

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY010924\
 Data File : VY016950.D
 Acq On : 09 Jan 2024 15:47
 Operator : SY/MD
 Sample : P1067-09
 Misc : 3.61g/5.0mL/MSVOA_Y/SOIL/A
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_Y
 ClientSampleId :

Quant Time: Jan 10 02:28:04 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y010224S.M
 Quant Title : SW846 8260
 QLast Update : Tue Jan 02 14:25:32 2024
 Response via : Initial Calibration

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

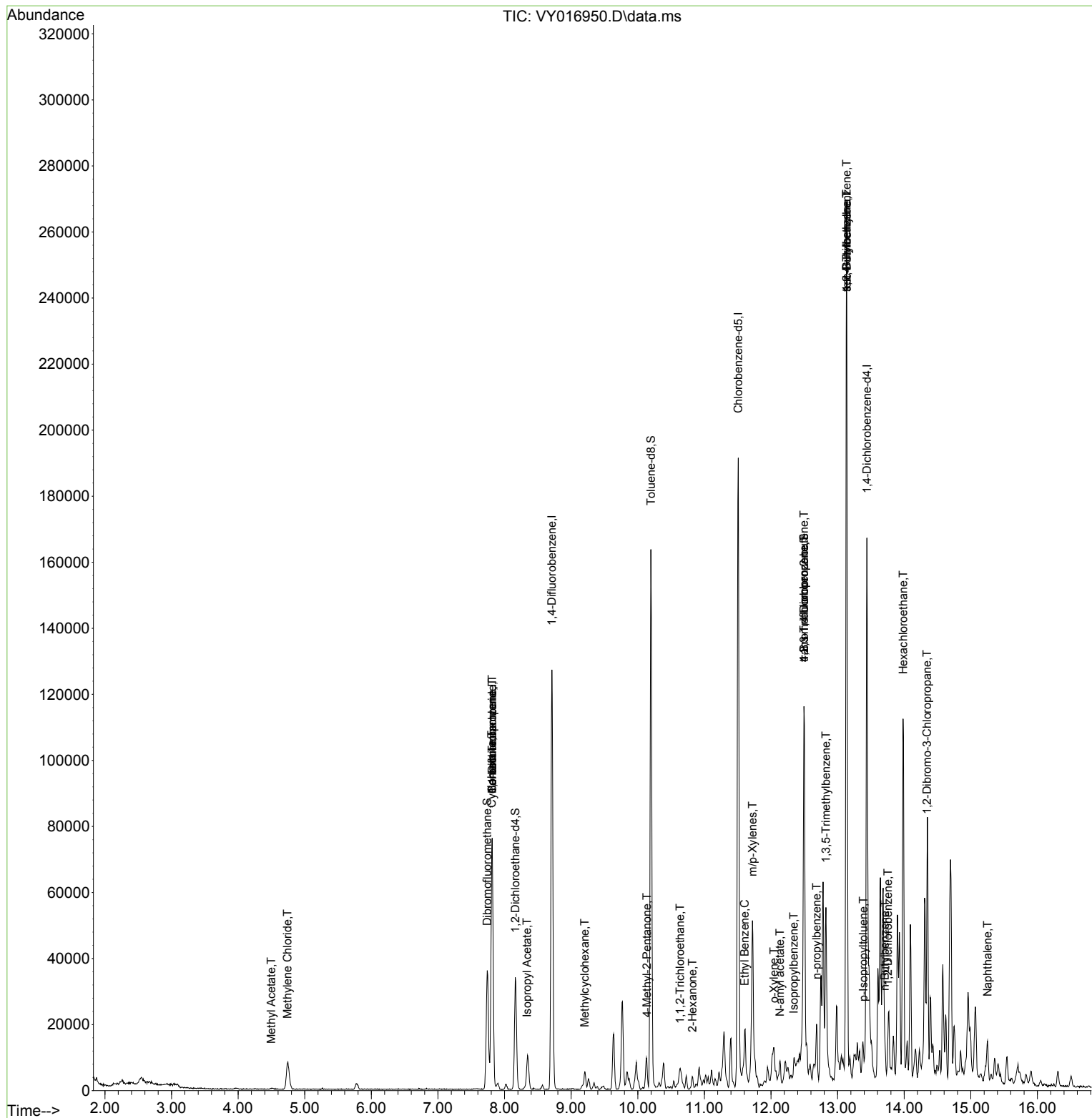
Internal Standards						
1) Pentafluorobenzene	7.813	168	57315	50.000	ug/l	0.01
34) 1,4-Difluorobenzene	8.710	114	110626	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.508	117	103150	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.440	152	38012	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.161	65	25564	45.128	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	90.260%
35) Dibromofluoromethane	7.740	113	26716	37.898	ug/l	0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	=	75.800%
50) Toluene-d8	10.197	98	102583	42.259	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	84.520%
62) 4-Bromofluorobenzene	12.496	95	31418	38.361	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	76.720%
Target Compounds						
					Qvalue	
16) Acetone	3.973	43	633	Below Cal		91
18) Methyl Acetate	4.497	43	672	1.107 ug/l	#	51
20) Methylene Chloride	4.741	84	6428	2.015 ug/l		91
31) Cyclohexane	7.807	56	1434	1.475 ug/l	#	1
36) 1,1-Dichloropropene	7.813	75	4963	4.831 ug/l	#	48
38) Carbon Tetrachloride	7.813	117	5835	5.590 ug/l	#	20
39) Methylcyclohexane	9.203	83	1389	1.203 ug/l	#	75
43) Isopropyl Acetate	8.338	43	1981	2.216 ug/l	#	51
51) 4-Methyl-2-Pentanone	10.136	43	1114	2.343 ug/l	#	75
55) 1,1,2-Trichloroethane	10.636	97	1302	2.201 ug/l	#	28
59) 2-Hexanone	10.819	43	1379	3.939 ug/l	#	23
67) Ethyl Benzene	11.605	91	10610	2.743 ug/l		95
68) m/p-Xylenes	11.721	106	12237	8.618 ug/l		97
69) o-Xylene	12.044	106	2337	1.756 ug/l		97
73) Isopropylbenzene	12.343	105	3563	1.148 ug/l		99
74) N-amyl acetate	12.136	43	1618	2.594 ug/l	#	79
76) 1,2,3-Trichloropropane	12.496	75	16718	40.529 ug/l	#	100
78) n-propylbenzene	12.685	91	12253	3.247 ug/l		99
80) 1,3,5-Trimethylbenzene	12.825	105	19534	7.957 ug/l		95
81) trans-1,4-Dichloro-2-b...	12.496	75	16718	92.030 ug/l	#	14
83) tert-Butylbenzene	13.136	119	16668	7.709 ug/l	#	64
84) 1,2,4-Trimethylbenzene	13.136	105	136830	56.596 ug/l		98
85) sec-Butylbenzene	13.136	105	136830	42.707 ug/l	#	57
86) p-Isopropyltoluene	13.386	119	3497	1.323 ug/l		96
89) n-Butylbenzene	13.709	91	4586	1.804 ug/l	#	62
90) Hexachloroethane	13.983	117	5133	9.034 ug/l	#	17
91) 1,2-Dichlorobenzene	13.758	146	1581	1.365 ug/l		86
92) 1,2-Dibromo-3-Chloropr...	14.343	75	308	3.883 ug/l	#	1
95) Naphthalene	15.251	128	9401	10.273 ug/l		97

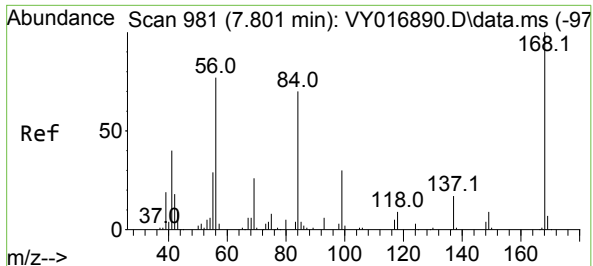
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_Y\Data\VY010924\
Data File : VY016950.D
Acq On : 09 Jan 2024 15:47
Operator : SY/MD
Sample : P1067-09
Misc : 3.61g/5.0mL/MSVOA_Y/SOIL/A
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_Y
ClientSampleId :

Quant Time: Jan 10 02:28:04 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_Y\methods\82Y010224S.M
Quant Title : SW846 8260
QLast Update : Tue Jan 02 14:25:32 2024
Response via : Initial Calibration

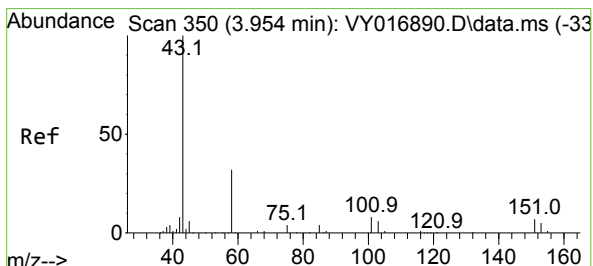
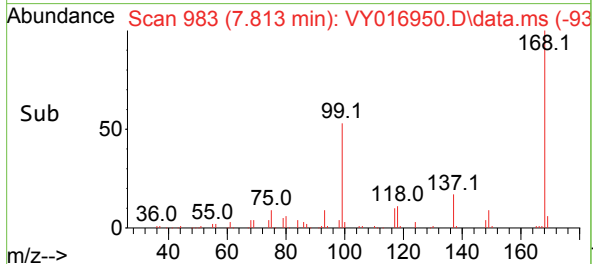
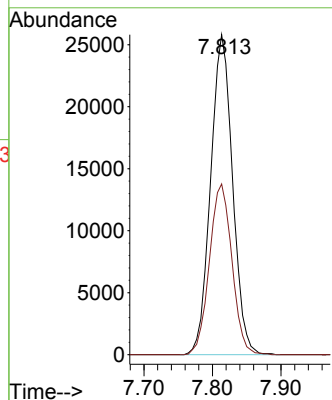
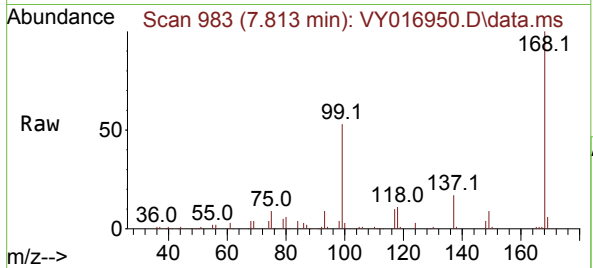




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.813 min Scan# 91
Delta R.T. 0.012 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

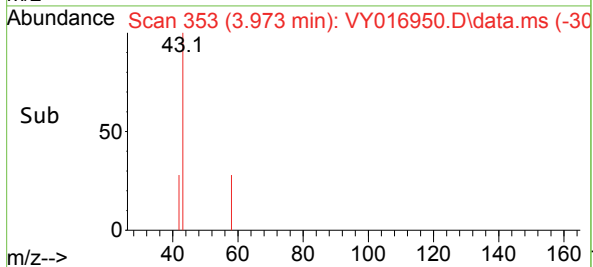
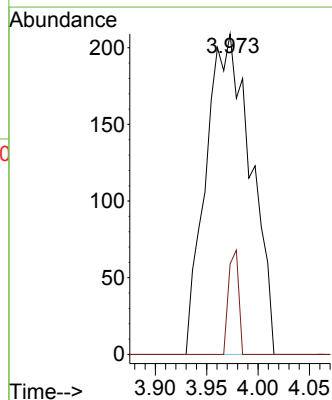
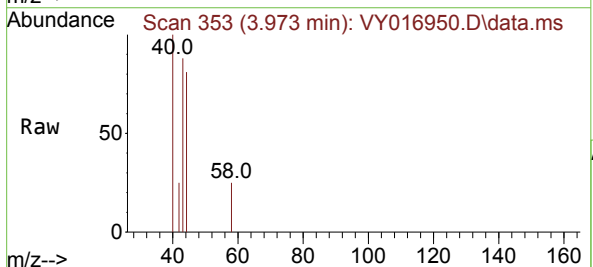
Instrument :
MSVOA_Y
ClientSampleId :

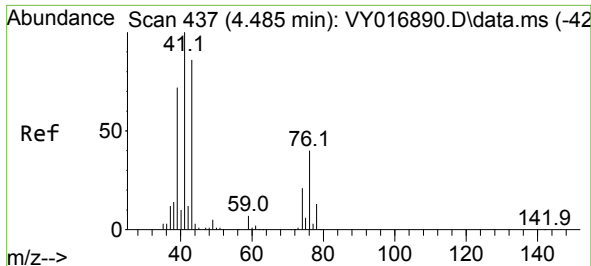
Tgt Ion:168 Resp: 57315
Ion Ratio Lower Upper
168 100
99 53.4 44.2 66.4



#16
Acetone
Concen: Below Cal
RT: 3.973 min Scan# 353
Delta R.T. 0.013 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

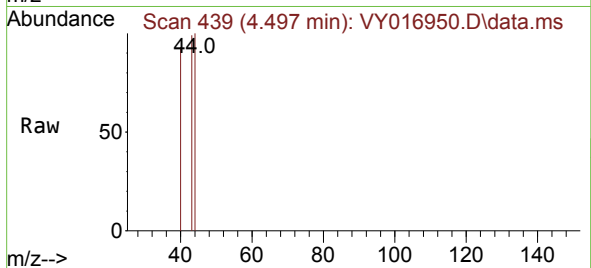
Tgt Ion: 43 Resp: 633
Ion Ratio Lower Upper
43 100
58 28.2 26.6 39.8



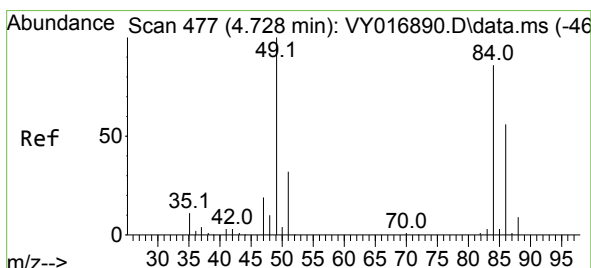
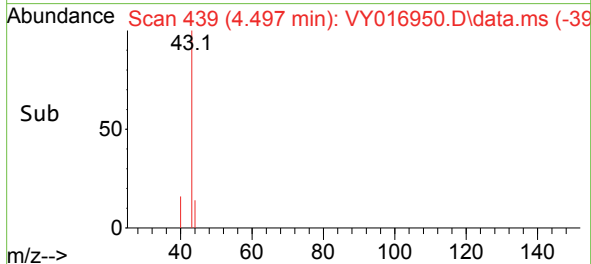
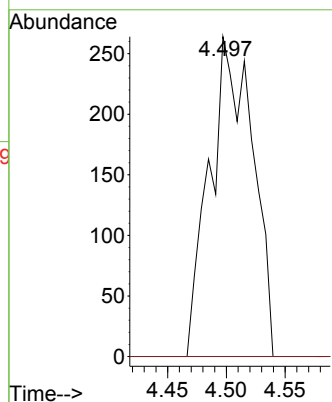


#18
Methyl Acetate
Concen: 1.107 ug/l
RT: 4.497 min Scan# 418
Delta R.T. -0.000 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Instrument :
MSVOA_Y
ClientSampleId :

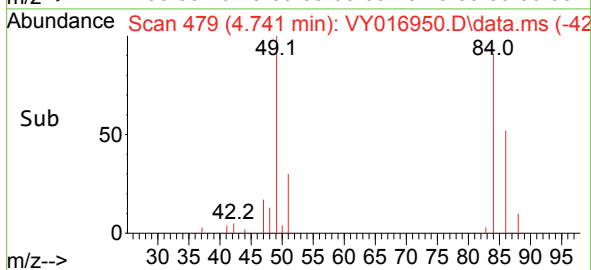
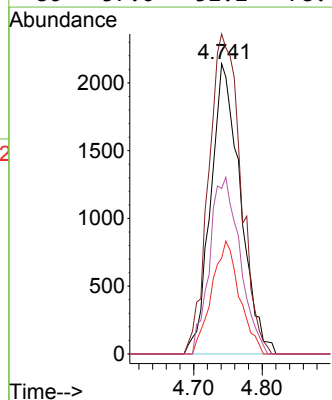
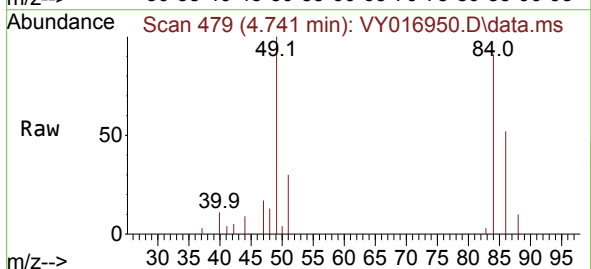


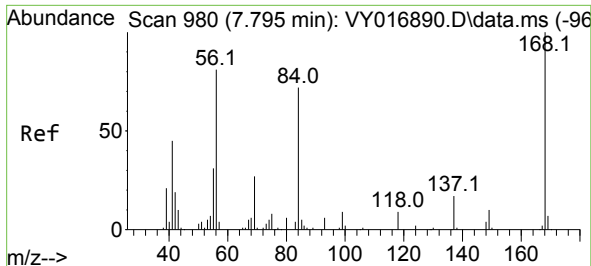
Tgt Ion: 43 Resp: 672
Ion Ratio Lower Upper
43 100
74 0.0 19.8 29.6#



#20
Methylene Chloride
Concen: 2.015 ug/l
RT: 4.741 min Scan# 479
Delta R.T. 0.007 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

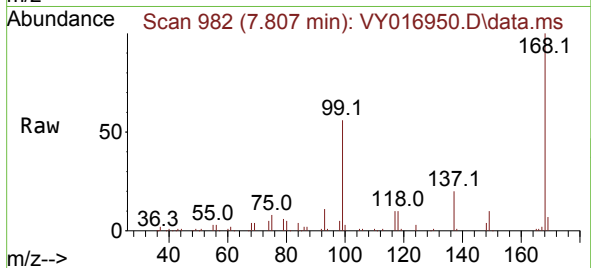
Tgt Ion: 84 Resp: 6428
Ion Ratio Lower Upper
84 100
49 110.3 95.2 142.8
51 33.0 29.9 44.9
86 57.0 52.2 78.4



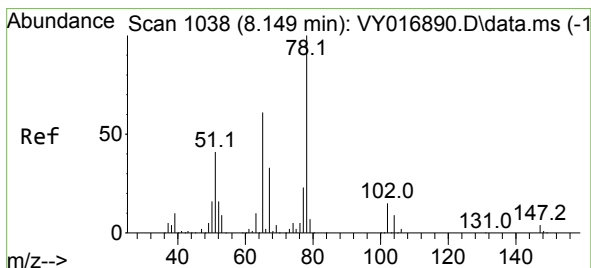
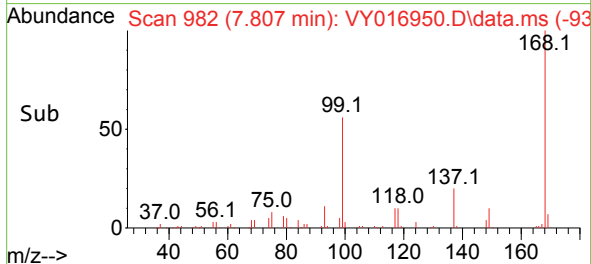
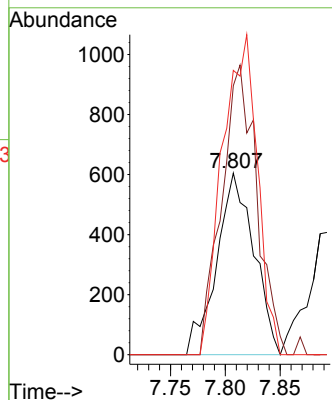


#31
Cyclohexane
Concen: 1.475 ug/l
RT: 7.807 min Scan# 91
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Instrument :
MSVOA_Y
ClientSampleId :

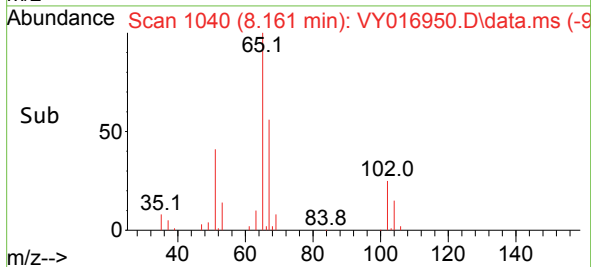
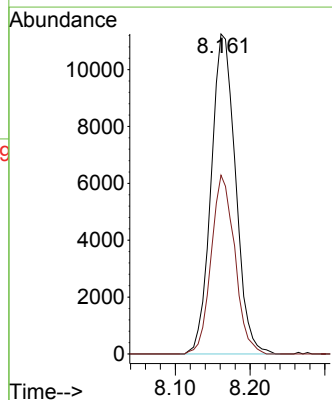
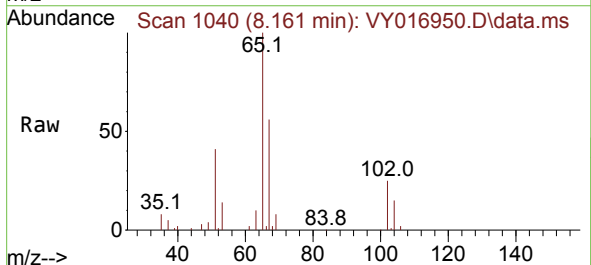


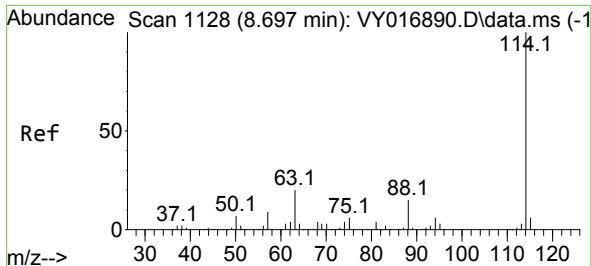
Tgt Ion: 56 Resp: 1434
Ion Ratio Lower Upper
56 100
69 148.1 27.0 40.6#
84 156.5 71.8 107.6#



#33
1,2-Dichloroethane-d4
Concen: 45.128 ug/l
RT: 8.161 min Scan# 1040
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion: 65 Resp: 25564
Ion Ratio Lower Upper
65 100
67 53.9 0.0 109.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.710 min Scan# 1130

Delta R.T. 0.007 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

Instrument :

MSVOA_Y

ClientSampleId :

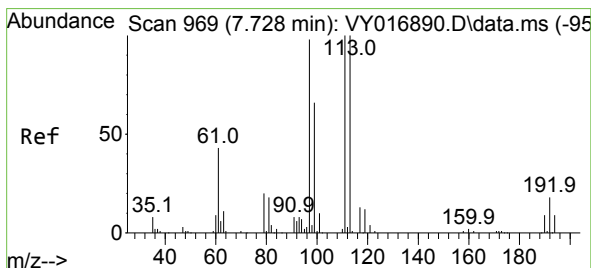
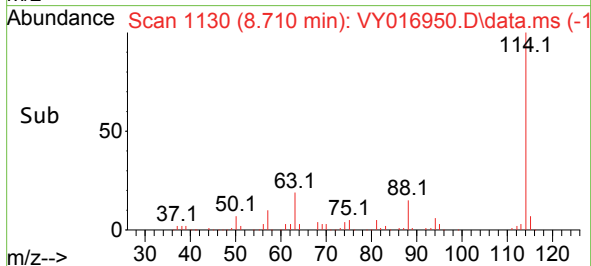
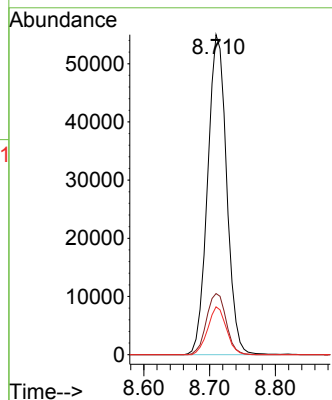
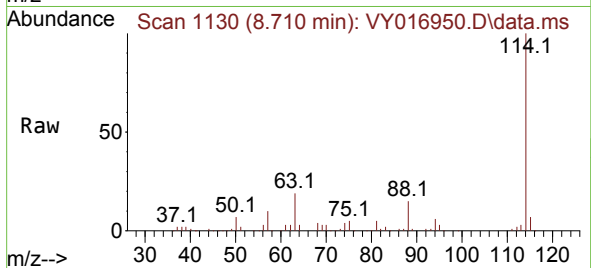
Tgt Ion:114 Resp: 110626

Ion Ratio Lower Upper

114 100

63 19.1 0.0 37.4

88 14.9 0.0 29.0



#35

Dibromofluoromethane

Concen: 37.898 ug/l

RT: 7.740 min Scan# 971

Delta R.T. 0.012 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

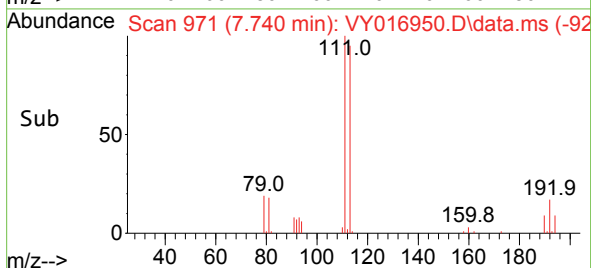
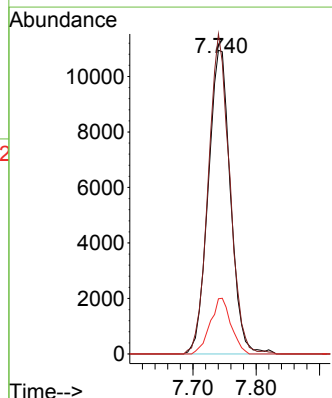
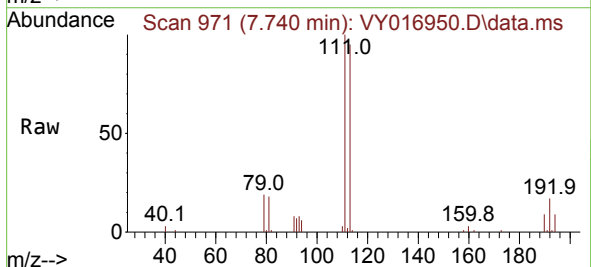
Tgt Ion:113 Resp: 26716

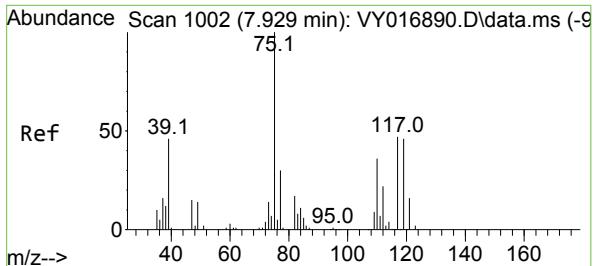
Ion Ratio Lower Upper

113 100

111 101.8 83.8 125.6

192 17.2 14.5 21.7





#36

1,1-Dichloropropene

Concen: 4.831 ug/l

RT: 7.813 min Scan# 983

Delta R.T. -0.116 min

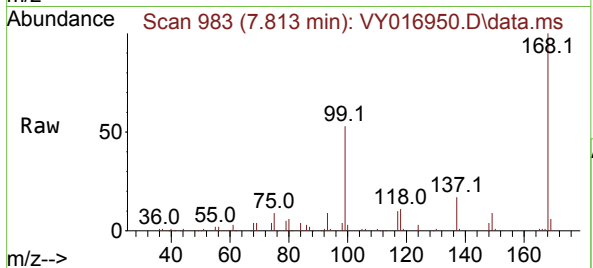
Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

Instrument :

MSVOA_Y

ClientSampleId :



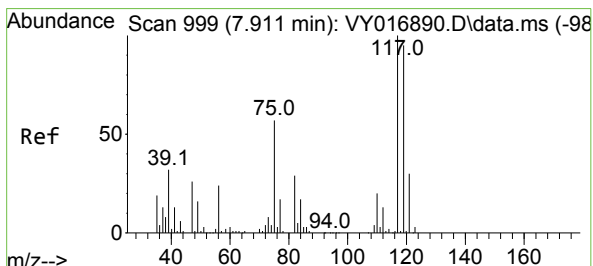
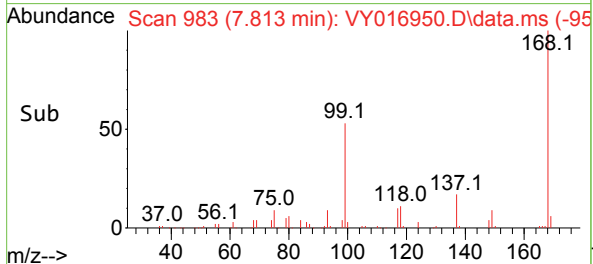
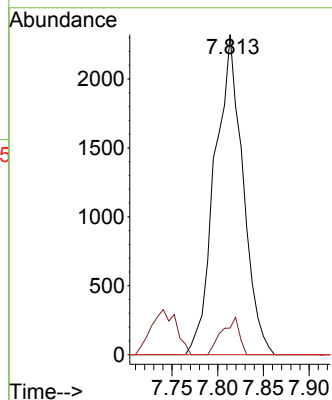
Tgt Ion: 75 Resp: 4963

Ion Ratio Lower Upper

75 100

110 7.2 17.4 52.3#

77 0.0 24.7 37.1#



#38

Carbon Tetrachloride

Concen: 5.590 ug/l

RT: 7.813 min Scan# 983

Delta R.T. -0.104 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

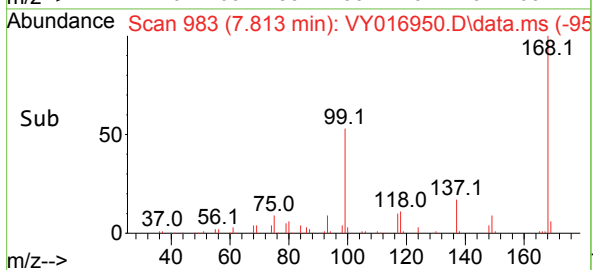
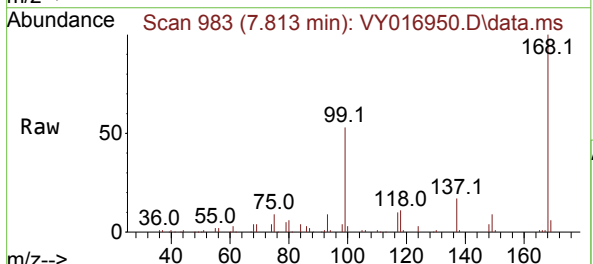
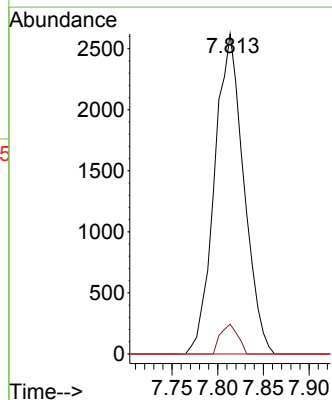
Tgt Ion: 117 Resp: 5835

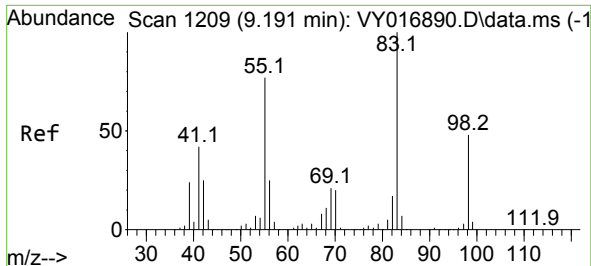
Ion Ratio Lower Upper

117 100

119 9.3 76.0 114.0#

121 0.0 24.2 36.2#





#39

Methylcyclohexane

Concen: 1.203 ug/l

RT: 9.203 min Scan# 1211

Delta R.T. 0.012 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

Instrument :

MSVOA_Y

ClientSampleId :

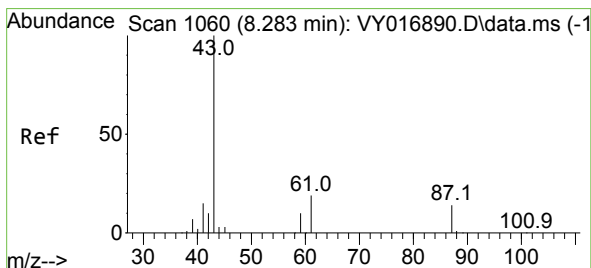
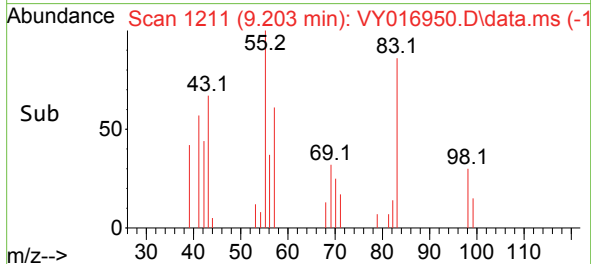
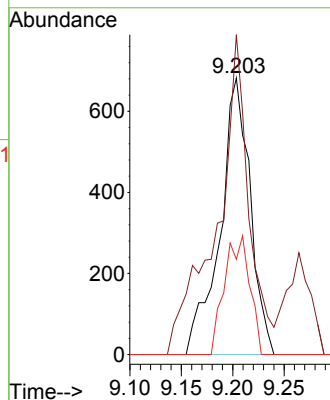
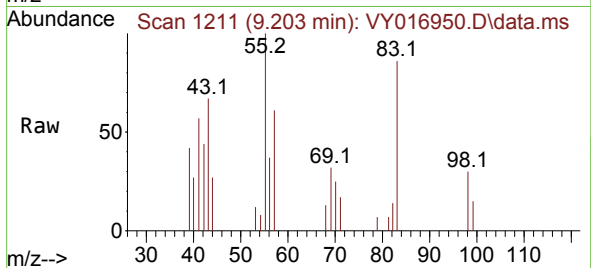
Tgt Ion: 83 Resp: 1389

Ion Ratio Lower Upper

83 100

55 99.4 59.7 89.5#

98 34.5 38.0 57.0#



#43

Isopropyl Acetate

Concen: 2.216 ug/l

RT: 8.338 min Scan# 1069

Delta R.T. 0.055 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

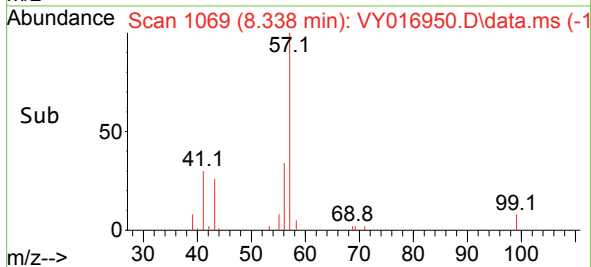
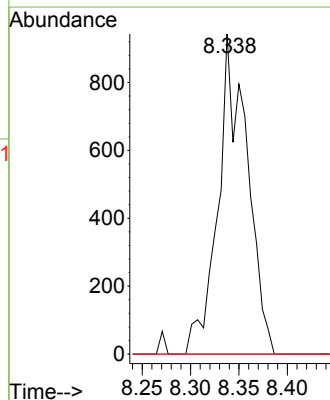
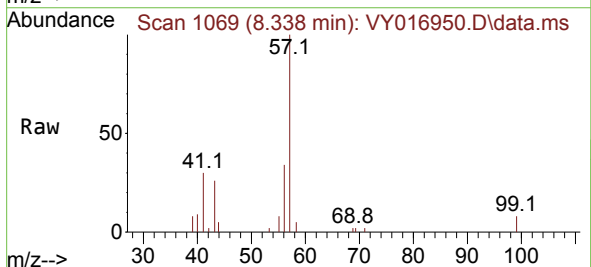
Tgt Ion: 43 Resp: 1981

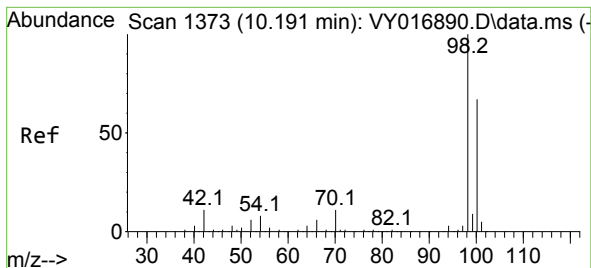
Ion Ratio Lower Upper

43 100

61 0.0 24.8 37.2#

87 0.0 10.7 16.1#





#50

Toluene-d8

Concen: 42.259 ug/l

RT: 10.197 min Scan# 1373

Delta R.T. 0.006 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

Instrument :

MSVOA_Y

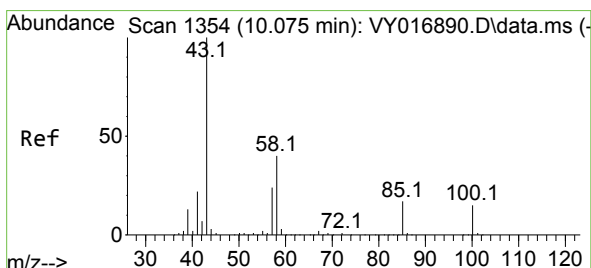
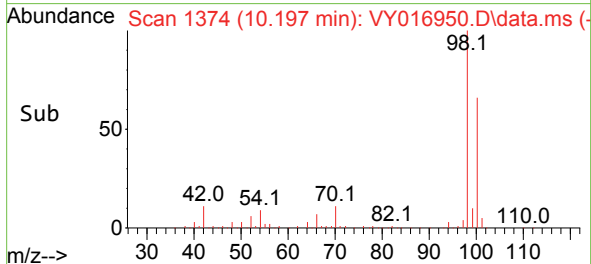
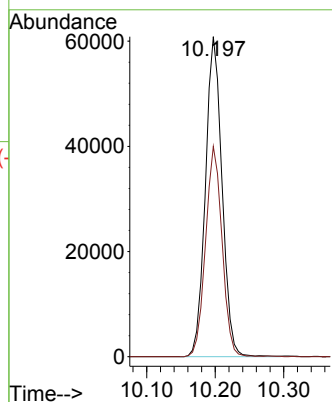
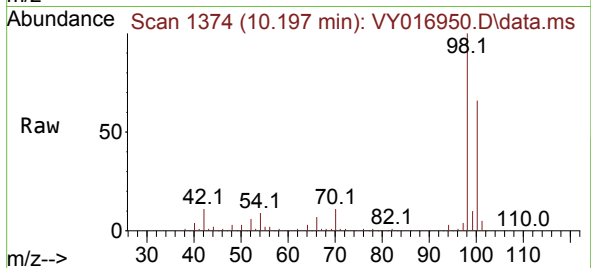
ClientSampleId :

Tgt Ion: 98 Resp: 102583

Ion Ratio Lower Upper

98 100

100 65.3 52.3 78.5



#51

4-Methyl-2-Pentanone

Concen: 2.343 ug/l

RT: 10.136 min Scan# 1364

Delta R.T. 0.055 min

Lab File: VY016950.D

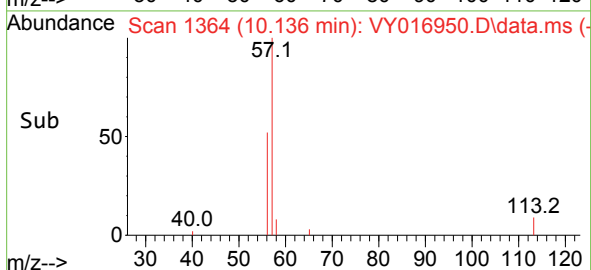
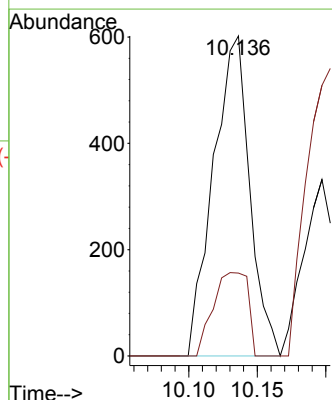
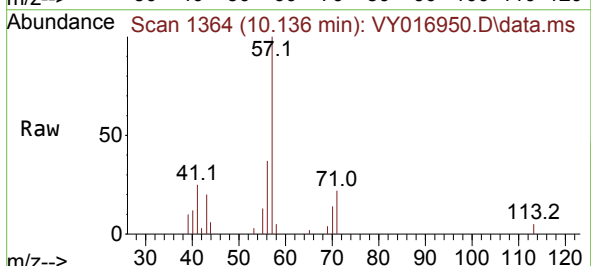
Acq: 09 Jan 2024 15:47

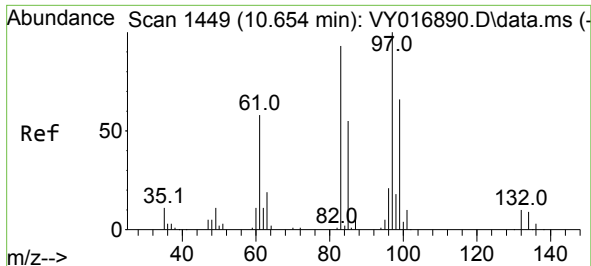
Tgt Ion: 43 Resp: 1114

Ion Ratio Lower Upper

43 100

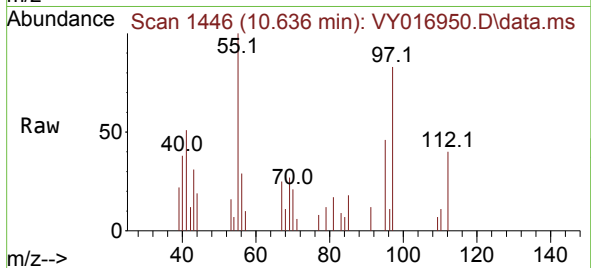
58 24.9 32.2 48.2#



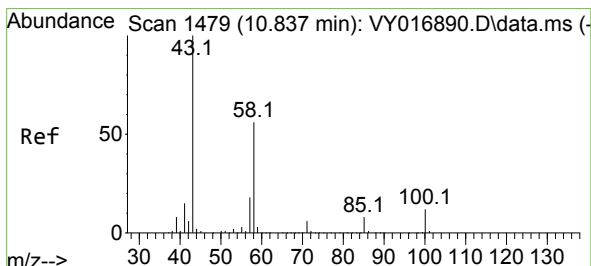
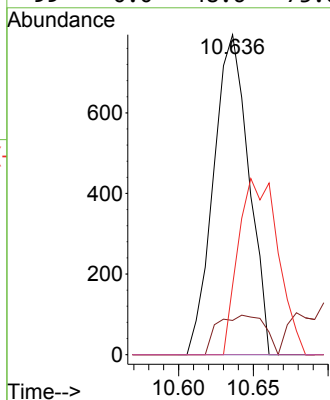
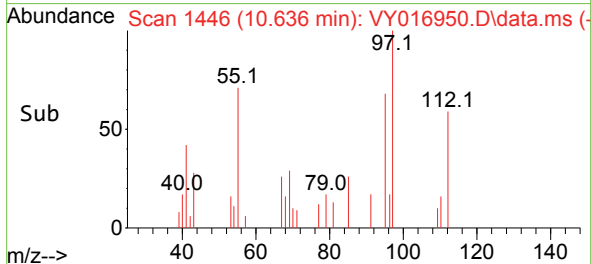


#55
1,1,2-Trichloroethane
Concen: 2.201 ug/l
RT: 10.636 min Scan# 1446
Delta R.T. -0.018 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Instrument :
MSVOA_Y
ClientSampleId :

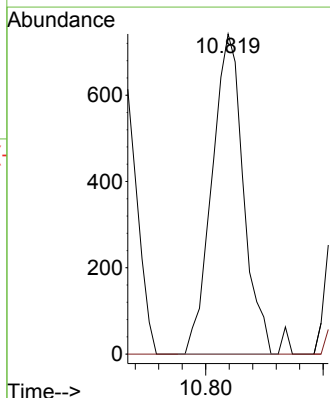
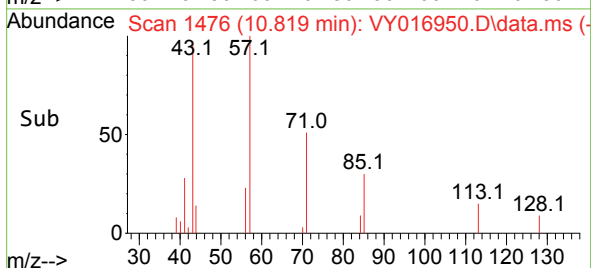
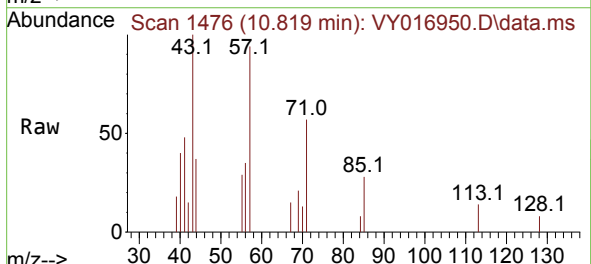


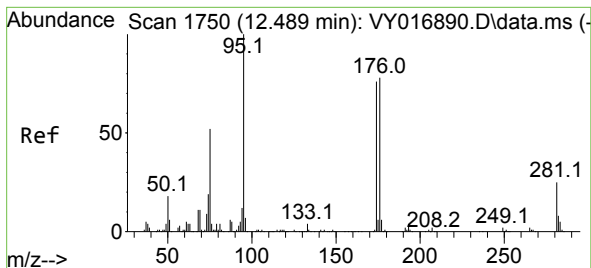
Tgt Ion	Ratio	Lower	Upper
97	100		
83	10.7	69.4	104.2#
85	21.7	43.9	65.9#
99	0.0	48.6	73.0#



#59
2-Hexanone
Concen: 3.939 ug/l
RT: 10.819 min Scan# 1476
Delta R.T. -0.024 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.1	84.3#

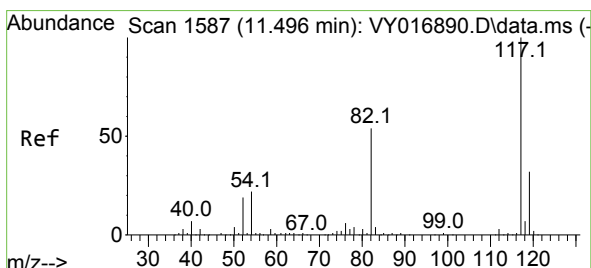
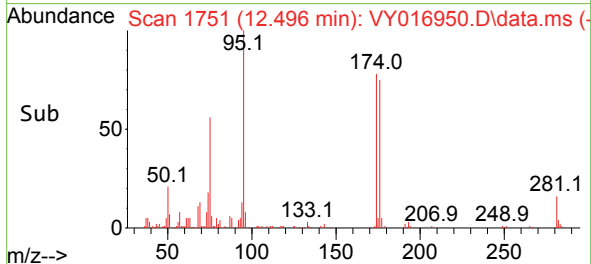
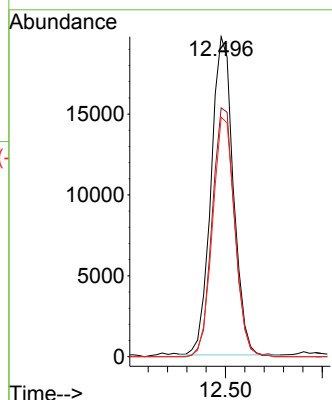
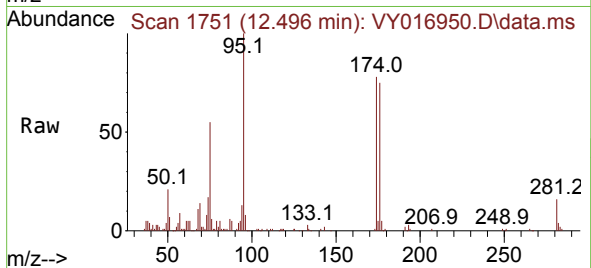




#62
4-Bromofluorobenzene
Concen: 38.361 ug/l
RT: 12.496 min Scan# 1751
Delta R.T. 0.007 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

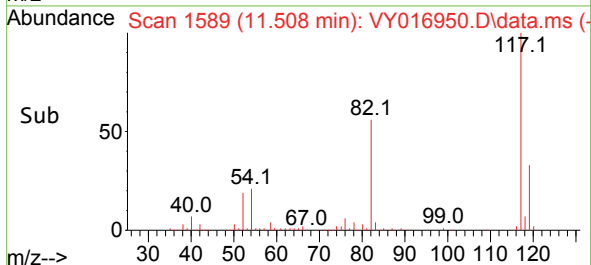
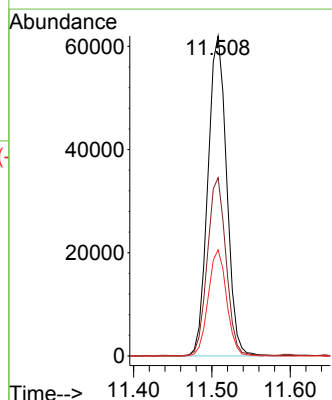
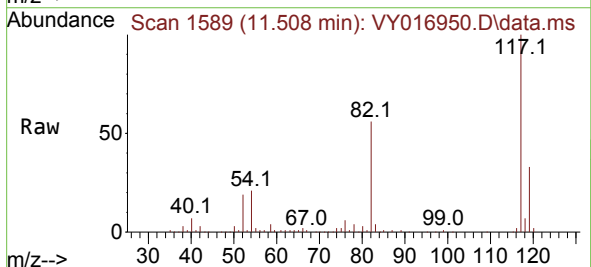
Instrument :
MSVOA_Y
ClientSampleId :

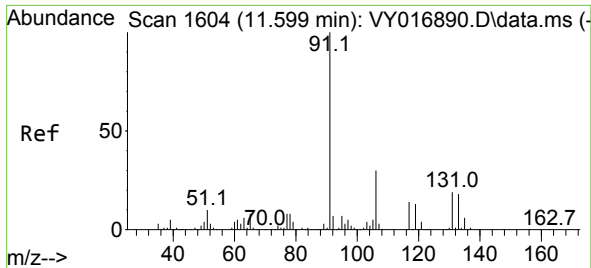
Tgt Ion: 95 Resp: 31418
Ion Ratio Lower Upper
95 100
174 78.5 0.0 160.0
176 75.7 0.0 151.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.508 min Scan# 1589
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion: 117 Resp: 103150
Ion Ratio Lower Upper
117 100
82 55.7 43.8 65.8
119 33.1 26.5 39.7

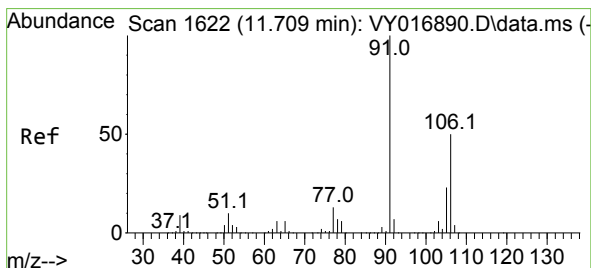
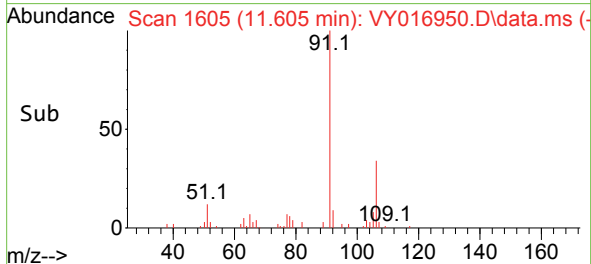
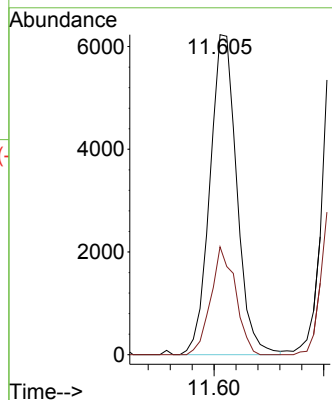
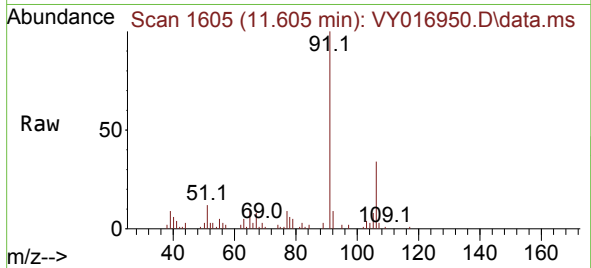




#67
Ethyl Benzene
Concen: 2.743 ug/l
RT: 11.605 min Scan# 1605
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

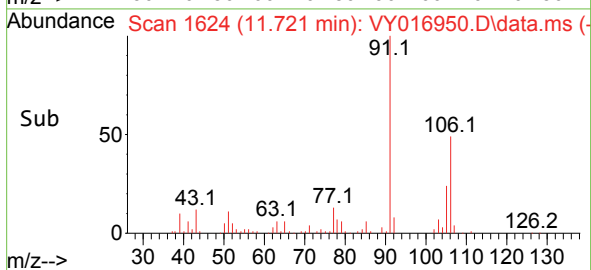
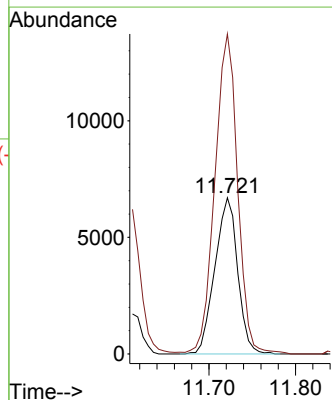
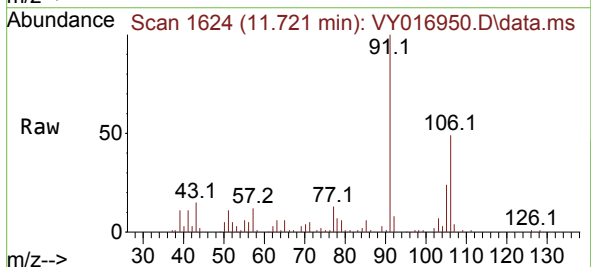
Instrument :
MSVOA_Y
ClientSampleId :

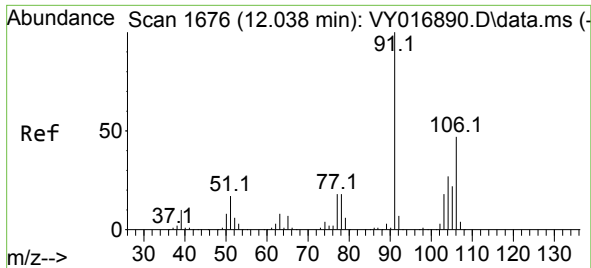
Tgt Ion: 91 Resp: 10610
Ion Ratio Lower Upper
91 100
106 33.7 25.0 37.4



#68
m/p-Xylenes
Concen: 8.618 ug/l
RT: 11.721 min Scan# 1624
Delta R.T. 0.012 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion:106 Resp: 12237
Ion Ratio Lower Upper
106 100
91 204.8 160.7 241.1

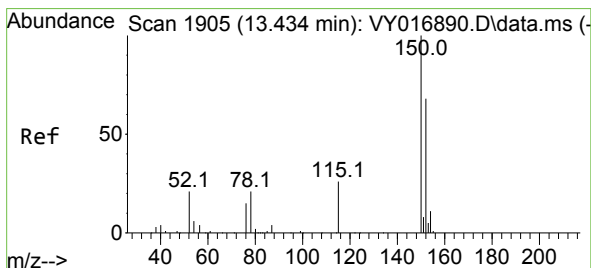
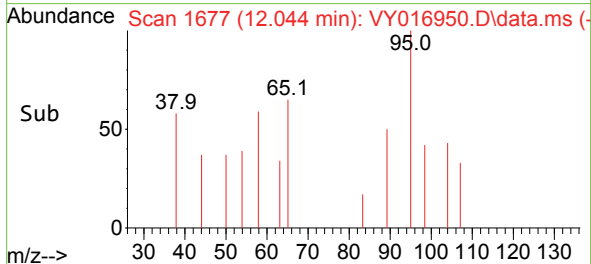
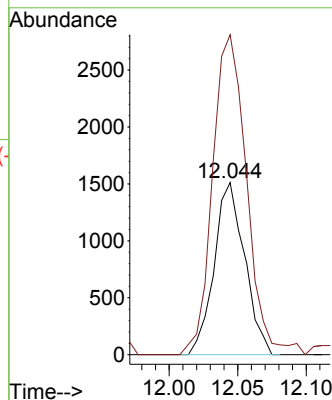
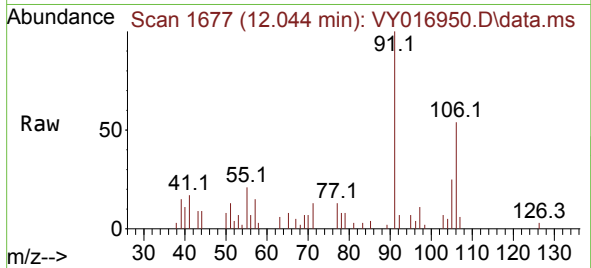




#69
o-Xylene
Concen: 1.756 ug/l
RT: 12.044 min Scan# 1
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

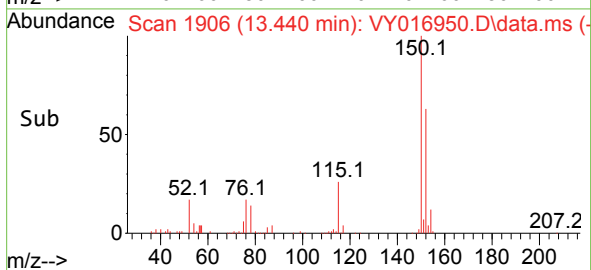
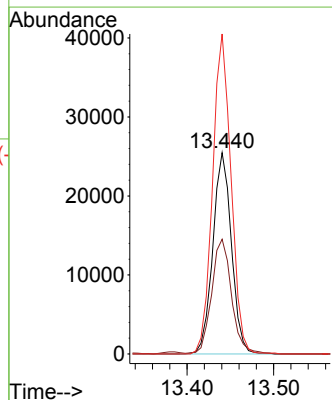
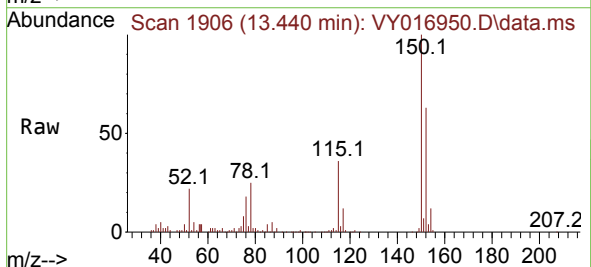
Instrument :
MSVOA_Y
ClientSampleId :

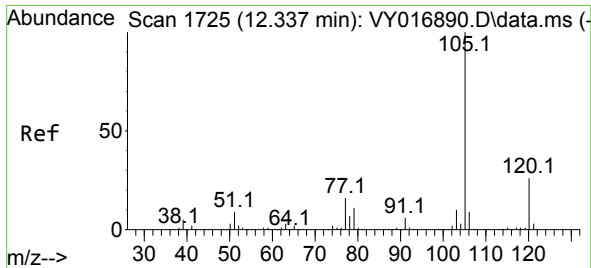
Tgt Ion:106 Resp: 2337
Ion Ratio Lower Upper
106 100
91 207.5 106.5 319.5



#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.440 min Scan# 1906
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion:152 Resp: 38012
Ion Ratio Lower Upper
152 100
115 60.9 30.0 90.0
150 157.6 0.0 344.6

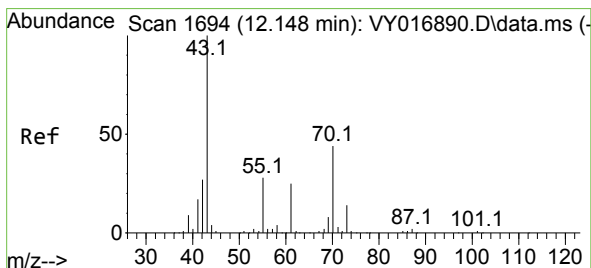
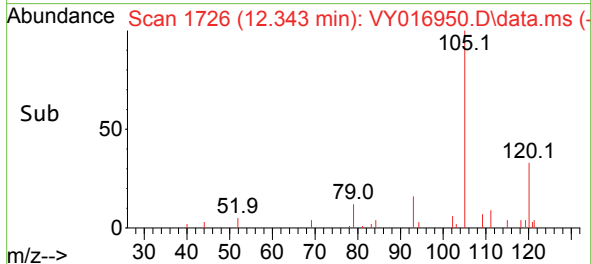
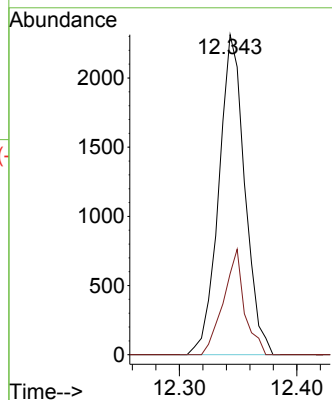
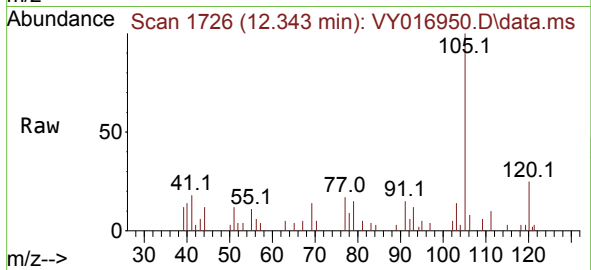




#73
Isopropylbenzene
Concen: 1.148 ug/l
RT: 12.343 min Scan# 1726
Delta R.T. 0.006 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

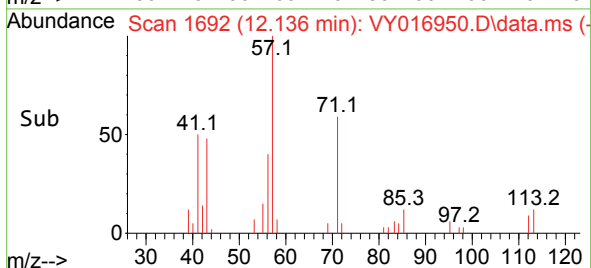
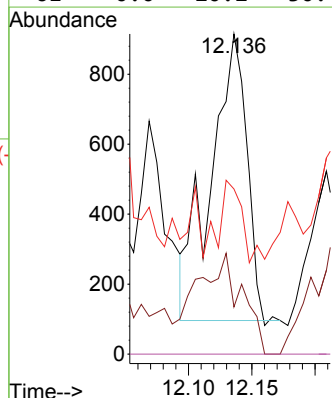
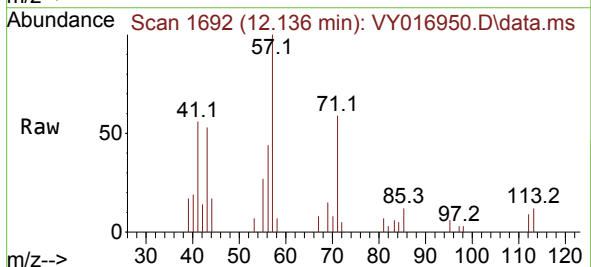
Instrument :
MSVOA_Y
ClientSampleId :

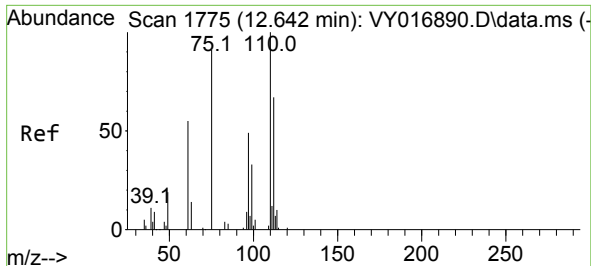
Tgt Ion:105 Resp: 3563
Ion Ratio Lower Upper
105 100
120 26.6 13.0 39.0



#74
N-ethyl acetate
Concen: 2.594 ug/l
RT: 12.136 min Scan# 1692
Delta R.T. -0.018 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

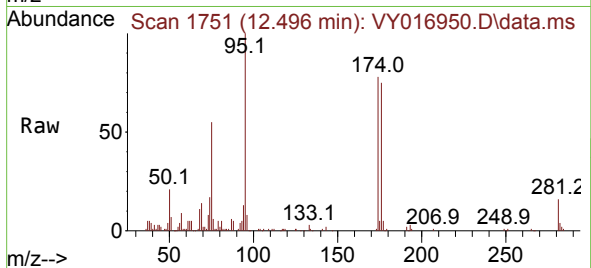
Tgt Ion: 43 Resp: 1618
Ion Ratio Lower Upper
43 100
70 45.0 36.6 55.0
55 13.7 22.2 33.4#
61 0.0 20.2 30.4#



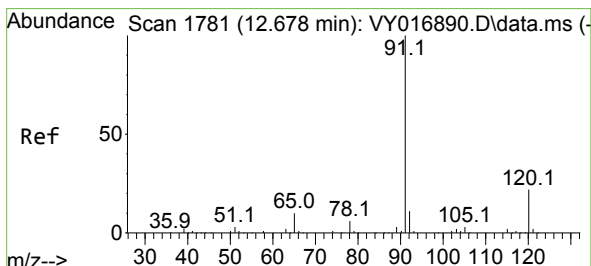
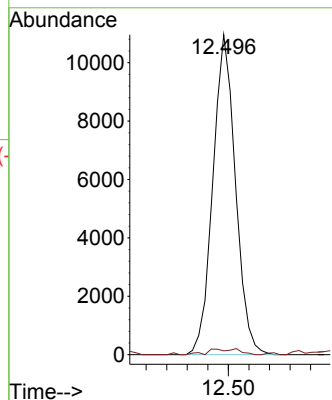
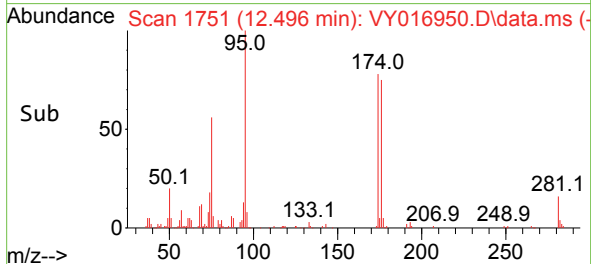


#76
1,2,3-Trichloropropane
Concen: 40.529 ug/l
RT: 12.496 min Scan# 1775
Delta R.T. -0.146 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

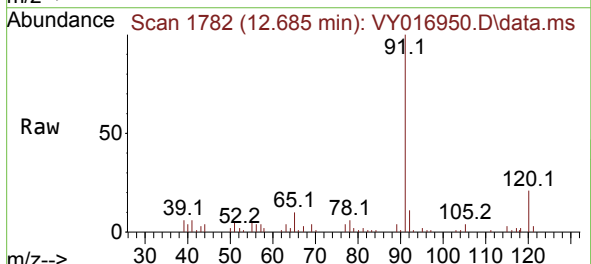
Instrument :
MSVOA_Y
ClientSampleId :



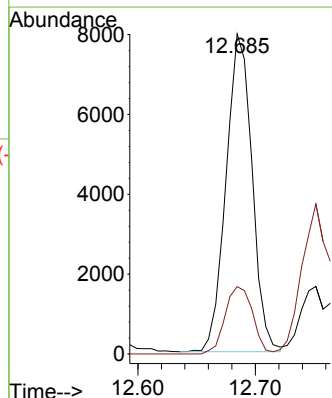
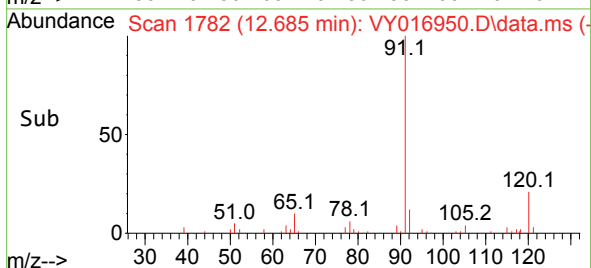
Tgt Ion: 75 Resp: 16718
Ion Ratio Lower Upper
75 100
77 1.4 0.0 0.0#

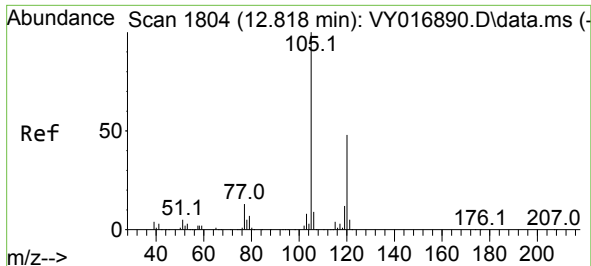


#78
n-propylbenzene
Concen: 3.247 ug/l
RT: 12.685 min Scan# 1782
Delta R.T. 0.007 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47



Tgt Ion: 91 Resp: 12253
Ion Ratio Lower Upper
91 100
120 22.5 11.0 33.0

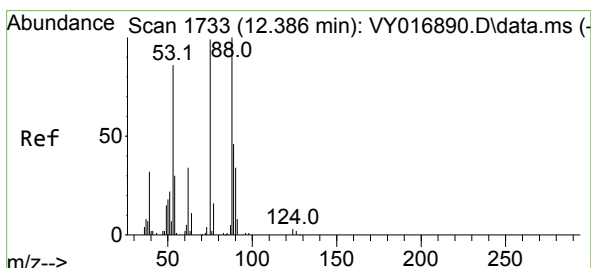
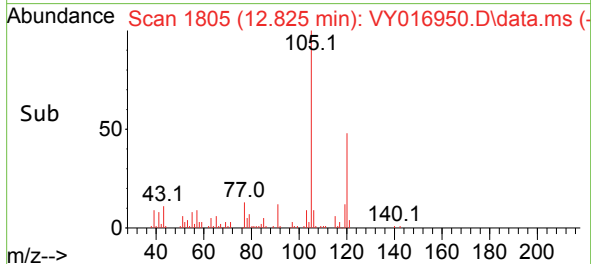
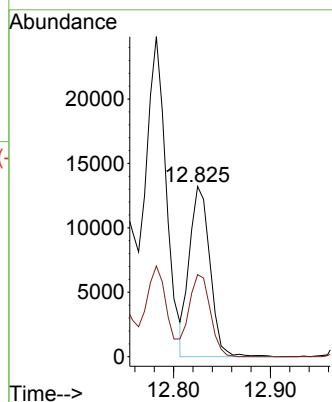
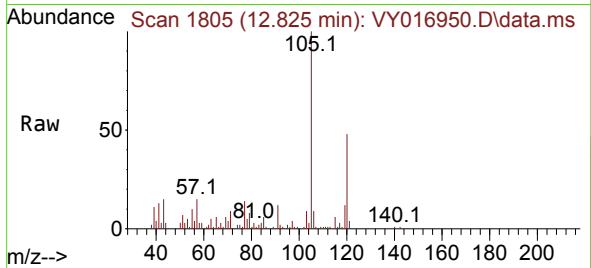




#80
1,3,5-Trimethylbenzene
Concen: 7.957 ug/l
RT: 12.825 min Scan# 11
Delta R.T. 0.007 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

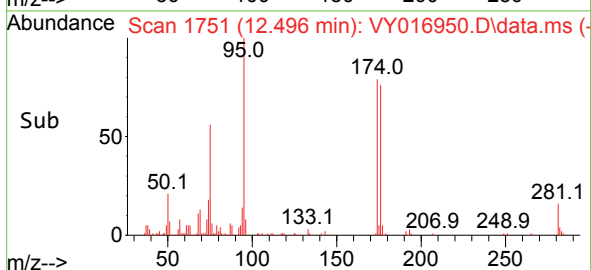
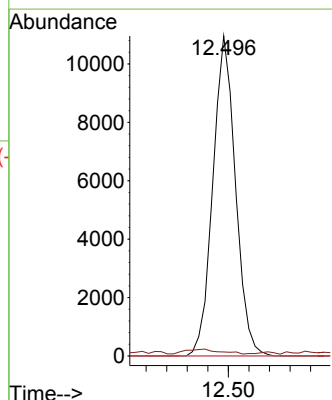
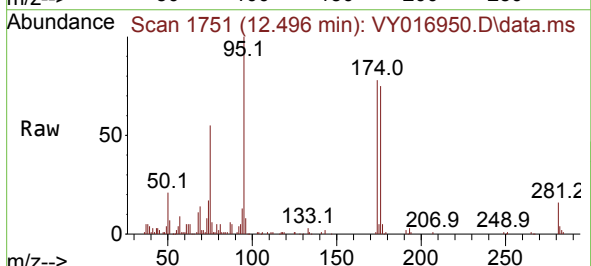
Instrument :
MSVOA_Y
ClientSampleId :

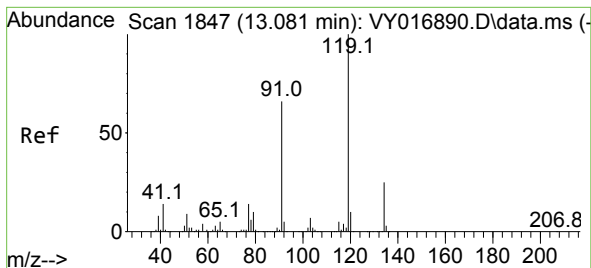
Tgt Ion:105 Resp: 19534
Ion Ratio Lower Upper
105 100
120 51.7 24.3 72.8



#81
trans-1,4-Dichloro-2-butene
Concen: 92.030 ug/l
RT: 12.496 min Scan# 1751
Delta R.T. 0.111 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion: 75 Resp: 16718
Ion Ratio Lower Upper
75 100
53 2.3 74.0 111.0#
89 0.0 36.5 54.7#





#83

tert-Butylbenzene

Concen: 7.709 ug/l

RT: 13.136 min Scan# 1856

Delta R.T. 0.049 min

Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

Instrument :

MSVOA_Y

ClientSampleId :

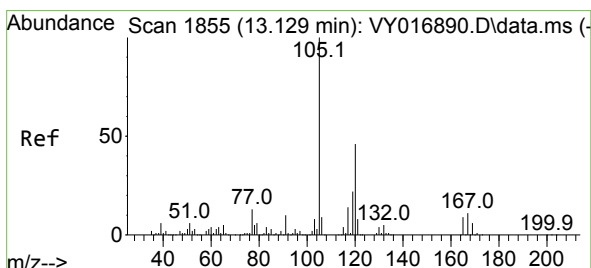
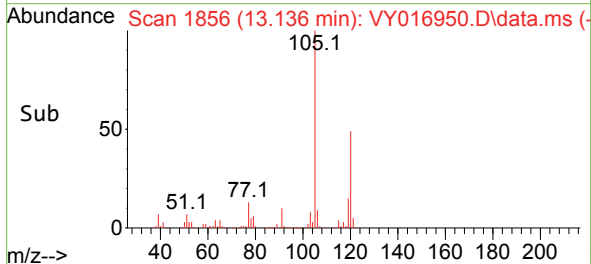
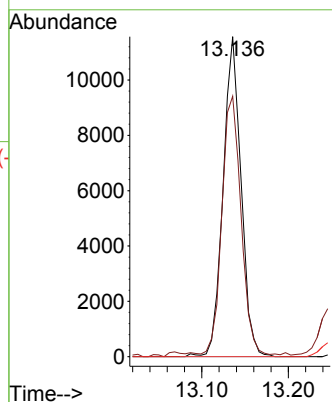
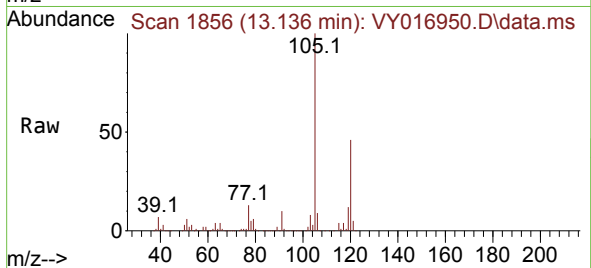
Tgt Ion:119 Resp: 16668

Ion Ratio Lower Upper

119 100

91 85.6 31.5 94.5

134 0.0 13.1 39.3#



#84

1,2,4-Trimethylbenzene

Concen: 56.596 ug/l

RT: 13.136 min Scan# 1856

Delta R.T. 0.007 min

Lab File: VY016950.D

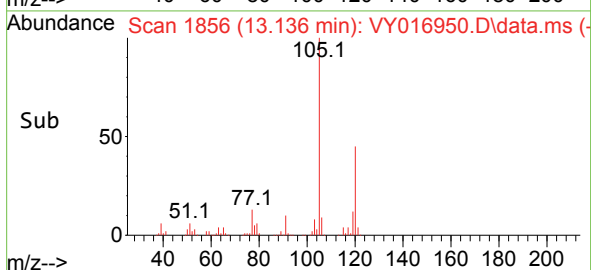
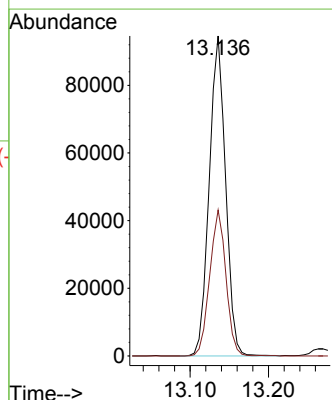
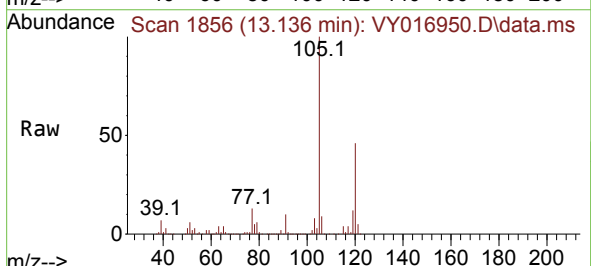
Acq: 09 Jan 2024 15:47

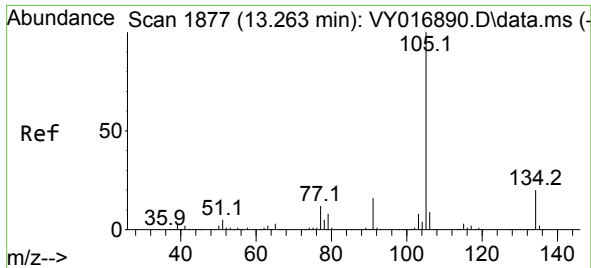
Tgt Ion:105 Resp: 136830

Ion Ratio Lower Upper

105 100

120 45.4 22.1 66.3

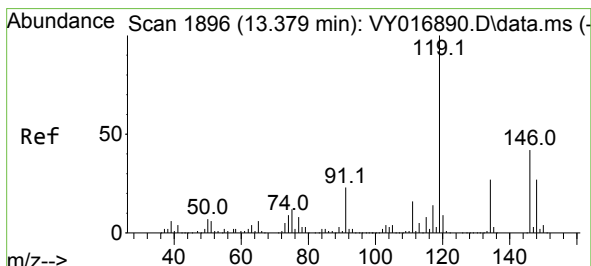
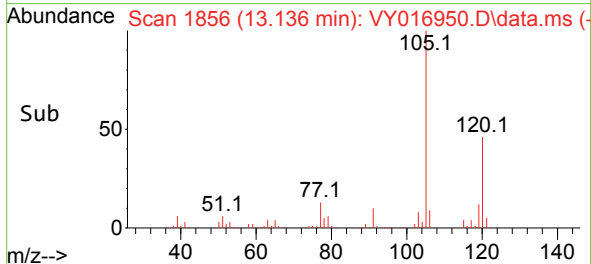
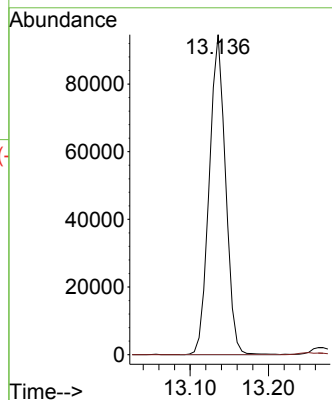
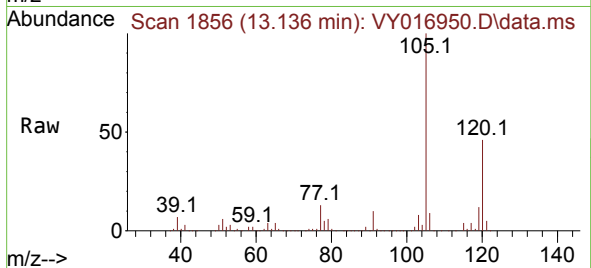




#85
 sec-Butylbenzene
 Concen: 42.707 ug/l
 RT: 13.136 min Scan# 1856
 Delta R.T. -0.127 min
 Lab File: VY016950.D
 Acq: 09 Jan 2024 15:47

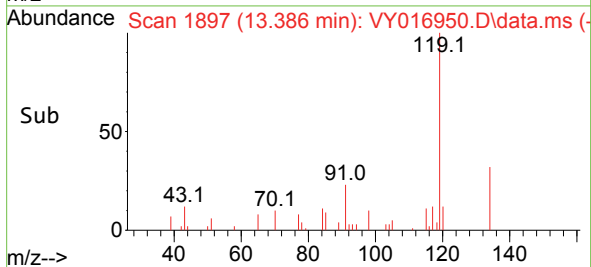
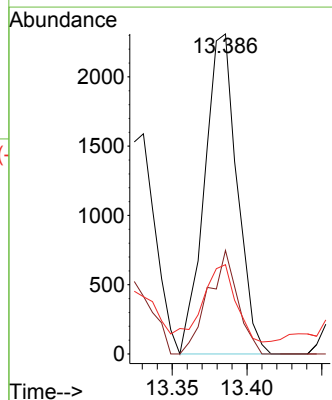
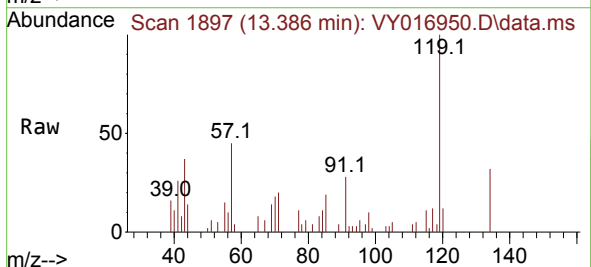
Instrument :
 MSVOA_Y
 ClientSampleId :

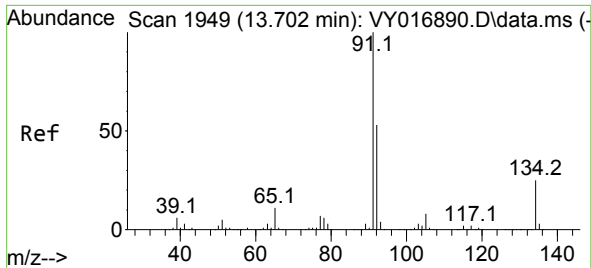
Tgt Ion:105 Resp: 136830
 Ion Ratio Lower Upper
 105 100
 134 0.0 9.7 28.9#



#86
 p-Isopropyltoluene
 Concen: 1.323 ug/l
 RT: 13.386 min Scan# 1897
 Delta R.T. 0.007 min
 Lab File: VY016950.D
 Acq: 09 Jan 2024 15:47

Tgt Ion:119 Resp: 3497
 Ion Ratio Lower Upper
 119 100
 134 29.2 13.1 39.1
 91 22.6 11.7 35.0

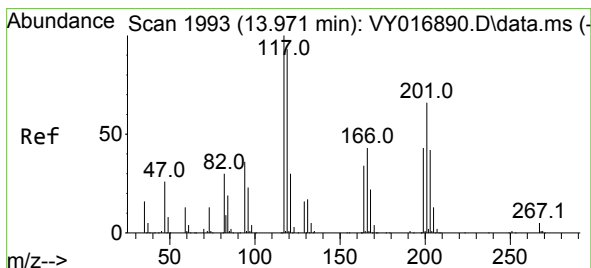
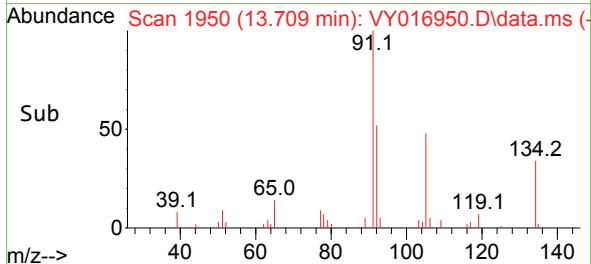
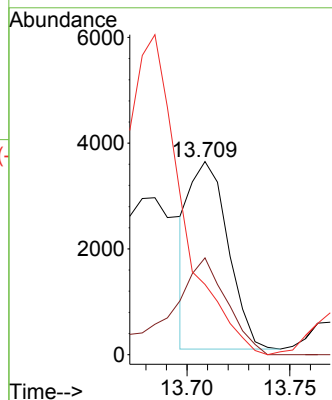
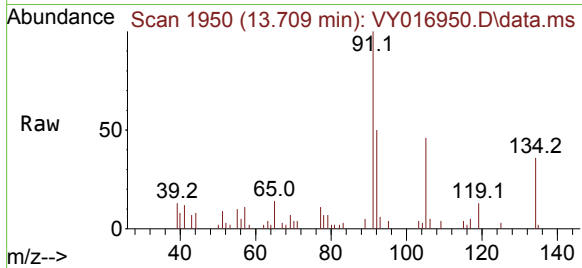




#89
n-Butylbenzene
Concen: 1.804 ug/l
RT: 13.709 min Scan# 1949
Delta R.T. 0.007 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

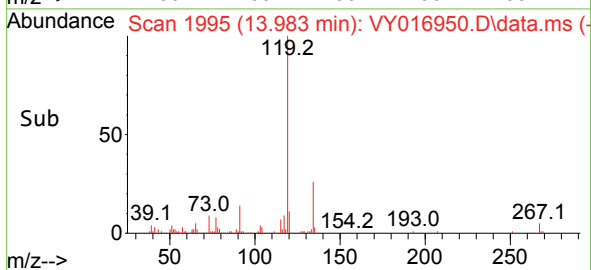
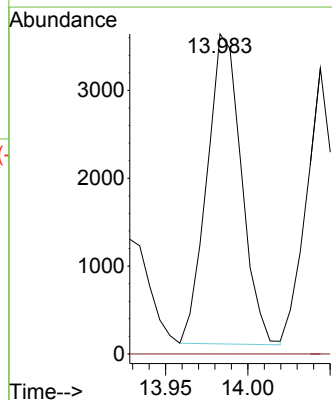
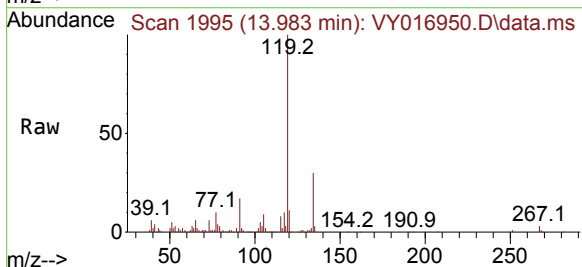
Instrument :
MSVOA_Y
ClientSampleId :

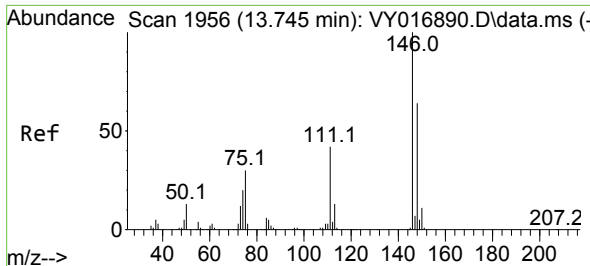
Tgt Ion: 91 Resp: 4586
Ion Ratio Lower Upper
91 100
92 76.5 26.4 79.2
134 0.0 12.3 36.8#



#90
Hexachloroethane
Concen: 9.034 ug/l
RT: 13.983 min Scan# 1995
Delta R.T. 0.012 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

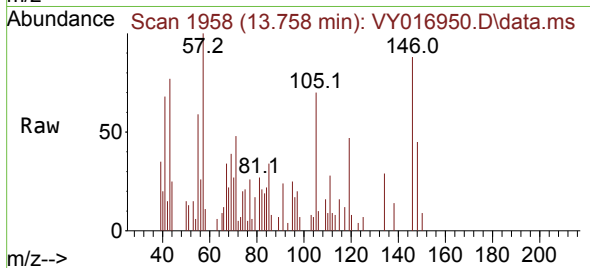
Tgt Ion: 117 Resp: 5133
Ion Ratio Lower Upper
117 100
201 0.0 33.4 100.1#



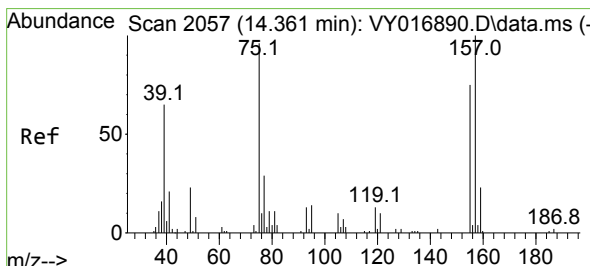
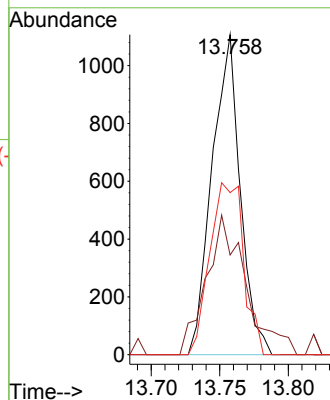
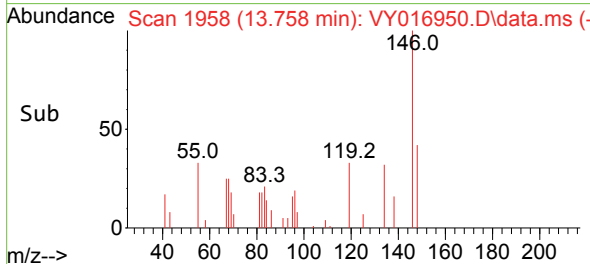


#91
1,2-Dichlorobenzene
Concen: 1.365 ug/l
RT: 13.758 min Scan# 1958
Delta R.T. 0.007 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Instrument :
MSVOA_Y
ClientSampleId :

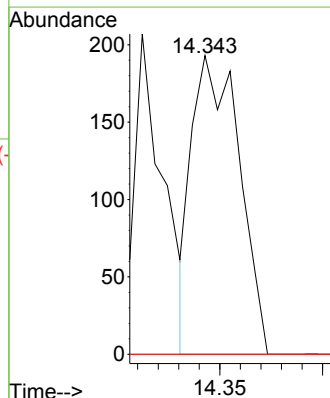
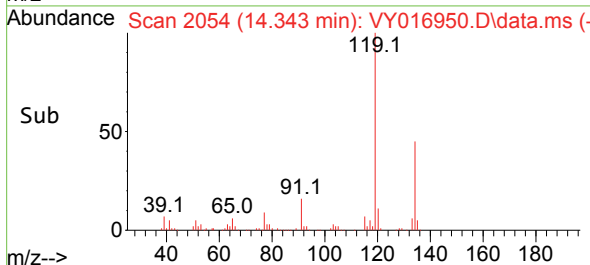
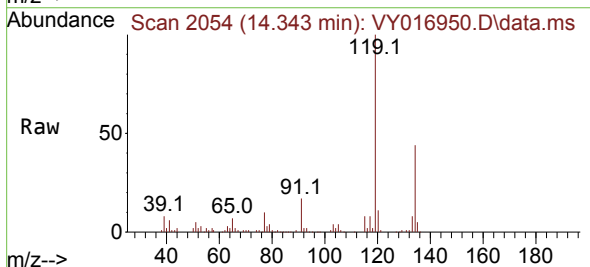


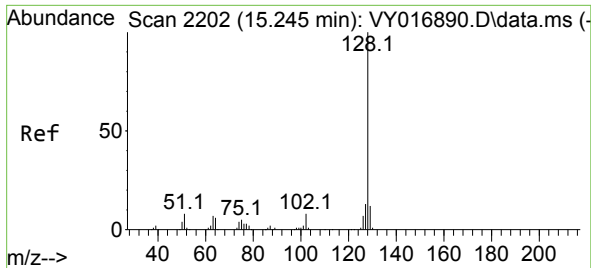
Tgt Ion:146 Resp: 1581
Ion Ratio Lower Upper
146 100
111 61.3 20.5 61.6
148 64.5 31.4 94.3



#92
1,2-Dibromo-3-Chloropropane
Concen: 3.883 ug/l
RT: 14.343 min Scan# 2054
Delta R.T. -0.024 min
Lab File: VY016950.D
Acq: 09 Jan 2024 15:47

Tgt Ion: 75 Resp: 308
Ion Ratio Lower Upper
75 100
155 0.0 42.1 126.3#
157 0.0 55.8 167.4#





#95

Naphthalene

Concen: 10.273 ug/l

RT: 15.251 min Scan# 21

Delta R.T. 0.006 min

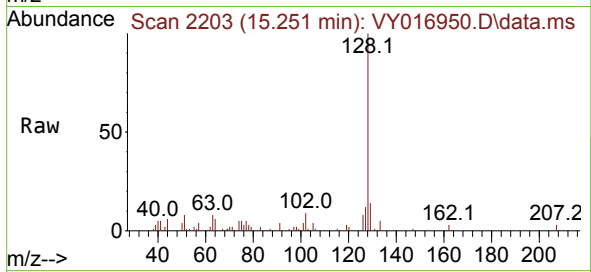
Lab File: VY016950.D

Acq: 09 Jan 2024 15:47

Instrument :

MSVOA_Y

ClientSampleId :



Tgt Ion:128 Resp: 9401

Ion Ratio Lower Upper

128 100

127 12.6 10.2 15.4

129 12.8 8.6 12.8

