

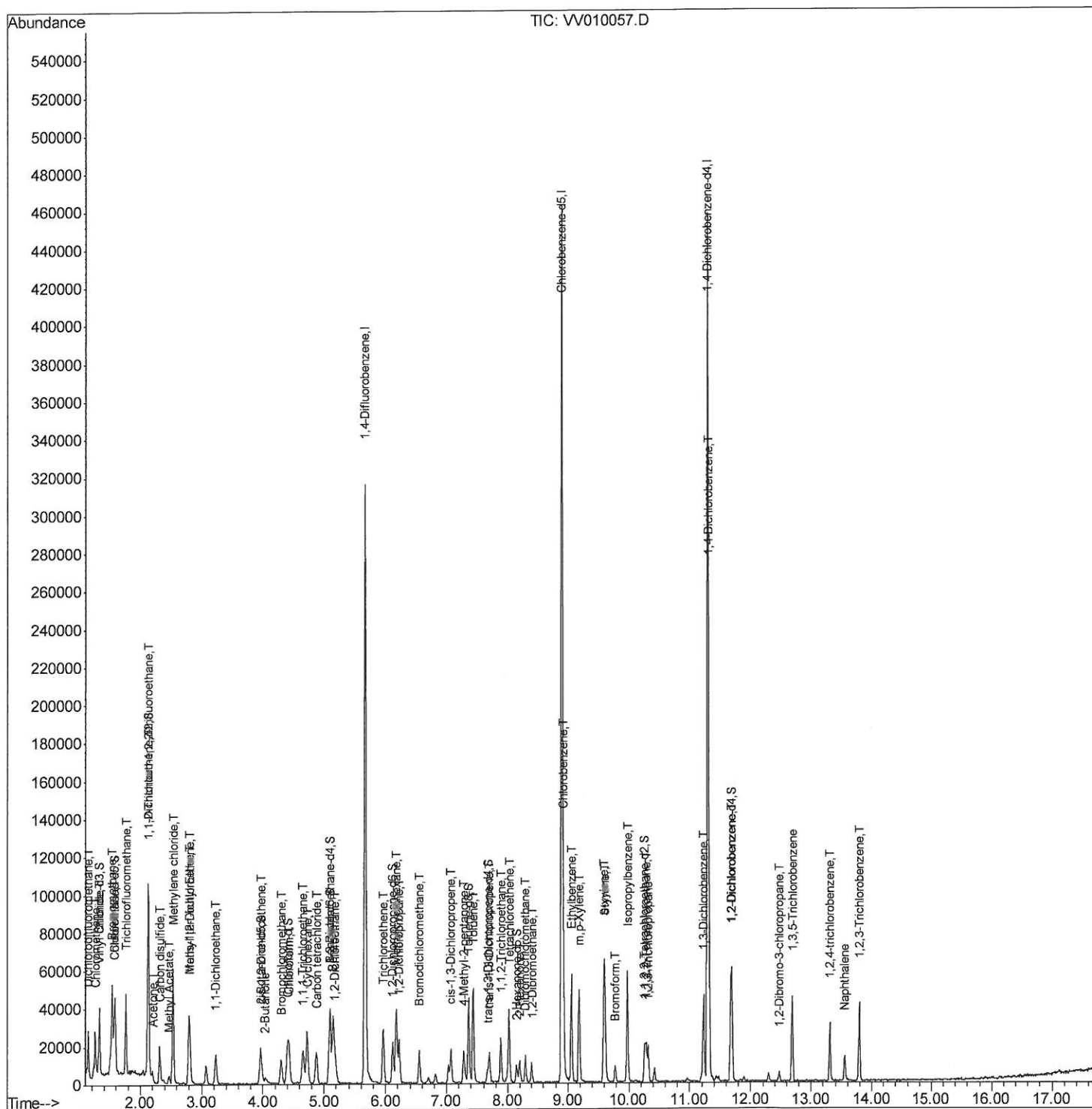
Data File : VV010057.D  
Acq On : 02 Apr 2019 12:46  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS vial : 1 Sample Multiplier: 1

**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD2.561

**Manual Integrations**  
**APPROVED**

MMDadoda  
4/6/2019 5:03:33 AM

Quant Time: Apr 02 14:40:35 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040219S.M  
Quant Title : VOC Analysis  
QLast Update : Tue Apr 02 14:35:17 2019  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV040219\  
Quantitation Report (Qedit)

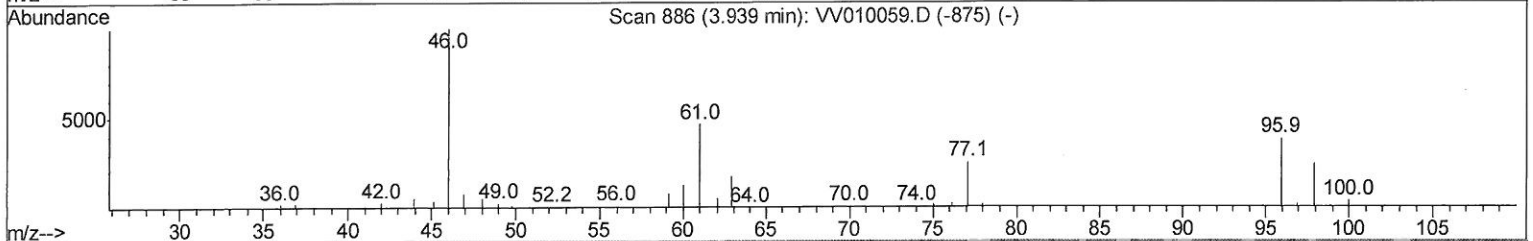
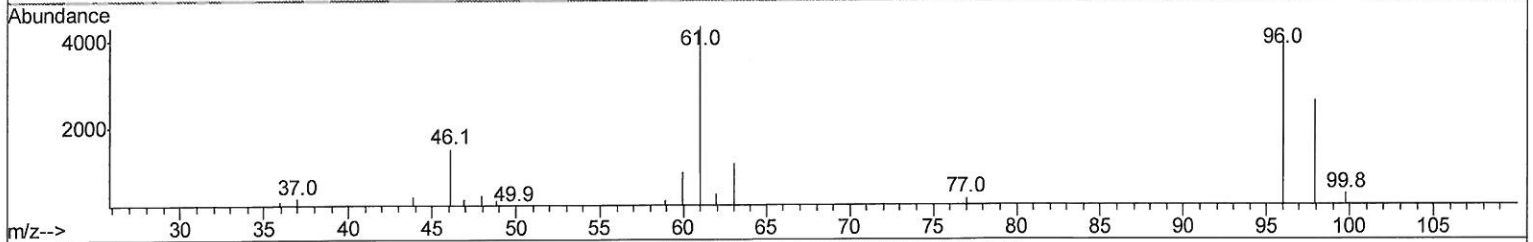
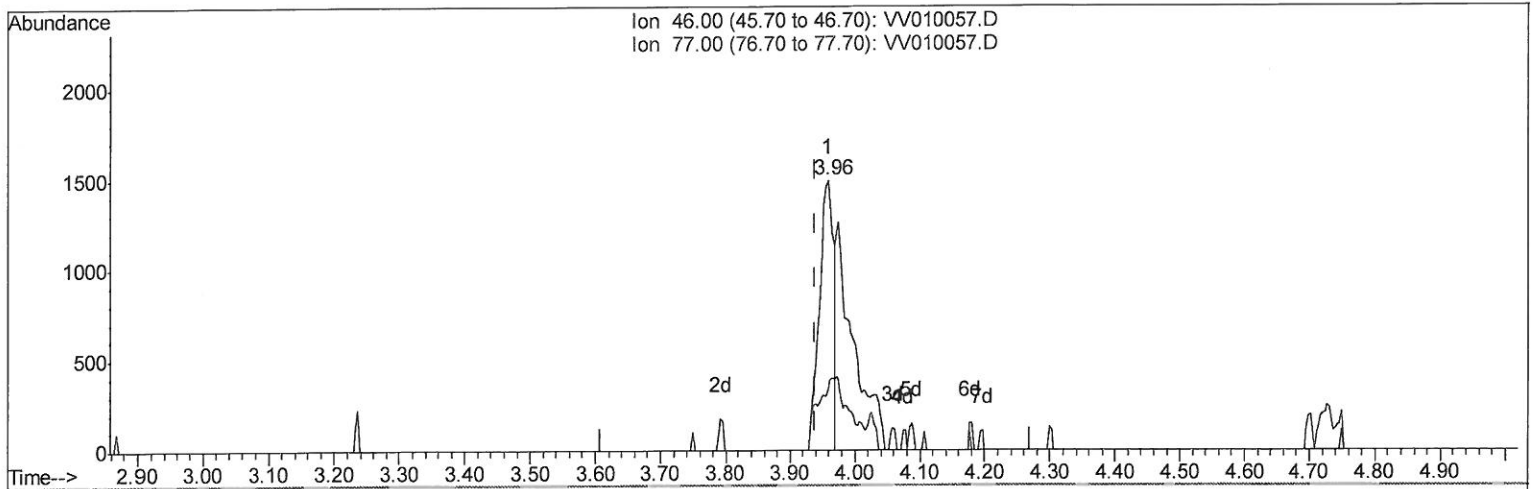
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TIC: VV010057.D

(20) 2-Butanone-d5 (S)

3.959min (+0.019) 2.16ug/L

response 2235

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 46.00 | 100   | 100   |
| 77.00 | 25.70 | 3.40# |
| 0.00  | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

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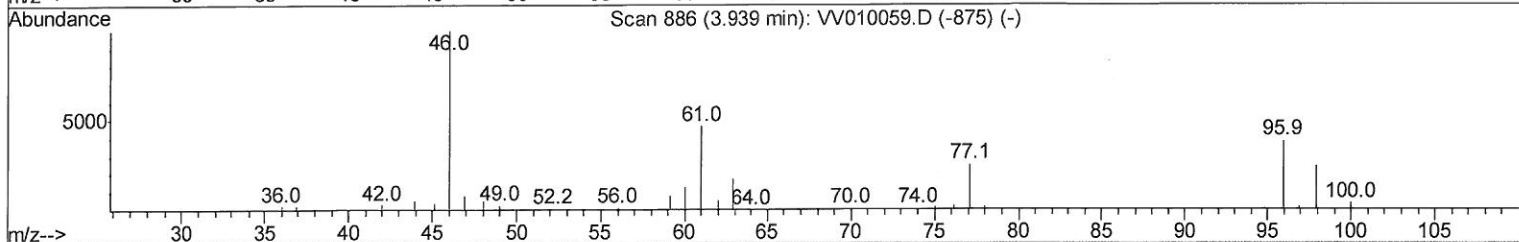
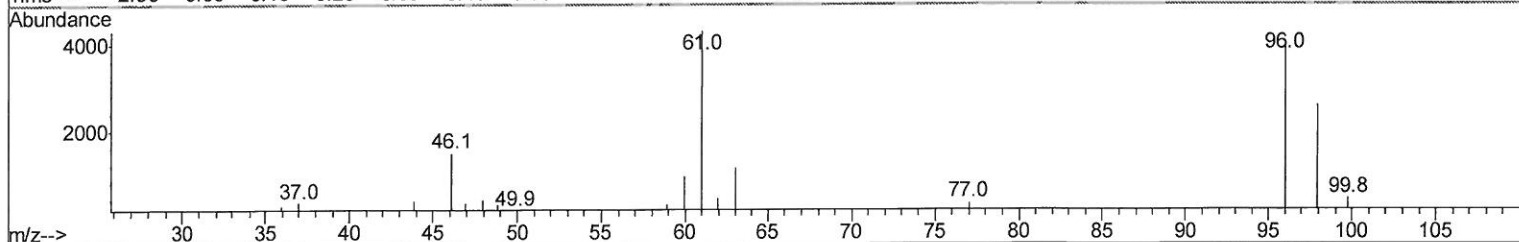
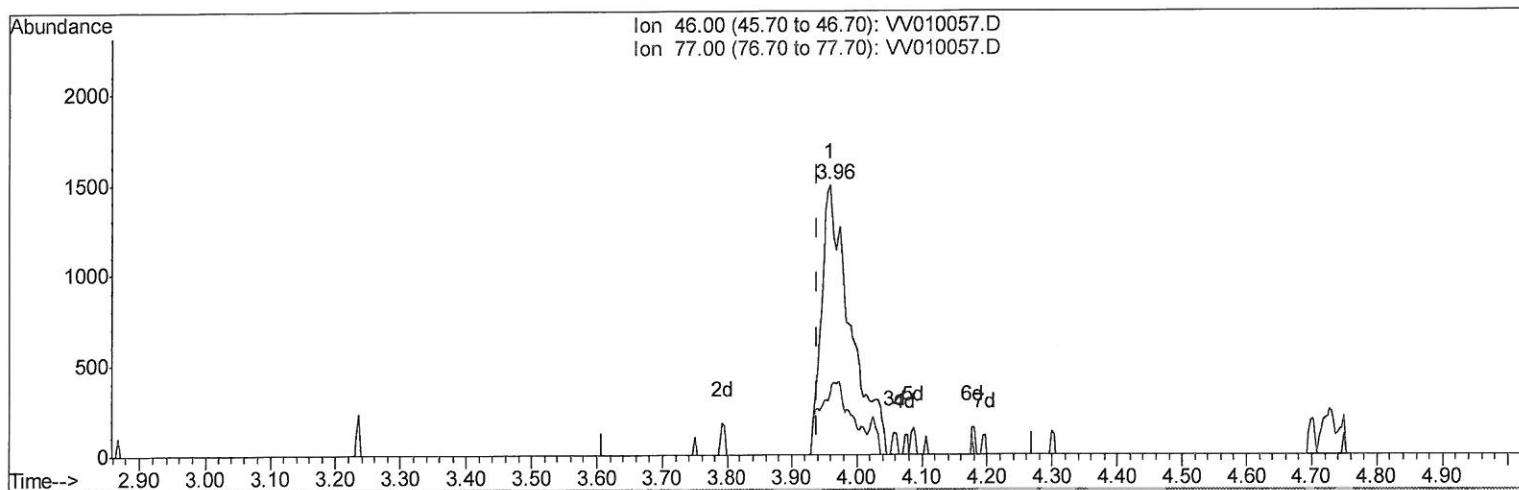
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TIC: VV010057.D

(20) 2-Butanone-d5 (S)

3.959min (+0.019) 4.46ug/L m

response 4621

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 46.00 | 100   | 100   |
| 77.00 | 25.70 | 1.64# |
| 0.00  | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

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4/13/19

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV040219\  
Quantitation Report (Qedit)

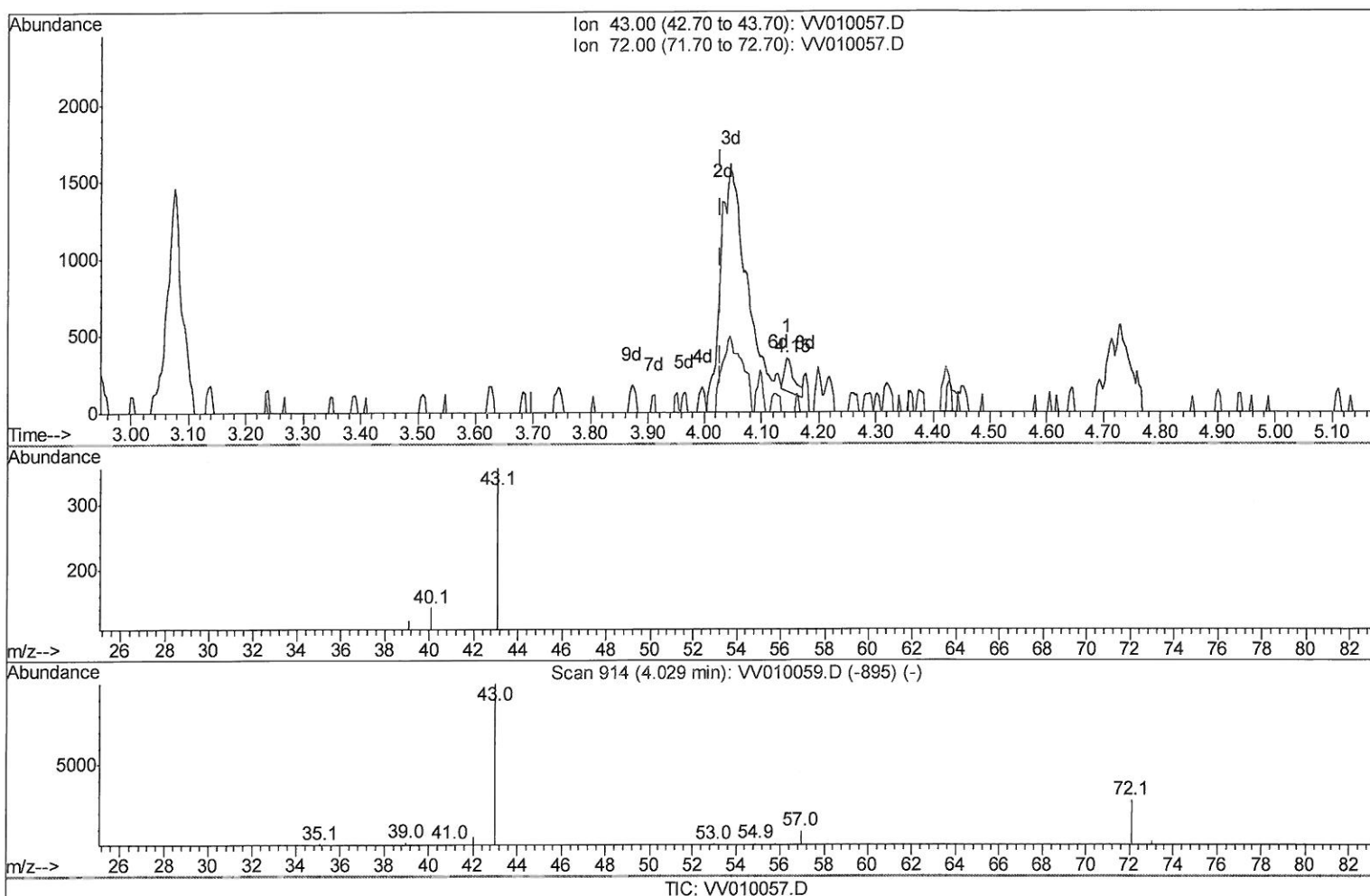
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(21) 2-Butanone

4.145min (+0.116) 0.22ug/L

response 253

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 43.00 | 100   | 100   |
| 72.00 | 25.60 | 17.79 |
| 0.00  | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV040219\  
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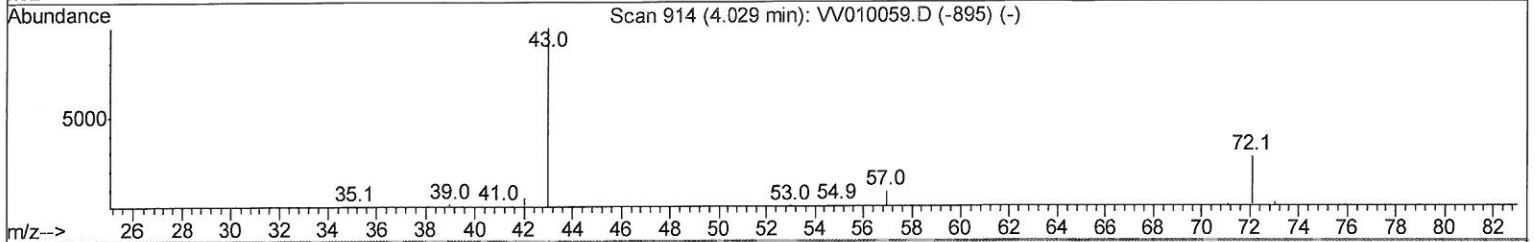
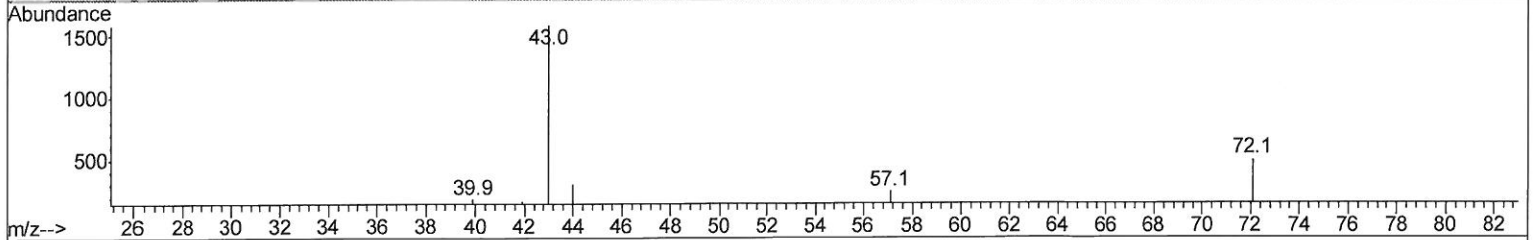
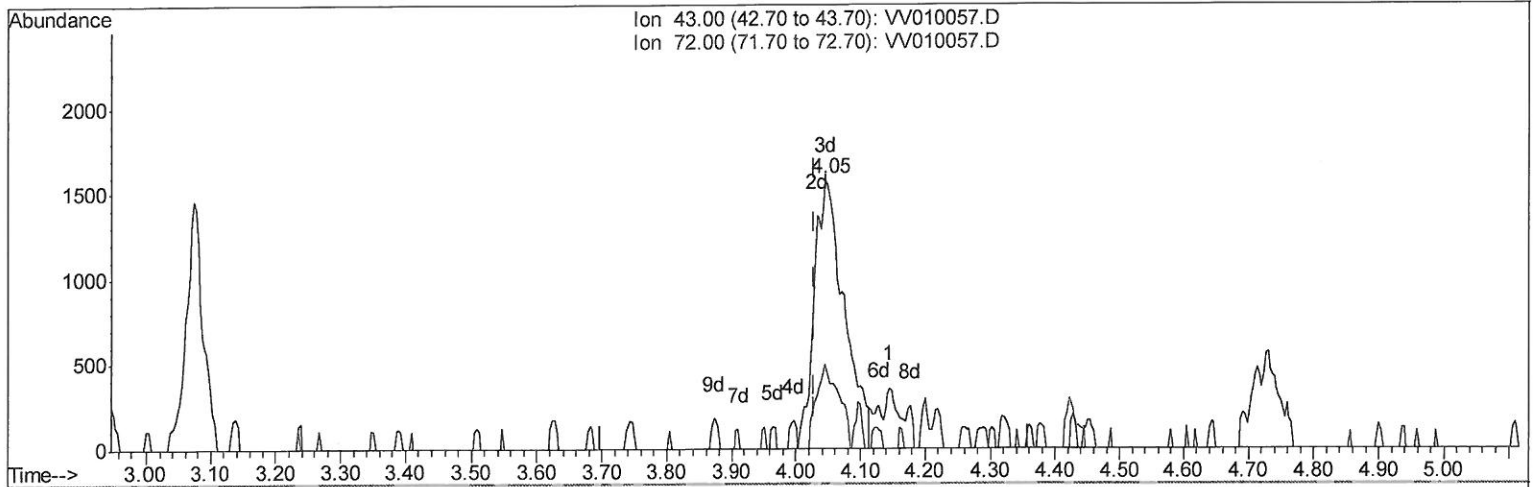
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TIC: VV010057.D

(21) 2-Butanone

4.045min (+0.016) 4.38ug/L m

response 5104

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 43.00 | 100   | 100   |
| 72.00 | 25.60 | 0.88# |
| 0.00  | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

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4/13/19

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV040219\  
Quantitation Report (Qedit)

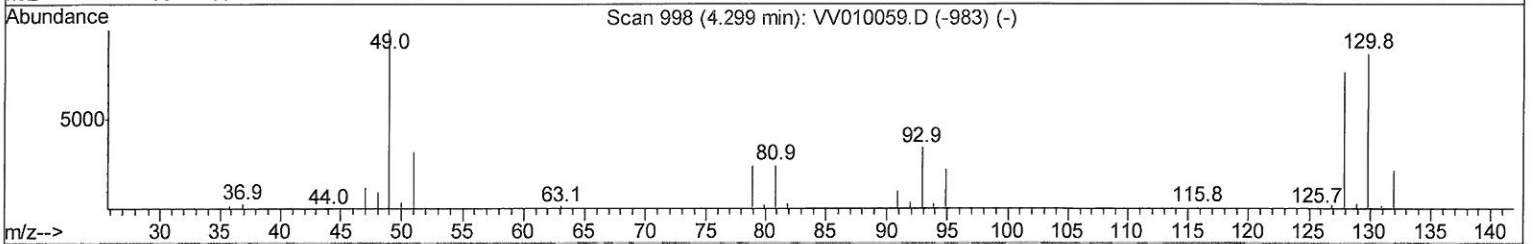
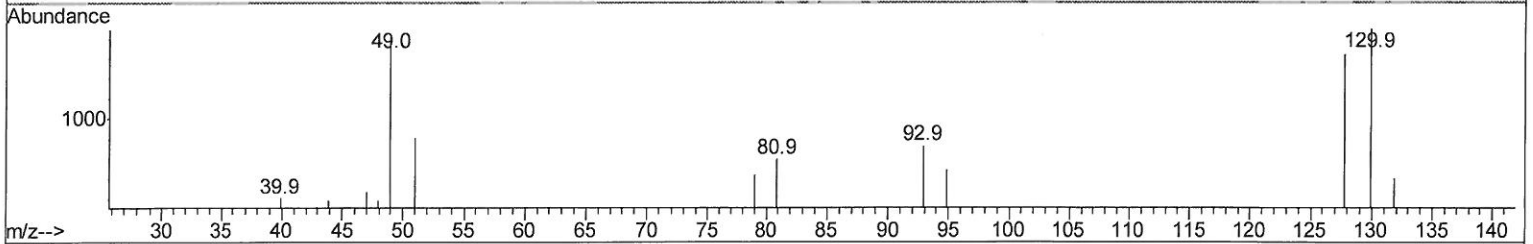
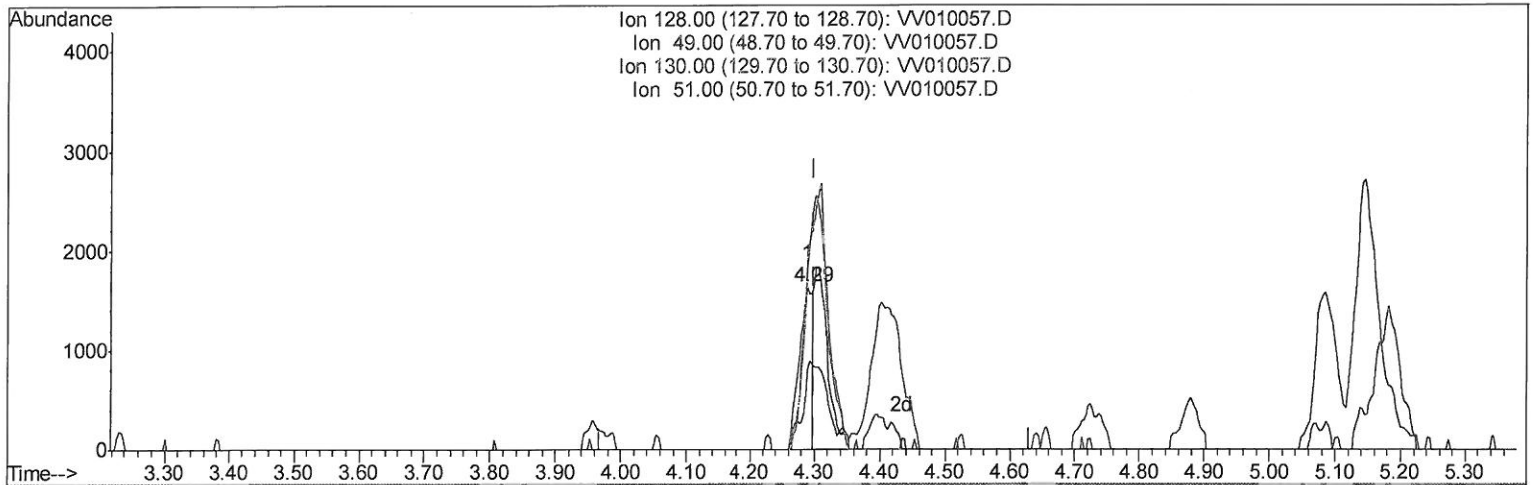
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TIC: VV010057.D

(23) Bromochloromethane (T)

4.290min (-0.010) 0.97ug/L

response 1844

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 128.00 | 100    | 100    |
| 49.00  | 132.60 | 111.27 |
| 130.00 | 115.10 | 116.05 |
| 51.00  | 41.40  | 49.08  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV040219\  
Quantitation Report (Qedit)

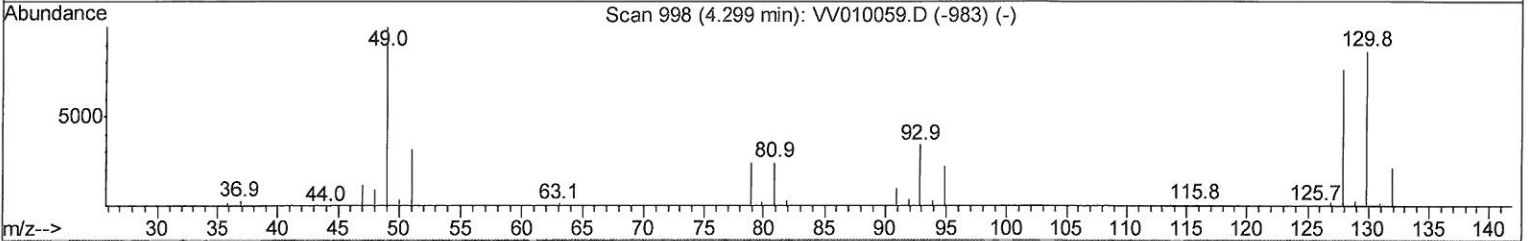
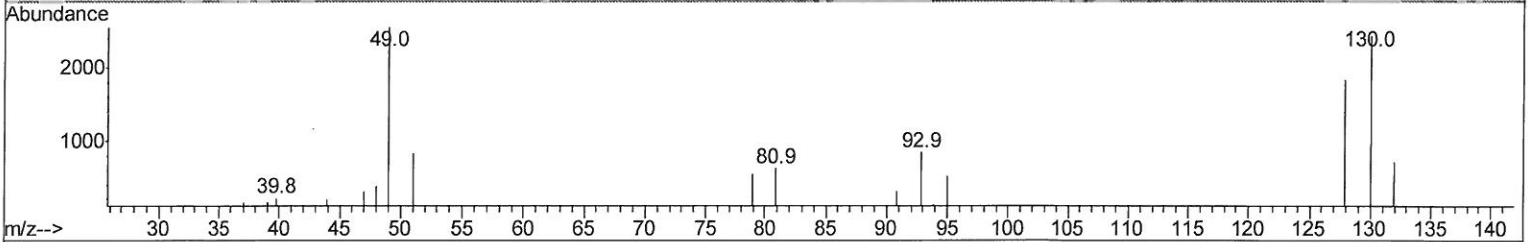
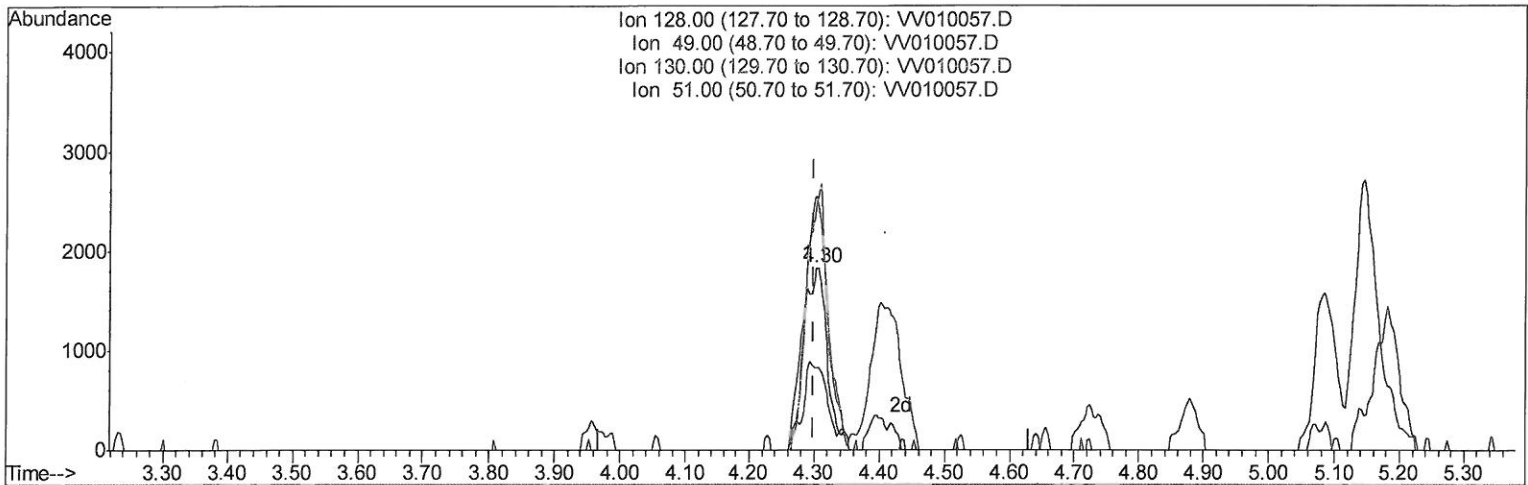
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Instrument :  
MSVOA\_V  
ClientSampled :  
VSTD2.561

Manual Integrations  
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Response via : Initial Calibration



(23) Bromochloromethane (T)

4.303min (+0.003) 2.39ug/L m

response 4528

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 128.00 | 100    | 100    |
| 49.00  | 132.60 | 139.69 |
| 130.00 | 115.10 | 133.46 |
| 51.00  | 41.40  | 45.05  |

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4/13/19

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_V\Data\VV040219\  
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| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 277834   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 253333   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 118487   | 25.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 10110 | 2.65 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.57  | 69  | 12087 | 3.60 | ug/L | 0.00 |
| 10) 1,1-Dichloroethene-d2      | 2.13  | 63  | 24839 | 2.59 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.96  | 46  | 4621m | 4.46 | ug/L | 0.02 |
| 24) Chloroform-d               | 4.40  | 84  | 16232 | 2.43 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.09  | 65  | 8944  | 2.19 | ug/L | 0.00 |
| 29) Benzene-d6                 | 5.10  | 84  | 33954 | 2.60 | ug/L | 0.00 |
| 33) 1,2-Dichloropropane-d6     | 6.12  | 67  | 9833  | 2.64 | ug/L | 0.00 |
| 37) Toluene-d8                 | 7.36  | 98  | 29396 | 2.30 | ug/L | 0.00 |
| 38) trans-1,3-Dichloropropene- | 7.67  | 79  | 3071  | 1.91 | ug/L | 0.00 |
| 39) 2-Hexanone-d5              | 8.14  | 63  | 2877  | 3.90 | ug/L | 0.00 |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 8829  | 2.30 | ug/L | 0.00 |
| 61) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 11276 | 2.39 | ug/L | 0.00 |

MD  
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Target Compounds

|                                |      |     |       |       |        | Qvalue |
|--------------------------------|------|-----|-------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 12378 | 2.893 | ug/L   | 98     |
| 3) Chloromethane               | 1.25 | 50  | 10586 | 2.831 | ug/L   | 95     |
| 5) Vinyl chloride              | 1.32 | 62  | 11281 | 2.758 | ug/L   | 89     |
| 6) Bromomethane                | 1.53 | 94  | 12581 | 3.452 | ug/L   | 97     |
| 8) Chloroethane                | 1.59 | 64  | 9629  | 3.557 | ug/L   | 90     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 22456 | 2.668 | ug/L   | 98     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 12812 | 2.689 | ug/L   | 98     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 10701 | 2.606 | ug/L   | 85     |
| 13) Acetone                    | 2.20 | 43  | 6580  | 5.371 | ug/L   | 89     |
| 14) Carbon disulfide           | 2.32 | 76  | 21726 | 2.634 | ug/L   | 99     |
| 15) Methyl Acetate             | 2.46 | 43  | 4263  | 2.398 | ug/L # | 89     |
| 16) Methylene chloride         | 2.54 | 84  | 25364 | 5.225 | ug/L   | 96     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 19253 | 2.273 | ug/L   | 94     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 9733  | 2.848 | ug/L   | 94     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 14697 | 2.445 | ug/L   | 97     |
| 21) 2-Butanone                 | 4.05 | 43  | 5104m | 4.382 | ug/L   |        |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 9516  | 2.485 | ug/L   | 96     |
| 23) Bromochloromethane         | 4.30 | 128 | 4528m | 2.392 | ug/L   |        |
| 25) Chloroform                 | 4.43 | 83  | 16666 | 2.367 | ug/L   | 94     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 11160 | 2.495 | ug/L # | 91     |
| 30) Cyclohexane                | 4.72 | 56  | 12534 | 2.708 | ug/L   | 100    |
| 31) 1,1,1-Trichloroethane      | 4.66 | 97  | 14172 | 2.738 | ug/L   | 93     |
| 32) Carbon tetrachloride       | 4.87 | 117 | 11355 | 2.409 | ug/L   | 86     |
| 34) Benzene                    | 5.14 | 78  | 34501 | 2.719 | ug/L   | 100    |
| 35) Trichloroethene            | 5.96 | 95  | 10330 | 2.847 | ug/L   | 93     |
| 36) Methylcyclohexane          | 6.17 | 83  | 15362 | 2.752 | ug/L   | 98     |
| 40) 1,2-Dichloropropane        | 6.22 | 63  | 8570  | 2.761 | ug/L # | 94     |
| 41) Bromodichloromethane       | 6.56 | 83  | 10129 | 2.448 | ug/L   | 92     |
| 42) cis-1,3-Dichloropropene    | 7.07 | 75  | 9675  | 2.037 | ug/L   | 92     |
| 43) 4-Methyl-2-pentanone       | 7.28 | 43  | 11870 | 5.003 | ug/L   | 92     |

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| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 44) Toluene                    | 7.43  | 91   | 37375    | 2.599 | ug/L   | 93       |
| 45) trans-1,3-Dichloropropene  | 7.70  | 75   | 8533     | 2.161 | ug/L   | 99       |
| 46) 1,1,2-Trichloroethane      | 7.89  | 97   | 6943     | 2.469 | ug/L   | 97       |
| 47) Tetrachloroethene          | 8.02  | 164  | 8643     | 2.806 | ug/L   | 92       |
| 49) 2-Hexanone                 | 8.19  | 43   | 7166     | 4.555 | ug/L # | 89       |
| 50) Dibromochloromethane       | 8.29  | 129  | 6272     | 1.929 | ug/L   | 94       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 6668     | 2.365 | ug/L # | 96       |
| 52) Chlorobenzene              | 8.93  | 112  | 25398    | 2.565 | ug/L   | 96       |
| 53) Ethylbenzene               | 9.06  | 91   | 38985    | 2.454 | ug/L   | 91       |
| 54) m,p-Xylene                 | 9.18  | 106  | 14455    | 2.269 | ug/L   | 92       |
| 55) o-xylene                   | 9.59  | 106  | 13816    | 2.293 | ug/L   | 98       |
| 56) Styrene                    | 9.61  | 104  | 20710    | 2.054 | ug/L   | 97       |
| 57) Isopropylbenzene           | 9.98  | 105  | 36189    | 2.254 | ug/L   | 98       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 7837     | 2.154 | ug/L   | 93       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 6619     | 2.480 | ug/L   | 89       |
| 62) Bromoform                  | 9.78  | 173  | 3870     | 2.338 | ug/L # | 96       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 18790    | 2.629 | ug/L   | 93       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 18756    | 2.496 | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 17041    | 2.416 | ug/L   | 94       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 1150     | 2.529 | ug/L   | 94       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 13907    | 2.639 | ug/L   | 95       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 8810     | 2.292 | ug/L   | 97       |
| 69) Naphthalene                | 13.56 | 128  | 11510    | 1.905 | ug/L # | 90       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 7898     | 2.193 | ug/L   | 97       |

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