

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL120219\
 Data File : VL034428.D
 Acq On : 2 Dec 2019 16:16
 Operator : SY/AP
 Sample : K6068-02DL2 40X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2DL2

Quant Time: Dec 03 02:50:10 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	946194	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.21	114	1934944	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.15	117	1881431	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1561882	9.87	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.70%

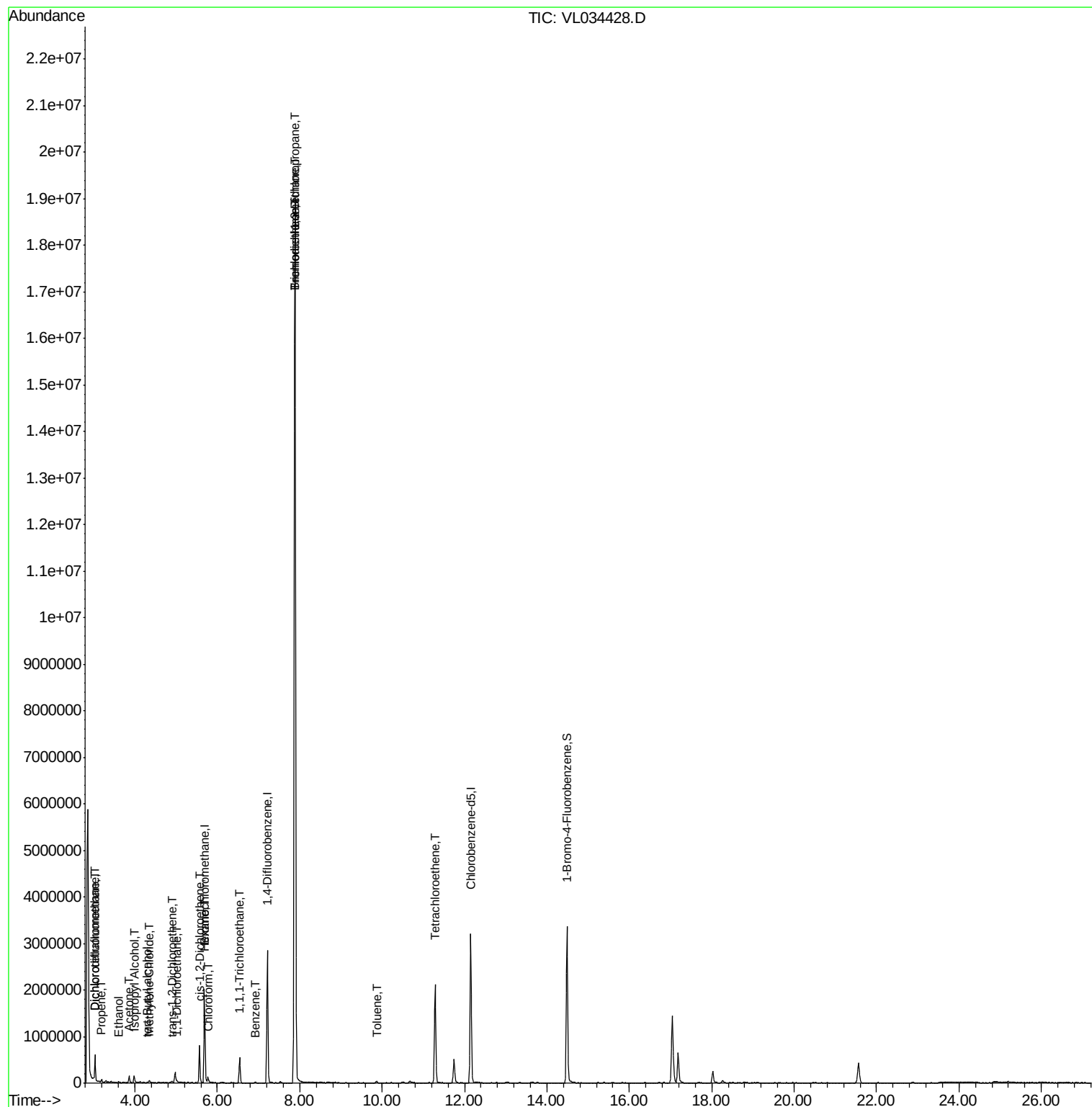
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	382629	2.235	ppbv	94
8) Dichlorotetrafluoroethane	3.03	85	382629	2.489	ppbv #	18
9) Propene	3.19	41	12030	0.230	ppbv	90
13) Ethanol	3.61	45	20847	1.428	ppbv	97
15) Acetone	3.85	43	145925	1.077	ppbv	99
17) tert-Butyl alcohol	4.31	59	5862	0.051	ppbv #	29
19) Isopropyl Alcohol	3.98	45	155771	1.794	ppbv	100
20) Methylene Chloride	4.35	84	12260	0.255	ppbv	92
22) trans-1,2-Dichloroethene	4.90	96	3224	0.065	ppbv #	81
24) 1,1-Dichloroethane	5.02	63	19908	0.146	ppbv #	89
26) Hexane	5.70	57	5980	0.058	ppbv #	50
29) Chloroform	5.77	83	76338	0.454	ppbv	100
31) cis-1,2-Dichloroethene	5.57	61	444557	4.141	ppbv	97
32) 1,1,1-Trichloroethane	6.54	97	324801	2.059	ppbv	97
36) Benzene	6.92	78	8623	0.045	ppbv #	72
38) Trichloroethene	7.88	130	6639680	83.648	ppbv	93
39) 1,2-Dichloropropane	7.87	63	9926	0.133	ppbv #	1
42) Bromodichloromethane	7.89	83	111749	0.622	ppbv	92
52) Tetrachloroethene	11.28	164	510929	6.105	ppbv	96
53) Toluene	9.87	91	20732	0.094	ppbv	99

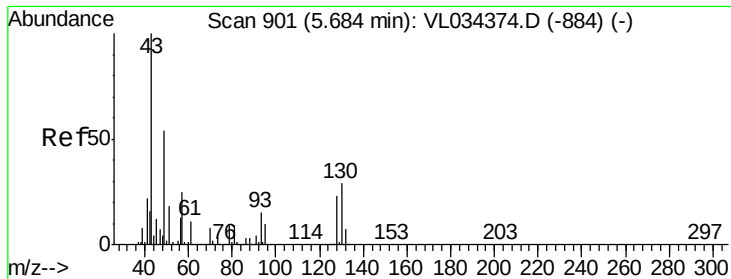
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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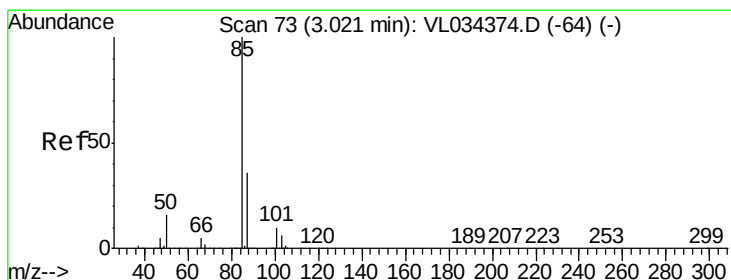
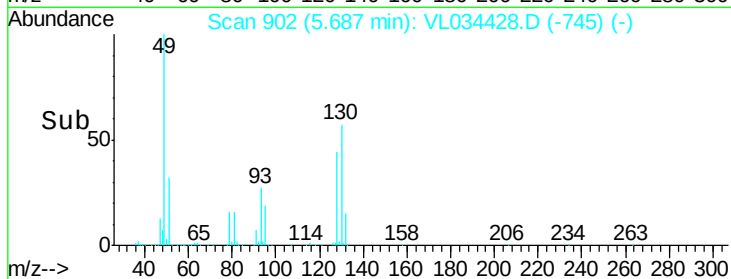
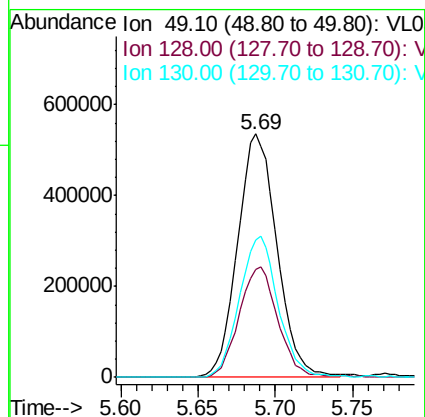
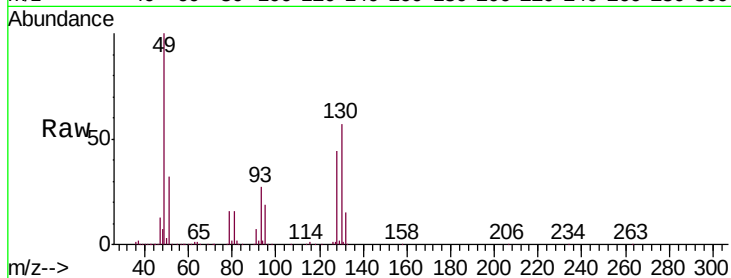




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.69 min Scan# 902
 Delta R.T. 0.00 min
 Lab File: VL034428.D
 Acq: 2 Dec 2019 16:16

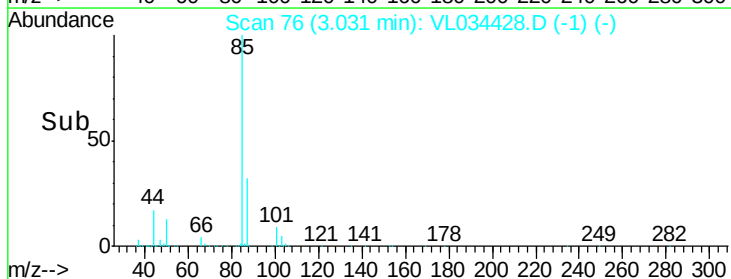
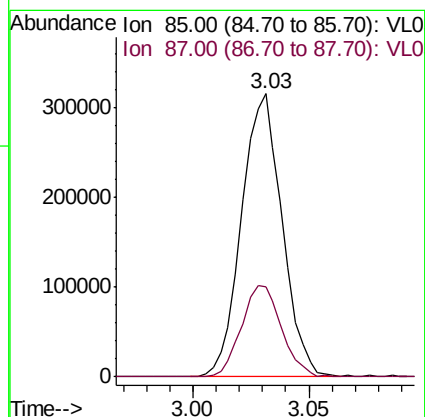
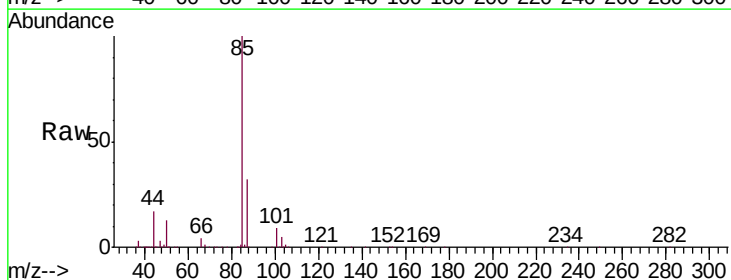
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2DL2

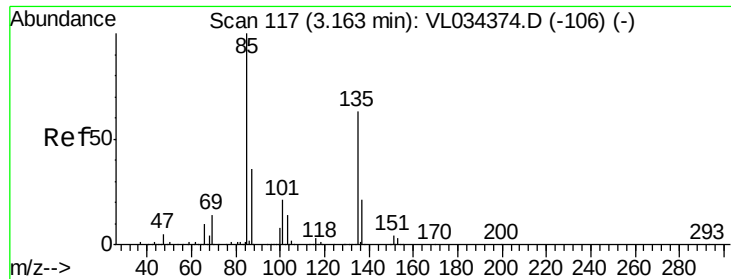
Tgt Ion: 49 Resp: 946194
 Ion Ratio Lower Upper
 49 100
 128 45.3 21.8 65.3
 130 57.7 28.0 84.0



#2
 Dichlorodifluoromethane
 Concen: 2.235 ppbv
 RT: 3.03 min Scan# 76
 Delta R.T. 0.01 min
 Lab File: VL034428.D
 Acq: 2 Dec 2019 16:16

Tgt Ion: 85 Resp: 382629
 Ion Ratio Lower Upper
 85 100
 87 32.0 28.5 42.7





#8

Dichlorotetrafluoroethane

Concen: 2.489 ppbv

RT: 3.03 min Scan# 76

Delta R.T. -0.13 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

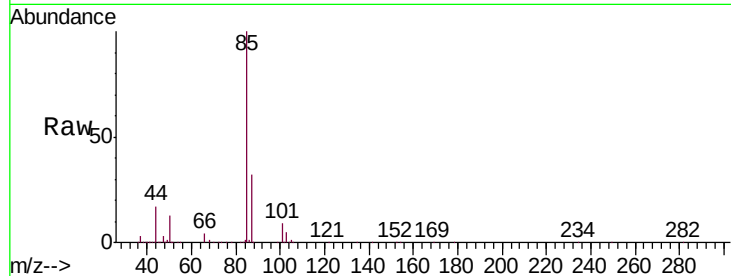
SV-2DL2

Tgt Ion: 85 Resp: 382629

Ion Ratio Lower Upper

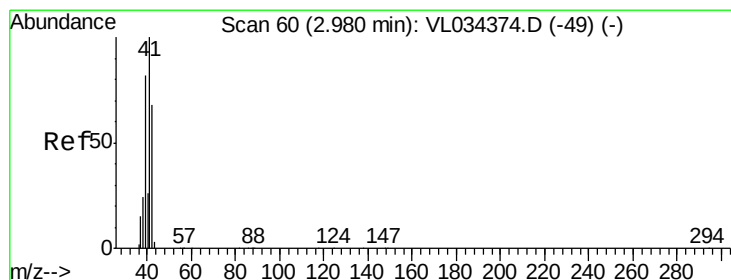
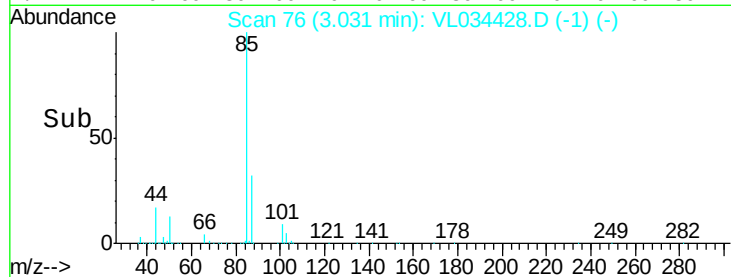
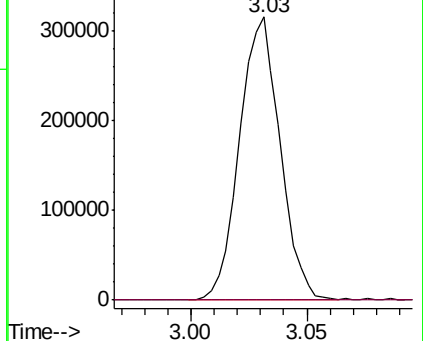
85 100

135 0.1 51.1 76.7#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V



#9

Propene

Concen: 0.230 ppbv

RT: 3.19 min Scan# 124

Delta R.T. 0.21 min

Lab File: VL034428.D

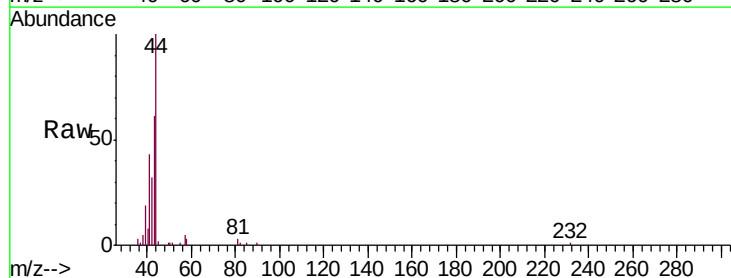
Acq: 2 Dec 2019 16:16

Tgt Ion: 41 Resp: 12030

Ion Ratio Lower Upper

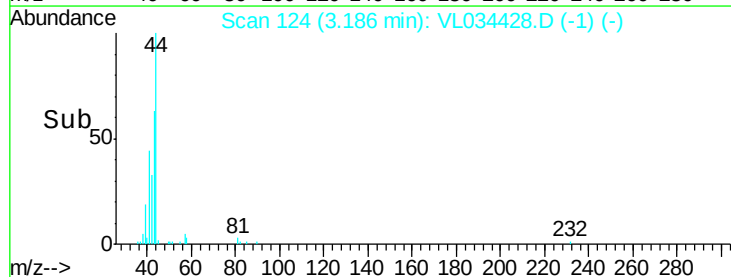
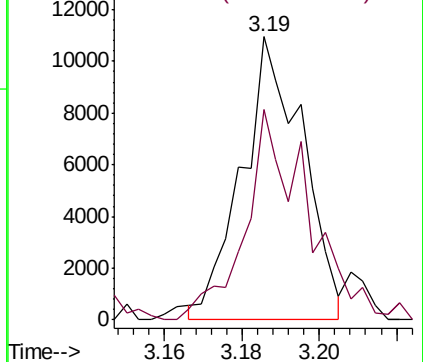
41 100

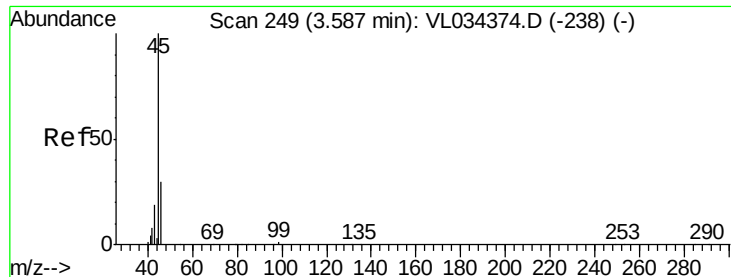
42 76.1 54.6 82.0



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#13

Ethanol

Concen: 1.428 ppbv

RT: 3.61 min Scan# 255

Delta R.T. 0.02 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

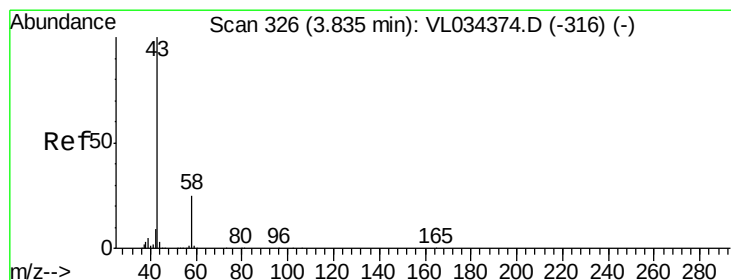
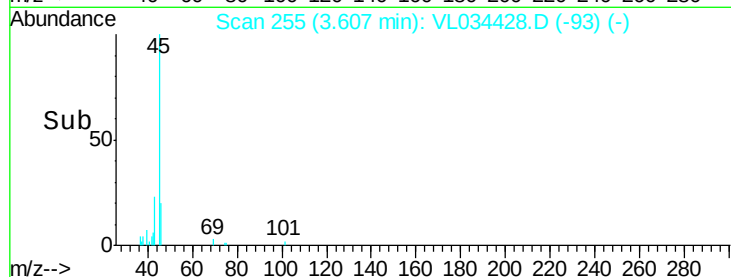
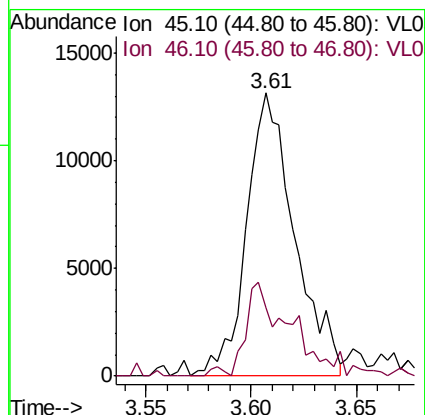
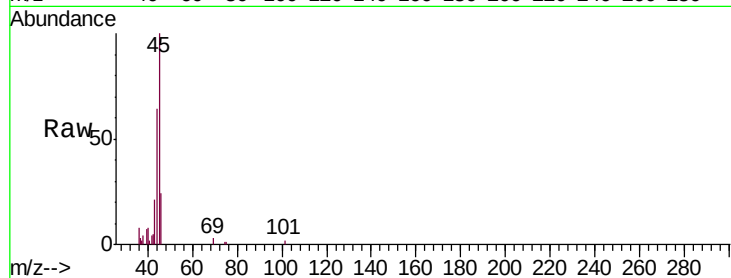
SV-2DL2

Tgt Ion: 45 Resp: 20847

Ion Ratio Lower Upper

45 100

46 32.8 13.8 55.4



#15

Acetone

Concen: 1.077 ppbv

RT: 3.85 min Scan# 332

Delta R.T. 0.02 min

Lab File: VL034428.D

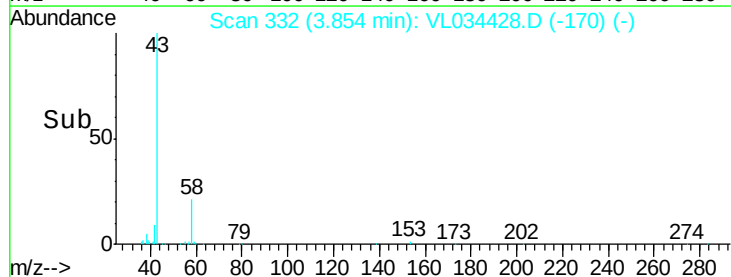
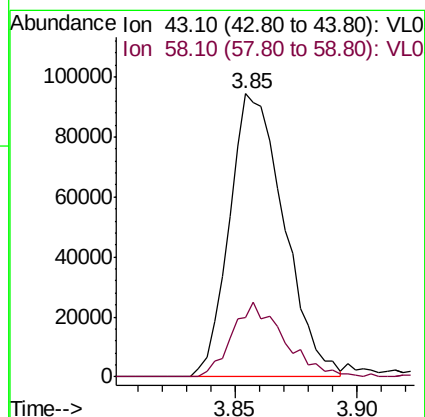
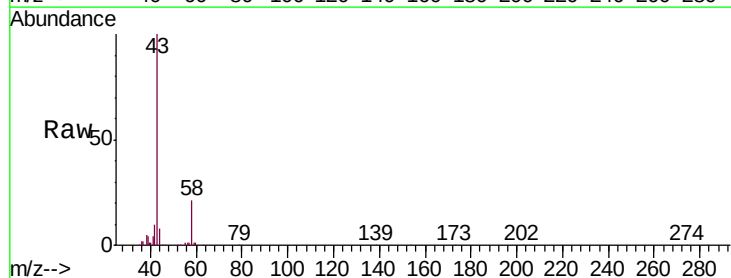
Acq: 2 Dec 2019 16:16

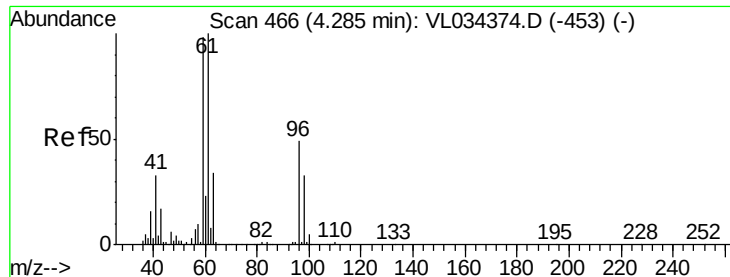
Tgt Ion: 43 Resp: 145925

Ion Ratio Lower Upper

43 100

58 25.7 20.2 30.4



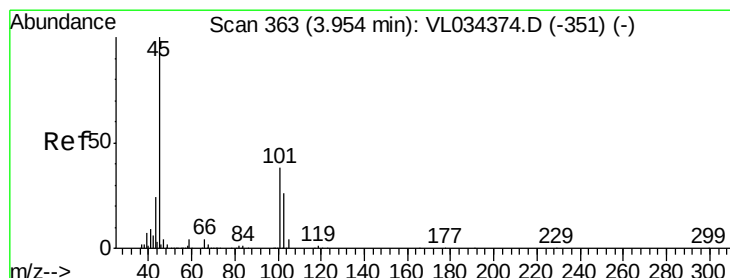
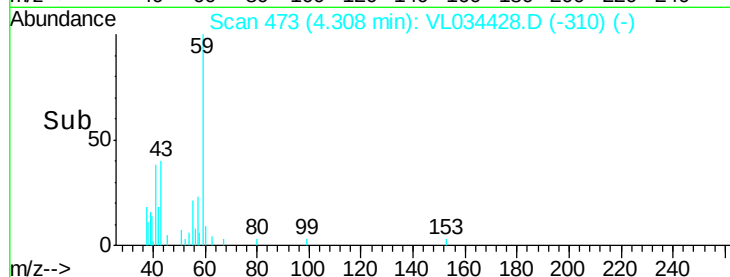
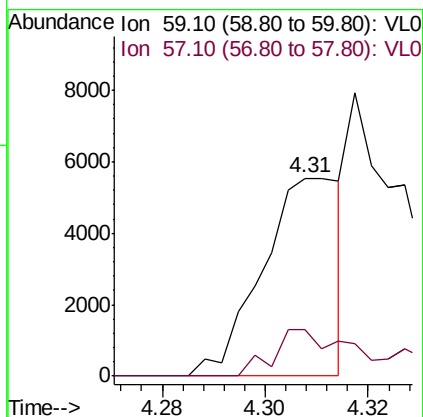
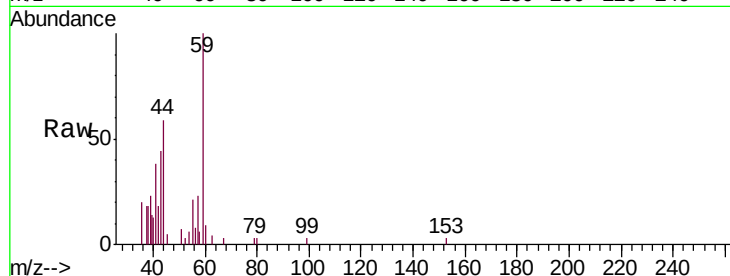


#17

tert-Butyl alcohol
Concen: 0.051 ppbv
RT: 4.31 min Scan# 473
Delta R.T. 0.02 min
Lab File: VL034428.D
Acq: 2 Dec 2019 16:16

Instrument :
MSVOA_L
ClientSampleId :
SV-2DL2

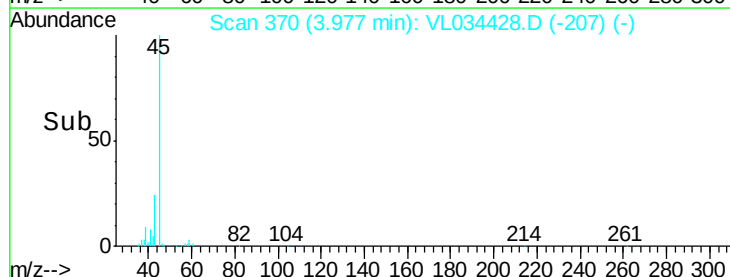
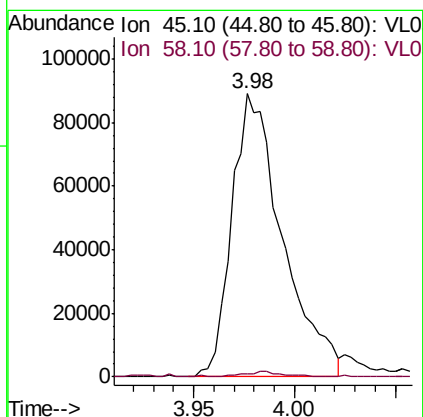
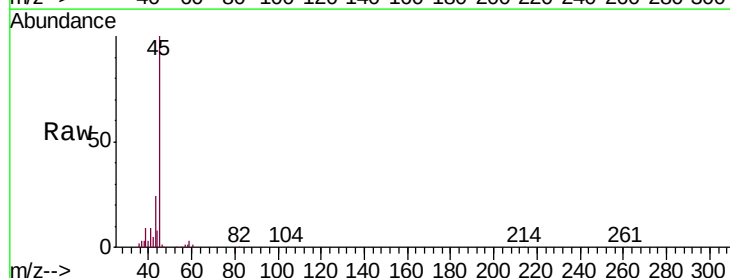
Tgt Ion: 59 Resp: 5862
Ion Ratio Lower Upper
59 100
57 37.8 8.8 13.2#

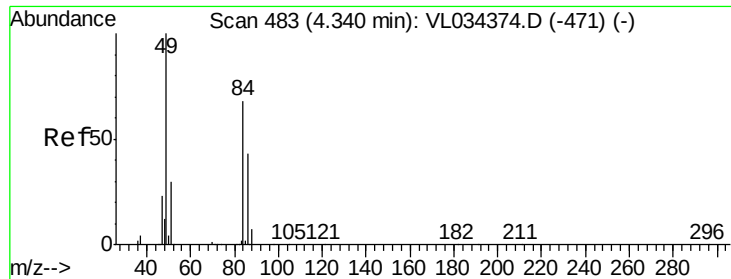


#19

Isopropyl Alcohol
Concen: 1.794 ppbv
RT: 3.98 min Scan# 370
Delta R.T. 0.02 min
Lab File: VL034428.D
Acq: 2 Dec 2019 16:16

Tgt Ion: 45 Resp: 155771
Ion Ratio Lower Upper
45 100
58 1.7 1.3 1.9

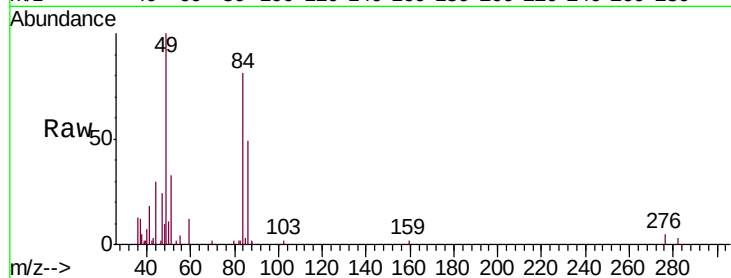




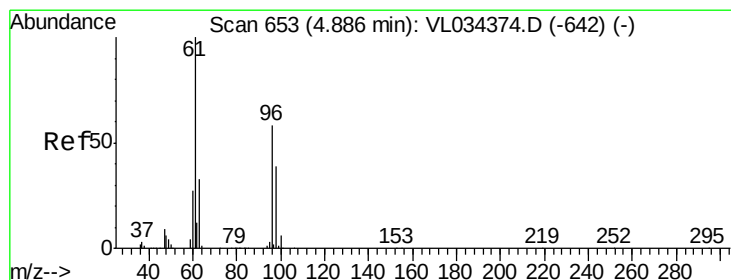
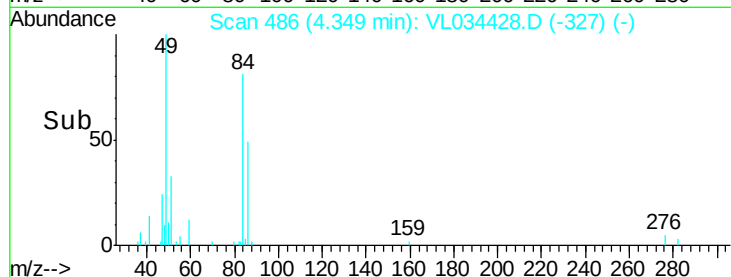
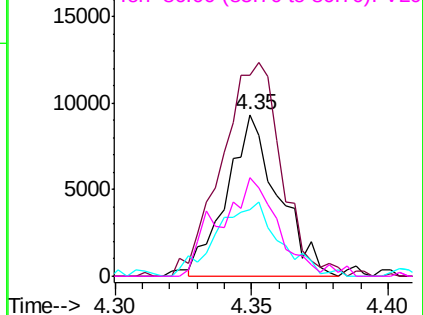
#20
Methylene Chloride
Concen: 0.255 ppbv
RT: 4.35 min Scan# 486
Delta R.T. 0.01 min
Lab File: VL034428.D
Acq: 2 Dec 2019 16:16

Instrument :
MSVOA_L
ClientSampleId :
SV-2DL2

Tgt Ion:	84	Resp:	12260
Ion	Ratio	Lower	Upper
84	100		
49	135.6	116.8	175.2
51	38.2	35.6	53.4
86	59.9	50.7	76.1

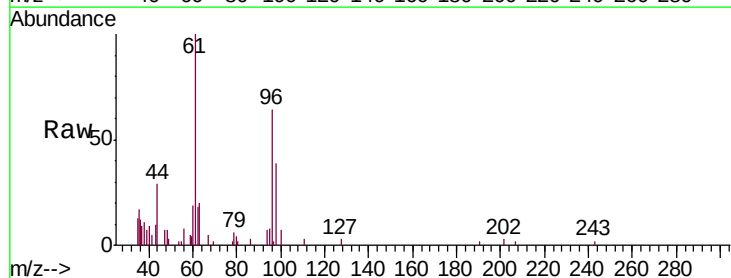


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

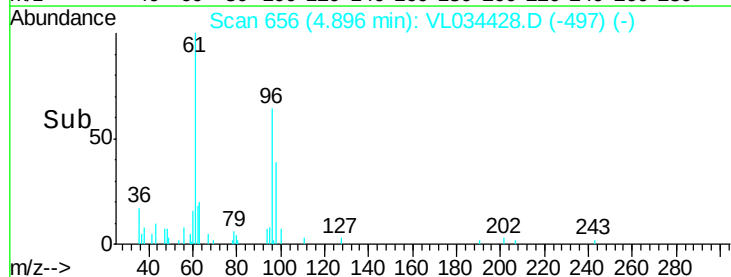
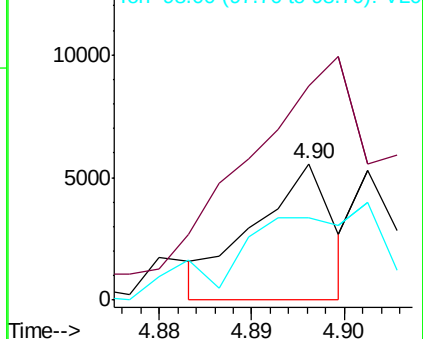


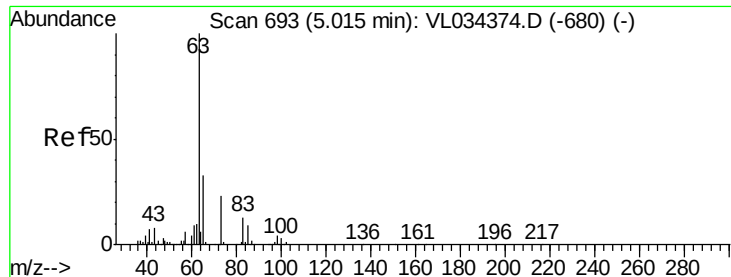
#22
trans-1,2-Dichloroethene
Concen: 0.065 ppbv
RT: 4.90 min Scan# 656
Delta R.T. 0.01 min
Lab File: VL034428.D
Acq: 2 Dec 2019 16:16

Tgt Ion:	96	Resp:	3224
Ion	Ratio	Lower	Upper
96	100		
61	151.6	137.9	206.9
98	43.2	53.5	80.3#



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0





#24

1,1-Dichloroethane

Concen: 0.146 ppbv

RT: 5.02 min Scan# 696

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

SV-2DL2

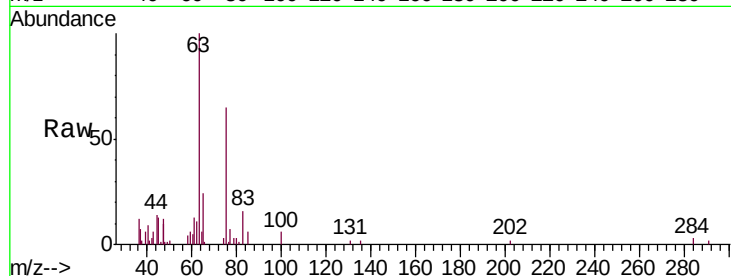
Tgt Ion: 63 Resp: 19908

Ion Ratio Lower Upper

63 100

98 0.0 1.9 5.7#

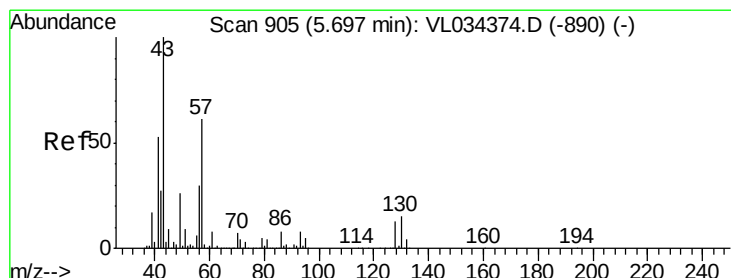
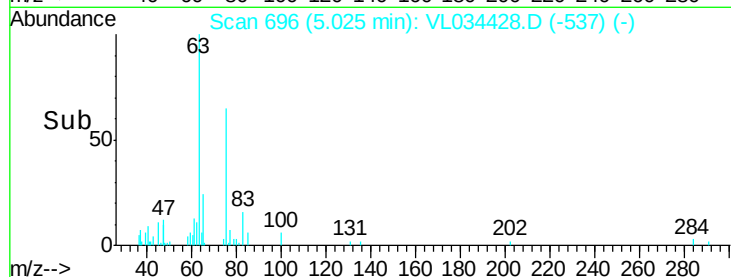
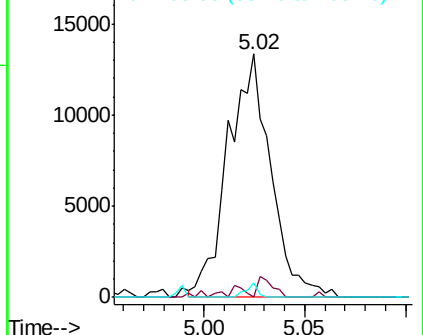
100 5.9 1.4 4.0#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0



#26

Hexane

Concen: 0.058 ppbv

RT: 5.70 min Scan# 907

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Tgt Ion: 57 Resp: 5980

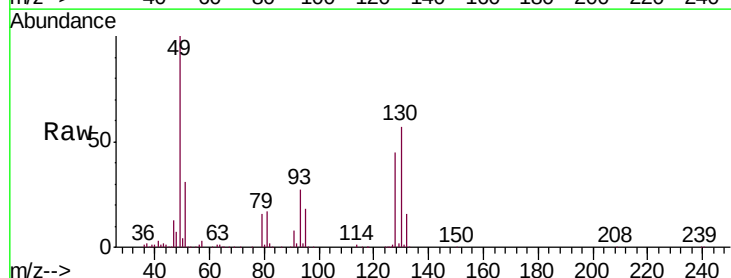
Ion Ratio Lower Upper

57 100

41 0.0 75.0 112.4#

43 189.1 186.6 279.8

56 0.0 41.5 62.3#

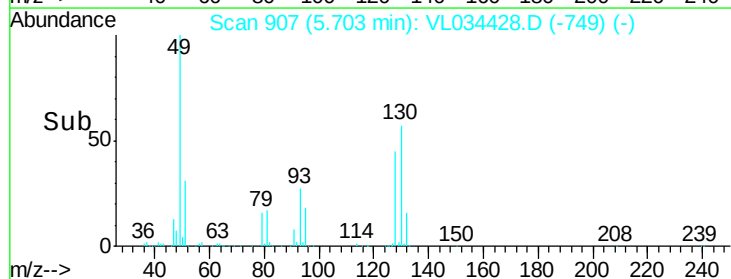
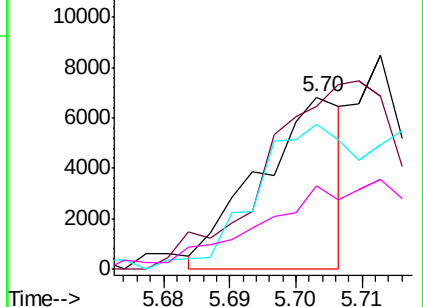


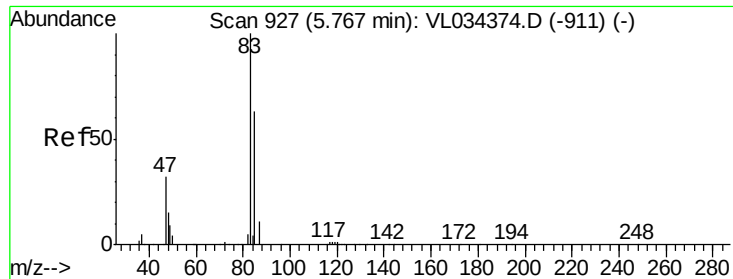
Abundance Ion 57.10 (56.80 to 57.80): VL0

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





#29

Chloroform

Concen: 0.454 ppbv

RT: 5.77 min Scan# 929

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

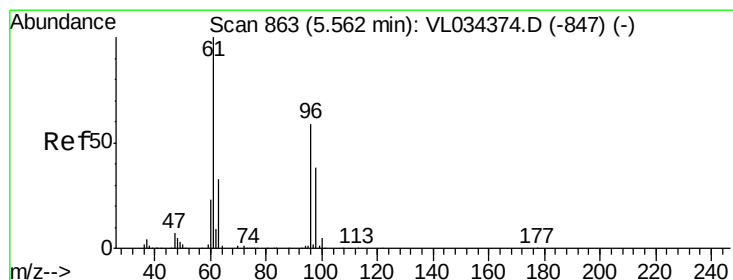
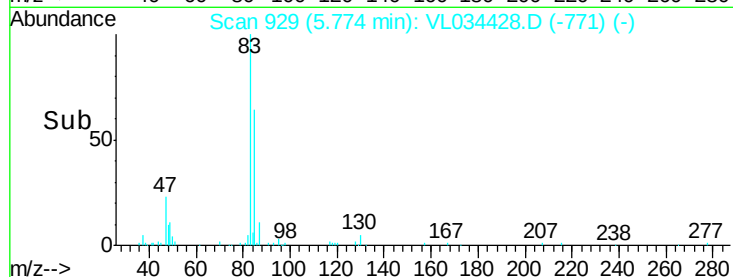
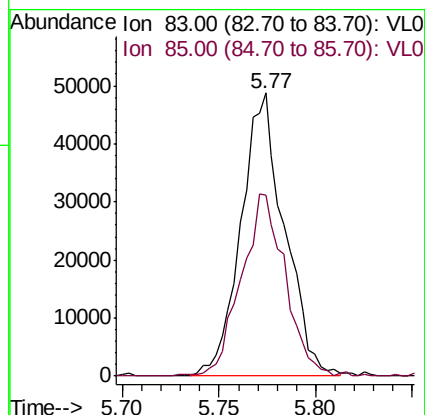
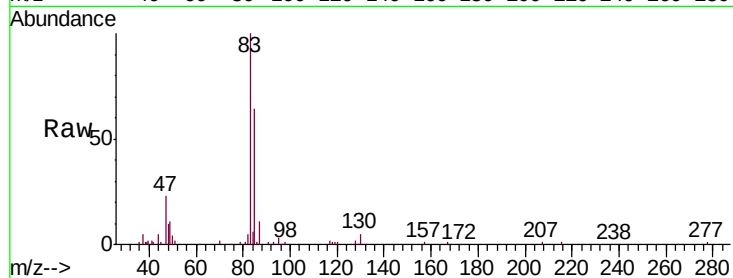
SV-2DL2

Tgt Ion: 83 Resp: 76338

Ion Ratio Lower Upper

83 100

85 63.3 50.4 75.6



#31

cis-1,2-Dichloroethene

Concen: 4.141 ppbv

RT: 5.57 min Scan# 865

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

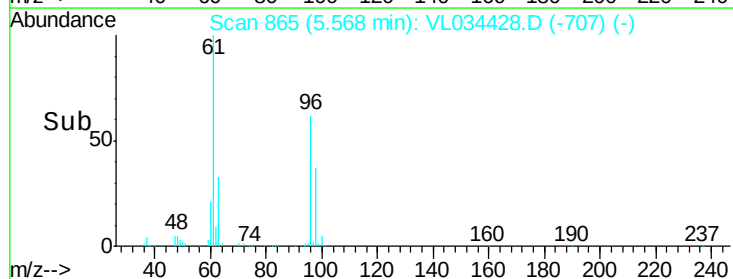
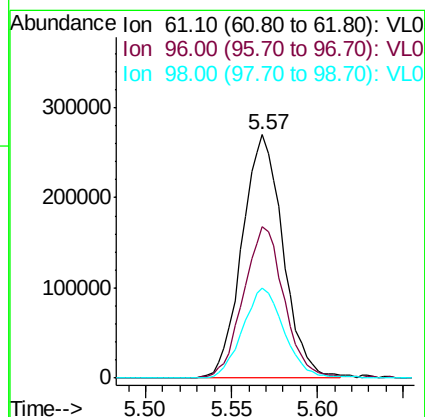
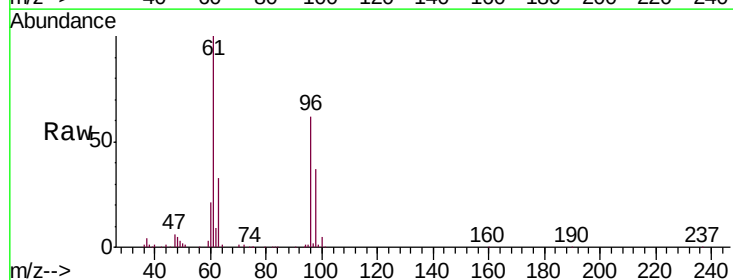
Tgt Ion: 61 Resp: 444557

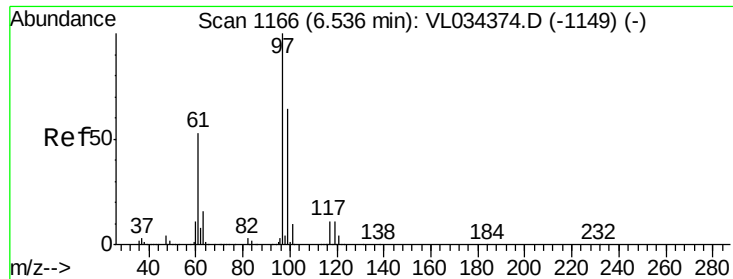
Ion Ratio Lower Upper

61 100

96 62.4 47.4 71.2

98 37.0 30.6 45.8





#32

1,1,1-Trichloroethane

Concen: 2.059 ppbv

RT: 6.54 min Scan# 1168

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

SV-2DL2

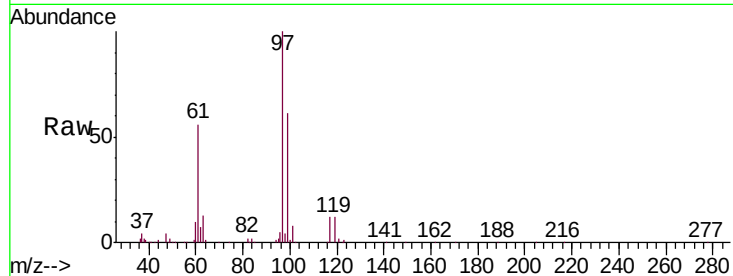
Tgt Ion: 97 Resp: 324801

Ion Ratio Lower Upper

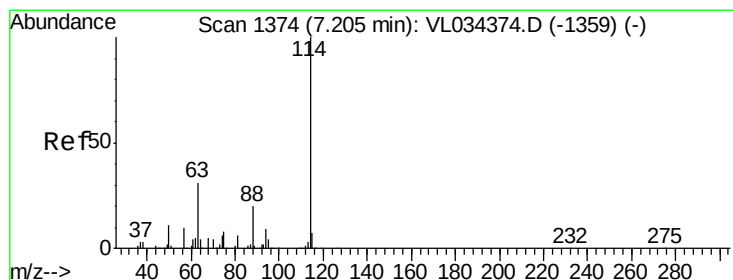
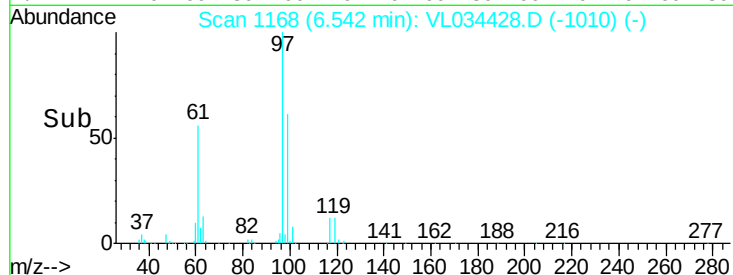
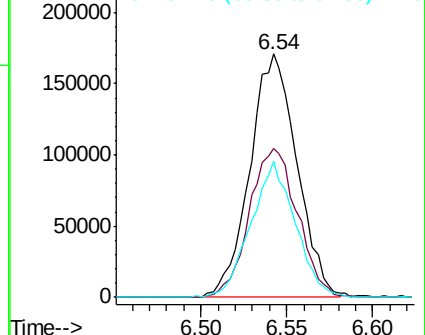
97 100

99 62.6 52.3 78.5

61 52.6 43.7 65.5



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 99.00 (98.70 to 99.70): VL0
Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.21 min Scan# 1377

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

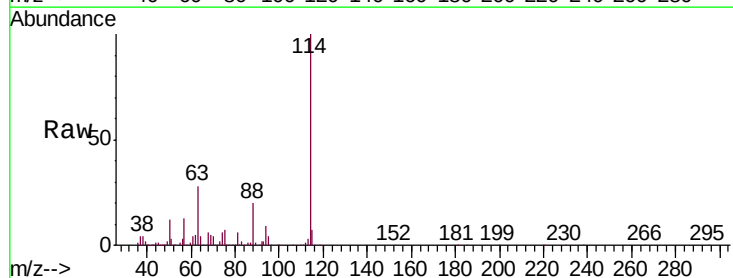
Tgt Ion: 114 Resp: 1934944

Ion Ratio Lower Upper

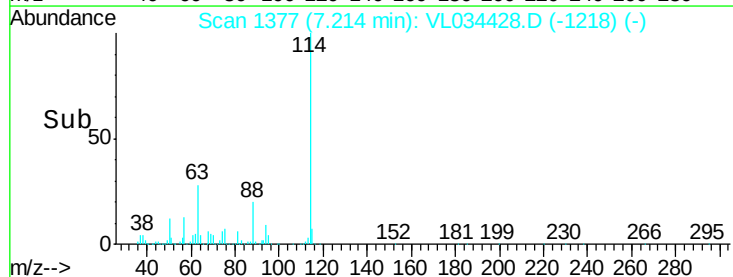
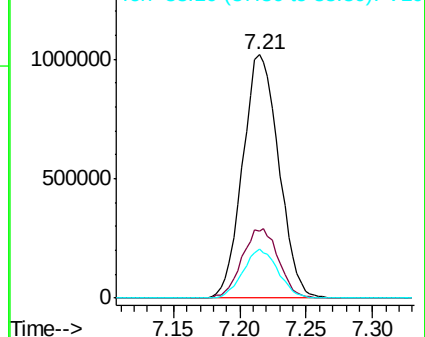
114 100

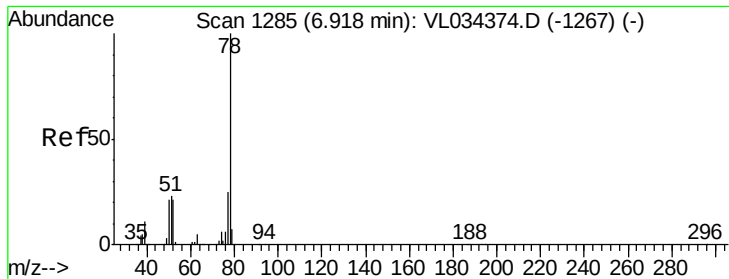
63 28.7 24.2 36.4

88 19.5 15.9 23.9



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





#36

Benzene

Concen: 0.045 ppbv

RT: 6.92 min Scan# 1287

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

SV-2DL2

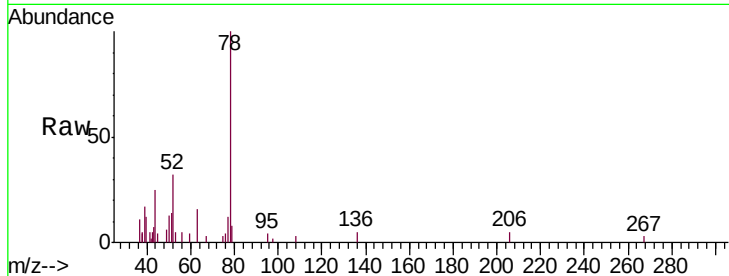
Tgt Ion: 78 Resp: 8623

Ion Ratio Lower Upper

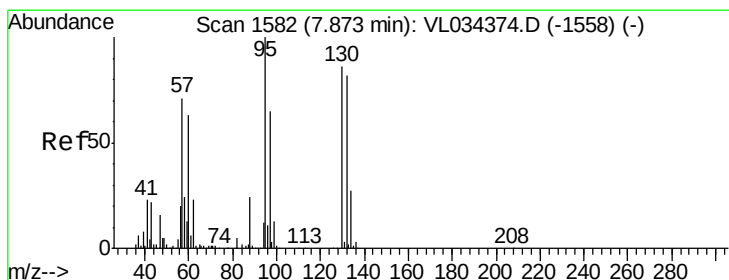
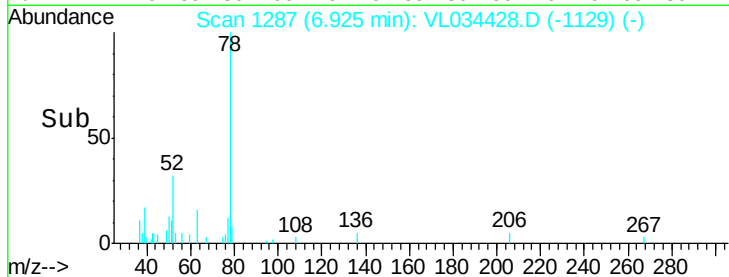
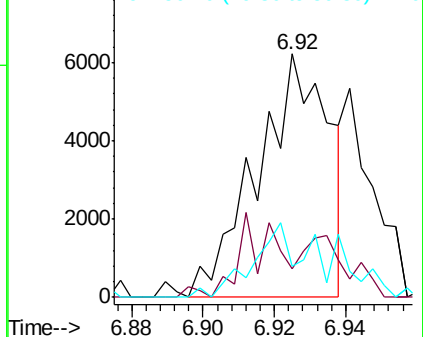
78 100

77 7.3 20.2 30.4#

50 12.8 17.1 25.7#



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



#38

Trichloroethene

Concen: 83.648 ppbv

RT: 7.88 min Scan# 1585

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Tgt Ion: 130 Resp: 6639680

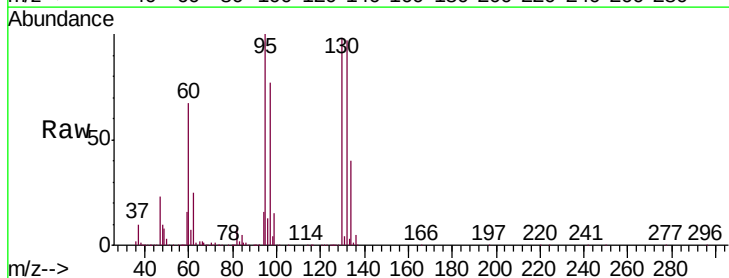
Ion Ratio Lower Upper

130 100

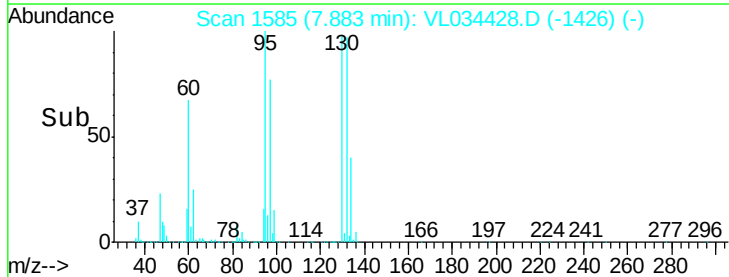
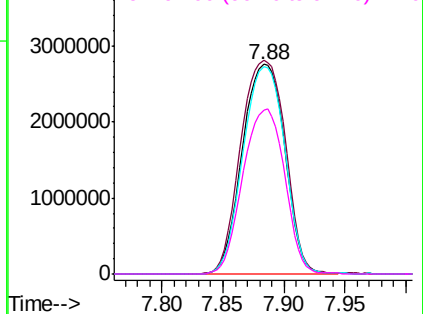
95 102.0 93.4 140.0

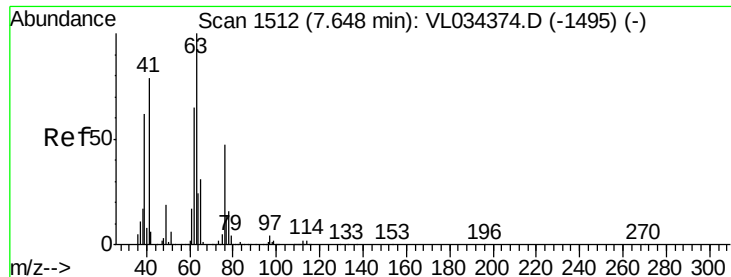
132 98.9 76.4 114.6

97 78.4 61.1 91.7



Abundance Ion 130.00 (129.70 to 130.70): V
Ion 95.00 (94.70 to 95.70): VL0
Ion 132.00 (131.70 to 132.70): V
Ion 97.00 (96.70 to 97.70): VL0





#39

1,2-Dichloropropane

Concen: 0.133 ppbv

RT: 7.87 min Scan# 1580

Delta R.T. 0.22 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

SV-2DL2

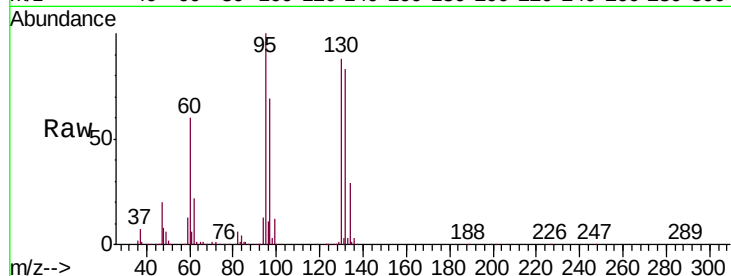
Tgt Ion: 63 Resp: 9926

Ion Ratio Lower Upper

63 100

41 6.9 63.1 94.7#

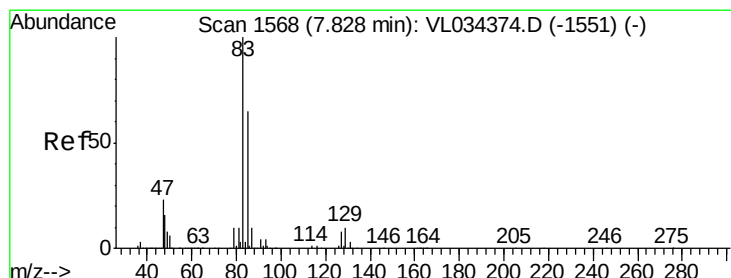
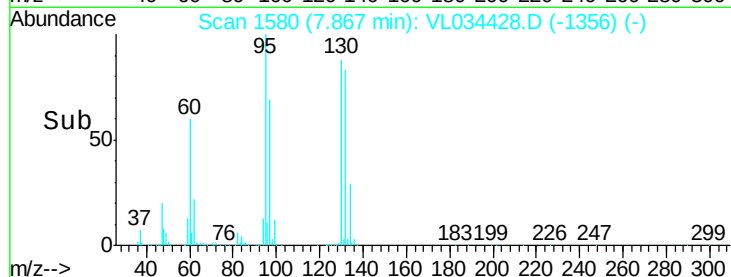
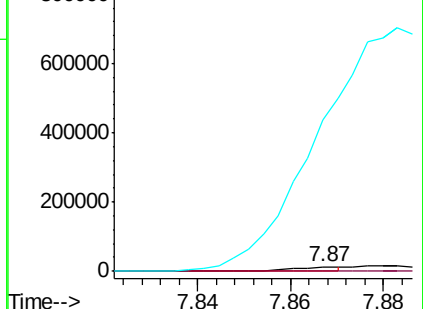
62 3260.5 52.3 78.5#



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



#42

Bromodichloromethane

Concen: 0.622 ppbv

RT: 7.89 min Scan# 1586

Delta R.T. 0.06 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

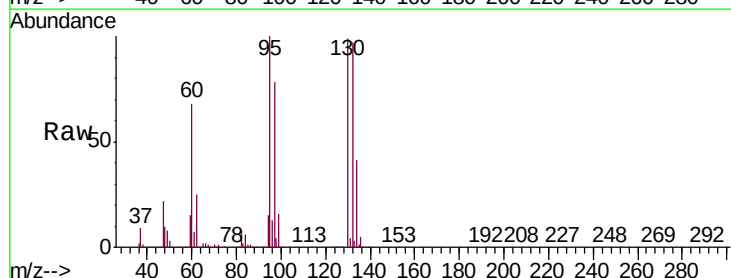
Tgt Ion: 83 Resp: 111749

Ion Ratio Lower Upper

83 100

85 58.6 52.3 78.5

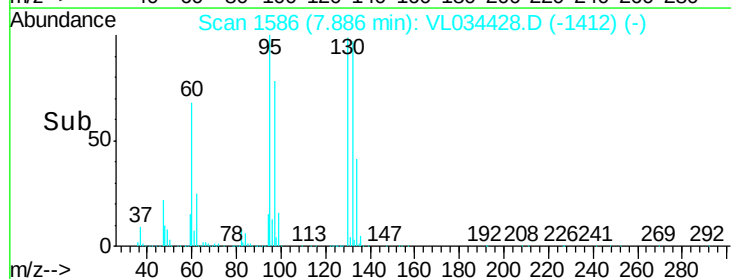
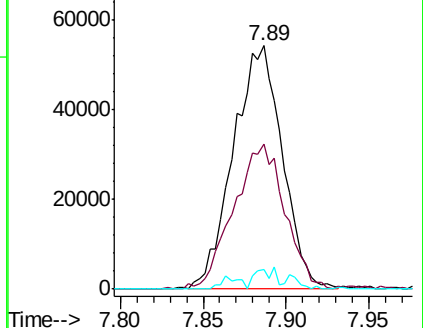
127 7.9 6.1 9.1

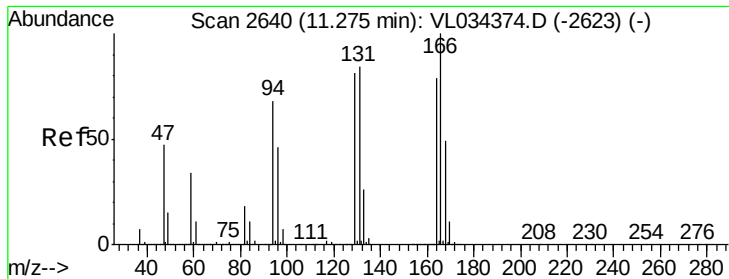


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V





#52

Tetrachloroethene

Concen: 6.105 ppbv

RT: 11.28 min Scan# 2643

Delta R.T. 0.01 min

Lab File: VL034428.D

Acq: 2 Dec 2019 16:16

Instrument :

MSVOA_L

ClientSampleId :

SV-2DL2

Tgt Ion:164 Resp: 510929

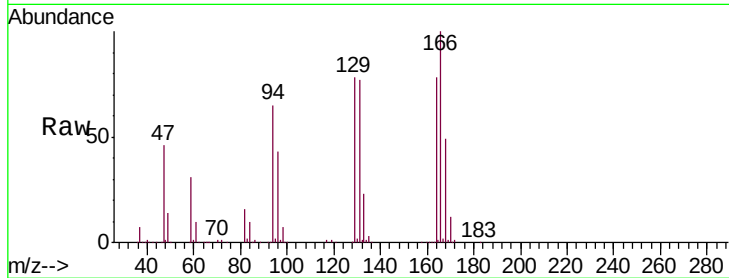
Ion Ratio Lower Upper

164 100

166 128.0 101.7 152.5

129 99.1 82.6 123.8

131 98.9 85.2 127.8

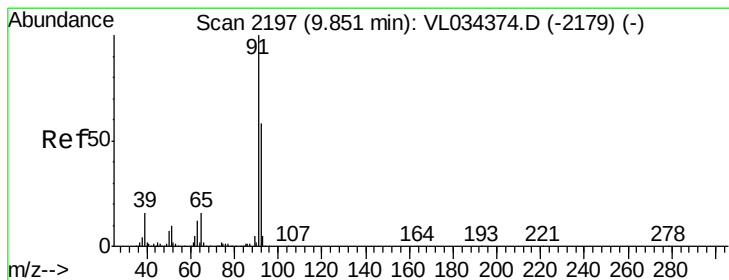
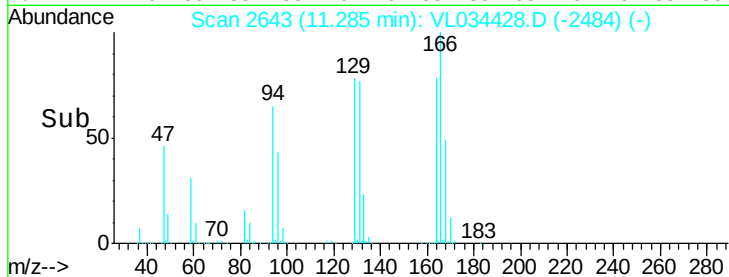
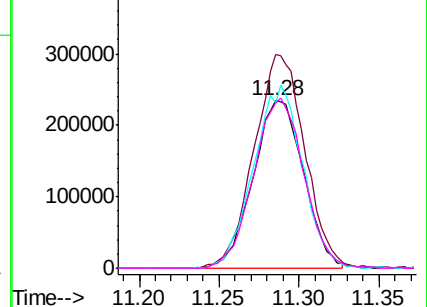


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.094 ppbv

RT: 9.87 min Scan# 2202

Delta R.T. 0.02 min

Lab File: VL034428.D

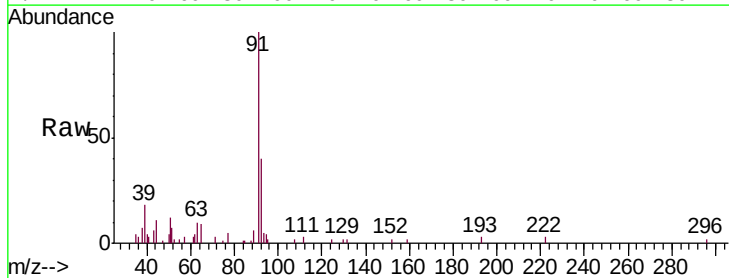
Acq: 2 Dec 2019 16:16

Tgt Ion: 91 Resp: 20732

Ion Ratio Lower Upper

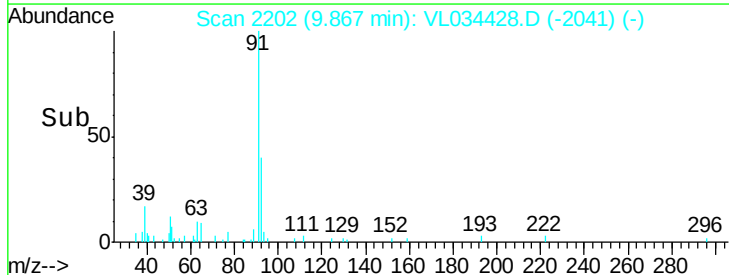
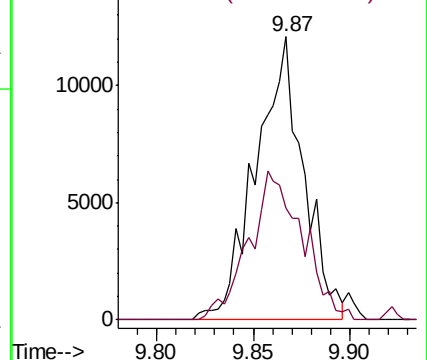
91 100

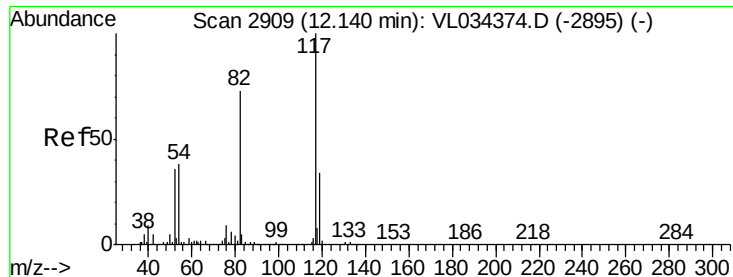
92 59.1 47.9 71.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

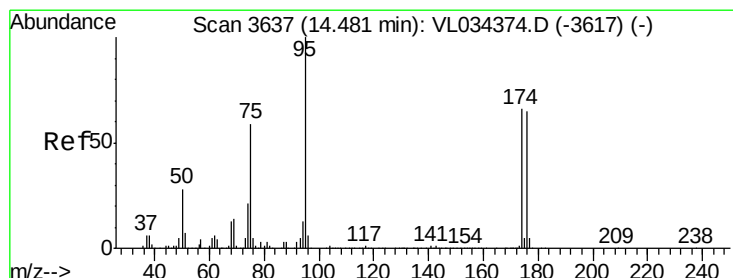
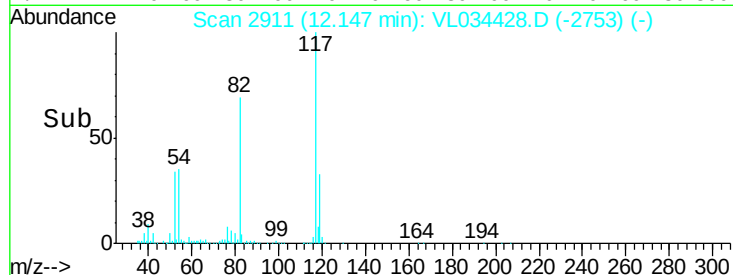
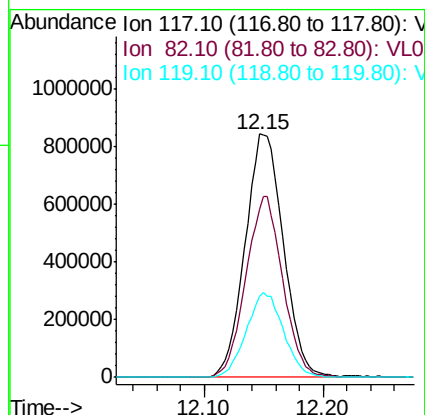
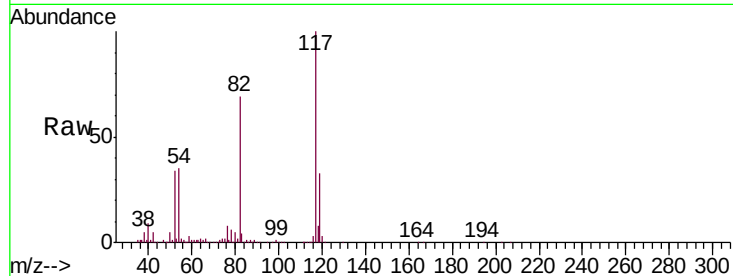




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2911
Delta R.T. 0.01 min
Lab File: VL034428.D
Acq: 2 Dec 2019 16:16

Instrument :
MSVOA_L
ClientSampleId :
SV-2DL2

Tgt Ion:117 Resp: 1881431
Ion Ratio Lower Upper
117 100
82 71.5 57.5 86.3
119 34.0 25.4 38.2



#68
1-Bromo-4-Fluorobenzene
Concen: 9.868 ppbv
RT: 14.49 min Scan# 3639
Delta R.T. 0.01 min
Lab File: VL034428.D
Acq: 2 Dec 2019 16:16

Tgt Ion: 95 Resp: 1561882
Ion Ratio Lower Upper
95 100
174 67.7 52.2 78.2
175 4.9 3.8 5.8

