

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX092019\  
 Data File : VX012552.D  
 Acq On : 20 Sep 2019 13:15  
 Operator : JC/SP  
 Sample : K4887-01DL 5X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z2-0157DL

Manual Integrations  
 APPROVED

MMDadoda  
 9/23/2019 11:29:45 AM

Quant Time: Sep 21 01:54:36 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091719W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 17 15:27:10 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 182215   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 284067   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 232729   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 95981    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 119023   | 45.58 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.16%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 83102    | 48.33 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.66%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 326710   | 51.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.68% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 114354   | 43.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 86.56%  |      |

## Target Compounds

|                            |       |     |        |        |      | Qvalue |
|----------------------------|-------|-----|--------|--------|------|--------|
| 31) Cyclohexane            | 5.57  | 56  | 19020  | 10.545 | ug/l | 96     |
| 39) Methylcyclohexane      | 7.45  | 83  | 16561  | 9.868  | ug/l | 96     |
| 67) Ethyl Benzene          | 10.25 | 91  | 49562  | 7.510  | ug/l | 99     |
| 68) m/p-Xylenes            | 10.35 | 106 | 106772 | 44.466 | ug/l | 99     |
| 73) Isopropylbenzene       | 11.01 | 105 | 58891  | 9.779  | ug/l | 99     |
| 78) n-propylbenzene        | 11.35 | 91  | 56910  | 8.479  | ug/l | 100    |
| 80) 1,3,5-Trimethylbenzene | 11.50 | 105 | 86463  | 16.835 | ug/l | 99     |
| 84) 1,2,4-Trimethylbenzene | 11.81 | 105 | 263737 | 50.012 | ug/l | 99     |
| 85) sec-Butylbenzene       | 11.95 | 105 | 6605m  | 1.089  | ug/l |        |
| 86) p-Isopropyltoluene     | 12.06 | 119 | 4607   | 0.827  | ug/l | 79     |
| 95) Naphthalene            | 13.83 | 128 | 31767  | 4.800  | ug/l | 99     |

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

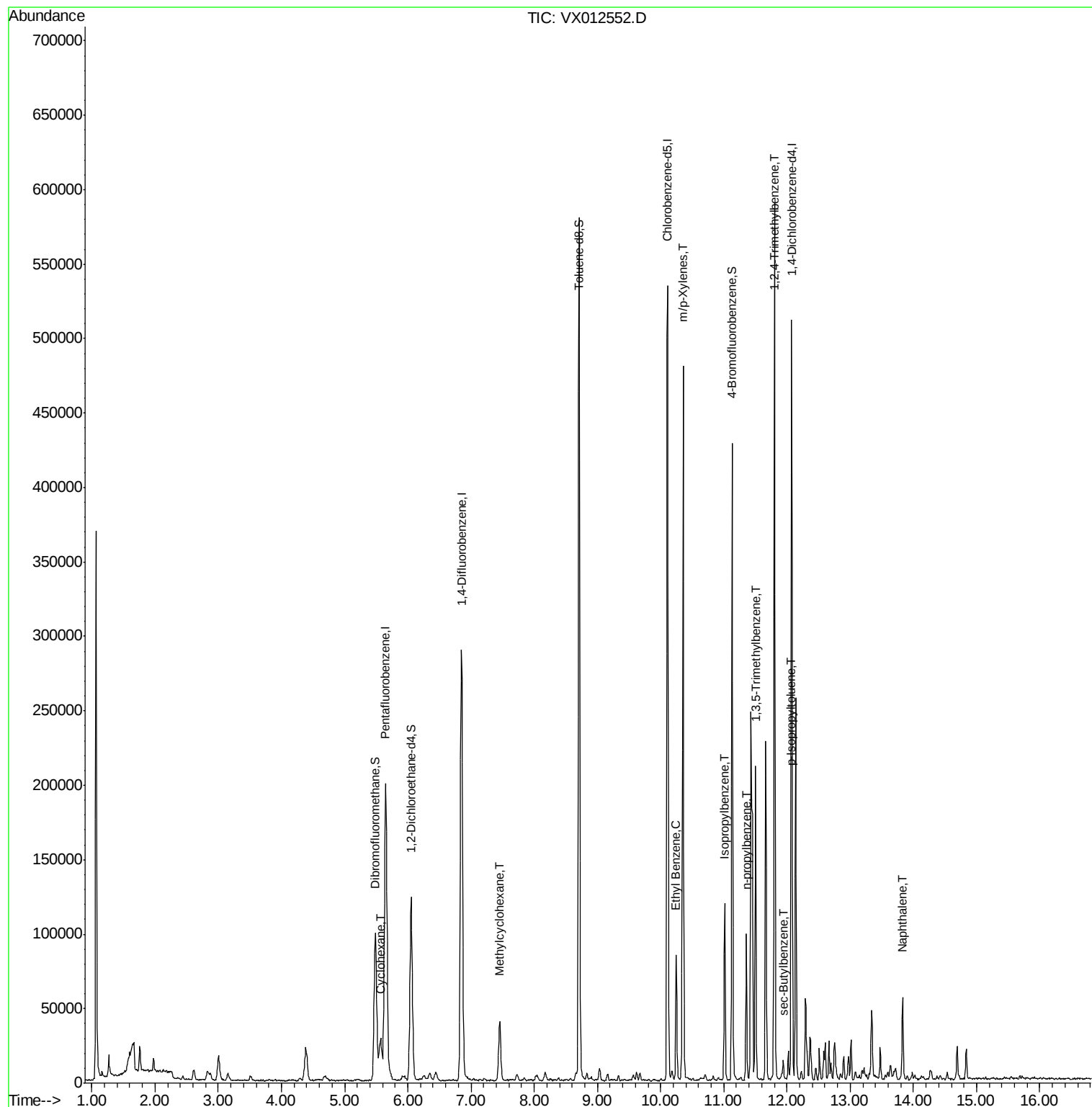
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX092019\  
Data File : VX012552.D  
Acq On : 20 Sep 2019 13:15  
Operator : JC/SP  
Sample : K4887-01DL 5X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 9 Sample Multiplier: 1

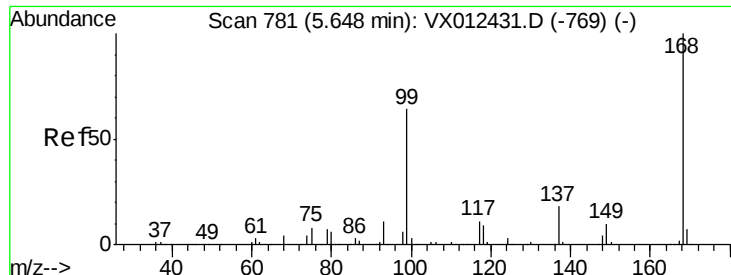
Instrument :  
MSVOA\_X  
ClientSampleID :  
Z2-0157DL

Manual Integrations  
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9/23/2019 11:29:45 AM

Quant Time: Sep 21 01:54:36 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X091719W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 17 15:27:10 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.00 min

Lab File: VX012552.D

Acq: 20 Sep 2019 13:15

Instrument :

MSVOA\_X

ClientSampleId :

Z2-0157DL

Tot Ion:168 Resp: 182215

Ion Ratio Lower Upper

168 100

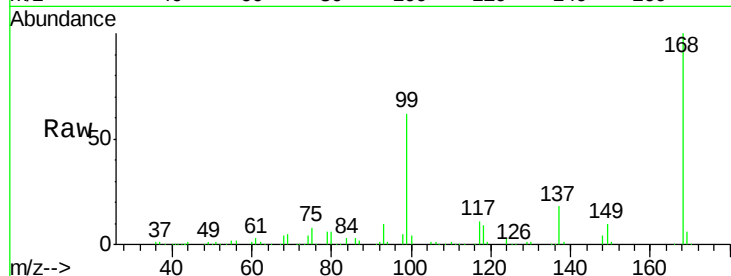
99 62.1 51.4 77.2

Manual Integrations

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9/23/2019 11:29:45 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

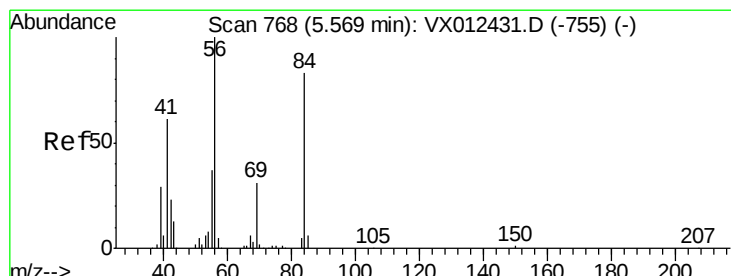
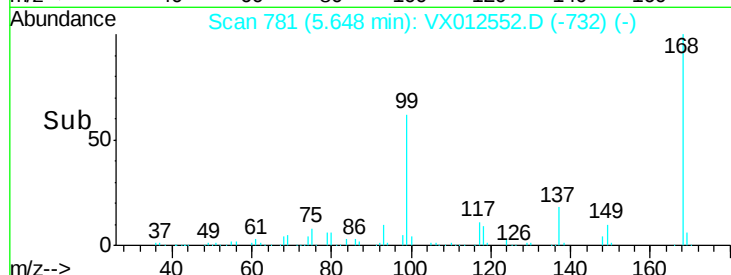
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#31

Cyclohexane

Concen: 10.545 ug/l

RT: 5.57 min Scan# 768

Delta R.T. 0.00 min

Lab File: VX012552.D

Acq: 20 Sep 2019 13:15

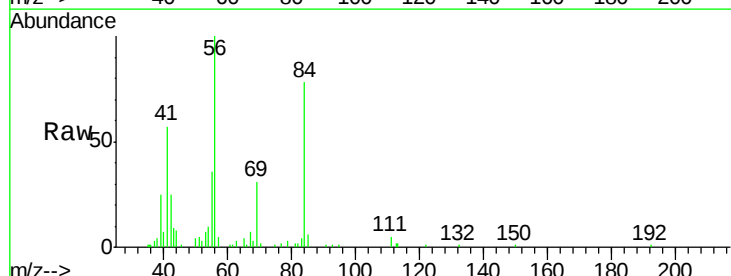
Tgt Ion: 56 Resp: 19020

Ion Ratio Lower Upper

56 100

69 30.8 25.0 37.6

84 78.3 66.4 99.6



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

8000

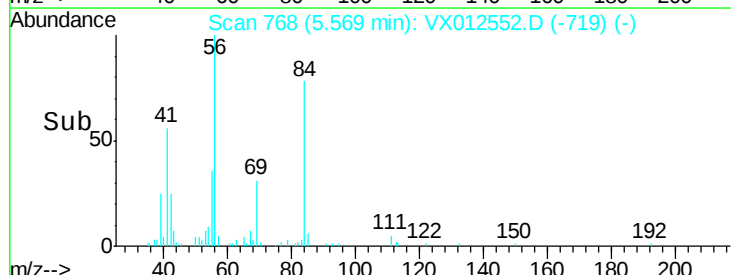
6000

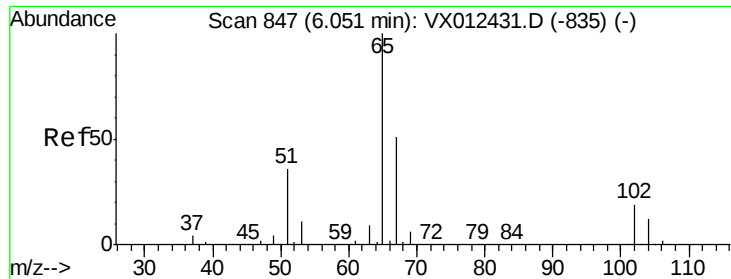
4000

2000

0

Time--> 5.40 5.50 5.60 5.70





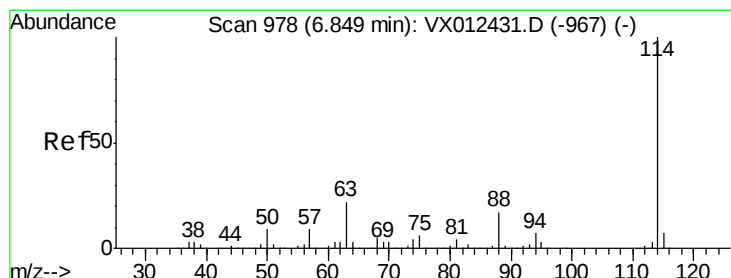
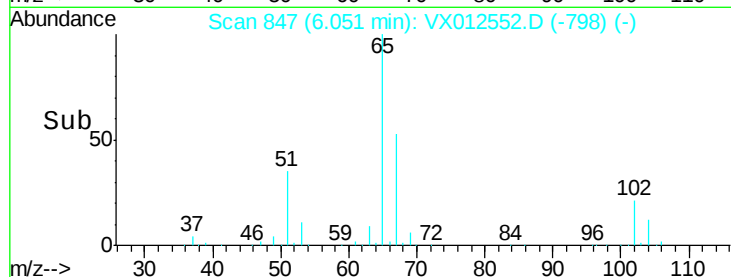
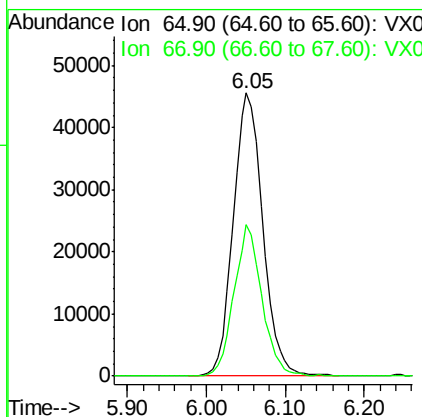
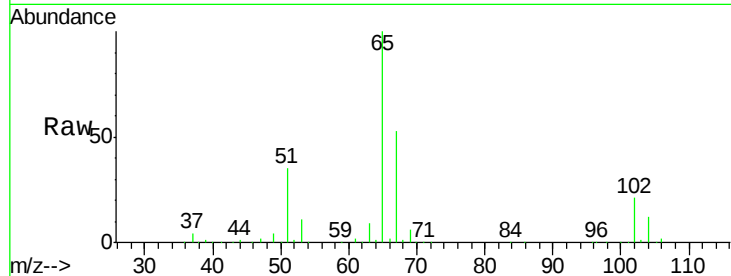
#33  
 1,2-Dichloroethane-d4  
 Concen: 45.576 ug/l  
 RT: 6.05 min Scan# 847  
 Delta R.T. 0.00 min  
 Lab File: VX012552.D  
 Acq: 20 Sep 2019 13:15

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 Z2-0157DL

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 65      | 100   | 119023 |       |       |
| 67      | 50.3  | 0.0    | 101.2 |       |

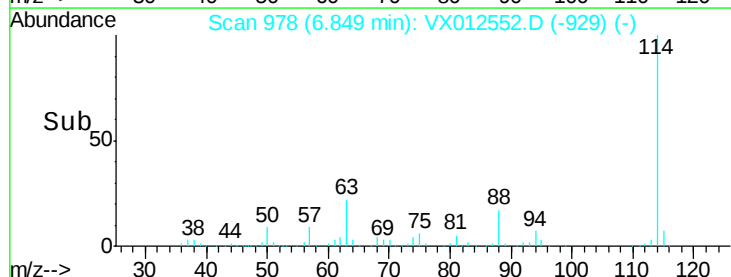
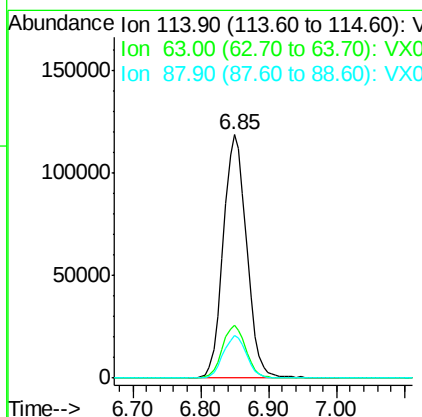
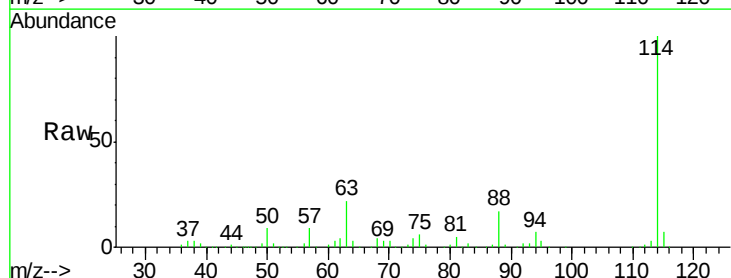
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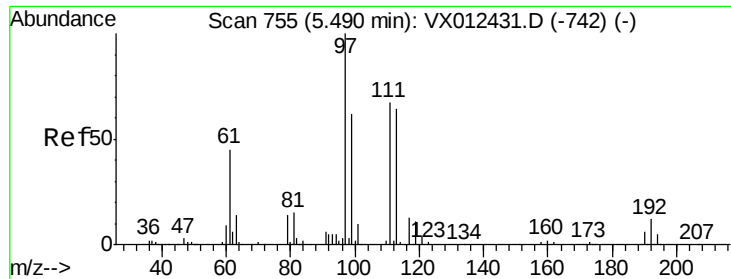
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#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. 0.00 min  
 Lab File: VX012552.D  
 Acq: 20 Sep 2019 13:15

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 114     | 100   | 284067 |       |       |
| 63      | 21.6  | 0.0    | 43.2  |       |
| 88      | 17.3  | 0.0    | 33.2  |       |





#35

Dibromofluoromethane

Concen: 48.334 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX012552.D

Acq: 20 Sep 2019 13:15

Instrument :

MSVOA\_X

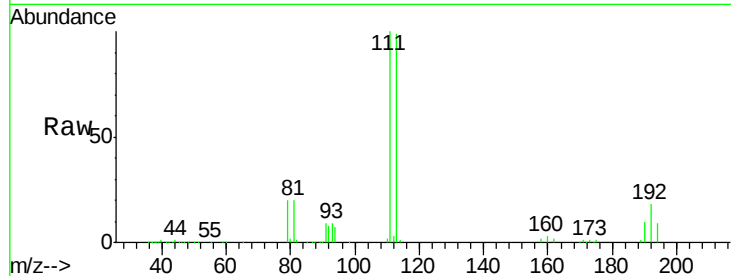
ClientSampleId :

Z2-0157DL

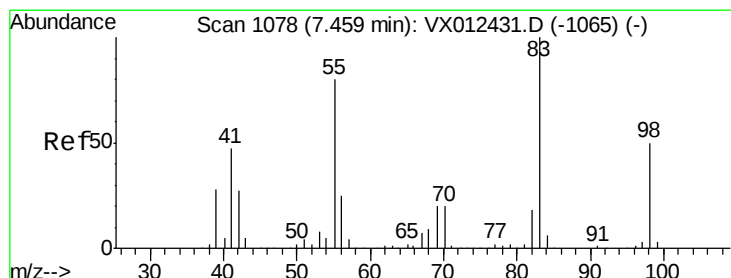
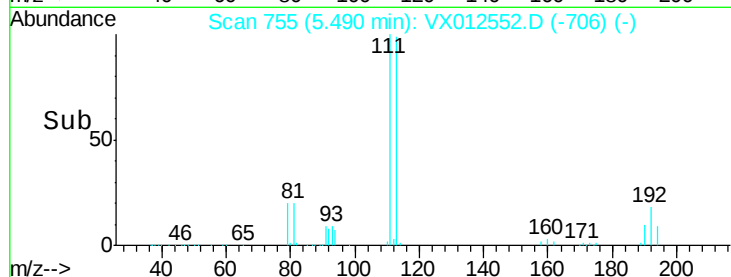
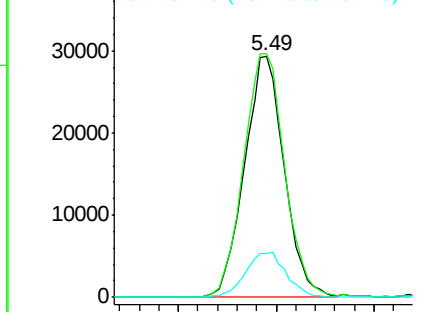
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 113   | Resp: | 83102 |
| Ion      | Ratio | Lower | Upper |
| 113      | 100   |       |       |
| 111      | 104.8 | 83.4  | 125.2 |
| 192      | 19.2  | 14.4  | 21.6  |

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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: 9.868 ug/l

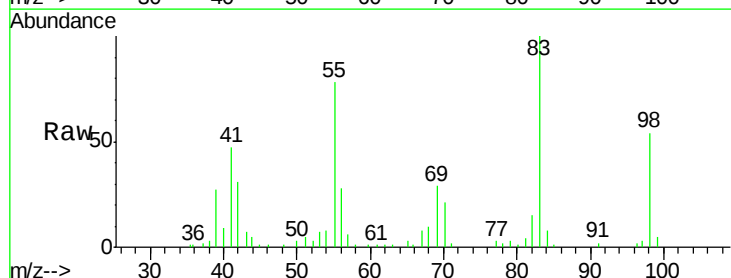
RT: 7.45 min Scan# 1077

Delta R.T. -0.01 min

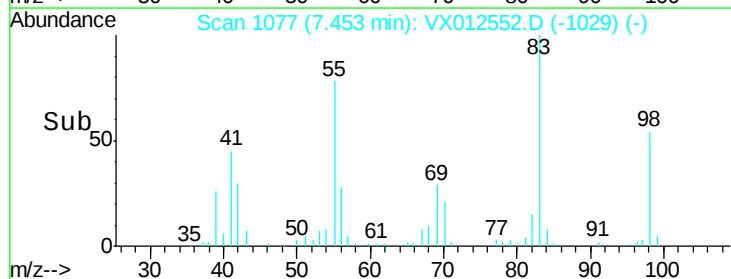
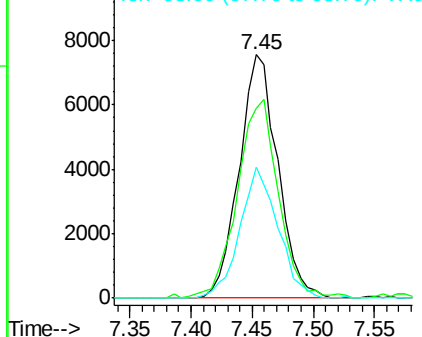
Lab File: VX012552.D

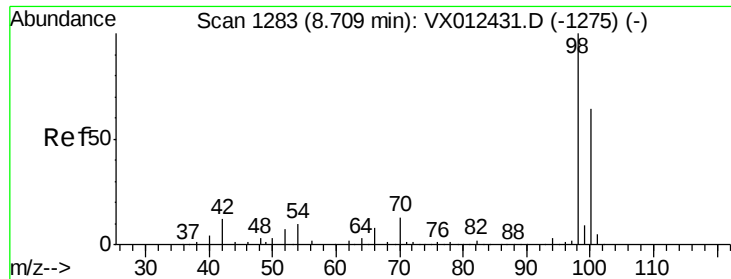
Acq: 20 Sep 2019 13:15

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 83    | Resp: | 16561 |
| Ion      | Ratio | Lower | Upper |
| 83       | 100   |       |       |
| 55       | 77.2  | 64.4  | 96.6  |
| 98       | 53.9  | 40.1  | 60.1  |



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





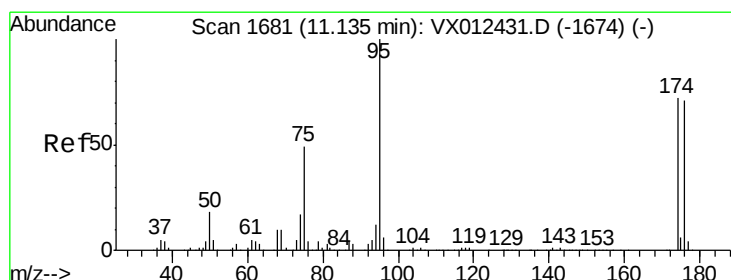
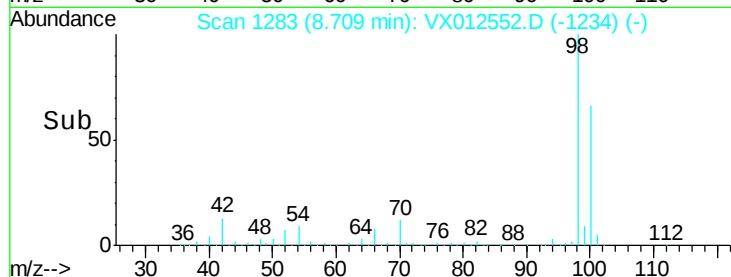
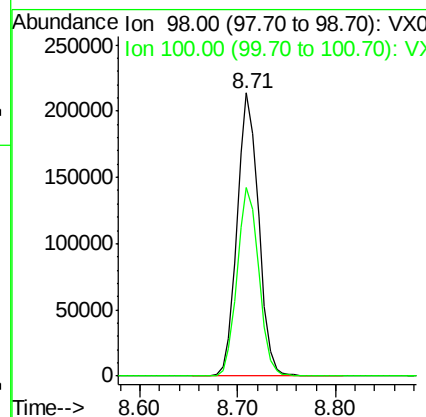
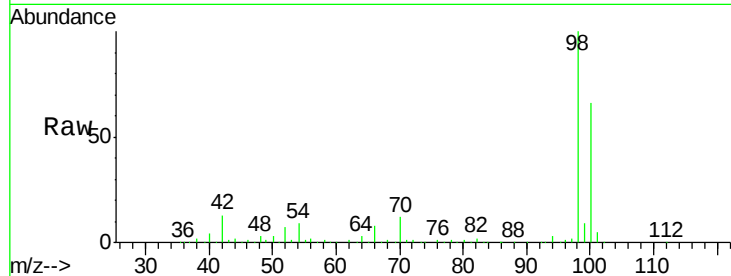
#50  
Toluene-d8  
Concen: 51.337 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

Instrument :  
MSVOA\_X  
ClientSampleID :  
Z2-0157DL

Tot Ion: 98 Resp: 326710  
Ion Ratio Lower Upper  
98 100  
100 67.2 53.4 80.2

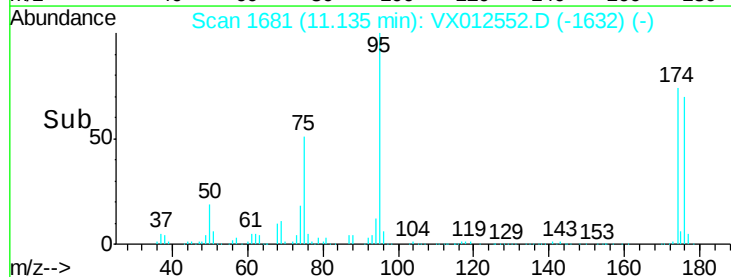
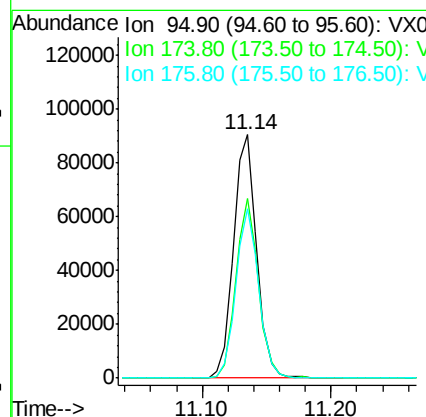
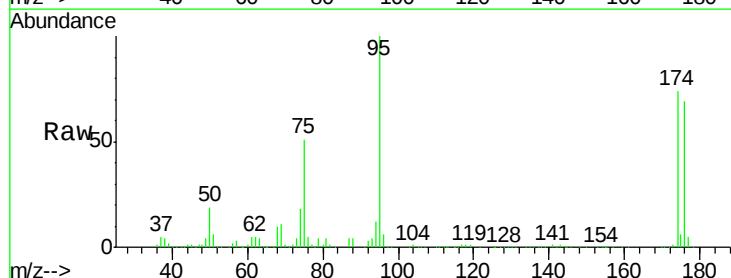
Manual Integrations  
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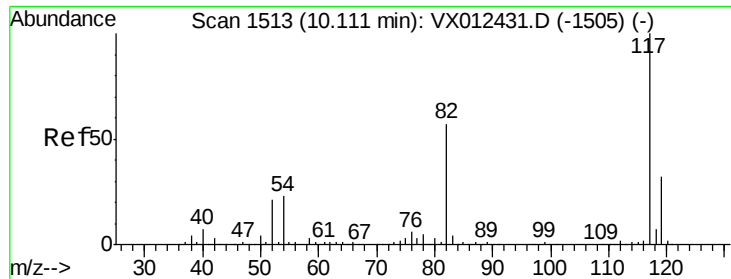
MMDadoda  
9/23/2019 11:29:45 AM



#62  
4-Bromofluorobenzene  
Concen: 43.277 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

Tgt Ion: 95 Resp: 114354  
Ion Ratio Lower Upper  
95 100  
174 71.6 0.0 140.0  
176 68.4 0.0 135.4





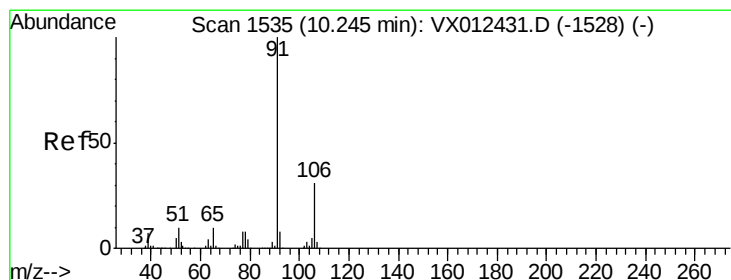
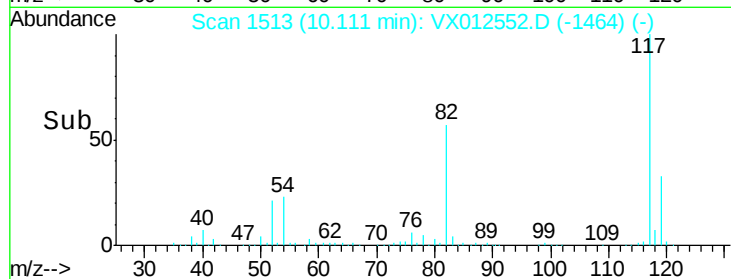
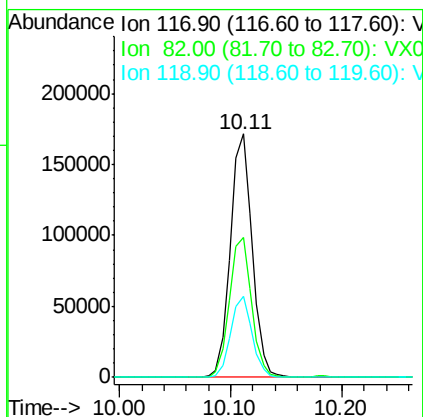
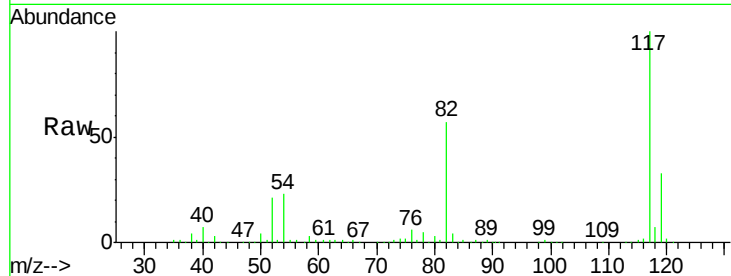
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z2-0157DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 57.3  | 45.9  | 68.9  |
| 119     | 33.1  | 25.3  | 37.9  |

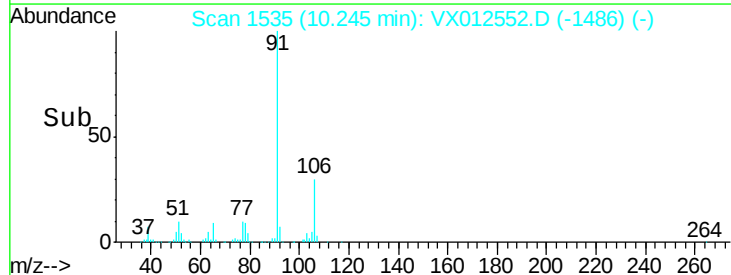
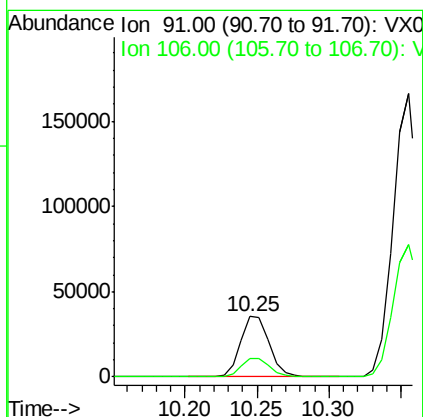
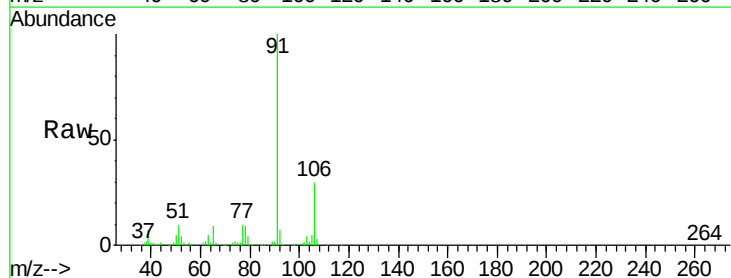
Manual Integrations  
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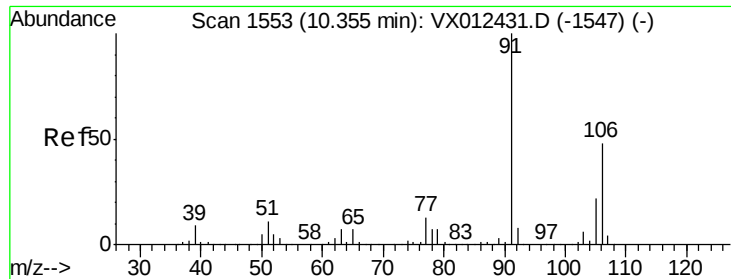
MMDadoda  
9/23/2019 11:29:45 AM



#67  
Ethyl Benzene  
Concen: 7.510 ug/l  
RT: 10.25 min Scan# 1535  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 30.1  | 24.6  | 37.0  |





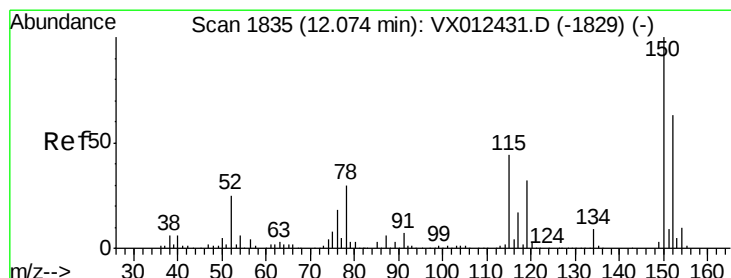
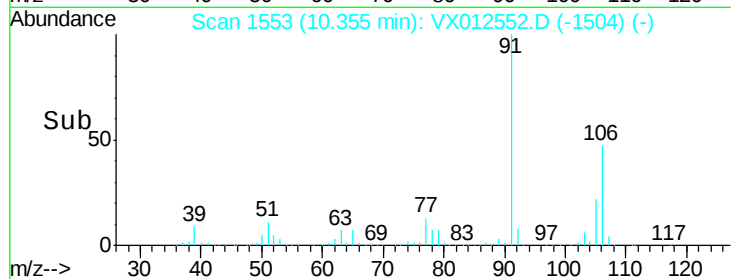
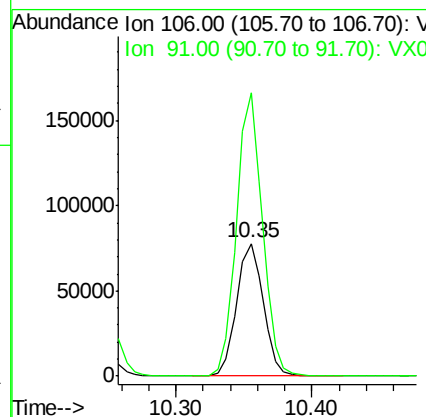
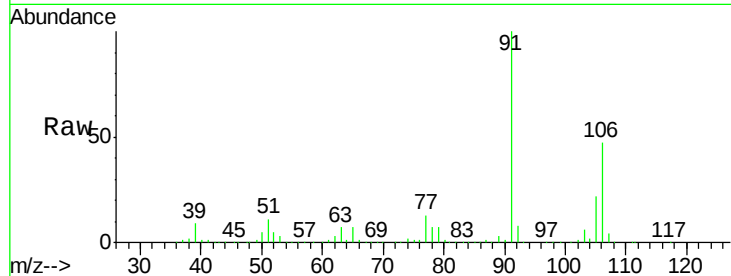
#68  
m/p-Xvlenes  
Concen: 44.466 ug/l  
RT: 10.35 min Scan# 1553  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z2-0157DL

Tot Ion:106 Resp: 106772  
Ion Ratio Lower Upper  
106 100  
91 206.4 166.6 250.0

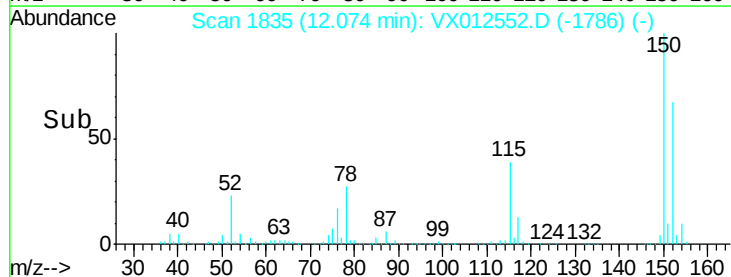
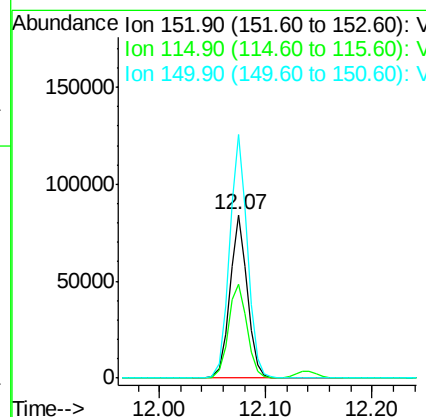
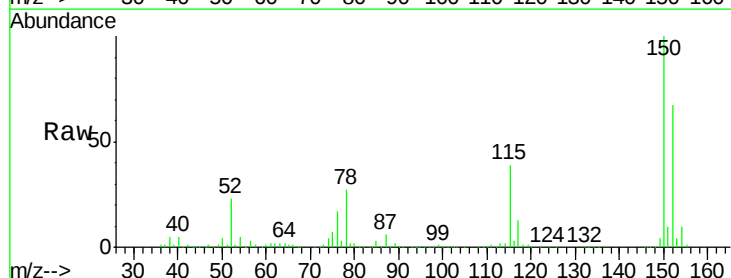
Manual Integrations  
APPROVED

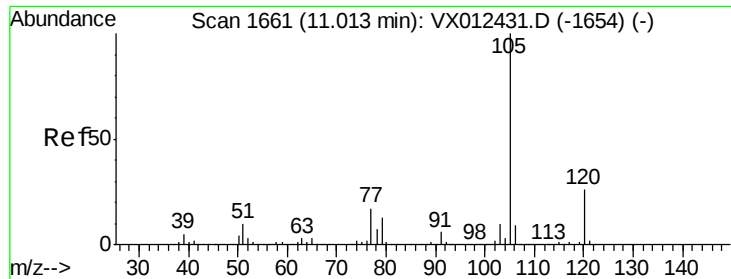
MMDadoda  
9/23/2019 11:29:45 AM



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

Tgt Ion:152 Resp: 95981  
Ion Ratio Lower Upper  
152 100  
115 61.2 44.1 132.3  
150 153.3 0.0 343.8





#73

Isopropylbenzene

Concen: 9.779 ug/l

RT: 11.01 min Scan# 1661

Delta R.T. 0.00 min

Lab File: VX012552.D

Acq: 20 Sep 2019 13:15

Instrument :

MSVOA\_X

ClientSampled :

Z2-0157DL

Tot Ion: 105 Resp: 58891

Ion Ratio Lower Upper

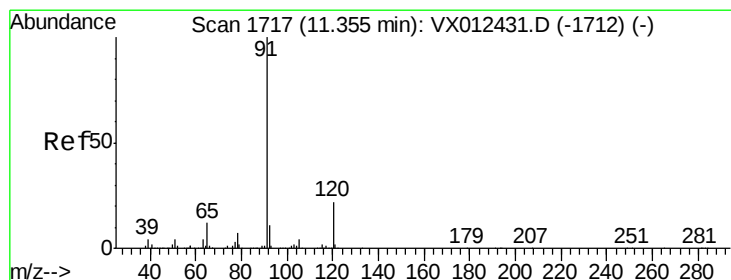
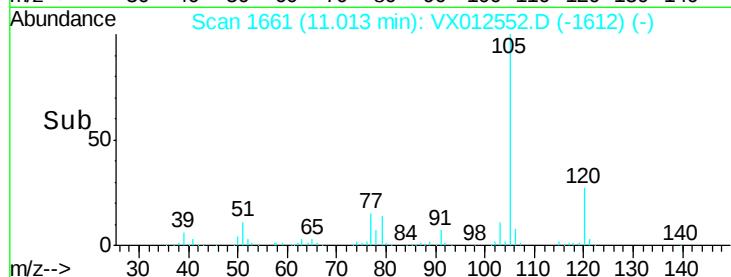
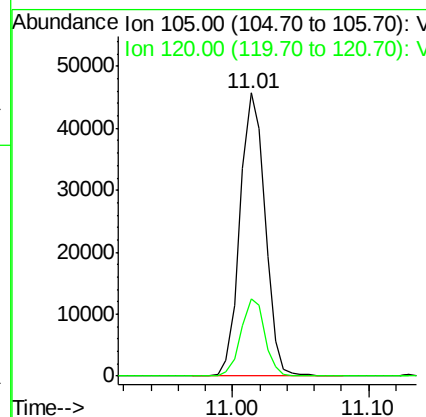
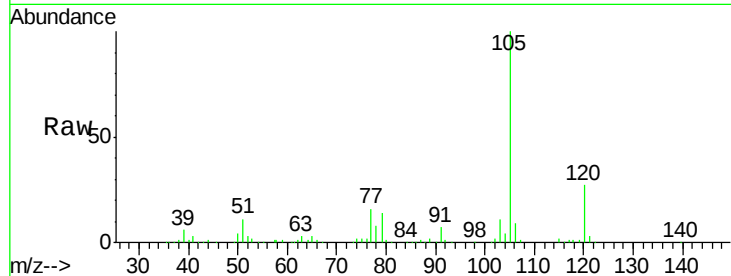
105 100

120 26.1 12.9 38.7

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#78

n-propylbenzene

Concen: 8.479 ug/l

RT: 11.35 min Scan# 1717

Delta R.T. 0.00 min

Lab File: VX012552.D

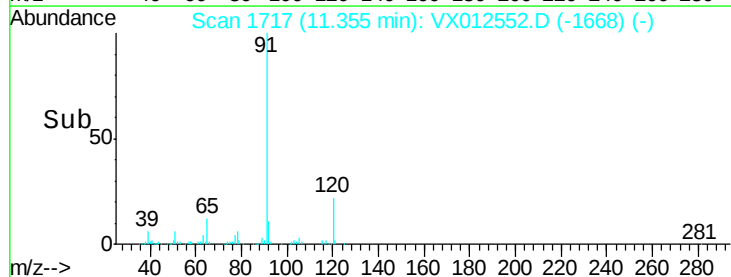
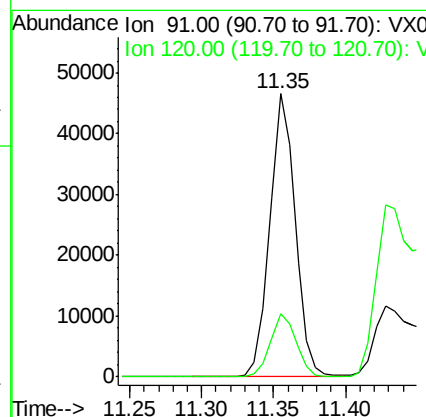
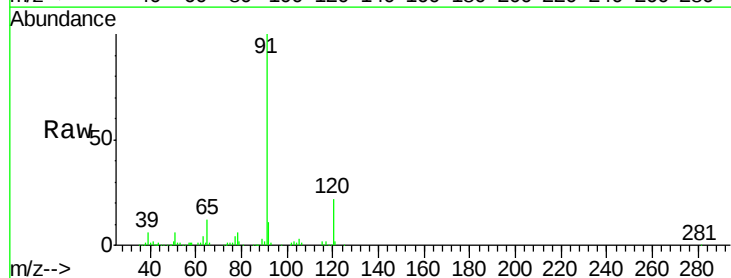
Acq: 20 Sep 2019 13:15

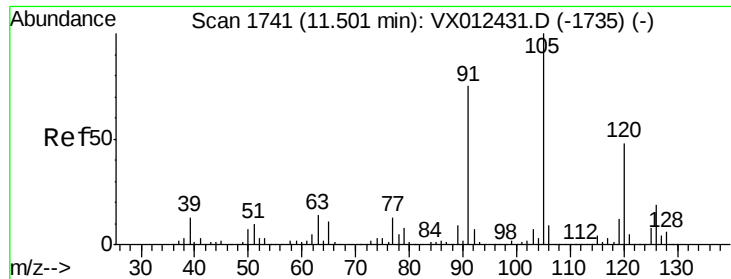
Tgt Ion: 91 Resp: 56910

Ion Ratio Lower Upper

91 100

120 22.6 11.3 33.8





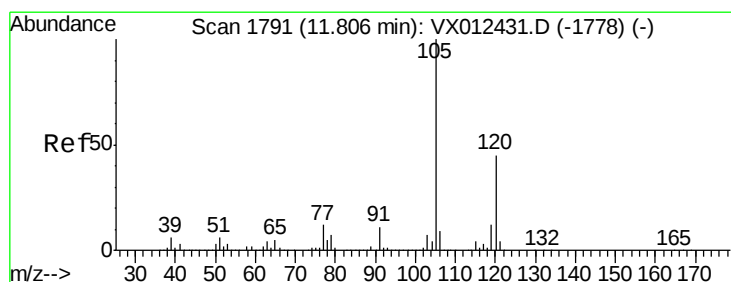
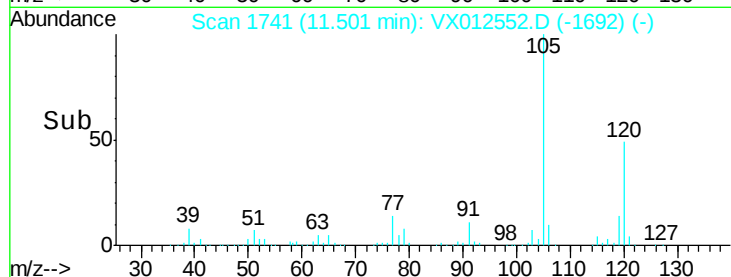
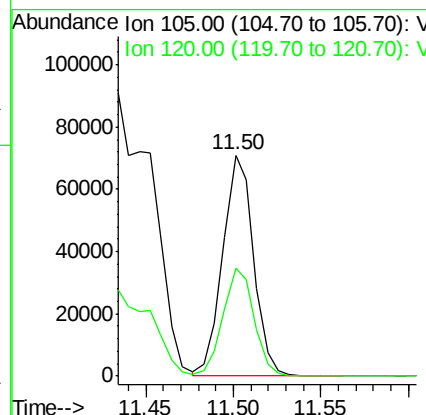
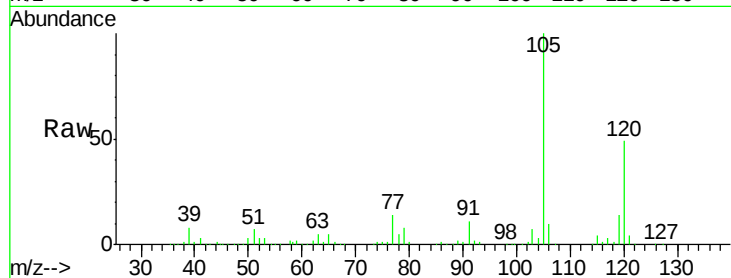
#80  
 1,3,5-Trimethylbenzene  
 Concen: 16.835 ug/l  
 RT: 11.50 min Scan# 1741  
 Delta R.T. 0.00 min  
 Lab File: VX012552.D  
 Acq: 20 Sep 2019 13:15

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 Z2-0157DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 49.2  | 24.3  | 72.8  |

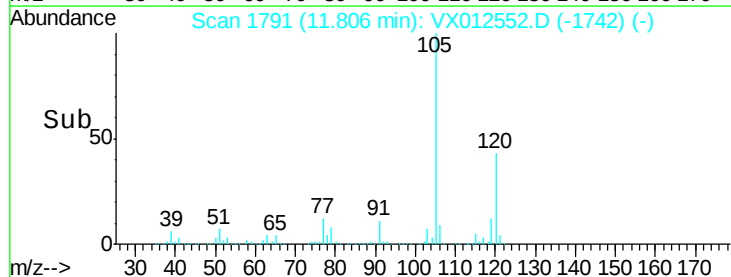
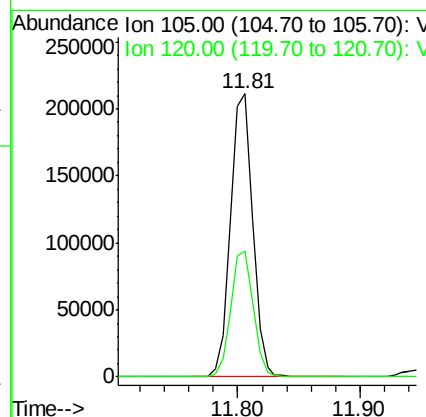
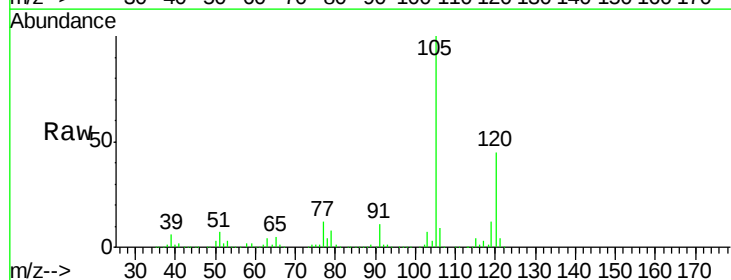
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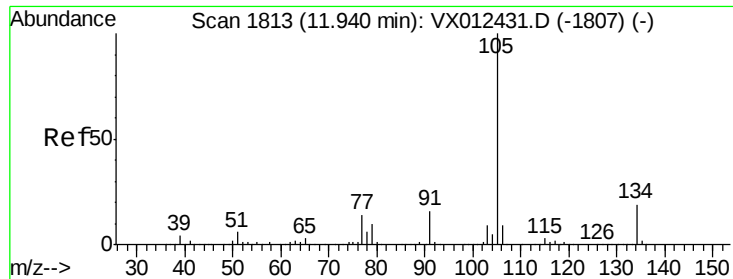
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#84  
 1,2,4-Trimethylbenzene  
 Concen: 50.012 ug/l  
 RT: 11.81 min Scan# 1791  
 Delta R.T. 0.00 min  
 Lab File: VX012552.D  
 Acq: 20 Sep 2019 13:15

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 45.0  | 22.2  | 66.6  |





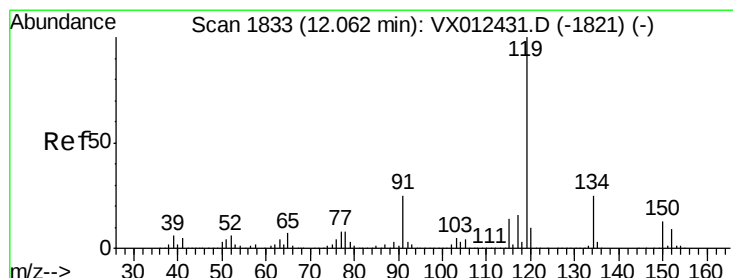
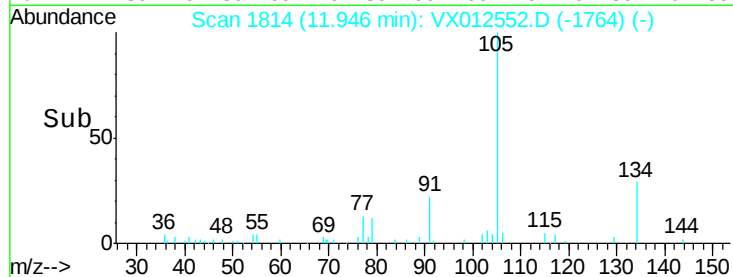
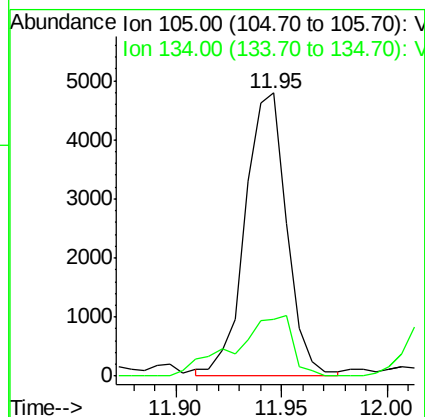
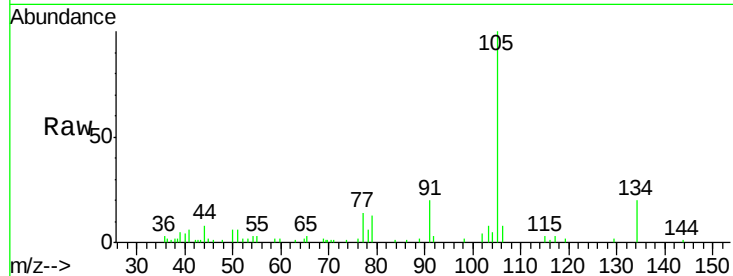
#85  
 sec-Butylbenzene  
 Concen: 1.089 ug/l m  
 RT: 11.95 min Scan# 1814  
 Delta R.T. 0.01 min  
 Lab File: VX012552.D  
 Acq: 20 Sep 2019 13:15

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 Z2-0157DL

Tot Ion:105 Resp: 6605  
 Ion Ratio Lower Upper  
 105 100  
 134 0.0 9.8 29.4#

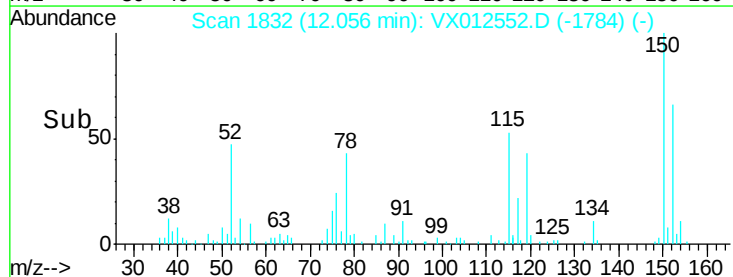
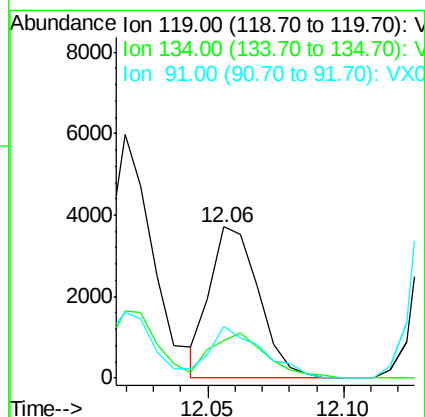
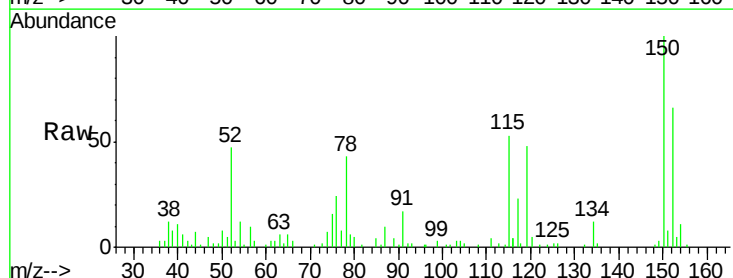
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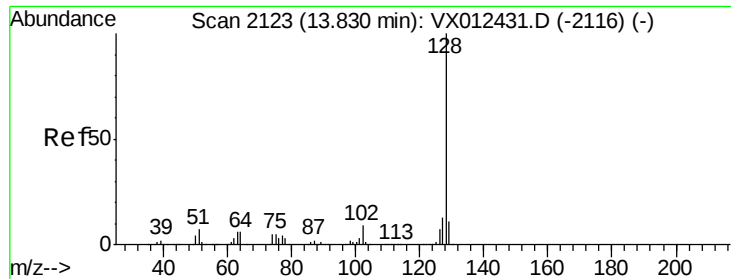
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#86  
 p-Isopropyltoluene  
 Concen: 0.827 ug/l  
 RT: 12.06 min Scan# 1832  
 Delta R.T. -0.01 min  
 Lab File: VX012552.D  
 Acq: 20 Sep 2019 13:15

Tgt Ion:119 Resp: 4607  
 Ion Ratio Lower Upper  
 119 100  
 134 34.0 12.7 38.1  
 91 38.0 12.8 38.4





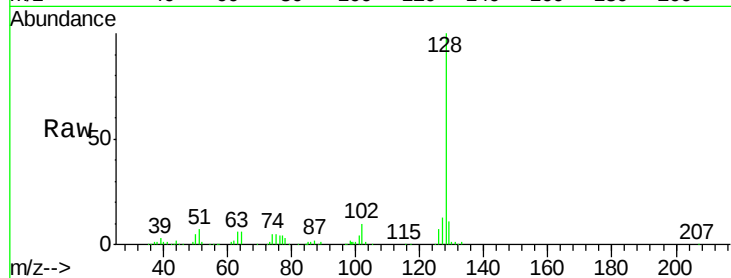
#95  
Naphthalene  
Concen: 4.800 ug/l  
RT: 13.83 min Scan# 2123  
Delta R.T. 0.00 min  
Lab File: VX012552.D  
Acq: 20 Sep 2019 13:15

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z2-0157DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.6  | 10.2  | 15.4  |
| 129     | 11.3  | 8.8   | 13.2  |

Manual Integrations  
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Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V

