

Data Path : Z:\voasrv\HPCHEM1\MSVOA_W\Data\VW091925\
 Data File : VW032219.D
 Acq On : 19 Sep 2025 16:33
 Operator : SY/MD
 Sample : Q3152-01
 Misc : 5.10g/5mL/MSVOA_W/SOIL/A
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :

Quant Time: Sep 19 23:12:27 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_W\Method\82W082625S.M
 Quant Title : SW846 8260
 QLast Update : Wed Aug 27 04:13:40 2025
 Response via : Initial Calibration

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

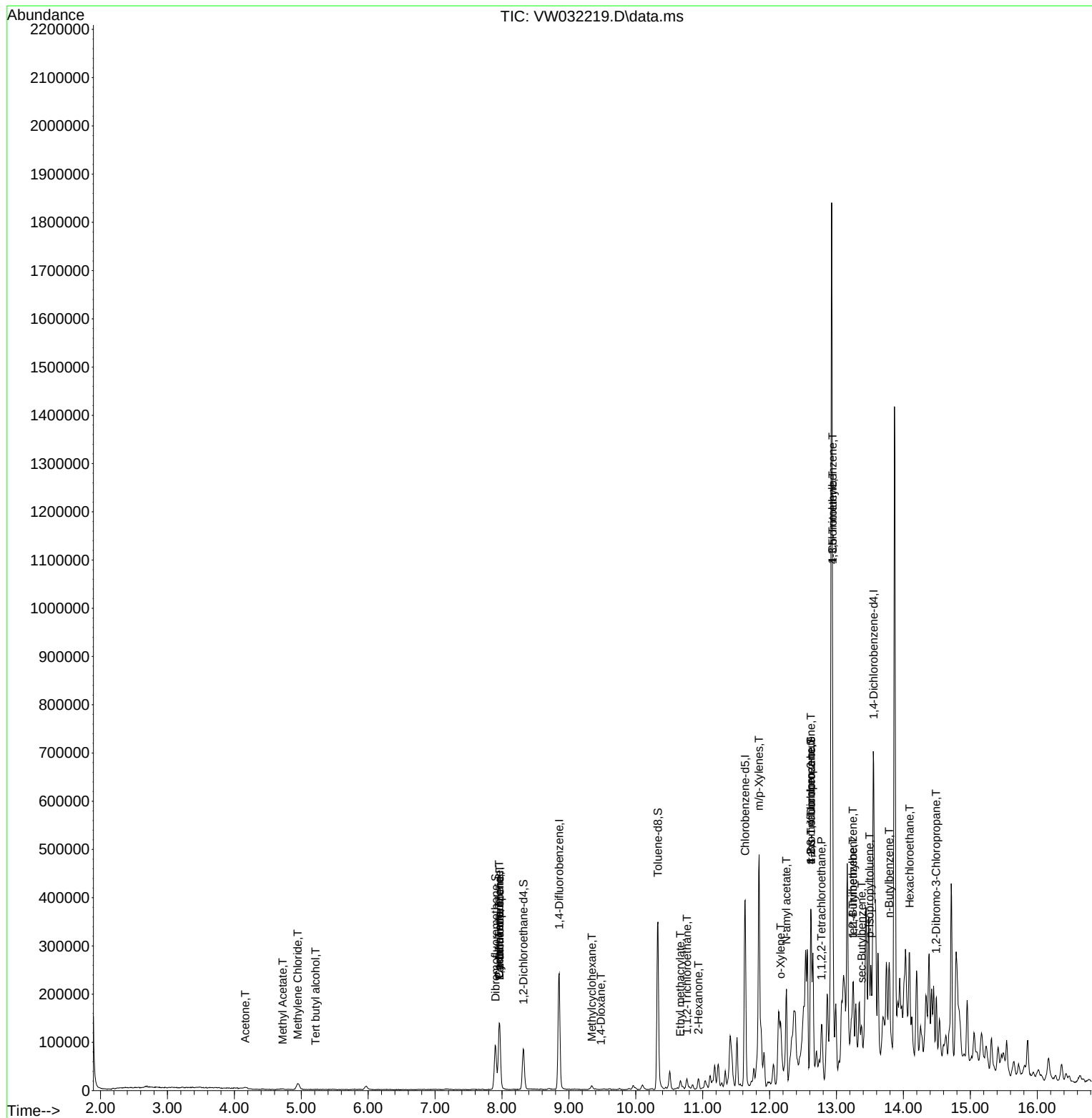
Internal Standards						
1) Pentafluorobenzene	7.965	168	97556	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	8.855	114	195019	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.635	117	212053	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.555	152	110112	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.319	65	69121	49.543	ug/l	0.00
Spiked Amount 50.000	Range 63 - 155		Recovery =	99.080%		
35) Dibromofluoromethane	7.904	113	64415	47.079	ug/l	0.00
Spiked Amount 50.000	Range 70 - 134		Recovery =	94.160%		
50) Toluene-d8	10.330	98	214232	44.602	ug/l	0.00
Spiked Amount 50.000	Range 74 - 123		Recovery =	89.200%		
62) 4-Bromofluorobenzene	12.617	95	96477	54.319	ug/l	0.00
Spiked Amount 50.000	Range 17 - 146		Recovery =	108.640%		
Target Compounds						Qvalue
11) Tert butyl alcohol	5.215	59	110	1.289	ug/l #	24
16) Acetone	4.161	43	2891	9.568	ug/l	100
18) Methyl Acetate	4.722	43	2012	2.090	ug/l	95
20) Methylene Chloride	4.947	84	9963	4.554	ug/l	100
31) Cyclohexane	7.959	56	3418	1.996	ug/l #	39
36) 1,1-Dichloropropene	7.965	75	9768	5.506	ug/l #	51
38) Carbon Tetrachloride	7.959	117	11372	5.980	ug/l #	17
39) Methylcyclohexane	9.343	83	2602	1.238	ug/l	96
49) 1,4-Dioxane	9.477	88	19	1.696	ug/l #	1
55) 1,1,2-Trichloroethane	10.763	97	6964	5.776	ug/l #	23
56) Ethyl methacrylate	10.666	69	1845	1.197	ug/l #	18
59) 2-Hexanone	10.934	43	7324	9.342	ug/l #	30
68) m/p-Xylenes	11.842	106	9834	3.231	ug/l	89
69) o-Xylene	12.165	106	21362	7.420	ug/l	93
74) N-amyl acetate	12.251	43	36264	16.697	ug/l #	61
75) 1,1,2,2-Tetrachloroethane	12.775	83	8531	4.799	ug/l #	25
76) 1,2,3-Trichloropropane	12.617	75	55254	40.054	ug/l #	1
80) 1,3,5-Trimethylbenzene	12.940	105	121459	19.177	ug/l	98
81) trans-1,4-Dichloro-2-b...	12.617	75	55254	107.844	ug/l #	6
82) 4-Chlorotoluene	12.940	91	14018	2.358	ug/l #	56
83) tert-Butylbenzene	13.245	119	10402	1.937	ug/l #	63
84) 1,2,4-Trimethylbenzene	13.245	105	87050	13.285	ug/l	98
85) sec-Butylbenzene	13.379	105	19323	2.410	ug/l	89
86) p-Isopropyltoluene	13.495	119	22150	3.249	ug/l	98
89) n-Butylbenzene	13.787	91	10347	1.592	ug/l #	1
90) Hexachloroethane	14.092	117	8851	7.097	ug/l #	17
92) 1,2-Dibromo-3-Chloropr...	14.488	75	419	1.334	ug/l #	33

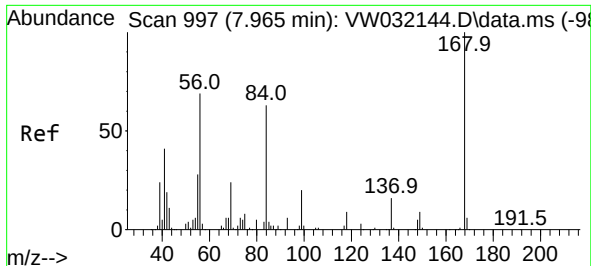
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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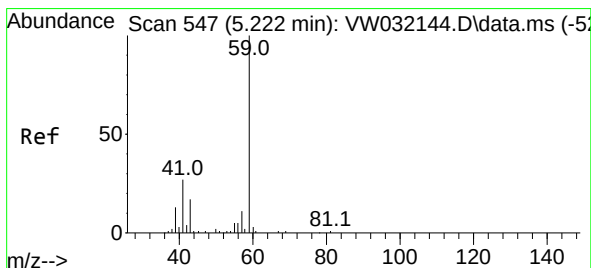
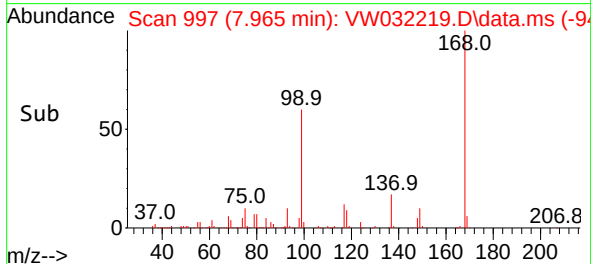
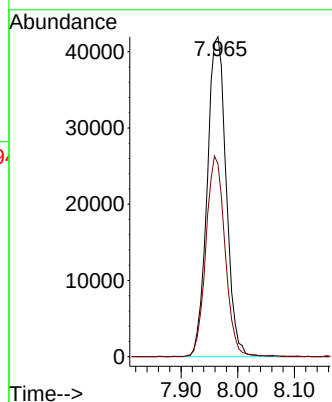
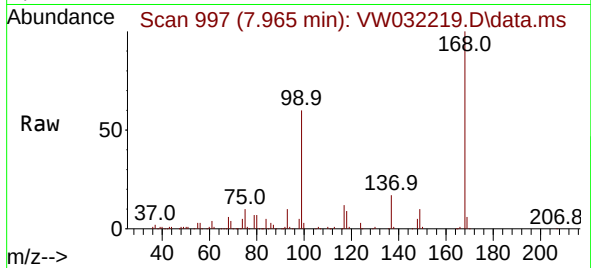




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.965 min Scan# 997
Delta R.T. 0.000 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

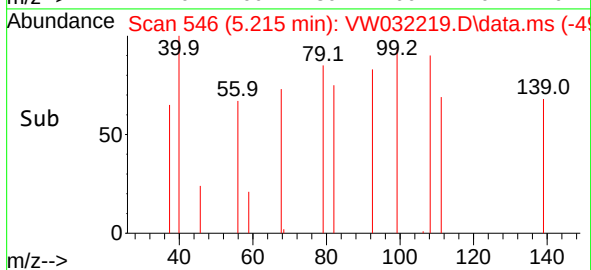
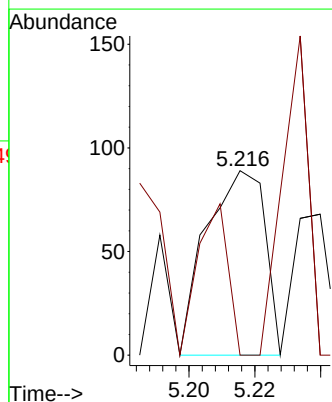
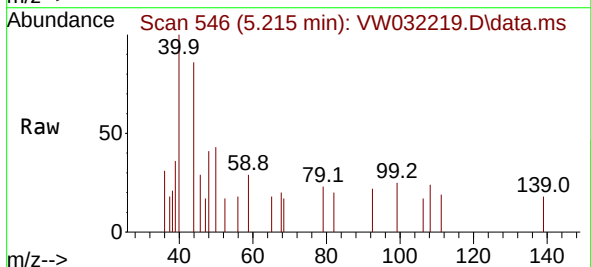
Instrument :
MSVOA_W
ClientSampleId :

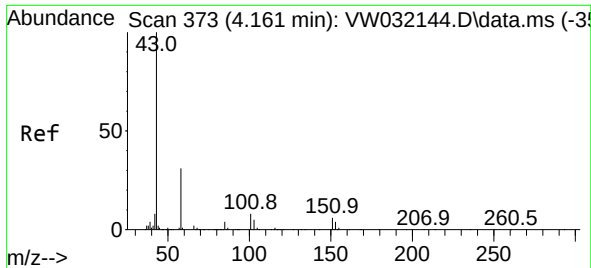
Tgt Ion:168 Resp: 97556
Ion Ratio Lower Upper
168 100
99 60.1 49.3 73.9



#11
Tert butyl alcohol
Concen: 1.289 ug/l
RT: 5.215 min Scan# 546
Delta R.T. -0.006 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion: 59 Resp: 110
Ion Ratio Lower Upper
59 100
57 41.8 9.8 14.6#

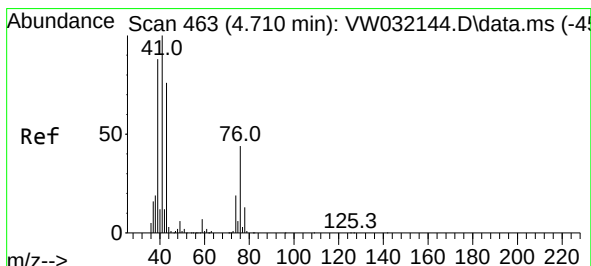
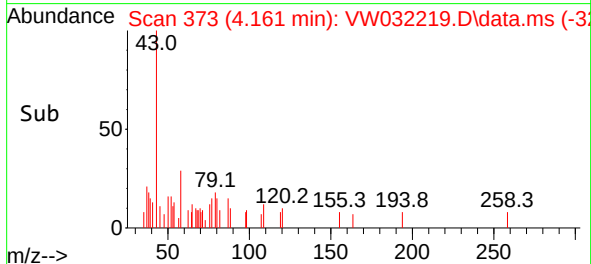
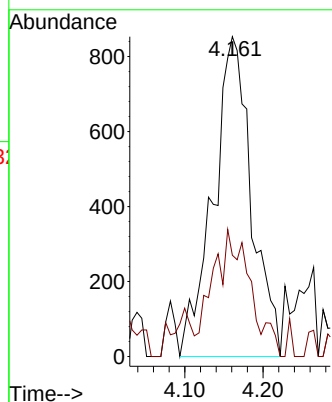
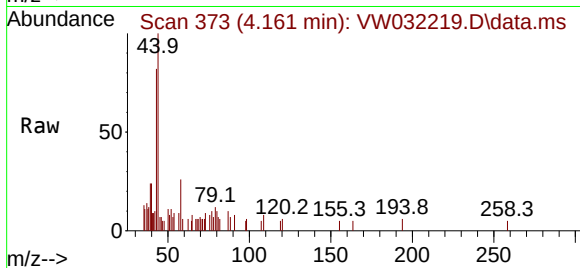




#16
Acetone
Concen: 9.568 ug/l
RT: 4.161 min Scan# 31
Delta R.T. -0.000 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

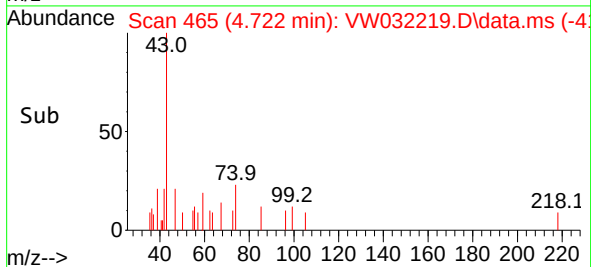
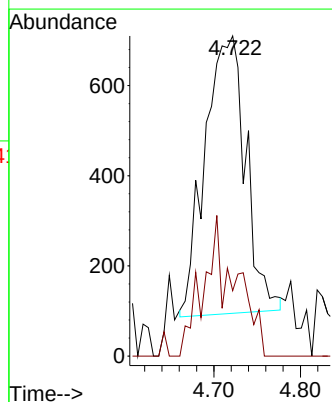
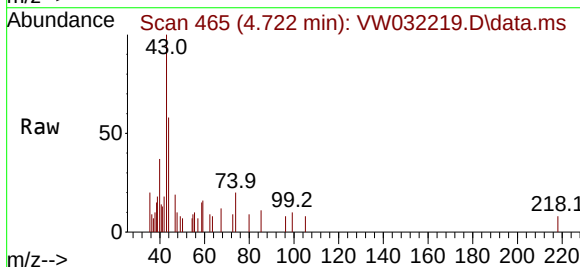
Instrument :
MSVOA_W
ClientSampleId :

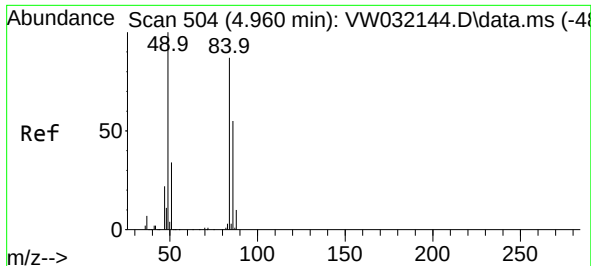
Tgt Ion: 43 Resp: 2891
Ion Ratio Lower Upper
43 100
58 31.7 25.3 37.9



#18
Methyl Acetate
Concen: 2.090 ug/l
RT: 4.722 min Scan# 465
Delta R.T. 0.012 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

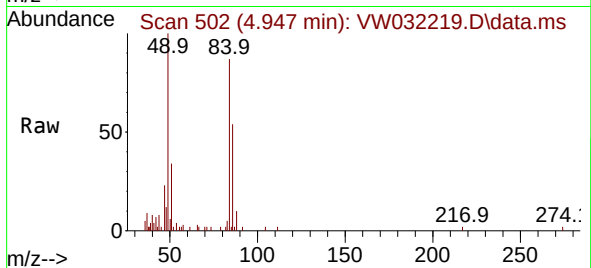
Tgt Ion: 43 Resp: 2012
Ion Ratio Lower Upper
43 100
74 27.7 20.2 30.4



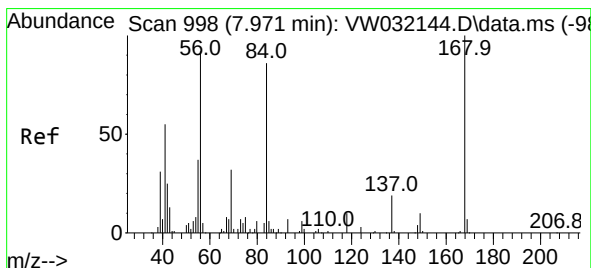
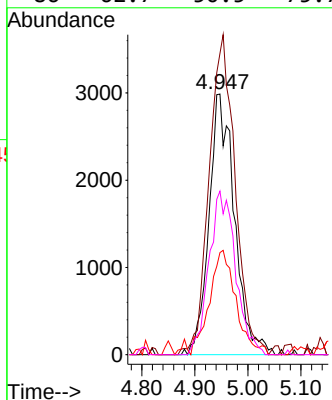
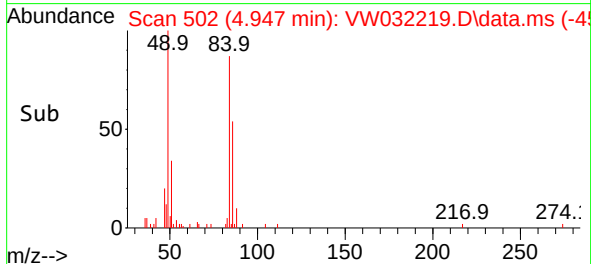


#20
Methylene Chloride
Concen: 4.554 ug/l
RT: 4.947 min Scan# 504
Delta R.T. -0.013 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Instrument :
MSVOA_W
ClientSampleId :

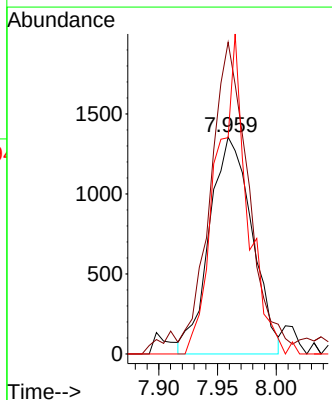
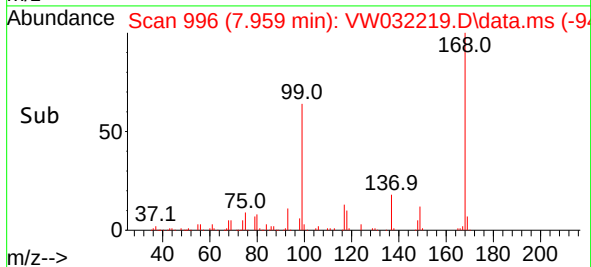
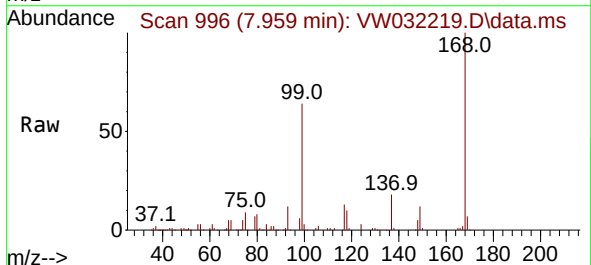


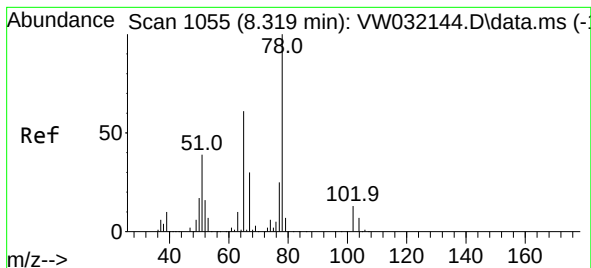
Tgt Ion:	84	Resp:	9963
Ion	Ratio	Lower	Upper
84	100		
49	115.6	92.2	138.4
51	39.2	31.0	46.6
86	62.7	50.5	75.7



#31
Cyclohexane
Concen: 1.996 ug/l
RT: 7.959 min Scan# 996
Delta R.T. -0.013 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion:	56	Resp:	3418
Ion	Ratio	Lower	Upper
56	100		
69	146.1	27.7	41.5#
84	105.4	74.6	112.0





#33

1,2-Dichloroethane-d4

Concen: 49.543 ug/l

RT: 8.319 min Scan# 1055

Delta R.T. -0.000 min

Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

Instrument :

MSVOA_W

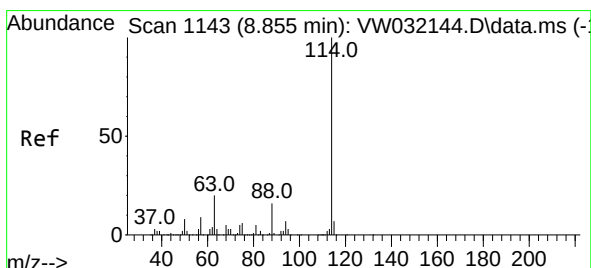
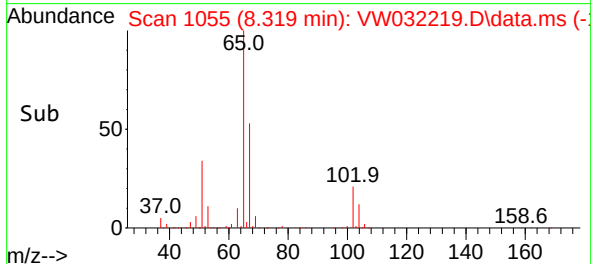
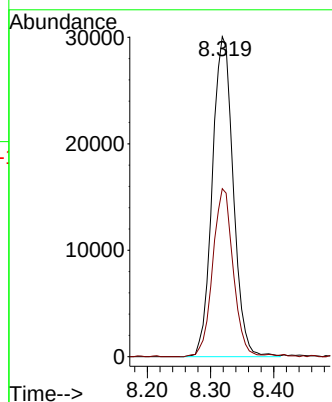
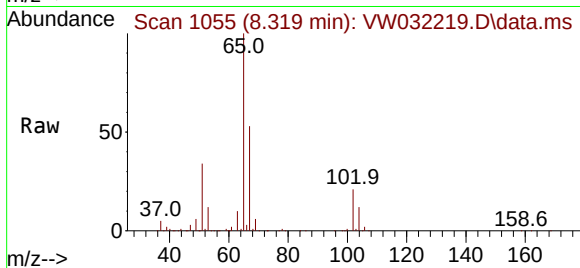
ClientSampleId :

Tgt Ion: 65 Resp: 69121

Ion Ratio Lower Upper

65 100

67 51.3 0.0 99.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.855 min Scan# 1143

Delta R.T. -0.000 min

Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

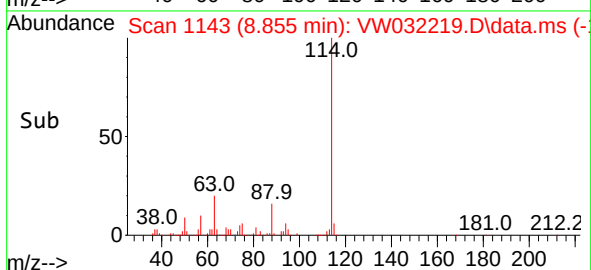
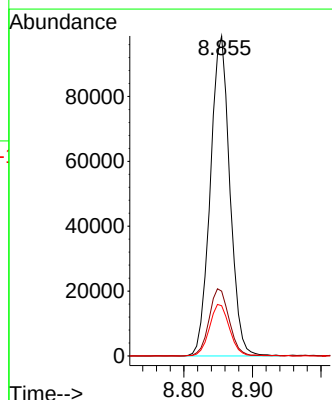
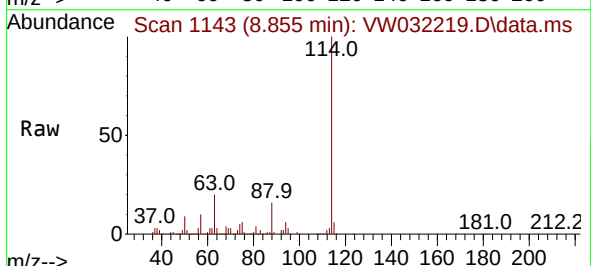
Tgt Ion: 114 Resp: 195019

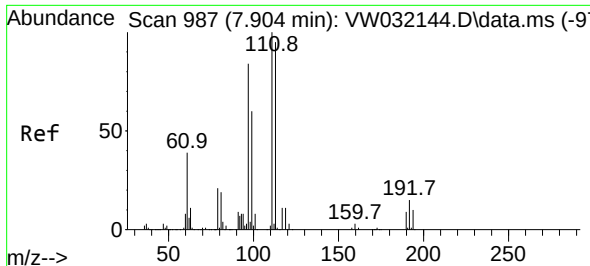
Ion Ratio Lower Upper

114 100

63 20.2 0.0 40.4

88 15.7 0.0 32.0

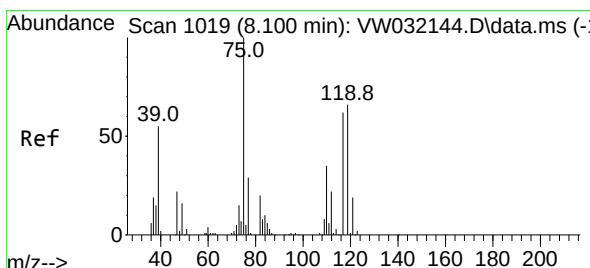
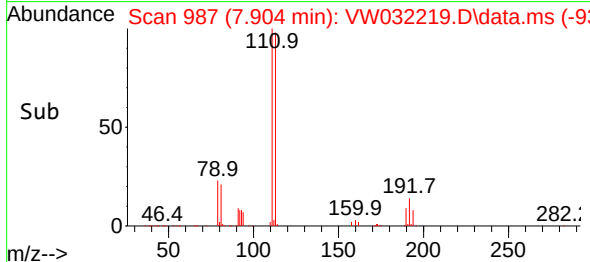
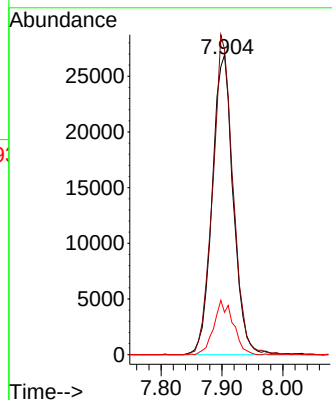
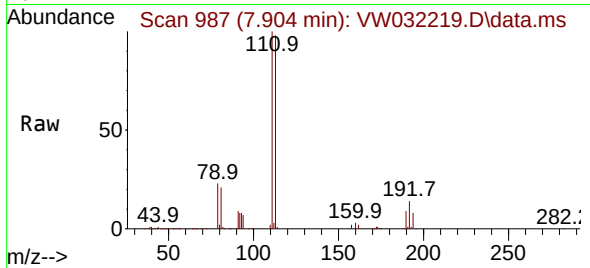




#35
Dibromofluoromethane
Concen: 47.079 ug/l
RT: 7.904 min Scan# 91
Delta R.T. -0.000 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

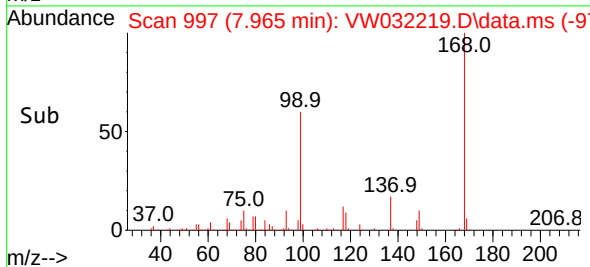
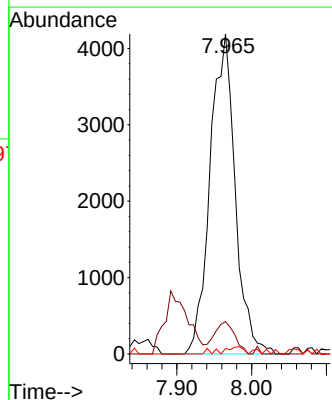
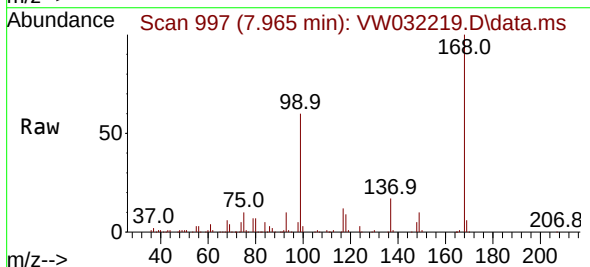
Instrument :
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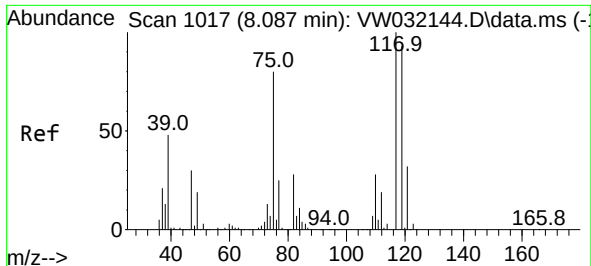
Tgt Ion	Ratio	Lower	Upper
113	100		
111	103.4	83.9	125.9
192	16.8	14.6	21.8



#36
1,1-Dichloropropene
Concen: 5.506 ug/l
RT: 7.965 min Scan# 997
Delta R.T. -0.135 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

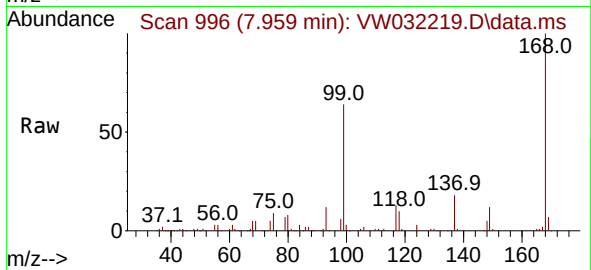
Tgt Ion	Ratio	Lower	Upper
75	100		
110	8.4	17.5	52.5#
77	1.4	24.1	36.1#



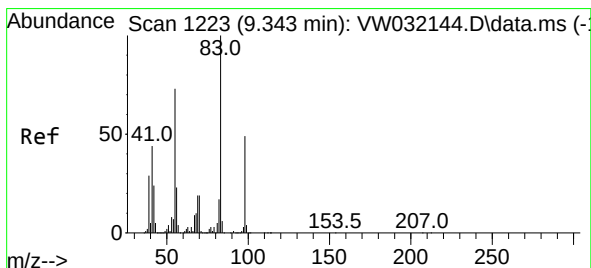
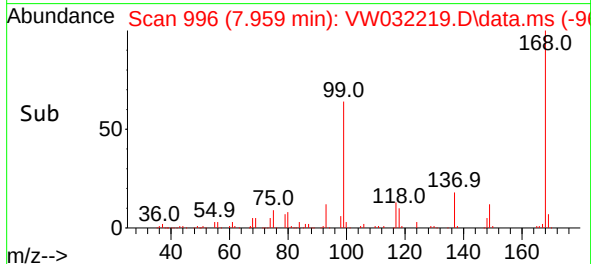
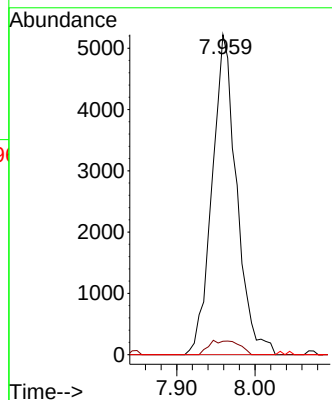


#38
Carbon Tetrachloride
Concen: 5.980 ug/l
RT: 7.959 min Scan# 996
Delta R.T. -0.128 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Instrument :
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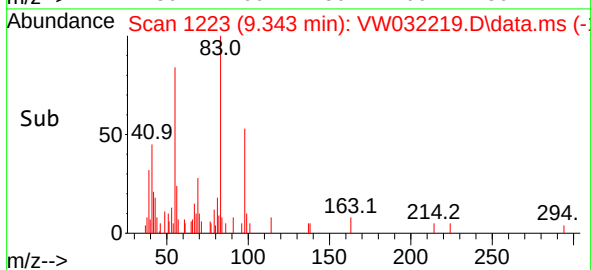
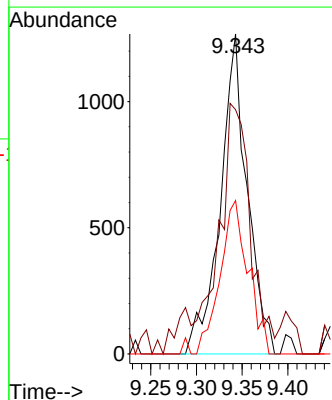
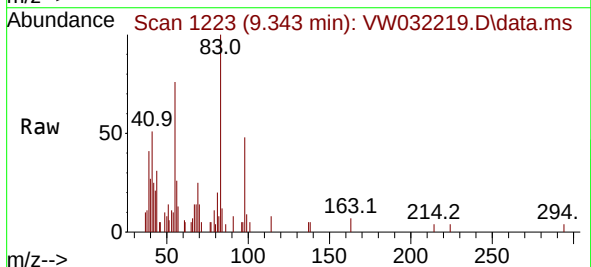


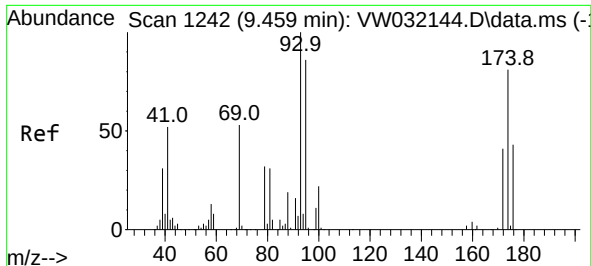
Tgt Ion: 117 Resp: 11372
Ion Ratio Lower Upper
117 100
119 4.2 74.2 111.2#
121 0.0 25.6 38.4#



#39
Methylcyclohexane
Concen: 1.238 ug/l
RT: 9.343 min Scan# 1223
Delta R.T. -0.000 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion: 83 Resp: 2602
Ion Ratio Lower Upper
83 100
55 68.1 58.4 87.6
98 47.9 39.4 59.2





#49

1,4-Dioxane

Concen: 1.696 ug/l

RT: 9.477 min Scan# 11

Delta R.T. 0.018 min

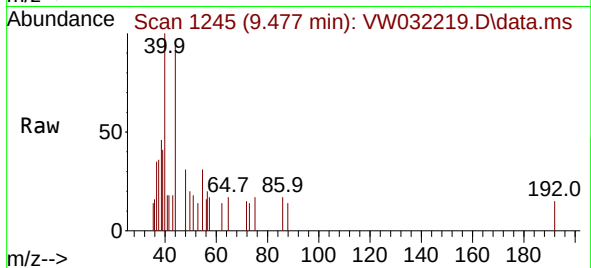
Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

Instrument :

MSVOA_W

ClientSampleId :



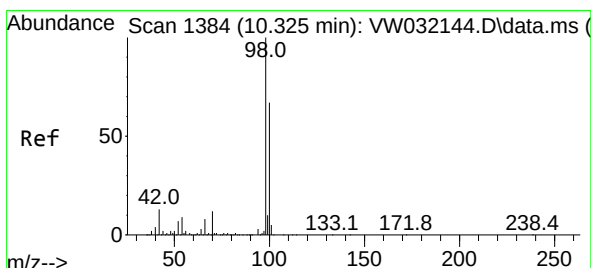
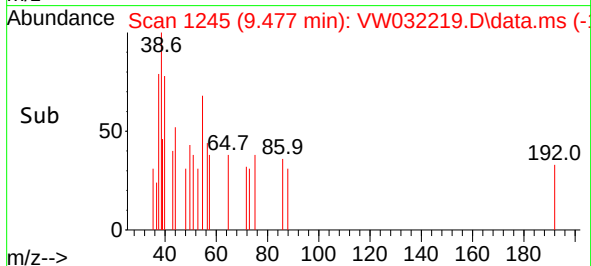
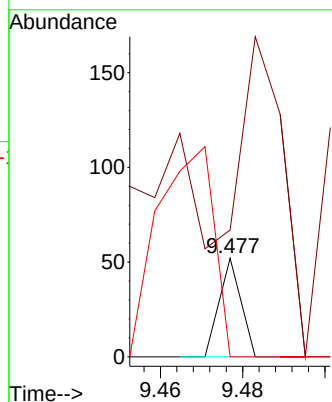
Tgt Ion: 88 Resp: 19

Ion Ratio Lower Upper

88 100

43 700.0 18.0 27.0#

58 552.6 55.4 83.0#



#50

Toluene-d8

Concen: 44.602 ug/l

RT: 10.330 min Scan# 1385

Delta R.T. 0.006 min

Lab File: VW032219.D

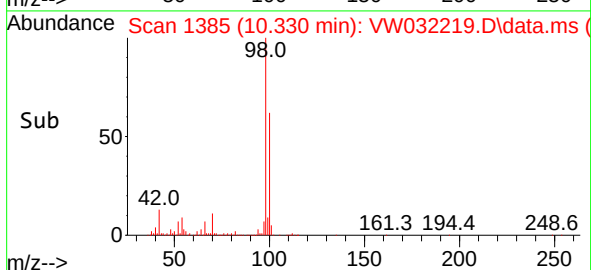
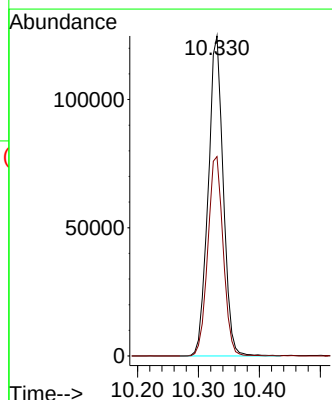
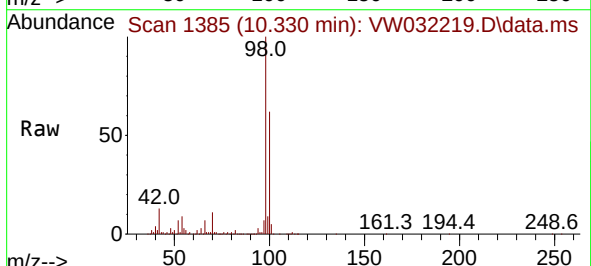
Acq: 19 Sep 2025 16:33

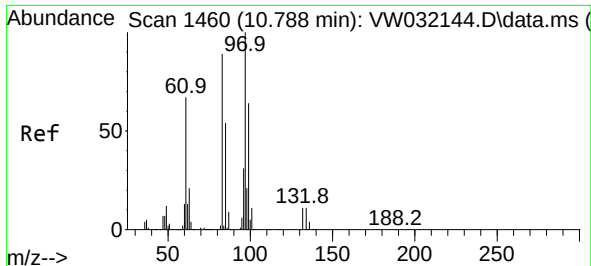
Tgt Ion: 98 Resp: 214232

Ion Ratio Lower Upper

98 100

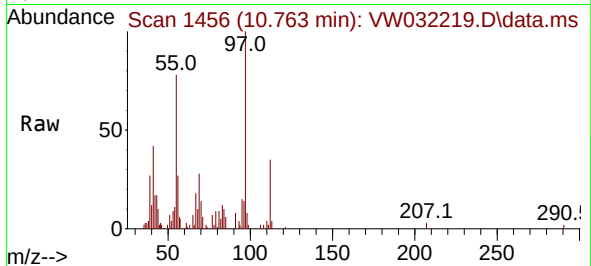
100 63.6 51.4 77.2



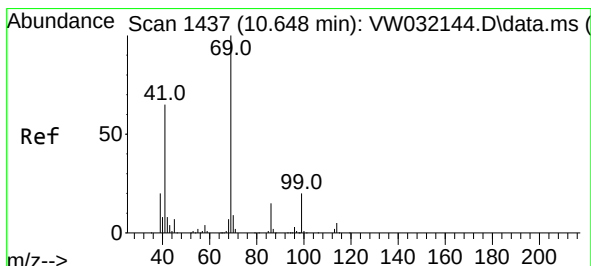
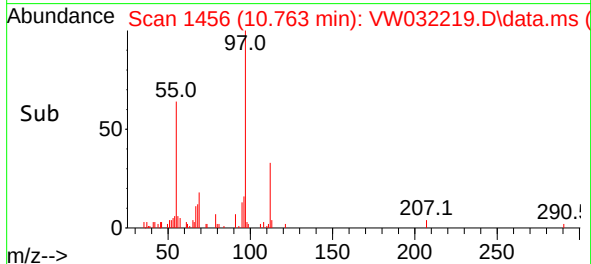
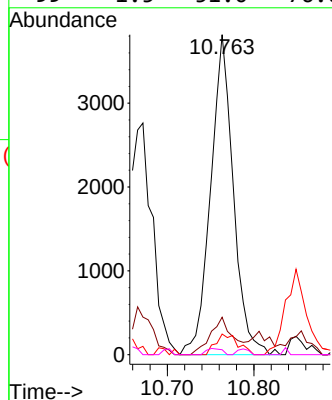


#55
1,1,2-Trichloroethane
Concen: 5.776 ug/l
RT: 10.763 min Scan# 1456
Delta R.T. -0.025 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Instrument :
MSVOA_W
ClientSampleId :

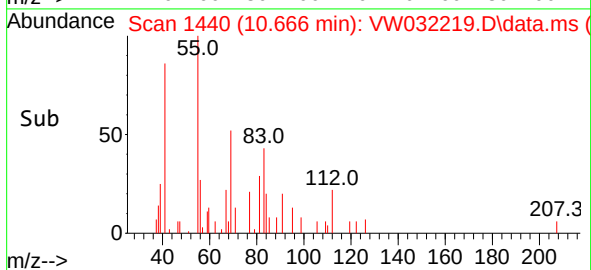
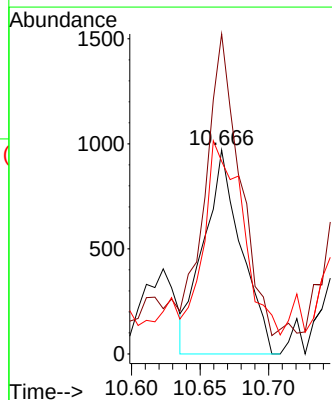
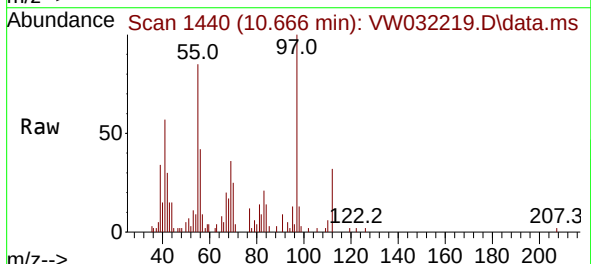


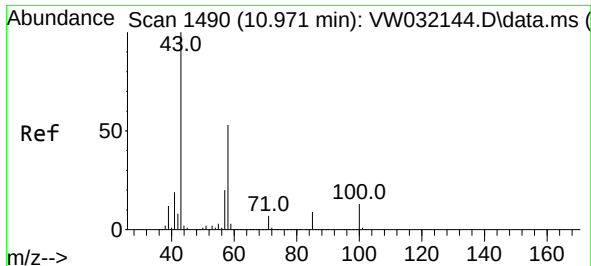
Tgt Ion	Ratio	Lower	Upper
97	100		
83	11.7	71.0	106.6#
85	6.4	42.8	64.2#
99	1.5	51.0	76.6#



#56
Ethyl methacrylate
Concen: 1.197 ug/l
RT: 10.666 min Scan# 1440
Delta R.T. 0.018 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion	Ratio	Lower	Upper
69	100		
41	127.5	53.2	79.8#
39	97.3	32.9	49.3#

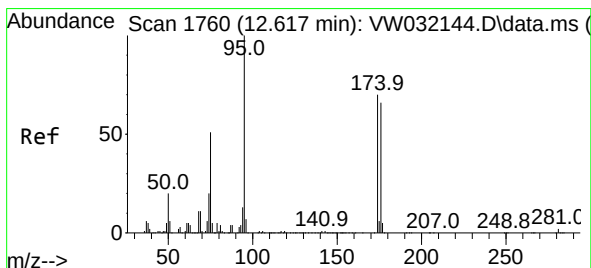
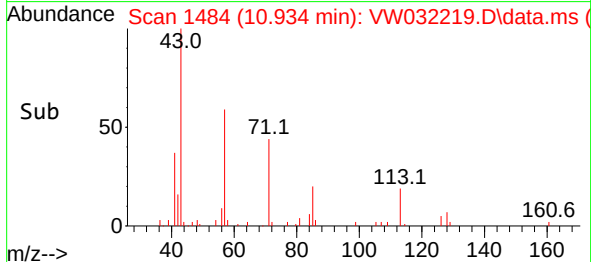
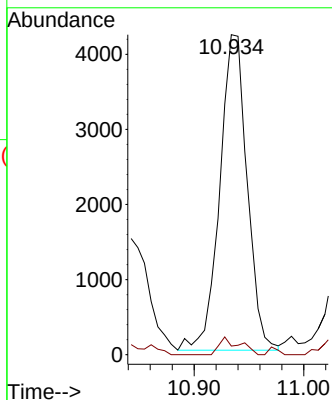
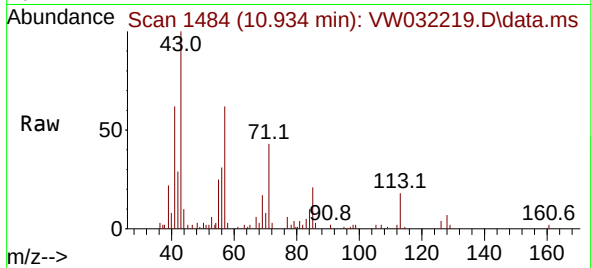




#59
2-Hexanone
Concen: 9.342 ug/l
RT: 10.934 min Scan# 1490
Delta R.T. -0.037 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

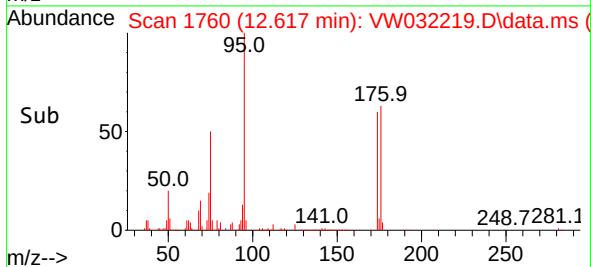
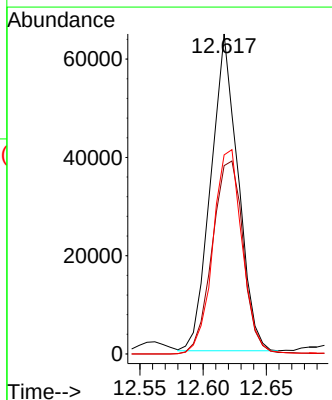
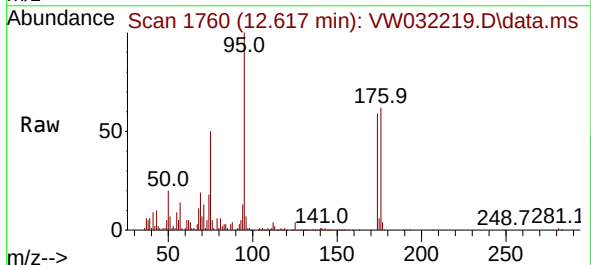
Instrument :
MSVOA_W
ClientSampleId :

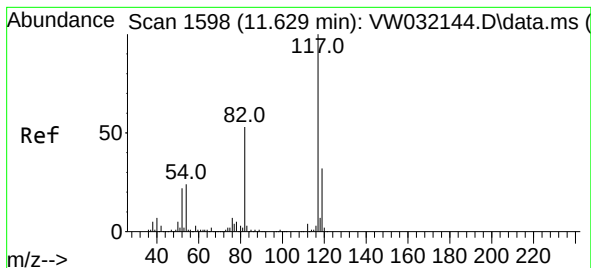
Tgt Ion: 43 Resp: 7324
Ion Ratio Lower Upper
43 100
58 4.1 27.5 82.4#



#62
4-Bromofluorobenzene
Concen: 54.319 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.000 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion: 95 Resp: 96477
Ion Ratio Lower Upper
95 100
174 69.8 0.0 145.6
176 69.4 0.0 140.8

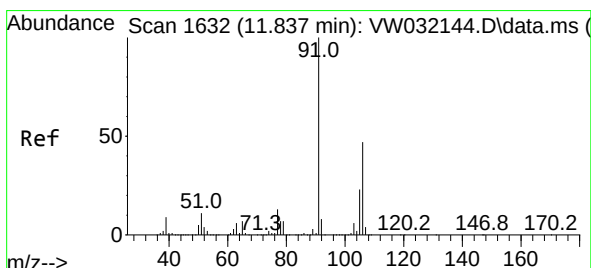
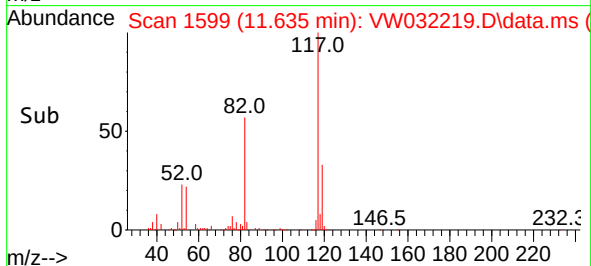
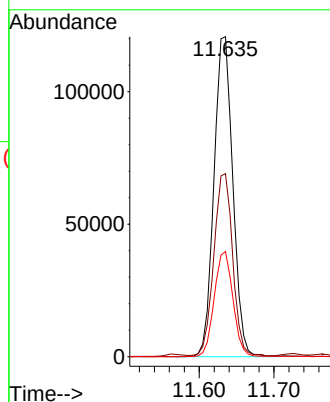
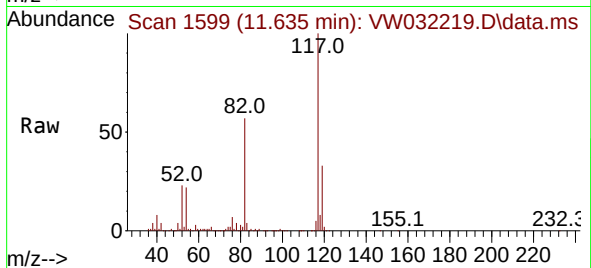




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.635 min Scan# 11
Delta R.T. 0.006 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

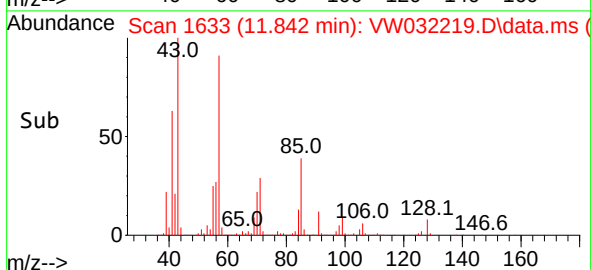
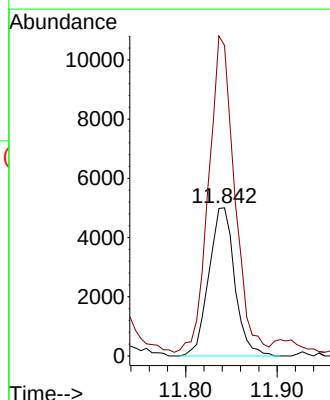
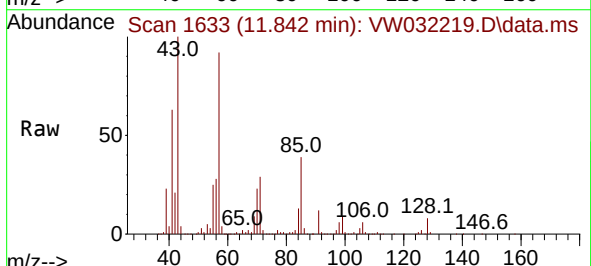
Instrument :
MSVOA_W
ClientSampleId :

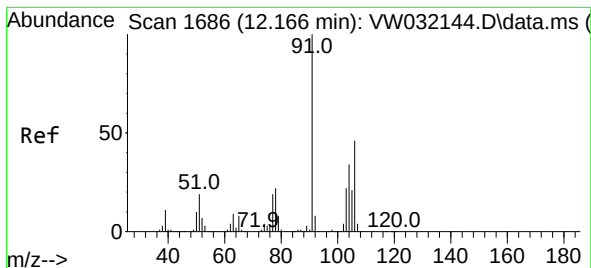
Tgt Ion:117 Resp: 212053
Ion Ratio Lower Upper
117 100
82 56.7 42.7 64.1
119 32.9 25.2 37.8



#68
m/p-Xylenes
Concen: 3.231 ug/l
RT: 11.842 min Scan# 1633
Delta R.T. 0.006 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion:106 Resp: 9834
Ion Ratio Lower Upper
106 100
91 221.5 164.2 246.2





#69

o-Xylene

Concen: 7.420 ug/l

RT: 12.165 min Scan# 1

Delta R.T. -0.000 min

Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

Instrument :

MSVOA_W

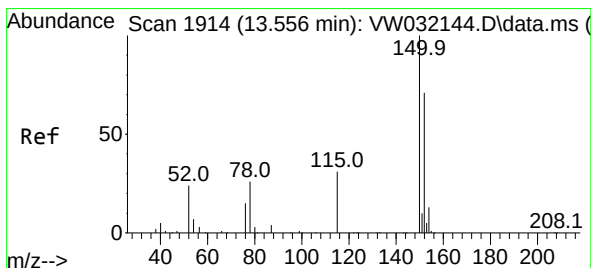
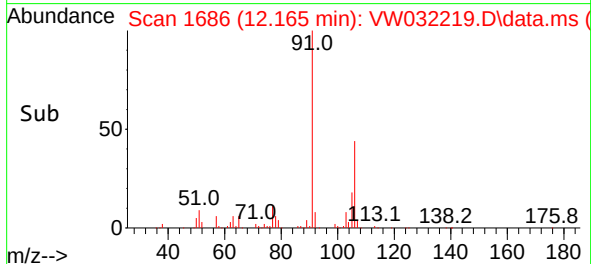
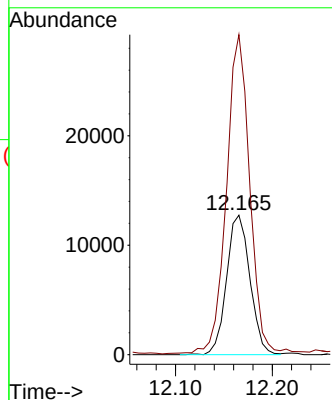
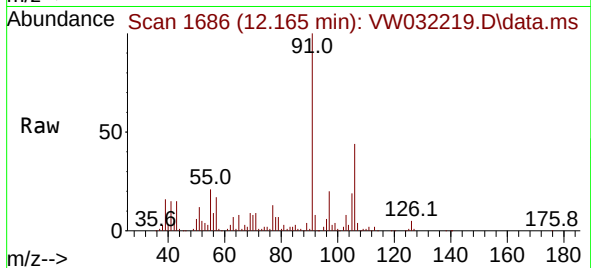
ClientSampleId :

Tgt Ion:106 Resp: 21362

Ion Ratio Lower Upper

106 100

91 228.4 108.7 326.3



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.555 min Scan# 1914

Delta R.T. -0.000 min

Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

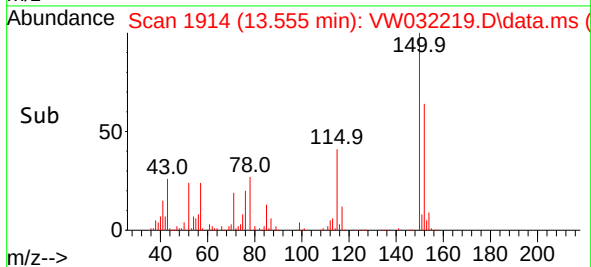
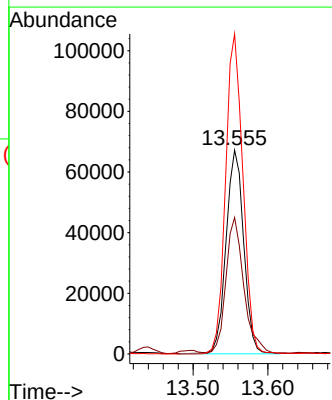
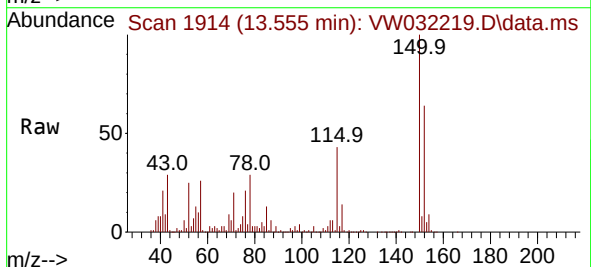
Tgt Ion:152 Resp: 110112

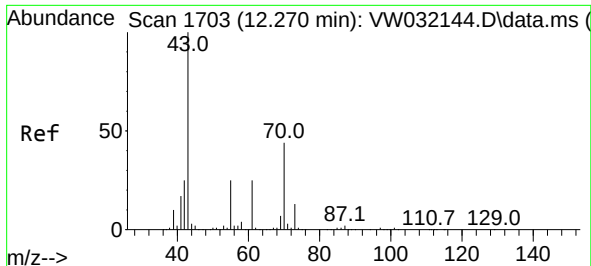
Ion Ratio Lower Upper

152 100

115 67.7 31.8 95.4

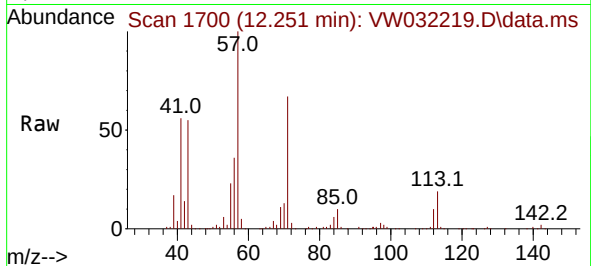
150 154.5 0.0 343.0



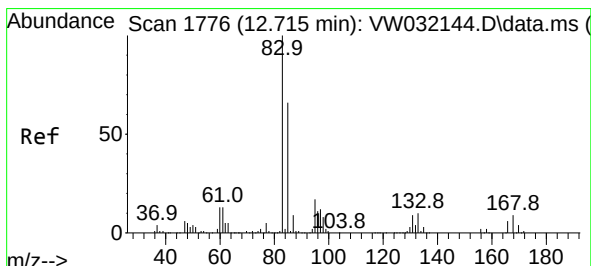
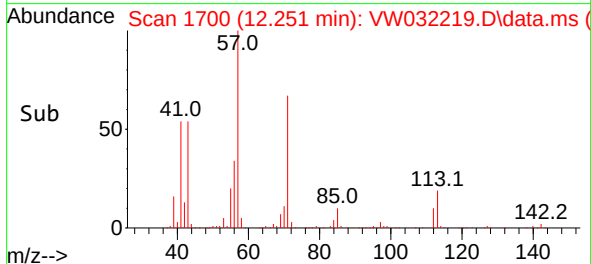
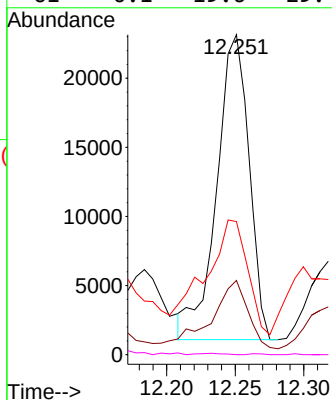


#74
N-amy1 acetate
Concen: 16.697 ug/l
RT: 12.251 min Scan# 1700
Delta R.T. -0.019 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Instrument :
MSVOA_W
ClientSampleId :

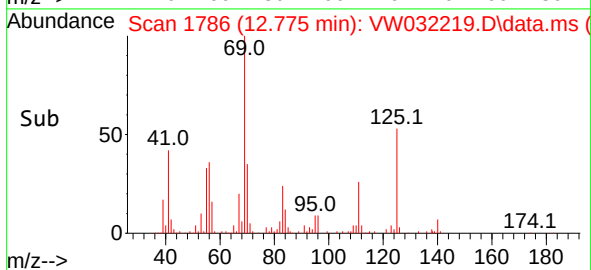
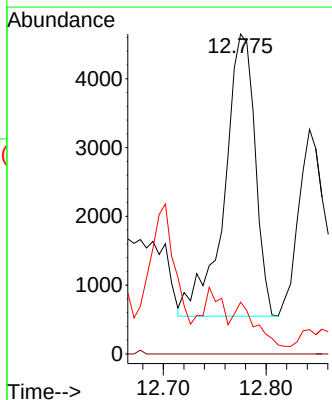
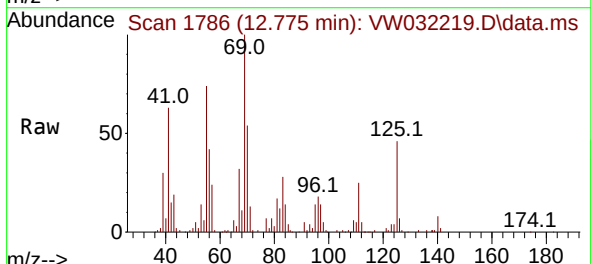


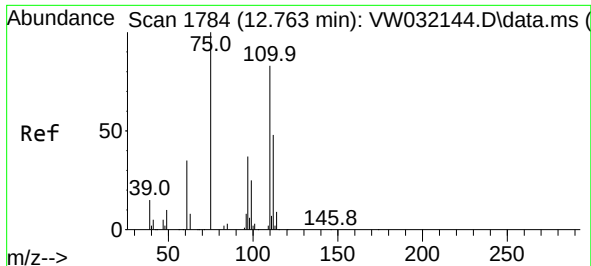
Tgt Ion:	43	Resp:	36264
Ion Ratio	100	Lower	Upper
70	26.2	35.3	52.9#
55	49.8	19.9	29.9#
61	0.1	19.6	29.4#



#75
1,1,2,2-Tetrachloroethane
Concen: 4.799 ug/l
RT: 12.775 min Scan# 1786
Delta R.T. 0.061 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion:	83	Resp:	8531
Ion Ratio	100	Lower	Upper
131	0.0	5.1	15.4#
85	0.0	32.2	96.6#

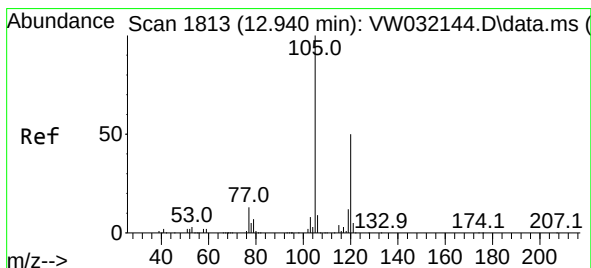
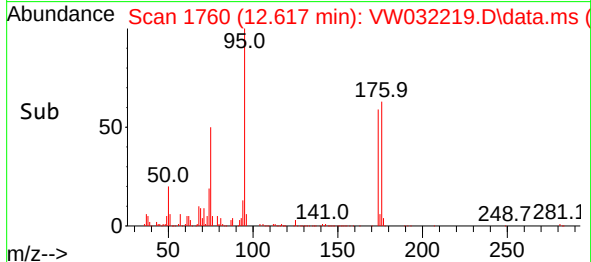
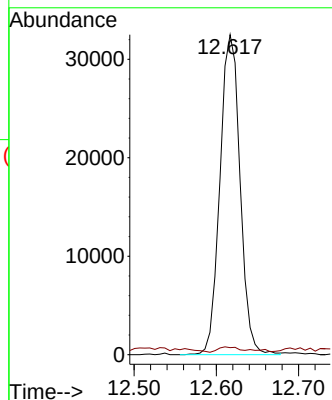
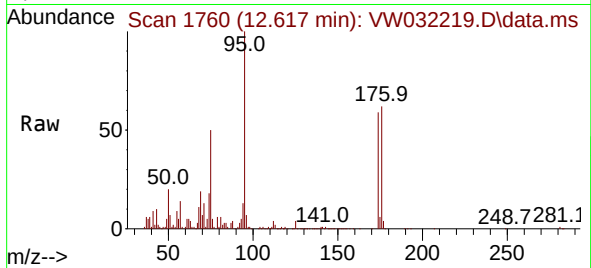




#76
1,2,3-Trichloropropane
Concen: 40.054 ug/l
RT: 12.617 min Scan# 1760
Delta R.T. -0.147 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

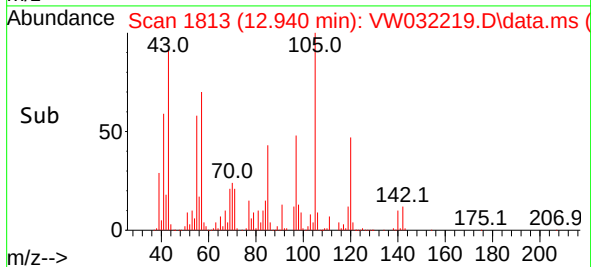
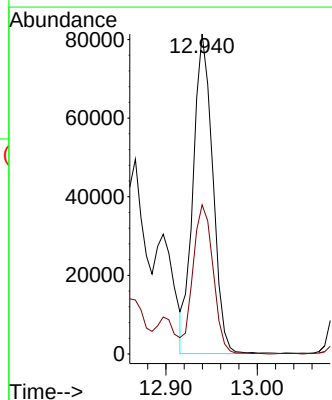
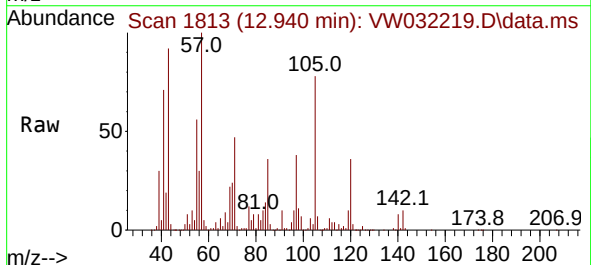
Instrument :
MSVOA_W
ClientSampleId :

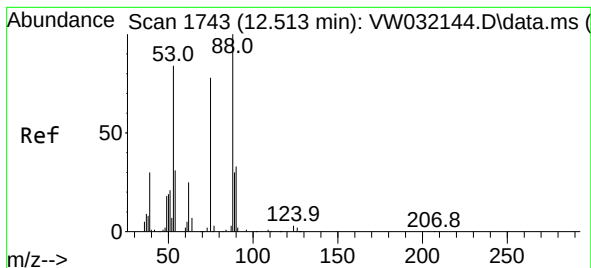
Tgt Ion: 75 Resp: 55254
Ion Ratio Lower Upper
75 100
77 1.7 141.7 425.1#



#80
1,3,5-Trimethylbenzene
Concen: 19.177 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.000 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion: 105 Resp: 121459
Ion Ratio Lower Upper
105 100
120 48.2 24.8 74.4

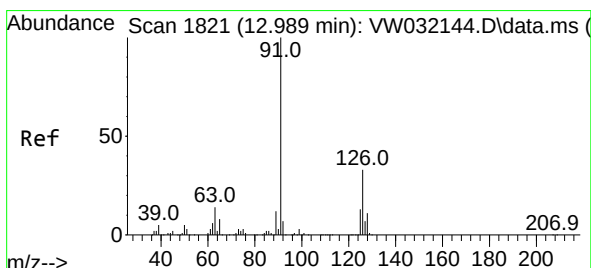
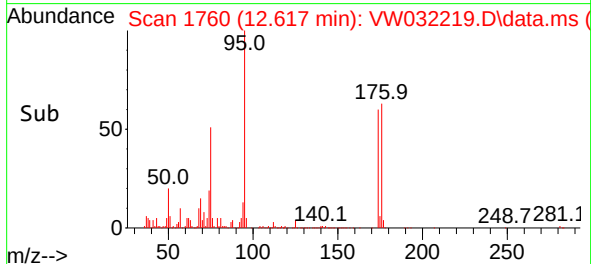
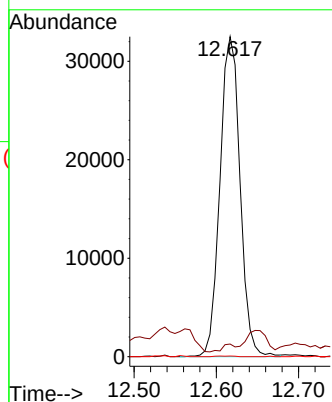
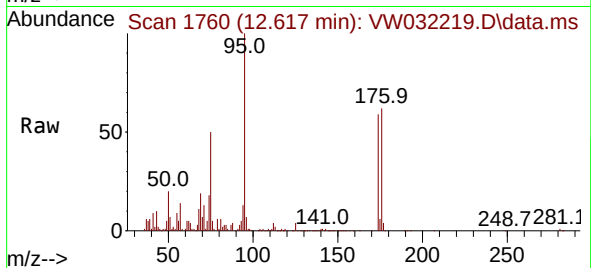




#81
trans-1,4-Dichloro-2-butene
Concen: 107.844 ug/l
RT: 12.617 min Scan# 11
Delta R.T. 0.103 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

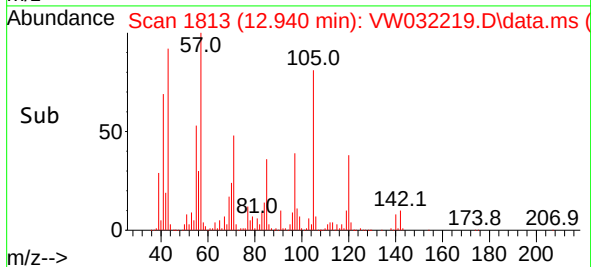
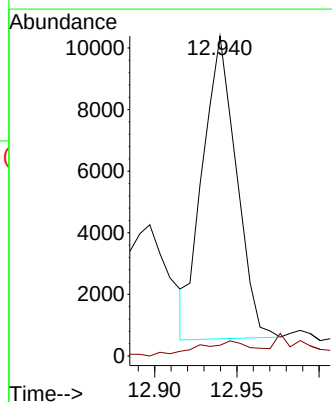
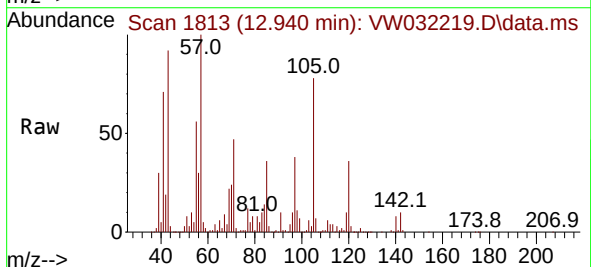
Instrument :
MSVOA_W
ClientSampleId :

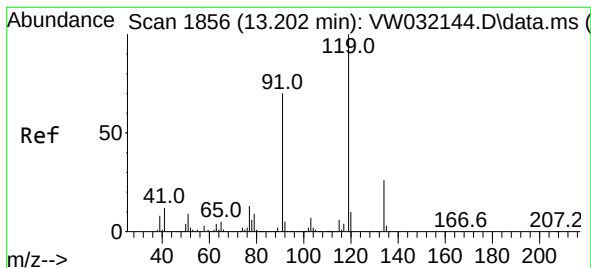
Tgt Ion: 75 Resp: 55254
Ion Ratio Lower Upper
75 100
53 1.5 91.0 136.6#
89 0.2 39.4 59.2#



#82
4-Chlorotoluene
Concen: 2.358 ug/l
RT: 12.940 min Scan# 1813
Delta R.T. -0.049 min
Lab File: VW032219.D
Acq: 19 Sep 2025 16:33

Tgt Ion: 91 Resp: 14018
Ion Ratio Lower Upper
91 100
126 7.8 16.1 48.2#





#83

tert-Butylbenzene

Concen: 1.937 ug/l

RT: 13.245 min Scan# 1863

Delta R.T. 0.042 min

Lab File: VW032219.D

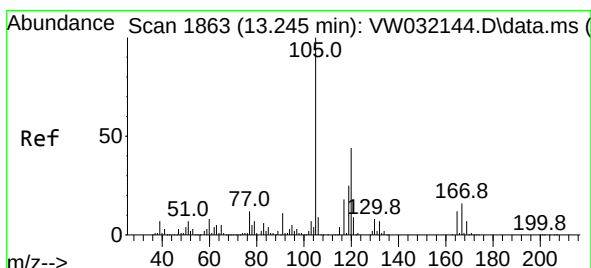
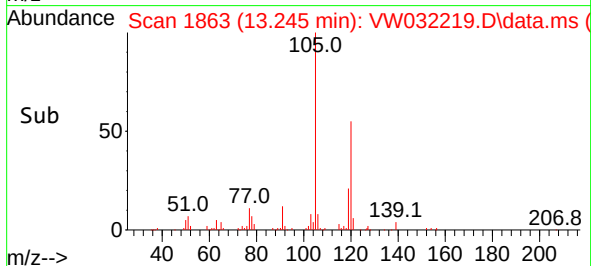
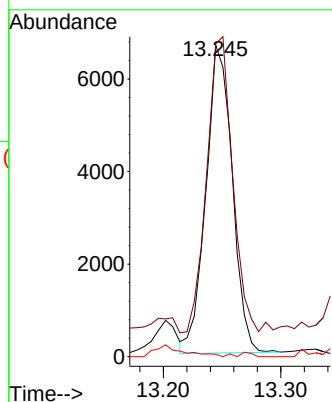
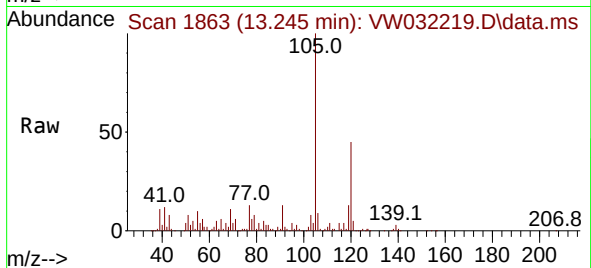
Acq: 19 Sep 2025 16:33

Instrument :

MSVOA_W

ClientSampleId :

Tgt Ion:119	Resp:	10402
Ion Ratio	Lower	Upper
119	100	
91	93.5	33.8 101.3
134	0.0	12.5 37.5#



#84

1,2,4-Trimethylbenzene

Concen: 13.285 ug/l

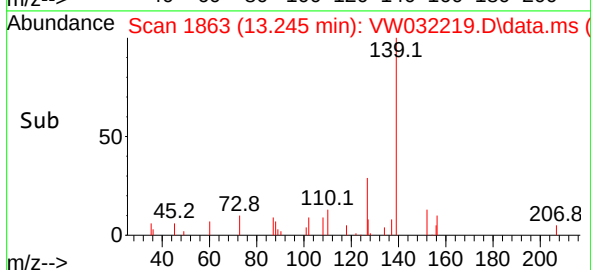
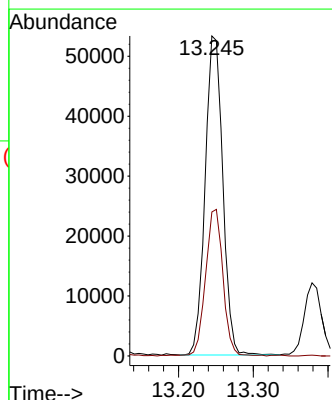
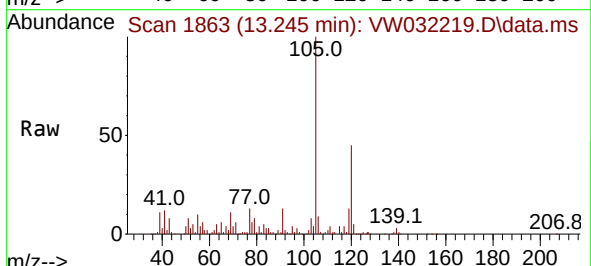
RT: 13.245 min Scan# 1863

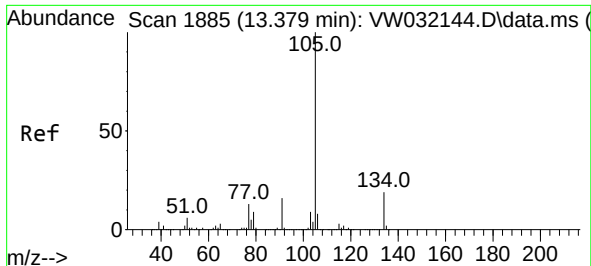
Delta R.T. -0.000 min

Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

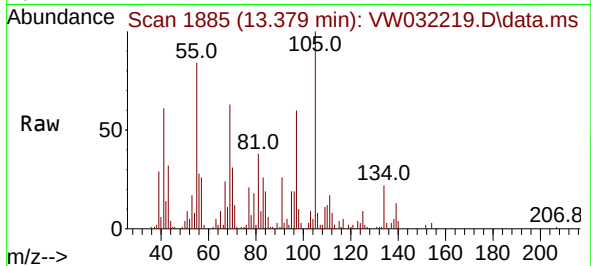
Tgt Ion:105	Resp:	87050
Ion Ratio	Lower	Upper
105	100	
120	45.6	22.1 66.3



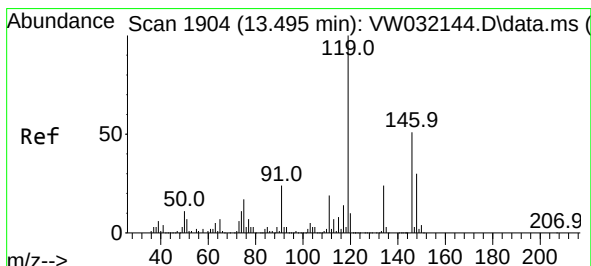
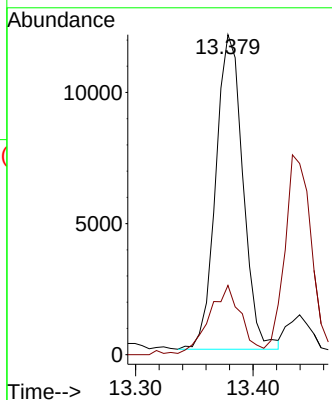
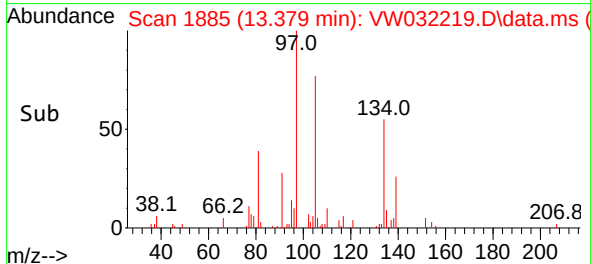


#85
 sec-Butylbenzene
 Concen: 2.410 ug/l
 RT: 13.379 min Scan# 11
 Delta R.T. -0.000 min
 Lab File: VW032219.D
 Acq: 19 Sep 2025 16:33

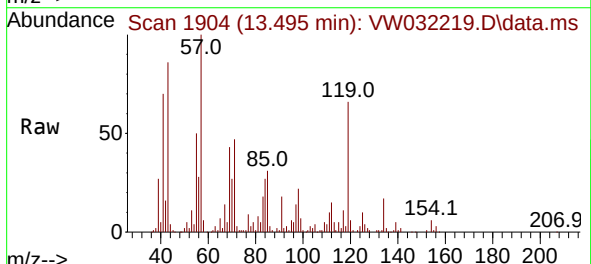
Instrument :
 MSVOA_W
 ClientSampleId :



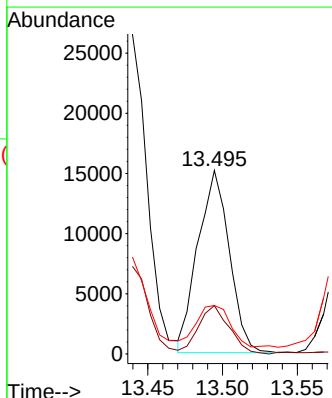
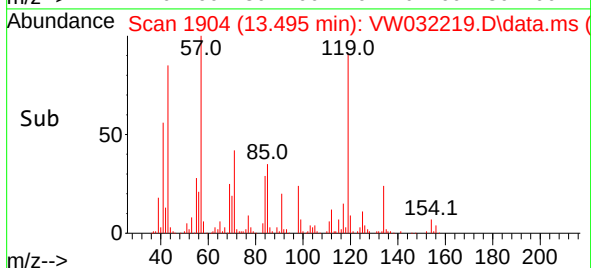
Tgt Ion:105 Resp: 19323
 Ion Ratio Lower Upper
 105 100
 134 25.0 10.1 30.1

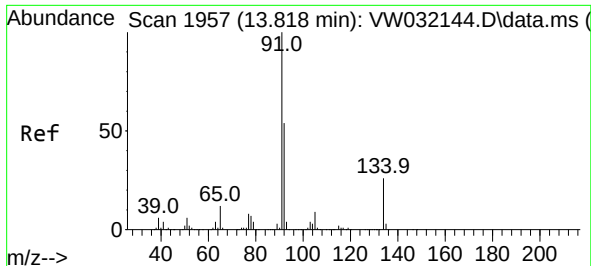


#86
 p-Isopropyltoluene
 Concen: 3.249 ug/l
 RT: 13.495 min Scan# 1904
 Delta R.T. -0.000 min
 Lab File: VW032219.D
 Acq: 19 Sep 2025 16:33



Tgt Ion:119 Resp: 22150
 Ion Ratio Lower Upper
 119 100
 134 25.9 12.6 37.6
 91 23.5 12.4 37.0





#89

n-Butylbenzene

Concen: 1.592 ug/l

RT: 13.787 min Scan# 1957

Delta R.T. -0.031 min

Lab File: VW032219.D

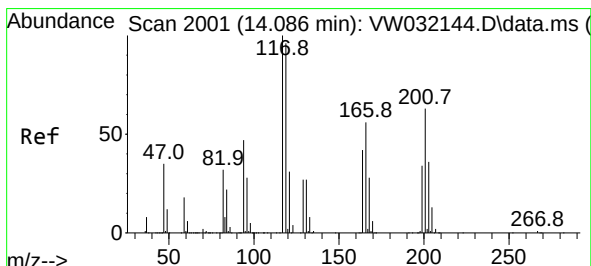
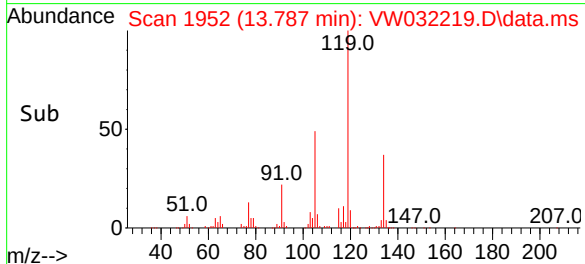
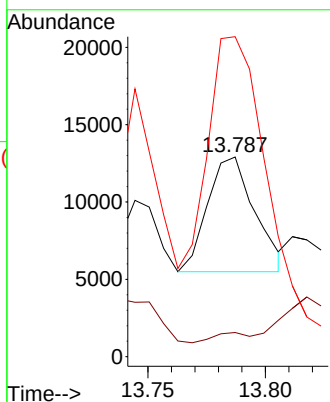
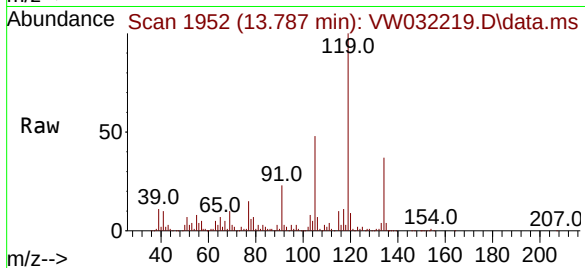
Acq: 19 Sep 2025 16:33

Instrument :

MSVOA_W

ClientSampleId :

Tgt Ion: 91 Resp: 10347
 Ion Ratio Lower Upper
 91 100
 92 0.0 27.0 81.0#
 134 386.6 13.1 39.3#



#90

Hexachloroethane

Concen: 7.097 ug/l

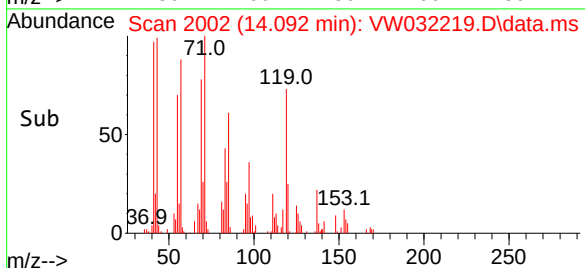
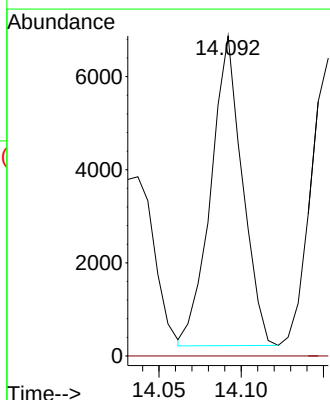
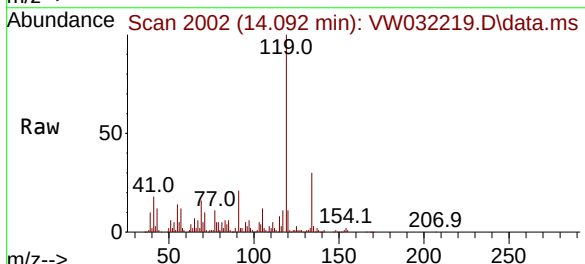
RT: 14.092 min Scan# 2002

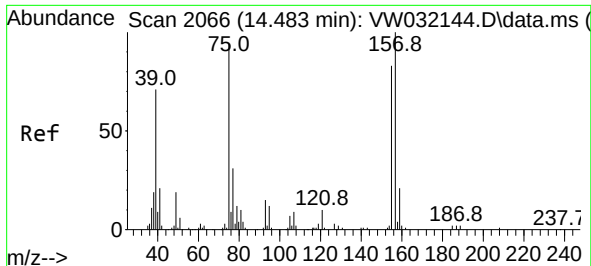
Delta R.T. 0.006 min

Lab File: VW032219.D

Acq: 19 Sep 2025 16:33

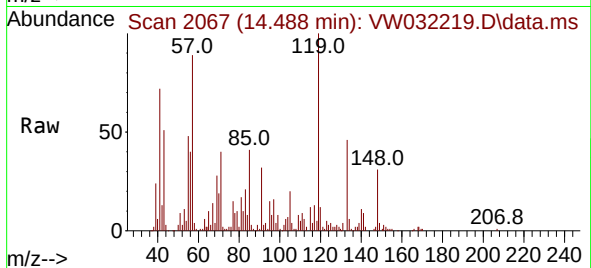
Tgt Ion: 117 Resp: 8851
 Ion Ratio Lower Upper
 117 100
 201 0.0 32.8 98.4#





#92
 1,2-Dibromo-3-Chloropropane
 Concen: 1.334 ug/l
 RT: 14.488 min Scan# 2066
 Delta R.T. 0.006 min
 Lab File: VW032219.D
 Acq: 19 Sep 2025 16:33

Instrument :
 MSVOA_W
 ClientSampleId :



Tgt Ion: 75 Resp: 419
 Ion Ratio Lower Upper
 75 100
 155 60.1 40.8 122.5
 157 0.0 51.8 155.4#

