

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL020419\
 Data File : VL033162.D
 Acq On : 4 Feb 2019 19:53
 Operator : SY/AP
 Sample : K1267-01DL 10X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSA2DL

Quant Time: Feb 05 01:05:28 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Feb 04 14:41:39 2019
 QLast Update : Mon Feb 04 14:41:39 2019
 Response via : Initial Calibration

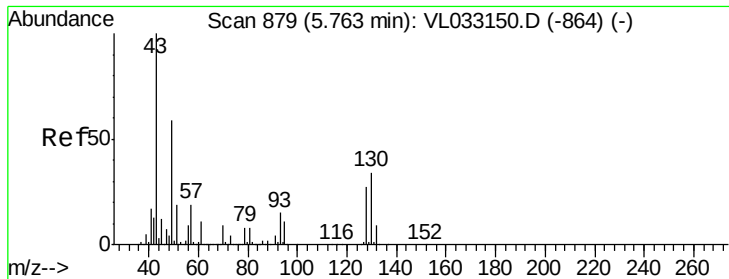
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1507062	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3498887	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	3365219	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2508647	10.00	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	11700	0.053	ppbv	92
3) Chlorodifluoromethane	3.02	51	6589	0.039	ppbv	97
9) Propene	3.04	41	9541	0.113	ppbv	93
10) Heptane	8.25	43	38711	0.147	ppbv	96
15) Acetone	3.90	43	1380560	7.694	ppbv	99
17) tert-Butyl alcohol	4.39	59	1654	0.042	ppbv #	1
20) Methylene Chloride	4.41	84	6854	0.111	ppbv #	72
26) Hexane	5.78	57	17280	0.100	ppbv #	40
30) Cyclohexane	7.25	84	6113	0.037	ppbv #	4
36) Benzene	7.01	78	33672	0.095	ppbv #	92
39) 1,2-Dichloropropane	7.29	63	896319	6.607	ppbv #	27
53) Toluene	9.95	91	719475	1.713	ppbv	100
58) Ethyl Benzene	12.86	91	46776	0.088	ppbv	92
59) m/p-Xylene	13.12	91	50190	0.116	ppbv #	1
60) o-Xylene	13.86	91	17256	0.043	ppbv #	30
61) Styrene	13.69	104	11696	0.037	ppbv #	85
62) Isopropylbenzene	14.83	105	459725	0.805	ppbv	97
74) 1,2,4-Trimethylbenzene	16.93	105	22938	0.049	ppbv #	72

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.01 min

Lab File: VL033162.D

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SSA2DL

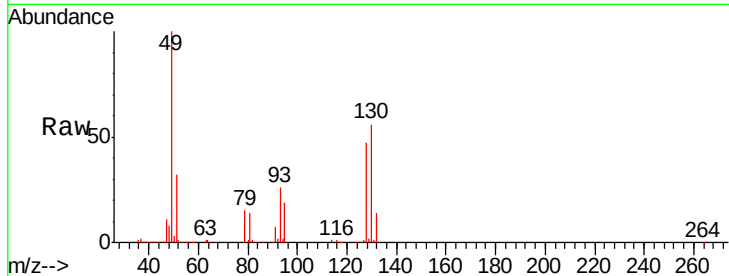
Tgt Ion: 49 Resp: 1507062

Ion Ratio Lower Upper

49 100

128 45.7 23.2 69.5

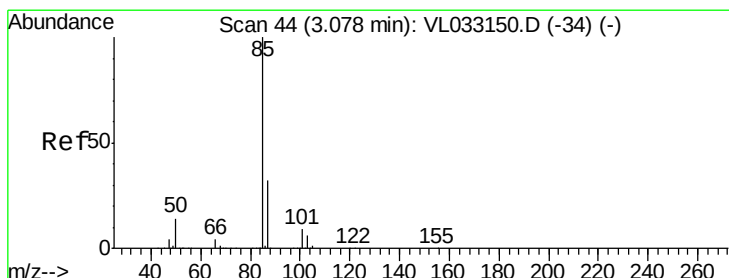
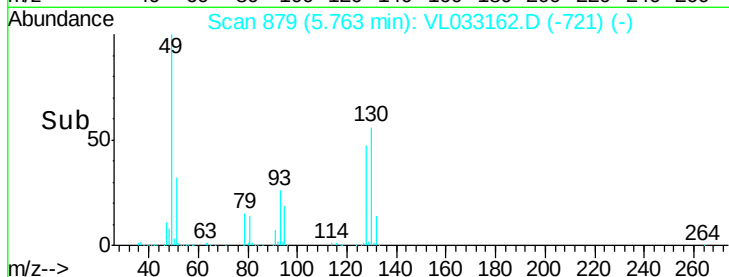
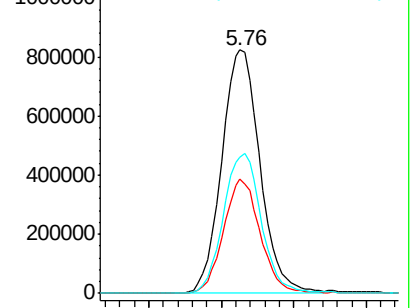
130 57.8 29.5 88.6



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.053 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033162.D

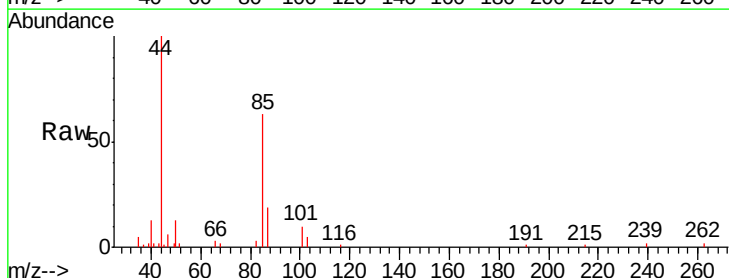
Acq: 4 Feb 2019 19:53

Tgt Ion: 85 Resp: 11700

Ion Ratio Lower Upper

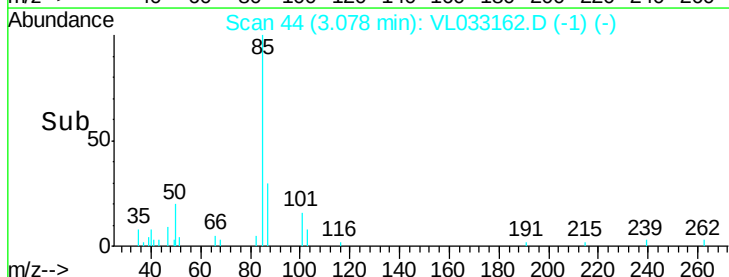
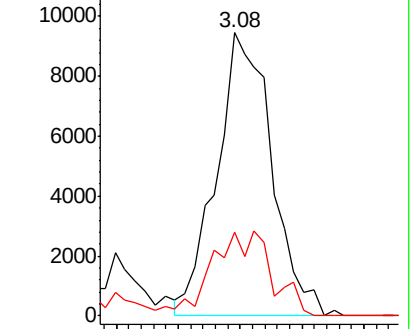
85 100

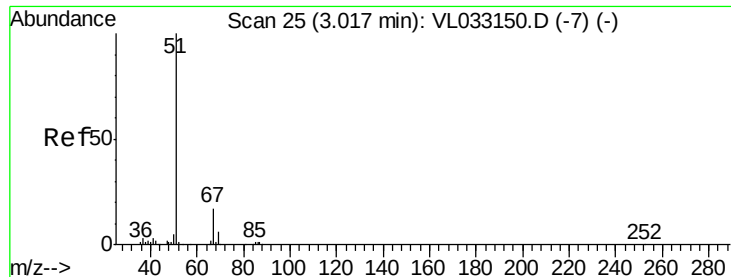
87 29.8 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.039 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.01 min

Lab File: VL033162.D

Acq: 4 Feb 2019 19:53

Instrument :

MSVOA_L

ClientSampleId :

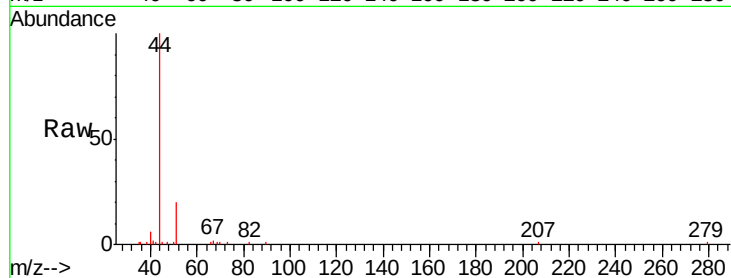
SSA2DL

Tgt Ion: 51 Resp: 6589

Ion Ratio Lower Upper

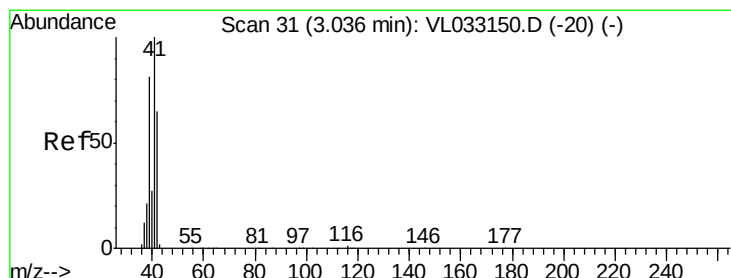
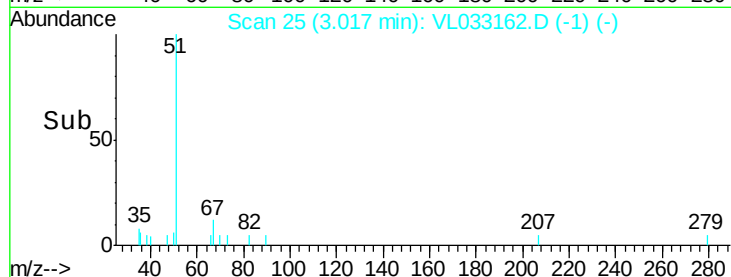
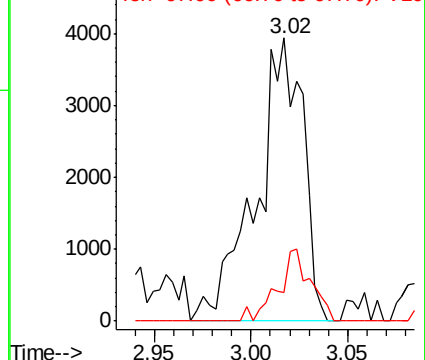
51 100

67 17.9 13.4 20.2



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 0.113 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.01 min

Lab File: VL033162.D

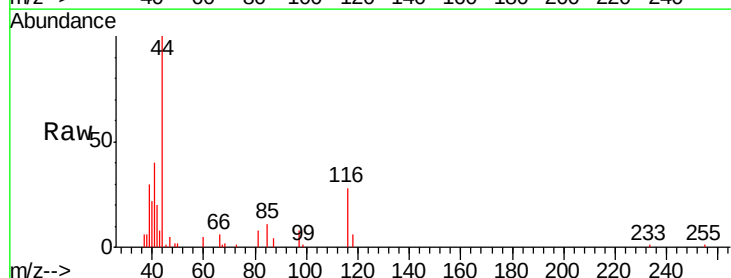
Acq: 4 Feb 2019 19:53

Tgt Ion: 41 Resp: 9541

Ion Ratio Lower Upper

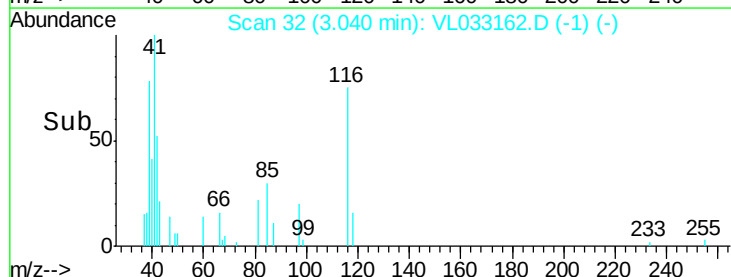
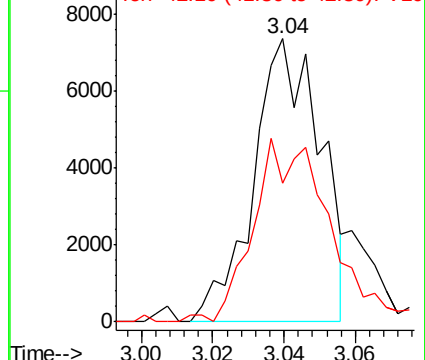
41 100

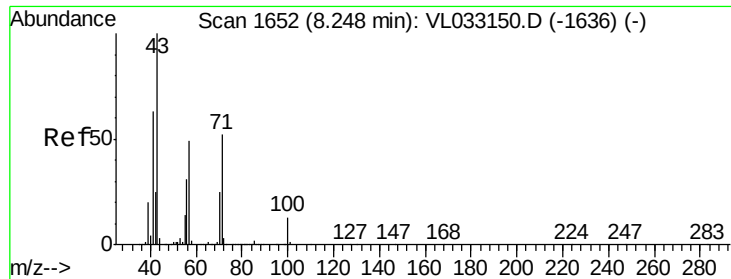
42 74.6 55.1 82.7



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 0.147 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. 0.01 min

Lab File: VL033162.D

Acq: 4 Feb 2019 19:53

Instrument :

MSVOA_L

ClientSampleId :

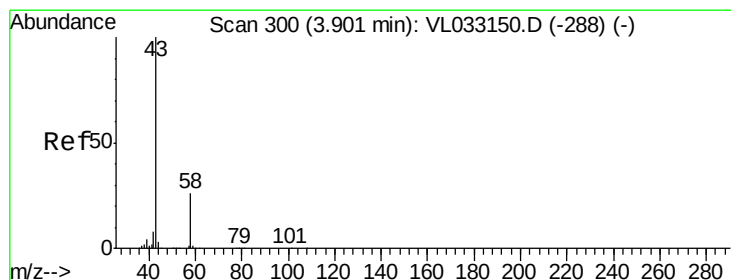
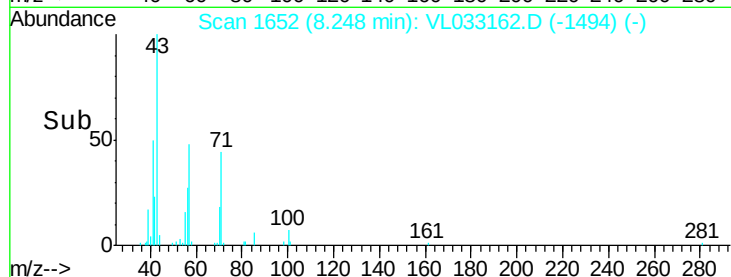
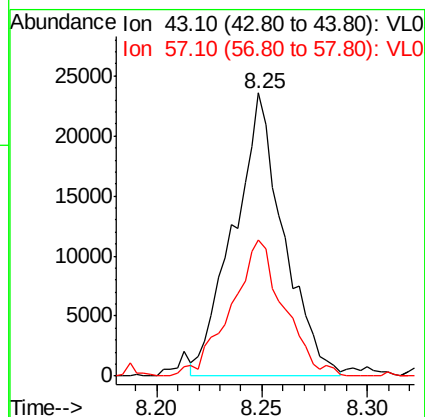
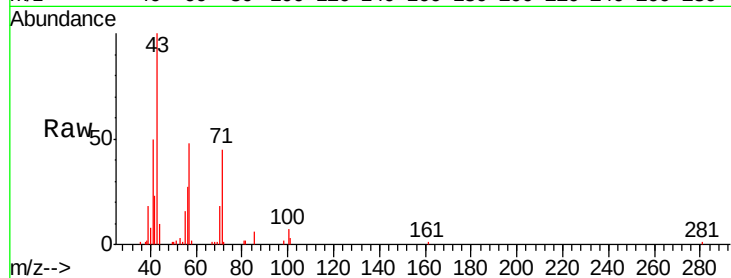
SSA2DL

Tgt Ion: 43 Resp: 38711

Ion Ratio Lower Upper

43 100

57 52.0 39.3 58.9



#15

Acetone

Concen: 7.694 ppbv

RT: 3.90 min Scan# 301

Delta R.T. 0.01 min

Lab File: VL033162.D

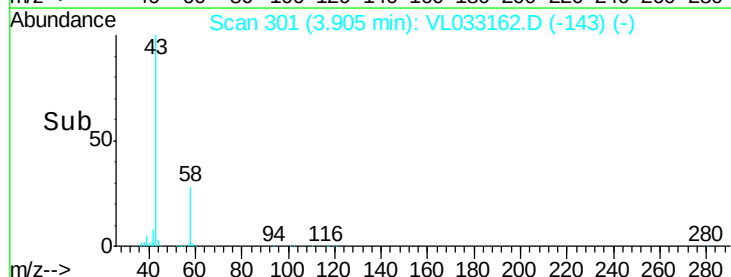
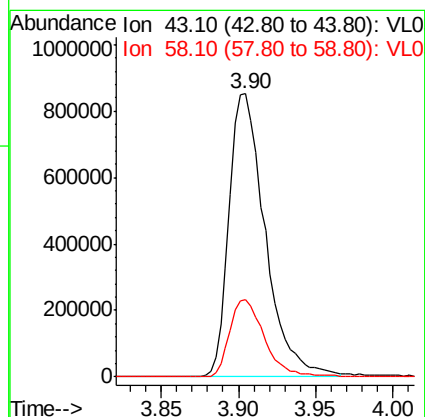
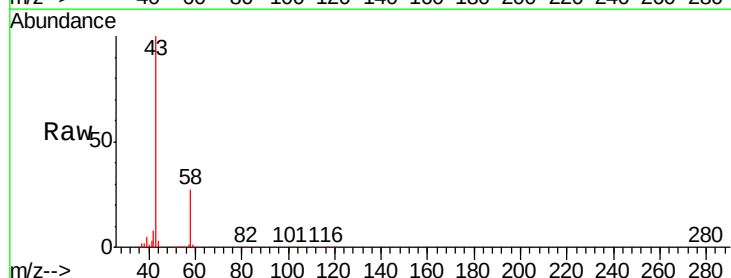
Acq: 4 Feb 2019 19:53

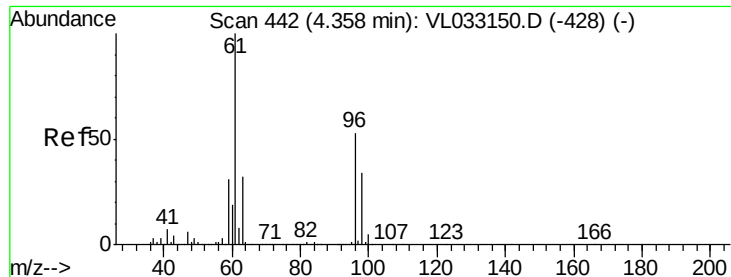
Tgt Ion: 43 Resp: 1380560

Ion Ratio Lower Upper

43 100

58 26.6 21.8 32.6



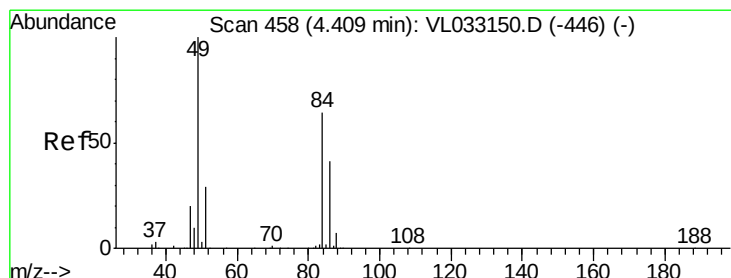
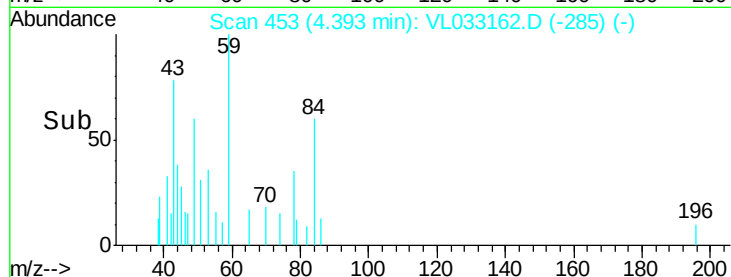
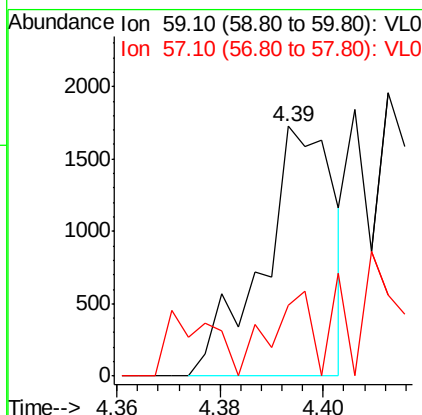
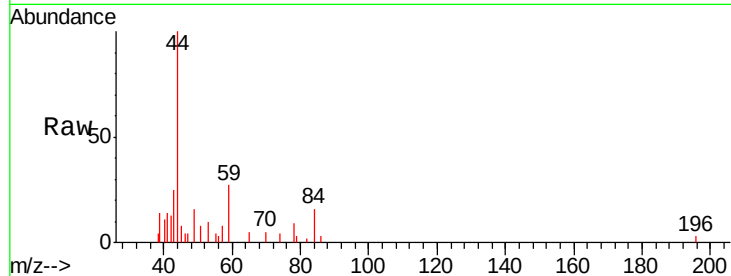


#17

tert-Butyl alcohol
Concen: 0.042 ppbv
RT: 4.39 min Scan# 453
Delta R.T. 0.04 min
Lab File: VL033162.D
Acq: 4 Feb 2019 19:53

Instrument :
MSVOA_L
ClientSampleId :
SSA2DL

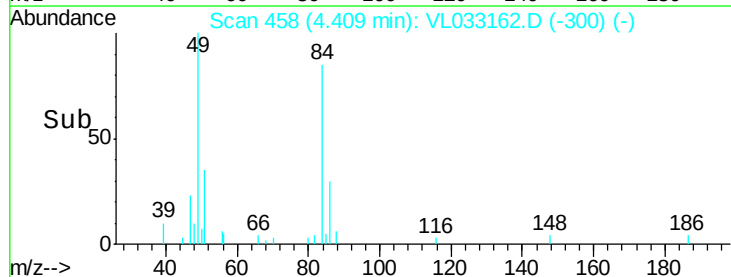
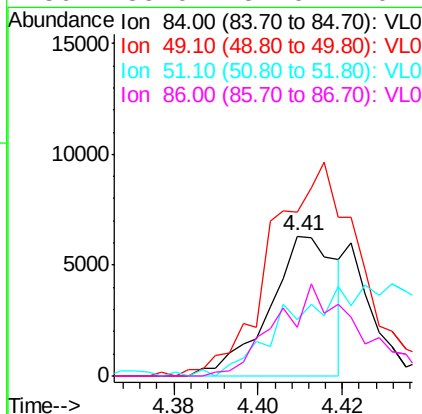
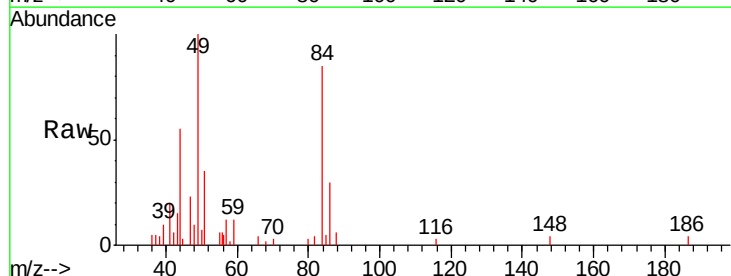
Tgt Ion: 59 Resp: 1654
Ion Ratio Lower Upper
59 100
57 55.4 8.0 12.0#

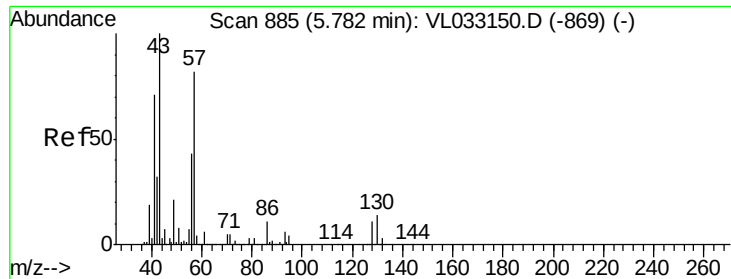


#20

Methylene Chloride
Concen: 0.111 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.01 min
Lab File: VL033162.D
Acq: 4 Feb 2019 19:53

Tgt Ion: 84 Resp: 6854
Ion Ratio Lower Upper
84 100
49 113.2 121.1 181.7#
51 40.5 37.5 56.3
86 35.0 51.0 76.4#

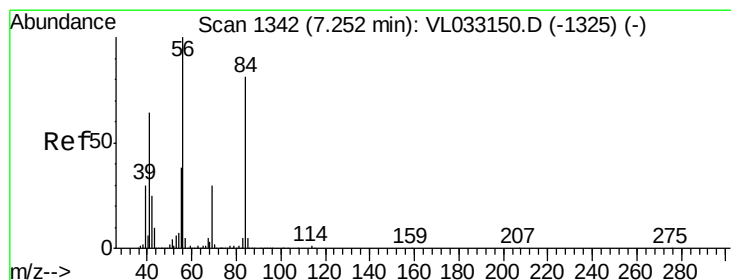
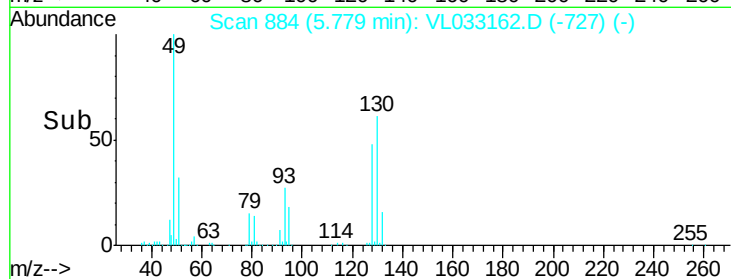
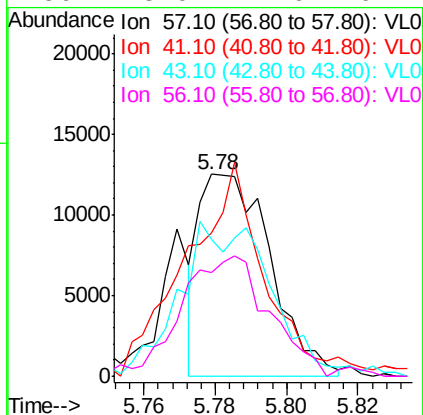
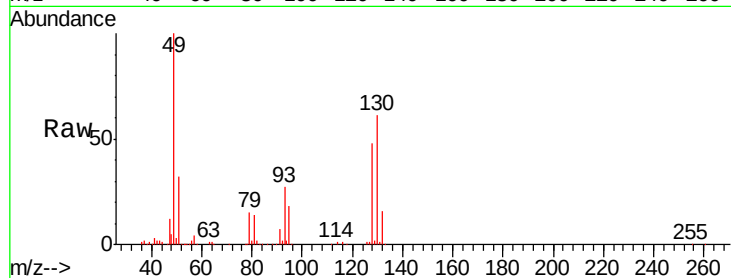




#26
Hexane
Concen: 0.100 ppbv
RT: 5.78 min Scan# 884
Delta R.T. 0.00 min
Lab File: VL033162.D
Acq: 4 Feb 2019 19:53

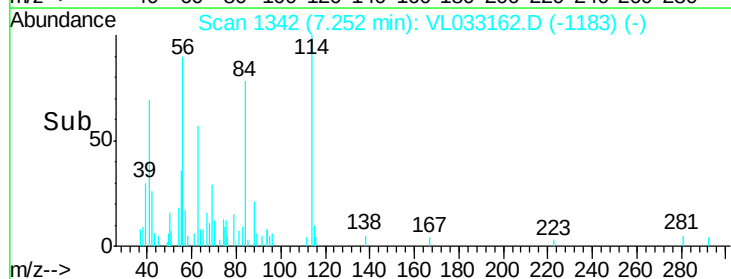
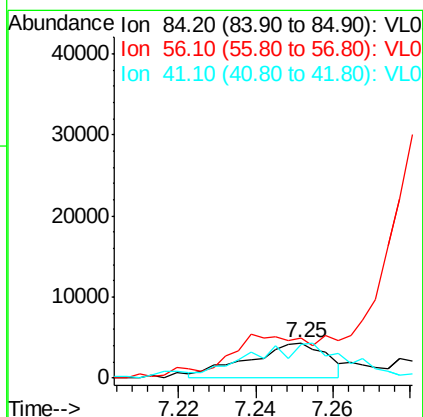
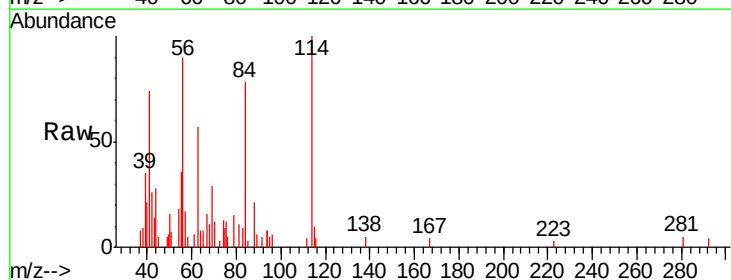
Instrument :
MSVOA_L
ClientSampleId :
SSA2DL

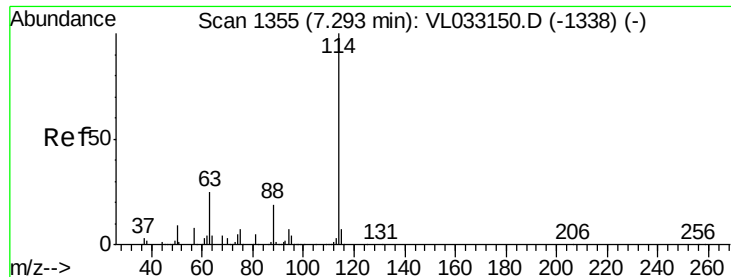
Tgt Ion: 57 Resp: 17280
Ion Ratio Lower Upper
57 100
41 123.1 69.5 104.3#
43 101.4 175.5 263.3#
56 78.0 41.6 62.4#



#30
Cyclohexane
Concen: 0.037 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. 0.01 min
Lab File: VL033162.D
Acq: 4 Feb 2019 19:53

Tgt Ion: 84 Resp: 6113
Ion Ratio Lower Upper
84 100
56 0.0 109.0 163.4#
41 139.9 65.3 97.9#

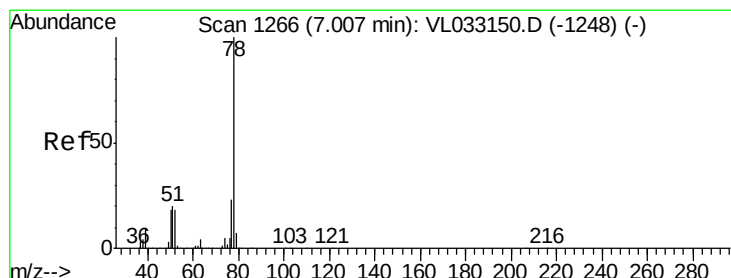
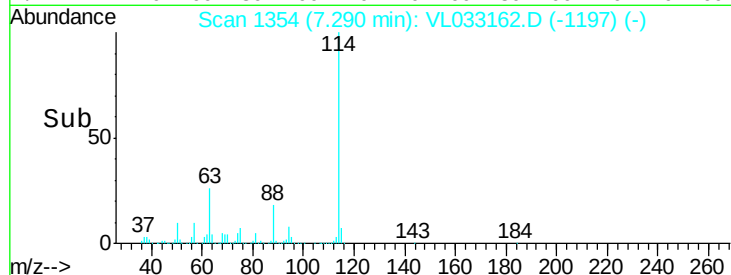
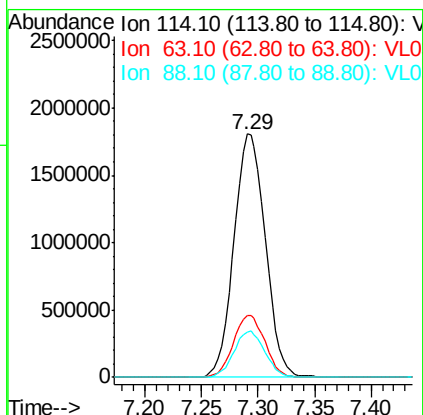
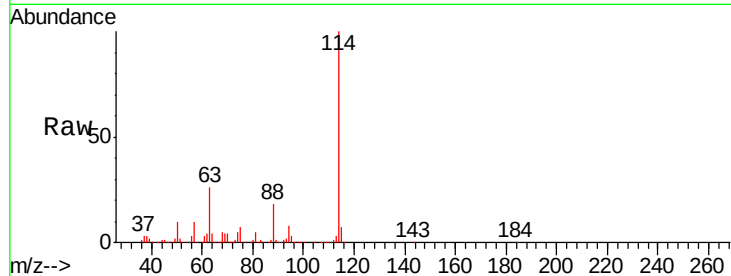




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1354
 Delta R.T. 0.00 min
 Lab File: VL033162.D
 Acq: 4 Feb 2019 19:53

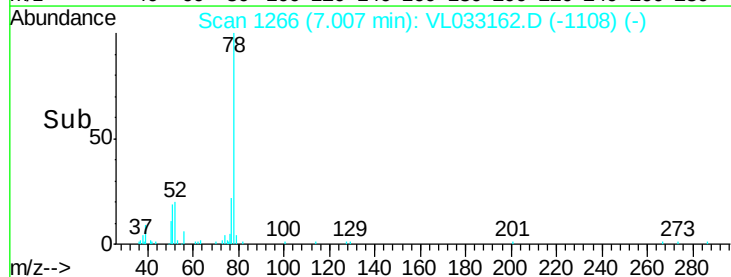
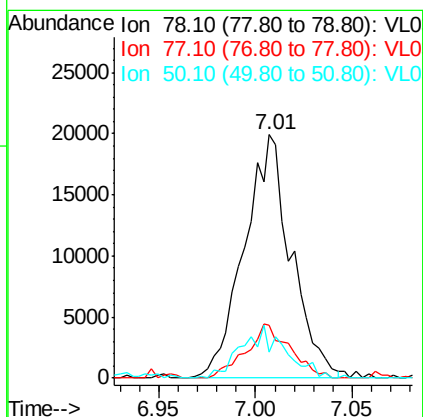
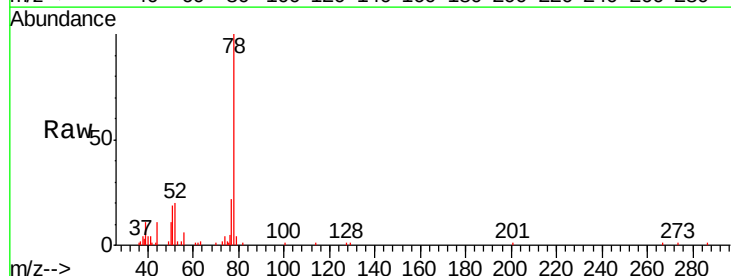
Instrument :
 MSVOA_L
 ClientSampleId :
 SSA2DL

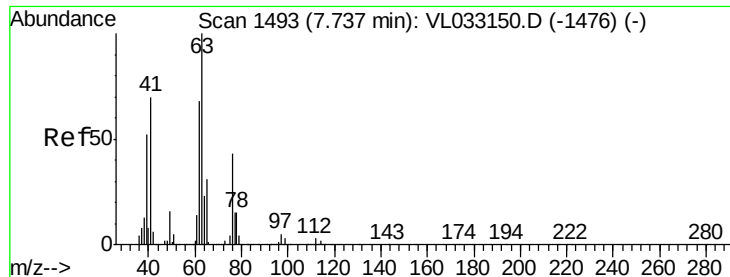
Tgt Ion:114 Resp: 3498887
 Ion Ratio Lower Upper
 114 100
 63 25.7 20.0 30.0
 88 18.7 14.4 21.6



#36
 Benzene
 Concen: 0.095 ppbv
 RT: 7.01 min Scan# 1266
 Delta R.T. 0.01 min
 Lab File: VL033162.D
 Acq: 4 Feb 2019 19:53

Tgt Ion: 78 Resp: 33672
 Ion Ratio Lower Upper
 78 100
 77 21.8 17.8 26.6
 50 10.8 14.7 22.1#





#39

1,2-Dichloropropane

Concen: 6.607 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.44 min

Lab File: VL033162.D

Acq: 4 Feb 2019 19:53

Instrument :

MSVOA_L

ClientSampleId :

SSA2DL

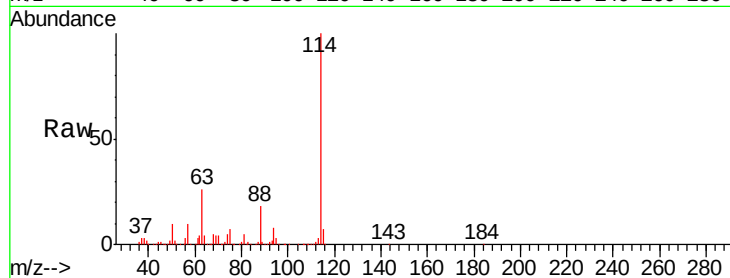
Tgt Ion: 63 Resp: 896319

Ion Ratio Lower Upper

63 100

41 0.0 53.2 79.8#

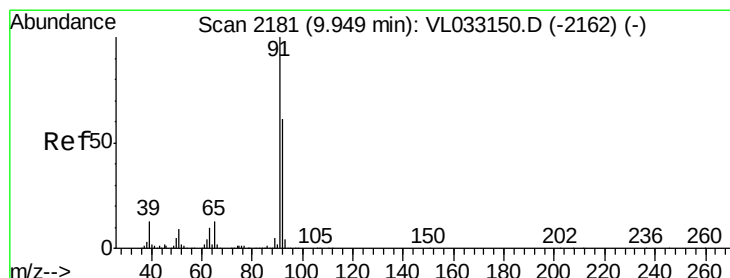
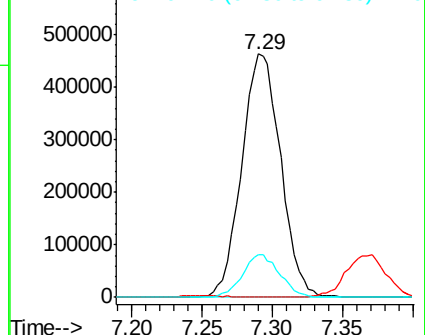
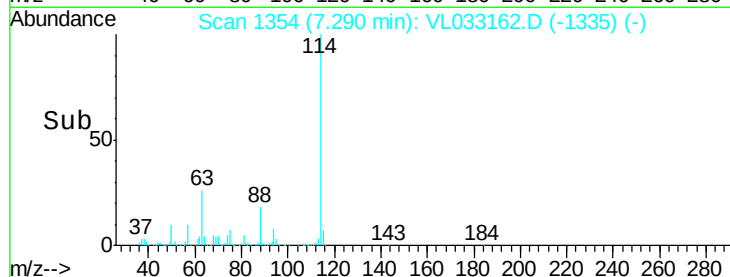
62 17.3 54.4 81.6#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#53

Toluene

Concen: 1.713 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. 0.01 min

Lab File: VL033162.D

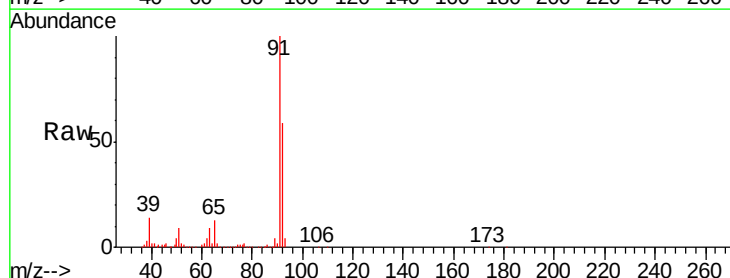
Acq: 4 Feb 2019 19:53

Tgt Ion: 91 Resp: 719475

Ion Ratio Lower Upper

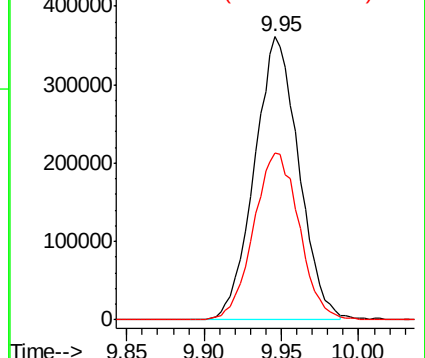
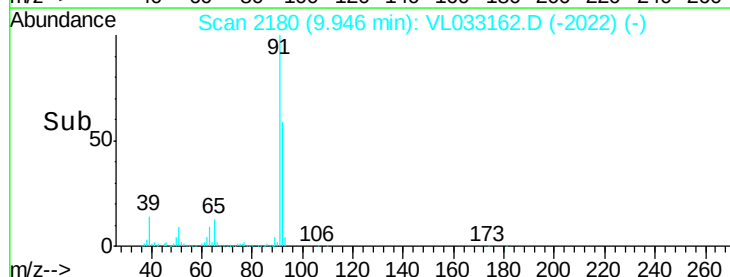
91 100

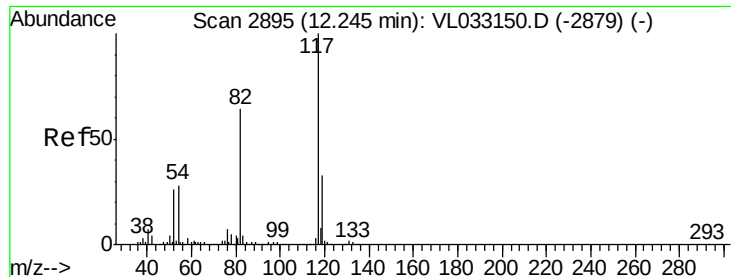
92 60.8 48.9 73.3



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2894

Delta R.T. 0.01 min

Lab File: VL033162.D

Acq: 4 Feb 2019 19:53

Instrument :

MSVOA_L

ClientSampleId :

SSA2DL

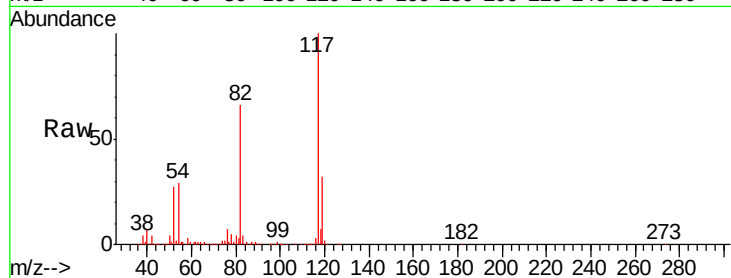
Tgt Ion:117 Resp: 3365219

Ion Ratio Lower Upper

117 100

82 65.6 49.3 73.9

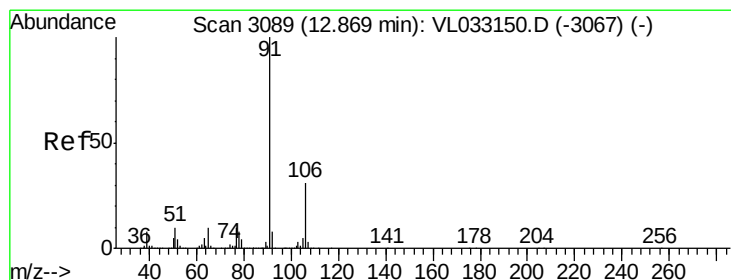
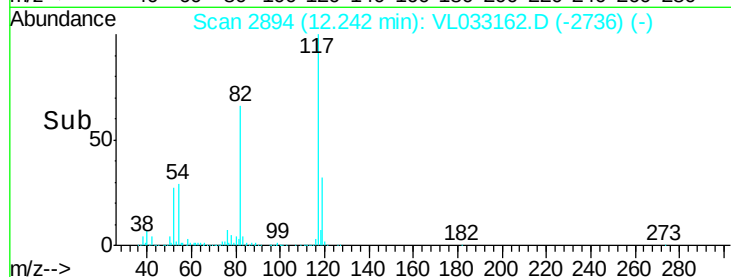
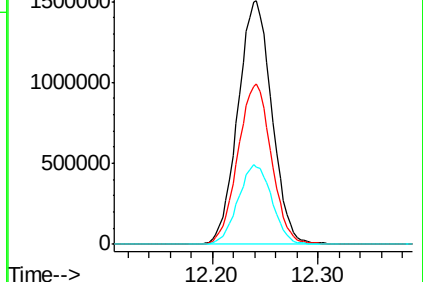
119 32.6 27.1 40.7



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.088 ppbv

RT: 12.86 min Scan# 3087

Delta R.T. 0.00 min

Lab File: VL033162.D

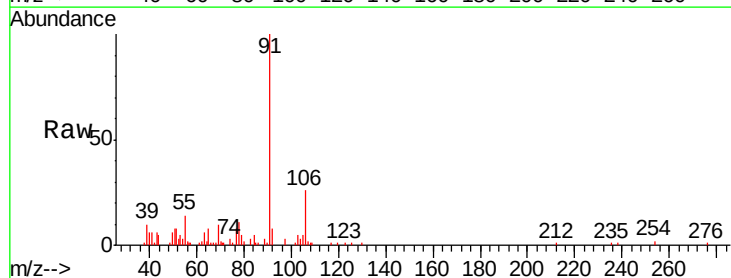
Acq: 4 Feb 2019 19:53

Tgt Ion: 91 Resp: 46776

Ion Ratio Lower Upper

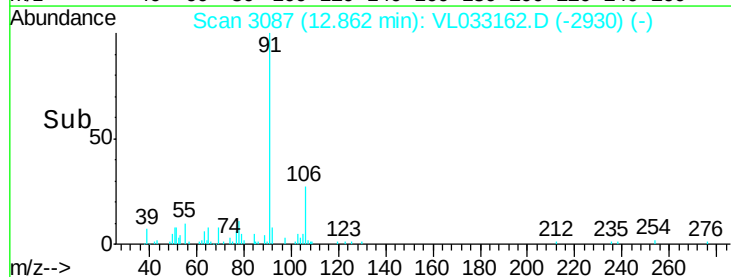
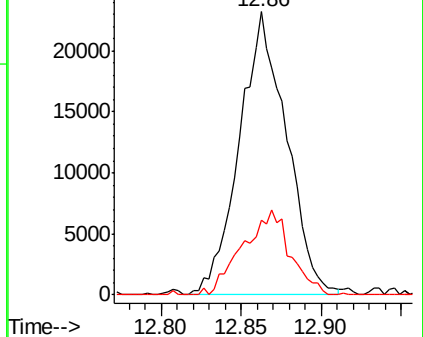
91 100

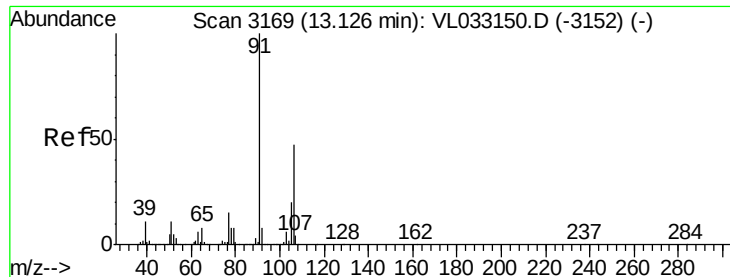
106 26.4 24.7 37.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 0.116 ppbv

RT: 13.12 min Scan# 3168

Delta R.T. 0.00 min

Lab File: VL033162.D

Acq: 4 Feb 2019 19:53

Instrument :

MSVOA_L

ClientSampleId :

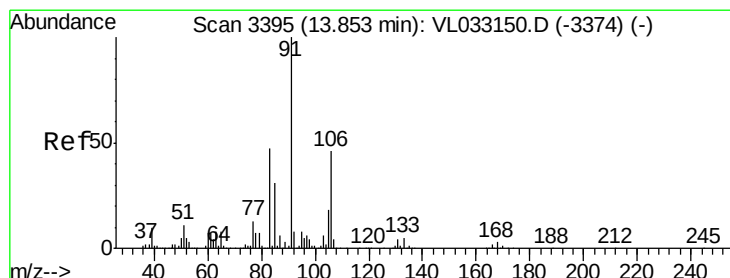
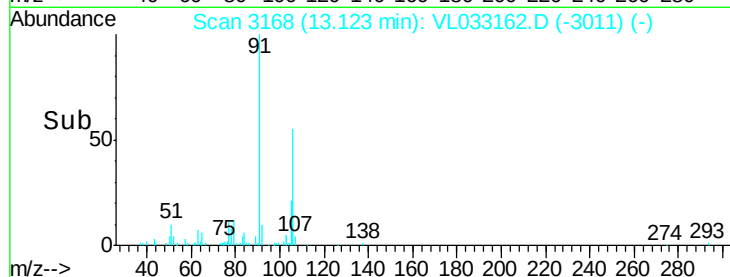
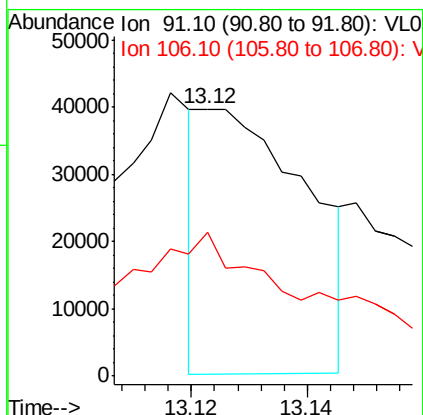
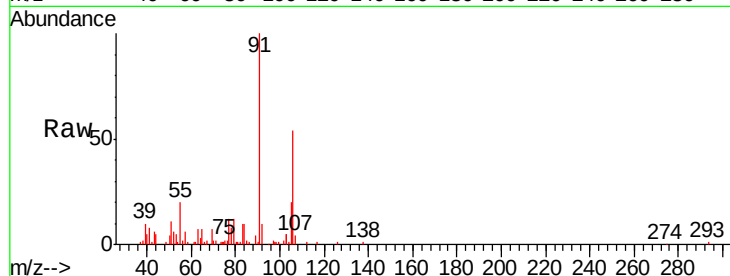
SSA2DL

Tgt Ion: 91 Resp: 50190

Ion Ratio Lower Upper

91 100

106 117.5 37.6 56.4#



#60

o-Xylene

Concen: 0.043 ppbv

RT: 13.86 min Scan# 3396

Delta R.T. 0.01 min

Lab File: VL033162.D

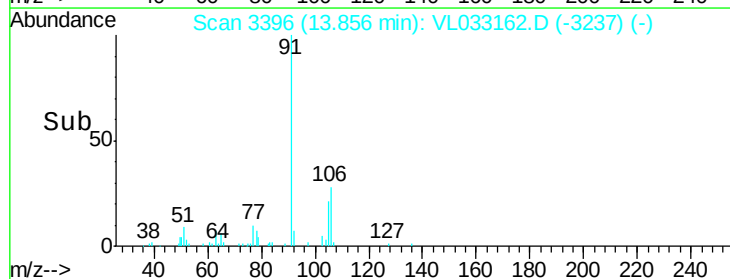
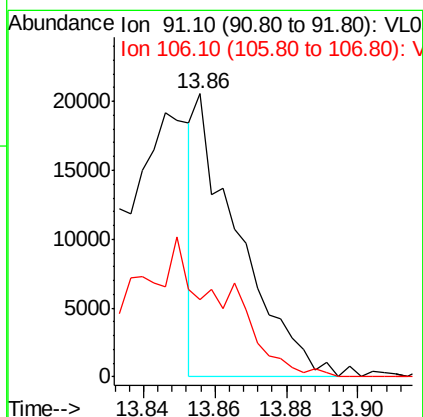
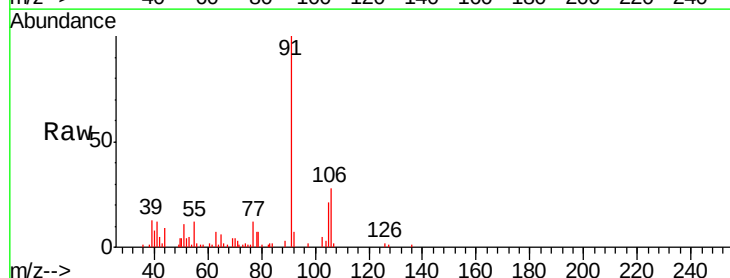
Acq: 4 Feb 2019 19:53

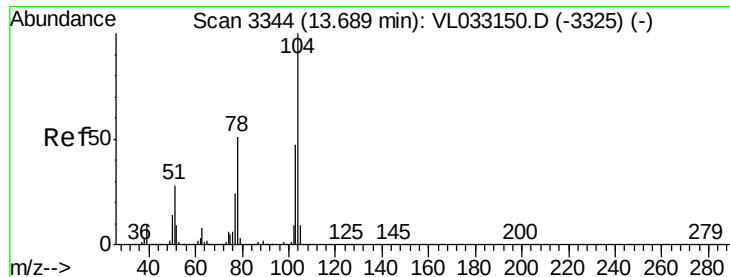
Tgt Ion: 91 Resp: 17256

Ion Ratio Lower Upper

91 100

106 0.0 23.2 69.5#

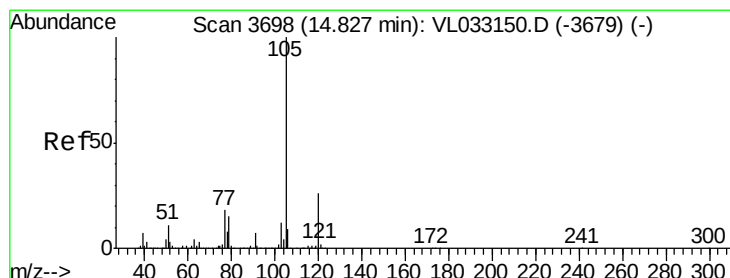
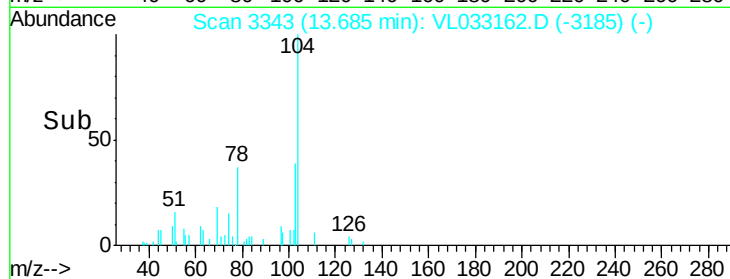
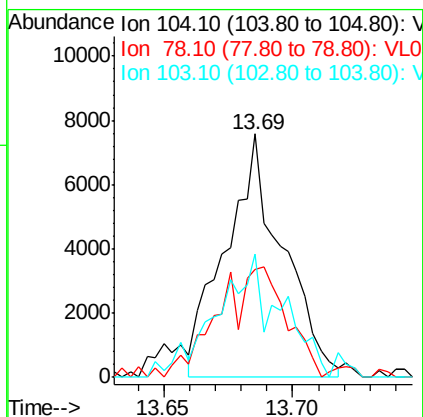
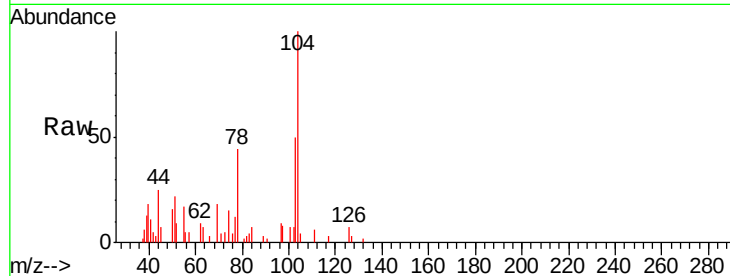




#61
Styrene
Concen: 0.037 ppbv
RT: 13.69 min Scan# 3343
Delta R.T. 0.01 min
Lab File: VL033162.D
Acq: 4 Feb 2019 19:53

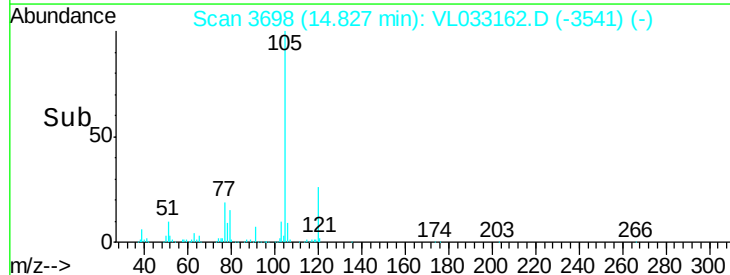
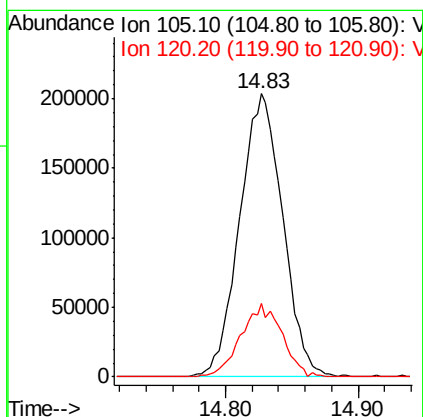
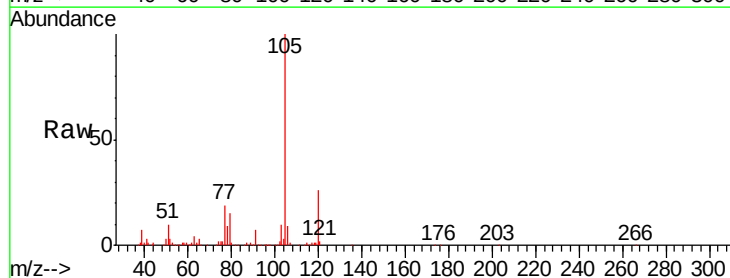
Instrument :
MSVOA_L
ClientSampleId :
SSA2DL

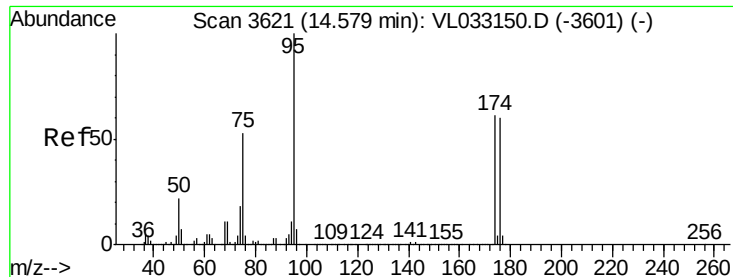
Tgt Ion:104 Resp: 11696
Ion Ratio Lower Upper
104 100
78 58.1 39.7 59.5
103 59.4 37.7 56.5#



#62
Isopropylbenzene
Concen: 0.805 ppbv
RT: 14.83 min Scan# 3698
Delta R.T. 0.00 min
Lab File: VL033162.D
Acq: 4 Feb 2019 19:53

Tgt Ion:105 Resp: 459725
Ion Ratio Lower Upper
105 100
120 24.7 20.8 31.2

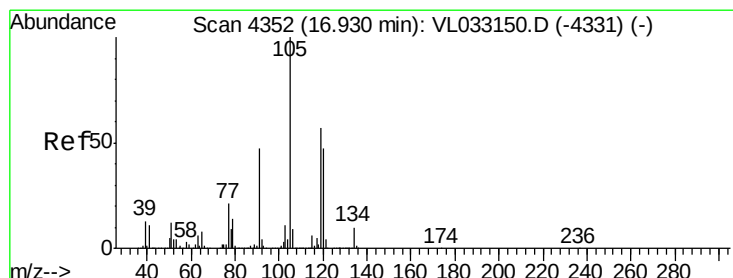
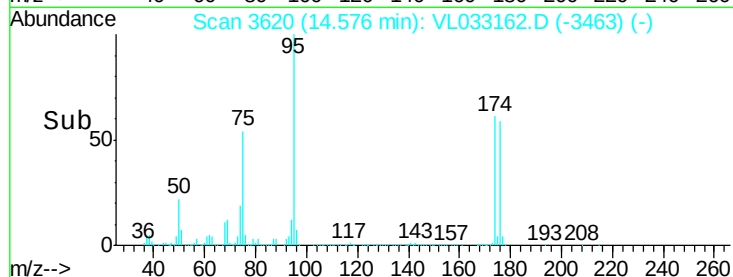
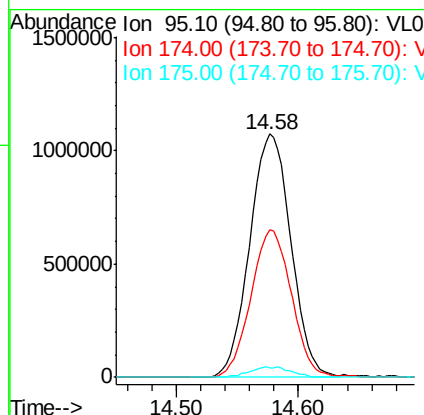
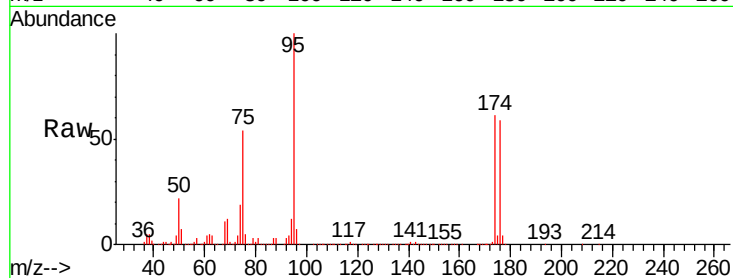




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.003 ppbv
 RT: 14.58 min Scan# 3620
 Delta R.T. 0.00 min
 Lab File: VL033162.D
 Acq: 4 Feb 2019 19:53

Instrument :
 MSVOA_L
 ClientSampleID :
 SSA2DL

Tgt Ion: 95 Resp: 2508647
 Ion Ratio Lower Upper
 95 100
 174 60.5 49.2 73.8
 175 4.4 3.7 5.5



#74
 1,2,4-Trimethylbenzene
 Concen: 0.049 ppbv
 RT: 16.93 min Scan# 4352
 Delta R.T. 0.01 min
 Lab File: VL033162.D
 Acq: 4 Feb 2019 19:53

Tgt Ion: 105 Resp: 22938
 Ion Ratio Lower Upper
 105 100
 120 35.6 38.2 57.4#
 91 15.9 35.0 52.4#
 77 10.9 15.8 23.6#

