

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032919\
 Data File : VL033504.D
 Acq On : 29 Mar 2019 16:14
 Operator : SY/AP
 Sample : K2042-17DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 30 01:10:56 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	5.76	49	836512	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1846531	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1873936	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	1433032	9.75	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.50%

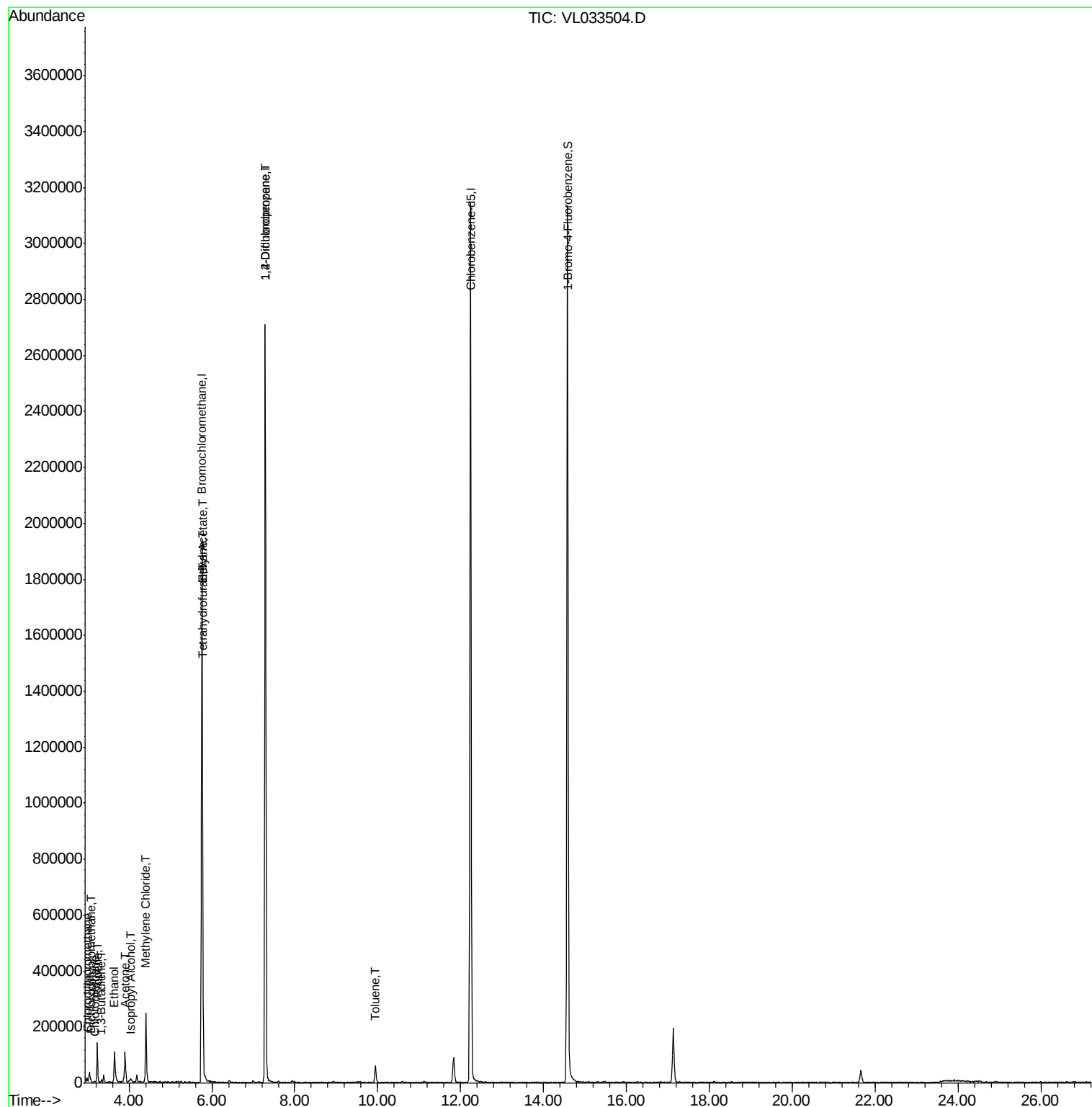
Target Compounds						Ovalue
2) Dichlorodifluoromethane	3.07	85	8333	0.07	ppbv	100
3) Chlorodifluoromethane	2.99	51	14840	0.15	ppbv #	70
4) Chloromethane	3.17	50	2644	0.05	ppbv #	83
9) Propene	3.24	41	37768	0.93	ppbv	97
13) Ethanol	3.65	45	111273	10.63	ppbv	67
15) Acetone	3.90	43	105759	1.05	ppbv	99
16) 1,3-Butadiene	3.34	39	2284	0.06	ppbv #	11
19) Isopropyl Alcohol	4.04	45	6781	0.11	ppbv #	95
20) Methylene Chloride	4.41	84	86417	2.02	ppbv	92
25) Ethyl Acetate	5.78	43	99483	0.53	ppbv #	78
26) Hexane	5.78	57	140575	1.69	ppbv #	39
39) 1,2-Dichloropropane	7.29	63	489989	8.07	ppbv #	23
41) Tetrahydrofuran	5.78	42	55717	0.91	ppbv #	50
53) Toluene	9.95	91	45162	0.25	ppbv	99

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

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
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QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :
MSVOA_L
ClientSampleId :

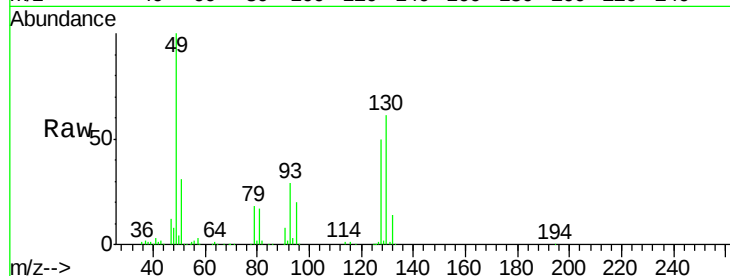
Tot Ion: 49 Resp: 836512

Ion Ratio Lower Upper

49 100

128 48.2 24.0 72.0

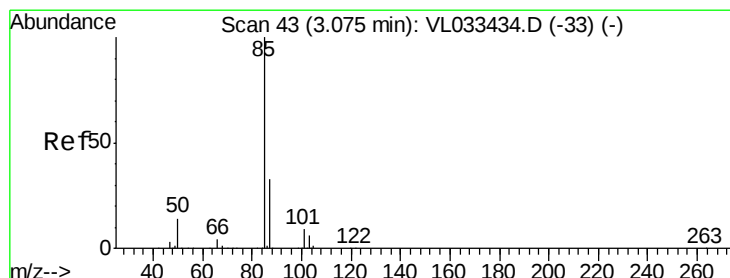
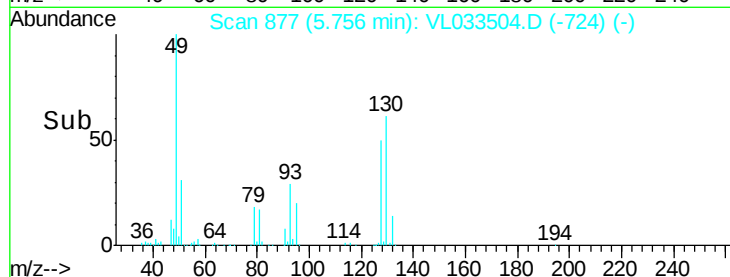
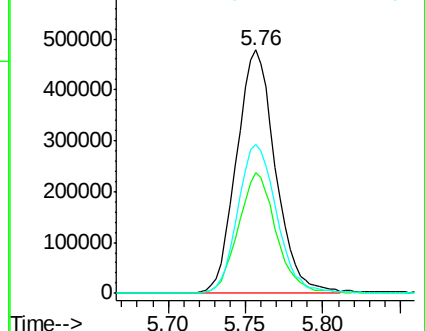
130 62.2 31.2 93.6



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: 0.07 ppbv

RT: 3.07 min Scan# 42

Delta R.T. -0.00 min

Lab File: VL033504.D

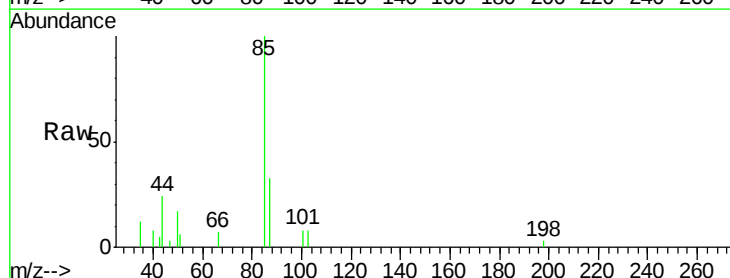
Acq: 29 Mar 2019 16:14

Tgt Ion: 85 Resp: 8333

Ion Ratio Lower Upper

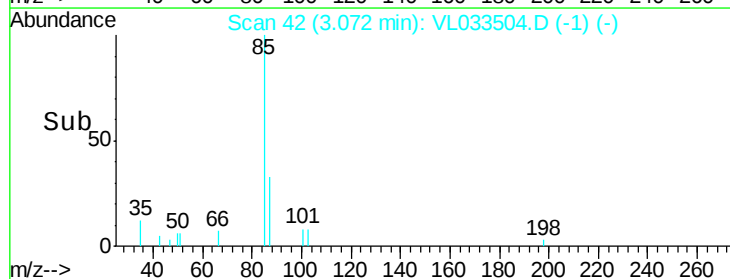
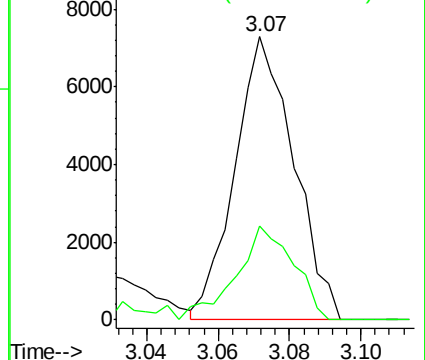
85 100

87 33.2 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: 0.15 ppbv

RT: 2.99 min Scan# 16

Delta R.T. -0.03 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :

MSVOA_L

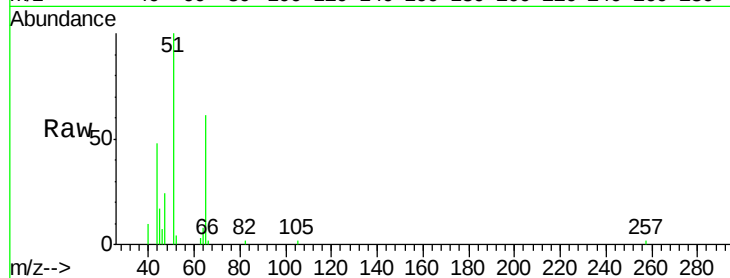
ClientSampled :

Tot Ion: 51 Resp: 14840

Ion Ratio Lower Upper

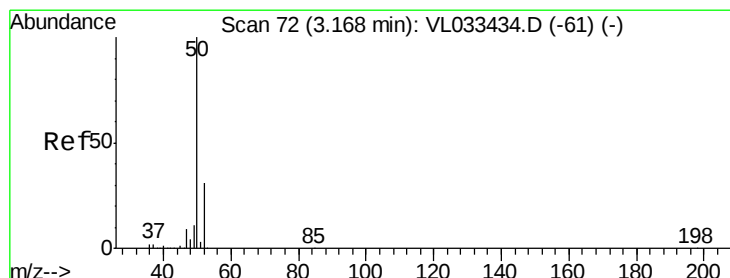
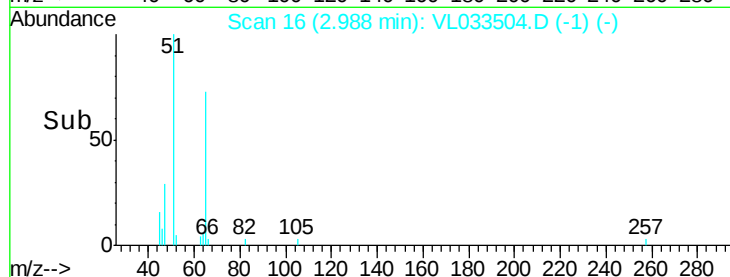
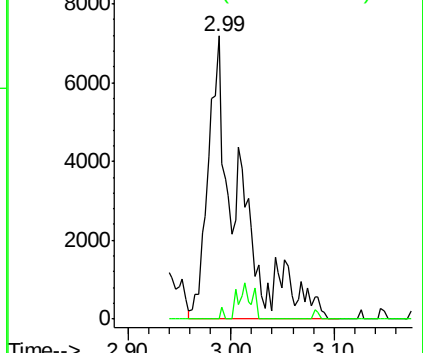
51 100

67 5.9 15.7 23.5#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.05 ppbv

RT: 3.17 min Scan# 72

Delta R.T. -0.00 min

Lab File: VL033504.D

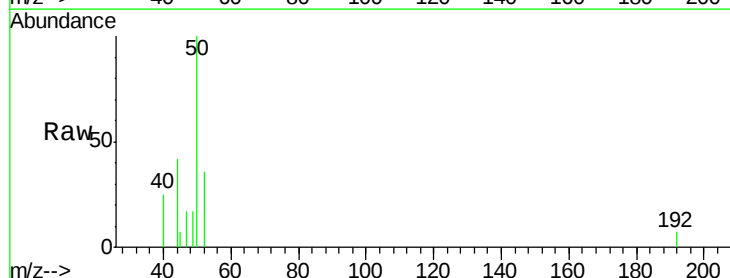
Acq: 29 Mar 2019 16:14

Tgt Ion: 50 Resp: 2644

Ion Ratio Lower Upper

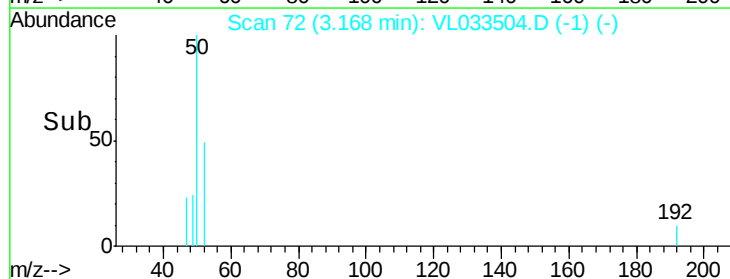
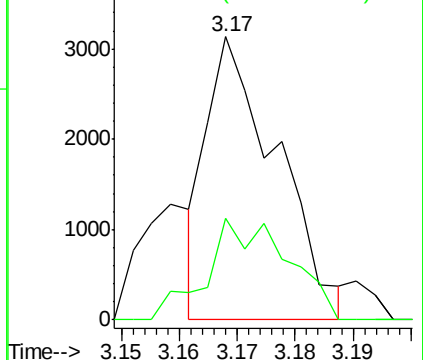
50 100

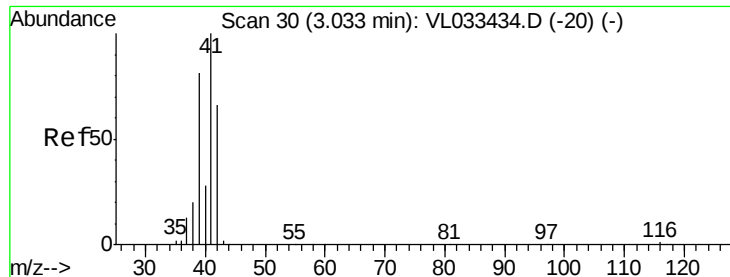
52 40.6 25.0 37.6#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.93 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.20 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :

MSVOA_L

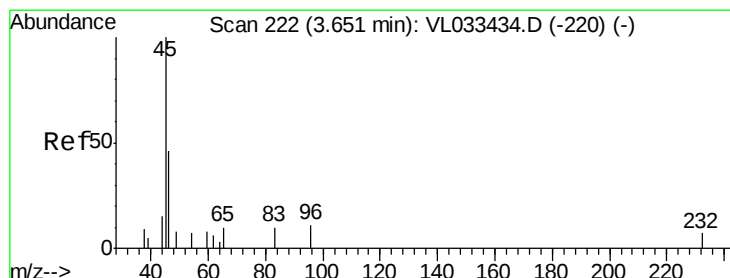
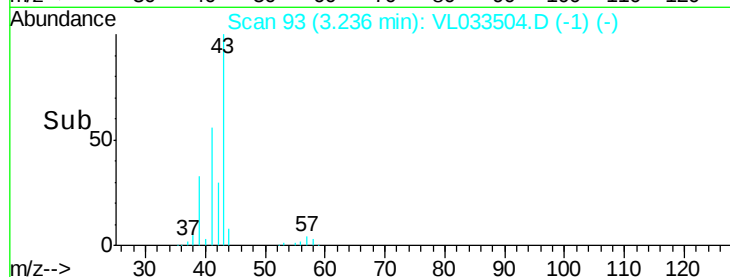
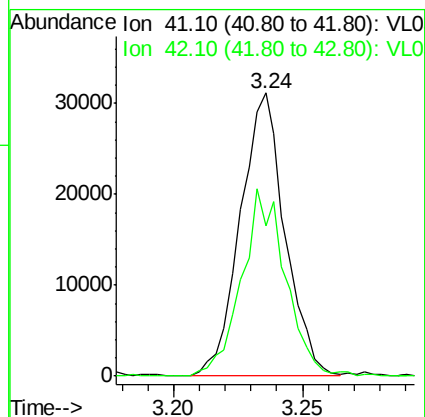
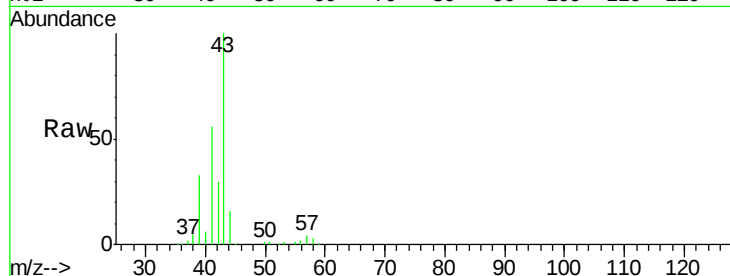
ClientSampleId :

Tot Ion: 41 Resp: 37768

Ion Ratio Lower Upper

41 100

42 65.2 53.9 80.9



#13

Ethanol

Concen: 10.63 ppbv

RT: 3.65 min Scan# 222

Delta R.T. -0.00 min

Lab File: VL033504.D

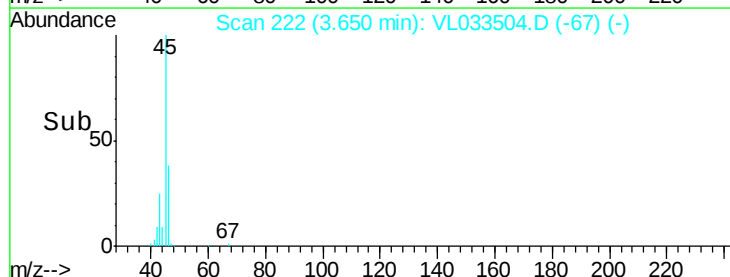
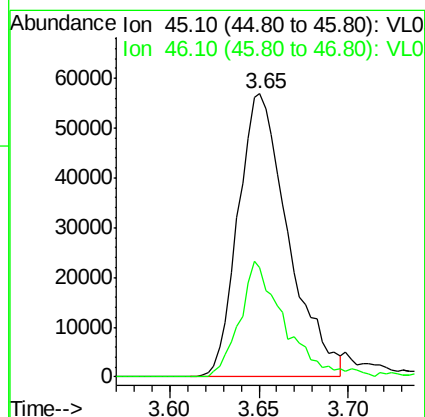
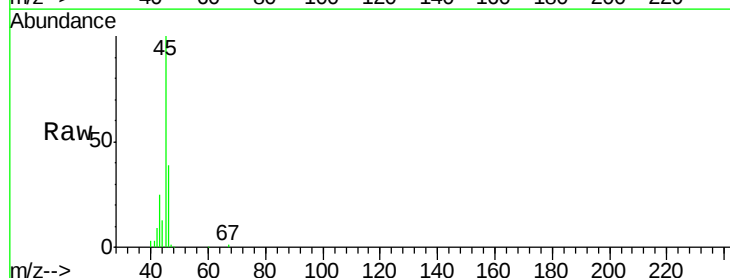
Acq: 29 Mar 2019 16:14

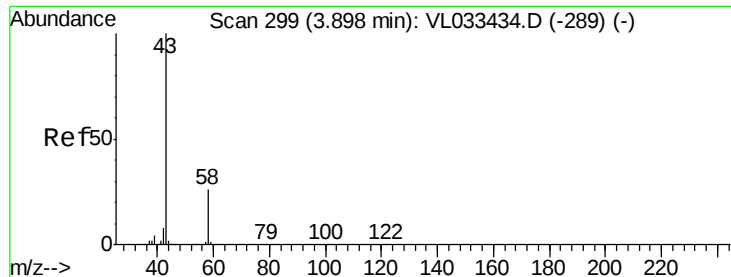
Tgt Ion: 45 Resp: 111273

Ion Ratio Lower Upper

45 100

46 37.7 25.4 101.8





#15

Acetone

Concen: 1.05 ppbv

RT: 3.90 min Scan# 301

Delta R.T. 0.01 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

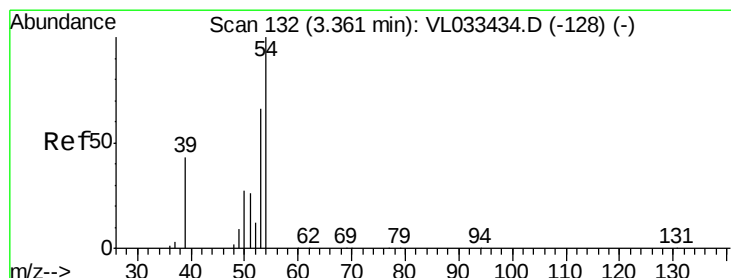
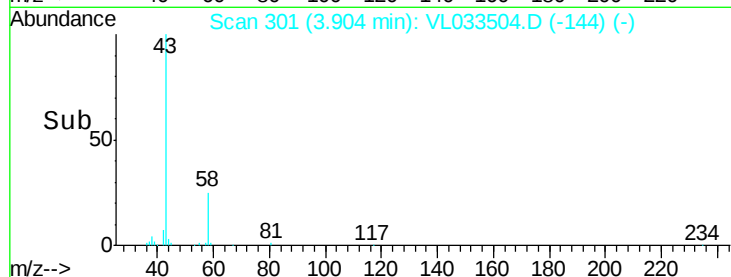
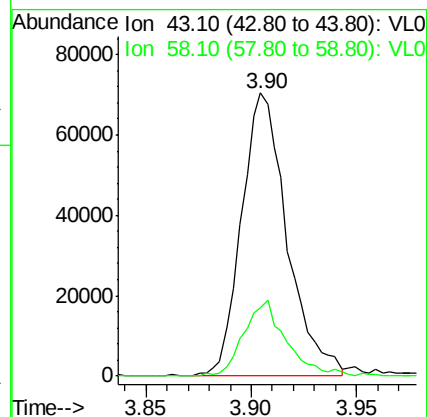
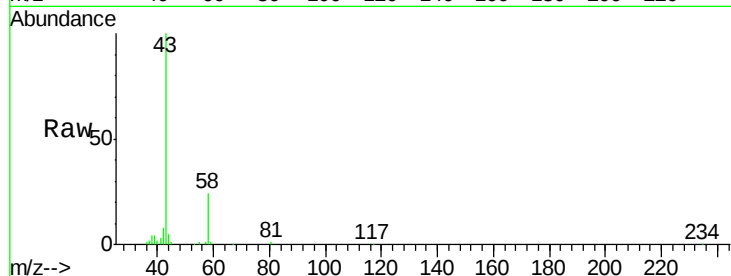
Instrument :
MSVOA_L
ClientSampled :

Tot Ion: 43 Resp: 105759

Ion Ratio Lower Upper

43 100

58 25.3 20.5 30.7



#16

1,3-Butadiene

Concen: 0.06 ppbv

RT: 3.34 min Scan# 125

Delta R.T. -0.02 min

Lab File: VL033504.D

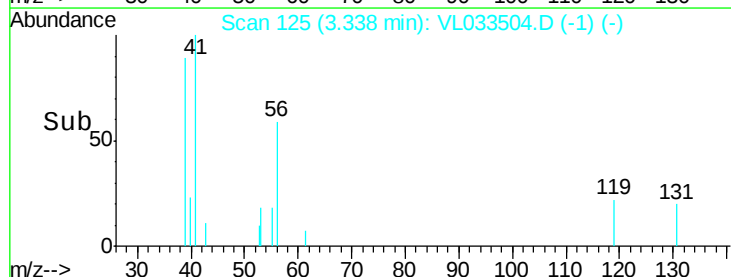
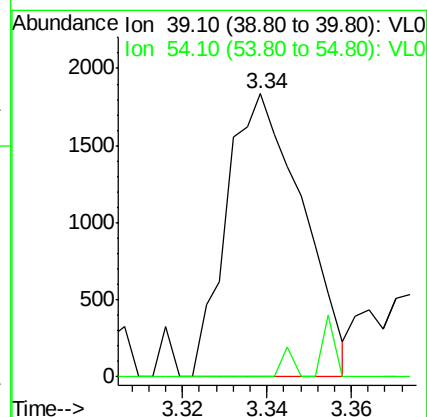
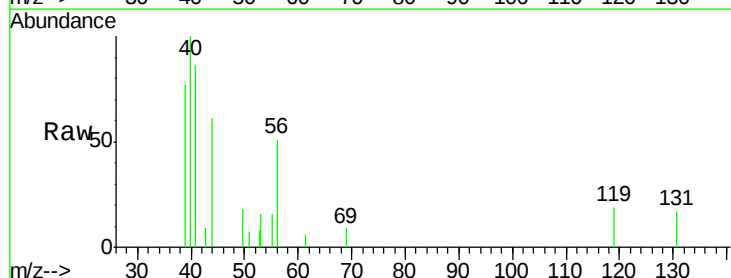
Acq: 29 Mar 2019 16:14

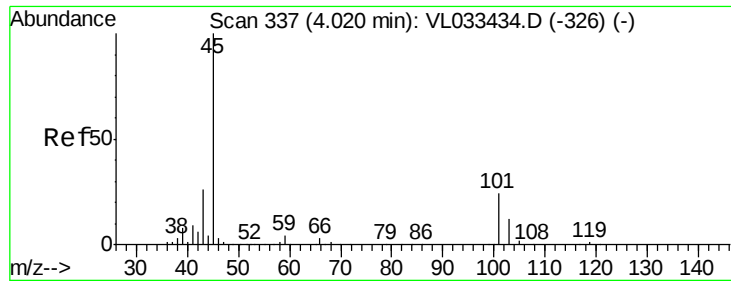
Tgt Ion: 39 Resp: 2284

Ion Ratio Lower Upper

39 100

54 5.1 69.4 104.2#





#19

Isopropyl Alcohol

Concen: 0.11 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.02 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :

MSVOA_L

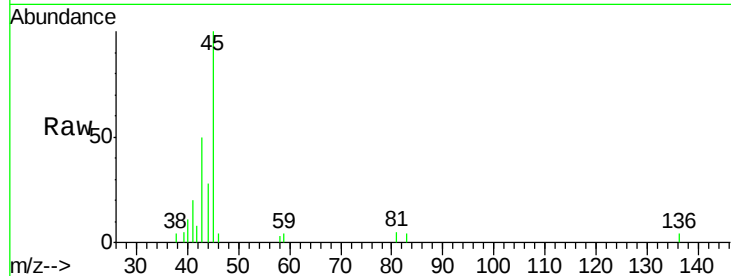
ClientSampleId :

Tot Ion: 45 Resp: 6781

Ion Ratio Lower Upper

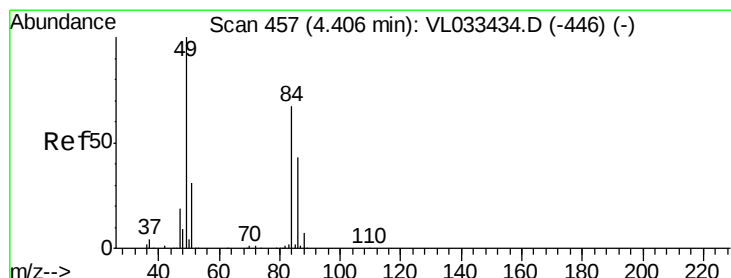
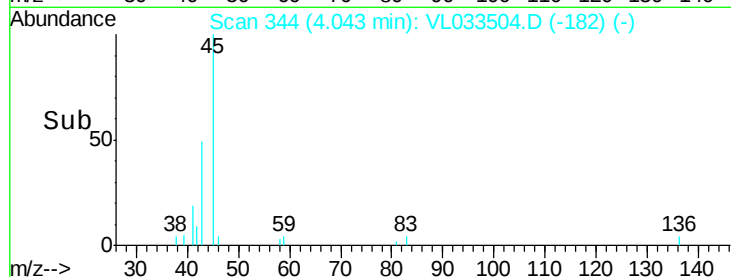
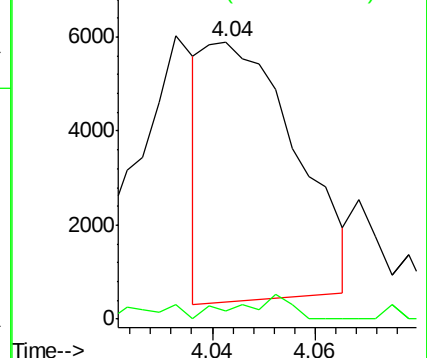
45 100

58 0.0 1.4 2.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 2.02 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.00 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Tgt Ion: 84 Resp: 86417

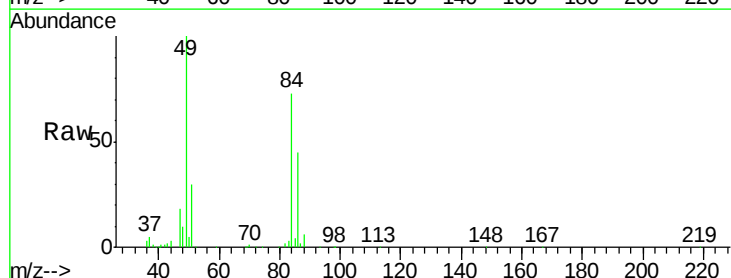
Ion Ratio Lower Upper

84 100

49 137.1 120.0 180.0

51 40.9 36.7 55.1

86 61.1 51.9 77.9

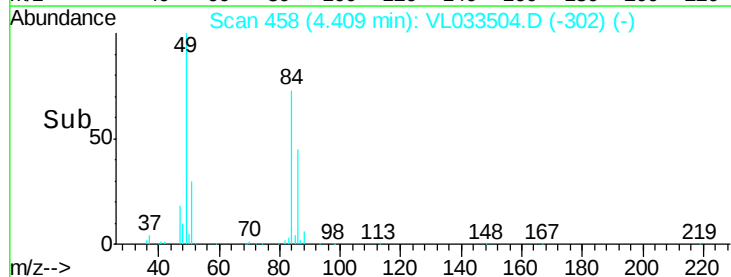
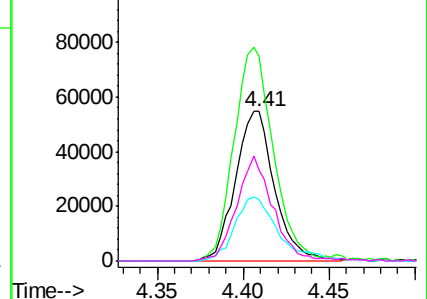


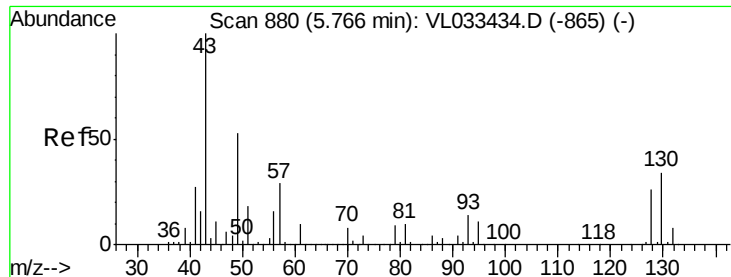
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#25

Ethyl Acetate

Concen: 0.53 ppbv

RT: 5.78 min Scan# 883

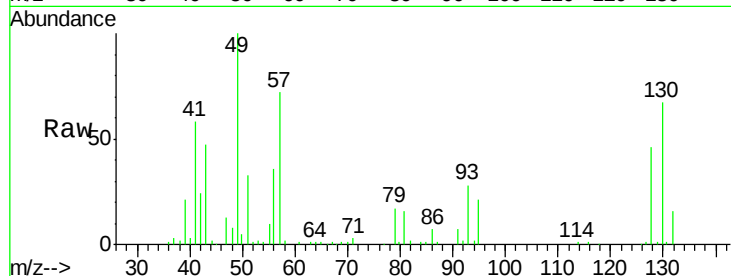
Delta R.T. 0.01 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :
MSVOA_L
ClientSampled :

Tot Ion:	43	Resp:	99483
Ion	Ratio	Lower	Upper
43	100		
45	0.6	7.8	11.6#
61	0.6	7.3	10.9#
70	1.9	5.6	8.4#



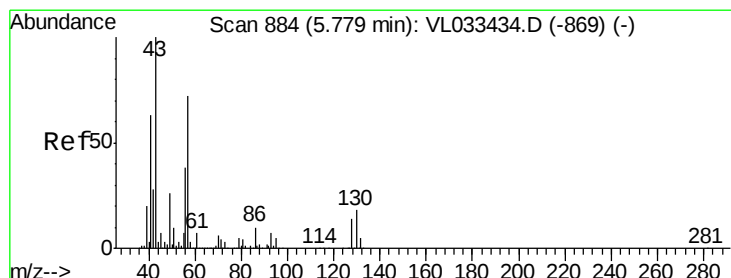
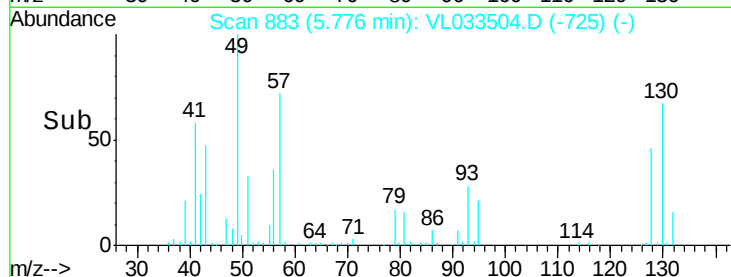
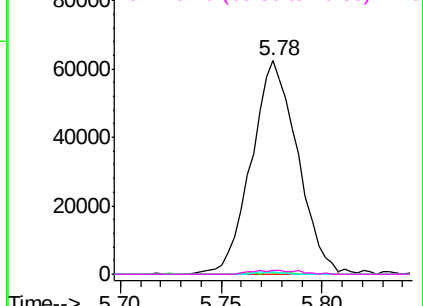
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 1.69 ppbv

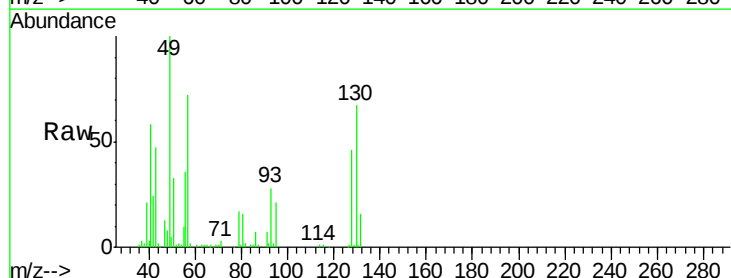
RT: 5.78 min Scan# 883

Delta R.T. -0.00 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Tgt Ion:	57	Resp:	140575
Ion	Ratio	Lower	Upper
57	100		
41	95.6	70.7	106.1
43	72.0	182.6	274.0#
56	54.8	42.0	63.0



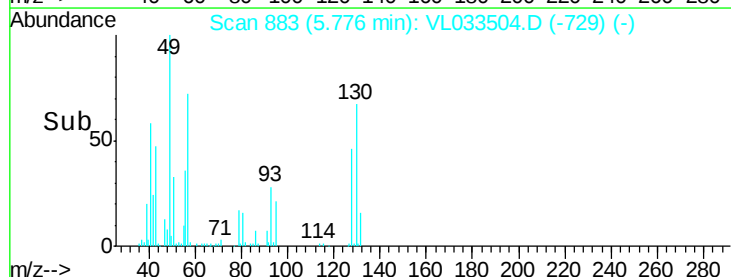
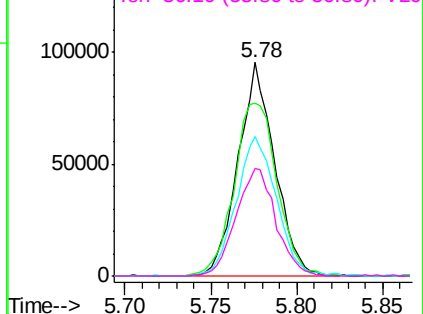
Abundance

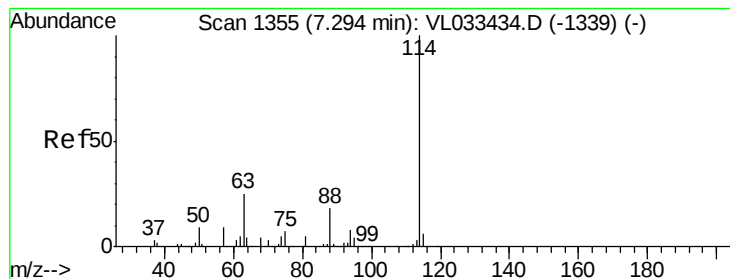
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :

MSVOA_L

ClientSampled :

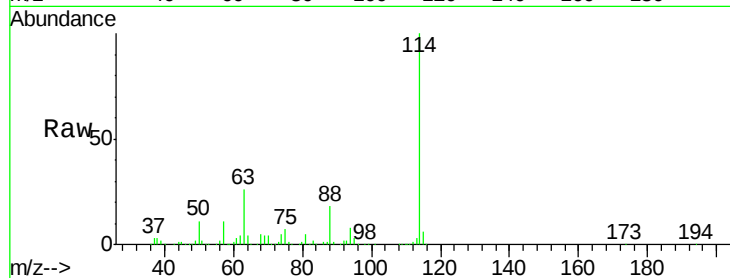
Tot Ion:114 Resp: 1846531

Ion Ratio Lower Upper

114 100

63 26.7 21.5 32.3

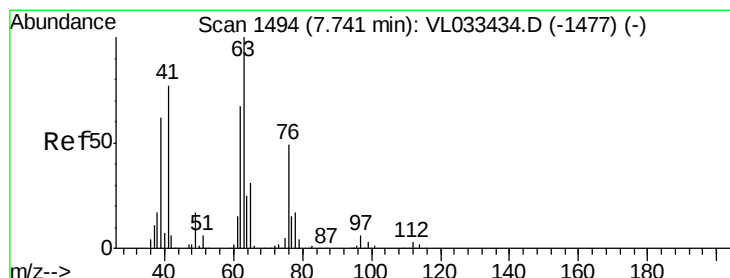
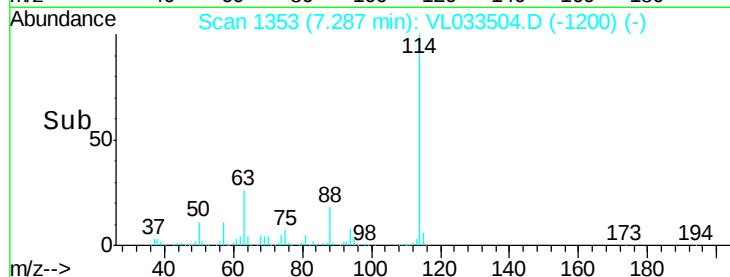
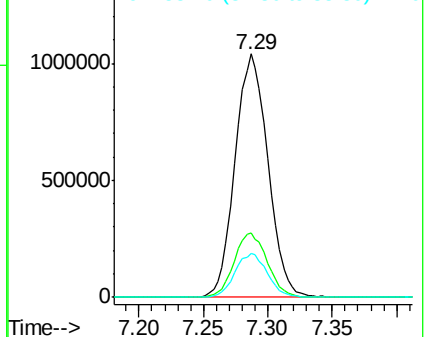
88 17.9 14.5 21.7



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



#39

1,2-Dichloropropane

Concen: 8.07 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.45 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

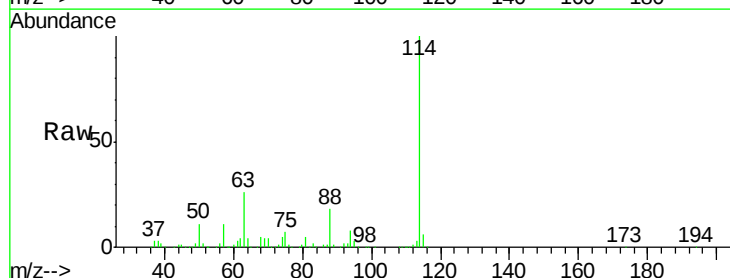
Tgt Ion: 63 Resp: 489989

Ion Ratio Lower Upper

63 100

41 0.0 61.2 91.8#

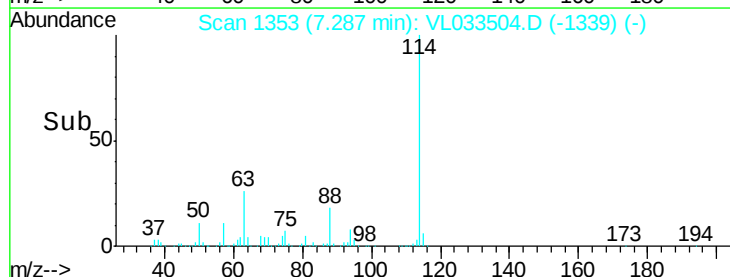
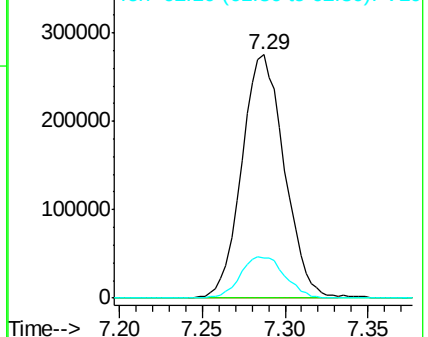
62 16.5 54.0 81.0#

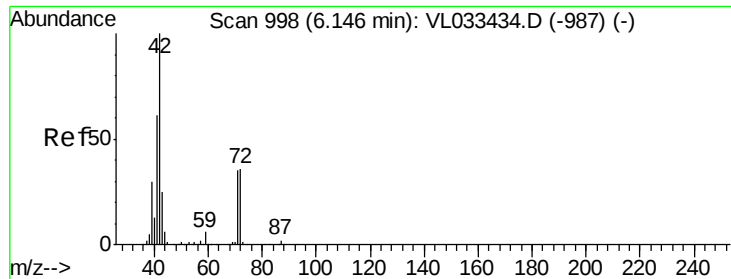


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#41

Tetrahydrofuran

Concen: 0.91 ppbv

RT: 5.78 min Scan# 884

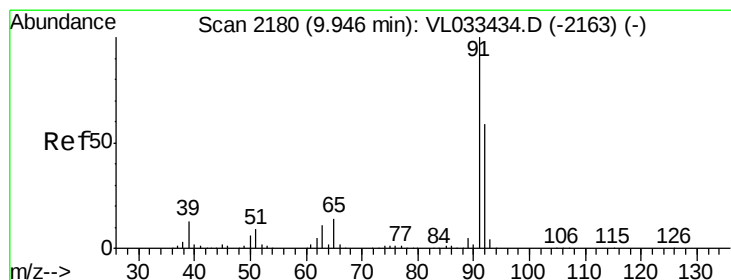
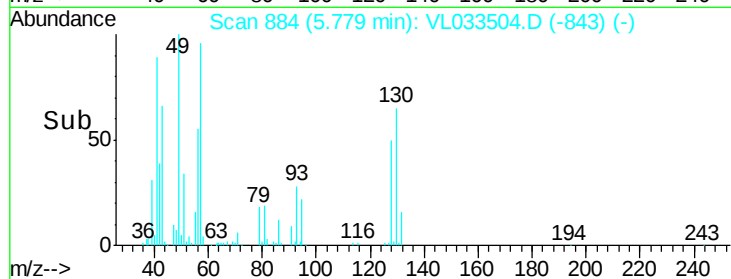
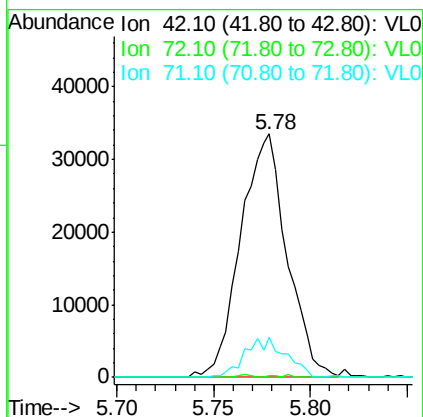
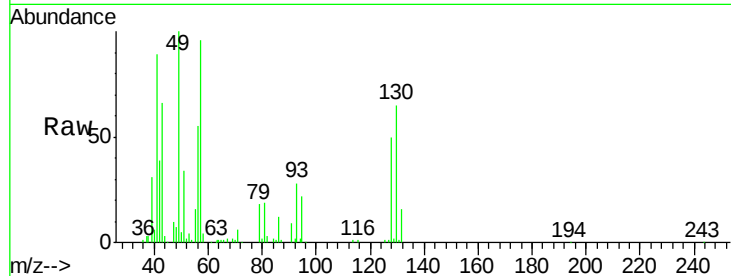
Delta R.T. -0.37 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 42 Resp: 55717
Ion Ratio Lower Upper
42 100
72 0.4 30.2 45.2#
71 14.5 29.4 44.2#



#53

Toluene

Concen: 0.25 ppbv

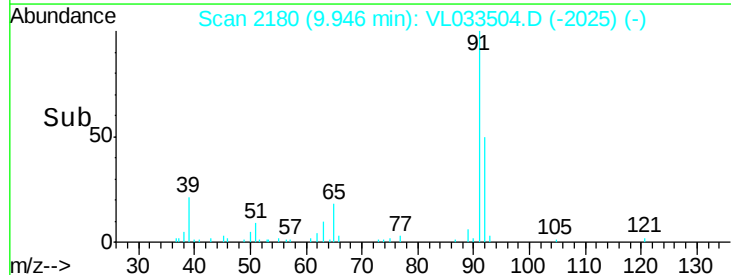
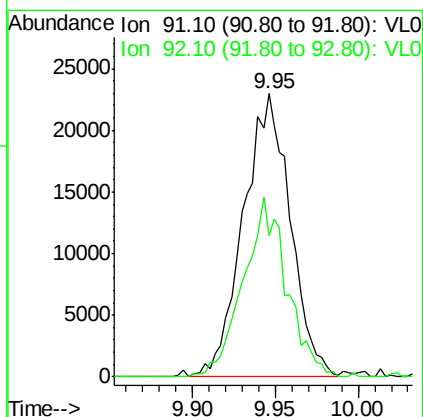
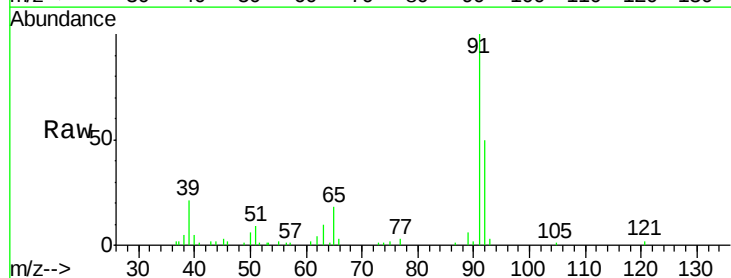
RT: 9.95 min Scan# 2180

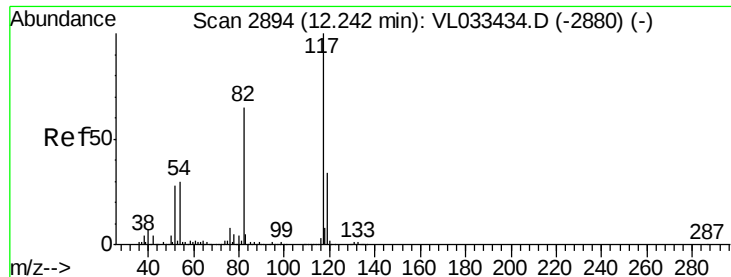
Delta R.T. -0.00 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Tgt Ion: 91 Resp: 45162
Ion Ratio Lower Upper
91 100
92 58.8 47.4 71.0





#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.00 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

Instrument :

MSVOA_L

ClientSampled :

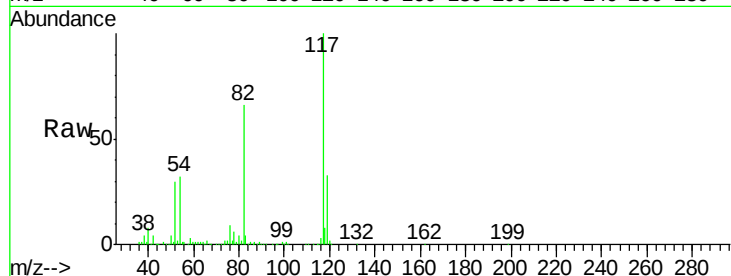
Tot Ion:117 Resp: 1873936

Ion Ratio Lower Upper

117 100

82 66.4 51.5 77.3

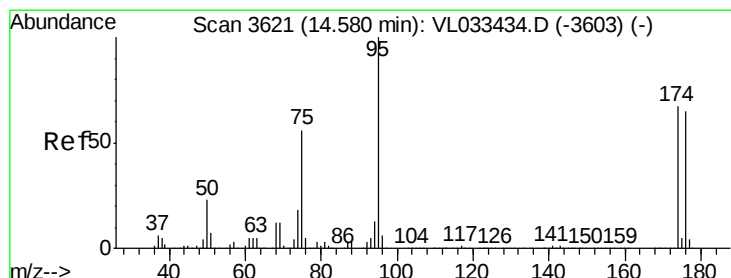
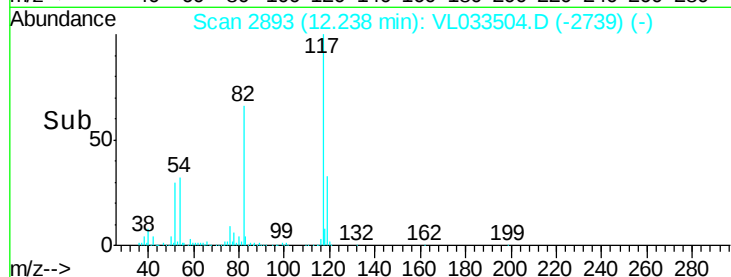
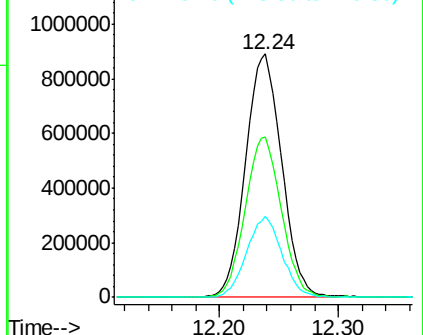
119 32.6 25.5 38.3



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.75 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.01 min

Lab File: VL033504.D

Acq: 29 Mar 2019 16:14

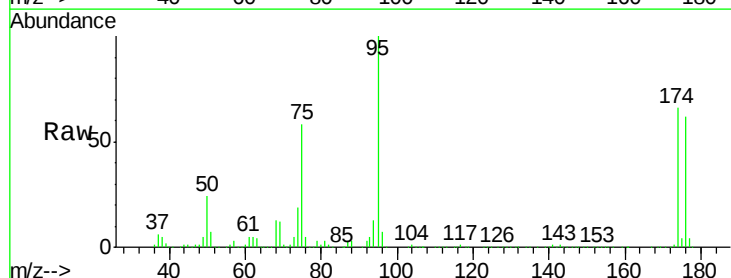
Tgt Ion: 95 Resp: 1433032

Ion Ratio Lower Upper

95 100

174 66.4 52.9 79.3

175 4.6 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

