

Data File : VV013444.D  
Acq On : 31 Oct 2019 13:34  
Operator : SY/MD  
Sample : VSTD0.533  
Misc : 25.0ML/MSVOA\_V/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD0.533

Quant Time: Nov 01 04:52:49 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR103119WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Nov 01 04:50:11 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 458026   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 472939   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 267999   | 5.00 | ug/L  | 0.00     |

System Monitoring Compounds

|                                |       |     |       |      |      |      |
|--------------------------------|-------|-----|-------|------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 15900 | 0.38 | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.58  | 69  | 13852 | 0.42 | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.13  | 63  | 30845 | 0.45 | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.98  | 46  | 37563 | 3.86 | ug/L | 0.03 |
| 24) Chloroform-d               | 4.40  | 84  | 40440 | 0.48 | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.08  | 65  | 20540 | 0.49 | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.10  | 84  | 75872 | 0.47 | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.12  | 67  | 22285 | 0.44 | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.36  | 98  | 63376 | 0.43 | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.67  | 79  | 9133  | 0.49 | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.14  | 63  | 21603 | 3.46 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 16849 | 0.50 | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.67 | 152 | 27564 | 0.52 | ug/L | 0.00 |

Target Compounds

|                                |      |     |        |              | Qvalue |
|--------------------------------|------|-----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 29513  | 0.487 ug/L   | 93     |
| 3) Chloromethane               | 1.25 | 50  | 23221  | 0.456 ug/L   | 98     |
| 5) Vinyl chloride              | 1.32 | 62  | 23398  | 0.472 ug/L # | 78     |
| 6) Bromomethane                | 1.53 | 94  | 11919  | 0.461 ug/L   | 98     |
| 8) Chloroethane                | 1.60 | 64  | 15751  | 0.561 ug/L   | 89     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 32106  | 0.493 ug/L   | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 18529  | 0.512 ug/L   | 98     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 17079  | 0.491 ug/L   | 95     |
| 13) Acetone                    | 2.22 | 43  | 23583  | 4.734 ug/L   | 98     |
| 14) Carbon disulfide           | 2.31 | 76  | 55600  | 0.530 ug/L   | 98     |
| 15) Methyl Acetate             | 2.47 | 43  | 7177   | 0.394 ug/L # | 89     |
| 16) Methylene chloride         | 2.53 | 84  | 47127  | 0.935 ug/L   | 97     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 46401  | 0.494 ug/L   | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 23605  | 0.513 ug/L   | 99     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 42110  | 0.499 ug/L   | 99     |
| 21) 2-Butanone                 | 4.05 | 43  | 37902  | 3.500 ug/L   | 95     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 22448  | 0.483 ug/L # | 92     |
| 23) Bromochloromethane         | 4.30 | 128 | 9741   | 0.463 ug/L   | 95     |
| 25) Chloroform                 | 4.42 | 83  | 48877  | 0.546 ug/L   | 96     |
| 27) 1,2-Dichloroethane         | 5.18 | 62  | 22844  | 0.462 ug/L # | 91     |
| 29) 1,1,1-Trichloroethane      | 4.65 | 97  | 32585  | 0.470 ug/L   | 90     |
| 30) Cyclohexane                | 4.72 | 56  | 33637  | 0.460 ug/L   | 94     |
| 31) Carbon tetrachloride       | 4.87 | 117 | 31170  | 0.496 ug/L   | 94     |
| 33) Benzene                    | 5.15 | 78  | 85192  | 0.488 ug/L   | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 23802  | 0.495 ug/L   | 93     |
| 35) Methylcyclohexane          | 6.17 | 83  | 33003  | 0.461 ug/L   | 99     |
| 37) 1,2-Dichloropropane        | 6.22 | 63  | 20565  | 0.467 ug/L   | 99     |
| 38) Bromodichloromethane       | 6.56 | 83  | 27561  | 0.495 ug/L   | 95     |
| 39) cis-1,3-Dichloropropene    | 7.07 | 75  | 24883  | 0.415 ug/L   | 96     |
| 40) 4-Methyl-2-pentanone       | 7.28 | 43  | 109076 | 4.319 ug/L   | 95     |

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ClientSampleId :  
VSTD0.533

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR103119WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Nov 01 04:50:11 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 42) Toluene                    | 7.43  | 91   | 86353    | 0.476 | ug/L   | 93       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 21265    | 0.446 | ug/L   | 100      |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 13684    | 0.462 | ug/L   | 95       |
| 47) Tetrachloroethene          | 8.02  | 164  | 19804    | 0.489 | ug/L   | 96       |
| 48) 2-Hexanone                 | 8.19  | 43   | 82798    | 4.557 | ug/L   | 89       |
| 49) Dibromochloromethane       | 8.29  | 129  | 16710    | 0.453 | ug/L   | 92       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 13124    | 0.481 | ug/L   | 90       |
| 51) Chlorobenzene              | 8.92  | 112  | 59724    | 0.508 | ug/L   | 100      |
| 52) Ethylbenzene               | 9.05  | 91   | 88204    | 0.457 | ug/L   | 99       |
| 53) m,p-xylene                 | 9.18  | 106  | 34052    | 0.476 | ug/L   | 99       |
| 54) o-xylene                   | 9.59  | 106  | 31088    | 0.446 | ug/L   | 99       |
| 55) Styrene                    | 9.60  | 104  | 50800    | 0.435 | ug/L   | 99       |
| 56) Isopropylbenzene           | 9.97  | 105  | 82467    | 0.442 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 16205    | 0.505 | ug/L # | 93       |
| 59) 1,2,3-Trichloropropane     | 10.31 | 75   | 13204    | 0.505 | ug/L   | 94       |
| 61) Bromoform                  | 9.77  | 173  | 10153    | 0.511 | ug/L   | 96       |
| 62) 1,3-Dichlorobenzene        | 11.22 | 146  | 48141    | 0.540 | ug/L   | 93       |
| 63) 1,4-Dichlorobenzene        | 11.31 | 146  | 49399    | 0.551 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 42209    | 0.509 | ug/L   | 96       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 2485     | 0.575 | ug/L   | 90       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 37063    | 0.520 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 30086    | 0.542 | ug/L   | 98       |
| 69) Naphthalene                | 13.55 | 128  | 43336    | 0.558 | ug/L   | 98       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 27888    | 0.549 | ug/L   | 95       |

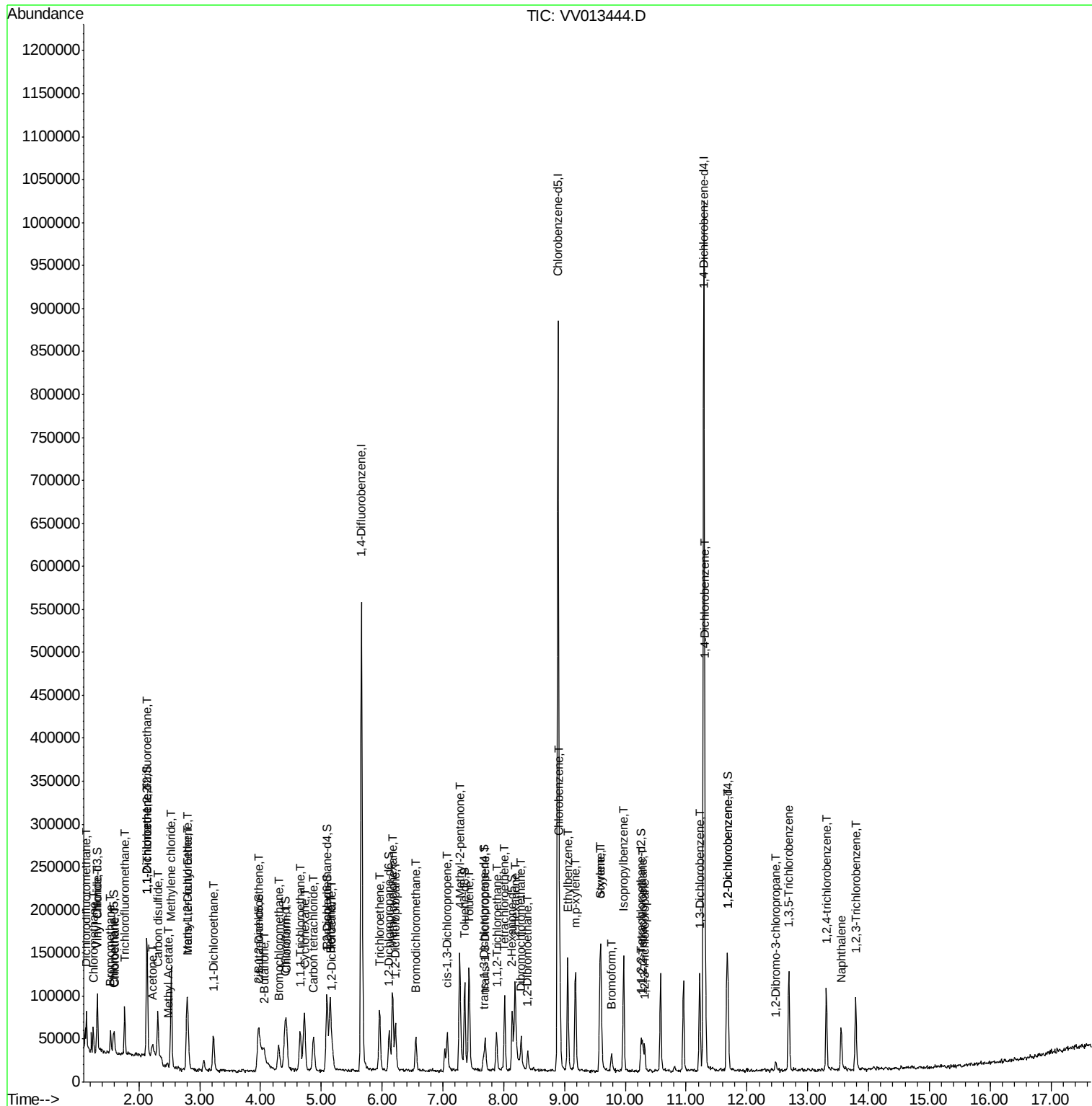
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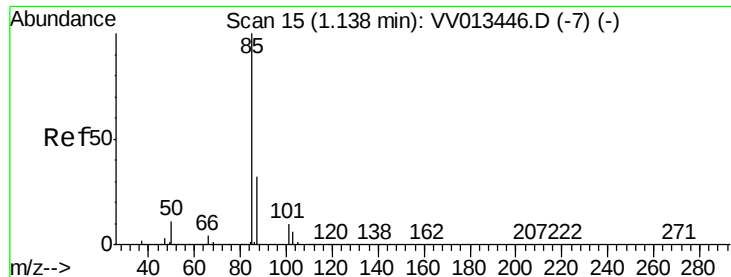
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**ClientSampleId :**  
VSTD0.533

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Quant Title : TRACE VOA SOM01.0  
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#2

Dichlorodifluoromethane

Concen: 0.487 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

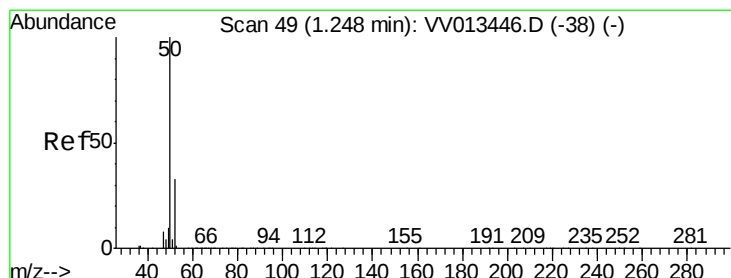
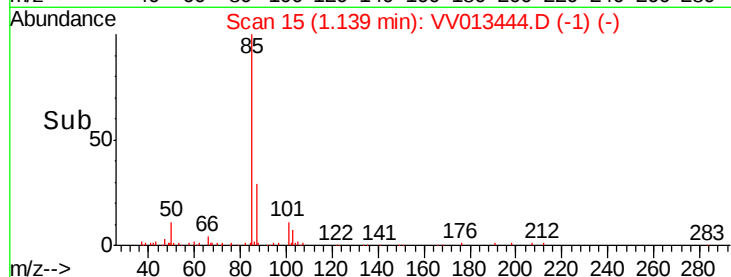
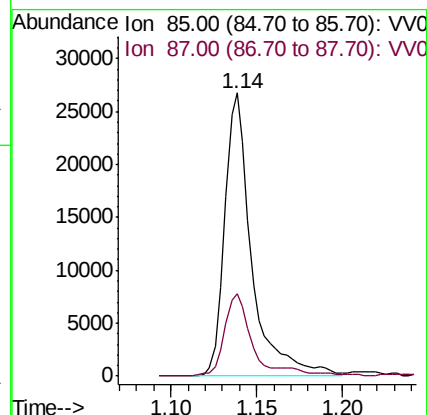
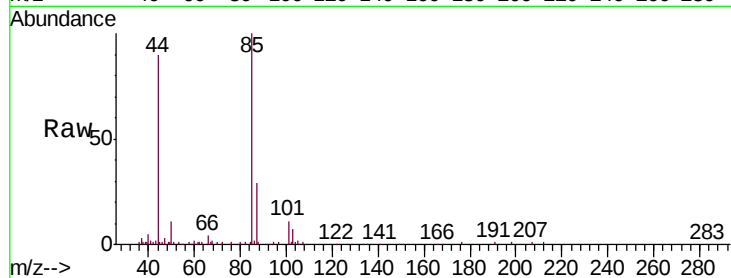
VSTD0.533

Tgt Ion: 85 Resp: 29513

Ion Ratio Lower Upper

85 100

87 27.9 25.6 38.4



#3

Chloromethane

Concen: 0.456 ug/L

RT: 1.25 min Scan# 49

Delta R.T. 0.00 min

Lab File: VV013444.D

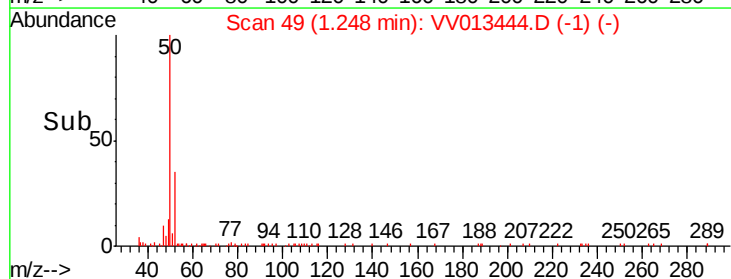
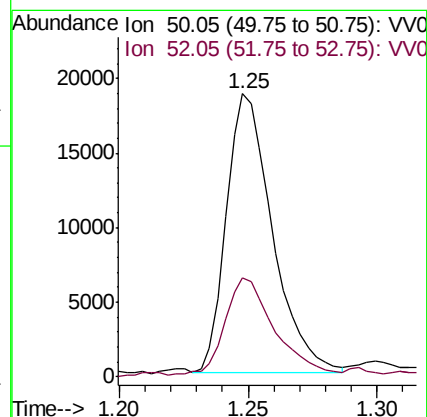
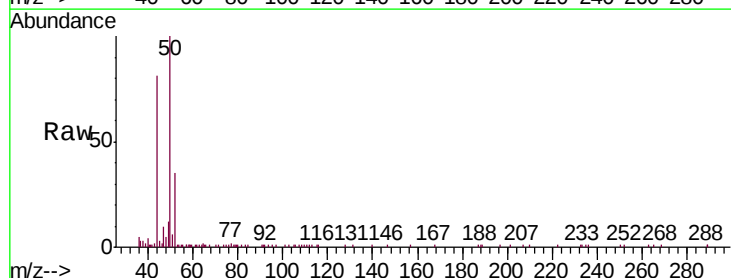
Acq: 31 Oct 2019 13:34

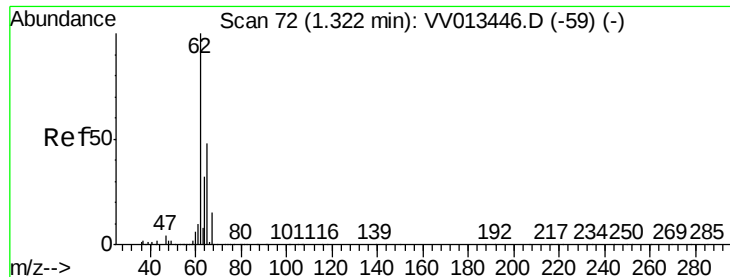
Tgt Ion: 50 Resp: 23221

Ion Ratio Lower Upper

50 100

52 34.8 23.4 43.6





#5

Vinyl chloride

Concen: 0.472 ug/L

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

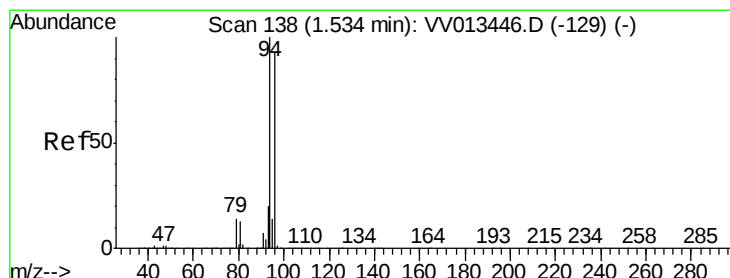
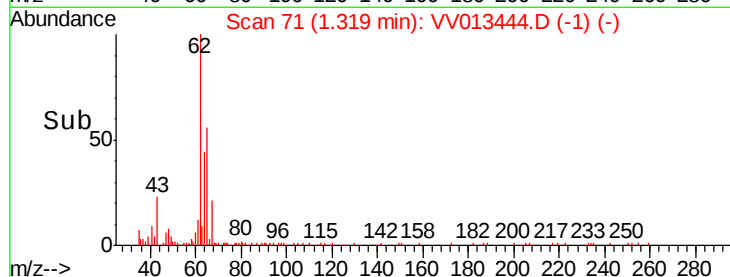
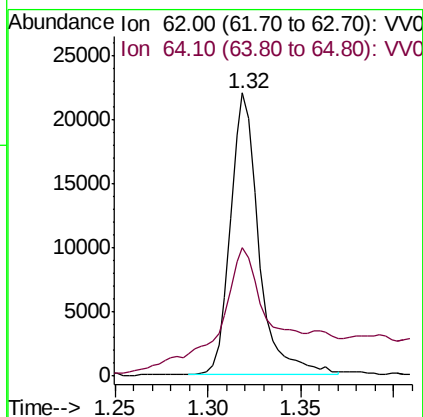
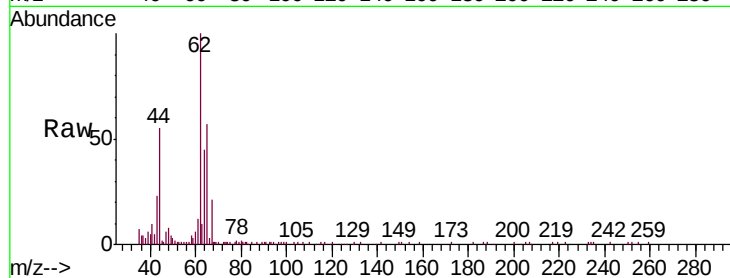
VSTD0.533

Tgt Ion: 62 Resp: 23398

Ion Ratio Lower Upper

62 100

64 45.2 23.1 42.9#



#6

Bromomethane

Concen: 0.461 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV013444.D

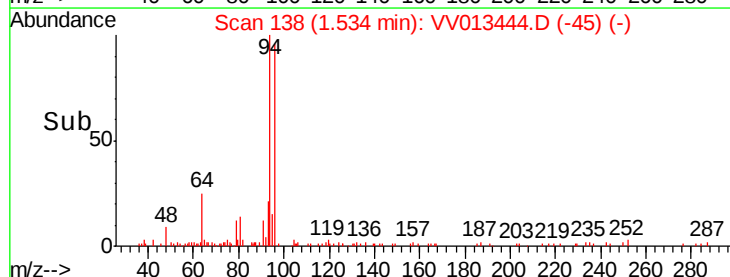
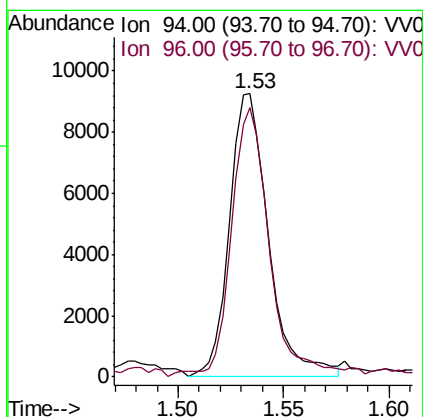
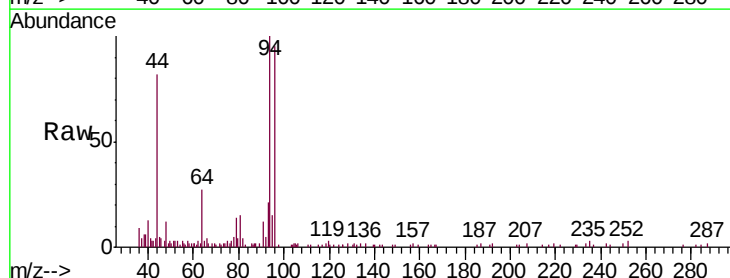
Acq: 31 Oct 2019 13:34

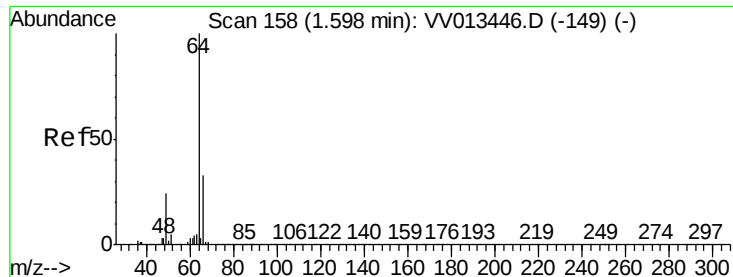
Tgt Ion: 94 Resp: 11919

Ion Ratio Lower Upper

94 100

96 95.0 65.2 121.2





#8

Chloroethane

Concen: 0.561 ug/L

RT: 1.60 min Scan# 157

Delta R.T. -0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

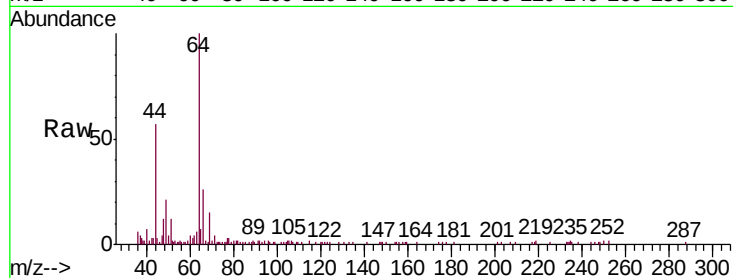
VSTD0.533

Tgt Ion: 64 Resp: 15751

Ion Ratio Lower Upper

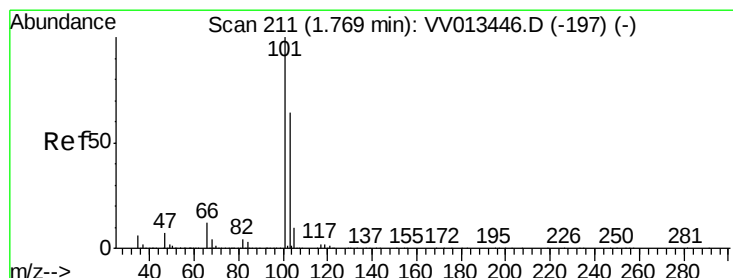
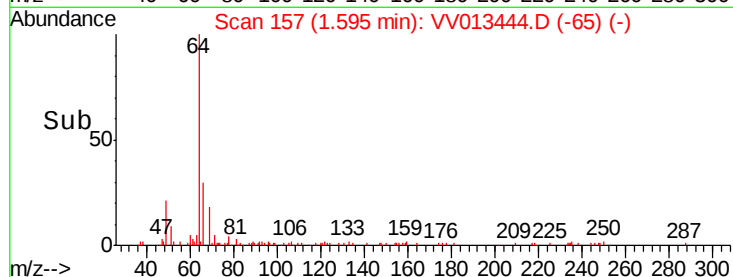
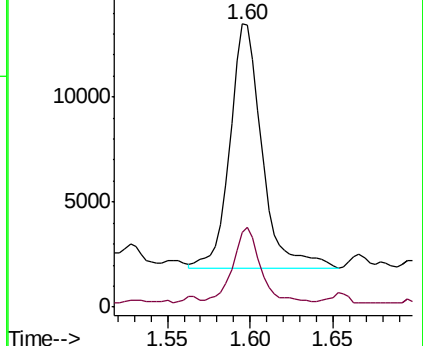
64 100

66 26.4 22.8 42.4



Abundance Ion 64.10 (63.80 to 64.80): VV013444.D (-157) (-)

Ion 66.05 (65.75 to 66.75): VV013444.D (-157) (-)



#9

Trichlorofluoromethane

Concen: 0.493 ug/L

RT: 1.77 min Scan# 210

Delta R.T. -0.00 min

Lab File: VV013444.D

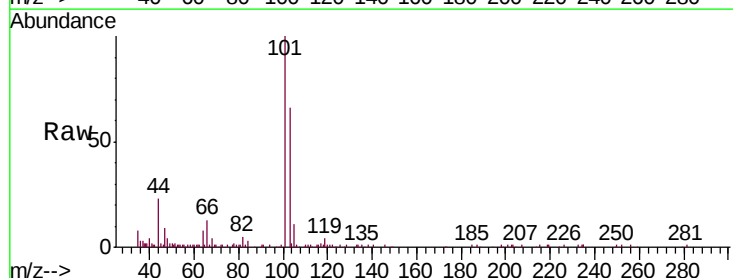
Acq: 31 Oct 2019 13:34

Tgt Ion: 101 Resp: 32106

Ion Ratio Lower Upper

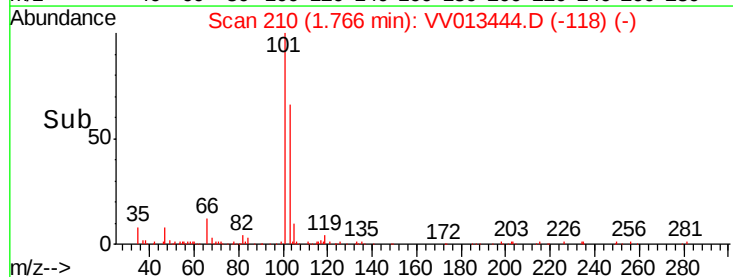
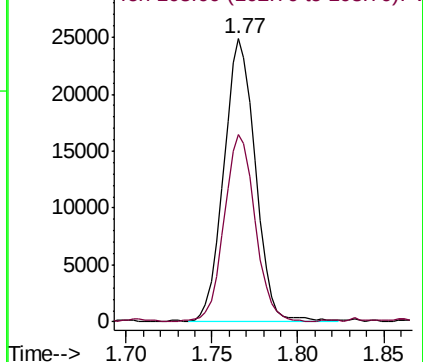
101 100

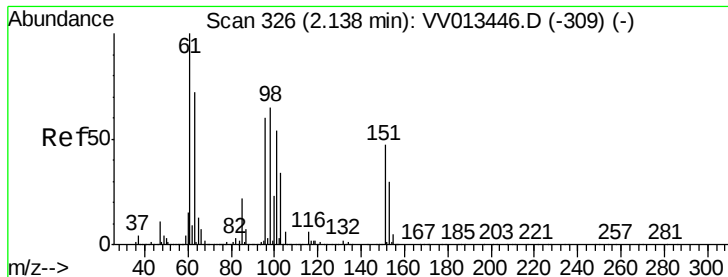
103 64.9 52.1 78.1



Abundance Ion 101.00 (100.70 to 101.70): VV013444.D (-210) (-)

Ion 103.00 (102.70 to 103.70): VV013444.D (-210) (-)





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.512 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

VSTD0.533

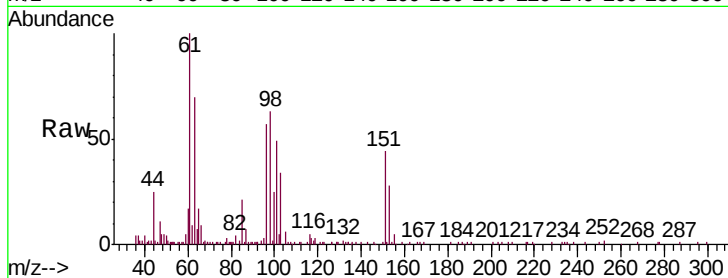
Tgt Ion: 101 Resp: 18529

Ion Ratio Lower Upper

101 100

85 42.6 33.1 49.7

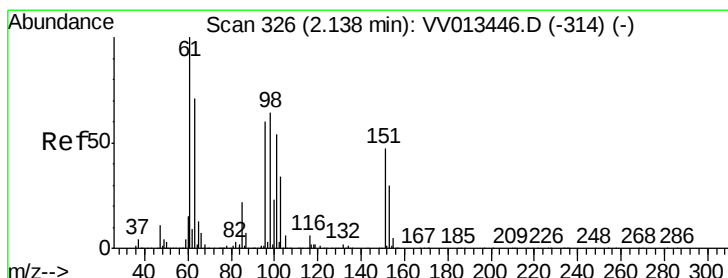
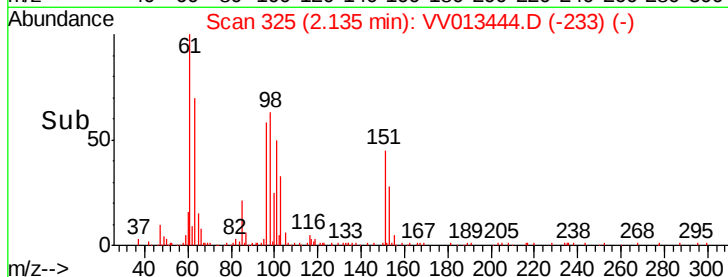
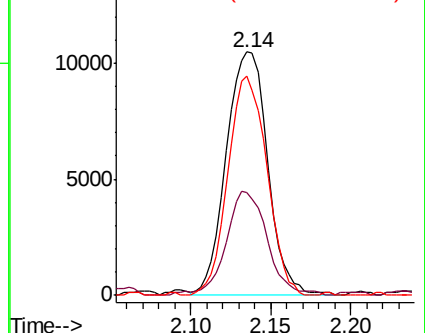
151 84.5 68.8 103.2



Abundance Ion 101.00 (100.70 to 101.70): VV013444.D (-309) (-)

Ion 85.00 (84.70 to 85.70): VV013444.D (-309) (-)

Ion 151.00 (150.70 to 151.70): VV013444.D (-309) (-)



#12

1,1-Dichloroethene

Concen: 0.491 ug/L

RT: 2.14 min Scan# 325

Delta R.T. -0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

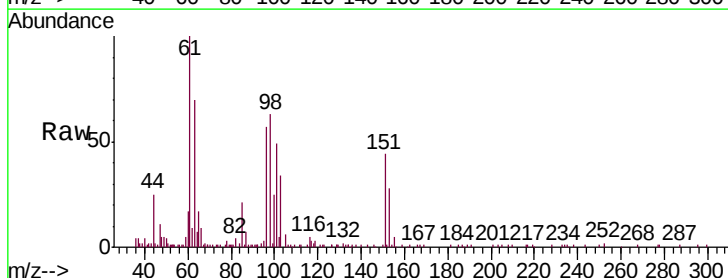
Tgt Ion: 96 Resp: 17079

Ion Ratio Lower Upper

96 100

61 175.6 117.1 217.5

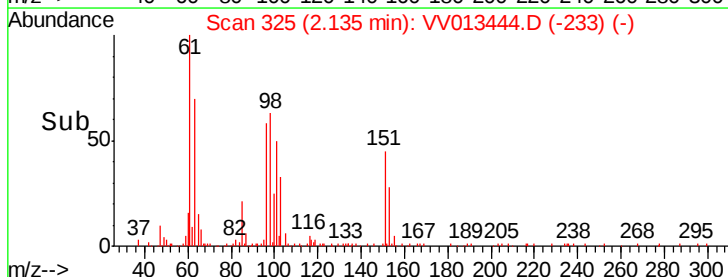
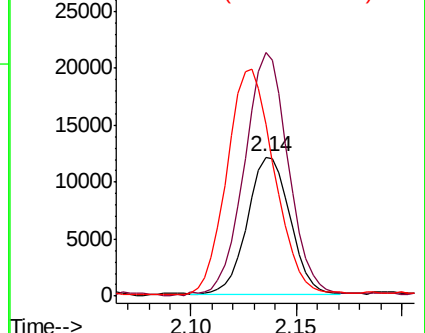
63 123.7 84.1 156.3

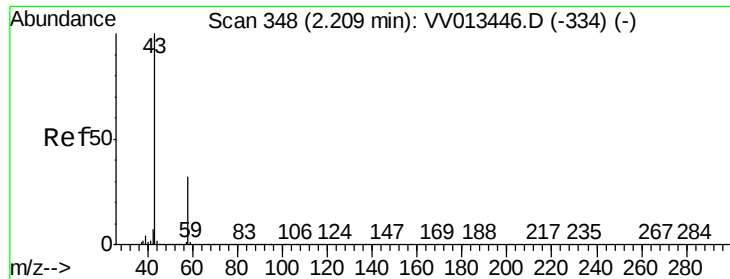


Abundance Ion 96.00 (95.70 to 96.70): VV013444.D (-314) (-)

Ion 61.05 (60.75 to 61.75): VV013444.D (-314) (-)

Ion 63.00 (62.70 to 63.70): VV013444.D (-314) (-)





#13

Acetone

Concen: 4.734 ug/L

RT: 2.22 min Scan# 351

Delta R.T. 0.01 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

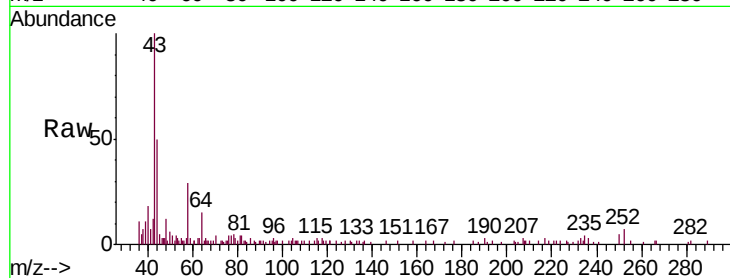
VSTD0.533

Tgt Ion: 43 Resp: 23583

Ion Ratio Lower Upper

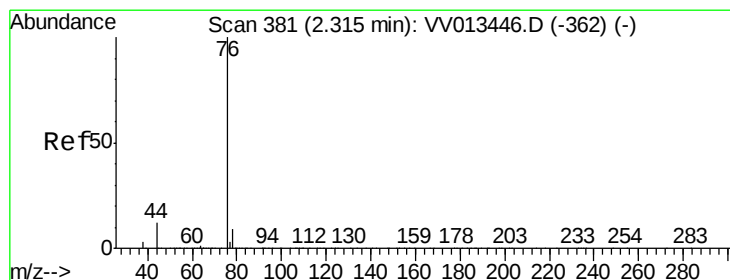
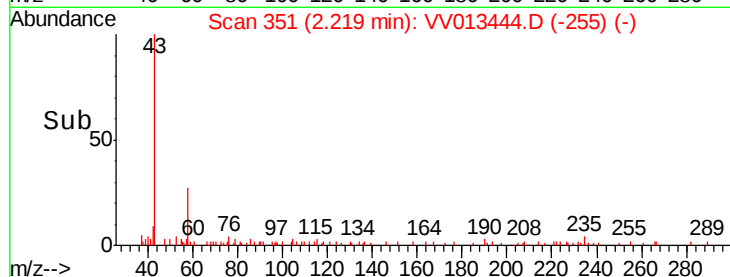
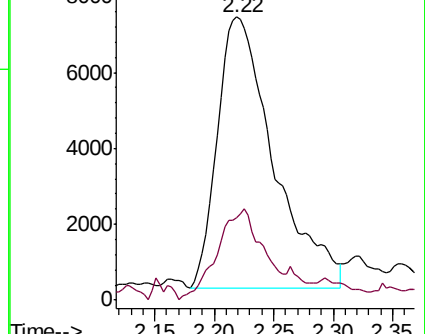
43 100

58 27.8 0.0 58.0



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0



#14

Carbon disulfide

Concen: 0.530 ug/L

RT: 2.31 min Scan# 380

Delta R.T. -0.00 min

Lab File: VV013444.D

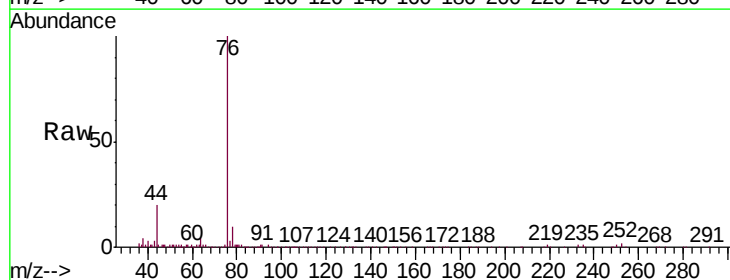
Acq: 31 Oct 2019 13:34

Tgt Ion: 76 Resp: 55600

Ion Ratio Lower Upper

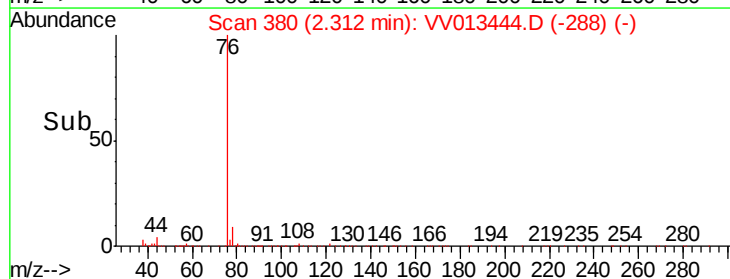
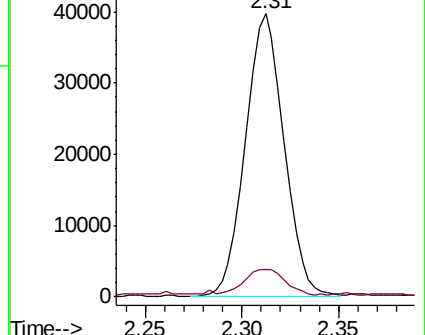
76 100

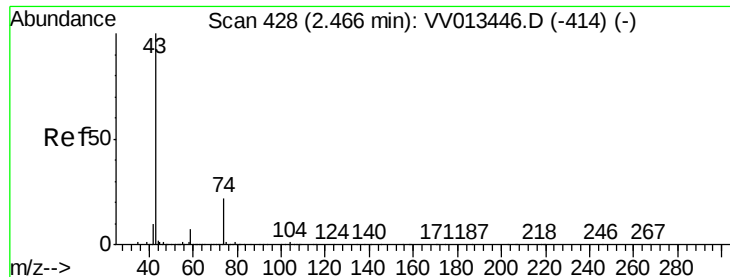
78 9.9 7.4 11.0



Abundance Ion 76.05 (75.75 to 76.75): VV0

Ion 78.00 (77.70 to 78.70): VV0





#15

Methyl Acetate

Concen: 0.394 ug/L

RT: 2.47 min Scan# 428

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

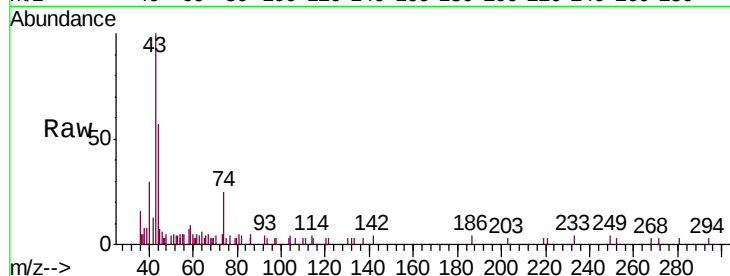
VSTD0.533

Tgt Ion: 43 Resp: 7177

Ion Ratio Lower Upper

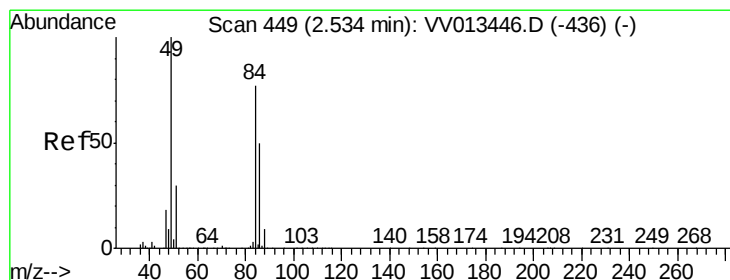
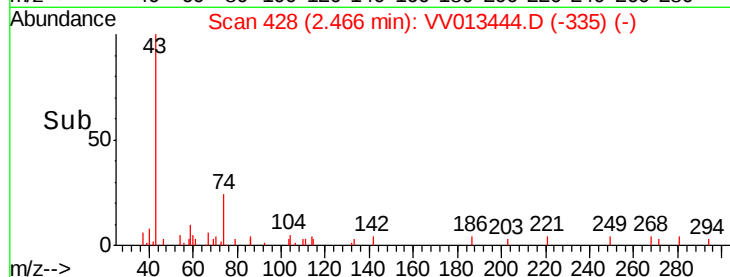
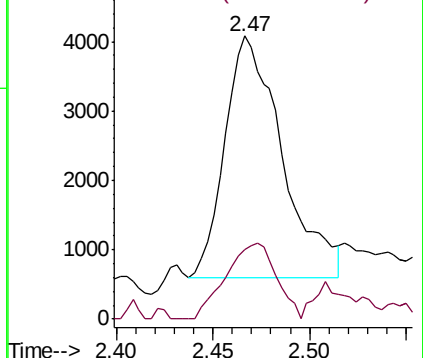
43 100

74 27.7 17.8 26.8#



Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 74.05 (73.75 to 74.75): VV0



#16

Methylene chloride

Concen: 0.935 ug/L

RT: 2.53 min Scan# 448

Delta R.T. -0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

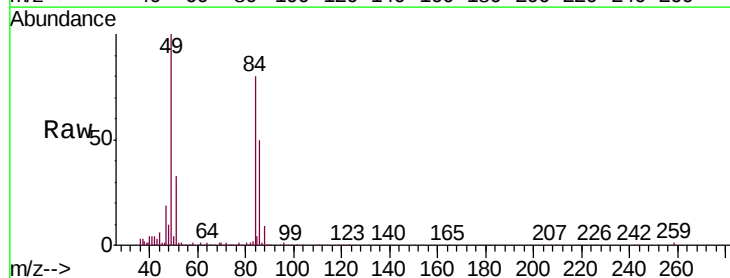
Tgt Ion: 84 Resp: 47127

Ion Ratio Lower Upper

84 100

86 62.6 45.3 84.1

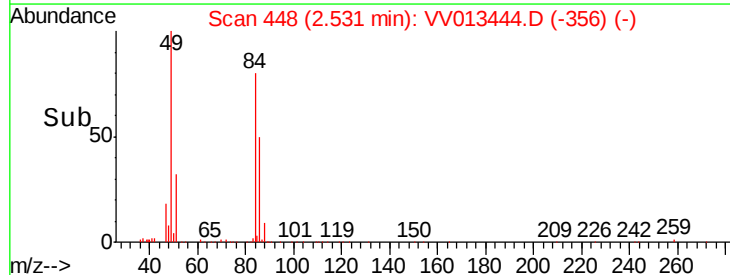
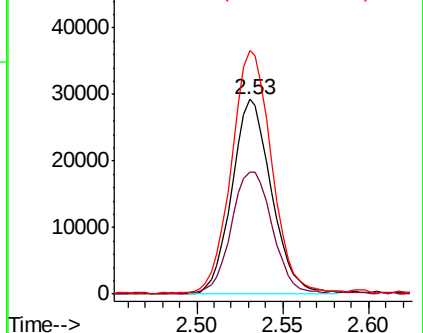
49 125.2 90.4 168.0

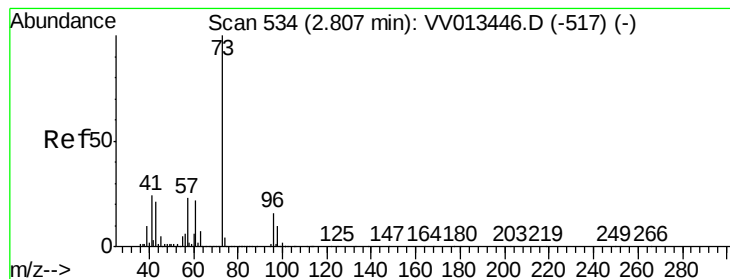


Abundance Ion 84.05 (83.75 to 84.75): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.10 (48.80 to 49.80): VV0



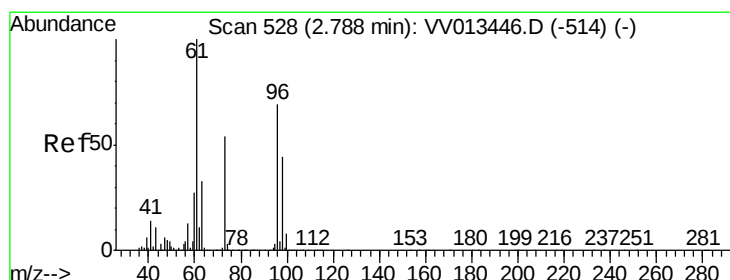
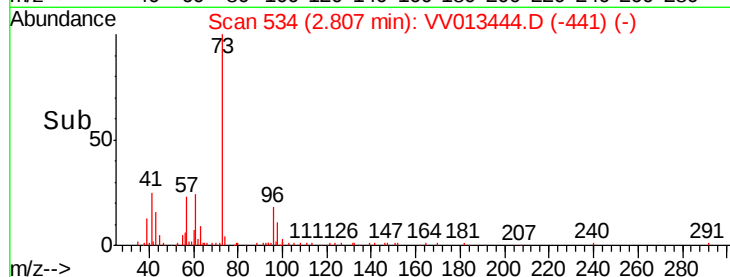
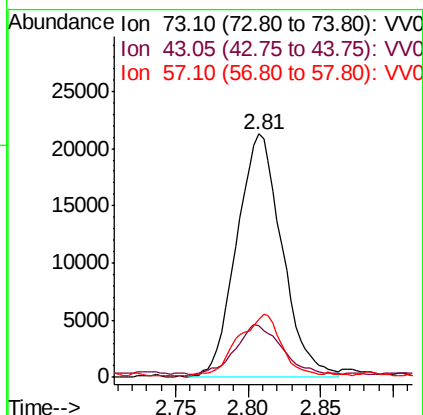
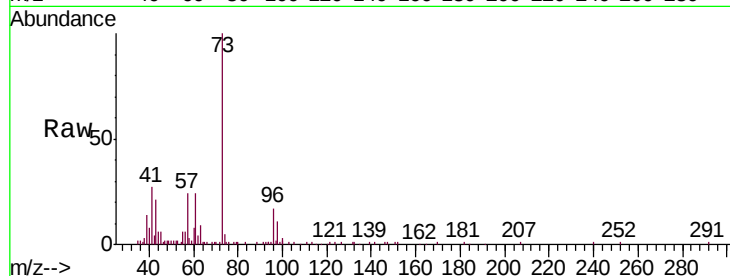


#17

Methyl tert-butyl Ether  
 Concen: 0.494 ug/L  
 RT: 2.81 min Scan# 534  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD0.533

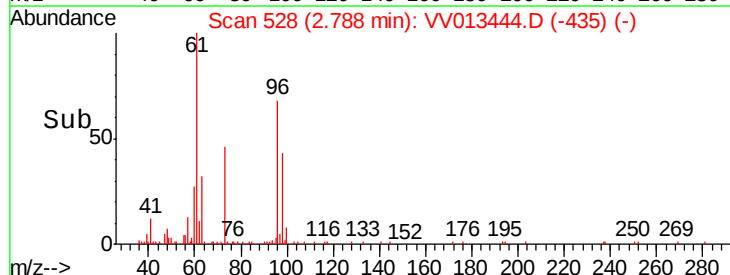
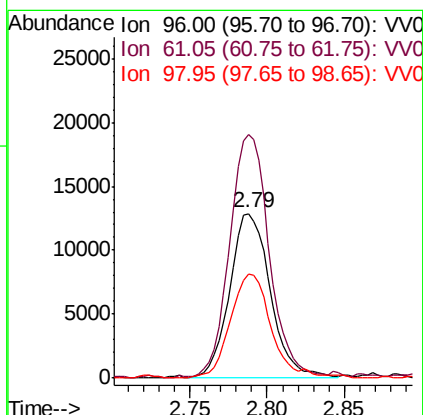
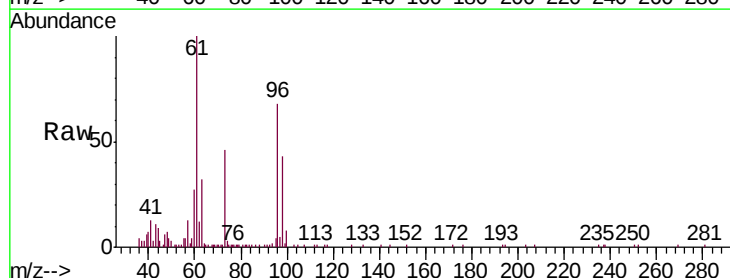
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 43      | 20.0  | 15.9  | 23.9  |
| 57      | 24.1  | 18.5  | 27.7  |

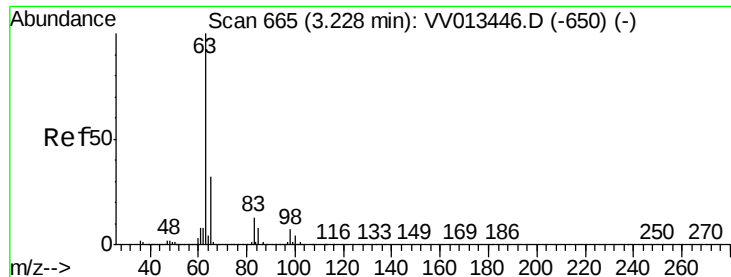


#18

trans-1,2-Dichloroethene  
 Concen: 0.513 ug/L  
 RT: 2.79 min Scan# 528  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 147.7 | 102.2 | 189.8 |
| 98      | 63.3  | 44.9  | 83.5  |





#19

1,1-Dichloroethane

Concen: 0.499 ug/L

RT: 3.23 min Scan# 664

Delta R.T. -0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

VSTD0.533

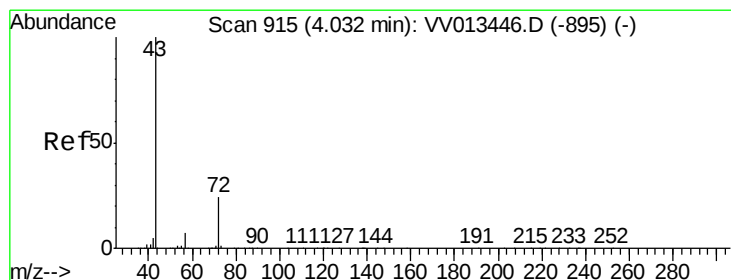
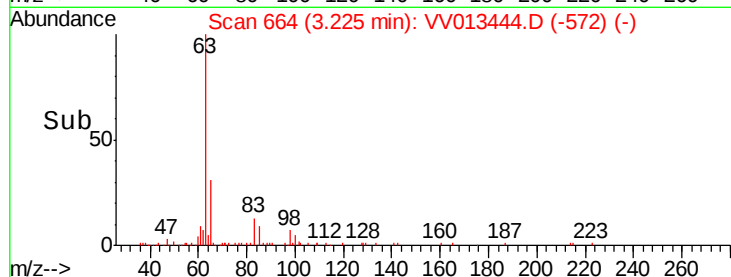
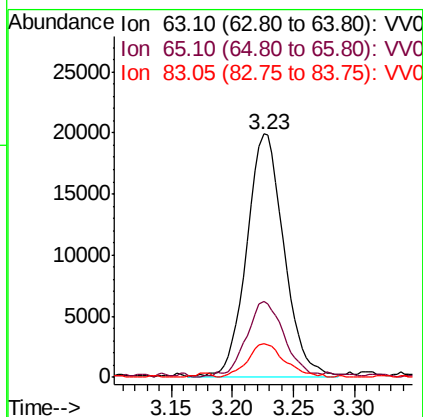
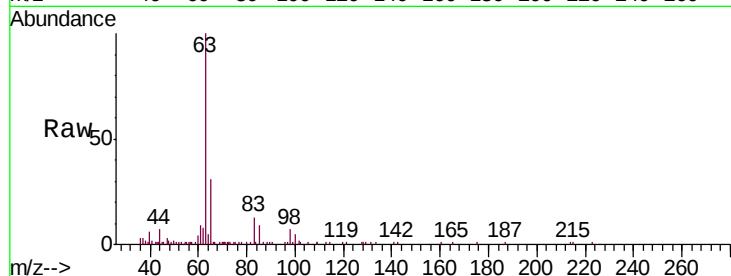
Tgt Ion: 63 Resp: 42110

Ion Ratio Lower Upper

63 100

65 31.4 22.5 41.7

83 13.6 9.1 16.9



#21

2-Butanone

Concen: 3.500 ug/L

RT: 4.05 min Scan# 922

Delta R.T. 0.02 min

Lab File: VV013444.D

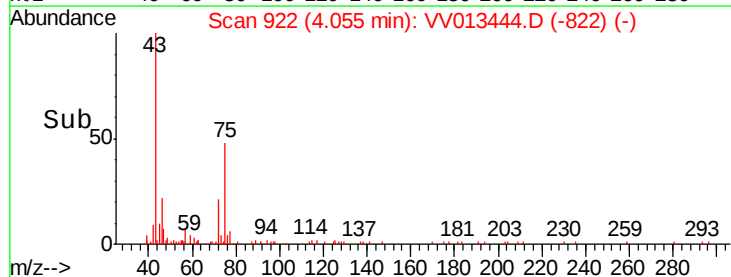
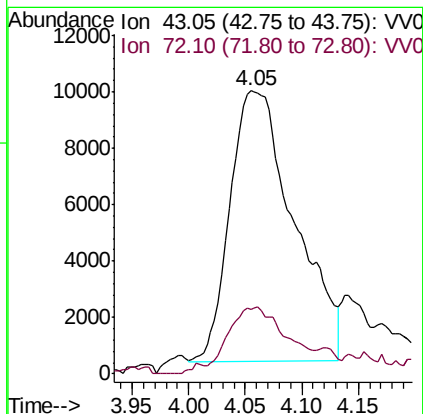
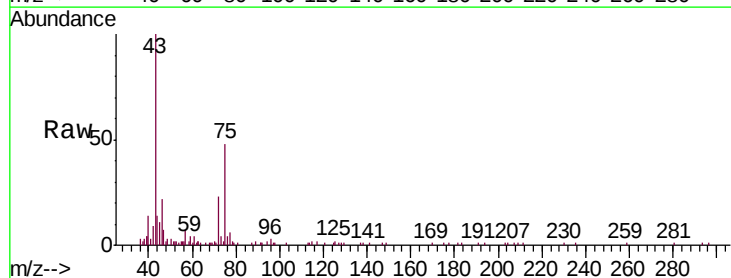
Acq: 31 Oct 2019 13:34

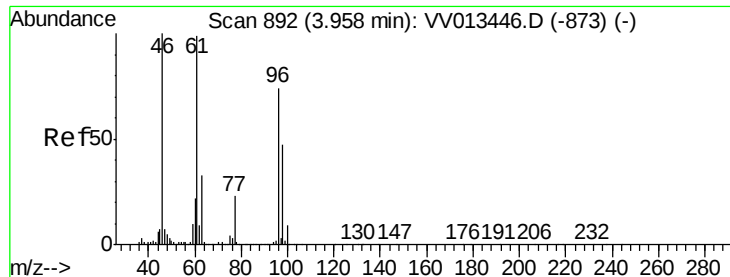
Tgt Ion: 43 Resp: 37902

Ion Ratio Lower Upper

43 100

72 19.5 10.9 32.7



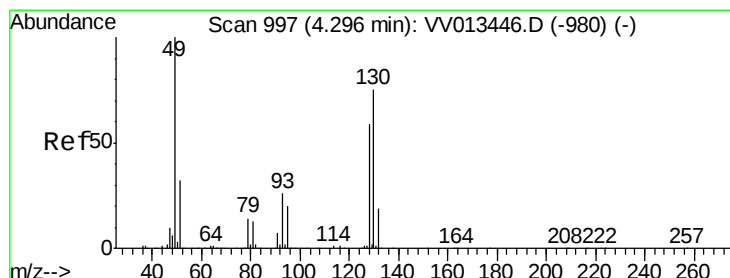
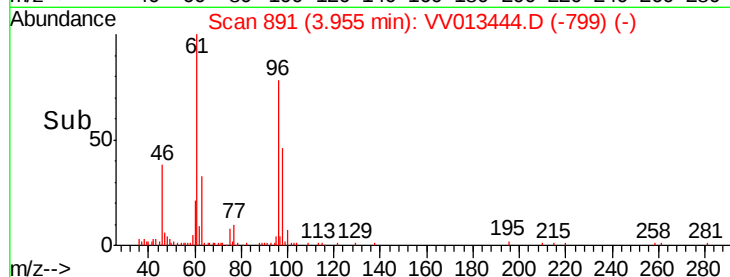
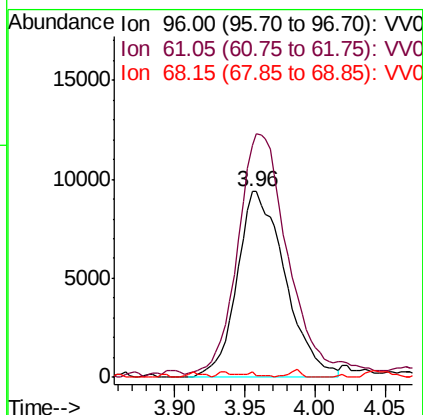
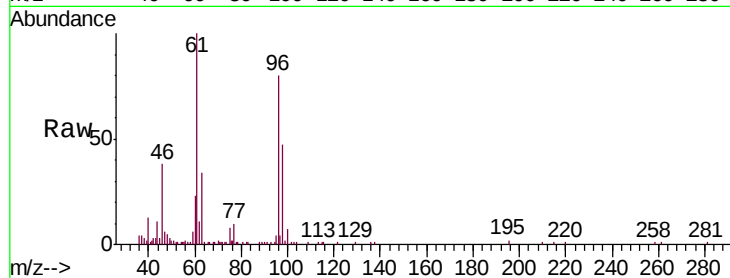


#22

cis-1,2-Dichloroethene  
 Concen: 0.483 ug/L  
 RT: 3.96 min Scan# 891  
 Delta R.T. -0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

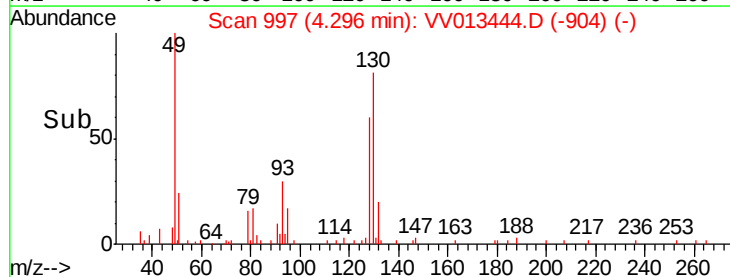
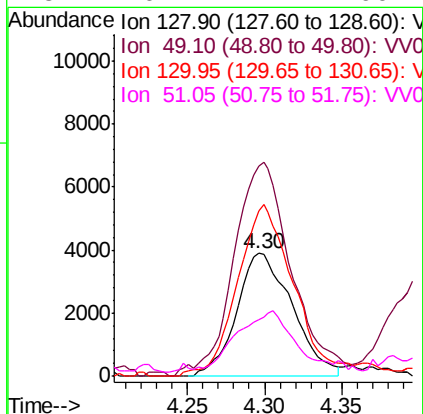
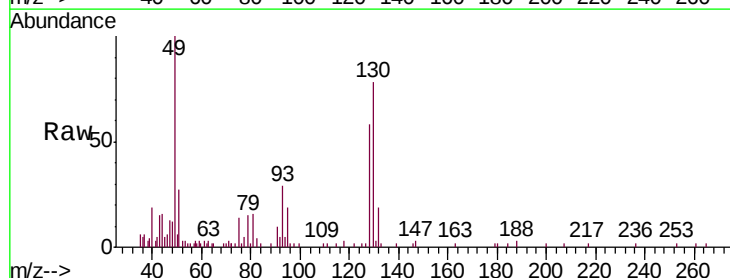
Tgt Ion: 96 Resp: 22448  
 Ion Ratio Lower Upper  
 96 100  
 61 125.0 94.2 175.0  
 68 2.7 0.1 0.3#

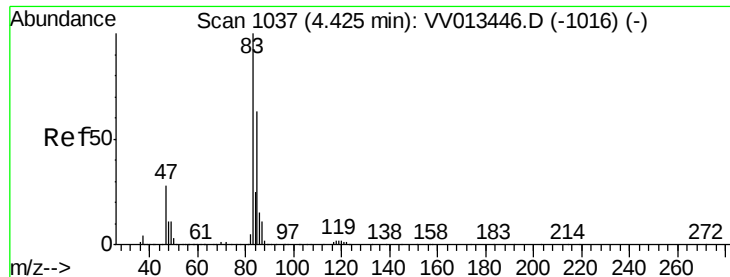


#23

Bromochloromethane  
 Concen: 0.463 ug/L  
 RT: 4.30 min Scan# 997  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Tgt Ion: 128 Resp: 9741  
 Ion Ratio Lower Upper  
 128 100  
 49 171.5 118.8 220.6  
 130 134.5 89.0 165.4  
 51 46.1 44.2 66.2





#25

Chloroform

Concen: 0.546 ug/L

RT: 4.42 min Scan# 1037

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

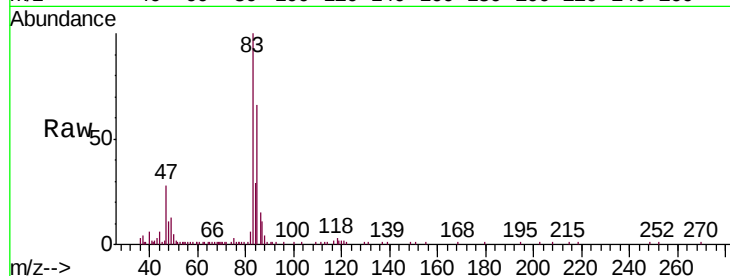
VSTD0.533

Tgt Ion: 83 Resp: 48877

Ion Ratio Lower Upper

83 100

85 66.4 44.1 81.9



Abundance Ion 83.05 (82.75 to 83.75): VV0

Ion 85.00 (84.70 to 85.70): VV0

20000

15000

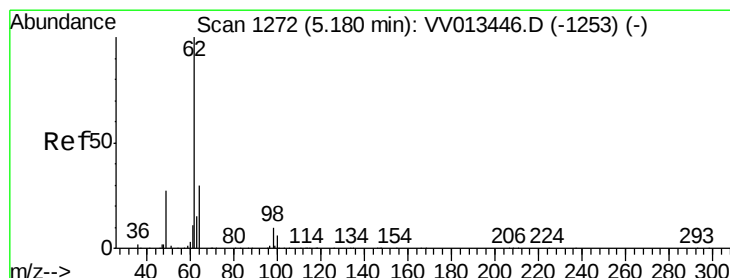
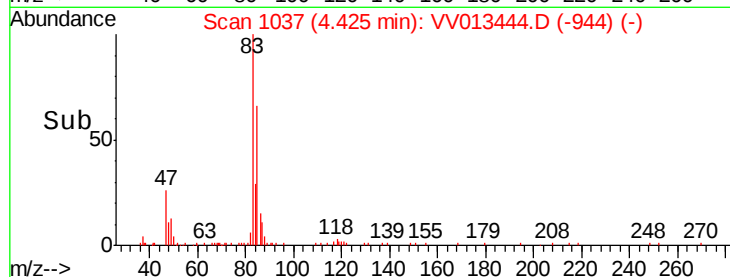
10000

5000

0

4.35 4.40 4.45 4.50

Time-->



#27

1,2-Dichloroethane

Concen: 0.462 ug/L

RT: 5.18 min Scan# 1272

Delta R.T. 0.00 min

Lab File: VV013444.D

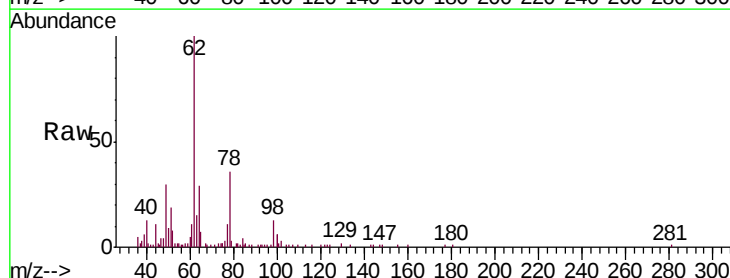
Acq: 31 Oct 2019 13:34

Tgt Ion: 62 Resp: 22844

Ion Ratio Lower Upper

62 100

98 12.8 7.7 11.5#



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 98.05 (97.75 to 98.75): VV0

12000

10000

8000

6000

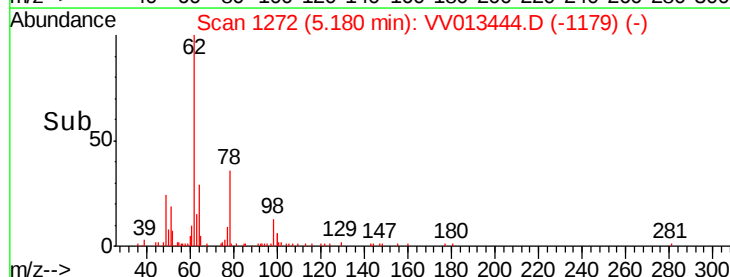
4000

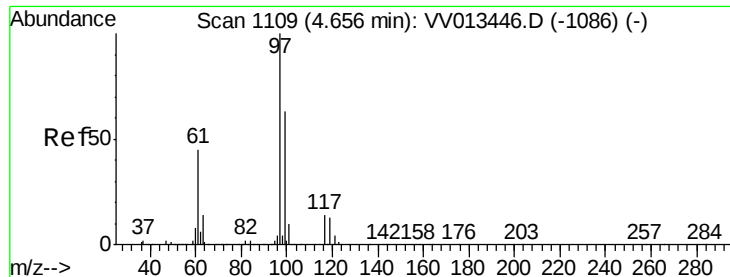
2000

0

5.10 5.15 5.20 5.25

Time-->

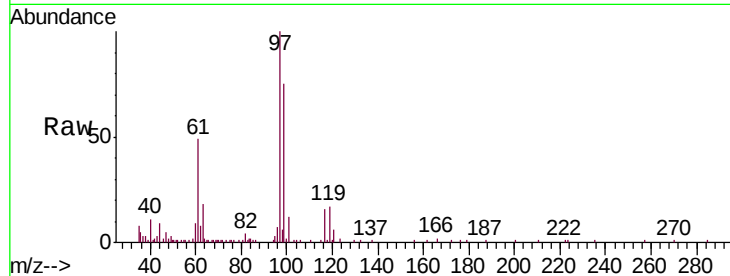




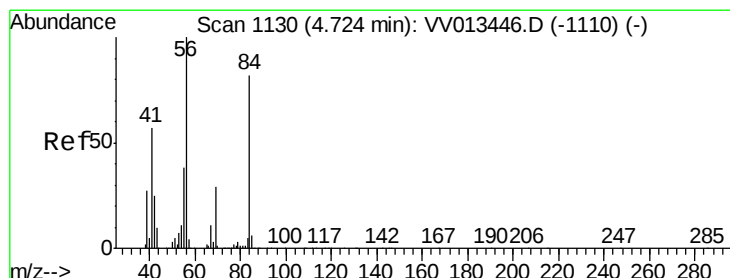
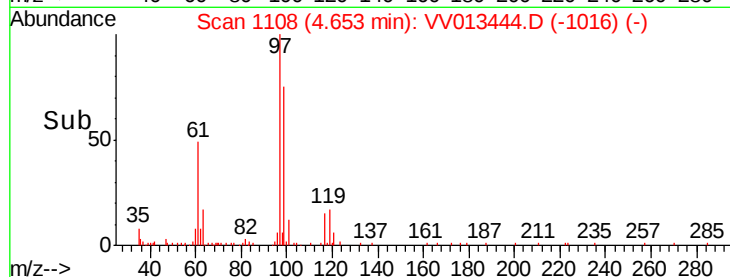
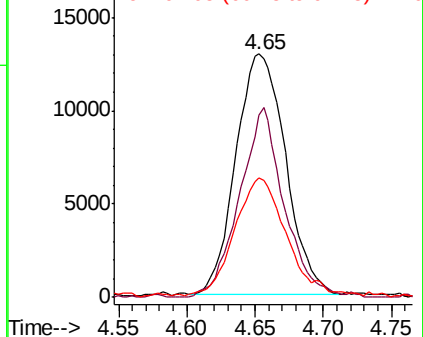
#29  
1,1,1-Trichloroethane  
Concen: 0.470 ug/L  
RT: 4.65 min Scan# 1108  
Delta R.T. -0.00 min  
Lab File: VV013444.D  
Acq: 31 Oct 2019 13:34

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD0.533

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 71.0  | 51.5  | 77.3  |
| 61      | 52.7  | 35.8  | 53.8  |

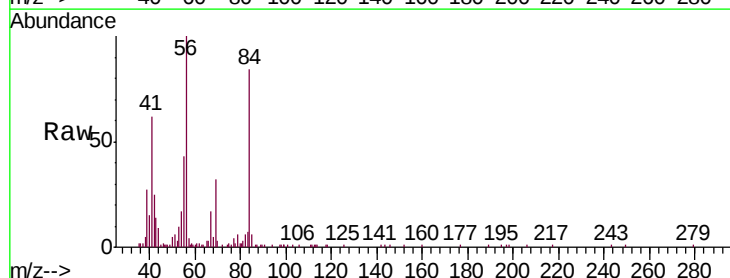


Abundance Ion 96.95 (96.65 to 97.65): VV0  
Ion 99.05 (98.75 to 99.75): VV0  
Ion 61.05 (60.75 to 61.75): VV0

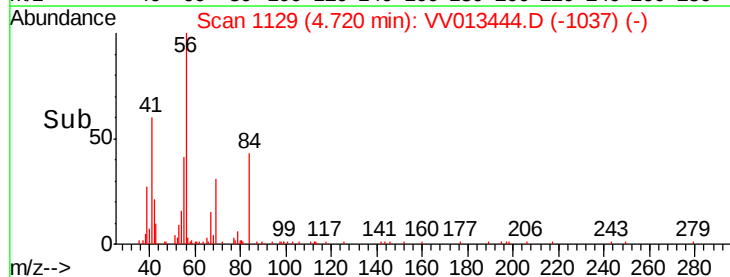
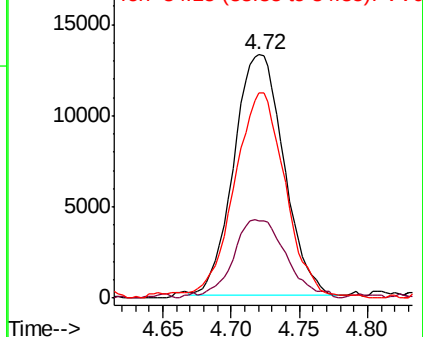


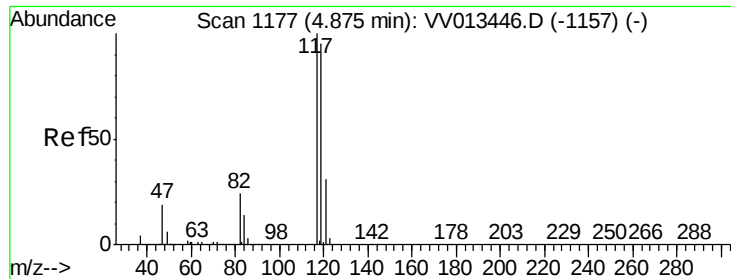
#30  
Cyclohexane  
Concen: 0.460 ug/L  
RT: 4.72 min Scan# 1129  
Delta R.T. -0.00 min  
Lab File: VV013444.D  
Acq: 31 Oct 2019 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 56      | 100   |       |       |
| 69      | 34.2  | 23.0  | 34.6  |
| 84      | 88.0  | 66.6  | 100.0 |



Abundance Ion 56.10 (55.80 to 56.80): VV0  
Ion 69.15 (68.85 to 69.85): VV0  
Ion 84.15 (83.85 to 84.85): VV0

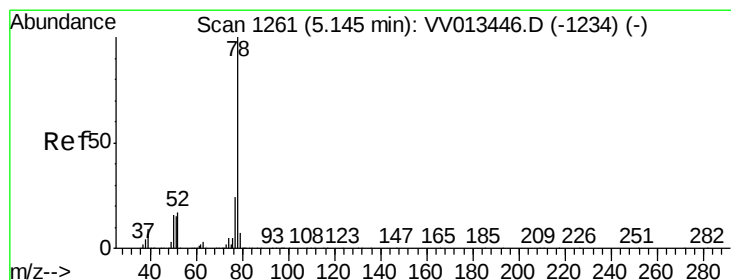
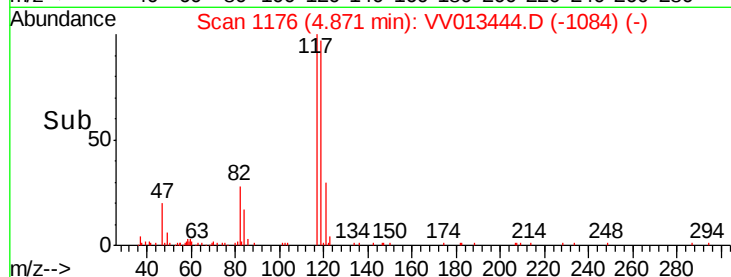
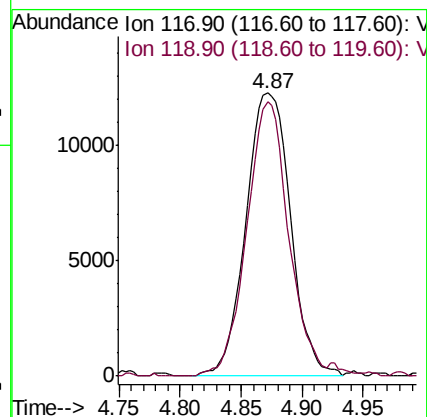
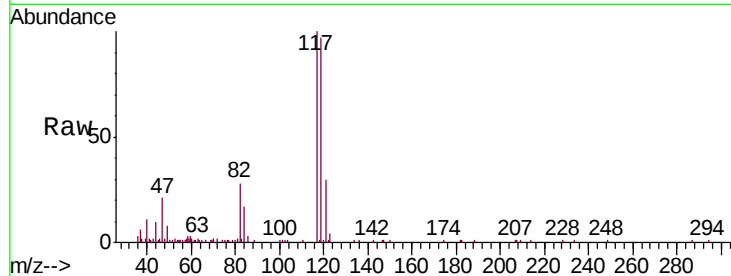




#31  
Carbon tetrachloride  
Concen: 0.496 ug/L  
RT: 4.87 min Scan# 1176  
Delta R.T. -0.00 min  
Lab File: VV013444.D  
Acq: 31 Oct 2019 13:34

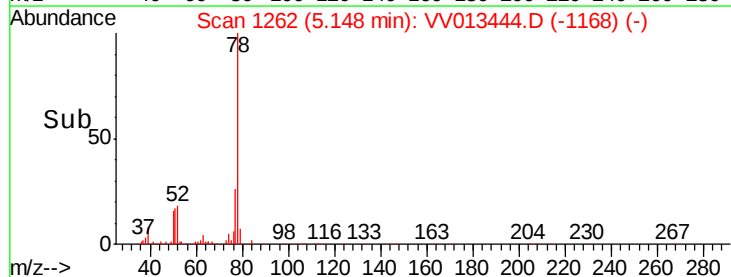
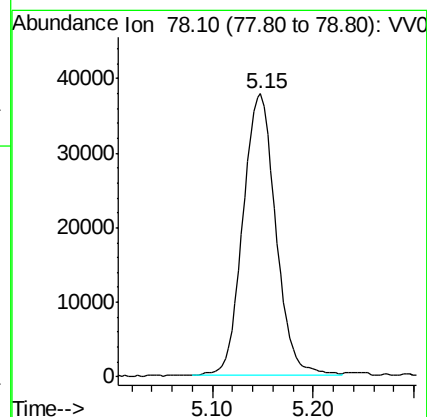
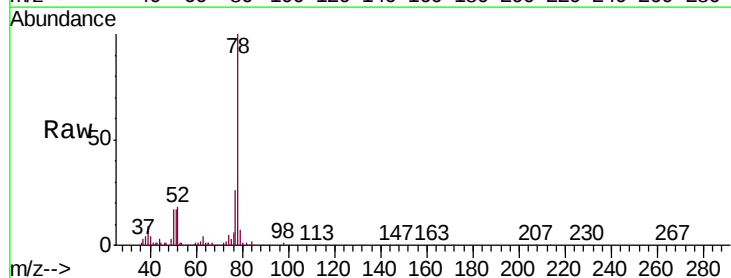
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD0.533

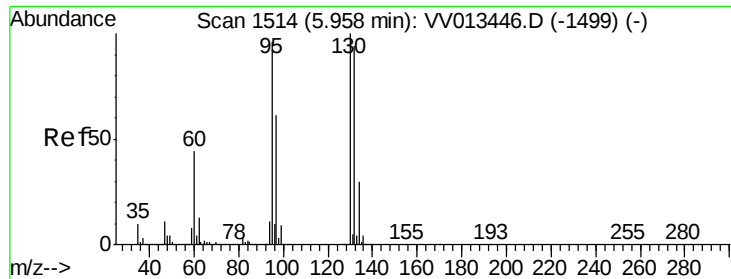
Tgt Ion:117 Resp: 31170  
Ion Ratio Lower Upper  
117 100  
119 90.4 76.8 115.2



#33  
Benzene  
Concen: 0.488 ug/L  
RT: 5.15 min Scan# 1262  
Delta R.T. 0.00 min  
Lab File: VV013444.D  
Acq: 31 Oct 2019 13:34

Tgt Ion: 78 Resp: 85192





#34

Trichloroethene

Concen: 0.495 ug/L

RT: 5.96 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

VSTD0.533

Tgt Ion: 95 Resp: 23802

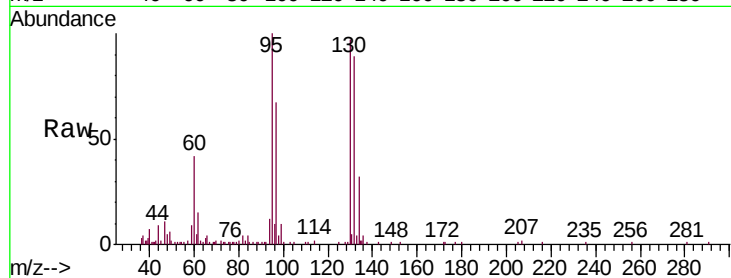
Ion Ratio Lower Upper

95 100

97 67.4 44.2 82.2

132 89.1 68.4 127.0

130 97.0 72.9 135.5

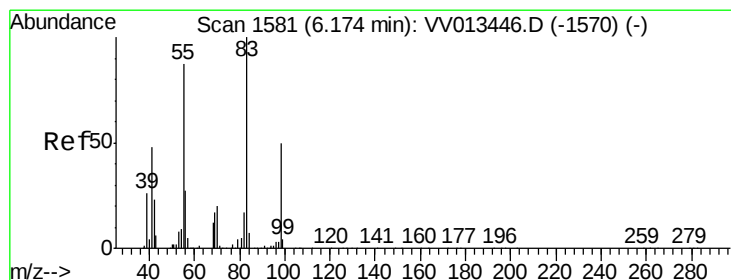
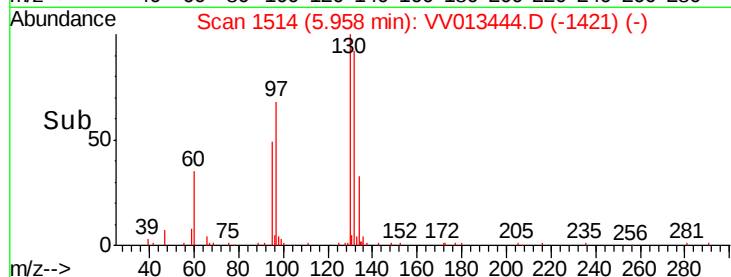
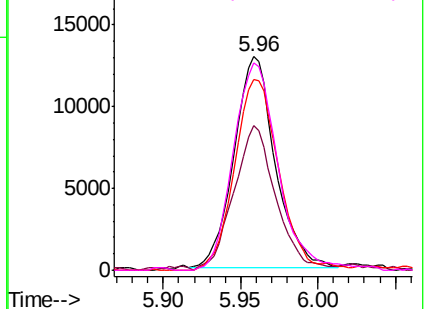


Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0



#35

Methylcyclohexane

Concen: 0.461 ug/L

RT: 6.17 min Scan# 1581

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

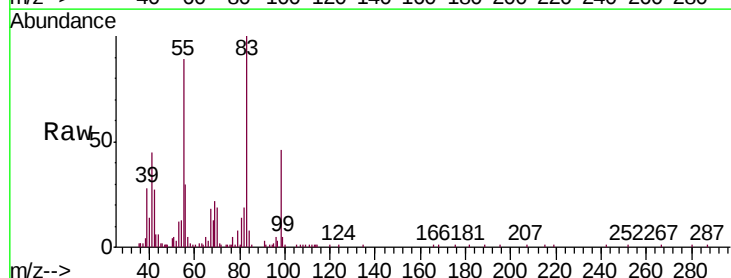
Tgt Ion: 83 Resp: 33003

Ion Ratio Lower Upper

83 100

55 81.9 64.6 96.8

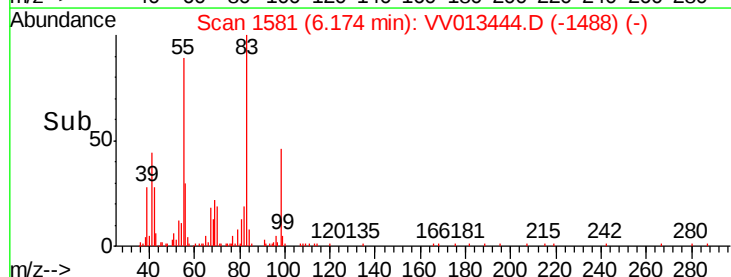
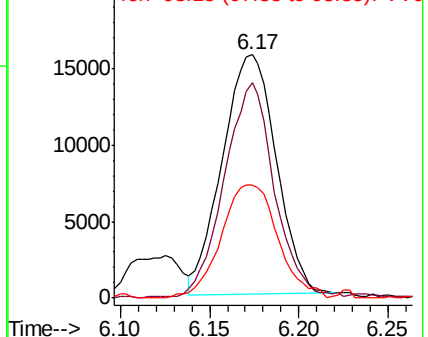
98 49.8 39.1 58.7

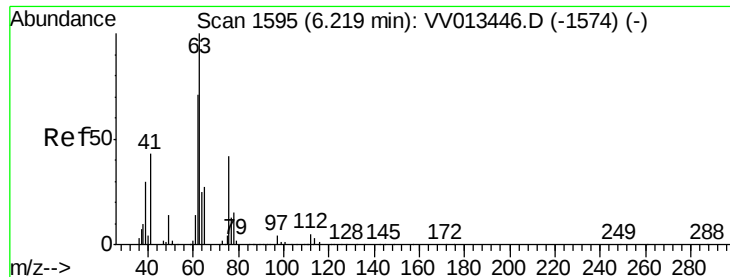


Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0





#37

1,2-Dichloropropane

Concen: 0.467 ug/L

RT: 6.22 min Scan# 1595

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampled :

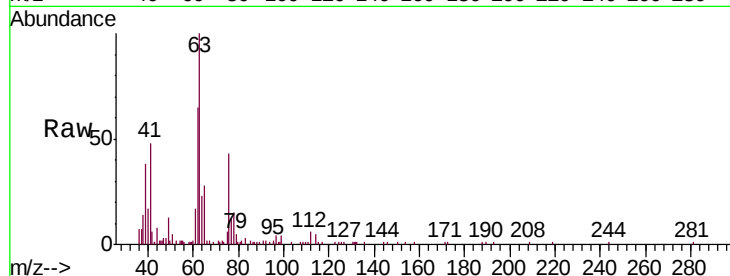
VSTD0.533

Tgt Ion: 63 Resp: 20565

Ion Ratio Lower Upper

63 100

112 5.0 3.8 5.8



Abundance Ion 63.10 (62.80 to 63.80): VV013444.D (-1574) (-)

Ion 112.10 (111.80 to 112.80): VV013444.D (-1574) (-)

6.22

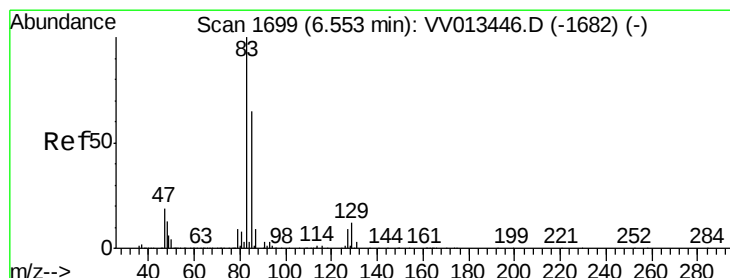
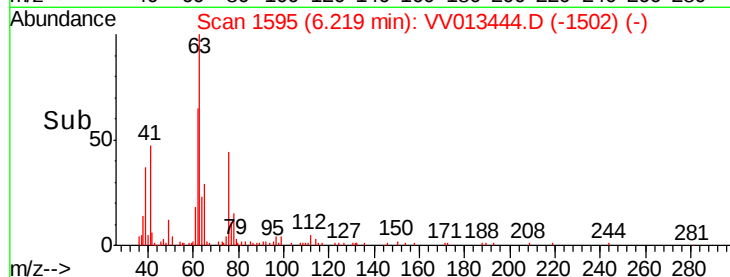
10000

5000

0

6.15 6.20 6.25 6.30

Time-->



#38

Bromodichloromethane

Concen: 0.495 ug/L

RT: 6.56 min Scan# 1700

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

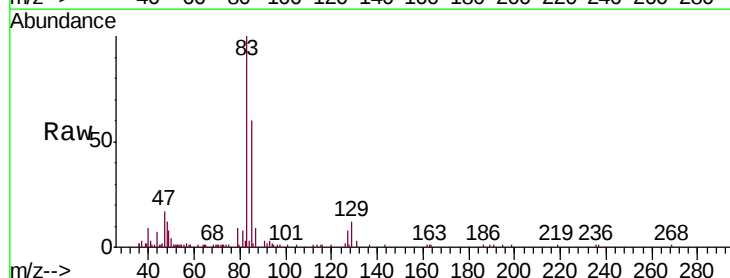
Tgt Ion: 83 Resp: 27561

Ion Ratio Lower Upper

83 100

85 59.9 45.1 83.9

127 8.1 7.0 10.4



Abundance Ion 82.95 (82.65 to 83.65): VV013444.D (-1682) (-)

Ion 85.00 (84.70 to 85.70): VV013444.D (-1682) (-)

Ion 126.90 (126.60 to 127.60): VV013444.D (-1682) (-)

6.56

20000

15000

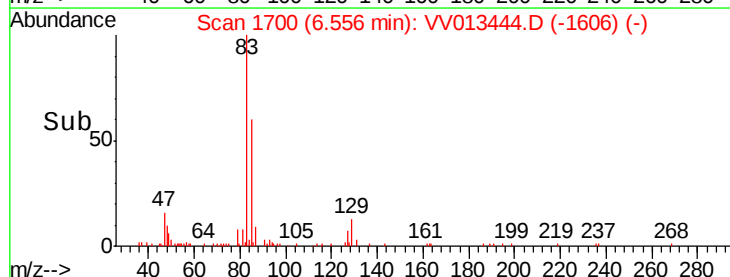
10000

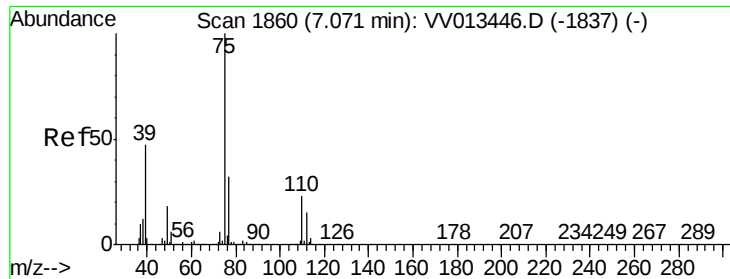
5000

0

6.50 6.55 6.60

Time-->

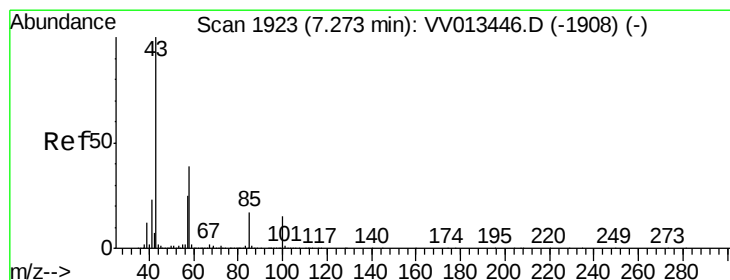
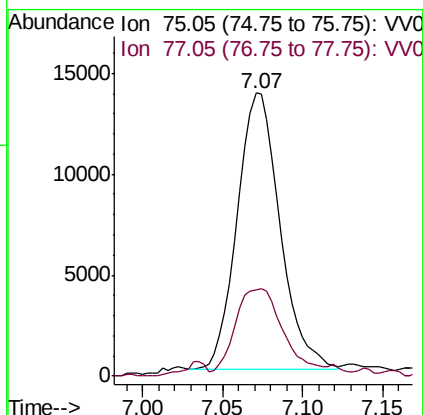
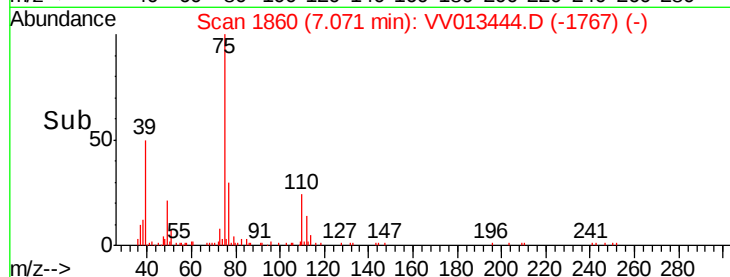
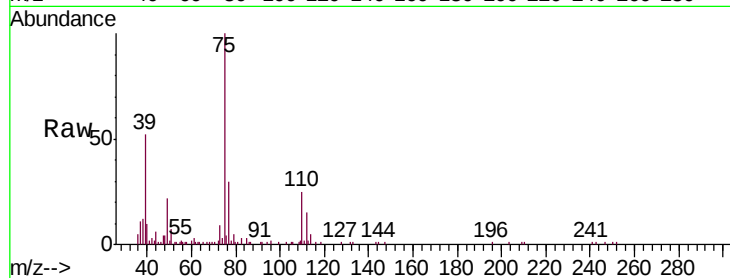




#39  
 cis-1,3-Dichloropropene  
 Concen: 0.415 ug/L  
 RT: 7.07 min Scan# 1860  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

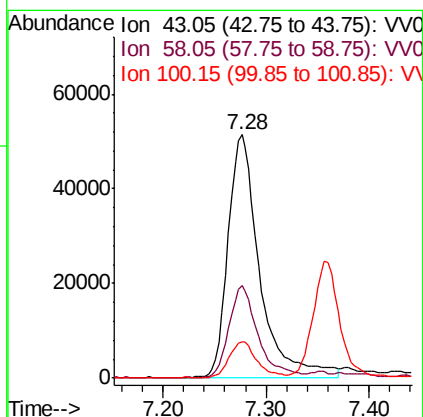
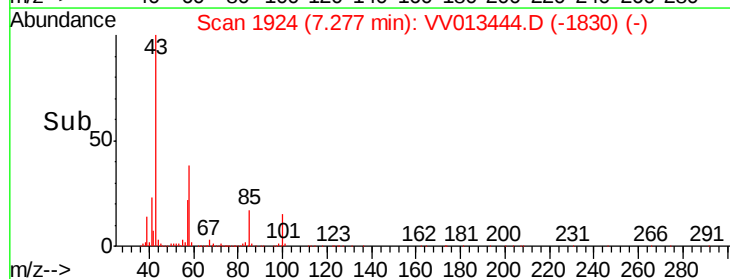
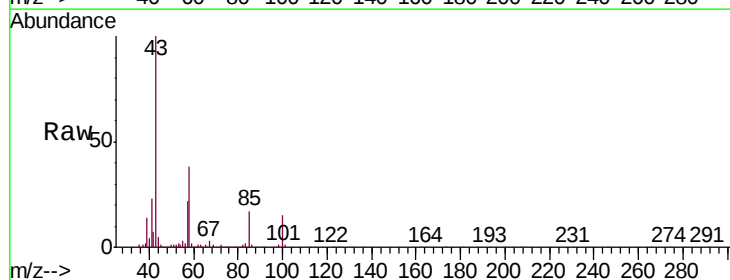
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

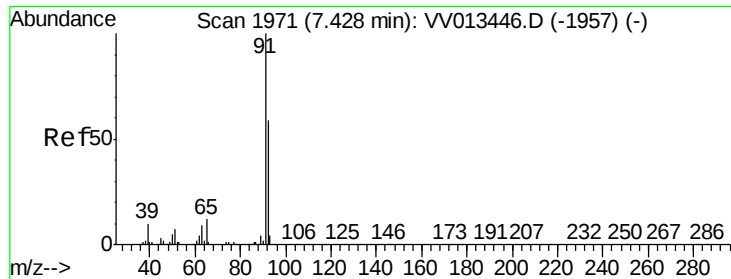
Tgt Ion: 75 Resp: 24883  
 Ion Ratio Lower Upper  
 75 100  
 77 30.3 22.7 42.1



#40  
 4-Methyl-2-pentanone  
 Concen: 4.319 ug/L  
 RT: 7.28 min Scan# 1924  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Tgt Ion: 43 Resp: 109076  
 Ion Ratio Lower Upper  
 43 100  
 58 34.8 30.9 46.3  
 100 13.4 11.7 17.5





#42

Toluene

Concen: 0.476 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

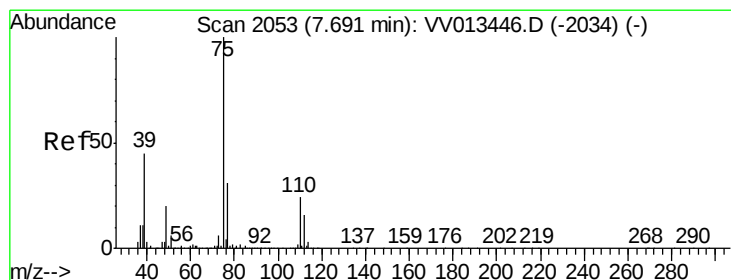
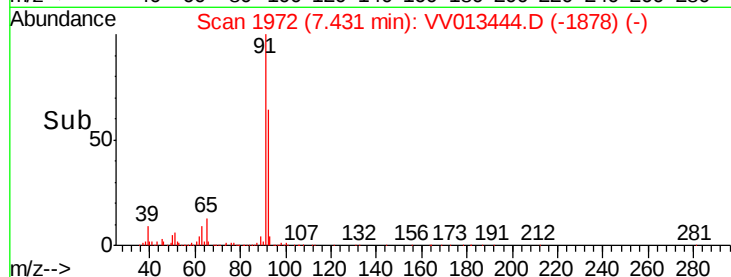
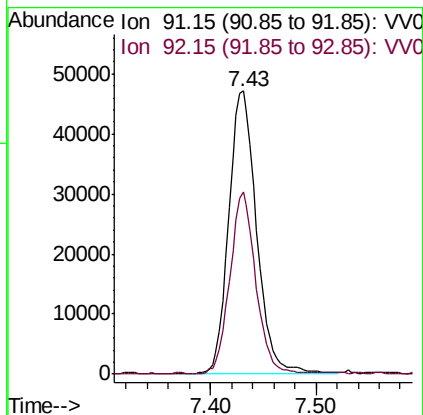
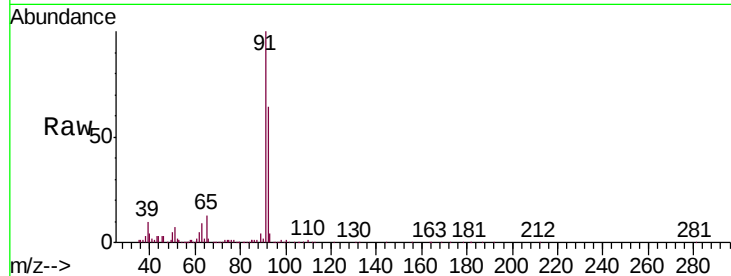
VSTD0.533

Tgt Ion: 91 Resp: 86353

Ion Ratio Lower Upper

91 100

92 64.3 41.5 77.1



#44

trans-1,3-Dichloropropene

Concen: 0.446 ug/L

RT: 7.69 min Scan# 2054

Delta R.T. 0.00 min

Lab File: VV013444.D

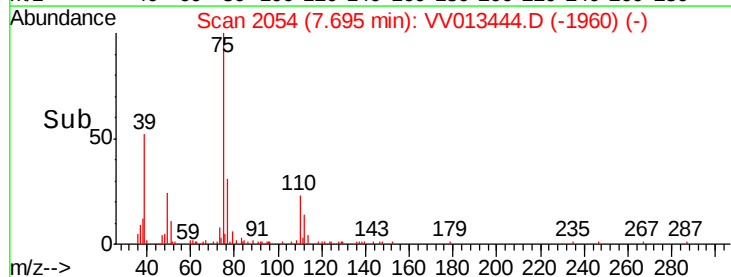
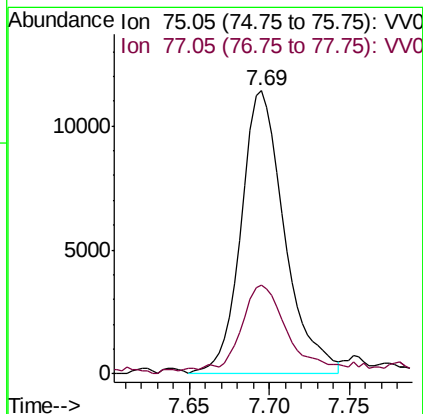
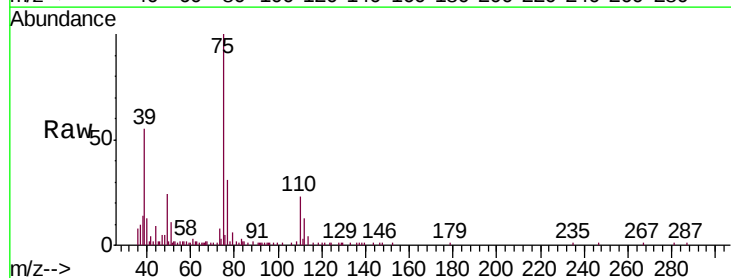
Acq: 31 Oct 2019 13:34

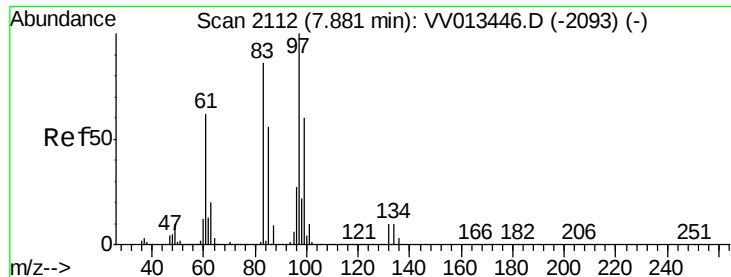
Tgt Ion: 75 Resp: 21265

Ion Ratio Lower Upper

75 100

77 31.3 21.9 40.7

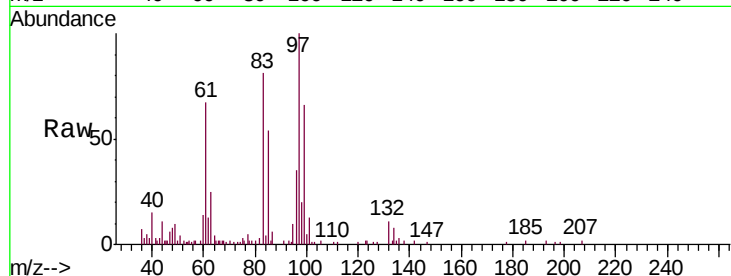




#45  
 1,1,2-Trichloroethane  
 Concen: 0.462 ug/L  
 RT: 7.88 min Scan# 2113  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 97    | Resp: | 13684 |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 66.0  | 42.3  | 78.5  |
| 83       | 81.4  | 60.0  | 111.4 |
| 85       | 53.5  | 38.9  | 72.2  |



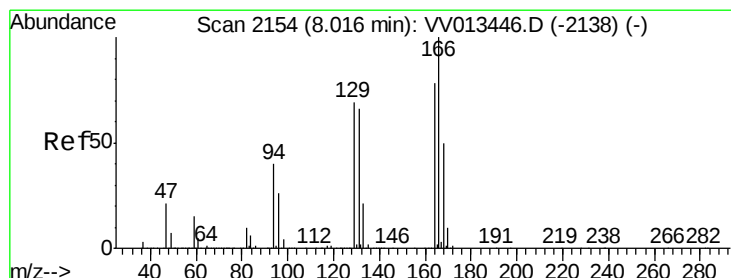
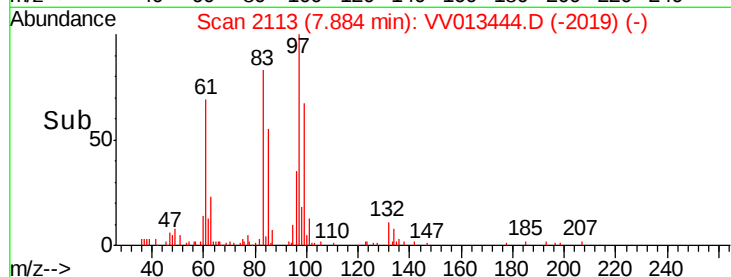
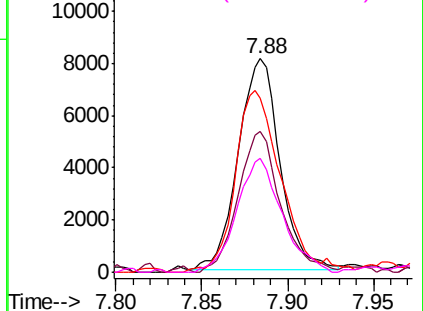
Abundance

Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

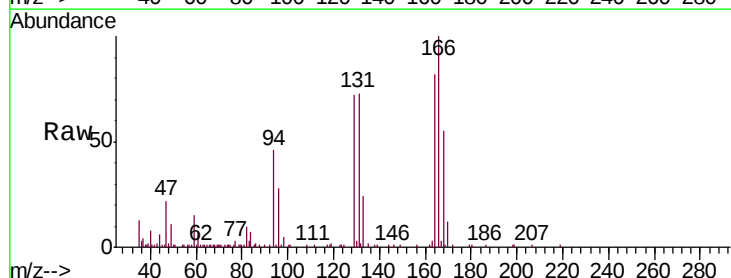
Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0



#47  
 Tetrachloroethene  
 Concen: 0.489 ug/L  
 RT: 8.02 min Scan# 2154  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 19804 |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 87.7  | 61.7  | 114.5 |
| 131      | 89.8  | 59.4  | 110.2 |
| 166      | 122.7 | 89.9  | 166.9 |



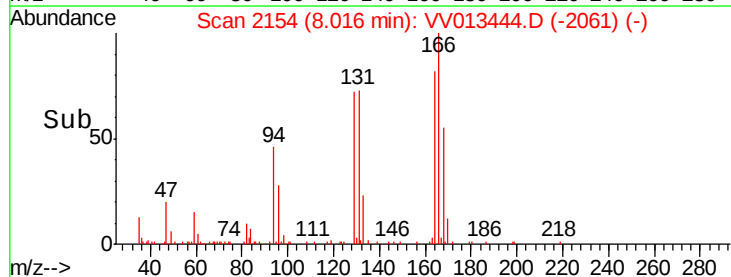
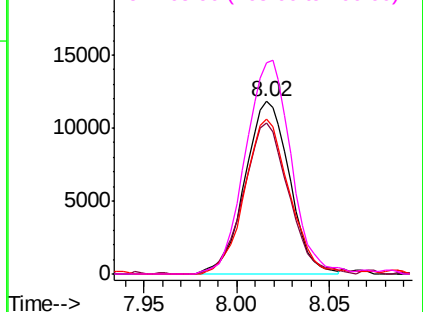
Abundance

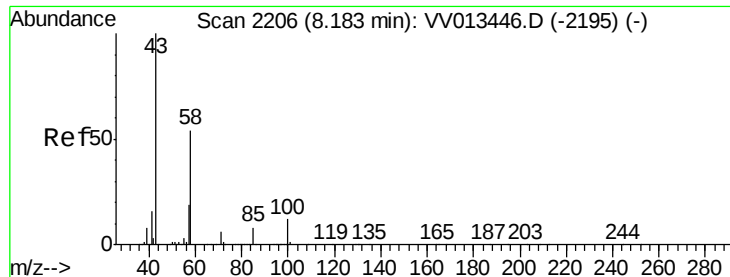
Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

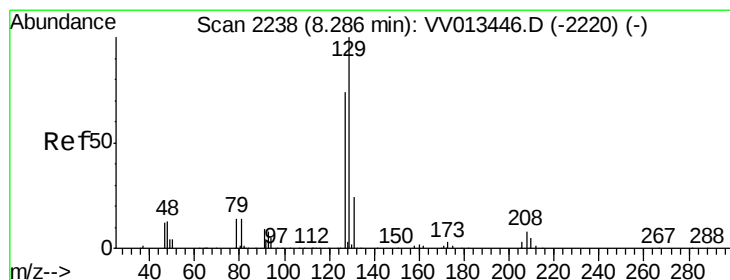
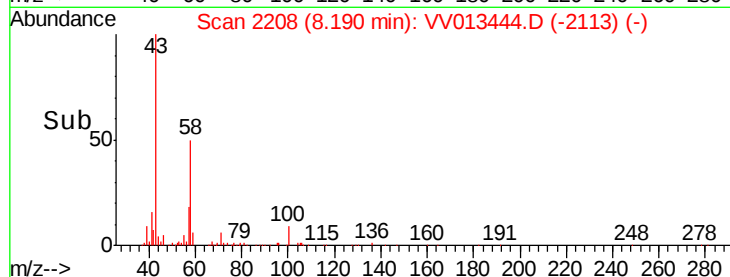
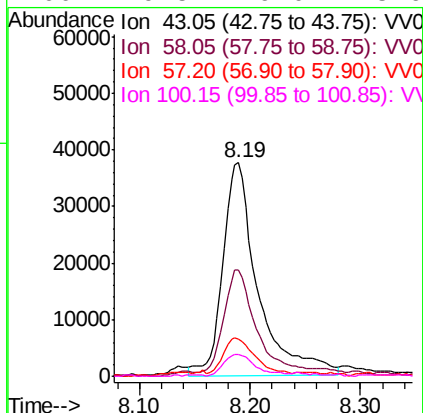
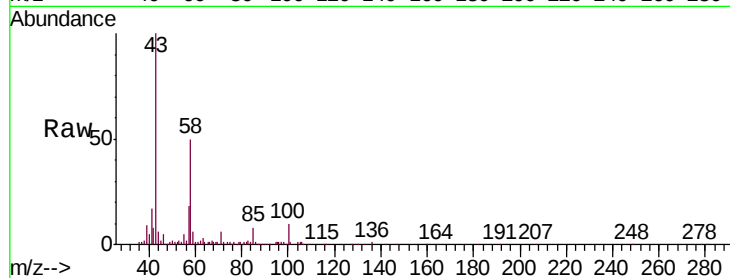




#48  
2-Hexanone  
Concen: 4.557 ug/L  
RT: 8.19 min Scan# 2208  
Delta R.T. 0.01 min  
Lab File: VV013444.D  
Acq: 31 Oct 2019 13:34

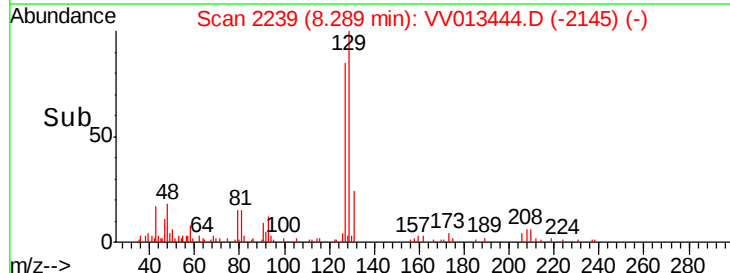
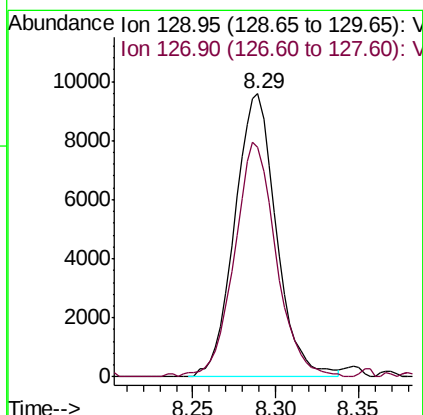
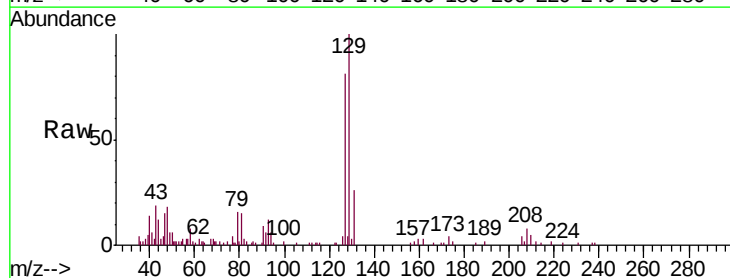
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD0.533

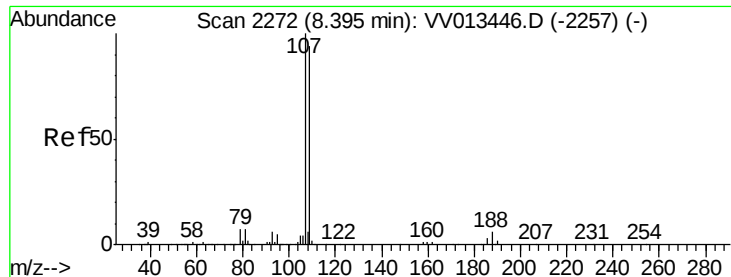
Tgt Ion: 43 Resp: 82798  
Ion Ratio Lower Upper  
43 100  
58 43.1 42.2 63.4  
57 16.3 14.9 22.3  
100 9.5 9.0 13.6



#49  
Dibromochloromethane  
Concen: 0.453 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. 0.00 min  
Lab File: VV013444.D  
Acq: 31 Oct 2019 13:34

Tgt Ion: 129 Resp: 16710  
Ion Ratio Lower Upper  
129 100  
127 81.0 52.1 96.7

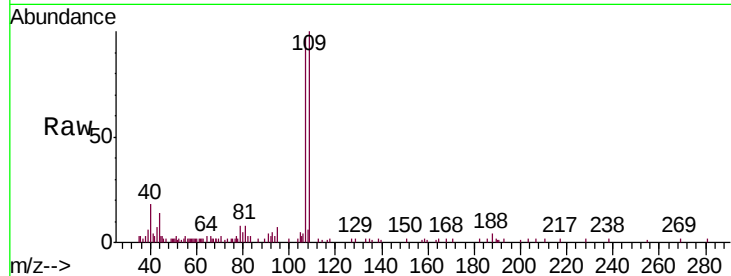




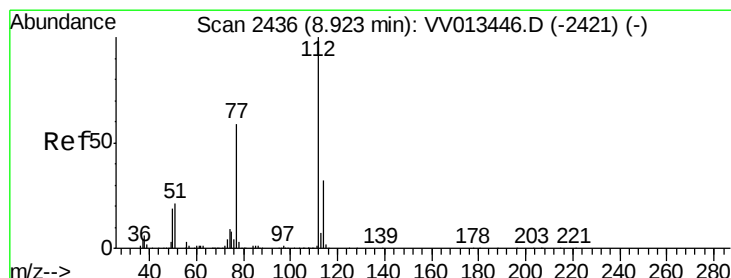
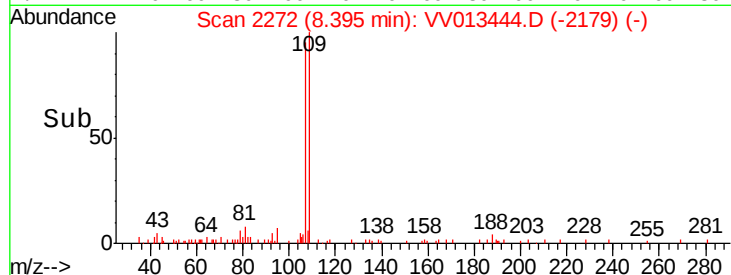
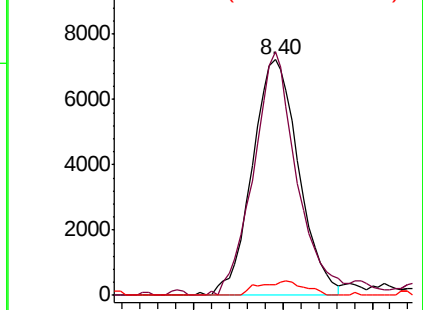
#50  
 1,2-Dibromoethane  
 Concen: 0.481 ug/L  
 RT: 8.40 min Scan# 2272  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 103.4 | 65.5  | 121.7 |
| 188     | 4.6   | 4.5   | 6.7   |

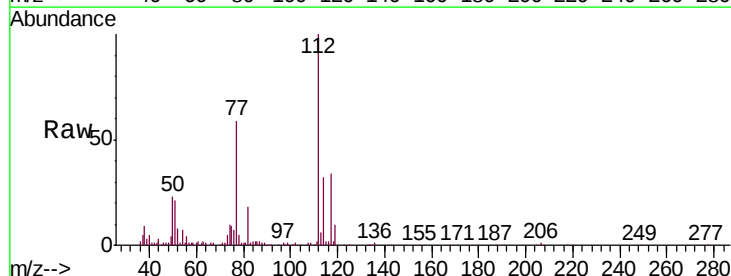


Abundance Ion 106.95 (106.65 to 107.65): V  
 Ion 109.00 (108.70 to 109.70): V  
 Ion 187.90 (187.60 to 188.60): V

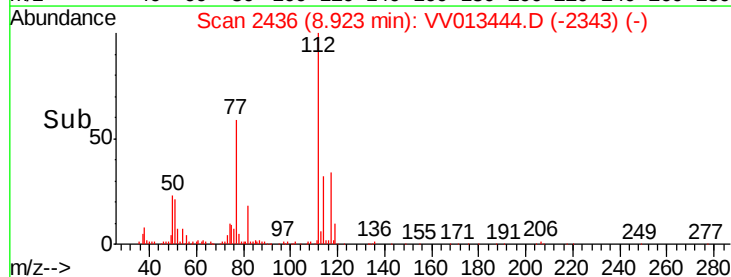
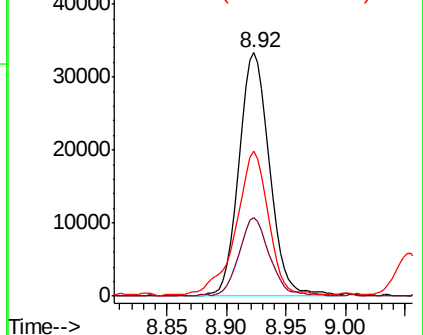


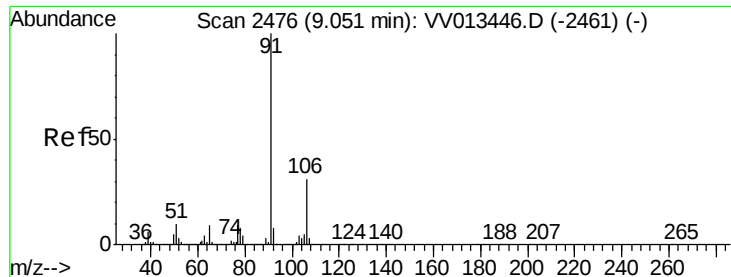
#51  
 Chlorobenzene  
 Concen: 0.508 ug/L  
 RT: 8.92 min Scan# 2436  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 32.4  | 22.5  | 41.7  |
| 77      | 59.4  | 47.3  | 70.9  |



Abundance Ion 112.10 (111.80 to 112.80): V  
 Ion 114.05 (113.75 to 114.75): V  
 Ion 77.10 (76.80 to 77.80): V





#52

Ethylbenzene

Concen: 0.457 ug/L

RT: 9.05 min Scan# 2476

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

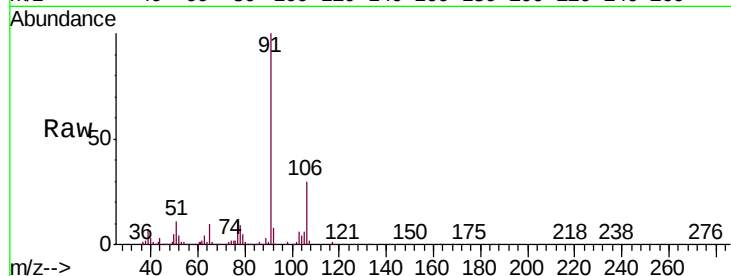
VSTD0.533

Tgt Ion: 91 Resp: 88204

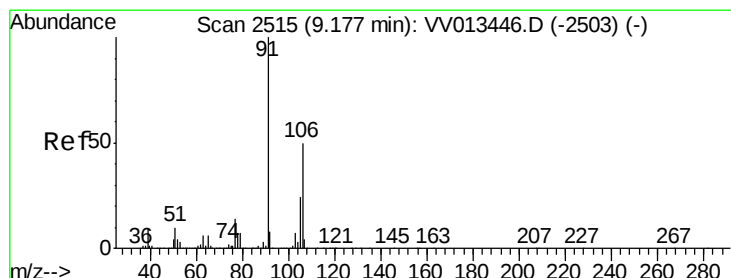
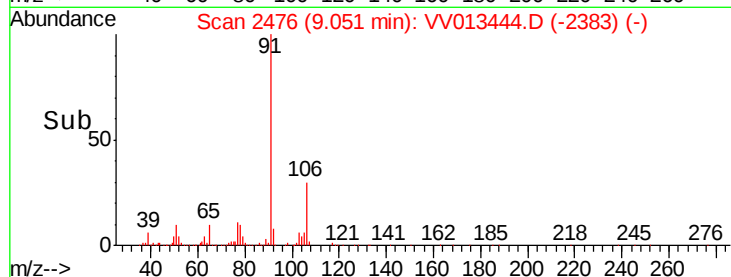
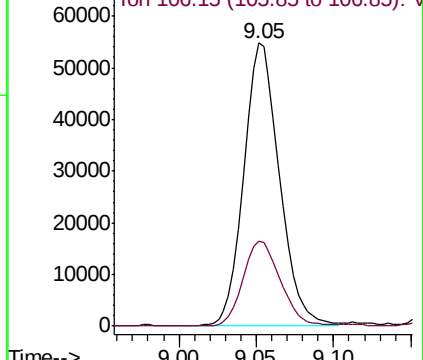
Ion Ratio Lower Upper

91 100

106 30.2 21.5 39.9



Abundance Ion 91.15 (90.85 to 91.85): VV013444.D (-2461) (-)



#53

m,p-xylene

Concen: 0.476 ug/L

RT: 9.18 min Scan# 2515

Delta R.T. 0.00 min

Lab File: VV013444.D

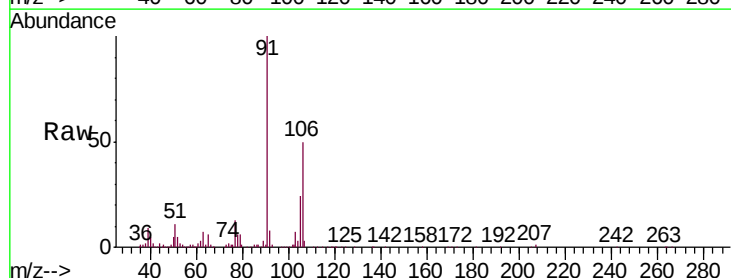
Acq: 31 Oct 2019 13:34

Tgt Ion: 106 Resp: 34052

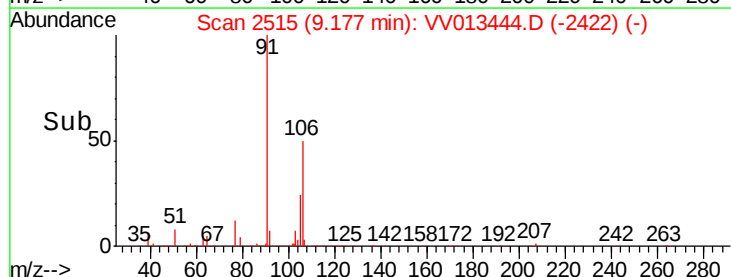
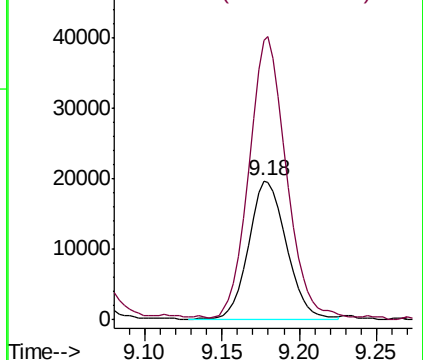
Ion Ratio Lower Upper

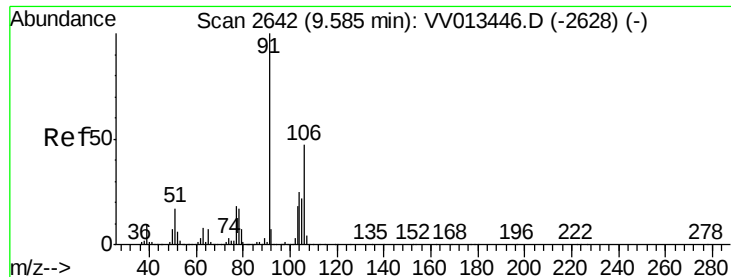
106 100

91 200.9 141.5 262.7



Abundance Ion 106.15 (105.85 to 106.85): VV013444.D (-2503) (-)





#54

o-xylene

Concen: 0.446 ug/L

RT: 9.59 min Scan# 2642

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

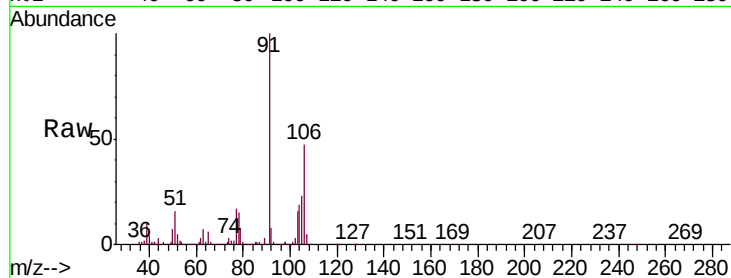
VSTD0.533

Tgt Ion:106 Resp: 31088

Ion Ratio Lower Upper

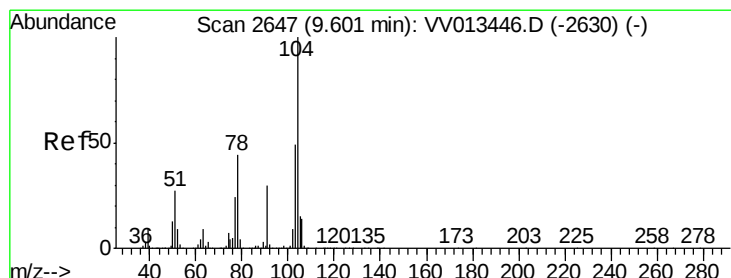
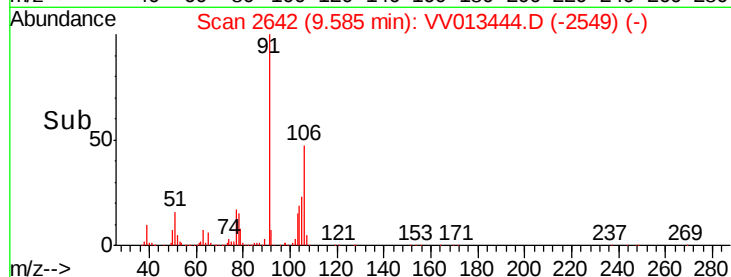
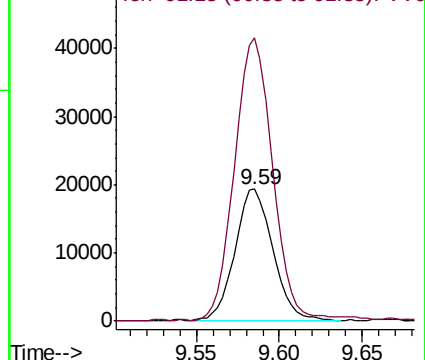
106 100

91 213.9 148.3 275.5



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 0.435 ug/L

RT: 9.60 min Scan# 2647

Delta R.T. 0.00 min

Lab File: VV013444.D

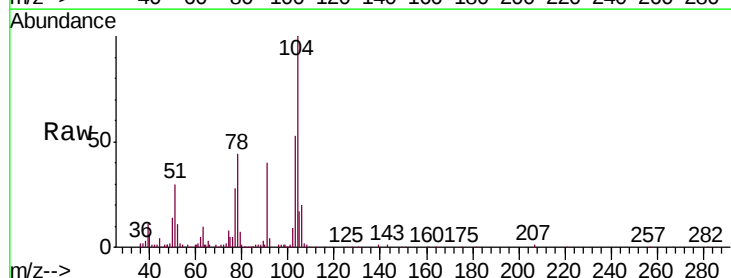
Acq: 31 Oct 2019 13:34

Tgt Ion:104 Resp: 50800

Ion Ratio Lower Upper

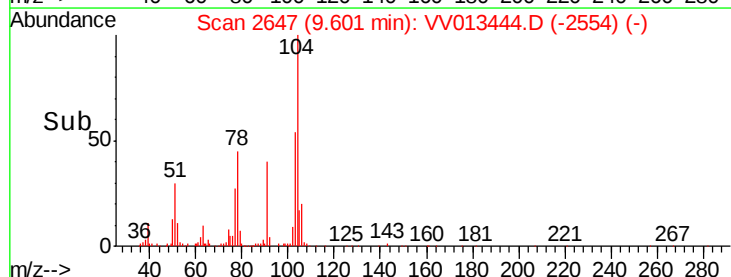
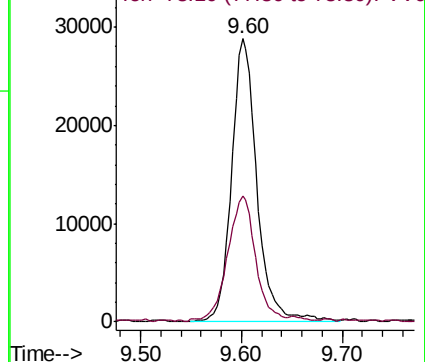
104 100

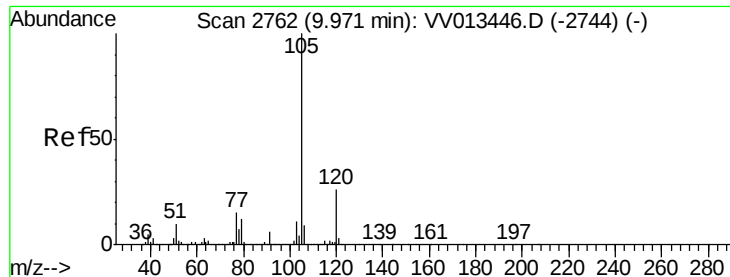
78 44.4 30.6 56.8



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0





#56

Isopropylbenzene

Concen: 0.442 ug/L

RT: 9.97 min Scan# 2762

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

VSTD0.533

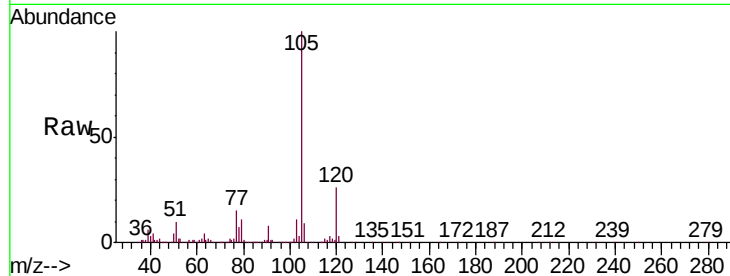
Tgt Ion: 105 Resp: 82467

Ion Ratio Lower Upper

105 100

120 26.4 21.1 31.7

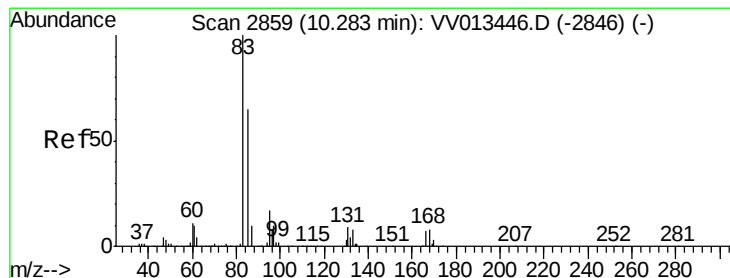
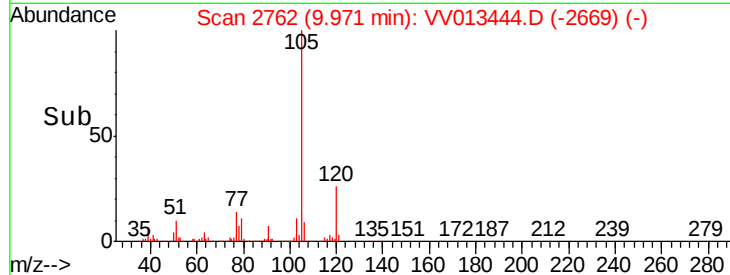
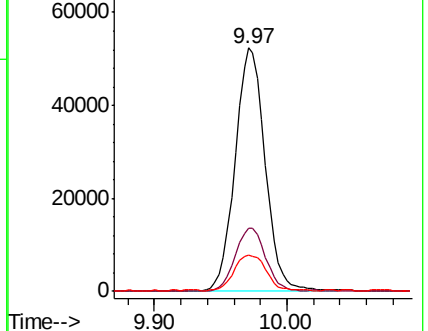
77 16.5 12.2 18.4



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 0.505 ug/L

RT: 10.28 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

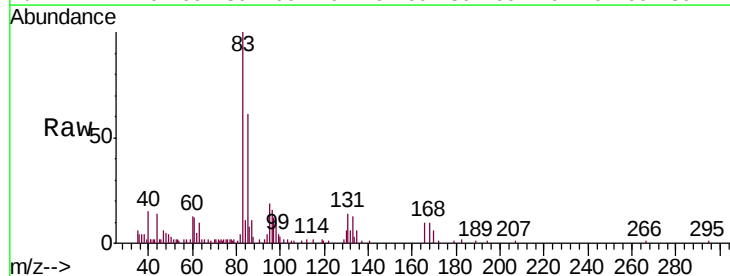
Tgt Ion: 83 Resp: 16205

Ion Ratio Lower Upper

83 100

85 60.6 45.8 85.0

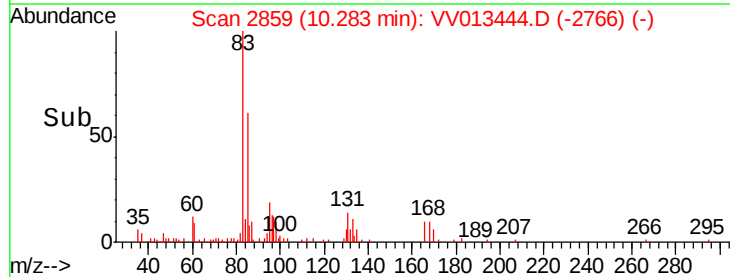
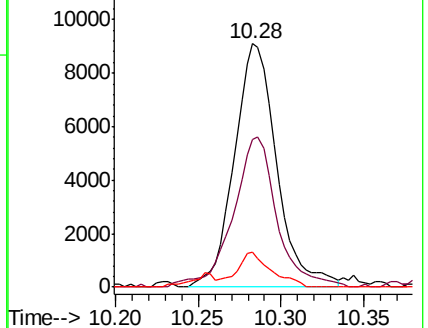
131 14.5 7.6 11.4#

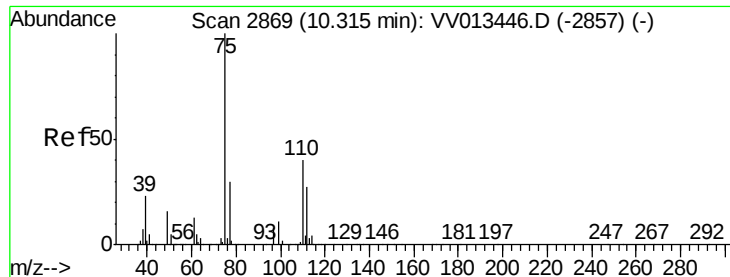


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 0.505 ug/L

RT: 10.31 min Scan# 2869

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

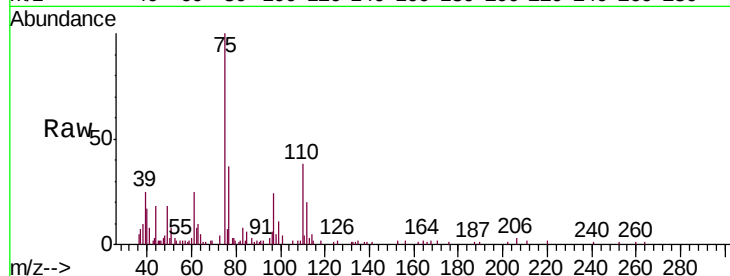
VSTD0.533

Tgt Ion: 75 Resp: 13204

Ion Ratio Lower Upper

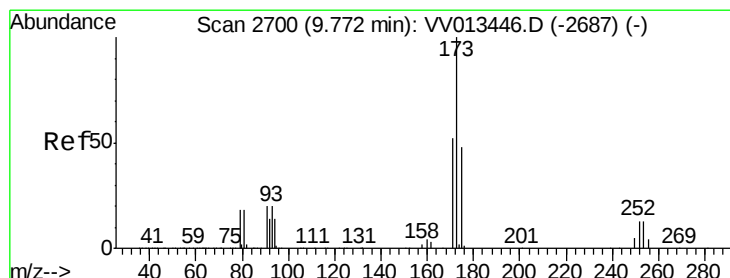
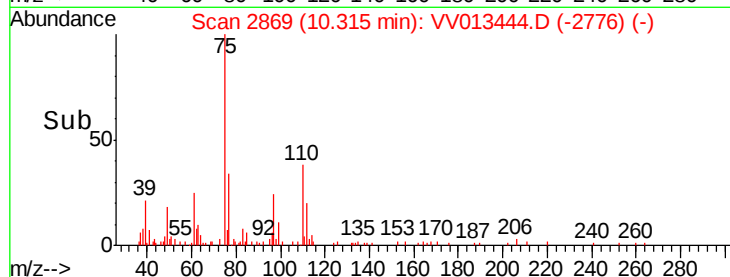
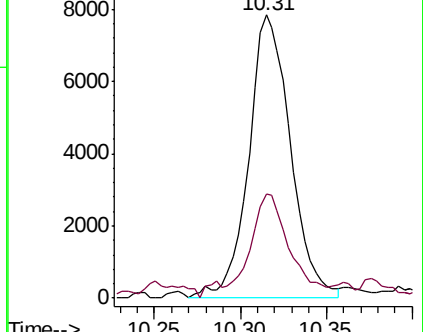
75 100

77 27.3 24.4 36.6



Abundance Ion 75.00 (74.70 to 75.70): VV013446.D (-2857) (-)

Ion 77.00 (76.70 to 77.70): VV013446.D (-2857) (-)



#61

Bromoform

Concen: 0.511 ug/L

RT: 9.77 min Scan# 2700

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

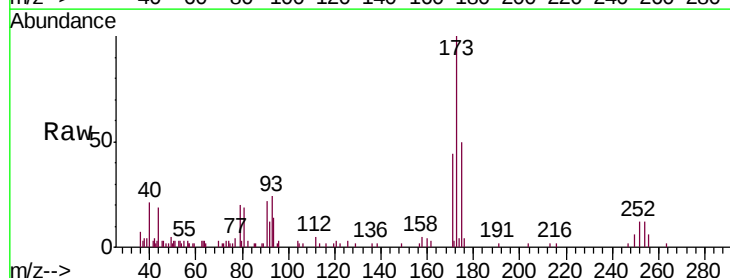
Tgt Ion: 173 Resp: 10153

Ion Ratio Lower Upper

173 100

175 51.2 38.6 58.0

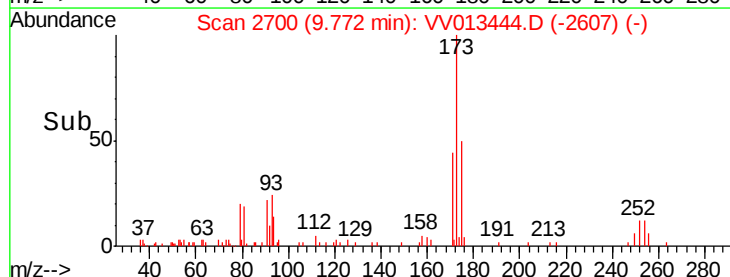
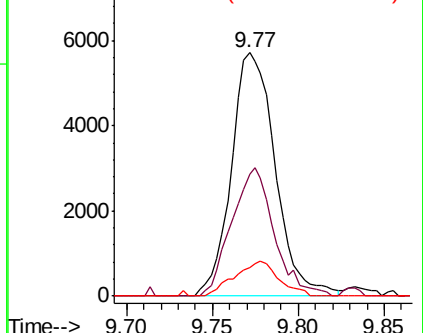
254 14.4 10.1 15.1

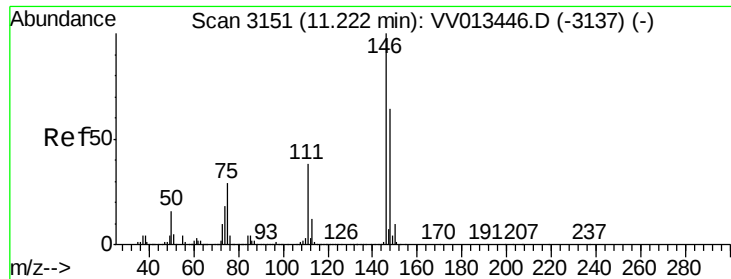


Abundance Ion 172.90 (172.60 to 173.60): VV013446.D (-2687) (-)

Ion 174.90 (174.60 to 175.60): VV013446.D (-2687) (-)

Ion 253.75 (253.45 to 254.45): VV013446.D (-2687) (-)

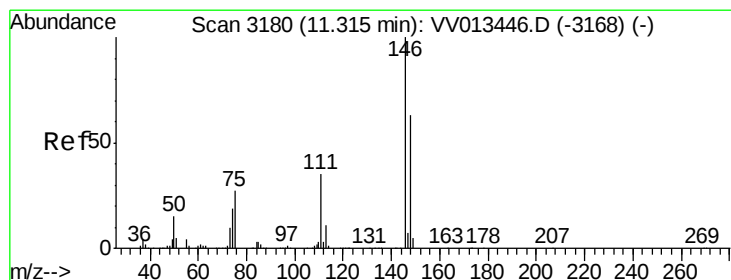
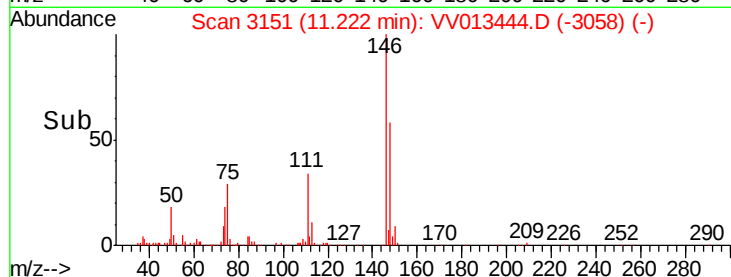
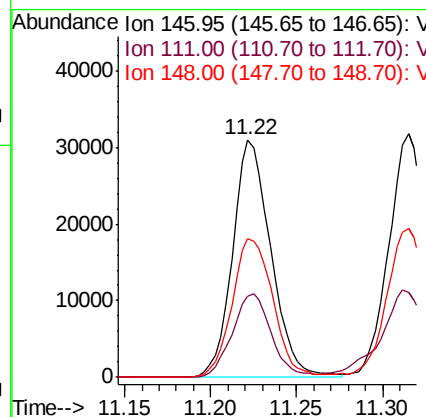
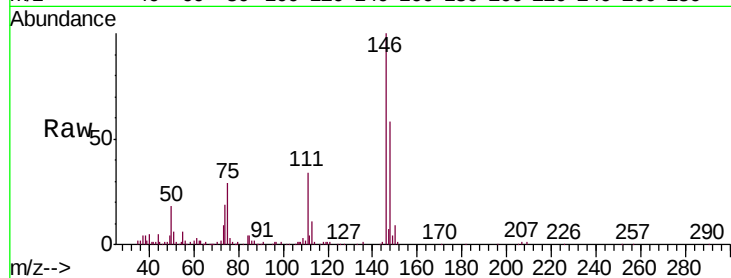




#62  
 1,3-Dichlorobenzene  
 Concen: 0.540 ug/L  
 RT: 11.22 min Scan# 3151  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

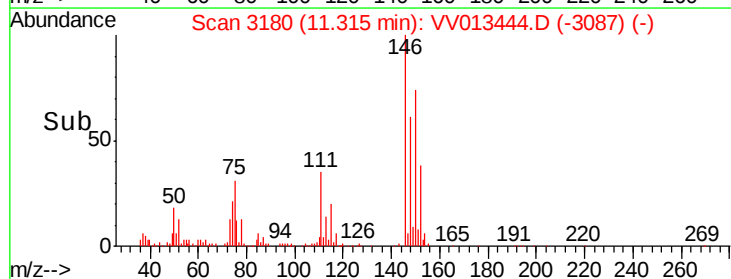
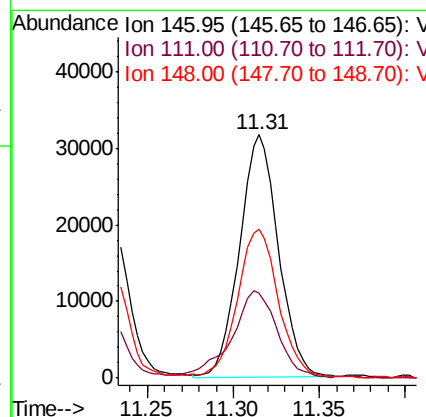
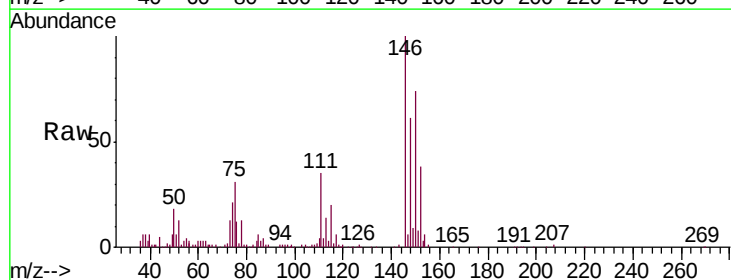
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

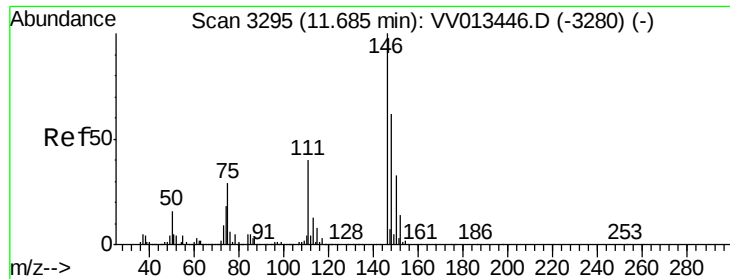
Tgt Ion:146 Resp: 48141  
 Ion Ratio Lower Upper  
 146 100  
 111 34.2 26.2 48.8  
 148 58.2 44.9 83.5



#63  
 1,4-Dichlorobenzene  
 Concen: 0.551 ug/L  
 RT: 11.31 min Scan# 3180  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Tgt Ion:146 Resp: 49399  
 Ion Ratio Lower Upper  
 146 100  
 111 35.0 24.7 45.9  
 148 60.9 44.2 82.0

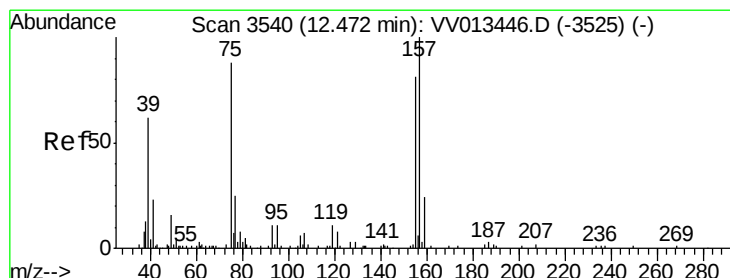
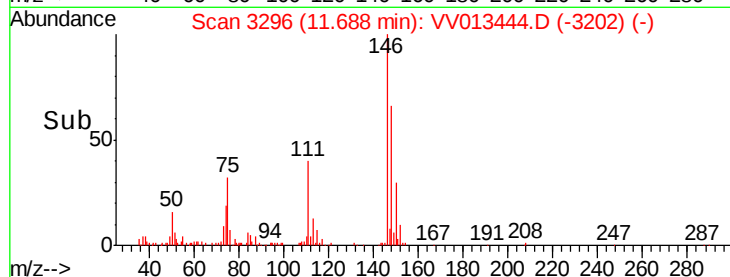
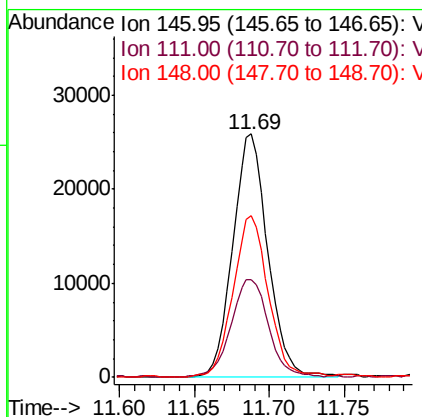
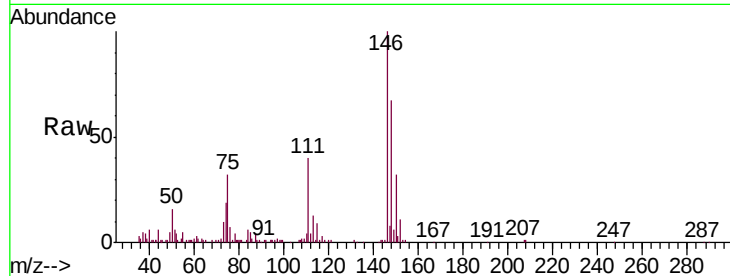




#65  
 1,2-Dichlorobenzene  
 Concen: 0.509 ug/L  
 RT: 11.69 min Scan# 3296  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

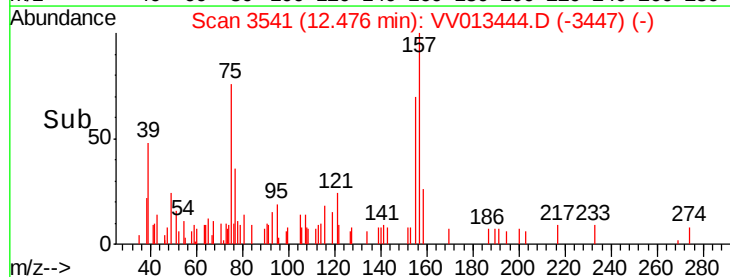
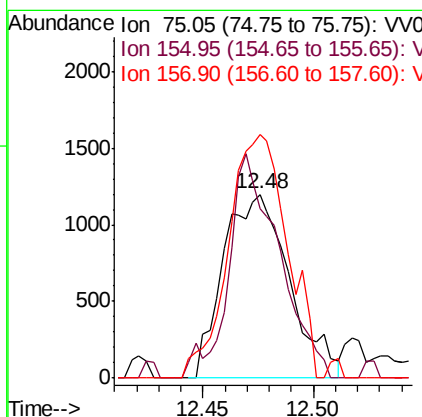
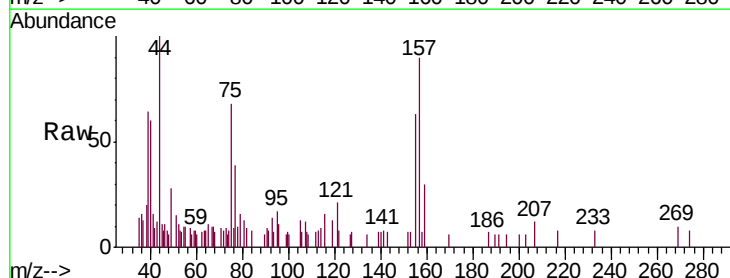
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

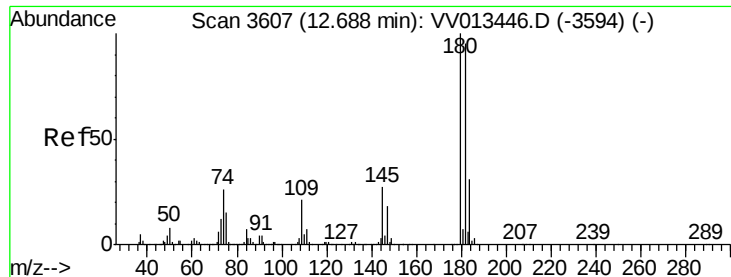
Tgt Ion: 146 Resp: 42209  
 Ion Ratio Lower Upper  
 146 100  
 111 40.3 31.8 47.6  
 148 66.6 49.5 74.3



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 0.575 ug/L  
 RT: 12.48 min Scan# 3541  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Tgt Ion: 75 Resp: 2485  
 Ion Ratio Lower Upper  
 75 100  
 155 92.3 73.5 110.3  
 157 132.3 90.4 135.6

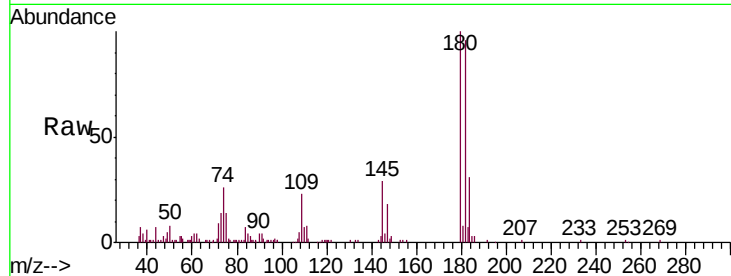




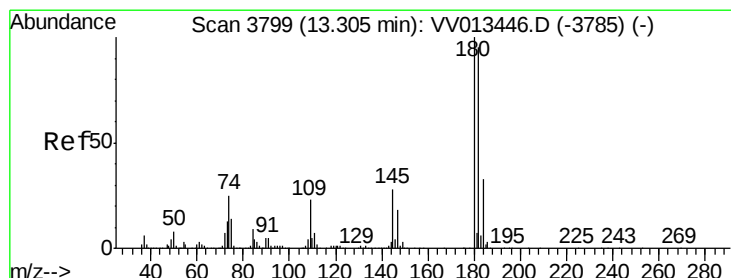
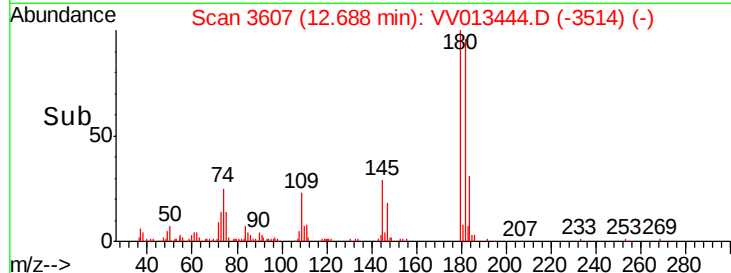
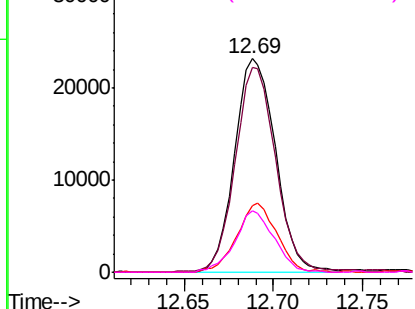
#67  
 1,3,5-Trichlorobenzene  
 Concen: 0.520 ug/L  
 RT: 12.69 min Scan# 3607  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD0.533

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 37063 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 95.3  | 76.1  | 114.1 |
| 184      | 31.5  | 24.5  | 36.7  |
| 145      | 27.6  | 21.4  | 32.2  |

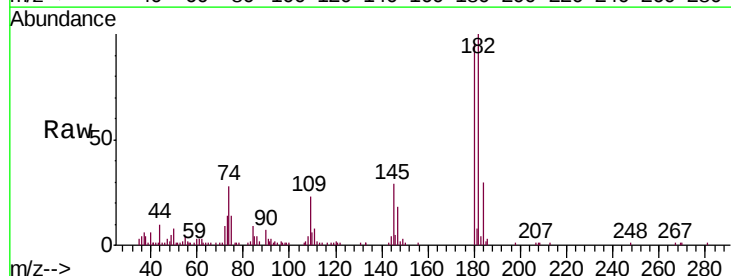


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

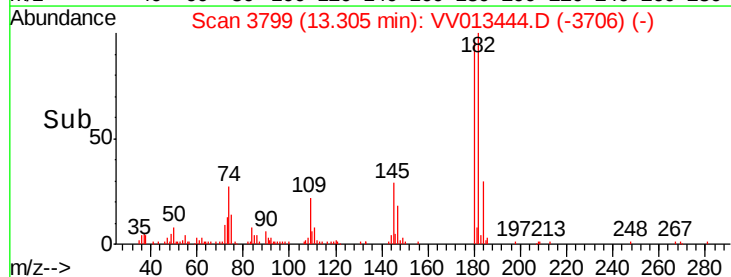
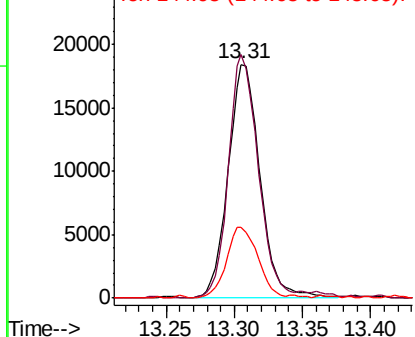


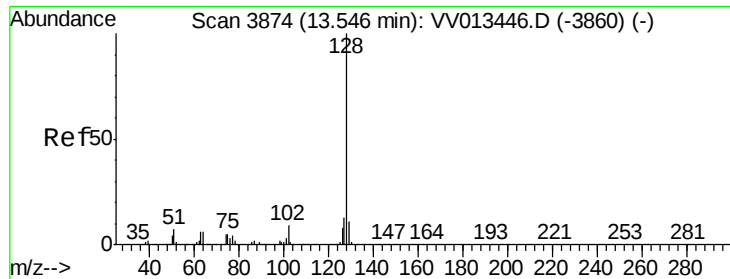
#68  
 1,2,4-trichlorobenzene  
 Concen: 0.542 ug/L  
 RT: 13.31 min Scan# 3799  
 Delta R.T. 0.00 min  
 Lab File: VV013444.D  
 Acq: 31 Oct 2019 13:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 180   | Resp: | 30086 |
| Ion      | Ratio | Lower | Upper |
| 180      | 100   |       |       |
| 182      | 96.9  | 76.1  | 114.1 |
| 145      | 29.8  | 22.1  | 33.1  |



Abundance Ion 179.90 (179.60 to 180.60): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 0.558 ug/L

RT: 13.55 min Scan# 3875

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

Instrument :

MSVOA\_V

ClientSampleId :

VSTD0.533

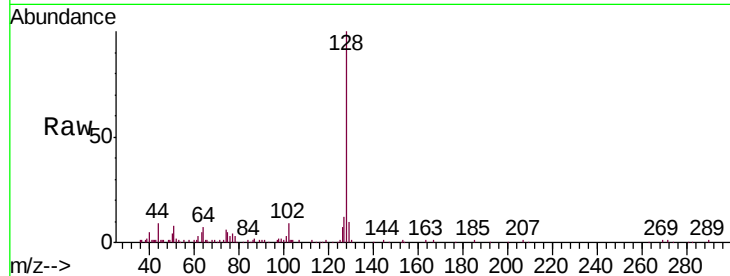
Tgt Ion:128 Resp: 43336

Ion Ratio Lower Upper

128 100

129 10.1 8.4 12.6

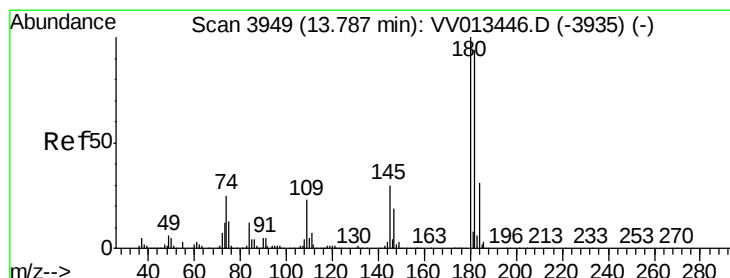
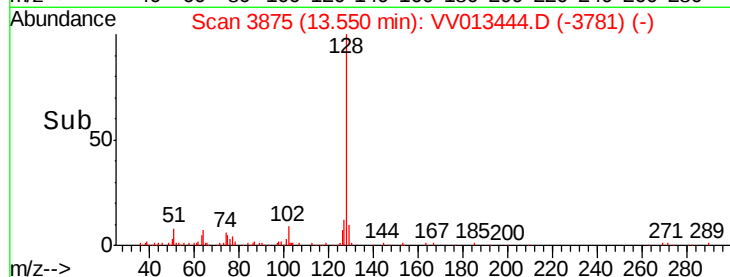
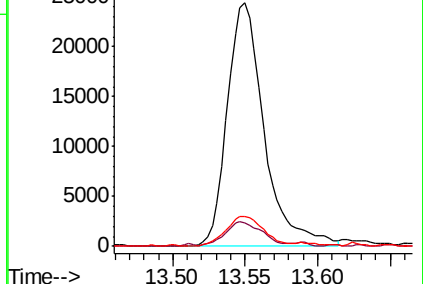
127 12.4 10.7 16.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 0.549 ug/L

RT: 13.79 min Scan# 3950

Delta R.T. 0.00 min

Lab File: VV013444.D

Acq: 31 Oct 2019 13:34

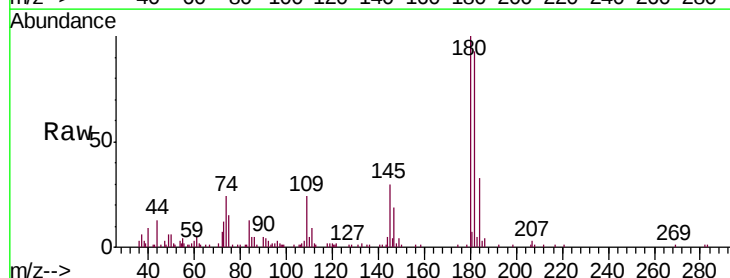
Tgt Ion:180 Resp: 27888

Ion Ratio Lower Upper

180 100

182 90.6 77.4 116.2

145 31.0 24.1 36.1



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

