

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN122018\  
 Data File : VN053055.D  
 Acq On : 20 Dec 2018 14:34  
 Operator : MD\SY  
 Sample : J6411-03DL 100X  
 Misc : 6.03g/5mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 14 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 EP1-MW-I(12-13FT)1218DL

Manual Integrations  
 APPROVED

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 12/21/2018 9:21:11 AM

Quant Time: Dec 21 01:05:03 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:03:37 2018  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|--------|---------|----------|
| 1) Pentafluorobenzene       | 7.67  | 168  | 1375697  | 50.00  | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene     | 8.59  | 114  | 2106855  | 50.00  | ug/l    | 0.00     |
| 63) Chlorobenzene-d5        | 11.41 | 117  | 1915983  | 50.00  | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.35 | 152  | 841604   | 50.00  | ug/l    | 0.00     |
| System Monitoring Compounds |       |      |          |        |         |          |
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 669194   | 47.93  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 95.86%  |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 554410   | 57.61  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 115.22% |          |
| 50) Toluene-d8              | 10.09 | 98   | 2570388  | 49.75  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 99.50%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 917462   | 50.58  | ug/l    | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery | =      | 101.16% |          |
| Target Compounds            |       |      |          |        |         |          |
| 67) Ethyl Benzene           | 11.51 | 91   | 52503    | 0.719  | ug/l    | 99       |
| 73) Isopropylbenzene        | 12.25 | 105  | 310944   | 4.722  | ug/l    | 100      |
| 78) n-propylbenzene         | 12.59 | 91   | 863833   | 11.519 | ug/l    | 100      |
| 80) 1,3,5-Trimethylbenzene  | 12.73 | 105  | 508773   | 9.479  | ug/l    | 98       |
| 83) tert-Butylbenzene       | 12.99 | 119  | 60639    | 1.277  | ug/l    | 95       |
| 84) 1,2,4-Trimethylbenzene  | 13.04 | 105  | 3374234  | 62.537 | ug/l    | 100      |
| 85) sec-Butylbenzene        | 13.17 | 105  | 490921   | 7.646  | ug/l #  | 76       |
| 86) p-Isopropyltoluene      | 13.29 | 119  | 417852   | 7.532  | ug/l    | 99       |
| 89) n-Butylbenzene          | 13.62 | 91   | 441995m  | 9.261  | ug/l    |          |
| 95) Naphthalene             | 15.13 | 128  | 25117    | 1.888  | ug/l    | 96       |

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

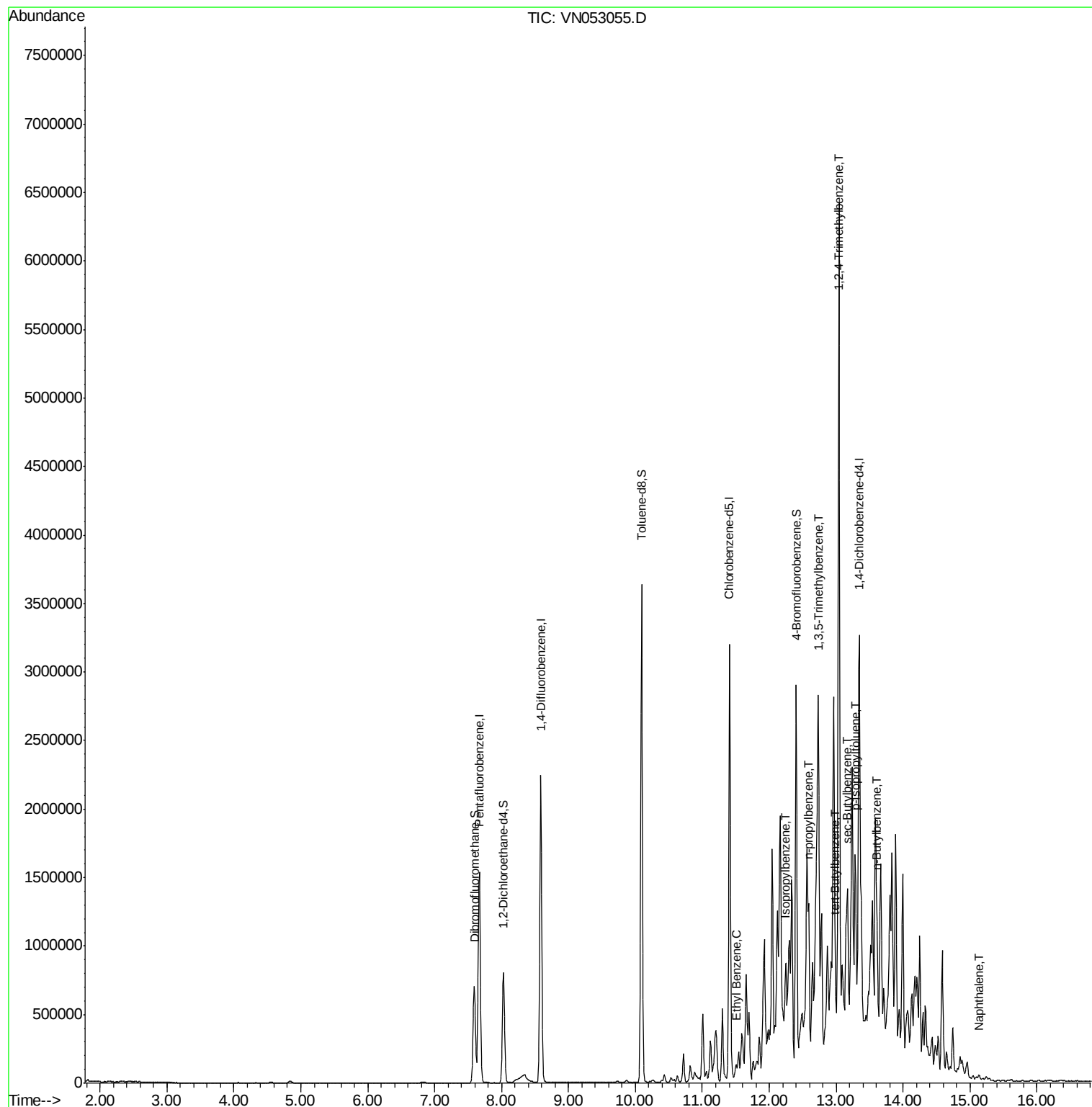
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN122018\  
Data File : VN053055.D  
Acq On : 20 Dec 2018 14:34  
Operator : MD\SY  
Sample : J6411-03DL 100X  
Misc : 6.03g/5mL/100uL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 14 Sample Multiplier: 28

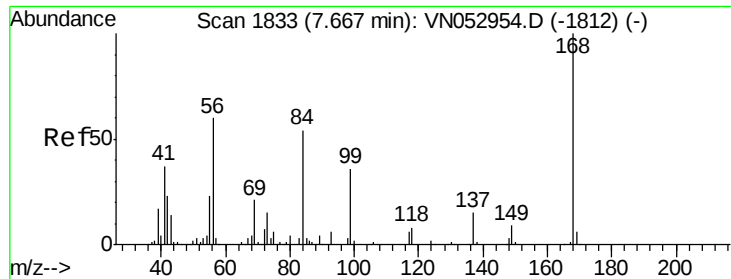
Instrument :  
MSVOA\_N  
ClientSampleId :  
EP1-MW-I(12-13FT)1218DL

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Quant Time: Dec 21 01:05:03 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 18 13:03:37 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VN053055.D

Acq: 20 Dec 2018 14:34

Instrument :

MSVOA\_N

ClientSampleId :

EP1-MW-I(12-13FT)1218DL

Tot Ion:168 Resp: 1375697

Ion Ratio Lower Upper

168 100

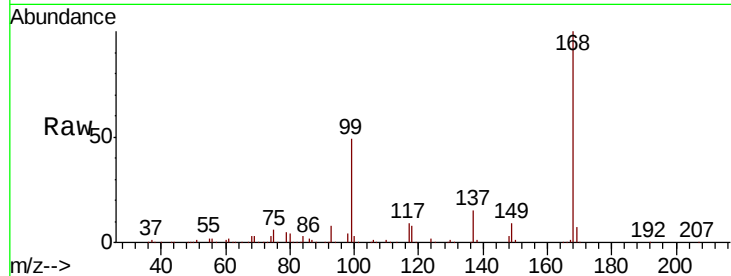
99 49.1 40.2 60.2

Manual Integrations

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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.67

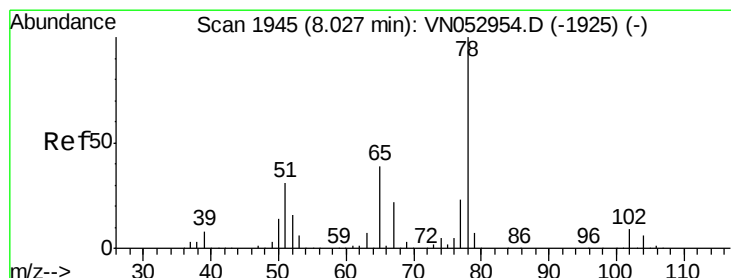
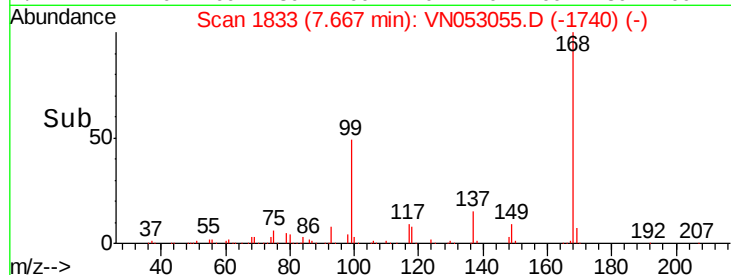
600000

400000

200000

0

Time-->



#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN053055.D

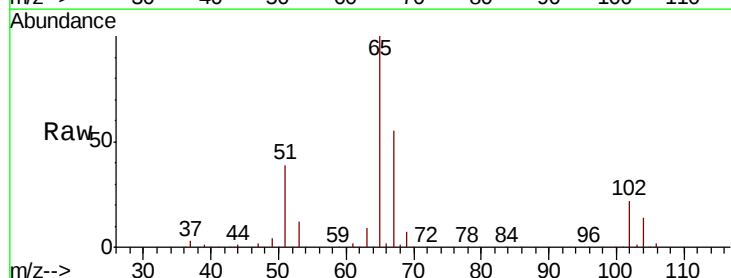
Acq: 20 Dec 2018 14:34

Tgt Ion: 65 Resp: 669194

Ion Ratio Lower Upper

65 100

67 55.0 0.0 110.4



Abundance Ion 64.90 (64.60 to 65.60): VNO

Ion 66.90 (66.60 to 67.60): VNO

8.03

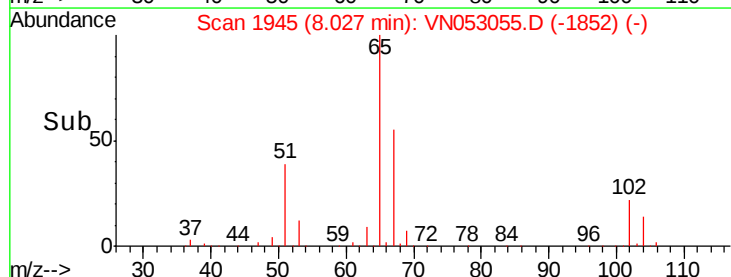
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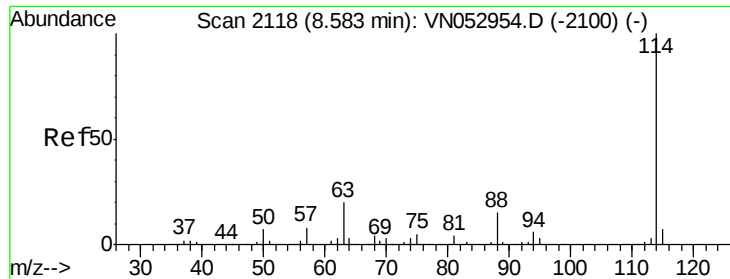
200000

100000

0

Time-->





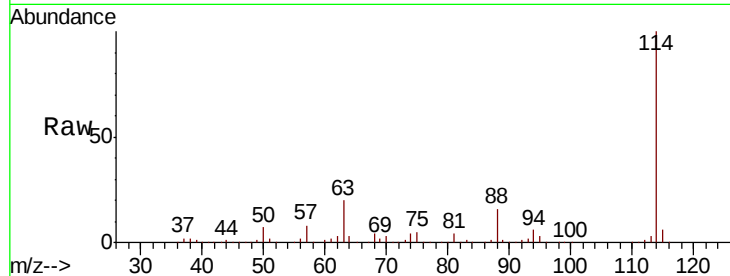
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.59 min Scan# 2119  
Delta R.T. 0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
EP1-MW-I(12-13FT)1218DL

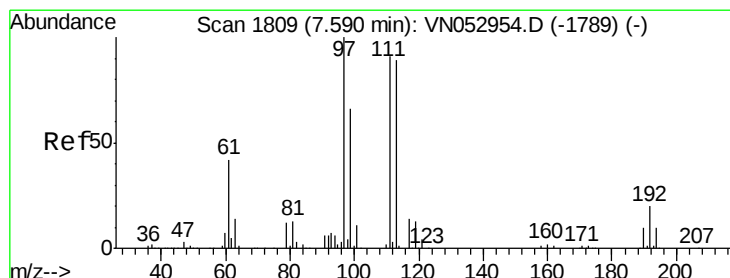
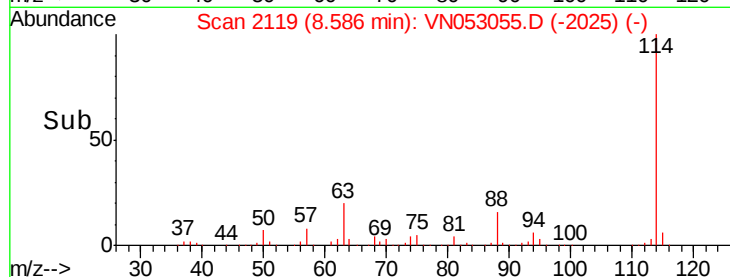
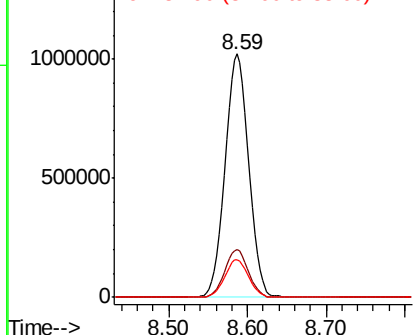
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 19.6  | 0.0   | 39.8  |
| 88      | 15.6  | 0.0   | 31.0  |

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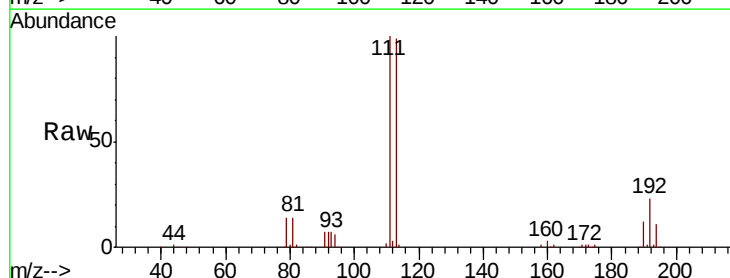


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VNO  
Ion 87.90 (87.60 to 88.60): VNO

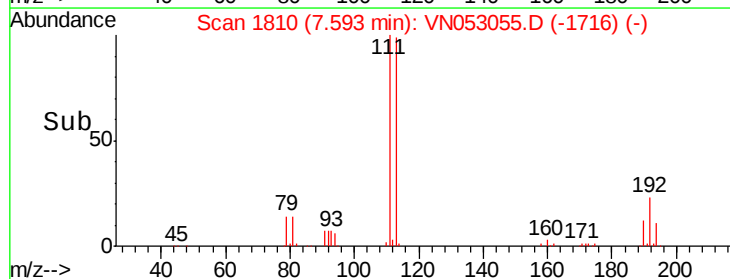
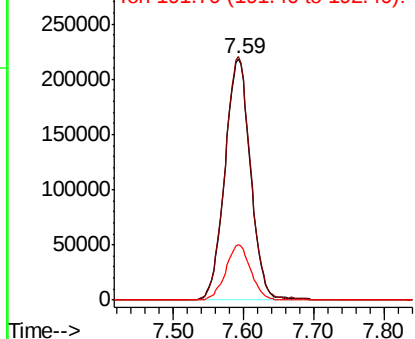


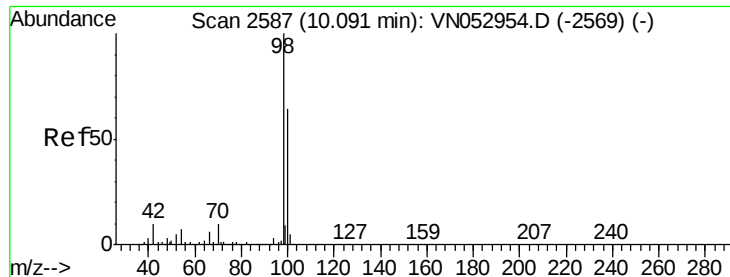
#35  
Dibromofluoromethane  
Concen: 50.000 ug/l  
RT: 7.59 min Scan# 1810  
Delta R.T. 0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 100.3 | 83.0  | 124.4 |
| 192     | 22.4  | 17.5  | 26.3  |



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





#50

Toluene-d8

Concen: N.D. ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN053055.D

Acq: 20 Dec 2018 14:34

Instrument :

MSVOA\_N

ClientSampleId :

EP1-MW-I(12-13FT)1218DL

Tot Ion: 98 Resp: 2570388

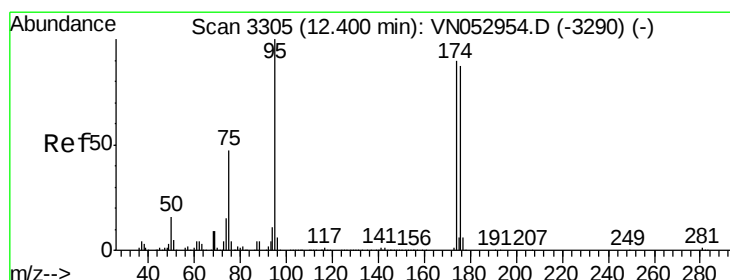
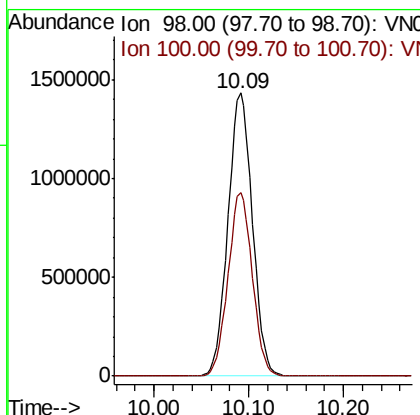
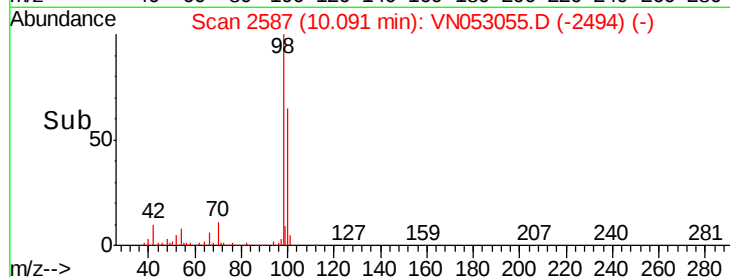
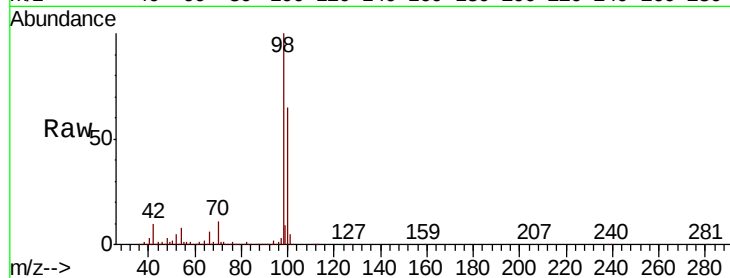
Ion Ratio Lower Upper

98 100

100 64.5 51.6 77.4

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#62

4-Bromofluorobenzene

Concen: Below ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN053055.D

Acq: 20 Dec 2018 14:34

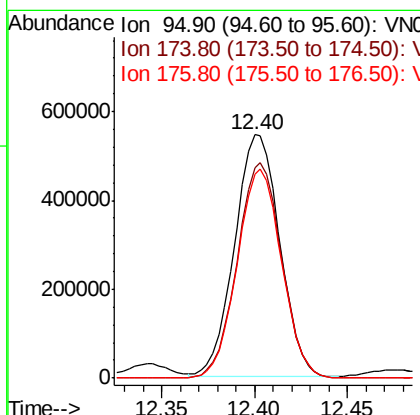
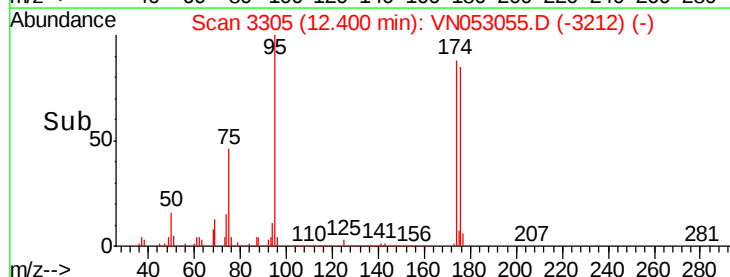
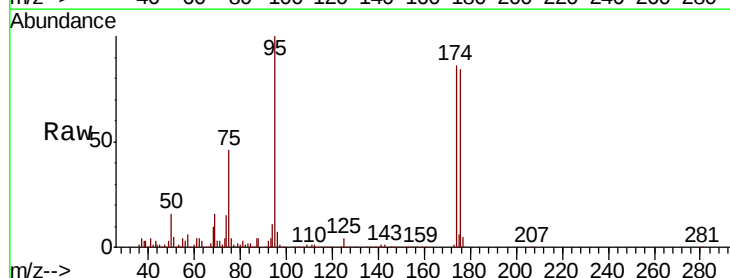
Tgt Ion: 95 Resp: 917462

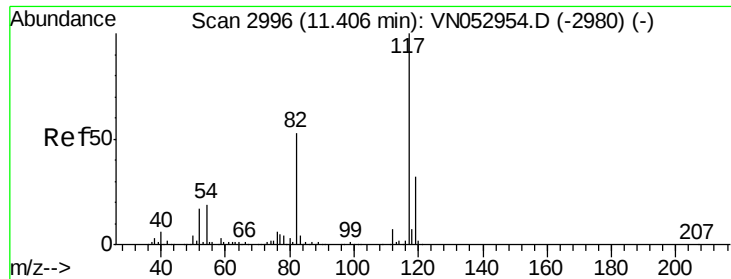
Ion Ratio Lower Upper

95 100

174 88.1 0.0 178.8

176 85.3 0.0 173.8





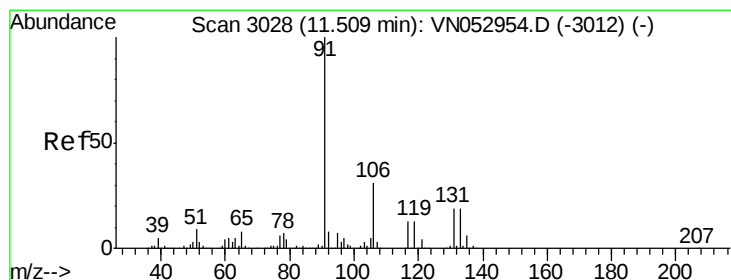
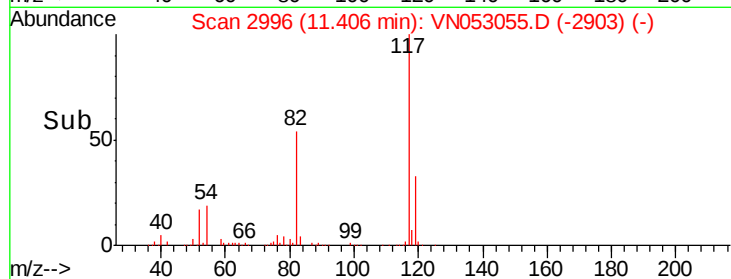
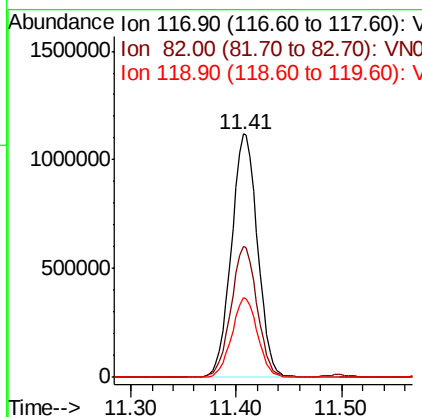
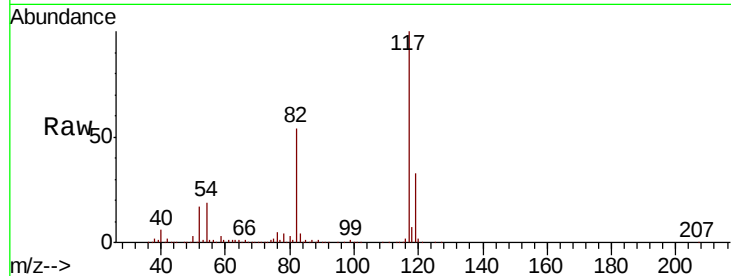
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. -0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
EP1-MW-I(12-13FT)1218DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 53.7  | 42.8  | 64.2  |
| 119     | 32.5  | 25.5  | 38.3  |

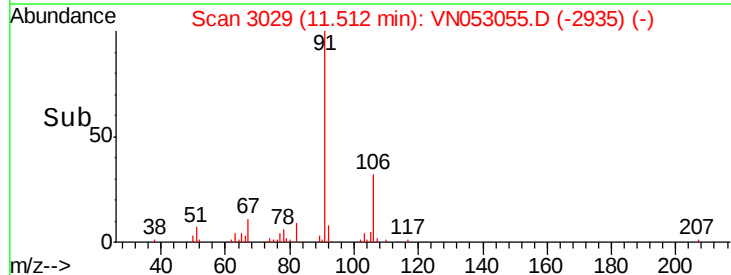
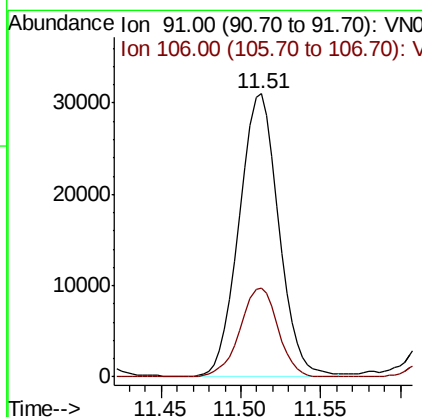
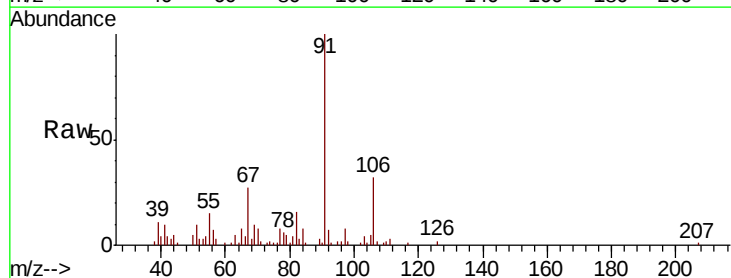
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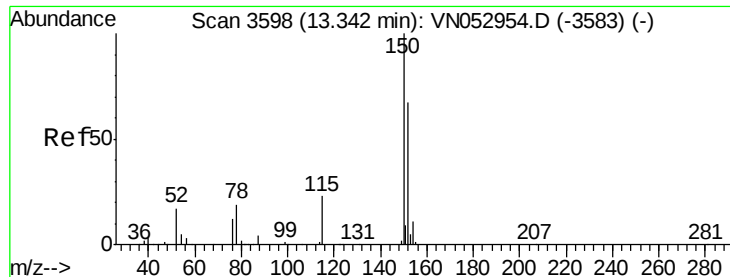
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#67  
Ethyl Benzene  
Concen: 0.719 ug/l  
RT: 11.51 min Scan# 3029  
Delta R.T. 0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 31.5  | 24.9  | 37.3  |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN053055.D

Acq: 20 Dec 2018 14:34

Instrument :

MSVOA\_N

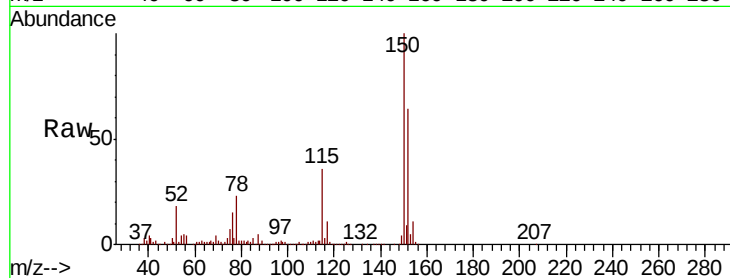
ClientSampleId :

EP1-MW-I(12-13FT)1218DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 59.0  | 28.3  | 85.0  |
| 150     | 157.6 | 0.0   | 347.8 |

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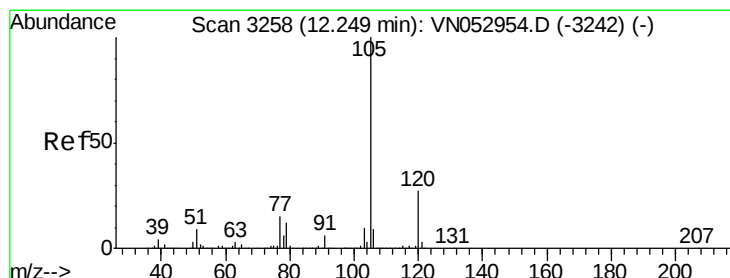
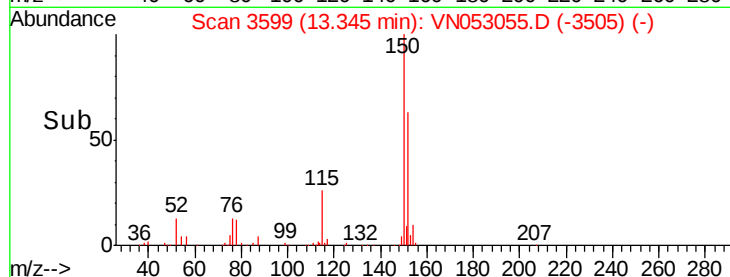
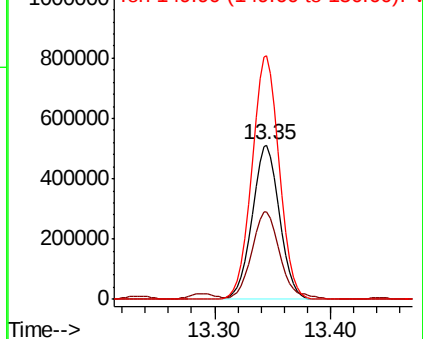


Abundance

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: 4.722 ug/l

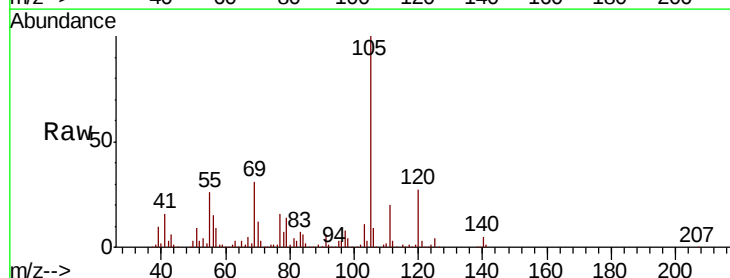
RT: 12.25 min Scan# 3258

Delta R.T. -0.00 min

Lab File: VN053055.D

Acq: 20 Dec 2018 14:34

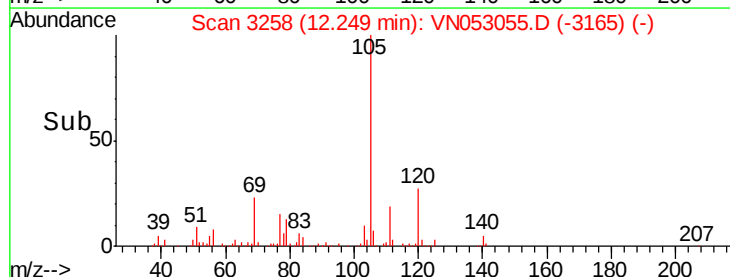
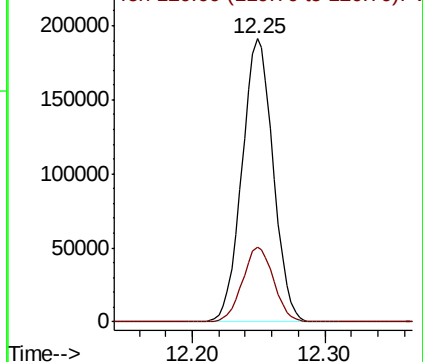
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 26.5  | 13.3  | 39.9  |

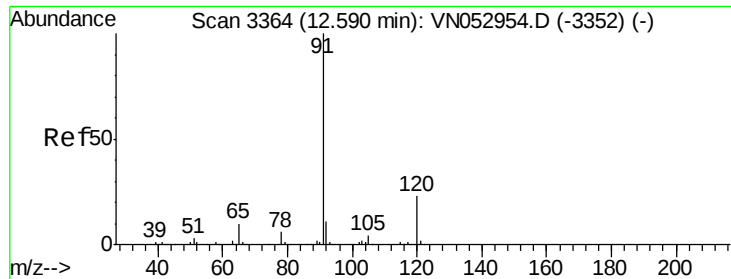


Abundance

Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





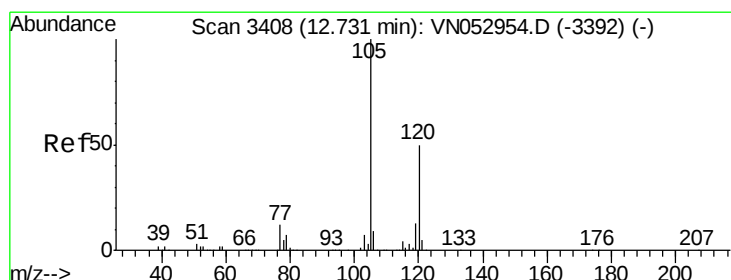
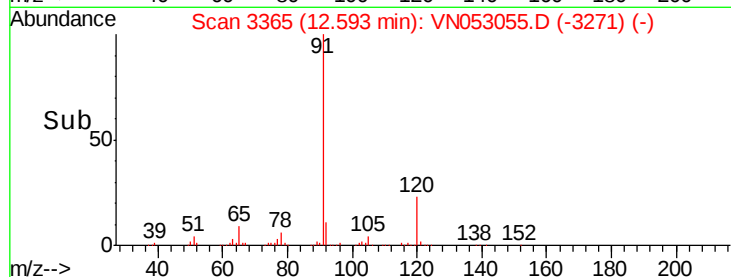
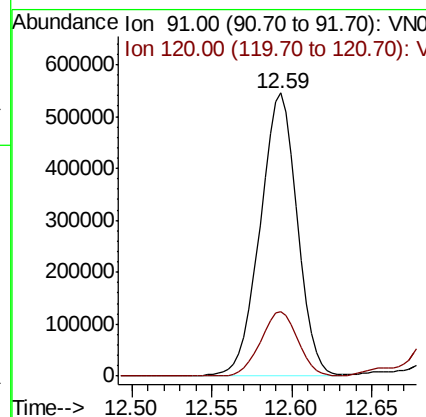
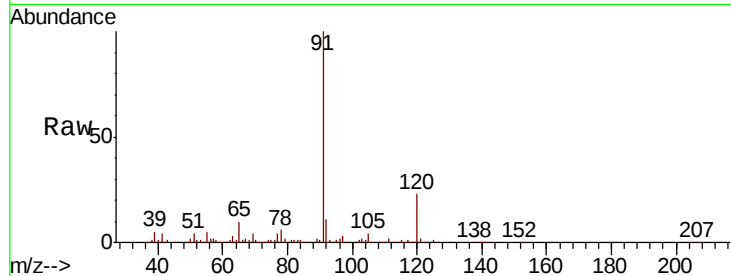
#78  
n-propylbenzene  
Concen: 11.519 ug/l  
RT: 12.59 min Scan# 3365  
Delta R.T. 0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
EP1-MW-I(12-13FT)1218DL

Tot Ion: 91 Resp: 863833  
Ion Ratio Lower Upper  
91 100  
120 23.2 11.5 34.5

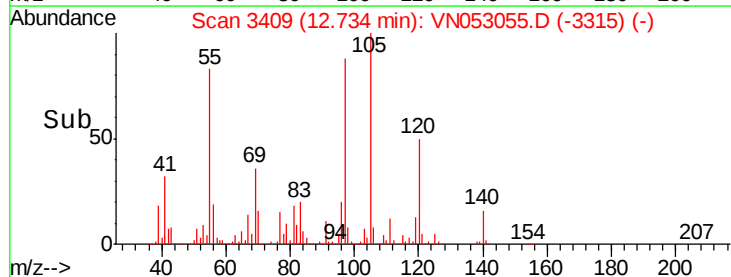
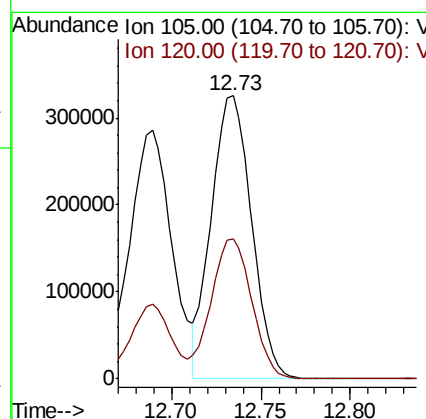
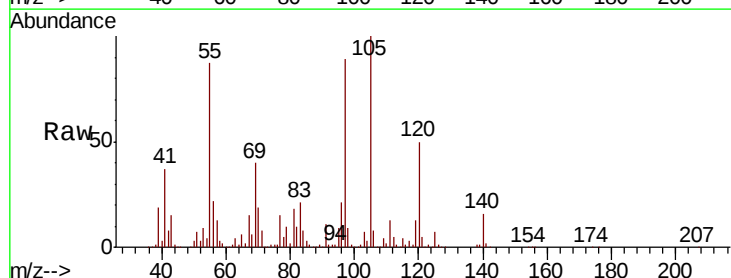
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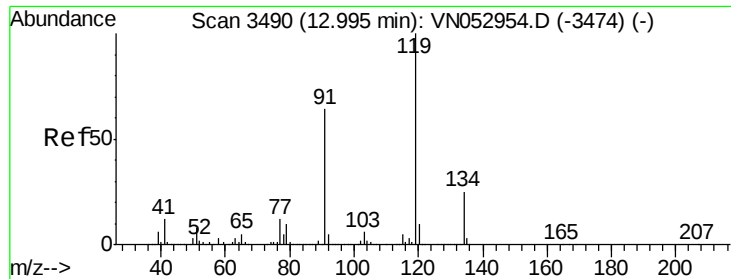
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#80  
1,3,5-Trimethylbenzene  
Concen: 9.479 ug/l  
RT: 12.73 min Scan# 3409  
Delta R.T. 0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

Tgt Ion: 105 Resp: 508773  
Ion Ratio Lower Upper  
105 100  
120 50.3 24.4 73.2





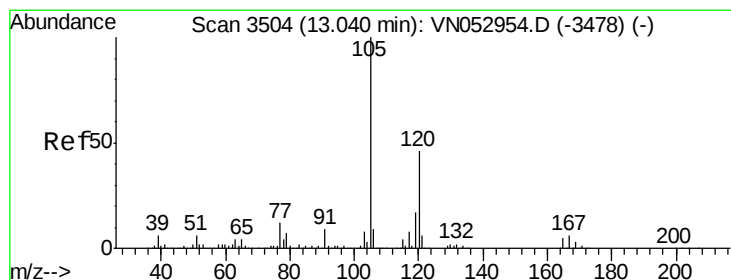
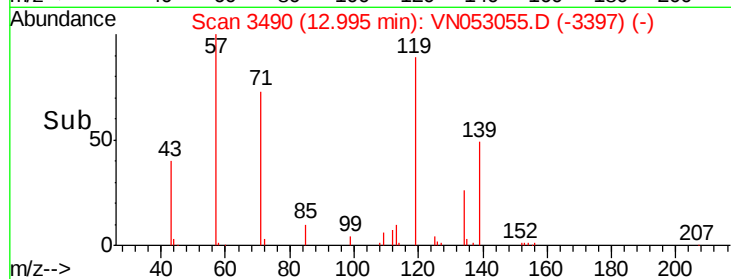
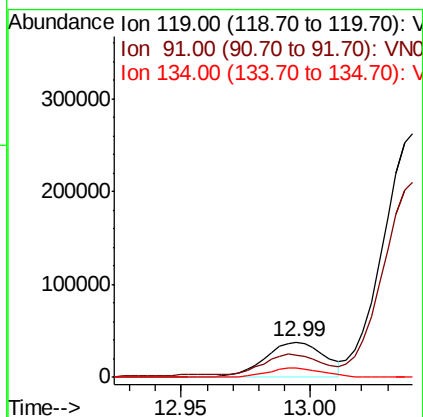
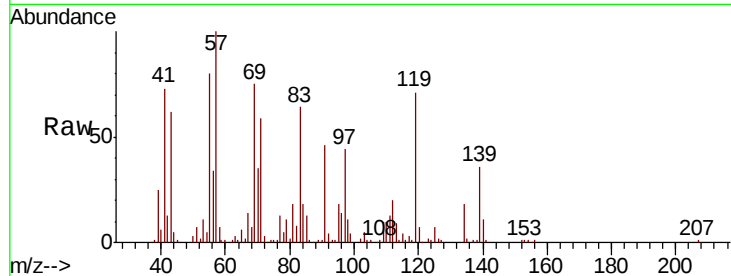
#83  
tert-Butylbenzene  
Concen: 1.277 ug/l  
RT: 12.99 min Scan# 3490  
Delta R.T. -0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
EP1-MW-I(12-13FT)1218DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 91      | 69.3  | 31.9  | 95.5  |
| 134     | 25.3  | 12.8  | 38.4  |

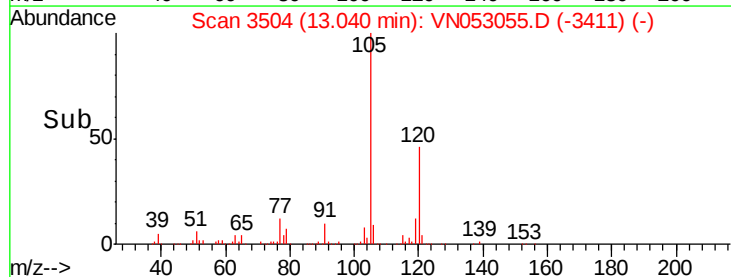
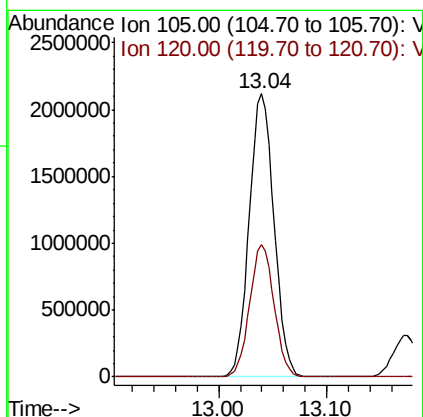
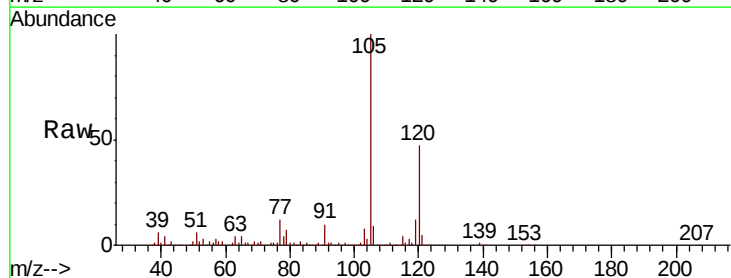
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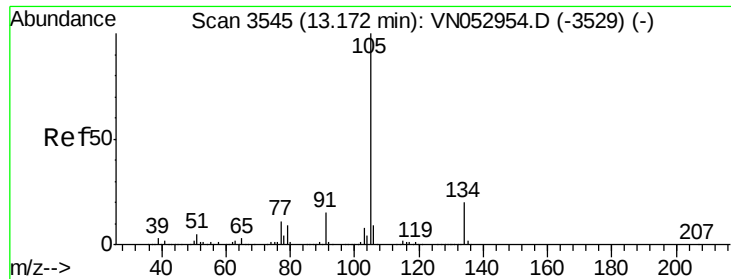
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12/21/2018 9:21:11 AM



#84  
1,2,4-Trimethylbenzene  
Concen: 62.537 ug/l  
RT: 13.04 min Scan# 3504  
Delta R.T. -0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 46.1  | 22.9  | 68.8  |





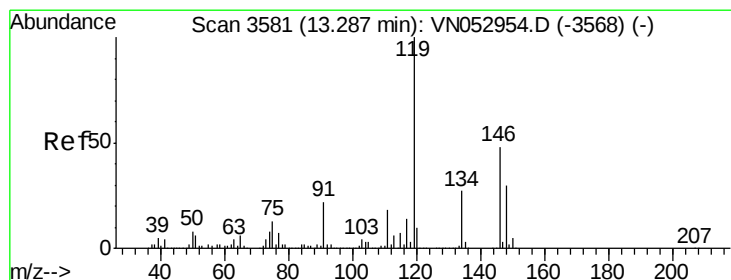
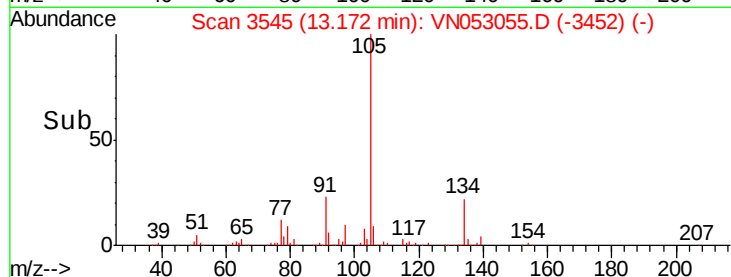
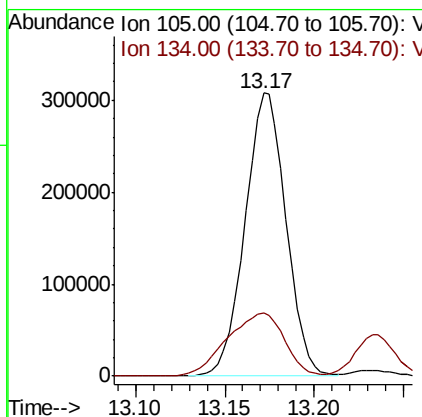
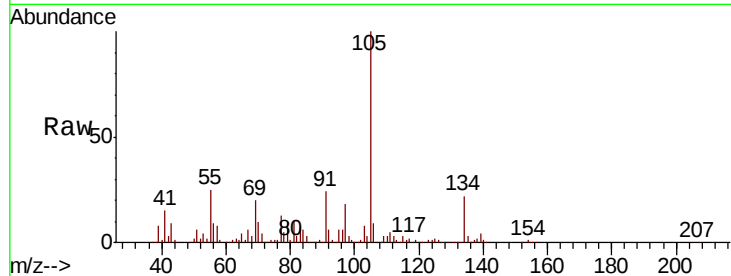
#85  
 sec-Butylbenzene  
 Concen: 7.646 ug/l  
 RT: 13.17 min Scan# 3545  
 Delta R.T. -0.00 min  
 Lab File: VN053055.D  
 Acq: 20 Dec 2018 14:34

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 EP1-MW-I(12-13FT)1218DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 134     | 31.2  | 10.1  | 30.3# |

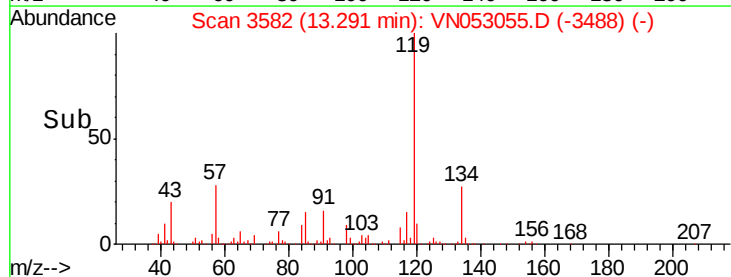
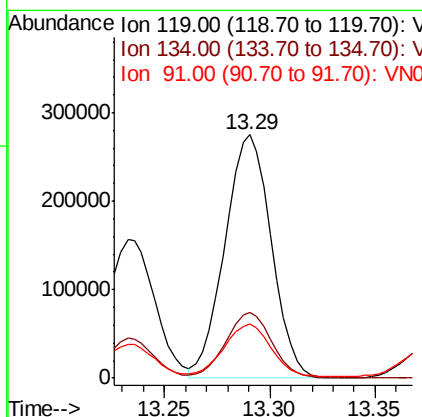
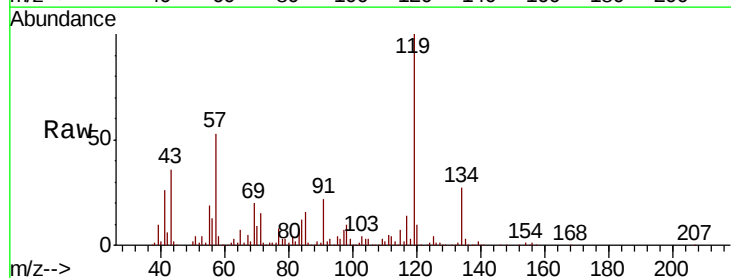
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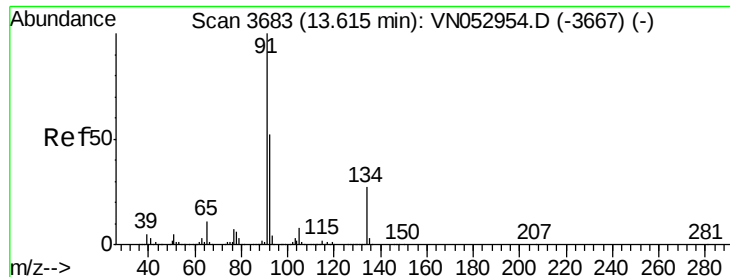
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#86  
 p-Isopropyltoluene  
 Concen: 7.532 ug/l  
 RT: 13.29 min Scan# 3582  
 Delta R.T. 0.00 min  
 Lab File: VN053055.D  
 Acq: 20 Dec 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 26.7  | 13.4  | 40.2  |
| 91      | 21.8  | 11.1  | 33.3  |





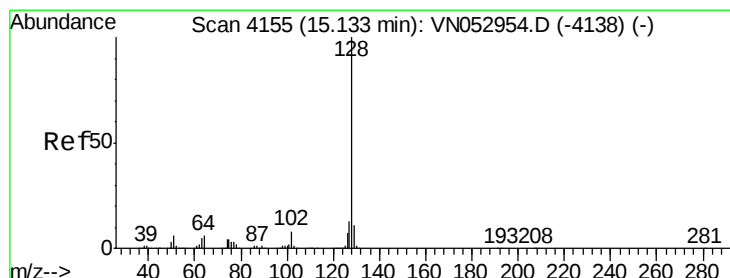
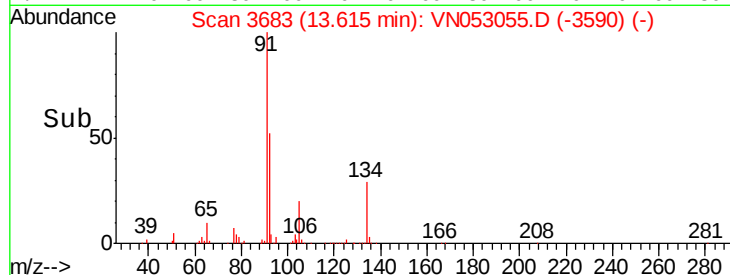
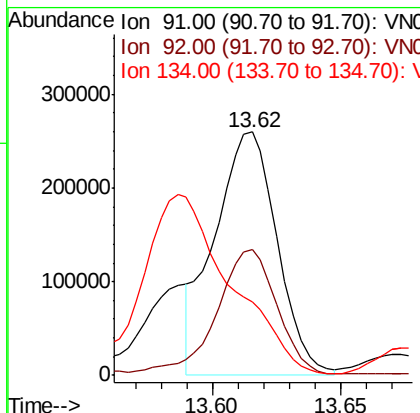
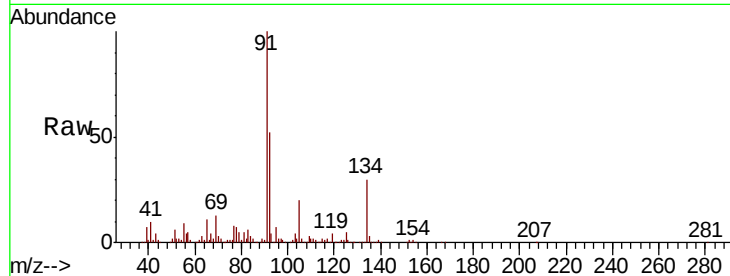
#89  
n-Butylbenzene  
Concen: 9.261 ug/l m  
RT: 13.62 min Scan# 3683  
Delta R.T. -0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
EP1-MW-I(12-13FT)1218DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 49.4  | 26.3  | 78.9  |
| 134     | 0.0   | 13.3  | 39.8# |

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#95  
Naphthalene  
Concen: 1.888 ug/l  
RT: 15.13 min Scan# 4155  
Delta R.T. -0.00 min  
Lab File: VN053055.D  
Acq: 20 Dec 2018 14:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 15.1  | 10.2  | 15.4  |
| 129     | 11.6  | 8.6   | 13.0  |

