

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX092019\  
 Data File : VX012553.D  
 Acq On : 20 Sep 2019 13:38  
 Operator : JC/SP  
 Sample : K4887-06DL 20X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z2-0159DL

Manual Integrations  
 APPROVED

MMDadoda  
 9/23/2019 11:29:50 AM

Quant Time: Sep 21 02:01:10 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  | 177141   | 50.00  | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene     | 6.85  | 114  | 279493   | 50.00  | ug/l    | 0.00     |
| 63) Chlorobenzene-d5        | 10.11 | 117  | 248719   | 50.00  | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 12.07 | 152  | 107509   | 50.00  | ug/l    | 0.00     |
| System Monitoring Compounds |       |      |          |        |         |          |
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 116766   | 45.99  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 91.98%  |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 81430    | 48.14  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 96.28%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 328084   | 52.40  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 104.80% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 126818   | 48.78  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 97.56%  |          |
| Target Compounds            |       |      |          |        |         |          |
|                             |       |      |          |        | Qvalue  |          |
| 31) Cyclohexane             | 5.56  | 56   | 20239    | 11.542 | ug/l    | 96       |
| 39) Methylcyclohexane       | 7.45  | 83   | 30245    | 18.316 | ug/l    | 97       |
| 67) Ethyl Benzene           | 10.25 | 91   | 217525   | 30.842 | ug/l    | 98       |
| 68) m/p-Xylenes             | 10.35 | 106  | 89902    | 35.034 | ug/l    | 95       |
| 73) Isopropylbenzene        | 11.01 | 105  | 49282    | 7.306  | ug/l    | 99       |
| 78) n-propylbenzene         | 11.35 | 91   | 53458    | 7.110  | ug/l    | 99       |
| 84) 1,2,4-Trimethylbenzene  | 11.81 | 105  | 218031   | 36.911 | ug/l    | 98       |
| 85) sec-Butylbenzene        | 11.94 | 105  | 7377     | 1.086  | ug/l    | 87       |
| 86) p-Isopropyltoluene      | 12.06 | 119  | 7051     | 1.130  | ug/l    | 92       |
| 89) n-Butylbenzene          | 12.39 | 91   | 2186m    | 0.393  | ug/l    |          |
| 95) Naphthalene             | 13.83 | 128  | 46654    | 6.294  | ug/l    | 99       |

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

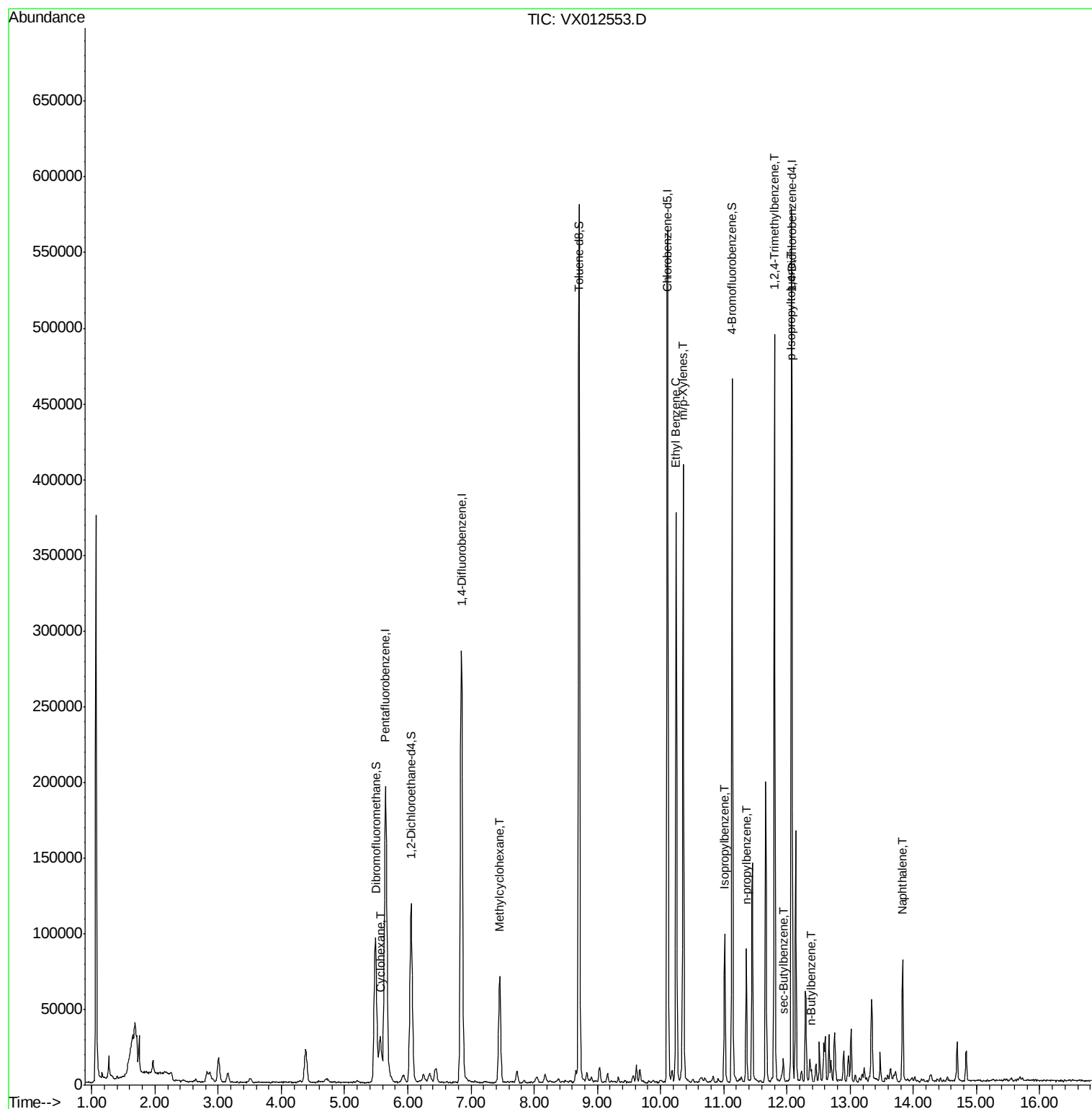
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX092019\  
Data File : VX012553.D  
Acq On : 20 Sep 2019 13:38  
Operator : JC/SP  
Sample : K4887-06DL 20X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 10 Sample Multiplier: 1

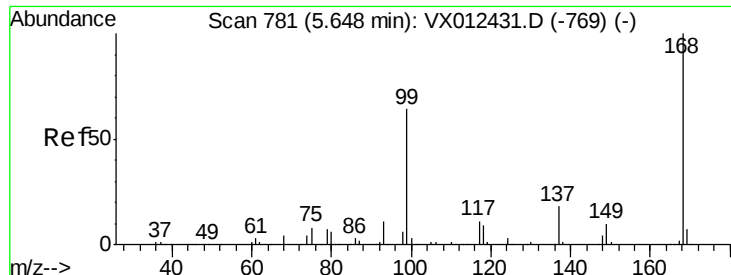
Instrument :  
MSVOA\_X  
ClientSampleID :  
Z2-0159DL

Manual Integrations  
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9/23/2019 11:29:50 AM

Quant Time: Sep 21 02:01:10 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: VX012553.D

Acq: 20 Sep 2019 13:38

Instrument :

MSVOA\_X

ClientSampleId :

Z2-0159DL

Tot Ion:168 Resp: 177141

Ion Ratio Lower Upper

168 100

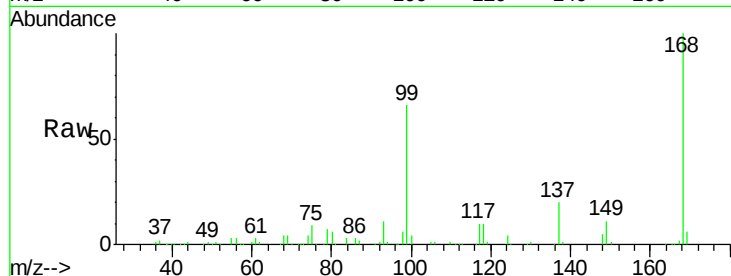
99 65.8 51.4 77.2

Manual Integrations

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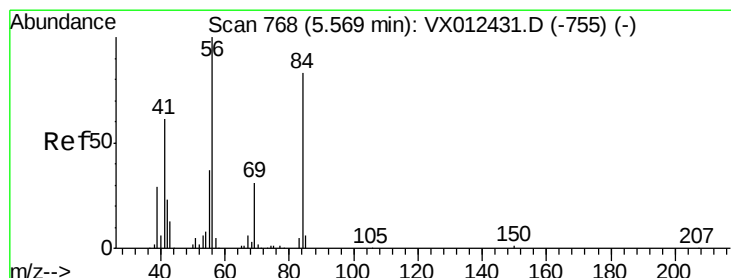
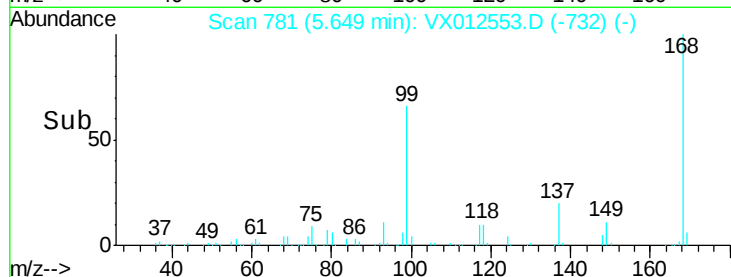
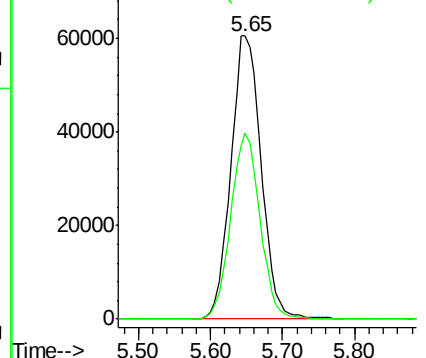
MMDadoda

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#31

Cyclohexane

Concen: 11.542 ug/l

RT: 5.56 min Scan# 767

Delta R.T. -0.01 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

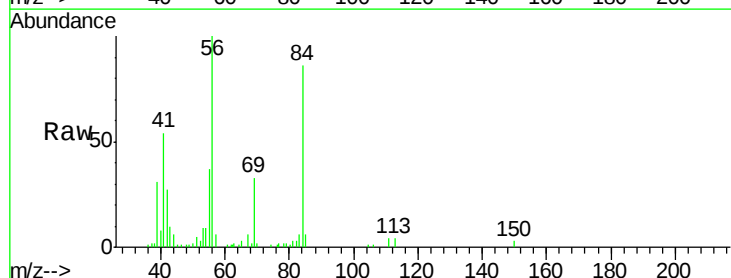
Tgt Ion: 56 Resp: 20239

Ion Ratio Lower Upper

56 100

69 32.8 25.0 37.6

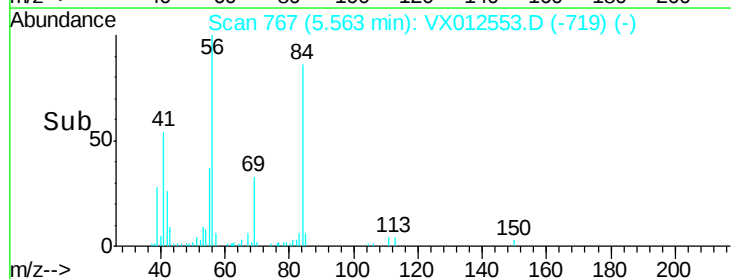
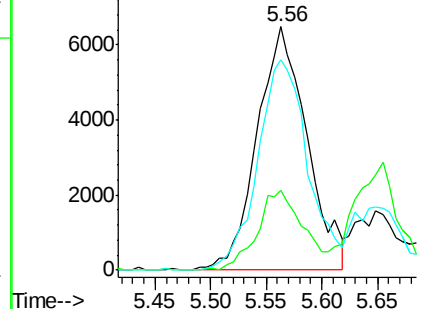
84 86.4 66.4 99.6

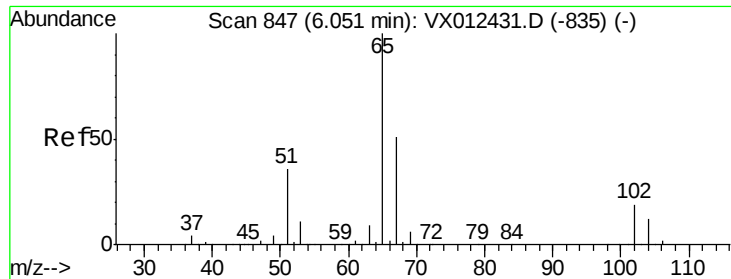


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0





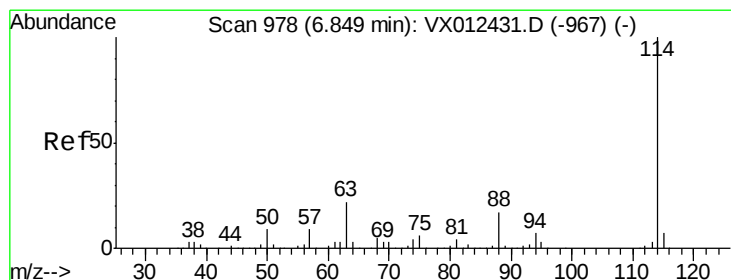
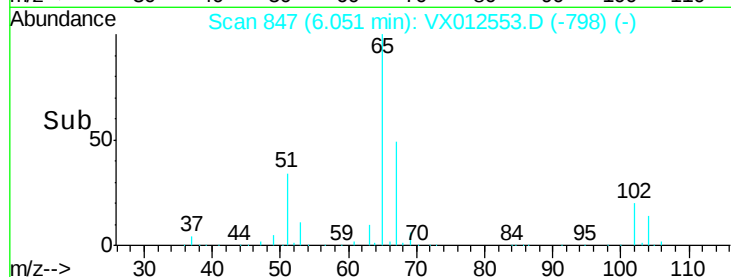
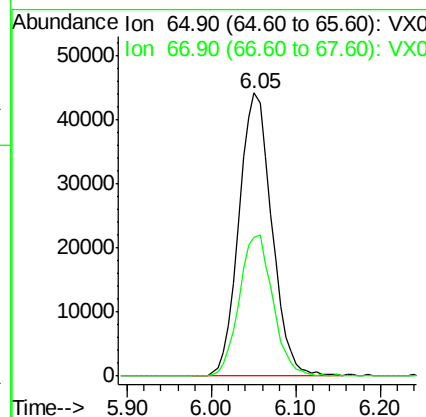
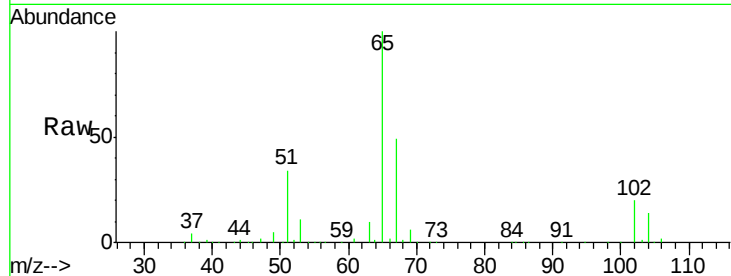
#33  
 1,2-Dichloroethane-d4  
 Concen: 45.993 ug/l  
 RT: 6.05 min Scan# 847  
 Delta R.T. 0.00 min  
 Lab File: VX012553.D  
 Acq: 20 Sep 2019 13:38

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 Z2-0159DL

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 65      | 100   | 116766 |       |       |
| 67      | 50.9  | 0.0    | 101.2 |       |

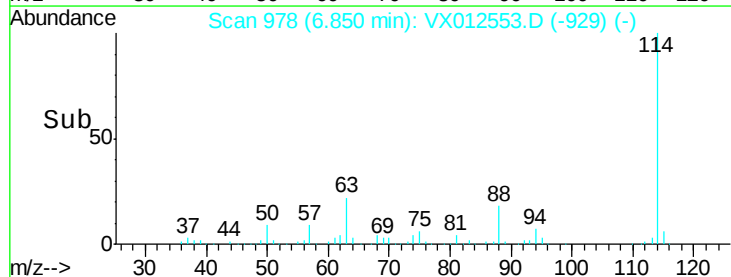
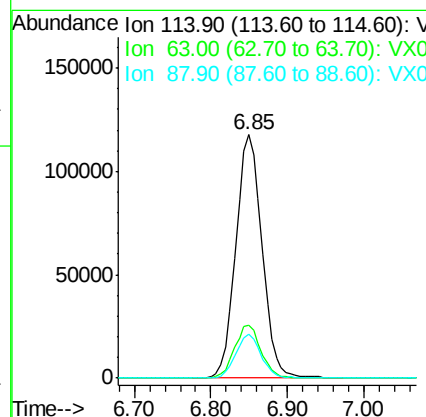
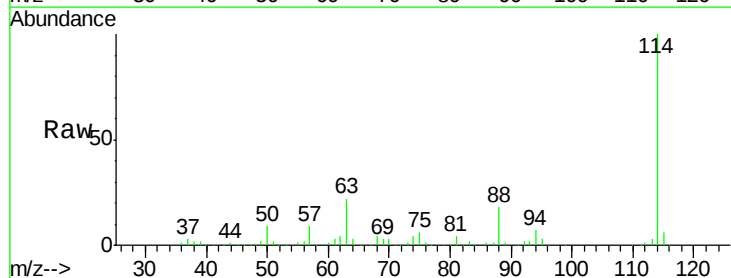
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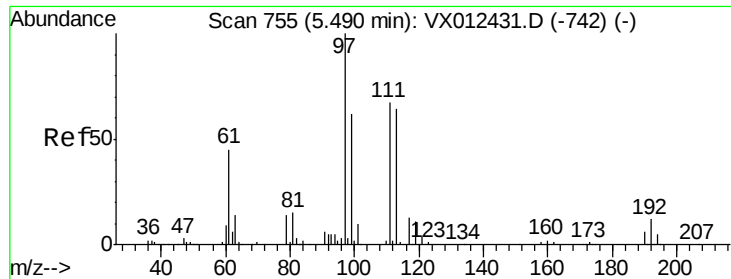
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 9/23/2019 11:29:50 AM



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. 0.00 min  
 Lab File: VX012553.D  
 Acq: 20 Sep 2019 13:38

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 114     | 100   | 279493 |       |       |
| 63      | 21.6  | 0.0    | 43.2  |       |
| 88      | 18.3  | 0.0    | 33.2  |       |





#35

Dibromofluoromethane

Concen: 48.136 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

Instrument :

MSVOA\_X

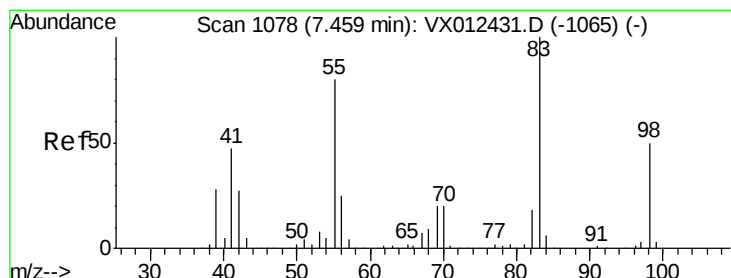
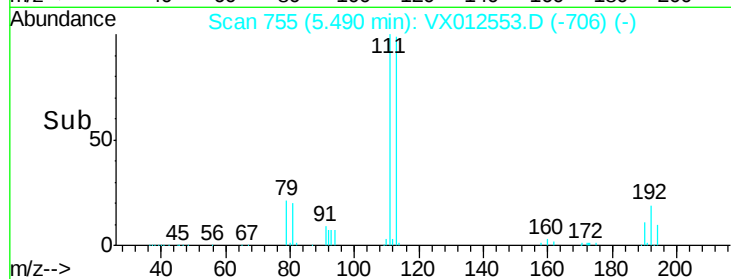
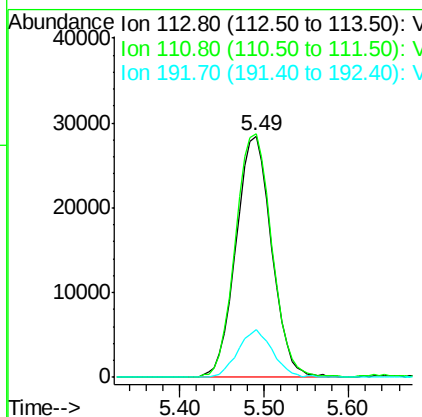
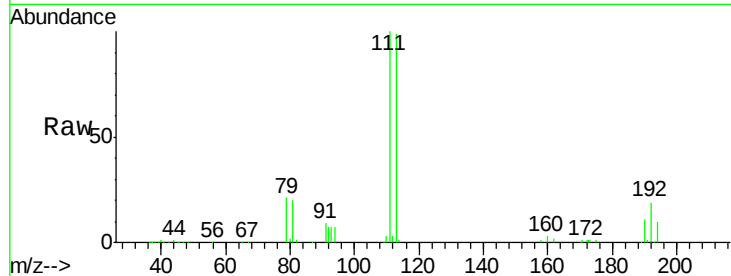
ClientSampleId :

Z2-0159DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 113   | Resp: | 81430 |
| Ion Ratio | Lower | Upper |       |
| 113       | 100   |       |       |
| 111       | 103.2 | 83.4  | 125.2 |
| 192       | 19.0  | 14.4  | 21.6  |

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#39

Methylcyclohexane

Concen: 18.316 ug/l

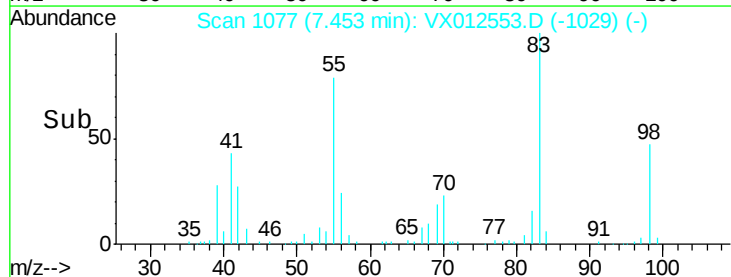
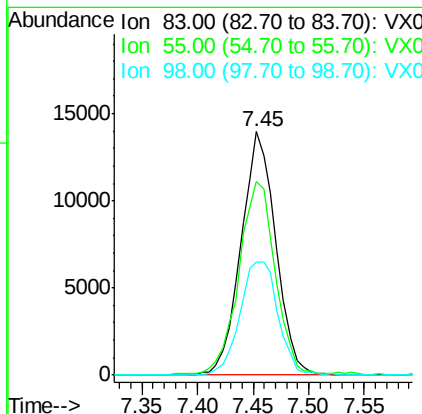
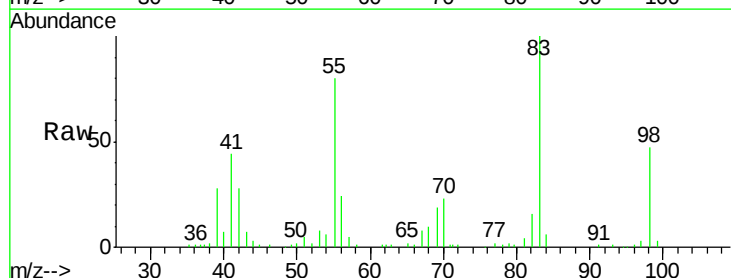
RT: 7.45 min Scan# 1077

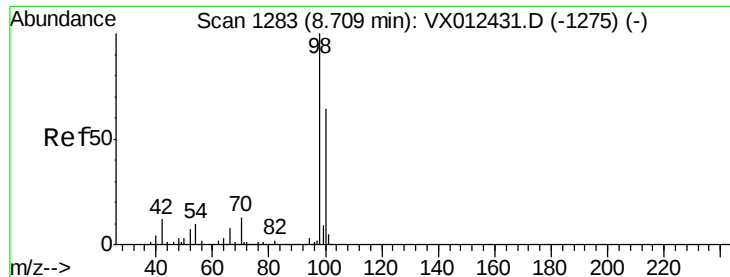
Delta R.T. -0.01 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 83    | Resp: | 30245 |
| Ion Ratio | Lower | Upper |       |
| 83        | 100   |       |       |
| 55        | 79.1  | 64.4  | 96.6  |
| 98        | 46.7  | 40.1  | 60.1  |





#50

Toluene-d8

Concen: 52.397 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

Instrument :

MSVOA\_X

ClientSampleID :

Z2-0159DL

Tot Ion: 98 Resp: 328084

Ion Ratio Lower Upper

98 100

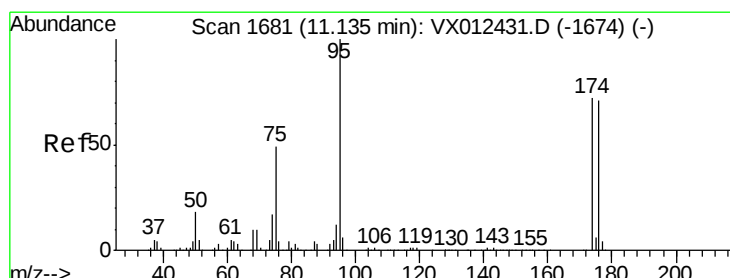
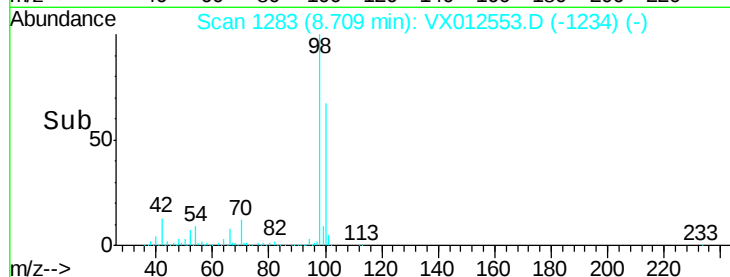
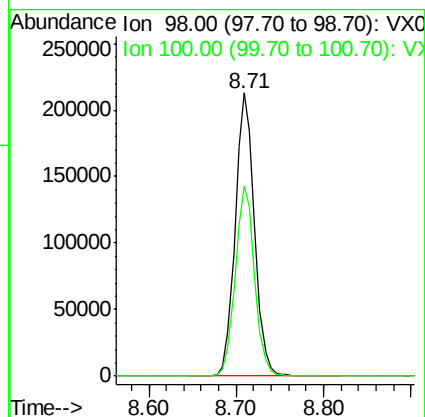
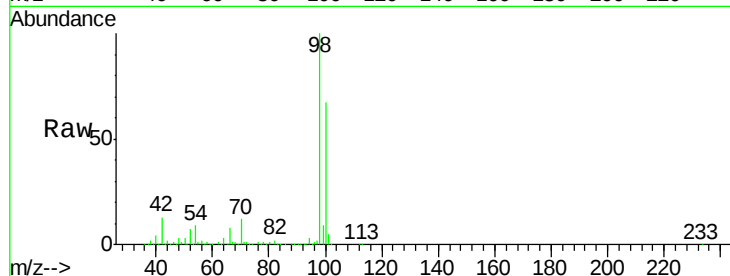
100 67.3 53.4 80.2

Manual Integrations

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#62

4-Bromofluorobenzene

Concen: 48.779 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.00 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

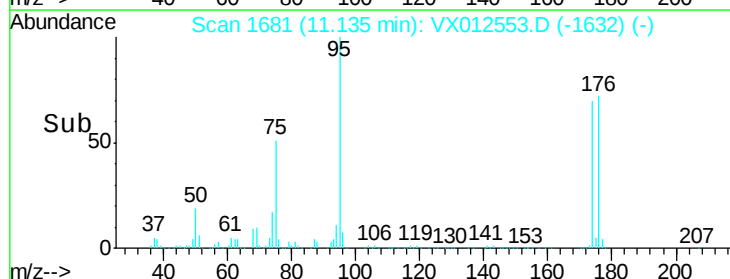
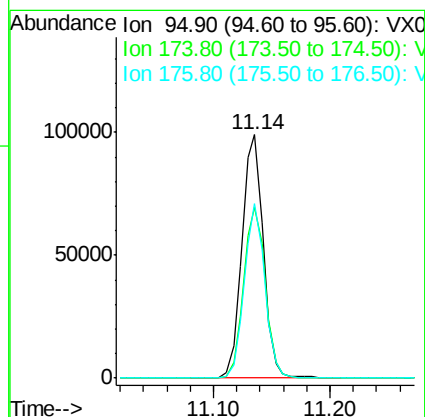
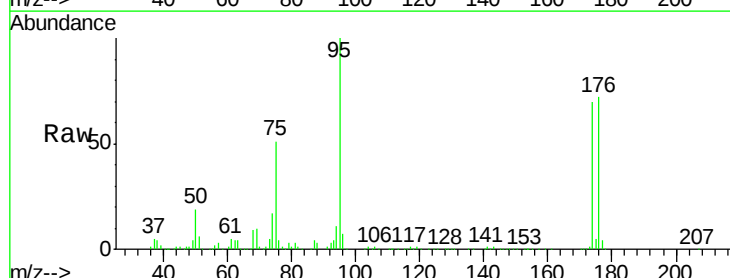
Tgt Ion: 95 Resp: 126818

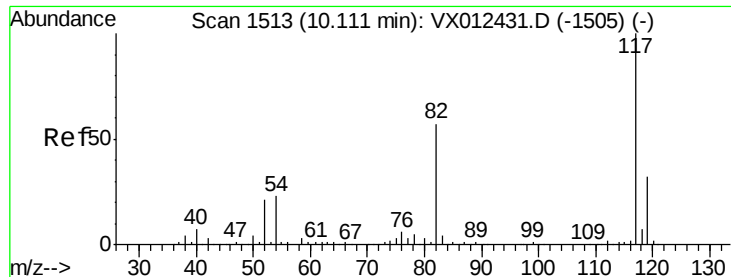
Ion Ratio Lower Upper

95 100

174 71.8 0.0 140.0

176 69.1 0.0 135.4





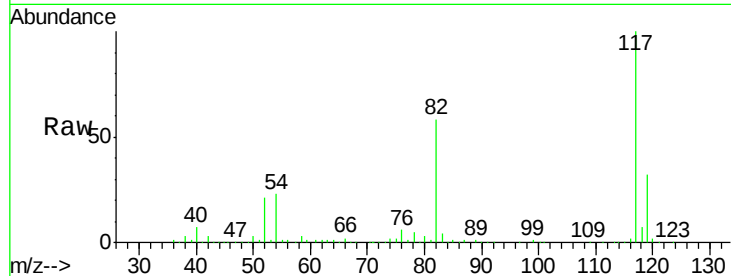
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

Instrument :  
MSVOA\_X  
ClientSampleID :  
Z2-0159DL

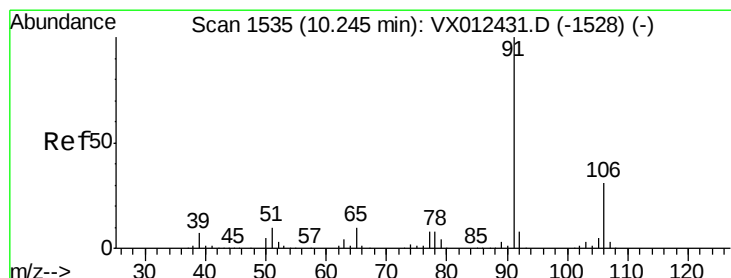
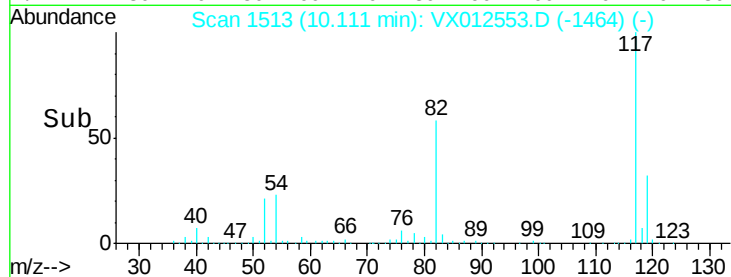
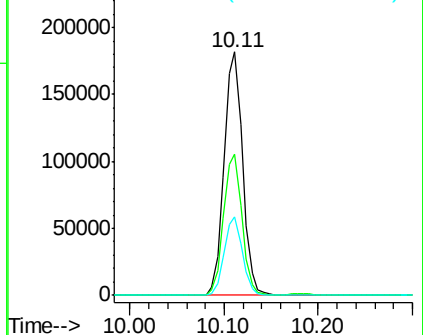
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 58.2  | 45.9  | 68.9  |
| 119     | 32.4  | 25.3  | 37.9  |

Manual Integrations  
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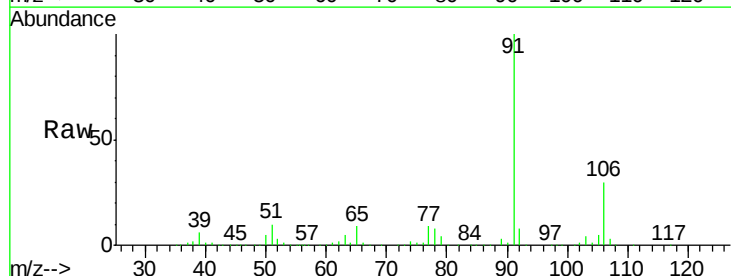


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

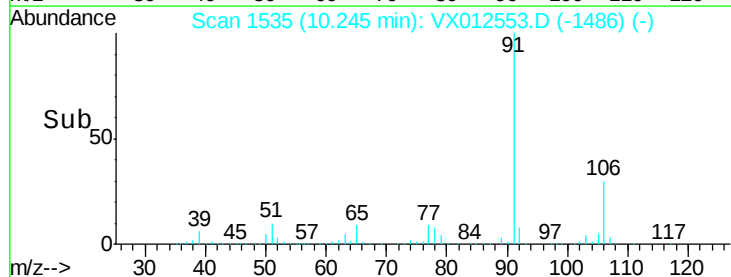
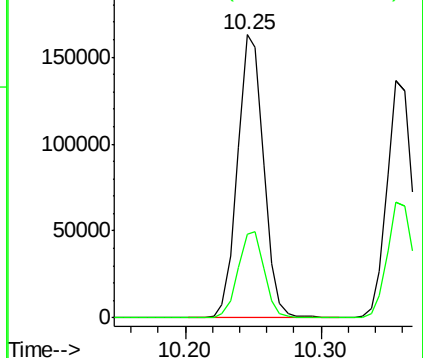


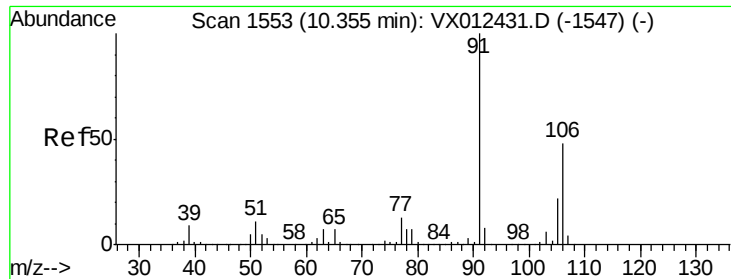
#67  
Ethyl Benzene  
Concen: 30.842 ug/l  
RT: 10.25 min Scan# 1535  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 29.5  | 24.6  | 37.0  |



Abundance Ion 91.00 (90.70 to 91.70): VX0  
Ion 106.00 (105.70 to 106.70): V





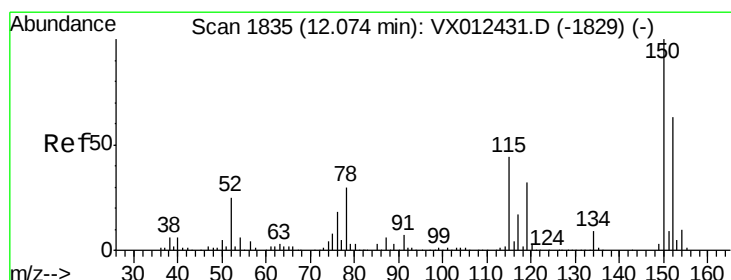
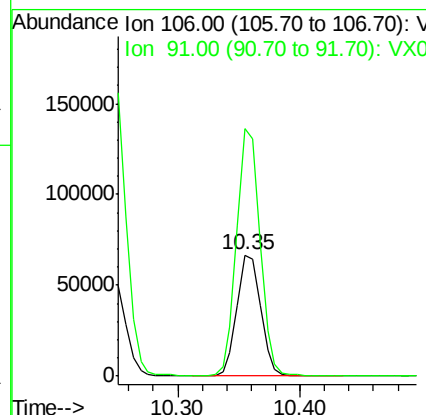
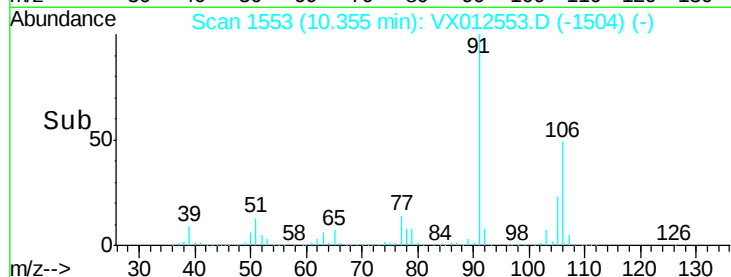
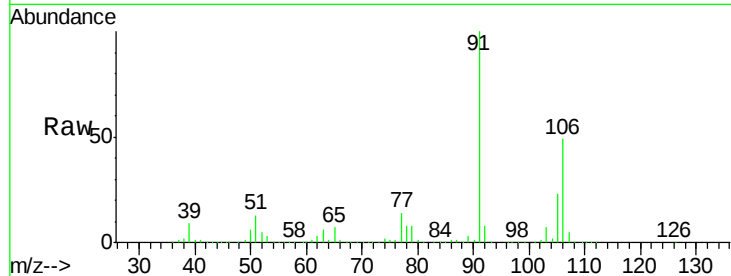
#68  
m/p-Xvlenes  
Concen: 35.034 ug/l  
RT: 10.35 min Scan# 1553  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

Instrument :  
MSVOA\_X  
ClientSampled :  
Z2-0159DL

Tot Ion:106 Resp: 89902  
Ion Ratio Lower Upper  
106 100  
91 200.1 166.6 250.0

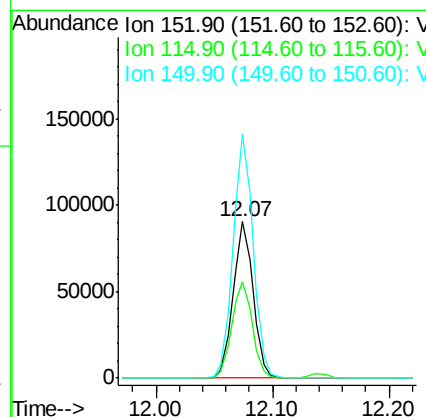
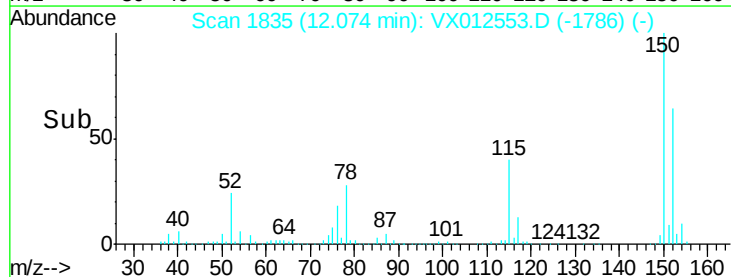
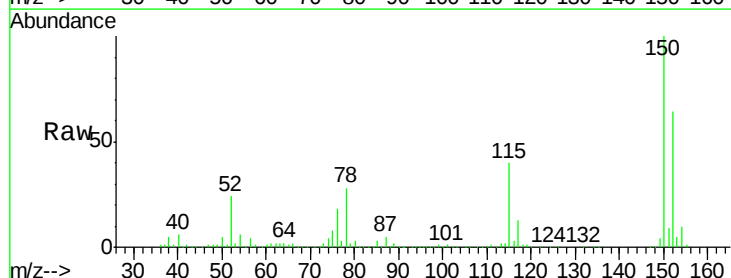
Manual Integrations  
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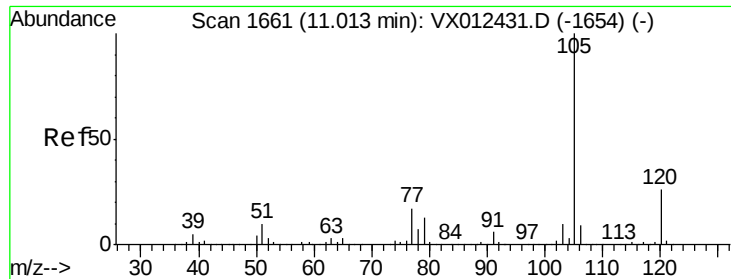
MMDadoda  
9/23/2019 11:29:50 AM



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

Tgt Ion:152 Resp: 107509  
Ion Ratio Lower Upper  
152 100  
115 63.1 44.1 132.3  
150 156.2 0.0 343.8





#73

Isopropylbenzene

Concen: 7.306 ug/l

RT: 11.01 min Scan# 1661

Delta R.T. 0.00 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

Instrument :

MSVOA\_X

ClientSampleId :

Z2-0159DL

Tot Ion: 105 Resp: 49282

Ion Ratio Lower Upper

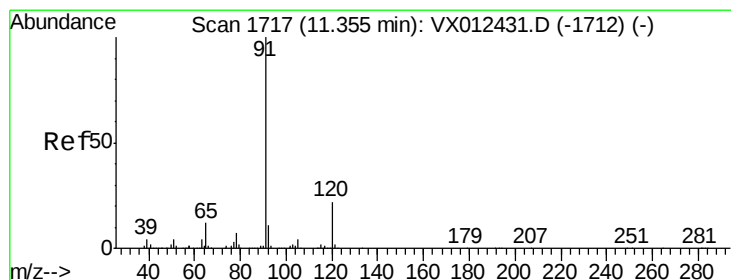
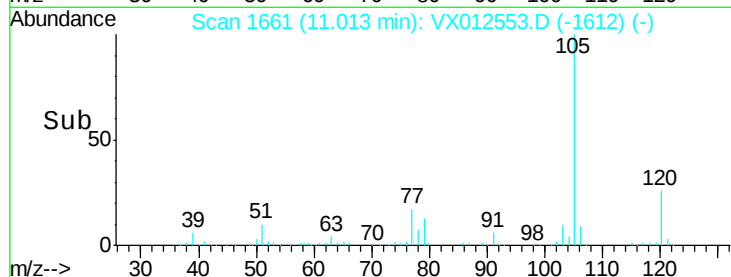
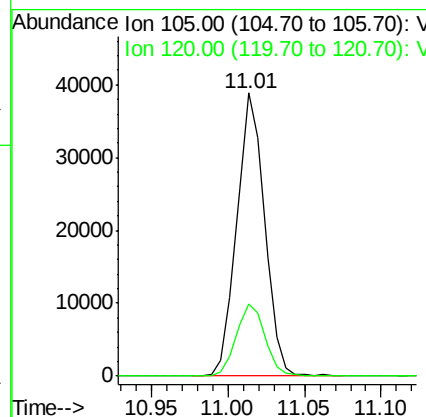
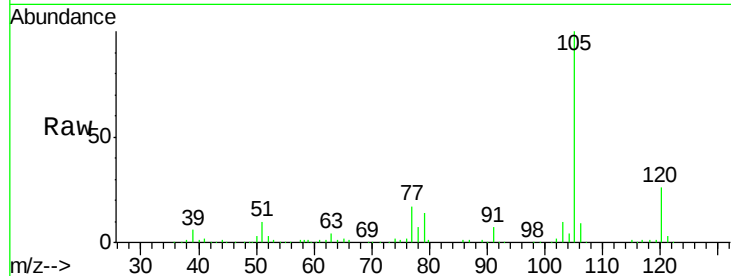
105 100

120 26.1 12.9 38.7

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#78

n-propylbenzene

Concen: 7.110 ug/l

RT: 11.35 min Scan# 1717

Delta R.T. 0.00 min

Lab File: VX012553.D

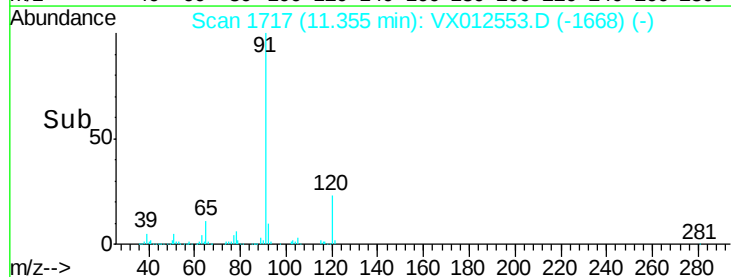
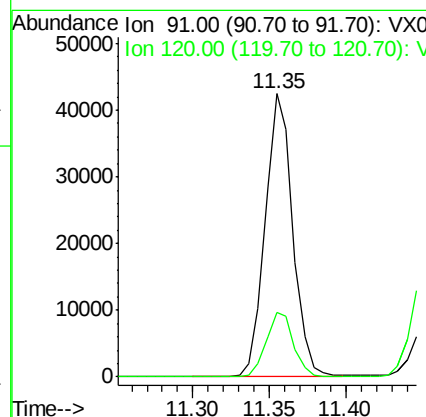
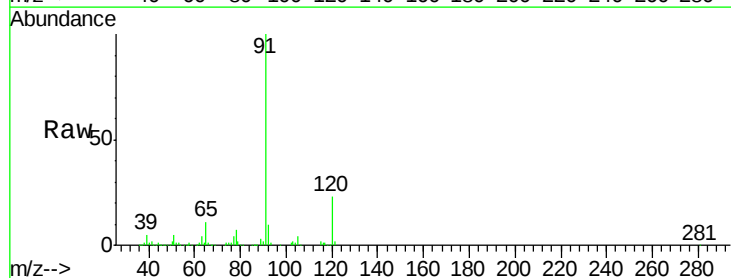
Acq: 20 Sep 2019 13:38

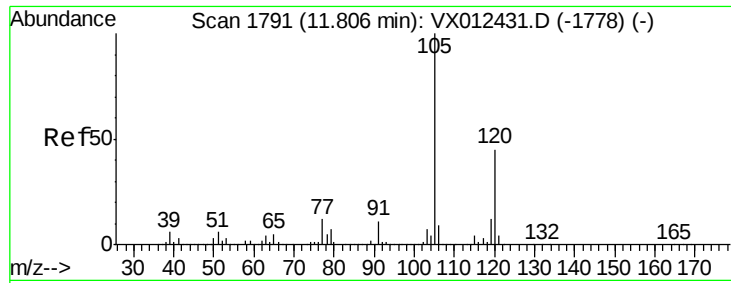
Tgt Ion: 91 Resp: 53458

Ion Ratio Lower Upper

91 100

120 22.9 11.3 33.8





#84

1,2,4-Trimethylbenzene

Concen: 36.911 ug/l

RT: 11.81 min Scan# 1791

Delta R.T. 0.00 min

Lab File: VX012553.D

Acq: 20 Sep 2019 13:38

Instrument :

MSVOA\_X

ClientSampleId :

Z2-0159DL

Tot Ion:105 Resp: 218031

Ion Ratio Lower Upper

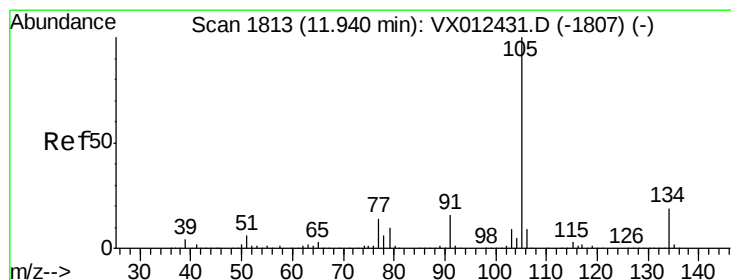
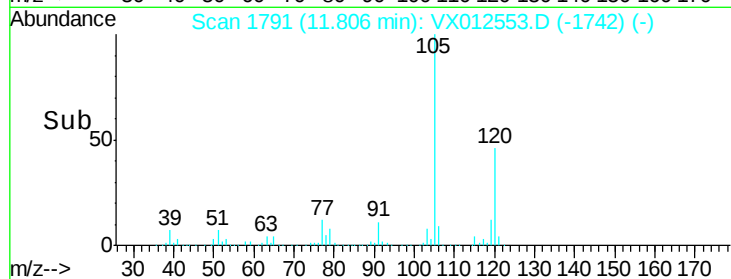
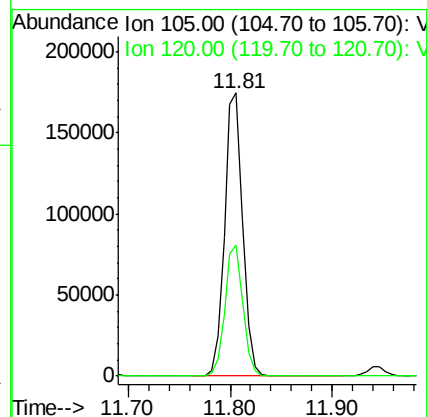
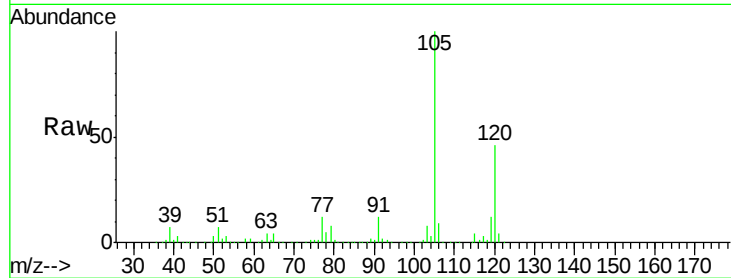
105 100

120 45.9 22.2 66.6

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#85

sec-Butylbenzene

Concen: 1.086 ug/l

RT: 11.94 min Scan# 1813

Delta R.T. 0.00 min

Lab File: VX012553.D

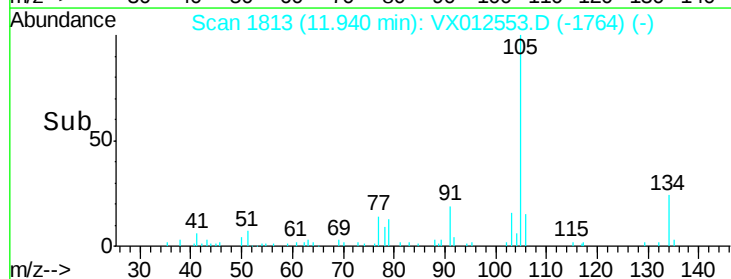
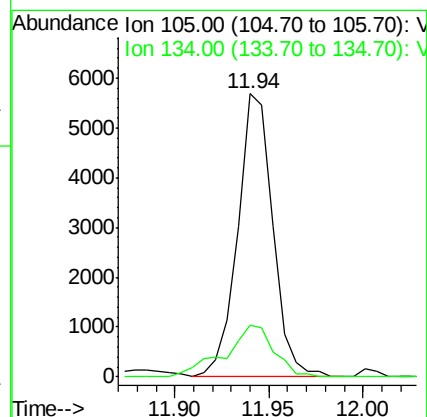
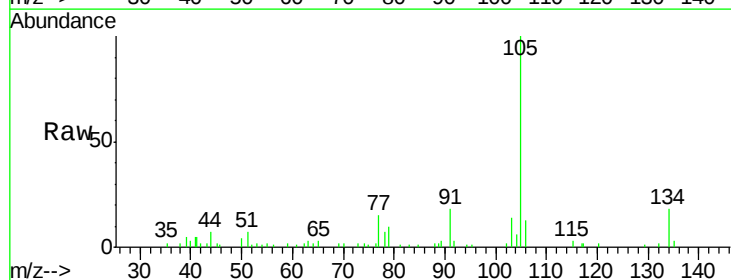
Acq: 20 Sep 2019 13:38

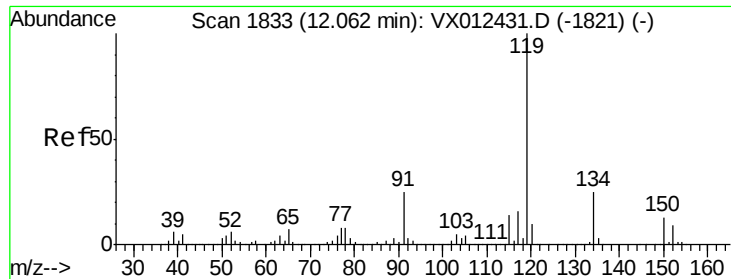
Tgt Ion:105 Resp: 7377

Ion Ratio Lower Upper

105 100

134 25.6 9.8 29.4





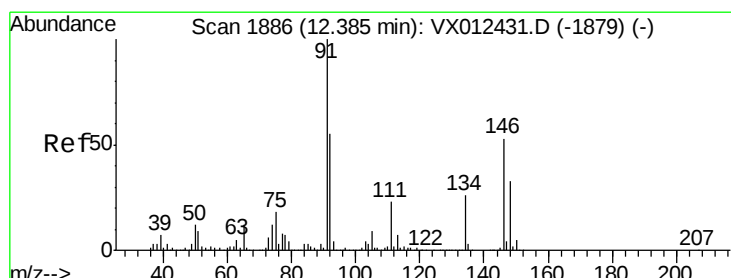
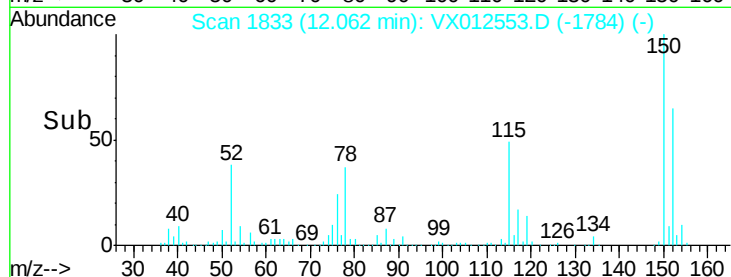
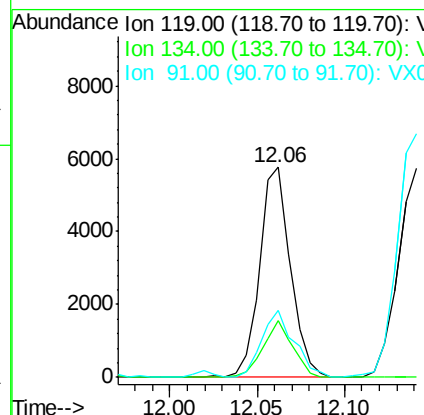
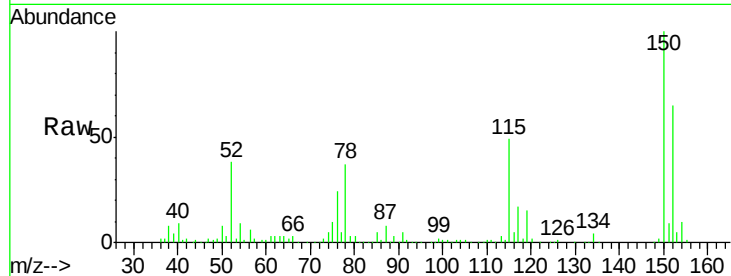
#86  
p-Isopropyltoluene  
Concen: 1.130 ug/l  
RT: 12.06 min Scan# 1833  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

Instrument :  
MSVOA\_X  
ClientSampleID :  
Z2-0159DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 25.9  | 12.7  | 38.1  |
| 91      | 33.6  | 12.8  | 38.4  |

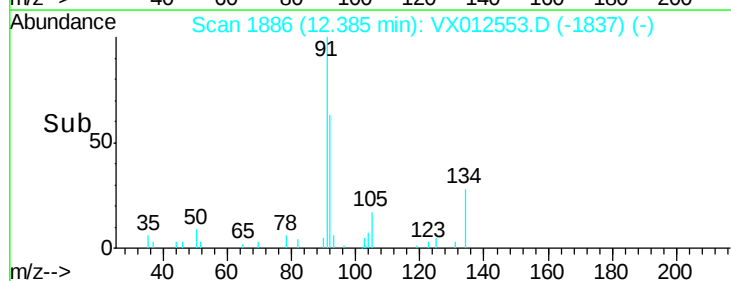
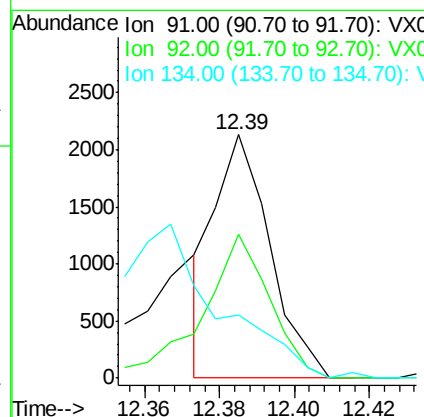
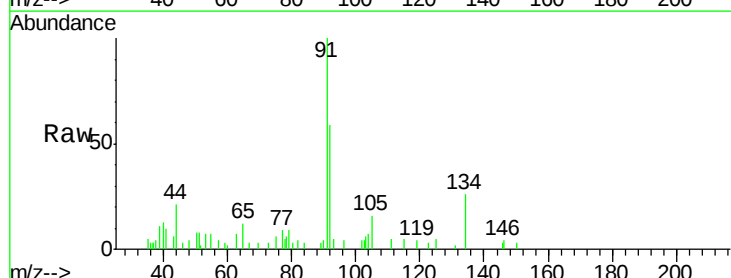
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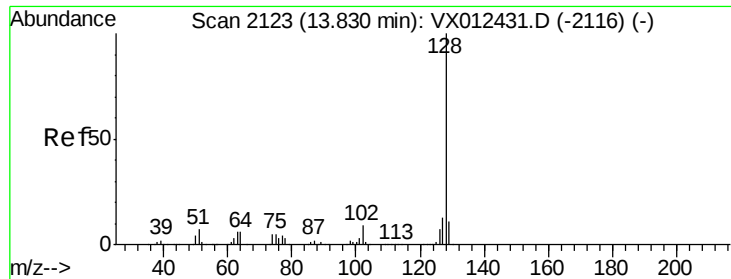
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#89  
n-Butylbenzene  
Concen: 0.393 ug/l m  
RT: 12.39 min Scan# 1886  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 72.4  | 27.7  | 83.0  |
| 134     | 108.8 | 12.9  | 38.6# |





#95  
Naphthalene  
Concen: 6.294 ug/l  
RT: 13.83 min Scan# 2123  
Delta R.T. 0.00 min  
Lab File: VX012553.D  
Acq: 20 Sep 2019 13:38

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z2-0159DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.7  | 10.2  | 15.4  |
| 129     | 12.1  | 8.8   | 13.2  |

Manual Integrations  
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