

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD112119\  
 Data File : VD064335.D  
 Acq On : 21 Nov 2019 20:18  
 Operator : VA/SY  
 Sample : K5972-01  
 Misc : 5.97G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 25441-26560

Quant Time: Nov 22 02:44:00 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 12 02:43:24 2019  
 Response via : Initial Calibration

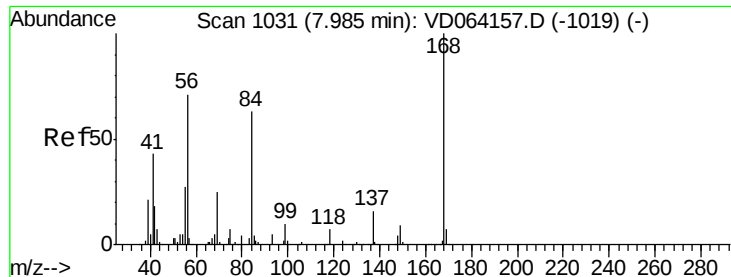
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.99  | 168  | 868562   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 1255883  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 1095832  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 523192   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.34  | 65   | 355460   | 49.76 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.52%  |          |
| 35) Dibromofluoromethane    | 7.92  | 113  | 377102   | 52.31 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.62% |          |
| 50) Toluene-d8              | 10.34 | 98   | 1460405  | 53.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.40% |          |
| 62) 4-Bromofluorobenzene    | 12.64 | 95   | 464163   | 49.29 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.58%  |          |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 52) Toluene                | 10.41 | 92   | 111536   | 5.355  | ug/l   | 99     |
| 67) Ethyl Benzene          | 11.75 | 91   | 230522   | 5.719  | ug/l   | 97     |
| 68) m/p-Xylenes            | 11.86 | 106  | 982267   | 63.577 | ug/l   | 98     |
| 69) o-Xylene               | 12.18 | 106  | 558295   | 38.963 | ug/l   | 99     |
| 73) Isopropylbenzene       | 12.48 | 105  | 90836    | 2.365  | ug/l   | 99     |
| 78) n-propylbenzene        | 12.83 | 91   | 325265   | 7.413  | ug/l   | 100    |
| 80) 1,3,5-Trimethylbenzene | 12.97 | 105  | 681649   | 21.602 | ug/l   | 100    |
| 84) 1,2,4-Trimethylbenzene | 13.27 | 105  | 2573442  | 82.606 | ug/l   | 99     |
| 85) sec-Butylbenzene       | 13.41 | 105  | 157316   | 4.210  | ug/l   | 89     |
| 86) p-Isopropyltoluene     | 13.53 | 119  | 92921    | 2.615  | ug/l   | 99     |
| 89) n-Butylbenzene         | 13.85 | 91   | 157346   | 4.902  | ug/l # | 75     |
| 95) Naphthalene            | 15.41 | 128  | 196774   | 10.616 | ug/l # | 94     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.99 min Scan# 1031

Delta R.T. 0.00 min

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Instrument :

MSVOA\_D

ClientSampleId :

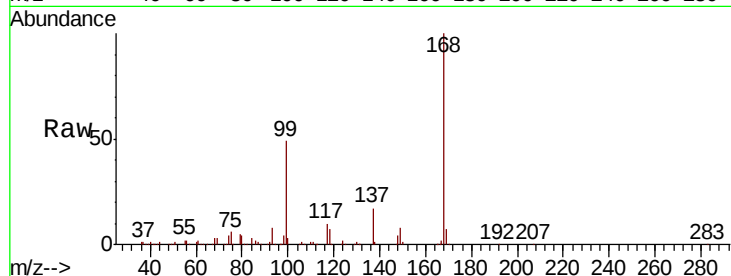
25441-26560

Tot Ion:168 Resp: 868562

Ion Ratio Lower Upper

168 100

99 48.6 41.6 62.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.99

400000

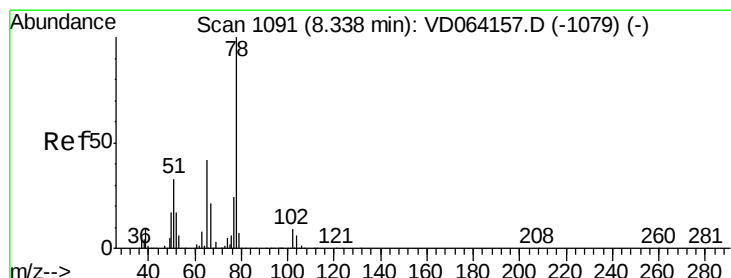
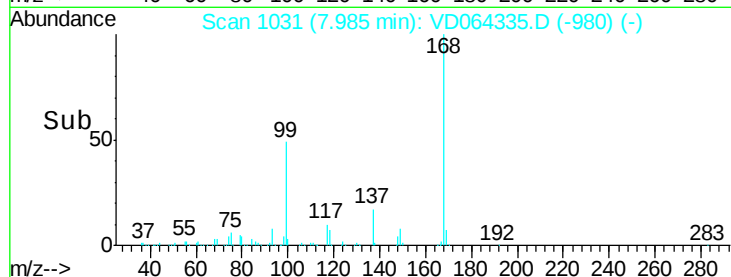
300000

200000

100000

0

Time-->



#33

1,2-Dichloroethane-d4

Concen: 49.761 ug/l

RT: 8.34 min Scan# 1091

Delta R.T. 0.00 min

Lab File: VD064335.D

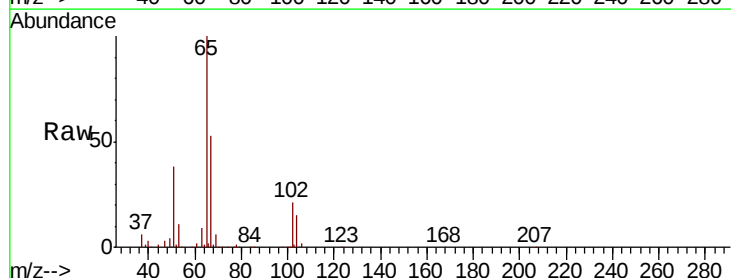
Acq: 21 Nov 2019 20:18

Tgt Ion: 65 Resp: 355460

Ion Ratio Lower Upper

65 100

67 51.4 0.0 104.4



Abundance Ion 64.90 (64.60 to 65.60): VDC

Ion 66.90 (66.60 to 67.60): VDC

8.34

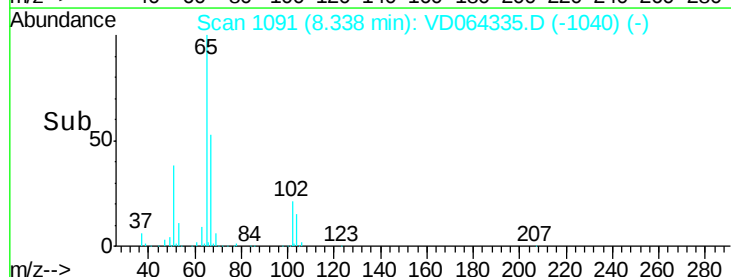
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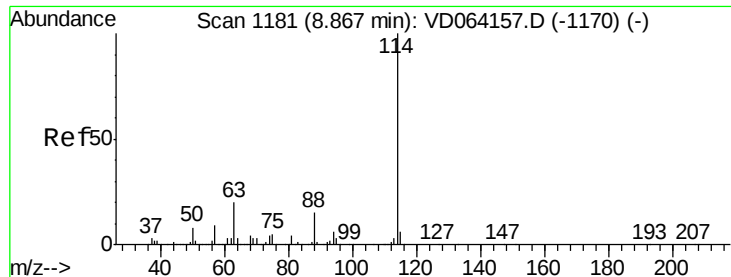
100000

50000

0

Time-->

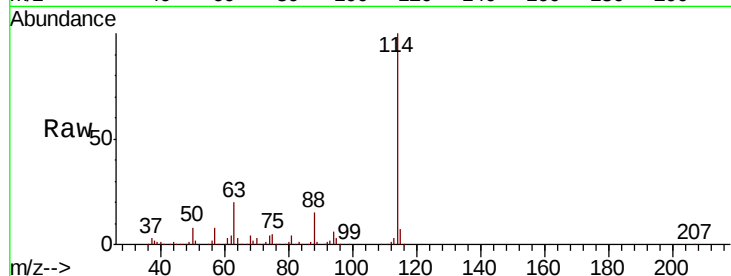




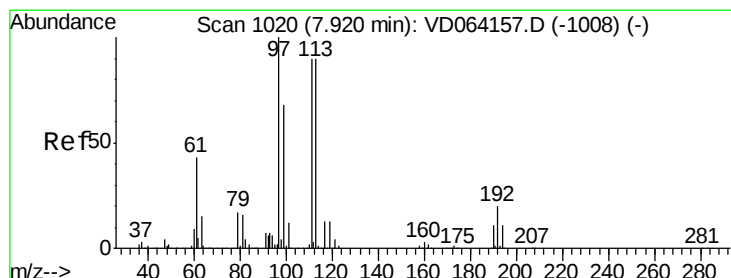
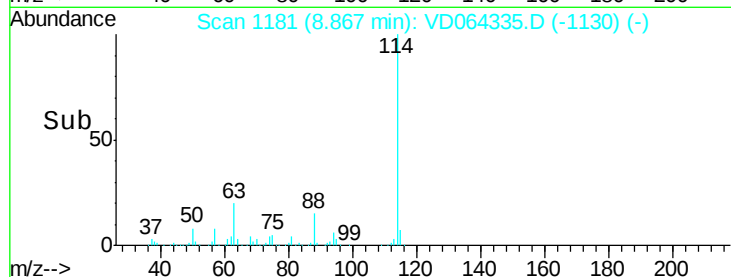
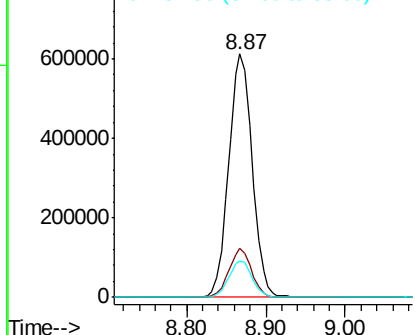
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.87 min Scan# 1181  
 Delta R.T. 0.00 min  
 Lab File: VD064335.D  
 Acq: 21 Nov 2019 20:18

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 25441-26560

Tot Ion:114 Resp: 1255883  
 Ion Ratio Lower Upper  
 114 100  
 63 20.0 0.0 40.0  
 88 15.0 0.0 30.2

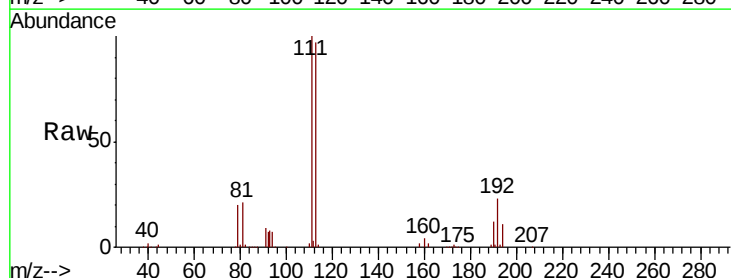


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VDC  
 Ion 87.90 (87.60 to 88.60): VDC

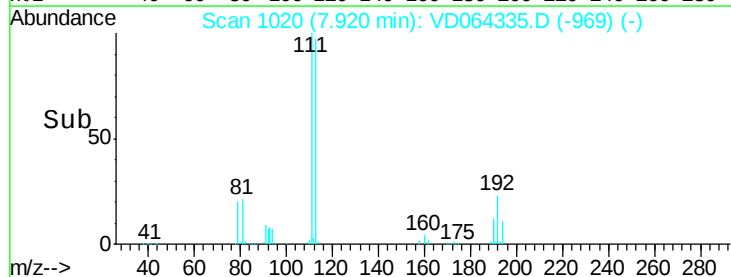
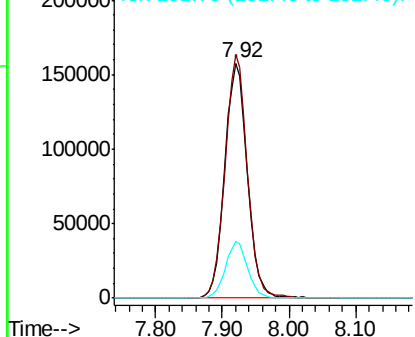


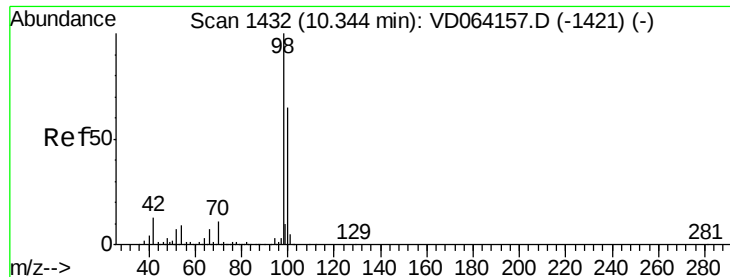
#35  
 Dibromofluoromethane  
 Concen: 52.310 ug/l  
 RT: 7.92 min Scan# 1020  
 Delta R.T. 0.00 min  
 Lab File: VD064335.D  
 Acq: 21 Nov 2019 20:18

Tgt Ion:113 Resp: 377102  
 Ion Ratio Lower Upper  
 113 100  
 111 101.9 81.5 122.3  
 192 23.6 18.8 28.2



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

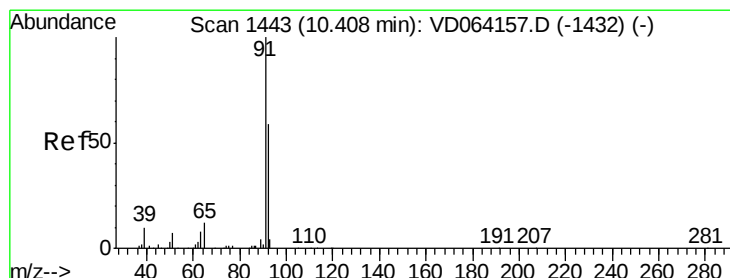
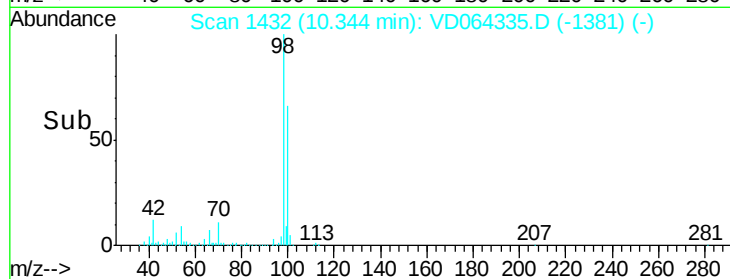
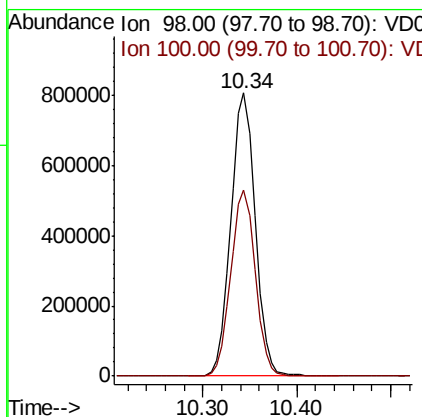
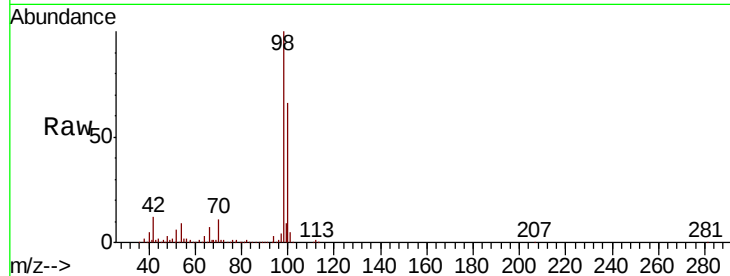




#50  
Toluene-d8  
Concen: 53.701 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

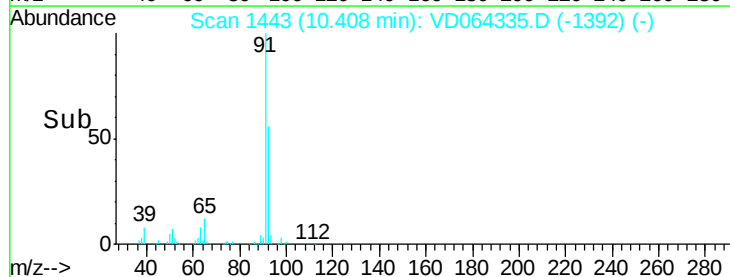
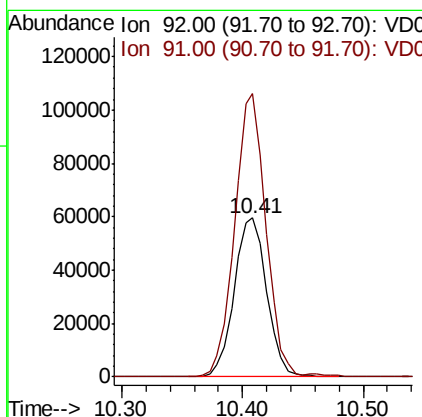
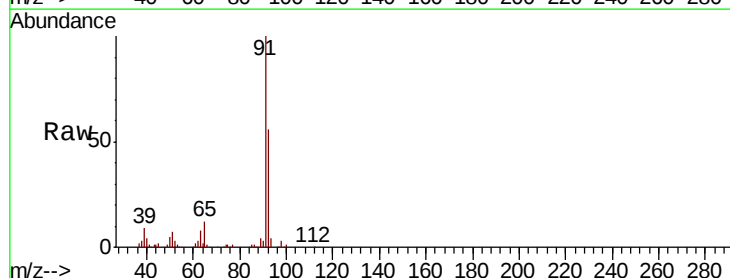
Instrument :  
MSVOA\_D  
ClientSampleId :  
25441-26560

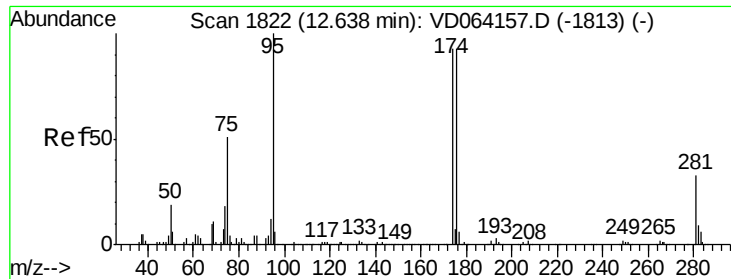
Tot Ion: 98 Resp: 1460405  
Ion Ratio Lower Upper  
98 100  
100 66.3 52.6 78.8



#52  
Toluene  
Concen: 5.355 ug/l  
RT: 10.41 min Scan# 1443  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

Tgt Ion: 92 Resp: 111536  
Ion Ratio Lower Upper  
92 100  
91 171.8 136.4 204.6

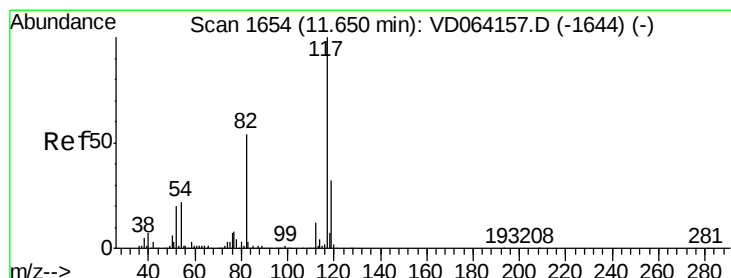
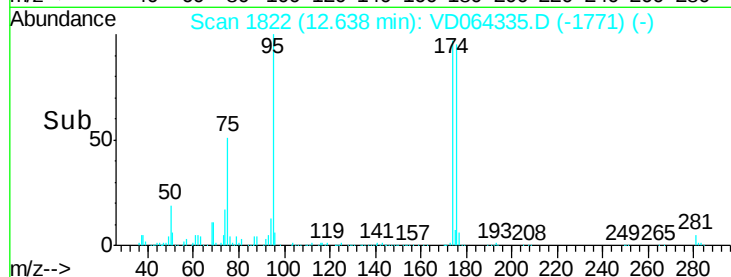
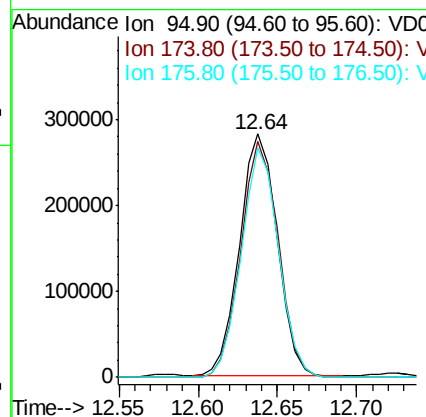
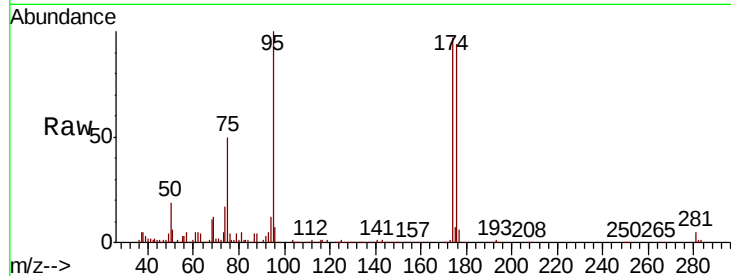




#62  
4-Bromofluorobenzene  
Concen: 49.285 ug/l  
RT: 12.64 min Scan# 1822  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

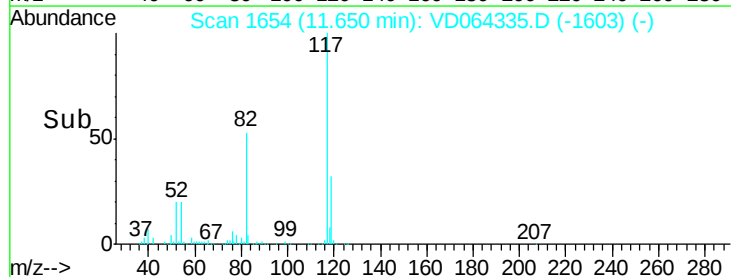
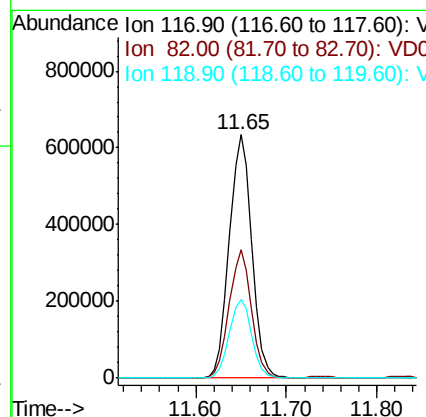
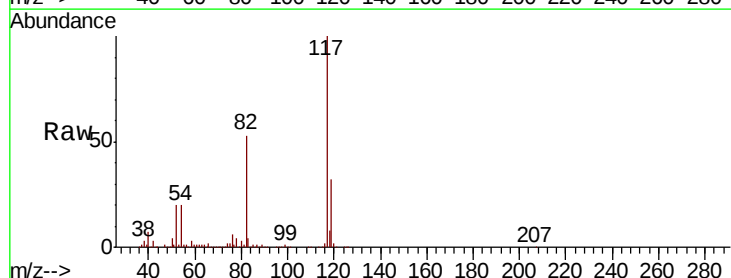
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MSVOA\_D  
ClientSampleId :  
25441-26560

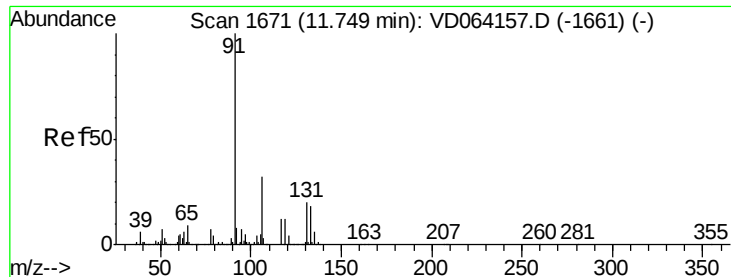
Tot Ion: 95 Resp: 464163  
Ion Ratio Lower Upper  
95 100  
174 97.4 0.0 183.6  
176 94.0 0.0 180.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

Tgt Ion: 117 Resp: 1095832  
Ion Ratio Lower Upper  
117 100  
82 52.5 42.8 64.2  
119 32.5 25.6 38.4





#67

Ethyl Benzene

Concen: 5.719 ug/l

RT: 11.75 min Scan# 1671

Delta R.T. 0.00 min

Lab File: VD064335.D

Acq: 21 Nov 2019 20:18

Instrument :

MSVOA\_D

ClientSampleId :

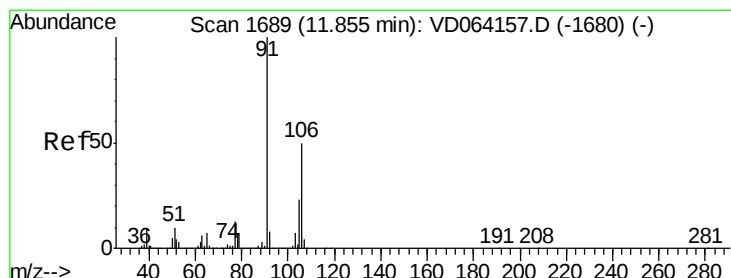
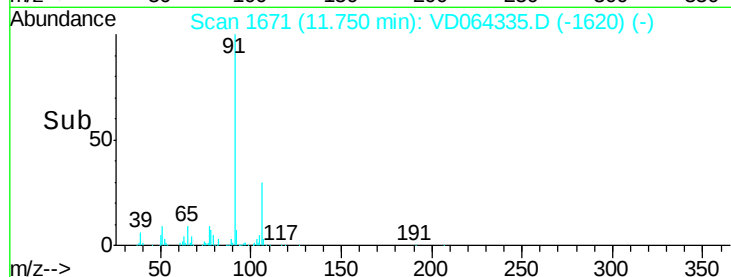
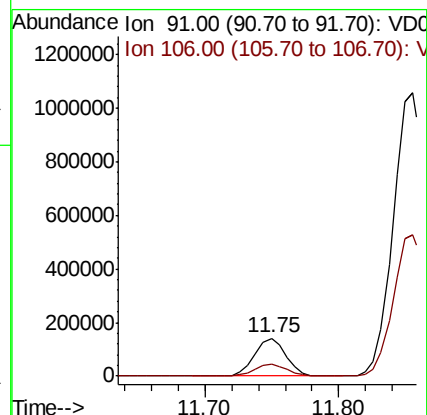
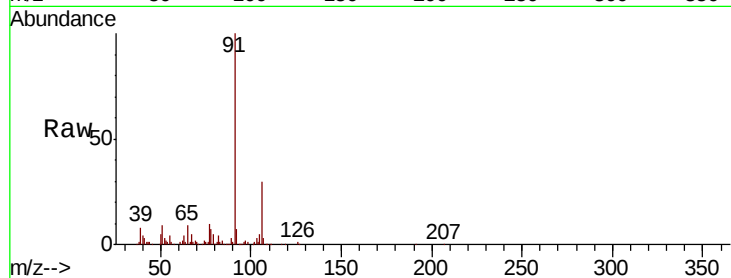
25441-26560

Tot Ion: 91 Resp: 230522

Ion Ratio Lower Upper

91 100

106 30.4 25.5 38.3



#68

m/p-Xylenes

Concen: 63.577 ug/l

RT: 11.86 min Scan# 1689

Delta R.T. 0.00 min

Lab File: VD064335.D

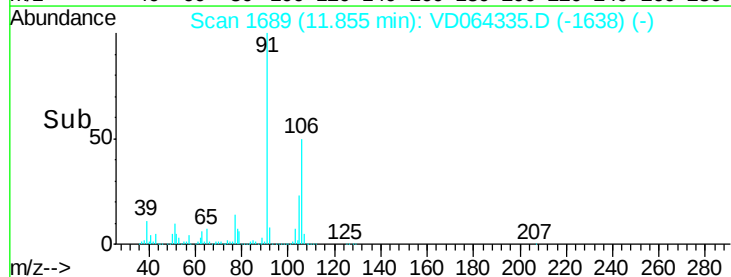
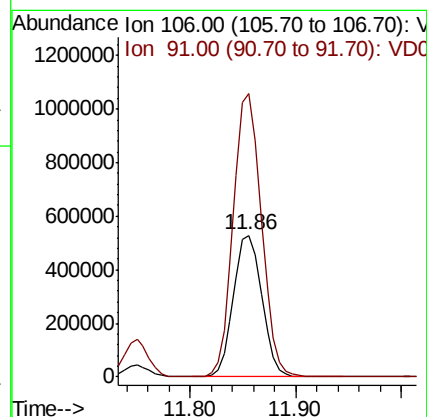
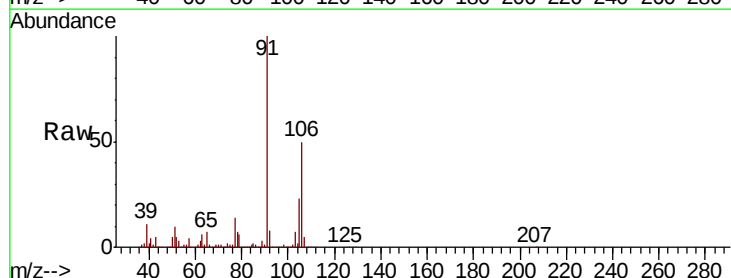
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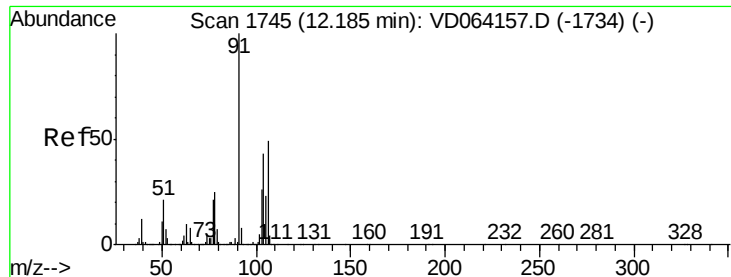
Tgt Ion: 106 Resp: 982267

Ion Ratio Lower Upper

106 100

91 197.9 160.3 240.5

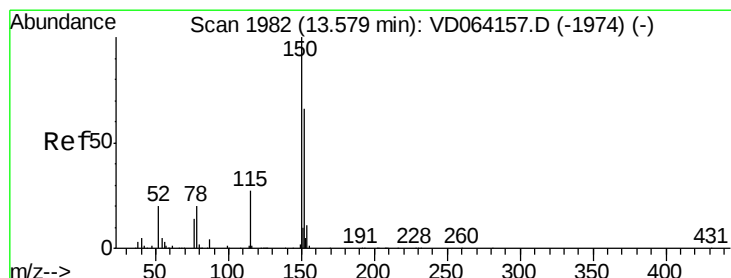
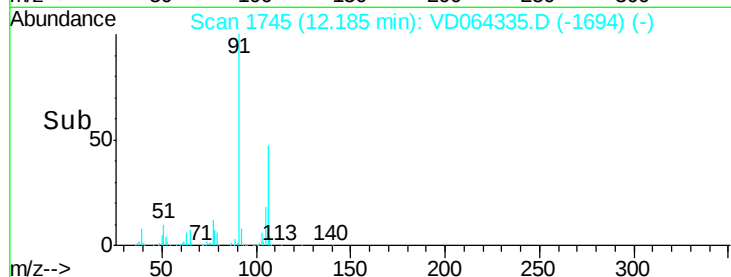
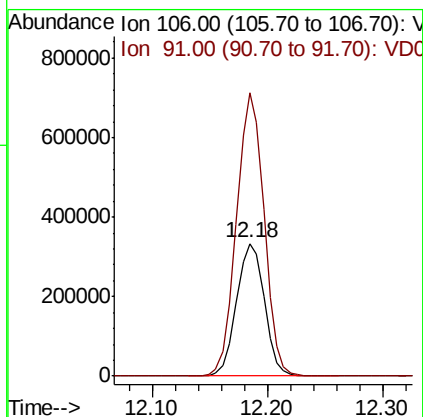
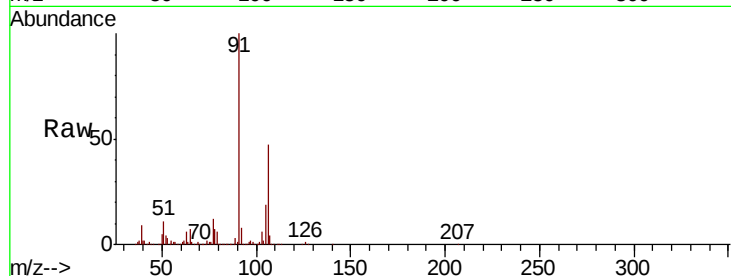




#69  
o-Xylene  
Concen: 38.963 ug/l  
RT: 12.18 min Scan# 1745  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

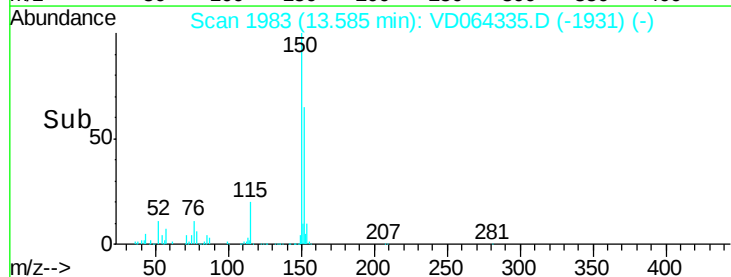
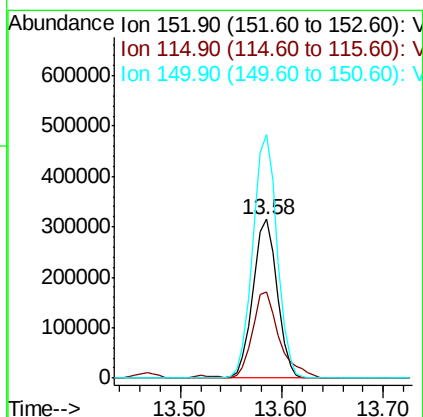
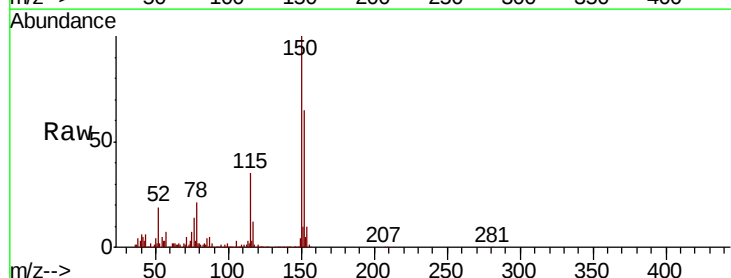
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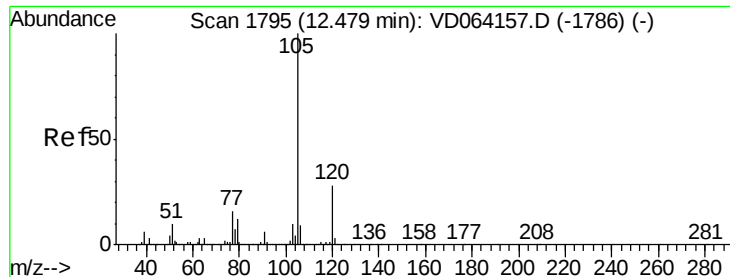
Tot Ion:106 Resp: 558295  
Ion Ratio Lower Upper  
106 100  
91 211.3 105.1 315.3



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1983  
Delta R.T. 0.01 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

Tgt Ion:152 Resp: 523192  
Ion Ratio Lower Upper  
152 100  
115 60.3 27.4 82.2  
150 153.2 0.0 351.6





#73

Isopropylbenzene

Concen: 2.365 ug/l

RT: 12.48 min Scan# 1796

Delta R.T. 0.01 min

Lab File: VD064335.D

Acq: 21 Nov 2019 20:18

Instrument :

MSVOA\_D

ClientSampleId :

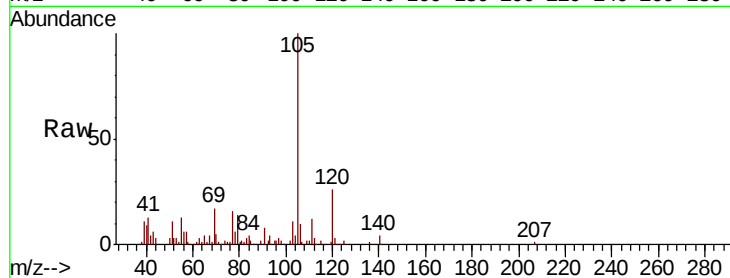
25441-26560

Tot Ion: 105 Resp: 90836

Ion Ratio Lower Upper

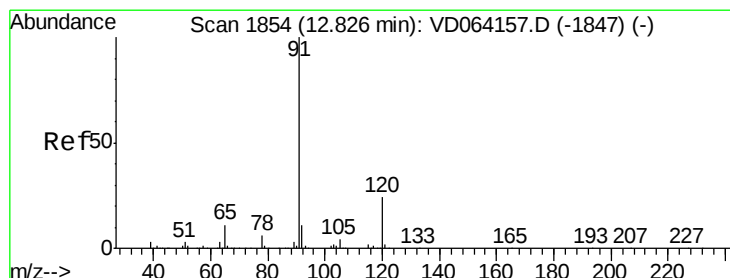
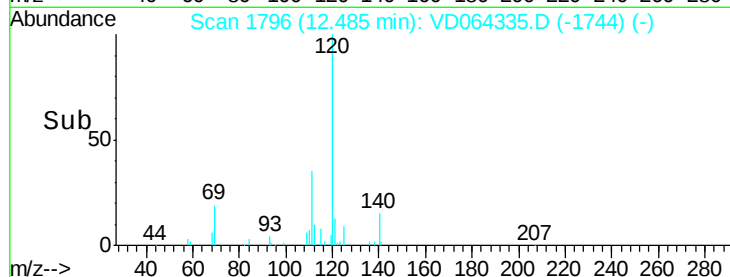
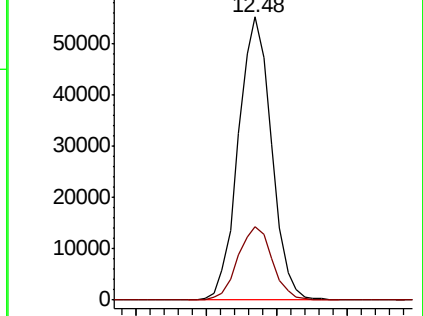
105 100

120 26.8 13.6 40.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#78

n-propylbenzene

Concen: 7.413 ug/l

RT: 12.83 min Scan# 1854

Delta R.T. 0.00 min

Lab File: VD064335.D

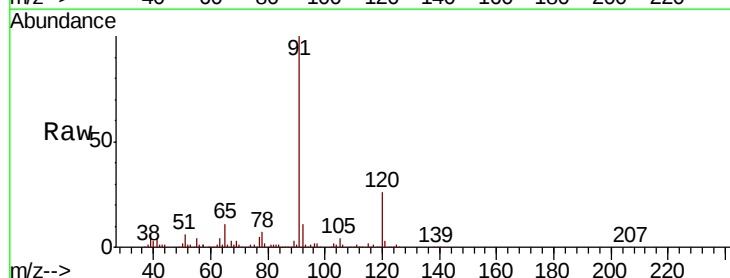
Acq: 21 Nov 2019 20:18

Tgt Ion: 91 Resp: 325265

Ion Ratio Lower Upper

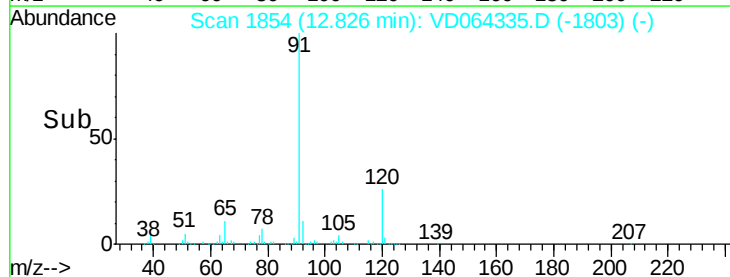
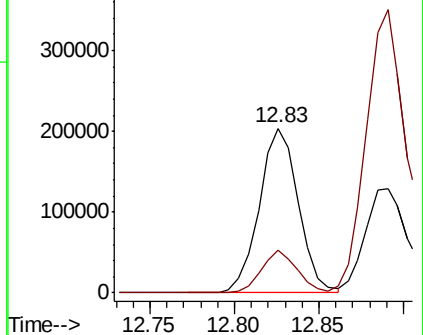
91 100

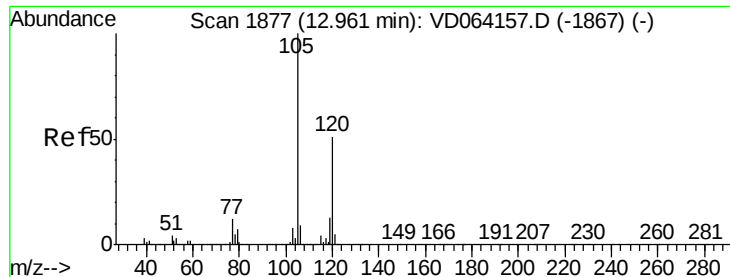
120 23.7 11.8 35.4



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 120.00 (119.70 to 120.70): V





#80

1,3,5-Trimethylbenzene

Concen: 21.602 ug/l

RT: 12.97 min Scan# 1878

Delta R.T. 0.01 min

Lab File: VD064335.D

Acq: 21 Nov 2019 20:18

Instrument :

MSVOA\_D

ClientSampleId :

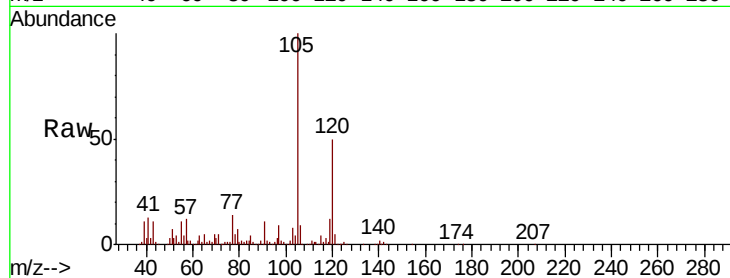
25441-26560

Tot Ion:105 Resp: 681649

Ion Ratio Lower Upper

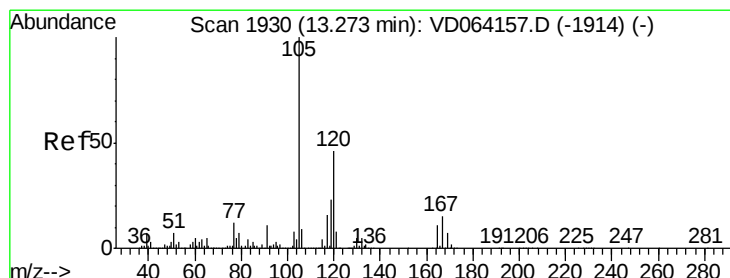
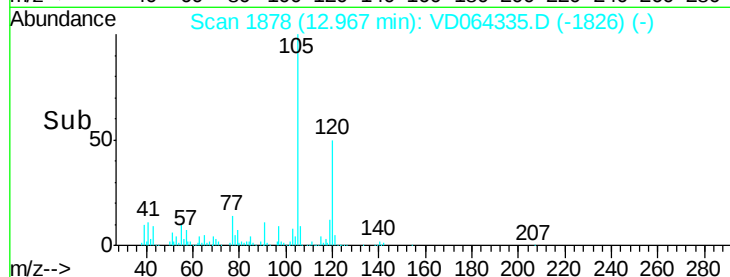
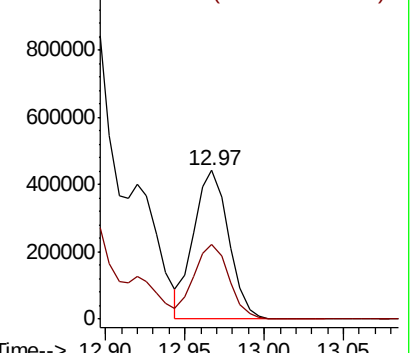
105 100

120 50.6 25.4 76.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#84

1,2,4-Trimethylbenzene

Concen: 82.606 ug/l

RT: 13.27 min Scan# 1930

Delta R.T. 0.00 min

Lab File: VD064335.D

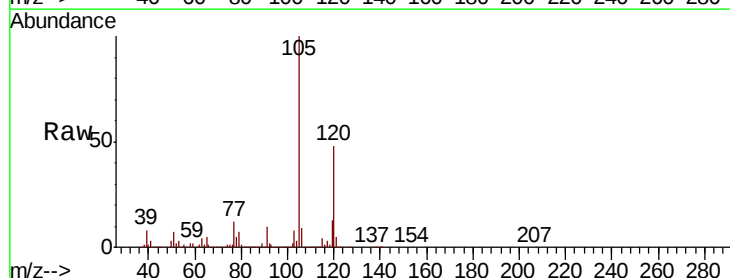
Acq: 21 Nov 2019 20:18

Tgt Ion:105 Resp: 2573442

Ion Ratio Lower Upper

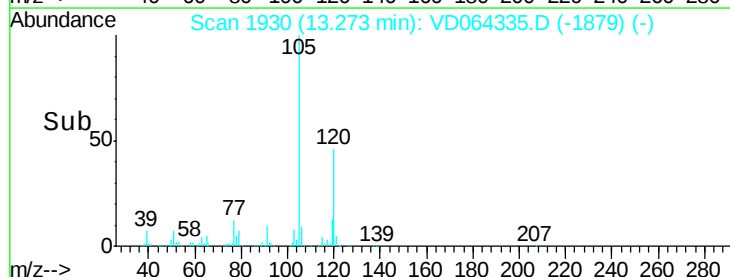
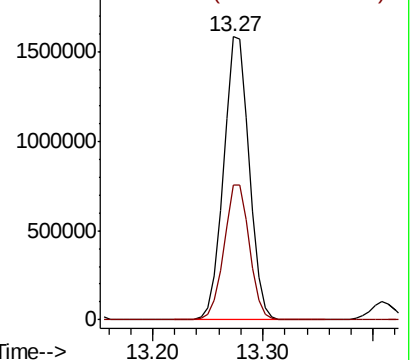
105 100

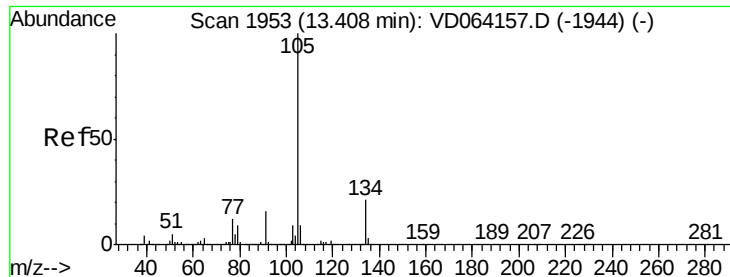
120 47.5 23.3 69.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#85

sec-Butylbenzene

Concen: 4.210 ug/l

RT: 13.41 min Scan# 1953

Delta R.T. 0.00 min

Lab File: VD064335.D

Acq: 21 Nov 2019 20:18

Instrument :

MSVOA\_D

ClientSampleId :

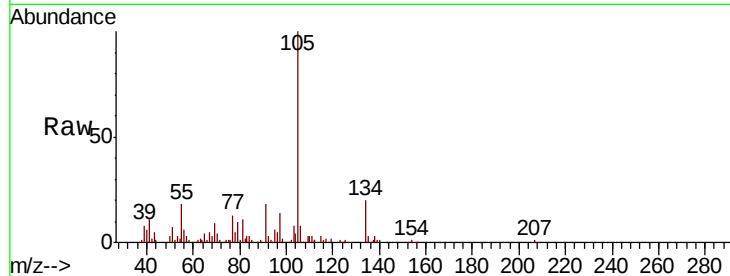
25441-26560

Tot Ion:105 Resp: 157316

Ion Ratio Lower Upper

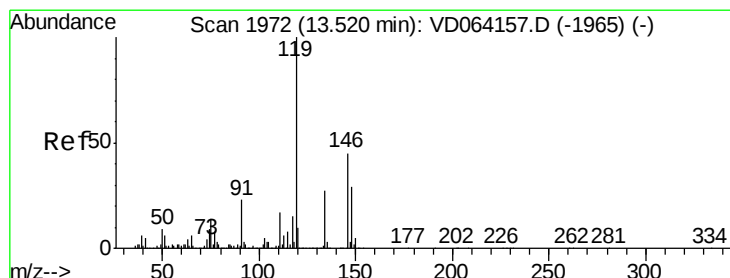
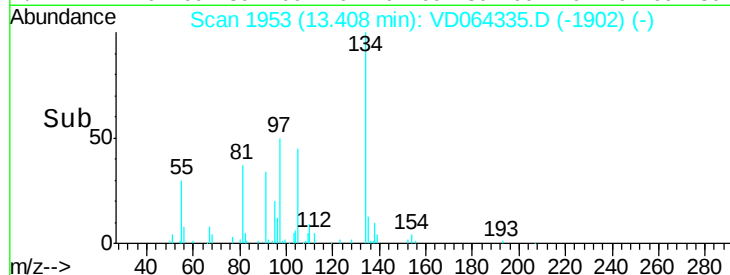
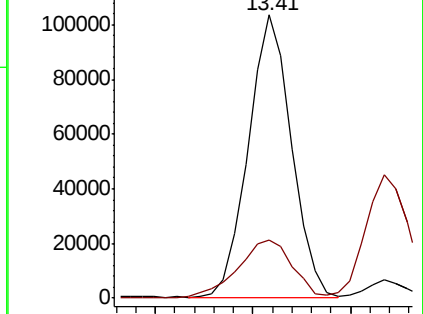
105 100

134 26.3 10.7 31.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 2.615 ug/l

RT: 13.53 min Scan# 1973

Delta R.T. 0.01 min

Lab File: VD064335.D

Acq: 21 Nov 2019 20:18

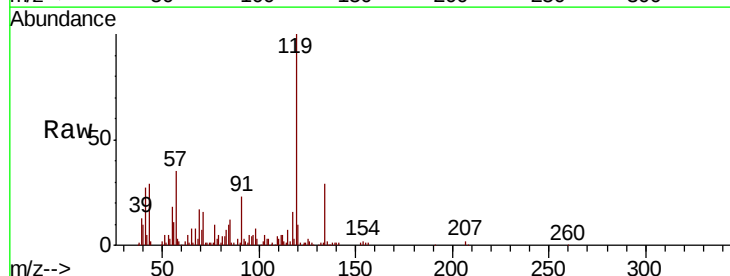
Tgt Ion:119 Resp: 92921

Ion Ratio Lower Upper

119 100

134 27.3 13.5 40.5

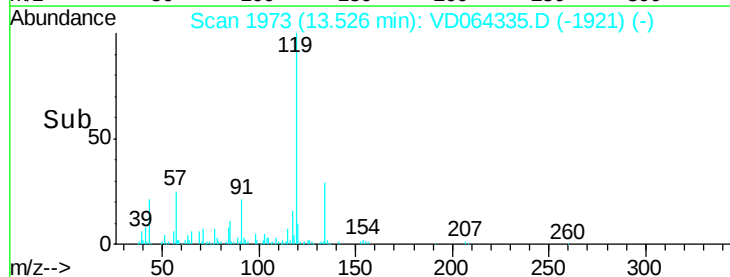
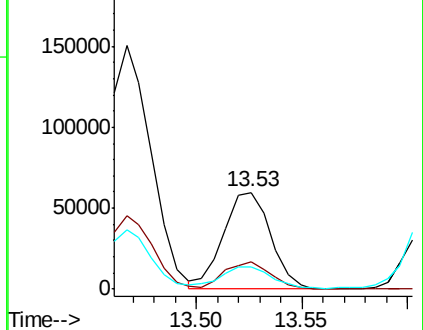
91 24.2 11.5 34.4

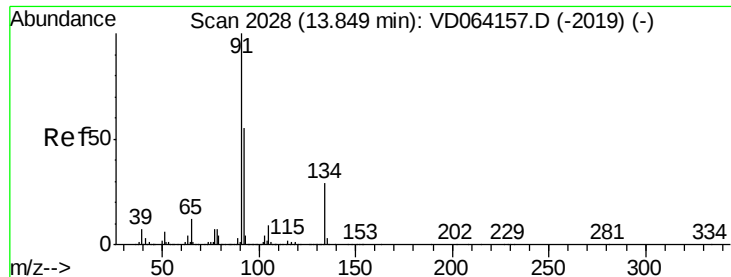


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V

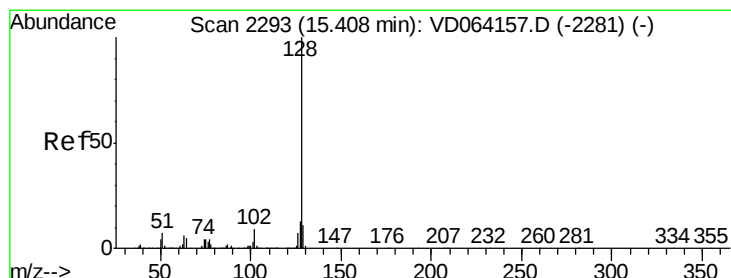
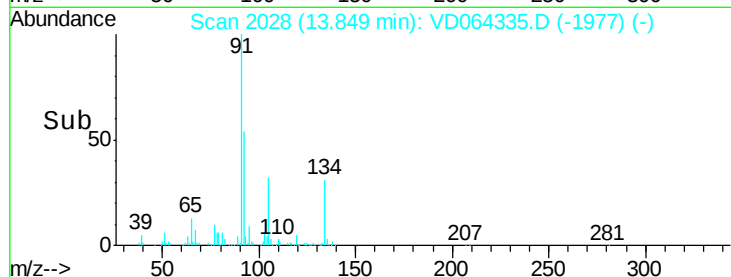
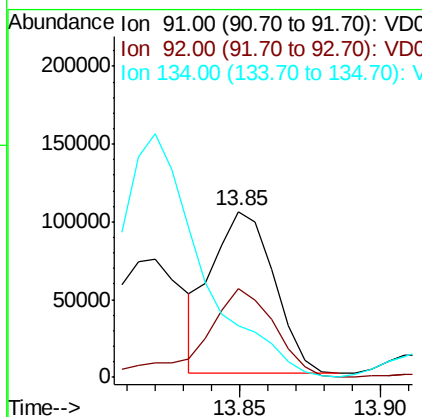
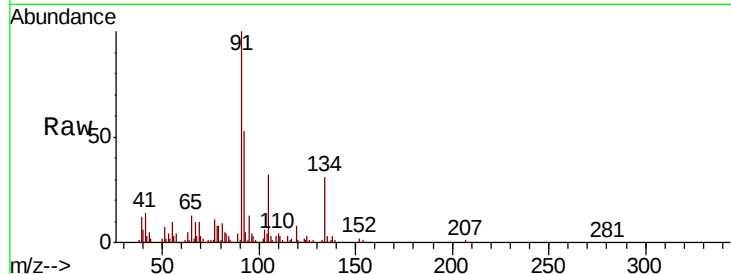




#89  
n-Butylbenzene  
Concen: 4.902 ug/l  
RT: 13.85 min Scan# 2028  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

Instrument :  
MSVOA\_D  
ClientSampleId :  
25441-26560

Tot Ion: 91 Resp: 157346  
Ion Ratio Lower Upper  
91 100  
92 61.3 27.3 81.8  
134 0.0 14.1 42.4#



#95  
Naphthalene  
Concen: 10.616 ug/l  
RT: 15.41 min Scan# 2293  
Delta R.T. 0.00 min  
Lab File: VD064335.D  
Acq: 21 Nov 2019 20:18

Tgt Ion: 128 Resp: 196774  
Ion Ratio Lower Upper  
128 100  
127 11.8 10.5 15.7  
129 14.0 8.6 13.0#

