

Data File : VL033751.D
Acq On : 22 May 2019 19:28
Operator : SY/AP
Sample : K2929-01 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3001-25DL

Quant Time: May 23 04:23:36 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	879164	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	2083122	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.23	117	2146561	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.56 95 1827337 10.50 ppbv -0.01
Spiked Amount 10.000 Range 65 - 135 Recovery = 105.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	10364	0.056	ppbv #	88
3) Chlorodifluoromethane	3.01	51	6641	0.066	ppbv #	90
4) Chloromethane	3.17	50	3571	0.062	ppbv #	81
5) Vinyl Chloride	3.05	62	638	0.011	ppbv #	42
8) Dichlorotetrafluoroethane	3.08	85	10364	0.069	ppbv #	16
9) Propene	3.04	41	32983	0.770	ppbv	94
10) Heptane	8.23	43	8618	0.071	ppbv #	26
11) Trichlorofluoromethane	4.00	101	7749	0.044	ppbv	92
13) Ethanol	3.65	45	34344	2.481	ppbv	98
15) Acetone	3.90	43	516661	4.236	ppbv	97
16) 1,3-Butadiene	3.34	39	38167	0.786	ppbv #	25
20) Methylene Chloride	4.40	84	12022	0.256	ppbv #	86
23) Vinyl Acetate	5.14	43	2963	0.018	ppbv #	1
25) Ethyl Acetate	5.77	43	98226	0.458	ppbv #	96
26) Hexane	5.77	57	11569	0.126	ppbv #	1
27) Carbon Disulfide	4.61	76	12295	0.097	ppbv #	50
31) cis-1,2-Dichloroethene	5.76	61	5673	0.062	ppbv #	32
34) 2-Butanone	5.33	43	13799	0.107	ppbv #	80
36) Benzene	7.00	78	5490	0.029	ppbv	99
39) 1,2-Dichloropropane	7.28	63	551049	7.800	ppbv #	22
53) Toluene	9.93	91	397715	1.946	ppbv	99
58) Ethyl Benzene	12.86	91	32199	0.113	ppbv	93
59) m/p-Xylene	13.11	91	291620	1.174	ppbv	98
60) o-Xylene	13.83	91	77568	0.310	ppbv	98
72) 4-Ethyltoluene	15.98	105	12022	0.042	ppbv #	50
73) 1,3,5-Trimethylbenzene	16.15	105	4779	0.017	ppbv	91
74) 1,2,4-Trimethylbenzene	16.91	105	27309	0.090	ppbv #	78

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

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Instrument :
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BPS1-SG-3001-25DL

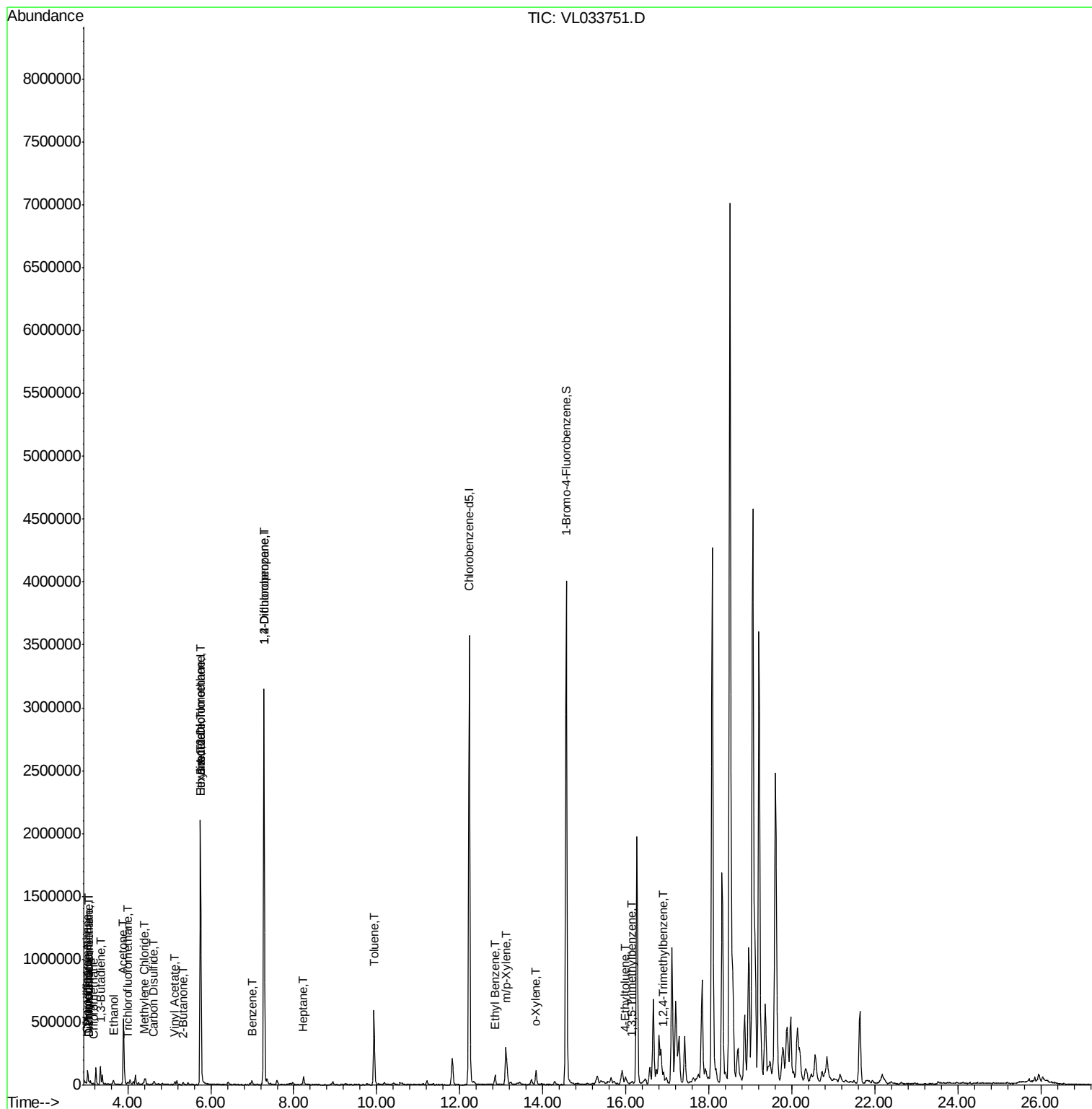
Quant Time: May 23 04:23:36 2019

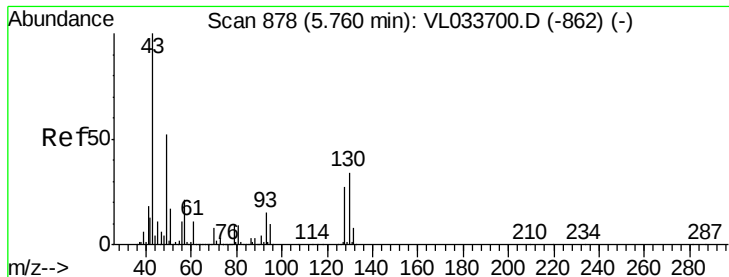
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_L\METHODS\VL051719AIR.M

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: 5.75 min Scan# 875

Delta R.T. -0.01 min

Lab File: VL033751.D

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Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3001-25DL

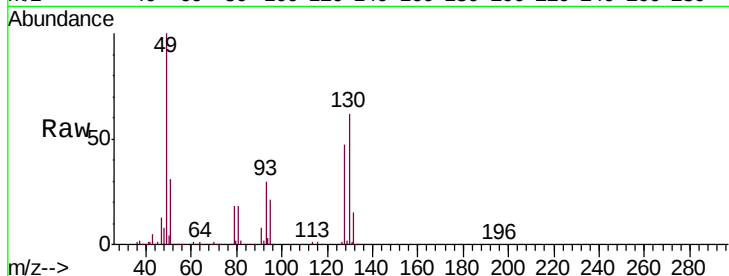
Tgt Ion: 49 Resp: 879164

Ion Ratio Lower Upper

49 100

128 49.8 25.2 75.6

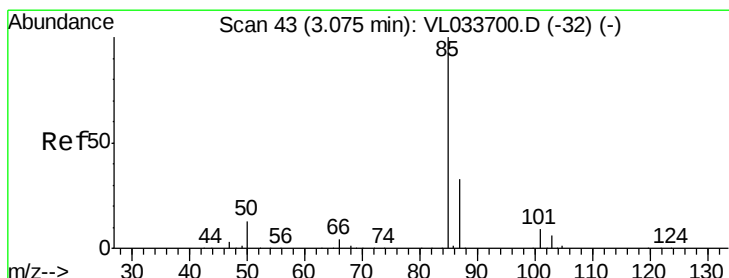
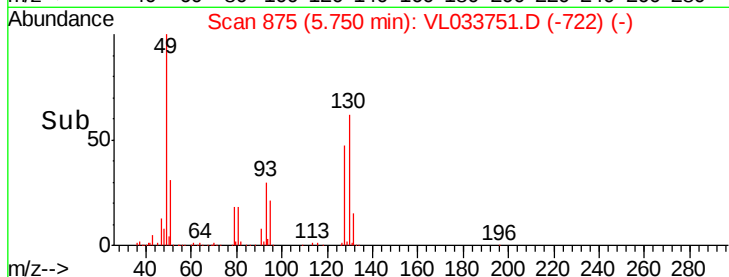
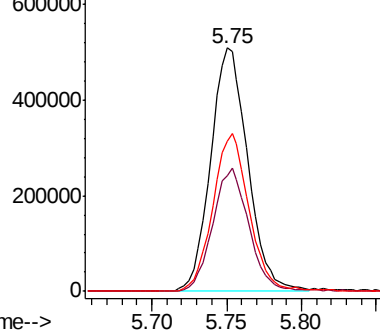
130 64.0 32.5 97.5



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



#2

Dichlorodifluoromethane

Concen: 0.056 ppbv

RT: 3.08 min Scan# 43

Delta R.T. 0.00 min

Lab File: VL033751.D

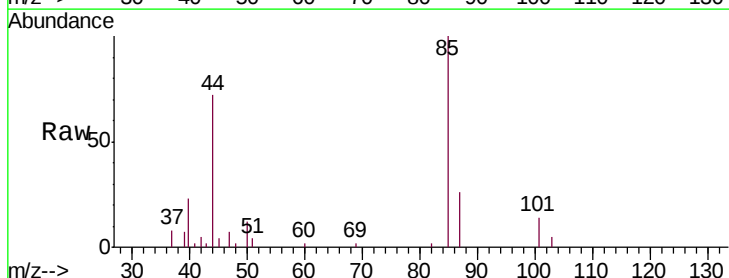
Acq: 22 May 2019 19:28

Tgt Ion: 85 Resp: 10364

Ion Ratio Lower Upper

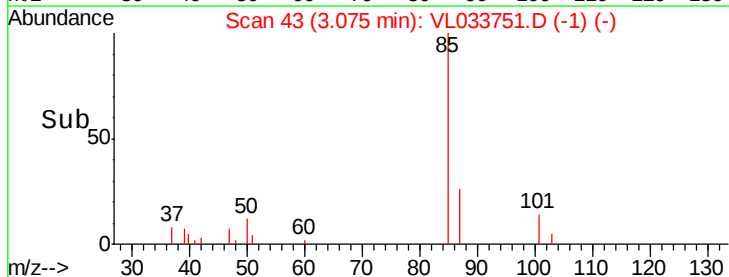
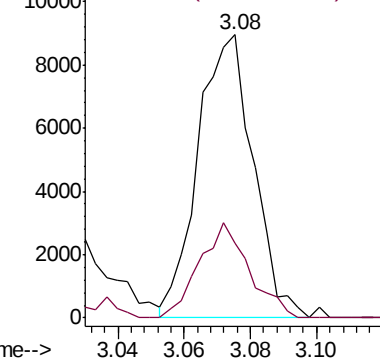
85 100

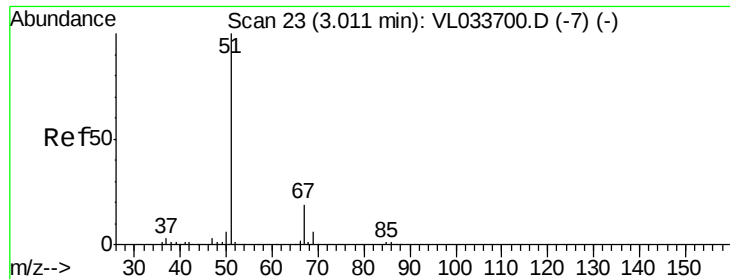
87 26.2 26.3 39.5#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.066 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.00 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

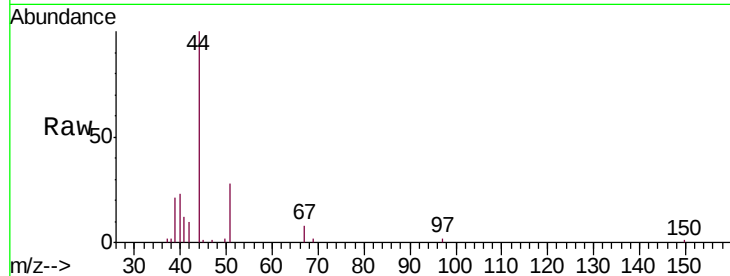
BPS1-SG-3001-25DL

Tgt Ion: 51 Resp: 6641

Ion Ratio Lower Upper

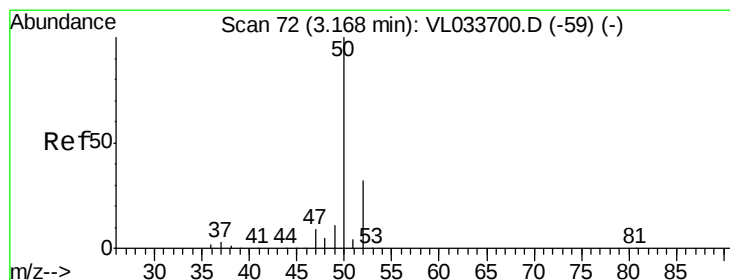
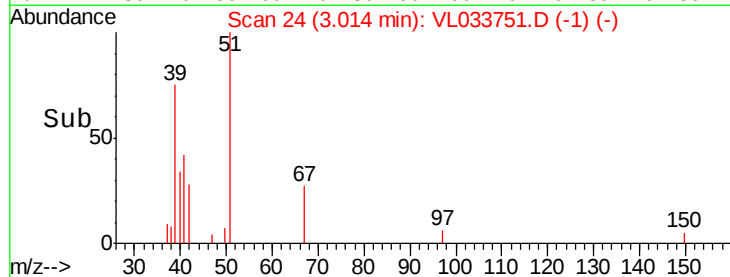
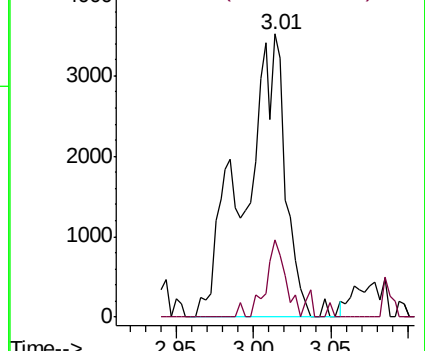
51 100

67 14.8 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: 0.062 ppbv

RT: 3.17 min Scan# 72

Delta R.T. 0.00 min

Lab File: VL033751.D

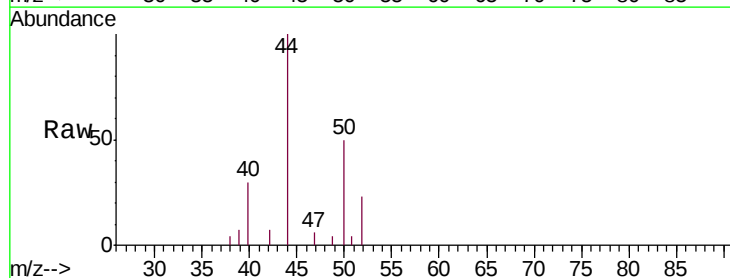
Acq: 22 May 2019 19:28

Tgt Ion: 50 Resp: 3571

Ion Ratio Lower Upper

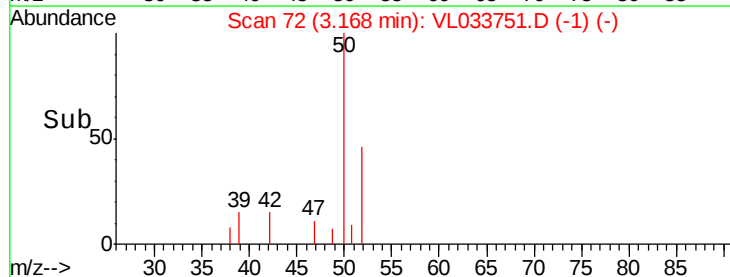
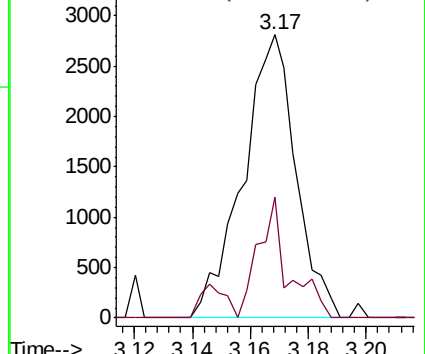
50 100

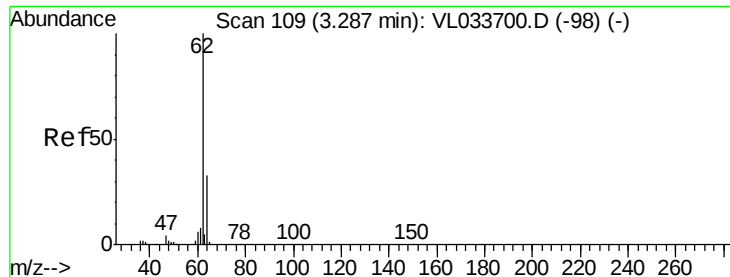
52 42.6 25.7 38.5#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.011 ppbv

RT: 3.05 min Scan# 35

Delta R.T. -0.24 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

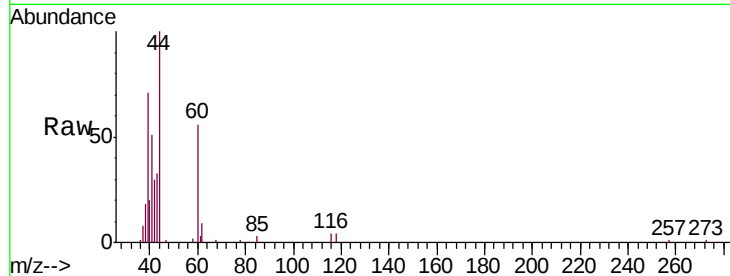
BPS1-SG-3001-25DL

Tgt Ion: 62 Resp: 638

Ion Ratio Lower Upper

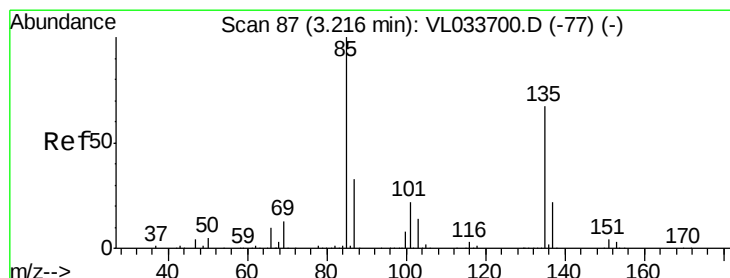
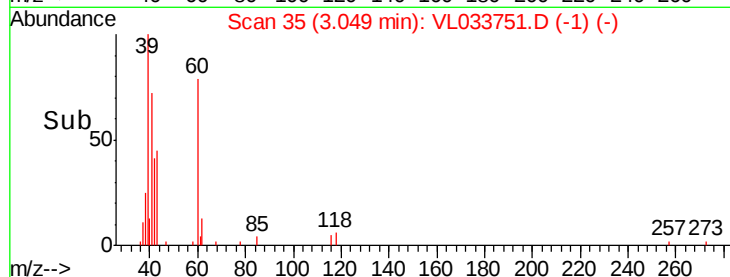
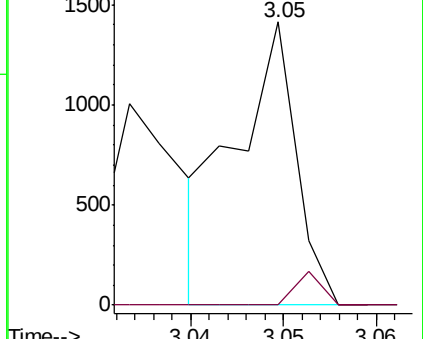
62 100

64 0.0 26.4 39.6#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.069 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.14 min

Lab File: VL033751.D

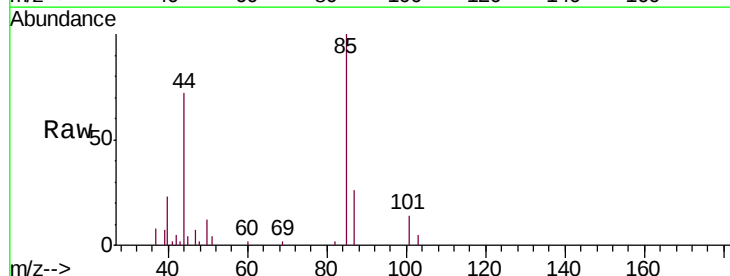
Acq: 22 May 2019 19:28

Tgt Ion: 85 Resp: 10364

Ion Ratio Lower Upper

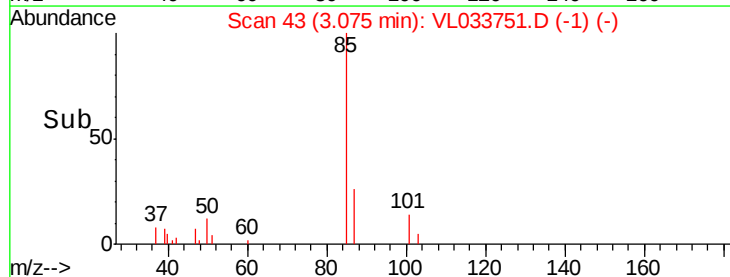
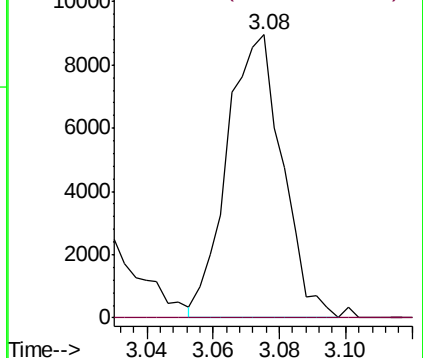
85 100

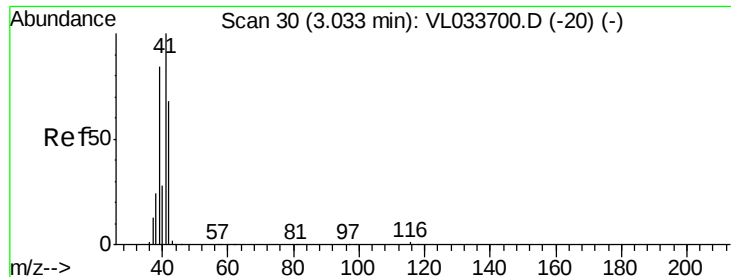
135 0.0 54.5 81.7#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.770 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

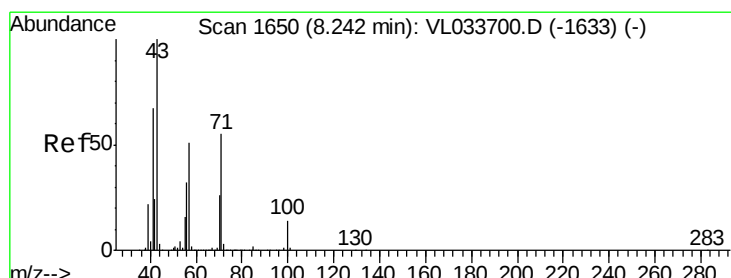
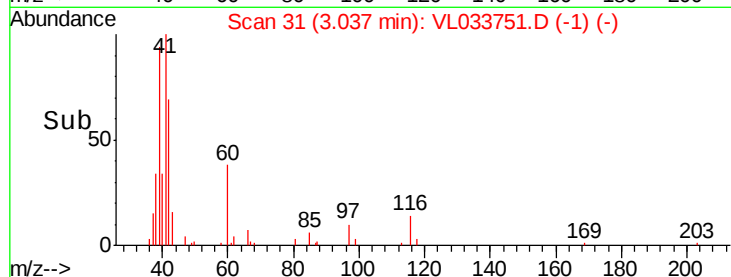
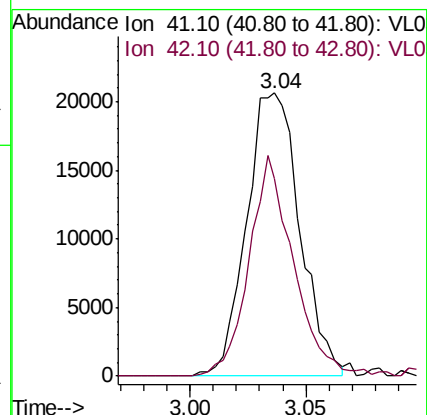
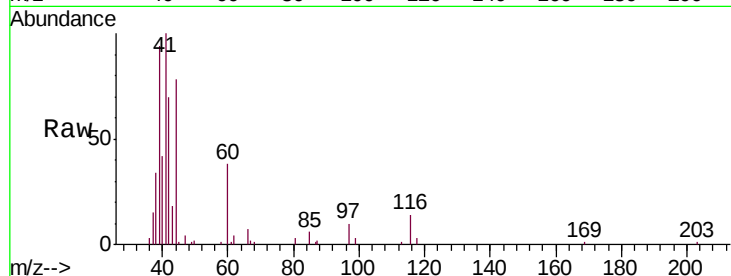
BPS1-SG-3001-25DL

Tgt Ion: 41 Resp: 32983

Ion Ratio Lower Upper

41 100

42 65.5 56.1 84.1



#10

Heptane

Concen: 0.071 ppbv

RT: 8.23 min Scan# 1647

Delta R.T. -0.01 min

Lab File: VL033751.D

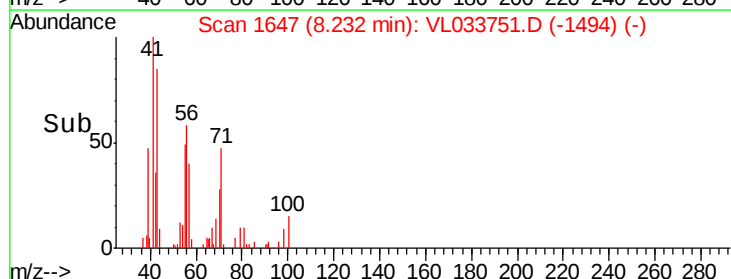
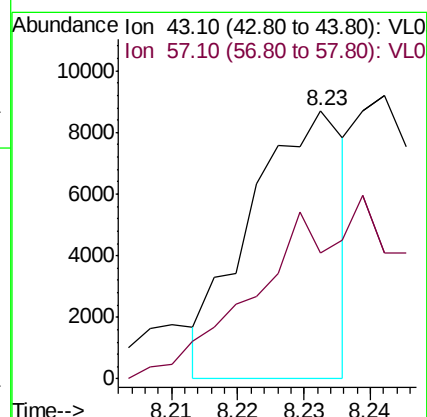
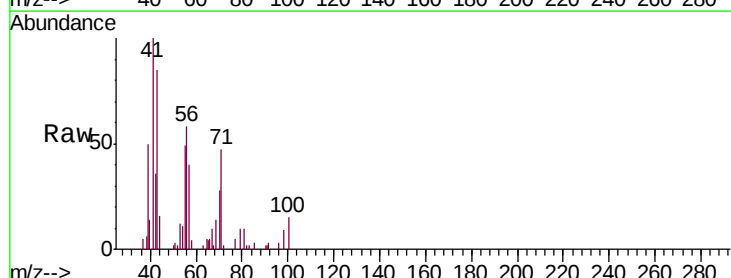
Acq: 22 May 2019 19:28

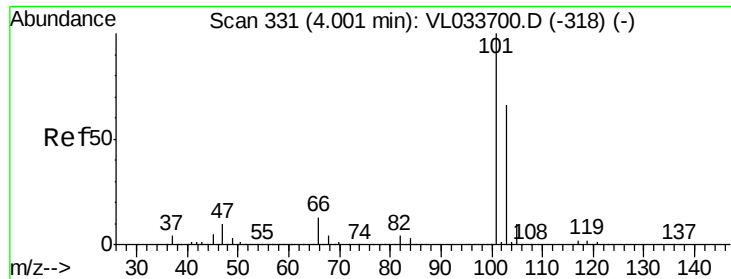
Tgt Ion: 43 Resp: 8618

Ion Ratio Lower Upper

43 100

57 0.0 41.4 62.0#

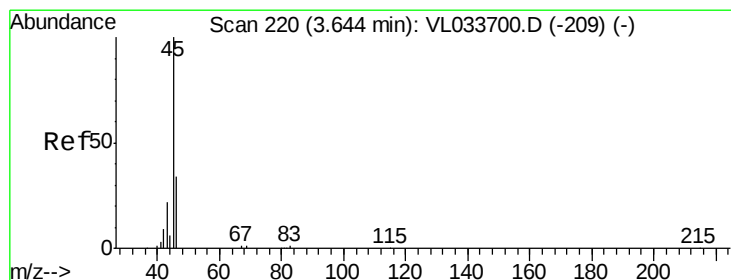
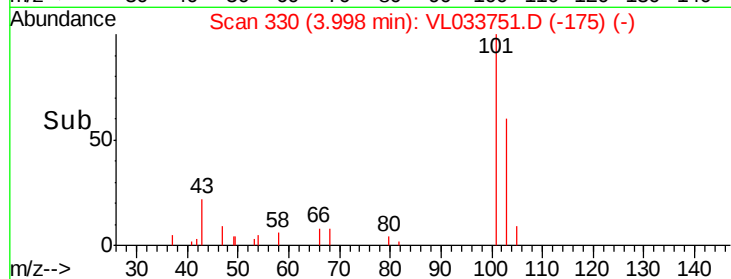
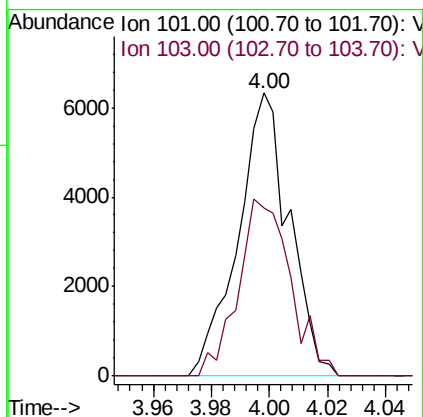
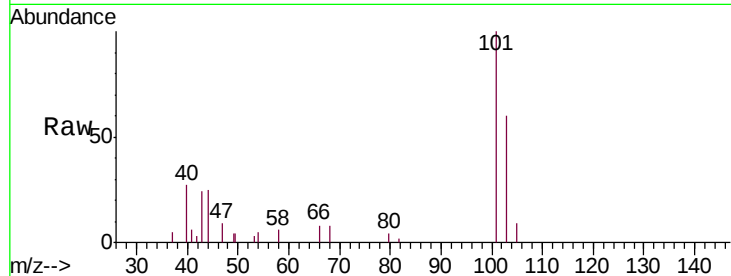




#11
 Trichlorofluoromethane
 Concen: 0.044 ppbv
 RT: 4.00 min Scan# 330
 Delta R.T. -0.00 min
 Lab File: VL033751.D
 Acq: 22 May 2019 19:28

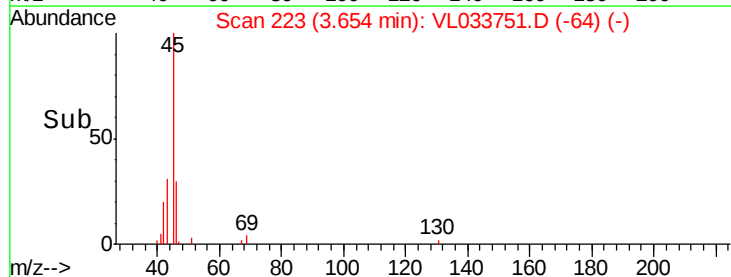
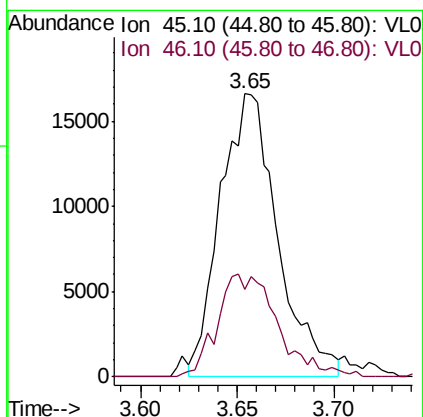
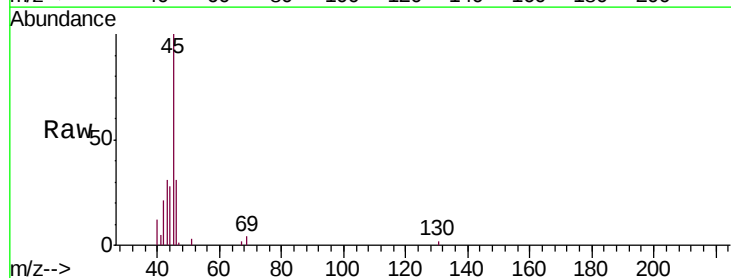
Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3001-25DL

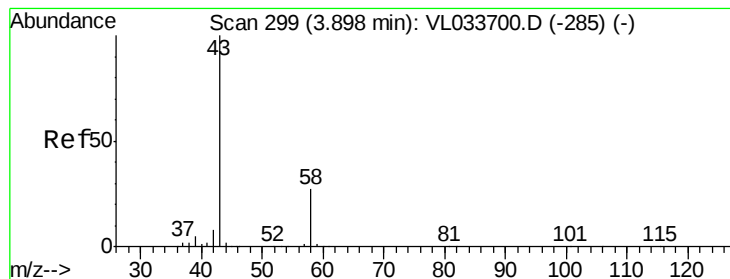
Tgt Ion: 101 Resp: 7749
 Ion Ratio Lower Upper
 101 100
 103 59.6 52.6 78.8



#13
 Ethanol
 Concen: 2.481 ppbv
 RT: 3.65 min Scan# 223
 Delta R.T. 0.01 min
 Lab File: VL033751.D
 Acq: 22 May 2019 19:28

Tgt Ion: 45 Resp: 34344
 Ion Ratio Lower Upper
 45 100
 46 38.3 14.8 59.0





#15

Acetone

Concen: 4.236 ppbv

RT: 3.90 min Scan# 298

Delta R.T. -0.00 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

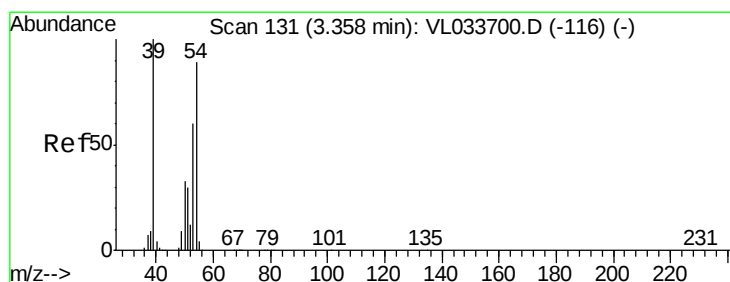
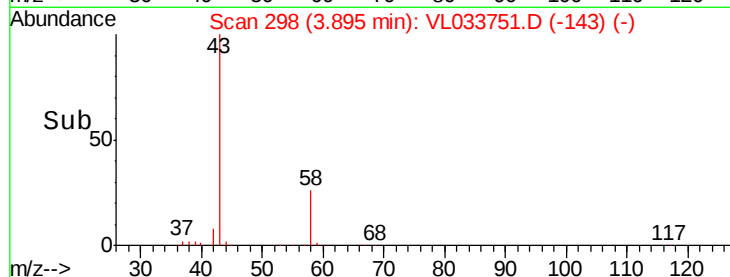
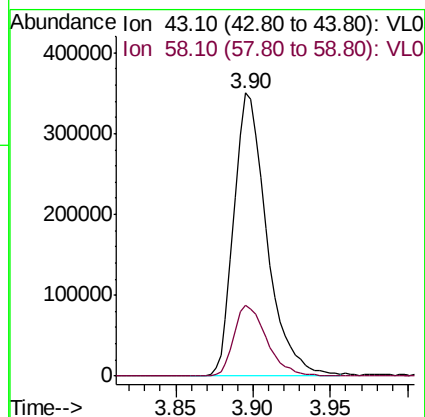
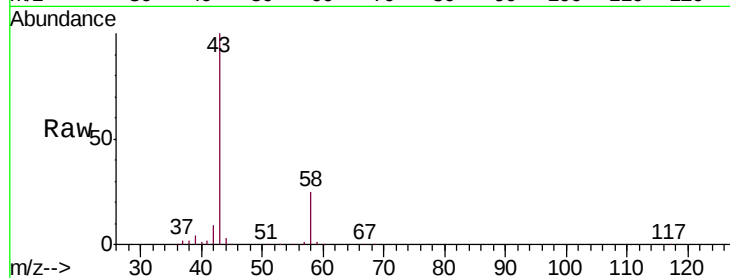
BPS1-SG-3001-25DL

Tgt Ion: 43 Resp: 516661

Ion Ratio Lower Upper

43 100

58 25.2 21.3 31.9



#16

1,3-Butadiene

Concen: 0.786 ppbv

RT: 3.34 min Scan# 125

Delta R.T. -0.02 min

Lab File: VL033751.D

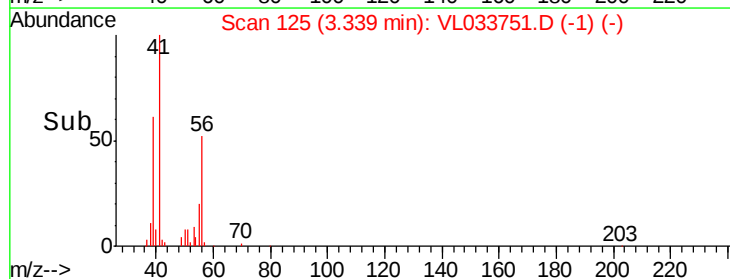
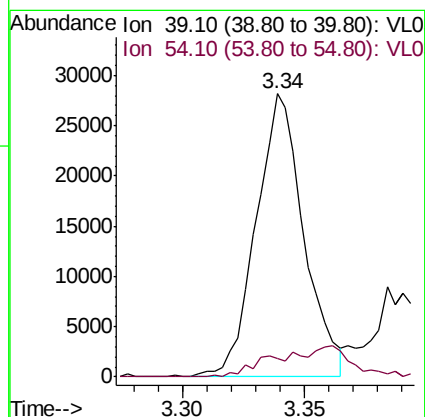
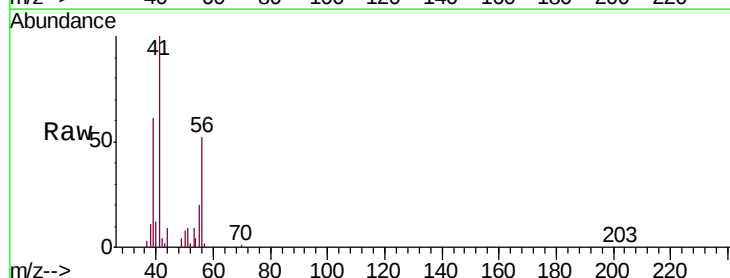
Acq: 22 May 2019 19:28

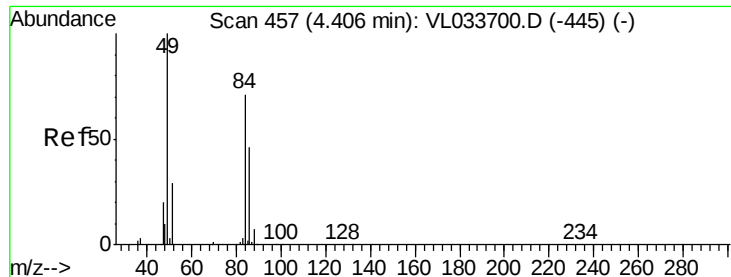
Tgt Ion: 39 Resp: 38167

Ion Ratio Lower Upper

39 100

54 17.7 69.0 103.6#

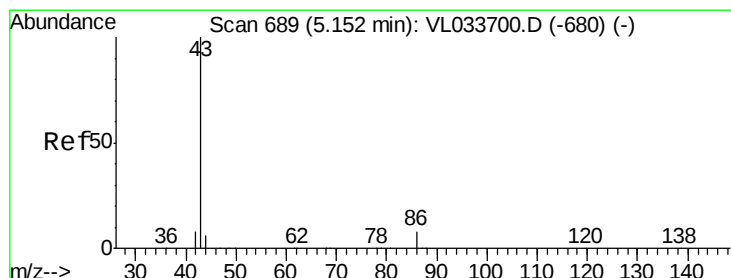
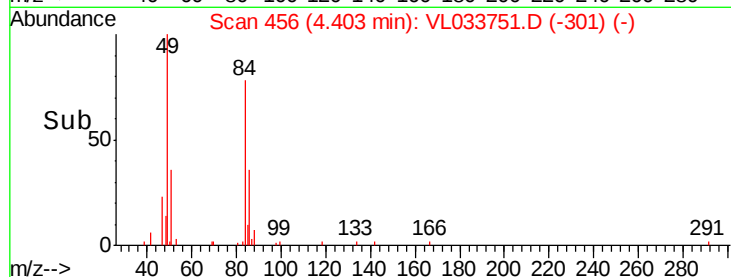
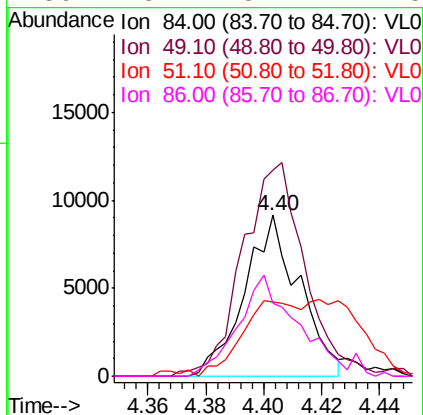
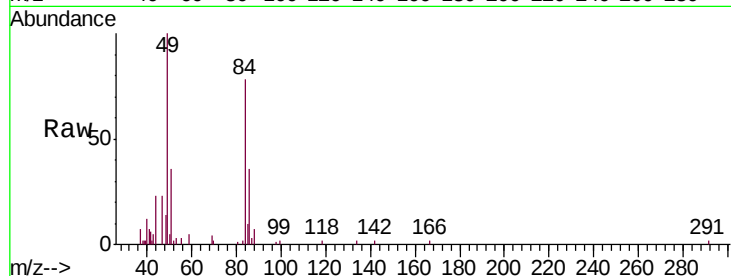




#20
Methylene Chloride
Concen: 0.256 ppbv
RT: 4.40 min Scan# 456
Delta R.T. -0.00 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

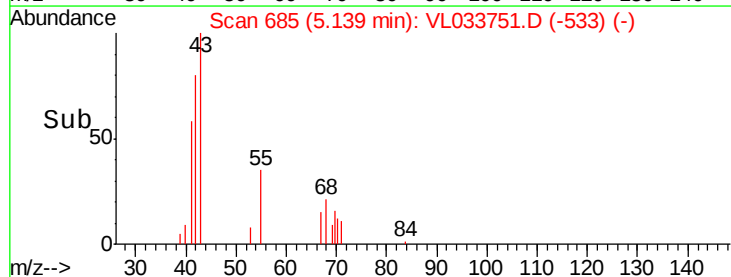
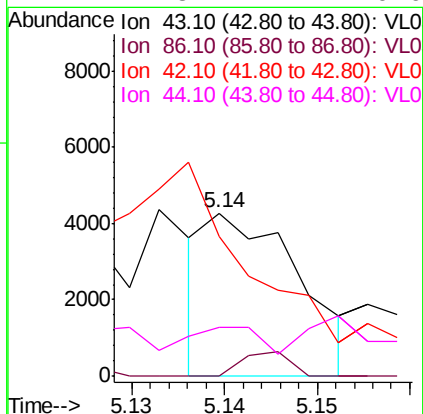
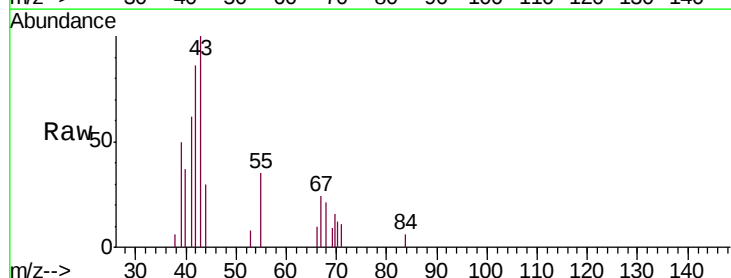
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3001-25DL

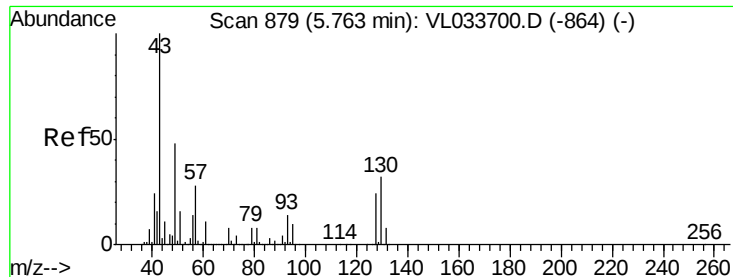
Tgt Ion: 84 Resp: 12022
Ion Ratio Lower Upper
84 100
49 124.3 112.8 169.2
51 42.5 33.4 50.0
86 45.4 51.7 77.5#



#23
Vinyl Acetate
Concen: 0.018 ppbv
RT: 5.14 min Scan# 685
Delta R.T. -0.01 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

Tgt Ion: 43 Resp: 2963
Ion Ratio Lower Upper
43 100
86 0.0 6.0 9.0#
42 104.4 7.5 11.3#
44 7.8 4.4 6.6#

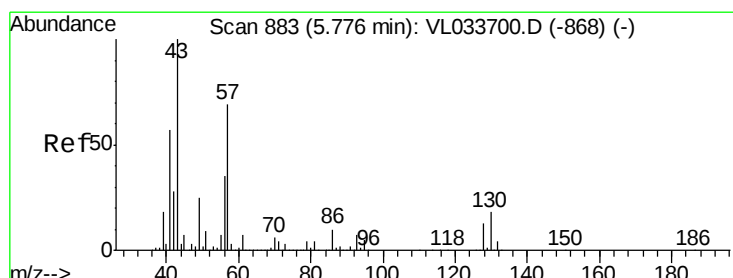
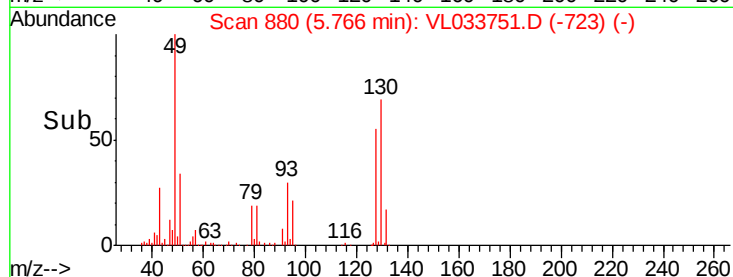
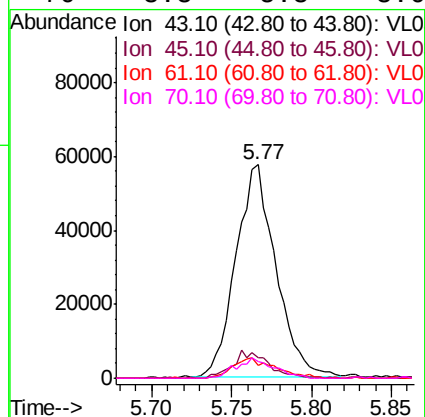
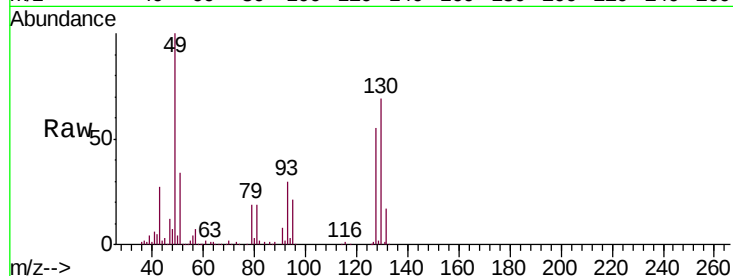




#25
Ethyl Acetate
Concen: 0.458 ppbv
RT: 5.77 min Scan# 880
Delta R.T. 0.00 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

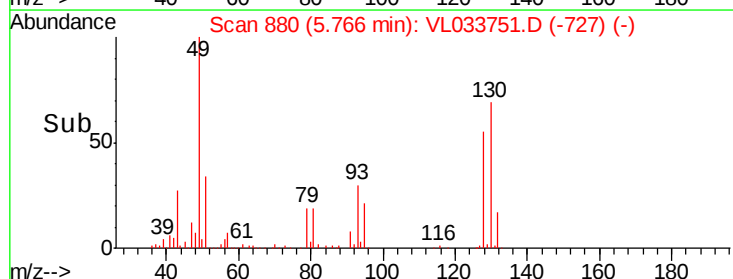
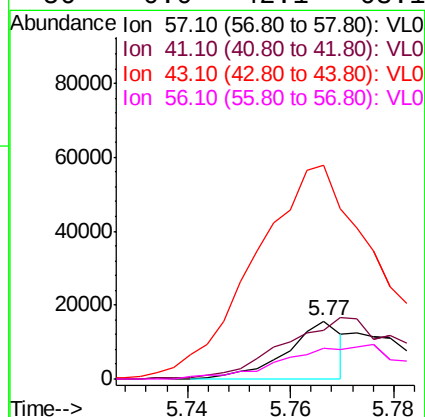
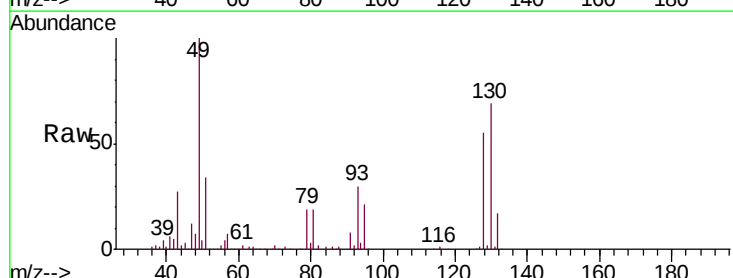
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3001-25DL

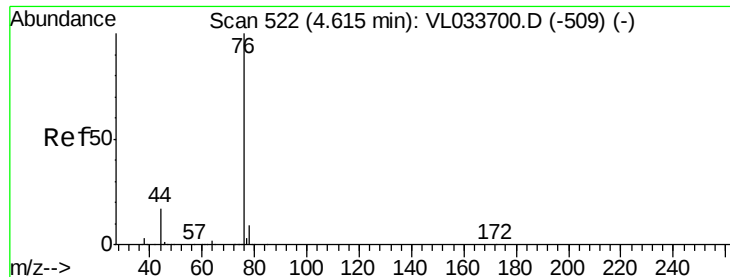
Tgt Ion:	43	Resp:	98226
Ion	Ratio	Lower	Upper
43	100		
45	12.0	7.9	11.9#
61	10.2	7.7	11.5
70	8.8	5.8	8.6#



#26
Hexane
Concen: 0.126 ppbv
RT: 5.77 min Scan# 880
Delta R.T. -0.01 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

Tgt Ion:	57	Resp:	11569
Ion	Ratio	Lower	Upper
57	100		
41	0.0	69.8	104.6#
43	877.2	181.8	272.6#
56	0.0	42.1	63.1#





#27

Carbon Disulfide

Concen: 0.097 ppbv

RT: 4.61 min Scan# 521

Delta R.T. -0.00 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3001-25DL

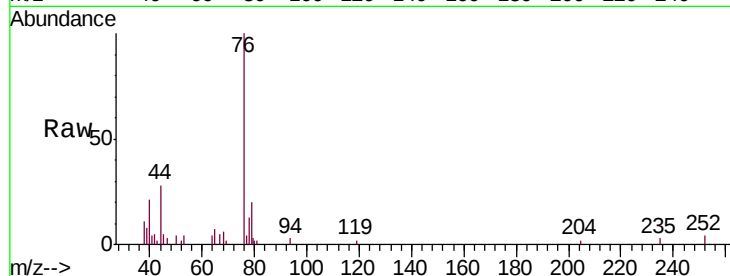
Tgt Ion: 76 Resp: 12295

Ion Ratio Lower Upper

76 100

44 48.7 13.8 20.8#

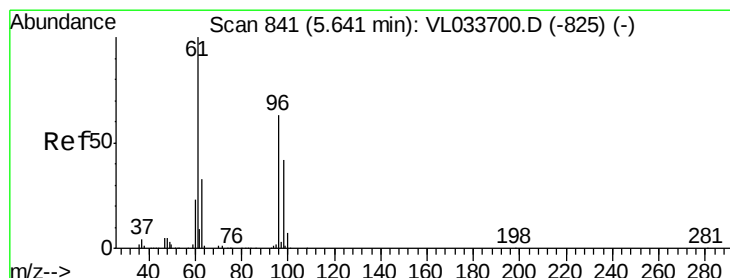
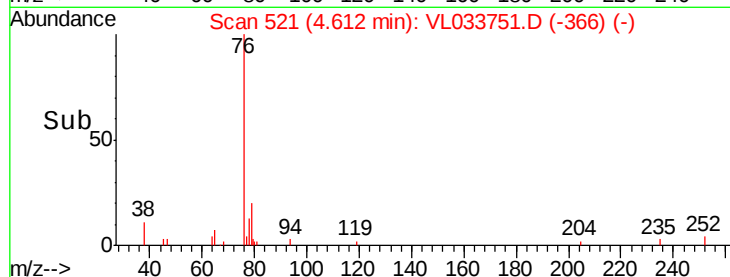
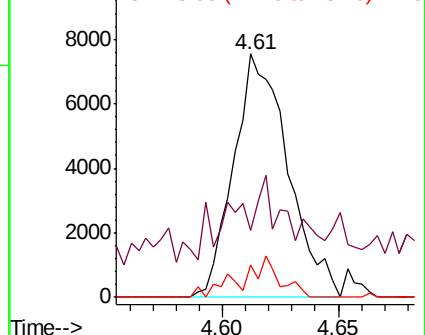
78 12.1 7.4 11.0#



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



#31

cis-1,2-Dichloroethene

Concen: 0.062 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.12 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

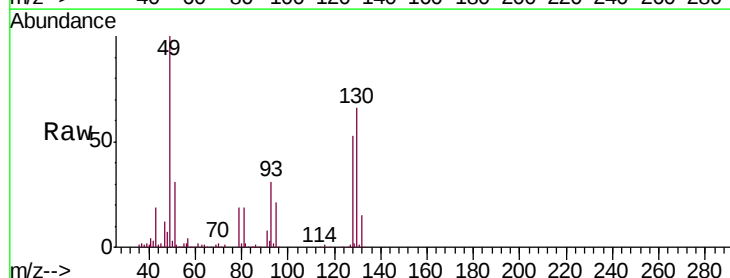
Tgt Ion: 61 Resp: 5673

Ion Ratio Lower Upper

61 100

96 9.6 50.8 76.2#

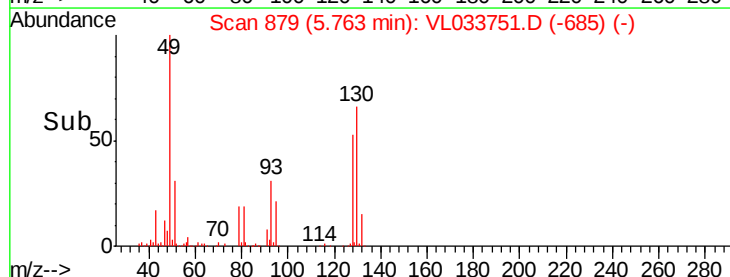
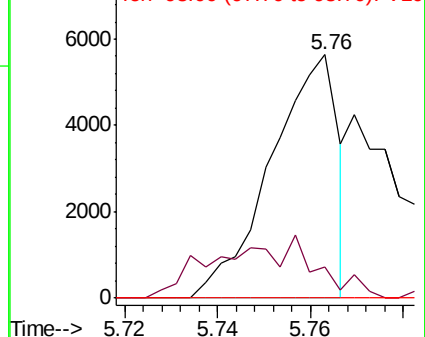
98 0.0 33.3 49.9#

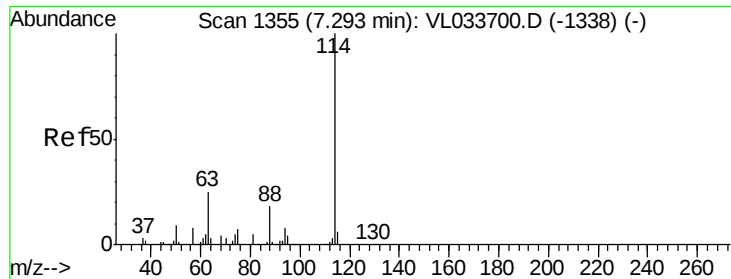


Abundance Ion 61.10 (60.80 to 61.80): VL0

Ion 96.00 (95.70 to 96.70): VL0

Ion 98.00 (97.70 to 98.70): VL0



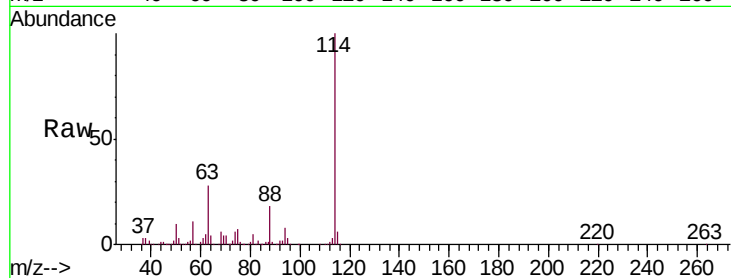


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.28 min Scan# 1351
 Delta R.T. -0.01 min
 Lab File: VL033751.D
 Acq: 22 May 2019 19:28

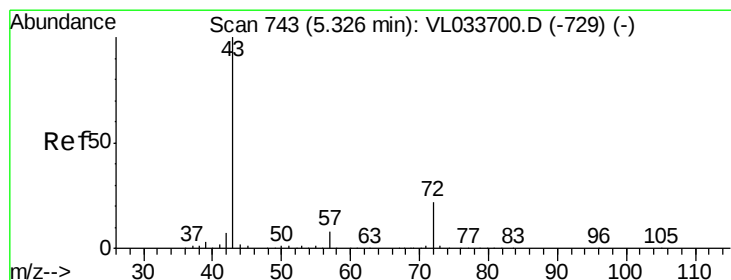
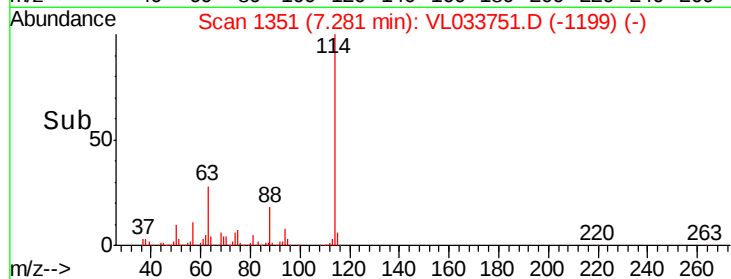
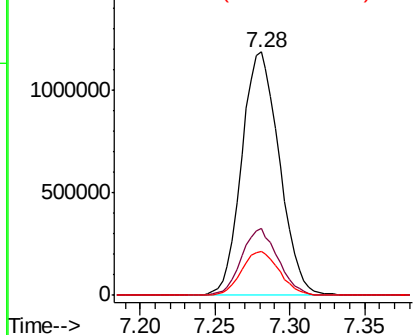
Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3001-25DL

Tgt Ion: 114 Resp: 2083122

Ion	Ratio	Lower	Upper
114	100		
63	26.7	20.9	31.3
88	18.1	14.3	21.5



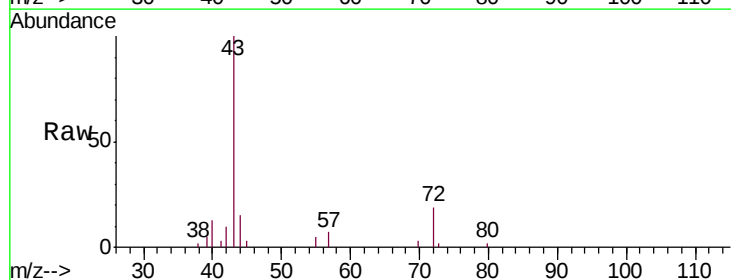
Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0



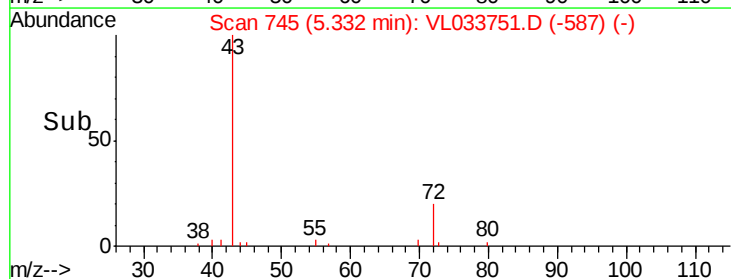
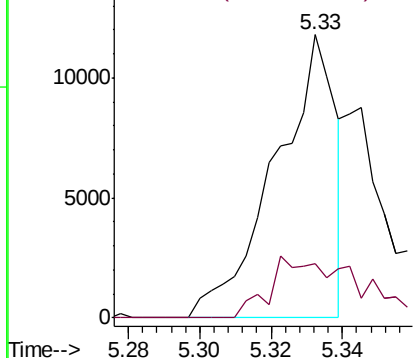
#34
 2-Butanone
 Concen: 0.107 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. 0.01 min
 Lab File: VL033751.D
 Acq: 22 May 2019 19:28

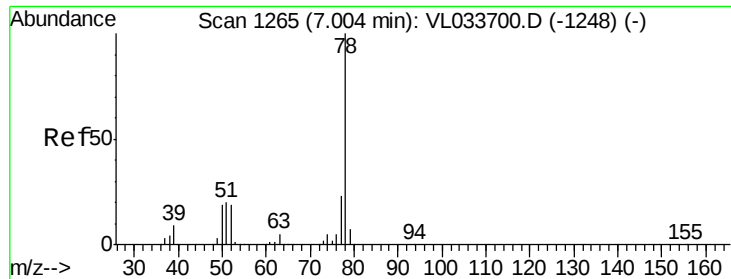
Tgt Ion: 43 Resp: 13799

Ion	Ratio	Lower	Upper
43	100		
72	31.9	17.8	26.6#



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

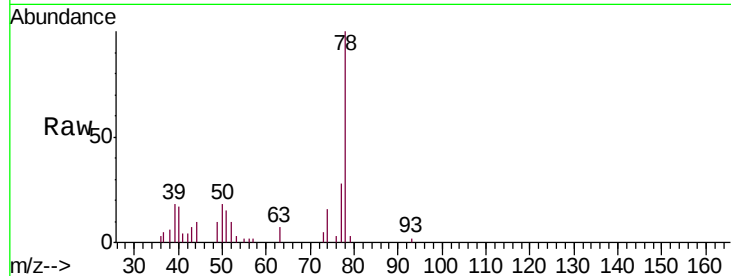




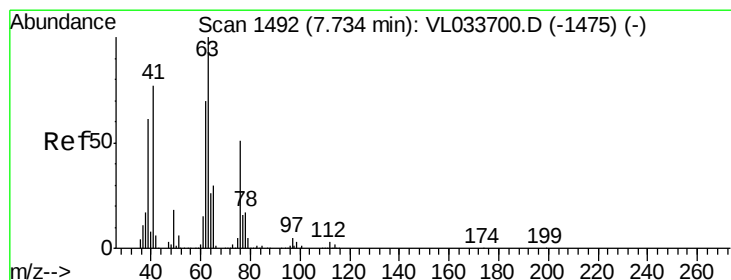
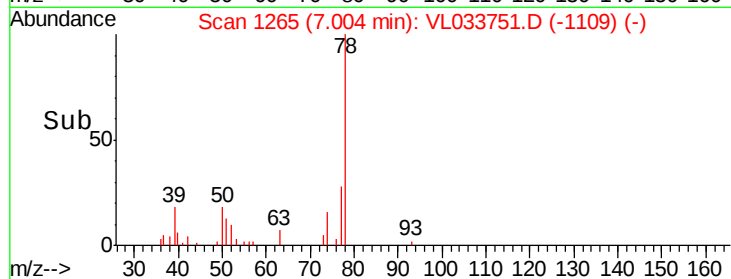
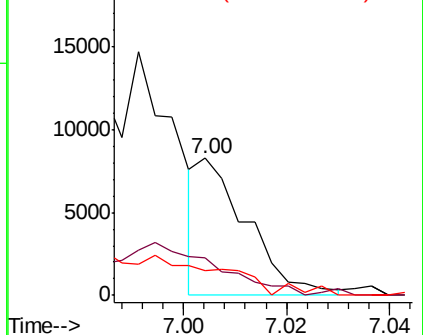
#36
Benzene
Concen: 0.029 ppbv
RT: 7.00 min Scan# 1265
Delta R.T. 0.00 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3001-25DL

Tgt Ion: 78 Resp: 5490
Ion Ratio Lower Upper
78 100
77 23.4 18.4 27.6
50 18.9 15.5 23.3

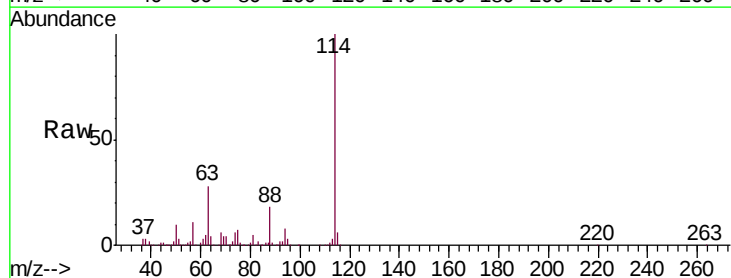


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

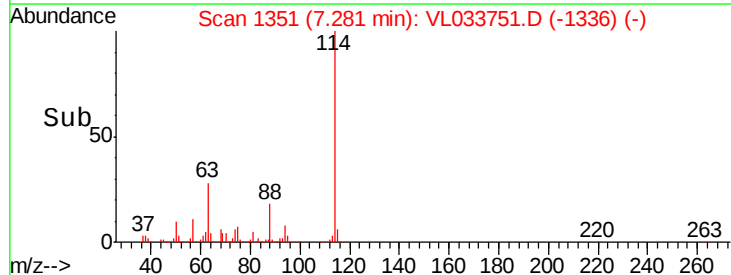
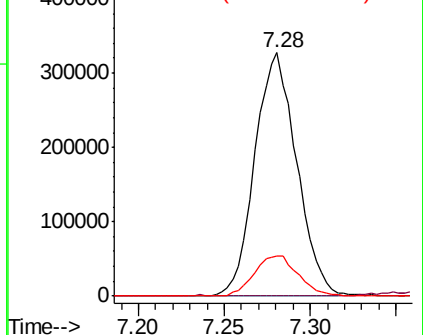


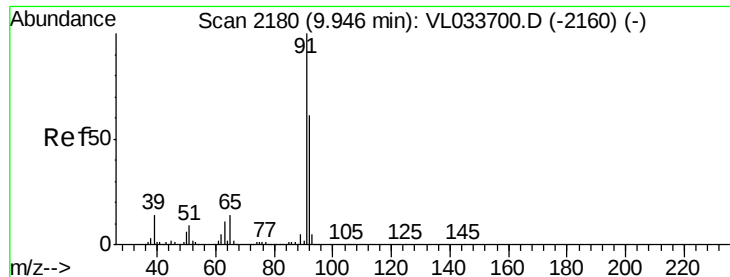
#39
1,2-Dichloropropane
Concen: 7.800 ppbv
RT: 7.28 min Scan# 1351
Delta R.T. -0.45 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

Tgt Ion: 63 Resp: 551049
Ion Ratio Lower Upper
63 100
41 0.0 61.5 92.3#
62 16.6 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





#53

Toluene

Concen: 1.946 ppbv

RT: 9.93 min Scan# 2176

Delta R.T. -0.01 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

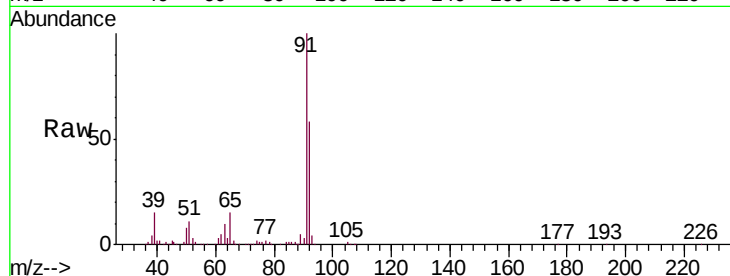
BPS1-SG-3001-25DL

Tgt Ion: 91 Resp: 397715

Ion Ratio Lower Upper

91 100

92 59.1 47.6 71.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

250000

200000

150000

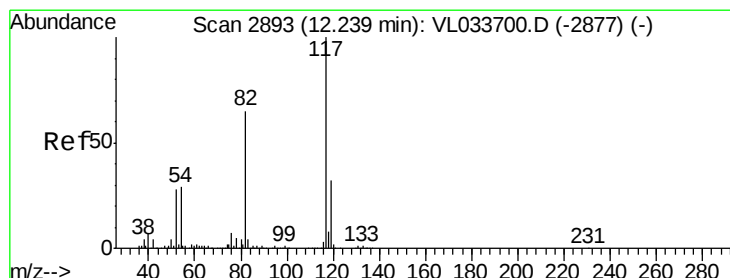
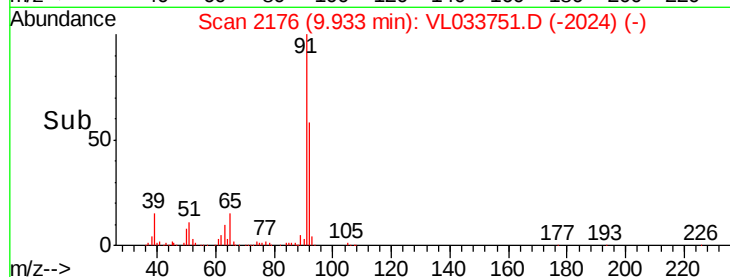
100000

50000

0

9.85 9.90 9.95 10.00

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2890

Delta R.T. -0.01 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

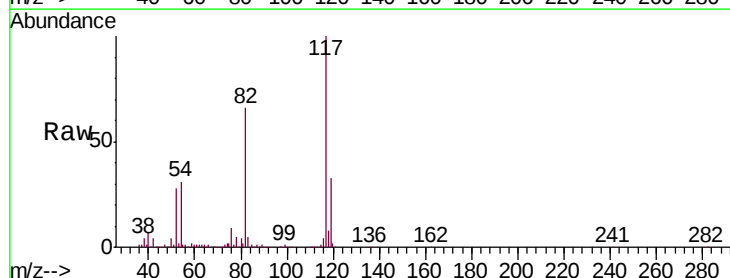
Tgt Ion: 117 Resp: 2146561

Ion Ratio Lower Upper

117 100

82 67.0 49.4 74.0

119 32.7 24.9 37.3



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

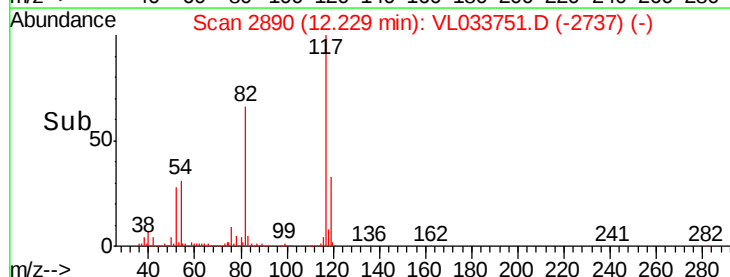
1000000

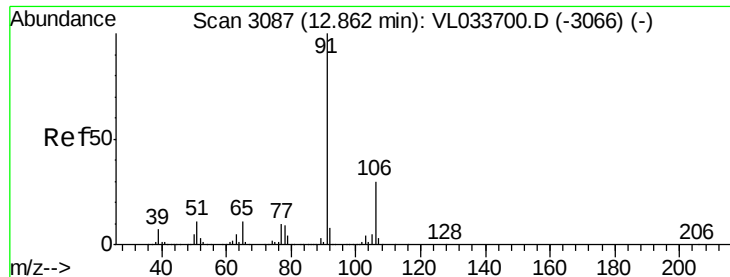
500000

0

12.20 12.30

Time-->





#58

Ethyl Benzene

Concen: 0.113 ppbv

RT: 12.86 min Scan# 3085

Delta R.T. -0.01 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Instrument :

MSVOA_L

ClientSampleId :

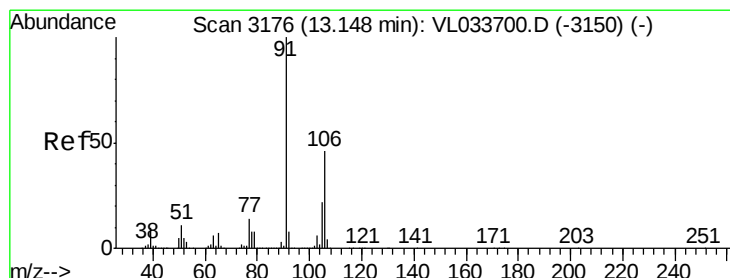
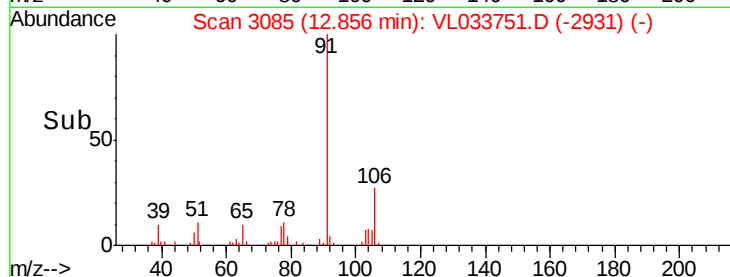
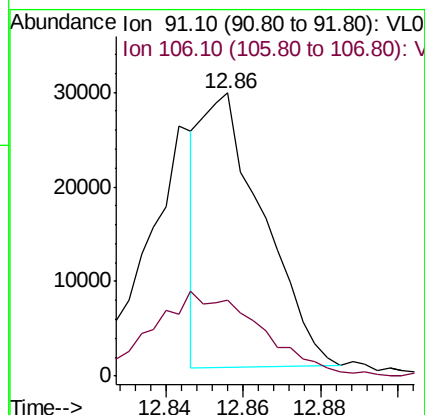
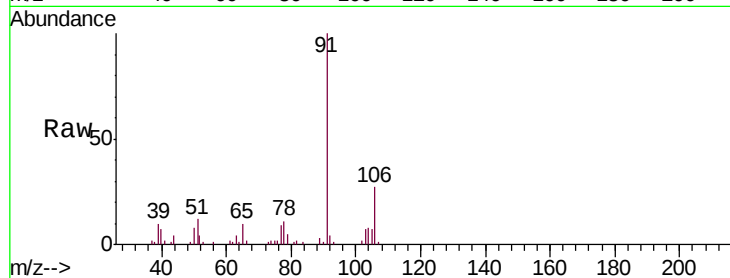
BPS1-SG-3001-25DL

Tgt Ion: 91 Resp: 32199

Ion Ratio Lower Upper

91 100

106 26.0 23.9 35.9



#59

m/p-Xylene

Concen: 1.174 ppbv

RT: 13.11 min Scan# 3164

Delta R.T. -0.04 min

Lab File: VL033751.D

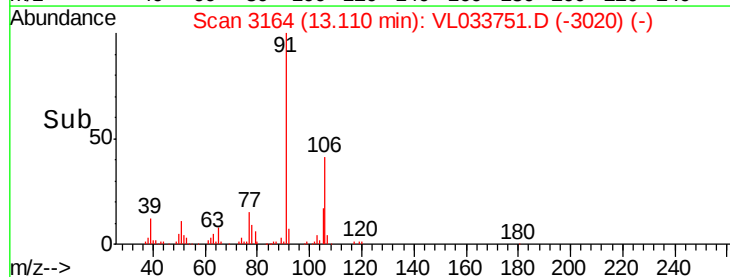
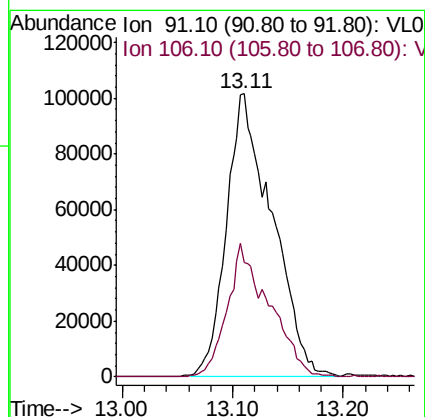
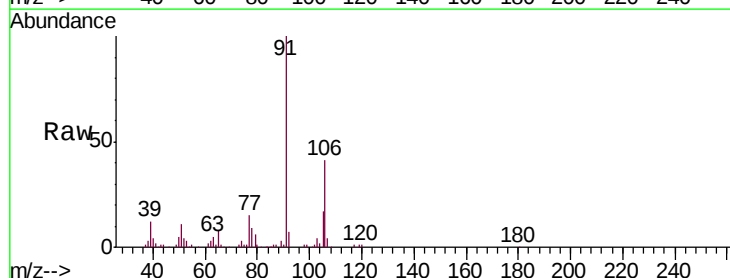
Acq: 22 May 2019 19:28

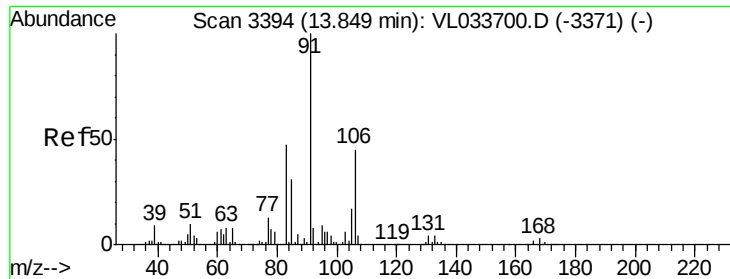
Tgt Ion: 91 Resp: 291620

Ion Ratio Lower Upper

91 100

106 43.2 35.8 53.6

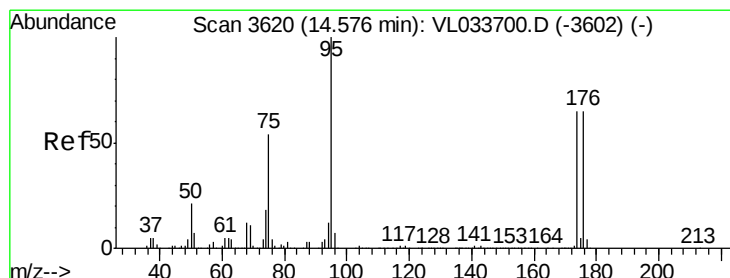
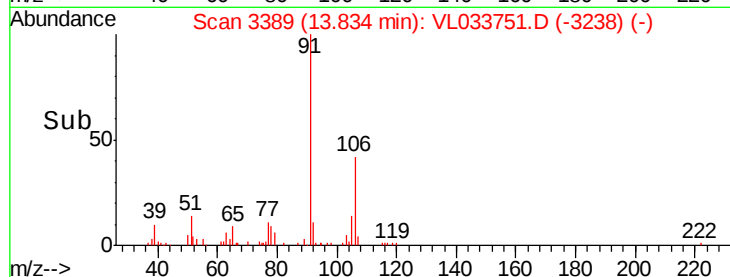
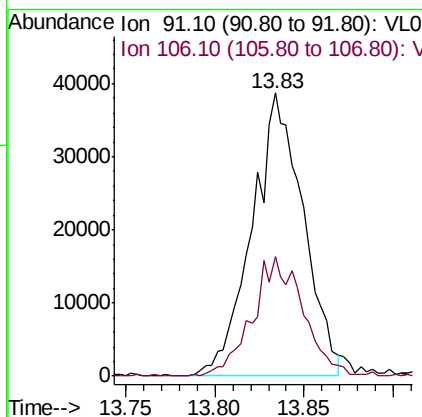
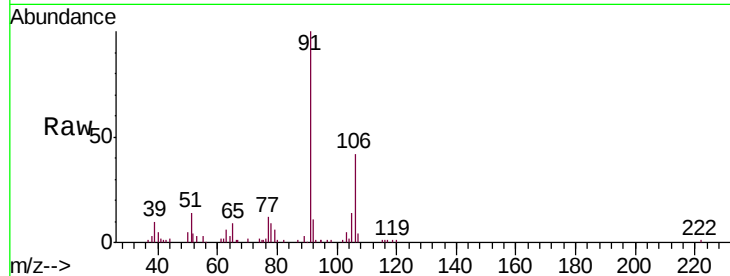




#60
o-Xylene
Concen: 0.310 ppbv
RT: 13.83 min Scan# 3389
Delta R.T. -0.02 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

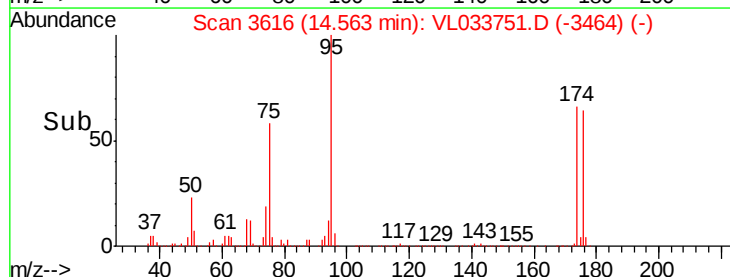
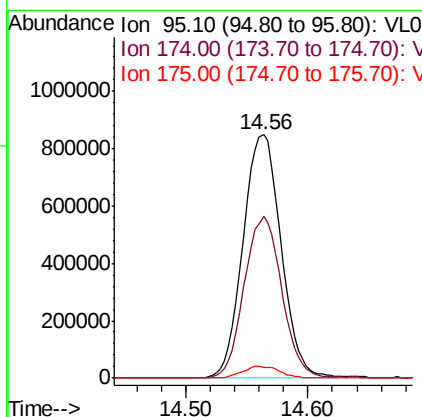
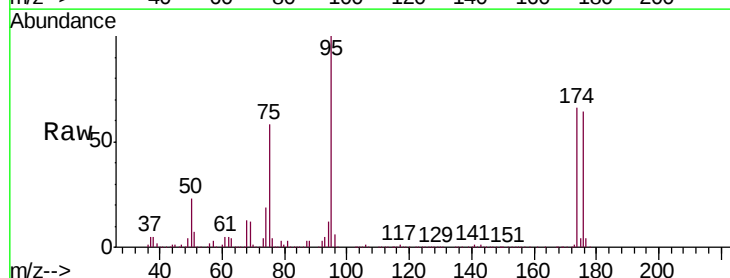
Instrument :
MSVOA_L
ClientSampleId :
BPS1-SG-3001-25DL

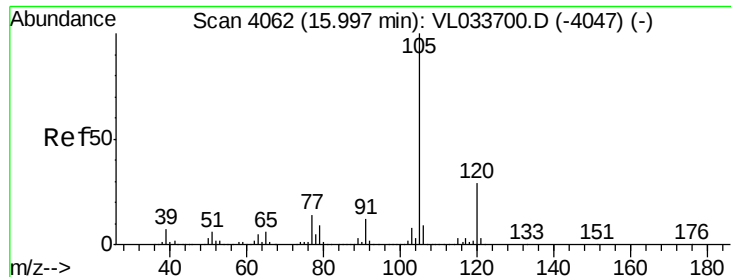
Tgt Ion: 91 Resp: 77568
Ion Ratio Lower Upper
91 100
106 42.1 21.6 64.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.501 ppbv
RT: 14.56 min Scan# 3616
Delta R.T. -0.01 min
Lab File: VL033751.D
Acq: 22 May 2019 19:28

Tgt Ion: 95 Resp: 1827337
Ion Ratio Lower Upper
95 100
174 66.3 53.9 80.9
175 4.8 3.8 5.8





#72

4-Ethyltoluene

Concen: 0.042 ppbv

RT: 15.98 min Scan# 4057

Delta R.T. -0.02 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

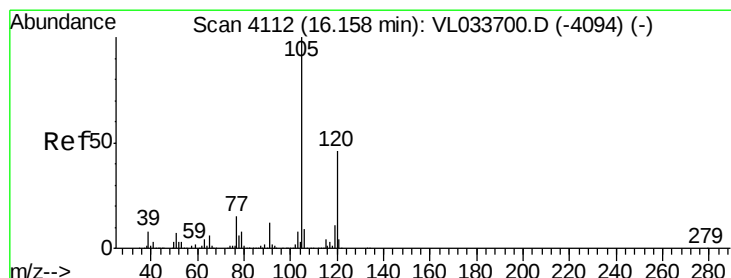
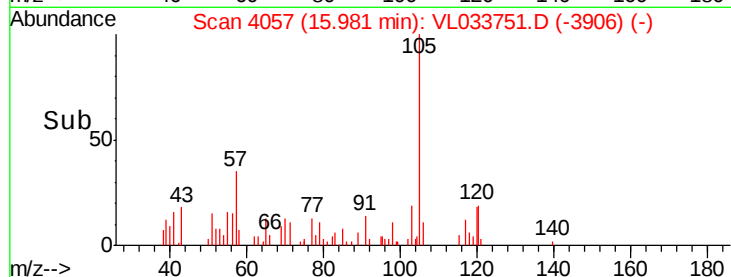
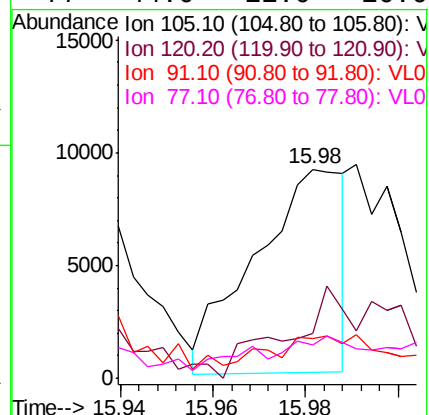
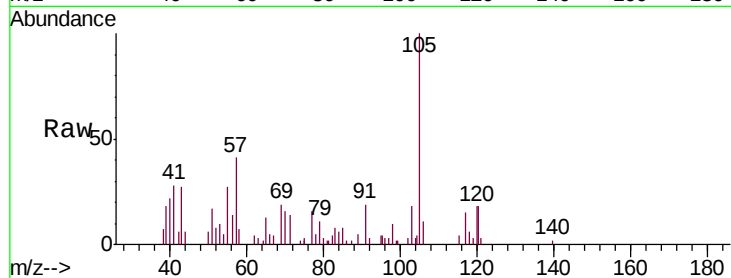
Instrument :

MSVOA_L

ClientSampleId :

BPS1-SG-3001-25DL

Tgt Ion:	105	Resp:	12022
Ion	Ratio	Lower	Upper
105	100		
120	53.2	23.1	34.7#
91	0.0	10.4	15.6#
77	44.0	11.0	16.6#



#73

1,3,5-Trimethylbenzene

Concen: 0.017 ppbv

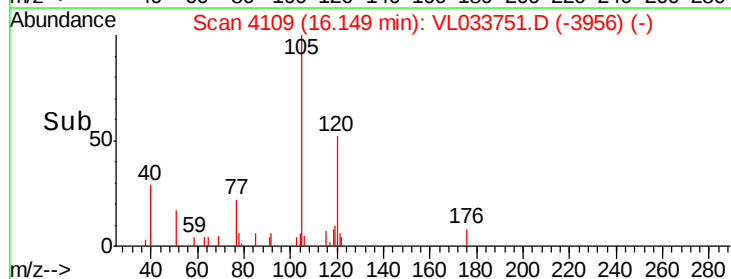
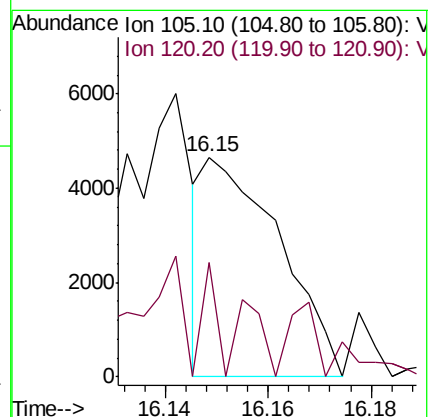
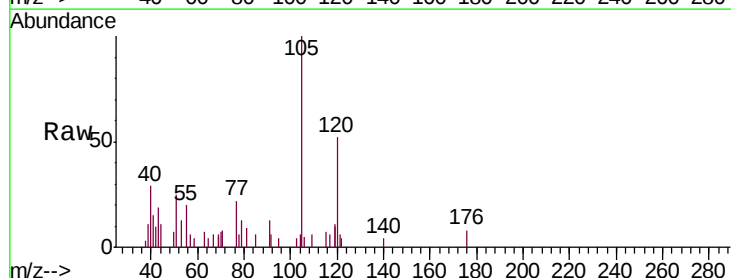
RT: 16.15 min Scan# 4109

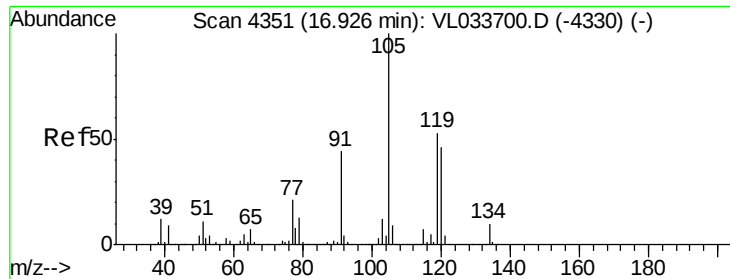
Delta R.T. -0.01 min

Lab File: VL033751.D

Acq: 22 May 2019 19:28

Tgt Ion:	105	Resp:	4779
Ion	Ratio	Lower	Upper
105	100		
120	51.9	37.0	55.4





#74
 1,2,4-Trimethylbenzene
 Concen: 0.090 ppbv
 RT: 16.91 min Scan# 4347
 Delta R.T. -0.01 min
 Lab File: VL033751.D
 Acq: 22 May 2019 19:28

Instrument :
 MSVOA_L
 ClientSampleId :
 BPS1-SG-3001-25DL

Tgt Ion:	105	Resp:	27309
Ion	Ratio	Lower	Upper
105	100		
120	49.5	36.8	55.2
91	16.6	35.4	53.0#
77	13.4	16.8	25.2#

