

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX072019\  
 Data File : VX011016.D  
 Acq On : 19 Jul 2019 20:31  
 Operator : JC/SP  
 Sample : K3884-02DL 20X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 FL-0609DL

Manual Integrations  
 APPROVED

MMDadoda  
 7/22/2019 5:24:14 PM

Quant Time: Jul 20 03:45:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 17 06:57:45 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene       | 5.66  | 168  | 211636   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene     | 6.85  | 114  | 335933   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5        | 10.11 | 117  | 318909   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 12.08 | 152  | 160785   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 114042   | 50.65   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 101.30% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 100442   | 47.11   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 94.22%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 400679   | 50.10   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 100.20% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 153178   | 52.11   | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =       | 104.22% |          |
| Target Compounds            |       |      |          |         |         |          |
|                             |       |      |          |         | Qvalue  |          |
| 31) Cyclohexane             | 5.57  | 56   | 40315    | 13.188  | ug/l    | 99       |
| 39) Methylcyclohexane       | 7.46  | 83   | 30606    | 8.553   | ug/l    | 98       |
| 40) Benzene                 | 6.13  | 78   | 3694     | 0.437   | ug/l #  | 90       |
| 52) Toluene                 | 8.78  | 92   | 21391    | 3.852   | ug/l    | 98       |
| 67) Ethyl Benzene           | 10.25 | 91   | 523031   | 46.912  | ug/l    | 100      |
| 68) m/p-Xylenes             | 10.35 | 106  | 638413   | 149.277 | ug/l    | 100      |
| 69) o-Xylene                | 10.69 | 106  | 159997   | 38.333  | ug/l    | 100      |
| 73) Isopropylbenzene        | 11.02 | 105  | 42615    | 3.923   | ug/l    | 100      |
| 78) n-propylbenzene         | 11.36 | 91   | 61890    | 5.156   | ug/l    | 99       |
| 80) 1,3,5-Trimethylbenzene  | 11.51 | 105  | 114088   | 12.567  | ug/l    | 100      |
| 84) 1,2,4-Trimethylbenzene  | 11.80 | 105  | 322704   | 35.269  | ug/l    | 99       |
| 85) sec-Butylbenzene        | 11.94 | 105  | 6782m    | 0.649   | ug/l    |          |
| 86) p-Isopropyltoluene      | 12.06 | 119  | 5934     | 0.614   | ug/l    | 91       |
| 89) n-Butylbenzene          | 12.38 | 91   | 9776     | 1.183   | ug/l #  | 25       |
| 95) Naphthalene             | 13.83 | 128  | 159655   | 15.478  | ug/l    | 99       |

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

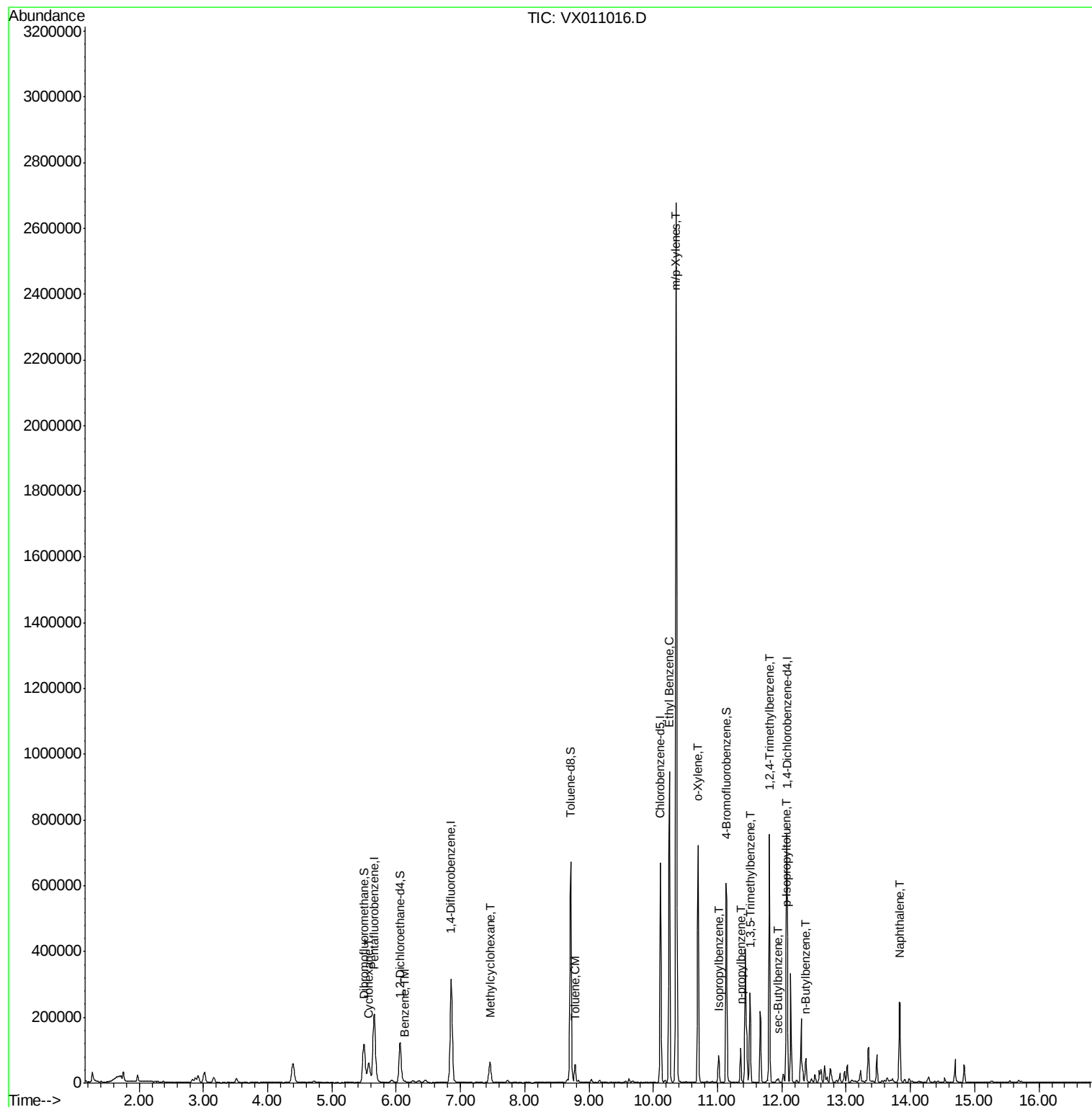
Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX072019\  
Data File : VX011016.D  
Acq On : 19 Jul 2019 20:31  
Operator : JC/SP  
Sample : K3884-02DL 20X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 27 Sample Multiplier: 1

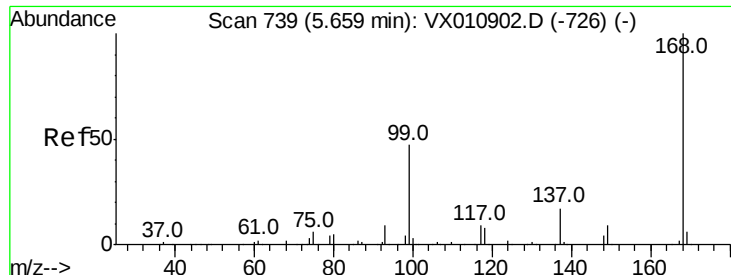
Instrument :  
MSVOA\_X  
ClientSampleId :  
FL-0609DL

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Quant Time: Jul 20 03:45:11 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 17 06:57:45 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

Instrument :

MSVOA\_X

ClientSampleId :

FL-0609DL

Tot Ion:168 Resp: 211636

Ion Ratio Lower Upper

168 100

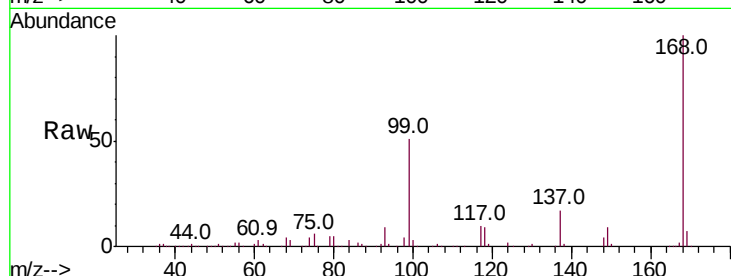
99 50.7 37.6 56.4

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

80000

60000

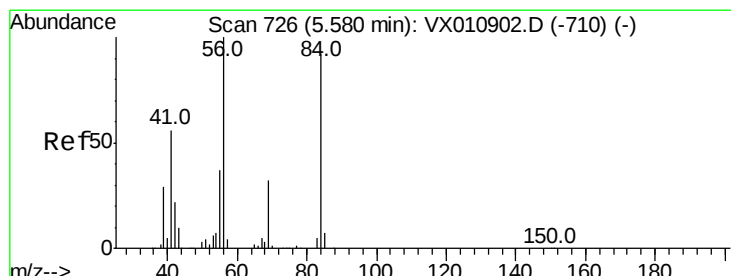
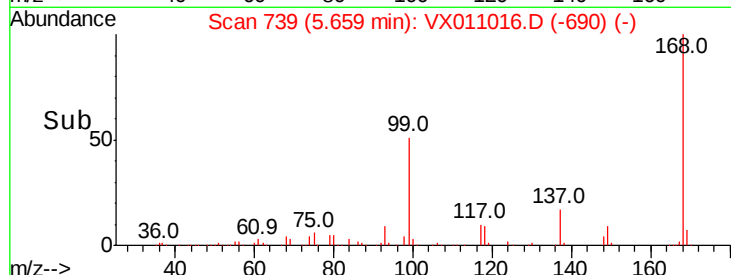
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#31

Cyclohexane

Concen: 13.188 ug/l

RT: 5.57 min Scan# 724

Delta R.T. -0.01 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

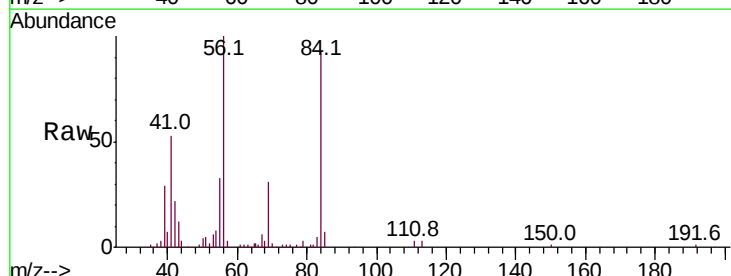
Tgt Ion: 56 Resp: 40315

Ion Ratio Lower Upper

56 100

69 30.5 25.8 38.8

84 92.6 73.8 110.6



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

5.57

15000

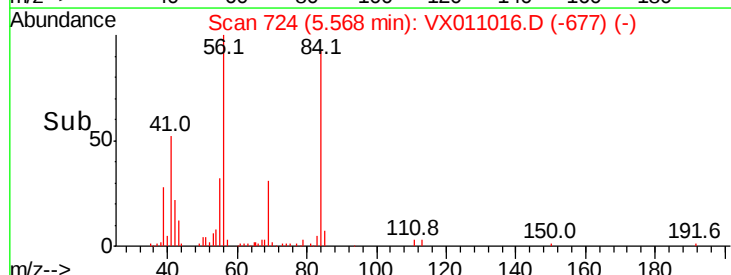
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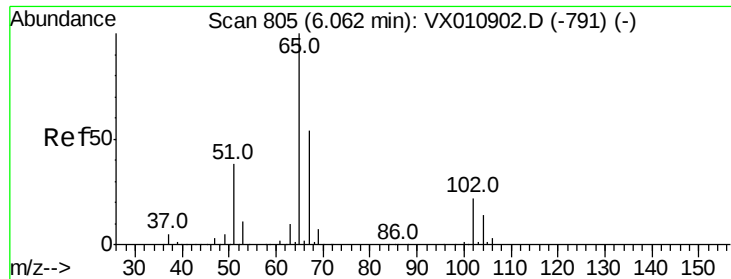
5000

0

Time-->

5.50 5.60





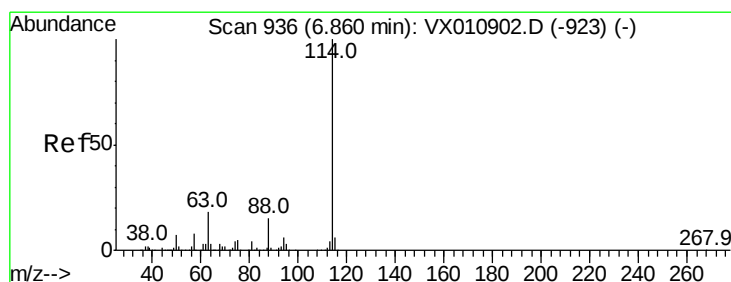
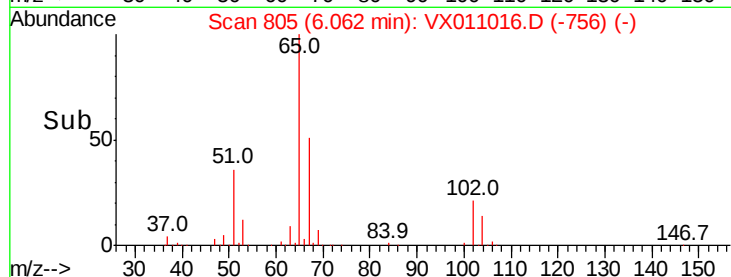
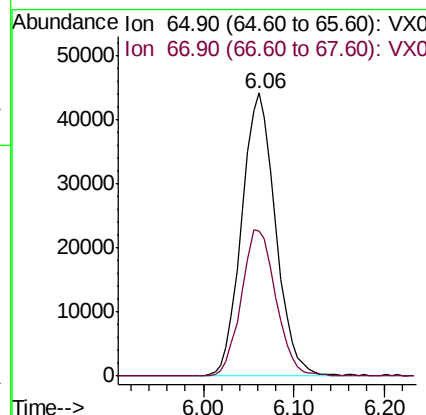
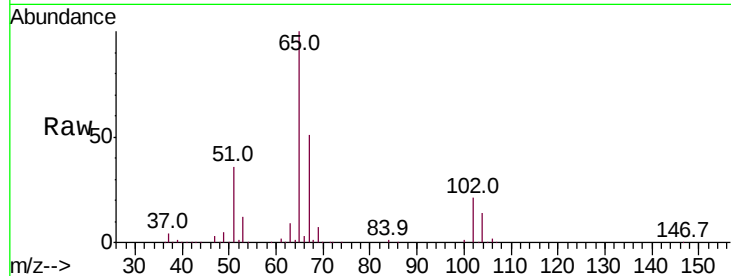
#33  
 1,2-Dichloroethane-d4  
 Concen: 50.652 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. -0.00 min  
 Lab File: VX011016.D  
 Acq: 19 Jul 2019 20:31

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 FL-0609DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 65      | 100   |       |       |
| 67      | 53.1  | 0.0   | 107.8 |

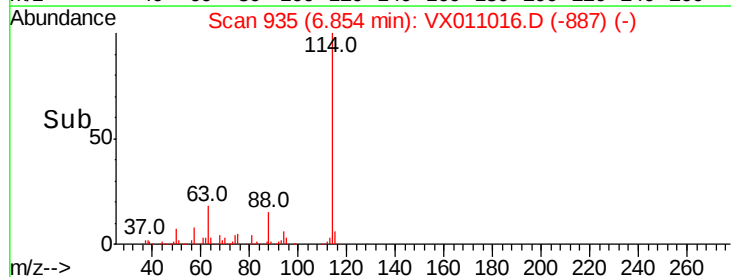
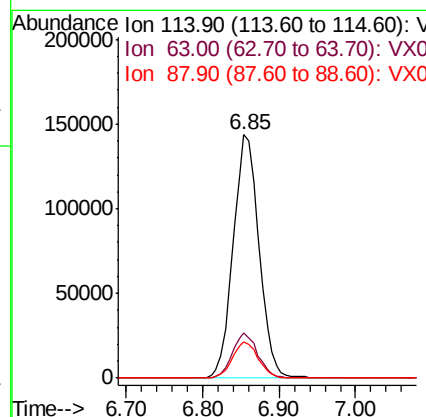
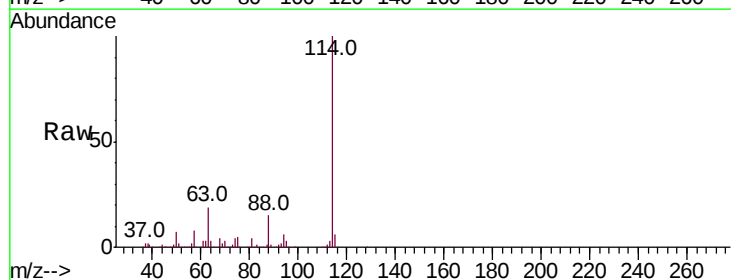
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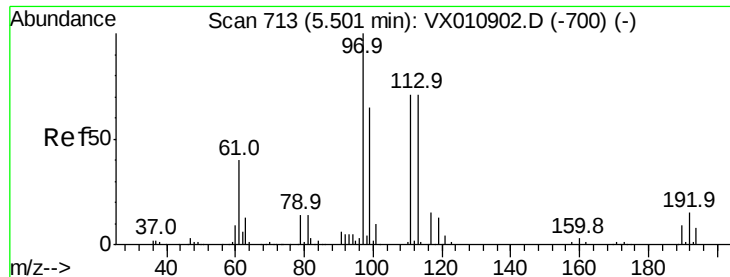
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#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 935  
 Delta R.T. -0.01 min  
 Lab File: VX011016.D  
 Acq: 19 Jul 2019 20:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 18.5  | 0.0   | 35.6  |
| 88      | 14.7  | 0.0   | 29.8  |





#35

Dibromofluoromethane

Concen: 47.106 ug/l

RT: 5.49 min Scan# 712

Delta R.T. -0.01 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

Instrument :

MSVOA\_X

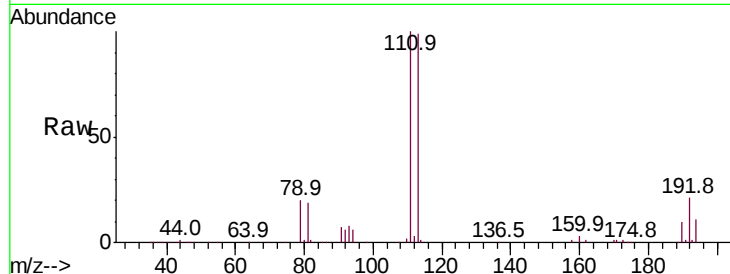
ClientSampleId :

FL-0609DL

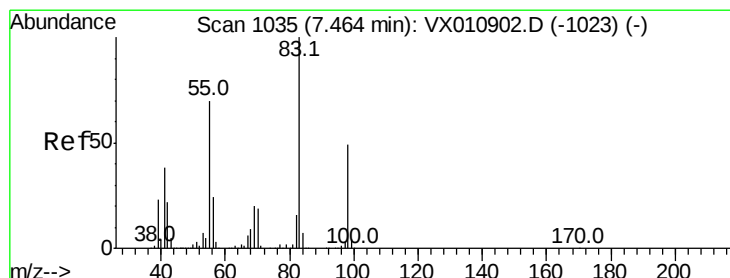
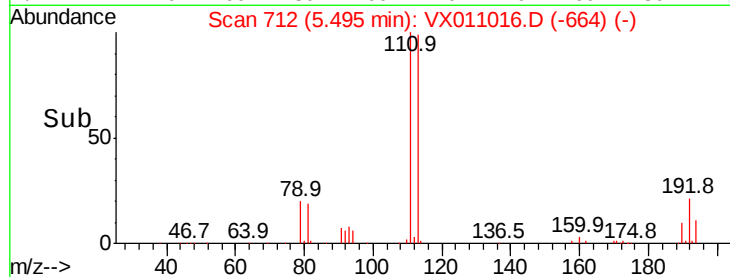
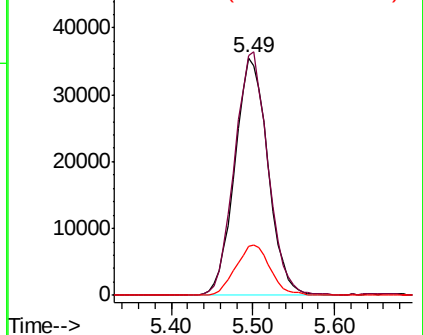
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 113   | Resp: | 100442 |
| Ion Ratio | Lower | Upper |        |
| 113       | 100   |       |        |
| 111       | 102.9 | 82.3  | 123.5  |
| 192       | 22.0  | 17.4  | 26.2   |

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Abundance Ion 112.80 (112.50 to 113.50): V  
Ion 110.80 (110.50 to 111.50): V  
Ion 191.70 (191.40 to 192.40): V



#39

Methylcyclohexane

Concen: 8.553 ug/l

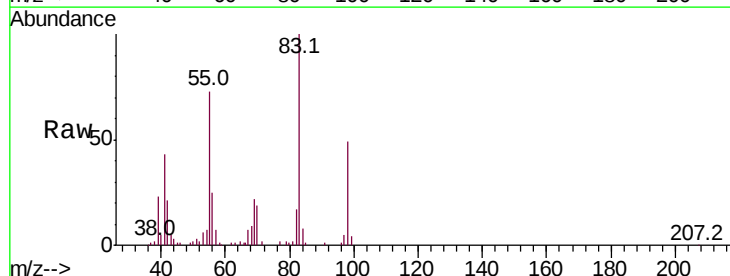
RT: 7.46 min Scan# 1034

Delta R.T. -0.01 min

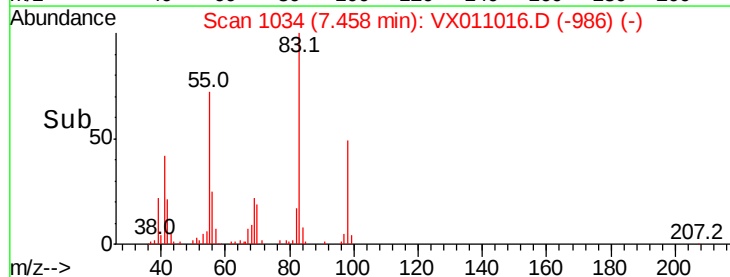
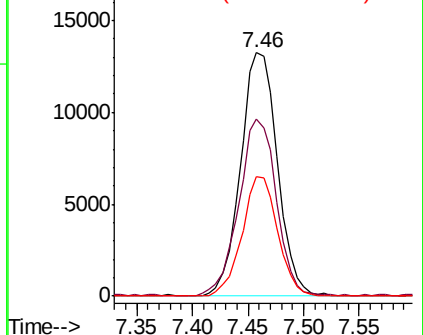
Lab File: VX011016.D

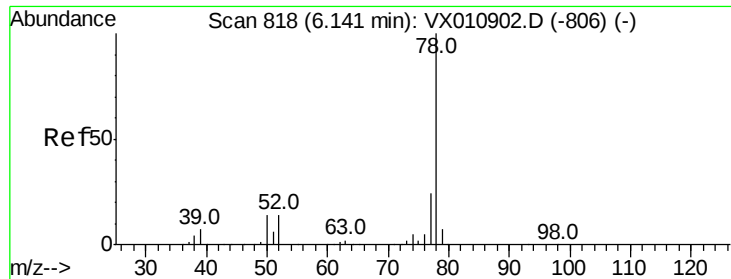
Acq: 19 Jul 2019 20:31

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 30606 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 55        | 72.7  | 56.2  | 84.4  |
| 98        | 49.1  | 39.0  | 58.4  |



Abundance Ion 83.00 (82.70 to 83.70): VX0  
Ion 55.00 (54.70 to 55.70): VX0  
Ion 98.00 (97.70 to 98.70): VX0





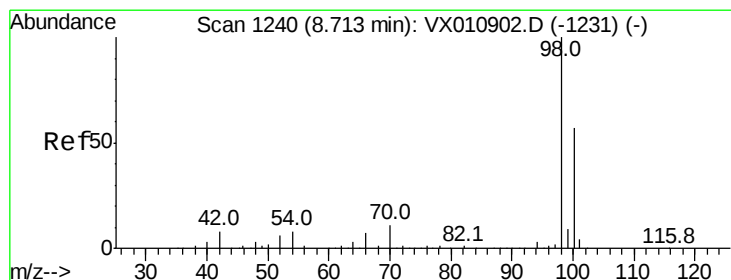
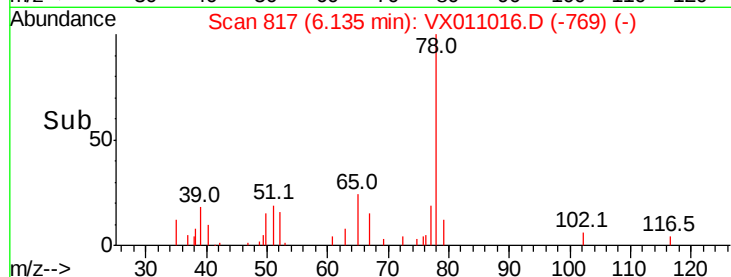
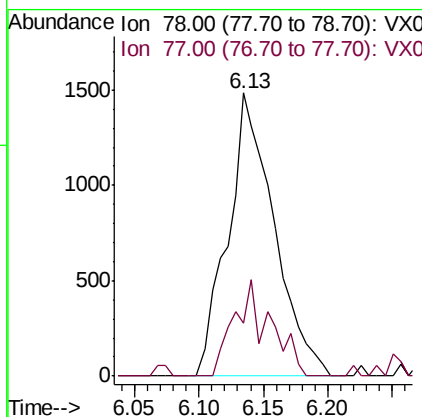
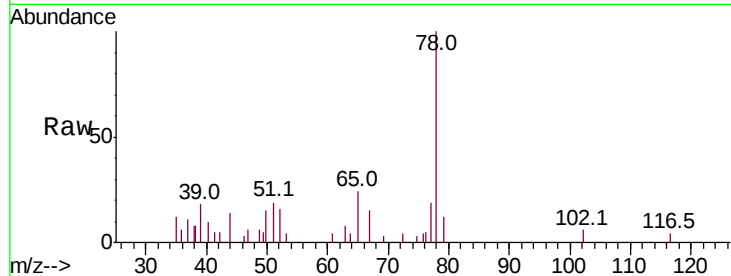
#40  
Benzene  
Concen: 0.437 ug/l  
RT: 6.13 min Scan# 817  
Delta R.T. -0.01 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Instrument :  
MSVOA\_X  
ClientSampleId :  
FL-0609DL

Tot Ion: 78 Resp: 3694  
Ion Ratio Lower Upper  
78 100  
77 18.7 19.0 28.6#

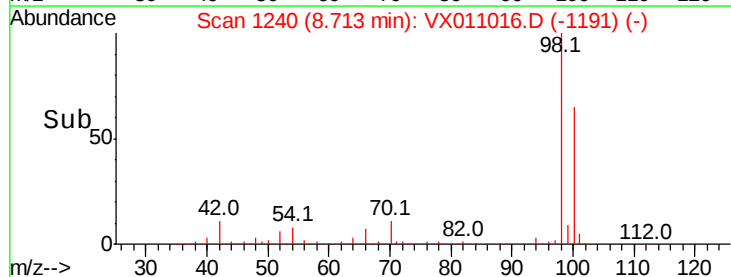
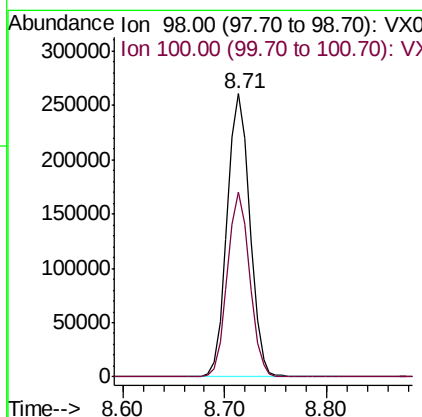
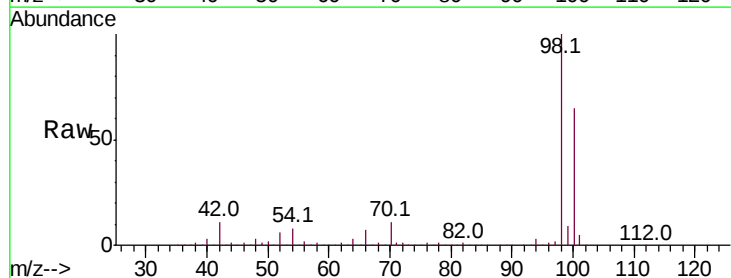
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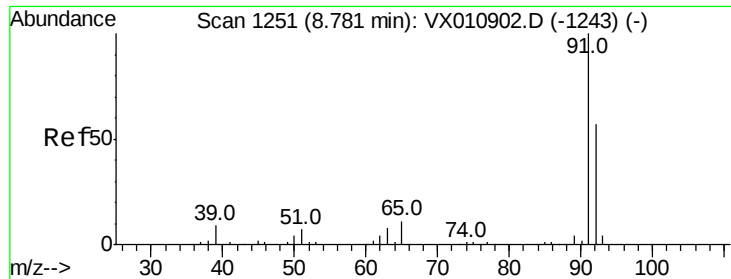
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#50  
Toluene-d8  
Concen: 50.102 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Tgt Ion: 98 Resp: 400679  
Ion Ratio Lower Upper  
98 100  
100 64.0 50.6 75.8





#52

Toluene

Concen: 3.852 ug/l

RT: 8.78 min Scan# 1251

Delta R.T. -0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

Instrument :

MSVOA\_X

ClientSampled :

FL-0609DL

Tot Ion: 92 Resp: 21391

Ion Ratio Lower Upper

92 100

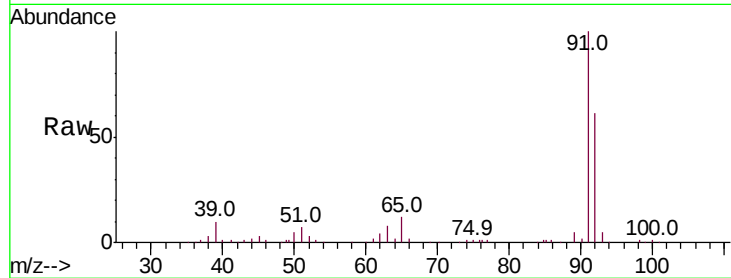
91 172.1 139.4 209.0

Manual Integrations

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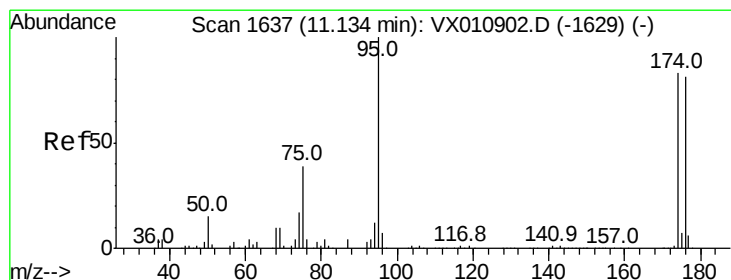
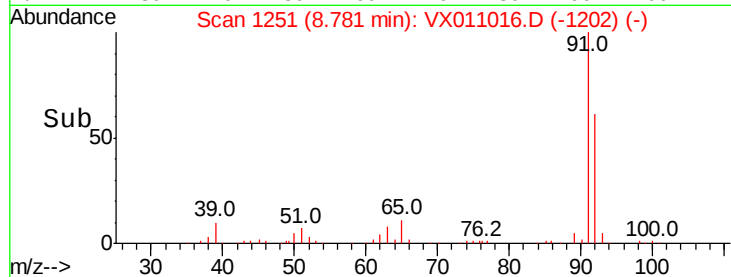
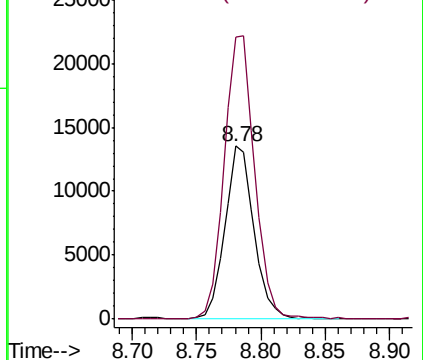
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Abundance Ion 92.00 (91.70 to 92.70): VX0

Ion 91.00 (90.70 to 91.70): VX0



#62

4-Bromofluorobenzene

Concen: 52.109 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

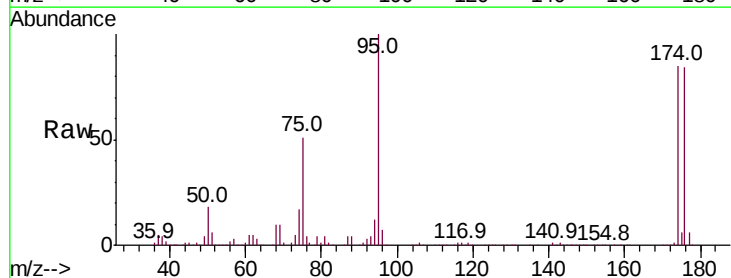
Tgt Ion: 95 Resp: 153178

Ion Ratio Lower Upper

95 100

174 90.1 0.0 180.6

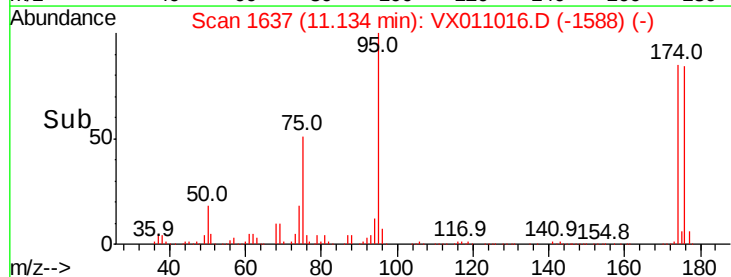
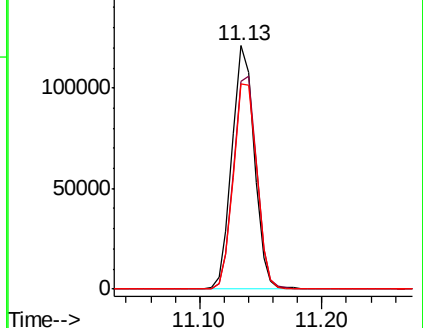
176 88.4 0.0 173.8

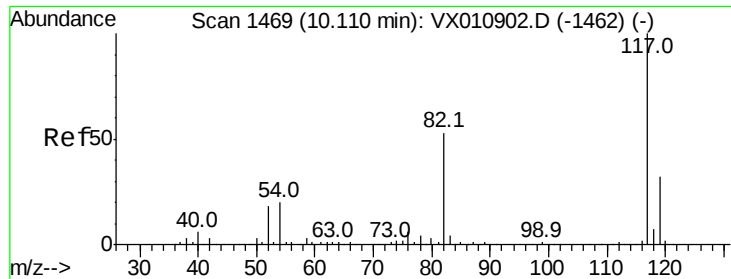


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

Instrument :

MSVOA\_X

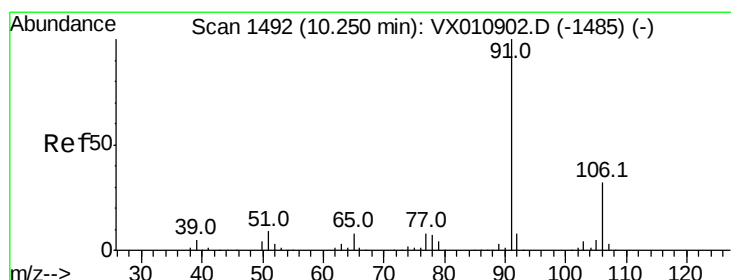
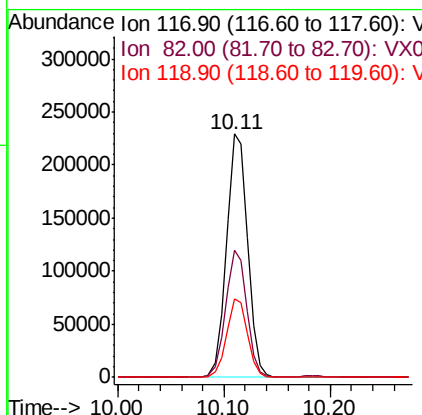
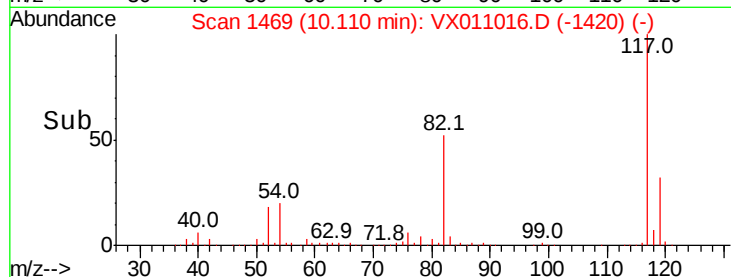
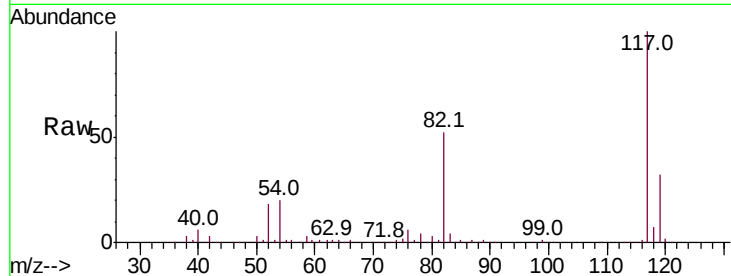
ClientSampleId :

FL-0609DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 117   | Resp: | 318909 |
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 52.3  | 42.6  | 63.8   |
| 119       | 32.4  | 25.9  | 38.9   |

Manual Integrations  
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7/22/2019 5:24:14 PM



#67

Ethyl Benzene

Concen: 46.912 ug/l

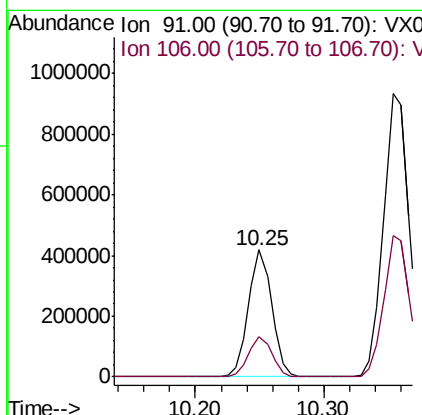
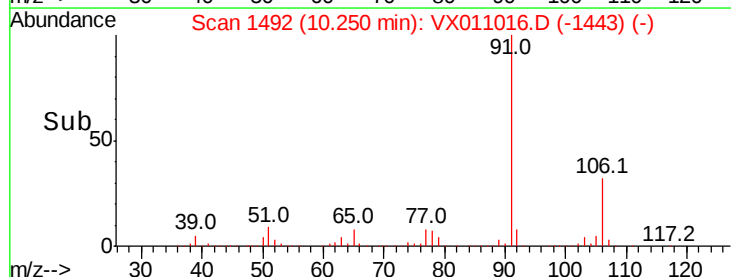
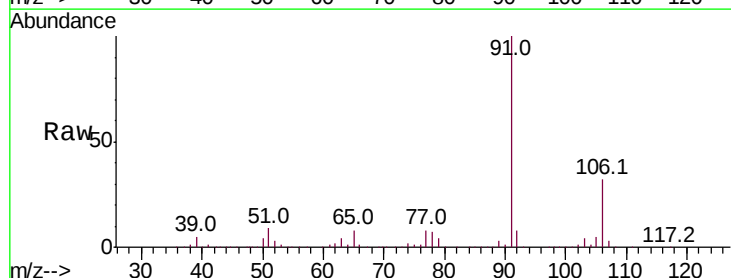
RT: 10.25 min Scan# 1492

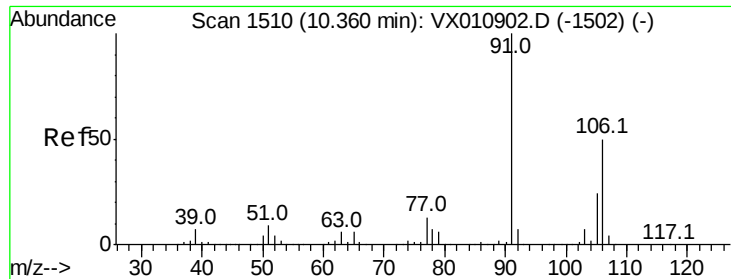
Delta R.T. -0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 91    | Resp: | 523031 |
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 106       | 31.8  | 25.4  | 38.2   |





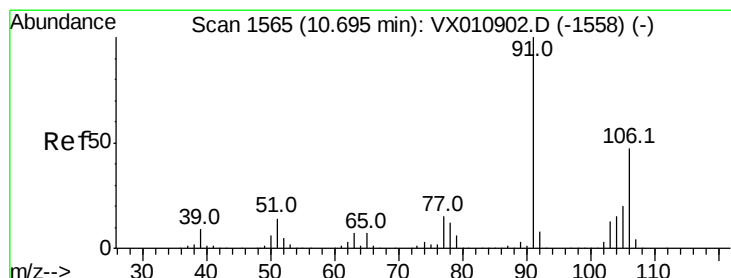
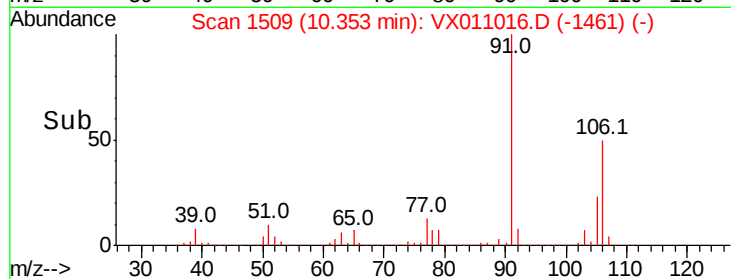
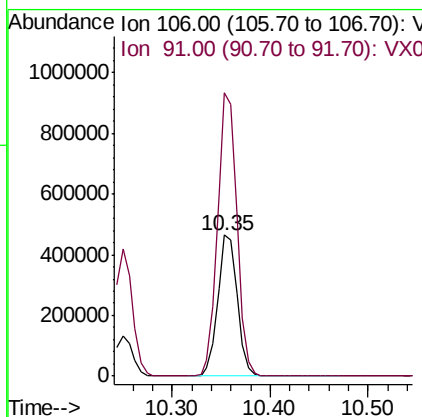
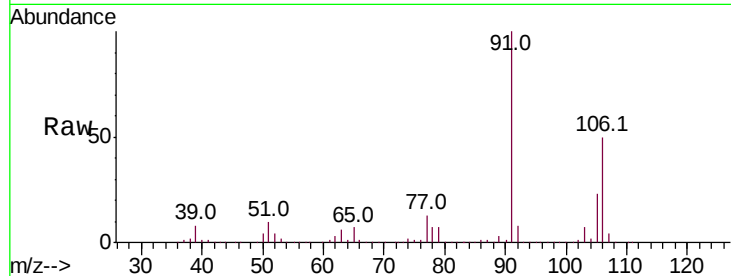
#68  
m/p-Xylenes  
Concen: 149.277 ug/l  
RT: 10.35 min Scan# 1509  
Delta R.T. -0.01 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Instrument :  
MSVOA\_X  
ClientSampled :  
FL-0609DL

Tot Ion:106 Resp: 638413  
Ion Ratio Lower Upper  
106 100  
91 200.5 160.1 240.1

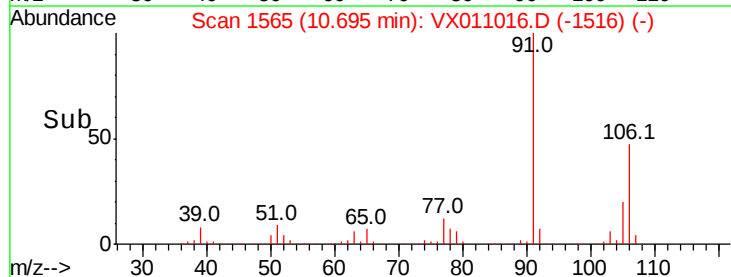
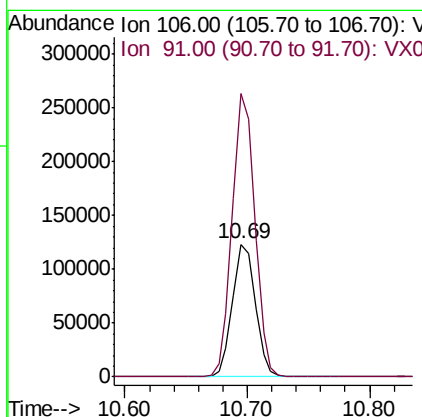
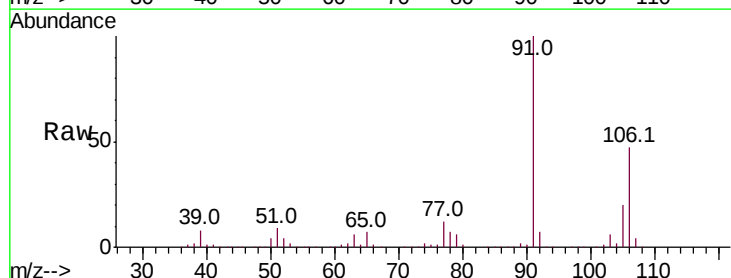
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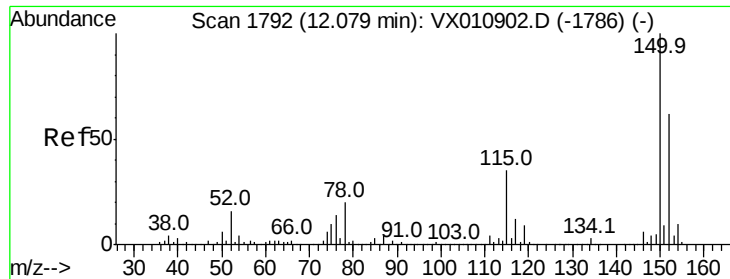
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7/22/2019 5:24:14 PM



#69  
o-Xylene  
Concen: 38.333 ug/l  
RT: 10.69 min Scan# 1565  
Delta R.T. 0.00 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Tgt Ion:106 Resp: 159997  
Ion Ratio Lower Upper  
106 100  
91 211.0 105.1 315.3





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

Instrument :

MSVOA\_X

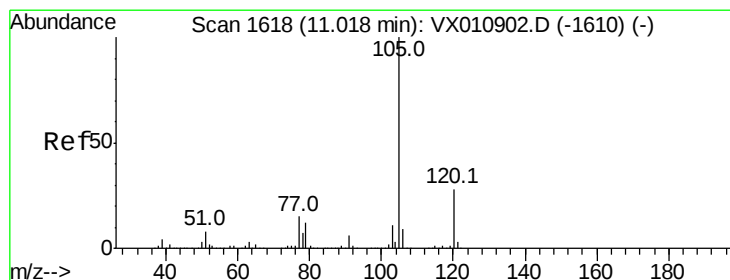
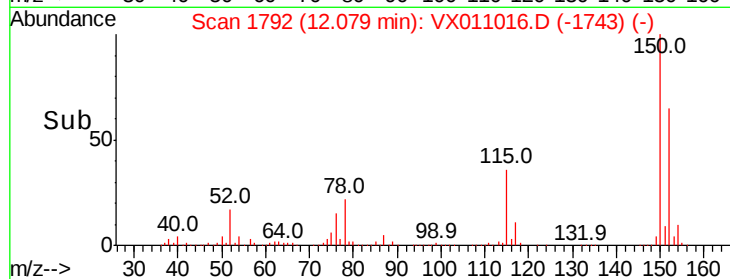
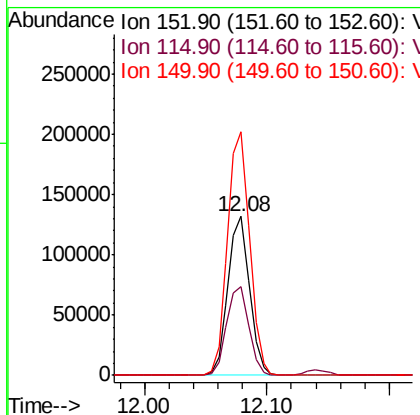
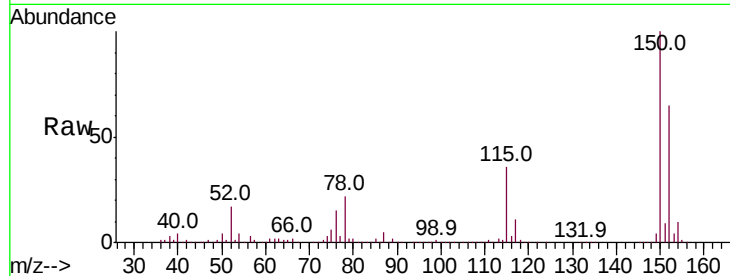
ClientSampled :

FL-0609DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 57.7  | 39.7  | 119.1 |
| 150     | 156.5 | 0.0   | 345.6 |

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7/22/2019 5:24:14 PM



#73

Isopropylbenzene

Concen: 3.923 ug/l

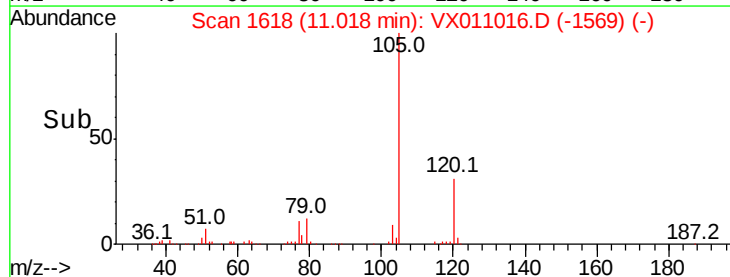
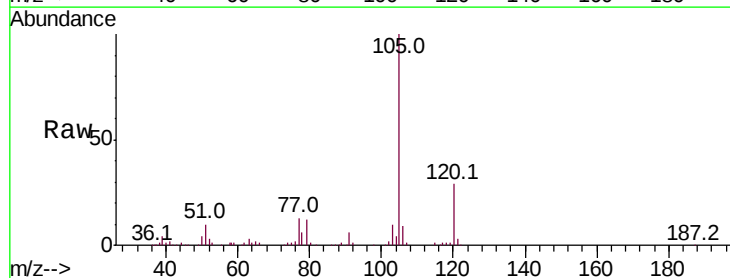
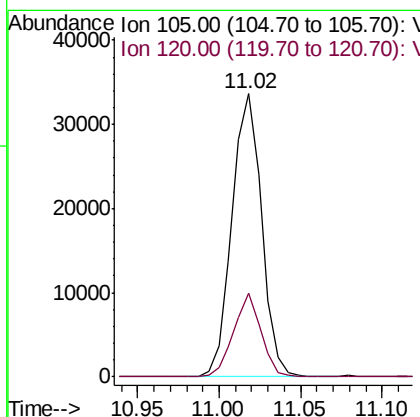
RT: 11.02 min Scan# 1618

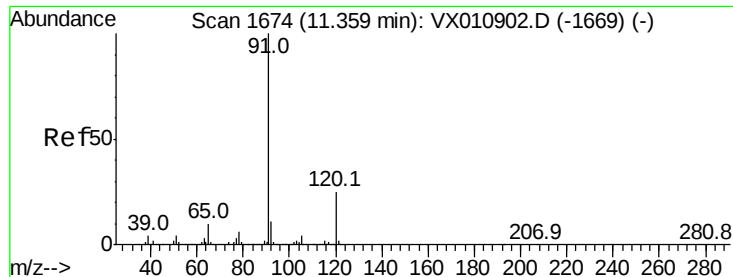
Delta R.T. 0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 27.3  | 13.7  | 41.1  |





#78

n-propylbenzene

Concen: 5.156 ug/l

RT: 11.36 min Scan# 1674

Delta R.T. 0.00 min

Lab File: VX011016.D

Acq: 19 Jul 2019 20:31

Instrument :

MSVOA\_X

ClientSampleId :

FL-0609DL

Tot Ion: 91 Resp: 61890

Ion Ratio Lower Upper

91 100

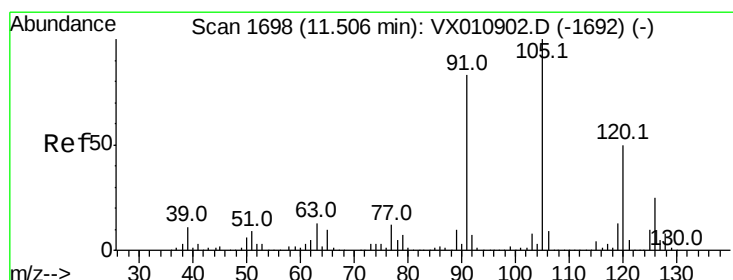
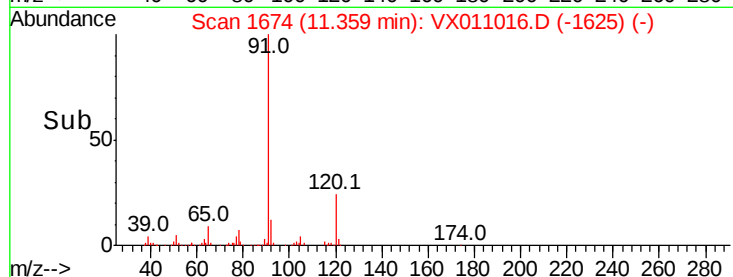
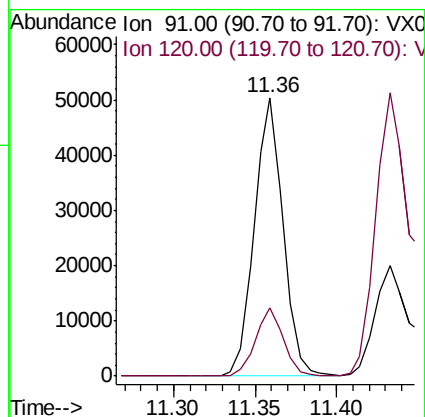
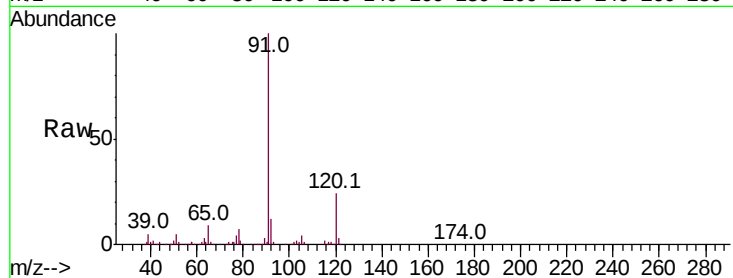
120 23.8 12.3 36.8

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7/22/2019 5:24:14 PM



#80

1,3,5-Trimethylbenzene

Concen: 12.567 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. 0.00 min

Lab File: VX011016.D

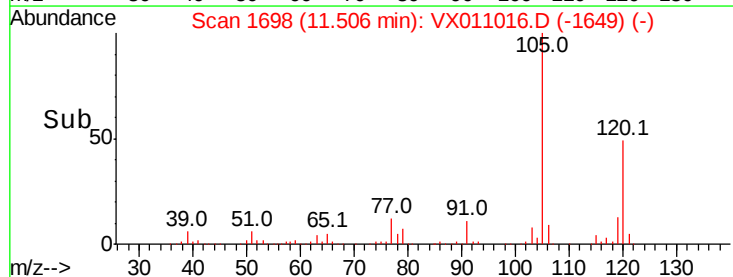
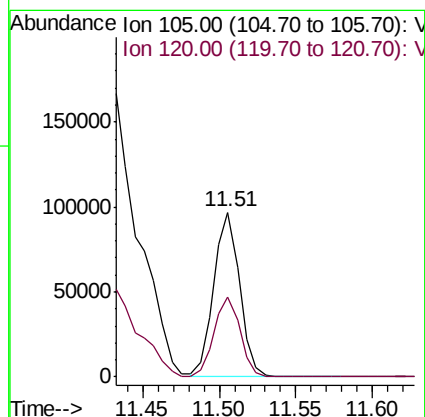
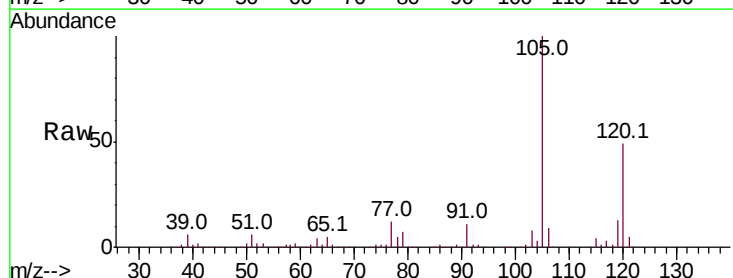
Acq: 19 Jul 2019 20:31

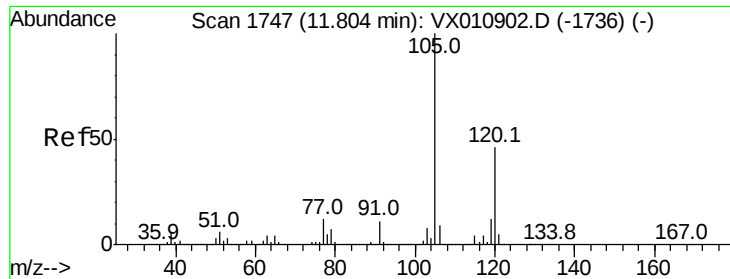
Tgt Ion: 105 Resp: 114088

Ion Ratio Lower Upper

105 100

120 49.3 24.6 73.8





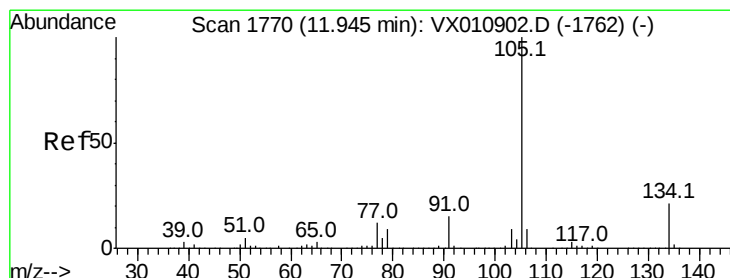
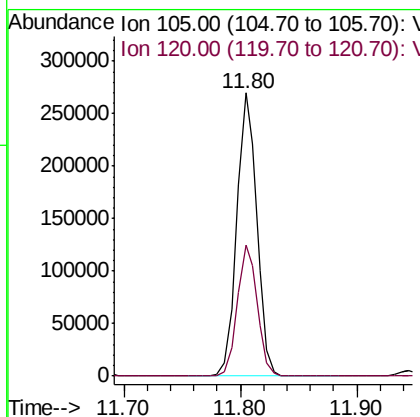
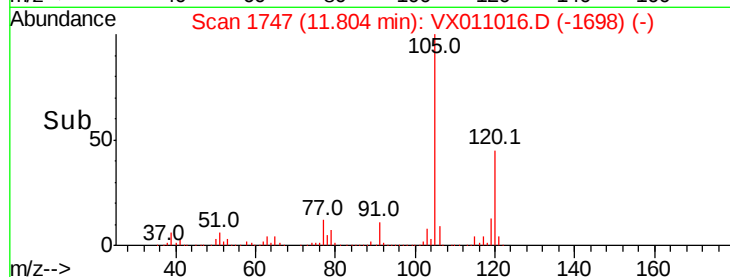
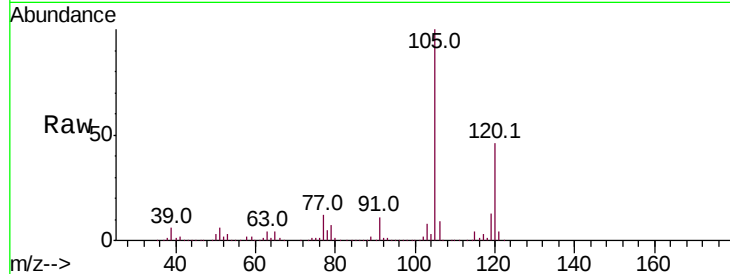
#84  
1,2,4-Trimethylbenzene  
Concen: 35.269 ug/l  
RT: 11.80 min Scan# 1747  
Delta R.T. -0.00 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Instrument :  
MSVOA\_X  
ClientSampleId :  
FL-0609DL

Tot Ion:105 Resp: 322704  
Ion Ratio Lower Upper  
105 100  
120 46.3 22.9 68.5

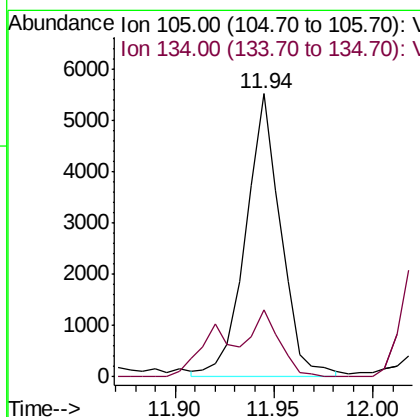
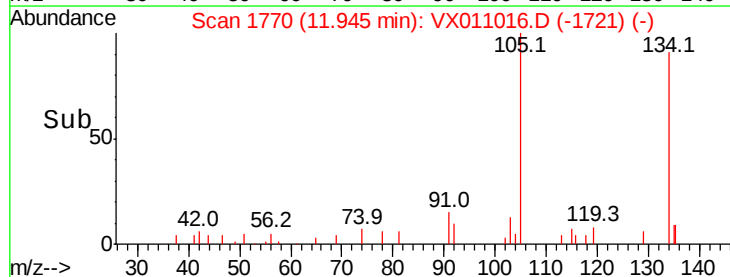
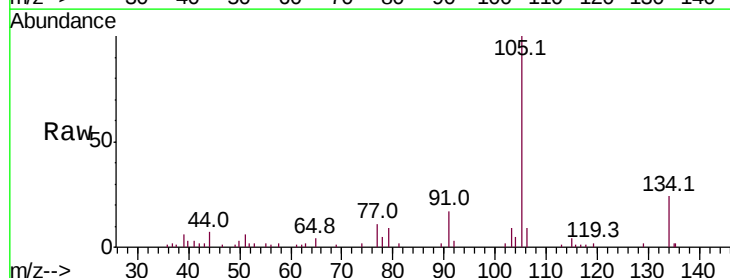
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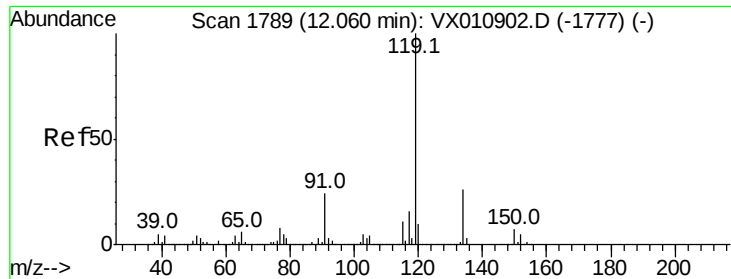
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#85  
sec-Butylbenzene  
Concen: 0.649 ug/l m  
RT: 11.94 min Scan# 1770  
Delta R.T. -0.00 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Tgt Ion:105 Resp: 6782  
Ion Ratio Lower Upper  
105 100  
134 0.0 10.4 31.4#





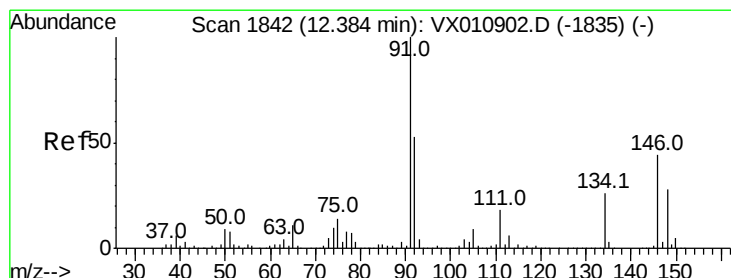
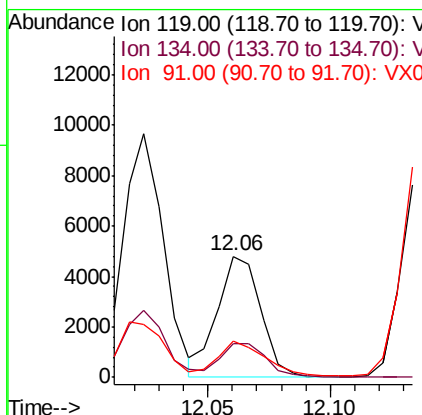
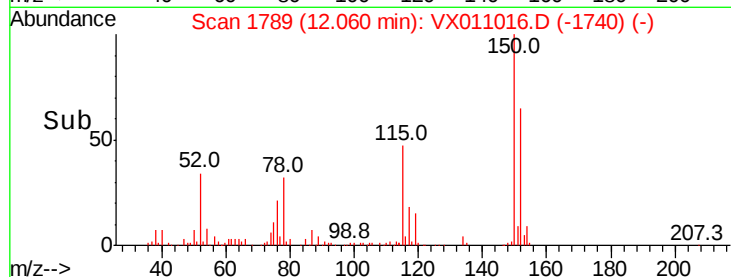
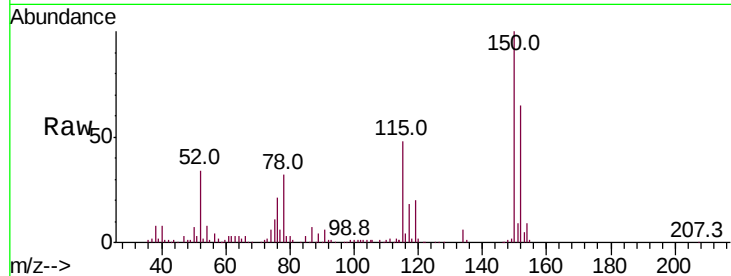
#86  
p-Isopropyltoluene  
Concen: 0.614 ug/l  
RT: 12.06 min Scan# 1789  
Delta R.T. -0.00 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Instrument :  
MSVOA\_X  
ClientSampleID :  
FL-0609DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 28.9  | 13.4  | 40.1  |
| 91      | 30.7  | 11.8  | 35.4  |

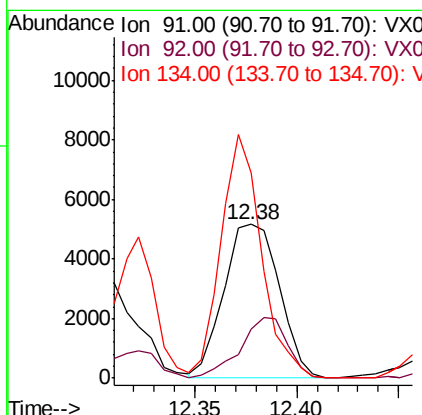
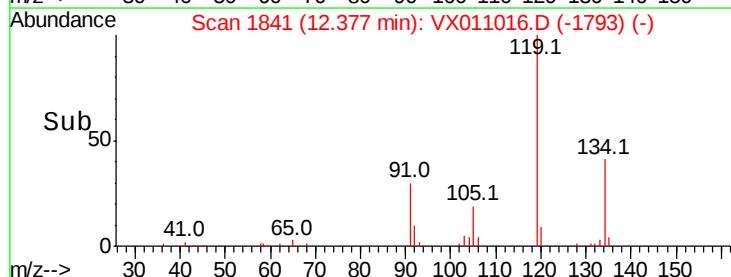
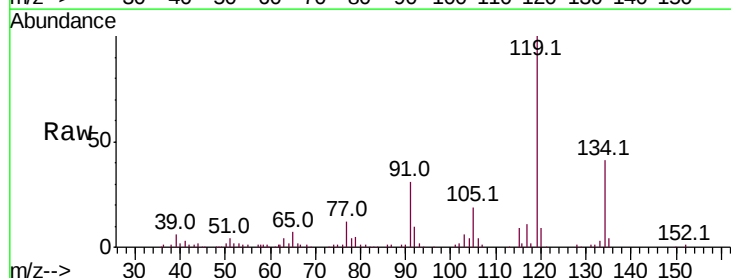
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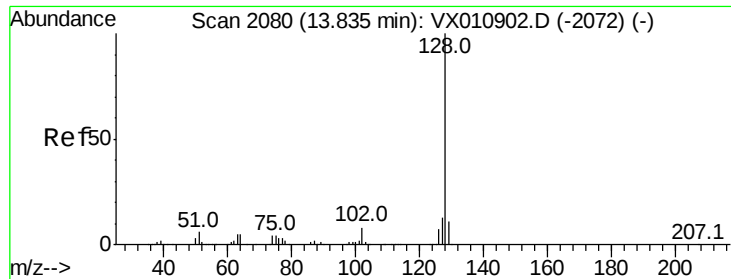
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#89  
n-Butylbenzene  
Concen: 1.183 ug/l  
RT: 12.38 min Scan# 1841  
Delta R.T. -0.01 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 33.4  | 26.2  | 78.5  |
| 134     | 115.0 | 13.8  | 41.3# |





#95  
Naphthalene  
Concen: 15.478 ug/l  
RT: 13.83 min Scan# 2080  
Delta R.T. 0.00 min  
Lab File: VX011016.D  
Acq: 19 Jul 2019 20:31

Instrument :  
MSVOA\_X  
ClientSampleId :  
FL-0609DL

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 128     | 100   |            |       |
| 127     | 12.8  | 10.4       | 15.6  |
| 129     | 10.7  | 8.9        | 13.3  |

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