

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032919\
 Data File : VL033525.D
 Acq On : 30 Mar 2019 6:15
 Operator : SY/AP
 Sample : K2042-09
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1-MAIN-DECT-ROOM

Manual Integrations
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MMDadoda
 4/1/2019 4:03:33 AM

Quant Time: Mar 31 01:01:40 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	816619	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1794987	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1844519	10.00	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	1437729	9.94	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.40%
Target Compounds						
					Ovalue	
2) Dichlorodifluoromethane	3.08	85	68987	0.579	ppbv	98
4) Chloromethane	3.17	50	22046	0.443	ppbv	89
9) Propene	3.05	41	67664m	1.714	ppbv	
10) Heptane	8.25	43	18046m	0.171	ppbv	
11) Trichlorofluoromethane	4.00	101	41981	0.286	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.56	101	8429m	0.085	ppbv	
13) Ethanol	3.67	45	1979284	193.729	ppbv	65
15) Acetone	3.90	43	1232563	12.553	ppbv	99
17) tert-Butyl alcohol	4.38	59	19181m	1.062	ppbv	
19) Isopropyl Alcohol	4.05	45	208620	3.359	ppbv #	1
20) Methylene Chloride	4.41	84	522823	12.544	ppbv	98
26) Hexane	5.78	57	574608	7.094	ppbv #	41
29) Chloroform	5.85	83	96327	0.694	ppbv	88
31) cis-1,2-Dichloroethene	5.64	61	83604	1.038	ppbv	96
34) 2-Butanone	5.34	43	109466	1.015	ppbv	97
35) Carbon Tetrachloride	7.13	117	10214m	0.080	ppbv	
36) Benzene	7.00	78	55414	0.368	ppbv	98
38) Trichloroethene	7.96	130	660531	11.653	ppbv	99
44) 2,2,4-Trimethylpentane	7.98	57	67554m	0.257	ppbv	
52) Tetrachloroethene	11.37	164	14325m	0.252	ppbv	
53) Toluene	9.95	91	622451	3.556	ppbv	100
58) Ethyl Benzene	12.87	91	34314m	0.139	ppbv	
59) m/p-Xylene	13.12	91	101090m	0.459	ppbv	
60) o-Xylene	13.85	91	31950m	0.150	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	26663	0.109	ppbv #	71

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion: 49 Resp: 816619

Ion Ratio Lower Upper

49 100

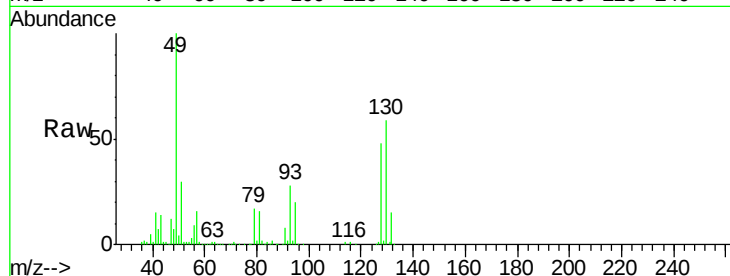
128 48.2 24.0 72.0

130 61.5 31.2 93.6

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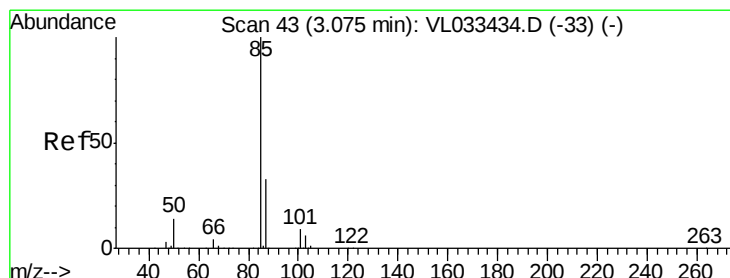
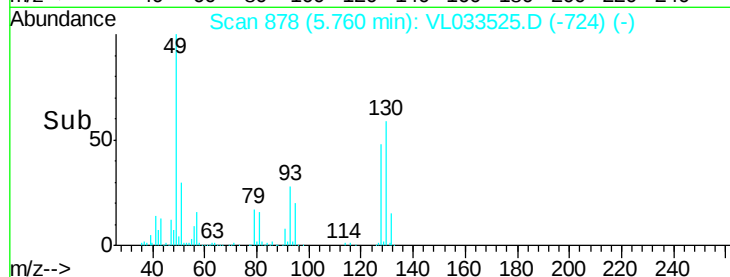
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.76

Time-->



#2

Dichlorodifluoromethane

Concen: 0.579 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033525.D

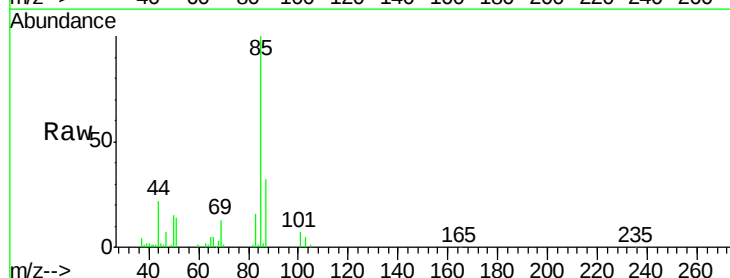
Acq: 30 Mar 2019 6:15

Tgt Ion: 85 Resp: 68987

Ion Ratio Lower Upper

85 100

87 32.3 26.7 40.1

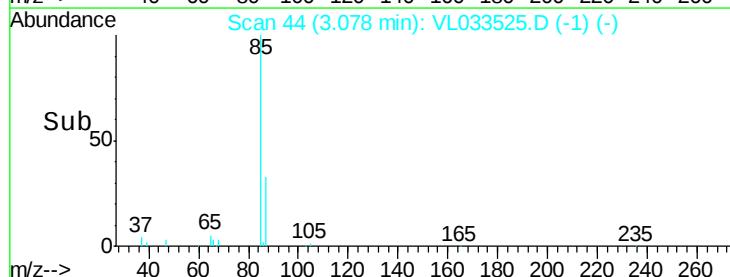


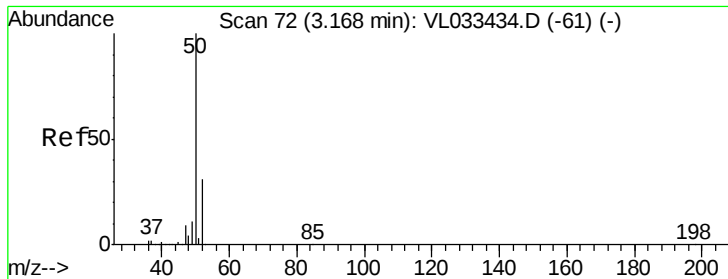
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.08

Time-->





#4

Chloromethane

Concen: 0.443 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion: 50 Resp: 22046

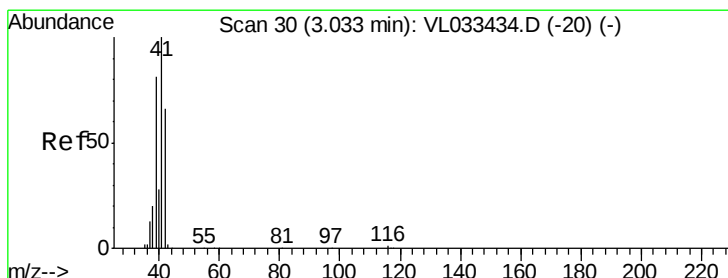
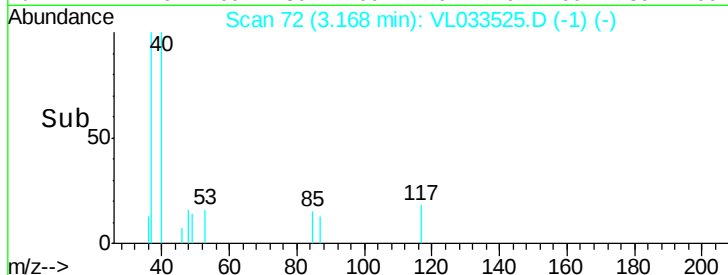
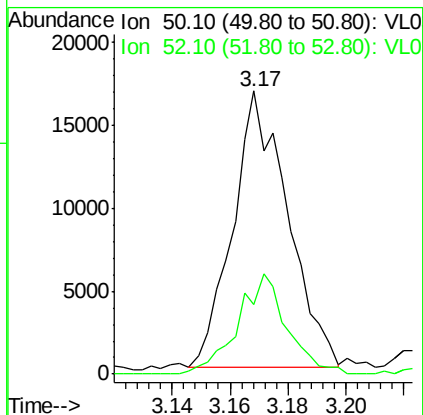
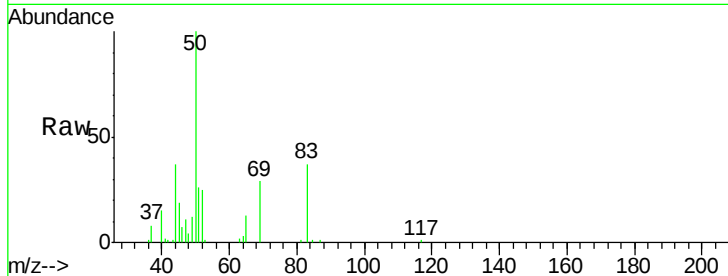
Ion Ratio Lower Upper

50 100

52 25.3 25.0 37.6

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#9

Propene

Concen: 1.714 ppbv m

RT: 3.05 min Scan# 34

Delta R.T. 0.01 min

Lab File: VL033525.D

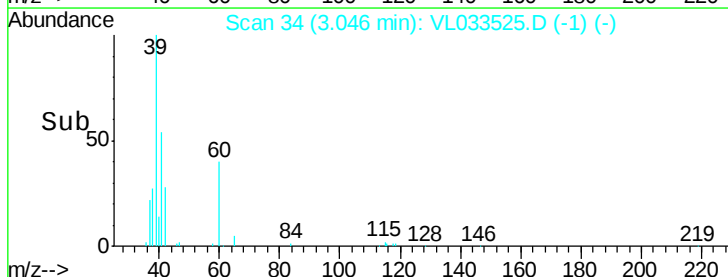
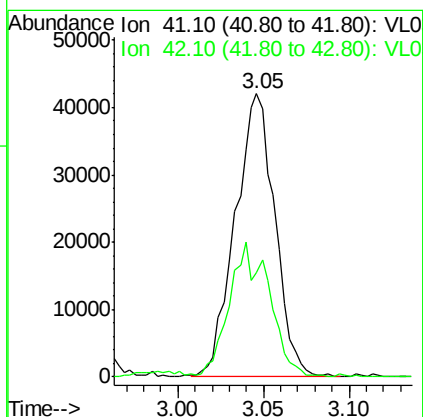
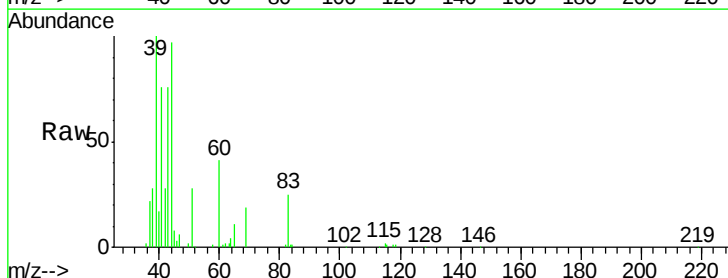
Acq: 30 Mar 2019 6:15

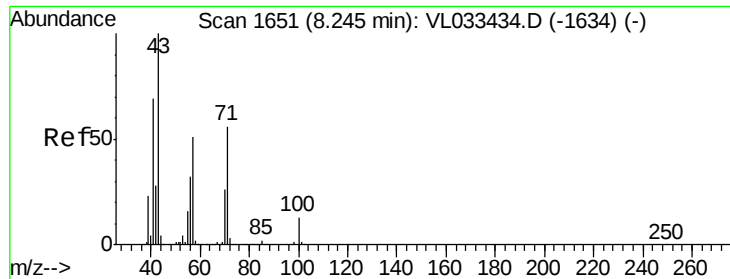
Tgt Ion: 41 Resp: 67664

Ion Ratio Lower Upper

41 100

42 197.9 53.9 80.9#





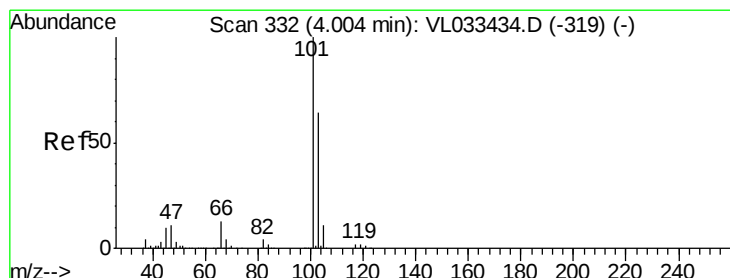
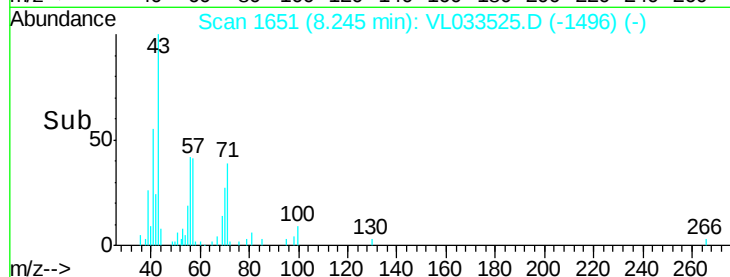
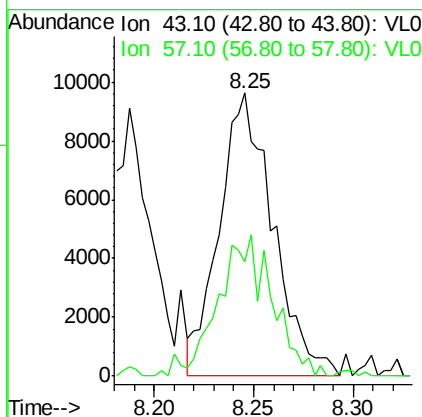
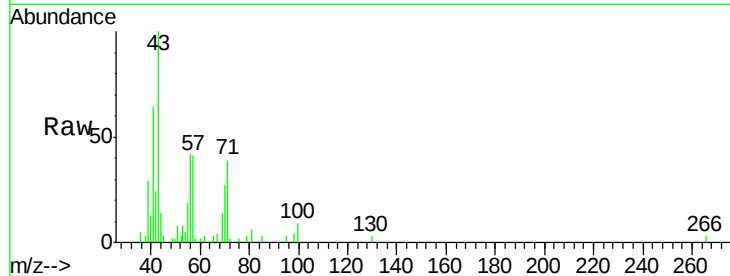
#10
 Heptane
 Concen: 0.171 ppbv m
 RT: 8.25 min Scan# 1651
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1-MAIN-DECT-ROOM

Tot Ion: 43 Resp: 18046
 Ion Ratio Lower Upper
 43 100
 57 50.3 40.6 60.8

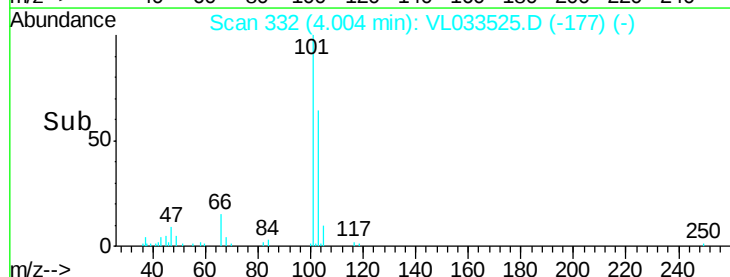
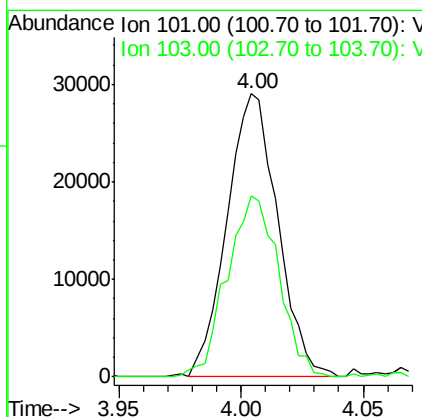
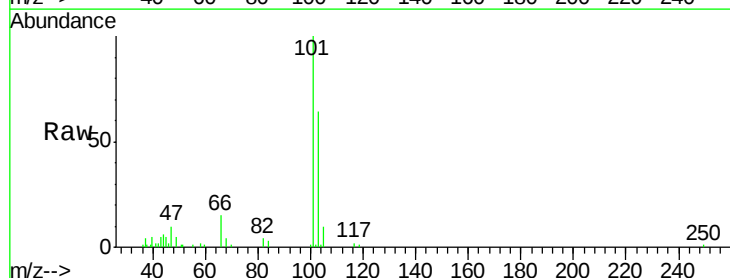
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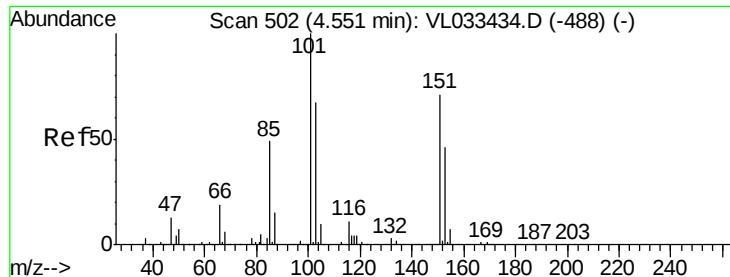
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#11
 Trichlorofluoromethane
 Concen: 0.286 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Tgt Ion: 101 Resp: 41981
 Ion Ratio Lower Upper
 101 100
 103 63.1 51.3 76.9





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.085 ppbv m

RT: 4.56 min Scan# 504

Delta R.T. 0.01 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion:101 Resp: 8429

Ion Ratio Lower Upper

101 100

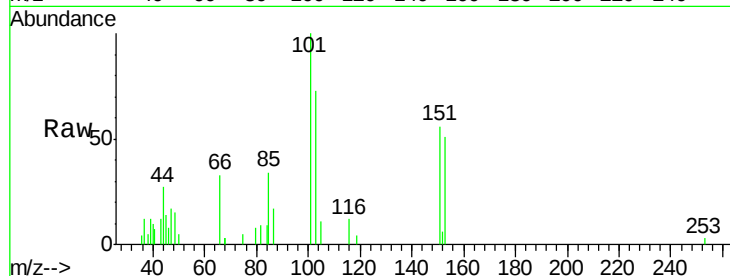
151 64.6 57.7 86.5

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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

6000

5000

4000

3000

2000

1000

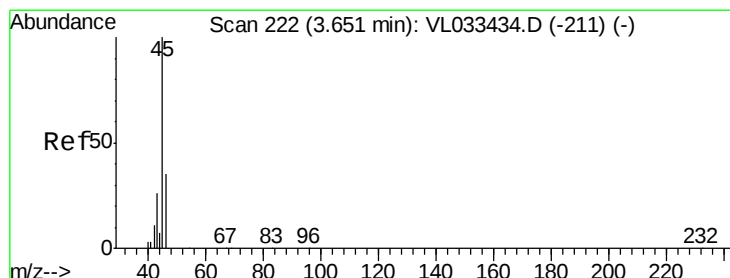
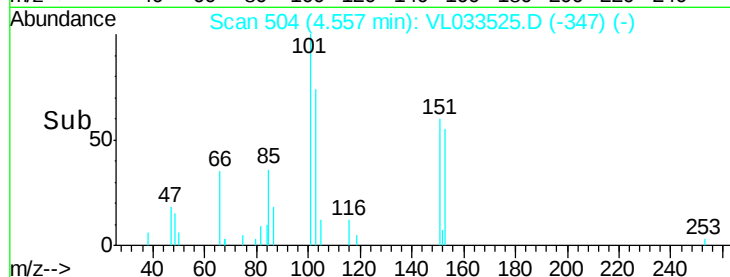
0

4.50

4.55

4.60

Time-->



#13

Ethanol

Concen: 193.729 ppbv

RT: 3.67 min Scan# 229

Delta R.T. 0.02 min

Lab File: VL033525.D

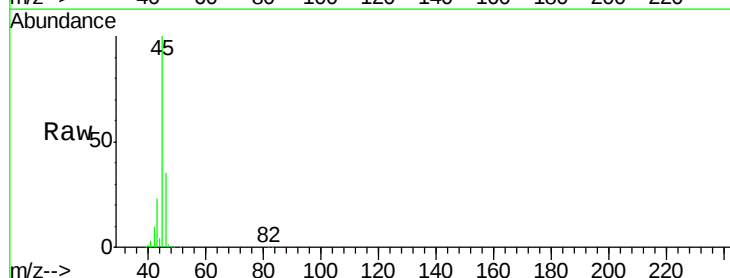
Acq: 30 Mar 2019 6:15

Tgt Ion: 45 Resp: 1979284

Ion Ratio Lower Upper

45 100

46 36.4 25.4 101.8



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0

1000000

800000

600000

400000

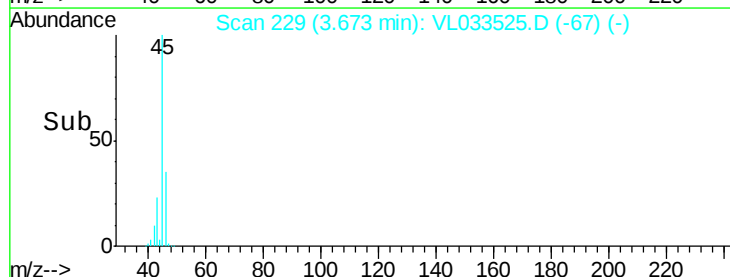
200000

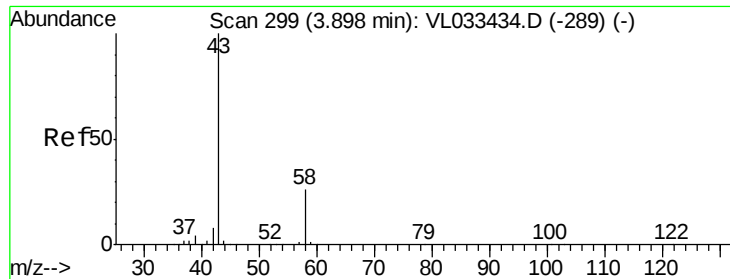
0

3.60

3.70

Time-->





#15

Acetone

Concen: 12.553 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion: 43 Resp: 1232563

Ion Ratio Lower Upper

43 100

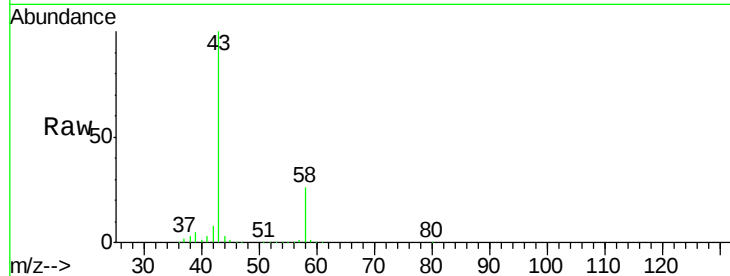
58 25.1 20.5 30.7

Manual Integrations

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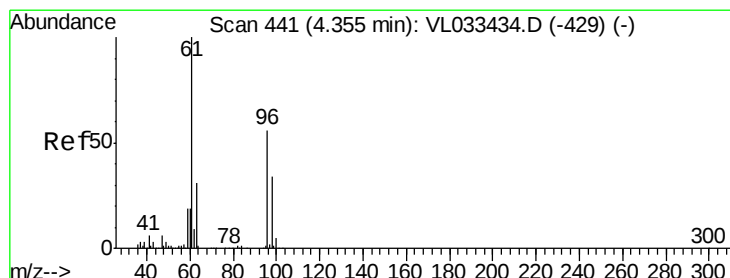
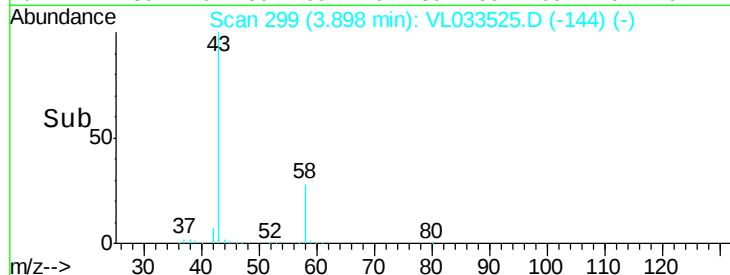
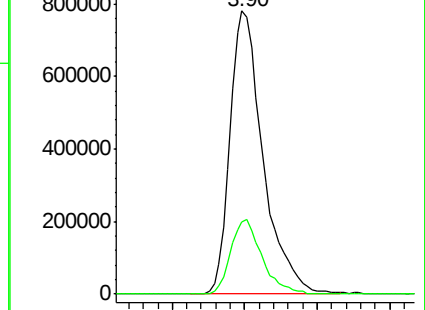
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 1.062 ppbv m

RT: 4.38 min Scan# 450

Delta R.T. 0.03 min

Lab File: VL033525.D

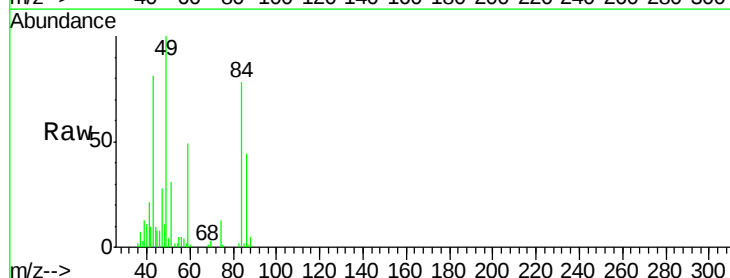
Acq: 30 Mar 2019 6:15

Tgt Ion: 59 Resp: 19181

Ion Ratio Lower Upper

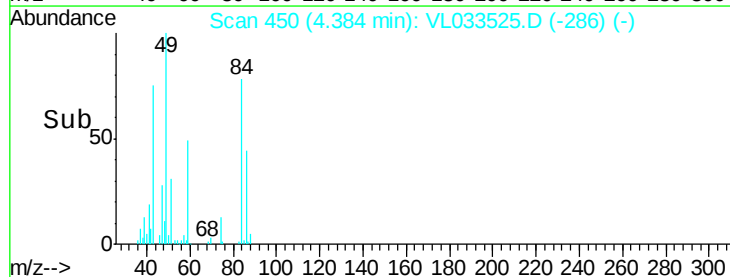
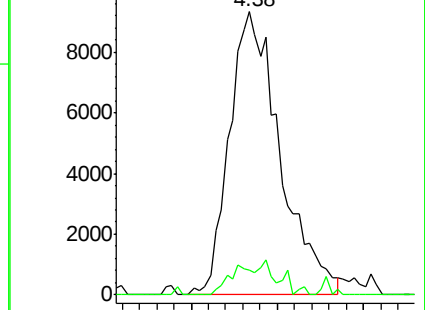
59 100

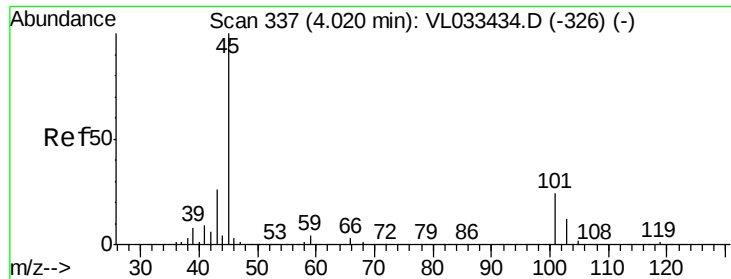
57 0.0 7.8 11.8#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

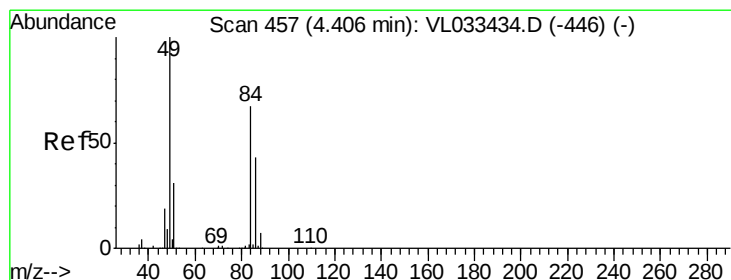
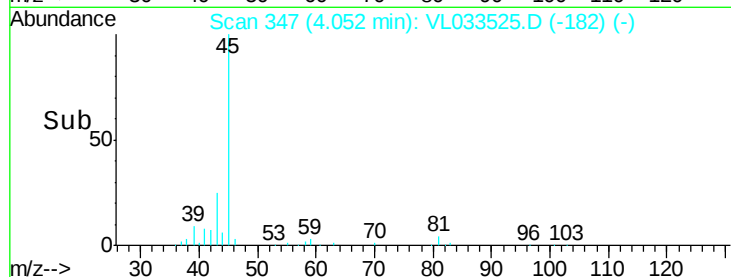
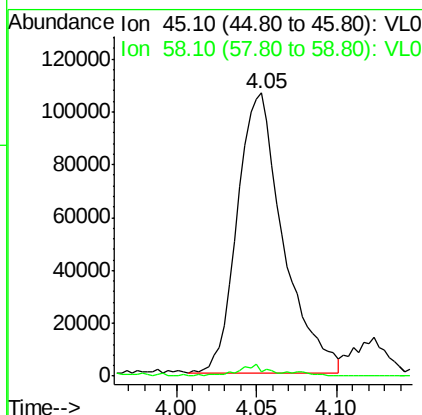
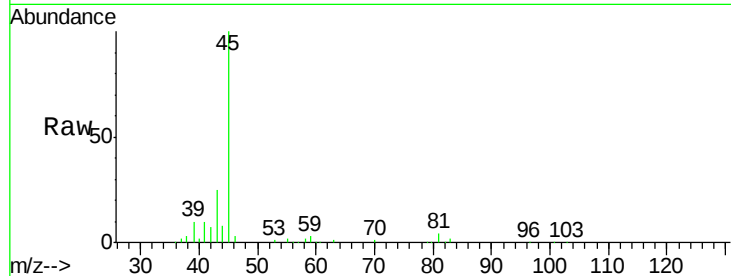
Isopropyl Alcohol
 Concen: 3.359 ppbv
 RT: 4.05 min Scan# 347
 Delta R.T. 0.03 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1-MAIN-DECT-ROOM

Tot Ion	45	58	Ratio	100	149.0	Resp	208620	Lower	Upper
45	100								
58		149.0						1.4	2.2#

Manual Integrations
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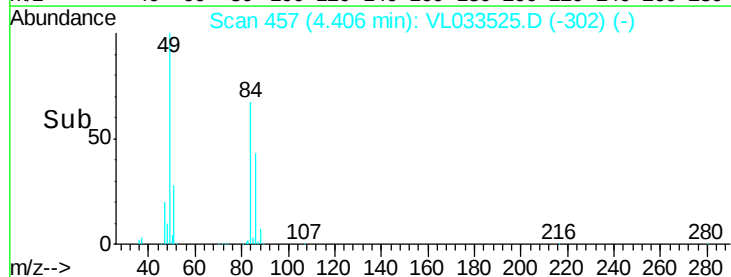
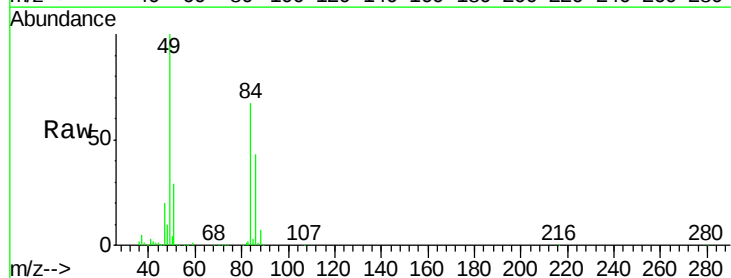
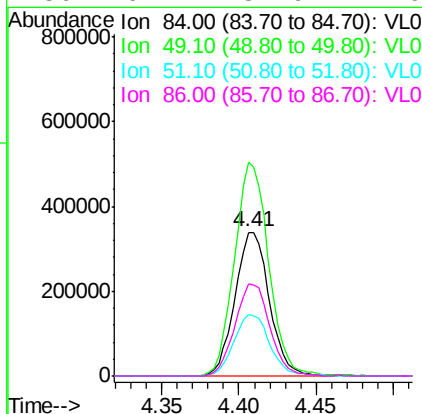
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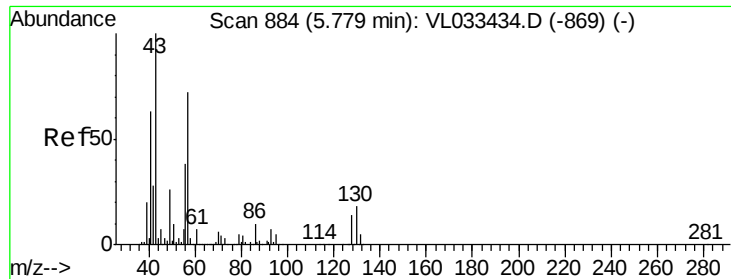


#20

Methylene Chloride
 Concen: 12.544 ppbv
 RT: 4.41 min Scan# 457
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Tgt Ion	84	49	51	86	Ratio	100	148.9	42.3	64.1	Resp	522823	Lower	Upper
84	100												
49		148.9					120.0					180.0	
51			42.3				36.7					55.1	
86				64.1			51.9					77.9	





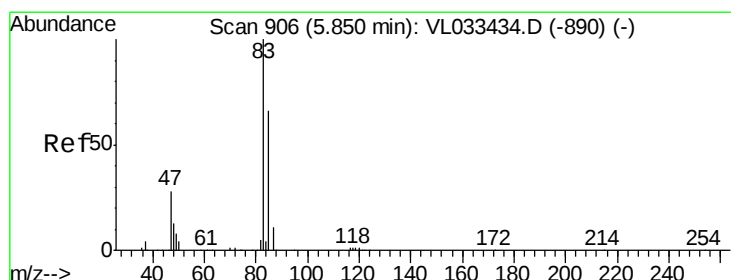
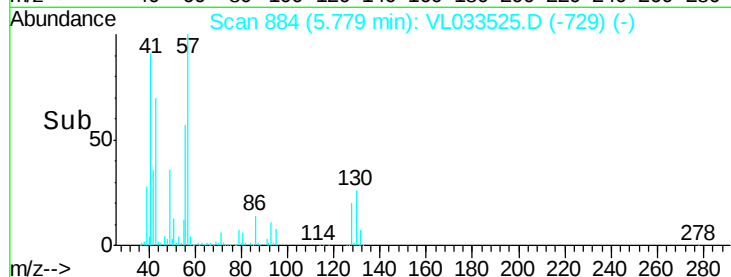
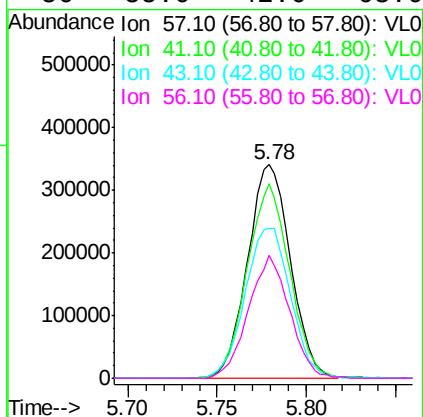
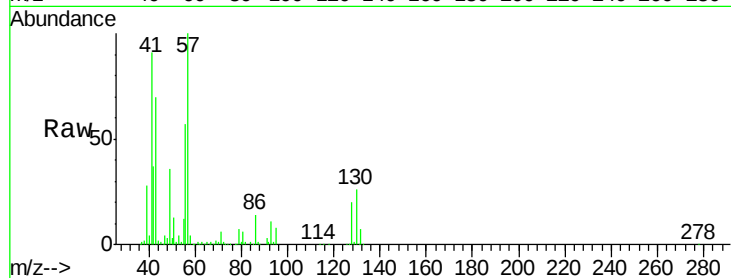
#26
Hexane
Concen: 7.094 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033525.D
Acq: 30 Mar 2019 6:15

Instrument :
MSVOA_L
ClientSampleId :
SG-1-MAIN-DECT-ROOM

Tot Ion	Ratio	Lower	Upper
57	100		
41	90.6	70.7	106.1
43	74.8	182.6	274.0#
56	55.0	42.0	63.0

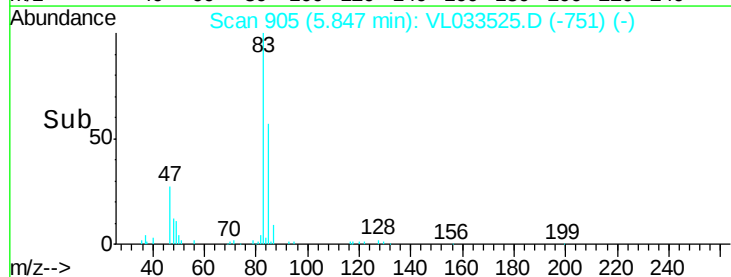
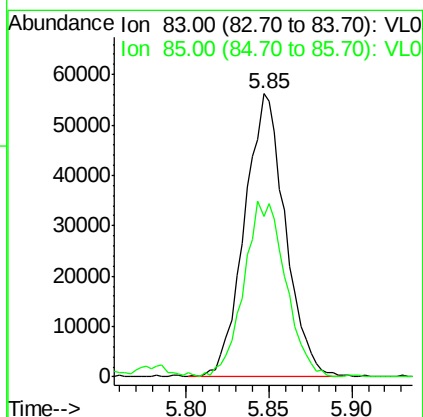
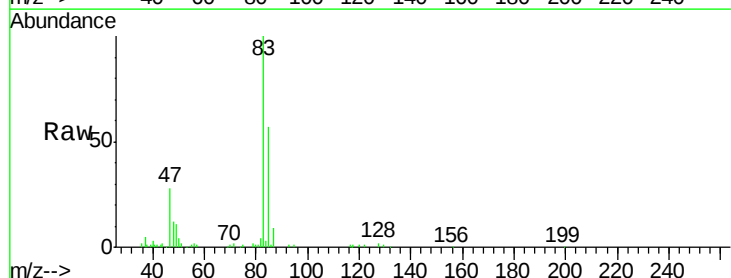
Manual Integrations
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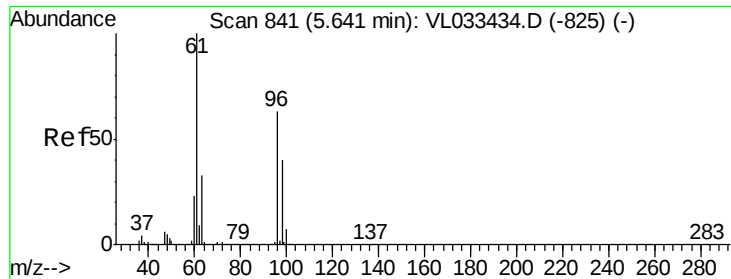
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#29
Chloroform
Concen: 0.694 ppbv
RT: 5.85 min Scan# 905
Delta R.T. -0.00 min
Lab File: VL033525.D
Acq: 30 Mar 2019 6:15

Tgt Ion	Ratio	Lower	Upper
83	100		
85	56.6	52.6	79.0





#31

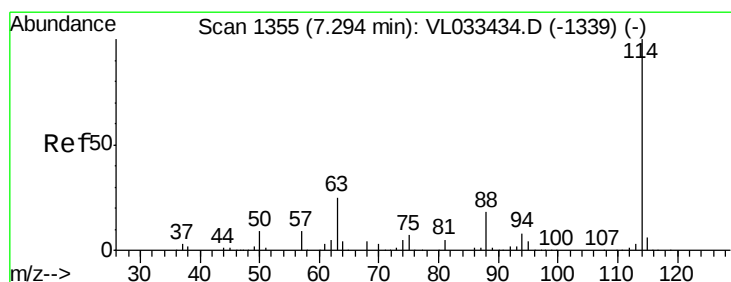
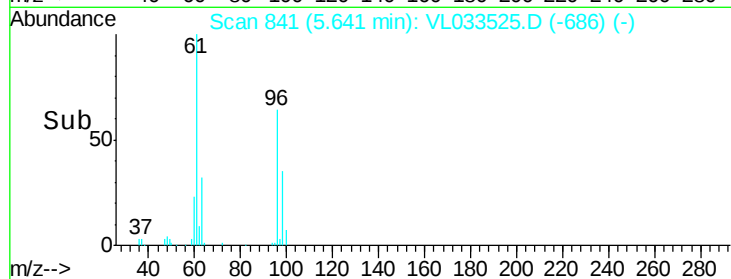
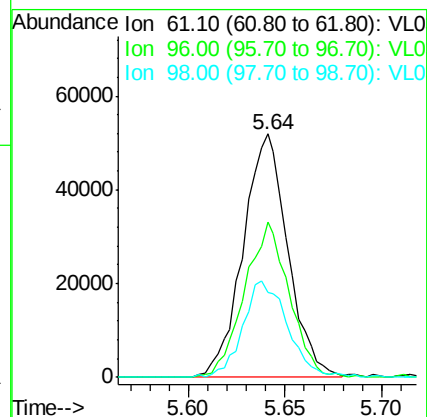
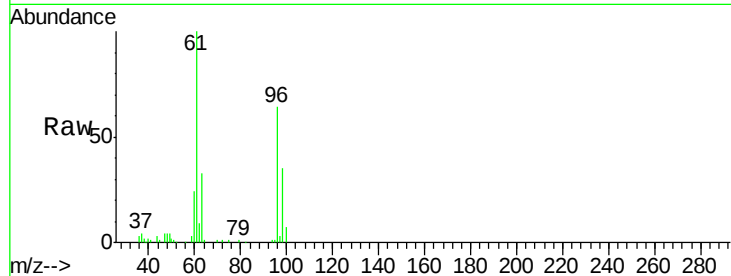
cis-1,2-Dichloroethene
 Concen: 1.038 ppbv
 RT: 5.64 min Scan# 841
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1-MAIN-DECT-ROOM

Tot Ion	Ratio	Lower	Upper
61	100		
96	64.1	50.6	76.0
98	34.9	32.2	48.2

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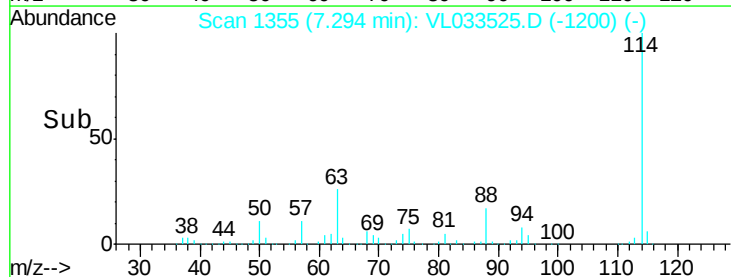
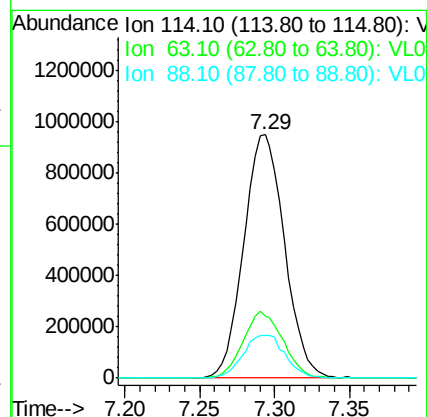
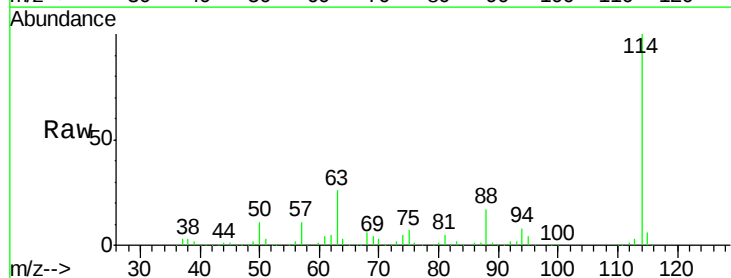
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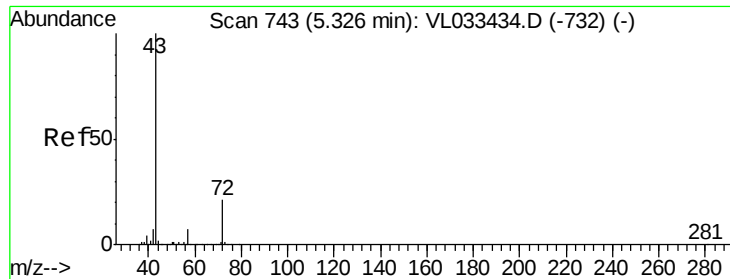


#33

1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1355
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.8	21.5	32.3
88	18.2	14.5	21.7





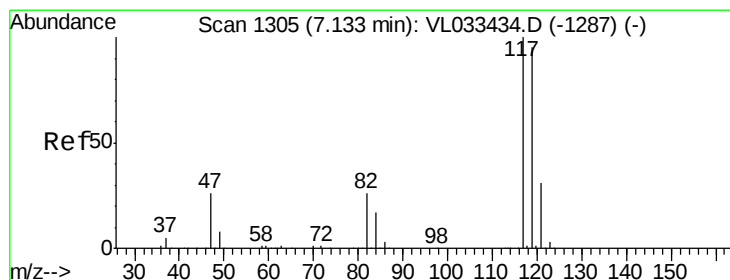
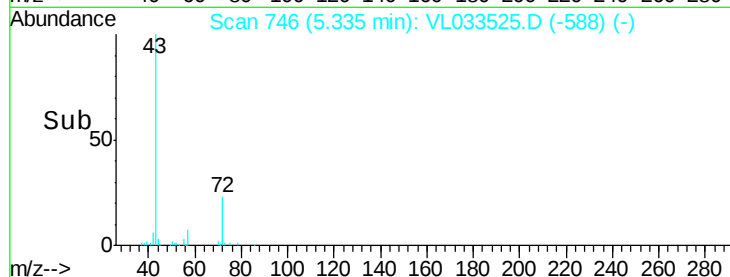
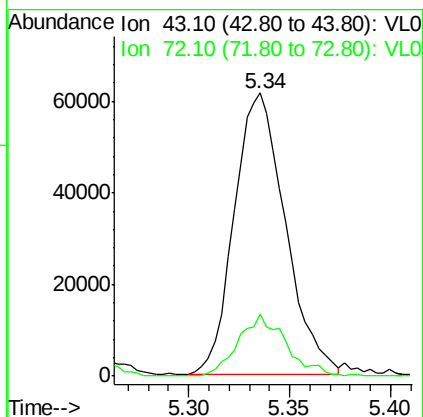
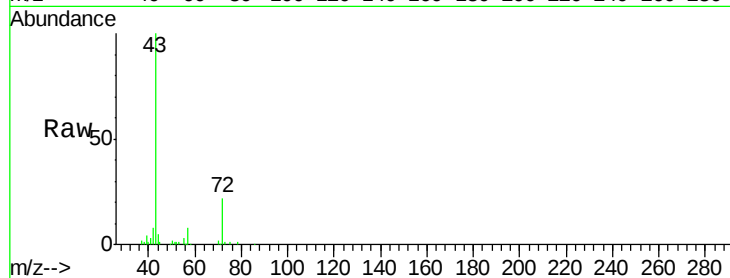
#34
2-Butanone
Concen: 1.015 ppbv
RT: 5.34 min Scan# 746
Delta R.T. 0.01 min
Lab File: VL033525.D
Acq: 30 Mar 2019 6:15

Instrument :
MSVOA_L
ClientSampleId :
SG-1-MAIN-DECT-ROOM

Tot Ion: 43 Resp: 109466
Ion Ratio Lower Upper
43 100
72 20.3 17.4 26.2

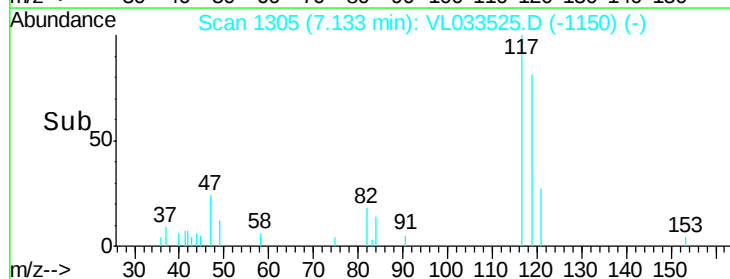
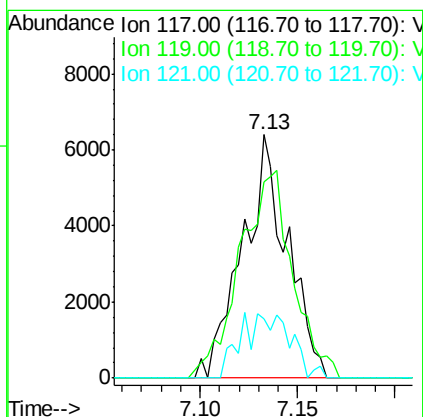
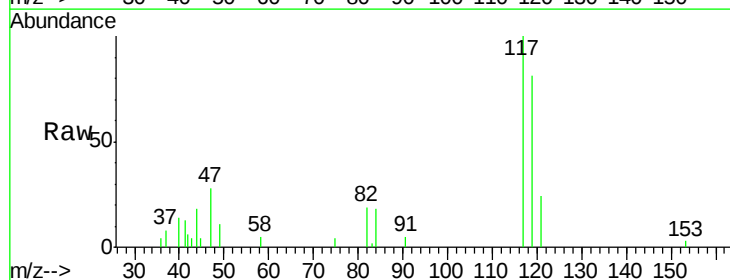
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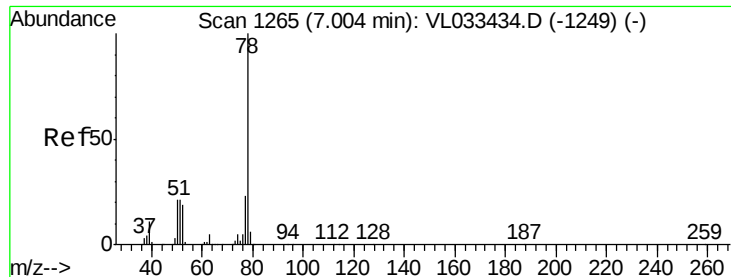
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#35
Carbon Tetrachloride
Concen: 0.080 ppbv m
RT: 7.13 min Scan# 1305
Delta R.T. -0.00 min
Lab File: VL033525.D
Acq: 30 Mar 2019 6:15

Tgt Ion: 117 Resp: 10214
Ion Ratio Lower Upper
117 100
119 80.9 75.8 113.8
121 24.3 24.7 37.1#





#36

Benzene

Concen: 0.368 ppbv

RT: 7.00 min Scan# 1264

Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

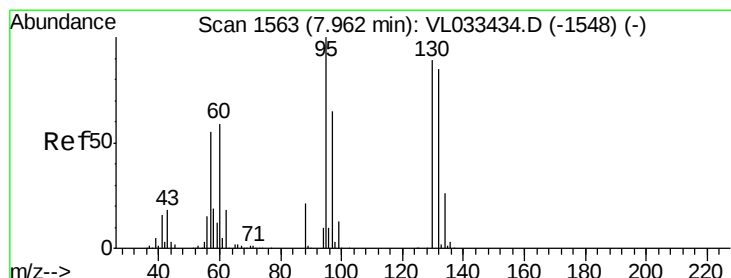
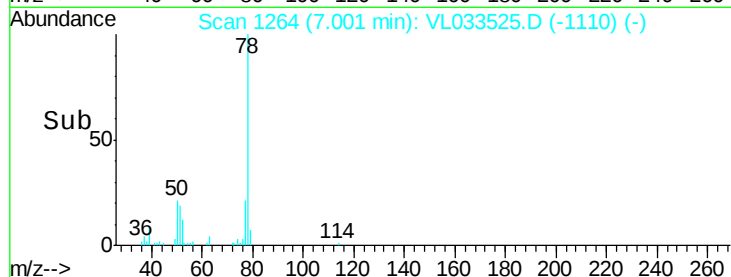
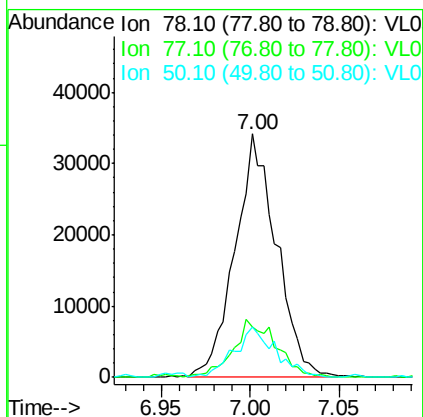
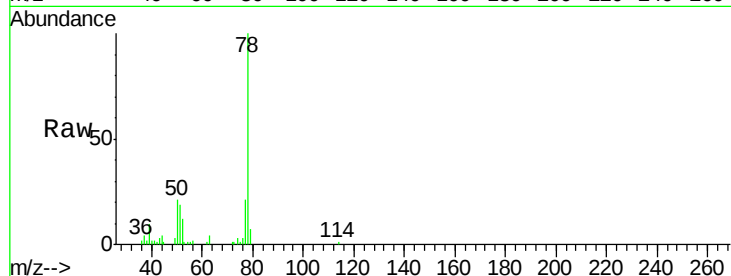
ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion:	78	Resp:	55414
Ion	Ratio	Lower	Upper
78	100		
77	20.7	18.1	27.1
50	20.9	16.7	25.1

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#38

Trichloroethene

Concen: 11.653 ppbv

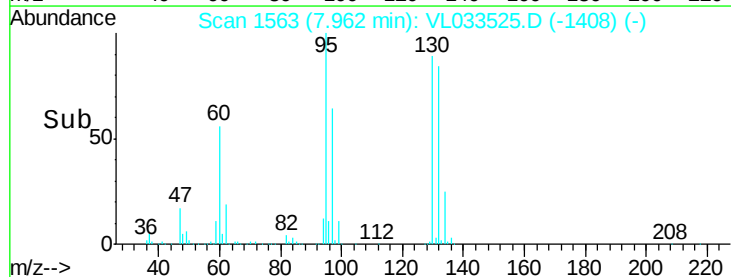
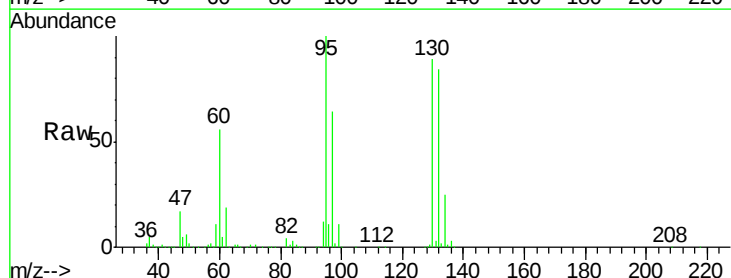
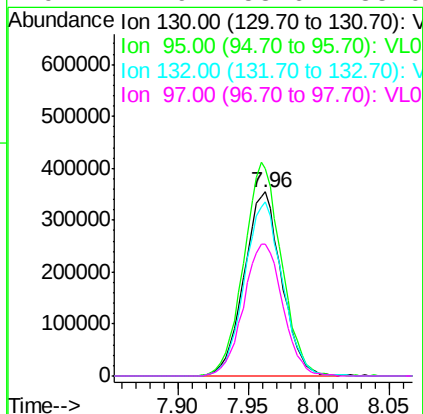
RT: 7.96 min Scan# 1563

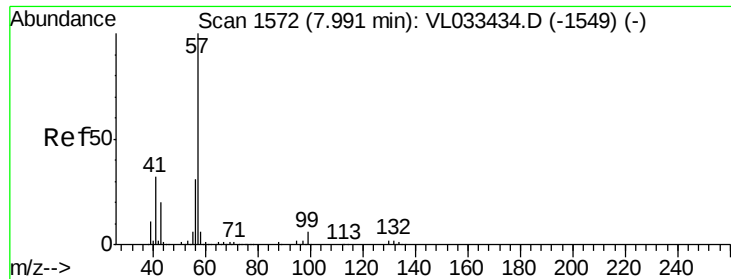
Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Tgt Ion:	130	Resp:	660531
Ion	Ratio	Lower	Upper
130	100		
95	112.7	89.8	134.8
132	94.5	76.6	115.0
97	71.9	58.6	88.0





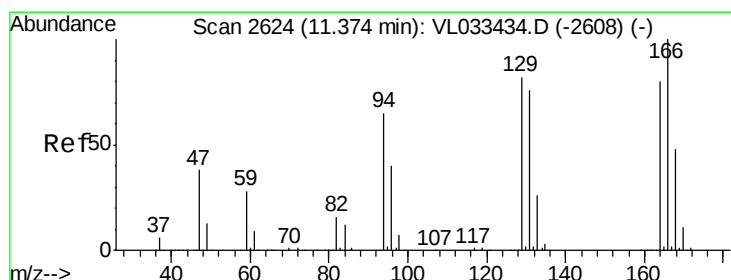
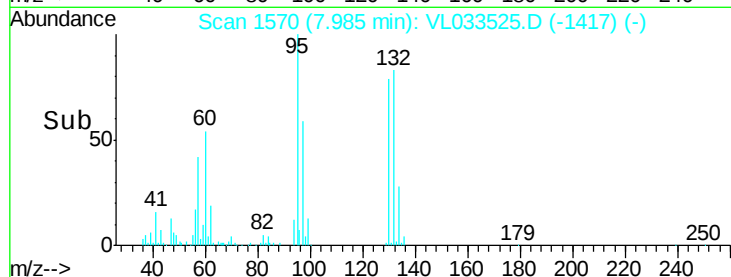
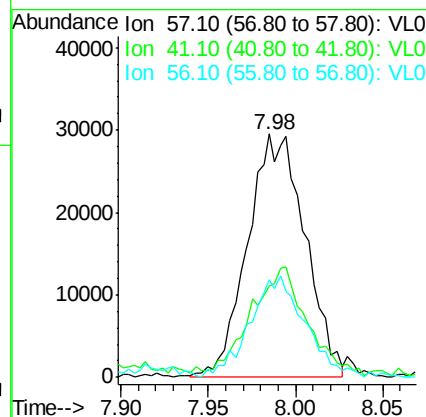
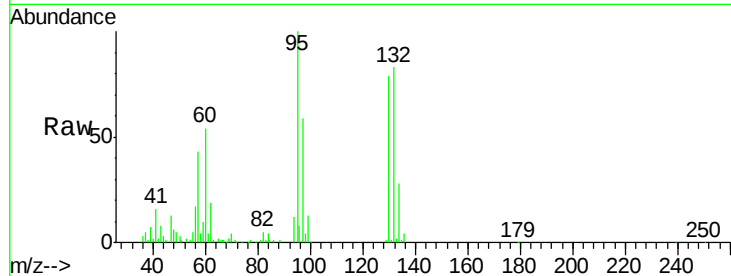
#44
 2,2,4-Trimethylpentane
 Concen: 0.257 ppbv m
 RT: 7.98 min Scan# 1570
 Delta R.T. -0.01 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1-MAIN-DECT-ROOM

Tot Ion	Ratio	Lower	Upper
57	100		
41	46.6	26.0	39.0#
56	40.5	24.6	37.0#

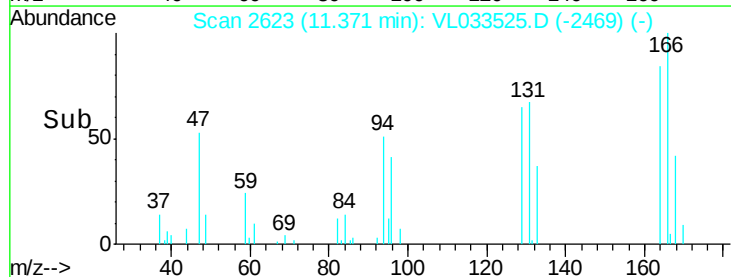
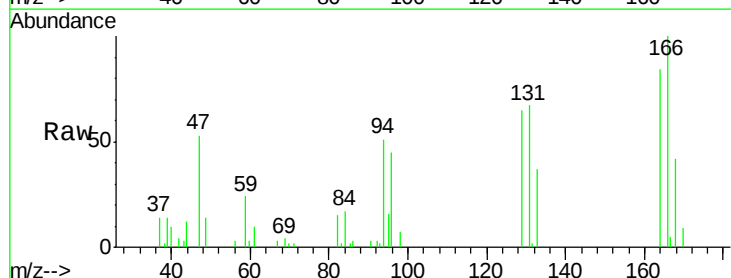
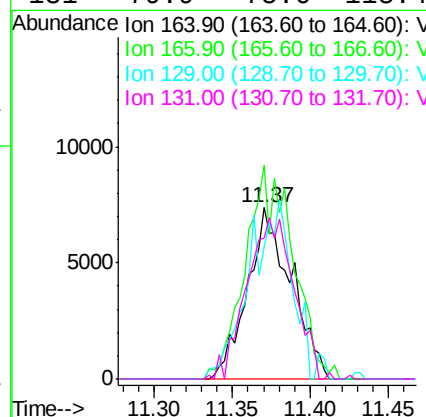
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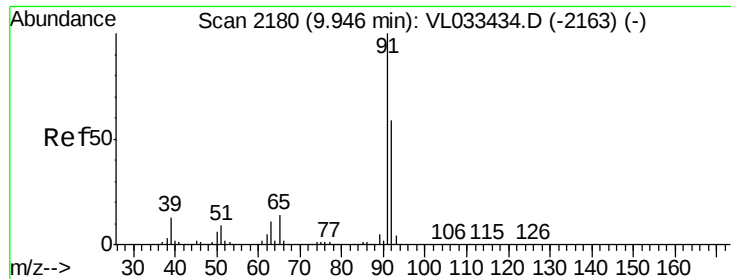
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#52
 Tetrachloroethene
 Concen: 0.252 ppbv m
 RT: 11.37 min Scan# 2623
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Tgt Ion	Ratio	Lower	Upper
164	100		
166	119.2	99.5	149.3
129	77.3	81.4	122.2#
131	79.9	75.6	113.4





#53

Toluene

Concen: 3.556 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion: 91 Resp: 622451

Ion Ratio Lower Upper

91 100

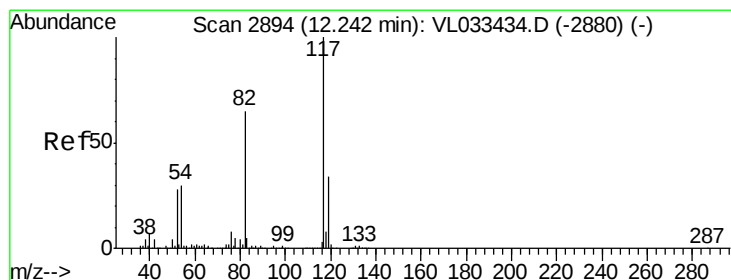
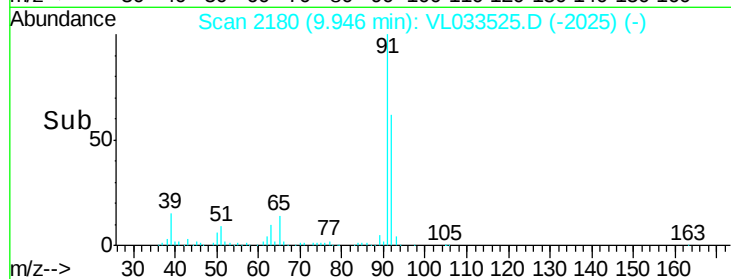
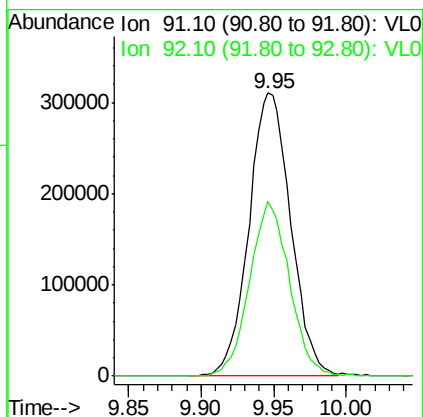
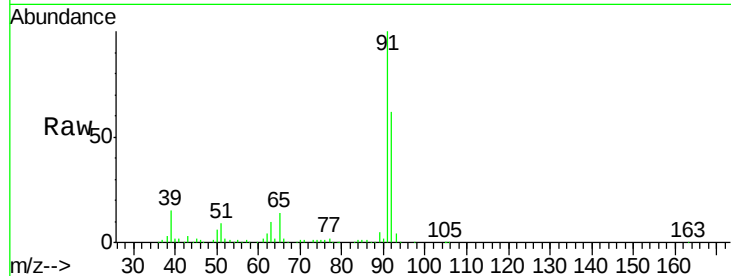
92 59.2 47.4 71.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2894

Delta R.T. -0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

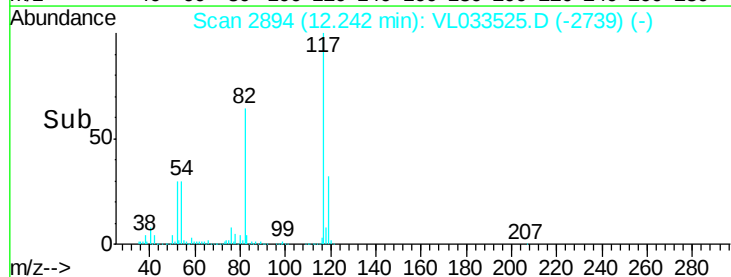
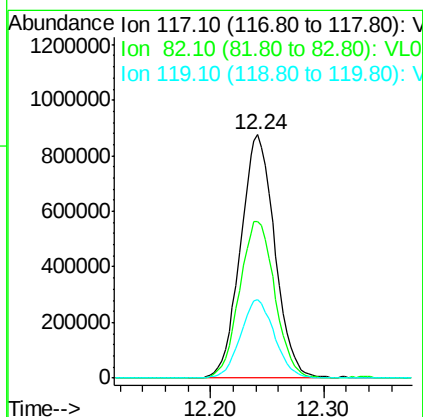
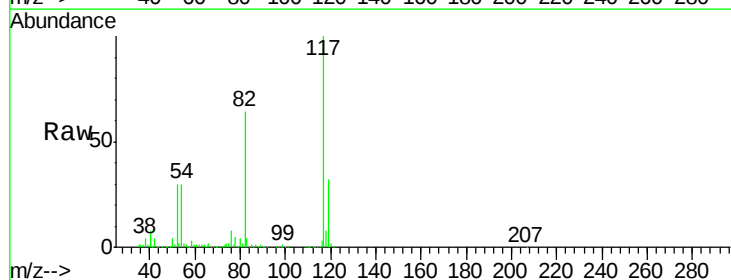
Tgt Ion: 117 Resp: 1844519

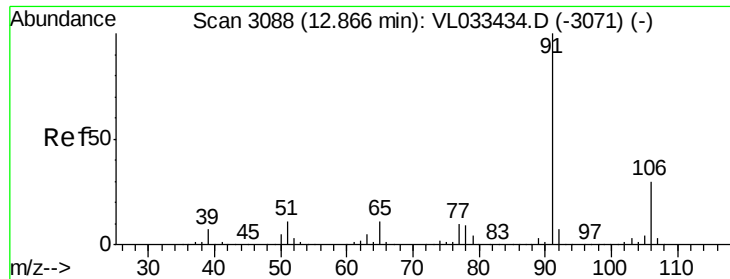
Ion Ratio Lower Upper

117 100

82 66.6 51.5 77.3

119 32.2 25.5 38.3





#58

Ethyl Benzene

Concen: 0.139 ppbv m

RT: 12.87 min Scan# 3089

Delta R.T. 0.00 min

Lab File: VL033525.D

Acq: 30 Mar 2019 6:15

Instrument :

MSVOA_L

ClientSampleId :

SG-1-MAIN-DECT-ROOM

Tot Ion: 91 Resp: 34314

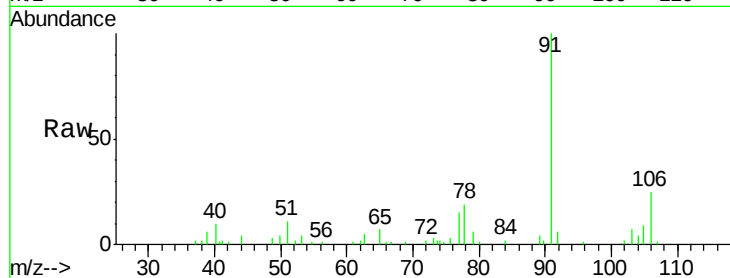
Ion Ratio Lower Upper

91 100

106 24.8 23.8 35.6

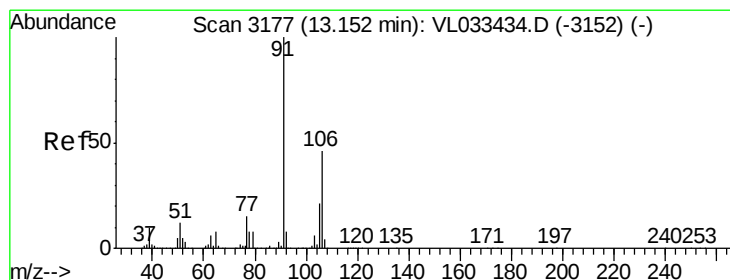
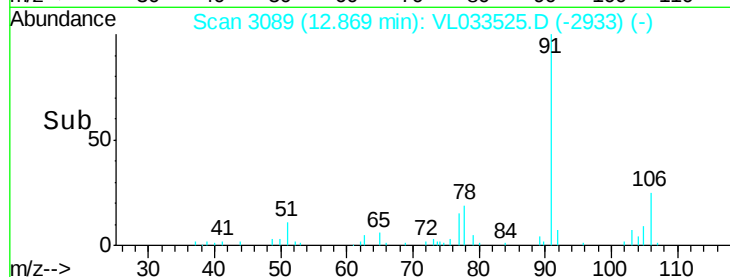
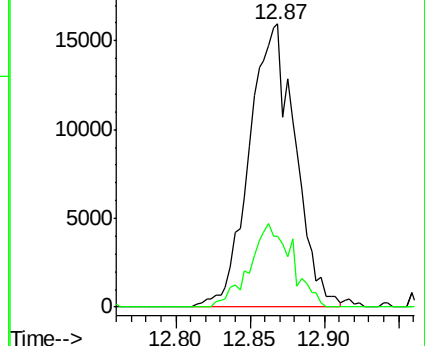
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.459 ppbv m

RT: 13.12 min Scan# 3167

Delta R.T. -0.03 min

Lab File: VL033525.D

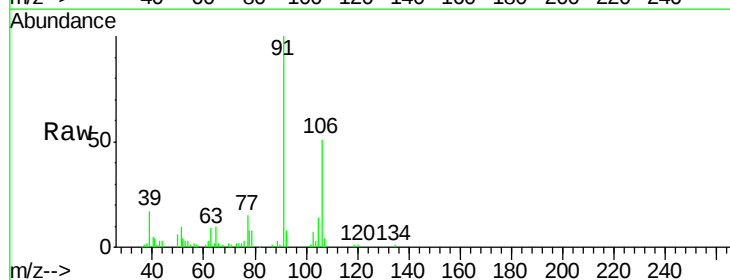
Acq: 30 Mar 2019 6:15

Tgt Ion: 91 Resp: 101090

Ion Ratio Lower Upper

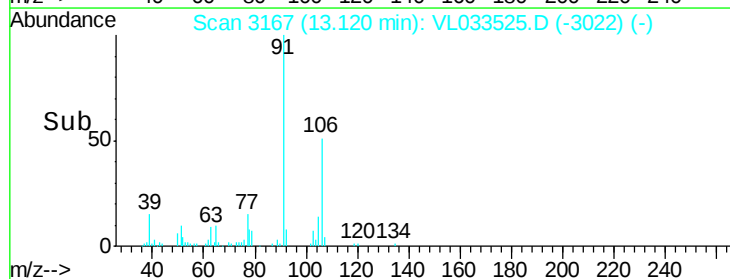
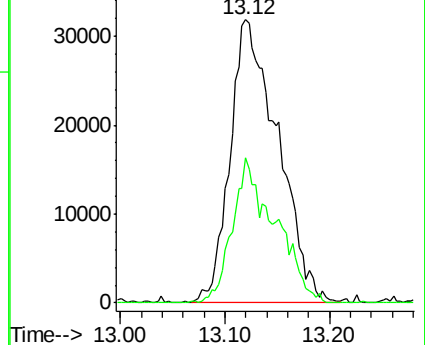
91 100

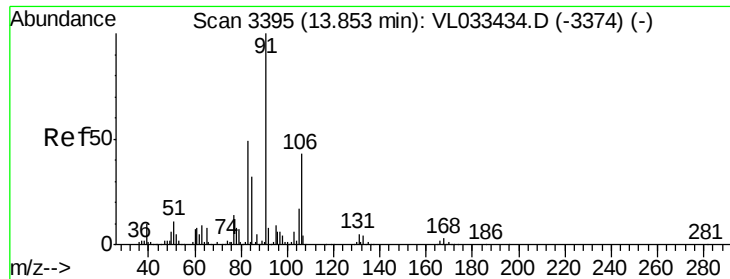
106 0.0 0.0 0.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





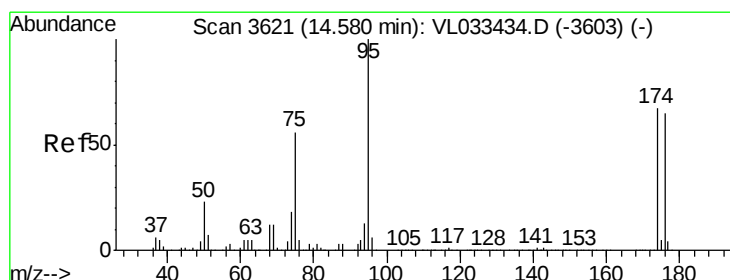
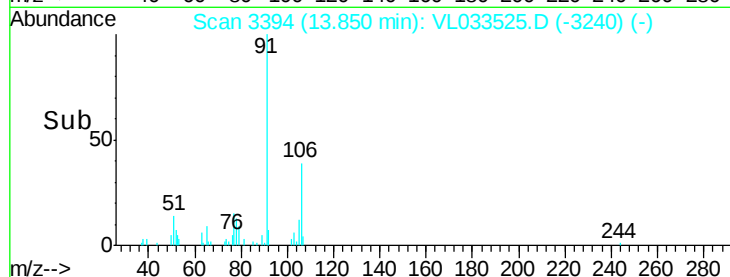
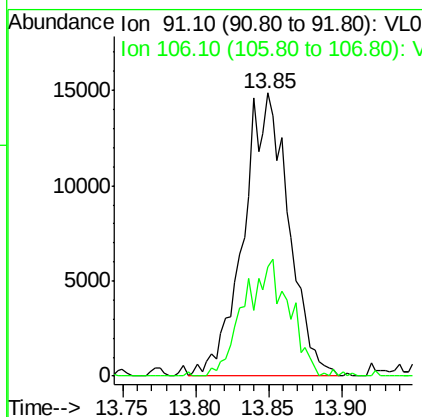
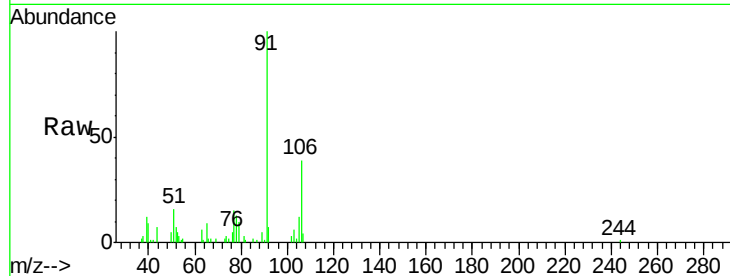
#60
o-Xylene
Concen: 0.150 ppbv m
RT: 13.85 min Scan# 3394
Delta R.T. -0.00 min
Lab File: VL033525.D
Acq: 30 Mar 2019 6:15

Instrument :
MSVOA_L
ClientSampleId :
SG-1-MAIN-DECT-ROOM

Tot Ion: 91 Resp: 31950
Ion Ratio Lower Upper
91 100
106 41.2 21.4 64.3

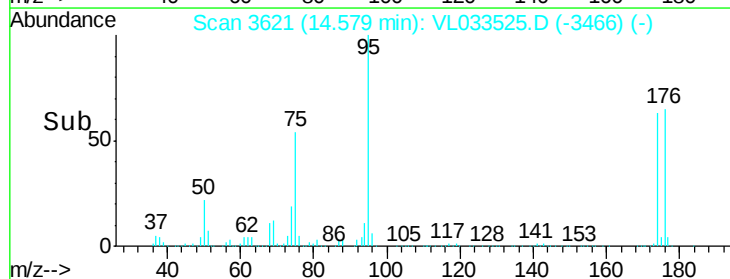
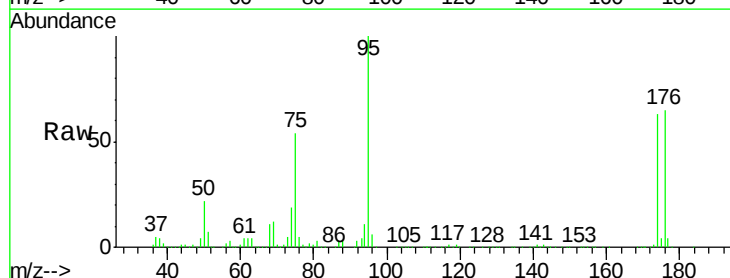
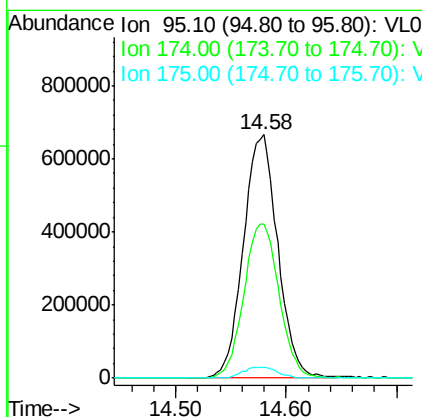
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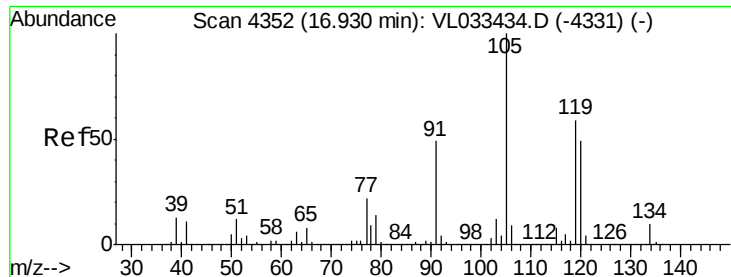
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.943 ppbv
RT: 14.58 min Scan# 3621
Delta R.T. -0.00 min
Lab File: VL033525.D
Acq: 30 Mar 2019 6:15

Tgt Ion: 95 Resp: 1437729
Ion Ratio Lower Upper
95 100
174 65.4 52.9 79.3
175 4.6 3.8 5.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.109 ppbv
 RT: 16.93 min Scan# 4351
 Delta R.T. -0.00 min
 Lab File: VL033525.D
 Acq: 30 Mar 2019 6:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1-MAIN-DECT-ROOM

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	50.7	39.0	58.6
91	8.6	40.0	60.0#
77	14.5	17.5	26.3#

Manual Integrations
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