

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071719\
 Data File : VL034040.D
 Acq On : 17 Jul 2019 20:33
 Operator : SY/AP
 Sample : K3804-01DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 18 04:40:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070219AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 02 19:31:31 2019
 QLast Update : Tue Jul 02 19:31:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.72	49	1090784	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.25	114	2879239	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.19	117	2786841	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.53	95	2194860	9.23	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	92.30%

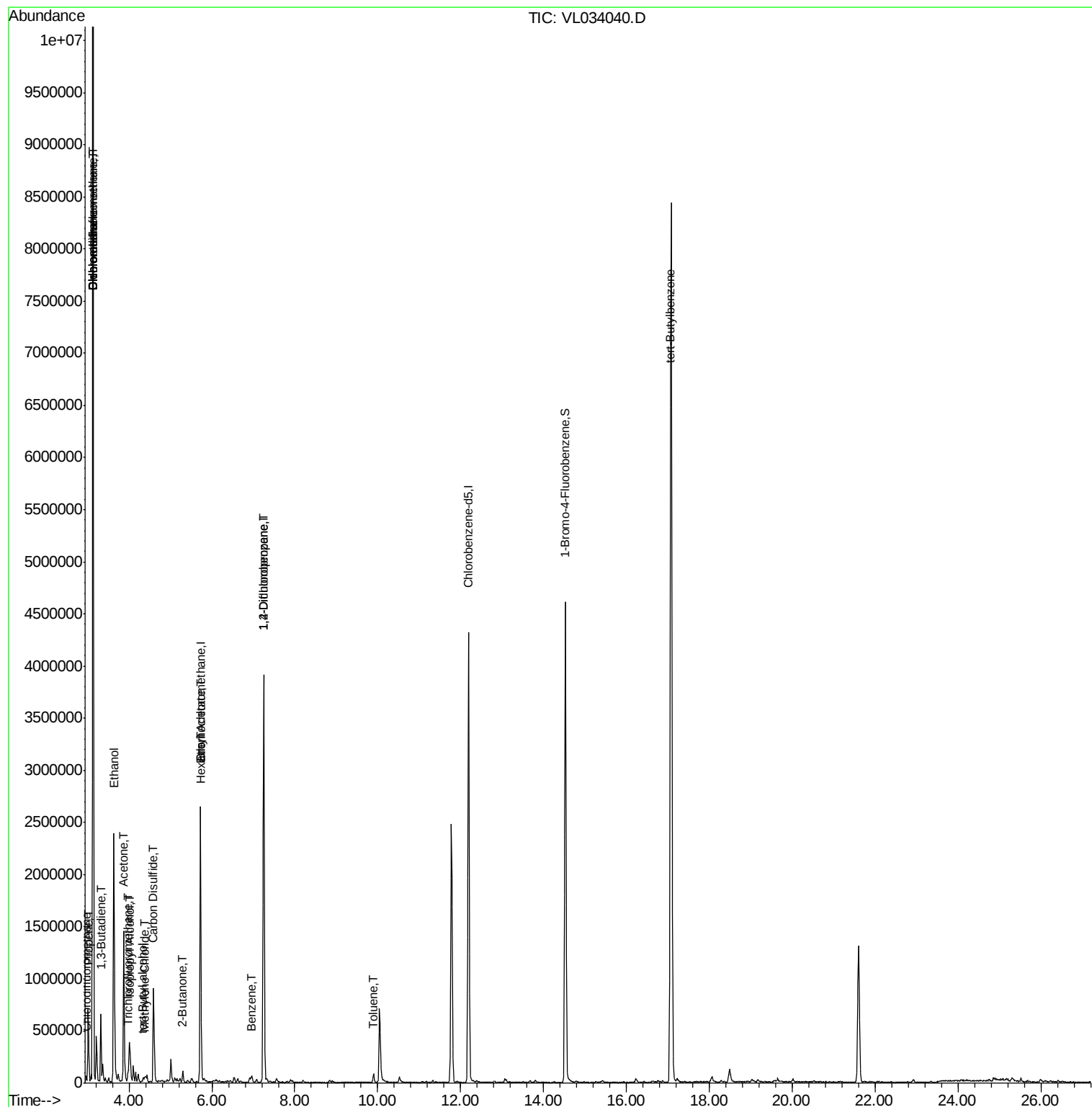
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	1169584	5.196	ppbv	99
3) Chlorodifluoromethane	2.97	51	28545	0.212	ppbv #	84
4) Chloromethane	3.13	50	147154	1.900	ppbv #	42
7) Chloroethane	3.13	64	743845	23.897	ppbv	100
8) Dichlorotetrafluoroethane	3.13	85	1169584	5.329	ppbv #	15
9) Propene	3.01	41	266545	5.379	ppbv	93
11) Trichlorofluoromethane	3.98	101	61751	0.244	ppbv	91
13) Ethanol	3.63	45	2701488	175.496	ppbv	94
15) Acetone	3.87	43	1436409	7.832	ppbv	96
16) 1,3-Butadiene	3.32	39	210291	3.247	ppbv #	25
17) tert-Butyl alcohol	4.35	59	16207	0.111	ppbv #	80
19) Isopropyl Alcohol	4.01	45	445542	3.619	ppbv #	1
20) Methylene Chloride	4.37	84	8356	0.104	ppbv #	86
25) Ethyl Acetate	5.73	43	23954	0.095	ppbv #	64
26) Hexane	5.74	57	9304	0.081	ppbv #	1
27) Carbon Disulfide	4.59	76	1029773	5.277	ppbv	100
34) 2-Butanone	5.30	43	106306	0.698	ppbv	98
36) Benzene	6.96	78	38096	0.169	ppbv	92
39) 1,2-Dichloropropane	7.25	63	700280	8.359	ppbv #	24
53) Toluene	9.90	91	46871	0.182	ppbv #	77
65) tert-Butylbenzene	17.05	119	19628	0.049	ppbv #	10

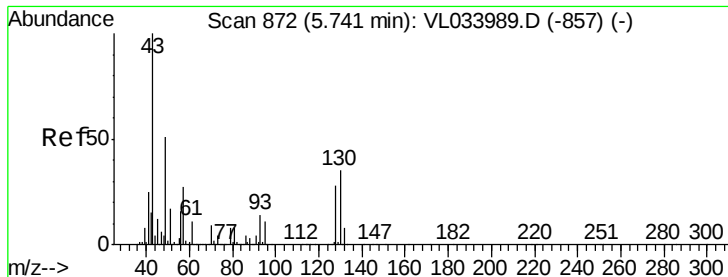
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.72 min Scan# 866

Delta R.T. -0.02 min

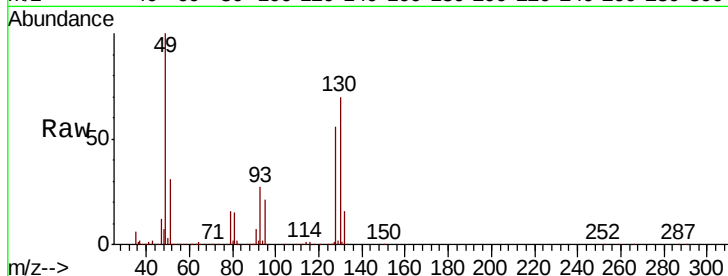
Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 49 Resp: 1090784

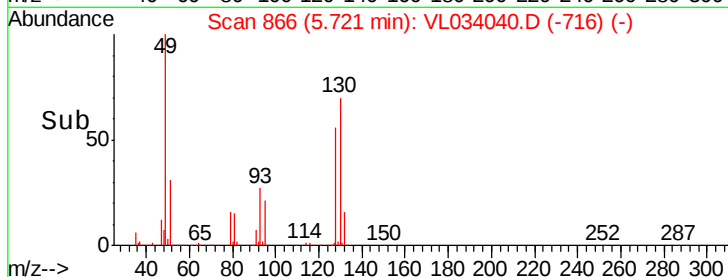
Ion	Ratio	Lower	Upper
49	100		
128	54.8	27.9	83.6
130	70.9	35.8	107.4



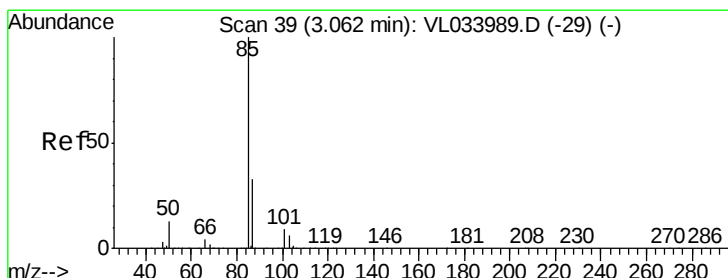
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



Time-->



#2

Dichlorodifluoromethane

Concen: 5.196 ppbv

RT: 3.13 min Scan# 61

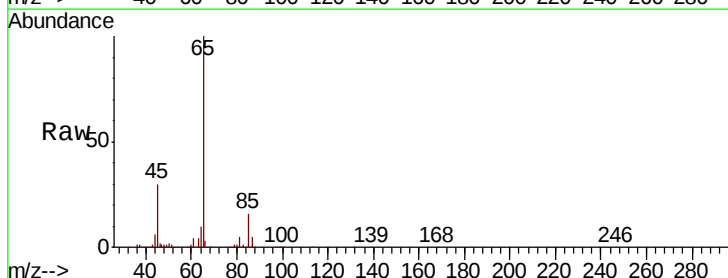
Delta R.T. 0.07 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

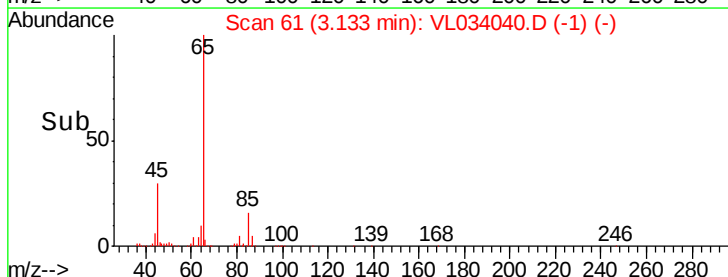
Tgt Ion: 85 Resp: 1169584

Ion	Ratio	Lower	Upper
85	100		
87	32.0	26.0	39.0

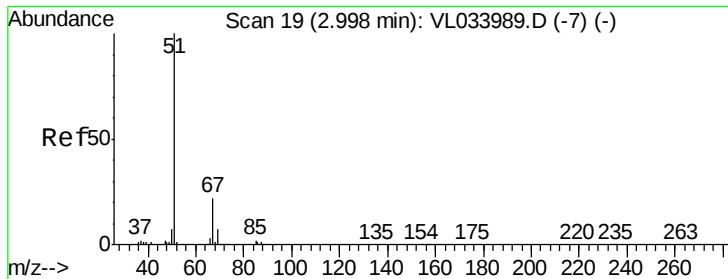


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



Time-->



#3

Chlorodifluoromethane

Concen: 0.212 ppbv

RT: 2.97 min Scan# 10

Delta R.T. -0.03 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :

MSVOA_L

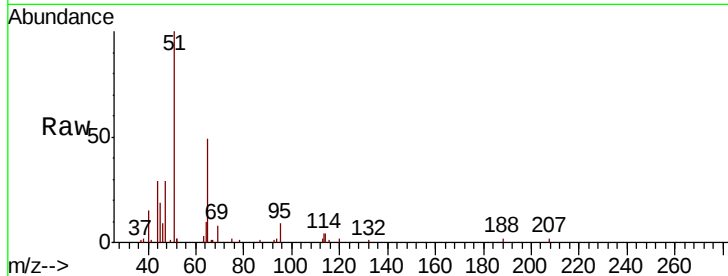
ClientSampleId :

Tot Ion: 51 Resp: 28545

Ion Ratio Lower Upper

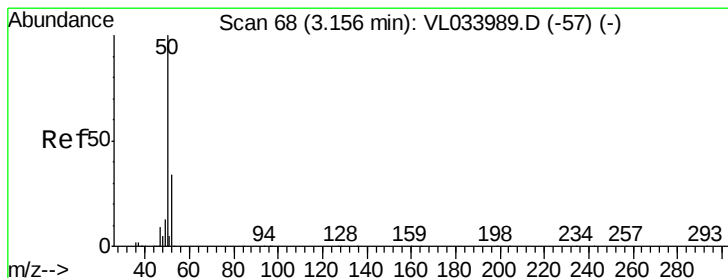
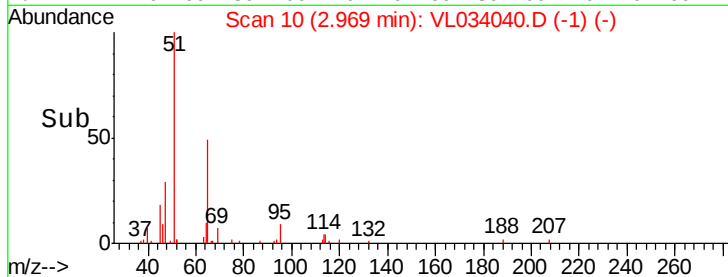
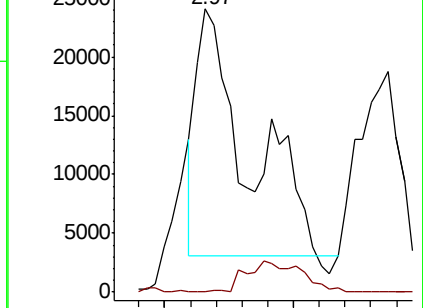
51 100

67 13.8 17.3 25.9#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 1.900 ppbv

RT: 3.13 min Scan# 60

Delta R.T. -0.03 min

Lab File: VL034040.D

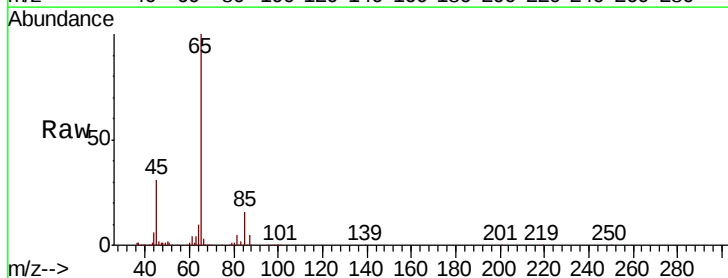
Acq: 17 Jul 2019 20:33

Tgt Ion: 50 Resp: 147154

Ion Ratio Lower Upper

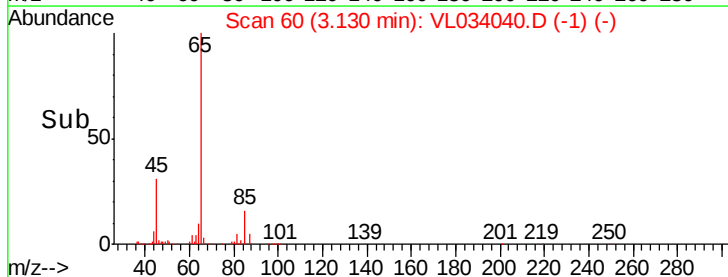
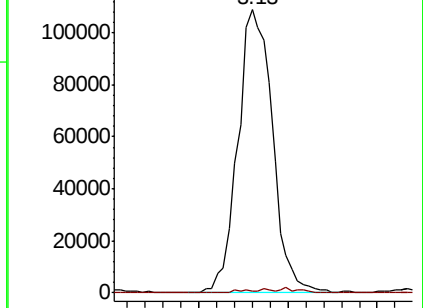
50 100

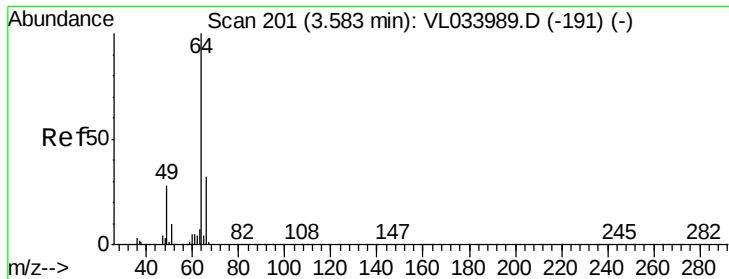
52 0.9 27.4 41.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#7

Chloroethane

Concen: 23.897 ppbv

RT: 3.13 min Scan# 61

Delta R.T. -0.45 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :

MSVOA_L

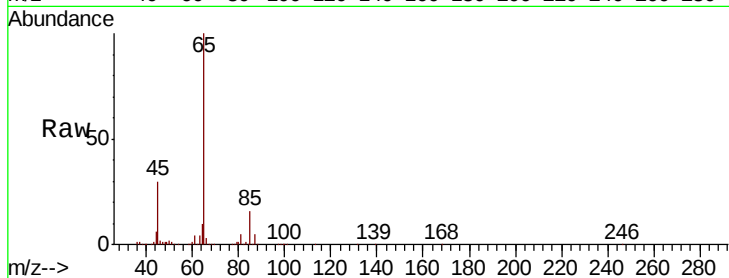
ClientSampleId :

Tot Ion: 64 Resp: 743845

Ion Ratio Lower Upper

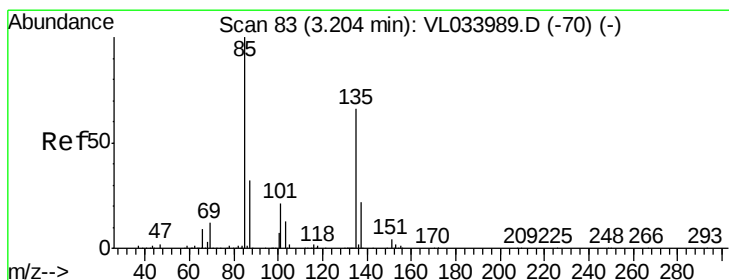
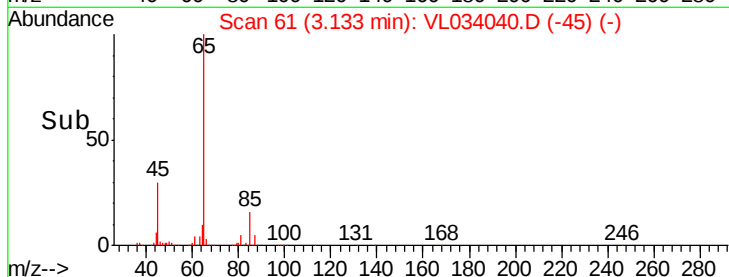
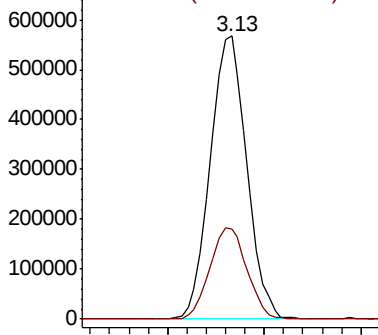
64 100

66 31.7 25.3 37.9



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 5.329 ppbv

RT: 3.13 min Scan# 61

Delta R.T. -0.07 min

Lab File: VL034040.D

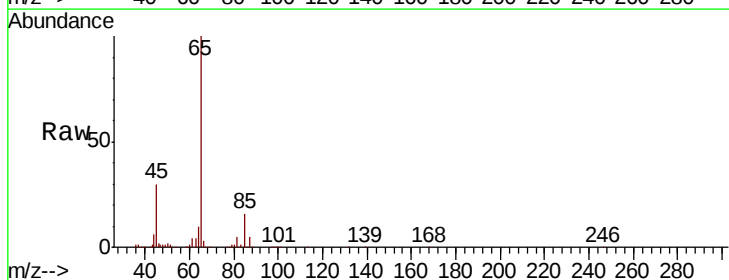
Acq: 17 Jul 2019 20:33

Tgt Ion: 85 Resp: 1169584

Ion Ratio Lower Upper

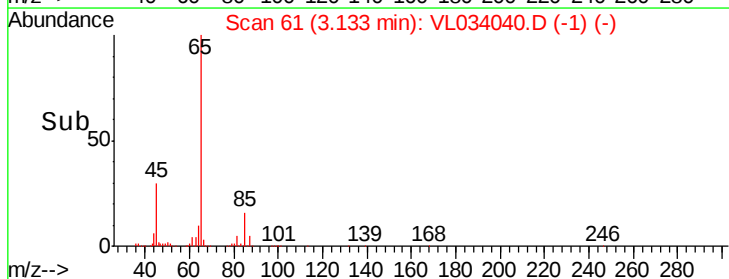
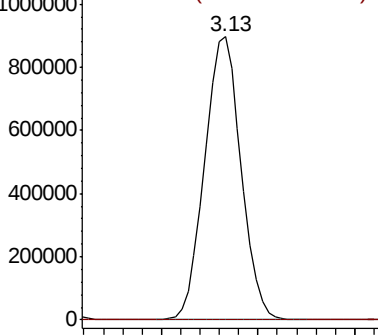
85 100

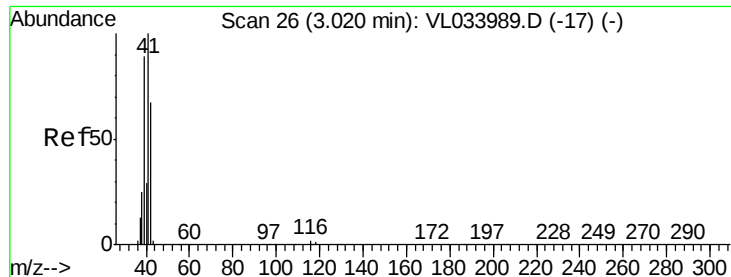
135 0.0 55.0 82.4#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 5.379 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.01 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :

MSVOA_L

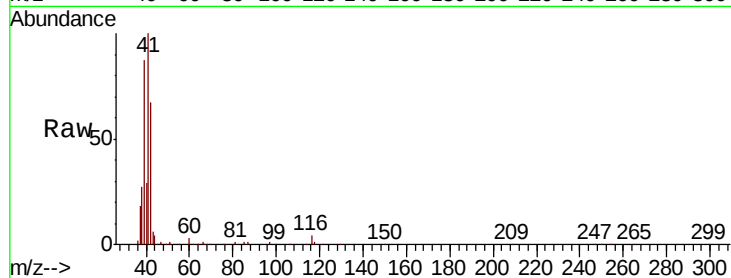
ClientSampleId :

Tot Ion: 41 Resp: 266545

Ion Ratio Lower Upper

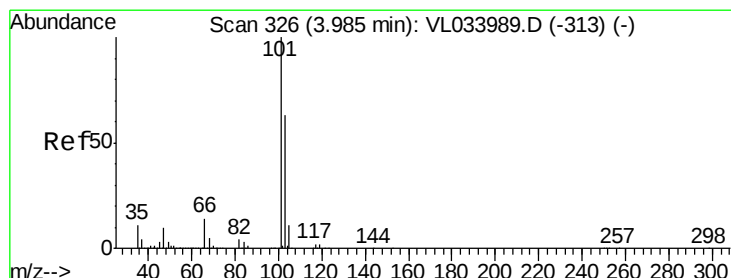
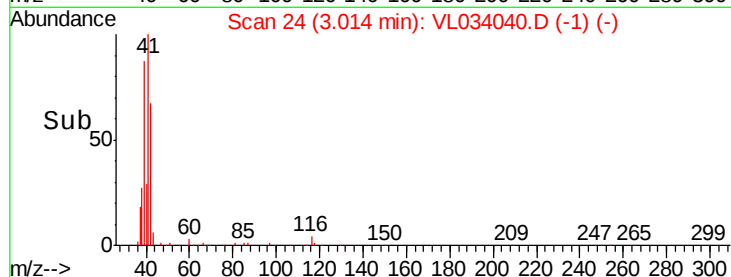
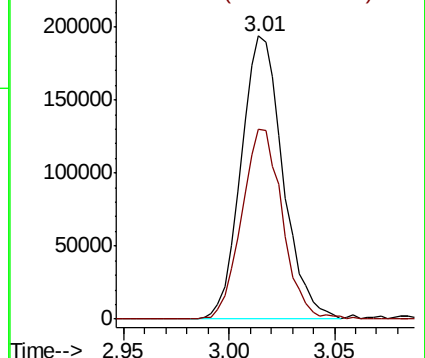
41 100

42 65.3 57.1 85.7



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.244 ppbv

RT: 3.98 min Scan# 324

Delta R.T. -0.01 min

Lab File: VL034040.D

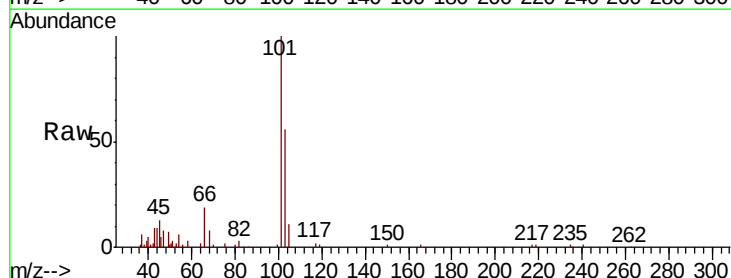
Acq: 17 Jul 2019 20:33

Tgt Ion: 101 Resp: 61751

Ion Ratio Lower Upper

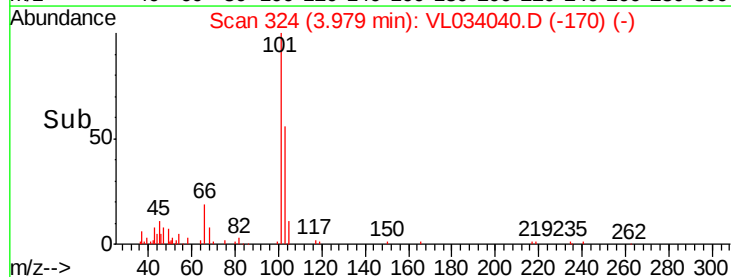
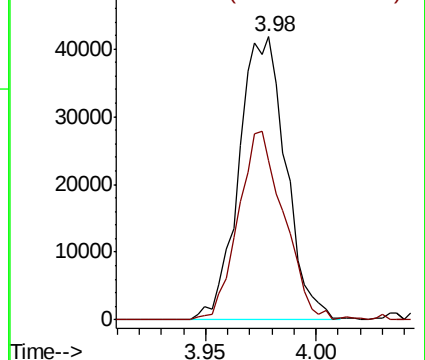
101 100

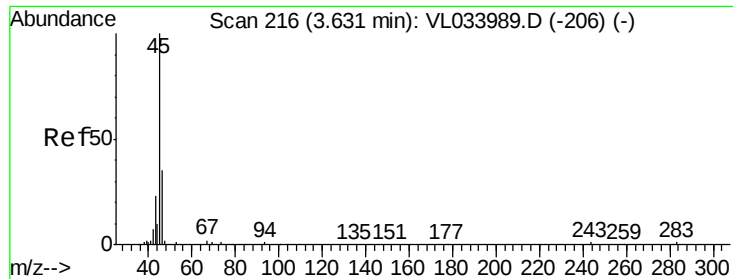
103 56.3 50.8 76.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

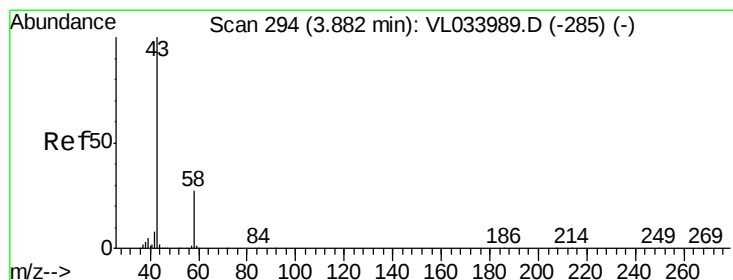
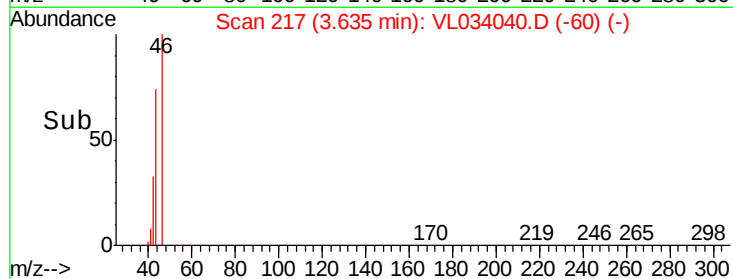
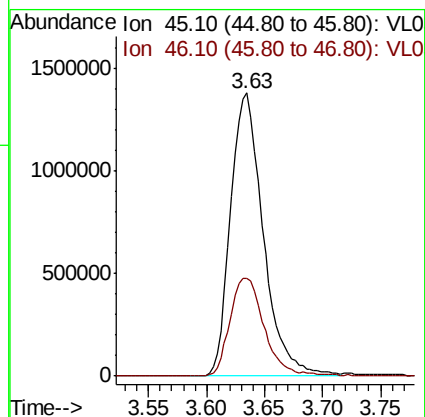
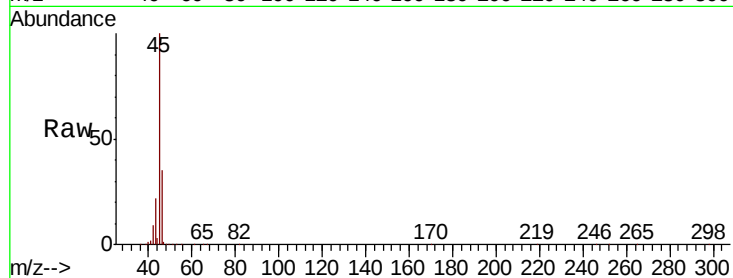




#13
Ethanol
Concen: 175.496 ppbv
RT: 3.63 min Scan# 217
Delta R.T. 0.00 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

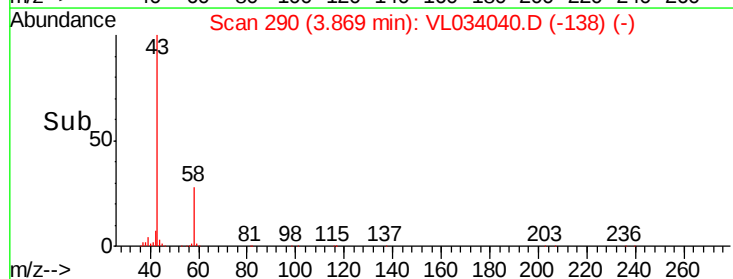
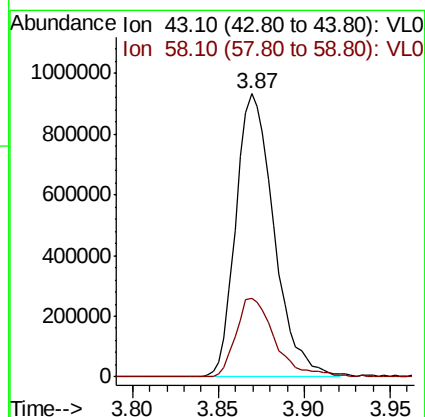
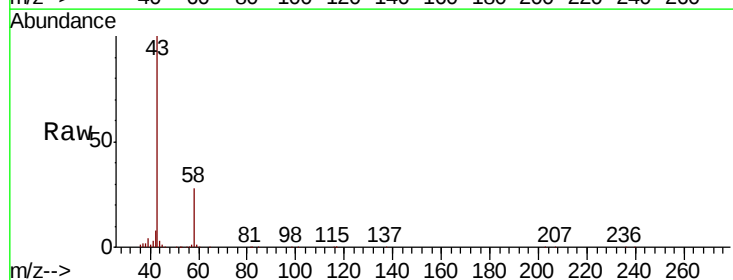
Instrument :
MSVOA_L
ClientSampleId :

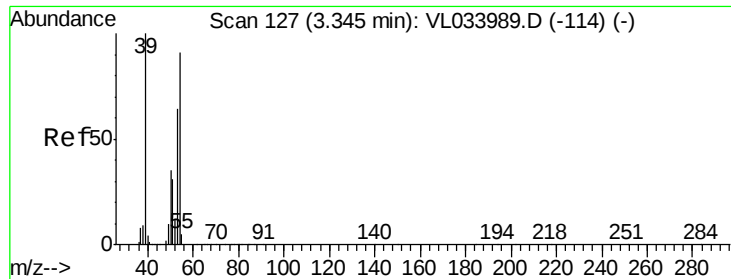
Tot Ion: 45 Resp: 2701488
Ion Ratio Lower Upper
45 100
46 36.6 16.2 64.6



#15
Acetone
Concen: 7.832 ppbv
RT: 3.87 min Scan# 290
Delta R.T. -0.01 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

Tgt Ion: 43 Resp: 1436409
Ion Ratio Lower Upper
43 100
58 28.6 21.4 32.0

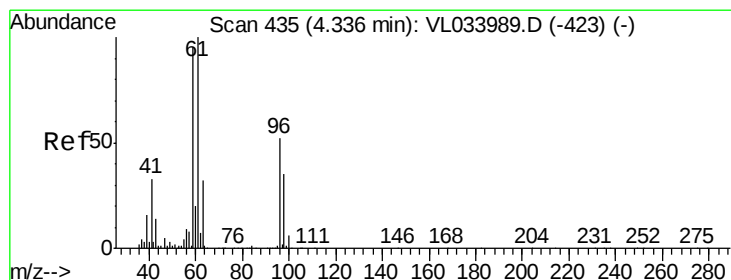
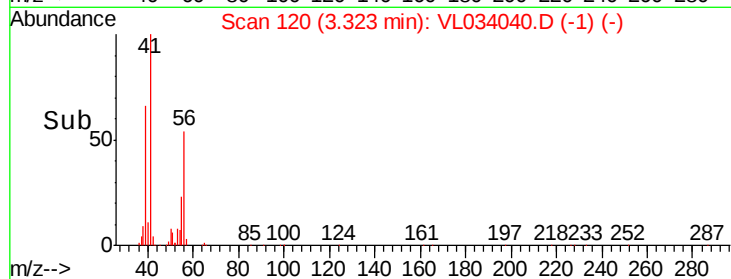
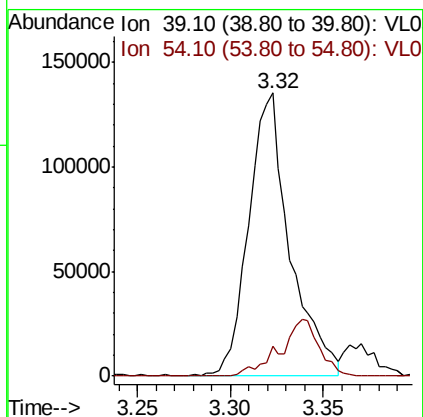
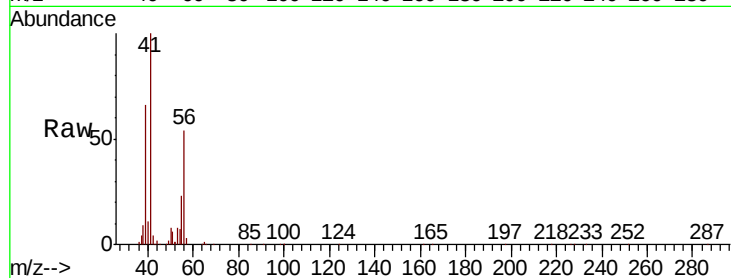




#16
1,3-Butadiene
Concen: 3.247 ppbv
RT: 3.32 min Scan# 120
Delta R.T. -0.02 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

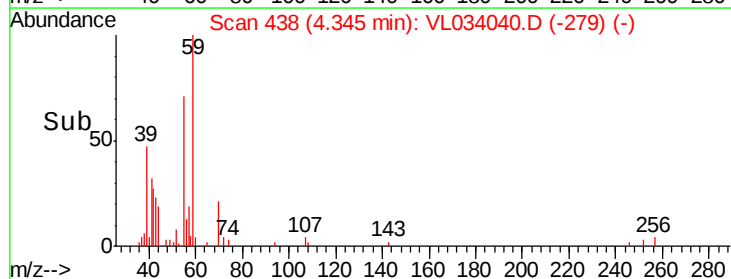
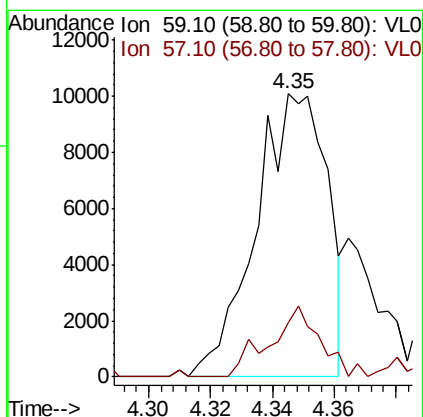
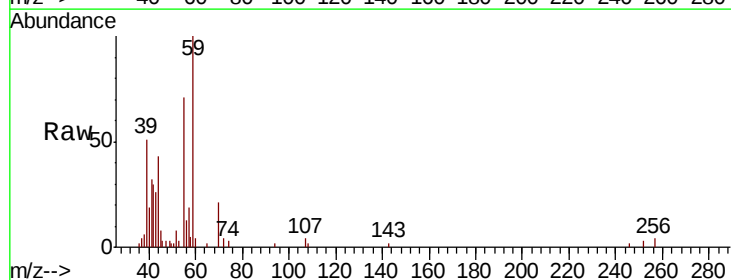
Instrument :
MSVOA_L
ClientSampleId :

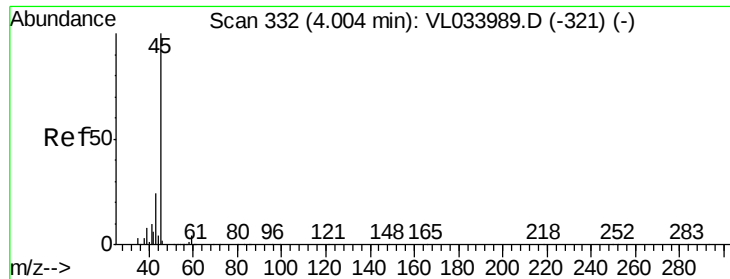
Tot Ion: 39 Resp: 210291
Ion Ratio Lower Upper
39 100
54 19.1 71.4 107.2#



#17
tert-Butyl alcohol
Concen: 0.111 ppbv
RT: 4.35 min Scan# 438
Delta R.T. 0.01 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

Tgt Ion: 59 Resp: 16207
Ion Ratio Lower Upper
59 100
57 17.7 8.2 12.2#



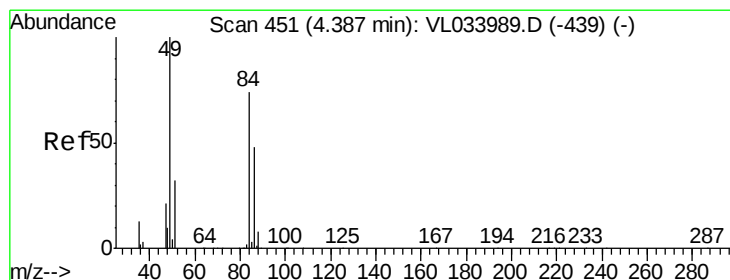
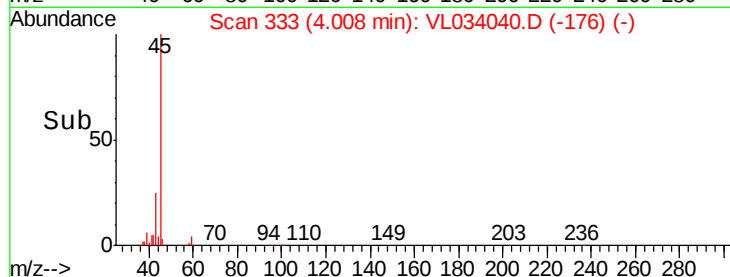
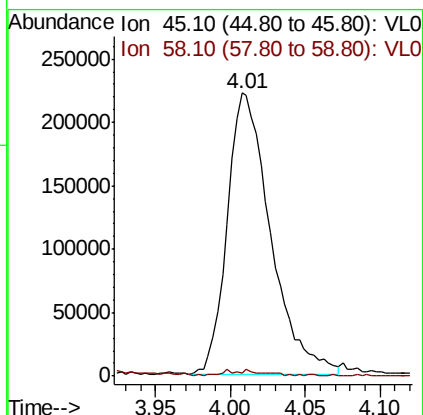
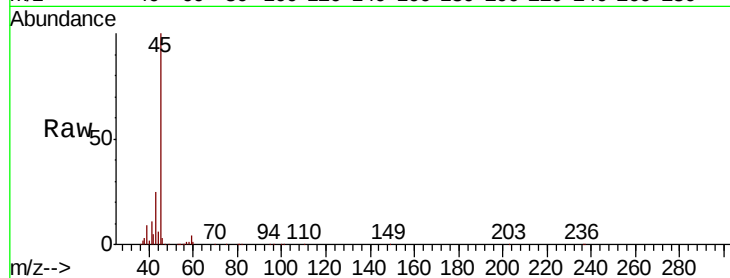


#19

Isopropyl Alcohol
 Concen: 3.619 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. 0.00 min
 Lab File: VL034040.D
 Acq: 17 Jul 2019 20:33

Instrument :
 MSVOA_L
 ClientSampleId :

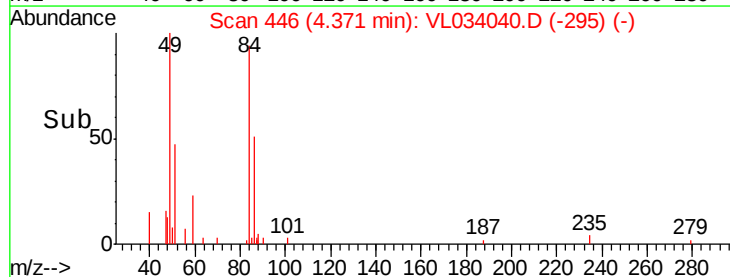
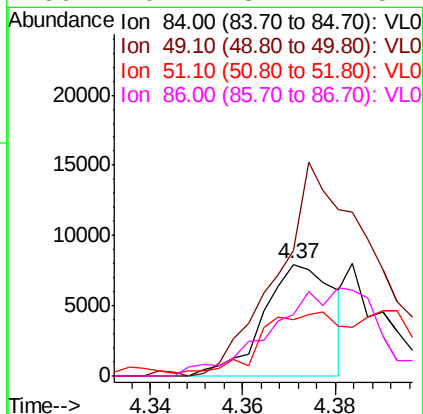
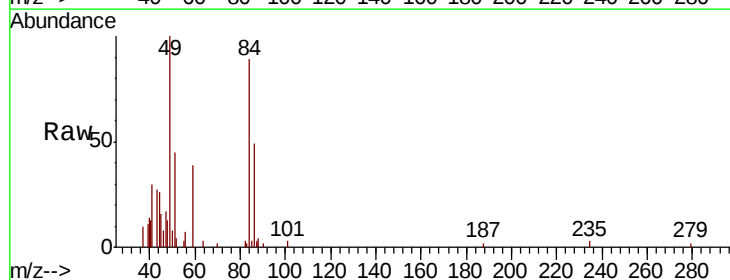
Tot Ion: 45 Resp: 445542
 Ion Ratio Lower Upper
 45 100
 58 92.3 1.7 2.5#

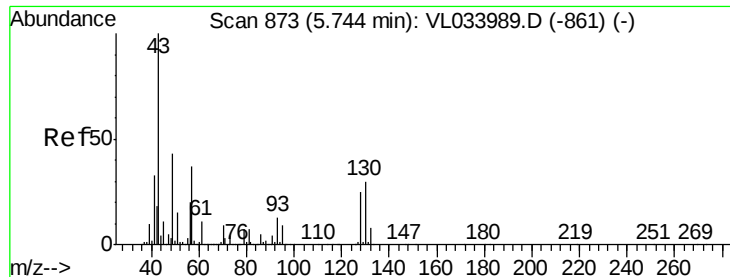


#20

Methylene Chloride
 Concen: 0.104 ppbv
 RT: 4.37 min Scan# 446
 Delta R.T. -0.02 min
 Lab File: VL034040.D
 Acq: 17 Jul 2019 20:33

Tgt Ion: 84 Resp: 8356
 Ion Ratio Lower Upper
 84 100
 49 121.2 107.6 161.4
 51 50.1 35.0 52.6
 86 46.2 52.1 78.1#





#25

Ethyl Acetate

Concen: 0.095 ppbv

RT: 5.73 min Scan# 870

Delta R.T. -0.01 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 43 Resp: 23954

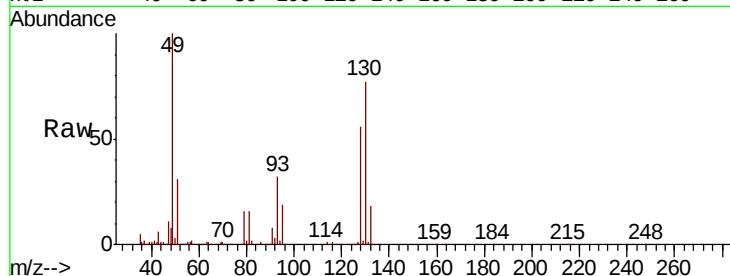
Ion Ratio Lower Upper

43 100

45 28.7 8.1 12.1#

61 20.2 8.1 12.1#

70 18.6 6.3 9.5#

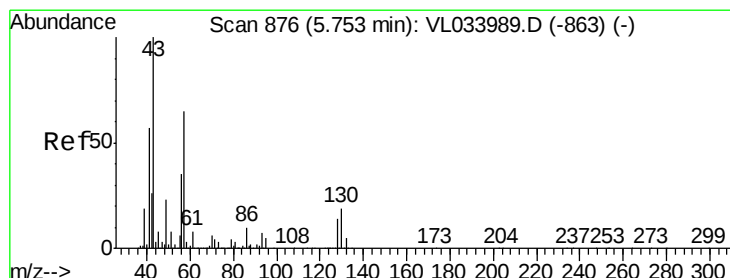
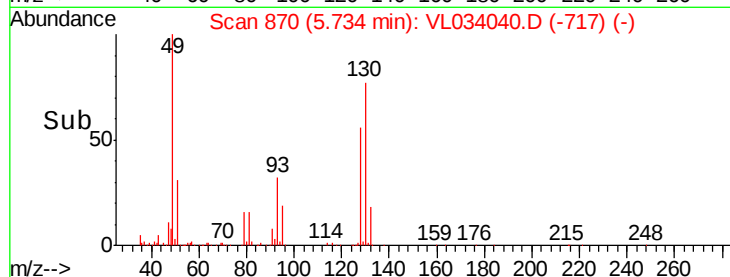
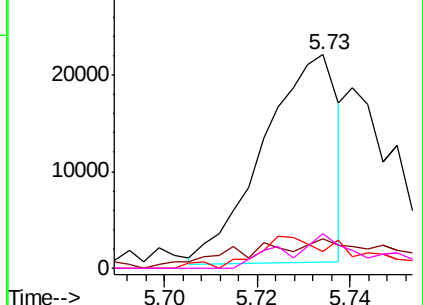


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.081 ppbv

RT: 5.74 min Scan# 871

Delta R.T. -0.02 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Tgt Ion: 57 Resp: 9304

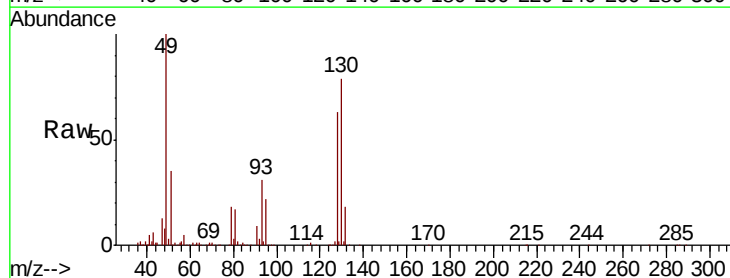
Ion Ratio Lower Upper

57 100

41 232.7 70.6 105.8#

43 468.1 177.6 266.4#

56 0.0 42.6 64.0#

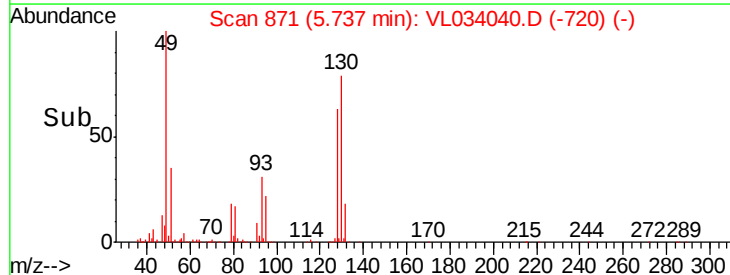
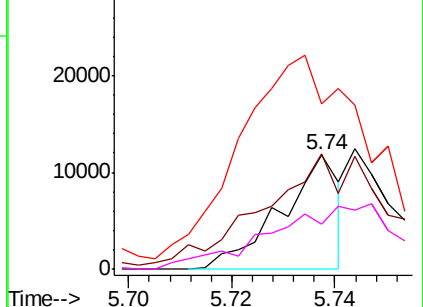


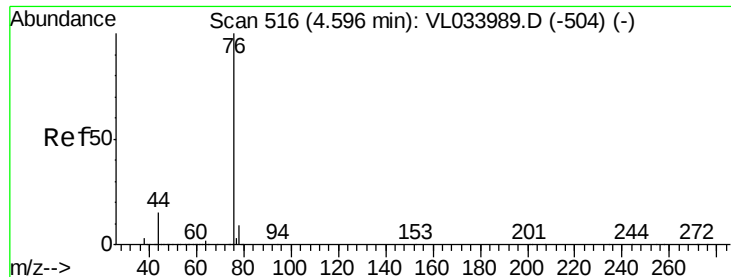
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#27

Carbon Disulfide

Concen: 5.277 ppbv

RT: 4.59 min Scan# 513

Delta R.T. -0.01 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :

MSVOA_L

ClientSampleId :

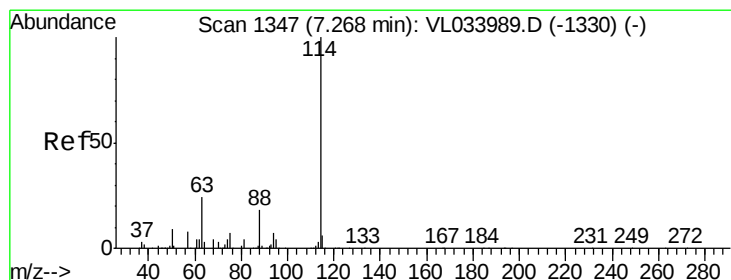
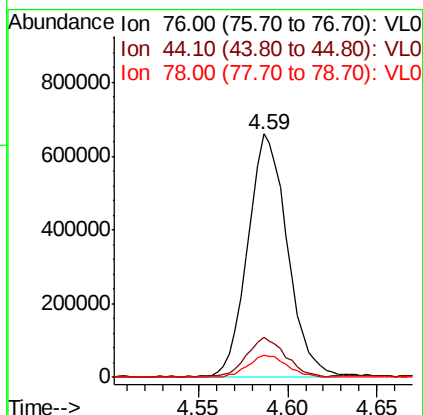
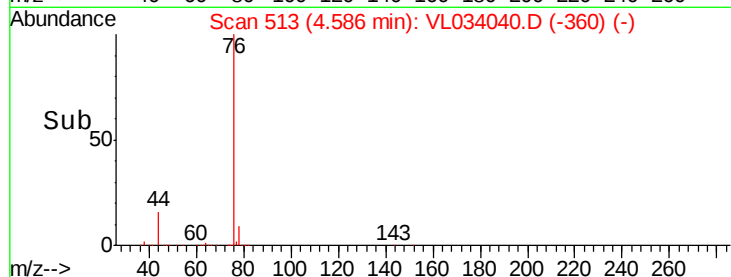
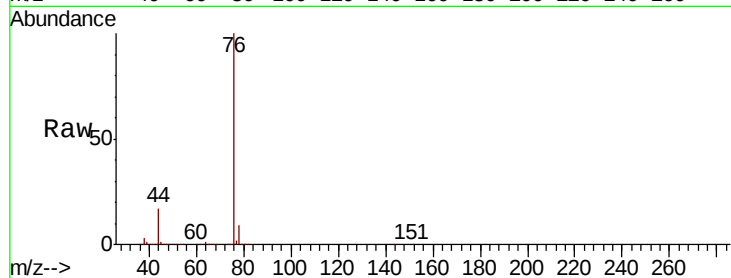
Tot Ion: 76 Resp: 1029773

Ion Ratio Lower Upper

76 100

44 15.7 12.6 18.8

78 9.2 7.2 10.8



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.25 min Scan# 1341

Delta R.T. -0.02 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

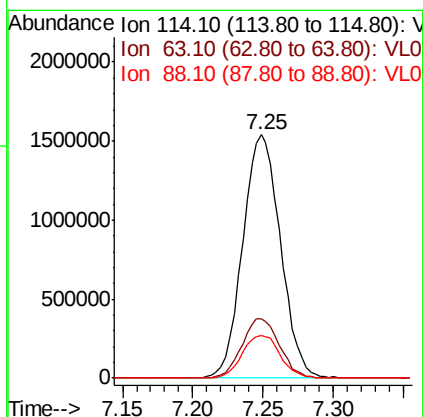
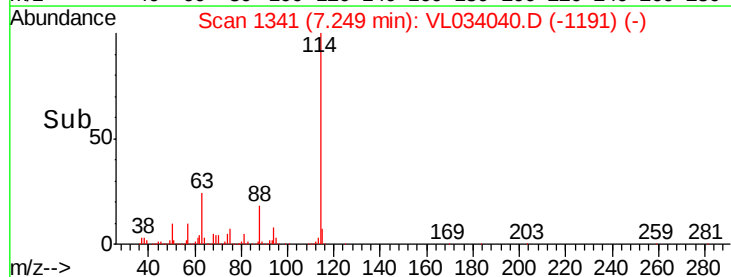
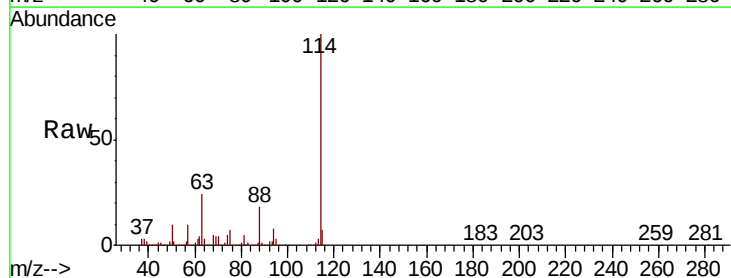
Tgt Ion: 114 Resp: 2879239

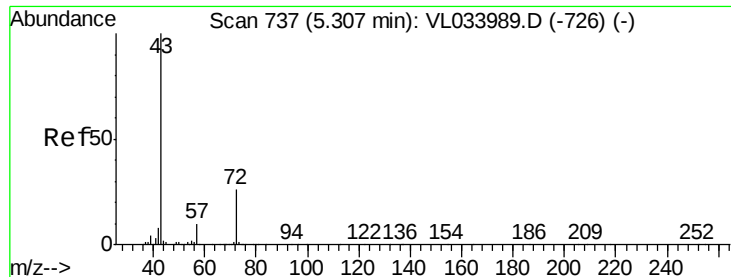
Ion Ratio Lower Upper

114 100

63 24.4 20.2 30.2

88 17.9 14.1 21.1

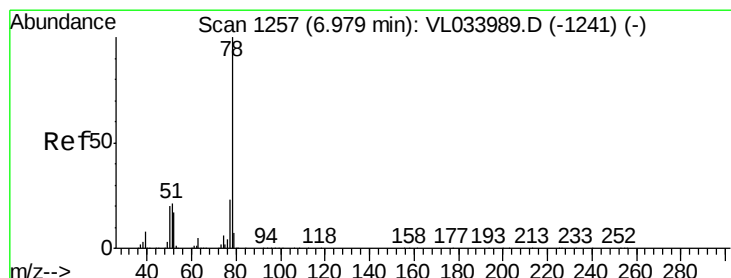
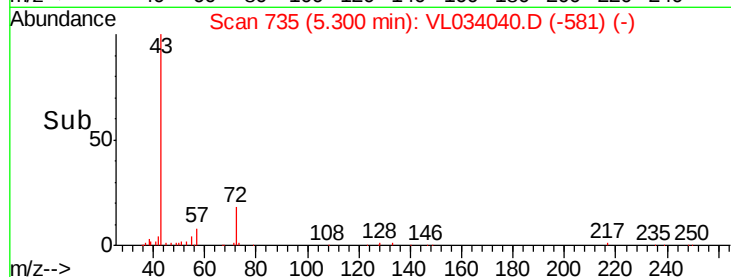
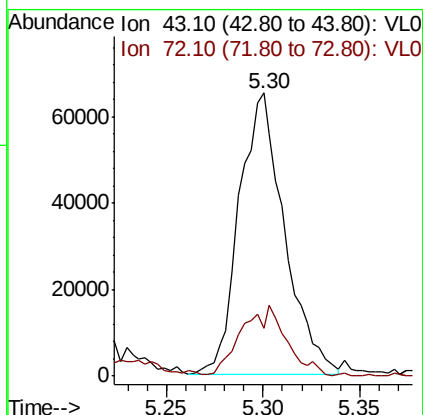
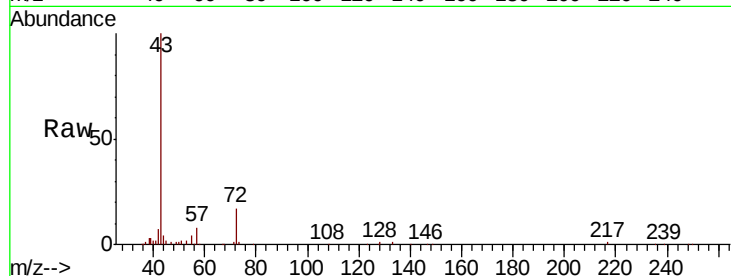




#34
2-Butanone
Concen: 0.698 ppbv
RT: 5.30 min Scan# 735
Delta R.T. -0.01 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

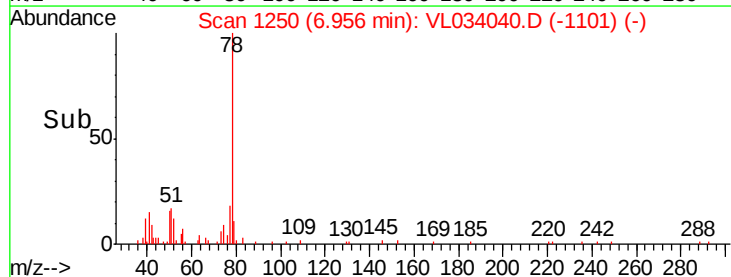
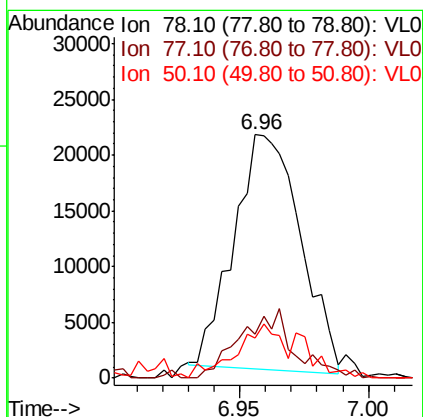
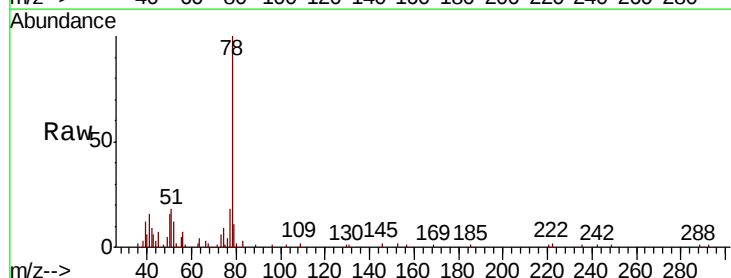
Instrument :
MSVOA_L
ClientSampleId :

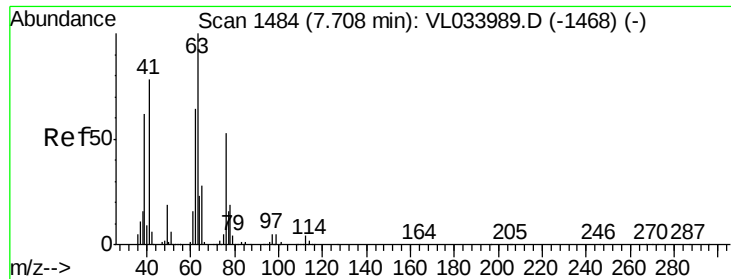
Tot Ion: 43 Resp: 106306
Ion Ratio Lower Upper
43 100
72 25.7 19.9 29.9



#36
Benzene
Concen: 0.169 ppbv
RT: 6.96 min Scan# 1250
Delta R.T. -0.02 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

Tgt Ion: 78 Resp: 38096
Ion Ratio Lower Upper
78 100
77 18.9 18.7 28.1
50 17.2 16.2 24.2

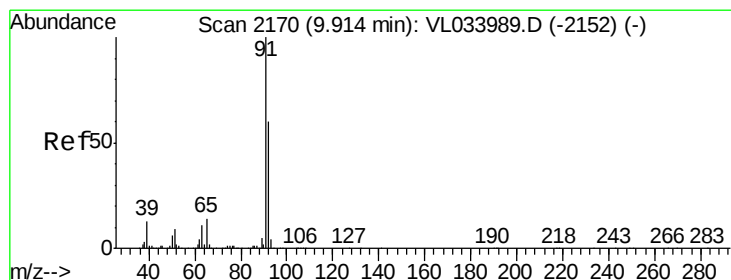
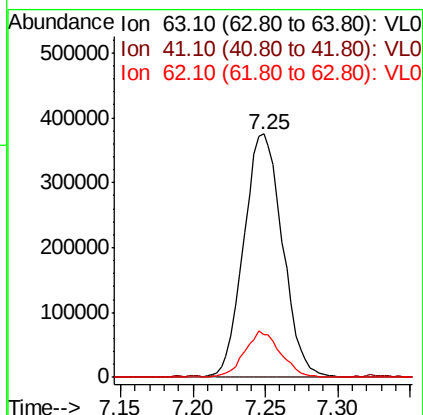
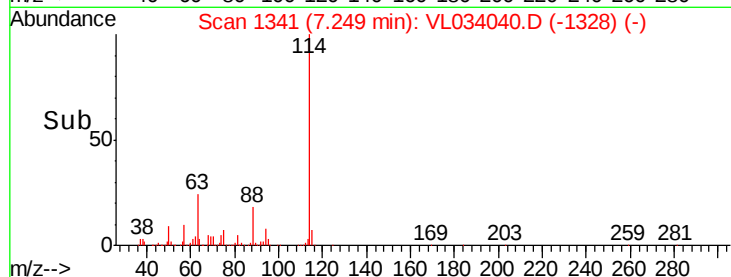
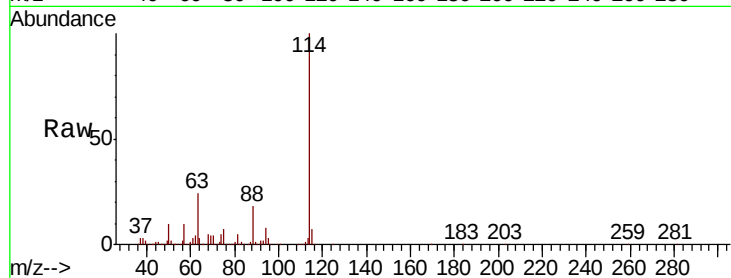




#39
 1,2-Dichloropropane
 Concen: 8.359 ppbv
 RT: 7.25 min Scan# 1341
 Delta R.T. -0.46 min
 Lab File: VL034040.D
 Acq: 17 Jul 2019 20:33

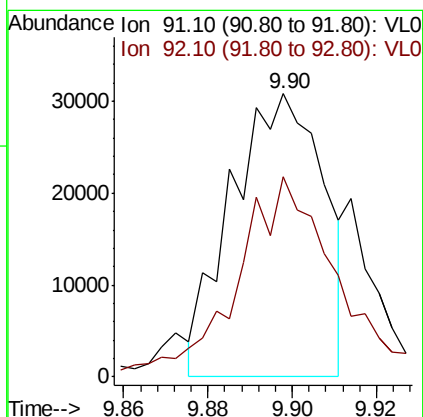
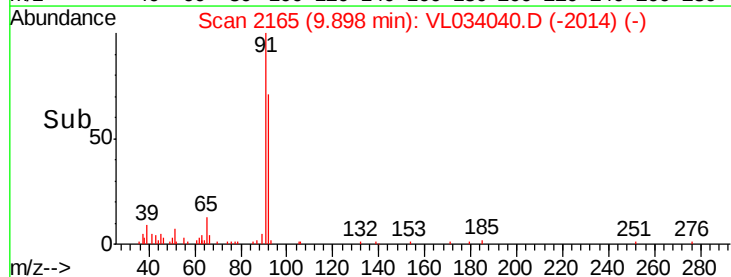
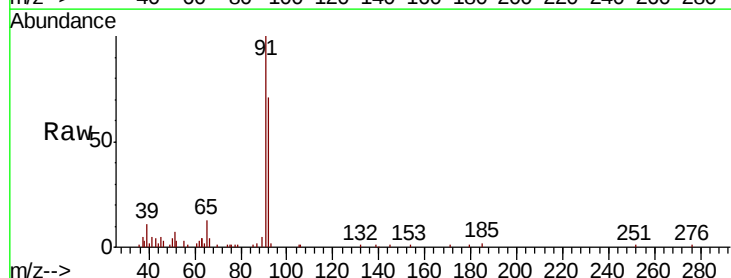
Instrument :
 MSVOA_L
 ClientSampleId :

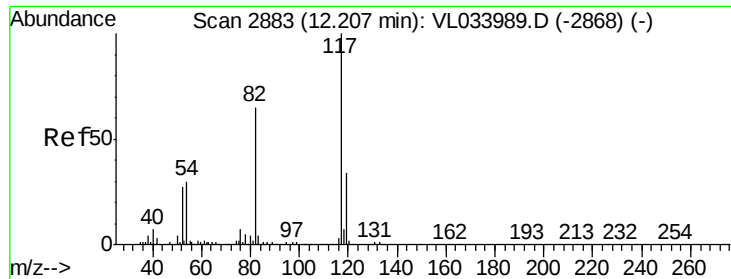
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.1	62.3	93.5#
62	17.7	51.4	77.2#



#53
 Toluene
 Concen: 0.182 ppbv
 RT: 9.90 min Scan# 2165
 Delta R.T. -0.02 min
 Lab File: VL034040.D
 Acq: 17 Jul 2019 20:33

Tgt Ion	Ratio	Lower	Upper
91	100		
92	76.8	47.7	71.5#

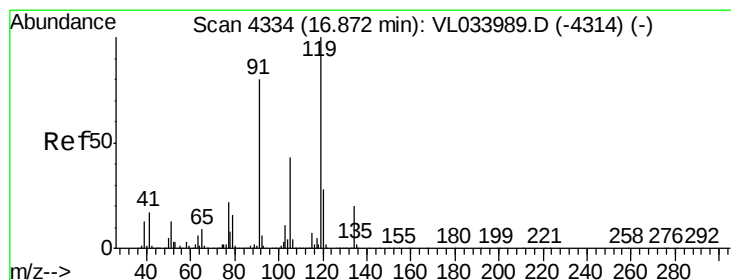
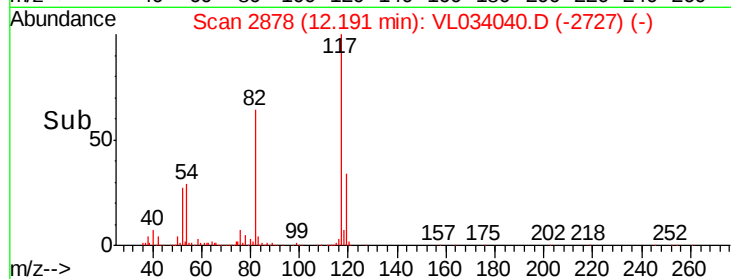
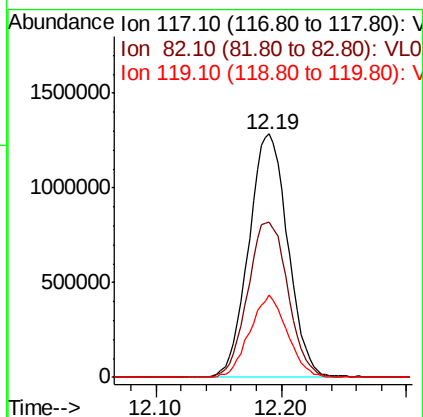
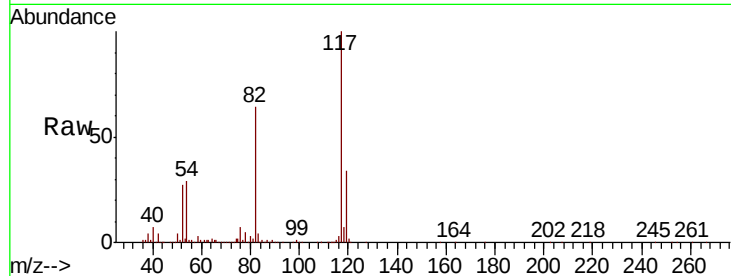




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.19 min Scan# 2878
Delta R.T. -0.02 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

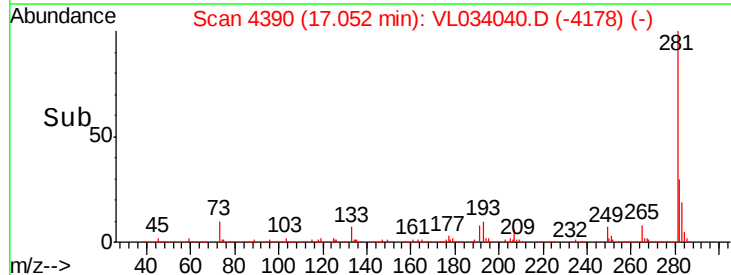
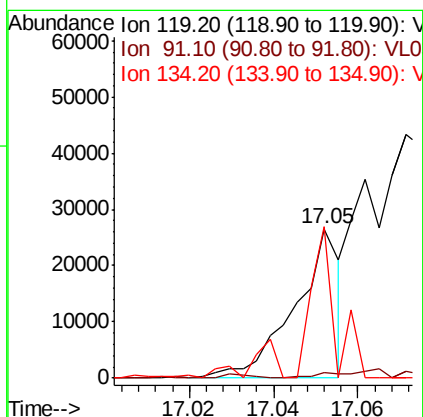
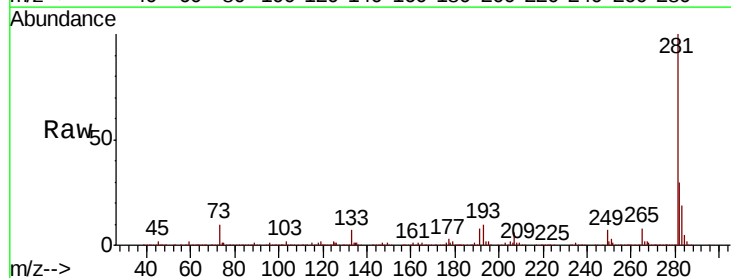
Instrument :
MSVOA_L
ClientSampleId :

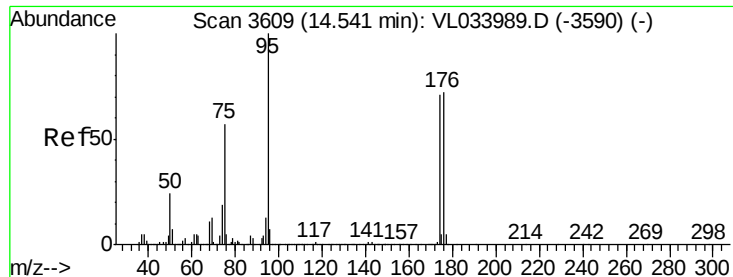
Tot Ion:117 Resp: 2786841
Ion Ratio Lower Upper
117 100
82 65.7 50.8 76.2
119 32.5 24.0 36.0



#65
tert-Butylbenzene
Concen: 0.049 ppbv
RT: 17.05 min Scan# 4390
Delta R.T. 0.18 min
Lab File: VL034040.D
Acq: 17 Jul 2019 20:33

Tgt Ion:119 Resp: 19628
Ion Ratio Lower Upper
119 100
91 1.0 67.0 100.6#
134 58.7 15.8 23.6#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.234 ppbv

RT: 14.53 min Scan# 3605

Delta R.T. -0.01 min

Lab File: VL034040.D

Acq: 17 Jul 2019 20:33

Instrument :

MSVOA_L

ClientSampleId :

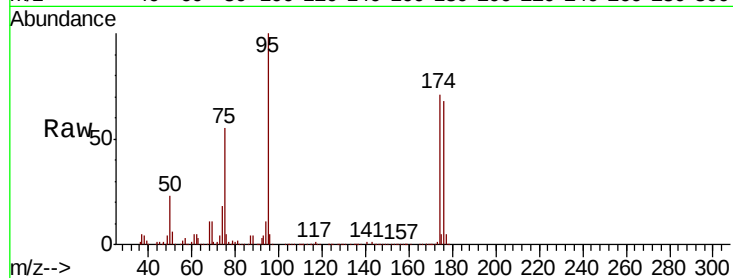
Tot Ion: 95 Resp: 2194860

Ion Ratio Lower Upper

95 100

174 71.8 60.5 90.7

175 5.1 4.0 6.0



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

