

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032719\
 Data File : VL033484.D
 Acq On : 28 Mar 2019 1:30
 Operator : SY/AP
 Sample : K1991-01DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 28 07:31:48 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 26 16:00:50 2019
 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	5.75	49	791441	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1968252	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	1929381	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	1472818	9.74	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.40%

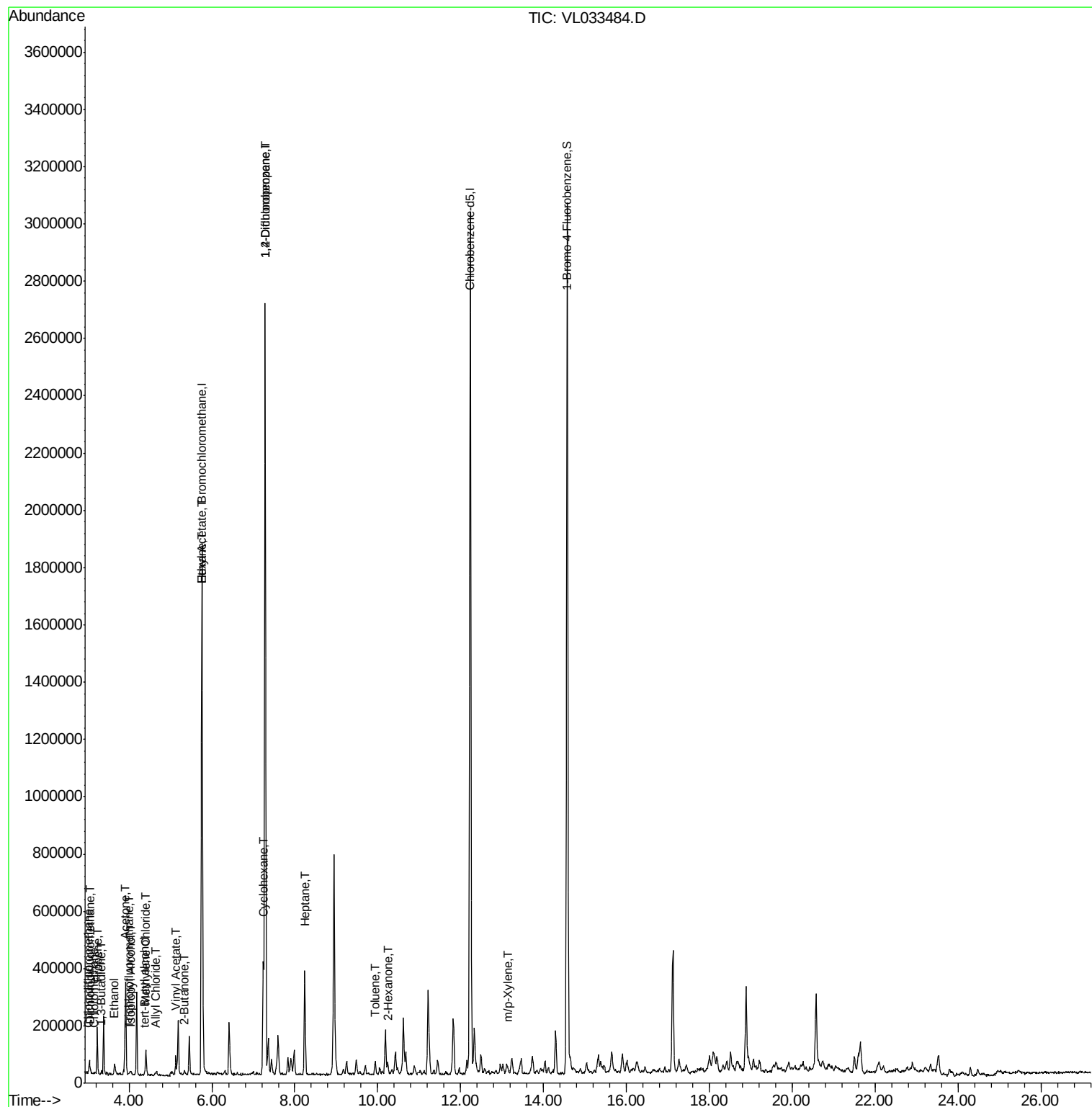
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	6929	0.060	ppbv #	81
3) Chlorodifluoromethane	3.01	51	4977	0.055	ppbv #	88
4) Chloromethane	3.17	50	1005	0.021	ppbv	97
9) Propene	3.24	41	40589	1.061	ppbv	98
10) Heptane	8.24	43	149858	1.465	ppbv	99
11) Trichlorofluoromethane	4.00	101	4023	0.028	ppbv	100
13) Ethanol	3.65	45	18984	1.917	ppbv #	18
15) Acetone	3.91	43	105434	1.108	ppbv #	89
16) 1,3-Butadiene	3.34	39	2071	0.055	ppbv #	6
17) tert-Butyl alcohol	4.37	59	1361	0.078	ppbv #	73
19) Isopropyl Alcohol	4.03	45	5078	0.084	ppbv #	95
20) Methylene Chloride	4.41	84	30394	0.752	ppbv #	80
21) Allyl Chloride	4.65	41	1419	0.024	ppbv #	1
23) Vinyl Acetate	5.14	43	8572	0.063	ppbv #	1
25) Ethyl Acetate	5.77	43	110492	0.626	ppbv #	78
26) Hexane	5.77	57	160835	2.049	ppbv #	40
30) Cyclohexane	7.24	84	121416	1.955	ppbv #	84
34) 2-Butanone	5.34	43	15352	0.130	ppbv	94
39) 1,2-Dichloropropane	7.28	63	490893	7.588	ppbv #	24
51) 2-Hexanone	10.25	43	3051	0.024	ppbv #	29
53) Toluene	9.94	91	35082	0.183	ppbv	98
59) m/p-Xylene	13.14	91	4918	0.021	ppbv #	100

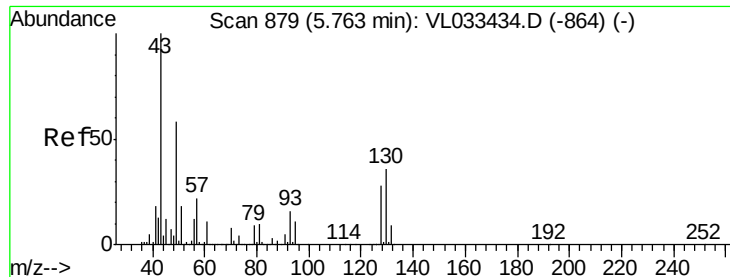
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Tue Mar 26 16:00:50 2019
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 876

Delta R.T. -0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :
MSVOA_L
ClientSampled :

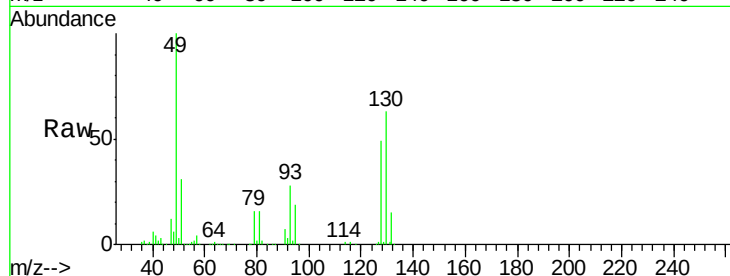
Tot Ion: 49 Resp: 791441

Ion Ratio Lower Upper

49 100

128 49.6 24.0 72.0

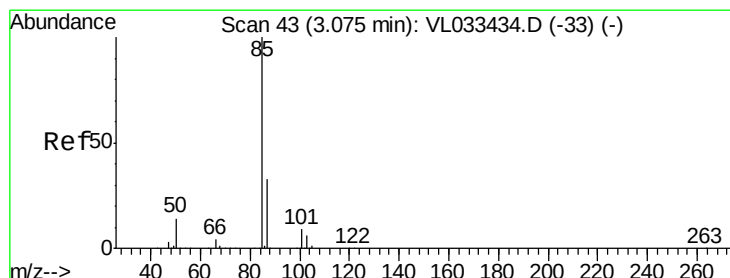
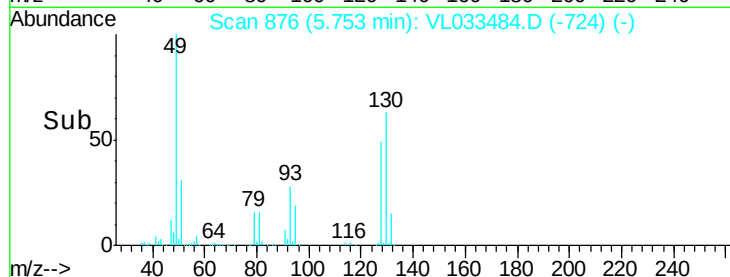
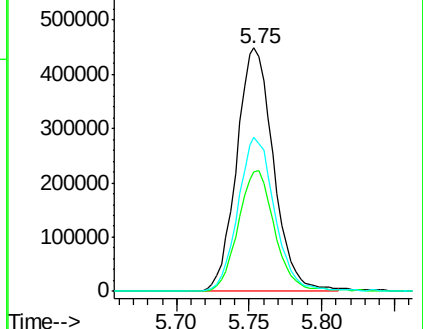
130 63.7 31.2 93.6



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



#2

Dichlorodifluoromethane

Concen: 0.060 ppbv

RT: 3.07 min Scan# 42

Delta R.T. -0.00 min

Lab File: VL033484.D

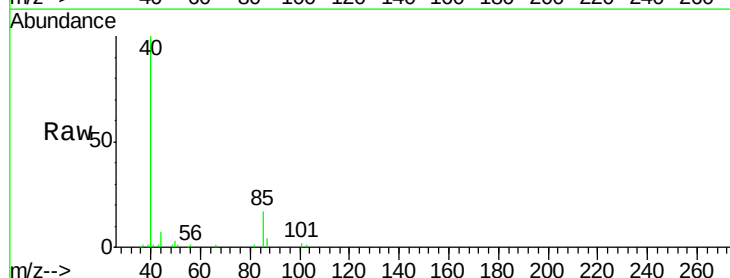
Acq: 28 Mar 2019 1:30

Tgt Ion: 85 Resp: 6929

Ion Ratio Lower Upper

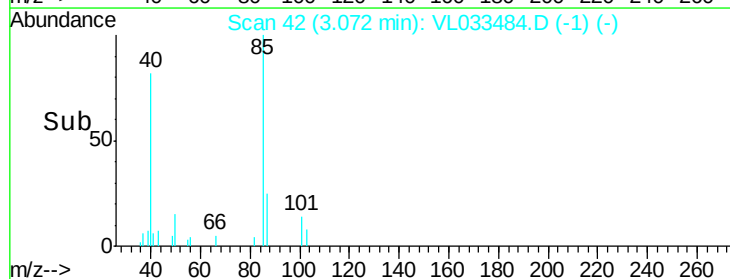
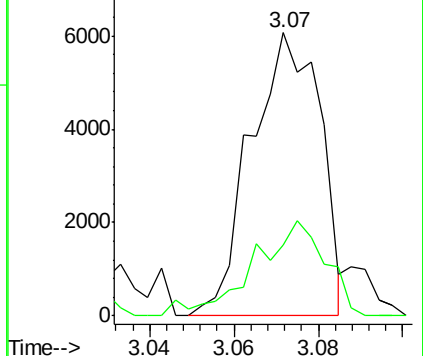
85 100

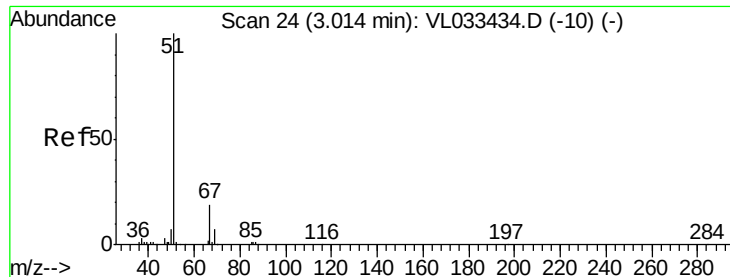
87 22.6 26.7 40.1#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

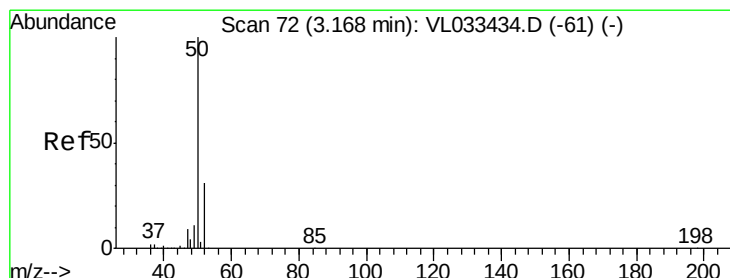
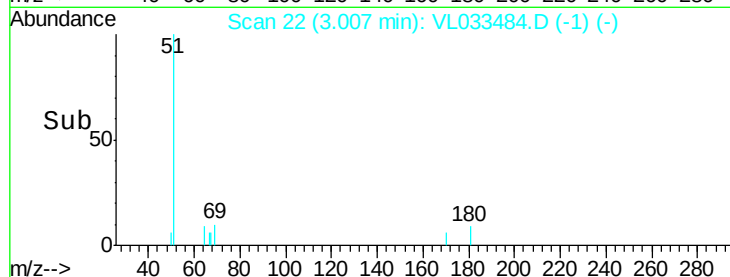
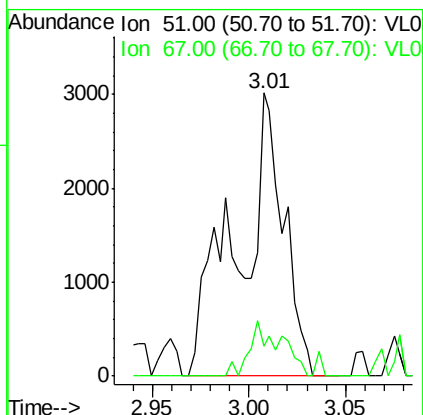
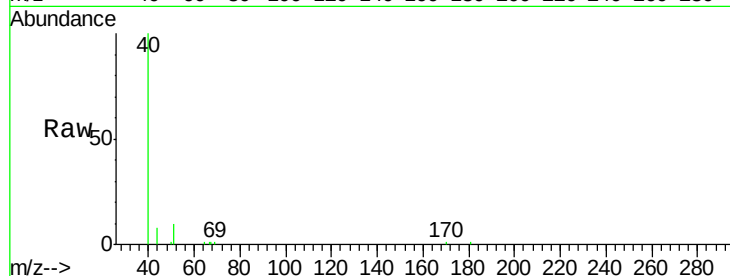




#3
Chlorodifluoromethane
Concen: 0.055 ppbv
RT: 3.01 min Scan# 22
Delta R.T. -0.01 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

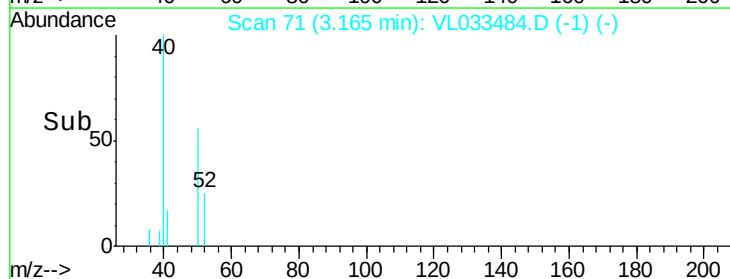
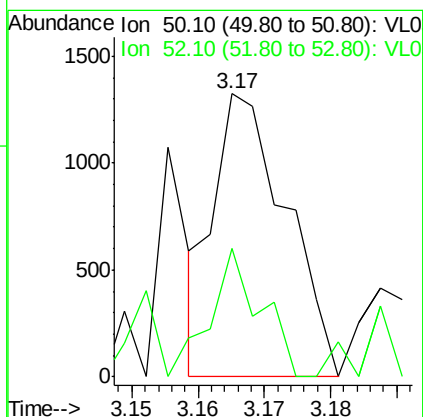
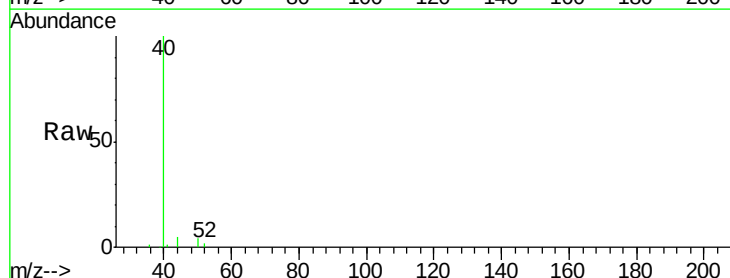
Instrument :
MSVOA_L
ClientSampleId :

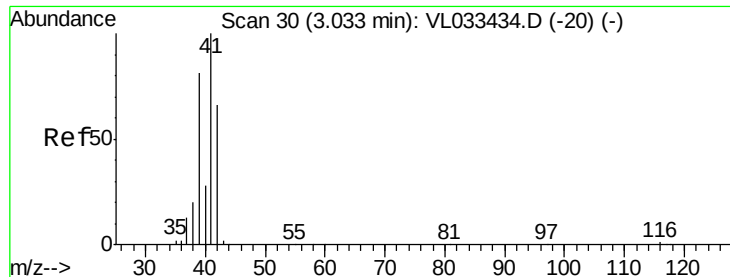
Tot Ion: 51 Resp: 4977
Ion Ratio Lower Upper
51 100
67 14.2 15.7 23.5#



#4
Chloromethane
Concen: 0.021 ppbv
RT: 3.17 min Scan# 71
Delta R.T. -0.00 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

Tgt Ion: 50 Resp: 1005
Ion Ratio Lower Upper
50 100
52 33.1 25.0 37.6





#9

Propene

Concen: 1.061 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.20 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :

MSVOA_L

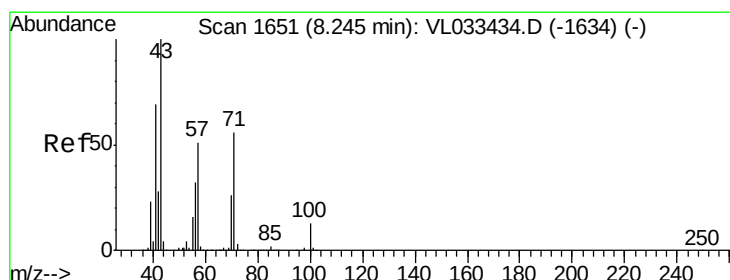
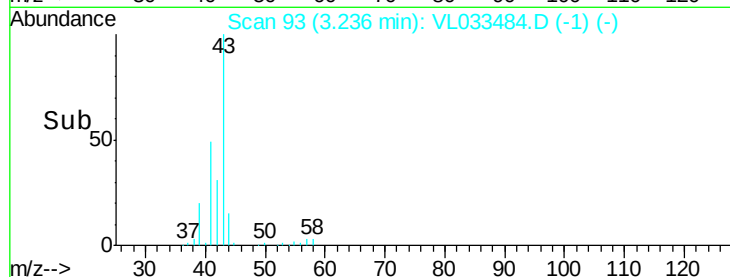
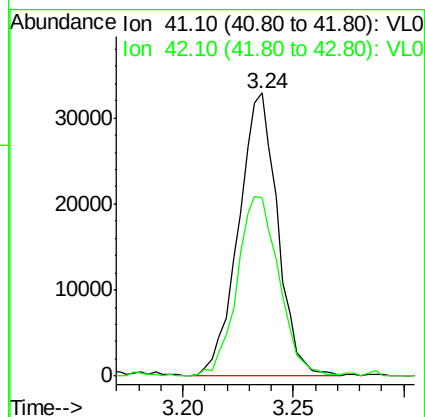
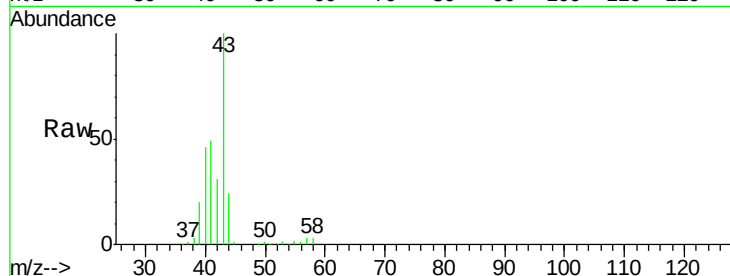
ClientSampleId :

Tot Ion: 41 Resp: 40589

Ion Ratio Lower Upper

41 100

42 68.7 53.9 80.9



#10

Heptane

Concen: 1.465 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. -0.00 min

Lab File: VL033484.D

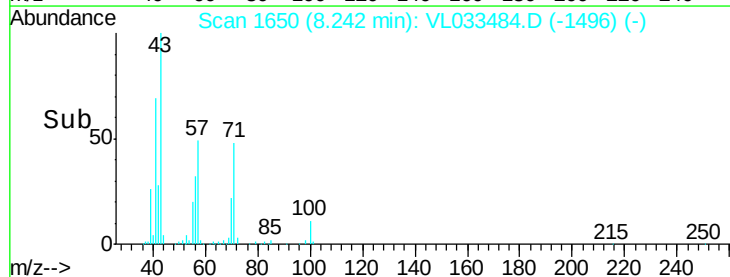
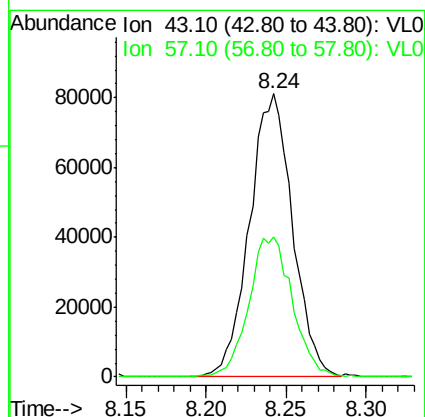
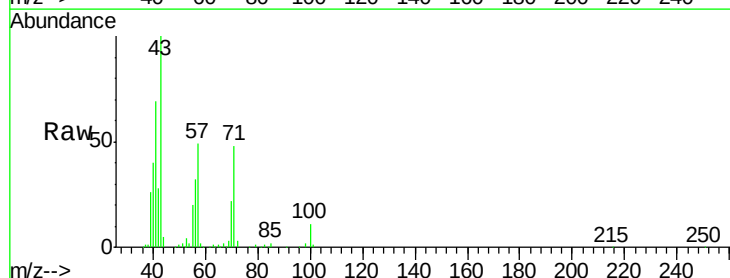
Acq: 28 Mar 2019 1:30

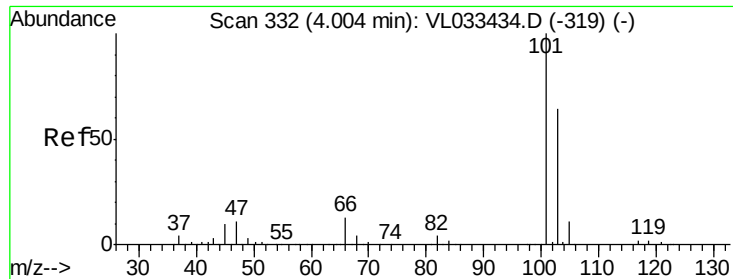
Tgt Ion: 43 Resp: 149858

Ion Ratio Lower Upper

43 100

57 50.1 40.6 60.8

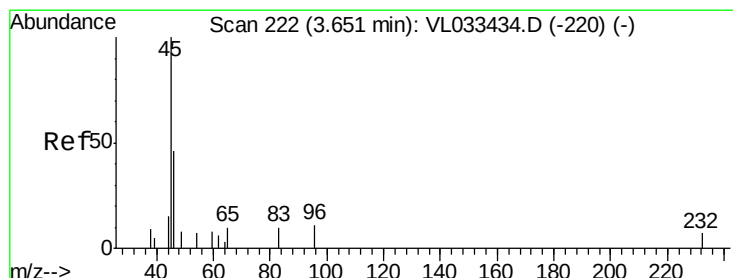
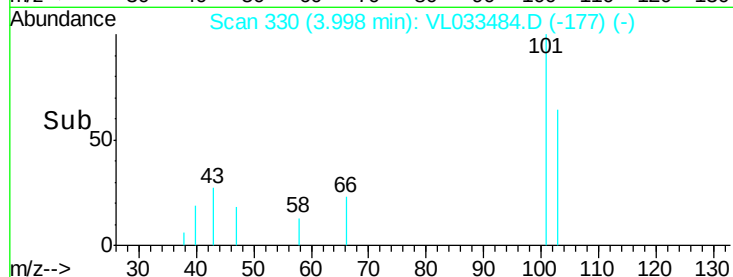
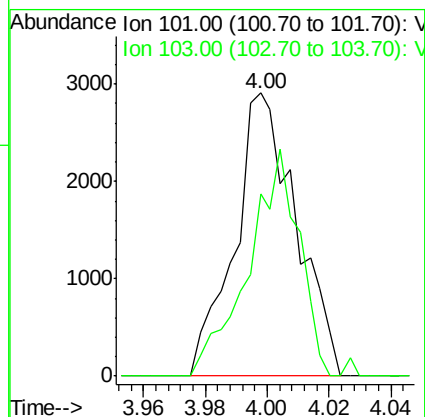
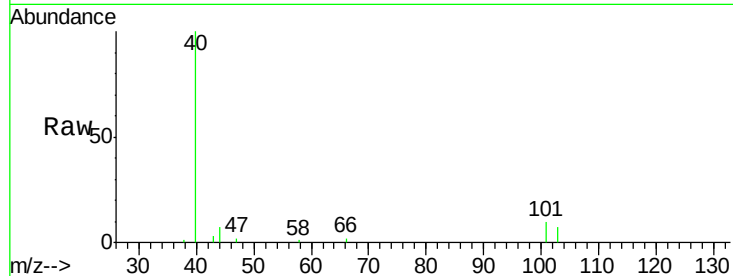




#11
 Trichlorofluoromethane
 Concen: 0.028 ppbv
 RT: 4.00 min Scan# 330
 Delta R.T. -0.01 min
 Lab File: VL033484.D
 Acq: 28 Mar 2019 1:30

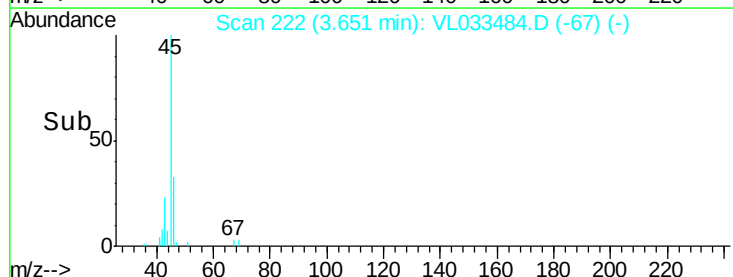
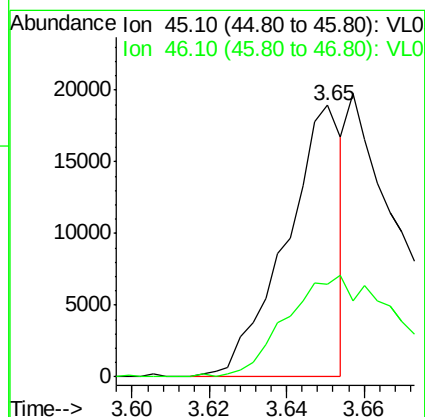
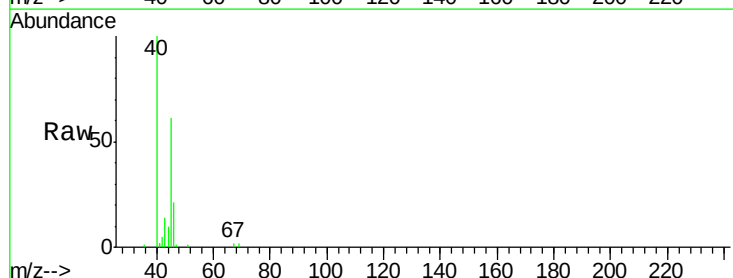
Instrument :
 MSVOA_L
 ClientSampleId :

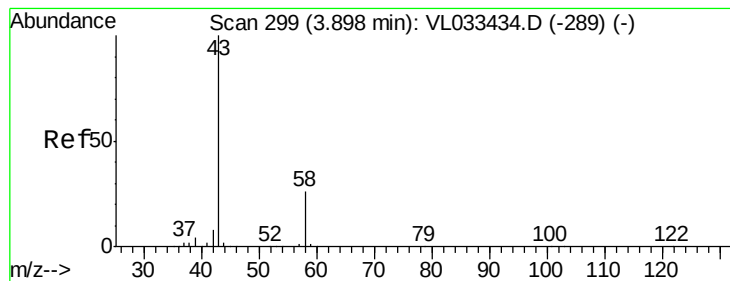
Tot Ion:101 Resp: 4023
 Ion Ratio Lower Upper
 101 100
 103 64.3 51.3 76.9



#13
 Ethanol
 Concen: 1.917 ppbv
 RT: 3.65 min Scan# 222
 Delta R.T. -0.00 min
 Lab File: VL033484.D
 Acq: 28 Mar 2019 1:30

Tgt Ion: 45 Resp: 18984
 Ion Ratio Lower Upper
 45 100
 46 0.0 25.4 101.8#





#15

Acetone

Concen: 1.108 ppbv

RT: 3.91 min Scan# 302

Delta R.T. 0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :

MSVOA_L

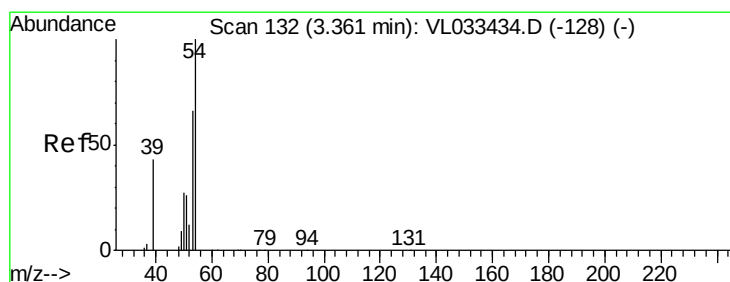
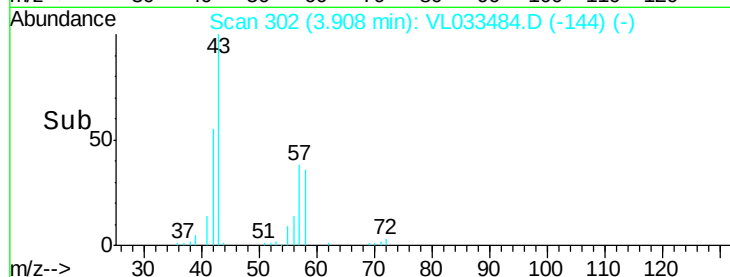
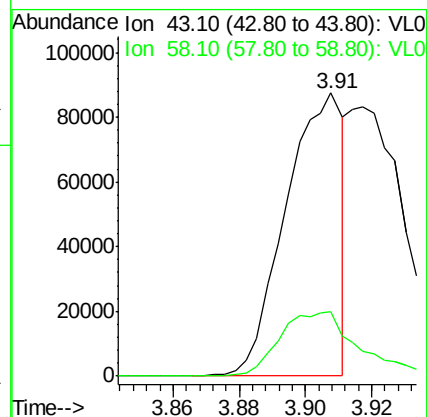
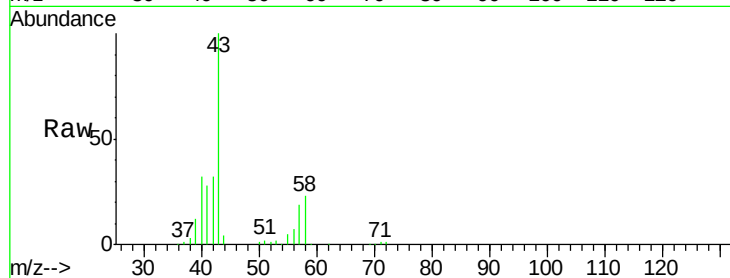
ClientSampleId :

Tot Ion: 43 Resp: 105434

Ion Ratio Lower Upper

43 100

58 31.0 20.5 30.7#



#16

1,3-Butadiene

Concen: 0.055 ppbv

RT: 3.34 min Scan# 126

Delta R.T. -0.02 min

Lab File: VL033484.D

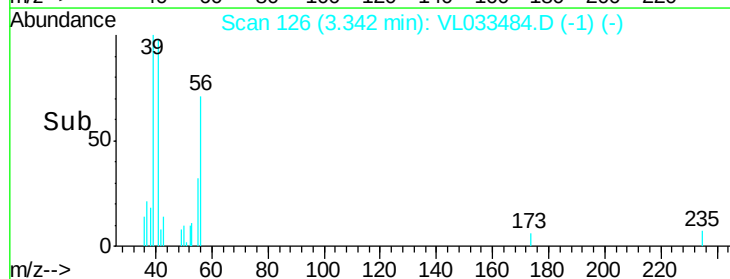
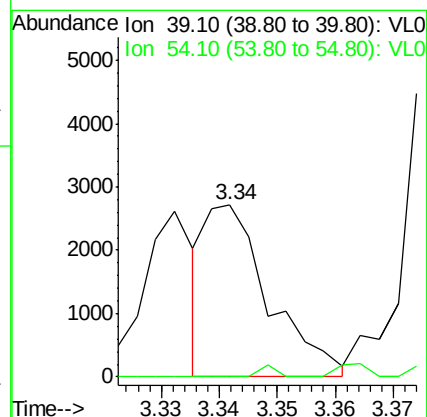
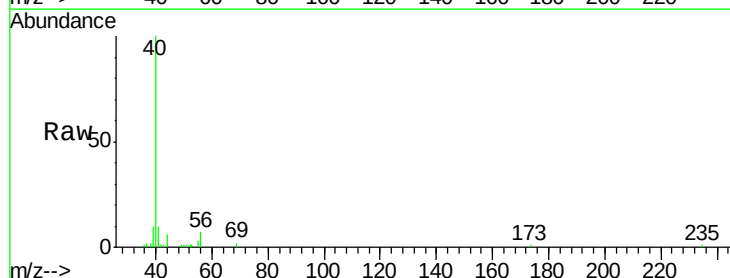
Acq: 28 Mar 2019 1:30

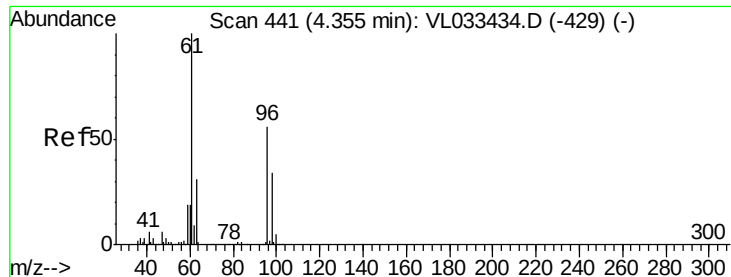
Tgt Ion: 39 Resp: 2071

Ion Ratio Lower Upper

39 100

54 0.0 69.4 104.2#





#17

tert-Butyl alcohol

Concen: 0.078 ppbv

RT: 4.37 min Scan# 445

Delta R.T. 0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :

MSVOA_L

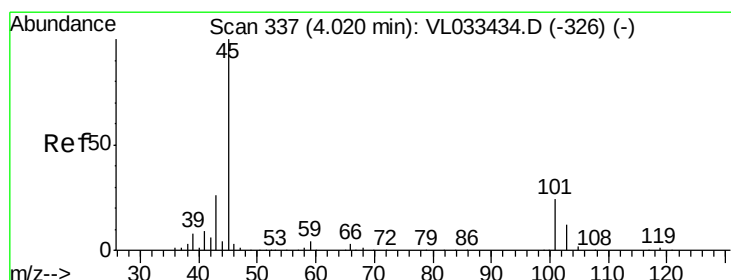
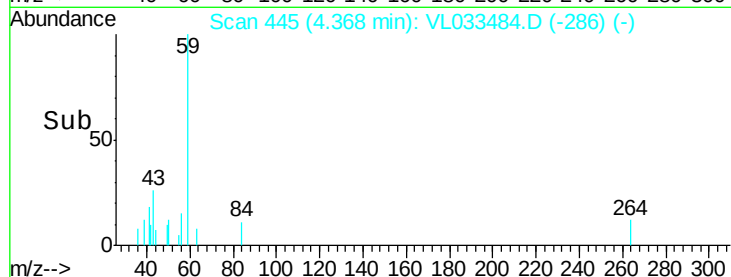
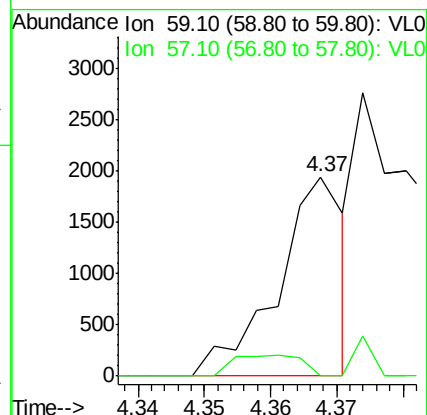
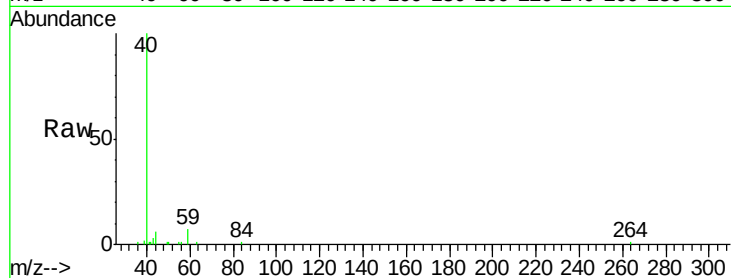
ClientSampled :

Tot Ion: 59 Resp: 1361

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.8#



#19

Isopropyl Alcohol

Concen: 0.084 ppbv

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033484.D

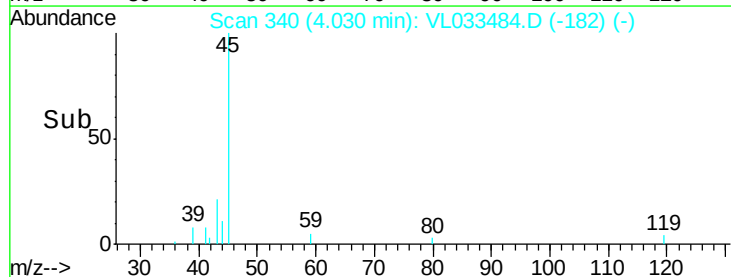
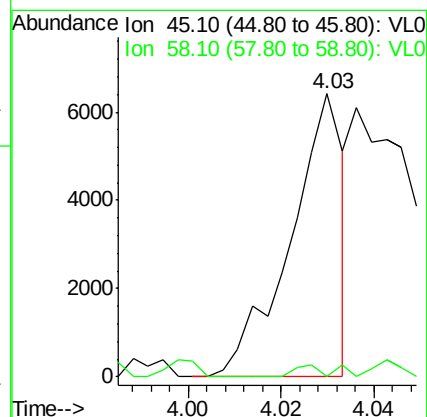
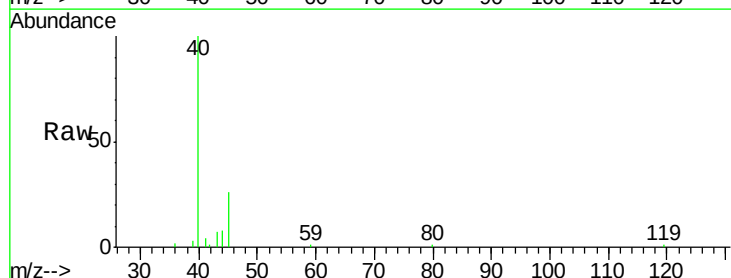
Acq: 28 Mar 2019 1:30

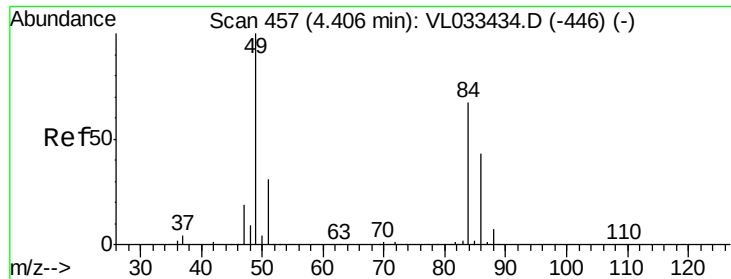
Tgt Ion: 45 Resp: 5078

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.2#

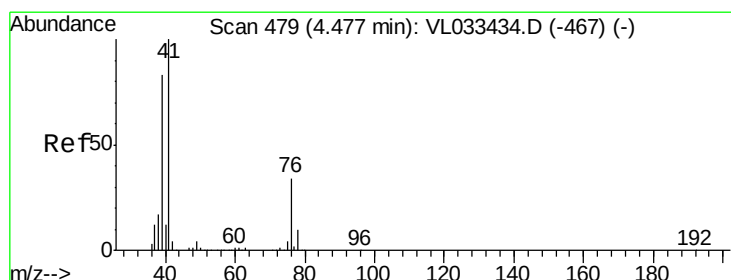
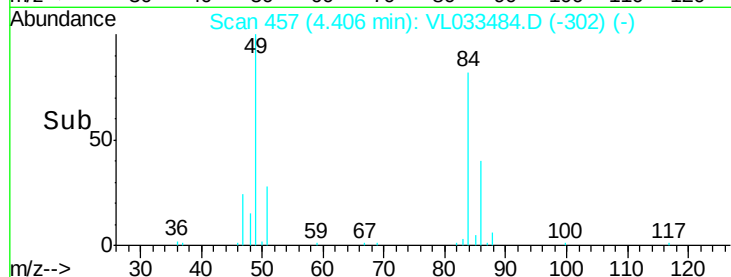
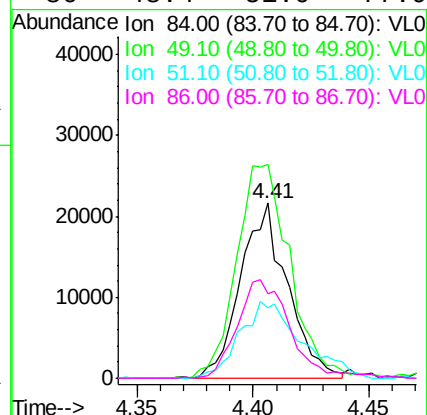
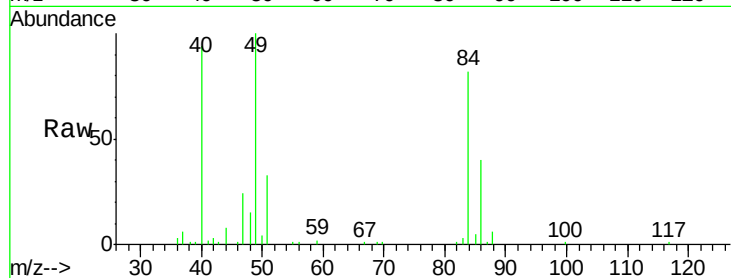




#20
Methvlene Chloride
Concen: 0.752 ppbv
RT: 4.41 min Scan# 457
Delta R.T. -0.00 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

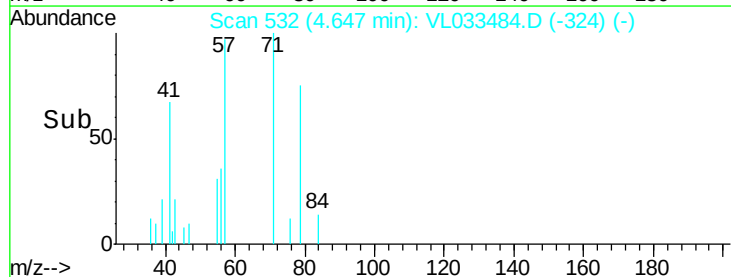
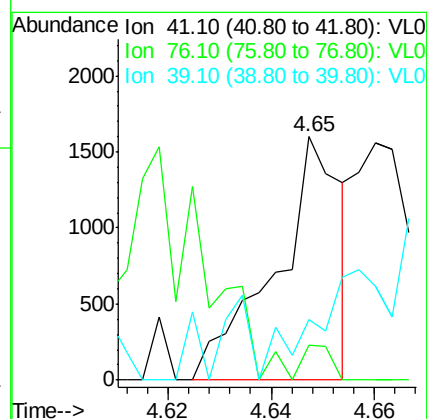
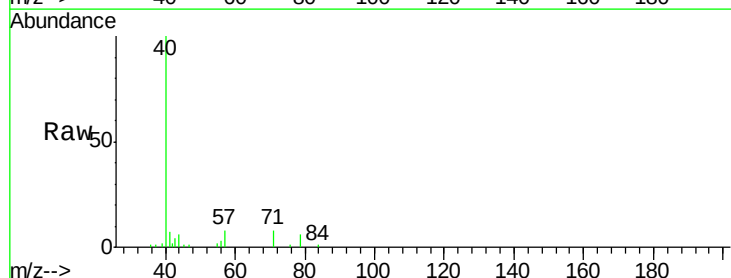
Instrument :
MSVOA_L
ClientSampleId :

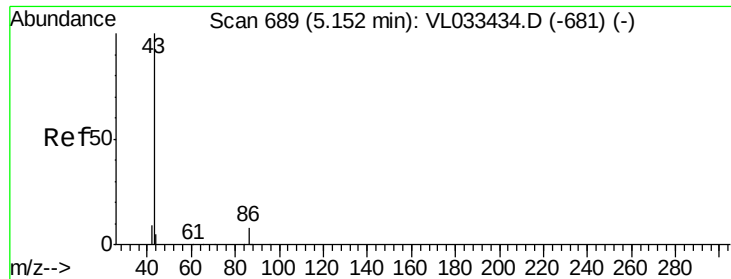
Tot Ion: 84 Resp: 30394
Ion Ratio Lower Upper
84 100
49 121.1 120.0 180.0
51 40.4 36.7 55.1
86 48.4 51.9 77.9#



#21
Allyl Chloride
Concen: 0.024 ppbv
RT: 4.65 min Scan# 532
Delta R.T. 0.17 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

Tgt Ion: 41 Resp: 1419
Ion Ratio Lower Upper
41 100
76 121.5 25.4 38.2#
39 0.0 65.3 97.9#





#23

Vinyl Acetate

Concen: 0.063 ppbv

RT: 5.14 min Scan# 684

Delta R.T. -0.02 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 43 Resp: 8572

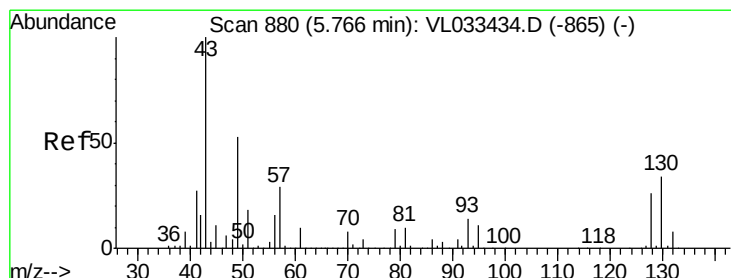
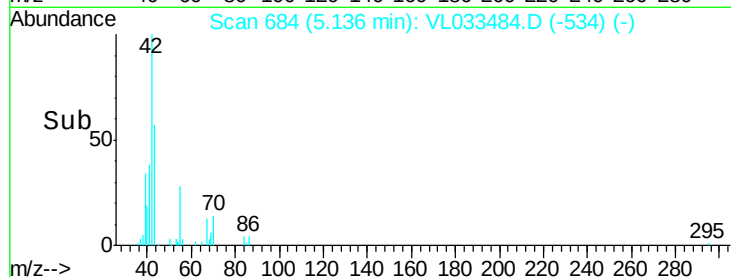
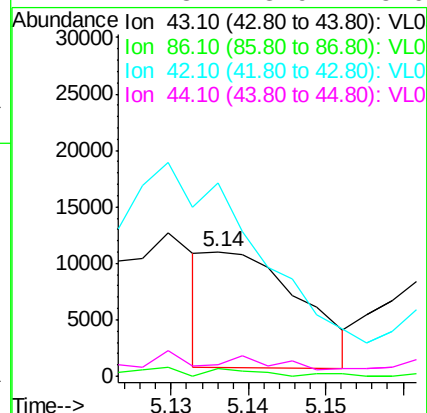
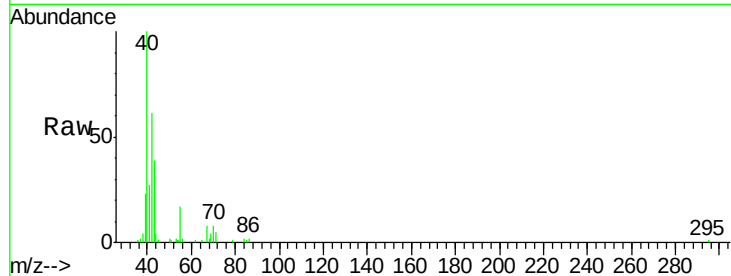
Ion Ratio Lower Upper

43 100

86 9.1 5.6 8.4#

42 185.6 8.0 12.0#

44 7.8 3.9 5.9#



#25

Ethyl Acetate

Concen: 0.626 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Tgt Ion: 43 Resp: 110492

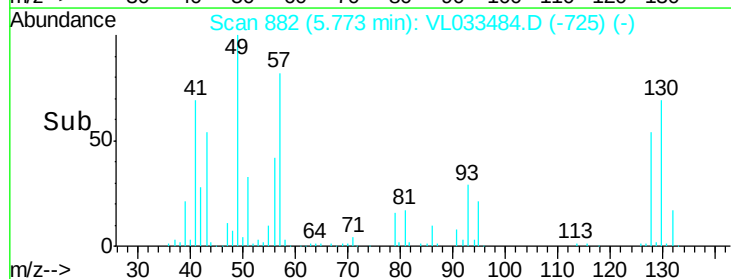
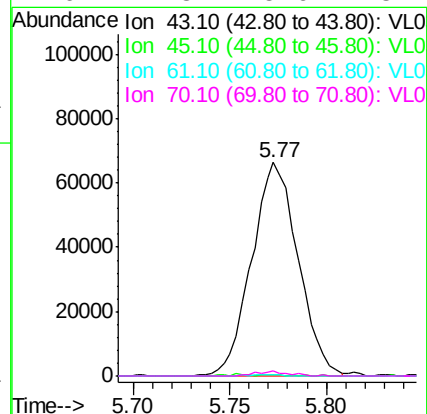
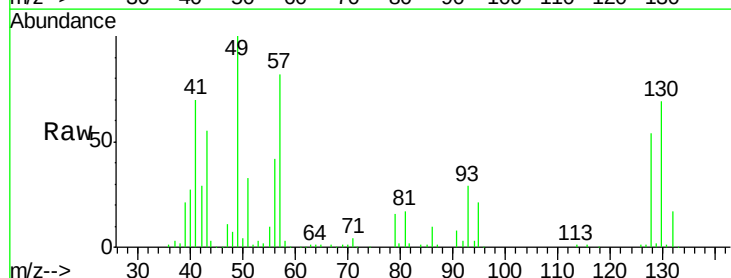
Ion Ratio Lower Upper

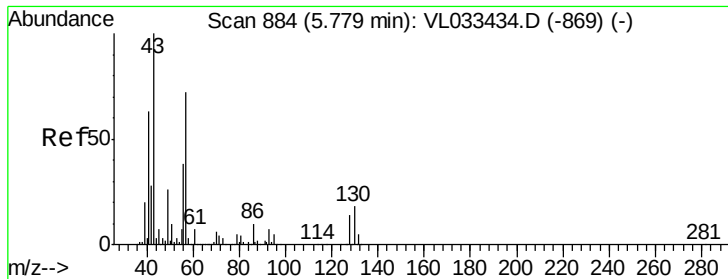
43 100

45 1.0 7.8 11.6#

61 0.4 7.3 10.9#

70 1.8 5.6 8.4#

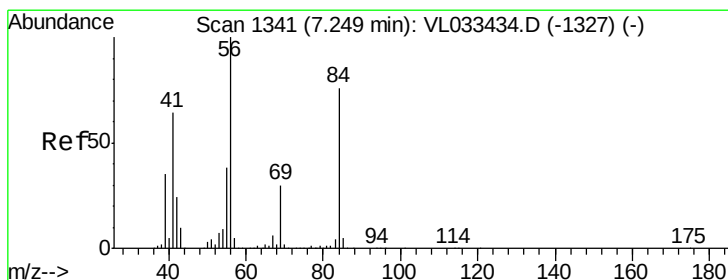
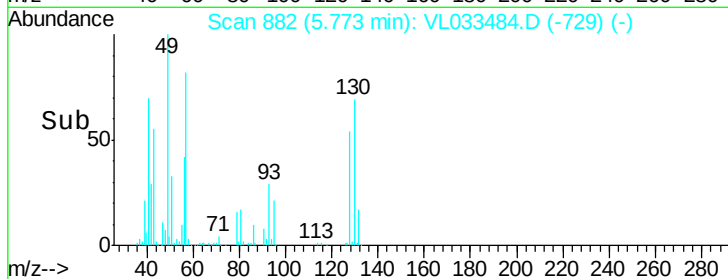
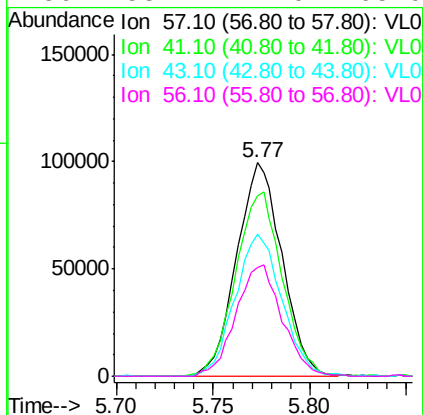
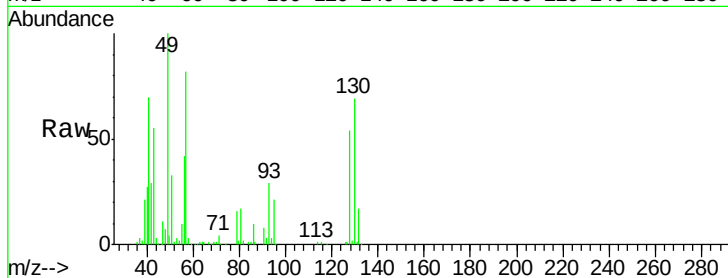




#26
Hexane
Concen: 2.049 ppbv
RT: 5.77 min Scan# 882
Delta R.T. -0.01 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

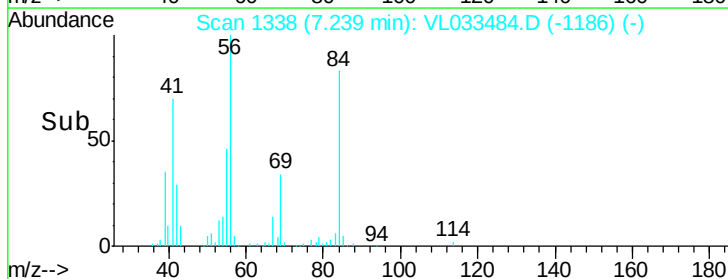
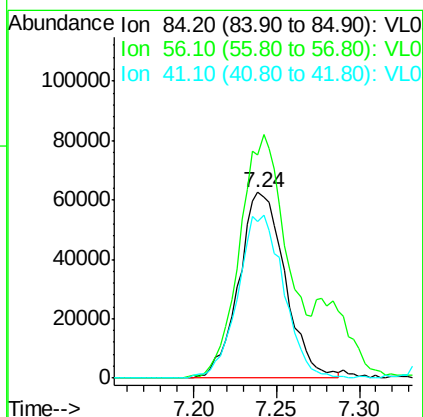
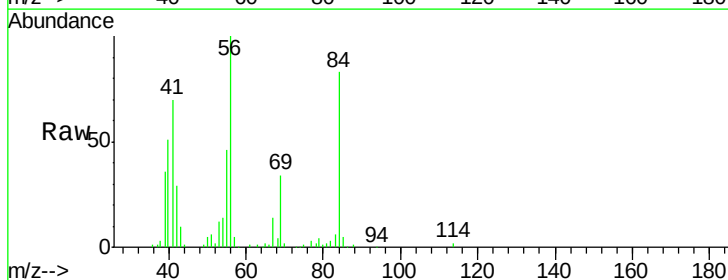
Instrument :
MSVOA_L
ClientSampleId :

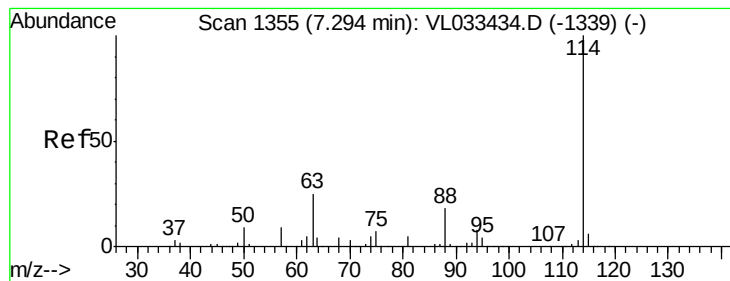
Tot Ion: 57 Resp: 160835
Ion Ratio Lower Upper
57 100
41 90.1 70.7 106.1
43 69.2 182.6 274.0#
56 53.7 42.0 63.0



#30
Cyclohexane
Concen: 1.955 ppbv
RT: 7.24 min Scan# 1338
Delta R.T. -0.01 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

Tgt Ion: 84 Resp: 121416
Ion Ratio Lower Upper
84 100
56 166.1 109.7 164.5#
41 86.9 68.2 102.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :

MSVOA_L

ClientSampleId :

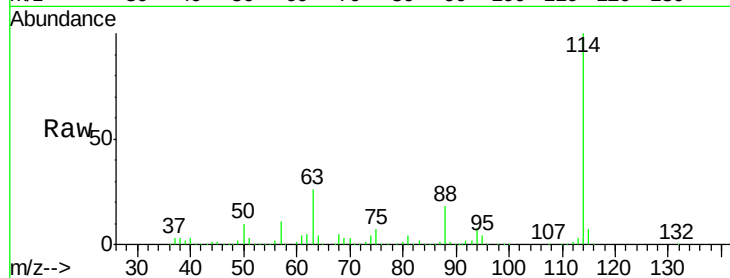
Tot Ion:114 Resp: 1968252

Ion Ratio Lower Upper

114 100

63 25.3 21.5 32.3

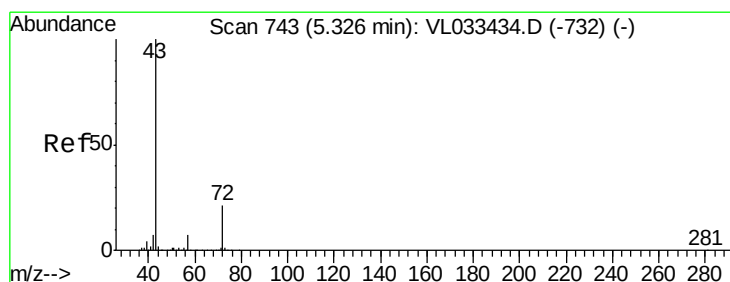
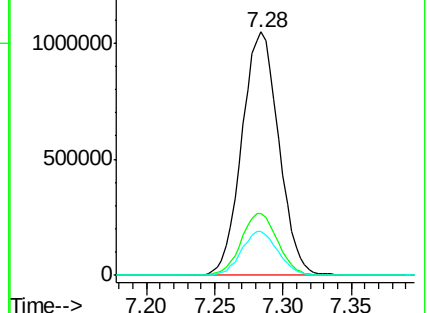
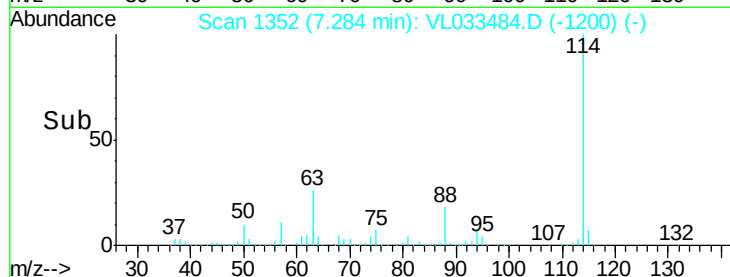
88 18.0 14.5 21.7



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: 0.130 ppbv

RT: 5.34 min Scan# 747

Delta R.T. 0.01 min

Lab File: VL033484.D

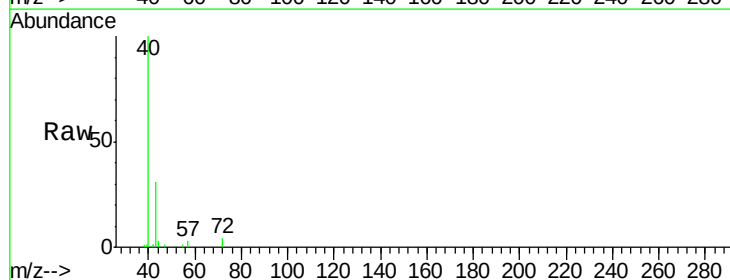
Acq: 28 Mar 2019 1:30

Tgt Ion: 43 Resp: 15352

Ion Ratio Lower Upper

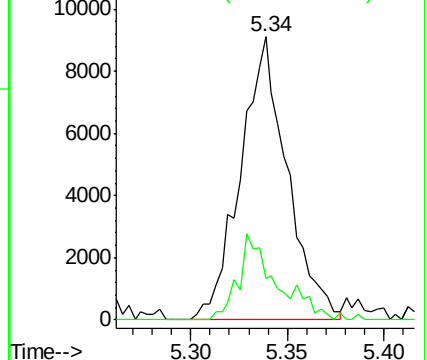
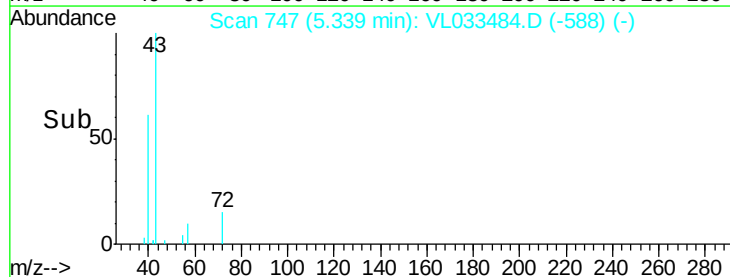
43 100

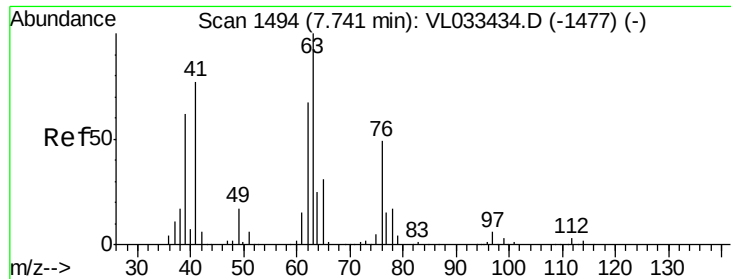
72 24.8 17.4 26.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

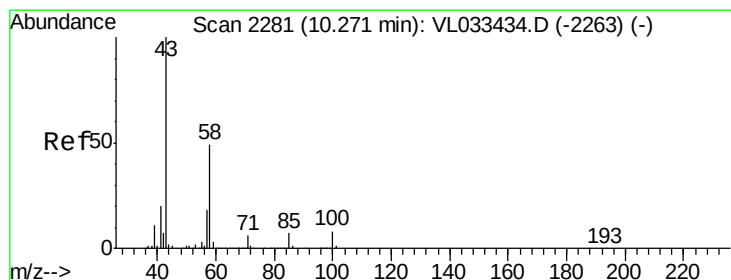
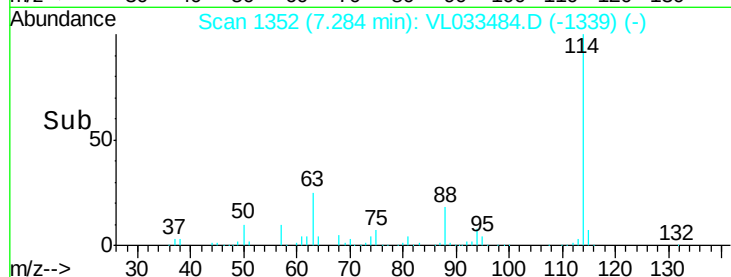
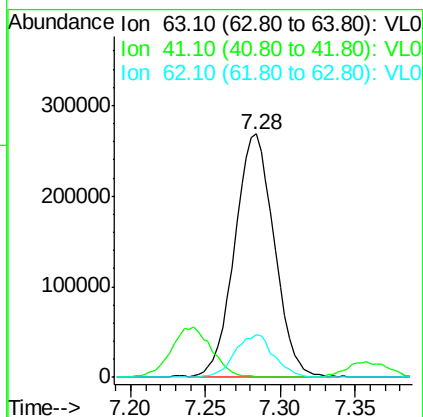
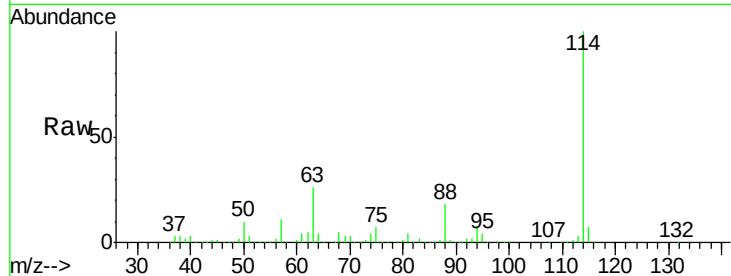




#39
 1,2-Dichloropropane
 Concen: 7.588 ppbv
 RT: 7.28 min Scan# 1352
 Delta R.T. -0.46 min
 Lab File: VL033484.D
 Acq: 28 Mar 2019 1:30

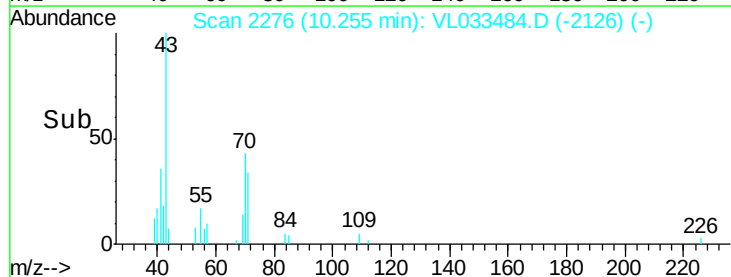
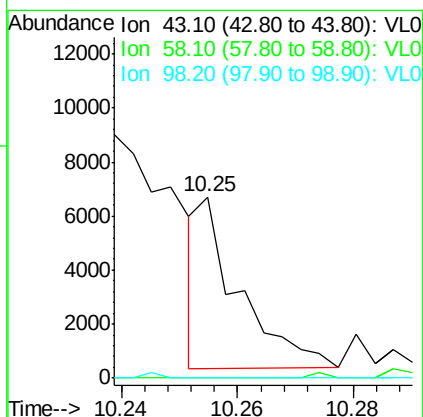
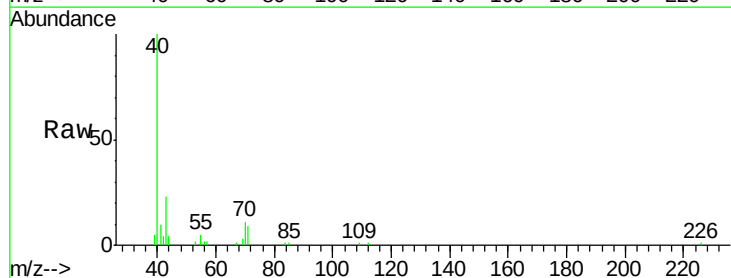
Instrument :
 MSVOA_L
 ClientSampleId :

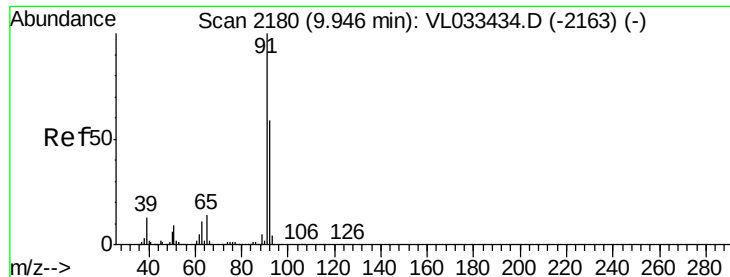
Tot Ion: 63 Resp: 490893
 Ion Ratio Lower Upper
 63 100
 41 0.0 61.2 91.8#
 62 17.7 54.0 81.0#



#51
 2-Hexanone
 Concen: 0.024 ppbv
 RT: 10.25 min Scan# 2276
 Delta R.T. -0.02 min
 Lab File: VL033484.D
 Acq: 28 Mar 2019 1:30

Tgt Ion: 43 Resp: 3051
 Ion Ratio Lower Upper
 43 100
 58 0.0 38.2 57.2#
 98 0.0 0.2 0.2#





#53

Toluene

Concen: 0.183 ppbv

RT: 9.94 min Scan# 2177

Delta R.T. -0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

Instrument :

MSVOA_L

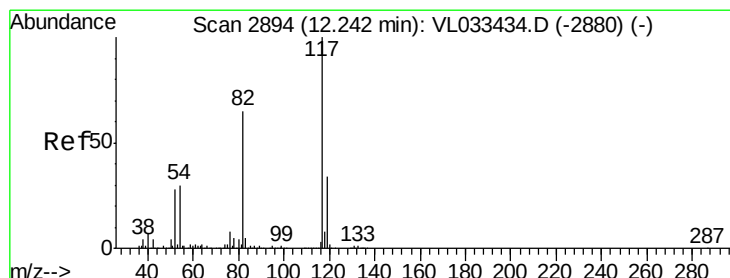
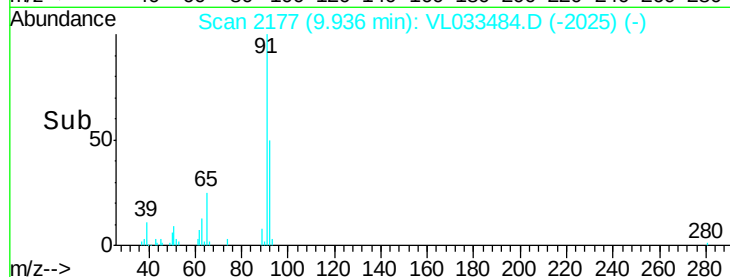
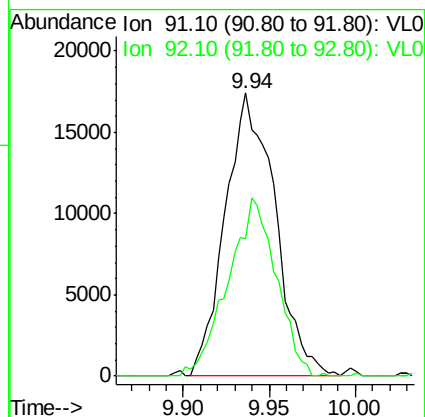
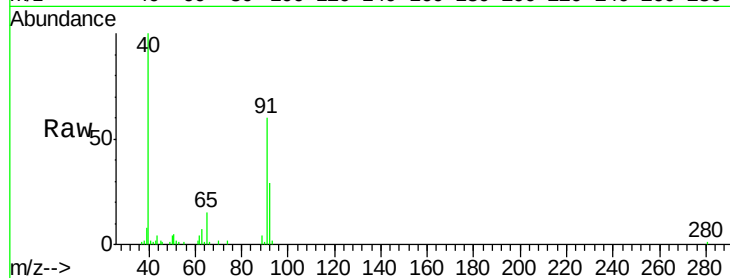
ClientSampleId :

Tot Ion: 91 Resp: 35082

Ion Ratio Lower Upper

91 100

92 60.8 47.4 71.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL033484.D

Acq: 28 Mar 2019 1:30

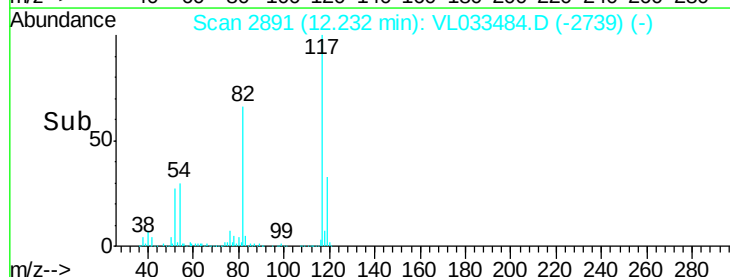
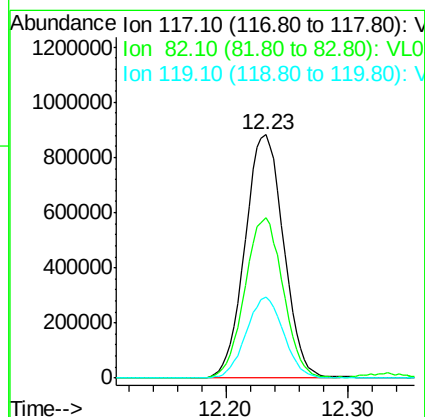
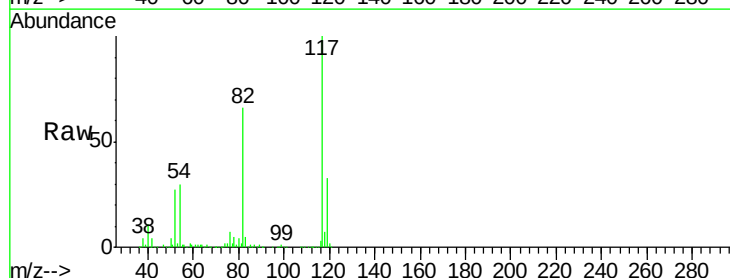
Tgt Ion: 117 Resp: 1929381

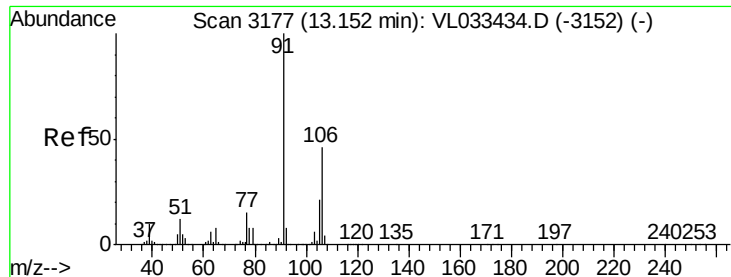
Ion Ratio Lower Upper

117 100

82 65.4 51.5 77.3

119 32.4 25.5 38.3

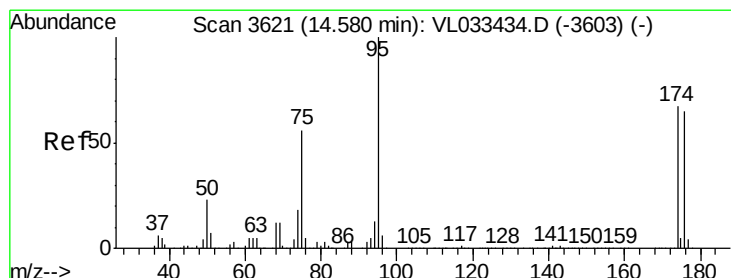
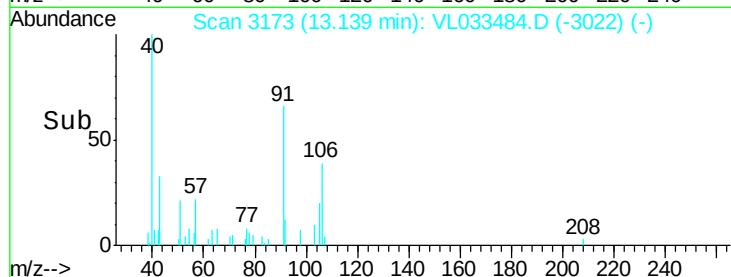
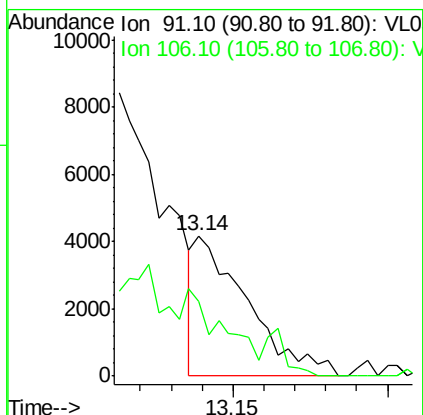
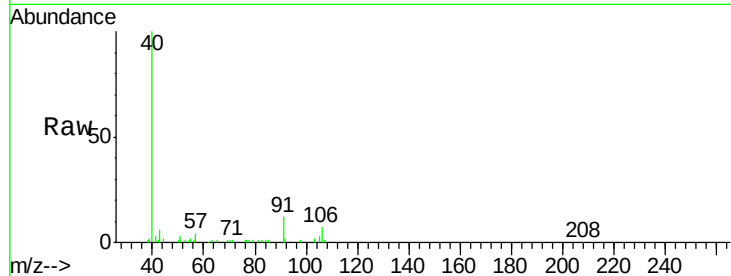




#59
m/p-Xylene
Concen: 0.021 ppbv
RT: 13.14 min Scan# 3173
Delta R.T. -0.01 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 91 Resp: 4918
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0



#68
1-Bromo-4-Fluorobenzene
Concen: 9.737 ppbv
RT: 14.57 min Scan# 3618
Delta R.T. -0.01 min
Lab File: VL033484.D
Acq: 28 Mar 2019 1:30

Tgt Ion: 95 Resp: 1472818
Ion Ratio Lower Upper
95 100
174 67.4 52.9 79.3
175 4.9 3.8 5.6

