

Data File : VL033826.D
Acq On : 29 May 2019 6:22
Operator : SY/AP
Sample : K2960-08 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3010-55

Quant Time: May 29 06:55:51 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL051719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May 17 08:15:41 2019
QLast Update : Fri May 17 08:15:41 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	729970	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1896896	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	1689913	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.57 95 1495983 10.92 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 109.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.99	51	11006	0.132	ppbv #	71
4) Chloromethane	3.16	50	1175	0.025	ppbv	94
9) Propene	3.04	41	236380	6.646	ppbv	88
10) Heptane	8.24	43	8078	0.080	ppbv #	77
11) Trichlorofluoromethane	4.00	101	71764	0.489	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.55	101	3598	0.035	ppbv	92
13) Ethanol	3.66	45	37068	3.225	ppbv	98
15) Acetone	3.89	43	1617592	15.972	ppbv	99
16) 1,3-Butadiene	3.34	39	157077	3.895	ppbv #	24
17) tert-Butyl alcohol	4.37	59	7701	0.094	ppbv #	57
19) Isopropyl Alcohol	4.04	45	5691	0.087	ppbv #	94
20) Methylene Chloride	4.40	84	11895	0.305	ppbv #	81
21) Allyl Chloride	4.47	41	674	0.011	ppbv #	1
23) Vinyl Acetate	5.15	43	14196	0.106	ppbv #	81
25) Ethyl Acetate	5.77	43	20557	0.116	ppbv #	80
26) Hexane	5.77	57	23035	0.301	ppbv #	40
27) Carbon Disulfide	4.62	76	18904	0.180	ppbv #	86
34) 2-Butanone	5.33	43	102117	0.869	ppbv	96
36) Benzene	6.99	78	10929	0.063	ppbv	95
39) 1,2-Dichloropropane	7.28	63	498466	7.748	ppbv #	23
53) Toluene	9.94	91	122065	0.656	ppbv	98
58) Ethyl Benzene	12.85	91	10477	0.047	ppbv #	76
59) m/p-Xylene	13.14	91	17759	0.091	ppbv #	31
60) o-Xylene	13.84	91	6604	0.033	ppbv #	1
72) 4-Ethyltoluene	15.99	105	6581	0.029	ppbv #	50
74) 1,2,4-Trimethylbenzene	16.92	105	35601	0.149	ppbv #	72
75) 1,3-Dichlorobenzene	17.15	146	3521	0.024	ppbv #	1

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

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Misc : 400ml/MSVOA_L

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MSVOA_L
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BPS1-SG-3010-55

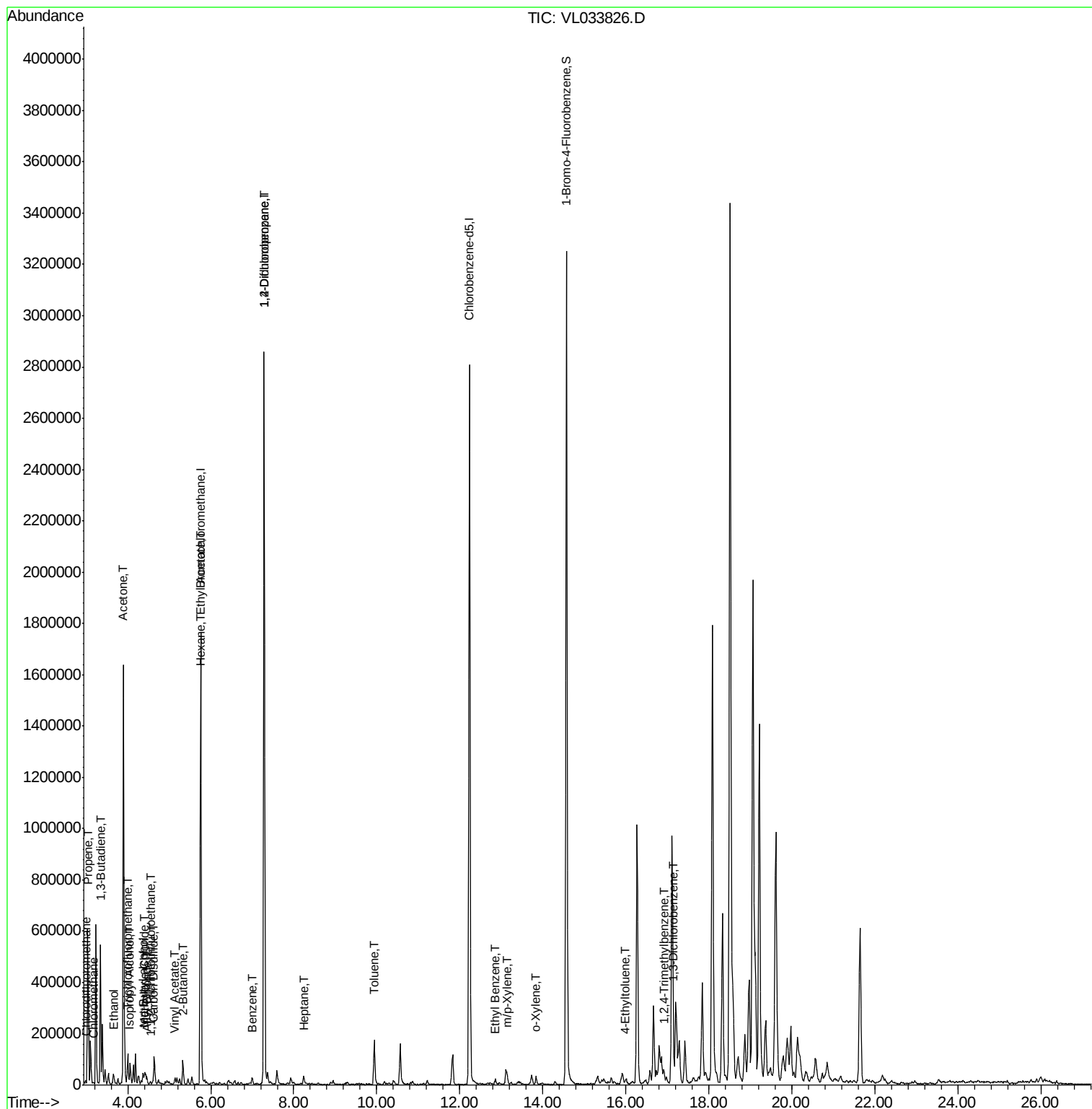
Quant Time: May 29 06:55:51 2019

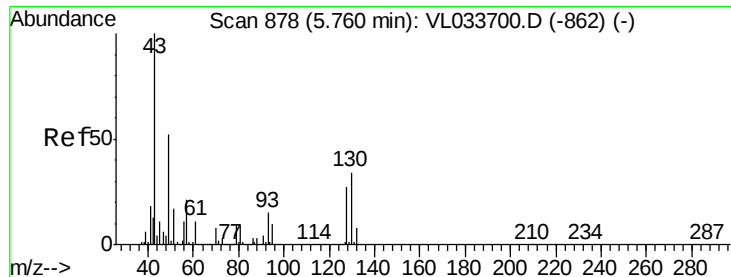
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL051719AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri May 17 08:15:41 2019

QLast Update : Fri May 17 08:15:41 2019

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3010-55

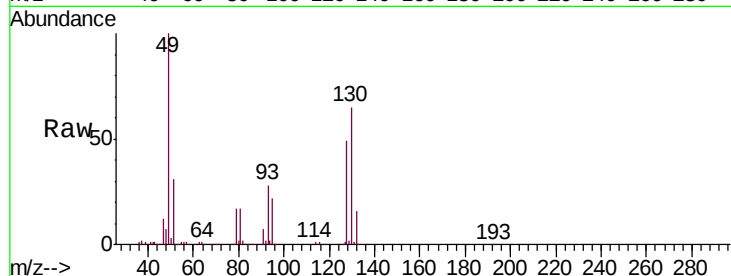
Tgt Ion: 49 Resp: 729970

Ion Ratio Lower Upper

49 100

128 50.7 25.2 75.6

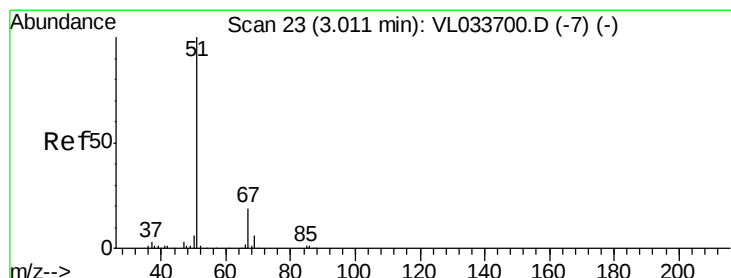
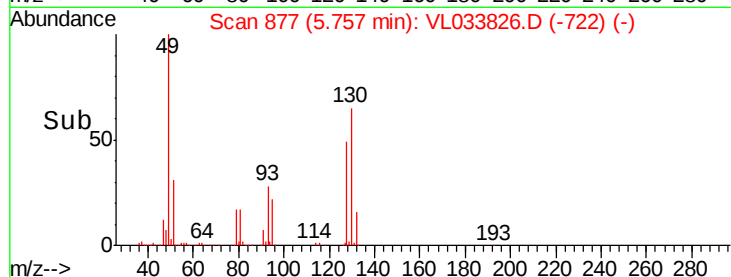
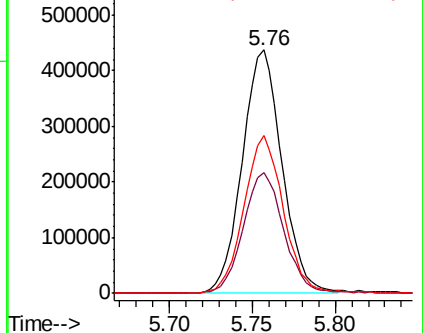
130 64.7 32.5 97.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#3

Chlorodifluoromethane

Concen: 0.132 ppbv

RT: 2.99 min Scan# 15

Delta R.T. -0.03 min

Lab File: VL033826.D

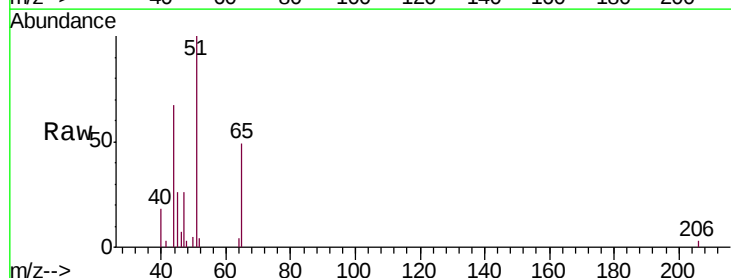
Acq: 29 May 2019 6:22

Tgt Ion: 51 Resp: 11006

Ion Ratio Lower Upper

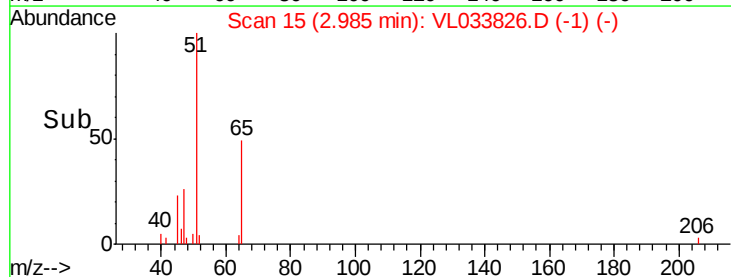
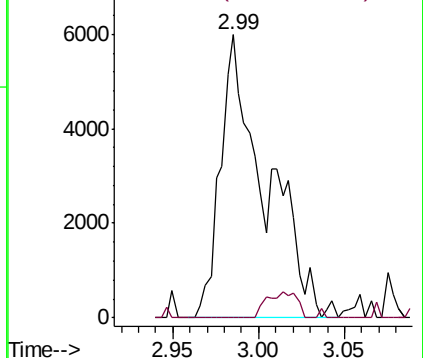
51 100

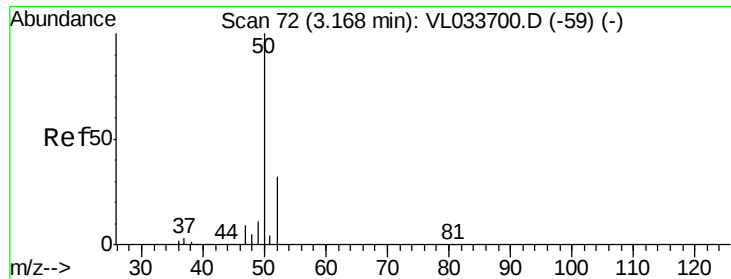
67 6.3 15.6 23.4#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.025 ppbv

RT: 3.16 min Scan# 70

Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

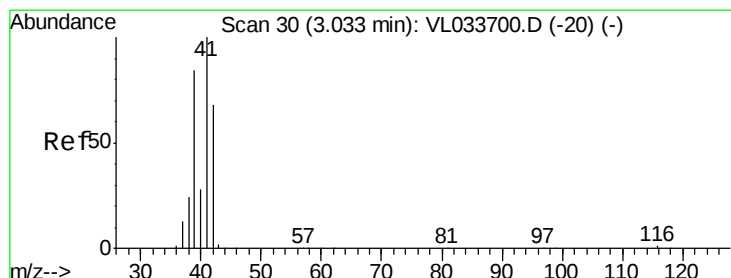
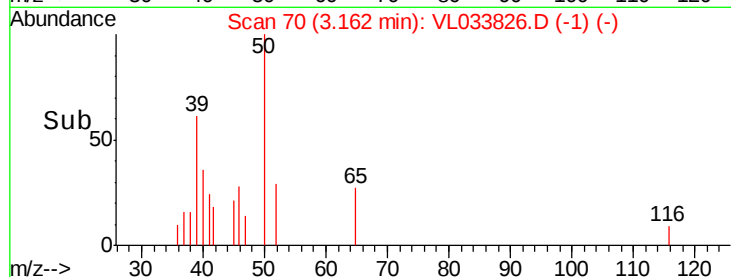
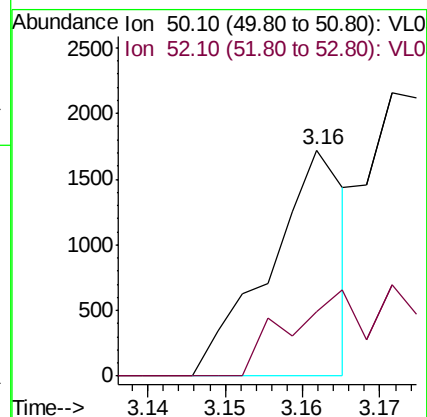
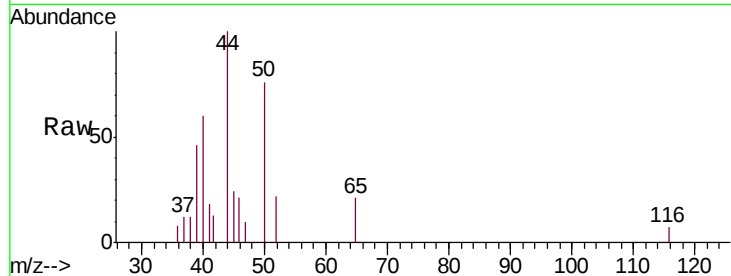
BPS1-SG-3010-55

Tgt Ion: 50 Resp: 1175

Ion Ratio Lower Upper

50 100

52 28.5 25.7 38.5



#9

Propene

Concen: 6.646 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033826.D

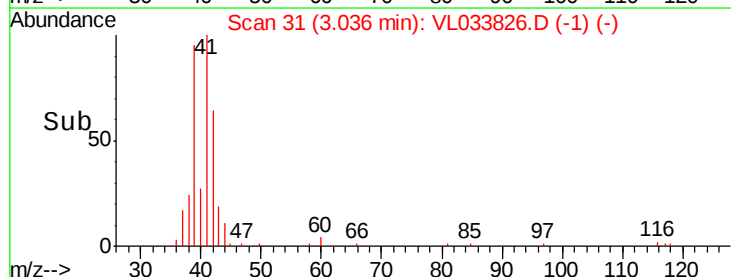
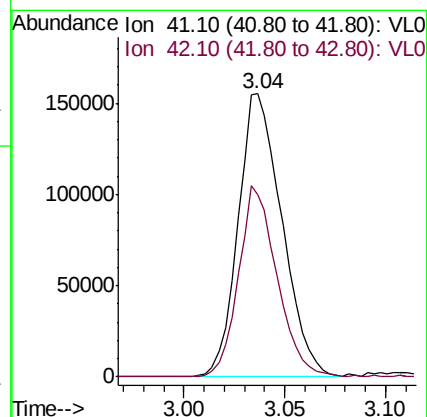
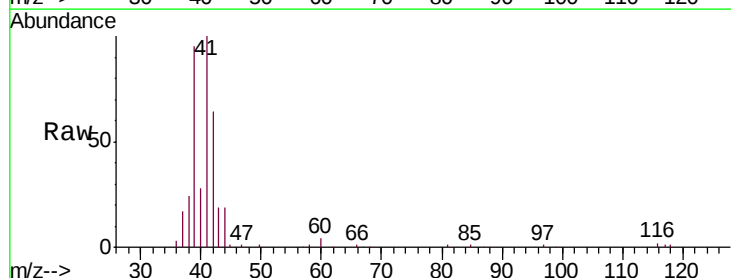
Acq: 29 May 2019 6:22

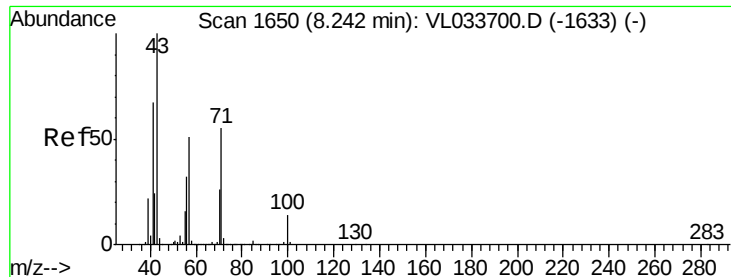
Tgt Ion: 41 Resp: 236380

Ion Ratio Lower Upper

41 100

42 59.9 56.1 84.1





#10

Heptane

Concen: 0.080 ppbv

RT: 8.24 min Scan# 1650

Delta R.T. 0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

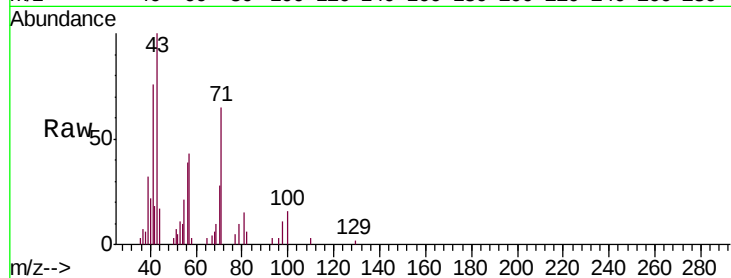
BPS1-SG-3010-55

Tgt Ion: 43 Resp: 8078

Ion Ratio Lower Upper

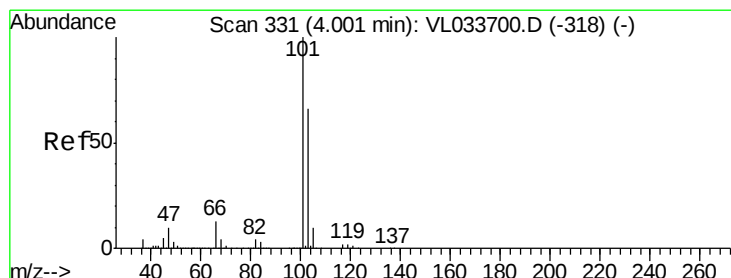
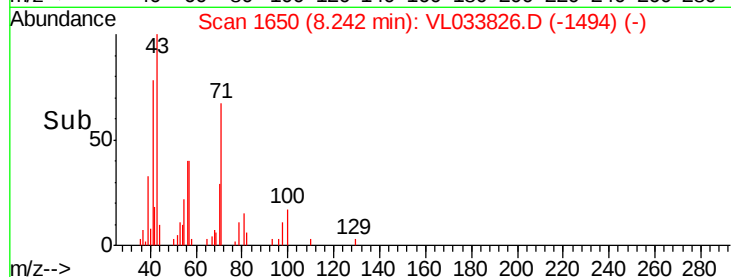
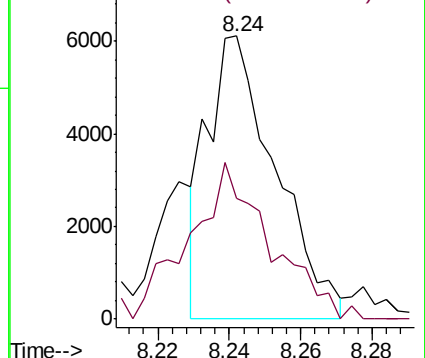
43 100

57 67.5 41.4 62.0#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#11

Trichlorofluoromethane

Concen: 0.489 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033826.D

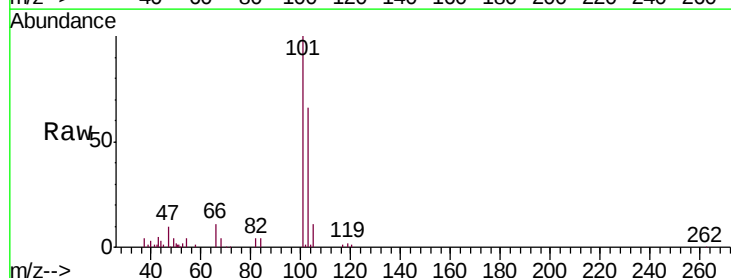
Acq: 29 May 2019 6:22

Tgt Ion: 101 Resp: 71764

Ion Ratio Lower Upper

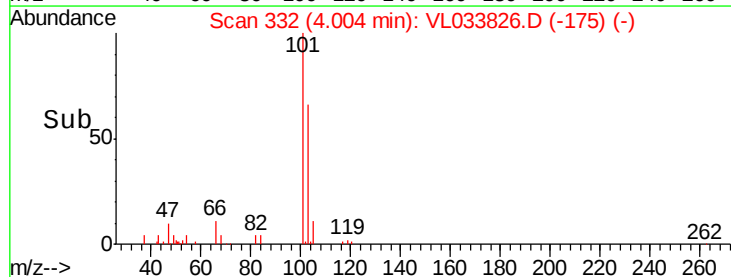
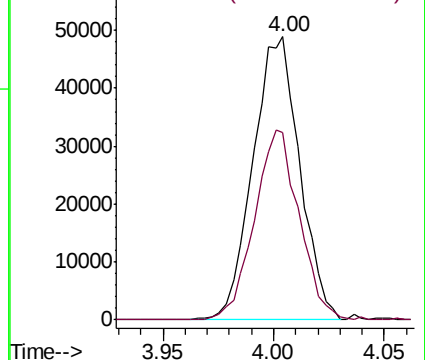
101 100

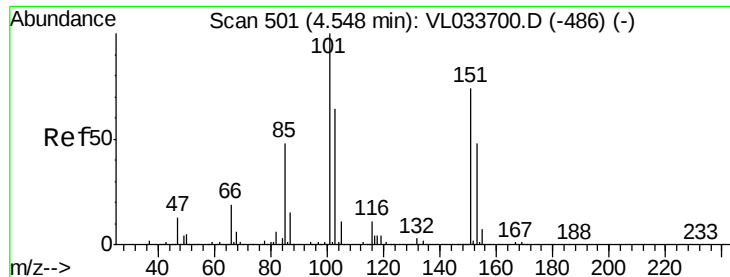
103 66.5 52.6 78.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.035 ppbv

RT: 4.55 min Scan# 501

Delta R.T. 0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

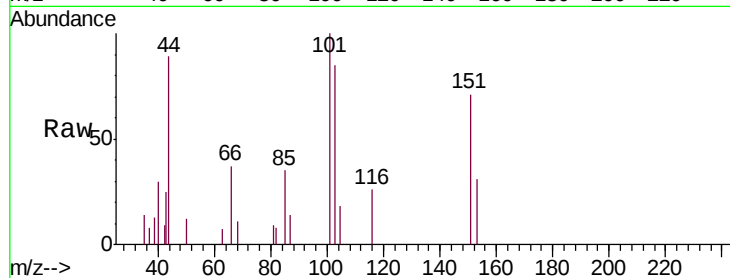
BPS1-SG-3010-55

Tgt Ion:101 Resp: 3598

Ion Ratio Lower Upper

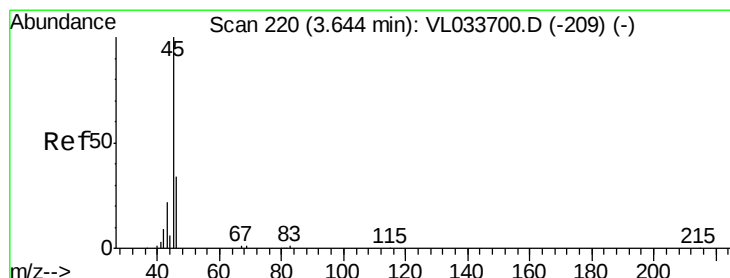
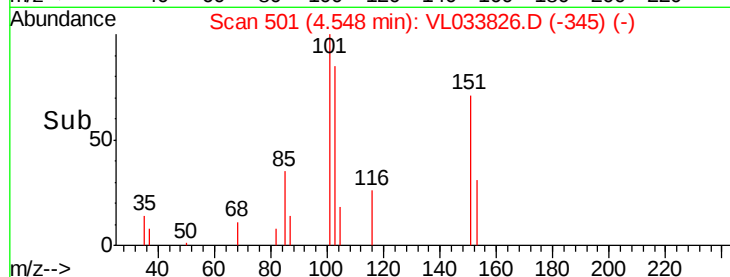
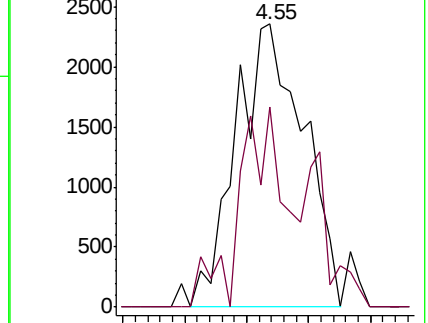
101 100

151 65.9 58.2 87.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 3.225 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.01 min

Lab File: VL033826.D

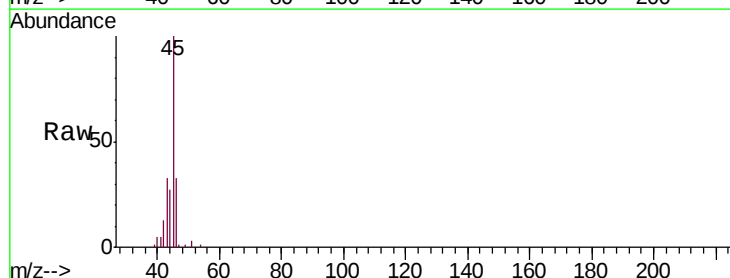
Acq: 29 May 2019 6:22

Tgt Ion: 45 Resp: 37068

Ion Ratio Lower Upper

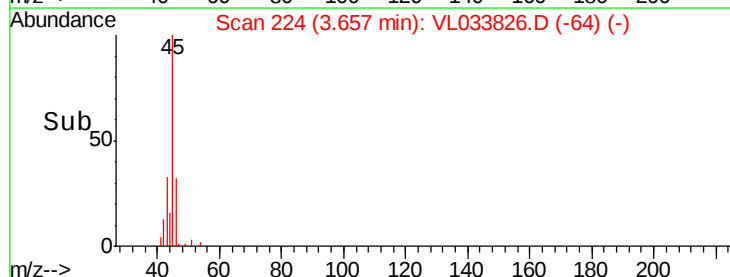
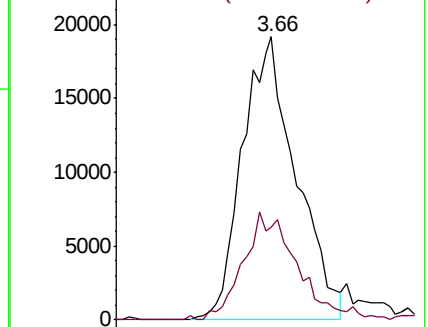
45 100

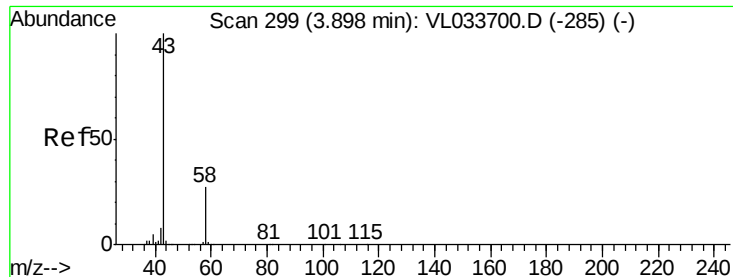
46 38.1 14.8 59.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 15.972 ppbv

RT: 3.89 min Scan# 298

Delta R.T. -0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

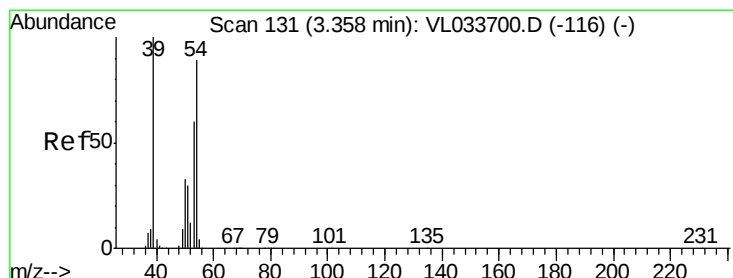
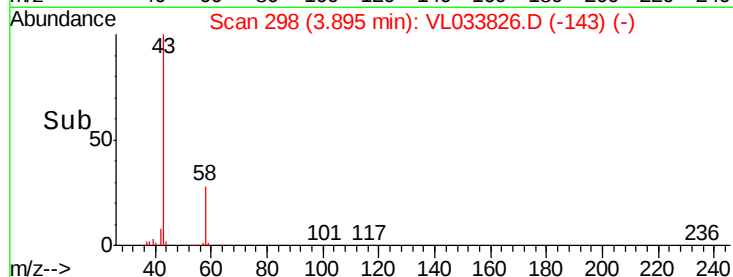
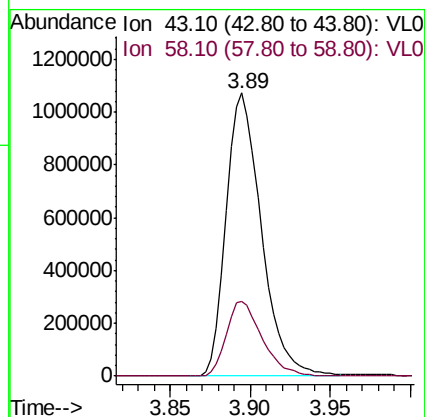
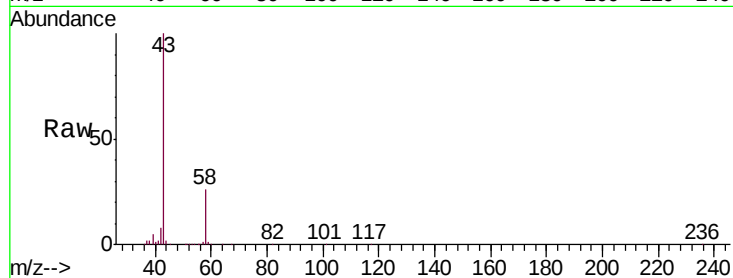
BPS1-SG-3010-55

Tgt Ion: 43 Resp: 1617592

Ion Ratio Lower Upper

43 100

58 27.0 21.3 31.9



#16

1,3-Butadiene

Concen: 3.895 ppbv

RT: 3.34 min Scan# 126

Delta R.T. -0.02 min

Lab File: VL033826.D

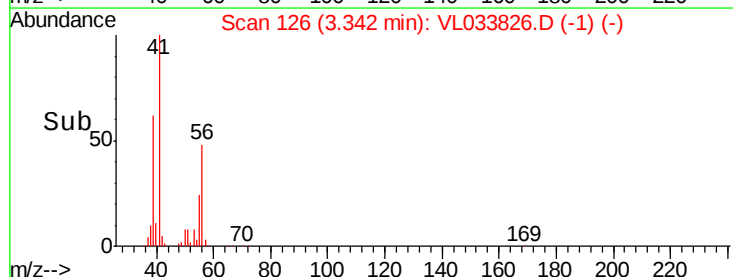
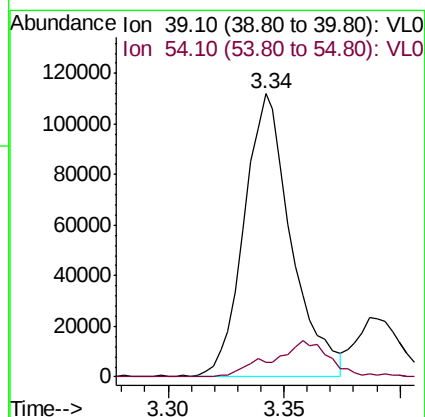
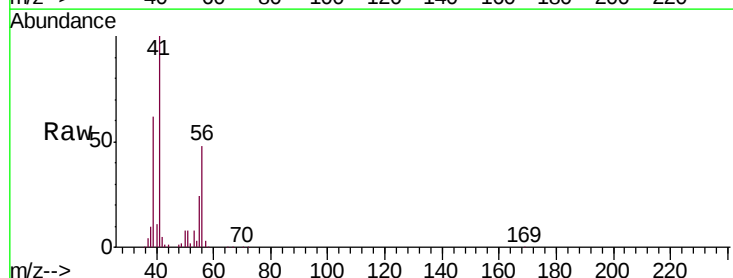
Acq: 29 May 2019 6:22

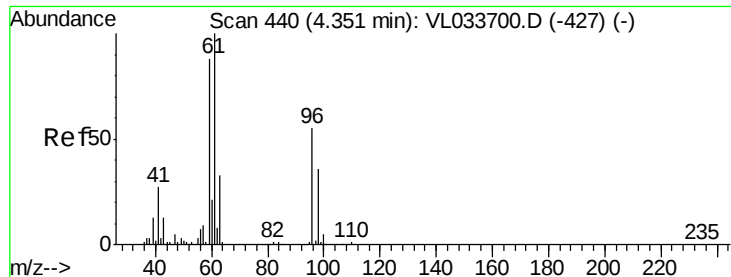
Tgt Ion: 39 Resp: 157077

Ion Ratio Lower Upper

39 100

54 16.2 69.0 103.6#





#17

tert-Butyl alcohol

Concen: 0.094 ppbv

RT: 4.37 min Scan# 447

Delta R.T. 0.02 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

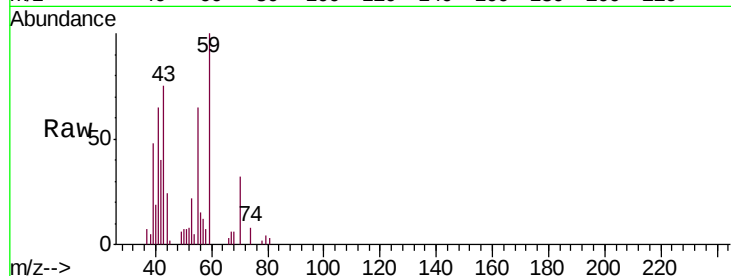
BPS1-SG-3010-55

Tgt Ion: 59 Resp: 7701

Ion Ratio Lower Upper

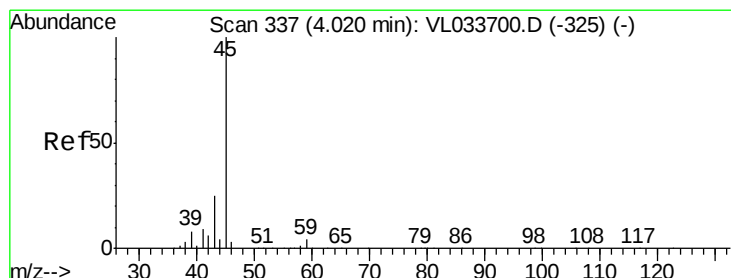
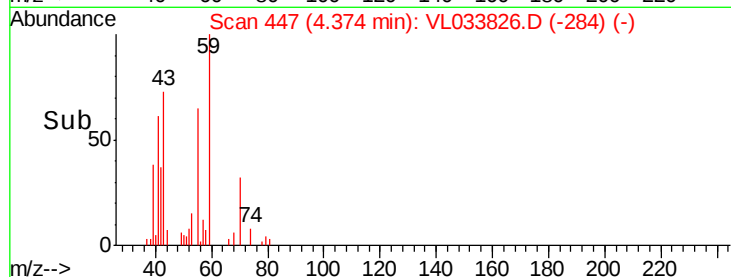
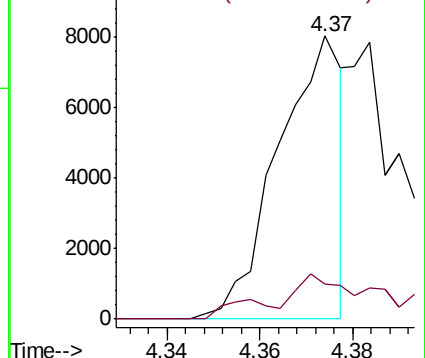
59 100

57 26.5 8.4 12.6#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 0.087 ppbv

RT: 4.04 min Scan# 342

Delta R.T. 0.02 min

Lab File: VL033826.D

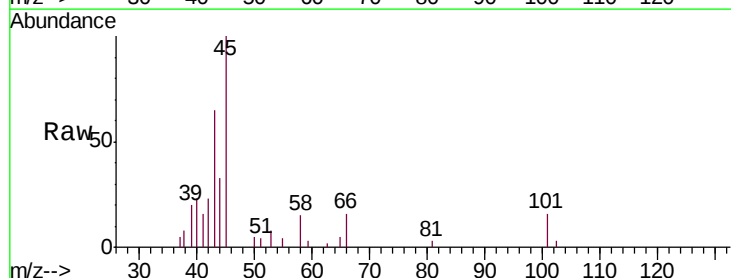
Acq: 29 May 2019 6:22

Tgt Ion: 45 Resp: 5691

Ion Ratio Lower Upper

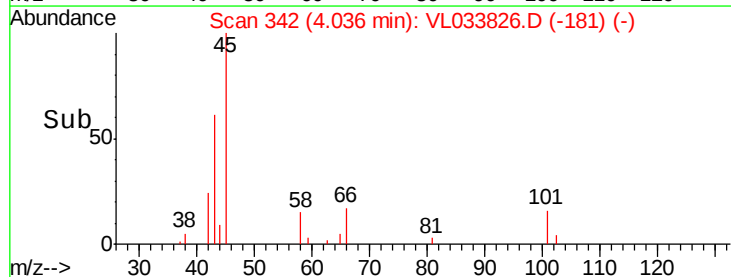
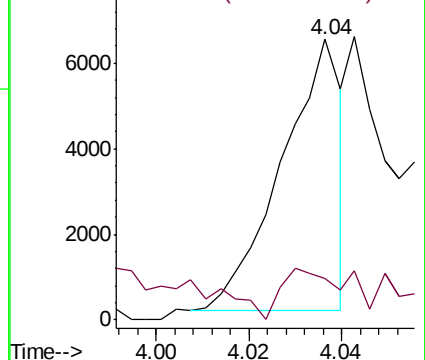
45 100

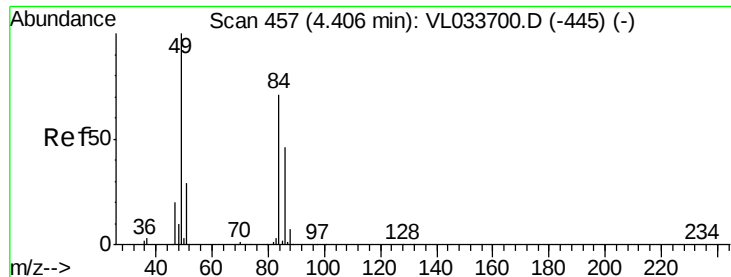
58 0.0 1.6 2.4#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#20

Methylene Chloride

Concen: 0.305 ppbv

RT: 4.40 min Scan# 456

Delta R.T. -0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3010-55

Tgt Ion: 84 Resp: 11895

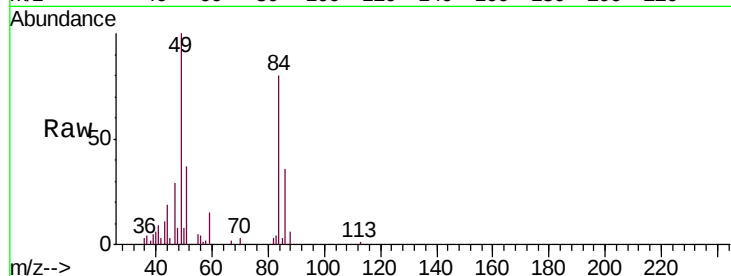
Ion Ratio Lower Upper

84 100

49 120.1 112.8 169.2

51 44.1 33.4 50.0

86 39.3 51.7 77.5#

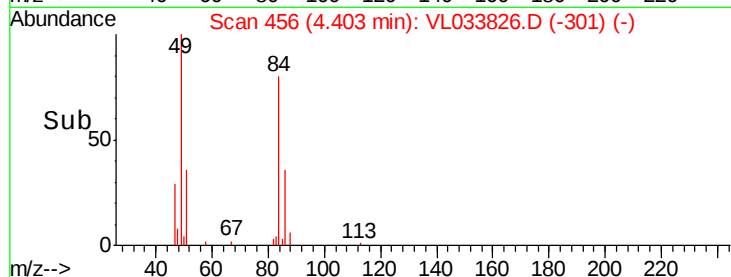
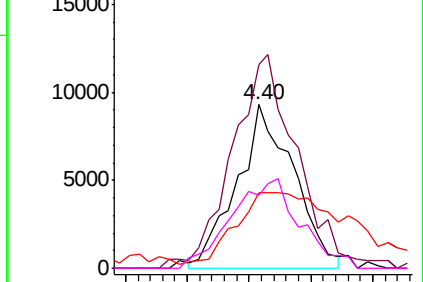


Abundance Ion 84.00 (83.70 to 84.70): VL0

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



#21

Allyl Chloride

Concen: 0.011 ppbv

RT: 4.47 min Scan# 477

Delta R.T. -0.01 min

Lab File: VL033826.D

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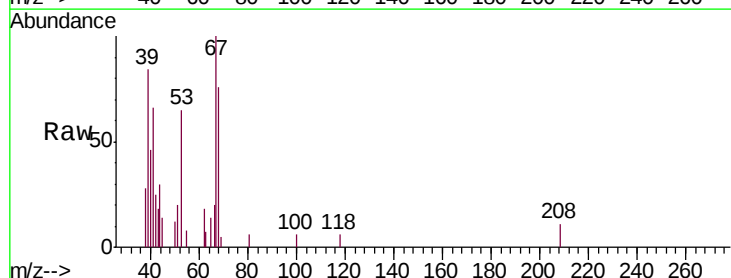
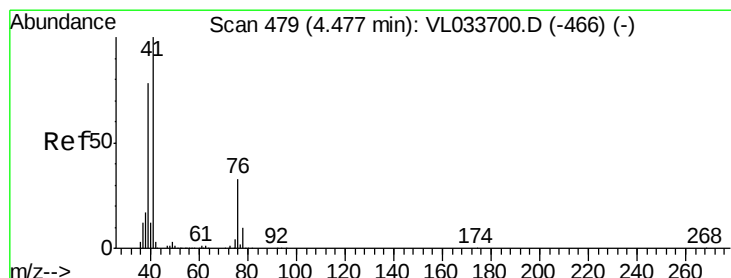
Tgt Ion: 41 Resp: 674

Ion Ratio Lower Upper

41 100

76 0.0 25.9 38.9#

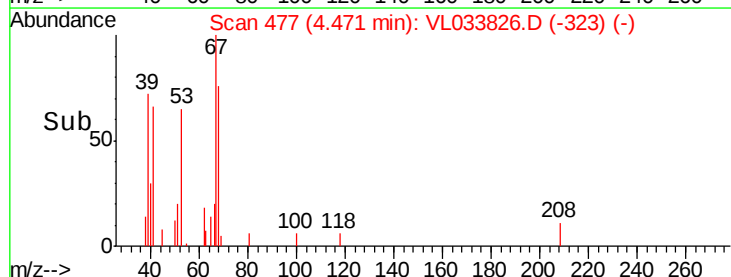
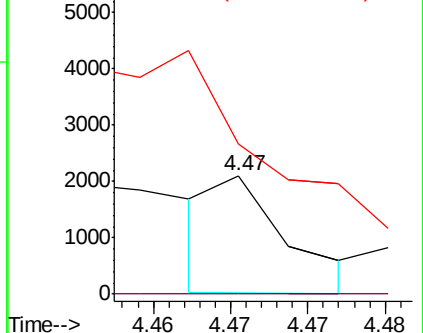
39 1792.4 64.6 97.0#

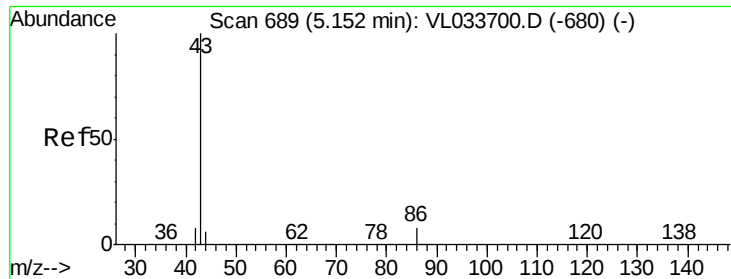


Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0





#23

Vinyl Acetate

Concen: 0.106 ppbv

RT: 5.15 min Scan# 687

Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3010-55

Tgt Ion: 43 Resp: 14196

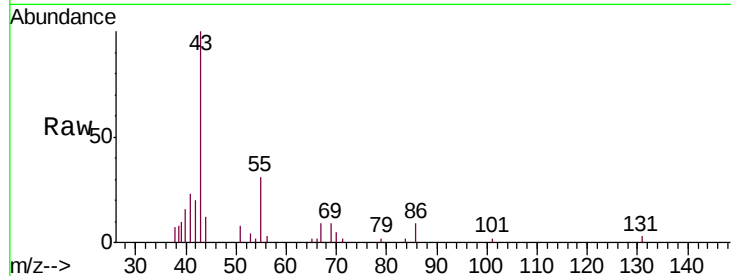
Ion Ratio Lower Upper

43 100

86 9.4 6.0 9.0#

42 20.9 7.5 11.3#

44 0.0 4.4 6.6#

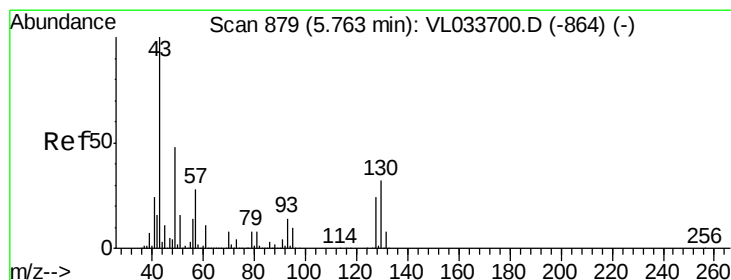
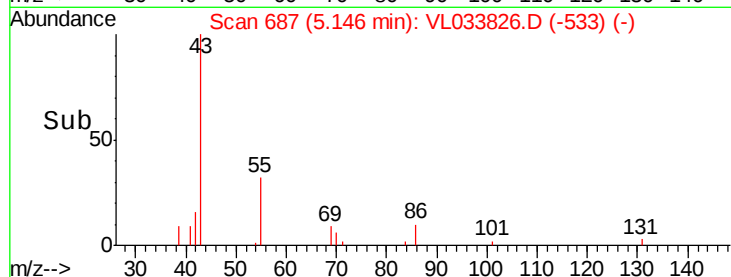
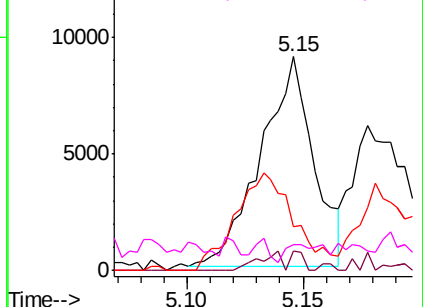


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.116 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Tgt Ion: 43 Resp: 20557

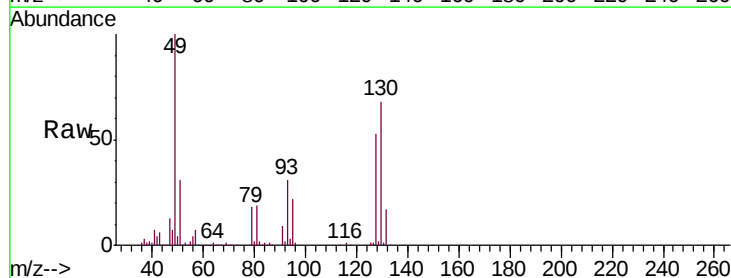
Ion Ratio Lower Upper

43 100

45 0.6 7.9 11.9#

61 2.5 7.7 11.5#

70 2.0 5.8 8.6#

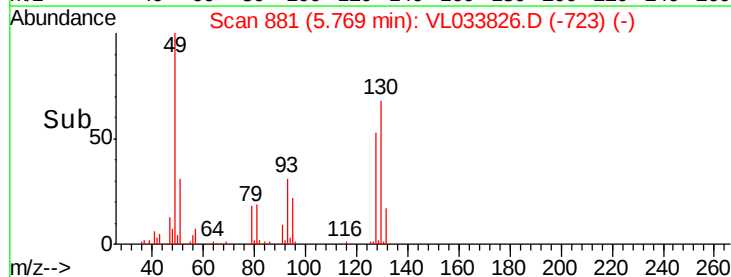
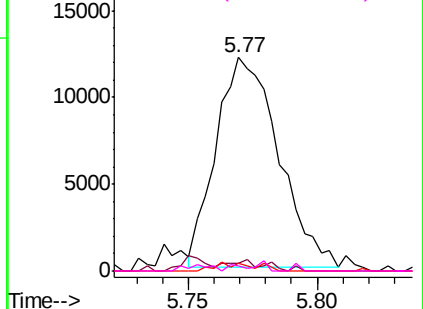


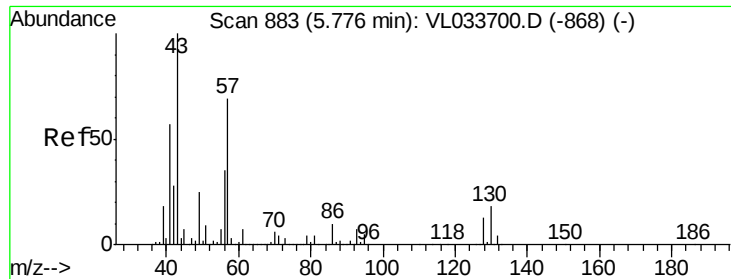
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.301 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3010-55

Tgt Ion: 57 Resp: 23035

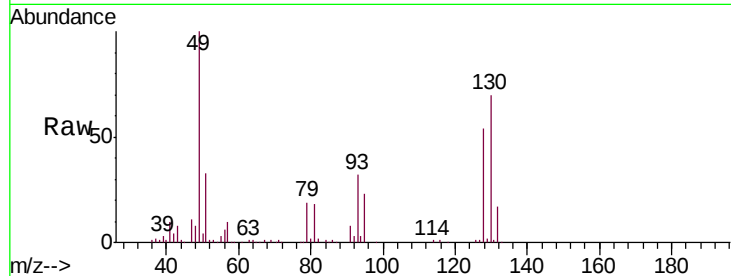
Ion Ratio Lower Upper

57 100

41 123.0 69.8 104.6#

43 98.2 181.8 272.6#

56 65.5 42.1 63.1#

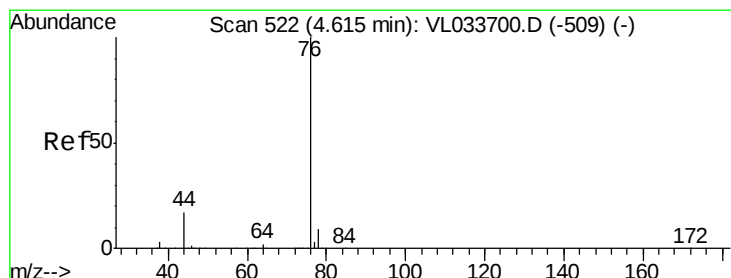
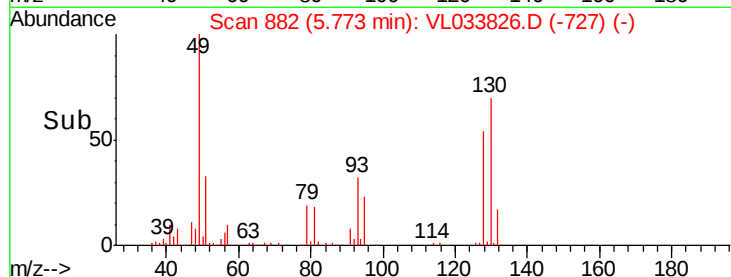
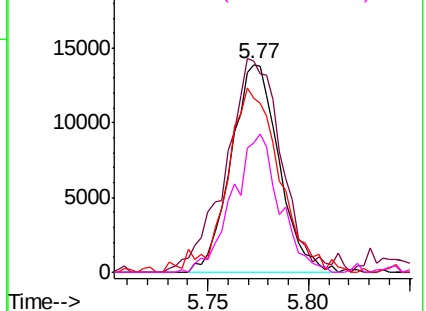


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#27

Carbon Disulfide

Concen: 0.180 ppbv

RT: 4.62 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

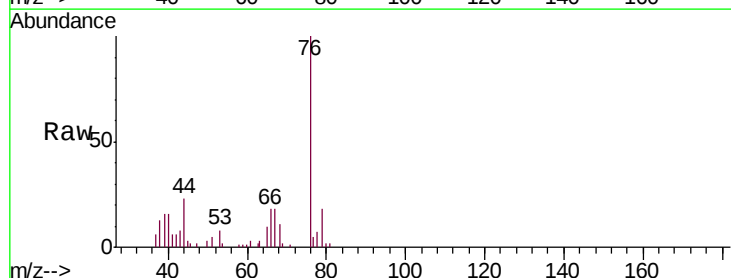
Tgt Ion: 76 Resp: 18904

Ion Ratio Lower Upper

76 100

44 24.9 13.8 20.8#

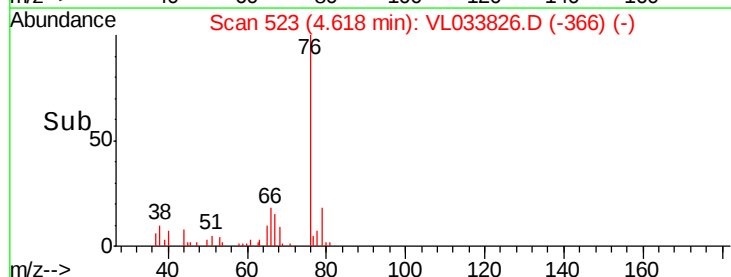
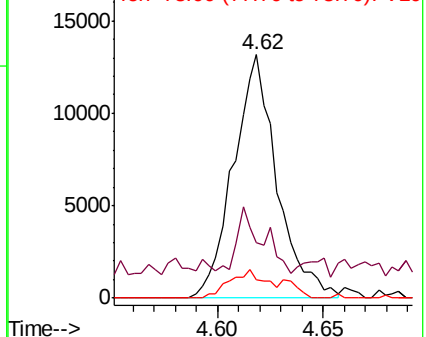
78 12.3 7.4 11.0#

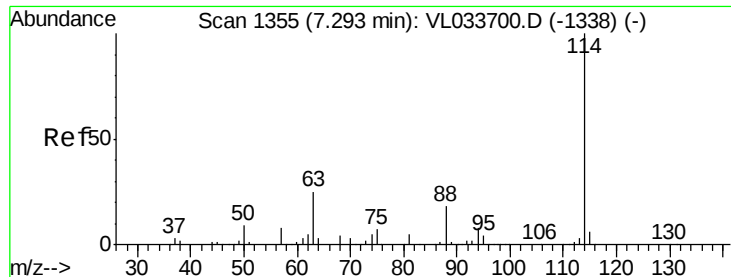


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0

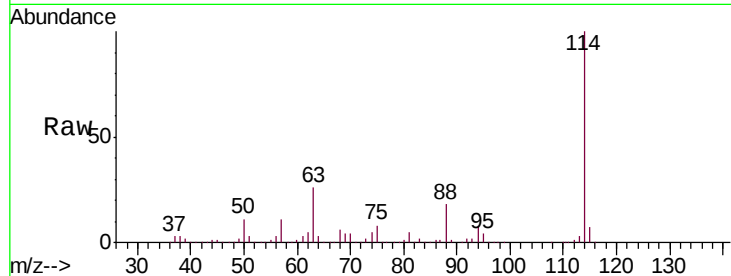




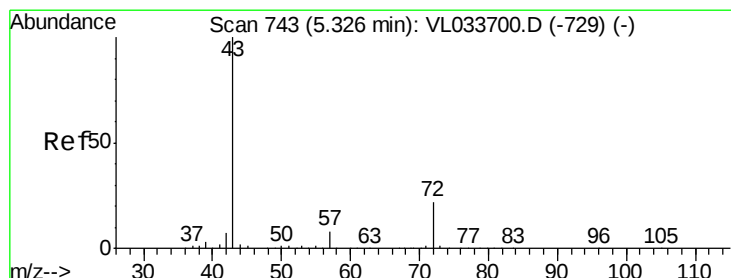
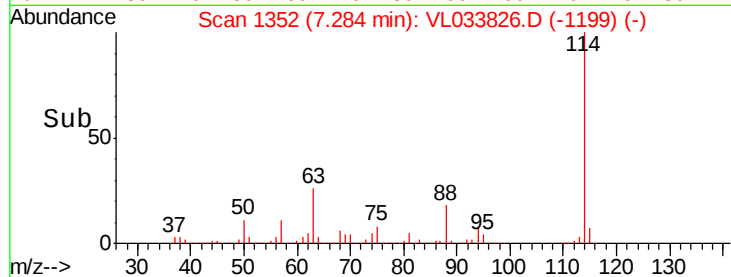
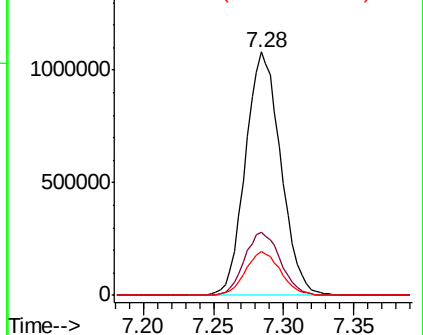
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.28 min Scan# 1352
 Delta R.T. -0.01 min
 Lab File: VL033826.D
 Acq: 29 May 2019 6:22

Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3010-55

Tgt Ion: 114 Resp: 1896896
 Ion Ratio Lower Upper
 114 100
 63 26.3 20.9 31.3
 88 17.8 14.3 21.5

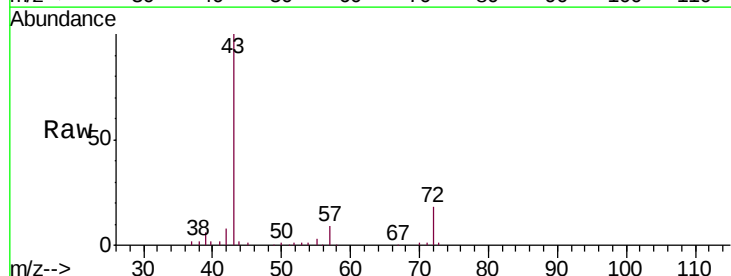


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

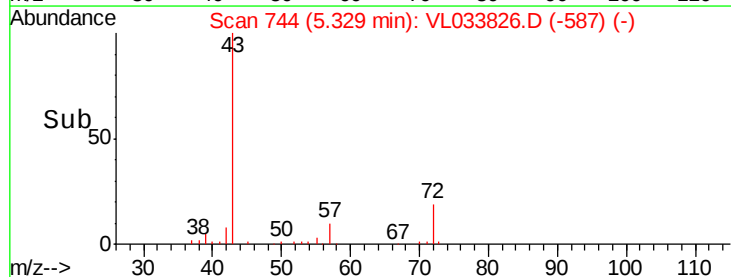
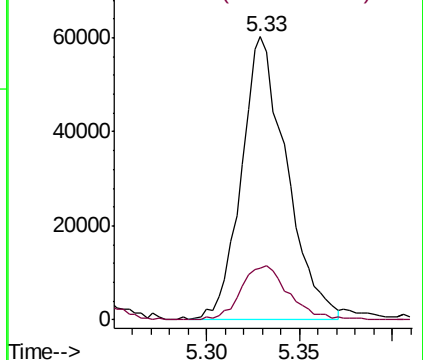


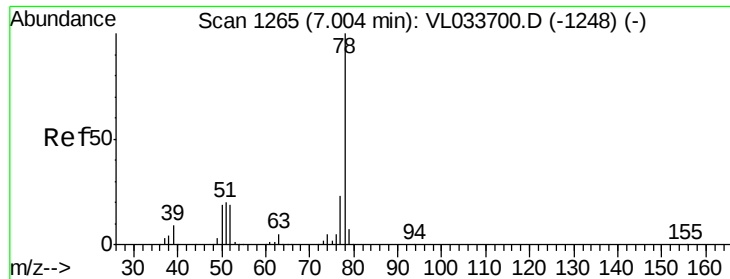
#34
 2-Butanone
 Concen: 0.869 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. 0.00 min
 Lab File: VL033826.D
 Acq: 29 May 2019 6:22

Tgt Ion: 43 Resp: 102117
 Ion Ratio Lower Upper
 43 100
 72 20.4 17.8 26.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0

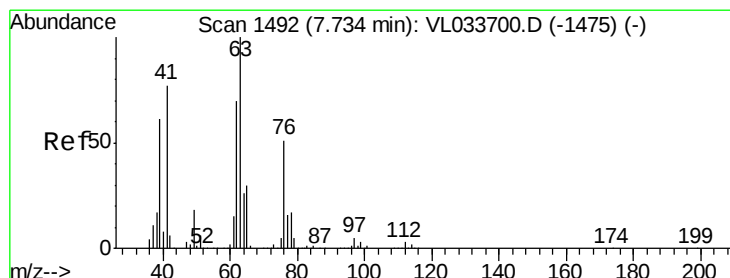
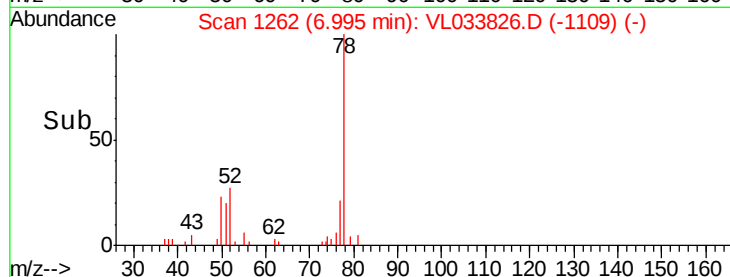
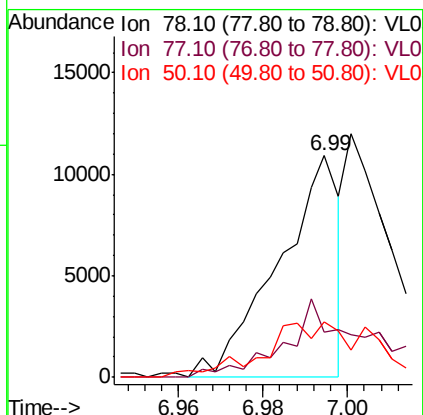
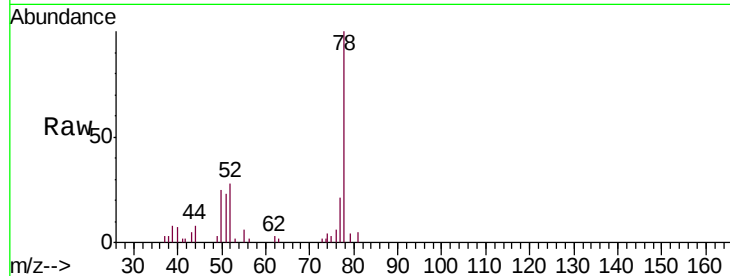




#36
Benzene
Concen: 0.063 ppbv
RT: 6.99 min Scan# 1262
Delta R.T. -0.01 min
Lab File: VL033826.D
Acq: 29 May 2019 6:22

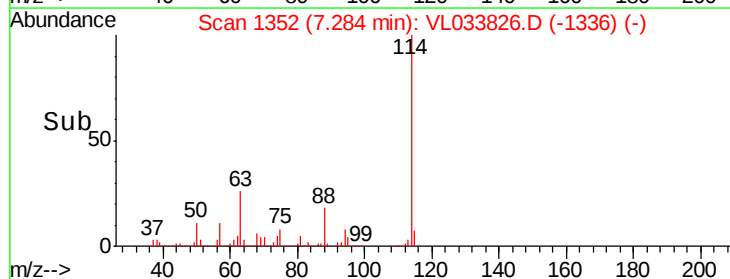
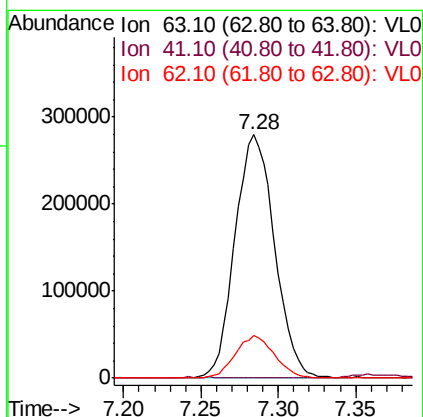
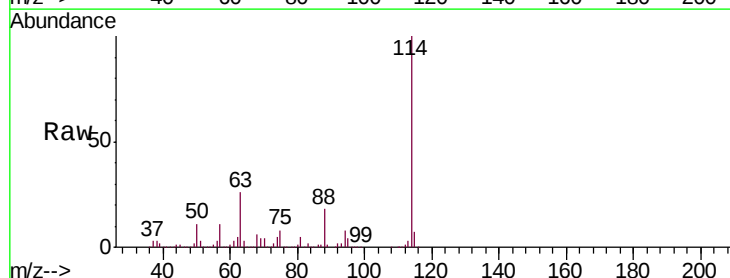
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3010-55

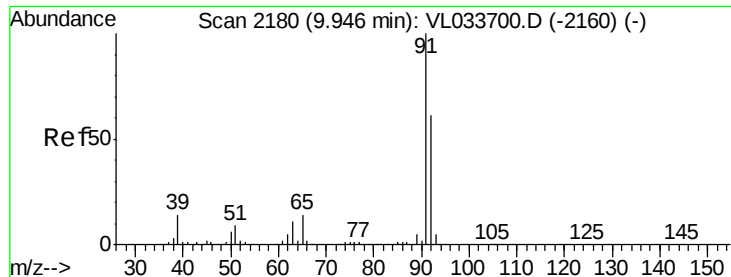
Tgt Ion: 78 Resp: 10929
Ion Ratio Lower Upper
78 100
77 20.7 18.4 27.6
50 22.3 15.5 23.3



#39
1,2-Dichloropropane
Concen: 7.748 ppbv
RT: 7.28 min Scan# 1352
Delta R.T. -0.45 min
Lab File: VL033826.D
Acq: 29 May 2019 6:22

Tgt Ion: 63 Resp: 498466
Ion Ratio Lower Upper
63 100
41 0.0 61.5 92.3#
62 17.5 56.2 84.4#





#53

Toluene

Concen: 0.656 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

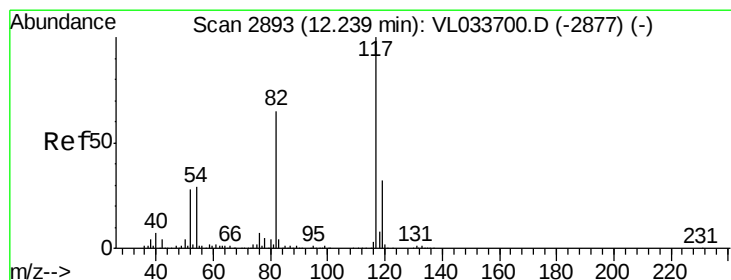
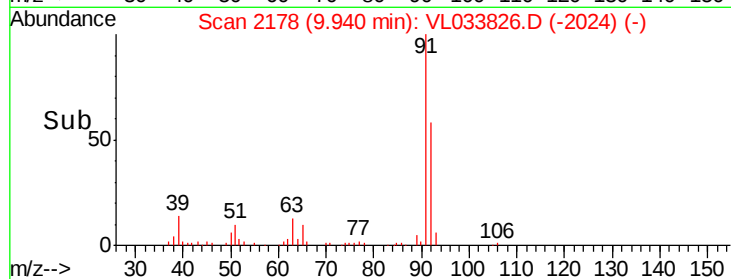
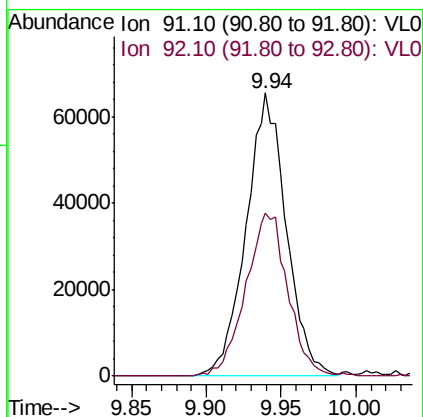
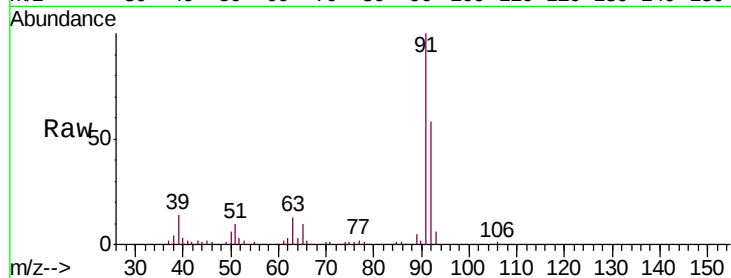
BPS1-SG-3010-55

Tgt Ion: 91 Resp: 122065

Ion Ratio Lower Upper

91 100

92 60.7 47.6 71.4



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2890

Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

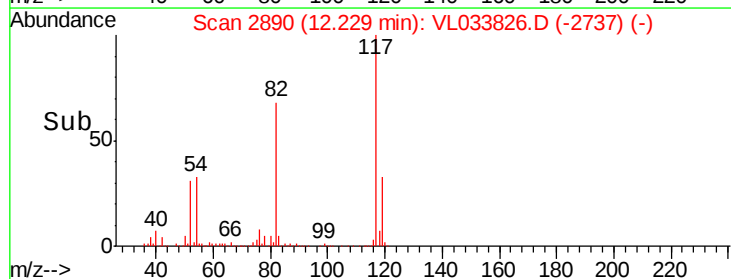
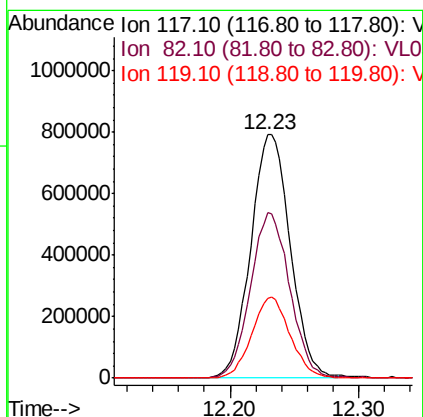
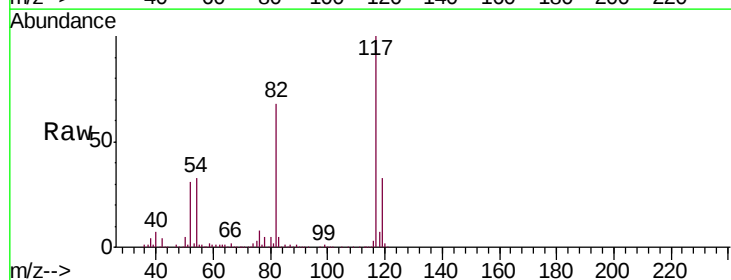
Tgt Ion: 117 Resp: 1689913

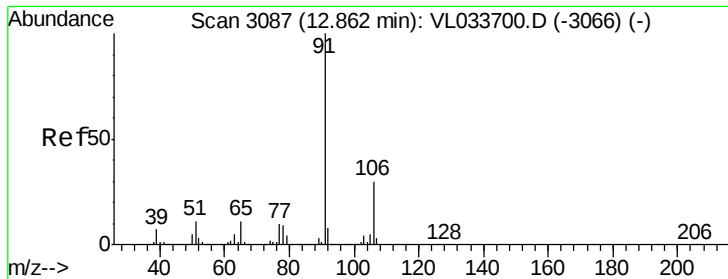
Ion Ratio Lower Upper

117 100

82 68.3 49.4 74.0

119 32.5 24.9 37.3





#58

Ethyl Benzene

Concen: 0.047 ppbv

RT: 12.85 min Scan# 3084

Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Instrument :

MSVOA_L

ClientSampleId :

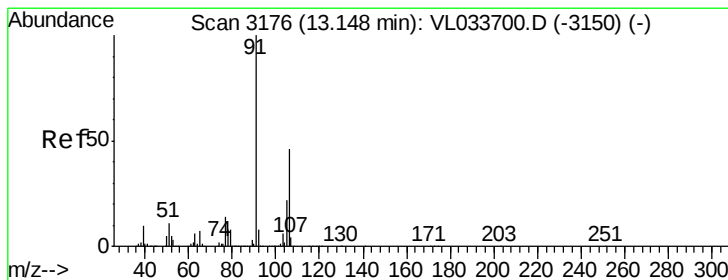
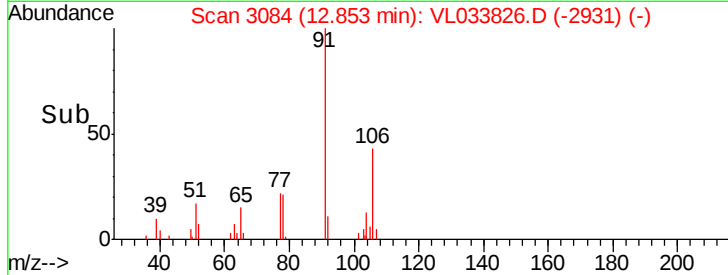
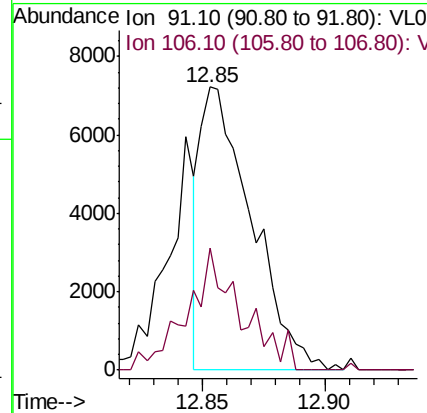
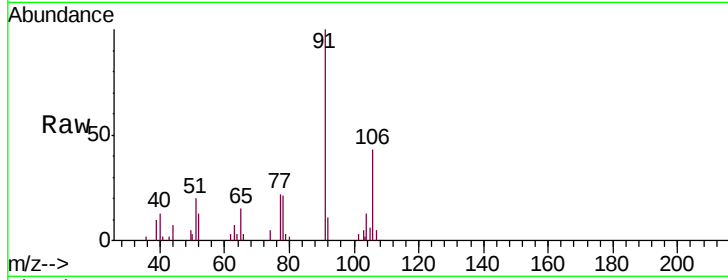
BPS1-SG-3010-55

Tgt Ion: 91 Resp: 10477

Ion Ratio Lower Upper

91 100

106 43.1 23.9 35.9#



#59

m/p-Xylene

Concen: 0.091 ppbv

RT: 13.14 min Scan# 3173

Delta R.T. -0.01 min

Lab File: VL033826.D

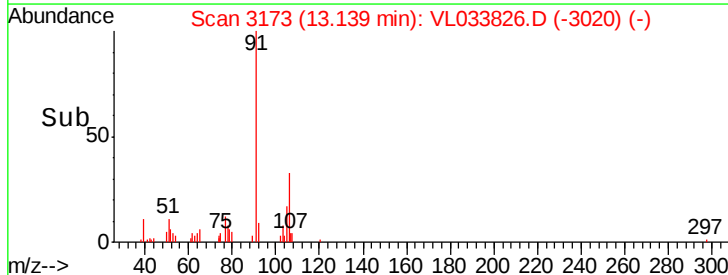
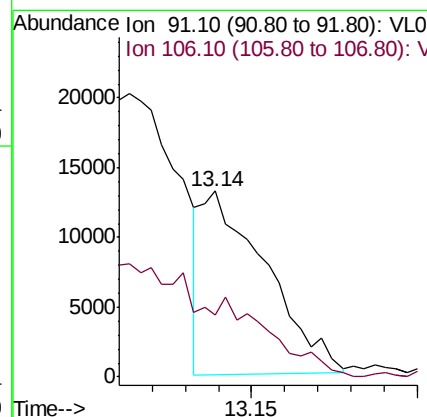
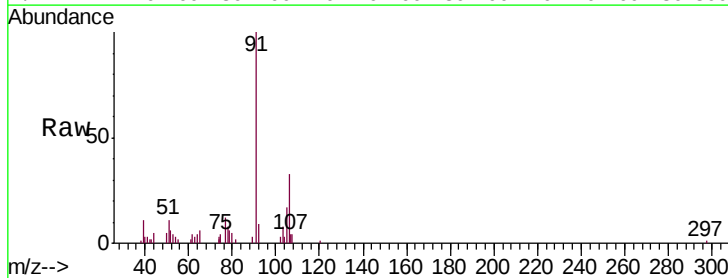
Acq: 29 May 2019 6:22

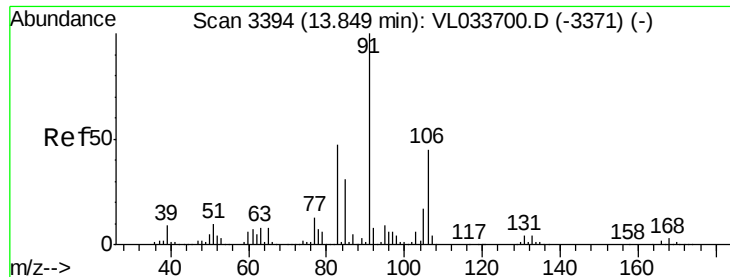
Tgt Ion: 91 Resp: 17759

Ion Ratio Lower Upper

91 100

106 0.0 35.8 53.6#

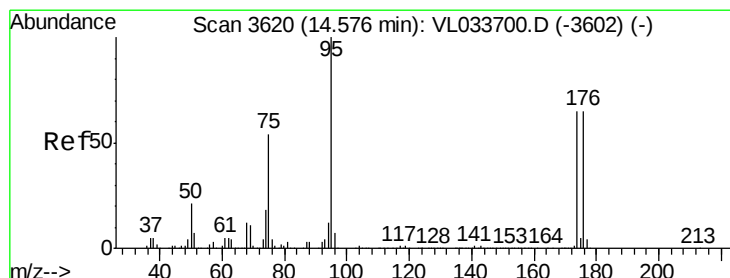
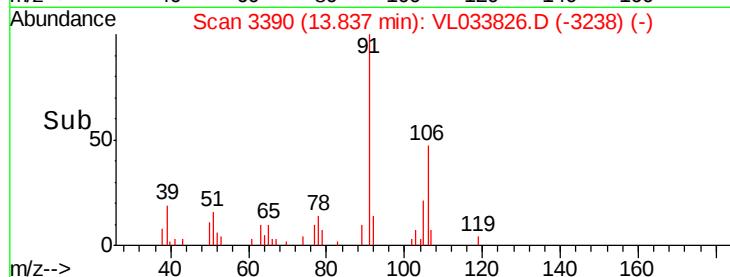
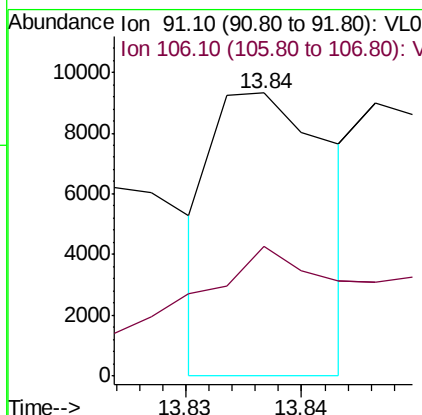
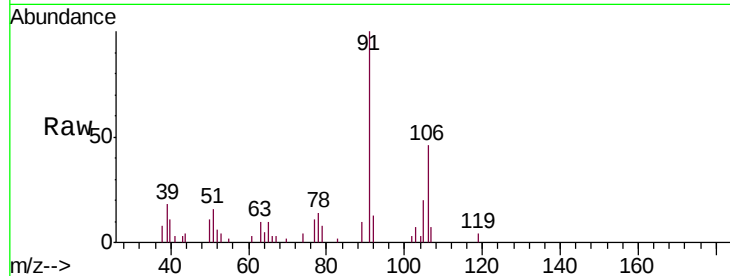




#60
o-Xylene
Concen: 0.033 ppbv
RT: 13.84 min Scan# 3390
Delta R.T. -0.01 min
Lab File: VL033826.D
Acq: 29 May 2019 6:22

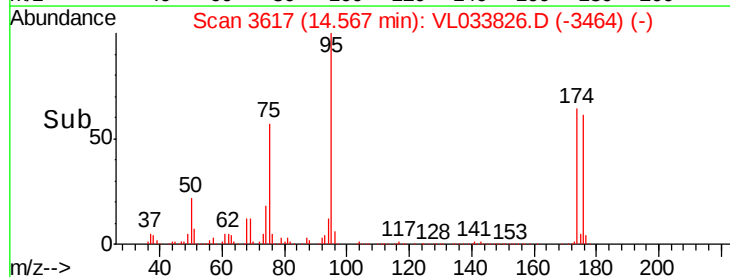
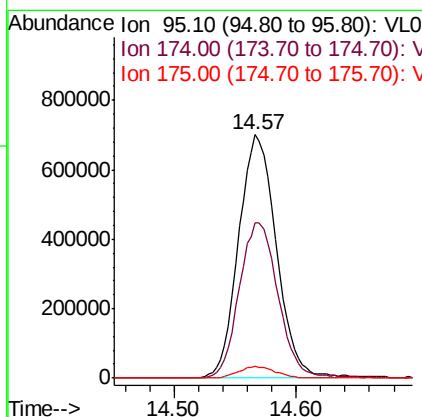
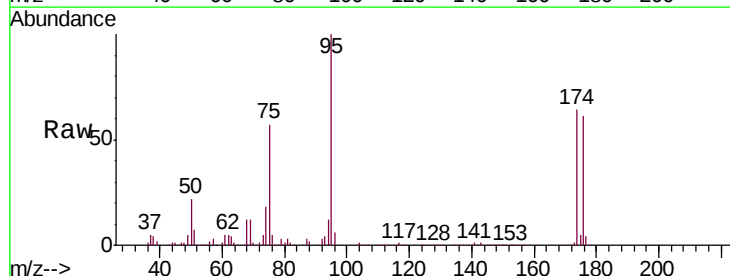
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3010-55

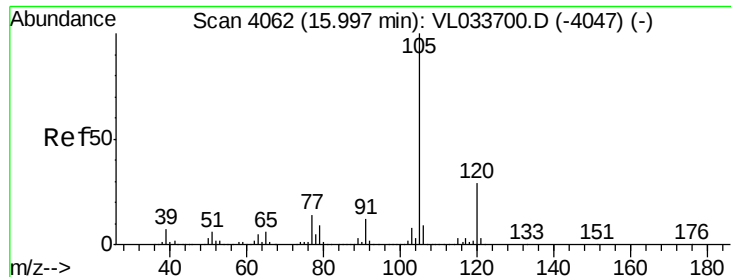
Tgt Ion: 91 Resp: 6604
Ion Ratio Lower Upper
91 100
106 124.1 21.6 64.8#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.920 ppbv
RT: 14.57 min Scan# 3617
Delta R.T. -0.01 min
Lab File: VL033826.D
Acq: 29 May 2019 6:22

Tgt Ion: 95 Resp: 1495983
Ion Ratio Lower Upper
95 100
174 66.4 53.9 80.9
175 4.8 3.8 5.8





#72

4-Ethyltoluene

Concen: 0.029 ppbv

RT: 15.99 min Scan# 4059

Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

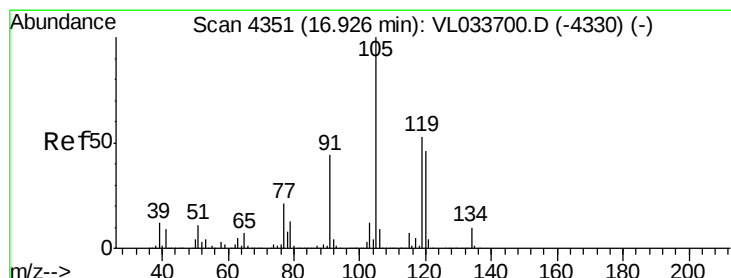
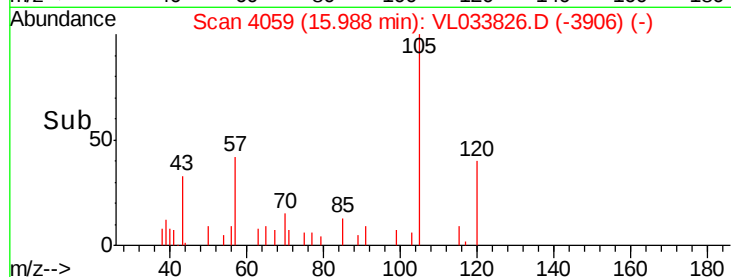
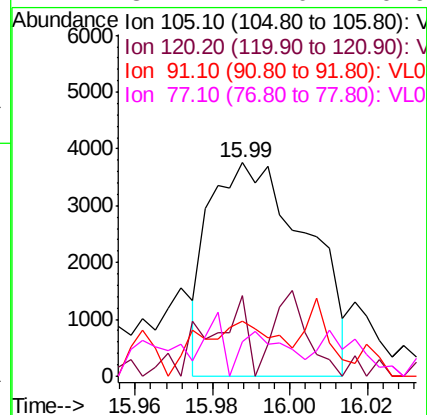
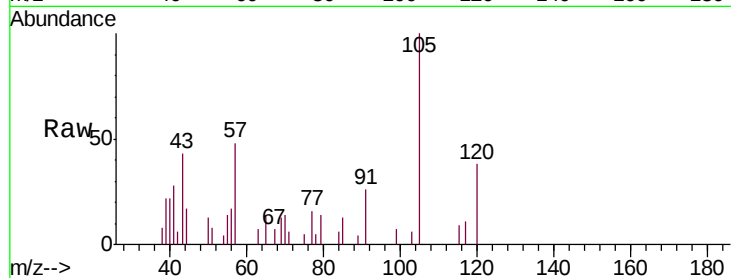
Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3010-55

Tgt Ion:	105	Resp:	6581
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.1	34.7#
91	0.0	10.4	15.6#
77	37.7	11.0	16.6#



#74

1,2,4-Trimethylbenzene

Concen: 0.149 ppbv

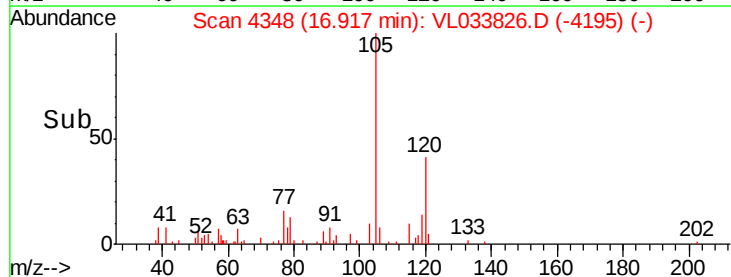
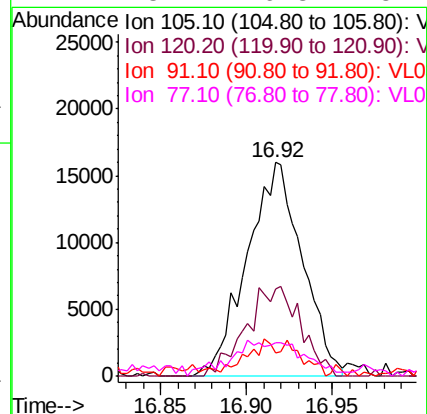
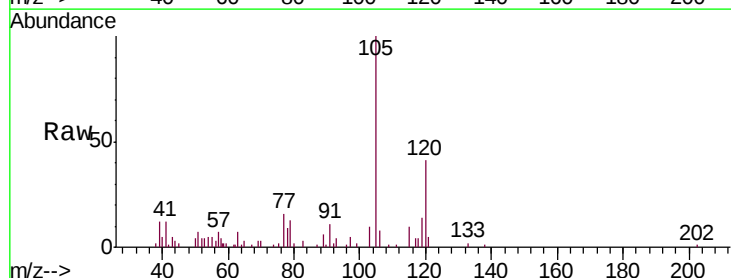
RT: 16.92 min Scan# 4348

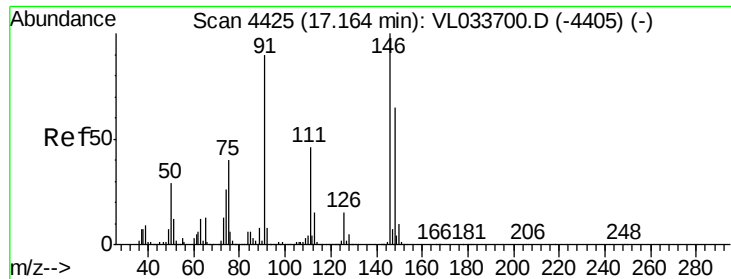
Delta R.T. -0.01 min

Lab File: VL033826.D

Acq: 29 May 2019 6:22

Tgt Ion:	105	Resp:	35601
Ion	Ratio	Lower	Upper
105	100		
120	41.0	36.8	55.2
91	8.6	35.4	53.0#
77	13.7	16.8	25.2#

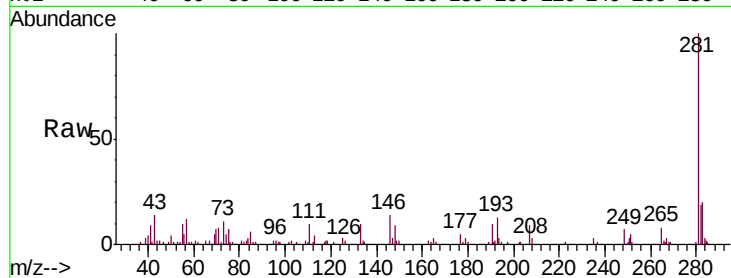




#75
 1,3-Dichlorobenzene
 Concen: 0.024 ppbv
 RT: 17.15 min Scan# 4422
 Delta R.T. -0.01 min
 Lab File: VL033826.D
 Acq: 29 May 2019 6:22

Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3010-55

Tgt Ion	Ratio	Lower	Upper
146	100		
111	0.0	22.9	68.8#
148	181.9	32.0	96.2#



Abundance Ion 146.00 (145.70 to 146.70): V
 Ion 111.10 (110.80 to 111.80): V
 Ion 148.00 (147.70 to 148.70): V

