

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092820\  
 Data File : VW016676.D  
 Acq On : 28 Sep 2020 18:29  
 Operator : SY/VA  
 Sample : L4109-19  
 Misc : 6.32G/10ML/MSVOA W/SOIL  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 BG3Z0

Manual Integrations  
 APPROVED

MMDadoda  
 9/30/2020 1:23:58 PM

Quant Time: Sep 29 21:56:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\SOM2WLM091520S.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Sep 29 05:26:53 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 8.84  | 114  | 681833   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 11.63 | 117  | 558794   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 208231m  | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

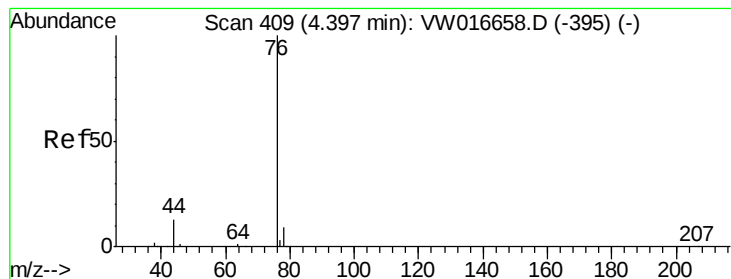
|                                |        |       |          |          |      |          |
|--------------------------------|--------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 2.35   | 65    | 148253   | 22.46    | ug/L | -0.01    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 89.84%   |
| 7) Chloroethane-d5             | 2.89   | 69    | 88236    | 16.37    | ug/L | -0.02    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 65.48%   |
| 10) 1,1-Dichloroethene-d2      | 4.03   | 63    | 208426   | 14.13    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 56.52%   |
| 20) 2-Butanone-d5              | 7.07   | 46    | 62374    | 34.66    | ug/L | -0.01    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 69.32%   |
| 24) Chloroform-d               | 7.65   | 84    | 352703   | 24.73    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 98.92%   |
| 26) 1,2-Dichloroethane-d4      | 8.31   | 65    | 161021   | 21.99    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 87.96%   |
| 29) Benzene-d6                 | 8.27   | 84    | 663774   | 26.49    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 105.96%  |
| 33) 1,2-Dichloropropane-d6     | 9.27   | 67    | 200035   | 29.45    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 117.80%  |
| 37) Toluene-d8                 | 10.33  | 98    | 1313077  | 53.26    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 213.04%# |
| 38) trans-1,3-Dichloropropene- | 10.58  | 79    | 72146    | 21.07    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 84.28%   |
| 39) 2-Hexanone-d5              | 10.93  | 63    | 65437    | 52.98    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 105.96%  |
| 48) 1,1,2,2-Tetrachloroethane- | 12.69  | 84    | 137140   | 23.73    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 94.92%   |
| 61) 1,2-Dichlorobenzene-d4     | 13.86  | 152   | 159729   | 24.01    | ug/L | 0.00     |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 96.04%   |

## Target Compounds

| Target Compounds           | R.T.  | QIon | Response | Conc     | Units  | Ovalue |
|----------------------------|-------|------|----------|----------|--------|--------|
| 14) Carbon disulfide       | 4.40  | 76   | 15478    | 0.594    | ug/L # | 92     |
| 30) Cyclohexane            | 7.96  | 56   | 3762471  | 308.115  | ug/L   | 94     |
| 36) Methylcyclohexane      | 9.34  | 83   | 1207776  | 82.172   | ug/L # | 76     |
| 44) Toluene                | 10.39 | 91   | 72206    | 2.144    | ug/L   | 98     |
| 52) Chlorobenzene          | 11.66 | 112  | 669717   | 29.605   | ug/L   | 98     |
| 53) Ethylbenzene           | 11.73 | 91   | 139817   | 3.657    | ug/L   | 98     |
| 54) m,p-Xylene             | 11.84 | 106  | 204436   | 13.654   | ug/L   | 97     |
| 55) o-xylene               | 12.17 | 106  | 25505    | 1.778    | ug/L   | 95     |
| 57) Isopropylbenzene       | 12.47 | 105  | 171614   | 4.379    | ug/L # | 92     |
| 63) 1,3-Dichlorobenzene    | 13.50 | 146  | 1497367  | 110.555  | ug/L   | 94     |
| 64) 1,4-Dichlorobenzene    | 13.58 | 146  | 6221773  | 469.072  | ug/L   | 97     |
| 65) 1,2-Dichlorobenzene    | 13.87 | 146  | 640207   | 52.900   | ug/L # | 91     |
| 68) 1,2,4-trichlorobenzene | 15.14 | 180  | 18603612 | 2321.676 | ug/L # | 93     |
| 70) 1,2,3-Trichlorobenzene | 15.56 | 180  | 4762854  | 691.108  | ug/L   | 98     |

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





#14

Carbon disulfide

Concen: 0.594 ug/L

RT: 4.40 min Scan# 409

Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

Instrument :

MSVOA\_W

ClientSampleId :

BG3Z0

Tot Ion: 76 Resp: 15478

Ion Ratio Lower Upper

76 100

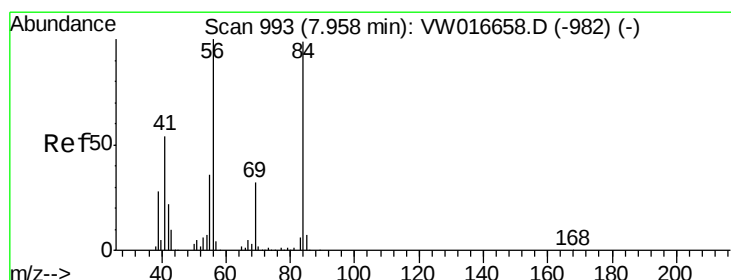
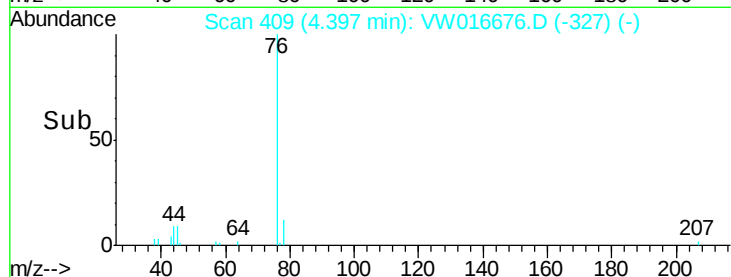
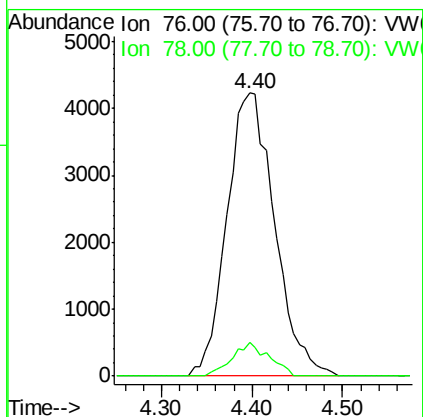
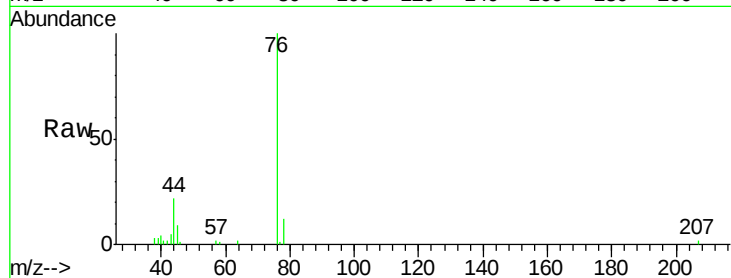
78 12.1 7.3 10.9#

Manual Integrations

APPROVED

MMDadoda

9/30/2020 1:23:58 PM



#30

Cyclohexane

Concen: 308.115 ug/L

RT: 7.96 min Scan# 994

Delta R.T. 0.01 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

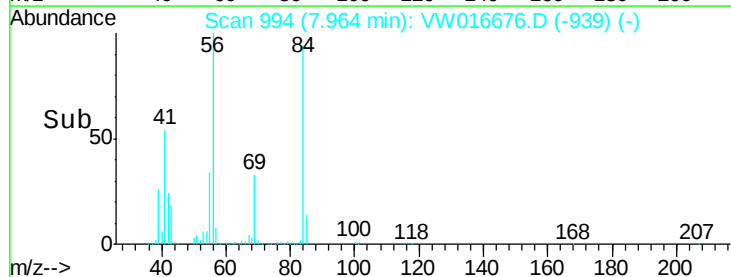
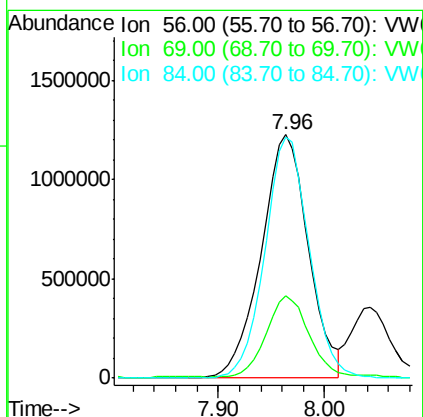
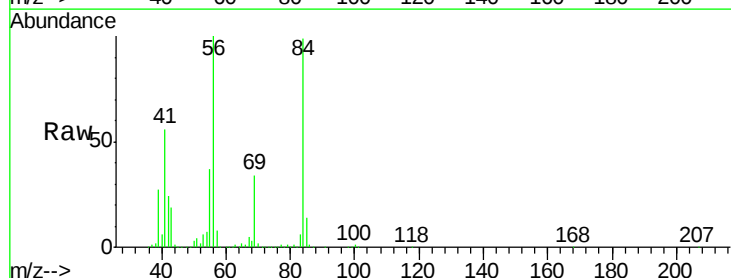
Tgt Ion: 56 Resp: 3762471

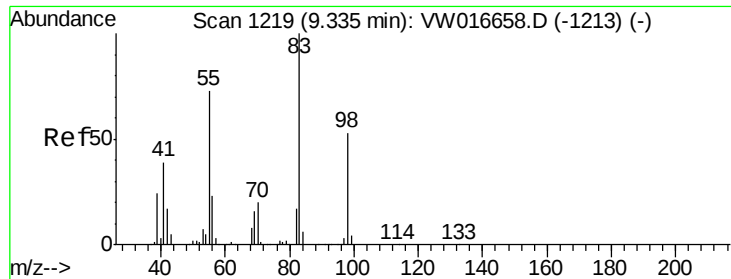
Ion Ratio Lower Upper

56 100

69 30.1 26.5 39.7

84 93.1 79.0 118.6





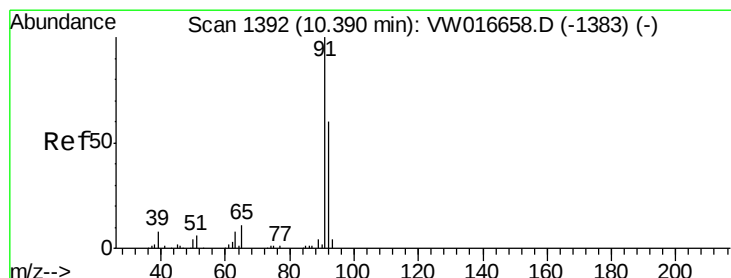
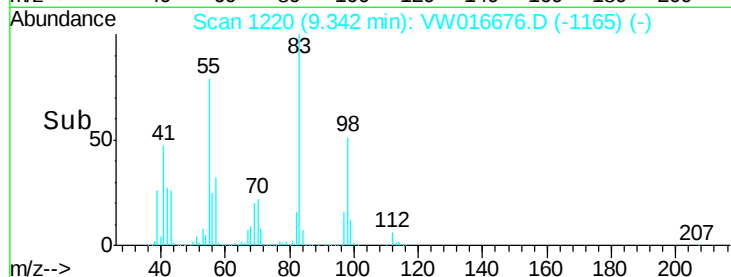
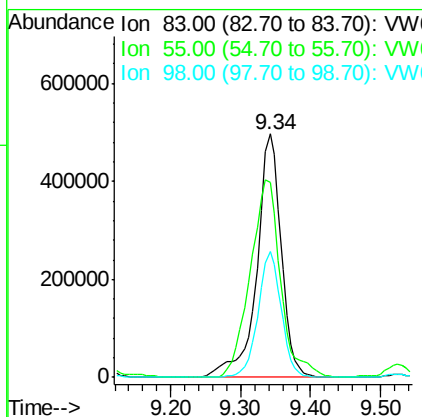
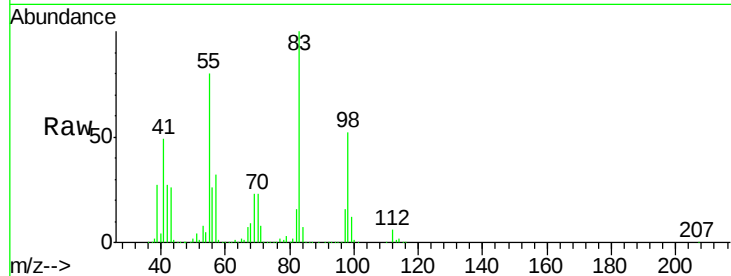
#36  
Methvlcvclohexane  
Concen: 82.172 ug/L  
RT: 9.34 min Scan# 1220  
Delta R.T. 0.01 min  
Lab File: VW016676.D  
Acq: 28 Sep 2020 18:29

Instrument :  
MSVOA\_W  
ClientSampled :  
BG3Z0

Tot Ion: 83 Resp: 1207776  
Ion Ratio Lower Upper  
83 100  
55 100.7 55.9 83.9#  
98 49.0 42.1 63.1

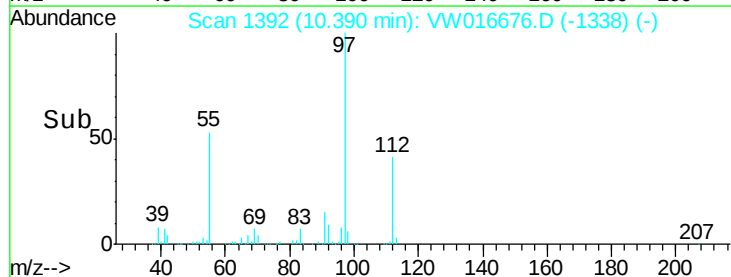
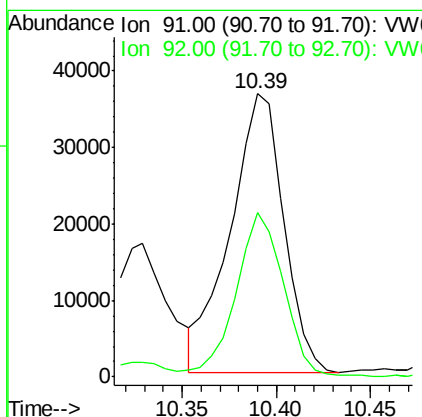
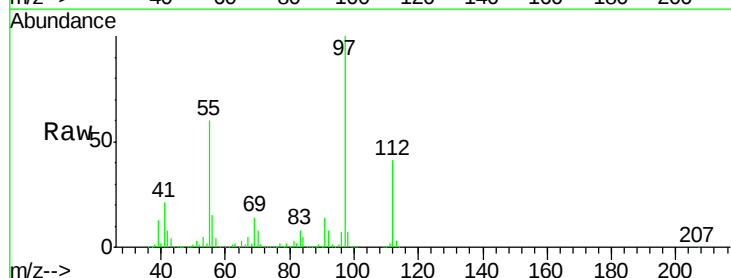
Manual Integrations  
APPROVED

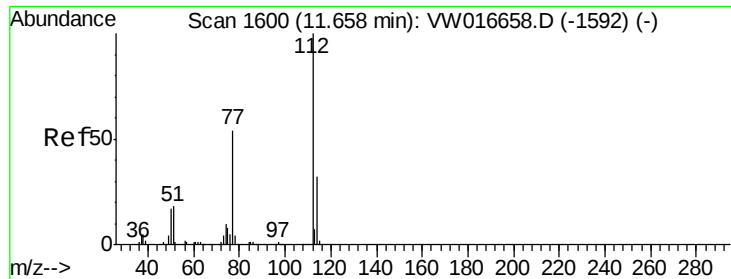
MMDadoda  
9/30/2020 1:23:58 PM



#44  
Toluene  
Concen: 2.144 ug/L  
RT: 10.39 min Scan# 1392  
Delta R.T. 0.00 min  
Lab File: VW016676.D  
Acq: 28 Sep 2020 18:29

Tgt Ion: 91 Resp: 72206  
Ion Ratio Lower Upper  
91 100  
92 58.2 39.6 73.6





#52

Chlorobenzene

Concen: 29.605 ug/L

RT: 11.66 min Scan# 1600

Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

Instrument :

MSVOA\_W

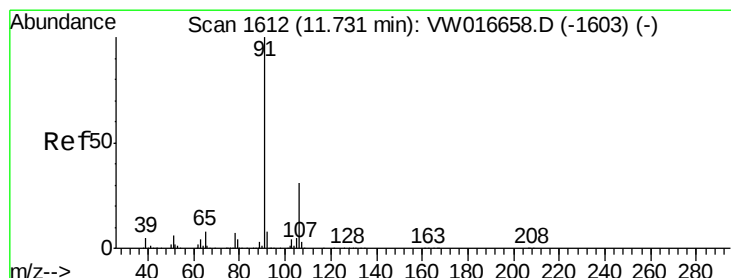
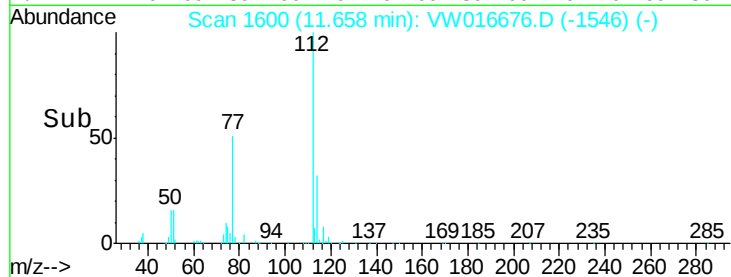
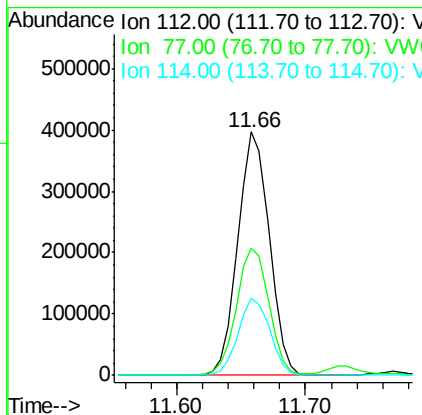
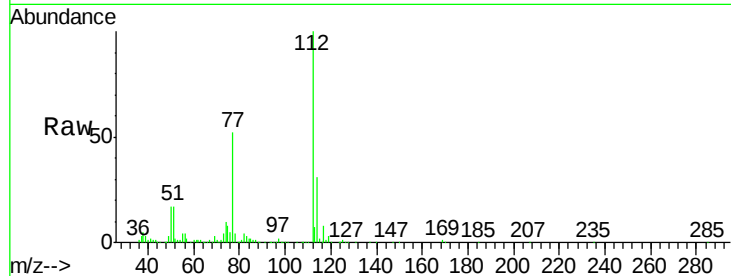
ClientSampled :

BG3Z0

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 112   | Resp: | 669717 |
| Ion Ratio | Lower | Upper |        |
| 112       | 100   |       |        |
| 77        | 52.4  | 43.1  | 64.7   |
| 114       | 31.5  | 22.3  | 41.3   |

Manual Integrations  
APPROVED

MMDadoda  
9/30/2020 1:23:58 PM



#53

Ethylbenzene

Concen: 3.657 ug/L

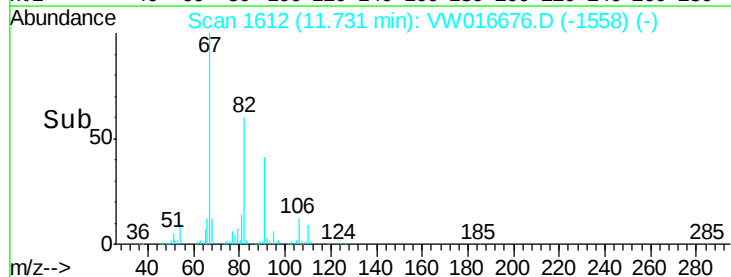
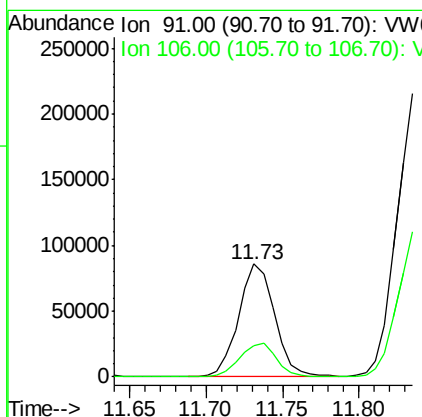
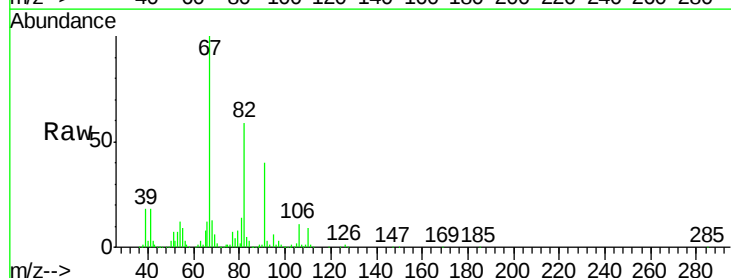
RT: 11.73 min Scan# 1612

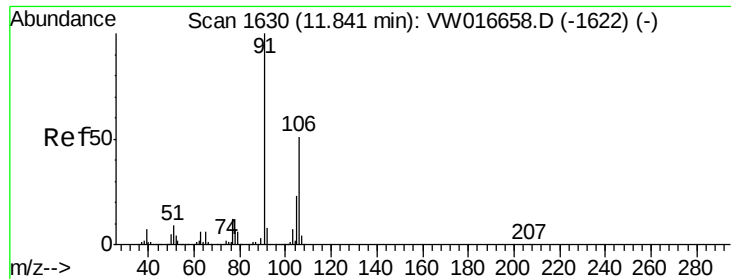
Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 91    | Resp: | 139817 |
| Ion Ratio | Lower | Upper |        |
| 91        | 100   |       |        |
| 106       | 28.3  | 20.7  | 38.5   |





#54

m,p-Xylene

Concen: 13.654 ug/L

RT: 11.84 min Scan# 1630

Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

Instrument :

MSVOA\_W

ClientSampled :

BG3Z0

Tot Ion:106 Resp: 204436

Ion Ratio Lower Upper

106 100

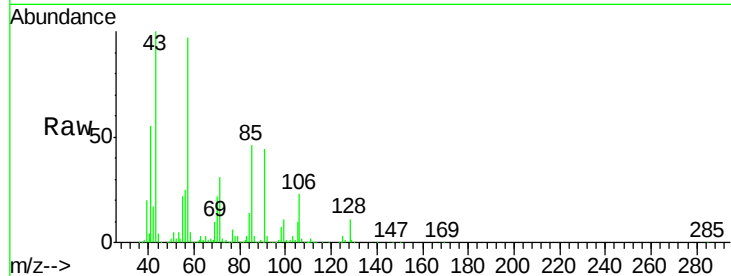
91 194.6 139.7 259.5

Manual Integrations

APPROVED

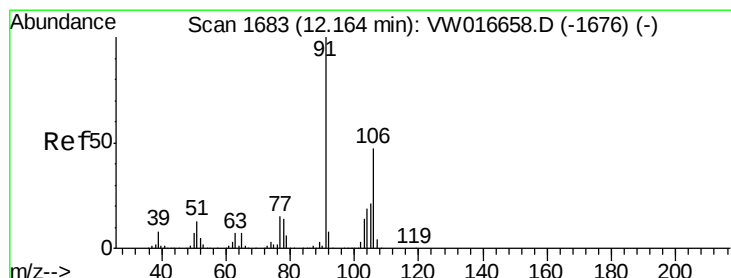
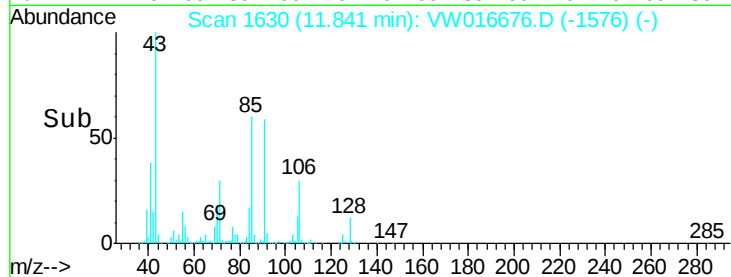
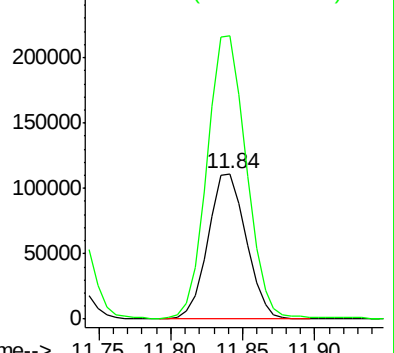
MMDadoda

9/30/2020 1:23:58 PM



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#55

o-xylene

Concen: 1.778 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. 0.01 min

Lab File: VW016676.D

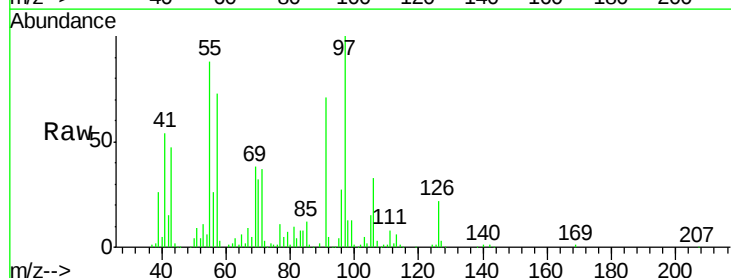
Acq: 28 Sep 2020 18:29

Tgt Ion:106 Resp: 25505

Ion Ratio Lower Upper

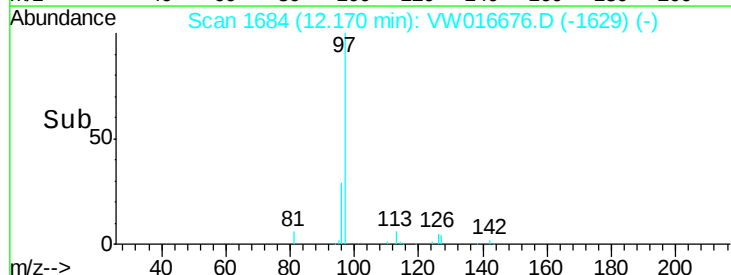
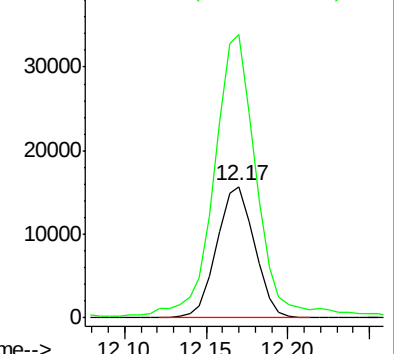
106 100

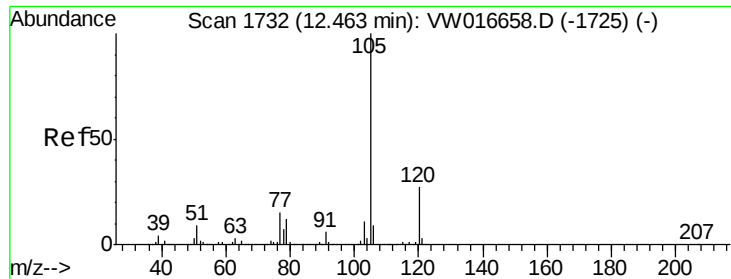
91 215.0 144.8 268.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW





#57

Isopropylbenzene

Concen: 4.379 ug/L

RT: 12.47 min Scan# 1733

Delta R.T. 0.01 min

Lab File: VW016676.D

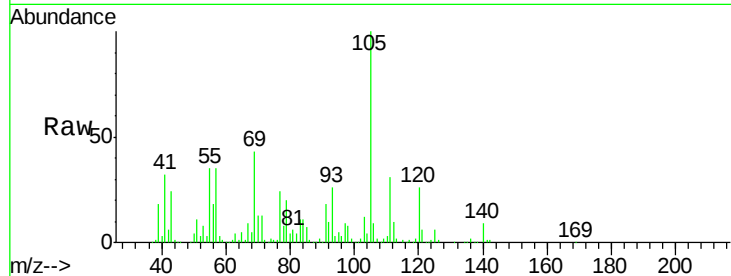
Acq: 28 Sep 2020 18:29

Instrument :

MSVOA\_W

ClientSampled :

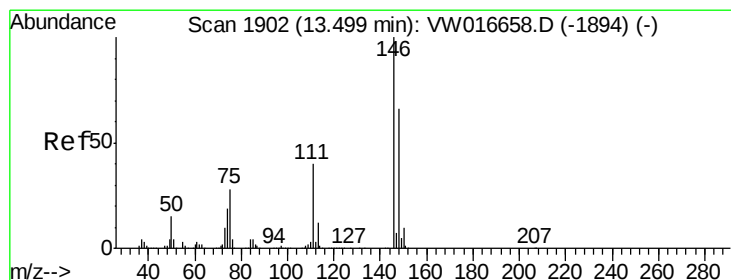
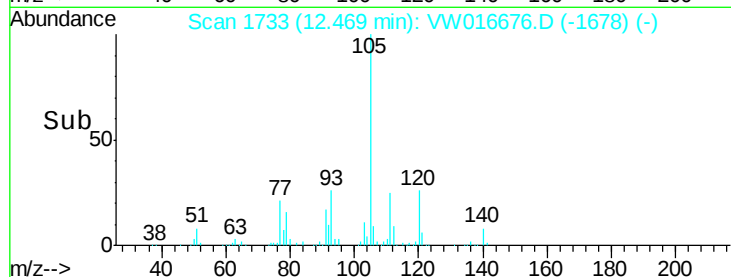
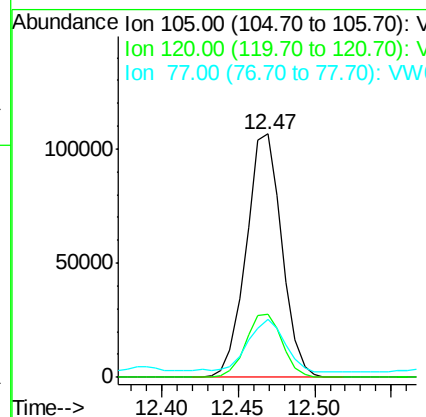
BG3Z0



| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 105     | 100   | 171614 |       |       |
| 120     | 26.5  | 21.8   | 32.8  |       |
| 77      | 23.2  | 12.2   | 18.2# |       |

Manual Integrations  
APPROVED

MMDadoda  
9/30/2020 1:23:58 PM



#63

1,3-Dichlorobenzene

Concen: 110.555 ug/L

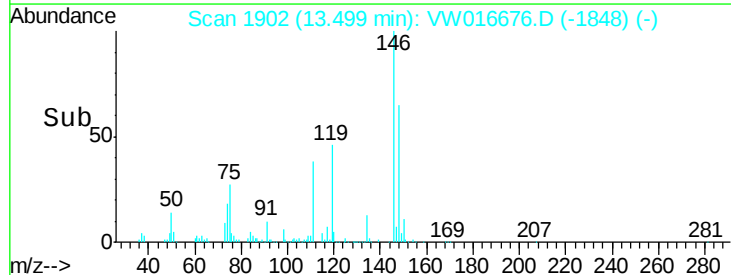
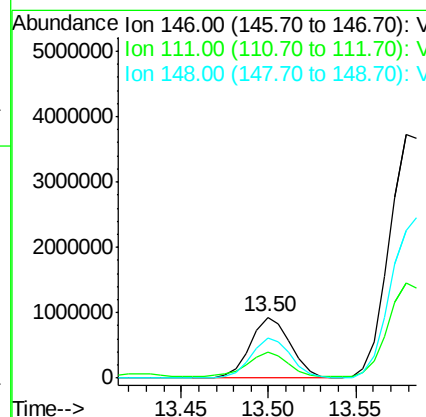
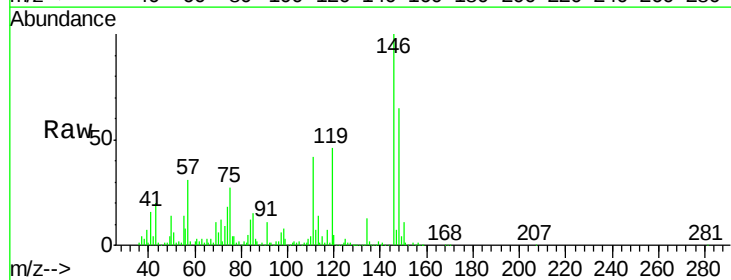
RT: 13.50 min Scan# 1902

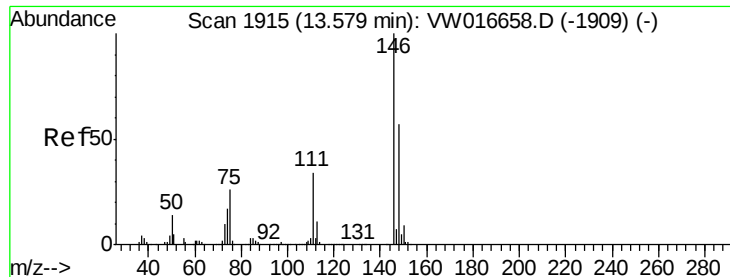
Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 146     | 100   | 1497367 |       |       |
| 111     | 42.2  | 25.0    | 46.4  |       |
| 148     | 65.2  | 44.0    | 81.8  |       |





#64

1,4-Dichlorobenzene

Concen: 469.072 ug/L

RT: 13.58 min Scan# 1915

Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

Instrument :

MSVOA\_W

ClientSampled :

BG3Z0

Tot Ion:146 Resp: 6221773

Ion Ratio Lower Upper

146 100

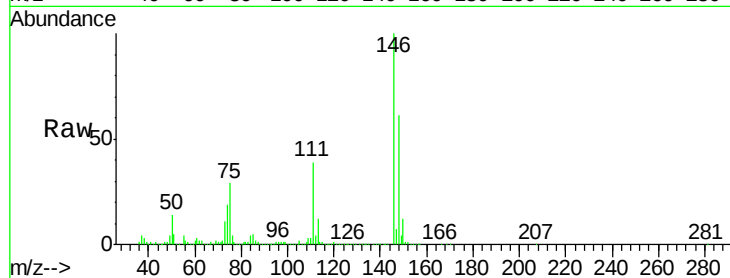
111 39.3 25.1 46.5

148 60.7 42.3 78.5

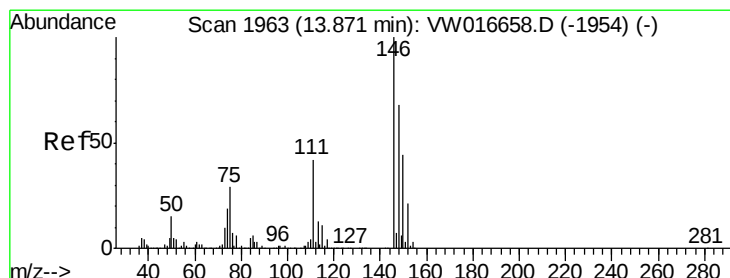
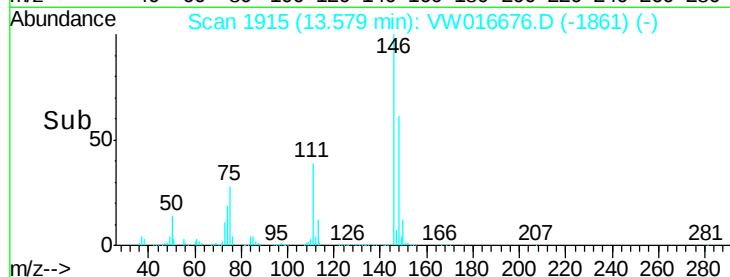
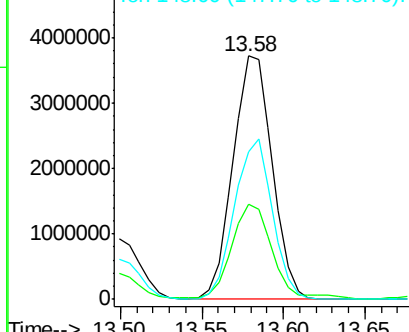
Manual Integrations  
APPROVED

MMDadoda

9/30/2020 1:23:58 PM



Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V



#65

1,2-Dichlorobenzene

Concen: 52.900 ug/L

RT: 13.87 min Scan# 1963

Delta R.T. 0.00 min

Lab File: VW016676.D

Acq: 28 Sep 2020 18:29

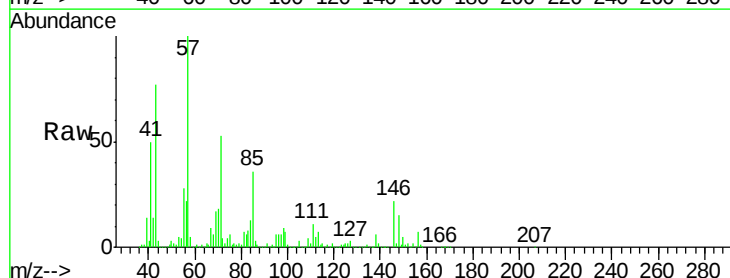
Tgt Ion:146 Resp: 640207

Ion Ratio Lower Upper

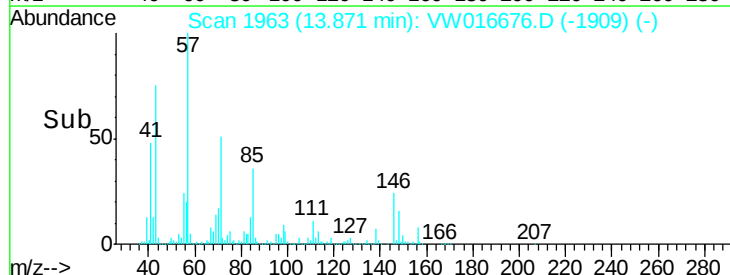
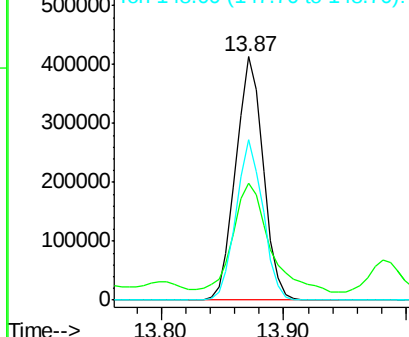
146 100

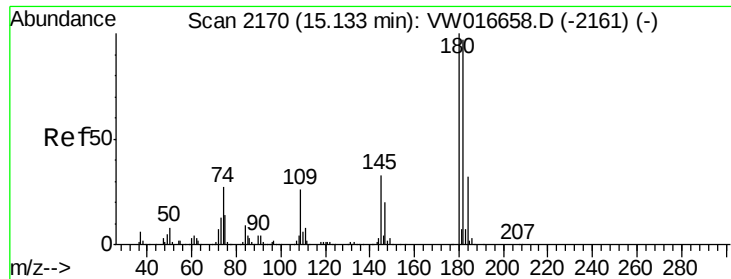
111 48.1 31.4 47.0#

148 65.8 49.3 73.9



Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V





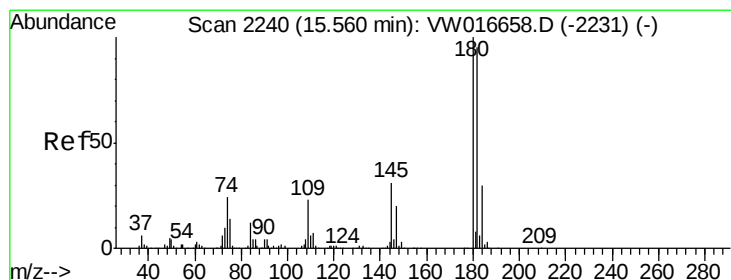
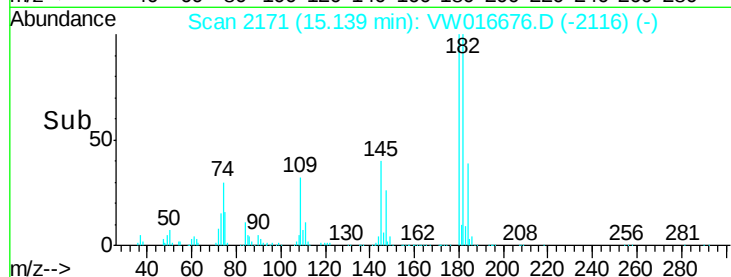
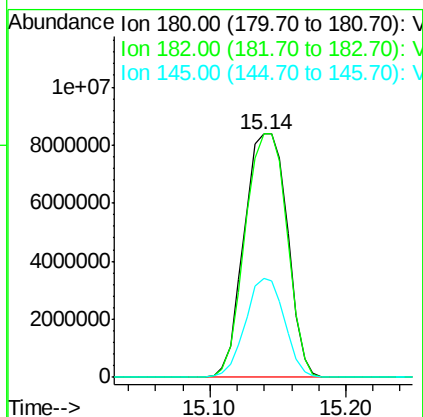
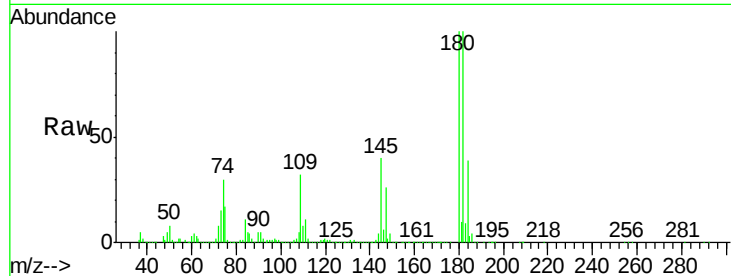
#68  
 1,2,4-trichlorobenzene  
 Concen: 2321.676 ug/L  
 RT: 15.14 min Scan# 2171  
 Delta R.T. 0.01 min  
 Lab File: VW016676.D  
 Acq: 28 Sep 2020 18:29

Instrument :  
 MSVOA\_W  
 ClientSampled :  
 BG3Z0

Tot Ion:180 Resp:18603612  
 Ion Ratio Lower Upper  
 180 100  
 182 97.4 74.5 111.7  
 145 37.2 23.1 34.7#

Manual Integrations  
 APPROVED

MMDadoda  
 9/30/2020 1:23:58 PM



#70  
 1,2,3-Trichlorobenzene  
 Concen: 691.108 ug/L  
 RT: 15.56 min Scan# 2240  
 Delta R.T. 0.00 min  
 Lab File: VW016676.D  
 Acq: 28 Sep 2020 18:29

Tgt Ion:180 Resp: 4762854  
 Ion Ratio Lower Upper  
 180 100  
 182 95.8 76.3 114.5  
 145 34.9 24.1 36.1

