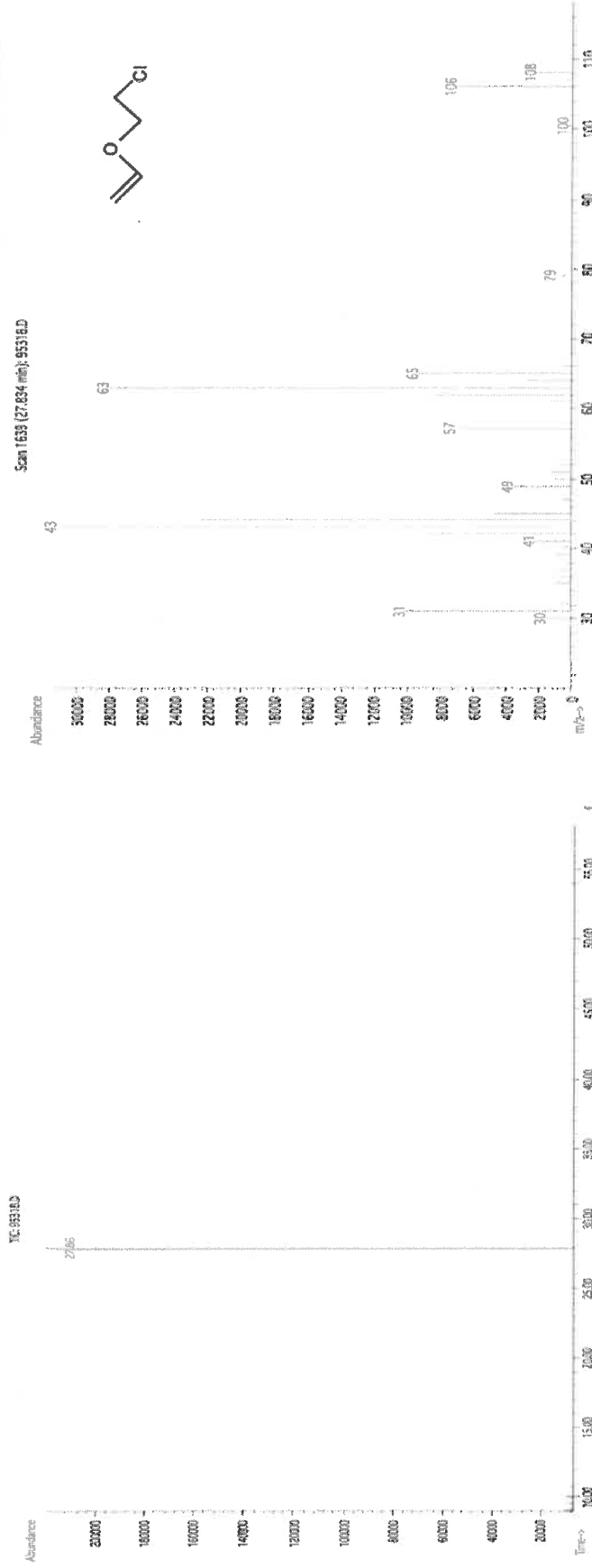
Weight(s) shown below were combined and diluted to (mL):

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Target Weight (g)	Actual Weight (g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)	LD50

1. 2-Chloroethyl vinyl ether	74	MKCD0033	10000	99	0.2	0.50536	0.50550	10002.9	40.5	110-75-8	N/A	or-rat 250mg/kg

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



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

Safety Data Sheet (SDS)

GHS/OSHA Compliant

Section I Product and Company Identification

IDENTITY ANALYTICAL STANDARD DISSOLVED IN METHANOL

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

Section II - Hazards Identification

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

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



Signal Word: DANGER

Section III - Composition

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

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

INTENDED USE: REFERENCE MATERIAL

Section IV. FIRST AID MEASURES

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

Section V. FIREFIGHTING MEASURES

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

Section VI. ACCIDENTAL RELEASE MEASURES

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

Section VII. HANDLING AND STORAGE

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

Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Section IX - Physical/Chemical Characteristics

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

Section X. STABILITY AND REACTIVITY

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

Section XI. TOXICOLOGICAL INFORMATION

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

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

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

Section XIII. DISPOSAL CONSIDERATIONS

Dispose with normal Laboratory Solvent Waste.

Section XIV. TRANSPORT INFORMATION

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

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



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.: A0181905
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 : February 28, 2025 Storage: 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)												
1	tert-Butanol (TBA) CAS # 75-65-0 Purity 99% (Lot SHBM7694)	50,126.0 µg/mL	<table><tr><td>+/-</td><td>293.4988</td><td>µg/mL</td><td>Gravimetric</td></tr><tr><td>+/-</td><td>1,073.7654</td><td>µg/mL</td><td>Unstressed</td></tr><tr><td>+/-</td><td>1,104.9494</td><td>µg/mL</td><td>Stressed</td></tr></table>	+/-	293.4988	µg/mL	Gravimetric	+/-	1,073.7654	µg/mL	Unstressed	+/-	1,104.9494	µg/mL	Stressed
+/-	293.4988	µg/mL	Gravimetric												
+/-	1,073.7654	µg/mL	Unstressed												
+/-	1,104.9494	µg/mL	Stressed												

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

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:

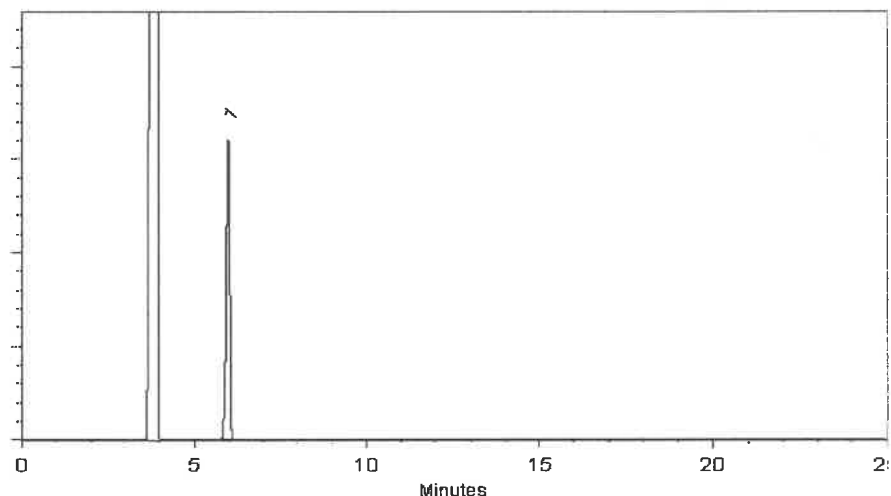
200°C

Det. Temp:

250°C

Det. Type:

FID



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.

John Friedline - Operations Technician I

Date Mixed: 16-Feb-2022

Balance: B442140311

Marlene Cowan - Operations Tech I

Date Passed: 21-Feb-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 combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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 ampules. 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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Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 4-Bromofluorobenzene Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

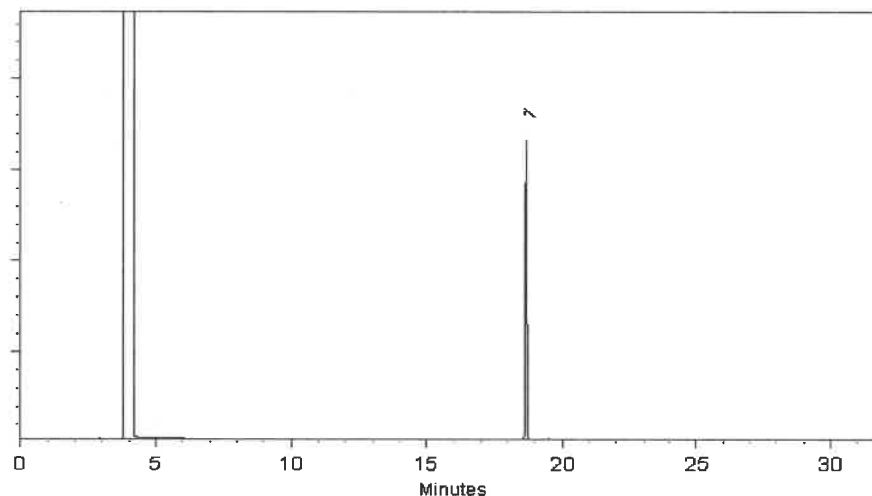
FID

Split Vent:

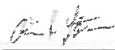
40 ml/min

Inj. Vol

1µl



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


Alicia Leathers - Operation Technician I

Date Mixed: 17-Nov-2022

Balance Serial # B251644995


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Nov-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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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:

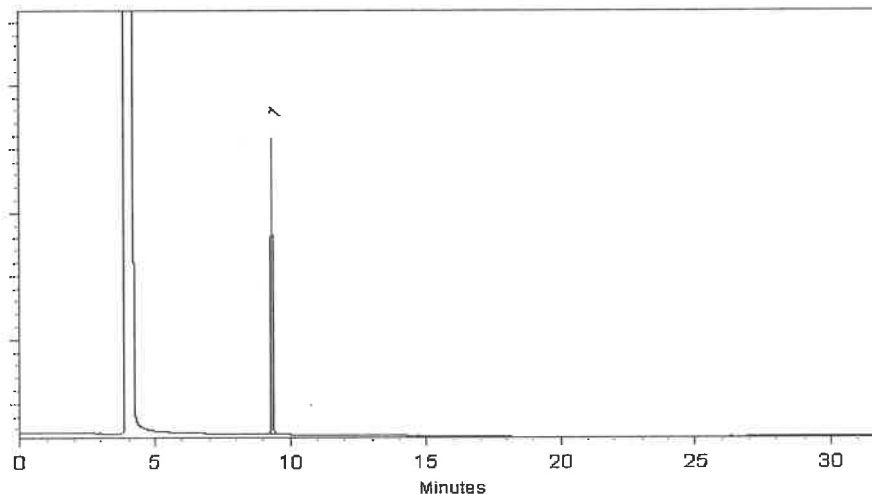
FID

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

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

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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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:

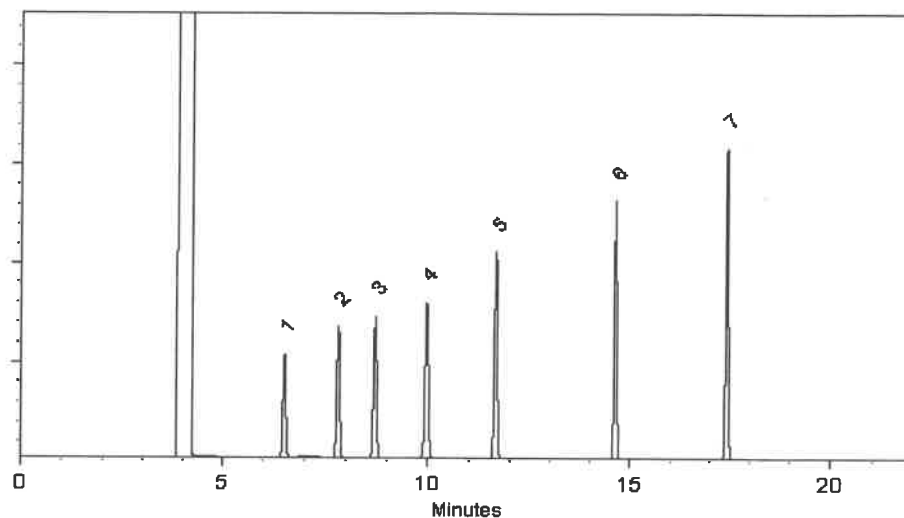
FID

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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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:

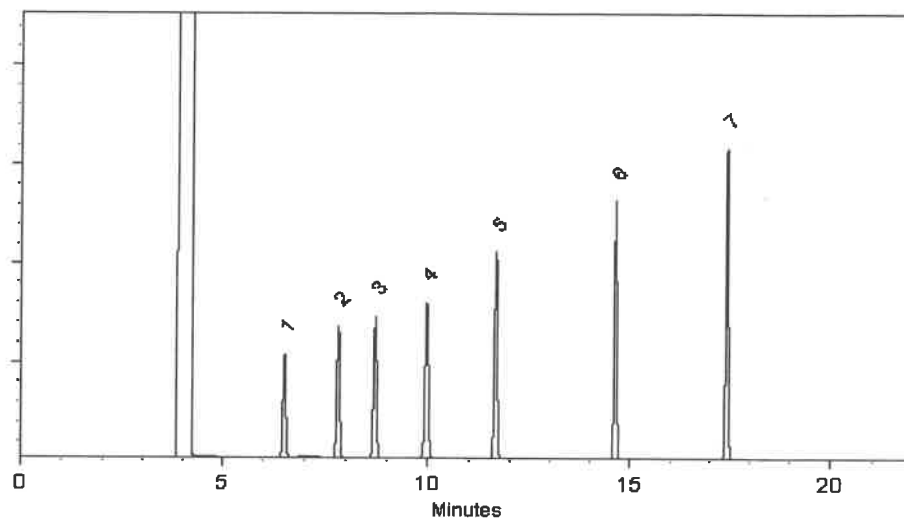
FID

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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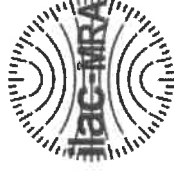
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Certificate of Analysis

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:

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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:

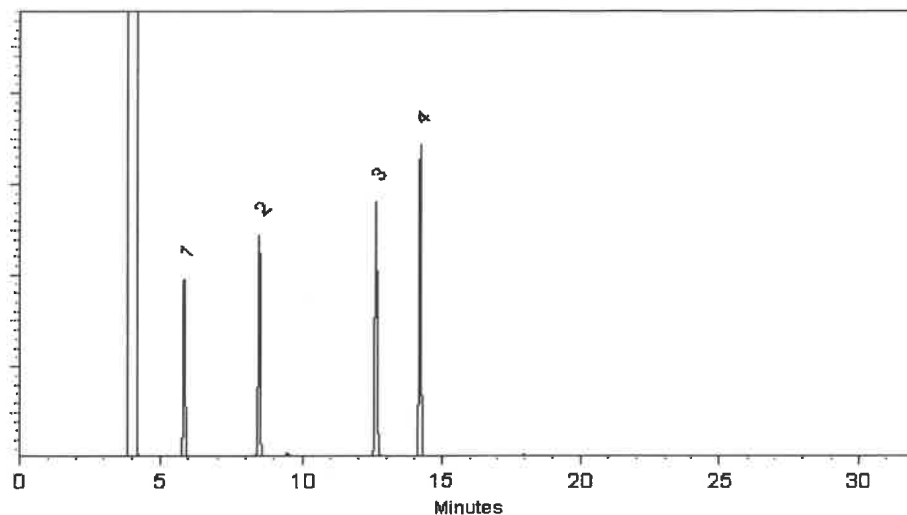
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

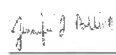


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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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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:

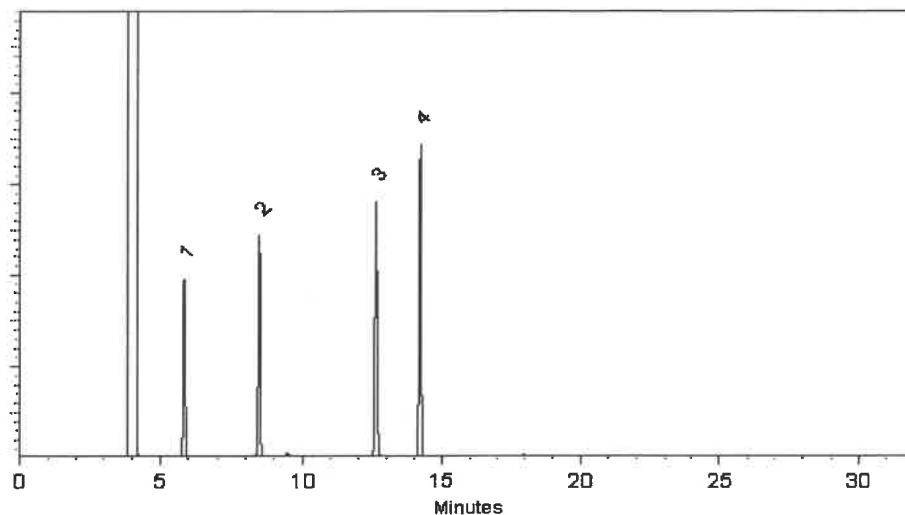
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

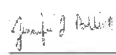


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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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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:

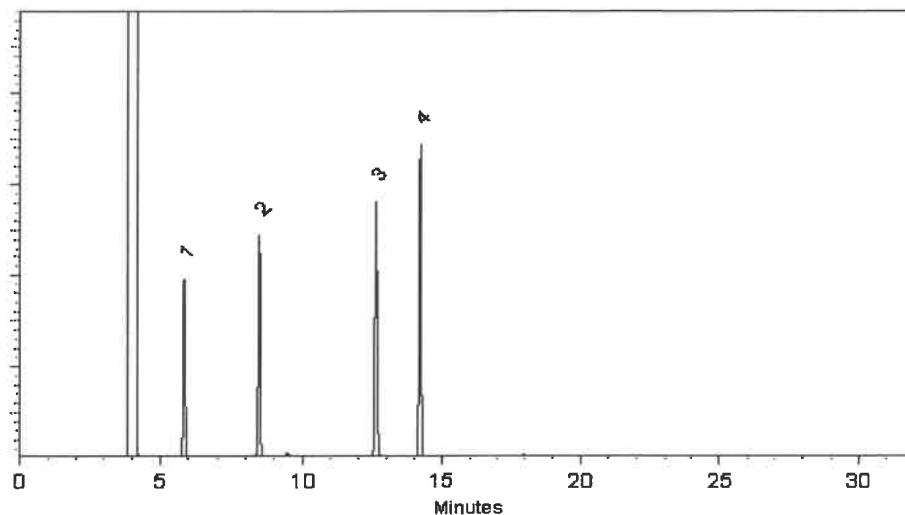
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

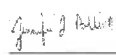


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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:

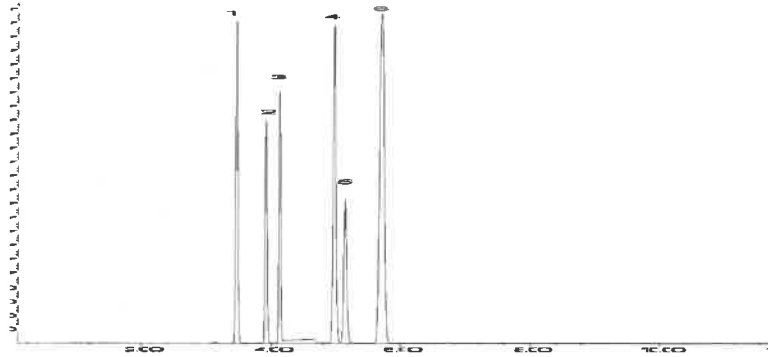
MSD

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.
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30 ml
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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:

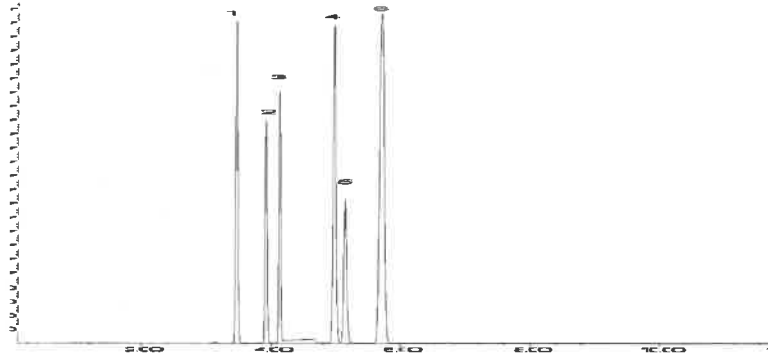
MSD

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.
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30 ml
Certificate of Analysis
chromatographic plus

V14727 to
V14756



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30042 **Lot No.:** A0216826
Description : 502.2 Calibration Mix #1
502.2 Calibration Mix #1 2,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : May 31, 2031 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

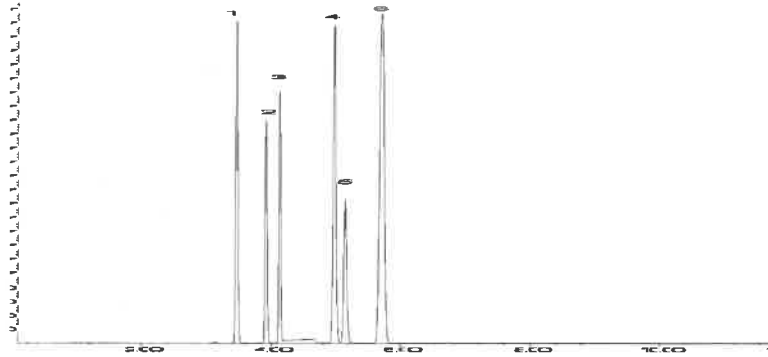
MSD

Split Vent:

Split ratio 10:1

Inj. Vol

1µl



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

Tom Suckal - Mix Technician

Date Mixed: 23-Sep-2024

Balance Serial # B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Certificate of Analysis

chromatographic plus

✓ 14842 to 14846



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30470 **Lot No.:** A0217535
Description : tert-Butanol Standard
tert-Butanol Std 50,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : October 31, 2027 **Storage:** 0°C or colder
Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	tert-Butanol (TBA)	75-65-0	SHBQ8002-1	99%	50,007.5 µg/mL	+/- 717.6137

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

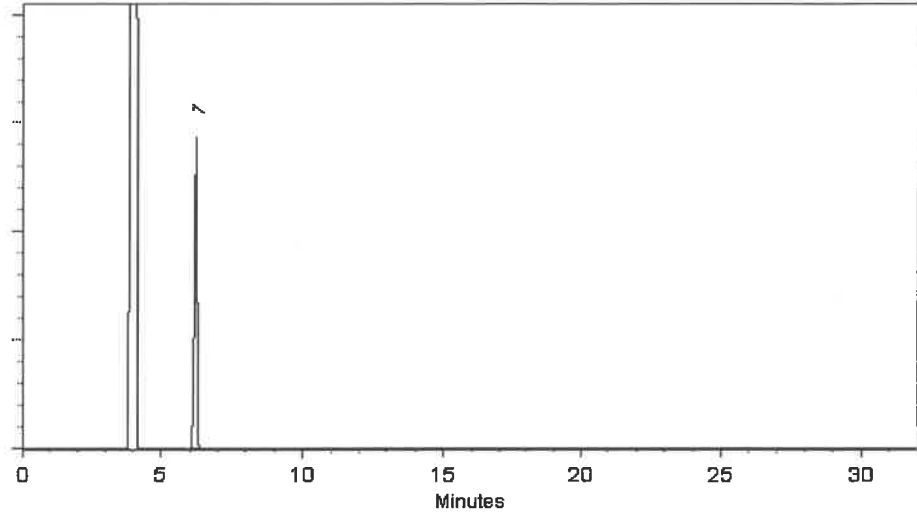
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

A. O. E.
Aaron Enyart - Operations Tech I

Date Mixed: 07-Oct-2024

Balance Serial # B251644995

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 09-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ 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:

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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:

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

Handling Notes:

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

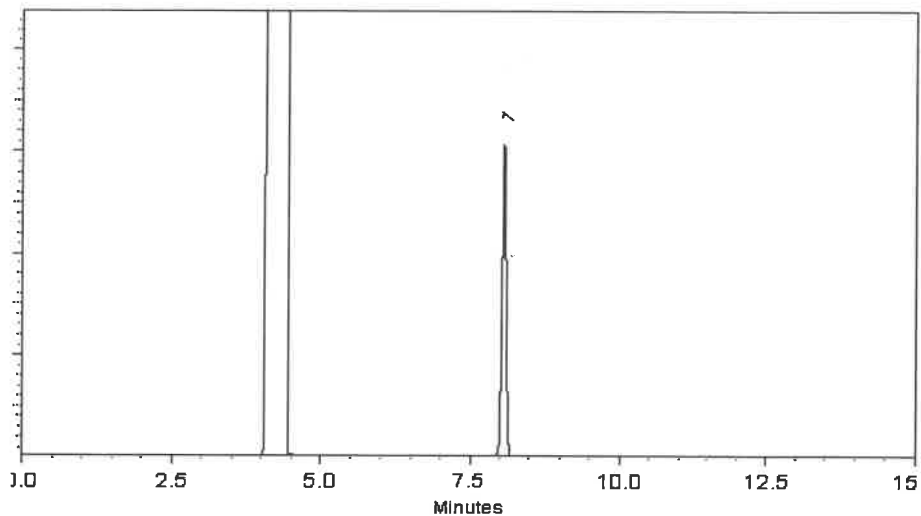
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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



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2014 Dec 01/08/21
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

V14803 - V14822



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 555408-SL **Lot No.:** A0220471
Description : Custom Vinyl Acetate Standard
Custom Vinyl Acetate Standard 8,000µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : June 30, 2026 **Storage:** -20°C or colder
Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Vinyl acetate	108-05-4	RD240423RSR	99%	8,066.0 µg/mL	+/- 278.7979

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

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

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

Inj. Temp:

200°C

Det. Temp:

250°C

Det. Type:

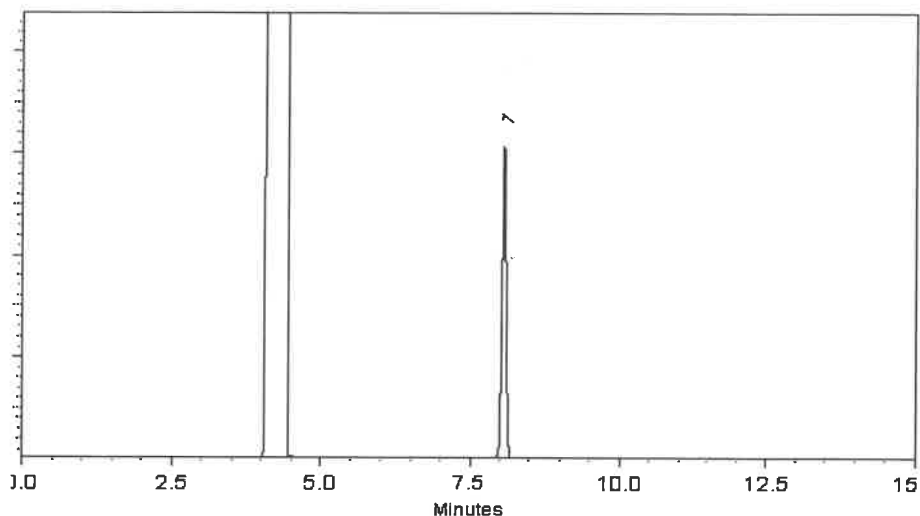
FID

Split Vent:

40 ml/min

Inj. Vol

1µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 24-Dec-2024

Balance Serial # 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pollock at 7:12 am, Jan 05, 2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/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:

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Fax: 1-814-353-1309

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10 vol Rec 01/08/25
CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

✓ 14793 to 14802



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-FL **Lot No.:** A0220563
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%	8,060.0 µg/mL	+/- 278.5905

* 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:

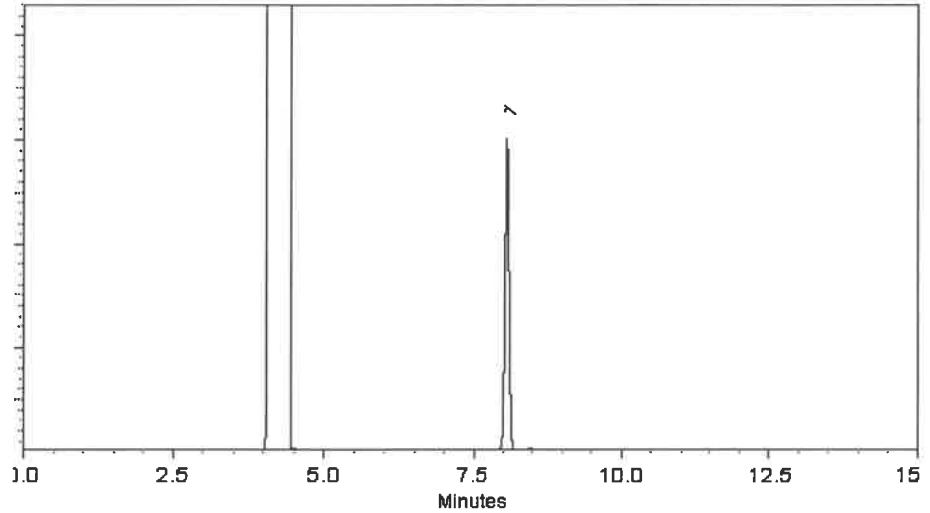
FID

Split Vent:

40 ml/min

Inj. Vol

1µl

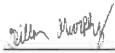


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Tom Suckal - Mix Technician

Date Mixed: 30-Dec-2024

Balance Serial # B345965662


Dillan Murphy - Operations Technician I

Date Passed: 02-Jan-2025

REVIEWED
By Jennifer Pothos at 7:11 am, Jan 03, 2025

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value 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:

- 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:

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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

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
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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

COMPANY: G Environmental
ADDRESS: 8 CARRIAGE
CITY: Jucashun STATE: NJ ZIP: 07096
ATTENTION:
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: FISAL
PROJECT NO.: LOCATION:
PROJECT MANAGER: GR
e-mail: gary@g-environmental.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: G Environmental PO#:
ADDRESS: 8 CARRIAGE
CITY: Jucashun STATE: NJ ZIP:
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 hazmat MDA MDA

Soil Volatiles
7/27/12

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1.	T1	soil		X	2/27/12	1111	5	X										
2.	T2	soil			2/27/12	1100												
3.	T3					1058												
4.	T4					1053												
5.	T5					1047												
6.	T6					1125												
7.	T7					1138												
8.	T8					1038												
9.	T9	soil				1038												
10.	T10	soil		X	2/27/12	1035		X										

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP
1. <u>HR</u>	<u>2/27/12</u>	<u>OK</u>	<u>1.9</u> °C
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Comments:
2.			<u>It's out</u>
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.			

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete
☐ YES ☐ NO

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1463 GENV01

Order Date : 2/27/2025 3:25:00 PM

Project Mgr :

Client Name : G Environmental

Project Name : Fisal

Report Type : ~~Level 1~~ NJ REDUCE

Client Contact : Gary Landis

Receive DateTime : 2/27/2025 2:15:00 PM

EDD Type : Excel NJ

Invoice Name : G Environmental

Purchase Order :

Hard Copy Date :

Invoice Contact : Gary Landis

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1463-01	~~TP1~~ T1	Solid	02/27/2025	11:11					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-02	~~TP2~~ T2	Solid	02/27/2025	11:00					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-03	~~TP3~~ T3	Solid	02/27/2025	10:58					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-04	~~TP4~~ T4	Solid	02/27/2025	10:53					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-05	~~TP5~~ T5	Solid	02/27/2025	10:47					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-06	~~TP6~~ T6	Solid	02/27/2025	11:25					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-07	~~TP7~~ T7	Solid	02/27/2025	11:38					
					VOCMS Group2		8260D	10 Bus. Days	
Q1463-08	~~TP8~~ T8	Solid	02/27/2025	10:38					

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1463	GENV01	Order Date : 2/27/2025 3:25:00 PM	Project Mgr :
Client Name : G Environmental		Project Name : Fisal	Report Type : ~~Level 1~~ NJ REDUCE
Client Contact : Gary Landis		Receive DateTime : 2/27/2025 2:15:00 PM	EDD Type : Excel NJ
Invoice Name : G Environmental		Purchase Order :	Hard Copy Date :
Invoice Contact : Gary Landis			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1463-09	IP9 T9	Solid	02/27/2025	10:38	VOCMS Group2		8260D	10 Bus. Days	
Q1463-10	~~TP10~~ T10	Solid	02/27/2025	10:31	VOCMS Group2		8260D	10 Bus. Days	
					VOCMS Group2		8260D	10 Bus. Days	

Relinquished By : 

Date / Time : 2-27-25 16:55

Received By : 

Date / Time : 2-27-25 16:55

Storage Area : VOA Refridgerator Room