

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121118\
 Data File : VL032970.D
 Acq On : 12 Dec 2018 1:16
 Operator : SY/AP
 Sample : J6338-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 12 02:24:00 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 07 09:35:17 2018
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

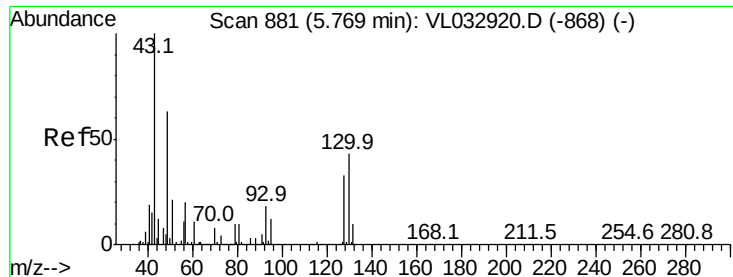
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1245514	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3144323	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2883735	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2235983	10.50	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	79901	0.481	ppbv	97
3) Chlorodifluoromethane	3.02	51	32088	0.340	ppbv	93
4) Chloromethane	3.17	50	31674	0.577	ppbv	100
9) Propene	3.25	41	24846	0.666	ppbv	96
11) Trichlorofluoromethane	4.01	101	36650	0.234	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.55	101	4065	0.030	ppbv #	17
13) Ethanol	3.67	45	30216	2.353	ppbv	93
15) Acetone	3.92	43	109663	1.026	ppbv	97
16) 1,3-Butadiene	3.35	39	2781	0.066	ppbv #	55
19) Isopropyl Alcohol	4.07	45	6441	0.096	ppbv #	95
20) Methylene Chloride	4.41	84	33996	0.651	ppbv #	95
25) Ethyl Acetate	5.78	43	32999	0.131	ppbv #	79
26) Hexane	5.78	57	37755	0.324	ppbv #	47
34) 2-Butanone	5.36	43	12111	0.088	ppbv	96
35) Carbon Tetrachloride	7.14	117	15905	0.064	ppbv	97
36) Benzene	7.01	78	18107	0.078	ppbv #	94
39) 1,2-Dichloropropane	7.30	63	758058	8.643	ppbv #	20
53) Toluene	9.95	91	41269	0.168	ppbv	98

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

Delta R.T. -0.00 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :
MSVOA_L
ClientSampleId :

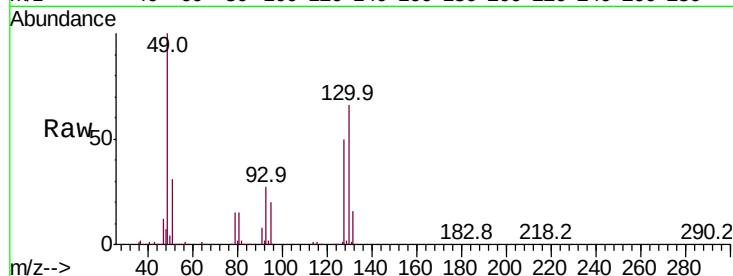
Tot Ion: 49 Resp: 1245514

Ion Ratio Lower Upper

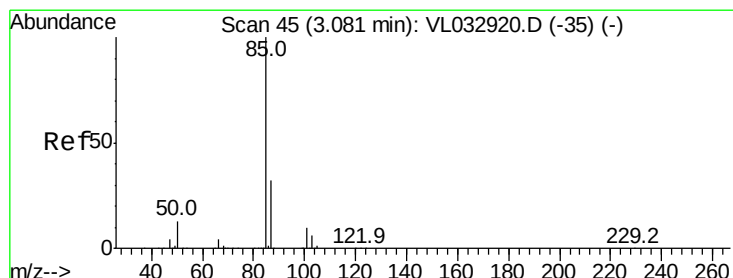
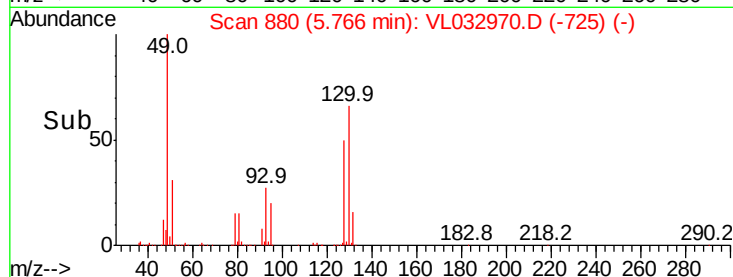
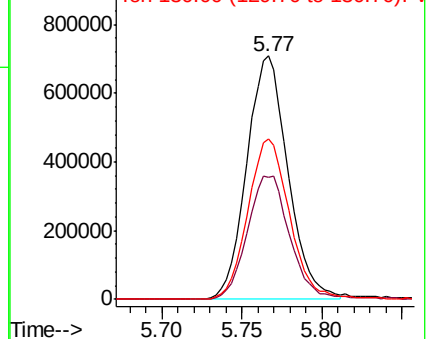
49 100

128 53.2 26.3 78.8

130 67.8 33.9 101.7



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: 0.481 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.00 min

Lab File: VL032970.D

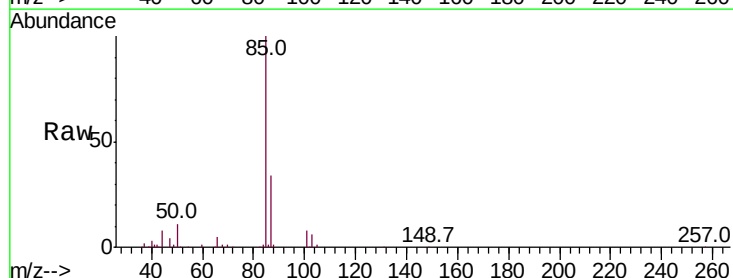
Acq: 12 Dec 2018 1:16

Tgt Ion: 85 Resp: 79901

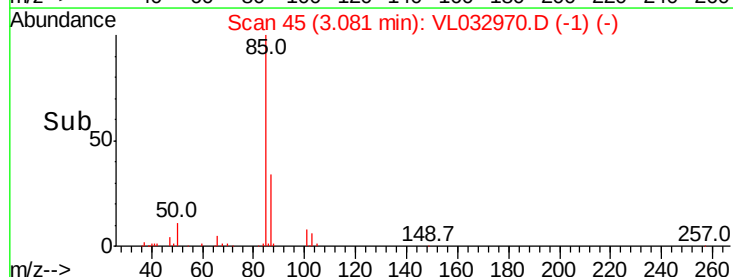
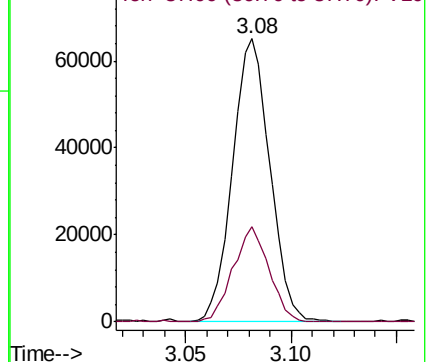
Ion Ratio Lower Upper

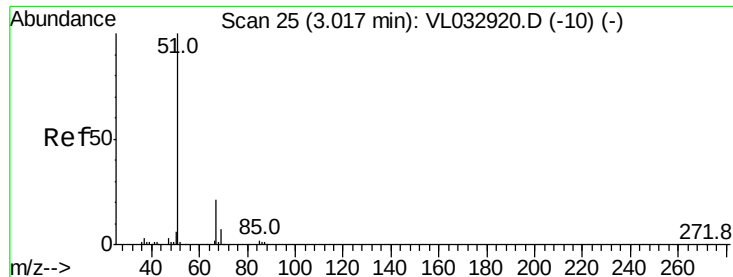
85 100

87 33.5 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.340 ppbv

RT: 3.02 min Scan# 26

Delta R.T. 0.00 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

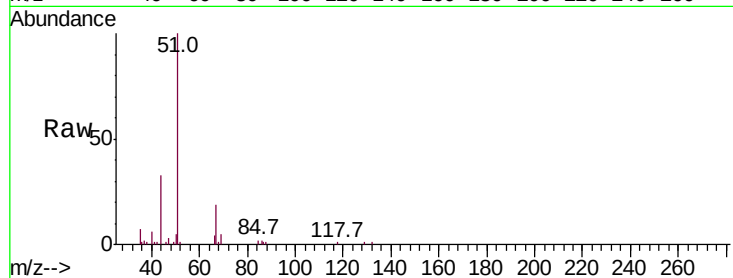
ClientSampleId :

Tot Ion: 51 Resp: 32088

Ion Ratio Lower Upper

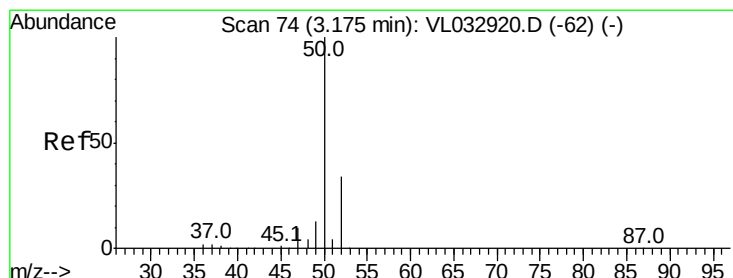
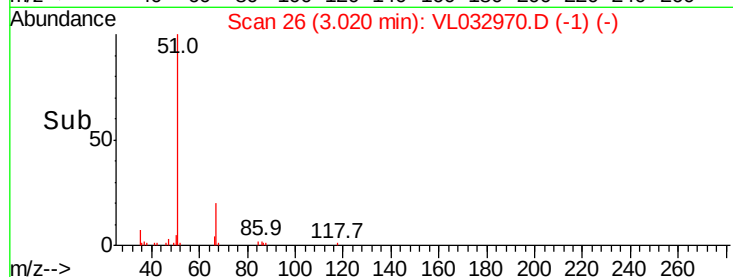
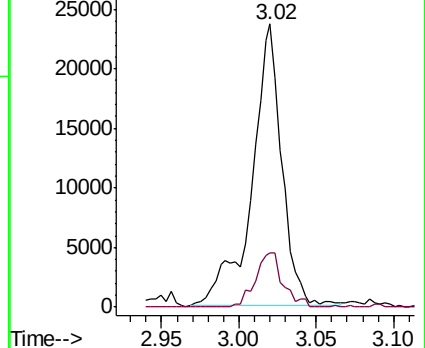
51 100

67 17.8 16.8 25.2



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.577 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL032970.D

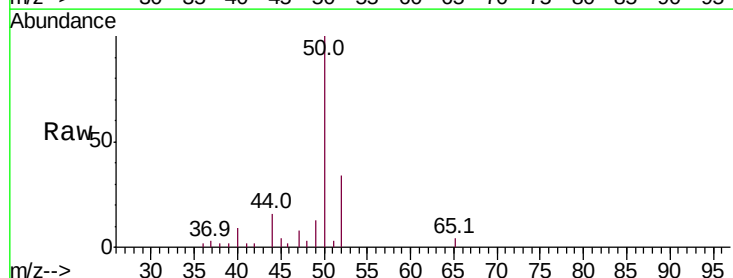
Acq: 12 Dec 2018 1:16

Tgt Ion: 50 Resp: 31674

Ion Ratio Lower Upper

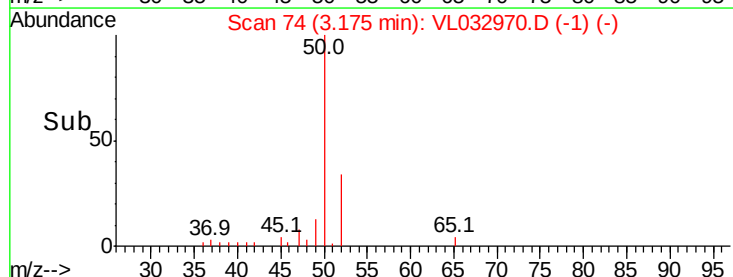
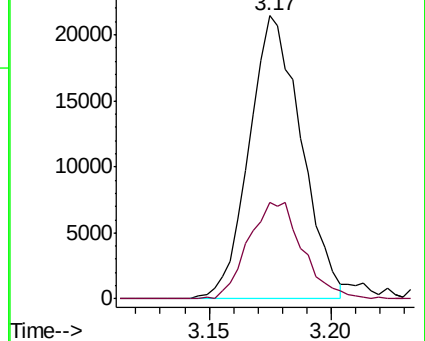
50 100

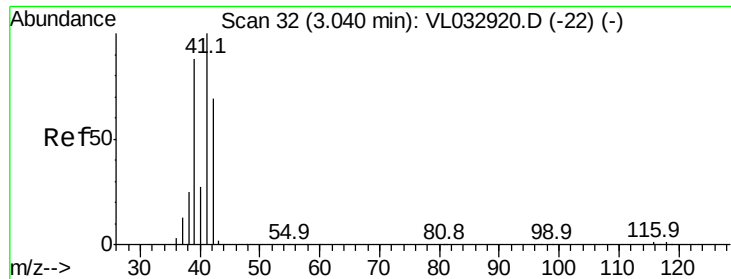
52 34.2 27.3 40.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.666 ppbv

RT: 3.25 min Scan# 96

Delta R.T. 0.21 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

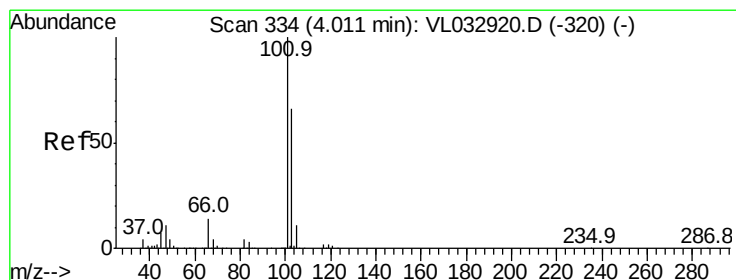
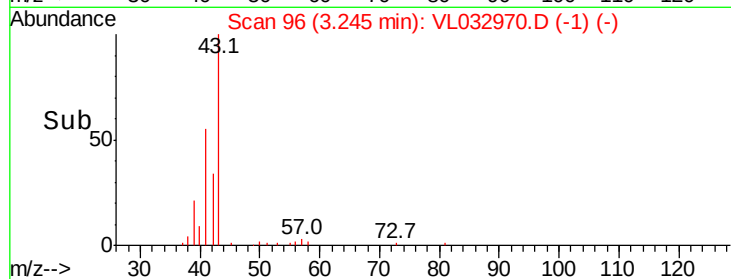
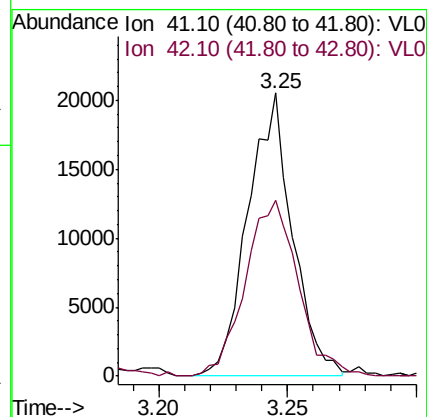
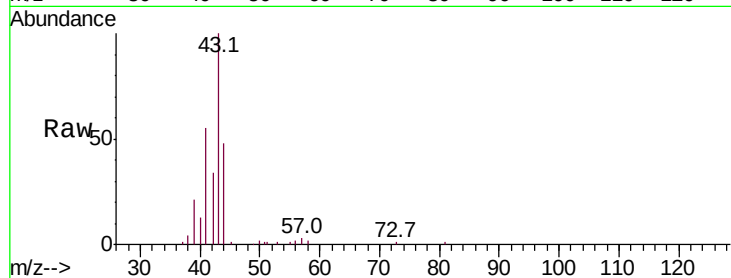
ClientSampleId :

Tot Ion: 41 Resp: 24846

Ion Ratio Lower Upper

41 100

42 73.4 56.2 84.2



#11

Trichlorofluoromethane

Concen: 0.234 ppbv

RT: 4.01 min Scan# 333

Delta R.T. -0.00 min

Lab File: VL032970.D

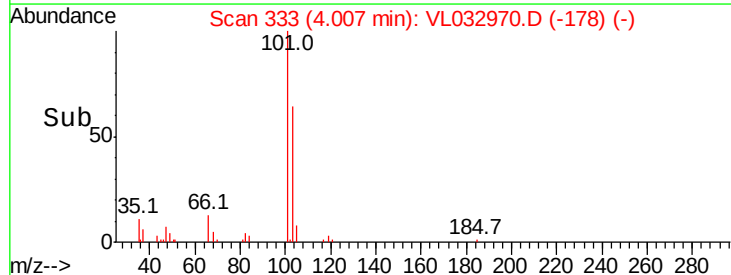
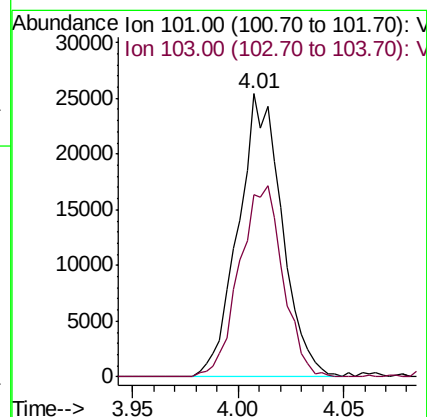
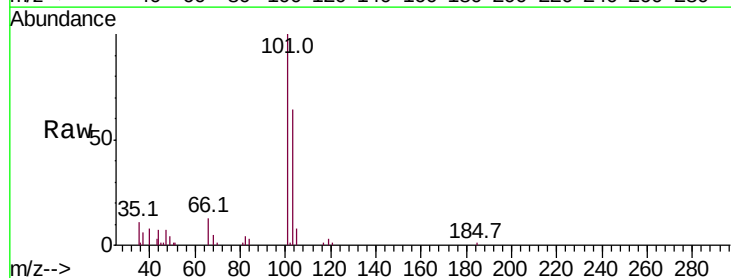
Acq: 12 Dec 2018 1:16

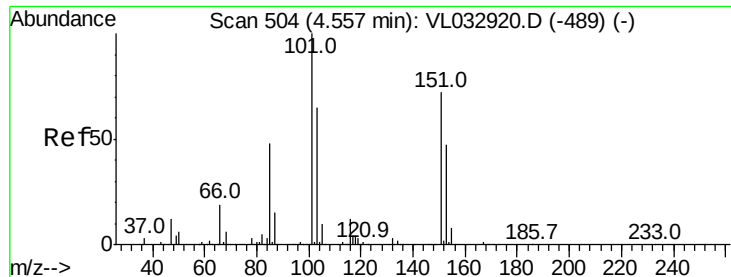
Tgt Ion: 101 Resp: 36650

Ion Ratio Lower Upper

101 100

103 64.3 52.7 79.1





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.030 ppbv

RT: 4.55 min Scan# 503

Delta R.T. -0.00 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

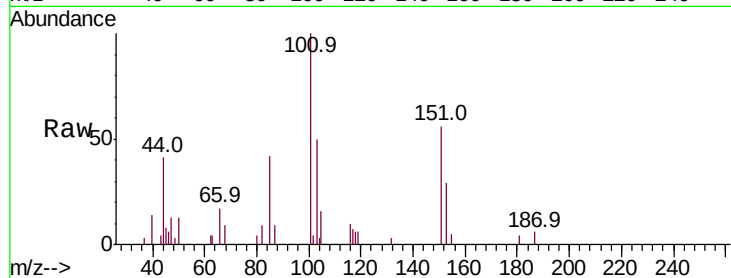
ClientSampleId :

Tot Ion:101 Resp: 4065

Ion Ratio Lower Upper

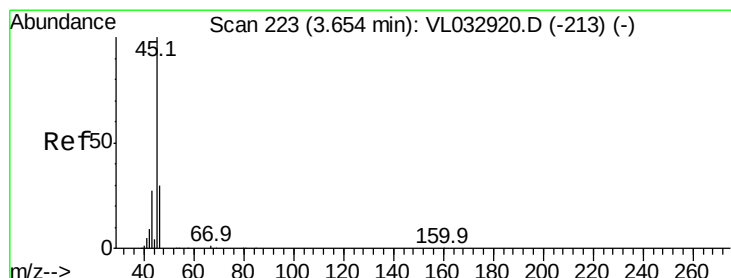
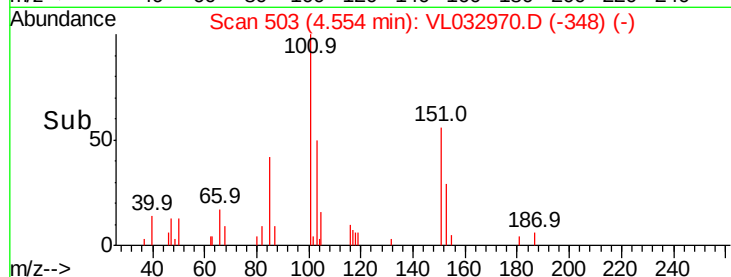
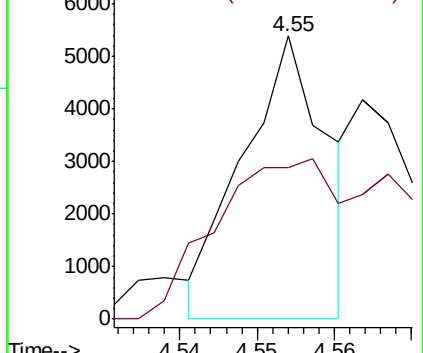
101 100

151 144.4 59.3 88.9#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 2.353 ppbv

RT: 3.67 min Scan# 229

Delta R.T. 0.02 min

Lab File: VL032970.D

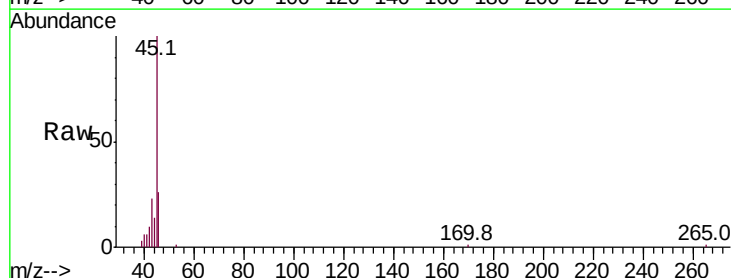
Acq: 12 Dec 2018 1:16

Tgt Ion: 45 Resp: 30216

Ion Ratio Lower Upper

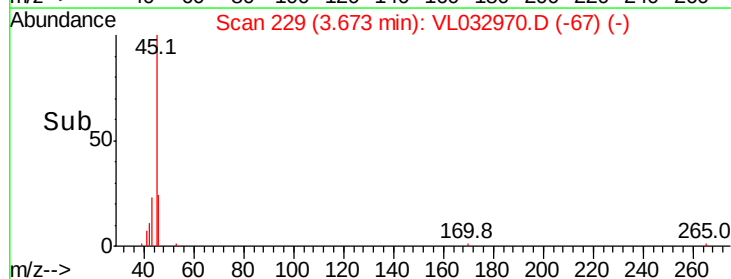
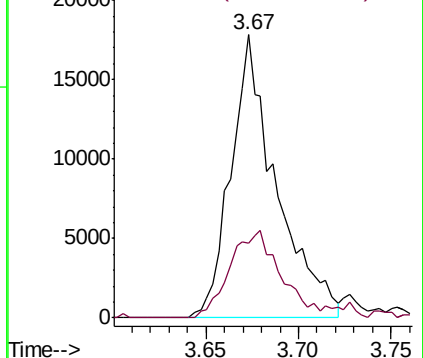
45 100

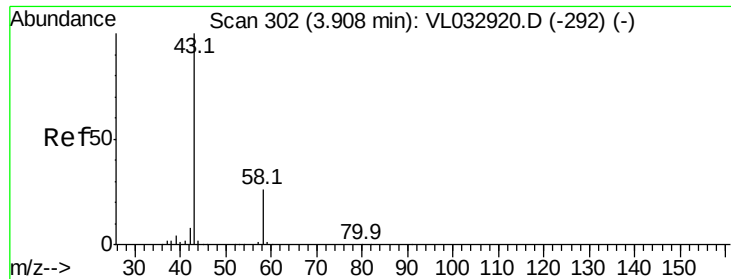
46 38.9 13.8 55.4



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 1.026 ppbv

RT: 3.92 min Scan# 306

Delta R.T. 0.01 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

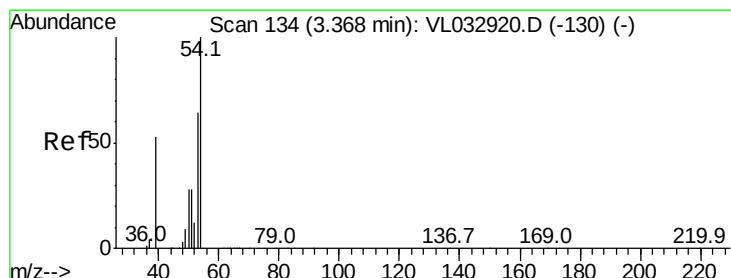
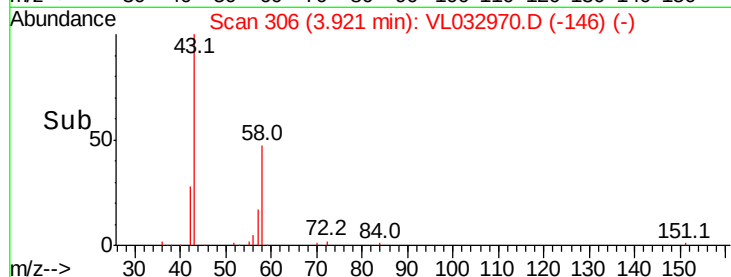
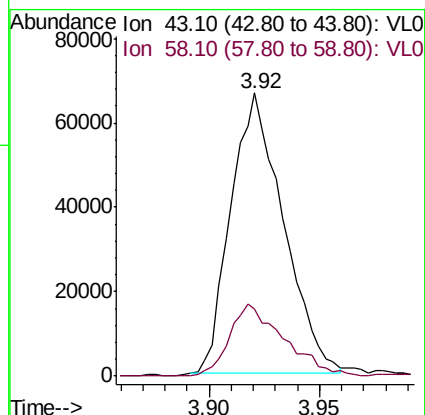
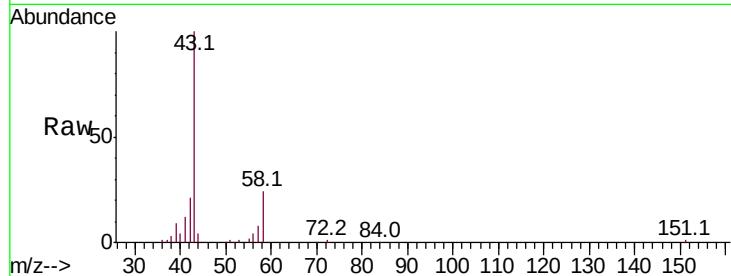
ClientSampleId :

Tot Ion: 43 Resp: 109663

Ion Ratio Lower Upper

43 100

58 27.2 20.6 30.8



#16

1,3-Butadiene

Concen: 0.066 ppbv

RT: 3.35 min Scan# 128

Delta R.T. -0.02 min

Lab File: VL032970.D

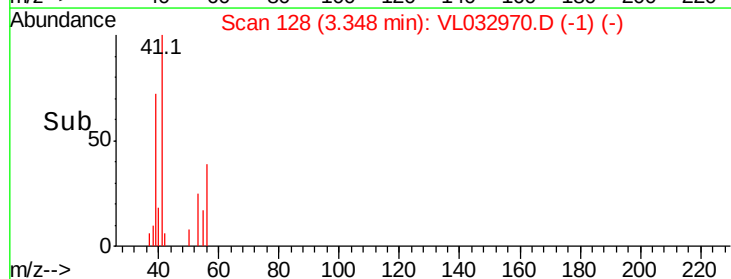
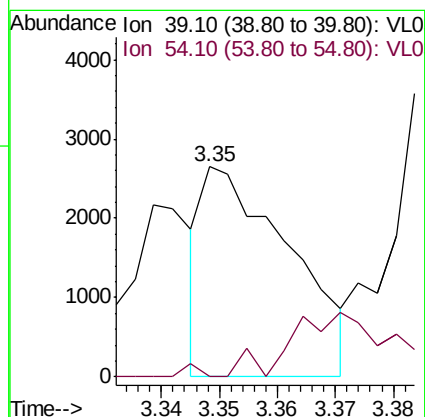
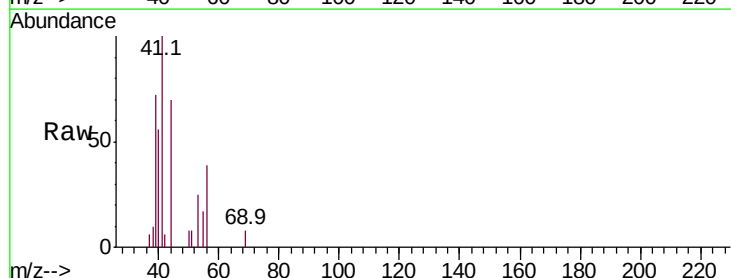
Acq: 12 Dec 2018 1:16

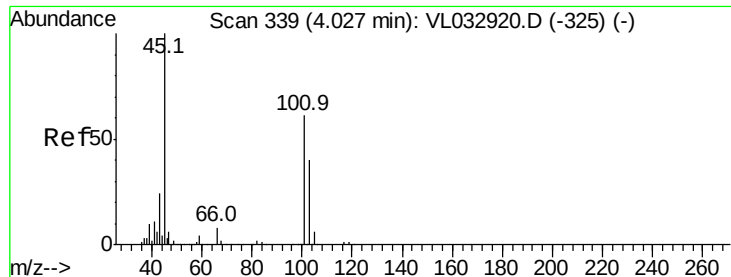
Tgt Ion: 39 Resp: 2781

Ion Ratio Lower Upper

39 100

54 48.3 72.7 109.1#





#19

Isopropyl Alcohol

Concen: 0.096 ppbv

RT: 4.07 min Scan# 353

Delta R.T. 0.05 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

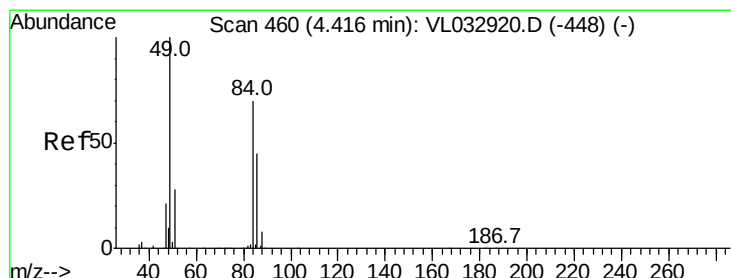
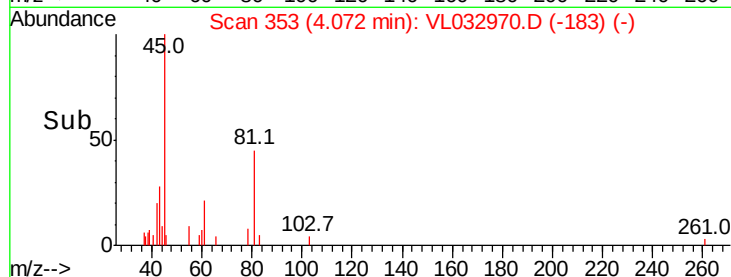
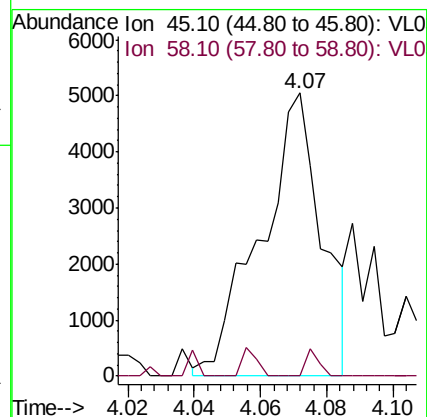
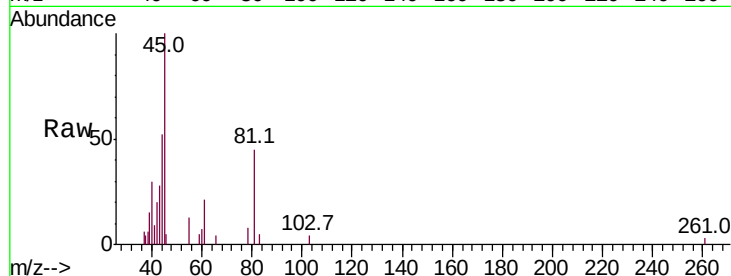
ClientSampleId :

Tot Ion: 45 Resp: 6441

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.2#



#20

Methylene Chloride

Concen: 0.651 ppbv

RT: 4.41 min Scan# 459

Delta R.T. -0.00 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Tgt Ion: 84 Resp: 33996

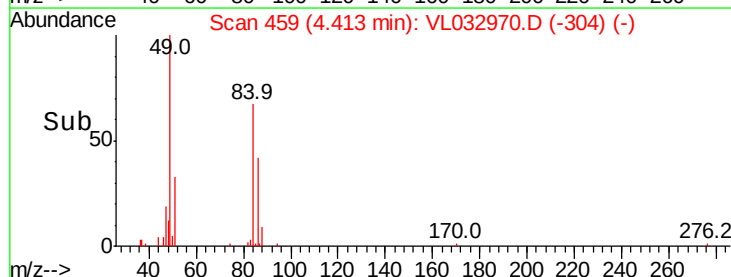
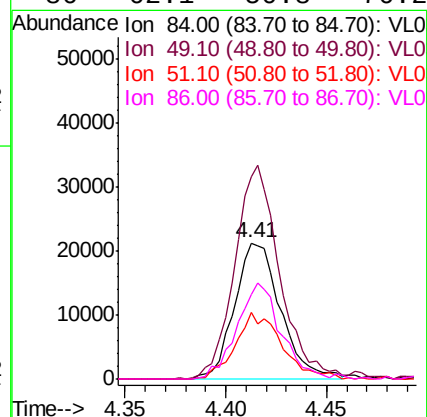
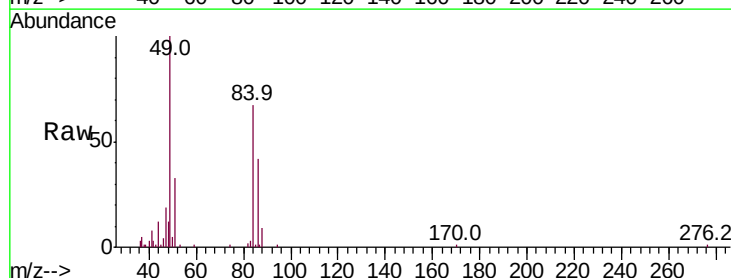
Ion Ratio Lower Upper

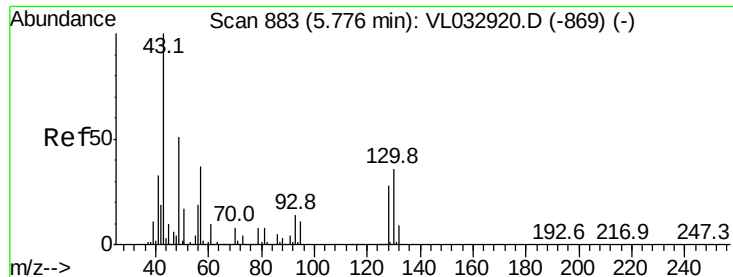
84 100

49 147.5 113.8 170.8

51 48.8 31.8 47.8#

86 62.1 50.8 76.2

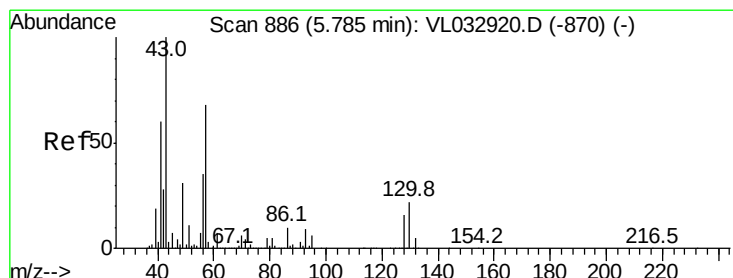
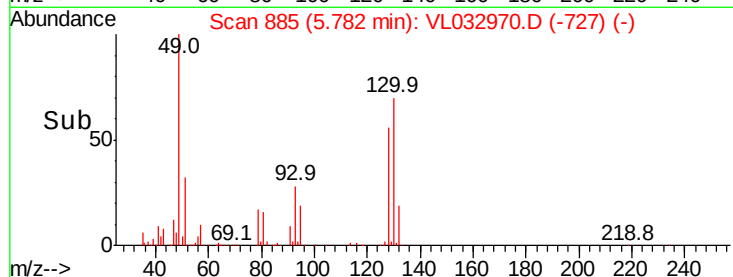
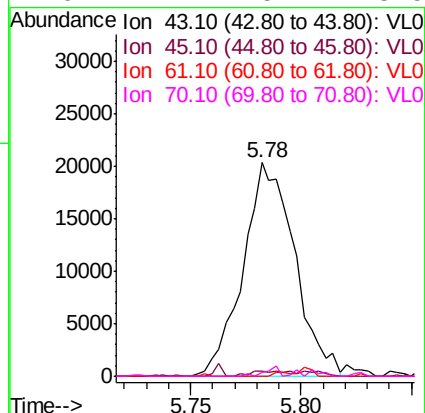
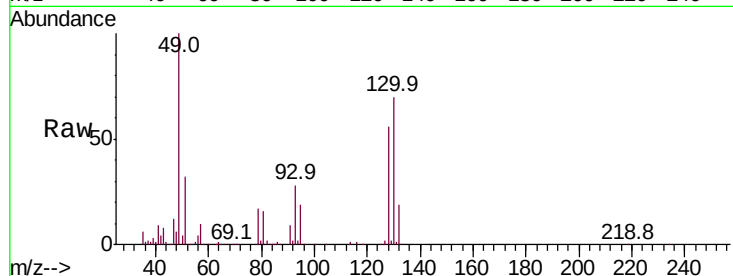




#25
Ethyl Acetate
Concen: 0.131 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.01 min
Lab File: VL032970.D
Acq: 12 Dec 2018 1:16

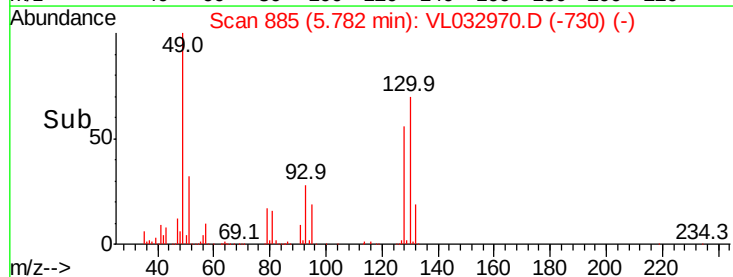
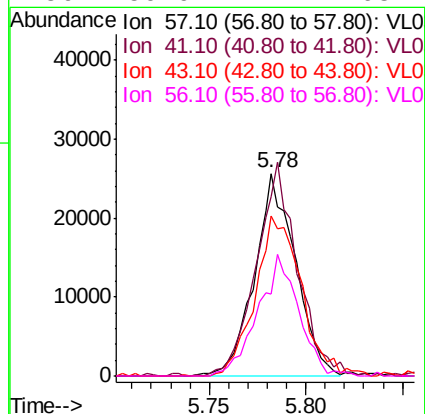
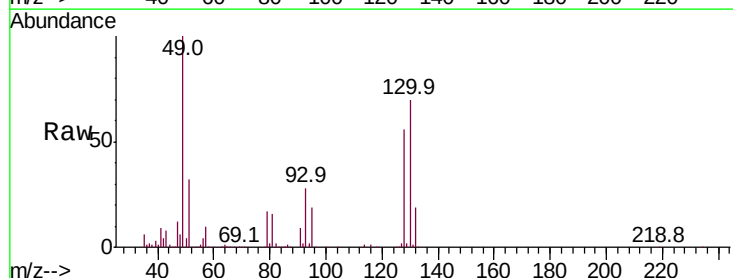
Instrument :
MSVOA_L
ClientSampleId :

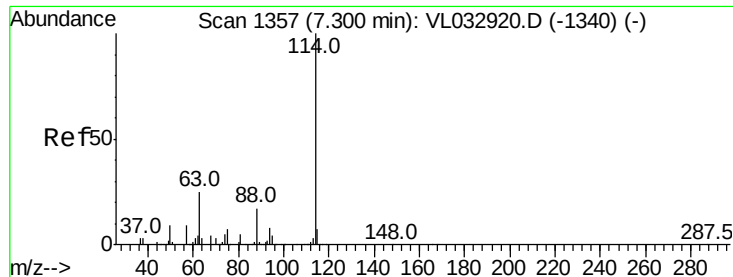
Tot Ion:	43	Resp:	32999
Ion	Ratio	Lower	Upper
43	100		
45	0.0	7.8	11.6#
61	1.6	7.4	11.2#
70	2.7	5.7	8.5#



#26
Hexane
Concen: 0.324 ppbv
RT: 5.78 min Scan# 885
Delta R.T. -0.00 min
Lab File: VL032970.D
Acq: 12 Dec 2018 1:16

Tgt Ion:	57	Resp:	37755
Ion	Ratio	Lower	Upper
57	100		
41	105.8	72.2	108.2
43	88.9	171.9	257.9#
56	59.9	42.2	63.2

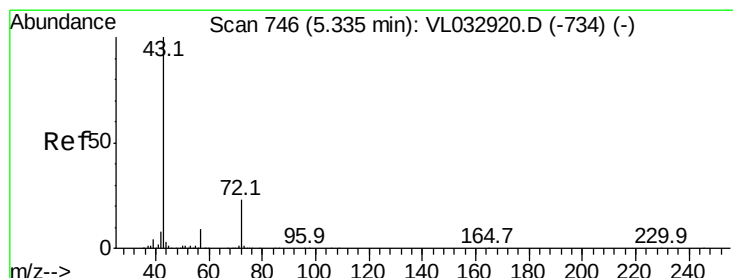
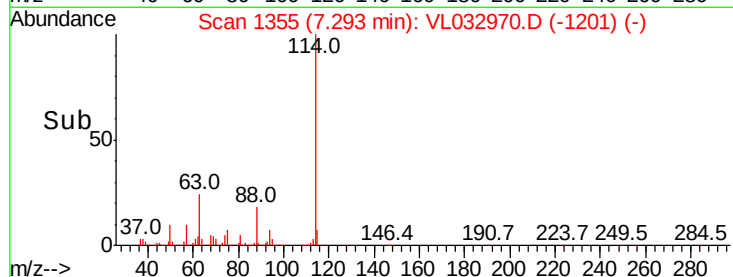
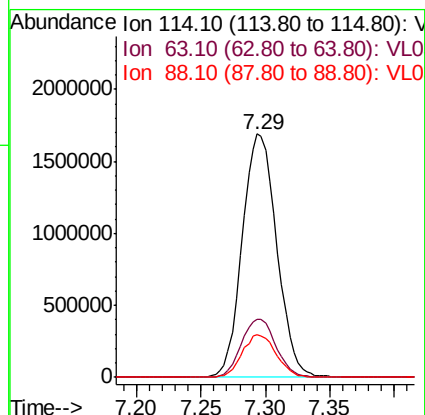
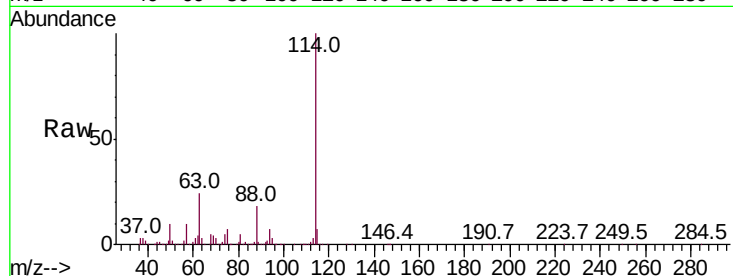




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1355
 Delta R.T. -0.01 min
 Lab File: VL032970.D
 Acq: 12 Dec 2018 1:16

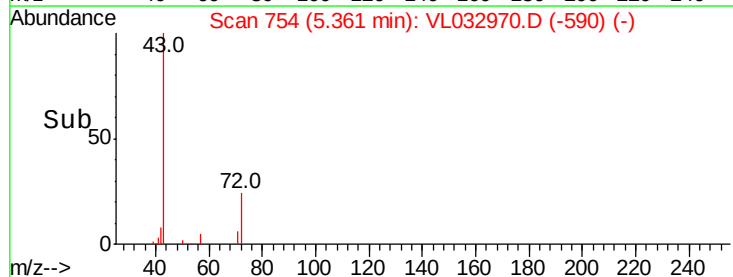
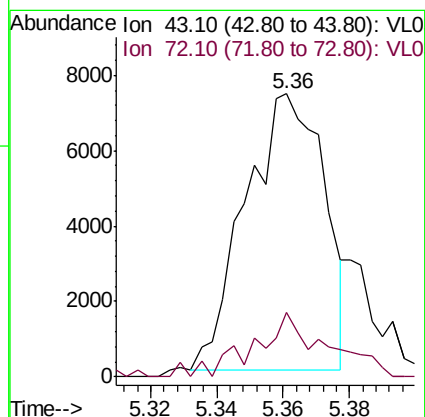
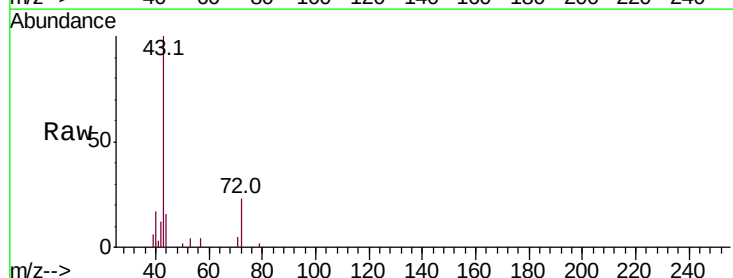
Instrument :
 MSVOA_L
 ClientSampleId :

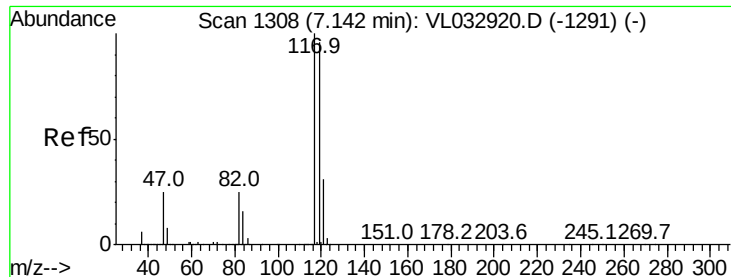
Tot Ion:114 Resp: 3144323
 Ion Ratio Lower Upper
 114 100
 63 24.1 20.1 30.1
 88 17.6 14.2 21.4



#34
 2-Butanone
 Concen: 0.088 ppbv
 RT: 5.36 min Scan# 754
 Delta R.T. 0.03 min
 Lab File: VL032970.D
 Acq: 12 Dec 2018 1:16

Tgt Ion: 43 Resp: 12111
 Ion Ratio Lower Upper
 43 100
 72 21.6 18.8 28.2





#35

Carbon Tetrachloride

Concen: 0.064 ppbv

RT: 7.14 min Scan# 1307

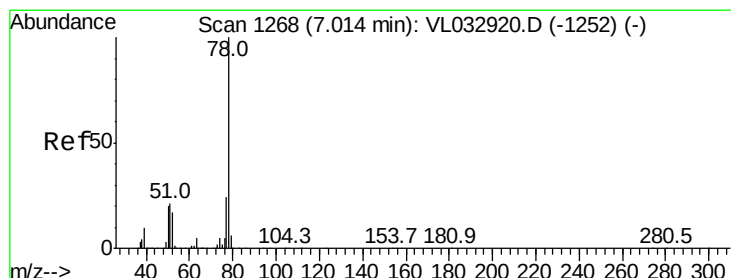
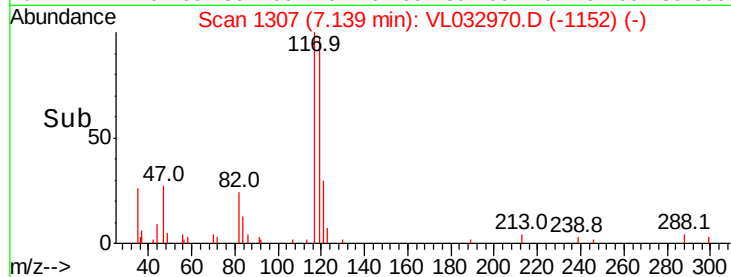
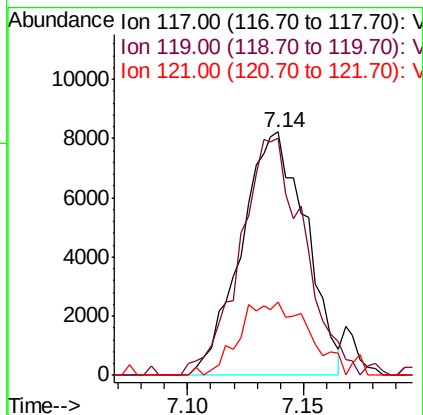
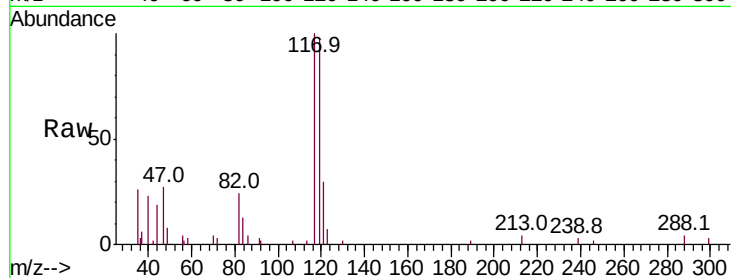
Delta R.T. -0.00 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:	117	Resp:	15905
Ion	Ratio	Lower	Upper
117	100		
119	92.6	76.5	114.7
121	30.0	24.5	36.7



#36

Benzene

Concen: 0.078 ppbv

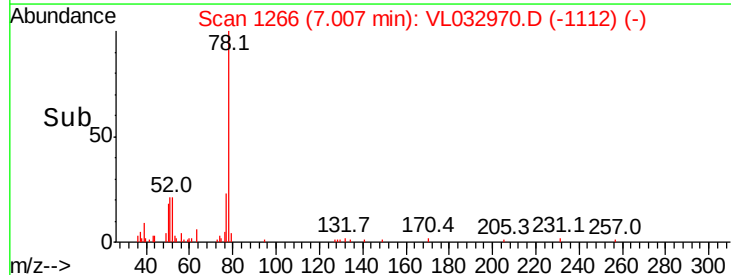
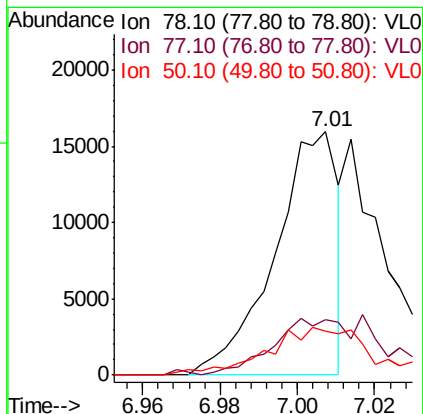
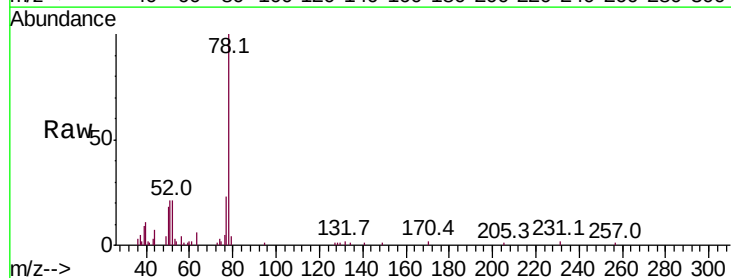
RT: 7.01 min Scan# 1266

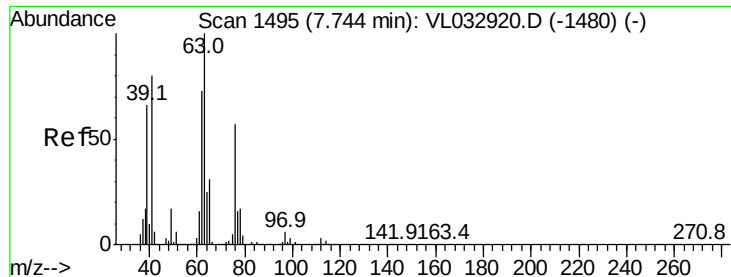
Delta R.T. -0.01 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Tgt Ion:	78	Resp:	18107
Ion	Ratio	Lower	Upper
78	100		
77	21.4	18.9	28.3
50	16.1	16.1	24.1#





#39

1,2-Dichloropropane

Concen: 8.643 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. -0.45 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

ClientSampleId :

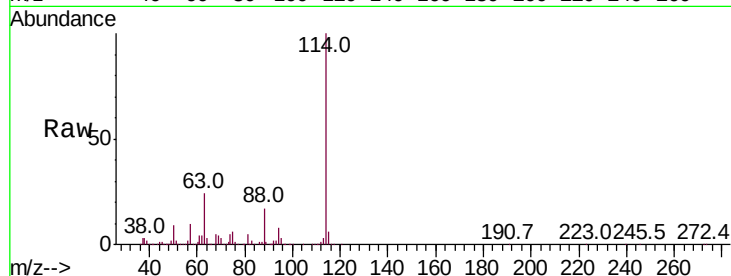
Tot Ion: 63 Resp: 758058

Ion Ratio Lower Upper

63 100

41 0.0 63.9 95.9#

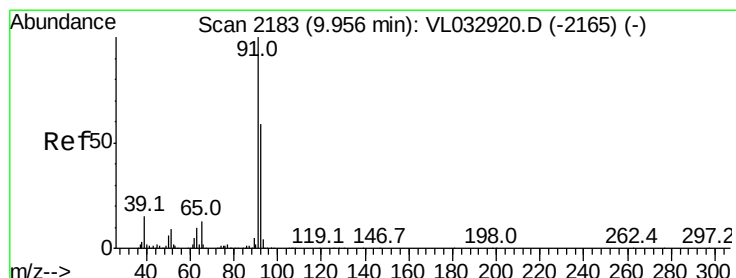
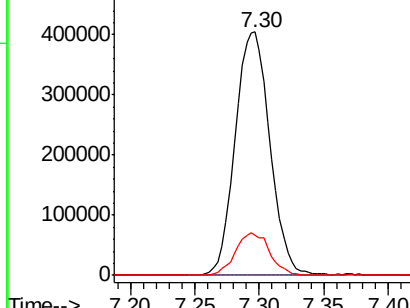
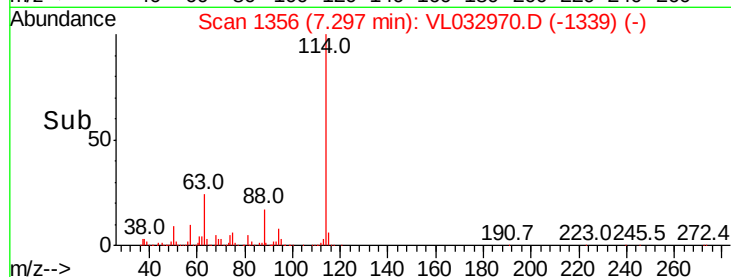
62 16.6 58.8 88.2#



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



#53

Toluene

Concen: 0.168 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.00 min

Lab File: VL032970.D

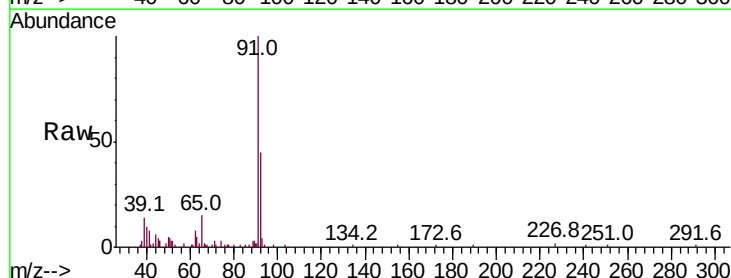
Acq: 12 Dec 2018 1:16

Tgt Ion: 91 Resp: 41269

Ion Ratio Lower Upper

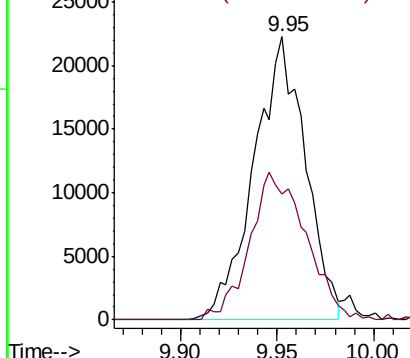
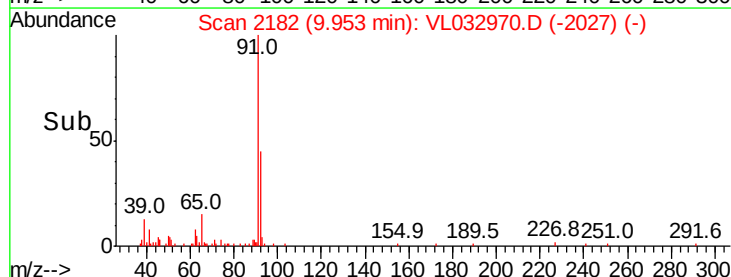
91 100

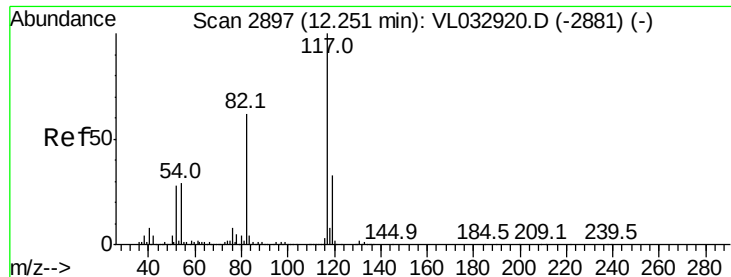
92 57.7 47.4 71.0



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: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

Instrument :

MSVOA_L

ClientSampled :

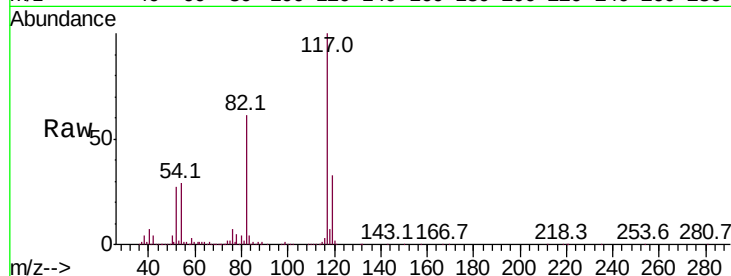
Tot Ion:117 Resp: 2883735

Ion Ratio Lower Upper

117 100

82 63.0 47.8 71.8

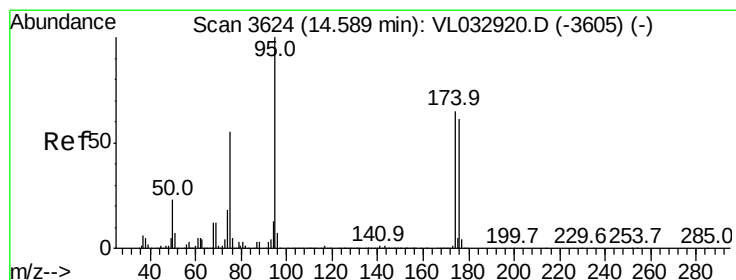
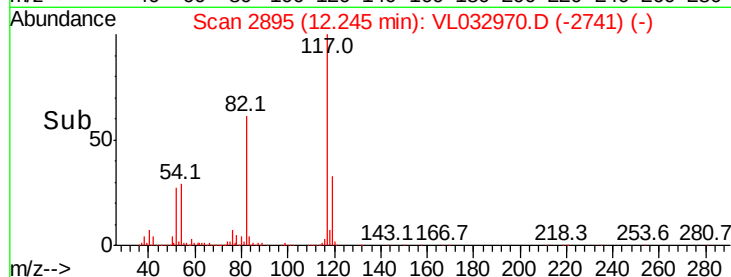
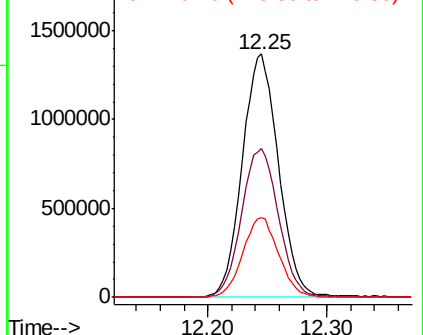
119 33.0 43.1 64.7#



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



#68

1-Bromo-4-Fluorobenzene

Concen: 10.495 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. -0.01 min

Lab File: VL032970.D

Acq: 12 Dec 2018 1:16

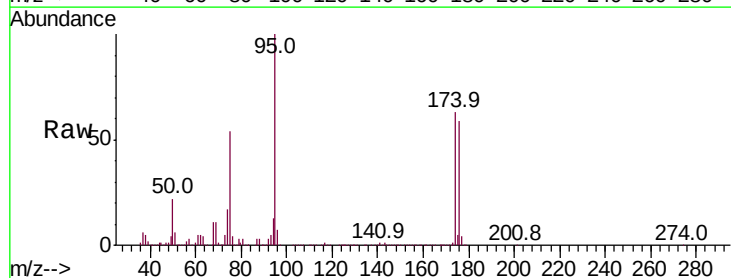
Tgt Ion: 95 Resp: 2235983

Ion Ratio Lower Upper

95 100

174 66.0 51.4 77.0

175 4.9 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

