

Data File : VL032395.D
Acq On : 17 Aug 2018 3:02
Operator : SY/AP
Sample : J4457-02DL 100X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS08-MIVIDL

Quant Time: Aug 17 04:18:05 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081518AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Aug 15 14:58:02 2018
QLast Update : Wed Aug 15 14:58:02 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.81	49	1752065	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.35	114	3596874	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.30	117	3540580	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.64 95 2709438 10.03 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 100.30%

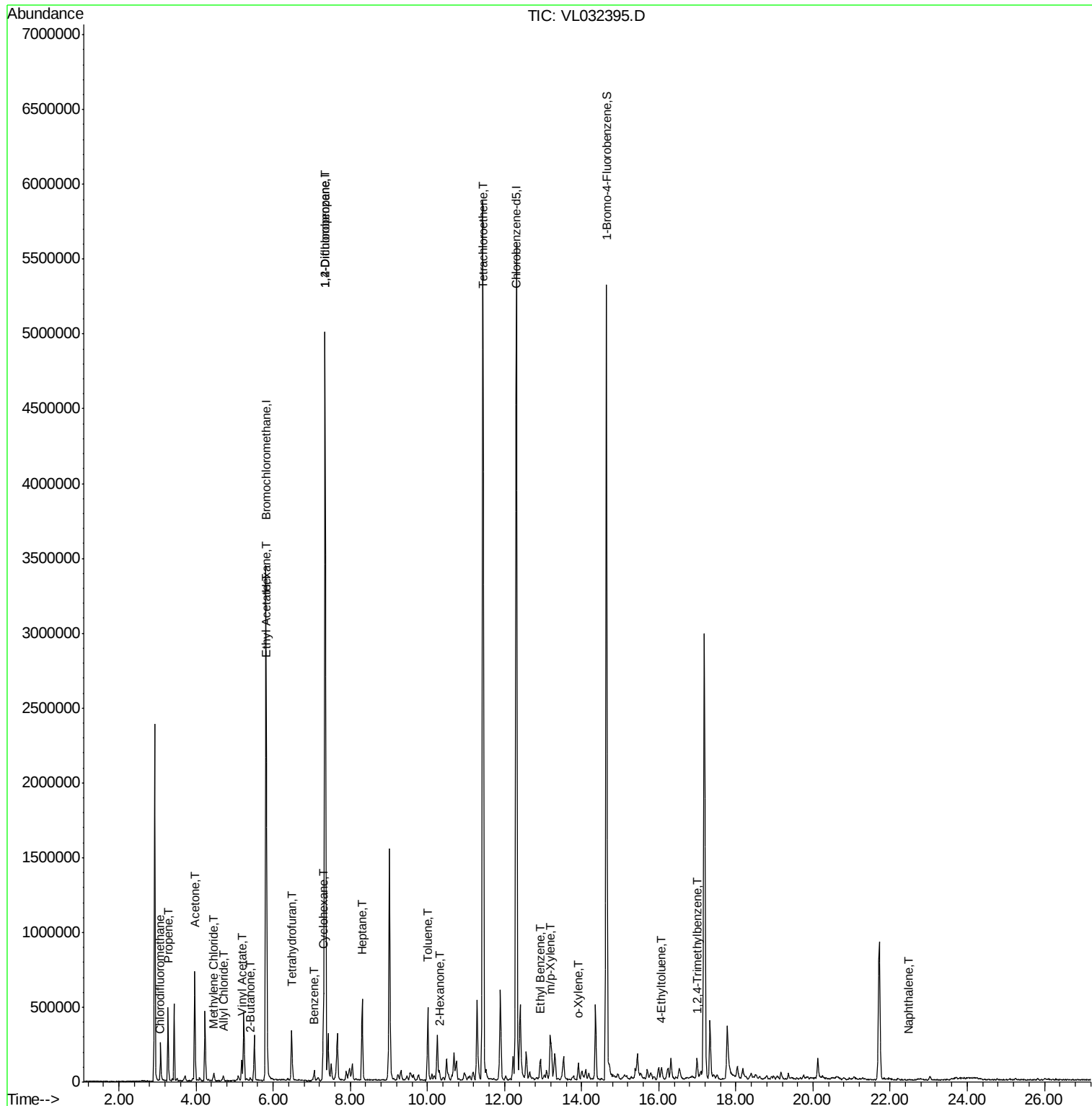
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.11	85	1680	Below Cal		90
3) Chlorodifluoromethane	3.05	51	6841	0.042	ppbv	100
9) Propene	3.27	41	139062	2.002	ppbv	96
10) Heptane	8.31	43	186097	0.890	ppbv	99
15) Acetone	3.97	43	299472	1.799	ppbv #	69
20) Methylene Chloride	4.45	84	16687	0.265	ppbv #	83
21) Allyl Chloride	4.71	41	8008	0.076	ppbv #	64
23) Vinyl Acetate	5.19	43	36280	0.126	ppbv #	1
25) Ethyl Acetate	5.84	43	162229	0.455	ppbv #	79
26) Hexane	5.83	57	209516	1.317	ppbv #	41
30) Cyclohexane	7.31	84	145878	1.204	ppbv #	69
34) 2-Butanone	5.40	43	19476	0.080	ppbv #	91
36) Benzene	7.06	78	51899	0.170	ppbv	98
39) 1,2-Dichloropropane	7.35	63	1006847	7.904	ppbv #	25
41) Tetrahydrofuran	6.48	42	20279	0.154	ppbv #	40
51) 2-Hexanone	10.31	43	17319	0.070	ppbv #	30
52) Tetrachloroethene	11.44	164	1451935	16.145	ppbv	96
53) Toluene	10.01	91	361437	1.081	ppbv	96
58) Ethyl Benzene	12.93	91	110227	0.259	ppbv	93
59) m/p-Xylene	13.21	91	116217	0.321	ppbv #	30
60) o-Xylene	13.92	91	78619	0.221	ppbv	96
72) 4-Ethyltoluene	16.07	105	23927	0.060	ppbv #	54
74) 1,2,4-Trimethylbenzene	16.99	105	82727	0.204	ppbv #	68
79) Naphthalene	22.49	128	611	0.329	ppbv #	61

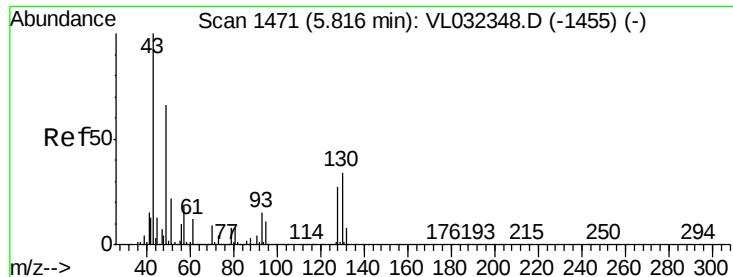
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.81 min Scan# 1470

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

SS08-MIVIDL

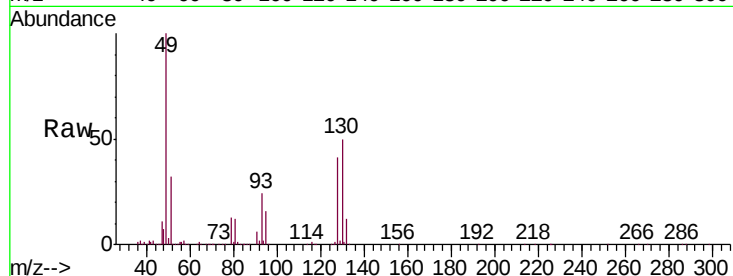
Tgt Ion: 49 Resp: 1752065

Ion Ratio Lower Upper

49 100

128 40.9 20.5 61.6

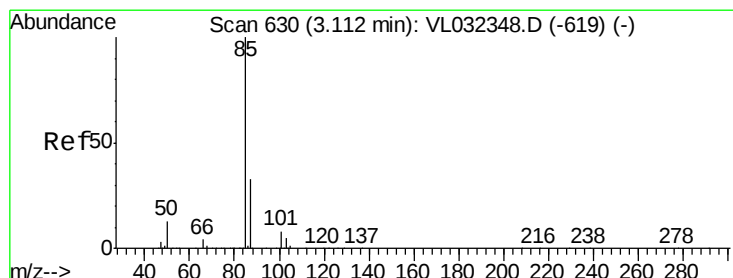
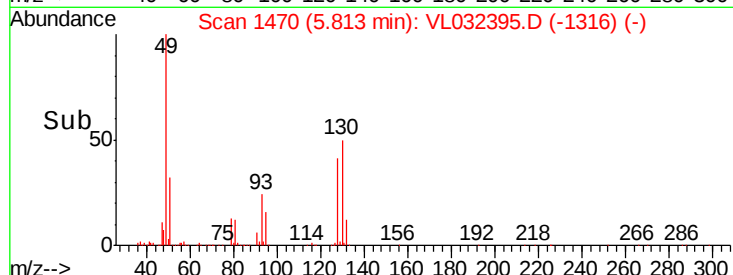
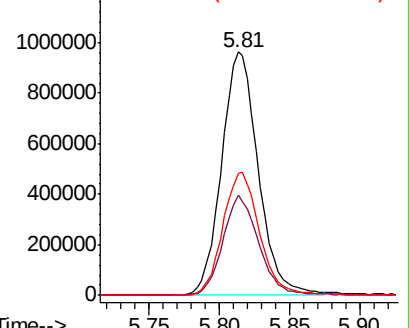
130 51.5 26.2 78.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 3.11 min Scan# 630

Delta R.T. 0.00 min

Lab File: VL032395.D

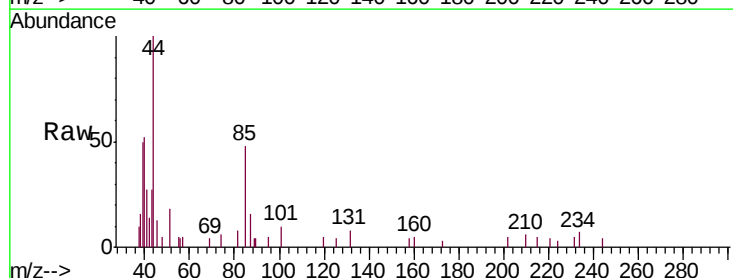
Acq: 17 Aug 2018 3:02

Tgt Ion: 85 Resp: 1680

Ion Ratio Lower Upper

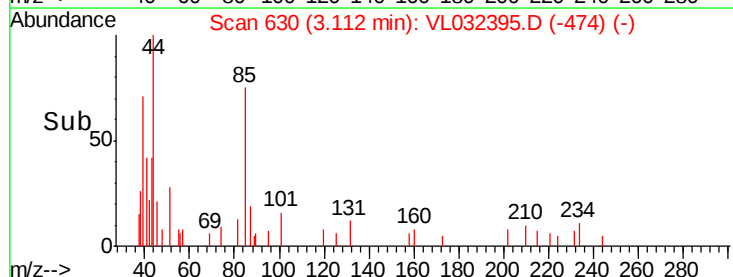
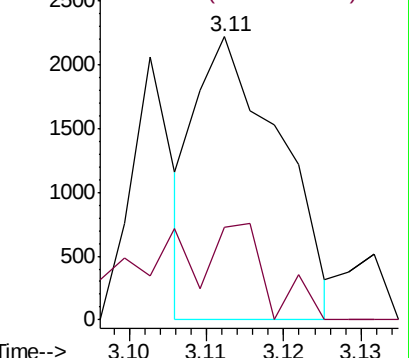
85 100

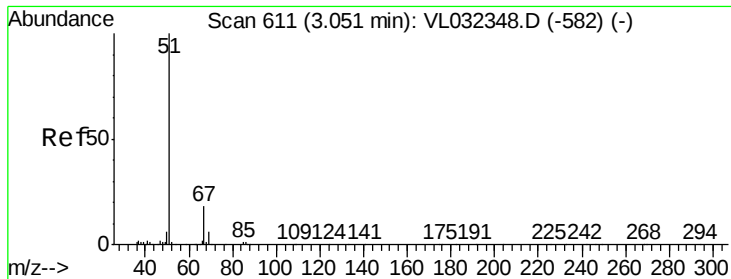
87 38.4 26.3 39.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.042 ppbv

RT: 3.05 min Scan# 611

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

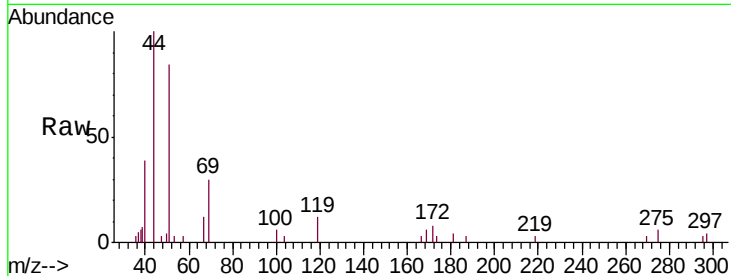
SS08-MIVIDL

Tgt Ion: 51 Resp: 6841

Ion Ratio Lower Upper

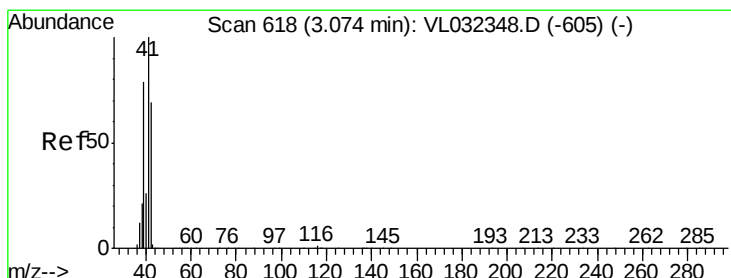
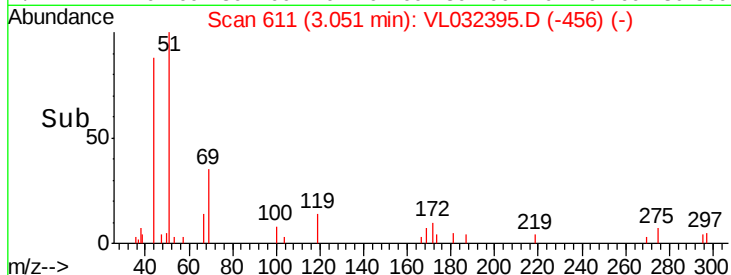
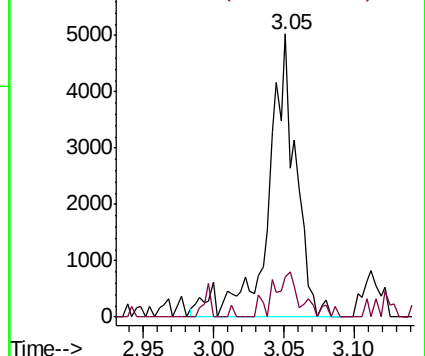
51 100

67 16.9 13.7 20.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 2.002 ppbv

RT: 3.27 min Scan# 680

Delta R.T. 0.20 min

Lab File: VL032395.D

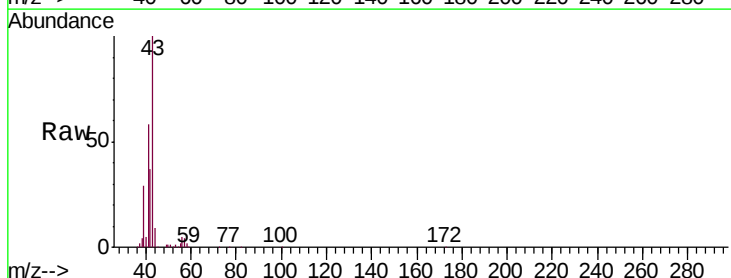
Acq: 17 Aug 2018 3:02

Tgt Ion: 41 Resp: 139062

Ion Ratio Lower Upper

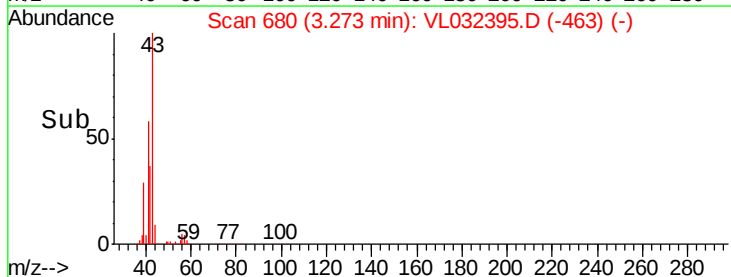
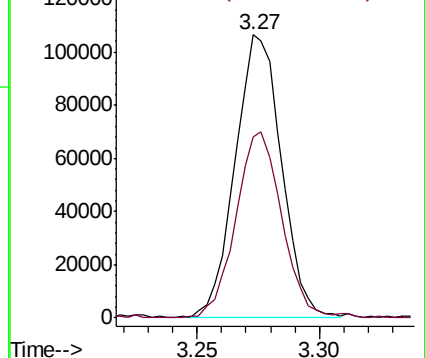
41 100

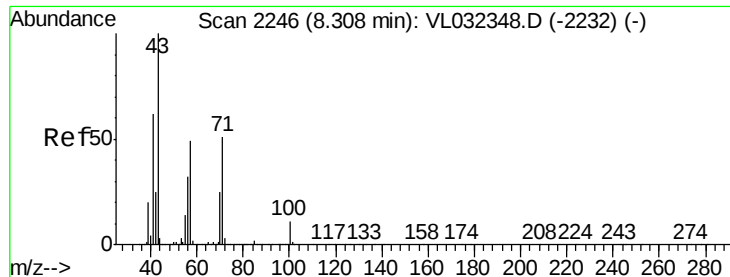
42 66.7 55.9 83.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 0.890 ppbv

RT: 8.31 min Scan# 2246

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

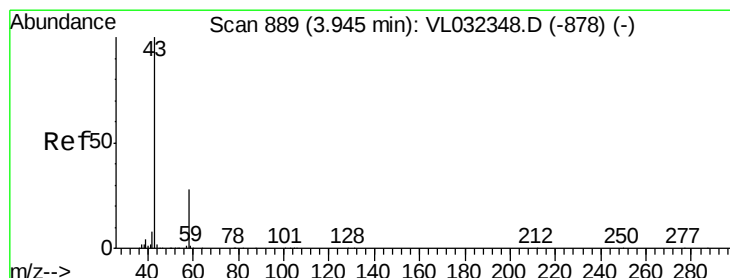
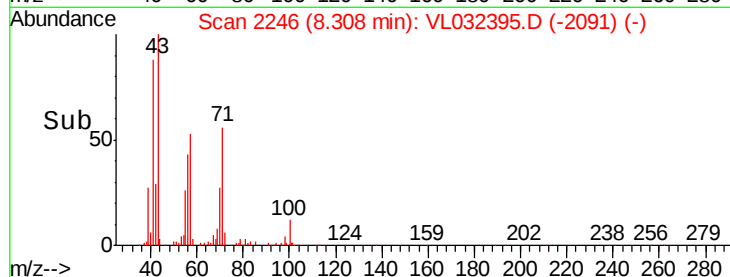
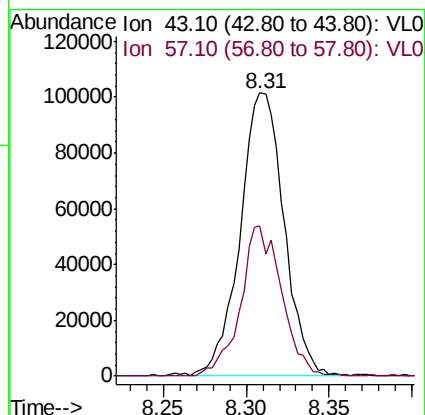
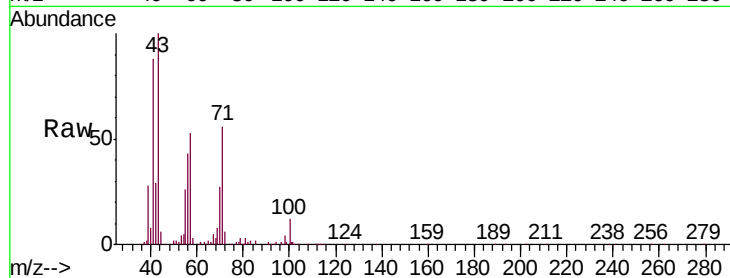
SS08-MIVIDL

Tgt Ion: 43 Resp: 186097

Ion Ratio Lower Upper

43 100

57 50.2 39.5 59.3



#15

Acetone

Concen: 1.799 ppbv

RT: 3.97 min Scan# 896

Delta R.T. 0.02 min

Lab File: VL032395.D

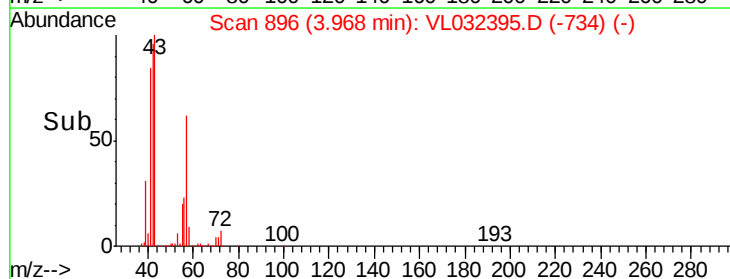
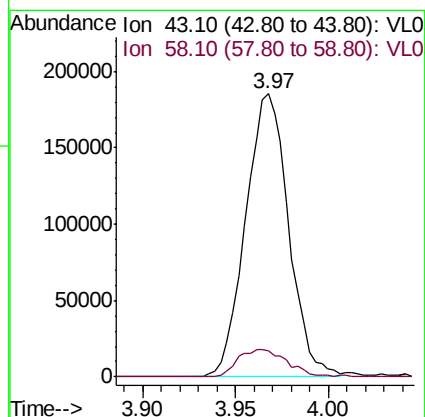
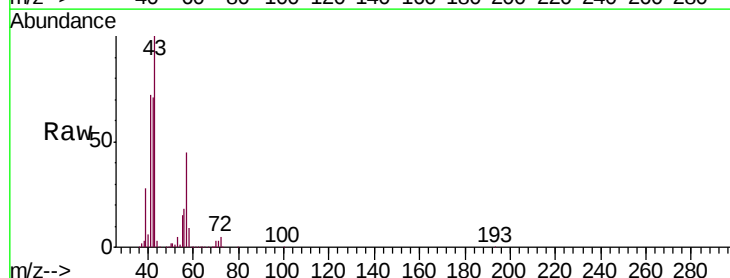
Acq: 17 Aug 2018 3:02

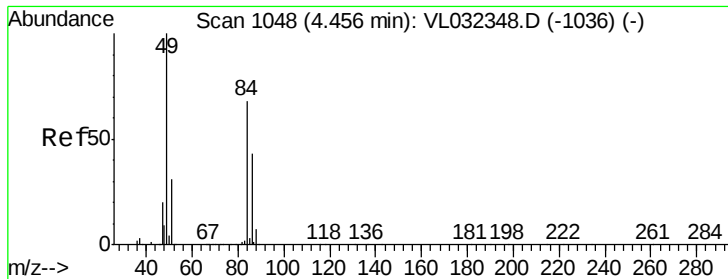
Tgt Ion: 43 Resp: 299472

Ion Ratio Lower Upper

43 100

58 11.5 22.4 33.6#

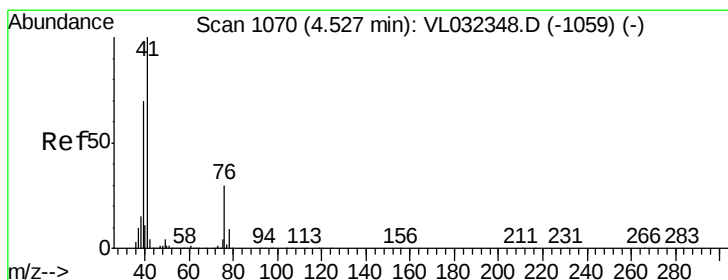
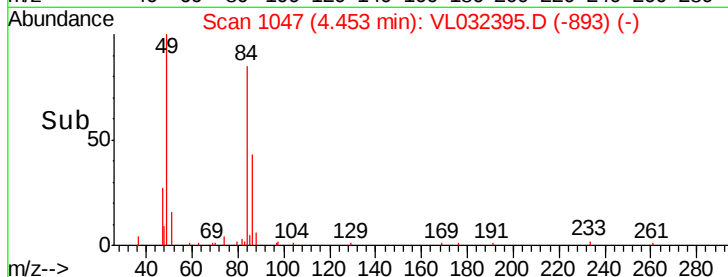
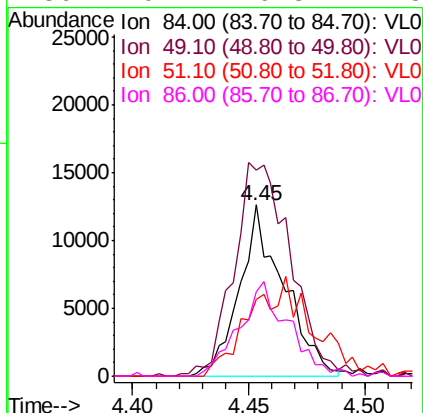
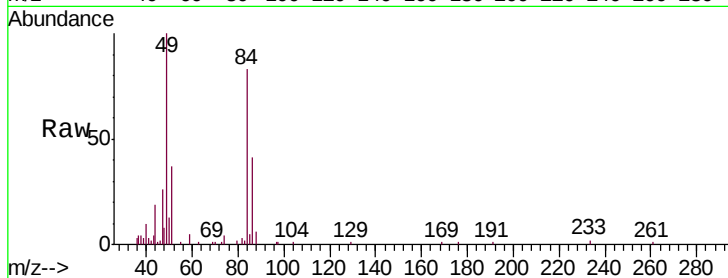




#20
Methylene Chloride
Concen: 0.265 ppbv
RT: 4.45 min Scan# 1047
Delta R.T. -0.00 min
Lab File: VL032395.D
Acq: 17 Aug 2018 3:02

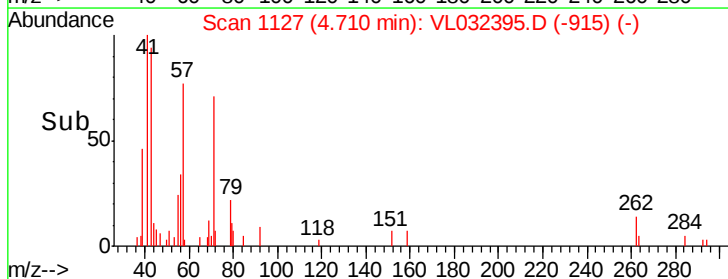
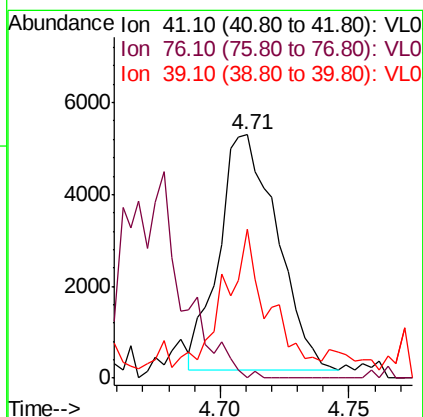
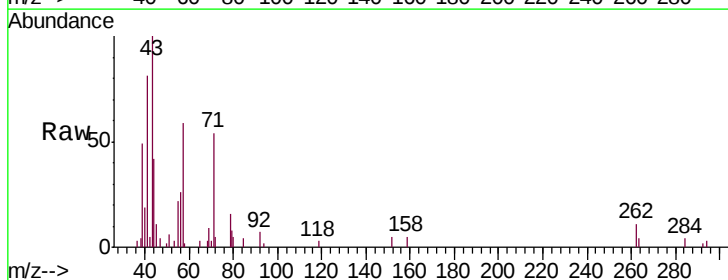
Instrument :
MSVOA_L
ClientSampleID :
SS08-MIVIDL

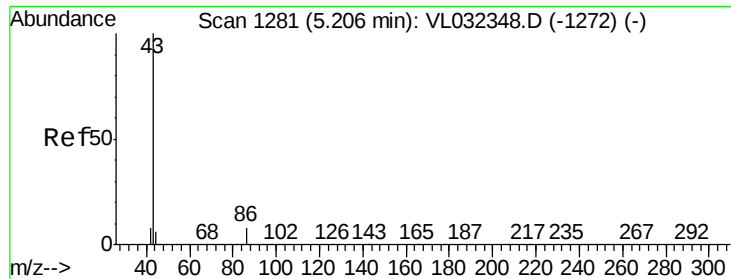
Tgt Ion: 84 Resp: 16687
Ion Ratio Lower Upper
84 100
49 118.6 117.3 175.9
51 44.6 36.6 55.0
86 49.1 49.8 74.8#



#21
Allyl Chloride
Concen: 0.076 ppbv
RT: 4.71 min Scan# 1127
Delta R.T. 0.18 min
Lab File: VL032395.D
Acq: 17 Aug 2018 3:02

Tgt Ion: 41 Resp: 8008
Ion Ratio Lower Upper
41 100
76 85.3 22.9 34.3#
39 65.0 57.6 86.4

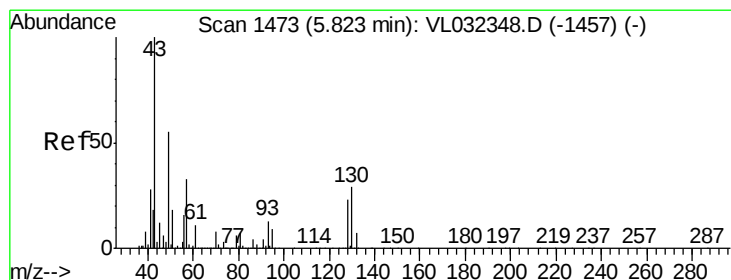
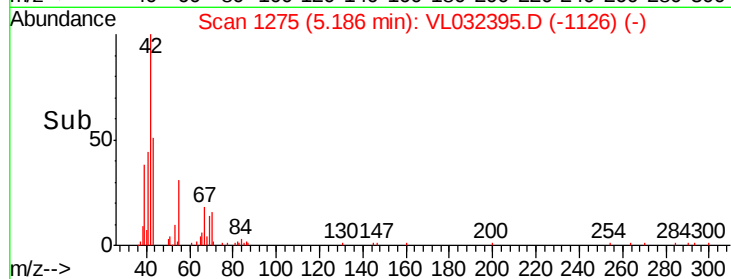
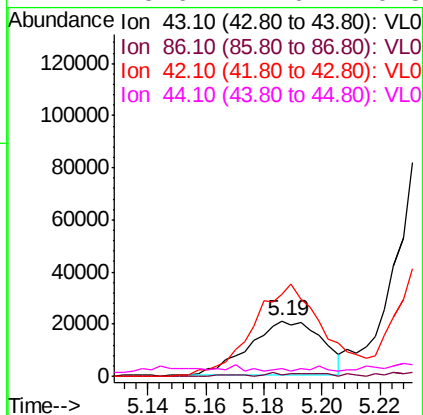
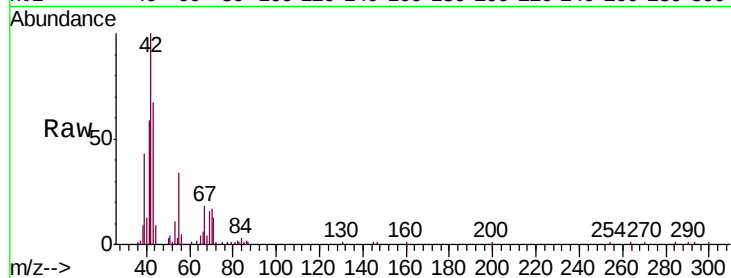




#23
 Vinyl Acetate
 Concen: 0.126 ppbv
 RT: 5.19 min Scan# 1275
 Delta R.T. -0.02 min
 Lab File: VL032395.D
 Acq: 17 Aug 2018 3:02

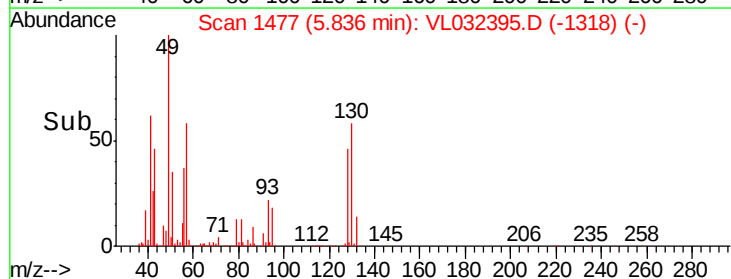
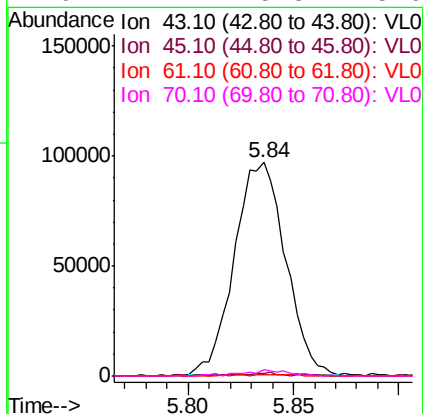
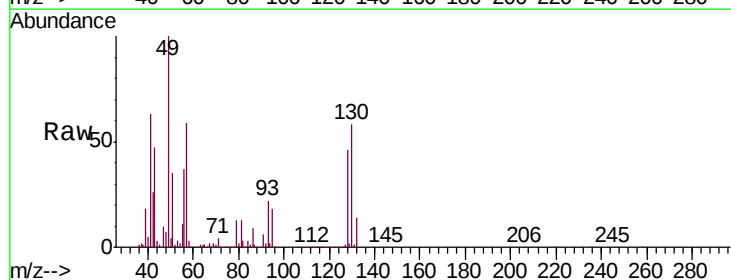
Instrument :
 MSVOA_L
 ClientSampleId :
 SS08-MIVIDL

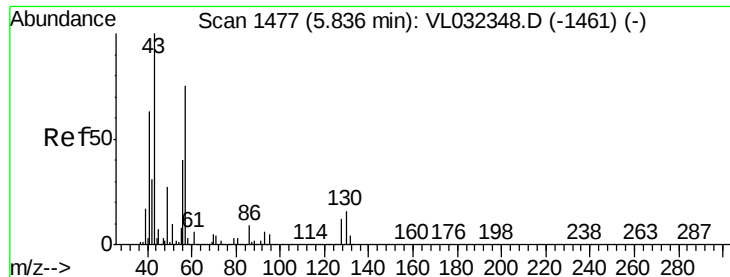
Tgt Ion:	43	Resp:	36280
Ion	Ratio	Lower	Upper
43	100		
86	3.2	5.5	8.3#
42	174.6	7.0	10.6#
44	5.6	4.6	6.8



#25
 Ethyl Acetate
 Concen: 0.455 ppbv
 RT: 5.84 min Scan# 1477
 Delta R.T. 0.01 min
 Lab File: VL032395.D
 Acq: 17 Aug 2018 3:02

Tgt Ion:	43	Resp:	162229
Ion	Ratio	Lower	Upper
43	100		
45	1.1	7.9	11.9#
61	0.9	7.4	11.2#
70	2.7	5.8	8.6#





#26

Hexane

Concen: 1.317 ppbv

RT: 5.83 min Scan# 1476

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

SS08-MIVIDL

Tgt Ion: 57 Resp: 209516

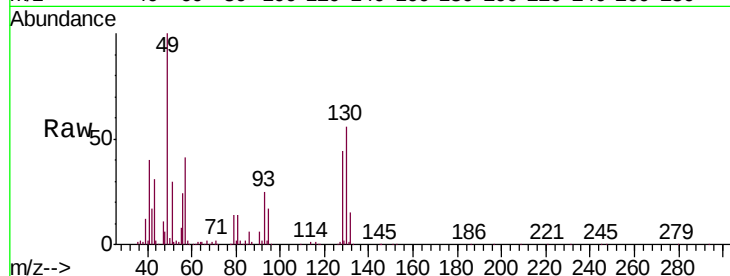
Ion Ratio Lower Upper

57 100

41 99.9 68.0 102.0

43 79.4 175.3 262.9#

56 61.1 42.0 63.0

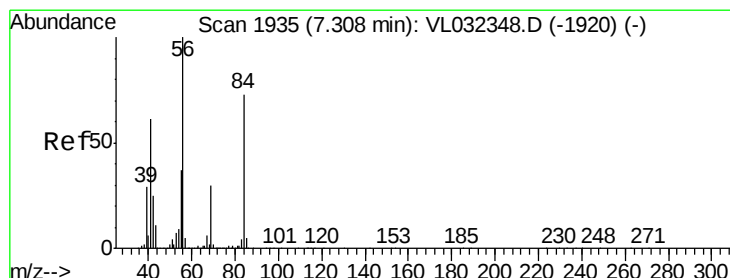
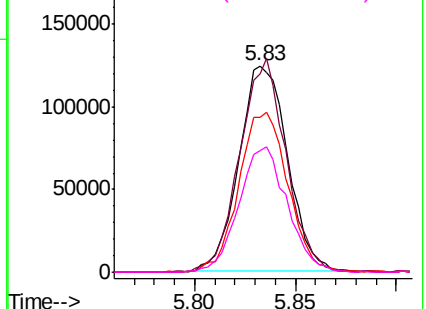
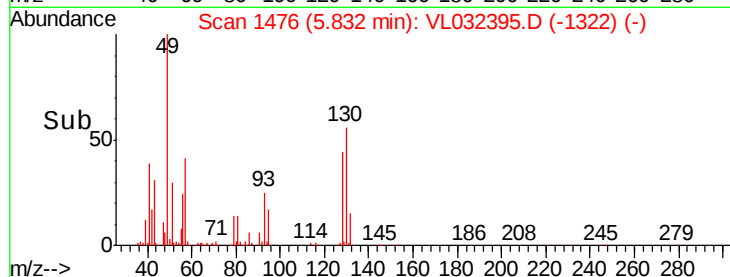


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#30

Cyclohexane

Concen: 1.204 ppbv

RT: 7.31 min Scan# 1934

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

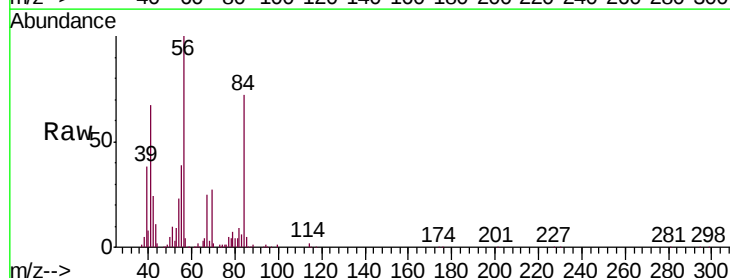
Tgt Ion: 84 Resp: 145878

Ion Ratio Lower Upper

84 100

56 196.8 115.7 173.5#

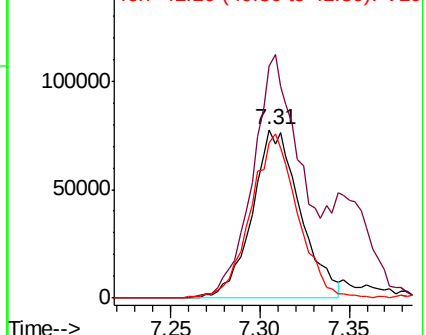
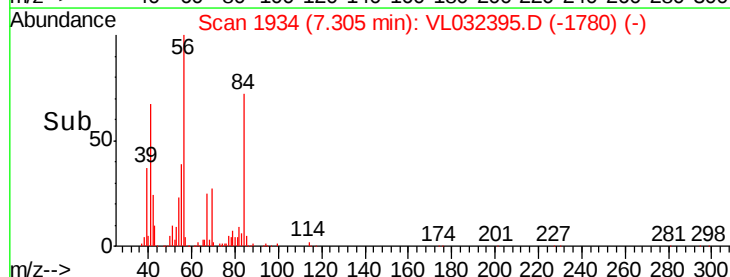
41 96.0 67.9 101.9

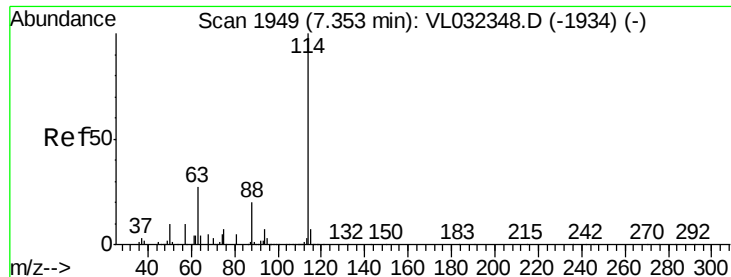


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

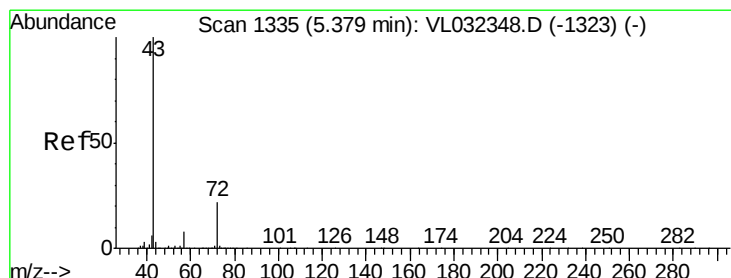
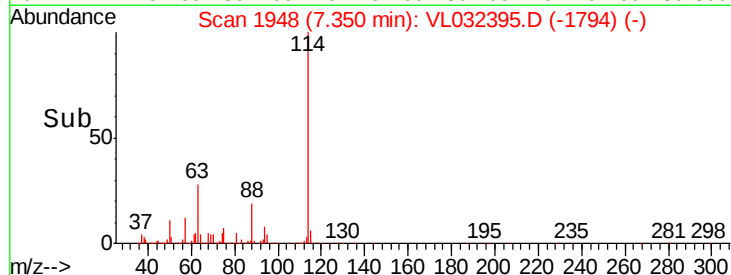
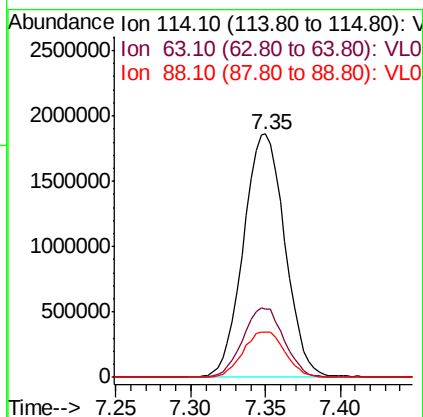
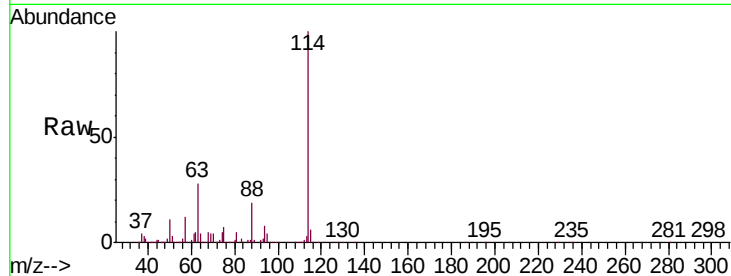




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.35 min Scan# 1948
 Delta R.T. -0.00 min
 Lab File: VL032395.D
 Acq: 17 Aug 2018 3:02

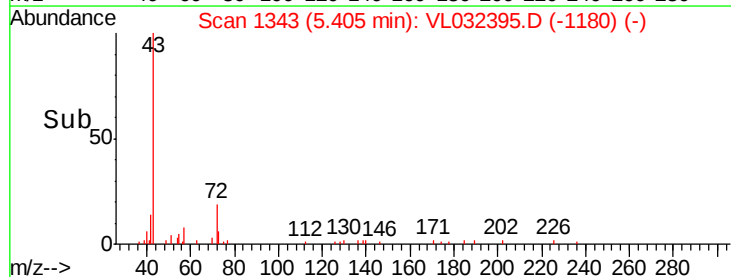
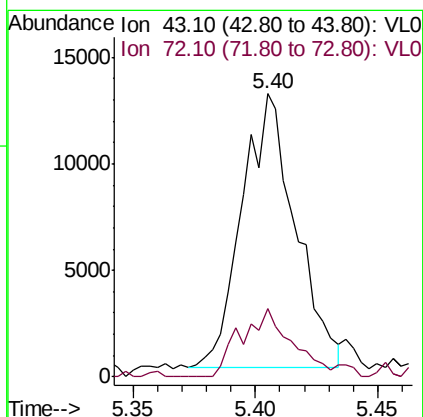
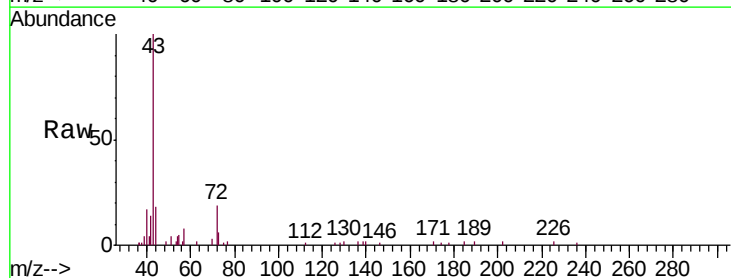
Instrument :
 MSVOA_L
 ClientSampleId :
 SS08-MIVIDL

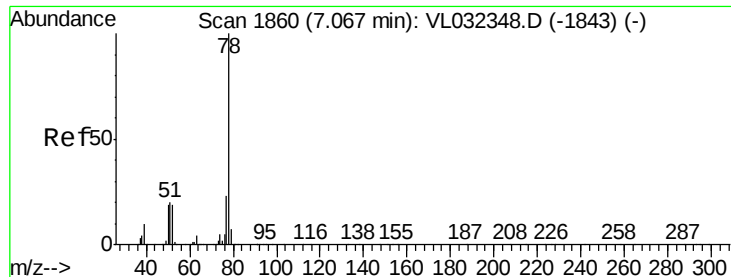
Tgt Ion:114 Resp: 3596874
 Ion Ratio Lower Upper
 114 100
 63 28.4 22.0 33.0
 88 19.2 15.3 22.9



#34
 2-Butanone
 Concen: 0.080 ppbv
 RT: 5.40 min Scan# 1343
 Delta R.T. 0.03 min
 Lab File: VL032395.D
 Acq: 17 Aug 2018 3:02

Tgt Ion: 43 Resp: 19476
 Ion Ratio Lower Upper
 43 100
 72 26.9 17.9 26.9#





#36

Benzene

Concen: 0.170 ppbv

RT: 7.06 min Scan# 1858

Delta R.T. -0.01 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

SS08-MIVIDL

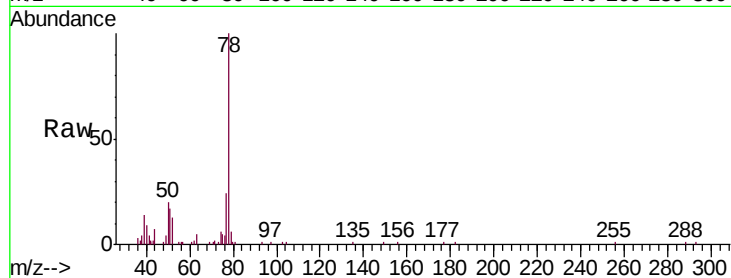
Tgt Ion: 78 Resp: 51899

Ion Ratio Lower Upper

78 100

77 23.7 18.0 27.0

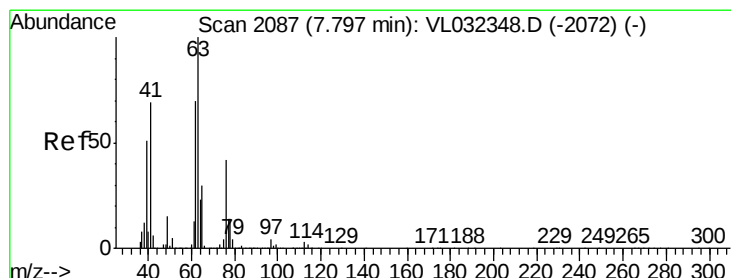
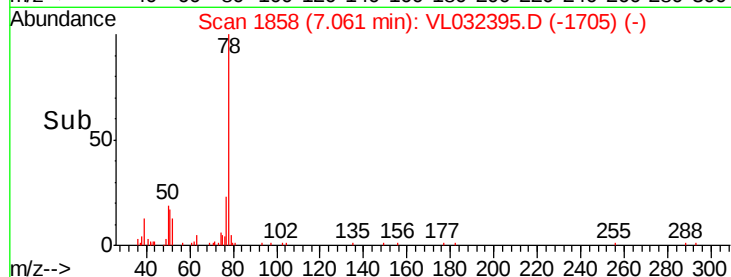
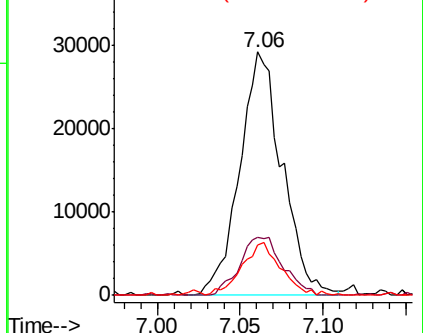
50 19.8 15.1 22.7



Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 7.904 ppbv

RT: 7.35 min Scan# 1947

Delta R.T. -0.45 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

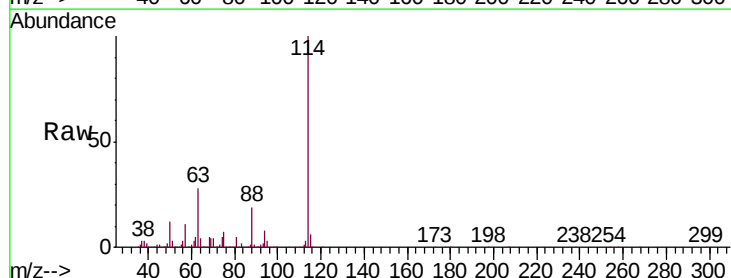
Tgt Ion: 63 Resp: 1006847

Ion Ratio Lower Upper

63 100

41 0.0 55.5 83.3#

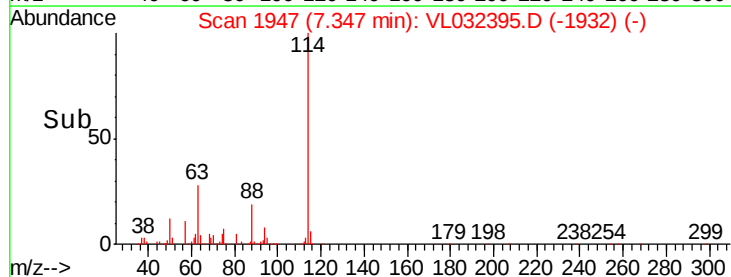
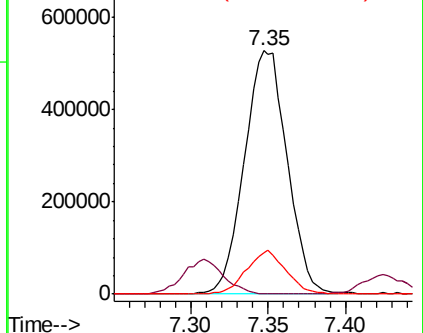
62 17.1 56.3 84.5#

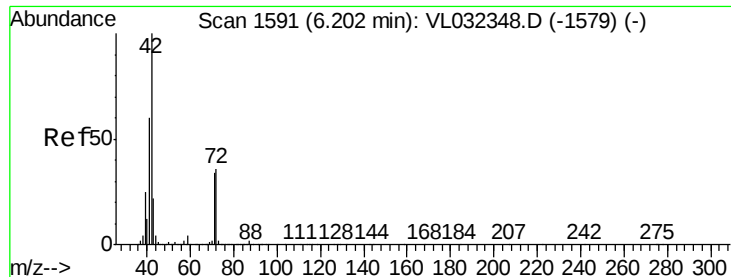


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#41

Tetrahydrofuran

Concen: 0.154 ppbv

RT: 6.48 min Scan# 1677

Delta R.T. 0.28 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

SS08-MIVIDL

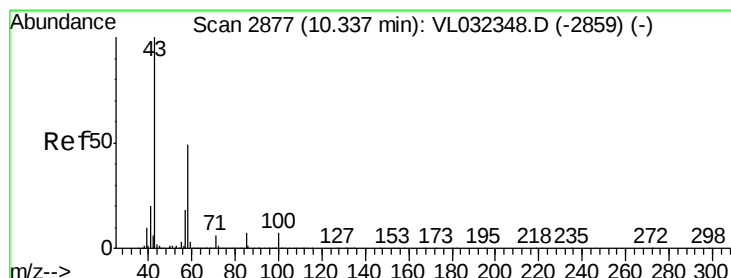
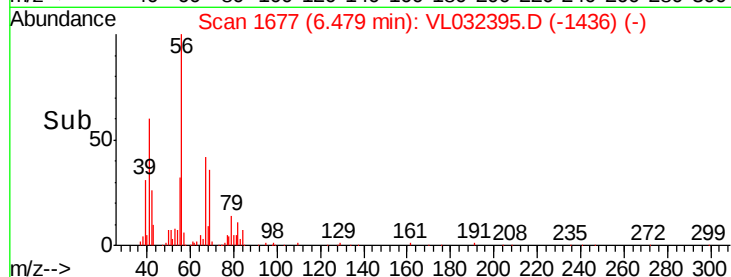
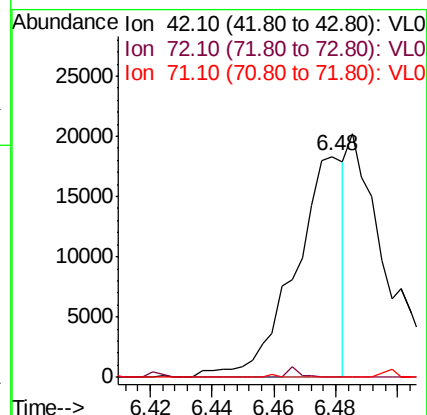
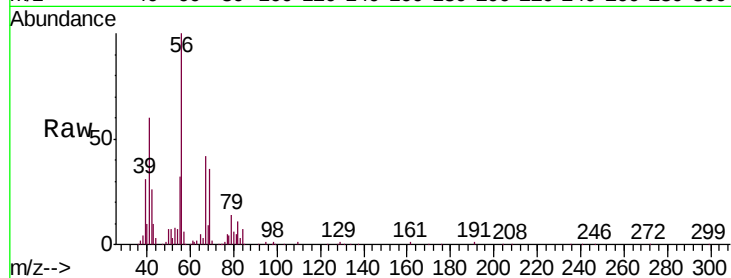
Tgt Ion: 42 Resp: 20279

Ion Ratio Lower Upper

42 100

72 1.2 29.8 44.6#

71 0.0 28.2 42.2#



#51

2-Hexanone

Concen: 0.070 ppbv

RT: 10.31 min Scan# 2868

Delta R.T. -0.03 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

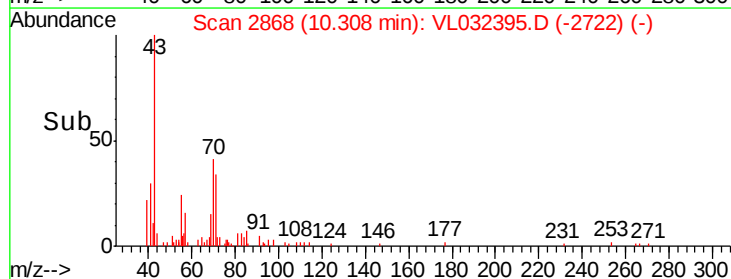
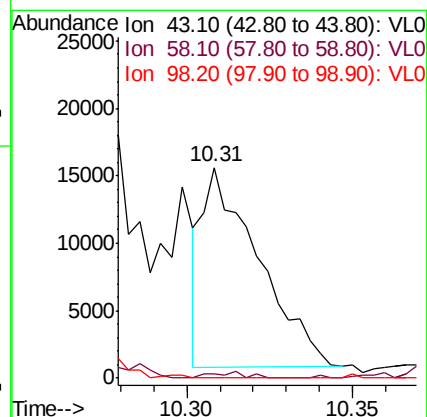
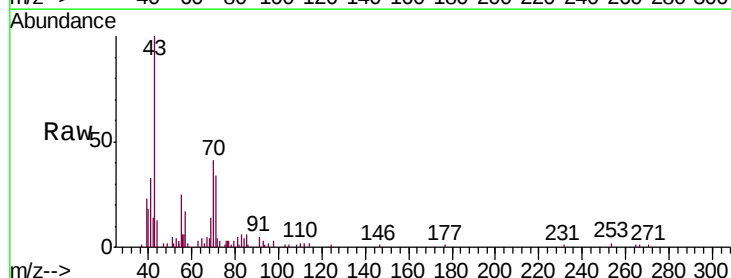
Tgt Ion: 43 Resp: 17319

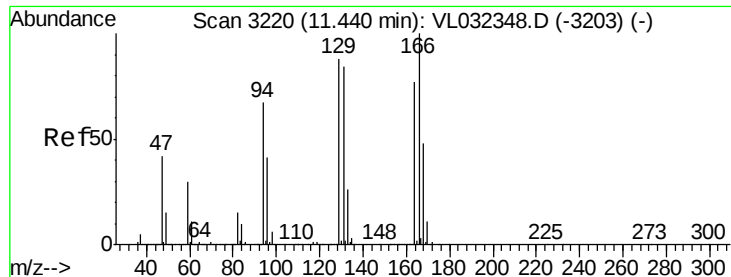
Ion Ratio Lower Upper

43 100

58 1.4 39.5 59.3#

98 0.0 0.3 0.5#





#52

Tetrachloroethene

Concen: 16.145 ppbv

RT: 11.44 min Scan# 3219

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

SS08-MIVIDL

Tgt Ion:164 Resp: 1451935

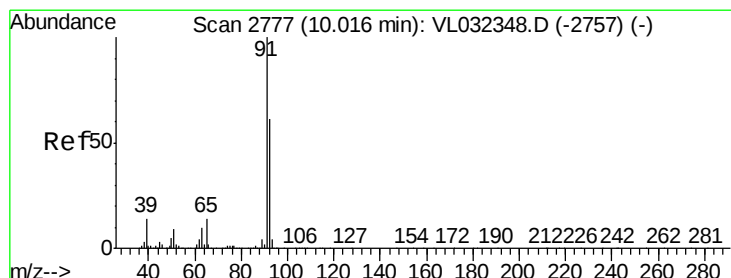
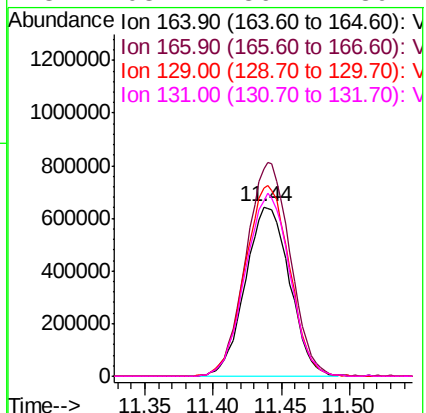
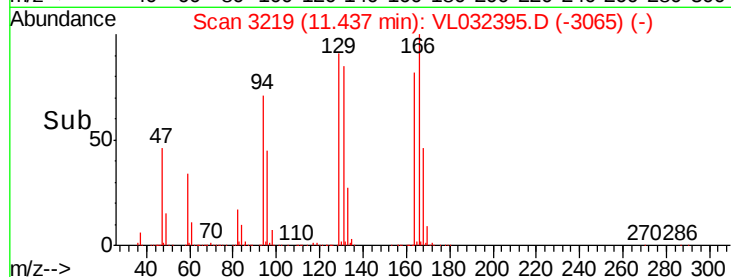
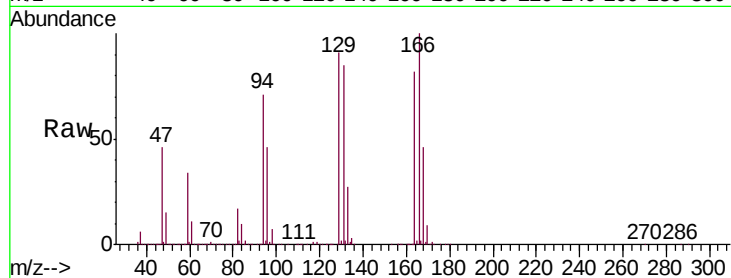
Ion Ratio Lower Upper

164 100

166 122.5 103.5 155.3

129 111.4 90.9 136.3

131 103.7 86.7 130.1



#53

Toluene

Concen: 1.081 ppbv

RT: 10.01 min Scan# 2776

Delta R.T. -0.00 min

Lab File: VL032395.D

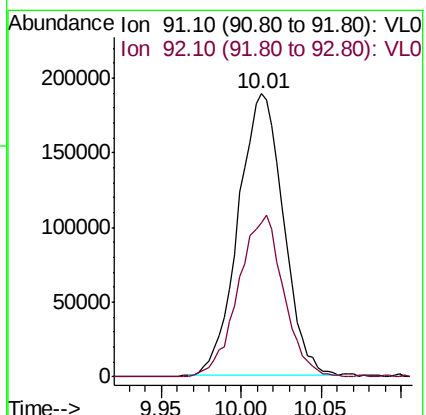
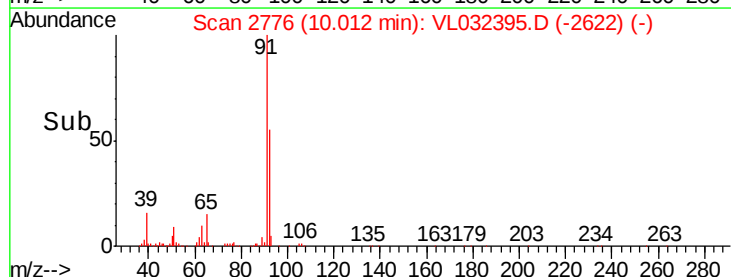
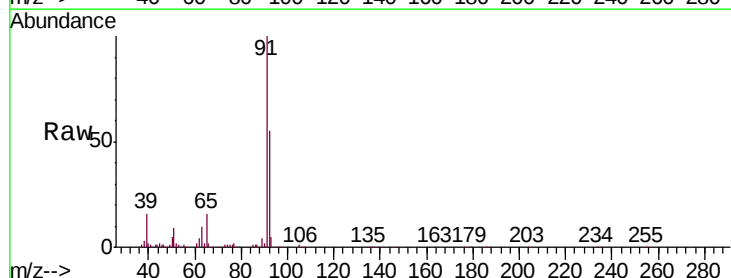
Acq: 17 Aug 2018 3:02

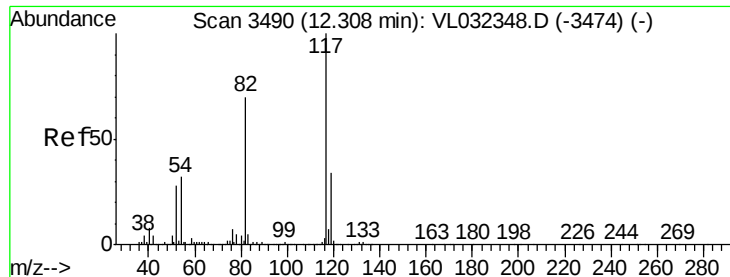
Tgt Ion: 91 Resp: 361437

Ion Ratio Lower Upper

91 100

92 58.1 48.7 73.1

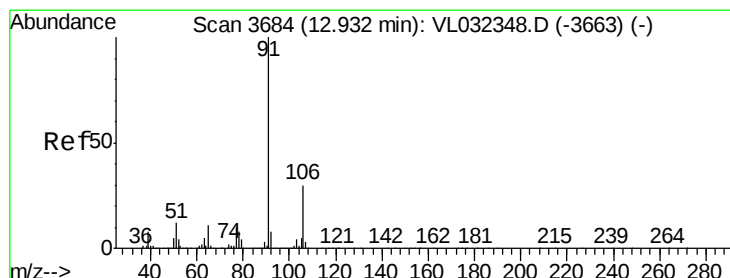
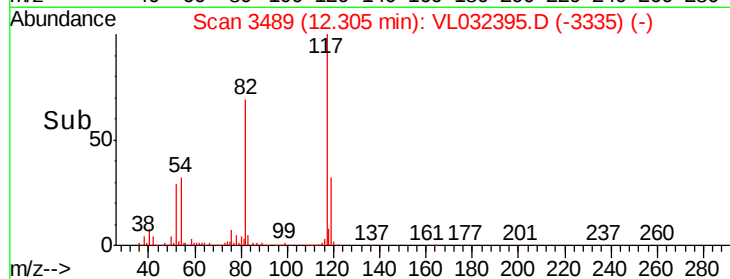
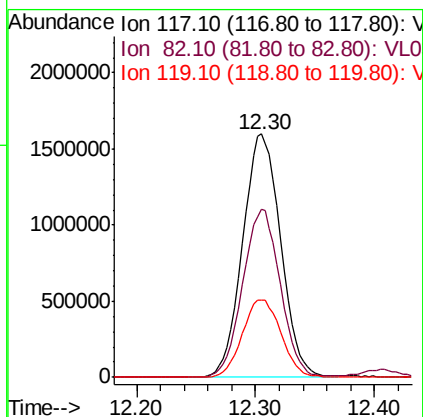
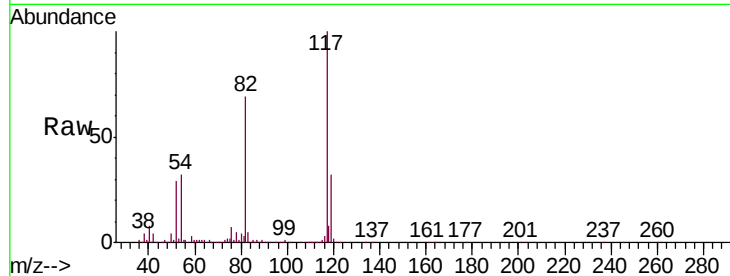




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.30 min Scan# 3489
Delta R.T. -0.00 min
Lab File: VL032395.D
Acq: 17 Aug 2018 3:02

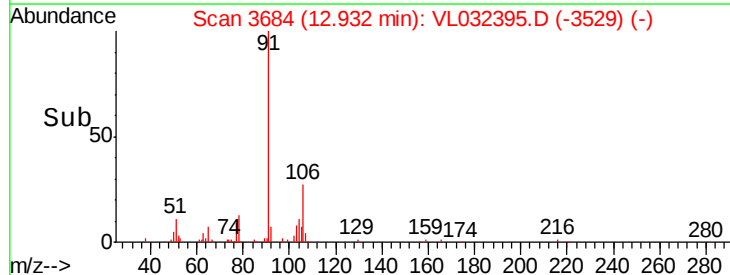
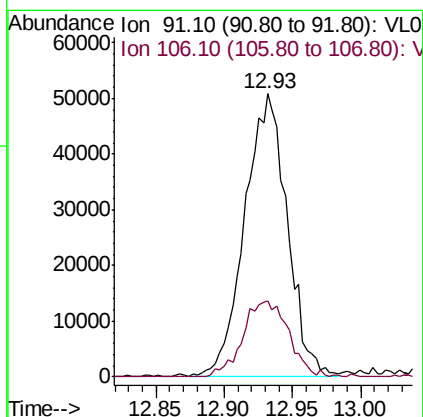
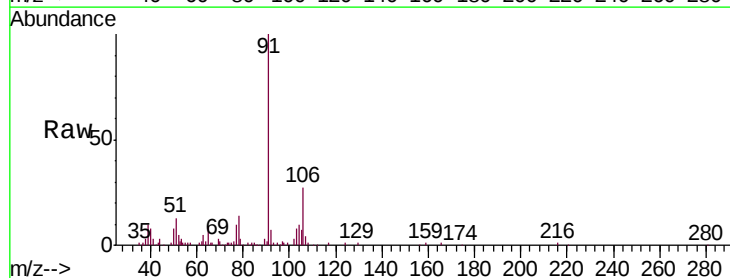
Instrument :
MSVOA_L
ClientSampleId :
SS08-MIVIDL

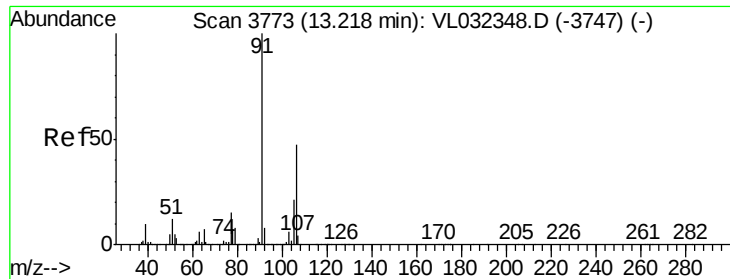
Tgt Ion: 117 Resp: 3540580
Ion Ratio Lower Upper
117 100
82 68.0 55.1 82.7
119 32.4 46.0 69.0#



#58
Ethyl Benzene
Concen: 0.259 ppbv
RT: 12.93 min Scan# 3684
Delta R.T. -0.00 min
Lab File: VL032395.D
Acq: 17 Aug 2018 3:02

Tgt Ion: 91 Resp: 110227
Ion Ratio Lower Upper
91 100
106 26.8 24.3 36.5

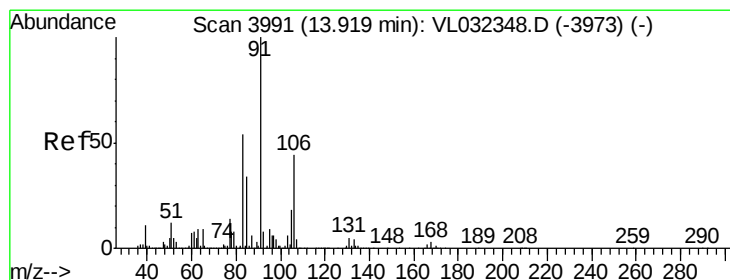
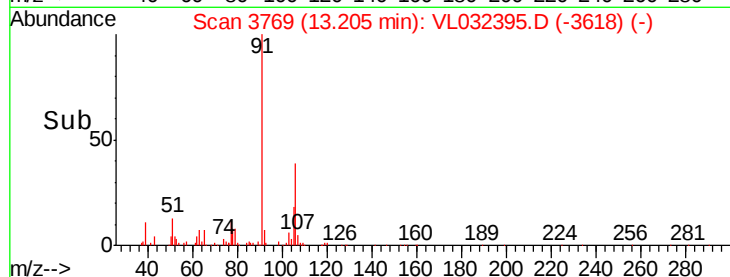
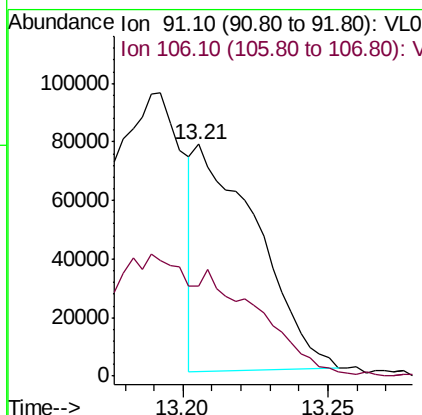
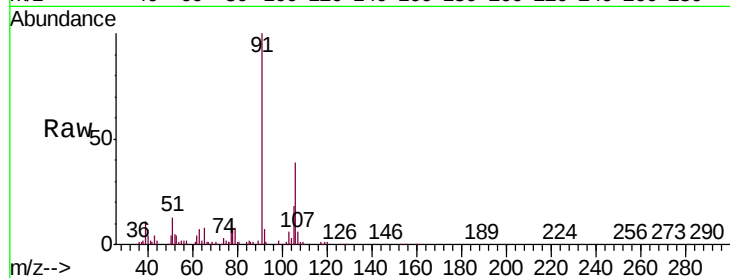




#59
m/p-Xylene
Concen: 0.321 ppbv
RT: 13.21 min Scan# 3769
Delta R.T. -0.01 min
Lab File: VL032395.D
Acq: 17 Aug 2018 3:02

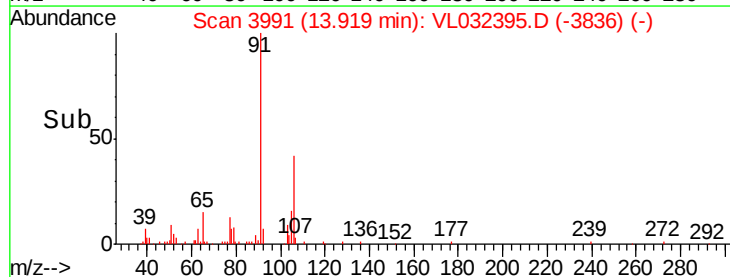
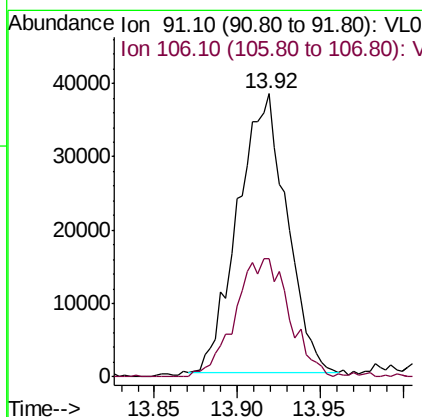
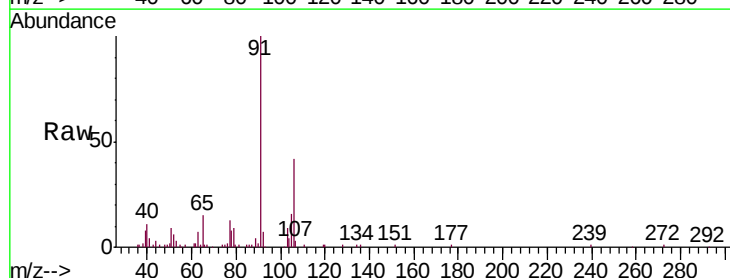
Instrument :
MSVOA_L
ClientSampleId :
SS08-MIVIDL

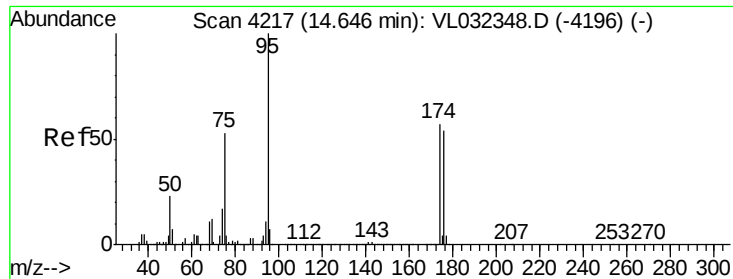
Tgt Ion: 91 Resp: 116217
Ion Ratio Lower Upper
91 100
106 0.0 37.0 55.4#



#60
o-Xylene
Concen: 0.221 ppbv
RT: 13.92 min Scan# 3991
Delta R.T. -0.00 min
Lab File: VL032395.D
Acq: 17 Aug 2018 3:02

Tgt Ion: 91 Resp: 78619
Ion Ratio Lower Upper
91 100
106 47.1 22.3 66.8

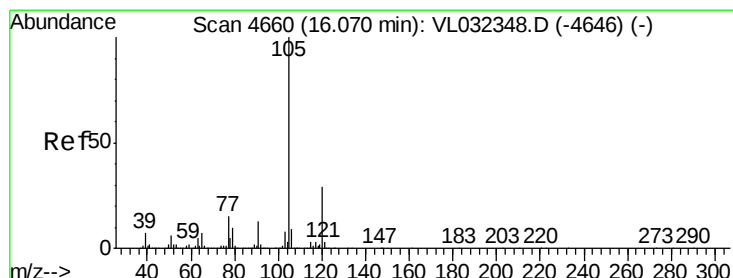
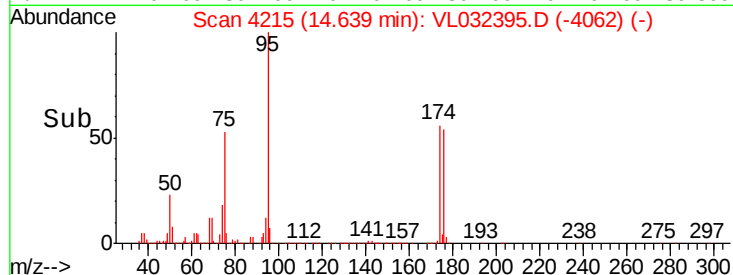
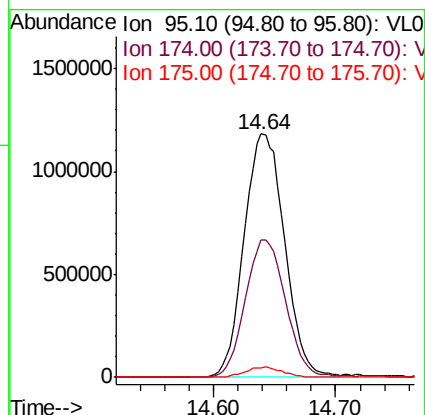
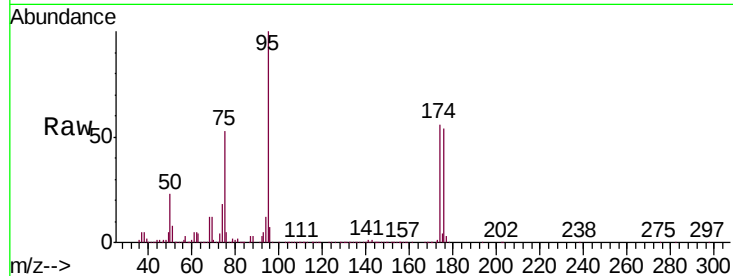




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.030 ppbv
 RT: 14.64 min Scan# 4215
 Delta R.T. -0.01 min
 Lab File: VL032395.D
 Acq: 17 Aug 2018 3:02

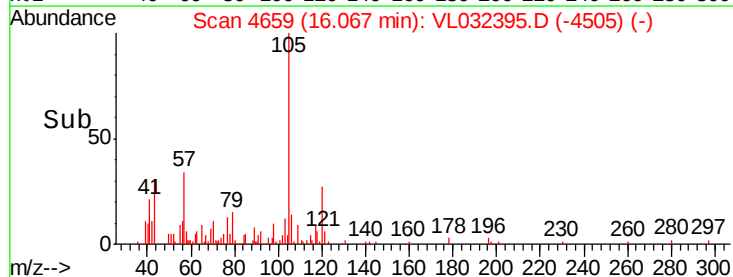
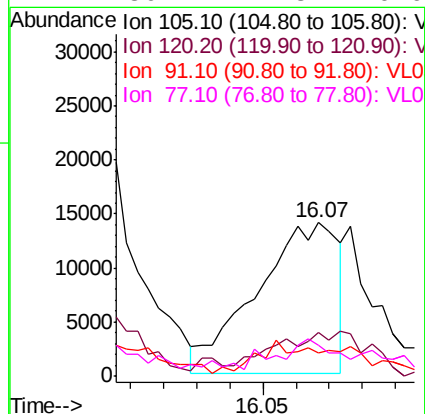
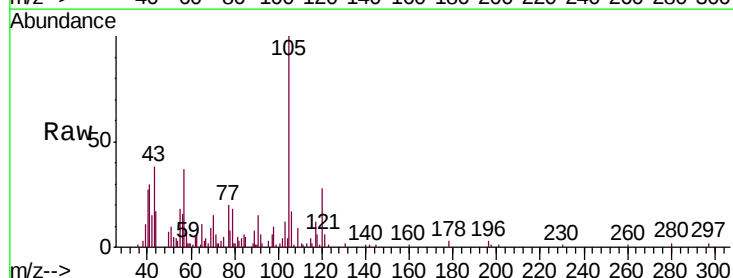
Instrument :
 MSVOA_L
 ClientSampleId :
 SS08-MIVIDL

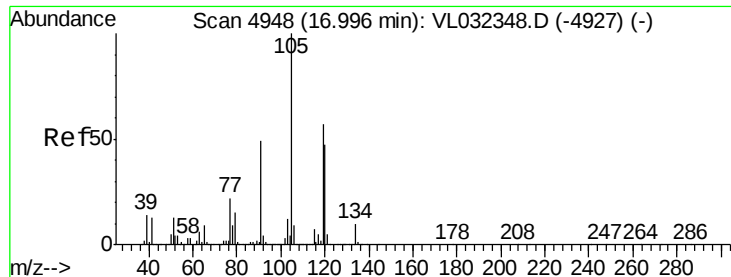
Tgt Ion: 95 Resp: 2709438
 Ion Ratio Lower Upper
 95 100
 174 57.1 46.2 69.4
 175 4.0 3.4 5.0



#72
 4-Ethyltoluene
 Concen: 0.060 ppbv
 RT: 16.07 min Scan# 4659
 Delta R.T. -0.00 min
 Lab File: VL032395.D
 Acq: 17 Aug 2018 3:02

Tgt Ion: 105 Resp: 23927
 Ion Ratio Lower Upper
 105 100
 120 0.0 23.4 35.0#
 91 25.3 10.0 15.0#
 77 30.1 11.3 16.9#





#74

1,2,4-Trimethylbenzene

Concen: 0.204 ppbv

RT: 16.99 min Scan# 4947

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

Instrument :

MSVOA_L

ClientSampleId :

SS08-MIVIDL

Tgt Ion:105 Resp: 82727

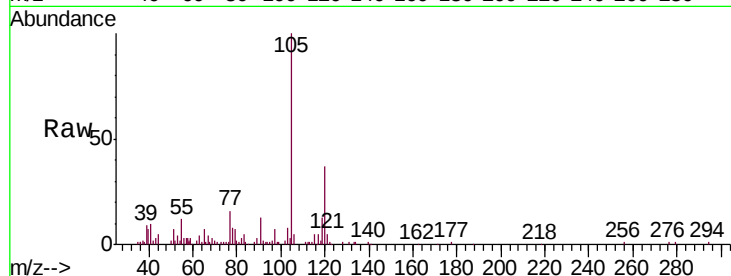
Ion Ratio Lower Upper

105 100

120 36.3 37.6 56.4#

91 12.4 39.9 59.9#

77 14.4 17.8 26.8#



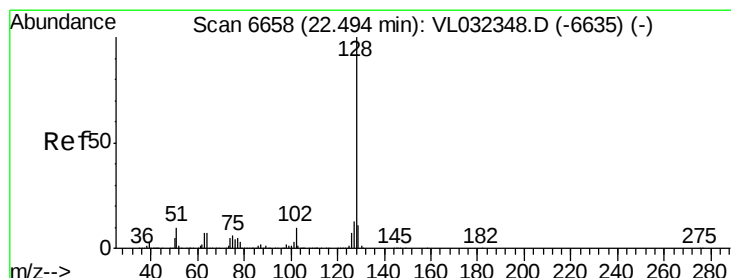
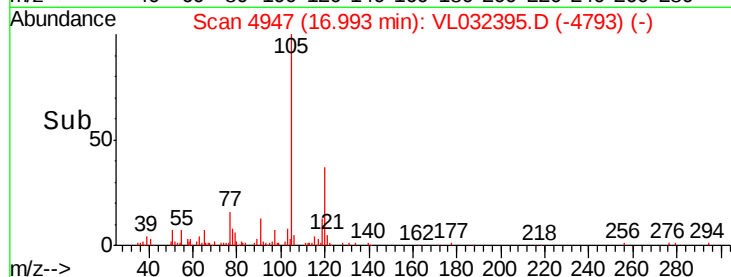
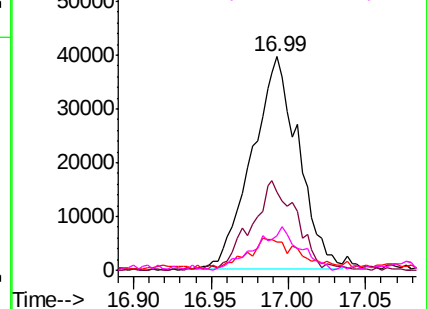
Abundance

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



#79

Naphthalene

Concen: 0.329 ppbv

RT: 22.49 min Scan# 6657

Delta R.T. -0.00 min

Lab File: VL032395.D

Acq: 17 Aug 2018 3:02

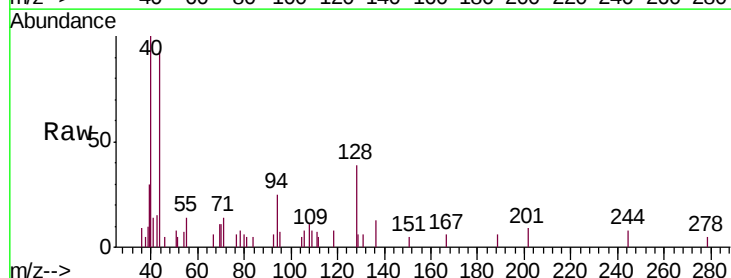
Tgt Ion:128 Resp: 611

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

129 28.8 8.6 13.0#



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

