

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032919\
 Data File : VL033517.D
 Acq On : 30 Mar 2019 00:56
 Operator : SY/AP
 Sample : K2042-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-8-RM-NEXT-TO-CST-ROOM

Manual Integrations
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 4/1/2019 4:03:25 AM

Quant Time: Mar 30 03:36:24 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue 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	816874	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1974127	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1943224	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	1471585	9.66	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	27793	0.233	ppbv	97
4) Chloromethane	3.17	50	19190m	0.386	ppbv	
7) Chloroethane	3.60	64	3201	0.176	ppbv	90
9) Propene	3.04	41	50844	1.287	ppbv #	82
10) Heptane	8.25	43	29789m	0.282	ppbv	
11) Trichlorofluoromethane	4.00	101	41095	0.280	ppbv	95
12) 1,1,2-Trichlorotrifluoroet	4.55	101	9210	0.093	ppbv	99
13) Ethanol	3.66	45	4353963	426.026	ppbv	65
15) Acetone	3.90	43	1272118	12.952	ppbv	98
17) tert-Butyl alcohol	4.38	59	38202m	2.115	ppbv	
19) Isopropyl Alcohol	4.04	45	751855	12.102	ppbv #	98
20) Methylene Chloride	4.41	84	106359	2.551	ppbv	95
26) Hexane	5.78	57	128280	1.583	ppbv #	47
29) Chloroform	5.84	83	22368m	0.161	ppbv	
34) 2-Butanone	5.33	43	98827	0.833	ppbv	99
35) Carbon Tetrachloride	7.13	117	11052m	0.079	ppbv	
36) Benzene	7.00	78	76216	0.460	ppbv	97
38) Trichloroethene	7.96	130	83748	1.343	ppbv	95
44) 2,2,4-Trimethylpentane	7.99	57	59620m	0.206	ppbv	
53) Toluene	9.94	91	1142873	5.937	ppbv	100
58) Ethyl Benzene	12.86	91	30122m	0.116	ppbv	
59) m/p-Xylene	13.12	91	98887m	0.427	ppbv	
60) o-Xylene	13.85	91	31088m	0.139	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	28156m	0.109	ppbv	
81) 1,2,4-Trichlorobenzene	21.66	180	25378	0.207	ppbv #	13

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

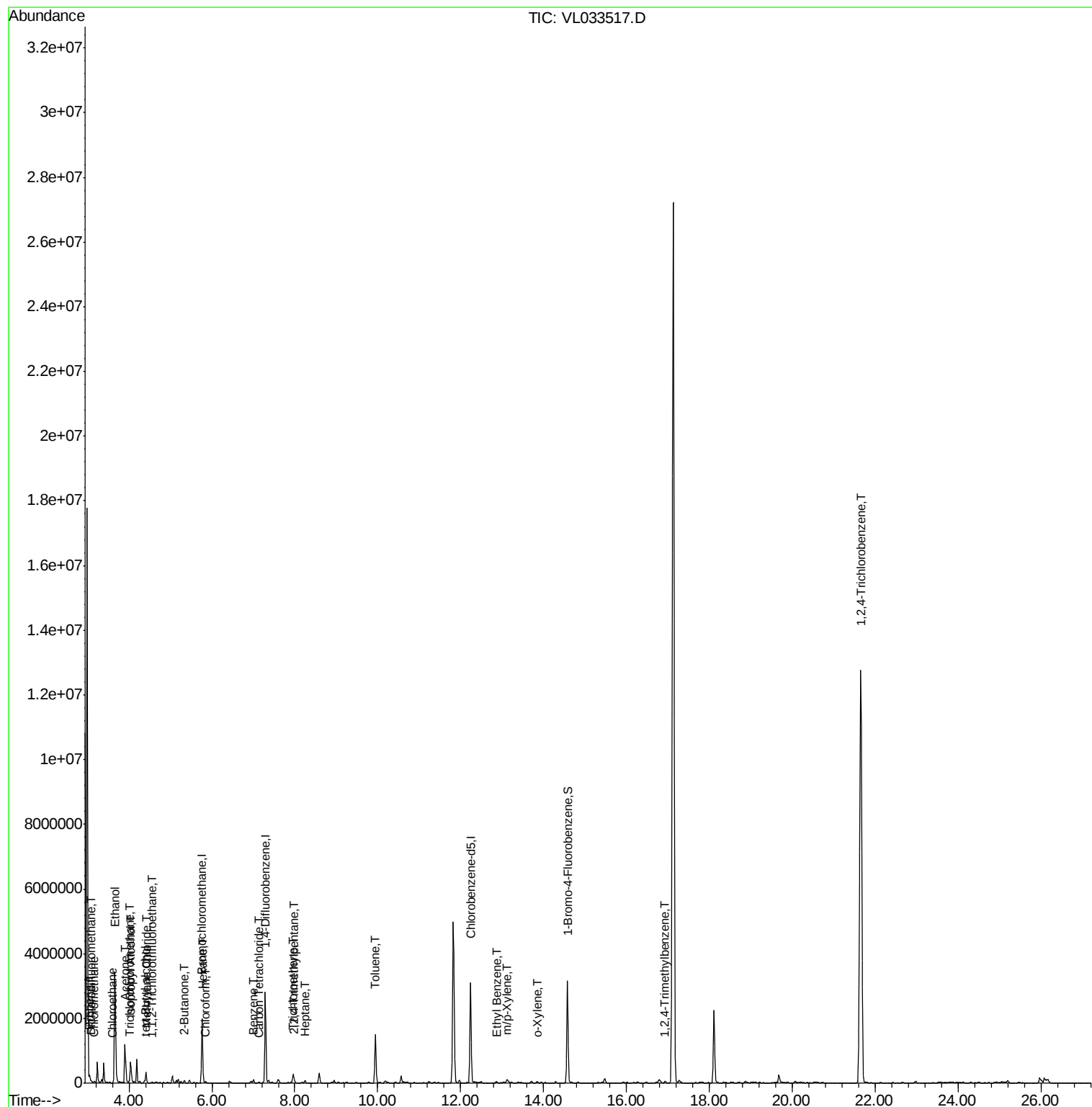
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032919\
Data File : VL033517.D
Acq On : 30 Mar 2019 00:56
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

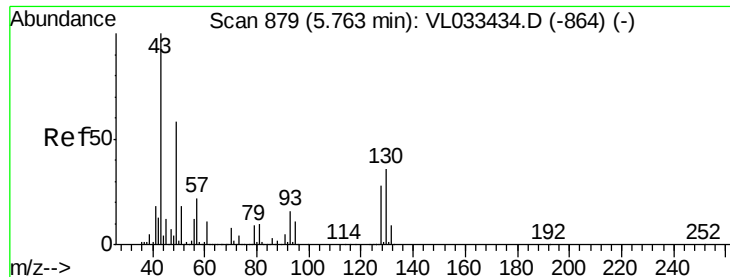
Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

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Quant Time: Mar 30 03:36:24 2019
Quant Method : Z:\V0ASRV\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: VL033517.D

Acq: 30 Mar 2019 00:56

Instrument :

MSVOA_L

ClientSampleId :

SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 49 Resp: 816874

Ion Ratio Lower Upper

49 100

128 48.6 24.0 72.0

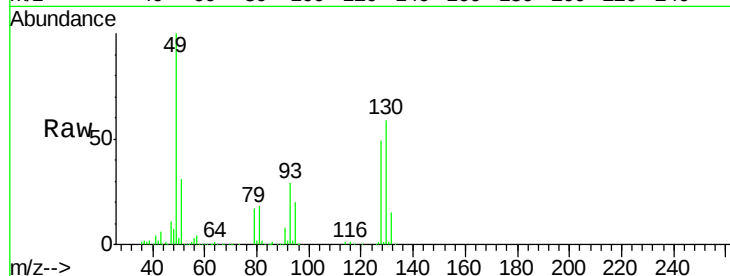
130 62.5 31.2 93.6

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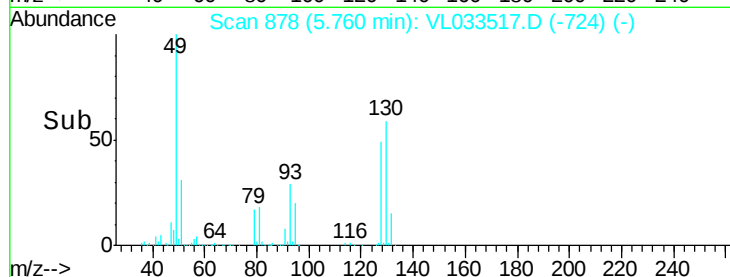
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

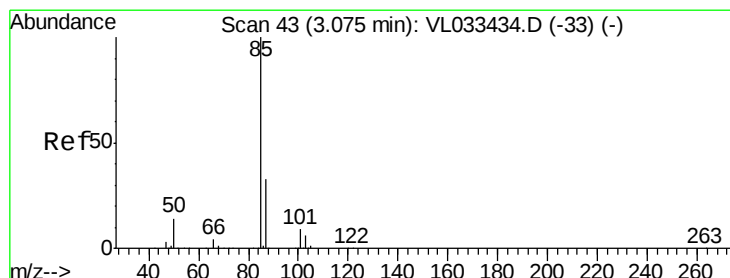
Ion 130.00 (129.70 to 130.70): V

5.76

Time-->



Time-->



#2

Dichlorodifluoromethane

Concen: 0.233 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033517.D

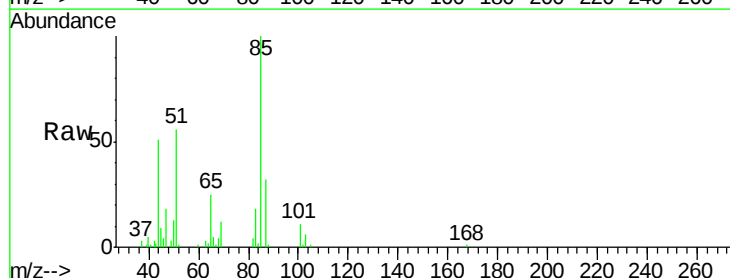
Acq: 30 Mar 2019 00:56

Tgt Ion: 85 Resp: 27793

Ion Ratio Lower Upper

85 100

87 31.6 26.7 40.1

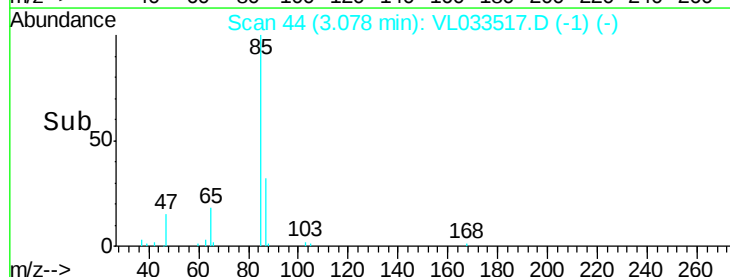


Abundance Ion 85.00 (84.70 to 85.70): VL0

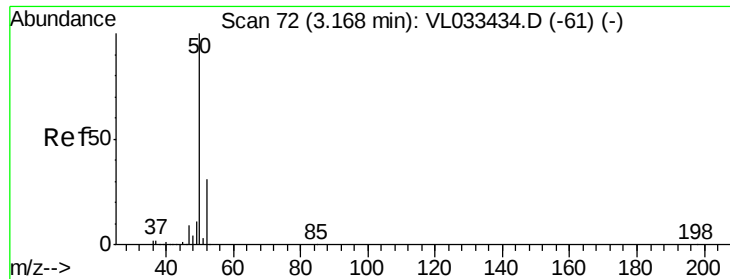
Ion 87.00 (86.70 to 87.70): VL0

3.08

Time-->



Time-->



#4

Chloromethane

Concen: 0.386 ppbv m

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033517.D

Acq: 30 Mar 2019 00:56

Instrument :

MSVOA_L

ClientSampleId :

SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 50 Resp: 19190

Ion Ratio Lower Upper

50 100

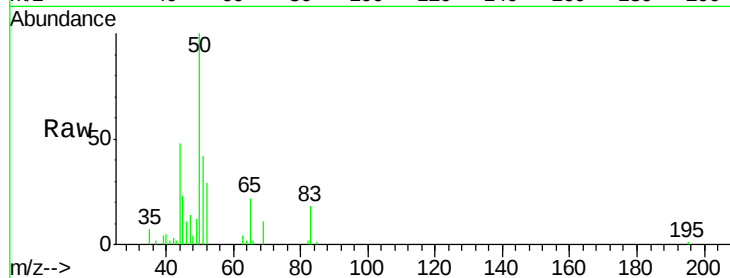
52 29.4 25.0 37.6

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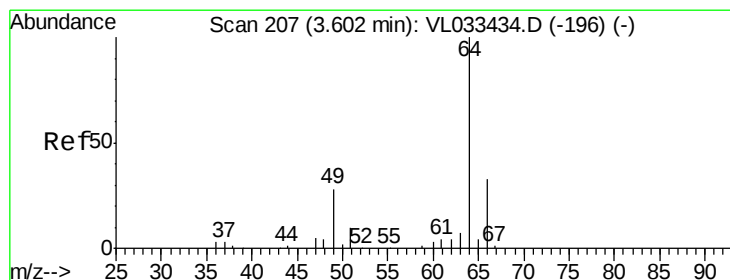
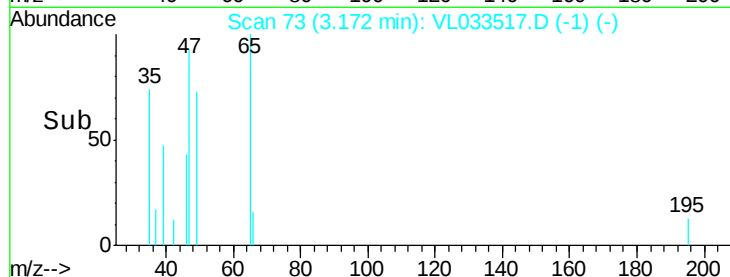
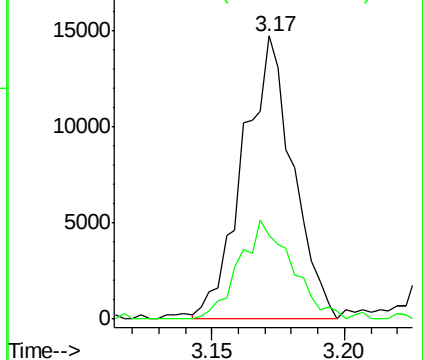
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#7

Chloroethane

Concen: 0.176 ppbv

RT: 3.60 min Scan# 207

Delta R.T. -0.00 min

Lab File: VL033517.D

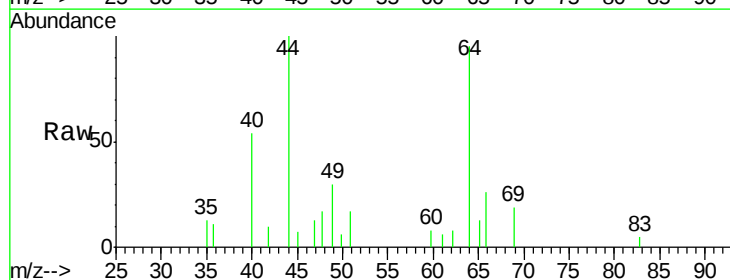
Acq: 30 Mar 2019 00:56

Tgt Ion: 64 Resp: 3201

Ion Ratio Lower Upper

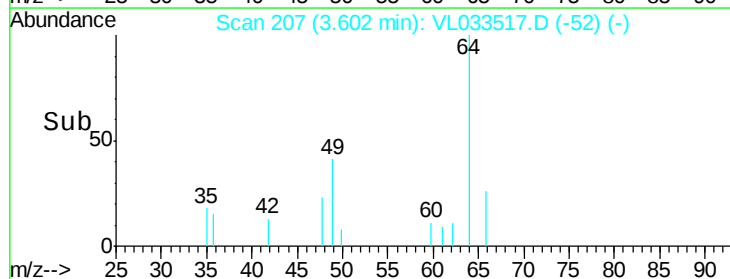
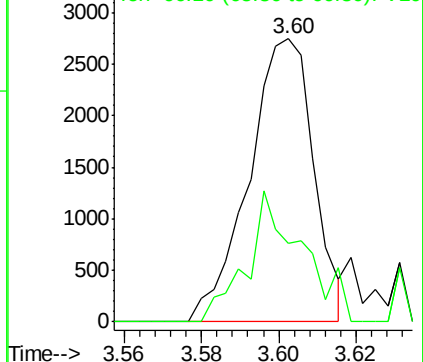
64 100

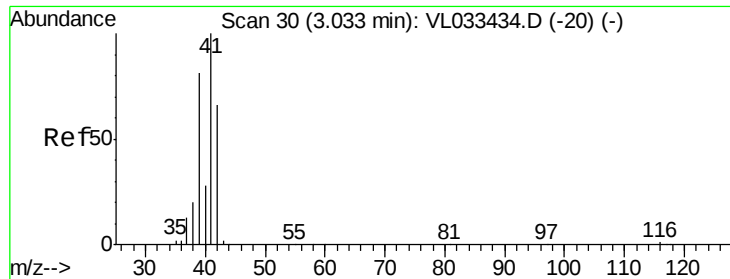
66 28.0 26.7 40.1



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0





#9

Propene

Concen: 1.287 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033517.D

Acq: 30 Mar 2019 00:56

Instrument :

MSVOA_L

ClientSampleId :

SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 41 Resp: 50844

Ion Ratio Lower Upper

41 100

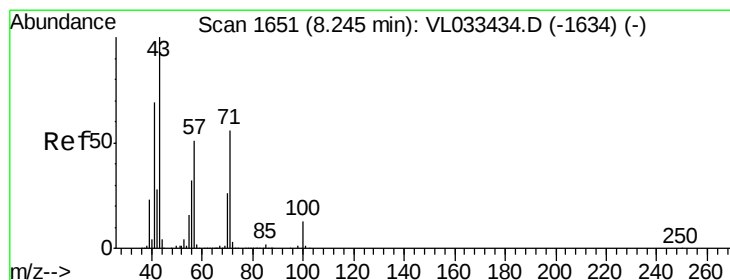
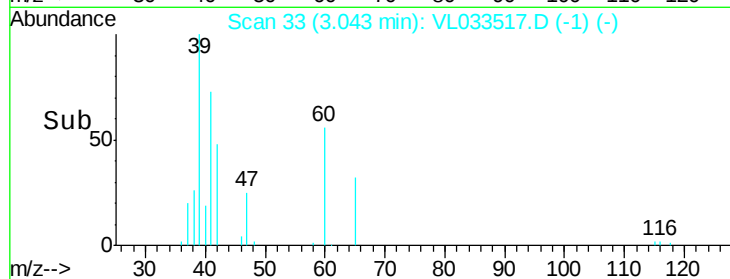
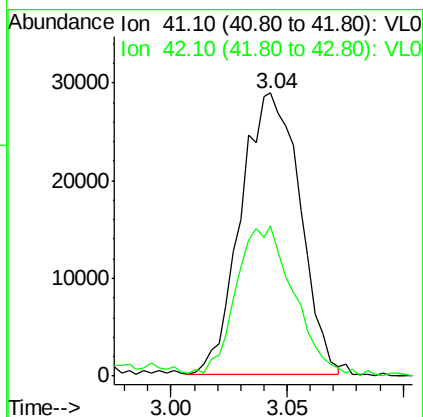
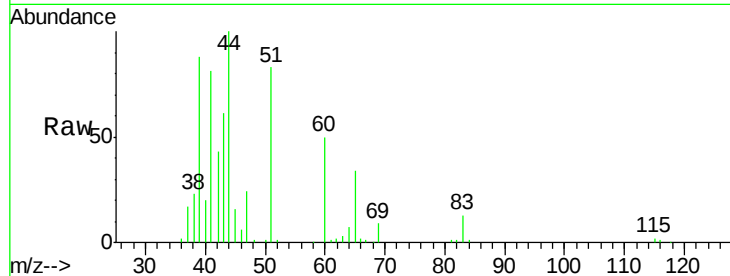
42 52.9 53.9 80.9#

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#10

Heptane

Concen: 0.282 ppbv m

RT: 8.25 min Scan# 1652

Delta R.T. 0.00 min

Lab File: VL033517.D

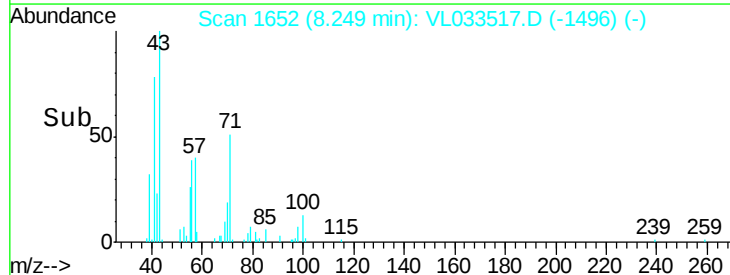
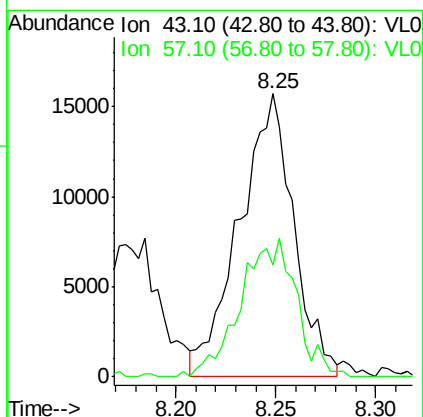
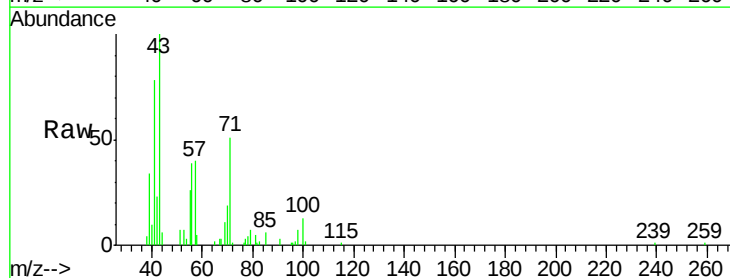
Acq: 30 Mar 2019 00:56

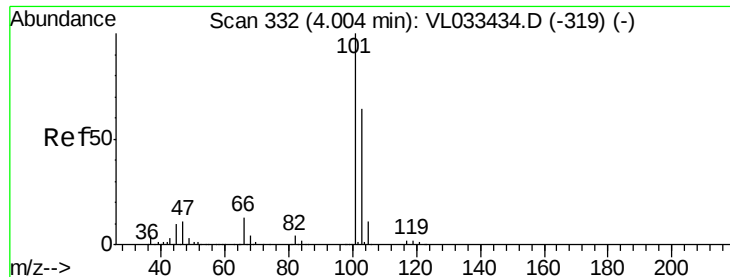
Tgt Ion: 43 Resp: 29789

Ion Ratio Lower Upper

43 100

57 50.4 40.6 60.8





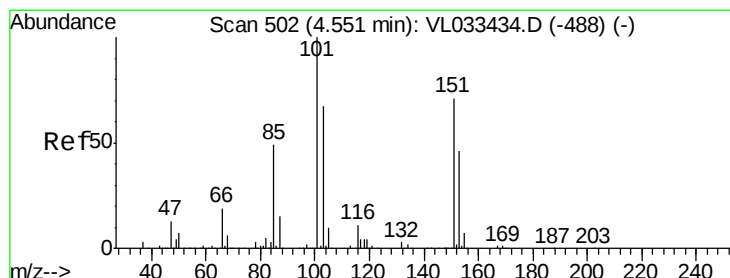
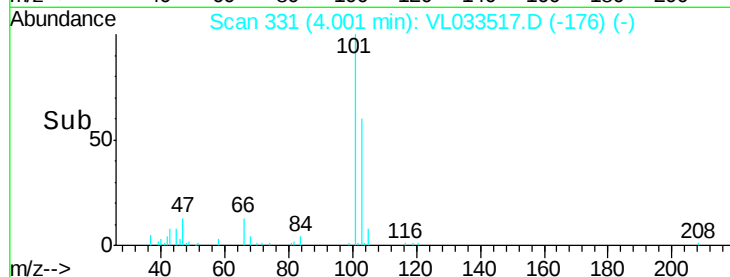
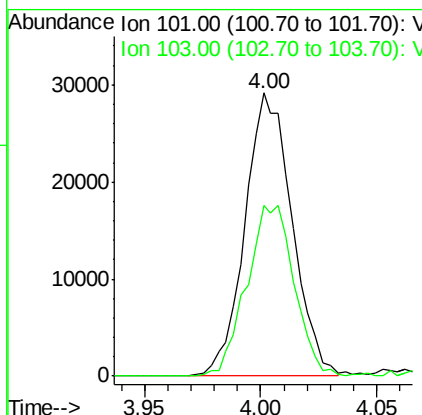
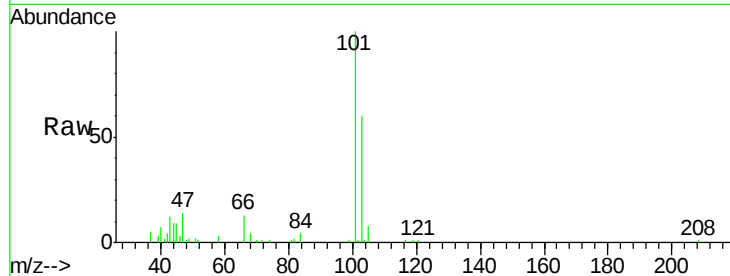
#11
 Trichlorofluoromethane
 Concen: 0.280 ppbv
 RT: 4.00 min Scan# 331
 Delta R.T. -0.00 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion:101 Resp: 41095
 Ion Ratio Lower Upper
 101 100
 103 60.5 51.3 76.9

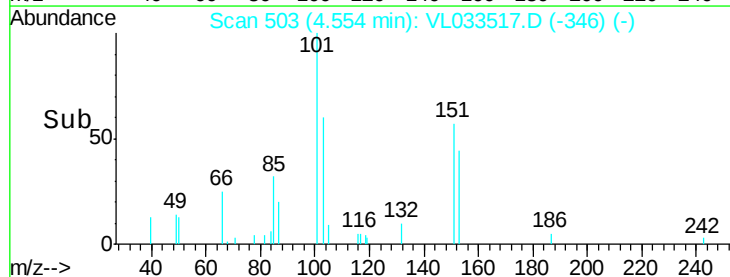
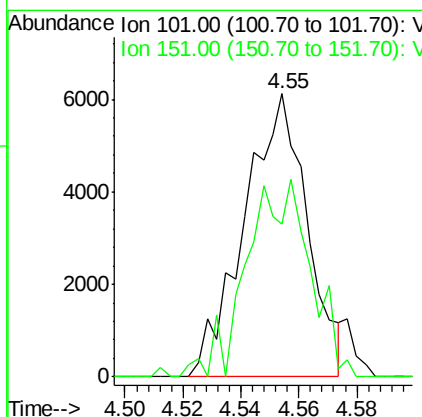
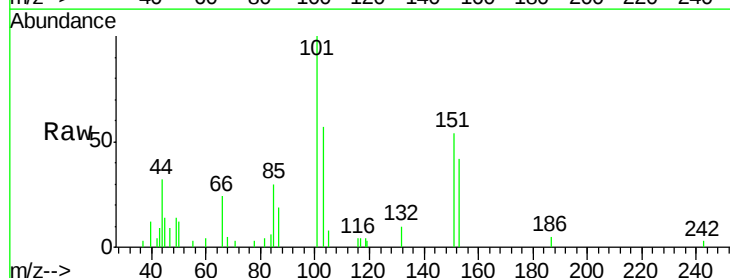
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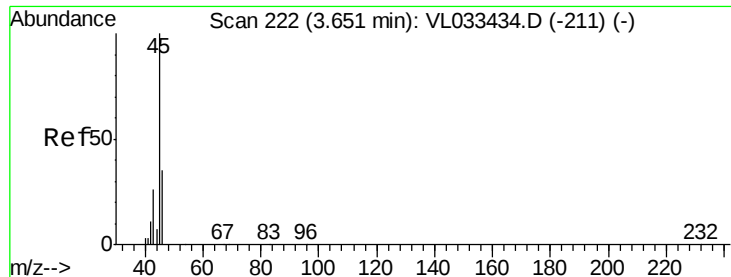
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.093 ppbv
 RT: 4.55 min Scan# 503
 Delta R.T. 0.00 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Tgt Ion:101 Resp: 9210
 Ion Ratio Lower Upper
 101 100
 151 70.9 57.7 86.5





#13

Ethanol

Concen: 426.026 ppbv

RT: 3.66 min Scan# 225

Delta R.T. 0.01 min

Lab File: VL033517.D

Acq: 30 Mar 2019 00:56

Tot Ion: 45 Resp: 4353963

Ion Ratio Lower Upper

45 100

46 36.7 25.4 101.8

Instrument :

MSVOA_L

ClientSampleId :

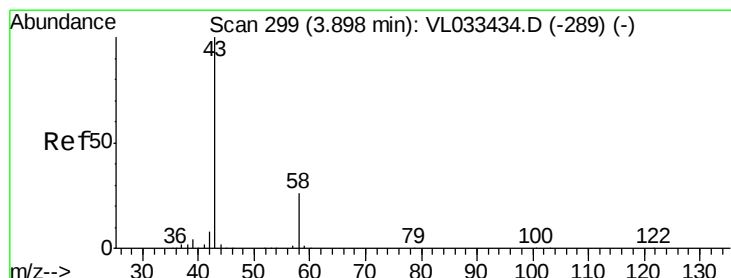
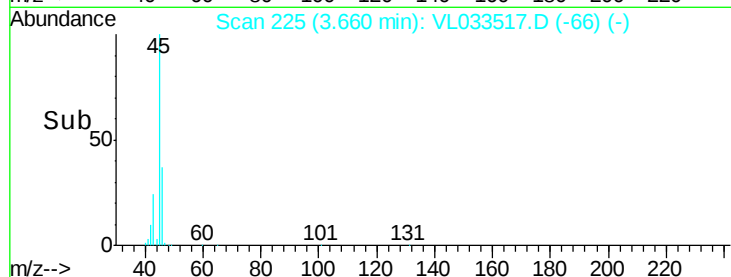
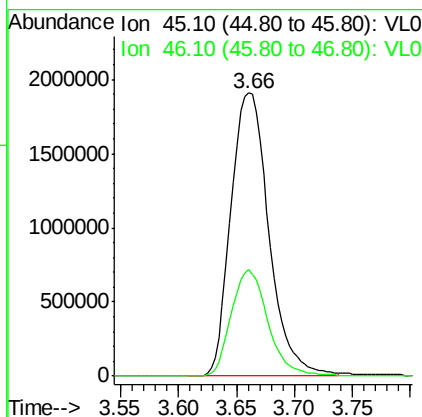
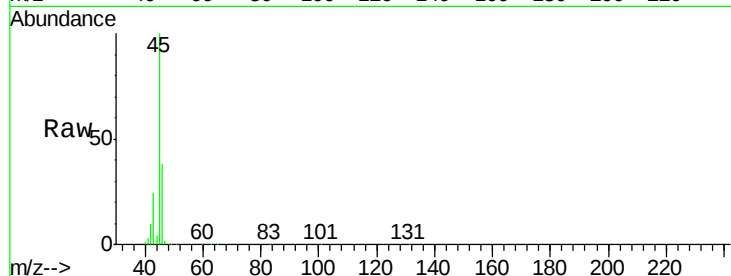
SG-8-RM-NEXT-TO-CST-ROOM

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#15

Acetone

Concen: 12.952 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.00 min

Lab File: VL033517.D

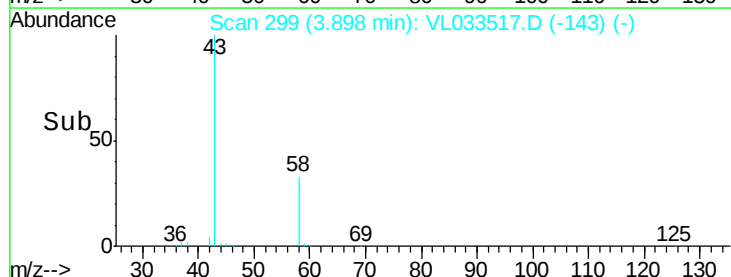
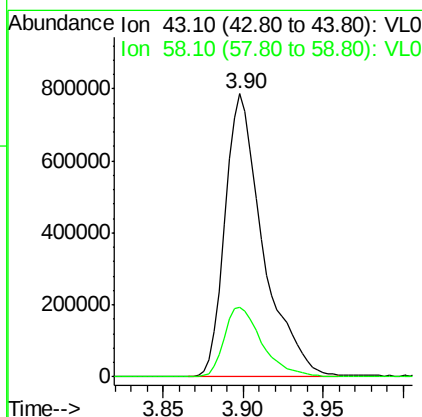
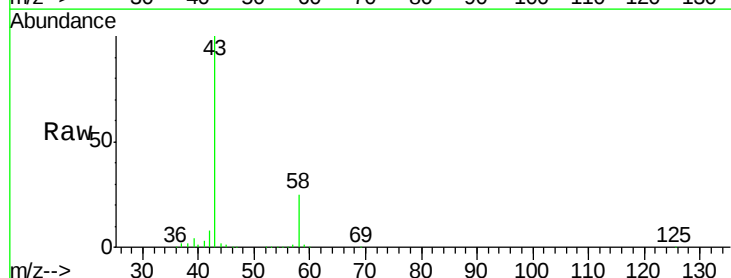
Acq: 30 Mar 2019 00:56

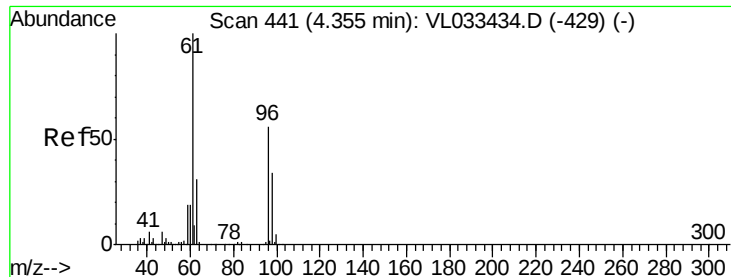
Tgt Ion: 43 Resp: 1272118

Ion Ratio Lower Upper

43 100

58 24.7 20.5 30.7





#17

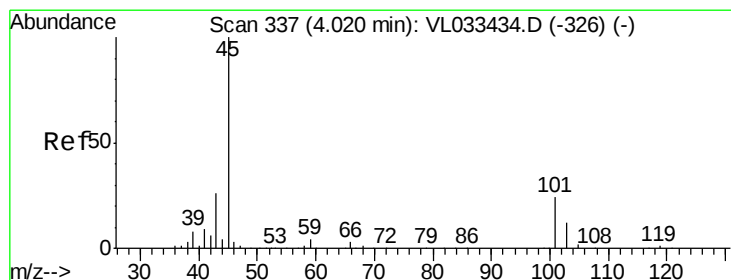
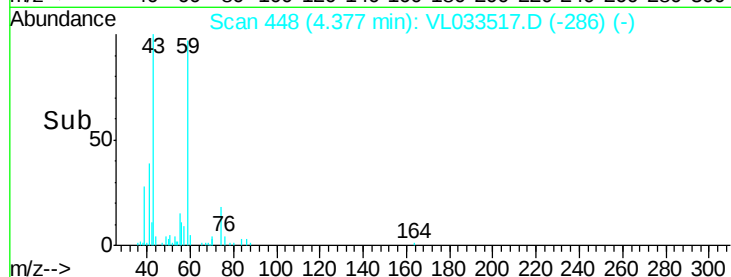
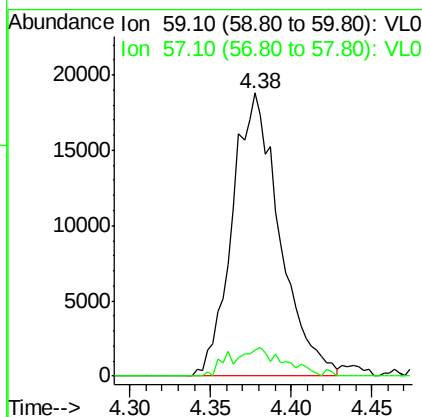
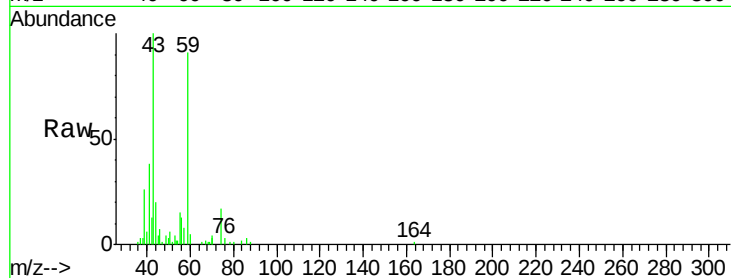
tert-Butyl alcohol
 Concen: 2.115 ppbv
 RT: 4.38 min Scan# 448
 Delta R.T. 0.02 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 59 Resp: 38202
 Ion Ratio Lower Upper
 59 100
 57 0.0 7.8 11.8#

Manual Integrations
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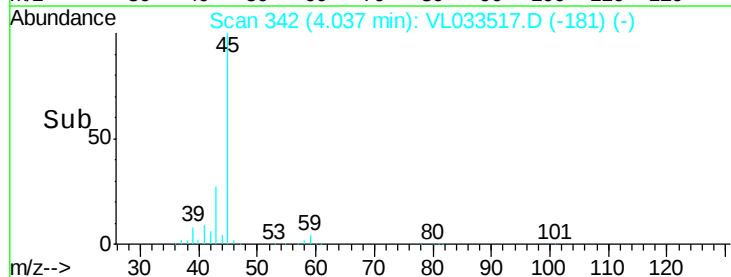
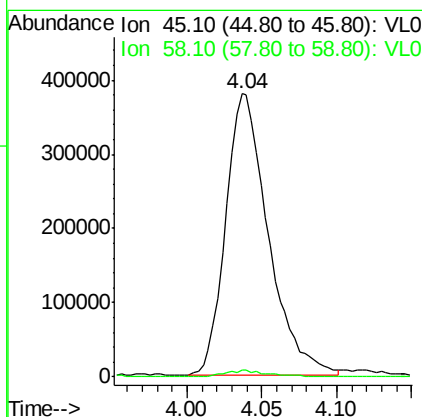
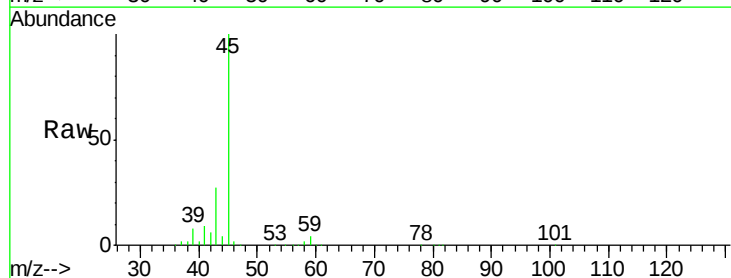
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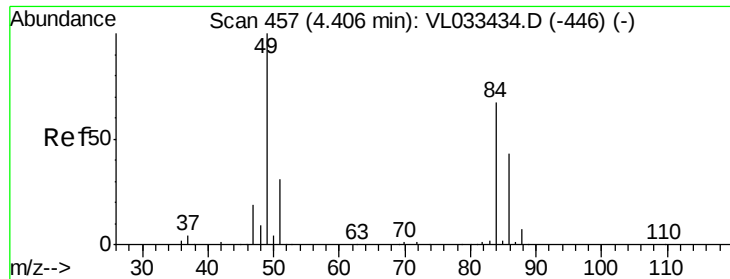


#19

Isopropyl Alcohol
 Concen: 12.102 ppbv
 RT: 4.04 min Scan# 342
 Delta R.T. 0.02 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Tgt Ion: 45 Resp: 751855
 Ion Ratio Lower Upper
 45 100
 58 2.5 1.4 2.2#





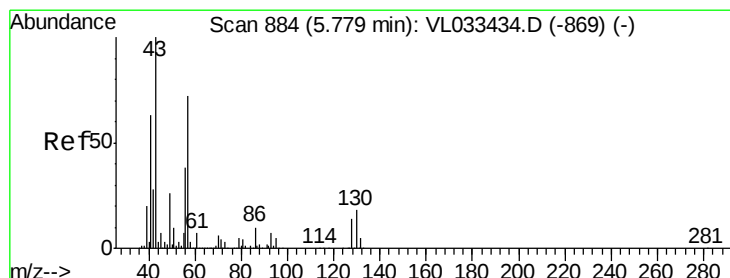
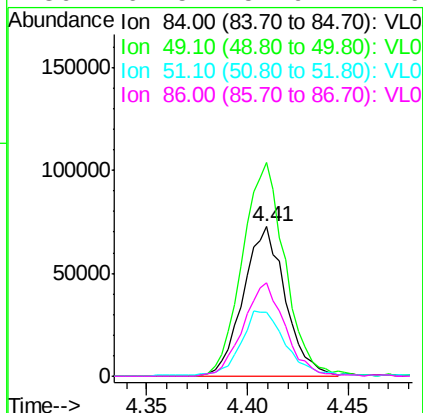
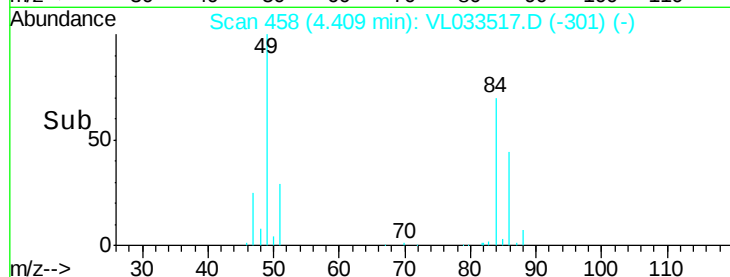
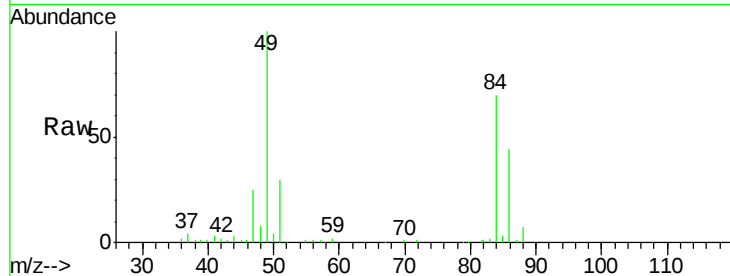
#20
Methvlene Chloride
Concen: 2.551 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion:	84	Resp:	106359
Ion	Ratio	Lower	Upper
84	100		
49	142.6	120.0	180.0
51	41.9	36.7	55.1
86	62.5	51.9	77.9

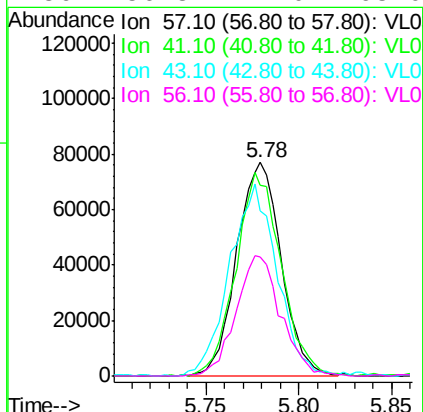
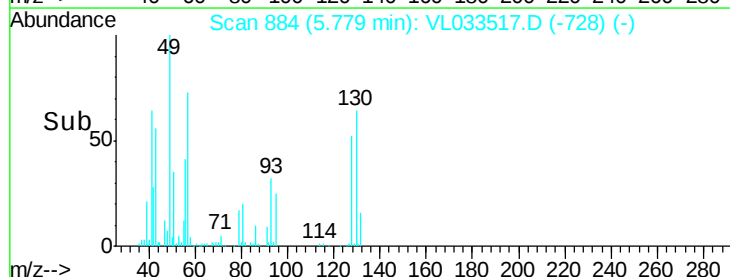
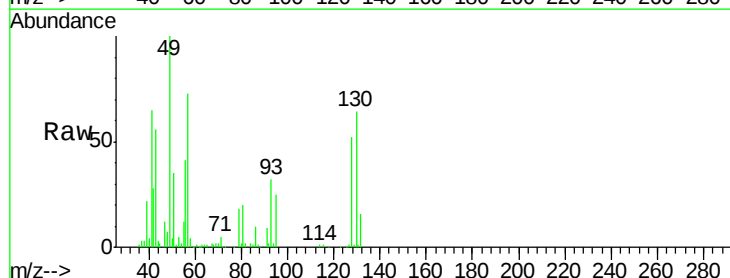
Manual Integrations
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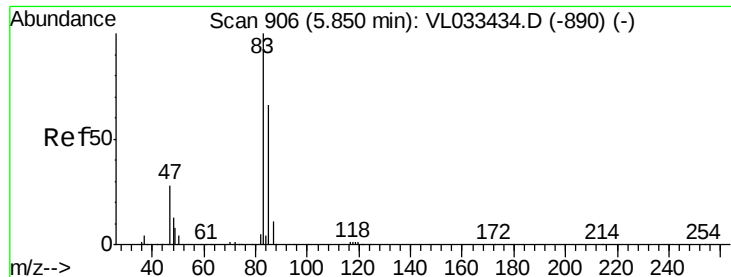
MMDadoda
4/1/2019 4:03:25 AM



#26
Hexane
Concen: 1.583 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Tgt Ion:	57	Resp:	128280
Ion	Ratio	Lower	Upper
57	100		
41	97.5	70.7	106.1
43	96.4	182.6	274.0#
56	56.8	42.0	63.0





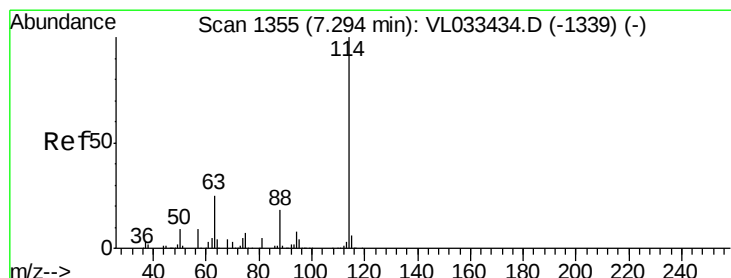
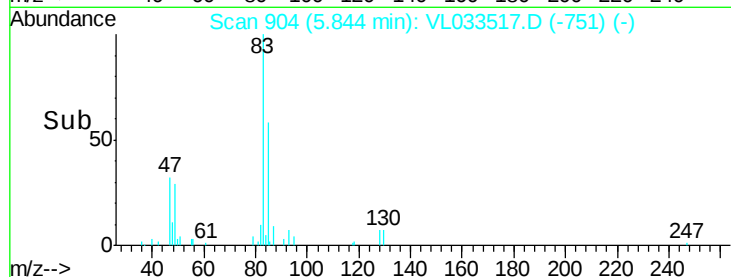
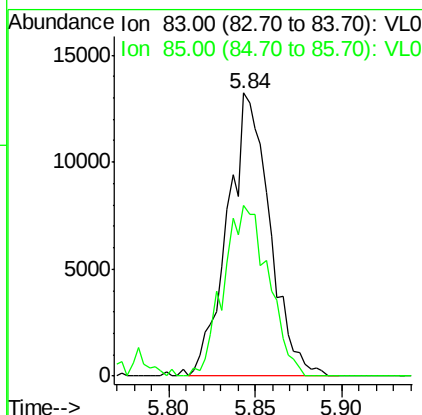
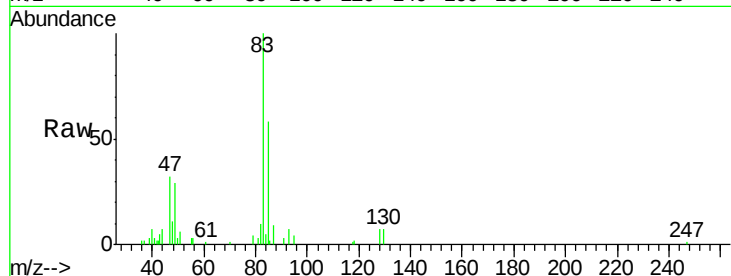
#29
Chloroform
Concen: 0.161 ppbv m
RT: 5.84 min Scan# 904
Delta R.T. -0.01 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 83 Resp: 22368
Ion Ratio Lower Upper
83 100
85 57.8 52.6 79.0

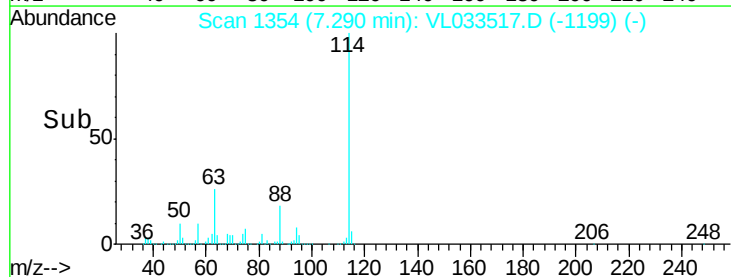
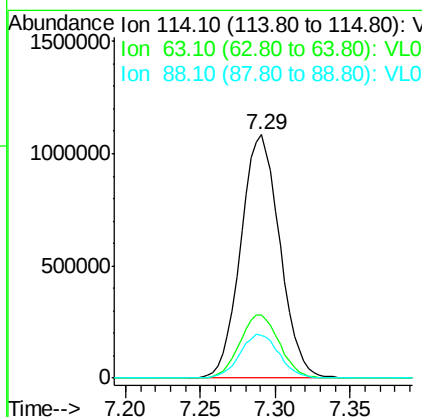
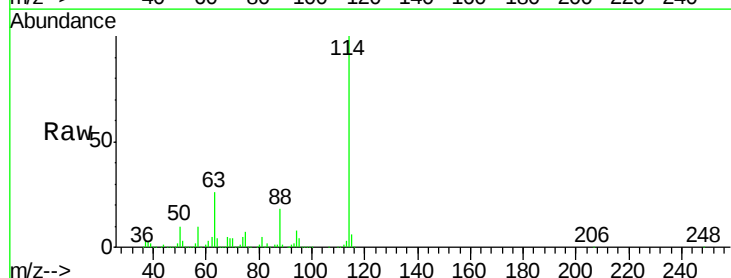
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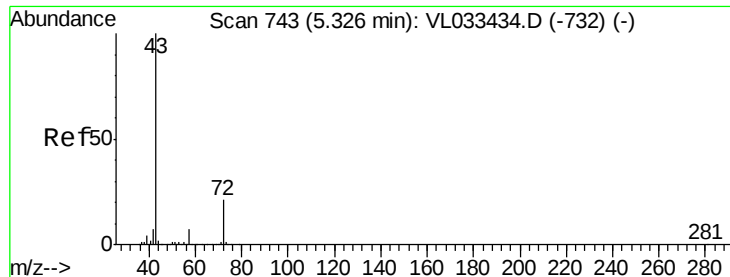
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4/1/2019 4:03:25 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Tgt Ion: 114 Resp: 1974127
Ion Ratio Lower Upper
114 100
63 26.5 21.5 32.3
88 18.2 14.5 21.7





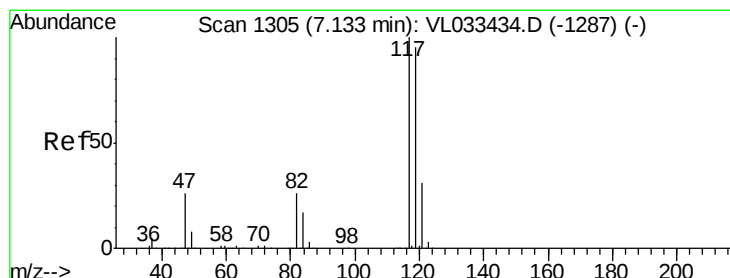
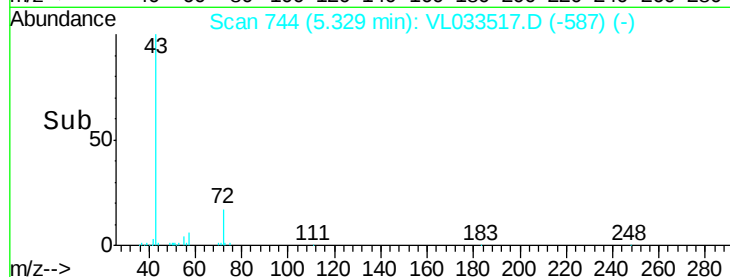
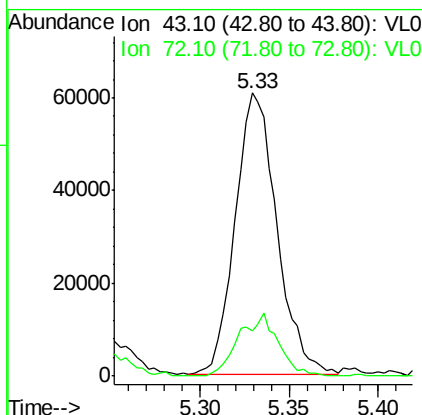
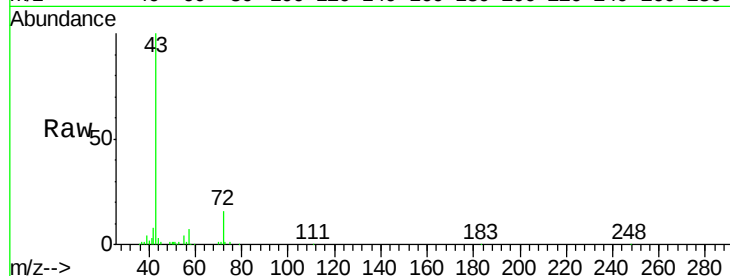
#34
2-Butanone
Concen: 0.833 ppbv
RT: 5.33 min Scan# 744
Delta R.T. 0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 43 Resp: 98827
Ion Ratio Lower Upper
43 100
72 21.4 17.4 26.2

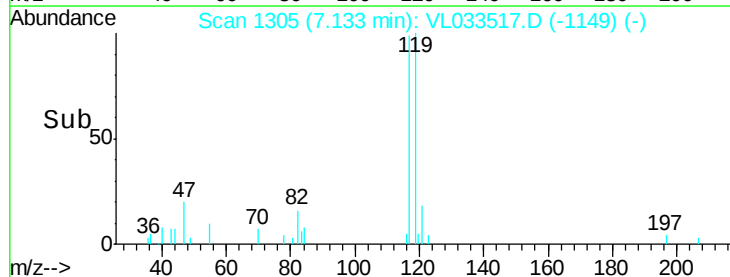
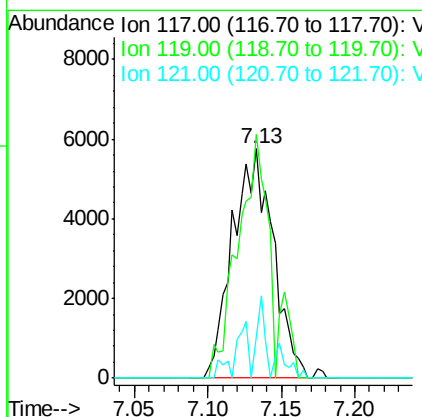
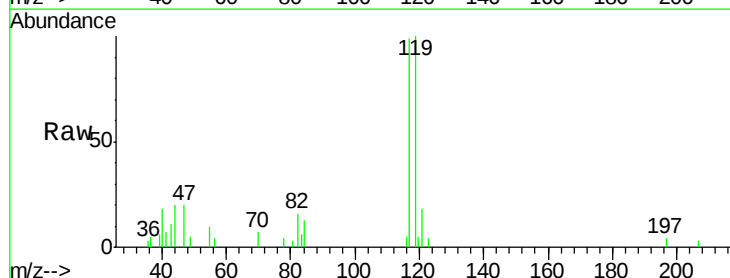
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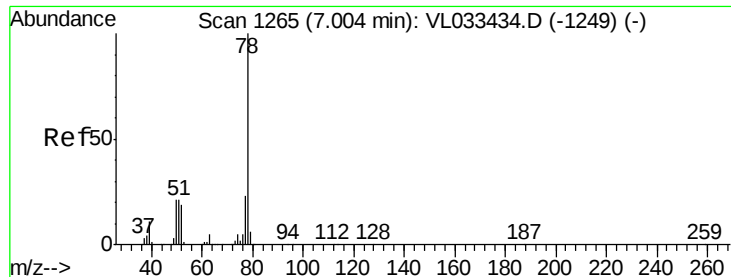
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#35
Carbon Tetrachloride
Concen: 0.079 ppbv m
RT: 7.13 min Scan# 1305
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Tgt Ion: 117 Resp: 11052
Ion Ratio Lower Upper
117 100
119 101.3 75.8 113.8
121 18.2 24.7 37.1#





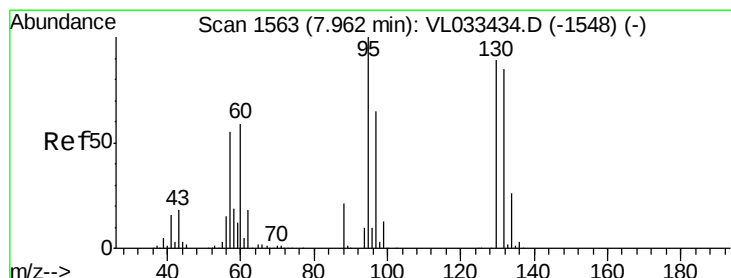
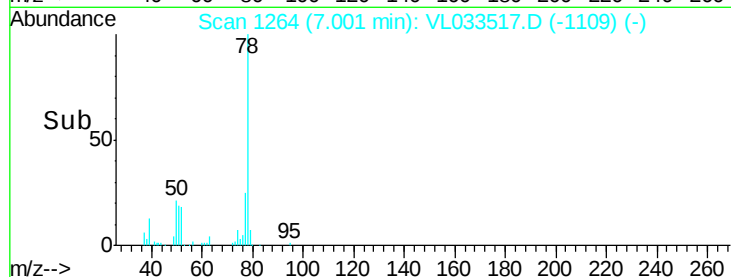
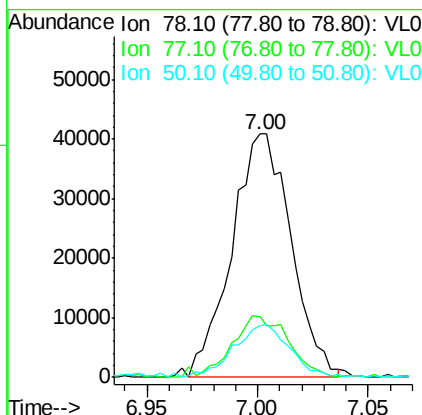
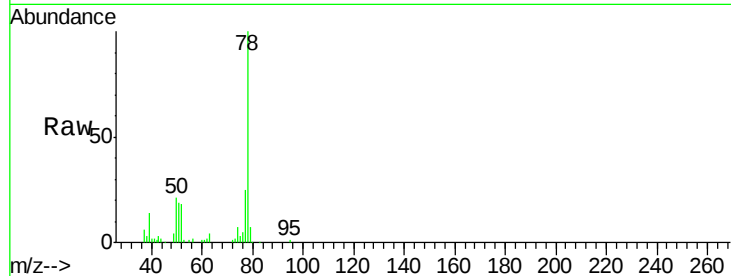
#36
Benzene
Concen: 0.460 ppbv
RT: 7.00 min Scan# 1264
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion	Ratio	Lower	Upper
78	100		
77	24.9	18.1	27.1
50	20.5	16.7	25.1

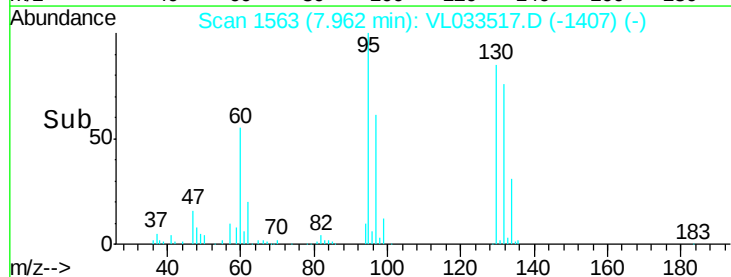
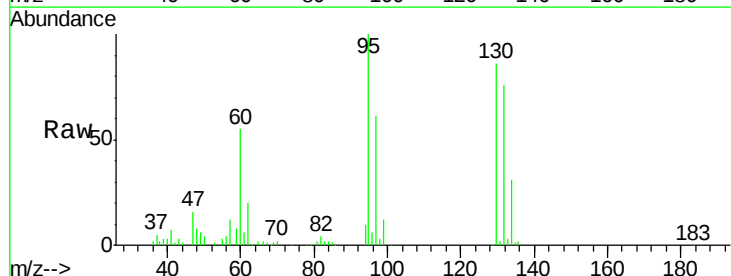
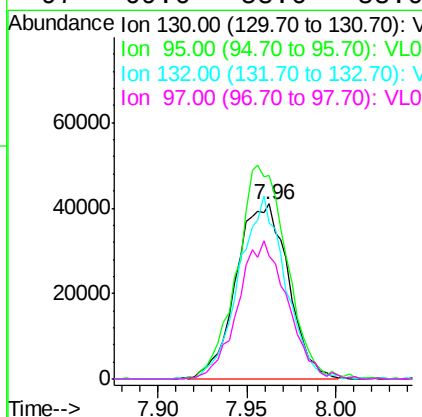
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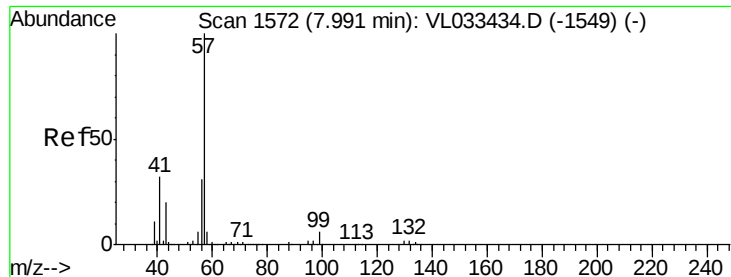
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#38
Trichloroethene
Concen: 1.343 ppbv
RT: 7.96 min Scan# 1563
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Tgt Ion	Ratio	Lower	Upper
130	100		
95	114.8	89.8	134.8
132	88.7	76.6	115.0
97	69.6	58.6	88.0





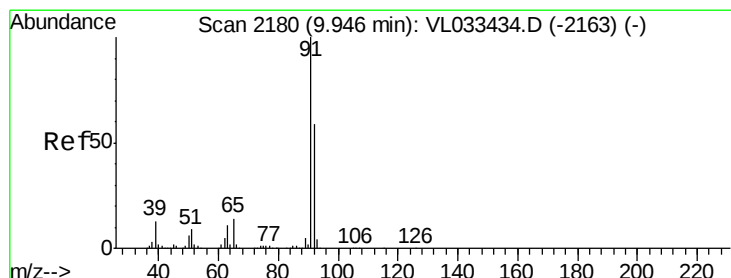
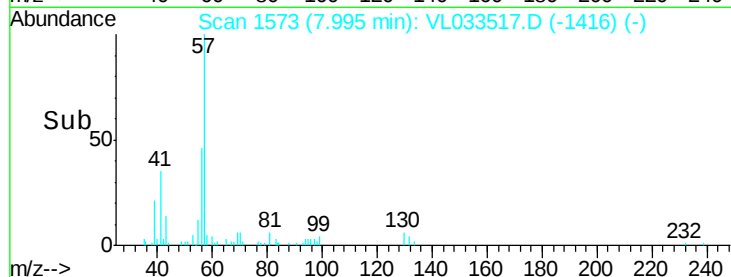
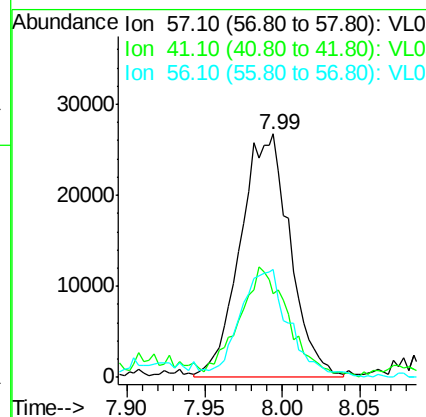
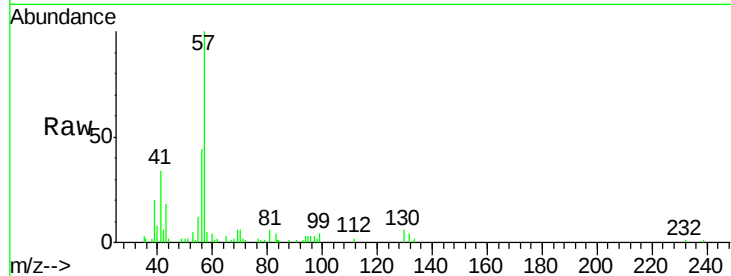
#44
 2,2,4-Trimethylpentane
 Concen: 0.206 ppbv m
 RT: 7.99 min Scan# 1573
 Delta R.T. 0.00 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion	Ratio	Lower	Upper
57	100		
41	43.6	26.0	39.0#
56	0.0	24.6	37.0#

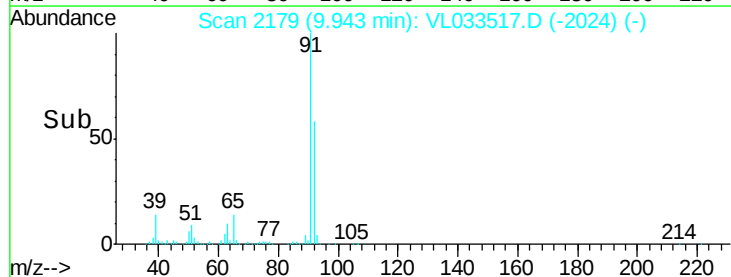
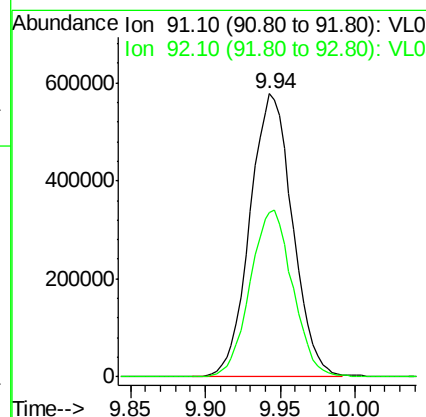
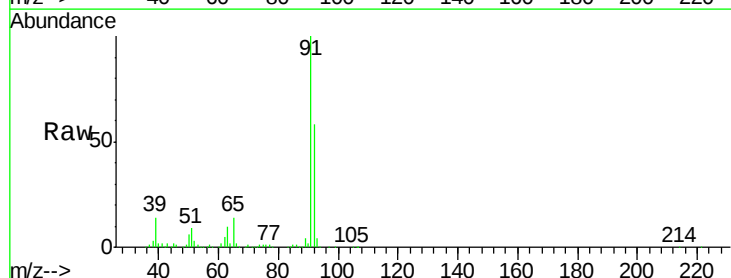
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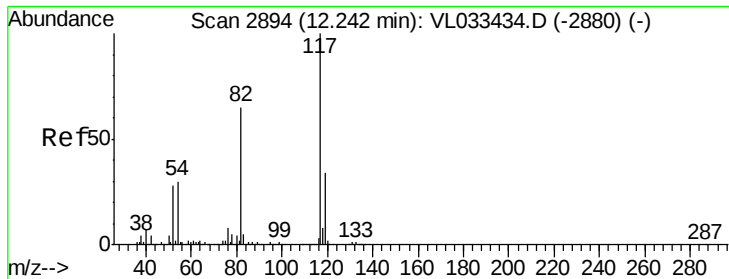
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#53
 Toluene
 Concen: 5.937 ppbv
 RT: 9.94 min Scan# 2179
 Delta R.T. -0.00 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.1	47.4	71.0





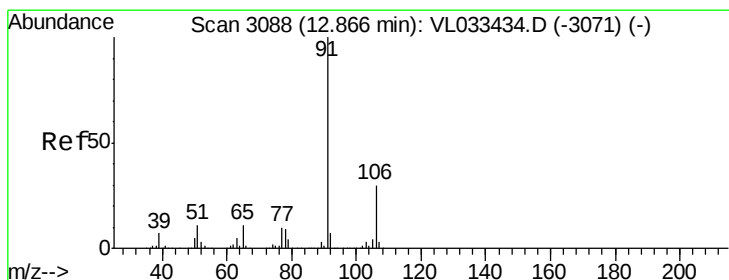
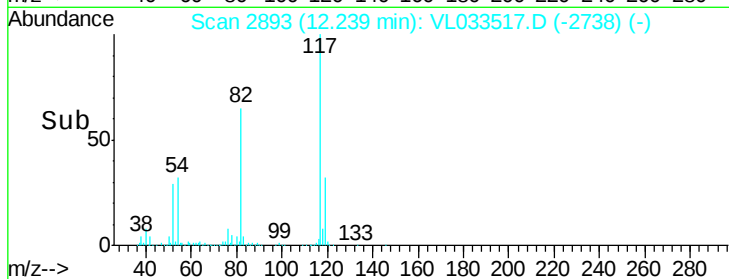
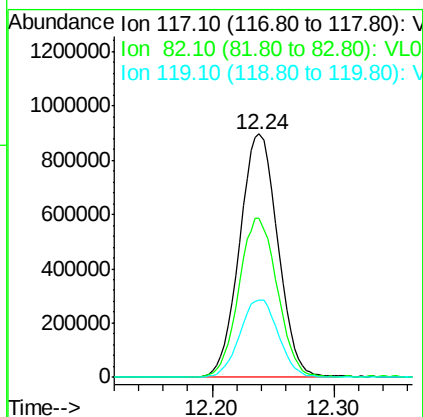
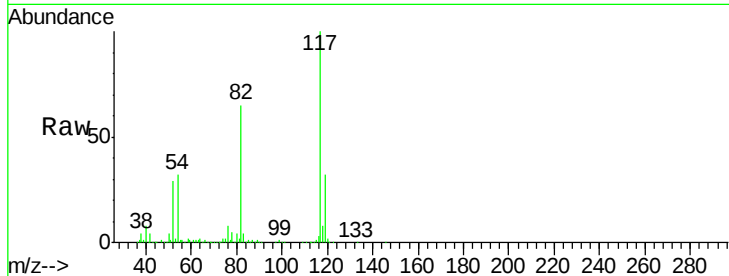
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion	Ratio	Lower	Upper
117	100		
82	66.0	51.5	77.3
119	32.3	25.5	38.3

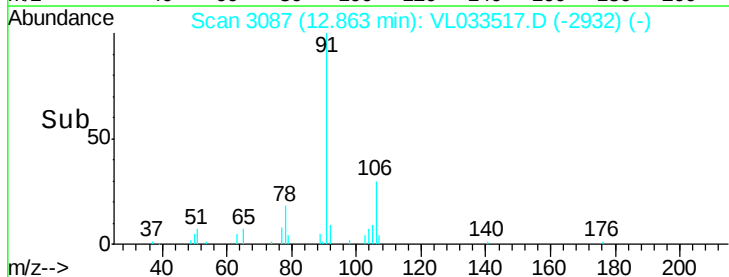
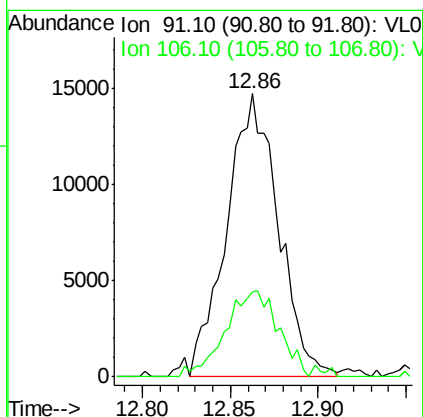
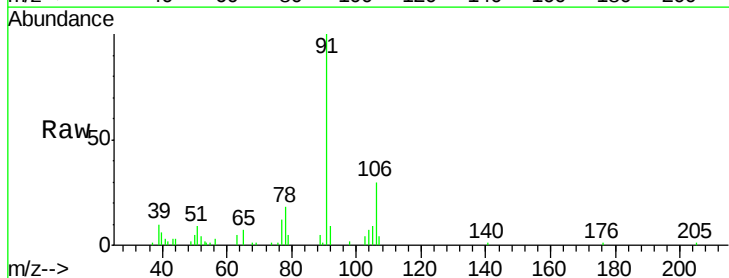
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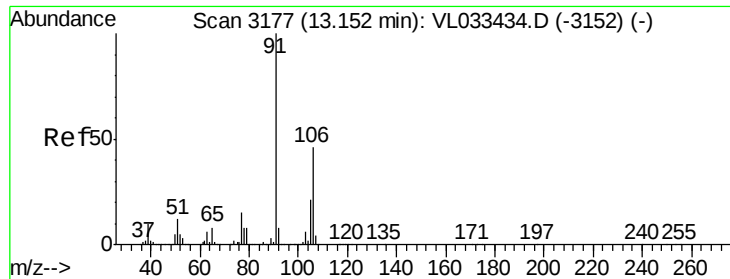
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#58
Ethyl Benzene
Concen: 0.116 ppbv m
RT: 12.86 min Scan# 3087
Delta R.T. -0.00 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.1	23.8	35.6





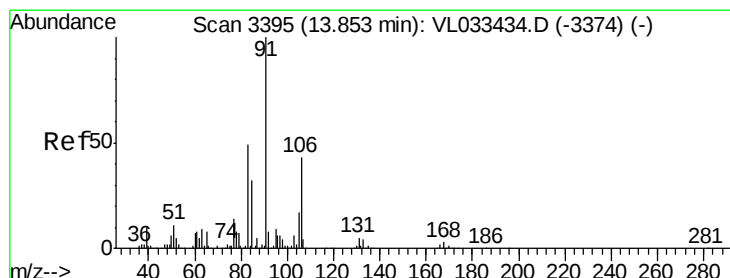
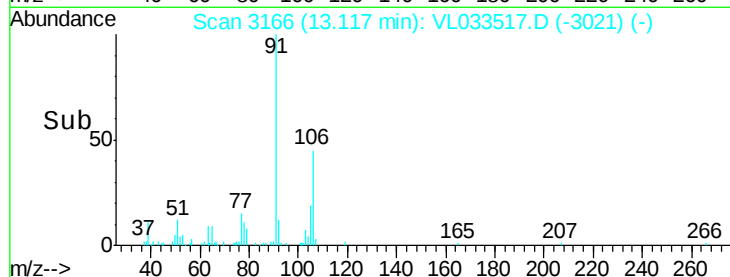
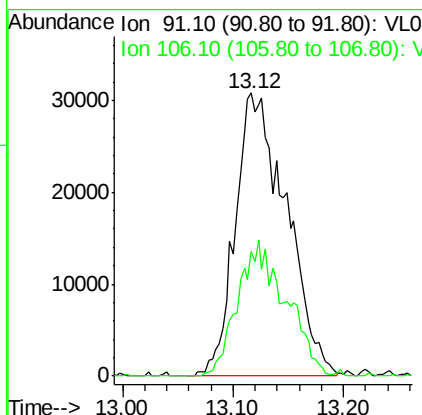
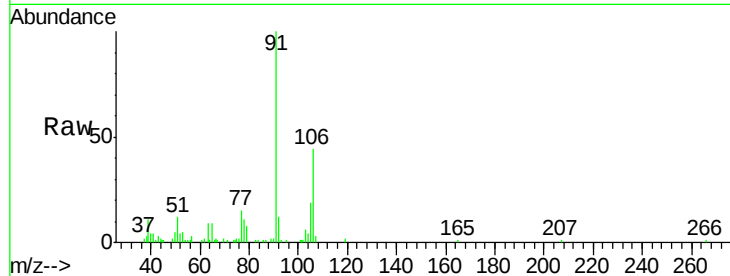
#59
m/p-Xylene
Concen: 0.427 ppbv m
RT: 13.12 min Scan# 3166
Delta R.T. -0.04 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Instrument :
MSVOA_L
ClientSampleId :
SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

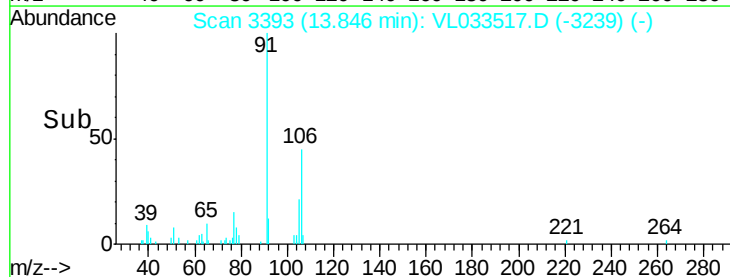
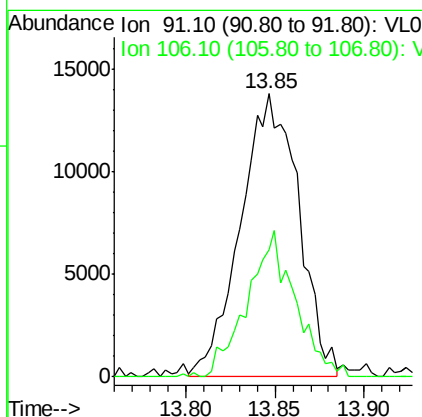
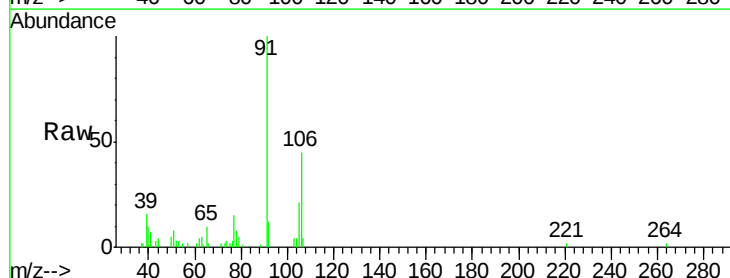
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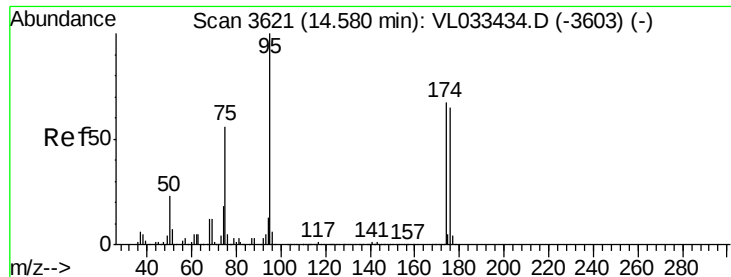
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4/1/2019 4:03:25 AM



#60
o-Xylene
Concen: 0.139 ppbv m
RT: 13.85 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL033517.D
Acq: 30 Mar 2019 00:56

Tgt Ion	Ratio	Lower	Upper
91	100		
106	42.7	21.4	64.3





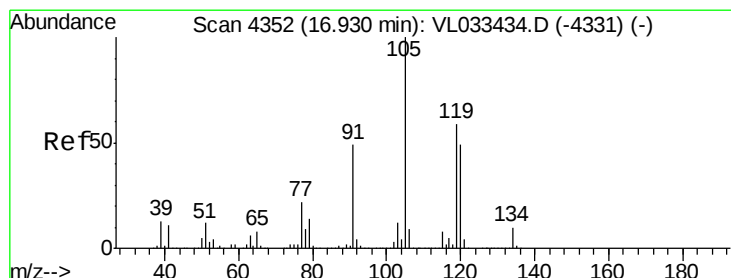
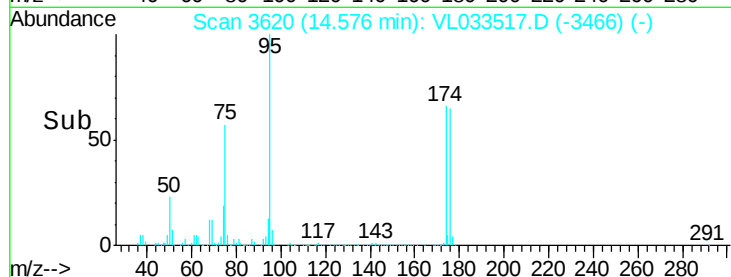
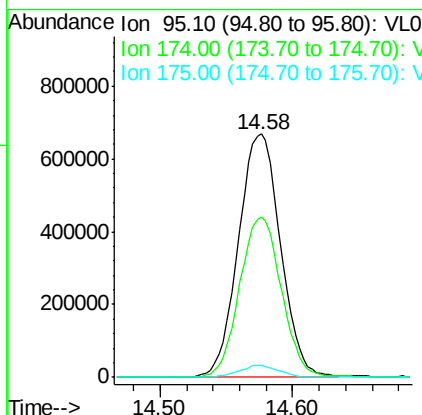
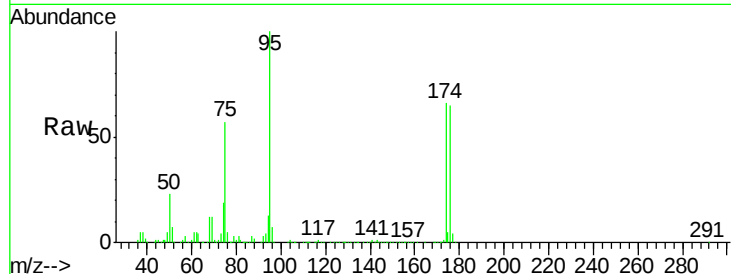
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.660 ppbv
 RT: 14.58 min Scan# 3620
 Delta R.T. -0.00 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion: 95 Resp: 1471585
 Ion Ratio Lower Upper
 95 100
 174 65.8 52.9 79.3
 175 4.8 3.8 5.6

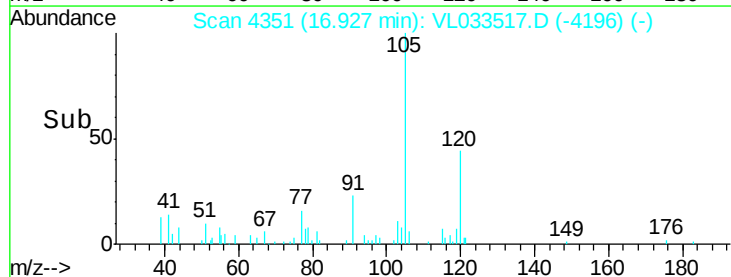
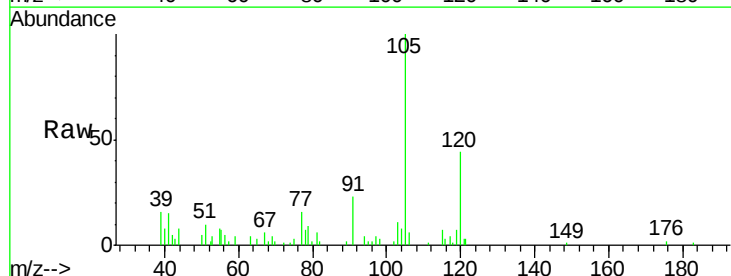
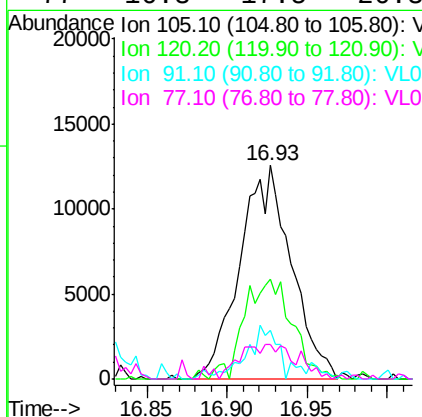
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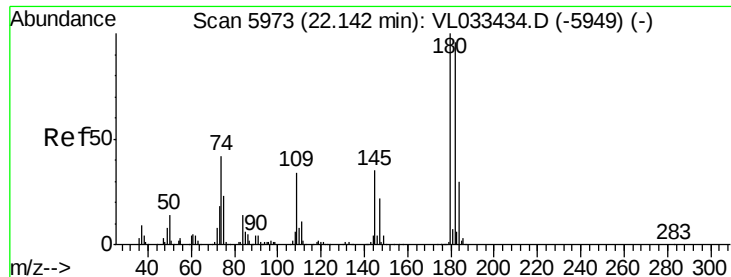
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.109 ppbv m
 RT: 16.93 min Scan# 4351
 Delta R.T. -0.00 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Tgt Ion: 105 Resp: 28156
 Ion Ratio Lower Upper
 105 100
 120 43.9 39.0 58.6
 91 22.8 40.0 60.0#
 77 16.3 17.5 26.3#





#81
 1,2,4-Trichlorobenzene
 Concen: 0.207 ppbv
 RT: 21.66 min Scan# 5824
 Delta R.T. -0.48 min
 Lab File: VL033517.D
 Acq: 30 Mar 2019 00:56

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-8-RM-NEXT-TO-CST-ROOM

Tot Ion	Ratio	Resp Lower	Upper
180	100		
182	0.0	77.0	115.4#
184	1.5	24.6	36.8#

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