

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW061924\
 Data File : VW029205.D
 Acq On : 19 Jun 2024 11:22
 Operator : SY/MD
 Sample : P2934-23DL 2X
 Misc : 5.00g/10mL/MSVOA_W/SOIL
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :

Quant Time: Jun 20 00:41:26 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\SFAMWLM061824SMA.M
 Quant Title : SFAM01.0
 QLast Update : Thu Jun 20 00:39:34 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	8.837	114	244223	25.000	ug/L	0.00
28) Chlorobenzene-d5	11.629	117	231510	25.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	13.556	152	112017	25.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	2.363	65	73870	21.853	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	87.400%
7) Chloroethane-d5	2.899	69	62216	21.795	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	87.200%
11) 1,1-Dichloroethene-d2	4.021	65	34555	21.172	ug/L	0.00
Spiked Amount	25.000	Range	45 - 110	Recovery	=	84.680%
21) 2-Butanone-d5	7.075	46	47598	47.064	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	94.120%
24) Chloroform-d	7.648	84	159415	21.882	ug/L	0.00
Spiked Amount	25.000	Range	40 - 150	Recovery	=	87.520%
26) 1,2-Dichloroethane-d4	8.307	65	96902	23.167	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	92.680%
32) Benzene-d6	8.276	84	314806	22.387	ug/L	0.00
Spiked Amount	25.000	Range	20 - 135	Recovery	=	89.560%
36) 1,2-Dichloropropane-d6	9.270	67	102428	22.915	ug/L	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	91.640%
41) Toluene-d8	10.319	98	292387	23.502	ug/L	0.00
Spiked Amount	25.000	Range	30 - 130	Recovery	=	94.000%
43) trans-1,3-Dichloroprop...	10.575	79	40541	22.506	ug/L	0.00
Spiked Amount	25.000	Range	30 - 135	Recovery	=	90.040%
47) 2-Hexanone-d5	10.922	63	34621	49.407	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	98.820%
56) 1,1,2,2-Tetrachloroeth...	12.690	84	78340	22.020	ug/L	0.00
Spiked Amount	25.000	Range	45 - 120	Recovery	=	88.080%
66) 1,2-Dichlorobenzene-d4	13.849	152	94354	24.267	ug/L	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	97.080%
Target Compounds						
					Qvalue	
12) 1,1-Dichloroethene	4.039	96	63504	22.441	ug/L #	76
13) Acetone	4.119	43	84737	98.592	ug/L	96
16) Methylene chloride	4.917	84	85777	19.974	ug/L	96
17) trans-1,2-Dichloroethene	5.429	96	43502	13.842	ug/L	96
18) Methyl tert-butyl Ether	5.429	73	50090	9.962	ug/L	97
20) cis-1,2-Dichloroethene	7.167	96	54705	15.786	ug/L	99
22) 2-Butanone	7.167	43	73385	62.288	ug/L	99
27) 1,2-Dichloroethane	8.398	62	87831	17.968	ug/L	99
31) Carbon tetrachloride	8.069	117	174794	37.168	ug/L	99
33) Benzene	8.325	78	383594	27.576	ug/L	100
34) Trichloroethene	9.093	95	179558	48.383	ug/L	94
37) 1,2-Dichloropropane	9.368	63	95228	24.363	ug/L	99
38) Bromodichloromethane	9.642	83	131761	27.571	ug/L	97
39) cis-1,3-Dichloropropene	10.069	75	153267	27.739	ug/L	95
40) 4-Methyl-2-pentanone	10.209	43	243775	100.623	ug/L	99
44) trans-1,3-Dichloropropene	10.605	75	83357	17.867	ug/L	99
45) 1,1,2-Trichloroethane	10.782	97	58959	21.658	ug/L	97
46) Tetrachloroethene	10.861	164	71707	27.640	ug/L	85
48) 2-Hexanone	10.965	43	101701	59.161	ug/L	99

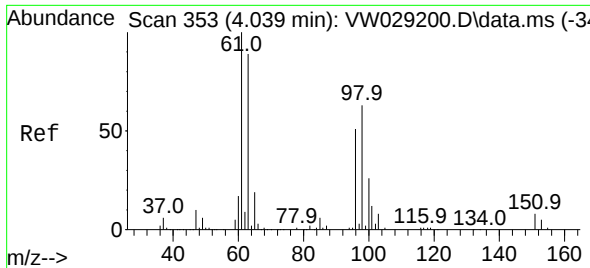
Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW061924\
Data File : VW029205.D
Acq On : 19 Jun 2024 11:22
Operator : SY/MD
Sample : P2934-23DL 2X
Misc : 5.00g/10mL/MSVOA_W/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :

Quant Time: Jun 20 00:41:26 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\SFAMWLM061824SMA.M
Quant Title : SFAM01.0
QLast Update : Thu Jun 20 00:39:34 2024
Response via : Initial Calibration

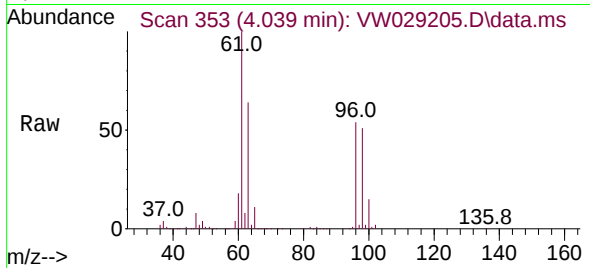
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Dibromochloromethane	11.123	129	42123	14.802	ug/L	95
50) 1,2-Dibromoethane	11.233	107	22274	9.115	ug/L	95
52) Ethylbenzene	11.727	91	719732	44.338	ug/L	99
53) m,p-Xylene	11.837	106	230759	38.919	ug/L	93
54) o-Xylene	12.166	106	26337	4.753	ug/L	96
57) 1,1,2,2-Tetrachloroethane	12.715	83	31613	9.388	ug/L	95
59) Bromoform	12.349	173	35030	22.817	ug/L	91
61) 1,2,3-Trichloropropane	12.763	75	83832	34.311	ug/L	98
64) 1,3-Dichlorobenzene	13.495	146	246822	38.213	ug/L	87
65) 1,4-Dichlorobenzene	13.574	146	95836	13.945	ug/L	94
67) 1,2-Dichlorobenzene	13.861	146	254265	42.581	ug/L	96
68) 1,2-Dibromo-3-chloropr...	14.483	75	6841	11.998	ug/L	87
71) Naphthalene	15.360	128	234622	33.640	ug/L	99

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

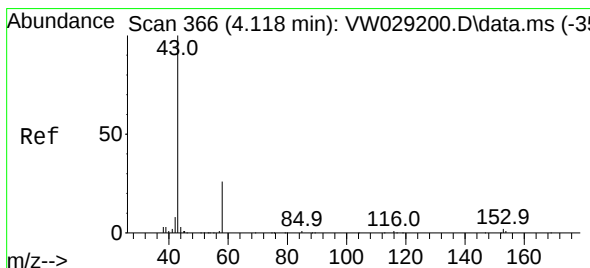
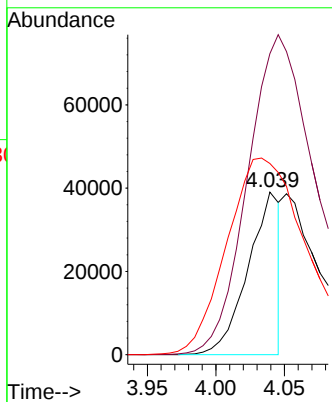
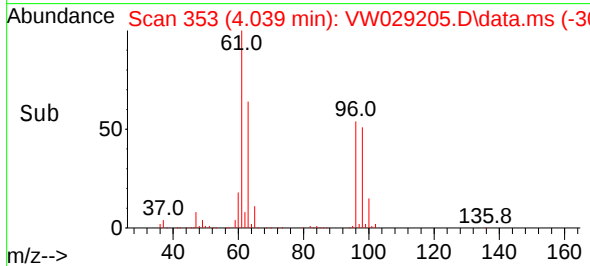


#12
1,1-Dichloroethene
Concen: 22.441 ug/L
RT: 4.039 min Scan# 353
Delta R.T. 0.000 min
Lab File: VW029205.D
Acq: 19 Jun 2024 11:22

Instrument :
MSVOA_W
ClientSampleId :

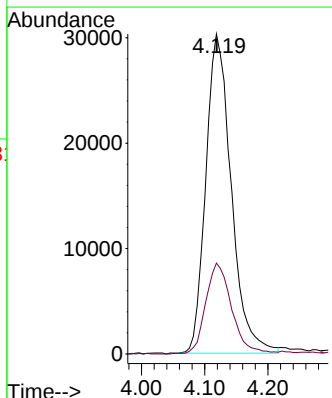
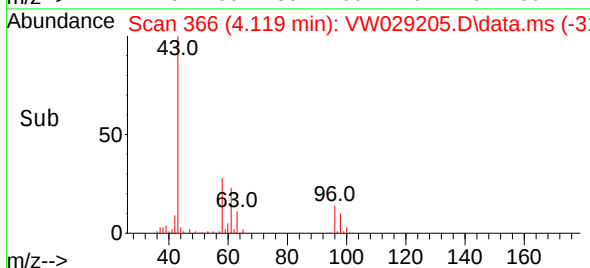
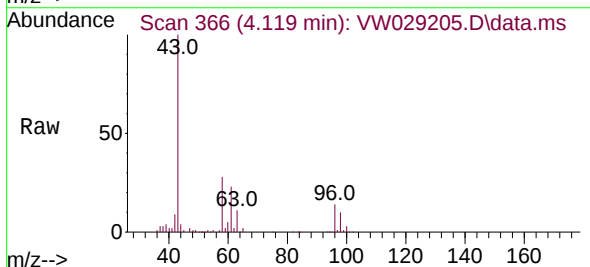


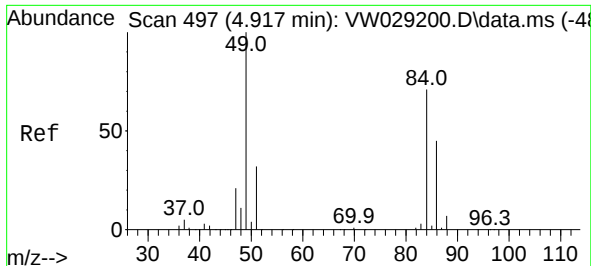
Tgt Ion: 96 Resp: 63504
Ion Ratio Lower Upper
96 100
61 185.1 140.1 260.3
63 117.6 122.0 226.6#



#13
Acetone
Concen: 98.592 ug/L
RT: 4.119 min Scan# 366
Delta R.T. 0.000 min
Lab File: VW029205.D
Acq: 19 Jun 2024 11:22

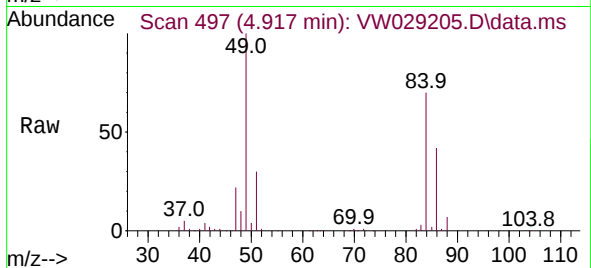
Tgt Ion: 43 Resp: 84737
Ion Ratio Lower Upper
43 100
58 28.4 0.0 61.4



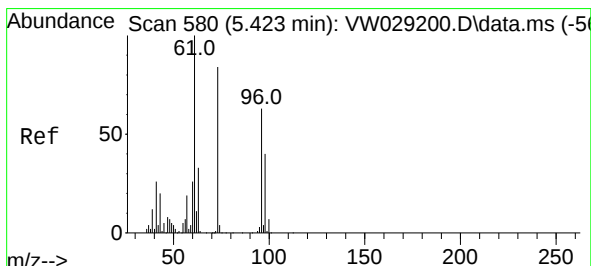
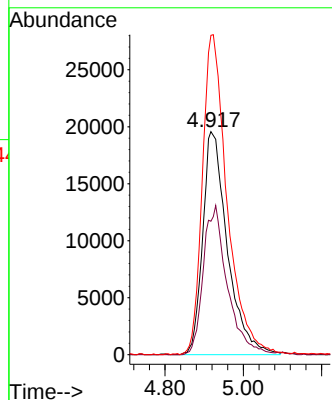
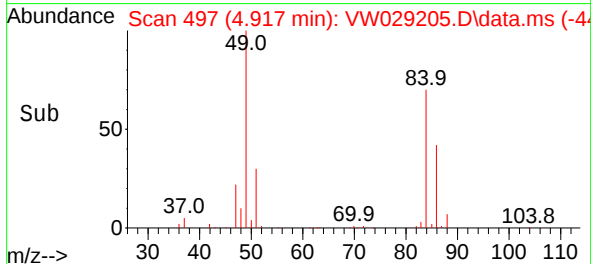


#16
Methylene chloride
Concen: 19.974 ug/L
RT: 4.917 min Scan# 497
Delta R.T. 0.000 min
Lab File: VW029205.D
Acq: 19 Jun 2024 11:22

Instrument :
MSVOA_W
ClientSampleId :

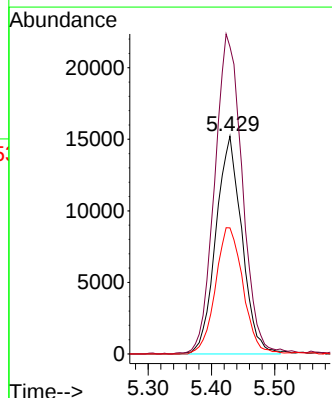
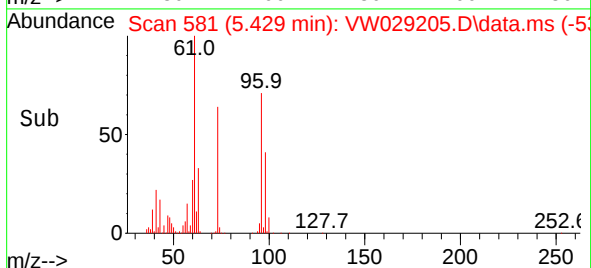
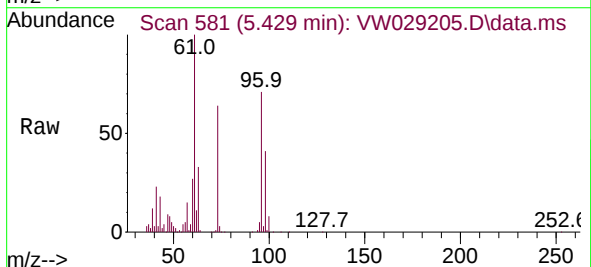


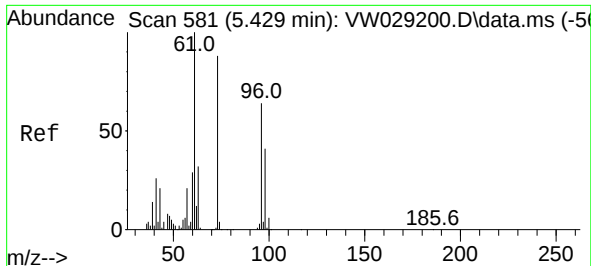
Tgt Ion: 84 Resp: 85777
Ion Ratio Lower Upper
84 100
86 59.9 41.4 77.0
49 143.2 95.7 177.7



#17
trans-1,2-Dichloroethene
Concen: 13.842 ug/L
RT: 5.429 min Scan# 581
Delta R.T. 0.006 min
Lab File: VW029205.D
Acq: 19 Jun 2024 11:22

Tgt Ion: 96 Resp: 43502
Ion Ratio Lower Upper
96 100
61 141.1 101.5 188.5
98 57.9 43.3 80.3





#18

Methyl tert-butyl Ether

Concen: 9.962 ug/L

RT: 5.429 min Scan# 581

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

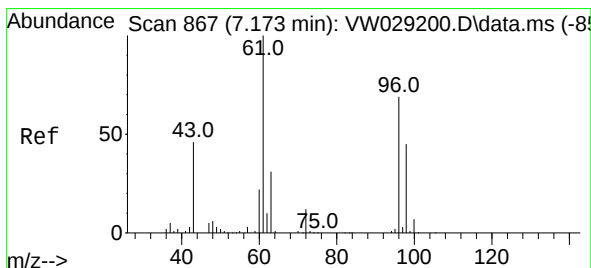
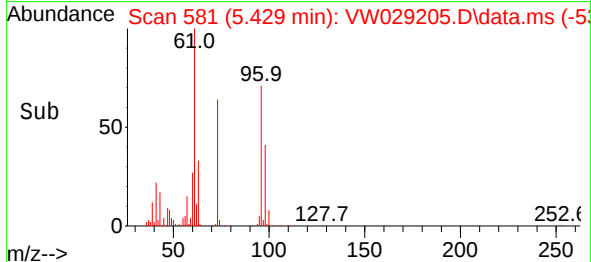
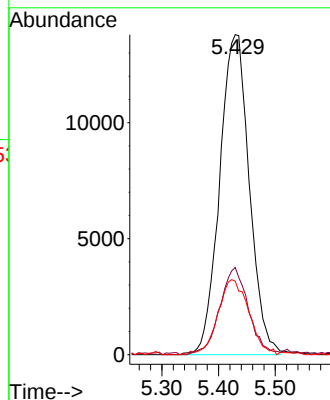
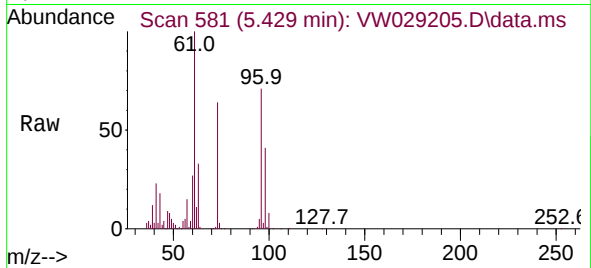
Tgt Ion: 73 Resp: 50090

Ion Ratio Lower Upper

73 100

43 26.3 19.5 29.3

57 24.0 18.4 27.6



#20

cis-1,2-Dichloroethene

Concen: 15.786 ug/L

RT: 7.167 min Scan# 866

Delta R.T. -0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

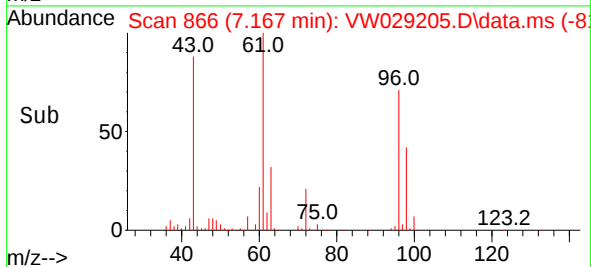
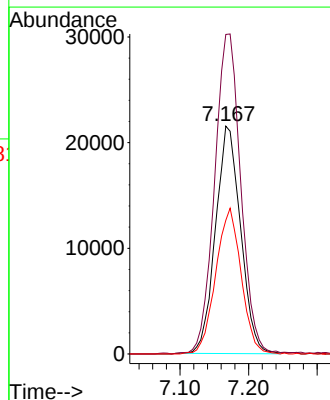
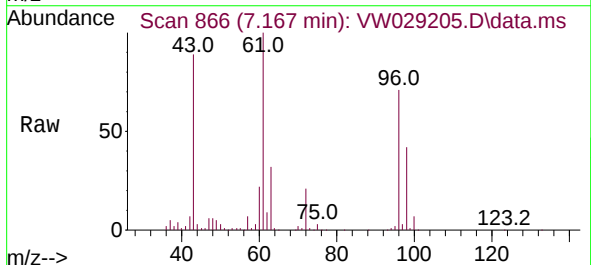
Tgt Ion: 96 Resp: 54705

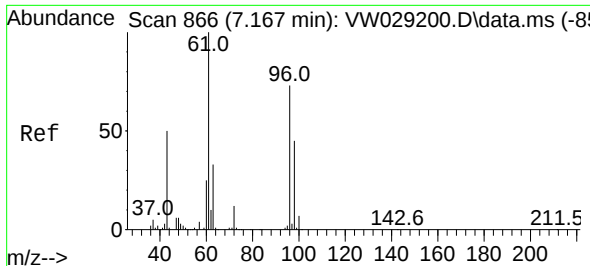
Ion Ratio Lower Upper

96 100

61 140.3 97.8 181.6

98 58.7 43.0 79.8

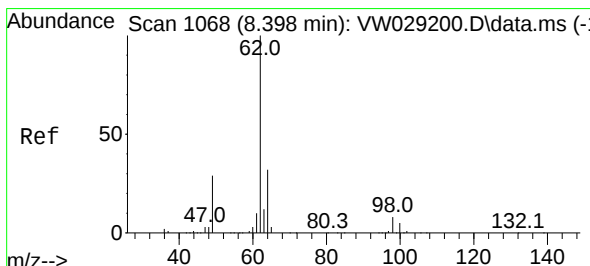
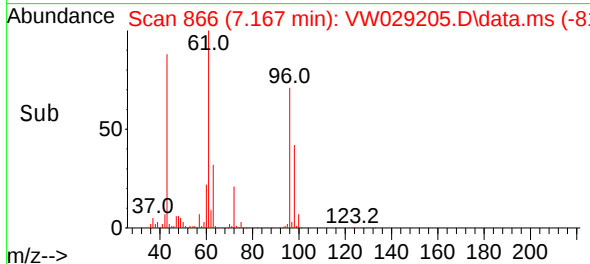
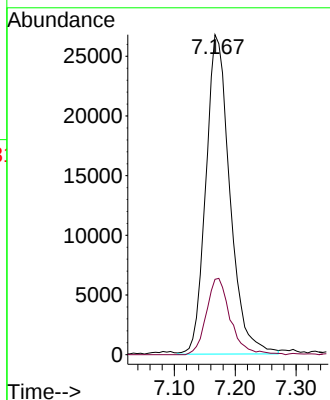
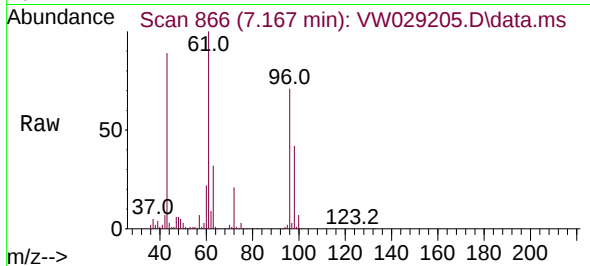




#22
2-Butanone
Concen: 62.288 ug/L
RT: 7.167 min Scan# 866
Delta R.T. 0.000 min
Lab File: VW029205.D
Acq: 19 Jun 2024 11:22

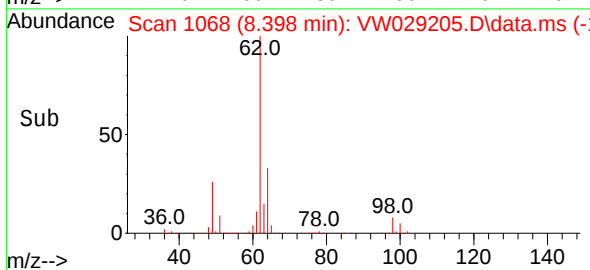
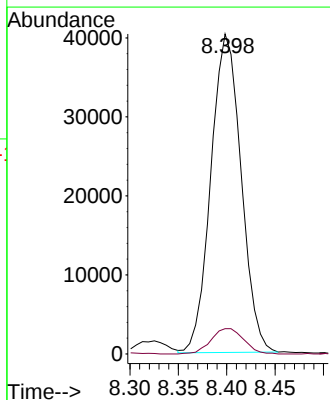
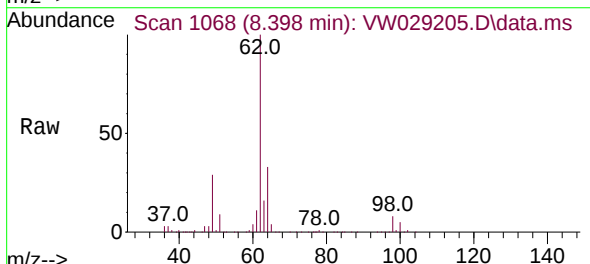
Instrument :
MSVOA_W
ClientSampleId :

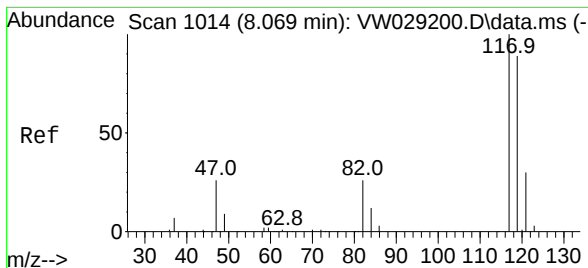
Tgt Ion: 43 Resp: 73385
Ion Ratio Lower Upper
43 100
72 23.3 11.9 35.7



#27
1,2-Dichloroethane
Concen: 17.968 ug/L
RT: 8.398 min Scan# 1068
Delta R.T. 0.000 min
Lab File: VW029205.D
Acq: 19 Jun 2024 11:22

Tgt Ion: 62 Resp: 87831
Ion Ratio Lower Upper
62 100
98 7.9 6.6 10.0





#31

Carbon tetrachloride

Concen: 37.168 ug/L

RT: 8.069 min Scan# 1014

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

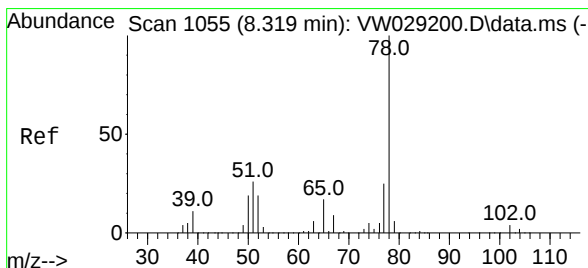
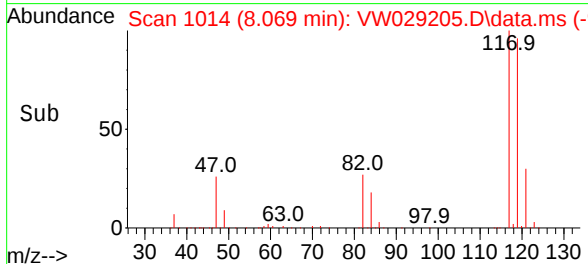
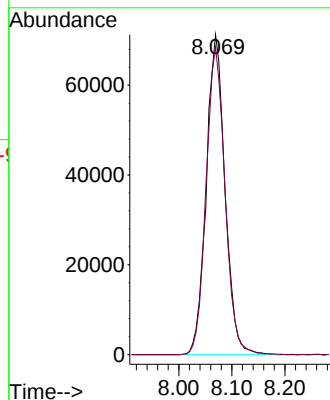
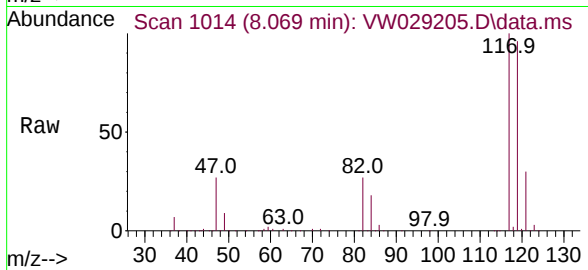
ClientSampleId :

Tgt Ion:117 Resp: 174794

Ion Ratio Lower Upper

117 100

119 97.3 79.0 118.4



#33

Benzene

Concen: 27.576 ug/L

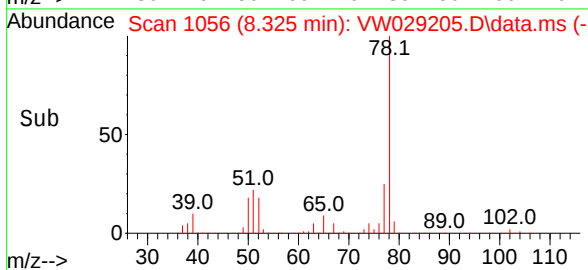
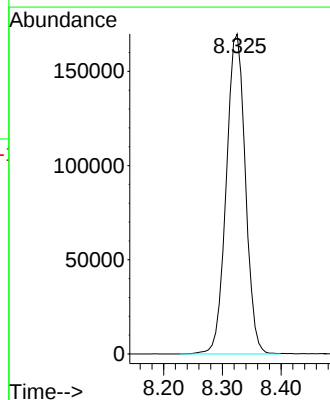
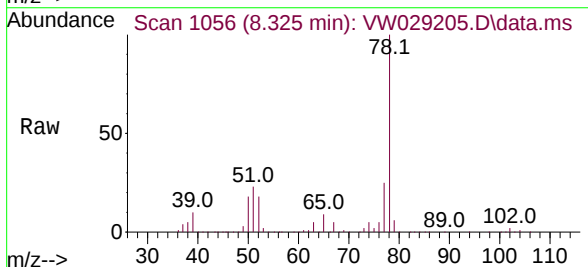
RT: 8.325 min Scan# 1056

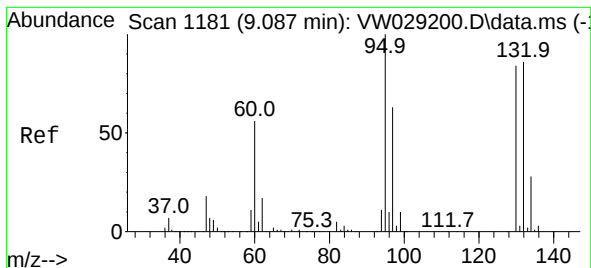
Delta R.T. 0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Tgt Ion: 78 Resp: 383594





#34

Trichloroethene

Concen: 48.383 ug/L

RT: 9.093 min Scan# 1181

Delta R.T. 0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

Tgt Ion: 95 Resp: 179558

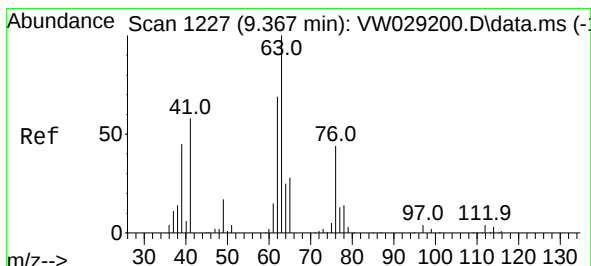
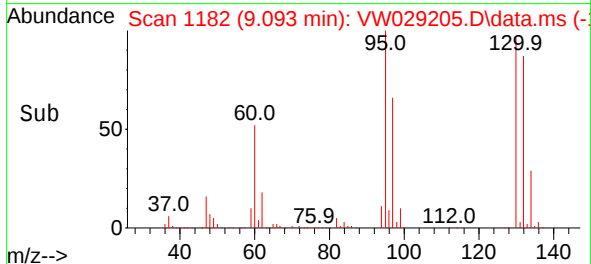
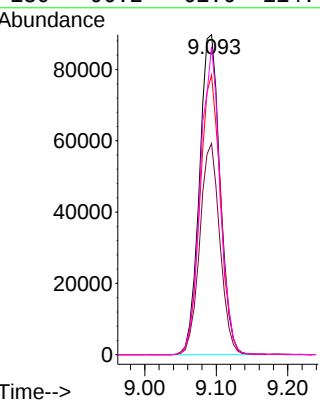
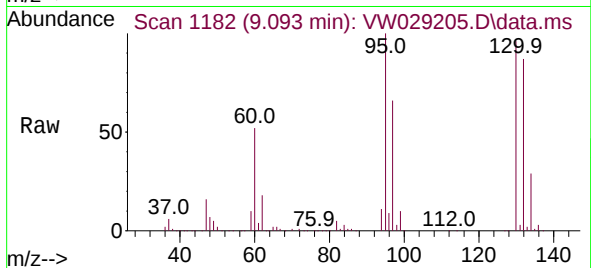
Ion Ratio Lower Upper

95 100

97 66.0 45.7 84.9

132 87.4 66.4 123.4

130 96.2 61.6 114.4



#37

1,2-Dichloropropane

Concen: 24.363 ug/L

RT: 9.368 min Scan# 1227

Delta R.T. 0.000 min

Lab File: VW029205.D

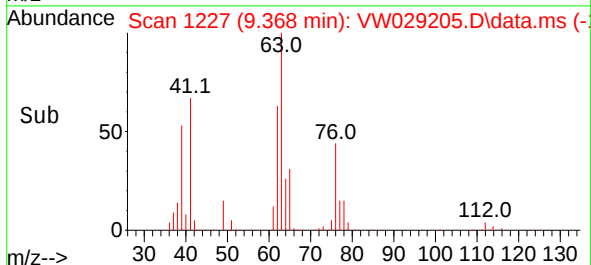
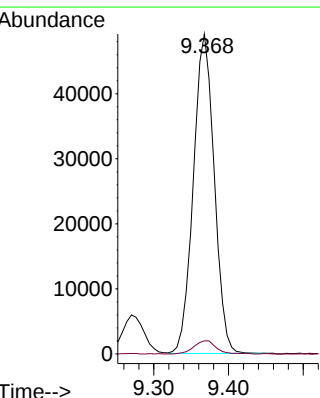
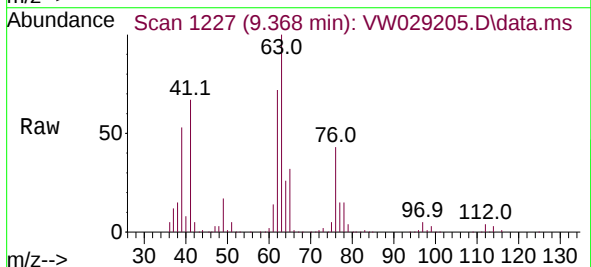
Acq: 19 Jun 2024 11:22

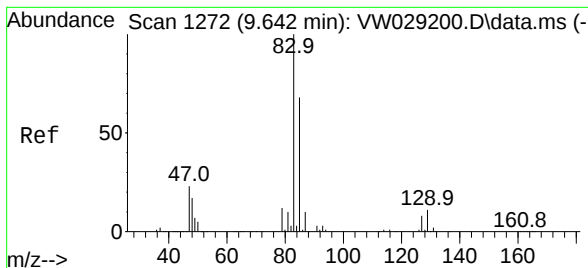
Tgt Ion: 63 Resp: 95228

Ion Ratio Lower Upper

63 100

112 4.4 3.8 5.6





#38

Bromodichloromethane

Concen: 27.571 ug/L

RT: 9.642 min Scan# 1272

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

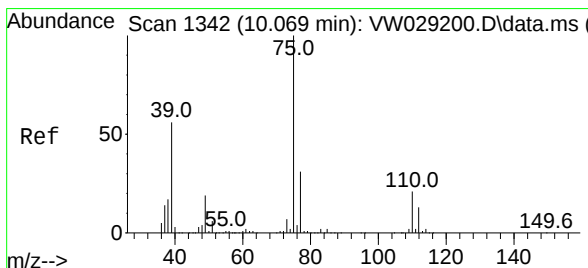
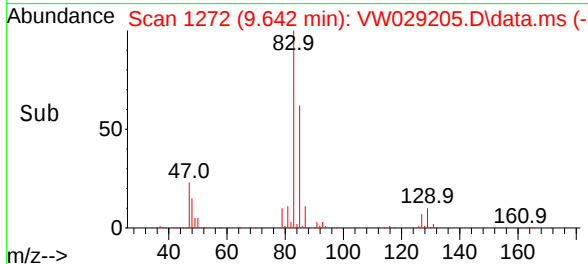
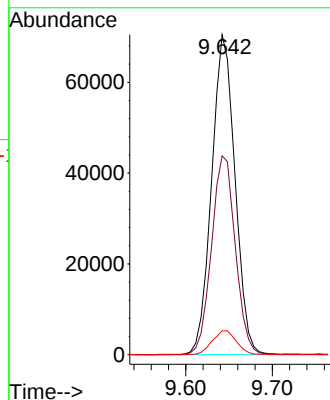
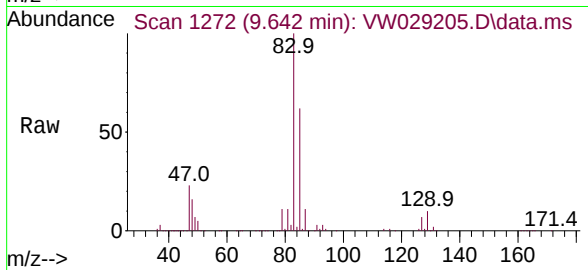
Tgt Ion: 83 Resp: 131761

Ion Ratio Lower Upper

83 100

85 62.2 45.1 83.9

127 7.4 5.8 8.6



#39

cis-1,3-Dichloropropene

Concen: 27.739 ug/L

RT: 10.069 min Scan# 1342

Delta R.T. 0.000 min

Lab File: VW029205.D

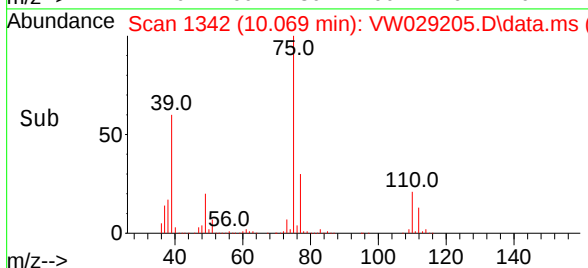
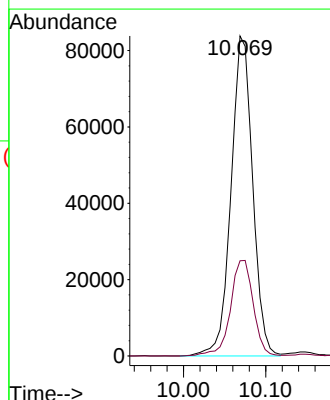
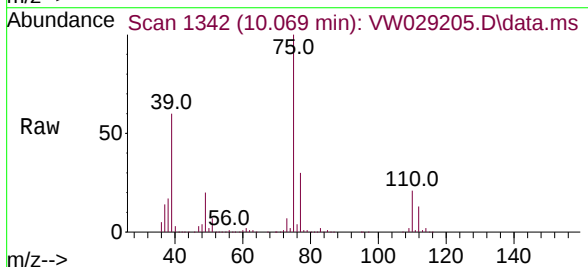
Acq: 19 Jun 2024 11:22

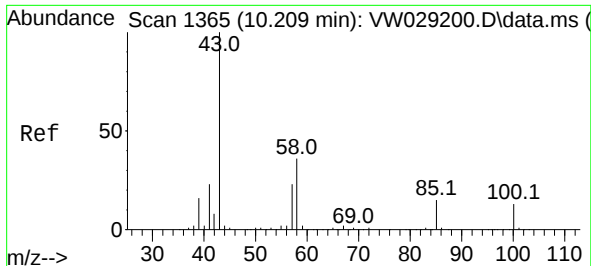
Tgt Ion: 75 Resp: 153267

Ion Ratio Lower Upper

75 100

77 29.8 22.7 42.1





#40

4-Methyl-2-pentanone

Concen: 100.623 ug/L

RT: 10.209 min Scan# 1365

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

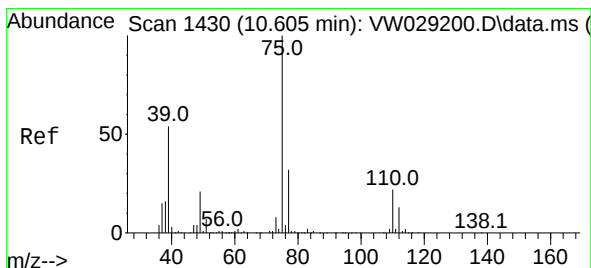
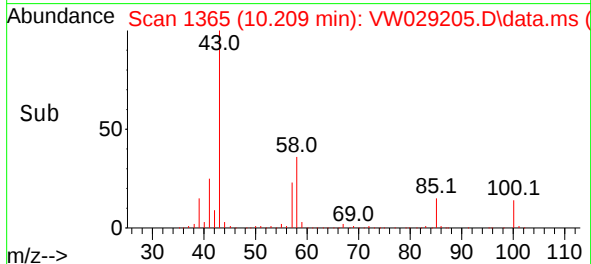
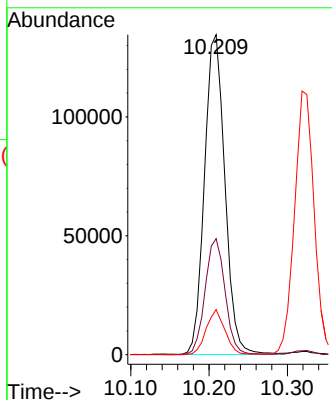
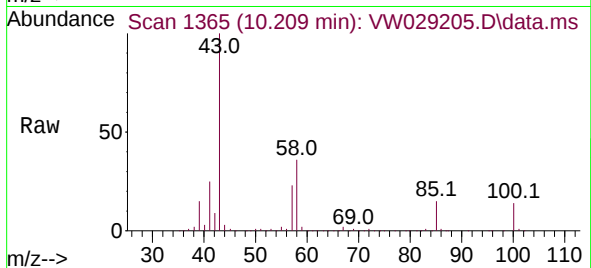
Tgt Ion: 43 Resp: 243775

Ion Ratio Lower Upper

43 100

58 35.7 28.2 42.4

100 13.1 11.0 16.4



#44

trans-1,3-Dichloropropene

Concen: 17.867 ug/L

RT: 10.605 min Scan# 1430

Delta R.T. 0.000 min

Lab File: VW029205.D

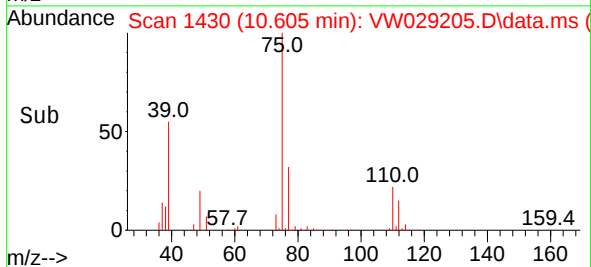
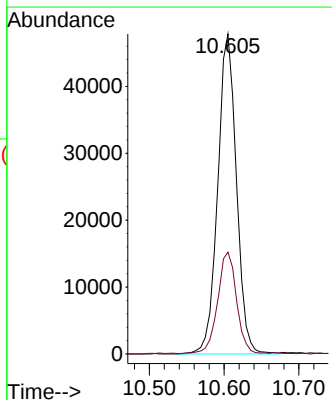
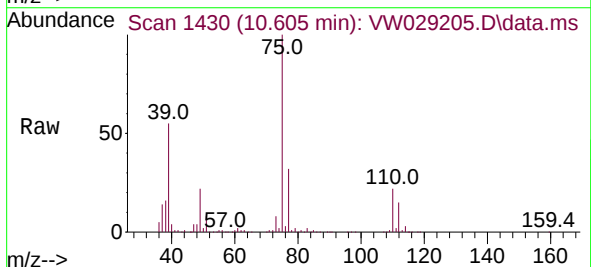
Acq: 19 Jun 2024 11:22

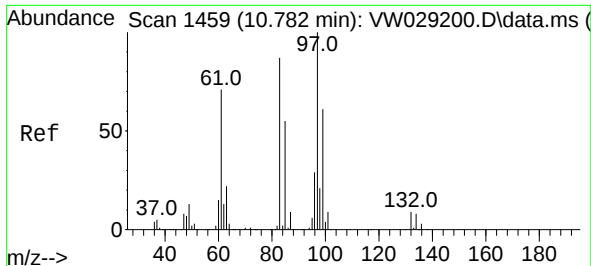
Tgt Ion: 75 Resp: 83357

Ion Ratio Lower Upper

75 100

77 31.8 22.7 42.1





#45

1,1,2-Trichloroethane

Concen: 21.658 ug/L

RT: 10.782 min Scan# 1459

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

Tgt Ion: 97 Resp: 58959

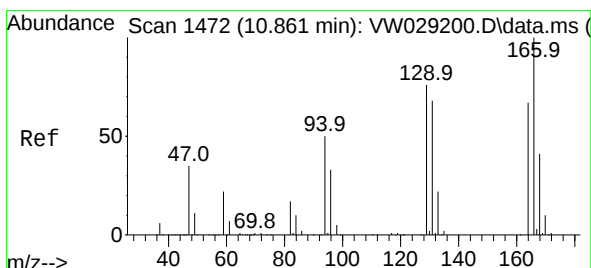
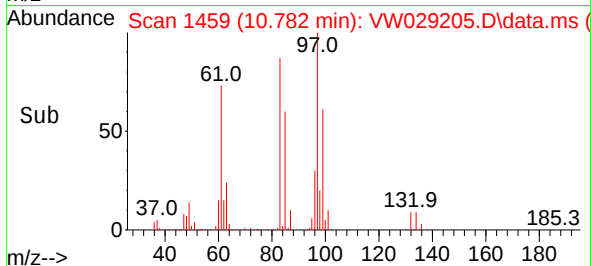
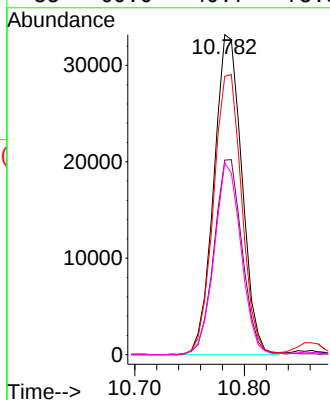
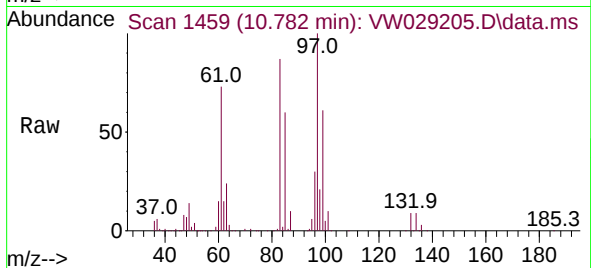
Ion Ratio Lower Upper

97 100

99 60.8 42.3 78.5

83 87.0 57.7 107.1

85 60.0 40.7 75.5



#46

Tetrachloroethene

Concen: 27.640 ug/L

RT: 10.861 min Scan# 1472

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Tgt Ion:164 Resp: 71707

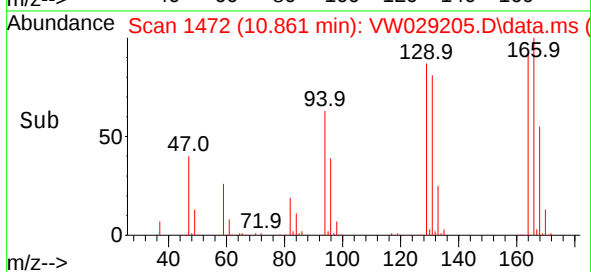
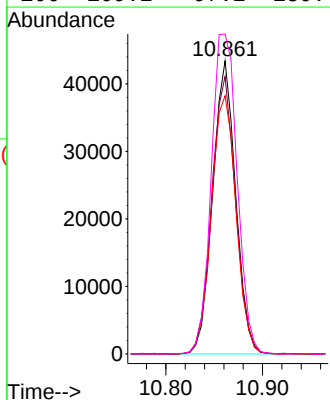
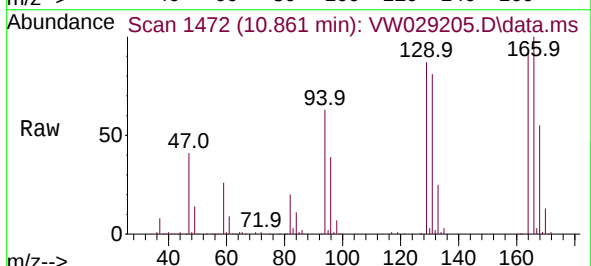
Ion Ratio Lower Upper

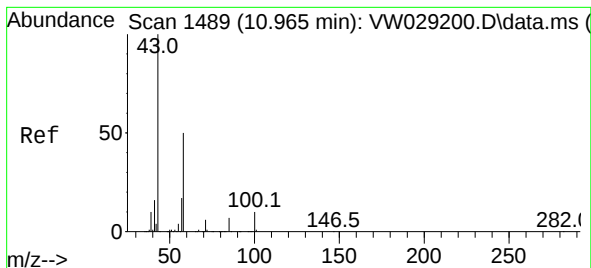
164 100

129 94.6 68.5 127.3

131 88.1 71.8 133.4

166 109.2 97.2 180.4





#48

2-Hexanone

Concen: 59.161 ug/L

RT: 10.965 min Scan# 1489

Delta R.T. 0.000 min

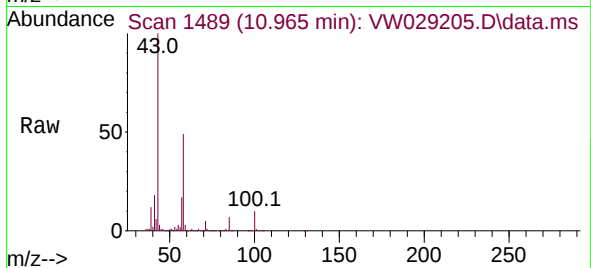
Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :



Tgt Ion: 43 Resp: 101701

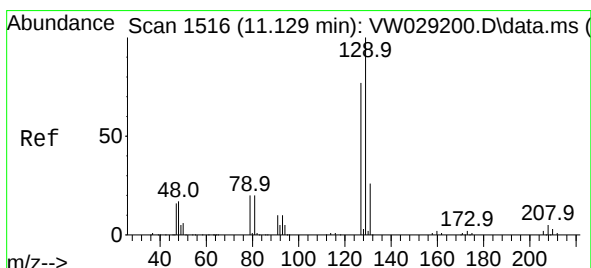
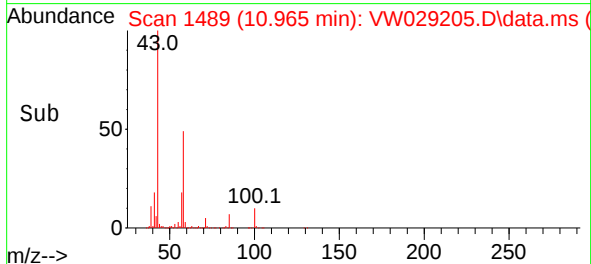
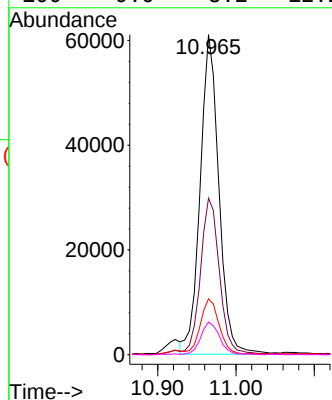
Ion Ratio Lower Upper

43 100

58 49.3 39.6 59.4

57 17.4 14.6 21.8

100 9.9 8.2 12.2



#49

Dibromochloromethane

Concen: 14.802 ug/L

RT: 11.123 min Scan# 1515

Delta R.T. -0.006 min

Lab File: VW029205.D

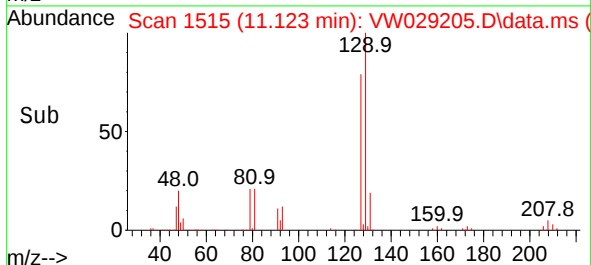
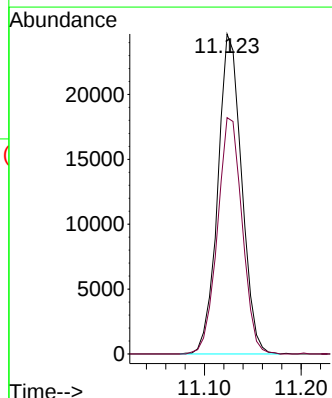
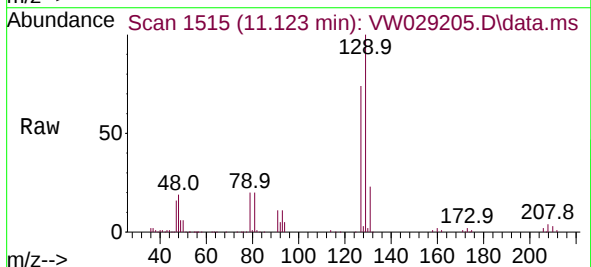
Acq: 19 Jun 2024 11:22

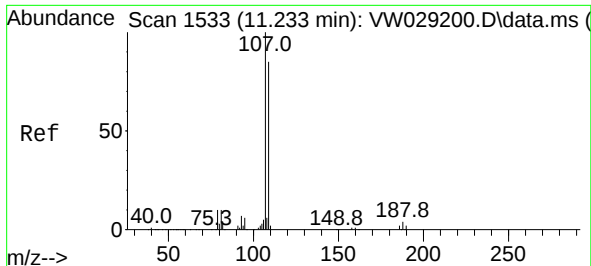
Tgt Ion: 129 Resp: 42123

Ion Ratio Lower Upper

129 100

127 73.9 54.8 101.8





#50

1,2-Dibromoethane

Concen: 9.115 ug/L

RT: 11.233 min Scan# 1533

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

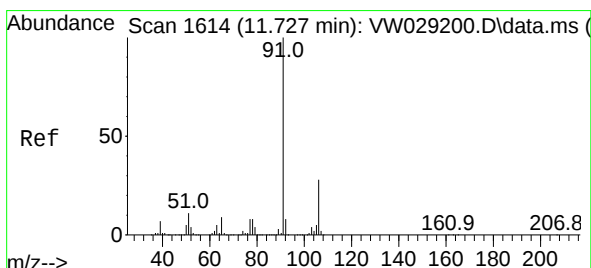
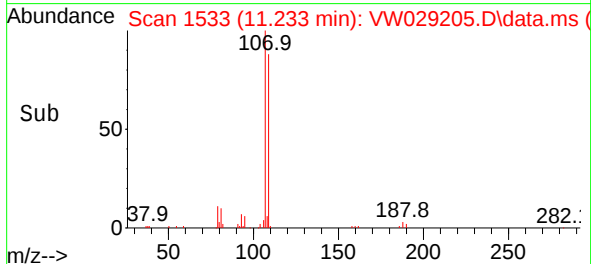
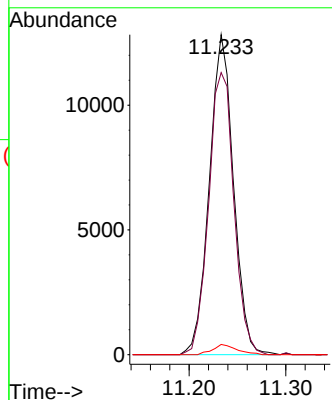
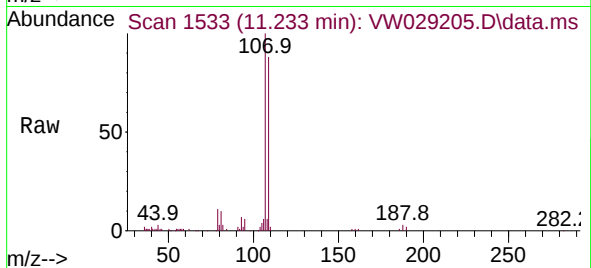
Tgt Ion:107 Resp: 22274

Ion Ratio Lower Upper

107 100

109 88.2 65.5 121.6

188 3.2 2.6 4.0



#52

Ethylbenzene

Concen: 44.338 ug/L

RT: 11.727 min Scan# 1614

Delta R.T. 0.000 min

Lab File: VW029205.D

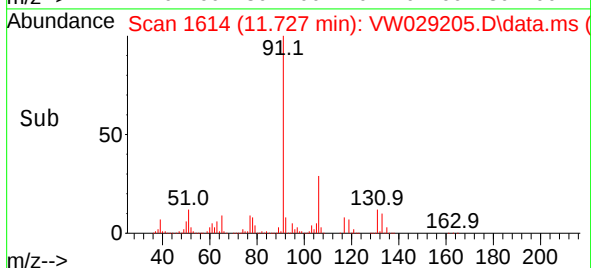
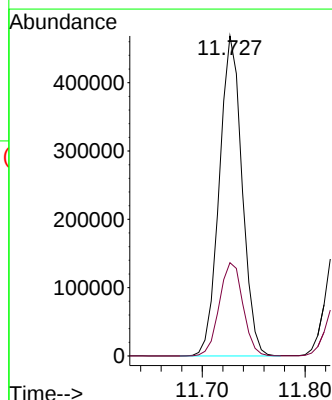
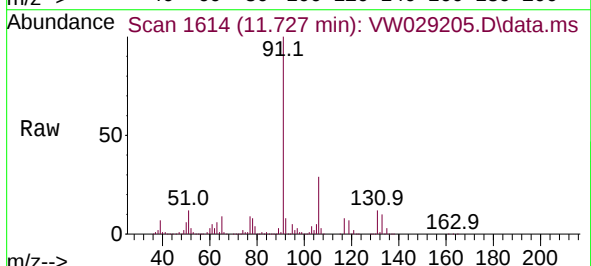
Acq: 19 Jun 2024 11:22

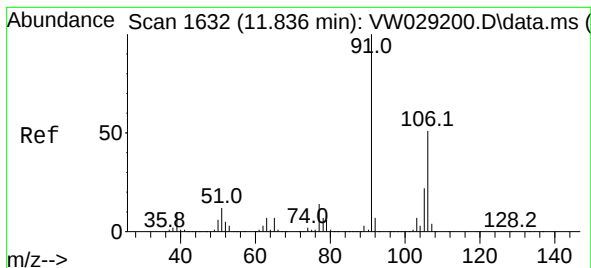
Tgt Ion: 91 Resp: 719732

Ion Ratio Lower Upper

91 100

106 29.1 19.9 37.0





#53

m,p-Xylene

Concen: 38.919 ug/L

RT: 11.837 min Scan# 1

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

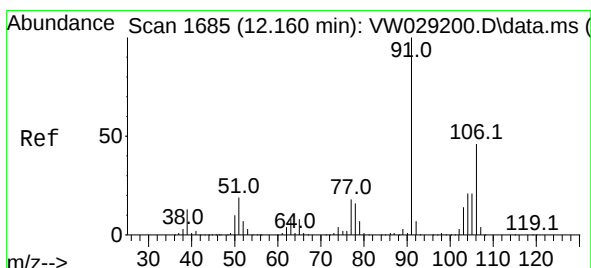
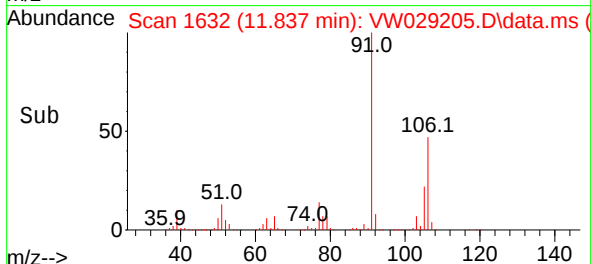
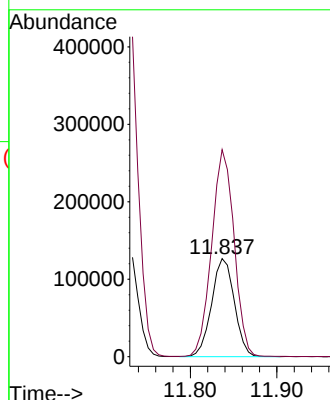
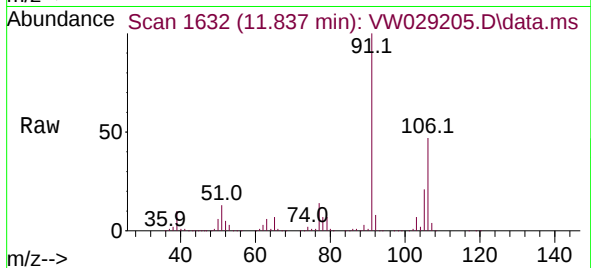
ClientSampleId :

Tgt Ion:106 Resp: 230759

Ion Ratio Lower Upper

106 100

91 211.0 140.5 260.9



#54

o-Xylene

Concen: 4.753 ug/L

RT: 12.166 min Scan# 1686

Delta R.T. 0.006 min

Lab File: VW029205.D

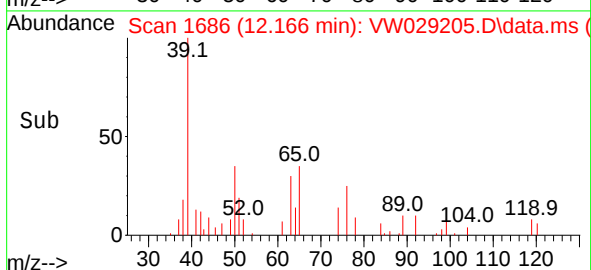
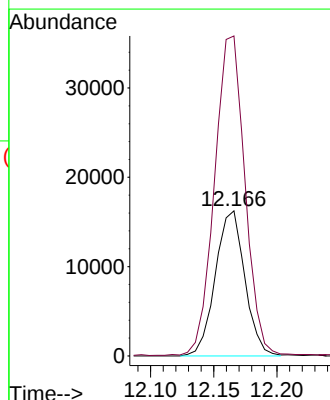
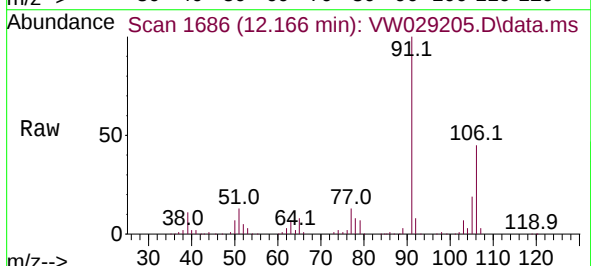
Acq: 19 Jun 2024 11:22

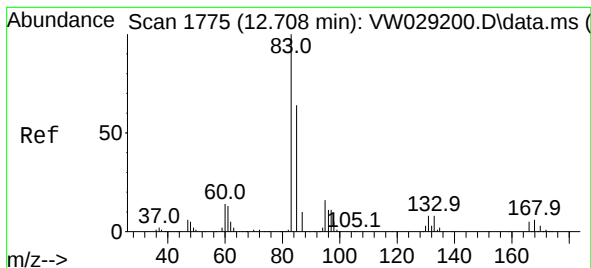
Tgt Ion:106 Resp: 26337

Ion Ratio Lower Upper

106 100

91 220.6 149.9 278.5





#57

1,1,2,2-Tetrachloroethane

Concen: 9.388 ug/L

RT: 12.715 min Scan# 1

Delta R.T. 0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

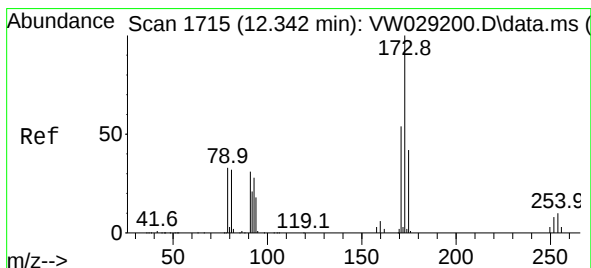
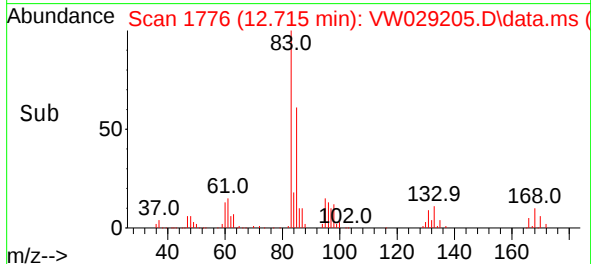
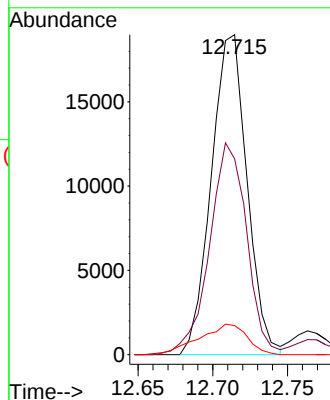
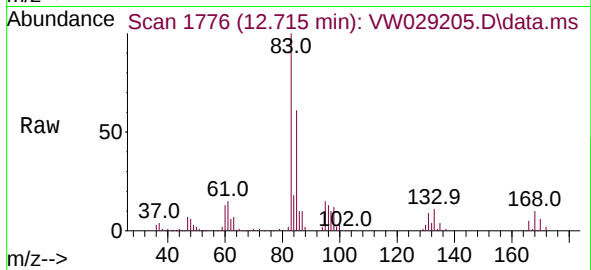
Tgt Ion: 83 Resp: 31613

Ion Ratio Lower Upper

83 100

85 61.2 45.8 85.0

131 9.1 7.8 11.6



#59

Bromoform

Concen: 22.817 ug/L

RT: 12.349 min Scan# 1716

Delta R.T. 0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

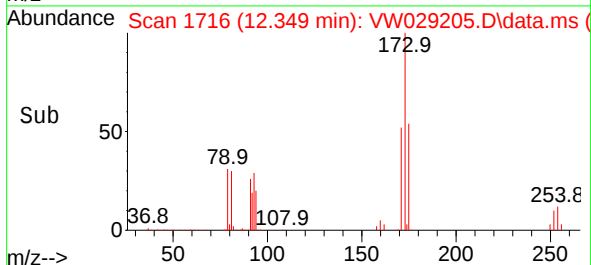
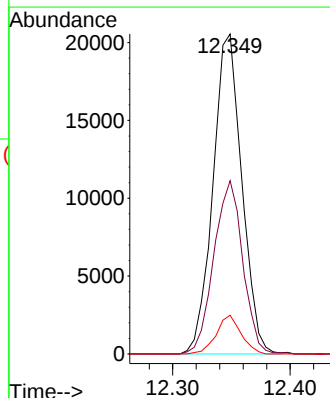
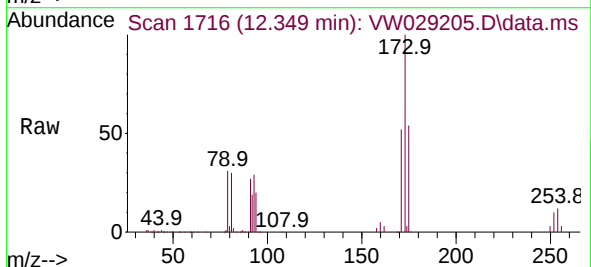
Tgt Ion:173 Resp: 35030

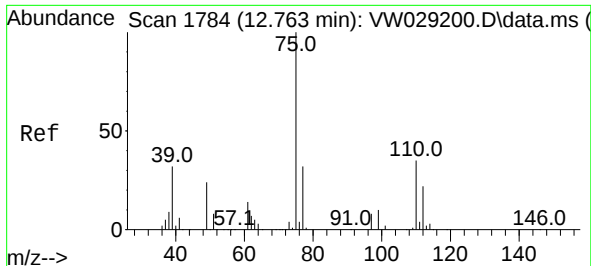
Ion Ratio Lower Upper

173 100

175 54.2 37.8 56.8

254 10.4 7.8 11.6





#61

1,2,3-Trichloropropane

Concen: 34.311 ug/L

RT: 12.763 min Scan# 1

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

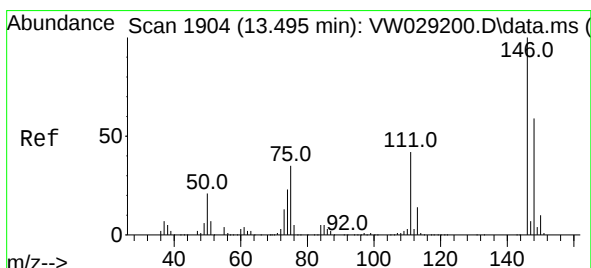
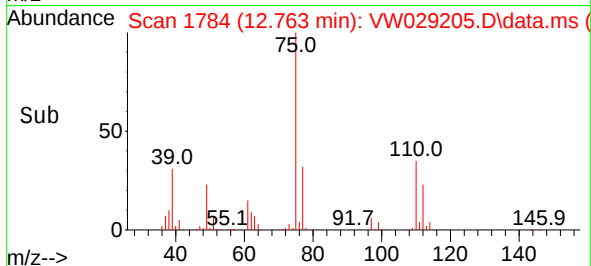
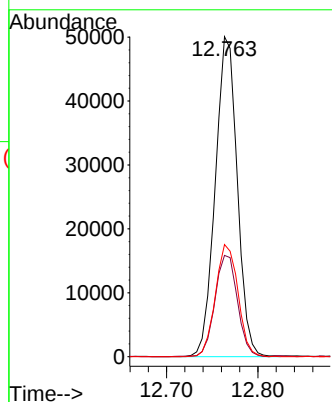
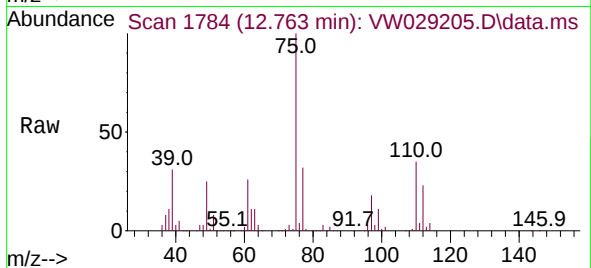
Tgt Ion: 75 Resp: 83832

Ion Ratio Lower Upper

75 100

77 32.4 26.6 39.8

110 35.9 29.5 44.3



#64

1,3-Dichlorobenzene

Concen: 38.213 ug/L

RT: 13.495 min Scan# 1904

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

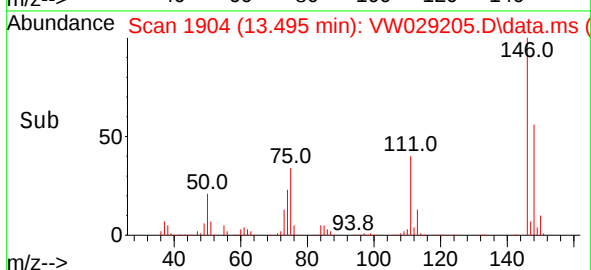
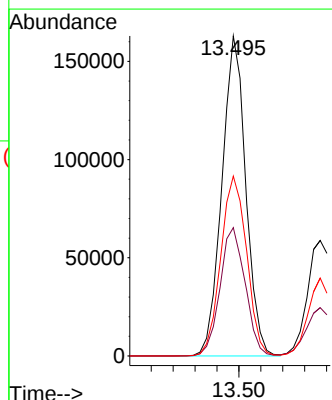
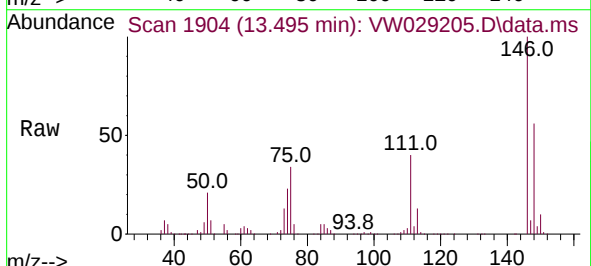
Tgt Ion:146 Resp: 246822

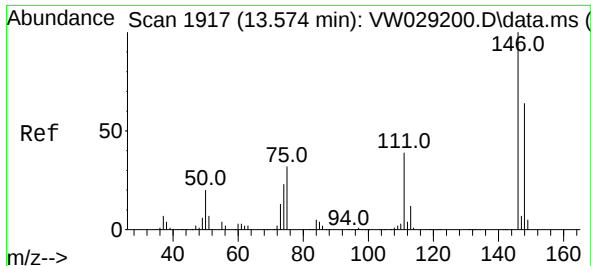
Ion Ratio Lower Upper

146 100

111 40.1 33.0 61.2

148 56.2 47.5 88.1





#65

1,4-Dichlorobenzene

Concen: 13.945 ug/L

RT: 13.574 min Scan# 1917

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

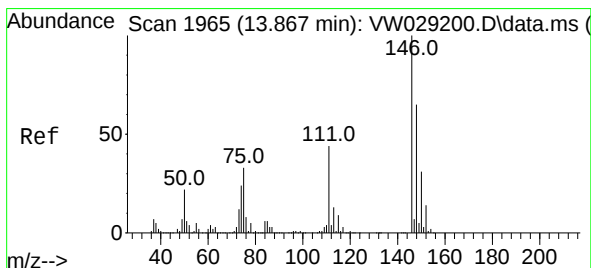
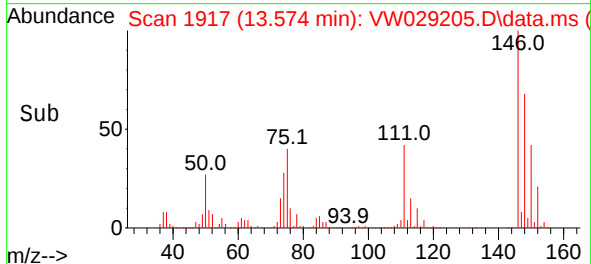
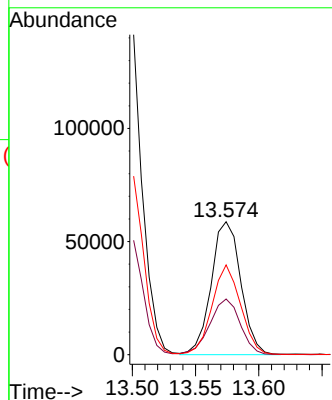
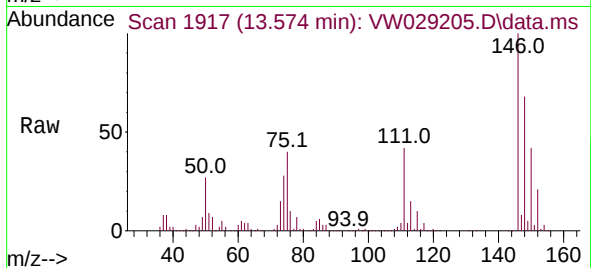
Tgt Ion:146 Resp: 95836

Ion Ratio Lower Upper

146 100

111 41.9 28.9 53.7

148 67.5 42.0 78.0



#67

1,2-Dichlorobenzene

Concen: 42.581 ug/L

RT: 13.861 min Scan# 1964

Delta R.T. -0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

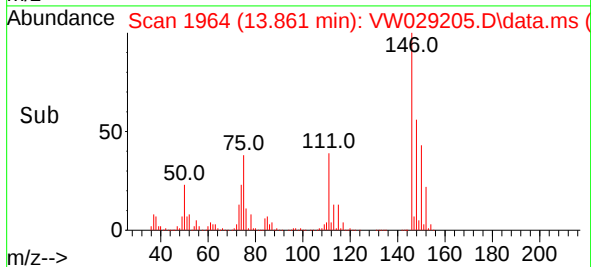
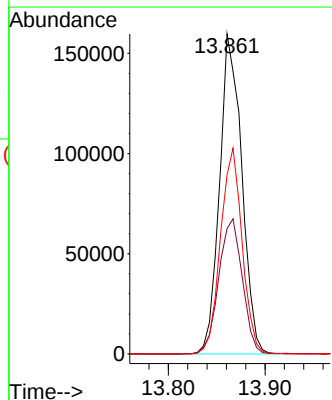
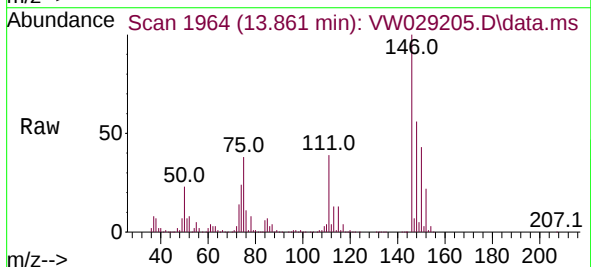
Tgt Ion:146 Resp: 254265

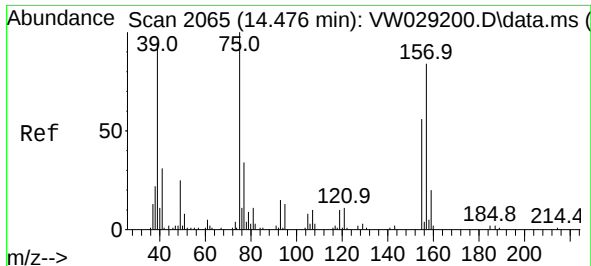
Ion Ratio Lower Upper

146 100

111 39.2 34.2 51.4

148 56.0 46.3 69.5





#68

1,2-Dibromo-3-chloropropane

Concen: 11.998 ug/L

RT: 14.483 min Scan# 2065

Delta R.T. 0.006 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Instrument :

MSVOA_W

ClientSampleId :

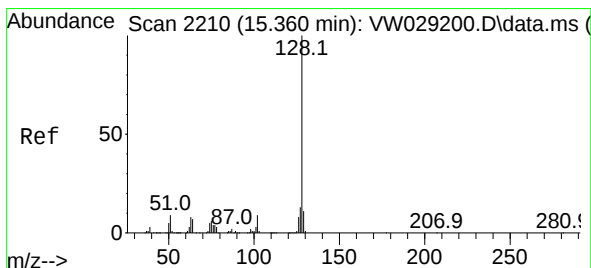
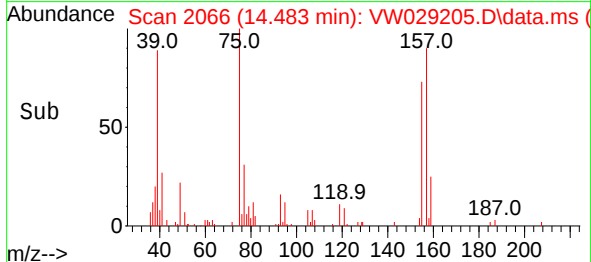
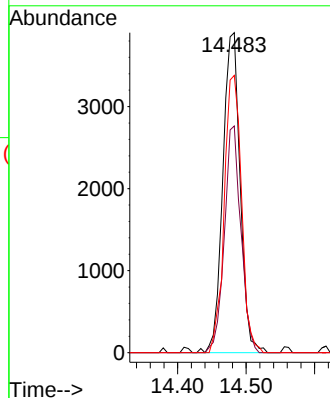
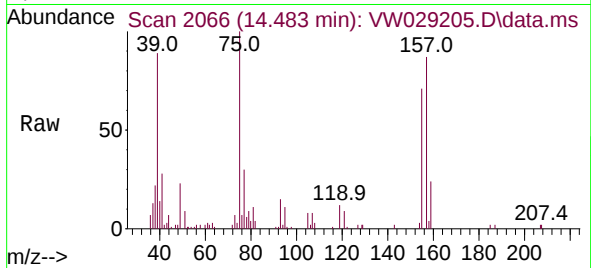
Tgt Ion: 75 Resp: 6841

Ion Ratio Lower Upper

75 100

155 70.9 51.0 76.6

157 86.7 58.8 88.2



#71

Naphthalene

Concen: 33.640 ug/L

RT: 15.360 min Scan# 2210

Delta R.T. 0.000 min

Lab File: VW029205.D

Acq: 19 Jun 2024 11:22

Tgt Ion: 128 Resp: 234622

Ion Ratio Lower Upper

128 100

127 13.4 10.3 15.5

129 11.2 8.9 13.3

