

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121124\
 Data File : VL041741.D
 Acq On : 12 Dec 2024 09:30
 Operator : SY/MD
 Sample : P5150-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Quant Time: Dec 12 13:17:51 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121124AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Dec 12 13:35:39 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.774	49	248666	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.939	114	1174841	10.000	ppbv	-0.03
55) Chlorobenzene-d5	8.869	117	1038894m	10.000	ppbv	-0.03

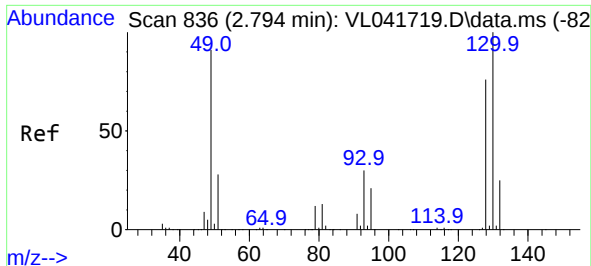
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.367	95	691149	10.120	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.200%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.492	85	5385	0.123	ppbv	94
5) Vinyl Chloride	1.573	62	1105	0.078	ppbv #	88
9) Propene	1.476	41	19632	1.360	ppbv	93
10) Heptane	4.959	43	21511	0.539	ppbv	95
13) Ethanol	1.716	45	4138	3.466	ppbv	91
15) Acetone	1.829	43	112952	3.934	ppbv #	67
17) tert-Butyl alcohol	2.033	59	9693	0.233	ppbv #	84
19) Isopropyl Alcohol	1.881	45	8990	0.330	ppbv #	1
20) Methylene Chloride	2.052	84	5770	0.332	ppbv	96
26) Hexane	2.816	57	111986	2.894	ppbv #	43
27) Carbon Disulfide	2.143	76	4855	0.122	ppbv #	46
29) Chloroform	2.836	83	424960	7.173	ppbv	98
30) Cyclohexane	3.839	84	7471	0.172	ppbv #	83
31) cis-1,2-Dichloroethene	2.709	61	3231107m	90.130	ppbv	
32) 1,1,1-Trichloroethane	3.357	97	10208	0.175	ppbv	96
34) 2-Butanone	2.547	43	134108	3.260	ppbv	100
35) Carbon Tetrachloride	3.748	117	1914	0.035	ppbv	86
36) Benzene	3.641	78	34844	0.377	ppbv	97
38) Trichloroethene	4.528	130	363103	7.580	ppbv	98
41) Tetrahydrofuran	3.056	42	3518	0.142	ppbv #	81
52) Tetrachloroethene	8.215	164	3566631	72.876	ppbv	95
53) Toluene	6.910	91	110875	0.977	ppbv	98
58) Ethyl Benzene	9.344	91	13407	0.096	ppbv	94
59) m/p-Xylene	9.519	91	35278	0.331	ppbv	97
60) o-Xylene	9.953	91	16663	0.158	ppbv	98
73) 1,3,5-Trimethylbenzene	11.193	105	10499	0.095	ppbv #	82
74) 1,2,4-Trimethylbenzene	11.529	105	28374	0.237	ppbv #	68

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

Quant Time: Dec 12 13:17:51 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121124AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Dec 12 13:35:39 2024
Response via : Initial Calibration

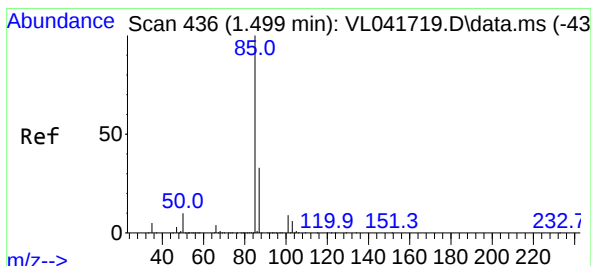
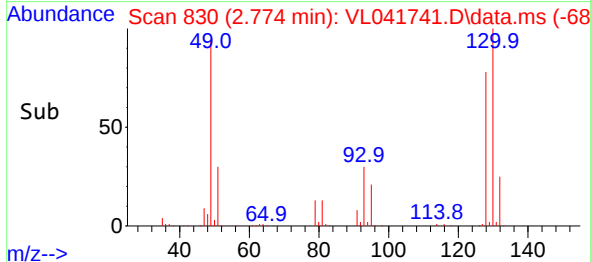
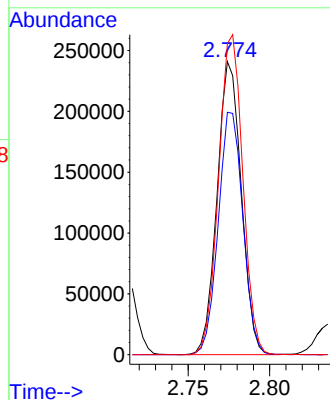
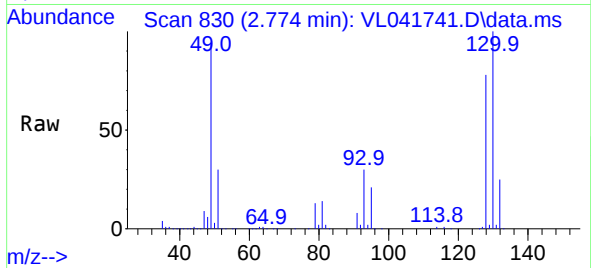




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.774 min Scan# 81
Delta R.T. -0.020 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

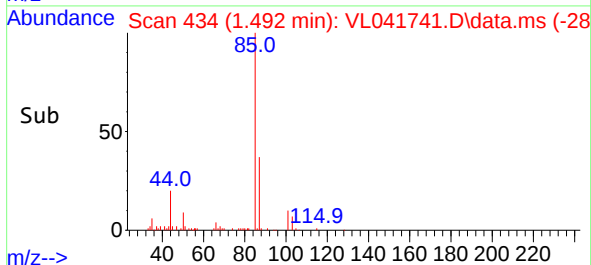
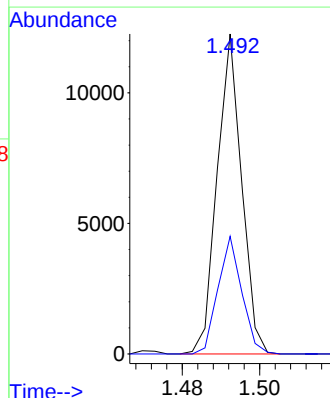
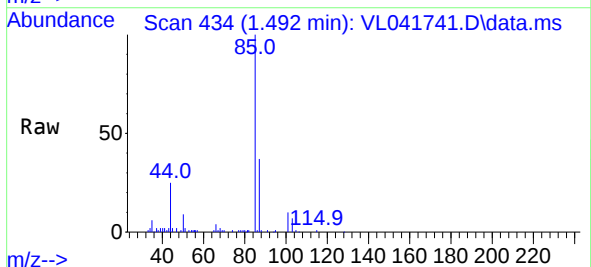
Instrument :
MSVOA_L
ClientSampleId :
SV1

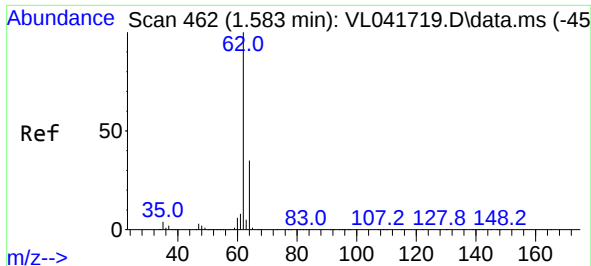
Tgt Ion: 49 Resp: 248666
Ion Ratio Lower Upper
49 100
128 84.1 42.8 128.3
130 109.2 55.8 167.4



#2
Dichlorodifluoromethane
Concen: 0.123 ppbv
RT: 1.492 min Scan# 434
Delta R.T. -0.007 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion: 85 Resp: 5385
Ion Ratio Lower Upper
85 100
87 36.7 26.6 39.8

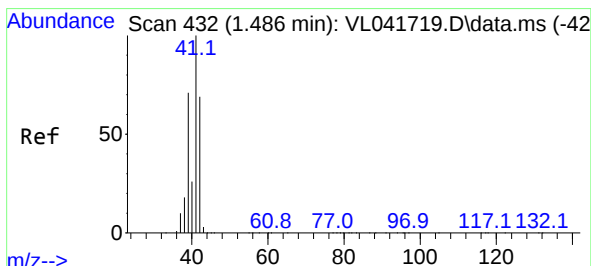
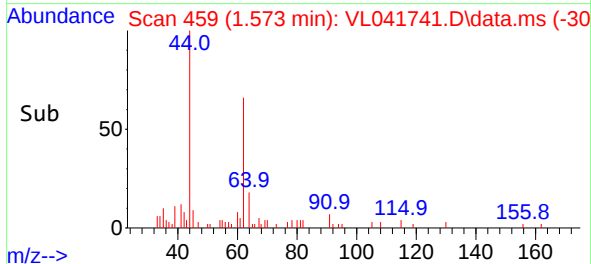
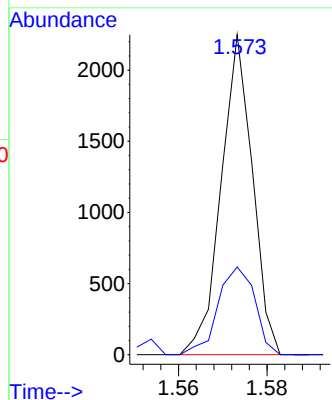
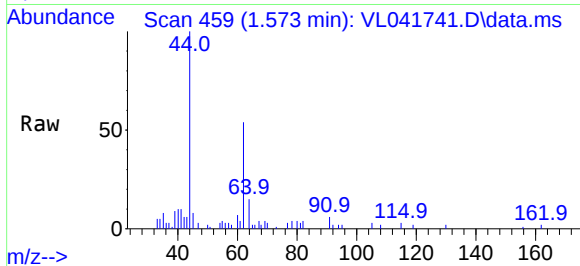




#5
 Vinyl Chloride
 Concen: 0.078 ppbv
 RT: 1.573 min Scan# 411
 Delta R.T. -0.010 min
 Lab File: VL041741.D
 Acq: 12 Dec 2024 09:30

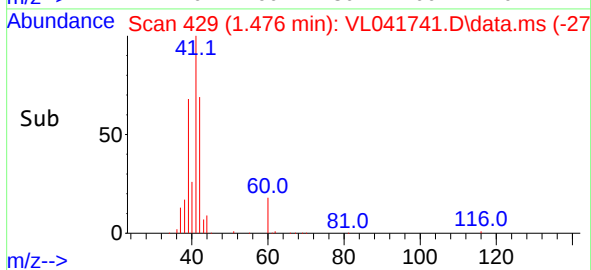
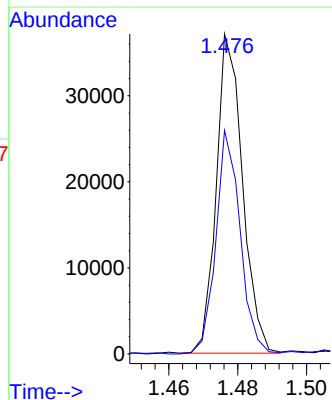
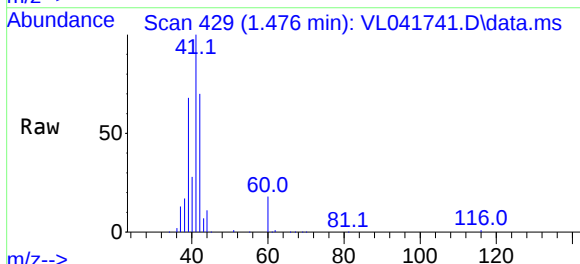
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

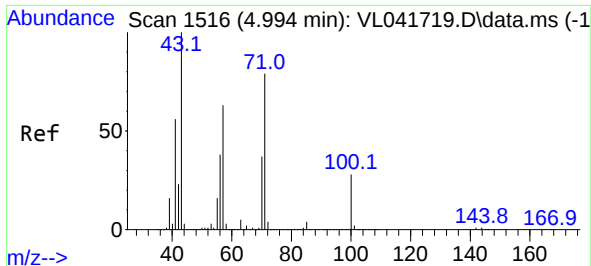
Tgt Ion: 62 Resp: 1105
 Ion Ratio Lower Upper
 62 100
 64 27.4 27.6 41.4#



#9
 Propene
 Concen: 1.360 ppbv
 RT: 1.476 min Scan# 429
 Delta R.T. -0.010 min
 Lab File: VL041741.D
 Acq: 12 Dec 2024 09:30

Tgt Ion: 41 Resp: 19632
 Ion Ratio Lower Upper
 41 100
 42 64.7 56.2 84.4





#10

Heptane

Concen: 0.539 ppbv

RT: 4.959 min Scan# 11

Delta R.T. -0.036 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Instrument :

MSVOA_L

ClientSampleId :

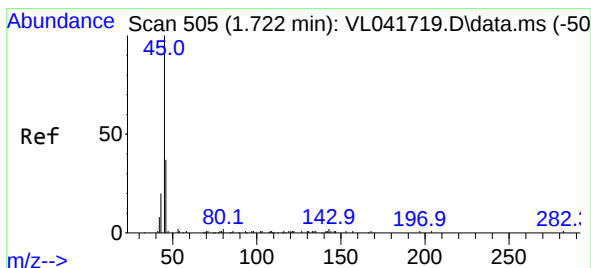
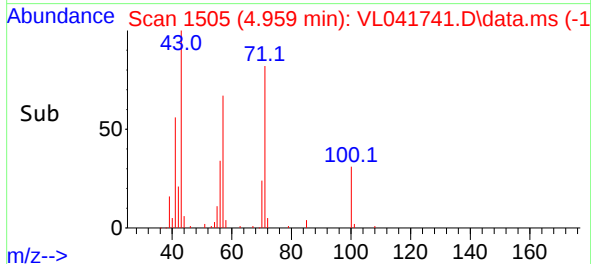
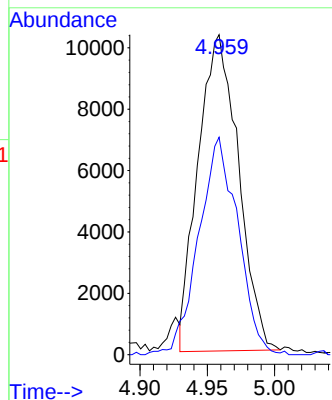
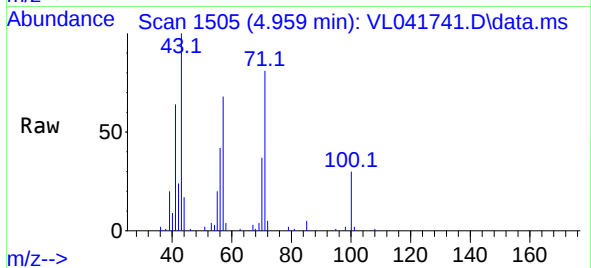
SV1

Tgt Ion: 43 Resp: 21511

Ion Ratio Lower Upper

43 100

57 66.9 50.5 75.7



#13

Ethanol

Concen: 3.466 ppbv

RT: 1.716 min Scan# 503

Delta R.T. -0.007 min

Lab File: VL041741.D

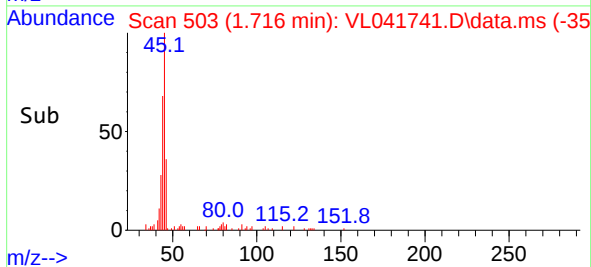
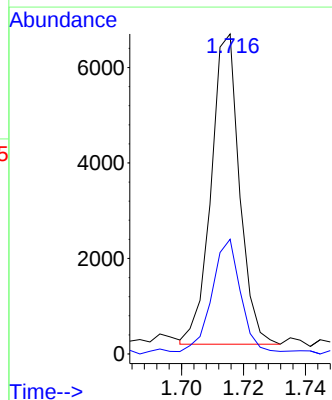
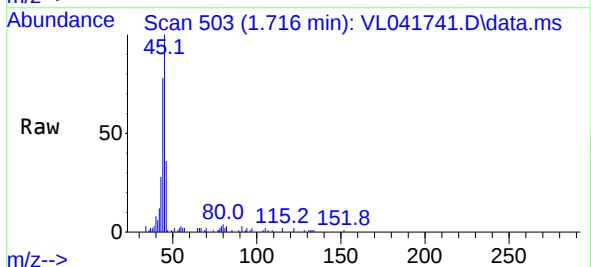
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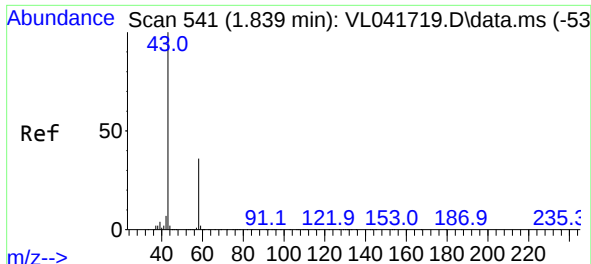
Tgt Ion: 45 Resp: 4138

Ion Ratio Lower Upper

45 100

46 35.9 16.6 66.6

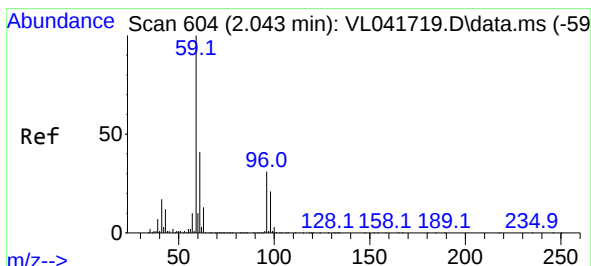
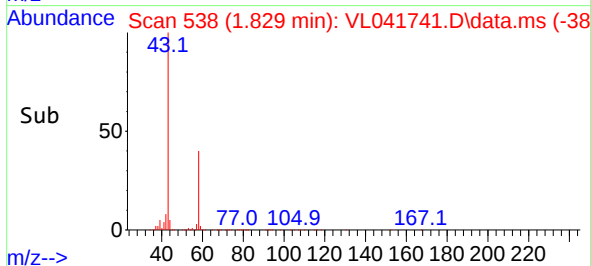
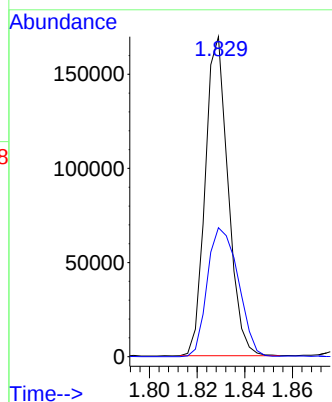
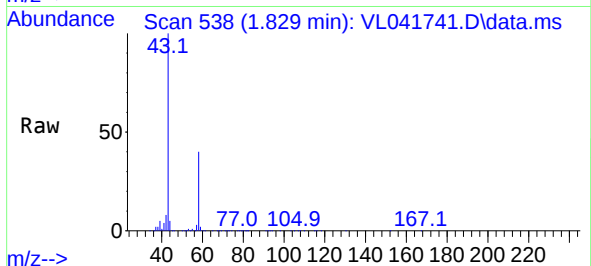




#15
Acetone
Concen: 3.934 ppbv
RT: 1.829 min Scan# 51
Delta R.T. -0.010 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

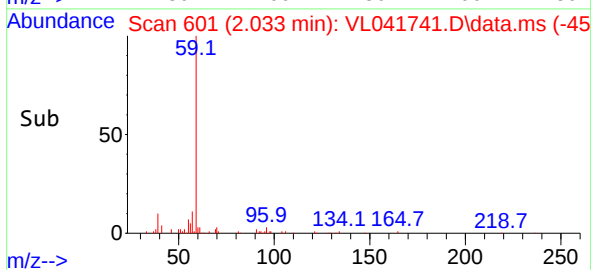
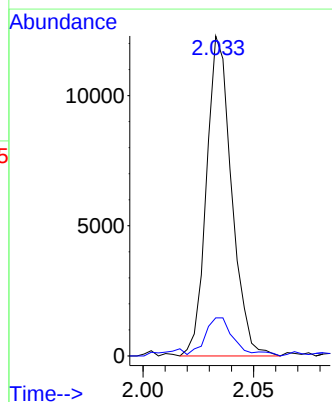
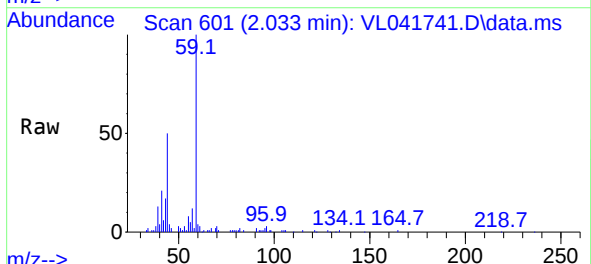
Instrument :
MSVOA_L
ClientSampleId :
SV1

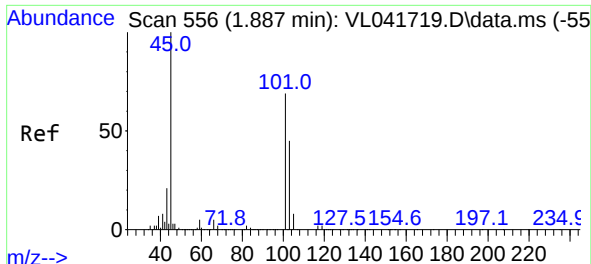
Tgt Ion: 43 Resp: 112952
Ion Ratio Lower Upper
43 100
58 55.4 28.9 43.3#



#17
tert-Butyl alcohol
Concen: 0.233 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.010 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion: 59 Resp: 9693
Ion Ratio Lower Upper
59 100
57 16.3 8.2 12.4#





#19

Isopropyl Alcohol

Concen: 0.330 ppbv

RT: 1.881 min Scan# 51

Delta R.T. -0.007 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Instrument :

MSVOA_L

ClientSampleId :

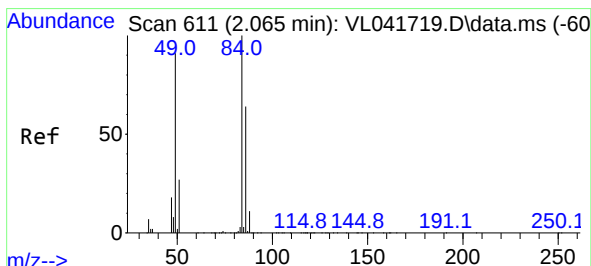
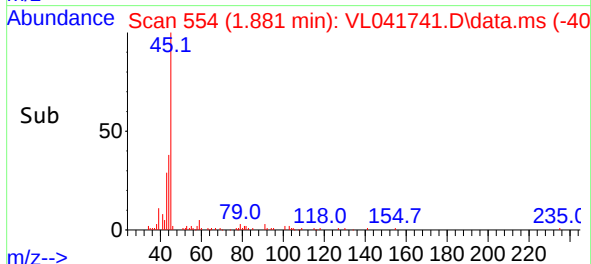
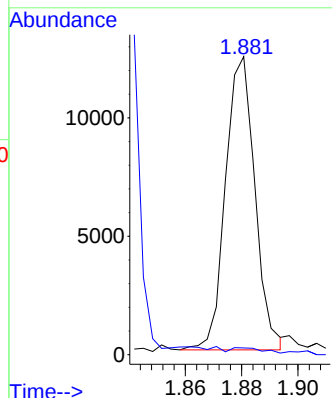
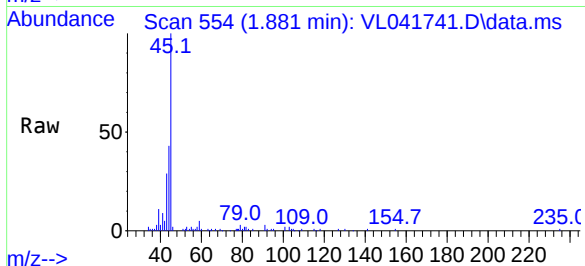
SV1

Tgt Ion: 45 Resp: 8990

Ion Ratio Lower Upper

45 100

58 695.9 40.6 61.0#



#20

Methylene Chloride

Concen: 0.332 ppbv

RT: 2.052 min Scan# 607

Delta R.T. -0.013 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Tgt Ion: 84 Resp: 5770

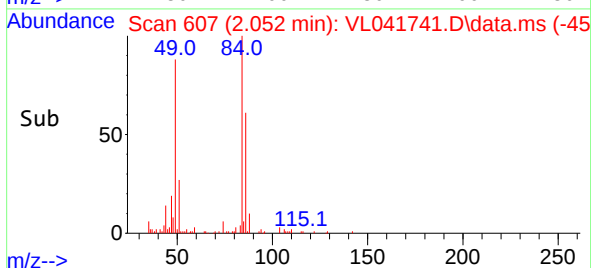
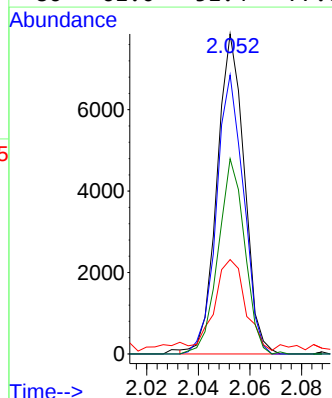
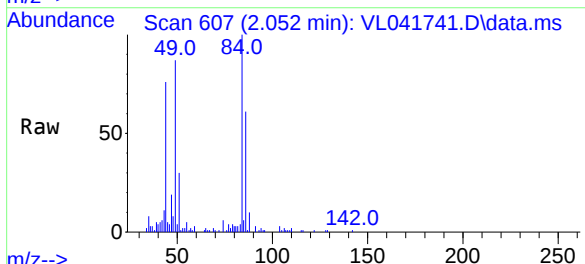
Ion Ratio Lower Upper

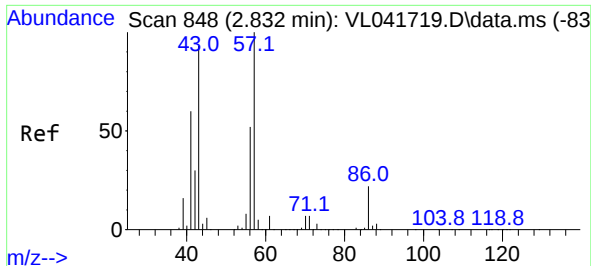
84 100

49 87.2 73.6 110.4

51 26.6 22.7 34.1

86 61.0 51.4 77.0

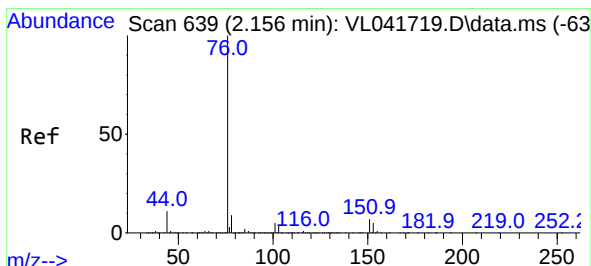
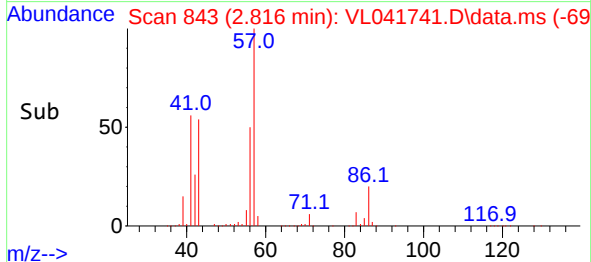
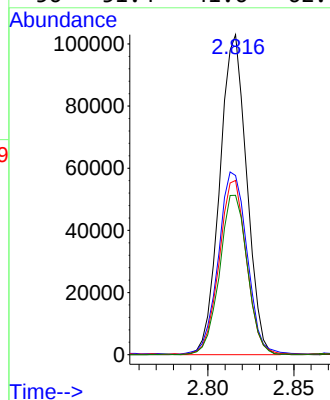
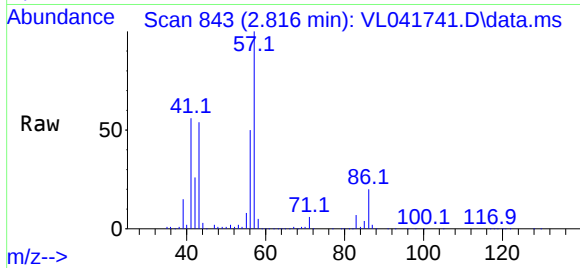




#26
Hexane
Concen: 2.894 ppbv
RT: 2.816 min Scan# 841
Delta R.T. -0.016 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

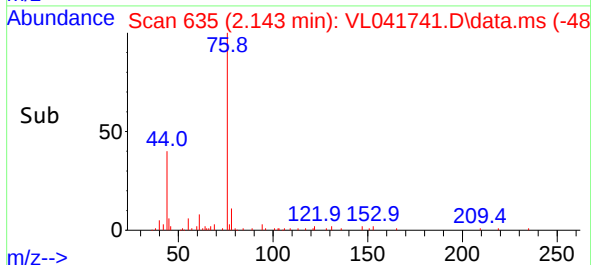
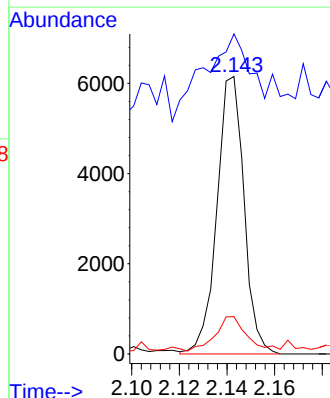
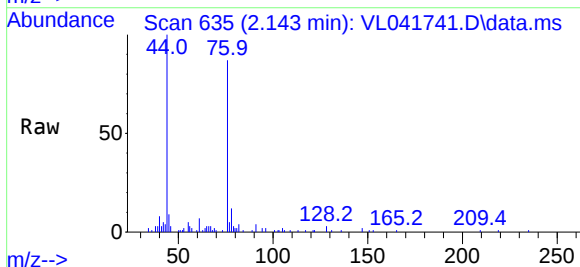
Instrument :
MSVOA_L
ClientSampleId :
SV1

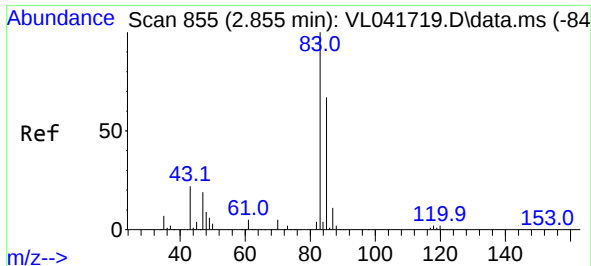
Tgt Ion: 57 Resp: 111986
Ion Ratio Lower Upper
57 100
41 60.5 49.5 74.3
43 55.0 150.6 225.8#
56 51.4 41.6 62.4



#27
Carbon Disulfide
Concen: 0.122 ppbv
RT: 2.143 min Scan# 635
Delta R.T. -0.013 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion: 76 Resp: 4855
Ion Ratio Lower Upper
76 100
44 49.4 9.4 14.0#
78 15.8 9.4 14.0#





#29

Chloroform

Concen: 7.173 ppbv

RT: 2.836 min Scan# 84

Delta R.T. -0.019 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Instrument :

MSVOA_L

ClientSampleId :

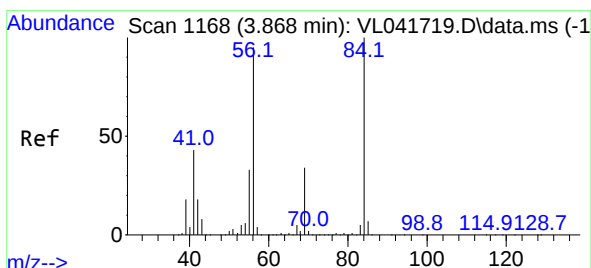
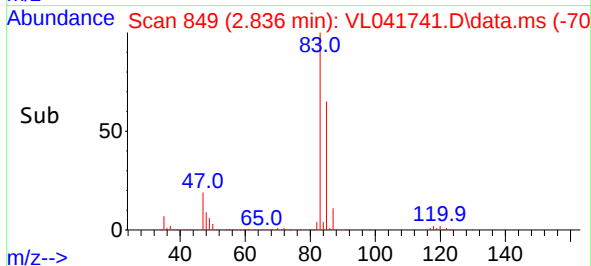
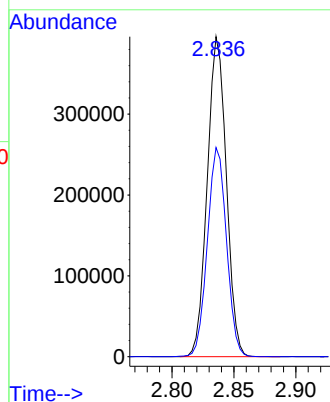
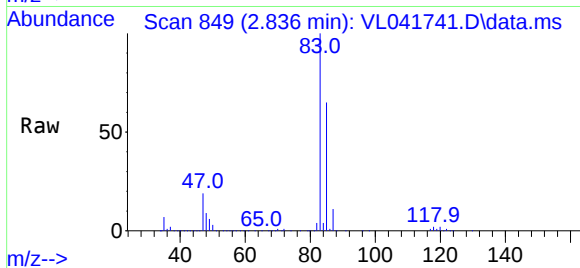
SV1

Tgt Ion: 83 Resp: 424960

Ion Ratio Lower Upper

83 100

85 65.3 53.6 80.4



#30

Cyclohexane

Concen: 0.172 ppbv

RT: 3.839 min Scan# 1159

Delta R.T. -0.029 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

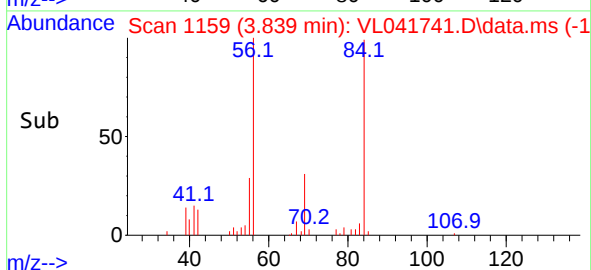
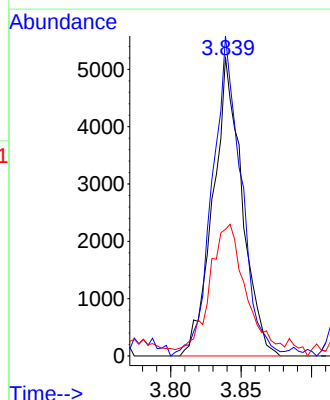
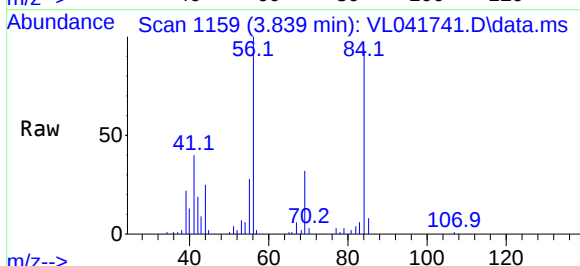
Tgt Ion: 84 Resp: 7471

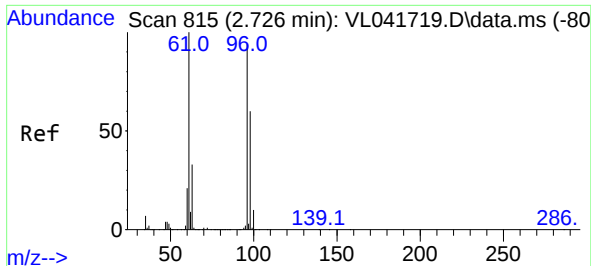
Ion Ratio Lower Upper

84 100

56 107.7 76.0 114.0

41 58.9 34.2 51.4#

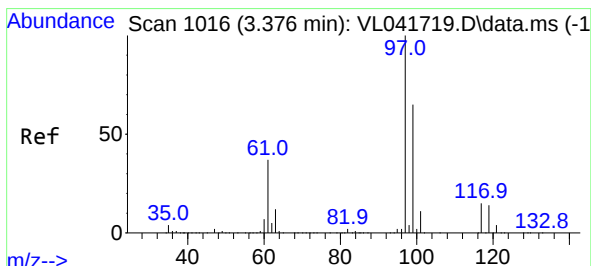
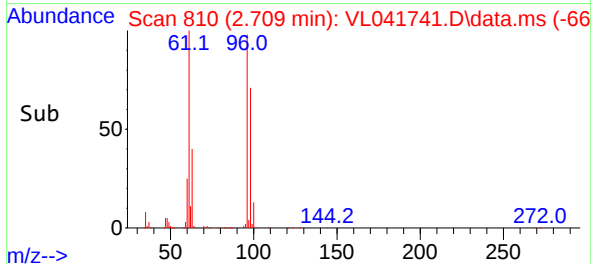
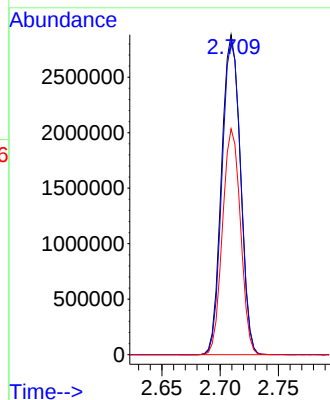
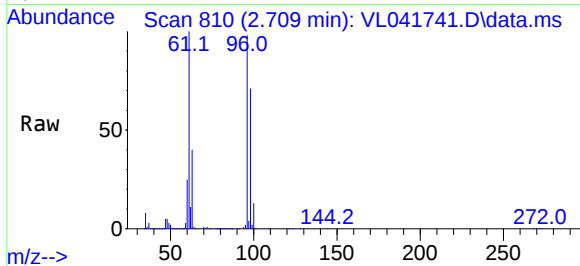




#31
cis-1,2-Dichloroethene
Concen: 90.130 ppbv m
RT: 2.709 min Scan# 81
Delta R.T. -0.016 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

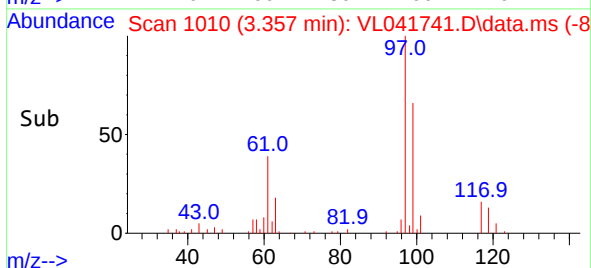
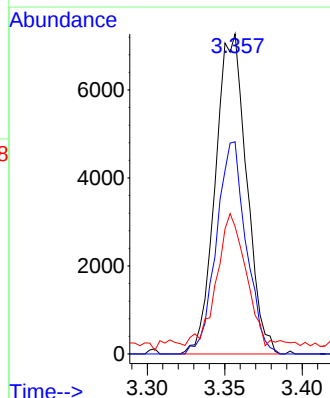
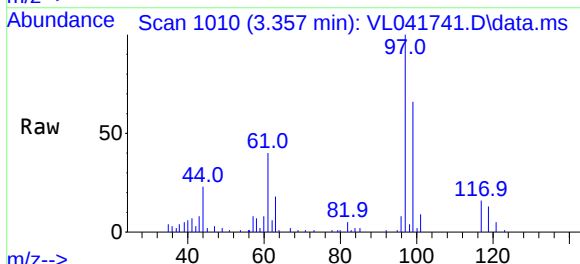
Instrument :
MSVOA_L
ClientSampleId :
SV1

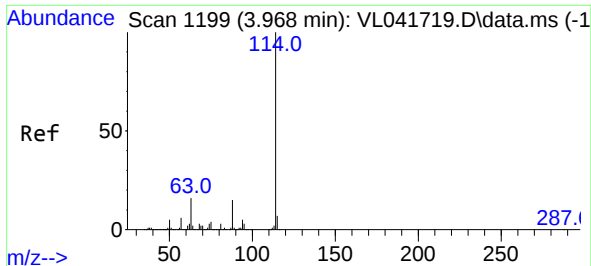
Tgt Ion: 61 Resp: 3231107
Ion Ratio Lower Upper
61 100
96 97.9 75.4 113.2
98 70.6 48.3 72.5



#32
1,1,1-Trichloroethane
Concen: 0.175 ppbv
RT: 3.357 min Scan# 1010
Delta R.T. -0.019 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion: 97 Resp: 10208
Ion Ratio Lower Upper
97 100
99 63.3 52.2 78.2
61 41.1 29.8 44.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.939 min Scan# 1199

Delta R.T. -0.029 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Instrument :

MSVOA_L

ClientSampleId :

SV1

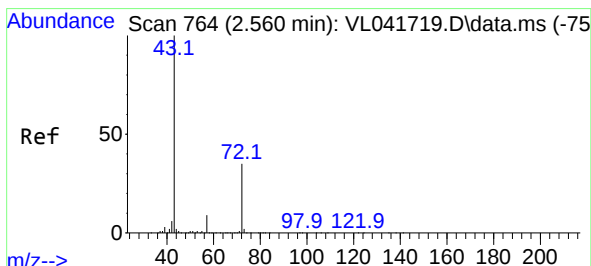
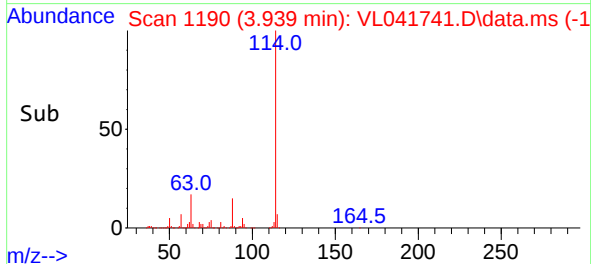
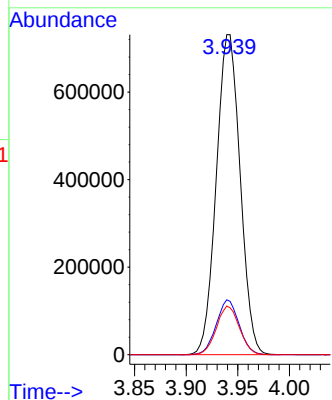
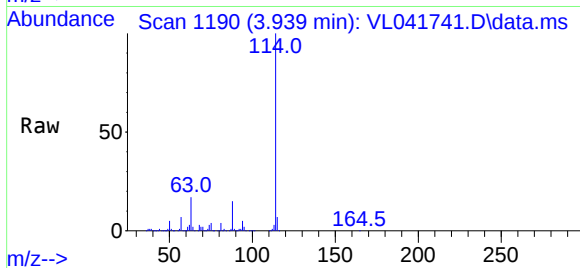
Tgt Ion:114 Resp: 1174841

Ion Ratio Lower Upper

114 100

63 16.4 12.9 19.3

88 14.7 11.8 17.6



#34

2-Butanone

Concen: 3.260 ppbv

RT: 2.547 min Scan# 760

Delta R.T. -0.013 min

Lab File: VL041741.D

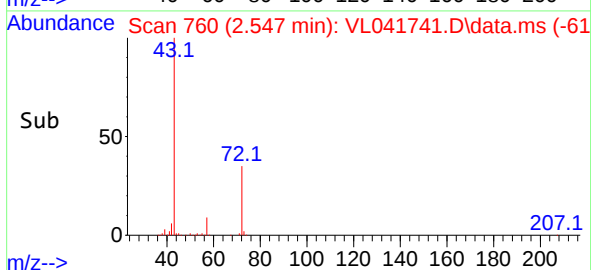
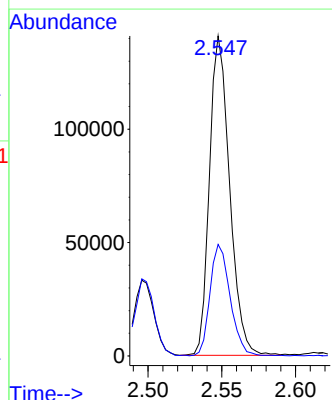
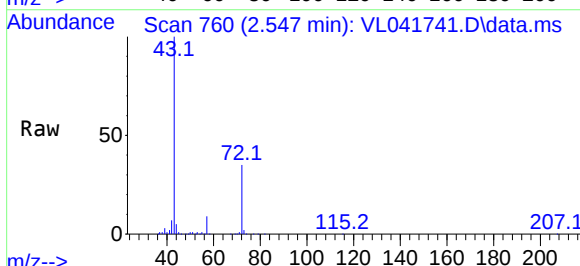
Acq: 12 Dec 2024 09:30

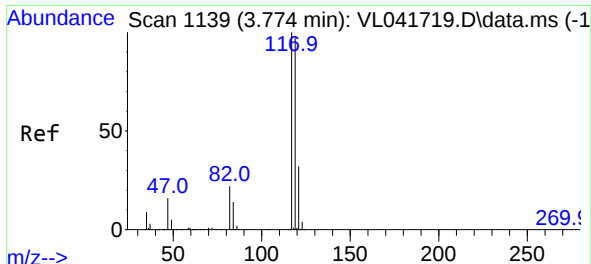
Tgt Ion: 43 Resp: 134108

Ion Ratio Lower Upper

43 100

72 35.3 28.3 42.5

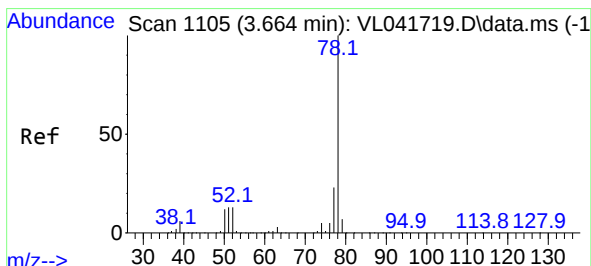
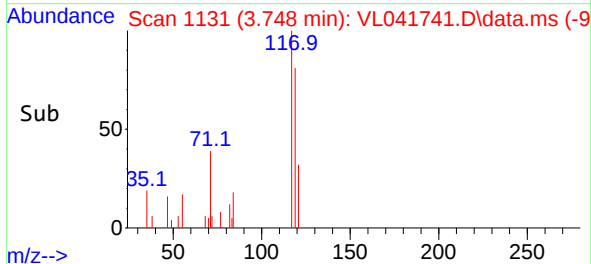
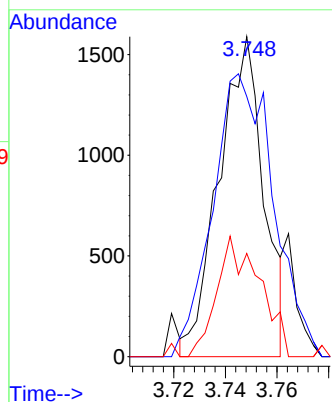
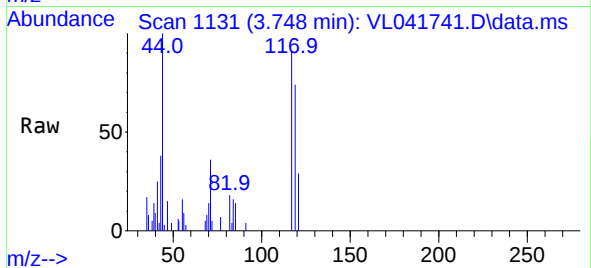




#35
Carbon Tetrachloride
Concen: 0.035 ppbv
RT: 3.748 min Scan# 1139
Delta R.T. -0.026 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

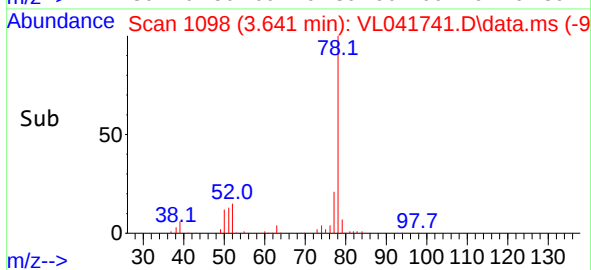
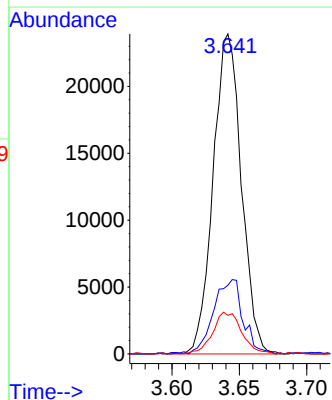
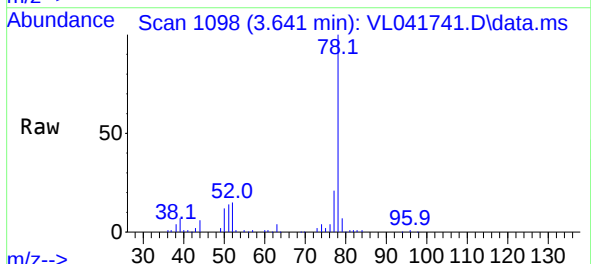
Instrument :
MSVOA_L
ClientSampleId :
SV1

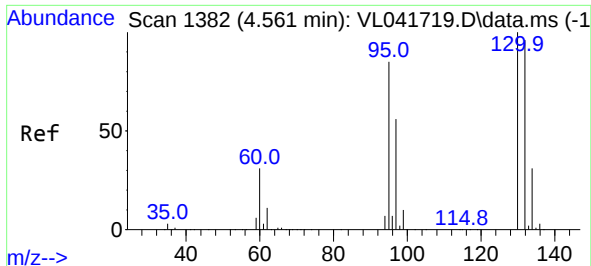
Tgt Ion:	117	Resp:	1914
Ion	Ratio	Lower	Upper
117	100		
119	79.6	77.7	116.5
121	34.1	25.5	38.3



#36
Benzene
Concen: 0.377 ppbv
RT: 3.641 min Scan# 1098
Delta R.T. -0.023 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion:	78	Resp:	34844
Ion	Ratio	Lower	Upper
78	100		
77	21.1	18.6	27.8
50	12.1	9.5	14.3





#38

Trichloroethene

Concen: 7.580 ppbv

RT: 4.528 min Scan# 11

Delta R.T. -0.032 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion:130 Resp: 363103

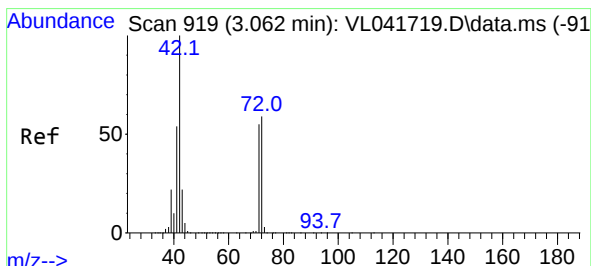
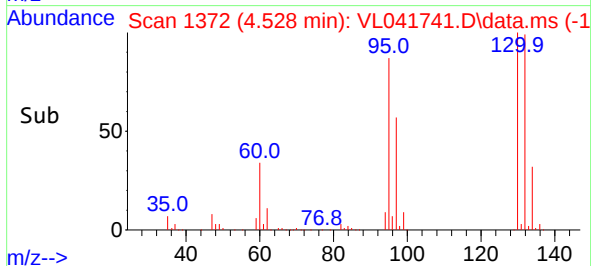
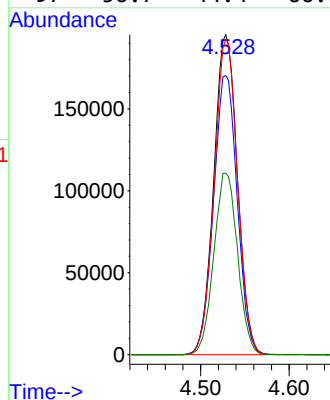
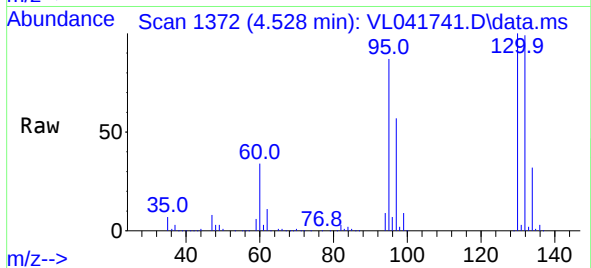
Ion Ratio Lower Upper

130 100

95 87.1 68.0 102.0

132 98.5 76.5 114.7

97 56.7 44.4 66.6



#41

Tetrahydrofuran

Concen: 0.142 ppbv

RT: 3.056 min Scan# 917

Delta R.T. -0.007 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

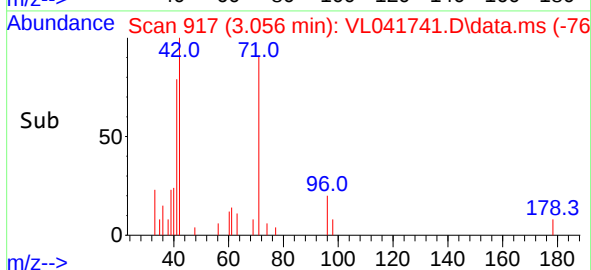
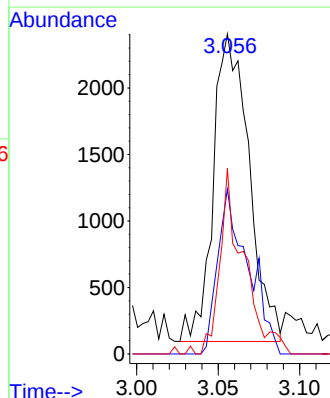
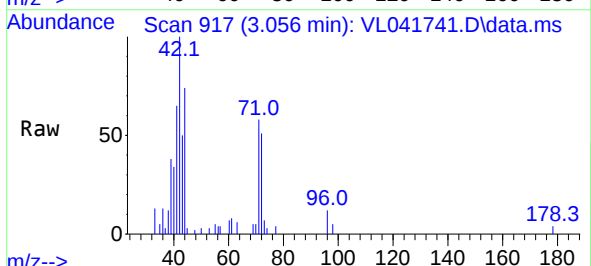
Tgt Ion: 42 Resp: 3518

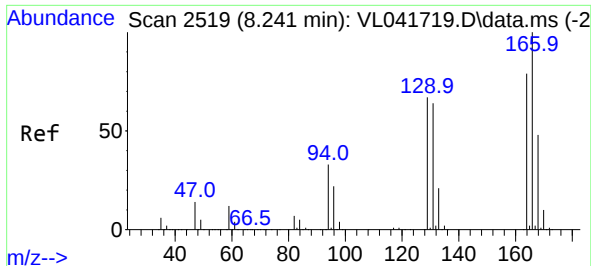
Ion Ratio Lower Upper

42 100

72 45.8 47.4 71.0#

71 40.6 44.4 66.6#



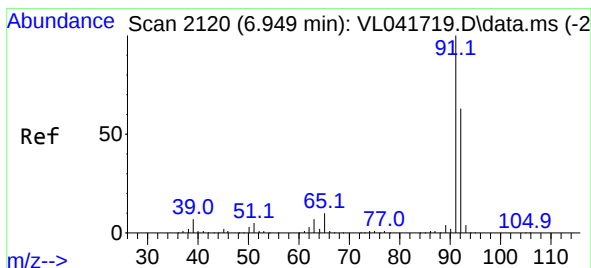
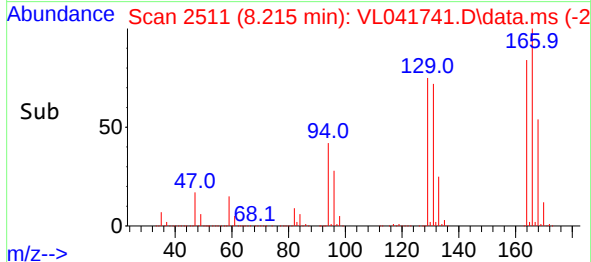
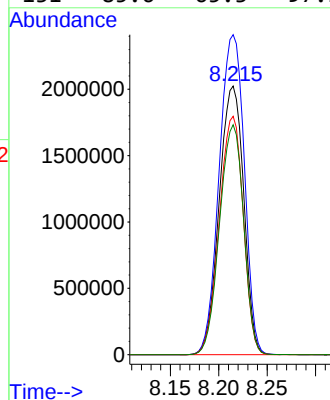
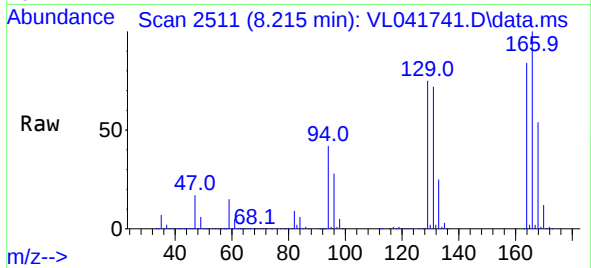


#52
Tetrachloroethene
Concen: 72.876 ppbv
RT: 8.215 min Scan# 2108
Delta R.T. -0.026 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion:164 Resp: 3566631

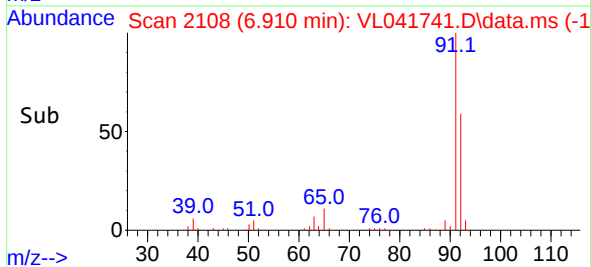
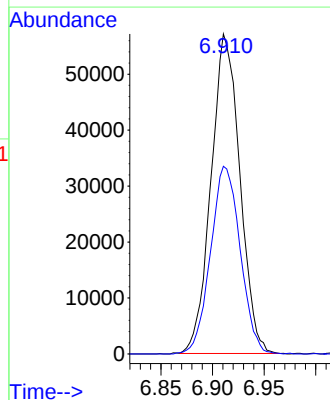
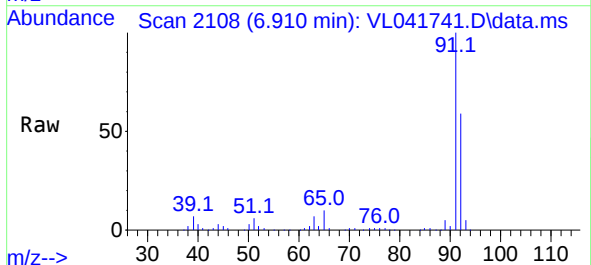
Ion	Ratio	Lower	Upper
164	100		
166	119.1	101.4	152.0
129	88.8	67.6	101.4
131	85.6	65.3	97.9

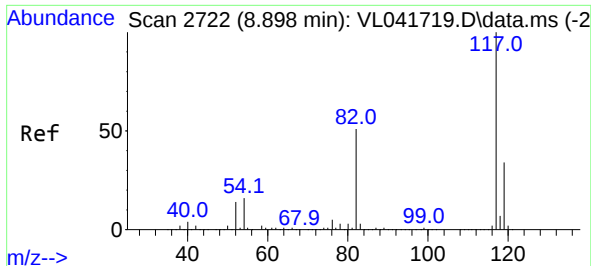


#53
Toluene
Concen: 0.977 ppbv
RT: 6.910 min Scan# 2108
Delta R.T. -0.039 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion: 91 Resp: 110875

Ion	Ratio	Lower	Upper
91	100		
92	60.6	49.7	74.5

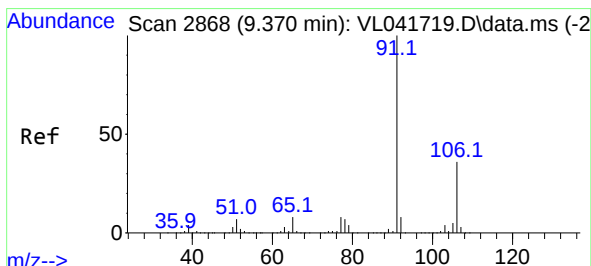
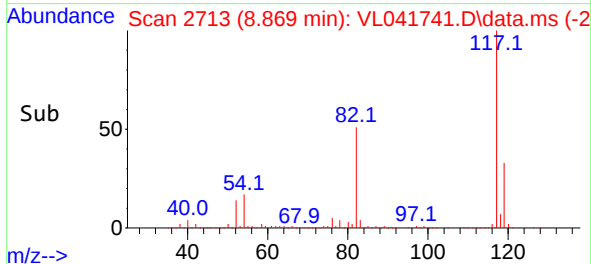
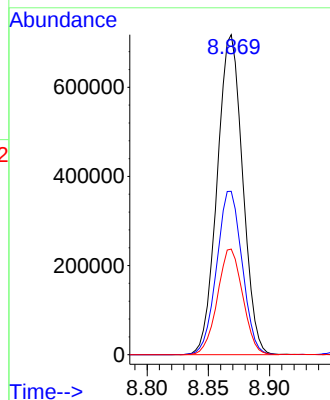
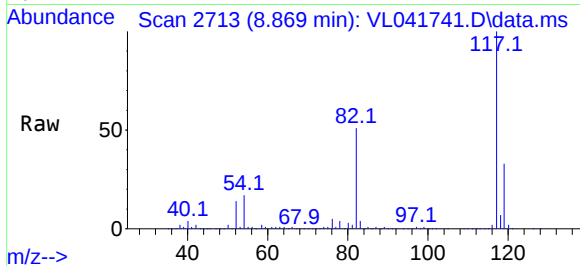




#55
Chlorobenzene-d5
Concen: 10.000 ppbv m
RT: 8.869 min Scan# 21
Delta R.T. -0.029 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

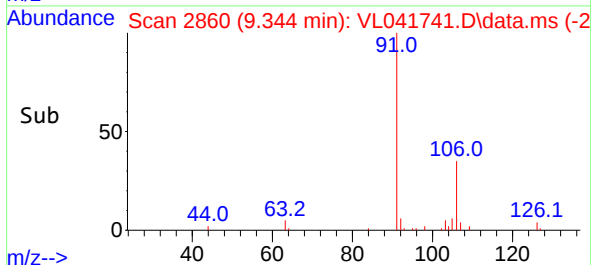
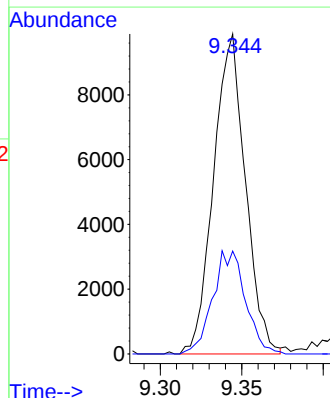
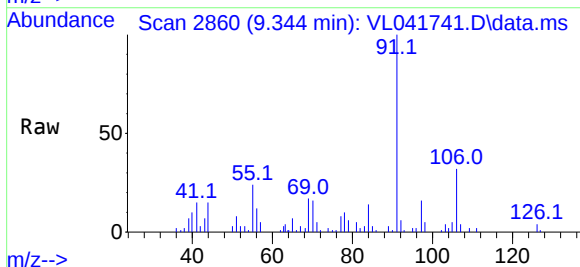
Instrument :
MSVOA_L
ClientSampleId :
SV1

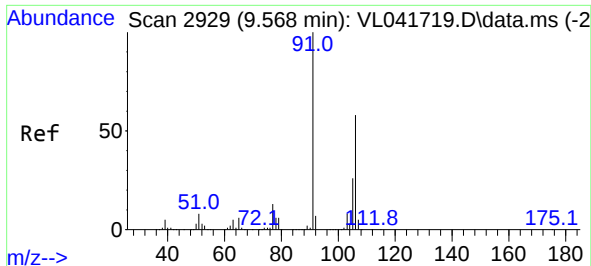
Tgt Ion:117 Resp: 1038894
Ion Ratio Lower Upper
117 100
82 0.0 41.3 61.9#
119 0.0 25.8 38.8#



#58
Ethyl Benzene
Concen: 0.096 ppbv
RT: 9.344 min Scan# 2860
Delta R.T. -0.026 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

Tgt Ion: 91 Resp: 13407
Ion Ratio Lower Upper
91 100
106 32.1 28.6 43.0





#59

m/p-Xylene

Concen: 0.331 ppbv

RT: 9.519 min Scan# 29

Delta R.T. -0.049 min

Lab File: VL041741.D

Acq: 12 Dec 2024 09:30

Instrument :

MSVOA_L

ClientSampleId :

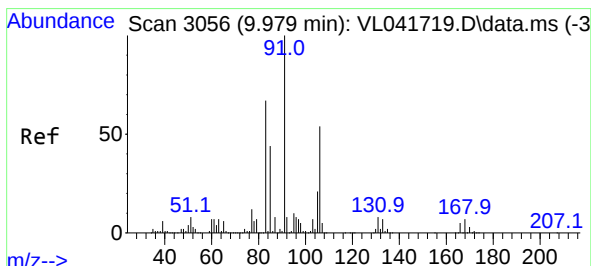
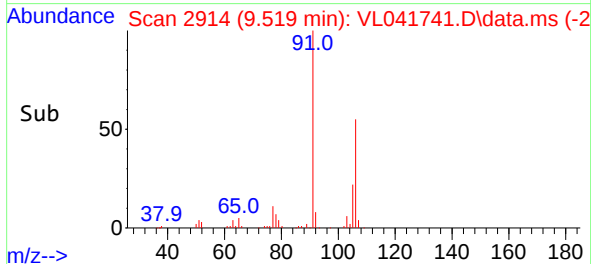
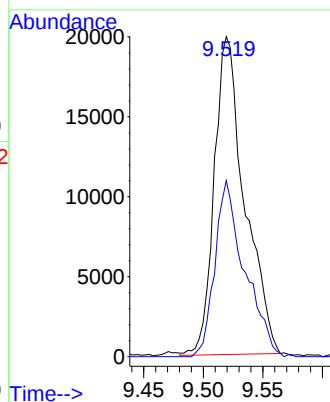
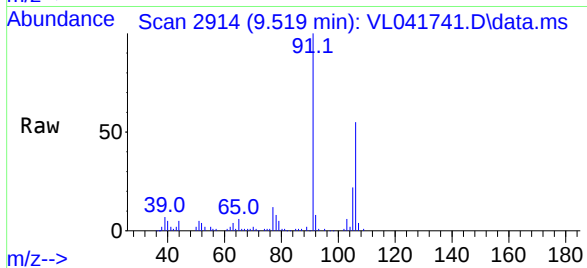
SV1

Tgt Ion: 91 Resp: 35278

Ion Ratio Lower Upper

91 100

106 54.0 45.1 67.7



#60

o-Xylene

Concen: 0.158 ppbv

RT: 9.953 min Scan# 3048

Delta R.T. -0.026 min

Lab File: VL041741.D

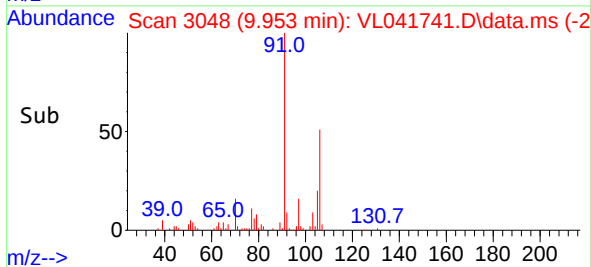
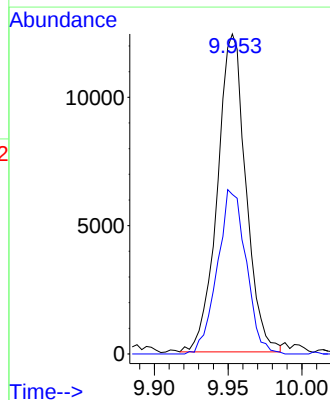
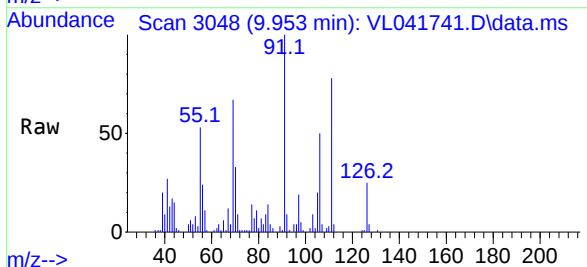
Acq: 12 Dec 2024 09:30

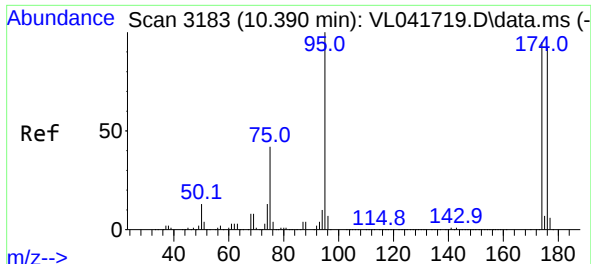
Tgt Ion: 91 Resp: 16663

Ion Ratio Lower Upper

91 100

106 52.3 26.8 80.4

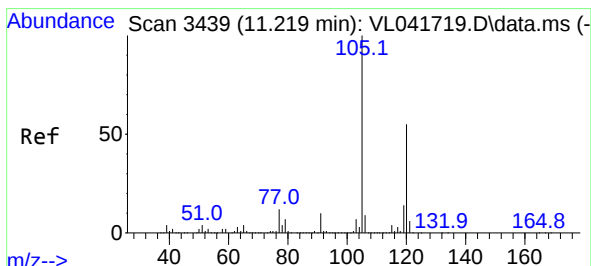
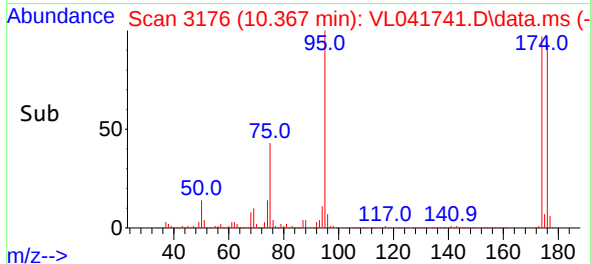
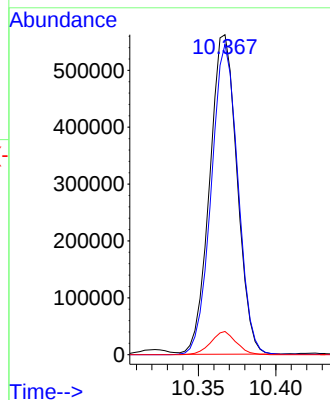
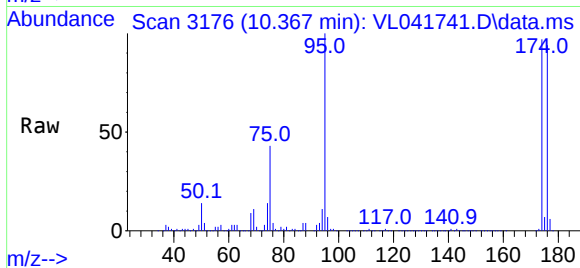




#68
1-Bromo-4-Fluorobenzene
Concen: 10.120 ppbv
RT: 10.367 min Scan# 3183
Delta R.T. -0.023 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

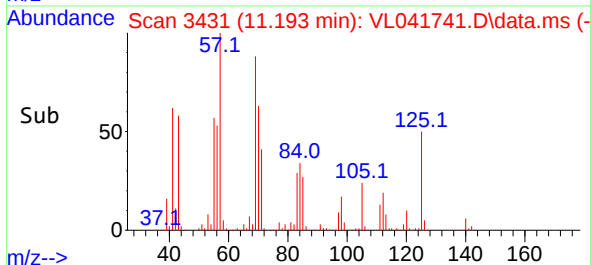
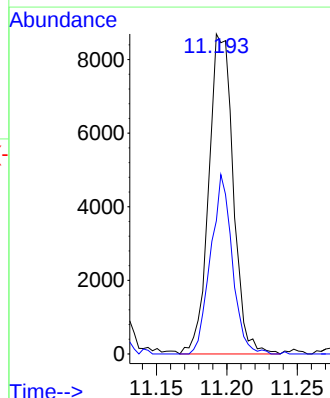
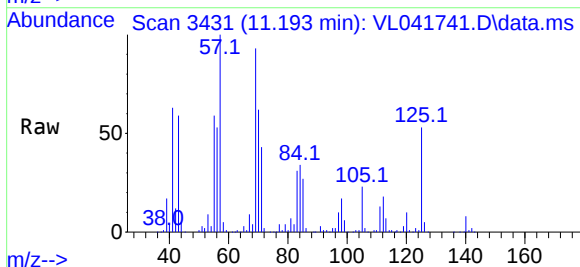
Instrument :
MSVOA_L
ClientSampleId :
SV1

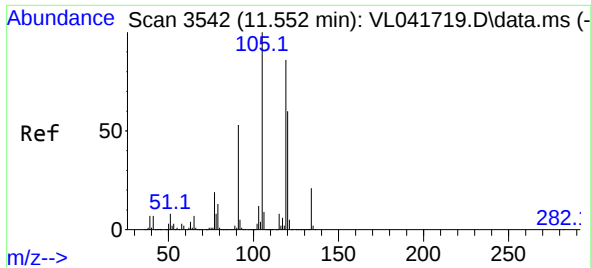
Tgt Ion: 95 Resp: 691149
Ion Ratio Lower Upper
95 100
174 94.4 76.7 115.1
175 6.7 5.4 8.2



#73
1,3,5-Trimethylbenzene
Concen: 0.095 ppbv
RT: 11.193 min Scan# 3431
Delta R.T. -0.026 min
Lab File: VL041741.D
Acq: 12 Dec 2024 09:30

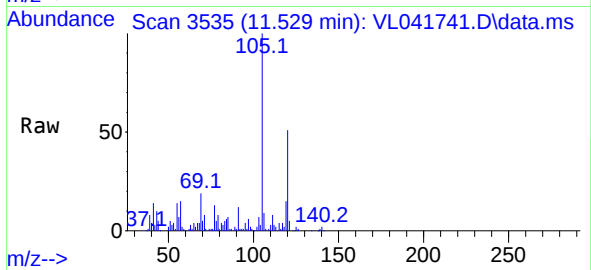
Tgt Ion: 105 Resp: 10499
Ion Ratio Lower Upper
105 100
120 41.6 43.6 65.4#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.237 ppbv
 RT: 11.529 min Scan# 31
 Delta R.T. -0.023 min
 Lab File: VL041741.D
 Acq: 12 Dec 2024 09:30

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1



Tgt Ion:	105	Resp:	28374
Ion	Ratio	Lower	Upper
105	100		
120	50.9	47.8	71.6
91	10.5	42.5	63.7#
77	12.0	15.4	23.2#

