

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032919\
 Data File : VL033511.D
 Acq On : 29 Mar 2019 20:54
 Operator : SY/AP
 Sample : K2042-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2-MUSIC-ROOM

Manual Integrations
 APPROVED

MMDadoda
 4/2/2019 8:40:17 AM

Quant Time: Mar 31 15:03:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar 2
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	840483	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1971872	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1991574	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	1521230	9.74	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	19523	0.159	ppbv	90
4) Chloromethane	3.17	50	24419	0.477	ppbv #	79
7) Chloroethane	3.61	64	4814m	0.257	ppbv	
9) Propene	3.04	41	56275	1.385	ppbv	86
10) Heptane	8.25	43	16072m	0.148	ppbv	
11) Trichlorofluoromethane	4.00	101	46133	0.305	ppbv	95
12) 1,1,2-Trichlorotrifluoroet	4.55	101	9764m	0.096	ppbv	
13) Ethanol	3.66	45	5427400	516.142	ppbv	66
15) Acetone	3.90	43	1107099	10.955	ppbv	97
17) tert-Butyl alcohol	4.38	59	42401	2.282	ppbv #	90
19) Isopropyl Alcohol	4.05	45	298678	4.673	ppbv #	94
20) Methylene Chloride	4.41	84	278442	6.491	ppbv	98
26) Hexane	5.78	57	358423	4.299	ppbv #	42
27) Carbon Disulfide	4.62	76	14500m	0.146	ppbv	
29) Chloroform	5.84	83	42787	0.299	ppbv	96
31) cis-1,2-Dichloroethene	5.64	61	41262	0.498	ppbv	96
32) 1,1,1-Trichloroethane	6.62	97	5203m	0.038	ppbv	
34) 2-Butanone	5.33	43	95130	0.803	ppbv	100
35) Carbon Tetrachloride	7.13	117	13673m	0.098	ppbv	
36) Benzene	7.00	78	76032	0.460	ppbv	98
38) Trichloroethene	7.96	130	130025	2.088	ppbv	96
44) 2,2,4-Trimethylpentane	7.99	57	54360m	0.188	ppbv	
52) Tetrachloroethene	11.37	164	2516m	0.040	ppbv	
53) Toluene	9.95	91	464003	2.413	ppbv	99
59) m/p-Xylene	13.12	91	75974m	0.320	ppbv	

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

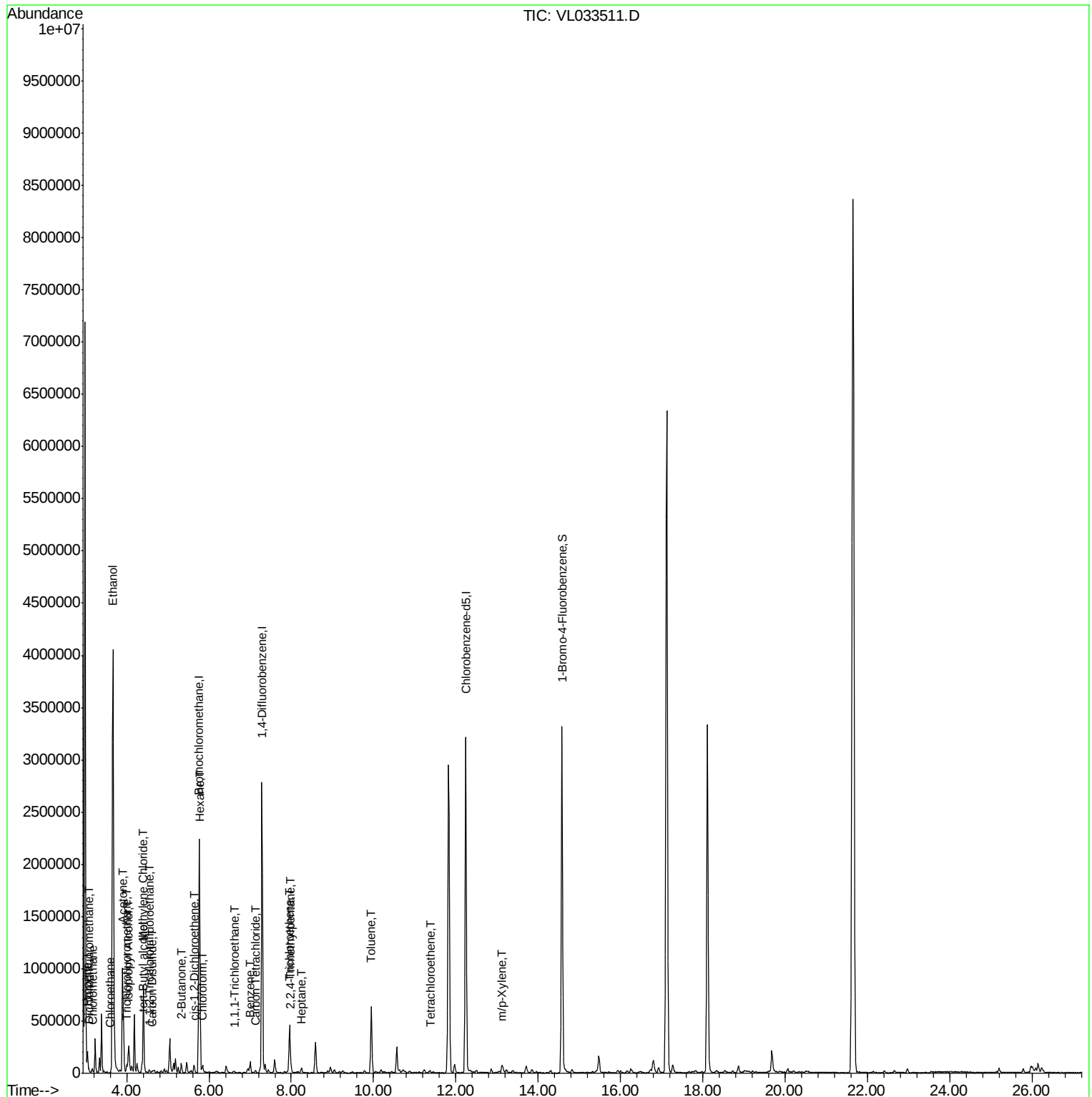
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Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032919\
Data File : VL033511.D
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Instrument :
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Quant Time: Mar 31 15:03:02 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2-MUSIC-ROOM

Tot Ion: 49 Resp: 840483

Ion Ratio Lower Upper

49 100

128 48.0 24.0 72.0

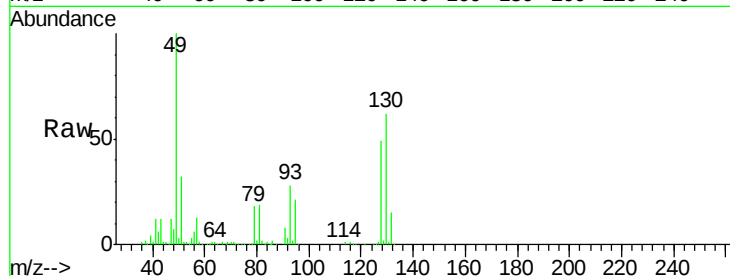
130 62.7 31.2 93.6

Manual Integrations

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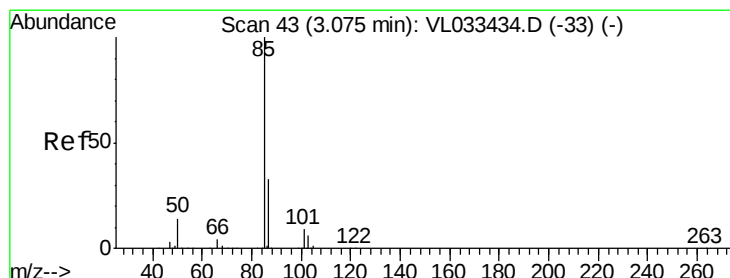
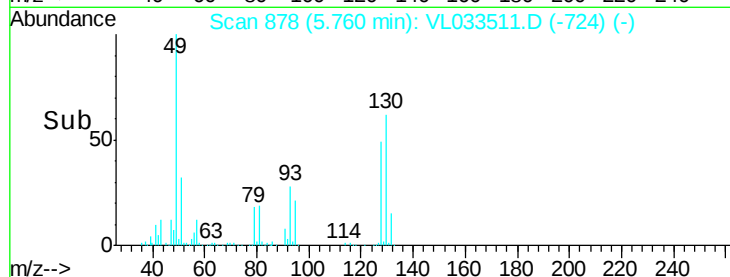
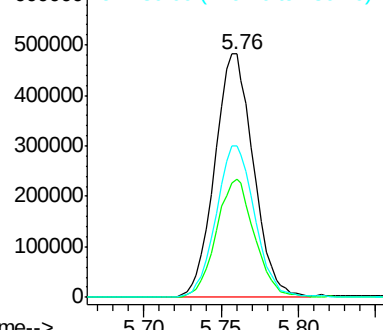
4/2/2019 8:40:17 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.159 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033511.D

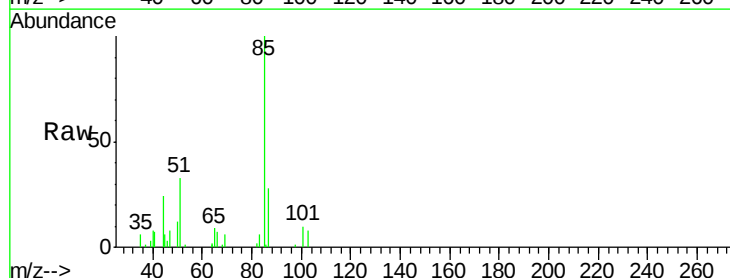
Acq: 29 Mar 2019 20:54

Tgt Ion: 85 Resp: 19523

Ion Ratio Lower Upper

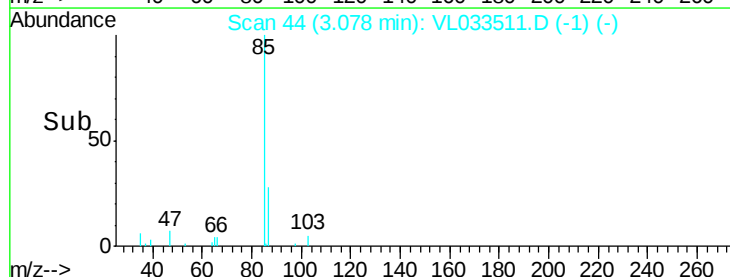
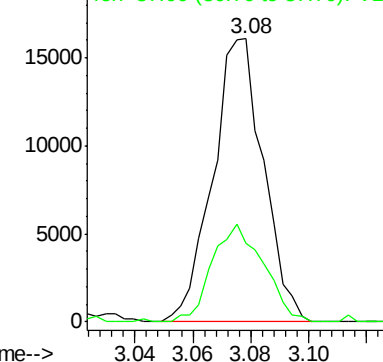
85 100

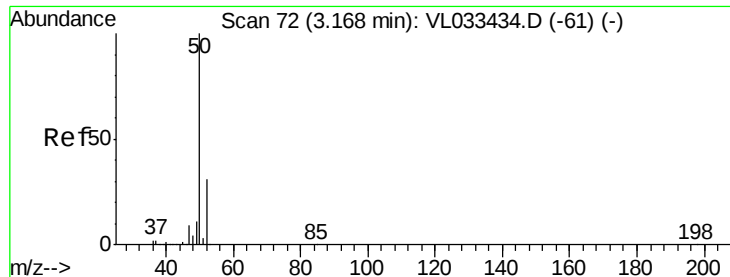
87 27.8 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.477 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2-MUSIC-ROOM

Tot Ion: 50 Resp: 24419

Ion Ratio Lower Upper

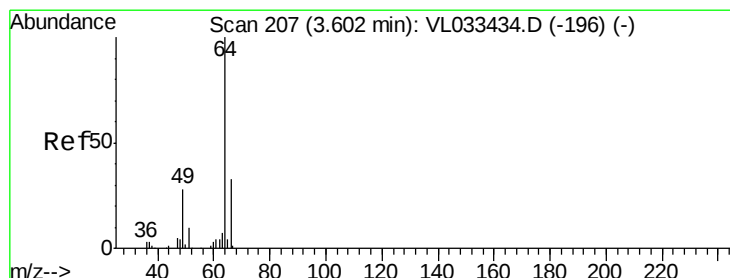
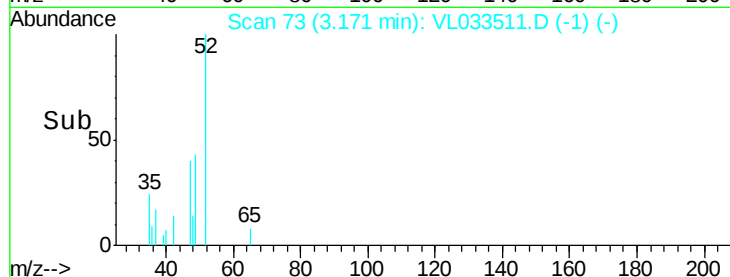
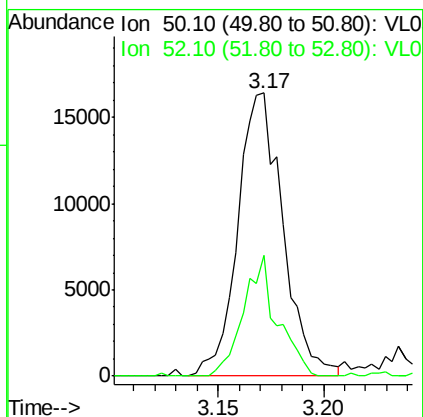
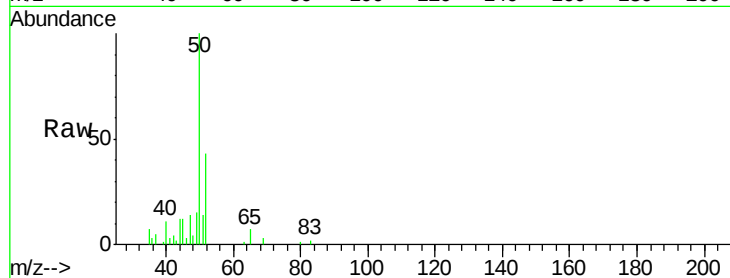
50 100

52 42.7 25.0 37.6#

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#7

Chloroethane

Concen: 0.257 ppbv m

RT: 3.61 min Scan# 208

Delta R.T. 0.00 min

Lab File: VL033511.D

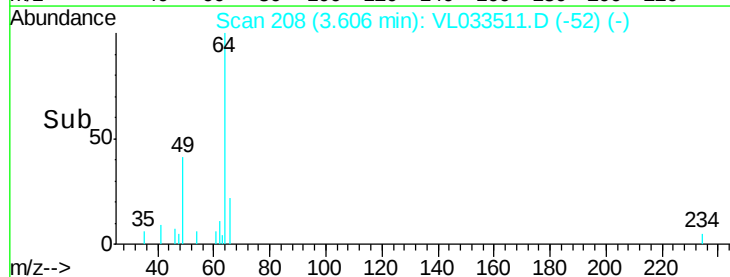
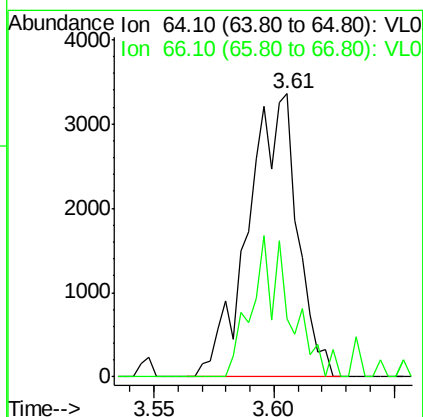
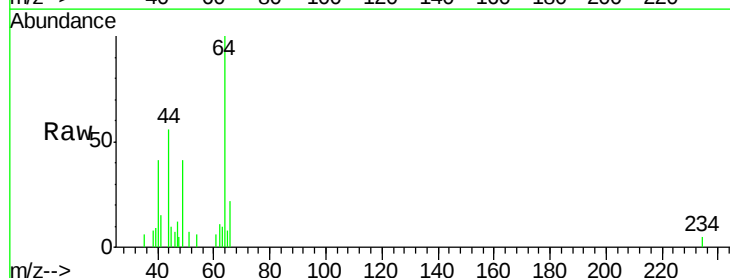
Acq: 29 Mar 2019 20:54

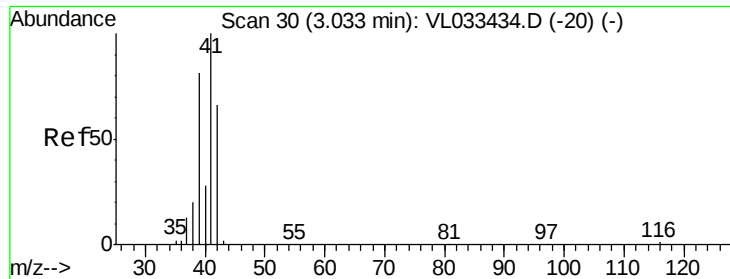
Tgt Ion: 64 Resp: 4814

Ion Ratio Lower Upper

64 100

66 22.1 26.7 40.1#





#9

Propene

Concen: 1.385 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2-MUSIC-ROOM

Tot Ion: 41 Resp: 56275

Ion Ratio Lower Upper

41 100

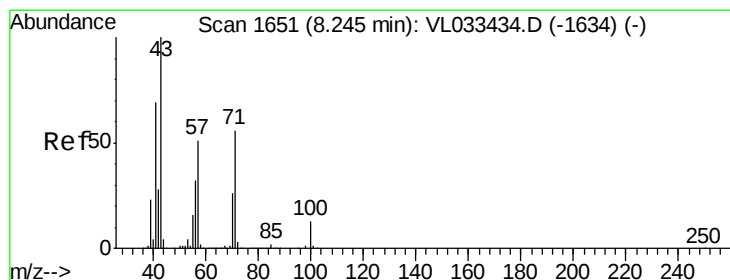
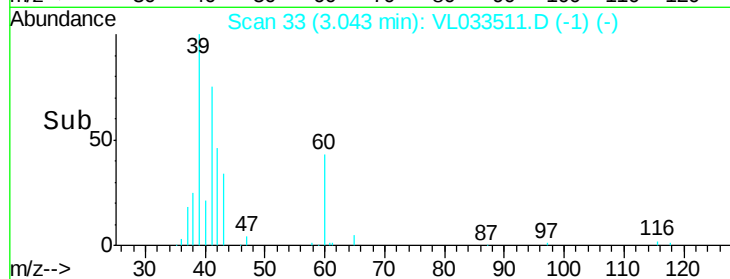
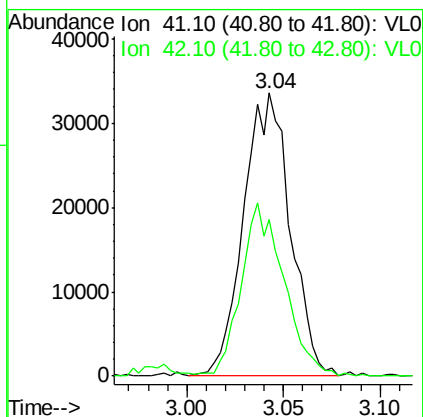
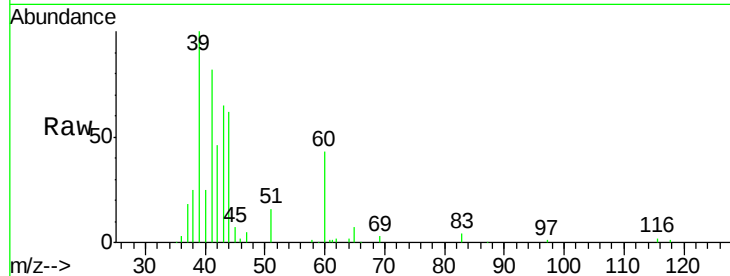
42 56.3 53.9 80.9

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#10

Heptane

Concen: 0.148 ppbv m

RT: 8.25 min Scan# 1651

Delta R.T. -0.00 min

Lab File: VL033511.D

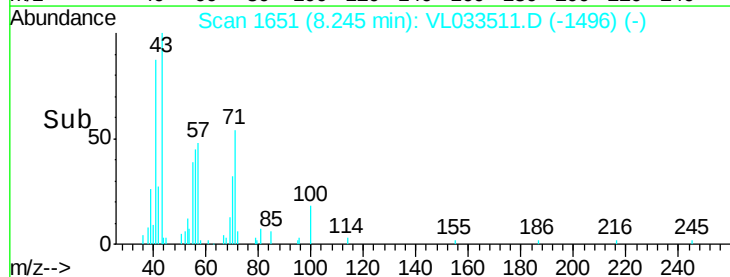
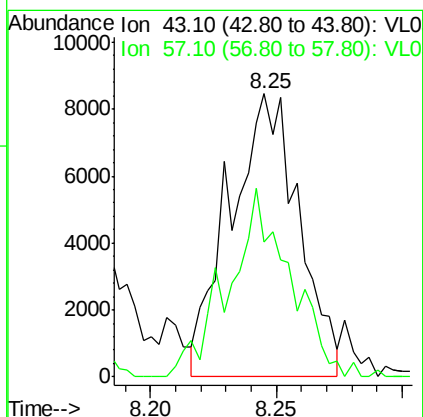
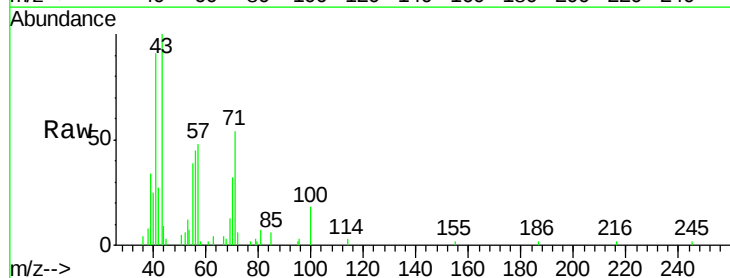
Acq: 29 Mar 2019 20:54

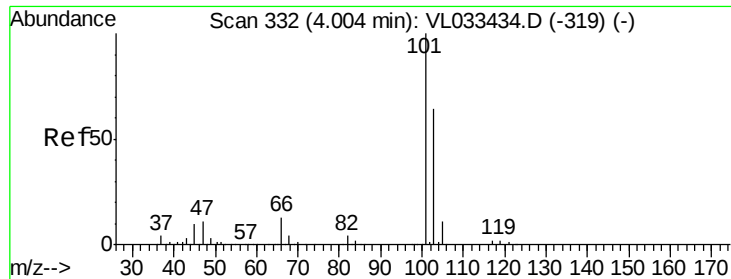
Tgt Ion: 43 Resp: 16072

Ion Ratio Lower Upper

43 100

57 60.0 40.6 60.8





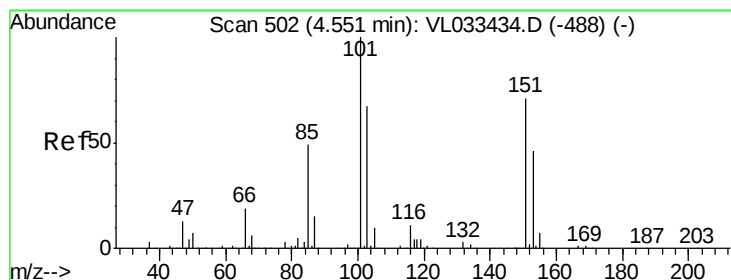
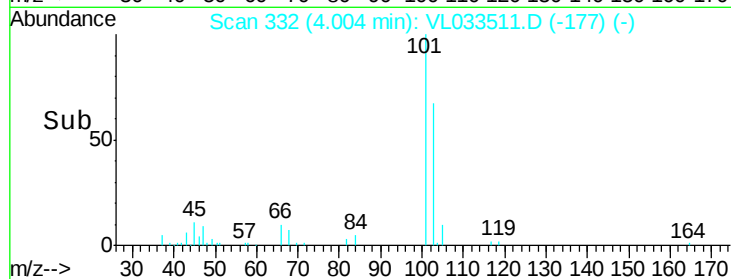
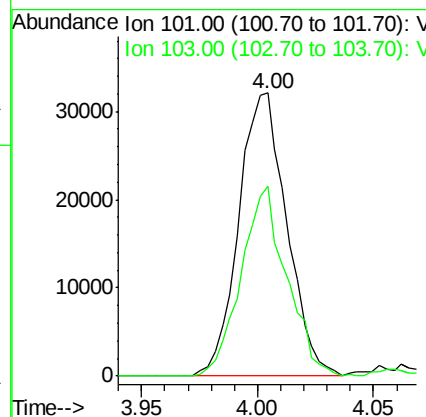
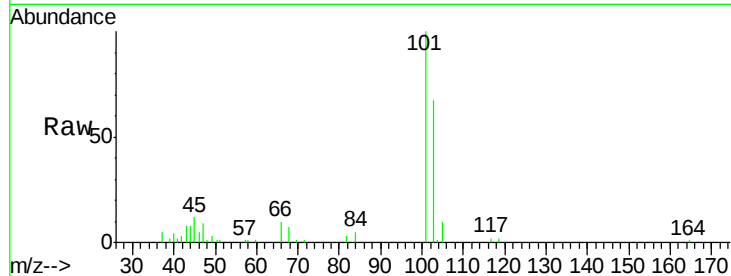
#11
 Trichlorofluoromethane
 Concen: 0.305 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.00 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2-MUSIC-ROOM

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		46133		
103	68.2	51.3	76.9		

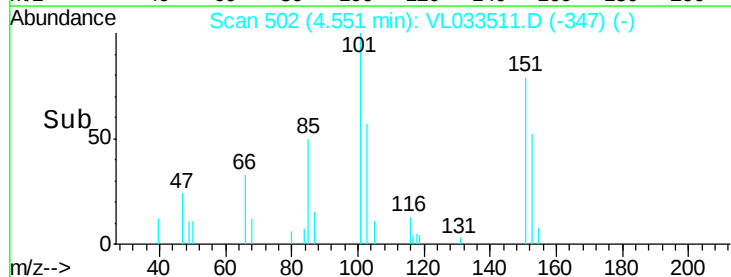
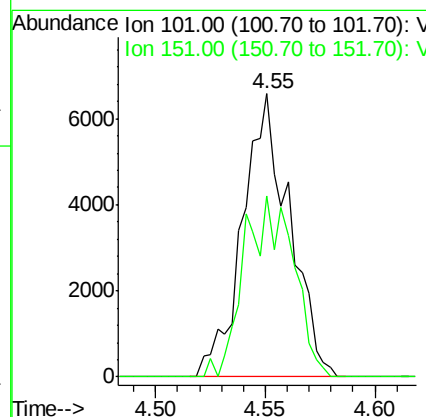
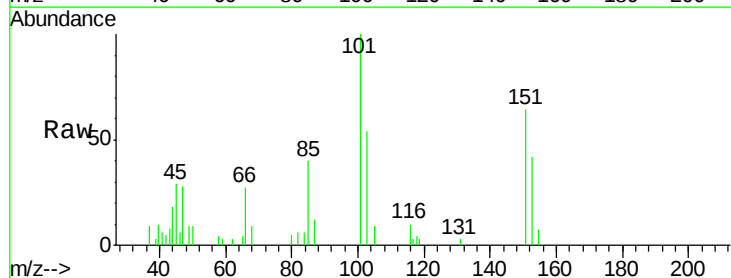
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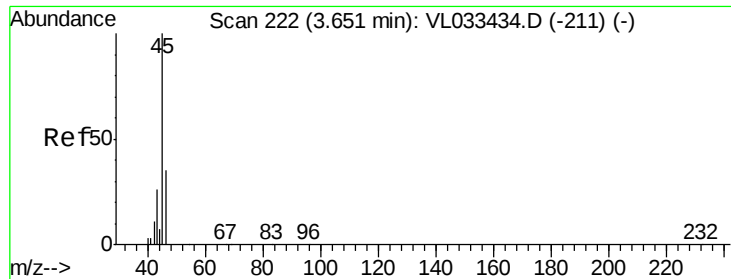
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.096 ppbv m
 RT: 4.55 min Scan# 502
 Delta R.T. -0.00 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
101	100		9764		
151	67.3	57.7	86.5		





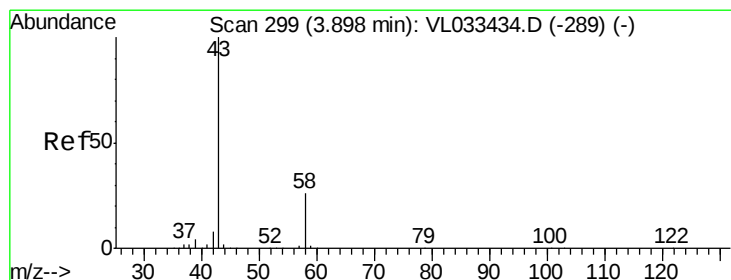
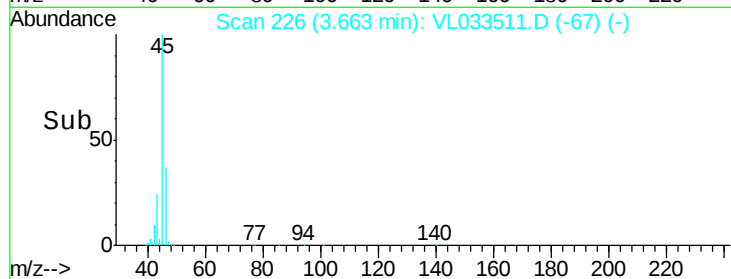
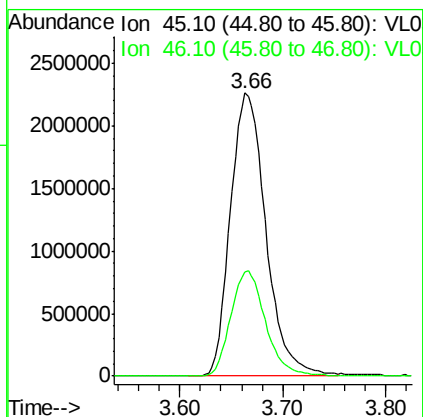
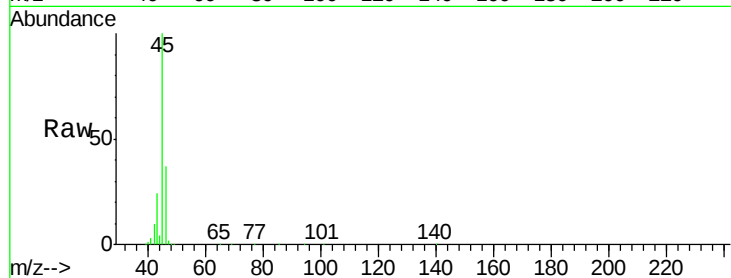
#13
Ethanol
Concen: 516.142 ppbv
RT: 3.66 min Scan# 226
Delta R.T. 0.01 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Instrument :
MSVOA_L
ClientSampleId :
SG-2-MUSIC-ROOM

Tot Ion: 45 Resp: 5427400
Ion Ratio Lower Upper
45 100
46 37.0 25.4 101.8

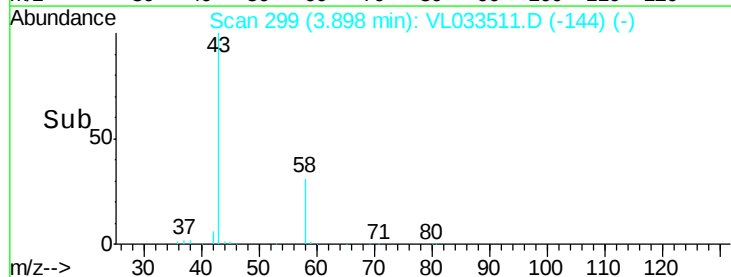
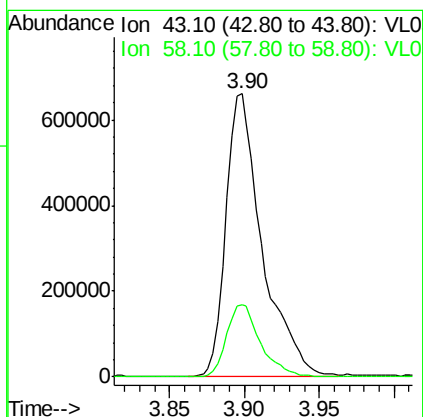
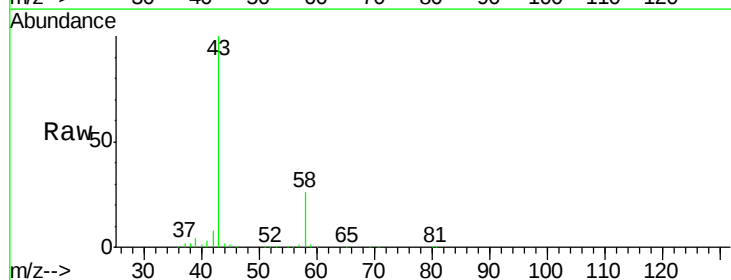
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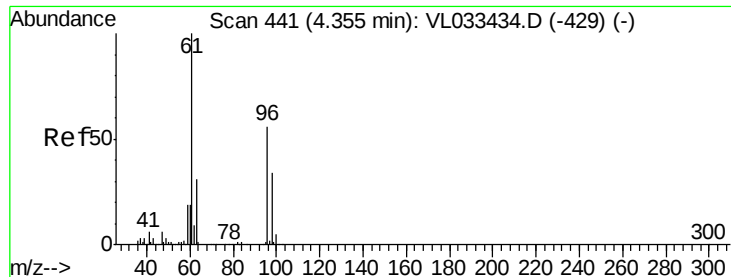
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#15
Acetone
Concen: 10.955 ppbv
RT: 3.90 min Scan# 299
Delta R.T. -0.00 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Tgt Ion: 43 Resp: 1107099
Ion Ratio Lower Upper
43 100
58 24.2 20.5 30.7





#17

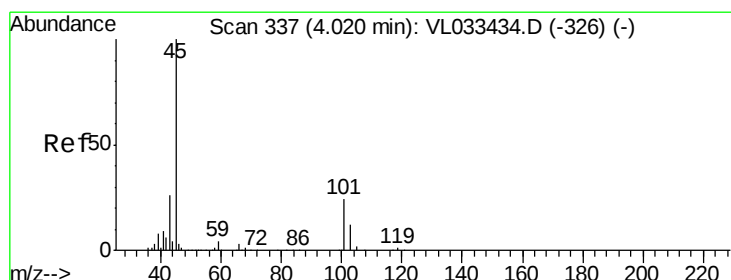
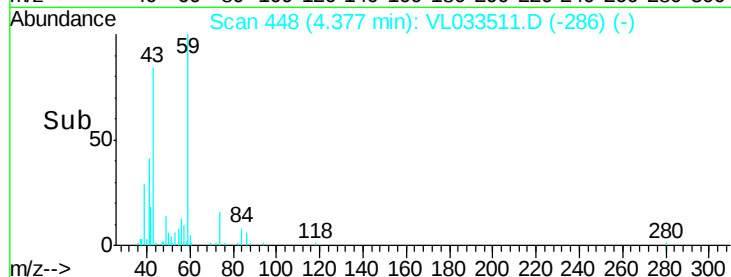
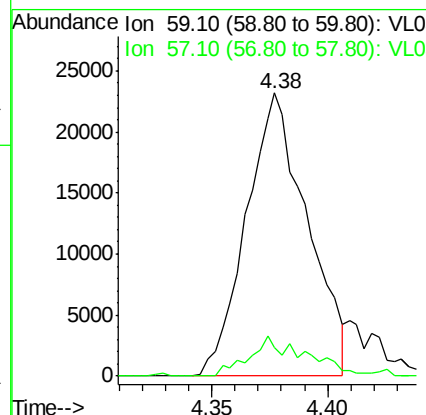
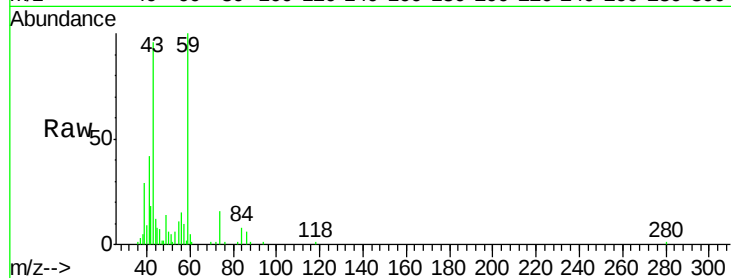
tert-Butyl alcohol
Concen: 2.282 ppbv
RT: 4.38 min Scan# 448
Delta R.T. 0.02 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Instrument :
MSVOA_L
ClientSampleId :
SG-2-MUSIC-ROOM

Tot Ion: 59 Resp: 42401
Ion Ratio Lower Upper
59 100
57 13.7 7.8 11.8#

Manual Integrations
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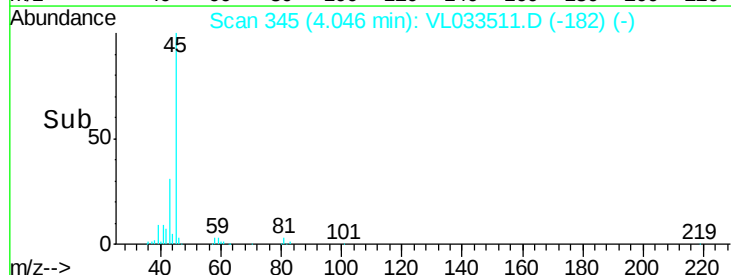
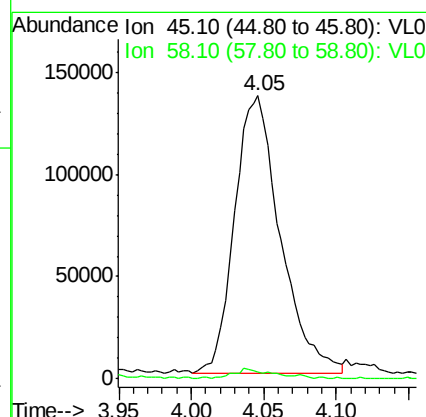
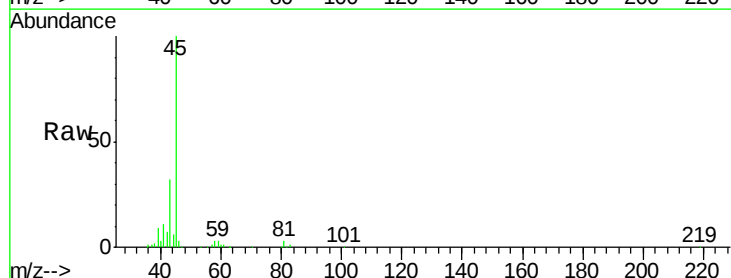
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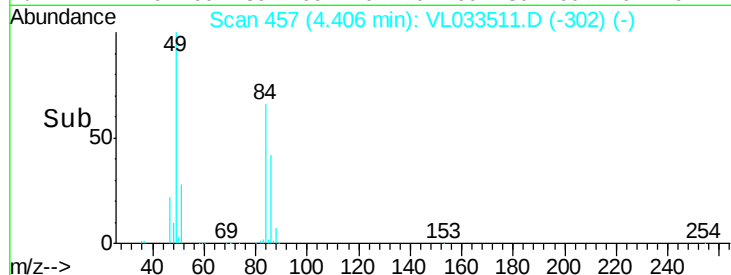
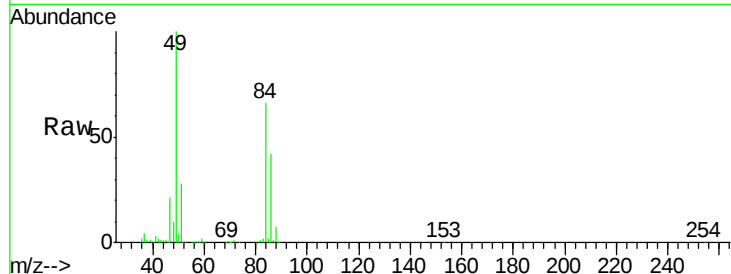
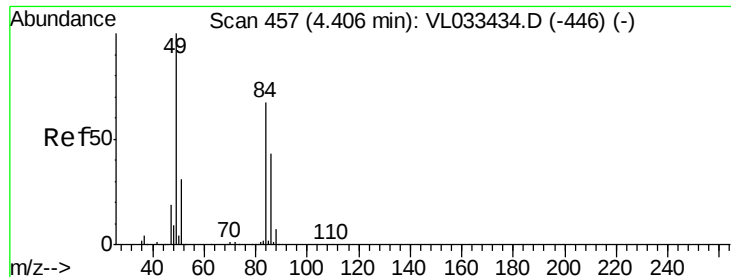


#19

Isopropyl Alcohol
Concen: 4.673 ppbv
RT: 4.05 min Scan# 345
Delta R.T. 0.03 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

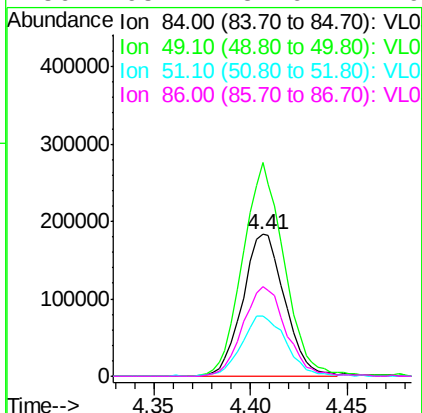
Tgt Ion: 45 Resp: 298678
Ion Ratio Lower Upper
45 100
58 3.9 1.4 2.2#





#20
Methvlene Chloride
Concen: 6.491 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

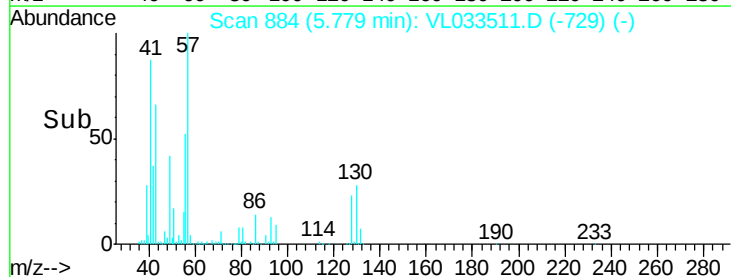
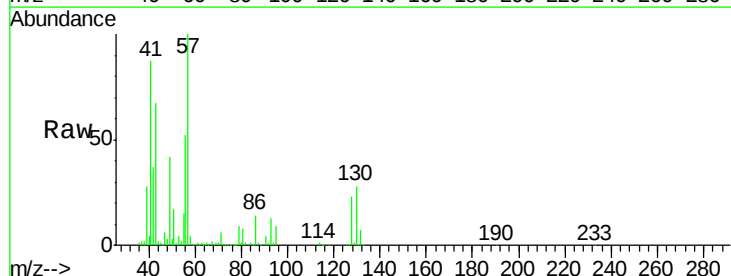
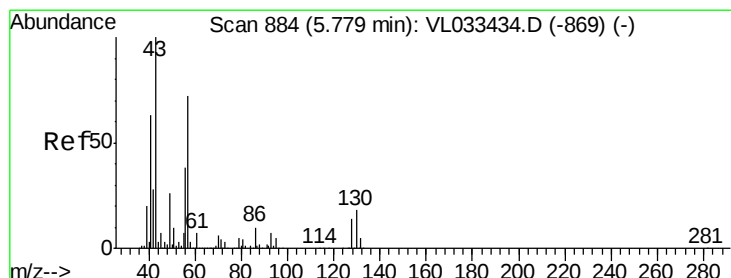
Tot Ion	84	Resp	278442
Ion Ratio	Lower	Upper	
84	100		
49	150.5	120.0	180.0
51	42.2	36.7	55.1
86	63.4	51.9	77.9



Instrument :
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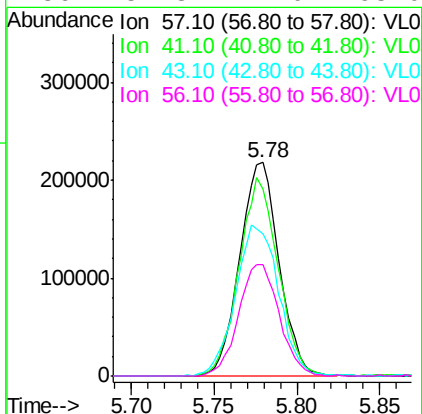
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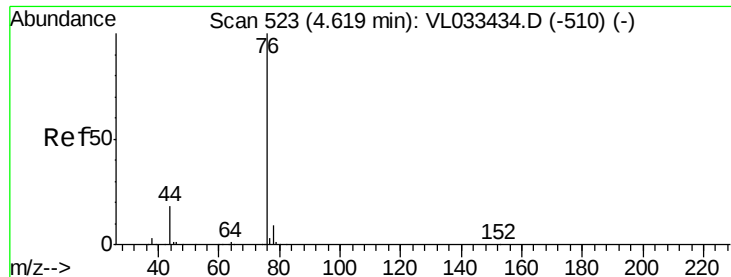
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#26
Hexane
Concen: 4.299 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Tgt Ion	57	Resp	358423
Ion Ratio	Lower	Upper	
57	100		
41	92.7	70.7	106.1
43	78.1	182.6	274.0#
56	54.3	42.0	63.0





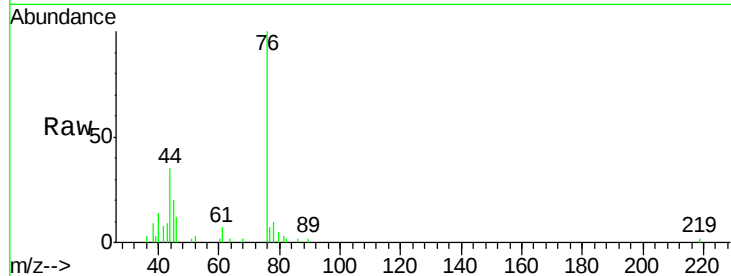
#27
Carbon Disulfide
Concen: 0.146 ppbv
RT: 4.62 min Scan# 523
Delta R.T. -0.00 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Instrument :
MSVOA_L
ClientSampleId :
SG-2-MUSIC-ROOM

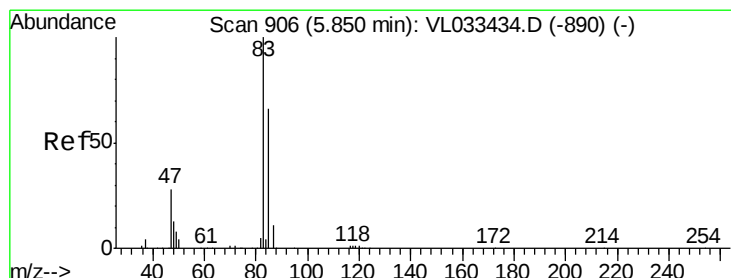
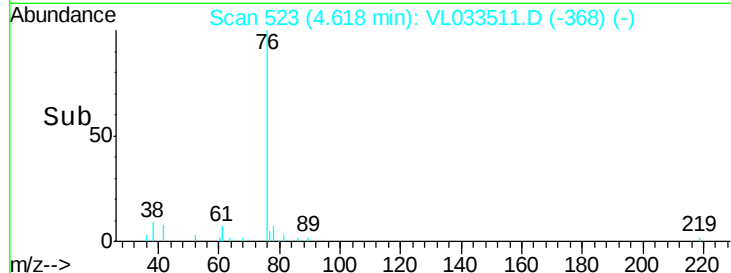
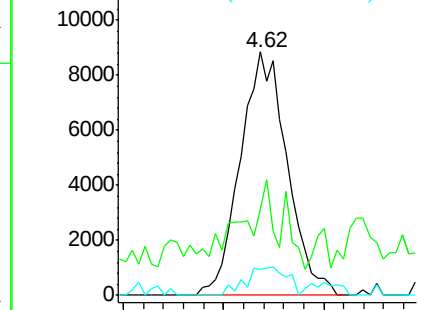
Tot Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.8	22.2#
78	0.0	7.6	11.4#

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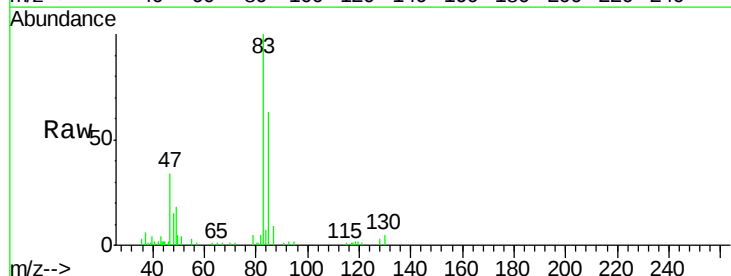


Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0

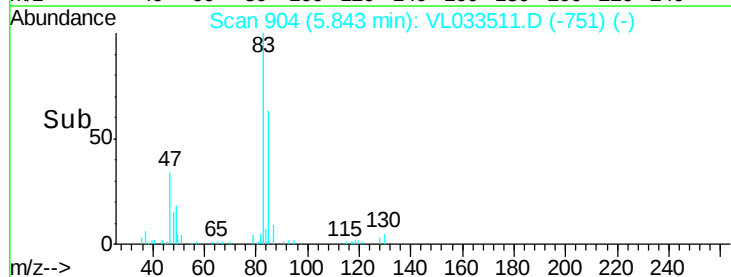
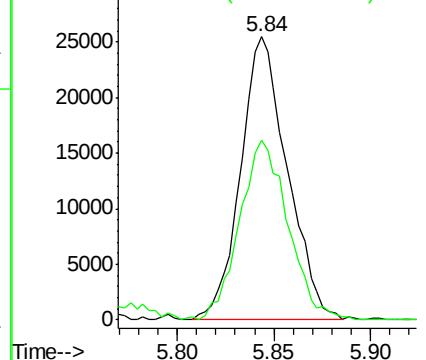


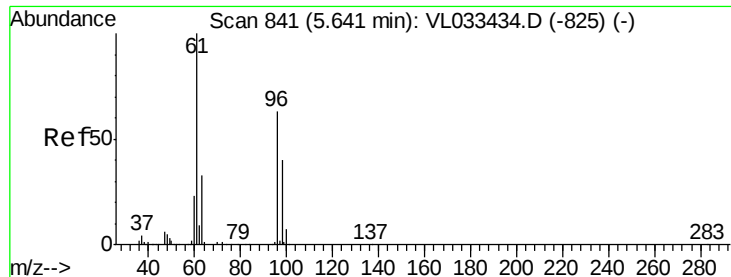
#29
Chloroform
Concen: 0.299 ppbv
RT: 5.84 min Scan# 904
Delta R.T. -0.01 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.4	52.6	79.0



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





#31

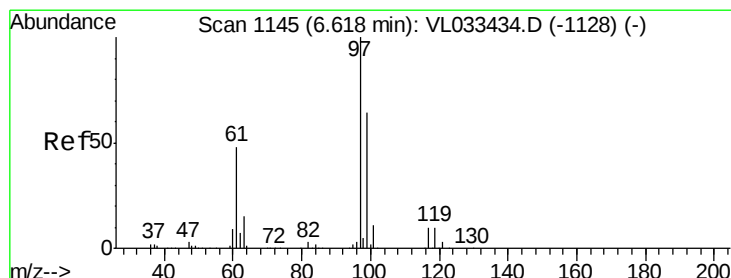
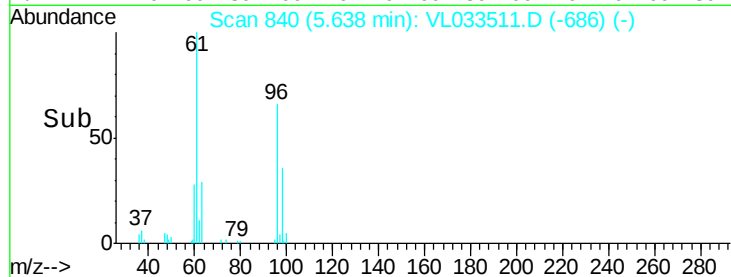
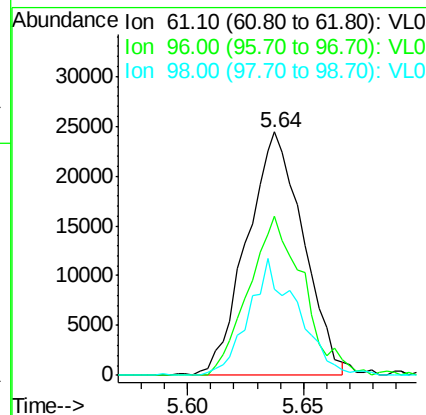
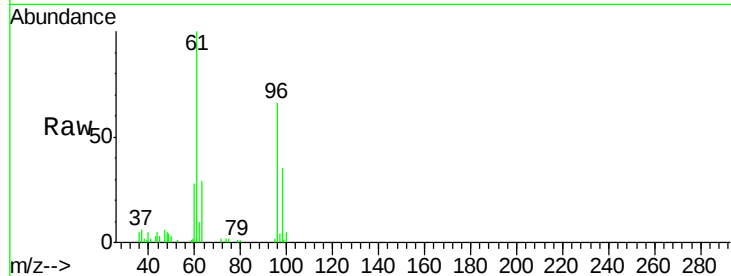
cis-1,2-Dichloroethene
 Concen: 0.498 ppbv
 RT: 5.64 min Scan# 840
 Delta R.T. -0.00 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2-MUSIC-ROOM

Tot Ion	Ratio	Lower	Upper
61	100		
96	65.6	50.6	76.0
98	36.5	32.2	48.2

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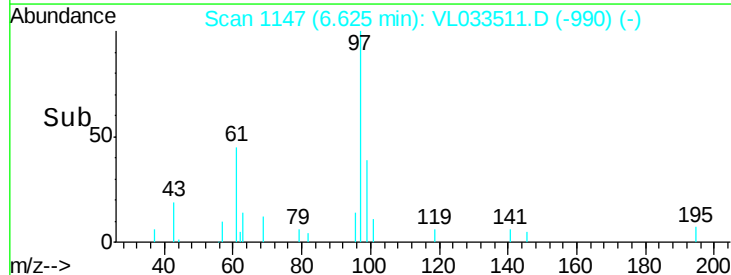
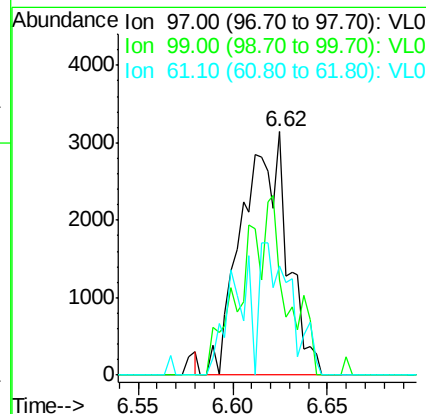
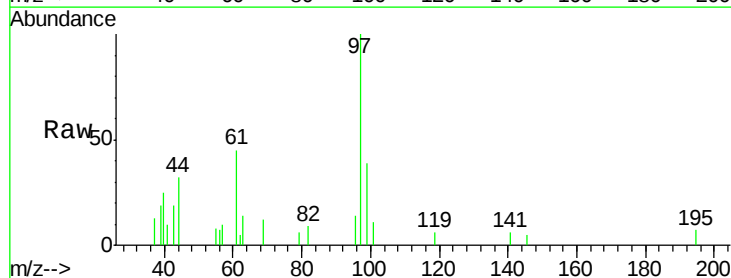
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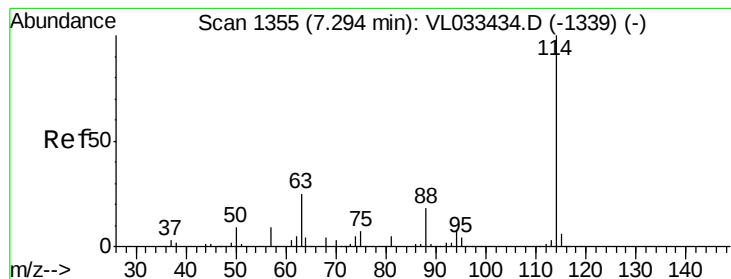


#32

1,1,1-Trichloroethane
 Concen: 0.038 ppbv m
 RT: 6.62 min Scan# 1147
 Delta R.T. 0.01 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	51.5	77.3#
61	59.3	38.8	58.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.00 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2-MUSIC-ROOM

Tot Ion:114 Resp: 1971872

Ion Ratio Lower Upper

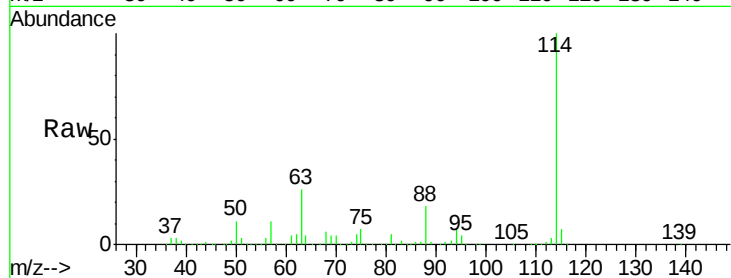
114 100

63 26.9 21.5 32.3

88 17.8 14.5 21.7

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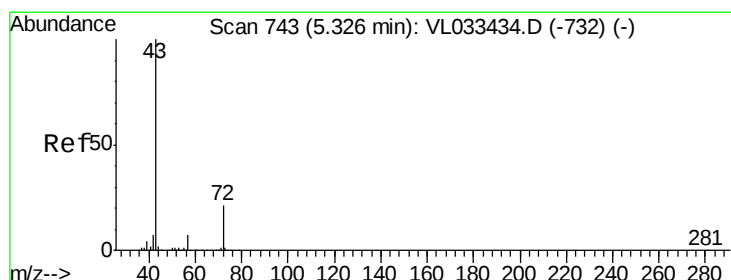
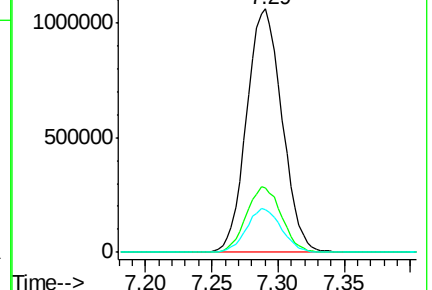
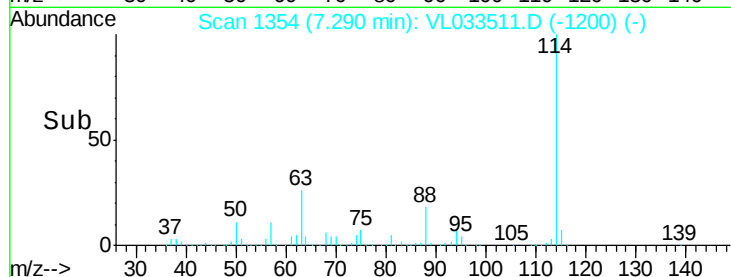
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Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.803 ppbv

RT: 5.33 min Scan# 745

Delta R.T. 0.01 min

Lab File: VL033511.D

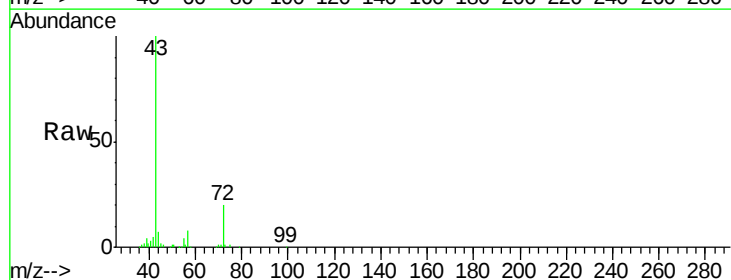
Acq: 29 Mar 2019 20:54

Tgt Ion: 43 Resp: 95130

Ion Ratio Lower Upper

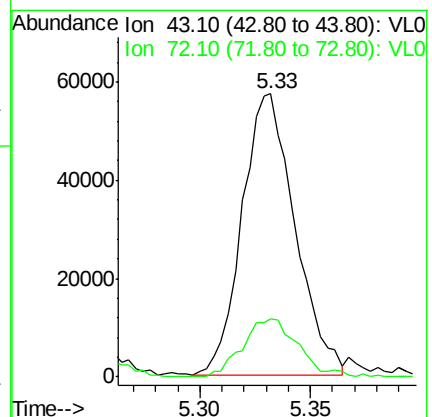
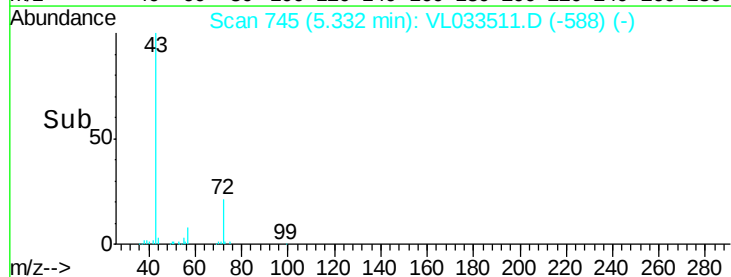
43 100

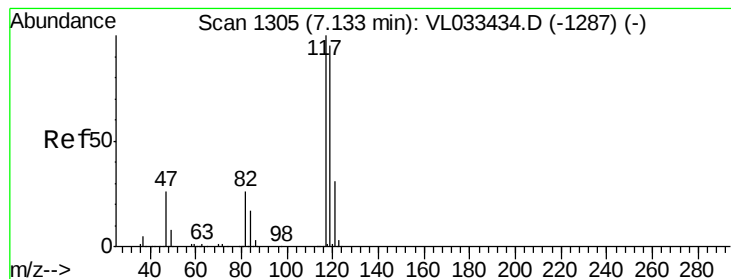
72 21.9 17.4 26.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.098 ppbv m

RT: 7.13 min Scan# 1303

Delta R.T. -0.01 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Instrument :

MSVOA_L

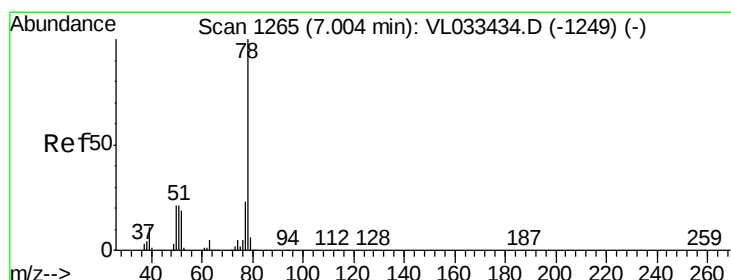
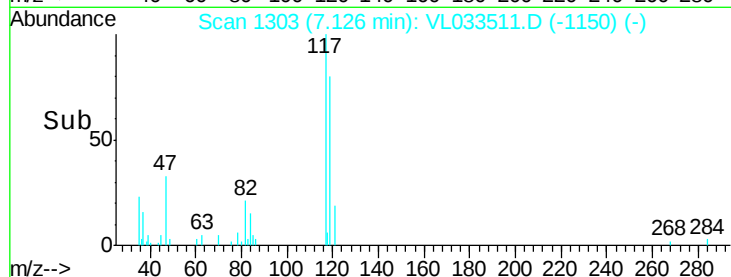
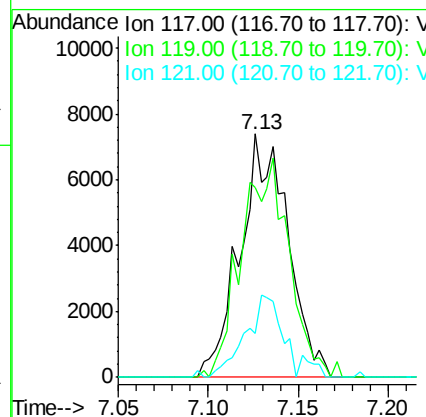
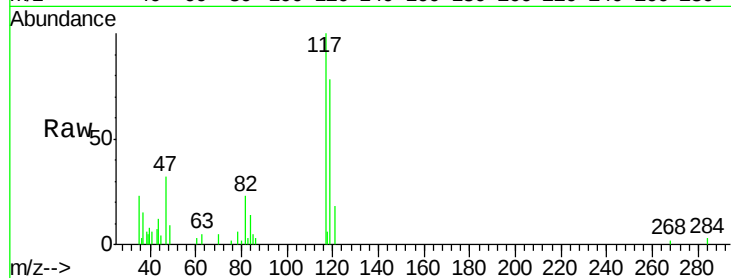
ClientSampleId :

SG-2-MUSIC-ROOM

Tot Ion	Ratio	Lower	Upper
117	100		
119	77.8	75.8	113.8
121	18.3	24.7	37.1#

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#36

Benzene

Concen: 0.460 ppbv

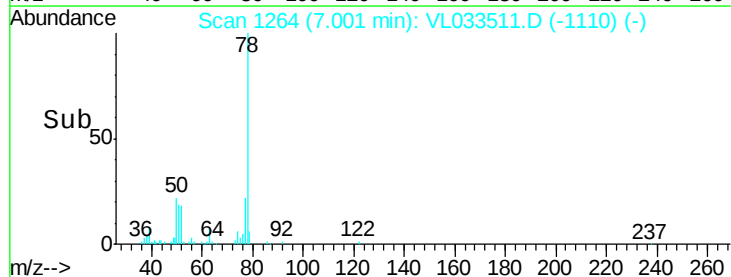
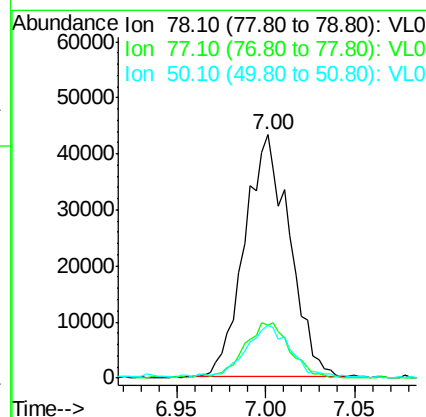
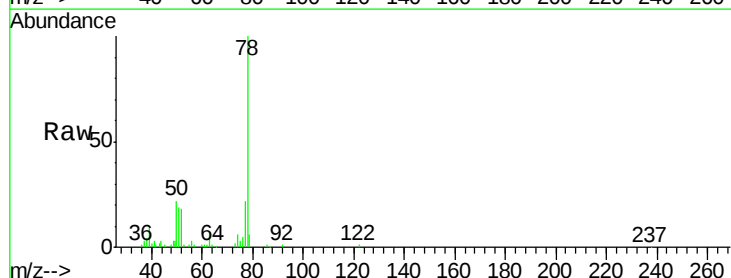
RT: 7.00 min Scan# 1264

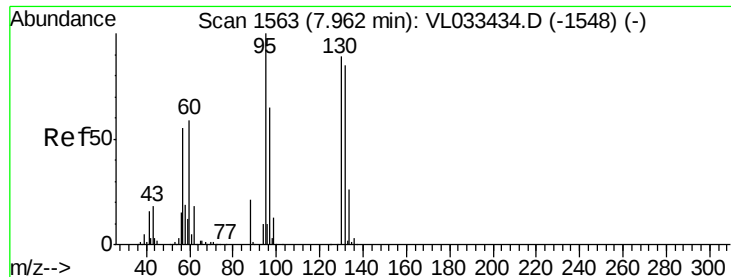
Delta R.T. -0.00 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.8	18.1	27.1
50	22.0	16.7	25.1





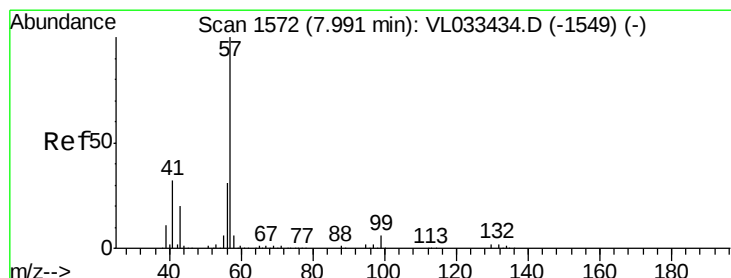
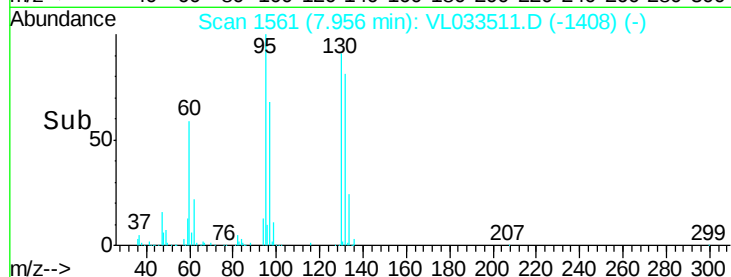
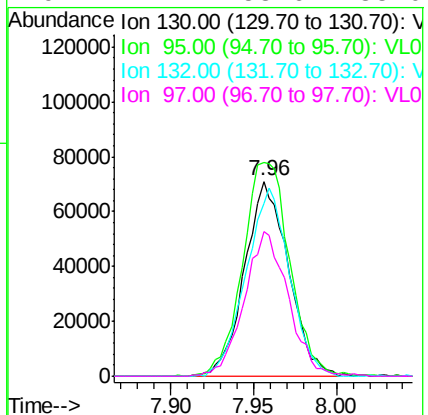
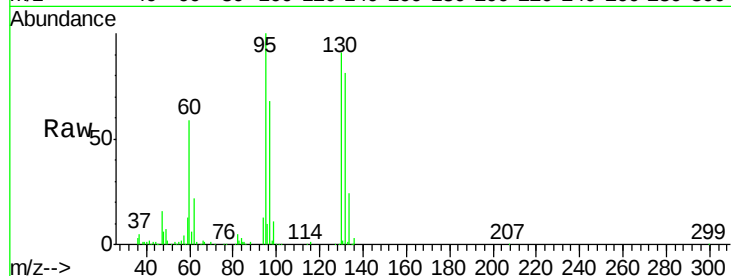
#38
 Trichloroethene
 Concen: 2.088 ppbv
 RT: 7.96 min Scan# 1561
 Delta R.T. -0.01 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2-MUSIC-ROOM

Tot Ion	Ratio	Lower	Upper
130	100		
95	109.7	89.8	134.8
132	88.6	76.6	115.0
97	74.4	58.6	88.0

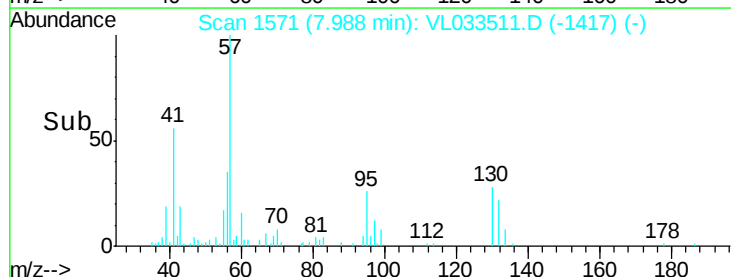
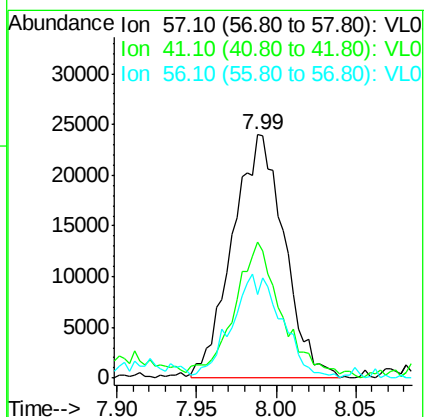
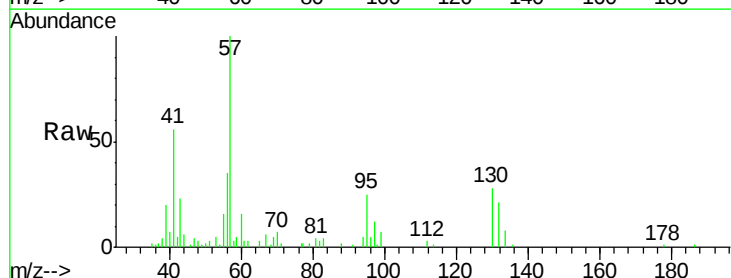
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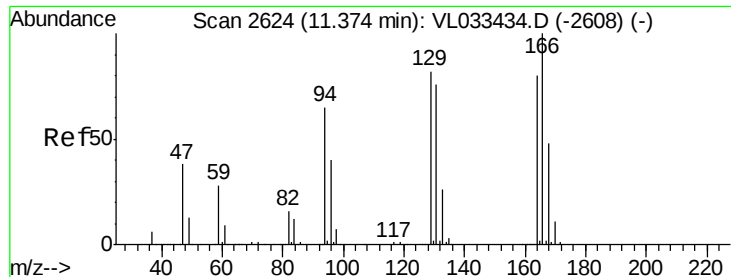
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#44
 2,2,4-Trimethylpentane
 Concen: 0.188 ppbv m
 RT: 7.99 min Scan# 1571
 Delta R.T. -0.00 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Tgt Ion	Ratio	Lower	Upper
57	100		
41	50.2	26.0	39.0#
56	42.2	24.6	37.0#





#52

Tetrachloroethene

Concen: 0.040 ppbv m

RT: 11.37 min Scan# 2624

Delta R.T. -0.00 min

Lab File: VL033511.D

Acq: 29 Mar 2019 20:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2-MUSIC-ROOM

Tot Ion:164 Resp: 2516

Ion Ratio Lower Upper

164 100

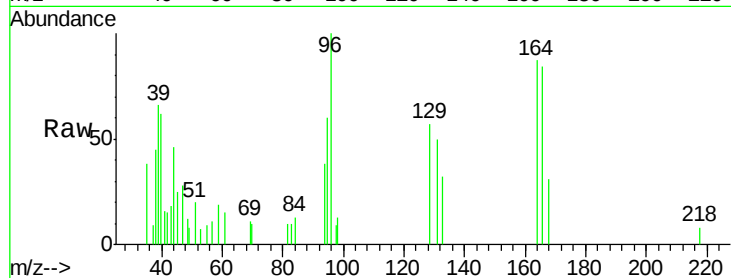
166 95.7 99.5 149.3#

129 65.8 81.4 122.2#

131 57.3 75.6 113.4#

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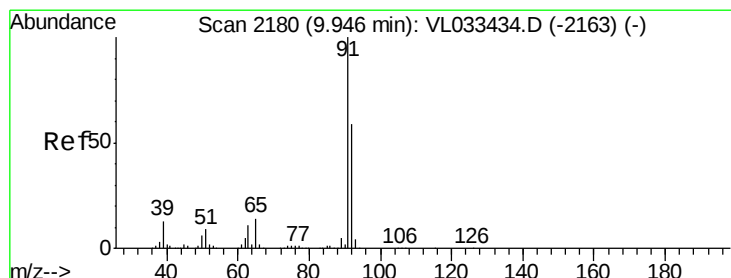
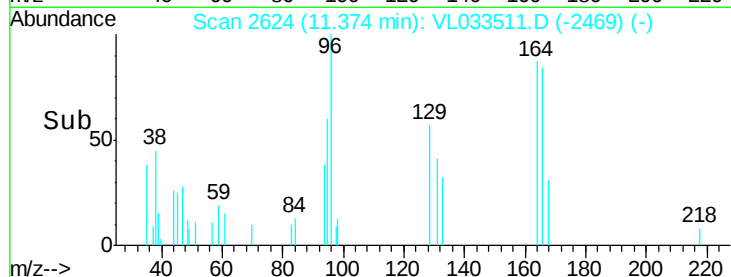
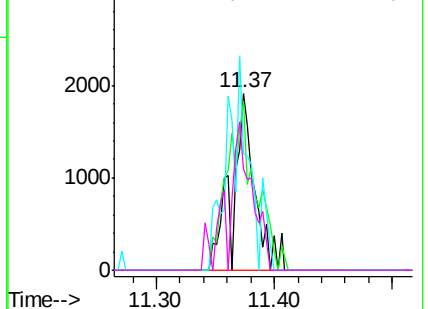


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 2.413 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.00 min

Lab File: VL033511.D

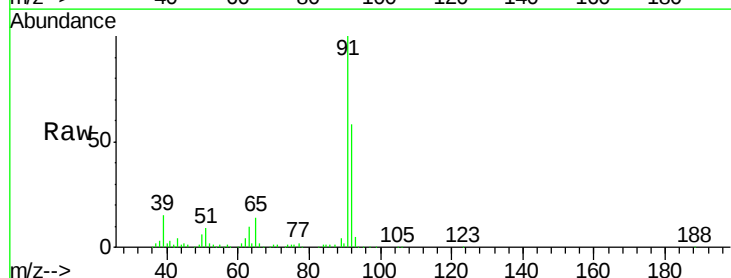
Acq: 29 Mar 2019 20:54

Tgt Ion: 91 Resp: 464003

Ion Ratio Lower Upper

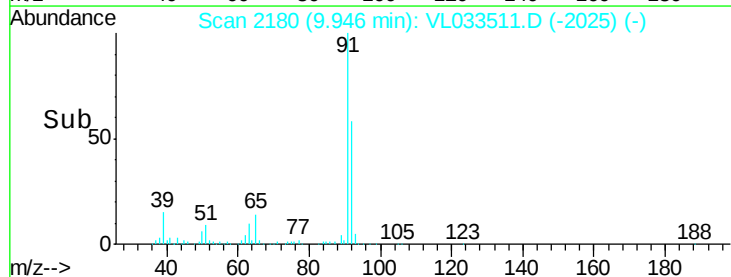
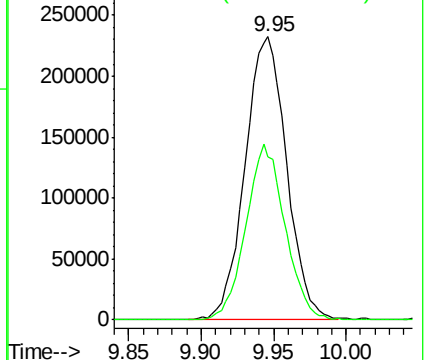
91 100

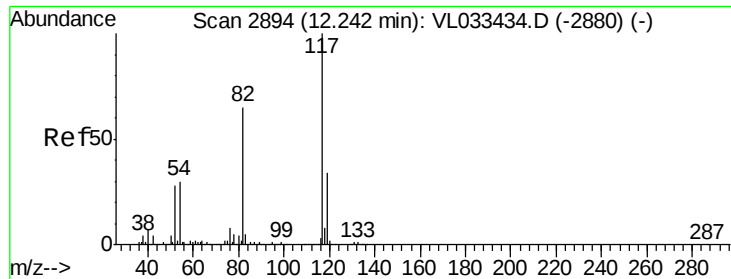
92 58.4 47.4 71.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





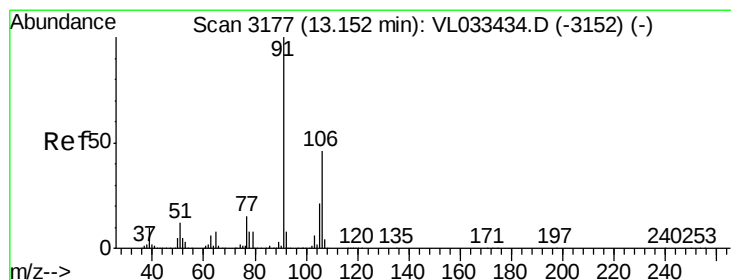
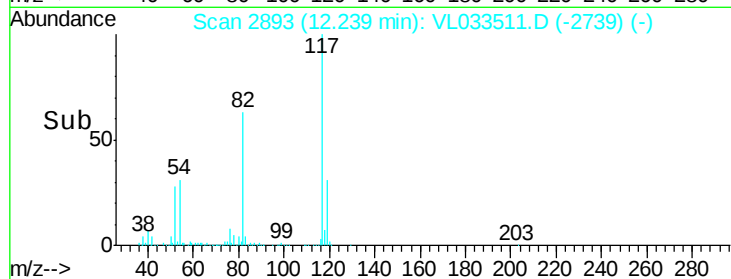
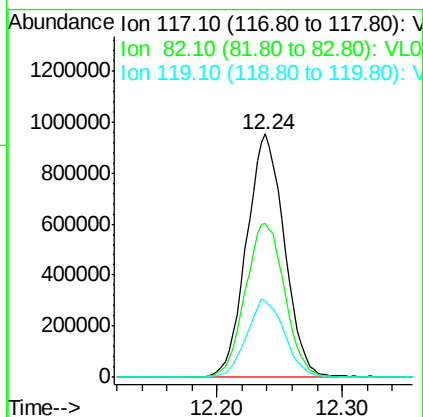
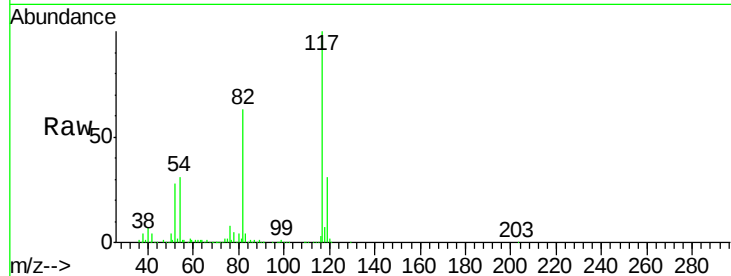
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. -0.00 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Instrument :
MSVOA_L
ClientSampleId :
SG-2-MUSIC-ROOM

Tot Ion	Ratio	Lower	Upper
117	100		
82	66.1	51.5	77.3
119	32.1	25.5	38.3

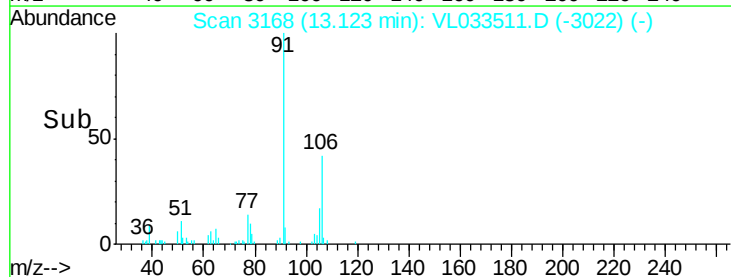
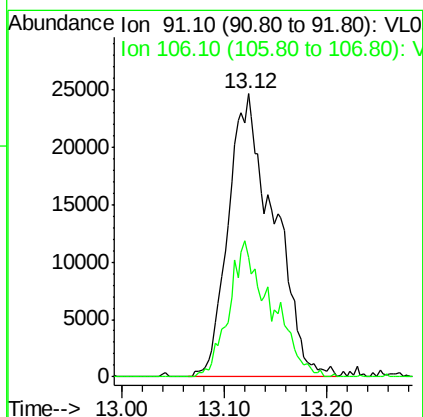
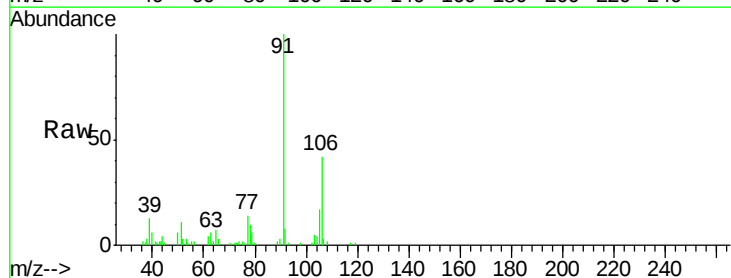
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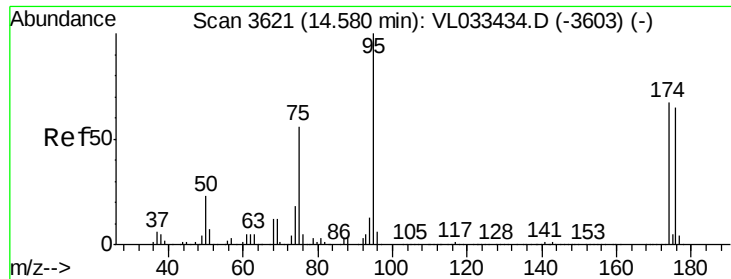
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#59
m/p-Xylene
Concen: 0.320 ppbv m
RT: 13.12 min Scan# 3168
Delta R.T. -0.03 min
Lab File: VL033511.D
Acq: 29 Mar 2019 20:54

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.743 ppbv
 RT: 14.58 min Scan# 3620
 Delta R.T. -0.00 min
 Lab File: VL033511.D
 Acq: 29 Mar 2019 20:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2-MUSIC-ROOM

Tot Ion: 95 Resp: 1521230
 Ion Ratio Lower Upper
 95 100
 174 66.6 52.9 79.3
 175 4.7 3.8 5.6

Manual Integrations
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