

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040419\
 Data File : VL033546.D
 Acq On : 4 Apr 2019 23:35
 Operator : SY/AP
 Sample : K2211-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA2

Manual Integrations
 APPROVED

MMDadoda
 4/8/2019 3:22:25 AM

Quant Time: Apr 05 03:26:40 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	1005820	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2025662	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2329674	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1914324	10.48	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	90641	0.618	ppbv	99
3) Chlorodifluoromethane	3.01	51	33314m	0.288	ppbv	
4) Chloromethane	3.17	50	29384	0.480	ppbv	94
9) Propene	3.05	41	78195m	1.608	ppbv	
10) Heptane	8.25	43	17103m	0.132	ppbv	
11) Trichlorofluoromethane	4.00	101	40064	0.222	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.55	101	7959m	0.066	ppbv	
13) Ethanol	3.70	45	18476110	1468.239	ppbv	68
15) Acetone	3.90	43	1141765	9.441	ppbv #	87
20) Methylene Chloride	4.41	84	452940	8.823	ppbv	98
26) Hexane	5.78	57	356863	3.577	ppbv #	71
34) 2-Butanone	5.33	43	81213	0.667	ppbv	100
35) Carbon Tetrachloride	7.13	117	9792m	0.068	ppbv	
36) Benzene	7.00	78	33216	0.195	ppbv #	93
44) 2,2,4-Trimethylpentane	7.98	57	34426m	0.116	ppbv	
52) Tetrachloroethene	11.37	164	37156	0.579	ppbv	89
53) Toluene	9.94	91	2448260	12.396	ppbv	100

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

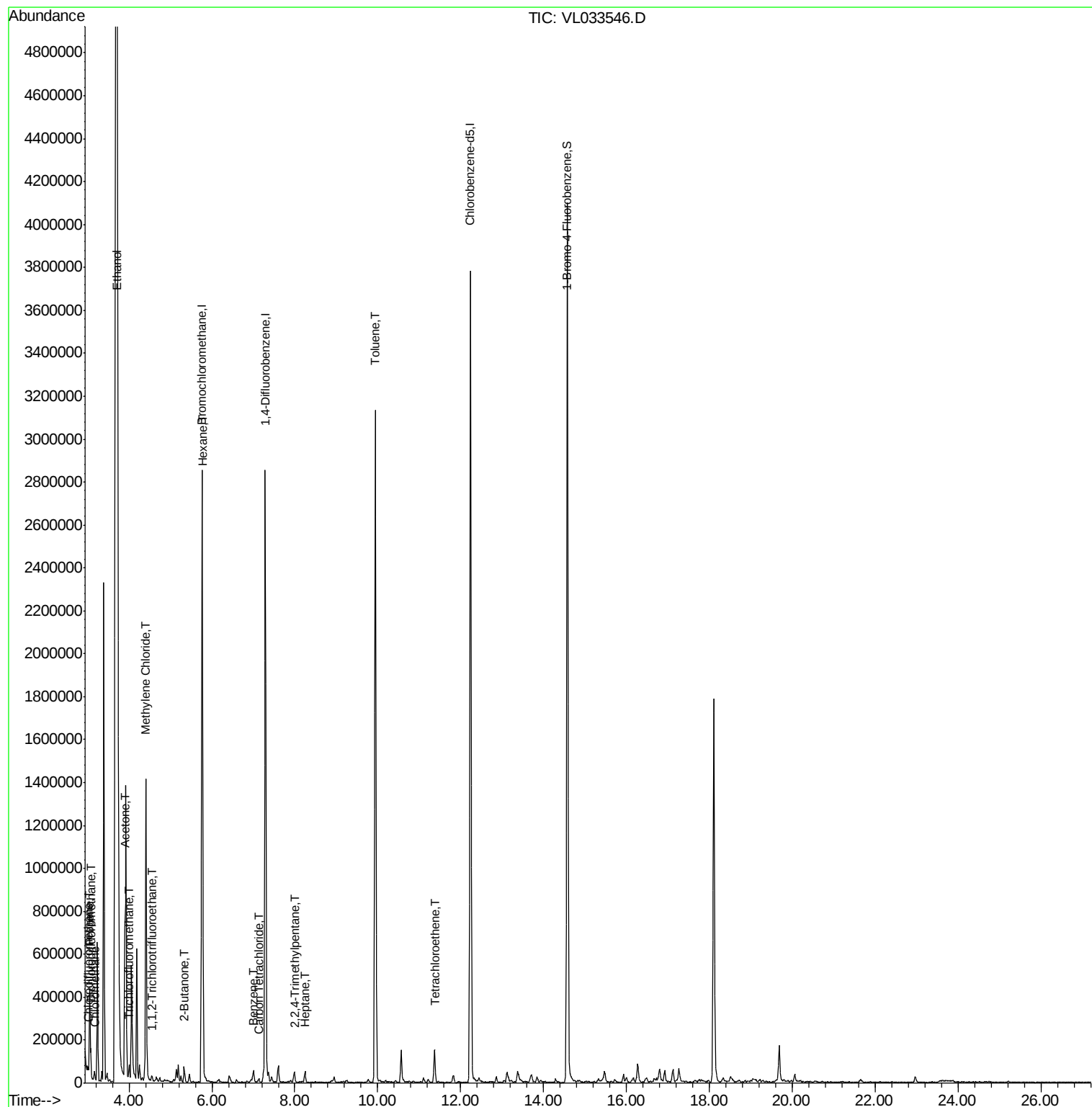
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040419\
Data File : VL033546.D
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Quant Time: Apr 05 03:26:40 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA2

Tot Ion: 49 Resp: 1005820

Ion Ratio Lower Upper

49 100

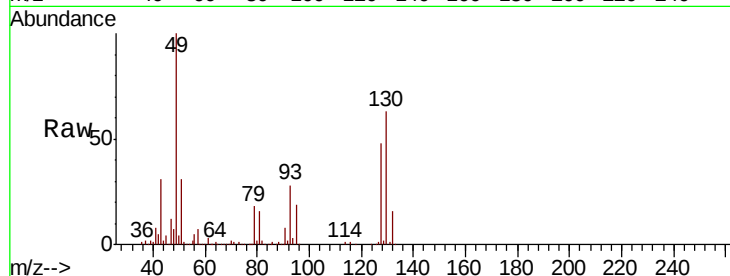
128 48.6 24.0 72.0

130 63.3 31.2 93.6

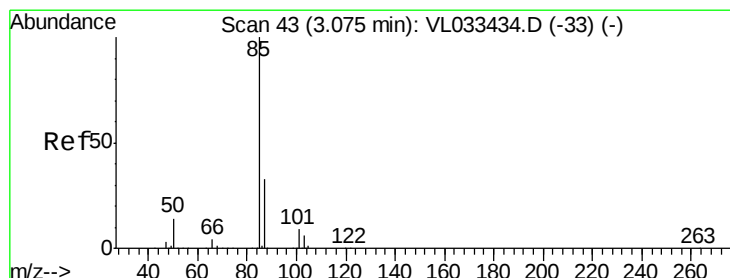
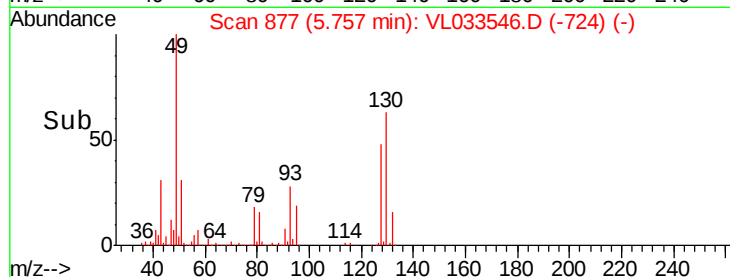
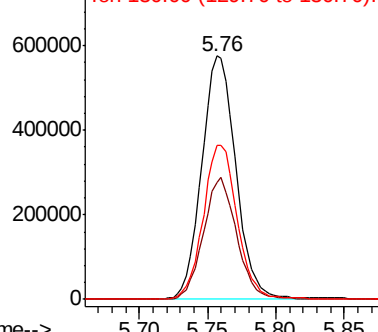
Manual Integrations
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Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.618 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033546.D

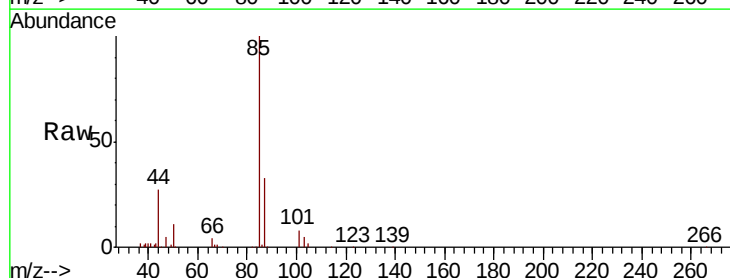
Acq: 4 Apr 2019 23:35

Tgt Ion: 85 Resp: 90641

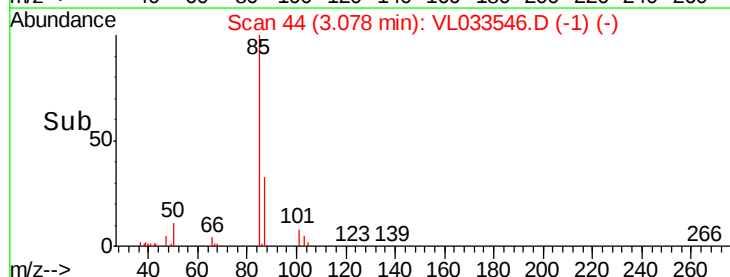
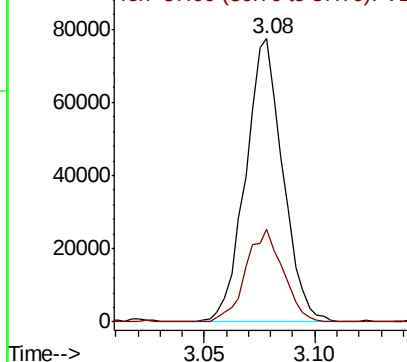
Ion Ratio Lower Upper

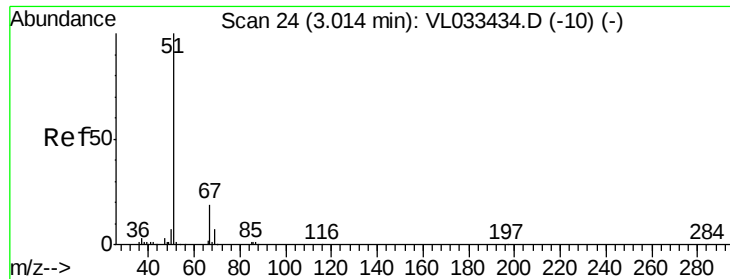
85 100

87 32.8 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

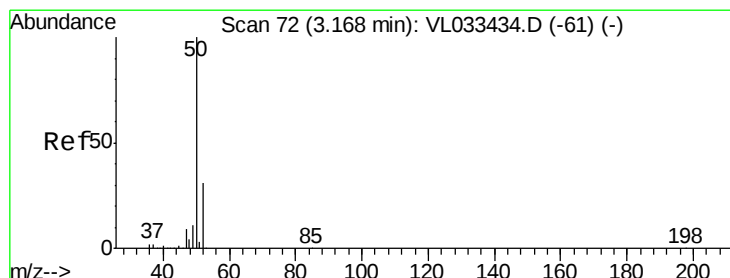
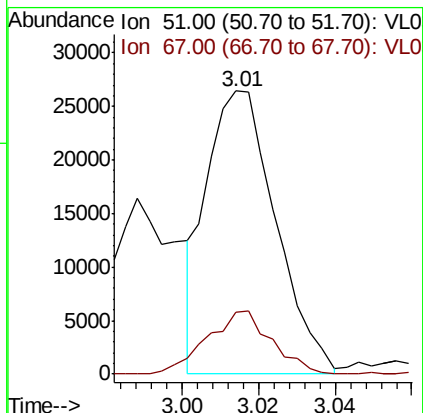
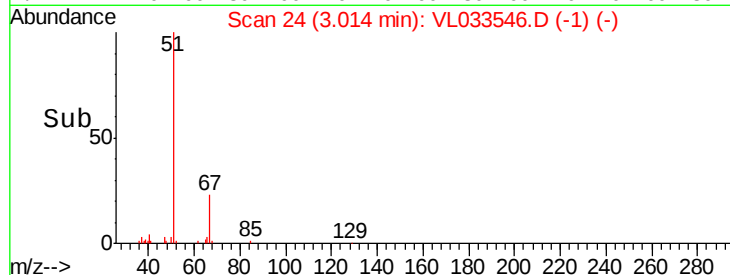
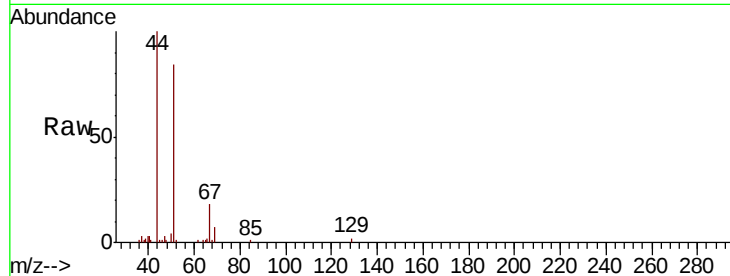
Chlorodifluoromethane
Concen: 0.288 ppbv
RT: 3.01 min Scan# 24
Delta R.T. -0.00 min
Lab File: VL033546.D
Acq: 4 Apr 2019 23:35

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion	Ratio	Lower	Upper
51	100		
67	20.6	15.7	23.5

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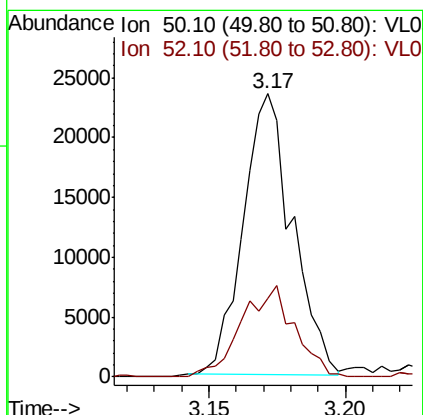
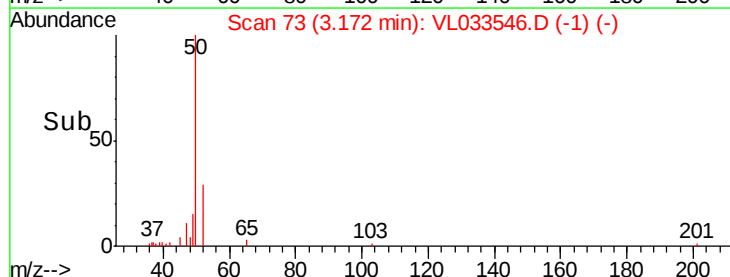
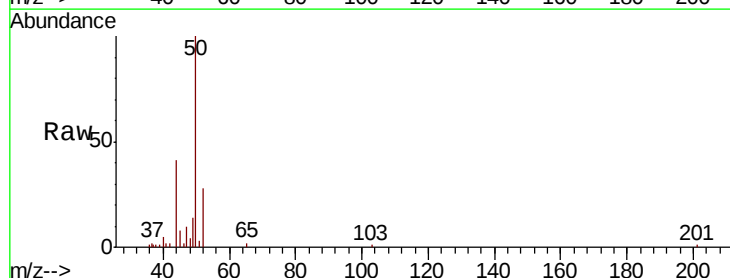
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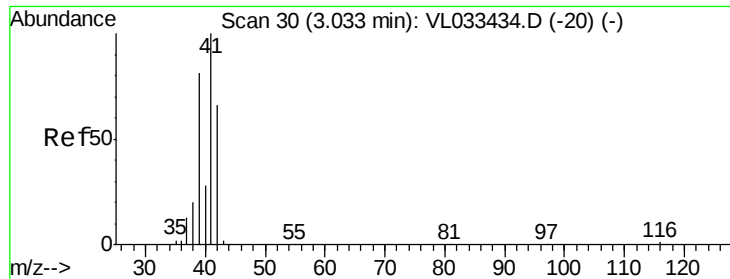


#4

Chloromethane
Concen: 0.480 ppbv
RT: 3.17 min Scan# 73
Delta R.T. 0.00 min
Lab File: VL033546.D
Acq: 4 Apr 2019 23:35

Tgt Ion	Ratio	Lower	Upper
50	100		
52	28.1	25.0	37.6





#9

Propene

Concen: 1.608 ppbv m

RT: 3.05 min Scan# 35

Delta R.T. 0.02 min

Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA2

Tot Ion: 41 Resp: 78195

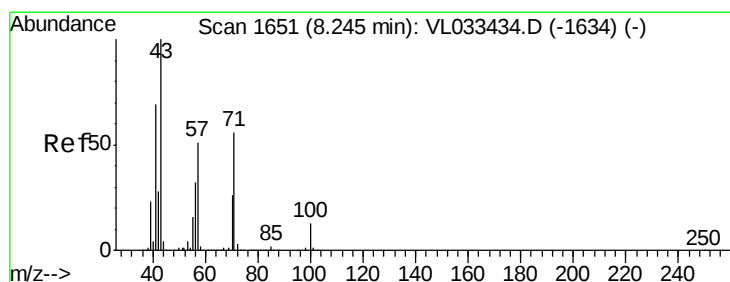
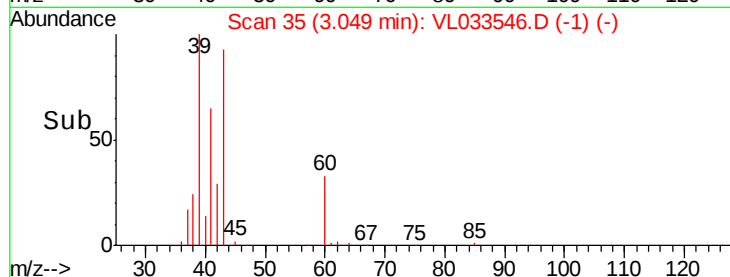
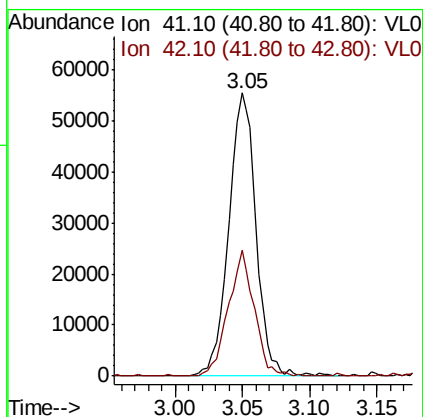
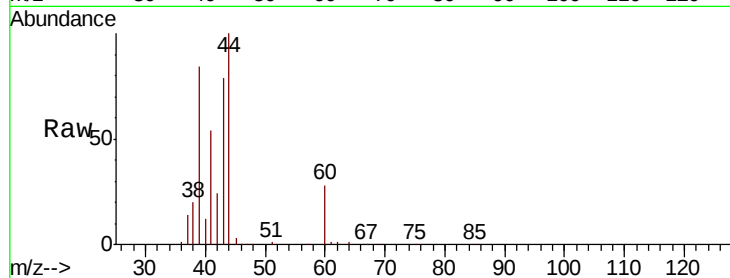
Ion Ratio Lower Upper

41 100

42 138.0 53.9 80.9#

Manual Integrations
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#10

Heptane

Concen: 0.132 ppbv m

RT: 8.25 min Scan# 1651

Delta R.T. -0.00 min

Lab File: VL033546.D

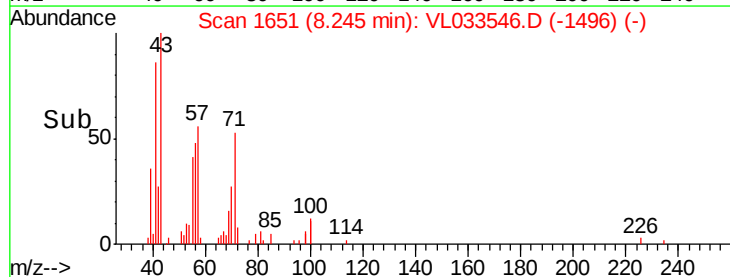
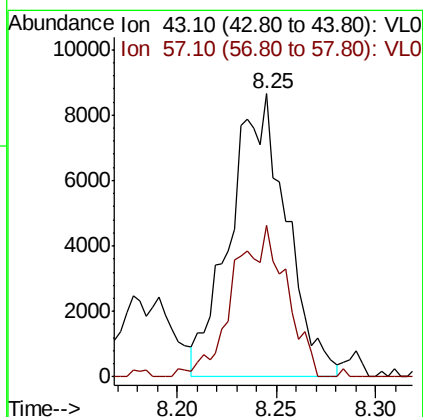
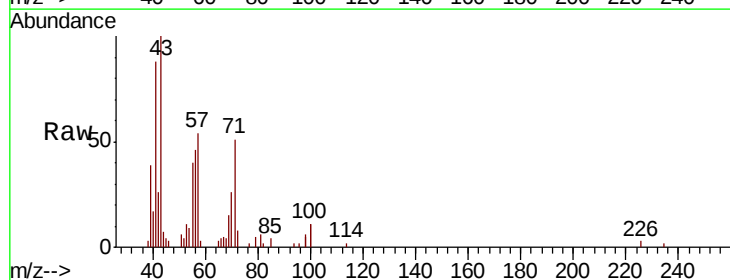
Acq: 4 Apr 2019 23:35

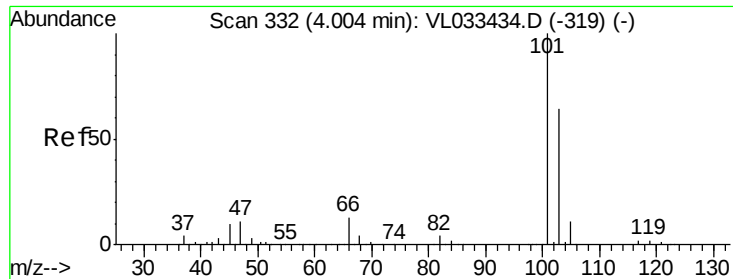
Tgt Ion: 43 Resp: 17103

Ion Ratio Lower Upper

43 100

57 0.0 40.6 60.8#





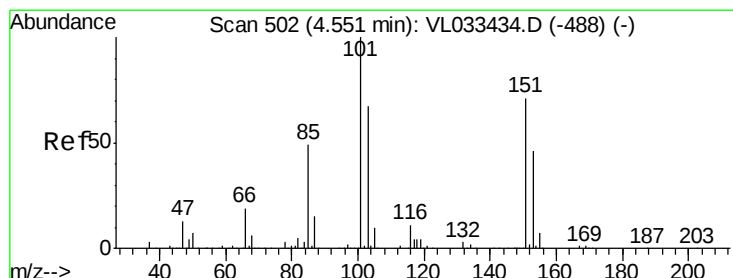
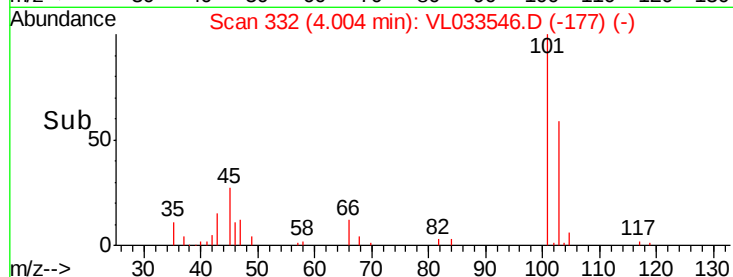
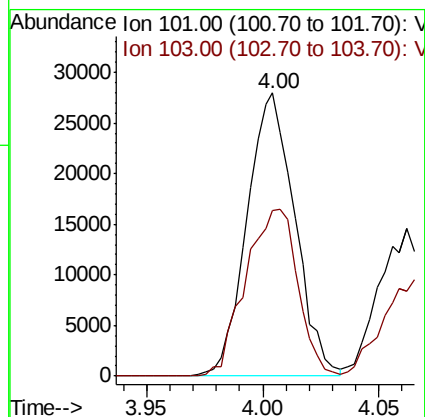
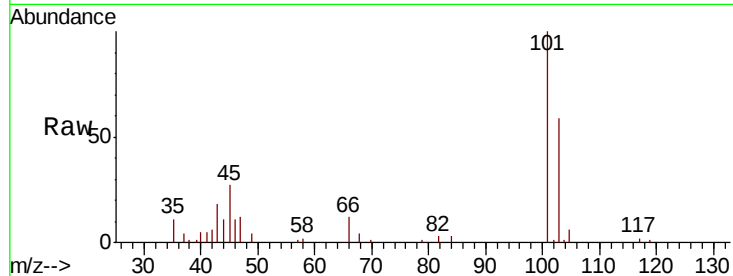
#11
 Trichlorofluoromethane
 Concen: 0.222 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.00 min
 Lab File: VL033546.D
 Acq: 4 Apr 2019 23:35

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA2

Tot Ion:101 Resp: 40064
 Ion Ratio Lower Upper
 101 100
 103 58.7 51.3 76.9

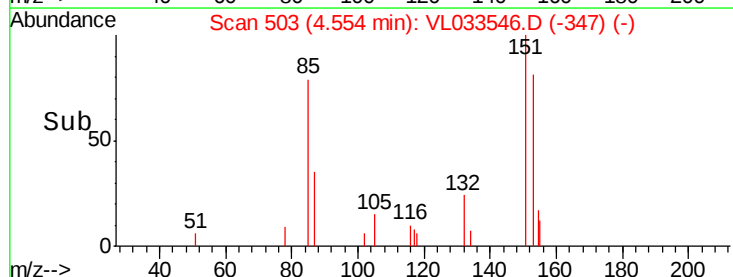
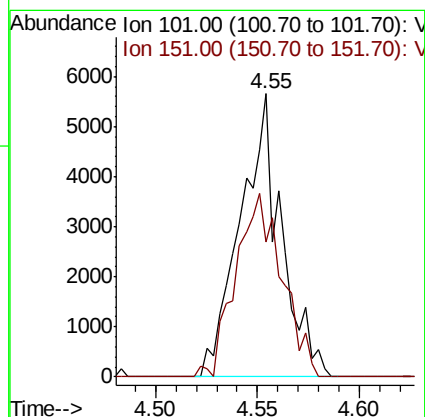
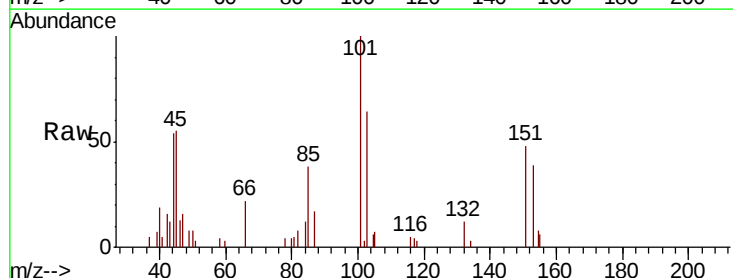
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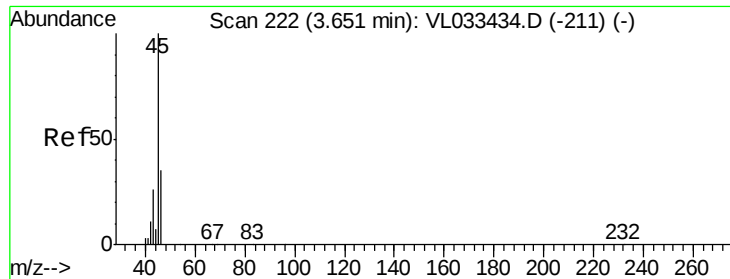
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.066 ppbv m
 RT: 4.55 min Scan# 503
 Delta R.T. 0.00 min
 Lab File: VL033546.D
 Acq: 4 Apr 2019 23:35

Tgt Ion:101 Resp: 7959
 Ion Ratio Lower Upper
 101 100
 151 72.6 57.7 86.5





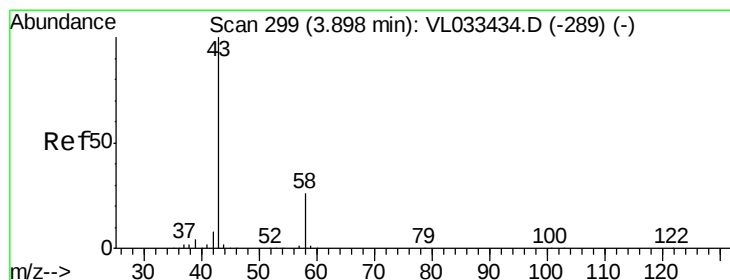
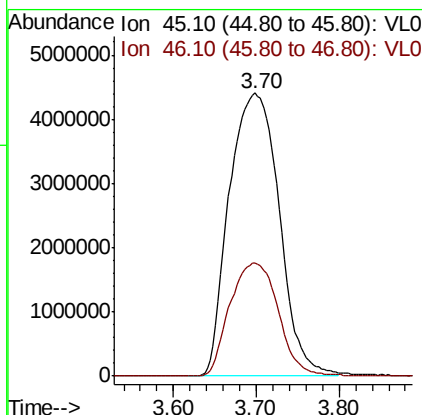
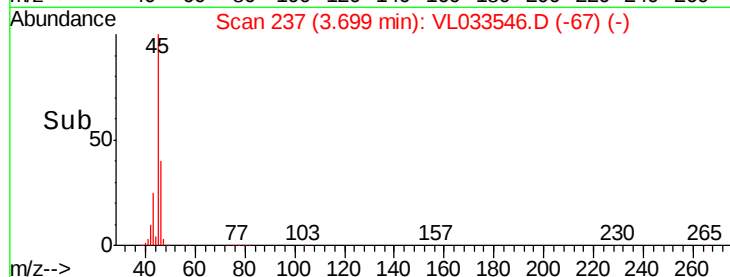
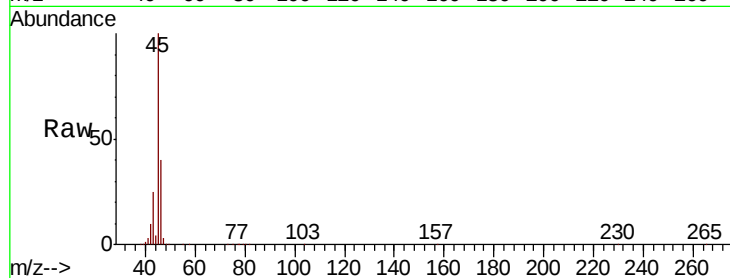
#13
Ethanol
Concen: 1468.239 ppbv
RT: 3.70 min Scan# 237
Delta R.T. 0.05 min
Lab File: VL033546.D
Acq: 4 Apr 2019 23:35

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion: 45 Resp:18476110
Ion Ratio Lower Upper
45 100
46 38.8 25.4 101.8

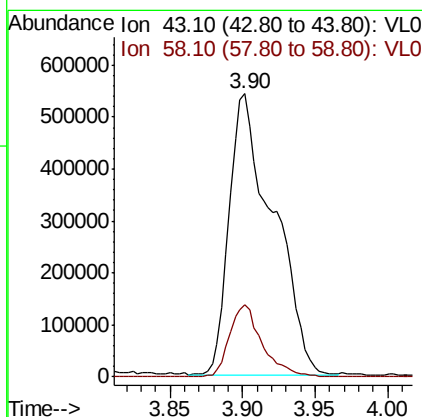
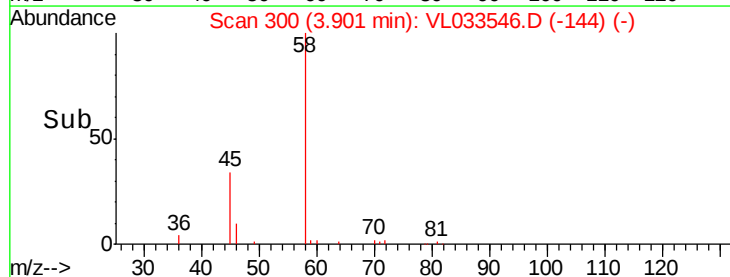
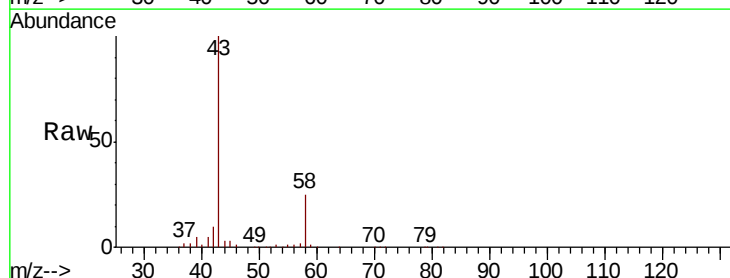
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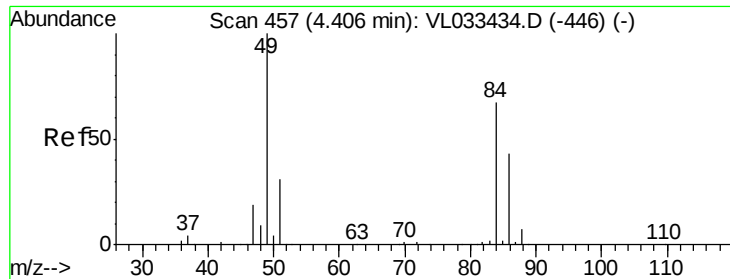
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#15
Acetone
Concen: 9.441 ppbv
RT: 3.90 min Scan# 300
Delta R.T. 0.00 min
Lab File: VL033546.D
Acq: 4 Apr 2019 23:35

Tgt Ion: 43 Resp: 1141765
Ion Ratio Lower Upper
43 100
58 19.2 20.5 30.7#





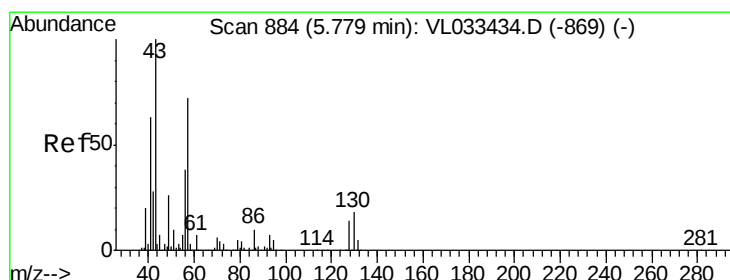
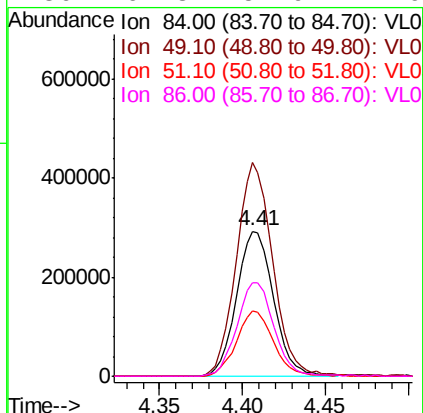
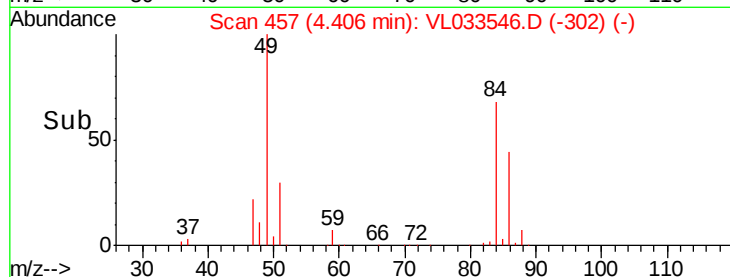
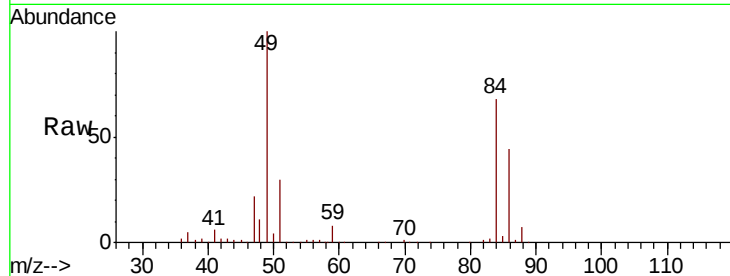
#20
Methvlene Chloride
Concen: 8.823 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033546.D
Acq: 4 Apr 2019 23:35

Instrument :
MSVOA_L
ClientSampleId :
LIHA-IA2

Tot Ion:	84	Resp:	452940
Ion	Ratio	Lower	Upper
84	100		
49	147.0	120.0	180.0
51	44.7	36.7	55.1
86	64.3	51.9	77.9

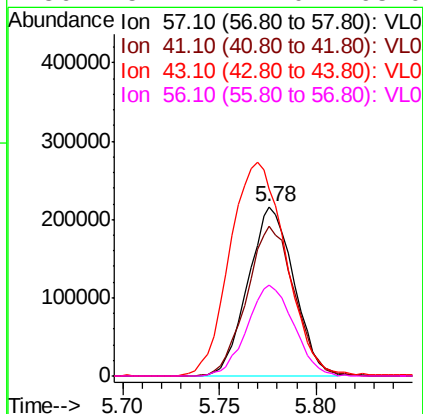
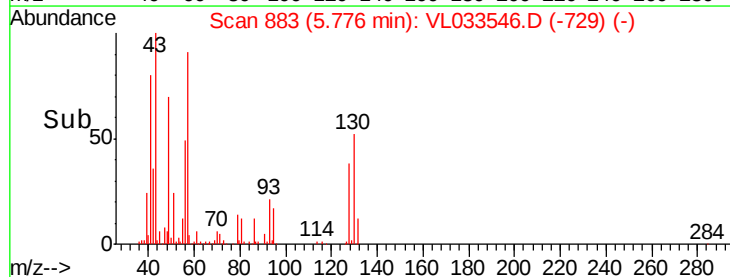
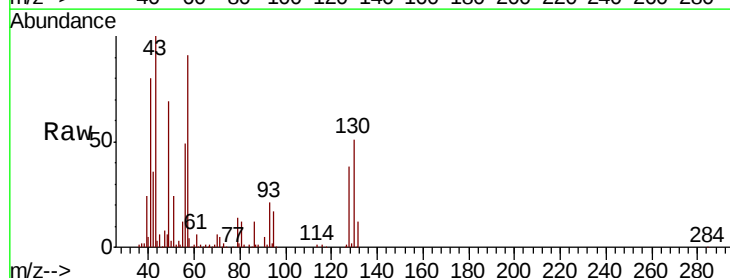
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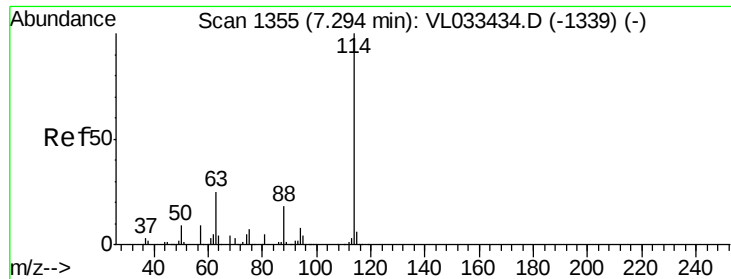
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#26
Hexane
Concen: 3.577 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.00 min
Lab File: VL033546.D
Acq: 4 Apr 2019 23:35

Tgt Ion:	57	Resp:	356863
Ion	Ratio	Lower	Upper
57	100		
41	92.1	70.7	106.1
43	154.8	182.6	274.0#
56	54.4	42.0	63.0





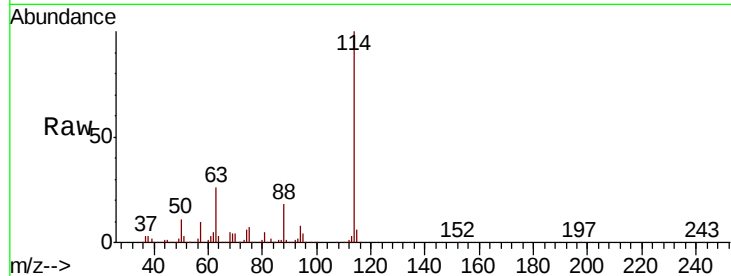
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1354
 Delta R.T. -0.00 min
 Lab File: VL033546.D
 Acq: 4 Apr 2019 23:35

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA2

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.9	21.5	32.3
88	18.3	14.5	21.7

Manual Integrations
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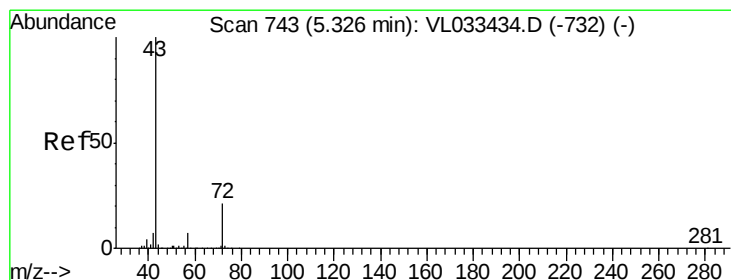
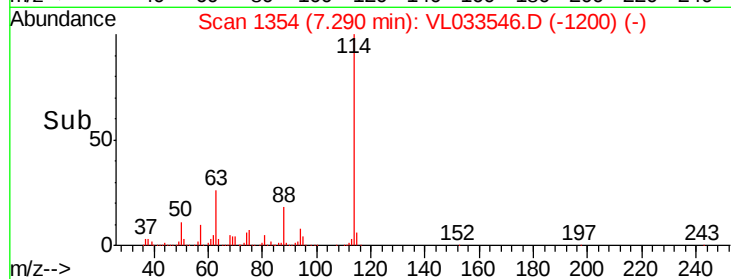
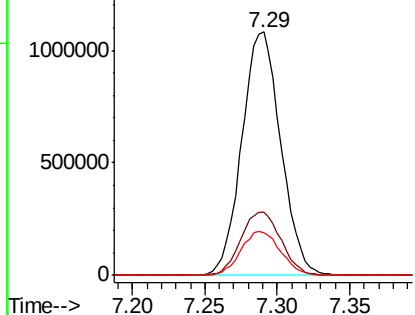


Abundance

Ion 114.10 (113.80 to 114.80): VL0

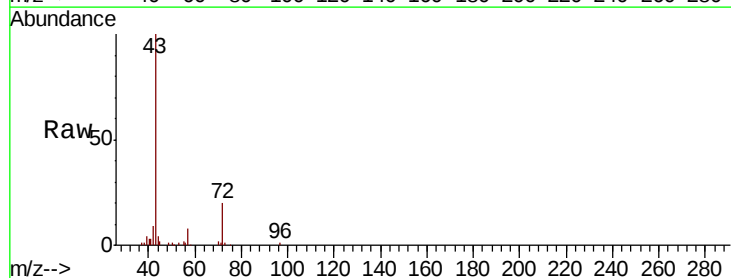
Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34
 2-Butanone
 Concen: 0.667 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. 0.01 min
 Lab File: VL033546.D
 Acq: 4 Apr 2019 23:35

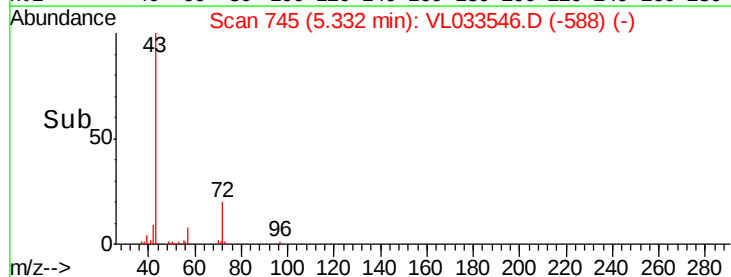
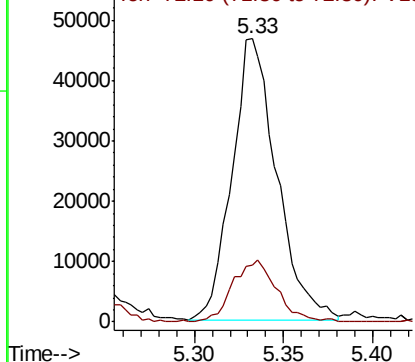
Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.8	17.4	26.2

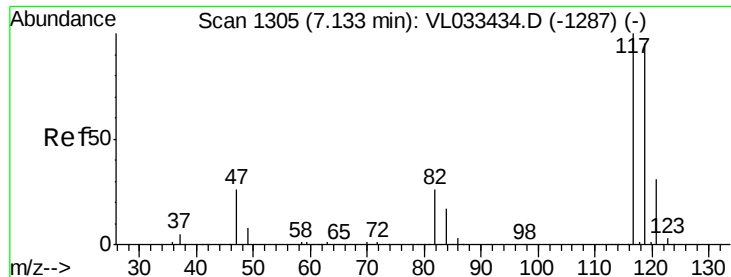


Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.068 ppbv m

RT: 7.13 min Scan# 1303

Delta R.T. -0.01 min

Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

Instrument :

MSVOA_L

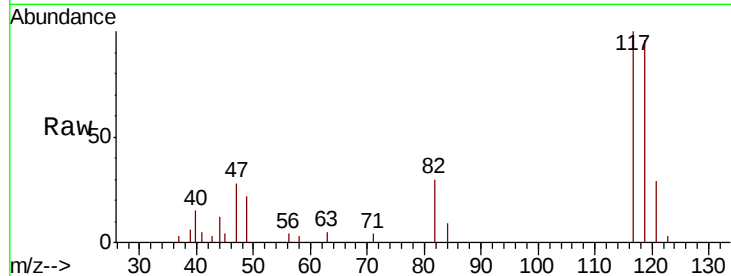
ClientSampleId :

LIHA-IA2

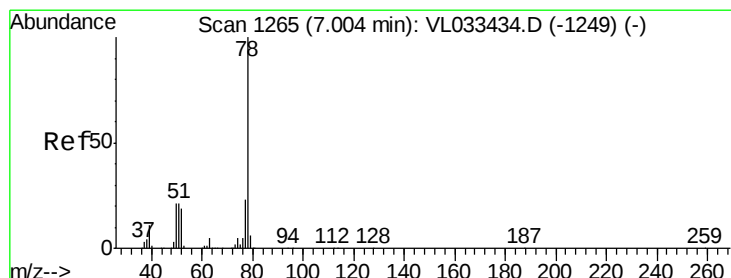
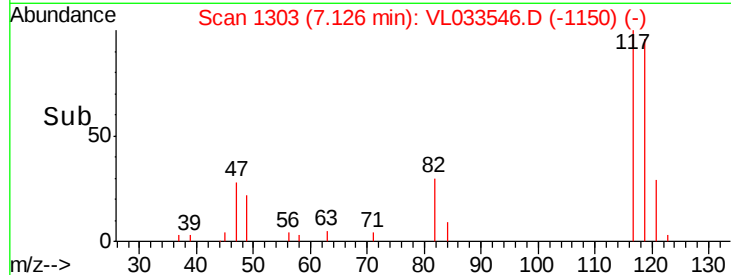
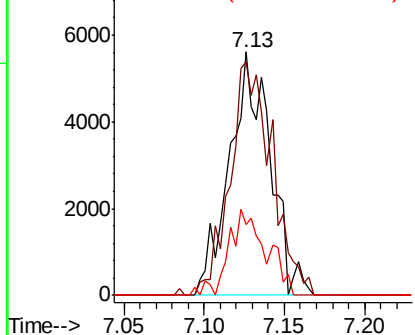
Tot Ion:	117	Resp:	9792
Ion	Ratio	Lower	Upper
117	100		
119	95.8	75.8	113.8
121	29.2	24.7	37.1

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Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.195 ppbv

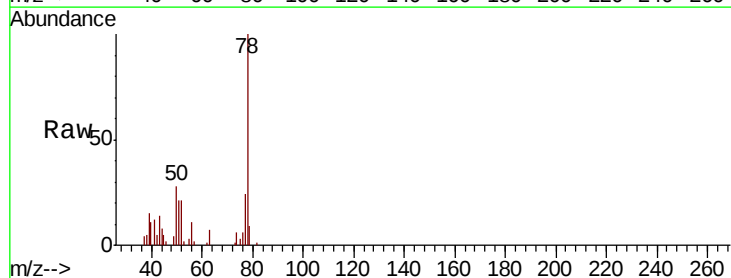
RT: 7.00 min Scan# 1264

Delta R.T. -0.00 min

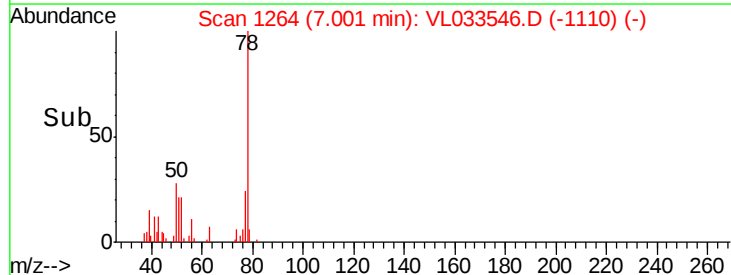
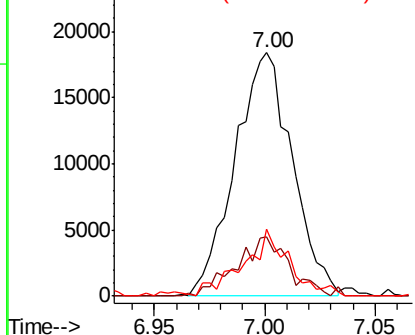
Lab File: VL033546.D

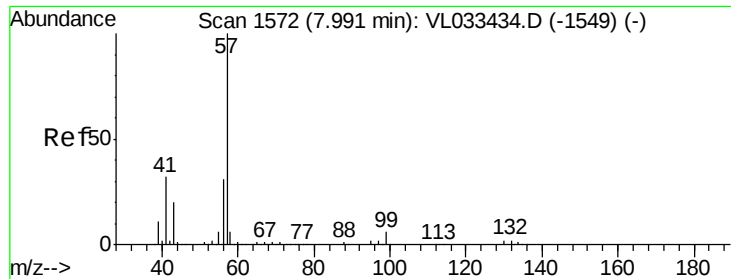
Acq: 4 Apr 2019 23:35

Tgt Ion:	78	Resp:	33216
Ion	Ratio	Lower	Upper
78	100		
77	23.2	18.1	27.1
50	26.9	16.7	25.1#



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.116 ppbv m

RT: 7.98 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

Instrument :

MSVOA_L

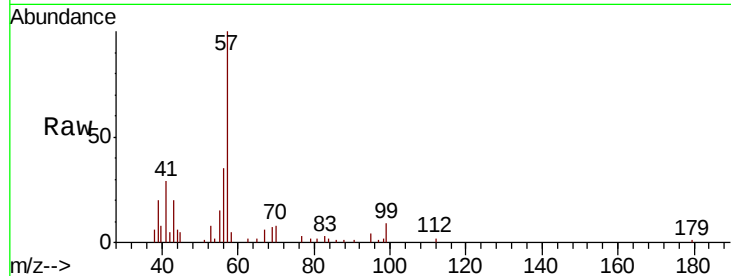
ClientSampleId :

LIHA-IA2

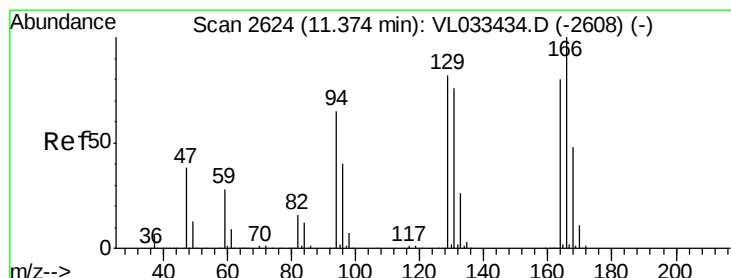
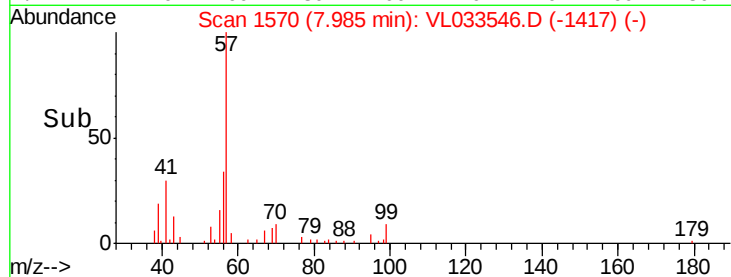
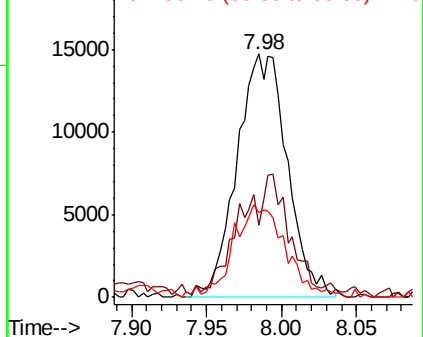
Tot Ion:	57	Resp:	34426
Ion Ratio	Lower	Upper	
57	100		
41	0.0	26.0	39.0#
56	39.8	24.6	37.0#

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Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



#52

Tetrachloroethene

Concen: 0.579 ppbv

RT: 11.37 min Scan# 2622

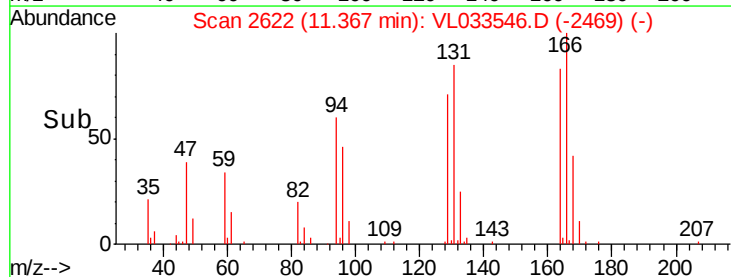
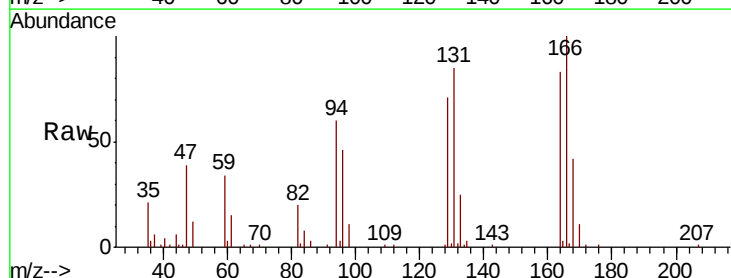
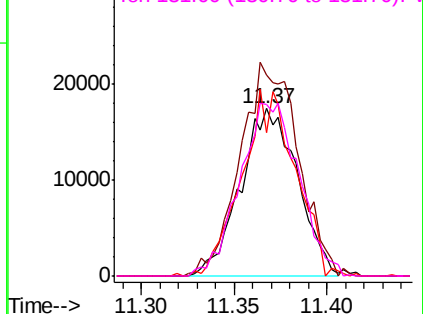
Delta R.T. -0.01 min

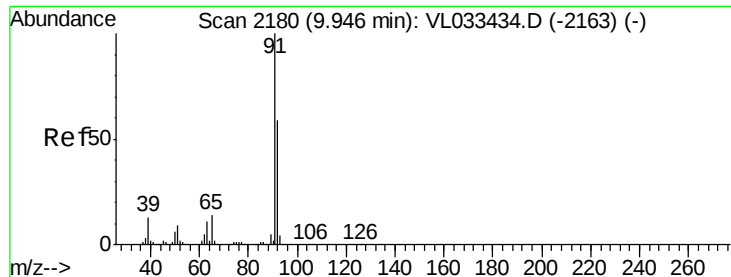
Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

Tgt Ion:	164	Resp:	37156
Ion Ratio	Lower	Upper	
164	100		
166	115.8	99.5	149.3
129	82.6	81.4	122.2
131	100.9	75.6	113.4

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: 12.396 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

Instrument :

MSVOA_L

ClientSampleId :

LIHA-IA2

Tot Ion: 91 Resp: 2448260

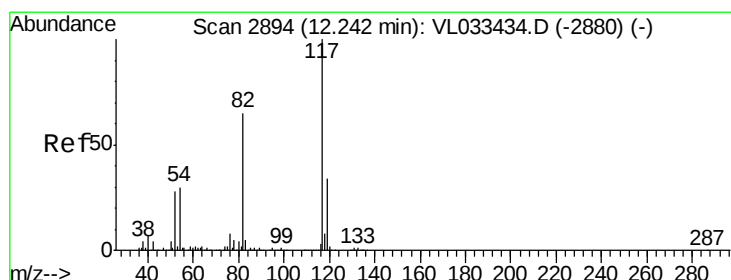
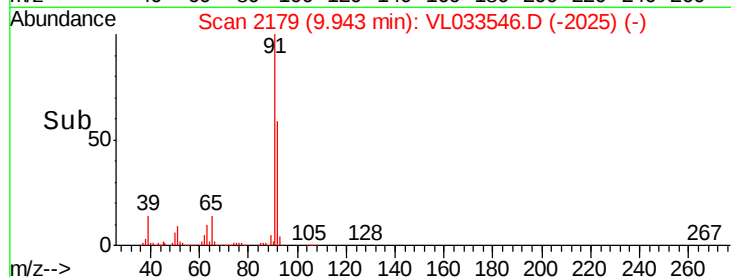
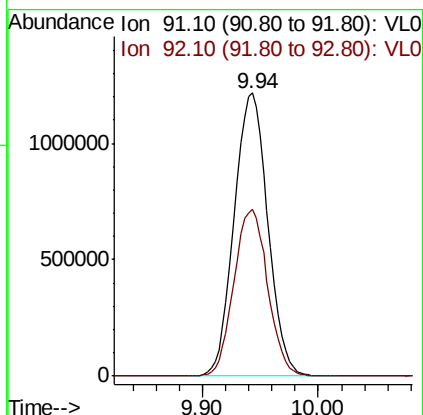
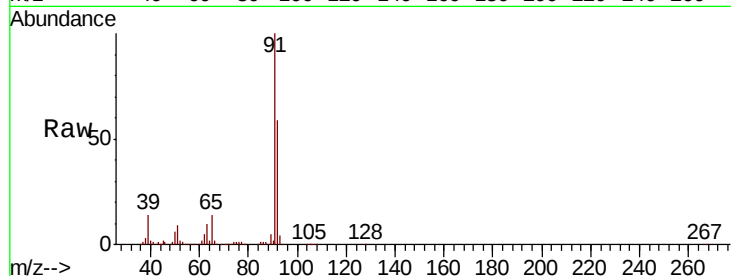
Ion Ratio Lower Upper

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# 2893

Delta R.T. -0.00 min

Lab File: VL033546.D

Acq: 4 Apr 2019 23:35

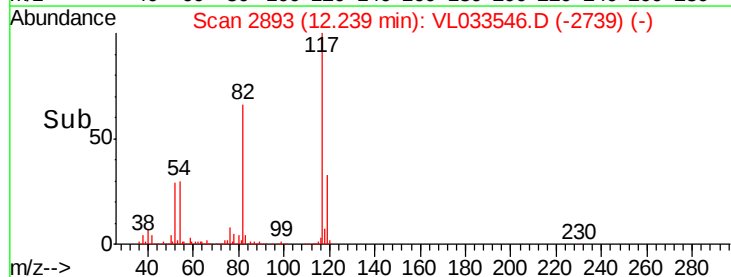
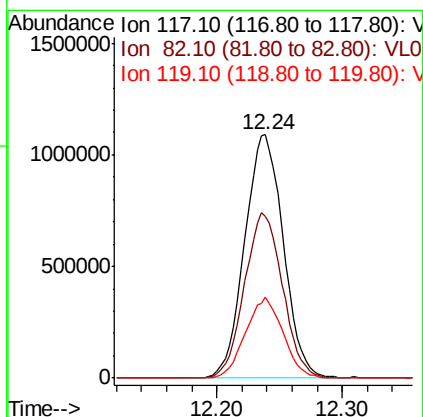
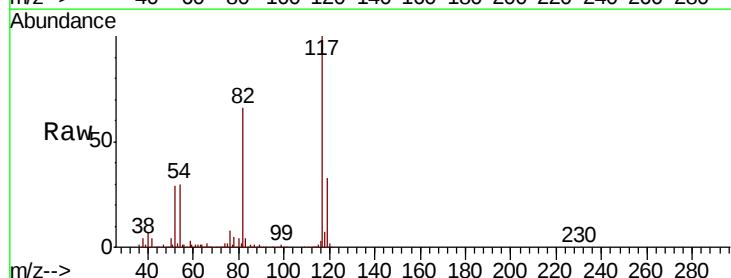
Tgt Ion: 117 Resp: 2329674

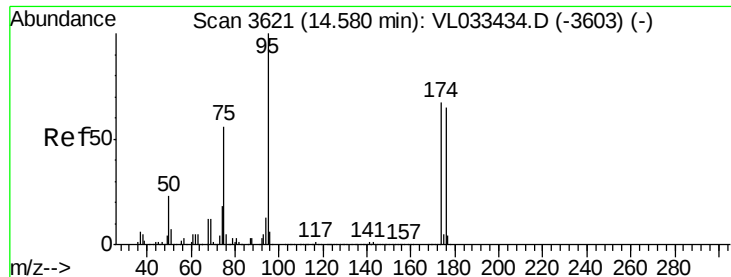
Ion Ratio Lower Upper

117 100

82 67.6 51.5 77.3

119 32.3 25.5 38.3





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.481 ppbv
 RT: 14.58 min Scan# 3620
 Delta R.T. -0.00 min
 Lab File: VL033546.D
 Acq: 4 Apr 2019 23:35

Instrument :
 MSVOA_L
 ClientSampleId :
 LIHA-IA2

Tot Ion	Ratio	Lower	Upper
95	100		
174	66.5	52.9	79.3
175	4.8	3.8	5.6

Manual Integrations
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