

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU040619\  
 Data File : VU030783.D  
 Acq On : 06 Apr 2019 07:55  
 Operator : JC/SP  
 Sample : K2277-13 50X  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 BF1C3

Manual Integrations  
 APPROVED

MMDadoda  
 4/8/2019 2:50:15 PM

Quant Time: Apr 08 02:55:06 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM040519WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon Apr 08 01:03:28 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 494958   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 484157   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 197394   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 178050   | 40.30    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 80.60%  |
| 7) Chloroethane-d5             | 1.68    | 69    | 152132   | 45.37    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 90.74%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 256286   | 32.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 64.14%  |
| 21) 2-Butanone-d5              | 4.17    | 46    | 376170   | 107.42   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 107.42% |
| 24) Chloroform-d               | 4.64    | 84    | 303514   | 44.97    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.94%  |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 222566   | 48.33    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.66%  |
| 32) Benzene-d6                 | 5.33    | 84    | 617176   | 43.67    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 87.34%  |
| 36) 1,2-Dichloropropane-d6     | 6.32    | 67    | 223191   | 46.08    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 92.16%  |
| 41) Toluene-d8                 | 7.56    | 98    | 516997   | 41.27    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 82.54%  |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 90268    | 40.87    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 81.74%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 232792   | 105.15   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 105.15% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43   | 84    | 318072   | 48.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 97.36%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 186171   | 47.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 95.92%  |

| Target Compounds           |      |     |        |              | Ovalue |
|----------------------------|------|-----|--------|--------------|--------|
| 20) cis-1,2-Dichloroethene | 4.23 | 96  | 6270m  | 1.563 ug/L   |        |
| 34) Trichloroethene        | 6.19 | 95  | 5726   | 1.474 ug/L   | 89     |
| 46) Tetrachloroethene      | 8.22 | 164 | 546644 | 193.489 ug/L | 98     |

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

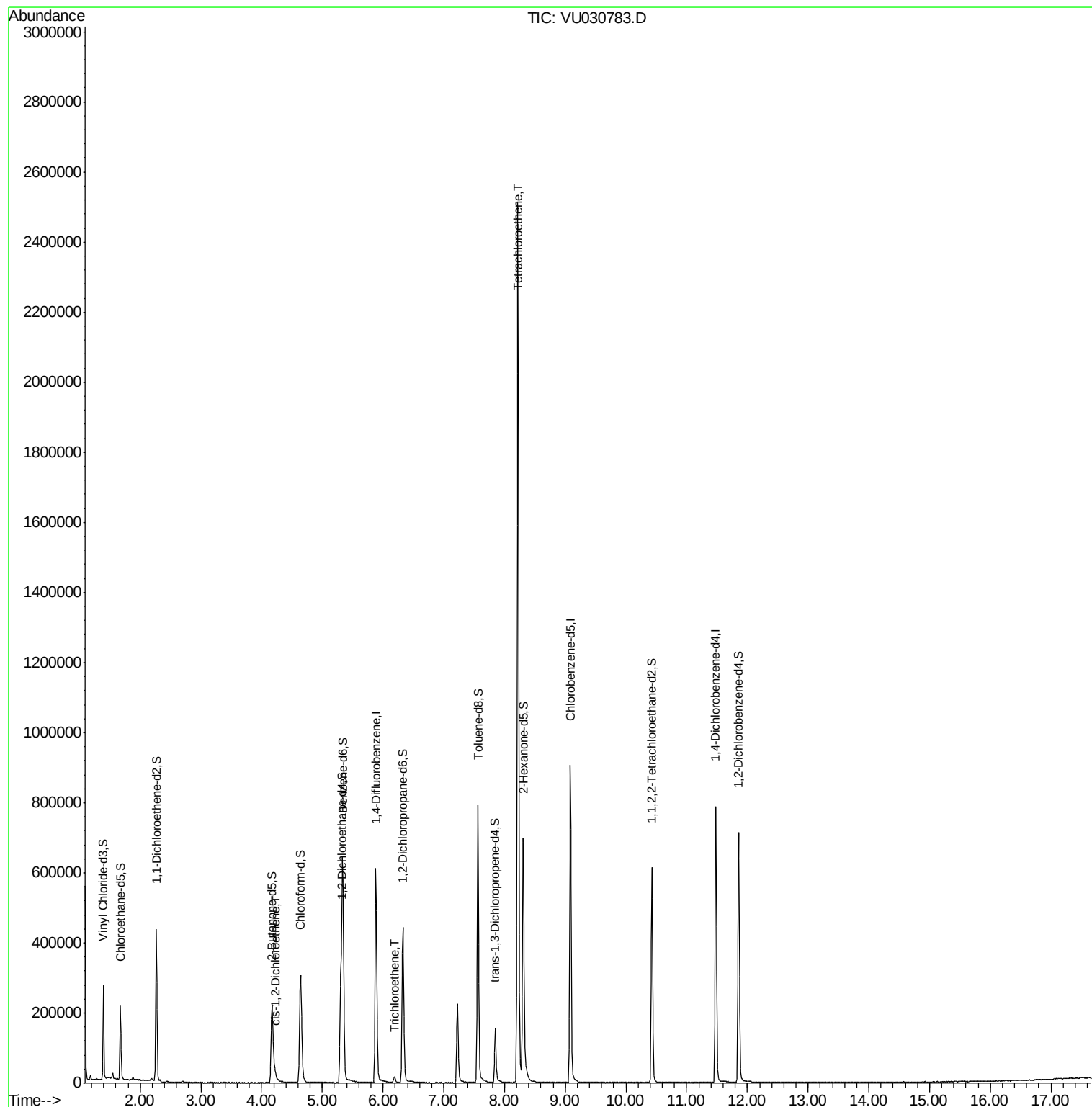
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU040619\  
Data File : VU030783.D  
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ALS Vial : 40 Sample Multiplier: 1

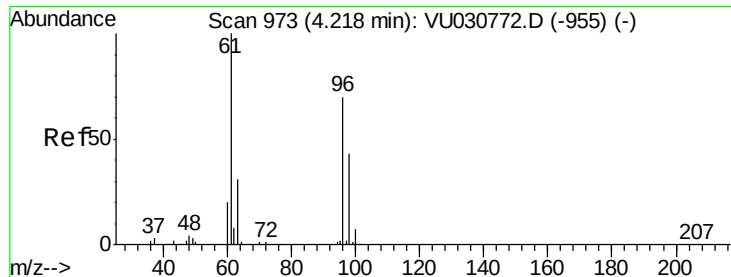
Instrument :  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM040519WMA.M  
Quant Title : VOC Analysis  
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Response via : Initial Calibration





#20

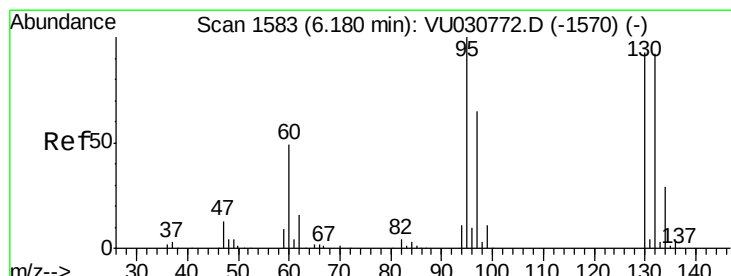
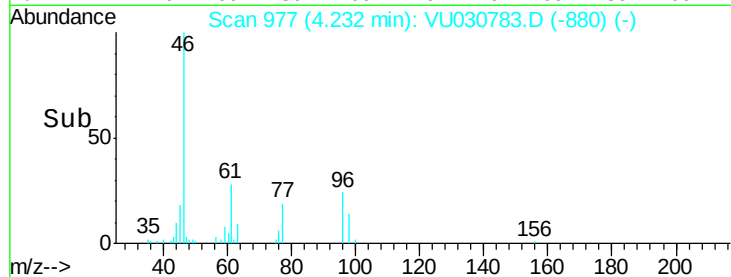
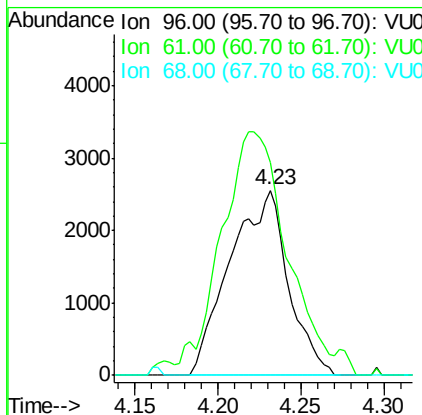
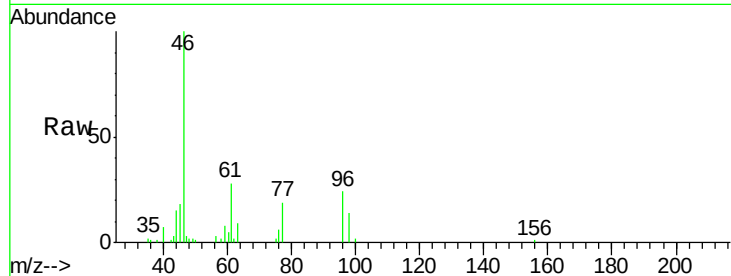
cis-1,2-Dichloroethene  
Concen: 1.563 ug/L  
RT: 4.23 min Scan# 977  
Delta R.T. 0.01 min  
Lab File: VU030783.D  
Acq: 06 Apr 2019 07:55

Instrument :  
MSVOA\_U  
ClientSampleId :  
BF1C3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 114.7 | 102.9 | 191.1 |
| 68      | 0.0   | 0.0   | 0.0   |

Manual Integrations  
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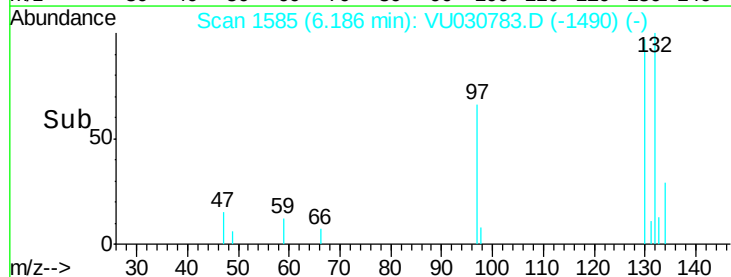
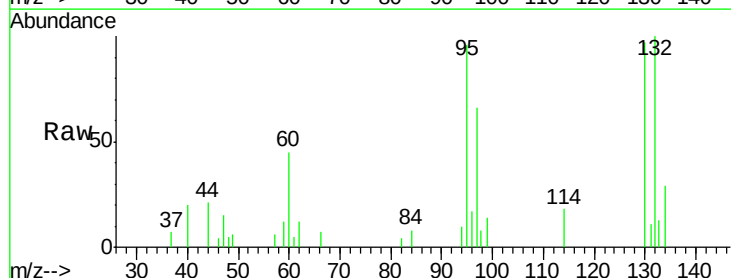
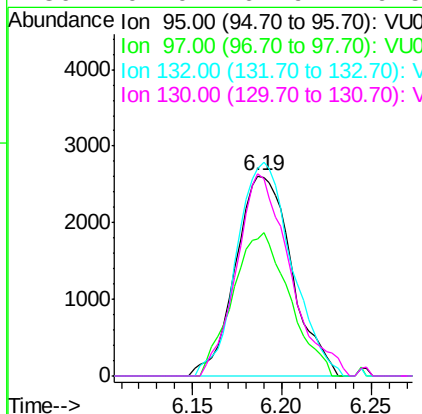
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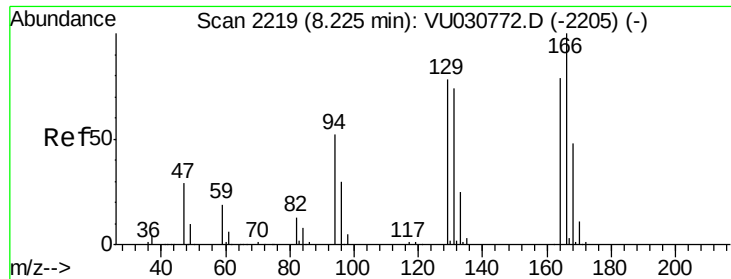


#34

Trichloroethene  
Concen: 1.474 ug/L  
RT: 6.19 min Scan# 1585  
Delta R.T. 0.01 min  
Lab File: VU030783.D  
Acq: 06 Apr 2019 07:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 95      | 100   |       |       |
| 97      | 68.4  | 44.5  | 82.7  |
| 132     | 103.9 | 61.5  | 114.1 |
| 130     | 101.0 | 64.9  | 120.5 |





#46

Tetrachloroethene

Concen: 193.489 ug/L

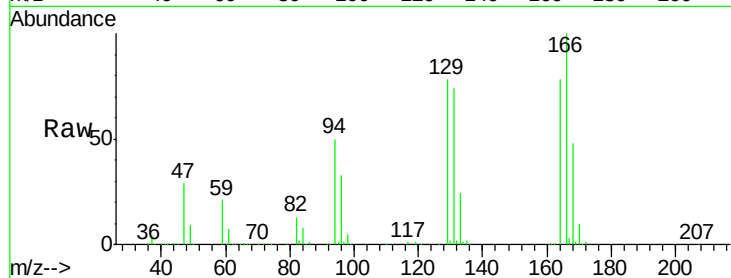
RT: 8.22 min Scan# 2218

Delta R.T. -0.00 min

Lab File: VU030783.D

Acq: 06 Apr 2019 07:55

Instrument :  
MSVOA\_U  
ClientSampleId :  
BF1C3



|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 164   | Resp: | 546644 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 129       | 100.1 | 67.4  | 125.2  |
| 131       | 93.9  | 65.9  | 122.5  |
| 166       | 127.7 | 88.6  | 164.6  |

Manual Integrations  
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