

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121118\
 Data File : VL032967.D
 Acq On : 11 Dec 2018 23:17
 Operator : SY/AP
 Sample : J6264-15DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 12 00:53:32 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	5.76	49	1367836	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3587601	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3375084	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2497549	10.02	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.20%

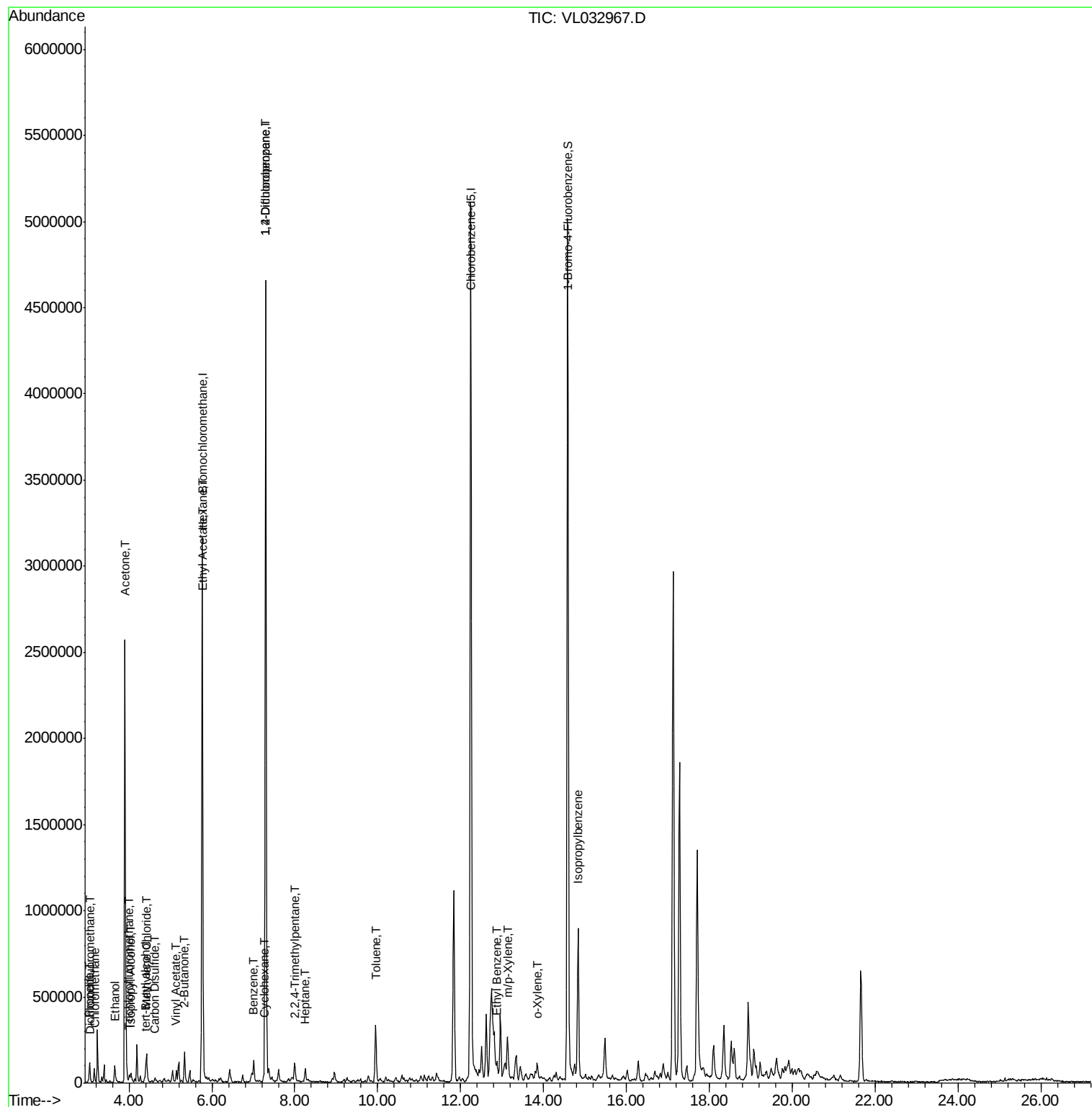
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	8144	0.045	ppbv	95
4) Chloromethane	3.17	50	11396	0.189	ppbv	93
9) Propene	3.04	41	15455	0.377	ppbv #	41
10) Heptane	8.25	43	12778	0.083	ppbv #	26
11) Trichlorofluoromethane	4.01	101	21347	0.124	ppbv	88
13) Ethanol	3.66	45	103465	7.336	ppbv	94
15) Acetone	3.90	43	2647816	22.553	ppbv	98
17) tert-Butyl alcohol	4.38	59	1420	0.048	ppbv #	98
19) Isopropyl Alcohol	4.04	45	22881	0.310	ppbv #	95
20) Methylene Chloride	4.41	84	51497	0.897	ppbv	92
23) Vinyl Acetate	5.14	43	8869	0.045	ppbv #	1
25) Ethyl Acetate	5.78	43	68415	0.247	ppbv #	82
26) Hexane	5.78	57	91722	0.716	ppbv #	46
27) Carbon Disulfide	4.62	76	23566	0.147	ppbv #	57
30) Cyclohexane	7.25	84	5713	0.054	ppbv #	1
34) 2-Butanone	5.34	43	214238	1.371	ppbv	97
36) Benzene	7.00	78	91320	0.346	ppbv	92
39) 1,2-Dichloropropane	7.29	63	839140	8.385	ppbv #	21
44) 2,2,4-Trimethylpentane	8.00	57	67703	0.151	ppbv	91
53) Toluene	9.96	91	112961	0.404	ppbv #	17
58) Ethyl Benzene	12.87	91	50961	0.142	ppbv	98
59) m/p-Xylene	13.15	91	22785	0.070	ppbv #	100
60) o-Xylene	13.85	91	24479	0.074	ppbv #	65
62) Isopropylbenzene	14.83	105	783519	1.704	ppbv	100

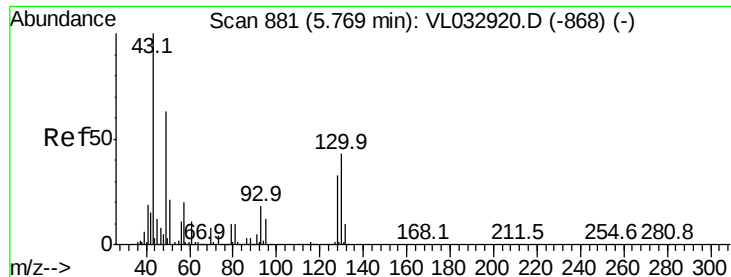
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121118\
Data File : VL032967.D
Acq On : 11 Dec 2018 23:17
Operator : SY/AP
Sample : J6264-15DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Dec 12 00:53:32 2018
Quant Method : Z:\V0ASRV\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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. -0.01 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

ClientSampleId :

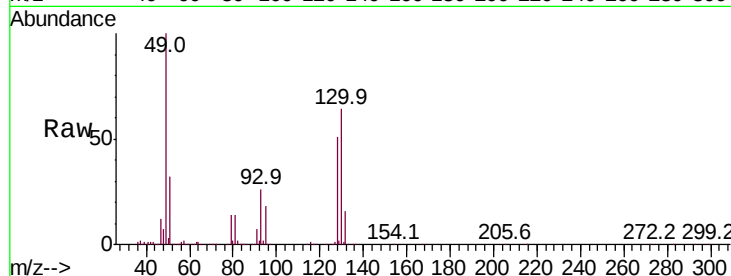
Tot Ion: 49 Resp: 1367836

Ion Ratio Lower Upper

49 100

128 52.9 26.3 78.8

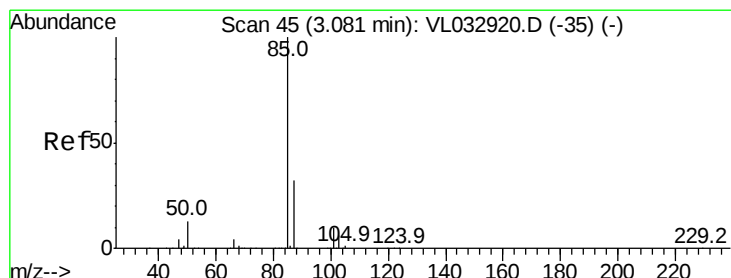
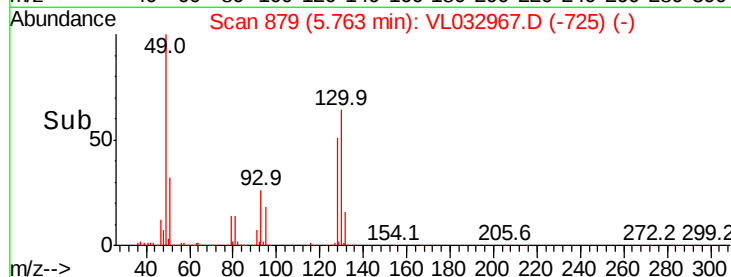
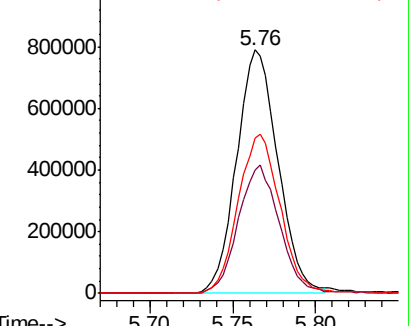
130 67.6 33.9 101.7



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: 0.045 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.00 min

Lab File: VL032967.D

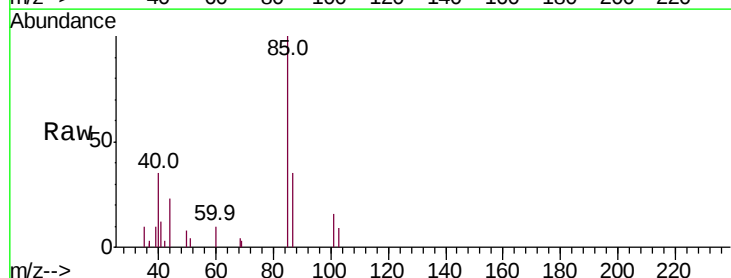
Acq: 11 Dec 2018 23:17

Tgt Ion: 85 Resp: 8144

Ion Ratio Lower Upper

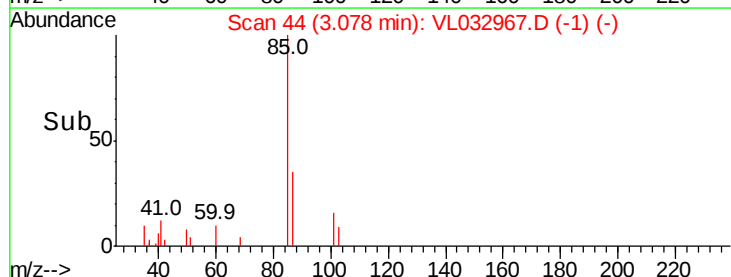
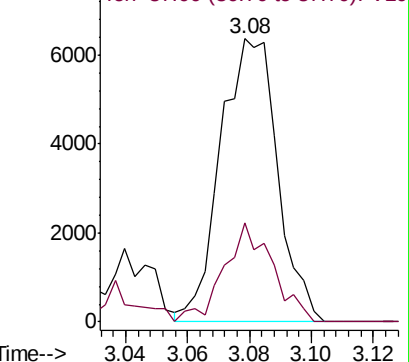
85 100

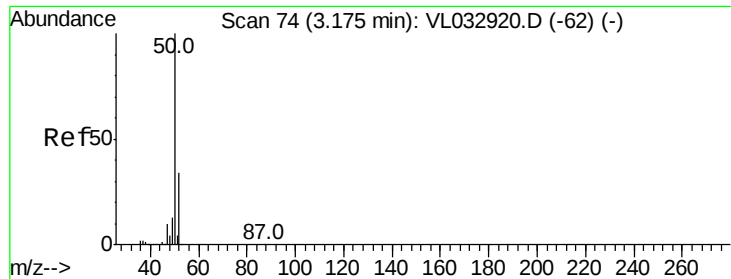
87 35.2 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.189 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

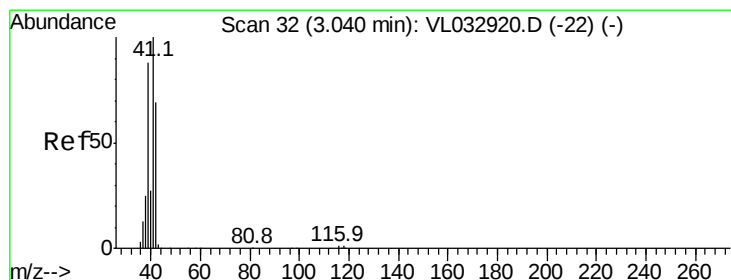
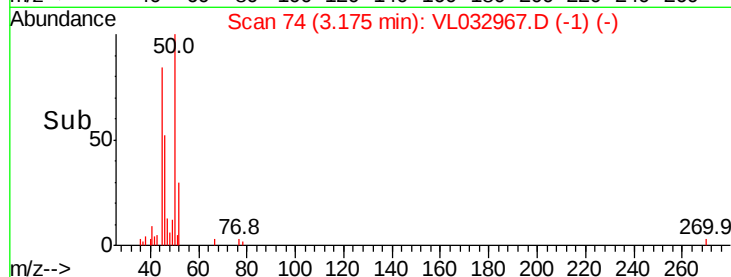
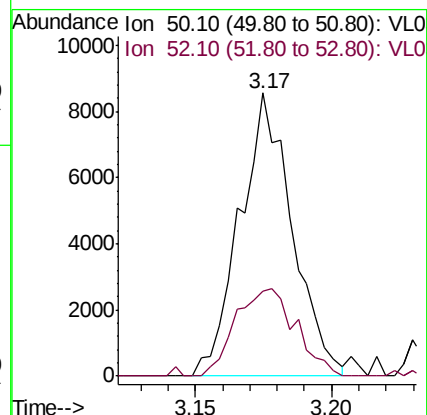
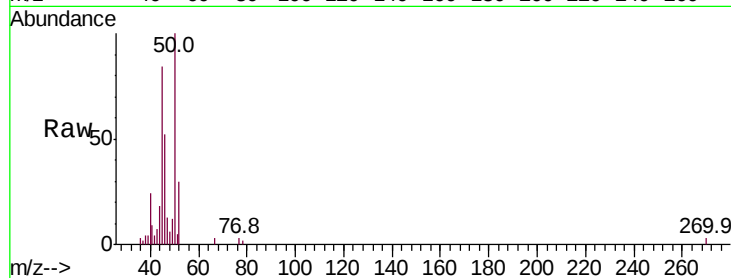
ClientSampleId :

Tot Ion: 50 Resp: 11396

Ion Ratio Lower Upper

50 100

52 30.0 27.3 40.9



#9

Propene

Concen: 0.377 ppbv

RT: 3.04 min Scan# 32

Delta R.T. 0.00 min

Lab File: VL032967.D

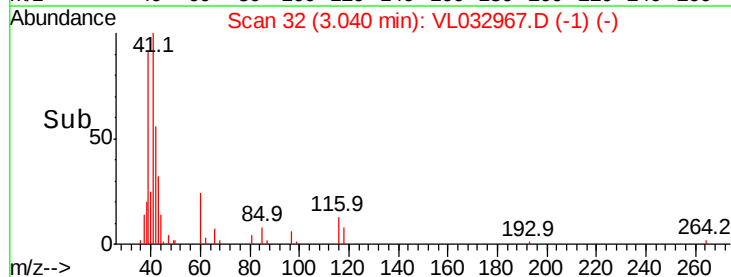
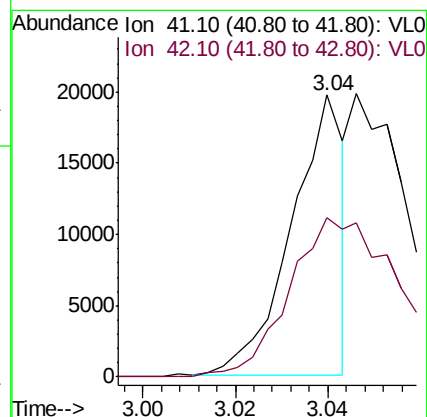
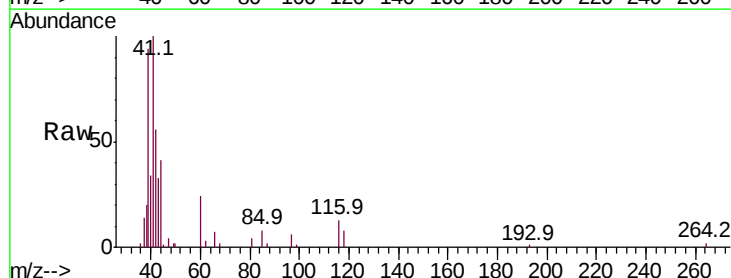
Acq: 11 Dec 2018 23:17

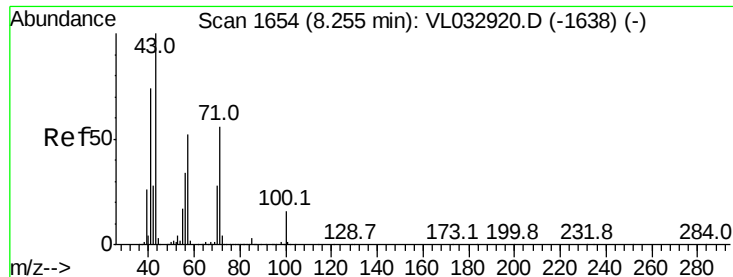
Tgt Ion: 41 Resp: 15455

Ion Ratio Lower Upper

41 100

42 118.7 56.2 84.2#

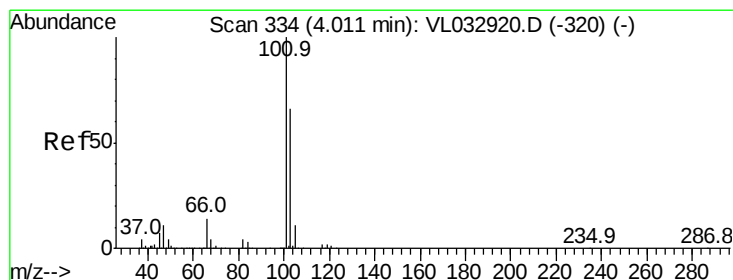
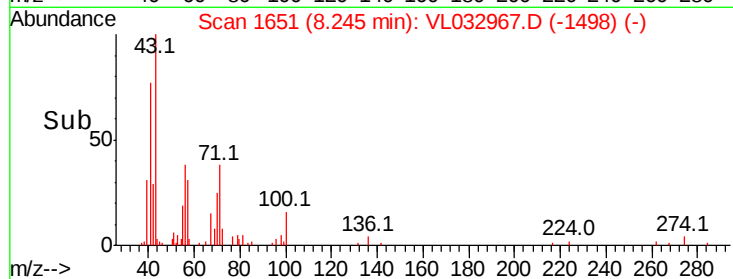
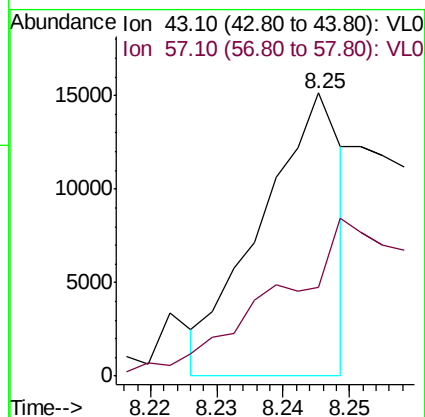
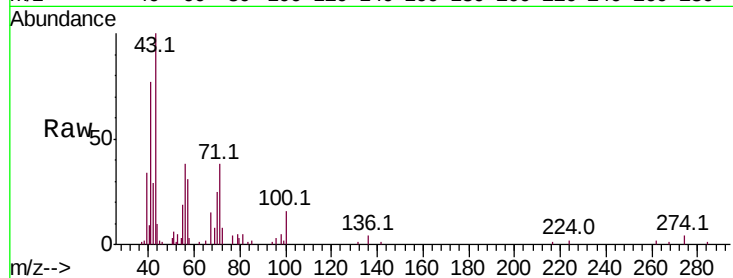




#10
 Heptane
 Concen: 0.083 ppbv
 RT: 8.25 min Scan# 1651
 Delta R.T. -0.01 min
 Lab File: VL032967.D
 Acq: 11 Dec 2018 23:17

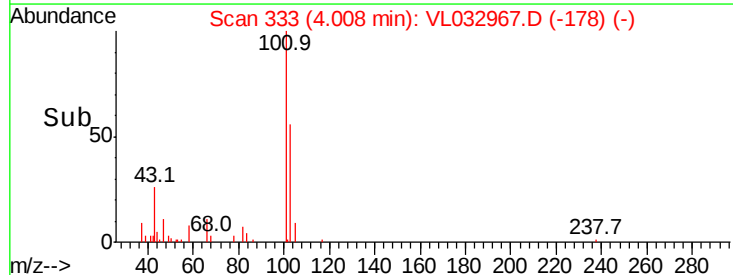
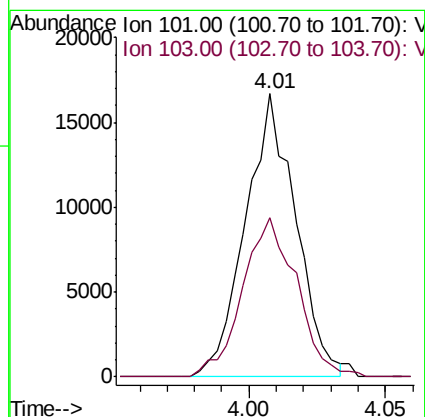
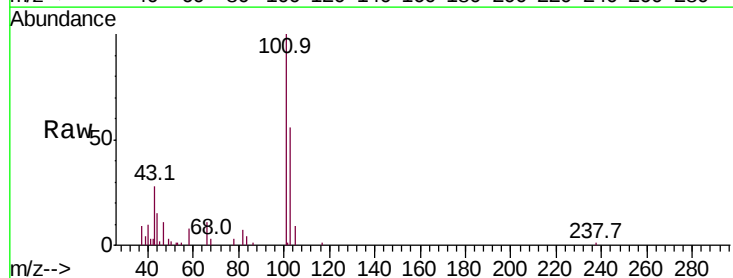
Instrument :
 MSVOA_L
 ClientSampleId :

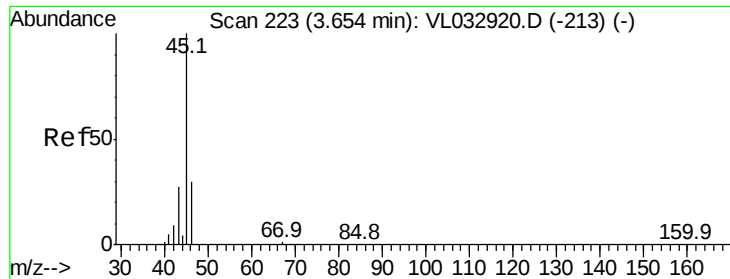
Tot Ion: 43 Resp: 12778
 Ion Ratio Lower Upper
 43 100
 57 0.0 41.8 62.6#



#11
 Trichlorofluoromethane
 Concen: 0.124 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL032967.D
 Acq: 11 Dec 2018 23:17

Tgt Ion: 101 Resp: 21347
 Ion Ratio Lower Upper
 101 100
 103 56.3 52.7 79.1





#13

Ethanol

Concen: 7.336 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.00 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

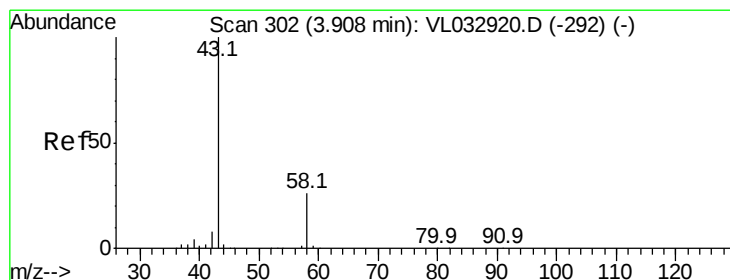
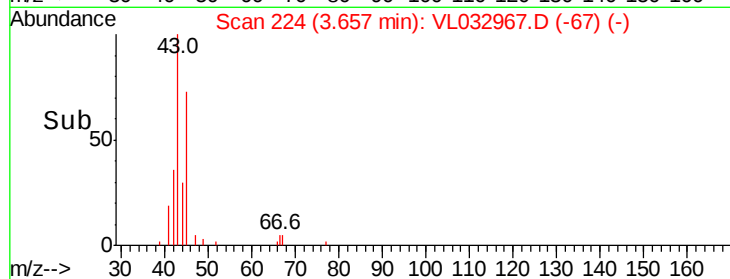
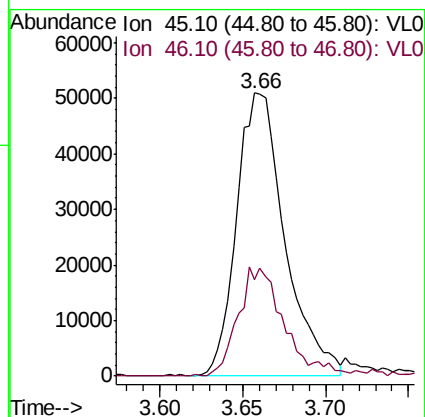
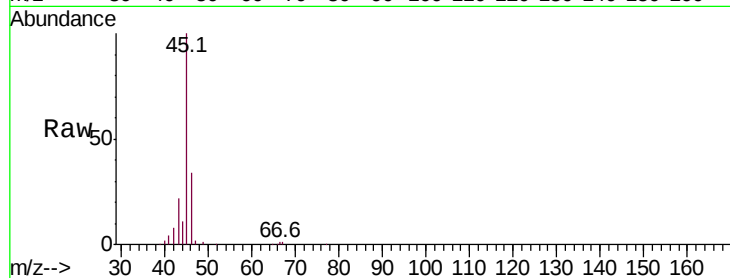
ClientSampleId :

Tot Ion: 45 Resp: 103465

Ion Ratio Lower Upper

45 100

46 37.9 13.8 55.4



#15

Acetone

Concen: 22.553 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.01 min

Lab File: VL032967.D

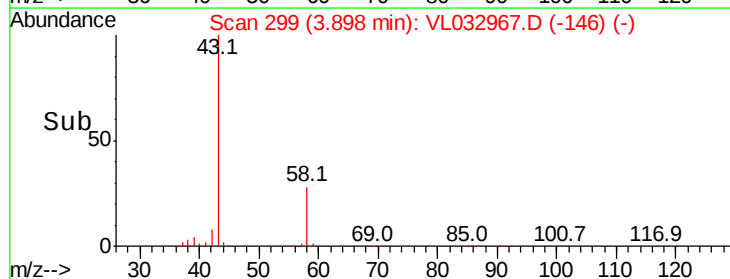
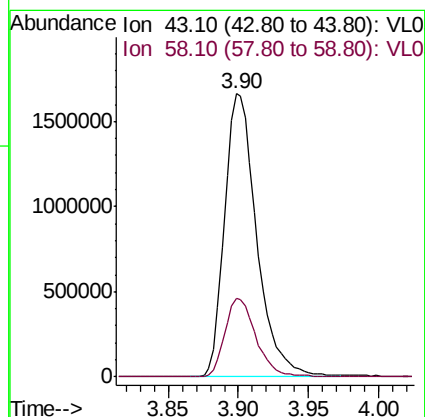
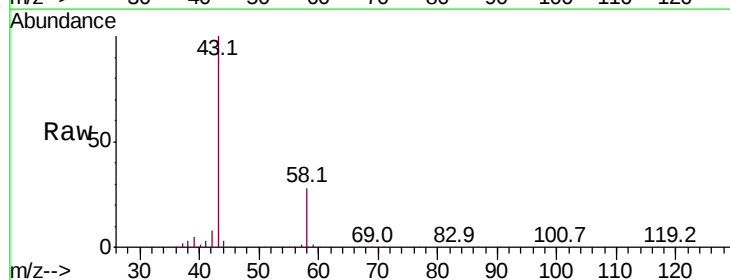
Acq: 11 Dec 2018 23:17

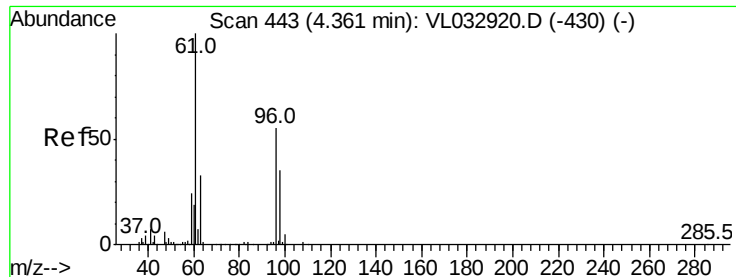
Tgt Ion: 43 Resp: 2647816

Ion Ratio Lower Upper

43 100

58 26.9 20.6 30.8



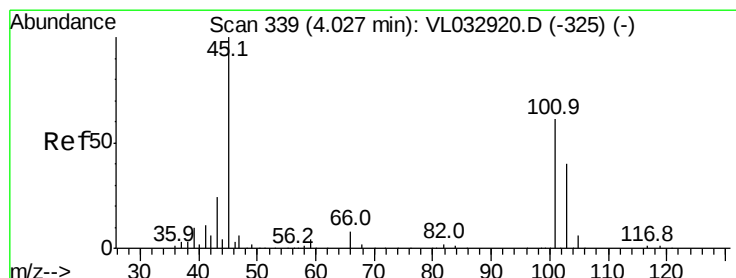
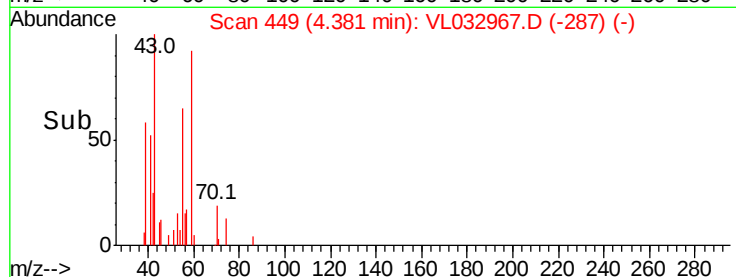
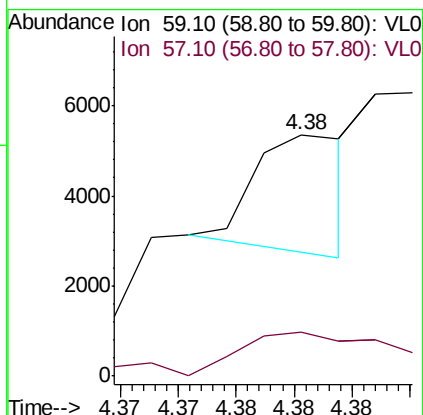
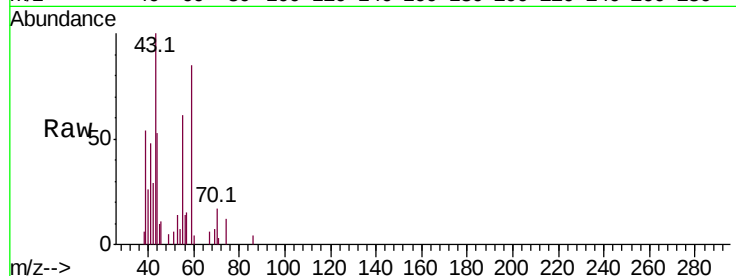


#17

tert-Butyl alcohol
Concen: 0.048 ppbv
RT: 4.38 min Scan# 449
Delta R.T. 0.02 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

Instrument :
MSVOA_L
ClientSampleId :

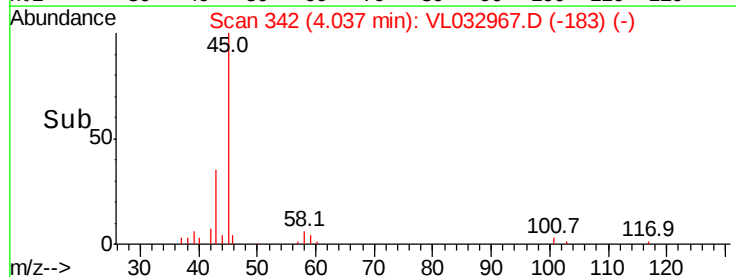
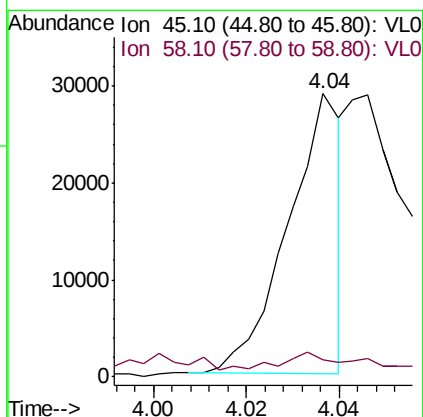
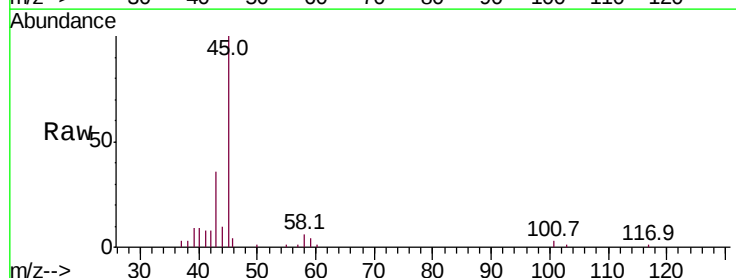
Tot Ion: 59 Resp: 1420
Ion Ratio Lower Upper
59 100
57 0.0 0.6 1.0#

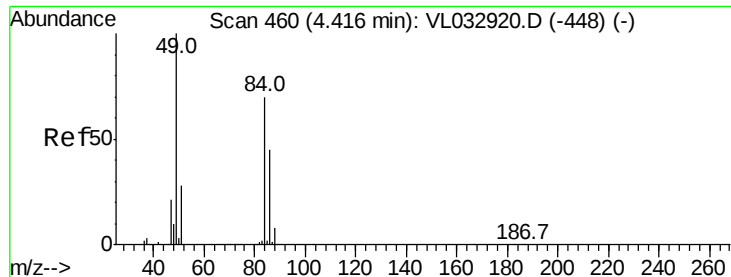


#19

Isopropyl Alcohol
Concen: 0.310 ppbv
RT: 4.04 min Scan# 342
Delta R.T. 0.01 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

Tgt Ion: 45 Resp: 22881
Ion Ratio Lower Upper
45 100
58 0.0 1.4 2.2#

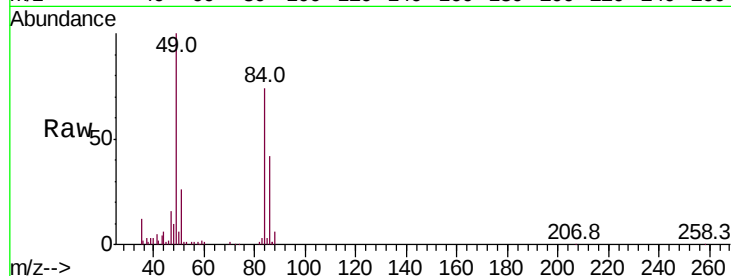




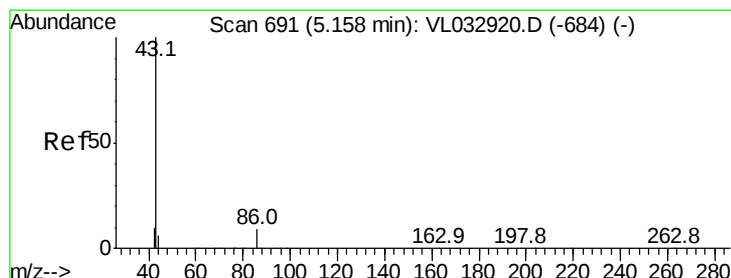
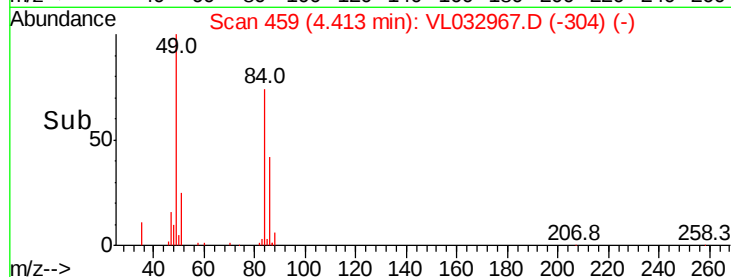
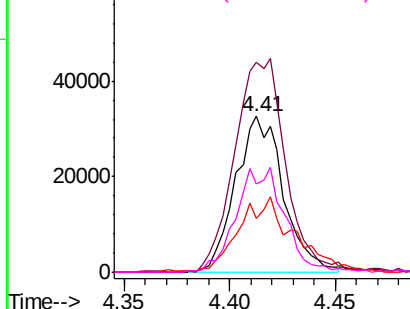
#20
Methylene Chloride
Concen: 0.897 ppbv
RT: 4.41 min Scan# 459
Delta R.T. -0.00 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:	84	Resp:	51497
Ion	Ratio	Lower	Upper
84	100		
49	134.2	113.8	170.8
51	33.7	31.8	47.8
86	55.9	50.8	76.2

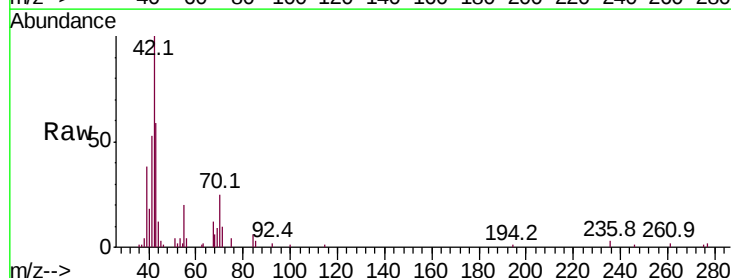


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

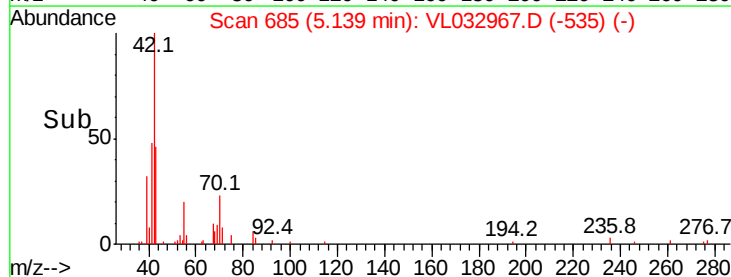
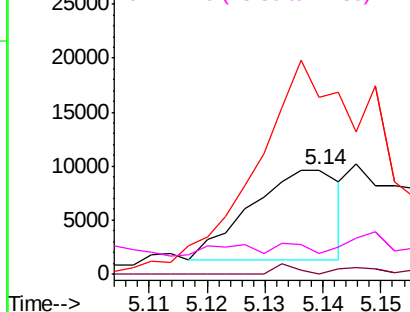


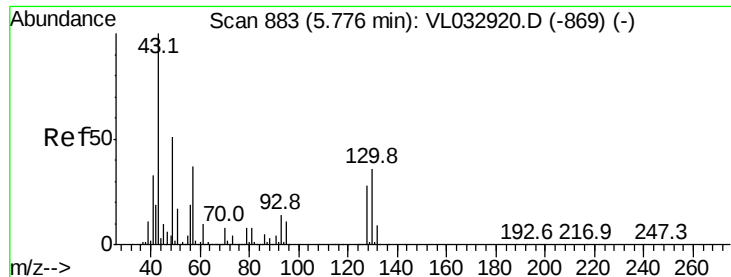
#23
Vinyl Acetate
Concen: 0.045 ppbv
RT: 5.14 min Scan# 685
Delta R.T. -0.02 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

Tgt Ion:	43	Resp:	8869
Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.6	9.8#
42	164.9	8.3	12.5#
44	0.8	4.2	6.4#



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

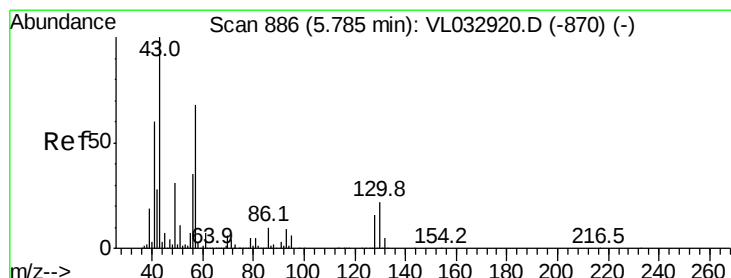
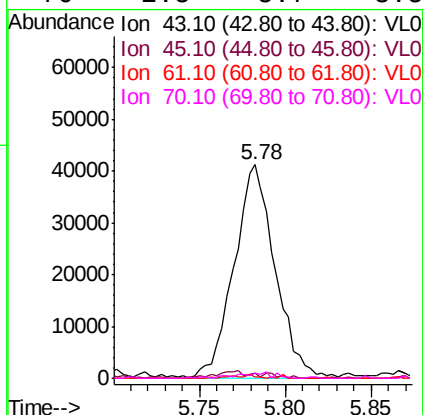
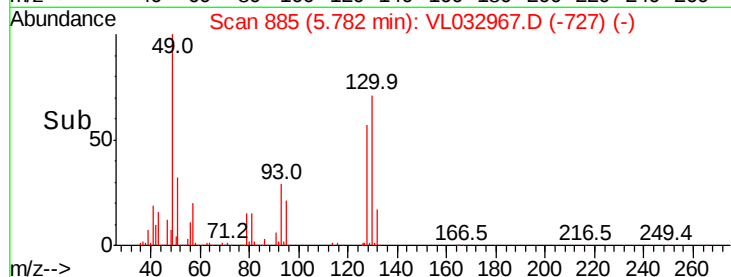
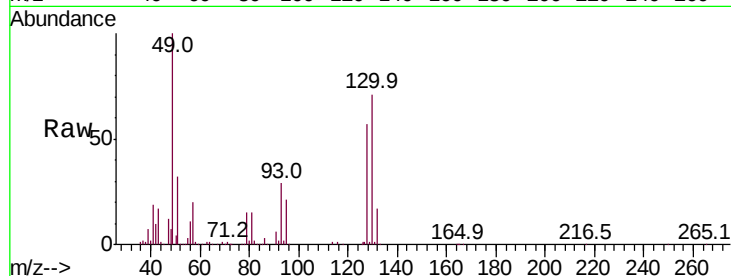




#25
Ethyl Acetate
Concen: 0.247 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.01 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

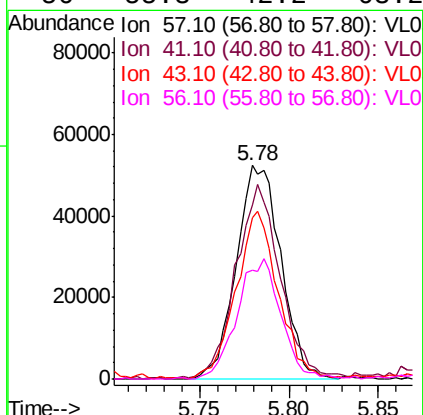
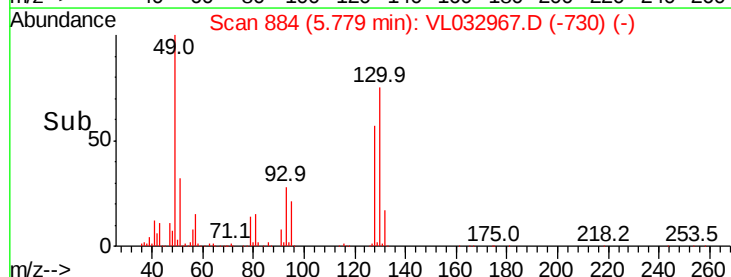
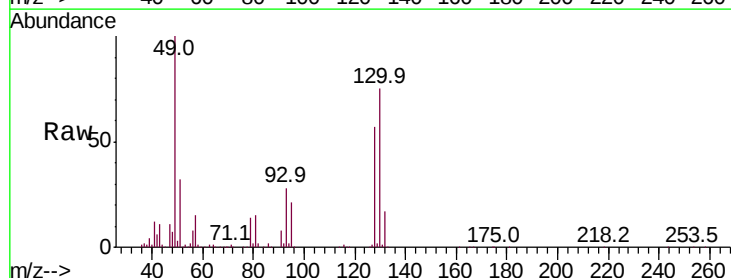
Instrument :
MSVOA_L
ClientSampleId :

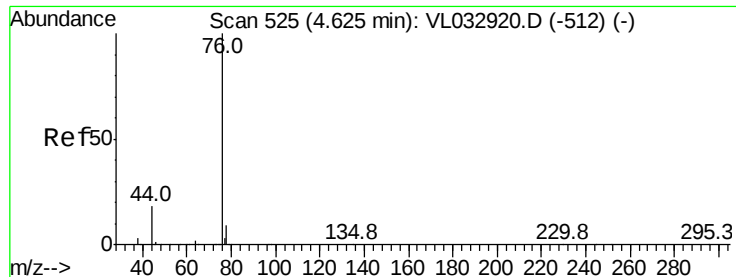
Tot Ion:	43	Resp:	68415
Ion	Ratio	Lower	Upper
43	100		
45	3.8	7.8	11.6#
61	1.1	7.4	11.2#
70	2.5	5.7	8.5#



#26
Hexane
Concen: 0.716 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.01 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

Tgt Ion:	57	Resp:	91722
Ion	Ratio	Lower	Upper
57	100		
41	90.0	72.2	108.2
43	74.3	171.9	257.9#
56	55.3	42.2	63.2





#27

Carbon Disulfide

Concen: 0.147 ppbv

RT: 4.62 min Scan# 524

Delta R.T. -0.00 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

ClientSampleId :

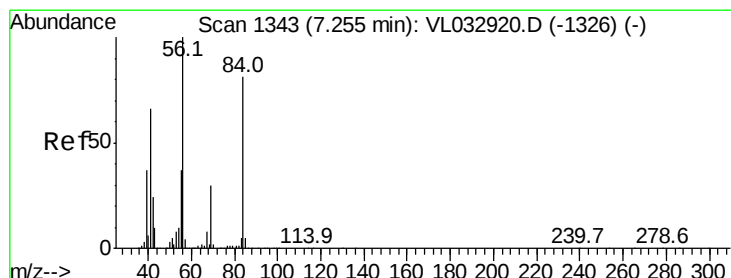
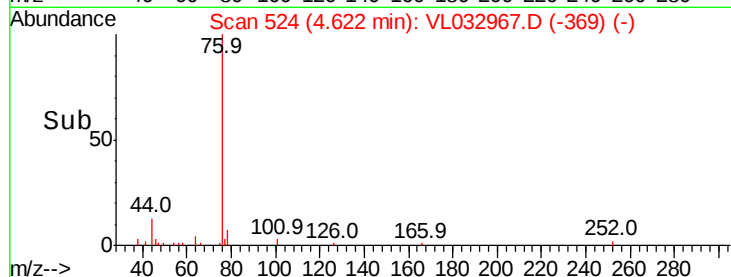
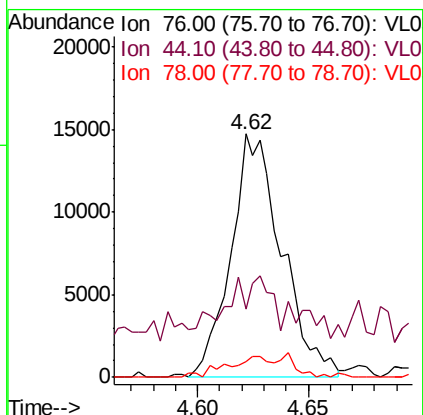
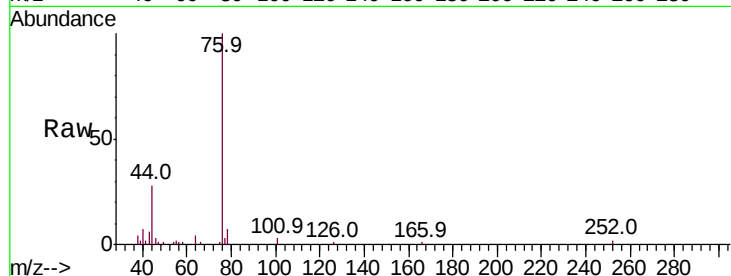
Tot Ion: 76 Resp: 23566

Ion Ratio Lower Upper

76 100

44 45.9 14.7 22.1#

78 11.0 7.4 11.2



#30

Cyclohexane

Concen: 0.054 ppbv

RT: 7.25 min Scan# 1342

Delta R.T. -0.00 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

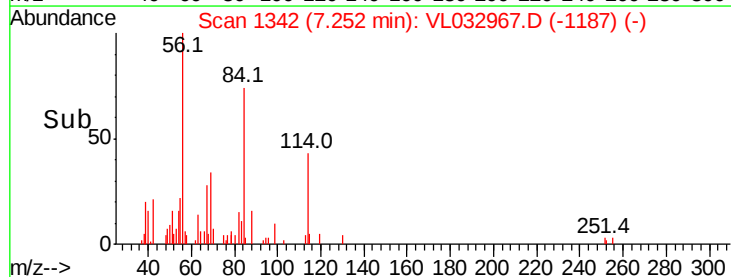
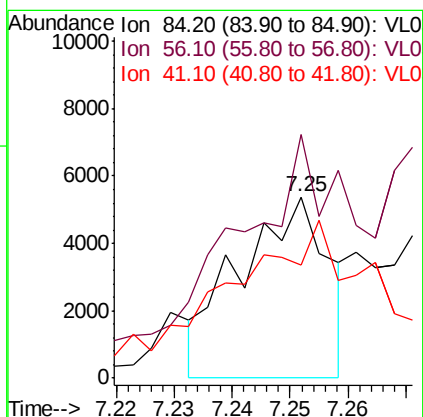
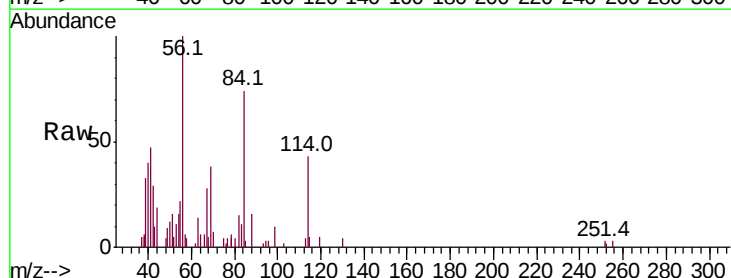
Tgt Ion: 84 Resp: 5713

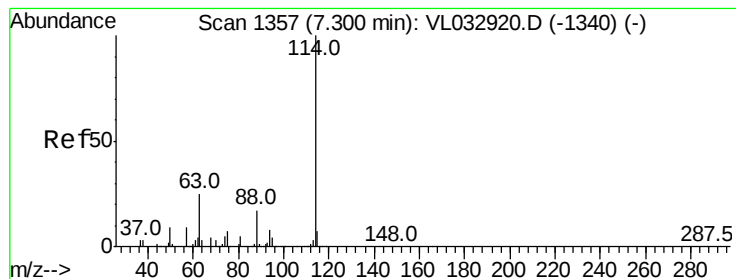
Ion Ratio Lower Upper

84 100

56 0.0 102.5 153.7#

41 185.3 64.1 96.1#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. -0.00 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

ClientSampled :

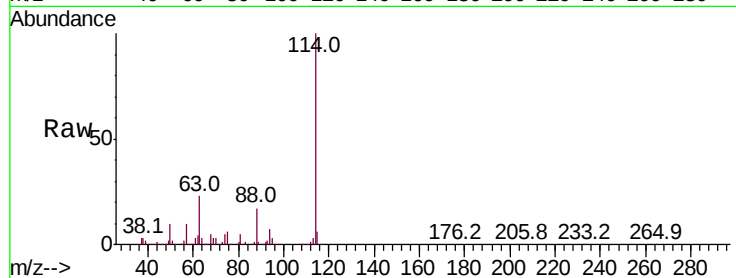
Tot Ion:114 Resp: 3587601

Ion Ratio Lower Upper

114 100

63 23.7 20.1 30.1

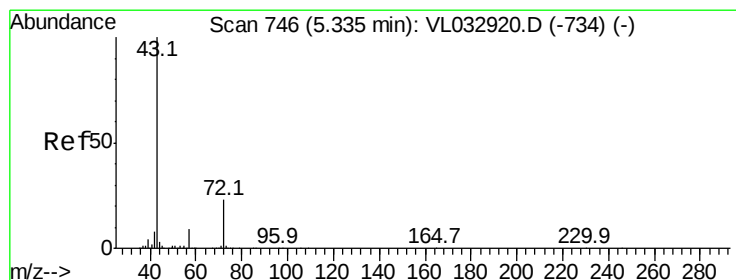
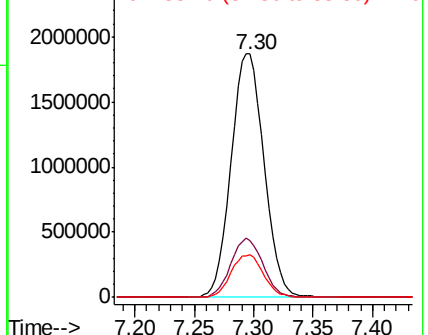
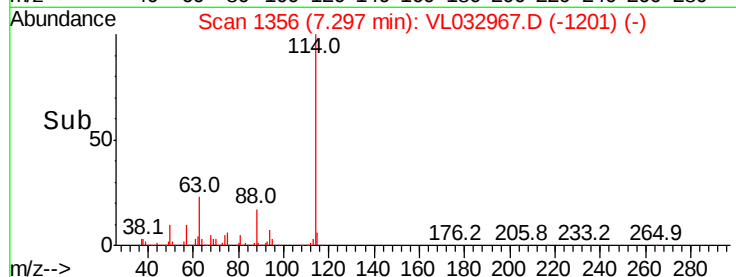
88 17.3 14.2 21.4



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.371 ppbv

RT: 5.34 min Scan# 747

Delta R.T. 0.00 min

Lab File: VL032967.D

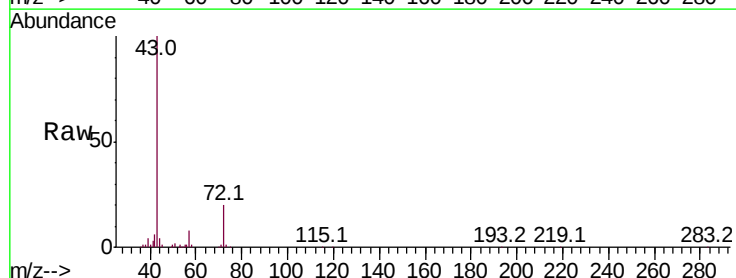
Acq: 11 Dec 2018 23:17

Tgt Ion: 43 Resp: 214238

Ion Ratio Lower Upper

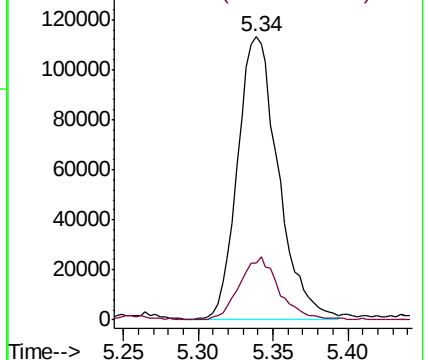
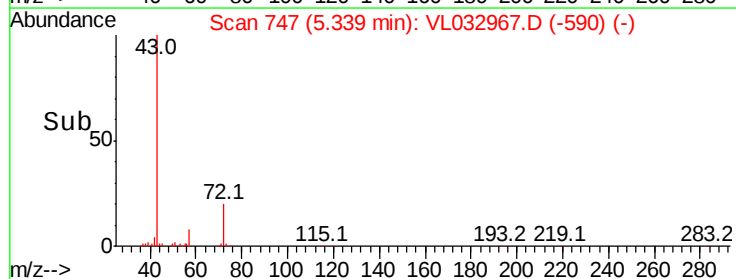
43 100

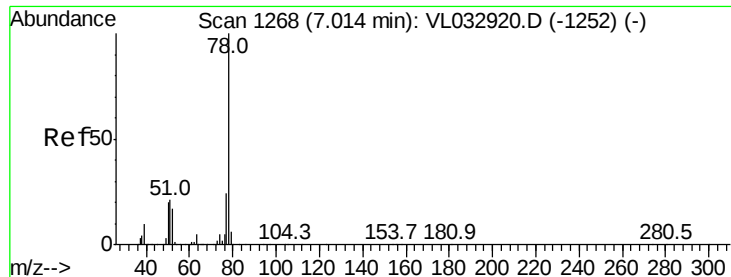
72 21.9 18.8 28.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.346 ppbv

RT: 7.00 min Scan# 1265

Delta R.T. -0.01 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

ClientSampleId :

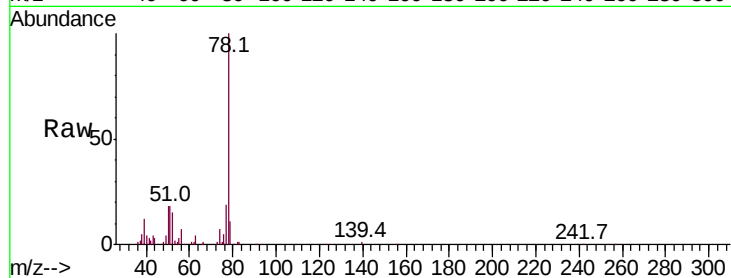
Tot Ion: 78 Resp: 91320

Ion Ratio Lower Upper

78 100

77 18.9 18.9 28.3

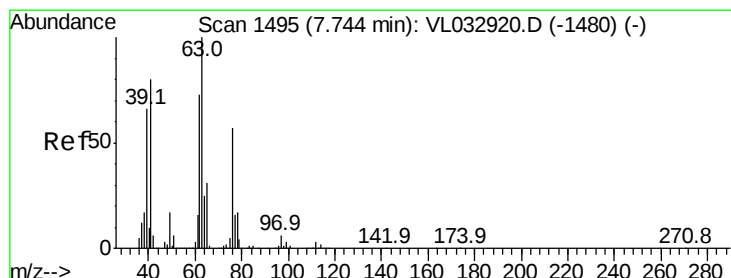
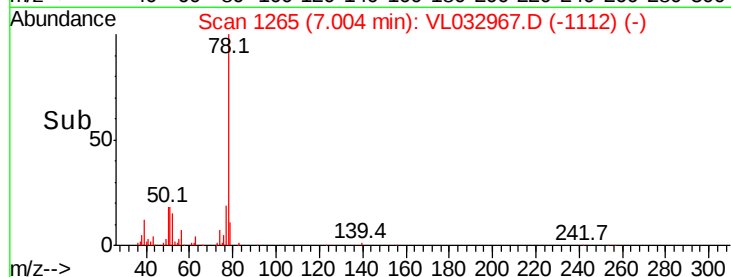
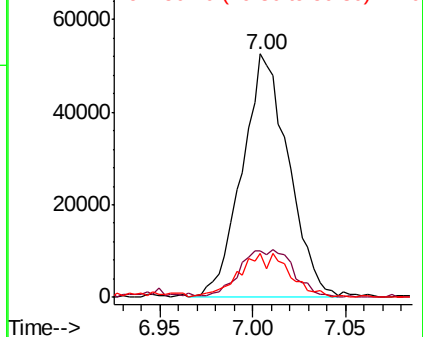
50 17.8 16.1 24.1



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: 8.385 ppbv

RT: 7.29 min Scan# 1355

Delta R.T. -0.45 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

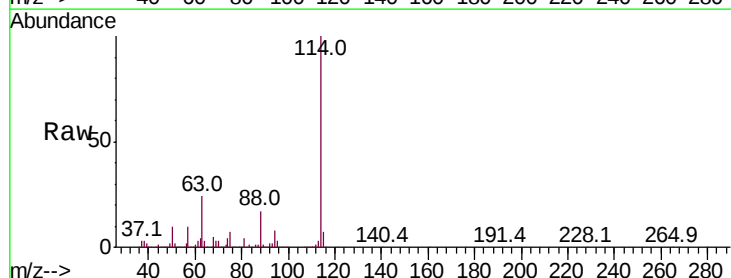
Tgt Ion: 63 Resp: 839140

Ion Ratio Lower Upper

63 100

41 0.0 63.9 95.9#

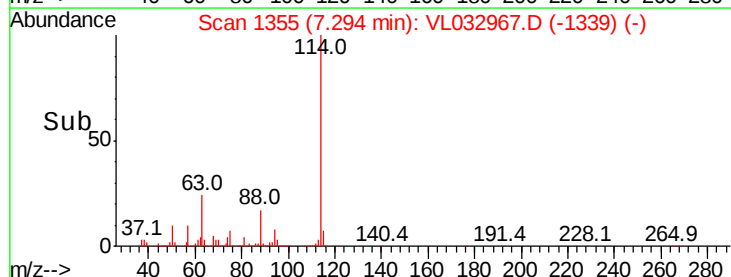
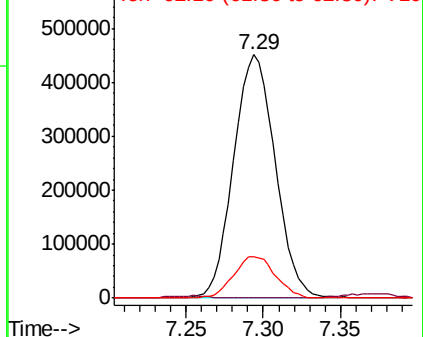
62 16.9 58.8 88.2#

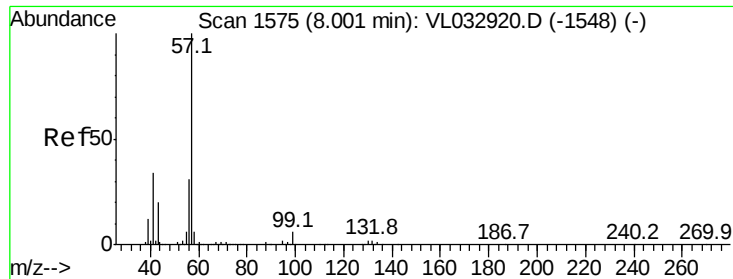


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

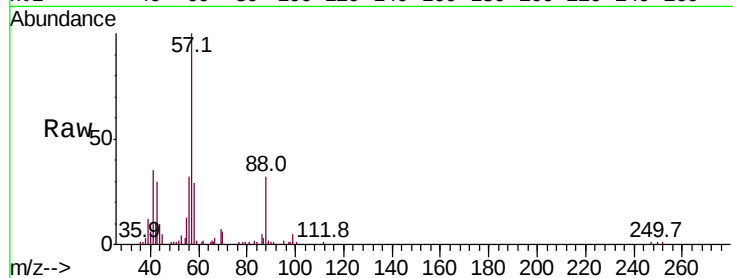




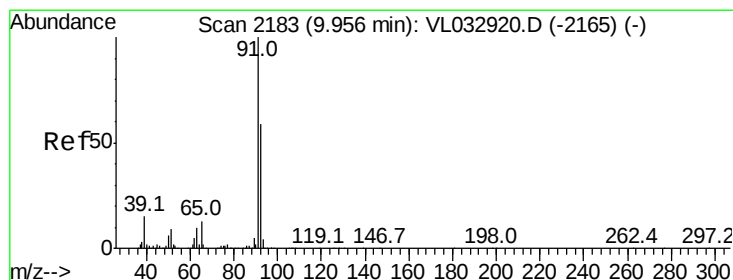
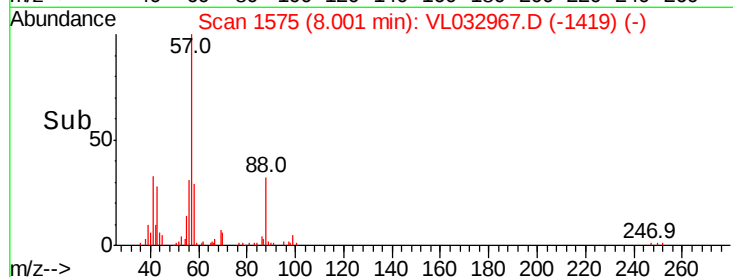
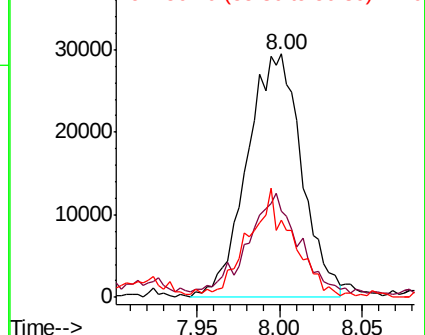
#44
 2,2,4-Trimethylpentane
 Concen: 0.151 ppbv
 RT: 8.00 min Scan# 1575
 Delta R.T. 0.00 min
 Lab File: VL032967.D
 Acq: 11 Dec 2018 23:17

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion	57	Resp	67703
Ion	Ratio	Lower	Upper
57	100		
41	38.0	27.0	40.4
56	36.9	24.6	37.0

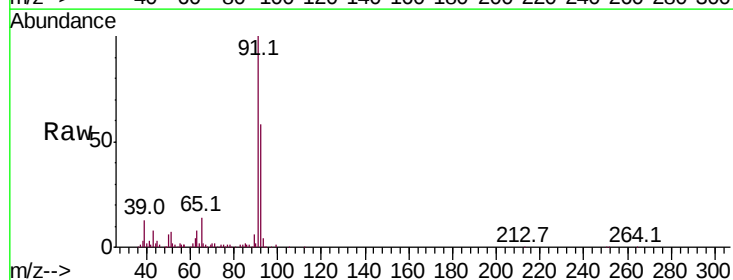


Abundance Ion 57.10 (56.80 to 57.80): VL0
 Ion 41.10 (40.80 to 41.80): VL0
 Ion 56.10 (55.80 to 56.80): VL0

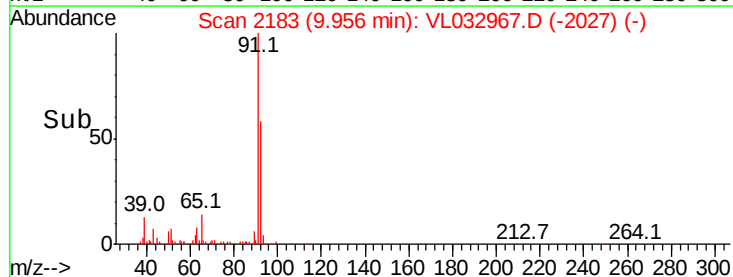
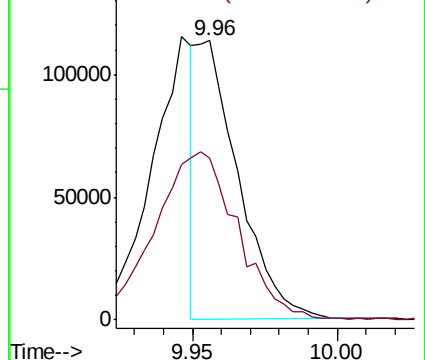


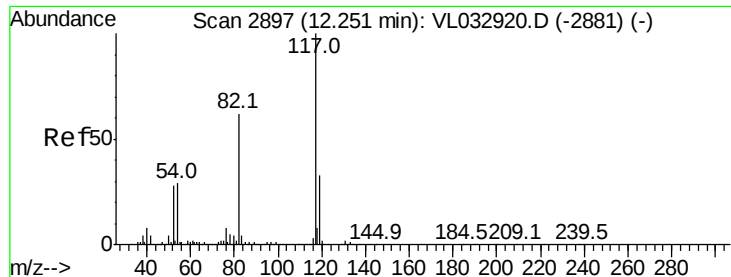
#53
 Toluene
 Concen: 0.404 ppbv
 RT: 9.96 min Scan# 2183
 Delta R.T. 0.00 min
 Lab File: VL032967.D
 Acq: 11 Dec 2018 23:17

Tgt Ion	91	Resp	112961
Ion	Ratio	Lower	Upper
91	100		
92	121.8	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: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

ClientSampleId :

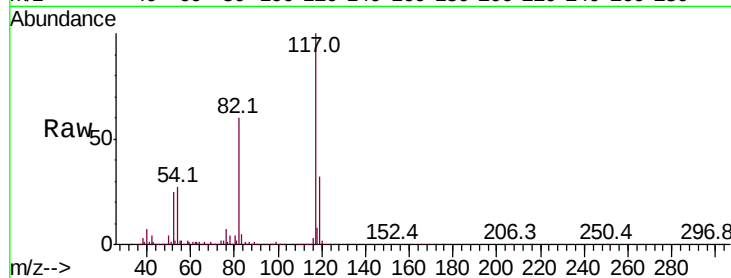
Tot Ion:117 Resp: 3375084

Ion	Ratio	Lower	Upper
117	100		
82	62.4	47.8	71.8
119	33.1	43.1	64.7#

117 100

82 62.4 47.8 71.8

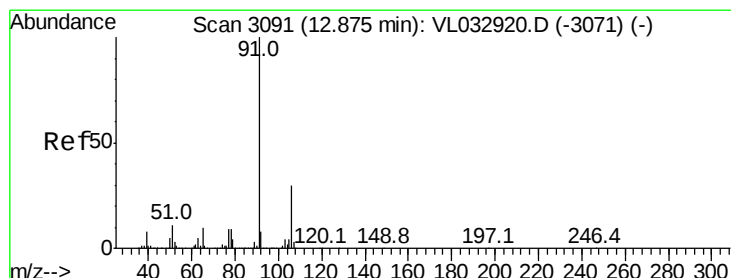
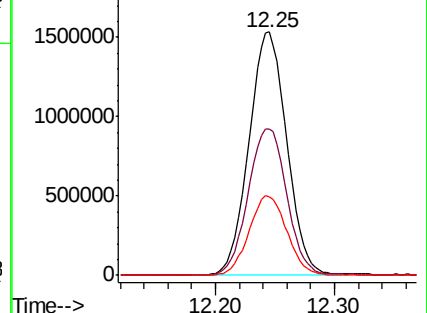
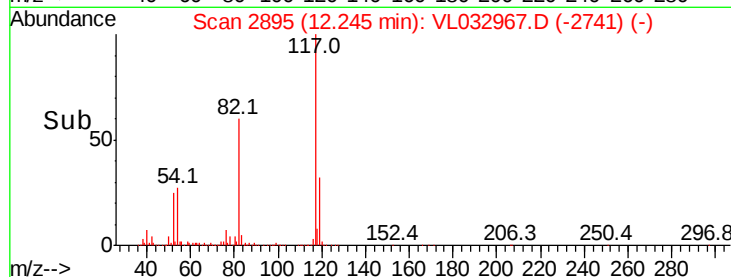
119 33.1 43.1 64.7#



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



#58

Ethyl Benzene

Concen: 0.142 ppbv

RT: 12.87 min Scan# 3089

Delta R.T. -0.01 min

Lab File: VL032967.D

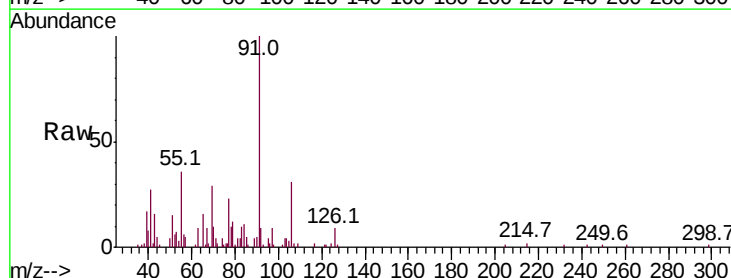
Acq: 11 Dec 2018 23:17

Tgt Ion: 91 Resp: 50961

Ion	Ratio	Lower	Upper
91	100		
106	31.2	23.9	35.9

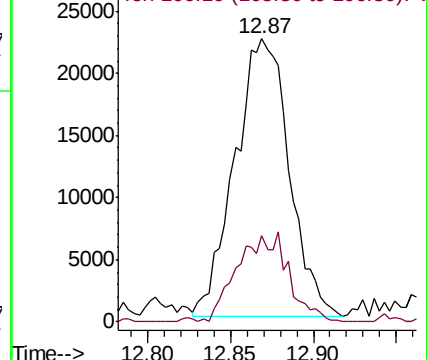
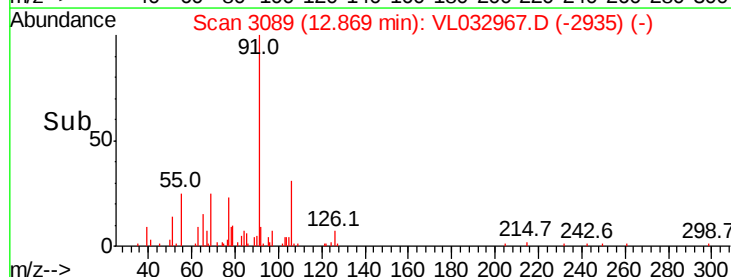
91 100

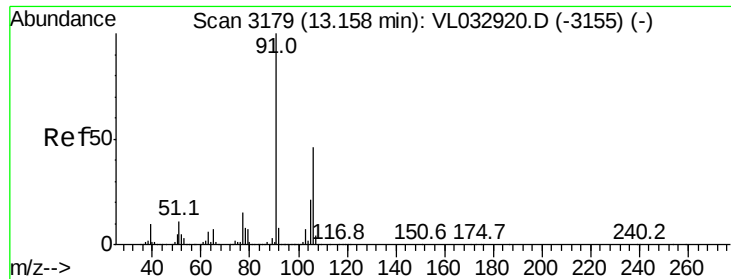
106 31.2 23.9 35.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

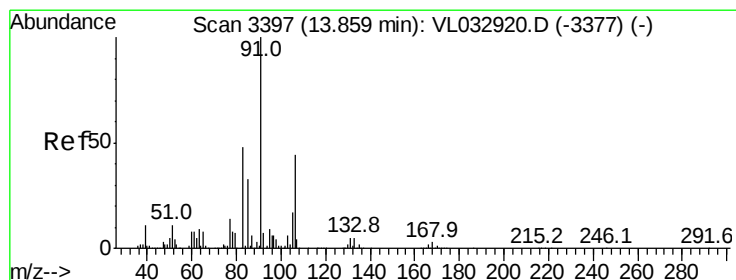
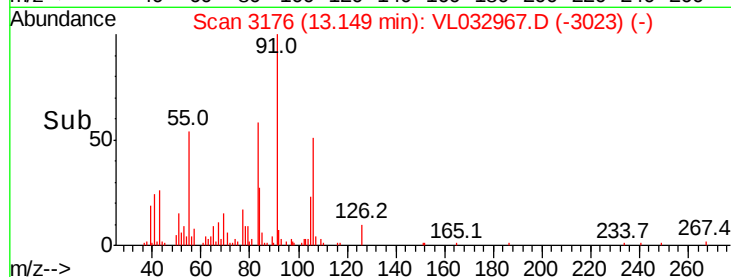
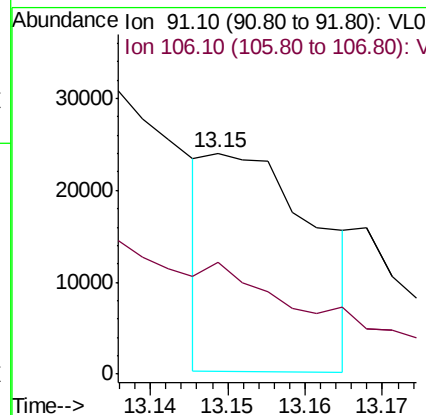
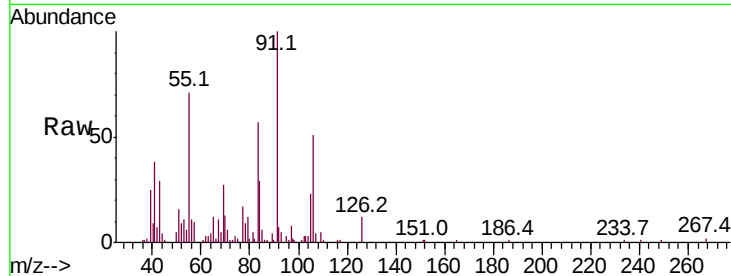




#59
m/p-Xylene
Concen: 0.070 ppbv
RT: 13.15 min Scan# 3176
Delta R.T. -0.01 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

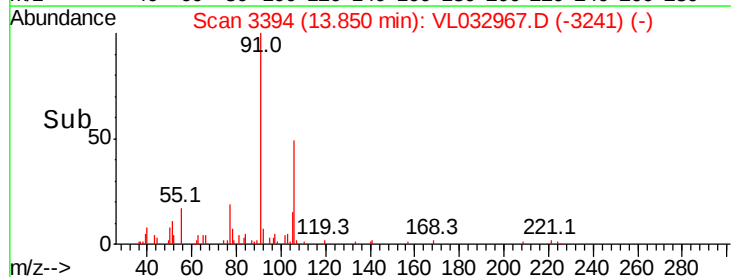
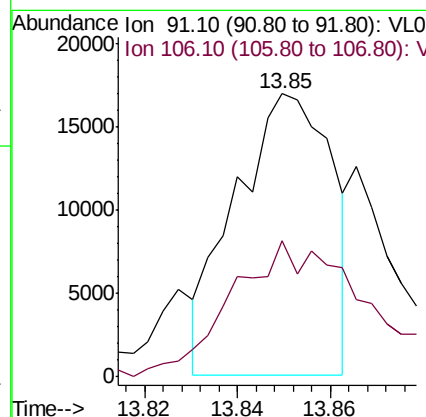
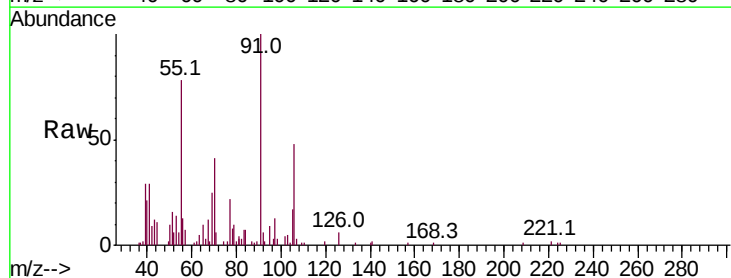
Instrument :
MSVOA_L
ClientSampleId :

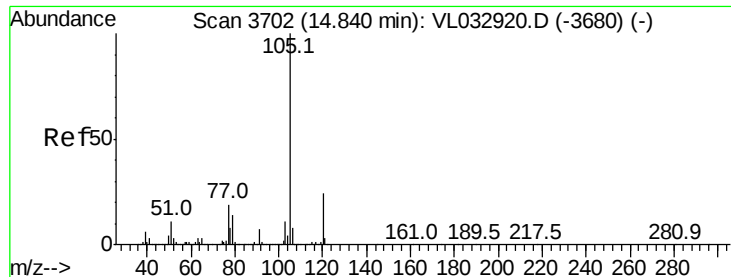
Tot Ion: 91 Resp: 22785
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0



#60
o-Xylene
Concen: 0.074 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. -0.01 min
Lab File: VL032967.D
Acq: 11 Dec 2018 23:17

Tgt Ion: 91 Resp: 24479
Ion Ratio Lower Upper
91 100
106 66.8 21.9 65.8#





#62

Isopropylbenzene

Concen: 1.704 ppbv

RT: 14.83 min Scan# 3700

Delta R.T. -0.01 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Instrument :

MSVOA_L

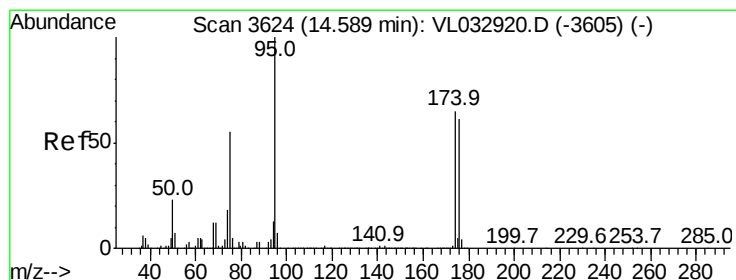
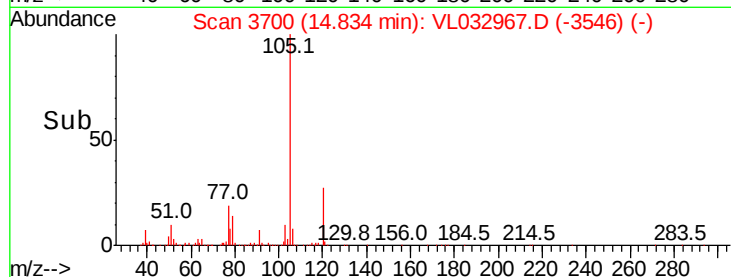
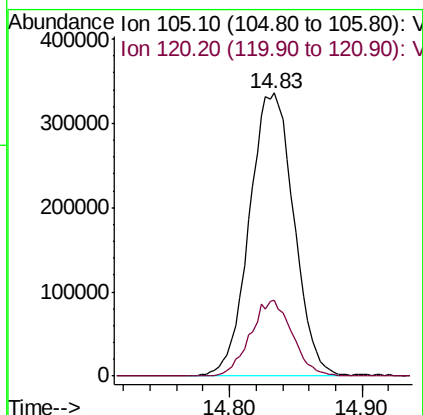
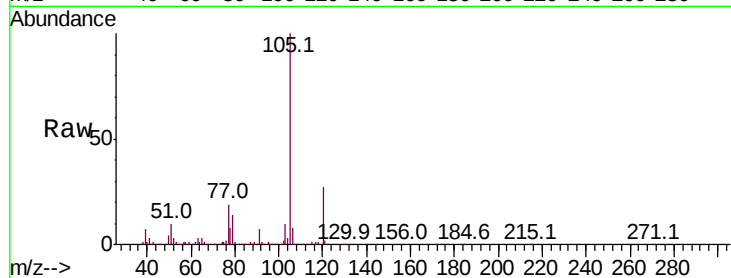
ClientSampleId :

Tot Ion:105 Resp: 783519

Ion Ratio Lower Upper

105 100

120 25.3 20.3 30.5



#68

1-Bromo-4-Fluorobenzene

Concen: 10.016 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. -0.01 min

Lab File: VL032967.D

Acq: 11 Dec 2018 23:17

Tgt Ion: 95 Resp: 2497549

Ion Ratio Lower Upper

95 100

174 66.4 51.4 77.0

175 4.9 3.8 5.6

