

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052219\  
 Data File : VL033762.D  
 Acq On : 23 May 2019 2:34  
 Operator : SY/AP  
 Sample : K2929-13DL 10X  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 BPS1-SG-3004-25DL

Manual Integrations  
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 5/28/2019 2:51:24 AM

Quant Time: May 23 07:07:36 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 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   | 889411   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.28  | 114  | 1947624  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.23 | 117  | 2081595  | 10.00 | ppbv  | -0.01    |

| System Monitoring Compounds |        | R.T.  | QIon     | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|-------|---------|----------|
| 68) 1-Bromo-4-Fluorobenzene |        | 14.56 | 95       | 1757255  | 10.41 | ppbv    | -0.01    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =     | 104.10% |          |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 9) Propene                 | 3.04  | 41   | 99474    | 2.296 | ppbv   | 88     |
| 10) Heptane                | 8.24  | 43   | 15929m   | 0.130 | ppbv   |        |
| 13) Ethanol                | 3.65  | 45   | 51530    | 3.679 | ppbv   | 100    |
| 15) Acetone                | 3.90  | 43   | 663252   | 5.375 | ppbv   | 98     |
| 17) tert-Butyl alcohol     | 4.36  | 59   | 22484    | 0.225 | ppbv   | 99     |
| 19) Isopropyl Alcohol      | 4.03  | 45   | 28573    | 0.359 | ppbv # | 94     |
| 20) Methylene Chloride     | 4.40  | 84   | 13720    | 0.289 | ppbv # | 88     |
| 26) Hexane                 | 5.77  | 57   | 24508    | 0.263 | ppbv # | 77     |
| 27) Carbon Disulfide       | 4.62  | 76   | 18844m   | 0.147 | ppbv   |        |
| 29) Chloroform             | 5.84  | 83   | 29483    | 0.172 | ppbv # | 80     |
| 34) 2-Butanone             | 5.33  | 43   | 42137    | 0.349 | ppbv   | 96     |
| 36) Benzene                | 6.99  | 78   | 25233m   | 0.142 | ppbv   |        |
| 53) Toluene                | 9.93  | 91   | 415305   | 2.173 | ppbv   | 99     |
| 58) Ethyl Benzene          | 12.86 | 91   | 54953    | 0.199 | ppbv   | 96     |
| 59) m/p-Xylene             | 13.11 | 91   | 215053m  | 0.892 | ppbv   |        |
| 60) o-Xylene               | 13.83 | 91   | 57220    | 0.236 | ppbv   | 96     |
| 74) 1,2,4-Trimethylbenzene | 16.91 | 105  | 54190    | 0.184 | ppbv # | 72     |

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

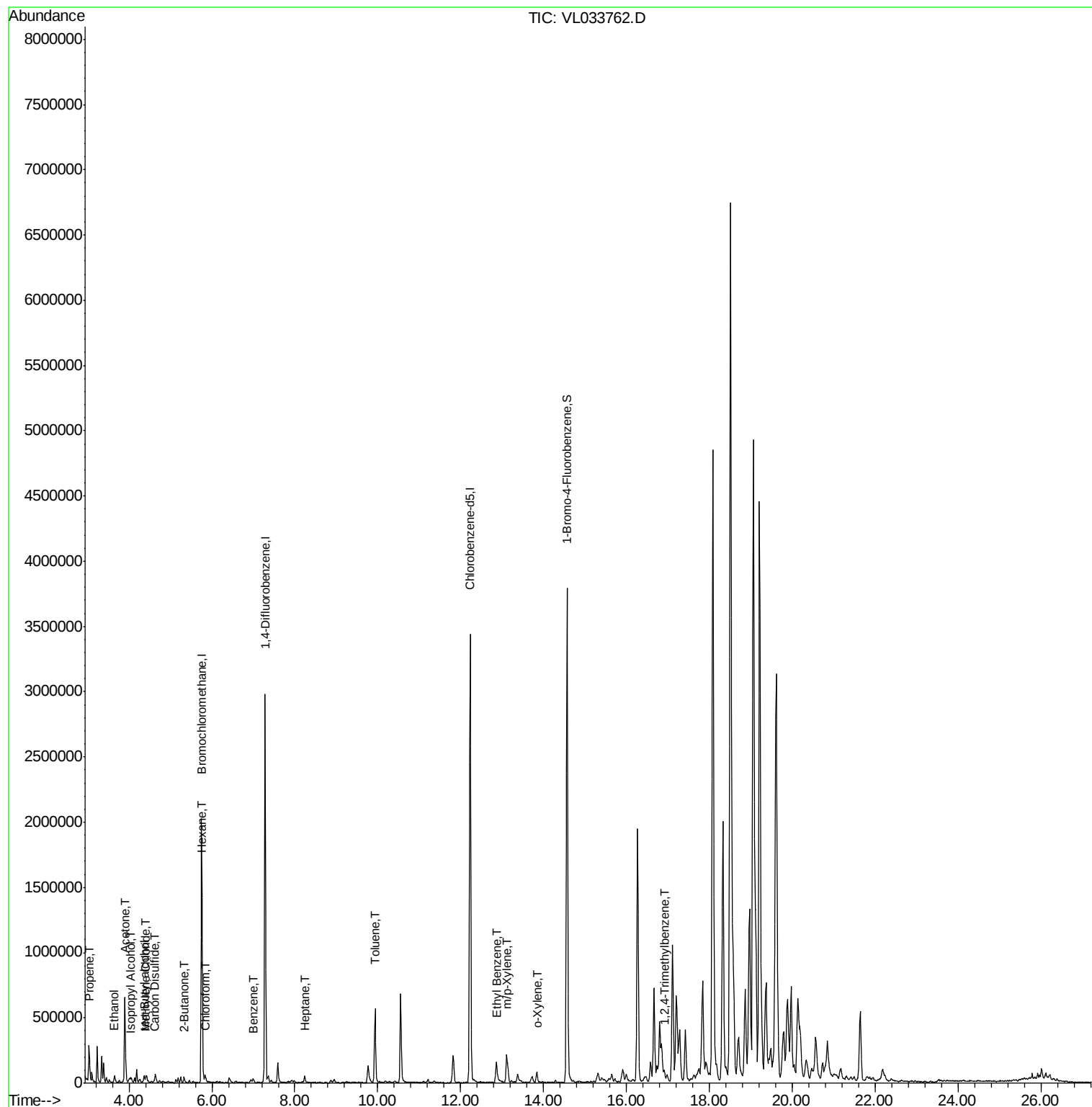
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL052219\  
Data File : VL033762.D  
Acq On : 23 May 2019 2:34  
Operator : SY/AP  
Sample : K2929-13DL 10X  
Misc : 400ml/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

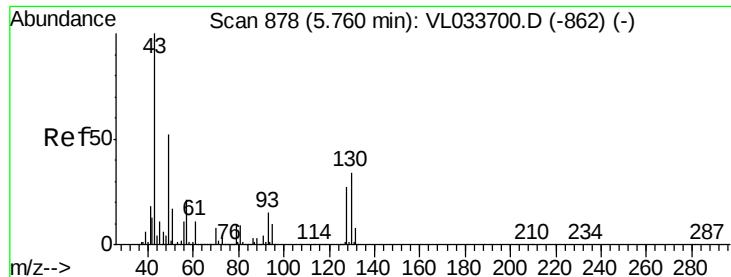
Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3004-25DL

Manual Integrations  
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5/28/2019 2:51:24 AM

Quant Time: May 23 07:07:36 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri May  
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: VL033762.D

Acq: 23 May 2019 2:34

Instrument :

MSVOA\_L

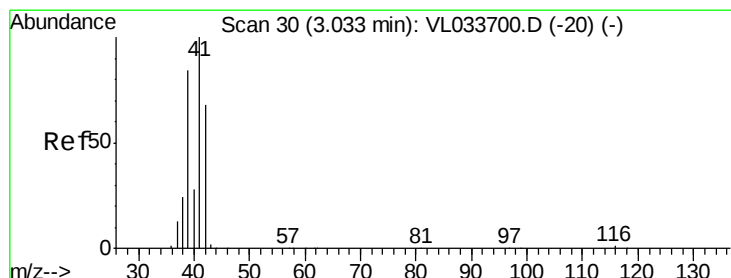
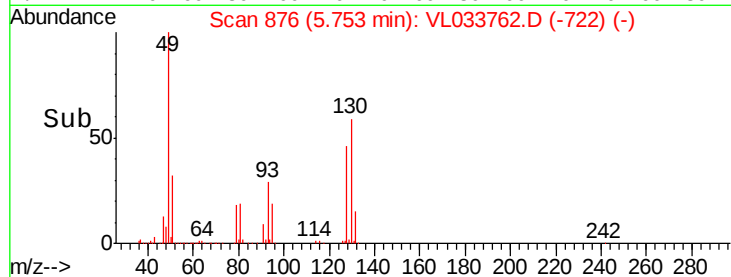
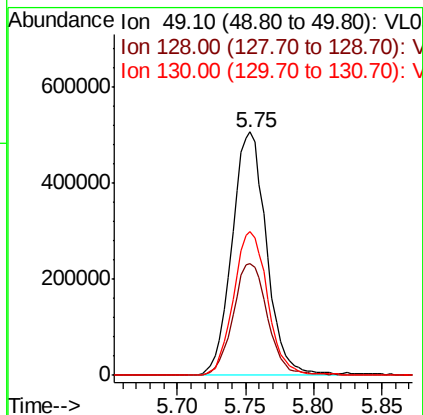
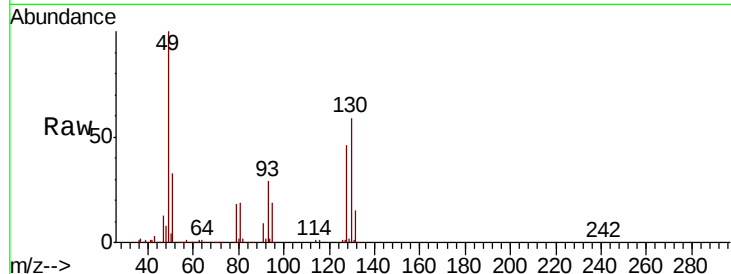
ClientSampleId :

BPS1-SG-3004-25DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 49    | Resp: | 889411 |
| Ion Ratio | Lower | Upper |        |
| 49        | 100   |       |        |
| 128       | 46.3  | 25.2  | 75.6   |
| 130       | 58.9  | 32.5  | 97.5   |

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#9

Propene

Concen: 2.296 ppbv

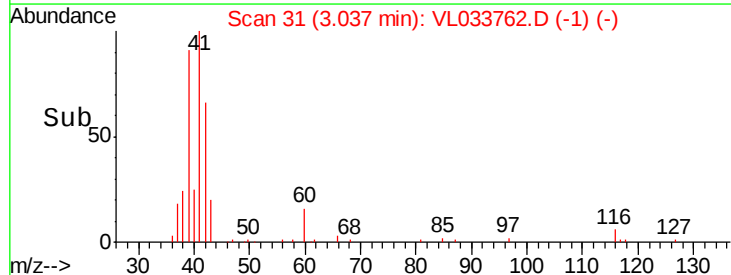
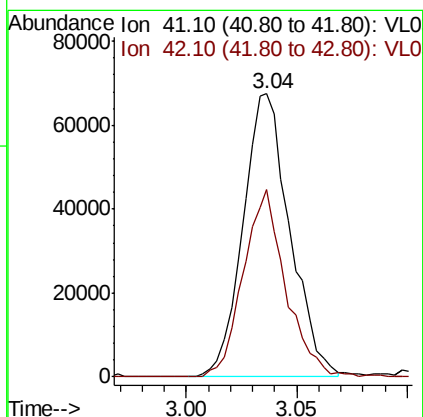
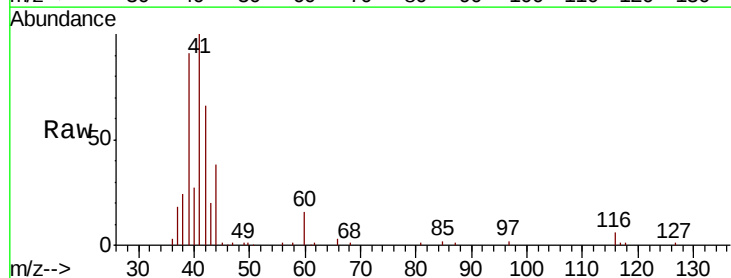
RT: 3.04 min Scan# 31

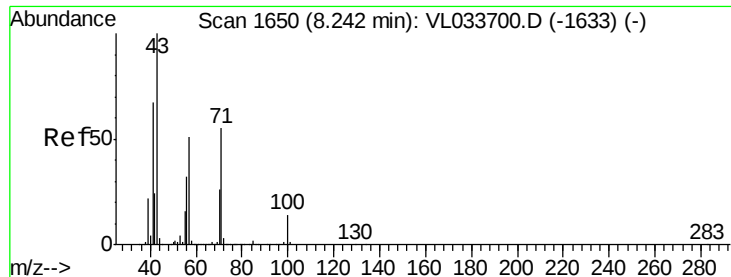
Delta R.T. 0.00 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 41    | Resp: | 99474 |
| Ion Ratio | Lower | Upper |       |
| 41        | 100   |       |       |
| 42        | 60.4  | 56.1  | 84.1  |





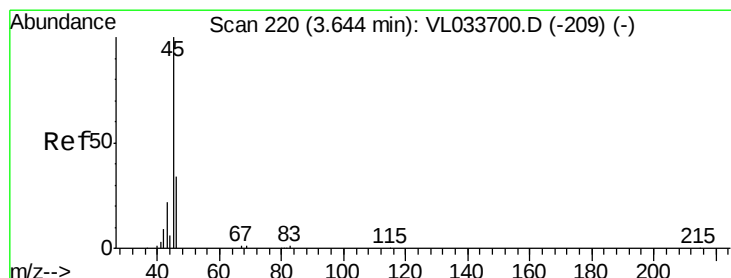
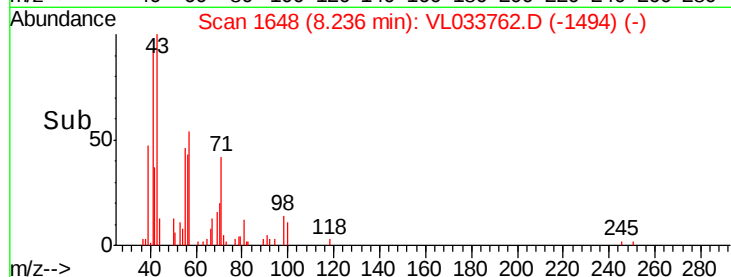
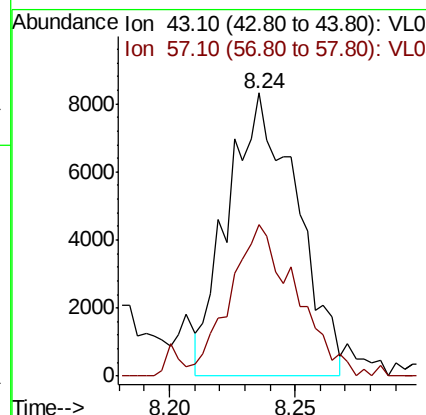
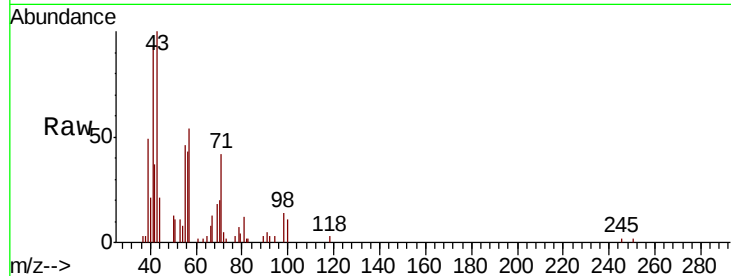
#10  
Heptane  
Concen: 0.130 ppbv m  
RT: 8.24 min Scan# 1648  
Delta R.T. -0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3004-25DL

Tot Ion: 43 Resp: 15929  
Ion Ratio Lower Upper  
43 100  
57 0.0 41.4 62.0#

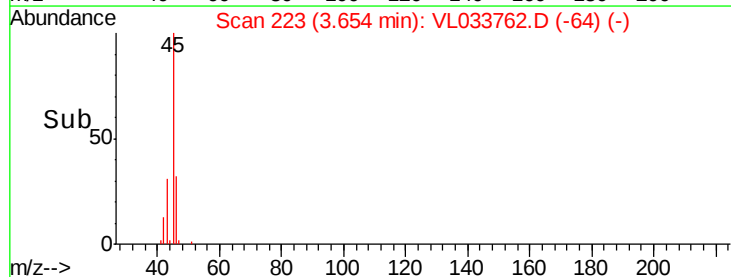
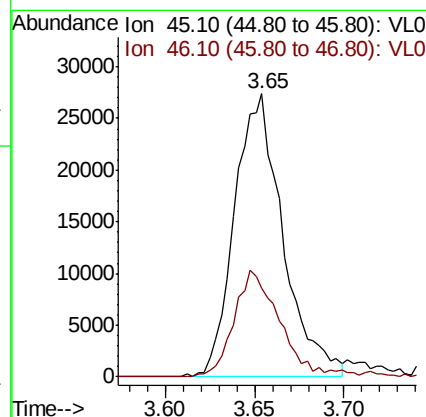
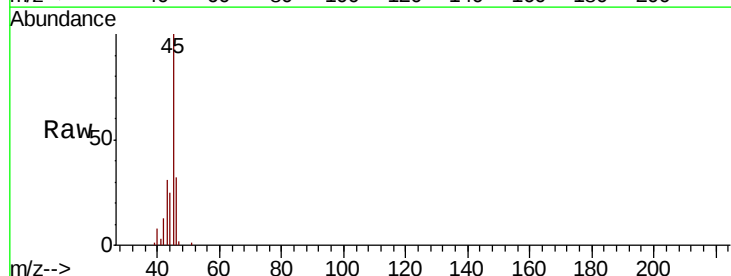
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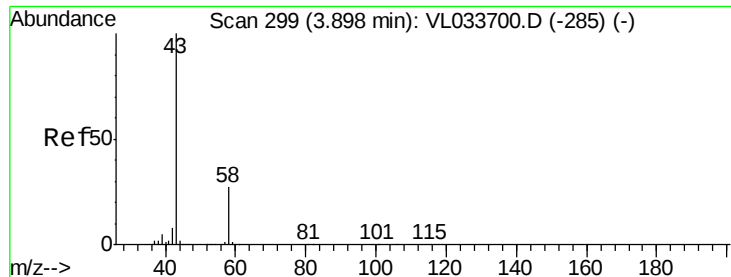
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#13  
Ethanol  
Concen: 3.679 ppbv  
RT: 3.65 min Scan# 223  
Delta R.T. 0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Tgt Ion: 45 Resp: 51530  
Ion Ratio Lower Upper  
45 100  
46 36.7 14.8 59.0





#15

Acetone

Concen: 5.375 ppbv

RT: 3.90 min Scan# 299

Delta R.T. 0.00 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

Instrument :

MSVOA\_L

ClientSampleId :

BPS1-SG-3004-25DL

Tot Ion: 43 Resp: 663252

Ion Ratio Lower Upper

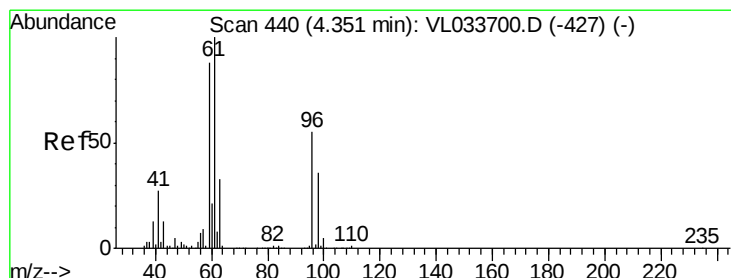
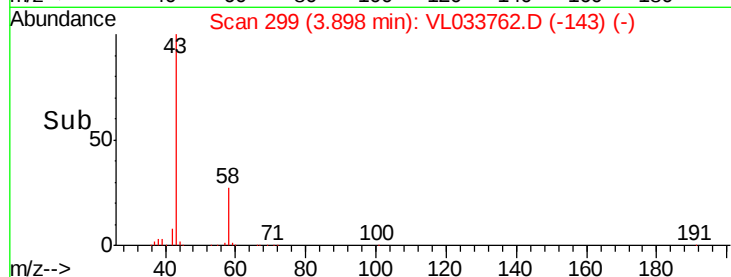
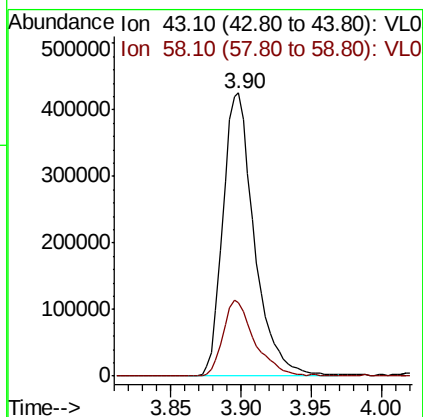
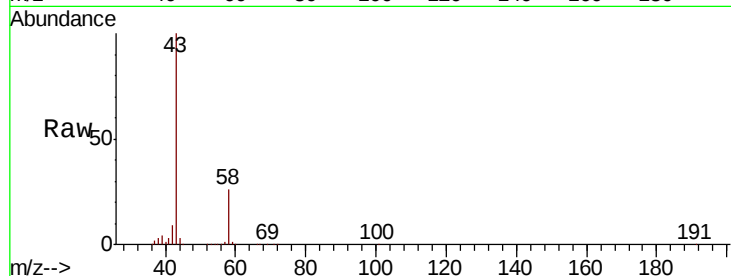
43 100

58 27.4 21.3 31.9

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#17

tert-Butyl alcohol

Concen: 0.225 ppbv

RT: 4.36 min Scan# 444

Delta R.T. 0.01 min

Lab File: VL033762.D

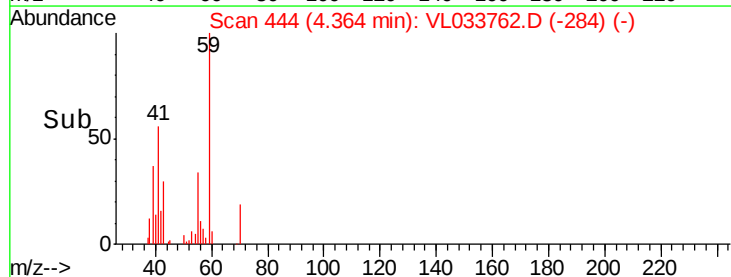
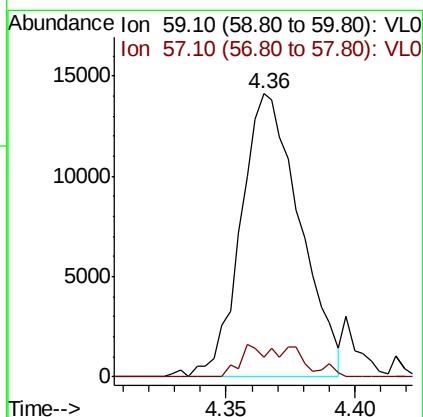
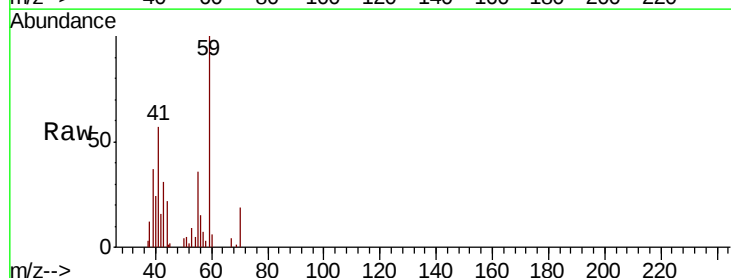
Acq: 23 May 2019 2:34

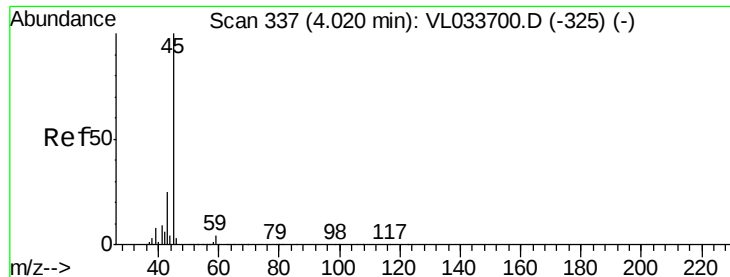
Tgt Ion: 59 Resp: 22484

Ion Ratio Lower Upper

59 100

57 10.8 8.4 12.6





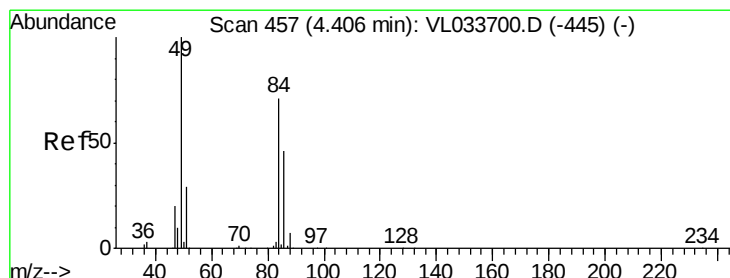
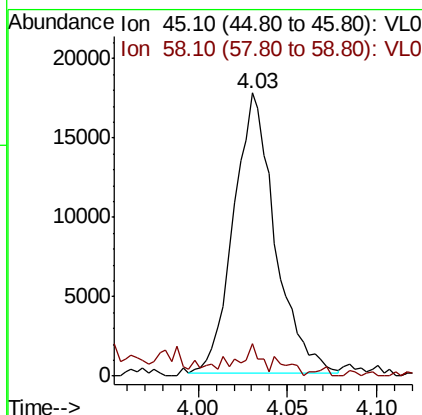
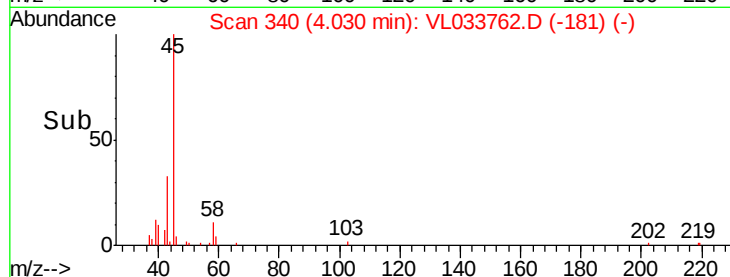
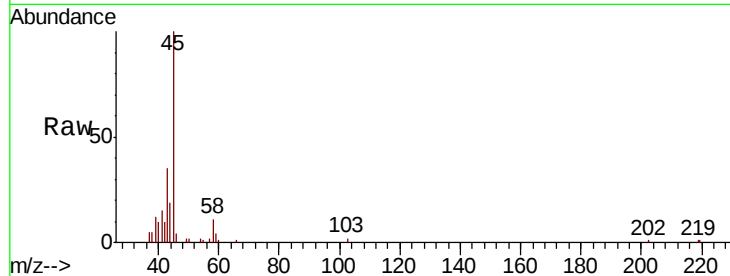
#19  
Isopropyl Alcohol  
Concen: 0.359 ppbv  
RT: 4.03 min Scan# 340  
Delta R.T. 0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3004-25DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 58      | 0.0   | 1.6   | 2.4#  |

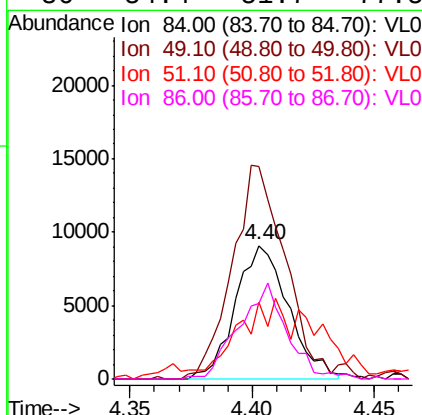
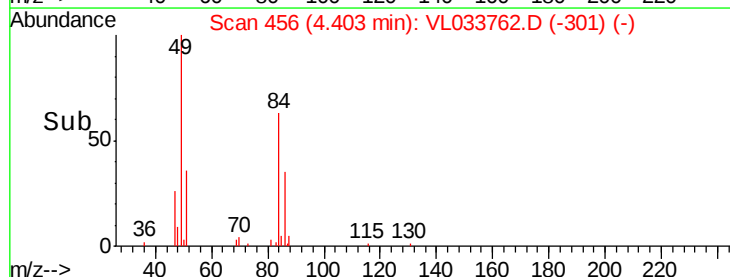
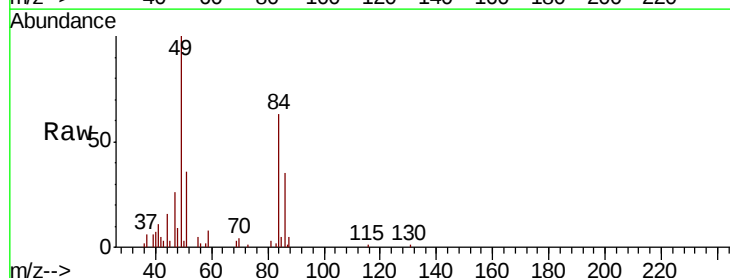
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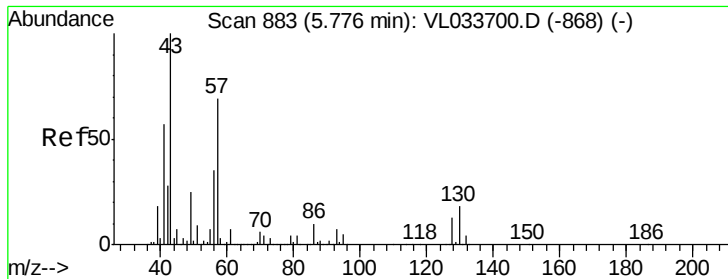
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#20  
Methylene Chloride  
Concen: 0.289 ppbv  
RT: 4.40 min Scan# 456  
Delta R.T. -0.00 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 49      | 154.6 | 112.8 | 169.2 |
| 51      | 51.4  | 33.4  | 50.0# |
| 86      | 54.4  | 51.7  | 77.5  |





#26

Hexane

Concen: 0.263 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.00 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

Instrument :

MSVOA\_L

ClientSampleId :

BPS1-SG-3004-25DL

Tot Ion: 57 Resp: 24508

Ion Ratio Lower Upper

57 100

41 123.4 69.8 104.6#

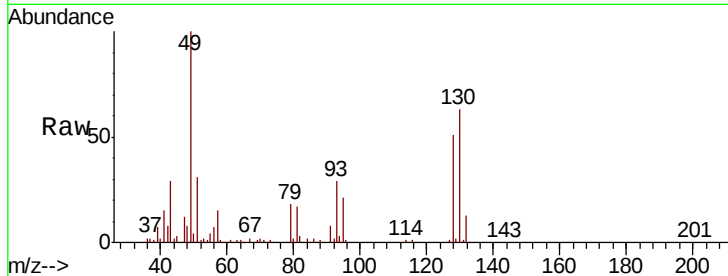
43 258.2 181.8 272.6

56 64.5 42.1 63.1#

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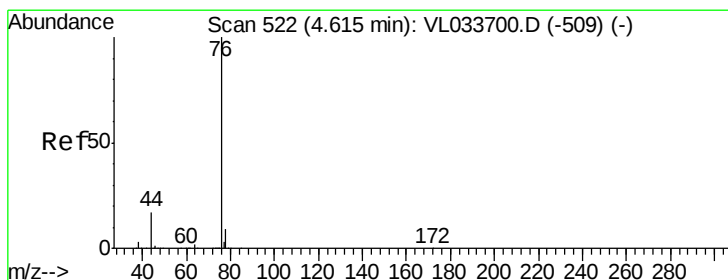
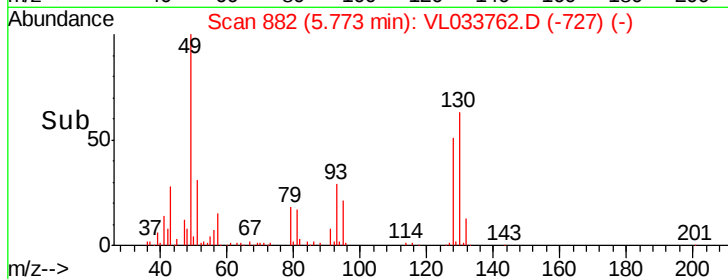
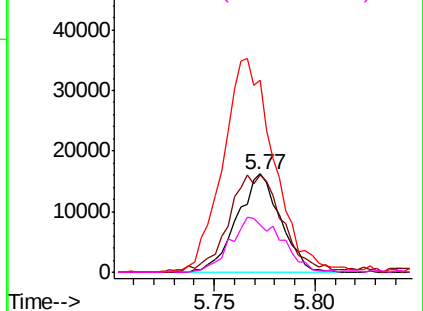


Abundance Ion 57.10 (56.80 to 57.80): VL0

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: 0.147 ppbv m

RT: 4.62 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

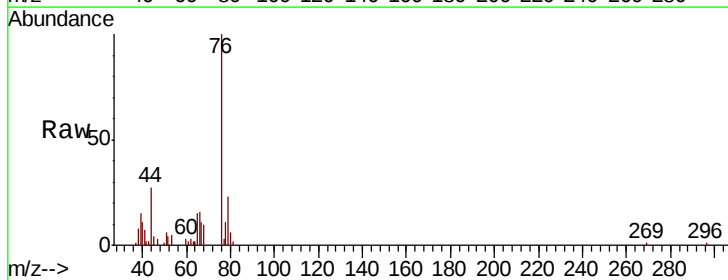
Tgt Ion: 76 Resp: 18844

Ion Ratio Lower Upper

76 100

44 22.7 13.8 20.8#

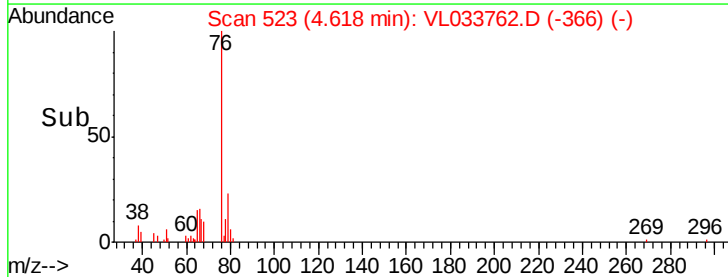
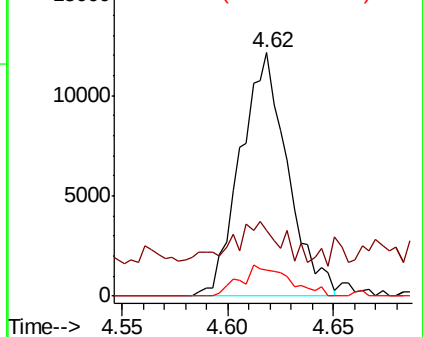
78 13.3 7.4 11.0#

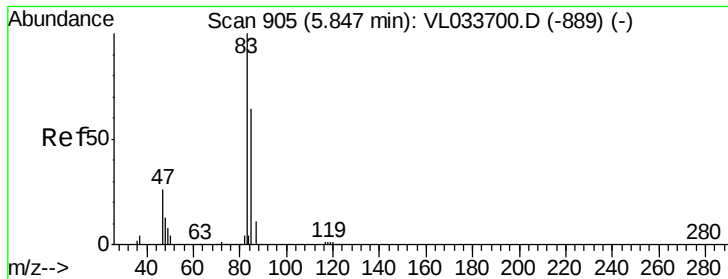


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





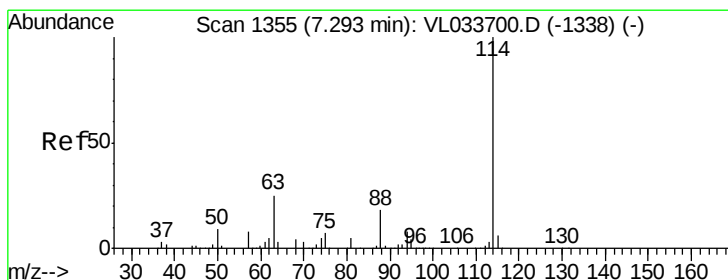
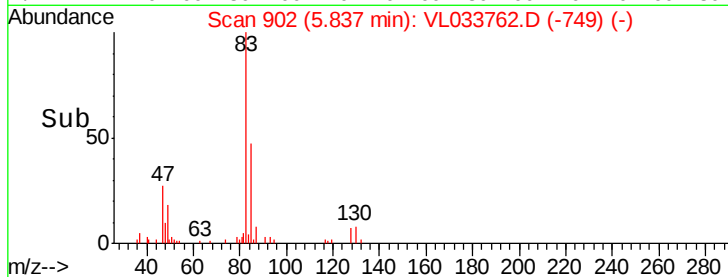
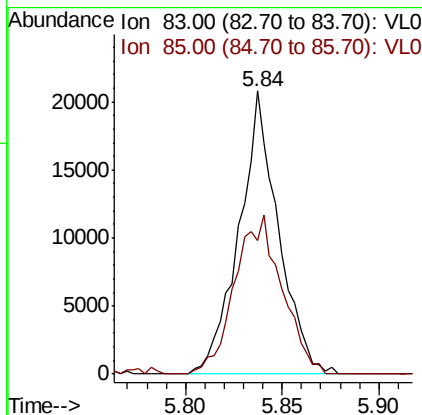
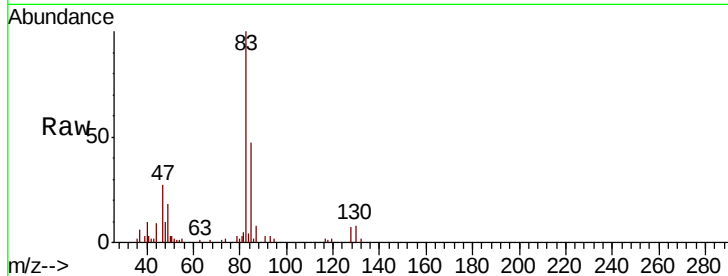
#29  
Chloroform  
Concen: 0.172 ppbv  
RT: 5.84 min Scan# 902  
Delta R.T. -0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3004-25DL

Tot Ion: 83 Resp: 29483  
Ion Ratio Lower Upper  
83 100  
85 48.8 51.5 77.3#

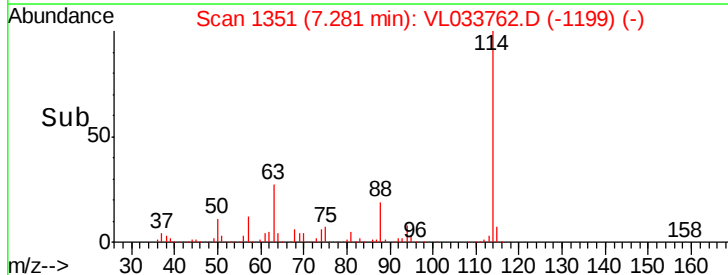
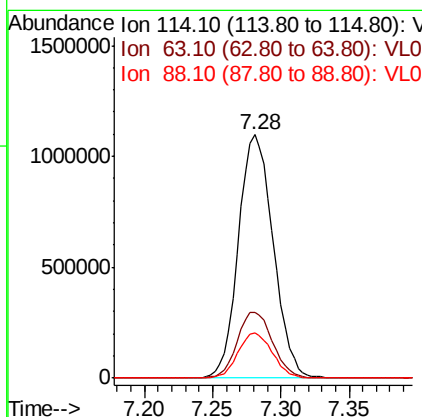
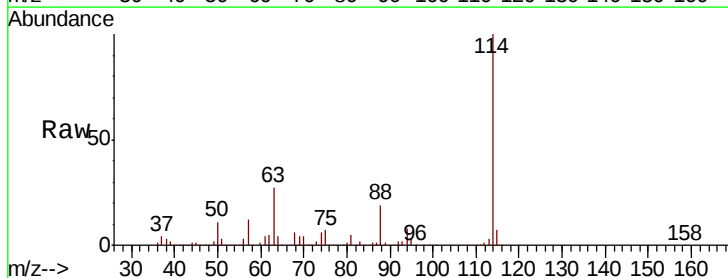
Manual Integrations  
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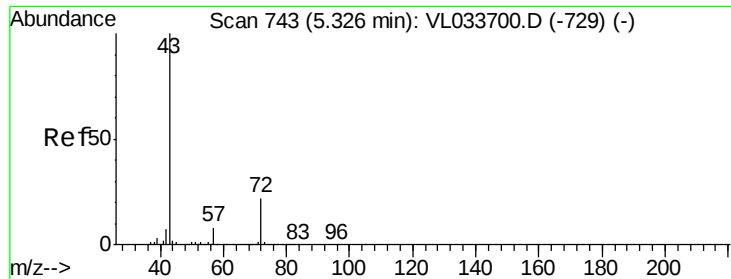
MMDadoda  
5/28/2019 2:51:24 AM



#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.28 min Scan# 1351  
Delta R.T. -0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Tgt Ion: 114 Resp: 1947624  
Ion Ratio Lower Upper  
114 100  
63 27.4 20.9 31.3  
88 18.4 14.3 21.5





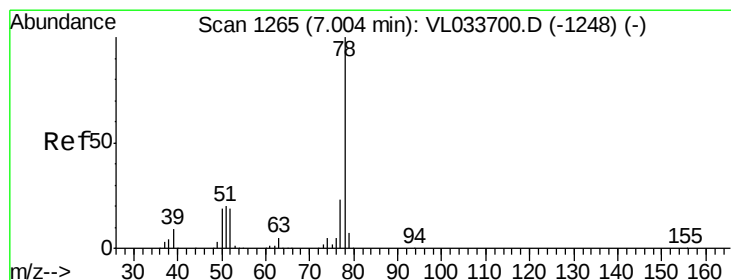
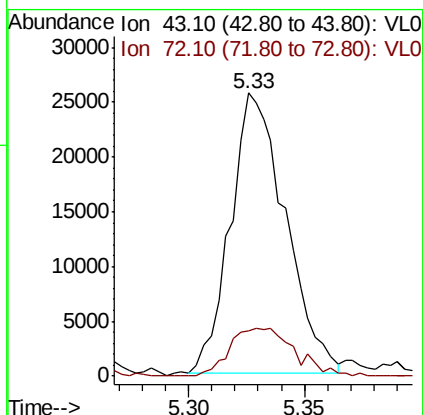
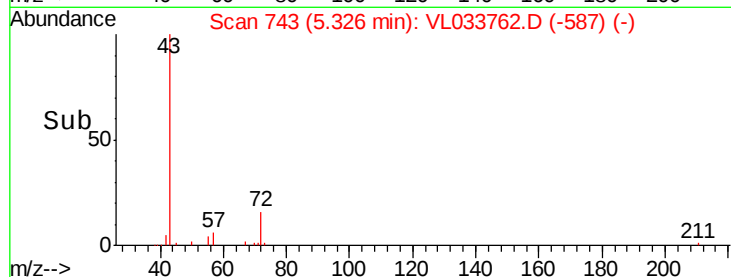
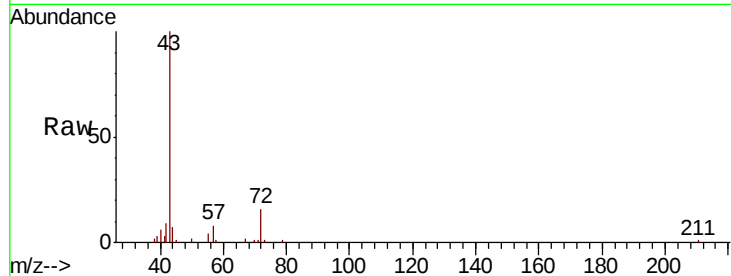
#34  
2-Butanone  
Concen: 0.349 ppbv  
RT: 5.33 min Scan# 743  
Delta R.T. 0.00 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3004-25DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 20.3  | 17.8  | 26.6  |

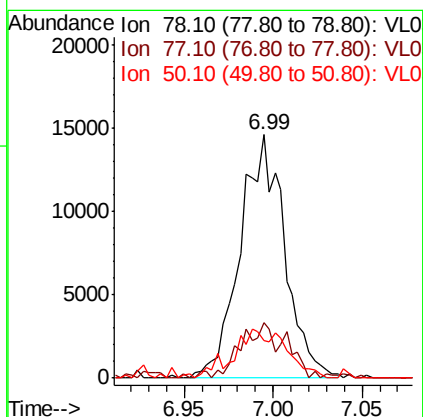
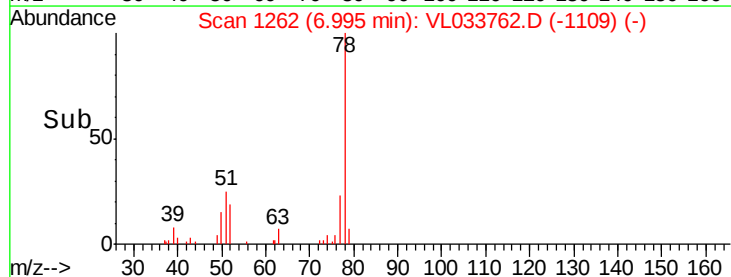
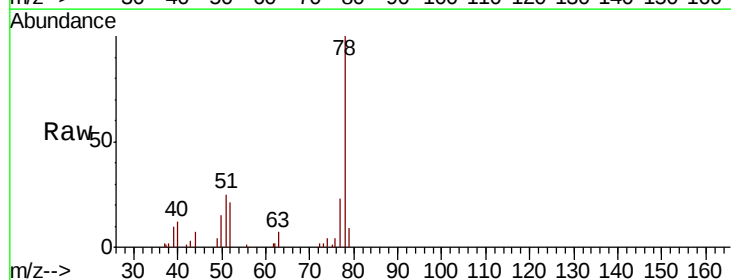
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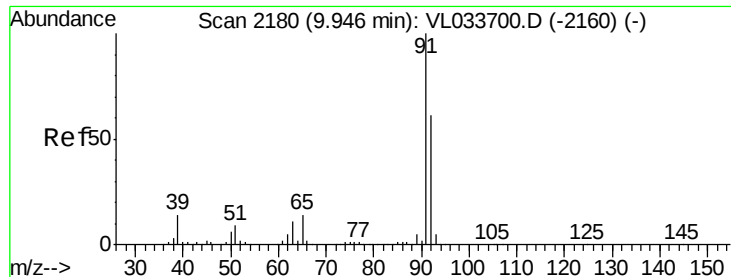
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#36  
Benzene  
Concen: 0.142 ppbv m  
RT: 6.99 min Scan# 1262  
Delta R.T. -0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 22.5  | 18.4  | 27.6  |
| 50      | 15.2  | 15.5  | 23.3# |





#53

Toluene

Concen: 2.173 ppbv

RT: 9.93 min Scan# 2176

Delta R.T. -0.01 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

Instrument :

MSVOA\_L

ClientSampleId :

BPS1-SG-3004-25DL

Tot Ion: 91 Resp: 415305

Ion Ratio Lower Upper

91 100

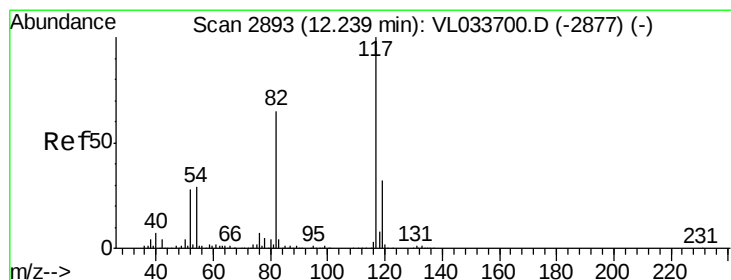
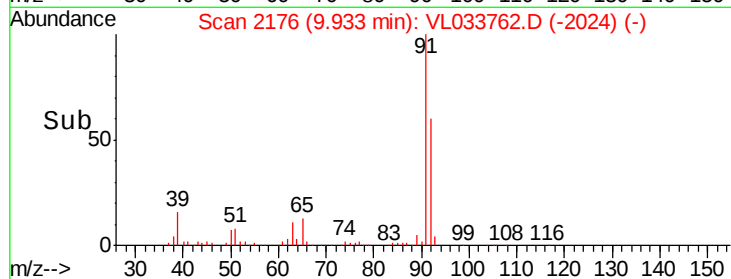
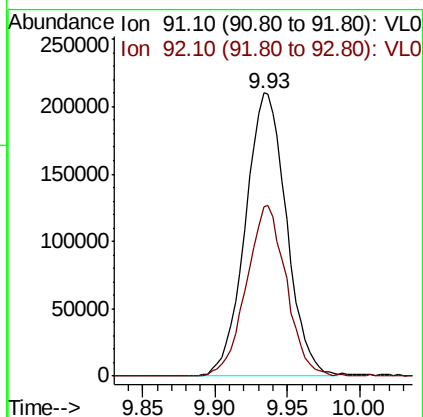
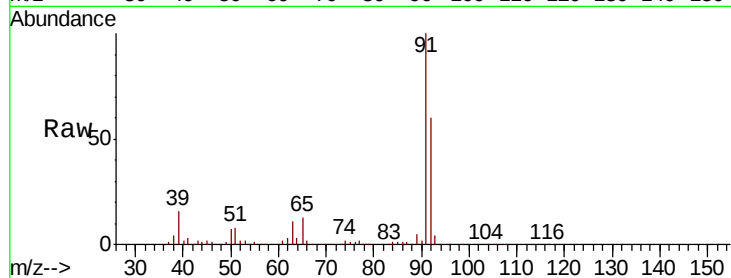
92 58.9 47.6 71.4

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.23 min Scan# 2889

Delta R.T. -0.01 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

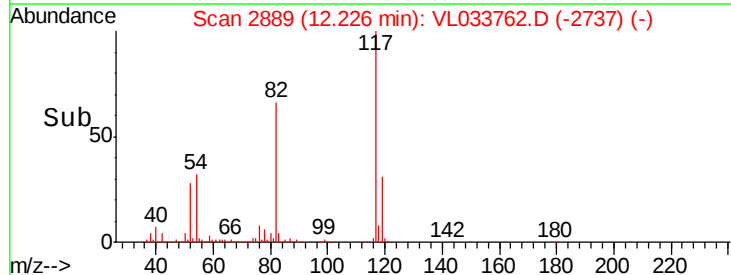
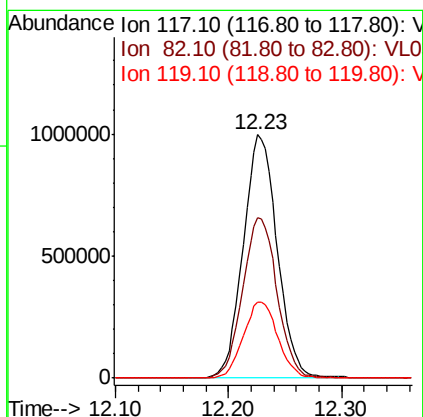
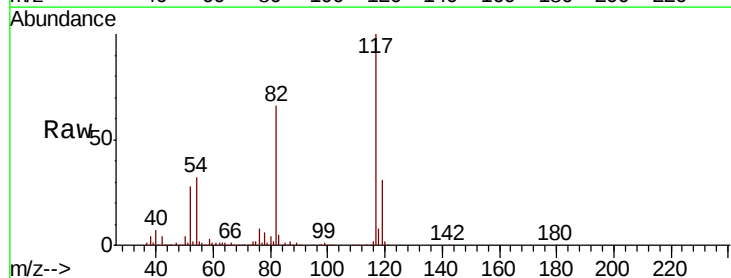
Tgt Ion: 117 Resp: 2081595

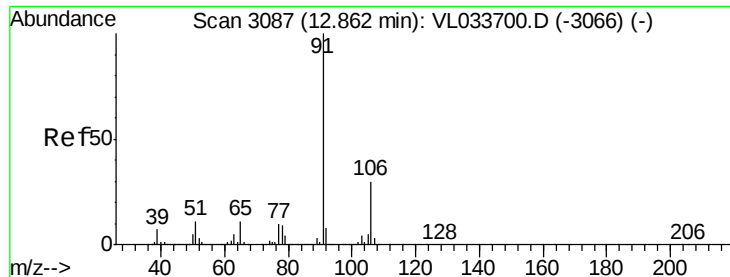
Ion Ratio Lower Upper

117 100

82 67.3 49.4 74.0

119 31.9 24.9 37.3





#58

Ethyl Benzene

Concen: 0.199 ppbv

RT: 12.86 min Scan# 3085

Delta R.T. -0.01 min

Lab File: VL033762.D

Acq: 23 May 2019 2:34

Instrument :

MSVOA\_L

ClientSampleId :

BPS1-SG-3004-25DL

Tot Ion: 91 Resp: 54953

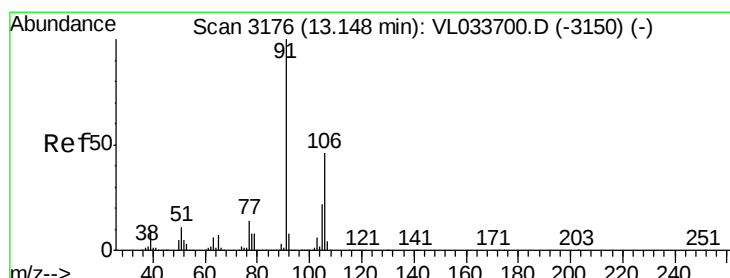
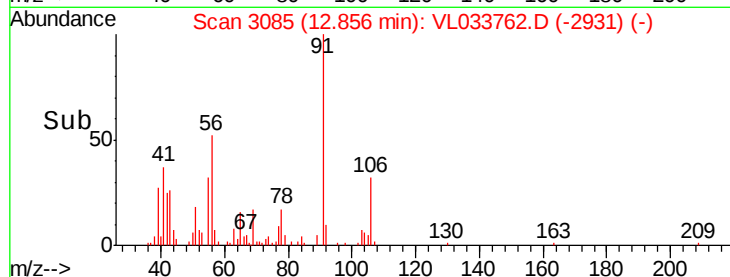
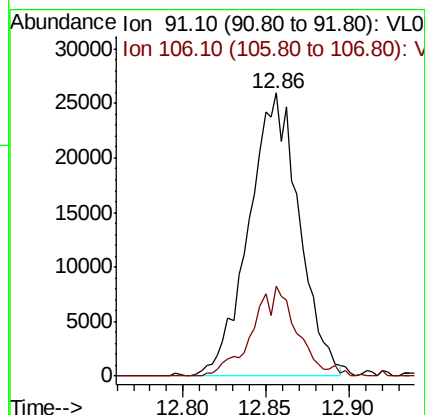
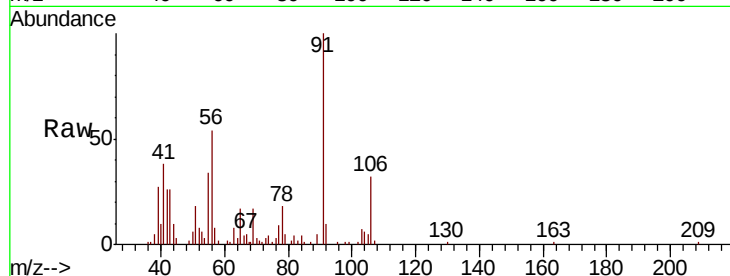
Ion Ratio Lower Upper

91 100

106 31.9 23.9 35.9

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#59

m/p-Xylene

Concen: 0.892 ppbv m

RT: 13.11 min Scan# 3165

Delta R.T. -0.04 min

Lab File: VL033762.D

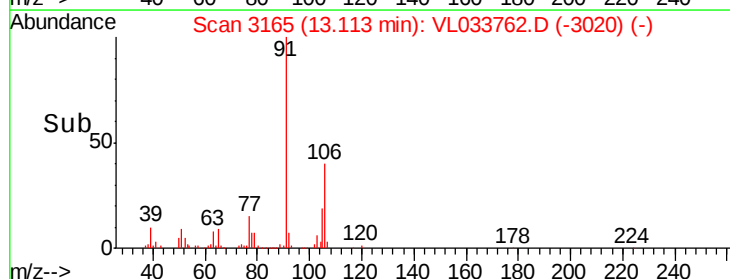
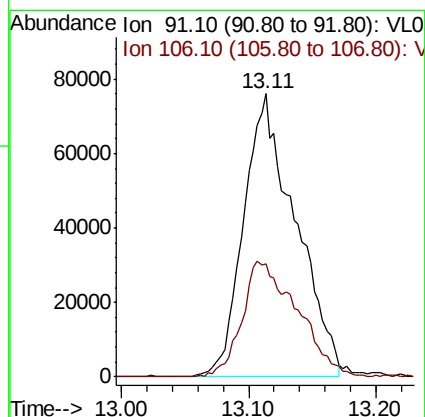
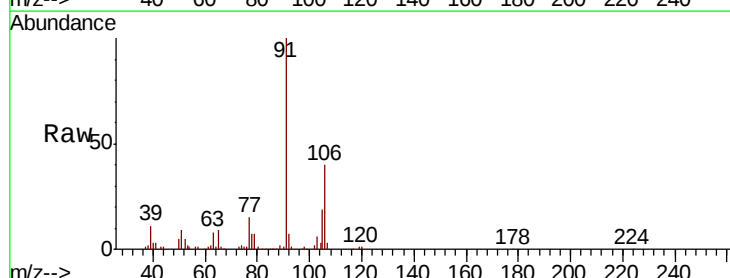
Acq: 23 May 2019 2:34

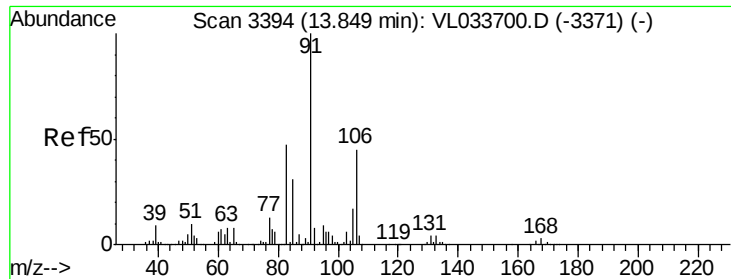
Tgt Ion: 91 Resp: 215053

Ion Ratio Lower Upper

91 100

106 43.7 35.8 53.6





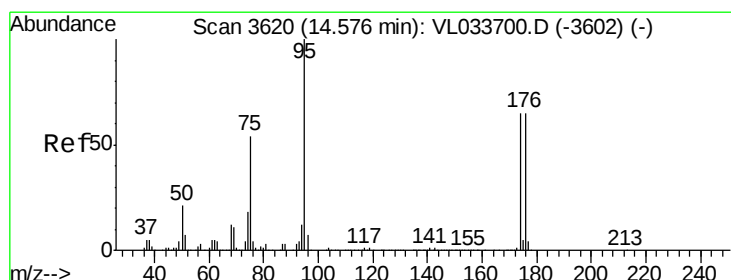
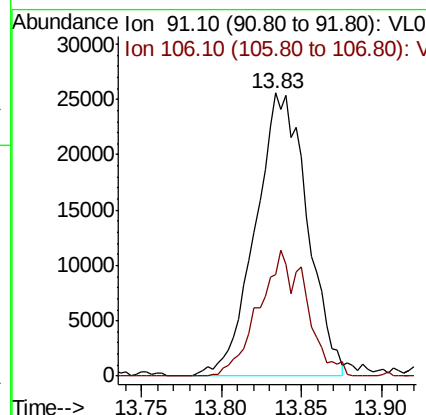
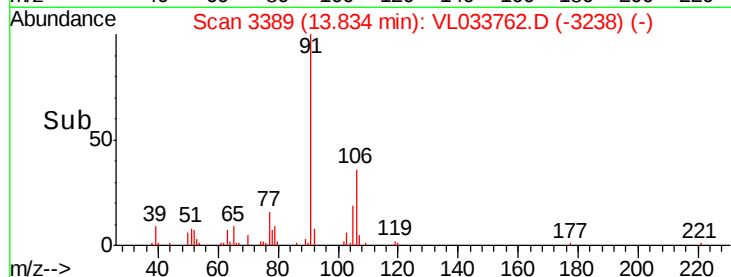
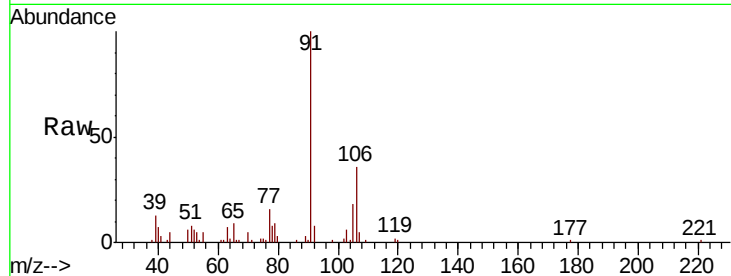
#60  
o-Xylene  
Concen: 0.236 ppbv  
RT: 13.83 min Scan# 3389  
Delta R.T. -0.02 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Instrument :  
MSVOA\_L  
ClientSampleId :  
BPS1-SG-3004-25DL

Tot Ion: 91 Resp: 57220  
Ion Ratio Lower Upper  
91 100  
106 40.6 21.6 64.8

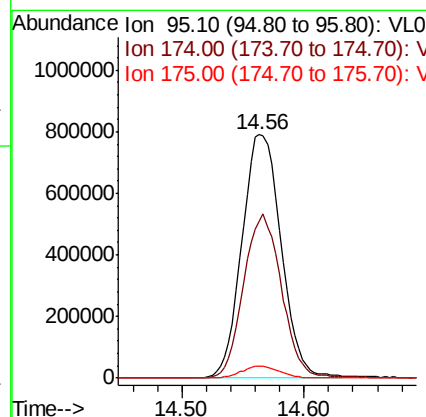
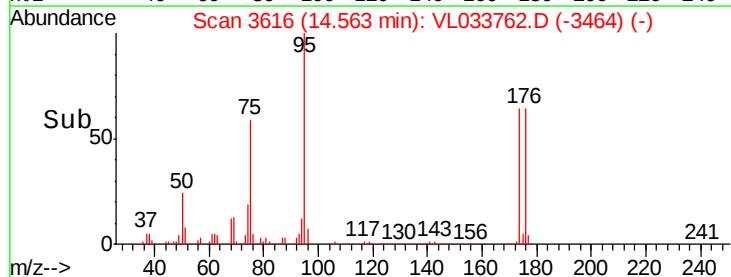
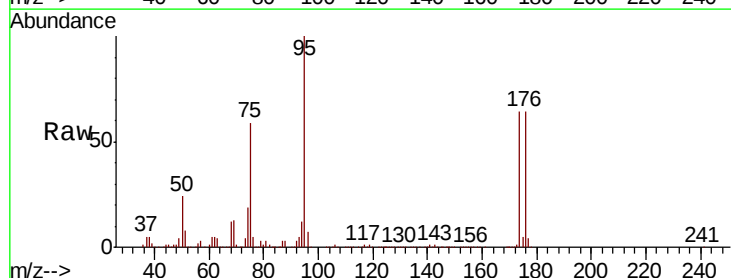
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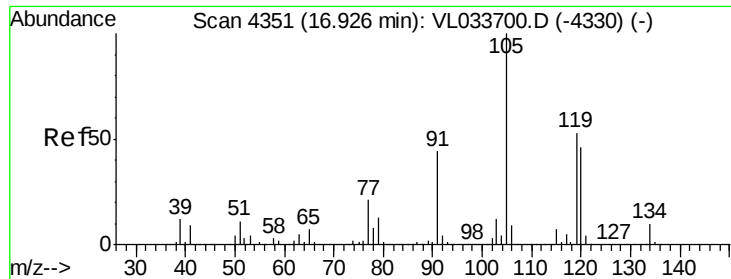
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#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.413 ppbv  
RT: 14.56 min Scan# 3616  
Delta R.T. -0.01 min  
Lab File: VL033762.D  
Acq: 23 May 2019 2:34

Tgt Ion: 95 Resp: 1757255  
Ion Ratio Lower Upper  
95 100  
174 65.6 53.9 80.9  
175 4.8 3.8 5.8





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.184 ppbv  
 RT: 16.91 min Scan# 4347  
 Delta R.T. -0.01 min  
 Lab File: VL033762.D  
 Acq: 23 May 2019 2:34

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 BPS1-SG-3004-25DL

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 105     | 100   |            |       |
| 120     | 37.2  | 36.8       | 55.2  |
| 91      | 12.3  | 35.4       | 53.0# |
| 77      | 14.0  | 16.8       | 25.2# |

Manual Integrations  
 APPROVED

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