

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX120420\  
 Data File : VX019731.D  
 Acq On : 04 Dec 2020 20:50  
 Operator : JC/MD  
 Sample : L4960-03  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 MW-5

Manual Integrations  
 APPROVED

MMDadoda  
 12/7/2020 10:53:05 AM

Quant Time: Dec 05 04:54:00 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X120420W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 04 15:32:53 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 331928   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 524382   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 478017   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 224428   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |        |
|---------------------------|--------|-------|----------|----------|------|--------|
| 33) 1,2-Dichloroethane-d4 | 6.03   | 65    | 195501   | 44.81    | ug/l | 0.00   |
| Spiked Amount             | 50.000 | Range | 61 - 141 | Recovery | =    | 89.62% |
| 35) Dibromofluoromethane  | 5.46   | 113   | 161436   | 47.64    | ug/l | 0.00   |
| Spiked Amount             | 50.000 | Range | 69 - 133 | Recovery | =    | 95.28% |
| 50) Toluene-d8            | 8.70   | 98    | 645168   | 49.86    | ug/l | 0.00   |
| Spiked Amount             | 50.000 | Range | 65 - 126 | Recovery | =    | 99.72% |
| 62) 4-Bromofluorobenzene  | 11.12  | 95    | 239718   | 48.68    | ug/l | 0.00   |
| Spiked Amount             | 50.000 | Range | 58 - 135 | Recovery | =    | 97.36% |

## Target Compounds

|                            |       |     |         |         | Qvalue    |
|----------------------------|-------|-----|---------|---------|-----------|
| 25) 2-Butanone             | 4.64  | 43  | 3623    | 1.438   | ug/l 99   |
| 31) Cyclohexane            | 5.55  | 56  | 170481  | 31.416  | ug/l # 93 |
| 39) Methylcyclohexane      | 7.44  | 83  | 283053  | 50.843  | ug/l 93   |
| 52) Toluene                | 8.76  | 92  | 11307   | 1.249   | ug/l 99   |
| 67) Ethyl Benzene          | 10.23 | 91  | 236070  | 13.965  | ug/l 100  |
| 68) m/p-Xylenes            | 10.34 | 106 | 8380    | 1.316   | ug/l 91   |
| 73) Isopropylbenzene       | 11.00 | 105 | 787383  | 51.353  | ug/l 99   |
| 78) n-propylbenzene        | 11.34 | 91  | 3854743 | 220.115 | ug/l 99   |
| 80) 1,3,5-Trimethylbenzene | 11.49 | 105 | 38833m  | 3.001   | ug/l      |
| 83) tert-Butylbenzene      | 11.75 | 119 | 11323   | 0.892   | ug/l # 43 |
| 84) 1,2,4-Trimethylbenzene | 11.79 | 105 | 148186  | 11.368  | ug/l 97   |
| 85) sec-Butylbenzene       | 11.93 | 105 | 475262  | 32.799  | ug/l 99   |
| 86) p-Isopropyltoluene     | 12.05 | 119 | 22329m  | 1.681   | ug/l      |
| 89) n-Butylbenzene         | 12.37 | 91  | 384765  | 32.703  | ug/l # 57 |
| 95) Naphthalene            | 13.82 | 128 | 196583  | 13.268  | ug/l # 93 |

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

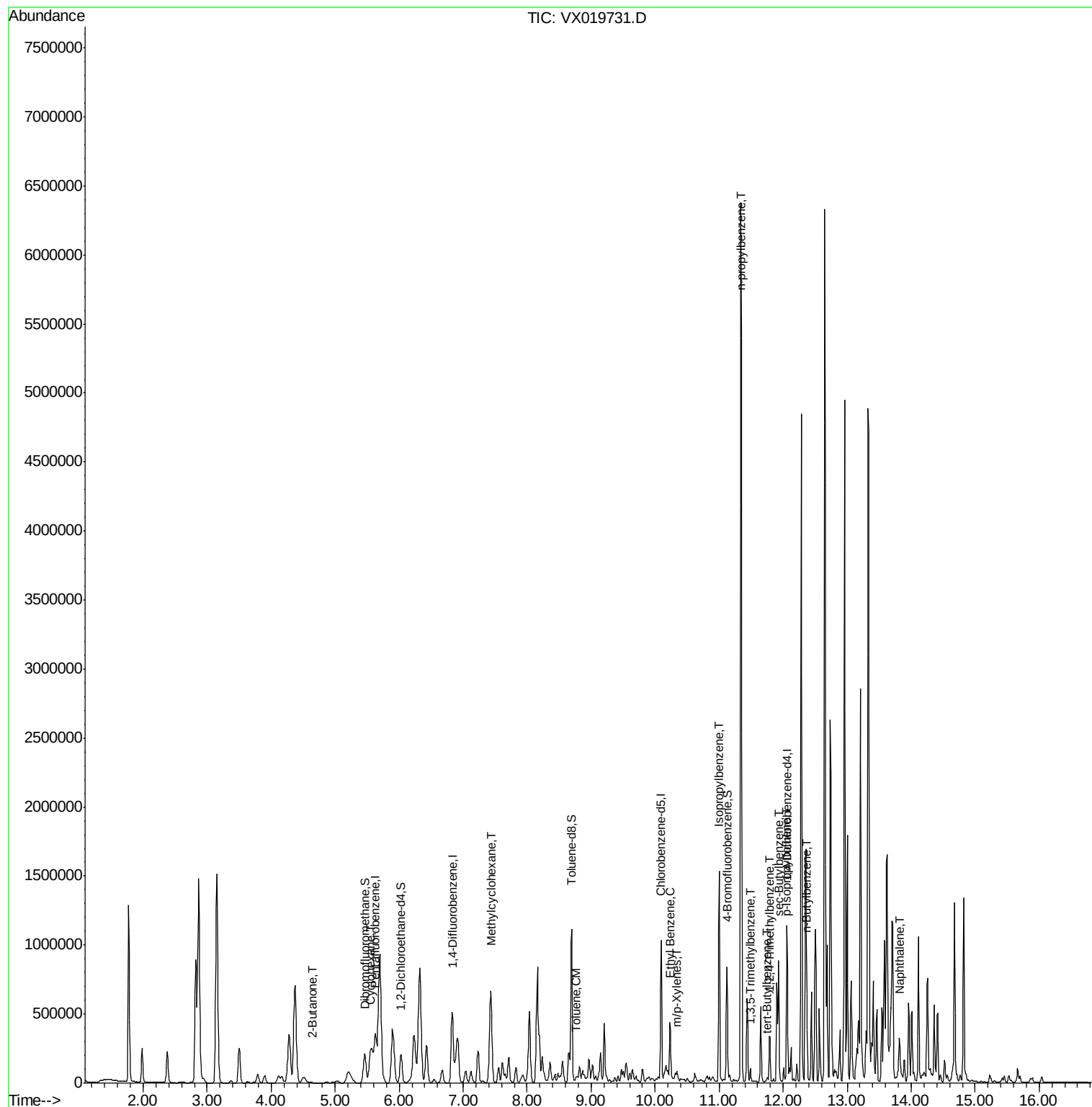
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX120420\  
Data File : VX019731.D  
Acq On : 04 Dec 2020 20:50  
Operator : JC/MD  
Sample : L4960-03  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 24 Sample Multiplier: 1

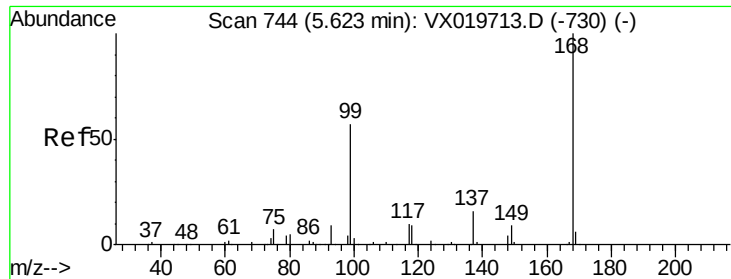
Instrument :  
MSVOA\_X  
ClientSampleId :  
MW-5

Manual Integrations  
APPROVED

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12/7/2020 10:53:05 AM

Quant Time: Dec 05 04:54:00 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X120420W.M  
Quant Title : SW846 8260  
QLast Update : Fri Dec 04 15:32:53 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.63 min Scan# 745

Delta R.T. 0.01 min

Lab File: VX019731.D

Acq: 04 Dec 2020 20:50

Instrument :

MSVOA\_X

ClientSampled :

MW-5

Tot Ion:168 Resp: 331928

Ion Ratio Lower Upper

168 100

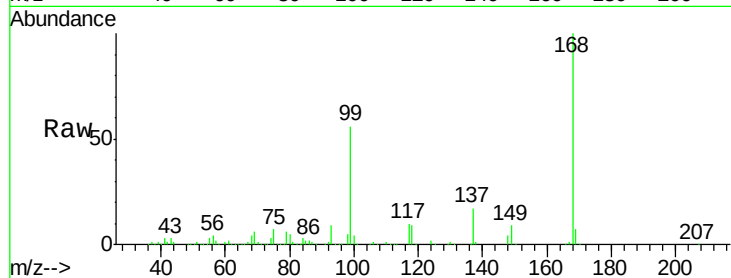
99 56.2 45.8 68.6

Manual Integrations

APPROVED

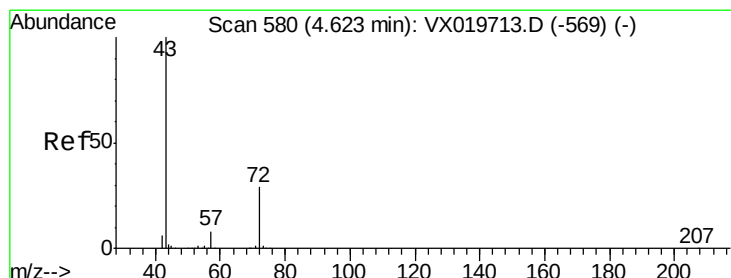
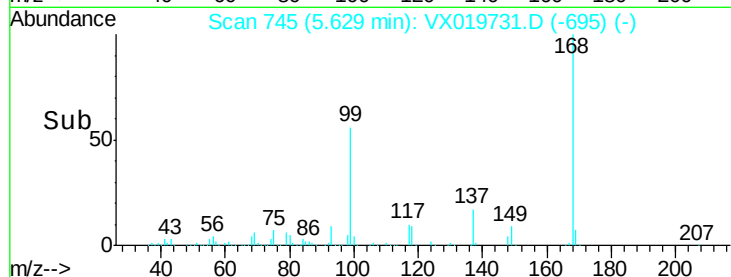
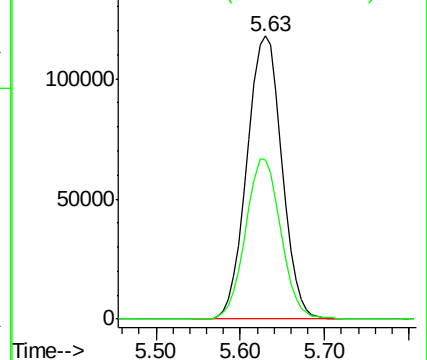
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12/7/2020 10:53:05 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#25

2-Butanone

Concen: 1.438 ug/l

RT: 4.64 min Scan# 583

Delta R.T. 0.02 min

Lab File: VX019731.D

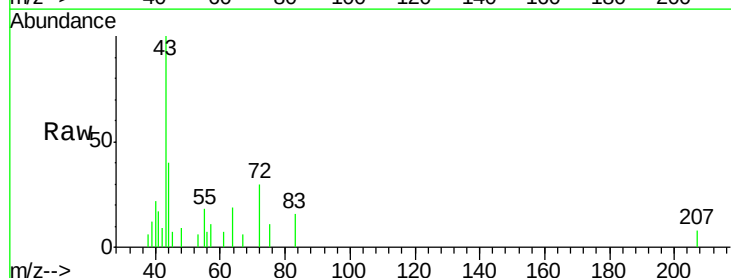
Acq: 04 Dec 2020 20:50

Tgt Ion: 43 Resp: 3623

Ion Ratio Lower Upper

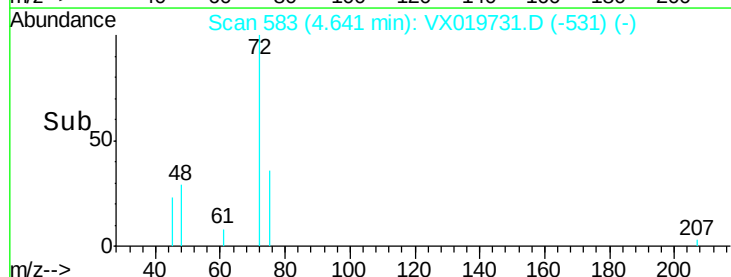
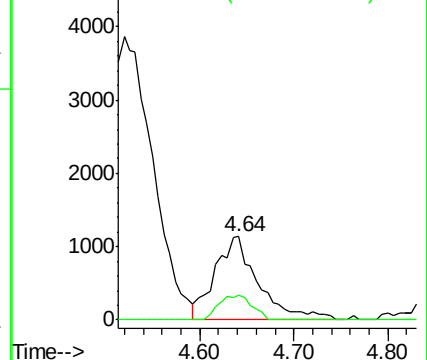
43 100

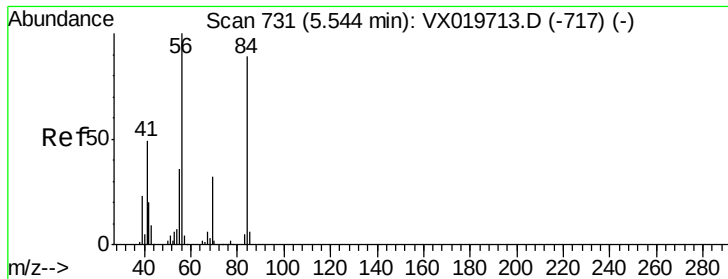
72 30.2 23.7 35.5



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0





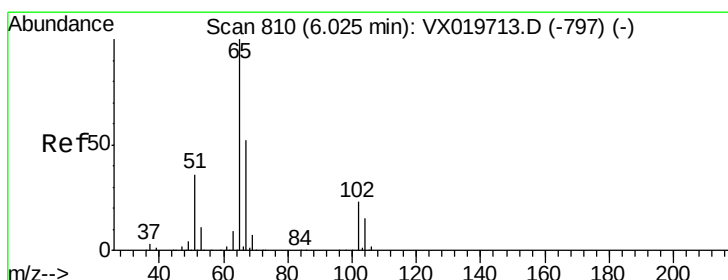
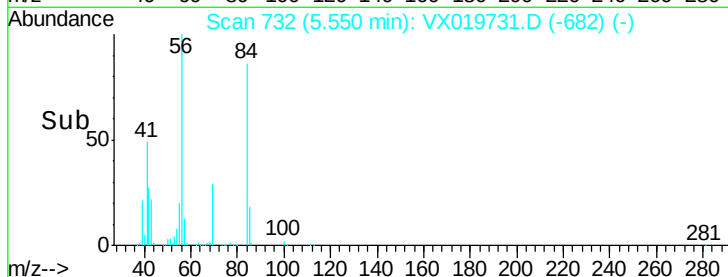
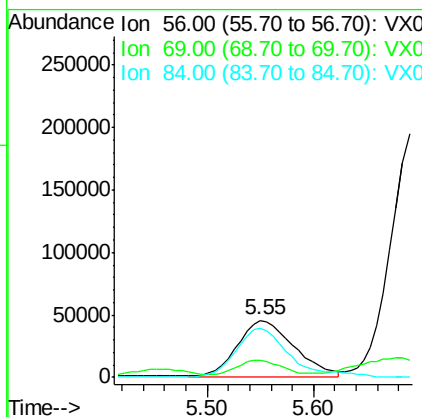
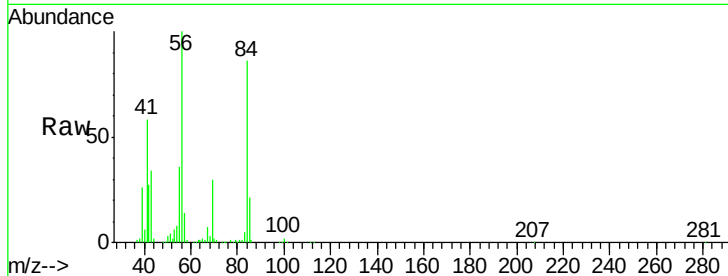
#31  
Cyclohexane  
Concen: 31.416 ug/l  
RT: 5.55 min Scan# 732  
Delta R.T. 0.01 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Instrument :  
MSVOA\_X  
ClientSampled :  
MW-5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 20.8  | 25.3  | 37.9# |
| 84      | 86.8  | 71.4  | 107.0 |

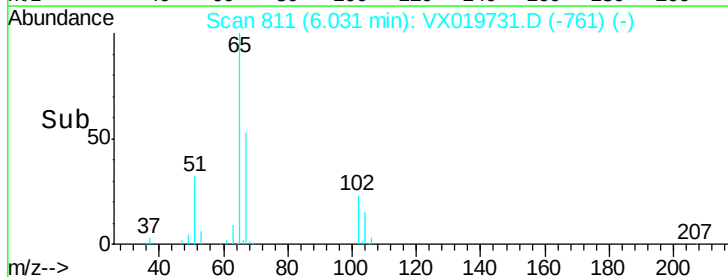
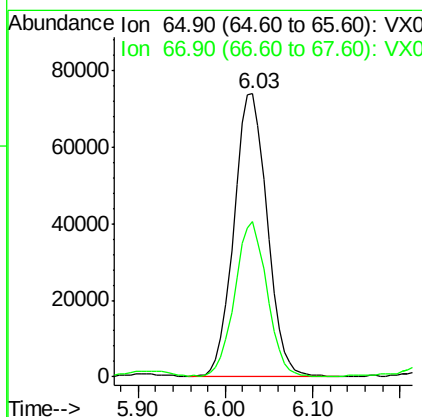
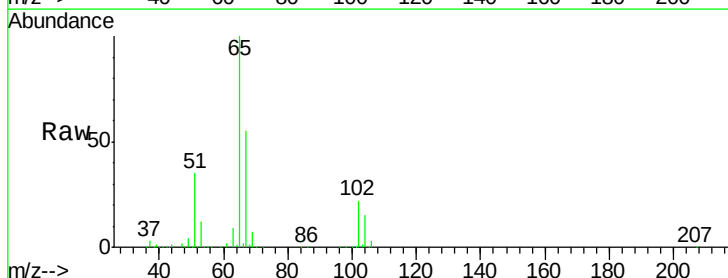
Manual Integrations  
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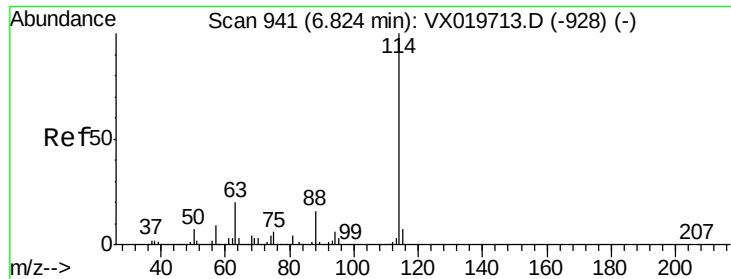
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#33  
1,2-Dichloroethane-d4  
Concen: 44.814 ug/l  
RT: 6.03 min Scan# 811  
Delta R.T. 0.01 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 65      | 100   |       |       |
| 67      | 52.8  | 0.0   | 105.4 |





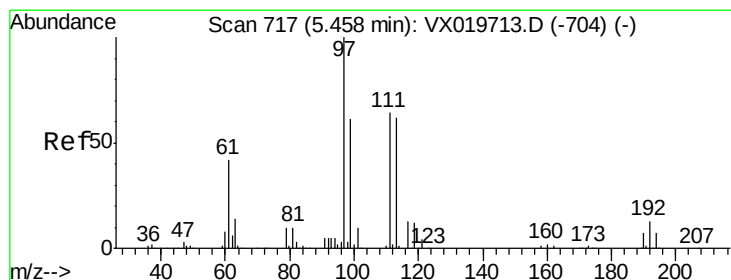
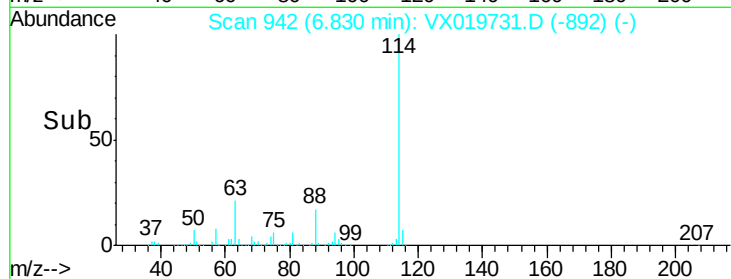
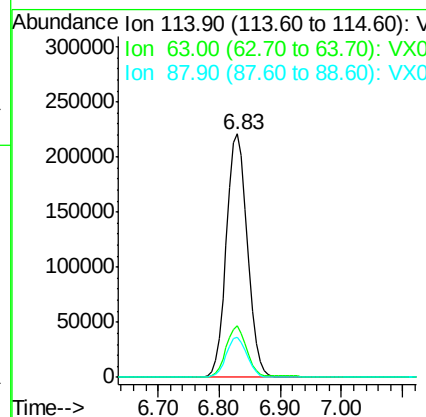
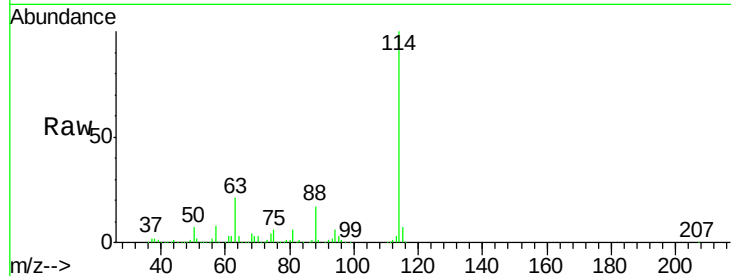
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.83 min Scan# 942  
 Delta R.T. 0.01 min  
 Lab File: VX019731.D  
 Acq: 04 Dec 2020 20:50

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 MW-5

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 114     | 100   | 524382 |       |       |
| 63      | 21.0  |        | 0.0   | 40.8  |
| 88      | 16.7  |        | 0.0   | 32.8  |

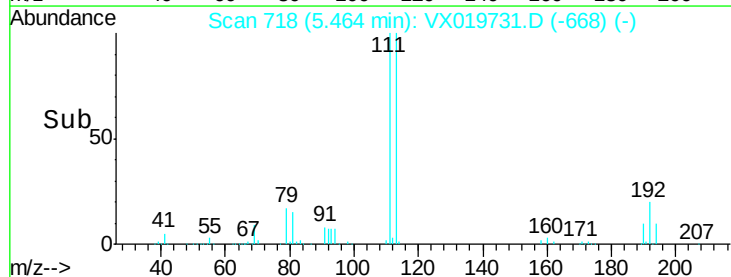
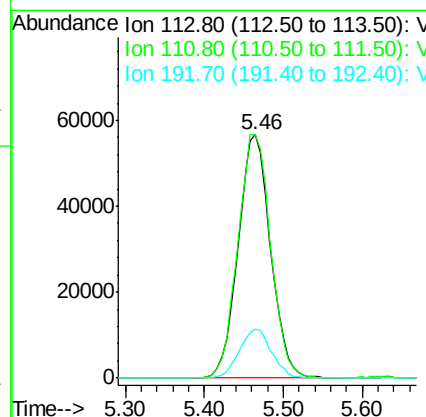
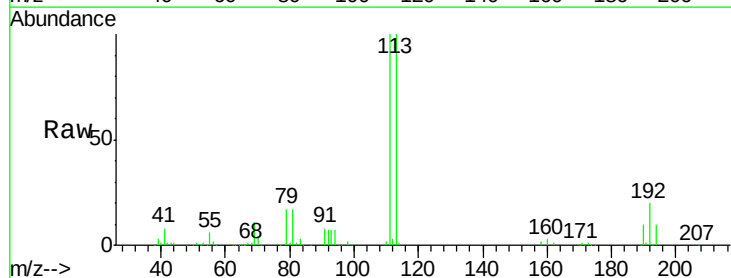
Manual Integrations  
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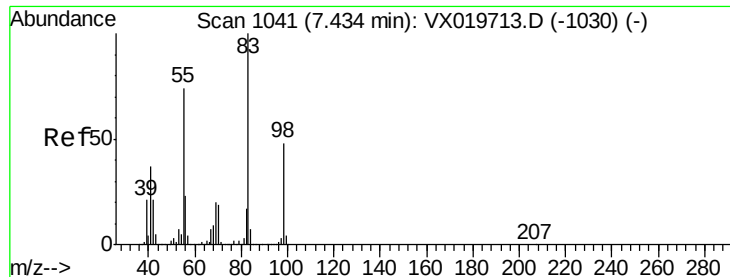
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 12/7/2020 10:53:05 AM



#35  
 Dibromofluoromethane  
 Concen: 47.635 ug/l  
 RT: 5.46 min Scan# 718  
 Delta R.T. 0.01 min  
 Lab File: VX019731.D  
 Acq: 04 Dec 2020 20:50

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 113     | 100   | 161436 |       |       |
| 111     | 101.8 |        | 81.9  | 122.9 |
| 192     | 20.1  |        | 16.7  | 25.1  |





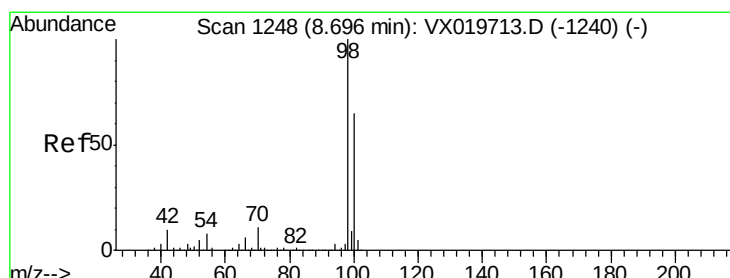
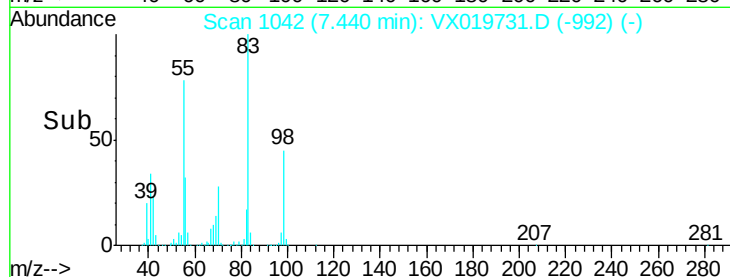
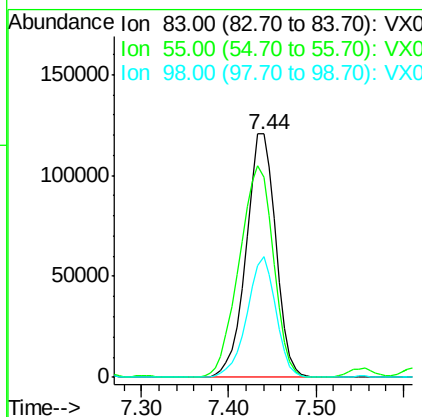
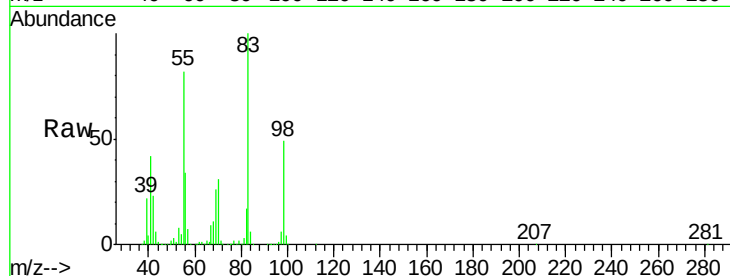
#39  
Methylvlcyclohexane  
Concen: 50.843 ug/l  
RT: 7.44 min Scan# 1042  
Delta R.T. 0.01 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Instrument :  
MSVOA\_X  
ClientSampleId :  
MW-5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 55      | 82.0  | 58.9  | 88.3  |
| 98      | 49.5  | 38.1  | 57.1  |

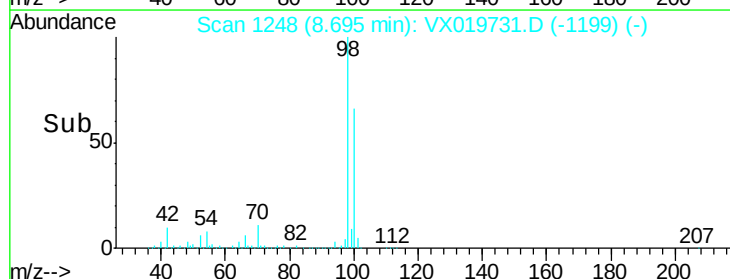
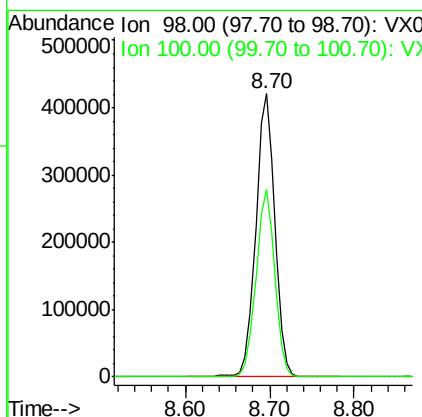
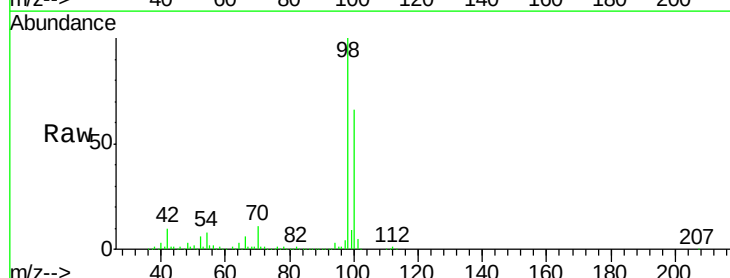
Manual Integrations  
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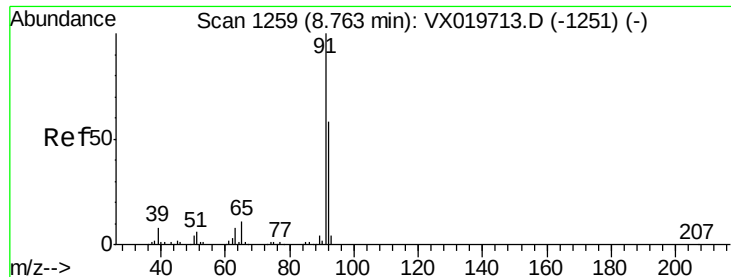
MMDadoda  
12/7/2020 10:53:05 AM



#50  
Toluene-d8  
Concen: 49.865 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 98      | 100   |       |       |
| 100     | 65.2  | 51.9  | 77.9  |





#52

Toluene

Concen: 1.249 ug/l

RT: 8.76 min Scan# 1259

Delta R.T. -0.00 min

Lab File: VX019731.D

Acq: 04 Dec 2020 20:50

Instrument :

MSVOA\_X

ClientSampled :

MW-5

Tot Ion: 92 Resp: 11307

Ion Ratio Lower Upper

92 100

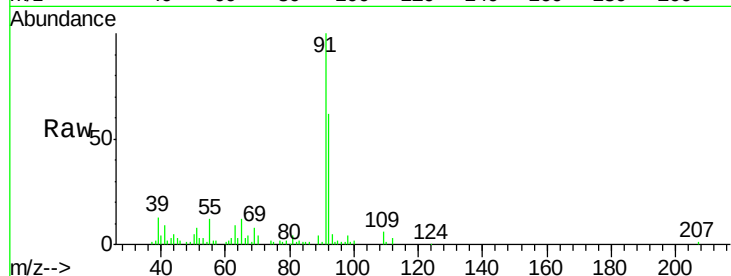
91 170.0 137.1 205.7

Manual Integrations

APPROVED

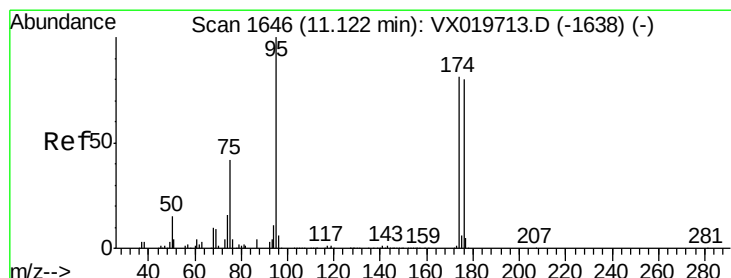
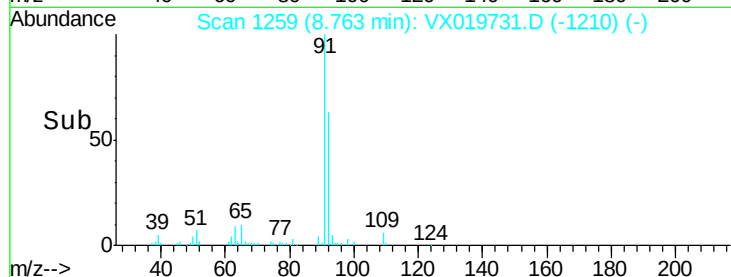
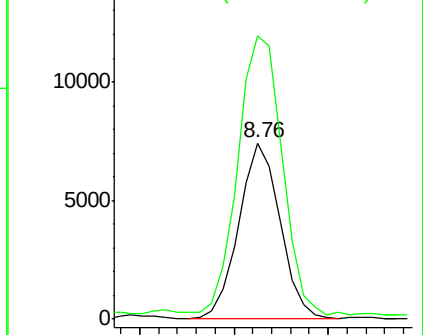
MMDadoda

12/7/2020 10:53:05 AM



Abundance Ion 92.00 (91.70 to 92.70): VX0

Ion 91.00 (90.70 to 91.70): VX0



#62

4-Bromofluorobenzene

Concen: 48.679 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX019731.D

Acq: 04 Dec 2020 20:50

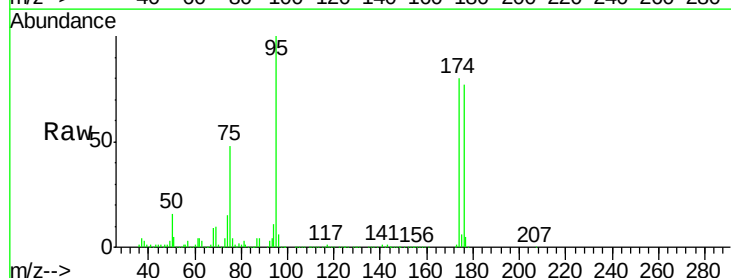
Tgt Ion: 95 Resp: 239718

Ion Ratio Lower Upper

95 100

174 76.4 0.0 154.6

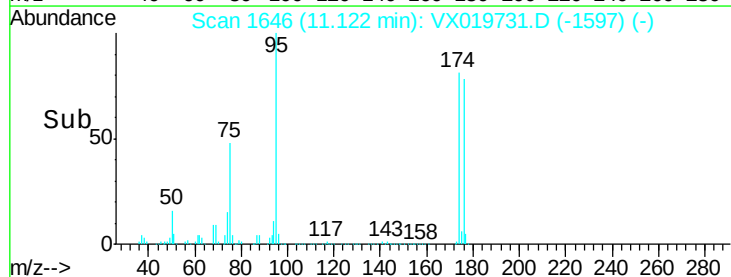
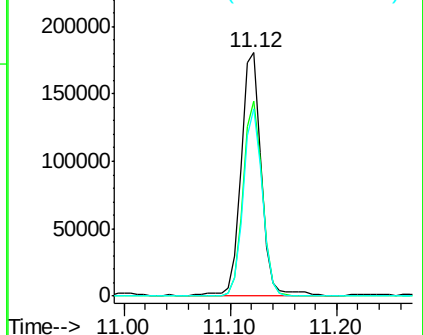
176 72.8 0.0 155.8

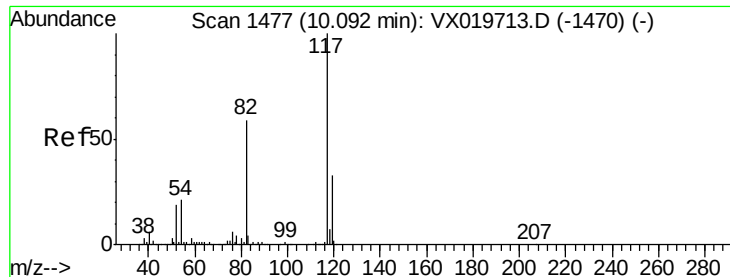


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V





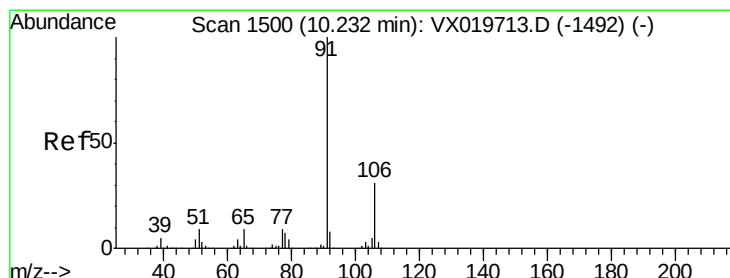
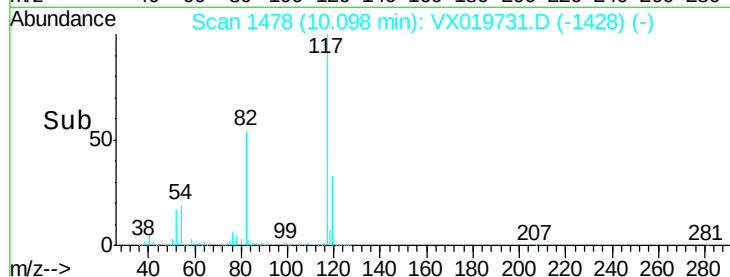
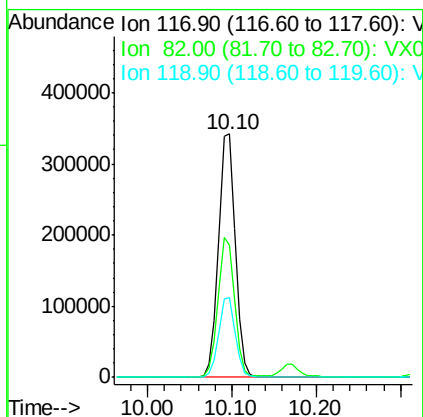
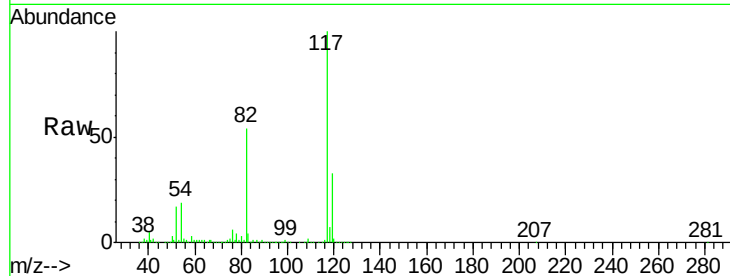
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.10 min Scan# 1478  
Delta R.T. 0.01 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Instrument :  
MSVOA\_X  
ClientSampled :  
MW-5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 54.1  | 47.4  | 71.2  |
| 119     | 32.8  | 26.6  | 39.8  |

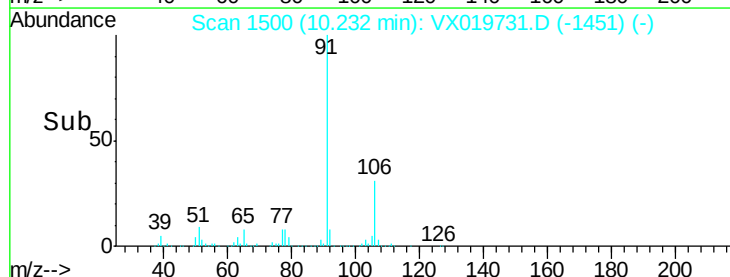
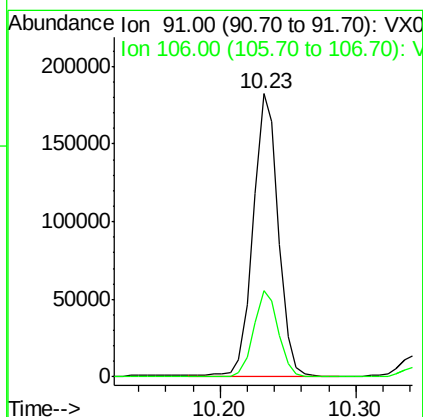
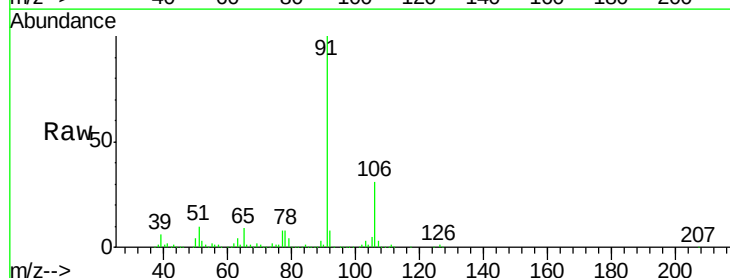
Manual Integrations  
APPROVED

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12/7/2020 10:53:05 AM

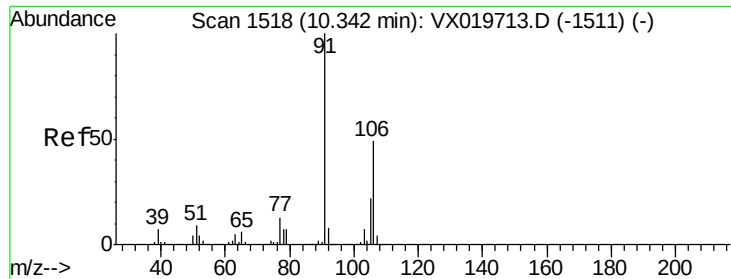


#67  
Ethyl Benzene  
Concen: 13.965 ug/l  
RT: 10.23 min Scan# 1500  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 30.8  | 24.6  | 37.0  |







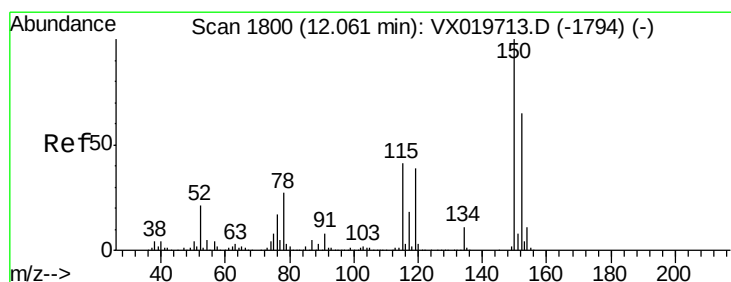
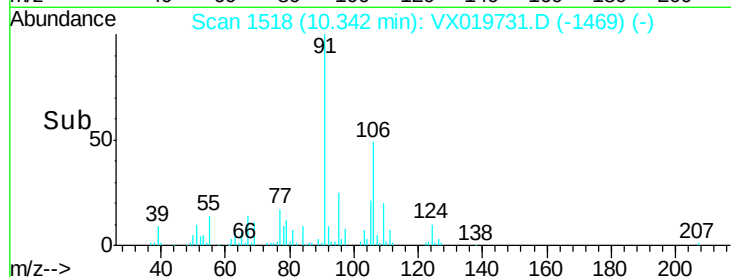
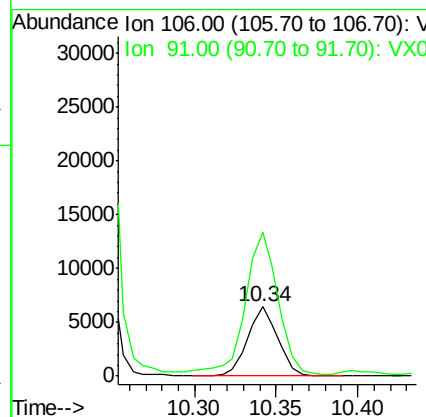
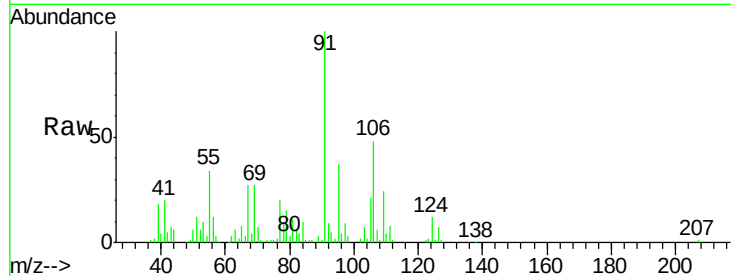
#68  
m/p-Xvlenes  
Concen: 1.316 ug/l  
RT: 10.34 min Scan# 1518  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Instrument :  
MSVOA\_X  
ClientSampled :  
MW-5

Tot Ion:106 Resp: 8380  
Ion Ratio Lower Upper  
106 100  
91 216.5 162.8 244.2

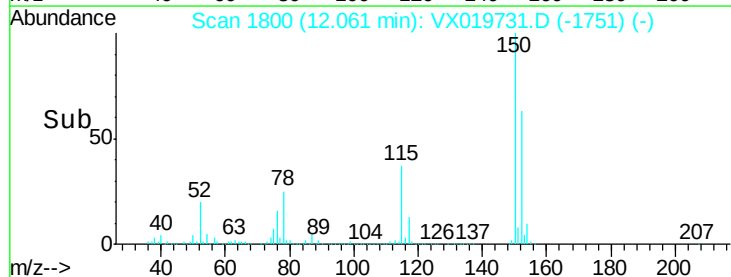
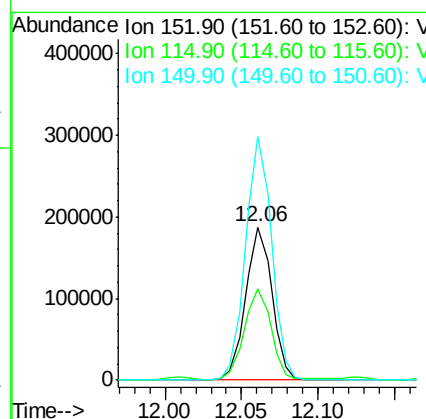
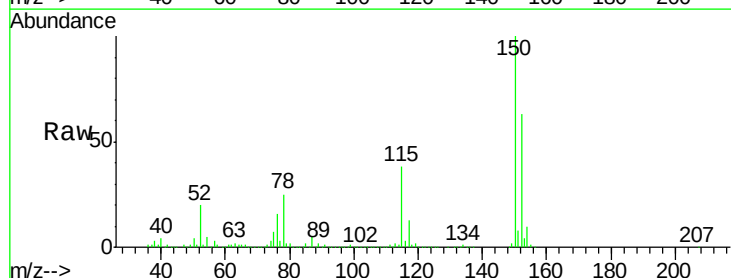
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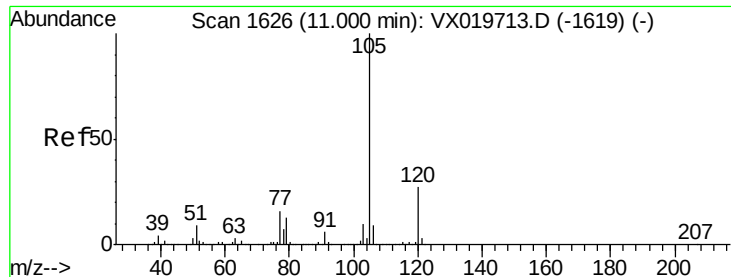
MMDadoda  
12/7/2020 10:53:05 AM



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.06 min Scan# 1800  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Tgt Ion:152 Resp: 224428  
Ion Ratio Lower Upper  
152 100  
115 60.0 41.1 123.3  
150 157.3 0.0 349.0





#73

Isopropylbenzene

Concen: 51.353 ug/l

RT: 11.00 min Scan# 1626

Delta R.T. -0.00 min

Lab File: VX019731.D

Acq: 04 Dec 2020 20:50

Instrument :

MSVOA\_X

ClientSampled :

MW-5

Tot Ion: 105 Resp: 787383

Ion Ratio Lower Upper

105 100

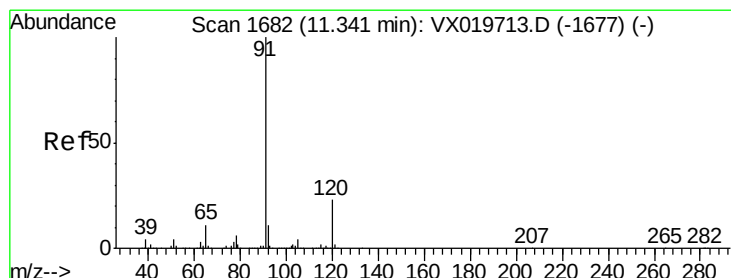
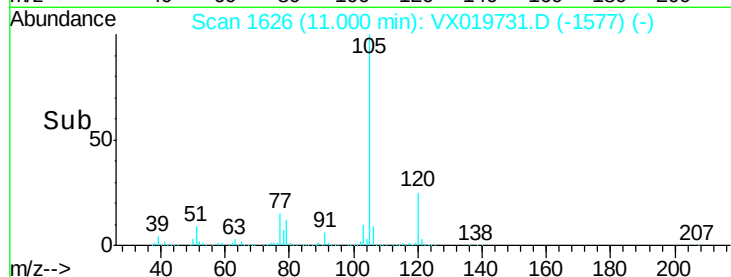
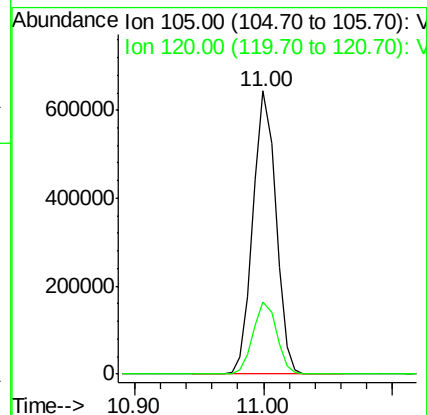
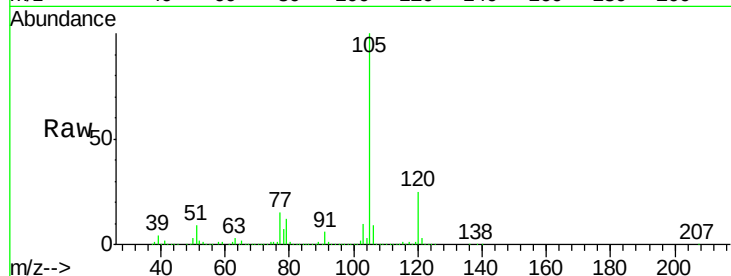
120 26.1 13.2 39.6

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#78

n-propylbenzene

Concen: 220.115 ug/l

RT: 11.34 min Scan# 1682

Delta R.T. -0.00 min

Lab File: VX019731.D

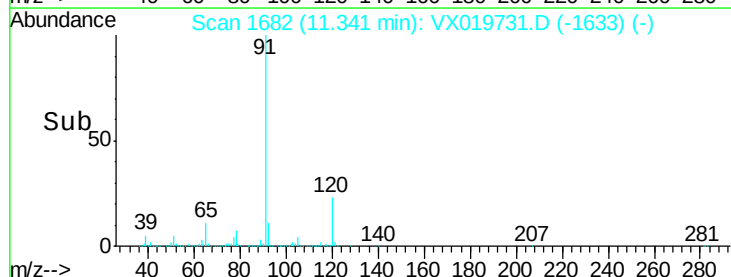
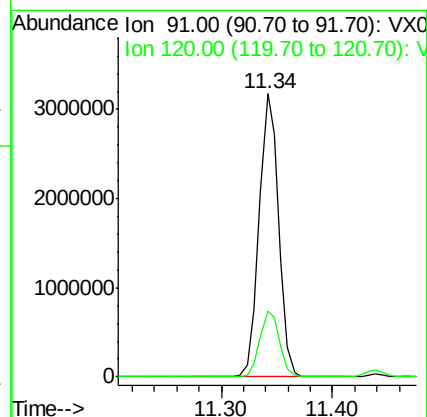
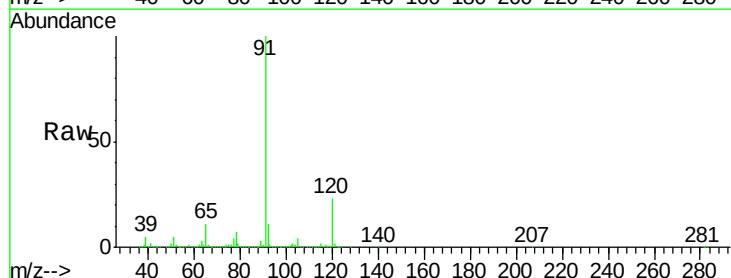
Acq: 04 Dec 2020 20:50

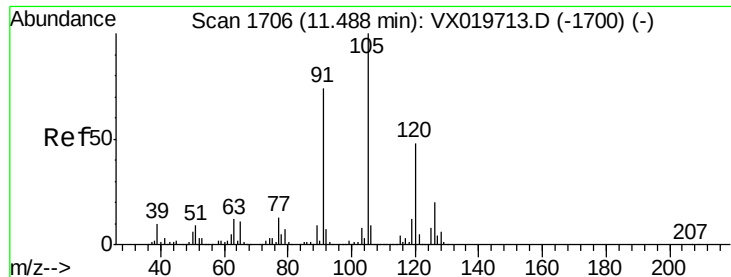
Tgt Ion: 91 Resp: 3854743

Ion Ratio Lower Upper

91 100

120 23.3 11.5 34.5





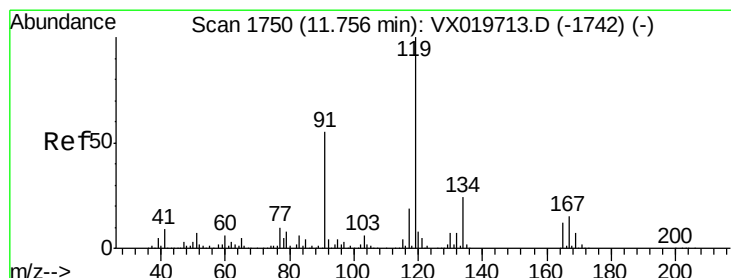
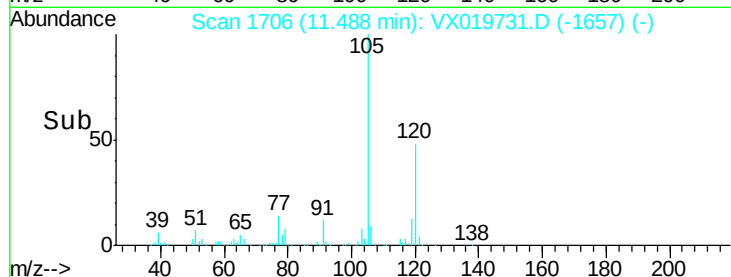
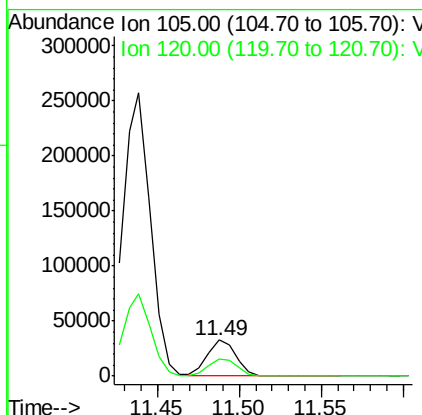
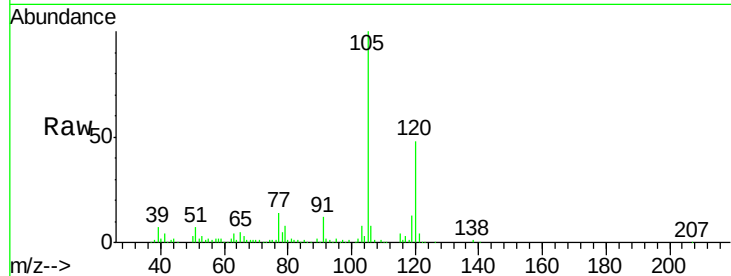
#80  
 1,3,5-Trimethylbenzene  
 Concen: 3.001 ug/l m  
 RT: 11.49 min Scan# 1706  
 Delta R.T. -0.00 min  
 Lab File: VX019731.D  
 Acq: 04 Dec 2020 20:50

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 MW-5

Tot Ion:105 Resp: 38833  
 Ion Ratio Lower Upper  
 105 100  
 120 229.0 23.8 71.5#

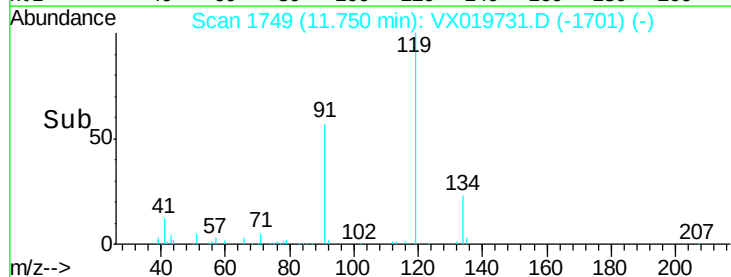
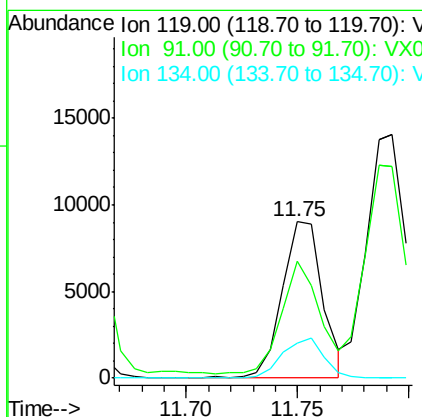
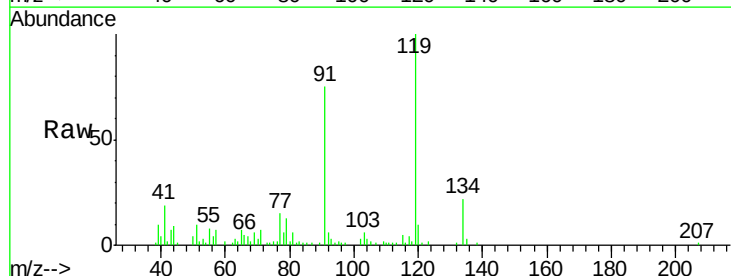
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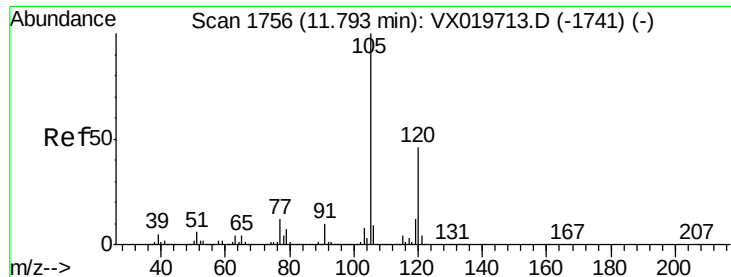
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#83  
 tert-Butylbenzene  
 Concen: 0.892 ug/l  
 RT: 11.75 min Scan# 1749  
 Delta R.T. -0.01 min  
 Lab File: VX019731.D  
 Acq: 04 Dec 2020 20:50

Tgt Ion:119 Resp: 11323  
 Ion Ratio Lower Upper  
 119 100  
 91 0.0 27.9 83.7#  
 134 26.2 11.3 33.9





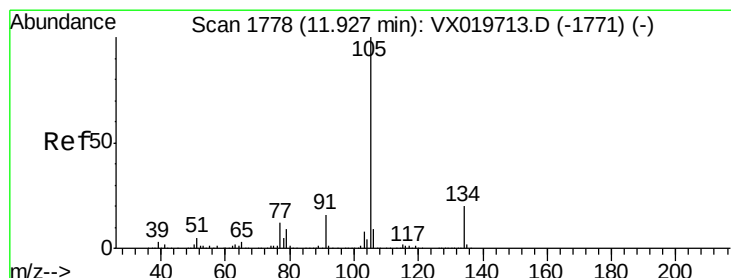
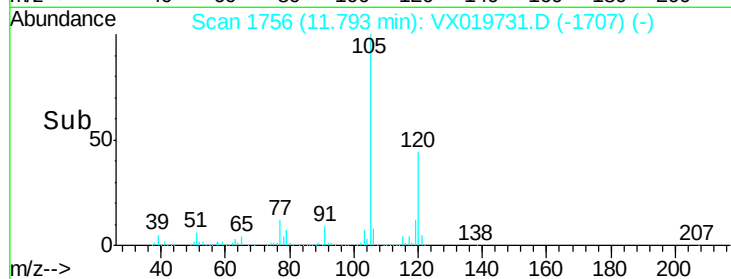
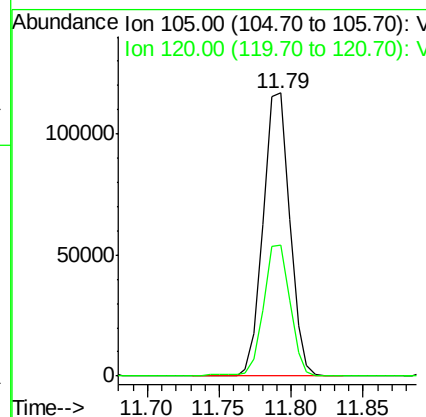
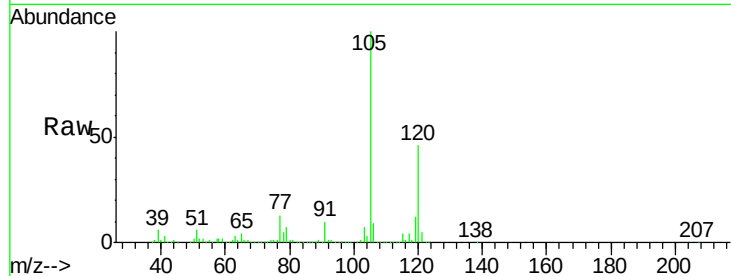
#84  
 1,2,4-Trimethylbenzene  
 Concen: 11.368 ug/l  
 RT: 11.79 min Scan# 1756  
 Delta R.T. -0.00 min  
 Lab File: VX019731.D  
 Acq: 04 Dec 2020 20:50

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 MW-5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 47.0  | 22.4  | 67.3  |

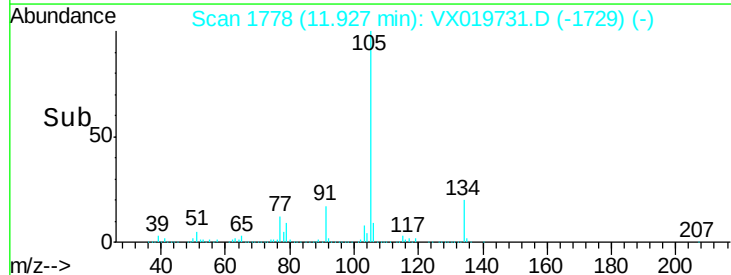
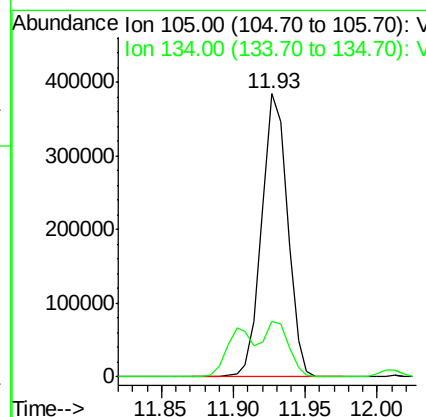
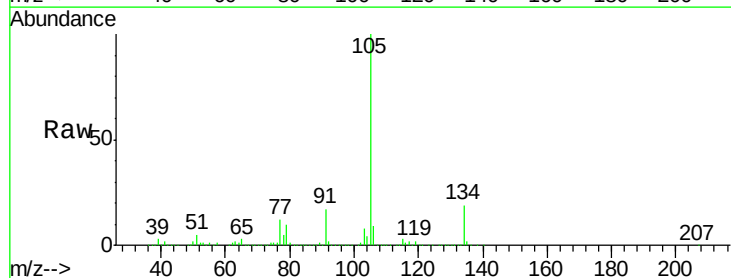
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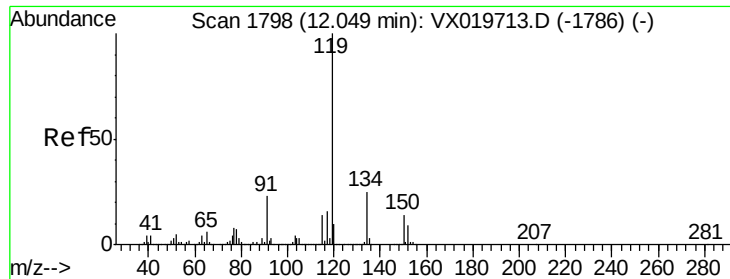
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#85  
 sec-Butylbenzene  
 Concen: 32.799 ug/l  
 RT: 11.93 min Scan# 1778  
 Delta R.T. -0.00 min  
 Lab File: VX019731.D  
 Acq: 04 Dec 2020 20:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 134     | 19.2  | 10.0  | 29.8  |





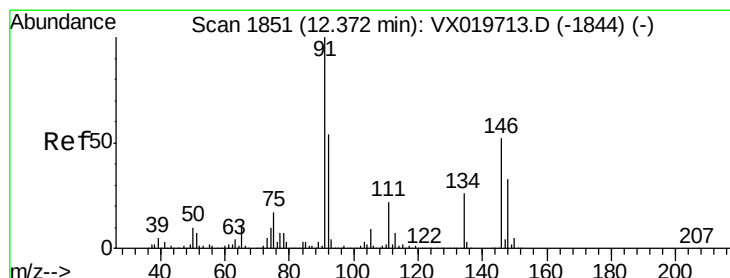
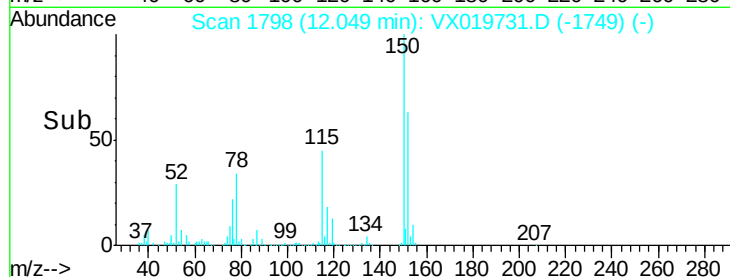
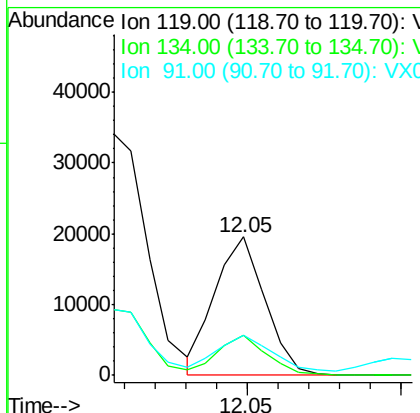
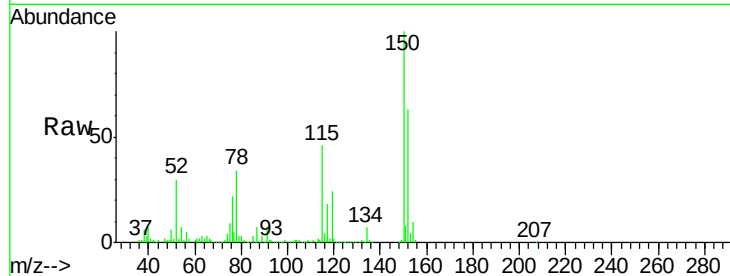
#86  
p-Isopropyltoluene  
Concen: 1.681 ug/l m  
RT: 12.05 min Scan# 1798  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Instrument :  
MSVOA\_X  
ClientSampled :  
MW-5

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 71.6  | 12.9  | 38.7# |
| 91      | 61.4  | 11.7  | 35.0# |

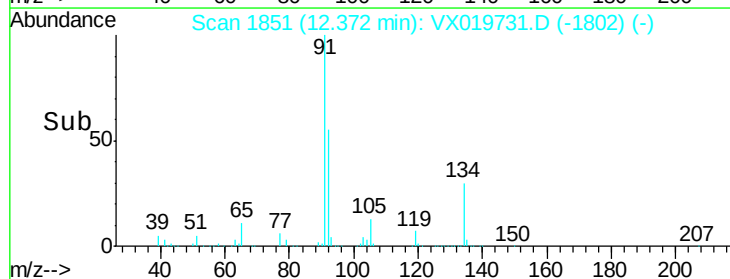
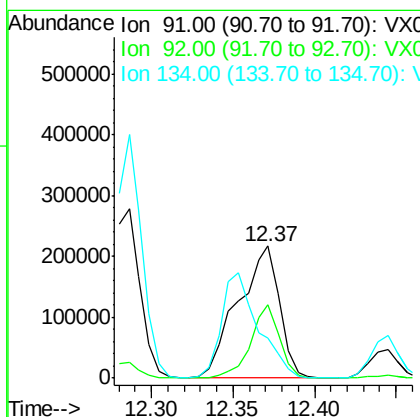
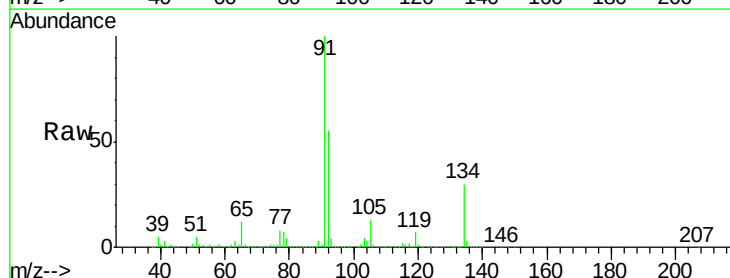
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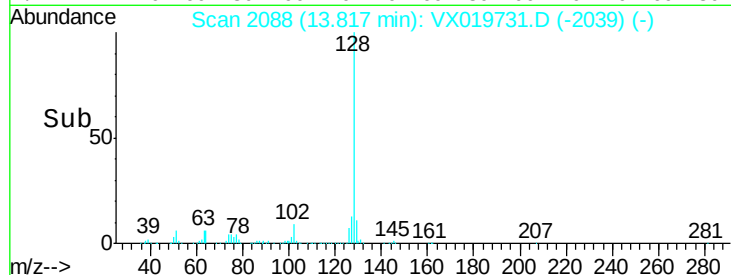
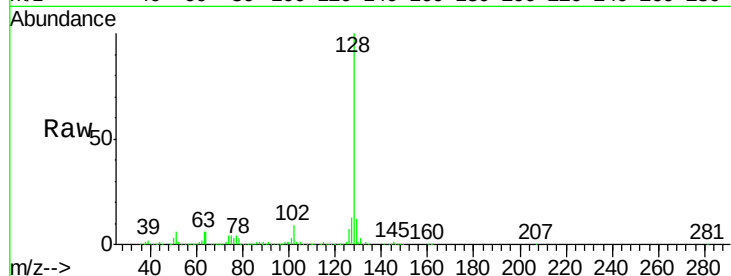
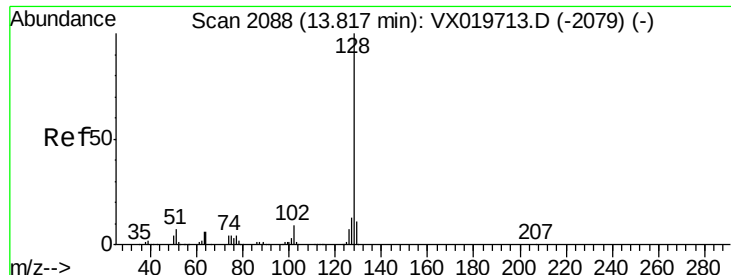
MMDadoda  
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#89  
n-Butylbenzene  
Concen: 32.703 ug/l  
RT: 12.37 min Scan# 1851  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 38.9  | 27.4  | 82.0  |
| 134     | 70.1  | 13.2  | 39.5# |





#95  
Naphthalene  
Concen: 13.268 ug/l  
RT: 13.82 min Scan# 2088  
Delta R.T. -0.00 min  
Lab File: VX019731.D  
Acq: 04 Dec 2020 20:50

Instrument :  
MSVOA\_X  
ClientSampleId :  
MW-5

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 128     | 100   |            |       |
| 127     | 13.4  | 10.3       | 15.5  |
| 129     | 16.3  | 8.8        | 13.2# |

Manual Integrations  
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