

Data File : VL032149.D
Acq On : 29 Jun 2018 20:37
Operator : SY/AP
Sample : VSTDIC0.1
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

Quant Time: Jun 29 21:20:09 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL062918AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 29 20:36:18 2018
QLast Update : Fri Jun 29 20:36:18 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.85	49	1668073	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.38	114	4171407	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.34	117	3972465	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.68	95	2998820	10.16	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.13	85	34411	0.197	ppbv	99
4) Chloromethane	3.23	50	11341	0.098	ppbv	98
5) Vinyl Chloride	3.35	62	11197	0.094	ppbv	91
6) Bromomethane	3.58	94	7344	0.106	ppbv	87
7) Chloroethane	3.67	64	2251	0.051	ppbv #	65
8) Dichlorotetrafluoroethane	3.28	85	28543	0.119	ppbv	97
9) Propene	3.10	41	12587	0.119	ppbv	97
10) Heptane	8.34	43	12794	0.043	ppbv #	28
11) Trichlorofluoromethane	4.08	101	8927	0.039	ppbv	92
12) 1,1,2-Trichlorotrifluoroet	4.63	101	17852	0.114	ppbv	98
14) Bromoethene	3.86	108	8470	0.111	ppbv #	95
15) Acetone	3.99	43	17420	0.079	ppbv #	54
16) 1,3-Butadiene	3.43	39	7770	0.075	ppbv #	72
18) 1,1-Dichloroethene	4.43	96	7045	0.092	ppbv #	59
20) Methylene Chloride	4.48	84	5352	0.071	ppbv #	69
21) Allyl Chloride	4.56	41	13555	0.099	ppbv #	80
22) trans-1,2-Dichloroethene	5.04	96	5784	0.074	ppbv #	74
23) Vinyl Acetate	5.23	43	10580	0.031	ppbv #	80
24) 1,1-Dichloroethane	5.17	63	24062	0.095	ppbv	97
25) Ethyl Acetate	5.87	43	44439	0.091	ppbv #	94
26) Hexane	5.86	57	21453	0.100	ppbv	90
27) Carbon Disulfide	4.70	76	7687	0.036	ppbv #	1
28) Methyl tert-Butyl Ether	5.22	73	36372	0.133	ppbv	96
29) Chloroform	5.93	83	17678	0.062	ppbv #	82
30) Cyclohexane	7.34	84	17161	0.097	ppbv #	19
31) cis-1,2-Dichloroethene	5.73	61	12699	0.066	ppbv #	80
32) 1,1,1-Trichloroethane	6.71	97	26726	0.090	ppbv	94
35) Carbon Tetrachloride	7.23	117	27628	0.095	ppbv #	83
36) Benzene	7.10	78	47158	0.104	ppbv #	88
37) 1,2-Dichloroethane	6.50	62	22155	0.095	ppbv	99
38) Trichloroethene	8.05	130	5360	0.031	ppbv #	79
39) 1,2-Dichloropropane	7.83	63	18593	0.112	ppbv #	88
42) Bromodichloromethane	8.01	83	30718	0.098	ppbv	97
43) Methyl Methacrylate	8.24	69	17084	0.095	ppbv	95
44) 2,2,4-Trimethylpentane	8.09	57	73810	0.099	ppbv	96
45) t-1,3-Dichloropropene	9.51	75	16082	0.073	ppbv	98
46) cis-1,3-Dichloropropene	8.93	75	18216	0.064	ppbv #	86
47) 1,1,2-Trichloroethane	9.71	97	10122	0.054	ppbv #	88
48) Dibromochloromethane	10.55	129	9920	0.035	ppbv #	10
50) 4-Methyl-2-Pentanone	9.01	43	51181	0.097	ppbv	99
51) 2-Hexanone	10.40	43	15850	0.030	ppbv #	27

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Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

Quant Time: Jun 29 21:20:09 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL062918AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 29 20:36:18 2018
QLast Update : Fri Jun 29 20:36:18 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Tetrachloroethene	11.47	164	5109	0.031	ppbv	85
53) Toluene	10.04	91	49793	0.091	ppbv	97
54) 1,2-Dibromoethane	10.85	107	9437	0.034	ppbv	84
57) Chlorobenzene	12.40	112	22000	0.058	ppbv #	90
59) m/p-Xylene	13.26	91	22399	0.041	ppbv #	1
60) o-Xylene	13.95	91	62173	0.114	ppbv	96
61) Styrene	13.79	104	42723	0.263	ppbv	90
62) Isopropylbenzene	14.92	105	39060	0.054	ppbv #	49
64) n-propylbenzene	15.82	120	7894	0.042	ppbv #	1
65) tert-Butylbenzene	17.00	119	32247	0.051	ppbv #	20
66) Benzyl Chloride	17.26	91	3294	0.041	ppbv #	1
67) sec-Butylbenzene	17.56	105	108064	0.116	ppbv	96
69) p-Isopropyltoluene	17.92	119	57101	0.075	ppbv #	65
70) n-Butylbenzene	18.81	91	37757	0.047	ppbv #	24
71) 2-Chlorotoluene	15.72	91	43017	0.077	ppbv	73
72) 4-Ethyltoluene	16.10	105	28861	0.047	ppbv #	48
73) 1,3,5-Trimethylbenzene	16.26	105	40489	0.074	ppbv #	85
74) 1,2,4-Trimethylbenzene	17.03	105	22657	0.039	ppbv	90
75) 1,3-Dichlorobenzene	17.27	146	17687	0.050	ppbv #	1
76) 1,4-Dichlorobenzene	17.41	146	31115	0.086	ppbv	75
77) 1,2-Dichlorobenzene	18.09	146	19047	0.051	ppbv #	23
80) Naphthalene,2-methyl-	25.20	142	14399	0.039	ppbv	94

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

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Acq On : 29 Jun 2018 20:37

Operator : SY/AP

Sample : VSTDICC0.1

Misc : 400mL/MSVOA_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

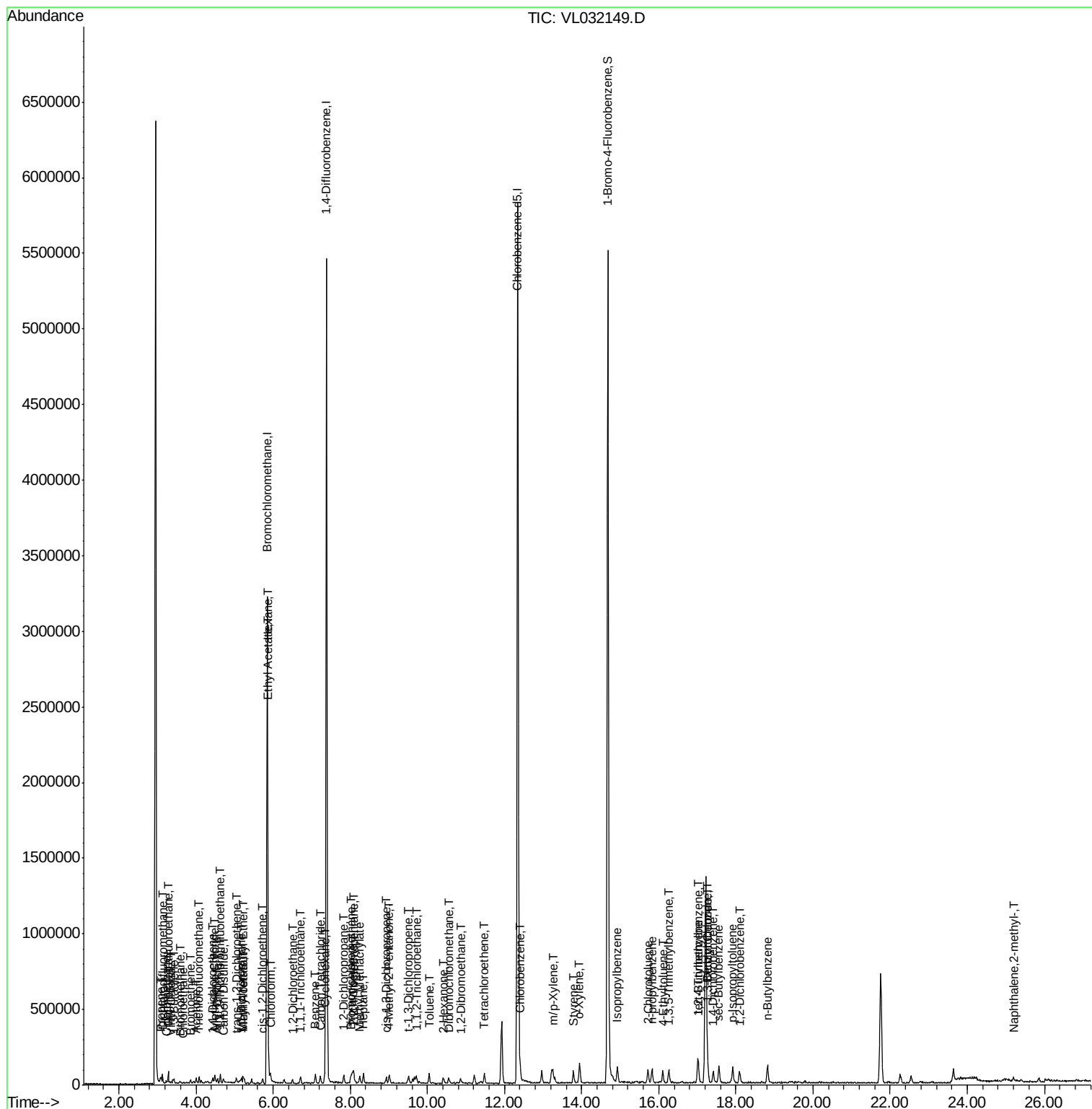
Quant Time: Jun 29 21:20:09 2018

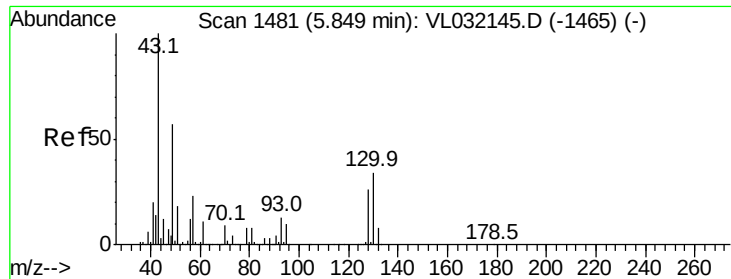
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL062918AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri Jun 29 20:36:18 2018

QLast Update : Fri Jun 29 20:36:18 2018

Response via : Initial Calibration

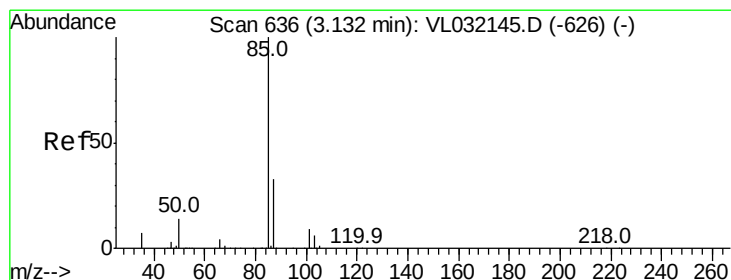
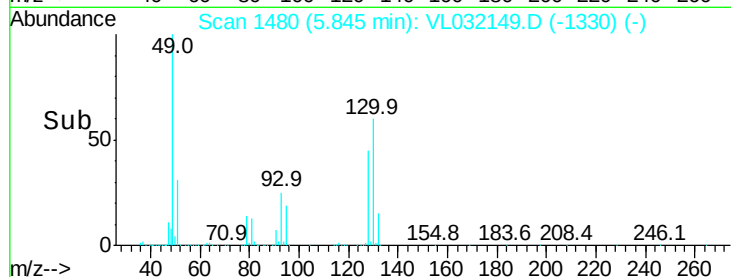
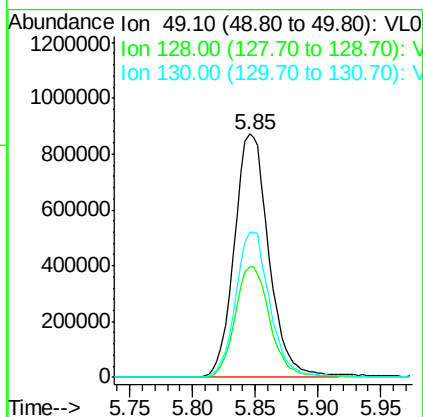
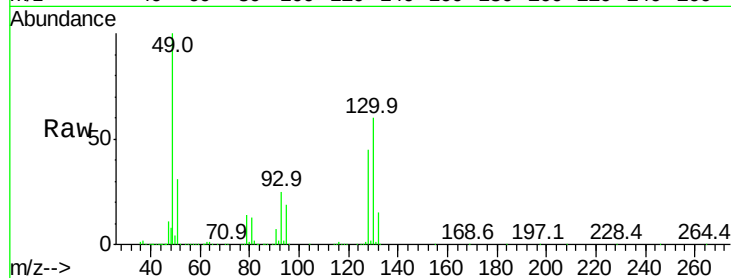




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.85 min Scan# 1480
 Delta R.T. -0.02 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

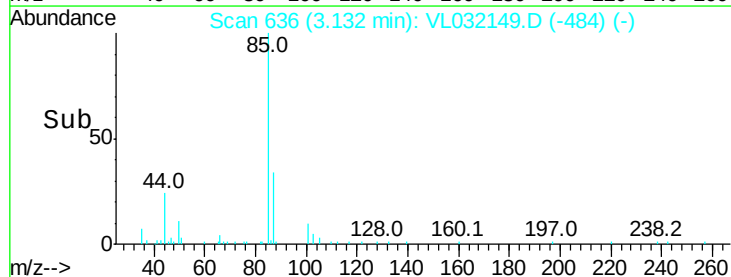
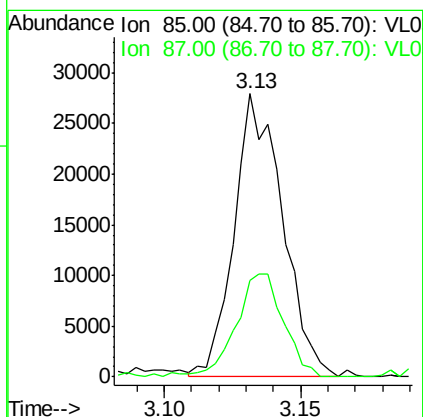
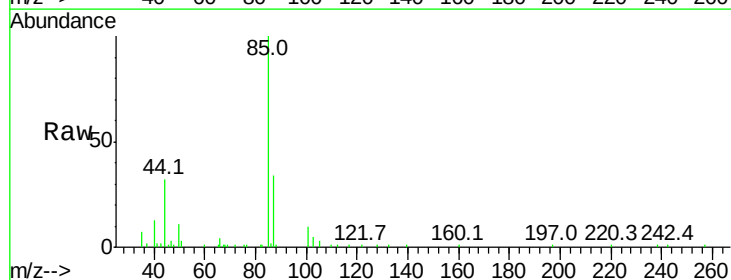
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

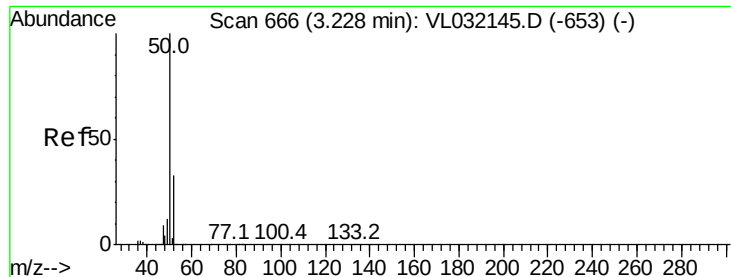
Tgt Ion: 49 Resp: 1668073
 Ion Ratio Lower Upper
 49 100
 128 46.5 23.4 70.0
 130 59.4 30.3 90.9



#2
 Dichlorodifluoromethane
 Concen: 0.197 ppbv
 RT: 3.13 min Scan# 636
 Delta R.T. -0.01 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

Tgt Ion: 85 Resp: 34411
 Ion Ratio Lower Upper
 85 100
 87 34.1 26.7 40.1





#4

Chloromethane

Concen: 0.098 ppbv

RT: 3.23 min Scan# 668

Delta R.T. -0.00 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

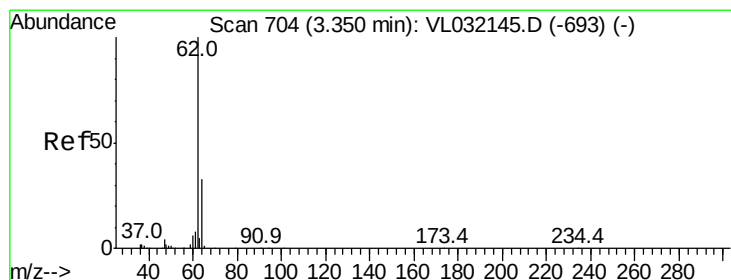
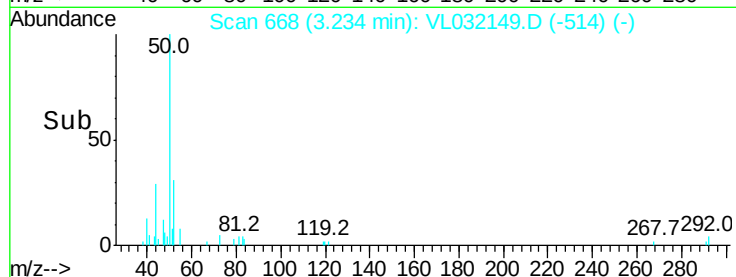
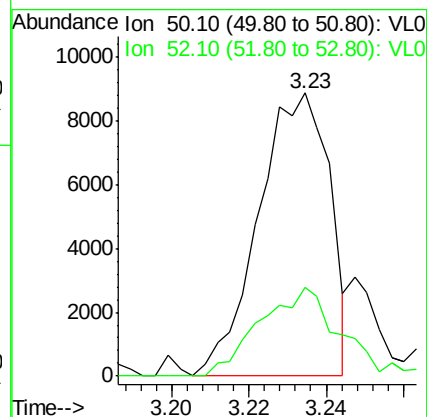
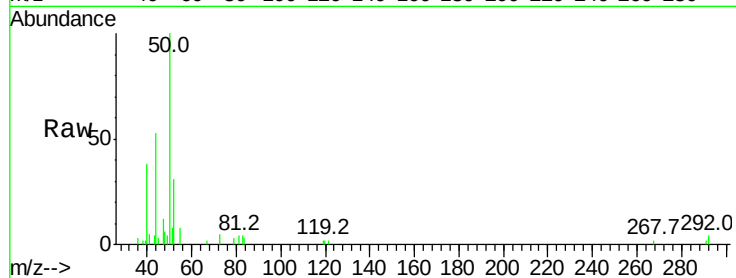
VSTDIC0.1

Tgt Ion: 50 Resp: 11341

Ion Ratio Lower Upper

50 100

52 31.4 26.0 39.0



#5

Vinyl Chloride

Concen: 0.094 ppbv

RT: 3.35 min Scan# 704

Delta R.T. -0.01 min

Lab File: VL032149.D

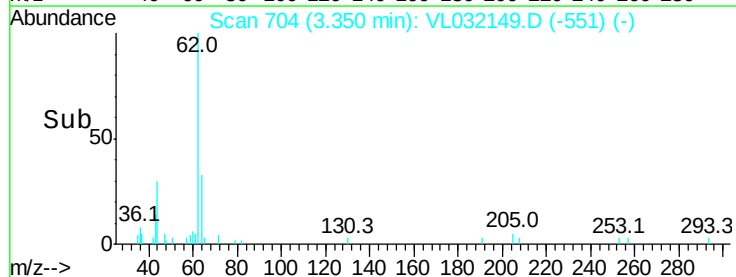
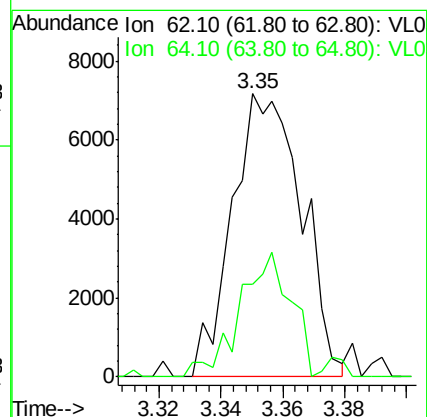
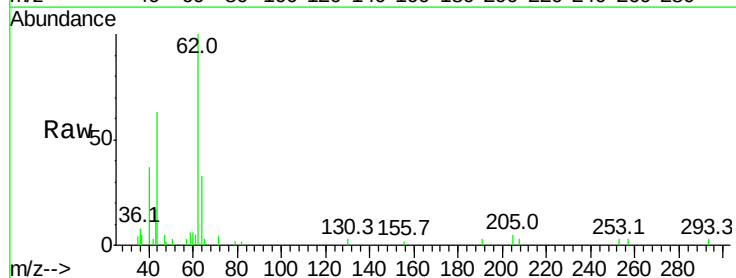
Acq: 29 Jun 2018 20:37

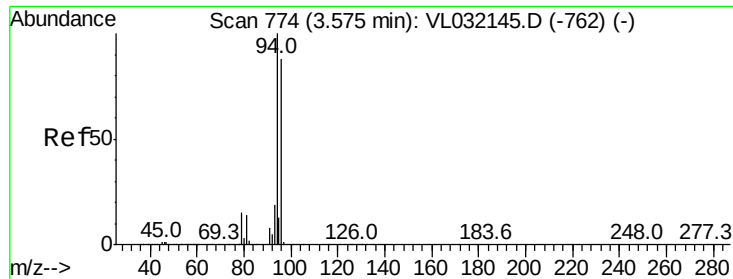
Tgt Ion: 62 Resp: 11197

Ion Ratio Lower Upper

62 100

64 27.6 26.1 39.1





#6

Bromomethane

Concen: 0.106 ppbv

RT: 3.58 min Scan# 776

Delta R.T. -0.00 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

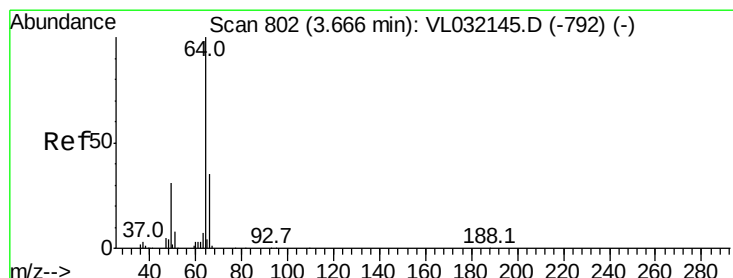
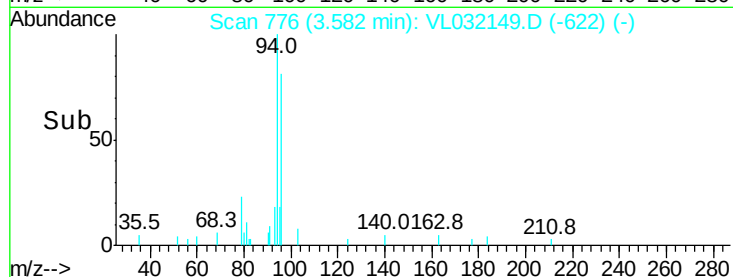
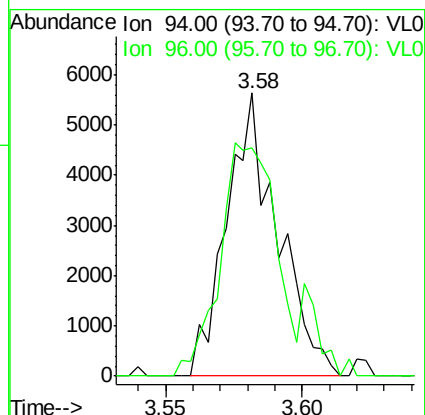
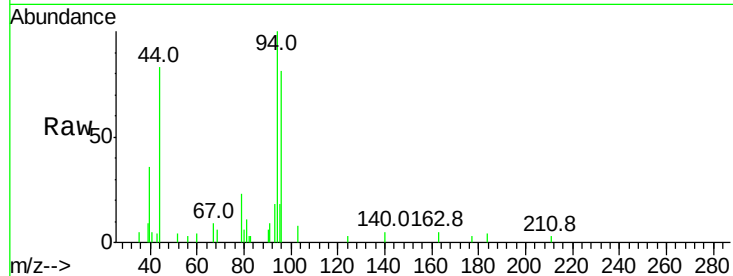
VSTDIC0.1

Tgt Ion: 94 Resp: 7344

Ion Ratio Lower Upper

94 100

96 80.5 74.7 112.1



#7

Chloroethane

Concen: 0.051 ppbv

RT: 3.67 min Scan# 802

Delta R.T. -0.01 min

Lab File: VL032149.D

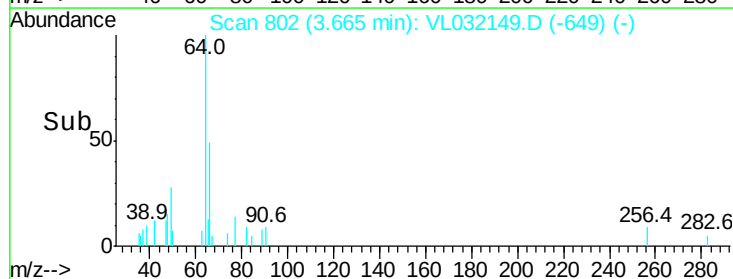
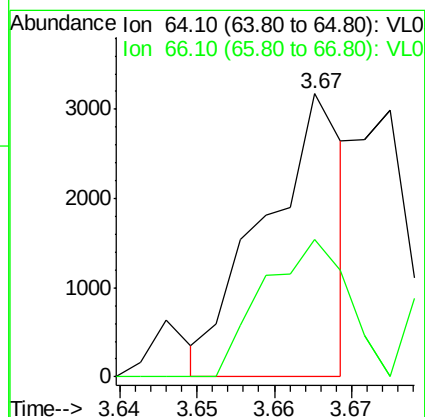
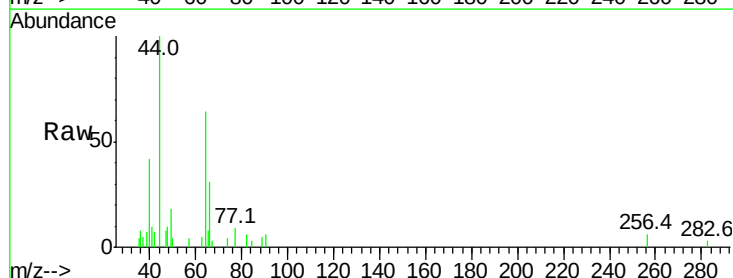
Acq: 29 Jun 2018 20:37

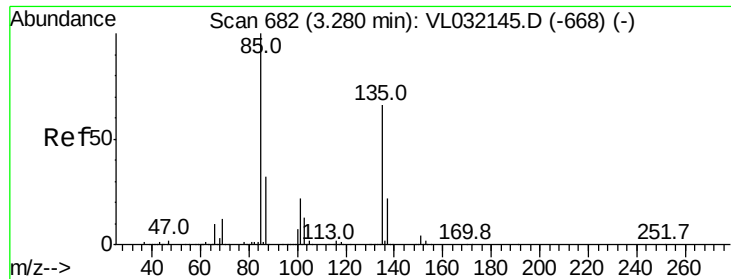
Tgt Ion: 64 Resp: 2251

Ion Ratio Lower Upper

64 100

66 53.7 26.9 40.3#





#8

Dichlorotetrafluoroethane

Concen: 0.119 ppbv

RT: 3.28 min Scan# 683

Delta R.T. -0.00 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

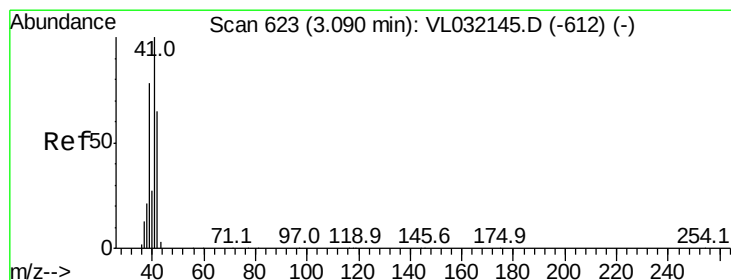
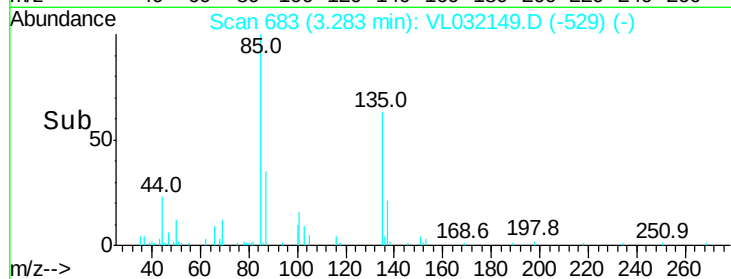
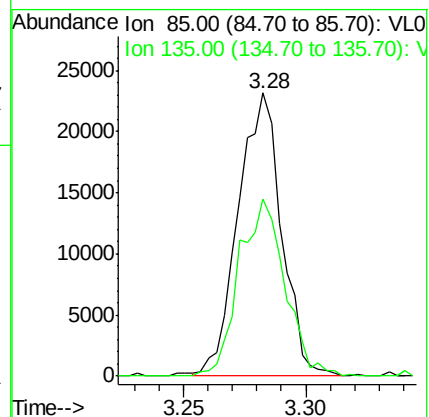
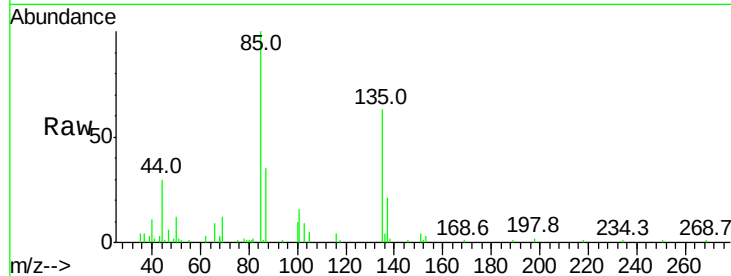
VSTDIC0.1

Tgt Ion: 85 Resp: 28543

Ion Ratio Lower Upper

85 100

135 65.9 54.6 82.0



#9

Propene

Concen: 0.119 ppbv

RT: 3.10 min Scan# 625

Delta R.T. -0.00 min

Lab File: VL032149.D

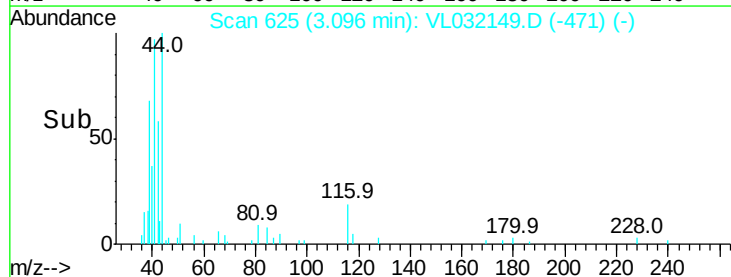
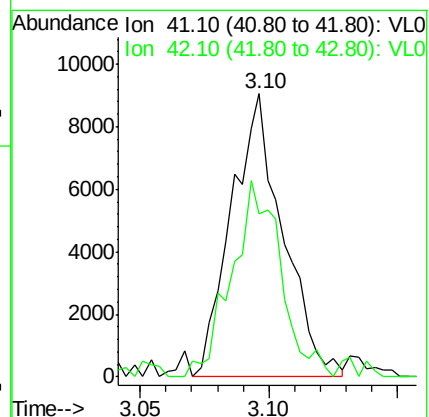
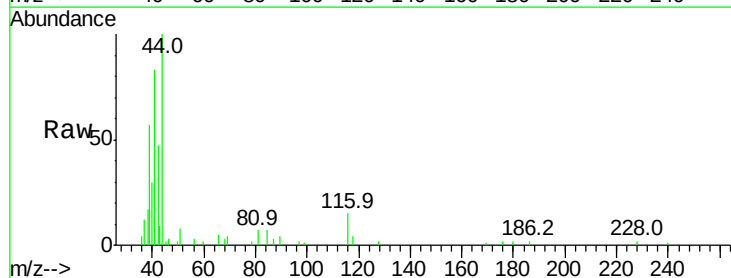
Acq: 29 Jun 2018 20:37

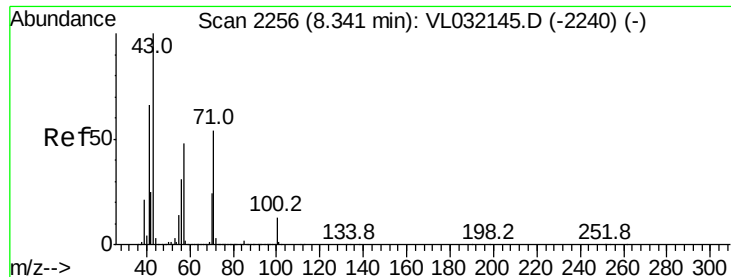
Tgt Ion: 41 Resp: 12587

Ion Ratio Lower Upper

41 100

42 68.2 56.2 84.4





#10

Heptane

Concen: 0.043 ppbv

RT: 8.34 min Scan# 2255

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

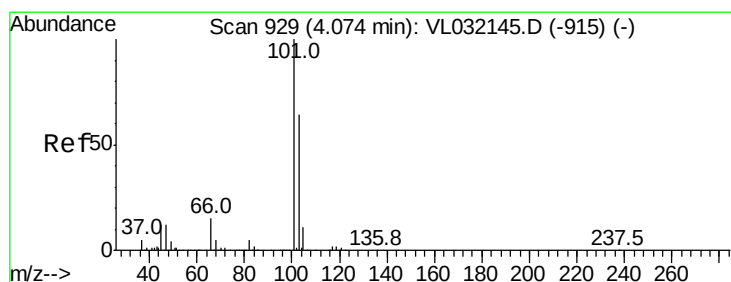
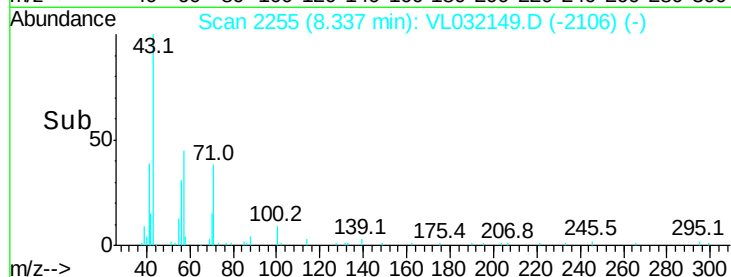
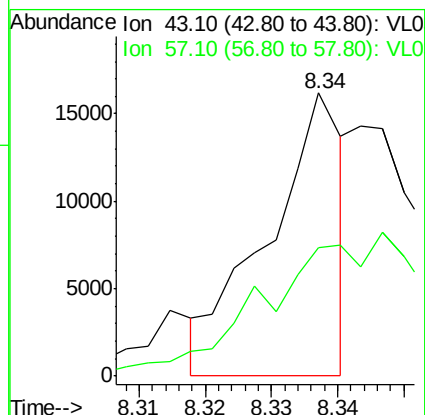
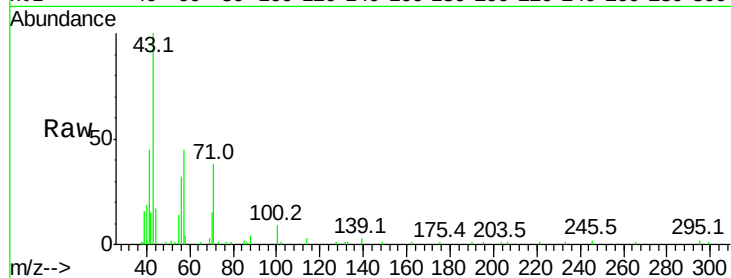
VSTDIC0.1

Tgt Ion: 43 Resp: 12794

Ion Ratio Lower Upper

43 100

57 0.0 39.8 59.8#



#11

Trichlorofluoromethane

Concen: 0.039 ppbv

RT: 4.08 min Scan# 932

Delta R.T. -0.00 min

Lab File: VL032149.D

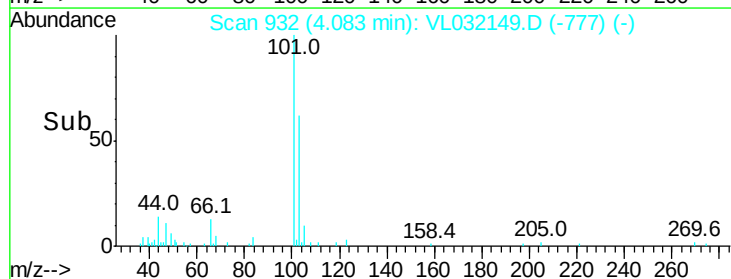
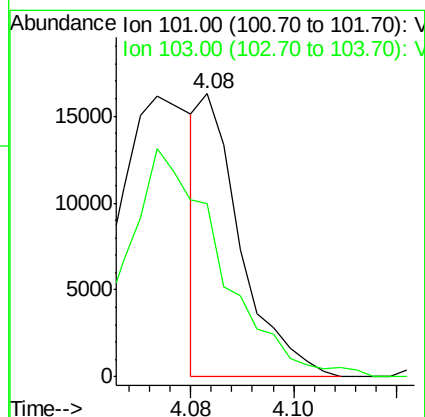
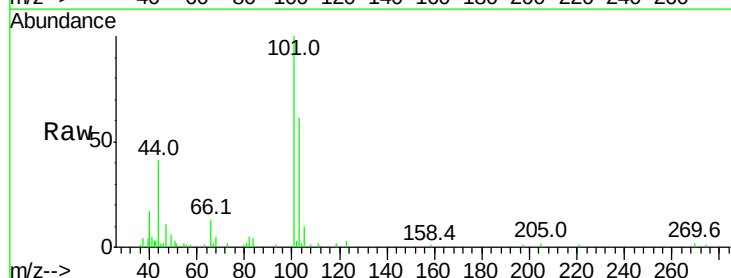
Acq: 29 Jun 2018 20:37

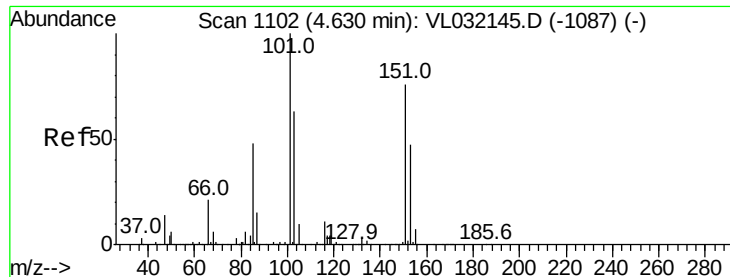
Tgt Ion: 101 Resp: 8927

Ion Ratio Lower Upper

101 100

103 57.7 51.4 77.0





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.114 ppbv

RT: 4.63 min Scan# 1101

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

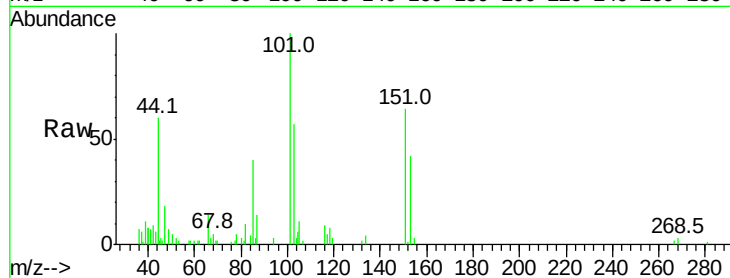
VSTDIC0.1

Tgt Ion:101 Resp: 17852

Ion Ratio Lower Upper

101 100

151 72.2 58.8 88.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

4.63

12000

10000

8000

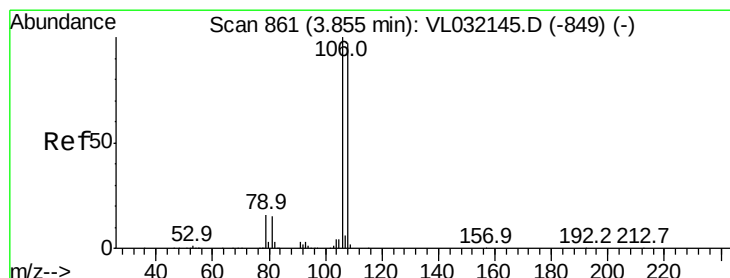
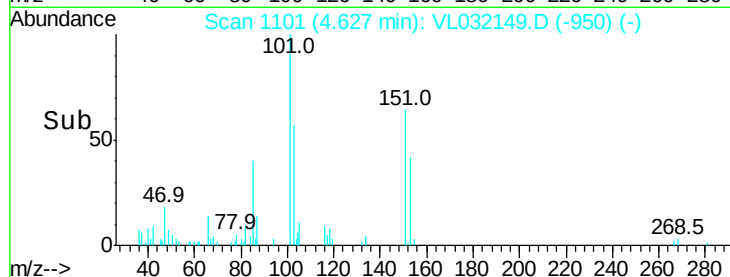
6000

4000

2000

0

Time-->



#14

Bromoethene

Concen: 0.111 ppbv

RT: 3.86 min Scan# 862

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

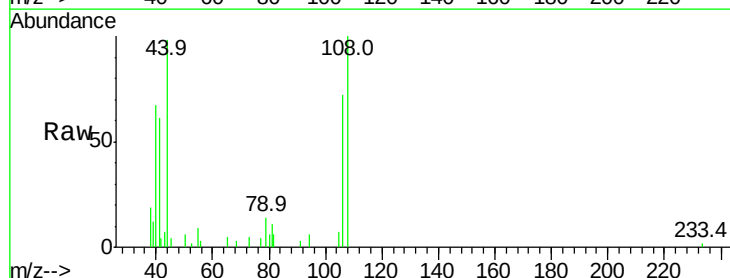
Tgt Ion:108 Resp: 8470

Ion Ratio Lower Upper

108 100

106 105.0 86.3 129.5

79 23.1 12.7 19.1#



Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0

3.86

8000

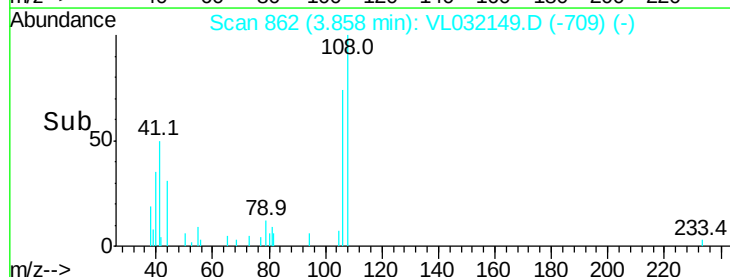
6000

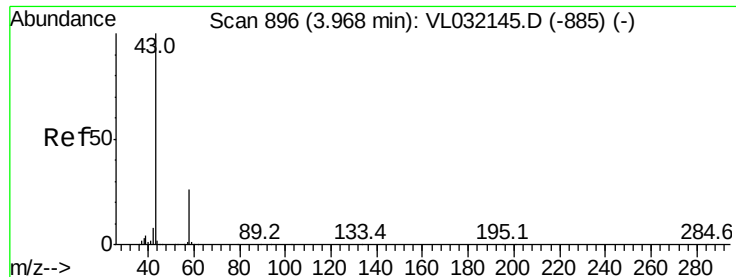
4000

2000

0

Time-->





#15

Acetone

Concen: 0.079 ppbv

RT: 3.99 min Scan# 904

Delta R.T. 0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

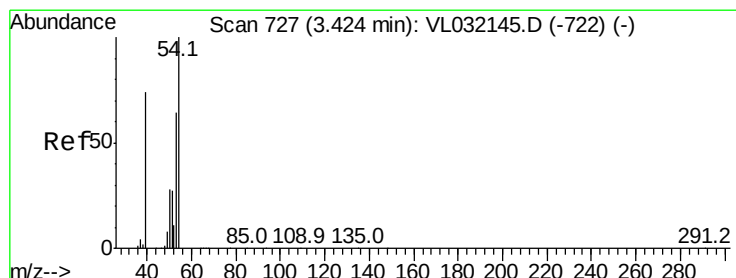
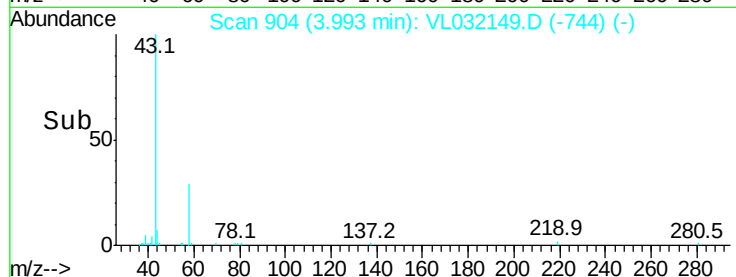
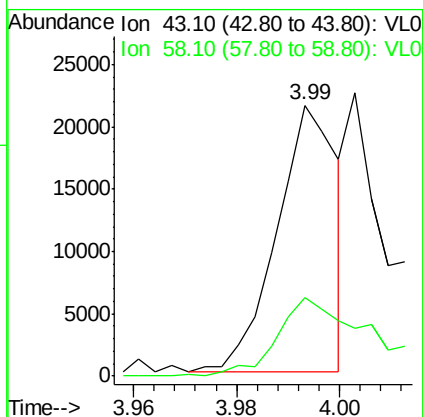
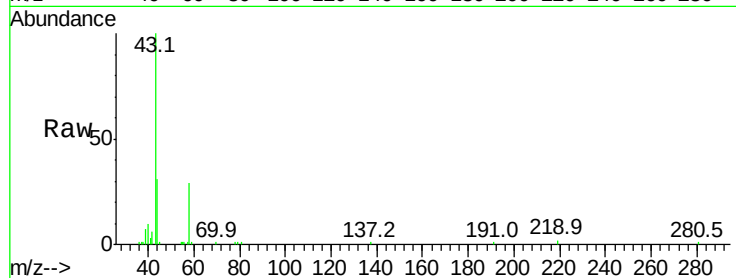
VSTDIC0.1

Tgt Ion: 43 Resp: 17420

Ion Ratio Lower Upper

43 100

58 50.6 21.4 32.0#



#16

1,3-Butadiene

Concen: 0.075 ppbv

RT: 3.43 min Scan# 728

Delta R.T. -0.00 min

Lab File: VL032149.D

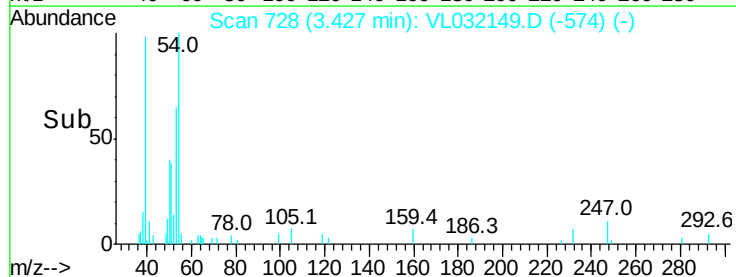
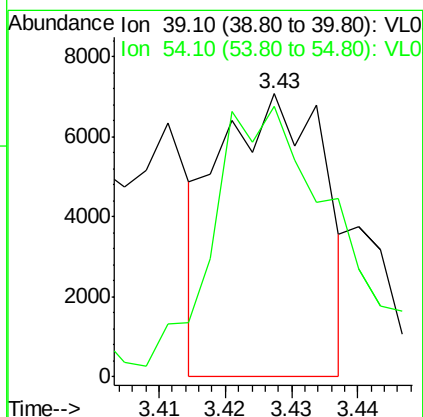
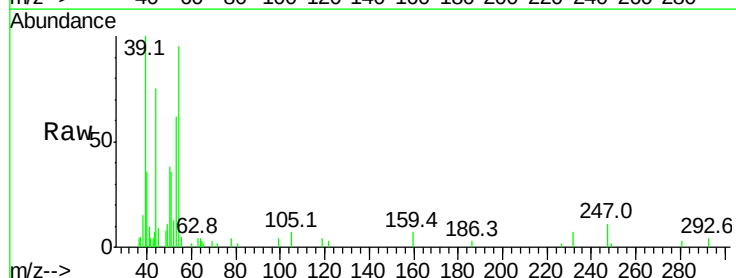
Acq: 29 Jun 2018 20:37

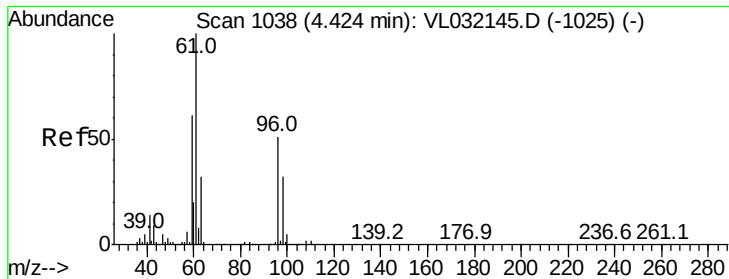
Tgt Ion: 39 Resp: 7770

Ion Ratio Lower Upper

39 100

54 121.8 75.8 113.6#

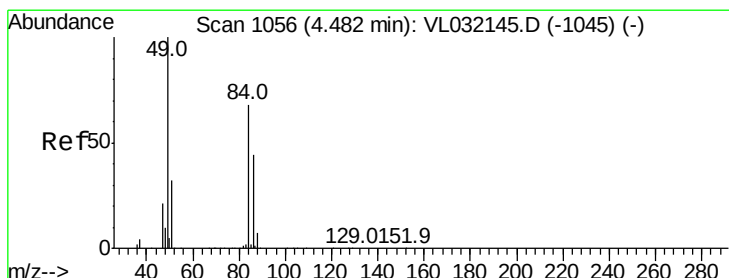
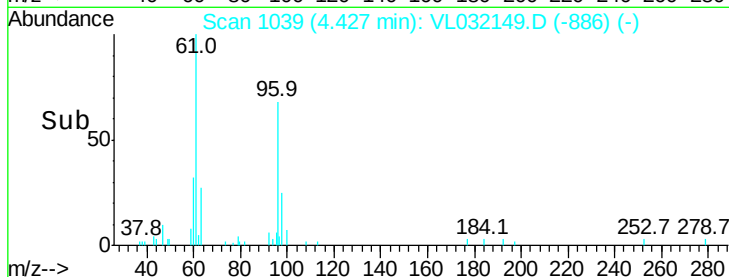
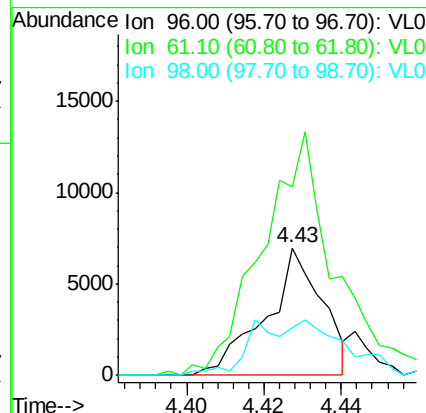
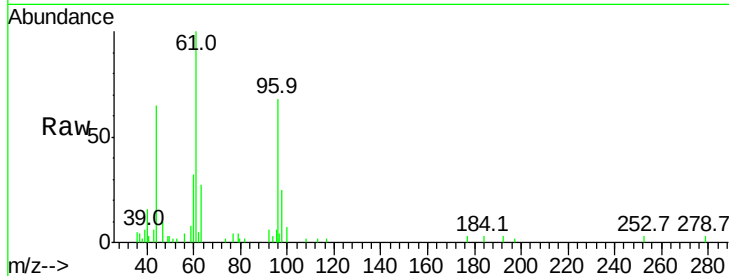




#18
 1,1-Dichloroethene
 Concen: 0.092 ppbv
 RT: 4.43 min Scan# 1039
 Delta R.T. -0.01 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

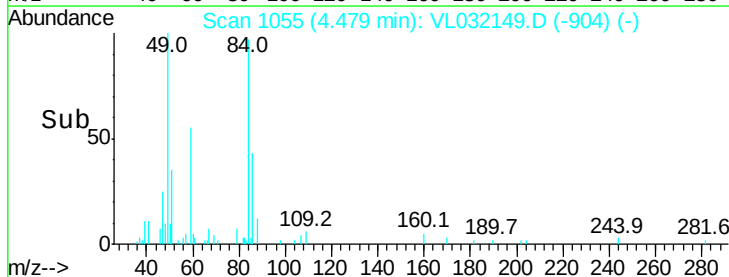
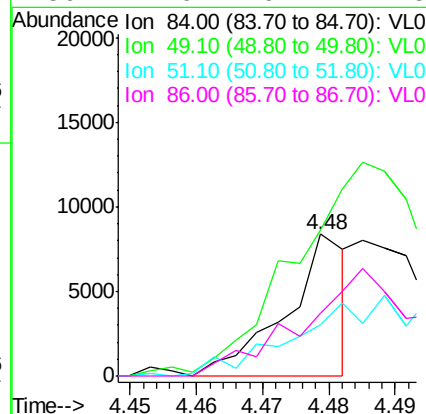
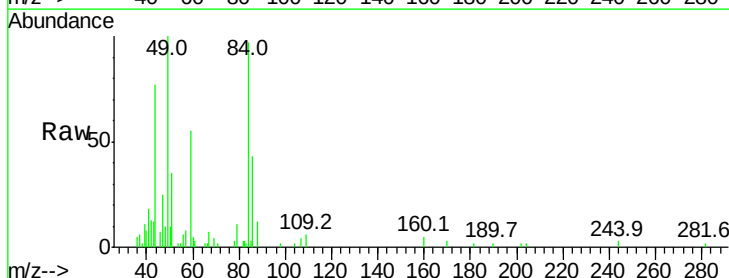
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

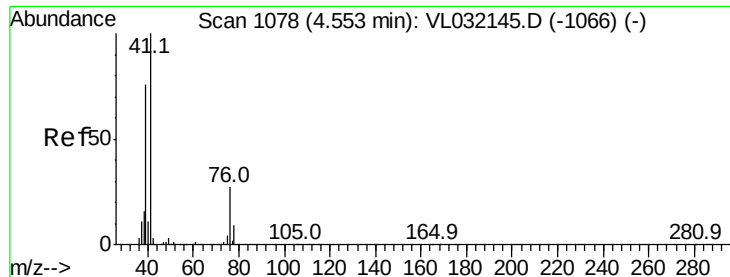
Tgt Ion: 96 Resp: 7045
 Ion Ratio Lower Upper
 96 100
 61 131.5 154.1 231.1#
 98 32.1 50.3 75.5#



#20
 Methylene Chloride
 Concen: 0.071 ppbv
 RT: 4.48 min Scan# 1055
 Delta R.T. -0.01 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

Tgt Ion: 84 Resp: 5352
 Ion Ratio Lower Upper
 84 100
 49 100.0 119.6 179.4#
 51 34.1 36.3 54.5#
 86 44.6 49.7 74.5#





#21

Allyl Chloride

Concen: 0.099 ppbv

RT: 4.56 min Scan# 1079

Delta R.T. -0.01 min

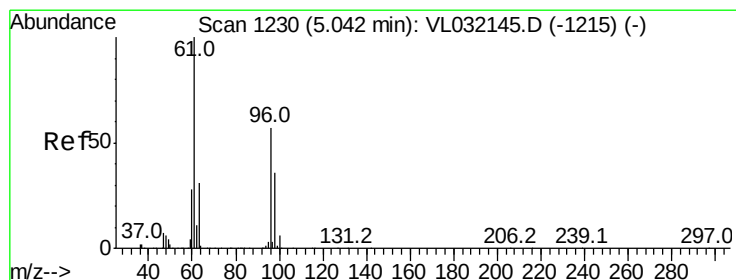
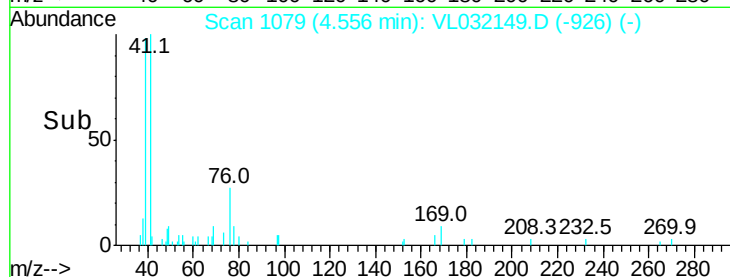
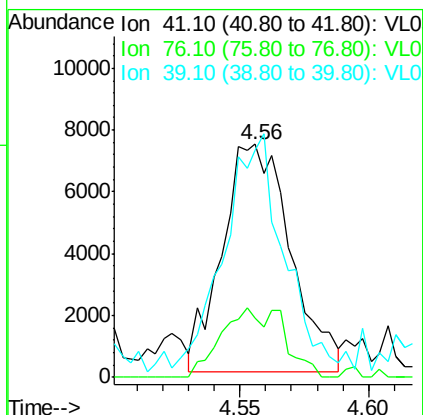
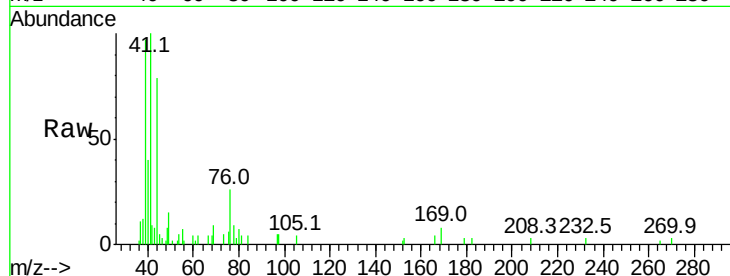
Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

Tgt Ion: 41 Resp: 13555

Ion	Ratio	Lower	Upper
41	100		
76	29.3	22.5	33.7
39	98.4	60.5	90.7#



#22

trans-1,2-Dichloroethene

Concen: 0.074 ppbv

RT: 5.04 min Scan# 1231

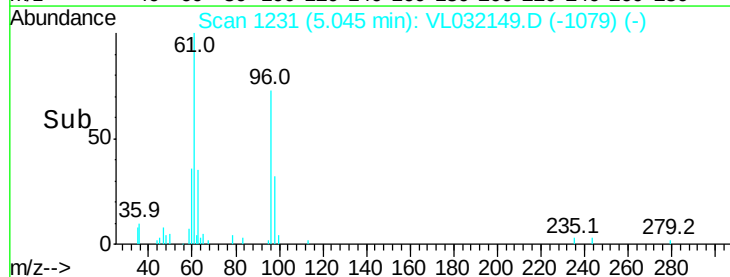
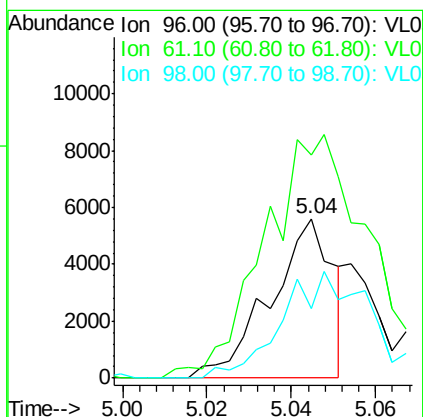
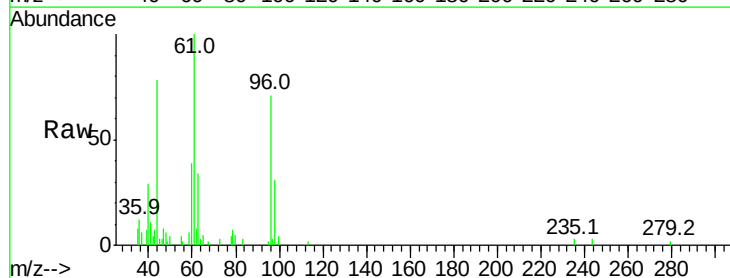
Delta R.T. -0.01 min

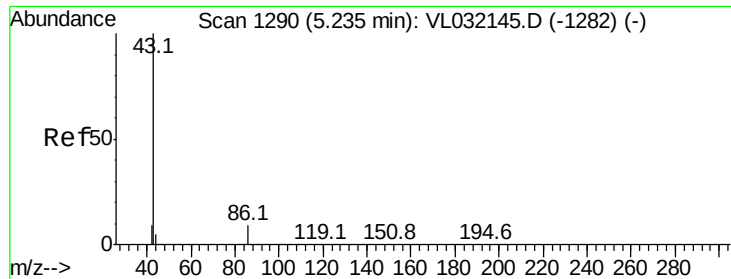
Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Tgt Ion: 96 Resp: 5784

Ion	Ratio	Lower	Upper
96	100		
61	133.1	135.2	202.8#
98	43.5	49.7	74.5#





#23

Vinyl Acetate

Concen: 0.031 ppbv

RT: 5.23 min Scan# 1290

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion: 43 Resp: 10580

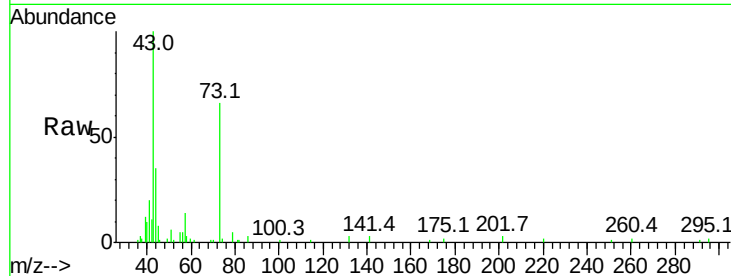
Ion Ratio Lower Upper

43 100

86 3.7 6.2 9.4#

42 3.6 6.9 10.3#

44 19.7 3.8 5.8#

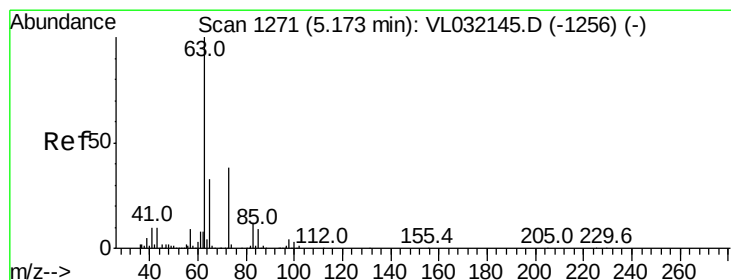
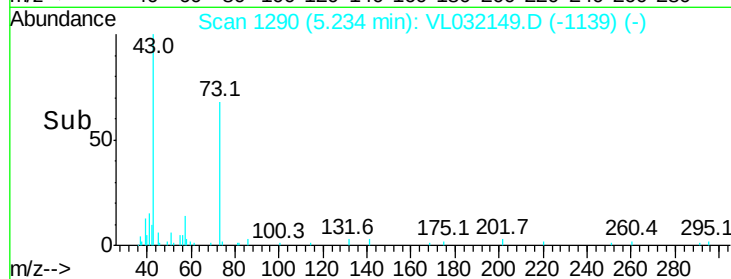
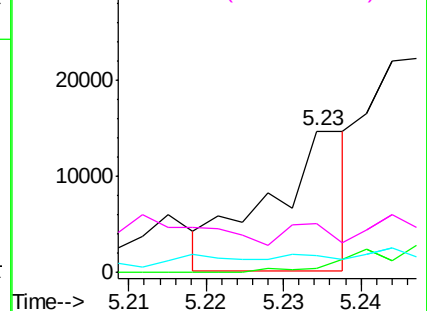


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.095 ppbv

RT: 5.17 min Scan# 1271

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

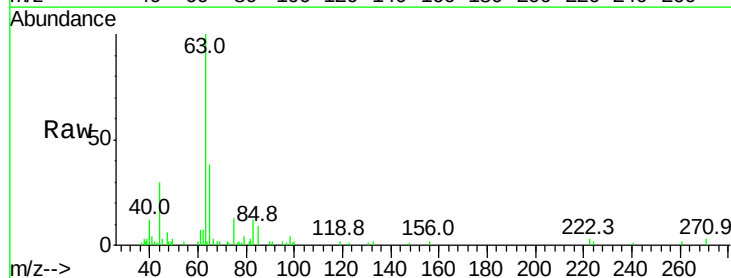
Tgt Ion: 63 Resp: 24062

Ion Ratio Lower Upper

63 100

98 3.9 2.4 7.2

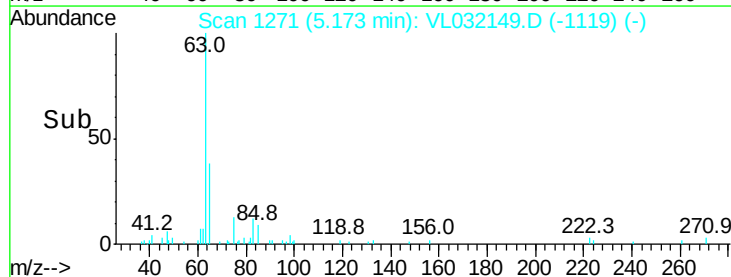
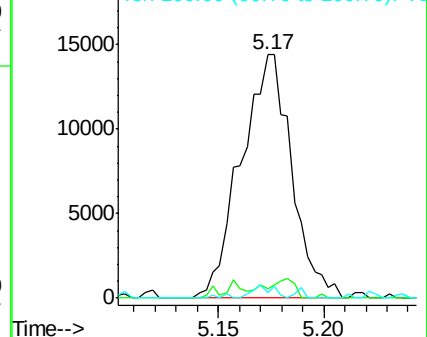
100 2.3 1.7 5.0

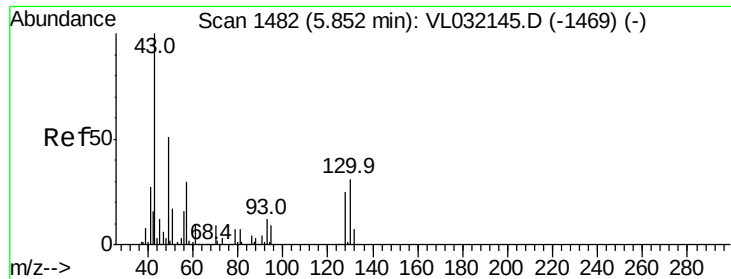


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

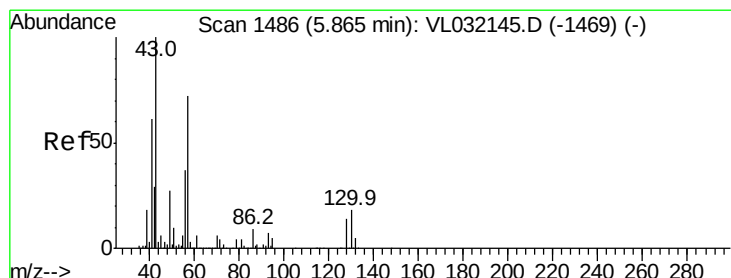
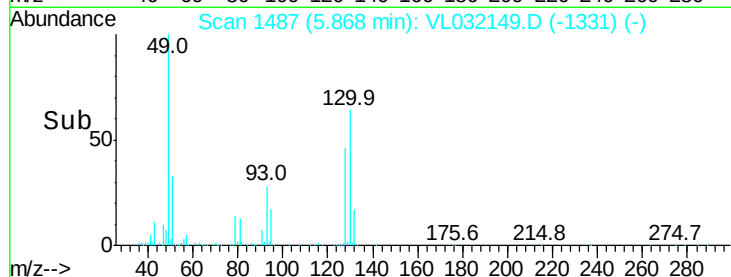
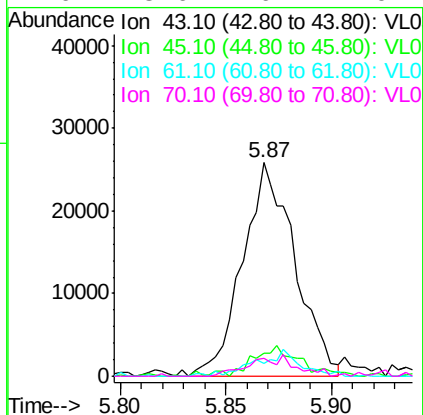
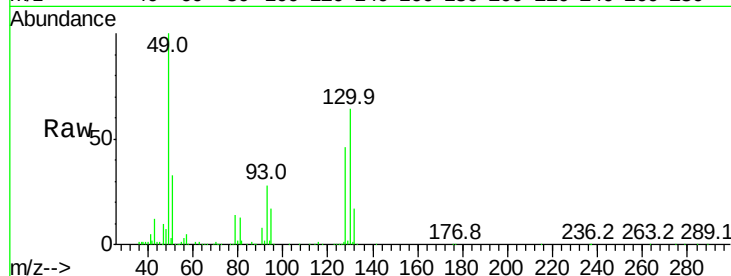




#25
Ethyl Acetate
Concen: 0.091 ppbv
RT: 5.87 min Scan# 1487
Delta R.T. 0.00 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

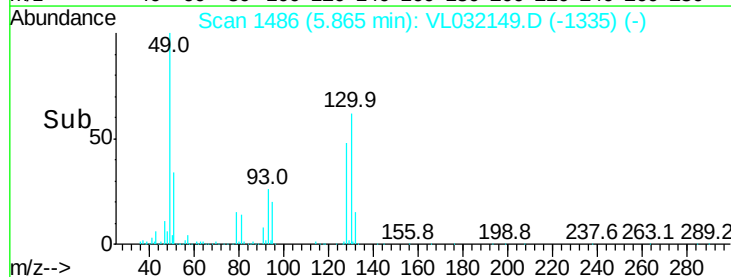
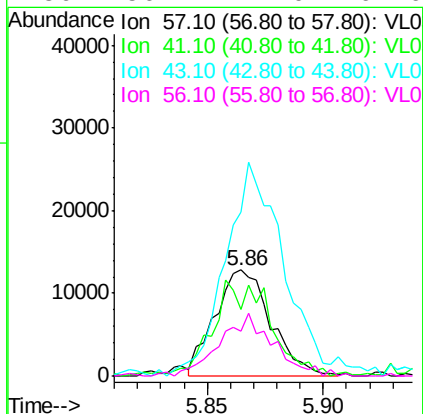
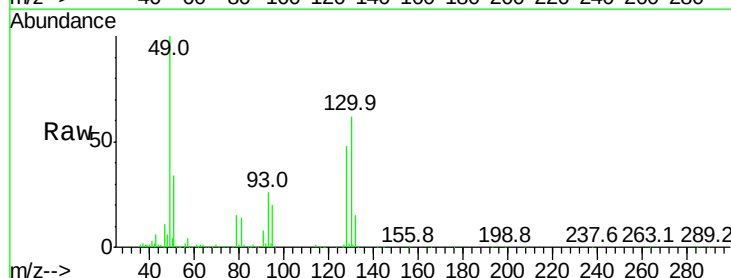
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

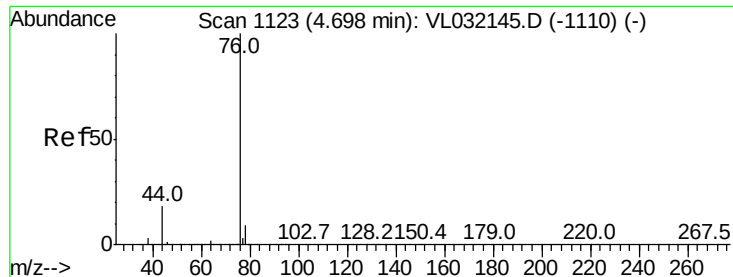
Tgt Ion:	43	Resp:	44439
Ion	Ratio	Lower	Upper
43	100		
45	13.7	7.8	11.8#
61	10.6	7.4	11.0
70	8.6	6.1	9.1



#26
Hexane
Concen: 0.100 ppbv
RT: 5.86 min Scan# 1486
Delta R.T. -0.01 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

Tgt Ion:	57	Resp:	21453
Ion	Ratio	Lower	Upper
57	100		
41	95.3	68.6	103.0
43	227.1	168.6	252.8
56	56.1	41.0	61.6





#27

Carbon Disulfide

Concen: 0.036 ppbv

RT: 4.70 min Scan# 1123

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

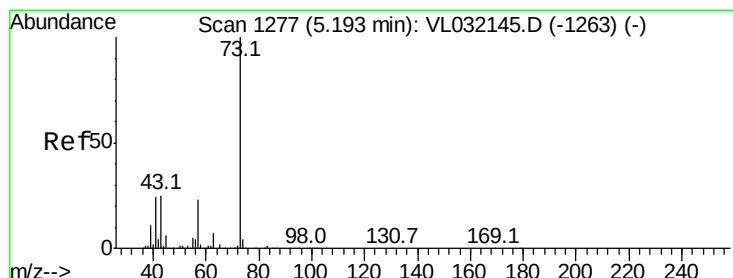
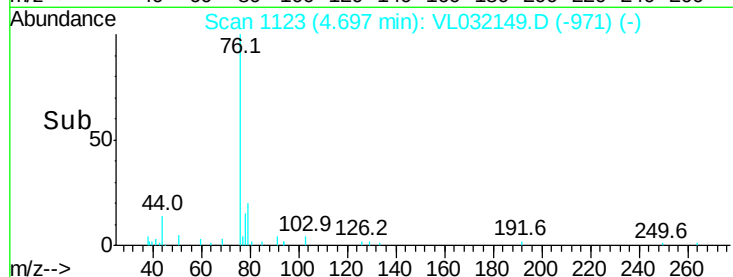
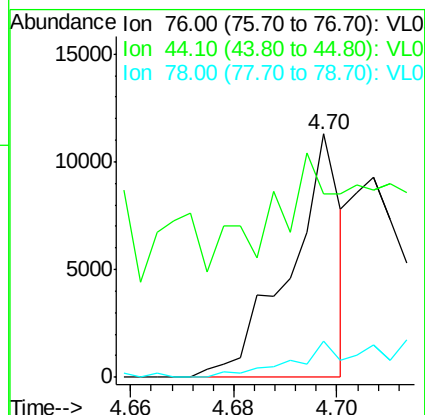
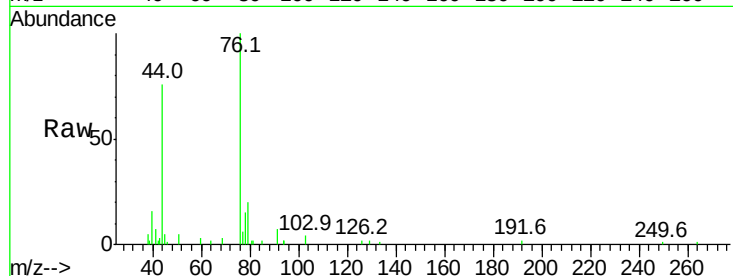
Tgt Ion: 76 Resp: 7687

Ion Ratio Lower Upper

76 100

44 128.8 15.1 22.7#

78 0.0 7.2 10.8#



#28

Methyl tert-Butyl Ether

Concen: 0.133 ppbv

RT: 5.22 min Scan# 1285

Delta R.T. 0.02 min

Lab File: VL032149.D

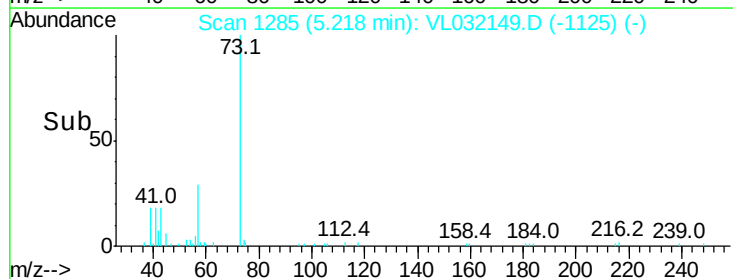
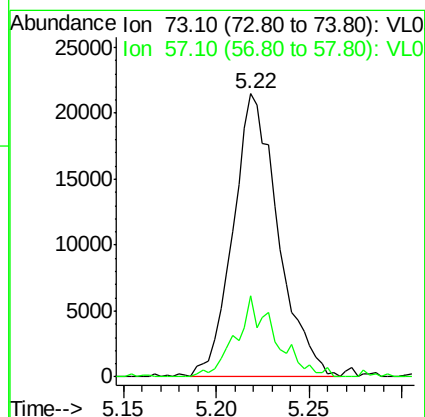
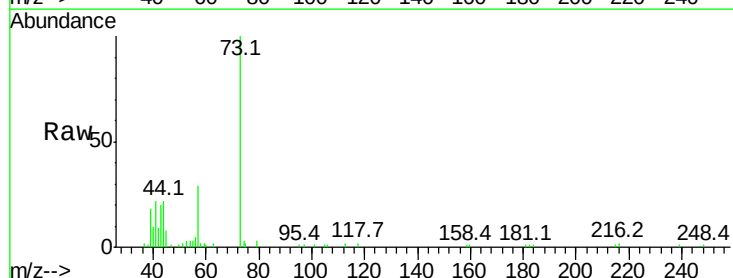
Acq: 29 Jun 2018 20:37

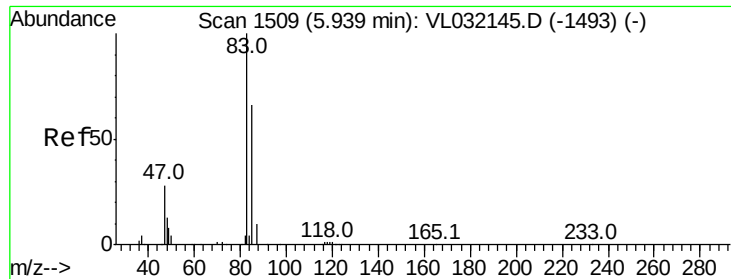
Tgt Ion: 73 Resp: 36372

Ion Ratio Lower Upper

73 100

57 25.0 18.6 27.8

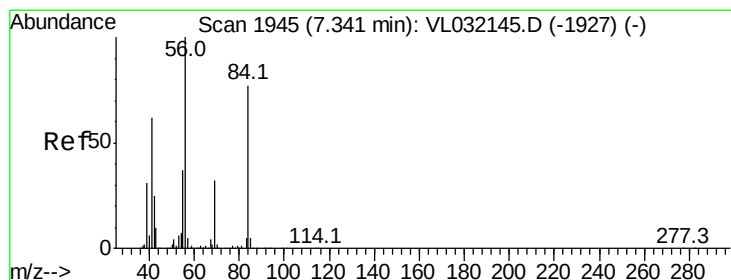
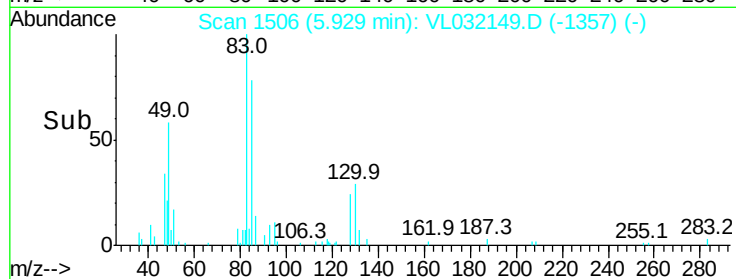
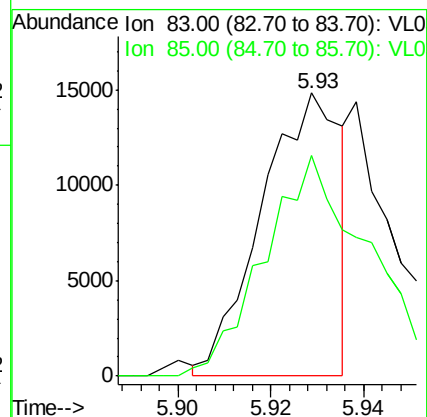
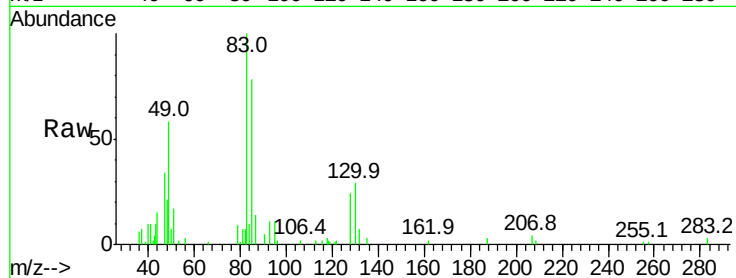




#29
Chloroform
Concen: 0.062 ppbv
RT: 5.93 min Scan# 1506
Delta R.T. -0.02 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

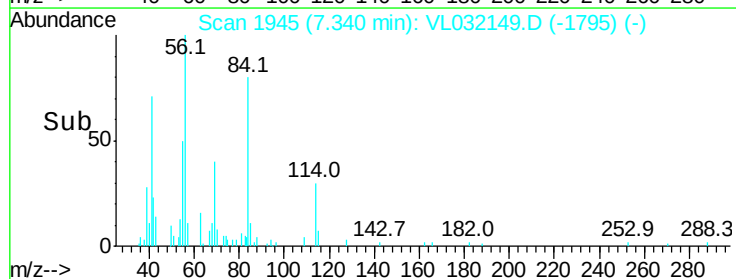
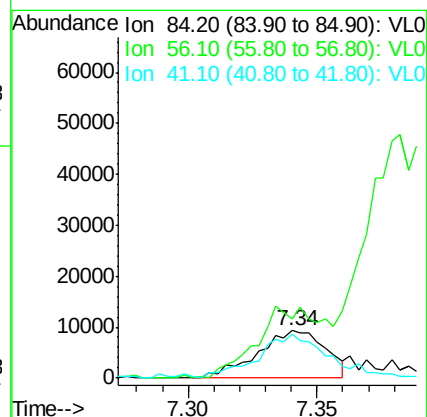
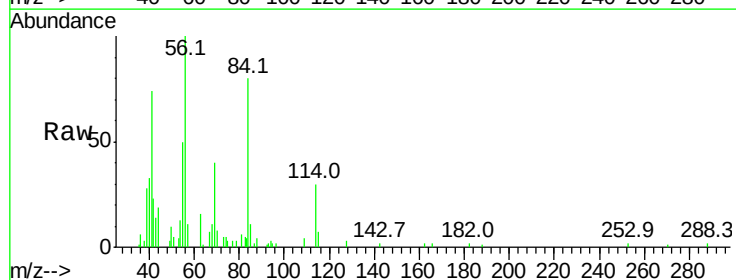
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

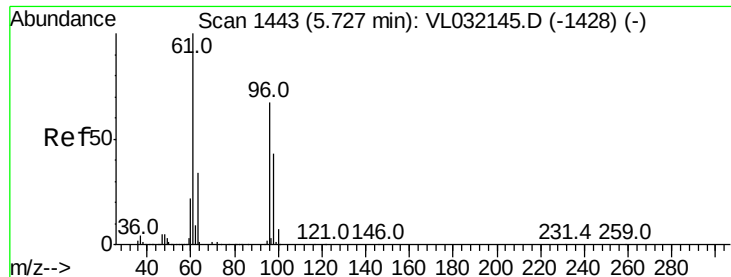
Tgt Ion: 83 Resp: 17678
Ion Ratio Lower Upper
83 100
85 78.4 51.6 77.4#



#30
Cyclohexane
Concen: 0.097 ppbv
RT: 7.34 min Scan# 1945
Delta R.T. -0.02 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

Tgt Ion: 84 Resp: 17161
Ion Ratio Lower Upper
84 100
56 0.0 109.1 163.7#
41 104.5 64.6 96.8#





#31

cis-1,2-Dichloroethene

Concen: 0.066 ppbv

RT: 5.73 min Scan# 1444

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

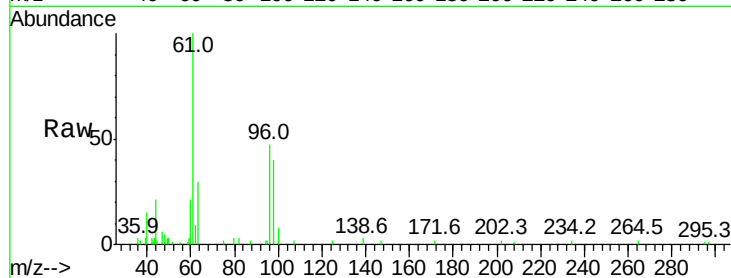
Tgt Ion: 61 Resp: 12699

Ion Ratio Lower Upper

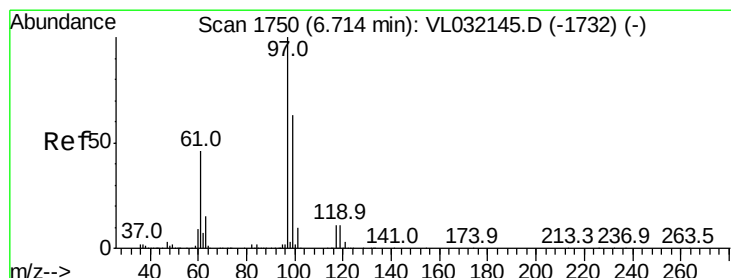
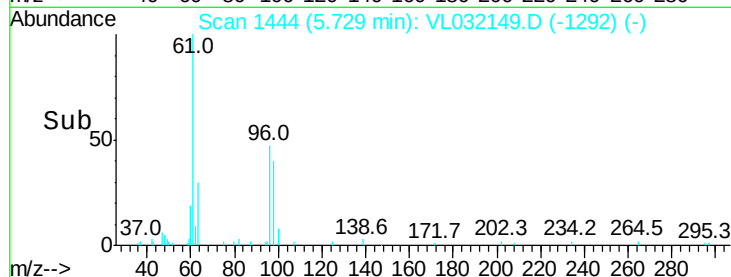
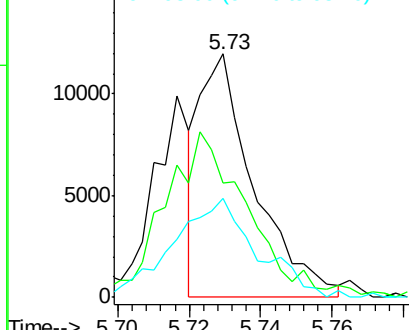
61 100

96 44.5 54.2 81.4#

98 39.3 34.6 52.0



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



#32

1,1,1-Trichloroethane

Concen: 0.090 ppbv

RT: 6.71 min Scan# 1750

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

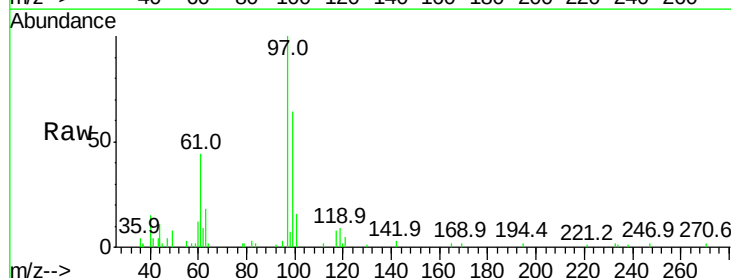
Tgt Ion: 97 Resp: 26726

Ion Ratio Lower Upper

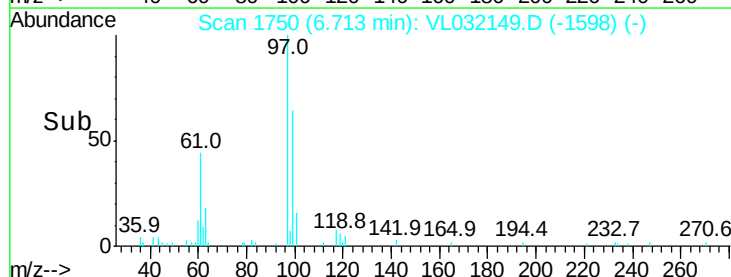
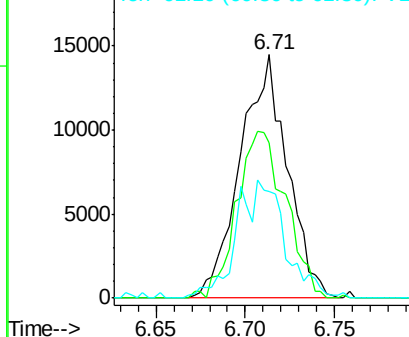
97 100

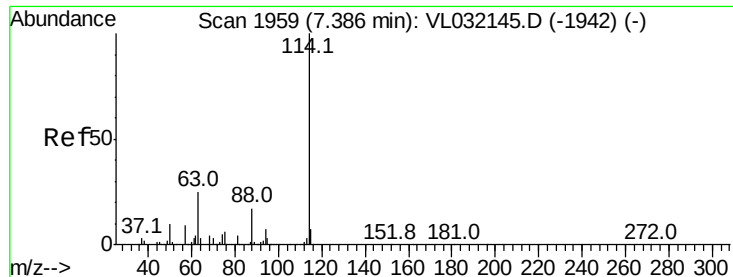
99 70.9 51.3 76.9

61 50.1 38.4 57.6



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

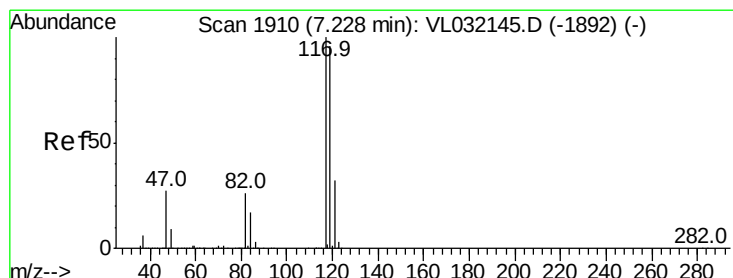
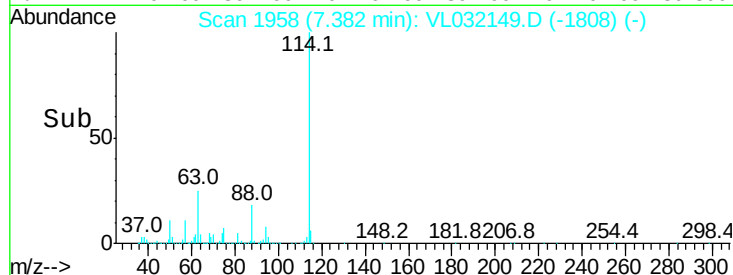
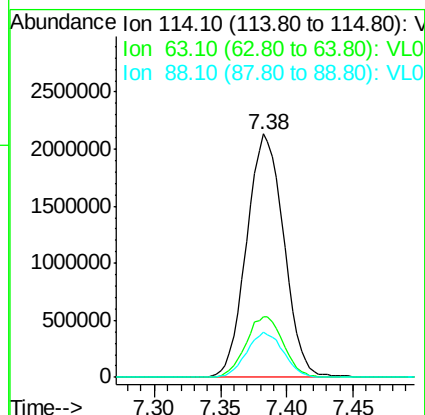
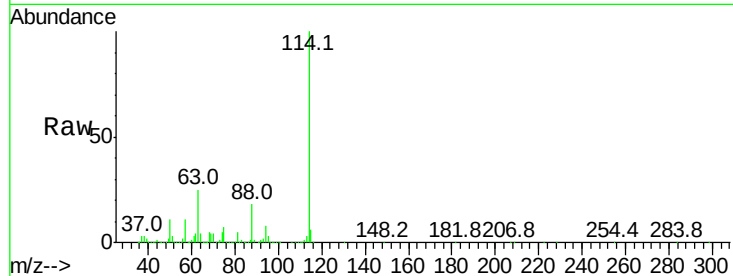




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.38 min Scan# 1958
 Delta R.T. -0.02 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

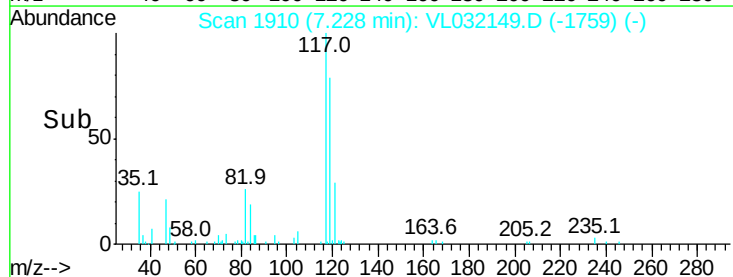
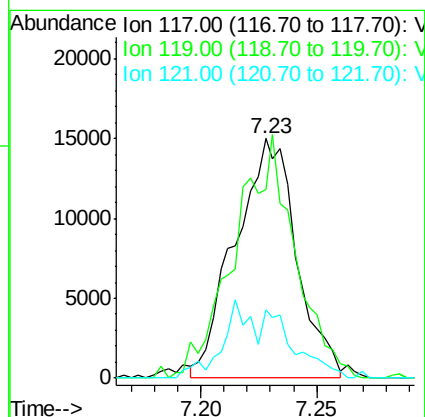
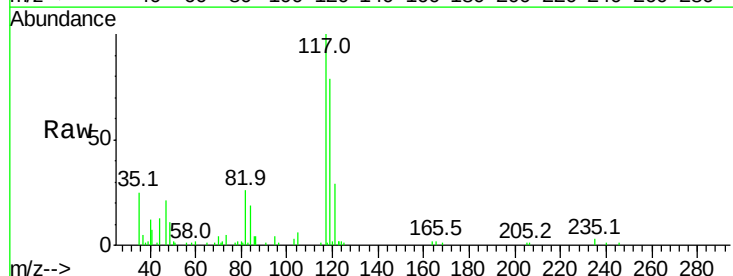
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

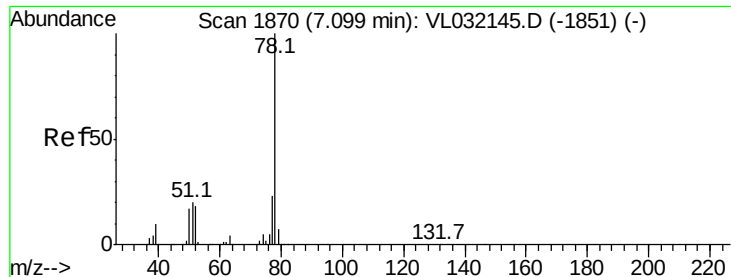
Tgt Ion:114 Resp: 4171407
 Ion Ratio Lower Upper
 114 100
 63 25.2 19.1 28.7
 88 18.4 13.9 20.9



#35
 Carbon Tetrachloride
 Concen: 0.095 ppbv
 RT: 7.23 min Scan# 1910
 Delta R.T. -0.01 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

Tgt Ion:117 Resp: 27628
 Ion Ratio Lower Upper
 117 100
 119 74.2 74.8 112.2#
 121 26.2 24.0 36.0





#36

Benzene

Concen: 0.104 ppbv

RT: 7.10 min Scan# 1870

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

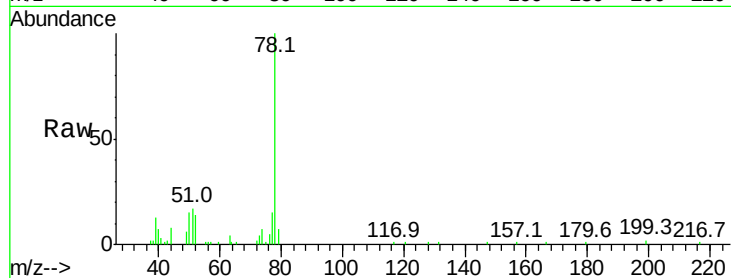
Tgt Ion: 78 Resp: 47158

Ion Ratio Lower Upper

78 100

77 14.6 17.7 26.5#

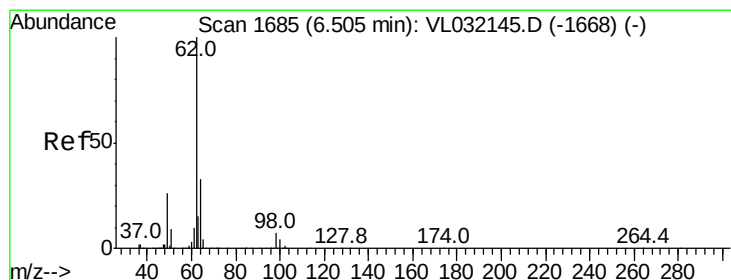
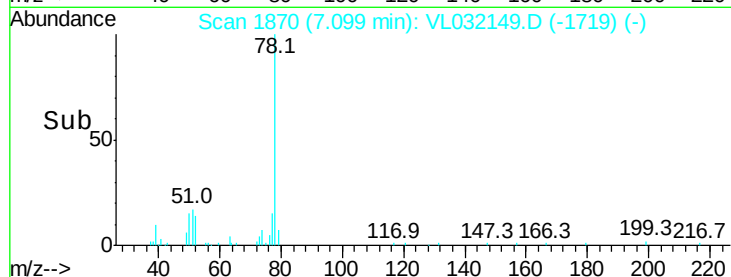
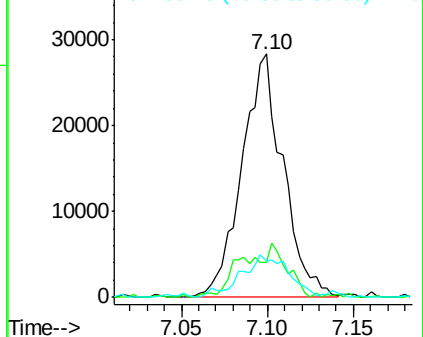
50 14.2 14.0 21.0



Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0



#37

1,2-Dichloroethane

Concen: 0.095 ppbv

RT: 6.50 min Scan# 1684

Delta R.T. -0.02 min

Lab File: VL032149.D

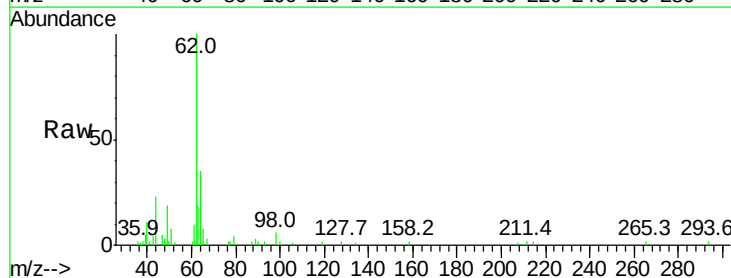
Acq: 29 Jun 2018 20:37

Tgt Ion: 62 Resp: 22155

Ion Ratio Lower Upper

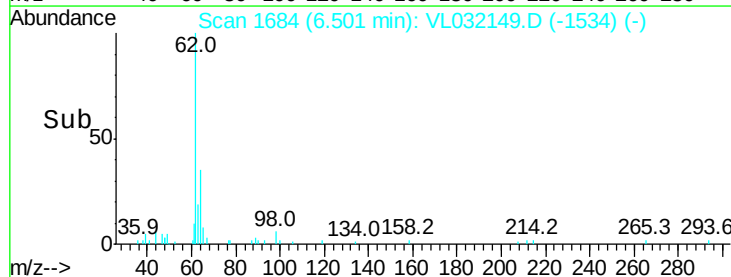
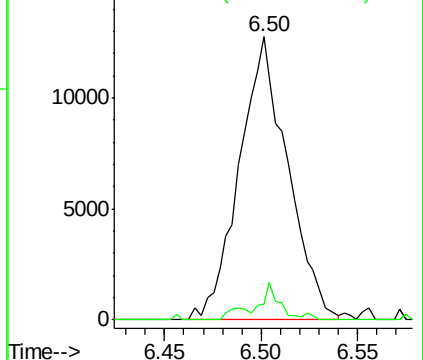
62 100

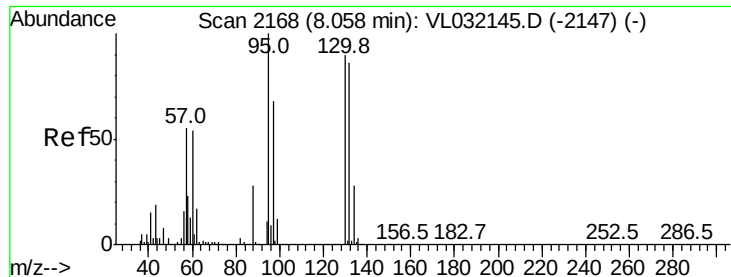
98 6.9 5.8 8.6



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0





#38

Trichloroethene

Concen: 0.031 ppbv

RT: 8.05 min Scan# 2166

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:130 Resp: 5360

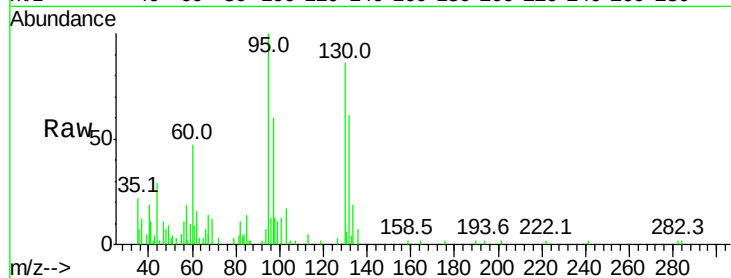
Ion Ratio Lower Upper

130 100

95 93.5 88.1 132.1

132 60.7 74.6 112.0#

97 84.5 58.6 88.0

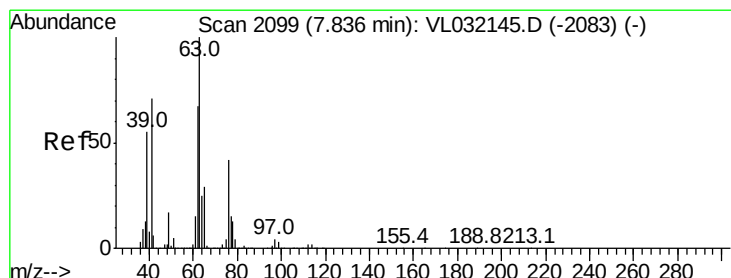
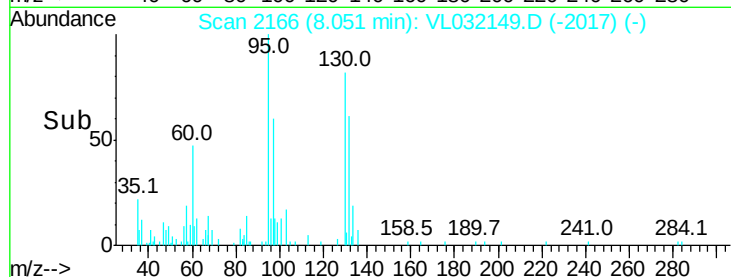
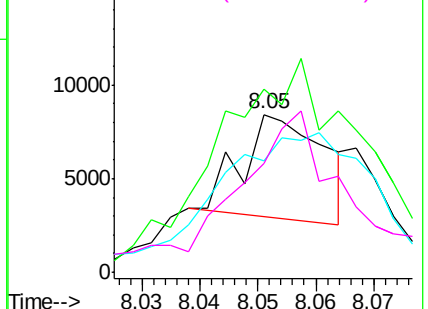


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 0.112 ppbv

RT: 7.83 min Scan# 2098

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

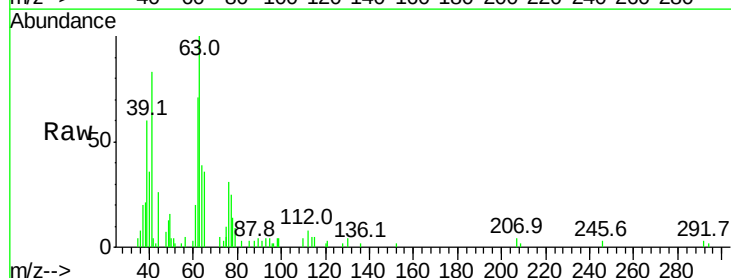
Tgt Ion: 63 Resp: 18593

Ion Ratio Lower Upper

63 100

41 82.7 53.3 79.9#

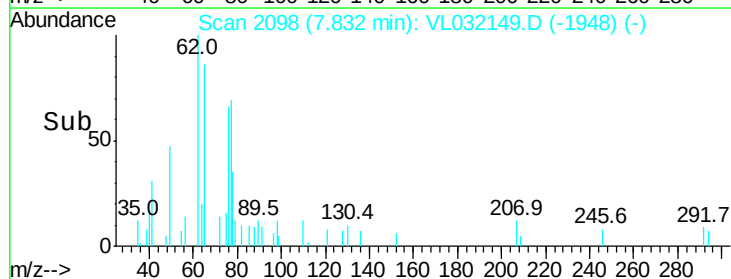
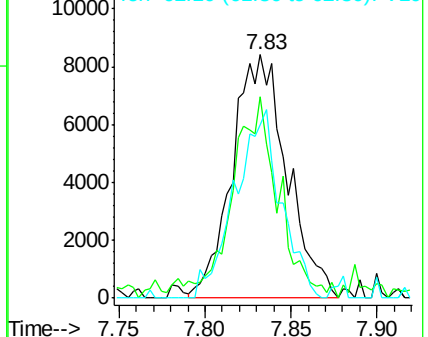
62 71.3 54.8 82.2

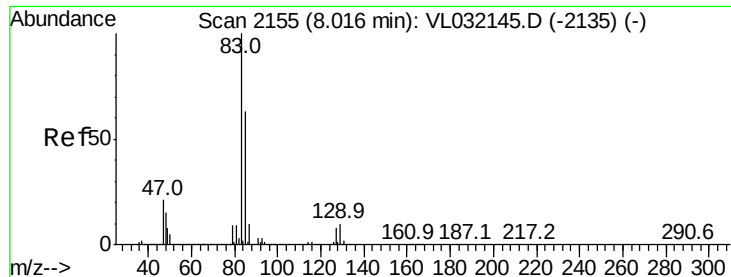


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#42

Bromodichloromethane

Concen: 0.098 ppbv

RT: 8.01 min Scan# 2153

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

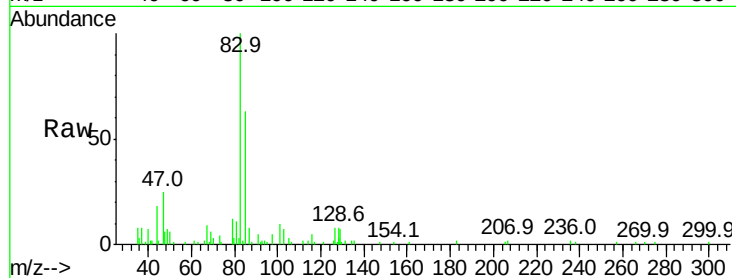
Tgt Ion: 83 Resp: 30718

Ion Ratio Lower Upper

83 100

85 63.2 52.6 79.0

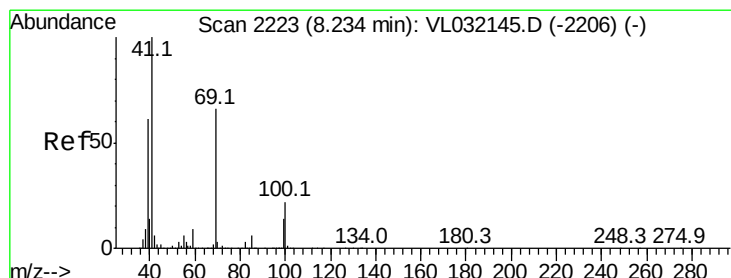
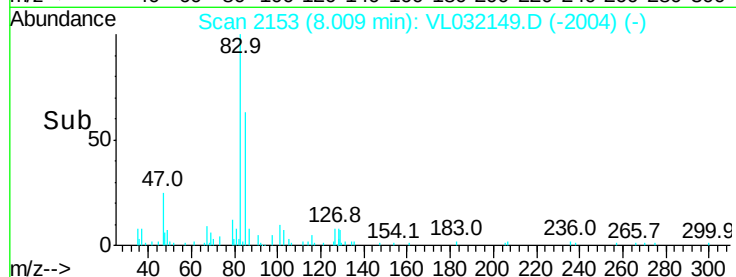
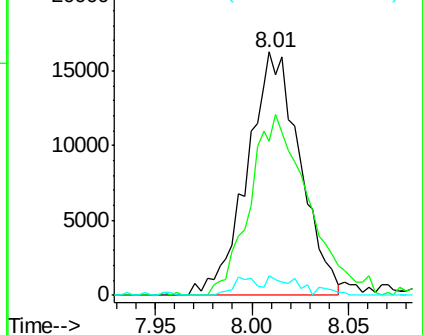
127 8.0 6.5 9.7



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): VL0



#43

Methyl Methacrylate

Concen: 0.095 ppbv

RT: 8.24 min Scan# 2226

Delta R.T. -0.00 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

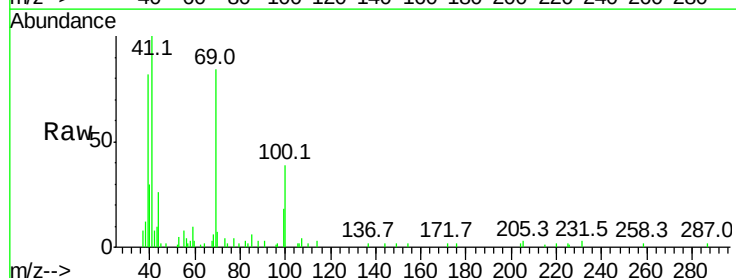
Tgt Ion: 69 Resp: 17084

Ion Ratio Lower Upper

69 100

41 153.8 118.2 177.4

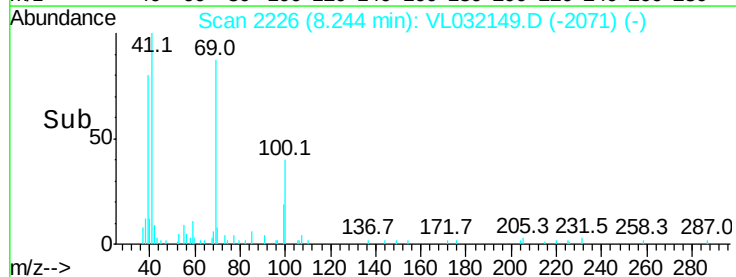
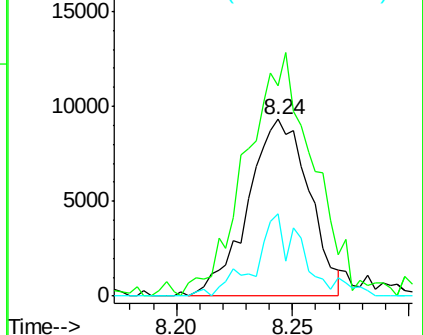
100 36.9 27.4 41.2

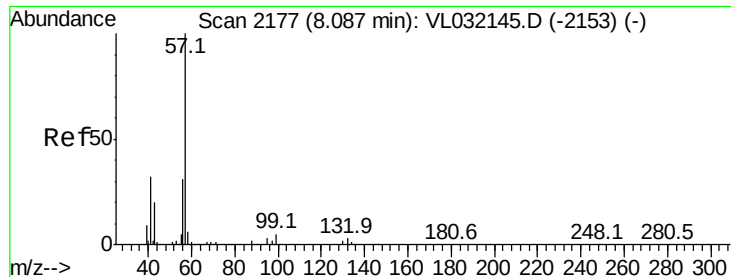


Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0





#44

2,2,4-Trimethylpentane

Concen: 0.099 ppbv

RT: 8.09 min Scan# 2177

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

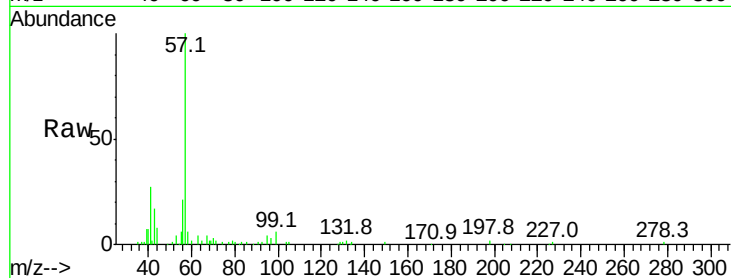
Tgt Ion: 57 Resp: 73810

Ion Ratio Lower Upper

57 100

41 32.6 24.3 36.5

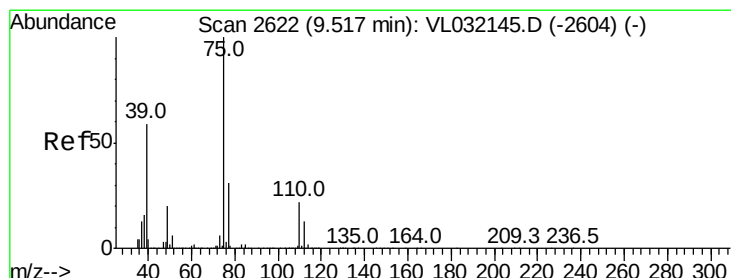
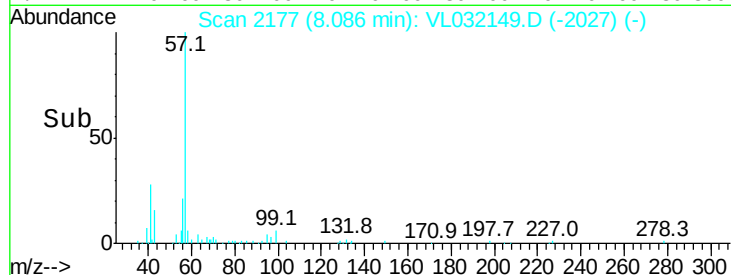
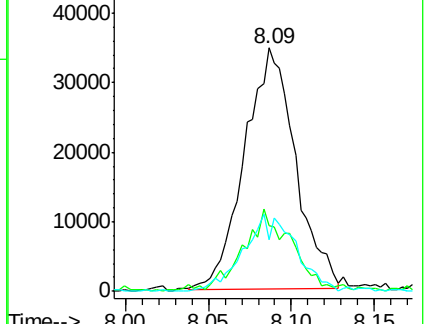
56 33.4 25.1 37.7



Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#45

t-1,3-Dichloropropene

Concen: 0.073 ppbv

RT: 9.51 min Scan# 2621

Delta R.T. -0.01 min

Lab File: VL032149.D

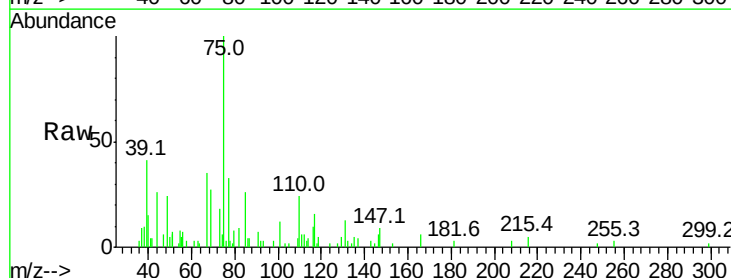
Acq: 29 Jun 2018 20:37

Tgt Ion: 75 Resp: 16082

Ion Ratio Lower Upper

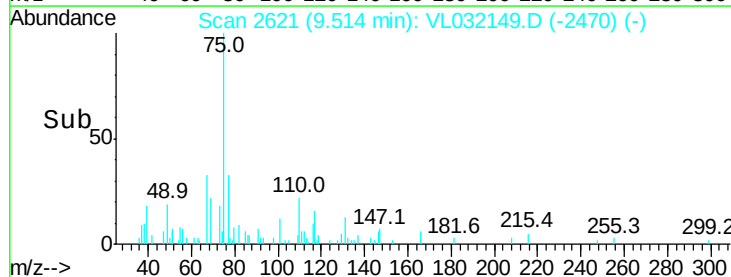
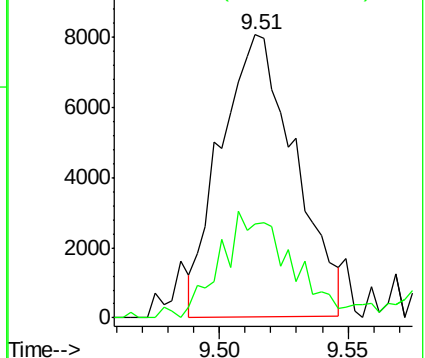
75 100

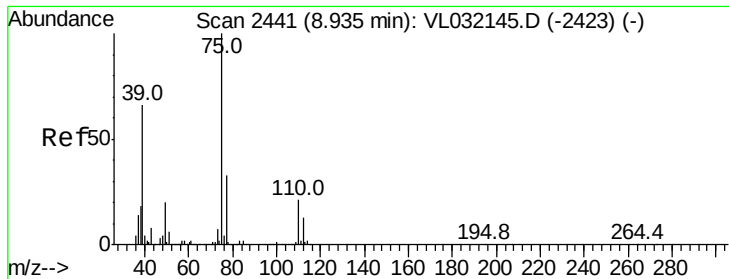
77 33.2 25.6 38.4



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#46

cis-1,3-Dichloropropene

Concen: 0.064 ppbv

RT: 8.93 min Scan# 2440

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

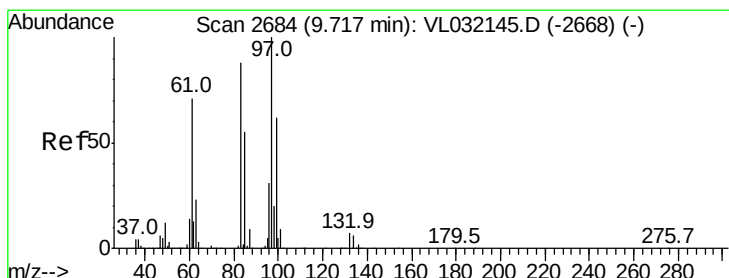
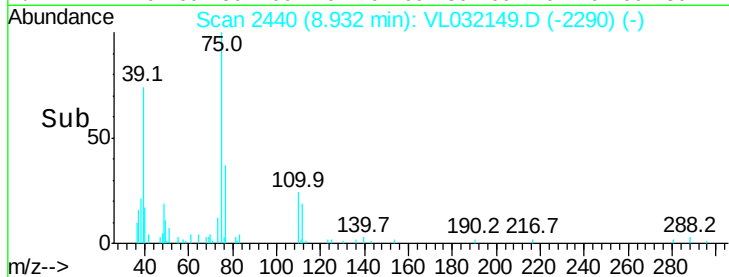
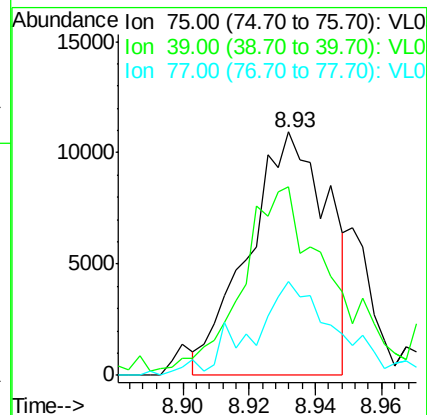
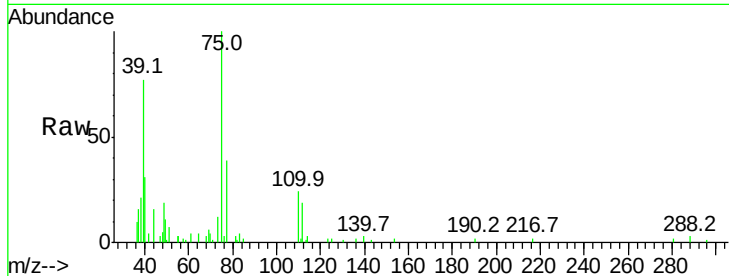
Tgt Ion: 75 Resp: 18216

Ion Ratio Lower Upper

75 100

39 77.9 51.9 77.9#

77 35.6 24.3 36.5



#47

1,1,2-Trichloroethane

Concen: 0.054 ppbv

RT: 9.71 min Scan# 2681

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Tgt Ion: 97 Resp: 10122

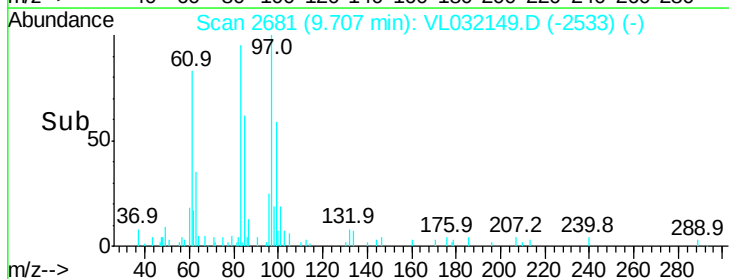
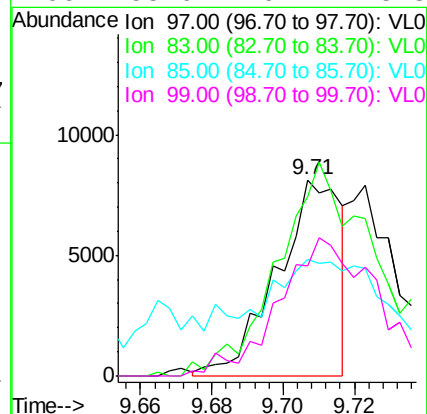
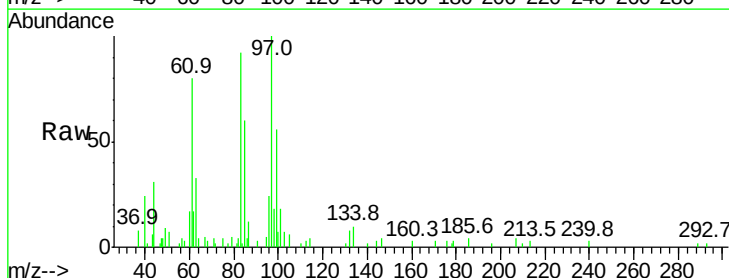
Ion Ratio Lower Upper

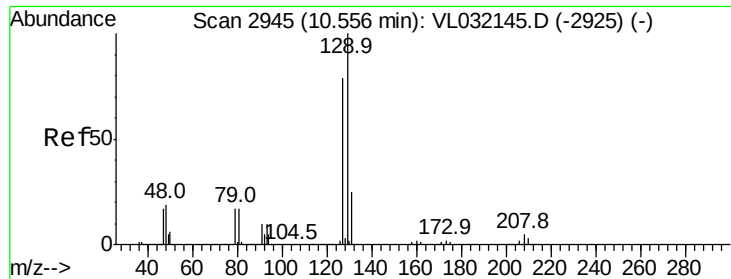
97 100

83 92.3 71.0 106.4

85 31.4 44.2 66.4#

99 58.6 49.2 73.8





#48

Dibromochloromethane

Concen: 0.035 ppbv

RT: 10.55 min Scan# 2942

Delta R.T. -0.03 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

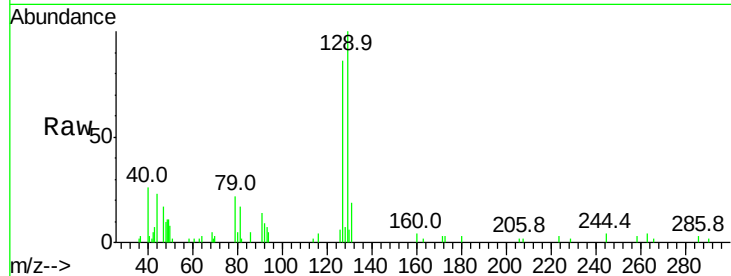
VSTDIC0.1

Tgt Ion:129 Resp: 9920

Ion Ratio Lower Upper

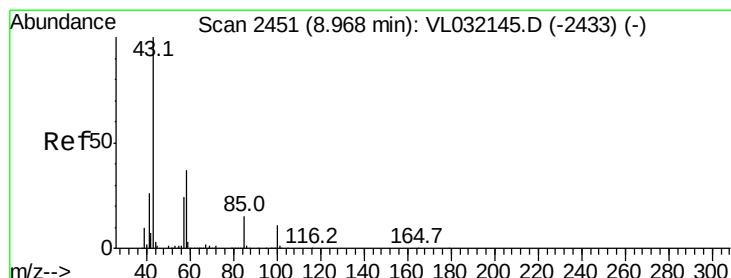
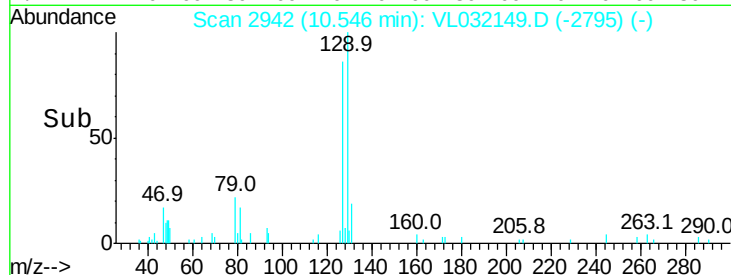
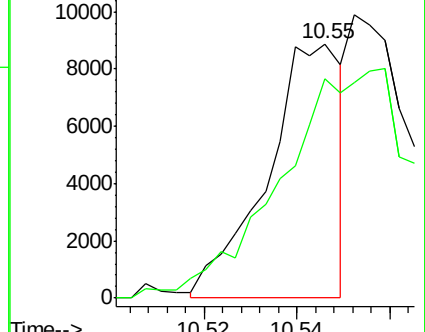
129 100

127 0.0 39.1 117.5#



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#50

4-Methyl-2-Pentanone

Concen: 0.097 ppbv

RT: 9.01 min Scan# 2463

Delta R.T. 0.02 min

Lab File: VL032149.D

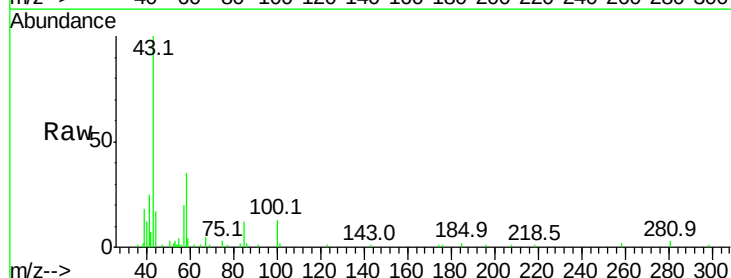
Acq: 29 Jun 2018 20:37

Tgt Ion: 43 Resp: 51181

Ion Ratio Lower Upper

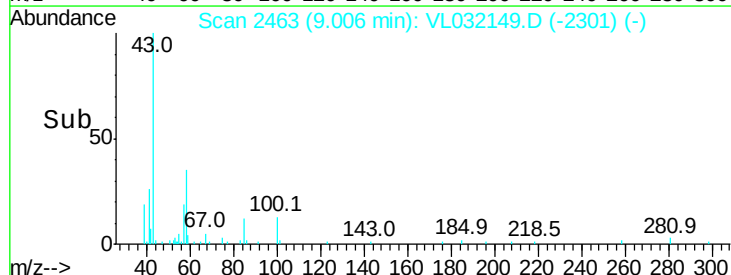
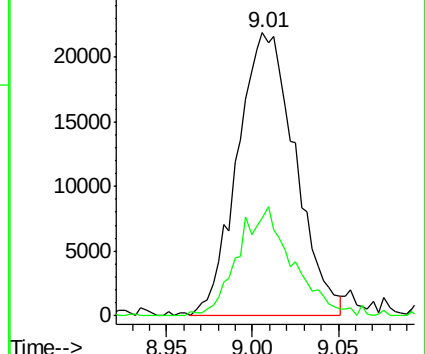
43 100

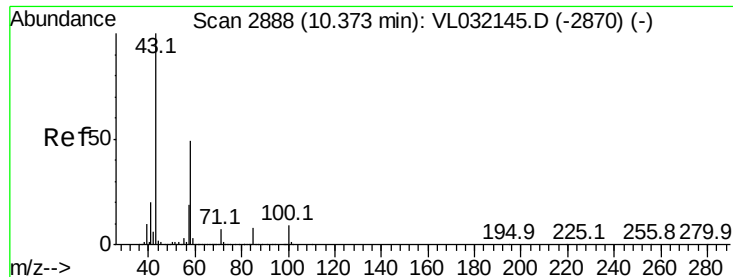
58 36.6 29.8 44.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 0.030 ppbv

RT: 10.40 min Scan# 2898

Delta R.T. 0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

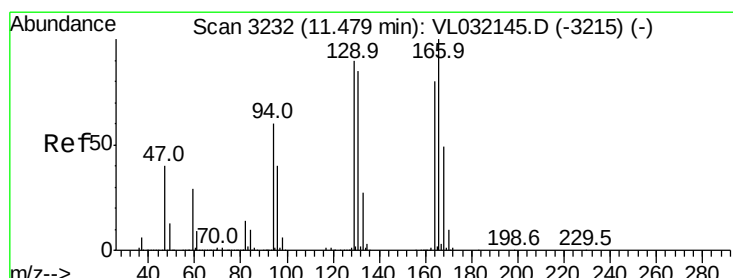
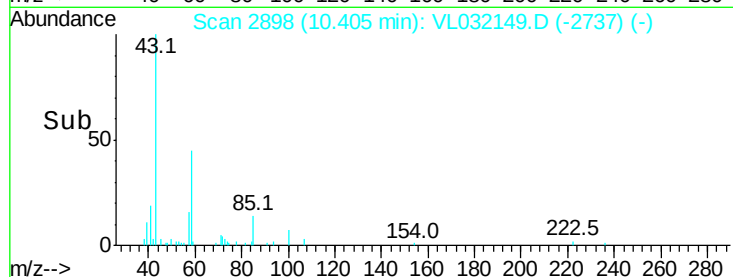
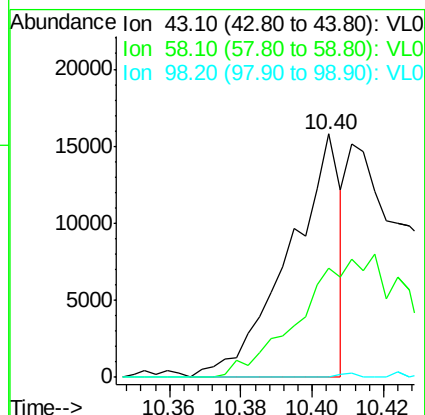
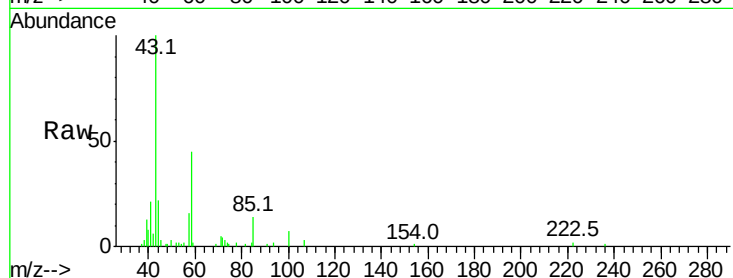
Tgt Ion: 43 Resp: 15850

Ion Ratio Lower Upper

43 100

58 0.0 40.6 60.8#

98 0.0 0.1 0.1#



#52

Tetrachloroethene

Concen: 0.031 ppbv

RT: 11.47 min Scan# 3228

Delta R.T. -0.03 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Tgt Ion: 164 Resp: 5109

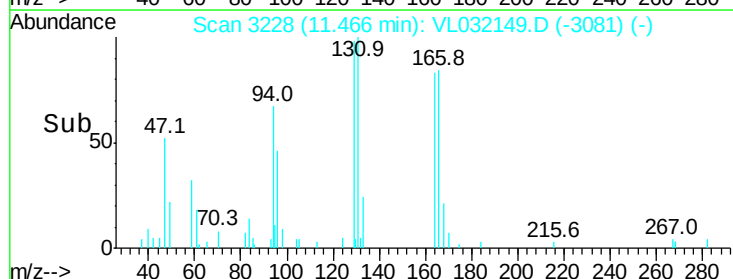
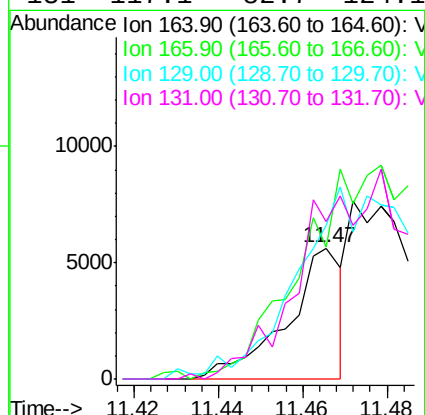
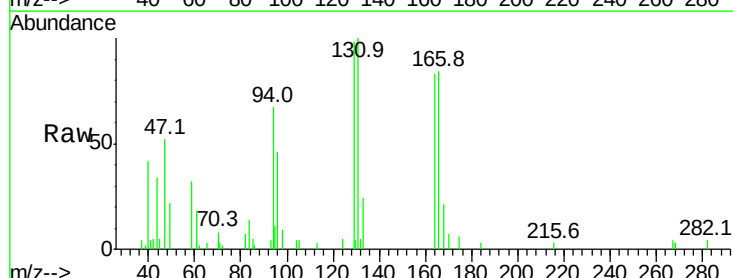
Ion Ratio Lower Upper

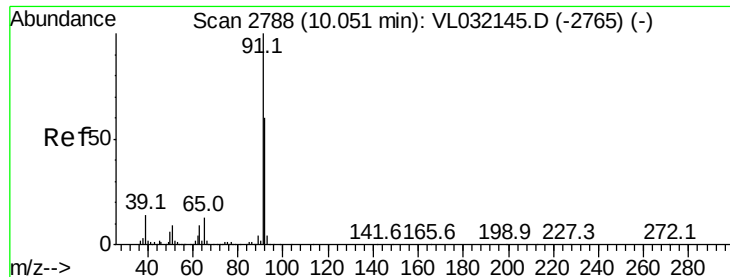
164 100

166 101.0 100.6 151.0

129 114.2 84.0 126.0

131 117.1 82.7 124.1





#53

Toluene

Concen: 0.091 ppbv

RT: 10.04 min Scan# 2786

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

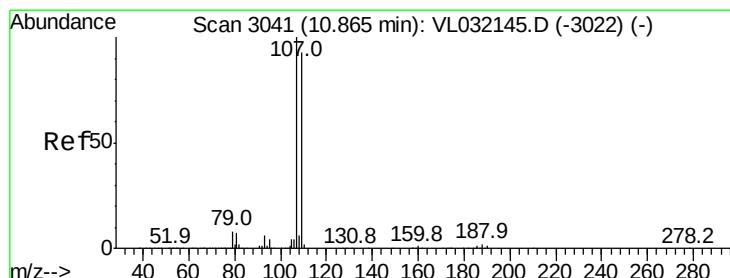
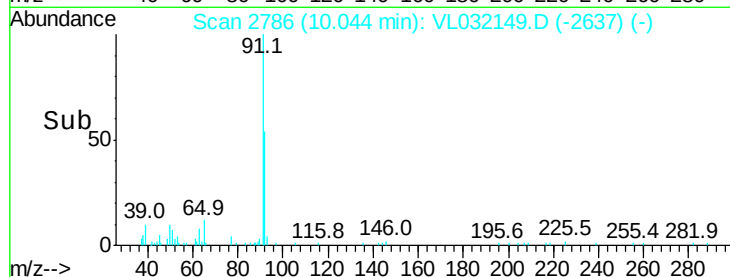
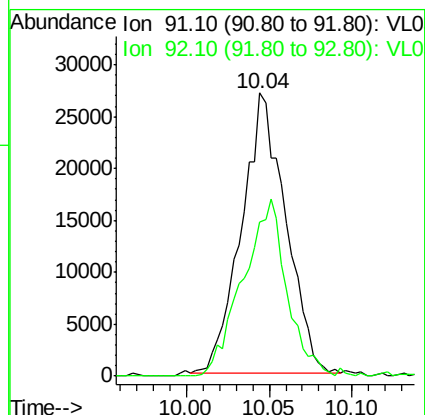
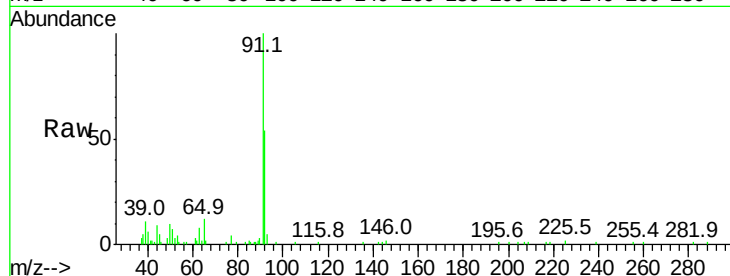
VSTDIC0.1

Tgt Ion: 91 Resp: 49793

Ion Ratio Lower Upper

91 100

92 63.6 49.2 73.8



#54

1,2-Dibromoethane

Concen: 0.034 ppbv

RT: 10.85 min Scan# 3038

Delta R.T. -0.02 min

Lab File: VL032149.D

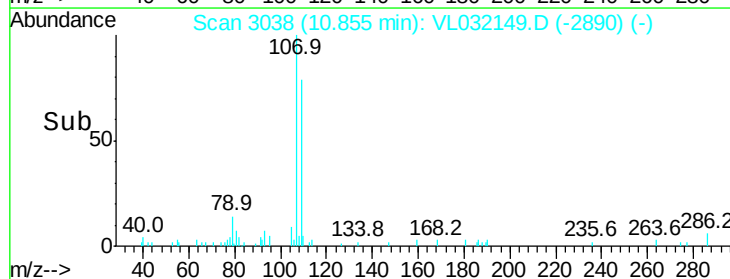
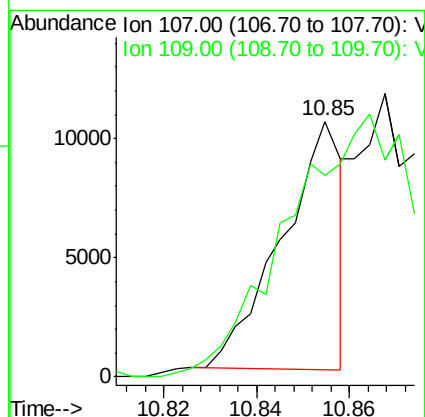
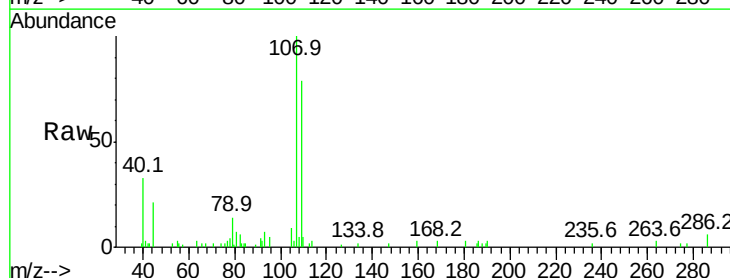
Acq: 29 Jun 2018 20:37

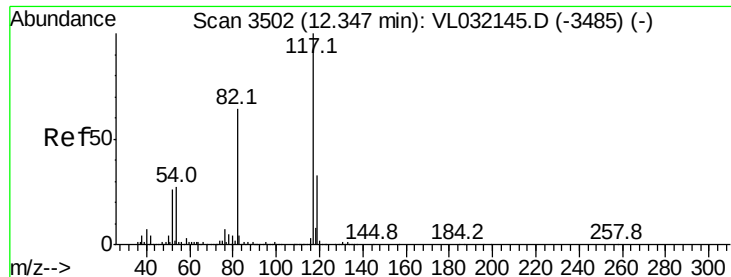
Tgt Ion: 107 Resp: 9437

Ion Ratio Lower Upper

107 100

109 78.6 75.0 112.4

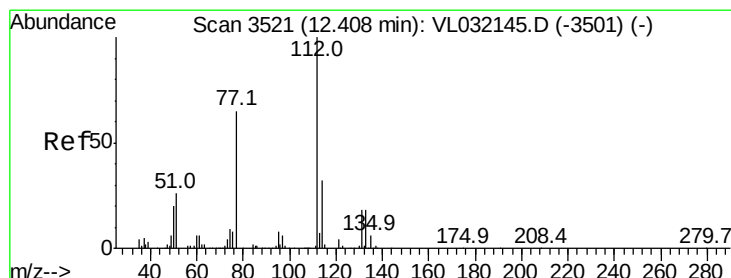
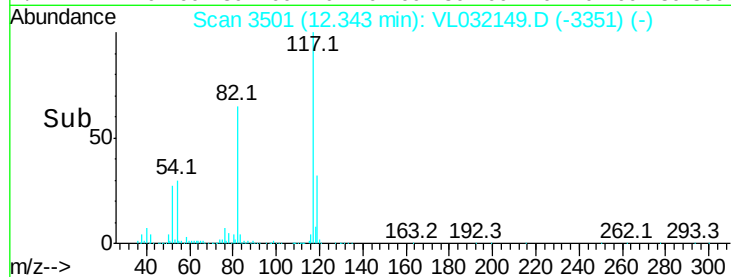
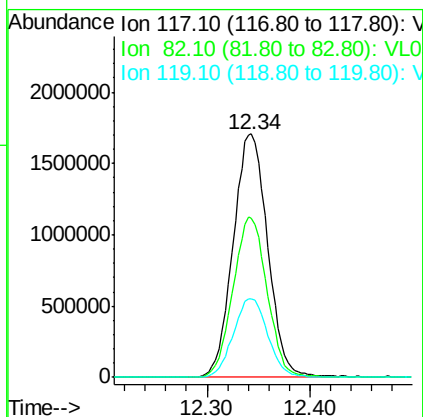
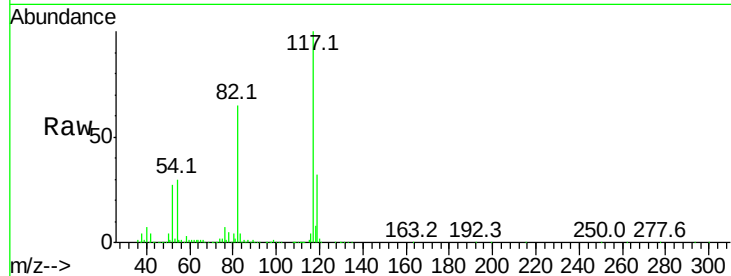




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.34 min Scan# 3501
Delta R.T. -0.02 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

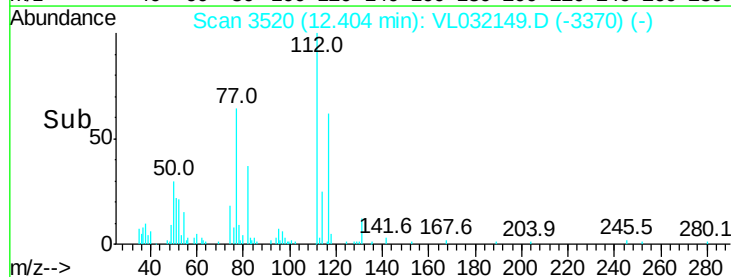
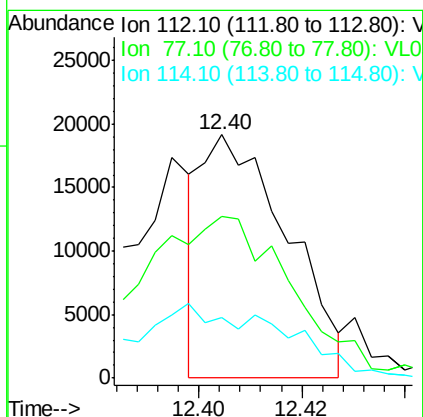
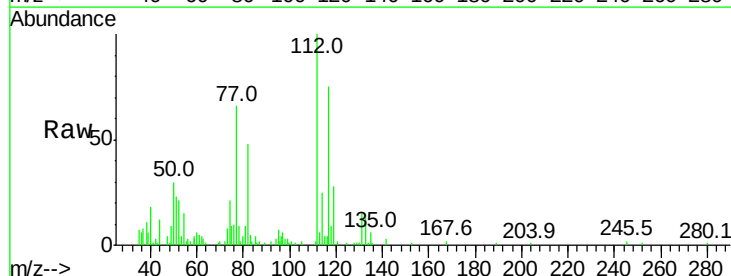
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

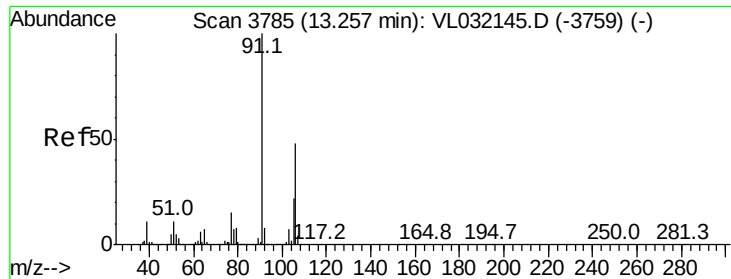
Tgt Ion:117 Resp: 3972465
Ion Ratio Lower Upper
117 100
82 65.6 47.8 71.8
119 32.6 43.3 64.9#



#57
Chlorobenzene
Concen: 0.058 ppbv
RT: 12.40 min Scan# 3520
Delta R.T. -0.02 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

Tgt Ion:112 Resp: 22000
Ion Ratio Lower Upper
112 100
77 63.2 52.6 78.8
114 17.6 27.9 34.1#





#59

m/p-Xylene

Concen: 0.041 ppbv

RT: 13.26 min Scan# 3785

Delta R.T. -0.01 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

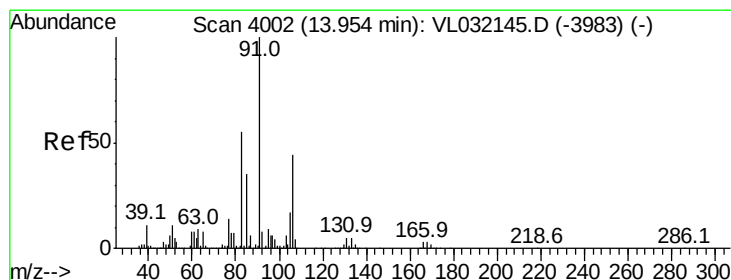
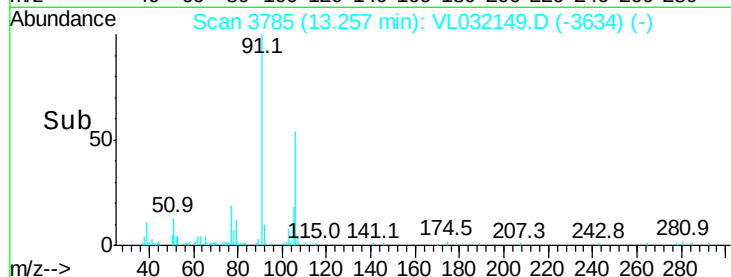
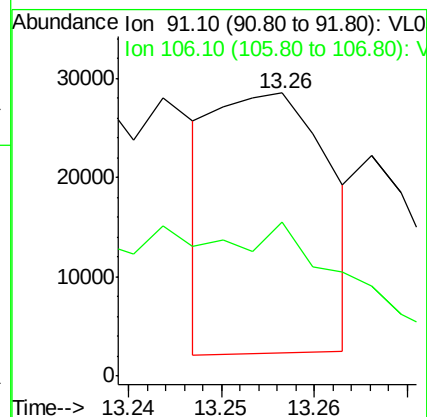
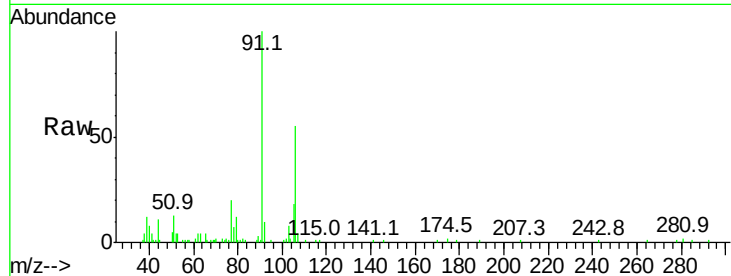
VSTDIC0.1

Tgt Ion: 91 Resp: 22399

Ion Ratio Lower Upper

91 100

106 240.1 38.6 58.0#



#60

o-Xylene

Concen: 0.114 ppbv

RT: 13.95 min Scan# 4001

Delta R.T. -0.02 min

Lab File: VL032149.D

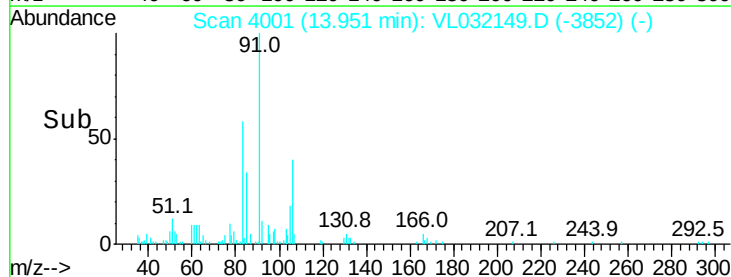
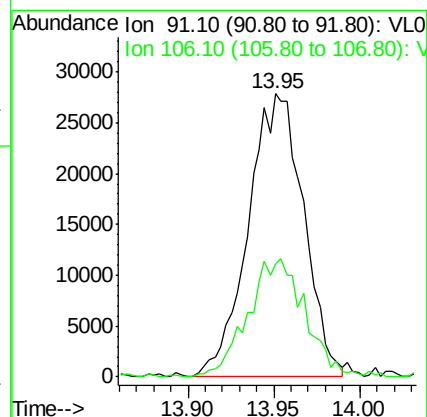
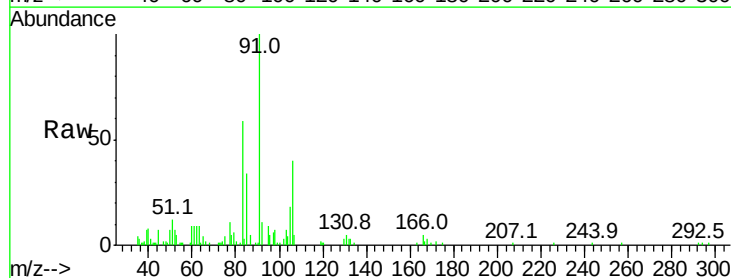
Acq: 29 Jun 2018 20:37

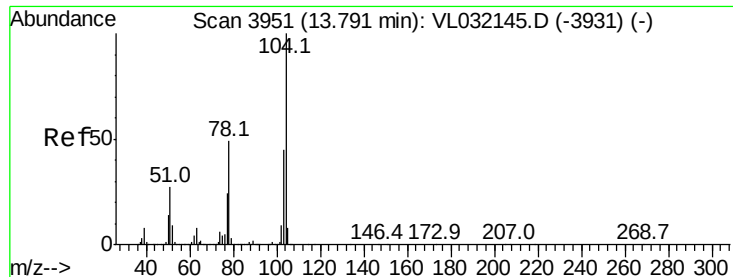
Tgt Ion: 91 Resp: 62173

Ion Ratio Lower Upper

91 100

106 43.5 23.3 69.8





#61

Styrene

Concen: 0.263 ppbv

RT: 13.79 min Scan# 3950

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

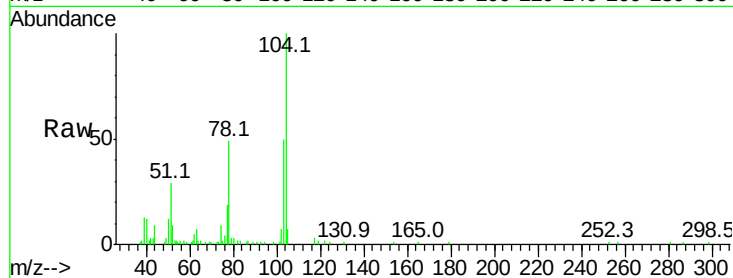
Tgt Ion:104 Resp: 42723

Ion Ratio Lower Upper

104 100

78 53.8 37.9 56.9

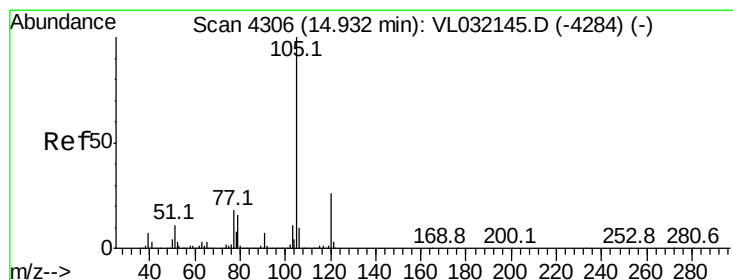
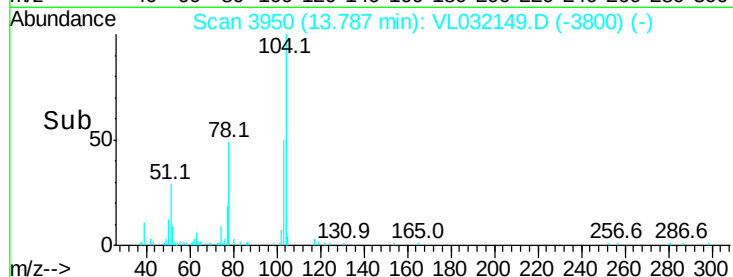
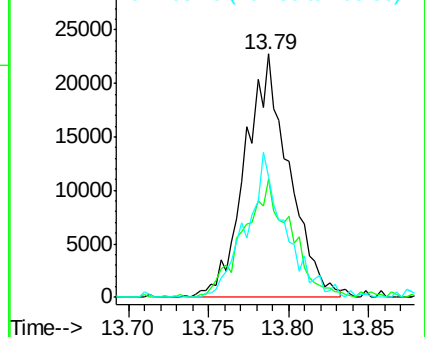
103 53.0 36.6 55.0



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



#62

Isopropylbenzene

Concen: 0.054 ppbv

RT: 14.92 min Scan# 4303

Delta R.T. -0.03 min

Lab File: VL032149.D

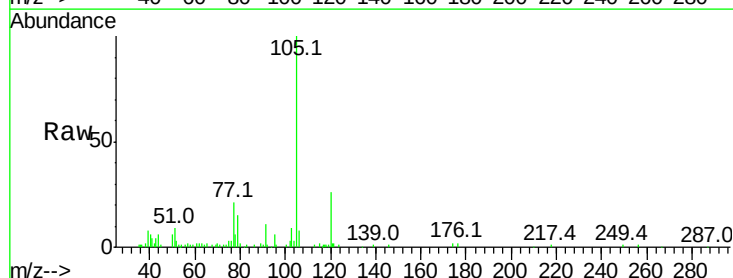
Acq: 29 Jun 2018 20:37

Tgt Ion:105 Resp: 39060

Ion Ratio Lower Upper

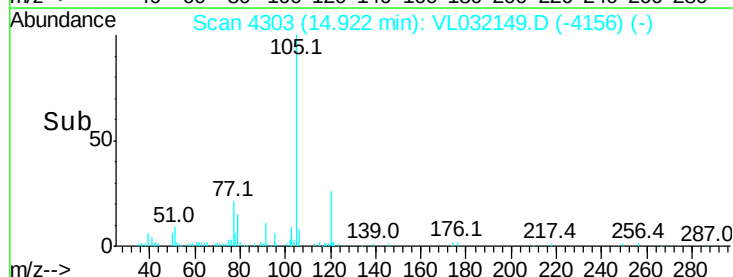
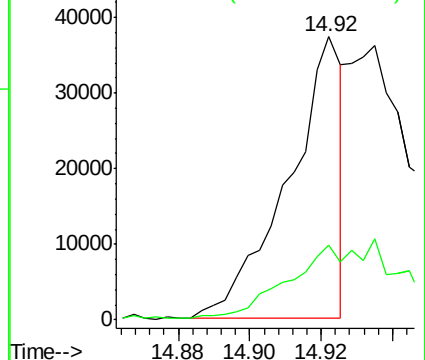
105 100

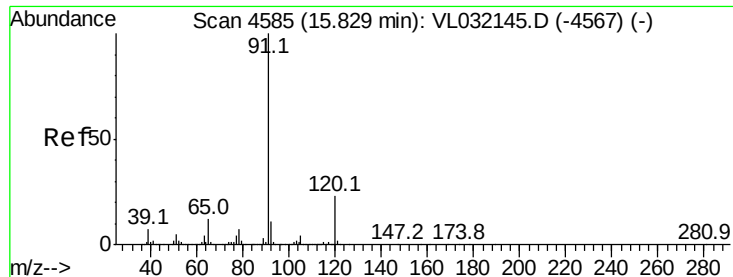
120 0.0 21.0 31.4#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#64

n-propylbenzene

Concen: 0.042 ppbv

RT: 15.82 min Scan# 4582

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

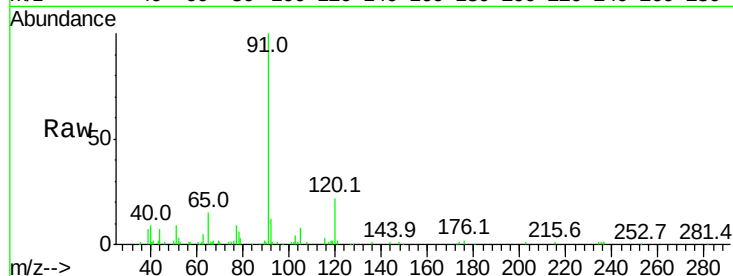
VSTDIC0.1

Tgt Ion:120 Resp: 7894

Ion Ratio Lower Upper

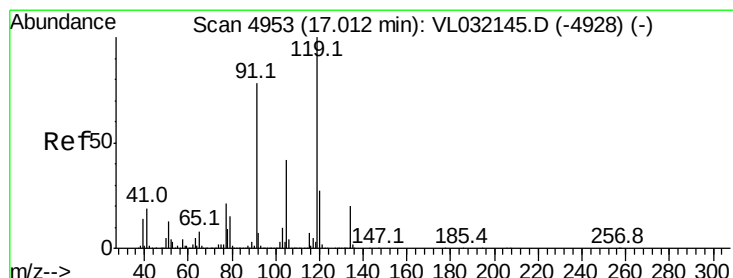
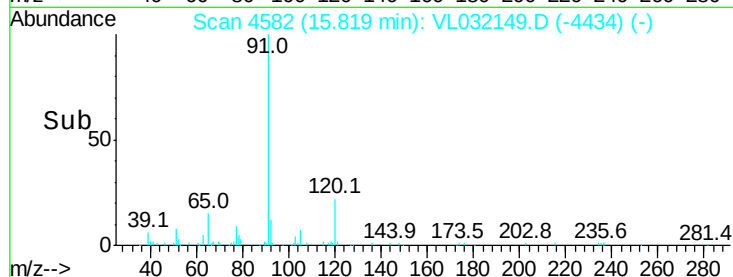
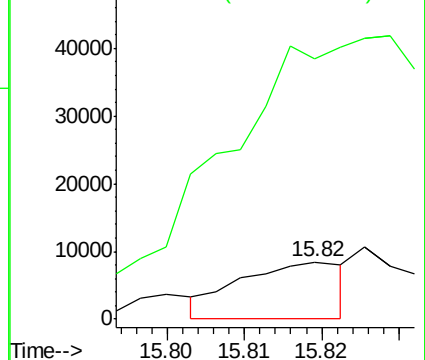
120 100

91 0.0 357.4 536.0#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#65

tert-Butylbenzene

Concen: 0.051 ppbv

RT: 17.00 min Scan# 4950

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

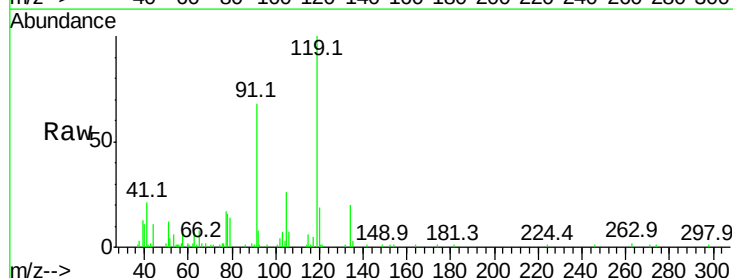
Tgt Ion:119 Resp: 32247

Ion Ratio Lower Upper

119 100

91 0.0 62.2 93.2#

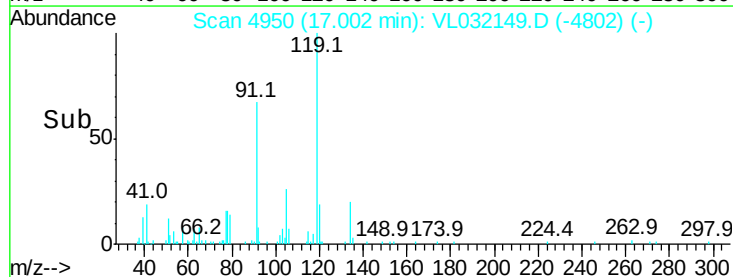
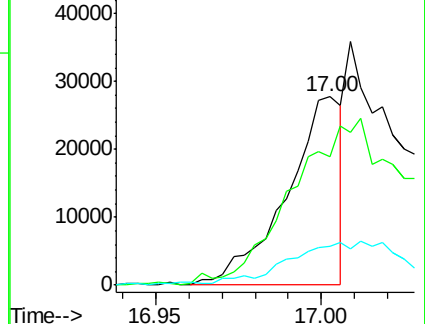
134 0.0 16.2 24.2#

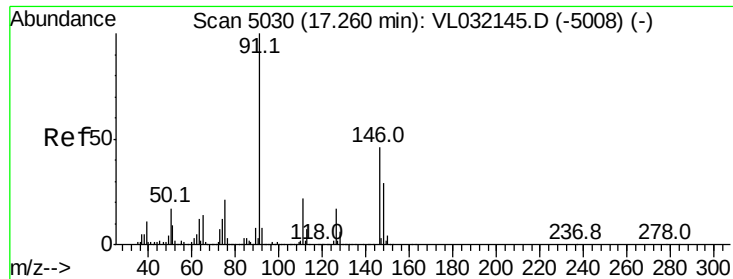


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

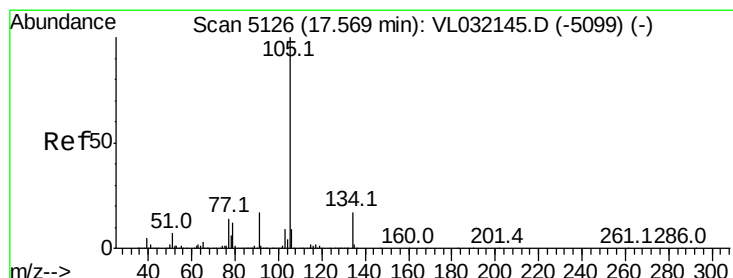
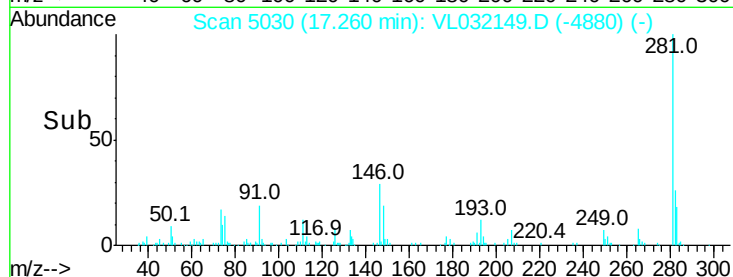
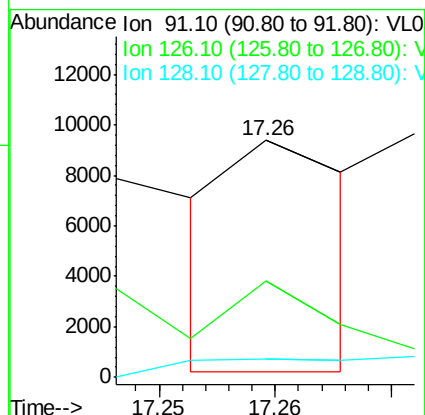
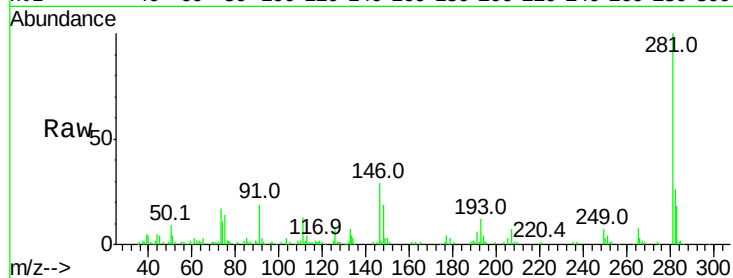




#66
Benzyl Chloride
Concen: 0.041 ppbv
RT: 17.26 min Scan# 5030
Delta R.T. -0.02 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

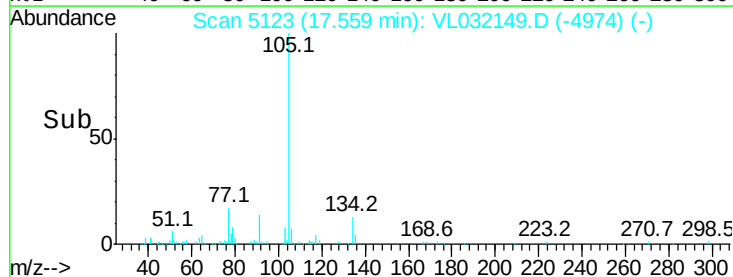
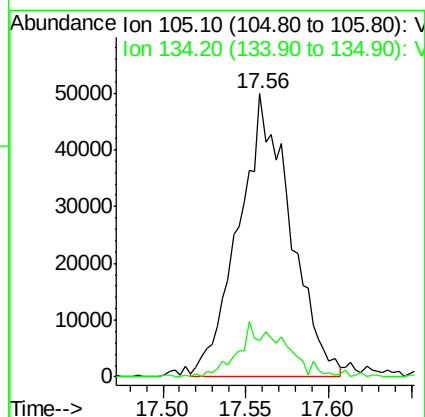
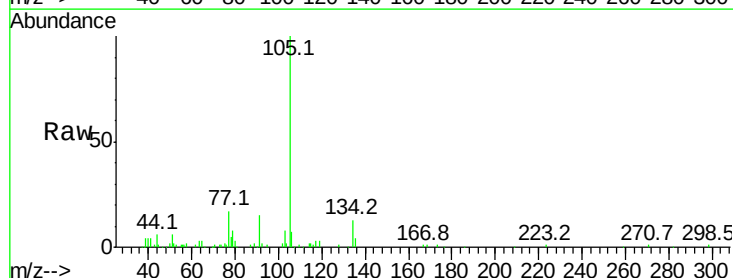
Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.1

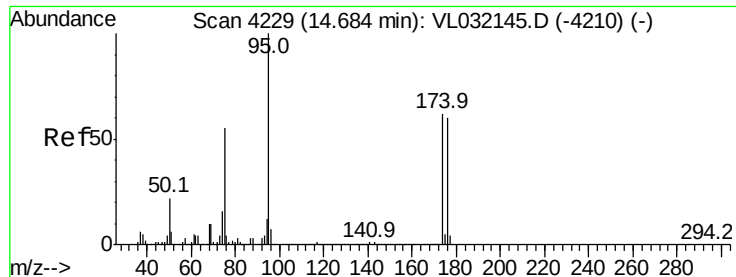
Tgt Ion: 91 Resp: 3294
Ion Ratio Lower Upper
91 100
126 129.1 15.7 23.5#
128 0.0 5.2 7.8#



#67
sec-Butylbenzene
Concen: 0.116 ppbv
RT: 17.56 min Scan# 5123
Delta R.T. -0.02 min
Lab File: VL032149.D
Acq: 29 Jun 2018 20:37

Tgt Ion: 105 Resp: 108064
Ion Ratio Lower Upper
105 100
134 16.8 14.7 22.1

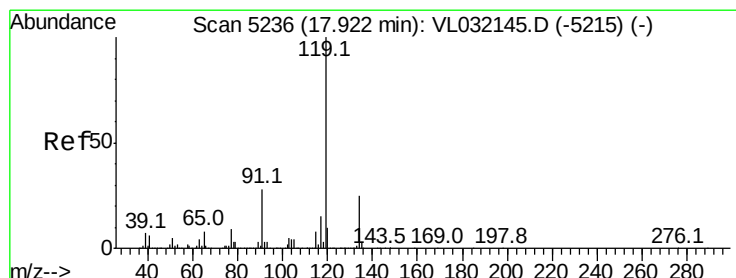
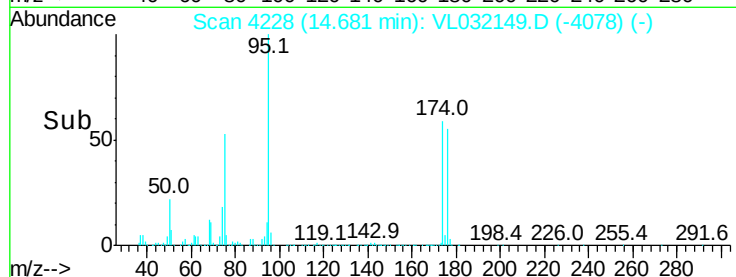
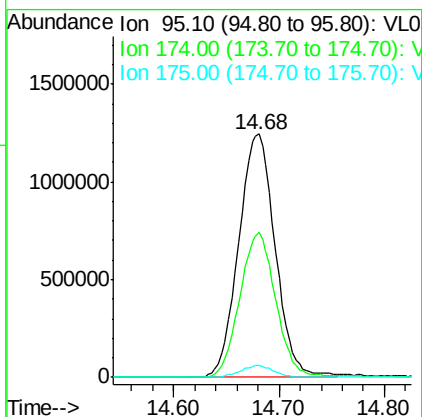
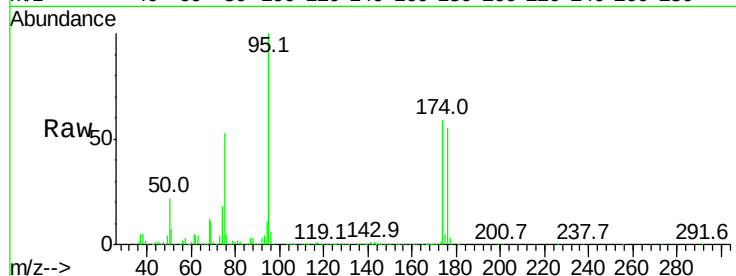




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.158 ppbv
 RT: 14.68 min Scan# 4228
 Delta R.T. -0.02 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

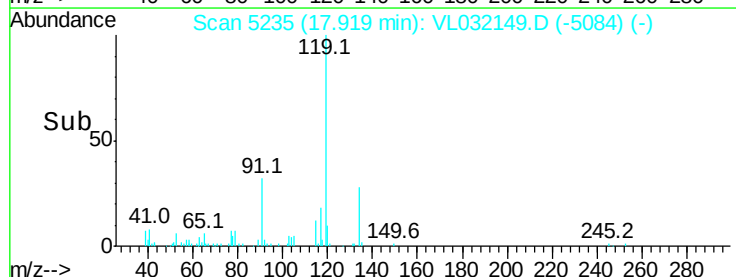
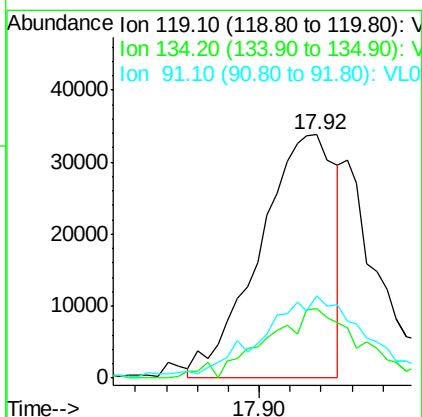
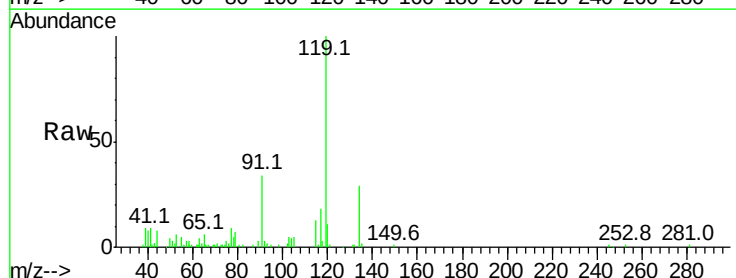
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

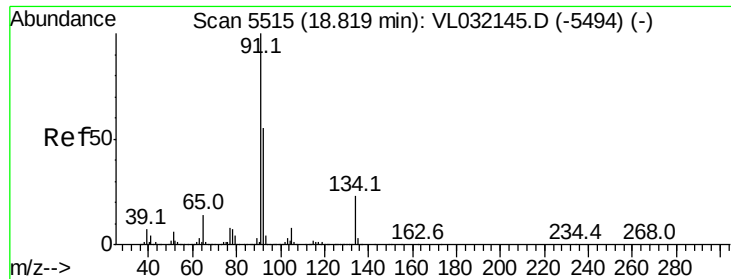
Tgt Ion: 95 Resp: 2998820
 Ion Ratio Lower Upper
 95 100
 174 59.2 52.1 78.1
 175 4.6 4.0 6.0



#69
 p-Isopropyltoluene
 Concen: 0.075 ppbv
 RT: 17.92 min Scan# 5235
 Delta R.T. -0.01 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

Tgt Ion: 119 Resp: 57101
 Ion Ratio Lower Upper
 119 100
 134 38.0 20.7 31.1#
 91 51.2 21.8 32.8#





#70

n-Butylbenzene

Concen: 0.047 ppbv

RT: 18.81 min Scan# 5512

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

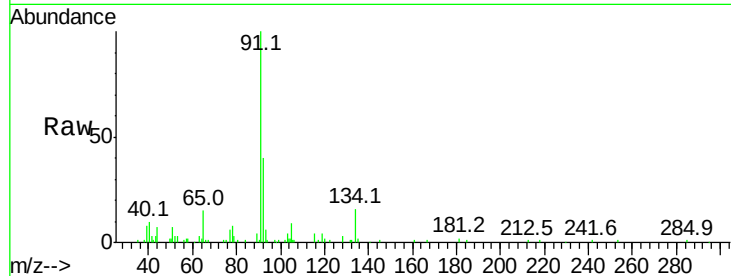
Tgt Ion: 91 Resp: 37757

Ion Ratio Lower Upper

91 100

92 0.0 43.7 65.5#

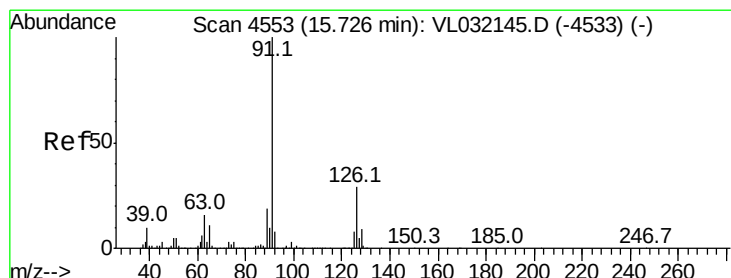
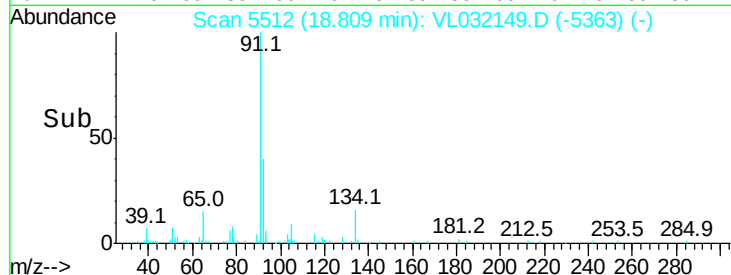
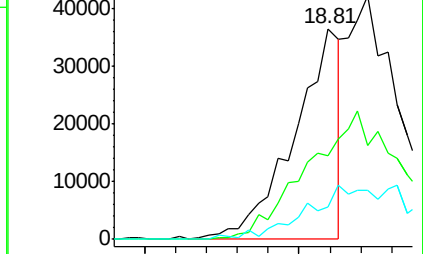
134 61.2 18.9 28.3#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

Ion 134.20 (133.90 to 134.90): V



#71

2-Chlorotoluene

Concen: 0.077 ppbv

RT: 15.72 min Scan# 4552

Delta R.T. -0.02 min

Lab File: VL032149.D

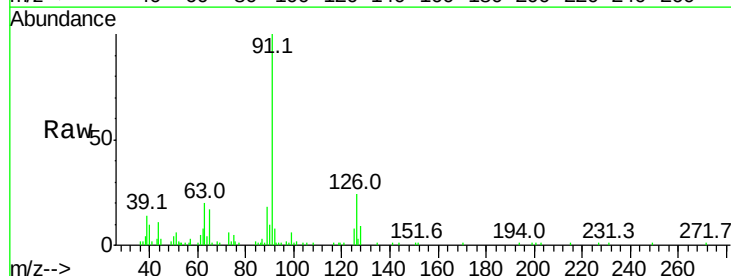
Acq: 29 Jun 2018 20:37

Tgt Ion: 91 Resp: 43017

Ion Ratio Lower Upper

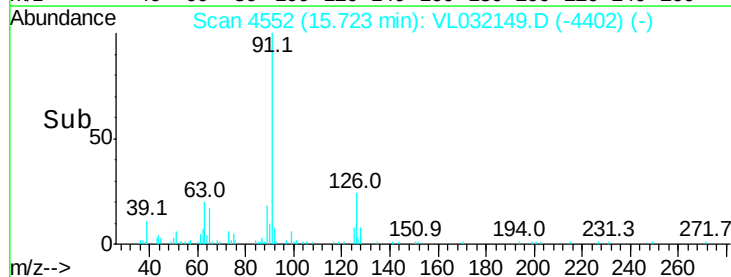
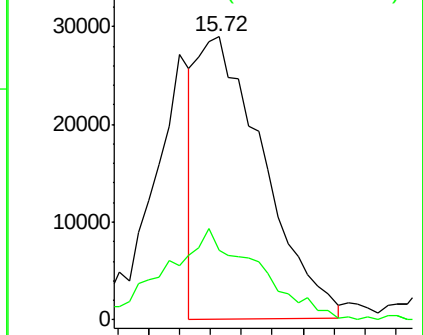
91 100

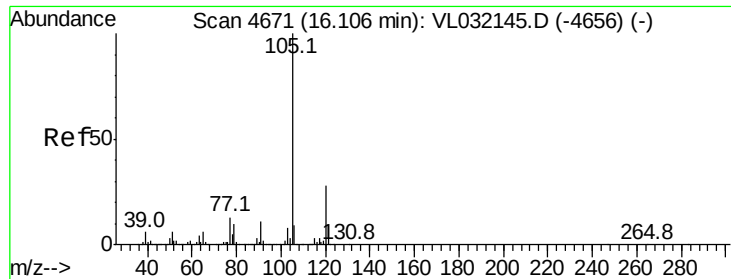
126 46.7 12.8 51.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V





#72

4-Ethyltoluene

Concen: 0.047 ppbv

RT: 16.10 min Scan# 4668

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

Tgt Ion:105 Resp: 28861

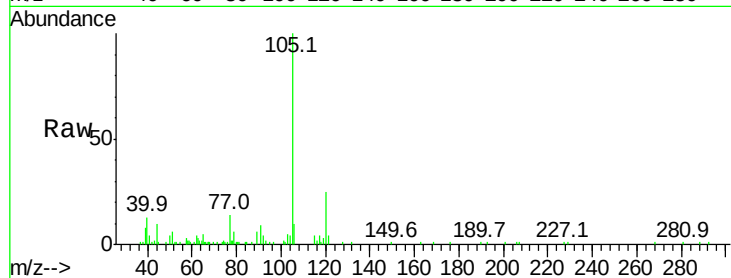
Ion Ratio Lower Upper

105 100

120 0.0 24.3 36.5#

91 35.5 9.4 14.0#

77 0.0 10.2 15.2#

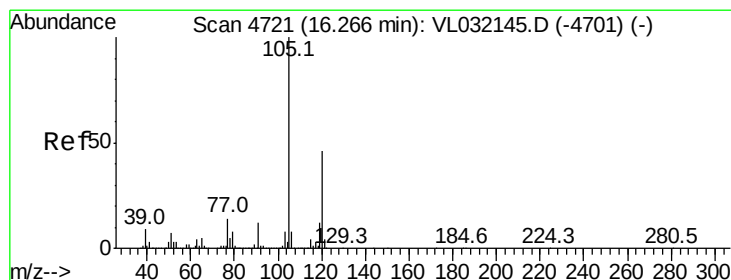
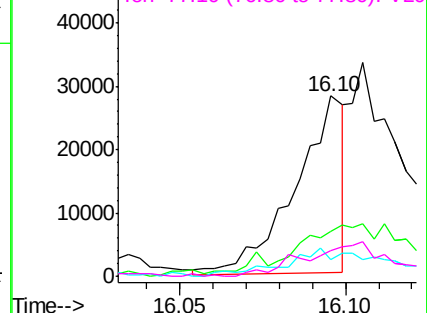
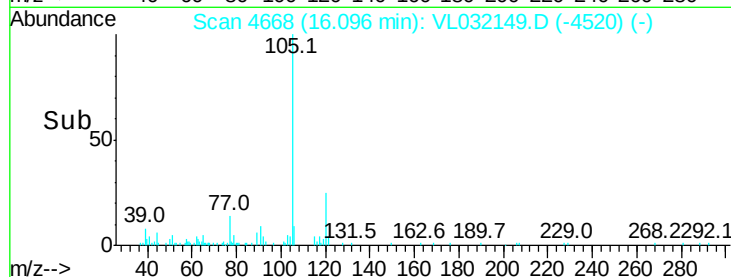


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.074 ppbv

RT: 16.26 min Scan# 4720

Delta R.T. -0.02 min

Lab File: VL032149.D

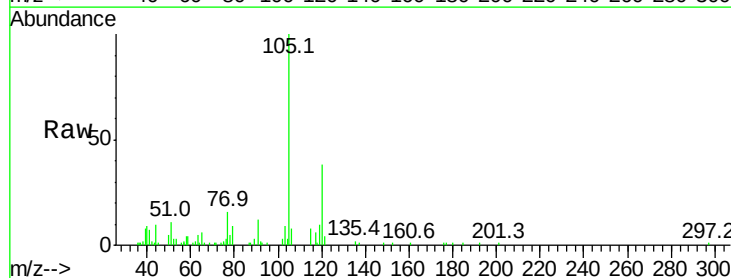
Acq: 29 Jun 2018 20:37

Tgt Ion:105 Resp: 40489

Ion Ratio Lower Upper

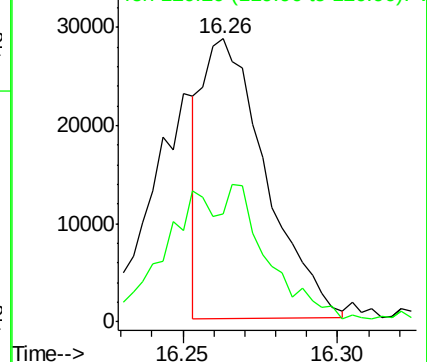
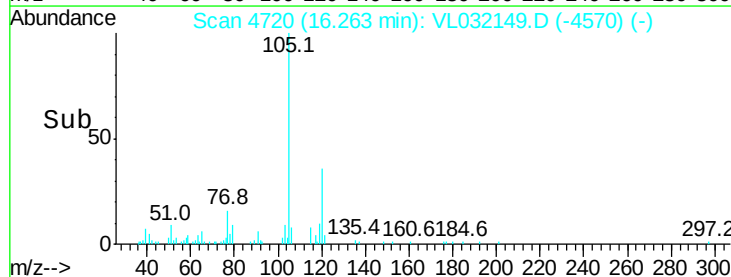
105 100

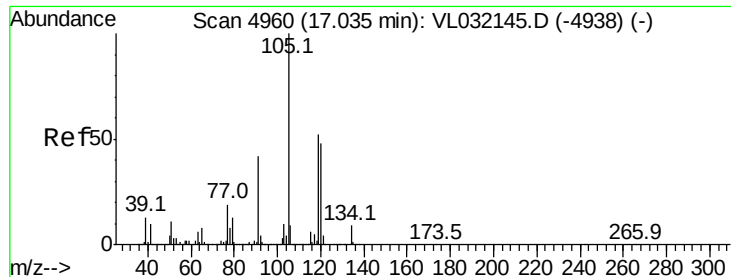
120 38.2 38.6 57.8#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

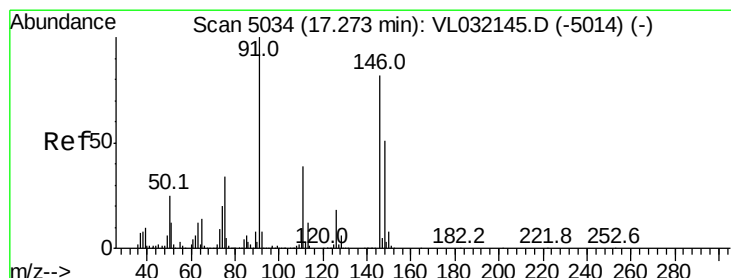
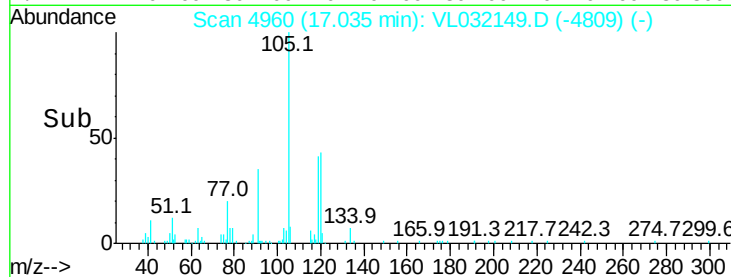
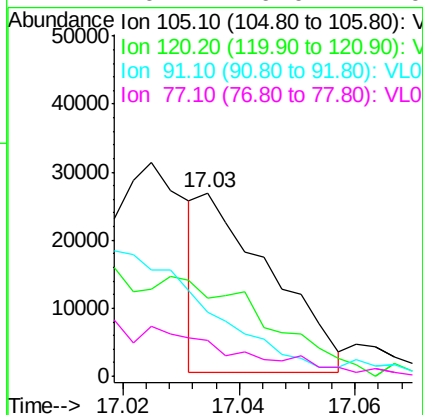
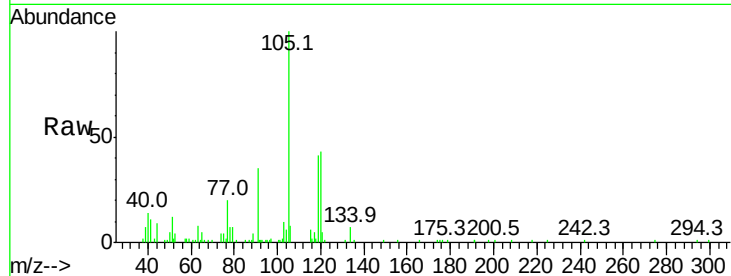




#74
 1,2,4-Trimethylbenzene
 Concen: 0.039 ppbv
 RT: 17.03 min Scan# 4960
 Delta R.T. -0.01 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

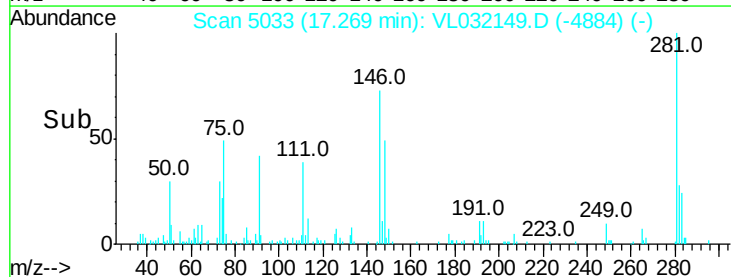
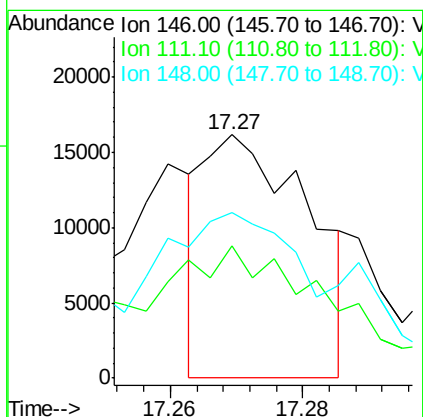
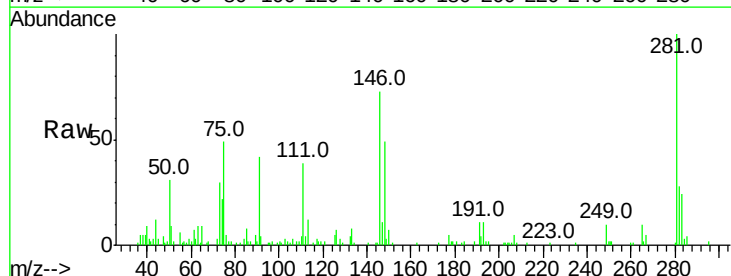
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.1

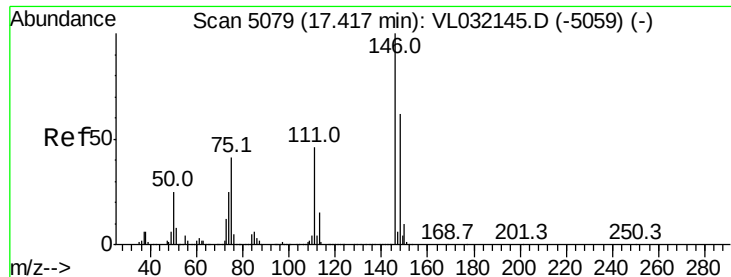
Tgt Ion:	105	Resp:	22657
Ion Ratio	Lower	Upper	
105	100		
120	41.6	38.8	58.2
91	34.3	33.6	50.4
77	16.7	16.0	24.0



#75
 1,3-Dichlorobenzene
 Concen: 0.050 ppbv
 RT: 17.27 min Scan# 5033
 Delta R.T. -0.02 min
 Lab File: VL032149.D
 Acq: 29 Jun 2018 20:37

Tgt Ion:	146	Resp:	17687
Ion Ratio	Lower	Upper	
146	100		
111	165.5	22.9	68.8#
148	164.0	31.7	95.1#





#76

1,4-Dichlorobenzene

Concen: 0.086 ppbv

RT: 17.41 min Scan# 5076

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

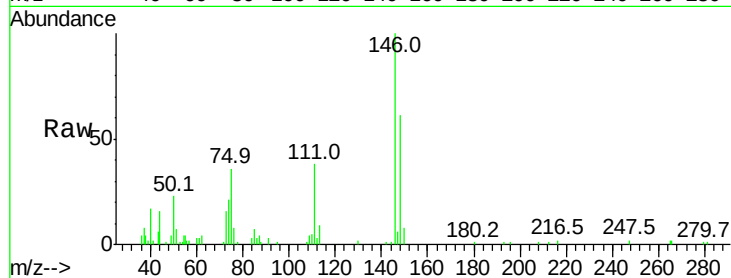
Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

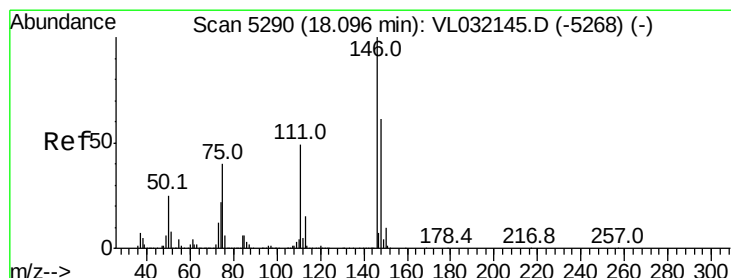
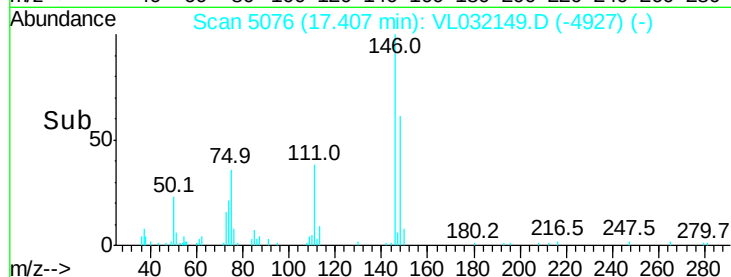
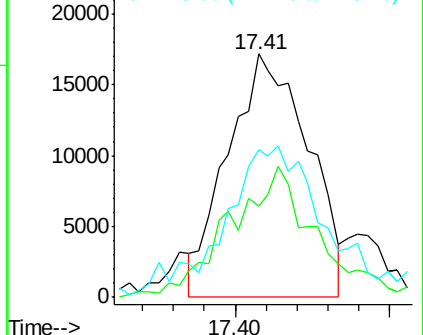
Tgt Ion:	146	Resp:	31115
Ion	Ratio	Lower	Upper
146	100		
111	60.2	21.9	65.8
148	83.2	32.1	96.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#77

1,2-Dichlorobenzene

Concen: 0.051 ppbv

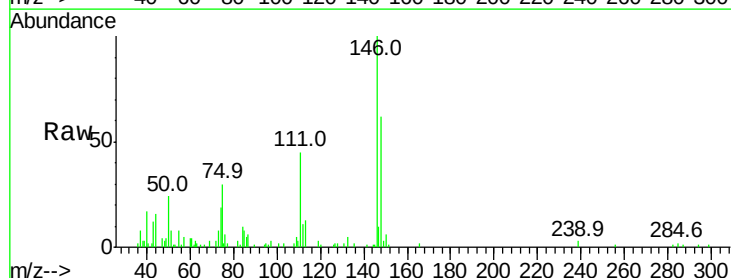
RT: 18.09 min Scan# 5287

Delta R.T. -0.02 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

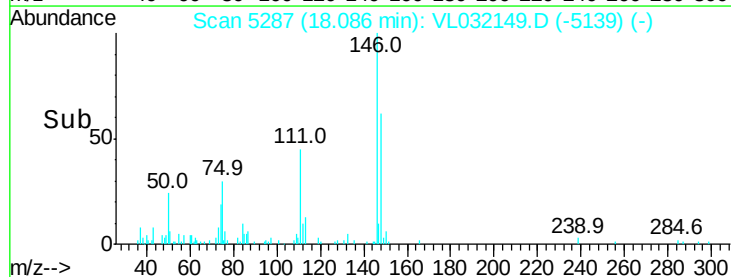
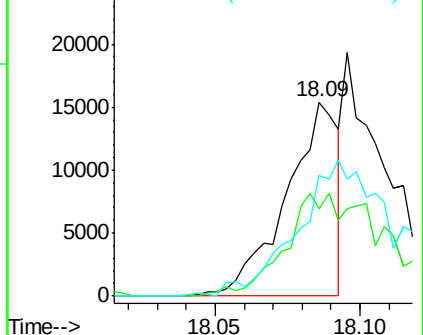
Tgt Ion:	146	Resp:	19047
Ion	Ratio	Lower	Upper
146	100		
111	0.0	23.4	70.3#
148	0.0	32.0	96.0#

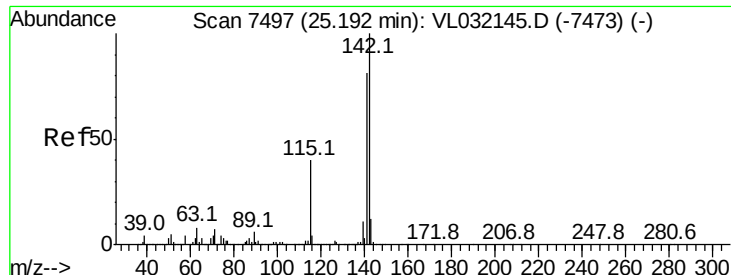


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#80

Naphthalene, 2-methyl-

Concen: 0.039 ppbv

RT: 25.20 min Scan# 7500

Delta R.T. -0.00 min

Lab File: VL032149.D

Acq: 29 Jun 2018 20:37

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.1

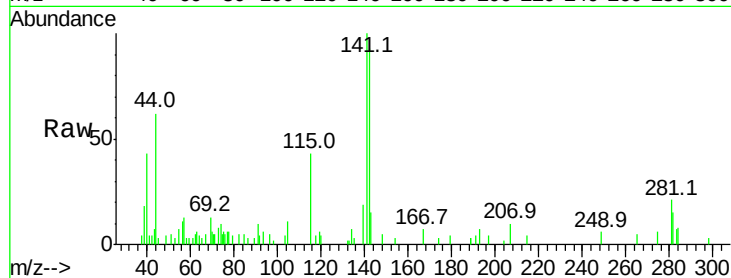
Tgt Ion:142 Resp: 14399

Ion Ratio Lower Upper

142 100

141 87.1 65.8 98.6

115 41.5 29.4 44.0



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

