

Data Path : W:\HPCHEM1\MSVOA\_L\DATA\VL122017\  
 Data File : VL031289.D  
 Acq On : 21 Dec 2017 3:55  
 Operator : SY/AP  
 Sample : I7005-09  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 EP1-SV-8

Quant Time: Dec 21 08:44:04 2017

Quant Method : W:\HPCHEM1\MSVOA\_L\METHODS\VL121317AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Dec 14 04:29:58 2017

QLast Update : Thu Dec 14 04:29:58 2017

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.92  | 49   | 1433346  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.46  | 114  | 3481460  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.41 | 117  | 3194775  | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.75  | 95    | 2535624  | 11.16    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 111.60% |

#### Target Compounds

|                                |       |     |          |        |        | Qvalue |
|--------------------------------|-------|-----|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.18  | 85  | 43211    | 0.36   | ppbv   | 95     |
| 3) Chlorodifluoromethane       | 3.16  | 51  | 20777873 | 127.50 | ppbv # | 61     |
| 4) Chloromethane               | 3.27  | 50  | 24674    | 0.28   | ppbv   | 96     |
| 5) Vinyl Chloride              | 3.40  | 62  | 3387     | 0.04   | ppbv # | 4      |
| 6) Bromomethane                | 3.23  | 94  | 1680     | 0.03   | ppbv # | 53     |
| 7) Chloroethane                | 3.71  | 64  | 1459     | 0.04   | ppbv # | 52     |
| 9) Propene                     | 3.13  | 41  | 1360451  | 17.01  | ppbv   | 98     |
| 10) Heptane                    | 8.41  | 43  | 267285   | 1.10   | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.13  | 101 | 423347   | 2.13   | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.69  | 101 | 12256    | 0.09   | ppbv   | 99     |
| 13) Ethanol                    | 3.77  | 45  | 262191   | 11.36  | ppbv   | 99     |
| 15) Acetone                    | 4.03  | 43  | 4331030  | 22.90  | ppbv # | 53     |
| 16) 1,3-Butadiene              | 3.45  | 39  | 2614069  | 32.12  | ppbv # | 15     |
| 17) tert-Butyl alcohol         | 4.50  | 59  | 438070   | 4.13   | ppbv   | 95     |
| 19) Isopropyl Alcohol          | 4.15  | 45  | 19298    | 0.16   | ppbv # | 41     |
| 20) Methylene Chloride         | 4.55  | 84  | 53651    | 0.86   | ppbv # | 86     |
| 21) Allyl Chloride             | 4.57  | 41  | 34067    | 0.31   | ppbv # | 1      |
| 23) Vinyl Acetate              | 5.28  | 43  | 131732   | 0.43   | ppbv # | 1      |
| 25) Ethyl Acetate              | 5.93  | 43  | 375713   | 0.97   | ppbv # | 80     |
| 26) Hexane                     | 5.93  | 57  | 524658   | 2.86   | ppbv # | 36     |
| 27) Carbon Disulfide           | 4.76  | 76  | 340380   | 1.85   | ppbv   | 97     |
| 28) Methyl tert-Butyl Ether    | 5.26  | 73  | 9084     | 0.04   | ppbv # | 1      |
| 29) Chloroform                 | 6.00  | 83  | 70993    | 0.29   | ppbv   | 96     |
| 30) Cyclohexane                | 7.41  | 84  | 127459   | 0.79   | ppbv # | 86     |
| 32) 1,1,1-Trichloroethane      | 6.78  | 97  | 40411    | 0.15   | ppbv   | 98     |
| 34) 2-Butanone                 | 5.47  | 43  | 12521152 | 50.92  | ppbv   | 91     |
| 35) Carbon Tetrachloride       | 7.30  | 117 | 51275    | 0.21   | ppbv   | 94     |
| 36) Benzene                    | 7.17  | 78  | 3286594  | 8.91   | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.46  | 63  | 841727   | 6.45   | ppbv # | 26     |
| 41) Tetrahydrofuran            | 6.31  | 42  | 14972    | 0.11   | ppbv # | 38     |
| 42) Bromodichloromethane       | 8.08  | 83  | 14361    | 0.06   | ppbv # | 25     |
| 44) 2,2,4-Trimethylpentane     | 8.15  | 57  | 644530   | 1.16   | ppbv # | 81     |
| 50) 4-Methyl-2-Pentanone       | 9.05  | 43  | 47650    | 0.16   | ppbv   | 100    |
| 51) 2-Hexanone                 | 10.44 | 43  | 1653903  | 5.76   | ppbv # | 98     |
| 52) Tetrachloroethene          | 11.55 | 164 | 2003535  | 14.72  | ppbv   | 97     |
| 53) Toluene                    | 10.12 | 91  | 633977   | 1.58   | ppbv   | 99     |
| 58) Ethyl Benzene              | 13.04 | 91  | 157948   | 0.30   | ppbv   | 99     |
| 59) m/p-Xylene                 | 13.29 | 91  | 459461   | 1.09   | ppbv   | 98     |
| 60) o-Xylene                   | 14.02 | 91  | 153736   | 0.36   | ppbv   | 100    |
| 61) Styrene                    | 13.86 | 104 | 51219    | 0.42   | ppbv   | 92     |
| 62) Isopropylbenzene           | 15.00 | 105 | 50183    | 0.09   | ppbv   | 96     |

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Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

Quant Time: Dec 21 08:44:04 2017  
Quant Method : W:\HPCHEM1\MSVOA\_L\METHODS\VL121317AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Dec 14 04:29:58 2017  
QLast Update : Thu Dec 14 04:29:58 2017  
Response via : Initial Calibration

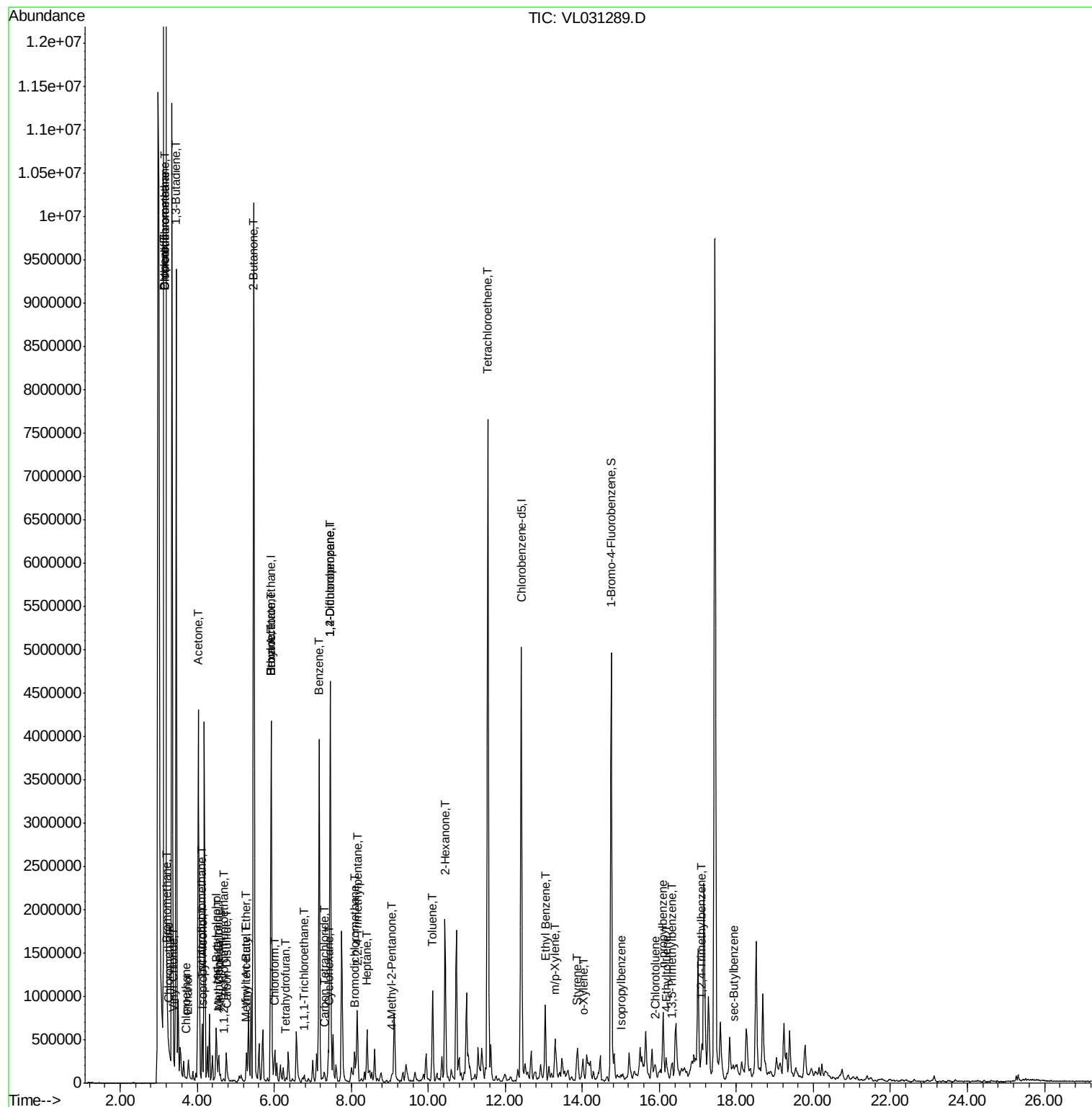
| Internal Standards         | R.T.  | QIon | Response | Conc | Units  | Dev(Min) |
|----------------------------|-------|------|----------|------|--------|----------|
| 64) n-propylbenzene        | 16.10 | 120  | 25555    | 0.17 | ppbv   | 84       |
| 67) sec-Butylbenzene       | 17.94 | 105  | 40279    | 0.06 | ppbv   | 99       |
| 71) 2-Chlorotoluene        | 15.89 | 91   | 81844    | 0.20 | ppbv # | 51       |
| 72) 4-Ethyltoluene         | 16.18 | 105  | 21755    | 0.05 | ppbv # | 3        |
| 73) 1,3,5-Trimethylbenzene | 16.33 | 105  | 80698    | 0.19 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene | 17.09 | 105  | 134992   | 0.31 | ppbv # | 72       |

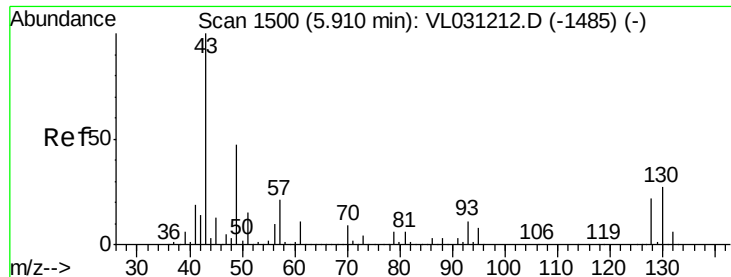
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.92 min Scan# 1502

Delta R.T. 0.01 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

EP1-SV-8

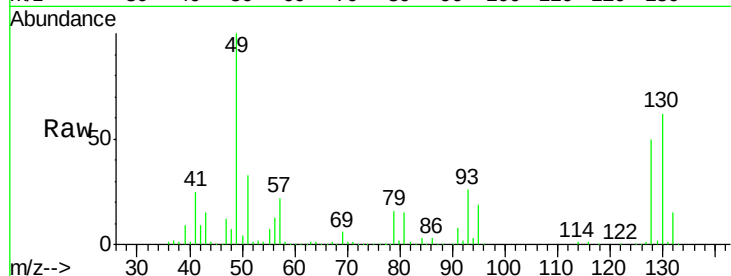
Tgt Ion: 49 Resp: 1433346

Ion Ratio Lower Upper

49 100

128 48.9 23.2 69.5

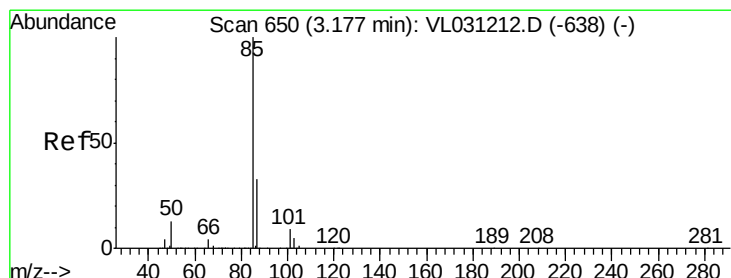
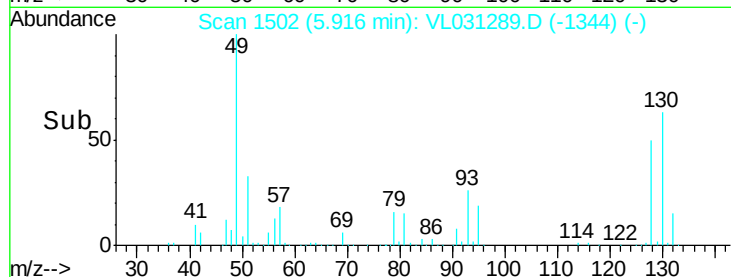
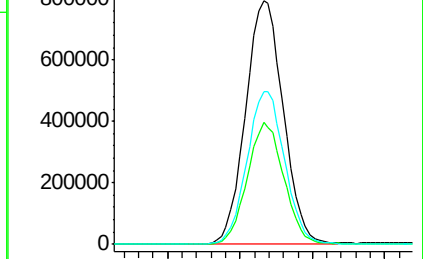
130 63.1 29.6 88.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.36 ppbv

RT: 3.18 min Scan# 651

Delta R.T. 0.00 min

Lab File: VL031289.D

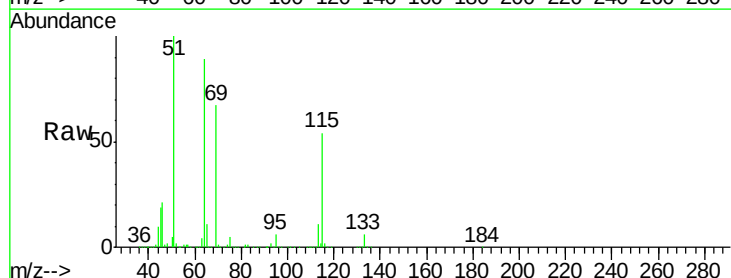
Acq: 21 Dec 2017 3:55

Tgt Ion: 85 Resp: 43211

Ion Ratio Lower Upper

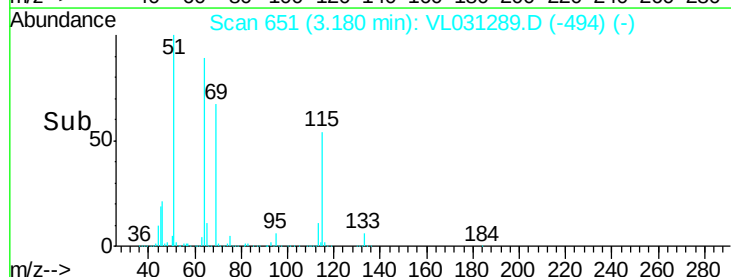
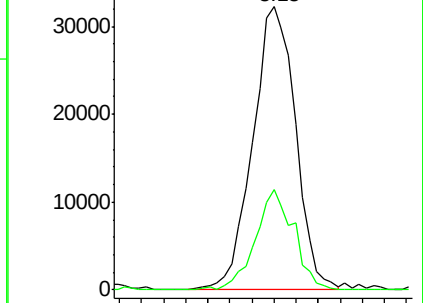
85 100

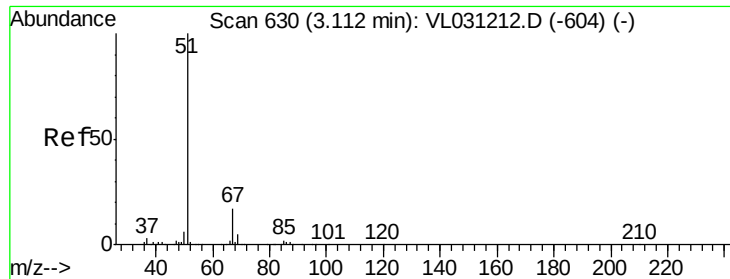
87 35.5 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 127.50 ppbv

RT: 3.16 min Scan# 646

Delta R.T. 0.05 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

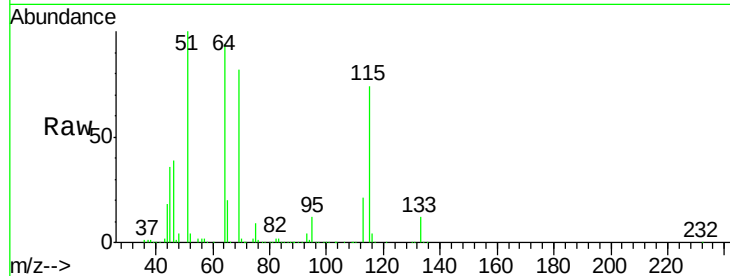
EP1-SV-8

Tgt Ion: 51 Resp:20777873

Ion Ratio Lower Upper

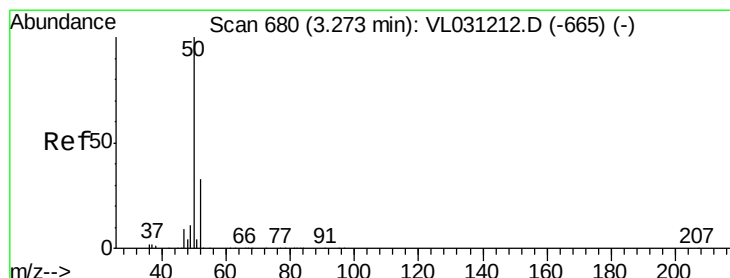
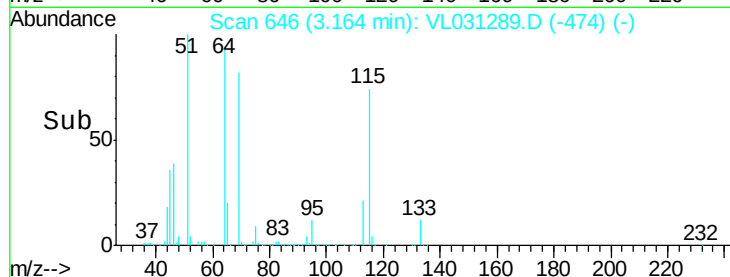
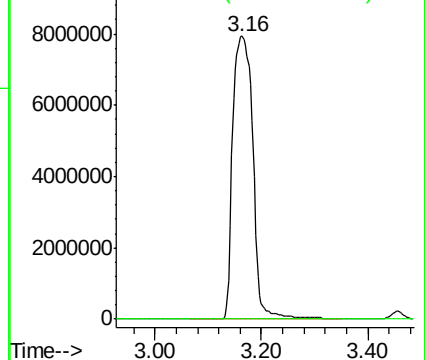
51 100

67 0.1 13.8 20.6#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.28 ppbv

RT: 3.27 min Scan# 680

Delta R.T. 0.00 min

Lab File: VL031289.D

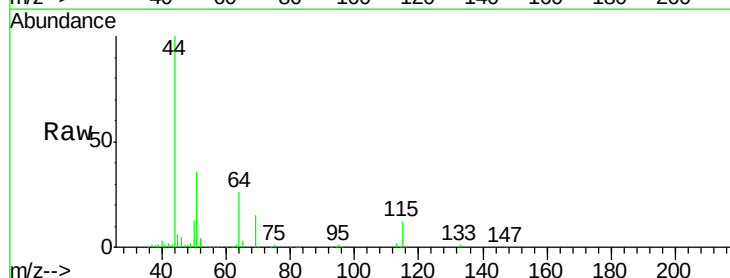
Acq: 21 Dec 2017 3:55

Tgt Ion: 50 Resp: 24674

Ion Ratio Lower Upper

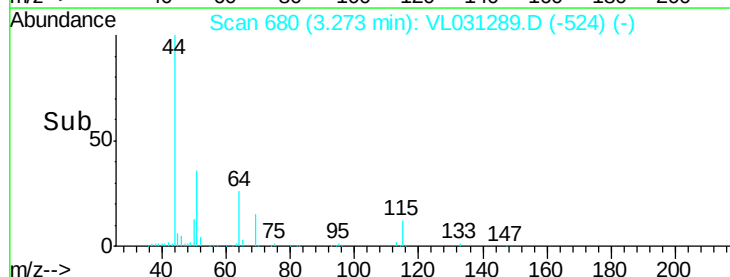
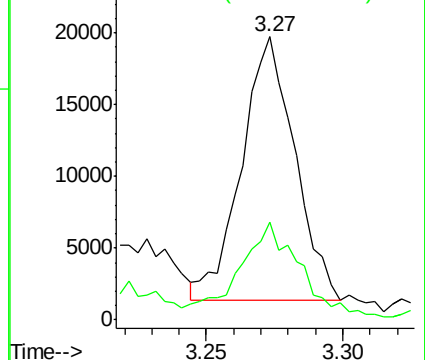
50 100

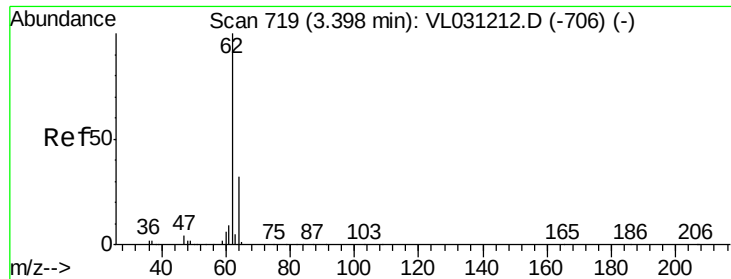
52 30.9 26.5 39.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.04 ppbv

RT: 3.40 min Scan# 718

Delta R.T. -0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

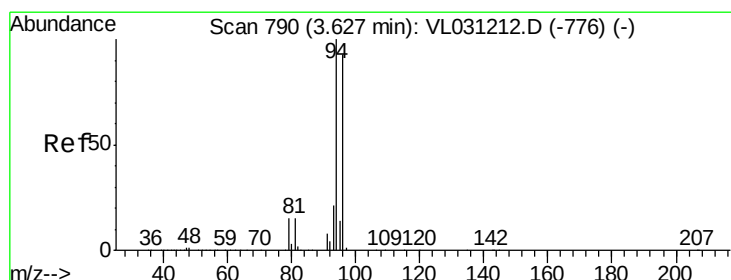
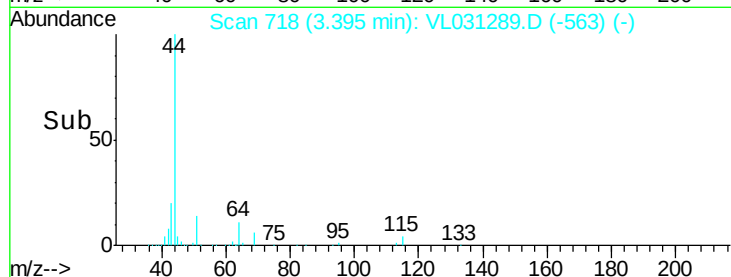
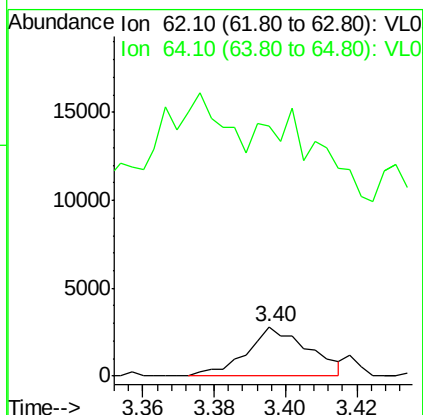
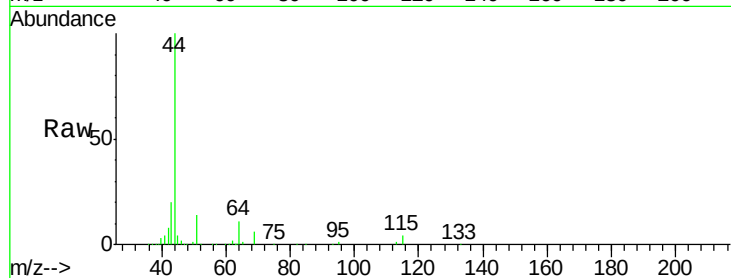
EP1-SV-8

Tgt Ion: 62 Resp: 3387

Ion Ratio Lower Upper

62 100

64 86.0 25.9 38.9#



#6

Bromomethane

Concen: 0.03 ppbv

RT: 3.23 min Scan# 666

Delta R.T. -0.40 min

Lab File: VL031289.D

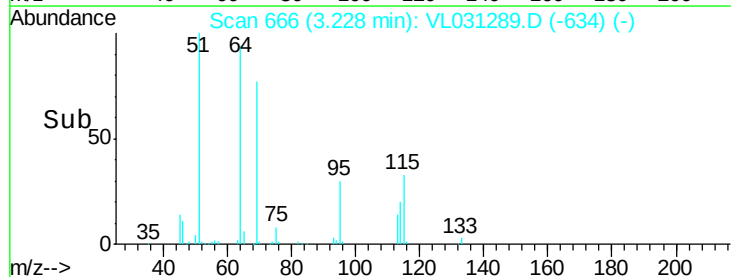
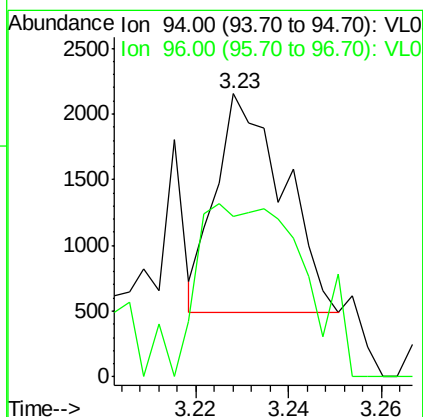
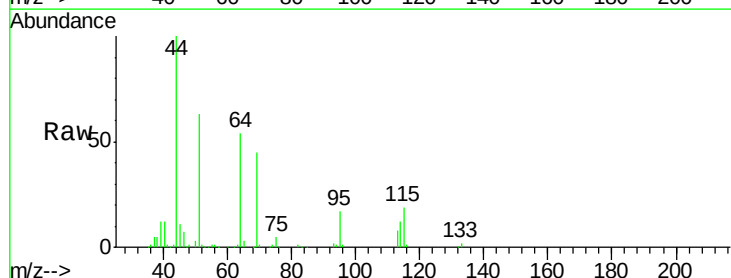
Acq: 21 Dec 2017 3:55

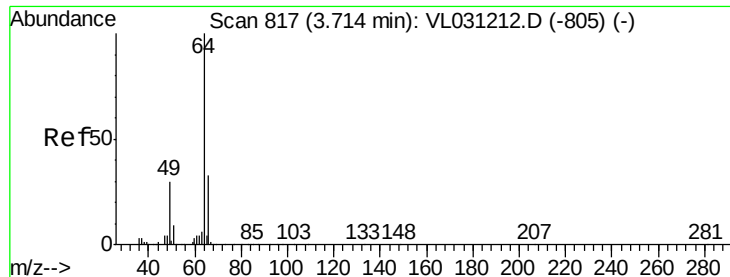
Tgt Ion: 94 Resp: 1680

Ion Ratio Lower Upper

94 100

96 48.0 74.4 111.6#





#7

Chloroethane

Concen: 0.04 ppbv

RT: 3.71 min Scan# 816

Delta R.T. -0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

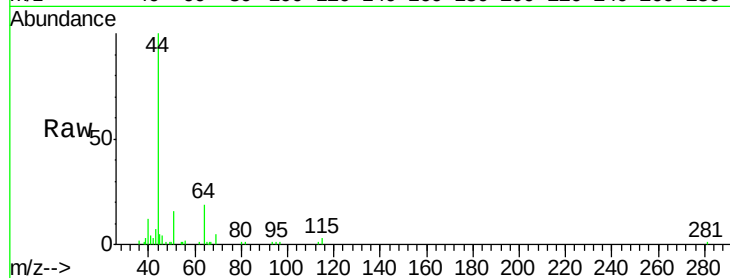
EP1-SV-8

Tgt Ion: 64 Resp: 1459

Ion Ratio Lower Upper

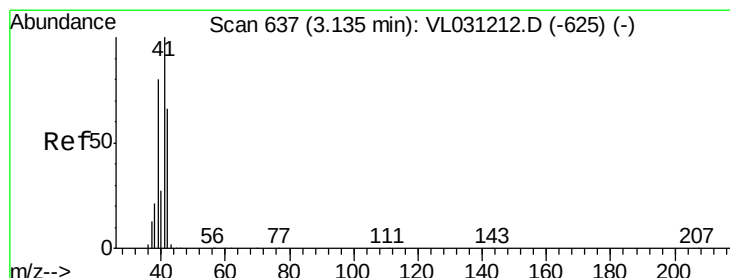
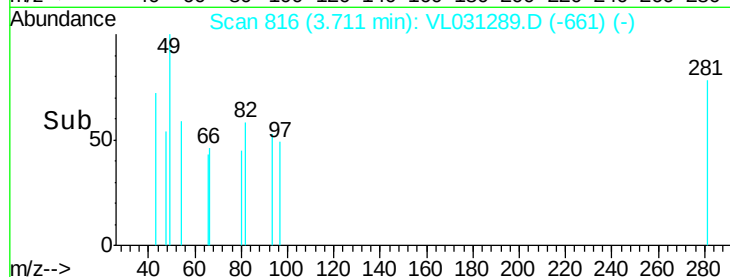
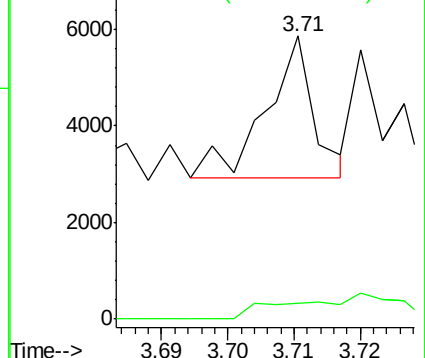
64 100

66 5.5 26.2 39.2#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#9

Propene

Concen: 17.01 ppbv

RT: 3.13 min Scan# 637

Delta R.T. 0.00 min

Lab File: VL031289.D

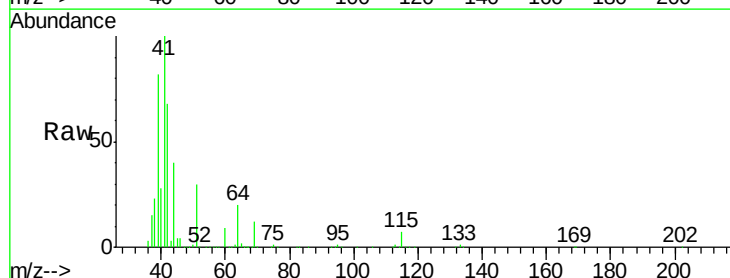
Acq: 21 Dec 2017 3:55

Tgt Ion: 41 Resp: 1360451

Ion Ratio Lower Upper

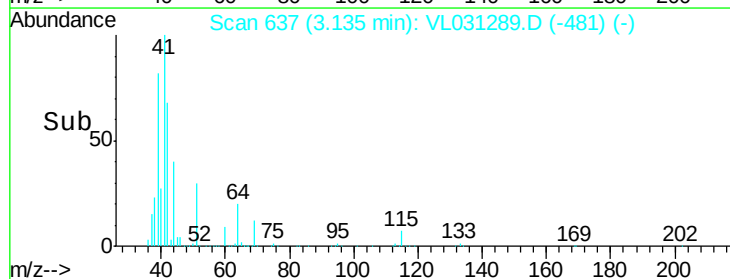
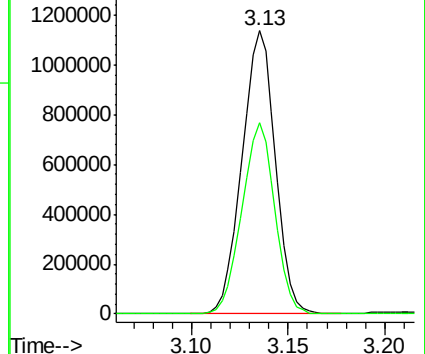
41 100

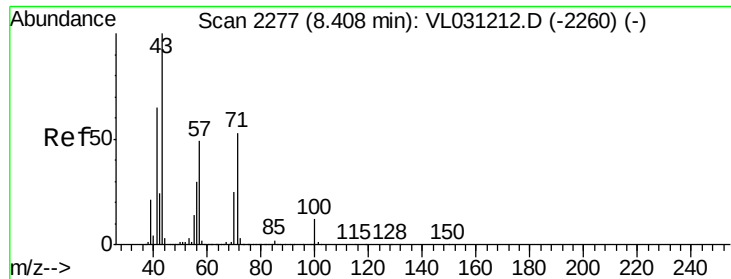
42 66.3 54.3 81.5



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 1.10 ppbv

RT: 8.41 min Scan# 2278

Delta R.T. 0.00 min

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MSVOA\_L

ClientSampleId :

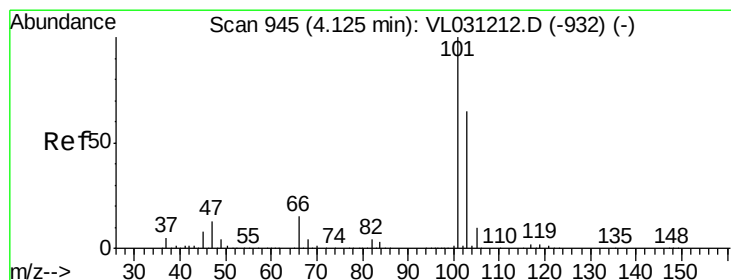
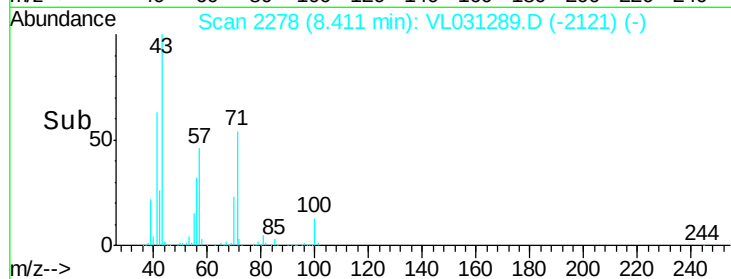
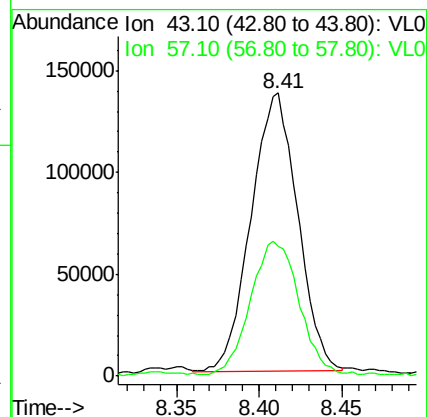
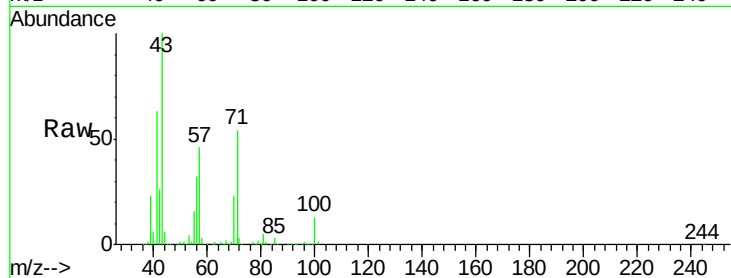
EP1-SV-8

Tgt Ion: 43 Resp: 267285

Ion Ratio Lower Upper

43 100

57 50.4 39.8 59.8



#11

Trichlorofluoromethane

Concen: 2.13 ppbv

RT: 4.13 min Scan# 946

Delta R.T. 0.00 min

Lab File: VL031289.D

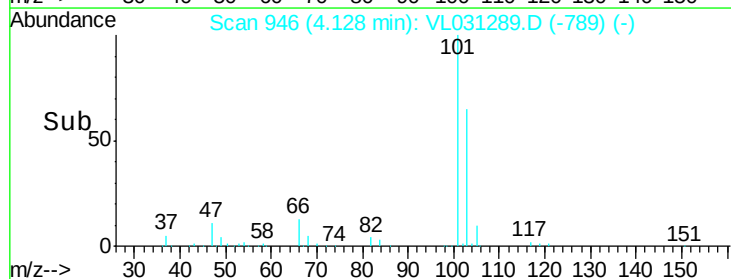
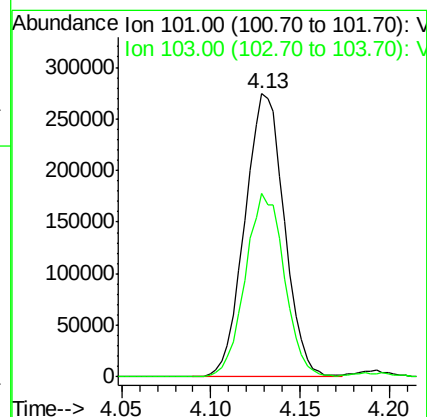
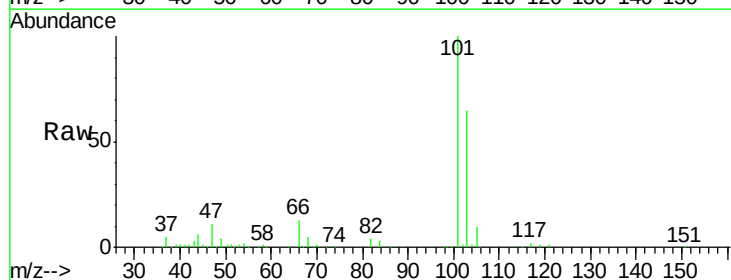
Acq: 21 Dec 2017 3:55

Tgt Ion: 101 Resp: 423347

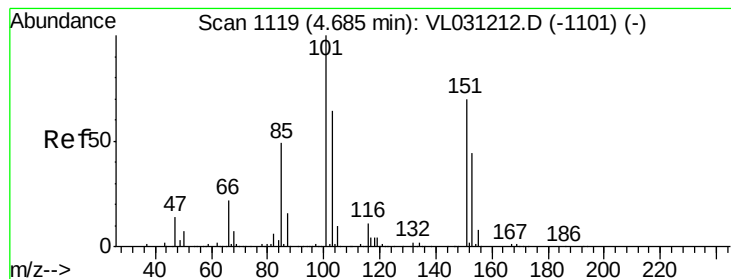
Ion Ratio Lower Upper

101 100

103 64.9 51.8 77.8







#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.09 ppbv

RT: 4.69 min Scan# 1122

Delta R.T. 0.01 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

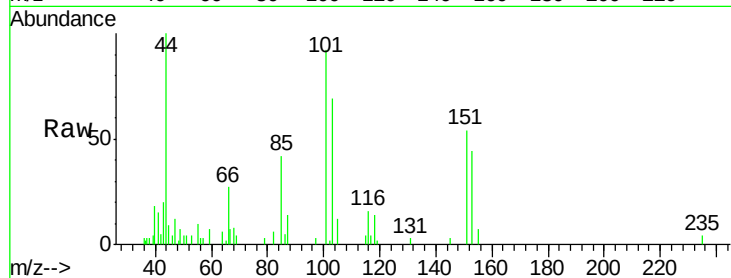
EP1-SV-8

Tgt Ion: 101 Resp: 12256

Ion Ratio Lower Upper

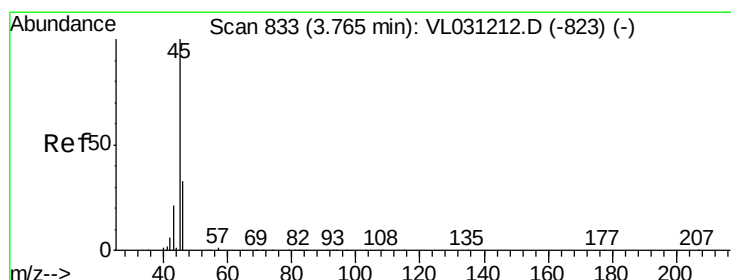
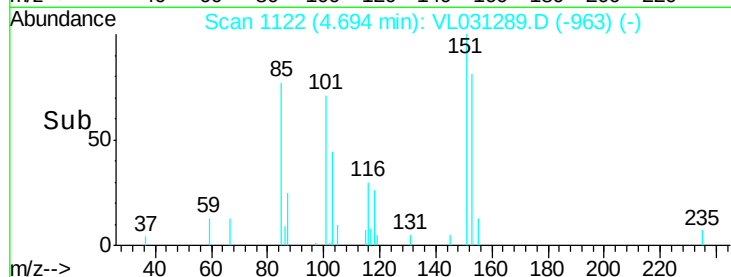
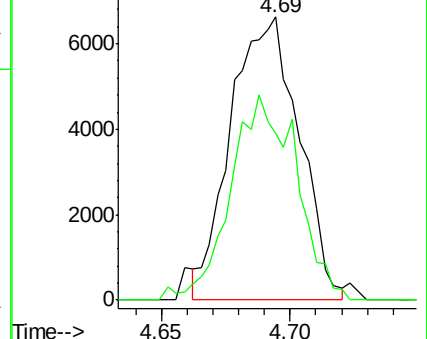
101 100

151 69.8 56.5 84.7



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 11.36 ppbv

RT: 3.77 min Scan# 835

Delta R.T. 0.01 min

Lab File: VL031289.D

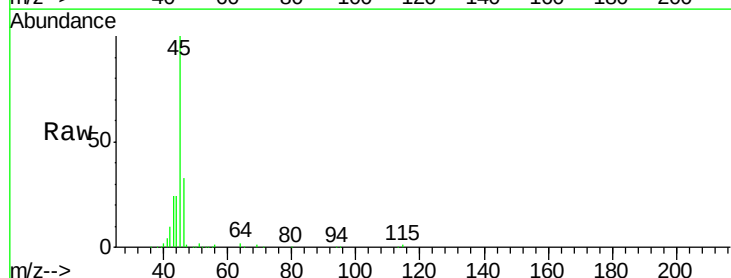
Acq: 21 Dec 2017 3:55

Tgt Ion: 45 Resp: 262191

Ion Ratio Lower Upper

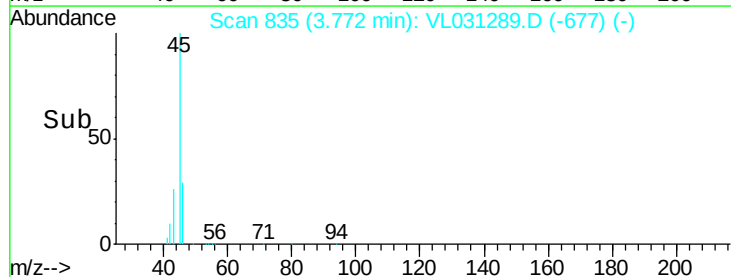
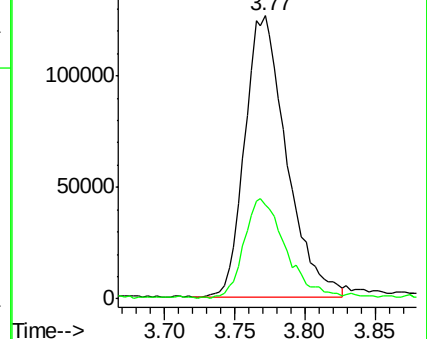
45 100

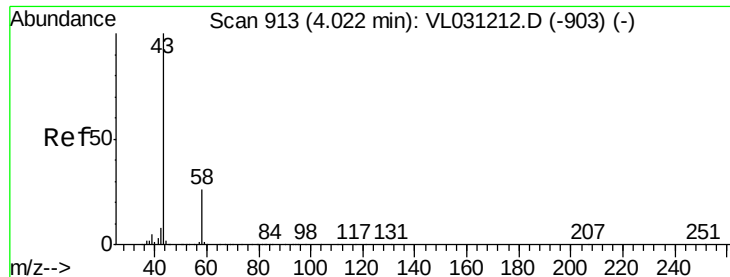
46 36.1 14.6 58.4



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 22.90 ppbv

RT: 4.03 min Scan# 914

Delta R.T. 0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

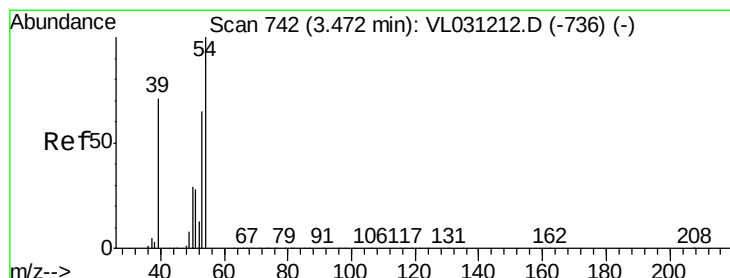
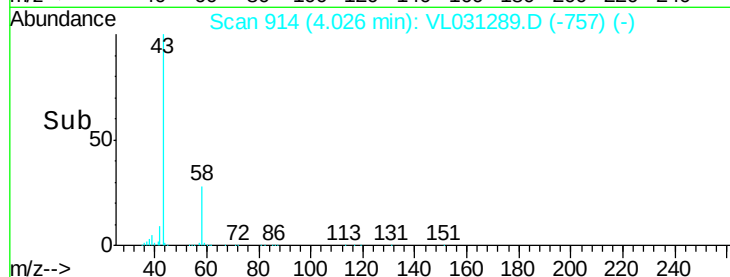
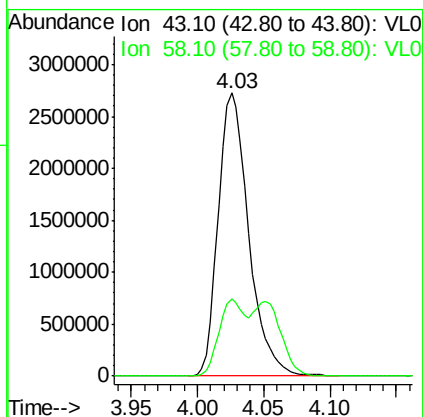
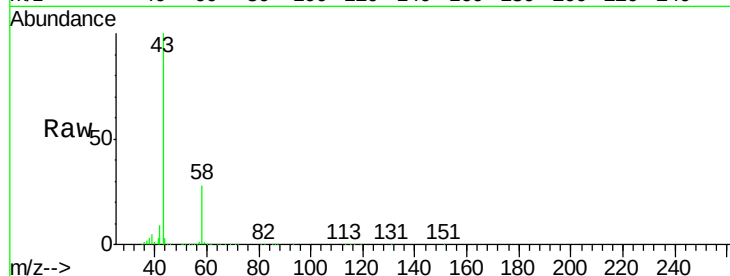
EP1-SV-8

Tgt Ion: 43 Resp: 4331030

Ion Ratio Lower Upper

43 100

58 48.9 20.3 30.5#



#16

1,3-Butadiene

Concen: 32.12 ppbv

RT: 3.45 min Scan# 736

Delta R.T. -0.02 min

Lab File: VL031289.D

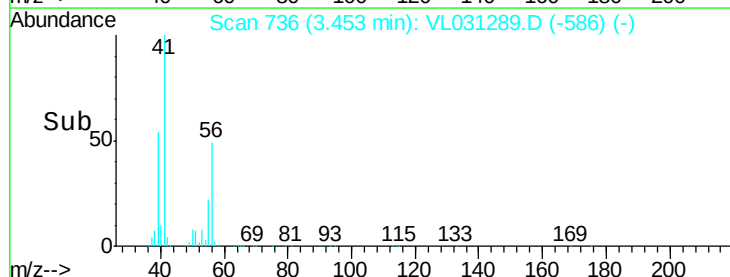
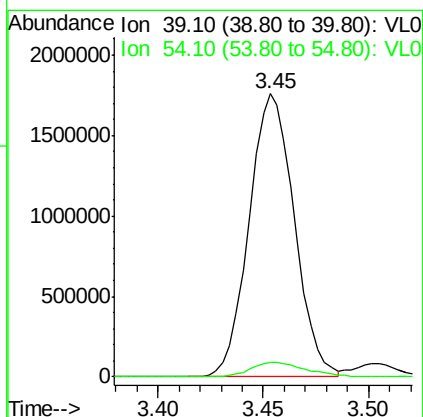
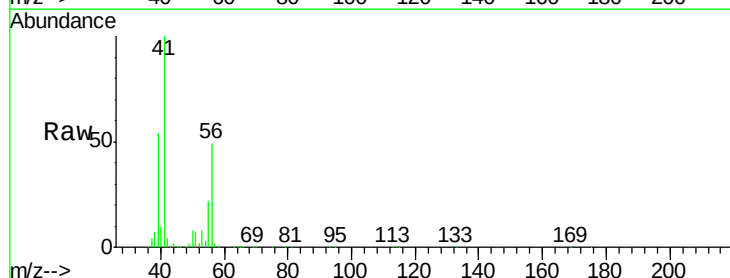
Acq: 21 Dec 2017 3:55

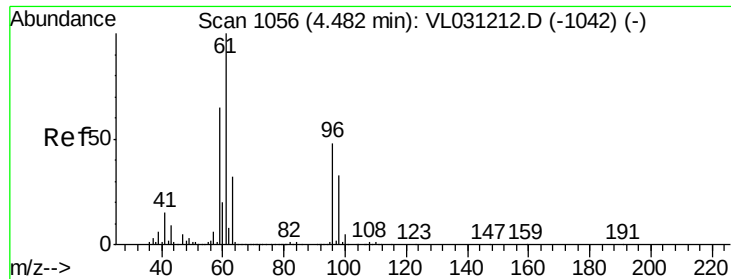
Tgt Ion: 39 Resp: 2614069

Ion Ratio Lower Upper

39 100

54 6.3 66.4 99.6#

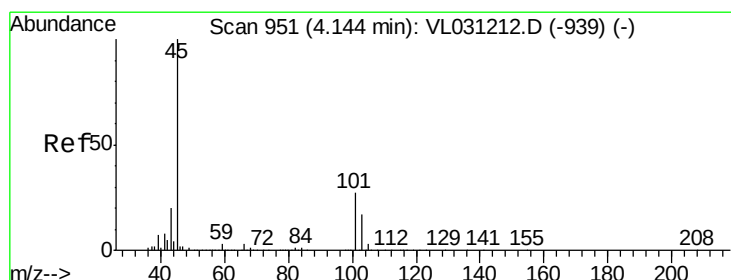
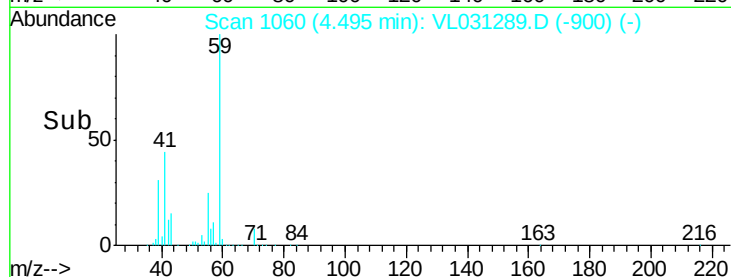
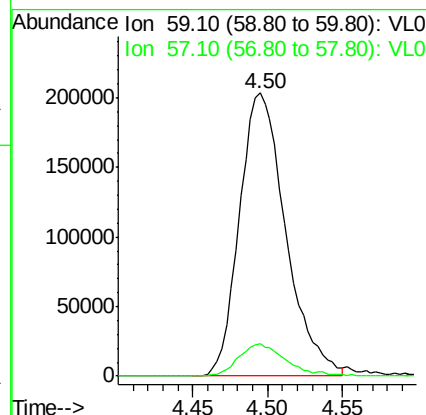
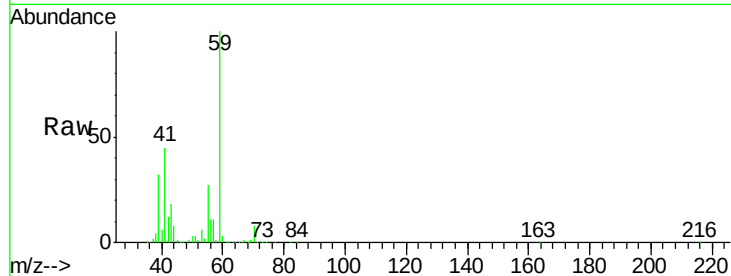




#17  
 tert-Butyl alcohol  
 Concen: 4.13 ppbv  
 RT: 4.50 min Scan# 1060  
 Delta R.T. 0.01 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

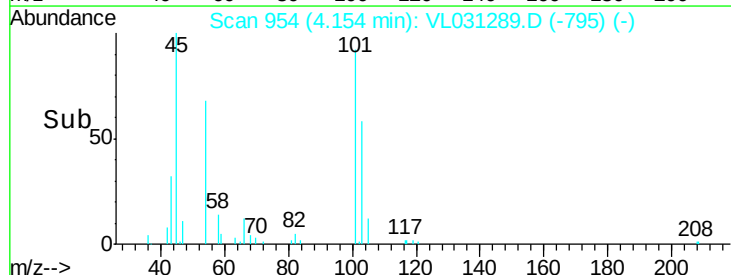
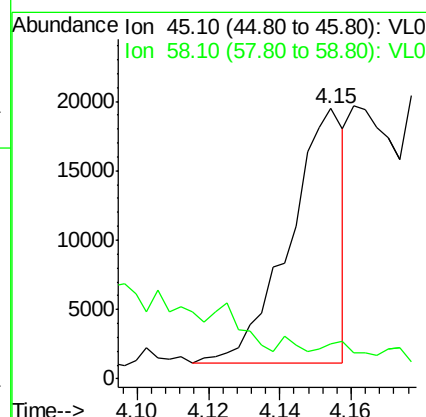
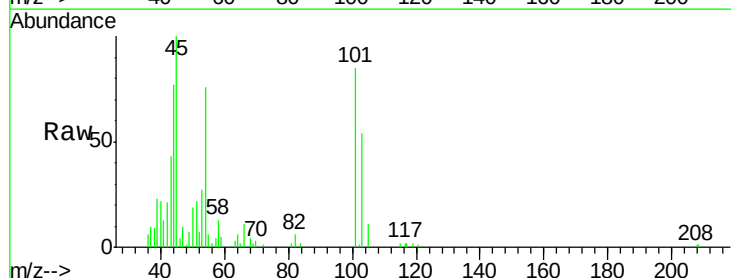
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 EP1-SV-8

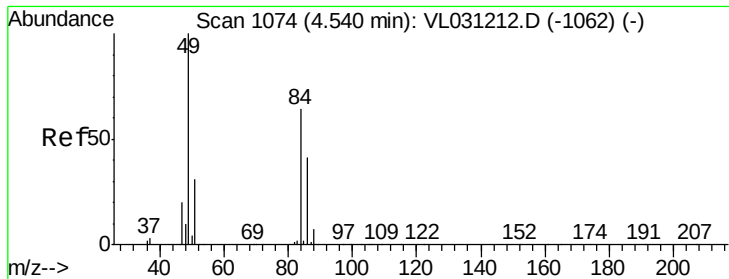
Tgt Ion: 59 Resp: 438070  
 Ion Ratio Lower Upper  
 59 100  
 57 11.9 8.2 12.2



#19  
 Isopropyl Alcohol  
 Concen: 0.16 ppbv  
 RT: 4.15 min Scan# 954  
 Delta R.T. 0.01 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

Tgt Ion: 45 Resp: 19298  
 Ion Ratio Lower Upper  
 45 100  
 58 0.0 27.2 40.8#

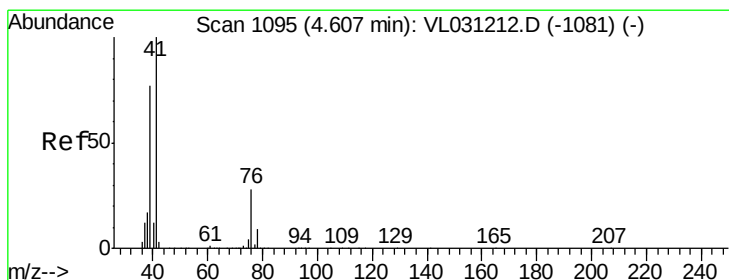
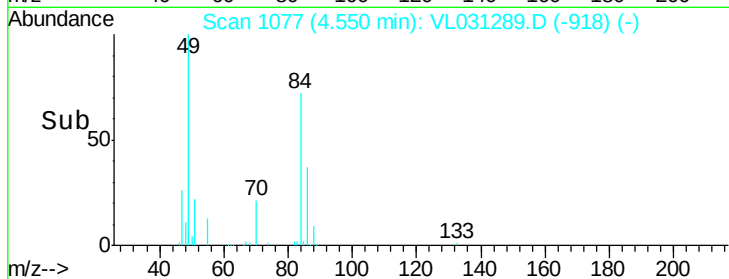
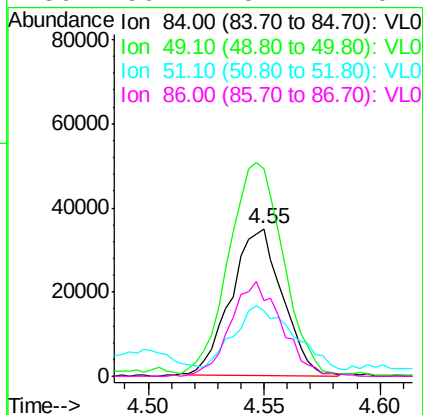
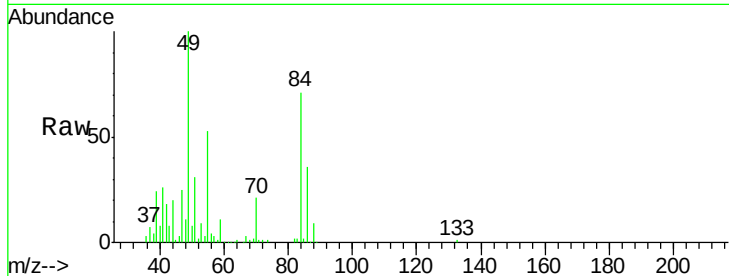




#20  
Methylene Chloride  
Concen: 0.86 ppbv  
RT: 4.55 min Scan# 1077  
Delta R.T. 0.01 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

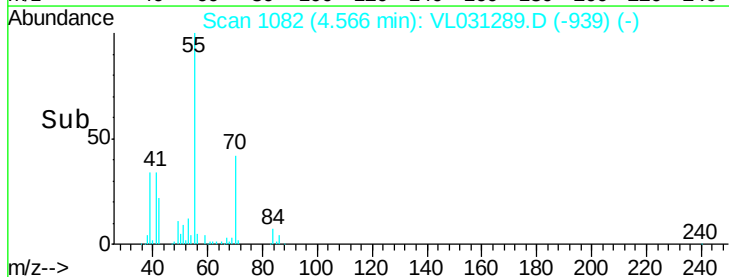
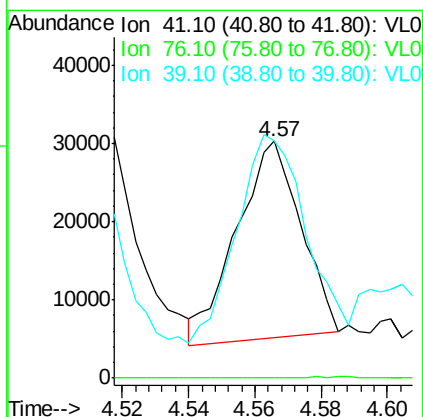
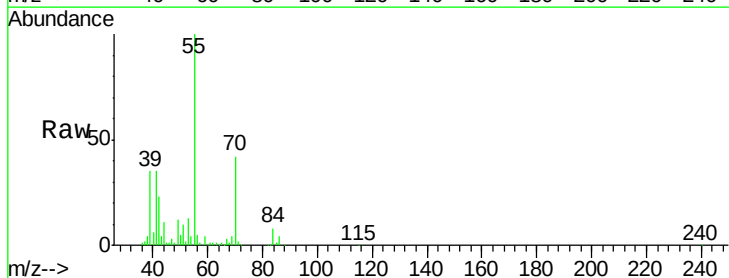
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

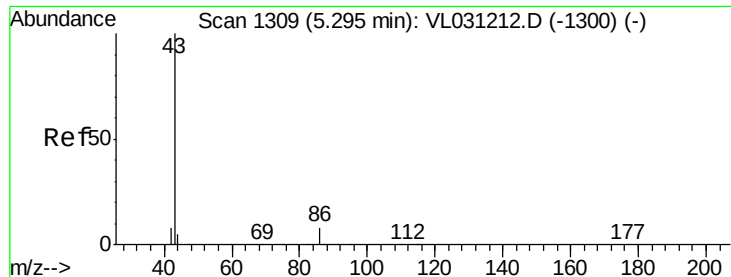
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 84      | 100   |       |       |
| 49      | 140.6 | 125.8 | 188.6 |
| 51      | 39.2  | 39.3  | 58.9# |
| 86      | 50.7  | 51.1  | 76.7# |



#21  
Allyl Chloride  
Concen: 0.31 ppbv  
RT: 4.57 min Scan# 1082  
Delta R.T. -0.04 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 0.0   | 22.9  | 34.3# |
| 39      | 188.6 | 62.6  | 93.8# |





#23

Vinyl Acetate

Concen: 0.43 ppbv

RT: 5.28 min Scan# 1305

Delta R.T. -0.01 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

EP1-SV-8

Tgt Ion: 43 Resp: 131732

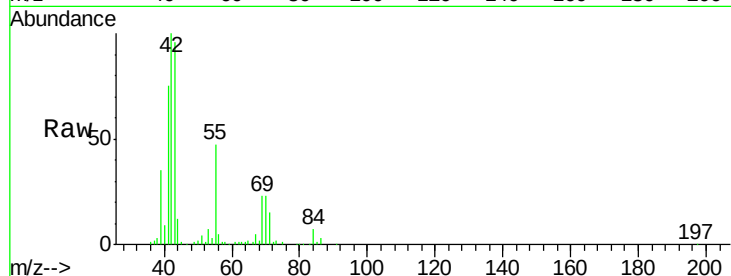
Ion Ratio Lower Upper

43 100

86 3.7 5.9 8.9#

42 106.0 7.3 10.9#

44 0.2 3.7 5.5#

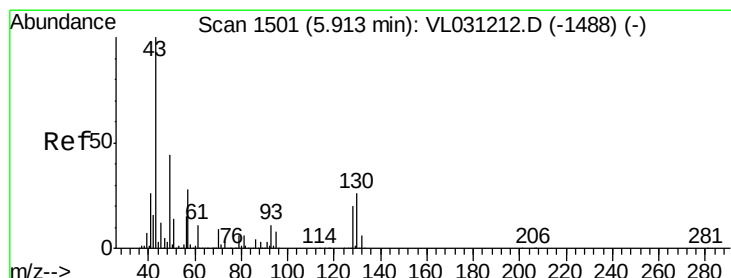
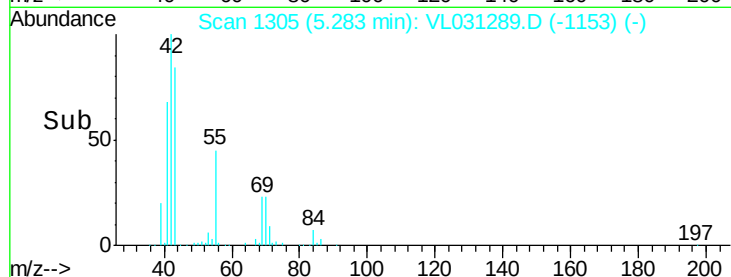
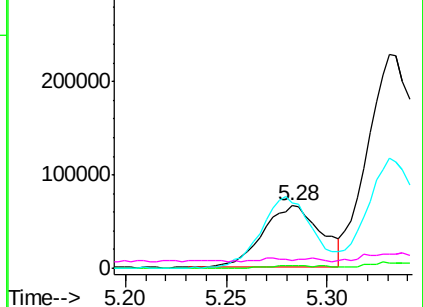


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.97 ppbv

RT: 5.93 min Scan# 1506

Delta R.T. 0.02 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Tgt Ion: 43 Resp: 375713

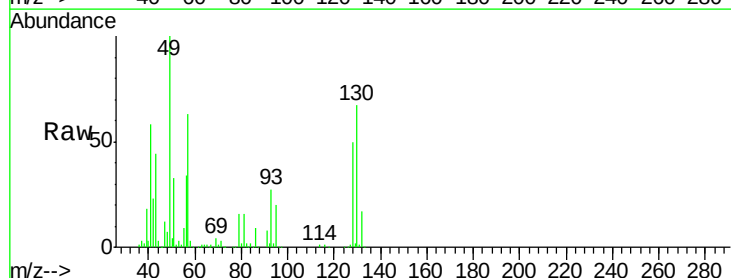
Ion Ratio Lower Upper

43 100

45 1.4 8.0 12.0#

61 0.5 7.4 11.0#

70 3.4 5.8 8.8#

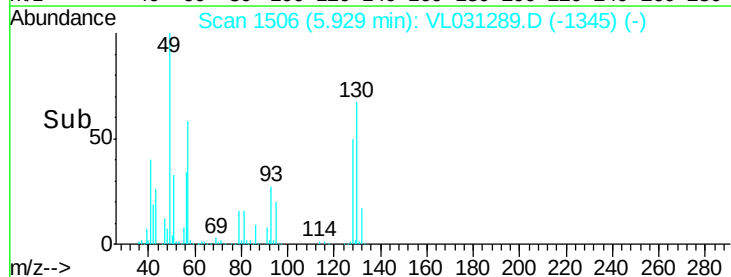
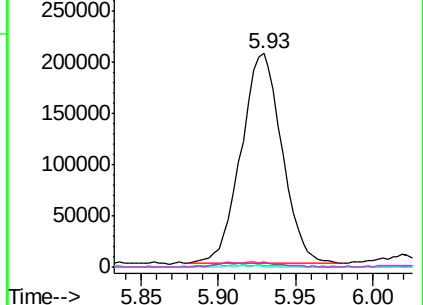


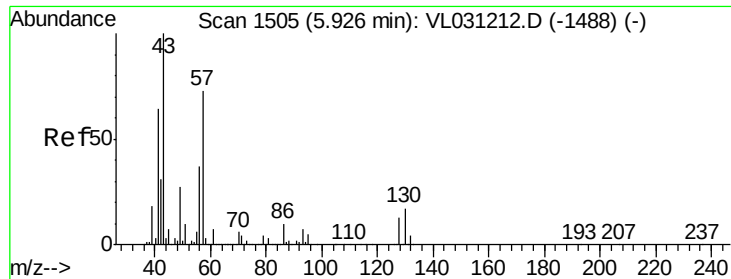
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

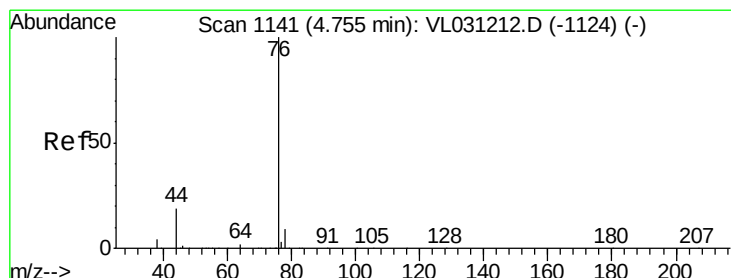
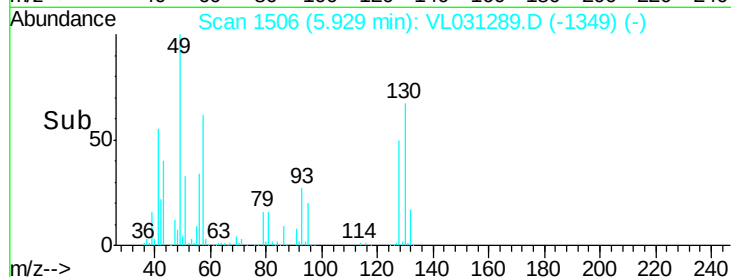
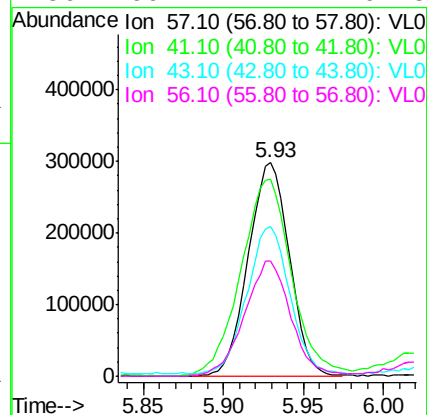
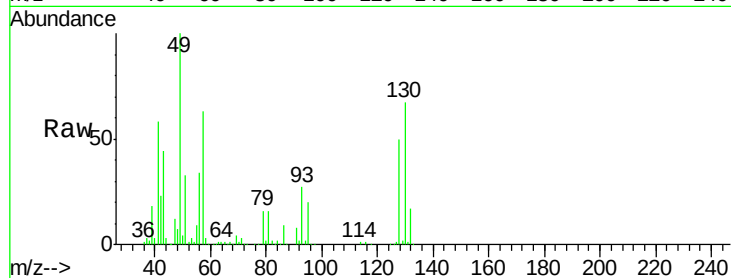




#26  
Hexane  
Concen: 2.86 ppbv  
RT: 5.93 min Scan# 1506  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

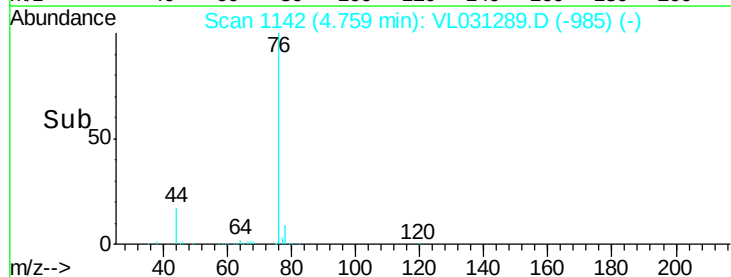
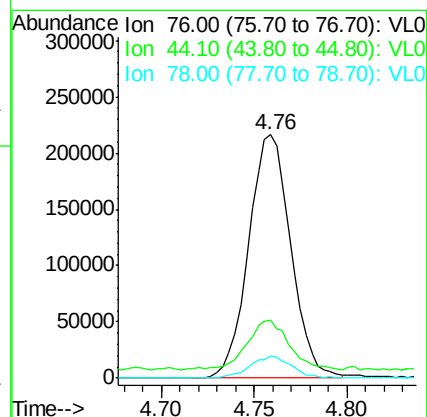
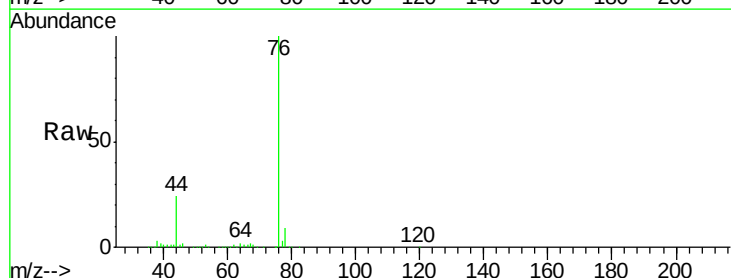
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

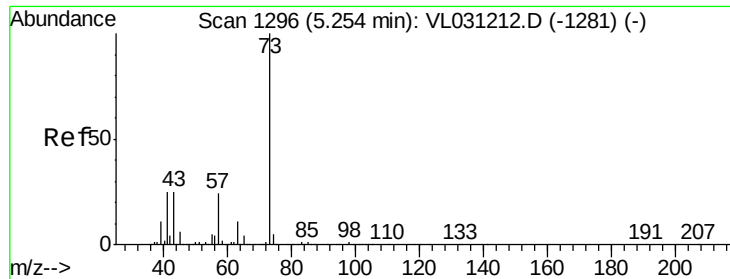
Tgt Ion: 57 Resp: 524658  
Ion Ratio Lower Upper  
57 100  
41 113.7 70.3 105.5#  
43 71.5 173.8 260.8#  
56 60.4 41.7 62.5



#27  
Carbon Disulfide  
Concen: 1.85 ppbv  
RT: 4.76 min Scan# 1142  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

Tgt Ion: 76 Resp: 340380  
Ion Ratio Lower Upper  
76 100  
44 22.1 16.0 24.0  
78 9.1 7.5 11.3

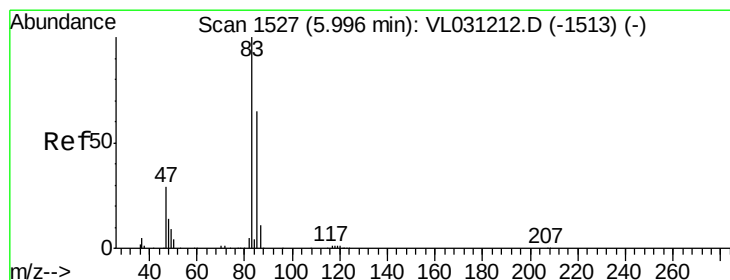
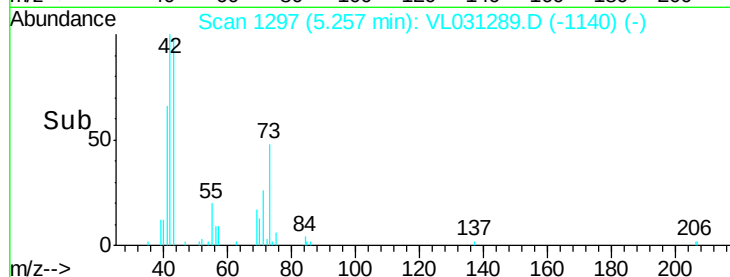
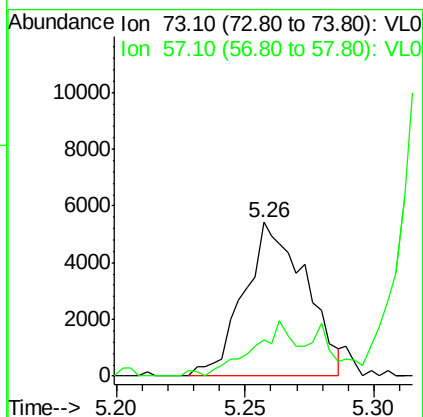
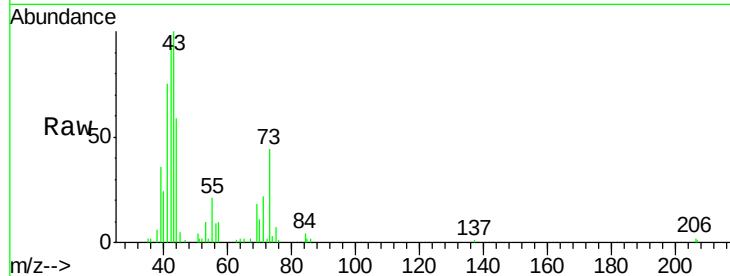




#28  
Methyl tert-Butyl Ether  
Concen: 0.04 ppbv  
RT: 5.26 min Scan# 1297  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

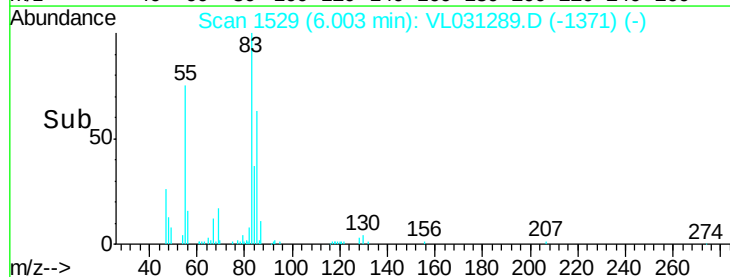
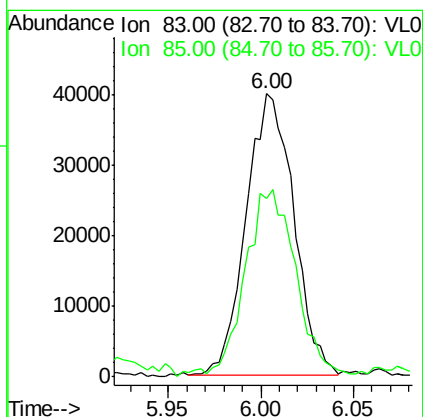
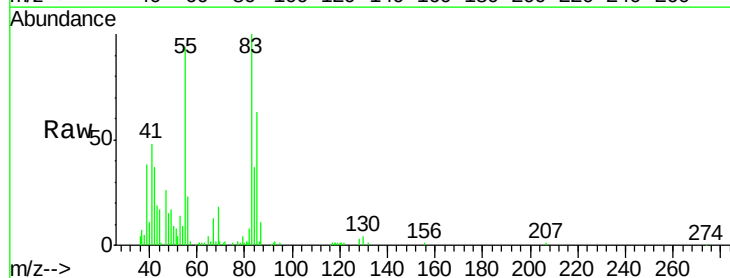
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

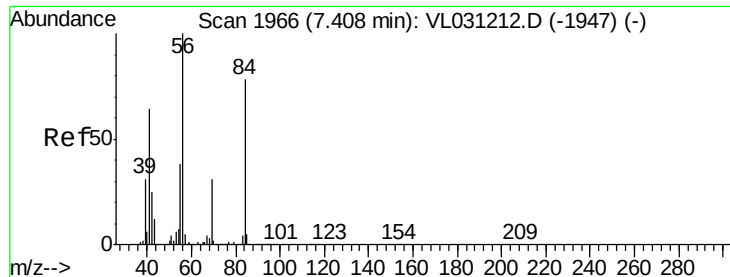
Tgt Ion: 73 Resp: 9084  
Ion Ratio Lower Upper  
73 100  
57 631.4 18.5 27.7#



#29  
Chloroform  
Concen: 0.29 ppbv  
RT: 6.00 min Scan# 1529  
Delta R.T. 0.01 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

Tgt Ion: 83 Resp: 70993  
Ion Ratio Lower Upper  
83 100  
85 61.7 51.8 77.6

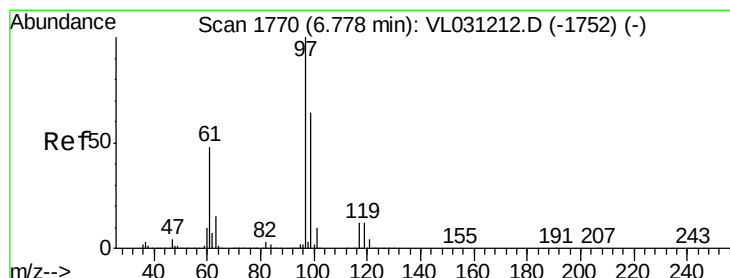
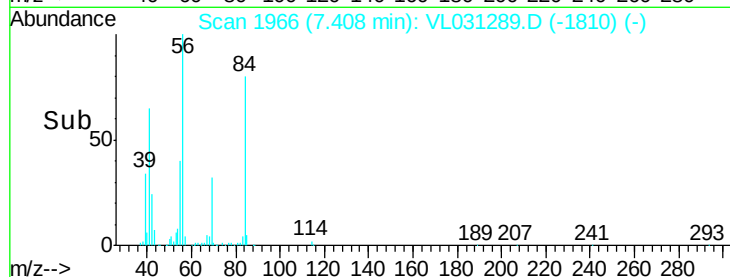
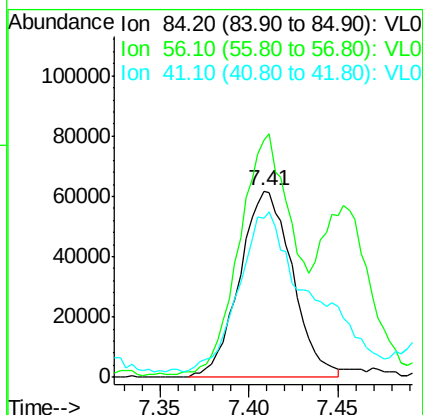
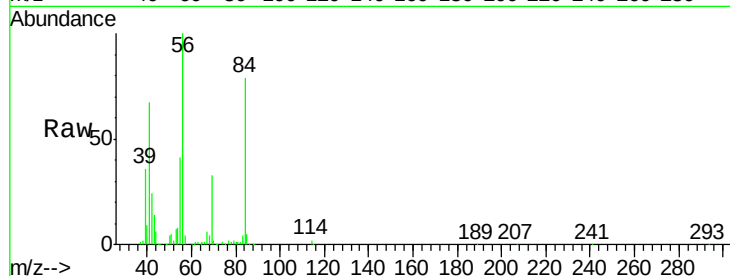




#30  
Cyclohexane  
Concen: 0.79 ppbv  
RT: 7.41 min Scan# 1966  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

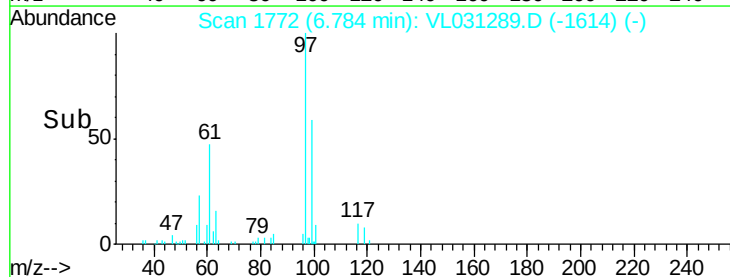
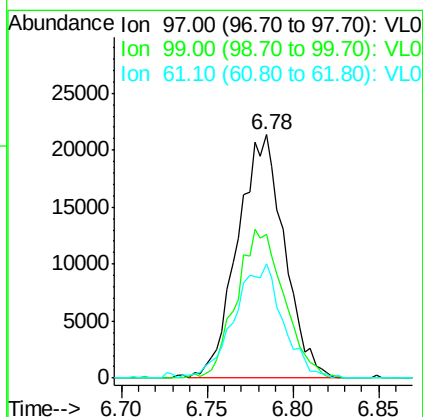
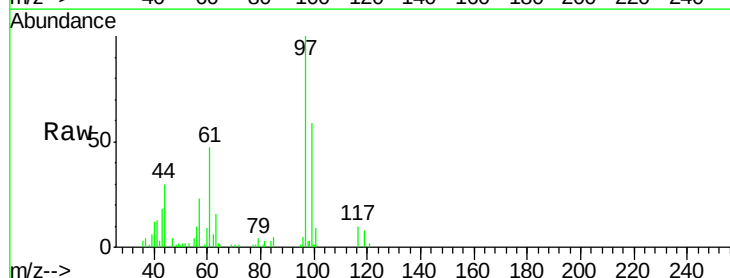
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

Tgt Ion: 84 Resp: 127459  
Ion Ratio Lower Upper  
84 100  
56 135.0 108.0 162.0  
41 115.4 66.2 99.4#

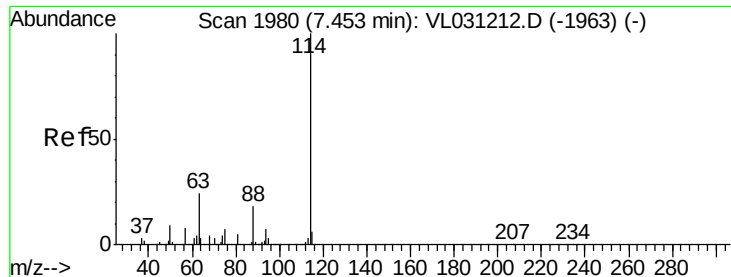


#32  
1,1,1-Trichloroethane  
Concen: 0.15 ppbv  
RT: 6.78 min Scan# 1772  
Delta R.T. 0.01 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

Tgt Ion: 97 Resp: 40411  
Ion Ratio Lower Upper  
97 100  
99 62.2 51.4 77.0  
61 48.8 38.4 57.6



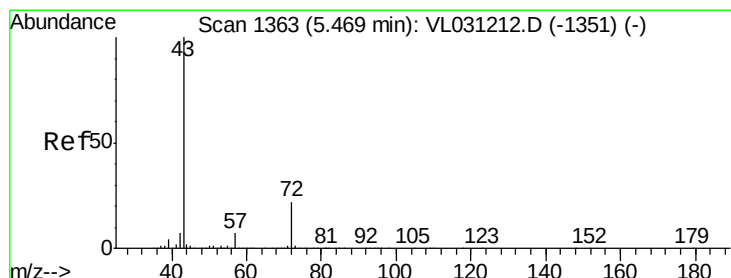
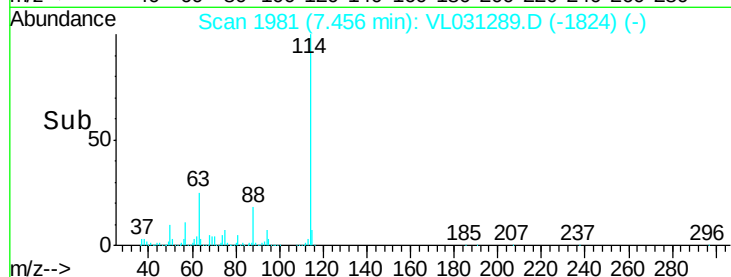
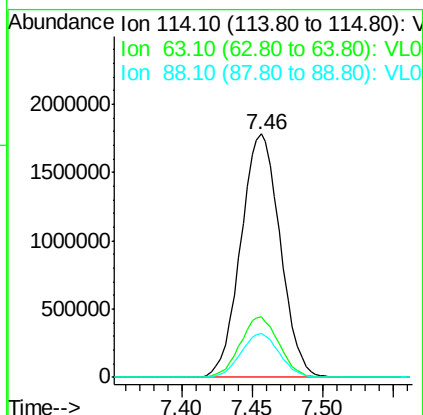
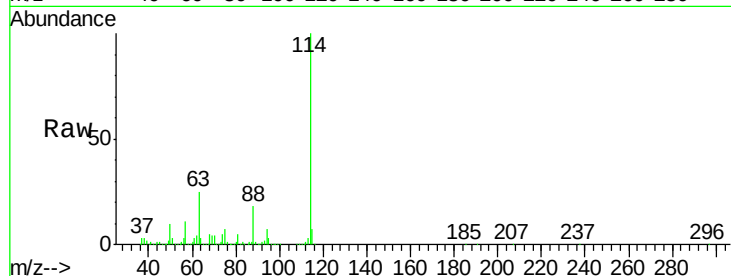




#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 7.46 min Scan# 1981  
 Delta R.T. 0.00 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

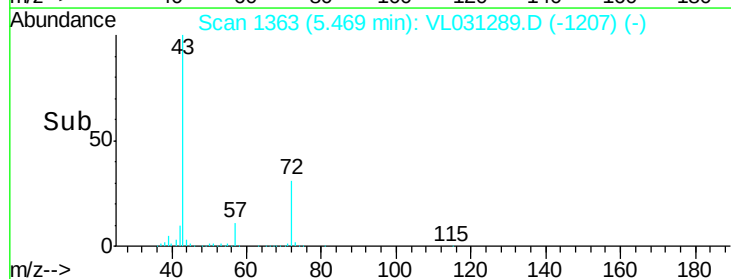
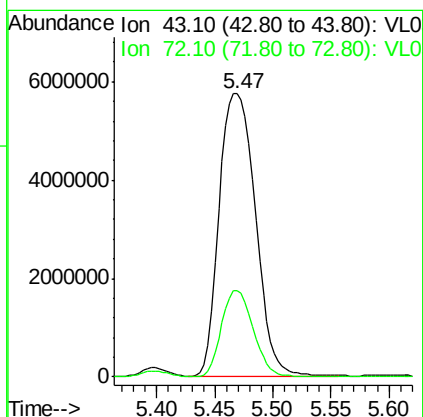
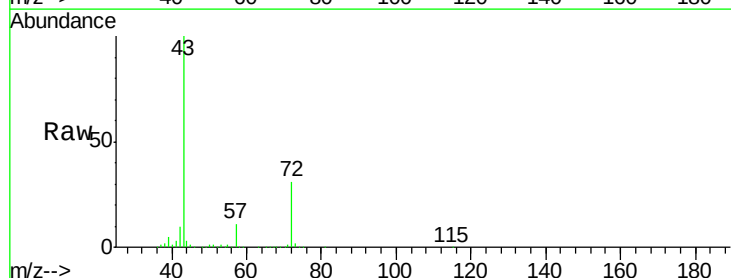
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 EP1-SV-8

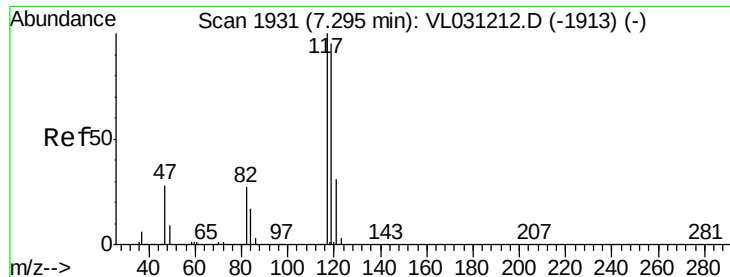
Tgt Ion:114 Resp: 3481460  
 Ion Ratio Lower Upper  
 114 100  
 63 24.5 19.8 29.8  
 88 17.7 14.2 21.4



#34  
 2-Butanone  
 Concen: 50.92 ppbv  
 RT: 5.47 min Scan# 1363  
 Delta R.T. 0.00 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

Tgt Ion: 43 Resp:12521152  
 Ion Ratio Lower Upper  
 43 100  
 72 26.9 18.1 27.1

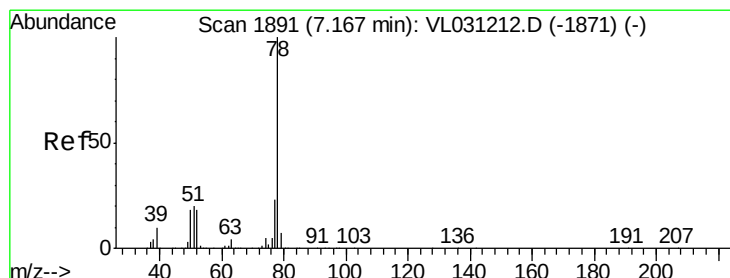
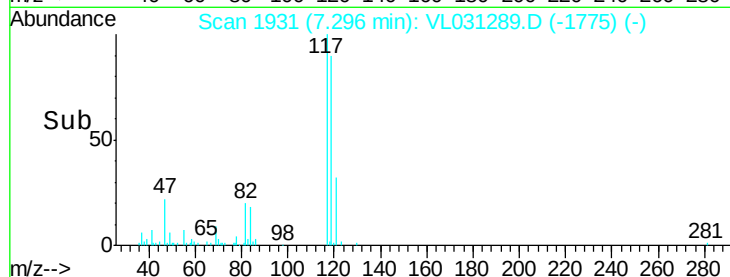
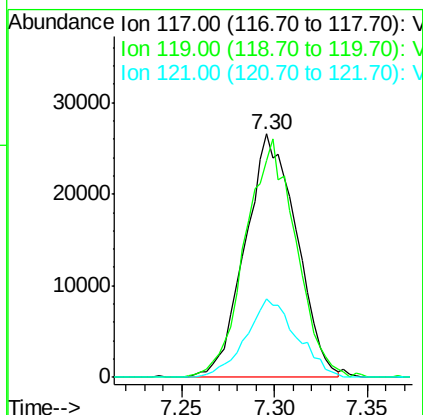
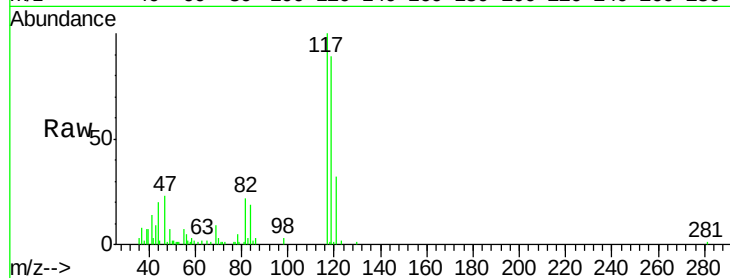




#35  
Carbon Tetrachloride  
Concen: 0.21 ppbv  
RT: 7.30 min Scan# 1931  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

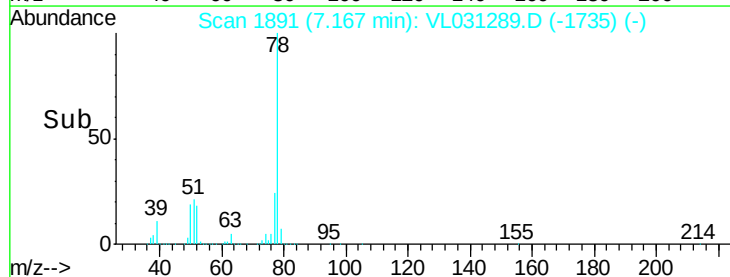
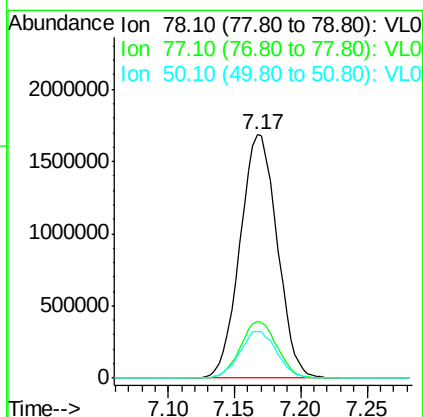
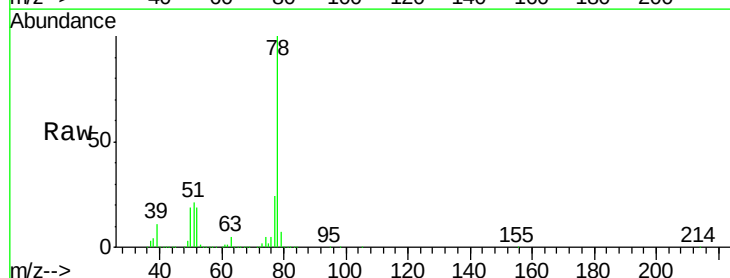
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

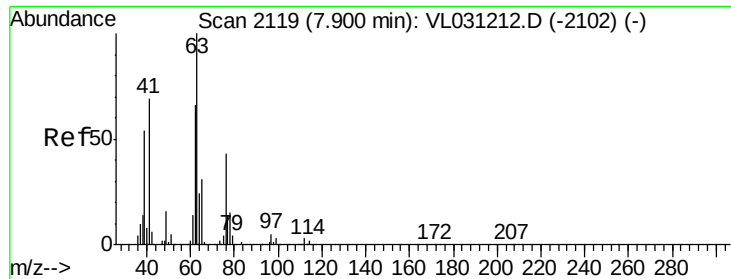
Tgt Ion: 117 Resp: 51275  
Ion Ratio Lower Upper  
117 100  
119 88.4 75.9 113.9  
121 32.2 24.6 37.0



#36  
Benzene  
Concen: 8.91 ppbv  
RT: 7.17 min Scan# 1891  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

Tgt Ion: 78 Resp: 3286594  
Ion Ratio Lower Upper  
78 100  
77 23.5 18.1 27.1  
50 19.0 14.6 21.8

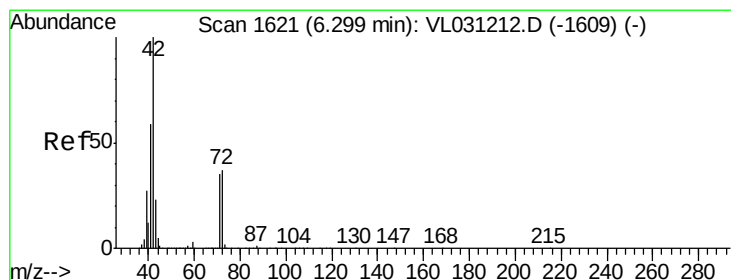
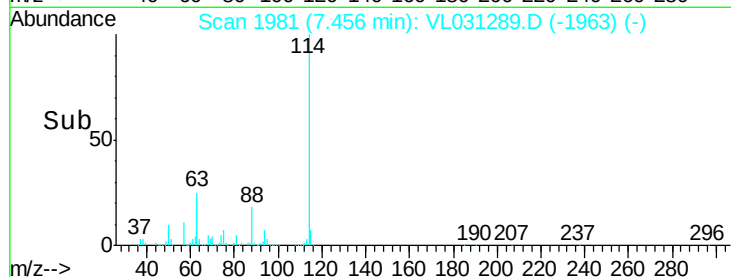
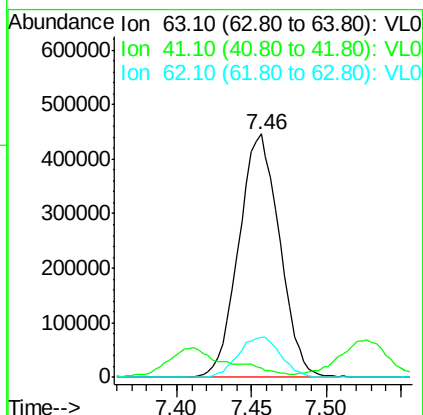
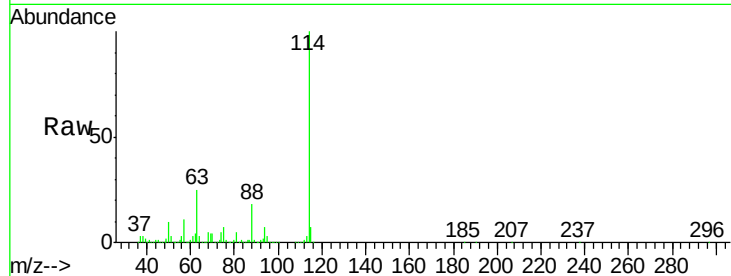




#39  
 1,2-Dichloropropane  
 Concen: 6.45 ppbv  
 RT: 7.46 min Scan# 1981  
 Delta R.T. -0.44 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

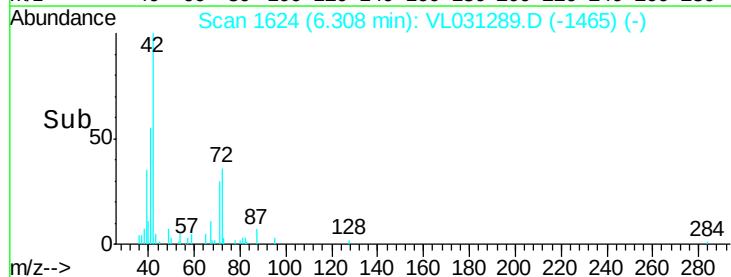
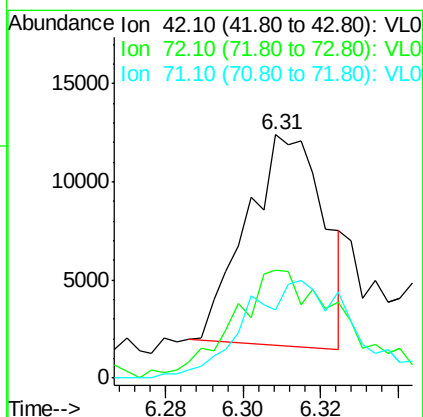
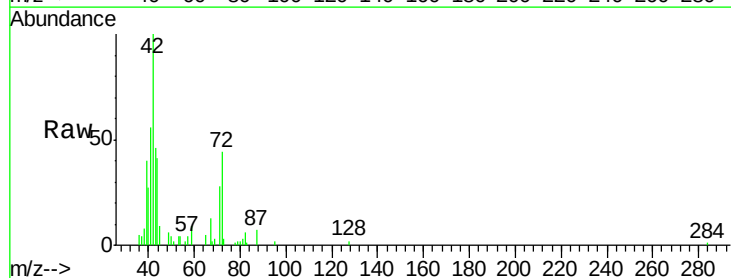
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 EP1-SV-8

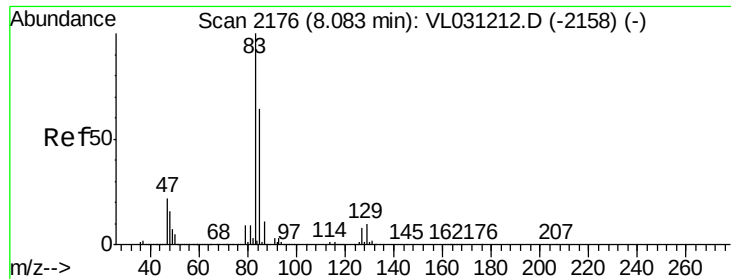
Tgt Ion: 63 Resp: 841727  
 Ion Ratio Lower Upper  
 63 100  
 41 0.0 55.2 82.8#  
 62 16.5 53.0 79.4#



#41  
 Tetrahydrofuran  
 Concen: 0.11 ppbv  
 RT: 6.31 min Scan# 1624  
 Delta R.T. 0.01 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

Tgt Ion: 42 Resp: 14972  
 Ion Ratio Lower Upper  
 42 100  
 72 79.8 30.2 45.4#  
 71 68.0 29.0 43.6#





#42

Bromodichloromethane

Concen: 0.06 ppbv

RT: 8.08 min Scan# 2176

Delta R.T. 0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

EP1-SV-8

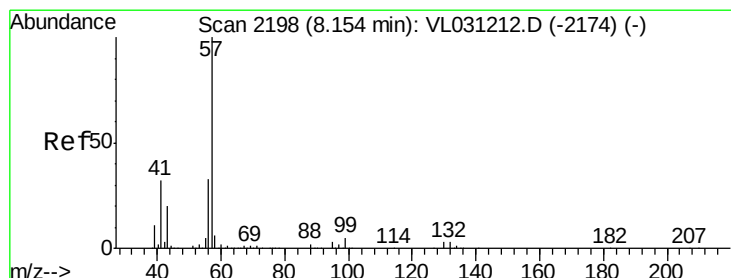
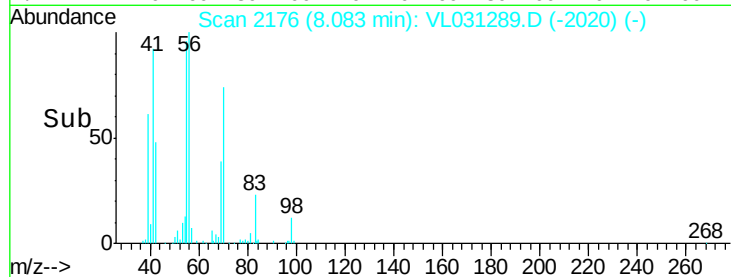
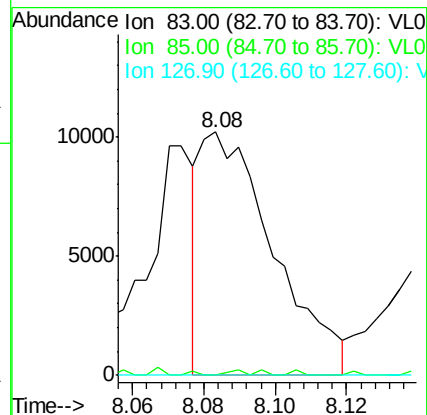
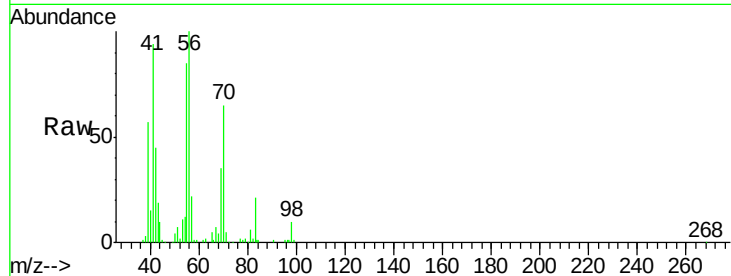
Tgt Ion: 83 Resp: 14361

Ion Ratio Lower Upper

83 100

85 0.0 51.5 77.3#

127 0.0 6.5 9.7#



#44

2,2,4-Trimethylpentane

Concen: 1.16 ppbv

RT: 8.15 min Scan# 2198

Delta R.T. 0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

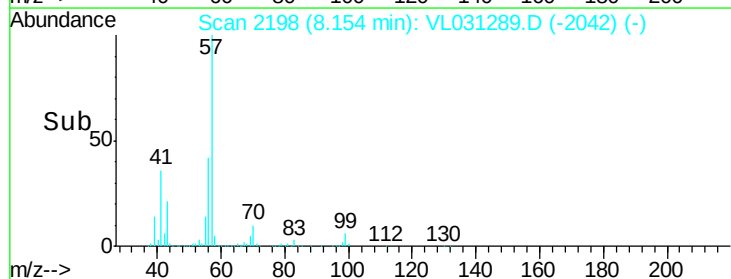
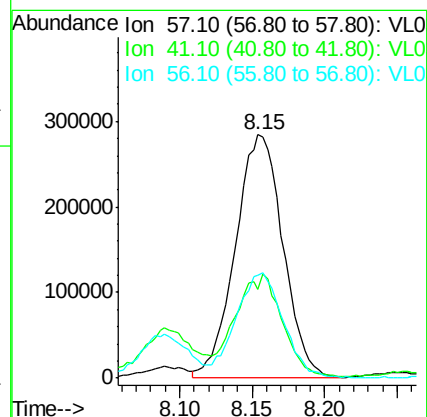
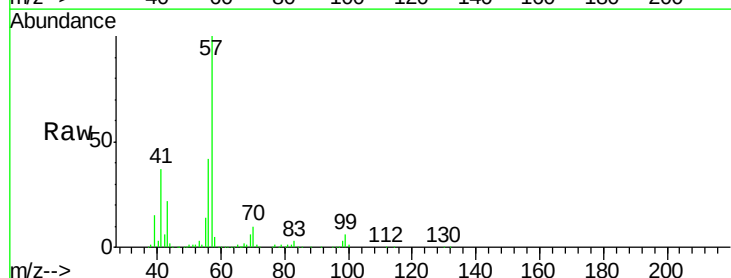
Tgt Ion: 57 Resp: 644530

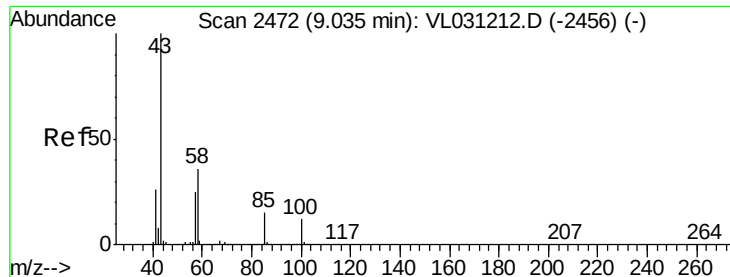
Ion Ratio Lower Upper

57 100

41 41.7 25.5 38.3#

56 42.7 25.0 37.6#





#50

4-Methyl-2-Pentanone

Concen: 0.16 ppbv

RT: 9.05 min Scan# 2476

Delta R.T. 0.01 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

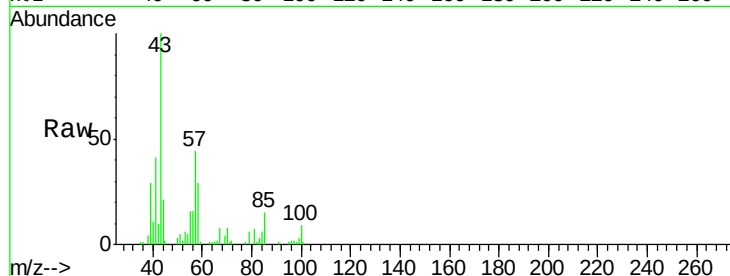
EP1-SV-8

Tgt Ion: 43 Resp: 47650

Ion Ratio Lower Upper

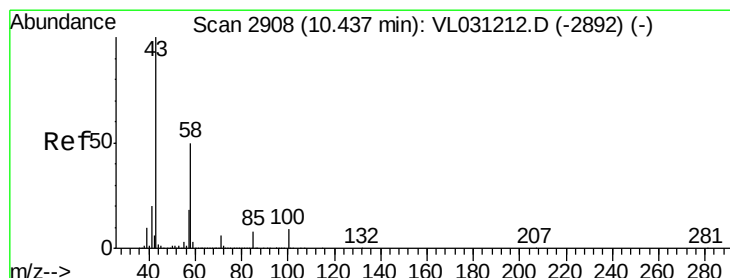
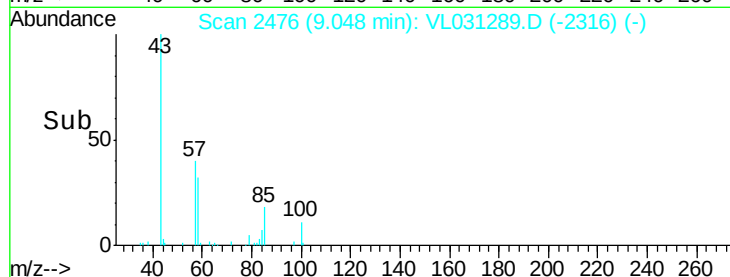
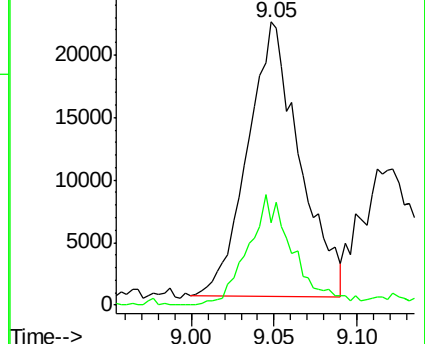
43 100

58 36.2 28.8 43.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#51

2-Hexanone

Concen: 5.76 ppbv

RT: 10.44 min Scan# 2908

Delta R.T. 0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

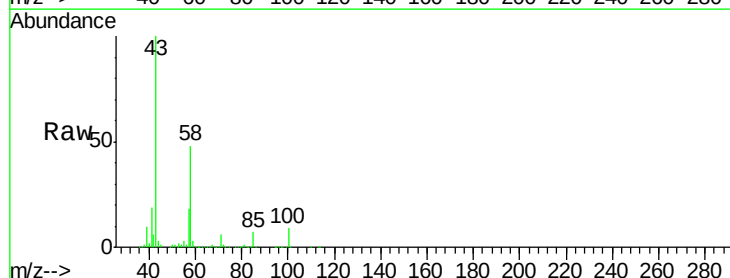
Tgt Ion: 43 Resp: 1653903

Ion Ratio Lower Upper

43 100

58 48.3 39.8 59.6

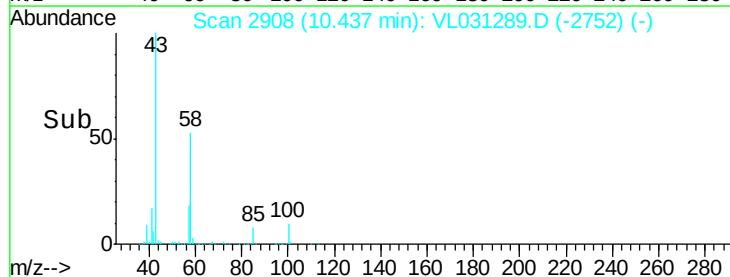
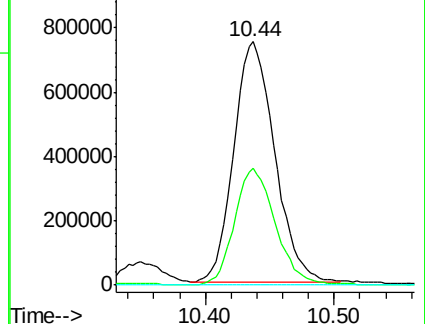
98 0.2 0.0 0.0#

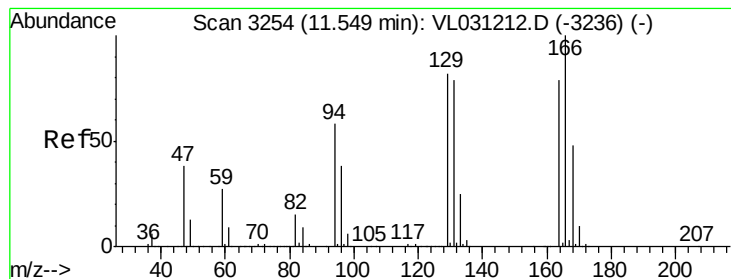


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0





#52

Tetrachloroethene

Concen: 14.72 ppbv

RT: 11.55 min Scan# 3253

Delta R.T. -0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

EP1-SV-8

Tgt Ion:164 Resp: 2003535

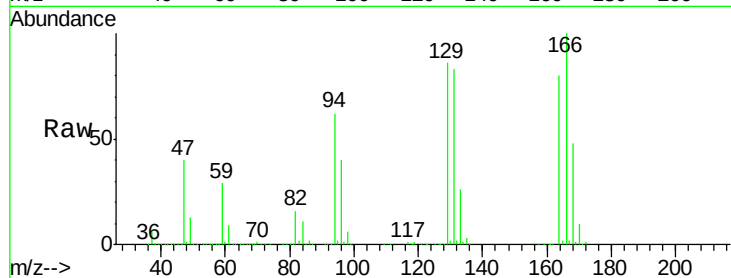
Ion Ratio Lower Upper

164 100

166 125.2 100.6 151.0

129 108.2 82.9 124.3

131 103.7 79.2 118.8

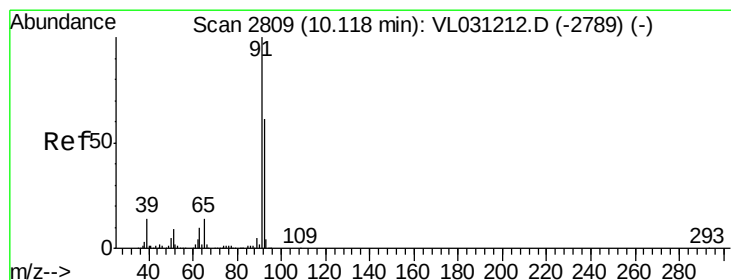
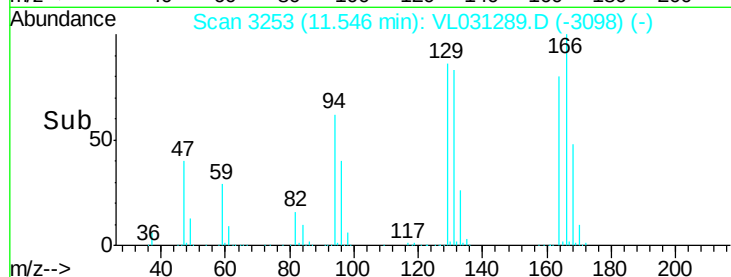
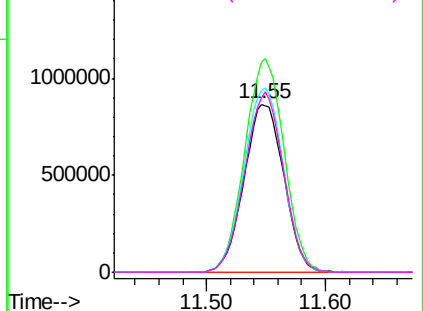


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 1.58 ppbv

RT: 10.12 min Scan# 2809

Delta R.T. 0.00 min

Lab File: VL031289.D

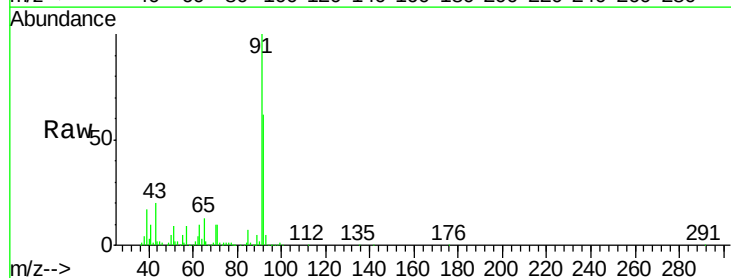
Acq: 21 Dec 2017 3:55

Tgt Ion: 91 Resp: 633977

Ion Ratio Lower Upper

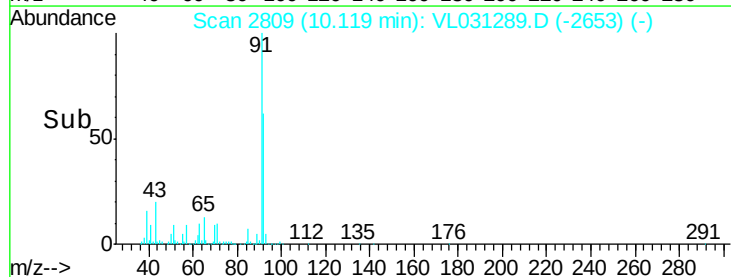
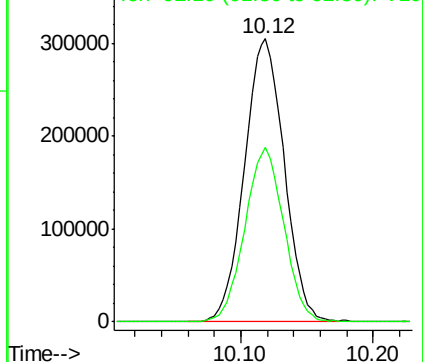
91 100

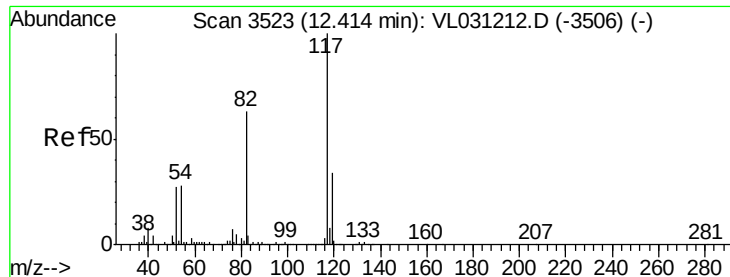
92 60.6 49.1 73.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

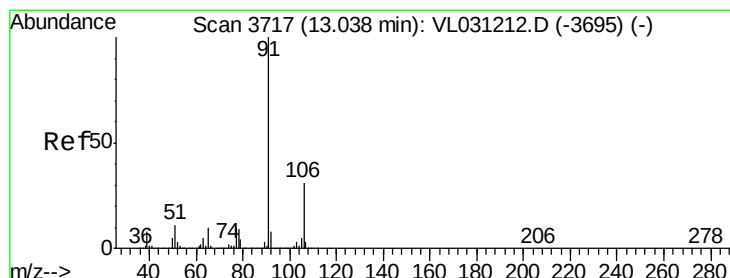
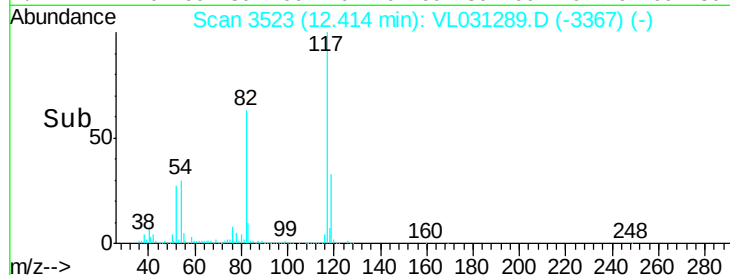
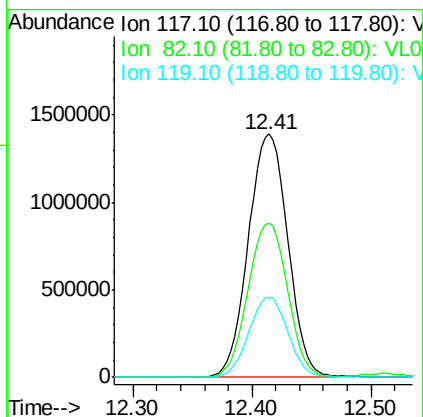
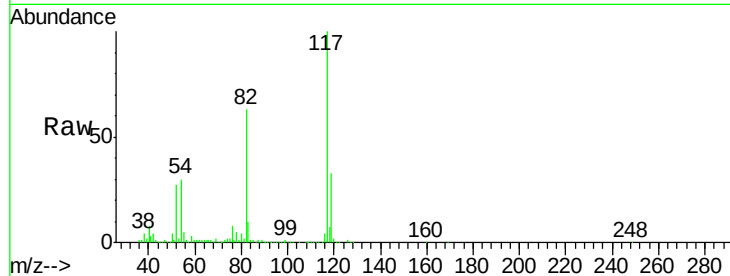




#55  
Chlorobenzene-d5  
Concen: 10.00 ppbv  
RT: 12.41 min Scan# 3523  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

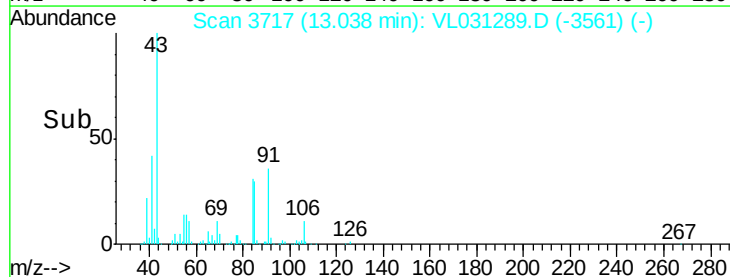
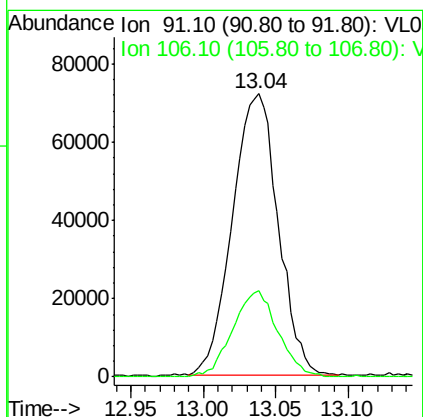
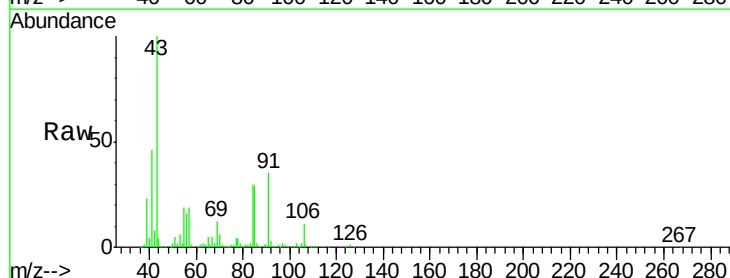
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

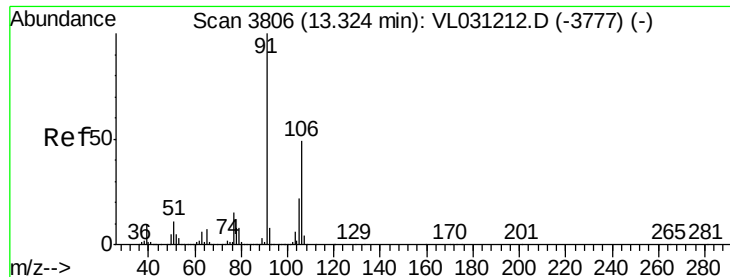
Tgt Ion:117 Resp: 3194775  
Ion Ratio Lower Upper  
117 100  
82 63.7 48.1 72.1  
119 32.7 23.1 34.7



#58  
Ethyl Benzene  
Concen: 0.30 ppbv  
RT: 13.04 min Scan# 3717  
Delta R.T. 0.00 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

Tgt Ion: 91 Resp: 157948  
Ion Ratio Lower Upper  
91 100  
106 30.8 25.1 37.7

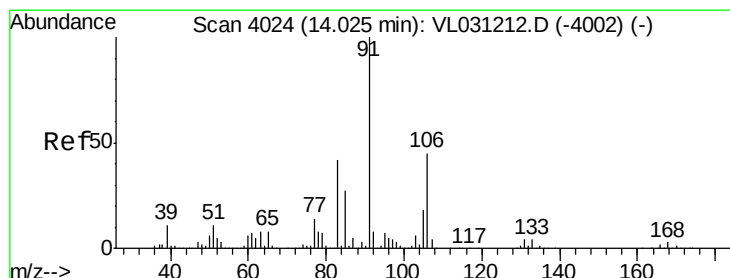
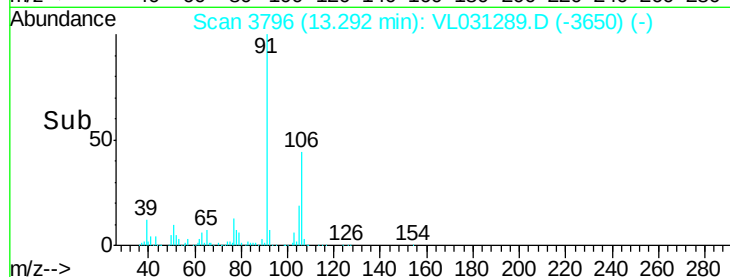
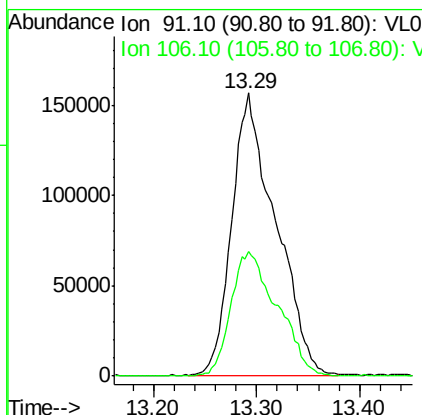
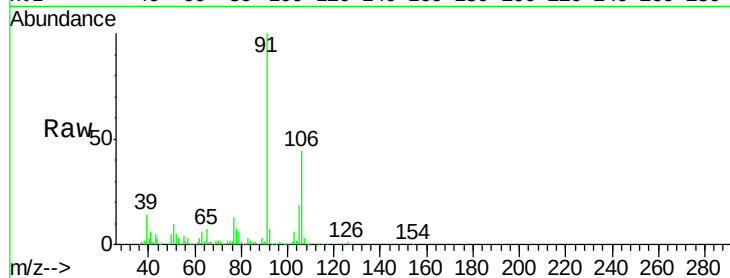




#59  
m/p-Xylene  
Concen: 1.09 ppbv  
RT: 13.29 min Scan# 3796  
Delta R.T. -0.03 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

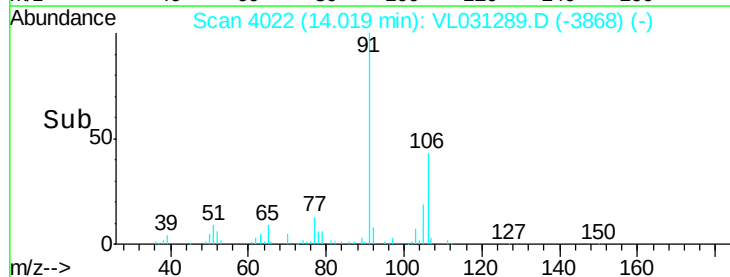
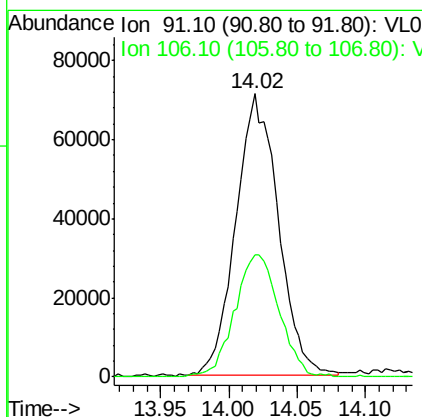
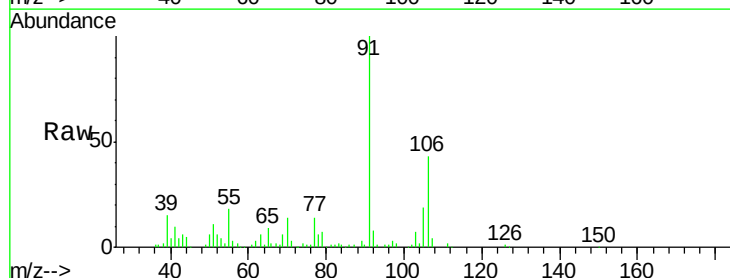
Instrument :  
MSVOA\_L  
ClientSampleId :  
EP1-SV-8

Tgt Ion: 91 Resp: 459461  
Ion Ratio Lower Upper  
91 100  
106 46.8 38.5 57.7

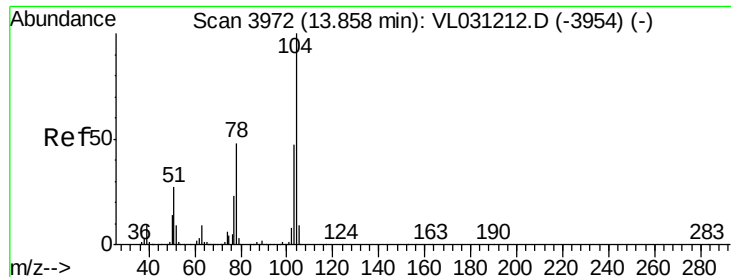


#60  
o-Xylene  
Concen: 0.36 ppbv  
RT: 14.02 min Scan# 4022  
Delta R.T. -0.01 min  
Lab File: VL031289.D  
Acq: 21 Dec 2017 3:55

Tgt Ion: 91 Resp: 153736  
Ion Ratio Lower Upper  
91 100  
106 45.4 22.7 68.1







#61

Styrene

Concen: 0.42 ppbv

RT: 13.86 min Scan# 3972

Delta R.T. 0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

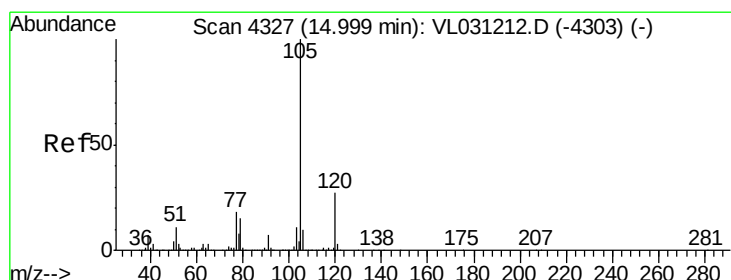
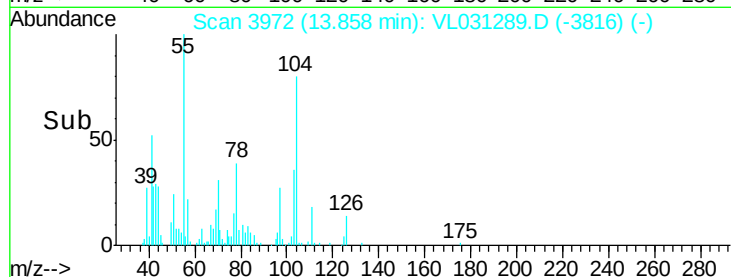
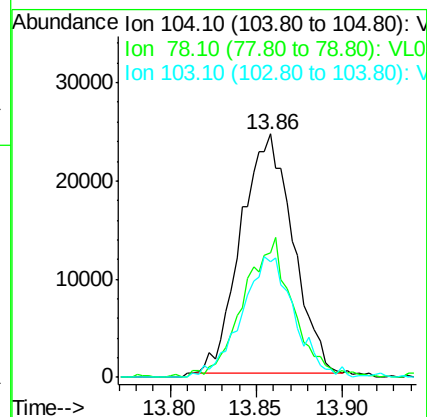
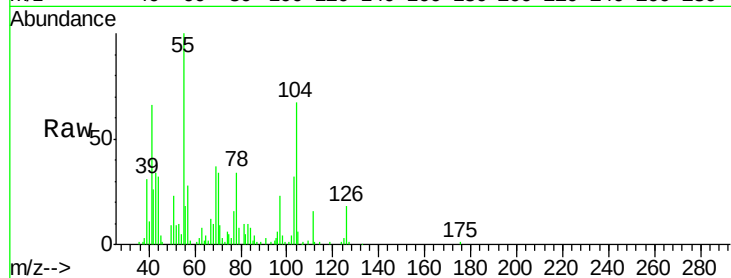
Instrument :

MSVOA\_L

ClientSampleId :

EP1-SV-8

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 104   | Resp: | 51219 |
| Ion      | Ratio | Lower | Upper |
| 104      | 100   |       |       |
| 78       | 55.8  | 39.1  | 58.7  |
| 103      | 50.8  | 37.3  | 55.9  |



#62

Isopropylbenzene

Concen: 0.09 ppbv

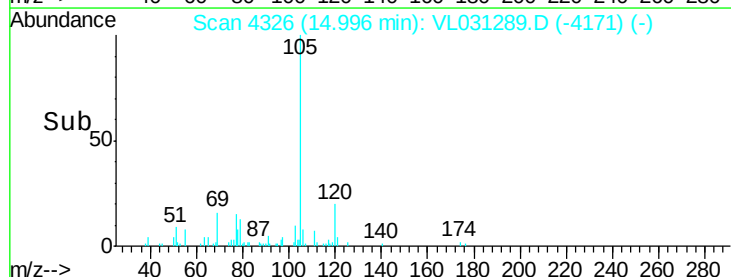
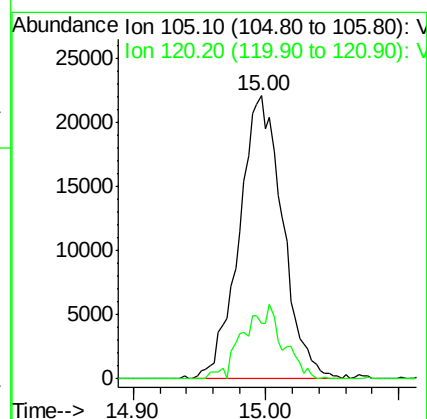
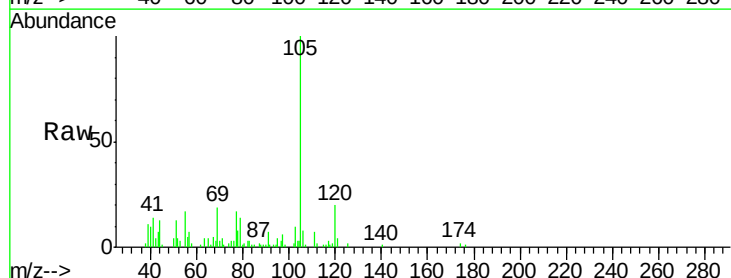
RT: 15.00 min Scan# 4326

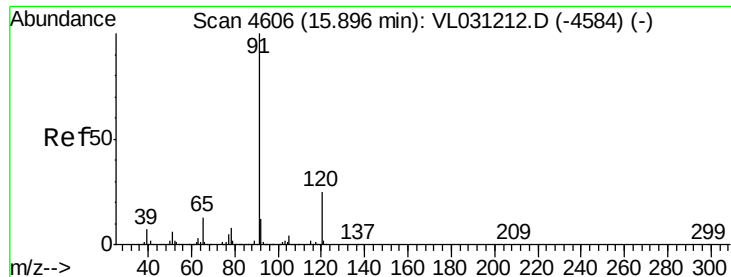
Delta R.T. -0.00 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 50183 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 24.0  | 21.0  | 31.6  |





#64

n-propylbenzene

Concen: 0.17 ppbv

RT: 16.10 min Scan# 4670

Delta R.T. 0.21 min

Lab File: VL031289.D

Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

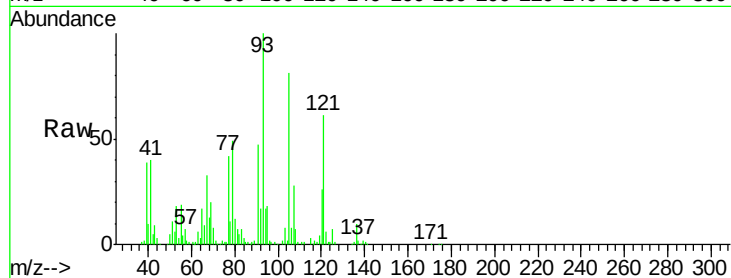
EP1-SV-8

Tgt Ion:120 Resp: 25555

Ion Ratio Lower Upper

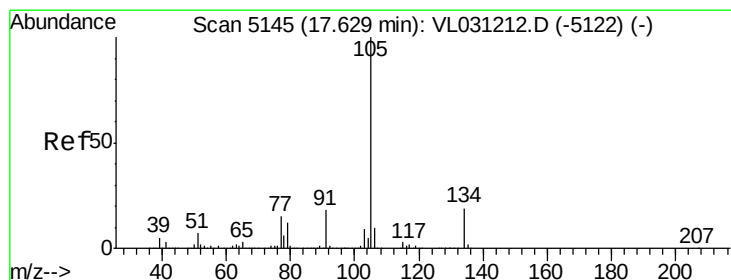
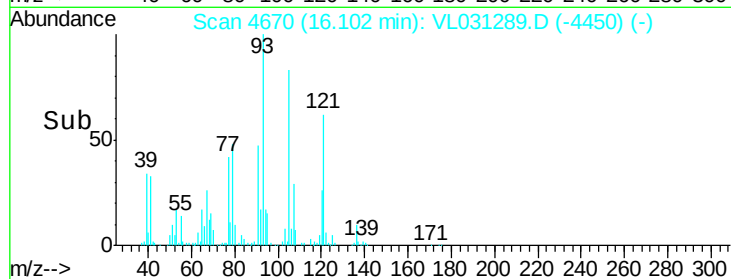
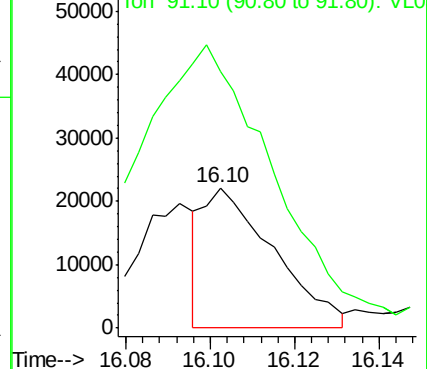
120 100

91 399.2 352.1 528.1



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#67

sec-Butylbenzene

Concen: 0.06 ppbv

RT: 17.94 min Scan# 5241

Delta R.T. 0.31 min

Lab File: VL031289.D

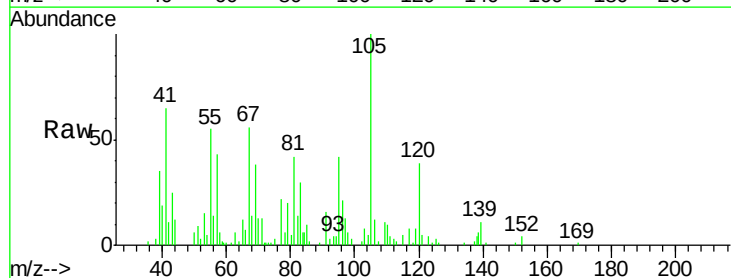
Acq: 21 Dec 2017 3:55

Tgt Ion:105 Resp: 40279

Ion Ratio Lower Upper

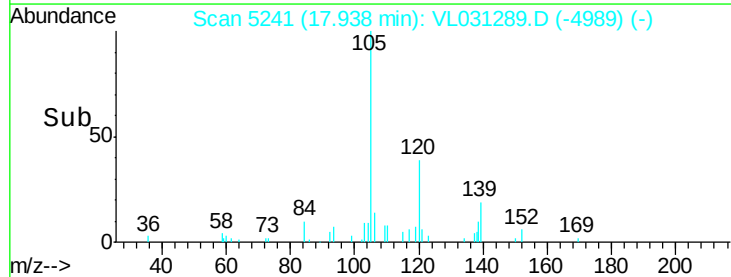
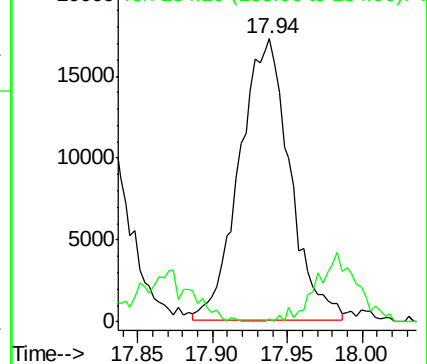
105 100

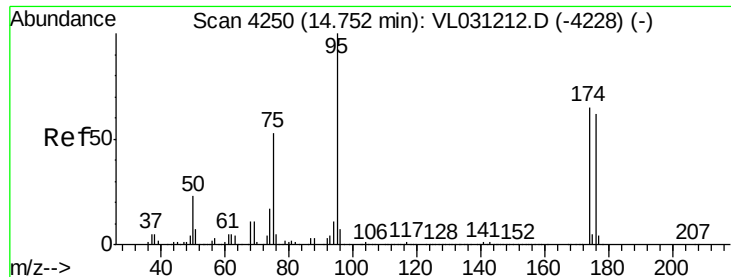
134 19.7 15.3 22.9



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

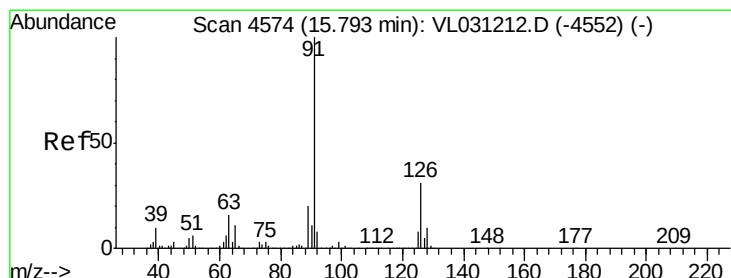
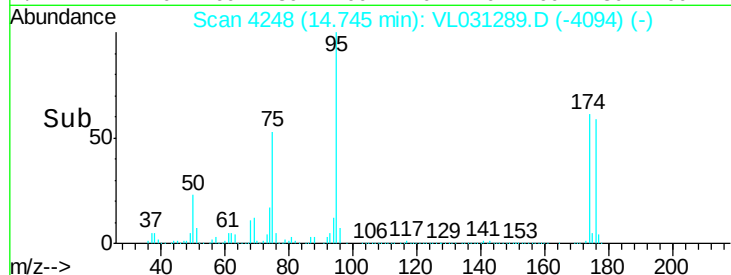
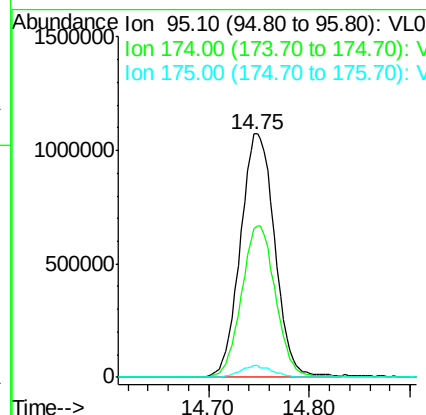
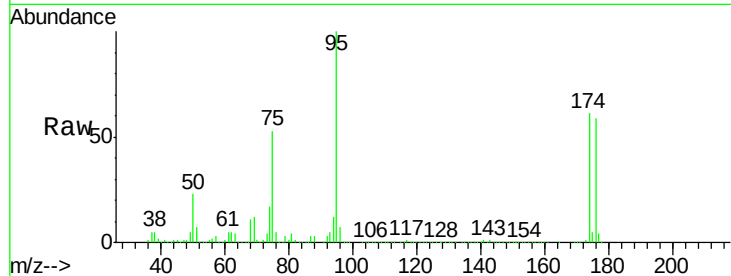




#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 11.16 ppbv  
 RT: 14.75 min Scan# 4248  
 Delta R.T. -0.01 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

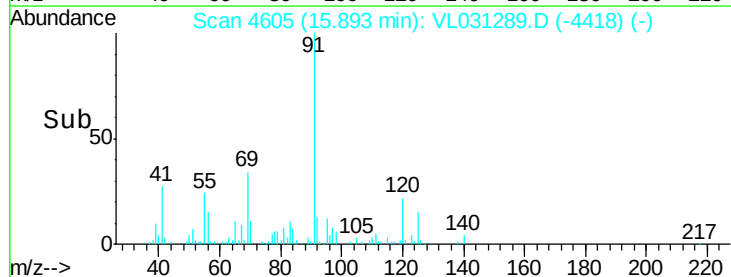
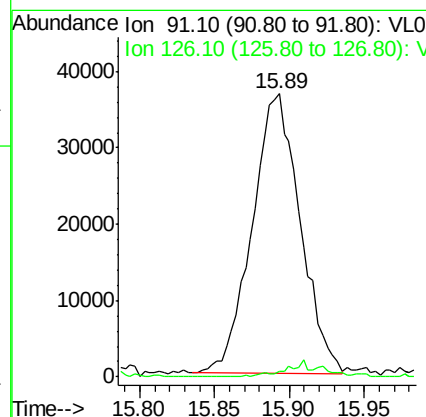
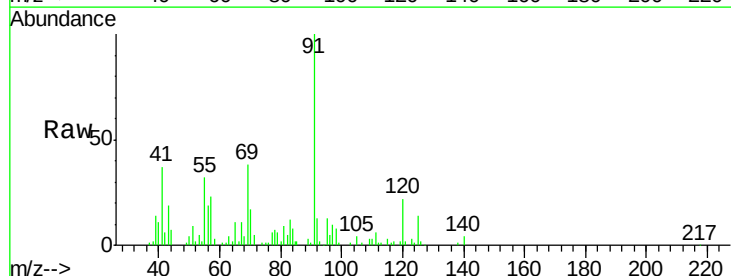
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 EP1-SV-8

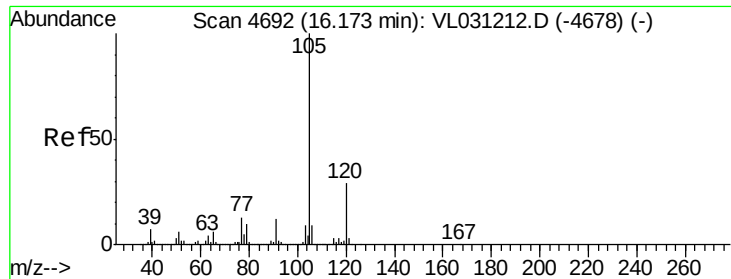
Tgt Ion: 95 Resp: 2535624  
 Ion Ratio Lower Upper  
 95 100  
 174 61.5 52.5 78.7  
 175 4.5 4.1 6.1



#71  
 2-Chlorotoluene  
 Concen: 0.20 ppbv  
 RT: 15.89 min Scan# 4605  
 Delta R.T. 0.10 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

Tgt Ion: 91 Resp: 81844  
 Ion Ratio Lower Upper  
 91 100  
 126 4.3 12.6 50.6#

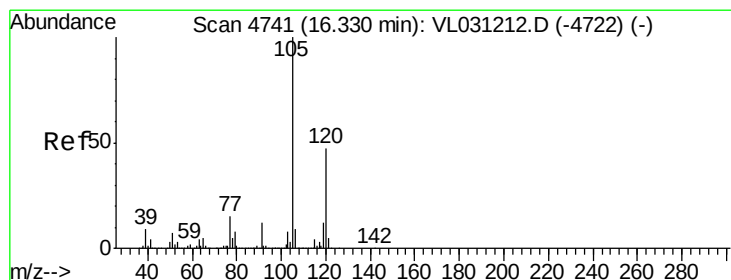
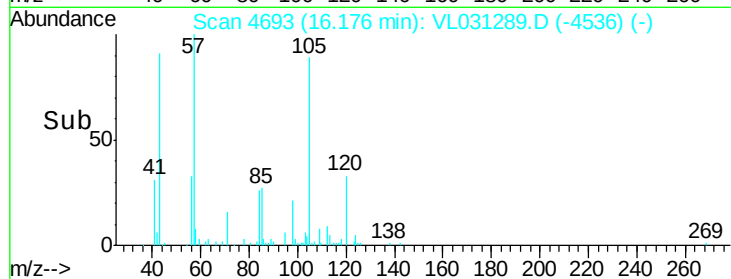
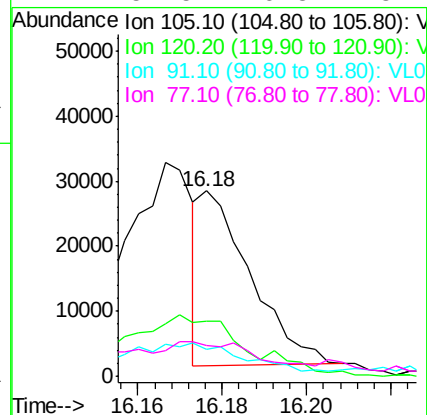
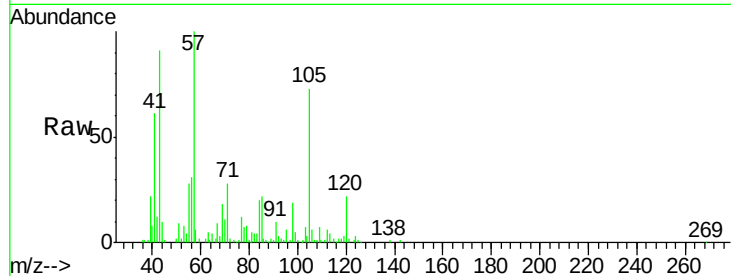




#72  
 4-Ethyltoluene  
 Concen: 0.05 ppbv  
 RT: 16.18 min Scan# 4693  
 Delta R.T. 0.00 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

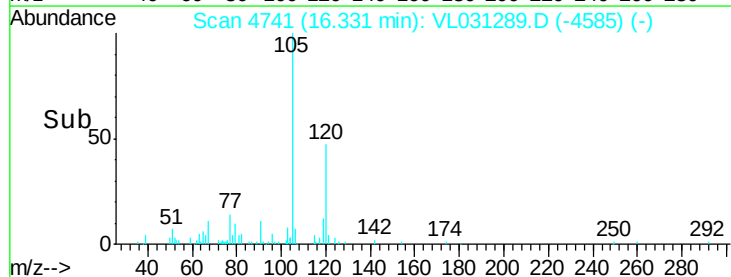
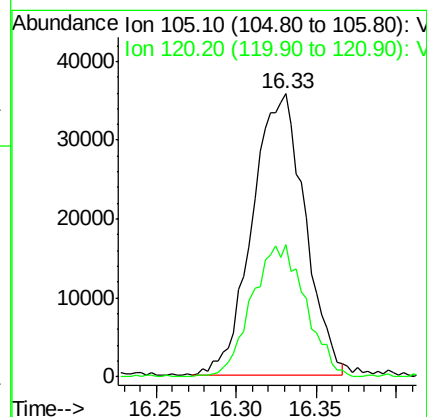
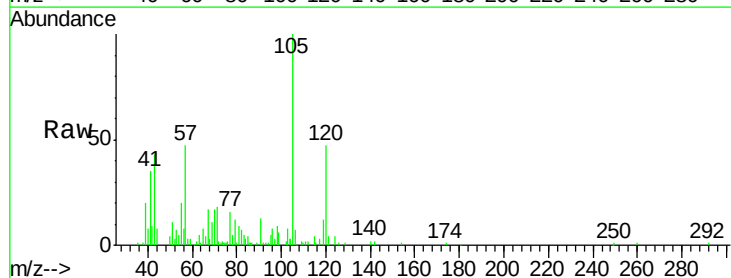
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 EP1-SV-8

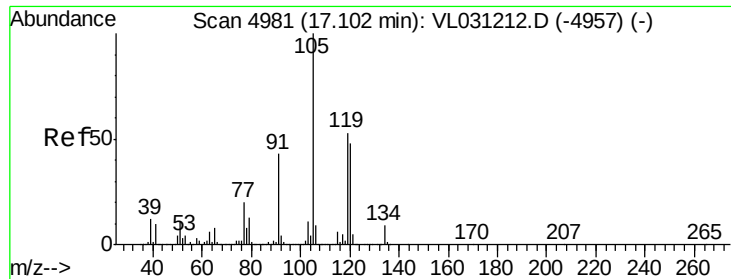
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 21755 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 90.4  | 24.2  | 36.2# |
| 91       | 33.6  | 9.8   | 14.8# |
| 77       | 54.5  | 10.5  | 15.7# |



#73  
 1,3,5-Trimethylbenzene  
 Concen: 0.19 ppbv  
 RT: 16.33 min Scan# 4741  
 Delta R.T. 0.00 min  
 Lab File: VL031289.D  
 Acq: 21 Dec 2017 3:55

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 80698 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 47.3  | 37.8  | 56.6  |





#74

1,2,4-Trimethylbenzene

Concen: 0.31 ppbv

RT: 17.09 min Scan# 4978

Delta R.T. -0.01 min

Lab File: VL031289.D

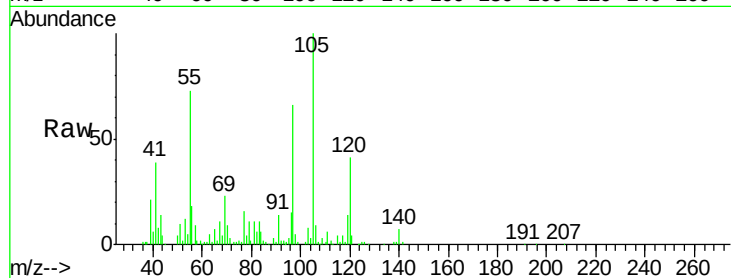
Acq: 21 Dec 2017 3:55

Instrument :

MSVOA\_L

ClientSampleId :

EP1-SV-8



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 105   | Resp: | 134992 |
| Ion Ratio | Lower | Upper |        |
| 105       | 100   |       |        |
| 120       | 45.0  | 38.6  | 58.0   |
| 91        | 7.0   | 34.2  | 51.4#  |
| 77        | 8.2   | 16.1  | 24.1#  |

