

Data File : VL034827.D
Acq On : 6 Mar 2020 23:07
Operator : SY/AP
Sample : L1698-04DL2 1200X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS-4-4DL2

Quant Time: Mar 07 03:19:30 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL030420AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Mar 04 06:36:39 2020
QLast Update : Wed Mar 04 06:36:39 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	895949	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.19	114	2111958	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.11	117	2084044	10.00	ppbv	-0.03

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.45 95 1660926 9.56 ppbv -0.03
Spiked Amount 10.000 Range 65 - 135 Recovery = 95.60%

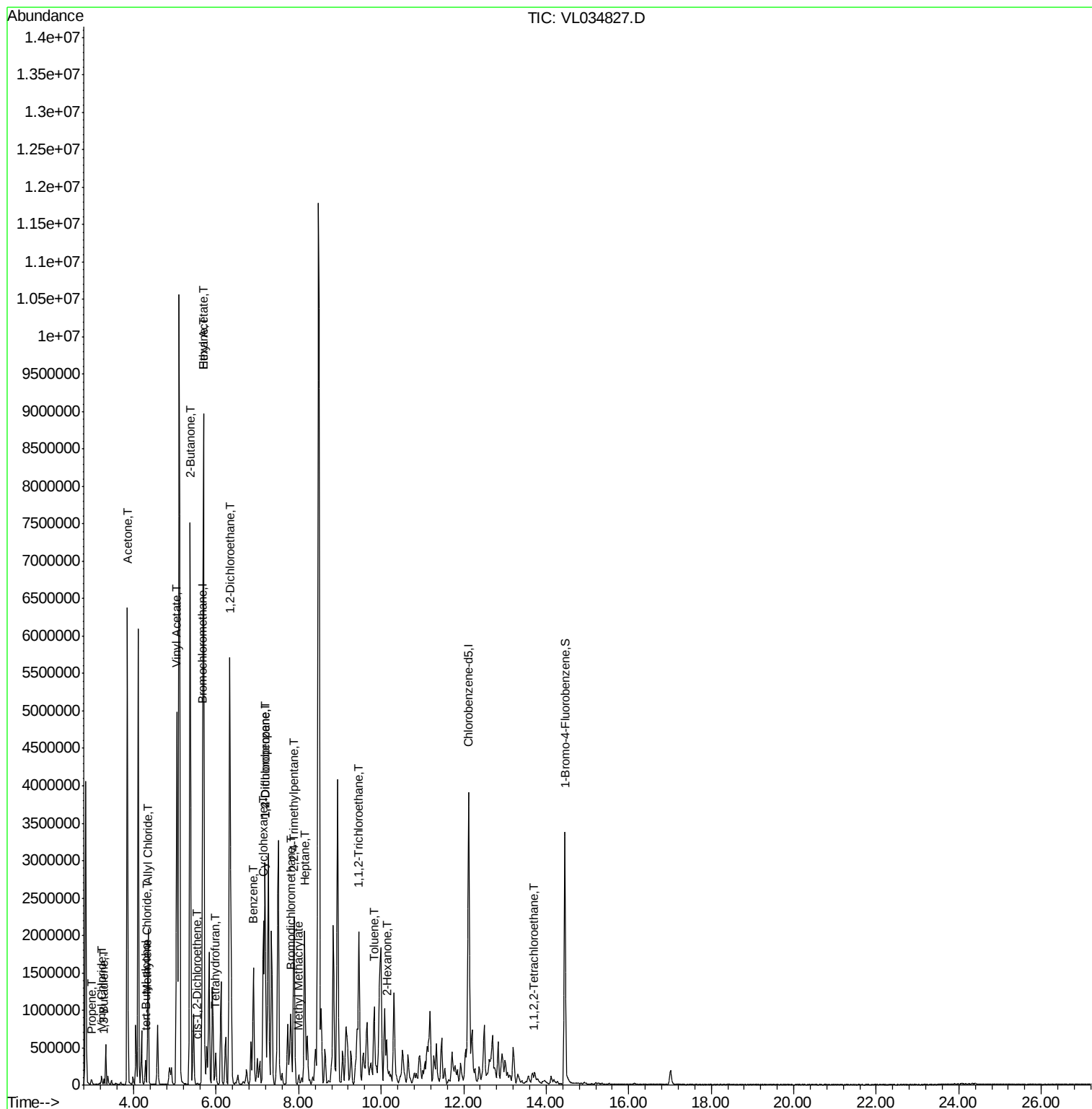
Target Compounds					Qvalue
5) Vinyl Chloride	3.22	62	96838	1.667 ppbv	96
9) Propene	2.97	41	29514	0.735 ppbv	84
10) Heptane	8.14	43	970944	9.509 ppbv	97
15) Acetone	3.85	43	2153813	20.075 ppbv #	55
16) 1,3-Butadiene	3.27	39	21014	0.433 ppbv #	15
17) tert-Butyl alcohol	4.31	59	2644	0.031 ppbv #	71
20) Methylene Chloride	4.32	84	5244	0.137 ppbv #	61
21) Allyl Chloride	4.35	41	344508	5.071 ppbv #	60
23) Vinyl Acetate	5.05	43	2018176	14.028 ppbv #	1
25) Ethyl Acetate	5.69	43	2761848	14.896 ppbv #	76
26) Hexane	5.69	57	3806313	46.994 ppbv #	42
30) Cyclohexane	7.14	84	771242	12.446 ppbv	99
31) cis-1,2-Dichloroethene	5.55	61	5802	0.070 ppbv #	91
34) 2-Butanone	5.37	43	1172618	8.534 ppbv #	57
36) Benzene	6.90	78	1096360	6.075 ppbv	97
37) 1,2-Dichloroethane	6.32	62	8065	0.065 ppbv #	84
39) 1,2-Dichloropropane	7.19	63	536738	7.370 ppbv #	22
41) Tetrahydrofuran	5.99	42	27810	0.397 ppbv #	36
42) Bromodichloromethane	7.81	83	160682	1.030 ppbv #	26
43) Methyl Methacrylate	8.01	69	12389	0.162 ppbv #	1
44) 2,2,4-Trimethylpentane	7.89	57	1471962	4.667 ppbv #	66
47) 1,1,2-Trichloroethane	9.46	97	65628	0.854 ppbv #	1
51) 2-Hexanone	10.14	43	117641	0.762 ppbv #	29
53) Toluene	9.83	91	302750	1.585 ppbv	98
63) 1,1,2,2-Tetrachloroethane	13.70	83	9371	0.053 ppbv #	24

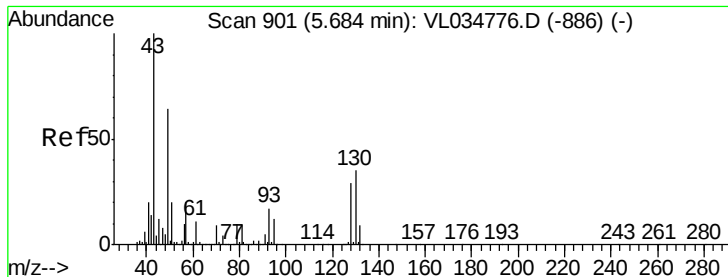
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 894

Delta R.T. -0.02 min

Lab File: VL034827.D

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Instrument :

MSVOA_L

ClientSampleId :

SS-4-4DL2

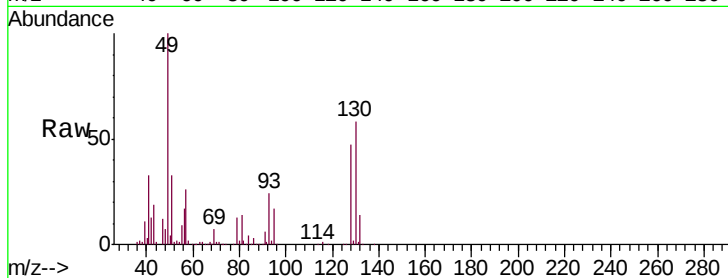
Tgt Ion: 49 Resp: 895949

Ion Ratio Lower Upper

49 100

128 46.8 21.6 64.6

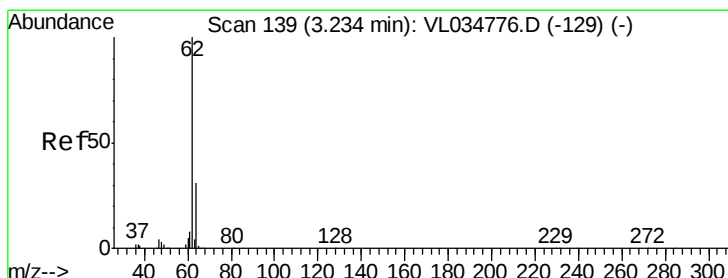
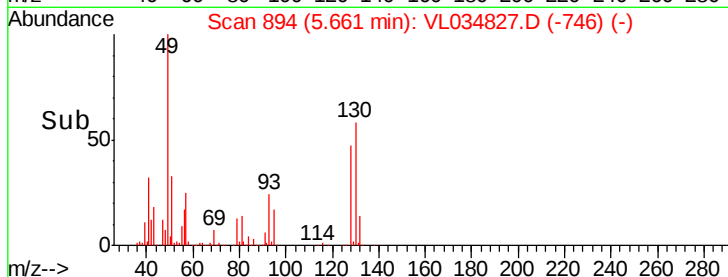
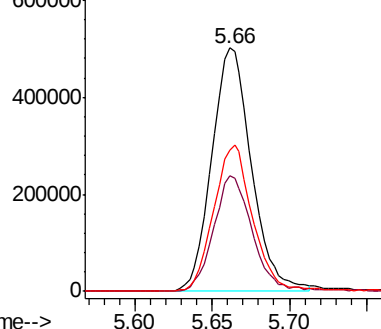
130 60.2 27.4 82.2



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



#5

Vinyl Chloride

Concen: 1.667 ppbv

RT: 3.22 min Scan# 136

Delta R.T. -0.01 min

Lab File: VL034827.D

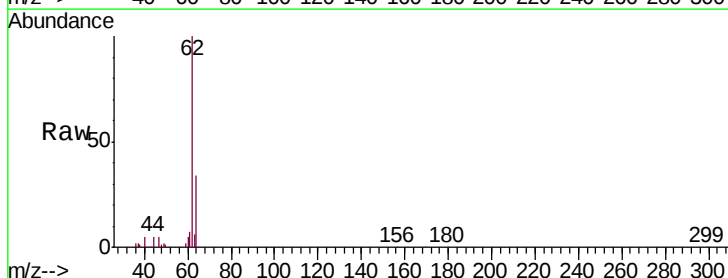
Acq: 6 Mar 2020 23:07

Tgt Ion: 62 Resp: 96838

Ion Ratio Lower Upper

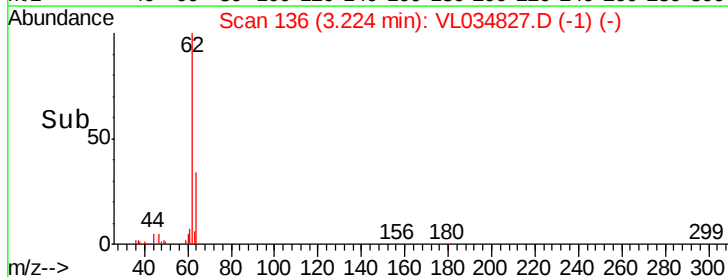
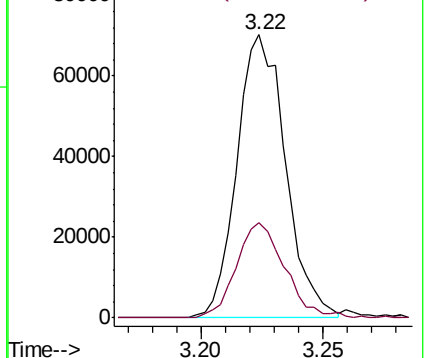
62 100

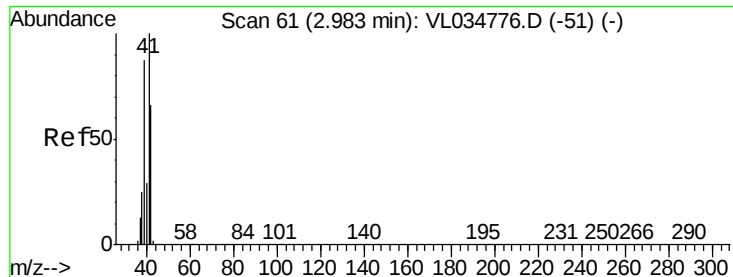
64 33.7 25.1 37.7



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0





#9

Propene

Concen: 0.735 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.01 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Instrument :

MSVOA_L

ClientSampleId :

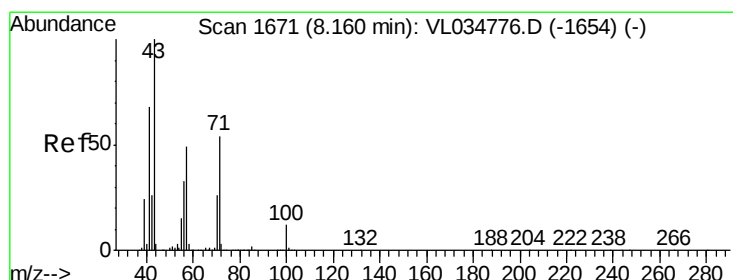
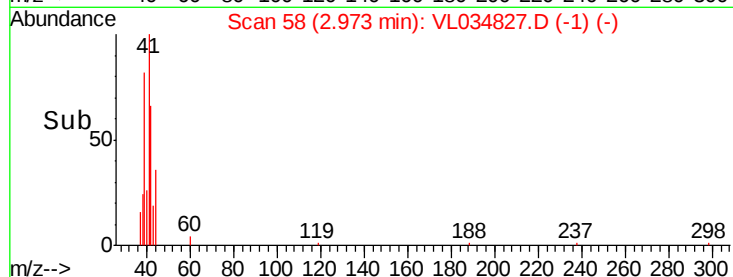
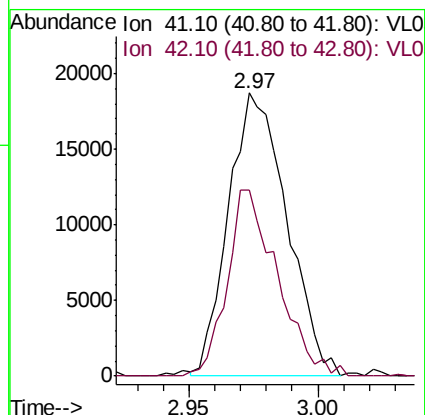
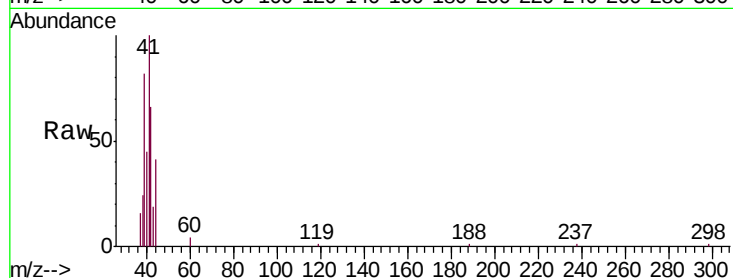
SS-4-4DL2

Tgt Ion: 41 Resp: 29514

Ion Ratio Lower Upper

41 100

42 56.4 55.6 83.4



#10

Heptane

Concen: 9.509 ppbv

RT: 8.14 min Scan# 1666

Delta R.T. -0.02 min

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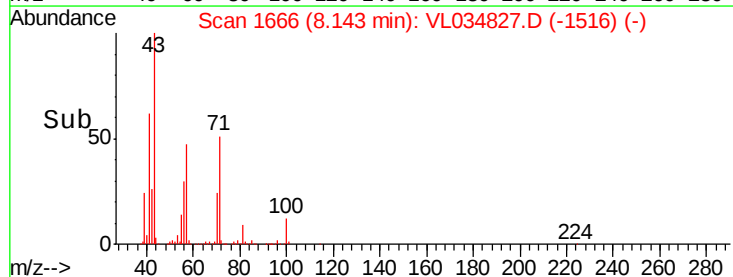
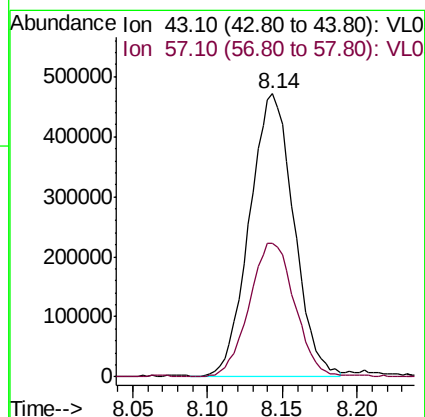
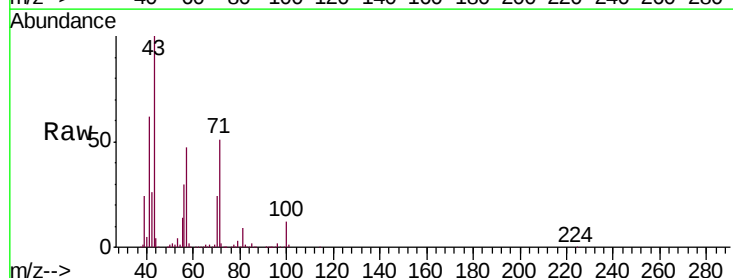
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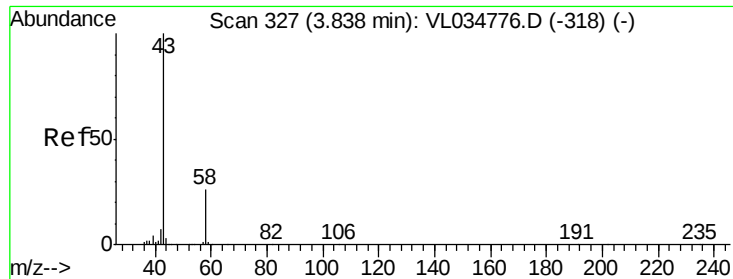
Tgt Ion: 43 Resp: 970944

Ion Ratio Lower Upper

43 100

57 48.4 40.5 60.7

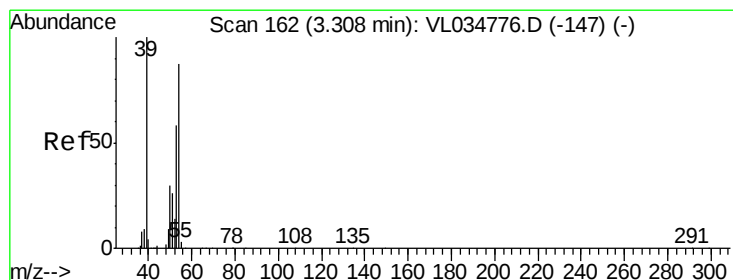
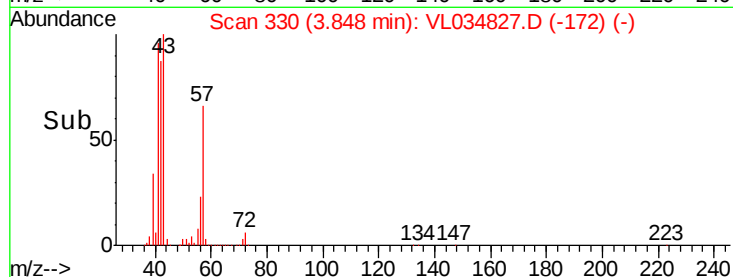
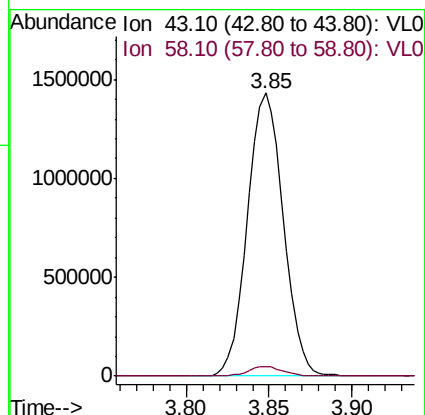
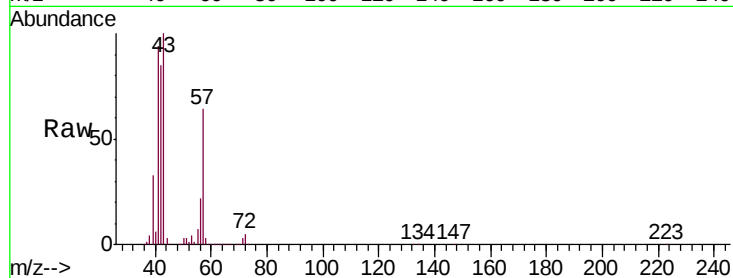




#15
Acetone
Concen: 20.075 ppbv
RT: 3.85 min Scan# 330
Delta R.T. 0.01 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

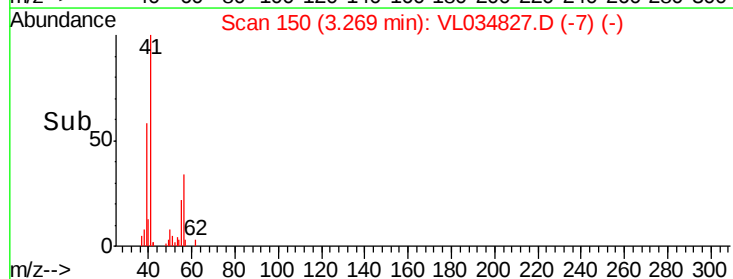
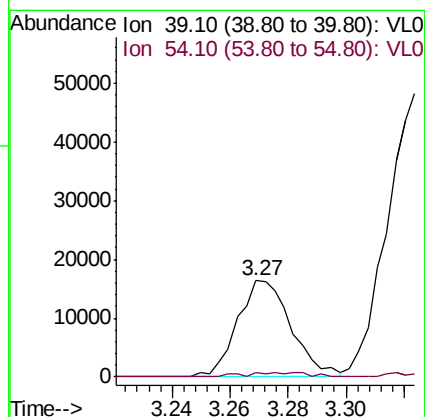
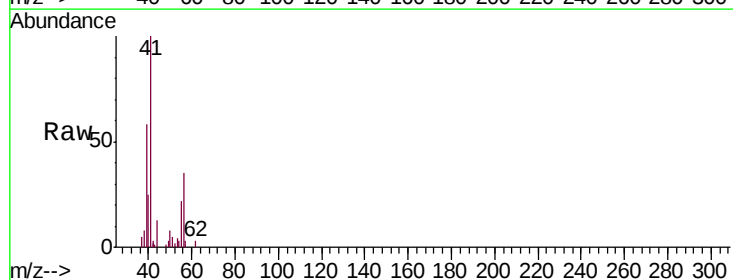
Instrument :
MSVOA_L
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SS-4-4DL2

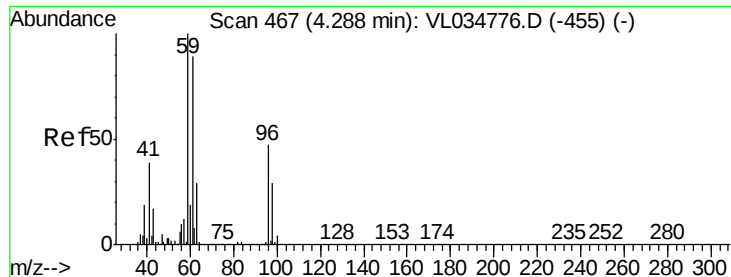
Tgt Ion: 43 Resp: 2153813
Ion Ratio Lower Upper
43 100
58 3.4 21.0 31.6#



#16
1,3-Butadiene
Concen: 0.433 ppbv
RT: 3.27 min Scan# 150
Delta R.T. -0.04 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

Tgt Ion: 39 Resp: 21014
Ion Ratio Lower Upper
39 100
54 5.0 64.2 96.2#

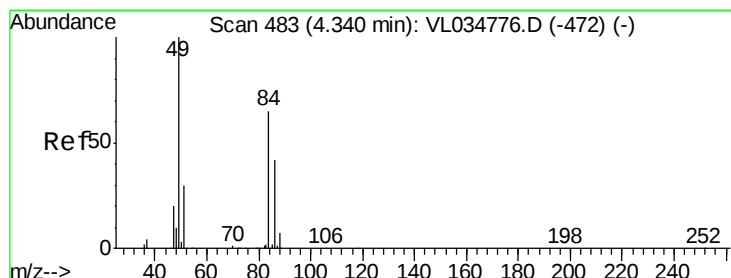
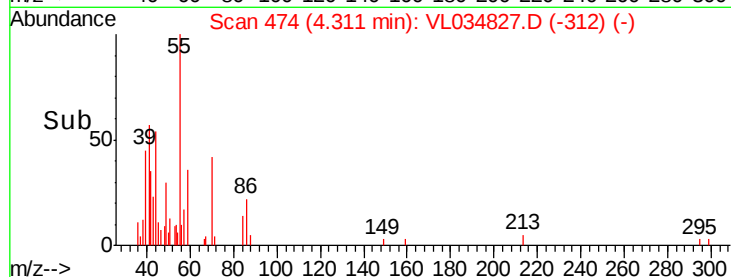
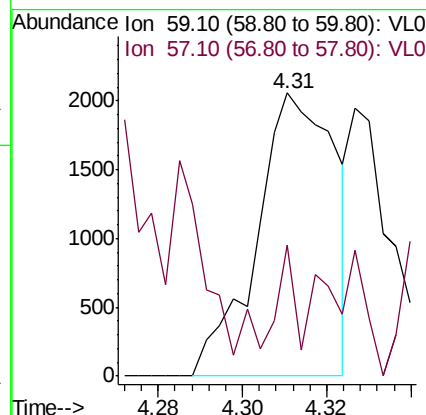
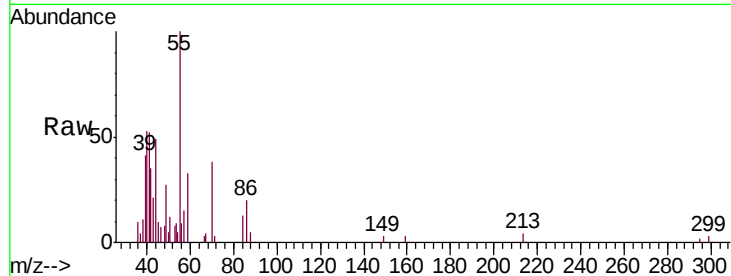




#17
tert-Butyl alcohol
Concen: 0.031 ppbv
RT: 4.31 min Scan# 474
Delta R.T. 0.02 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

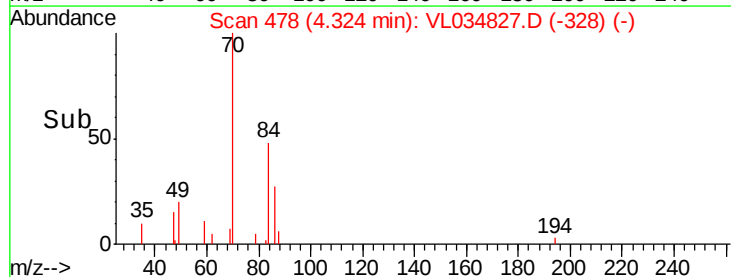
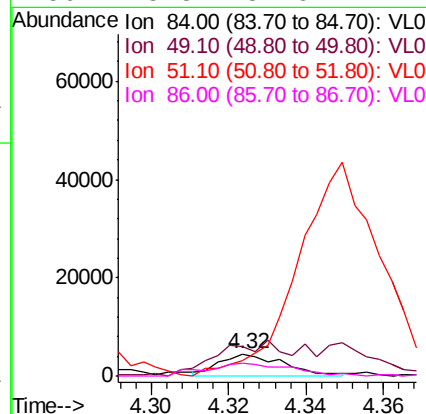
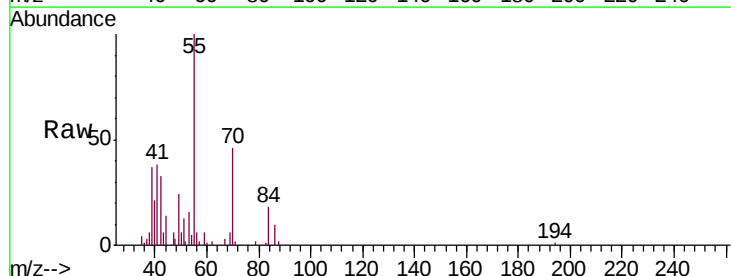
Instrument :
MSVOA_L
ClientSampleId :
SS-4-4DL2

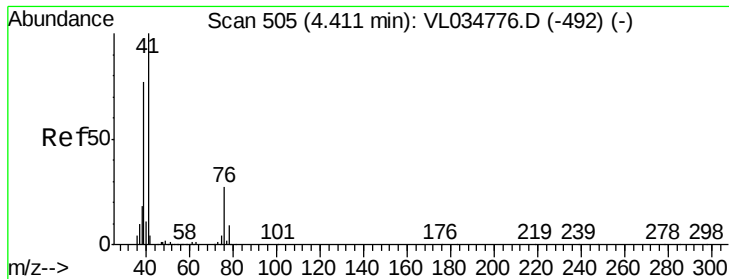
Tgt Ion: 59 Resp: 2644
Ion Ratio Lower Upper
59 100
57 0.0 8.6 13.0#



#20
Methylene Chloride
Concen: 0.137 ppbv
RT: 4.32 min Scan# 478
Delta R.T. -0.02 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

Tgt Ion: 84 Resp: 5244
Ion Ratio Lower Upper
84 100
49 105.6 123.2 184.8#
51 91.6 37.4 56.2#
86 48.8 51.6 77.4#

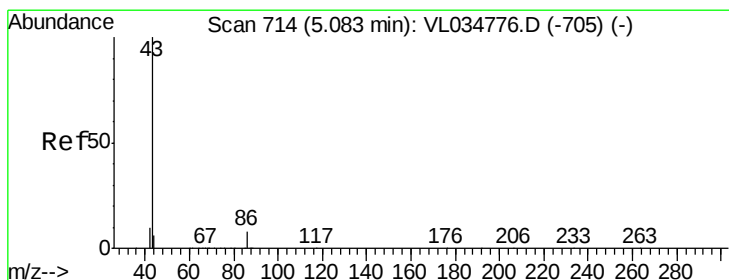
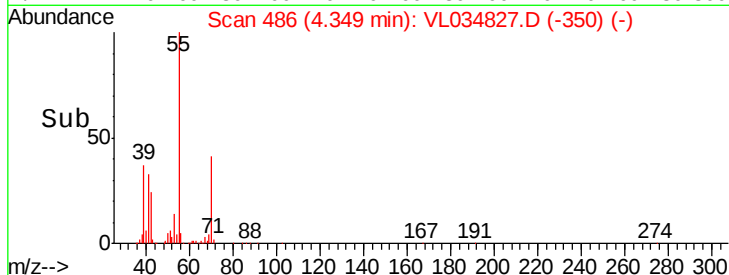
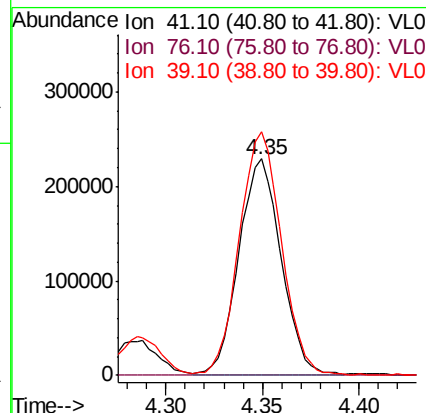
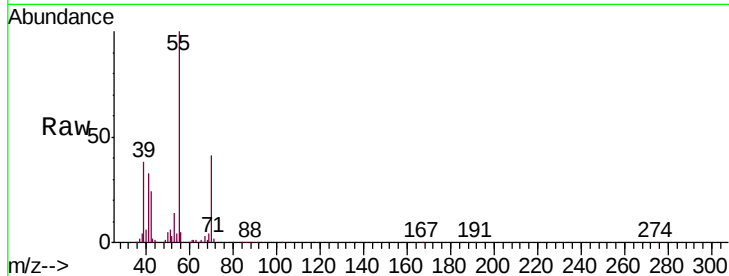




#21
 Allyl Chloride
 Concen: 5.071 ppbv
 RT: 4.35 min Scan# 486
 Delta R.T. -0.06 min
 Lab File: VL034827.D
 Acq: 6 Mar 2020 23:07

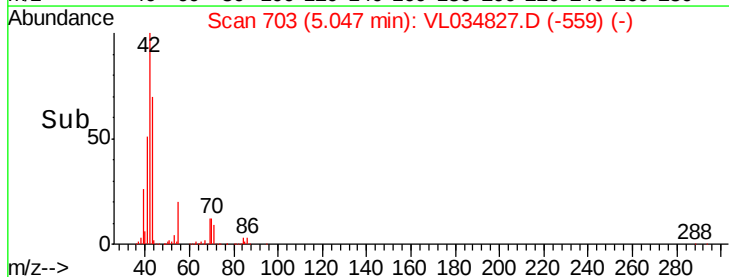
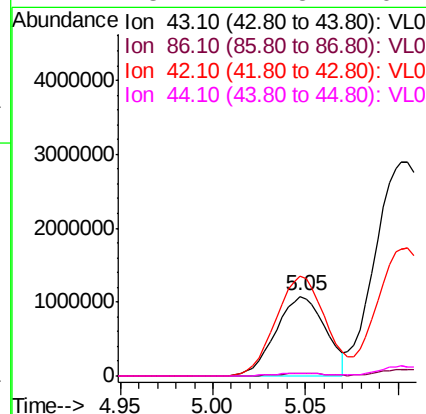
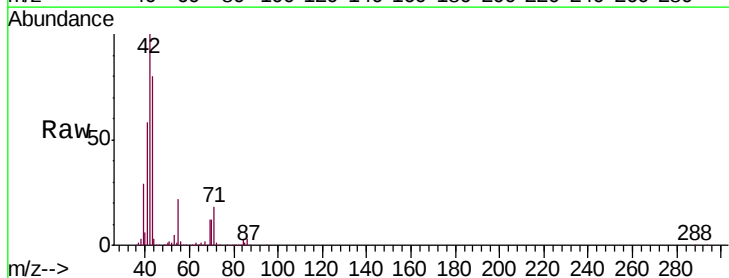
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 MSVOA_L
 ClientSampleId :
 SS-4-4DL2

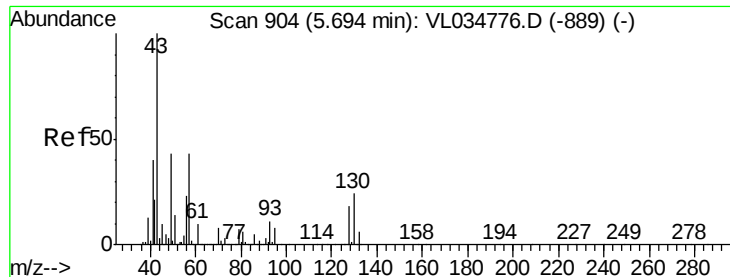
Tgt Ion: 41 Resp: 344508
 Ion Ratio Lower Upper
 41 100
 76 0.0 22.5 33.7#
 39 113.0 65.0 97.6#



#23
 Vinyl Acetate
 Concen: 14.028 ppbv
 RT: 5.05 min Scan# 703
 Delta R.T. -0.04 min
 Lab File: VL034827.D
 Acq: 6 Mar 2020 23:07

Tgt Ion: 43 Resp: 2018176
 Ion Ratio Lower Upper
 43 100
 86 3.3 5.9 8.9#
 42 124.9 8.2 12.2#
 44 3.4 4.5 6.7#

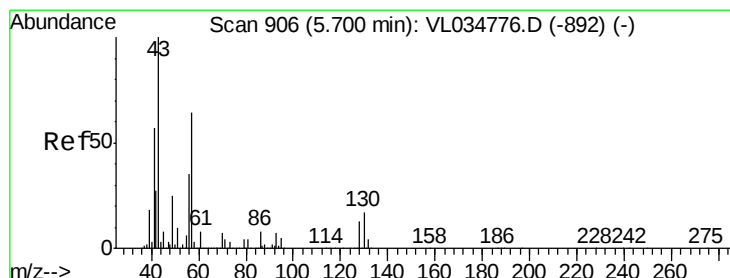
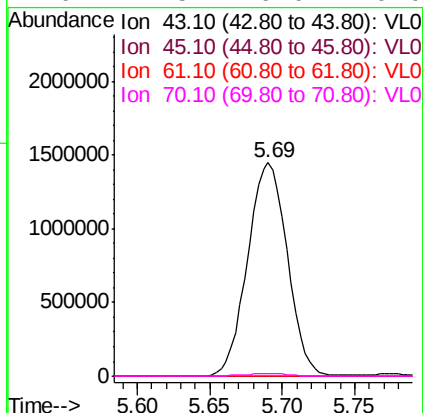
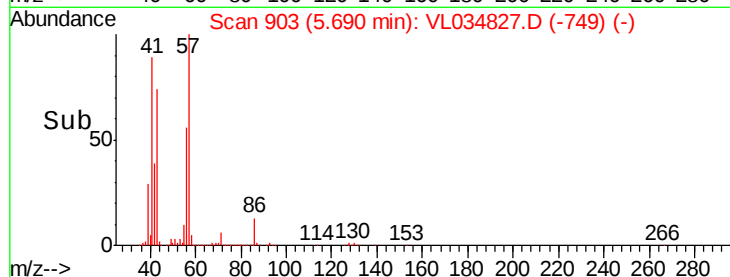
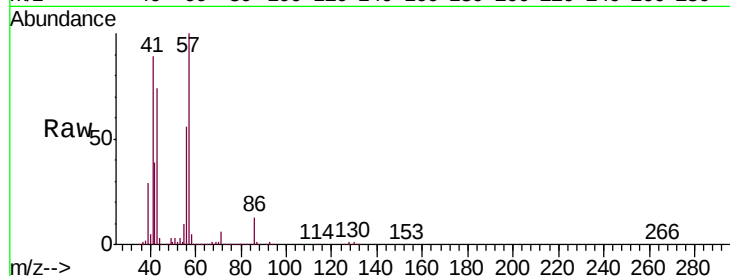




#25
Ethyl Acetate
Concen: 14.896 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.00 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

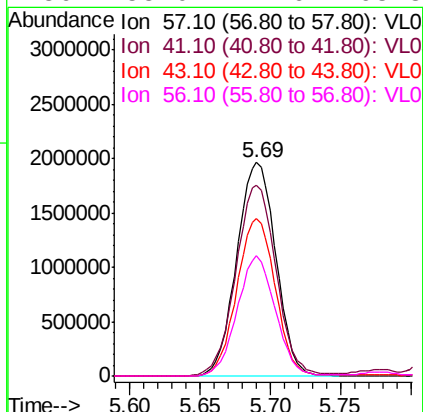
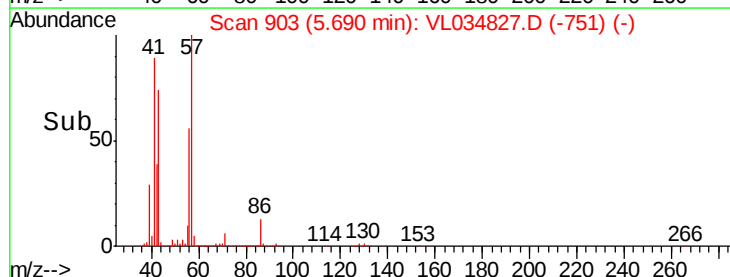
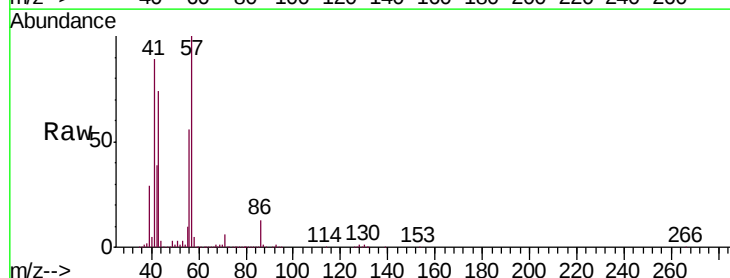
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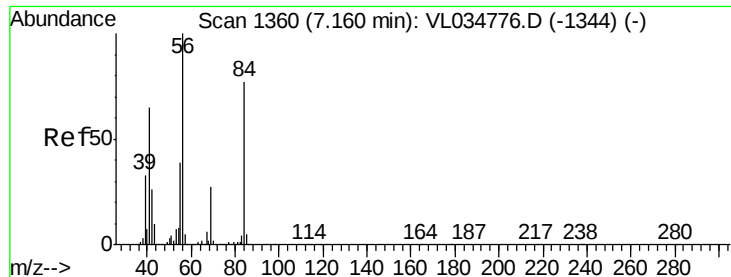
Tgt Ion: 43 Resp: 2761848
Ion Ratio Lower Upper
43 100
45 0.1 8.2 12.4#
61 0.1 7.5 11.3#
70 1.5 6.0 9.0#



#26
Hexane
Concen: 46.994 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

Tgt Ion: 57 Resp: 3806313
Ion Ratio Lower Upper
57 100
41 92.3 72.0 108.0
43 72.7 179.1 268.7#
56 55.0 42.6 63.8

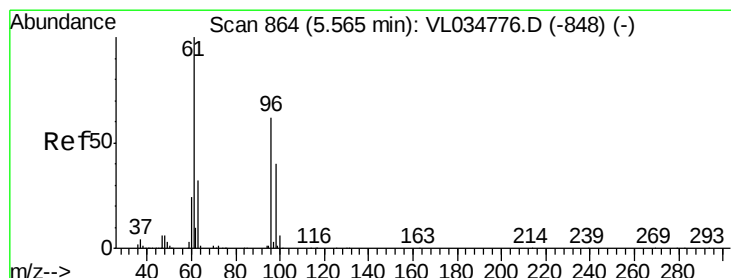
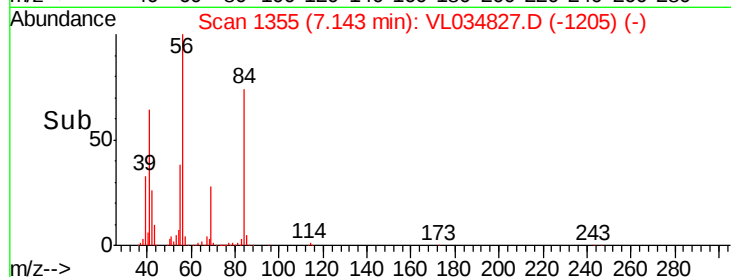
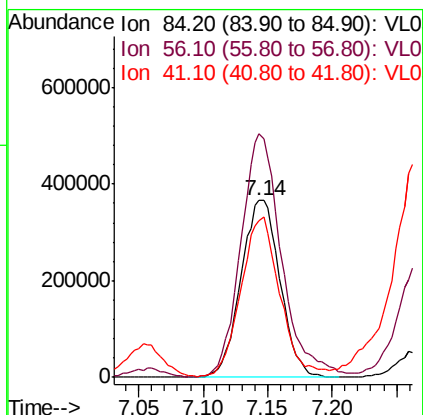
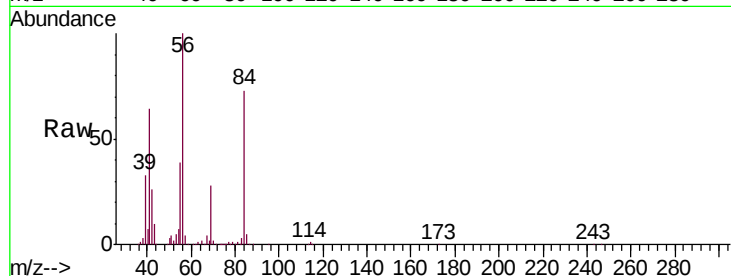




#30
Cyclohexane
Concen: 12.446 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. -0.02 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

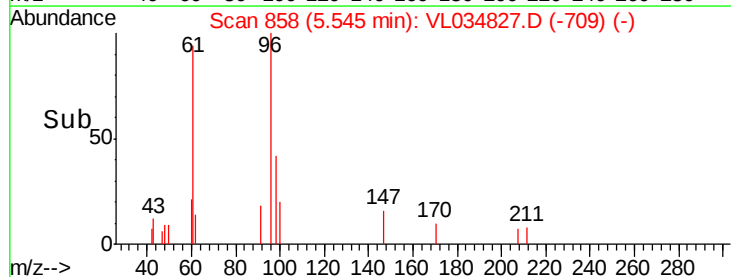
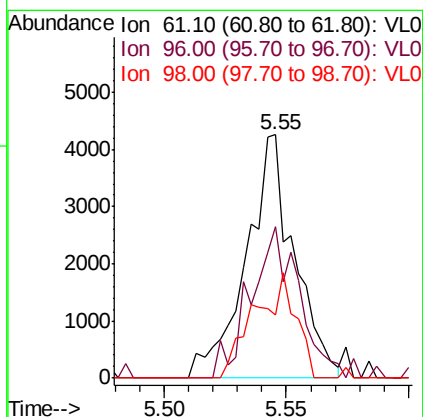
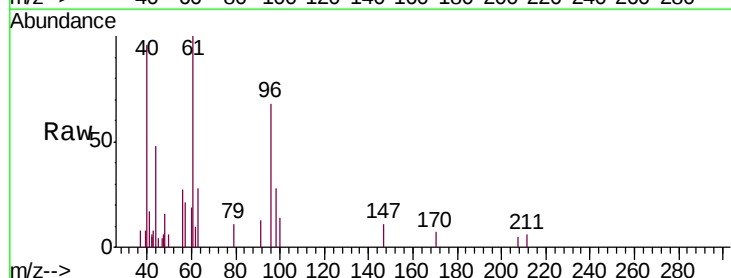
Instrument :
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SS-4-4DL2

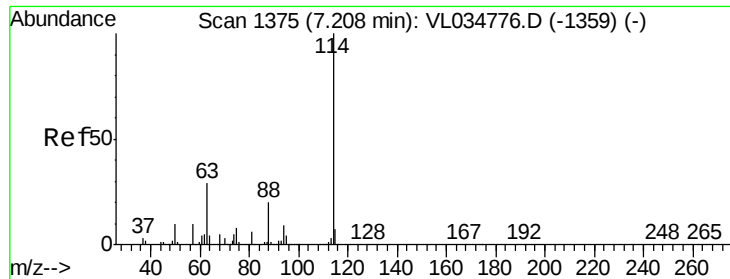
Tgt Ion: 84 Resp: 771242
Ion Ratio Lower Upper
84 100
56 142.1 113.2 169.8
41 90.0 70.2 105.4



#31
cis-1,2-Dichloroethene
Concen: 0.070 ppbv
RT: 5.55 min Scan# 858
Delta R.T. -0.02 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

Tgt Ion: 61 Resp: 5802
Ion Ratio Lower Upper
61 100
96 62.1 49.7 74.5
98 26.0 31.9 47.9#

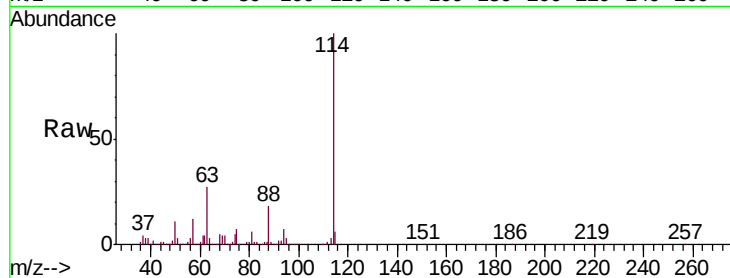




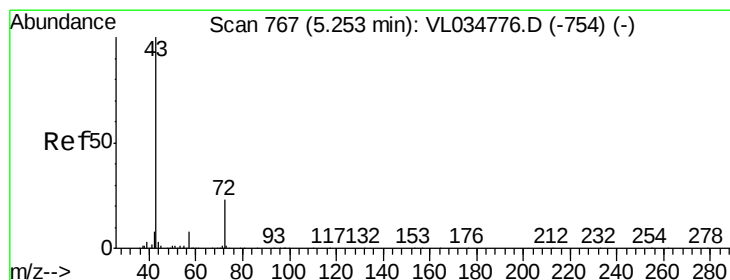
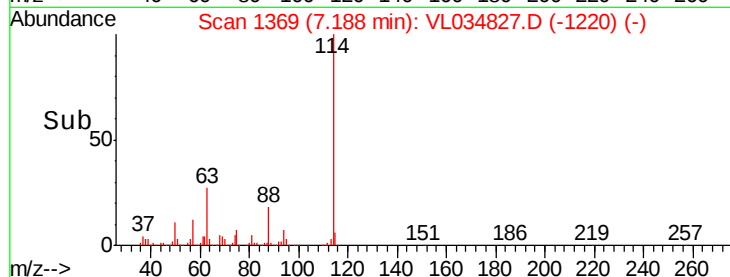
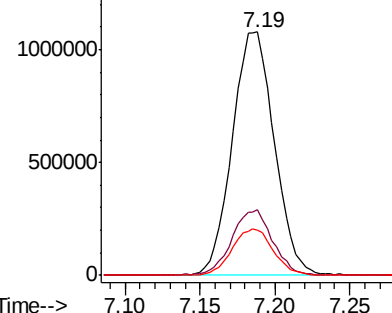
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1369
 Delta R.T. -0.02 min
 Lab File: VL034827.D
 Acq: 6 Mar 2020 23:07

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-4-4DL2

Tgt Ion:114 Resp: 2111958
 Ion Ratio Lower Upper
 114 100
 63 26.3 23.6 35.4
 88 18.8 15.8 23.8

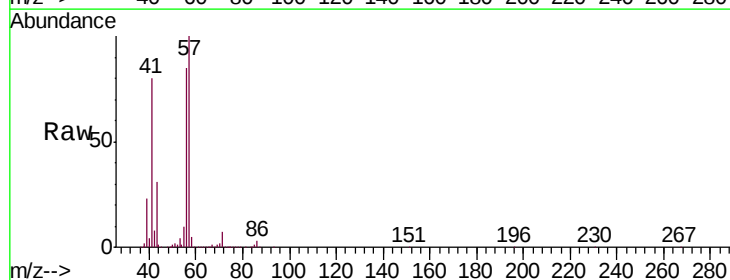


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

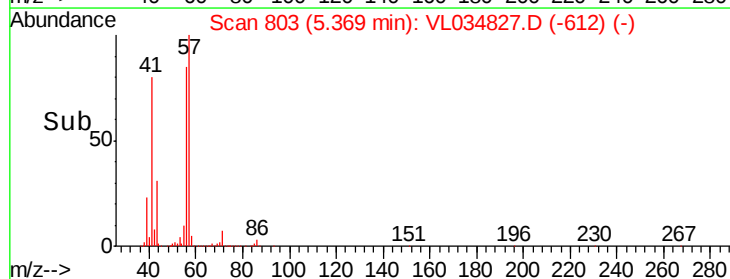
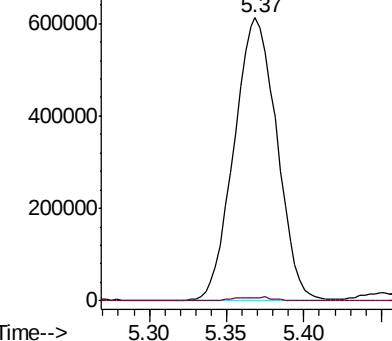


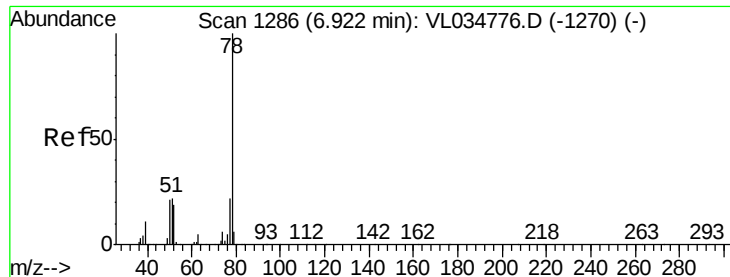
#34
 2-Butanone
 Concen: 8.534 ppbv
 RT: 5.37 min Scan# 803
 Delta R.T. 0.12 min
 Lab File: VL034827.D
 Acq: 6 Mar 2020 23:07

Tgt Ion: 43 Resp: 1172618
 Ion Ratio Lower Upper
 43 100
 72 1.3 17.5 26.3#



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





#36

Benzene

Concen: 6.075 ppbv

RT: 6.90 min Scan# 1279

Delta R.T. -0.02 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Instrument :

MSVOA_L

ClientSampleId :

SS-4-4DL2

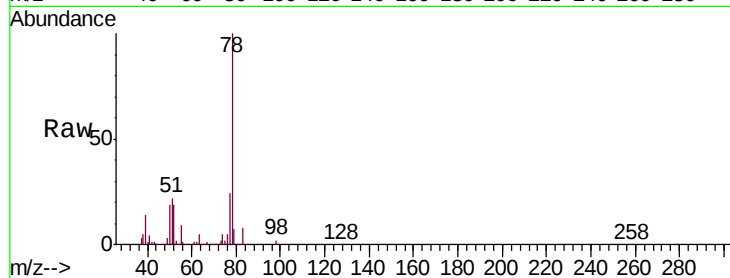
Tgt Ion: 78 Resp: 1096360

Ion Ratio Lower Upper

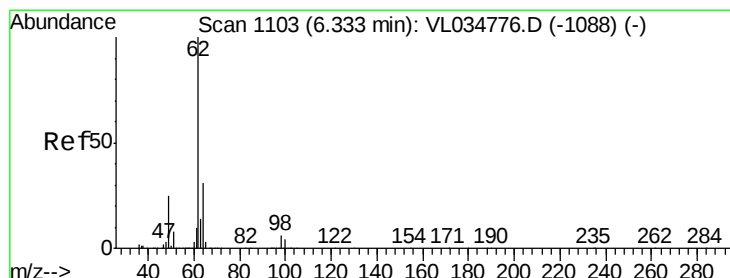
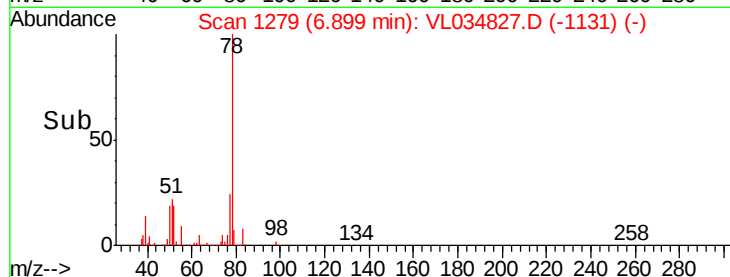
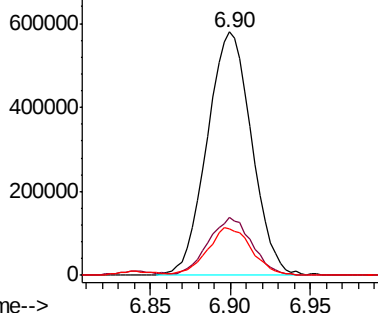
78 100

77 23.5 18.0 27.0

50 19.0 16.9 25.3



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: 0.065 ppbv

RT: 6.32 min Scan# 1100

Delta R.T. -0.01 min

Lab File: VL034827.D

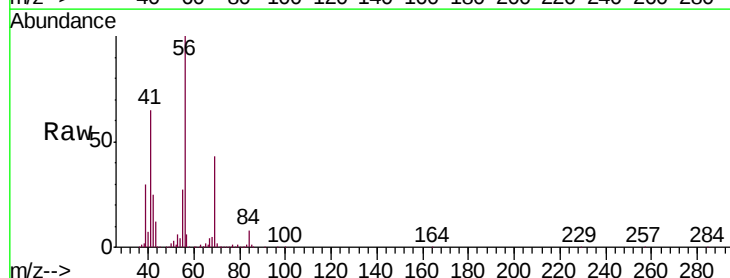
Acq: 6 Mar 2020 23:07

Tgt Ion: 62 Resp: 8065

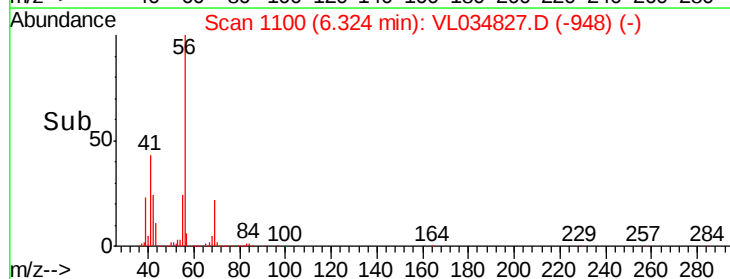
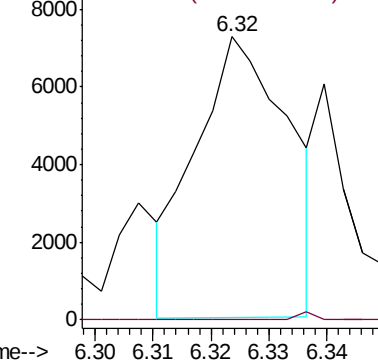
Ion Ratio Lower Upper

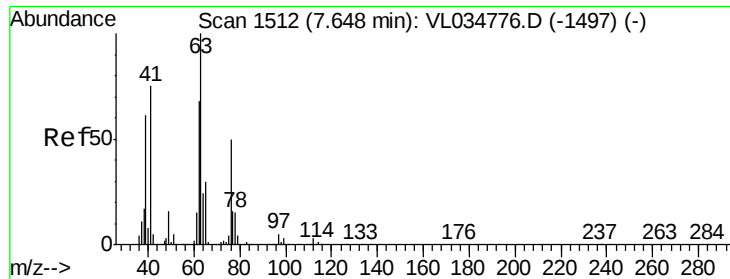
62 100

98 0.0 4.4 6.6#



Abundance Ion 62.10 (61.80 to 62.80): VL0
Ion 98.00 (97.70 to 98.70): VL0





#39

1,2-Dichloropropane

Concen: 7.370 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. -0.46 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Instrument :

MSVOA_L

ClientSampleId :

SS-4-4DL2

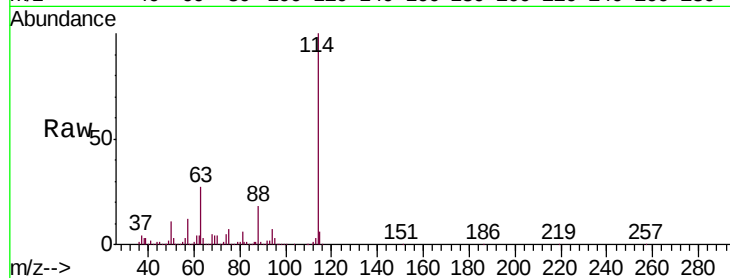
Tgt Ion: 63 Resp: 536738

Ion Ratio Lower Upper

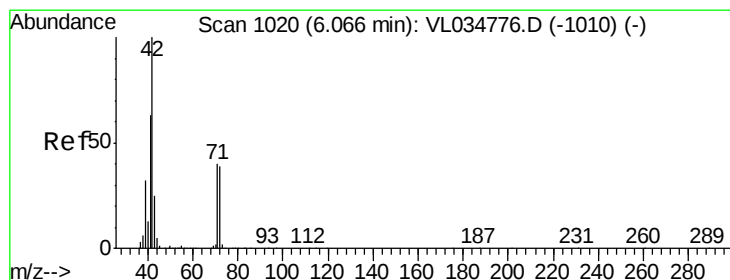
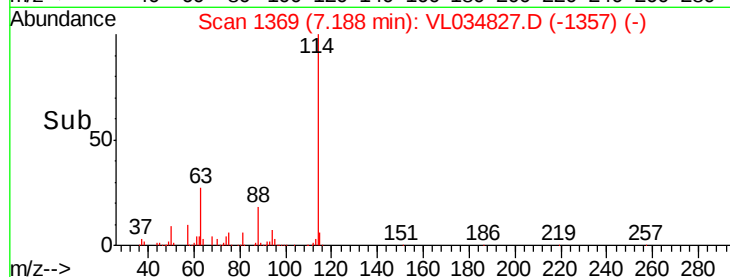
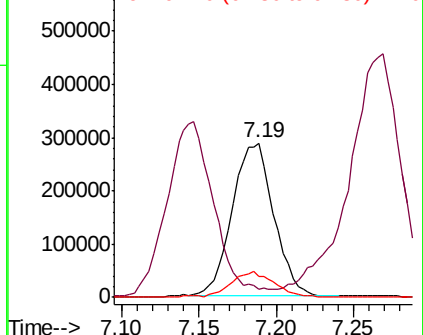
63 100

41 0.0 60.3 90.5#

62 13.6 54.5 81.7#



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0



#41

Tetrahydrofuran

Concen: 0.397 ppbv

RT: 5.99 min Scan# 995

Delta R.T. -0.08 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

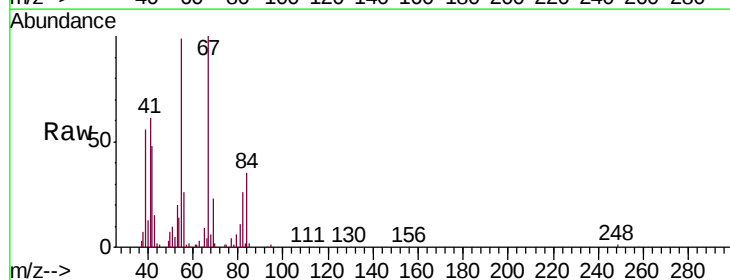
Tgt Ion: 42 Resp: 27810

Ion Ratio Lower Upper

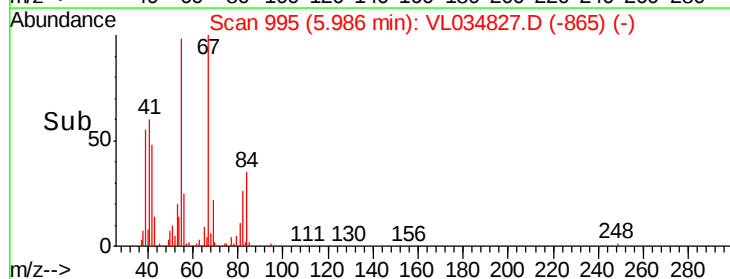
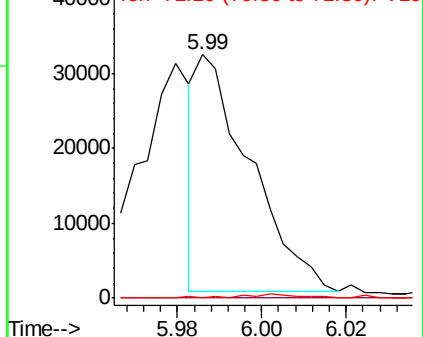
42 100

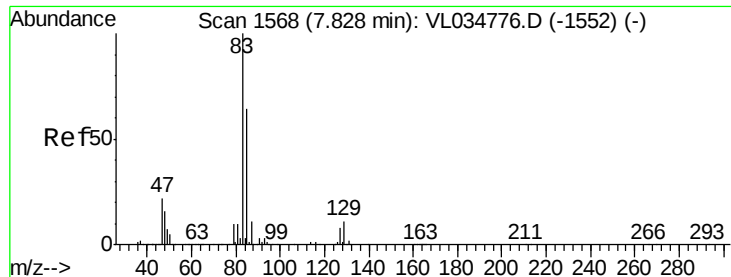
72 0.0 32.0 48.0#

71 0.0 31.3 46.9#



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0





#42

Bromodichloromethane

Concen: 1.030 ppbv

RT: 7.81 min Scan# 1562

Delta R.T. -0.02 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Instrument :

MSVOA_L

ClientSampleId :

SS-4-DL2

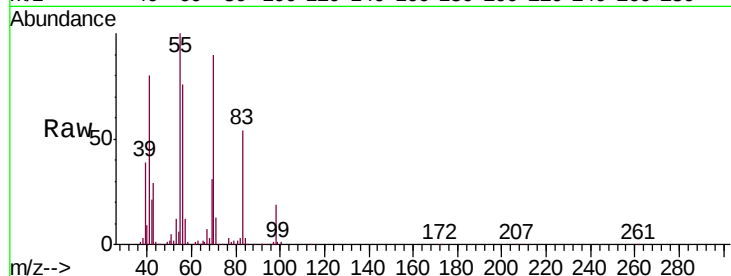
Tgt Ion: 83 Resp: 160682

Ion Ratio Lower Upper

83 100

85 0.4 50.8 76.2#

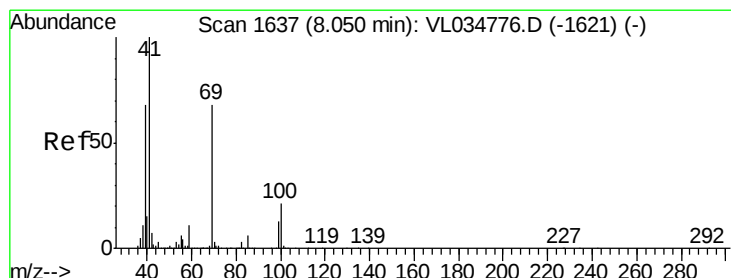
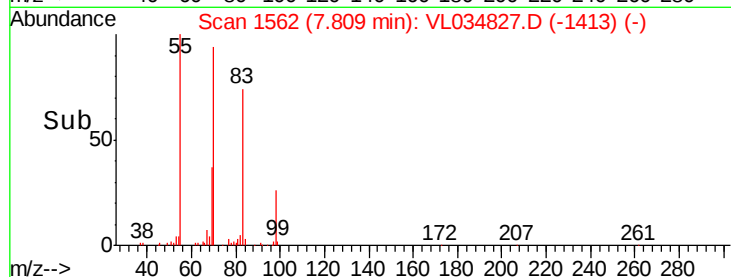
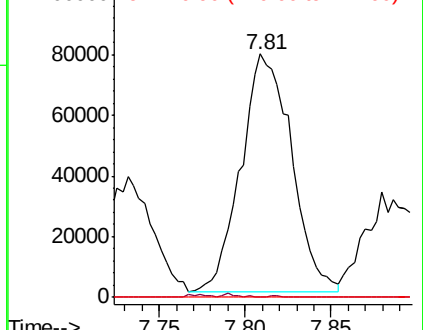
127 0.0 6.5 9.7#



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): VL0



#43

Methyl Methacrylate

Concen: 0.162 ppbv

RT: 8.01 min Scan# 1625

Delta R.T. -0.04 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

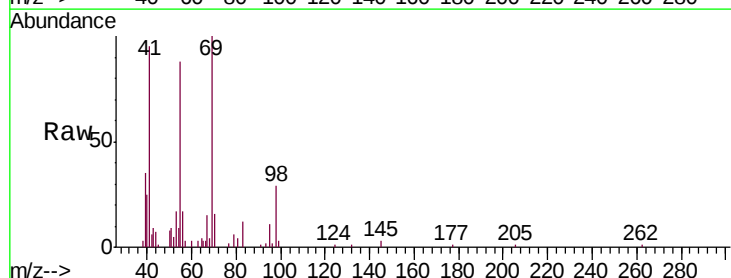
Tgt Ion: 69 Resp: 12389

Ion Ratio Lower Upper

69 100

41 0.0 121.6 182.4#

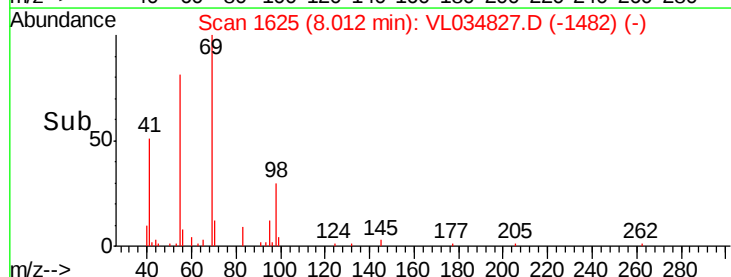
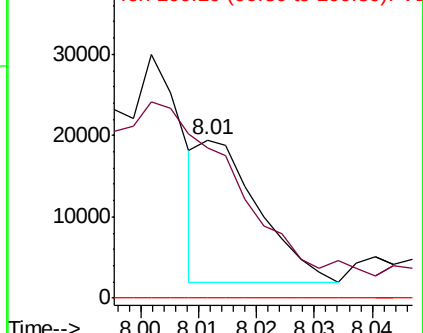
100 0.0 23.8 35.8#

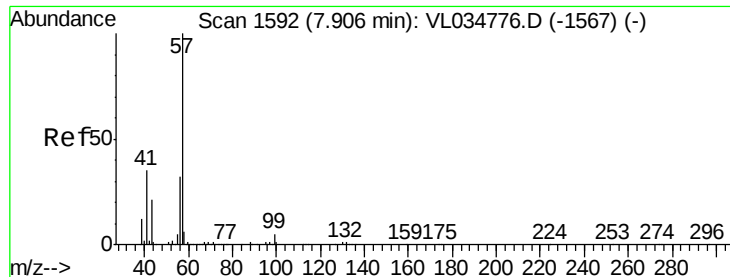


Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 4.667 ppbv

RT: 7.89 min Scan# 1587

Delta R.T. -0.02 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Instrument :

MSVOA_L

ClientSampleId :

SS-4-4DL2

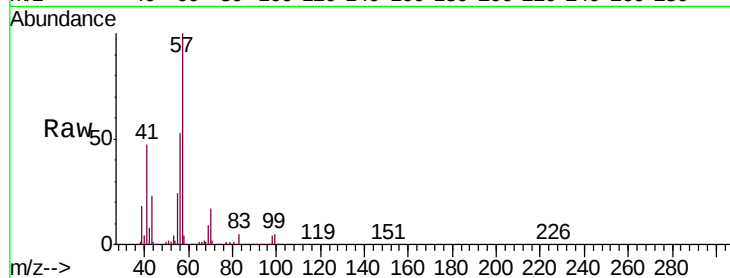
Tgt Ion: 57 Resp: 1471962

Ion Ratio Lower Upper

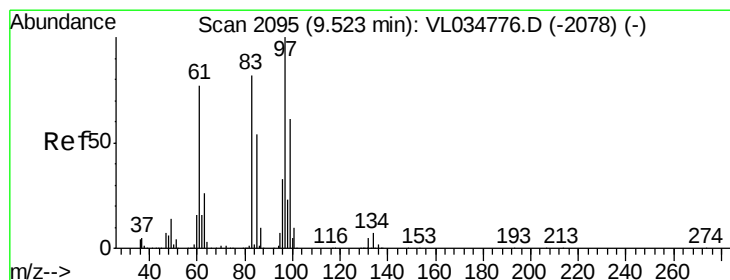
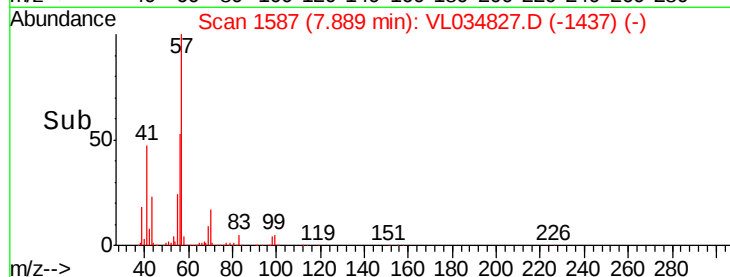
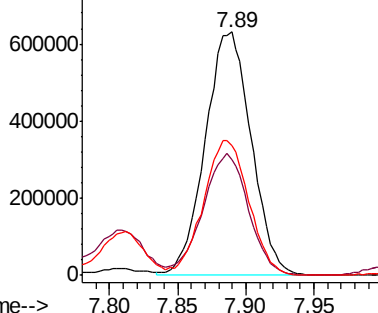
57 100

41 50.0 27.4 41.0#

56 53.9 25.0 37.6#



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: 0.854 ppbv

RT: 9.46 min Scan# 2074

Delta R.T. -0.07 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Tgt Ion: 97 Resp: 65628

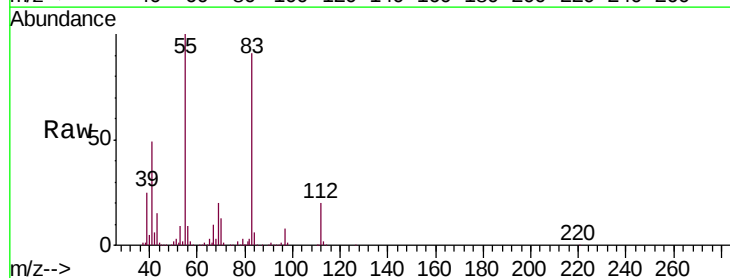
Ion Ratio Lower Upper

97 100

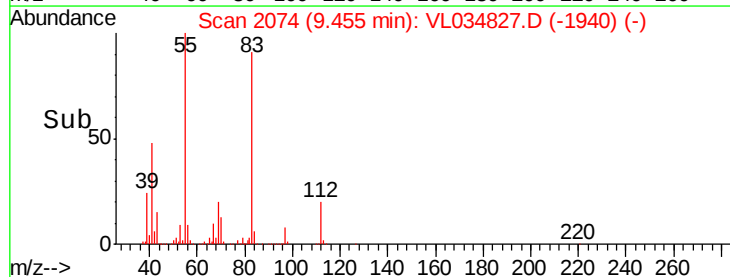
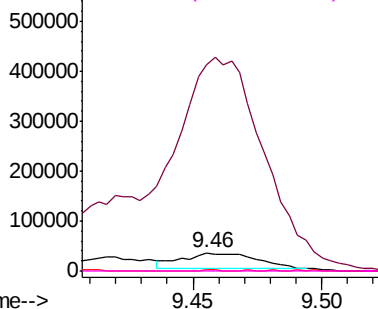
83 1125.1 65.2 97.8#

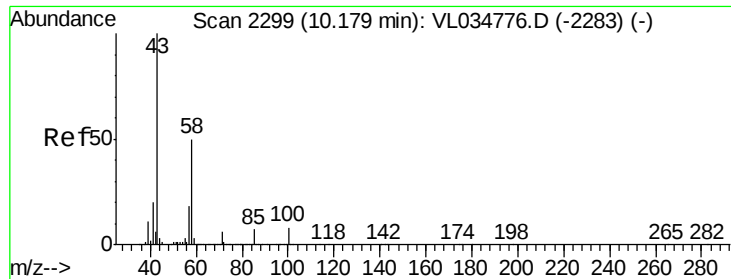
85 4.8 43.6 65.4#

99 0.0 48.9 73.3#



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

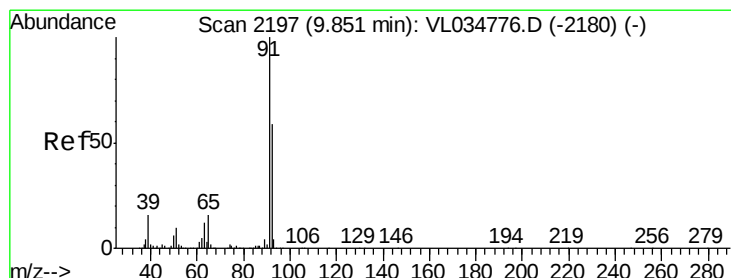
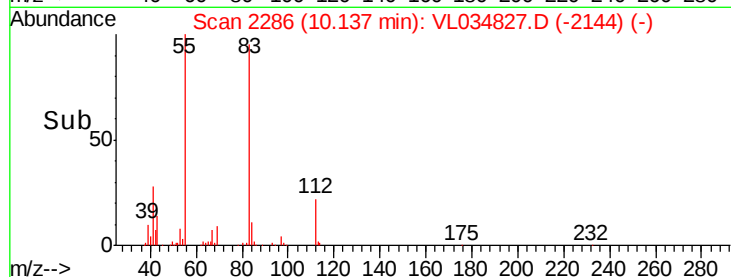
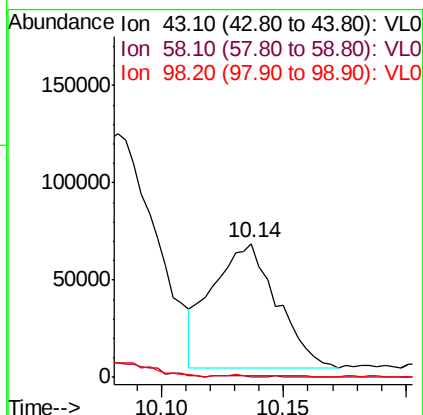
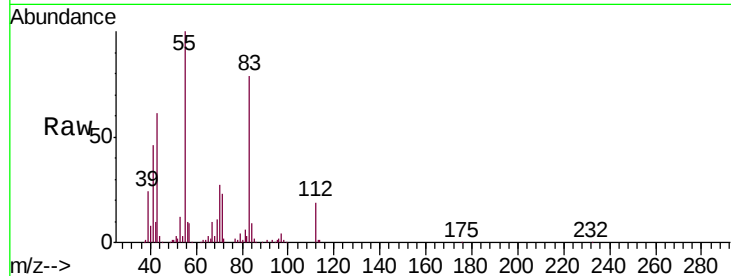




#51
2-Hexanone
Concen: 0.762 ppbv
RT: 10.14 min Scan# 2286
Delta R.T. -0.04 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

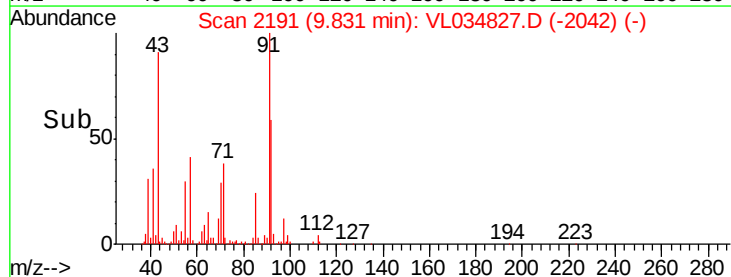
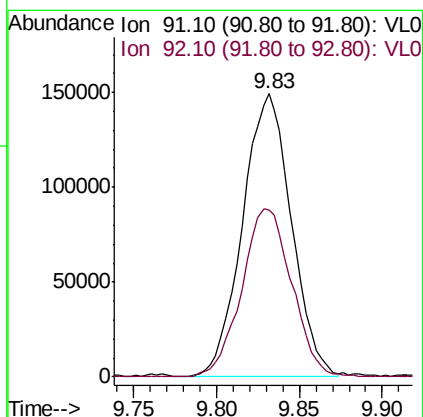
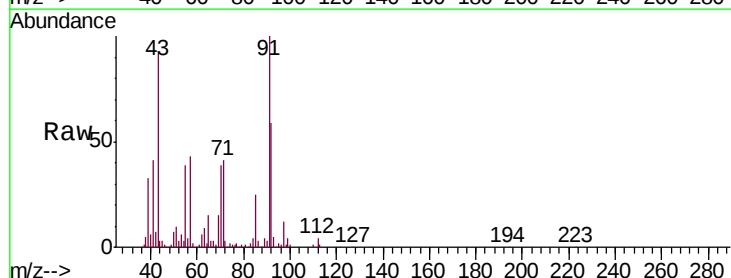
Instrument :
MSVOA_L
ClientSampleId :
SS-4-4DL2

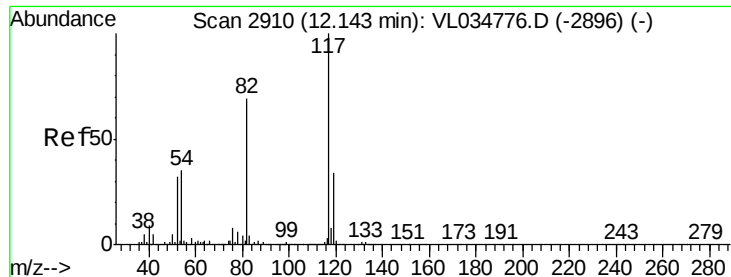
Tgt Ion: 43 Resp: 117641
Ion Ratio Lower Upper
43 100
58 0.0 38.6 58.0#
98 1.7 0.2 0.4#



#53
Toluene
Concen: 1.585 ppbv
RT: 9.83 min Scan# 2191
Delta R.T. -0.02 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

Tgt Ion: 91 Resp: 302750
Ion Ratio Lower Upper
91 100
92 61.8 48.2 72.2

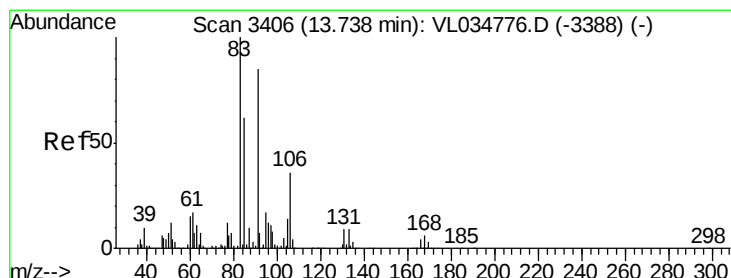
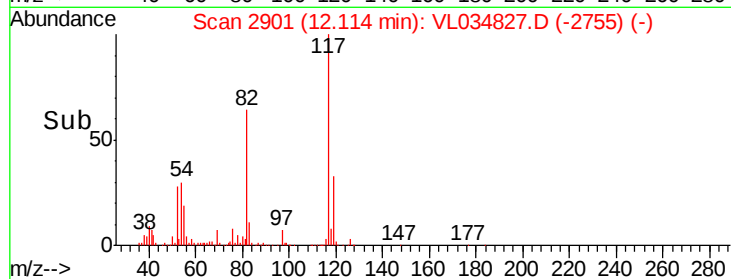
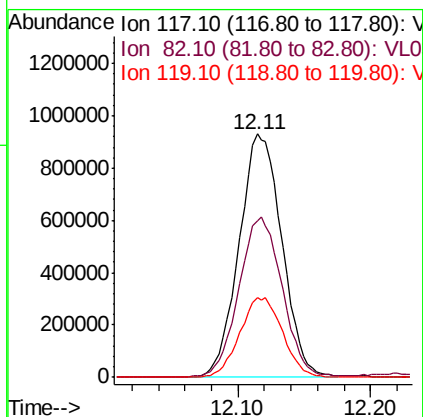
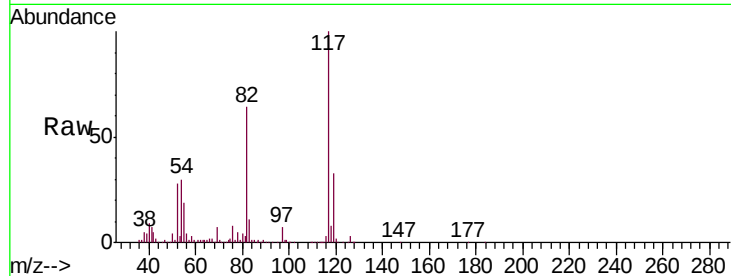




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2901
Delta R.T. -0.03 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

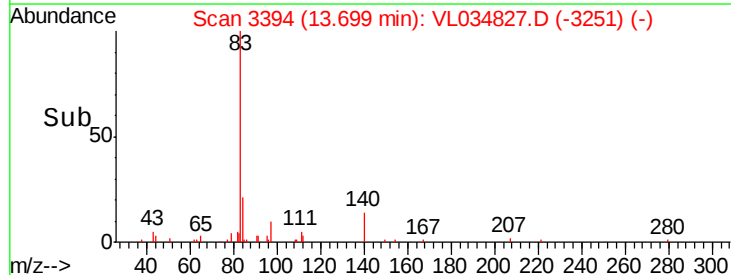
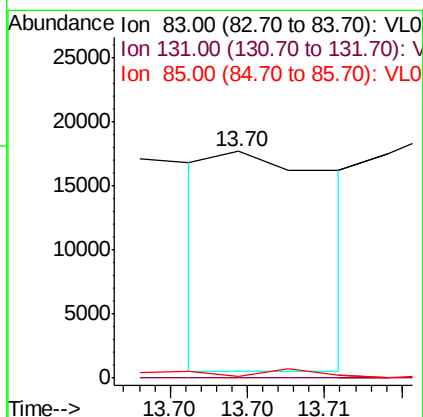
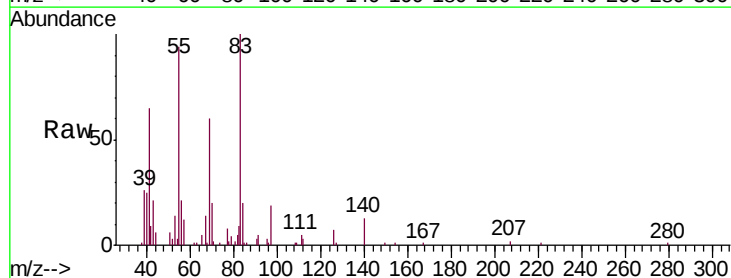
Instrument :
MSVOA_L
ClientSampleId :
SS-4-4DL2

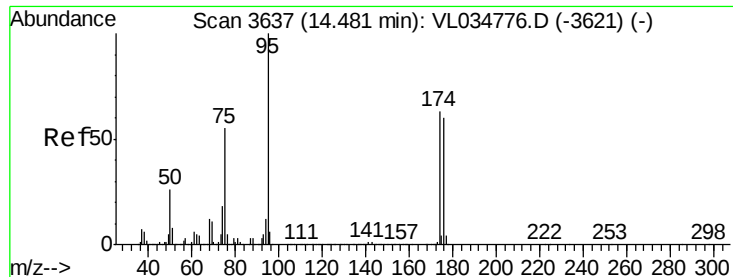
Tgt Ion: 117 Resp: 2084044
Ion Ratio Lower Upper
117 100
82 66.9 53.9 80.9
119 32.9 25.0 37.4



#63
1,1,2,2-Tetrachloroethane
Concen: 0.053 ppbv
RT: 13.70 min Scan# 3394
Delta R.T. -0.04 min
Lab File: VL034827.D
Acq: 6 Mar 2020 23:07

Tgt Ion: 83 Resp: 9371
Ion Ratio Lower Upper
83 100
131 0.0 4.7 14.0#
85 0.0 32.9 98.7#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.558 ppbv

RT: 14.45 min Scan# 3628

Delta R.T. -0.03 min

Lab File: VL034827.D

Acq: 6 Mar 2020 23:07

Instrument :

MSVOA_L

ClientSampleId :

SS-4-4DL2

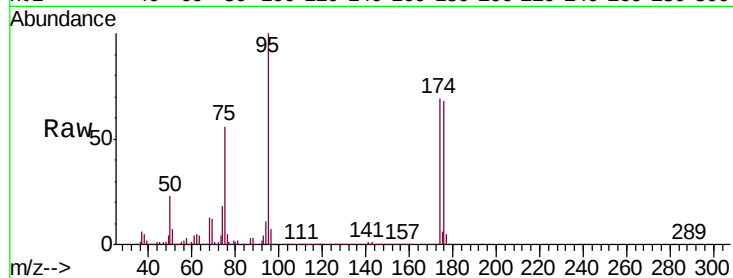
Tgt Ion: 95 Resp: 1660926

Ion Ratio Lower Upper

95 100

174 70.0 50.6 76.0

175 5.3 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

