

Data Path : W:\HPCHEM1\MSVOA N\DATA\VN091715\  
 Data File : VN027277.D  
 Acq On : 18 Sep 2015 2:15  
 Operator : MD\FY  
 Sample : G3683-04  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 MW-2R-11

Manual Integrations  
 APPROVED

MMDadoda  
 9/18/2015 12:24:07 PM

Quant Time: Sep 18 12:00:16 2015  
 Quant Method : W:\HPCHEM1\MSVOA\_N\METHODS\82N091515W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 15 21:12:09 2015  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.75  | 168  | 760278   | 50.00 | ug/l  | 0.00     |
| 35) 1,4-Difluorobenzene    | 8.68  | 114  | 1362738  | 50.00 | ug/l  | 0.00     |
| 64) Chlorobenzene-d5       | 11.52 | 117  | 1164876  | 50.00 | ug/l  | 0.00     |
| 73) 1,4-Dichlorobenzene-d4 | 13.47 | 152  | 439258   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 34) 1,2-Dichloroethane-d4   | 8.12  | 65   | 743378   | 47.72 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.44%  |          |
| 36) Dibromofluoromethane    | 7.68  | 113  | 483435   | 51.18 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.36% |          |
| 51) Toluene-d8              | 10.19 | 98   | 1999325  | 54.06 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.12% |          |
| 63) 4-Bromofluorobenzene    | 12.52 | 95   | 683183   | 52.04 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.08% |          |

| Target Compounds            | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|-----------------------------|-------|------|----------|-------|--------|--------|
| 12) Tert butyl alcohol      | 4.80  | 59   | 47370    | 31.10 | ug/l # | 85     |
| 20) Methyl tert-butyl Ether | 5.12  | 73   | 113442   | 2.89  | ug/l # | 1      |
| 32) Cyclohexane             | 7.76  | 56   | 226524   | 9.85  | ug/l # | 85     |
| 40) Methylcyclohexane       | 9.19  | 83   | 115061   | 5.92  | ug/l   | 98     |
| 41) Benzene                 | 8.14  | 78   | 396417   | 8.52  | ug/l   | 99     |
| 53) Toluene                 | 10.26 | 92   | 34135    | 1.25  | ug/l   | 95     |
| 68) Ethyl Benzene           | 11.62 | 91   | 46174    | 0.89  | ug/l   | 97     |
| 69) m/p-Xylenes             | 11.73 | 106  | 11154    | 0.62  | ug/l   | 87     |
| 70) o-Xylene                | 12.06 | 106  | 8526     | 0.47  | ug/l   | 96     |
| 74) Isopropylbenzene        | 12.36 | 105  | 529108   | 10.93 | ug/l   | 97     |
| 79) n-propylbenzene         | 12.71 | 91   | 621310   | 10.91 | ug/l   | 98     |
| 84) tert-Butylbenzene       | 13.11 | 119  | 9164     | 0.29  | ug/l   | 88     |
| 86) sec-Butylbenzene        | 13.29 | 105  | 74621    | 1.59  | ug/l   | 85     |
| 90) n-Butylbenzene          | 13.74 | 91   | 69029    | 1.96  | ug/l # | 75     |
| 96) Naphthalene             | 15.29 | 128  | 403606   | 15.88 | ug/l   | 99     |

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

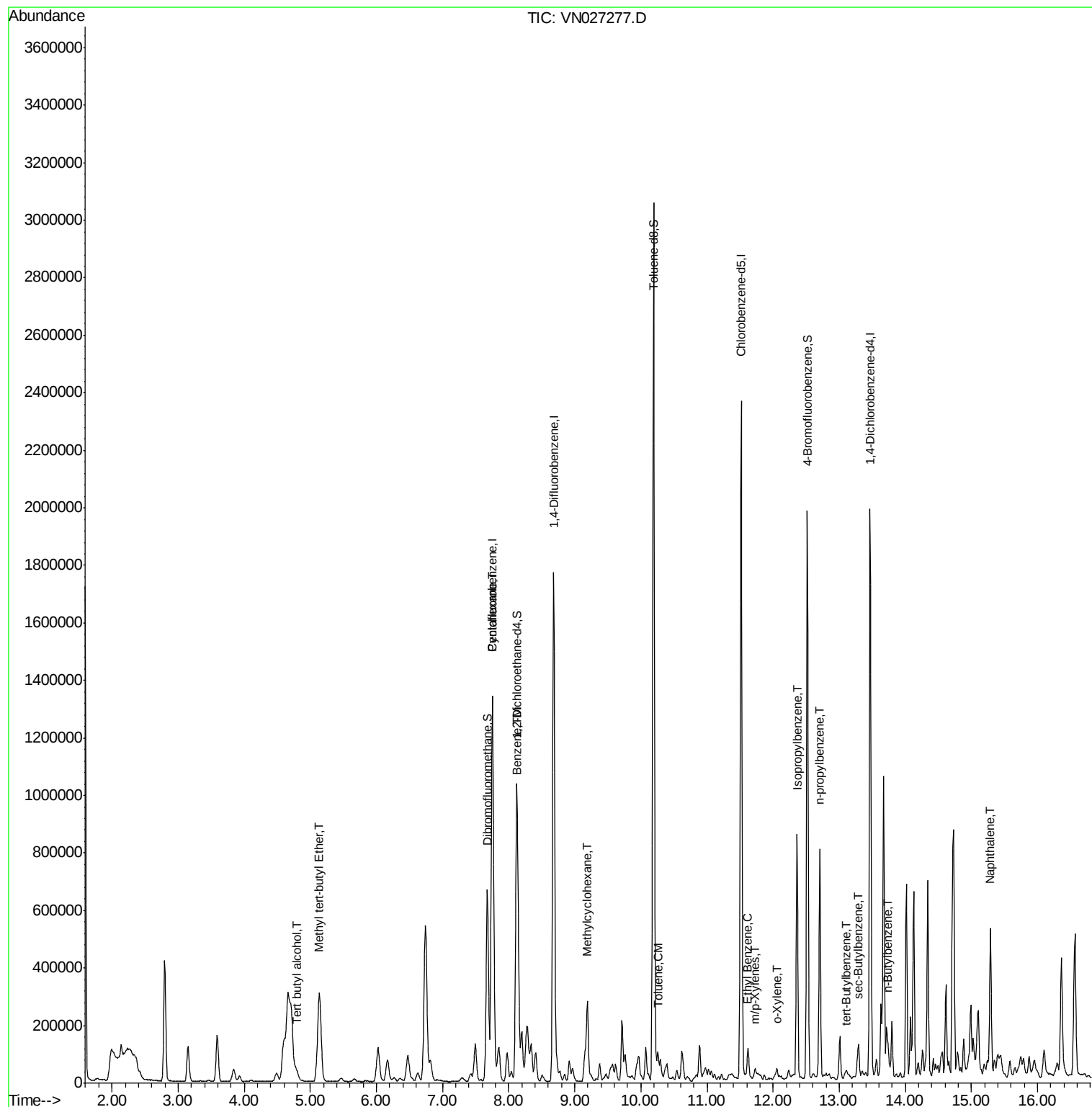
Data Path : W:\HPCHEM1\MSVOA N\DATA\VN091715\  
Data File : VN027277.D  
Acq On : 18 Sep 2015 2:15  
Operator : MD\FY  
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Instrument :  
MSVOA\_N  
ClientSampleId :  
MW-2R-11

Manual Integrations  
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Quant Time: Sep 18 12:00:16 2015  
Quant Method : W:\HPCHEM1\MSVOA\_N\METHODS\82N091515W.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 15 21:12:09 2015  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.75 min Scan# 1917

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

ClientSampled :

MW-2R-11

Tot Ion:168 Resp: 760278

Ion Ratio Lower Upper

168 100

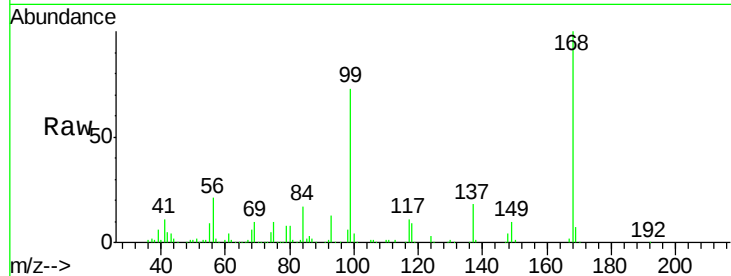
99 72.9 50.4 75.6

Manual Integrations

APPROVED

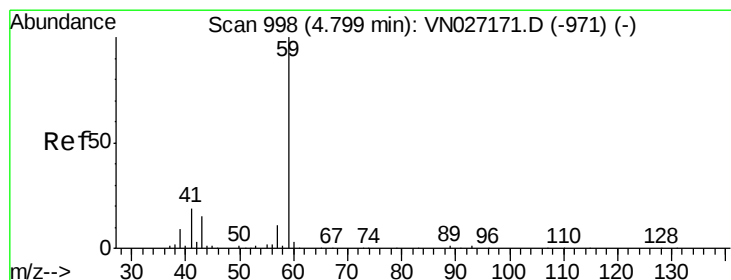
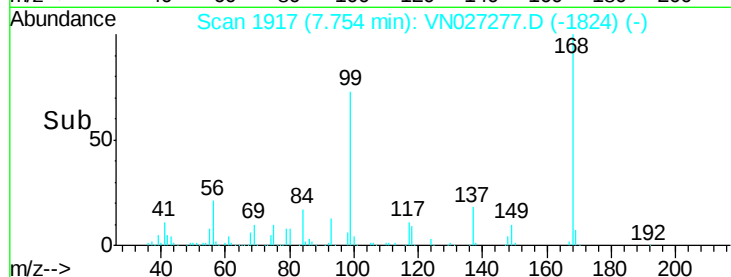
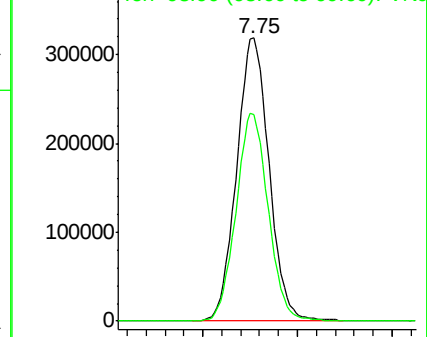
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Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#12

Tert butyl alcohol

Concen: 31.10 ug/l

RT: 4.80 min Scan# 998

Delta R.T. 0.00 min

Lab File: VN027277.D

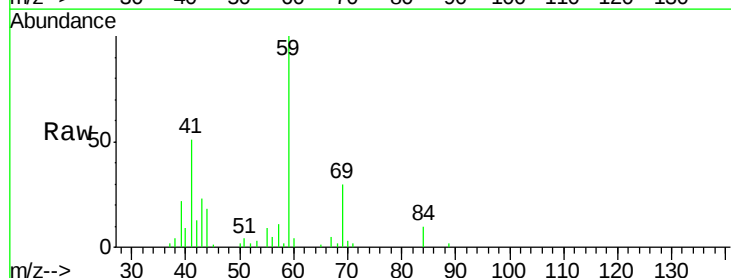
Acq: 18 Sep 2015 2:15

Tgt Ion: 59 Resp: 47370

Ion Ratio Lower Upper

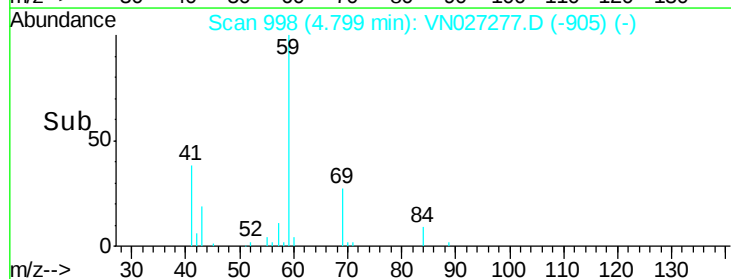
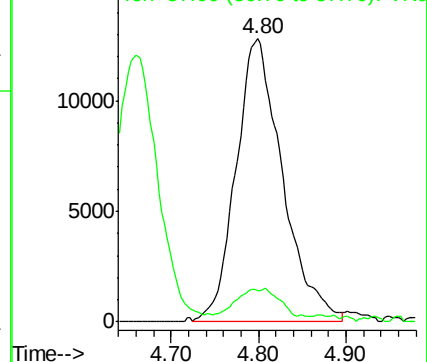
59 100

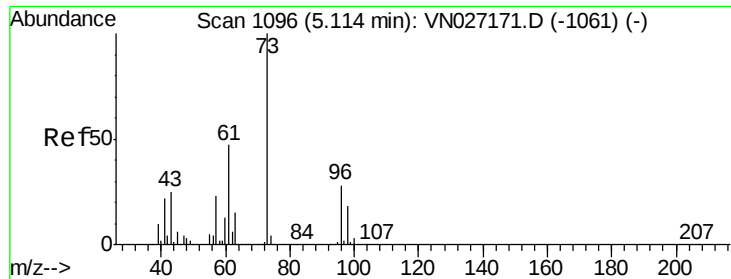
57 3.9 7.6 11.4#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO





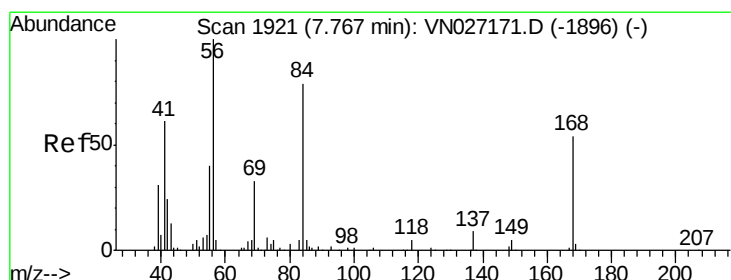
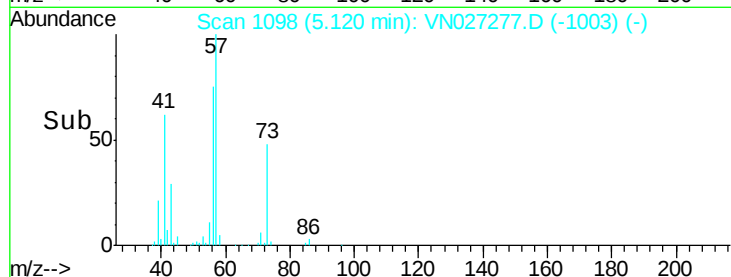
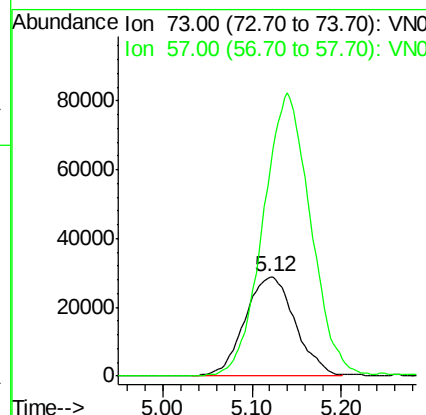
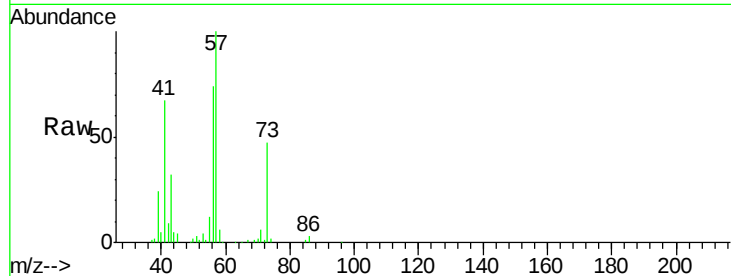
#20  
Methvl tert-butvl Ether  
Concen: 2.89 ug/l  
RT: 5.12 min Scan# 1098  
Delta R.T. 0.01 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
MW-2R-11

Tot Ion: 73 Resp: 113442  
Ion Ratio Lower Upper  
73 100  
57 210.0 19.8 29.6#

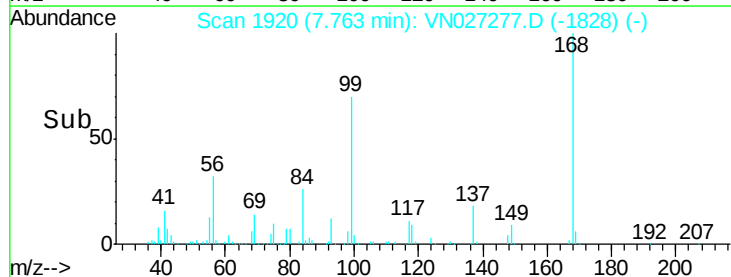
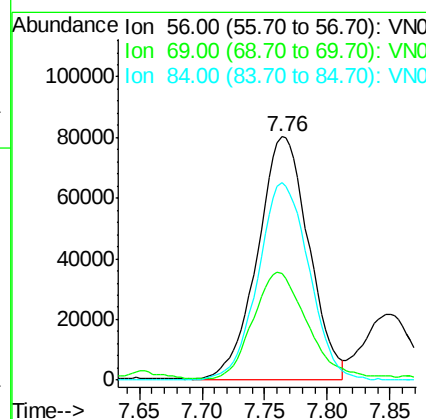
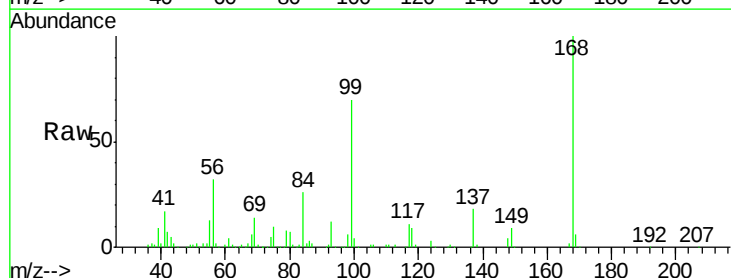
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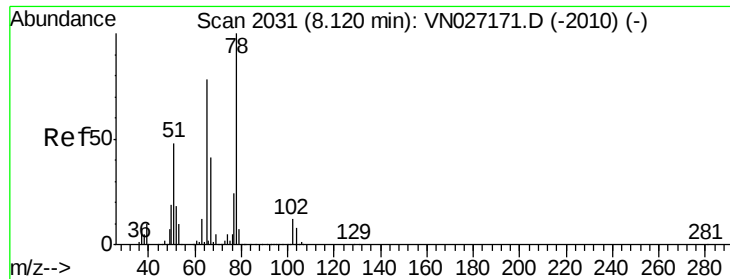
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#32  
Cyclohexane  
Concen: 9.85 ug/l  
RT: 7.76 min Scan# 1920  
Delta R.T. -0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

Tgt Ion: 56 Resp: 226524  
Ion Ratio Lower Upper  
56 100  
69 43.2 23.0 34.4#  
84 81.3 57.8 86.8





#34

1,2-Dichloroethane-d4

Concen: 47.72 ug/l

RT: 8.12 min Scan# 2031

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

ClientSampleId :

MW-2R-11

Tot Ion: 65 Resp: 743378

Ion Ratio Lower Upper

65 100

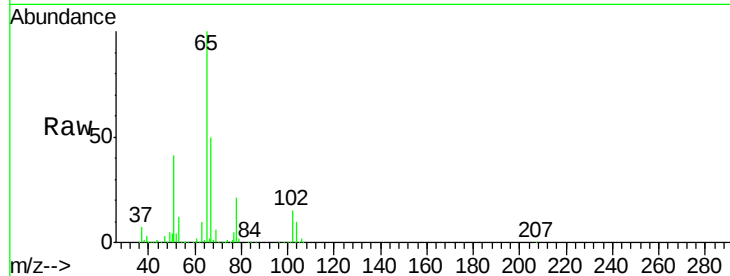
67 50.8 0.0 110.6

Manual Integrations

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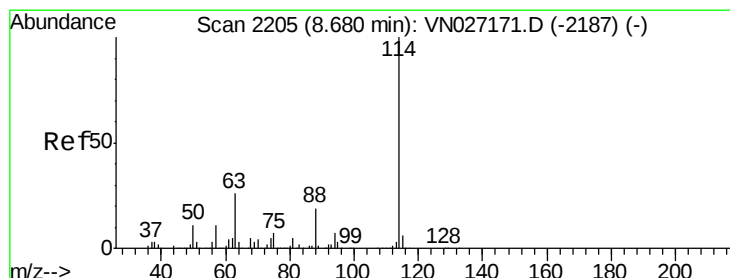
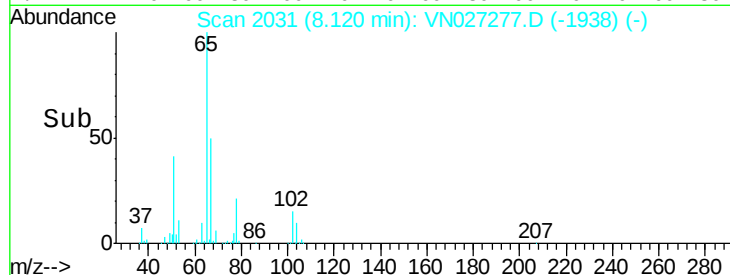
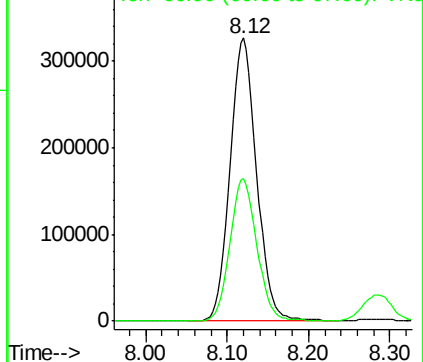
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Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0



#35

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 8.68 min Scan# 2205

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

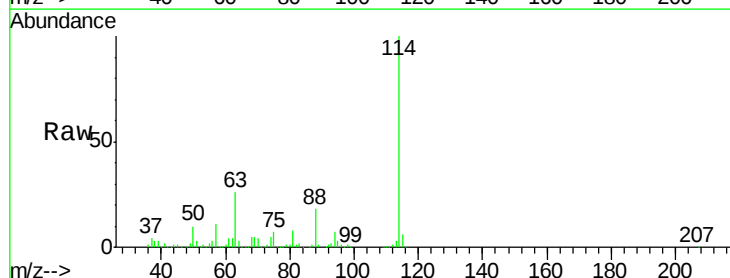
Tgt Ion: 114 Resp: 1362738

Ion Ratio Lower Upper

114 100

63 26.3 0.0 48.8

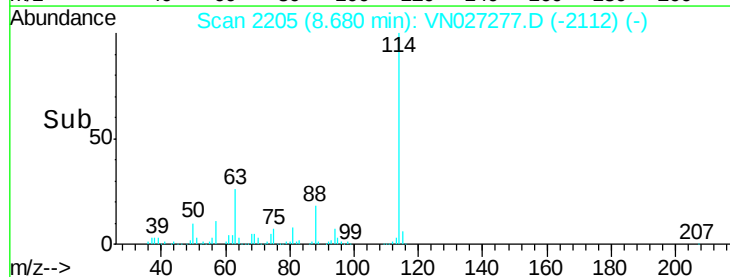
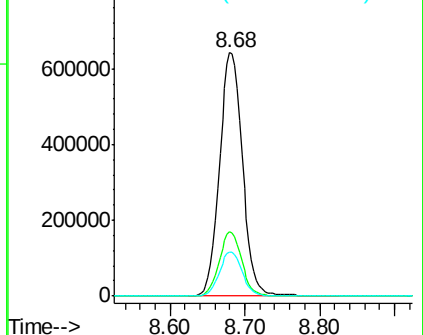
88 18.0 0.0 32.2

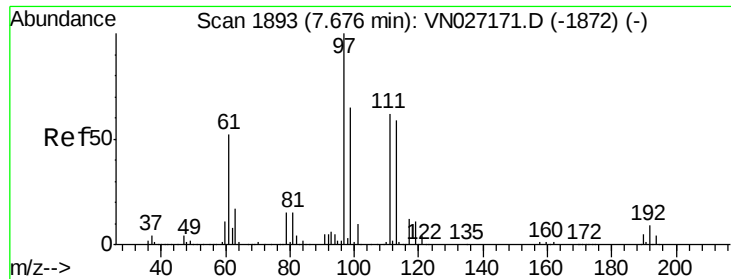


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0





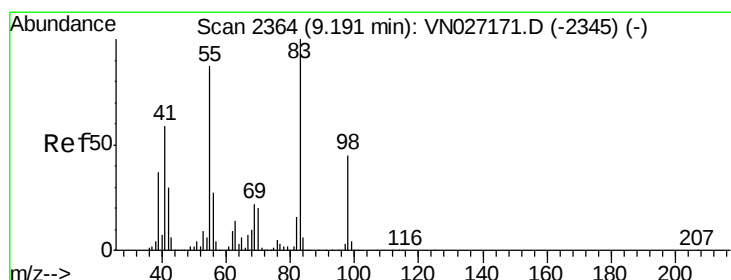
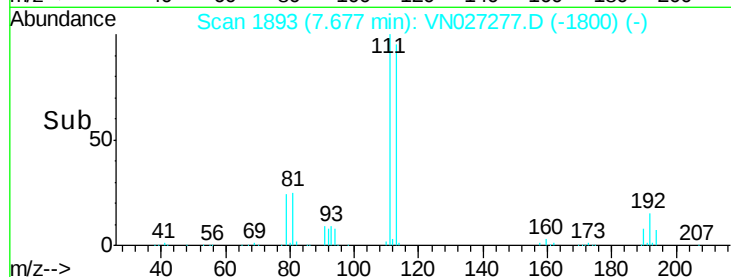
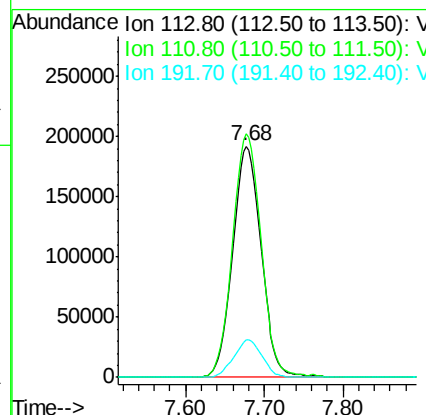
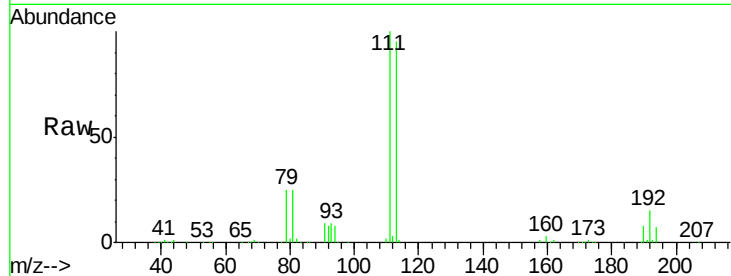
#36  
Dibromofluoromethane  
Concen: 51.18 ug/l  
RT: 7.68 min Scan# 1893  
Delta R.T. 0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

Instrument :  
MSVOA\_N  
ClientSampled :  
MW-2R-11

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 113     | 100   | 483435 |       |       |
| 111     | 105.3 | 83.0   | 124.4 |       |
| 192     | 16.1  | 14.1   | 21.1  |       |

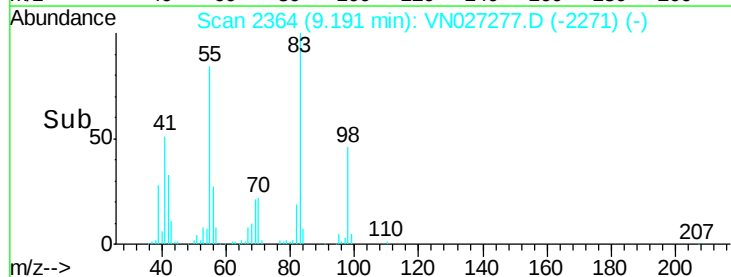
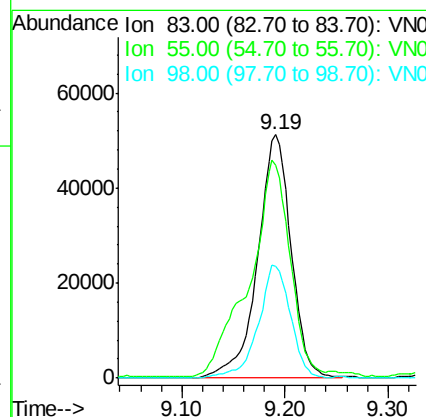
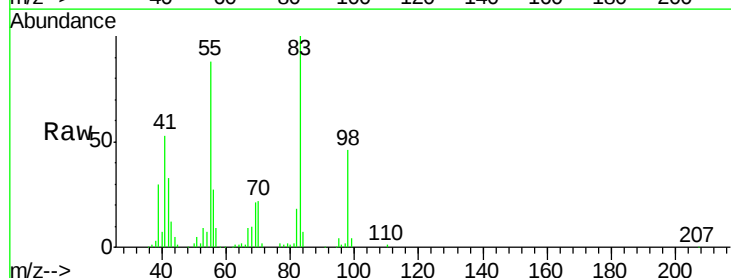
Manual Integrations  
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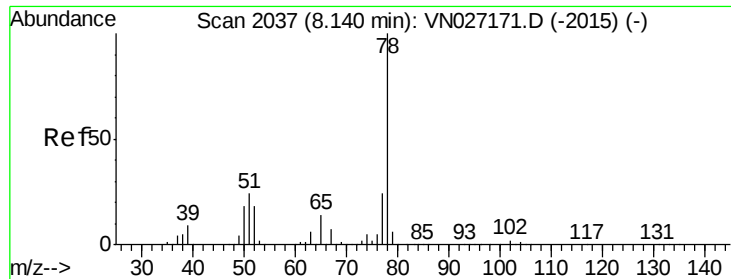
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#40  
Methylcyclohexane  
Concen: 5.92 ug/l  
RT: 9.19 min Scan# 2364  
Delta R.T. 0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 83      | 100   | 115061 |       |       |
| 55      | 86.7  | 69.8   | 104.8 |       |
| 98      | 46.2  | 34.3   | 51.5  |       |





#41

Benzene

Concen: 8.52 ug/l

RT: 8.14 min Scan# 2038

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

ClientSampleId :

MW-2R-11

Tot Ion: 78 Resp: 396417

Ion Ratio Lower Upper

78 100

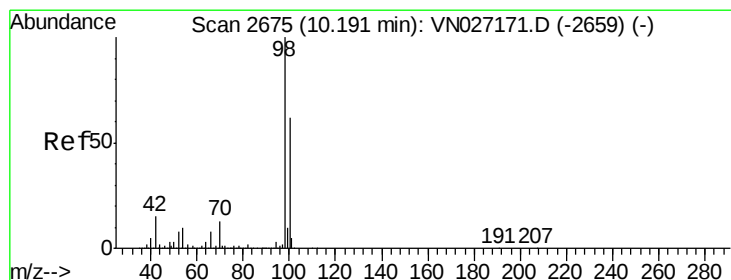
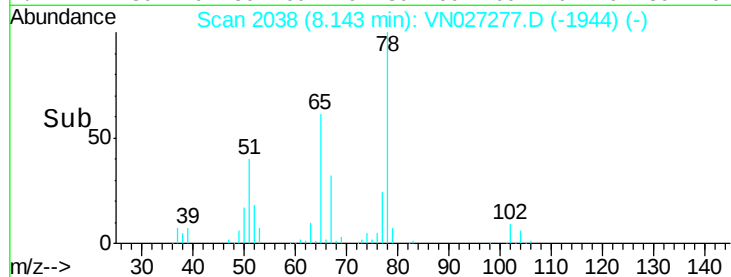
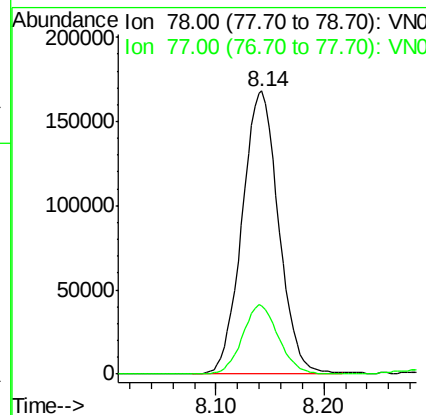
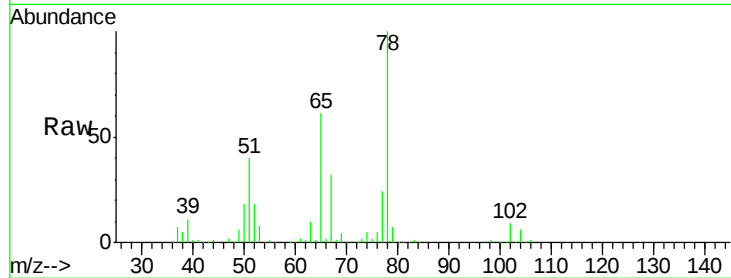
77 24.2 19.0 28.4

Manual Integrations

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#51

Toluene-d8

Concen: 54.06 ug/l

RT: 10.19 min Scan# 2675

Delta R.T. 0.00 min

Lab File: VN027277.D

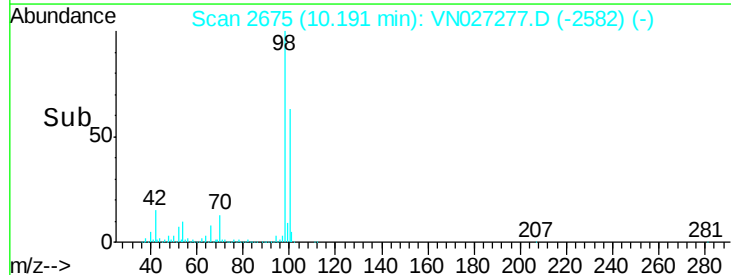
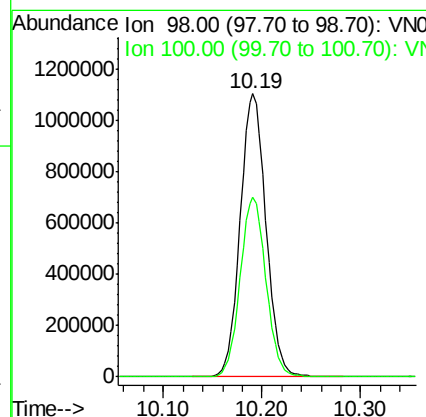
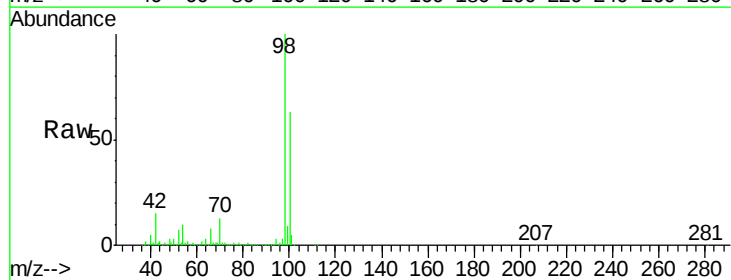
Acq: 18 Sep 2015 2:15

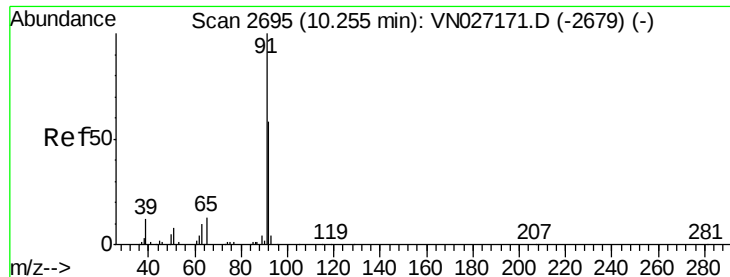
Tgt Ion: 98 Resp: 1999325

Ion Ratio Lower Upper

98 100

100 63.5 50.5 75.7





#53

Toluene

Concen: 1.25 ug/l

RT: 10.26 min Scan# 2695

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

ClientSampleId :

MW-2R-11

Tot Ion: 92 Resp: 34135

Ion Ratio Lower Upper

92 100

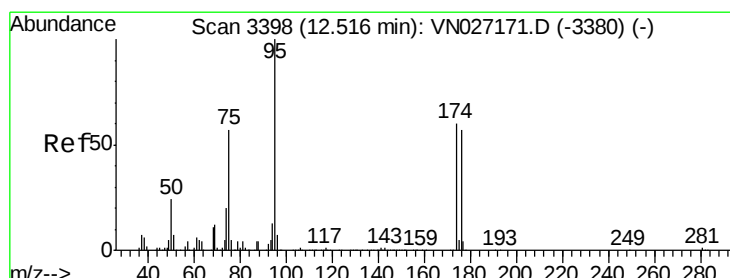
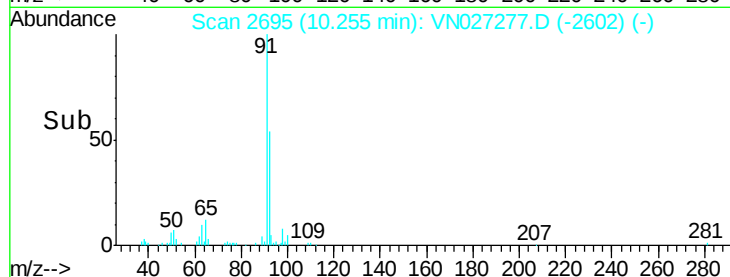
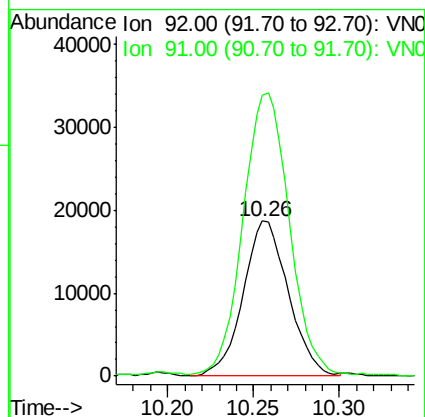
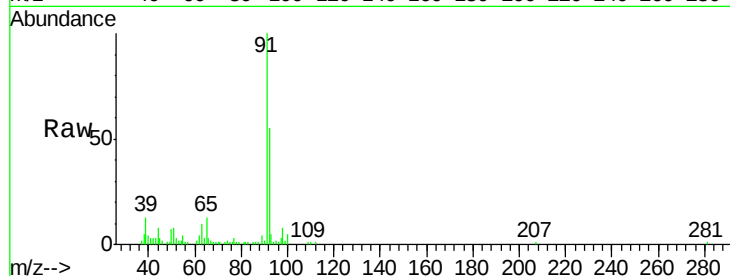
91 183.6 141.4 212.2

Manual Integrations

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#63

4-Bromofluorobenzene

Concen: 52.04 ug/l

RT: 12.52 min Scan# 3399

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

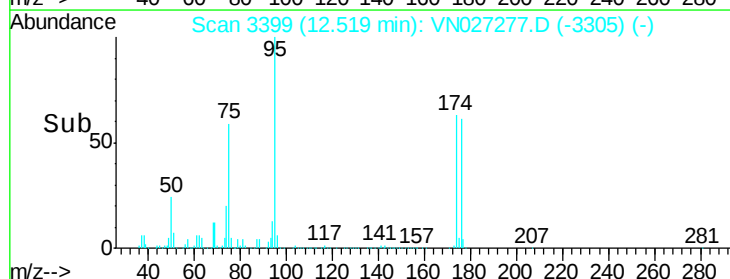
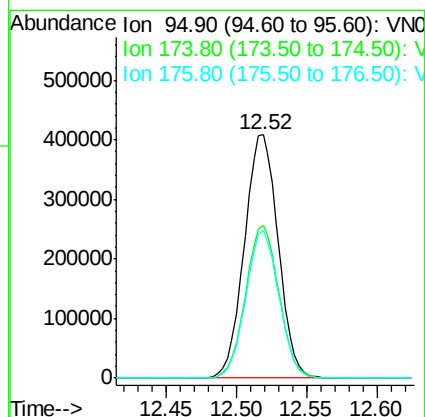
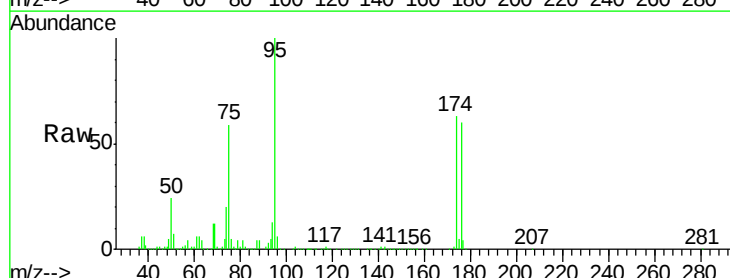
Tgt Ion: 95 Resp: 683183

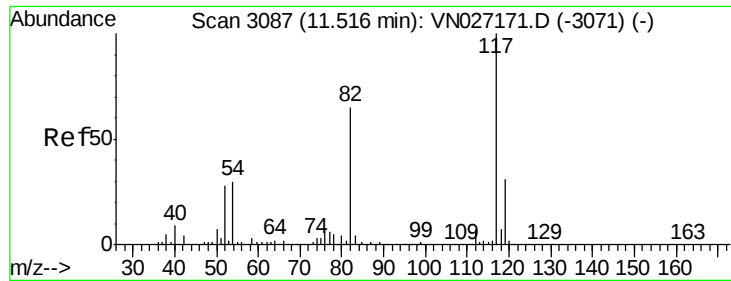
Ion Ratio Lower Upper

95 100

174 62.3 0.0 137.0

176 59.7 0.0 130.8





#64

Chlorobenzene-d5

Concen: 50.00 ug/l

RT: 11.52 min Scan# 3087

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

ClientSampleId :

MW-2R-11

Tot Ion:117 Resp: 1164876

Ion Ratio Lower Upper

117 100

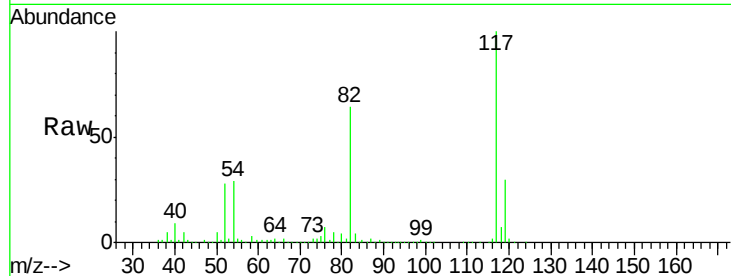
82 64.1 49.6 74.4

119 30.2 24.6 36.8

Manual Integrations  
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Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V

800000

600000

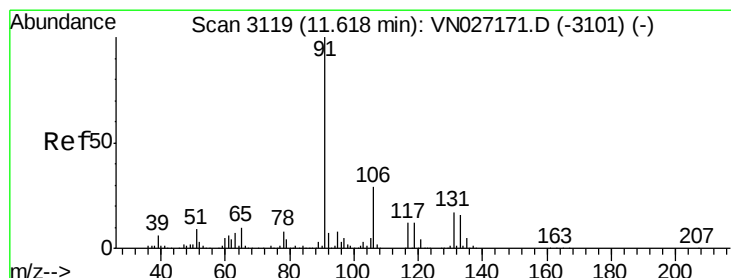
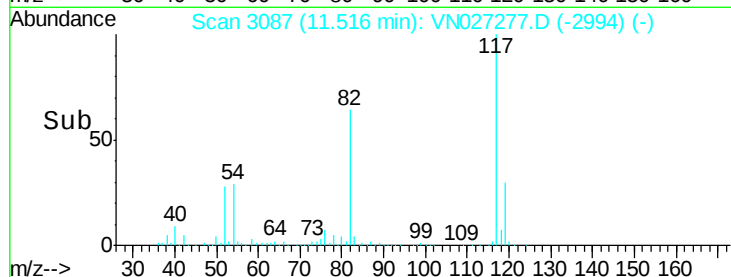
400000

200000

0

11.50 11.60

Time-->



#68

Ethyl Benzene

Concen: 0.89 ug/l

RT: 11.62 min Scan# 3119

Delta R.T. 0.00 min

Lab File: VN027277.D

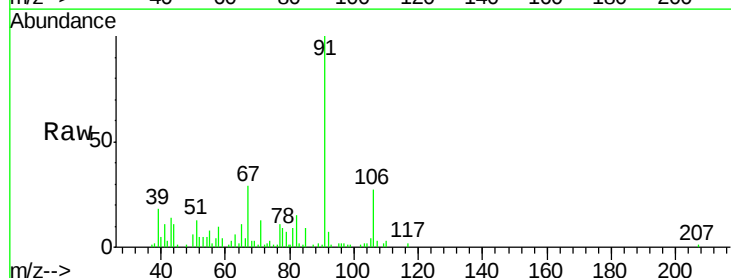
Acq: 18 Sep 2015 2:15

Tgt Ion: 91 Resp: 46174

Ion Ratio Lower Upper

91 100

106 27.4 23.1 34.7



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 106.00 (105.70 to 106.70): V

30000

25000

20000

15000

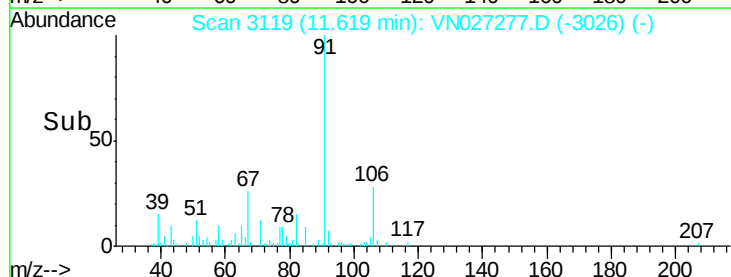
10000

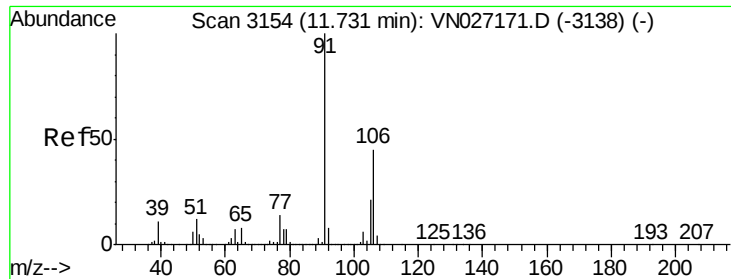
5000

0

11.55 11.60 11.65

Time-->





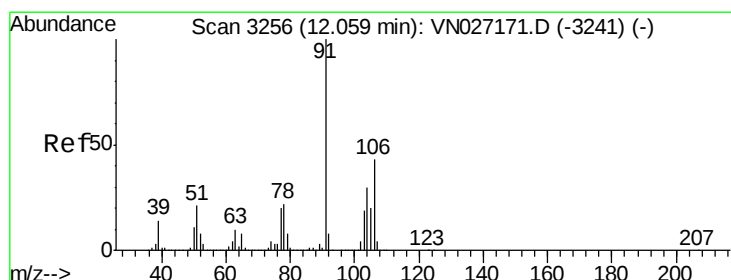
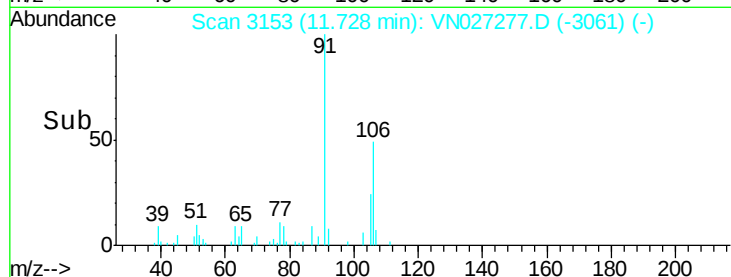
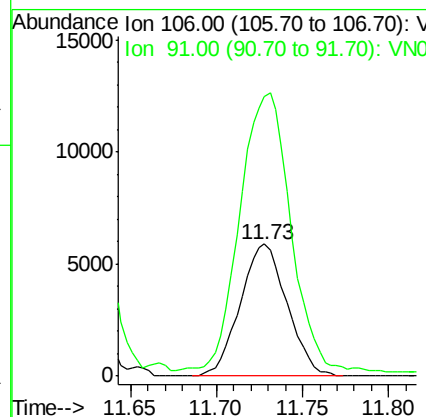
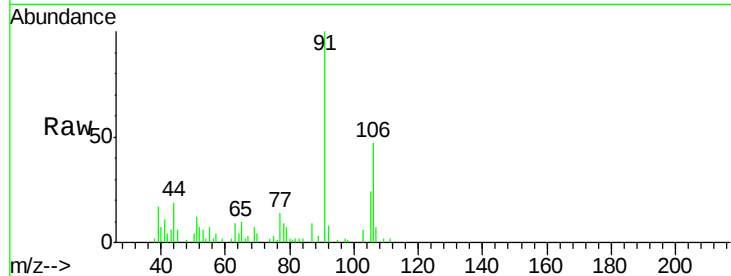
#69  
m/p-Xylenes  
Concen: 0.62 ug/l  
RT: 11.73 min Scan# 3153  
Delta R.T. -0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
MW-2R-11

Tot Ion:106 Resp: 11154  
Ion Ratio Lower Upper  
106 100  
91 229.9 167.1 250.7

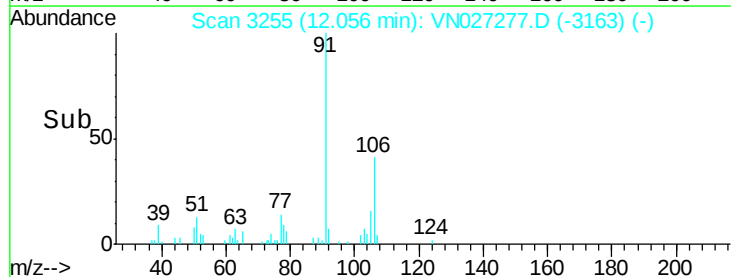
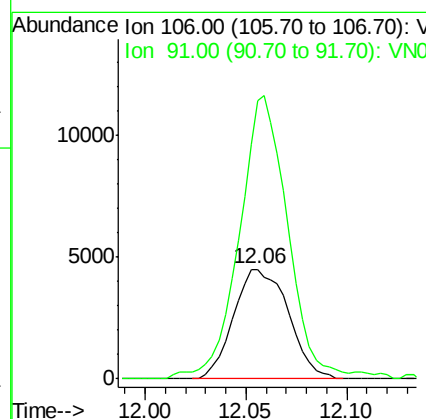
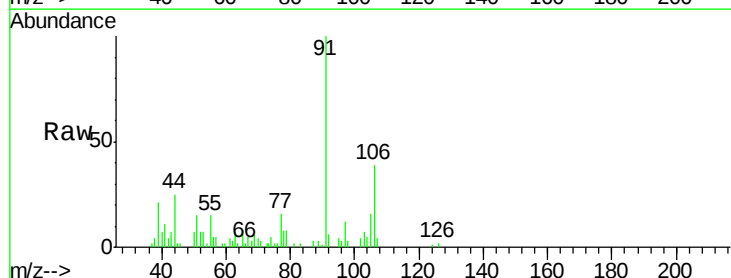
Manual Integrations  
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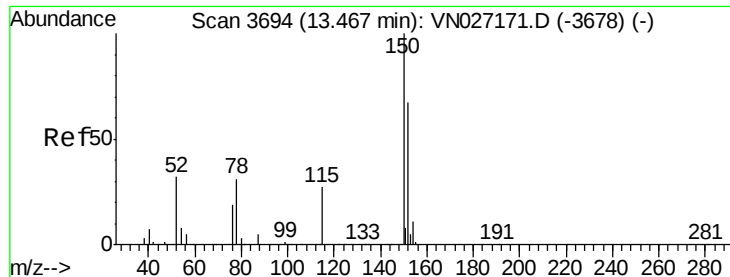
MMDadoda  
9/18/2015 12:24:07 PM



#70  
o-Xylene  
Concen: 0.47 ug/l  
RT: 12.06 min Scan# 3255  
Delta R.T. -0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

Tgt Ion:106 Resp: 8526  
Ion Ratio Lower Upper  
106 100  
91 228.3 110.7 331.9





#73

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 13.47 min Scan# 3694

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

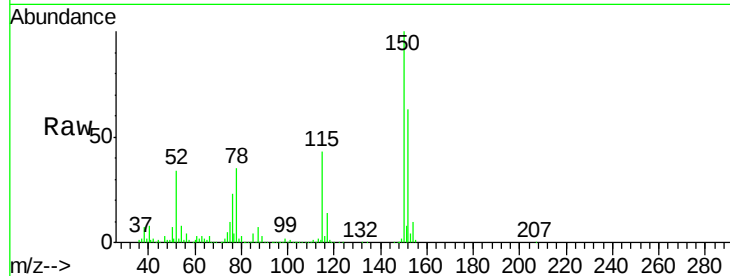
ClientSampled :

MW-2R-11

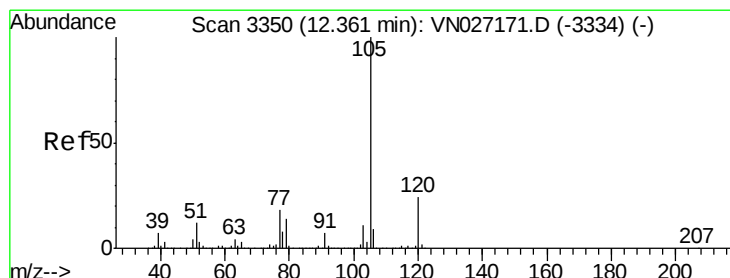
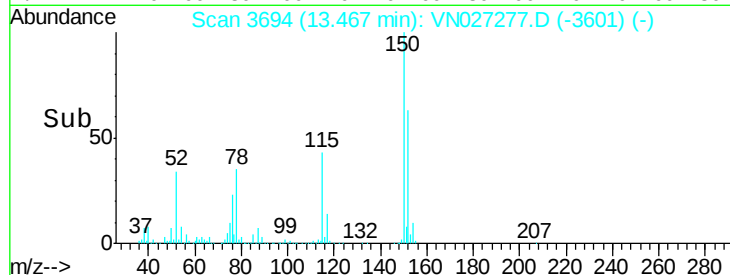
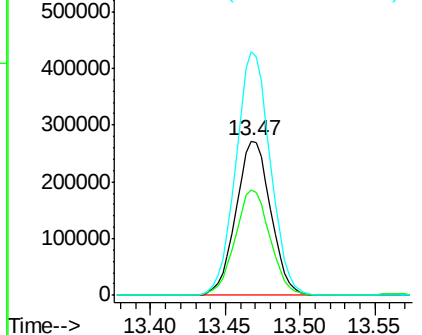
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 152   | Resp: | 439258 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 115       | 68.4  | 30.8  | 92.3   |
| 150       | 156.9 | 0.0   | 345.0  |

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9/18/2015 12:24:07 PM



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



#74

Isopropylbenzene

Concen: 10.93 ug/l

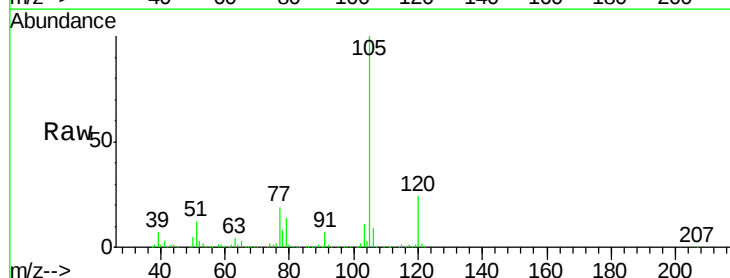
RT: 12.36 min Scan# 3350

Delta R.T. 0.00 min

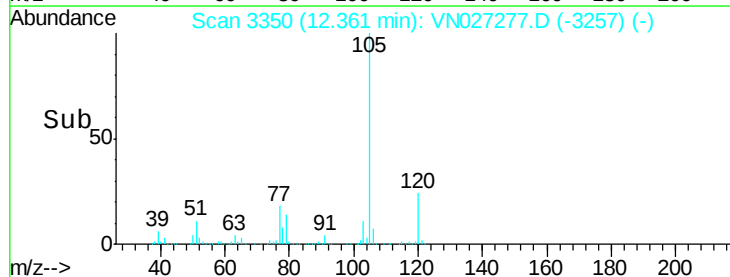
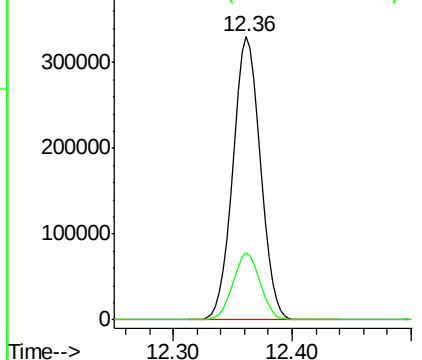
Lab File: VN027277.D

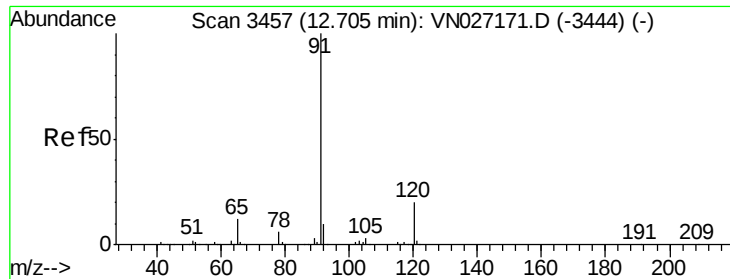
Acq: 18 Sep 2015 2:15

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 105   | Resp: | 529108 |
| Ion Ratio | Lower | Upper |        |
| 105       | 100   |       |        |
| 120       | 23.4  | 12.4  | 37.2   |



Abundance Ion 105.00 (104.70 to 105.70): V  
Ion 120.00 (119.70 to 120.70): V





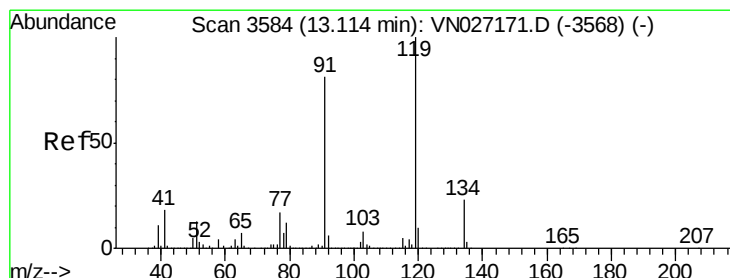
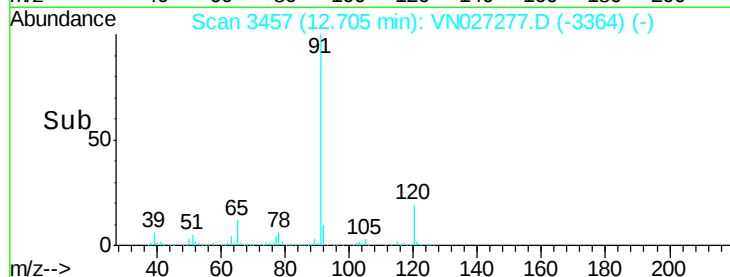
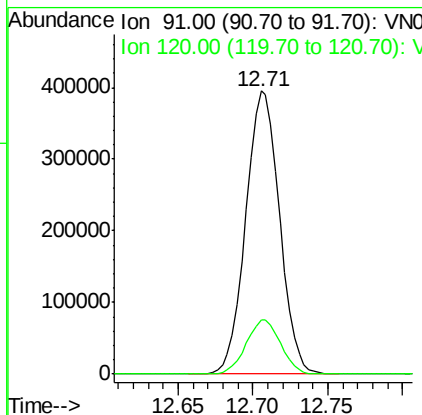
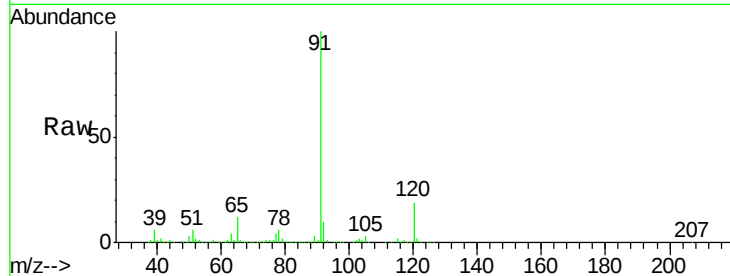
#79  
n-propylbenzene  
Concen: 10.91 ug/l  
RT: 12.71 min Scan# 3457  
Delta R.T. 0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

Instrument :  
MSVOA\_N  
ClientSampleId :  
MW-2R-11

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 91      | 100   | 621310 |       |       |
| 120     | 19.6  | 10.3   | 30.8  |       |

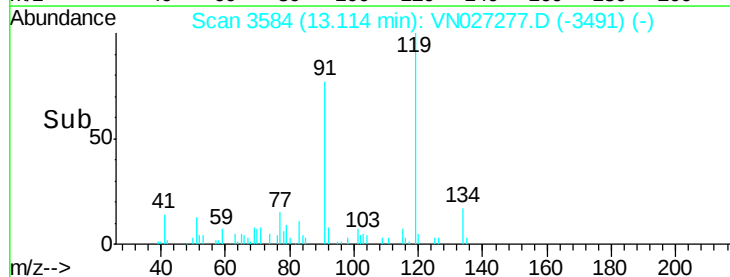
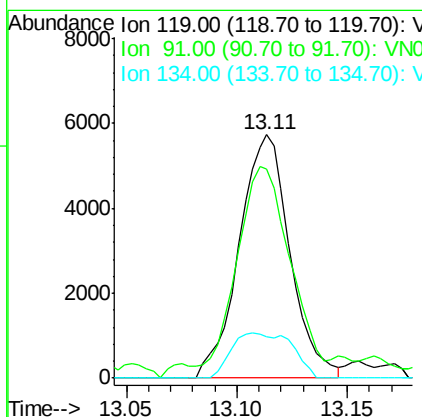
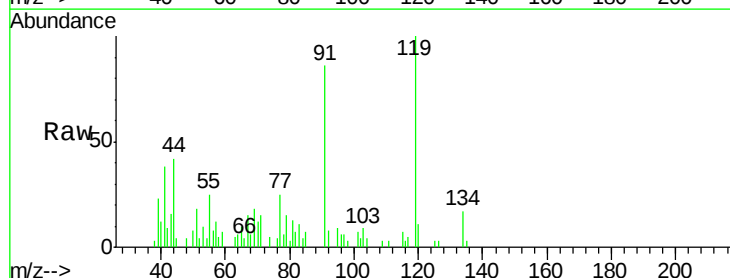
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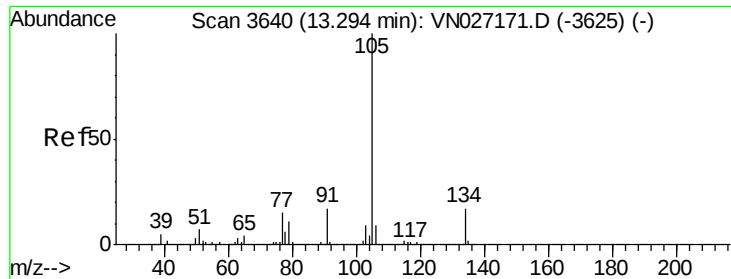
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#84  
tert-Butylbenzene  
Concen: 0.29 ug/l  
RT: 13.11 min Scan# 3584  
Delta R.T. 0.00 min  
Lab File: VN027277.D  
Acq: 18 Sep 2015 2:15

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 119     | 100   | 9164 |       |       |
| 91      | 82.0  | 34.6 | 103.8 |       |
| 134     | 22.0  | 11.4 | 34.2  |       |





#86

sec-Butylbenzene

Concen: 1.59 ug/l

RT: 13.29 min Scan# 3640

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

Instrument :

MSVOA\_N

ClientSampled :

MW-2R-11

Tot Ion: 105 Resp: 74621

Ion Ratio Lower Upper

105 100

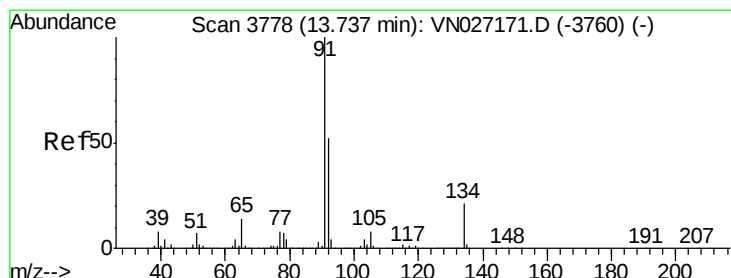
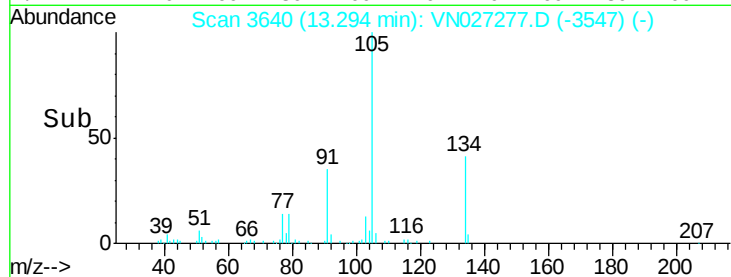
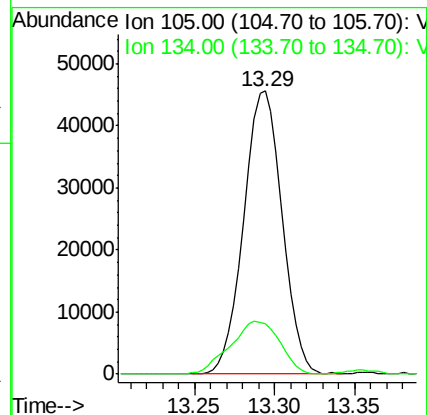
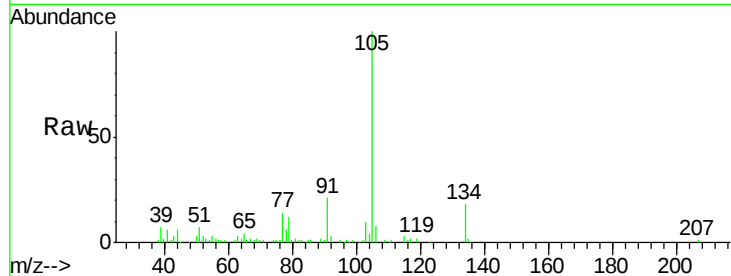
134 24.2 8.8 26.4

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9/18/2015 12:24:07 PM



#90

n-Butylbenzene

Concen: 1.96 ug/l

RT: 13.74 min Scan# 3778

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

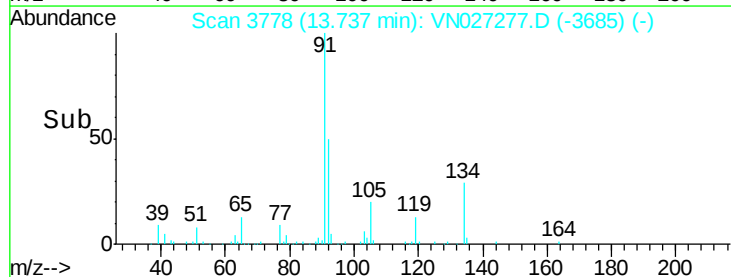
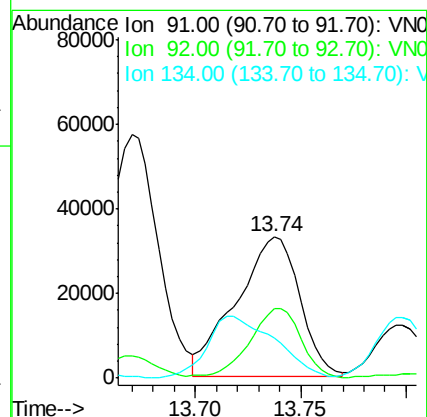
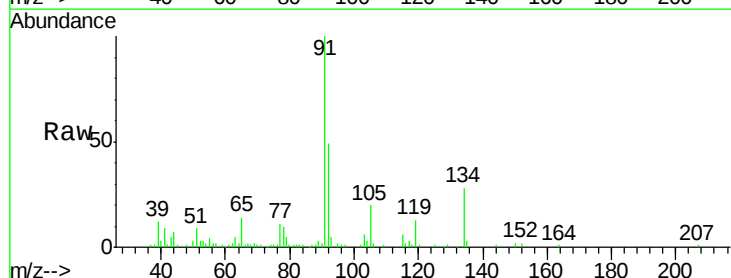
Tgt Ion: 91 Resp: 69029

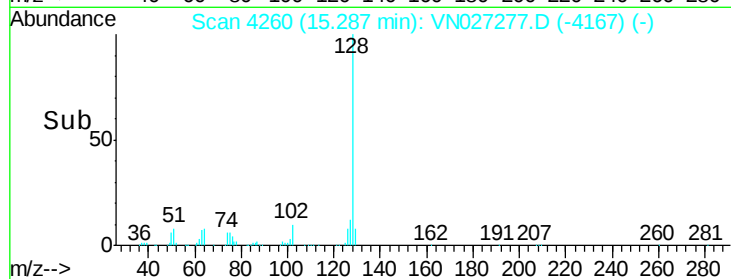
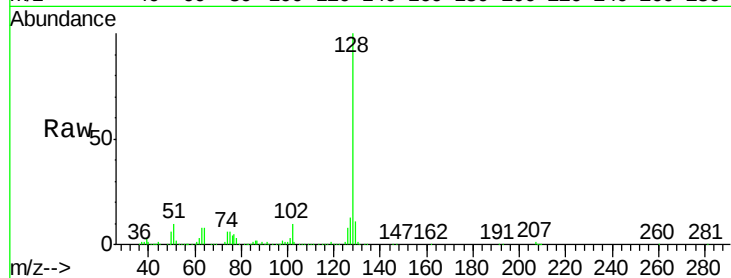
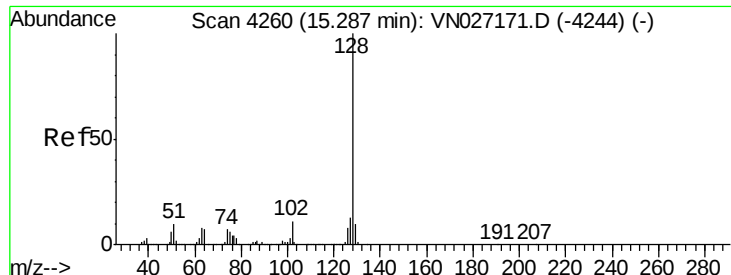
Ion Ratio Lower Upper

91 100

92 40.8 26.1 78.2

134 0.0 11.1 33.1#





#96

Naphthalene

Concen: 15.88 ug/l

RT: 15.29 min Scan# 4260

Delta R.T. 0.00 min

Lab File: VN027277.D

Acq: 18 Sep 2015 2:15

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 128  | Resp: | 403606 |
| Ion Ratio |      | Lower | Upper  |
| 128       | 100  |       |        |
| 127       | 13.2 | 10.4  | 15.6   |
| 129       | 10.4 | 8.6   | 12.8   |

Instrument :

MSVOA\_N

ClientSampleId :

MW-2R-11

Manual Integrations  
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9/18/2015 12:24:07 PM

