

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX091619\  
 Data File : VX012420.D  
 Acq On : 16 Sep 2019 21:02  
 Operator : JC/SP  
 Sample : K4830-08  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 S13-0280

Manual Integrations  
 APPROVED

MMDadoda  
 9/18/2019 12:02:38 PM

Quant Time: Sep 17 05:39:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091619W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 17 04:36:38 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-----------------------------|--------|------|----------|---------|--------|----------|
| 1) Pentafluorobenzene       | 5.65   | 168  | 119737   | 50.00   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene     | 6.85   | 114  | 192341   | 50.00   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5        | 10.11  | 117  | 181744   | 50.00   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 12.07  | 152  | 107772   | 50.00   | ug/l   | 0.00     |
| System Monitoring Compounds |        |      |          |         |        |          |
| 33) 1,2-Dichloroethane-d4   | 6.05   | 65   | 113846   | 46.40   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =       | 92.80% |          |
| 35) Dibromofluoromethane    | 5.49   | 113  | 81480    | 43.73   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =       | 87.46% |          |
| 50) Toluene-d8              | 8.71   | 98   | 308363   | 46.64   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =       | 93.28% |          |
| 62) 4-Bromofluorobenzene    | 11.14  | 95   | 127029   | 45.67   | ug/l   | 0.00     |
| Spiked Amount               | 50.000 |      | Recovery | =       | 91.34% |          |
| Target Compounds            |        |      |          |         |        |          |
|                             |        |      |          |         | Qvalue |          |
| 31) Cyclohexane             | 5.57   | 56   | 794747   | 471.494 | ug/l   | 98       |
| 39) Methylcyclohexane       | 7.46   | 83   | 733297   | 429.516 | ug/l   | 96       |
| 40) Benzene                 | 6.14   | 78   | 81411    | 14.864  | ug/l   | 99       |
| 52) Toluene                 | 8.78   | 92   | 5300     | 1.487   | ug/l   | 98       |
| 67) Ethyl Benzene           | 10.25  | 91   | 6191223  | 854.948 | ug/l   | 95       |
| 68) m/p-Xylenes             | 10.35  | 106  | 461942   | 172.814 | ug/l   | 100      |
| 69) o-Xylene                | 10.70  | 106  | 86477    | 31.197  | ug/l   | 97       |
| 73) Isopropylbenzene        | 11.01  | 105  | 776485   | 103.705 | ug/l   | 99       |
| 78) n-propylbenzene         | 11.35  | 91   | 1061511  | 125.445 | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene  | 11.50  | 105  | 393120   | 60.295  | ug/l   | 99       |
| 83) tert-Butylbenzene       | 11.77  | 119  | 14970m   | 2.165   | ug/l   |          |
| 84) 1,2,4-Trimethylbenzene  | 11.81  | 105  | 4664349  | 705.042 | ug/l   | 98       |
| 85) sec-Butylbenzene        | 11.94  | 105  | 126989m  | 16.609  | ug/l   |          |
| 86) p-Isopropyltoluene      | 12.06  | 119  | 126556   | 18.067  | ug/l   | 98       |
| 89) n-Butylbenzene          | 12.38  | 91   | 72779m   | 11.765  | ug/l   |          |
| 95) Naphthalene             | 13.83  | 128  | 2163723  | 235.773 | ug/l   | 99       |

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

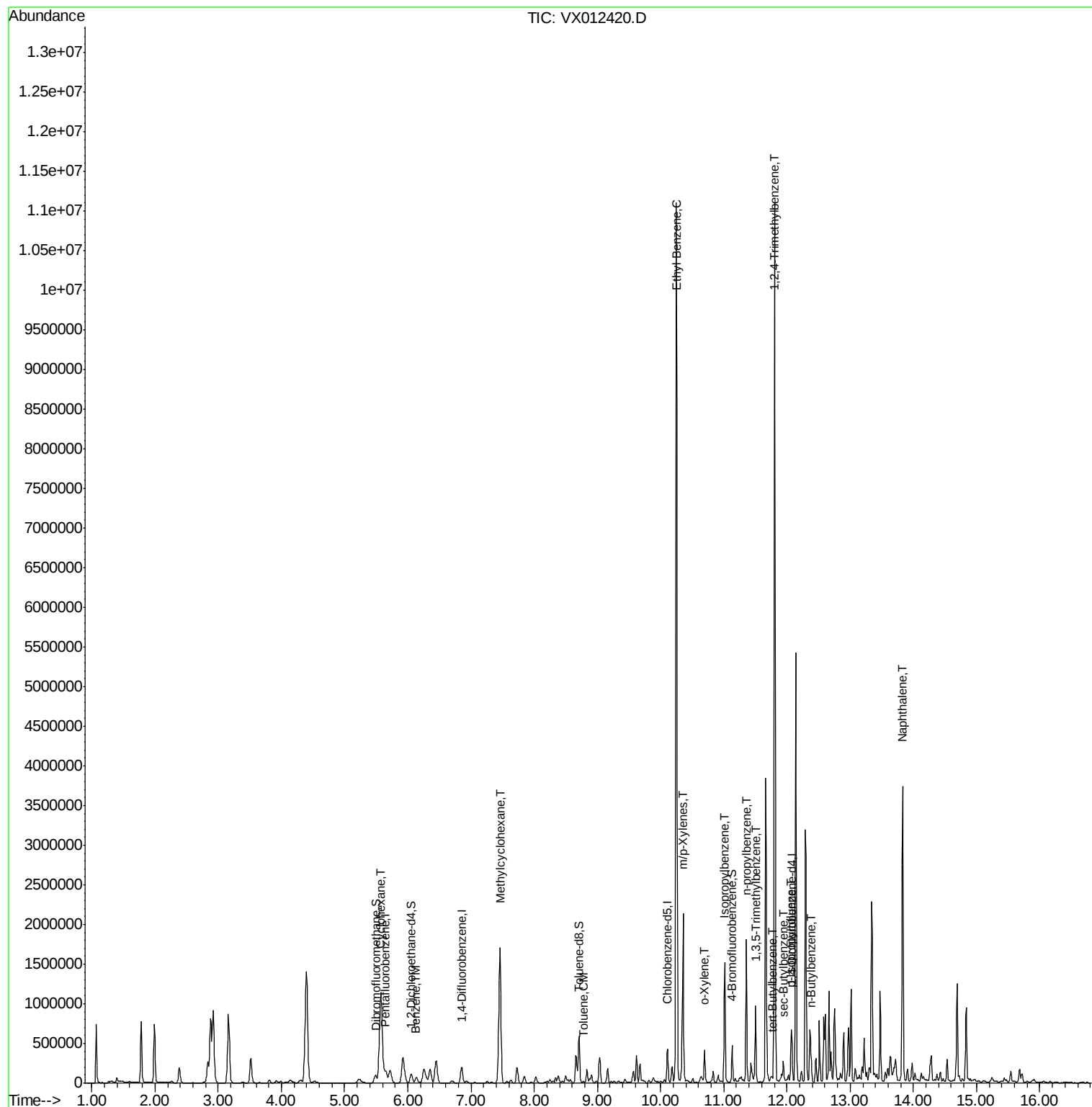
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX091619\  
Data File : VX012420.D  
Acq On : 16 Sep 2019 21:02  
Operator : JC/SP  
Sample : K4830-08  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 20 Sample Multiplier: 1

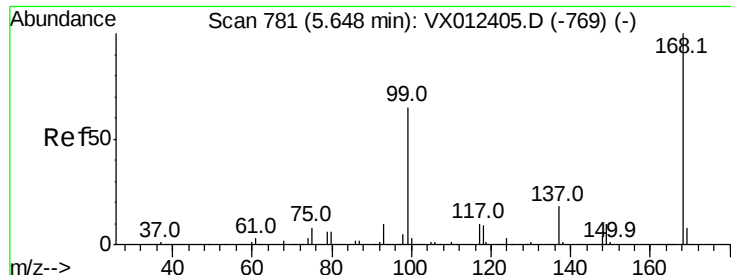
Instrument :  
MSVOA\_X  
ClientSampleId :  
S13-0280

Manual Integrations  
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9/18/2019 12:02:38 PM

Quant Time: Sep 17 05:39:07 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X091619W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 17 04:36:38 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

ClientSampleId :

S13-0280

Tot Ion:168 Resp: 119737

Ion Ratio Lower Upper

168 100

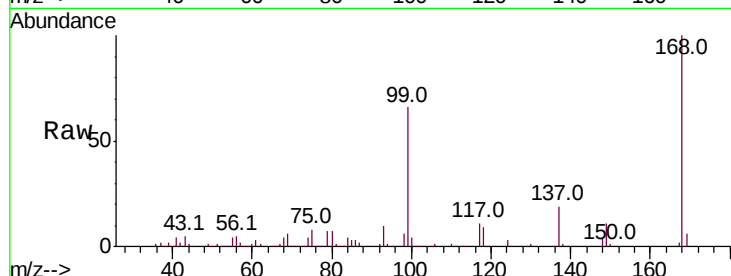
99 65.9 51.8 77.6

Manual Integrations

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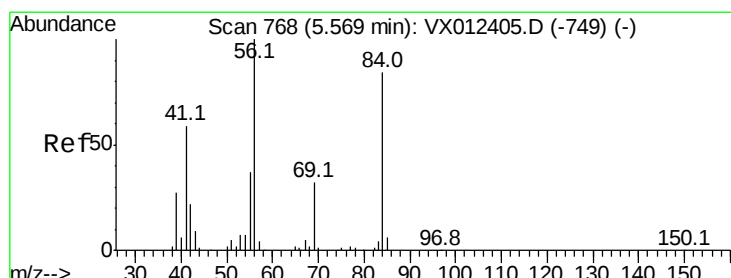
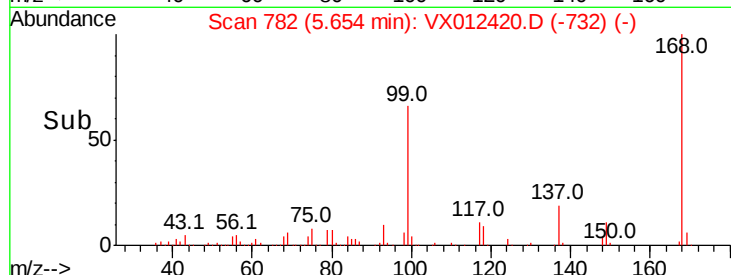


Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

Time-->



#31

Cyclohexane

Concen: 471.494 ug/l

RT: 5.57 min Scan# 768

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

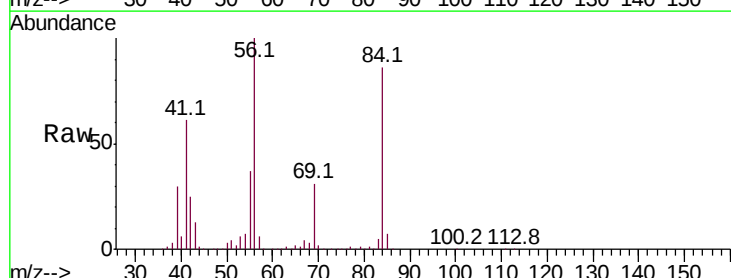
Tgt Ion: 56 Resp: 794747

Ion Ratio Lower Upper

56 100

69 30.3 24.9 37.3

84 85.8 67.2 100.8



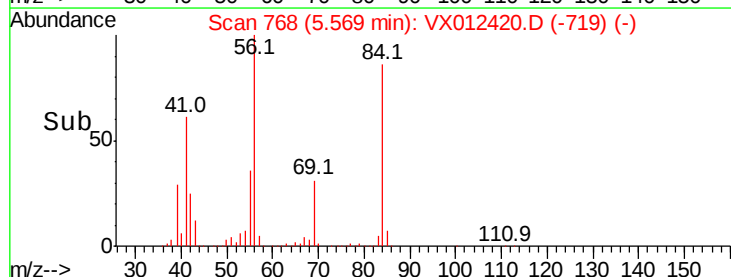
Abundance Ion 56.00 (55.70 to 56.70): VX0

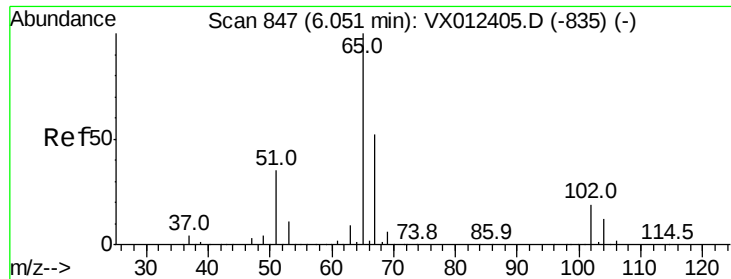
Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

5.57

Time-->





#33

1,2-Dichloroethane-d4

Concen: 46.403 ug/l

RT: 6.05 min Scan# 847

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

ClientSampleId :

S13-0280

Tot Ion: 65 Resp: 113846

Ion Ratio Lower Upper

65 100

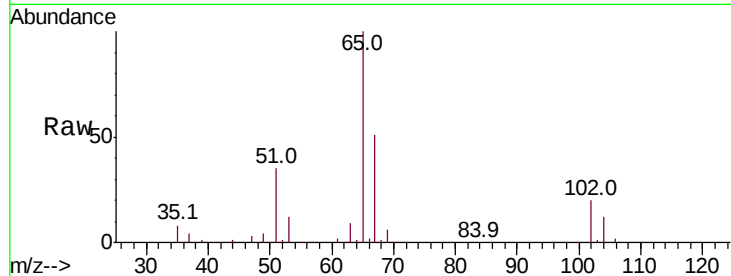
67 50.3 0.0 102.8

Manual Integrations

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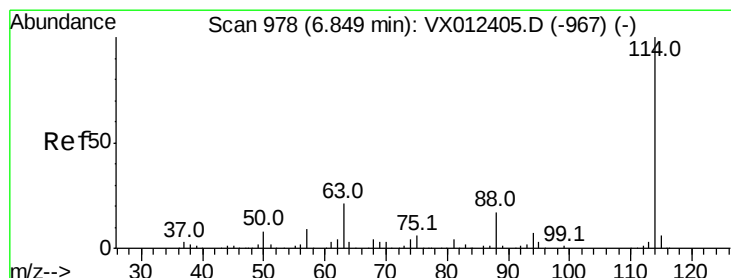
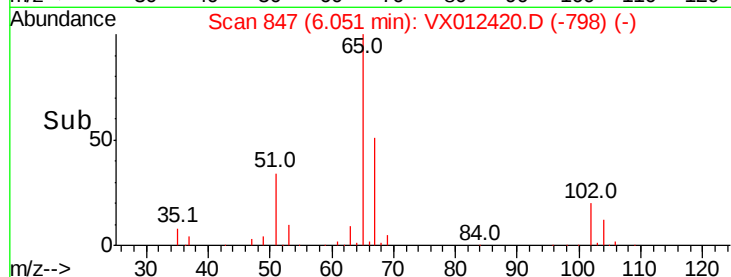


Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

6.05

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

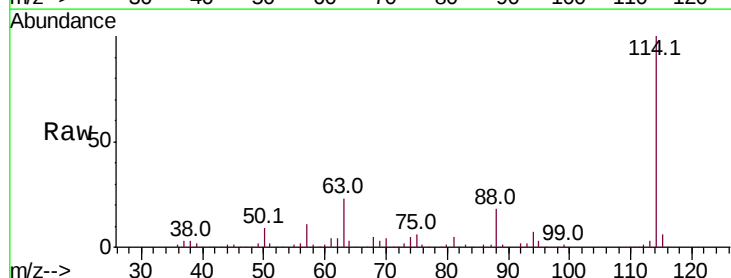
Tgt Ion: 114 Resp: 192341

Ion Ratio Lower Upper

114 100

63 23.2 0.0 42.4

88 17.8 0.0 33.4



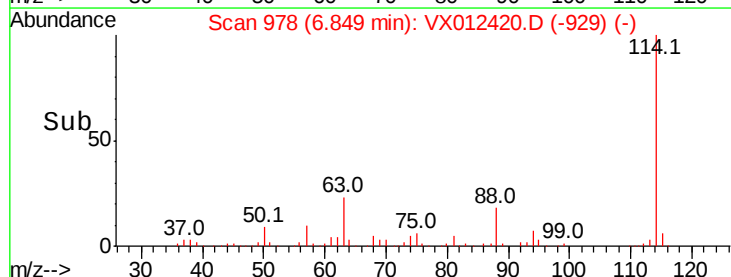
Abundance Ion 113.90 (113.60 to 114.60): V

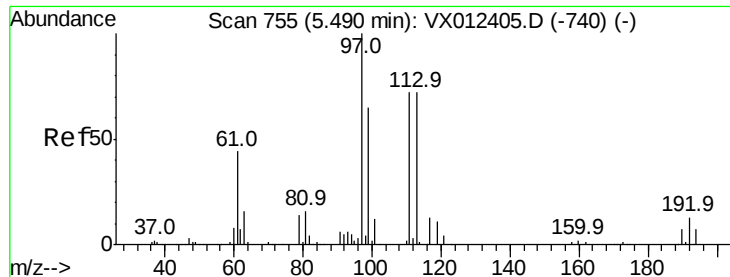
Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

6.85

Time-->





#35

Dibromofluoromethane

Concen: 43.732 ug/l

RT: 5.49 min Scan# 755

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

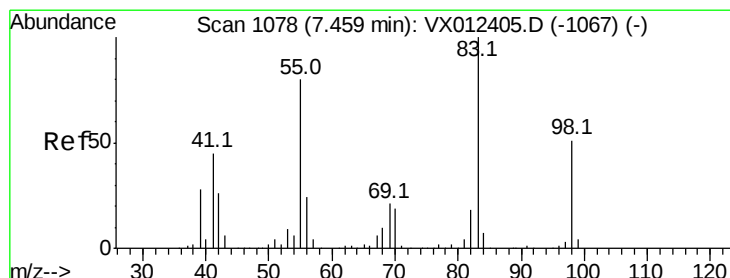
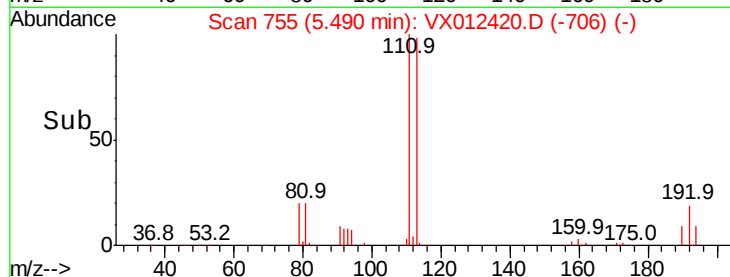
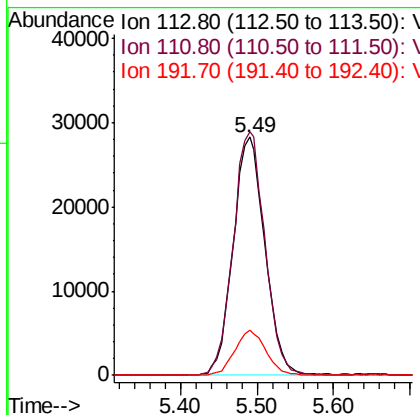
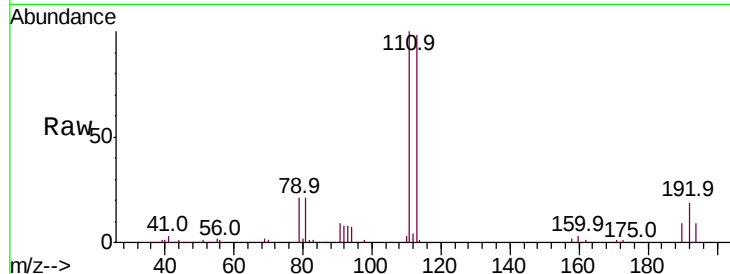
ClientSampleId :

S13-0280

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 113   | Resp: | 81480 |
| Ion Ratio | Lower | Upper |       |
| 113       | 100   |       |       |
| 111       | 102.1 | 81.8  | 122.6 |
| 192       | 18.5  | 15.0  | 22.4  |

Manual Integrations  
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#39

Methylcyclohexane

Concen: 429.516 ug/l

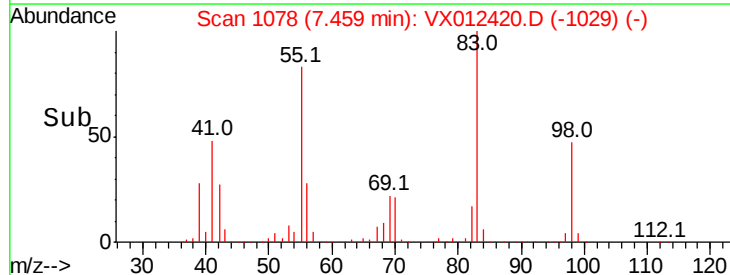
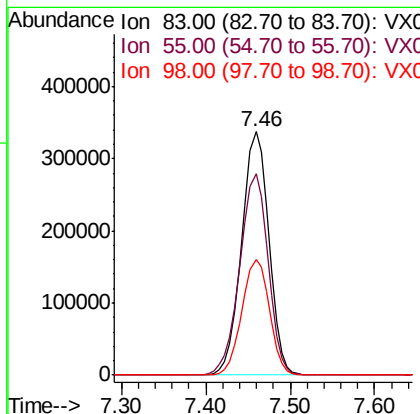
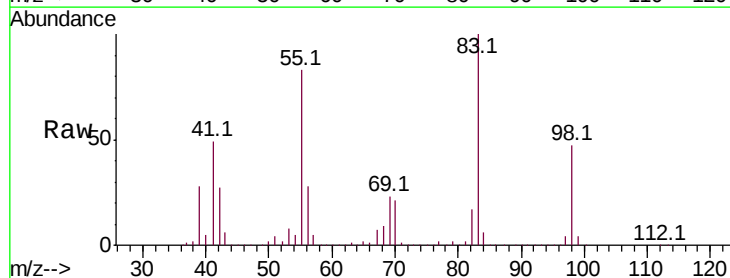
RT: 7.46 min Scan# 1078

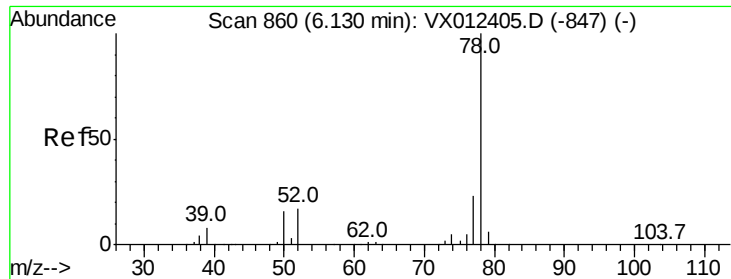
Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 83    | Resp: | 733297 |
| Ion Ratio | Lower | Upper |        |
| 83        | 100   |       |        |
| 55        | 82.9  | 63.8  | 95.6   |
| 98        | 47.3  | 40.6  | 61.0   |





#40

Benzene

Concen: 14.864 ug/l

RT: 6.14 min Scan# 861

Delta R.T. 0.01 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

ClientSampleId :

S13-0280

Tot Ion: 78 Resp: 81411

Ion Ratio Lower Upper

78 100

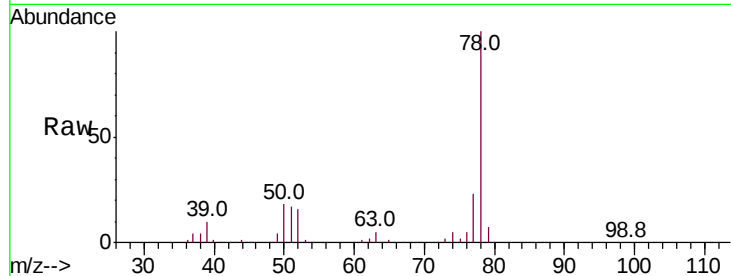
77 23.4 18.2 27.2

Manual Integrations

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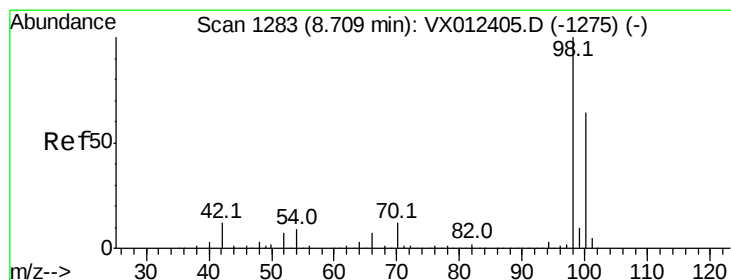
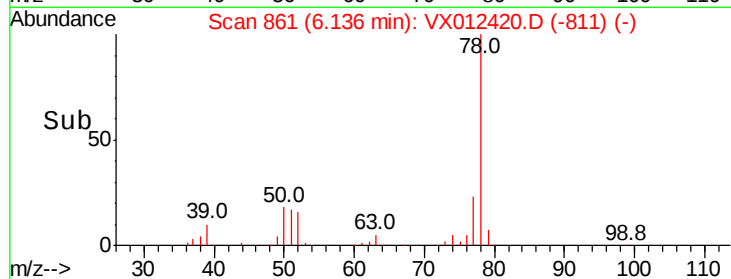
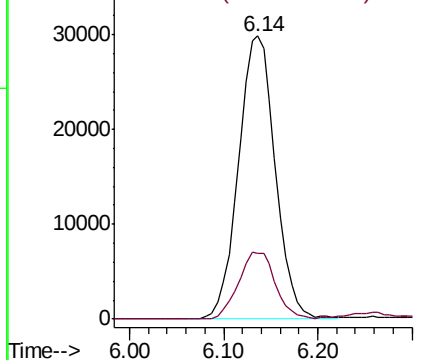
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Abundance Ion 78.00 (77.70 to 78.70): VX0

Ion 77.00 (76.70 to 77.70): VX0



#50

Toluene-d8

Concen: 46.639 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. -0.00 min

Lab File: VX012420.D

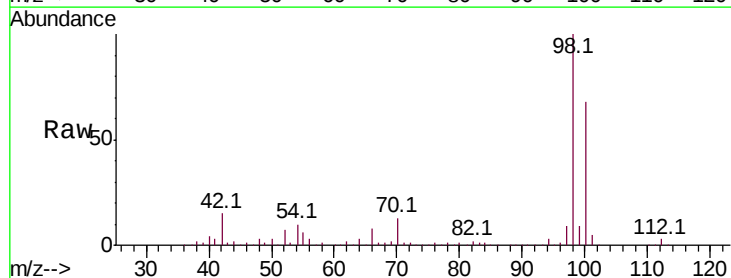
Acq: 16 Sep 2019 21:02

Tgt Ion: 98 Resp: 308363

Ion Ratio Lower Upper

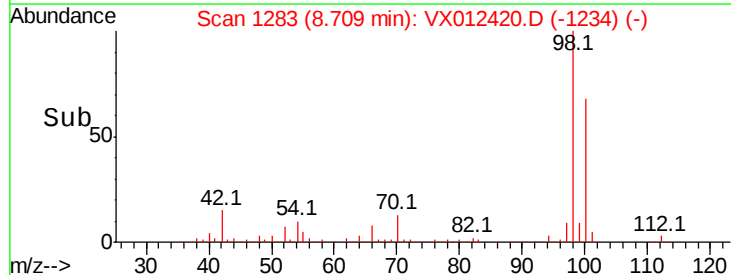
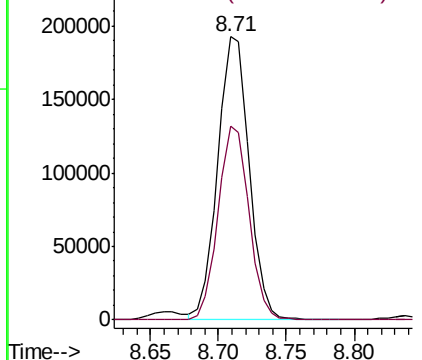
98 100

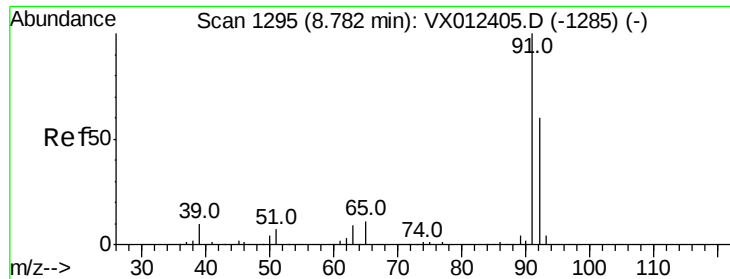
100 67.8 54.4 81.6



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#52

Toluene

Concen: 1.487 ug/l

RT: 8.78 min Scan# 1295

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

ClientSampleId :

S13-0280

Tot Ion: 92 Resp: 5300

Ion Ratio Lower Upper

92 100

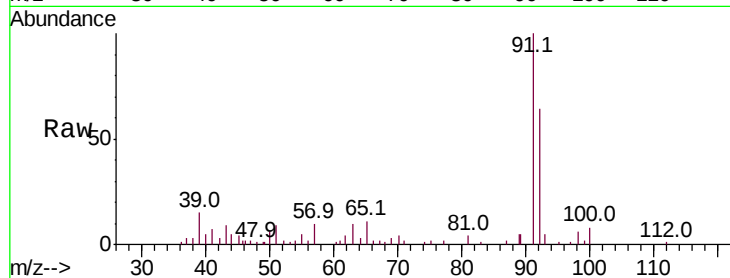
91 169.1 133.3 199.9

Manual Integrations

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Abundance Ion 92.00 (91.70 to 92.70): VX0

Ion 91.00 (90.70 to 91.70): VX0

6000

5000

4000

3000

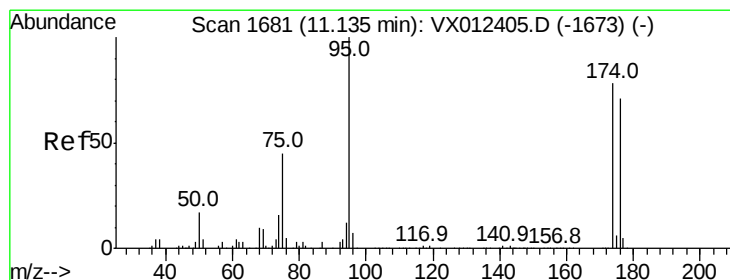
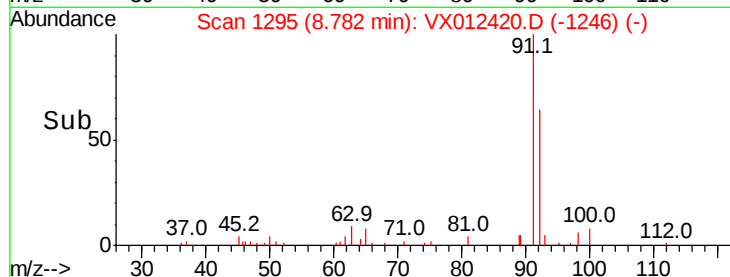
2000

1000

0

8.70 8.75 8.80 8.85

Time-->



#62

4-Bromofluorobenzene

Concen: 45.667 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

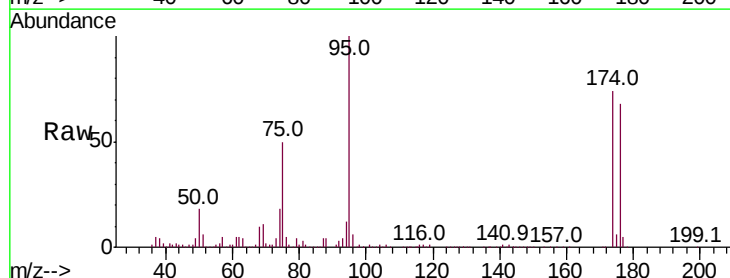
Tgt Ion: 95 Resp: 127029

Ion Ratio Lower Upper

95 100

174 70.4 0.0 146.0

176 65.5 0.0 137.6



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

120000

100000

80000

60000

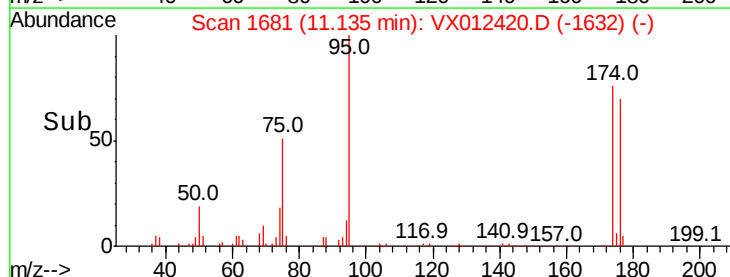
40000

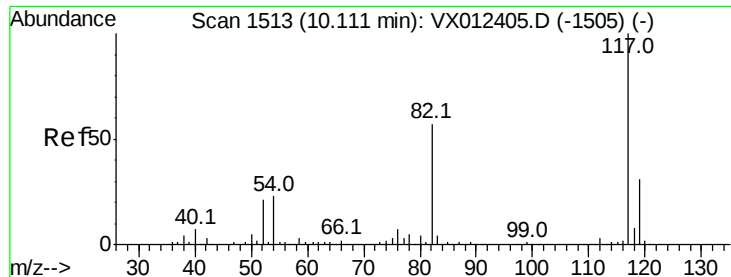
20000

0

11.05 11.10 11.15

Time-->





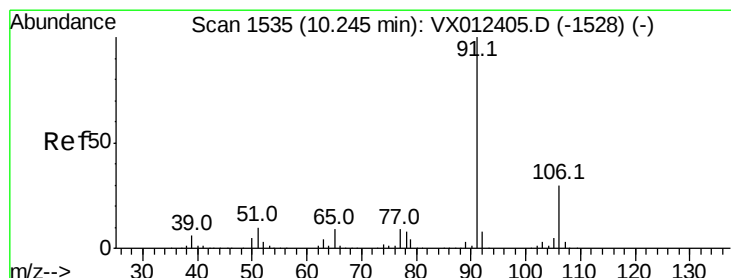
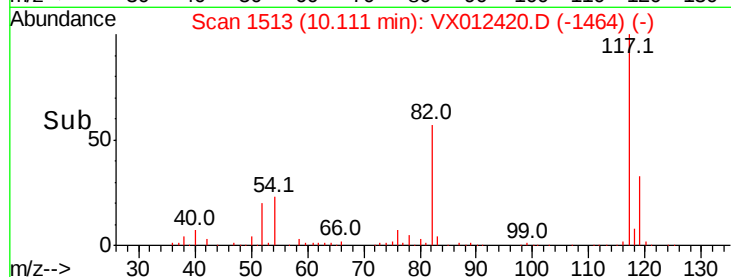
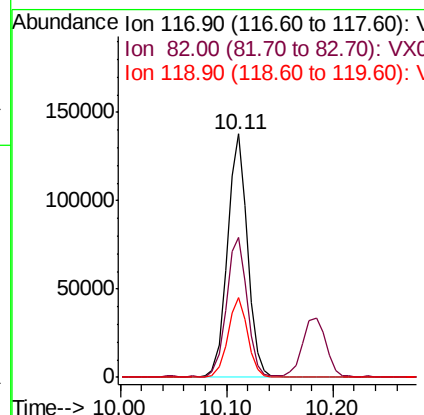
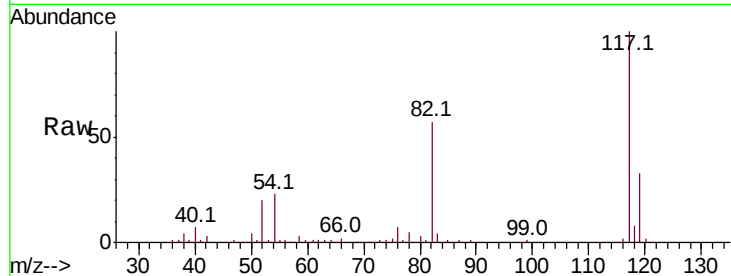
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Instrument :  
MSVOA\_X  
ClientSampleId :  
S13-0280

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 56.9  | 45.8  | 68.6  |
| 119     | 32.6  | 24.9  | 37.3  |

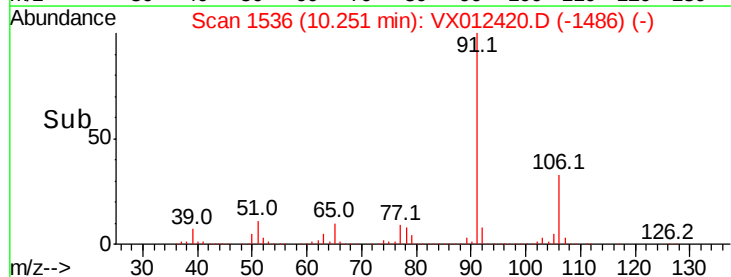
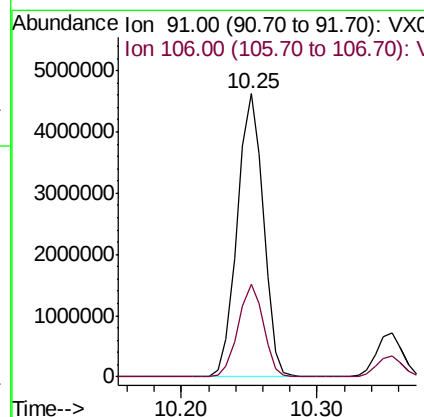
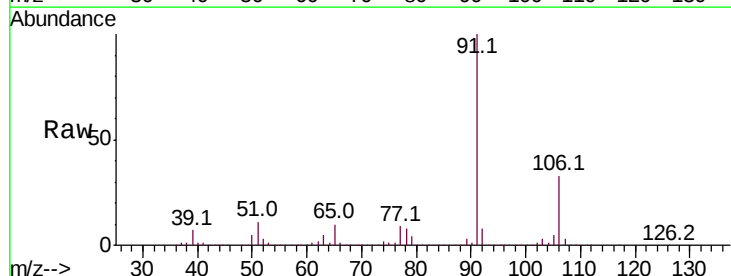
Manual Integrations  
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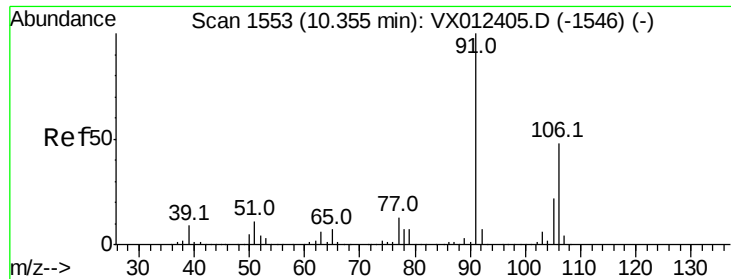
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9/18/2019 12:02:38 PM



#67  
Ethyl Benzene  
Concen: 854.948 ug/l  
RT: 10.25 min Scan# 1536  
Delta R.T. 0.01 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 32.8  | 24.0  | 36.0  |





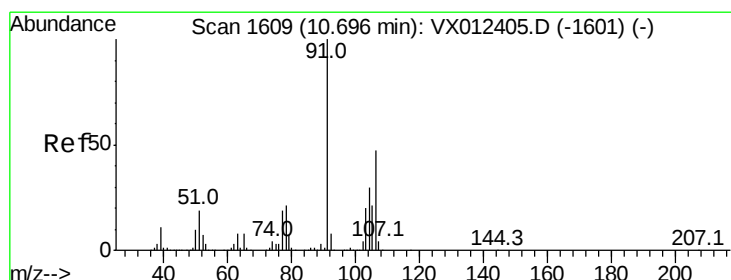
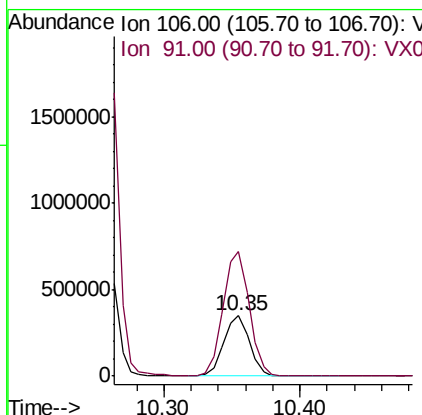
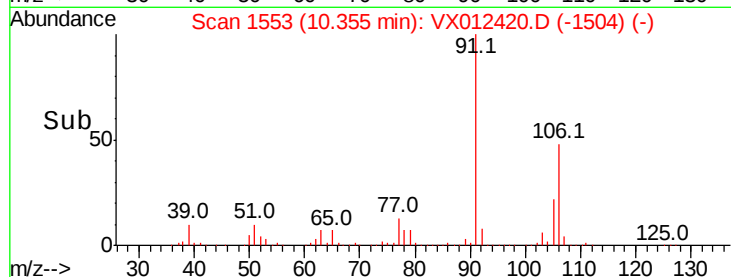
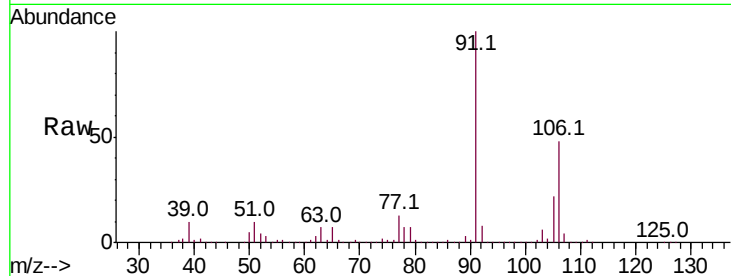
#68  
m/p-Xylenes  
Concen: 172.814 ug/l  
RT: 10.35 min Scan# 1553  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Instrument :  
MSVOA\_X  
ClientSampled :  
S13-0280

Tot Ion:106 Resp: 461942  
Ion Ratio Lower Upper  
106 100  
91 208.5 167.4 251.0

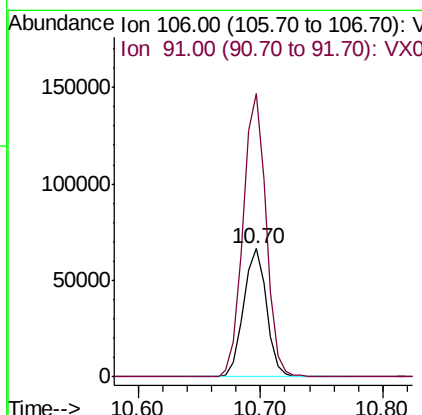
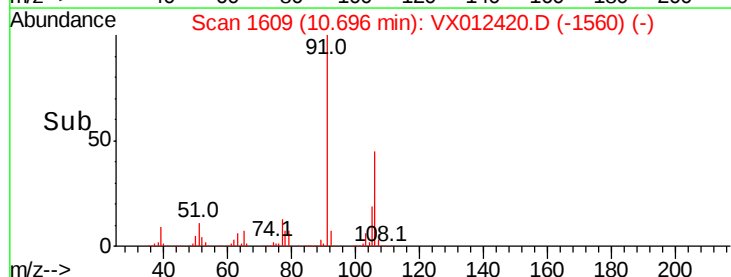
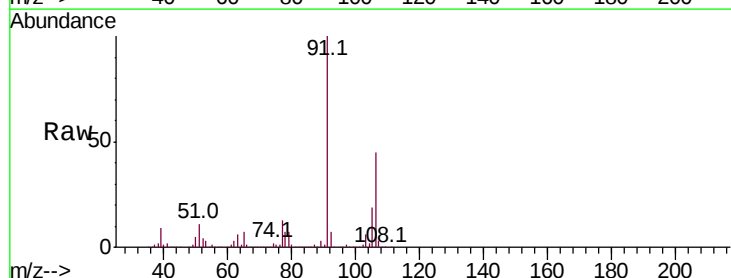
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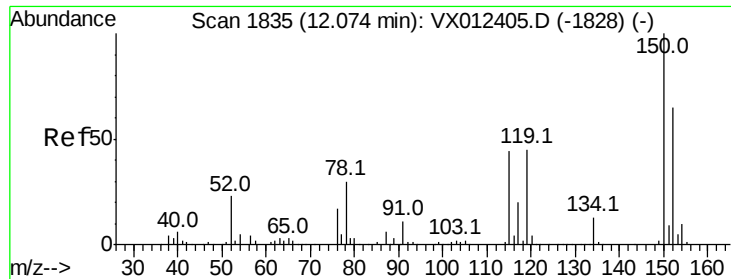
MMDadoda  
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#69  
o-Xylene  
Concen: 31.197 ug/l  
RT: 10.70 min Scan# 1609  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Tgt Ion:106 Resp: 86477  
Ion Ratio Lower Upper  
106 100  
91 220.5 107.8 323.6





#72

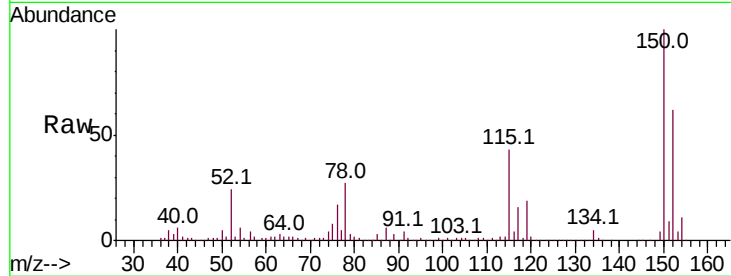
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Instrument :  
MSVOA\_X  
ClientSampled :  
S13-0280

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 74.3  | 45.3  | 135.9 |
| 150     | 159.5 | 0.0   | 354.0 |

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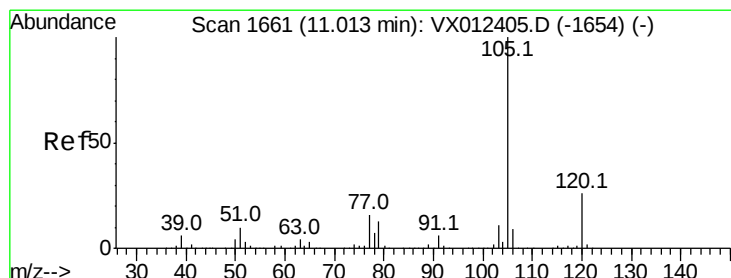
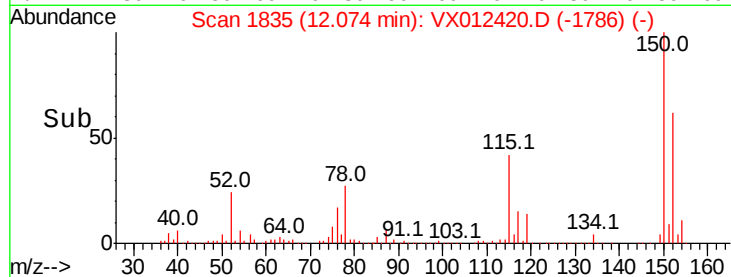
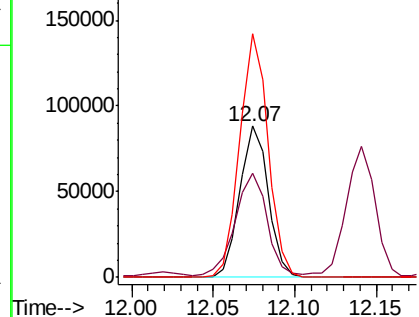


Abundance

Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

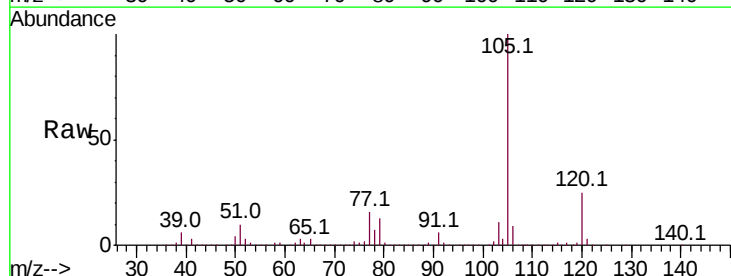
Ion 149.90 (149.60 to 150.60): V



#73

Isopropylbenzene  
Concen: 103.705 ug/l  
RT: 11.01 min Scan# 1661  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

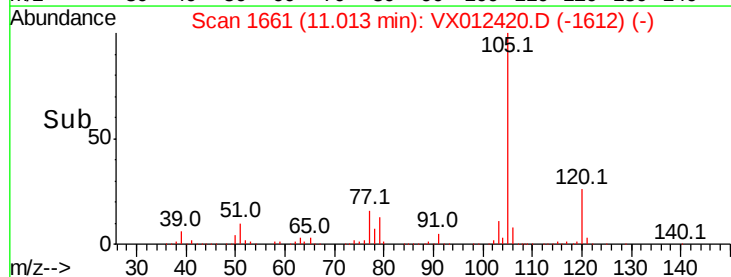
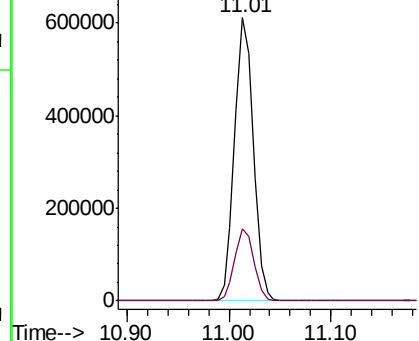
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 25.9  | 13.2  | 39.6  |

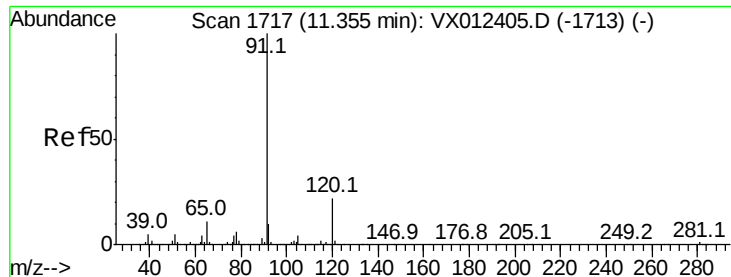


Abundance

Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#78

n-propylbenzene

Concen: 125.445 ug/l

RT: 11.35 min Scan# 1717

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

ClientSampled :

S13-0280

Tot Ion: 91 Resp: 1061511

Ion Ratio Lower Upper

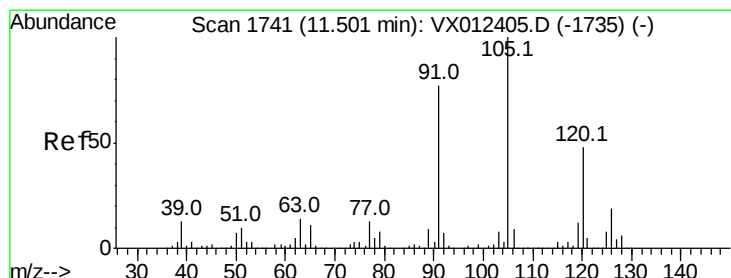
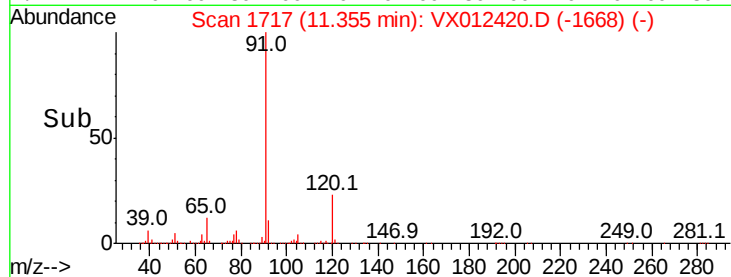
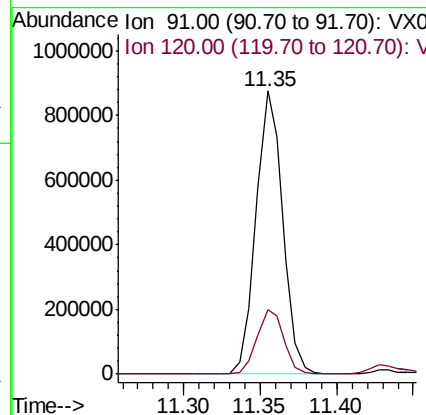
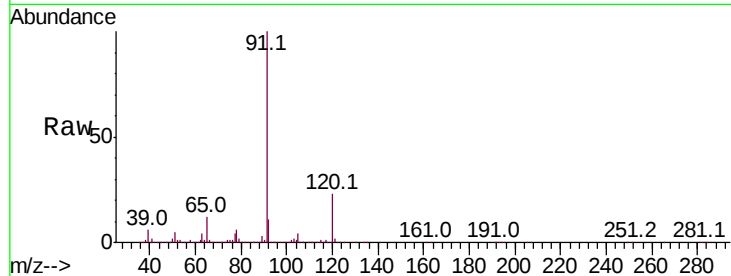
91 100

120 22.9 11.5 34.4

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#80

1,3,5-Trimethylbenzene

Concen: 60.295 ug/l

RT: 11.50 min Scan# 1741

Delta R.T. -0.00 min

Lab File: VX012420.D

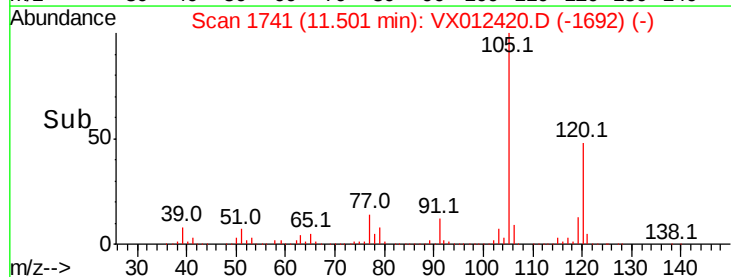
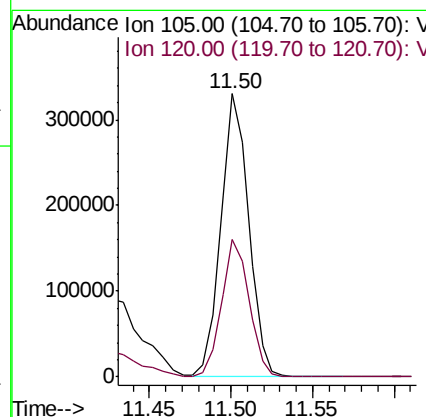
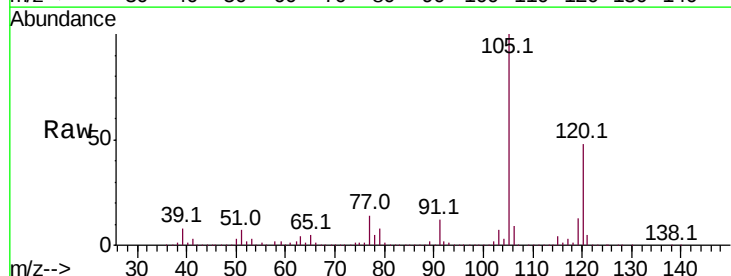
Acq: 16 Sep 2019 21:02

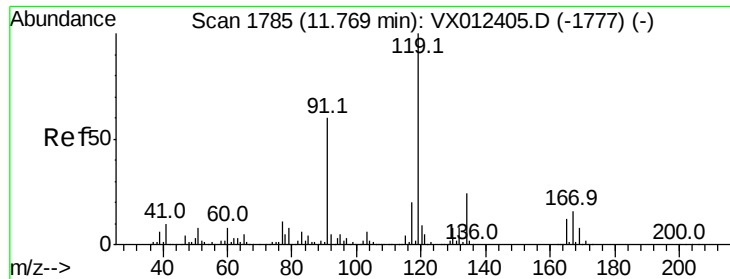
Tgt Ion: 105 Resp: 393120

Ion Ratio Lower Upper

105 100

120 48.0 24.3 72.9





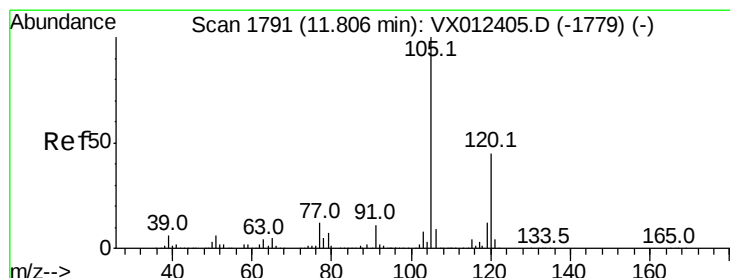
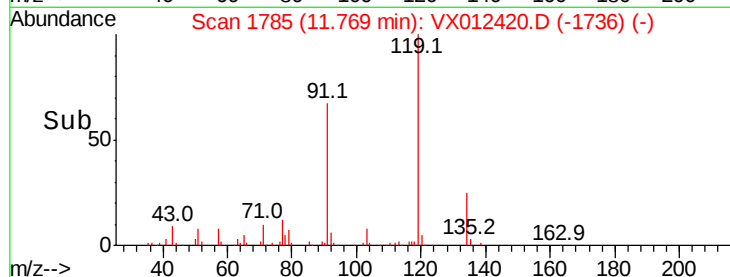
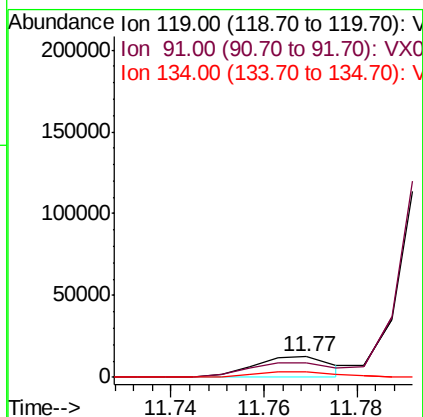
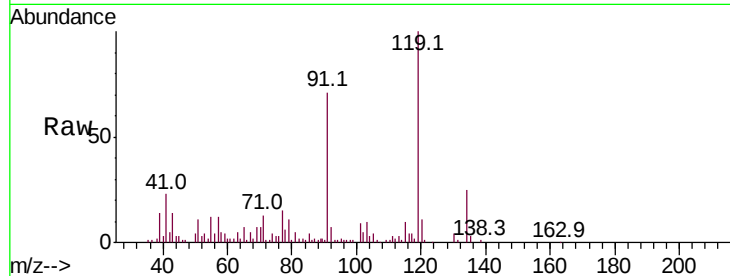
#83  
tert-Butylbenzene  
Concen: 2.165 ug/l m  
RT: 11.77 min Scan# 1785  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Instrument :  
MSVOA\_X  
ClientSampleId :  
S13-0280

Tot Ion:119 Resp: 14970  
Ion Ratio Lower Upper  
119 100  
91 3528.2 29.6 88.8  
134 0.0 11.4 34.1#

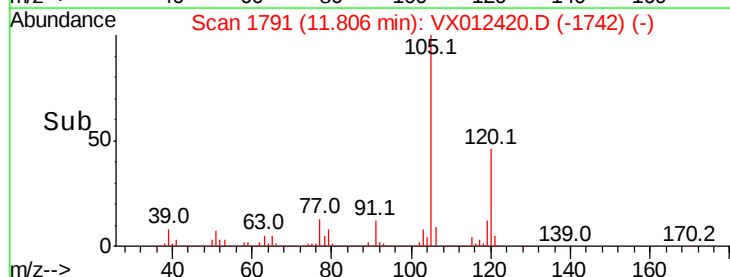
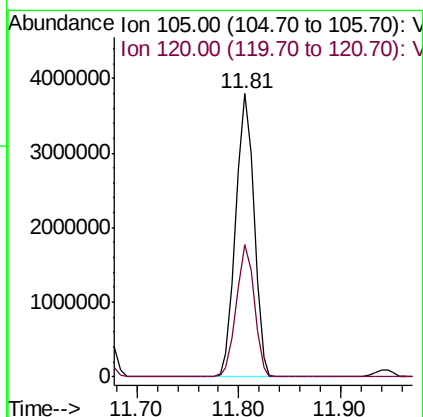
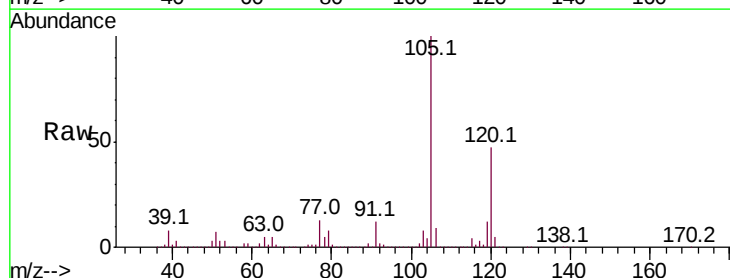
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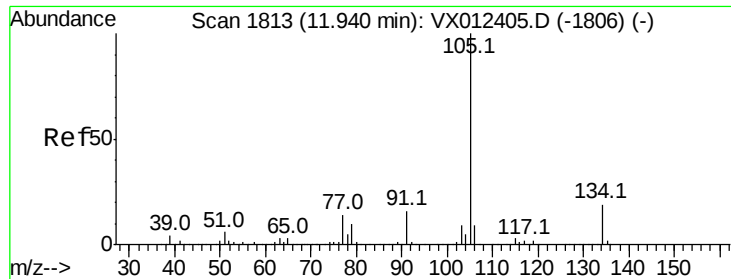
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#84  
1,2,4-Trimethylbenzene  
Concen: 705.042 ug/l  
RT: 11.81 min Scan# 1791  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Tgt Ion:105 Resp: 4664349  
Ion Ratio Lower Upper  
105 100  
120 45.8 22.1 66.5





#85

sec-Butylbenzene

Concen: 16.609 ug/l m

RT: 11.94 min Scan# 1813

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

Instrument :

MSVOA\_X

ClientSampled :

S13-0280

Tot Ion:105 Resp: 126989

Ion Ratio Lower Upper

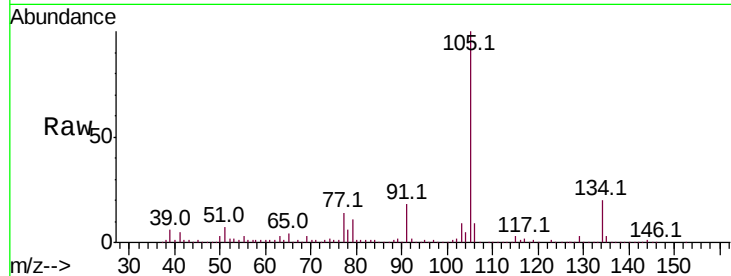
105 100

134 0.0 10.1 30.1#

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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V

11.94

100000

80000

60000

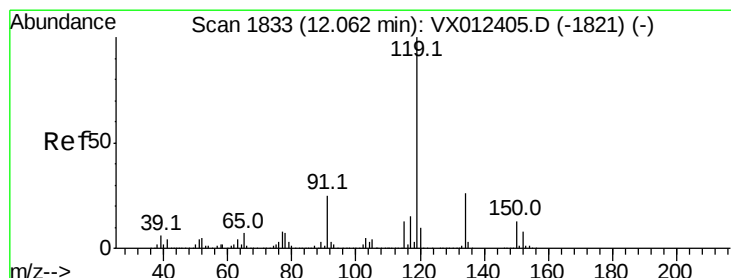
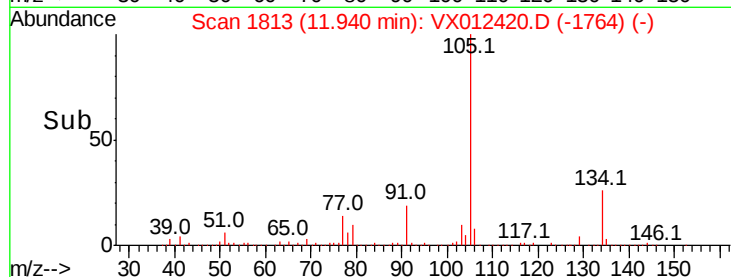
40000

20000

0

Time-->

11.90 11.95



#86

p-Isopropyltoluene

Concen: 18.067 ug/l

RT: 12.06 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VX012420.D

Acq: 16 Sep 2019 21:02

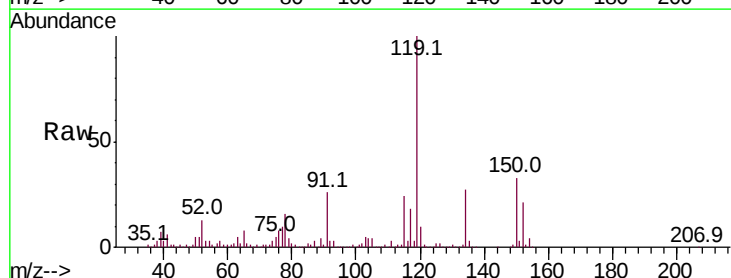
Tgt Ion:119 Resp: 126556

Ion Ratio Lower Upper

119 100

134 26.7 12.9 38.6

91 26.5 12.9 38.6



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): VX0

200000

150000

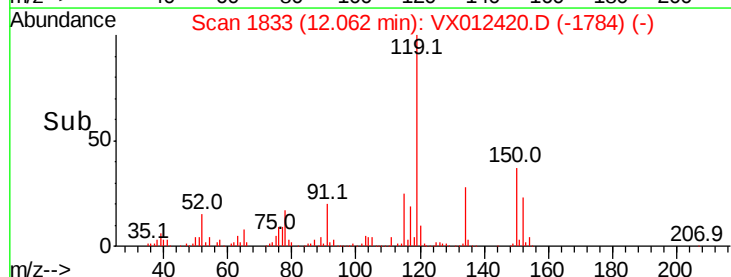
100000

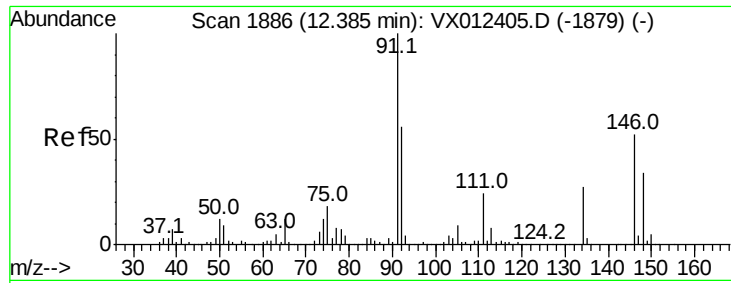
50000

0

Time-->

12.05 12.10





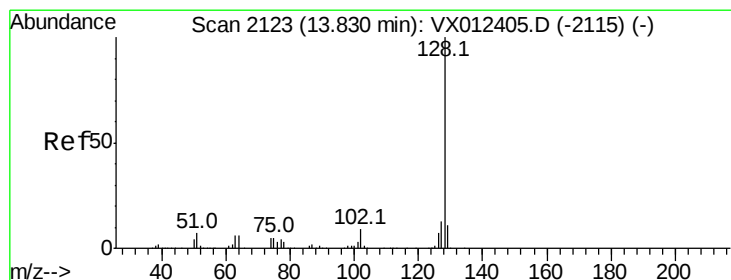
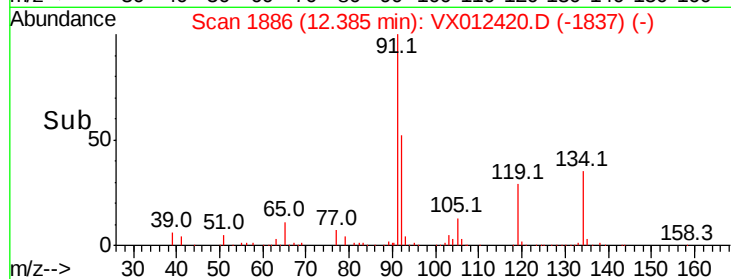
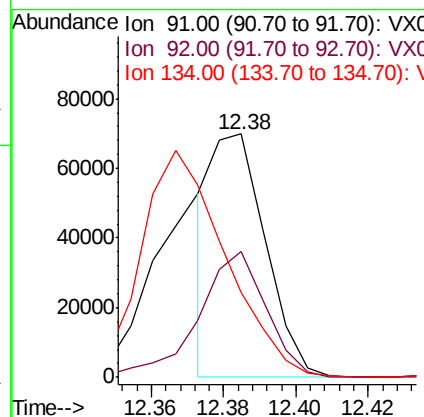
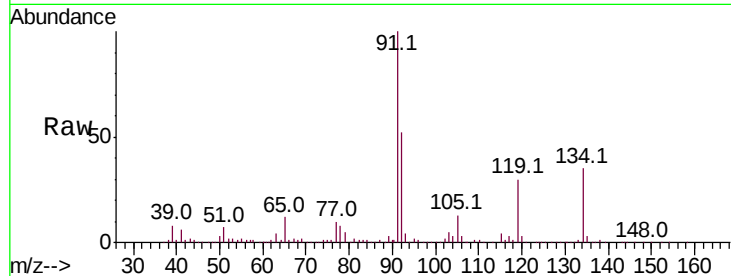
#89  
n-Butylbenzene  
Concen: 11.765 ug/l m  
RT: 12.38 min Scan# 1886  
Delta R.T. -0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

Instrument :  
MSVOA\_X  
ClientSampled :  
S13-0280

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 64.7  | 27.5  | 82.4  |
| 134     | 144.1 | 13.2  | 39.6# |

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#95  
Naphthalene  
Concen: 235.773 ug/l  
RT: 13.83 min Scan# 2123  
Delta R.T. 0.00 min  
Lab File: VX012420.D  
Acq: 16 Sep 2019 21:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.0  | 10.2  | 15.4  |
| 129     | 11.2  | 8.6   | 13.0  |

