

Data File : VL031862.D

Acq On : 12 Apr 2018 11:39

Operator : SY/AP

Sample : J2191-07

Misc : 400ml/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA_L

ClientSampleId :

GAC-EFF-040218

Quant Time: Apr 14 01:34:15 2018

Quant Method : W:\HPCHEM1\MSVOA_L\METHODS\VL041218AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Apr 13 16:50:02 2018

QLast Update : Fri Apr 13 16:50:02 2018

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.89	49	1155096	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.43	114	2412511	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.39	117	2195650	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.73	95	1734604	9.83	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.30%

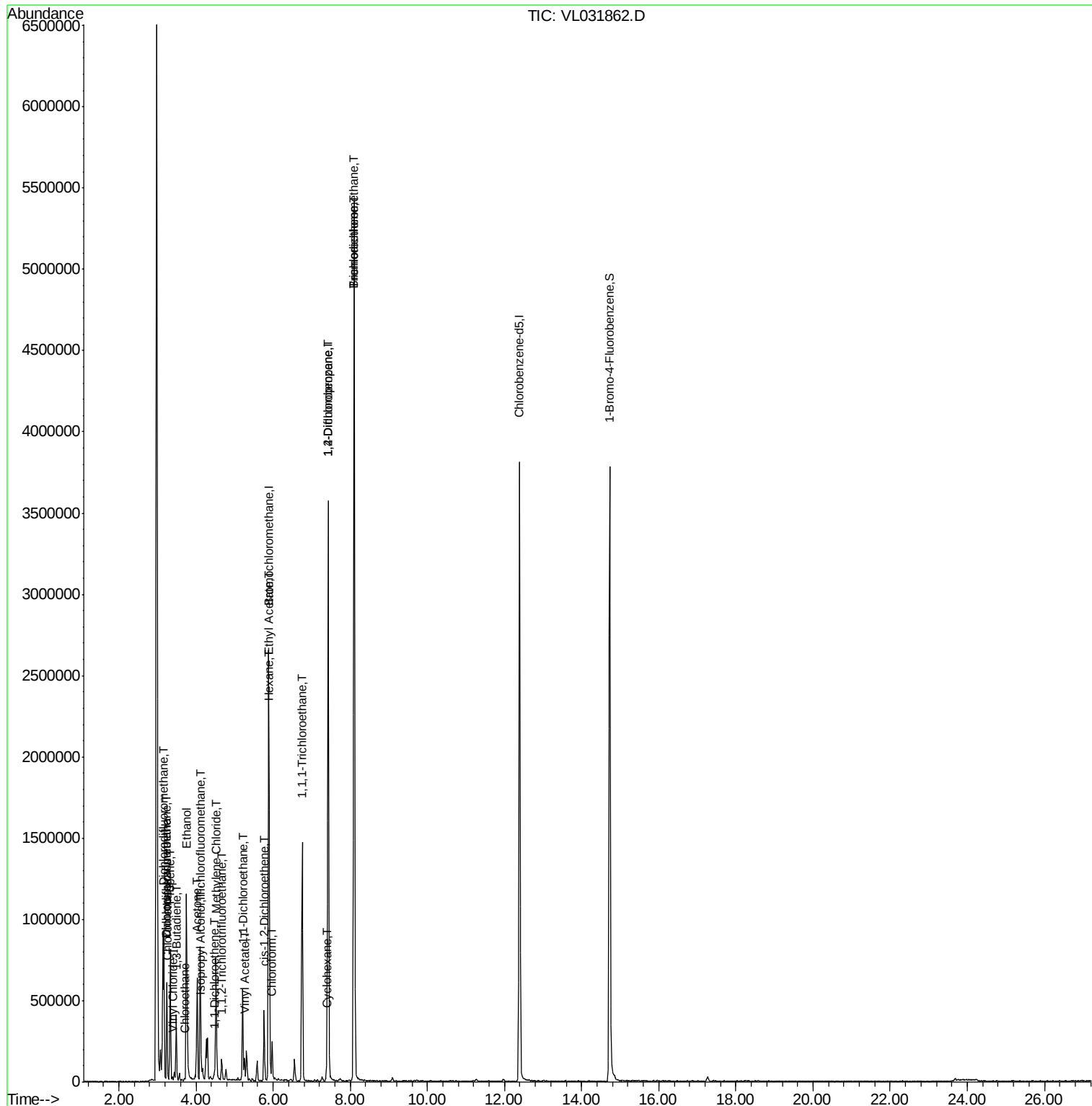
Target Compounds

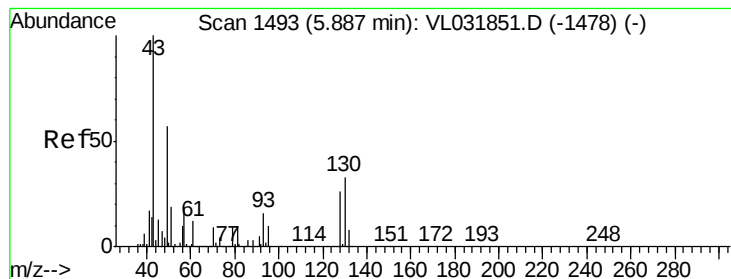
						Qvalue
2) Dichlorodifluoromethane	3.16	85	642022	2.69	ppbv	97
3) Chlorodifluoromethane	3.25	51	5848	0.04	ppbv	100
4) Chloromethane	3.26	50	23188	0.34	ppbv #	85
5) Vinyl Chloride	3.39	62	12747	0.17	ppbv #	74
7) Chloroethane	3.70	64	9742	0.32	ppbv #	88
8) Dichlorotetrafluoroethane	3.24	85	46444	0.24	ppbv #	22
9) Propene	3.33	41	230021	4.95	ppbv	90
11) Trichlorofluoromethane	4.11	101	517191	2.21	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.67	101	42168	0.28	ppbv	99
13) Ethanol	3.75	45	1283749	81.43	ppbv	99
15) Acetone	4.02	43	218309	1.23	ppbv	93
16) 1,3-Butadiene	3.49	39	59040	0.90	ppbv #	18
18) 1,1-Dichloroethene	4.47	96	6991	0.11	ppbv #	49
19) Isopropyl Alcohol	4.14	45	23395	0.24	ppbv #	68
20) Methylene Chloride	4.52	84	252095	3.89	ppbv	90
23) Vinyl Acetate	5.27	43	13946	0.08	ppbv #	5
24) 1,1-Dichloroethane	5.21	63	441945	2.46	ppbv	98
25) Ethyl Acetate	5.90	43	68973	0.25	ppbv #	89
26) Hexane	5.91	57	52575	0.41	ppbv #	66
29) Chloroform	5.97	83	144605	0.66	ppbv	97
30) Cyclohexane	7.39	84	5753	0.06	ppbv #	1
31) cis-1,2-Dichloroethene	5.77	61	231669	1.98	ppbv	99
32) 1,1,1-Trichloroethane	6.75	97	931250	4.36	ppbv	99
38) Trichloroethene	8.10	130	1613214	18.31	ppbv	96
39) 1,2-Dichloropropane	7.43	63	644645	7.99	ppbv #	22
42) Bromodichloromethane	8.10	83	13081	0.07	ppbv	93

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.89 min Scan# 1493

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

GAC-EFF-040218

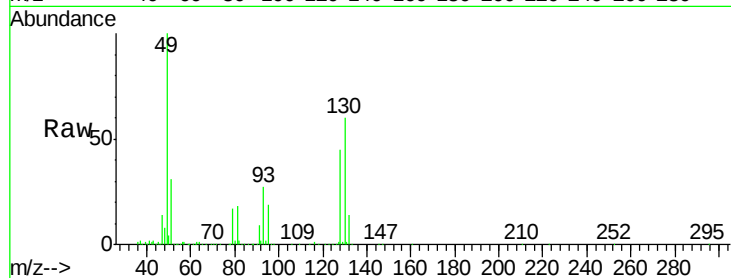
Tgt Ion: 49 Resp: 1155096

Ion Ratio Lower Upper

49 100

128 47.9 23.9 71.7

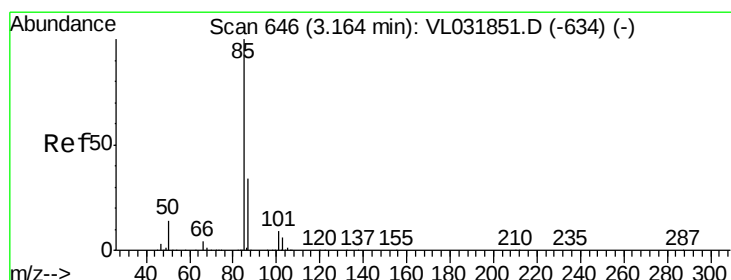
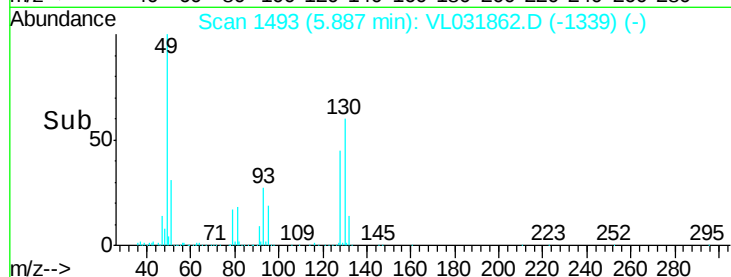
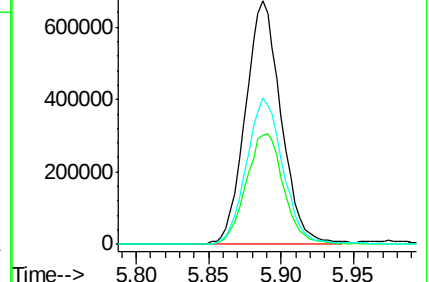
130 61.7 30.9 92.7



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: 2.69 ppbv

RT: 3.16 min Scan# 646

Delta R.T. -0.00 min

Lab File: VL031862.D

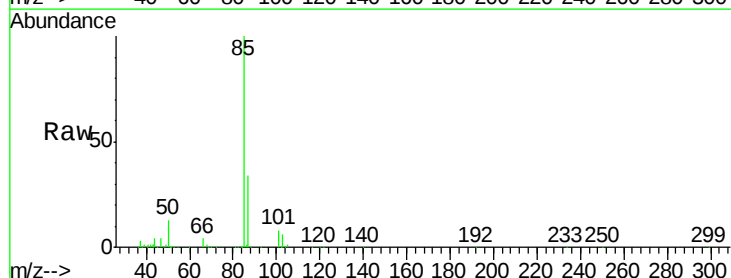
Acq: 12 Apr 2018 11:39

Tgt Ion: 85 Resp: 642022

Ion Ratio Lower Upper

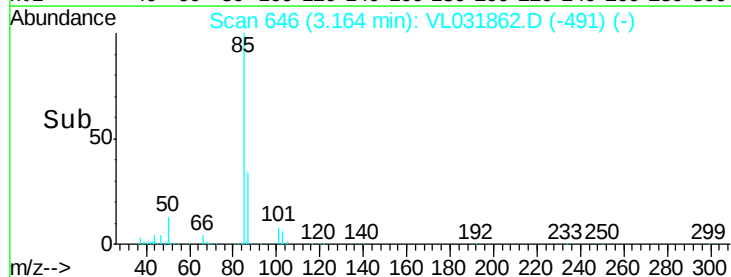
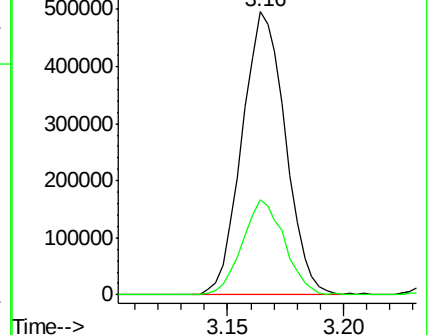
85 100

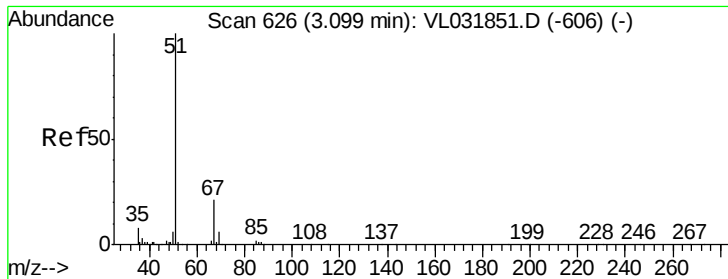
87 33.8 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.04 ppbv

RT: 3.25 min Scan# 673

Delta R.T. 0.15 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

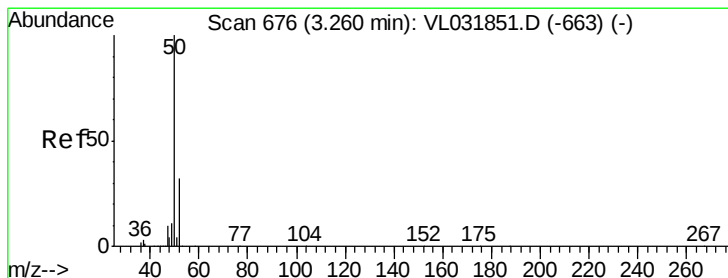
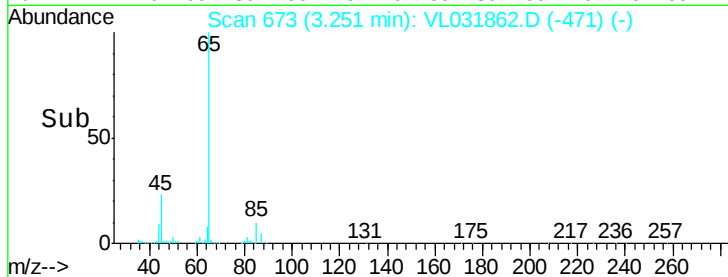
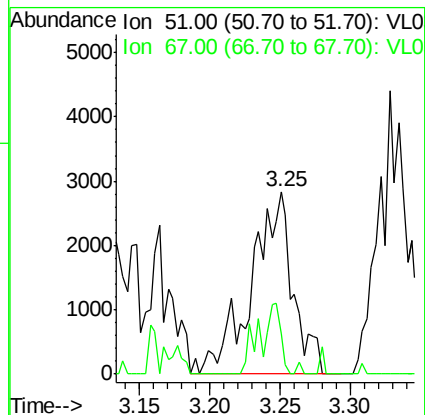
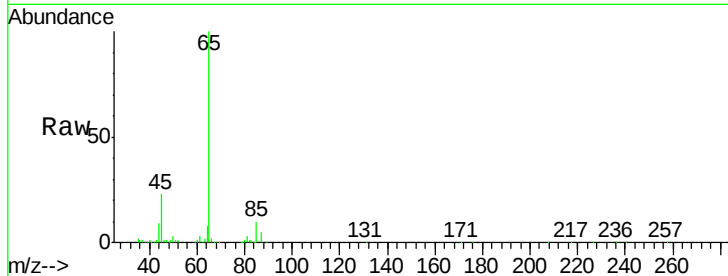
GAC-EFF-040218

Tgt Ion: 51 Resp: 5848

Ion Ratio Lower Upper

51 100

67 22.0 17.5 26.3



#4

Chloromethane

Concen: 0.34 ppbv

RT: 3.26 min Scan# 676

Delta R.T. -0.00 min

Lab File: VL031862.D

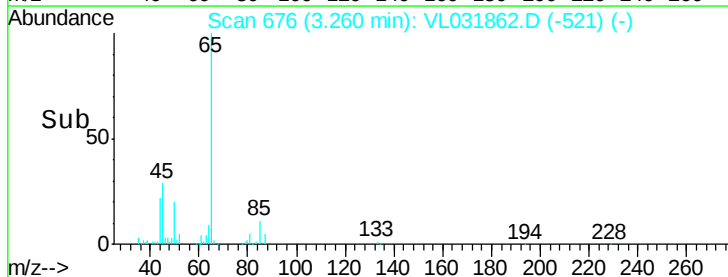
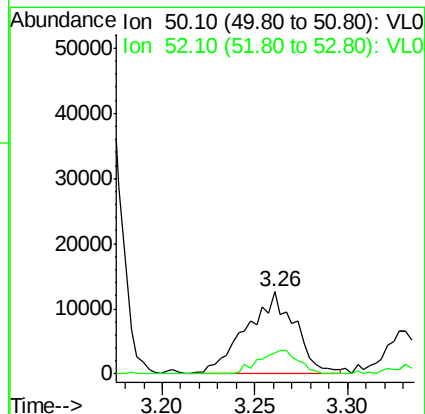
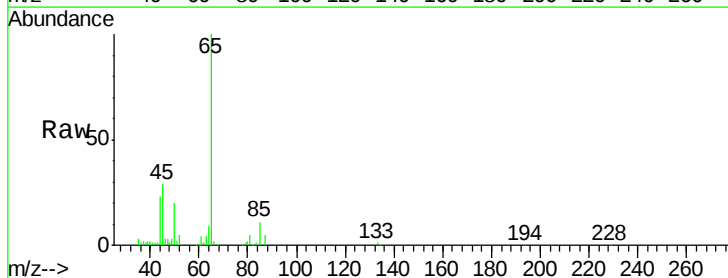
Acq: 12 Apr 2018 11:39

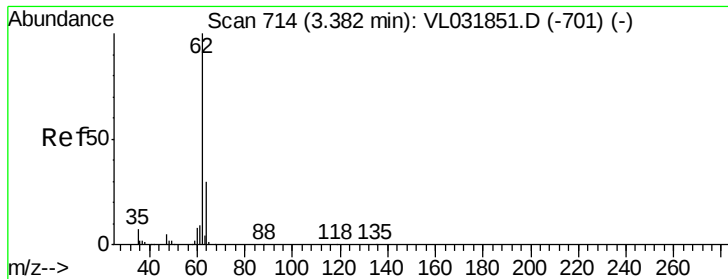
Tgt Ion: 50 Resp: 23188

Ion Ratio Lower Upper

50 100

52 26.1 28.1 42.1#





#5

Vinyl Chloride

Concen: 0.17 ppbv

RT: 3.39 min Scan# 716

Delta R.T. 0.01 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

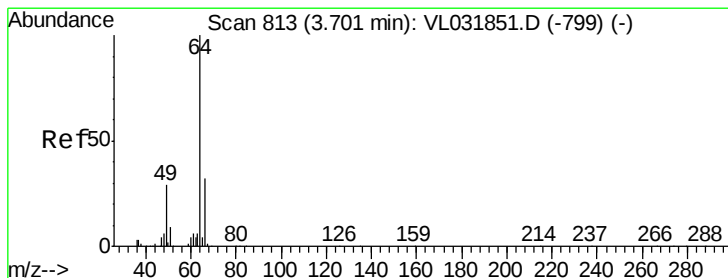
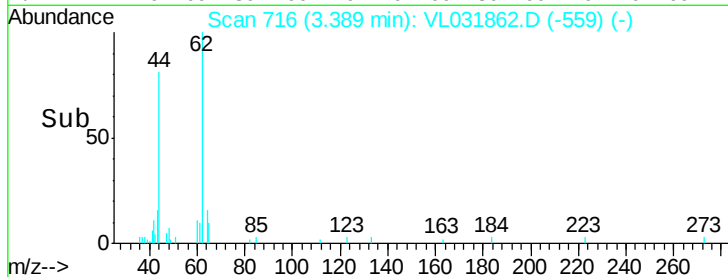
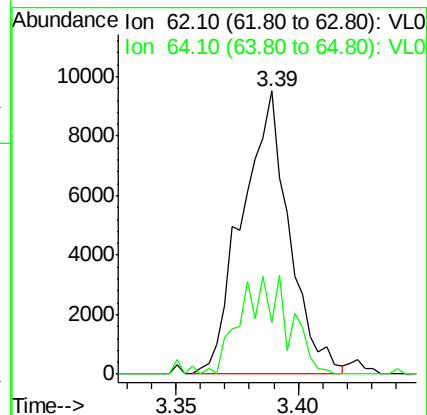
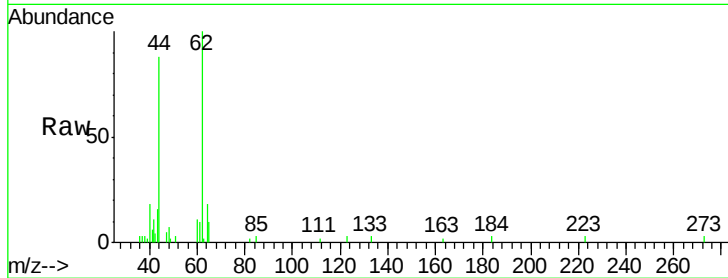
GAC-EFF-040218

Tgt Ion: 62 Resp: 12747

Ion Ratio Lower Upper

62 100

64 18.0 25.9 38.9#



#7

Chloroethane

Concen: 0.32 ppbv

RT: 3.70 min Scan# 814

Delta R.T. 0.01 min

Lab File: VL031862.D

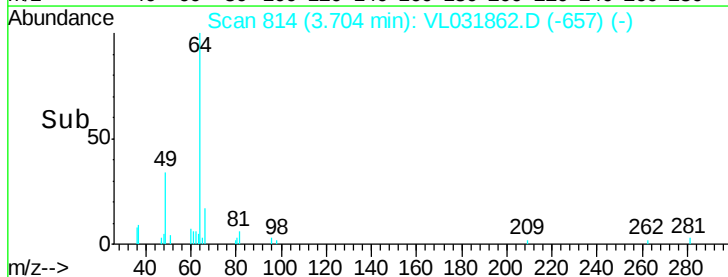
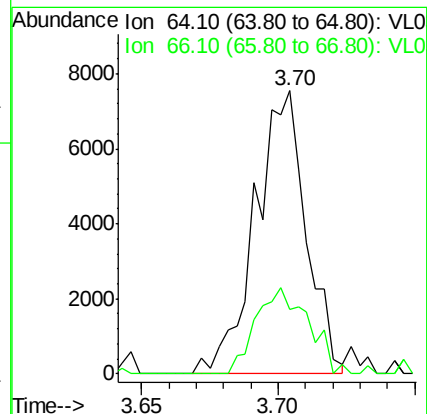
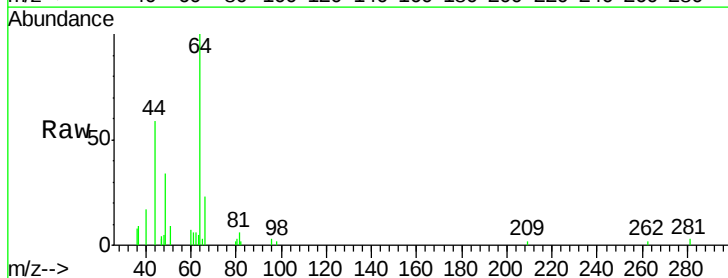
Acq: 12 Apr 2018 11:39

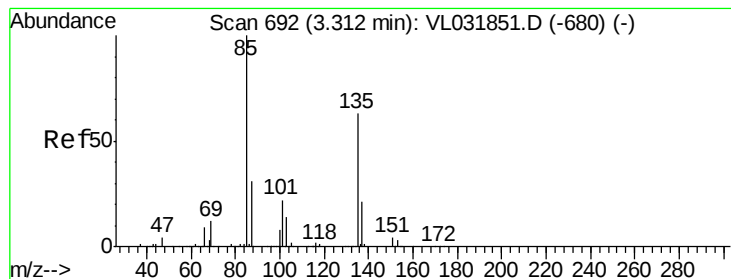
Tgt Ion: 64 Resp: 9742

Ion Ratio Lower Upper

64 100

66 22.8 23.4 35.0#





#8

Dichlorotetrafluoroethane

Concen: 0.24 ppbv

RT: 3.24 min Scan# 671

Delta R.T. -0.07 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

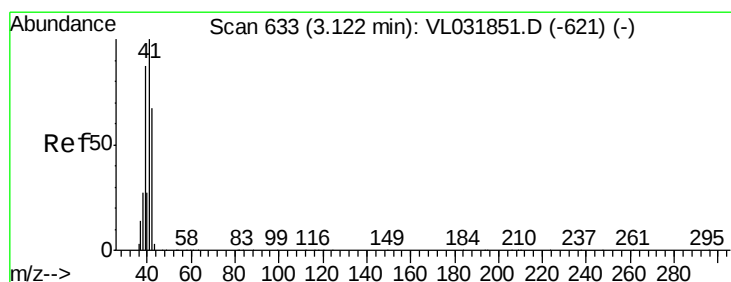
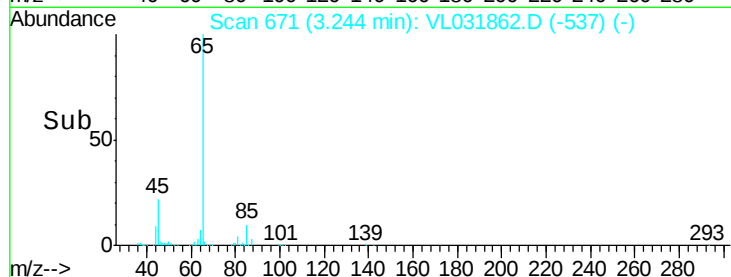
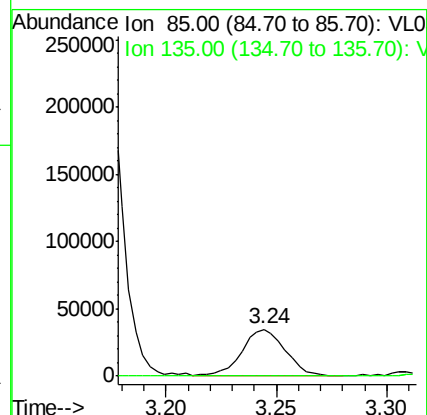
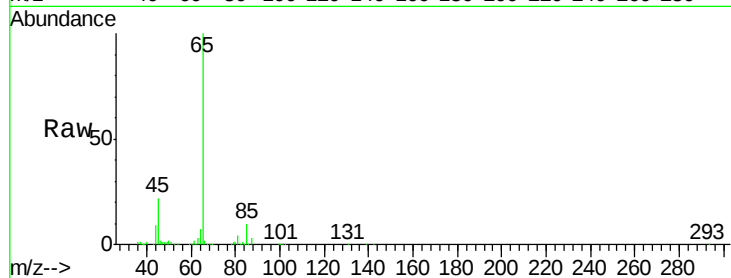
GAC-EFF-040218

Tgt Ion: 85 Resp: 46444

Ion Ratio Lower Upper

85 100

135 4.2 52.7 79.1#



#9

Propene

Concen: 4.95 ppbv

RT: 3.33 min Scan# 697

Delta R.T. 0.21 min

Lab File: VL031862.D

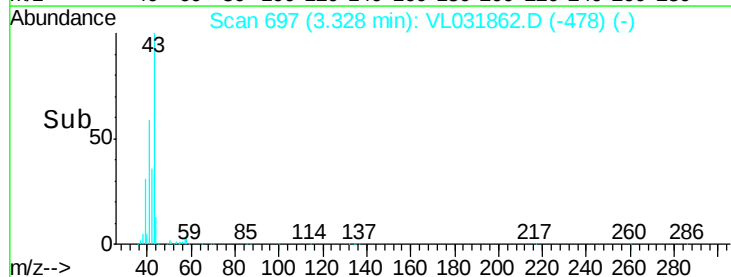
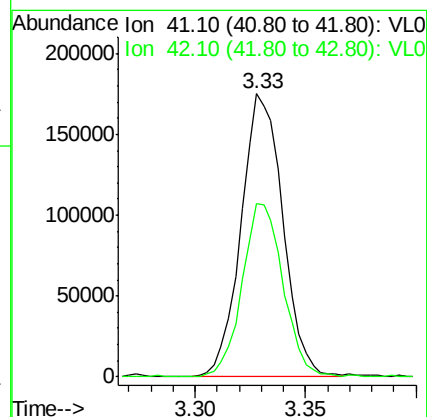
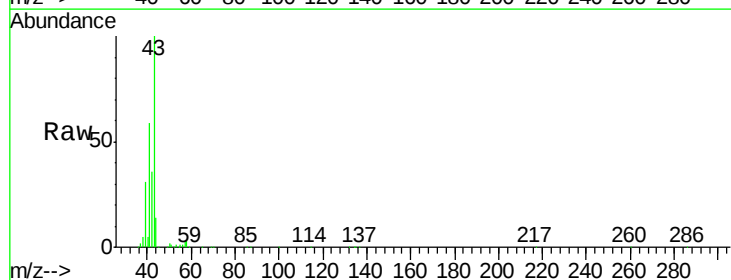
Acq: 12 Apr 2018 11:39

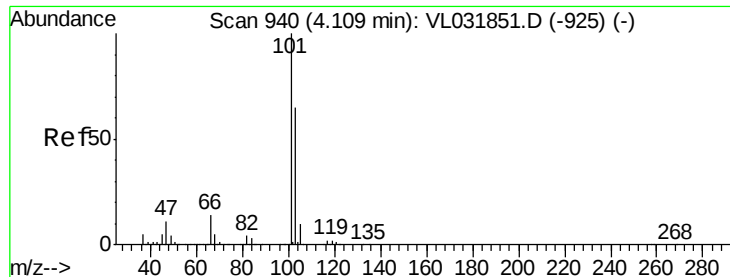
Tgt Ion: 41 Resp: 230021

Ion Ratio Lower Upper

41 100

42 60.9 55.0 82.4

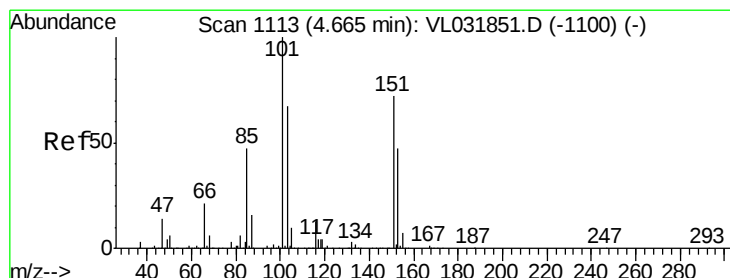
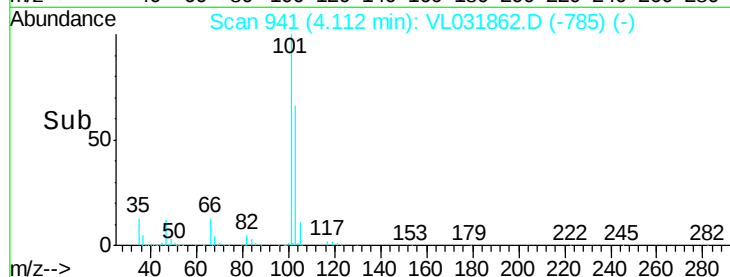
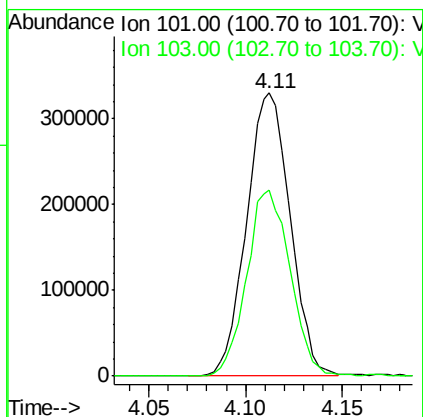
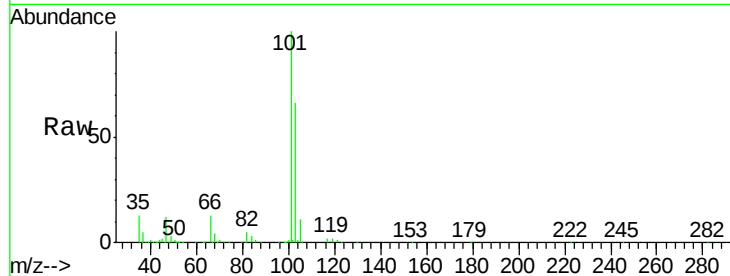




#11
 Trichlorofluoromethane
 Concen: 2.21 ppbv
 RT: 4.11 min Scan# 941
 Delta R.T. 0.00 min
 Lab File: VL031862.D
 Acq: 12 Apr 2018 11:39

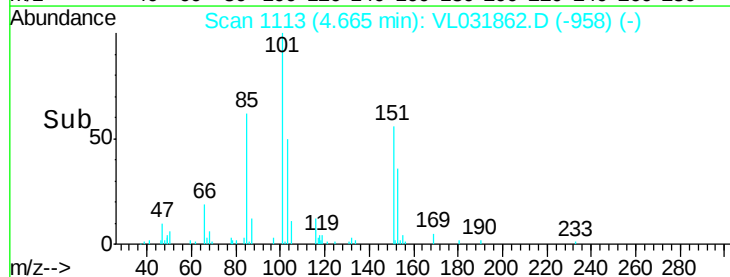
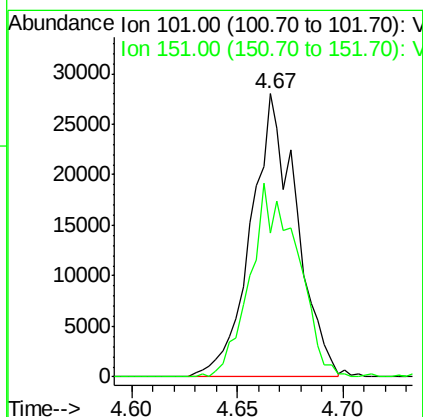
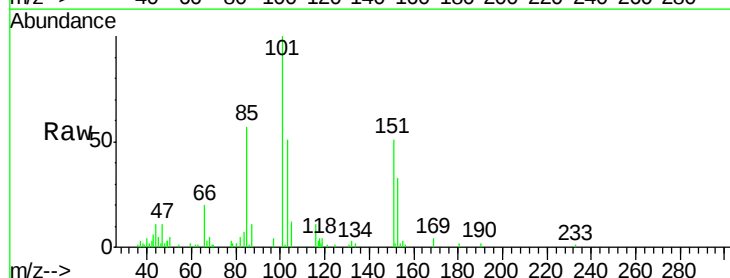
Instrument :
 MSVOA_L
 ClientSampleId :
 GAC-EFF-040218

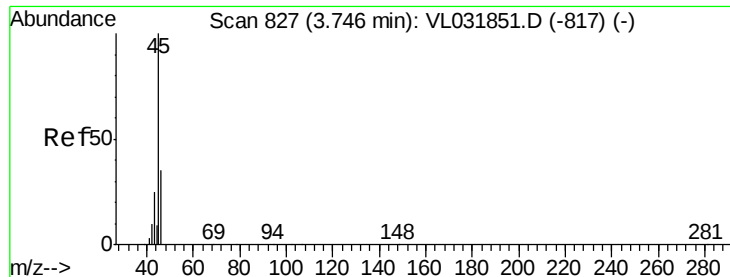
Tgt Ion:101 Resp: 517191
 Ion Ratio Lower Upper
 101 100
 103 65.7 51.8 77.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.28 ppbv
 RT: 4.67 min Scan# 1113
 Delta R.T. -0.00 min
 Lab File: VL031862.D
 Acq: 12 Apr 2018 11:39

Tgt Ion:101 Resp: 42168
 Ion Ratio Lower Upper
 101 100
 151 70.7 57.0 85.6





#13

Ethanol

Concen: 81.43 ppbv

RT: 3.75 min Scan# 828

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

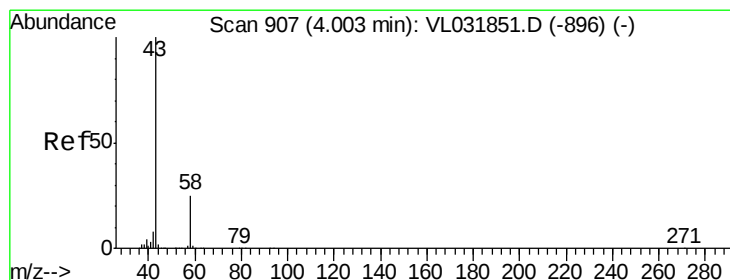
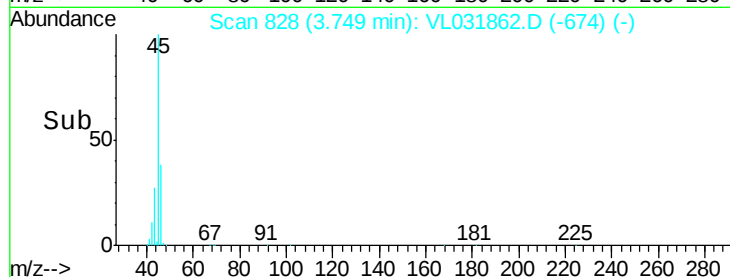
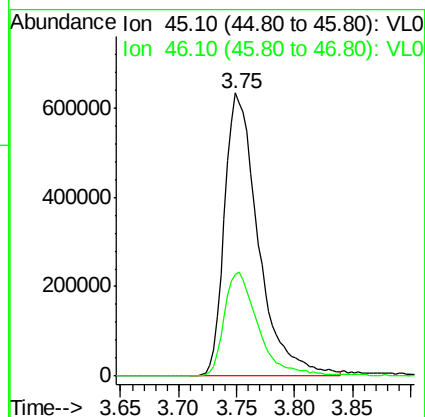
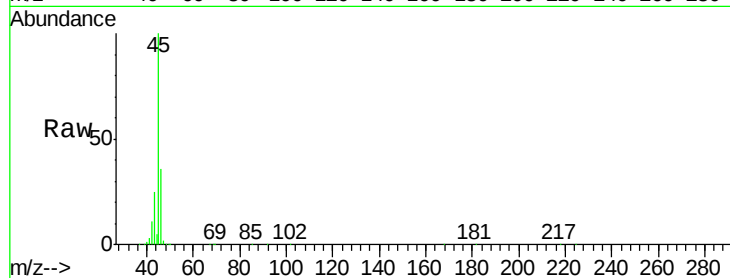
GAC-EFF-040218

Tgt Ion: 45 Resp: 1283749

Ion Ratio Lower Upper

45 100

46 37.4 14.6 58.6



#15

Acetone

Concen: 1.23 ppbv

RT: 4.02 min Scan# 913

Delta R.T. 0.02 min

Lab File: VL031862.D

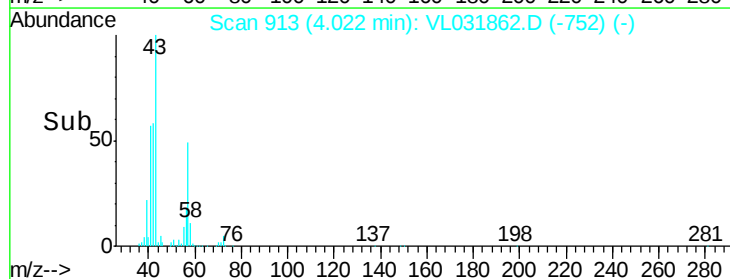
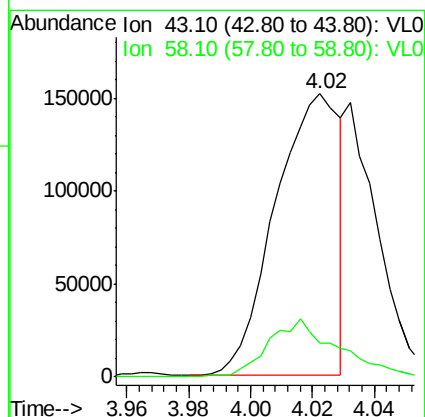
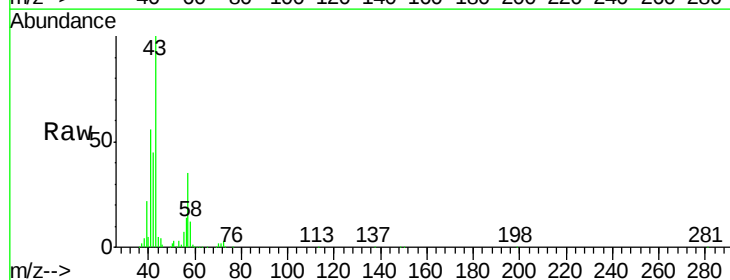
Acq: 12 Apr 2018 11:39

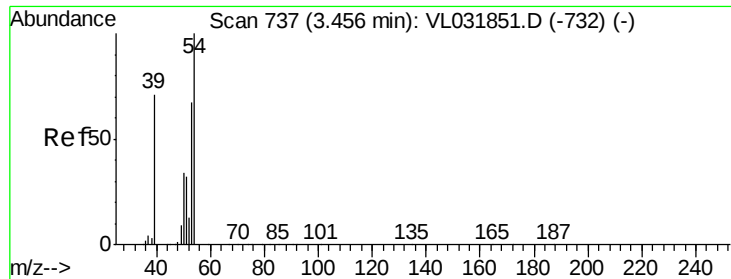
Tgt Ion: 43 Resp: 218309

Ion Ratio Lower Upper

43 100

58 22.4 20.9 31.3

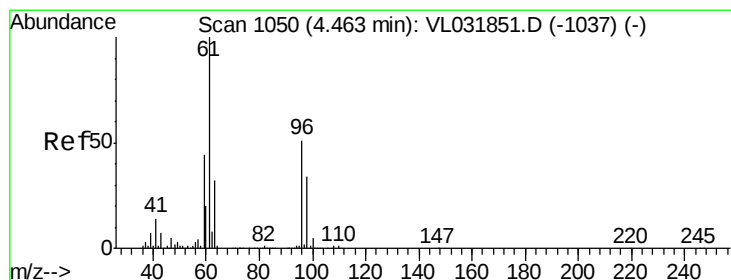
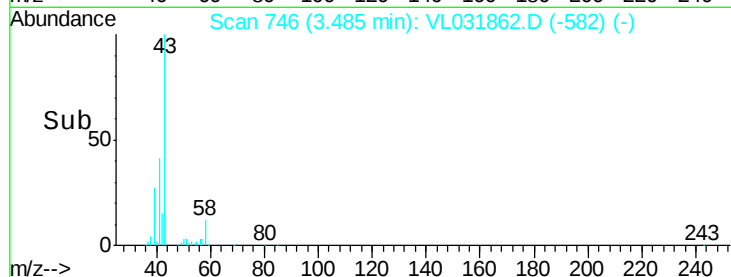
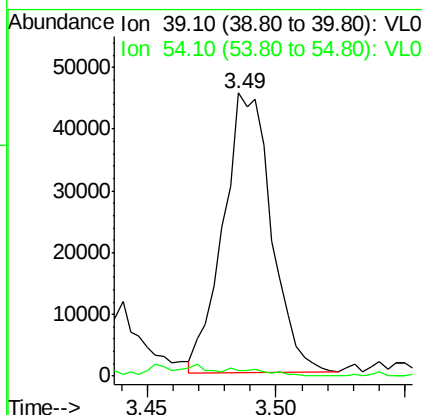
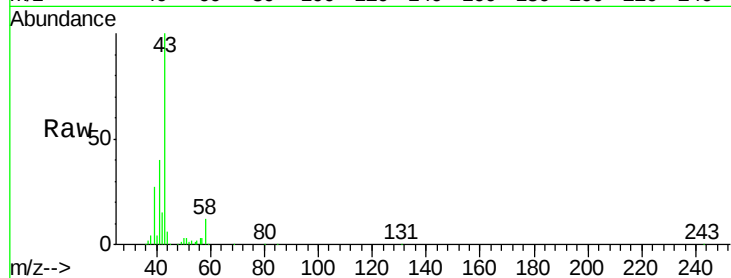




#16
 1,3-Butadiene
 Concen: 0.90 ppbv
 RT: 3.49 min Scan# 746
 Delta R.T. 0.03 min
 Lab File: VL031862.D
 Acq: 12 Apr 2018 11:39

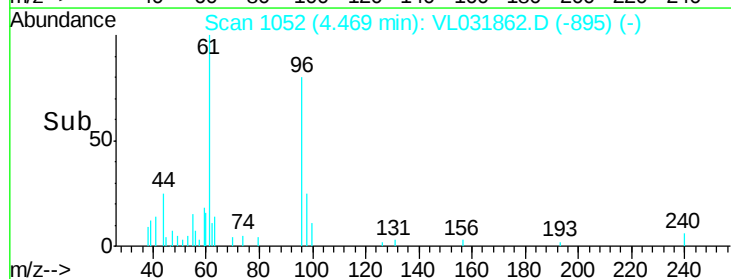
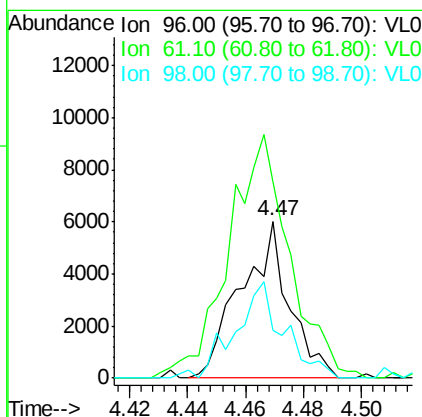
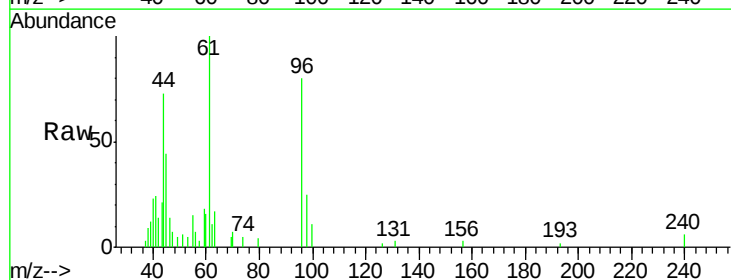
Instrument :
 MSVOA_L
 ClientSampleId :
 GAC-EFF-040218

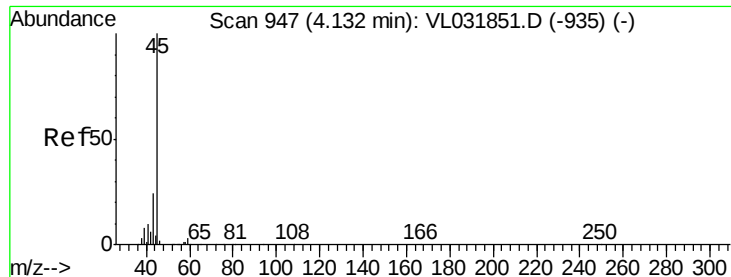
Tgt Ion: 39 Resp: 59040
 Ion Ratio Lower Upper
 39 100
 54 7.4 63.3 94.9#



#18
 1,1-Dichloroethene
 Concen: 0.11 ppbv
 RT: 4.47 min Scan# 1052
 Delta R.T. 0.01 min
 Lab File: VL031862.D
 Acq: 12 Apr 2018 11:39

Tgt Ion: 96 Resp: 6991
 Ion Ratio Lower Upper
 96 100
 61 119.5 161.0 241.6#
 98 30.8 52.7 79.1#





#19

Isopropyl Alcohol

Concen: 0.24 ppbv

RT: 4.14 min Scan# 949

Delta R.T. 0.01 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

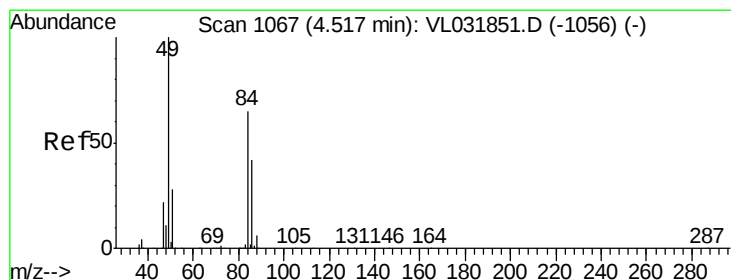
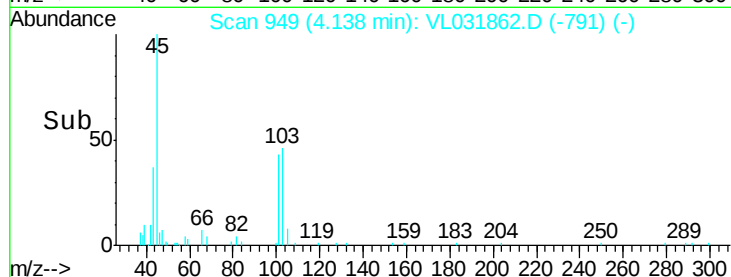
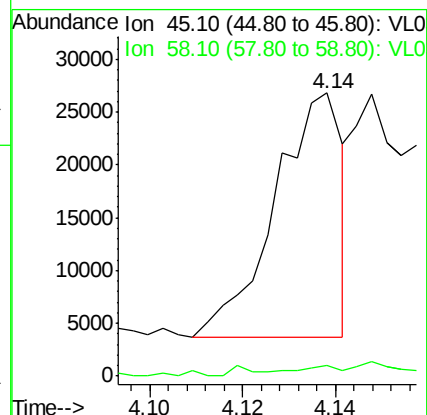
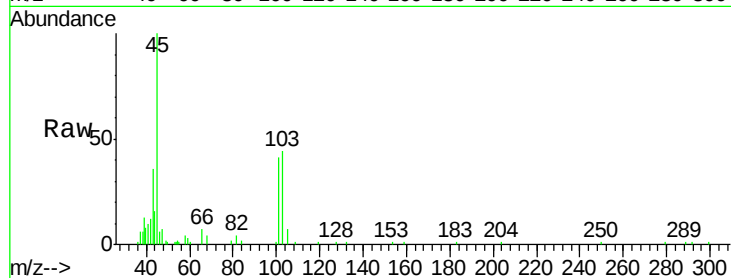
GAC-EFF-040218

Tgt Ion: 45 Resp: 23395

Ion Ratio Lower Upper

45 100

58 13.2 1.7 2.5#



#20

Methylene Chloride

Concen: 3.89 ppbv

RT: 4.52 min Scan# 1068

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Tgt Ion: 84 Resp: 252095

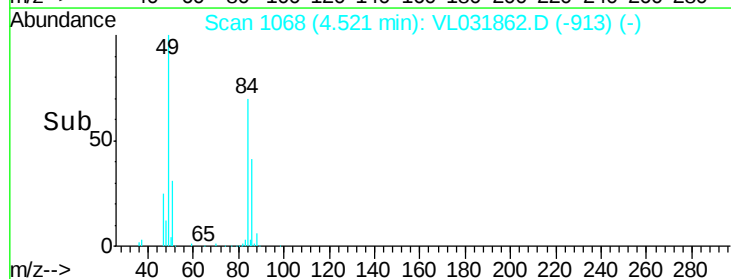
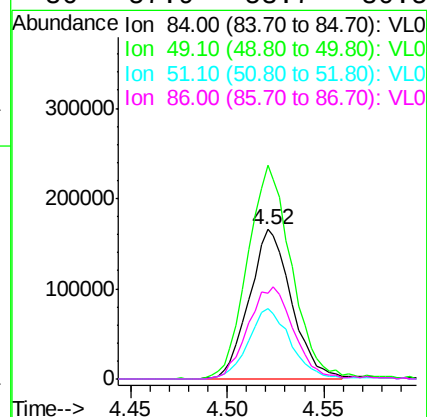
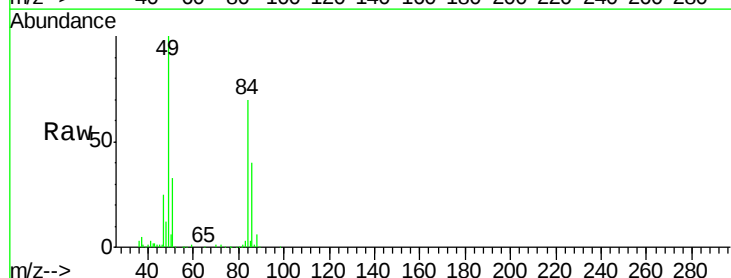
Ion Ratio Lower Upper

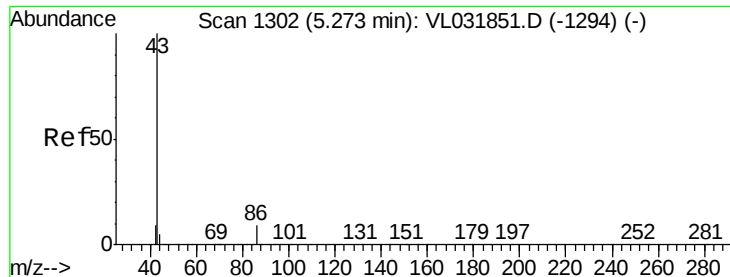
84 100

49 142.9 125.6 188.4

51 47.1 36.4 54.6

86 57.9 53.7 80.5





#23

Vinyl Acetate

Concen: 0.08 ppbv

RT: 5.27 min Scan# 1300

Delta R.T. -0.01 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

GAC-EFF-040218

Tgt Ion: 43 Resp: 13946

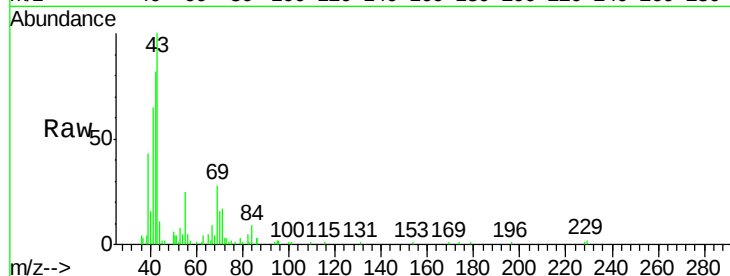
Ion Ratio Lower Upper

43 100

86 10.9 5.8 8.8#

42 83.3 8.5 12.7#

44 0.0 4.2 6.4#

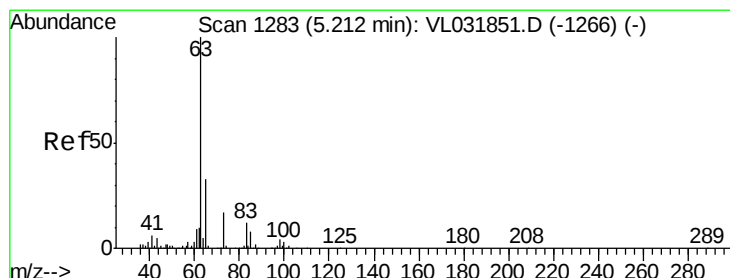
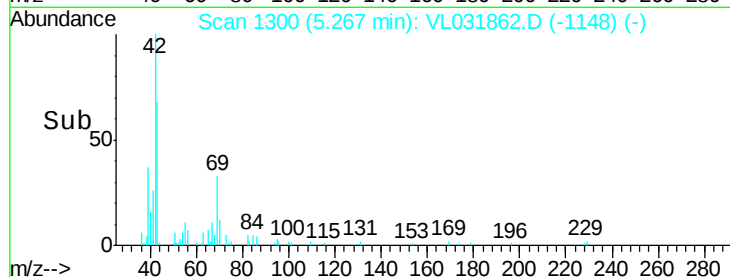
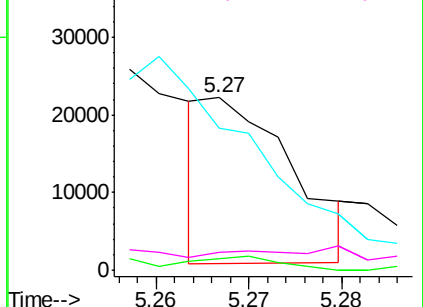


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 2.46 ppbv

RT: 5.21 min Scan# 1282

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

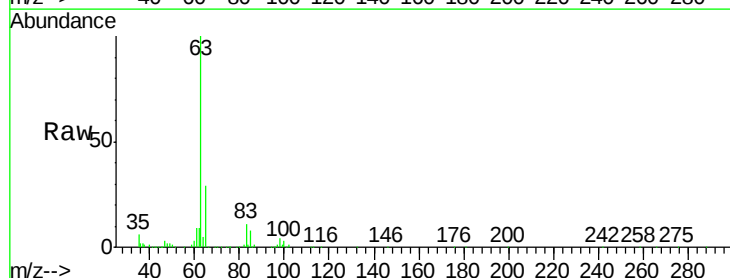
Tgt Ion: 63 Resp: 441945

Ion Ratio Lower Upper

63 100

98 4.0 2.4 7.2

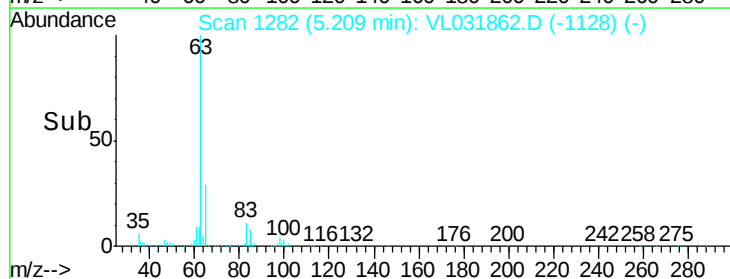
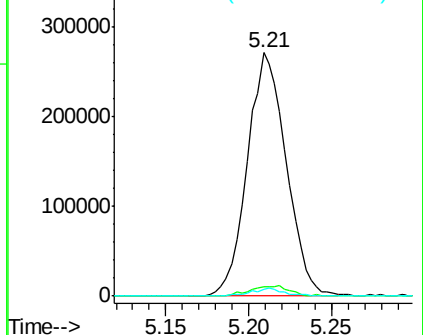
100 2.6 1.5 4.4

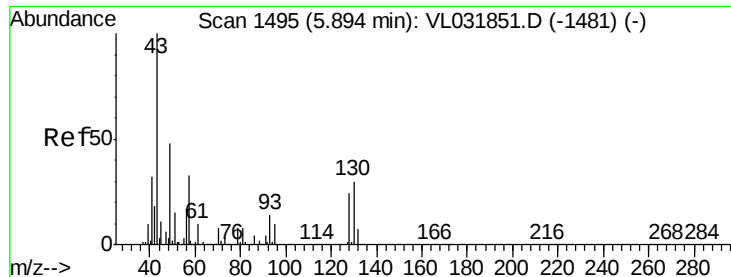


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

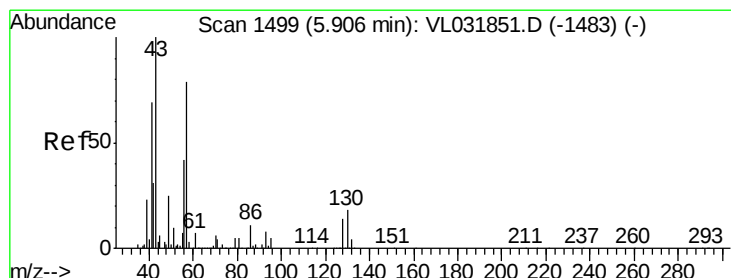
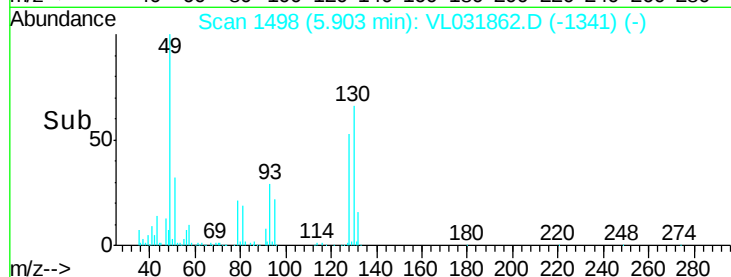
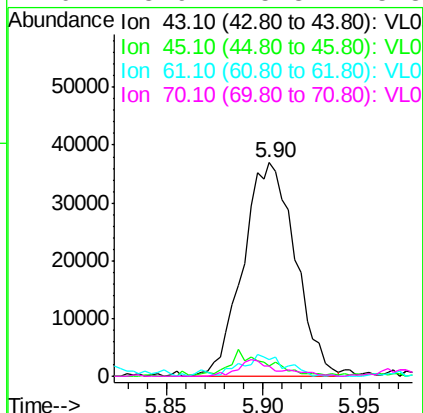
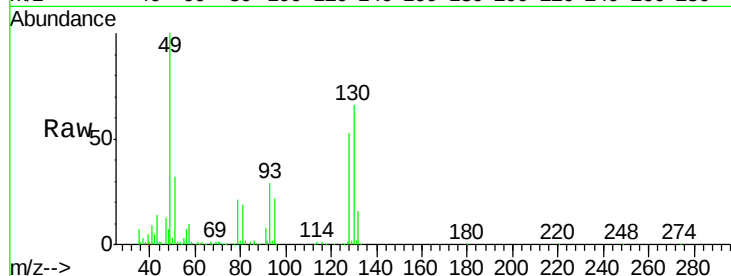




#25
Ethyl Acetate
Concen: 0.25 ppbv
RT: 5.90 min Scan# 1498
Delta R.T. 0.01 min
Lab File: VL031862.D
Acq: 12 Apr 2018 11:39

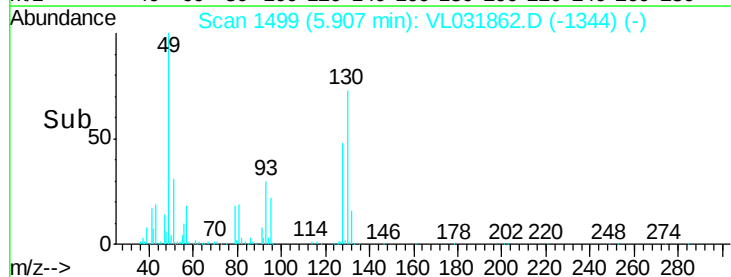
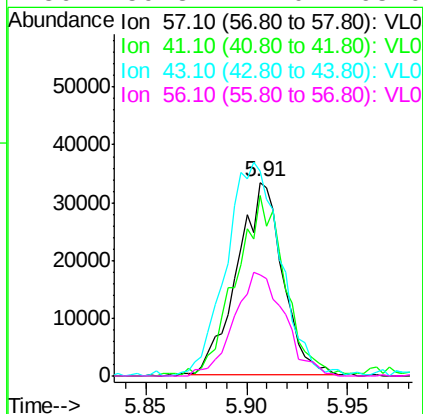
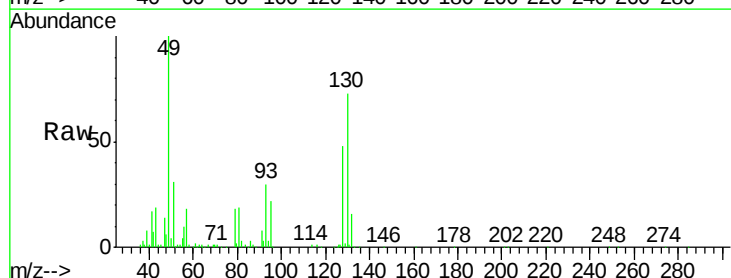
Instrument :
MSVOA_L
ClientSampleId :
GAC-EFF-040218

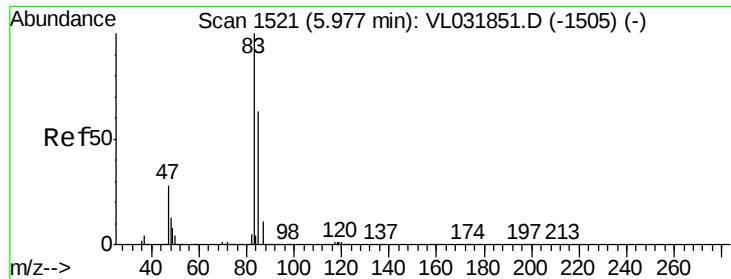
Tgt Ion:	43	Resp:	68973
Ion	Ratio	Lower	Upper
43	100		
45	10.8	7.8	11.8
61	0.0	7.2	10.8#
70	5.9	5.8	8.8



#26
Hexane
Concen: 0.41 ppbv
RT: 5.91 min Scan# 1499
Delta R.T. -0.00 min
Lab File: VL031862.D
Acq: 12 Apr 2018 11:39

Tgt Ion:	57	Resp:	52575
Ion	Ratio	Lower	Upper
57	100		
41	101.3	72.0	108.0
43	134.3	169.8	254.8#
56	59.3	42.0	63.0

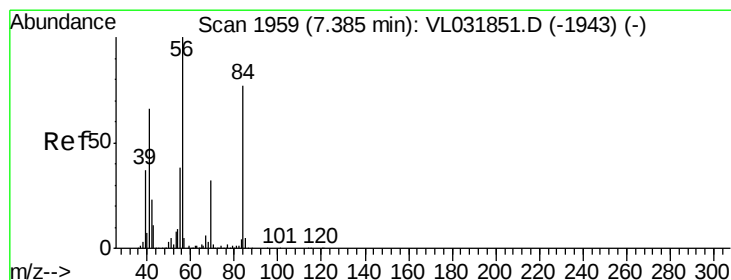
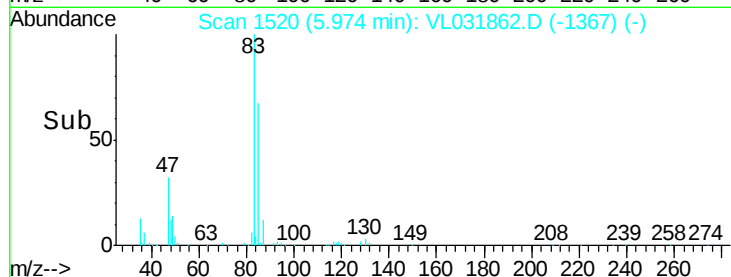
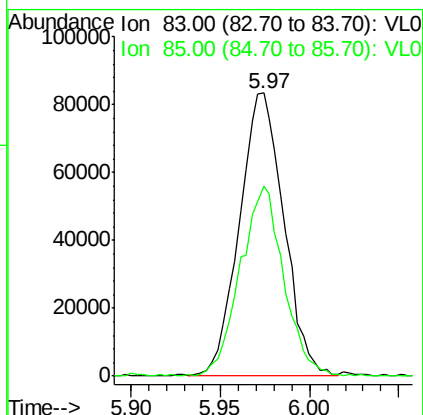
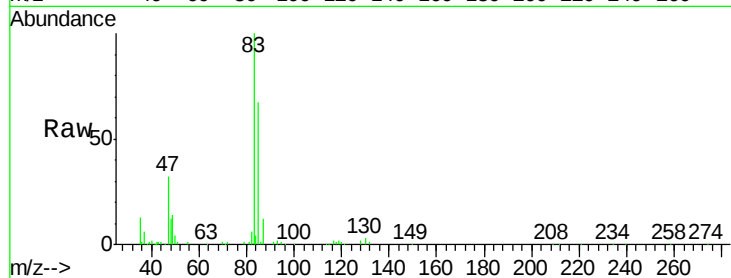




#29
Chloroform
Concen: 0.66 ppbv
RT: 5.97 min Scan# 1520
Delta R.T. -0.01 min
Lab File: VL031862.D
Acq: 12 Apr 2018 11:39

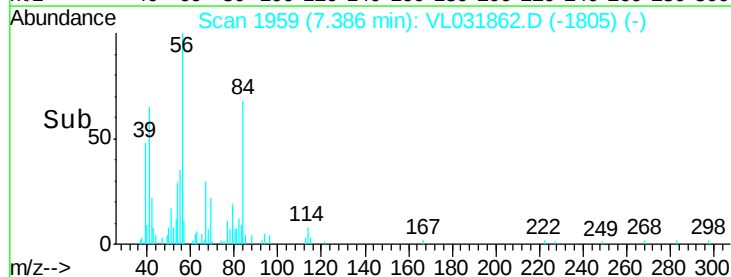
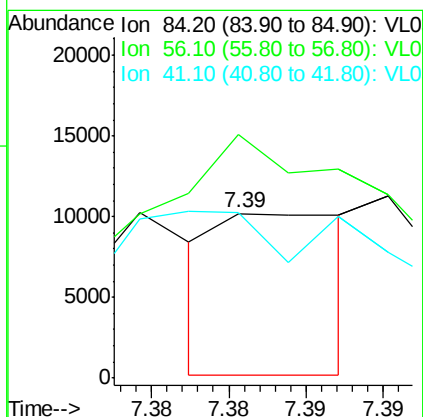
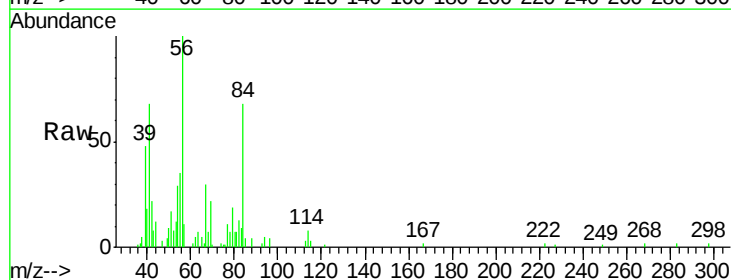
Instrument :
MSVOA_L
ClientSampleId :
GAC-EFF-040218

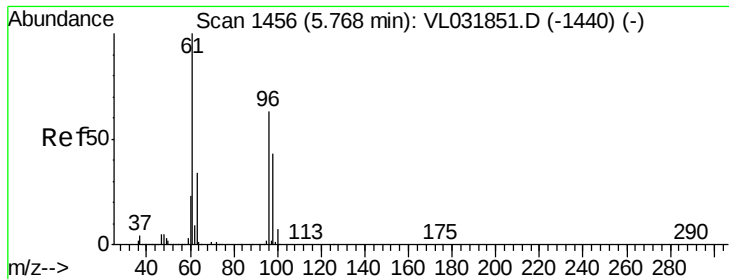
Tgt Ion: 83 Resp: 144605
Ion Ratio Lower Upper
83 100
85 66.6 51.4 77.0



#30
Cyclohexane
Concen: 0.06 ppbv
RT: 7.39 min Scan# 1959
Delta R.T. -0.00 min
Lab File: VL031862.D
Acq: 12 Apr 2018 11:39

Tgt Ion: 84 Resp: 5753
Ion Ratio Lower Upper
84 100
56 0.0 107.7 161.5#
41 381.6 68.2 102.2#





#31

cis-1,2-Dichloroethene

Concen: 1.98 ppbv

RT: 5.77 min Scan# 1455

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

GAC-EFF-040218

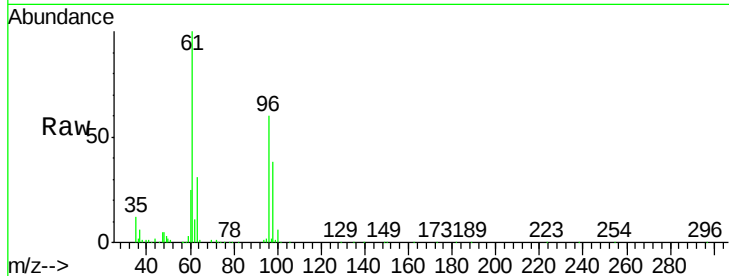
Tgt Ion: 61 Resp: 231669

Ion Ratio Lower Upper

61 100

96 60.0 47.6 71.4

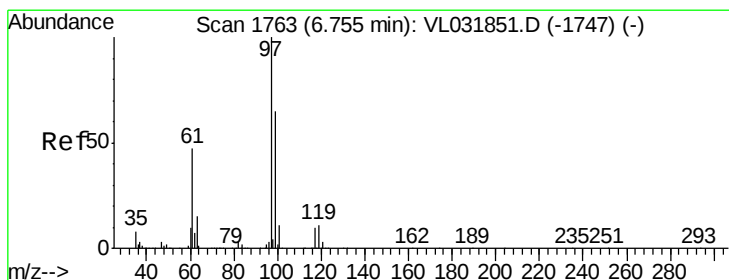
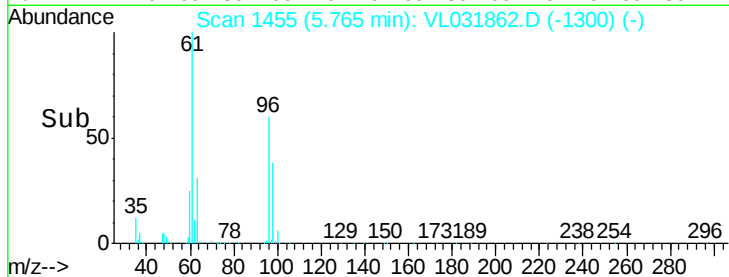
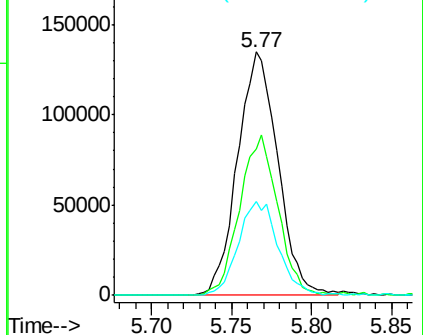
98 38.3 30.3 45.5



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: 4.36 ppbv

RT: 6.75 min Scan# 1762

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

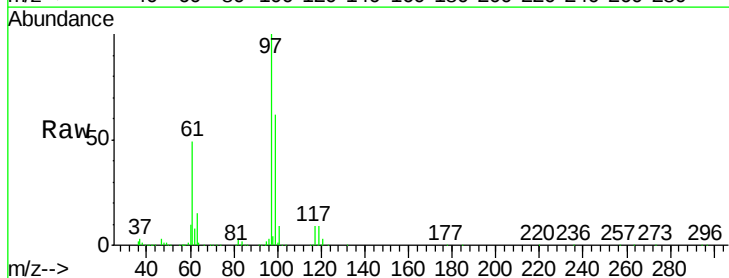
Tgt Ion: 97 Resp: 931250

Ion Ratio Lower Upper

97 100

99 63.7 51.5 77.3

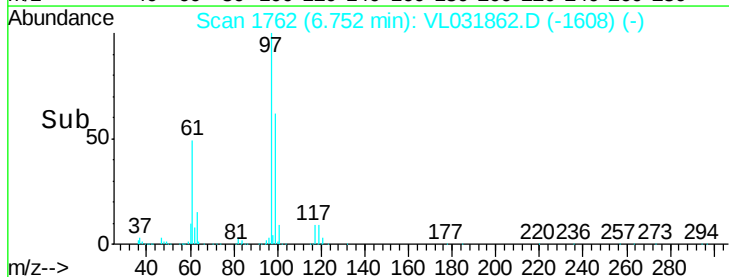
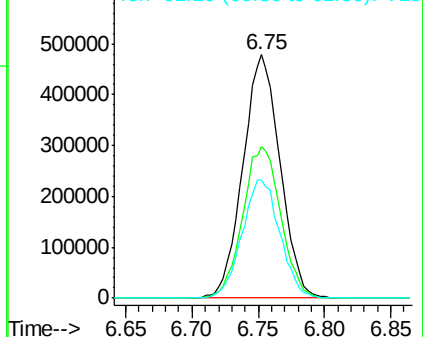
61 49.4 40.0 60.0

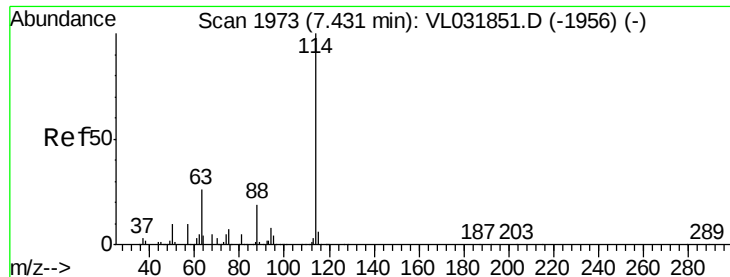


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

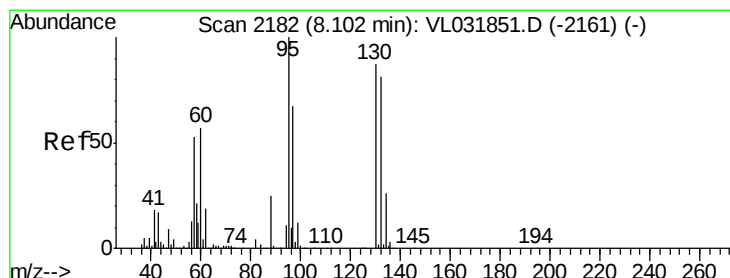
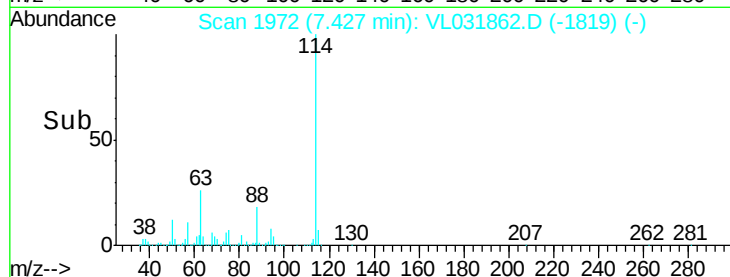
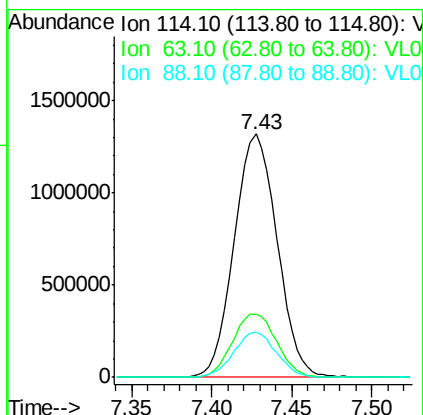
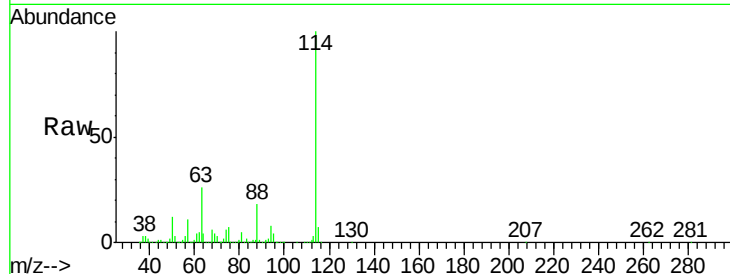




#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.43 min Scan# 1972
 Delta R.T. -0.01 min
 Lab File: VL031862.D
 Acq: 12 Apr 2018 11:39

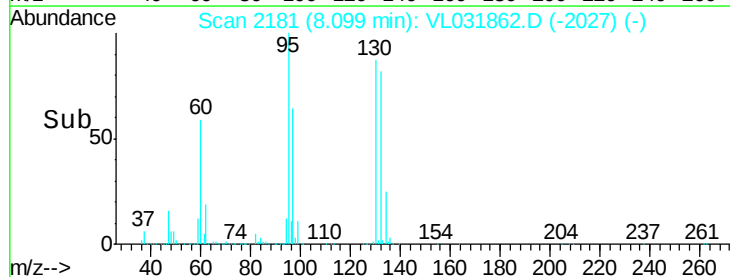
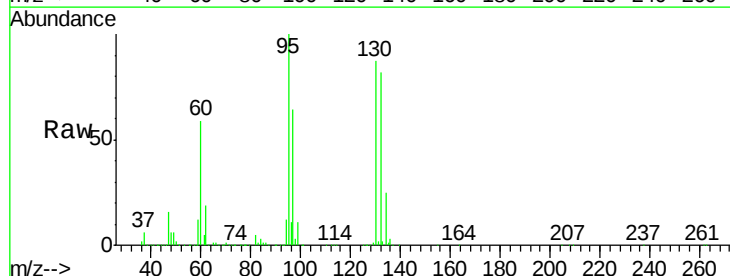
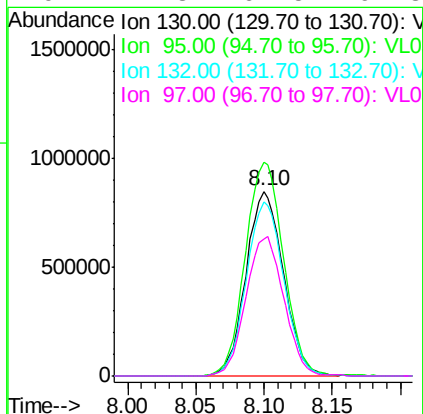
Instrument :
 MSVOA_L
 ClientSampleId :
 GAC-EFF-040218

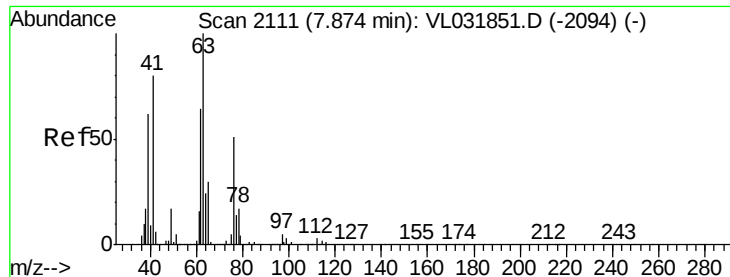
Tgt Ion:114 Resp: 2412511
 Ion Ratio Lower Upper
 114 100
 63 27.0 21.8 32.6
 88 18.5 14.6 22.0



#38
 Trichloroethene
 Concen: 18.31 ppbv
 RT: 8.10 min Scan# 2181
 Delta R.T. -0.00 min
 Lab File: VL031862.D
 Acq: 12 Apr 2018 11:39

Tgt Ion:130 Resp: 1613214
 Ion Ratio Lower Upper
 130 100
 95 115.6 96.6 144.8
 132 94.5 79.1 118.7
 97 74.3 61.5 92.3





#39

1,2-Dichloropropane

Concen: 7.99 ppbv

RT: 7.43 min Scan# 1972

Delta R.T. -0.45 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

GAC-EFF-040218

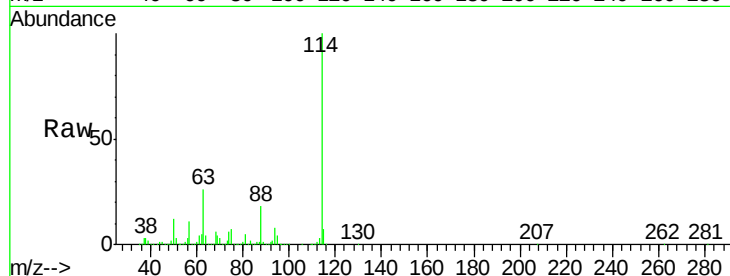
Tgt Ion: 63 Resp: 644645

Ion Ratio Lower Upper

63 100

41 0.2 65.8 98.6#

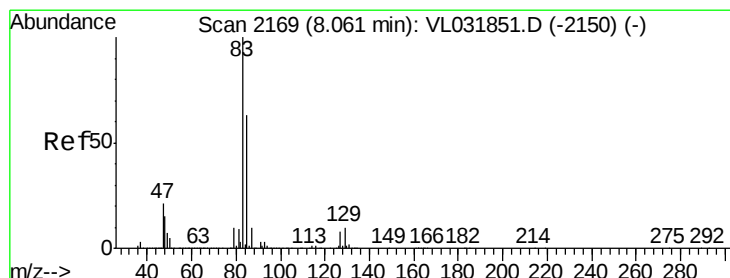
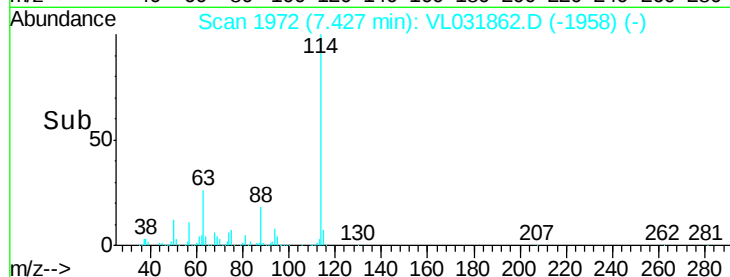
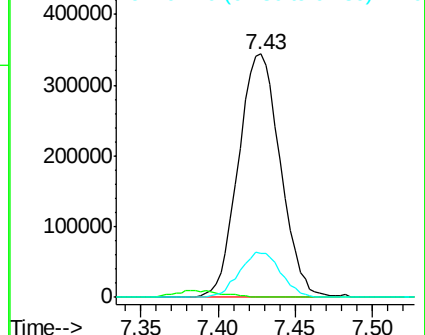
62 17.9 55.0 82.6#



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: 0.07 ppbv

RT: 8.10 min Scan# 2182

Delta R.T. 0.04 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

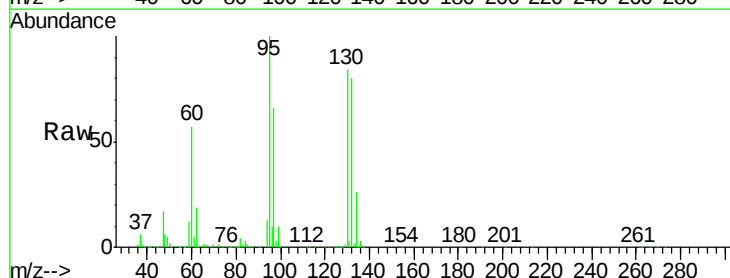
Tgt Ion: 83 Resp: 13081

Ion Ratio Lower Upper

83 100

85 69.0 50.5 75.7

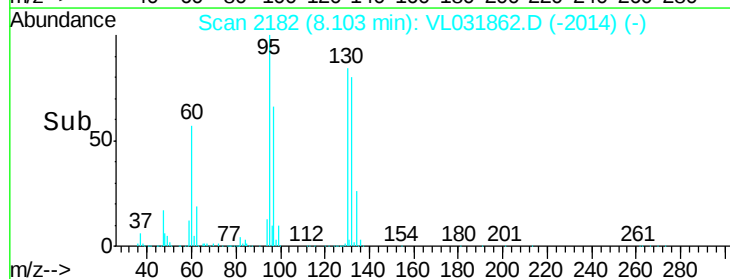
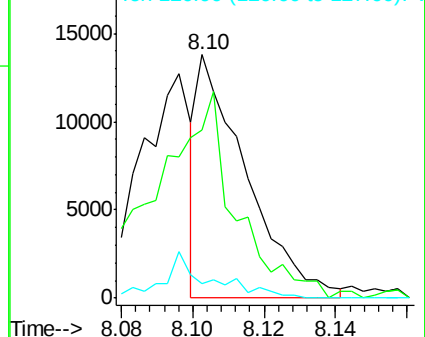
127 6.4 6.0 9.0

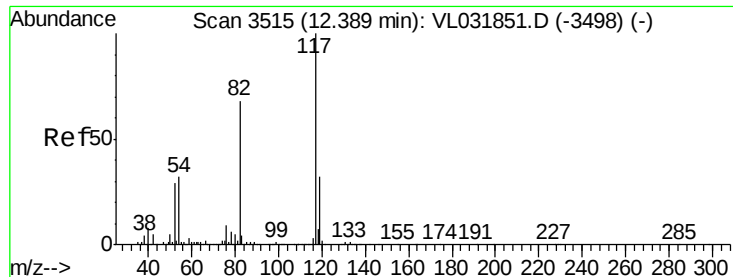


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V





#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.39 min Scan# 3515

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

Instrument :

MSVOA_L

ClientSampleId :

GAC-EFF-040218

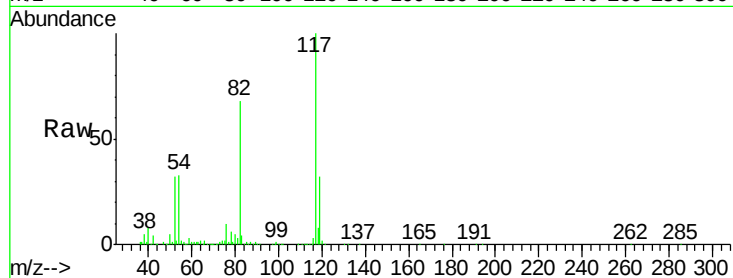
Tgt Ion: 117 Resp: 2195650

Ion	Ratio	Lower	Upper
117	100		
82	69.4	54.6	81.8
119	32.1	26.0	39.0

117 100

82 69.4 54.6 81.8

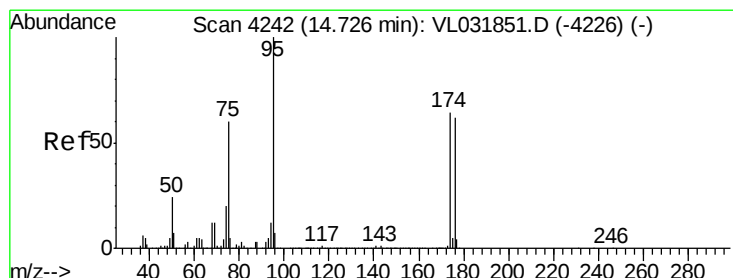
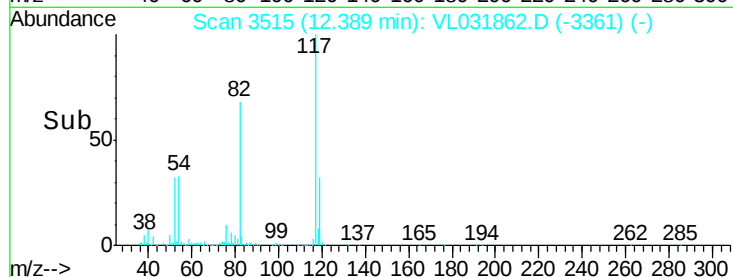
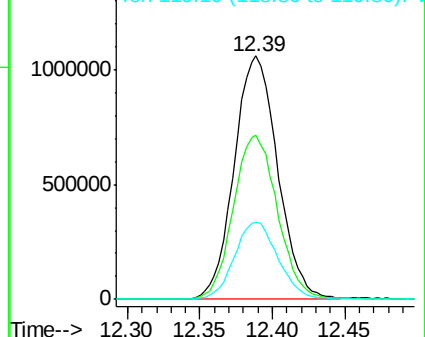
119 32.1 26.0 39.0



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.83 ppbv

RT: 14.73 min Scan# 4242

Delta R.T. -0.00 min

Lab File: VL031862.D

Acq: 12 Apr 2018 11:39

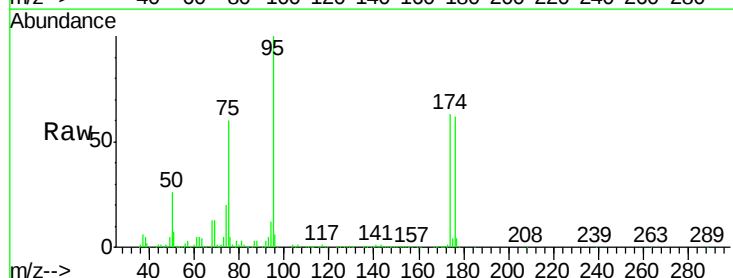
Tgt Ion: 95 Resp: 1734604

Ion	Ratio	Lower	Upper
95	100		
174	65.9	52.3	78.5
175	4.6	3.9	5.9

95 100

174 65.9 52.3 78.5

175 4.6 3.9 5.9



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

