

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL101719\
 Data File : VL034336.D
 Acq On : 18 Oct 2019 9:19
 Operator : SY/AP
 Sample : VIBLK
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VIBLK

Quant Time: Oct 19 00:19:50 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL101619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 17 05:12:37 2019
 QLast Update : Thu Oct 17 05:12:37 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	803053	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.20	114	1690689	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.14	117	1726532	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.48	95	1408232	9.63	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.30%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.02	85	4538	0.033	ppbv	95
3) Chlorodifluoromethane	2.96	51	9373	0.100	ppbv	98
4) Chloromethane	3.12	50	6001	0.108	ppbv	91
5) Vinyl Chloride	3.24	62	1721	0.032	ppbv #	75
6) Bromomethane	3.46	94	2375	0.091	ppbv	85
7) Chloroethane	3.54	64	937	0.050	ppbv #	58
8) Dichlorotetrafluoroethane	3.17	85	9723	0.081	ppbv #	84
10) Heptane	8.16	43	8212	0.077	ppbv #	82
11) Trichlorofluoromethane	3.94	101	8833	0.067	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.48	101	7073	0.082	ppbv #	67
13) Ethanol	3.60	45	1553	0.166	ppbv #	36
15) Acetone	3.85	43	58976	0.513	ppbv	92
16) 1,3-Butadiene	3.31	39	6037	0.129	ppbv #	77
17) tert-Butyl alcohol	4.32	59	4590	0.063	ppbv #	47
18) 1,1-Dichloroethene	4.28	96	3638	0.096	ppbv #	68
20) Methylene Chloride	4.34	84	10471	0.252	ppbv #	92
21) Allyl Chloride	4.41	41	4809	0.076	ppbv #	68
22) trans-1,2-Dichloroethene	4.89	96	3177	0.084	ppbv #	79
23) Vinyl Acetate	5.08	43	15924	0.111	ppbv #	85
24) 1,1-Dichloroethane	5.01	63	5661	0.053	ppbv #	90
25) Ethyl Acetate	5.70	43	14537	0.075	ppbv #	92
26) Hexane	5.70	57	10304	0.125	ppbv	91
29) Chloroform	5.76	83	5077	0.039	ppbv #	32
31) cis-1,2-Dichloroethene	5.56	61	4014	0.048	ppbv #	62
32) 1,1,1-Trichloroethane	6.53	97	10144	0.080	ppbv #	87
34) 2-Butanone	5.27	43	14332	0.104	ppbv #	88
35) Carbon Tetrachloride	7.05	117	9590	0.065	ppbv #	75
36) Benzene	6.92	78	15452	0.095	ppbv #	78
37) 1,2-Dichloroethane	6.33	62	8858	0.073	ppbv #	97
38) Trichloroethene	7.86	130	1983	0.030	ppbv #	59
39) 1,2-Dichloropropane	7.20	63	464346	6.648	ppbv #	21
42) Bromodichloromethane	7.83	83	10944	0.074	ppbv	98
44) 2,2,4-Trimethylpentane	7.90	57	12748	0.042	ppbv #	36
47) 1,1,2-Trichloroethane	9.52	97	3949	0.056	ppbv #	90
52) Tetrachloroethene	11.27	164	10934	0.172	ppbv #	67
53) Toluene	9.85	91	11607	0.065	ppbv #	68
56) 1,1,1,2-Tetrachloroethane	12.19	131	2481	0.031	ppbv #	1
60) o-Xylene	13.75	91	11468	0.055	ppbv #	33
61) Styrene	13.59	104	4738	0.032	ppbv #	29
63) 1,1,2,2-Tetrachloroethane	13.74	83	6794	0.041	ppbv #	33
64) n-propylbenzene	15.62	120	2682	0.038	ppbv #	1

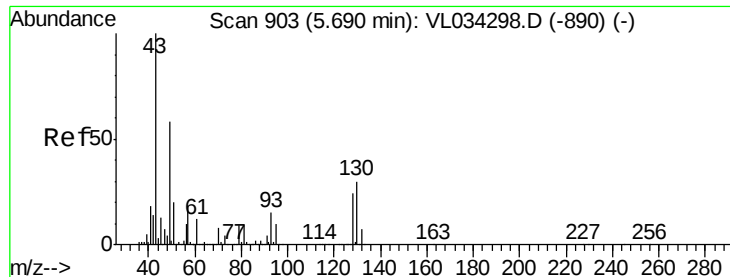
Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL101719\
Data File : VL034336.D
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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL101619AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 17 05:12:37 2019
QLast Update : Thu Oct 17 05:12:37 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
65) tert-Butylbenzene	16.82	119	9486	0.039	ppbv #	2
70) n-Butylbenzene	18.63	91	23216	0.076	ppbv	93
71) 2-Chlorotoluene	15.52	91	9025	0.042	ppbv #	37
72) 4-Ethyltoluene	15.91	105	10031	0.043	ppbv #	65
73) 1,3,5-Trimethylbenzene	16.06	105	7264	0.031	ppbv	87
74) 1,2,4-Trimethylbenzene	16.83	105	10538	0.044	ppbv #	81
75) 1,3-Dichlorobenzene	17.07	146	6302	0.043	ppbv #	18
77) 1,2-Dichlorobenzene	17.89	146	4554	0.032	ppbv #	1
78) Hexachloro-1,3-Butadiene	23.45	225	7405	0.063	ppbv #	56
80) Naphthalene,2-methyl-	25.05	142	5892	0.115	ppbv	98

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

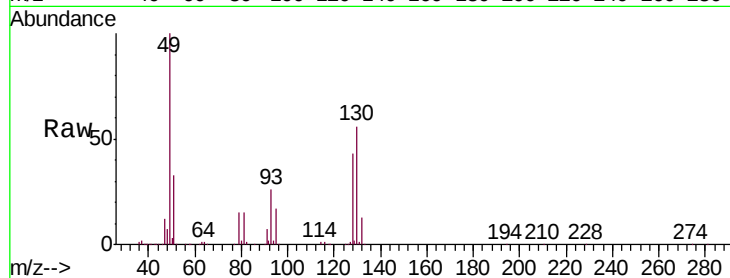
Tgt Ion: 49 Resp: 803053

Ion Ratio Lower Upper

49 100

128 44.5 20.6 61.8

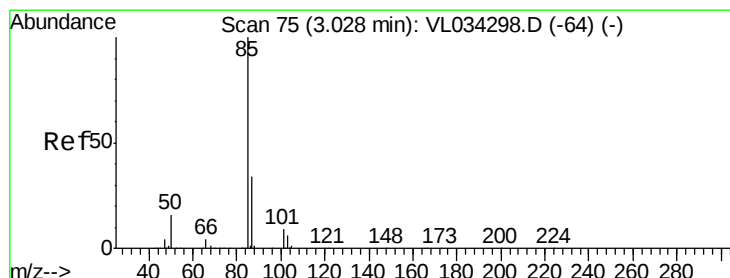
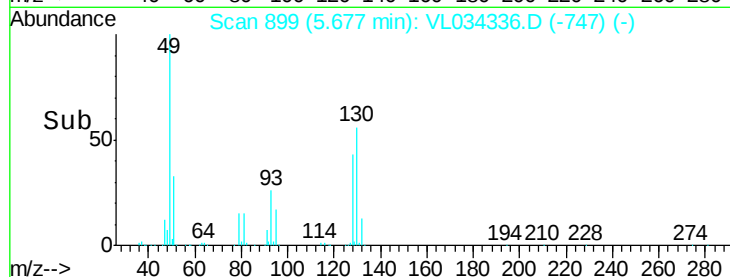
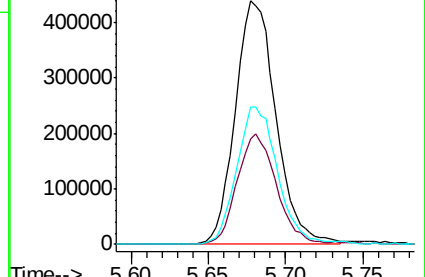
130 57.0 26.2 78.5



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: 0.033 ppbv

RT: 3.02 min Scan# 72

Delta R.T. -0.01 min

Lab File: VL034336.D

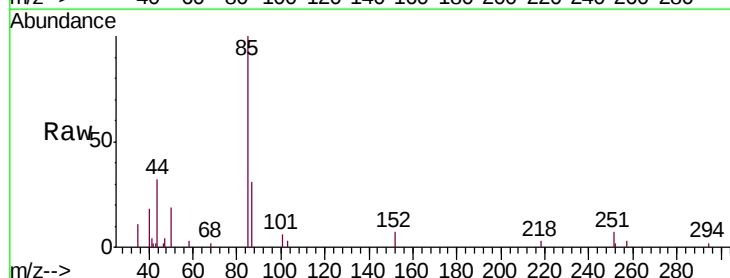
Acq: 18 Oct 2019 9:19

Tgt Ion: 85 Resp: 4538

Ion Ratio Lower Upper

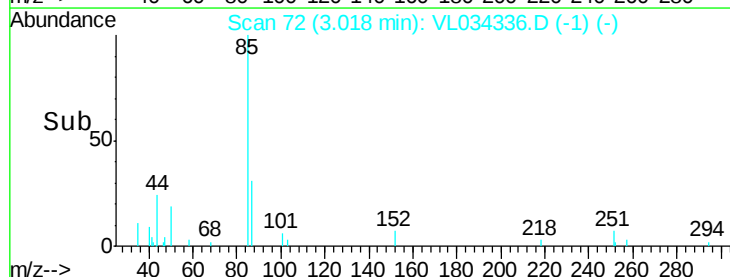
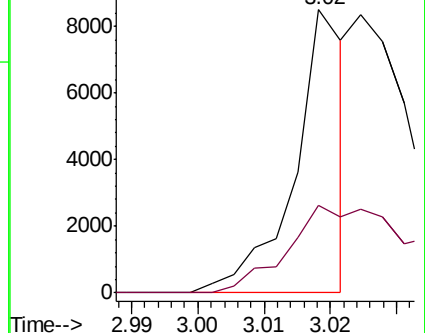
85 100

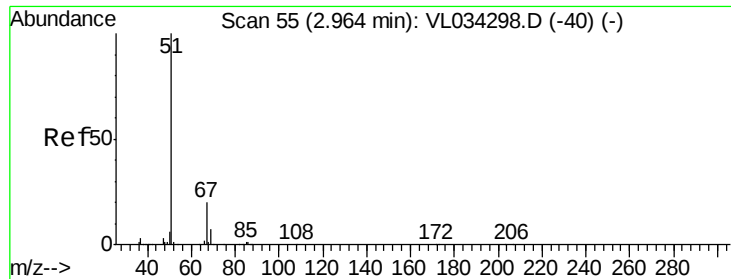
87 30.8 27.0 40.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.100 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

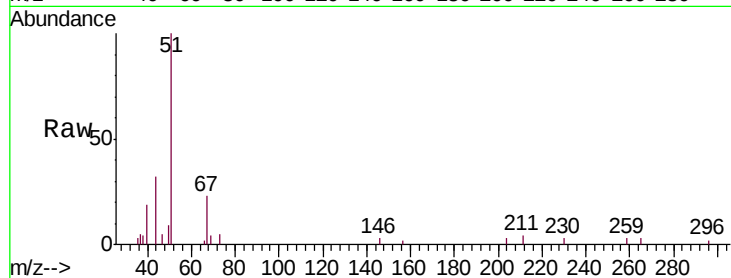
VIBLK

Tgt Ion: 51 Resp: 9373

Ion Ratio Lower Upper

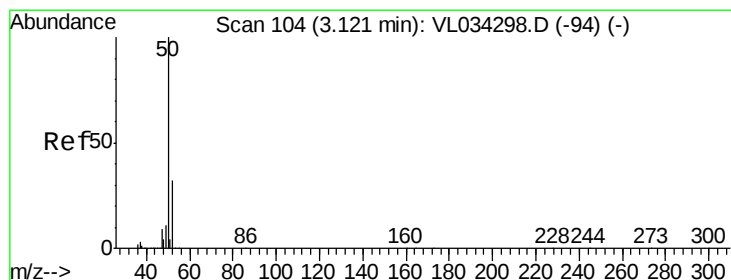
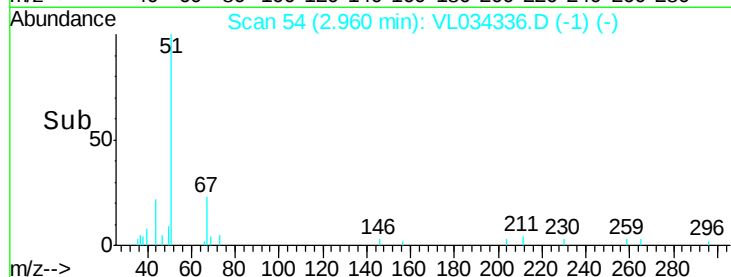
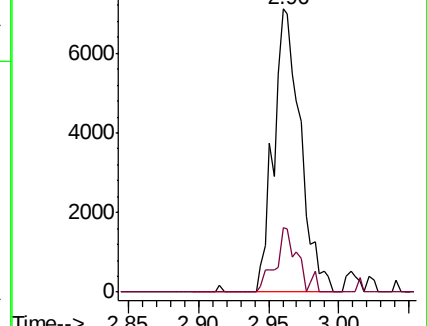
51 100

67 18.9 15.8 23.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.108 ppbv

RT: 3.12 min Scan# 103

Delta R.T. -0.00 min

Lab File: VL034336.D

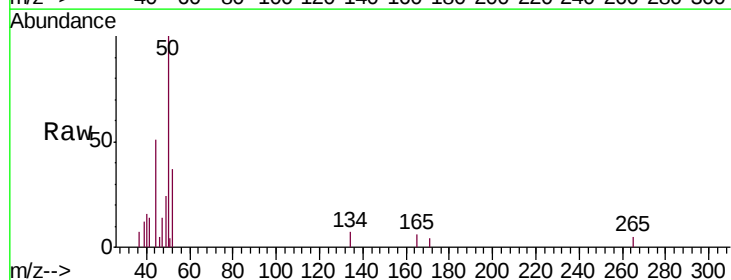
Acq: 18 Oct 2019 9:19

Tgt Ion: 50 Resp: 6001

Ion Ratio Lower Upper

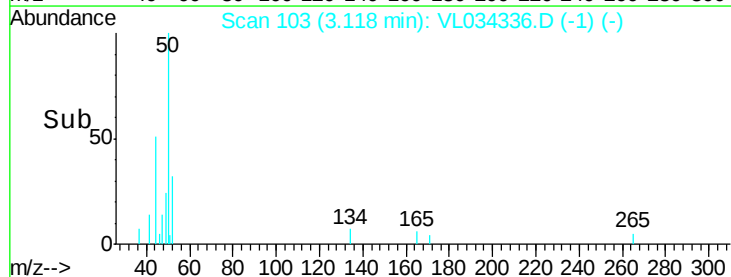
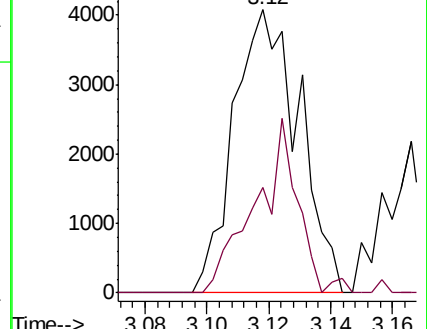
50 100

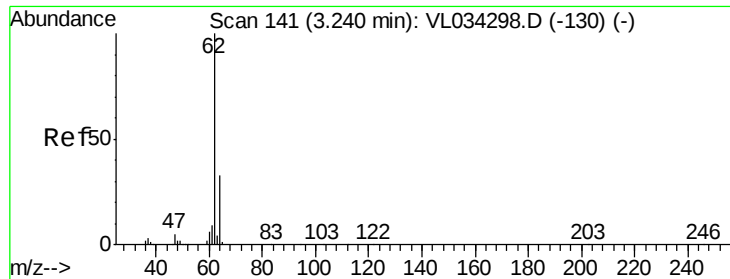
52 37.0 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.032 ppbv

RT: 3.24 min Scan# 141

Delta R.T. 0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

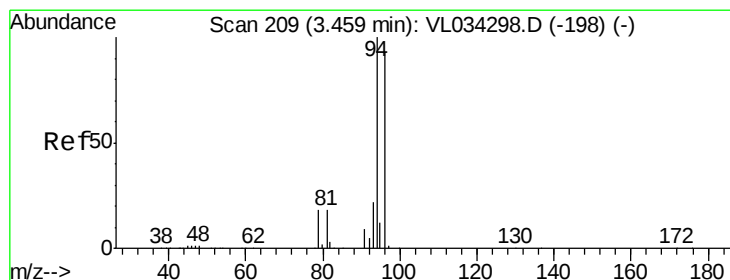
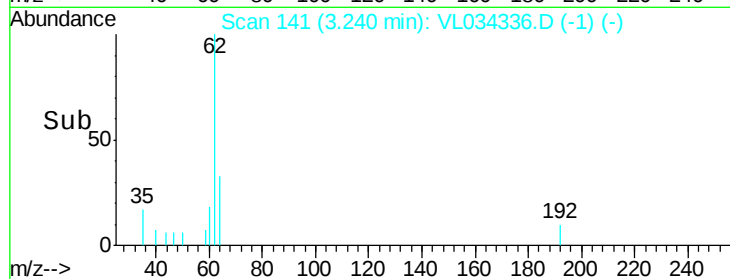
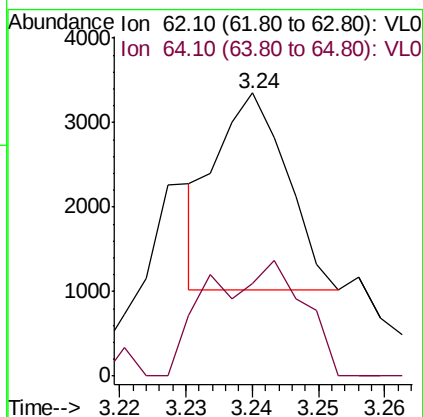
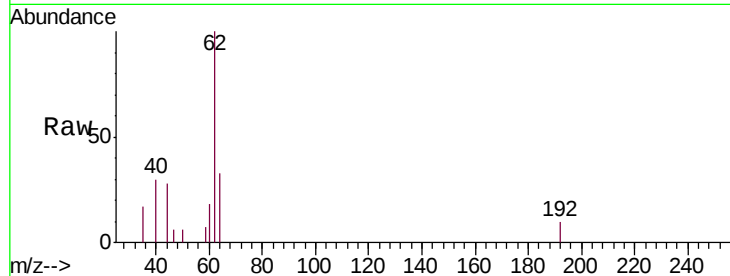
VIBLK

Tgt Ion: 62 Resp: 1721

Ion Ratio Lower Upper

62 100

64 46.8 26.0 39.0#



#6

Bromomethane

Concen: 0.091 ppbv

RT: 3.46 min Scan# 208

Delta R.T. -0.00 min

Lab File: VL034336.D

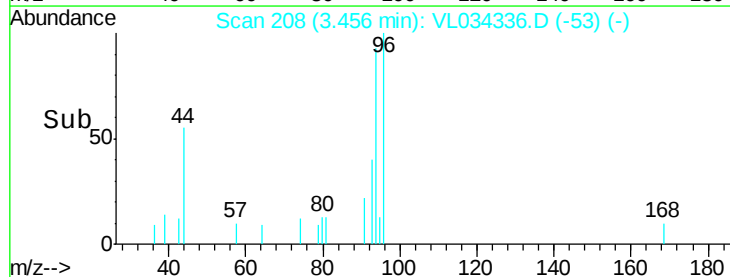
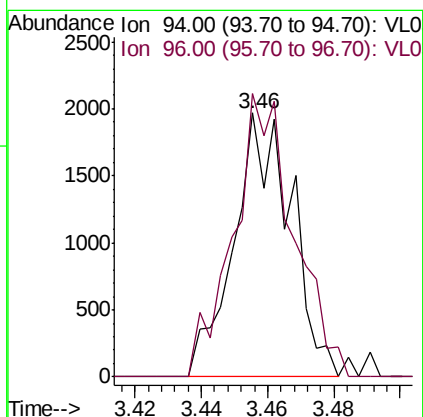
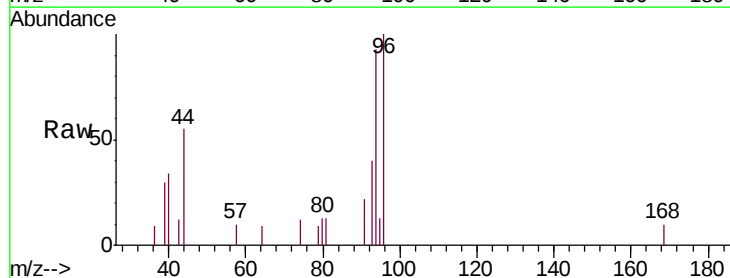
Acq: 18 Oct 2019 9:19

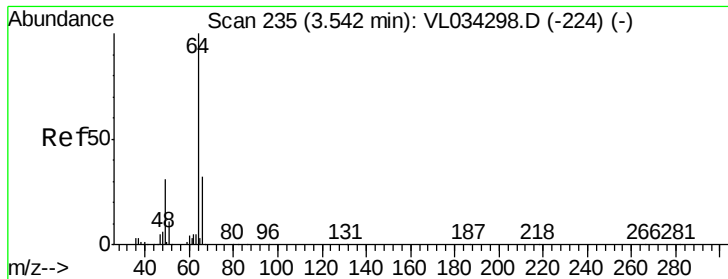
Tgt Ion: 94 Resp: 2375

Ion Ratio Lower Upper

94 100

96 107.4 74.6 112.0





#7

Chloroethane

Concen: 0.050 ppbv

RT: 3.54 min Scan# 234

Delta R.T. -0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

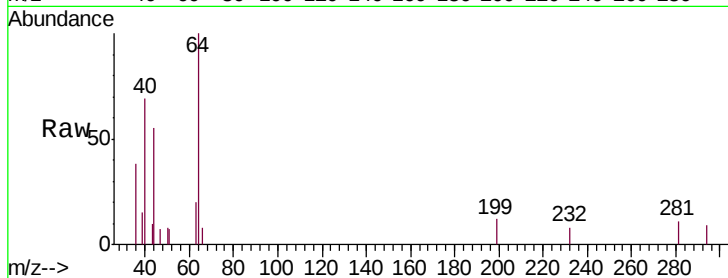
VIBLK

Tgt Ion: 64 Resp: 937

Ion Ratio Lower Upper

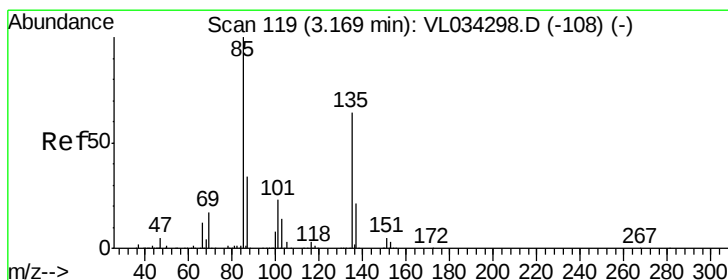
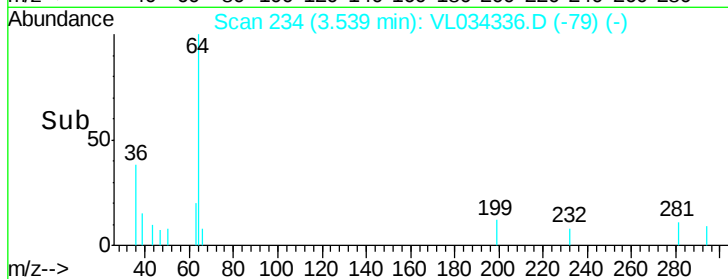
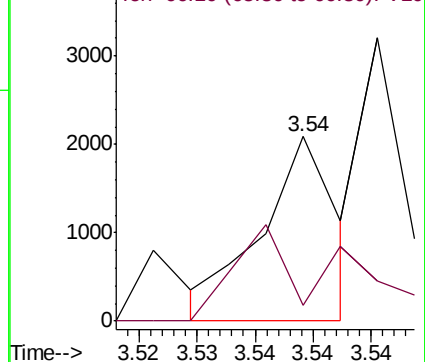
64 100

66 8.3 25.4 38.0#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.081 ppbv

RT: 3.17 min Scan# 118

Delta R.T. -0.00 min

Lab File: VL034336.D

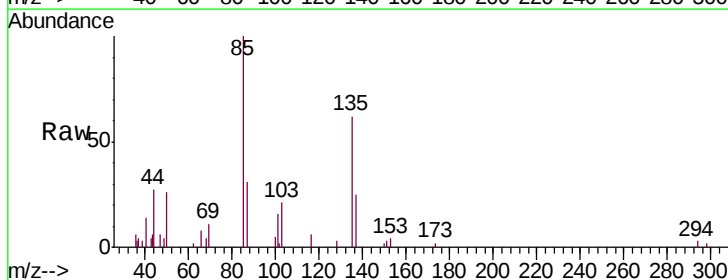
Acq: 18 Oct 2019 9:19

Tgt Ion: 85 Resp: 9723

Ion Ratio Lower Upper

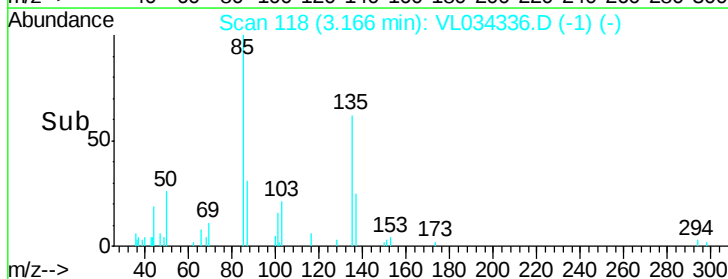
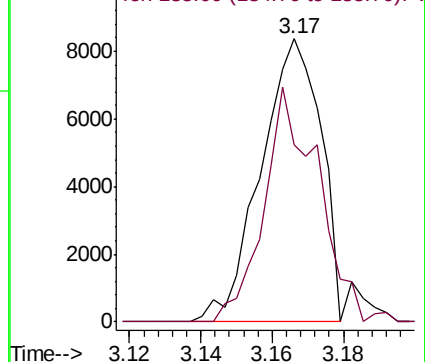
85 100

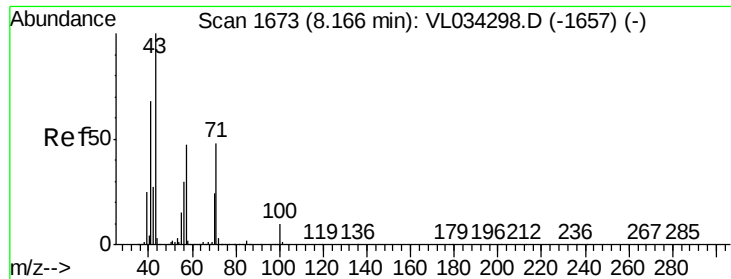
135 75.4 50.2 75.2#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#10

Heptane

Concen: 0.077 ppbv

RT: 8.16 min Scan# 1672

Delta R.T. -0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

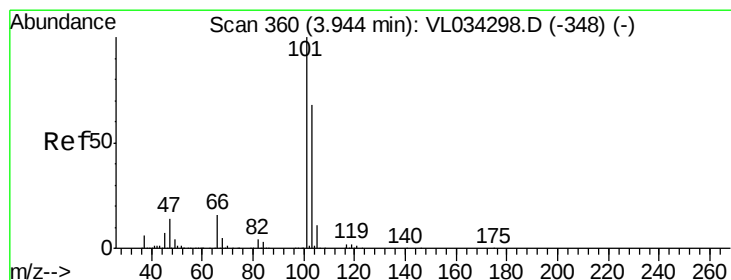
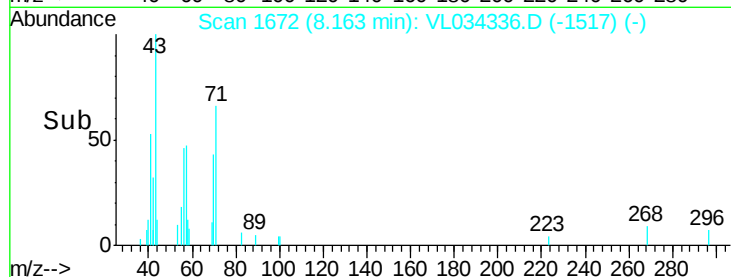
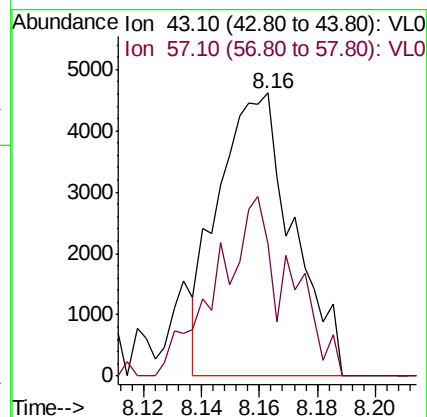
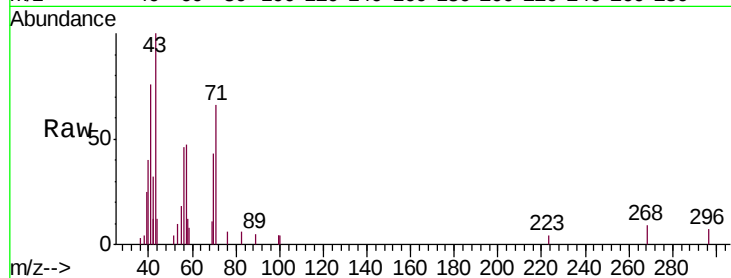
VIBLK

Tgt Ion: 43 Resp: 8212

Ion Ratio Lower Upper

43 100

57 61.5 39.5 59.3#



#11

Trichlorofluoromethane

Concen: 0.067 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL034336.D

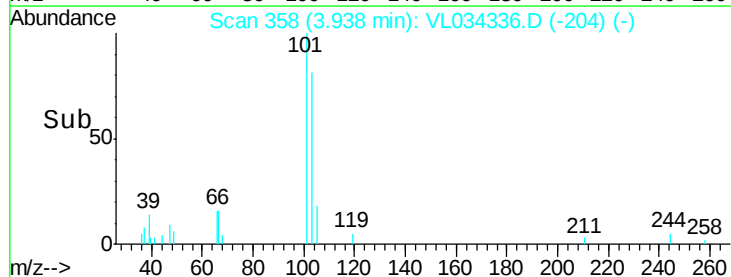
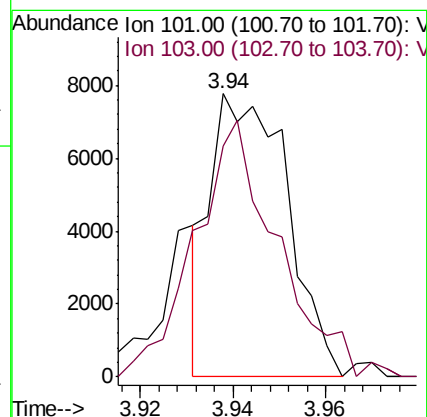
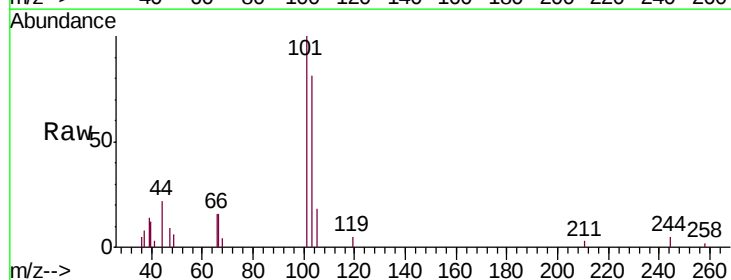
Acq: 18 Oct 2019 9:19

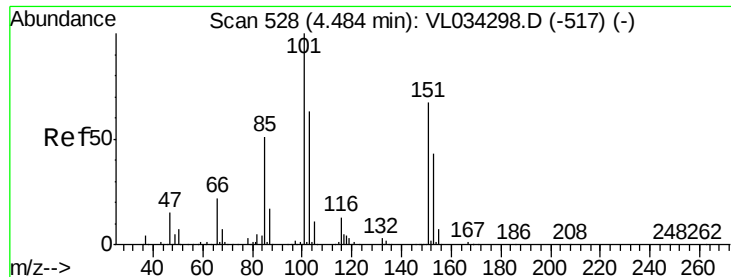
Tgt Ion: 101 Resp: 8833

Ion Ratio Lower Upper

101 100

103 65.5 54.5 81.7





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.082 ppbv

RT: 4.48 min Scan# 528

Delta R.T. 0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampled :

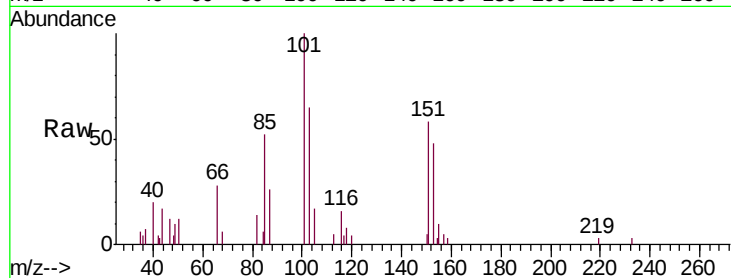
VIBLK

Tgt Ion: 101 Resp: 7073

Ion Ratio Lower Upper

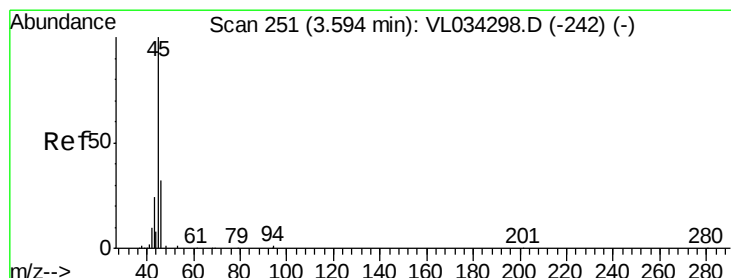
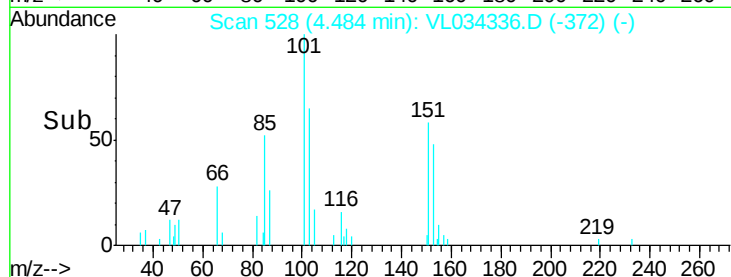
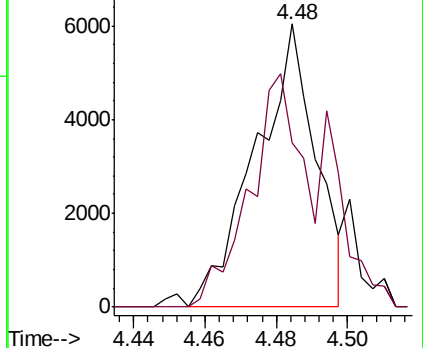
101 100

151 98.9 57.4 86.2#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 0.166 ppbv

RT: 3.60 min Scan# 252

Delta R.T. 0.00 min

Lab File: VL034336.D

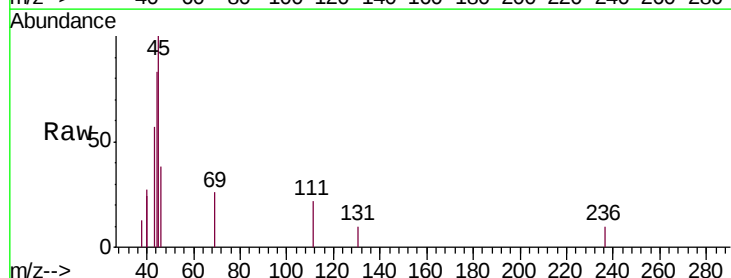
Acq: 18 Oct 2019 9:19

Tgt Ion: 45 Resp: 1553

Ion Ratio Lower Upper

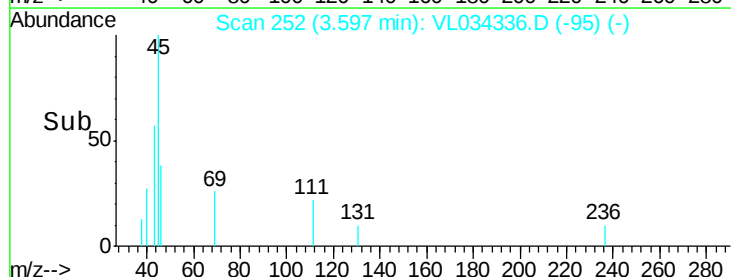
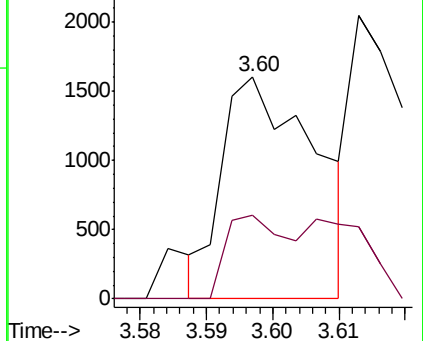
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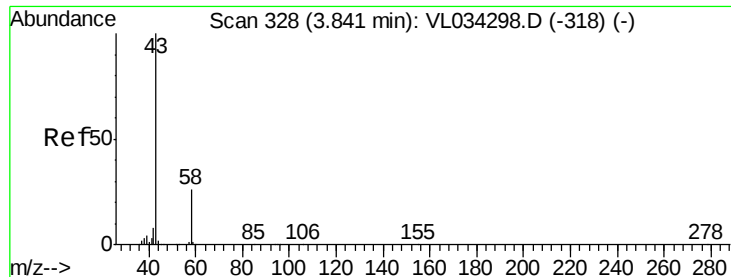
46 0.0 15.8 63.2#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 0.513 ppbv

RT: 3.85 min Scan# 330

Delta R.T. 0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

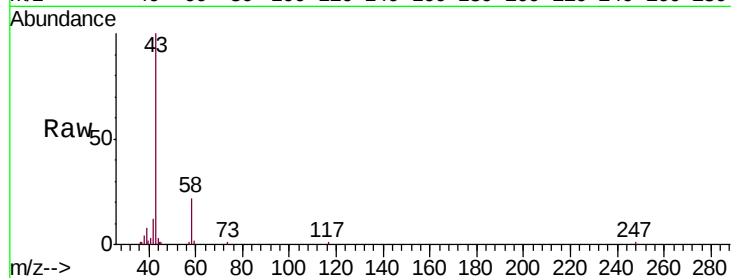
VIBLK

Tgt Ion: 43 Resp: 58976

Ion Ratio Lower Upper

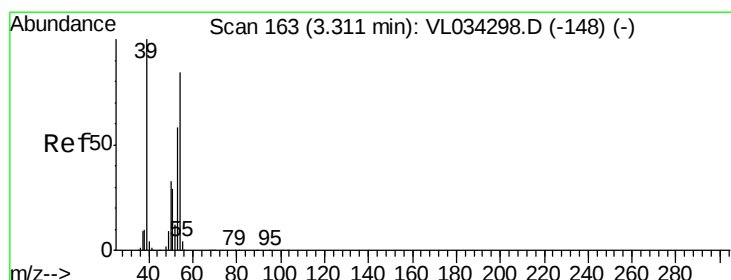
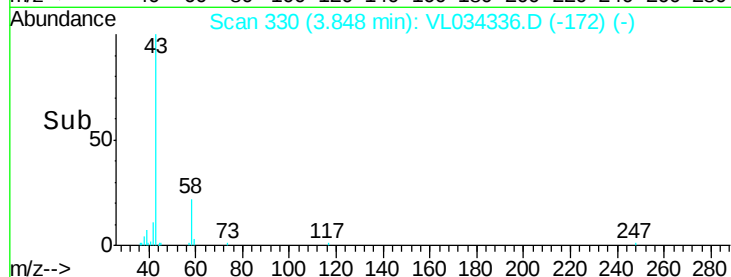
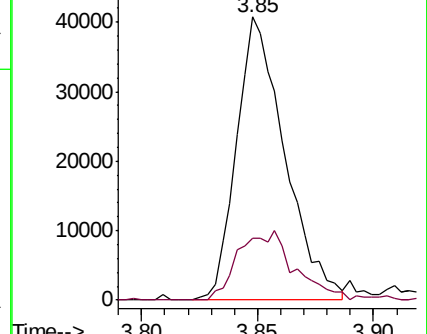
43 100

58 29.5 20.4 30.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.129 ppbv

RT: 3.31 min Scan# 162

Delta R.T. -0.00 min

Lab File: VL034336.D

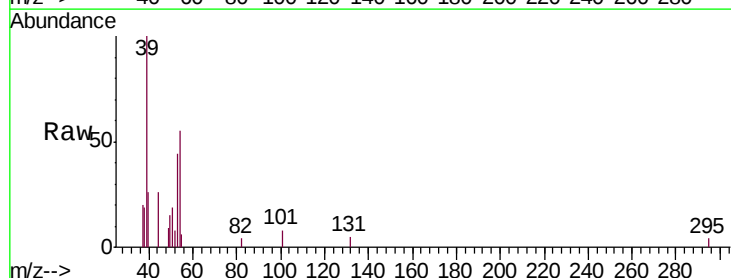
Acq: 18 Oct 2019 9:19

Tgt Ion: 39 Resp: 6037

Ion Ratio Lower Upper

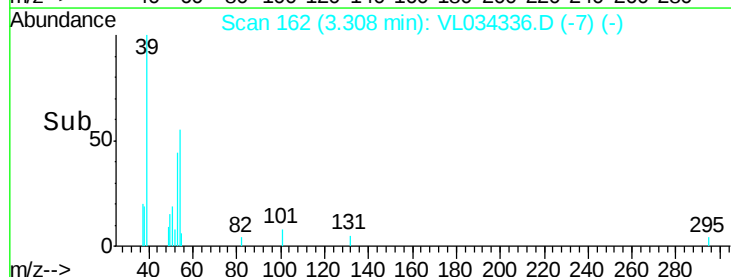
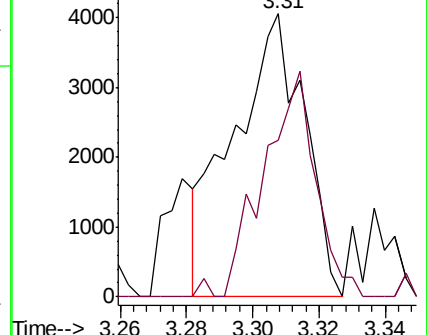
39 100

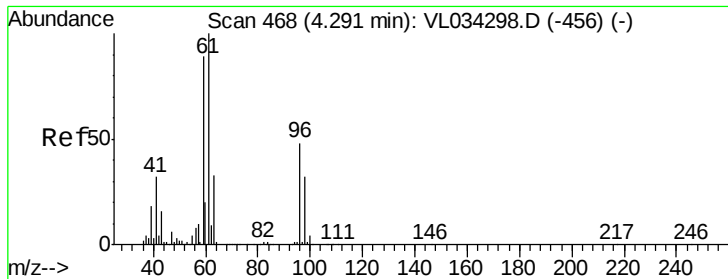
54 59.2 63.9 95.9#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



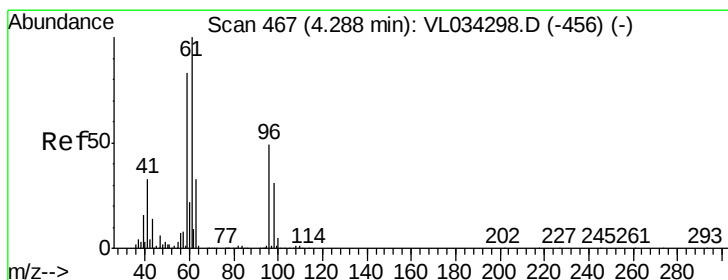
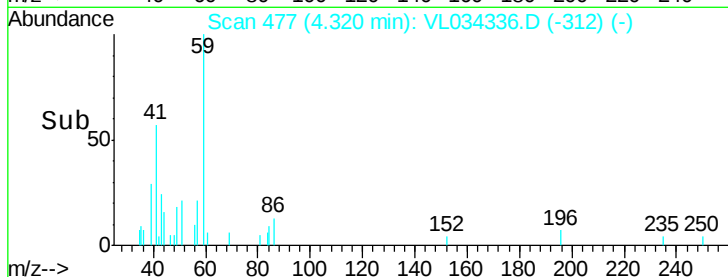
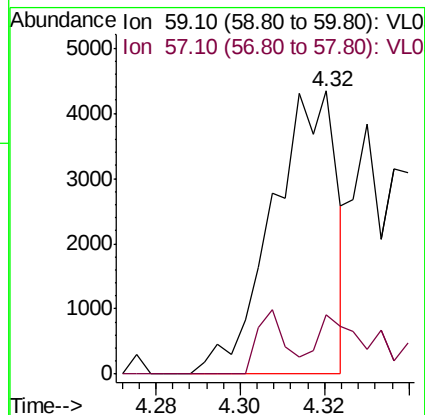
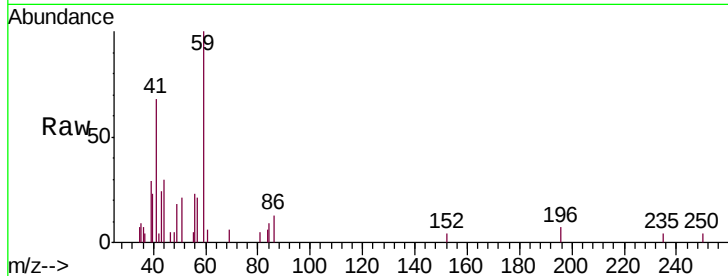


#17

tert-Butyl alcohol
Concen: 0.063 ppbv
RT: 4.32 min Scan# 477
Delta R.T. 0.03 min
Lab File: VL034336.D
Acq: 18 Oct 2019 9:19

Instrument :
MSVOA_L
ClientSampleId :
VIBLK

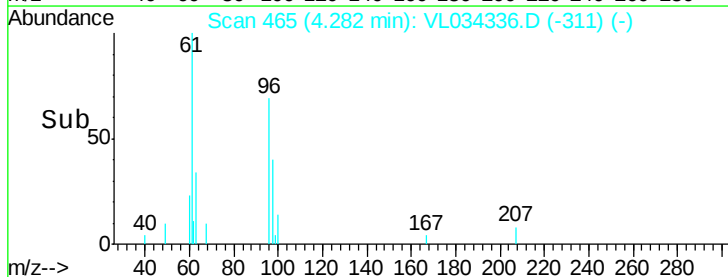
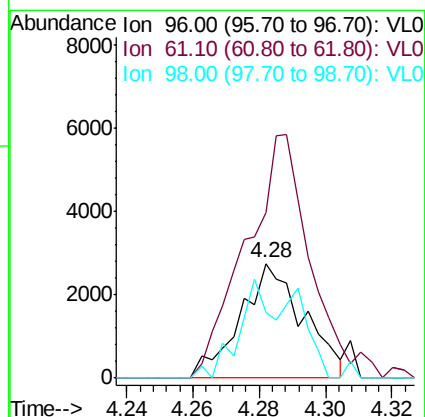
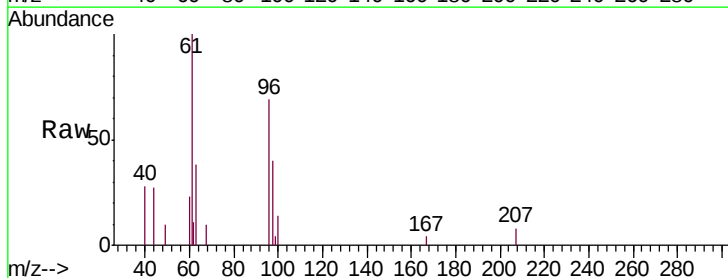
Tgt Ion: 59 Resp: 4590
Ion Ratio Lower Upper
59 100
57 31.1 8.8 13.2#

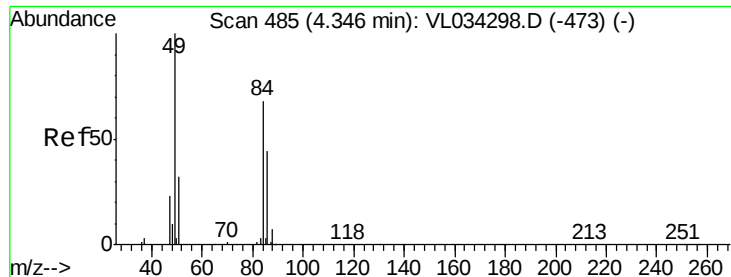


#18

1,1-Dichloroethene
Concen: 0.096 ppbv
RT: 4.28 min Scan# 465
Delta R.T. -0.01 min
Lab File: VL034336.D
Acq: 18 Oct 2019 9:19

Tgt Ion: 96 Resp: 3638
Ion Ratio Lower Upper
96 100
61 144.3 164.5 246.7#
98 57.6 51.7 77.5

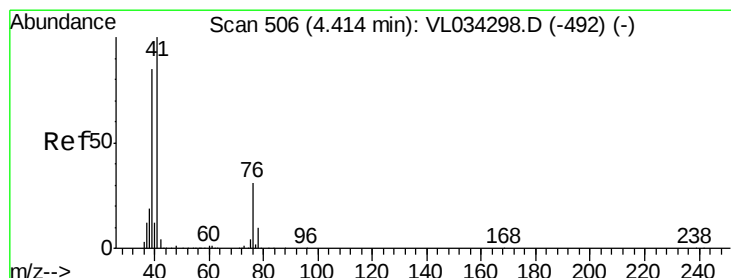
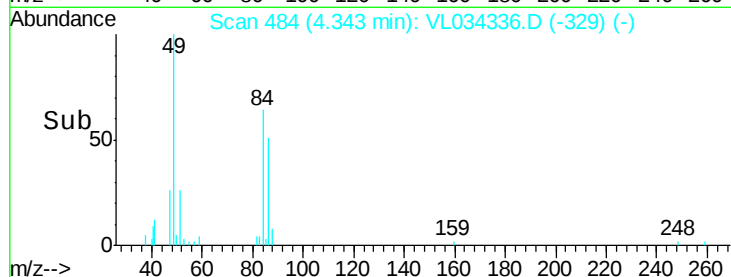
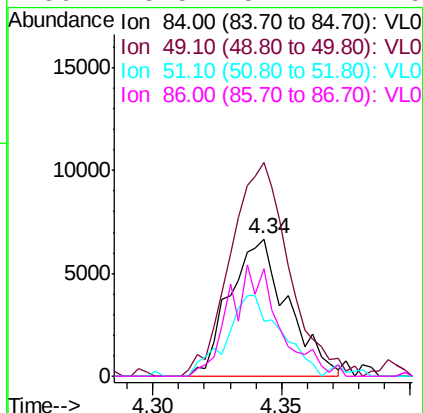
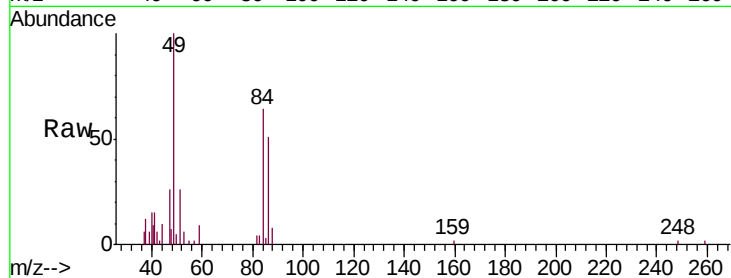




#20
Methylene Chloride
Concen: 0.252 ppbv
RT: 4.34 min Scan# 484
Delta R.T. -0.00 min
Lab File: VL034336.D
Acq: 18 Oct 2019 9:19

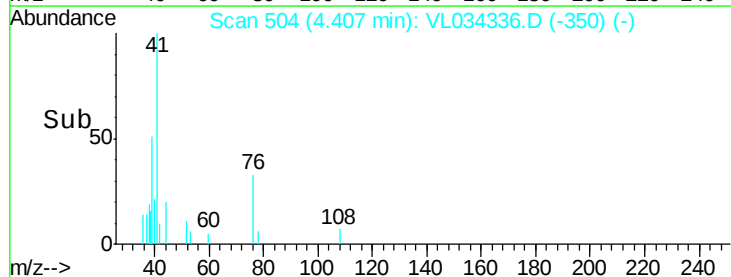
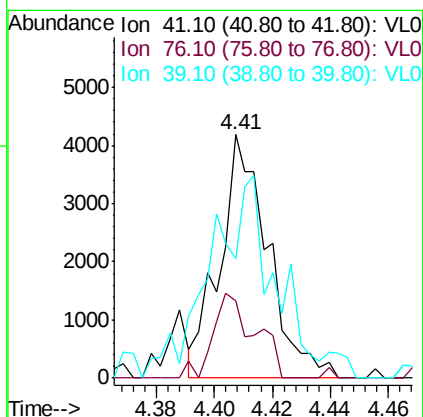
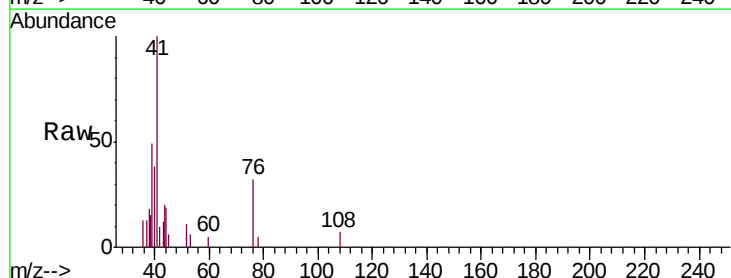
Instrument :
MSVOA_L
ClientSampleId :
VIBLK

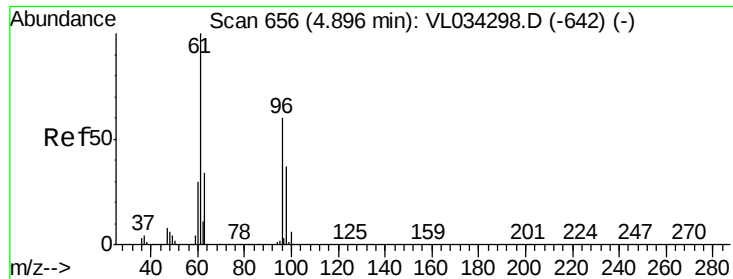
Tgt Ion: 84 Resp: 10471
Ion Ratio Lower Upper
84 100
49 150.7 118.5 177.7
51 39.9 38.8 58.2
86 78.5 51.7 77.5#



#21
Allyl Chloride
Concen: 0.076 ppbv
RT: 4.41 min Scan# 504
Delta R.T. -0.01 min
Lab File: VL034336.D
Acq: 18 Oct 2019 9:19

Tgt Ion: 41 Resp: 4809
Ion Ratio Lower Upper
41 100
76 30.3 22.8 34.2
39 120.7 66.0 99.0#





#22

trans-1,2-Dichloroethene

Concen: 0.084 ppbv

RT: 4.89 min Scan# 654

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

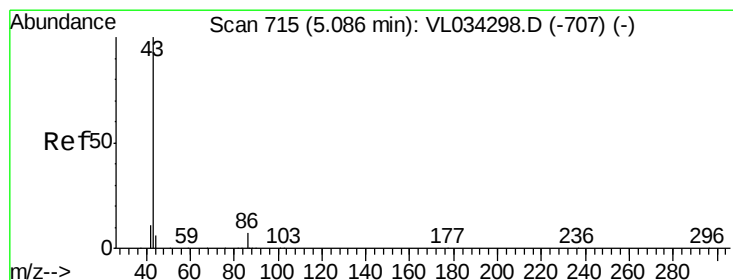
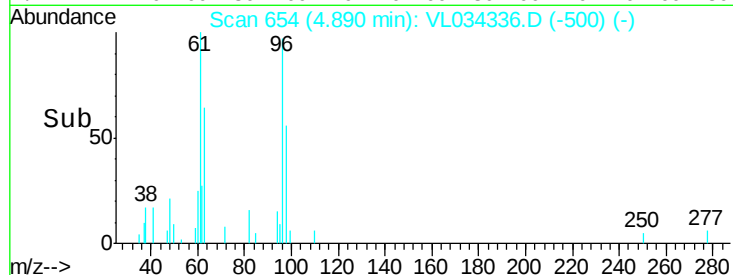
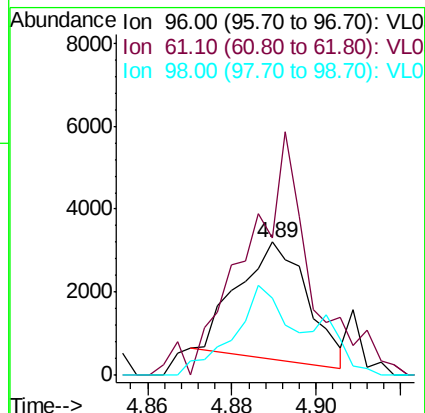
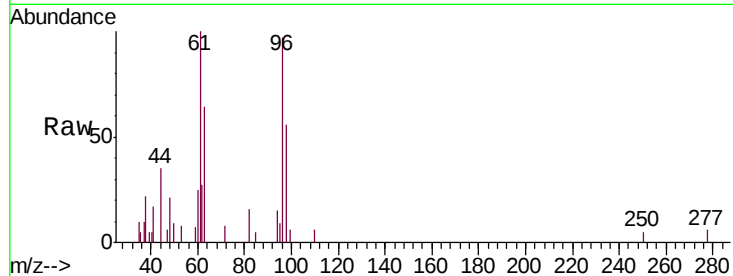
Tgt Ion: 96 Resp: 3177

Ion Ratio Lower Upper

96 100

61 129.6 133.8 200.6#

98 59.4 49.4 74.0



#23

Vinyl Acetate

Concen: 0.111 ppbv

RT: 5.08 min Scan# 714

Delta R.T. -0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Tgt Ion: 43 Resp: 15924

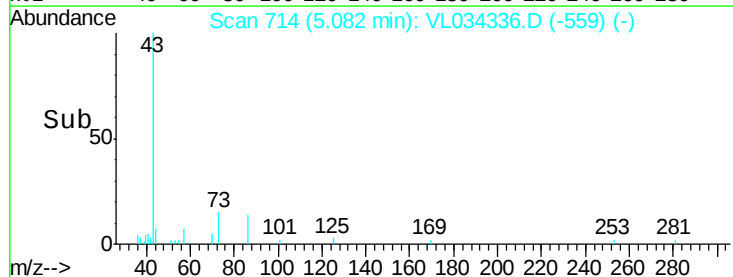
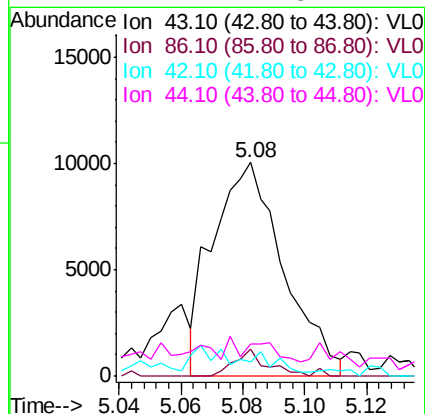
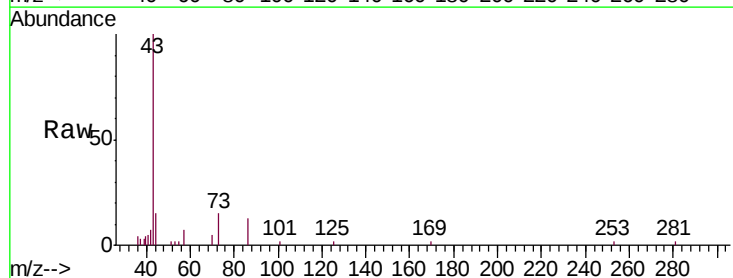
Ion Ratio Lower Upper

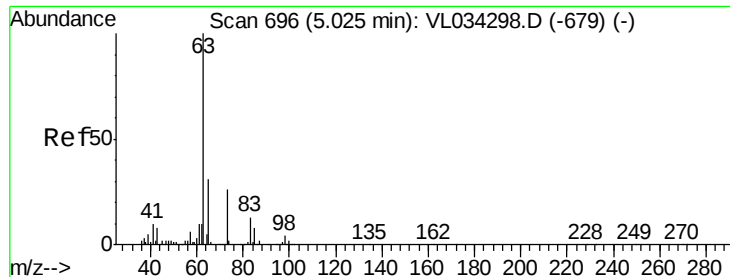
43 100

86 13.9 5.0 7.4#

42 4.6 8.6 13.0#

44 4.1 4.8 7.2#





#24

1,1-Dichloroethane

Concen: 0.053 ppbv

RT: 5.01 min Scan# 693

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

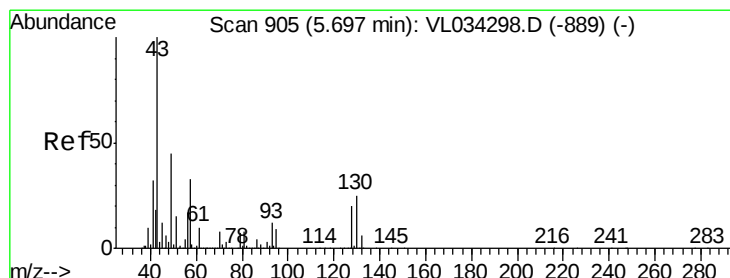
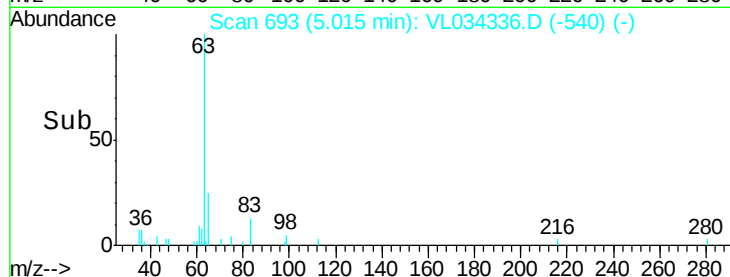
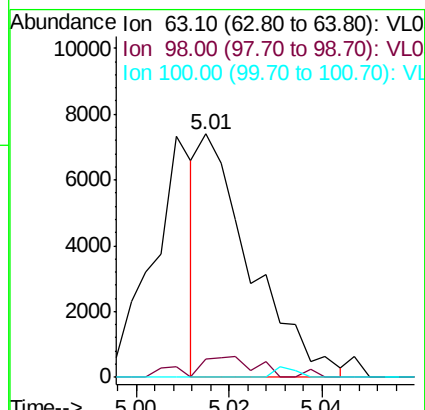
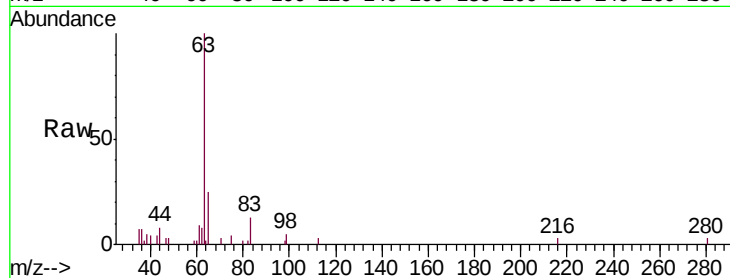
Tgt Ion: 63 Resp: 5661

Ion Ratio Lower Upper

63 100

98 7.7 2.0 6.0#

100 0.0 1.1 3.5#



#25

Ethyl Acetate

Concen: 0.075 ppbv

RT: 5.70 min Scan# 907

Delta R.T. 0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Tgt Ion: 43 Resp: 14537

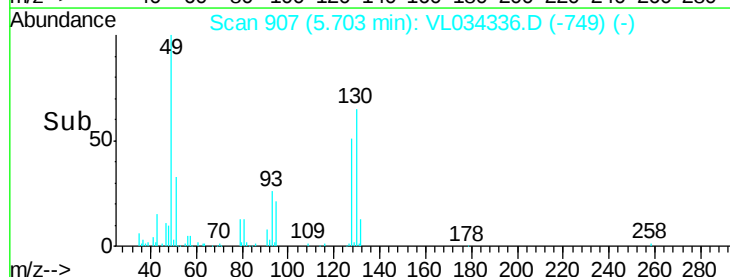
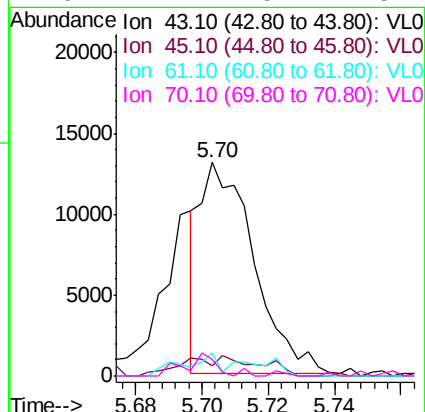
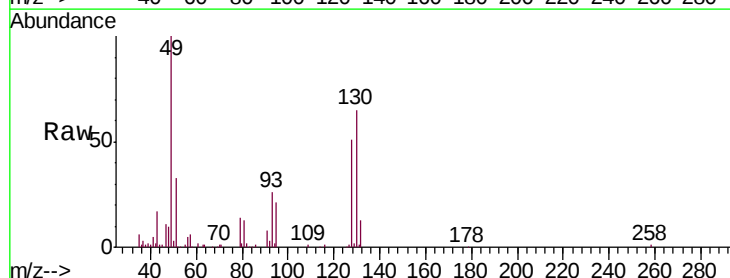
Ion Ratio Lower Upper

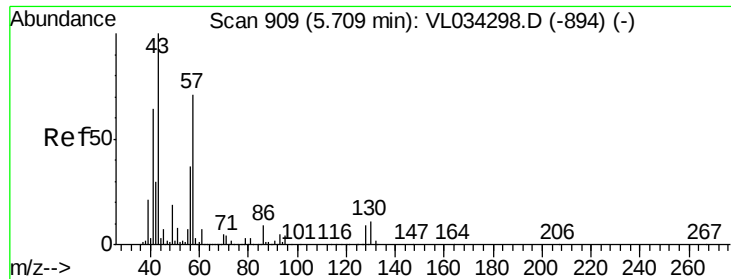
43 100

45 14.3 8.3 12.5#

61 13.0 7.7 11.5#

70 7.2 5.4 8.2





#26

Hexane

Concen: 0.125 ppbv

RT: 5.70 min Scan# 905

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

Tgt Ion: 57 Resp: 10304

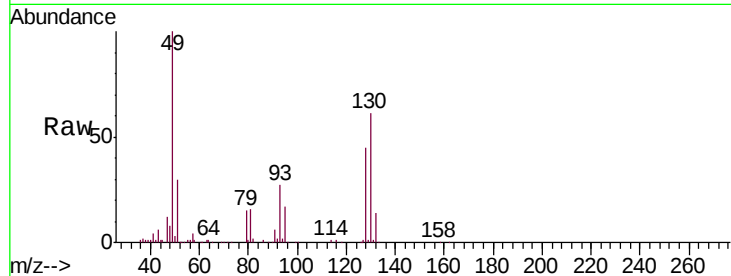
Ion Ratio Lower Upper

57 100

41 102.6 76.5 114.7

43 216.6 188.5 282.7

56 56.2 42.8 64.2

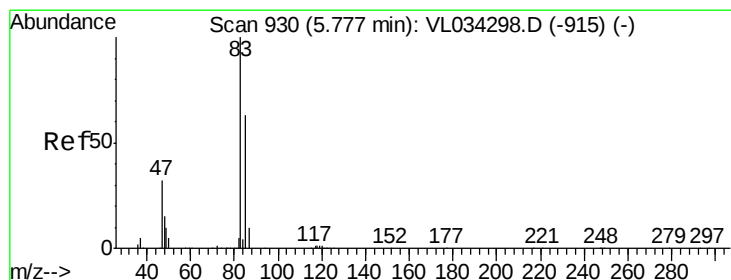
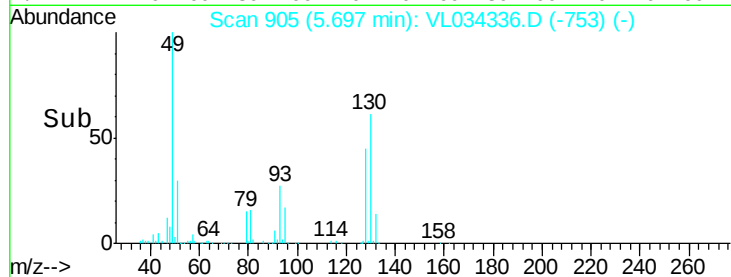
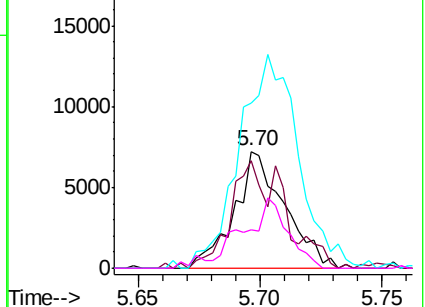


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.039 ppbv

RT: 5.76 min Scan# 925

Delta R.T. -0.02 min

Lab File: VL034336.D

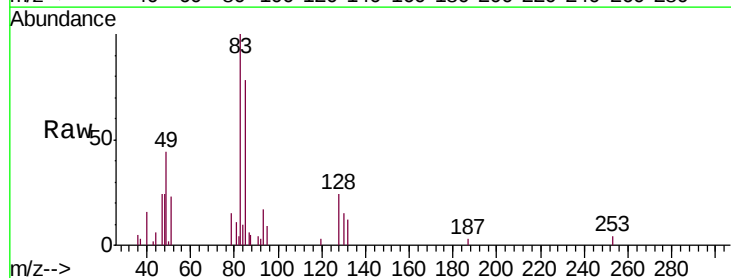
Acq: 18 Oct 2019 9:19

Tgt Ion: 83 Resp: 5077

Ion Ratio Lower Upper

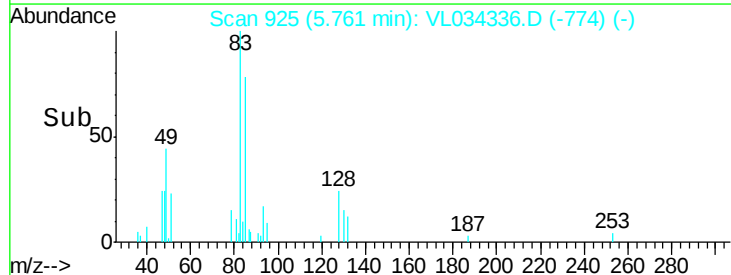
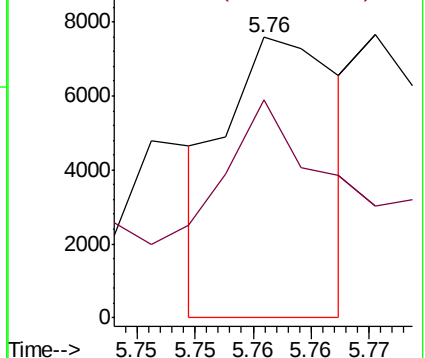
83 100

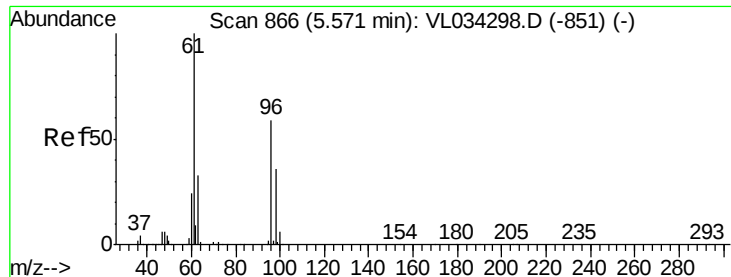
85 115.6 50.5 75.7#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





#31

cis-1,2-Dichloroethene

Concen: 0.048 ppbv

RT: 5.56 min Scan# 862

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

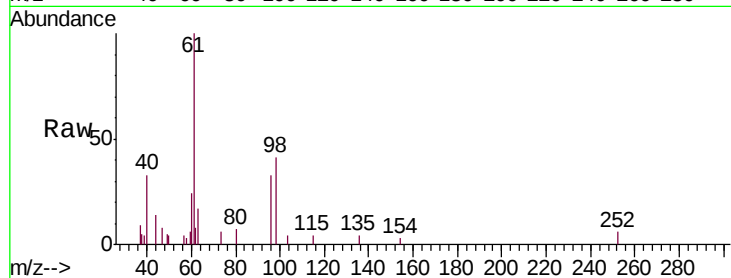
Tgt Ion: 61 Resp: 4014

Ion Ratio Lower Upper

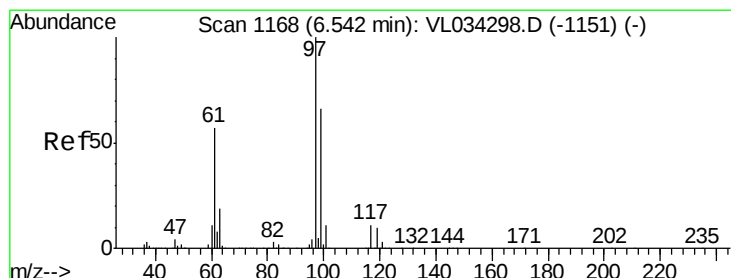
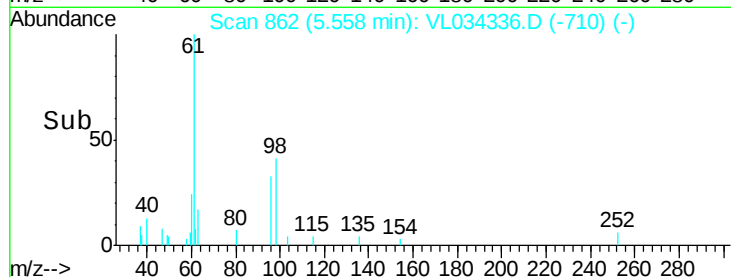
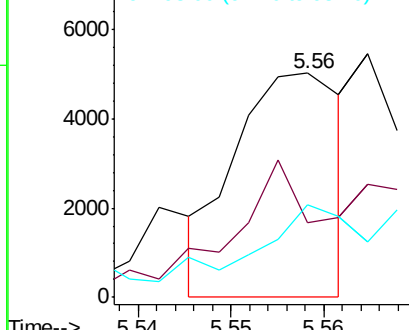
61 100

96 16.3 47.5 71.3#

98 32.5 28.8 43.2



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



#32

1,1,1-Trichloroethane

Concen: 0.080 ppbv

RT: 6.53 min Scan# 1165

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

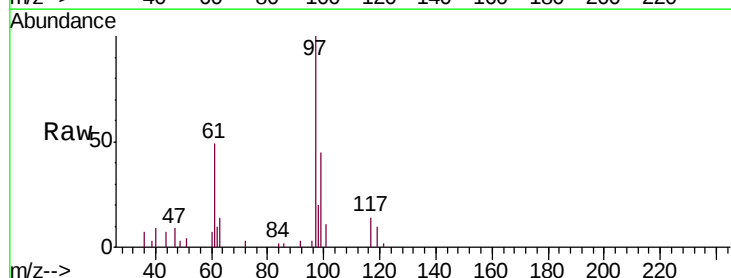
Tgt Ion: 97 Resp: 10144

Ion Ratio Lower Upper

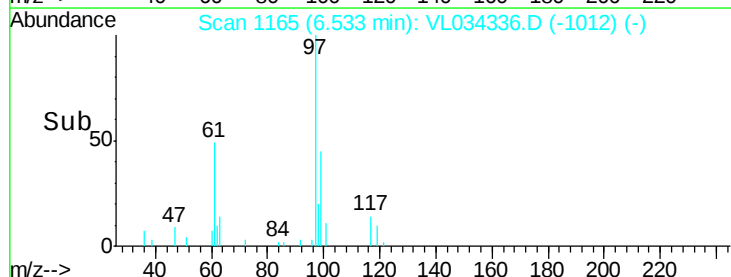
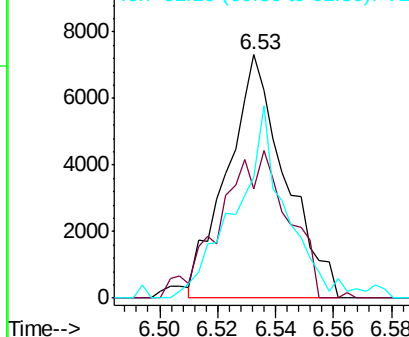
97 100

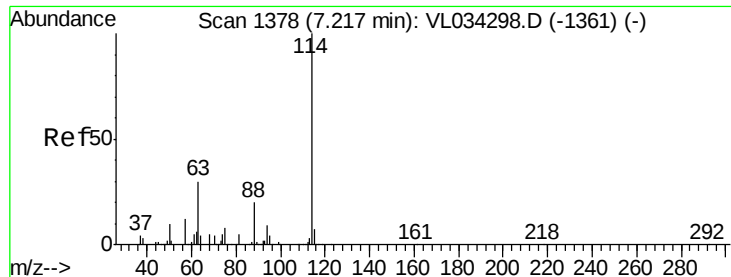
99 71.4 52.6 78.8

61 70.6 44.5 66.7#



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

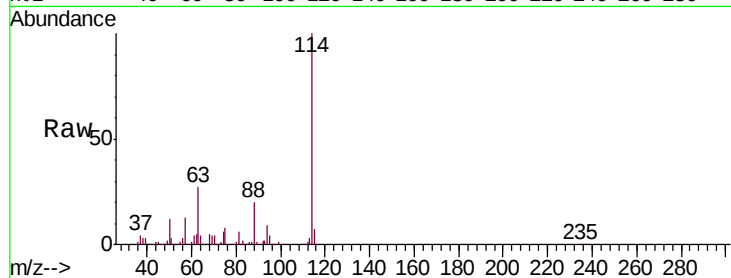




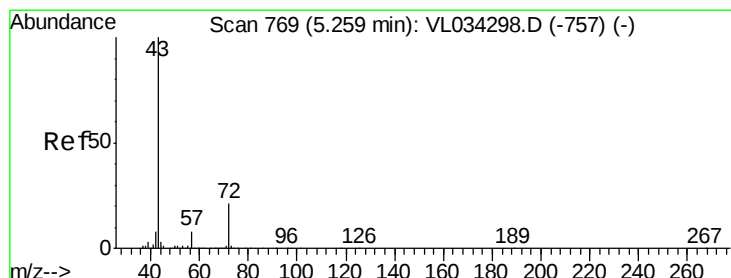
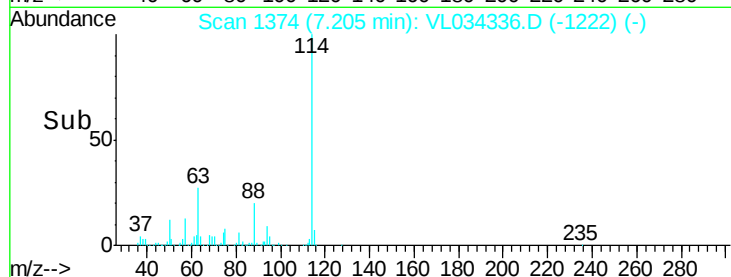
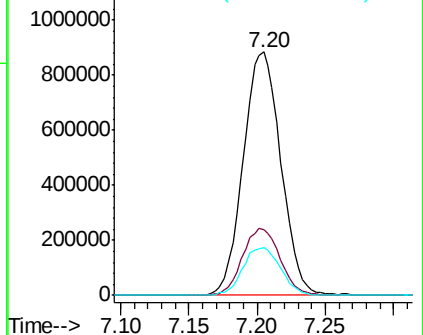
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.20 min Scan# 1374
 Delta R.T. -0.01 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

Instrument :
 MSVOA_L
 ClientSampleId :
 VIBLK

Tgt Ion:114 Resp: 1690689
 Ion Ratio Lower Upper
 114 100
 63 27.8 25.2 37.8
 88 19.8 16.0 24.0

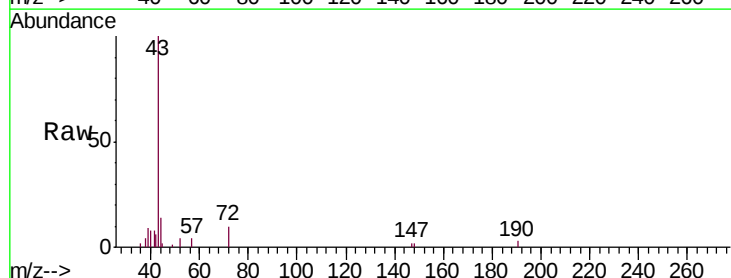


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

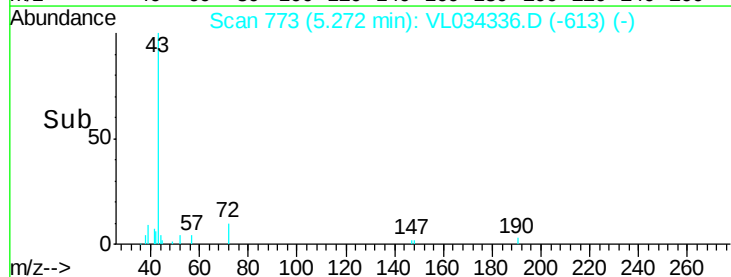
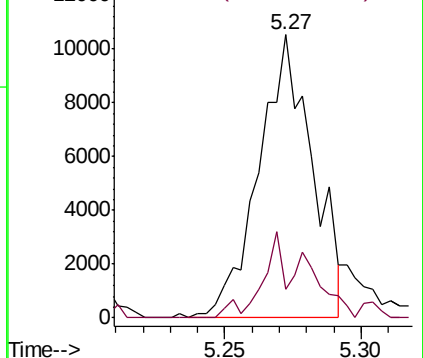


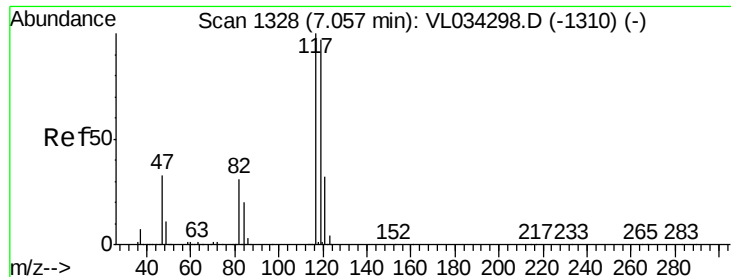
#34
 2-Butanone
 Concen: 0.104 ppbv
 RT: 5.27 min Scan# 773
 Delta R.T. 0.01 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

Tgt Ion: 43 Resp: 14332
 Ion Ratio Lower Upper
 43 100
 72 26.0 16.3 24.5#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.065 ppbv

RT: 7.05 min Scan# 1325

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

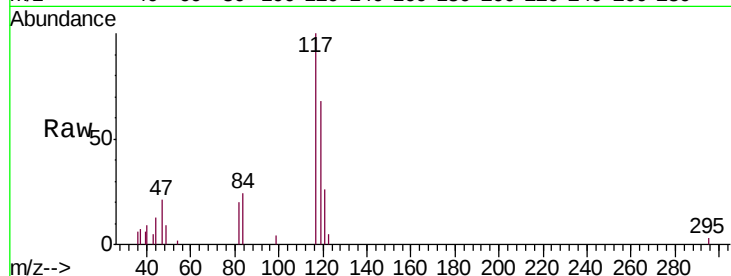
Tgt Ion: 117 Resp: 9590

Ion Ratio Lower Upper

117 100

119 67.9 77.3 115.9#

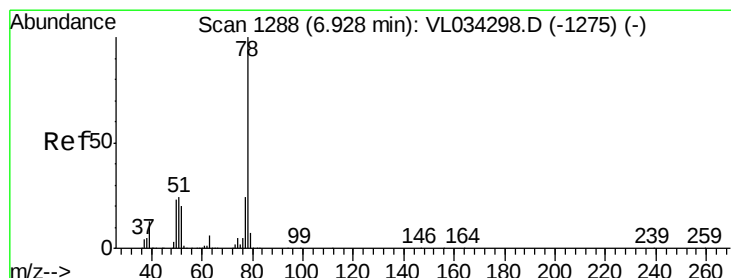
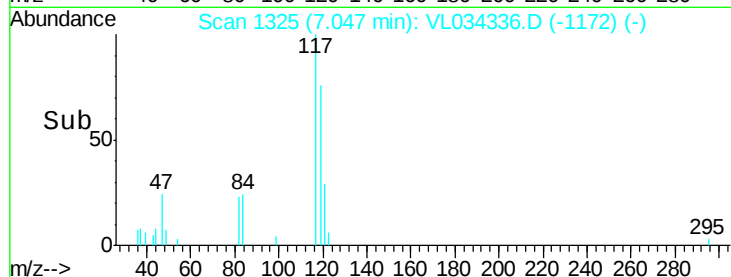
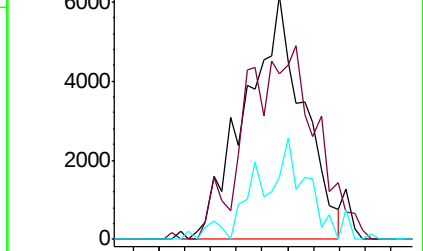
121 25.6 25.5 38.3



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.095 ppbv

RT: 6.92 min Scan# 1286

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

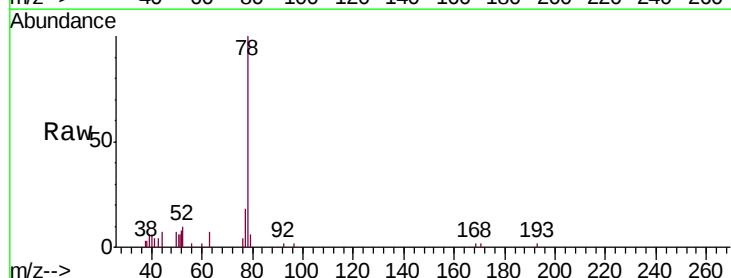
Tgt Ion: 78 Resp: 15452

Ion Ratio Lower Upper

78 100

77 17.6 19.0 28.4#

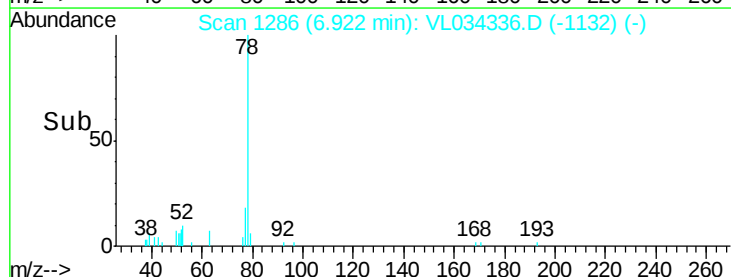
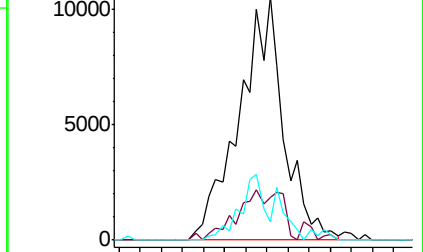
50 7.3 18.6 27.8#

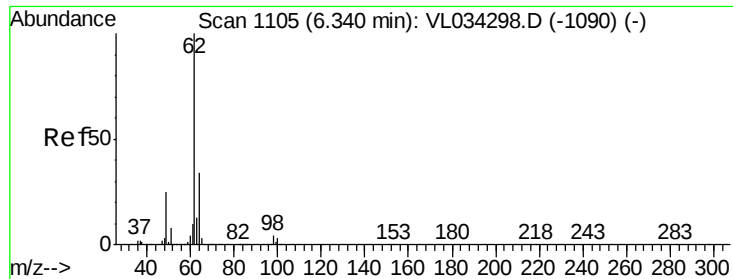


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

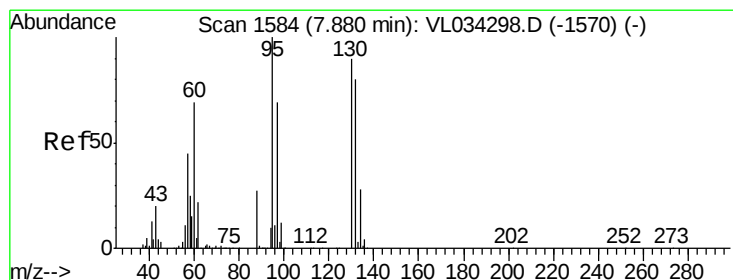
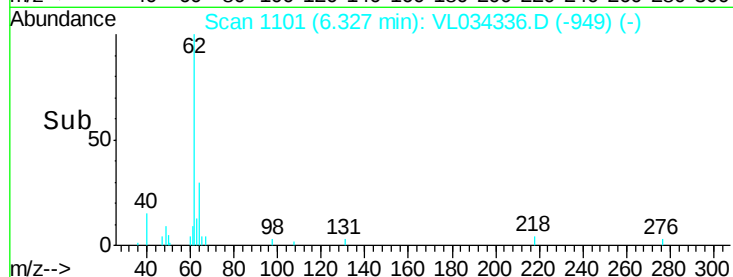
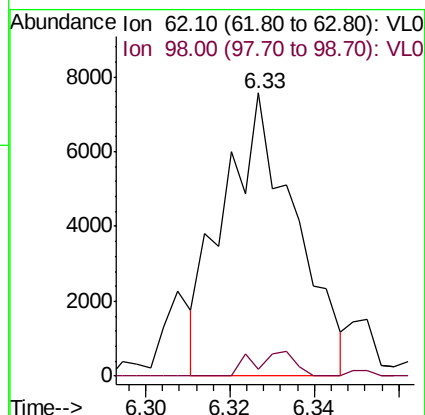
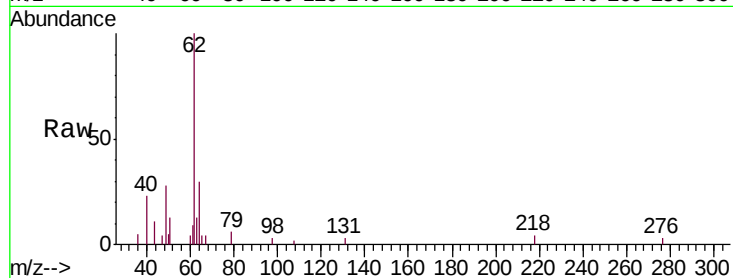




#37
 1,2-Dichloroethane
 Concen: 0.073 ppbv
 RT: 6.33 min Scan# 1101
 Delta R.T. -0.01 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

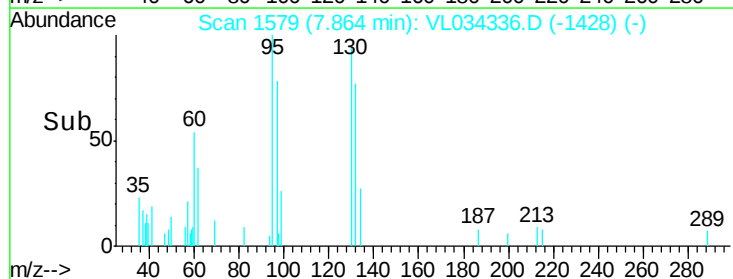
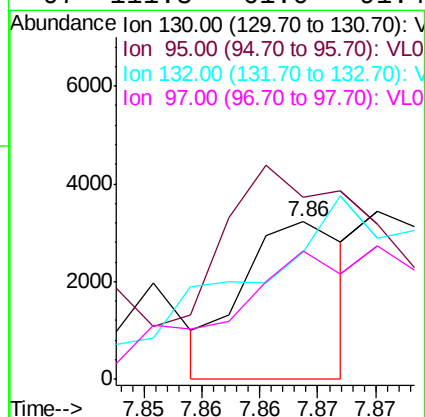
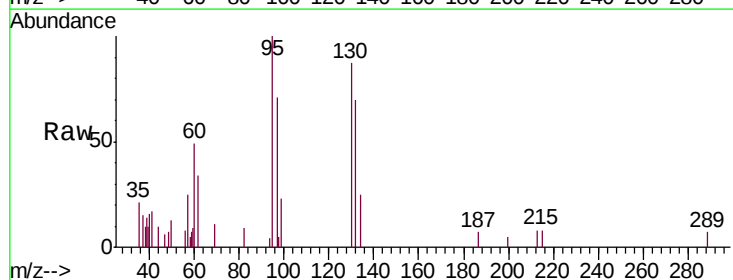
Instrument :
 MSVOA_L
 ClientSampleId :
 VIBLK

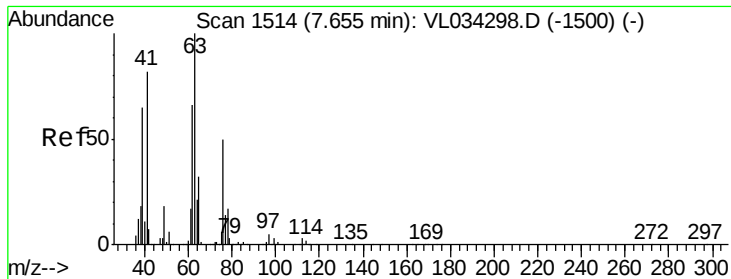
Tgt Ion: 62 Resp: 8858
 Ion Ratio Lower Upper
 62 100
 98 5.7 3.8 5.6#



#38
 Trichloroethene
 Concen: 0.030 ppbv
 RT: 7.86 min Scan# 1579
 Delta R.T. -0.02 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

Tgt Ion: 130 Resp: 1983
 Ion Ratio Lower Upper
 130 100
 95 148.8 88.6 132.8#
 132 43.6 71.2 106.8#
 97 111.8 61.0 91.4#





#39

1,2-Dichloropropane

Concen: 6.648 ppbv

RT: 7.20 min Scan# 1373

Delta R.T. -0.45 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

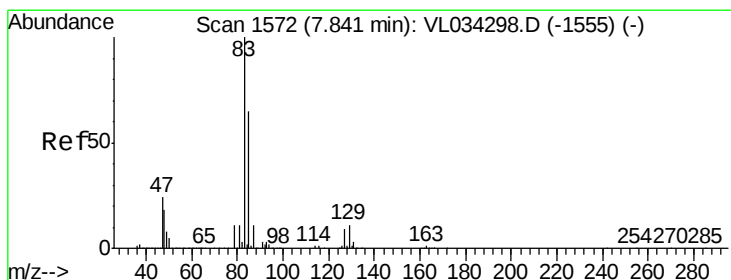
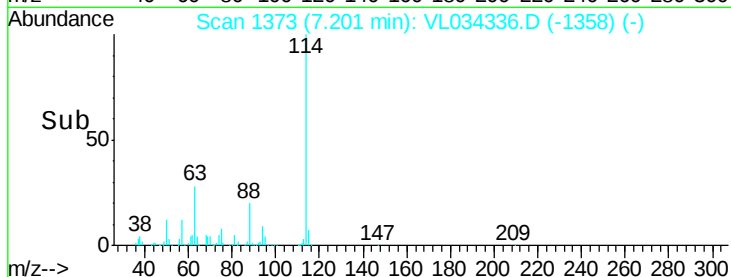
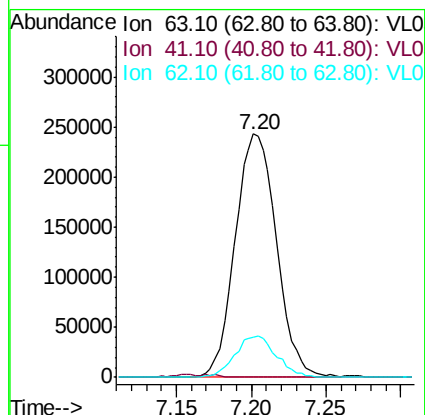
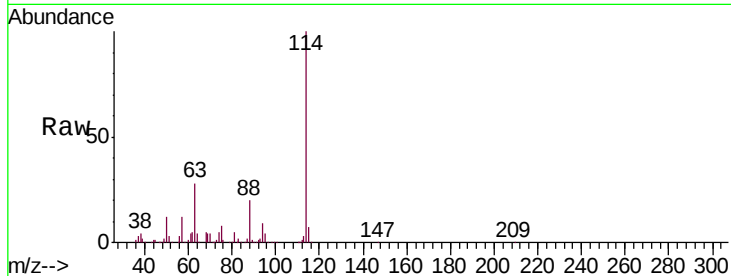
Tgt Ion: 63 Resp: 464346

Ion Ratio Lower Upper

63 100

41 0.0 65.6 98.4#

62 16.3 53.0 79.6#



#42

Bromodichloromethane

Concen: 0.074 ppbv

RT: 7.83 min Scan# 1567

Delta R.T. -0.02 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

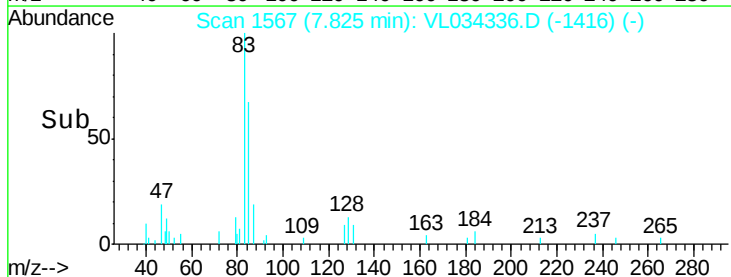
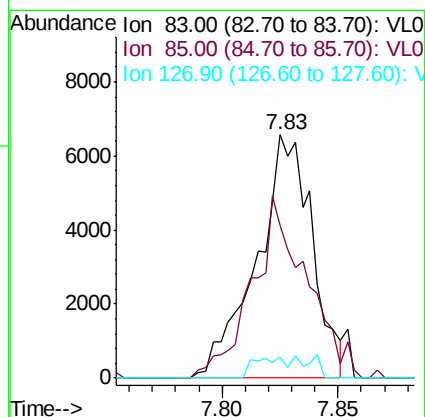
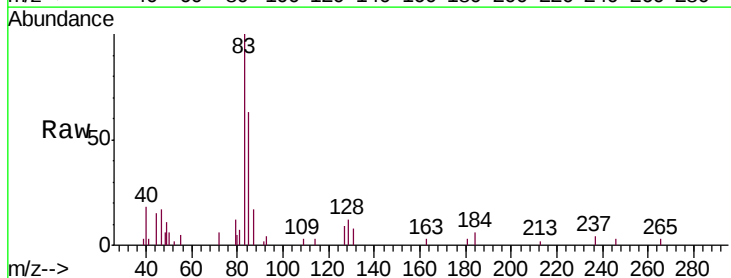
Tgt Ion: 83 Resp: 10944

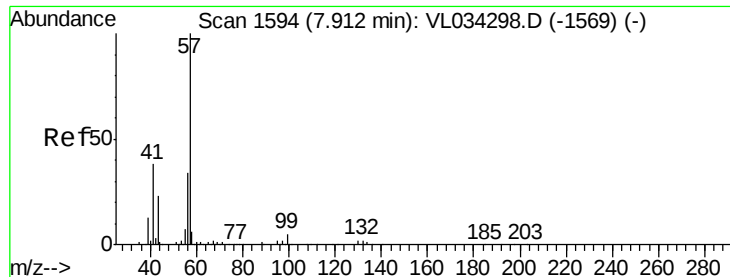
Ion Ratio Lower Upper

83 100

85 62.7 51.8 77.6

127 8.6 7.0 10.6





#44

2,2,4-Trimethylpentane

Concen: 0.042 ppbv

RT: 7.90 min Scan# 1590

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

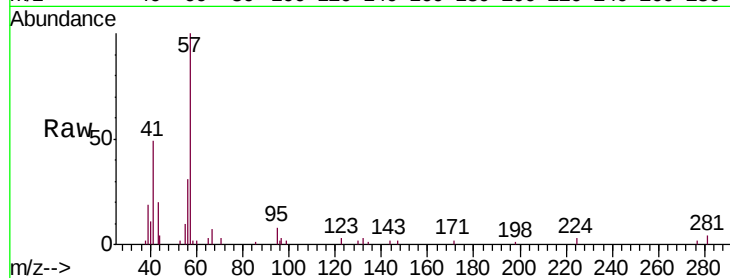
Tgt Ion: 57 Resp: 12748

Ion Ratio Lower Upper

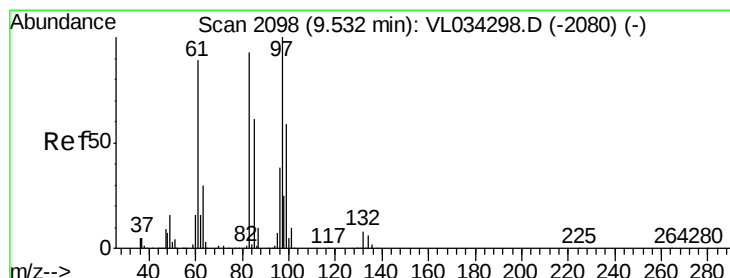
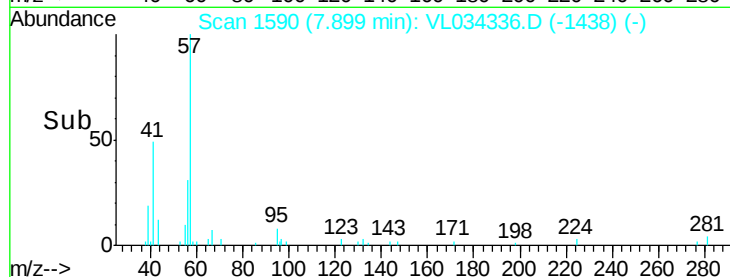
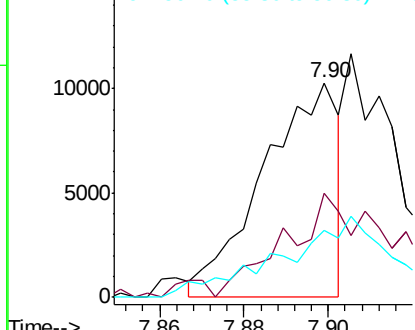
57 100

41 77.8 29.3 43.9#

56 0.0 25.3 37.9#



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



#47

1,1,2-Trichloroethane

Concen: 0.056 ppbv

RT: 9.52 min Scan# 2094

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Tgt Ion: 97 Resp: 3949

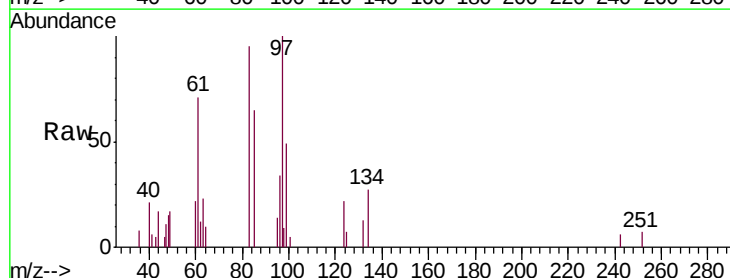
Ion Ratio Lower Upper

97 100

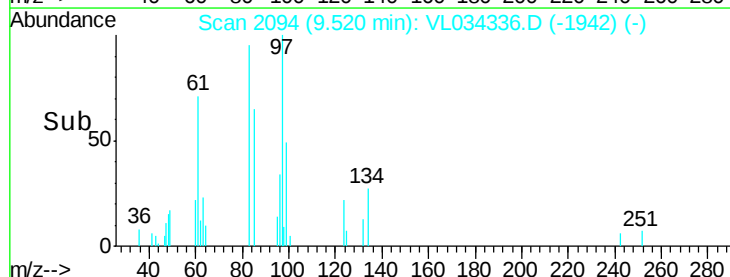
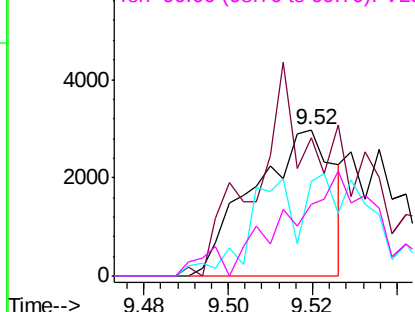
83 88.5 74.2 111.2

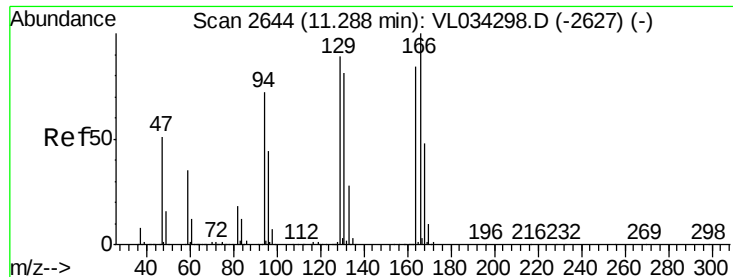
85 57.8 48.6 73.0

99 39.7 47.0 70.6#



Abundance Ion 97.00 (96.70 to 97.70): VL0
Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0
Ion 99.00 (98.70 to 99.70): VL0





#52

Tetrachloroethene

Concen: 0.172 ppbv

RT: 11.27 min Scan# 2638

Delta R.T. -0.02 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

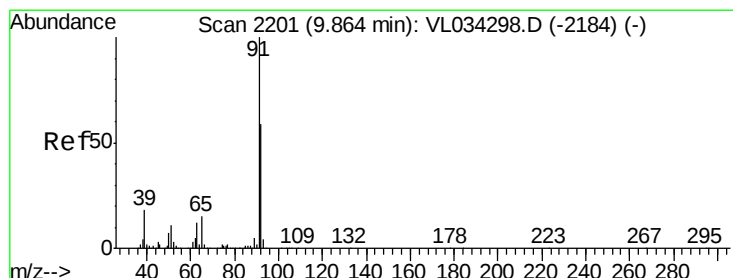
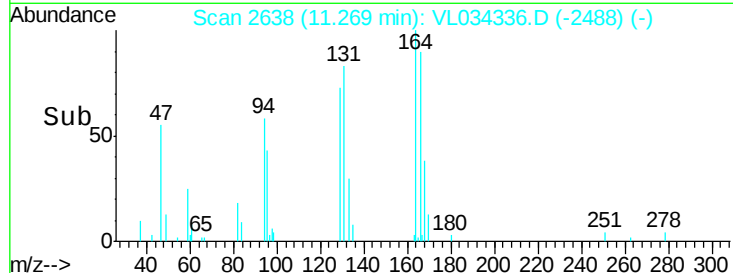
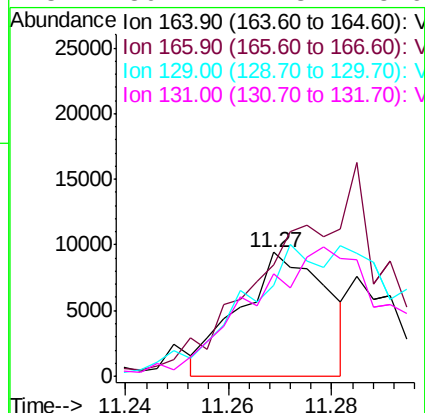
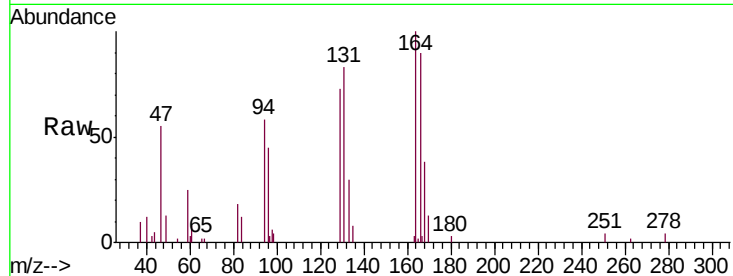
Instrument :

MSVOA_L

ClientSampleId :

VIBLK

Tgt Ion:	164	Resp:	10934
Ion	Ratio	Lower	Upper
164	100		
166	70.9	95.3	142.9#
129	69.8	84.5	126.7#
131	80.4	77.3	115.9



#53

Toluene

Concen: 0.065 ppbv

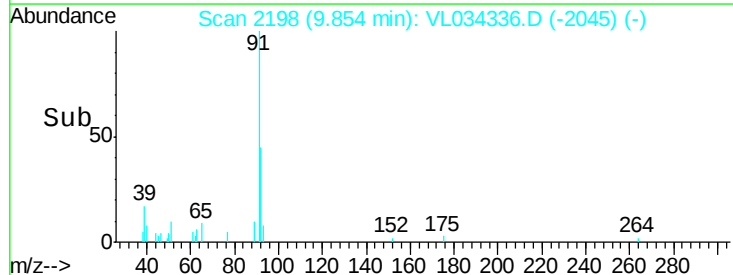
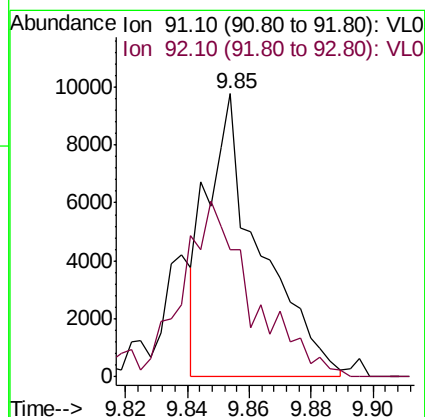
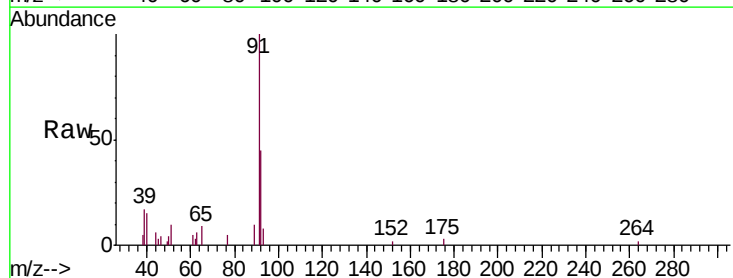
RT: 9.85 min Scan# 2198

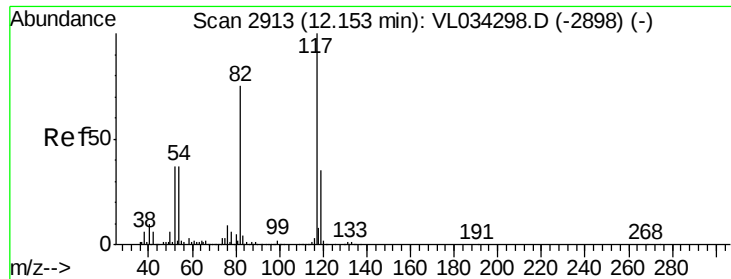
Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Tgt Ion:	91	Resp:	11607
Ion	Ratio	Lower	Upper
91	100		
92	84.9	48.4	72.6#

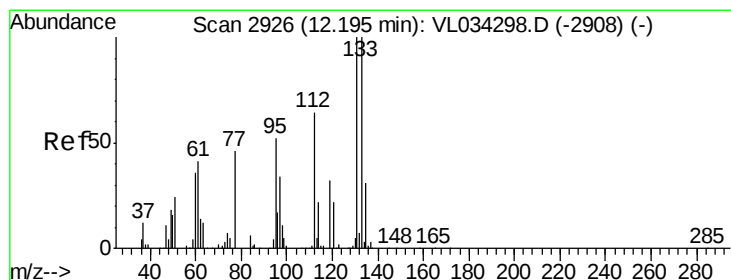
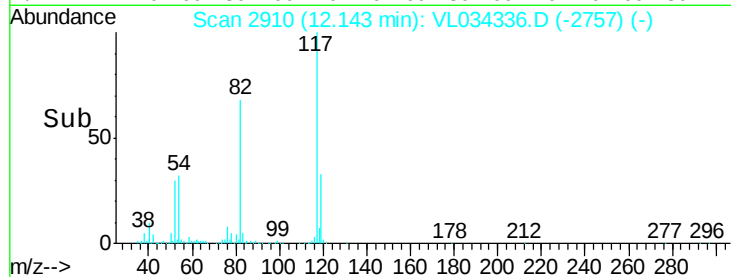
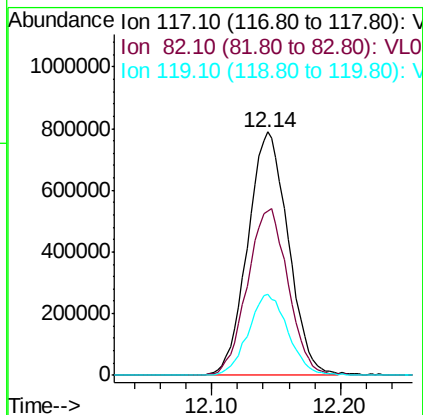
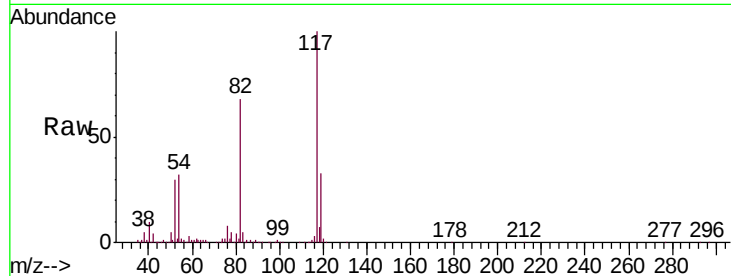




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.14 min Scan# 2910
Delta R.T. -0.01 min
Lab File: VL034336.D
Acq: 18 Oct 2019 9:19

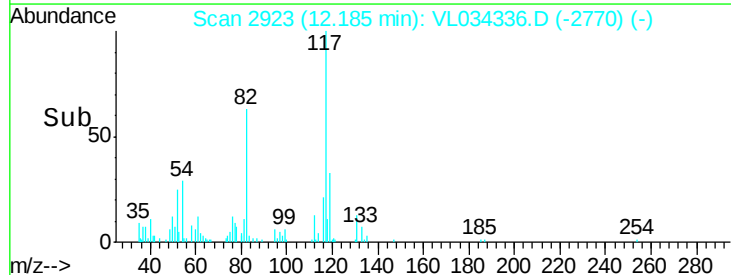
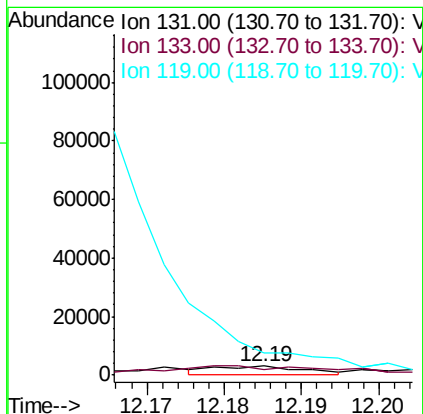
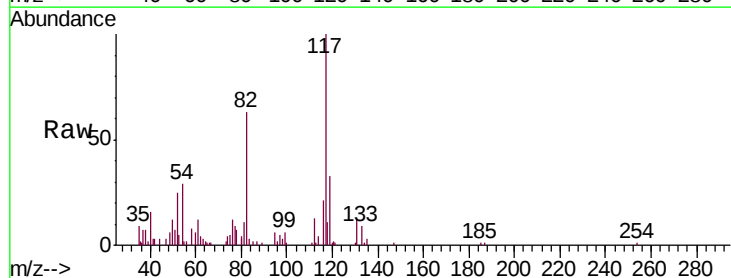
Instrument :
MSVOA_L
ClientSampleId :
VIBLK

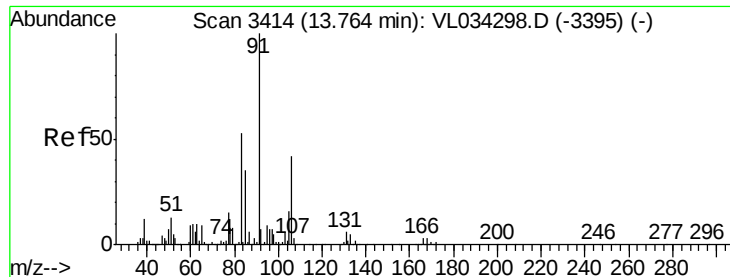
Tgt Ion:117 Resp: 1726532
Ion Ratio Lower Upper
117 100
82 69.3 55.5 83.3
119 32.9 26.5 39.7



#56
1,1,1,2-Tetrachloroethane
Concen: 0.031 ppbv
RT: 12.19 min Scan# 2923
Delta R.T. -0.01 min
Lab File: VL034336.D
Acq: 18 Oct 2019 9:19

Tgt Ion:131 Resp: 2481
Ion Ratio Lower Upper
131 100
133 262.2 77.1 115.7#
119 0.0 49.0 73.4#





#60

o-Xylene

Concen: 0.055 ppbv

RT: 13.75 min Scan# 3410

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

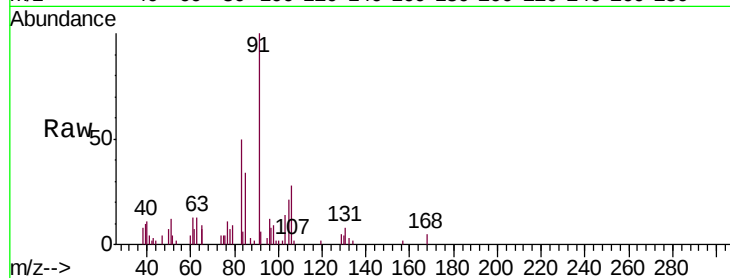
VIBLK

Tgt Ion: 91 Resp: 11468

Ion Ratio Lower Upper

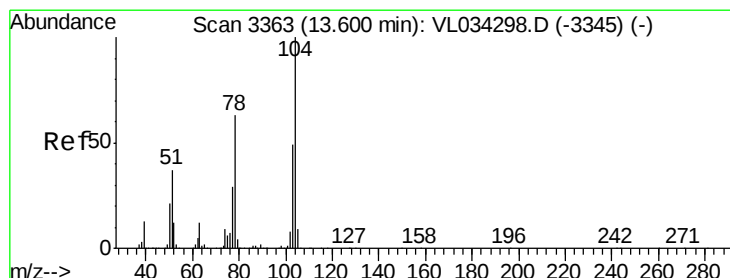
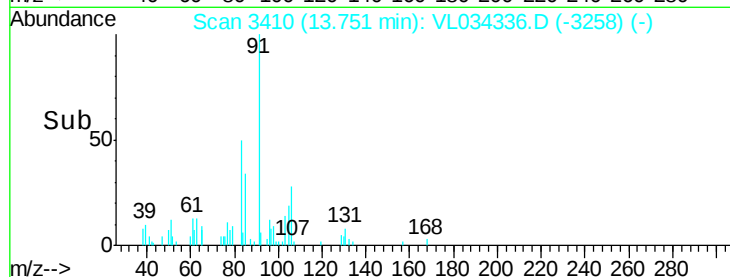
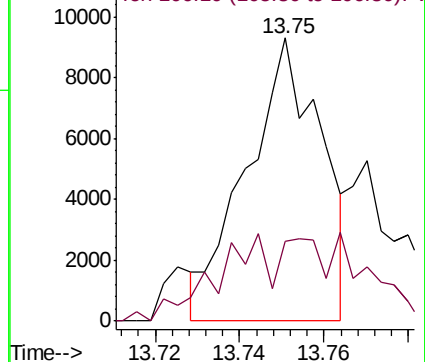
91 100

106 0.0 21.6 64.6#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#61

Styrene

Concen: 0.032 ppbv

RT: 13.59 min Scan# 3361

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

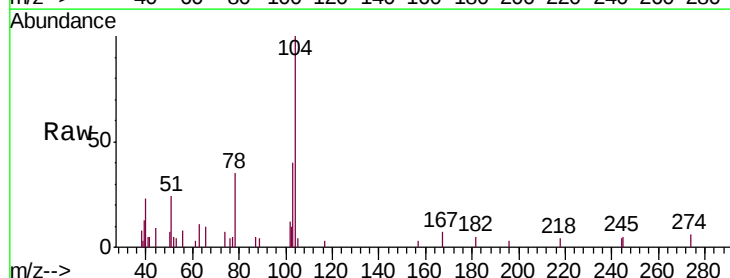
Tgt Ion: 104 Resp: 4738

Ion Ratio Lower Upper

104 100

78 122.5 47.8 71.8#

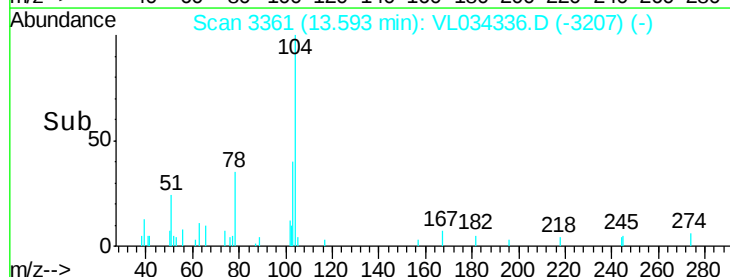
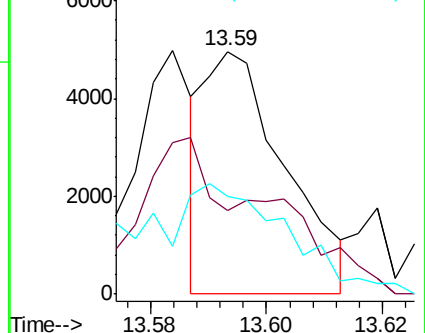
103 87.2 39.0 58.6#

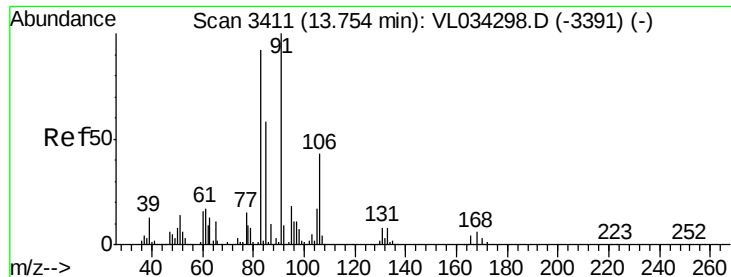


Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V





#63

1,1,2,2-Tetrachloroethane

Concen: 0.041 ppbv

RT: 13.74 min Scan# 3408

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

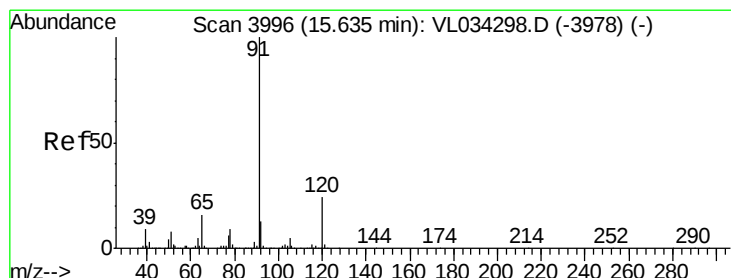
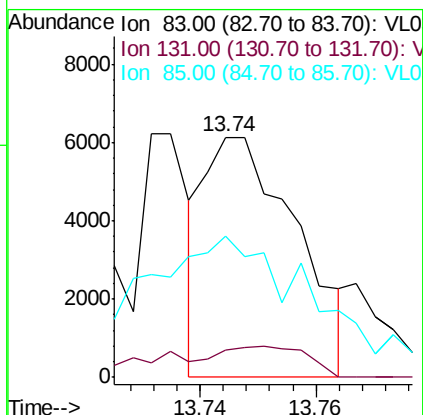
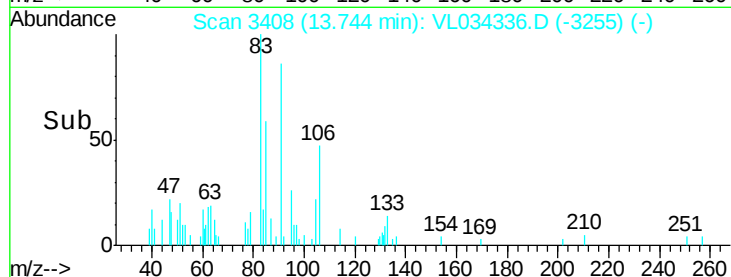
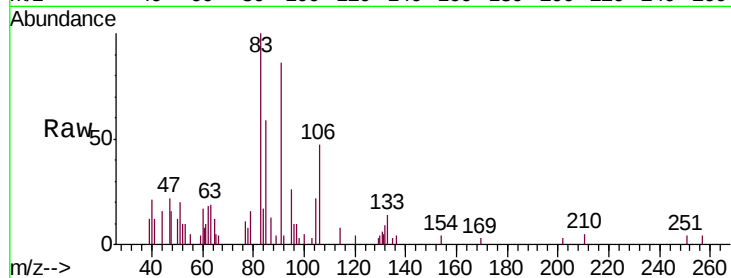
Tgt Ion: 83 Resp: 6794

Ion Ratio Lower Upper

83 100

131 20.7 4.8 14.4#

85 122.3 32.5 97.4#



#64

n-propylbenzene

Concen: 0.038 ppbv

RT: 15.62 min Scan# 3992

Delta R.T. -0.01 min

Lab File: VL034336.D

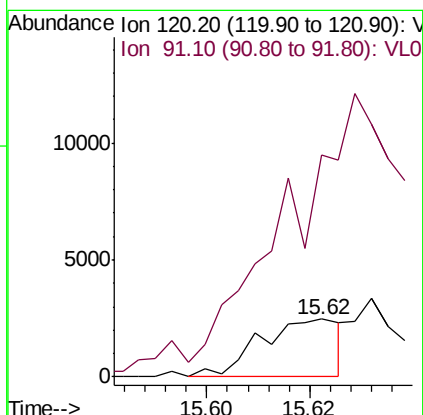
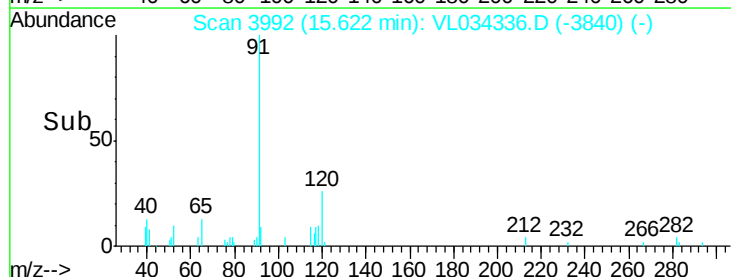
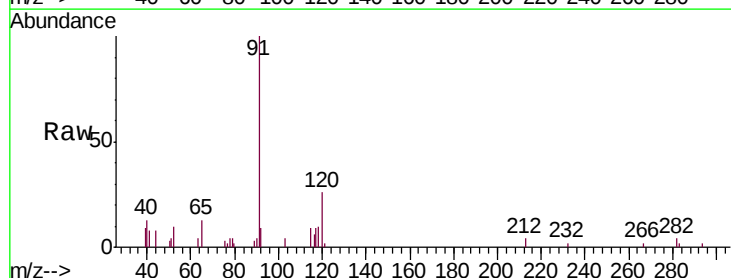
Acq: 18 Oct 2019 9:19

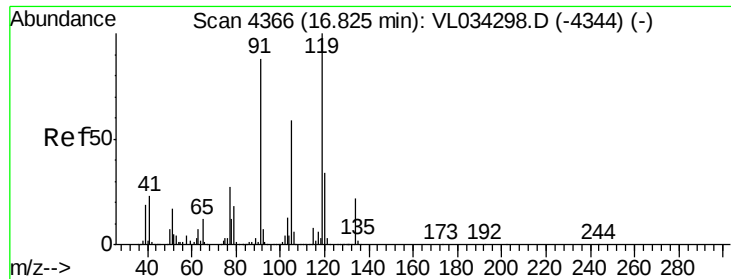
Tgt Ion: 120 Resp: 2682

Ion Ratio Lower Upper

120 100

91 0.0 374.9 562.3#





#65

tert-Butylbenzene

Concen: 0.039 ppbv

RT: 16.82 min Scan# 4363

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampled :

VIBLK

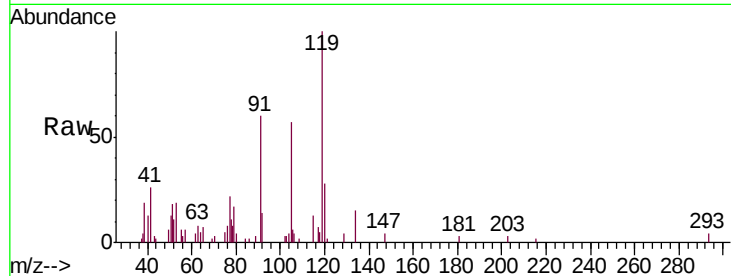
Tgt Ion: 119 Resp: 9486

Ion Ratio Lower Upper

119 100

91 193.7 71.4 107.0#

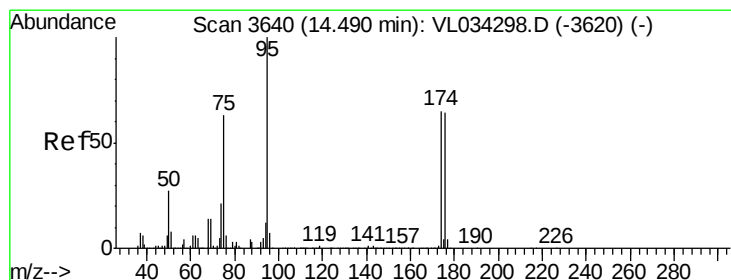
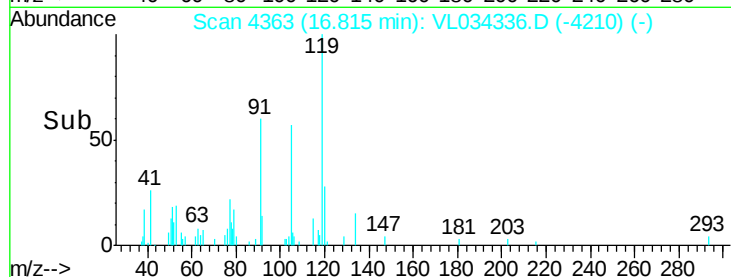
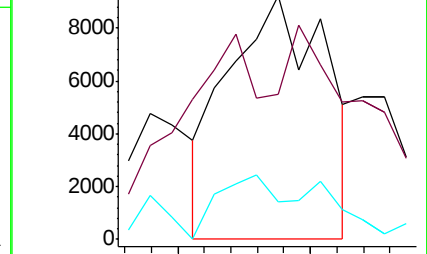
134 37.1 15.9 23.9#



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.631 ppbv

RT: 14.48 min Scan# 3637

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

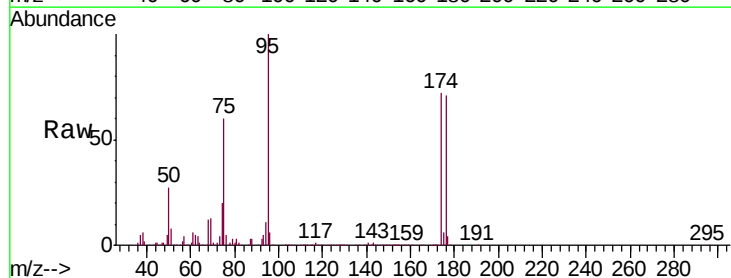
Tgt Ion: 95 Resp: 1408232

Ion Ratio Lower Upper

95 100

174 69.6 52.6 78.8

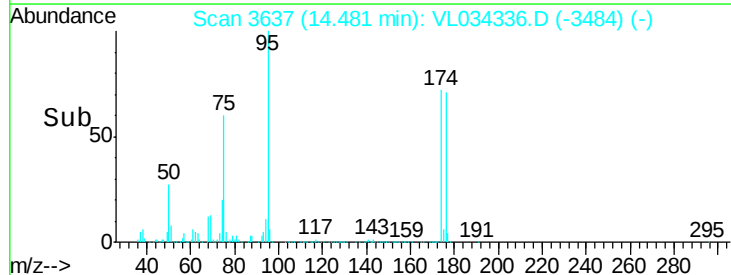
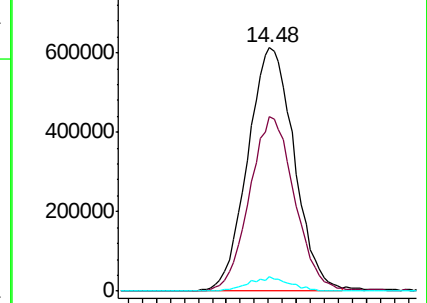
175 5.1 3.8 5.6

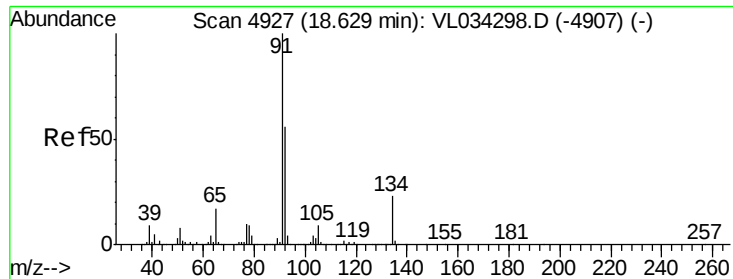


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#70

n-Butylbenzene

Concen: 0.076 ppbv

RT: 18.63 min Scan# 4926

Delta R.T. -0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

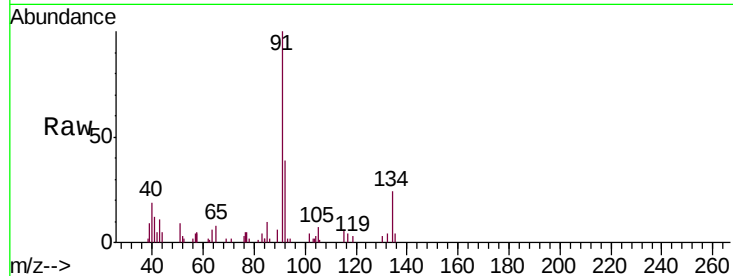
Tgt Ion: 91 Resp: 23216

Ion Ratio Lower Upper

91 100

92 51.0 44.5 66.7

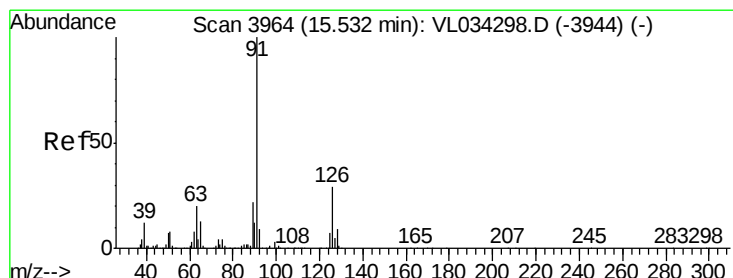
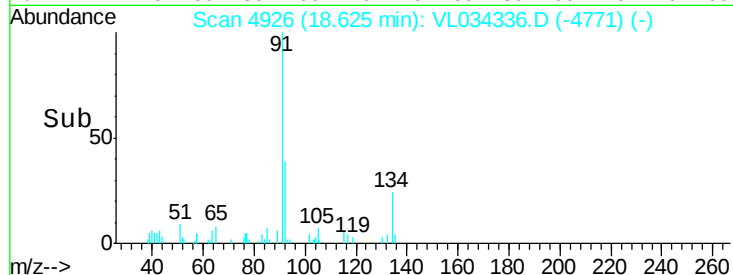
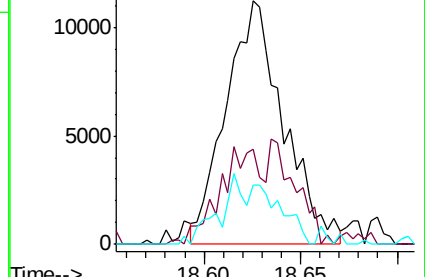
134 27.2 18.2 27.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

Ion 134.20 (133.90 to 134.90): V



#71

2-Chlorotoluene

Concen: 0.042 ppbv

RT: 15.52 min Scan# 3960

Delta R.T. -0.01 min

Lab File: VL034336.D

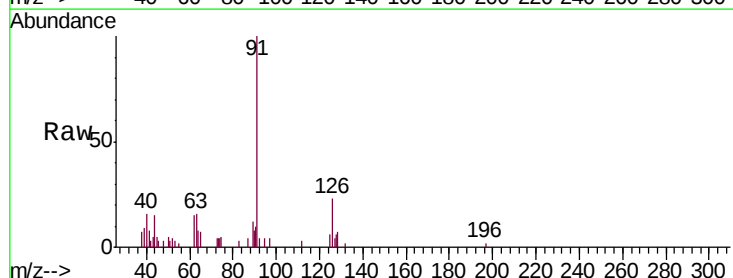
Acq: 18 Oct 2019 9:19

Tgt Ion: 91 Resp: 9025

Ion Ratio Lower Upper

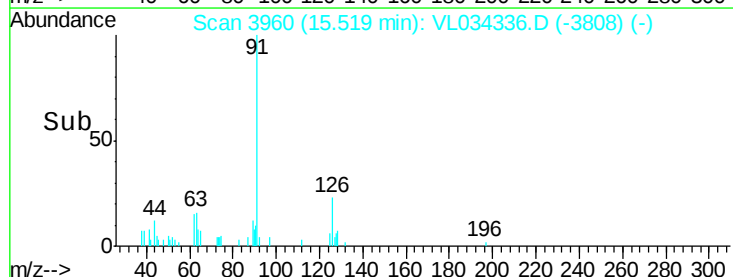
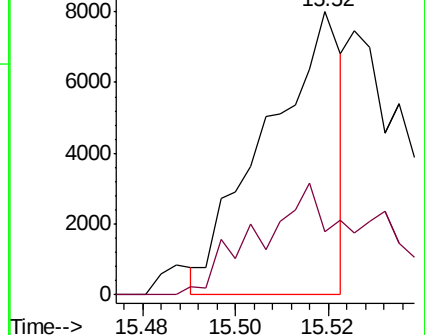
91 100

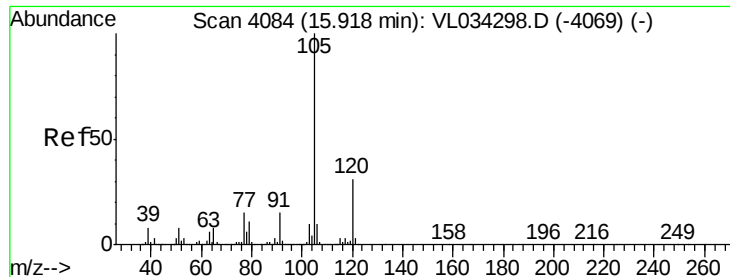
126 63.7 11.9 47.5#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V





#72

4-Ethyltoluene

Concen: 0.043 ppbv

RT: 15.91 min Scan# 4081

Delta R.T. -0.01 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

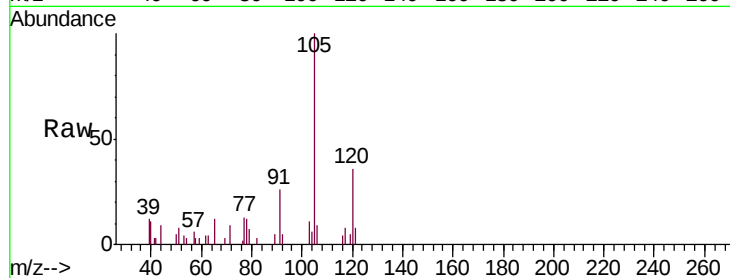
Instrument :

MSVOA_L

ClientSampleId :

VIBLK

Tgt Ion:	105	Resp:	10031
Ion	Ratio	Lower	Upper
105	100		
120	48.8	23.8	35.8#
91	26.7	11.2	16.8#
77	0.0	12.8	19.2#

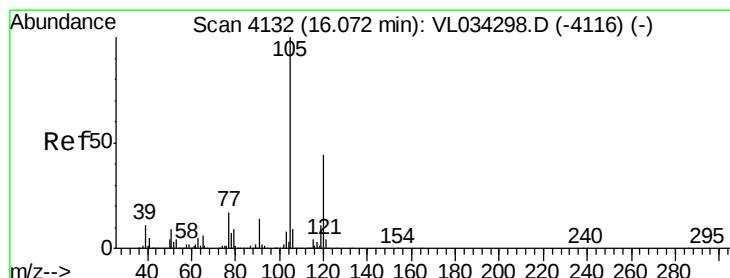
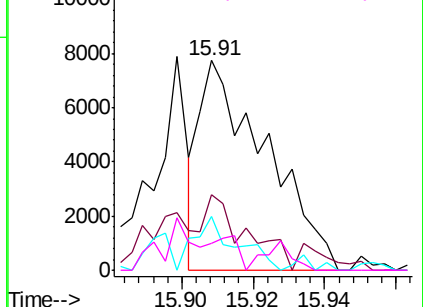
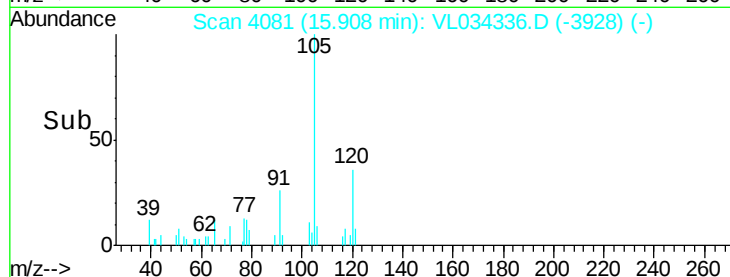


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.031 ppbv

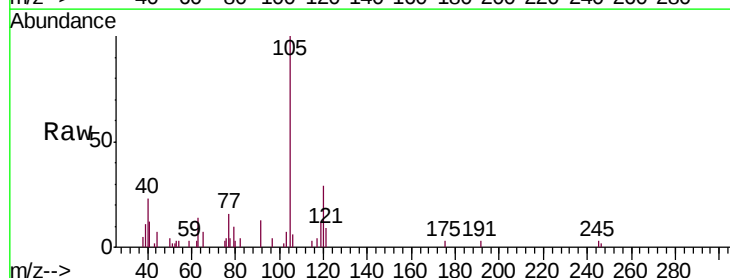
RT: 16.06 min Scan# 4129

Delta R.T. -0.01 min

Lab File: VL034336.D

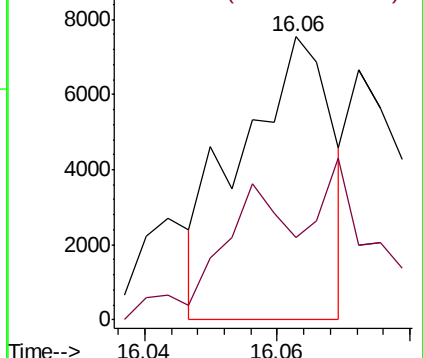
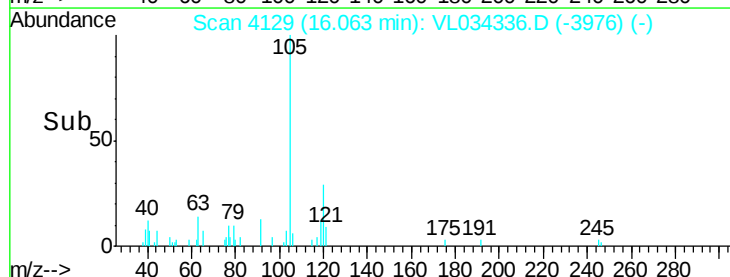
Acq: 18 Oct 2019 9:19

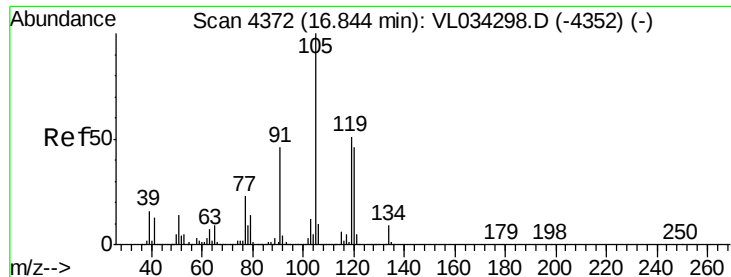
Tgt Ion:	105	Resp:	7264
Ion	Ratio	Lower	Upper
105	100		
120	35.7	35.2	52.8



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

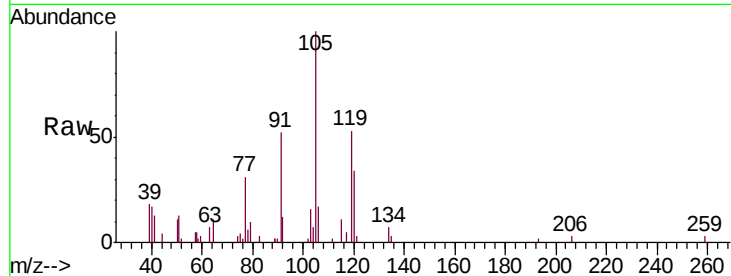




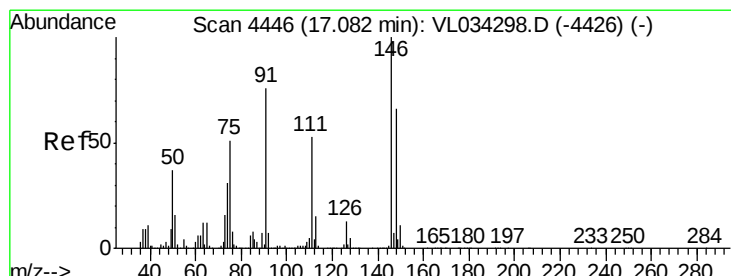
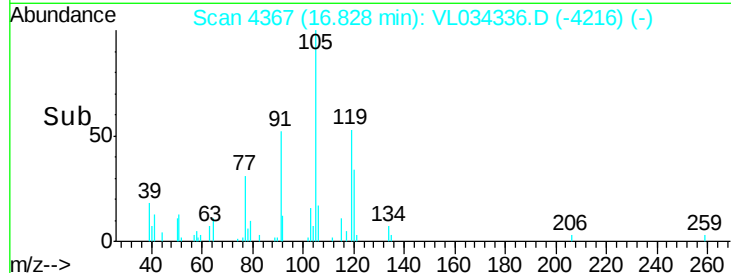
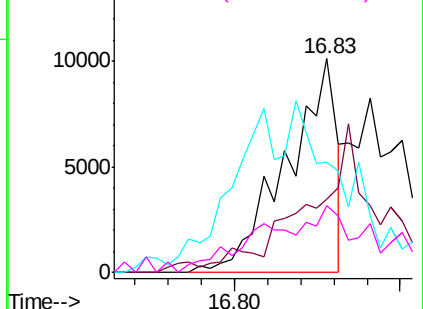
#74
 1,2,4-Trimethylbenzene
 Concen: 0.044 ppbv
 RT: 16.83 min Scan# 4367
 Delta R.T. -0.02 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

Instrument :
 MSVOA_L
 ClientSampleId :
 VIBLK

Tgt Ion:105 Resp: 10538
 Ion Ratio Lower Upper
 105 100
 120 29.5 37.0 55.6#
 91 36.0 38.2 57.2#
 77 27.7 19.0 28.4

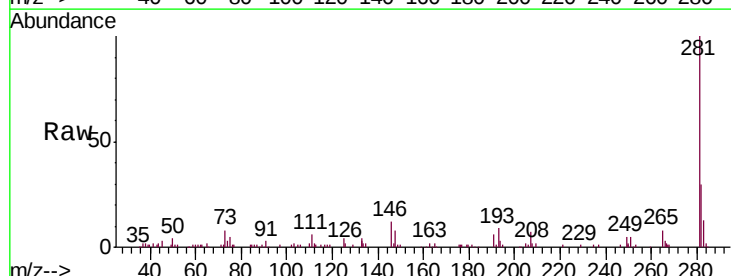


Abundance Ion 105.10 (104.80 to 105.80): V
 Ion 120.20 (119.90 to 120.90): V
 Ion 91.10 (90.80 to 91.80): VL0
 Ion 77.10 (76.80 to 77.80): VL0

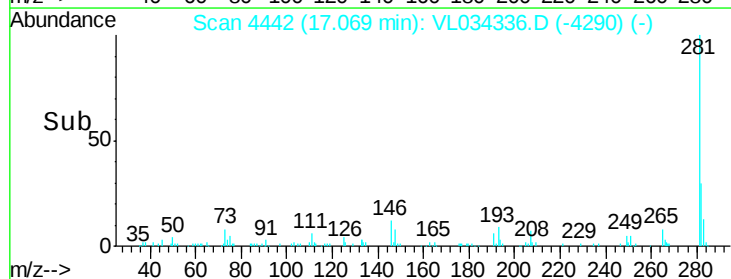
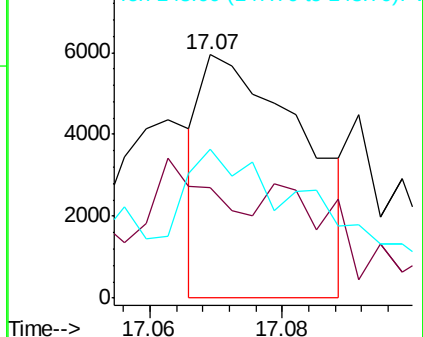


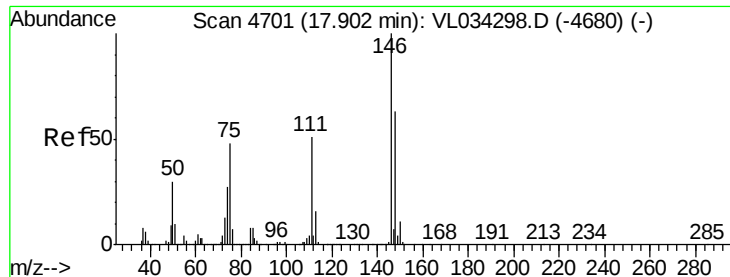
#75
 1,3-Dichlorobenzene
 Concen: 0.043 ppbv
 RT: 17.07 min Scan# 4442
 Delta R.T. -0.01 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

Tgt Ion:146 Resp: 6302
 Ion Ratio Lower Upper
 146 100
 111 0.0 24.5 73.5#
 148 134.3 32.3 96.8#



Abundance Ion 146.00 (145.70 to 146.70): V
 Ion 111.10 (110.80 to 111.80): V
 Ion 148.00 (147.70 to 148.70): V

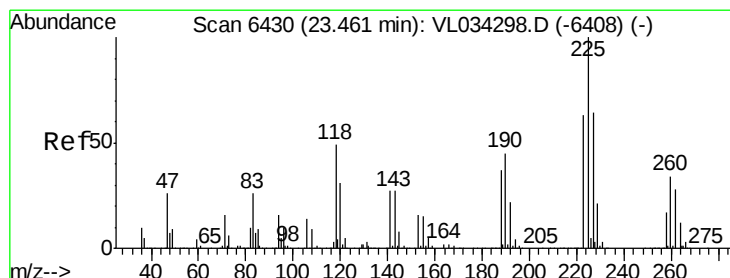
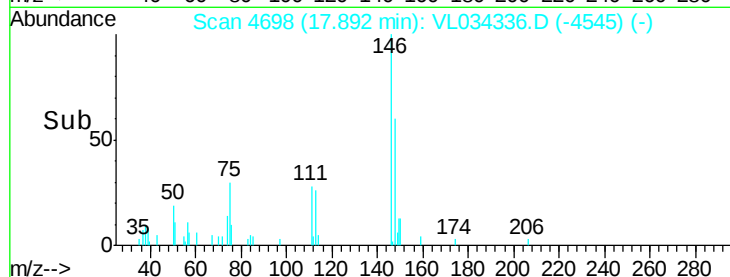
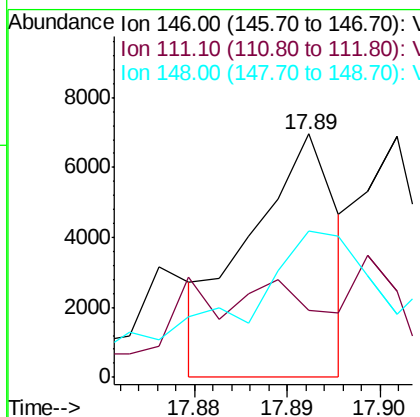
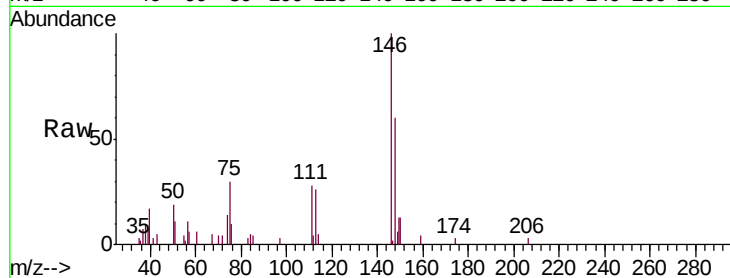




#77
 1,2-Dichlorobenzene
 Concen: 0.032 ppbv
 RT: 17.89 min Scan# 4698
 Delta R.T. -0.01 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

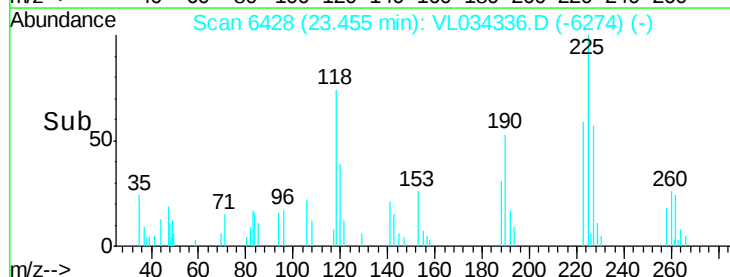
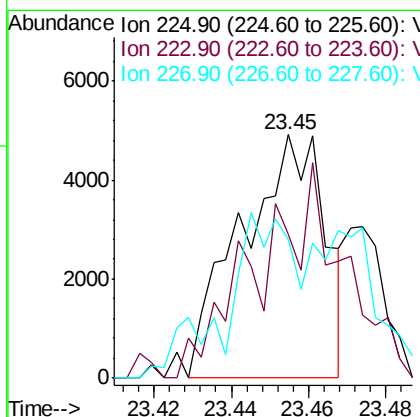
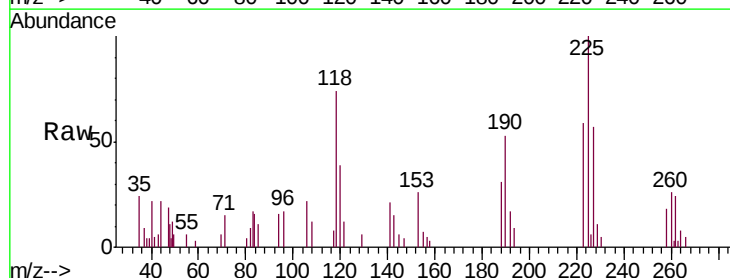
Instrument :
 MSVOA_L
 ClientSampleId :
 VIBLK

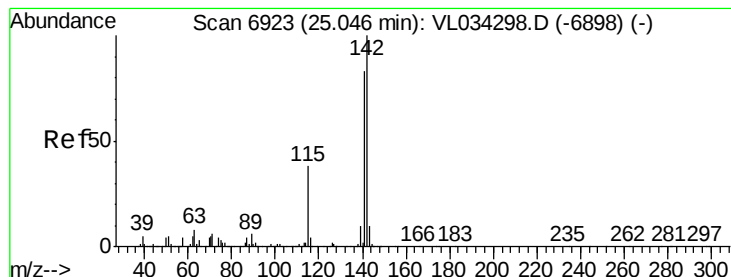
Tgt Ion:146 Resp: 4554
 Ion Ratio Lower Upper
 146 100
 111 0.0 25.1 75.3#
 148 190.5 32.3 96.8#



#78
 Hexachloro-1,3-Butadiene
 Concen: 0.063 ppbv
 RT: 23.45 min Scan# 6428
 Delta R.T. -0.01 min
 Lab File: VL034336.D
 Acq: 18 Oct 2019 9:19

Tgt Ion:225 Resp: 7405
 Ion Ratio Lower Upper
 225 100
 223 92.6 50.8 76.2#
 227 103.6 51.5 77.3#





#80

Naphthalene, 2-methyl-

Concen: 0.115 ppbv

RT: 25.05 min Scan# 6923

Delta R.T. 0.00 min

Lab File: VL034336.D

Acq: 18 Oct 2019 9:19

Instrument :

MSVOA_L

ClientSampleId :

VIBLK

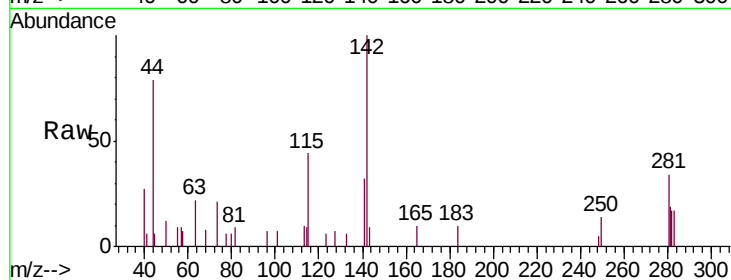
Tgt Ion:142 Resp: 5892

Ion Ratio Lower Upper

142 100

141 81.6 65.7 98.5

115 35.2 30.9 46.3



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

