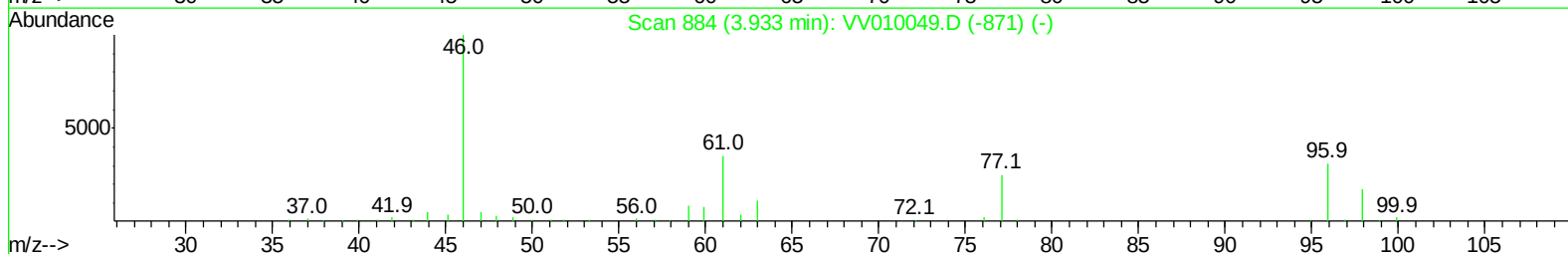
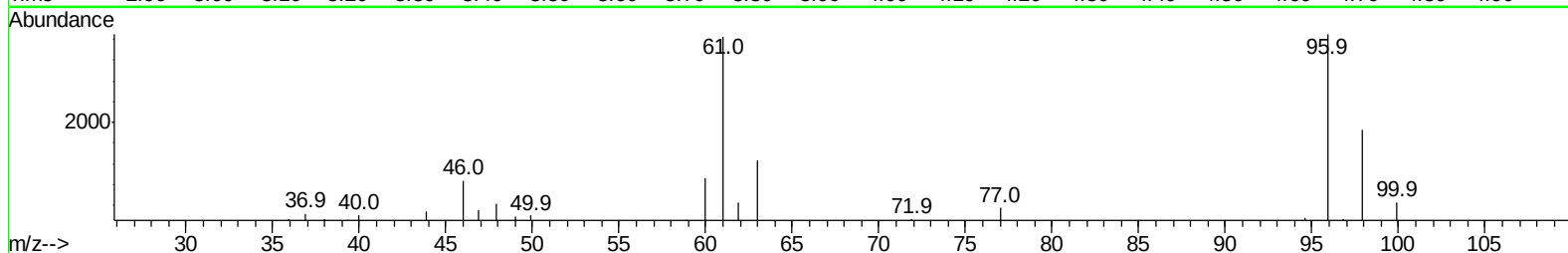
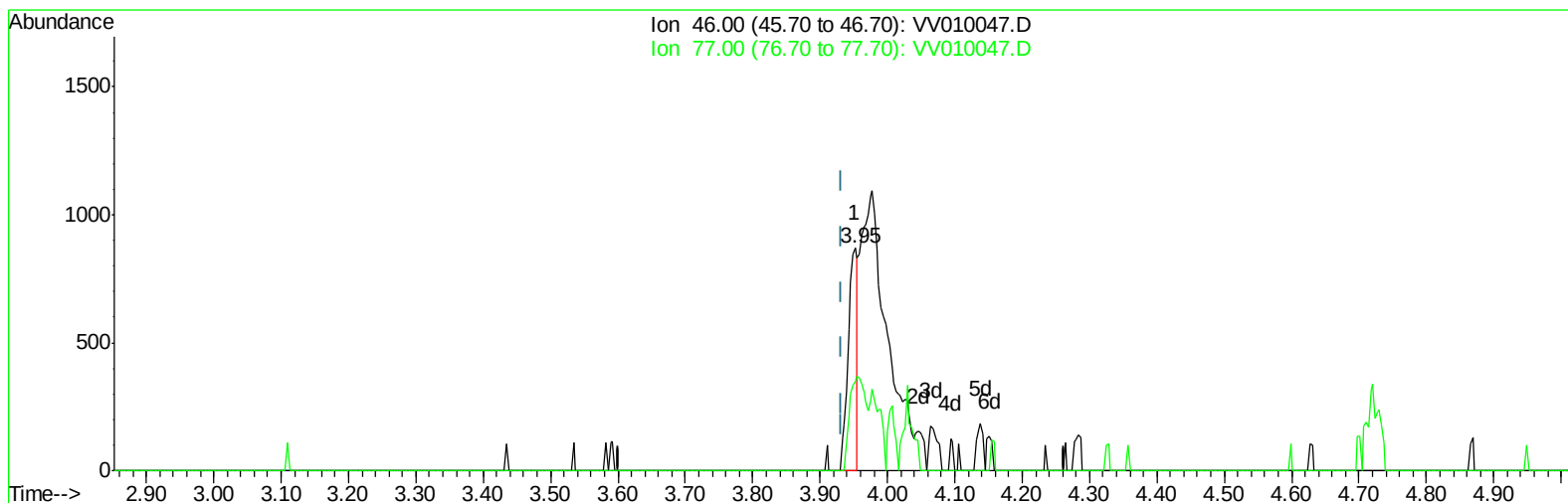


Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:33:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration



TIC: VV010047.D

(20) 2-Butanone-d5 (S)

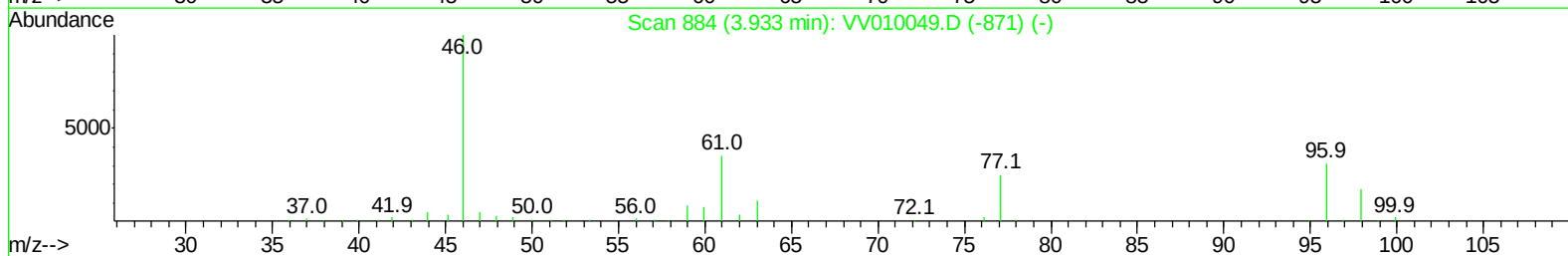
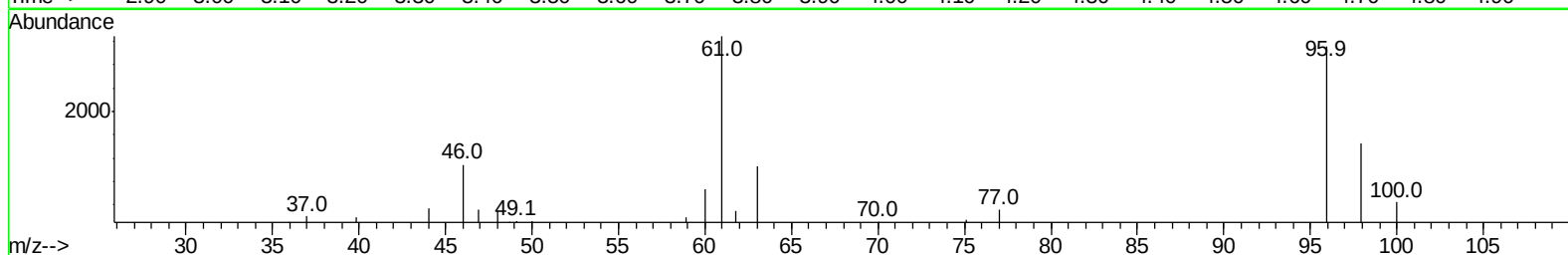
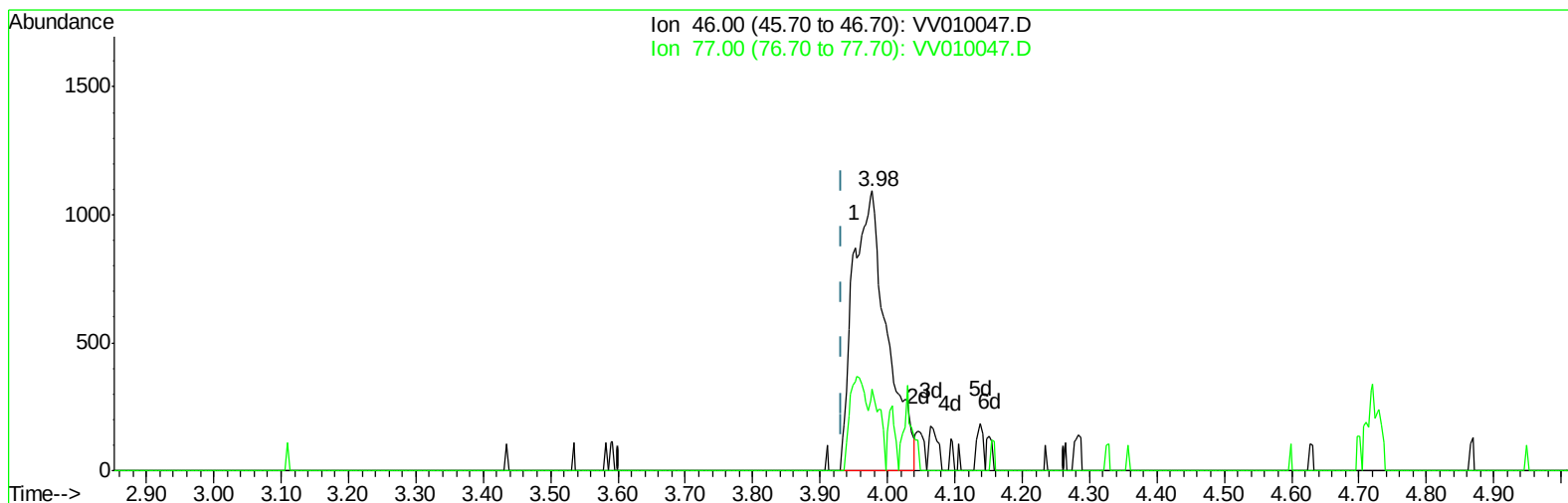
3.952min (+0.019) 0.78ug/L

response 858

| Ion   | Exp%  | Act%   |
|-------|-------|--------|
| 46.00 | 100   | 100    |
| 77.00 | 25.60 | 71.56# |
| 0.00  | 0.00  | 0.00   |
| 0.00  | 0.00  | 0.00   |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:33:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration



TIC: VV010047.D

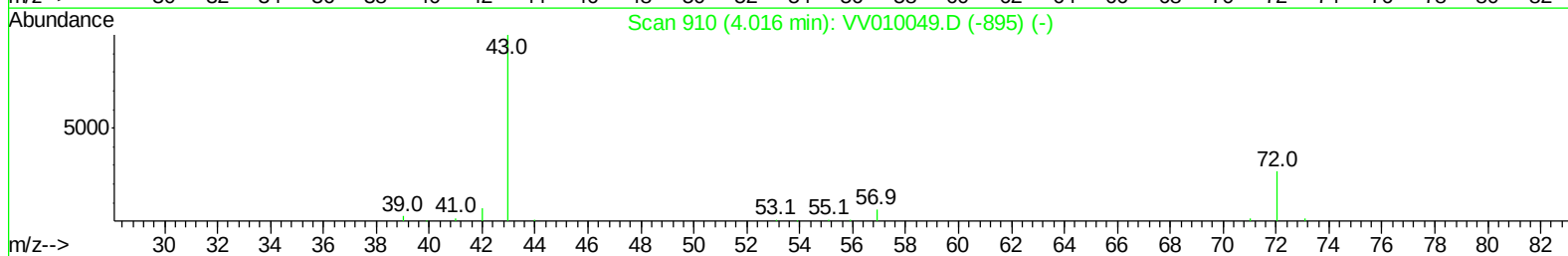
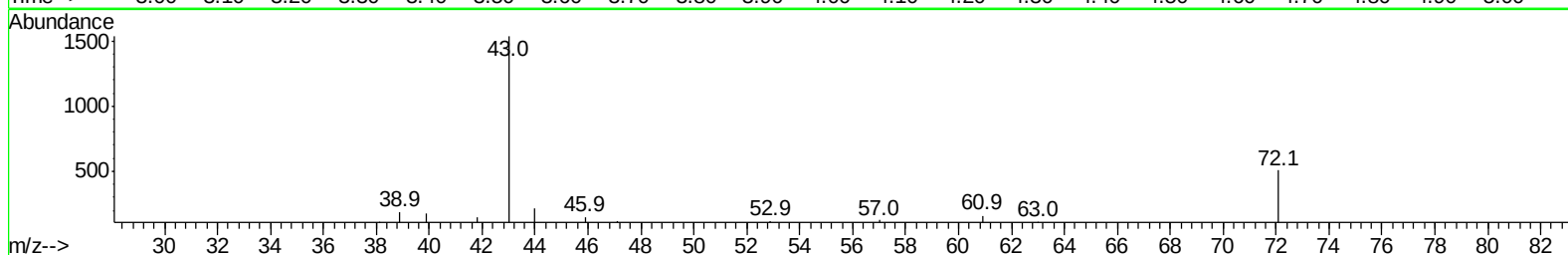
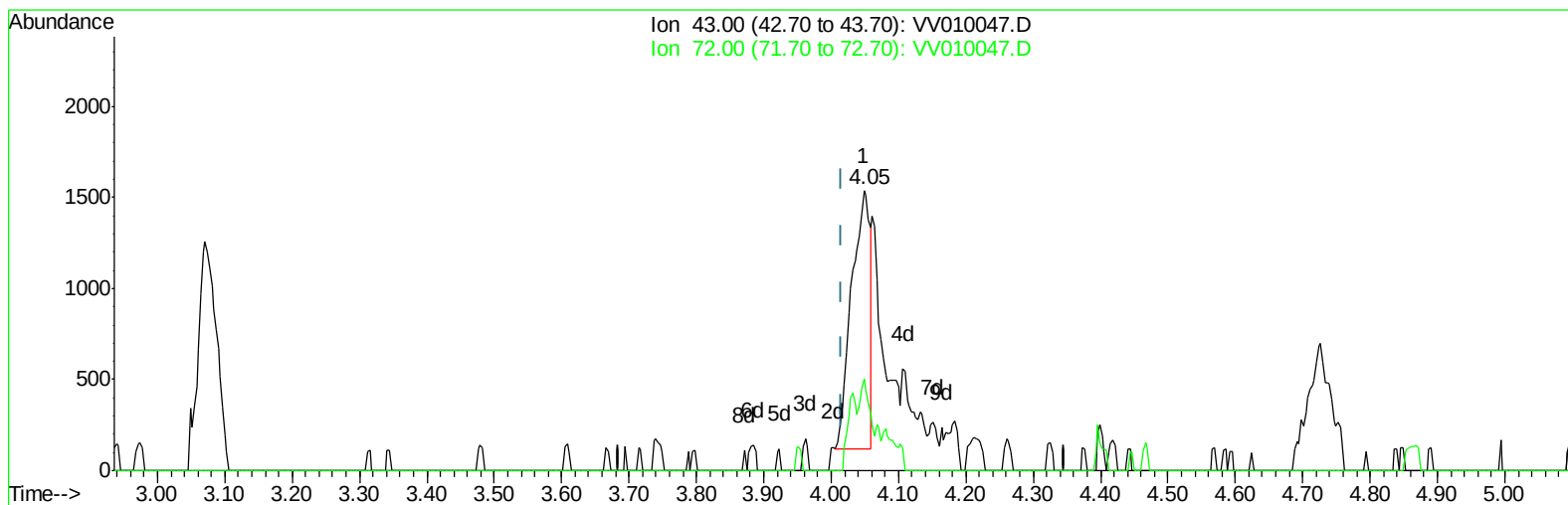
(20) 2-Butanone-d5 (S)  
3.978min (+0.045) 3.45ug/L m

response 3798

| Ion   | Exp%  | Act%   |
|-------|-------|--------|
| 46.00 | 100   | 100    |
| 77.00 | 25.60 | 16.17# |
| 0.00  | 0.00  | 0.00   |
| 0.00  | 0.00  | 0.00   |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:33:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration



TIC: VV010047.D

(21) 2-Butanone

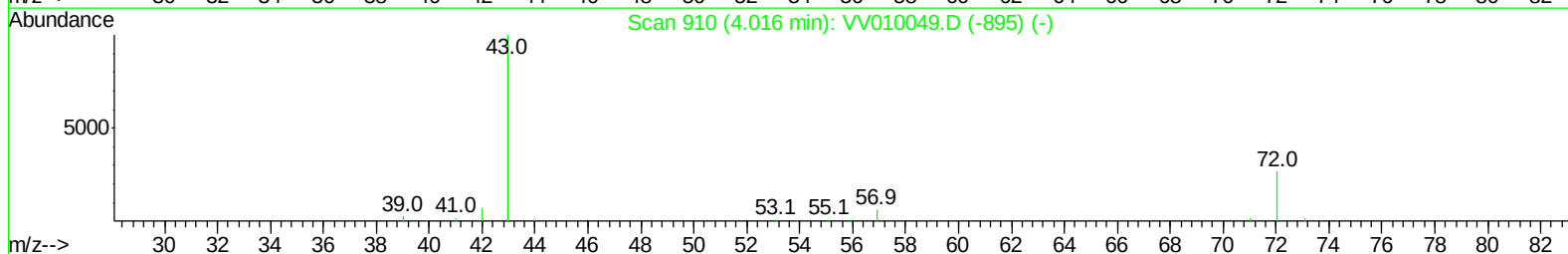
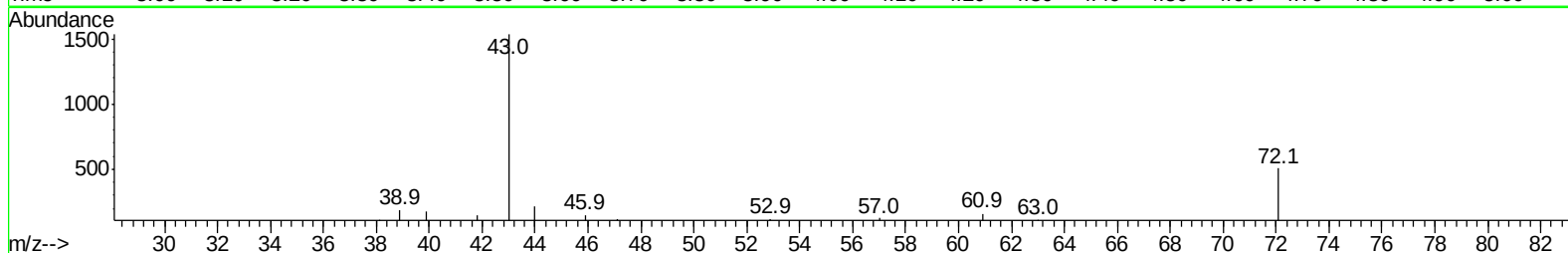
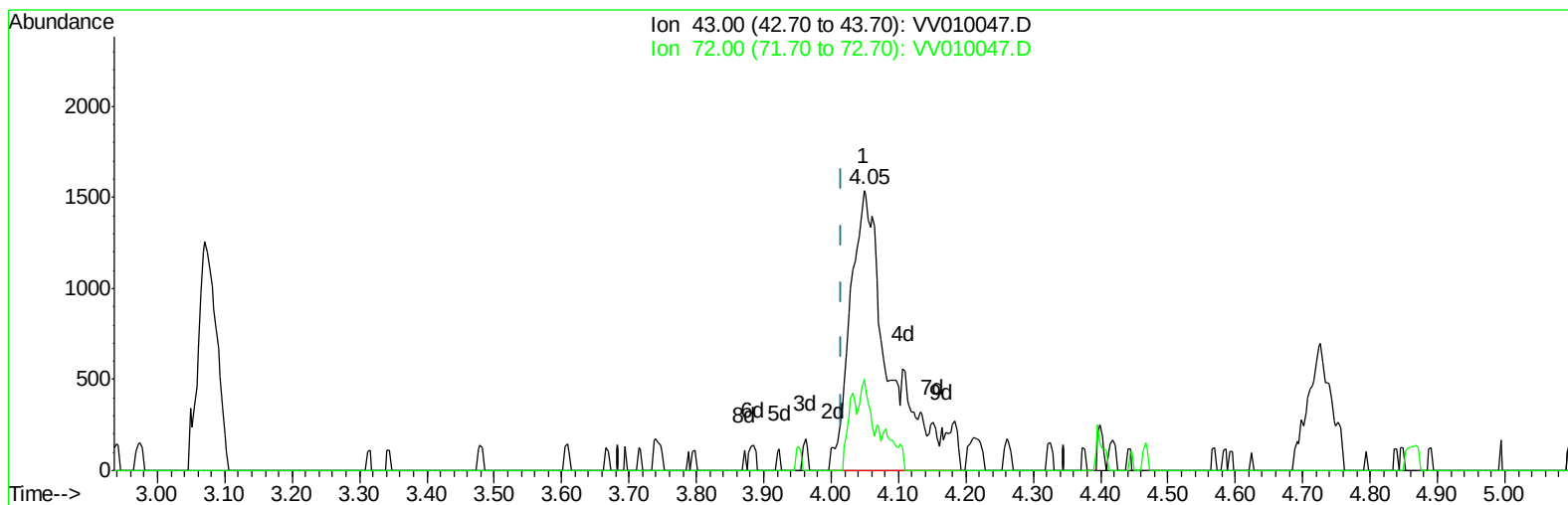
4.048min (+0.032) 1.78ug/L

response 2648

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 43.00 | 100   | 100   |
| 72.00 | 24.60 | 17.90 |
| 0.00  | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:33:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration



TIC: VV010047.D

(21) 2-Butanone

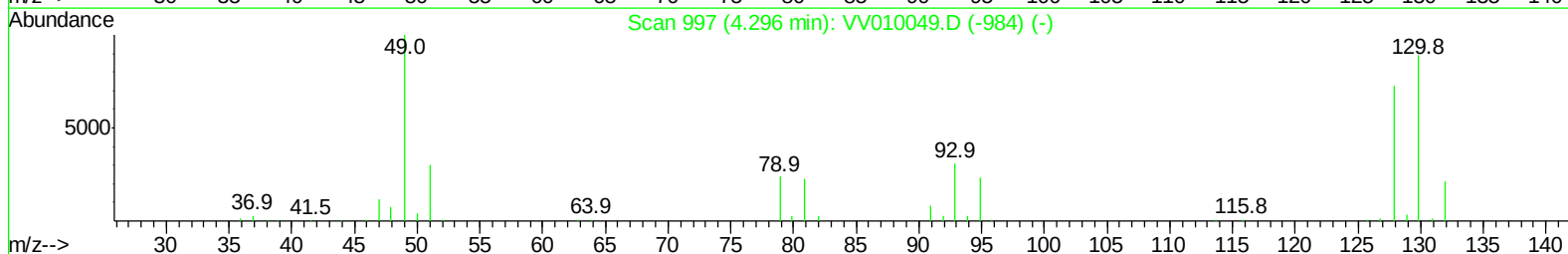
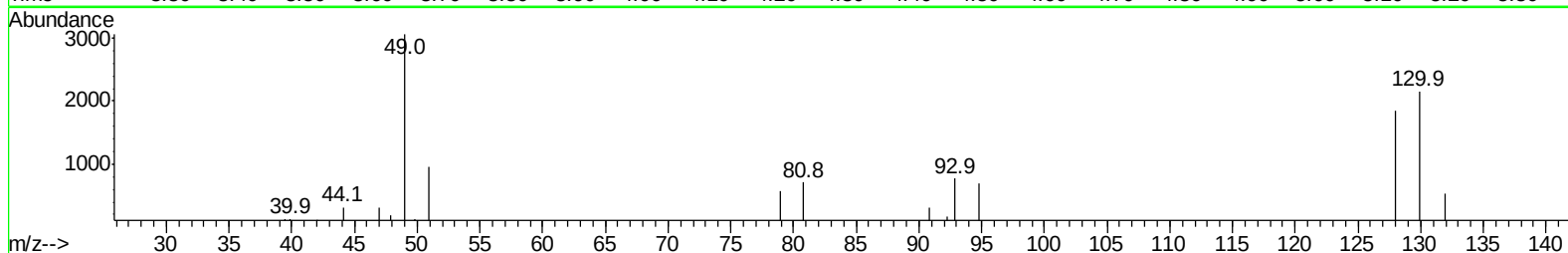
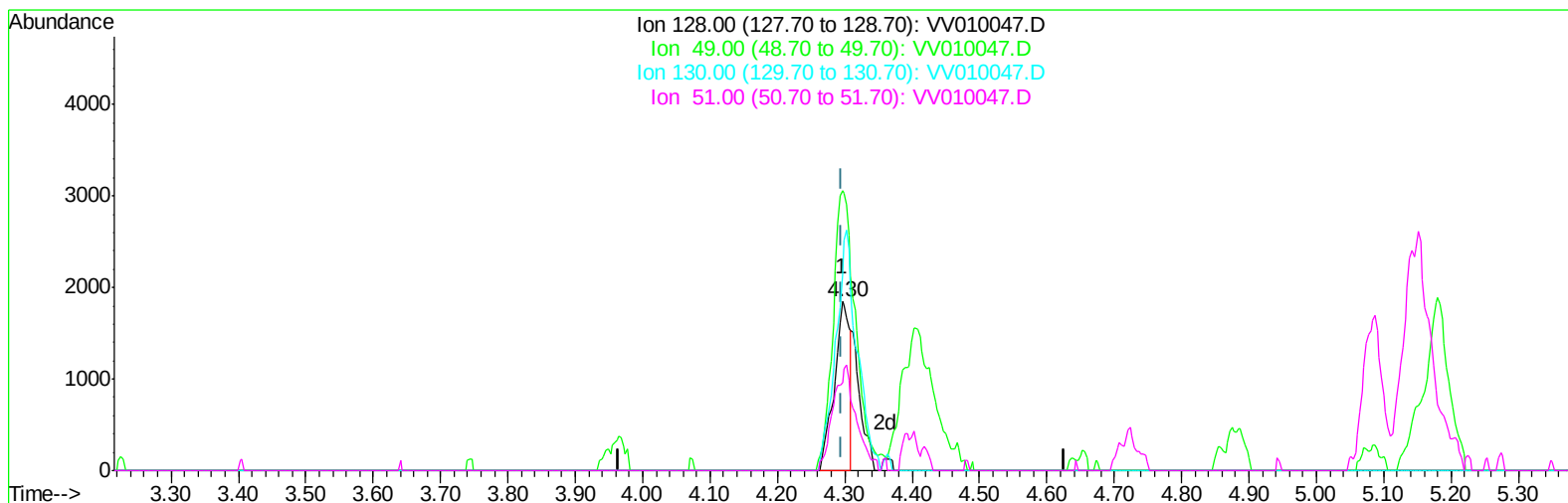
4.048min (+0.032) 4.30ug/L m

response 6388

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 43.00 | 100   | 100   |
| 72.00 | 24.60 | 7.42# |
| 0.00  | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:33:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration



TIC: VV010047.D

(23) Bromochloromethane (T)

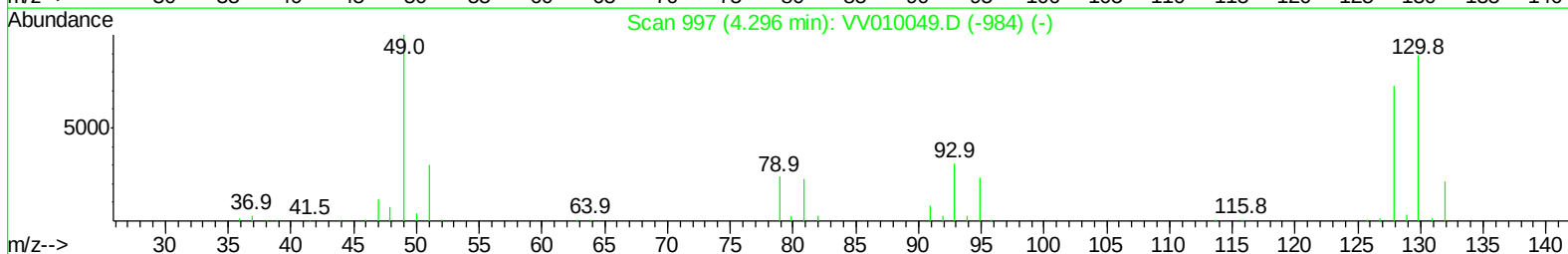
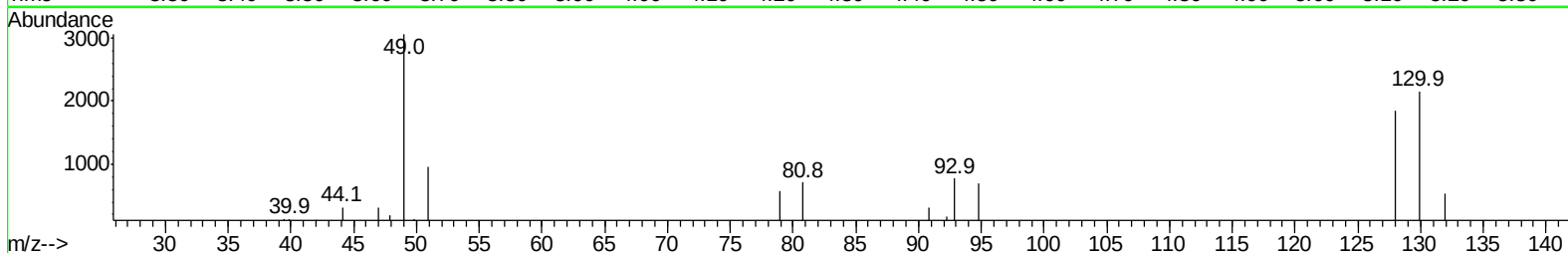
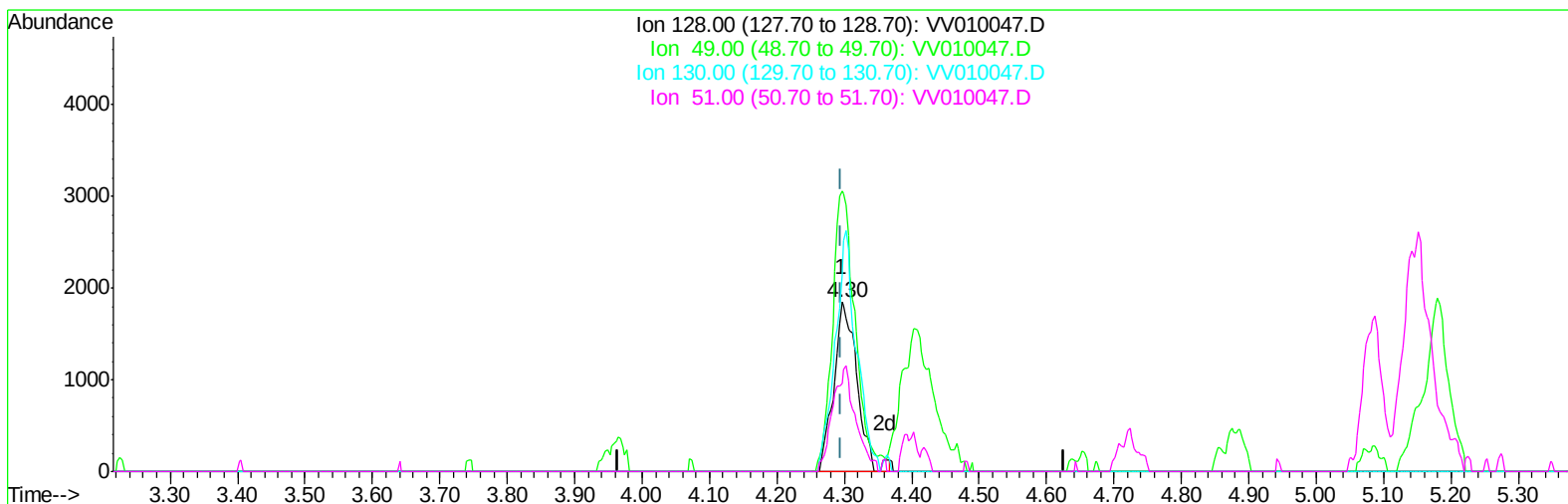
4.296min (+0.000) 1.52ug/L

response 2958

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 128.00 | 100    | 100    |
| 49.00  | 138.80 | 165.62 |
| 130.00 | 123.10 | 116.62 |
| 51.00  | 42.50  | 52.19# |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:33:55 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration



TIC: VV010047.D

(23) Bromochloromethane (T)

4.296min (+0.000) 2.26ug/L m

response 4402

| Ion    | Exp%   | Act%   |
|--------|--------|--------|
| 128.00 | 100    | 100    |
| 49.00  | 138.80 | 165.62 |
| 130.00 | 123.10 | 116.62 |
| 51.00  | 42.50  | 52.19# |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:38:27 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 291209   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 266681   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 126516   | 25.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 10111 | 1.71 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.58  | 69  | 15987 | 2.50 | ug/L | 0.00 |
| 10) 1,1-Dichloroethene-d2      | 2.13  | 63  | 27199 | 1.68 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.98  | 46  | 3798m | 3.45 | ug/L | 0.05 |
| 24) Chloroform-d               | 4.40  | 84  | 18844 | 2.54 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 9647  | 2.16 | ug/L | 0.00 |
| 29) Benzene-d6                 | 5.10  | 84  | 36624 | 2.62 | ug/L | 0.00 |
| 33) 1,2-Dichloropropane-d6     | 6.12  | 67  | 9310  | 2.27 | ug/L | 0.00 |
| 37) Toluene-d8                 | 7.36  | 98  | 31788 | 2.40 | ug/L | 0.00 |
| 38) trans-1,3-Dichloropropene- | 7.66  | 79  | 3388  | 2.02 | ug/L | 0.00 |
| 39) 2-Hexanone-d5              | 8.14  | 63  | 2824  | 3.69 | ug/L | 0.00 |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 8587  | 2.12 | ug/L | 0.00 |
| 61) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 12699 | 2.64 | ug/L | 0.00 |

Target Compounds

|                                |      |     |       |              | Qvalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 13131 | 2.913 ug/L   | 97     |
| 3) Chloromethane               | 1.25 | 50  | 12425 | 2.385 ug/L   | 93     |
| 5) Vinyl chloride              | 1.33 | 62  | 12904 | 1.905 ug/L   | 85     |
| 6) Bromomethane                | 1.54 | 94  | 15795 | 2.338 ug/L   | 99     |
| 8) Chloroethane                | 1.60 | 64  | 14224 | 2.437 ug/L   | 100    |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 26305 | 1.821 ug/L   | 95     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 14624 | 1.741 ug/L   | 98     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 11760 | 1.651 ug/L   | 97     |
| 13) Acetone                    | 2.21 | 43  | 5539  | 3.322 ug/L   | 94     |
| 14) Carbon disulfide           | 2.32 | 76  | 25099 | 2.604 ug/L   | 98     |
| 15) Methyl Acetate             | 2.47 | 43  | 3927  | 2.011 ug/L # | 74     |
| 16) Methylene chloride         | 2.54 | 84  | 21646 | 4.514 ug/L   | 98     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 20108 | 2.163 ug/L   | 96     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 9865  | 2.585 ug/L   | 93     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 16727 | 2.397 ug/L # | 97     |
| 21) 2-Butanone                 | 4.05 | 43  | 6388m | 4.302 ug/L   |        |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 10452 | 2.481 ug/L   | 87     |
| 23) Bromochloromethane         | 4.30 | 128 | 4402m | 2.263 ug/L   |        |
| 25) Chloroform                 | 4.43 | 83  | 18027 | 2.337 ug/L   | 96     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 12005 | 2.196 ug/L   | 98     |
| 30) Cyclohexane                | 4.73 | 56  | 13571 | 2.524 ug/L   | 91     |
| 31) 1,1,1-Trichloroethane      | 4.66 | 97  | 15924 | 2.984 ug/L   | 99     |
| 32) Carbon tetrachloride       | 4.87 | 117 | 14176 | 3.056 ug/L   | 100    |
| 34) Benzene                    | 5.15 | 78  | 38591 | 2.635 ug/L   | 100    |
| 35) Trichloroethene            | 5.96 | 95  | 11309 | 2.928 ug/L   | 96     |
| 36) Methylcyclohexane          | 6.17 | 83  | 16323 | 2.693 ug/L   | 96     |
| 40) 1,2-Dichloropropane        | 6.22 | 63  | 9199  | 2.514 ug/L # | 94     |
| 41) Bromodichloromethane       | 6.56 | 83  | 10390 | 2.283 ug/L # | 92     |
| 42) cis-1,3-Dichloropropene    | 7.07 | 75  | 10537 | 1.975 ug/L   | 100    |
| 43) 4-Methyl-2-pentanone       | 7.28 | 43  | 11819 | 4.526 ug/L # | 94     |

Data File : VV010047.D  
Acq On : 01 Apr 2019 14:36  
Operator : SY/MD  
Sample : VSTD2.561  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 16:38:27 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 44) Toluene                    | 7.43  | 91   | 40658    | 2.518 | ug/L   | 93       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 9662     | 2.212 | ug/L   | 94       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 6747     | 2.229 | ug/L   | 87       |
| 47) Tetrachloroethene          | 8.02  | 164  | 9648     | 3.165 | ug/L   | 96       |
| 49) 2-Hexanone                 | 8.19  | 43   | 8153     | 4.620 | ug/L # | 91       |
| 50) Dibromochloromethane       | 8.29  | 129  | 7589     | 2.418 | ug/L   | 92       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 7069     | 2.406 | ug/L # | 88       |
| 52) Chlorobenzene              | 8.92  | 112  | 29037    | 2.702 | ug/L   | 97       |
| 53) Ethylbenzene               | 9.05  | 91   | 46128    | 2.590 | ug/L   | 100      |
| 54) m,p-Xylene                 | 9.18  | 106  | 17030    | 2.435 | ug/L   | 95       |
| 55) o-xylene                   | 9.59  | 106  | 14488    | 2.134 | ug/L   | 91       |
| 56) Styrene                    | 9.60  | 104  | 25379    | 2.176 | ug/L   | 92       |
| 57) Isopropylbenzene           | 9.97  | 105  | 42596    | 2.418 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 8550     | 2.096 | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 7107     | 2.414 | ug/L   | 93       |
| 62) Bromoform                  | 9.77  | 173  | 3673     | 2.257 | ug/L # | 93       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 21481    | 2.745 | ug/L   | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 23307    | 2.741 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 20401    | 2.642 | ug/L   | 94       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 1002     | 2.076 | ug/L   | 90       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 15660    | 2.818 | ug/L   | 95       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 10150    | 2.476 | ug/L # | 83       |
| 69) Naphthalene                | 13.55 | 128  | 13552    | 1.989 | ug/L   | 98       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 9422     | 2.417 | ug/L   | 94       |
| -----                          |       |      |          |       |        |          |

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



Data File : VV010047.D

```
Acq On       : 01 Apr 2019   14:36
Operator     : SY/MD
Sample       : VSTD2.561
Misc         : 5.00G/10mL/MSV0A_V/SOIL
ALS Vial     : 1      Sample Multiplier: 1
```

Quant Time: Apr 01 16:38:27 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A\_V\METHOD\SOM2VLM040119S.M  
Quant Title : VOC Analysis  
QLast Update : Mon Apr 01 16:30:50 2019  
Response via : Initial Calibration

