

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL081219\
 Data File : VL034105.D
 Acq On : 12 Aug 2019 15:56
 Operator : SY/AP
 Sample : K4185-02
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 BP-VPB203-AIR-DW-20190805

Quant Time: Aug 13 04:04:30 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL080519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 05 17:09:48 2019
 QLast Update : Mon Aug 05 17:09:48 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.71	49	1093797	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.24	114	2095609	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.18	117	2143682	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.51	95	1847542	10.62	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.20%

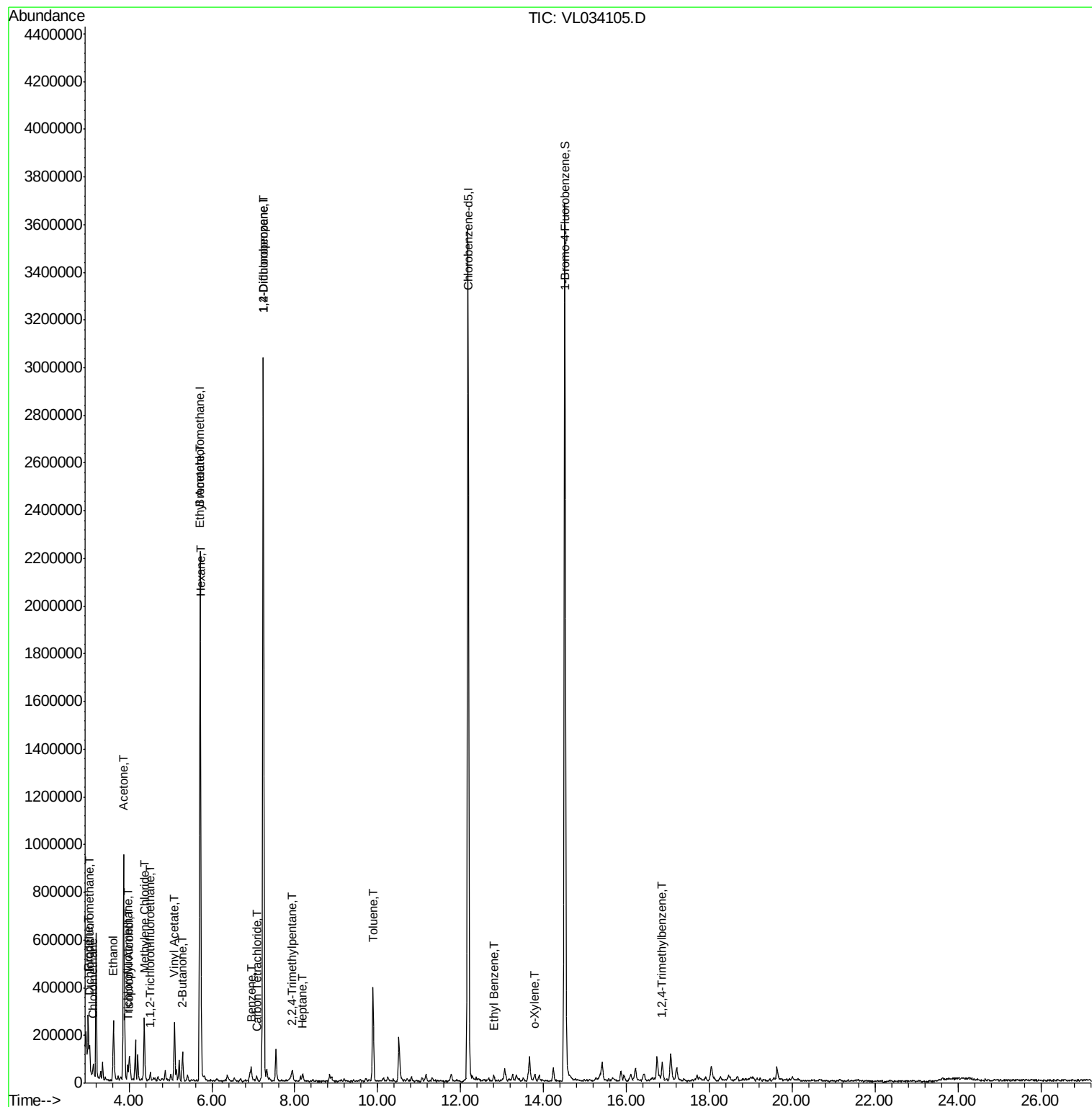
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.05	85	86115	0.640	ppbv	91
4) Chloromethane	3.14	50	38993	0.478	ppbv	96
9) Propene	3.02	41	45116	0.605	ppbv #	70
10) Heptane	8.19	43	9362	0.049	ppbv #	42
11) Trichlorofluoromethane	3.97	101	33843	0.212	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.51	101	7667	0.068	ppbv #	12
13) Ethanol	3.62	45	275620	13.116	ppbv	97
15) Acetone	3.87	43	976821	6.250	ppbv	99
19) Isopropyl Alcohol	4.00	45	120852	0.993	ppbv #	1
20) Methylene Chloride	4.36	84	51803	1.105	ppbv	84
23) Vinyl Acetate	5.10	43	94859	0.366	ppbv #	21
25) Ethyl Acetate	5.73	43	183271	0.596	ppbv #	94
26) Hexane	5.73	57	128586	0.987	ppbv #	65
34) 2-Butanone	5.28	43	138795	0.712	ppbv	100
35) Carbon Tetrachloride	7.08	117	4995	0.031	ppbv #	82
36) Benzene	6.95	78	30674	0.129	ppbv #	81
39) 1,2-Dichloropropane	7.24	63	625700	6.510	ppbv #	23
44) 2,2,4-Trimethylpentane	7.93	57	18198	0.043	ppbv #	40
53) Toluene	9.89	91	289093	1.052	ppbv	96
58) Ethyl Benzene	12.80	91	19318	0.054	ppbv #	84
60) o-Xylene	13.79	91	11343	0.039	ppbv #	46
74) 1,2,4-Trimethylbenzene	16.86	105	24233	0.071	ppbv #	49

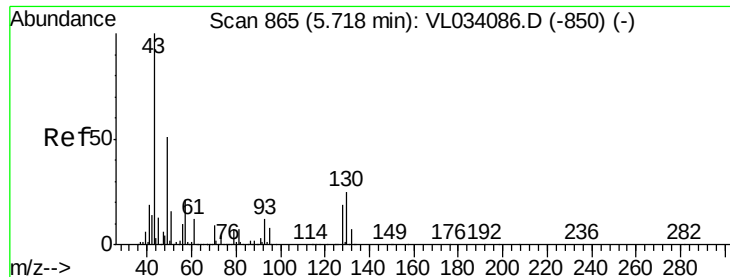
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Aug 05 17:09:48 2019
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.71 min Scan# 863

Delta R.T. -0.01 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

BP-VPB203-AIR-DW-20190805

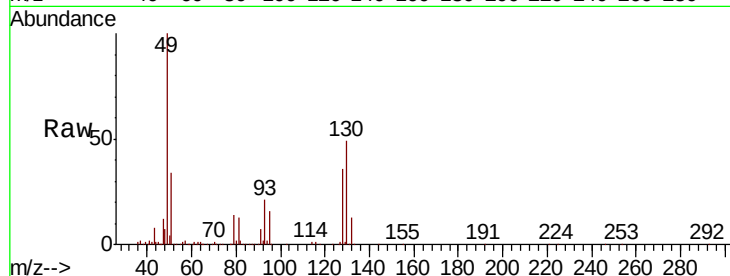
Tgt Ion: 49 Resp: 1093797

Ion Ratio Lower Upper

49 100

128 37.7 19.5 58.5

130 48.3 25.4 76.0



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.71

600000

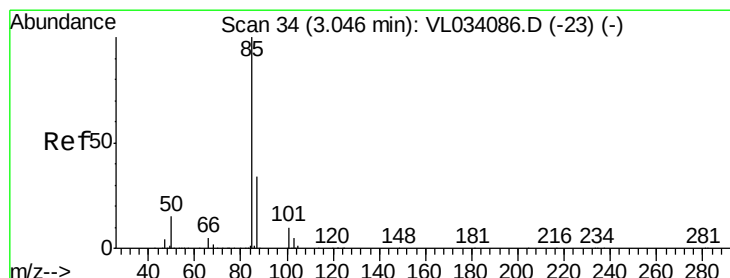
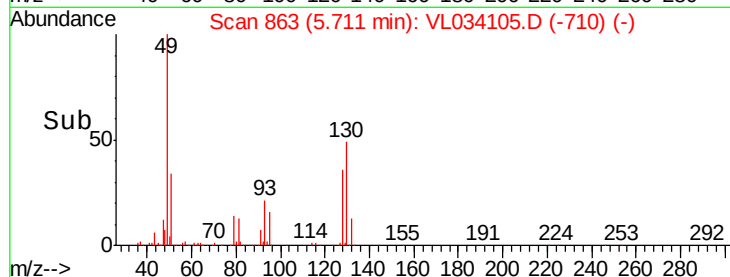
400000

200000

0

5.65 5.70 5.75

Time-->



#2

Dichlorodifluoromethane

Concen: 0.640 ppbv

RT: 3.05 min Scan# 34

Delta R.T. -0.00 min

Lab File: VL034105.D

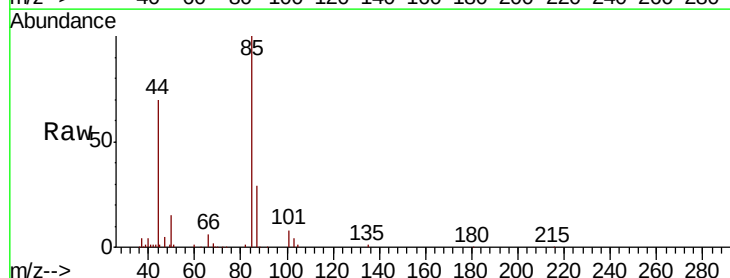
Acq: 12 Aug 2019 15:56

Tgt Ion: 85 Resp: 86115

Ion Ratio Lower Upper

85 100

87 28.8 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

80000

60000

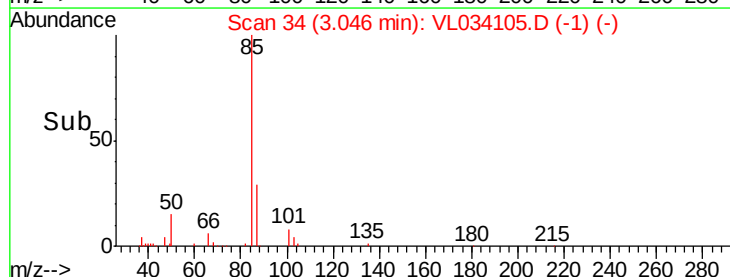
40000

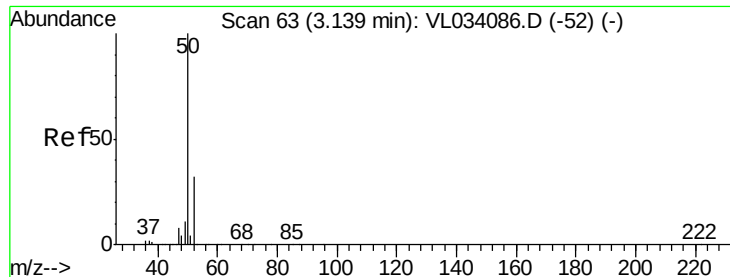
20000

0

3.00 3.05

Time-->





#4

Chloromethane

Concen: 0.478 ppbv

RT: 3.14 min Scan# 64

Delta R.T. 0.00 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

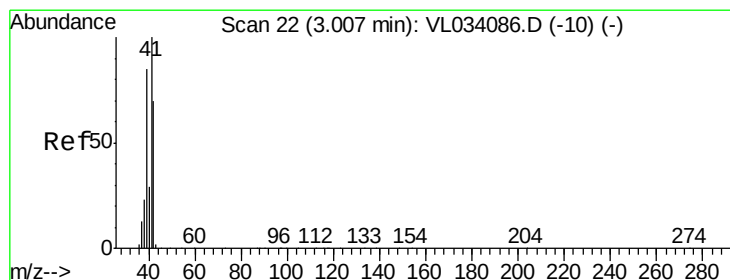
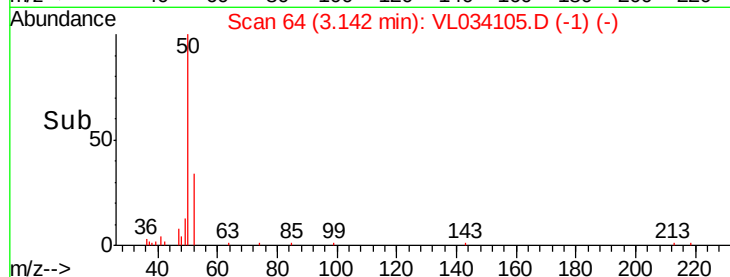
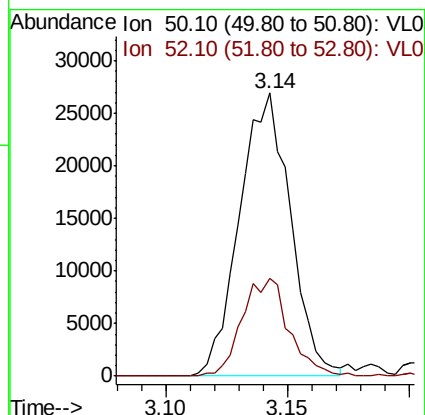
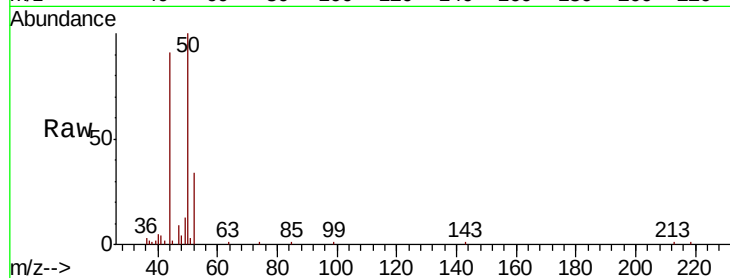
BP-VPB203-AIR-DW-20190805

Tgt Ion: 50 Resp: 38993

Ion Ratio Lower Upper

50 100

52 34.4 25.7 38.5



#9

Propene

Concen: 0.605 ppbv

RT: 3.02 min Scan# 26

Delta R.T. 0.01 min

Lab File: VL034105.D

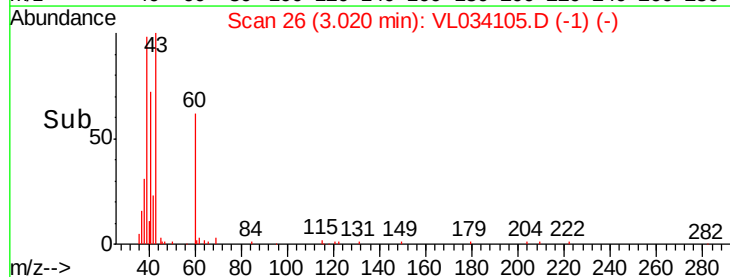
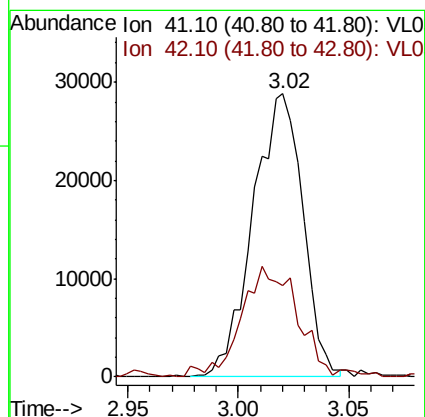
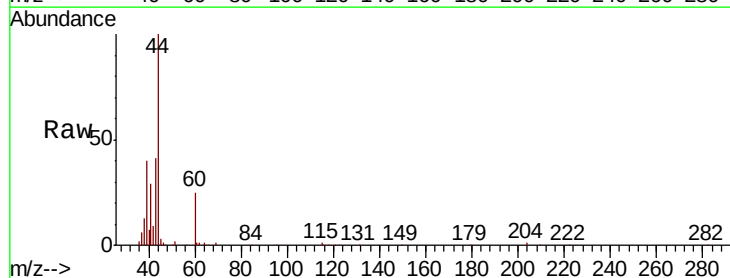
Acq: 12 Aug 2019 15:56

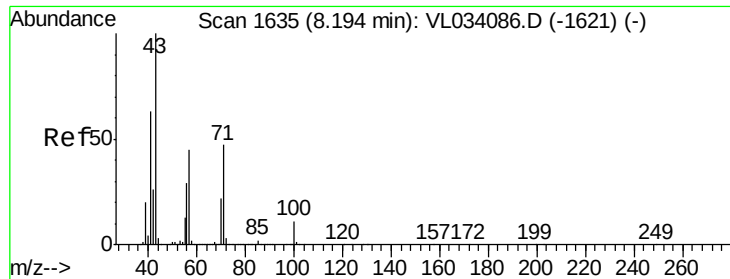
Tgt Ion: 41 Resp: 45116

Ion Ratio Lower Upper

41 100

42 44.8 55.8 83.6#

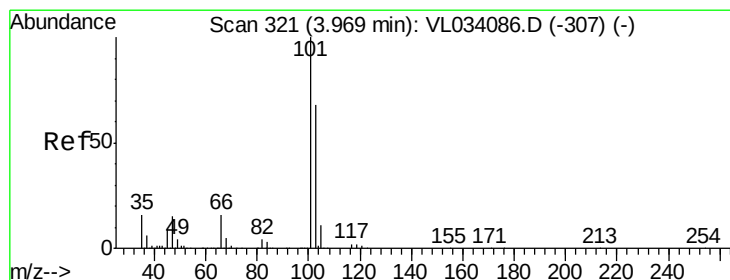
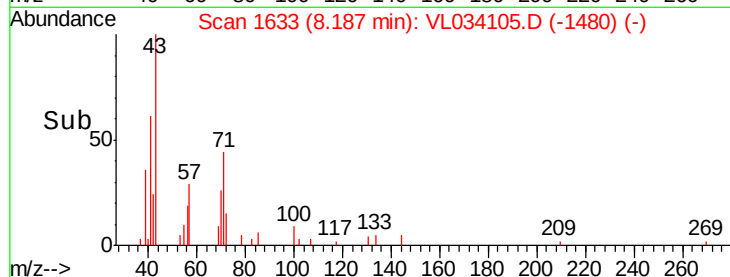
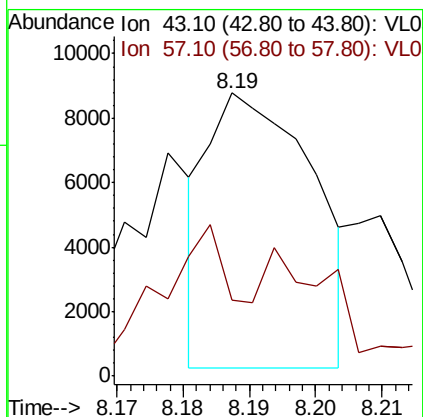
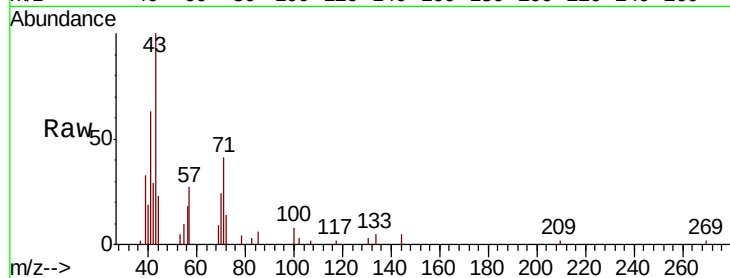




#10
Heptane
Concen: 0.049 ppbv
RT: 8.19 min Scan# 1633
Delta R.T. -0.01 min
Lab File: VL034105.D
Acq: 12 Aug 2019 15:56

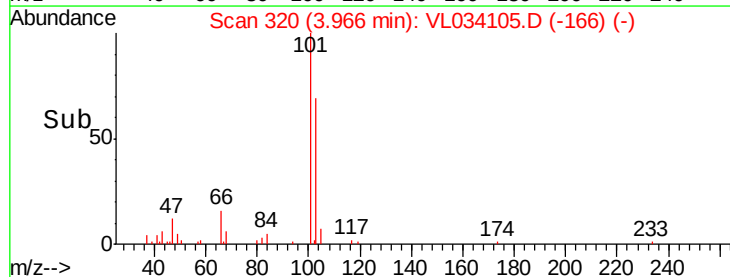
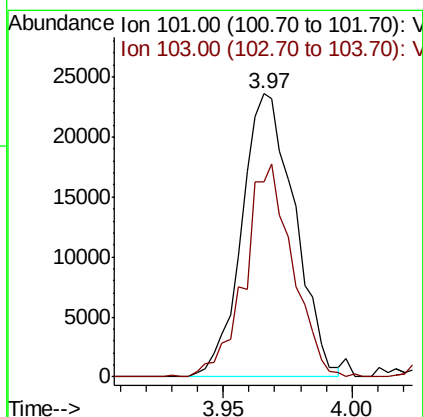
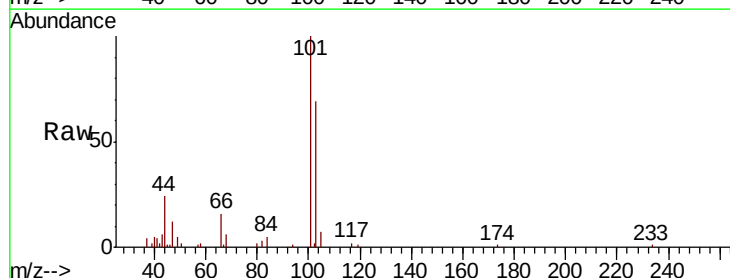
Instrument :
MSVOA_L
ClientSampleId :
BP-VPB203-AIR-DW-20190805

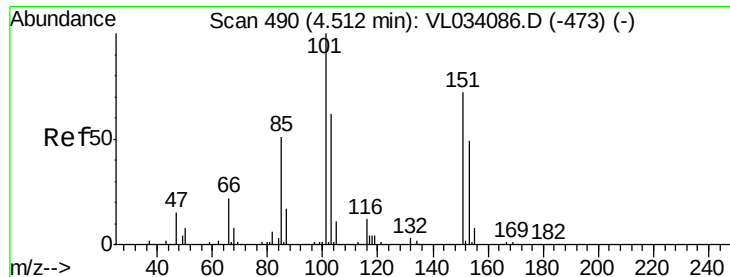
Tgt Ion: 43 Resp: 9362
Ion Ratio Lower Upper
43 100
57 85.0 37.2 55.8#



#11
Trichlorofluoromethane
Concen: 0.212 ppbv
RT: 3.97 min Scan# 320
Delta R.T. -0.00 min
Lab File: VL034105.D
Acq: 12 Aug 2019 15:56

Tgt Ion: 101 Resp: 33843
Ion Ratio Lower Upper
101 100
103 69.0 54.3 81.5





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.068 ppbv

RT: 4.51 min Scan# 489

Delta R.T. -0.00 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

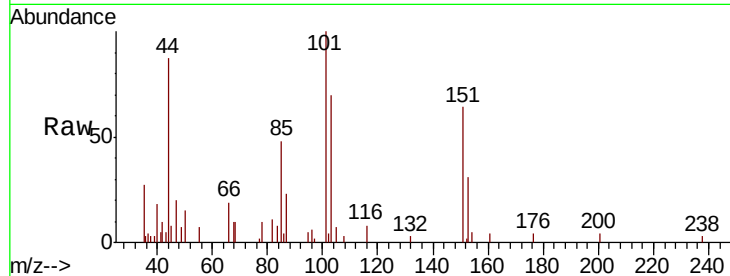
BP-VPB203-AIR-DW-20190805

Tgt Ion: 101 Resp: 7667

Ion Ratio Lower Upper

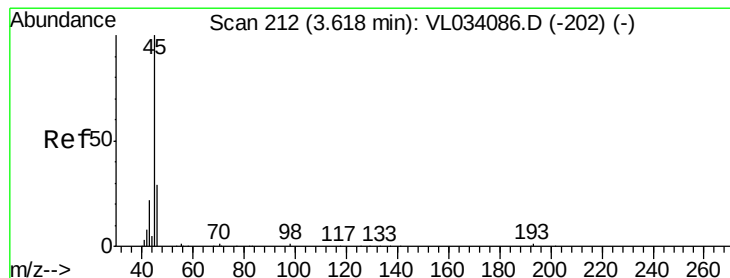
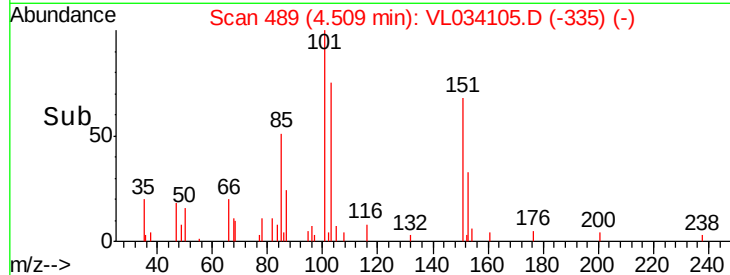
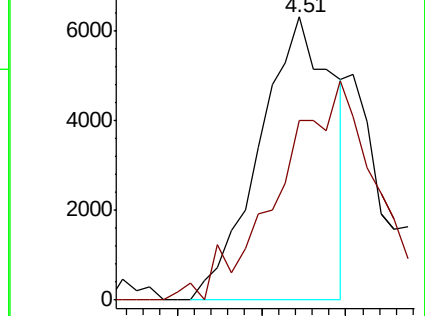
101 100

151 0.0 59.4 89.0#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 13.116 ppbv

RT: 3.62 min Scan# 214

Delta R.T. 0.01 min

Lab File: VL034105.D

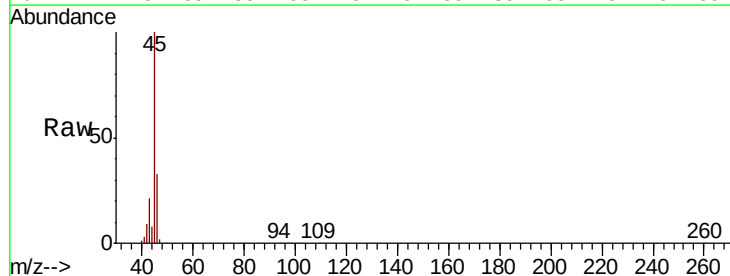
Acq: 12 Aug 2019 15:56

Tgt Ion: 45 Resp: 275620

Ion Ratio Lower Upper

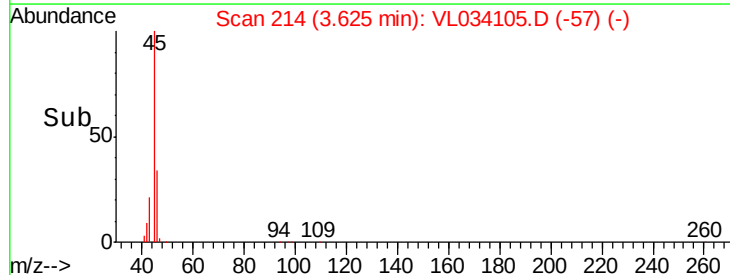
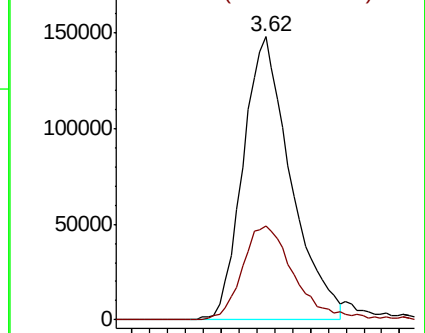
45 100

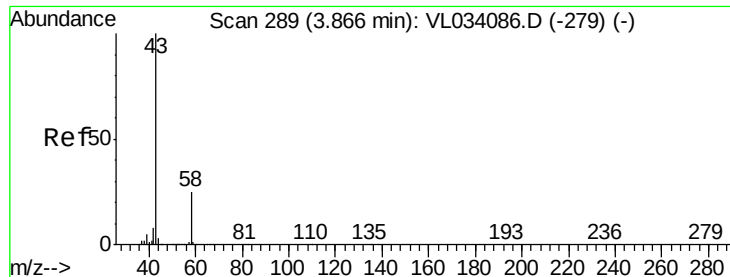
46 35.6 14.9 59.5



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 6.250 ppbv

RT: 3.87 min Scan# 289

Delta R.T. -0.00 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

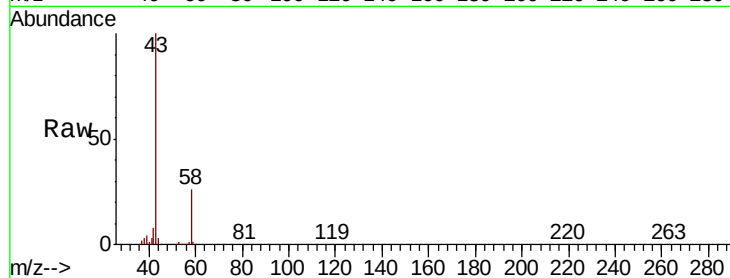
BP-VPB203-AIR-DW-20190805

Tgt Ion: 43 Resp: 976821

Ion Ratio Lower Upper

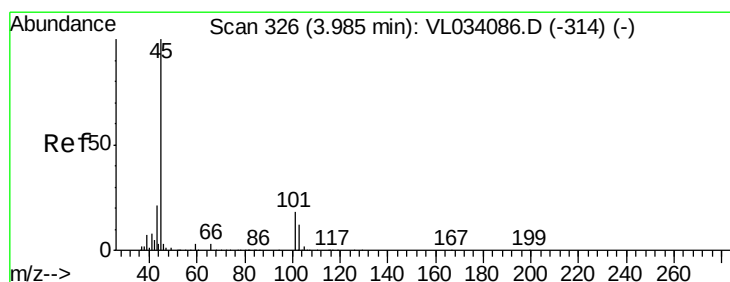
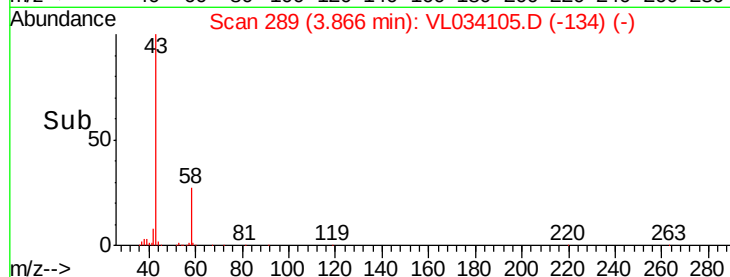
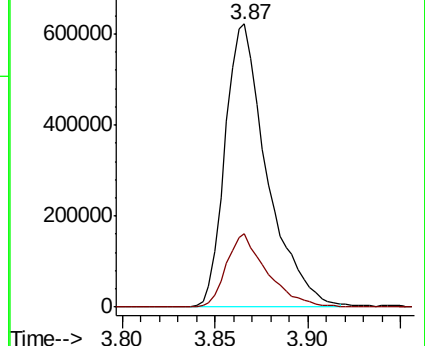
43 100

58 25.3 20.6 30.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 0.993 ppbv

RT: 4.00 min Scan# 331

Delta R.T. 0.02 min

Lab File: VL034105.D

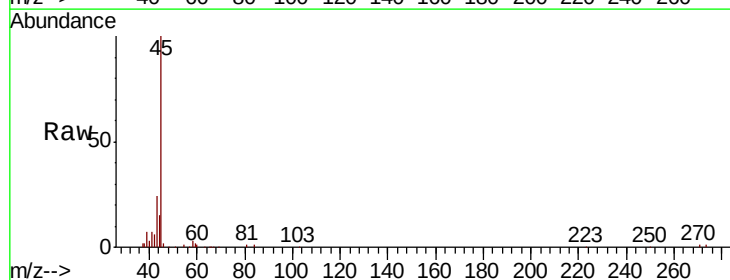
Acq: 12 Aug 2019 15:56

Tgt Ion: 45 Resp: 120852

Ion Ratio Lower Upper

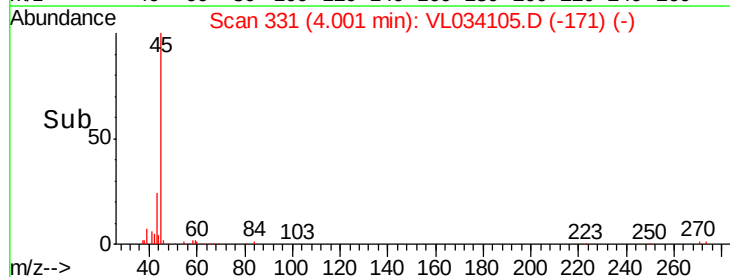
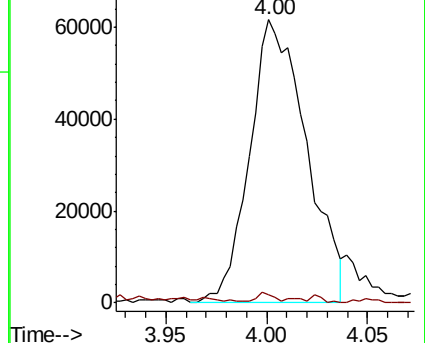
45 100

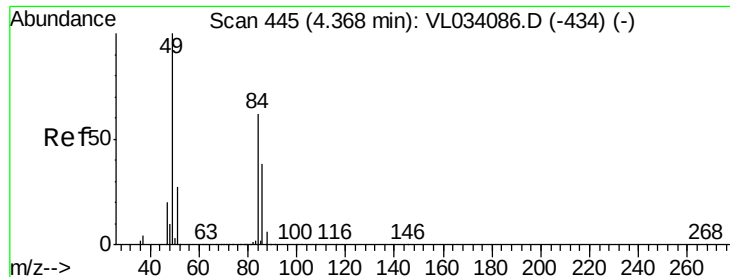
58 204.0 24.6 37.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

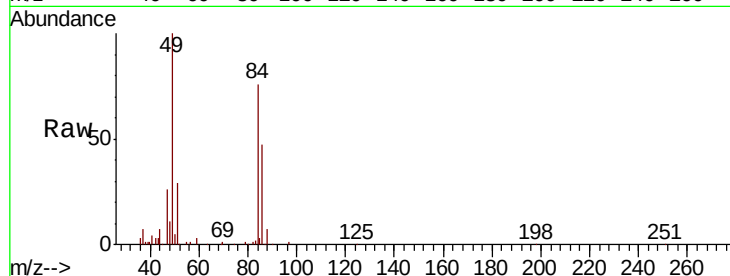




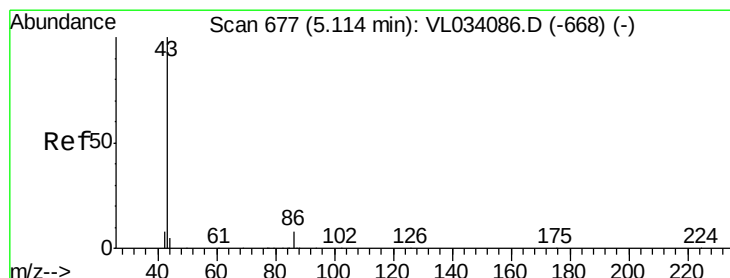
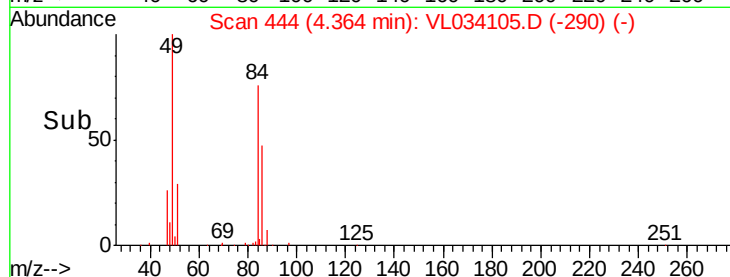
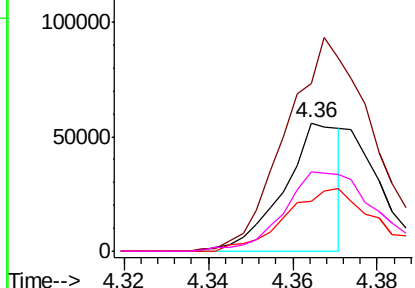
#20
Methylene Chloride
Concen: 1.105 ppbv
RT: 4.36 min Scan# 444
Delta R.T. -0.00 min
Lab File: VL034105.D
Acq: 12 Aug 2019 15:56

Instrument :
MSVOA_L
ClientSampleId :
BP-VPB203-AIR-DW-20190805

Tgt Ion:	84	Resp:	51803
Ion	Ratio	Lower	Upper
84	100		
49	130.9	129.7	194.5
51	38.2	35.8	53.8
86	61.9	49.8	74.8

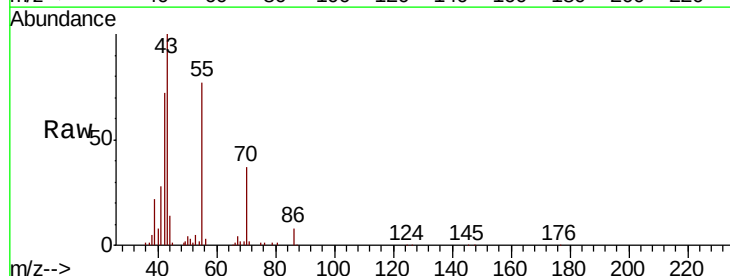


Abundance Ion 84.00 (83.70 to 84.70): VL0
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

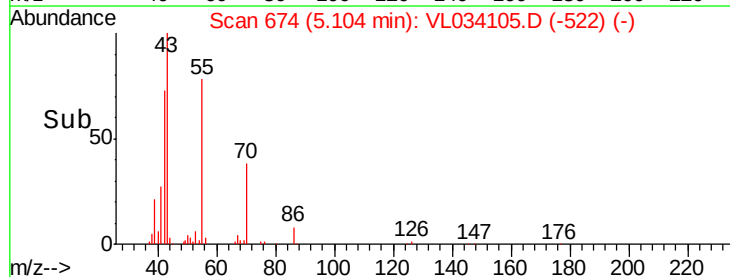
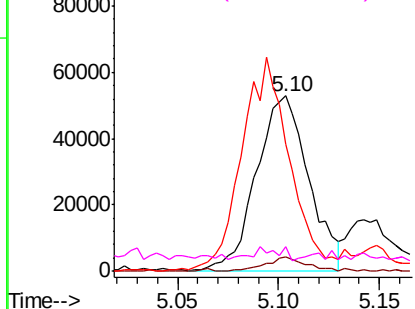


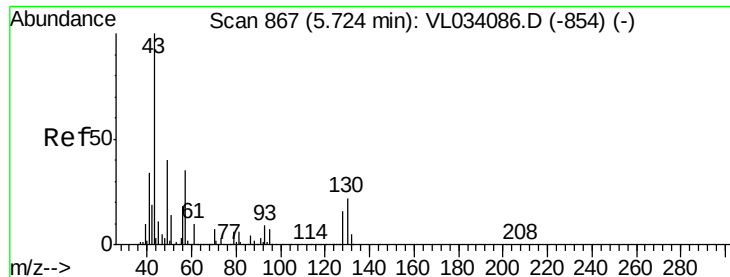
#23
Vinyl Acetate
Concen: 0.366 ppbv
RT: 5.10 min Scan# 674
Delta R.T. -0.01 min
Lab File: VL034105.D
Acq: 12 Aug 2019 15:56

Tgt Ion:	43	Resp:	94859
Ion	Ratio	Lower	Upper
43	100		
86	7.7	5.4	8.0
42	71.9	7.9	11.9#
44	7.3	4.0	6.0#



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

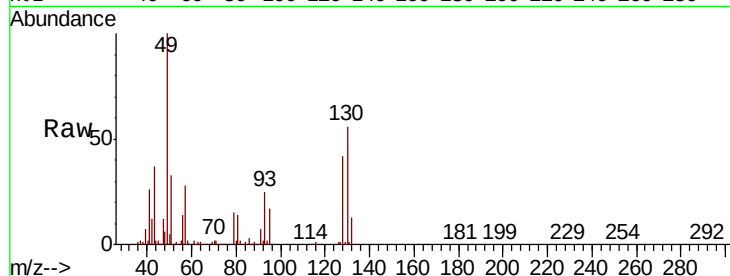




#25
Ethyl Acetate
Concen: 0.596 ppbv
RT: 5.73 min Scan# 868
Delta R.T. 0.00 min
Lab File: VL034105.D
Acq: 12 Aug 2019 15:56

Instrument :
MSVOA_L
ClientSampleId :
BP-VPB203-AIR-DW-20190805

Tgt Ion:	43	Resp:	183271
Ion	Ratio	Lower	Upper
43	100		
45	8.7	8.4	12.6
61	6.2	7.3	10.9#
70	5.4	5.8	8.6#



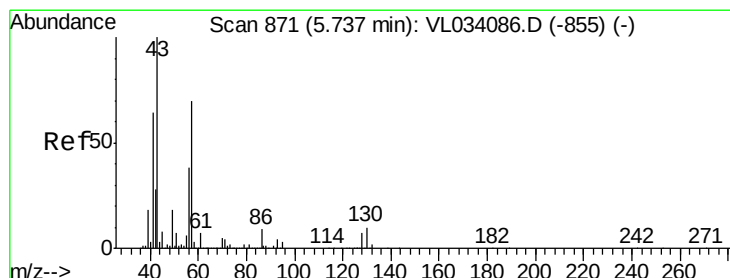
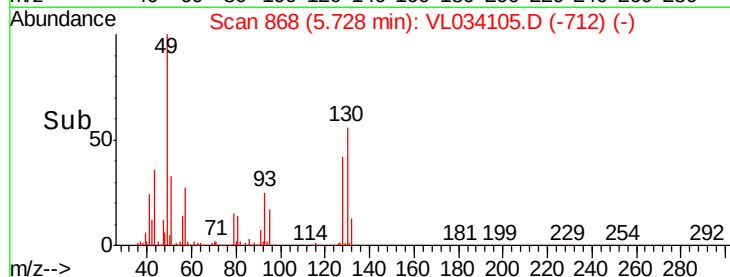
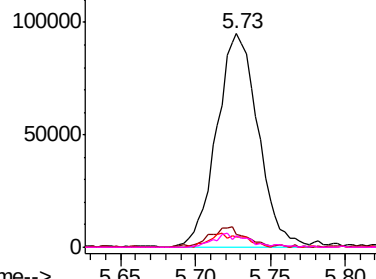
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

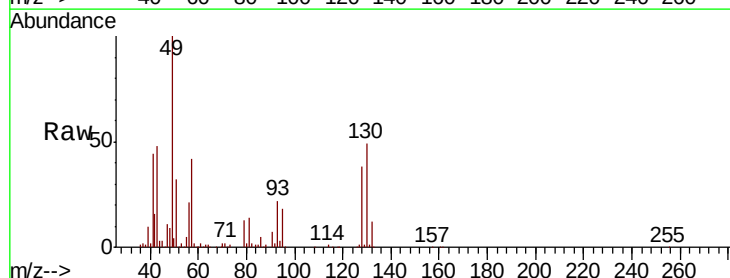
Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26
Hexane
Concen: 0.987 ppbv
RT: 5.73 min Scan# 869
Delta R.T. -0.01 min
Lab File: VL034105.D
Acq: 12 Aug 2019 15:56

Tgt Ion:	57	Resp:	128586
Ion	Ratio	Lower	Upper
57	100		
41	98.3	75.7	113.5
43	145.5	189.8	284.8#
56	51.6	42.7	64.1



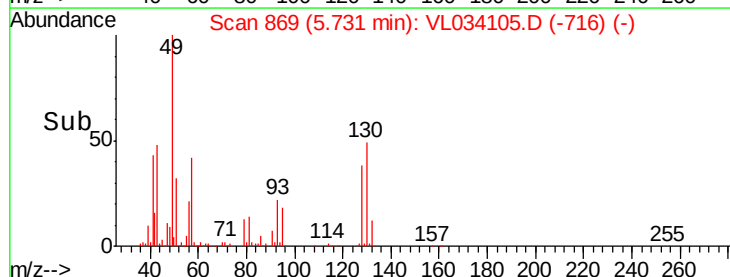
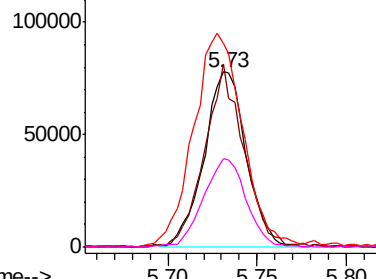
Abundance

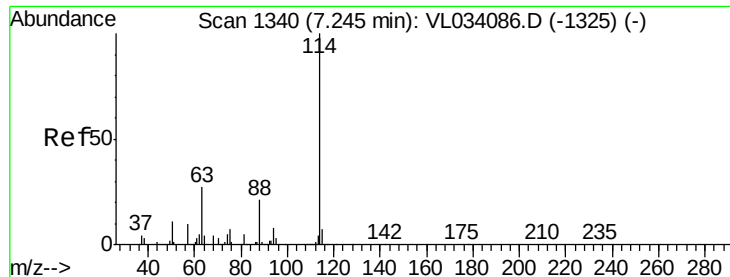
Ion 57.10 (56.80 to 57.80): VL0

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

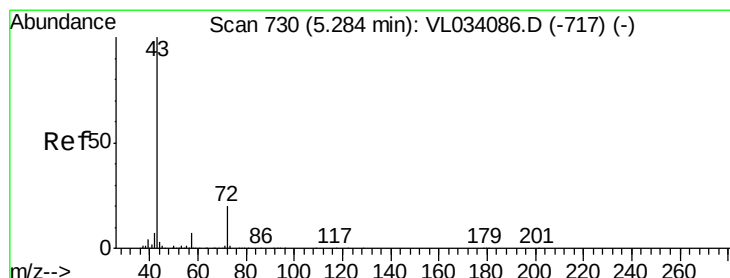
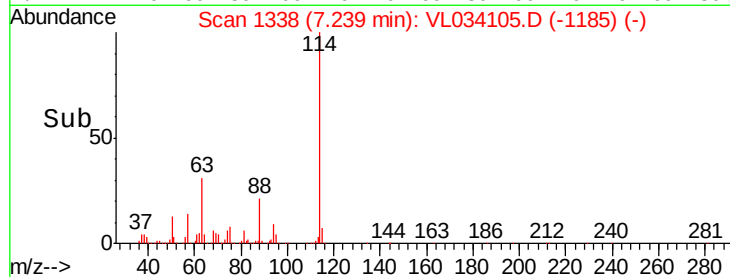
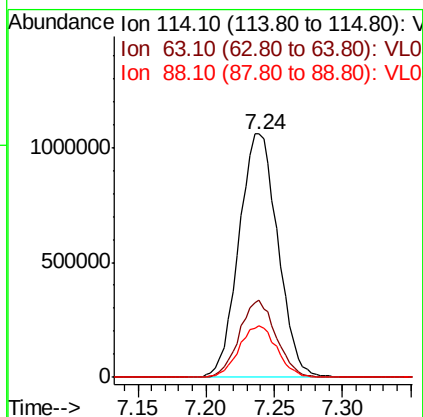
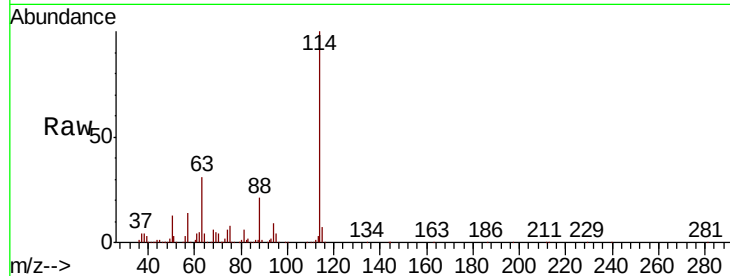




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.24 min Scan# 1338
 Delta R.T. -0.01 min
 Lab File: VL034105.D
 Acq: 12 Aug 2019 15:56

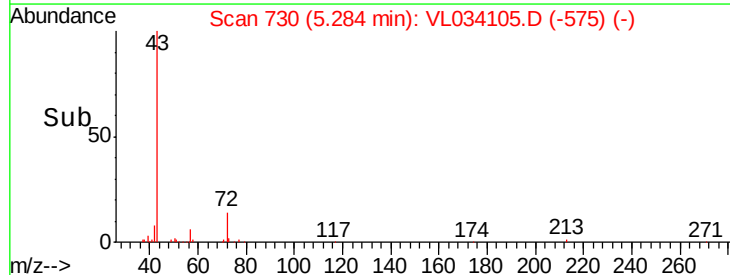
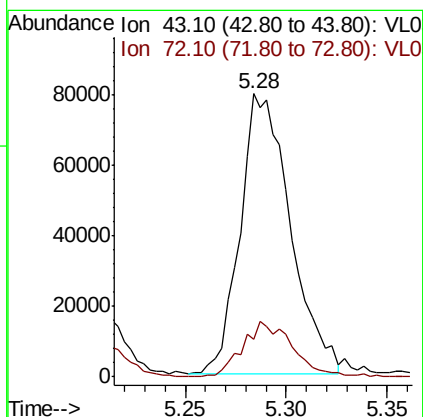
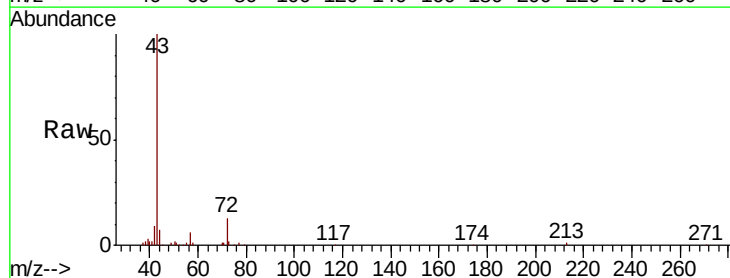
Instrument :
 MSVOA_L
 ClientSampleId :
 BP-VPB203-AIR-DW-20190805

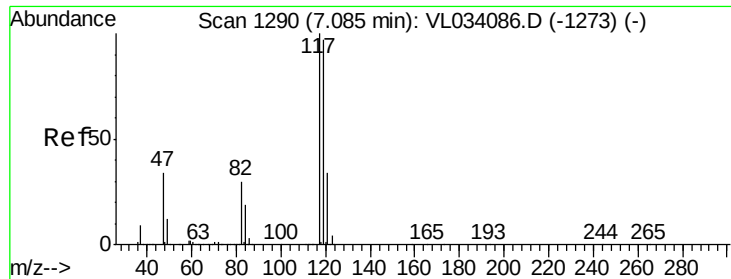
Tgt Ion: 114 Resp: 2095609
 Ion Ratio Lower Upper
 114 100
 63 30.0 22.5 33.7
 88 20.7 15.7 23.5



#34
 2-Butanone
 Concen: 0.712 ppbv
 RT: 5.28 min Scan# 730
 Delta R.T. -0.00 min
 Lab File: VL034105.D
 Acq: 12 Aug 2019 15:56

Tgt Ion: 43 Resp: 138795
 Ion Ratio Lower Upper
 43 100
 72 19.9 16.0 24.0





#35

Carbon Tetrachloride

Concen: 0.031 ppbv

RT: 7.08 min Scan# 1288

Delta R.T. -0.01 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

BP-VPB203-AIR-DW-20190805

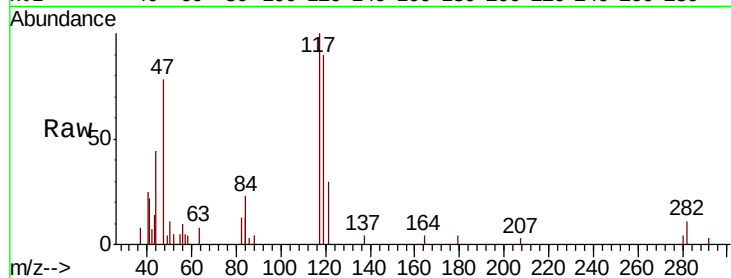
Tgt Ion: 117 Resp: 4995

Ion Ratio Lower Upper

117 100

119 85.5 77.8 116.6

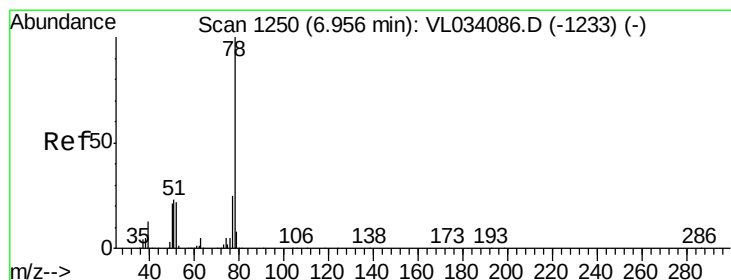
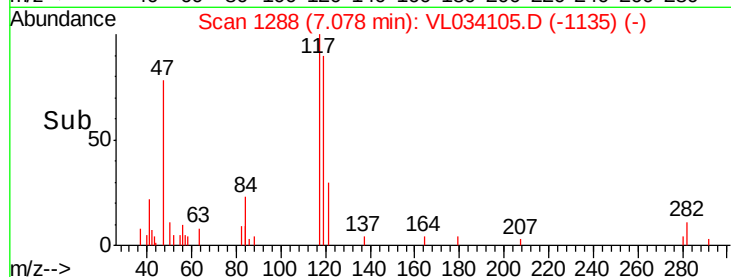
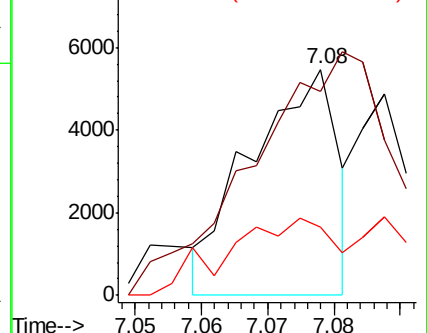
121 14.1 27.4 41.2#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.129 ppbv

RT: 6.95 min Scan# 1249

Delta R.T. -0.00 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

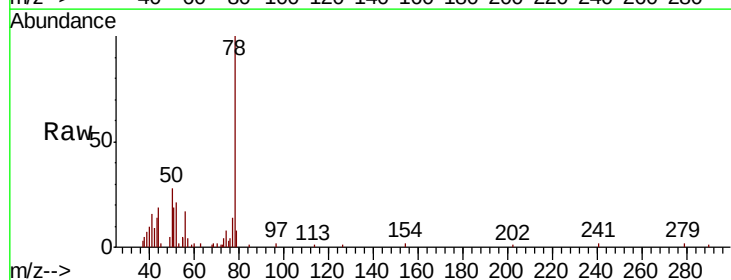
Tgt Ion: 78 Resp: 30674

Ion Ratio Lower Upper

78 100

77 14.0 19.9 29.9#

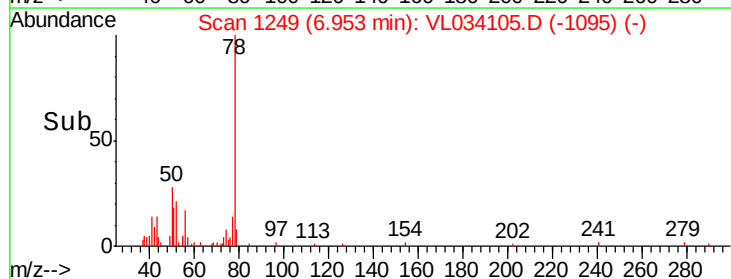
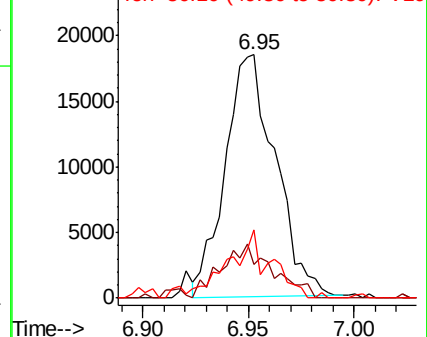
50 28.4 16.7 25.1#

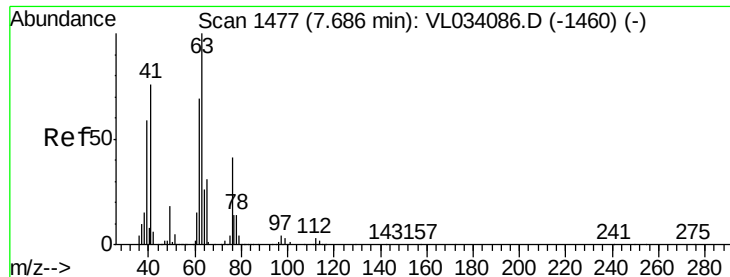


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 6.510 ppbv

RT: 7.24 min Scan# 1338

Delta R.T. -0.45 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

BP-VPB203-AIR-DW-20190805

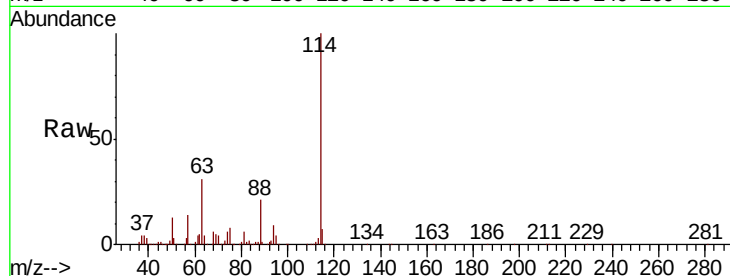
Tgt Ion: 63 Resp: 625700

Ion Ratio Lower Upper

63 100

41 0.0 60.6 91.0#

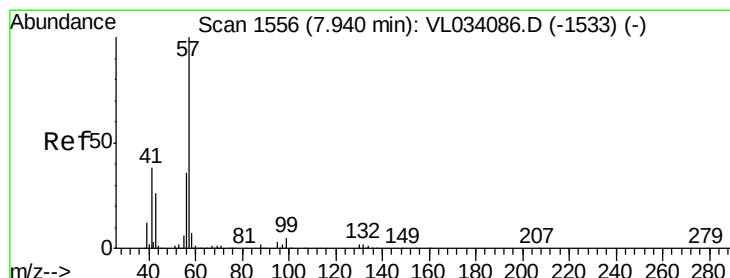
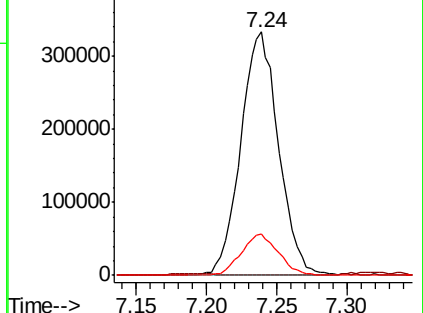
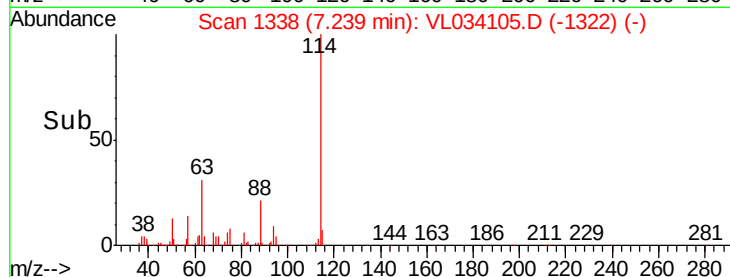
62 17.1 55.0 82.6#



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



#44

2,2,4-Trimethylpentane

Concen: 0.043 ppbv

RT: 7.93 min Scan# 1553

Delta R.T. -0.01 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

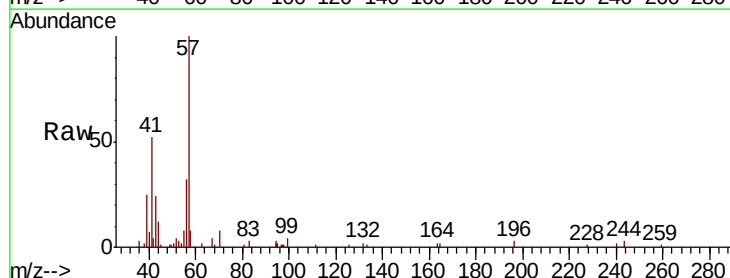
Tgt Ion: 57 Resp: 18198

Ion Ratio Lower Upper

57 100

41 0.0 29.2 43.8#

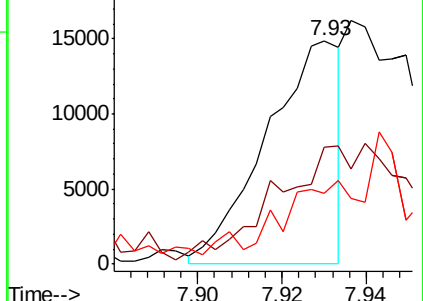
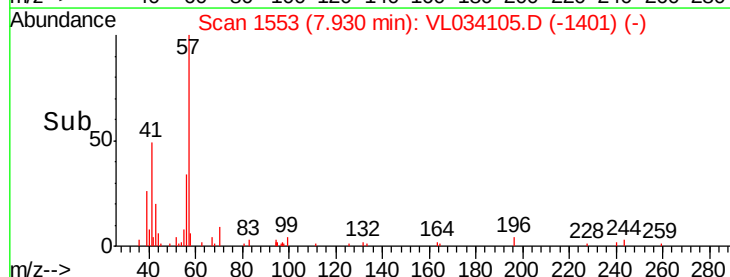
56 0.0 26.7 40.1#

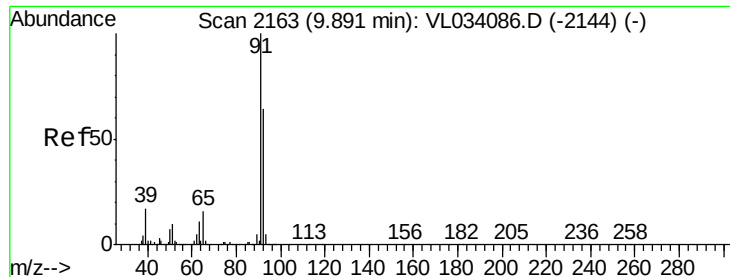


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 1.052 ppbv

RT: 9.89 min Scan# 2162

Delta R.T. -0.00 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

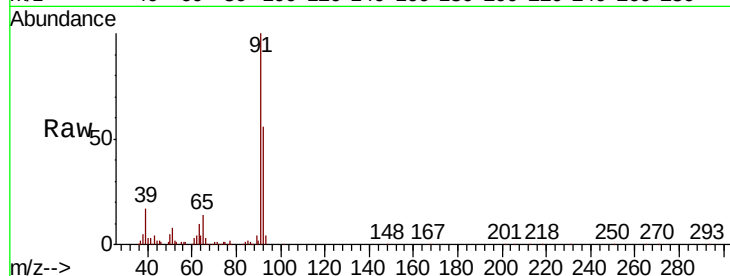
BP-VPB203-AIR-DW-20190805

Tgt Ion: 91 Resp: 289093

Ion Ratio Lower Upper

91 100

92 59.6 50.3 75.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

150000

100000

50000

0

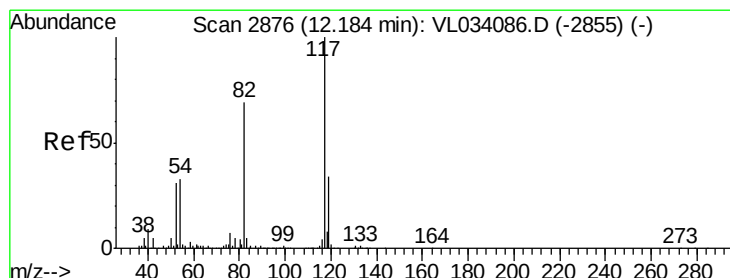
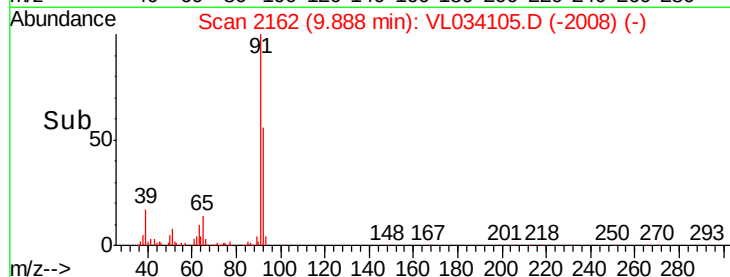
9.89

9.85

9.90

9.95

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.18 min Scan# 2874

Delta R.T. -0.01 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

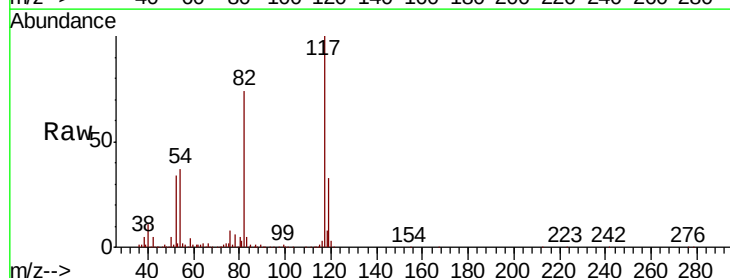
Tgt Ion: 117 Resp: 2143682

Ion Ratio Lower Upper

117 100

82 73.2 52.2 78.4

119 33.0 44.8 67.2#



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

1200000

1000000

800000

600000

400000

200000

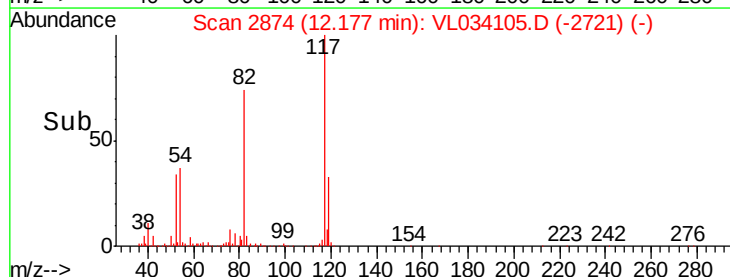
0

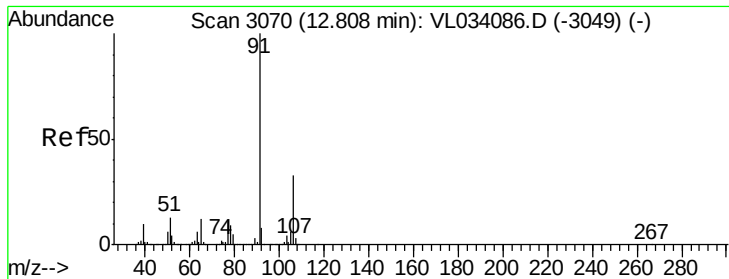
12.18

12.10

12.20

Time-->





#58

Ethyl Benzene

Concen: 0.054 ppbv

RT: 12.80 min Scan# 3069

Delta R.T. -0.00 min

Lab File: VL034105.D

Acq: 12 Aug 2019 15:56

Instrument :

MSVOA_L

ClientSampleId :

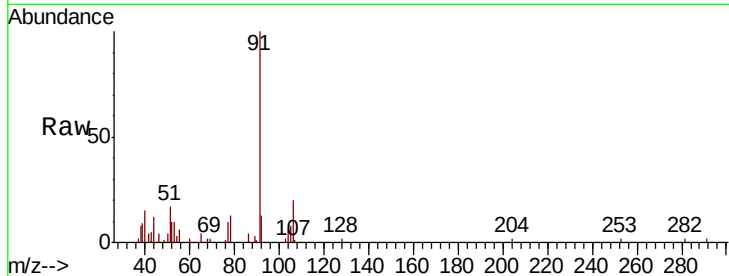
BP-VPB203-AIR-DW-20190805

Tgt Ion: 91 Resp: 19318

Ion Ratio Lower Upper

91 100

106 23.5 26.0 39.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12000

10000

8000

6000

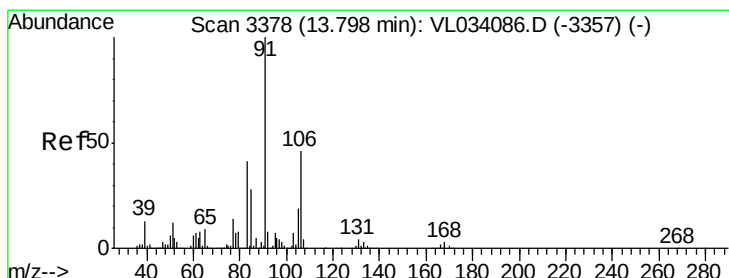
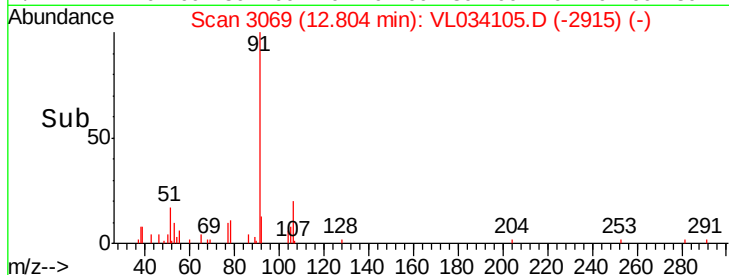
4000

2000

0

Time-->

12.75 12.80 12.85



#60

o-Xylene

Concen: 0.039 ppbv

RT: 13.79 min Scan# 3374

Delta R.T. -0.01 min

Lab File: VL034105.D

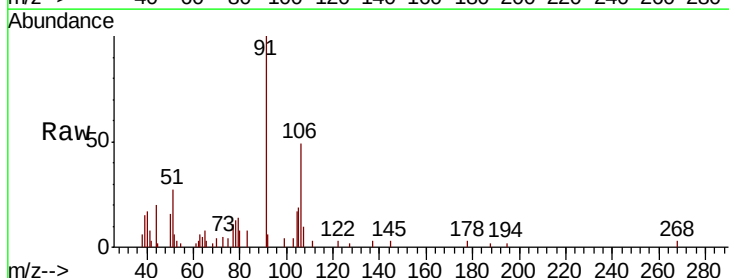
Acq: 12 Aug 2019 15:56

Tgt Ion: 91 Resp: 11343

Ion Ratio Lower Upper

91 100

106 80.3 22.6 67.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12000

10000

8000

6000

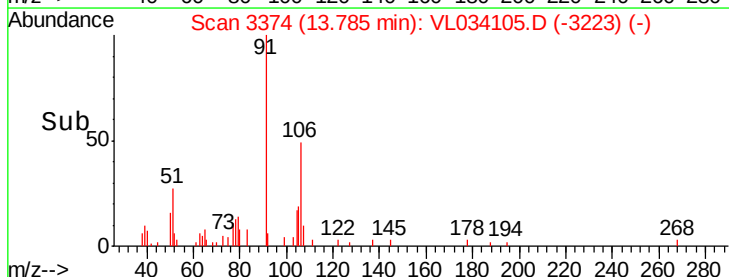
4000

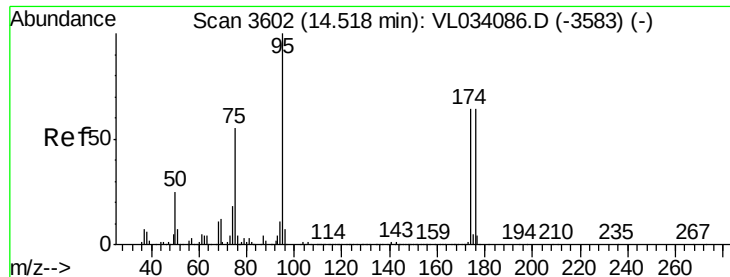
2000

0

Time-->

13.78 13.80 13.82

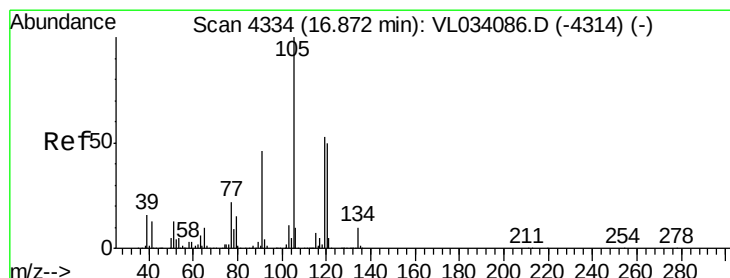
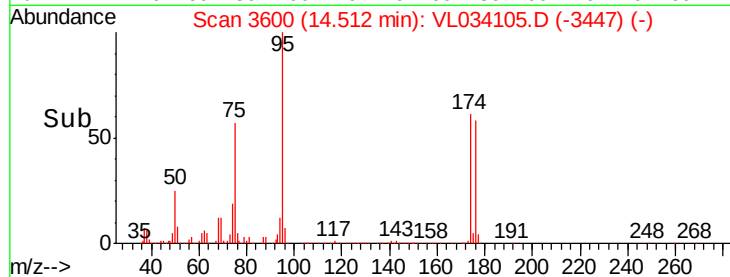
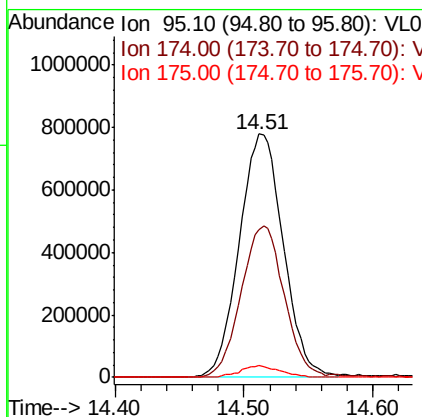
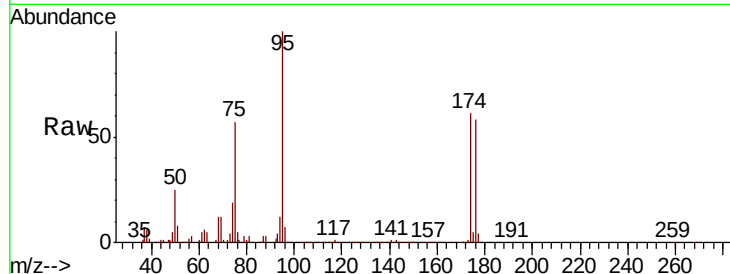




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.622 ppbv
 RT: 14.51 min Scan# 3600
 Delta R.T. -0.01 min
 Lab File: VL034105.D
 Acq: 12 Aug 2019 15:56

Instrument :
 MSVOA_L
 ClientSampleId :
 BP-VPB203-AIR-DW-20190805

Tgt Ion: 95 Resp: 1847542
 Ion Ratio Lower Upper
 95 100
 174 62.4 53.0 79.6
 175 4.5 4.2 6.2



#74
 1,2,4-Trimethylbenzene
 Concen: 0.071 ppbv
 RT: 16.86 min Scan# 4331
 Delta R.T. -0.01 min
 Lab File: VL034105.D
 Acq: 12 Aug 2019 15:56

Tgt Ion: 105 Resp: 24233
 Ion Ratio Lower Upper
 105 100
 120 12.7 40.2 60.4#
 91 6.2 38.1 57.1#
 77 31.8 17.8 26.8#

