

Data File : VL033785.D
Acq On : 23 May 2019 22:43
Operator : SY/AP
Sample : K2929-18DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3008-55DL

Quant Time: May 24 04:29:44 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	5.75	49	1105399	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	2847177	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	2810906	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	2233100	9.80	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.00%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.07	85	8328	0.036	ppbv #	85
3) Chlorodifluoromethane	3.01	51	8770	0.069	ppbv #	88
4) Chloromethane	3.16	50	1262	0.017	ppbv #	66
9) Propene	3.03	41	222291	4.127	ppbv	94
10) Heptane	8.23	43	6246	0.041	ppbv #	26
11) Trichlorofluoromethane	4.00	101	3282	0.015	ppbv	84
13) Ethanol	3.66	45	23854	1.370	ppbv	96
15) Acetone	3.89	43	2404925	15.681	ppbv	95
16) 1,3-Butadiene	3.34	39	193380	3.166	ppbv #	20
17) tert-Butyl alcohol	4.38	59	30410	0.245	ppbv	96
19) Isopropyl Alcohol	4.04	45	4887	0.049	ppbv #	94
20) Methylene Chloride	4.41	84	9457	0.160	ppbv	97
21) Allyl Chloride	4.47	41	993	0.010	ppbv #	18
23) Vinyl Acetate	5.14	43	7301	0.036	ppbv #	83
25) Ethyl Acetate	5.77	43	17848	0.066	ppbv #	87
26) Hexane	5.78	57	11703	0.101	ppbv #	32
27) Carbon Disulfide	4.62	76	16917	0.106	ppbv #	78
34) 2-Butanone	5.33	43	181916	1.031	ppbv	98
36) Benzene	7.00	78	9507	0.037	ppbv	96
39) 1,2-Dichloropropane	7.28	63	661331	6.849	ppbv #	22
52) Tetrachloroethene	11.35	164	1336	0.015	ppbv #	31
53) Toluene	9.93	91	104637	0.375	ppbv #	54
58) Ethyl Benzene	12.85	91	38648	0.104	ppbv	98
59) m/p-Xylene	13.14	91	36273	0.111	ppbv #	31
60) o-Xylene	13.84	91	48899	0.149	ppbv	97
72) 4-Ethyltoluene	15.99	105	16411	0.044	ppbv #	89
73) 1,3,5-Trimethylbenzene	16.15	105	4137	0.011	ppbv	94
74) 1,2,4-Trimethylbenzene	16.91	105	19800	0.050	ppbv #	68

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

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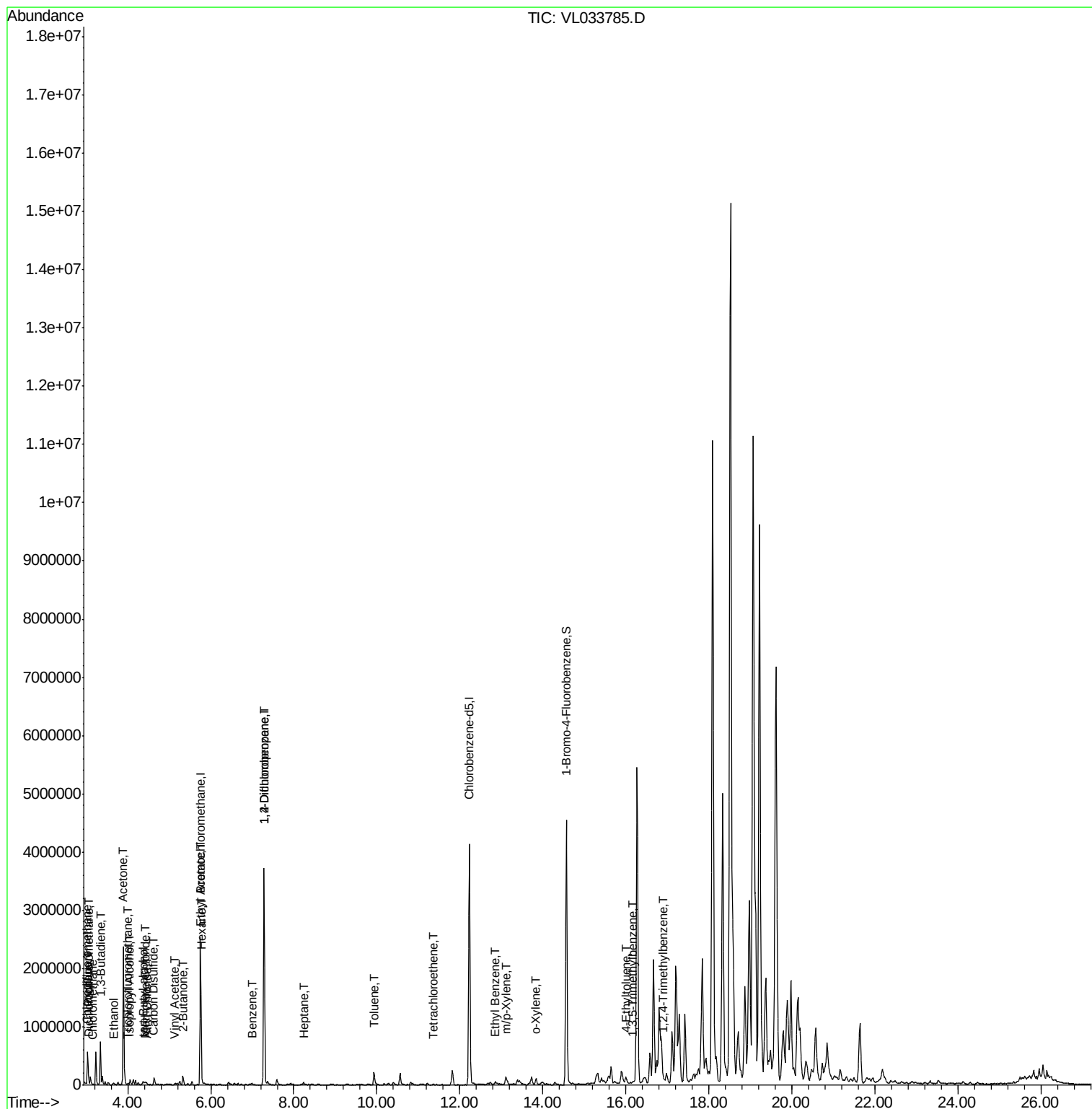
Quant Time: May 24 04:29:44 2019

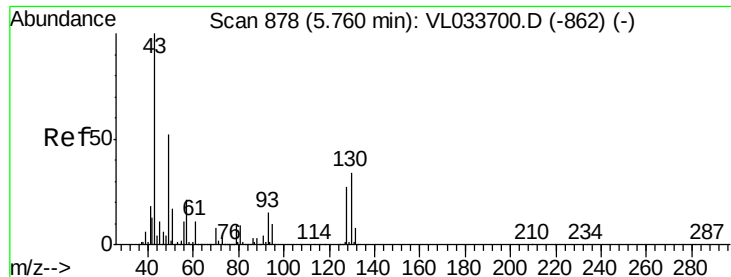
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A_L\METHODS\VL051719AIR.M

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: 5.75 min Scan# 876

Delta R.T. -0.01 min

Lab File: VL033785.D

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Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3008-55DL

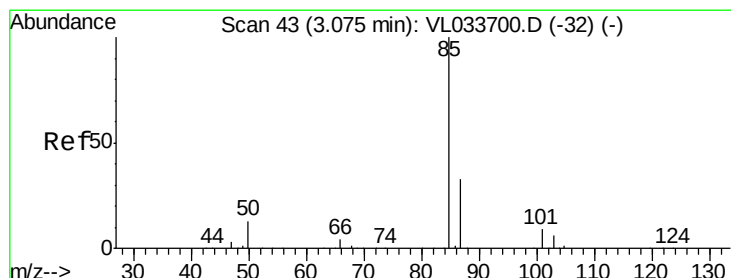
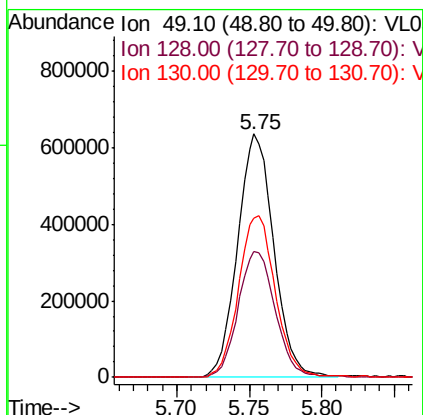
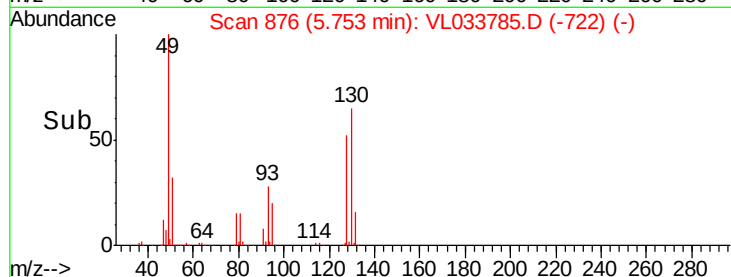
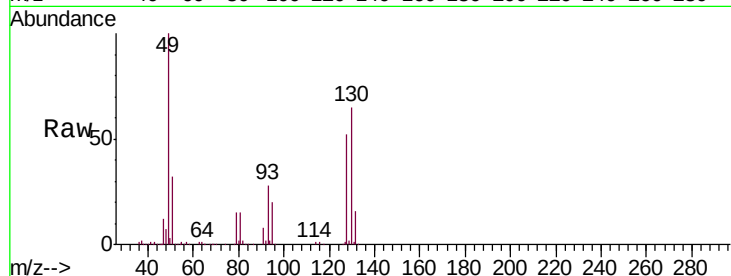
Tgt Ion: 49 Resp: 1105399

Ion Ratio Lower Upper

49 100

128 53.2 25.2 75.6

130 68.4 32.5 97.5



#2

Dichlorodifluoromethane

Concen: 0.036 ppbv

RT: 3.07 min Scan# 42

Delta R.T. -0.00 min

Lab File: VL033785.D

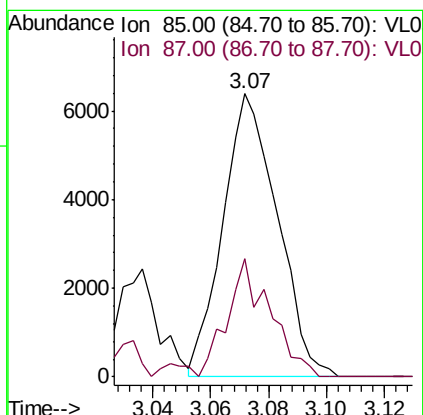
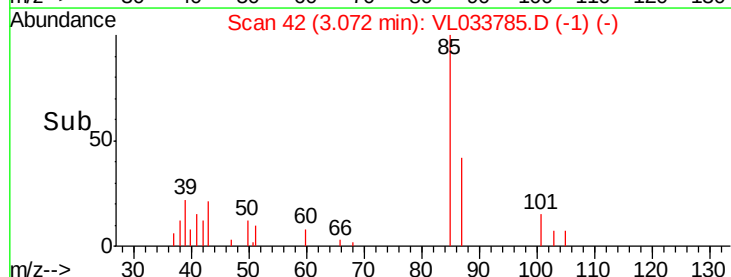
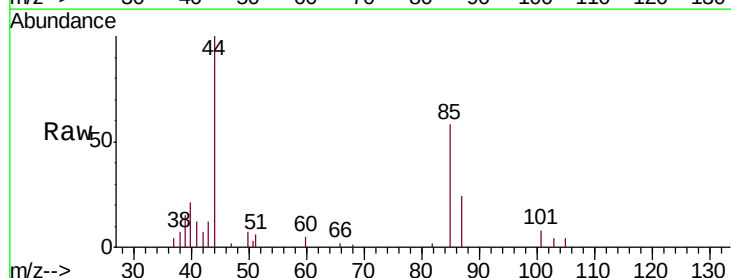
Acq: 23 May 2019 22:43

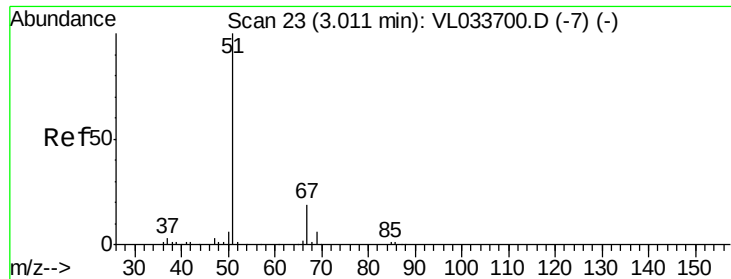
Tgt Ion: 85 Resp: 8328

Ion Ratio Lower Upper

85 100

87 41.6 26.3 39.5#





#3

Chlorodifluoromethane

Concen: 0.069 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

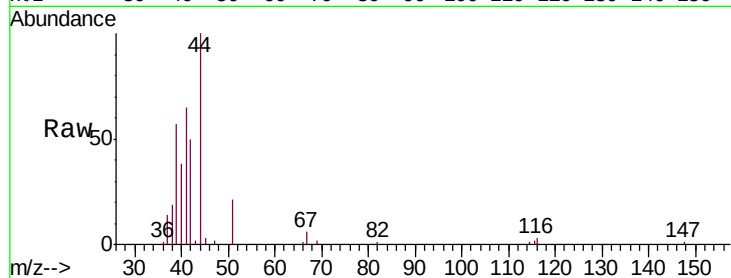
BPS1-SG-3008-55DL

Tgt Ion: 51 Resp: 8770

Ion Ratio Lower Upper

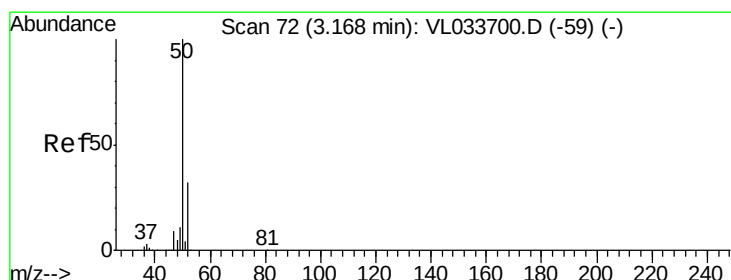
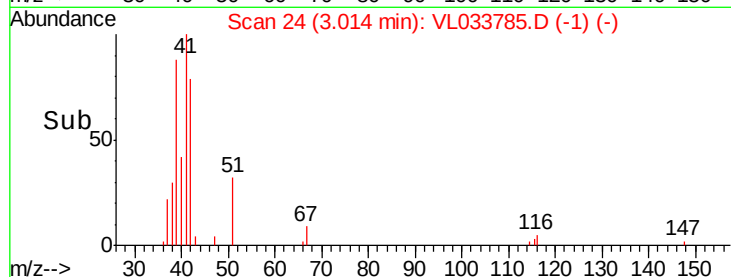
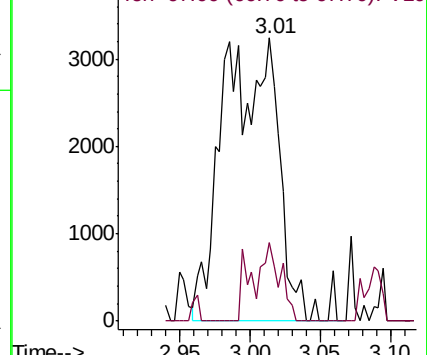
51 100

67 14.0 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: 0.017 ppbv

RT: 3.16 min Scan# 71

Delta R.T. -0.00 min

Lab File: VL033785.D

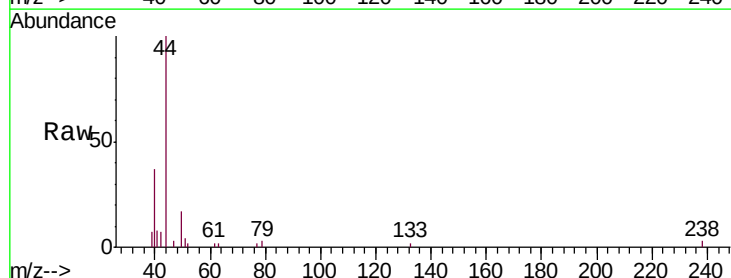
Acq: 23 May 2019 22:43

Tgt Ion: 50 Resp: 1262

Ion Ratio Lower Upper

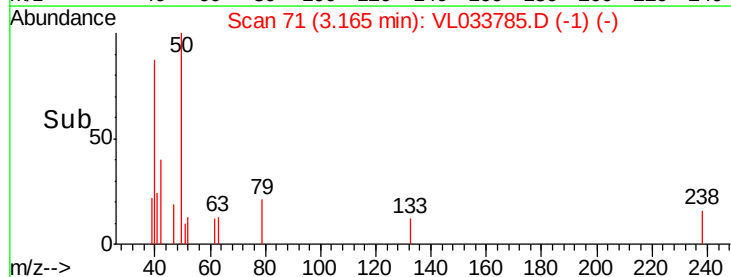
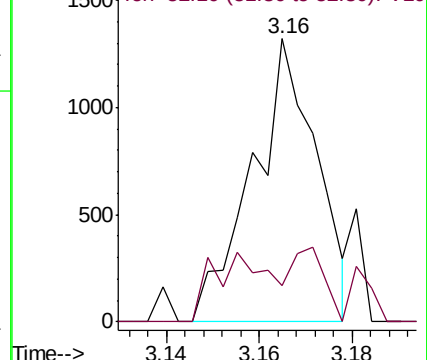
50 100

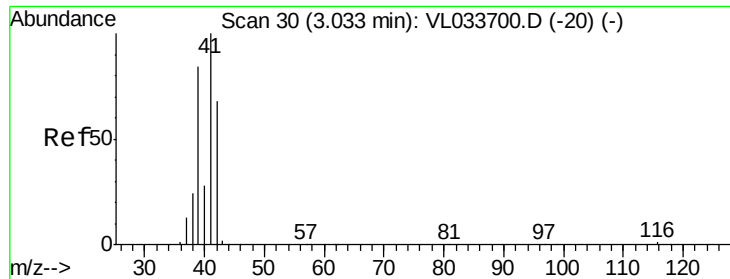
52 12.9 25.7 38.5#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 4.127 ppbv

RT: 3.03 min Scan# 30

Delta R.T. 0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

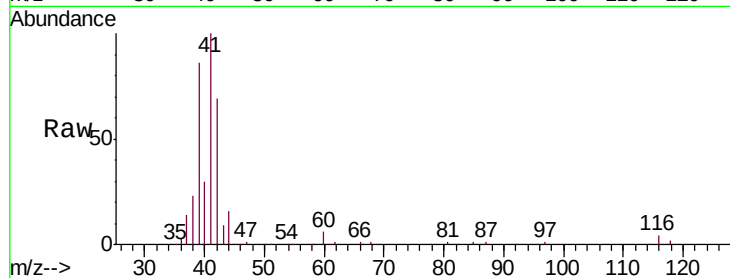
BPS1-SG-3008-55DL

Tgt Ion: 41 Resp: 222291

Ion Ratio Lower Upper

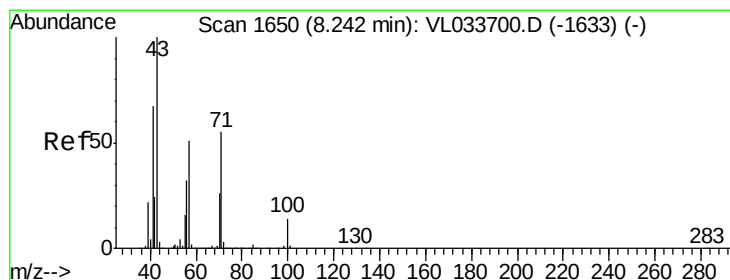
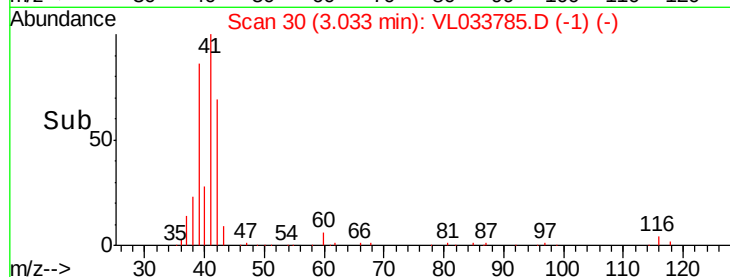
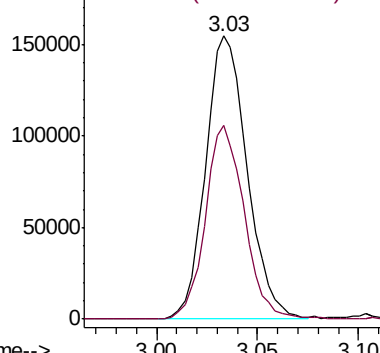
41 100

42 65.0 56.1 84.1



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.041 ppbv

RT: 8.23 min Scan# 1646

Delta R.T. -0.01 min

Lab File: VL033785.D

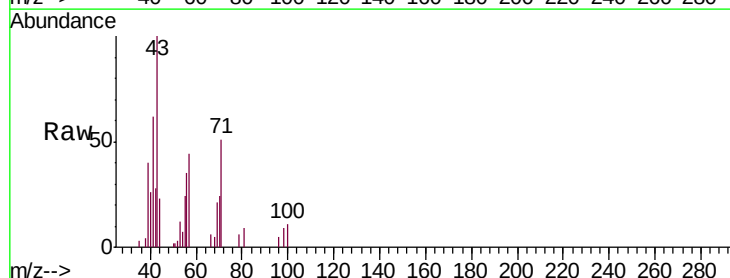
Acq: 23 May 2019 22:43

Tgt Ion: 43 Resp: 6246

Ion Ratio Lower Upper

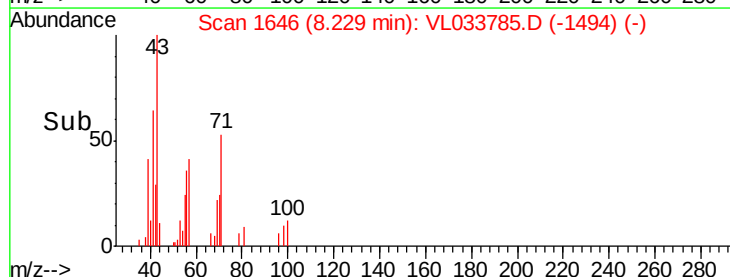
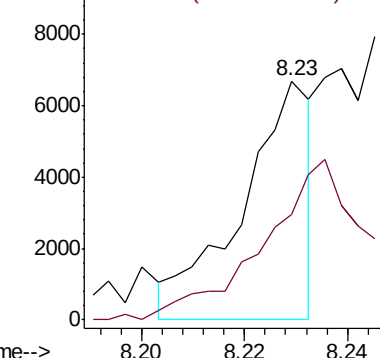
43 100

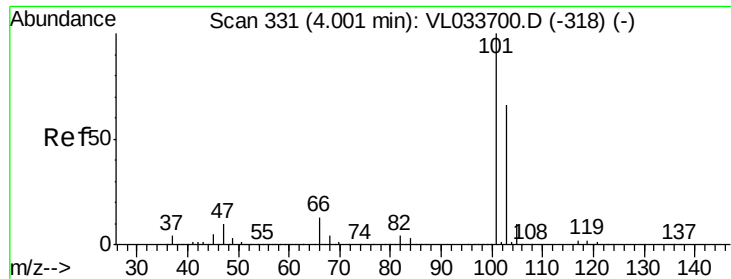
57 0.0 41.4 62.0#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

Trichlorofluoromethane

Concen: 0.015 ppbv

RT: 4.00 min Scan# 330

Delta R.T. -0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

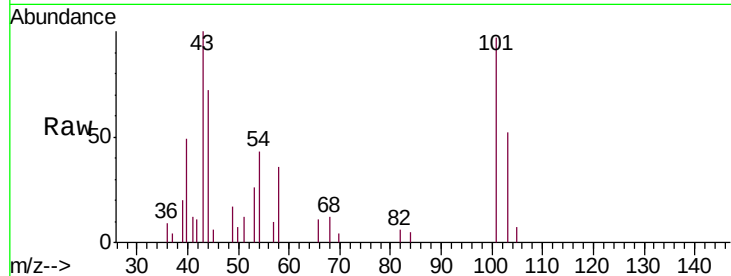
BPS1-SG-3008-55DL

Tgt Ion: 101 Resp: 3282

Ion Ratio Lower Upper

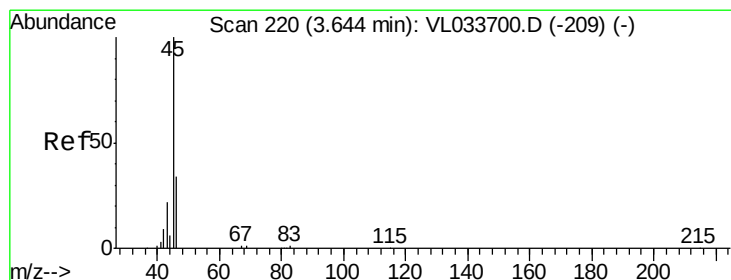
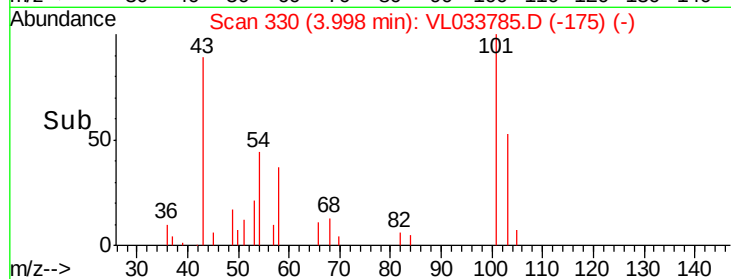
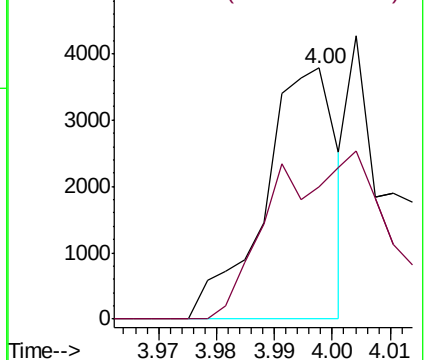
101 100

103 52.9 52.6 78.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 1.370 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.01 min

Lab File: VL033785.D

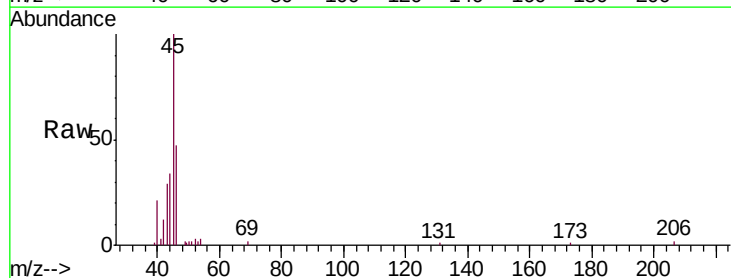
Acq: 23 May 2019 22:43

Tgt Ion: 45 Resp: 23854

Ion Ratio Lower Upper

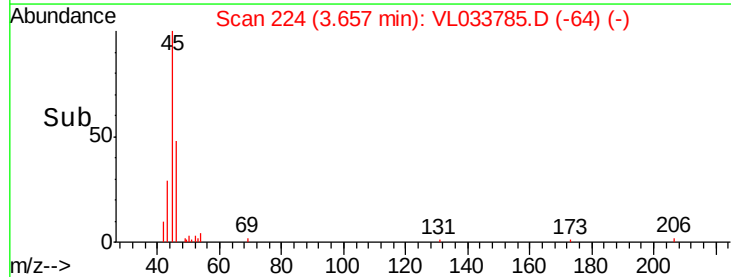
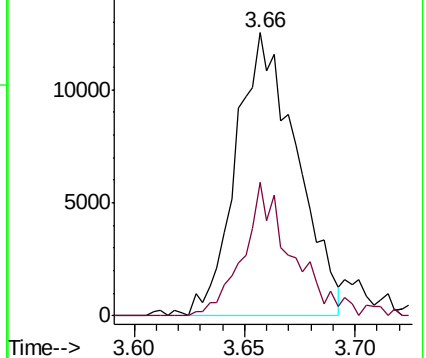
45 100

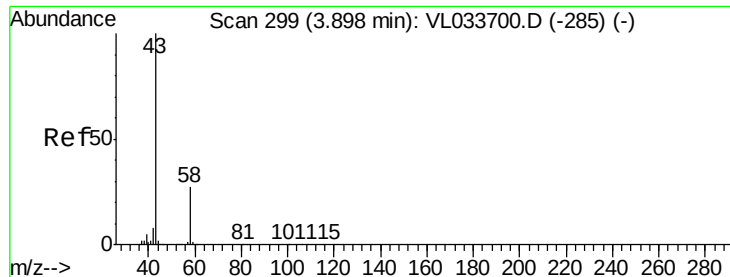
46 39.1 14.8 59.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 15.681 ppbv

RT: 3.89 min Scan# 298

Delta R.T. -0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

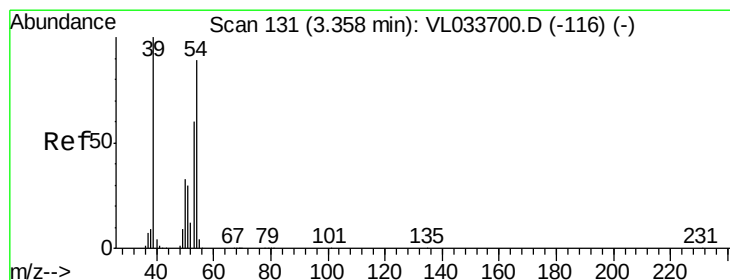
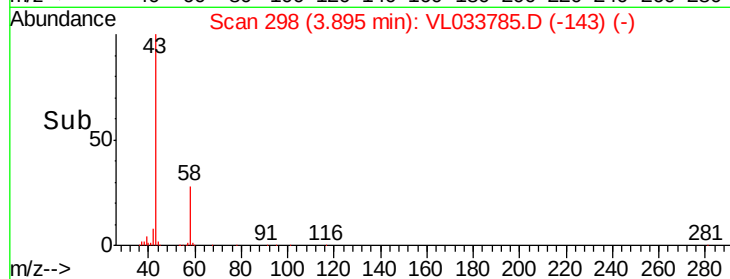
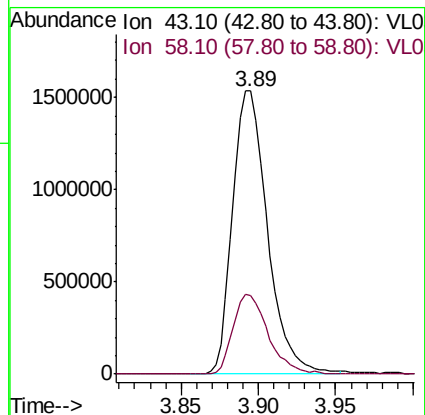
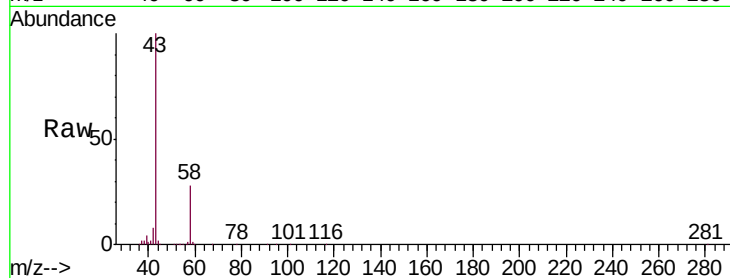
BPS1-SG-3008-55DL

Tgt Ion: 43 Resp: 2404925

Ion Ratio Lower Upper

43 100

58 29.0 21.3 31.9



#16

1,3-Butadiene

Concen: 3.166 ppbv

RT: 3.34 min Scan# 126

Delta R.T. -0.02 min

Lab File: VL033785.D

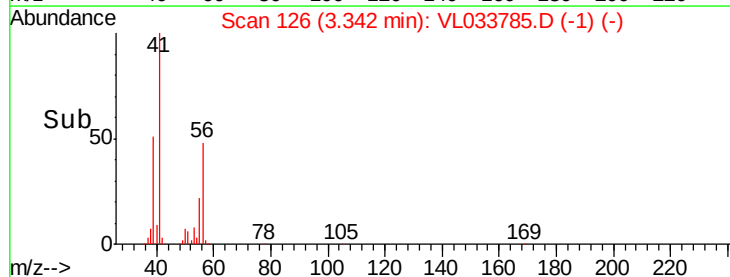
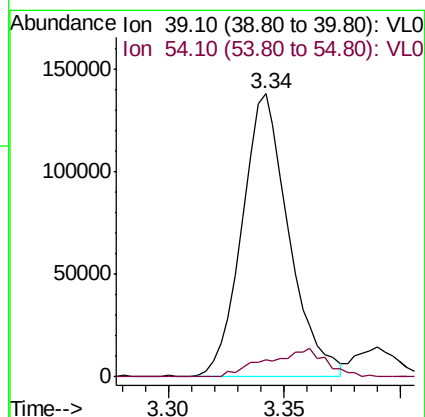
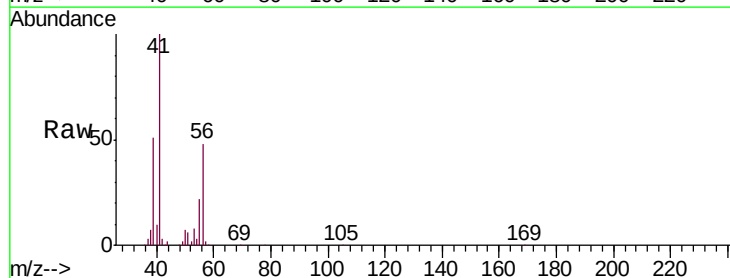
Acq: 23 May 2019 22:43

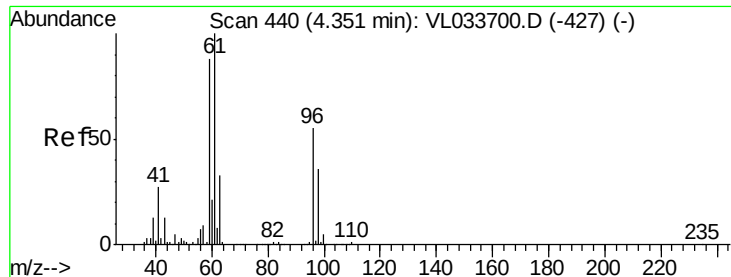
Tgt Ion: 39 Resp: 193380

Ion Ratio Lower Upper

39 100

54 13.0 69.0 103.6#

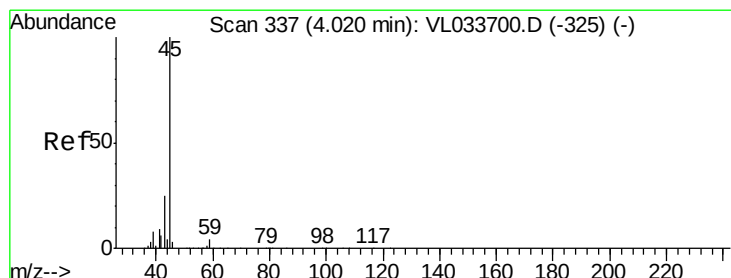
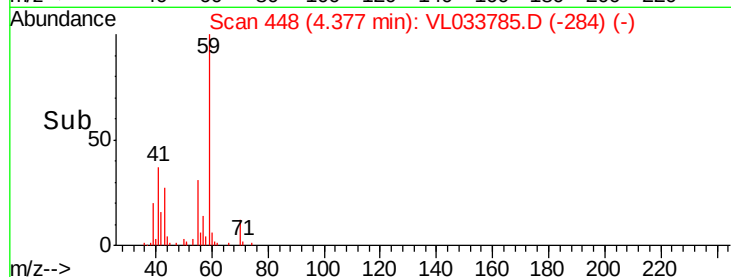
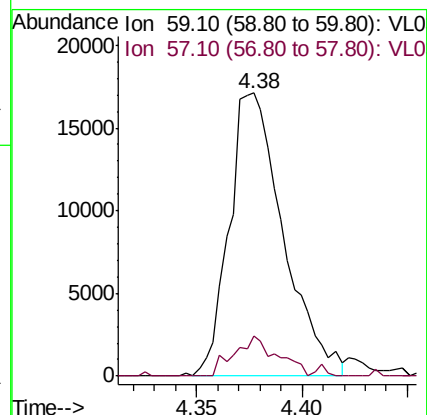
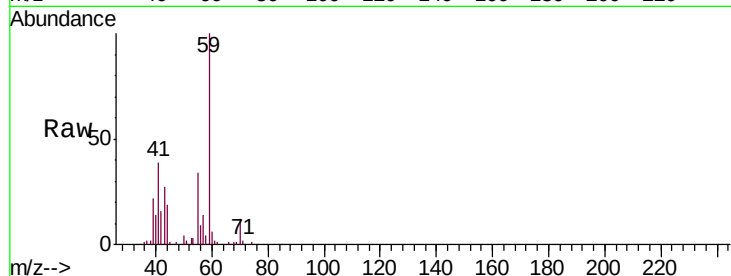




#17
 tert-Butyl alcohol
 Concen: 0.245 ppbv
 RT: 4.38 min Scan# 448
 Delta R.T. 0.03 min
 Lab File: VL033785.D
 Acq: 23 May 2019 22:43

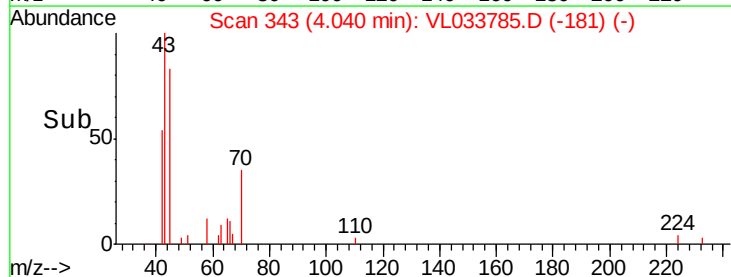
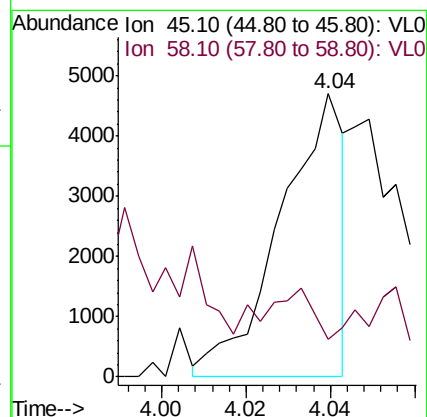
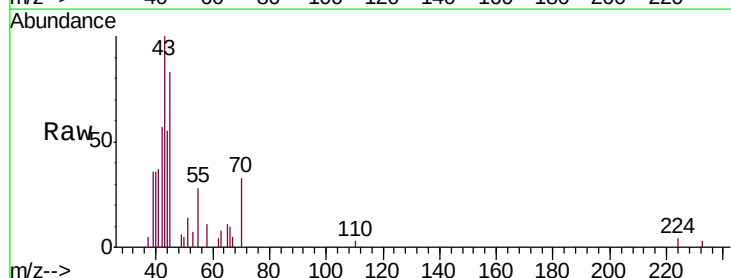
Instrument :
 MSVOA_L
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 BPS1-SG-3008-55DL

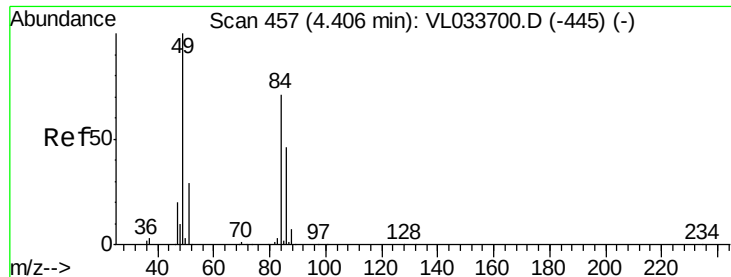
Tgt Ion: 59 Resp: 30410
 Ion Ratio Lower Upper
 59 100
 57 11.9 8.4 12.6



#19
 Isopropyl Alcohol
 Concen: 0.049 ppbv
 RT: 4.04 min Scan# 343
 Delta R.T. 0.02 min
 Lab File: VL033785.D
 Acq: 23 May 2019 22:43

Tgt Ion: 45 Resp: 4887
 Ion Ratio Lower Upper
 45 100
 58 0.0 1.6 2.4#

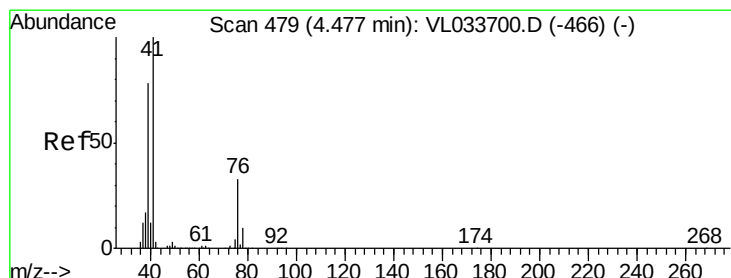
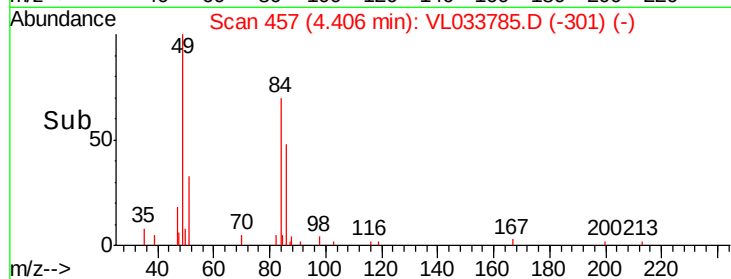
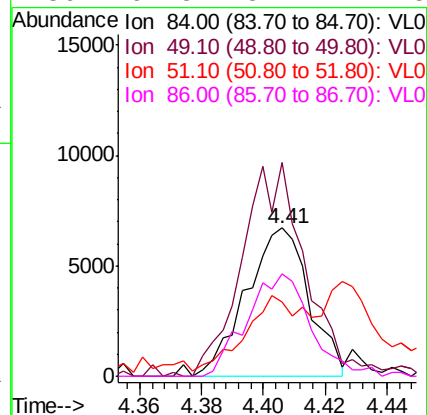
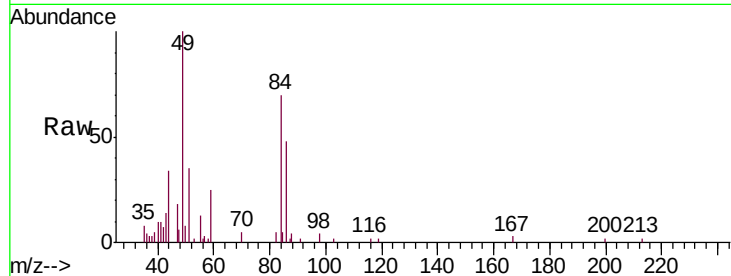




#20
Methylene Chloride
Concen: 0.160 ppbv
RT: 4.41 min Scan# 457
Delta R.T. 0.00 min
Lab File: VL033785.D
Acq: 23 May 2019 22:43

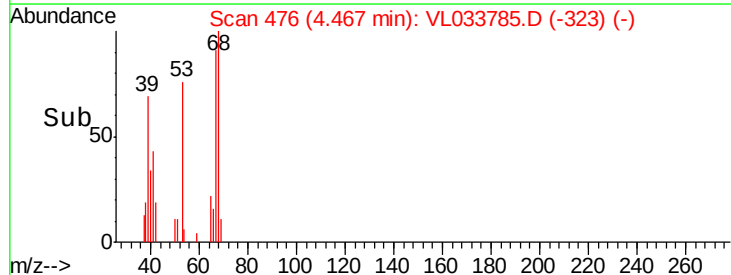
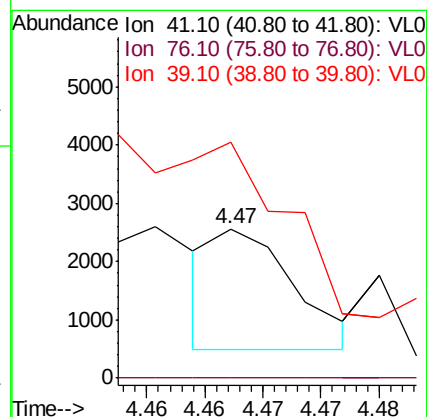
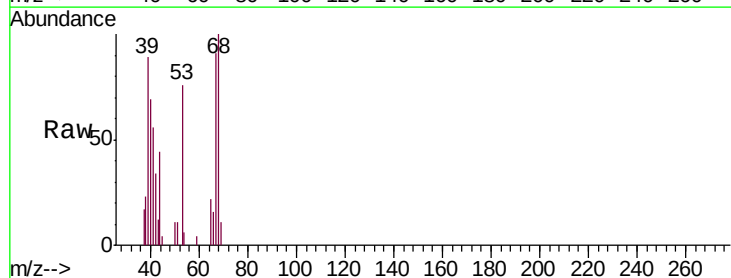
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3008-55DL

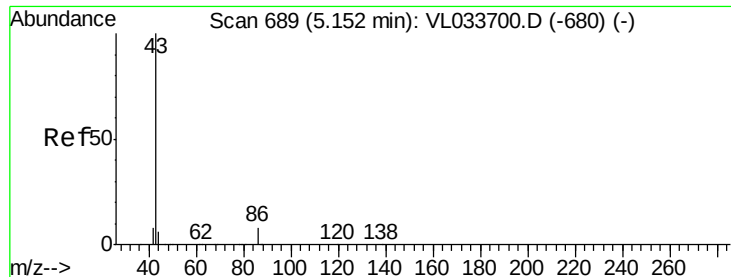
Tgt Ion:	84	Resp:	9457
Ion	Ratio	Lower	Upper
84	100		
49	134.9	112.8	169.2
51	43.5	33.4	50.0
86	64.3	51.7	77.5



#21
Allyl Chloride
Concen: 0.010 ppbv
RT: 4.47 min Scan# 476
Delta R.T. -0.01 min
Lab File: VL033785.D
Acq: 23 May 2019 22:43

Tgt Ion:	41	Resp:	993
Ion	Ratio	Lower	Upper
41	100		
76	0.0	25.9	38.9#
39	0.0	64.6	97.0#





#23

Vinyl Acetate

Concen: 0.036 ppbv

RT: 5.14 min Scan# 685

Delta R.T. -0.01 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3008-55DL

Tgt Ion: 43 Resp: 7301

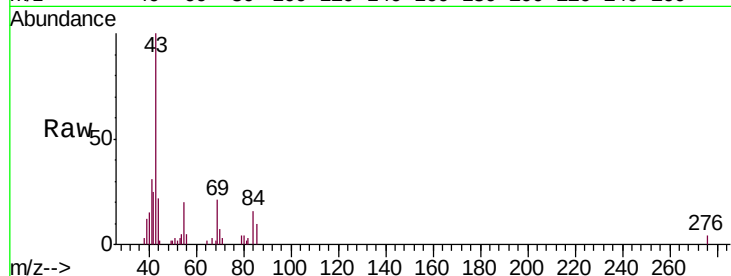
Ion Ratio Lower Upper

43 100

86 5.1 6.0 9.0#

42 18.0 7.5 11.3#

44 11.8 4.4 6.6#

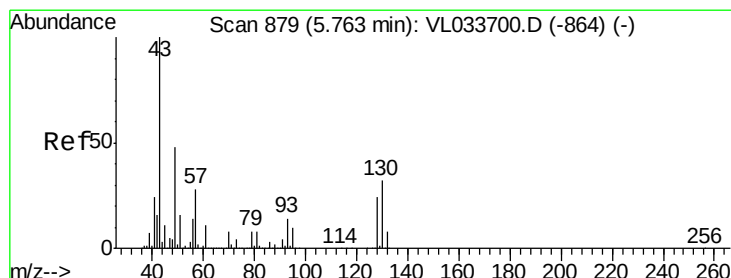
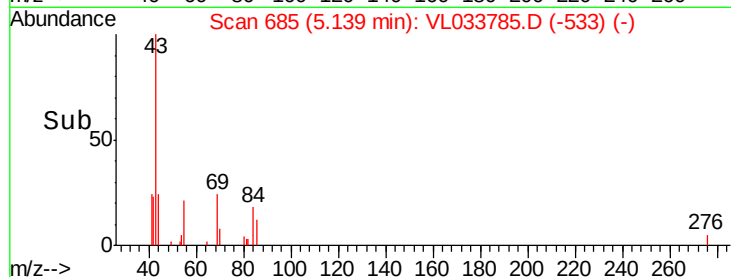
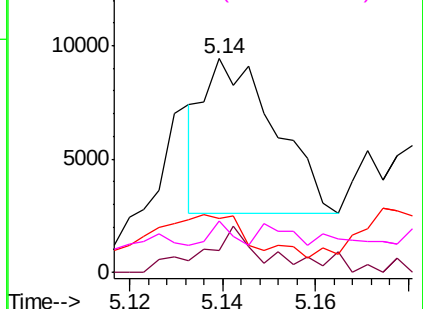


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.066 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.01 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Tgt Ion: 43 Resp: 17848

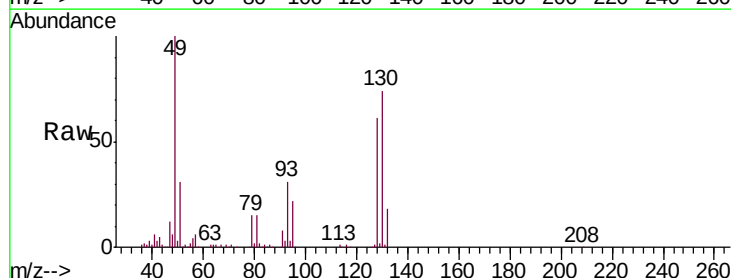
Ion Ratio Lower Upper

43 100

45 8.3 7.9 11.9

61 0.0 7.7 11.5#

70 4.6 5.8 8.6#

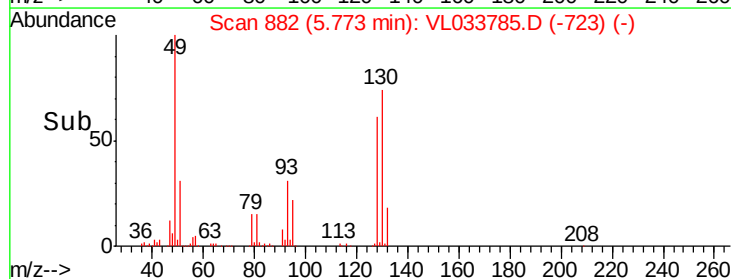
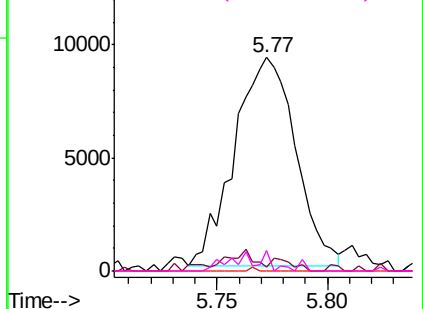


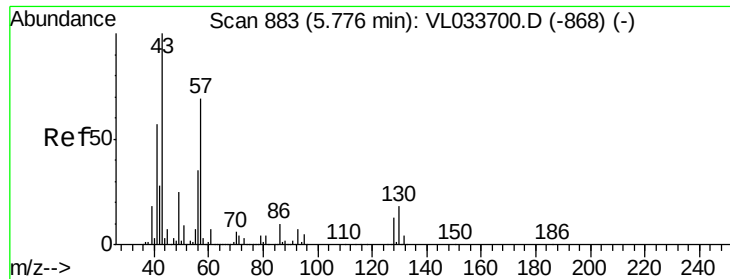
Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.101 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3008-55DL

Tgt Ion: 57 Resp: 11703

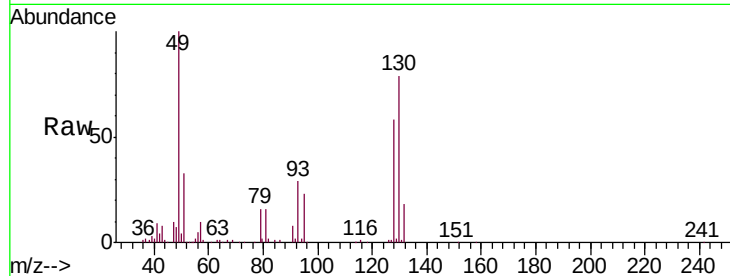
Ion Ratio Lower Upper

57 100

41 216.9 69.8 104.6#

43 170.2 181.8 272.6#

56 118.1 42.1 63.1#

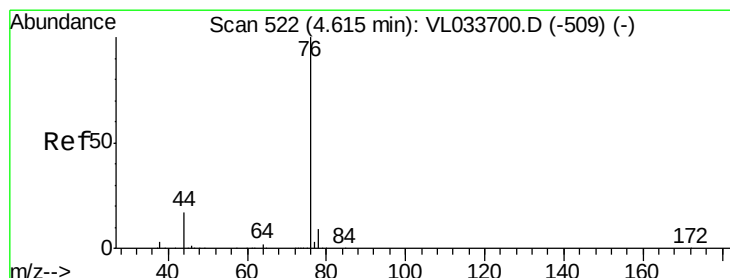
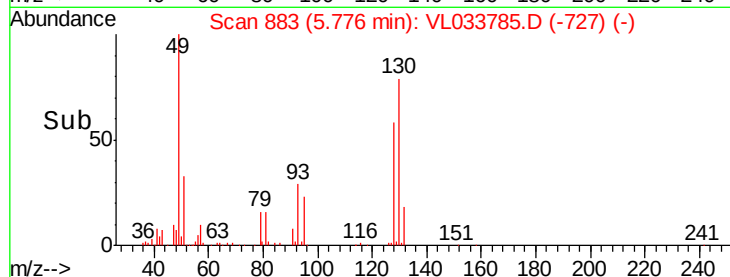
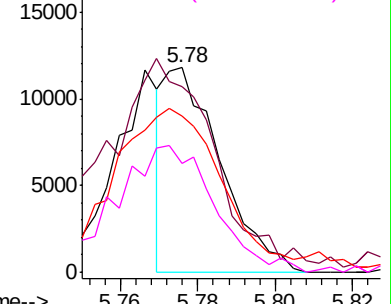


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.106 ppbv

RT: 4.62 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

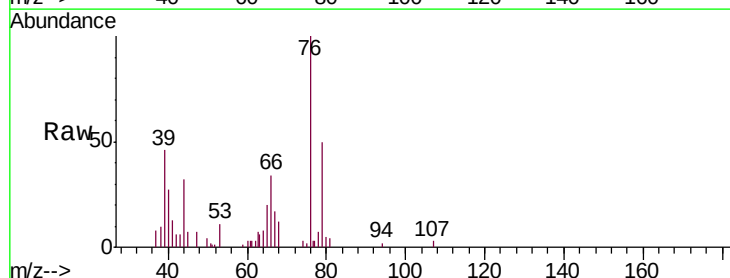
Tgt Ion: 76 Resp: 16917

Ion Ratio Lower Upper

76 100

44 27.3 13.8 20.8#

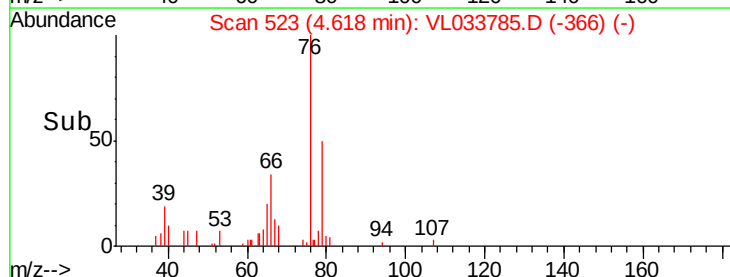
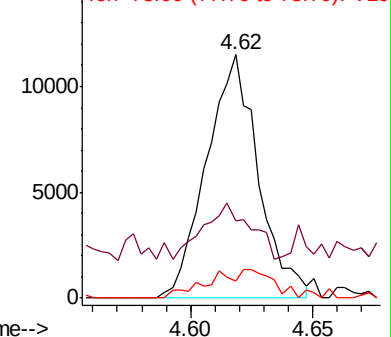
78 16.2 7.4 11.0#

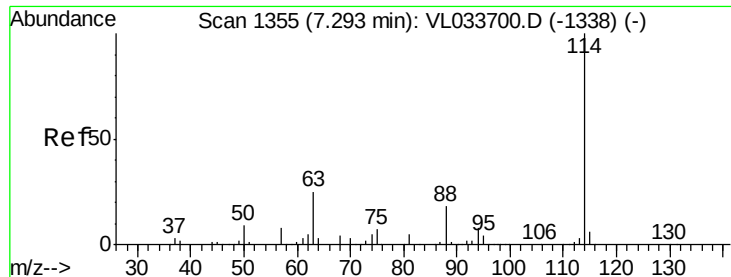


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0

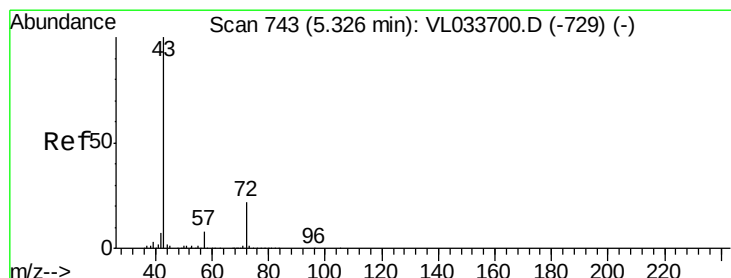
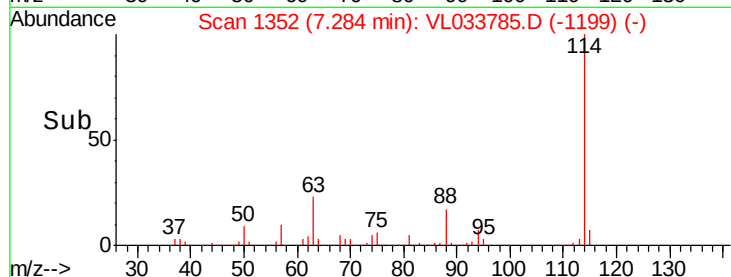
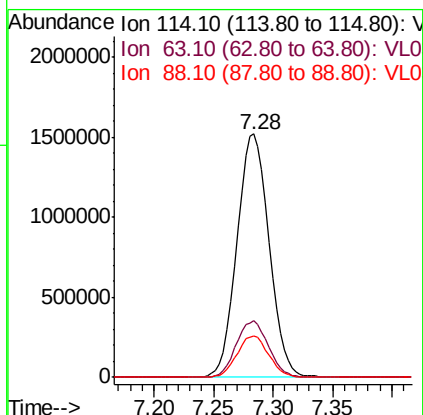
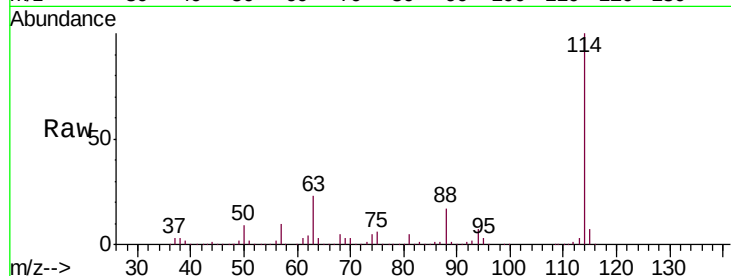




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.28 min Scan# 1352
 Delta R.T. -0.01 min
 Lab File: VL033785.D
 Acq: 23 May 2019 22:43

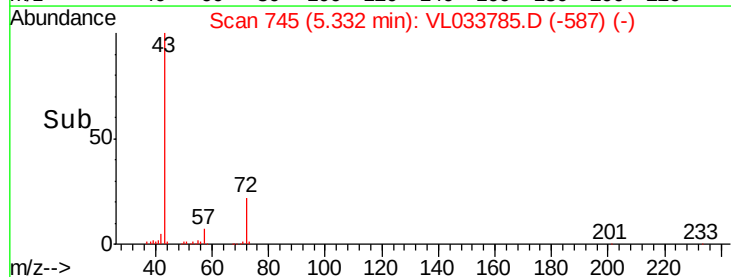
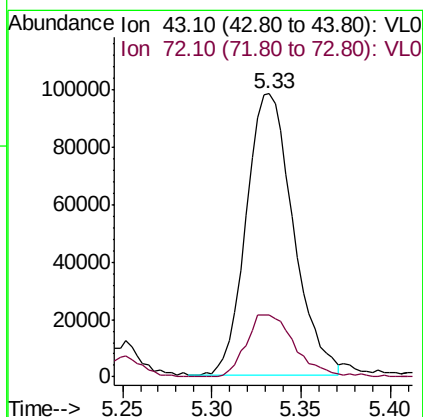
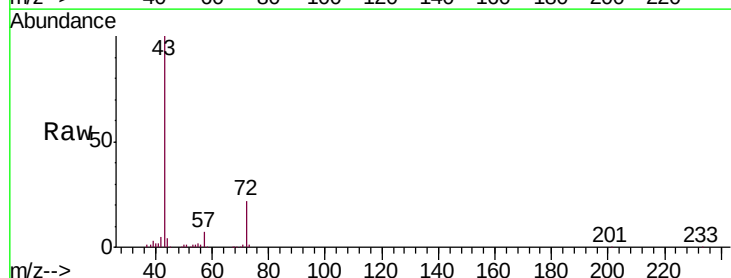
Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3008-55DL

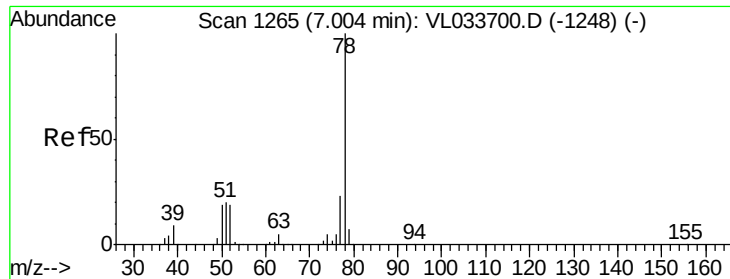
Tgt Ion: 114 Resp: 2847177
 Ion Ratio Lower Upper
 114 100
 63 23.3 20.9 31.3
 88 16.9 14.3 21.5



#34
 2-Butanone
 Concen: 1.031 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. 0.01 min
 Lab File: VL033785.D
 Acq: 23 May 2019 22:43

Tgt Ion: 43 Resp: 181916
 Ion Ratio Lower Upper
 43 100
 72 23.1 17.8 26.6





#36

Benzene

Concen: 0.037 ppbv

RT: 7.00 min Scan# 1264

Delta R.T. -0.00 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3008-55DL

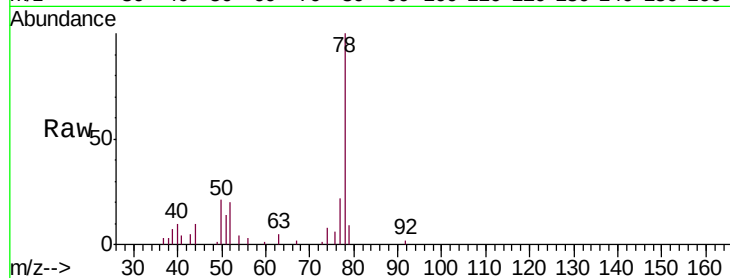
Tgt Ion: 78 Resp: 9507

Ion Ratio Lower Upper

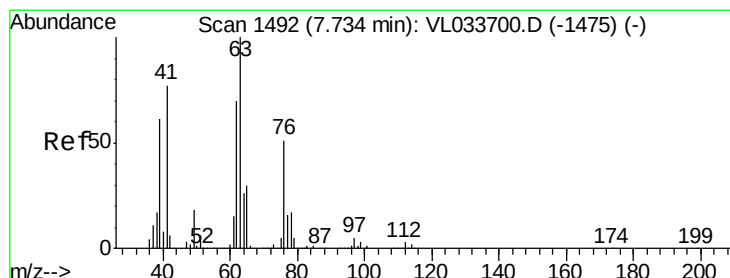
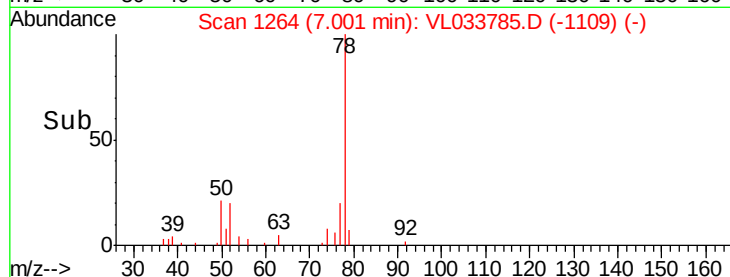
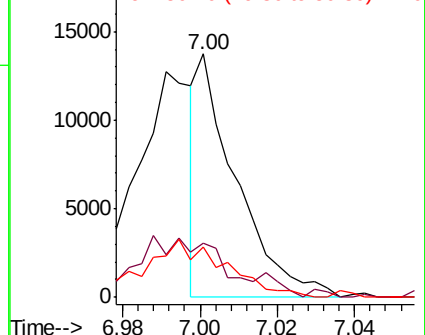
78 100

77 22.0 18.4 27.6

50 16.9 15.5 23.3



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: 6.849 ppbv

RT: 7.28 min Scan# 1352

Delta R.T. -0.45 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

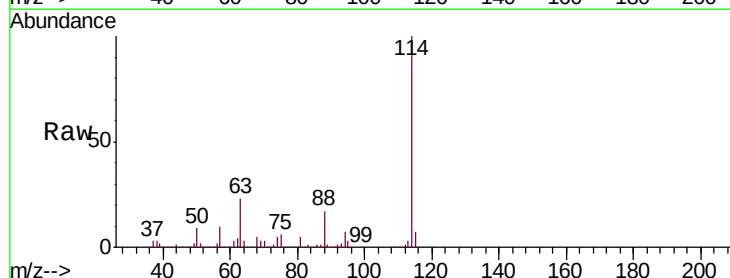
Tgt Ion: 63 Resp: 661331

Ion Ratio Lower Upper

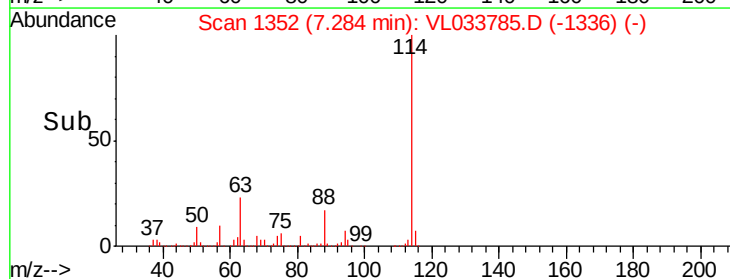
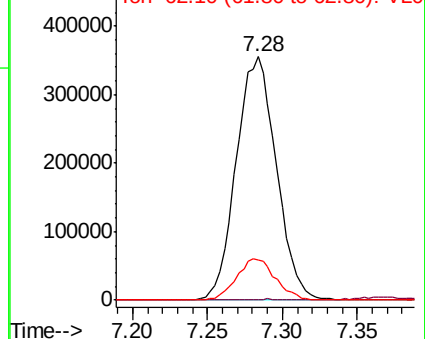
63 100

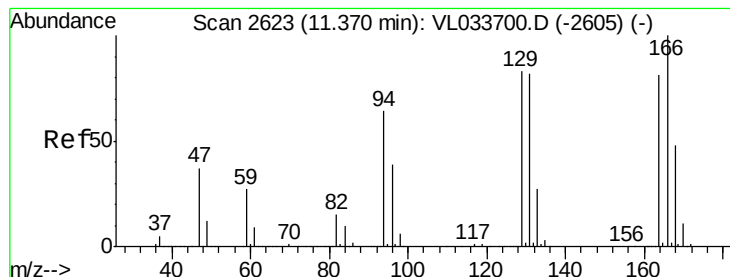
41 0.2 61.5 92.3#

62 16.7 56.2 84.4#



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





#52

Tetrachloroethene

Concen: 0.015 ppbv

RT: 11.35 min Scan# 2618

Delta R.T. -0.02 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3008-55DL

Tgt Ion:164 Resp: 1336

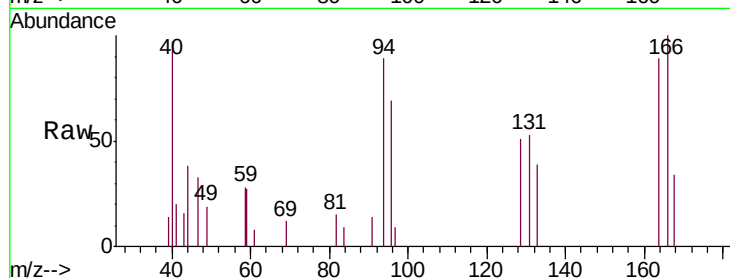
Ion Ratio Lower Upper

164 100

166 83.7 98.9 148.3#

129 13.1 81.8 122.6#

131 8.4 81.1 121.7#

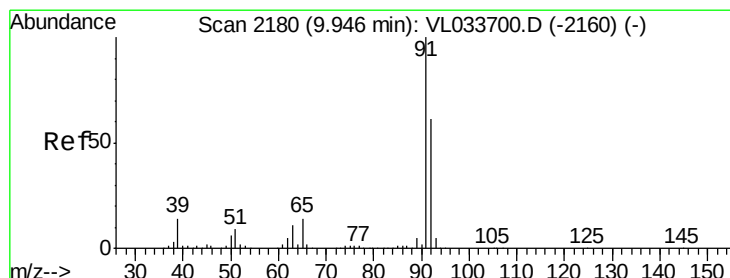
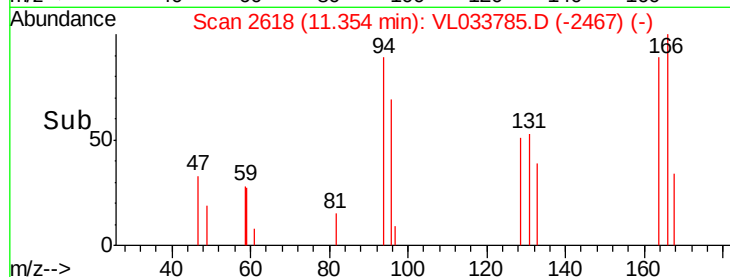
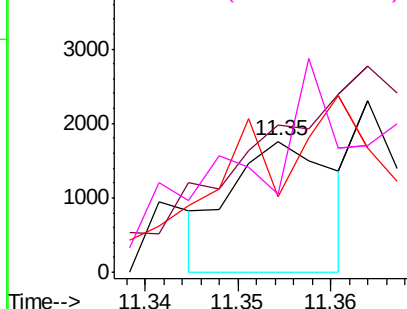


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.375 ppbv

RT: 9.93 min Scan# 2176

Delta R.T. -0.01 min

Lab File: VL033785.D

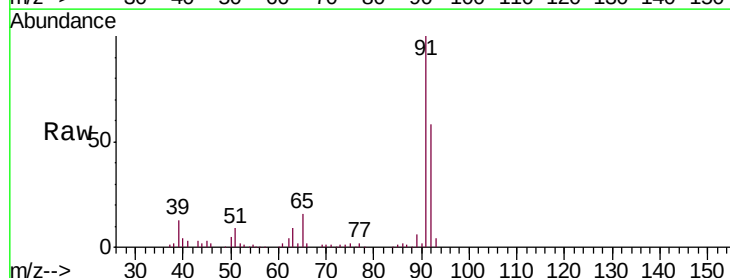
Acq: 23 May 2019 22:43

Tgt Ion: 91 Resp: 104637

Ion Ratio Lower Upper

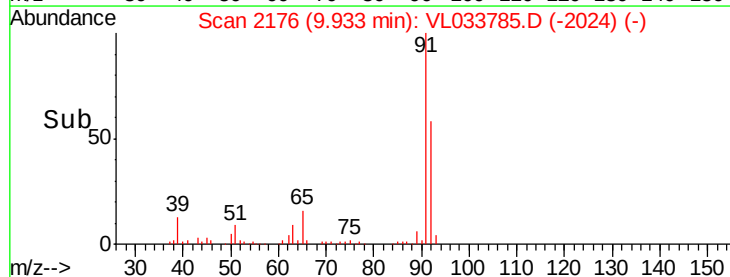
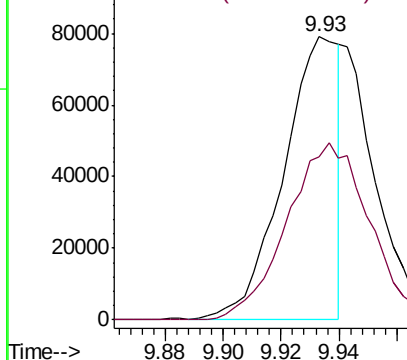
91 100

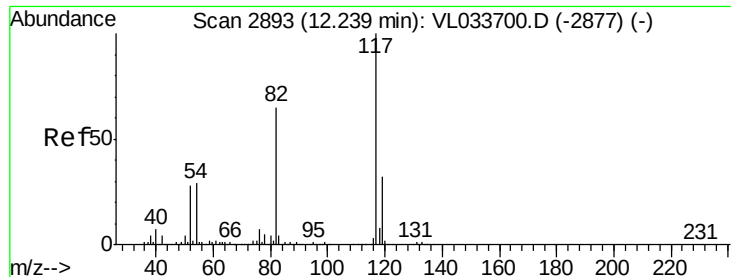
92 93.9 47.6 71.4#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

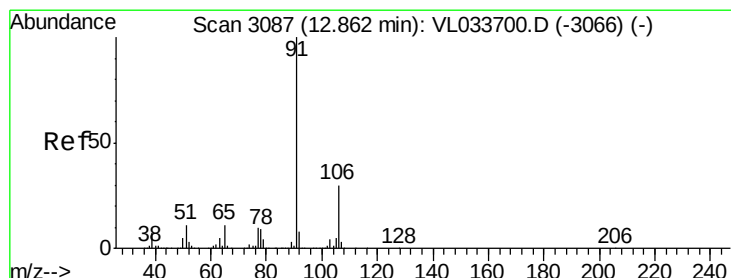
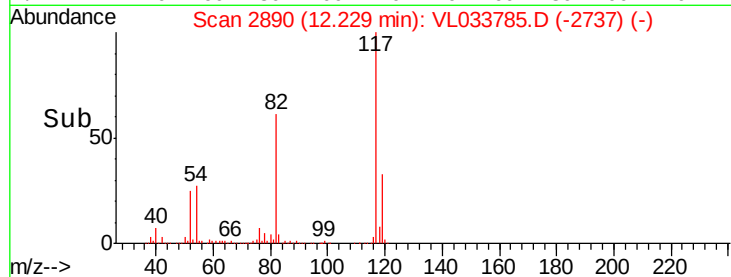
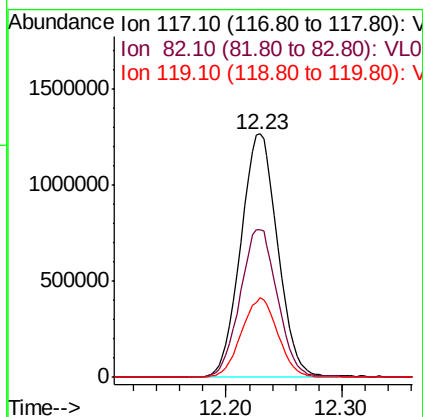
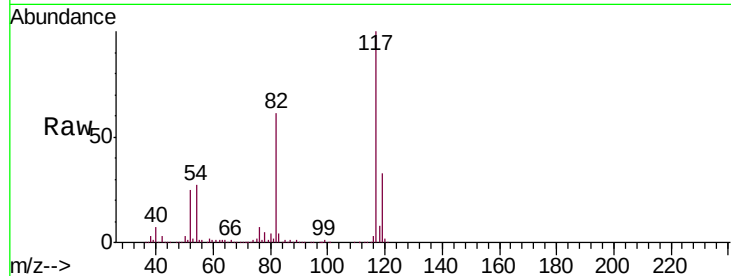




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2890
Delta R.T. -0.01 min
Lab File: VL033785.D
Acq: 23 May 2019 22:43

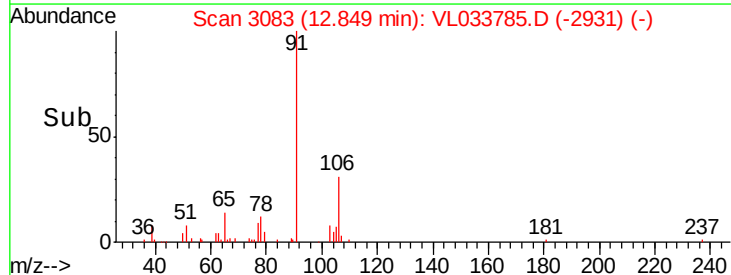
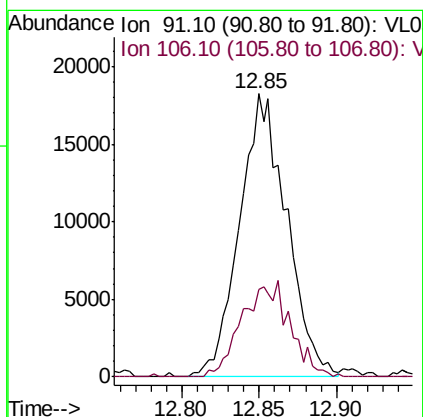
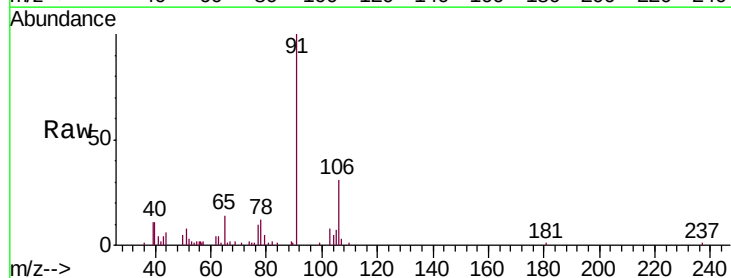
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3008-55DL

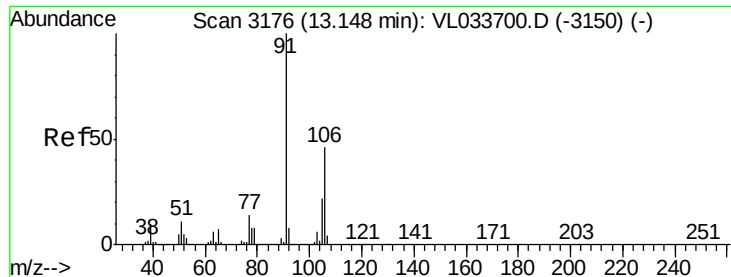
Tgt Ion: 117 Resp: 2810906
Ion Ratio Lower Upper
117 100
82 61.8 49.4 74.0
119 32.5 24.9 37.3



#58
Ethyl Benzene
Concen: 0.104 ppbv
RT: 12.85 min Scan# 3083
Delta R.T. -0.01 min
Lab File: VL033785.D
Acq: 23 May 2019 22:43

Tgt Ion: 91 Resp: 38648
Ion Ratio Lower Upper
91 100
106 30.8 23.9 35.9

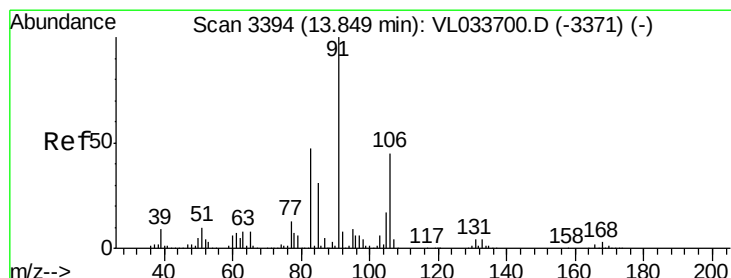
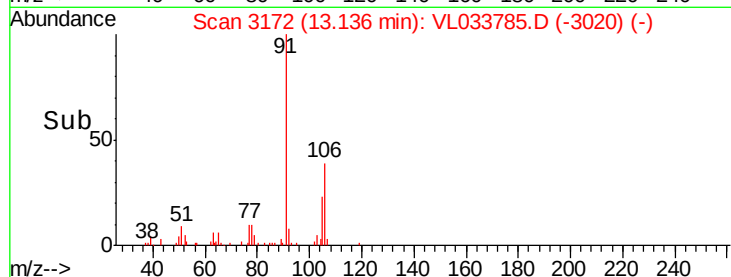
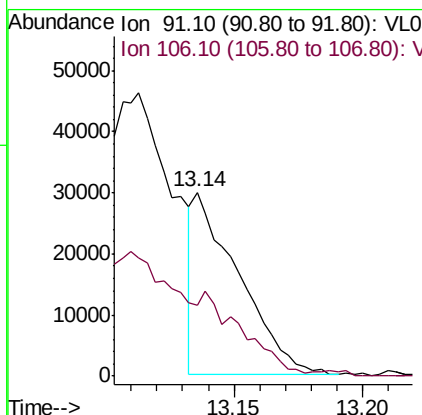
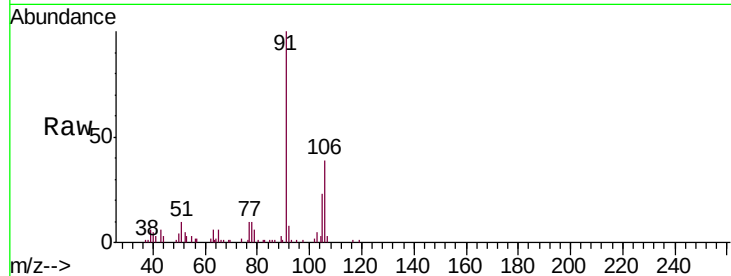




#59
m/p-Xylene
Concen: 0.111 ppbv
RT: 13.14 min Scan# 3172
Delta R.T. -0.01 min
Lab File: VL033785.D
Acq: 23 May 2019 22:43

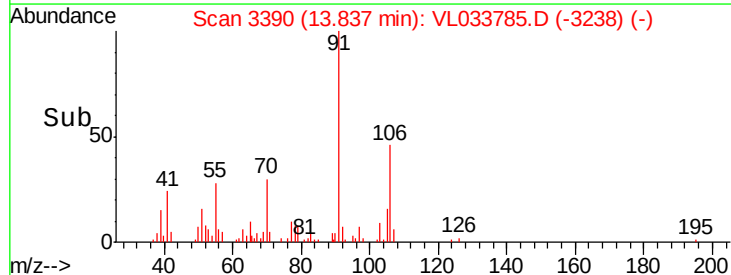
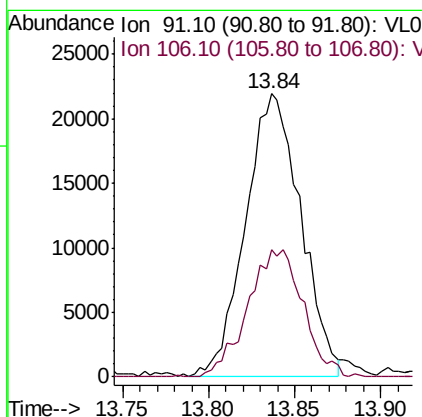
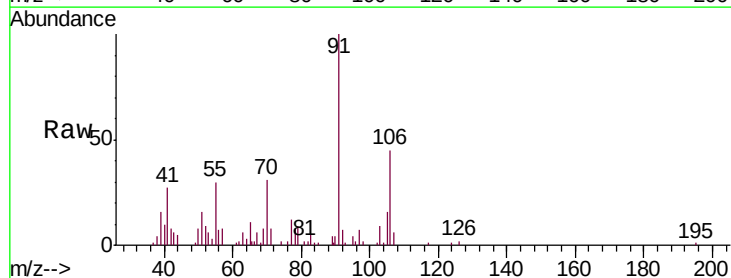
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3008-55DL

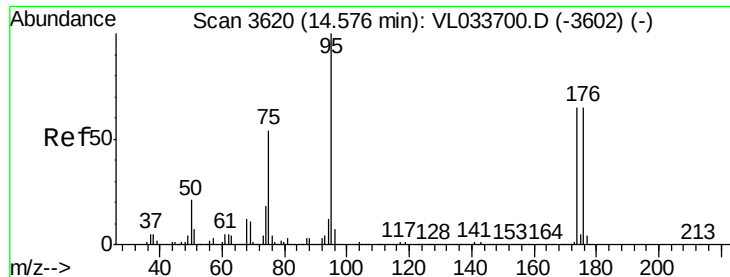
Tgt Ion: 91 Resp: 36273
Ion Ratio Lower Upper
91 100
106 0.0 35.8 53.6#



#60
o-Xylene
Concen: 0.149 ppbv
RT: 13.84 min Scan# 3390
Delta R.T. -0.01 min
Lab File: VL033785.D
Acq: 23 May 2019 22:43

Tgt Ion: 91 Resp: 48899
Ion Ratio Lower Upper
91 100
106 45.1 21.6 64.8

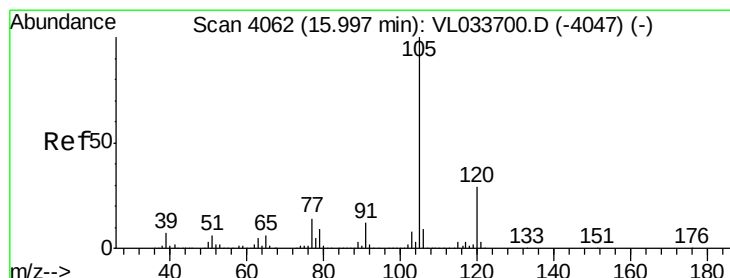
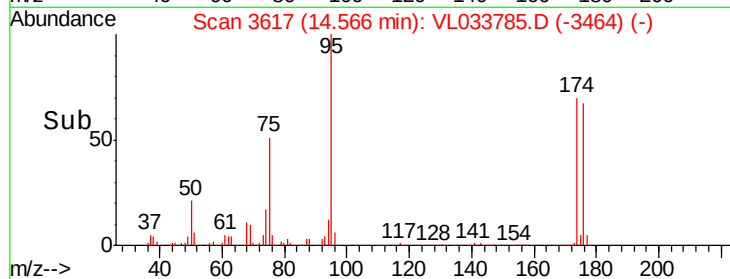
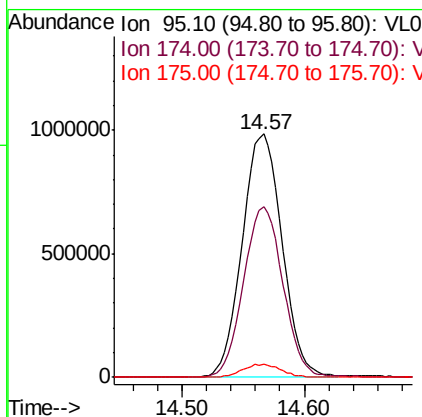
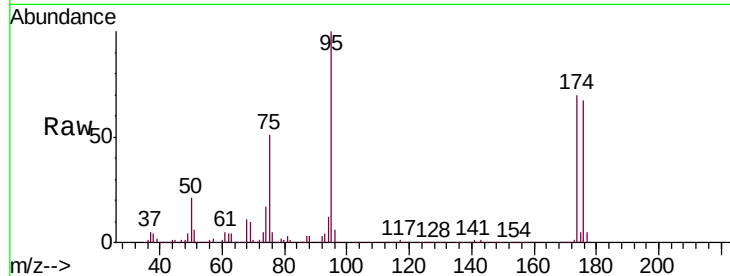




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.800 ppbv
 RT: 14.57 min Scan# 3617
 Delta R.T. -0.01 min
 Lab File: VL033785.D
 Acq: 23 May 2019 22:43

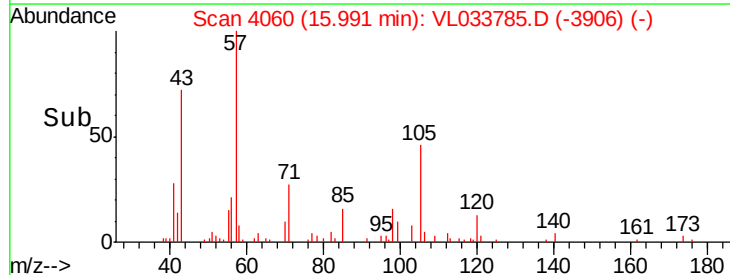
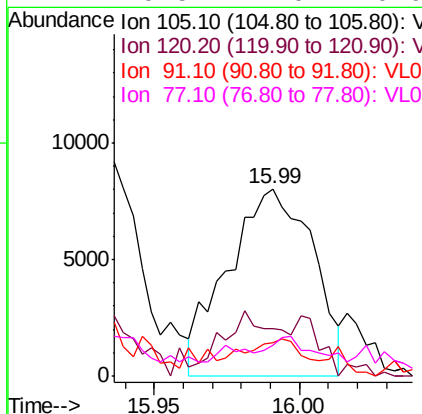
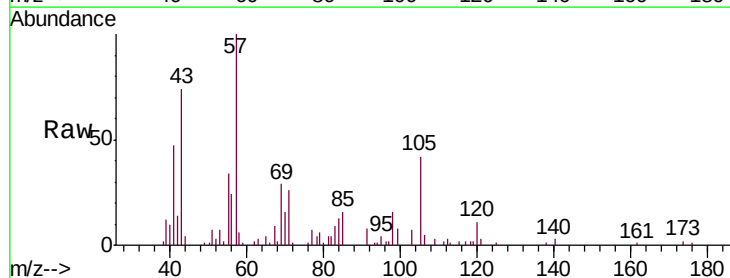
Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3008-55DL

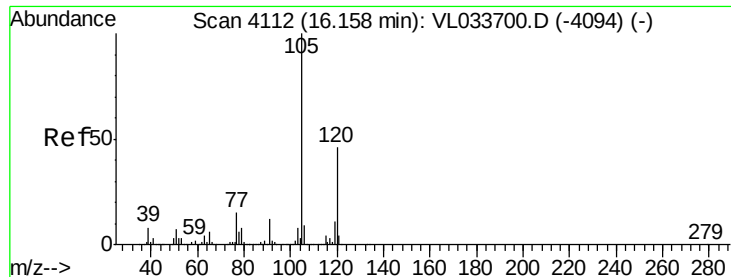
Tgt Ion: 95 Resp: 2233100
 Ion Ratio Lower Upper
 95 100
 174 69.5 53.9 80.9
 175 5.2 3.8 5.8



#72
 4-Ethyltoluene
 Concen: 0.044 ppbv
 RT: 15.99 min Scan# 4060
 Delta R.T. -0.01 min
 Lab File: VL033785.D
 Acq: 23 May 2019 22:43

Tgt Ion: 105 Resp: 16411
 Ion Ratio Lower Upper
 105 100
 120 31.8 23.1 34.7
 91 21.9 10.4 15.6#
 77 19.5 11.0 16.6#





#73

1,3,5-Trimethylbenzene

Concen: 0.011 ppbv

RT: 16.15 min Scan# 4108

Delta R.T. -0.01 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Instrument :

MSVOA_L

ClientSampleId :

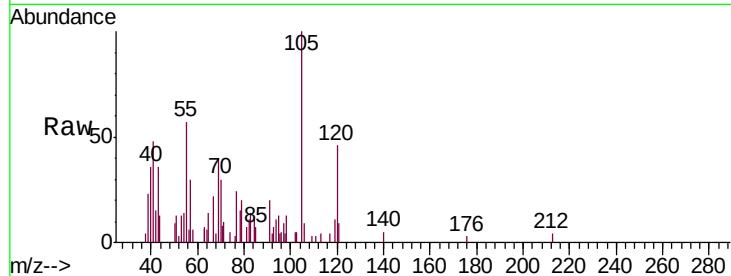
BPS1-SG-3008-55DL

Tgt Ion:105 Resp: 4137

Ion Ratio Lower Upper

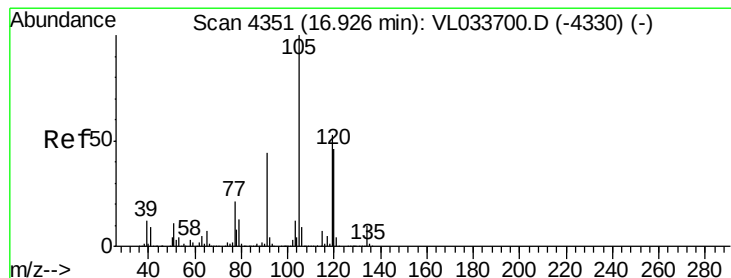
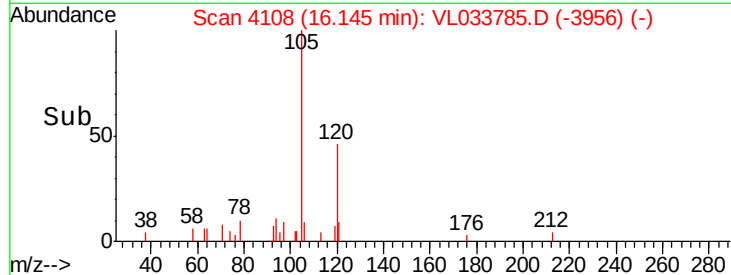
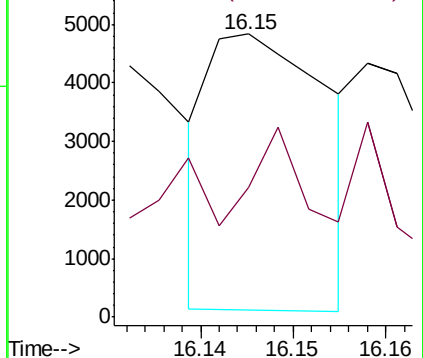
105 100

120 50.1 37.0 55.4



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.050 ppbv

RT: 16.91 min Scan# 4346

Delta R.T. -0.02 min

Lab File: VL033785.D

Acq: 23 May 2019 22:43

Tgt Ion:105 Resp: 19800

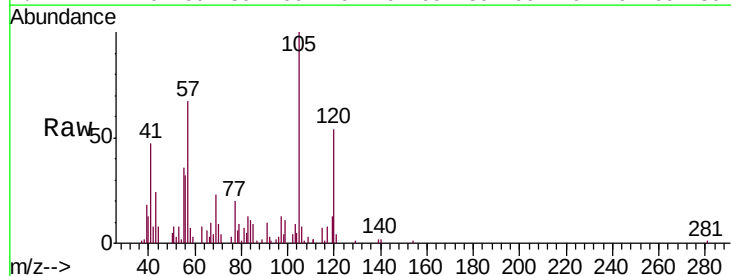
Ion Ratio Lower Upper

105 100

120 53.7 36.8 55.2

91 6.1 35.4 53.0#

77 12.4 16.8 25.2#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

