

Data File : VL032669.D
Acq On : 19 Oct 2018 5:04
Operator : SY/AP
Sample : J5581-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
A-1

Quant Time: Oct 19 07:57:05 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL101818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Oct 19 01:25:37 2018
QLast Update : Fri Oct 19 01:25:37 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1368674	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.31	114	3428033	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3307313	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2416858	9.81	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.10%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.08	85	73944	0.530	ppbv	92
3) Chlorodifluoromethane	3.03	51	251564	2.350	ppbv	95
4) Chloromethane	3.18	50	30598	0.512	ppbv	89
9) Propene	3.06	41	41395	0.940	ppbv	83
10) Heptane	8.25	43	6471	0.038	ppbv #	12
11) Trichlorofluoromethane	4.01	101	41498	0.228	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.56	101	11849	0.078	ppbv	88
13) Ethanol	3.66	45	919593	73.043	ppbv	97
15) Acetone	3.91	43	1526039	12.074	ppbv	99
16) 1,3-Butadiene	3.35	39	11590	0.249	ppbv #	1
17) tert-Butyl alcohol	4.37	59	1619	0.044	ppbv #	100
19) Isopropyl Alcohol	4.04	45	626077	6.956	ppbv	100
20) Methylene Chloride	4.42	84	87710	1.367	ppbv	92
23) Vinyl Acetate	5.16	43	38877	0.174	ppbv #	28
25) Ethyl Acetate	5.79	43	194157	0.667	ppbv #	93
26) Hexane	5.79	57	156395	1.136	ppbv #	63
30) Cyclohexane	7.26	84	3648	0.033	ppbv #	1
34) 2-Butanone	5.35	43	100192	0.545	ppbv	99
35) Carbon Tetrachloride	7.15	117	16918	0.070	ppbv #	79
36) Benzene	7.02	78	43453	0.156	ppbv	96
39) 1,2-Dichloropropane	7.30	63	864848	8.045	ppbv #	25
41) Tetrahydrofuran	6.15	42	3859	0.038	ppbv #	35
44) 2,2,4-Trimethylpentane	8.00	57	38092	0.080	ppbv #	57
53) Toluene	9.96	91	589952	1.849	ppbv	98
58) Ethyl Benzene	12.88	91	9731	0.025	ppbv	91
60) o-Xylene	13.87	91	6816	0.021	ppbv #	1
74) 1,2,4-Trimethylbenzene	16.94	105	17440	0.048	ppbv #	77

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

Data File : VL032669.D

Acq On : 19 Oct 2018 5:04

Operator : SY/AP

Sample : J5581-01

Misc : 400ml/MSVOA L

ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
A-1

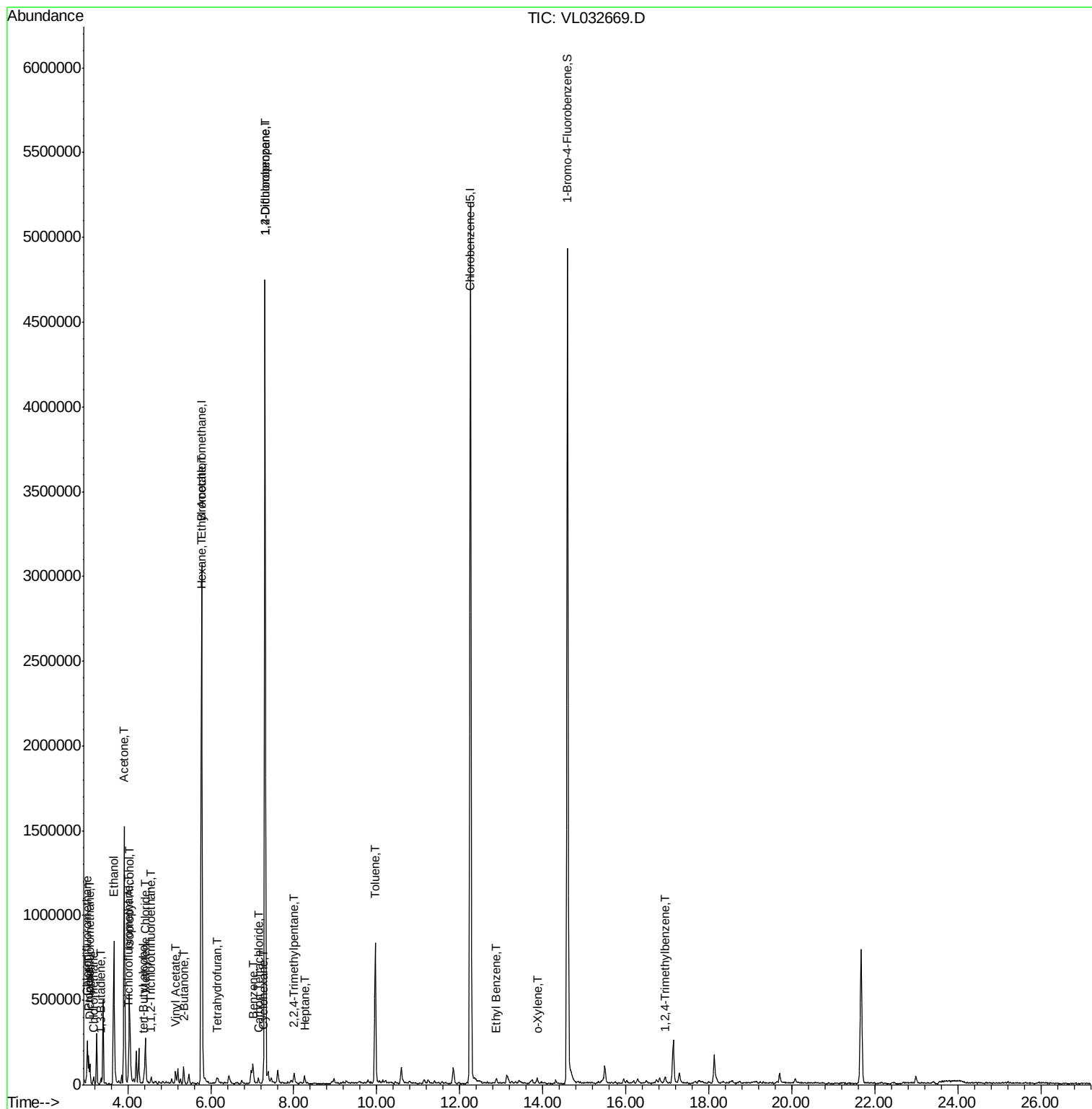
Quant Time: Oct 19 07:57:05 2018

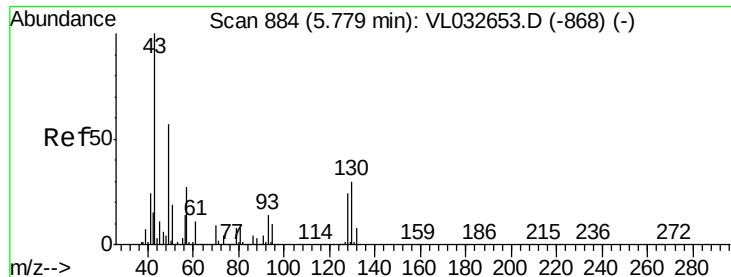
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL101818AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri Oct 19 01:25:37 2018

QLast Update : Fri Oct 19 01:25:37 2018

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.01 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

A-1

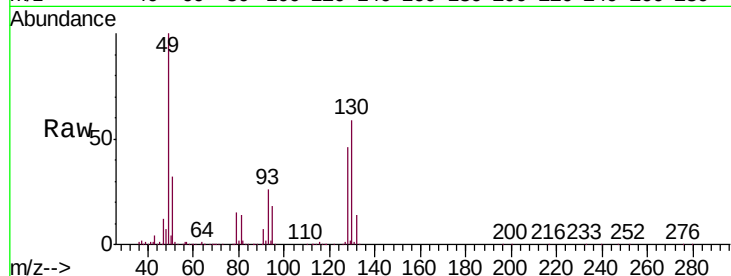
Tgt Ion: 49 Resp: 1368674

Ion Ratio Lower Upper

49 100

128 49.1 22.3 66.8

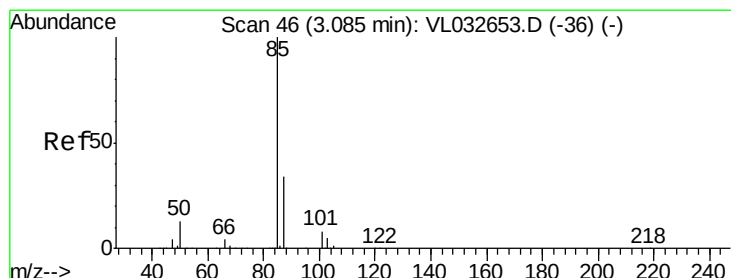
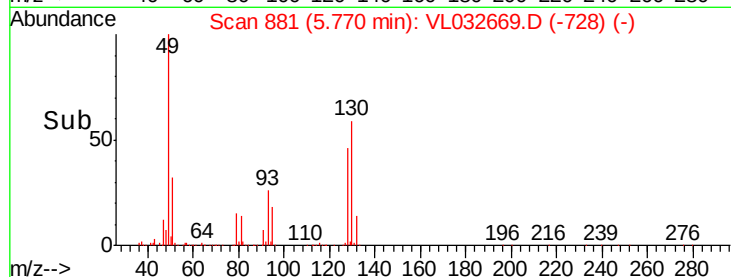
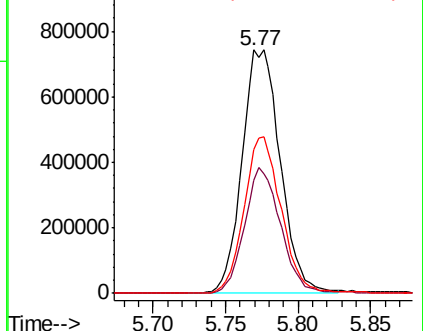
130 62.8 28.4 85.3



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



#2

Dichlorodifluoromethane

Concen: 0.530 ppbv

RT: 3.08 min Scan# 46

Delta R.T. 0.00 min

Lab File: VL032669.D

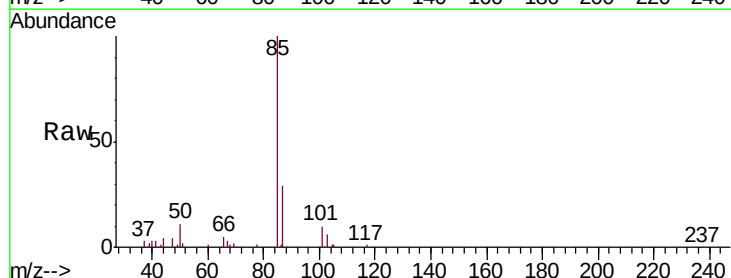
Acq: 19 Oct 2018 5:04

Tgt Ion: 85 Resp: 73944

Ion Ratio Lower Upper

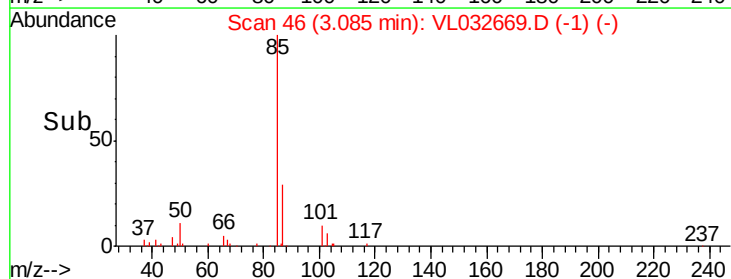
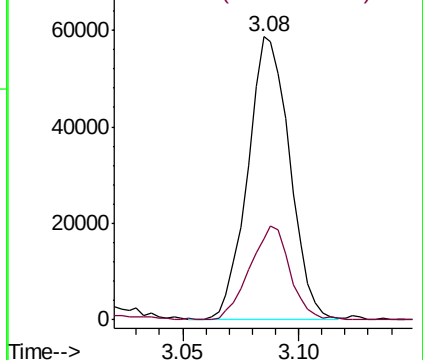
85 100

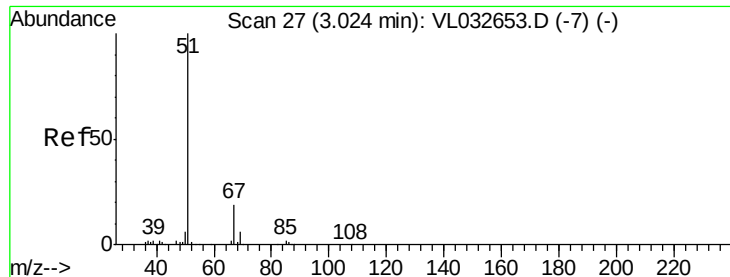
87 28.2 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 2.350 ppbv

RT: 3.03 min Scan# 28

Delta R.T. 0.00 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

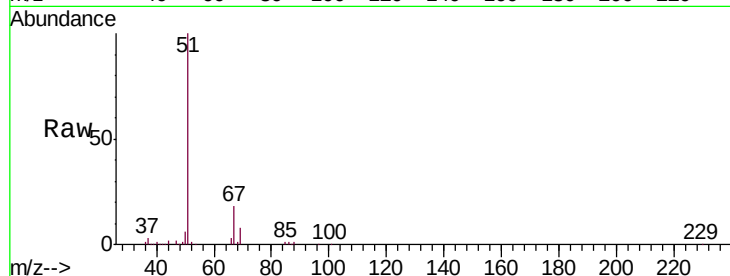
A-1

Tgt Ion: 51 Resp: 251564

Ion Ratio Lower Upper

51 100

67 16.9 15.2 22.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

200000

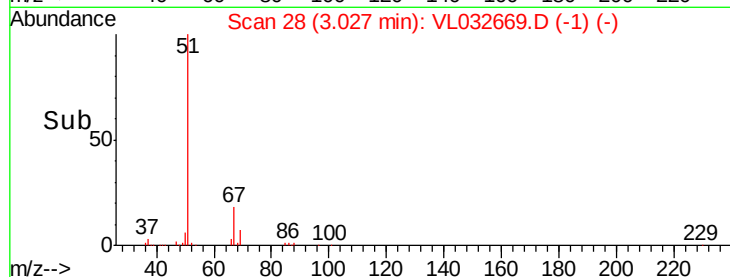
150000

100000

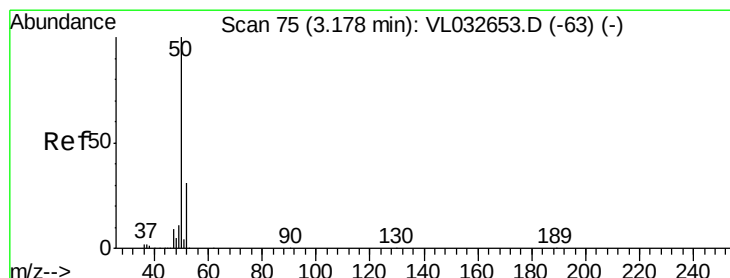
50000

0

Time-->



Time-->



#4

Chloromethane

Concen: 0.512 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL032669.D

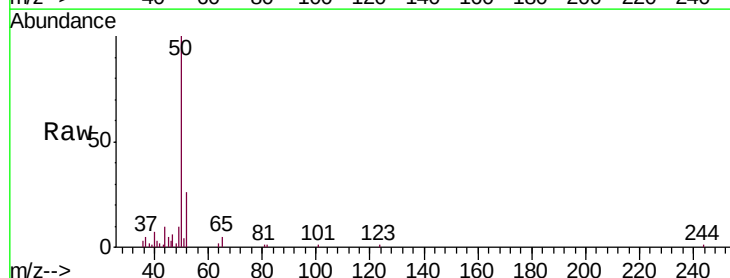
Acq: 19 Oct 2018 5:04

Tgt Ion: 50 Resp: 30598

Ion Ratio Lower Upper

50 100

52 26.2 25.9 38.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

25000

20000

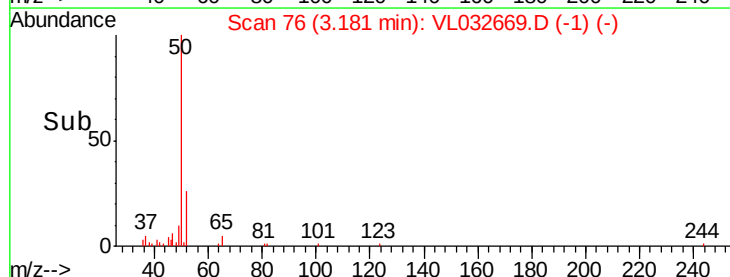
15000

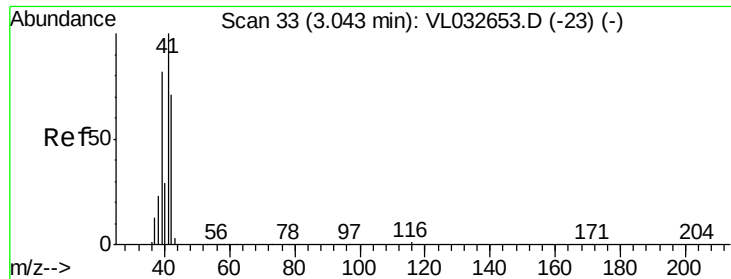
10000

5000

0

Time-->





#9

Propene

Concen: 0.940 ppbv

RT: 3.06 min Scan# 38

Delta R.T. 0.02 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

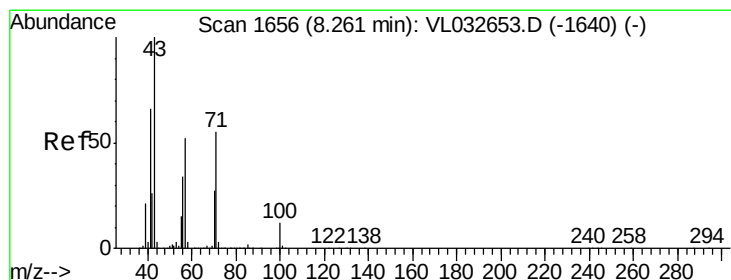
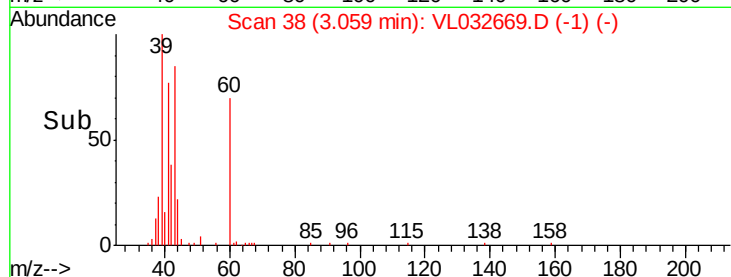
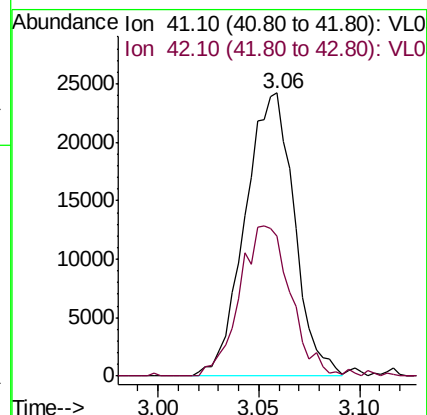
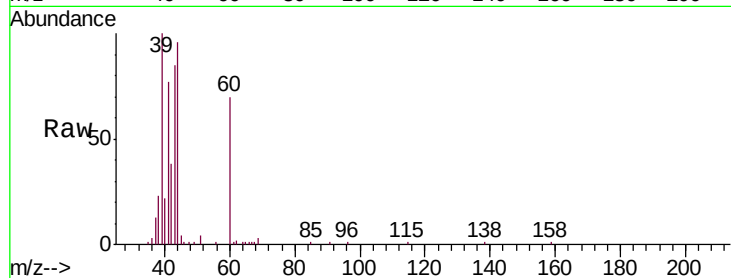
A-1

Tgt Ion: 41 Resp: 41395

Ion Ratio Lower Upper

41 100

42 55.7 55.4 83.0



#10

Heptane

Concen: 0.038 ppbv

RT: 8.25 min Scan# 1654

Delta R.T. -0.01 min

Lab File: VL032669.D

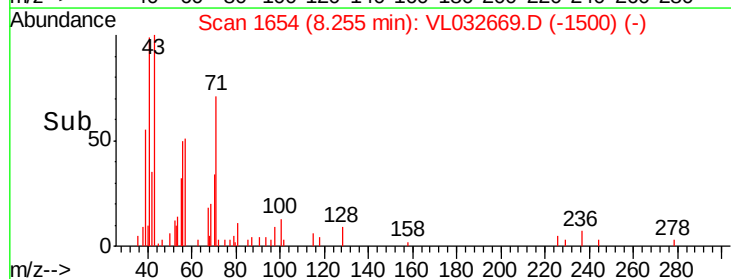
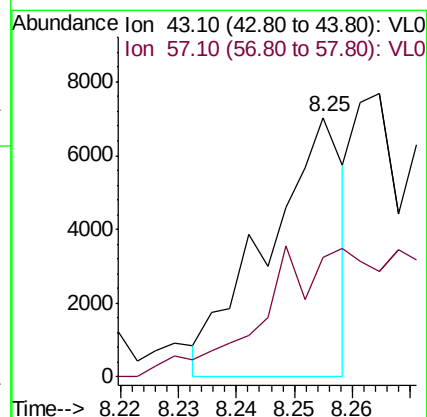
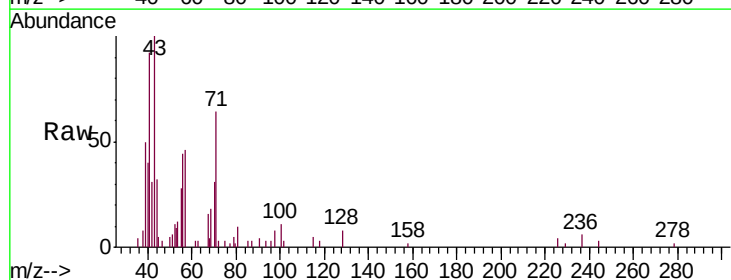
Acq: 19 Oct 2018 5:04

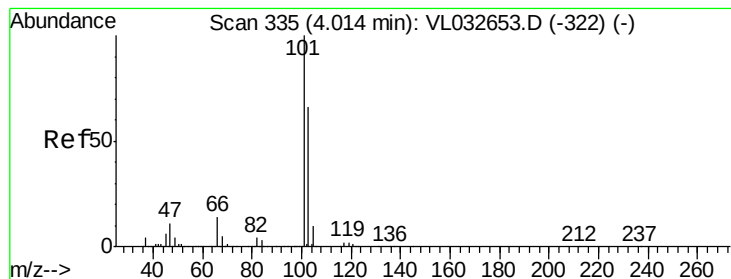
Tgt Ion: 43 Resp: 6471

Ion Ratio Lower Upper

43 100

57 114.0 41.5 62.3#





#11

Trichlorofluoromethane

Concen: 0.228 ppbv

RT: 4.01 min Scan# 335

Delta R.T. -0.00 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

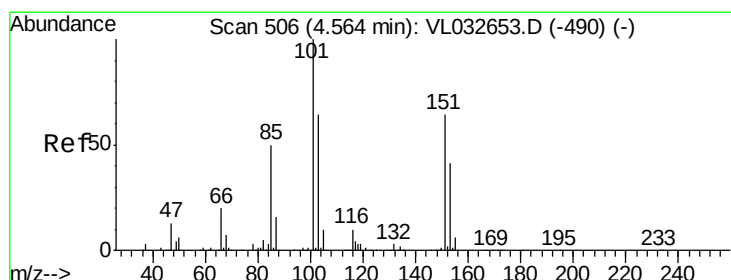
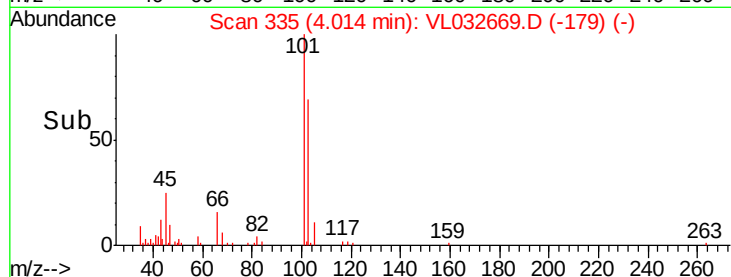
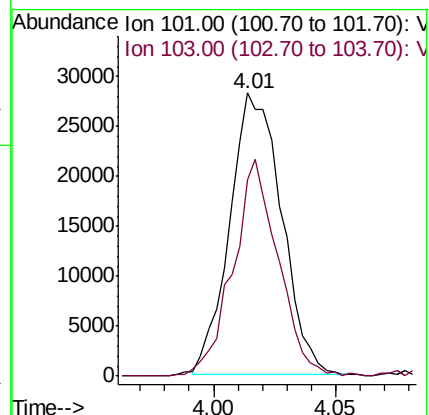
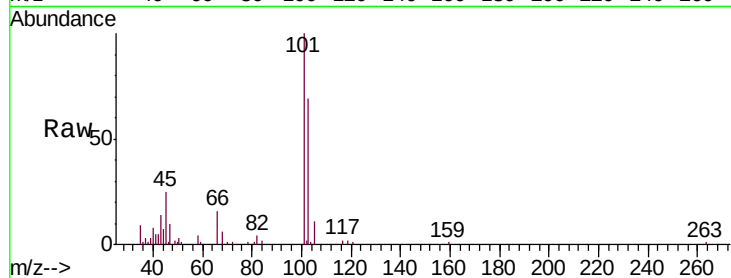
A-1

Tgt Ion:101 Resp: 41498

Ion Ratio Lower Upper

101 100

103 69.6 51.4 77.2



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.078 ppbv

RT: 4.56 min Scan# 506

Delta R.T. -0.00 min

Lab File: VL032669.D

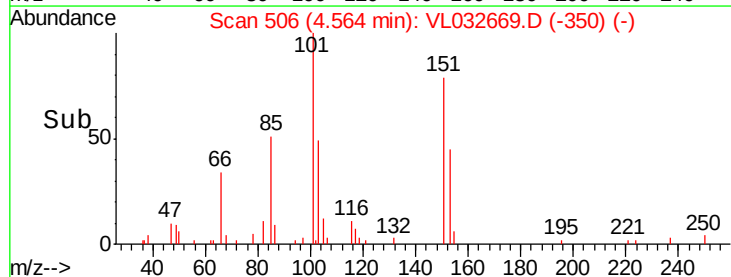
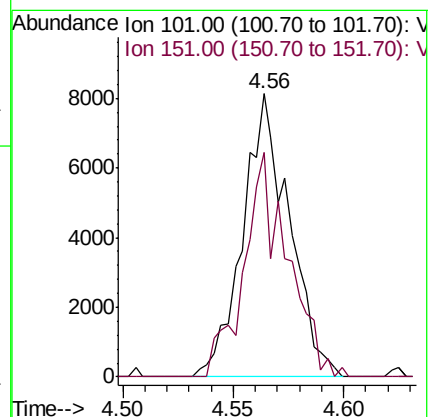
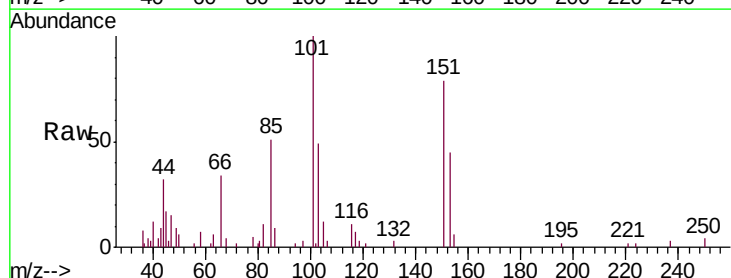
Acq: 19 Oct 2018 5:04

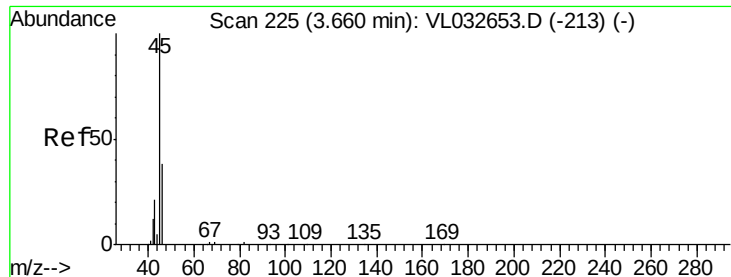
Tgt Ion:101 Resp: 11849

Ion Ratio Lower Upper

101 100

151 74.8 52.3 78.5

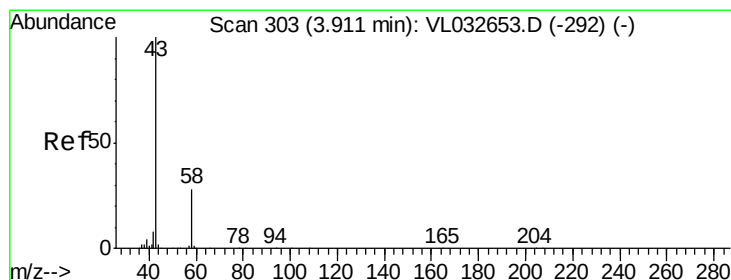
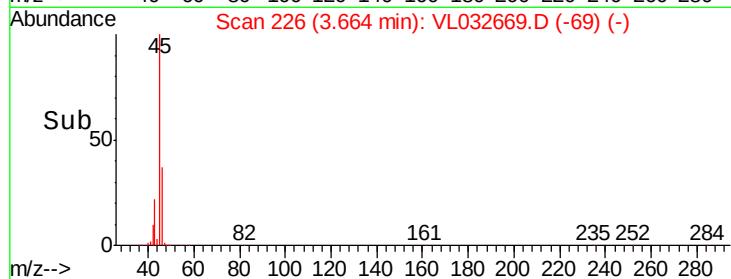
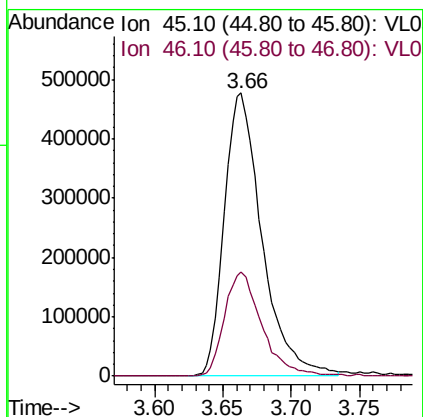
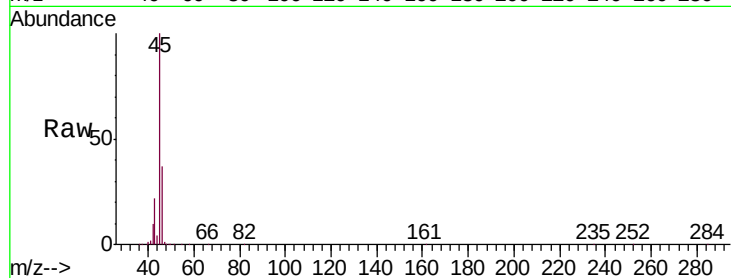




#13
Ethanol
Concen: 73.043 ppbv
RT: 3.66 min Scan# 226
Delta R.T. 0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

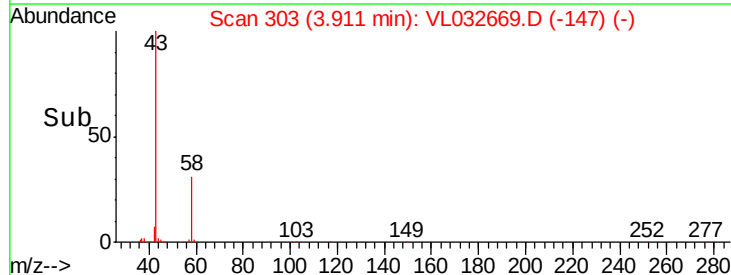
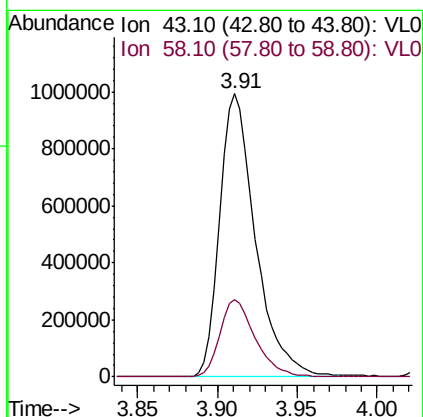
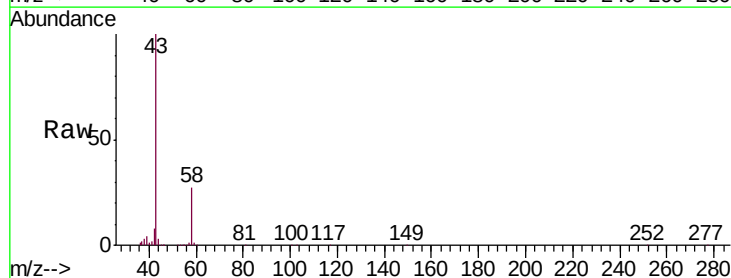
Instrument :
MSVOA_L
ClientSampleId :
A-1

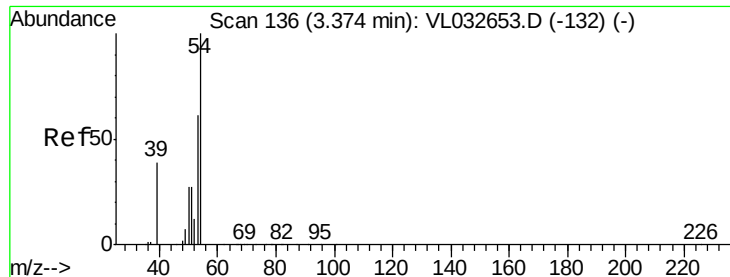
Tgt Ion: 45 Resp: 919593
Ion Ratio Lower Upper
45 100
46 36.9 15.4 61.8



#15
Acetone
Concen: 12.074 ppbv
RT: 3.91 min Scan# 303
Delta R.T. 0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

Tgt Ion: 43 Resp: 1526039
Ion Ratio Lower Upper
43 100
58 27.3 22.1 33.1

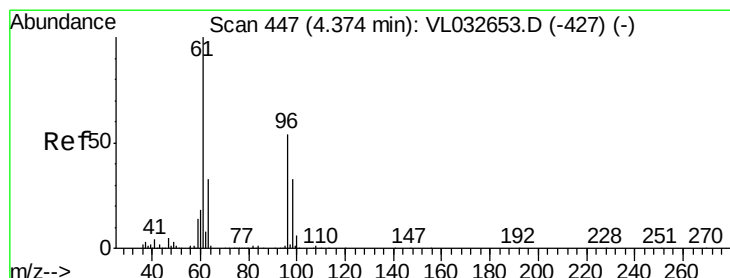
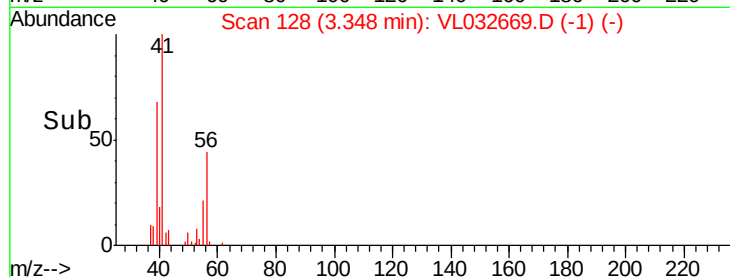
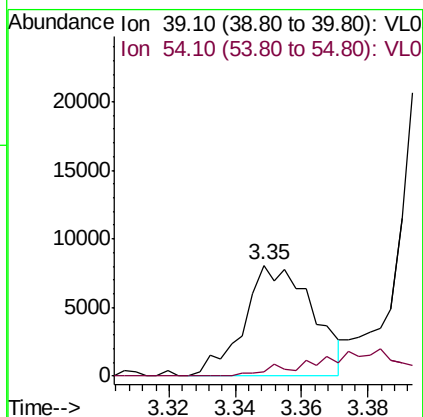
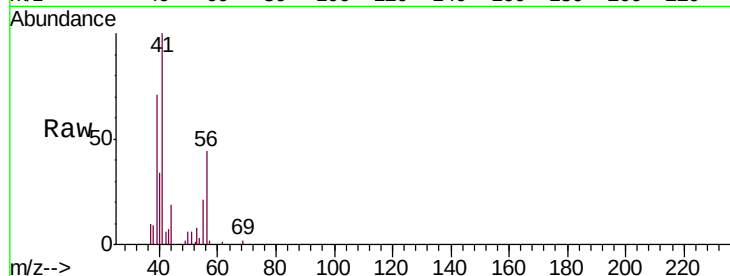




#16
 1,3-Butadiene
 Concen: 0.249 ppbv
 RT: 3.35 min Scan# 128
 Delta R.T. -0.03 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

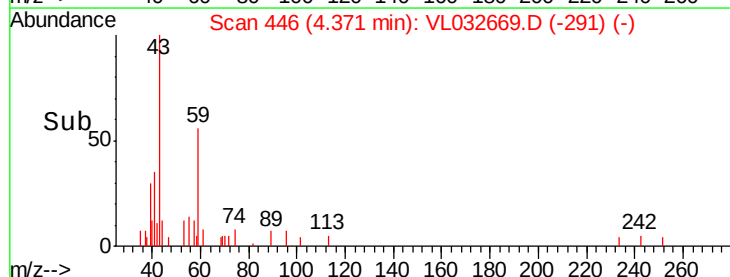
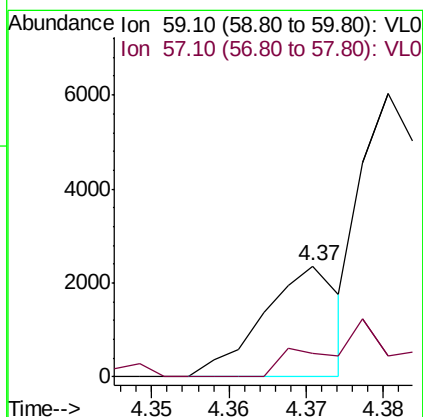
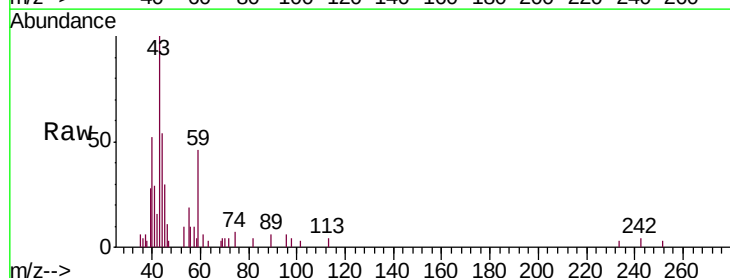
Instrument :
 MSVOA_L
 ClientSampleId :
 A-1

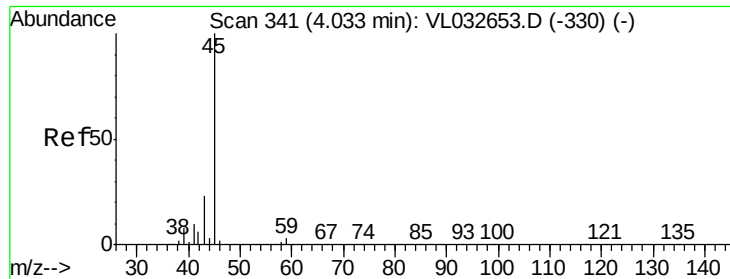
Tgt Ion: 39 Resp: 11590
 Ion Ratio Lower Upper
 39 100
 54 0.0 90.4 135.6#



#17
 tert-Butyl alcohol
 Concen: 0.044 ppbv
 RT: 4.37 min Scan# 446
 Delta R.T. -0.00 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

Tgt Ion: 59 Resp: 1619
 Ion Ratio Lower Upper
 59 100
 57 0.0 0.0 0.0

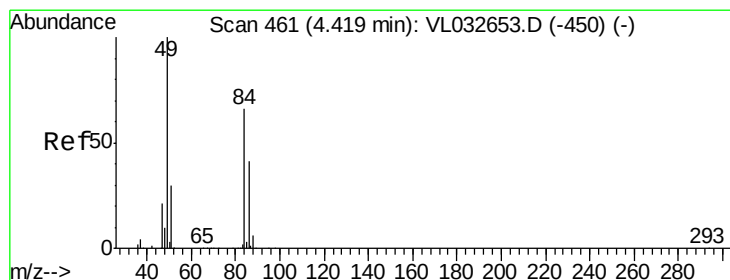
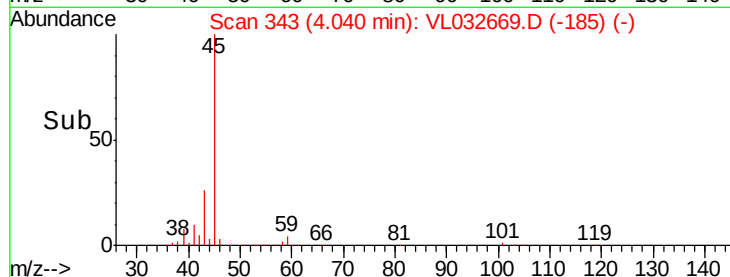
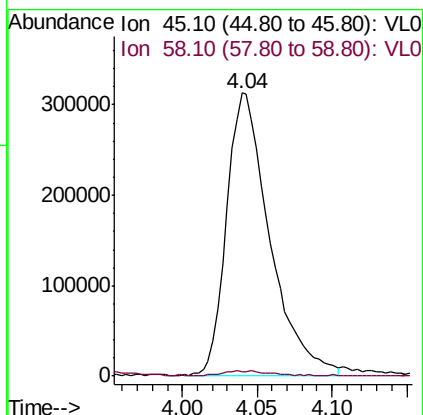
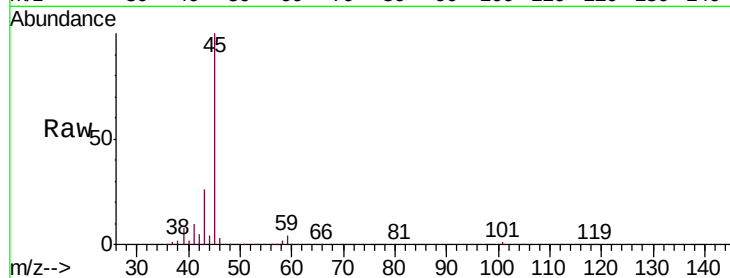




#19
Isopropyl Alcohol
Concen: 6.956 ppbv
RT: 4.04 min Scan# 343
Delta R.T. 0.01 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

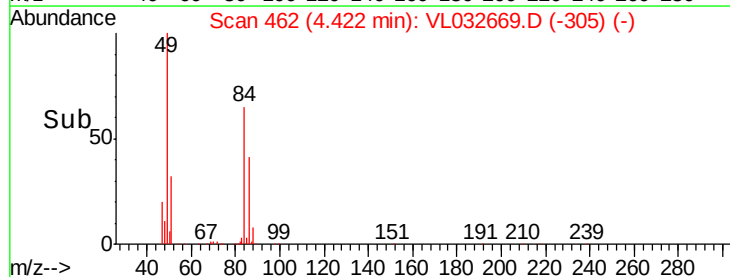
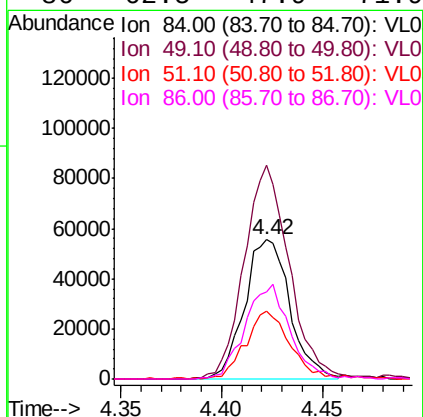
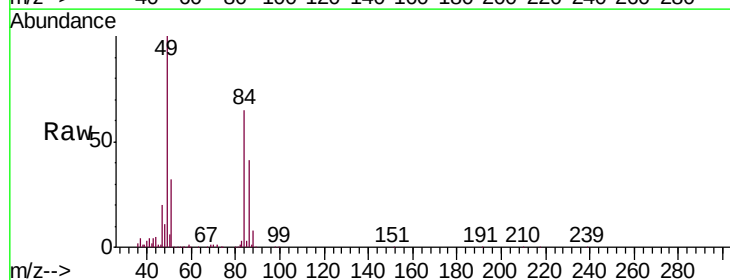
Instrument :
MSVOA_L
ClientSampleId :
A-1

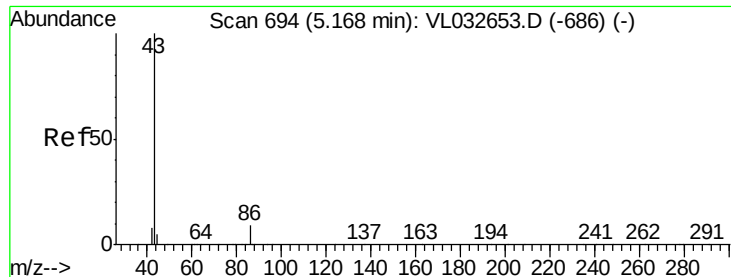
Tgt Ion: 45 Resp: 626077
Ion Ratio Lower Upper
45 100
58 2.5 2.0 3.0



#20
Methylene Chloride
Concen: 1.367 ppbv
RT: 4.42 min Scan# 462
Delta R.T. 0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

Tgt Ion: 84 Resp: 87710
Ion Ratio Lower Upper
84 100
49 153.6 113.5 170.3
51 48.5 34.8 52.2
86 62.5 47.9 71.9

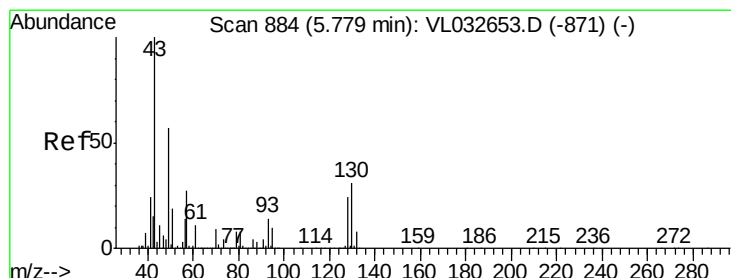
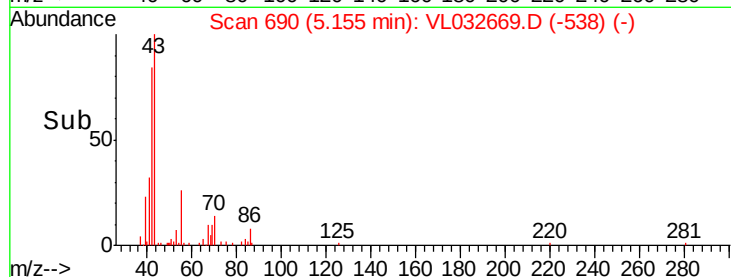
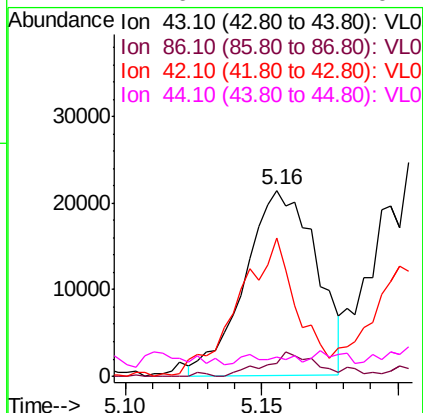
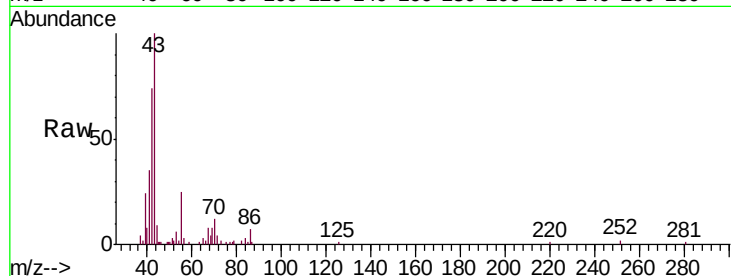




#23
 Vinyl Acetate
 Concen: 0.174 ppbv
 RT: 5.16 min Scan# 690
 Delta R.T. -0.01 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

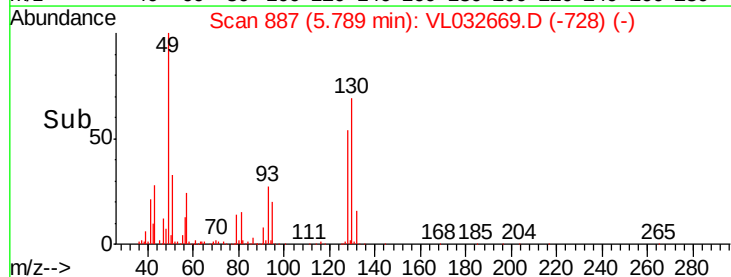
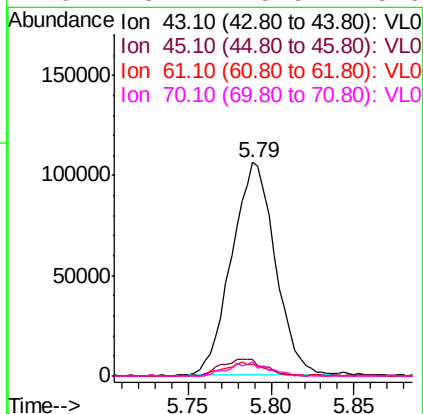
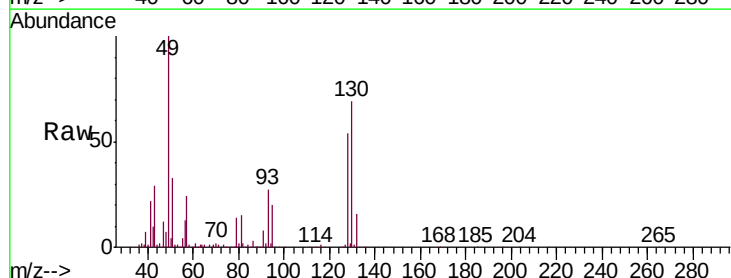
Instrument :
 MSVOA_L
 ClientSampleId :
 A-1

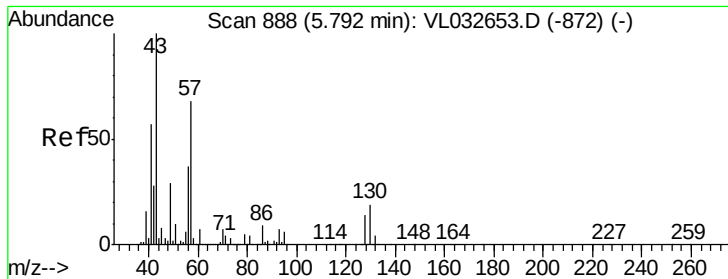
Tgt Ion:	43	Resp:	38877
Ion	Ratio	Lower	Upper
43	100		
86	7.2	6.1	9.1
42	69.8	7.4	11.2#
44	2.6	4.2	6.2#



#25
 Ethyl Acetate
 Concen: 0.667 ppbv
 RT: 5.79 min Scan# 887
 Delta R.T. 0.01 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

Tgt Ion:	43	Resp:	194157
Ion	Ratio	Lower	Upper
43	100		
45	8.2	8.0	12.0
61	6.0	8.0	12.0#
70	5.7	5.9	8.9#

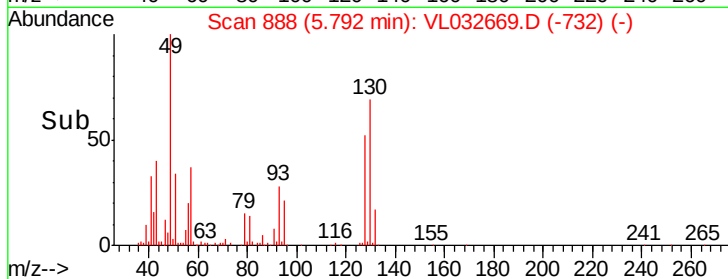
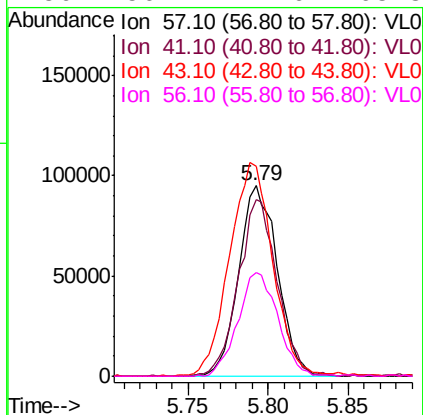
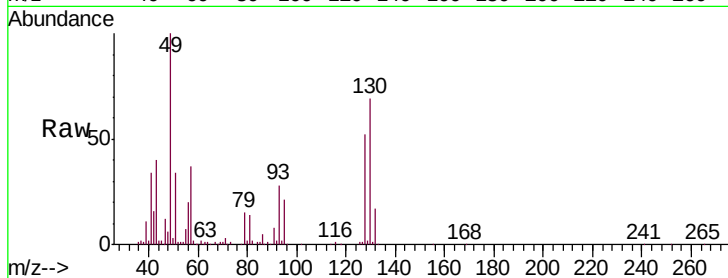




#26
Hexane
Concen: 1.136 ppbv
RT: 5.79 min Scan# 888
Delta R.T. 0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

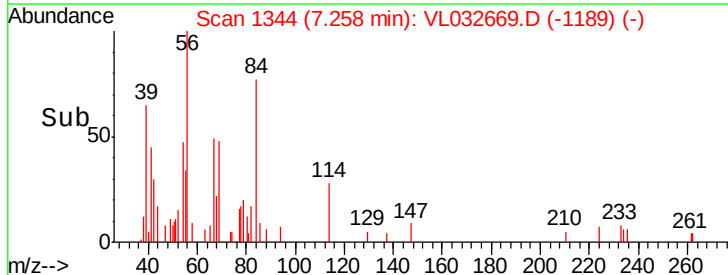
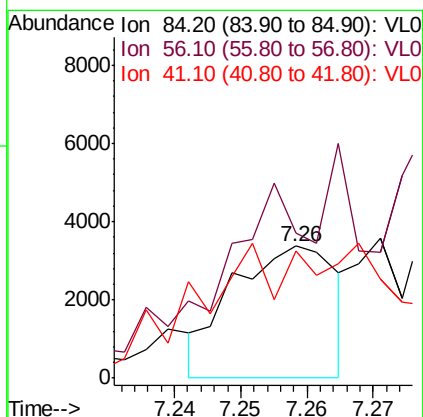
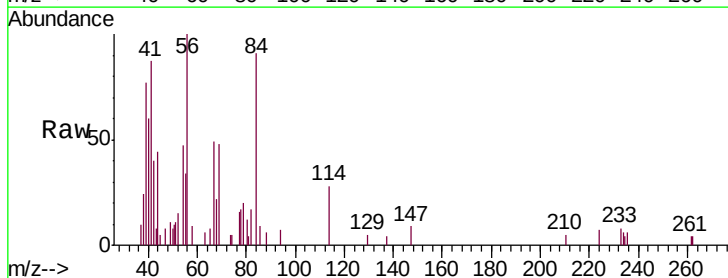
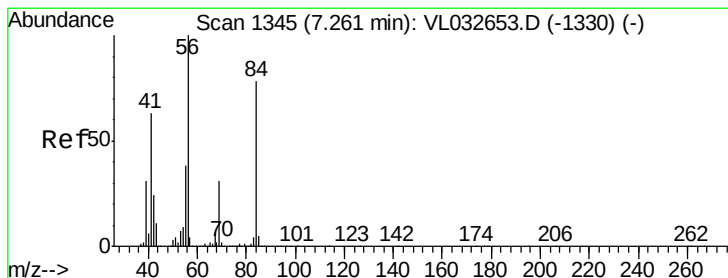
Instrument :
MSVOA_L
ClientSampleId :
A-1

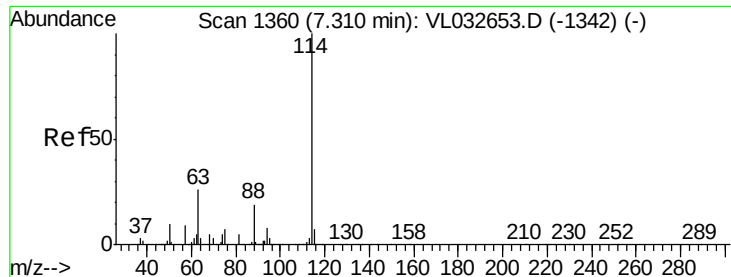
Tgt Ion: 57 Resp: 156395
Ion Ratio Lower Upper
57 100
41 93.4 67.4 101.0
43 127.2 171.9 257.9#
56 56.2 42.6 63.8



#30
Cyclohexane
Concen: 0.033 ppbv
RT: 7.26 min Scan# 1344
Delta R.T. -0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

Tgt Ion: 84 Resp: 3648
Ion Ratio Lower Upper
84 100
56 0.0 108.3 162.5#
41 272.5 64.8 97.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.31 min Scan# 1359

Delta R.T. -0.00 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

A-1

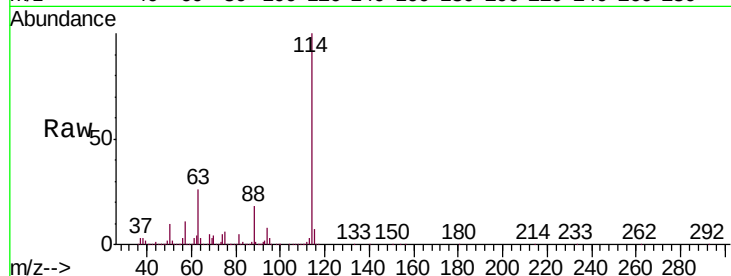
Tgt Ion:114 Resp: 3428033

Ion Ratio Lower Upper

114 100

63 25.4 21.7 32.5

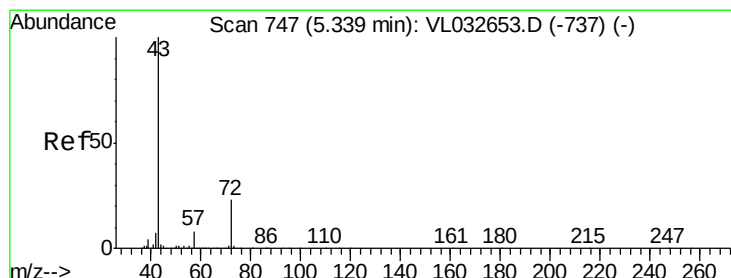
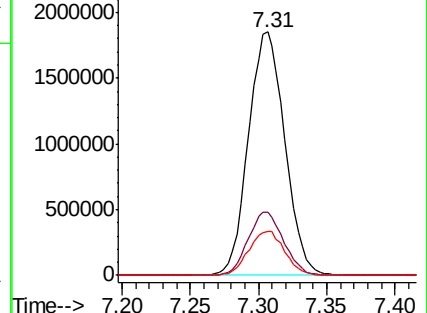
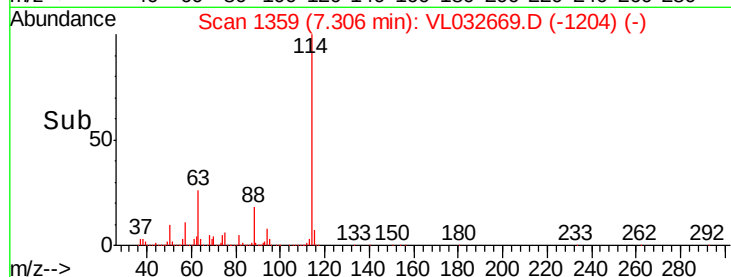
88 18.0 14.9 22.3



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: 0.545 ppbv

RT: 5.35 min Scan# 750

Delta R.T. 0.01 min

Lab File: VL032669.D

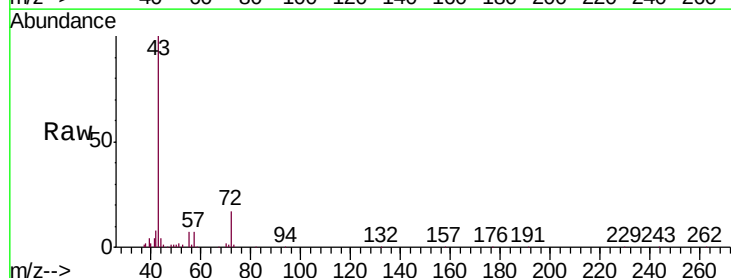
Acq: 19 Oct 2018 5:04

Tgt Ion: 43 Resp: 100192

Ion Ratio Lower Upper

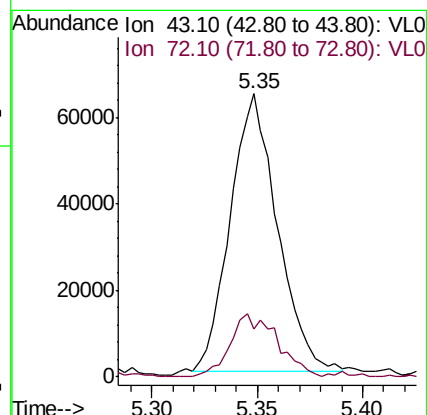
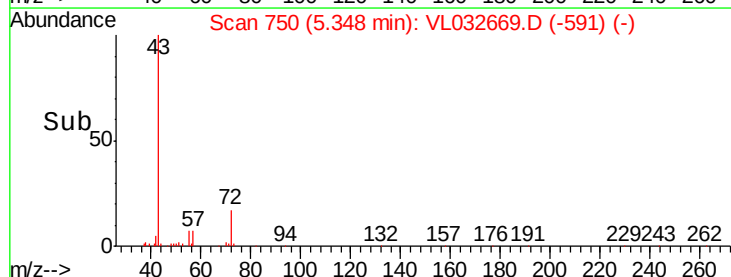
43 100

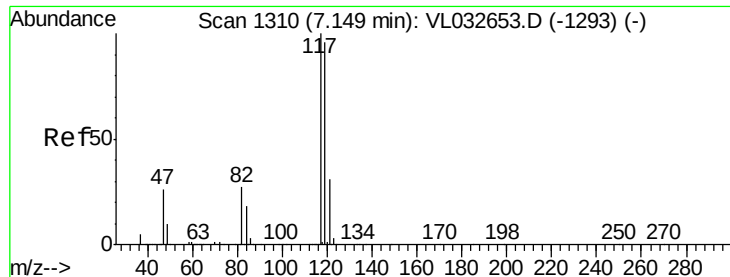
72 23.7 18.6 27.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.070 ppbv

RT: 7.15 min Scan# 1310

Delta R.T. 0.00 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

A-1

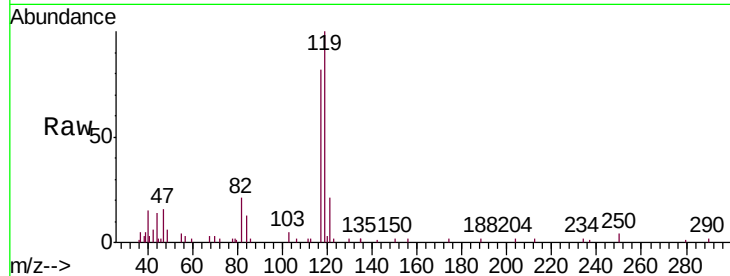
Tgt Ion: 117 Resp: 16918

Ion Ratio Lower Upper

117 100

119 118.9 75.7 113.5#

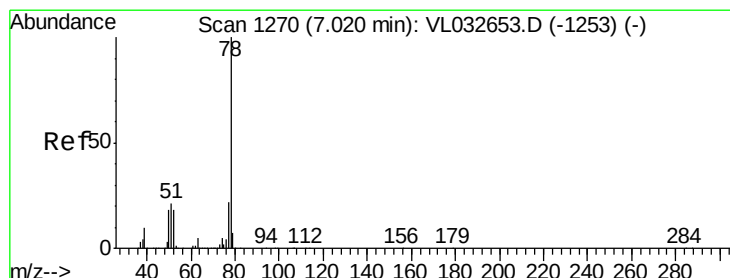
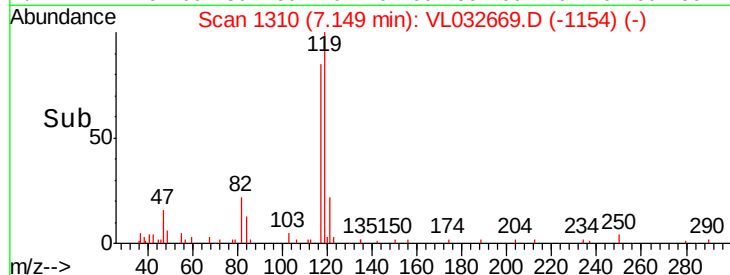
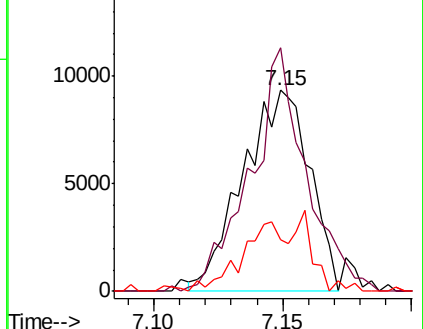
121 25.8 24.7 37.1



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: 0.156 ppbv

RT: 7.02 min Scan# 1270

Delta R.T. 0.00 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

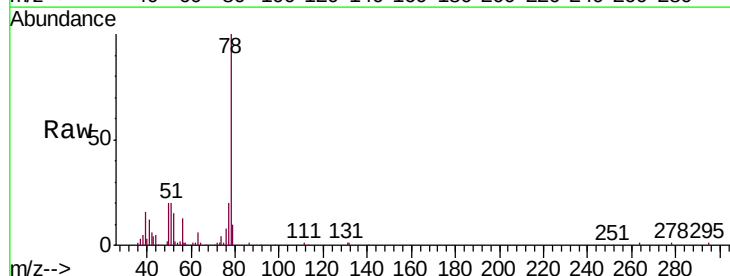
Tgt Ion: 78 Resp: 43453

Ion Ratio Lower Upper

78 100

77 19.6 18.1 27.1

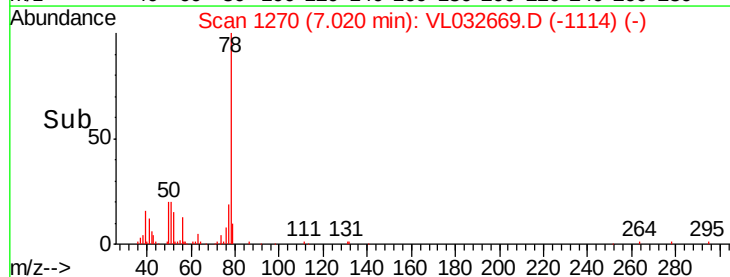
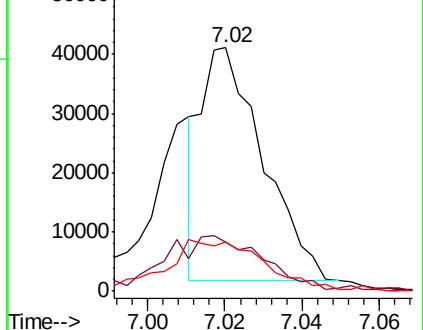
50 19.9 15.1 22.7

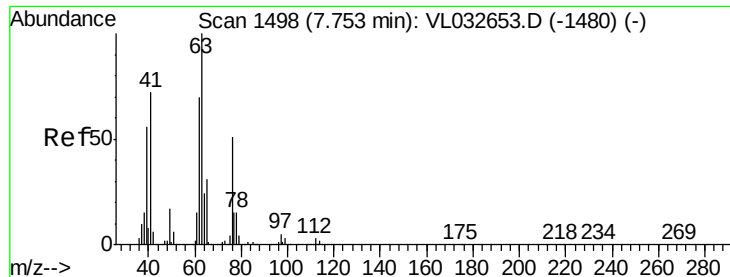


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 8.045 ppbv

RT: 7.30 min Scan# 1358

Delta R.T. -0.45 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

Instrument :

MSVOA_L

ClientSampleId :

A-1

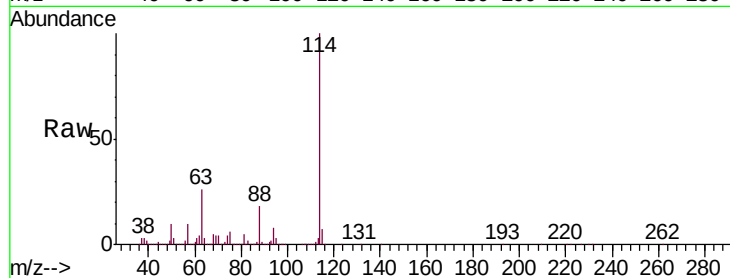
Tgt Ion: 63 Resp: 864848

Ion Ratio Lower Upper

63 100

41 0.0 56.2 84.4#

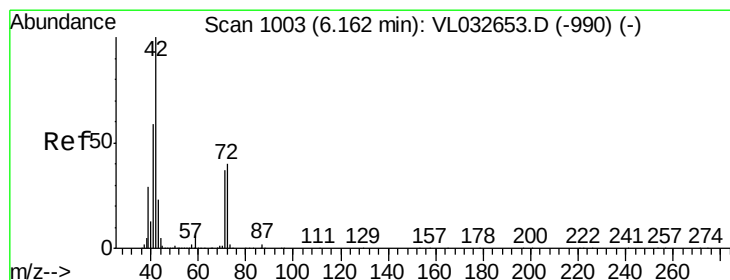
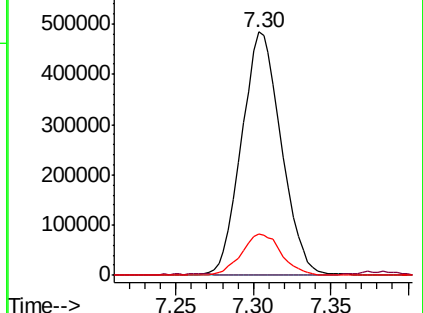
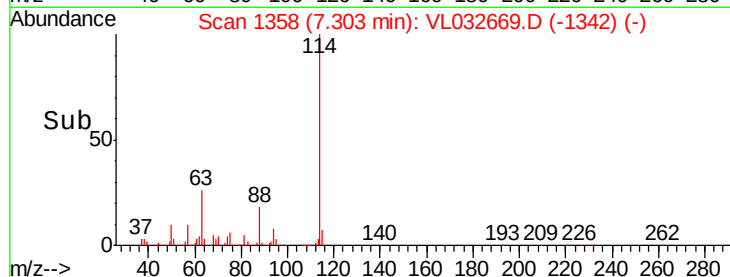
62 16.8 54.4 81.6#



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



#41

Tetrahydrofuran

Concen: 0.038 ppbv

RT: 6.15 min Scan# 1000

Delta R.T. -0.01 min

Lab File: VL032669.D

Acq: 19 Oct 2018 5:04

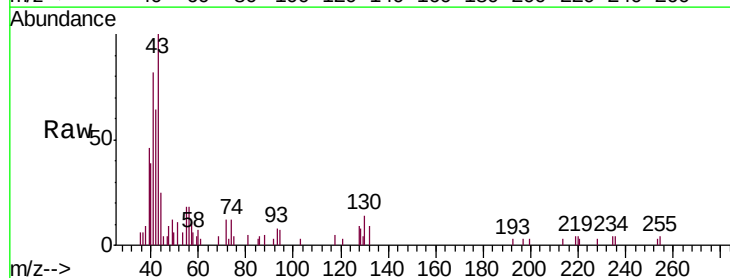
Tgt Ion: 42 Resp: 3859

Ion Ratio Lower Upper

42 100

72 0.0 32.4 48.6#

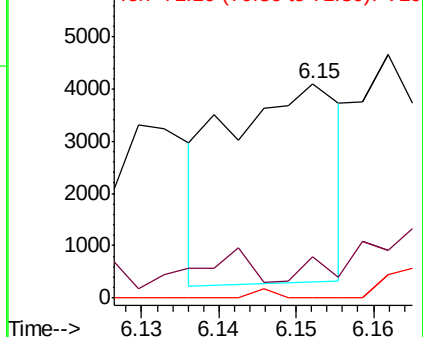
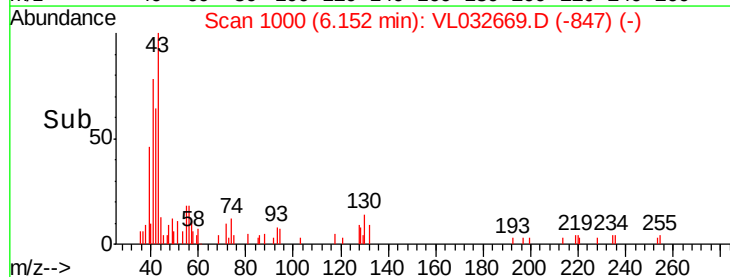
71 0.0 31.3 46.9#

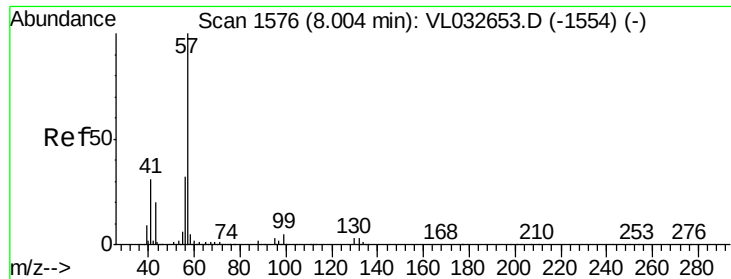


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0

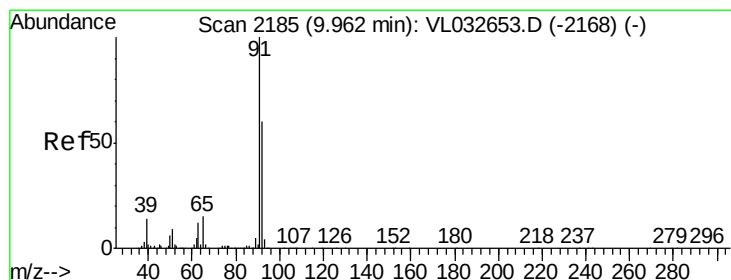
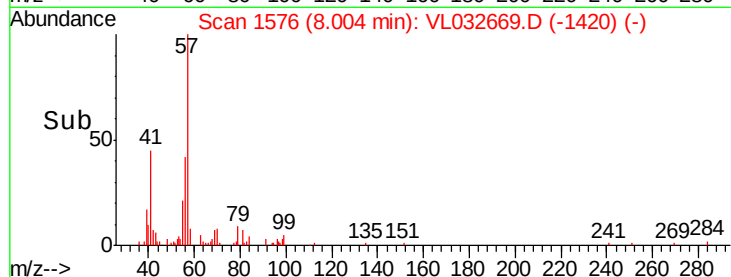
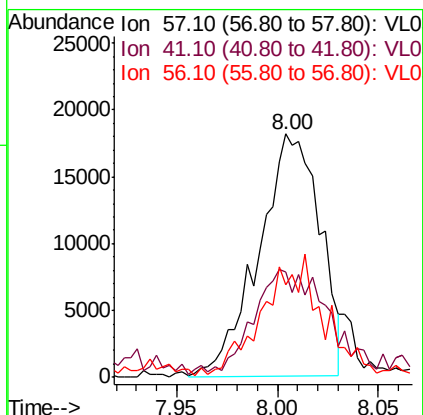
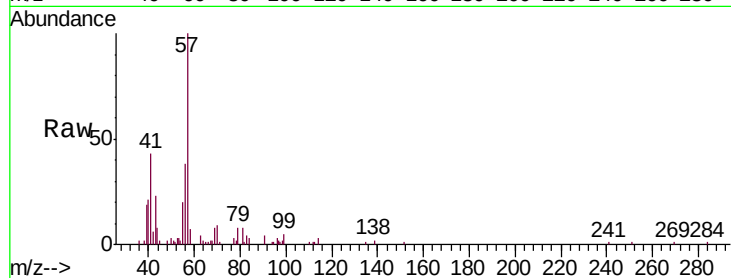




#44
 2,2,4-Trimethylpentane
 Concen: 0.080 ppbv
 RT: 8.00 min Scan# 1576
 Delta R.T. 0.00 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

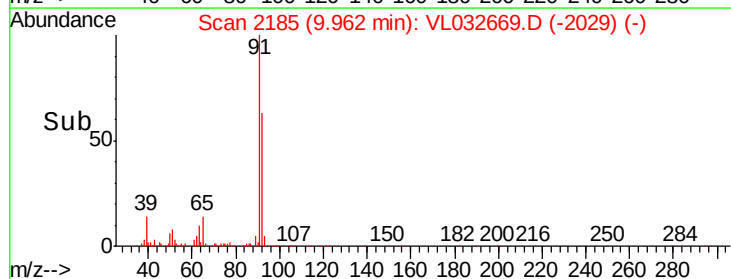
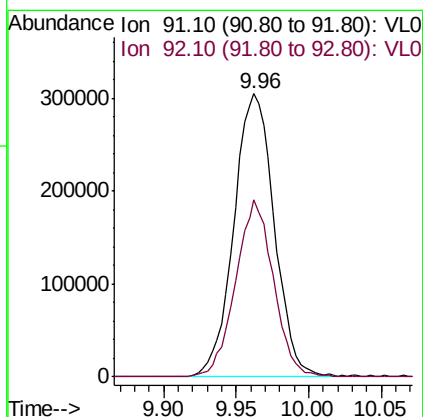
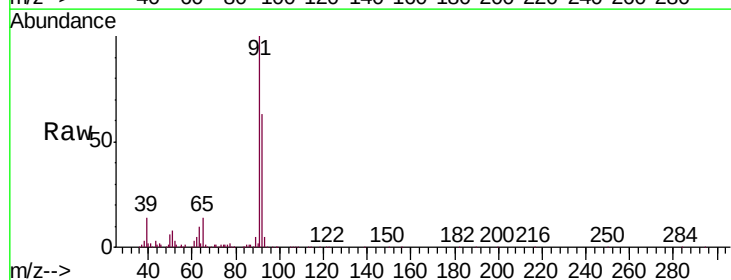
Instrument :
 MSVOA_L
 ClientSampleId :
 A-1

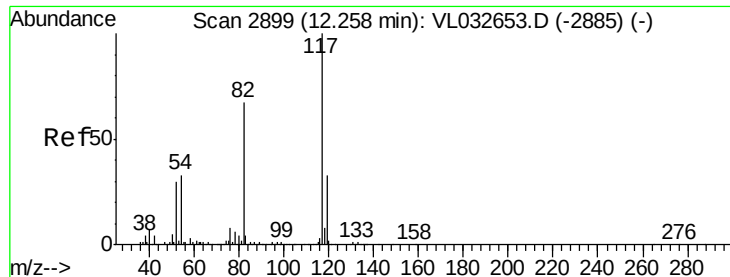
Tgt Ion: 57 Resp: 38092
 Ion Ratio Lower Upper
 57 100
 41 57.6 24.7 37.1#
 56 52.3 25.0 37.4#



#53
 Toluene
 Concen: 1.849 ppbv
 RT: 9.96 min Scan# 2185
 Delta R.T. 0.00 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

Tgt Ion: 91 Resp: 589952
 Ion Ratio Lower Upper
 91 100
 92 58.9 48.4 72.6

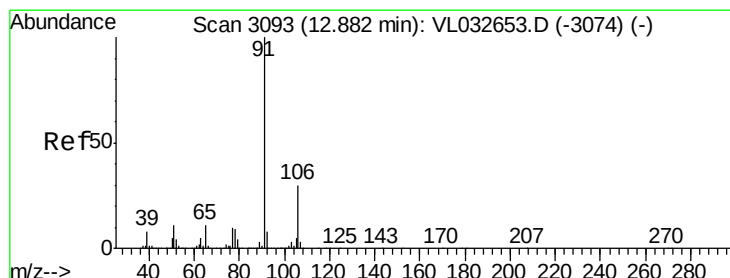
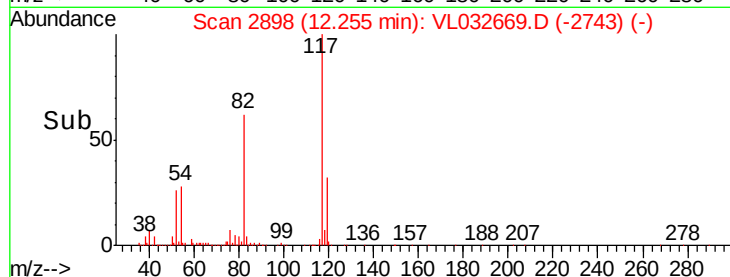
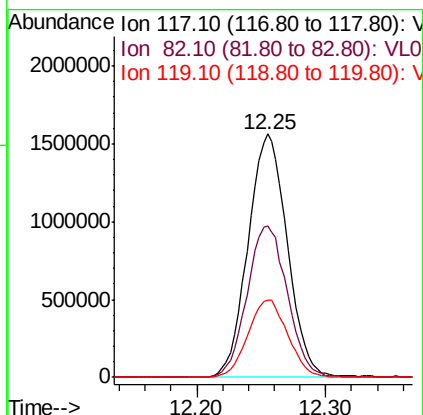
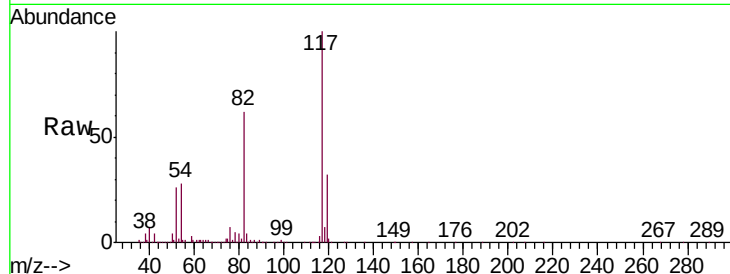




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2898
Delta R.T. -0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

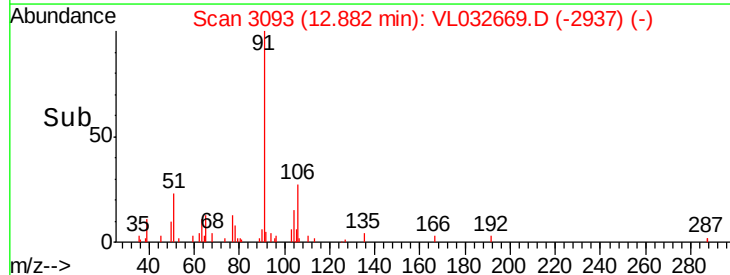
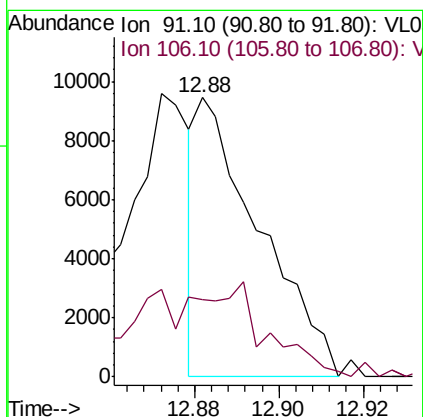
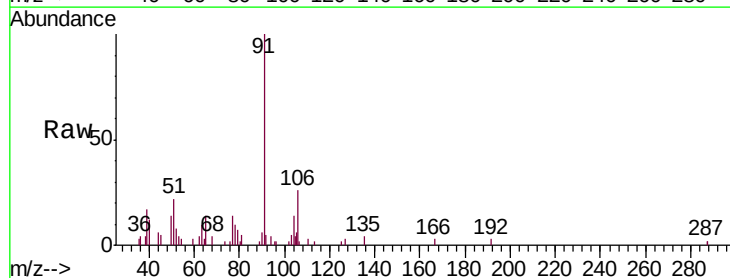
Instrument :
MSVOA_L
ClientSampleId :
A-1

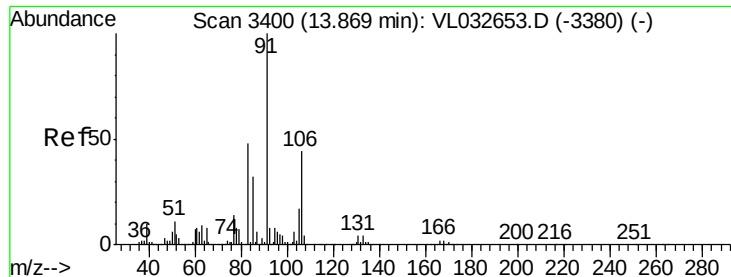
Tgt Ion: 117 Resp: 3307313
Ion Ratio Lower Upper
117 100
82 64.2 52.7 79.1
119 32.5 26.7 40.1



#58
Ethyl Benzene
Concen: 0.025 ppbv
RT: 12.88 min Scan# 3093
Delta R.T. 0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

Tgt Ion: 91 Resp: 9731
Ion Ratio Lower Upper
91 100
106 25.5 24.2 36.2

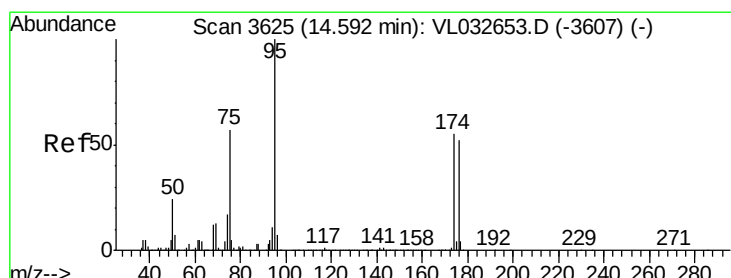
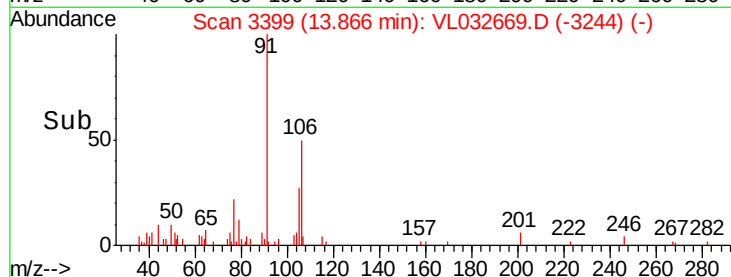
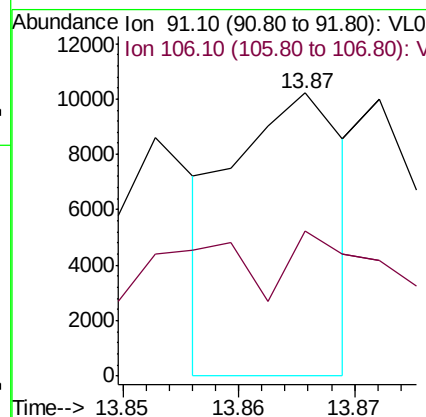
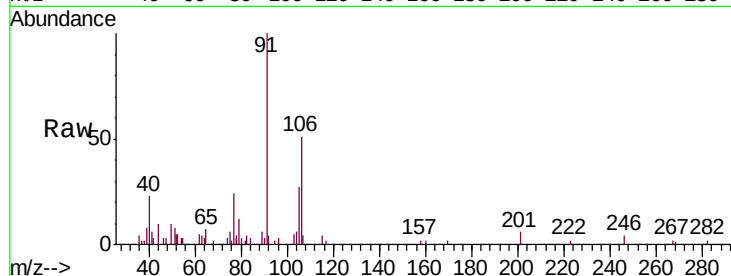




#60
o-Xylene
Concen: 0.021 ppbv
RT: 13.87 min Scan# 3399
Delta R.T. -0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

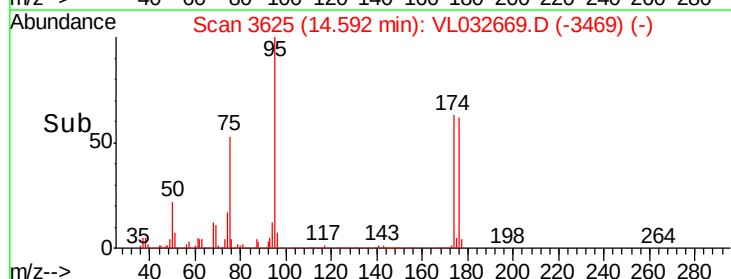
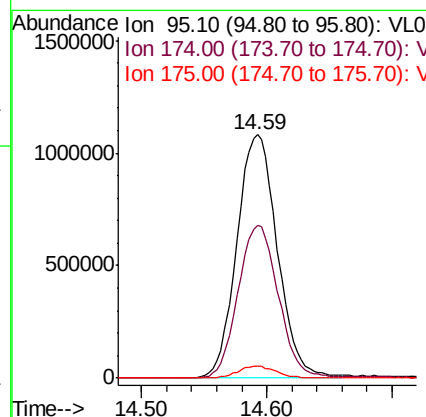
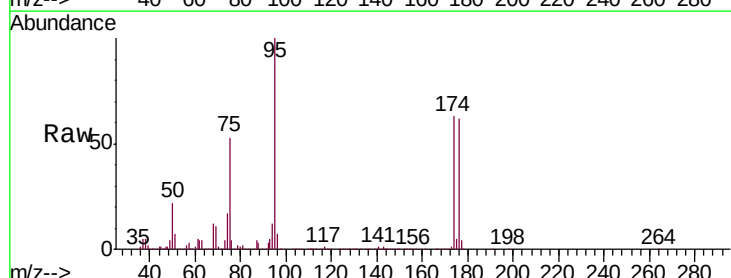
Instrument :
MSVOA_L
ClientSampled :
A-1

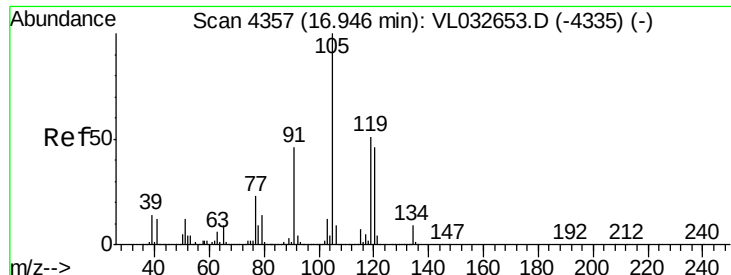
Tgt Ion: 91 Resp: 6816
Ion Ratio Lower Upper
91 100
106 162.7 22.1 66.1#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.814 ppbv
RT: 14.59 min Scan# 3625
Delta R.T. -0.00 min
Lab File: VL032669.D
Acq: 19 Oct 2018 5:04

Tgt Ion: 95 Resp: 2416858
Ion Ratio Lower Upper
95 100
174 64.2 46.0 69.0
175 4.7 3.4 5.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.048 ppbv
 RT: 16.94 min Scan# 4355
 Delta R.T. -0.01 min
 Lab File: VL032669.D
 Acq: 19 Oct 2018 5:04

Instrument :
 MSVOA_L
 ClientSampleId :
 A-1

Tgt Ion:	105	Resp:	17440
Ion	Ratio	Lower	Upper
105	100		
120	37.1	35.8	53.8
91	13.1	33.2	49.8#
77	19.1	16.2	24.4

