

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL071318\
 Data File : VL032251.D
 Acq On : 13 Jul 2018 18:43
 Operator : SY/AP
 Sample : J3753-02
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MID

Quant Time: Jul 14 03:18:28 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL071218AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jul 13 04:25:14 2018
 QLast Update : Fri Jul 13 04:25:14 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.85	49	1604920	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.39	114	3495316	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.34	117	4097719	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.67	95	3129692	9.87	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.70%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.13	85	127647	0.552	ppbv	95
3) Chlorodifluoromethane	3.06	51	151590	0.769	ppbv #	84
4) Chloromethane	3.23	50	28773	0.256	ppbv	98
7) Chloroethane	3.66	64	53316	1.401	ppbv	98
8) Dichlorotetrafluoroethane	3.27	85	5640	0.022	ppbv	89
9) Propene	3.09	41	191793	2.281	ppbv	91
10) Heptane	8.34	43	233142	0.976	ppbv	97
11) Trichlorofluoromethane	4.07	101	78056	0.353	ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.62	101	277446	1.965	ppbv	98
13) Ethanol	3.74	45	10012894	412.606	ppbv	100
15) Acetone	3.96	43	7429753	39.894	ppbv	97
16) 1,3-Butadiene	3.40	39	154899	1.646	ppbv #	12
17) tert-Butyl alcohol	4.46	59	960583	11.047	ppbv	100
18) 1,1-Dichloroethene	4.42	96	110852	1.687	ppbv	94
19) Isopropyl Alcohol	4.13	45	6144353	50.244	ppbv #	99
20) Methylene Chloride	4.48	84	167522	2.654	ppbv	98
21) Allyl Chloride	4.46	41	232395	2.131	ppbv #	20
22) trans-1,2-Dichloroethene	5.04	96	91662	1.466	ppbv	93
23) Vinyl Acetate	5.22	43	637278	2.058	ppbv #	78
24) 1,1-Dichloroethane	5.17	63	2472218	11.368	ppbv	98
25) Ethyl Acetate	5.86	43	479156	1.300	ppbv #	86
26) Hexane	5.86	57	336946	2.004	ppbv #	69
27) Carbon Disulfide	4.69	76	7387	0.049	ppbv #	10
28) Methyl tert-Butyl Ether	5.19	73	5298	0.020	ppbv #	52
29) Chloroform	5.94	83	24858	0.096	ppbv #	75
30) Cyclohexane	7.33	84	81038	0.546	ppbv	95
31) cis-1,2-Dichloroethene	5.72	61	13807	0.082	ppbv	88
32) 1,1,1-Trichloroethane	6.71	97	15304524	60.770	ppbv	95
34) 2-Butanone	5.41	43	1620659	6.805	ppbv	99
35) Carbon Tetrachloride	7.22	117	7098	0.030	ppbv #	71
36) Benzene	7.10	78	173142	0.498	ppbv #	93
37) 1,2-Dichloroethane	6.50	62	14615	0.077	ppbv #	83
39) 1,2-Dichloropropane	7.39	63	964054	6.983	ppbv #	28
40) 1,4-Dioxane	8.06	88	1785	0.038	ppbv #	1
41) Tetrahydrofuran	6.24	42	111036	0.833	ppbv #	85
42) Bromodichloromethane	8.01	83	6653	0.025	ppbv #	44
43) Methyl Methacrylate	8.23	69	6869	0.051	ppbv #	1
44) 2,2,4-Trimethylpentane	8.08	57	1531846	2.564	ppbv	96
50) 4-Methyl-2-Pentanone	8.96	43	295624	0.718	ppbv	94
51) 2-Hexanone	10.37	43	93993	0.273	ppbv #	95
52) Tetrachloroethene	11.48	164	3634	0.028	ppbv #	45

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 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

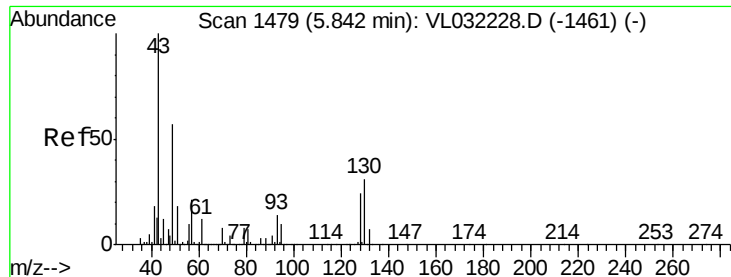
Instrument :
 MSVOA_L
 ClientSampleId :
 MID

Quant Time: Jul 14 03:18:28 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL071218AIR.M
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 QLast Update : Fri Jul 13 04:25:14 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

53) Toluene	10.04	91	2172103	5.289	ppbv	99
57) Chlorobenzene	12.40	112	19205	0.055	ppbv #	61
58) Ethyl Benzene	12.96	91	678968	1.138	ppbv	96
59) m/p-Xylene	13.22	91	2075645	4.228	ppbv	100
60) o-Xylene	13.94	91	836872	1.727	ppbv	99
61) Styrene	13.78	104	12928	0.036	ppbv #	1
62) Isopropylbenzene	14.92	105	54498	0.080	ppbv	94
64) n-propylbenzene	15.82	120	41244	0.240	ppbv	77
65) tert-Butylbenzene	17.03	119	36553	0.064	ppbv #	1
66) Benzyl Chloride	17.27	91	14609	0.051	ppbv #	58
69) p-Isopropyltoluene	17.92	119	1713333	2.647	ppbv	99
70) n-Butylbenzene	18.83	91	33033	0.046	ppbv #	1
71) 2-Chlorotoluene	15.82	91	218106	0.408	ppbv #	46
72) 4-Ethyltoluene	16.10	105	137328	0.253	ppbv #	62
73) 1,3,5-Trimethylbenzene	16.25	105	212259	0.420	ppbv	96
74) 1,2,4-Trimethylbenzene	17.02	105	889364	1.721	ppbv #	73
75) 1,3-Dichlorobenzene	17.26	146	601705	1.951	ppbv #	39
76) 1,4-Dichlorobenzene	17.26	146	601705	1.993	ppbv #	39
79) Naphthalene	22.52	128	48835	0.141	ppbv	96
80) Naphthalene,2-methyl-	25.19	142	50598	0.456	ppbv #	91
81) 1,2,4-Trichlorobenzene	22.25	180	3846	0.022	ppbv #	12

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.85 min Scan# 1480

Delta R.T. 0.00 min

Lab File: VL032251.D

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MID

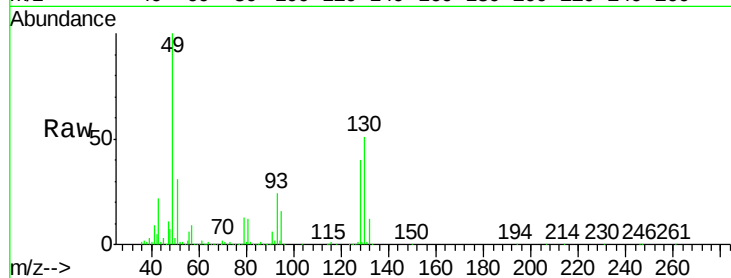
Tgt Ion: 49 Resp: 1604920

Ion Ratio Lower Upper

49 100

128 40.5 20.9 62.8

130 51.5 27.0 81.0



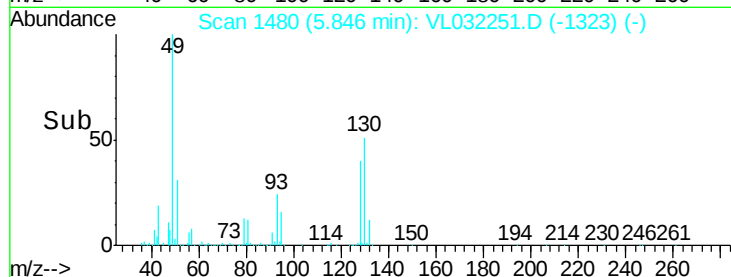
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

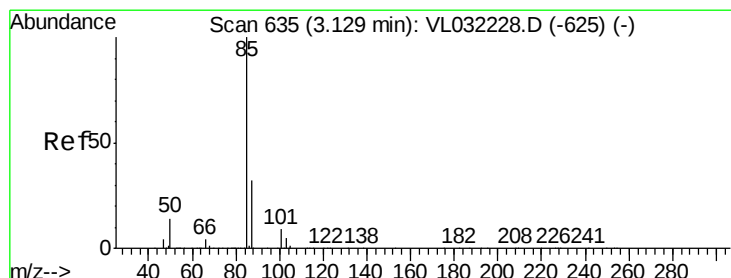
Ion 130.00 (129.70 to 130.70): VL0

Time-->

5.75 5.80 5.85 5.90 5.95



Time-->



#2

Dichlorodifluoromethane

Concen: 0.552 ppbv

RT: 3.13 min Scan# 635

Delta R.T. 0.00 min

Lab File: VL032251.D

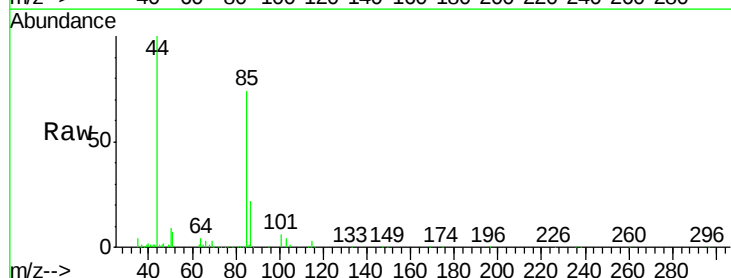
Acq: 13 Jul 2018 18:43

Tgt Ion: 85 Resp: 127647

Ion Ratio Lower Upper

85 100

87 29.2 25.8 38.6

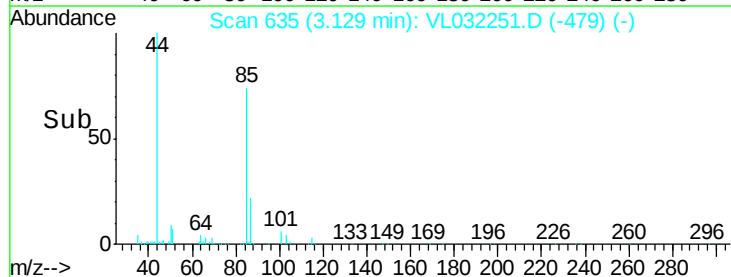


Abundance Ion 85.00 (84.70 to 85.70): VL0

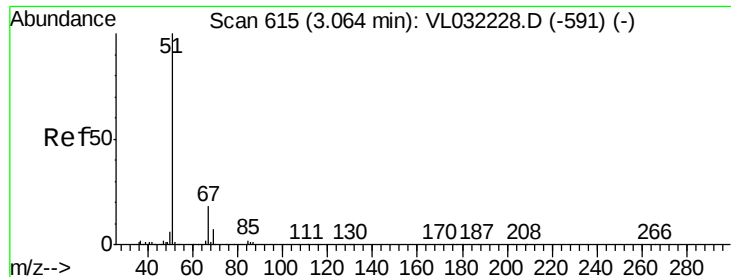
Ion 87.00 (86.70 to 87.70): VL0

Time-->

3.08 3.10 3.12 3.14 3.16



Time-->



#3

Chlorodifluoromethane

Concen: 0.769 ppbv

RT: 3.06 min Scan# 615

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

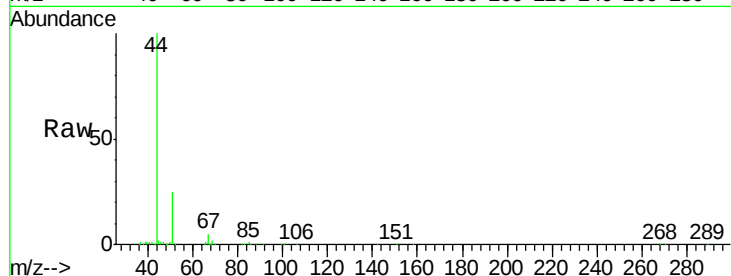
MID

Tgt Ion: 51 Resp: 151590

Ion Ratio Lower Upper

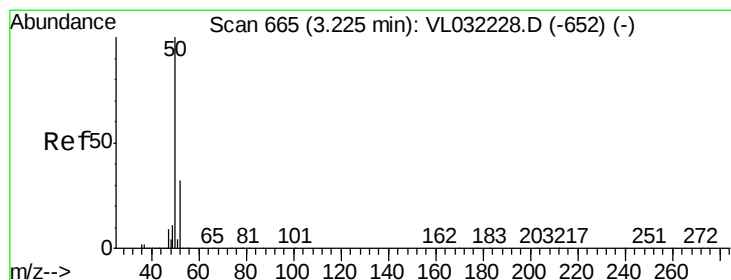
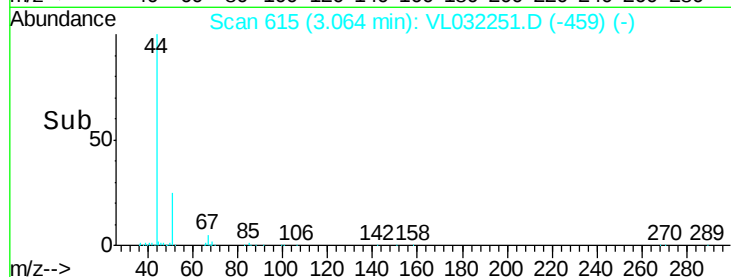
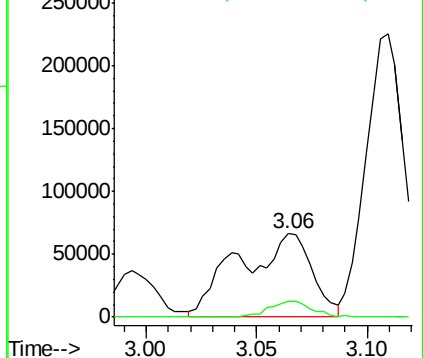
51 100

67 11.4 14.6 22.0#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.256 ppbv

RT: 3.23 min Scan# 665

Delta R.T. 0.00 min

Lab File: VL032251.D

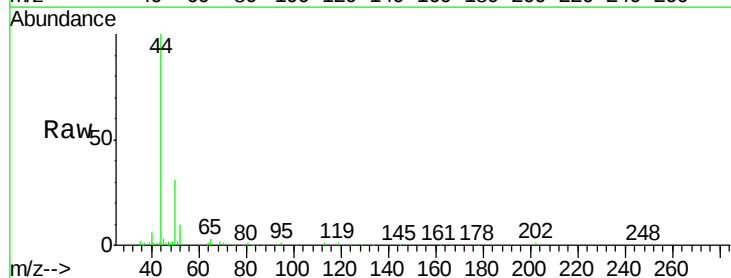
Acq: 13 Jul 2018 18:43

Tgt Ion: 50 Resp: 28773

Ion Ratio Lower Upper

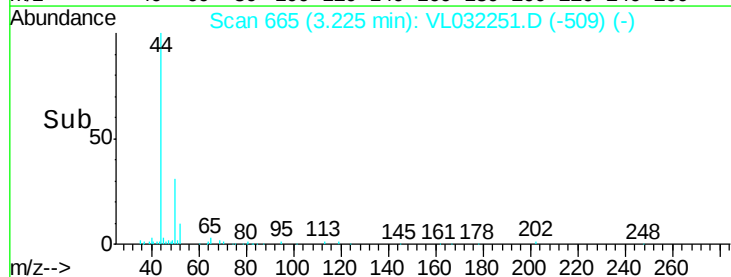
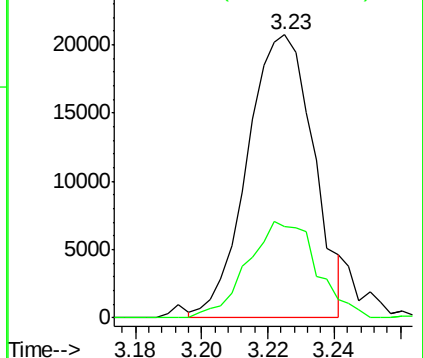
50 100

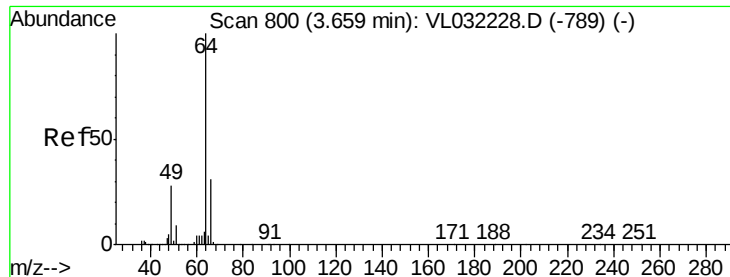
52 33.1 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#7

Chloroethane

Concen: 1.401 ppbv

RT: 3.66 min Scan# 800

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

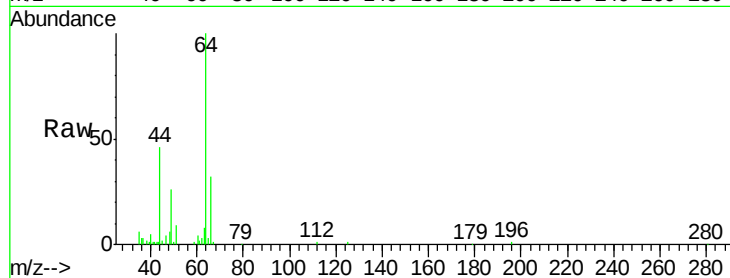
MID

Tgt Ion: 64 Resp: 53316

Ion Ratio Lower Upper

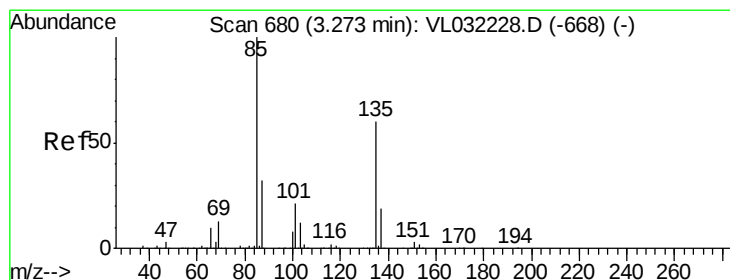
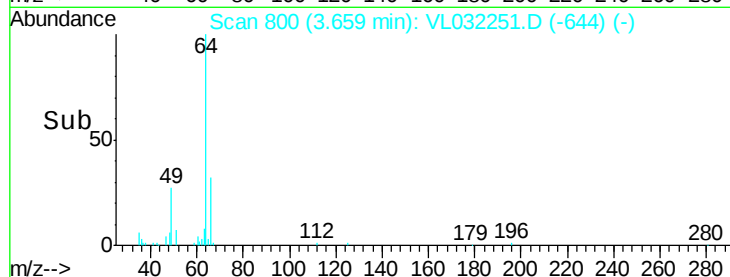
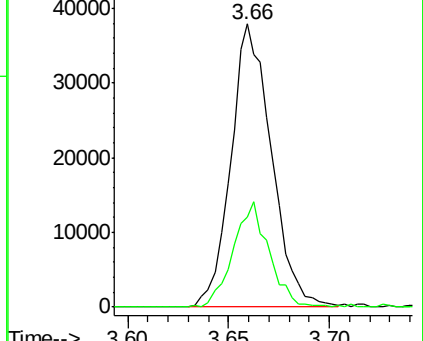
64 100

66 31.7 24.4 36.6



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.022 ppbv

RT: 3.27 min Scan# 680

Delta R.T. 0.00 min

Lab File: VL032251.D

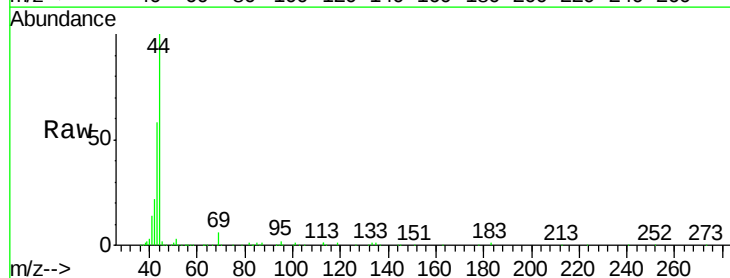
Acq: 13 Jul 2018 18:43

Tgt Ion: 85 Resp: 5640

Ion Ratio Lower Upper

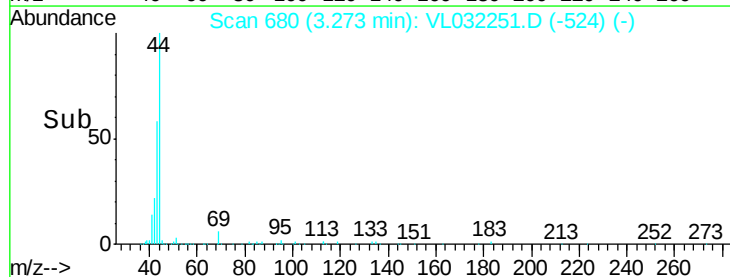
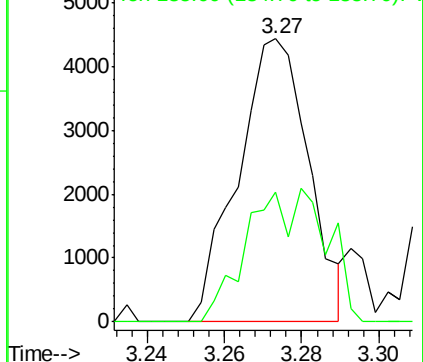
85 100

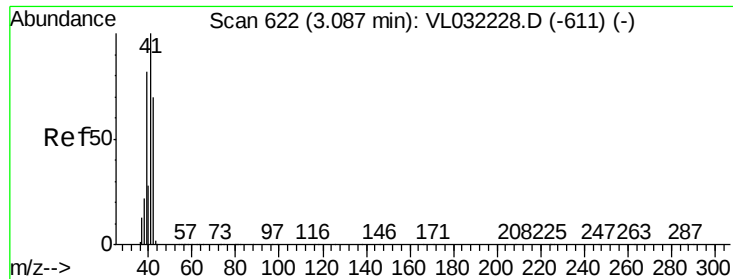
135 52.2 48.6 72.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 2.281 ppbv

RT: 3.09 min Scan# 622

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

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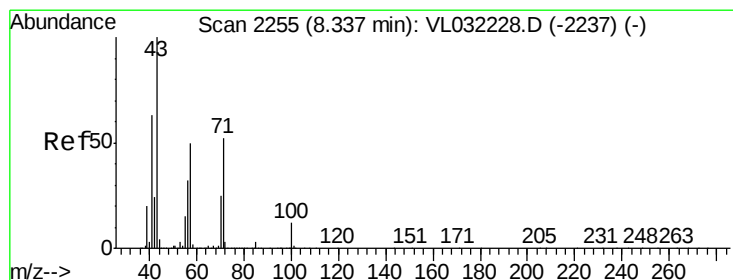
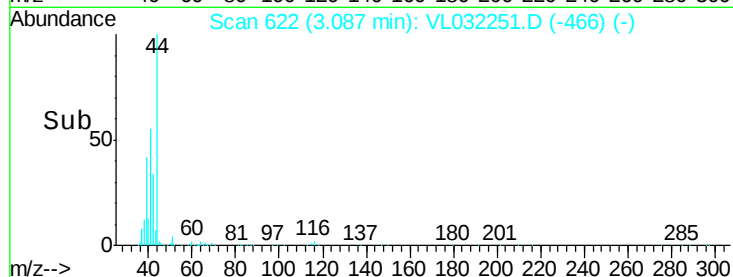
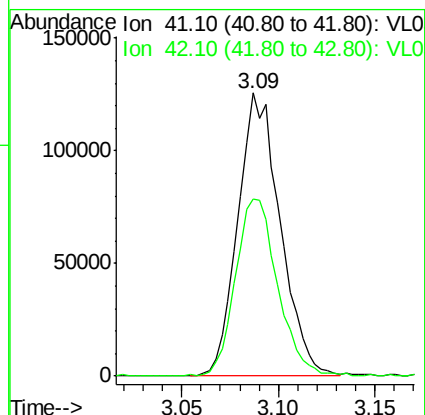
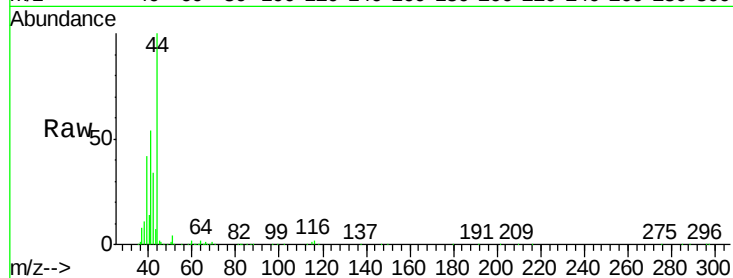
MID

Tgt Ion: 41 Resp: 191793

Ion Ratio Lower Upper

41 100

42 62.6 56.2 84.4



#10

Heptane

Concen: 0.976 ppbv

RT: 8.34 min Scan# 2256

Delta R.T. 0.00 min

Lab File: VL032251.D

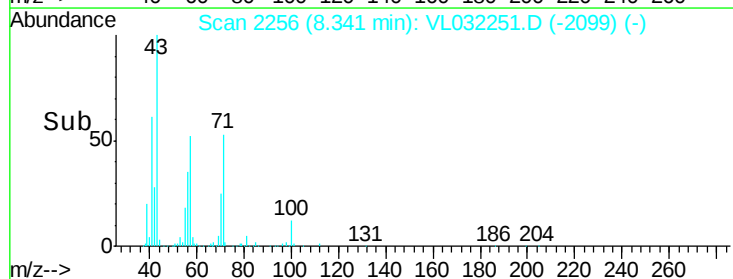
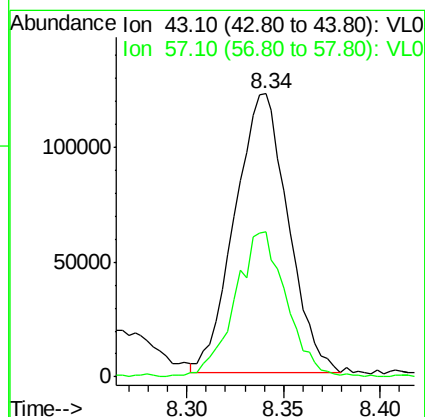
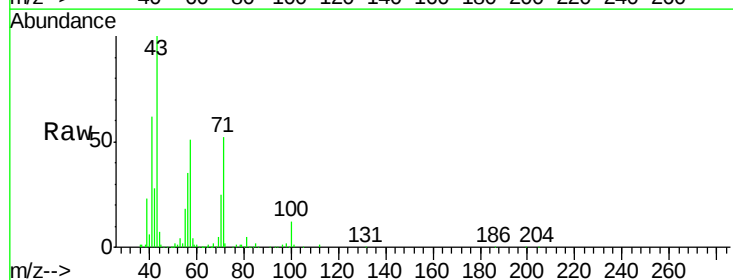
Acq: 13 Jul 2018 18:43

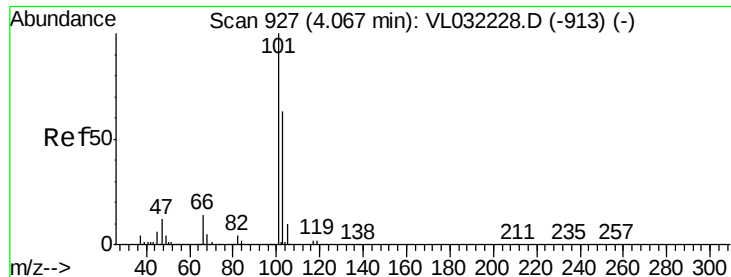
Tgt Ion: 43 Resp: 233142

Ion Ratio Lower Upper

43 100

57 48.9 40.7 61.1

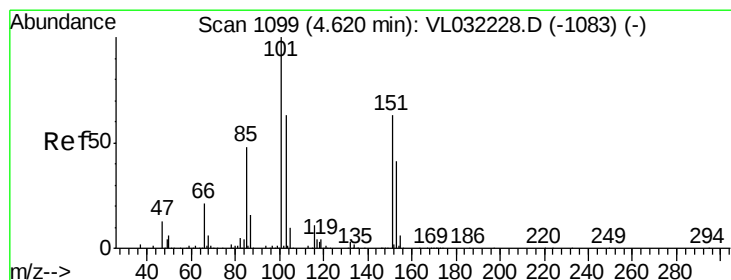
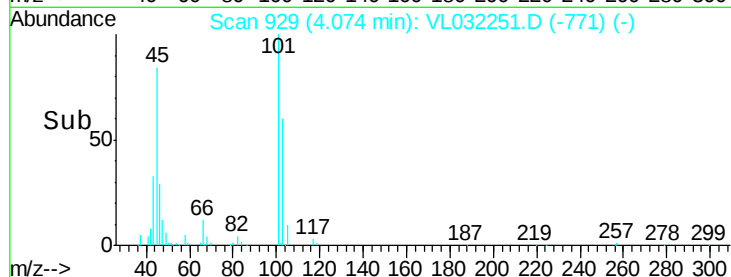
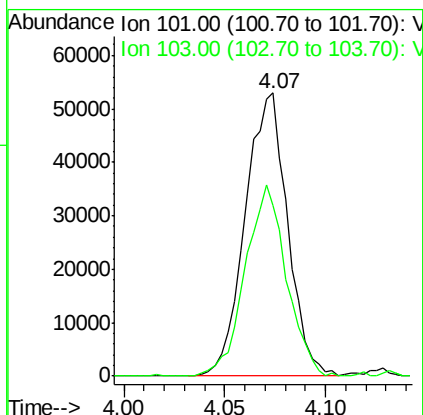
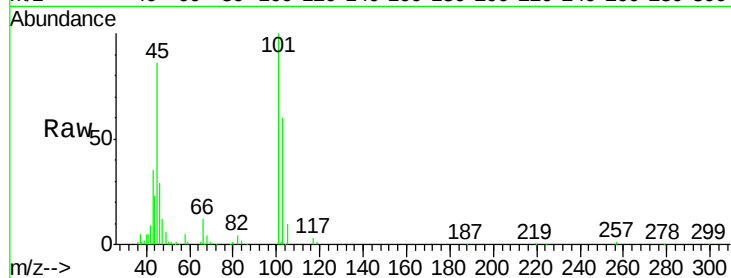




#11
 Trichlorofluoromethane
 Concen: 0.353 ppbv
 RT: 4.07 min Scan# 929
 Delta R.T. 0.01 min
 Lab File: VL032251.D
 Acq: 13 Jul 2018 18:43

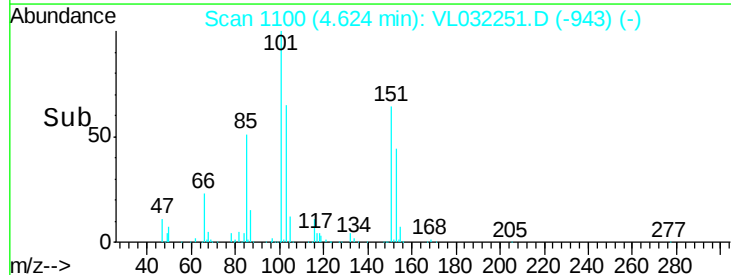
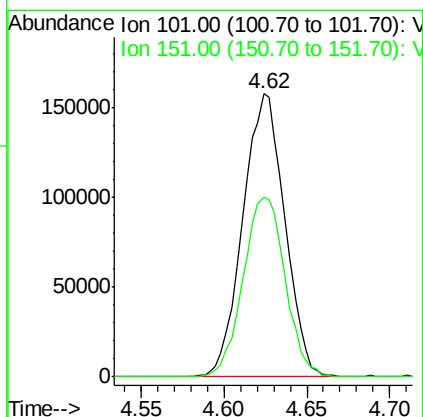
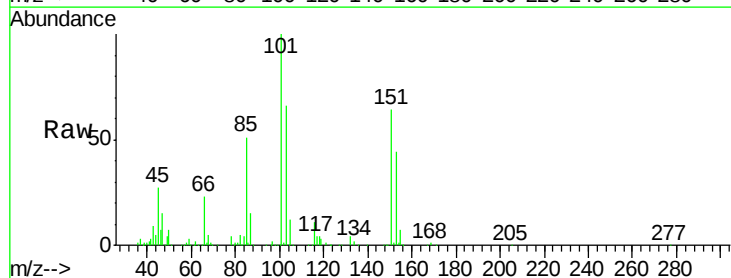
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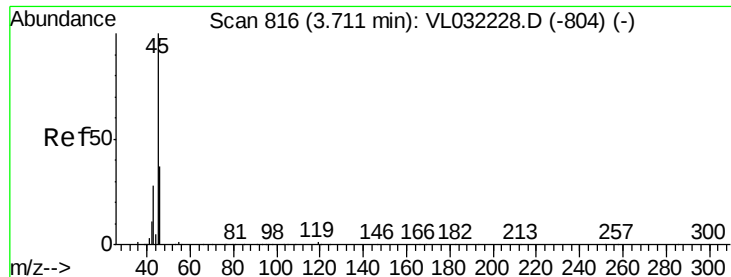
Tgt Ion:101 Resp: 78056
 Ion Ratio Lower Upper
 101 100
 103 60.4 50.2 75.2



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 1.965 ppbv
 RT: 4.62 min Scan# 1100
 Delta R.T. 0.00 min
 Lab File: VL032251.D
 Acq: 13 Jul 2018 18:43

Tgt Ion:101 Resp: 277446
 Ion Ratio Lower Upper
 101 100
 151 63.5 52.2 78.2

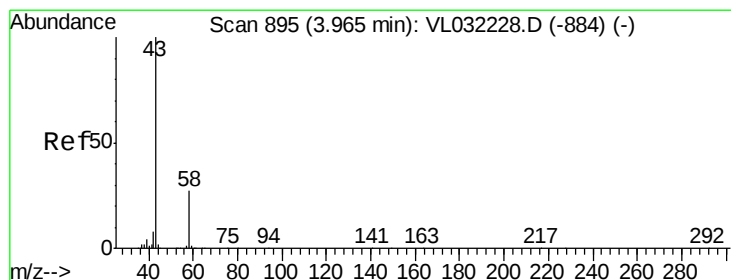
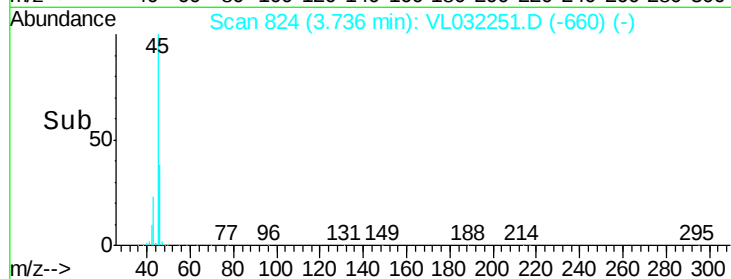
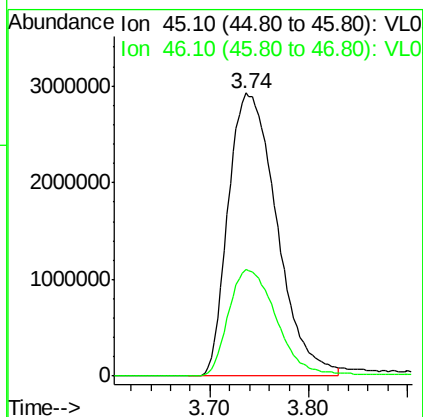
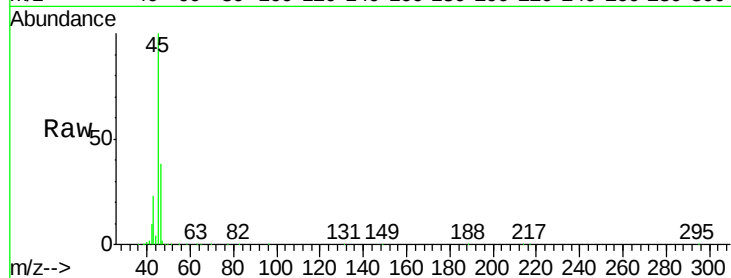




#13
Ethanol
Concen: 412.606 ppbv
RT: 3.74 min Scan# 824
Delta R.T. 0.03 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

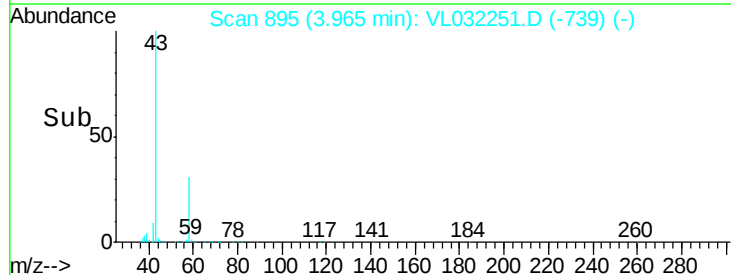
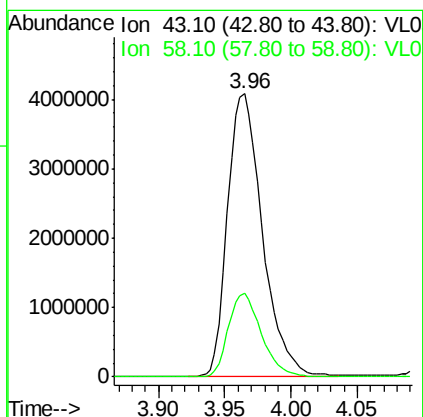
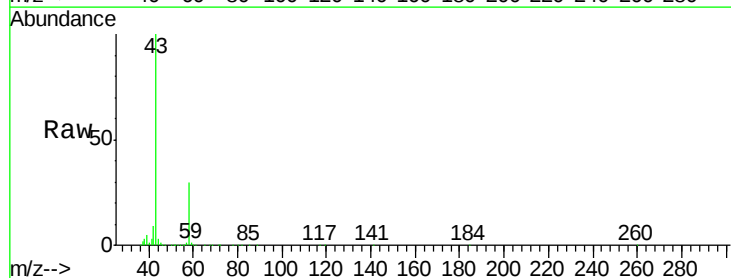
Instrument :
MSVOA_L
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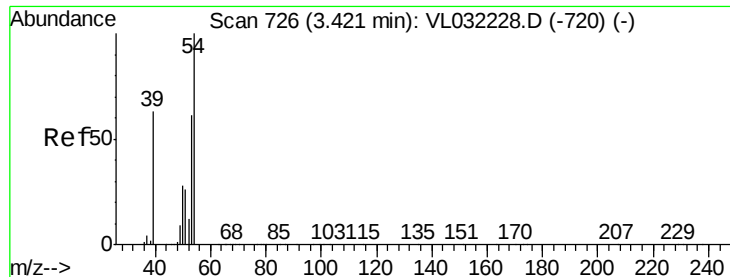
Tgt Ion: 45 Resp:10012894
Ion Ratio Lower Upper
45 100
46 38.5 15.5 61.9



#15
Acetone
Concen: 39.894 ppbv
RT: 3.96 min Scan# 895
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion: 43 Resp: 7429753
Ion Ratio Lower Upper
43 100
58 28.3 21.5 32.3





#16

1,3-Butadiene

Concen: 1.646 ppbv

RT: 3.40 min Scan# 718

Delta R.T. -0.03 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

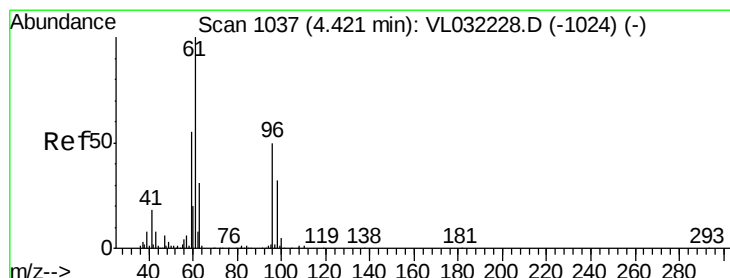
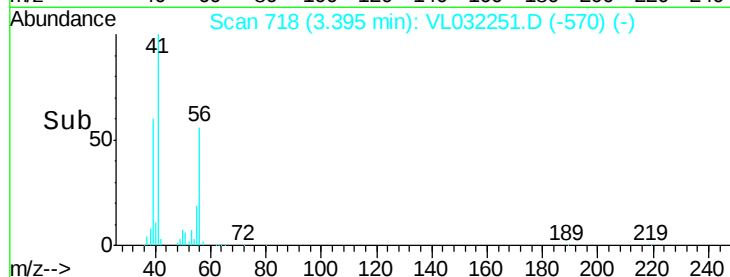
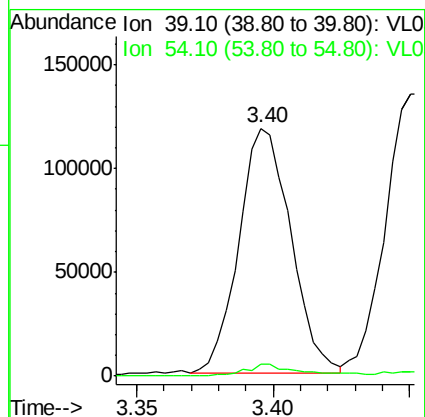
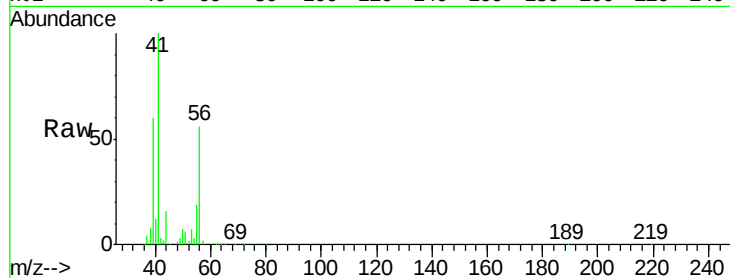
MID

Tgt Ion: 39 Resp: 154899

Ion Ratio Lower Upper

39 100

54 5.5 70.0 105.0#



#17

tert-Butyl alcohol

Concen: 11.047 ppbv

RT: 4.46 min Scan# 1049

Delta R.T. 0.04 min

Lab File: VL032251.D

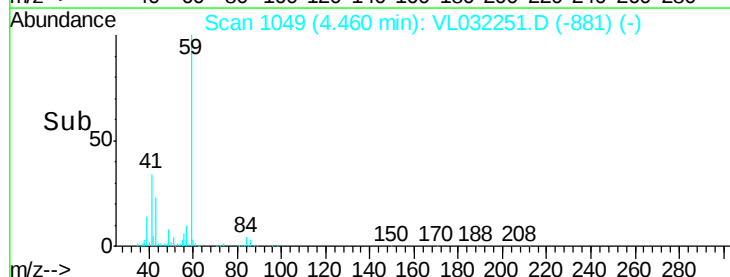
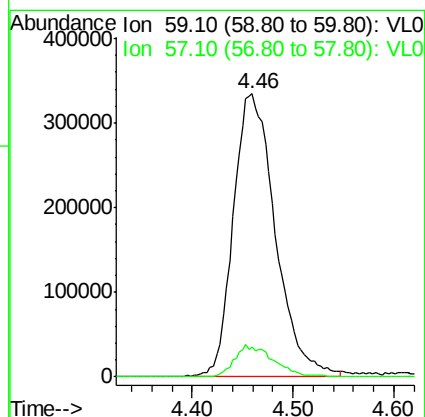
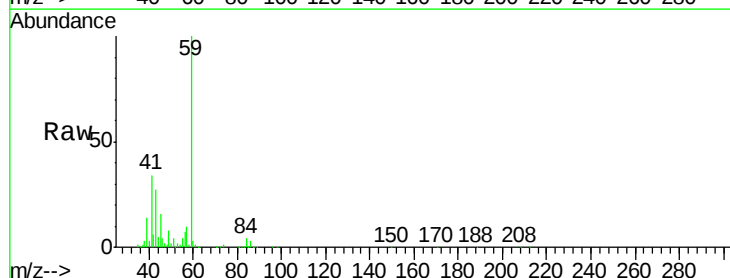
Acq: 13 Jul 2018 18:43

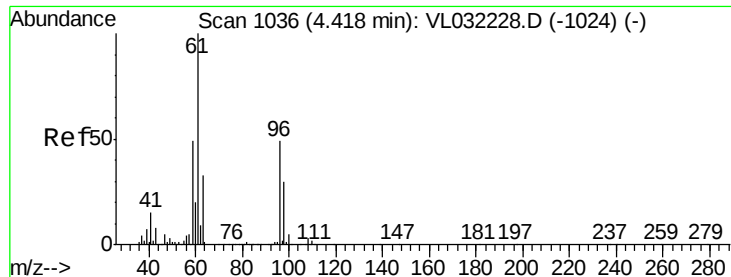
Tgt Ion: 59 Resp: 960583

Ion Ratio Lower Upper

59 100

57 10.6 8.4 12.6





#18

1,1-Dichloroethene

Concen: 1.687 ppbv

RT: 4.42 min Scan# 1037

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampled :

MID

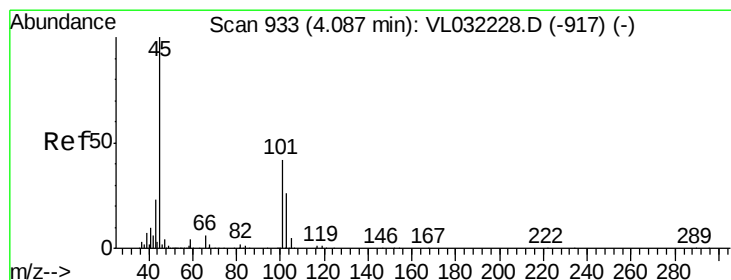
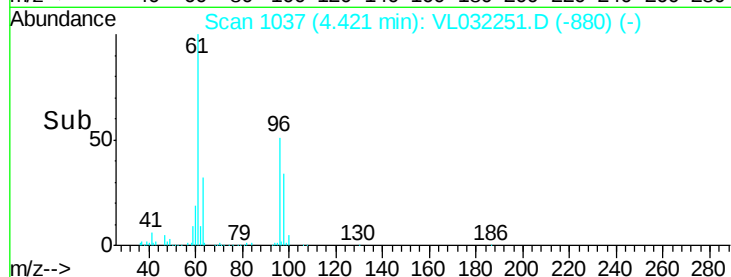
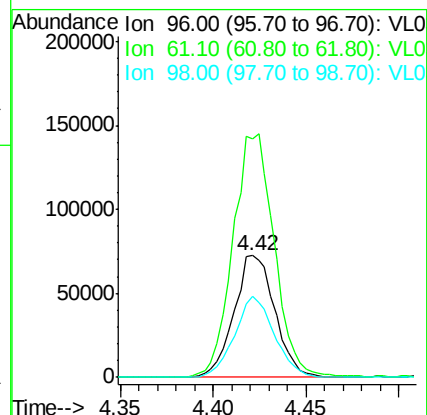
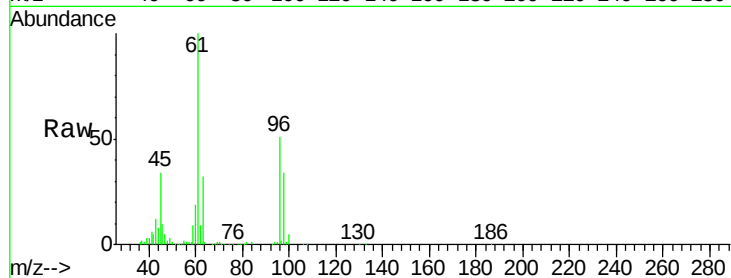
Tgt Ion: 96 Resp: 110852

Ion Ratio Lower Upper

96 100

61 194.3 163.0 244.4

98 66.3 48.5 72.7



#19

Isopropyl Alcohol

Concen: 50.244 ppbv

RT: 4.13 min Scan# 945

Delta R.T. 0.04 min

Lab File: VL032251.D

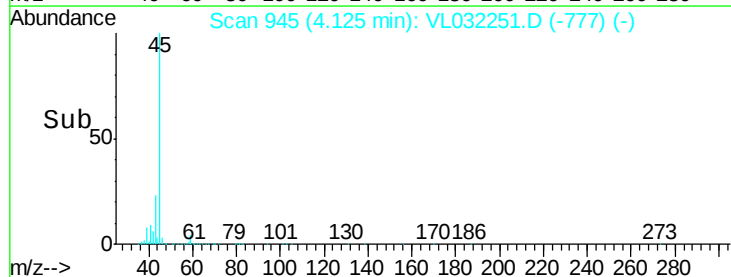
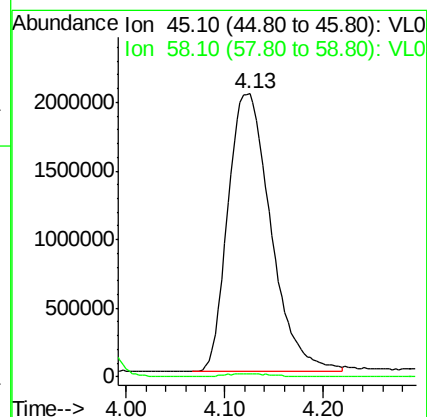
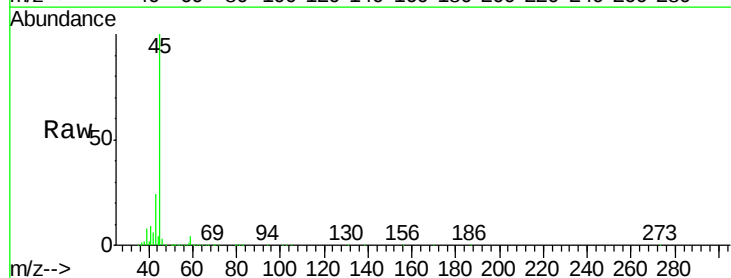
Acq: 13 Jul 2018 18:43

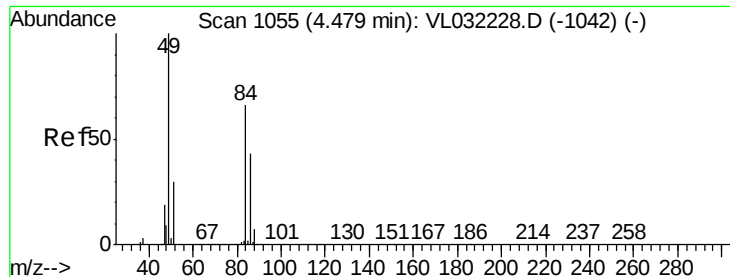
Tgt Ion: 45 Resp: 6144353

Ion Ratio Lower Upper

45 100

58 1.2 1.3 1.9#

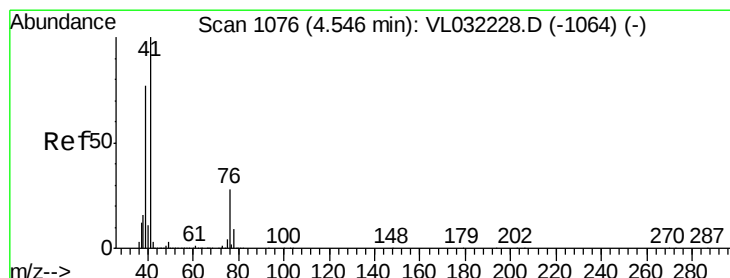
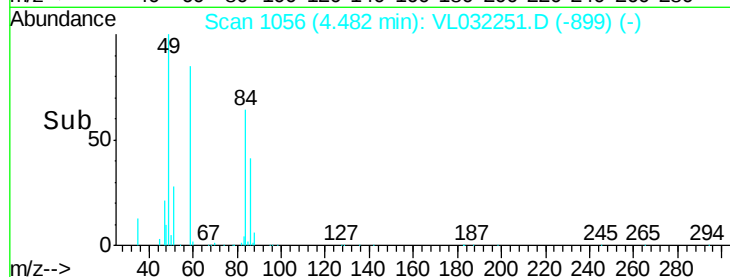
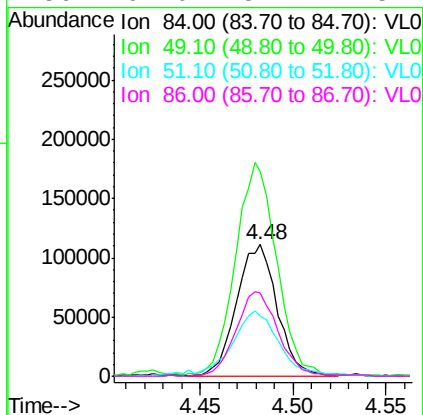
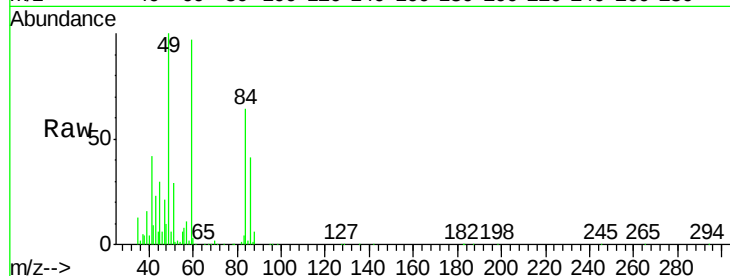




#20
Methylene Chloride
Concen: 2.654 ppbv
RT: 4.48 min Scan# 1056
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

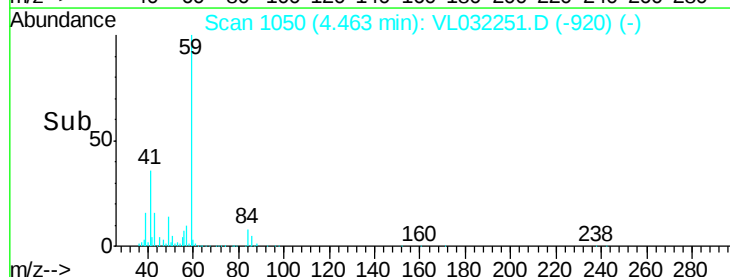
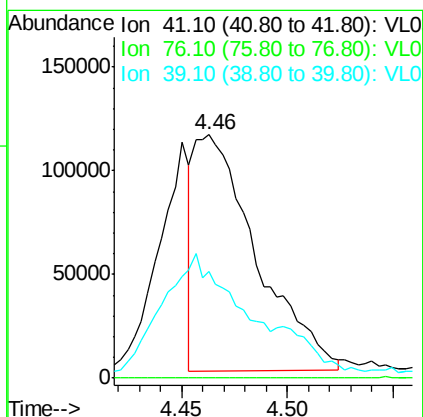
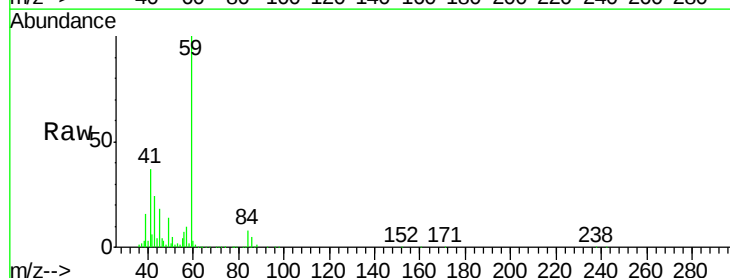
Instrument :
MSVOA_L
ClientSampleId :
MID

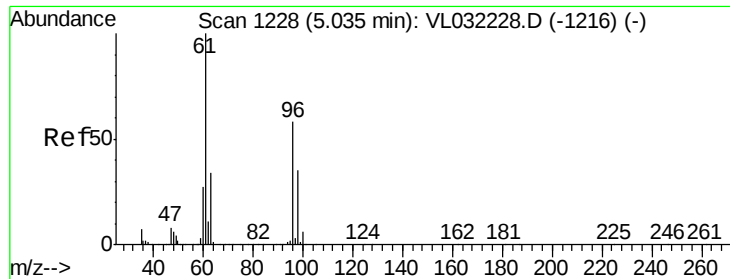
Tgt Ion:	84	Resp:	167522
Ion	Ratio	Lower	Upper
84	100		
49	154.8	121.8	182.6
51	45.2	36.3	54.5
86	64.0	52.1	78.1



#21
Allyl Chloride
Concen: 2.131 ppbv
RT: 4.46 min Scan# 1050
Delta R.T. -0.08 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion:	41	Resp:	232395
Ion	Ratio	Lower	Upper
41	100		
76	0.2	22.9	34.3#
39	0.0	62.3	93.5#





#22

trans-1,2-Dichloroethene

Concen: 1.466 ppbv

RT: 5.04 min Scan# 1229

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

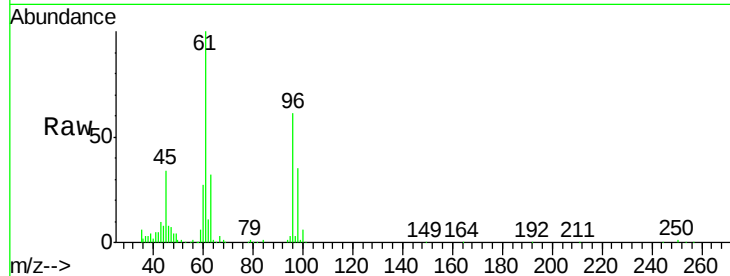
Tgt Ion: 96 Resp: 91662

Ion Ratio Lower Upper

96 100

61 162.4 139.1 208.7

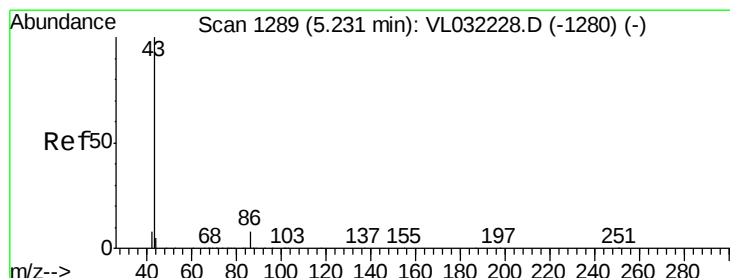
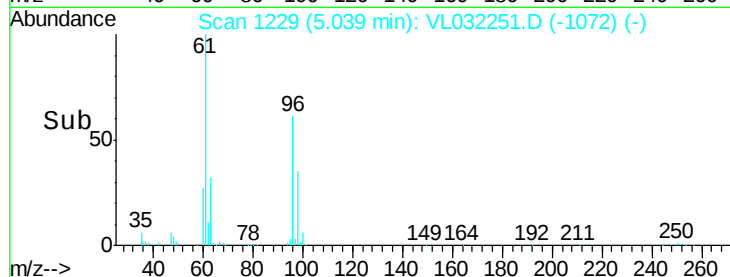
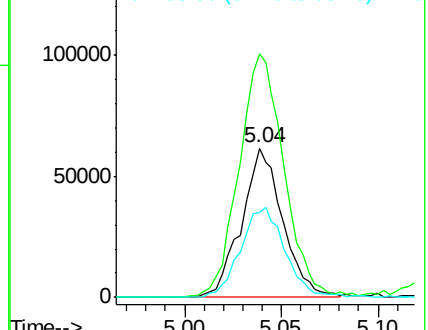
98 56.8 48.4 72.6



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#23

Vinyl Acetate

Concen: 2.058 ppbv

RT: 5.22 min Scan# 1287

Delta R.T. -0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Tgt Ion: 43 Resp: 637278

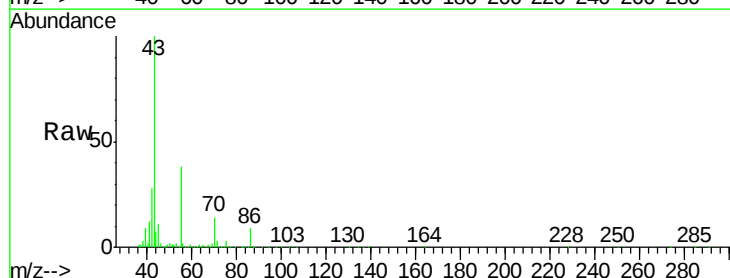
Ion Ratio Lower Upper

43 100

86 8.9 5.9 8.9

42 26.5 7.0 10.6#

44 4.2 4.2 6.2

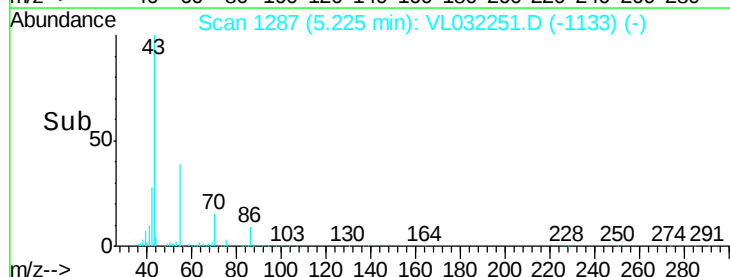
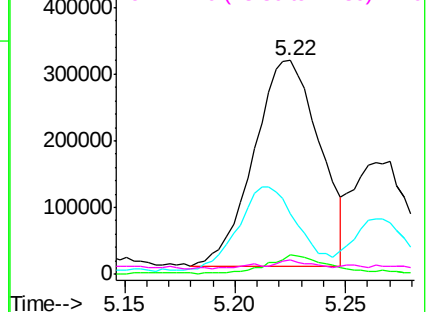


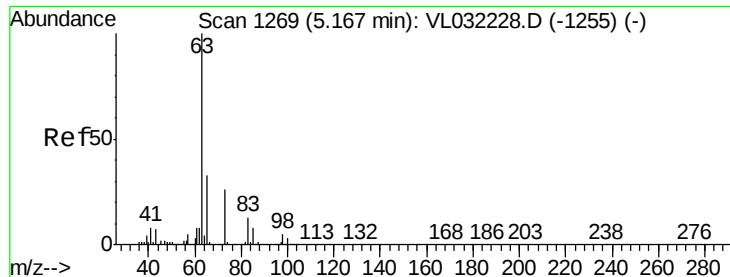
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 11.368 ppbv

RT: 5.17 min Scan# 1269

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

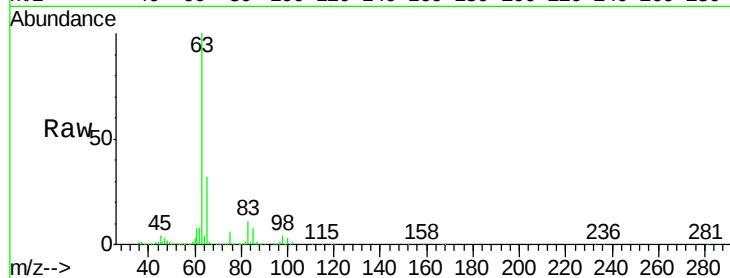
Tgt Ion: 63 Resp: 2472218

Ion Ratio Lower Upper

63 100

98 4.0 2.4 7.1

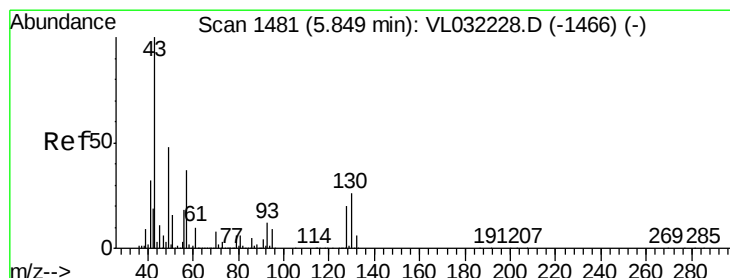
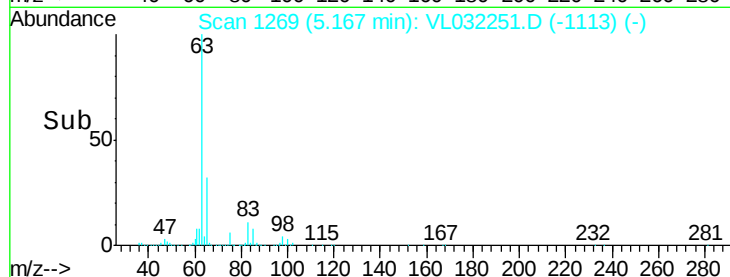
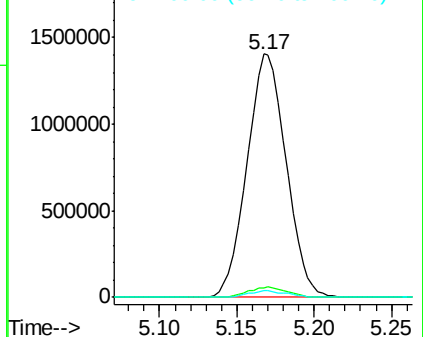
100 2.6 1.5 4.4



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: 1.300 ppbv

RT: 5.86 min Scan# 1483

Delta R.T. 0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Tgt Ion: 43 Resp: 479156

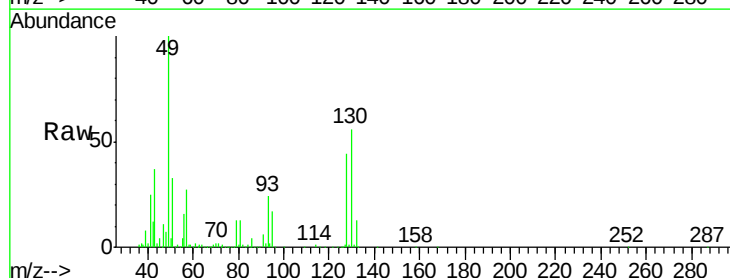
Ion Ratio Lower Upper

43 100

45 0.0 8.0 12.0#

61 7.1 7.7 11.5#

70 6.0 5.9 8.9

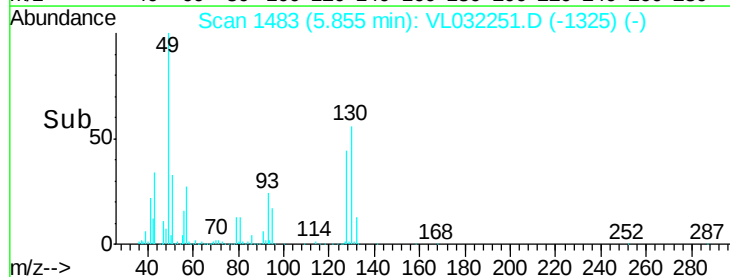
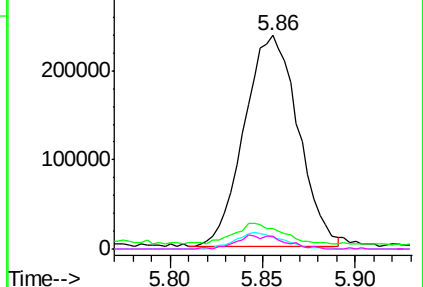


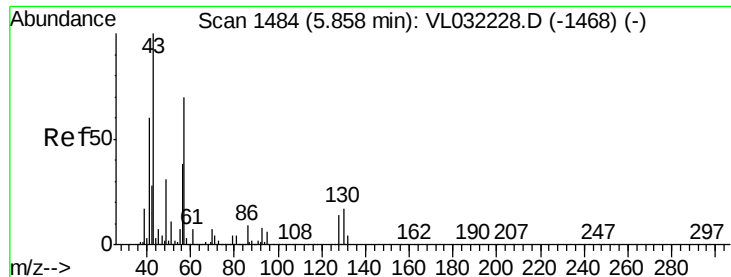
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

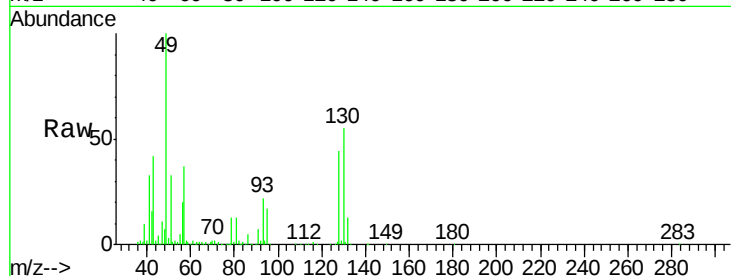




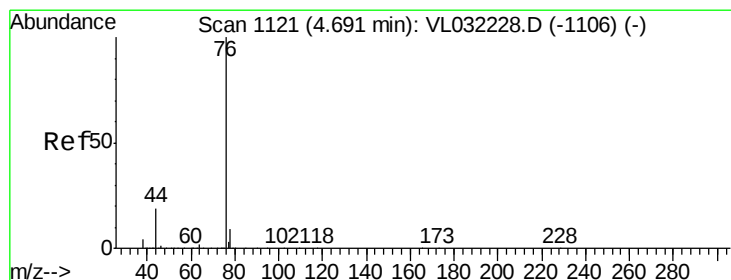
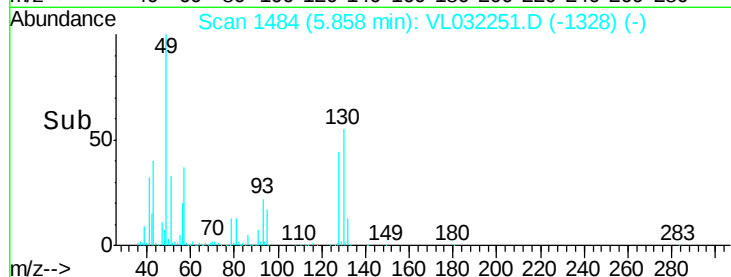
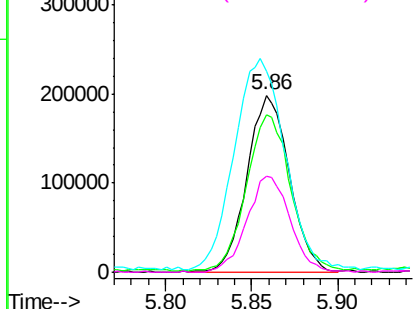
#26
Hexane
Concen: 2.004 ppbv
RT: 5.86 min Scan# 1484
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Instrument :
MSVOA_L
ClientSampleId :
MID

Tgt Ion: 57 Resp: 336946
Ion Ratio Lower Upper
57 100
41 93.5 68.7 103.1
43 144.6 176.2 264.2#
56 54.9 42.8 64.2

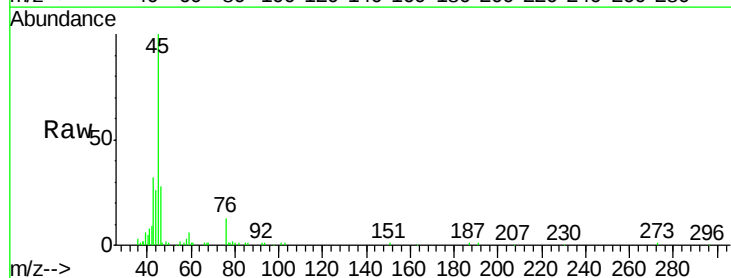


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

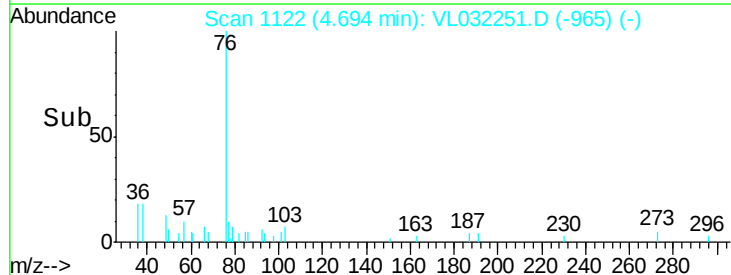
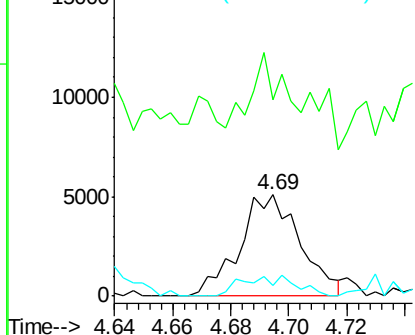


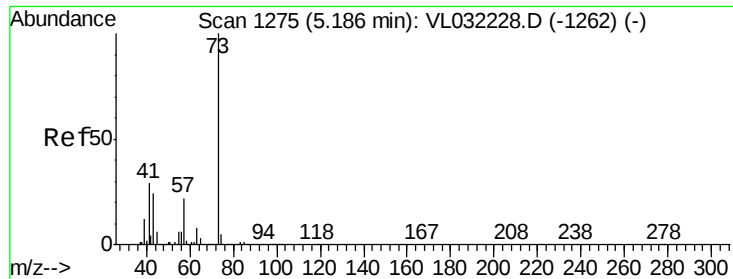
#27
Carbon Disulfide
Concen: 0.049 ppbv
RT: 4.69 min Scan# 1122
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion: 76 Resp: 7387
Ion Ratio Lower Upper
76 100
44 74.2 15.1 22.7#
78 17.4 7.4 11.0#



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0





#28

Methyl tert-Butyl Ether

Concen: 0.020 ppbv

RT: 5.19 min Scan# 1276

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

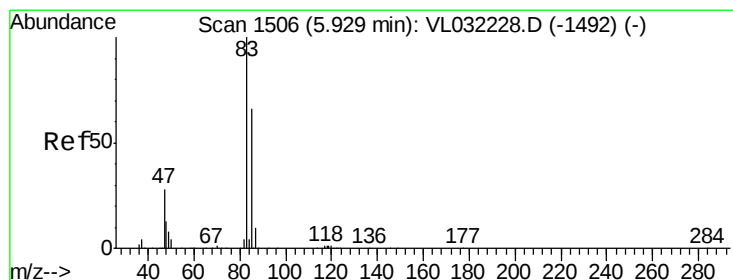
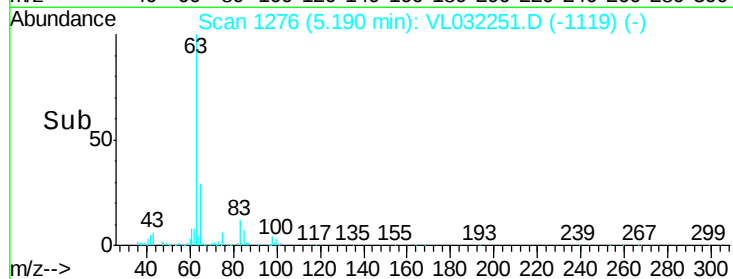
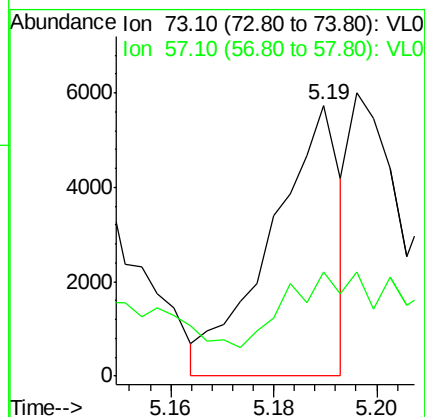
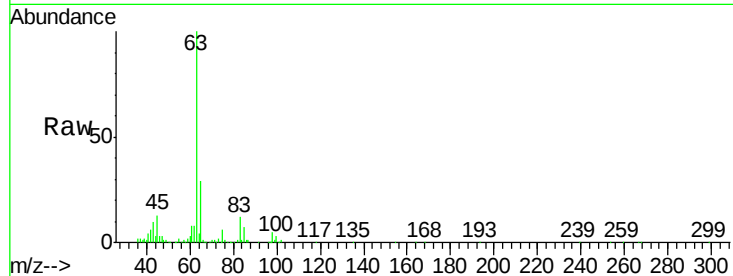
MID

Tgt Ion: 73 Resp: 5298

Ion Ratio Lower Upper

73 100

57 0.0 18.6 27.8#



#29

Chloroform

Concen: 0.096 ppbv

RT: 5.94 min Scan# 1509

Delta R.T. 0.01 min

Lab File: VL032251.D

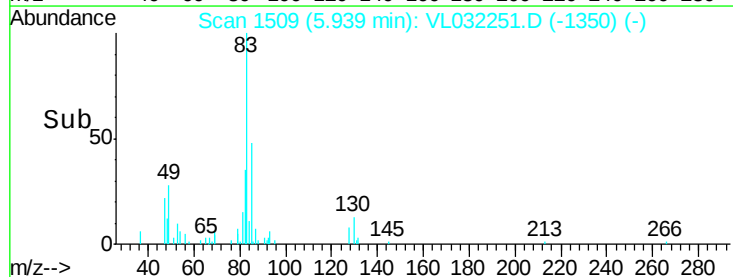
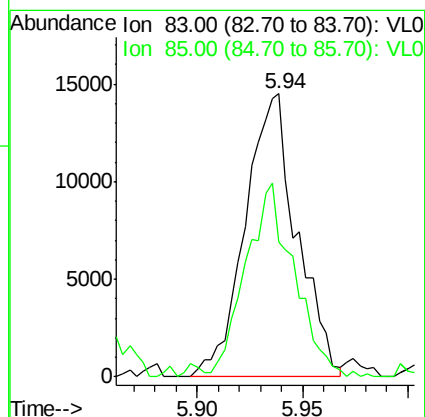
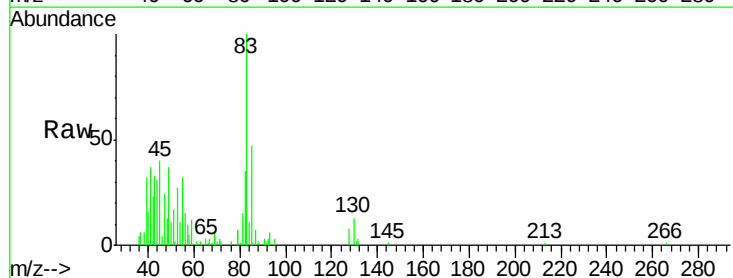
Acq: 13 Jul 2018 18:43

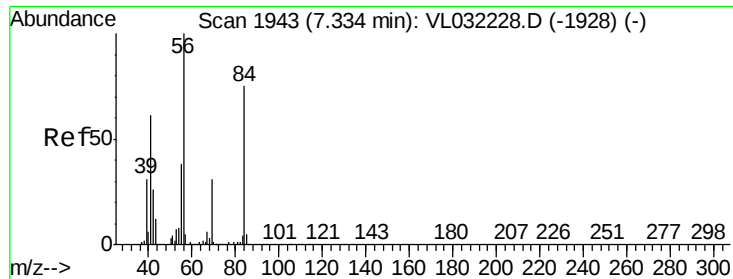
Tgt Ion: 83 Resp: 24858

Ion Ratio Lower Upper

83 100

85 46.1 52.7 79.1#

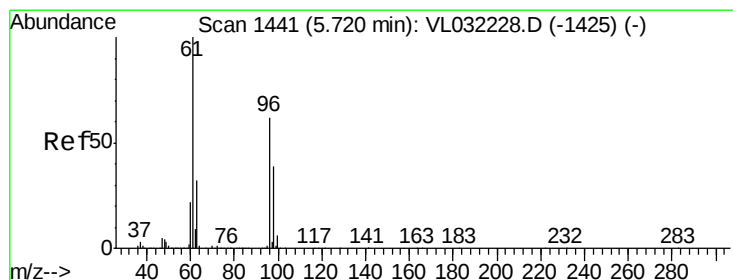
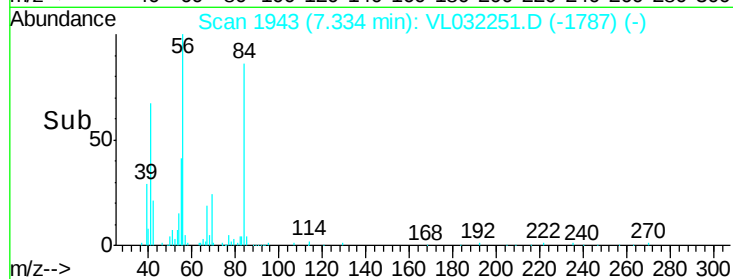
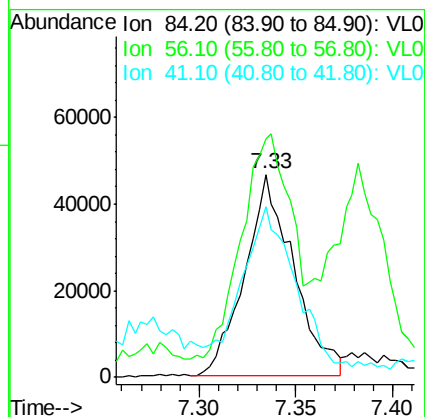
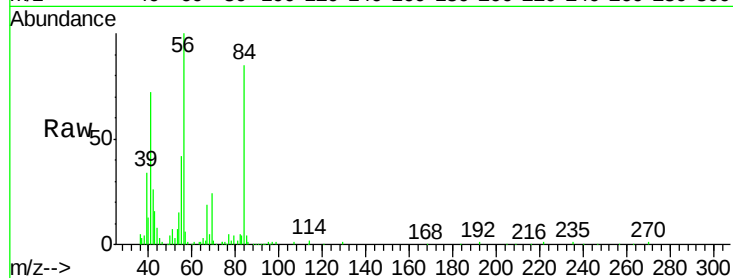




#30
Cyclohexane
Concen: 0.546 ppbv
RT: 7.33 min Scan# 1943
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

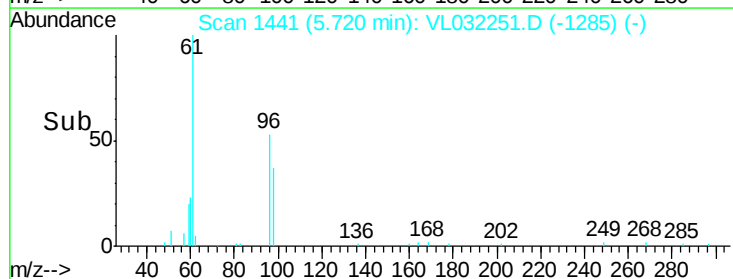
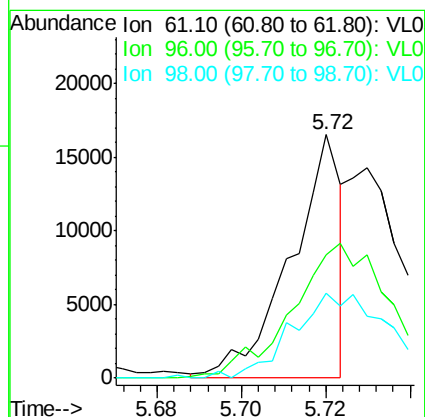
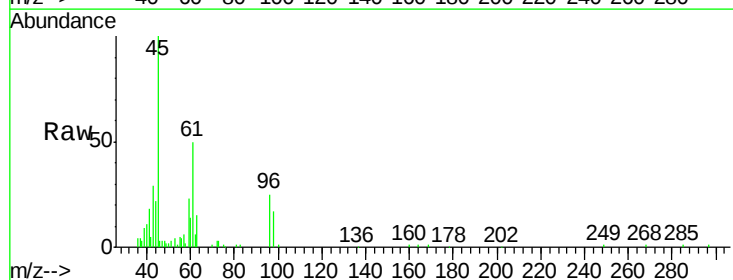
Instrument :
MSVOA_L
ClientSampleId :
MID

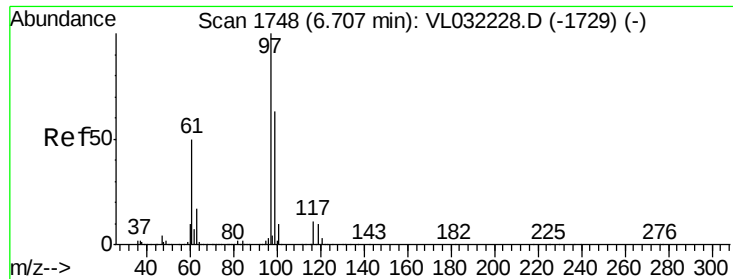
Tgt Ion: 84 Resp: 81038
Ion Ratio Lower Upper
84 100
56 139.1 112.6 168.8
41 95.0 67.0 100.6



#31
cis-1,2-Dichloroethene
Concen: 0.082 ppbv
RT: 5.72 min Scan# 1441
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion: 61 Resp: 13807
Ion Ratio Lower Upper
61 100
96 50.8 49.8 74.8
98 35.3 31.4 47.2





#32

1,1,1-Trichloroethane

Concen: 60.770 ppbv

RT: 6.71 min Scan# 1748

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

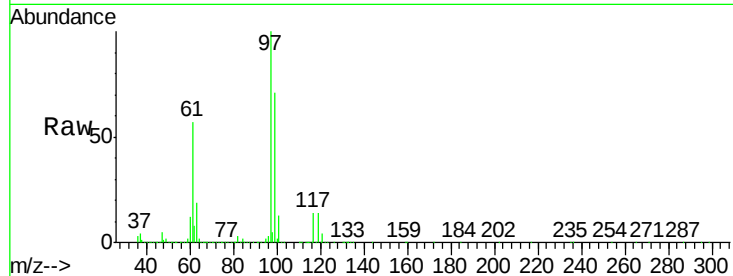
Tgt Ion: 97 Resp:15304524

Ion Ratio Lower Upper

97 100

99 68.7 51.2 76.8

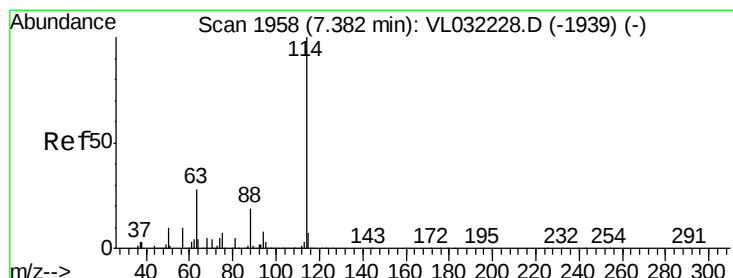
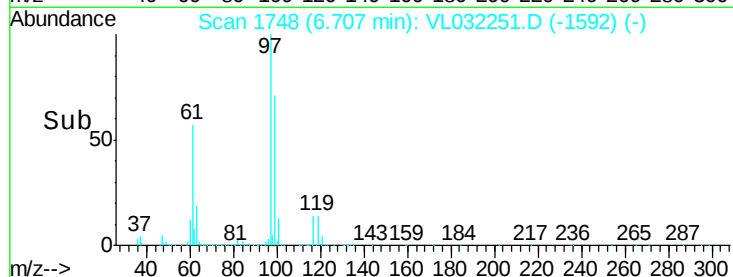
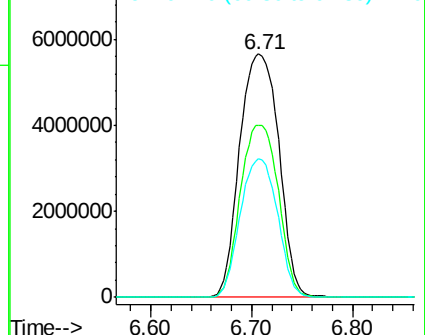
61 54.2 41.3 61.9



Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.39 min Scan# 1959

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

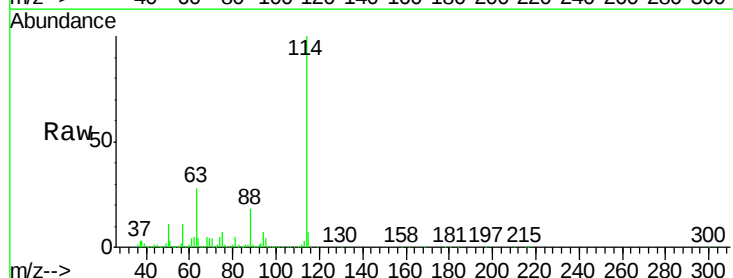
Tgt Ion:114 Resp: 3495316

Ion Ratio Lower Upper

114 100

63 27.9 22.5 33.7

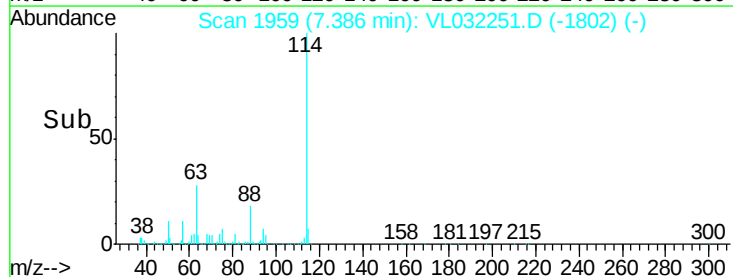
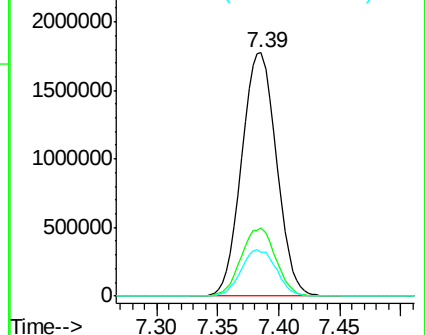
88 19.3 15.4 23.0

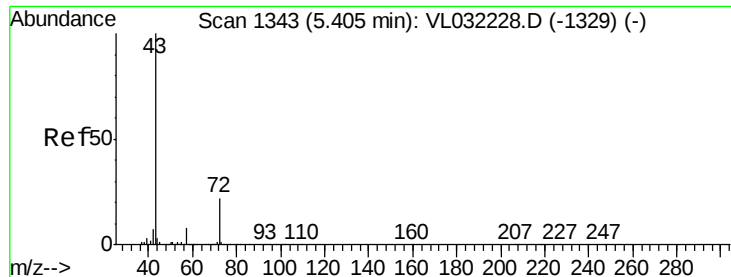


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

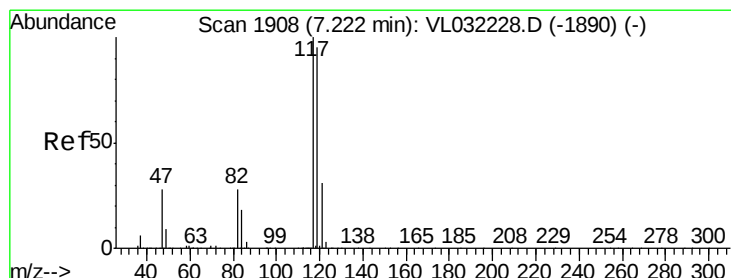
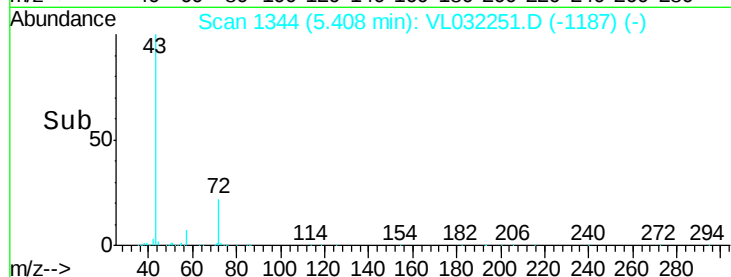
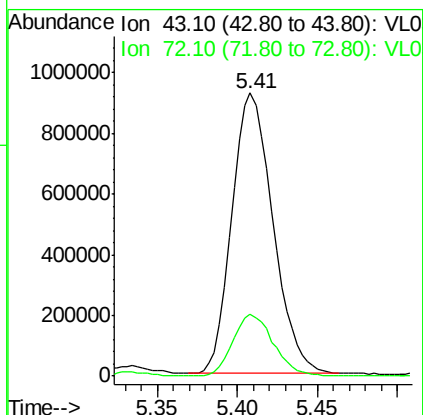
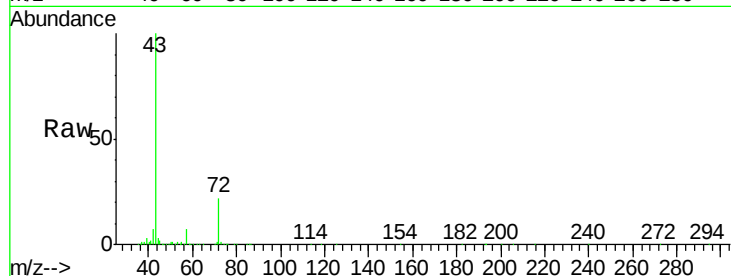




#34
2-Butanone
Concen: 6.805 ppbv
RT: 5.41 min Scan# 1344
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

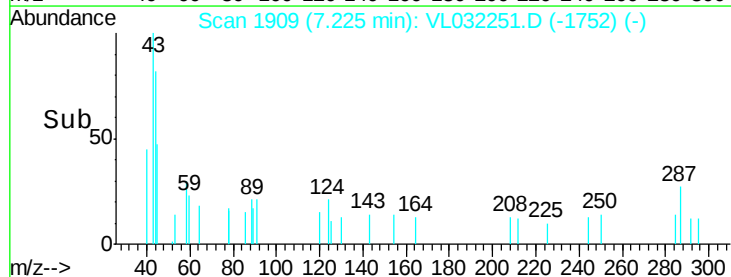
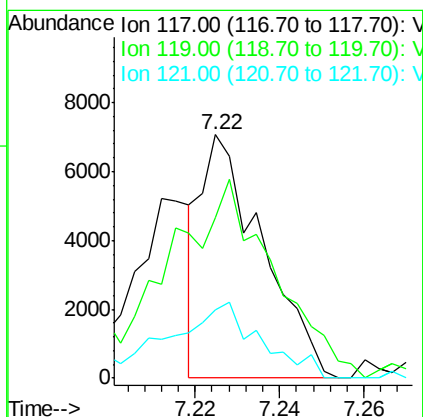
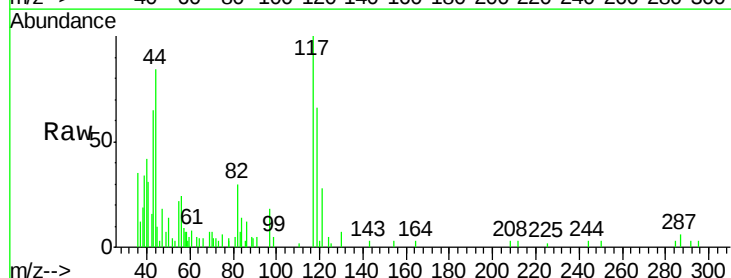
Instrument :
MSVOA_L
ClientSampled :
MID

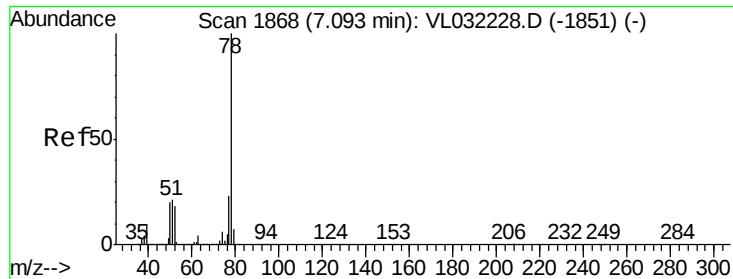
Tgt Ion: 43 Resp: 1620659
Ion Ratio Lower Upper
43 100
72 21.9 18.1 27.1



#35
Carbon Tetrachloride
Concen: 0.030 ppbv
RT: 7.22 min Scan# 1909
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion: 117 Resp: 7098
Ion Ratio Lower Upper
117 100
119 58.5 75.7 113.5#
121 27.9 24.6 37.0





#36

Benzene

Concen: 0.498 ppbv

RT: 7.10 min Scan# 1870

Delta R.T. 0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

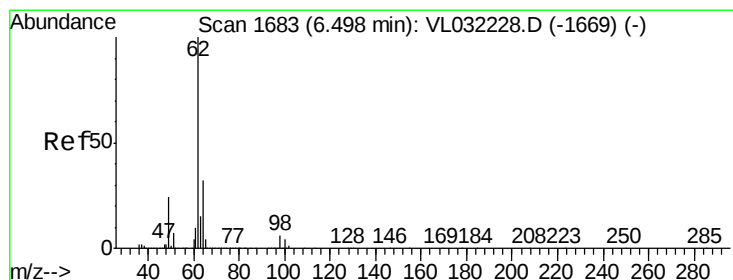
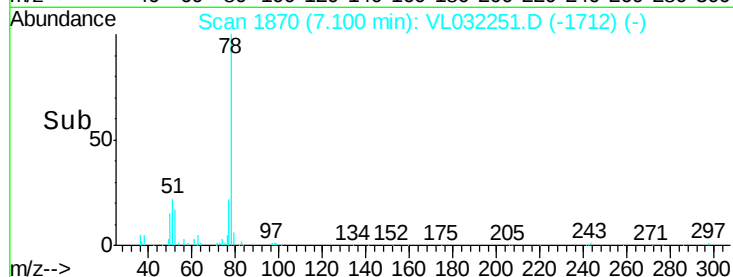
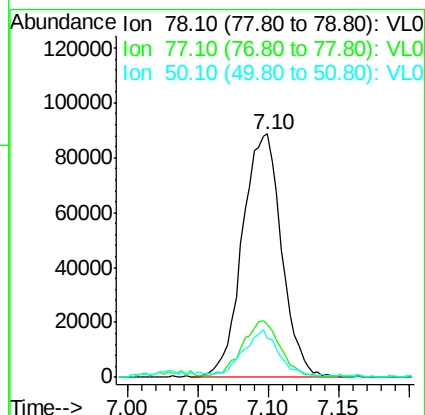
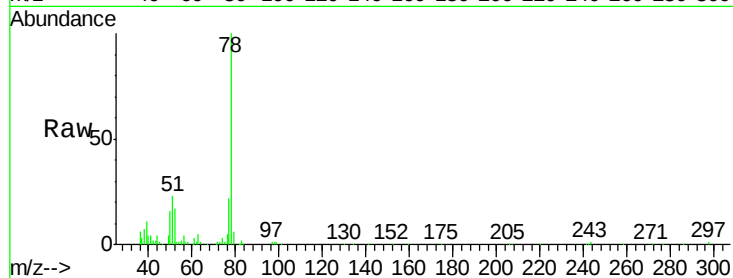
Tgt Ion: 78 Resp: 173142

Ion Ratio Lower Upper

78 100

77 20.6 18.0 27.0

50 15.2 15.8 23.8#



#37

1,2-Dichloroethane

Concen: 0.077 ppbv

RT: 6.50 min Scan# 1684

Delta R.T. 0.00 min

Lab File: VL032251.D

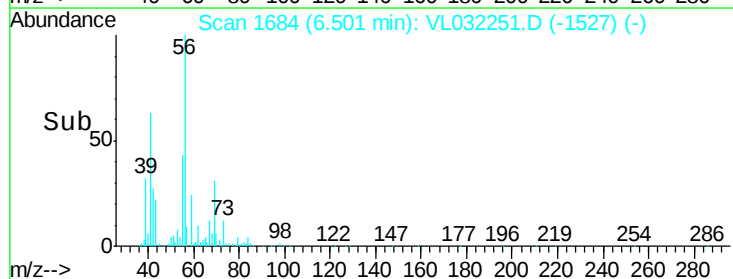
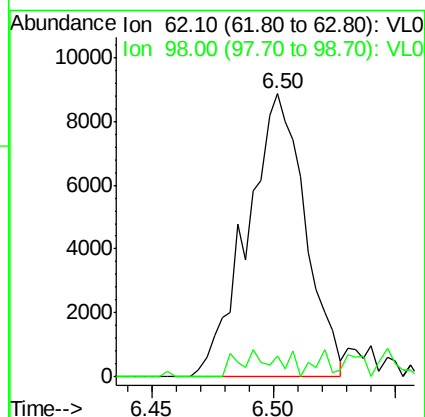
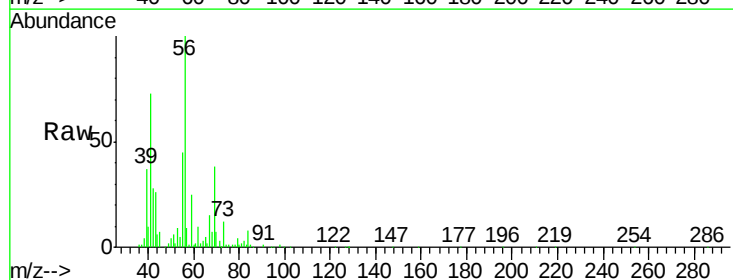
Acq: 13 Jul 2018 18:43

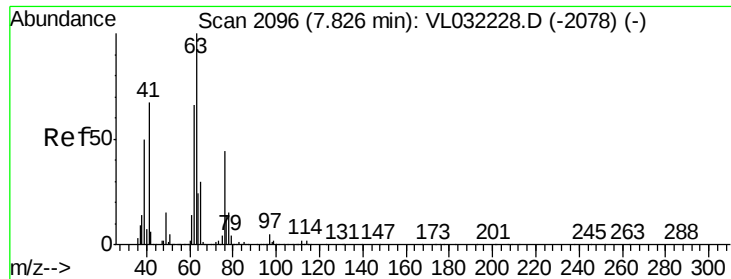
Tgt Ion: 62 Resp: 14615

Ion Ratio Lower Upper

62 100

98 0.0 4.6 7.0#





#39

1,2-Dichloropropane

Concen: 6.983 ppbv

RT: 7.39 min Scan# 1959

Delta R.T. -0.44 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

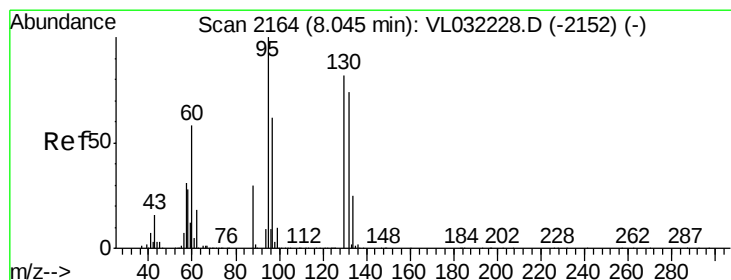
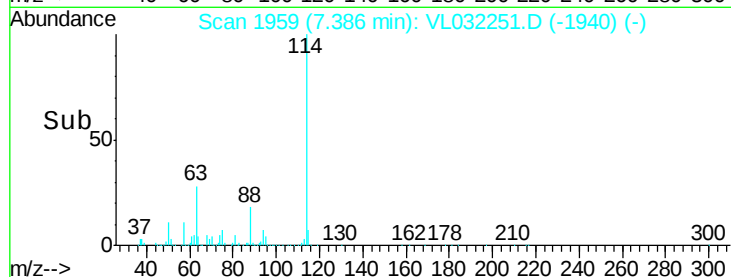
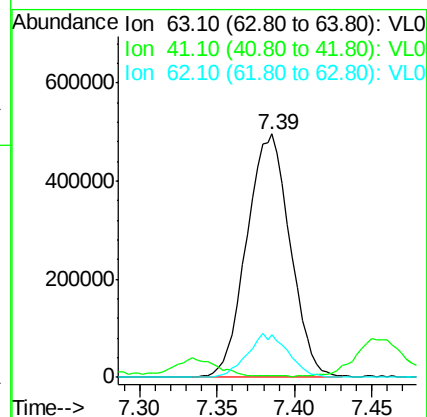
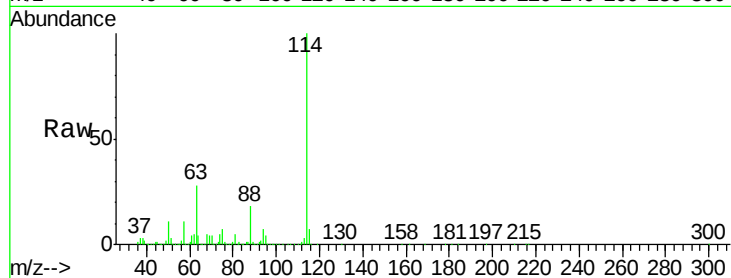
Tgt Ion: 63 Resp: 964054

Ion Ratio Lower Upper

63 100

41 0.0 53.8 80.6#

62 17.7 53.1 79.7#



#40

1,4-Dioxane

Concen: 0.038 ppbv

RT: 8.06 min Scan# 2168

Delta R.T. 0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Tgt Ion: 88 Resp: 1785

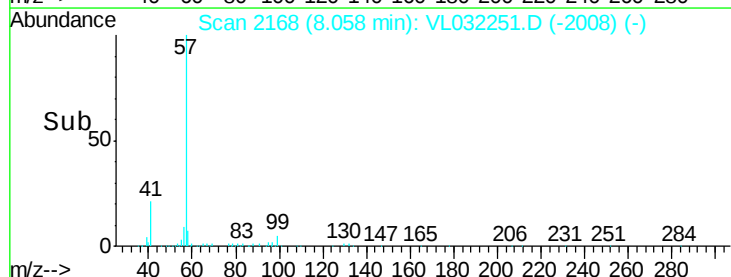
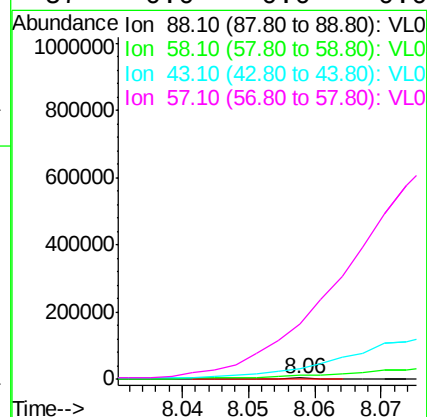
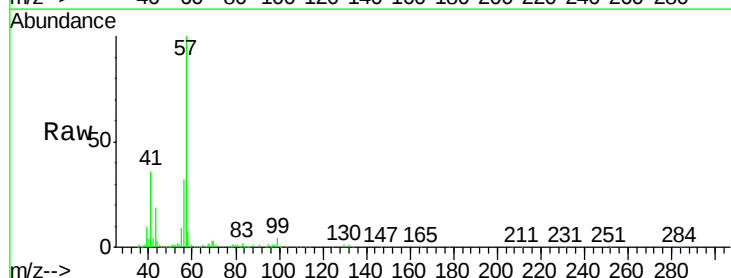
Ion Ratio Lower Upper

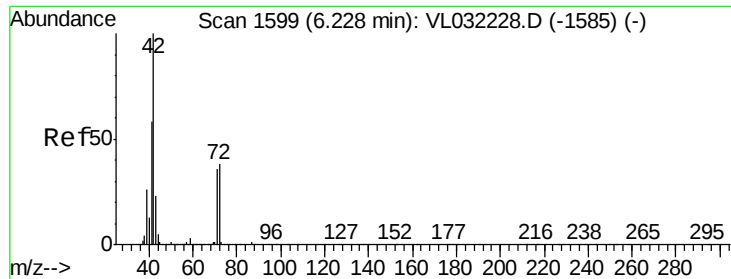
88 100

58 0.0 117.4 176.2#

43 0.0 0.0 0.0

57 0.0 0.0 0.0





#41

Tetrahydrofuran

Concen: 0.833 ppbv

RT: 6.24 min Scan# 1602

Delta R.T. 0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

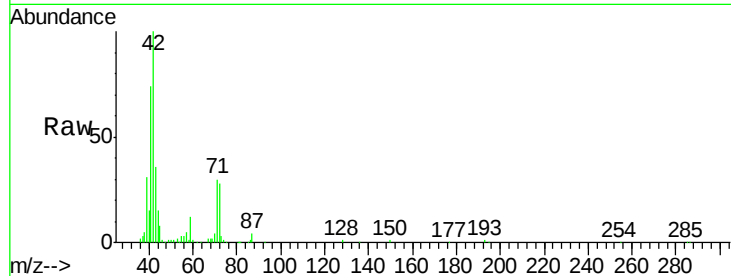
Tgt Ion: 42 Resp: 111036

Ion Ratio Lower Upper

42 100

72 31.9 30.6 45.8

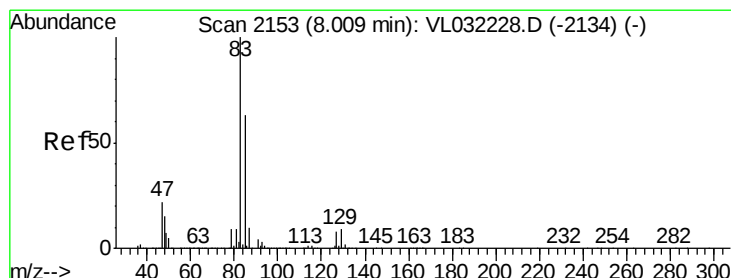
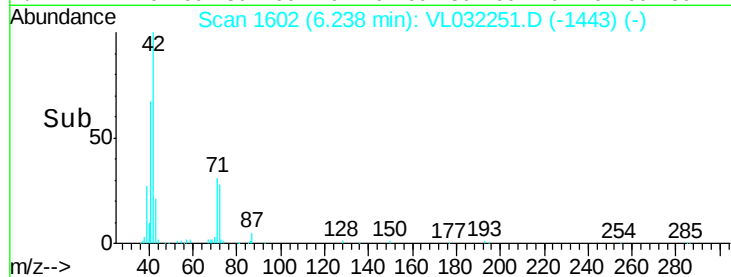
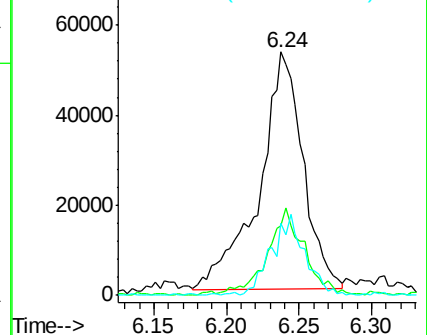
71 25.3 29.7 44.5#



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: 0.025 ppbv

RT: 8.01 min Scan# 2153

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

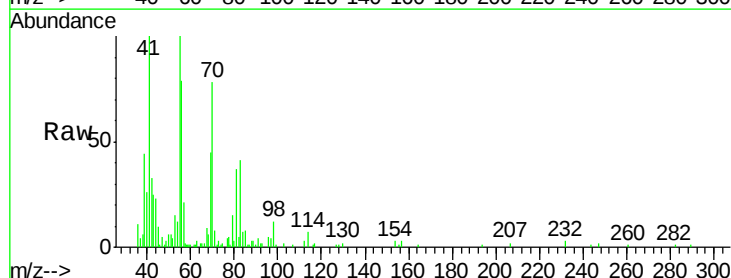
Tgt Ion: 83 Resp: 6653

Ion Ratio Lower Upper

83 100

85 15.6 50.6 76.0#

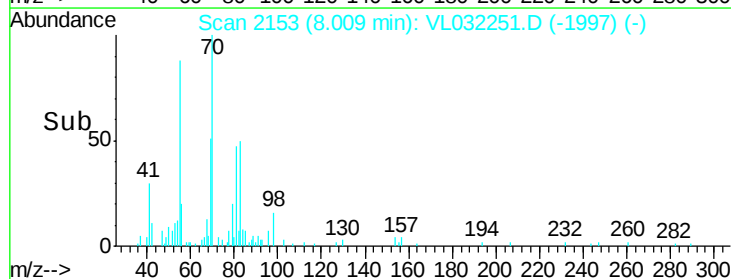
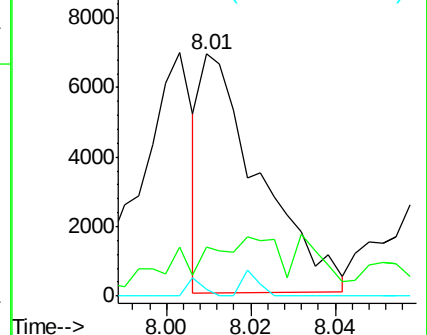
127 3.1 6.1 9.1#

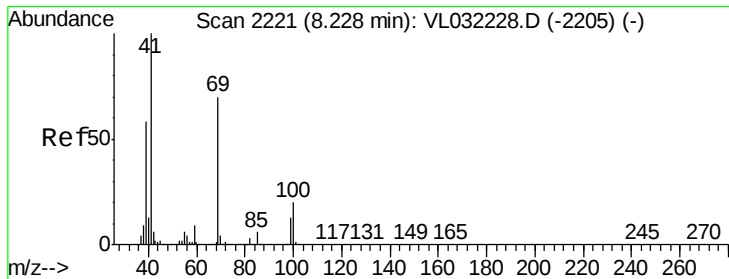


Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V

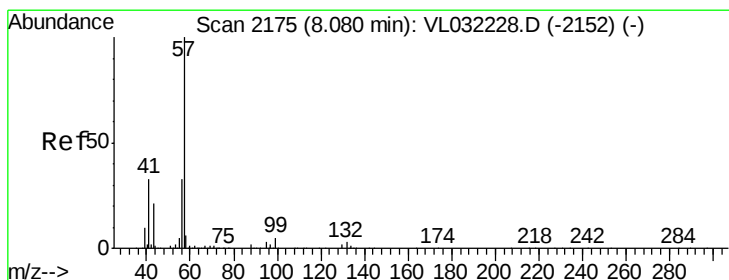
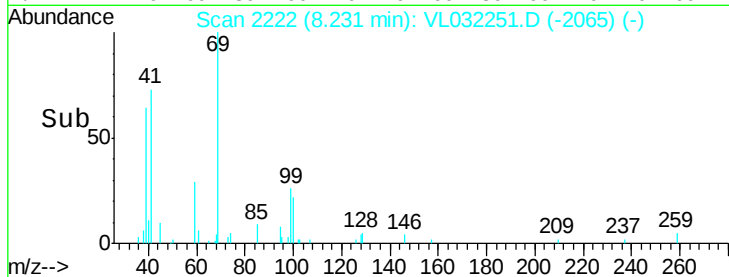
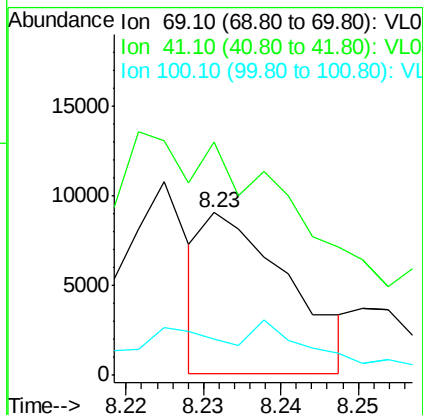
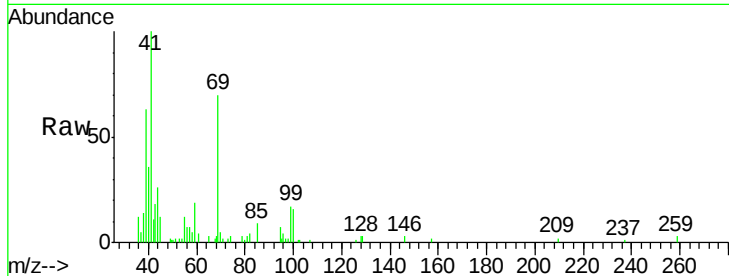




#43
Methyl Methacrylate
Concen: 0.051 ppbv
RT: 8.23 min Scan# 2222
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

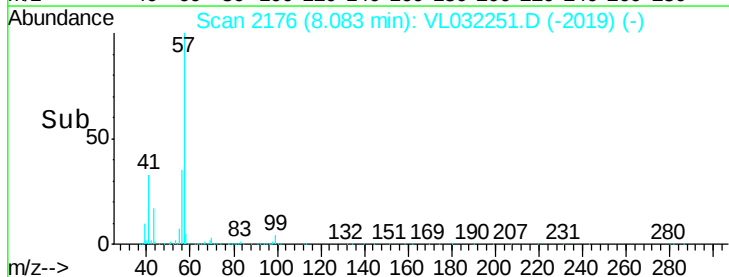
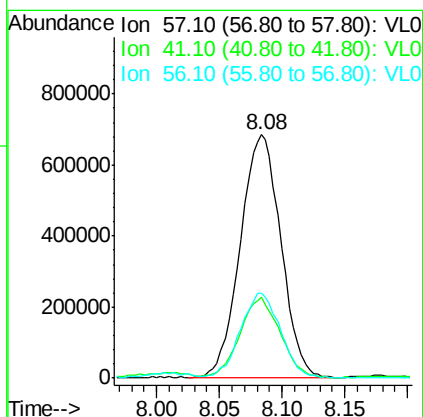
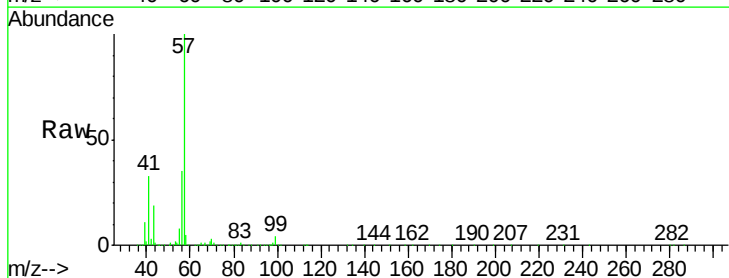
Instrument :
MSVOA_L
ClientSampleId :
MID

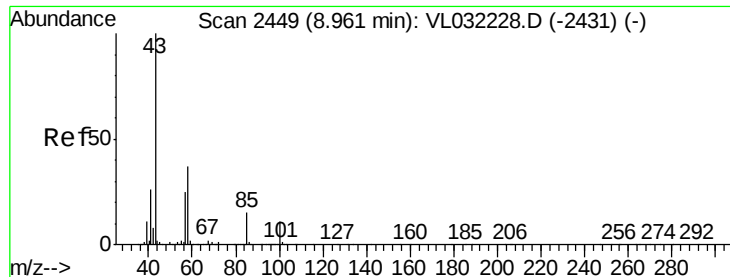
Tgt Ion: 69 Resp: 6869
Ion Ratio Lower Upper
69 100
41 0.0 116.3 174.5#
100 78.6 23.8 35.8#



#44
2,2,4-Trimethylpentane
Concen: 2.564 ppbv
RT: 8.08 min Scan# 2176
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion: 57 Resp: 1531846
Ion Ratio Lower Upper
57 100
41 32.9 24.7 37.1
56 34.6 25.4 38.0

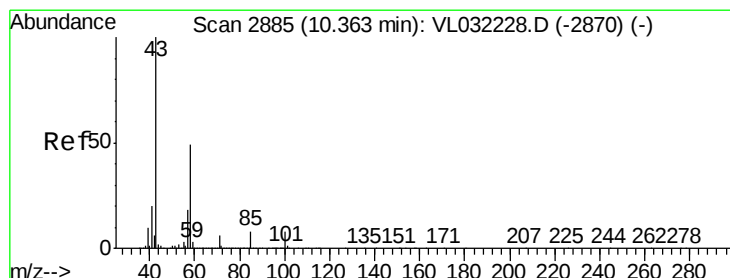
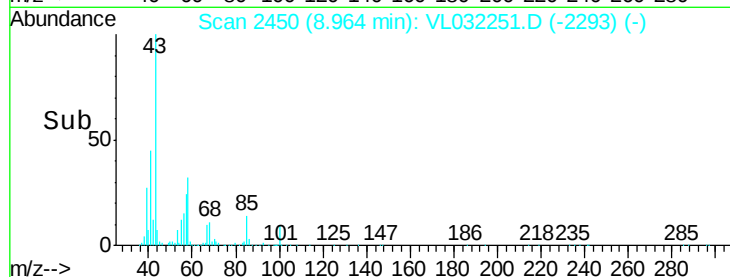
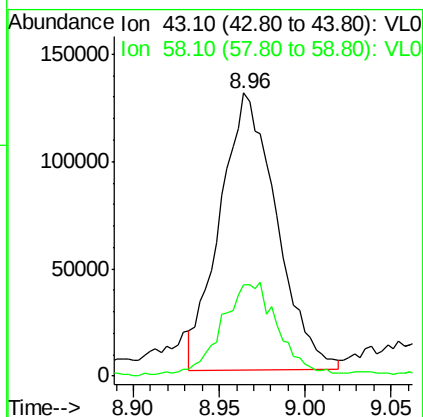
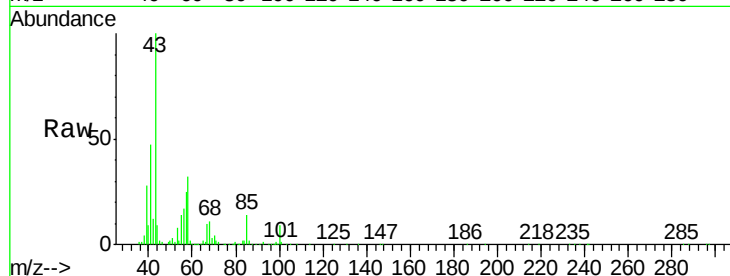




#50
 4-Methyl-2-Pentanone
 Concen: 0.718 ppbv
 RT: 8.96 min Scan# 2450
 Delta R.T. 0.00 min
 Lab File: VL032251.D
 Acq: 13 Jul 2018 18:43

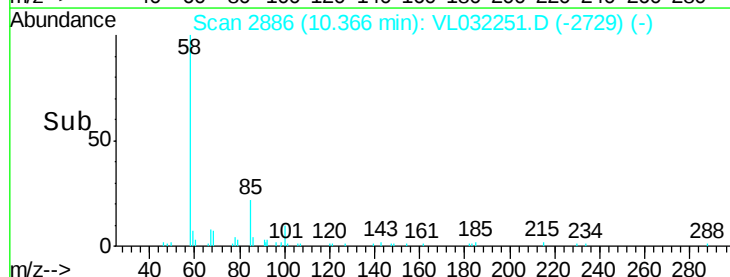
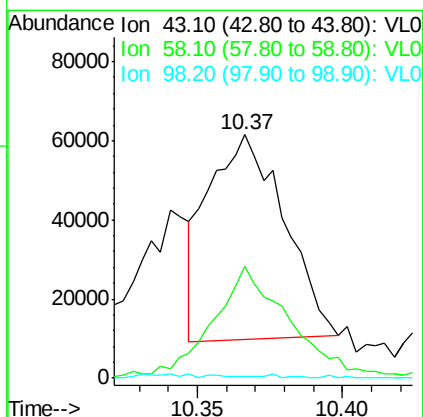
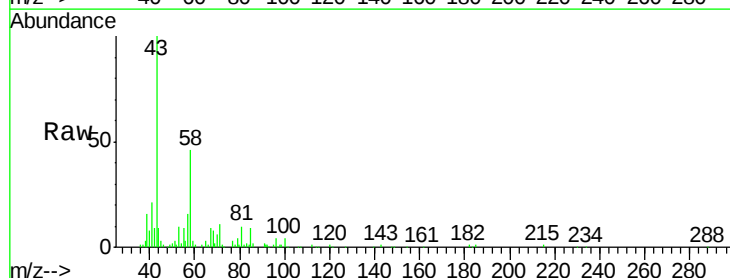
Instrument :
 MSVOA_L
 ClientSampleId :
 MID

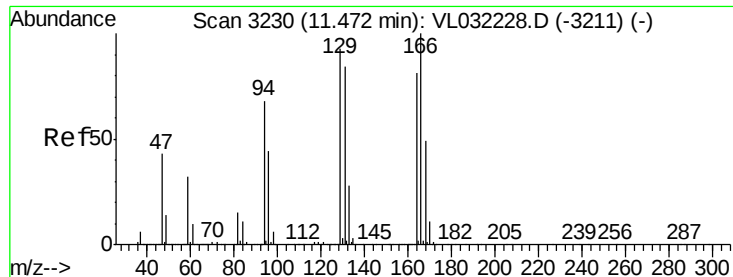
Tgt Ion: 43 Resp: 295624
 Ion Ratio Lower Upper
 43 100
 58 33.2 29.5 44.3



#51
 2-Hexanone
 Concen: 0.273 ppbv
 RT: 10.37 min Scan# 2886
 Delta R.T. 0.00 min
 Lab File: VL032251.D
 Acq: 13 Jul 2018 18:43

Tgt Ion: 43 Resp: 93993
 Ion Ratio Lower Upper
 43 100
 58 53.3 39.9 59.9
 98 1.4 0.2 0.4#





#52

Tetrachloroethene

Concen: 0.028 ppbv

RT: 11.48 min Scan# 3232

Delta R.T. 0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

Tgt Ion:164 Resp: 3634

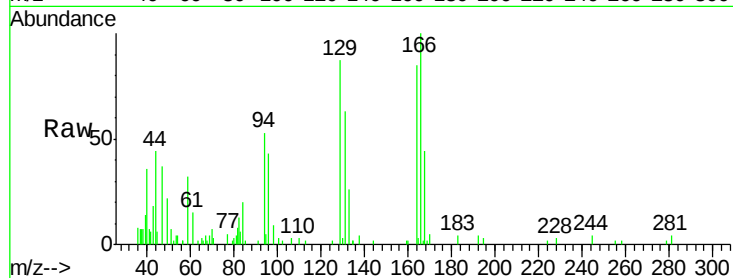
Ion Ratio Lower Upper

164 100

166 63.7 99.3 148.9#

129 53.1 92.0 138.0#

131 48.0 83.8 125.8#

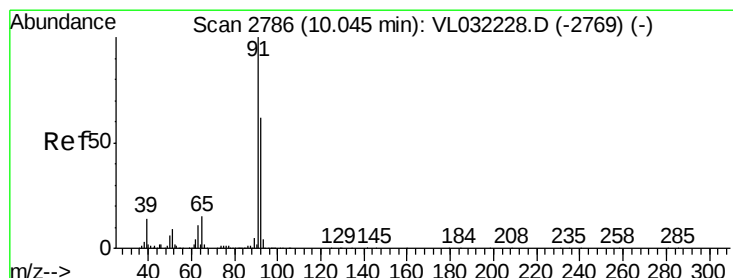
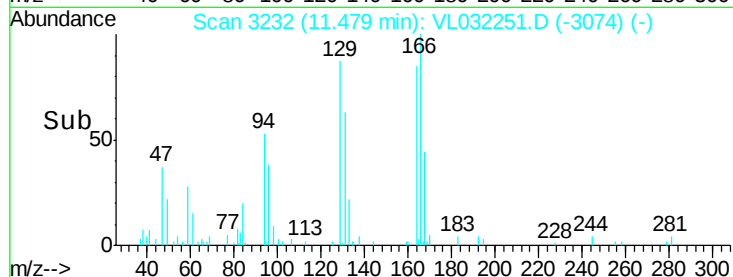
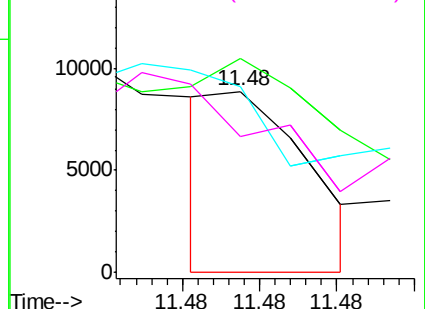


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 5.289 ppbv

RT: 10.04 min Scan# 2786

Delta R.T. 0.00 min

Lab File: VL032251.D

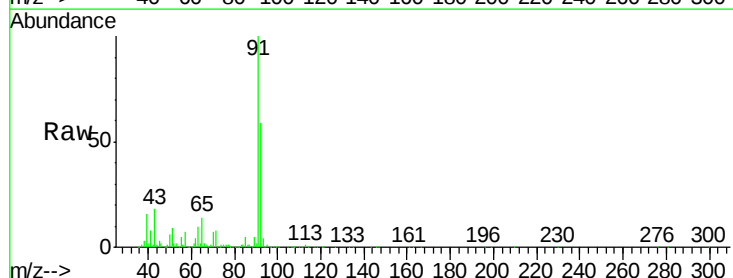
Acq: 13 Jul 2018 18:43

Tgt Ion: 91 Resp: 2172103

Ion Ratio Lower Upper

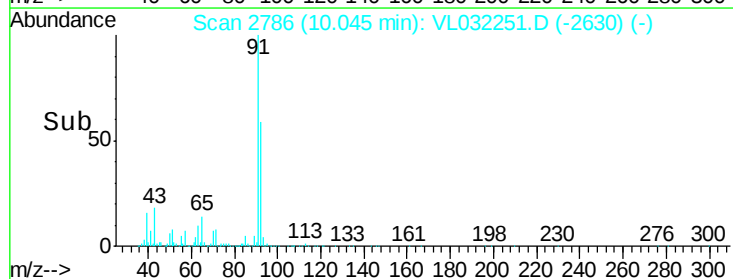
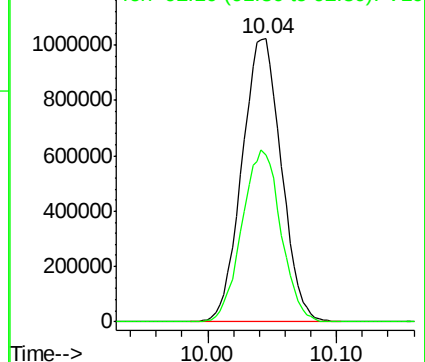
91 100

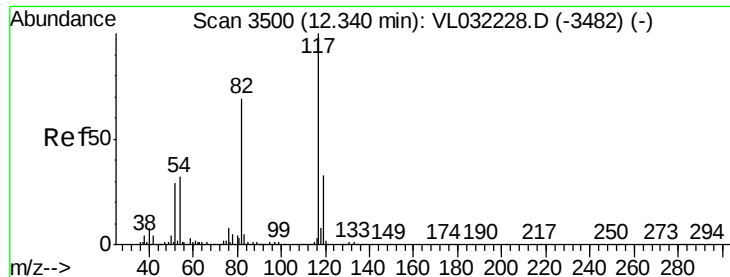
92 60.5 49.0 73.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

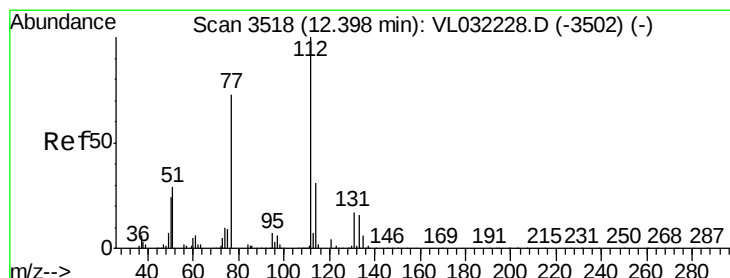
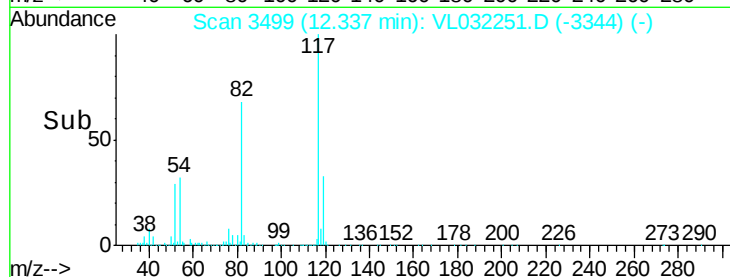
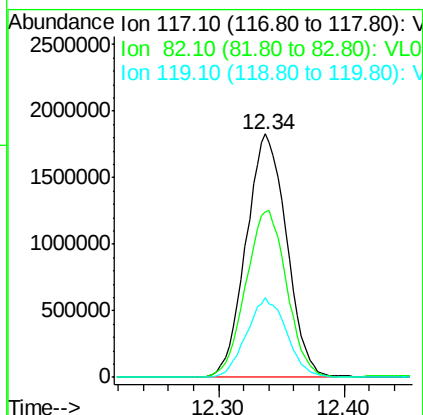
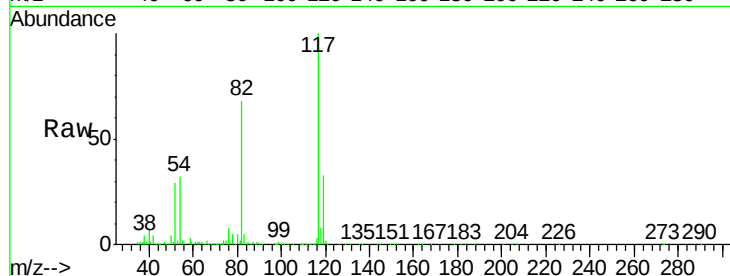




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.34 min Scan# 3499
Delta R.T. -0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

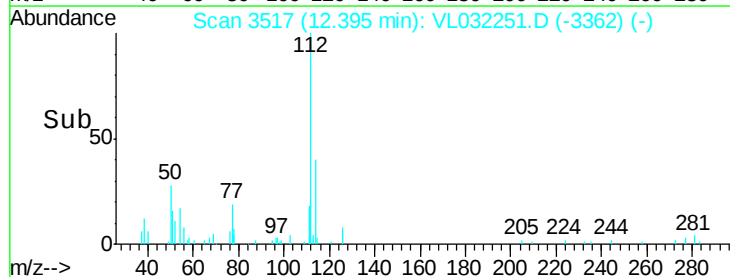
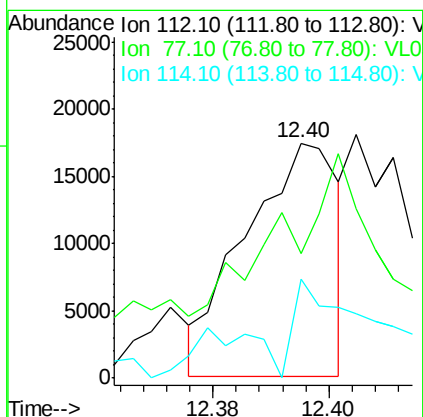
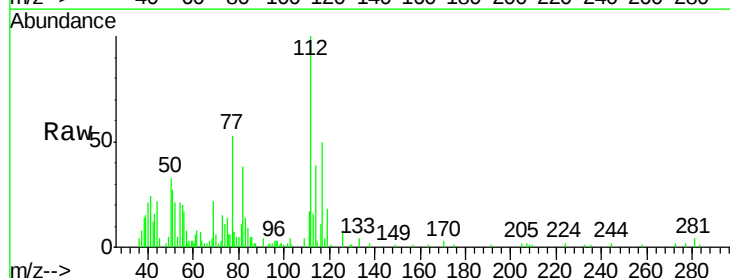
Instrument :
MSVOA_L
ClientSampleId :
MID

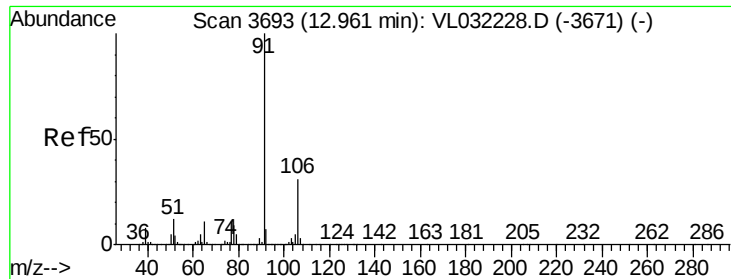
Tgt Ion:117 Resp: 4097719
Ion Ratio Lower Upper
117 100
82 69.2 53.2 79.8
119 32.5 43.9 65.9#



#57
Chlorobenzene
Concen: 0.055 ppbv
RT: 12.40 min Scan# 3517
Delta R.T. -0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion:112 Resp: 19205
Ion Ratio Lower Upper
112 100
77 33.7 58.8 88.2#
114 41.5 27.9 34.1#





#58

Ethyl Benzene

Concen: 1.138 ppbv

RT: 12.96 min Scan# 3694

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampled :

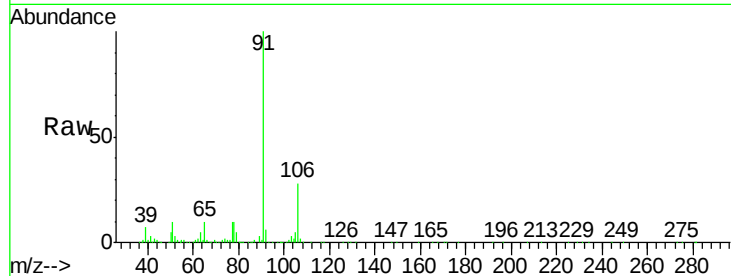
MID

Tgt Ion: 91 Resp: 678968

Ion Ratio Lower Upper

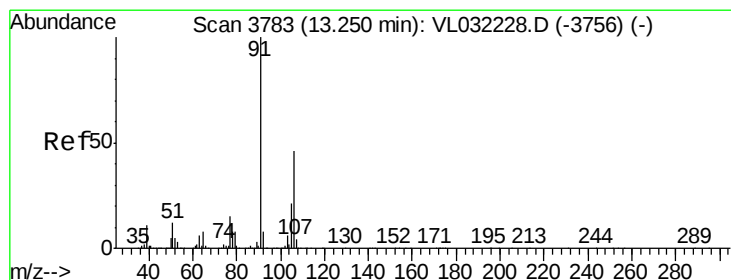
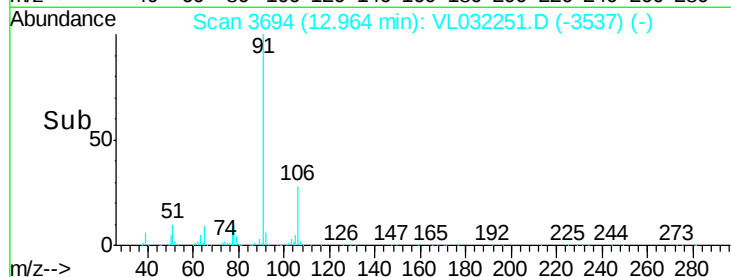
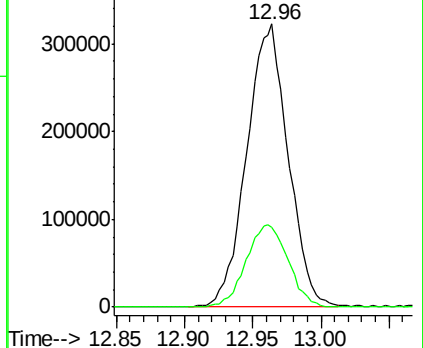
91 100

106 28.3 24.5 36.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 4.228 ppbv

RT: 13.22 min Scan# 3772

Delta R.T. -0.04 min

Lab File: VL032251.D

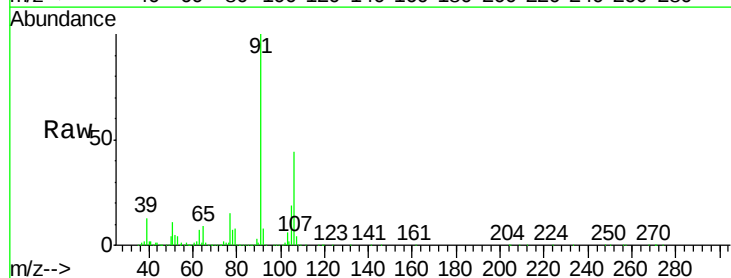
Acq: 13 Jul 2018 18:43

Tgt Ion: 91 Resp: 2075645

Ion Ratio Lower Upper

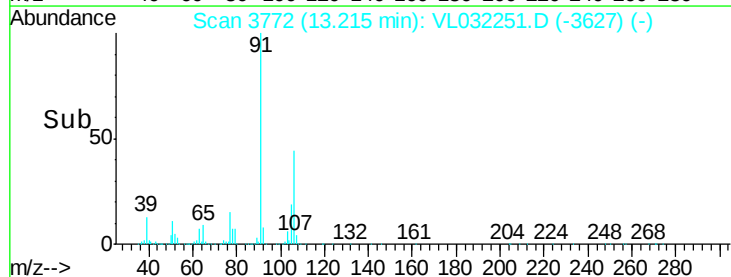
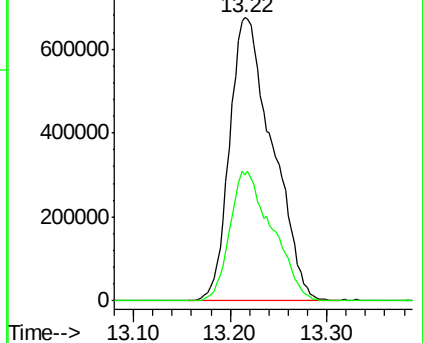
91 100

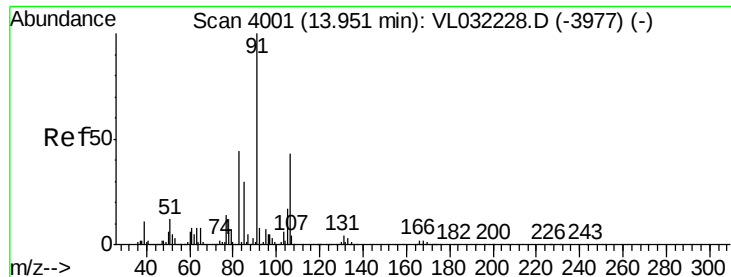
106 45.4 36.4 54.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#60

o-Xylene

Concen: 1.727 ppbv

RT: 13.94 min Scan# 3999

Delta R.T. -0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

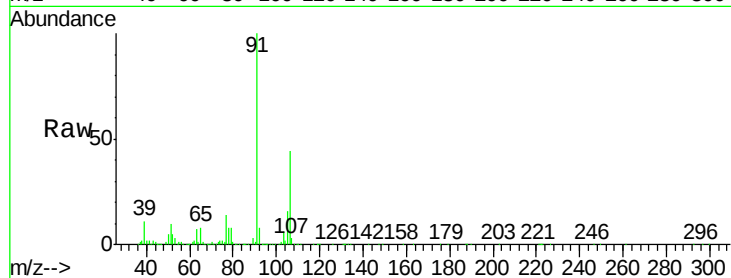
MID

Tgt Ion: 91 Resp: 836872

Ion Ratio Lower Upper

91 100

106 43.2 21.9 65.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.94

400000

300000

200000

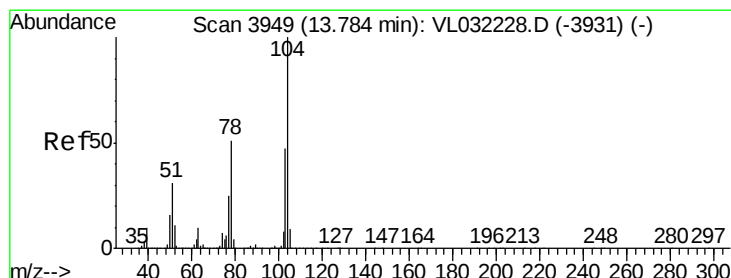
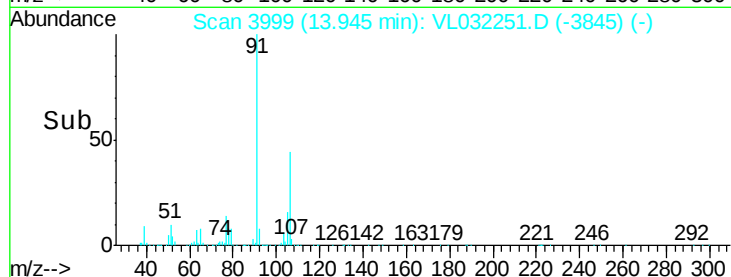
100000

0

13.90

14.00

Time-->



#61

Styrene

Concen: 0.036 ppbv

RT: 13.78 min Scan# 3948

Delta R.T. -0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

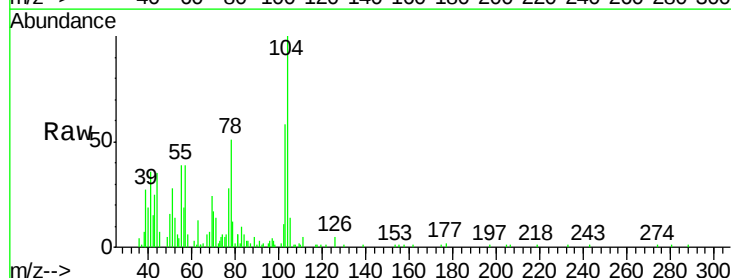
Tgt Ion: 104 Resp: 12928

Ion Ratio Lower Upper

104 100

78 0.0 43.4 65.0#

103 213.3 38.0 57.0#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V

13.78

30000

25000

20000

15000

10000

5000

0

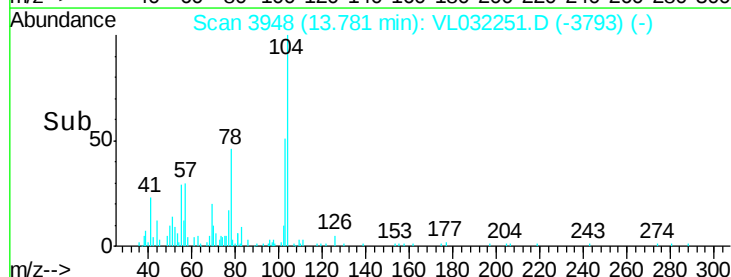
13.77

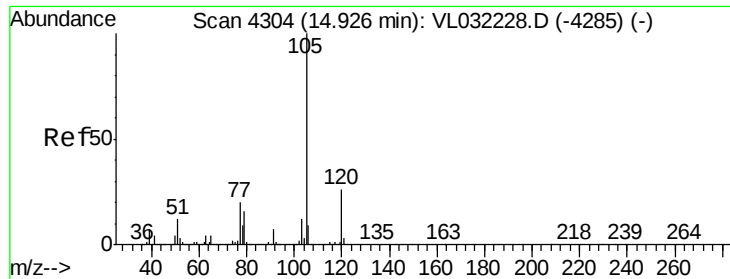
13.78

13.78

13.79

Time-->





#62

Isopropylbenzene

Concen: 0.080 ppbv

RT: 14.92 min Scan# 4302

Delta R.T. -0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

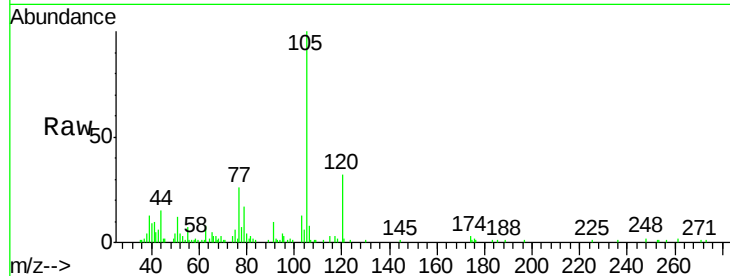
MID

Tgt Ion:105 Resp: 54498

Ion Ratio Lower Upper

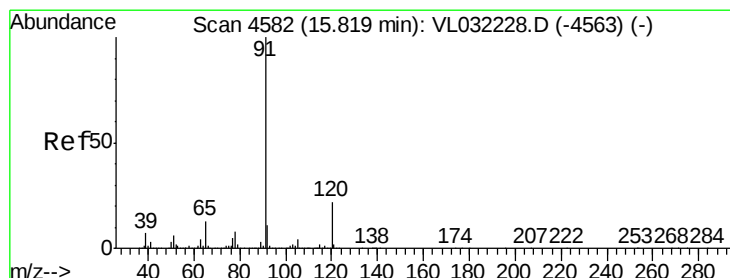
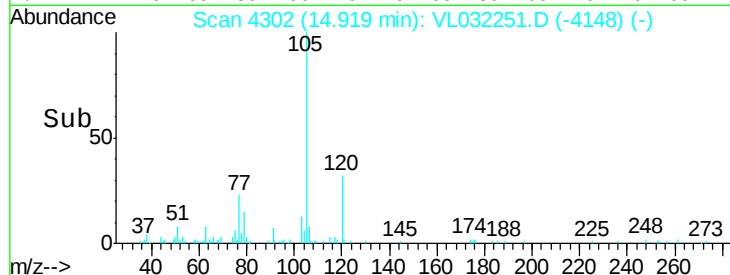
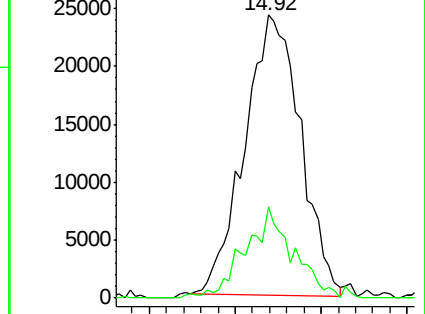
105 100

120 28.4 20.2 30.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.240 ppbv

RT: 15.82 min Scan# 4582

Delta R.T. 0.00 min

Lab File: VL032251.D

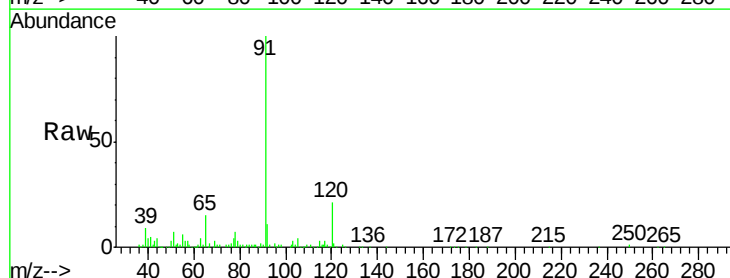
Acq: 13 Jul 2018 18:43

Tgt Ion:120 Resp: 41244

Ion Ratio Lower Upper

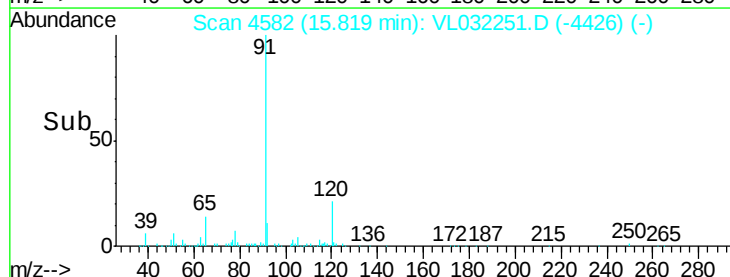
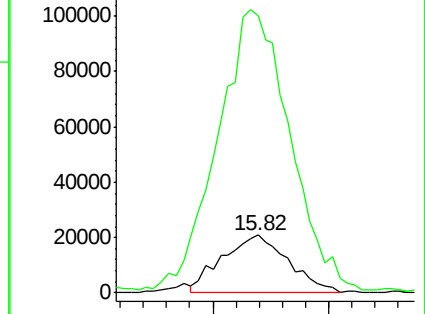
120 100

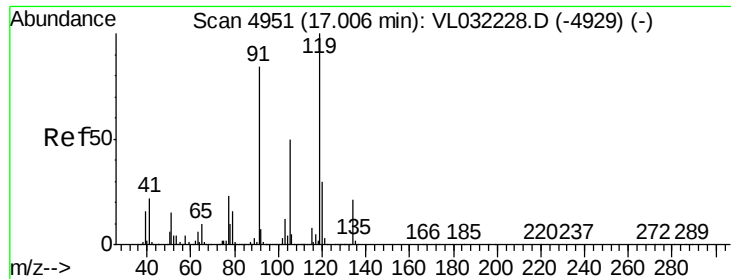
91 542.0 385.0 577.4



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

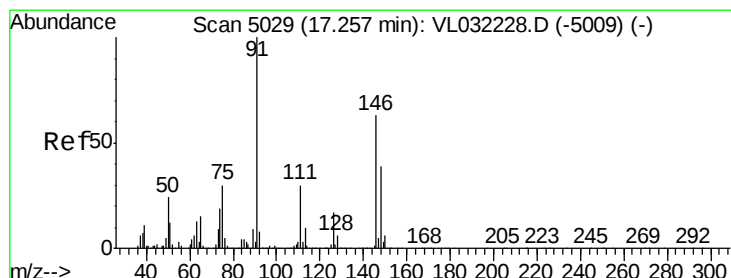
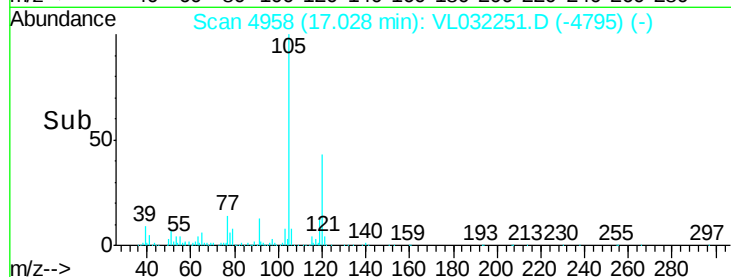
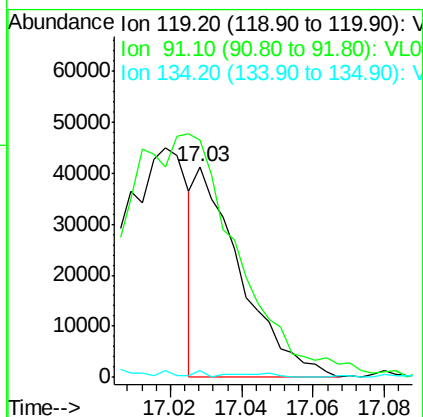
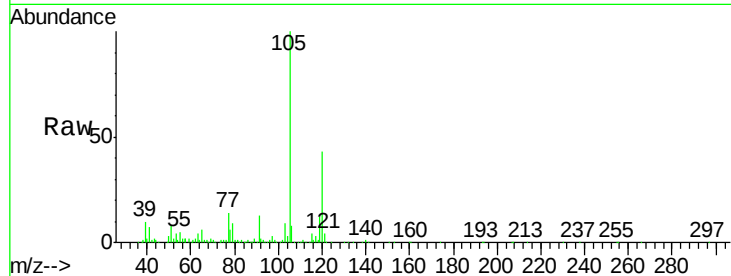




#65
 tert-Butylbenzene
 Concen: 0.064 ppbv
 RT: 17.03 min Scan# 4958
 Delta R.T. 0.02 min
 Lab File: VL032251.D
 Acq: 13 Jul 2018 18:43

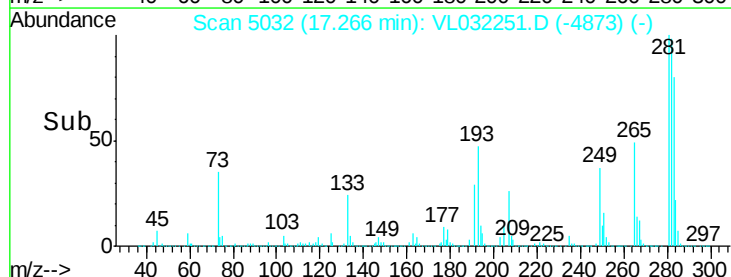
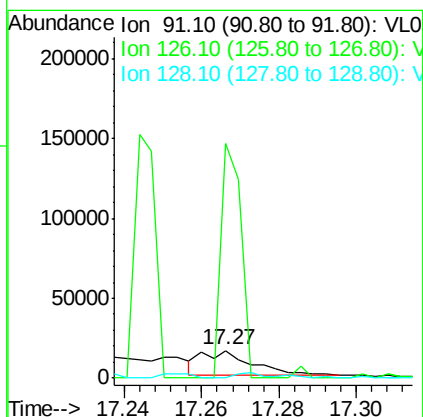
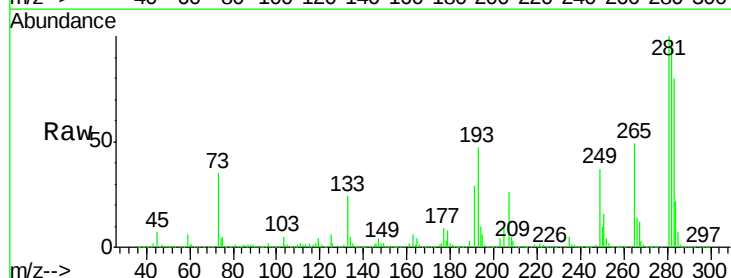
Instrument :
 MSVOA_L
 ClientSampleId :
 MID

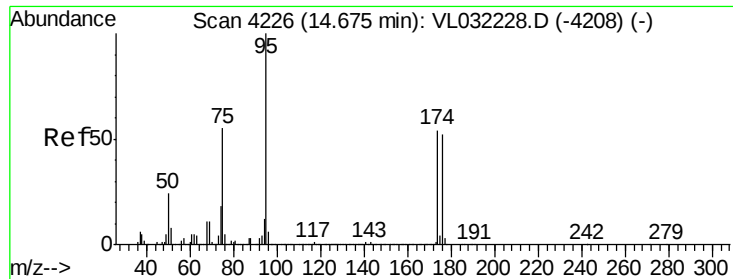
Tgt Ion: 119 Resp: 36553
 Ion Ratio Lower Upper
 119 100
 91 303.8 68.6 102.8#
 134 0.0 15.4 23.2#



#66
 Benzyl Chloride
 Concen: 0.051 ppbv
 RT: 17.27 min Scan# 5032
 Delta R.T. 0.01 min
 Lab File: VL032251.D
 Acq: 13 Jul 2018 18:43

Tgt Ion: 91 Resp: 14609
 Ion Ratio Lower Upper
 91 100
 126 30.4 13.4 20.0#
 128 30.4 4.5 6.7#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.866 ppbv

RT: 14.67 min Scan# 4225

Delta R.T. -0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

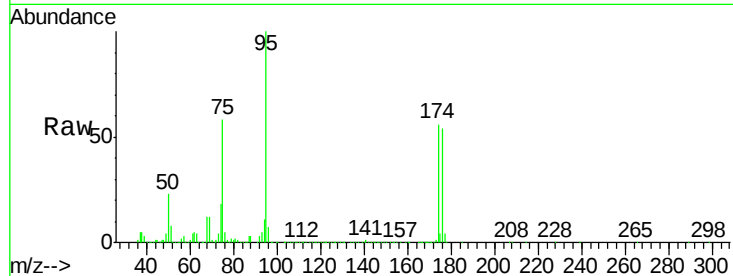
Tgt Ion: 95 Resp: 3129692

Ion Ratio Lower Upper

95 100

174 55.4 44.6 67.0

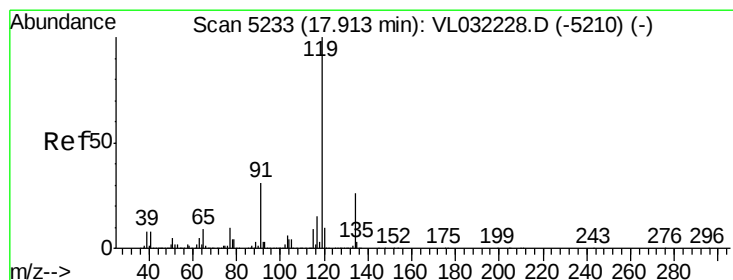
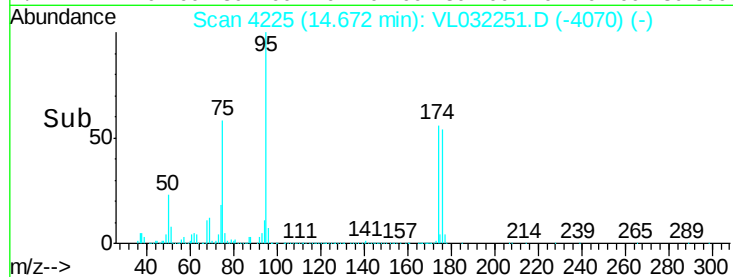
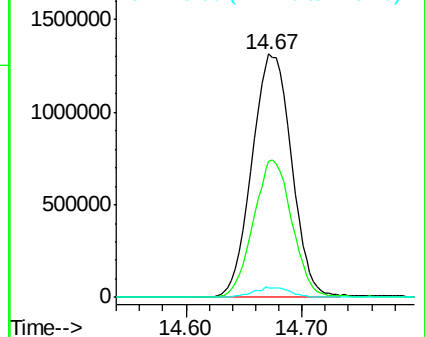
175 4.0 3.3 4.9



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



#69

p-Isopropyltoluene

Concen: 2.647 ppbv

RT: 17.92 min Scan# 5234

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

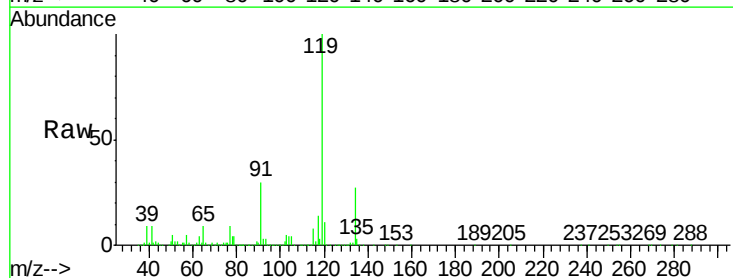
Tgt Ion: 119 Resp: 1713333

Ion Ratio Lower Upper

119 100

134 24.6 20.1 30.1

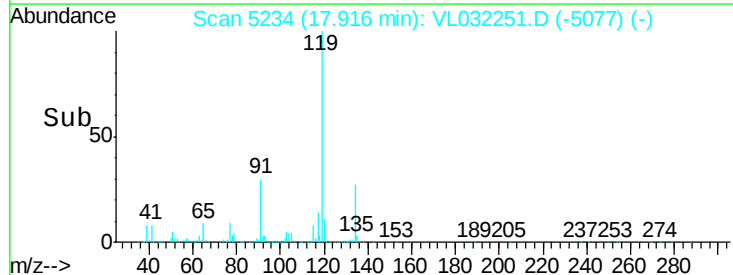
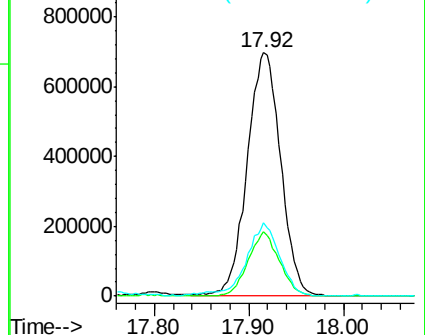
91 29.7 24.2 36.2

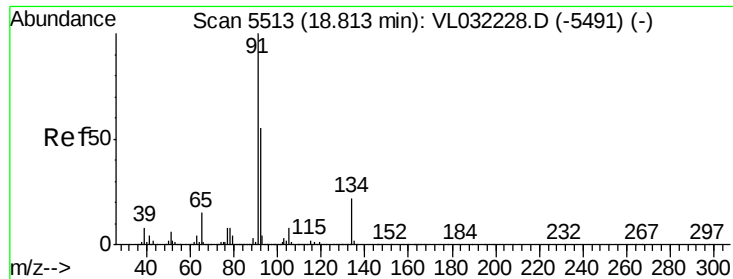


Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): VL0





#70

n-Butylbenzene

Concen: 0.046 ppbv

RT: 18.83 min Scan# 5517

Delta R.T. 0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

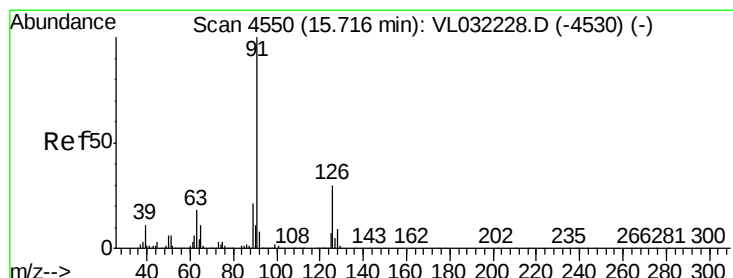
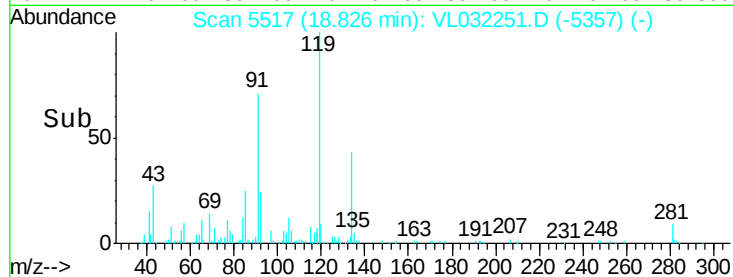
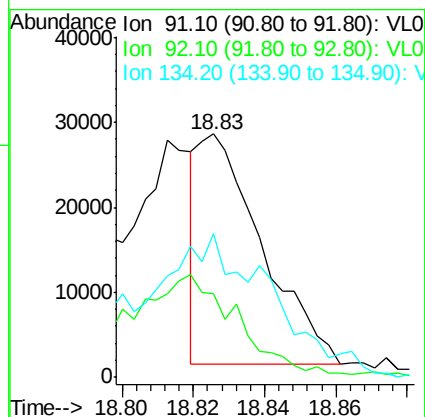
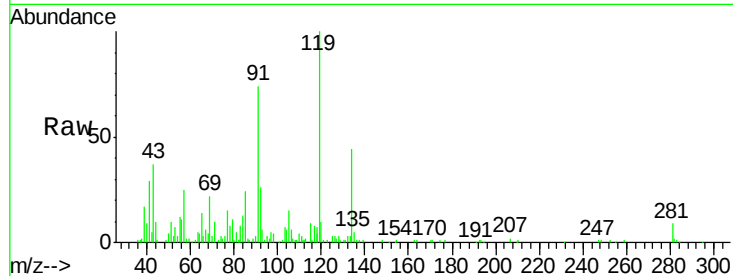
Tgt Ion: 91 Resp: 33033

Ion Ratio Lower Upper

91 100

92 0.0 43.6 65.4#

134 166.3 17.1 25.7#



#71

2-Chlorotoluene

Concen: 0.408 ppbv

RT: 15.82 min Scan# 4581

Delta R.T. 0.10 min

Lab File: VL032251.D

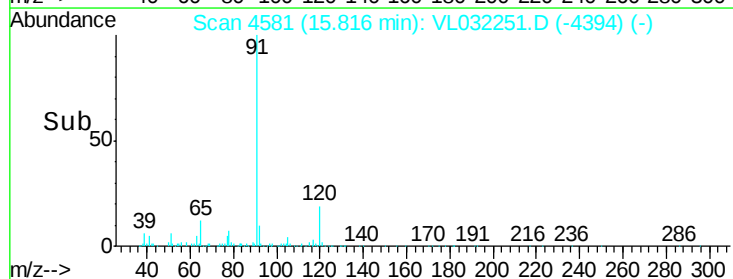
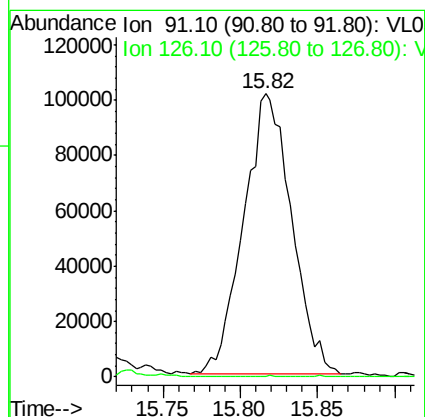
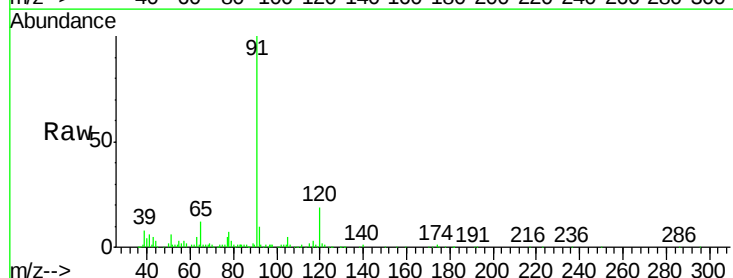
Acq: 13 Jul 2018 18:43

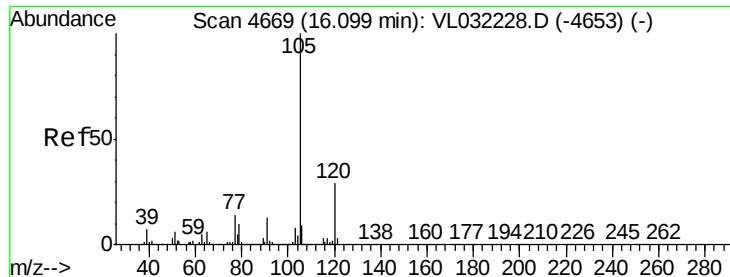
Tgt Ion: 91 Resp: 218106

Ion Ratio Lower Upper

91 100

126 0.2 11.7 46.7#





#72

4-Ethyltoluene

Concen: 0.253 ppbv

RT: 16.10 min Scan# 4669

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

Tgt Ion:105 Resp: 137328

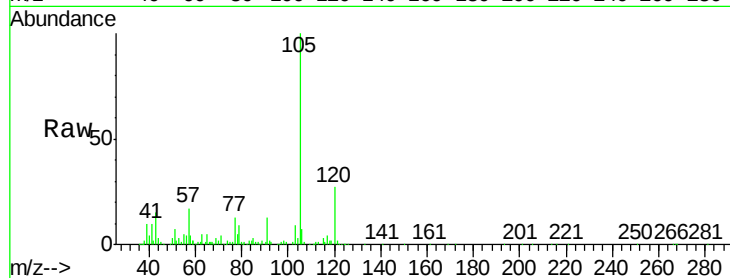
Ion Ratio Lower Upper

105 100

120 53.5 23.3 34.9#

91 24.2 10.3 15.5#

77 26.5 11.5 17.3#

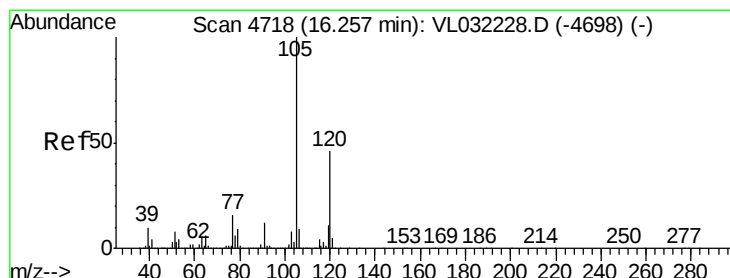
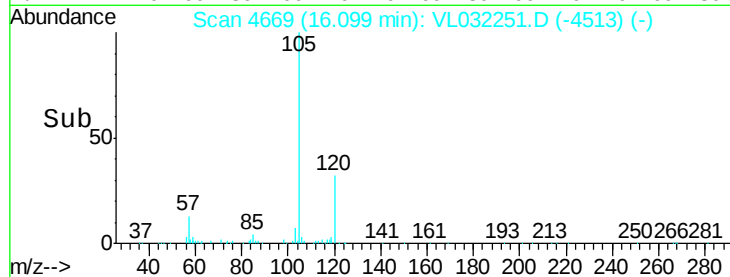
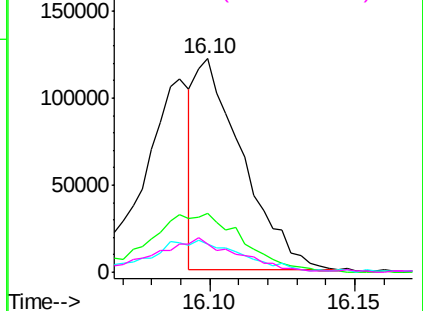


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.420 ppbv

RT: 16.25 min Scan# 4717

Delta R.T. -0.00 min

Lab File: VL032251.D

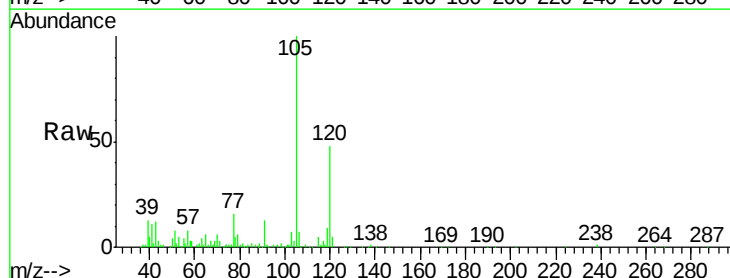
Acq: 13 Jul 2018 18:43

Tgt Ion:105 Resp: 212259

Ion Ratio Lower Upper

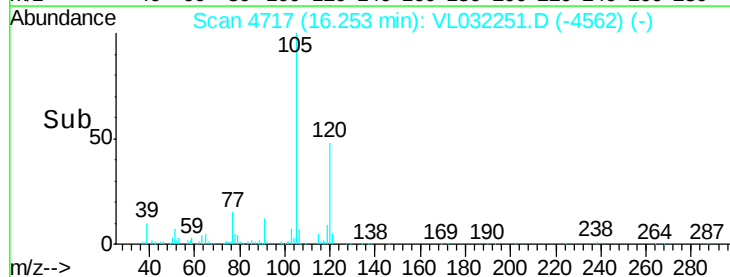
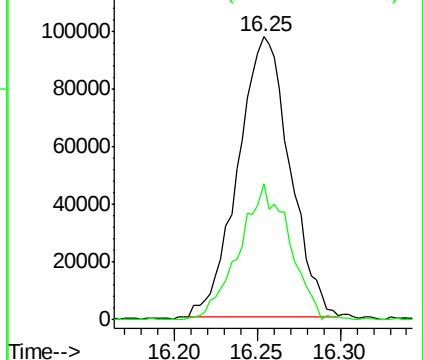
105 100

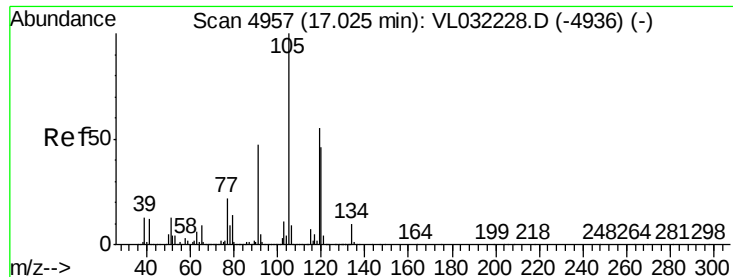
120 48.2 36.6 54.8



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74

1,2,4-Trimethylbenzene

Concen: 1.721 ppbv

RT: 17.02 min Scan# 4956

Delta R.T. -0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

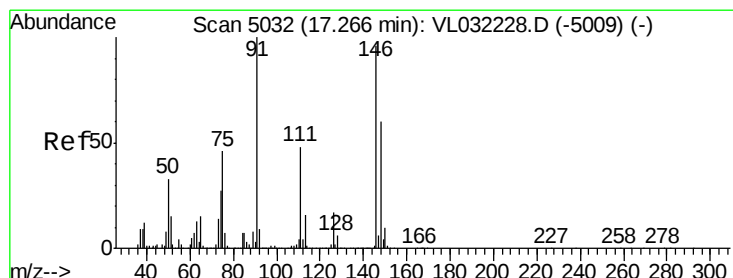
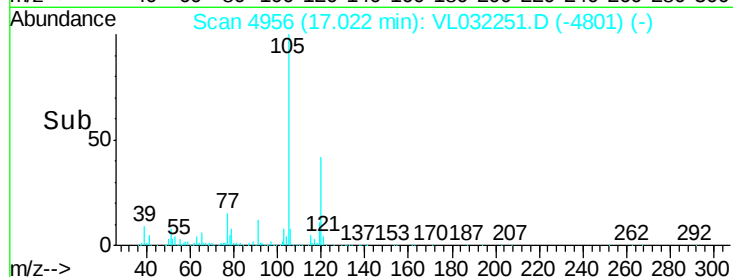
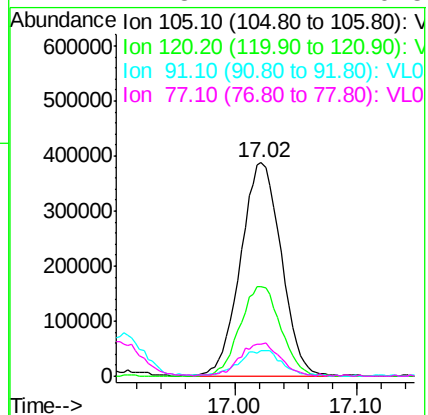
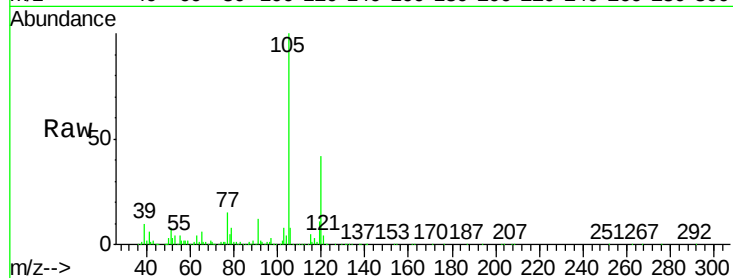
Instrument :

MSVOA_L

ClientSampled :

MID

Tgt Ion:	105	Resp:	889364
Ion Ratio		Lower	Upper
105	100		
120	41.7	37.0	55.4
91	12.2	38.2	57.2#
77	14.8	17.7	26.5#



#75

1,3-Dichlorobenzene

Concen: 1.951 ppbv

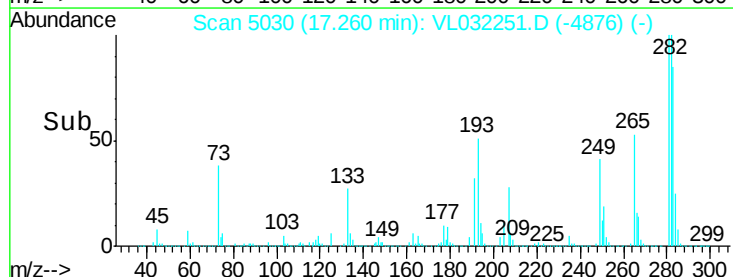
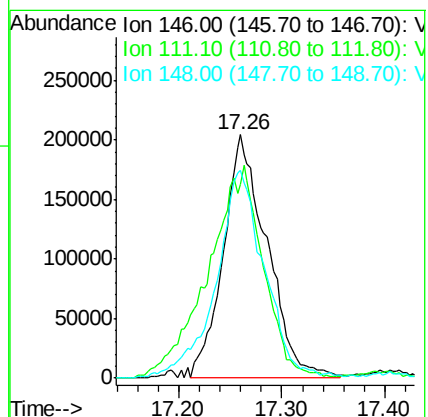
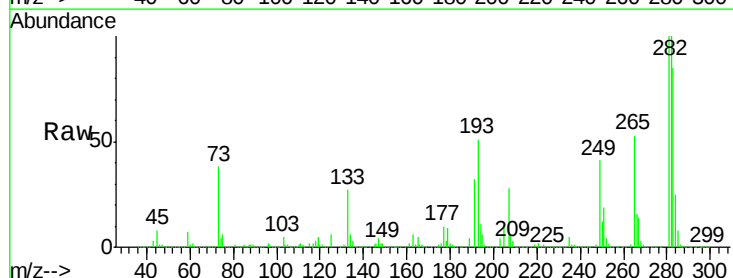
RT: 17.26 min Scan# 5030

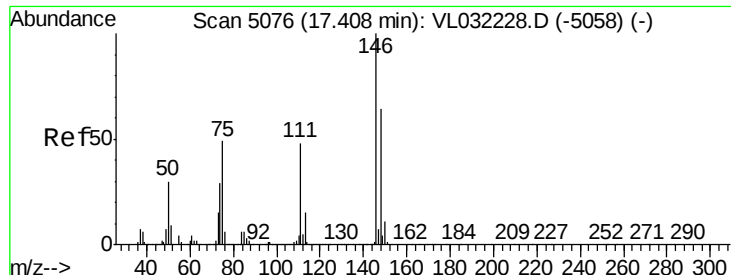
Delta R.T. -0.01 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Tgt Ion:	146	Resp:	601705
Ion Ratio		Lower	Upper
146	100		
111	110.4	24.9	74.7#
148	95.1	31.9	95.5





#76

1,4-Dichlorobenzene

Concen: 1.993 ppbv

RT: 17.26 min Scan# 5030

Delta R.T. -0.15 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

Instrument :

MSVOA_L

ClientSampleId :

MID

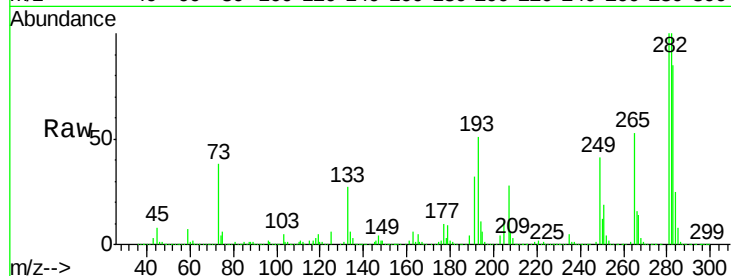
Tgt Ion:146 Resp: 601705

Ion Ratio Lower Upper

146 100

111 110.5 24.6 73.6#

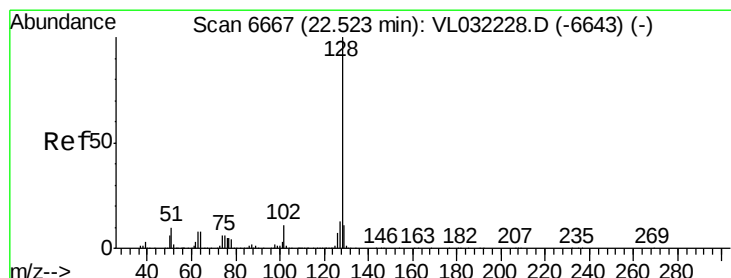
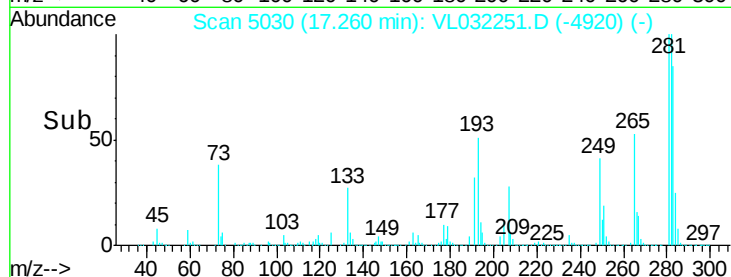
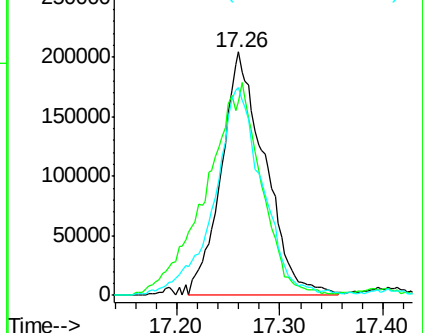
148 95.4 32.3 96.9



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#79

Naphthalene

Concen: 0.141 ppbv

RT: 22.52 min Scan# 6667

Delta R.T. 0.00 min

Lab File: VL032251.D

Acq: 13 Jul 2018 18:43

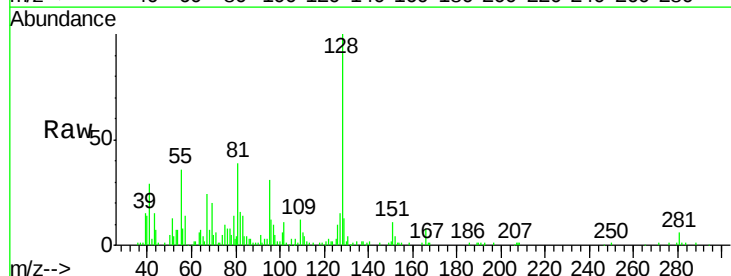
Tgt Ion:128 Resp: 48835

Ion Ratio Lower Upper

128 100

127 13.3 10.0 15.0

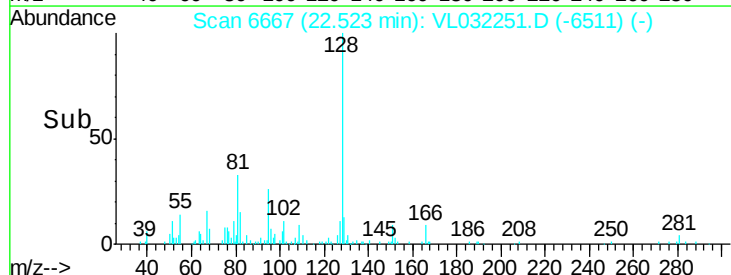
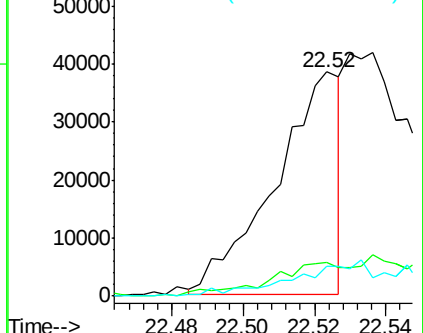
129 13.2 9.0 13.4

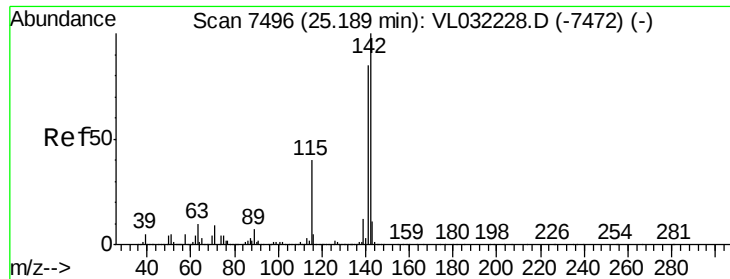


Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

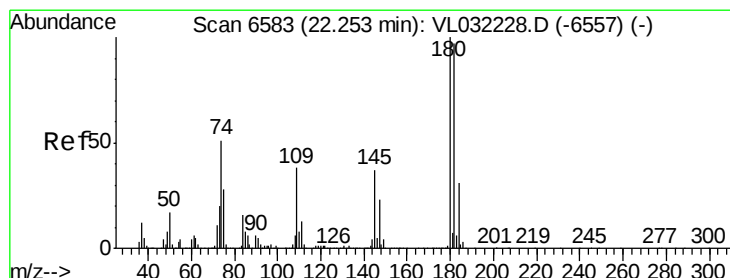
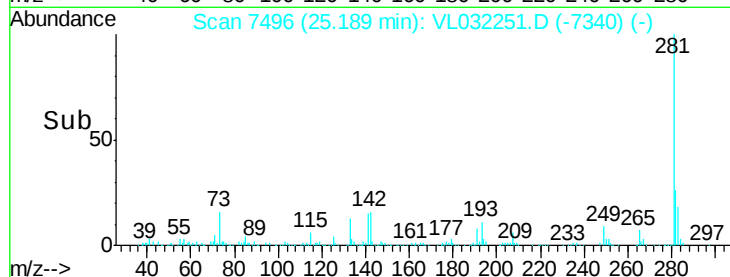
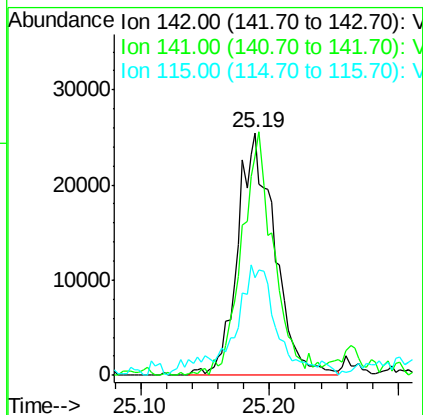
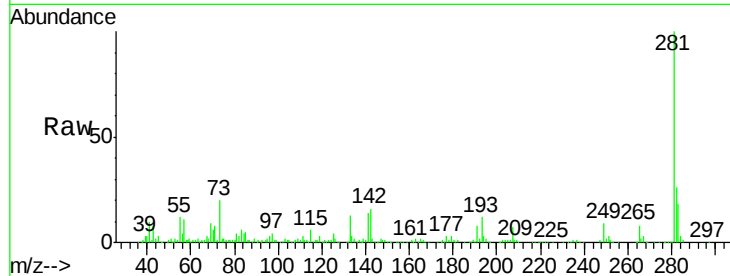




#80
Naphthalene, 2-methyl-
Concen: 0.456 ppbv
RT: 25.19 min Scan# 7496
Delta R.T. 0.00 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Instrument :
MSVOA_L
ClientSampleId :
MID

Tgt Ion:142 Resp: 50598
Ion Ratio Lower Upper
142 100
141 86.8 67.0 100.6
115 53.6 32.6 49.0#



#81
1,2,4-Trichlorobenzene
Concen: 0.022 ppbv
RT: 22.25 min Scan# 6581
Delta R.T. -0.01 min
Lab File: VL032251.D
Acq: 13 Jul 2018 18:43

Tgt Ion:180 Resp: 3846
Ion Ratio Lower Upper
180 100
182 0.0 76.1 114.1#
184 0.0 24.2 36.4#

