

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031819\  
 Data File : VL033388.D  
 Acq On : 19 Mar 2019 12:53  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 3/21/2019 12:16:09 PM

Quant Time: Mar 20 01:56:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Mar 1  
 QLast Update : Fri Mar 15 14:52:14 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 792418   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 1856250  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 2200226  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1536958  | 9.43     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 94.30% |

| Target Compounds               |      |     |         |        | Ovalue   |
|--------------------------------|------|-----|---------|--------|----------|
| 2) Dichlorodifluoromethane     | 3.08 | 85  | 1639626 | 11.766 | ppbv 98  |
| 3) Chlorodifluoromethane       | 3.01 | 51  | 966132  | 10.622 | ppbv 99  |
| 4) Chloromethane               | 3.17 | 50  | 523217  | 10.624 | ppbv 96  |
| 5) Vinyl Chloride              | 3.29 | 62  | 518449  | 10.204 | ppbv 98  |
| 6) Bromomethane                | 3.52 | 94  | 332504  | 11.010 | ppbv 98  |
| 7) Chloroethane                | 3.60 | 64  | 194278  | 10.943 | ppbv 98  |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85  | 1286968 | 10.848 | ppbv 99  |
| 9) Propene                     | 3.04 | 41  | 423126  | 10.422 | ppbv 99  |
| 10) Heptane                    | 8.25 | 43  | 1097365 | 10.897 | ppbv 100 |
| 11) Trichlorofluoromethane     | 4.00 | 101 | 1437262 | 10.358 | ppbv 97  |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101 | 974022  | 10.580 | ppbv 98  |
| 13) Ethanol                    | 3.65 | 45  | 101111  | 5.224  | ppbv 100 |
| 14) Bromoethene                | 3.79 | 108 | 418744  | 10.912 | ppbv 99  |
| 15) Acetone                    | 3.90 | 43  | 940934  | 7.639  | ppbv 99  |
| 16) 1,3-Butadiene              | 3.36 | 39  | 427720  | 10.691 | ppbv 99  |
| 17) tert-Butyl alcohol         | 4.36 | 59  | 168589  | 9.725  | ppbv 99  |
| 18) 1,1-Dichloroethene         | 4.35 | 96  | 433782  | 10.304 | ppbv 97  |
| 19) Isopropyl Alcohol          | 4.02 | 45  | 602127  | 10.276 | ppbv 99  |
| 20) Methylene Chloride         | 4.41 | 84  | 366108  | 9.113  | ppbv 97  |
| 21) Allyl Chloride             | 4.48 | 41  | 664026  | 11.113 | ppbv 99  |
| 22) trans-1,2-Dichloroethene   | 4.96 | 96  | 443059  | 10.860 | ppbv 98  |
| 23) Vinyl Acetate              | 5.16 | 43  | 1516923 | 10.643 | ppbv 98  |
| 24) 1,1-Dichloroethane         | 5.09 | 63  | 1067074 | 10.366 | ppbv 99  |
| 25) Ethyl Acetate              | 5.77 | 43  | 1858462 | 10.379 | ppbv 100 |
| 26) Hexane                     | 5.78 | 57  | 825900  | 10.317 | ppbv 99  |
| 27) Carbon Disulfide           | 4.62 | 76  | 1044861 | 11.338 | ppbv 99  |
| 28) Methyl tert-Butyl Ether    | 5.11 | 73  | 1250533 | 10.517 | ppbv 99  |
| 29) Chloroform                 | 5.85 | 83  | 1382707 | 10.549 | ppbv 99  |
| 30) Cyclohexane                | 7.25 | 84  | 699588  | 10.900 | ppbv 98  |
| 31) cis-1,2-Dichloroethene     | 5.64 | 61  | 859073  | 10.733 | ppbv 95  |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97  | 1327491 | 10.315 | ppbv 99  |
| 34) 2-Butanone                 | 5.33 | 43  | 1226989 | 10.065 | ppbv 99  |
| 35) Carbon Tetrachloride       | 7.14 | 117 | 1431002 | 10.935 | ppbv 98  |
| 36) Benzene                    | 7.01 | 78  | 1742443 | 10.489 | ppbv 100 |
| 37) 1,2-Dichloroethane         | 6.42 | 62  | 1061788 | 10.108 | ppbv 100 |
| 38) Trichloroethene            | 7.96 | 130 | 664171  | 10.565 | ppbv 98  |
| 39) 1,2-Dichloropropane        | 7.73 | 63  | 655783  | 10.541 | ppbv 98  |
| 40) 1,4-Dioxane                | 7.95 | 88  | 241193  | 11.010 | ppbv 86  |
| 41) Tetrahydrofuran            | 6.15 | 42  | 696075  | 10.700 | ppbv 99  |
| 42) Bromodichloromethane       | 7.92 | 83  | 1522605 | 10.811 | ppbv 98  |
| 43) Methyl Methacrylate        | 8.14 | 69  | 712165  | 11.010 | ppbv 98  |

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 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

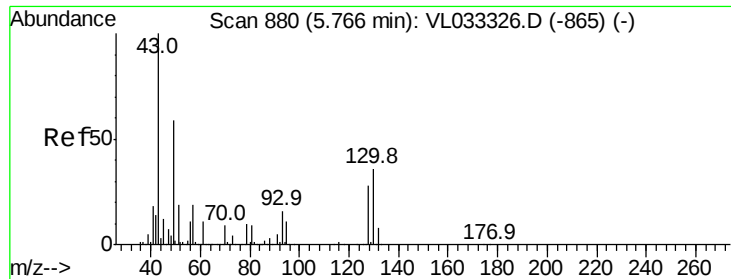
MMDadoda  
 3/21/2019 12:16:09 PM

Quant Time: Mar 20 01:56:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Mar 1  
 QLast Update : Fri Mar 15 14:52:14 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.99  | 57   | 2902316  | 10.548 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.42  | 75   | 944471   | 11.827 | ppbv   | 97       |
| 46) cis-1,3-Dichloropropene   | 8.84  | 75   | 1080955  | 11.495 | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 9.61  | 97   | 723739   | 10.529 | ppbv   | 95       |
| 48) Dibromochloromethane      | 10.45 | 129  | 1272330  | 11.037 | ppbv   | 100      |
| 49) Bromoform                 | 13.20 | 173  | 1292784  | 11.822 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.87  | 43   | 1813758  | 10.533 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.27 | 43   | 1414236  | 10.645 | ppbv # | 100      |
| 52) Tetrachloroethene         | 11.37 | 164  | 742883   | 10.734 | ppbv   | 99       |
| 53) Toluene                   | 9.95  | 91   | 2048382  | 10.852 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 1158712  | 9.972  | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 1020521  | 10.369 | ppbv   | 97       |
| 57) Chlorobenzene             | 12.30 | 112  | 1741470  | 9.994  | ppbv   | 100      |
| 58) Ethyl Benzene             | 12.86 | 91   | 3237377  | 10.401 | ppbv   | 99       |
| 59) m/p-Xylene                | 13.12 | 91   | 5417854m | 20.255 | ppbv   |          |
| 60) o-Xylene                  | 13.85 | 91   | 2659657  | 10.192 | ppbv   | 99       |
| 61) Styrene                   | 13.69 | 104  | 1983838  | 10.858 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.83 | 105  | 3716855  | 10.245 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.84 | 83   | 1829927  | 9.701  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.72 | 120  | 957593   | 10.431 | ppbv   | 98       |
| 65) tert-Butylbenzene         | 16.91 | 119  | 3297664  | 10.096 | ppbv   | 100      |
| 66) Benzyl Chloride           | 17.16 | 91   | 1717243  | 12.723 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.46 | 105  | 4718922  | 10.196 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.81 | 119  | 3912160  | 10.346 | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.72 | 91   | 4134208  | 10.254 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 15.62 | 91   | 2883877  | 10.212 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 16.00 | 105  | 3118362  | 10.523 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.16 | 105  | 2975533  | 10.307 | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.93 | 105  | 3048656  | 9.971  | ppbv   | 93       |
| 75) 1,3-Dichlorobenzene       | 17.17 | 146  | 1775233  | 9.851  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 1771171  | 10.151 | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.99 | 146  | 1728055  | 10.125 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.54 | 225  | 962122   | 9.402  | ppbv   | 99       |
| 79) Naphthalene               | 22.41 | 128  | 2975827  | 10.100 | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.12 | 142  | 1378483  | 9.867  | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 22.14 | 180  | 1503624  | 10.008 | ppbv   | 100      |

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





#1

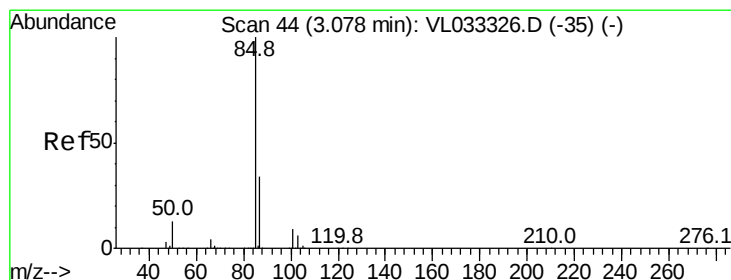
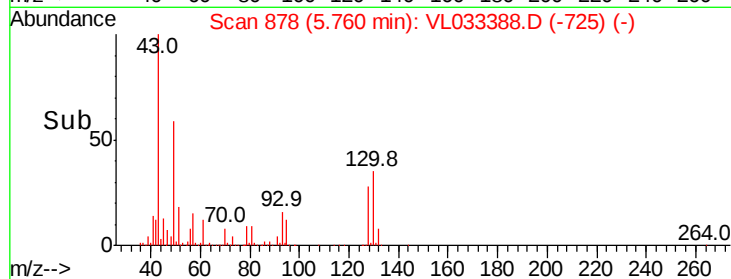
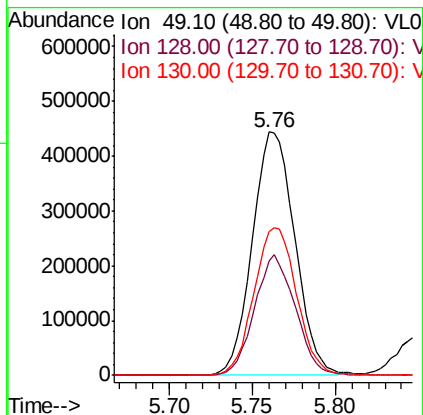
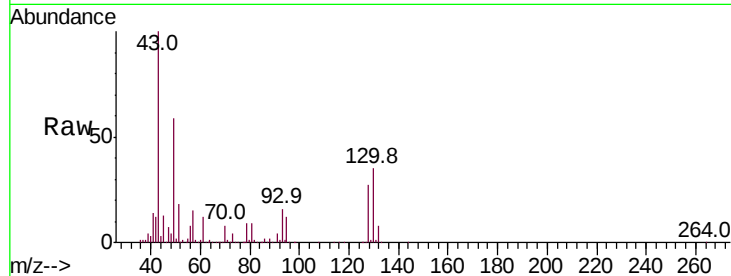
Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.76 min Scan# 878  
 Delta R.T. -0.01 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 128     | 47.5  | 23.5  | 70.6  |
| 130     | 61.2  | 30.1  | 90.3  |

Manual Integrations  
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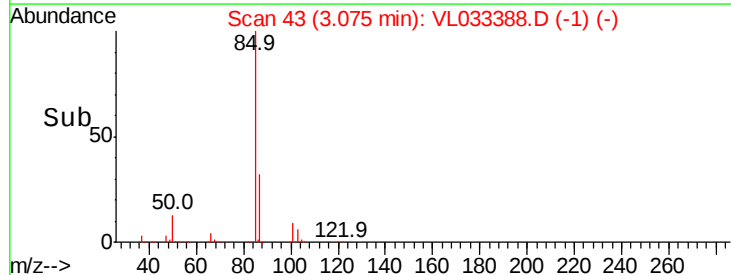
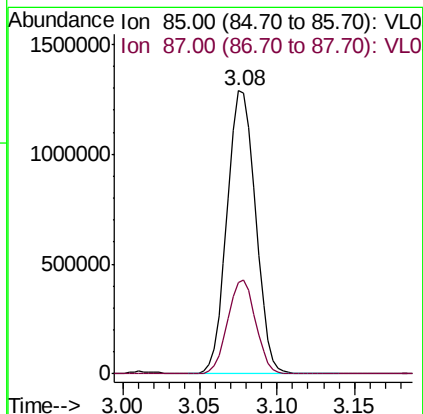
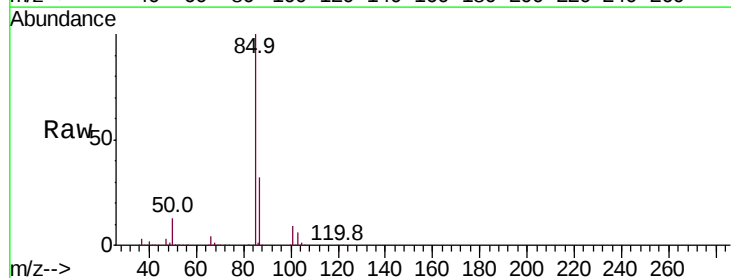
MMDadoda  
 3/21/2019 12:16:09 PM

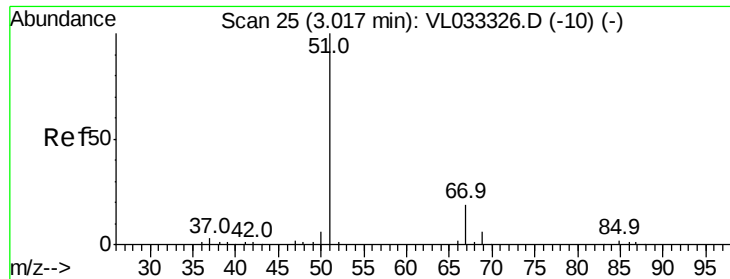


#2

Dichlorodifluoromethane  
 Concen: 11.766 ppbv  
 RT: 3.08 min Scan# 43  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 85      | 100   |       |       |
| 87      | 32.4  | 26.9  | 40.3  |





#3

Chlorodifluoromethane

Concen: 10.622 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 51 Resp: 966132

Ion Ratio Lower Upper

51 100

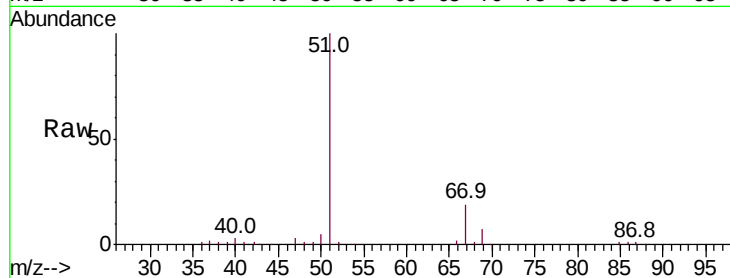
67 18.9 14.9 22.3

Manual Integrations

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3/21/2019 12:16:09 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

800000

600000

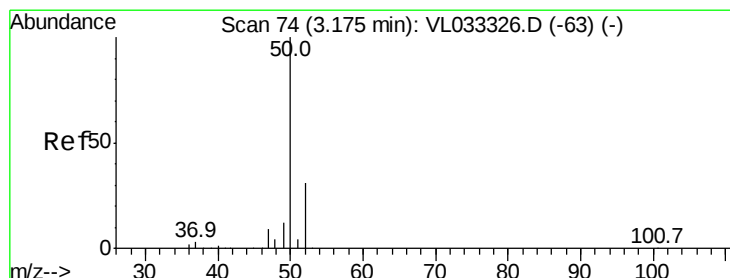
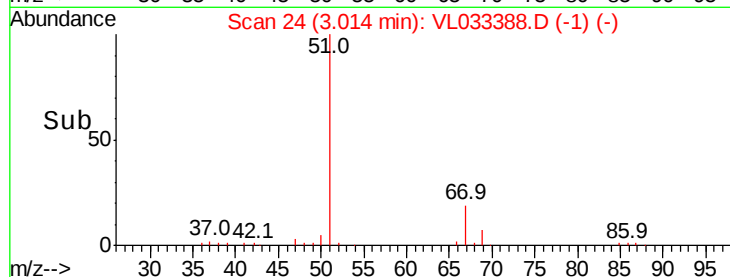
400000

200000

0

2.95 3.00 3.05 3.10

Time-->



#4

Chloromethane

Concen: 10.624 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033388.D

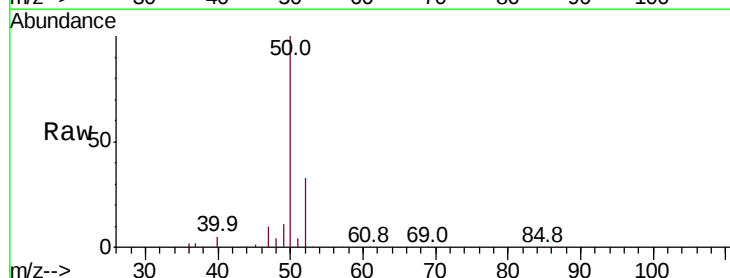
Acq: 19 Mar 2019 12:53

Tgt Ion: 50 Resp: 523217

Ion Ratio Lower Upper

50 100

52 33.3 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

400000

300000

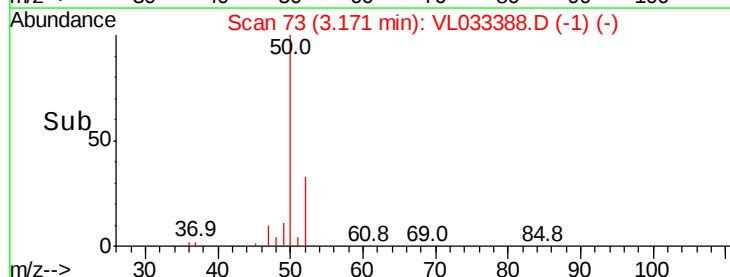
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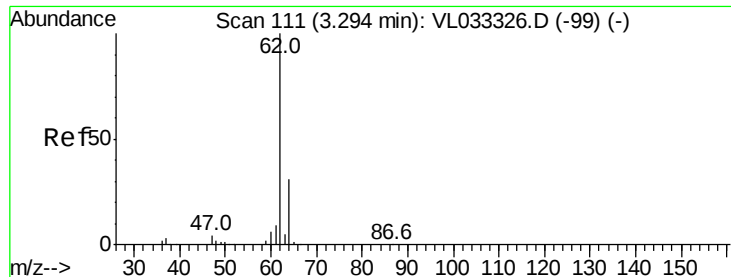
100000

0

3.10 3.15 3.20

Time-->





#5

Vinyl Chloride

Concen: 10.204 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 62 Resp: 518449

Ion Ratio Lower Upper

62 100

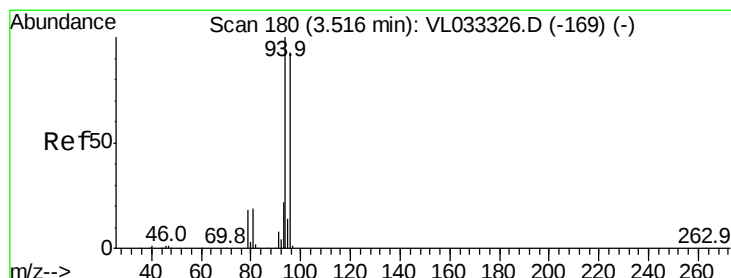
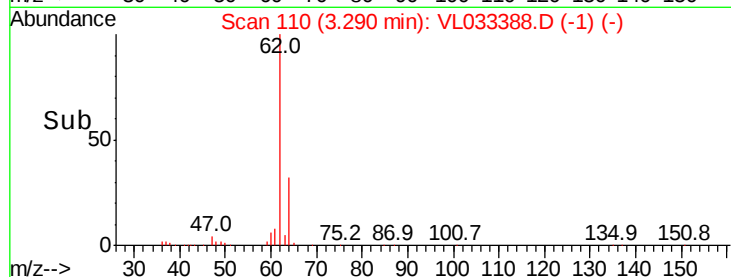
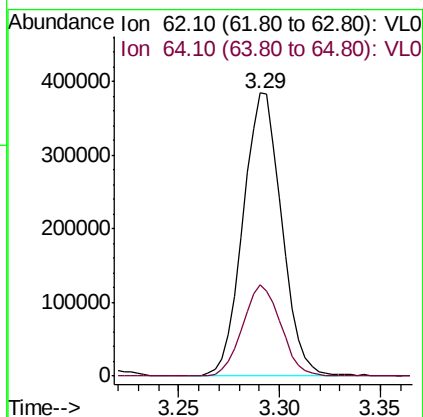
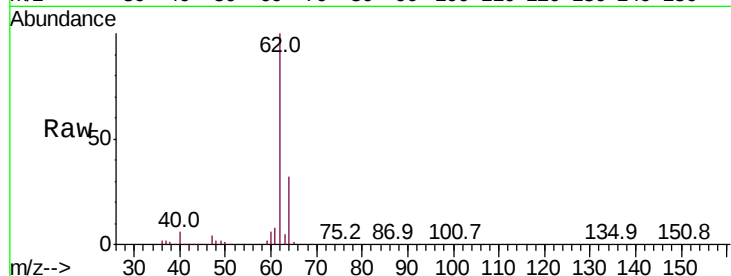
64 32.5 25.0 37.6

Manual Integrations

APPROVED

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3/21/2019 12:16:09 PM



#6

Bromomethane

Concen: 11.010 ppbv

RT: 3.52 min Scan# 180

Delta R.T. -0.00 min

Lab File: VL033388.D

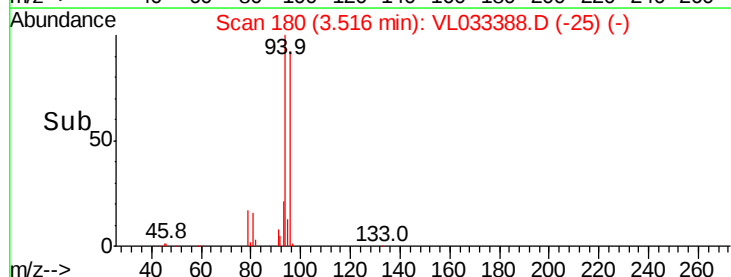
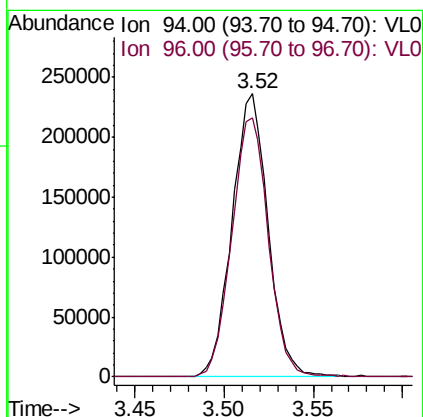
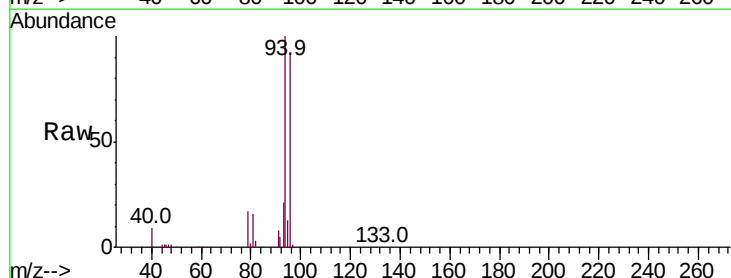
Acq: 19 Mar 2019 12:53

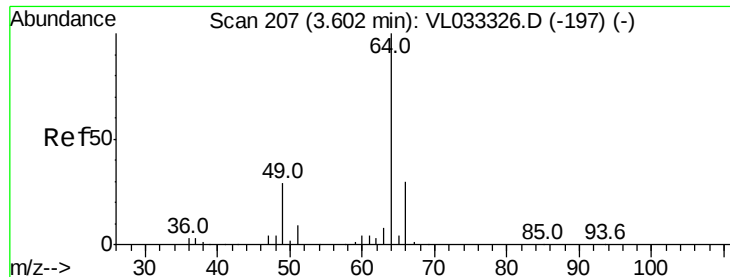
Tgt Ion: 94 Resp: 332504

Ion Ratio Lower Upper

94 100

96 91.5 74.6 111.8





#7

Chloroethane

Concen: 10.943 ppbv

RT: 3.60 min Scan# 206

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 64 Resp: 194278

Ion Ratio Lower Upper

64 100

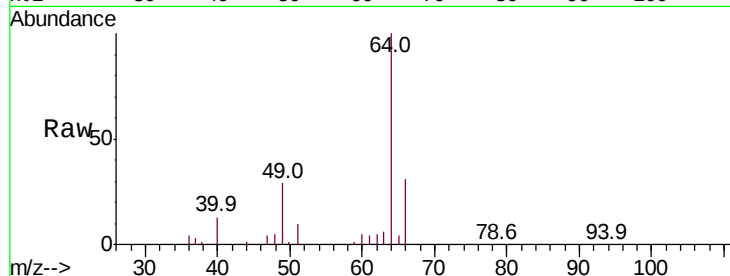
66 31.3 24.0 36.0

Manual Integrations

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3/21/2019 12:16:09 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

150000

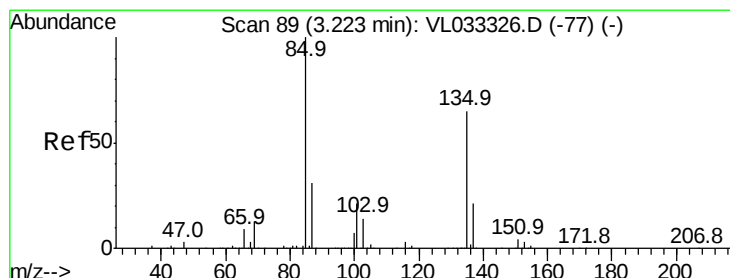
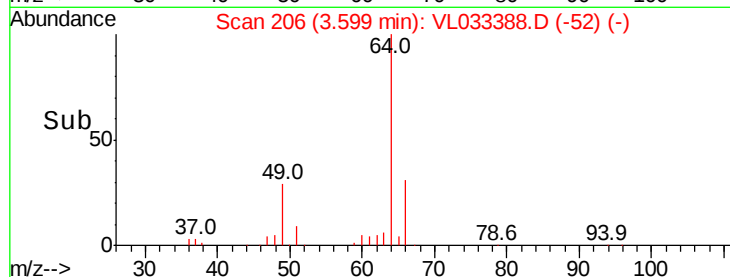
100000

50000

0

3.55 3.60 3.65

Time-->



#8

Dichlorotetrafluoroethane

Concen: 10.848 ppbv

RT: 3.22 min Scan# 88

Delta R.T. -0.00 min

Lab File: VL033388.D

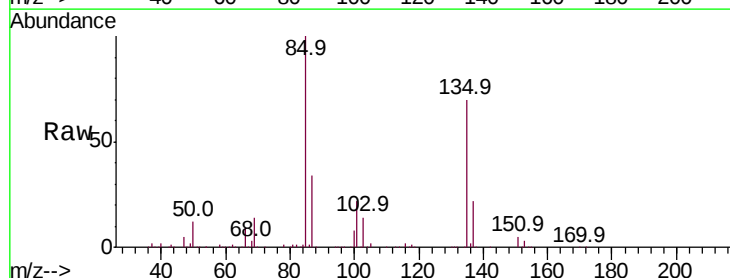
Acq: 19 Mar 2019 12:53

Tgt Ion: 85 Resp: 1286968

Ion Ratio Lower Upper

85 100

135 67.6 53.4 80.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

1000000

800000

600000

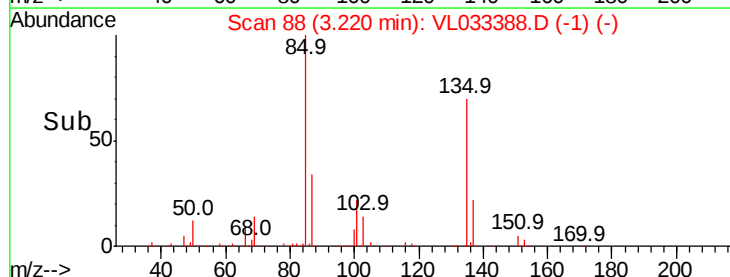
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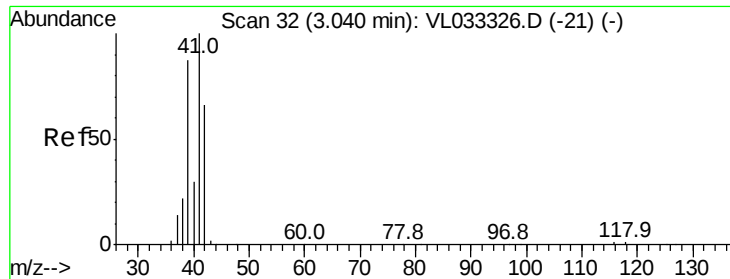
200000

0

3.15 3.20 3.25

Time-->





#9

Propene

Concen: 10.422 ppbv

RT: 3.04 min Scan# 31

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 41 Resp: 423126

Ion Ratio Lower Upper

41 100

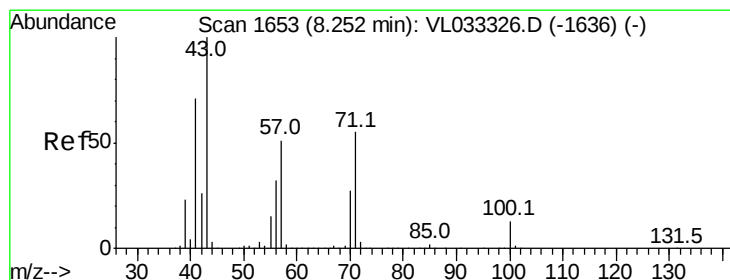
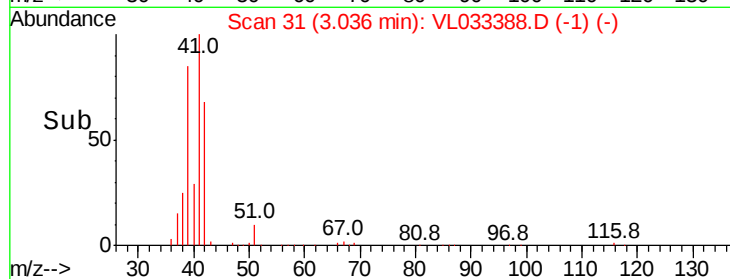
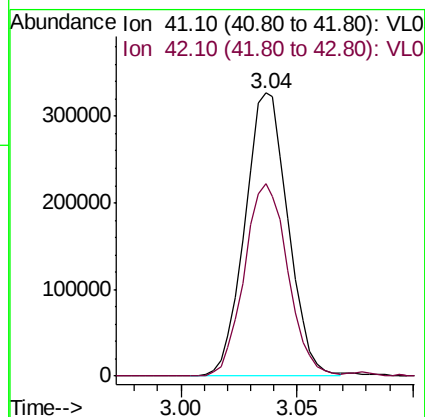
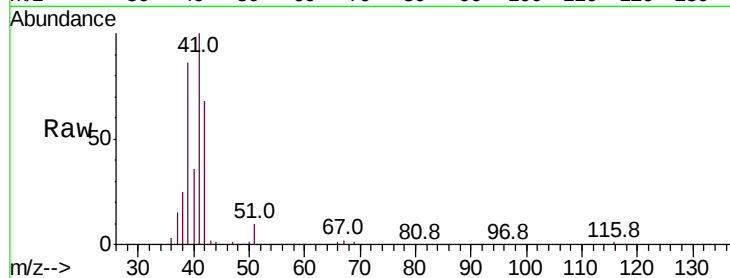
42 69.5 55.2 82.8

Manual Integrations

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3/21/2019 12:16:09 PM



#10

Heptane

Concen: 10.897 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.01 min

Lab File: VL033388.D

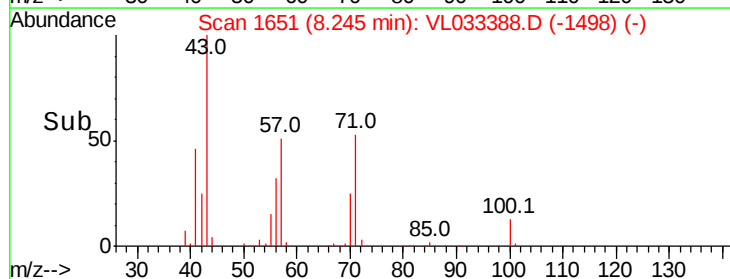
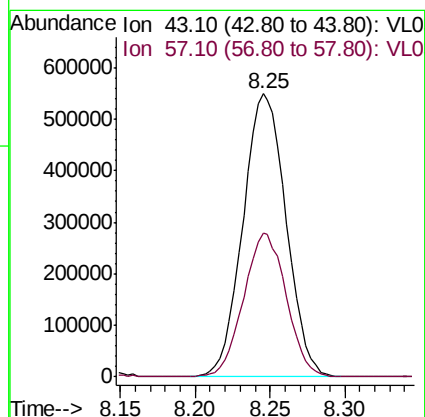
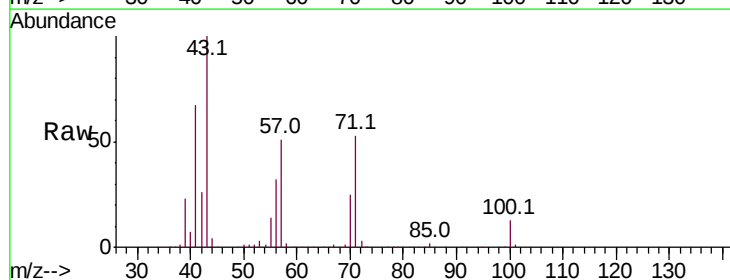
Acq: 19 Mar 2019 12:53

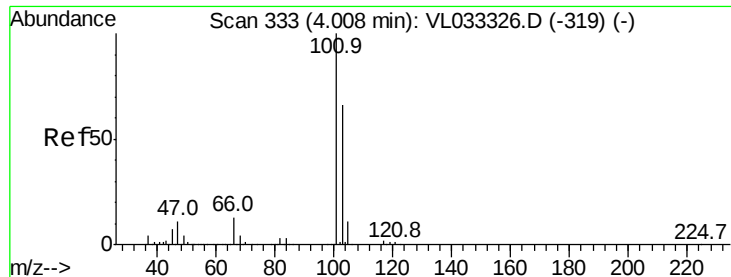
Tgt Ion: 43 Resp: 1097365

Ion Ratio Lower Upper

43 100

57 50.6 40.4 60.6





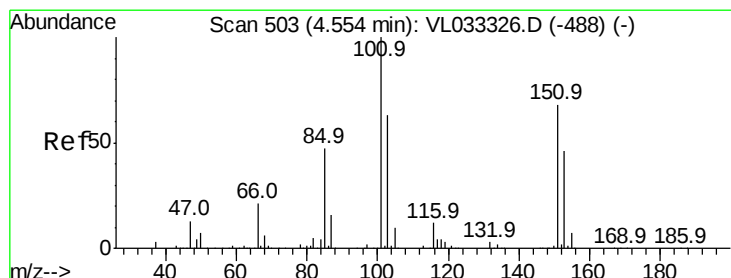
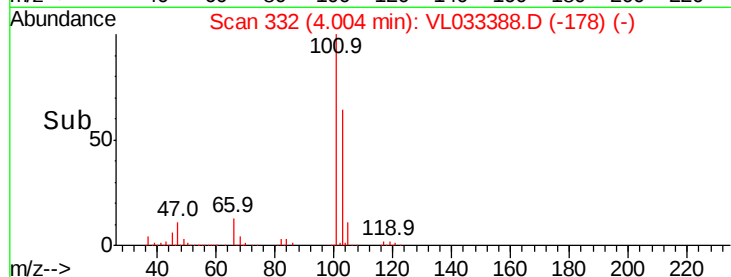
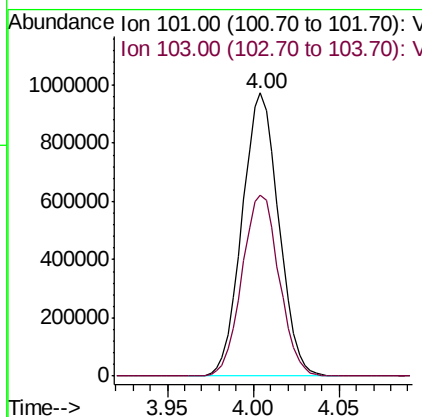
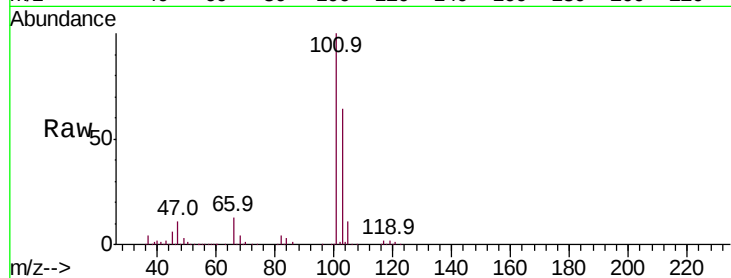
#11  
 Trichlorofluoromethane  
 Concen: 10.358 ppbv  
 RT: 4.00 min Scan# 332  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion:101 Resp: 1437262  
 Ion Ratio Lower Upper  
 101 100  
 103 63.8 52.9 79.3

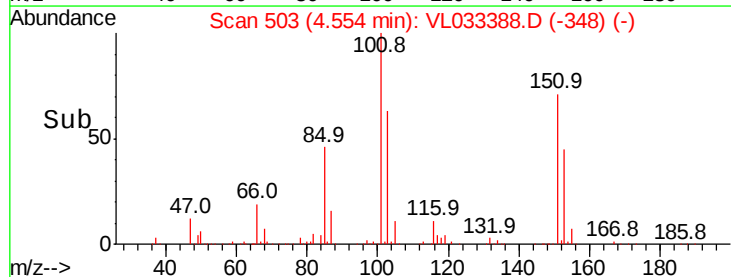
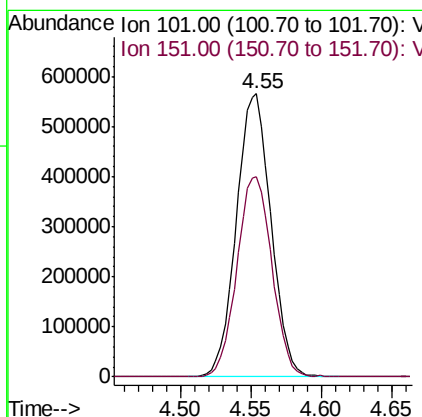
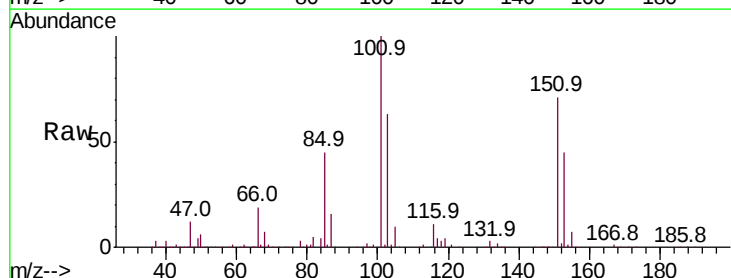
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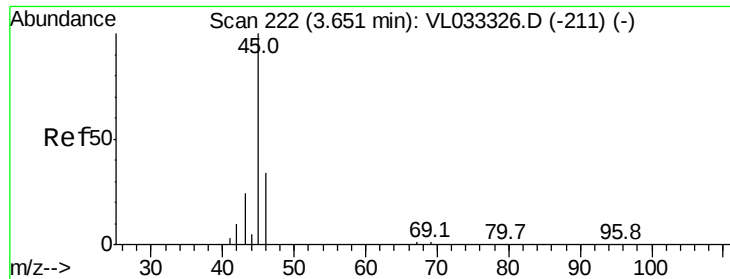
MMDadoda  
 3/21/2019 12:16:09 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 10.580 ppbv  
 RT: 4.55 min Scan# 503  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Tgt Ion:101 Resp: 974022  
 Ion Ratio Lower Upper  
 101 100  
 151 71.6 56.3 84.5





#13

Ethanol

Concen: 5.224 ppbv

RT: 3.65 min Scan# 221

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 45 Resp: 101111

Ion Ratio Lower Upper

45 100

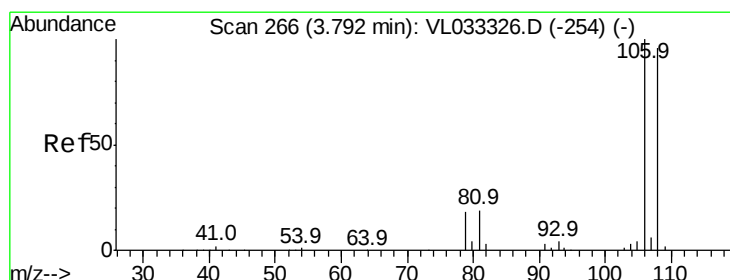
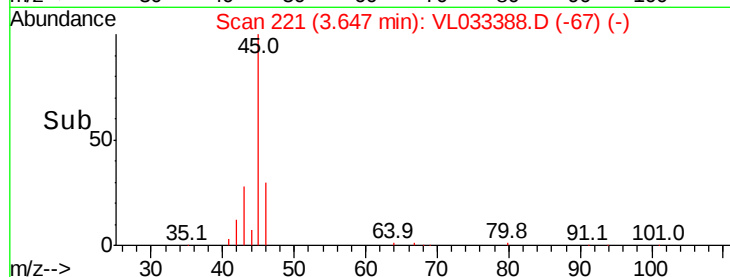
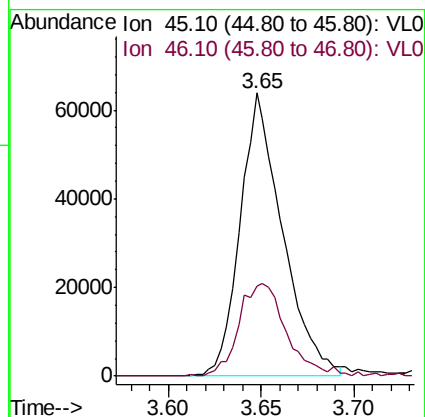
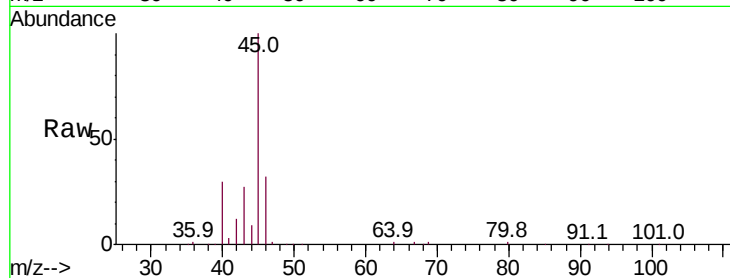
46 37.1 14.9 59.7

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#14

Bromoethene

Concen: 10.912 ppbv

RT: 3.79 min Scan# 265

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

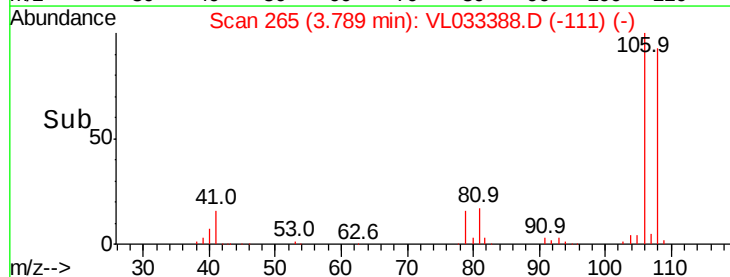
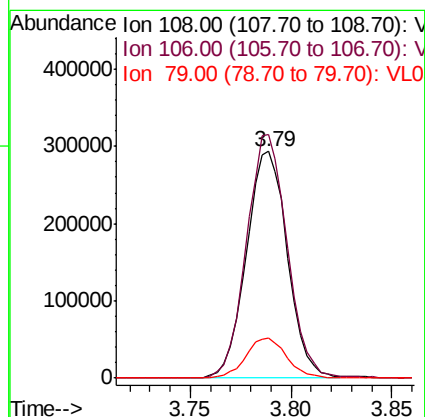
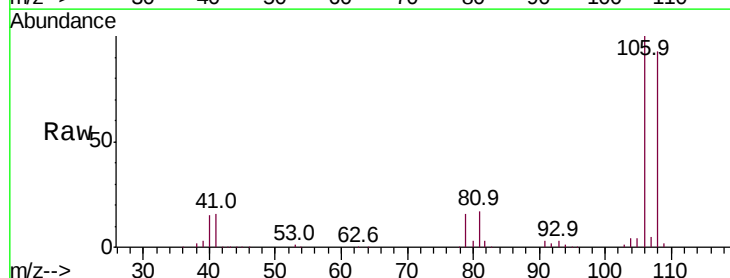
Tgt Ion: 108 Resp: 418744

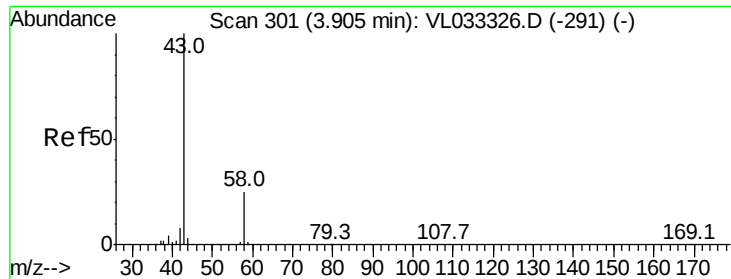
Ion Ratio Lower Upper

108 100

106 107.2 86.2 129.2

79 17.7 15.4 23.2





#15

Acetone

Concen: 7.639 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 940934

Ion Ratio Lower Upper

43 100

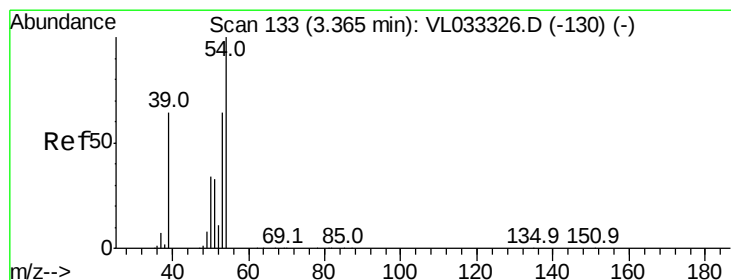
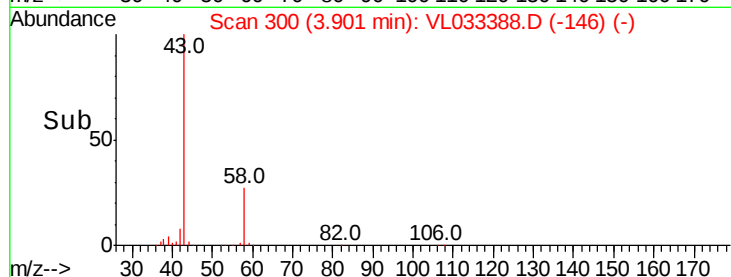
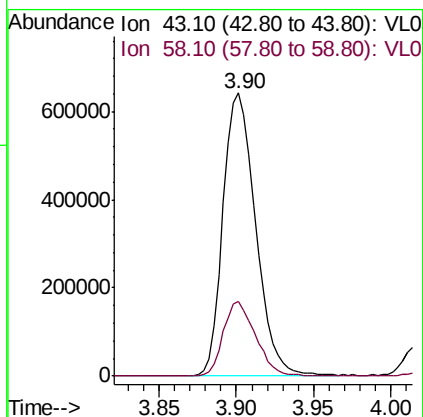
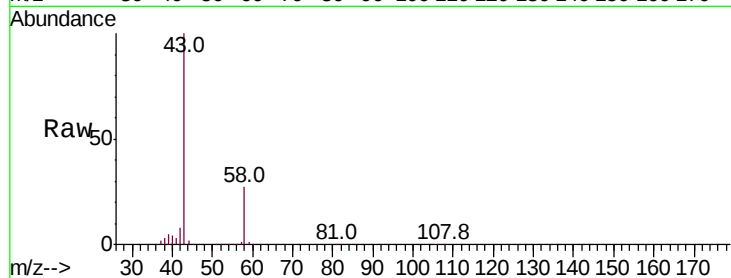
58 26.1 20.4 30.6

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#16

1,3-Butadiene

Concen: 10.691 ppbv

RT: 3.36 min Scan# 133

Delta R.T. -0.00 min

Lab File: VL033388.D

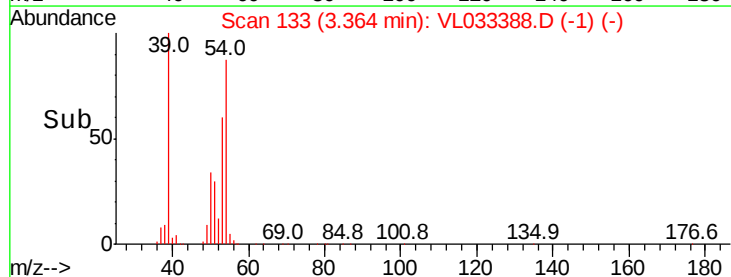
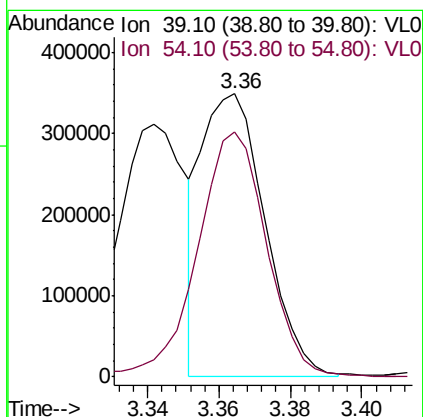
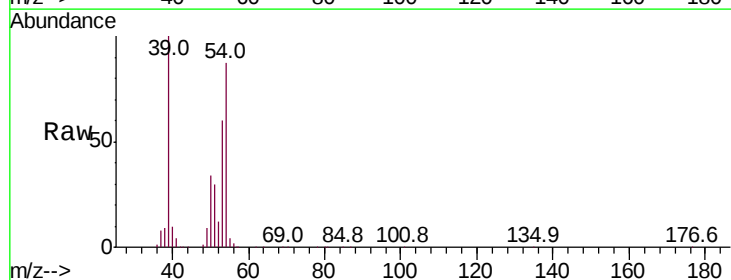
Acq: 19 Mar 2019 12:53

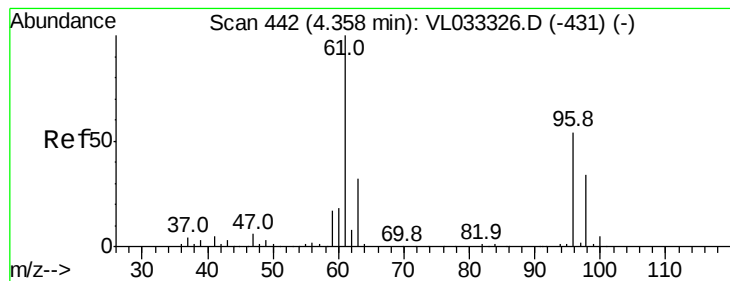
Tgt Ion: 39 Resp: 427720

Ion Ratio Lower Upper

39 100

54 95.5 76.8 115.2





#17

tert-Butyl alcohol

Concen: 9.725 ppbv

RT: 4.36 min Scan# 442

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleID :

VSTDCCC010EC

Tot Ion: 59 Resp: 168589

Ion Ratio Lower Upper

59 100

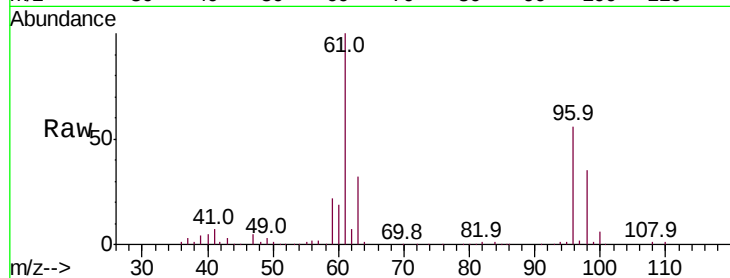
57 9.4 7.7 11.5

Manual Integrations

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Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

4.36

100000

80000

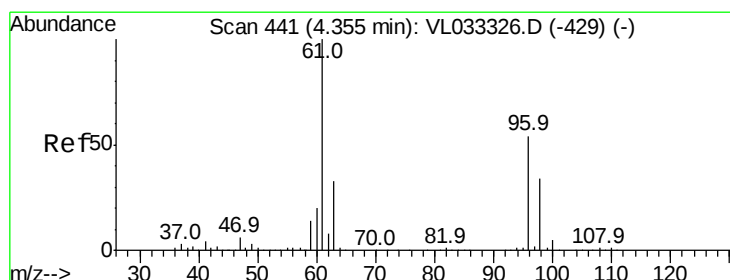
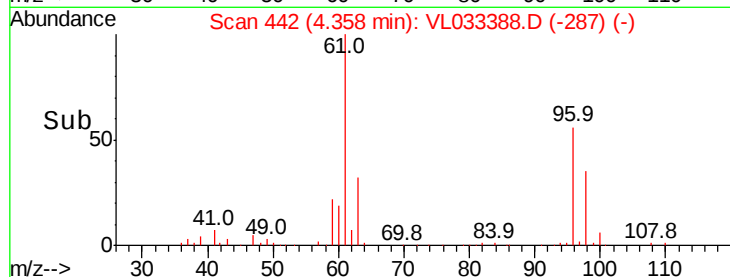
60000

40000

20000

0

Time-->



#18

1,1-Dichloroethene

Concen: 10.304 ppbv

RT: 4.35 min Scan# 440

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

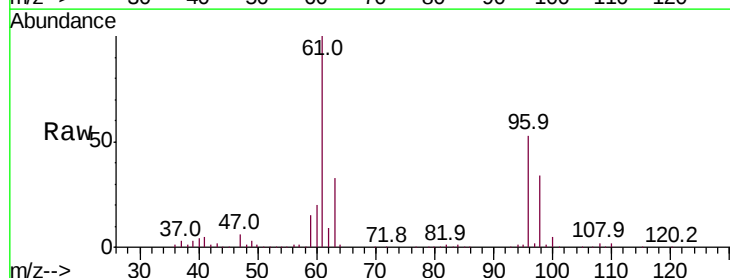
Tgt Ion: 96 Resp: 433782

Ion Ratio Lower Upper

96 100

61 190.2 148.6 222.8

98 65.1 50.3 75.5



Abundance Ion 96.00 (95.70 to 96.70): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

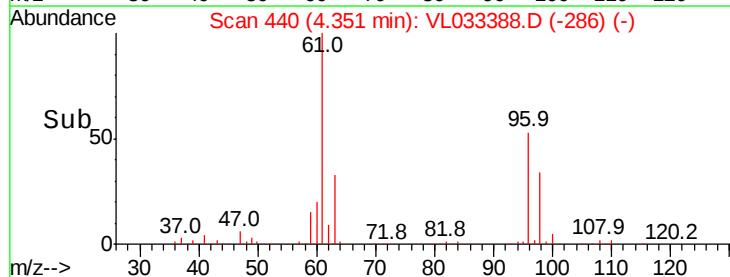
600000

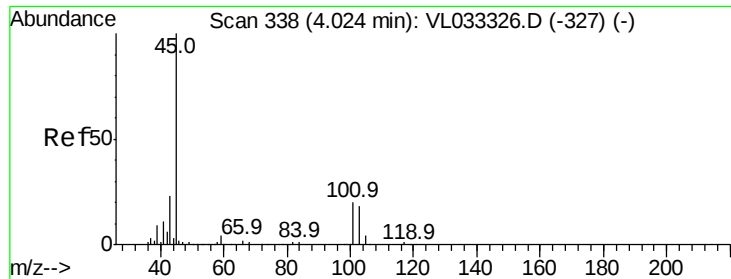
400000

200000

0

Time-->





#19

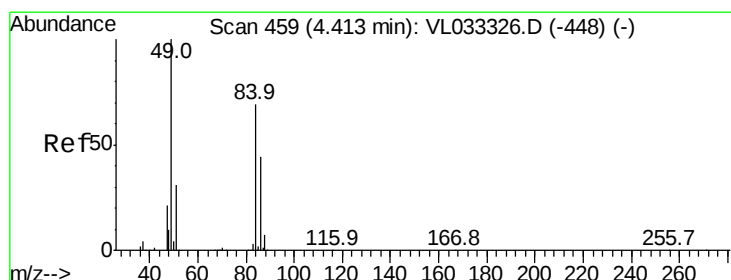
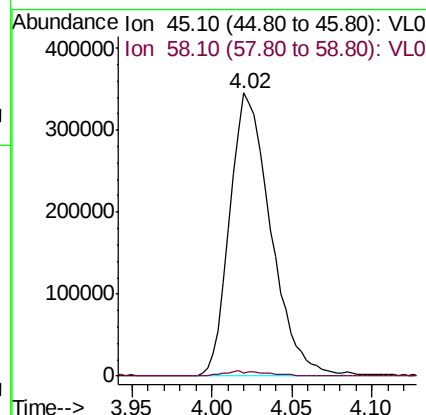
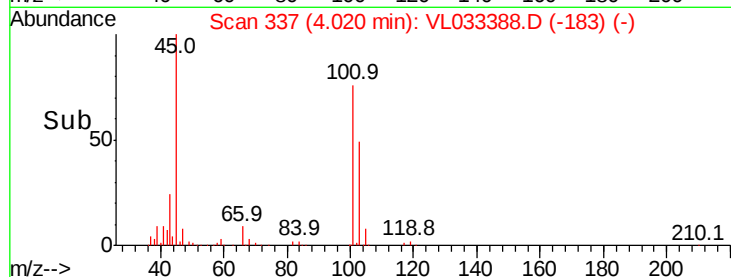
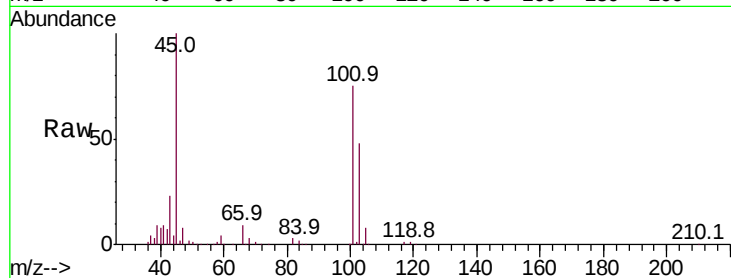
Isopropyl Alcohol  
 Concen: 10.276 ppbv  
 RT: 4.02 min Scan# 337  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Tot Ion: 45 Resp: 602127  
 Ion Ratio Lower Upper  
 45 100  
 58 2.2 1.5 2.3

Manual Integrations  
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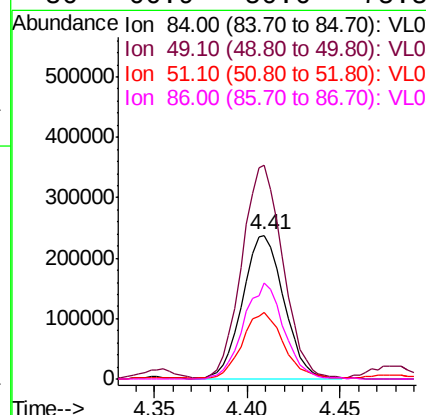
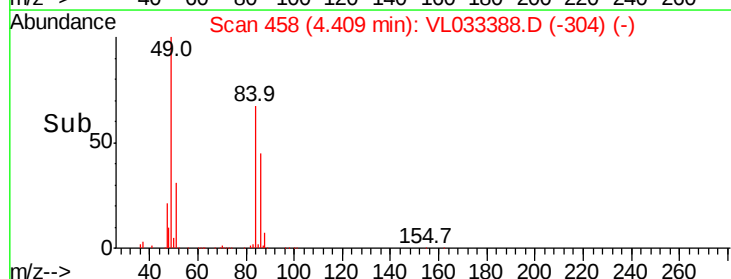
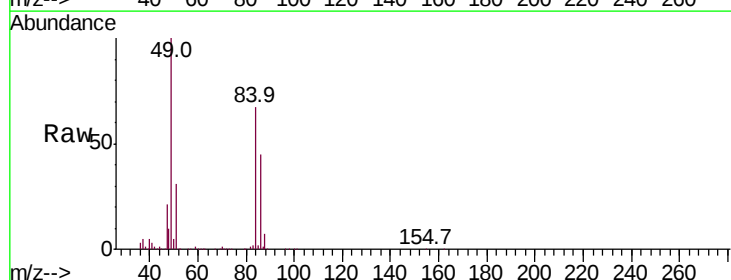
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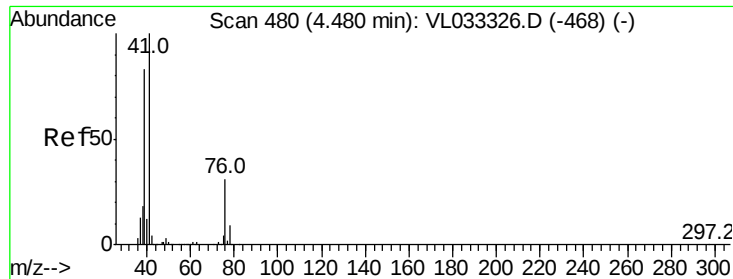


#20

Methylene Chloride  
 Concen: 9.113 ppbv  
 RT: 4.41 min Scan# 458  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Tgt Ion: 84 Resp: 366108  
 Ion Ratio Lower Upper  
 84 100  
 49 148.1 115.4 173.0  
 51 46.3 35.8 53.6  
 86 66.9 50.6 75.8





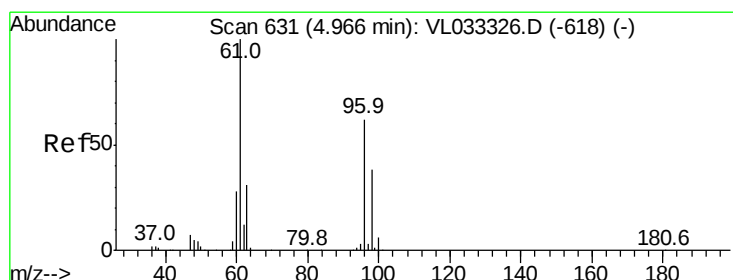
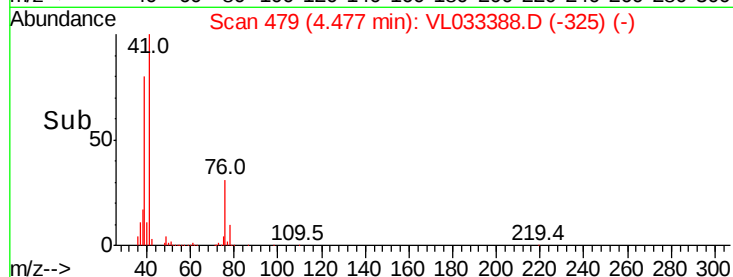
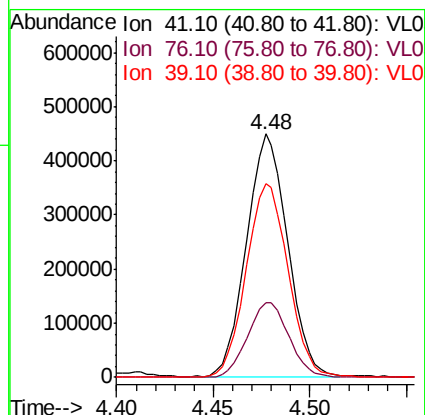
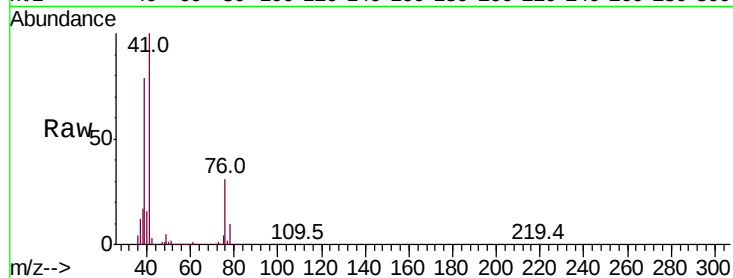
#21  
Allvl Chloride  
Concen: 11.113 ppbv  
RT: 4.48 min Scan# 479  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 30.9  | 25.0  | 37.4  |
| 39      | 81.4  | 65.9  | 98.9  |

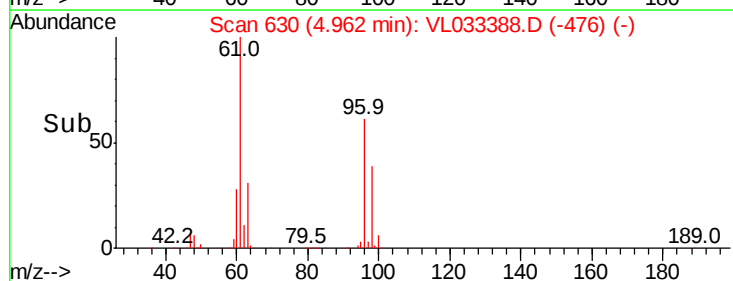
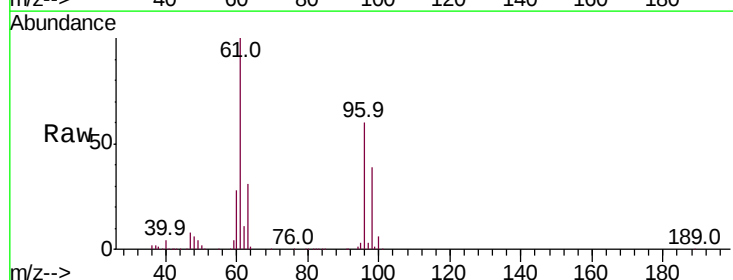
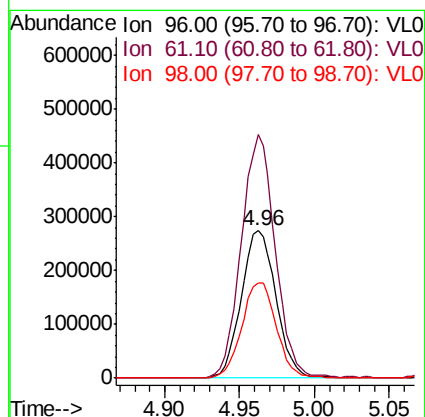
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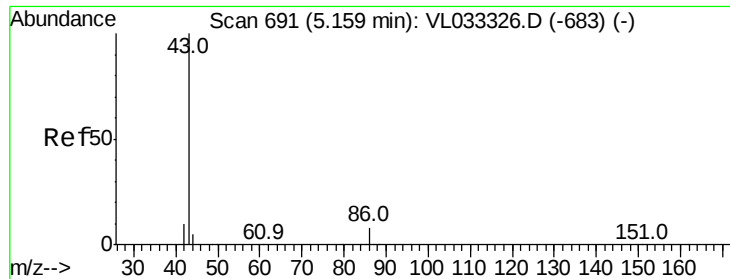
MMDadoda  
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#22  
trans-1,2-Dichloroethene  
Concen: 10.860 ppbv  
RT: 4.96 min Scan# 630  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 165.6 | 130.0 | 195.0 |
| 98      | 64.7  | 50.0  | 75.0  |





#23

Vinyl Acetate

Concen: 10.643 ppbv

RT: 5.16 min Scan# 690

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1516923

Ion Ratio Lower Upper

43 100

86 7.0 6.2 9.2

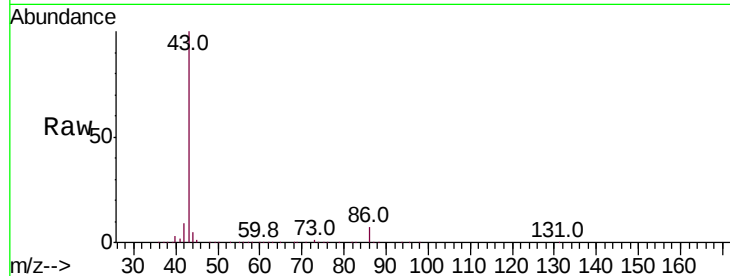
42 9.3 8.1 12.1

44 4.9 4.1 6.1

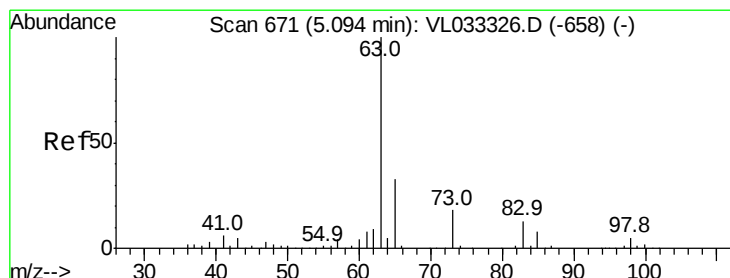
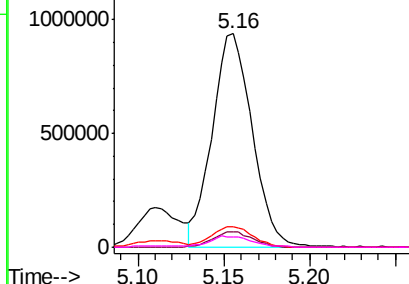
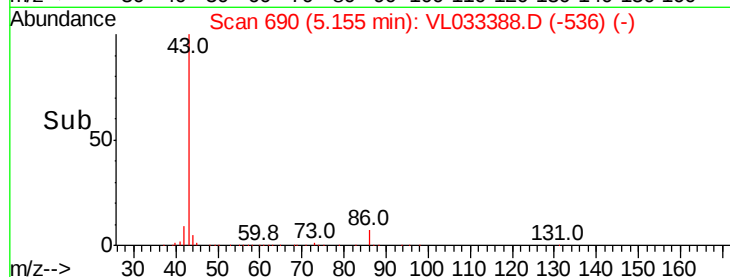
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Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 86.10 (85.80 to 86.80): VL0  
Ion 42.10 (41.80 to 42.80): VL0  
Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 10.366 ppbv

RT: 5.09 min Scan# 670

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

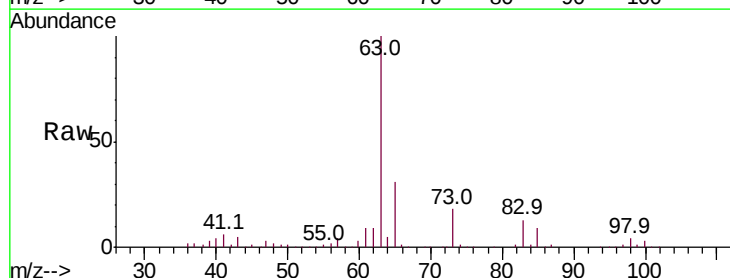
Tgt Ion: 63 Resp: 1067074

Ion Ratio Lower Upper

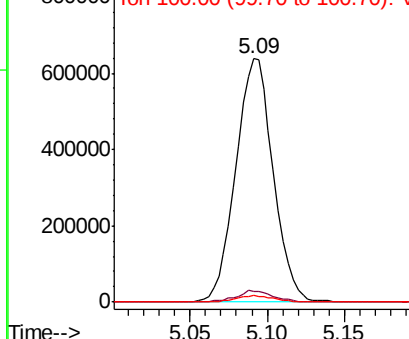
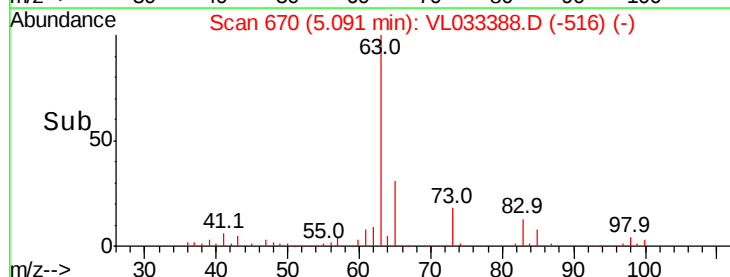
63 100

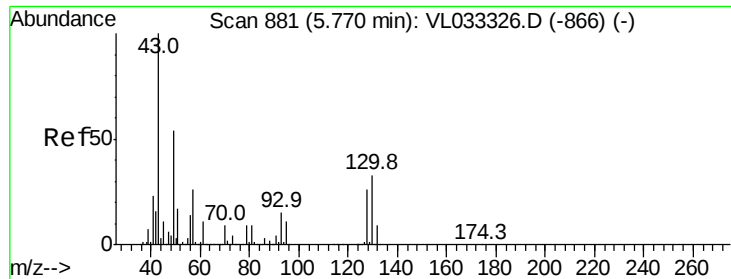
98 4.4 2.4 7.1

100 2.8 1.3 3.8



Abundance Ion 63.10 (62.80 to 63.80): VL0  
Ion 98.00 (97.70 to 98.70): VL0  
Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 10.379 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1858462

Ion Ratio Lower Upper

43 100

45 9.8 7.9 11.9

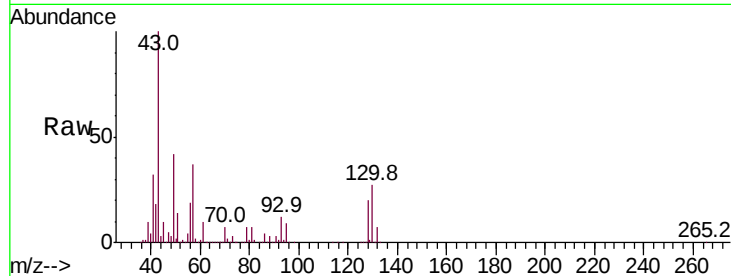
61 9.5 7.4 11.2

70 7.2 5.7 8.5

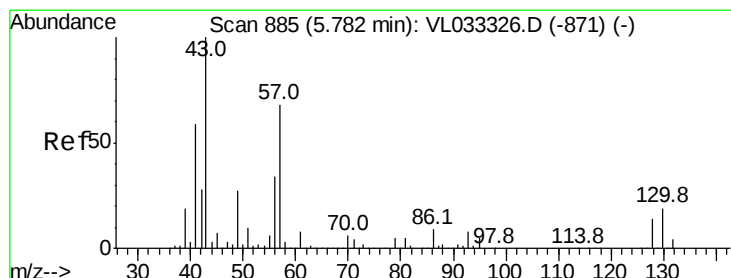
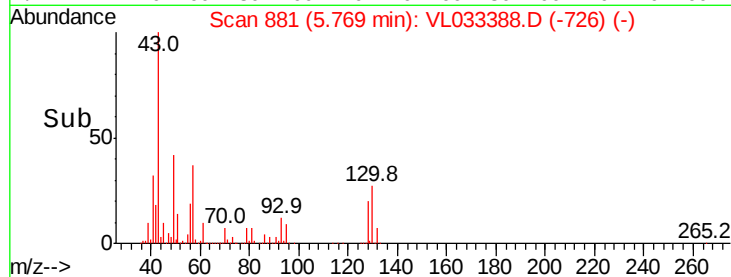
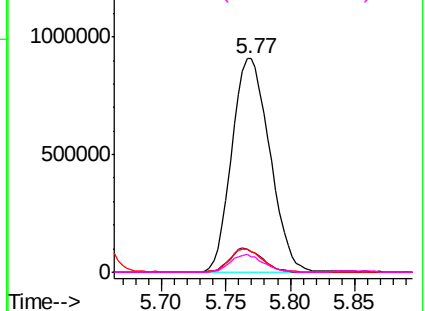
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Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 45.10 (44.80 to 45.80): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 10.317 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Tgt Ion: 57 Resp: 825900

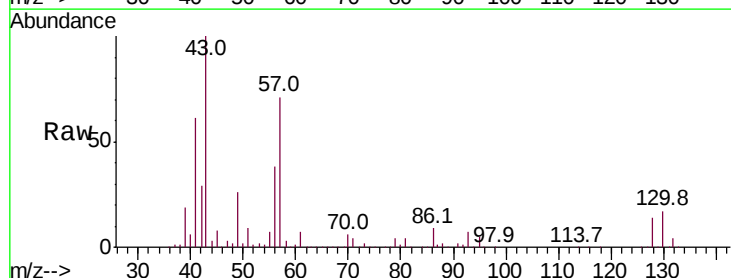
Ion Ratio Lower Upper

57 100

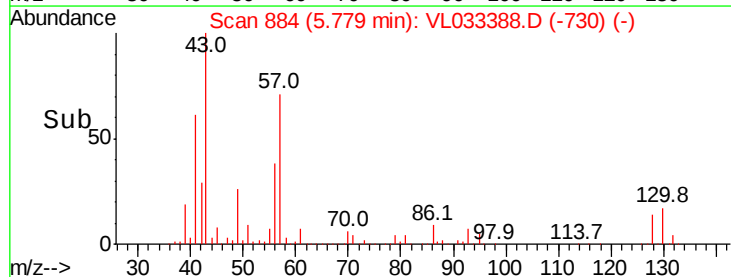
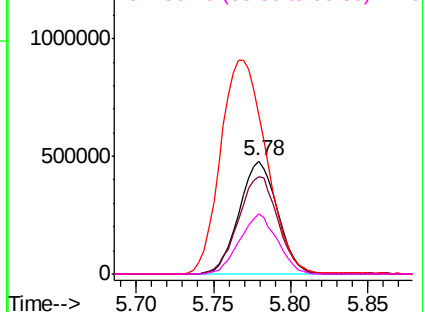
41 90.1 70.5 105.7

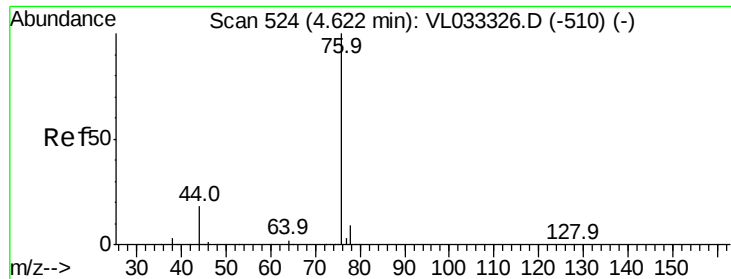
43 226.1 181.8 272.8

56 52.4 42.2 63.2



Abundance Ion 57.10 (56.80 to 57.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 11.338 ppbv

RT: 4.62 min Scan# 523

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 76 Resp: 1044861

Ion Ratio Lower Upper

76 100

44 18.4 15.2 22.8

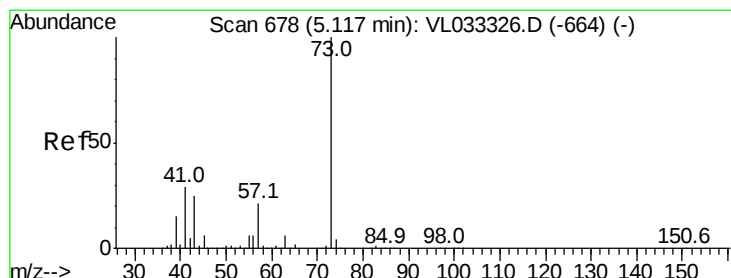
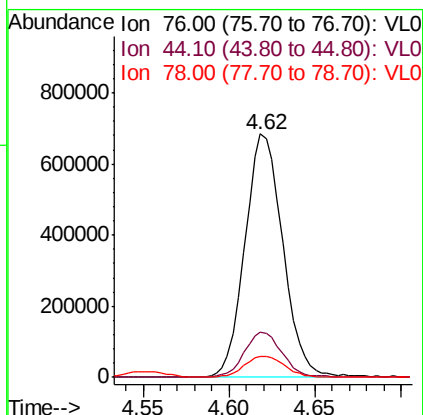
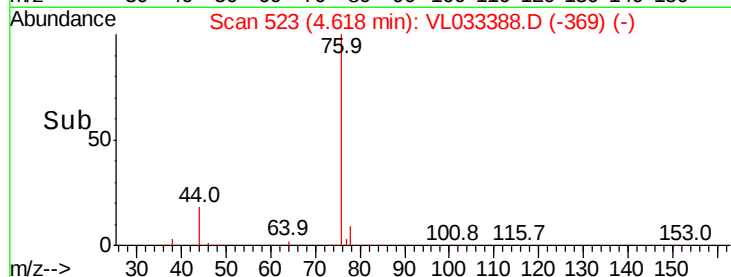
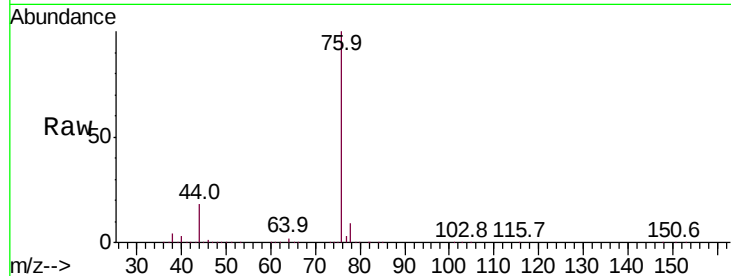
78 9.2 7.2 10.8

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#28

Methyl tert-Butyl Ether

Concen: 10.517 ppbv

RT: 5.11 min Scan# 677

Delta R.T. -0.00 min

Lab File: VL033388.D

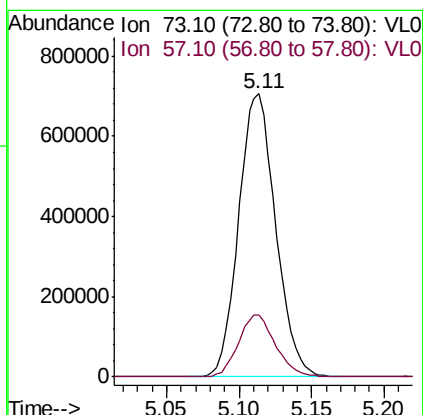
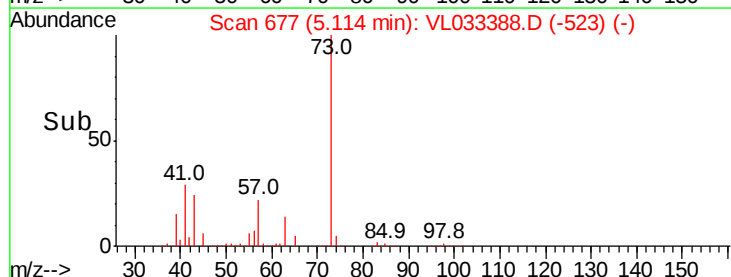
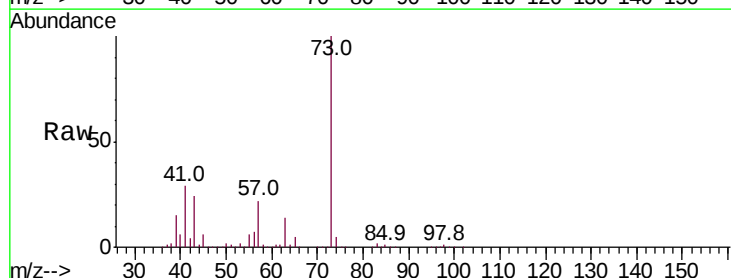
Acq: 19 Mar 2019 12:53

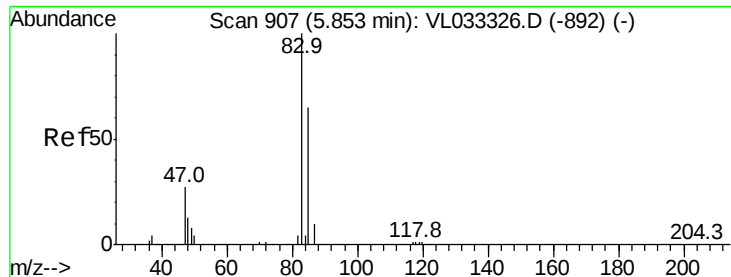
Tgt Ion: 73 Resp: 1250533

Ion Ratio Lower Upper

73 100

57 22.0 17.4 26.0





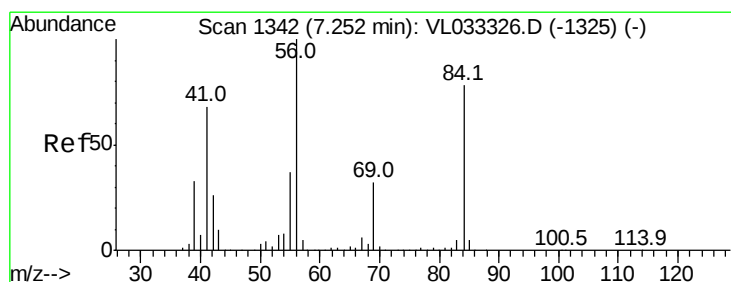
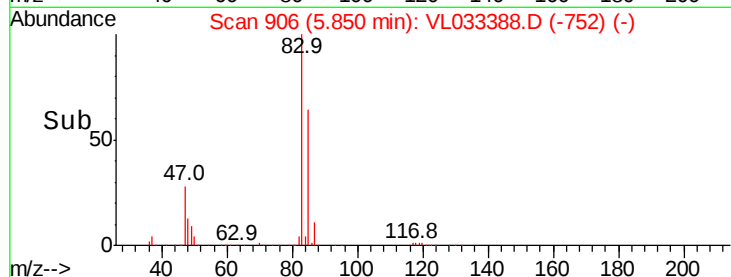
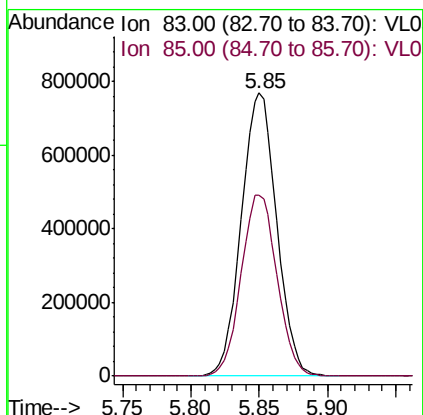
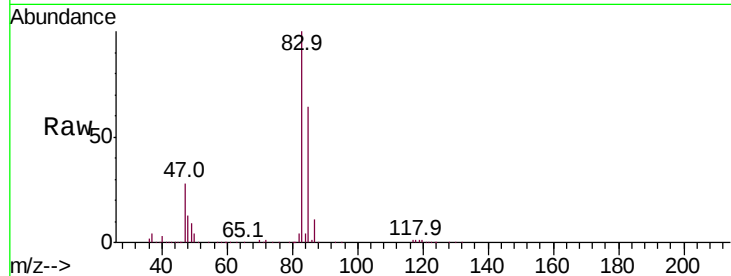
#29  
Chloroform  
Concen: 10.549 ppbv  
RT: 5.85 min Scan# 906  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 83 Resp: 1382707  
Ion Ratio Lower Upper  
83 100  
85 63.9 52.0 78.0

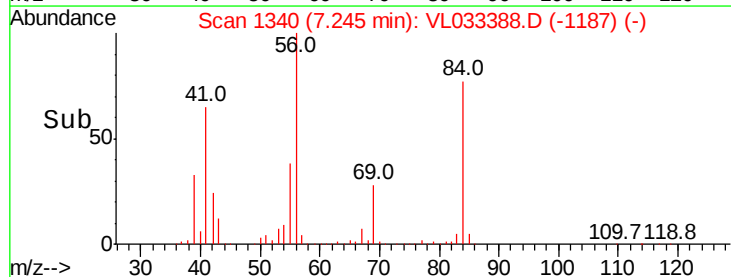
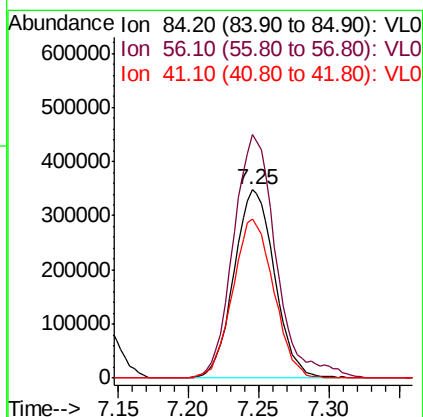
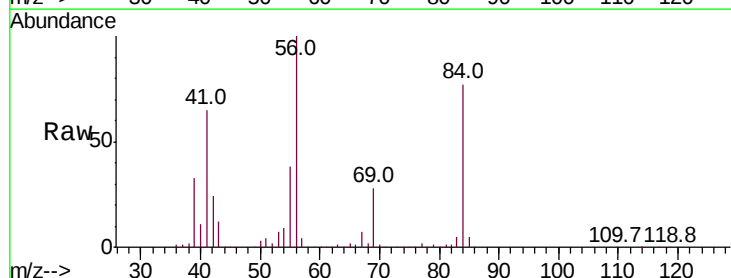
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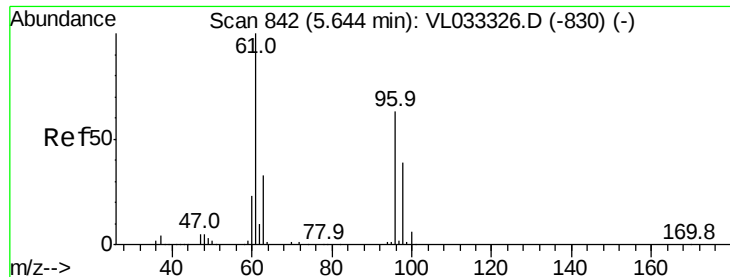
MMDadoda  
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#30  
Cyclohexane  
Concen: 10.900 ppbv  
RT: 7.25 min Scan# 1340  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Tgt Ion: 84 Resp: 699588  
Ion Ratio Lower Upper  
84 100  
56 136.9 111.3 166.9  
41 85.5 69.6 104.4





#31

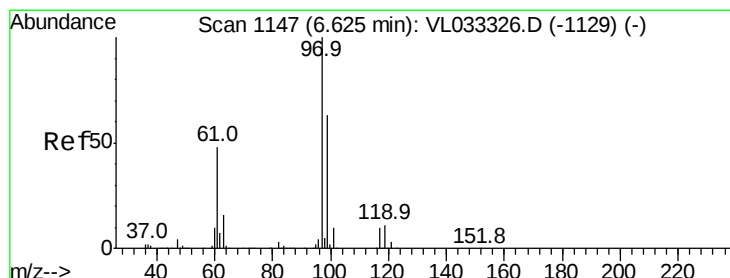
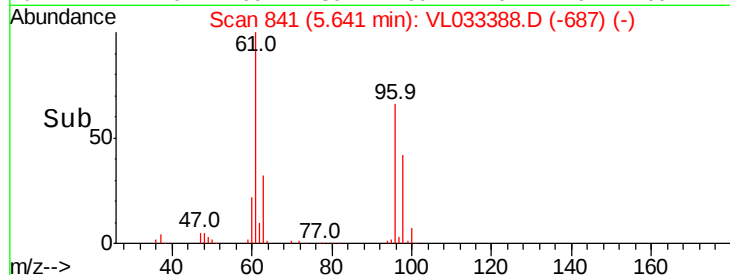
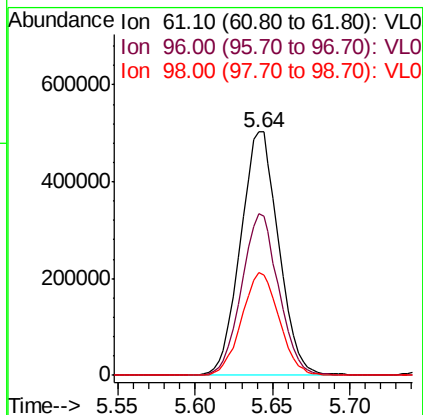
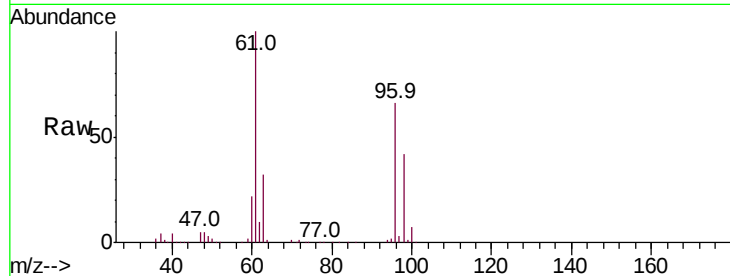
cis-1,2-Dichloroethene  
 Concen: 10.733 ppbv  
 RT: 5.64 min Scan# 841  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 66.4  | 50.3  | 75.5  |
| 98      | 42.5  | 31.5  | 47.3  |

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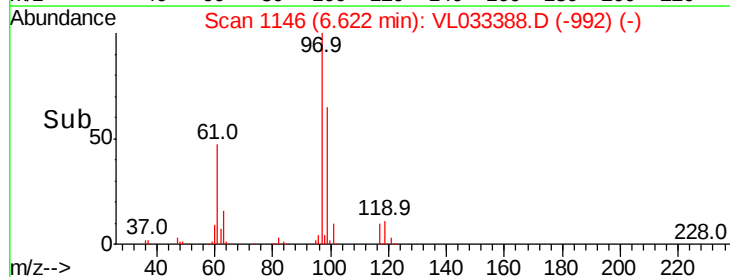
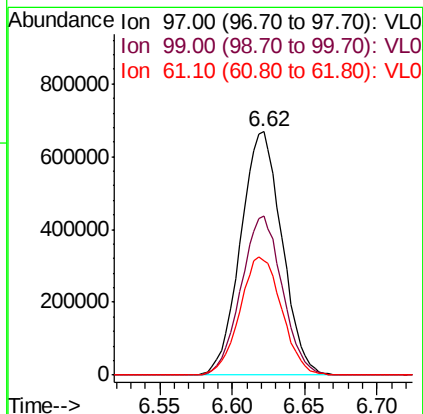
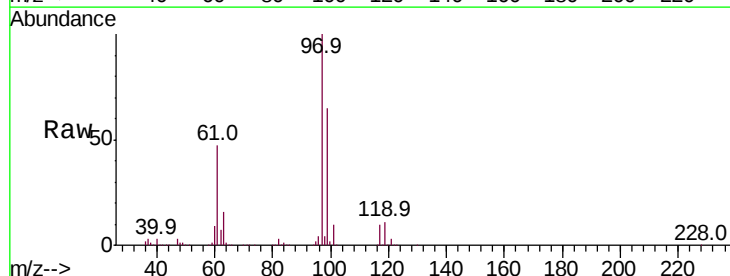
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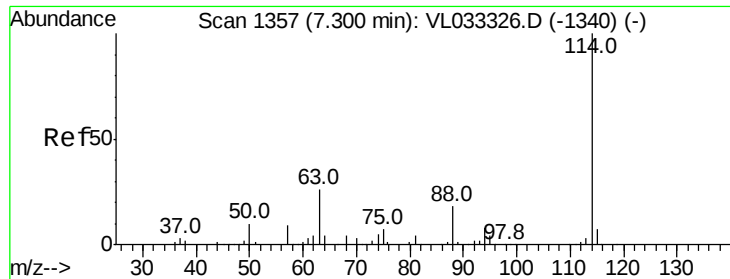


#32

1,1,1-Trichloroethane  
 Concen: 10.315 ppbv  
 RT: 6.62 min Scan# 1146  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 65.1  | 51.0  | 76.6  |
| 61      | 49.3  | 39.3  | 58.9  |





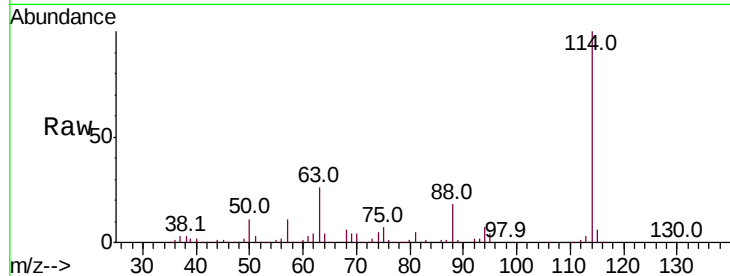
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.29 min Scan# 1355  
 Delta R.T. -0.01 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

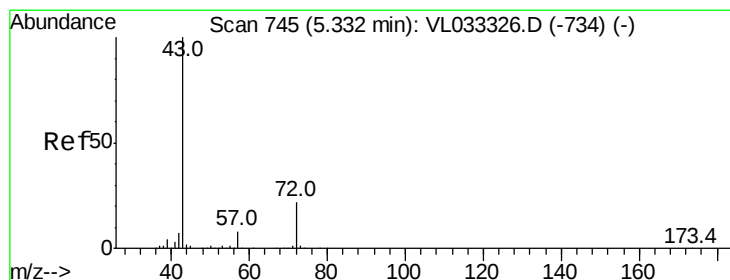
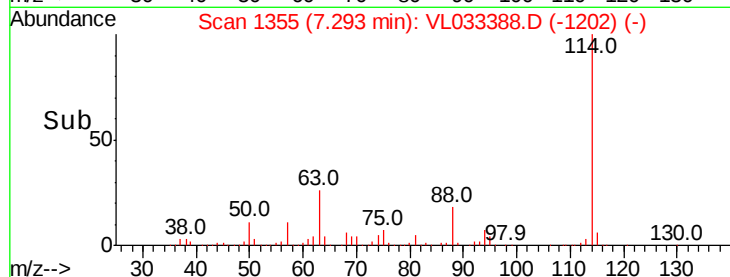
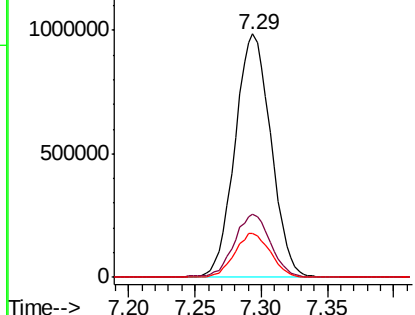
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 26.5  | 21.4  | 32.2  |
| 88      | 18.0  | 14.5  | 21.7  |

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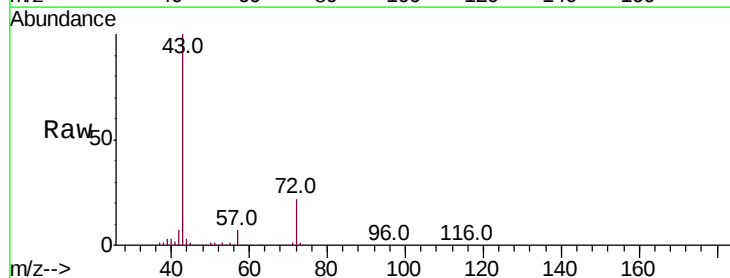


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

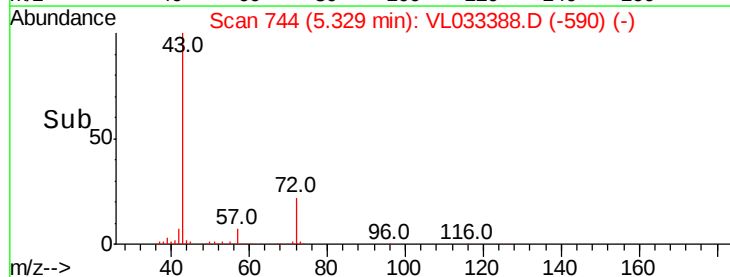
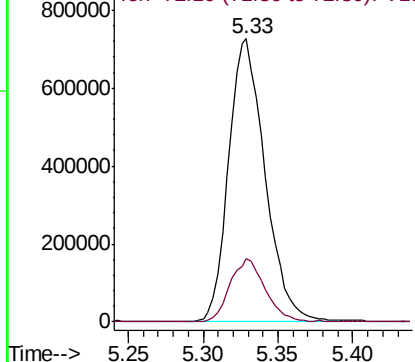


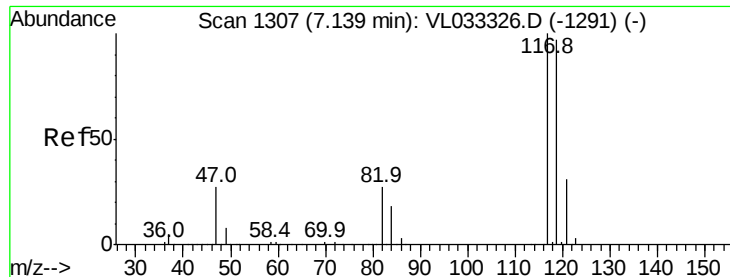
#34  
 2-Butanone  
 Concen: 10.065 ppbv  
 RT: 5.33 min Scan# 744  
 Delta R.T. -0.00 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 21.8  | 17.7  | 26.5  |



Abundance Ion 43.10 (42.80 to 43.80): VL0  
 Ion 72.10 (71.80 to 72.80): VL0





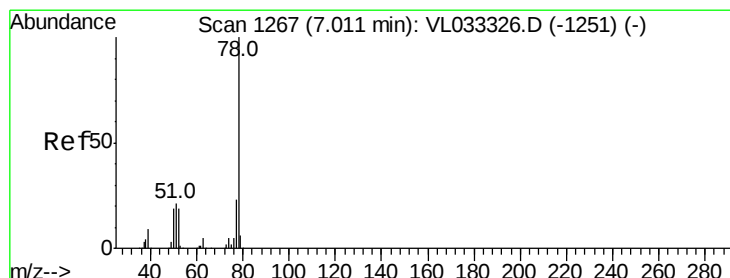
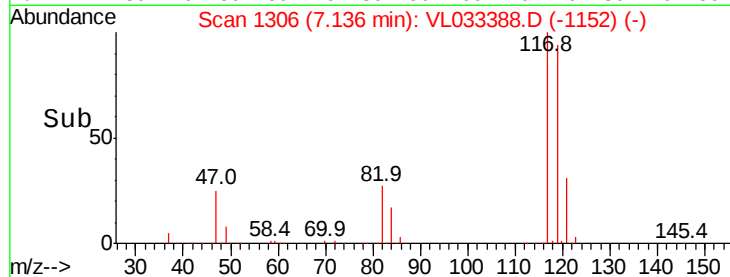
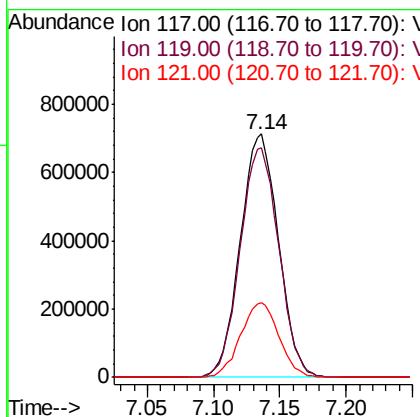
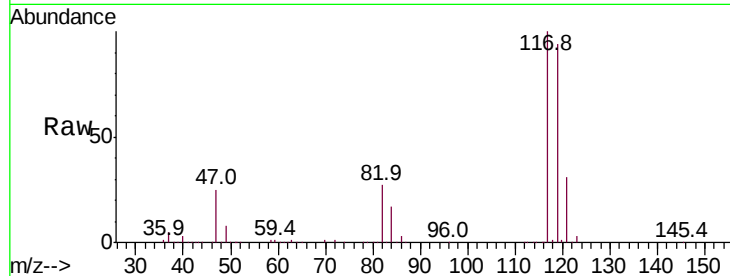
#35  
Carbon Tetrachloride  
Concen: 10.935 ppbv  
RT: 7.14 min Scan# 1306  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion:117 Resp: 1431002  
Ion Ratio Lower Upper  
117 100  
119 94.0 77.4 116.0  
121 30.8 24.9 37.3

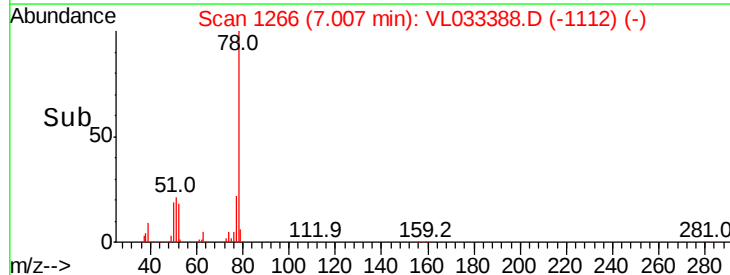
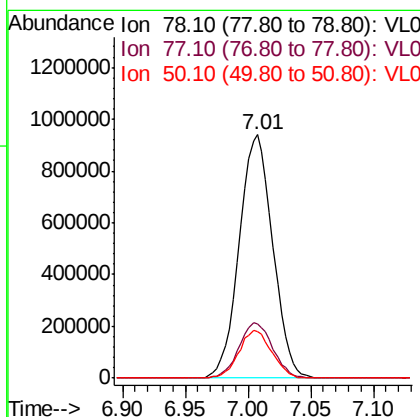
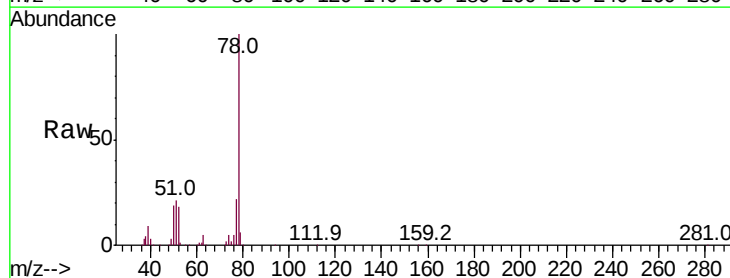
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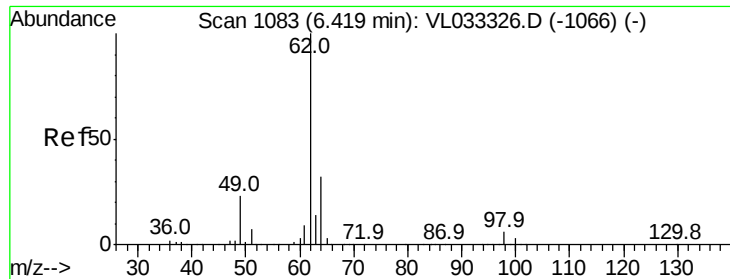
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#36  
Benzene  
Concen: 10.489 ppbv  
RT: 7.01 min Scan# 1266  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Tgt Ion: 78 Resp: 1742443  
Ion Ratio Lower Upper  
78 100  
77 22.5 18.1 27.1  
50 19.2 15.2 22.8





#37

1,2-Dichloroethane

Concen: 10.108 ppbv

RT: 6.42 min Scan# 1082

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

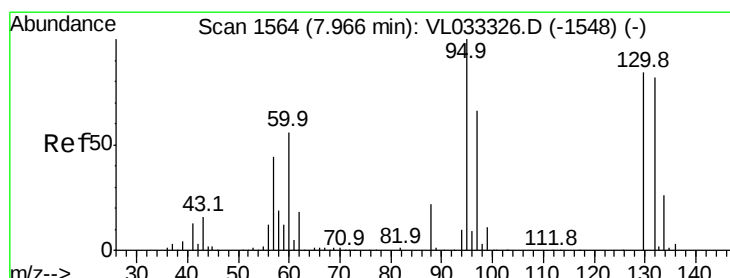
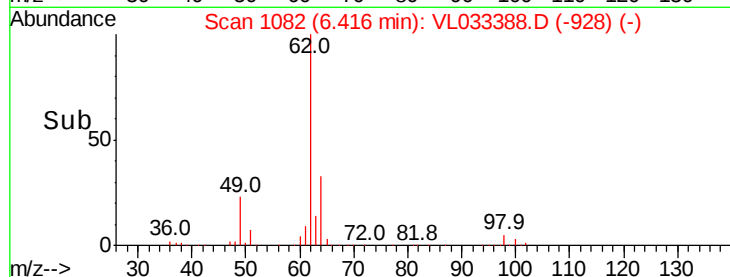
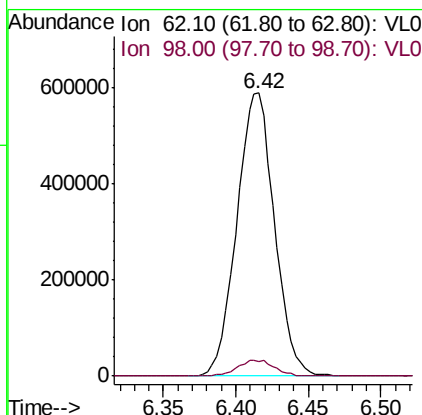
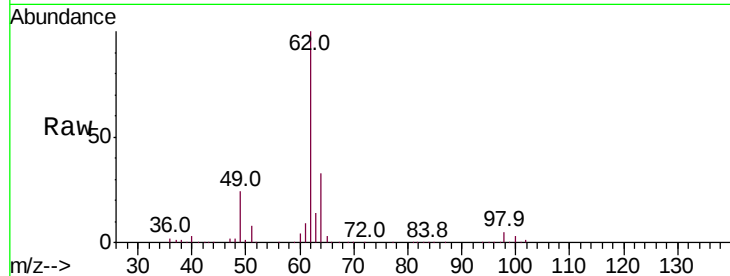
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 62 Resp: 1061788

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 62  | 100   |       |       |
| 98  | 5.6   | 4.5   | 6.7   |

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#38

Trichloroethene

Concen: 10.565 ppbv

RT: 7.96 min Scan# 1562

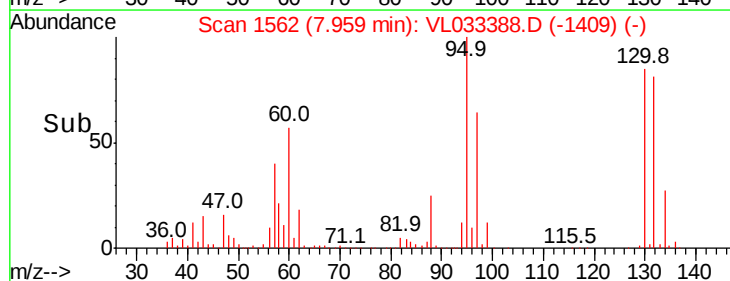
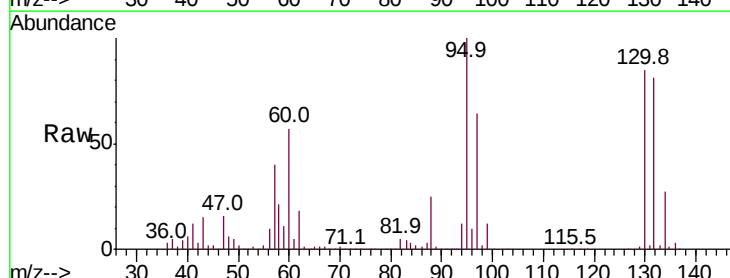
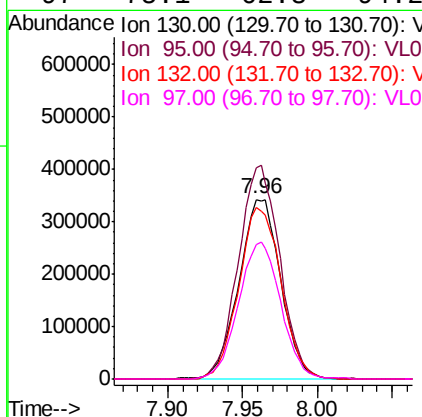
Delta R.T. -0.01 min

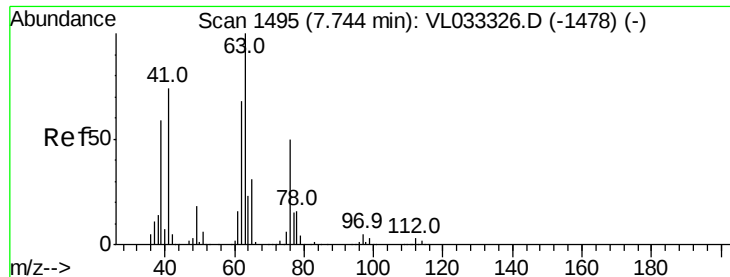
Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Tgt Ion: 130 Resp: 664171

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 130 | 100   |       |       |
| 95  | 117.7 | 95.2  | 142.8 |
| 132 | 95.9  | 77.7  | 116.5 |
| 97  | 75.1  | 62.8  | 94.2  |





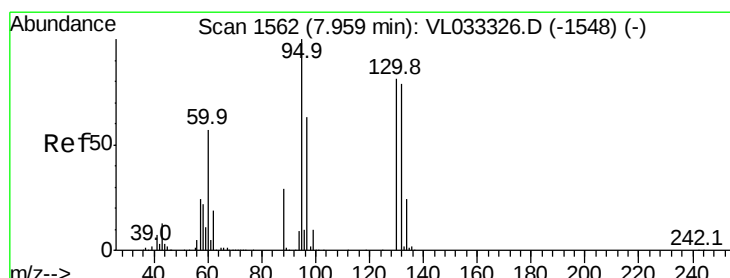
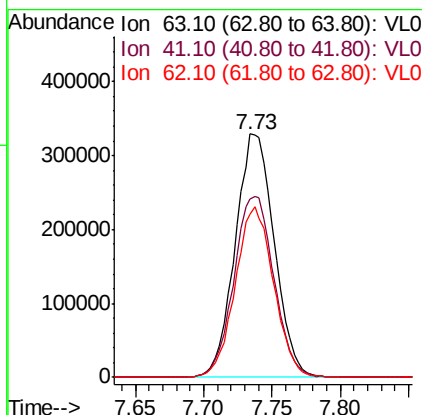
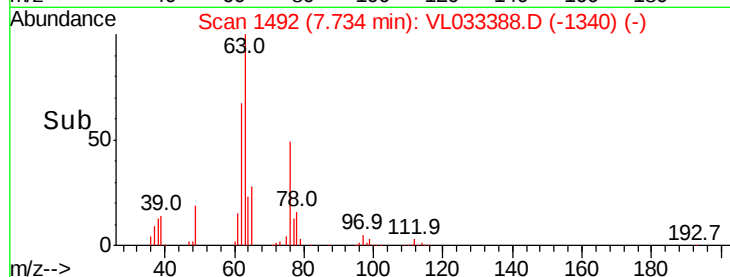
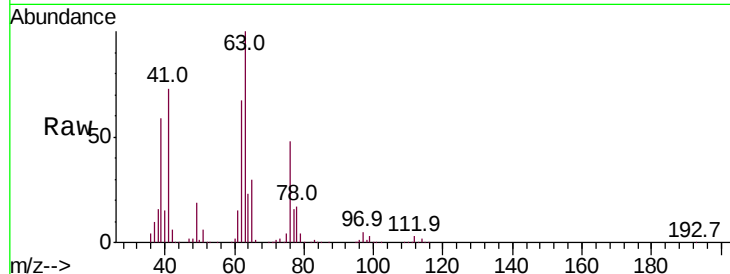
#39  
 1,2-Dichloropropane  
 Concen: 10.541 ppbv  
 RT: 7.73 min Scan# 1492  
 Delta R.T. -0.01 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 73.0  | 59.5  | 89.3  |
| 62      | 66.5  | 54.7  | 82.1  |

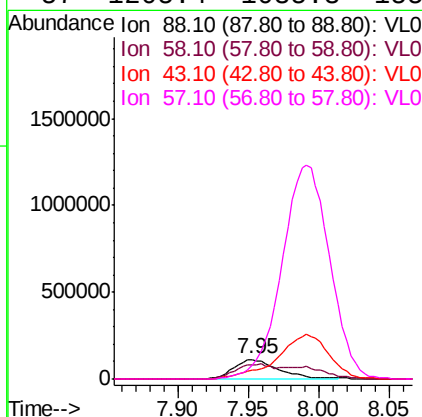
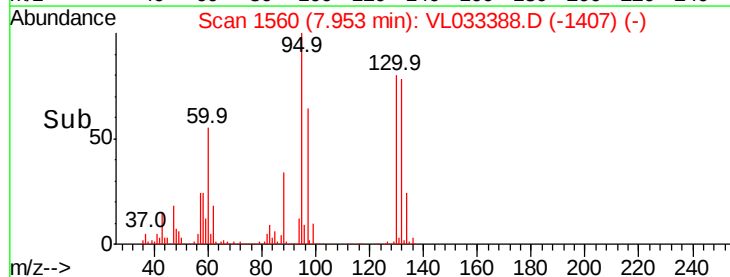
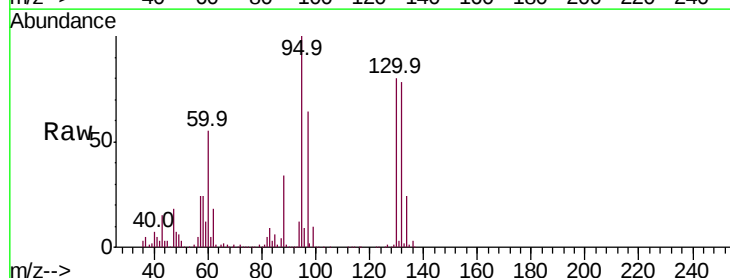
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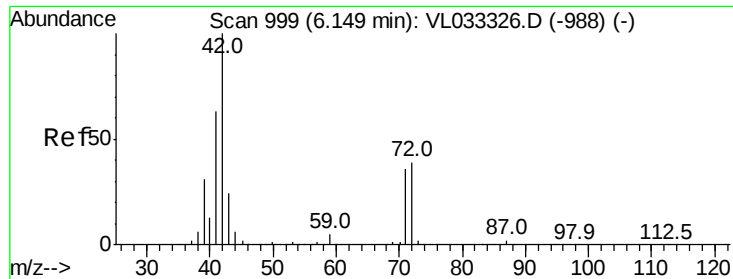
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#40  
 1,4-Dioxane  
 Concen: 11.010 ppbv  
 RT: 7.95 min Scan# 1560  
 Delta R.T. -0.01 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio  | Lower  | Upper  |
|---------|--------|--------|--------|
| 88      | 100    |        |        |
| 58      | 129.7  | 107.9  | 161.9  |
| 43      | 271.2  | 230.8  | 346.2  |
| 57      | 1205.4 | 1035.3 | 1552.9 |





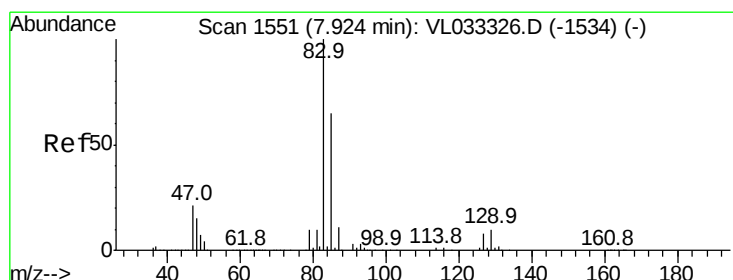
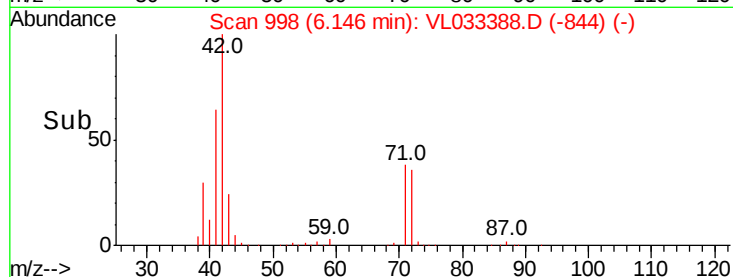
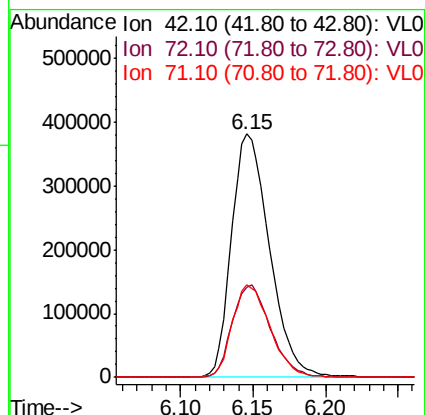
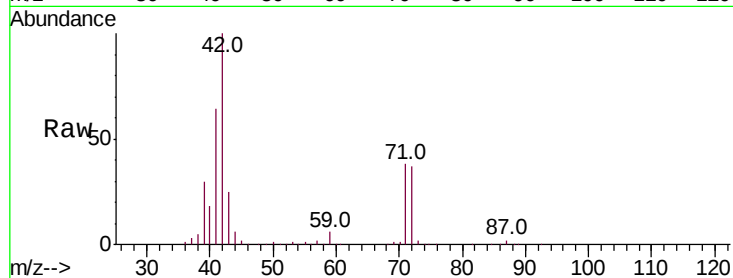
#41  
Tetrahydrofuran  
Concen: 10.700 ppbv  
RT: 6.15 min Scan# 998  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 38.4  | 31.6  | 47.4  |
| 71      | 38.0  | 29.9  | 44.9  |

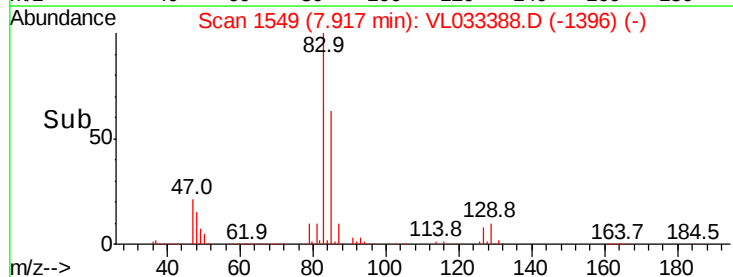
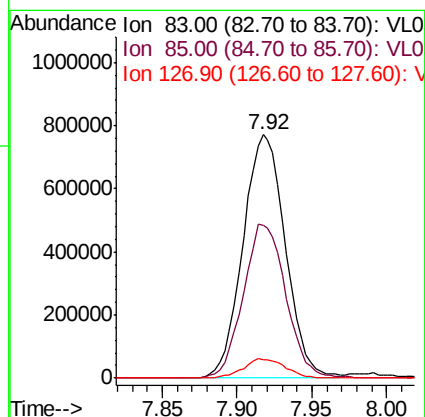
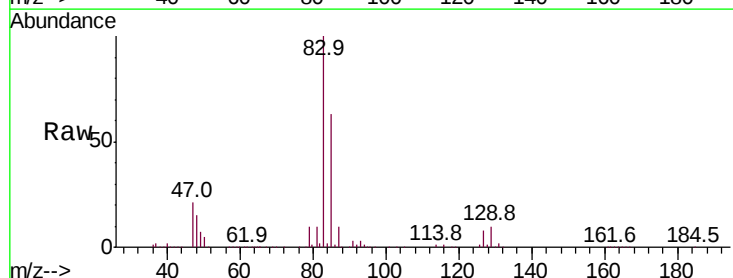
Manual Integrations  
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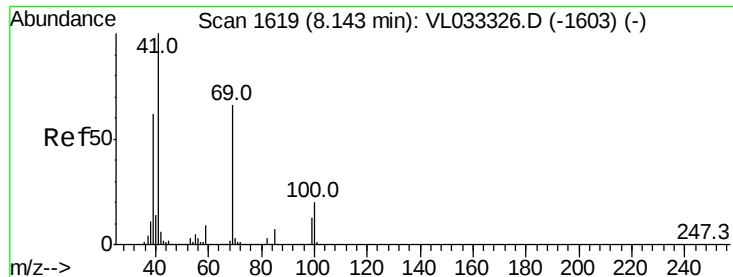
MMDadoda  
3/21/2019 12:16:09 PM



#42  
Bromodichloromethane  
Concen: 10.811 ppbv  
RT: 7.92 min Scan# 1549  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 62.7  | 51.8  | 77.6  |
| 127     | 7.7   | 6.2   | 9.2   |





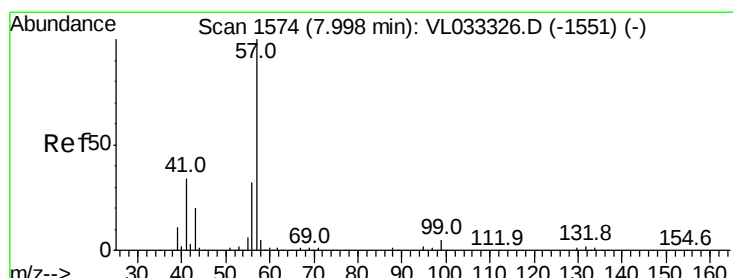
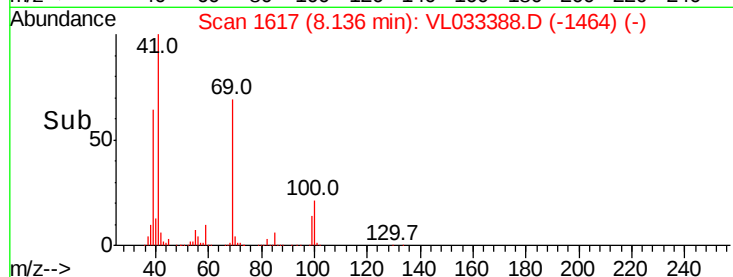
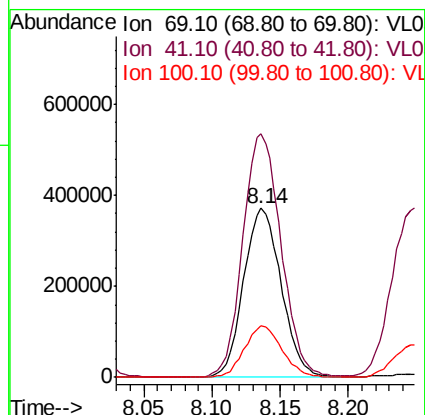
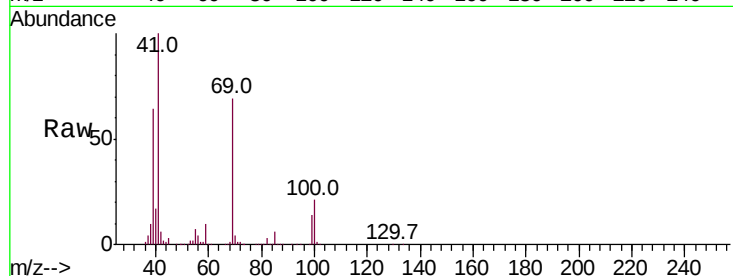
#43  
Methyl Methacrylate  
Concen: 11.010 ppbv  
RT: 8.14 min Scan# 1617  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleID :  
VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 69      | 100   |       |       |
| 41      | 146.3 | 119.5 | 179.3 |
| 100     | 30.5  | 24.4  | 36.6  |

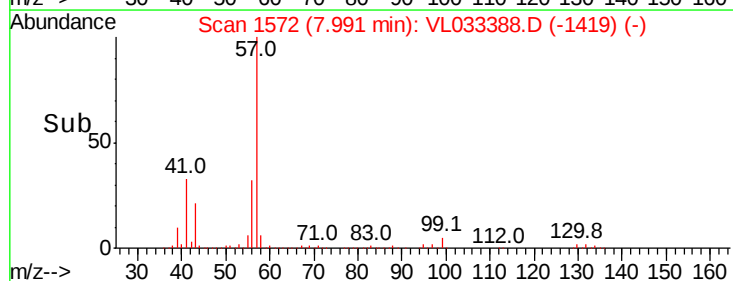
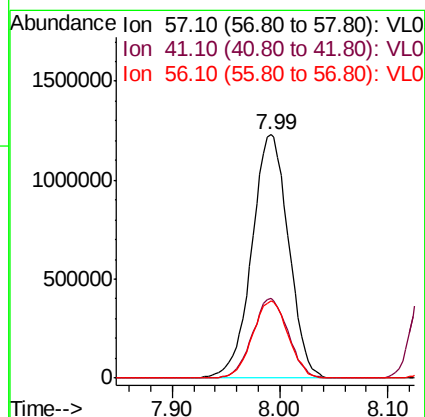
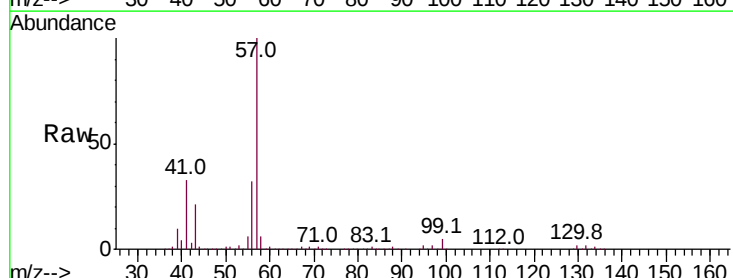
Manual Integrations  
APPROVED

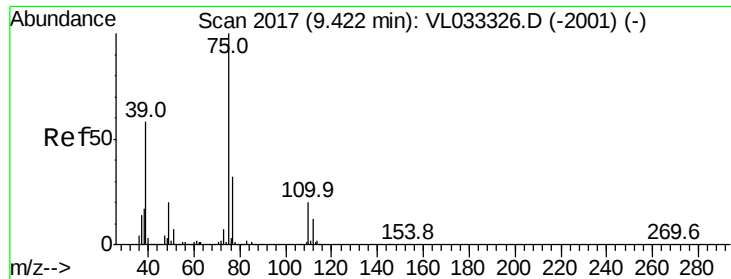
MMDadoda  
3/21/2019 12:16:09 PM



#44  
2,2,4-Trimethylpentane  
Concen: 10.548 ppbv  
RT: 7.99 min Scan# 1572  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 32.0  | 26.0  | 39.0  |
| 56      | 30.8  | 24.6  | 36.8  |





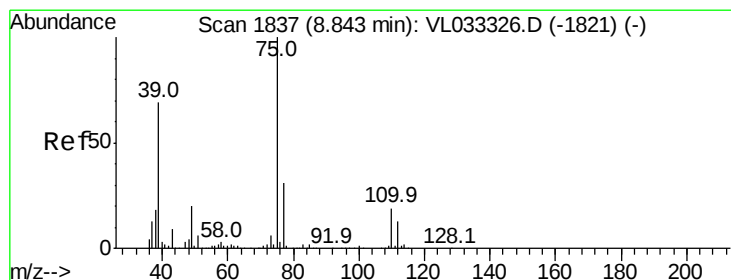
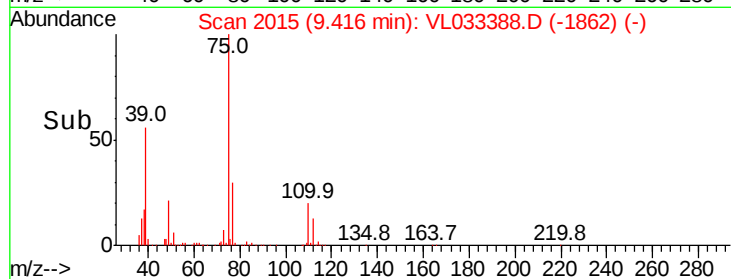
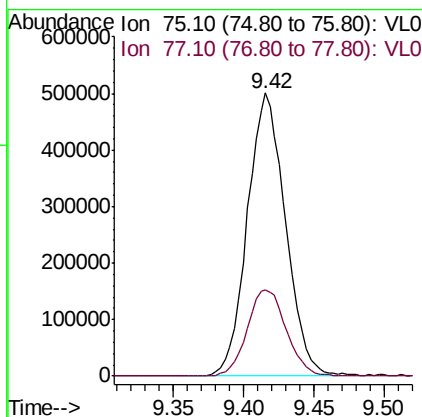
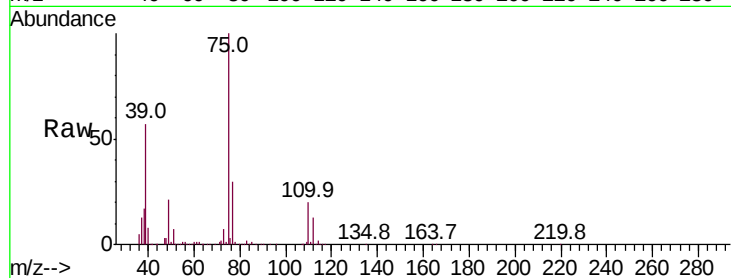
#45  
t-1,3-Dichloropropene  
Concen: 11.827 ppbv  
RT: 9.42 min Scan# 2015  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion: 75 Resp: 944471  
Ion Ratio Lower Upper  
75 100  
77 30.5 25.5 38.3

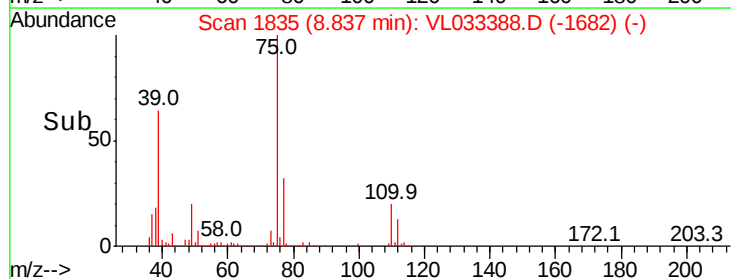
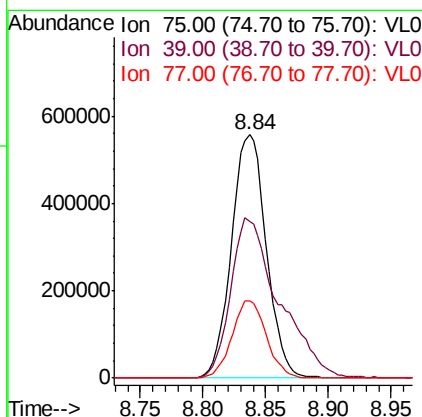
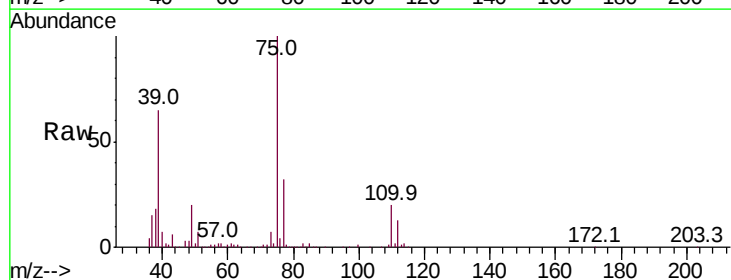
Manual Integrations  
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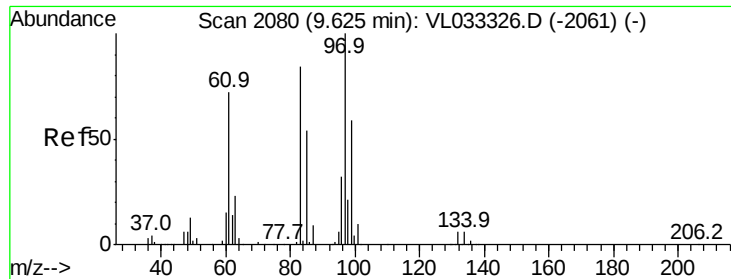
MMDadoda  
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#46  
cis-1,3-Dichloropropene  
Concen: 11.495 ppbv  
RT: 8.84 min Scan# 1835  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Tgt Ion: 75 Resp: 1080955  
Ion Ratio Lower Upper  
75 100  
39 64.4 55.0 82.6  
77 31.8 24.5 36.7





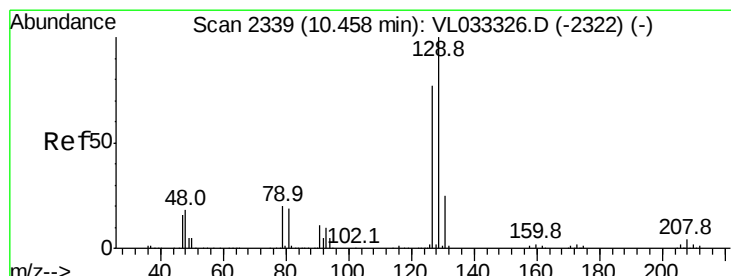
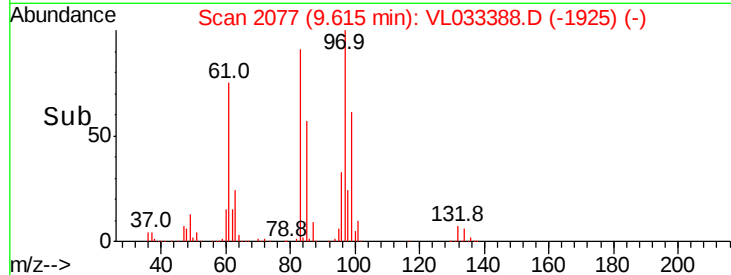
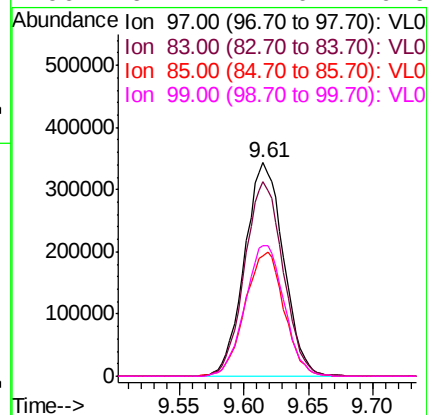
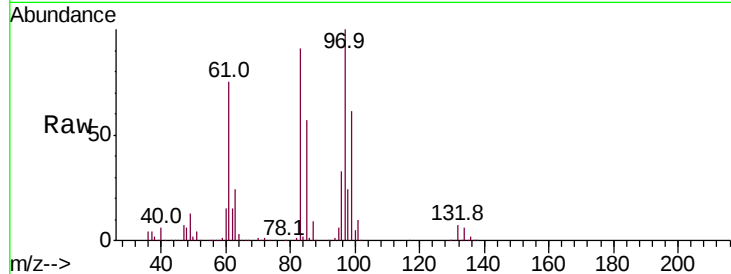
#47  
 1,1,2-Trichloroethane  
 Concen: 10.529 ppbv  
 RT: 9.61 min Scan# 2077  
 Delta R.T. -0.01 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 91.0  | 67.4  | 101.0 |
| 85      | 56.3  | 43.0  | 64.4  |
| 99      | 61.1  | 47.0  | 70.6  |

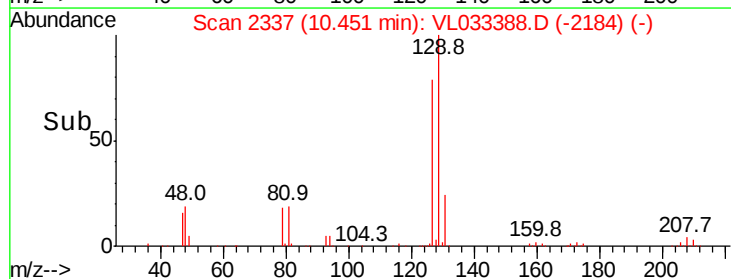
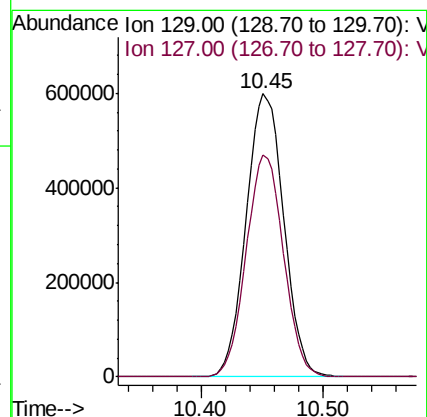
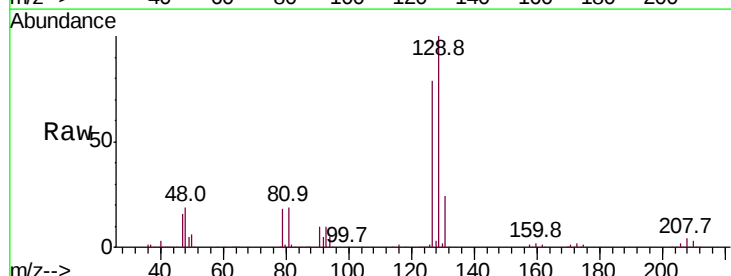
Manual Integrations  
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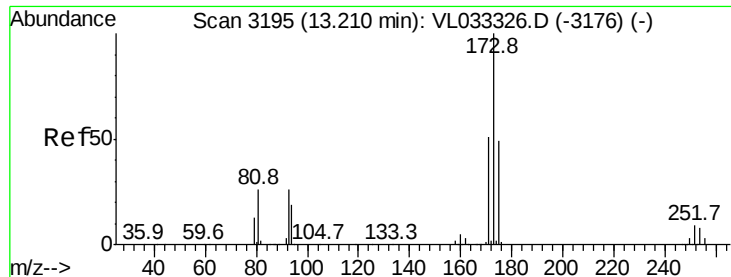
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#48  
 Dibromochloromethane  
 Concen: 11.037 ppbv  
 RT: 10.45 min Scan# 2337  
 Delta R.T. -0.01 min  
 Lab File: VL033388.D  
 Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 78.1  | 38.9  | 116.6 |





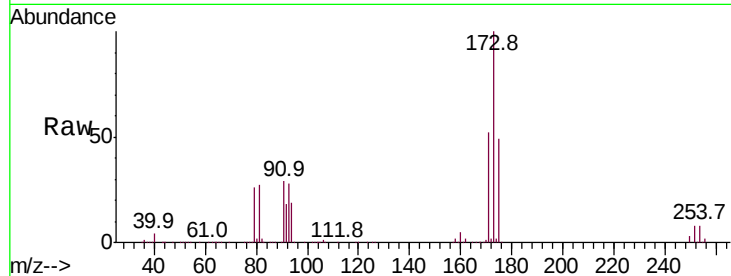
#49  
Bromoform  
Concen: 11.822 ppbv  
RT: 13.20 min Scan# 3193  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

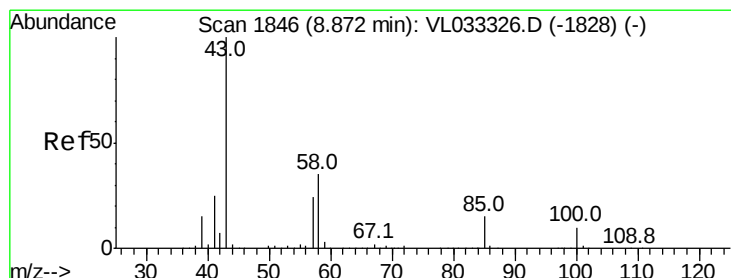
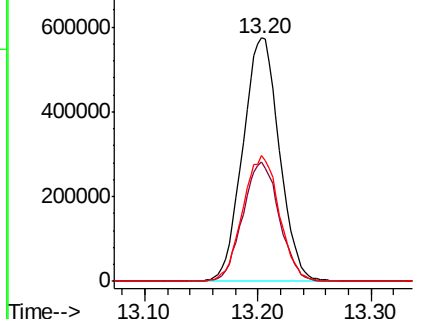
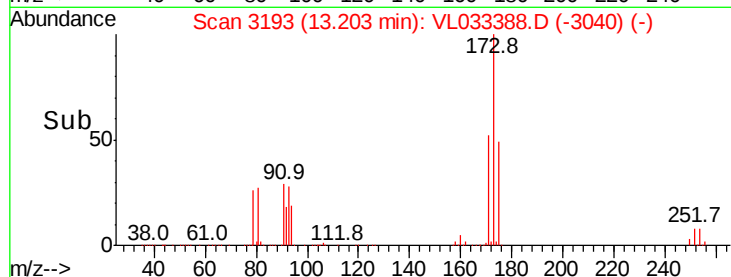
Tot Ion:173 Resp: 1292784  
Ion Ratio Lower Upper  
173 100  
175 48.8 39.0 58.6  
171 51.7 41.7 62.5

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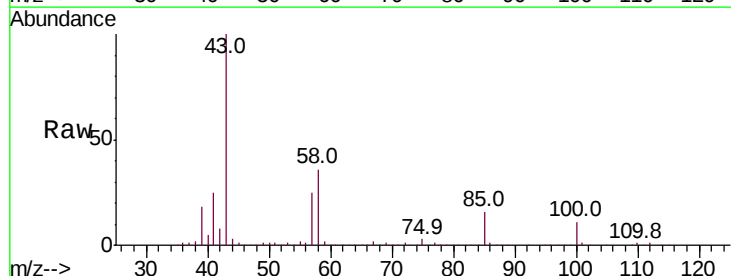


Abundance Ion 172.90 (172.60 to 173.60): V  
Ion 174.90 (174.60 to 175.60): V  
Ion 170.90 (170.60 to 171.60): V

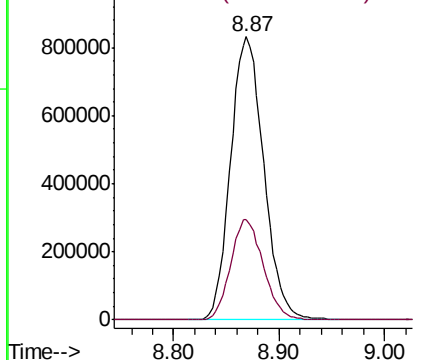
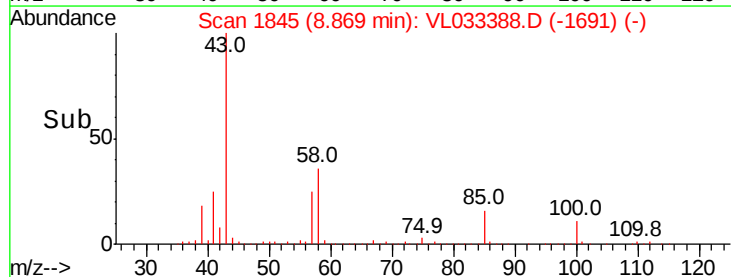


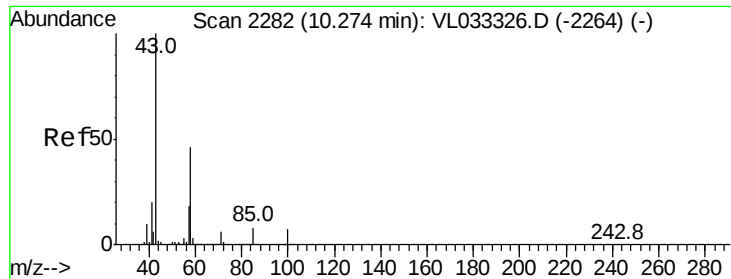
#50  
4-Methyl-2-Pentanone  
Concen: 10.533 ppbv  
RT: 8.87 min Scan# 1845  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Tgt Ion: 43 Resp: 1813758  
Ion Ratio Lower Upper  
43 100  
58 34.9 28.4 42.6



Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 10.645 ppbv

RT: 10.27 min Scan# 2281

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 43 Resp: 1414236

Ion Ratio Lower Upper

43 100

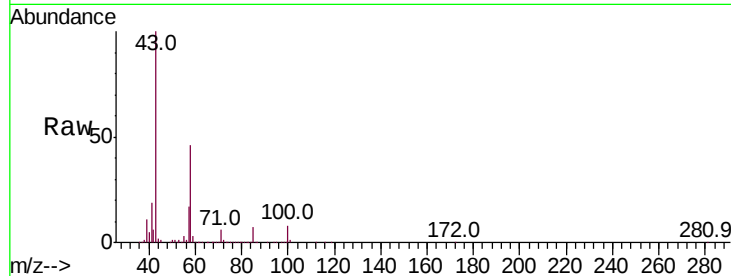
58 47.5 38.0 57.0

98 0.3 0.1 0.1#

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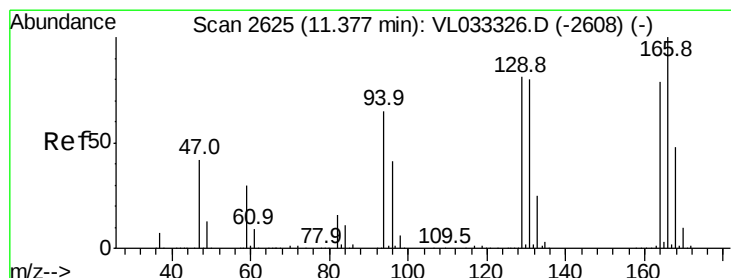
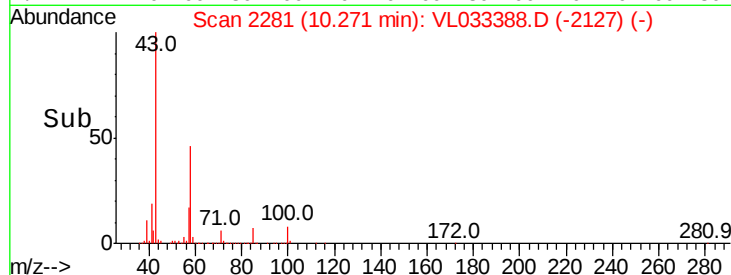
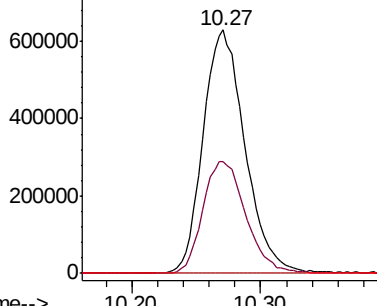
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 10.734 ppbv

RT: 11.37 min Scan# 2624

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Tgt Ion: 164 Resp: 742883

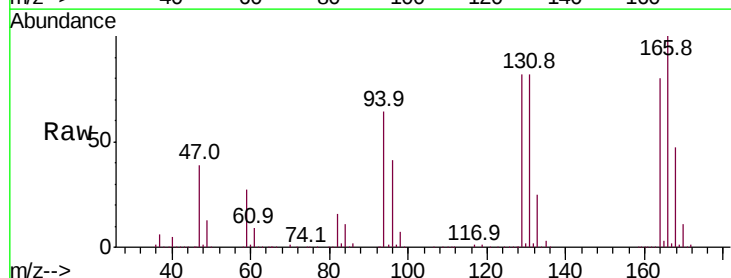
Ion Ratio Lower Upper

164 100

166 125.2 101.5 152.3

129 102.6 82.2 123.2

131 102.5 81.1 121.7

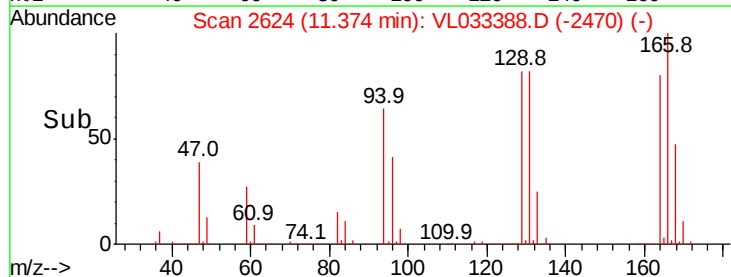
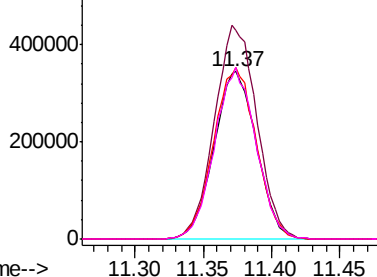


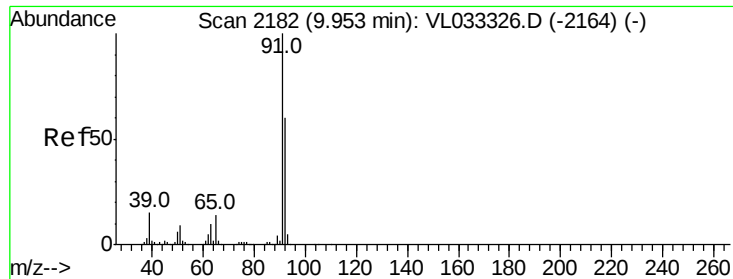
Abundance Ion 163.90 (163.60 to 164.60): V

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: 10.852 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 2048382

Ion Ratio Lower Upper

91 100

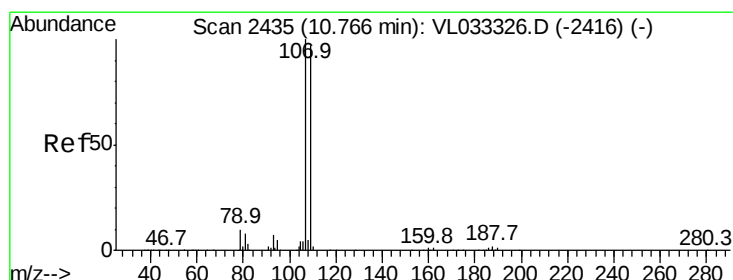
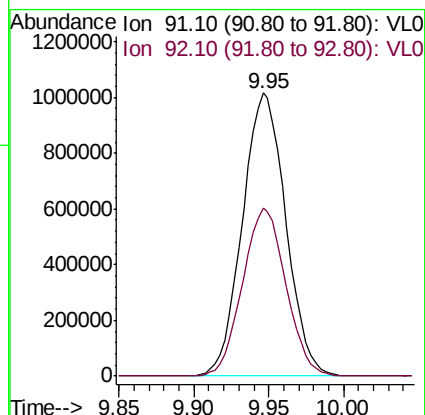
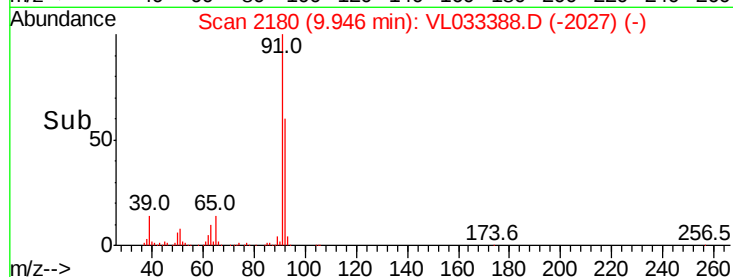
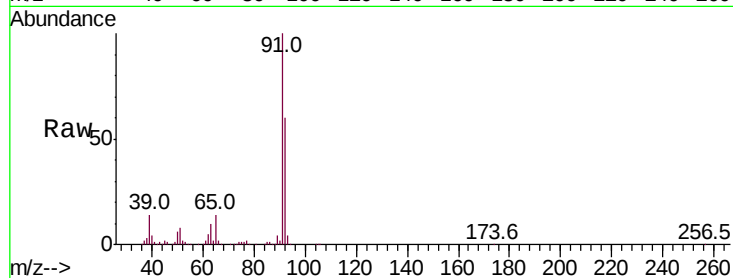
92 59.5 47.4 71.0

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#54

1,2-Dibromoethane

Concen: 9.972 ppbv

RT: 10.76 min Scan# 2433

Delta R.T. -0.01 min

Lab File: VL033388.D

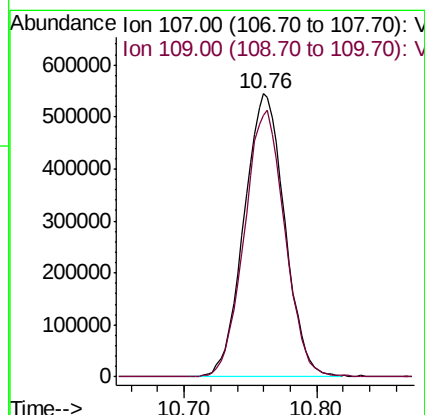
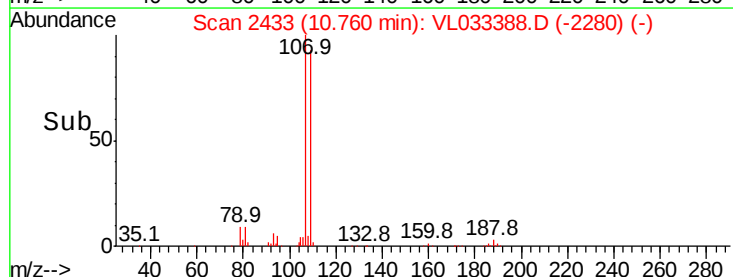
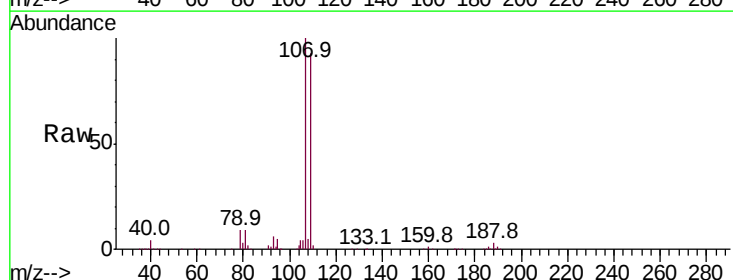
Acq: 19 Mar 2019 12:53

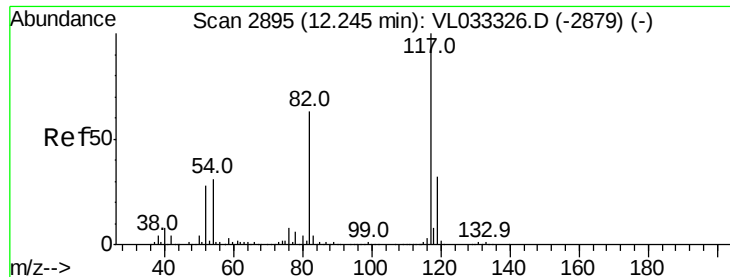
Tgt Ion: 107 Resp: 1158712

Ion Ratio Lower Upper

107 100

109 92.6 77.2 115.8





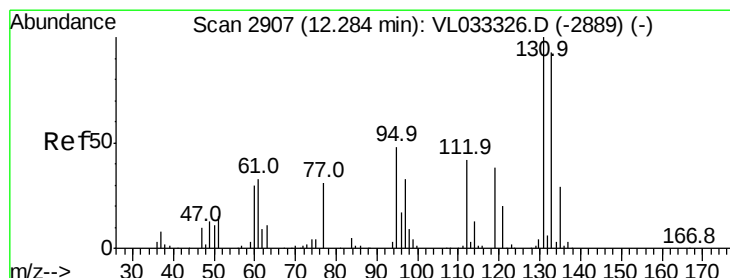
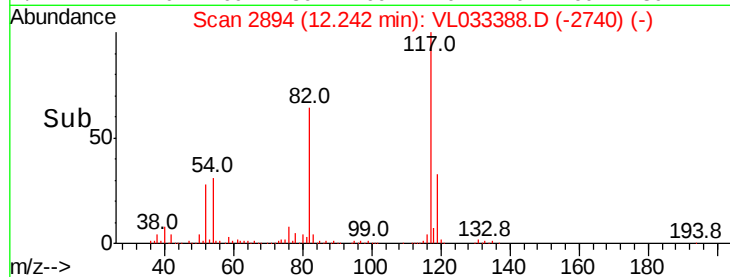
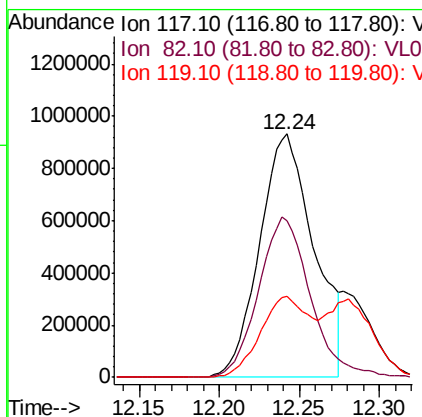
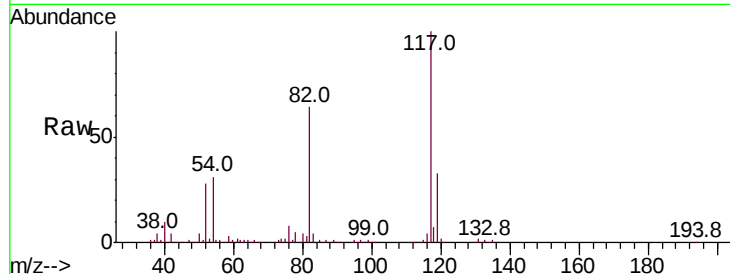
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2894  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

Tot Ion:117 Resp: 2200226  
Ion Ratio Lower Upper  
117 100  
82 62.9 53.4 80.2  
119 32.6 27.3 40.9

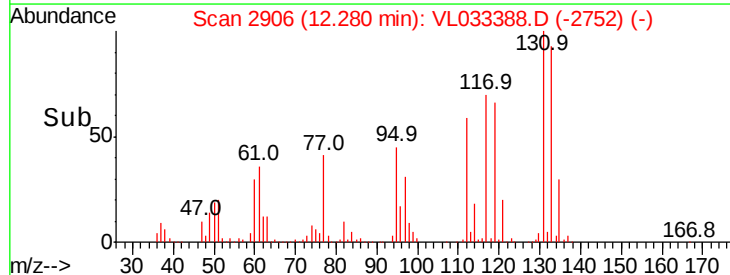
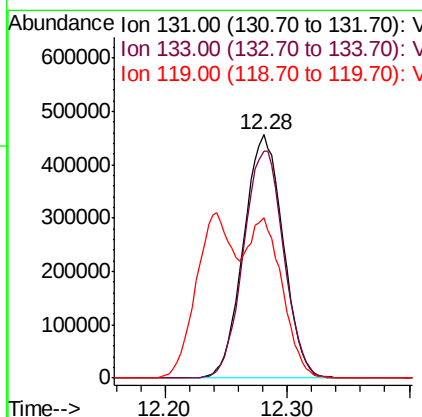
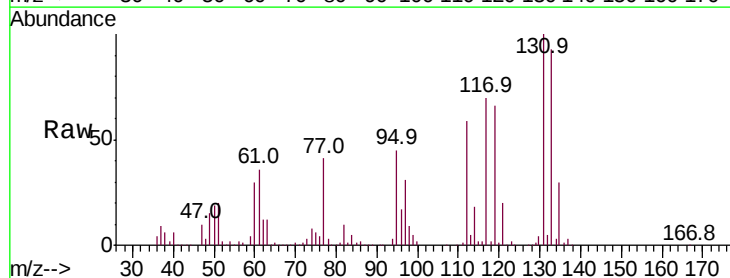
Manual Integrations  
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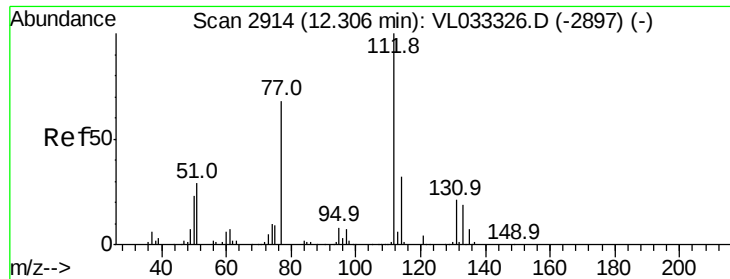
MMDadoda  
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#56  
1,1,1,2-Tetrachloroethane  
Concen: 10.369 ppbv  
RT: 12.28 min Scan# 2906  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Tgt Ion:131 Resp: 1020521  
Ion Ratio Lower Upper  
131 100  
133 95.1 76.7 115.1  
119 55.5 40.3 60.5





#57

Chlorobenzene

Concen: 9.994 ppbv

RT: 12.30 min Scan# 2913

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:112 Resp: 1741470

Ion Ratio Lower Upper

112 100

77 69.6 55.8 83.6

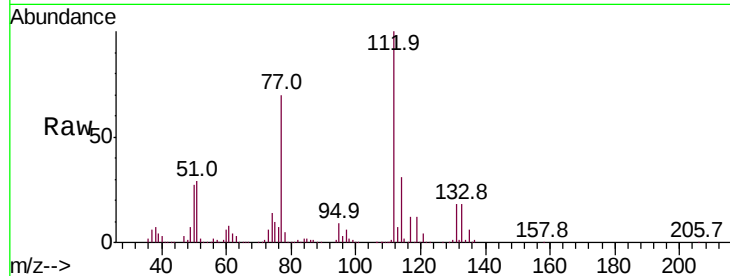
114 31.4 28.6 35.0

Manual Integrations

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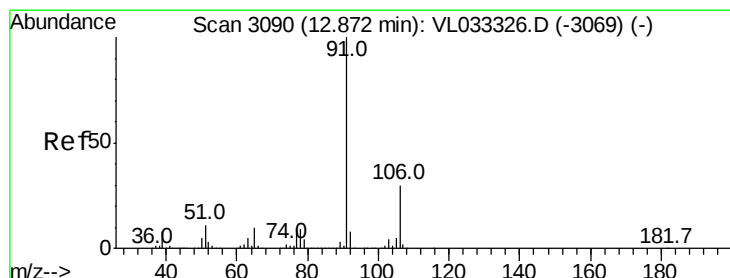
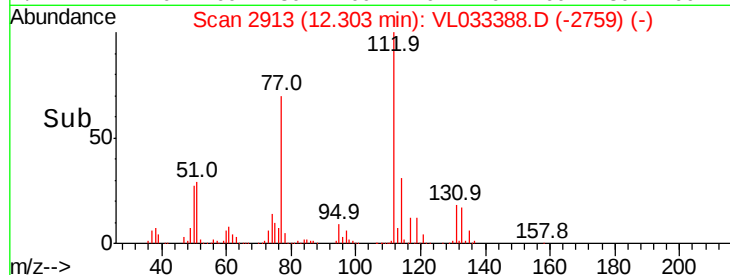
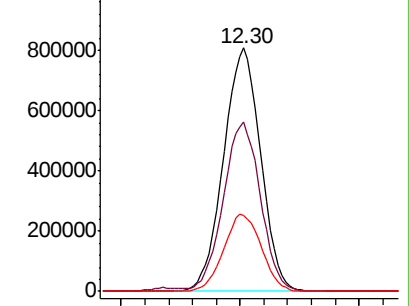
3/21/2019 12:16:09 PM



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 10.401 ppbv

RT: 12.86 min Scan# 3087

Delta R.T. -0.01 min

Lab File: VL033388.D

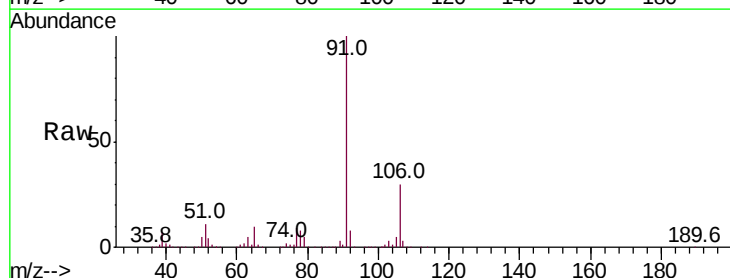
Acq: 19 Mar 2019 12:53

Tgt Ion: 91 Resp: 3237377

Ion Ratio Lower Upper

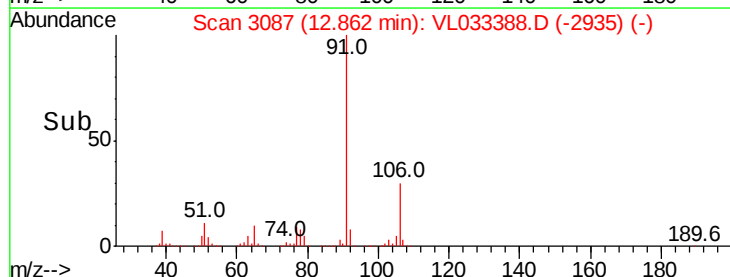
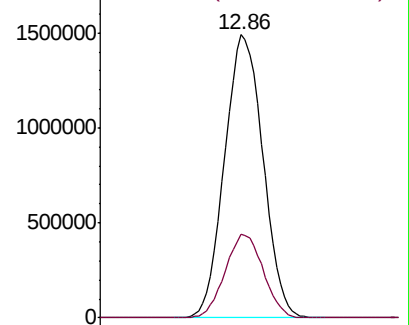
91 100

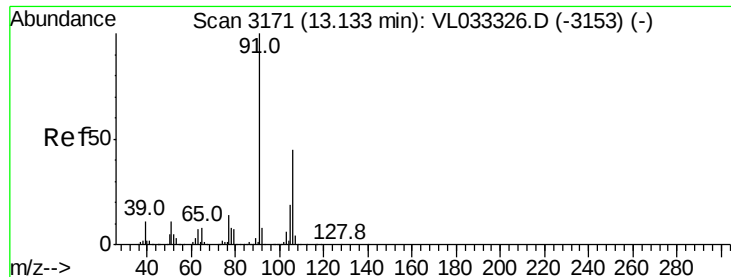
106 29.7 24.2 36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 20.255 ppbv m

RT: 13.12 min Scan# 3168

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 5417854

Ion Ratio Lower Upper

91 100

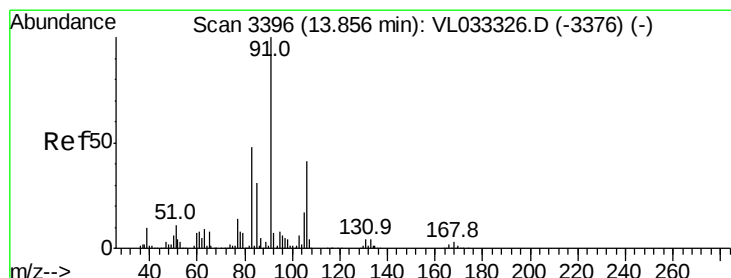
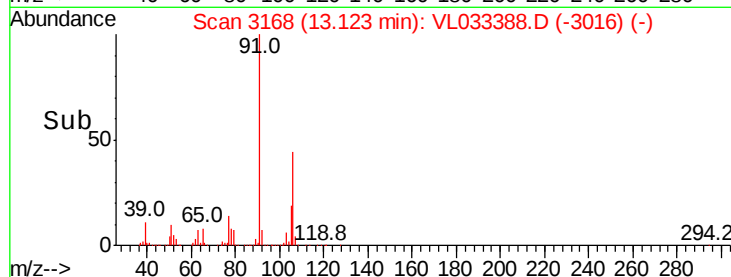
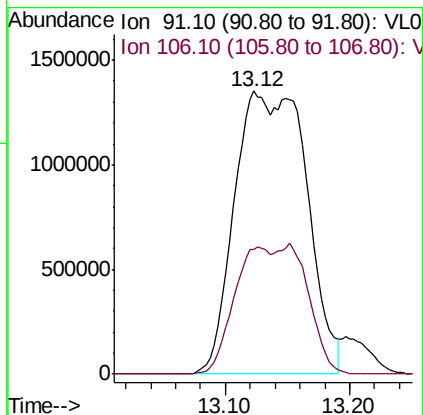
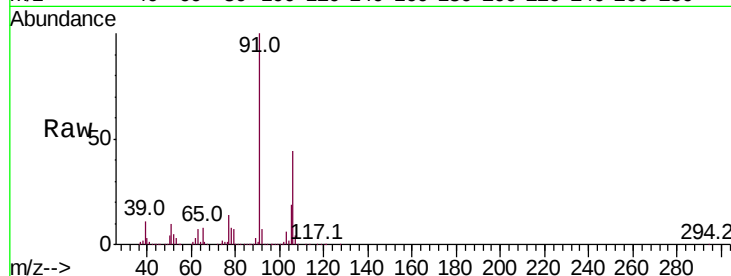
106 0.0 0.0 0.0

Manual Integrations

APPROVED

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#60

o-Xylene

Concen: 10.192 ppbv

RT: 13.85 min Scan# 3394

Delta R.T. -0.01 min

Lab File: VL033388.D

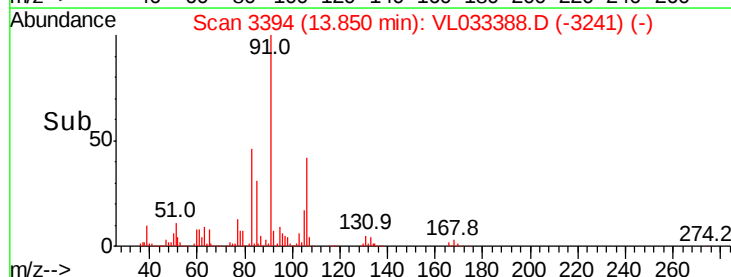
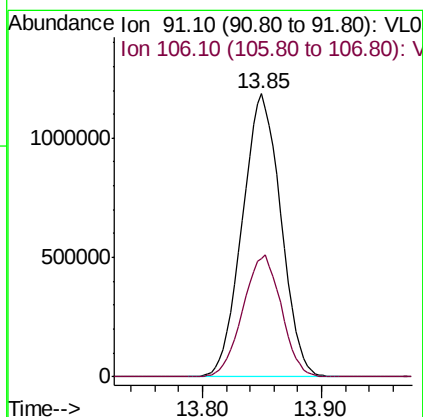
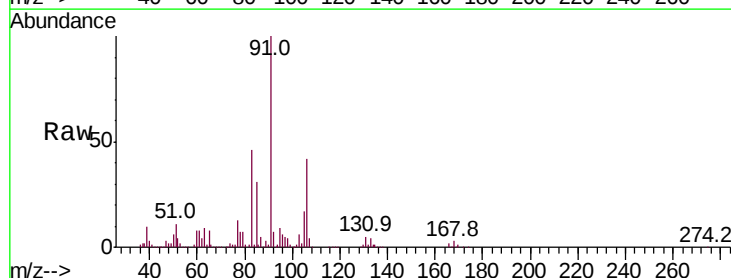
Acq: 19 Mar 2019 12:53

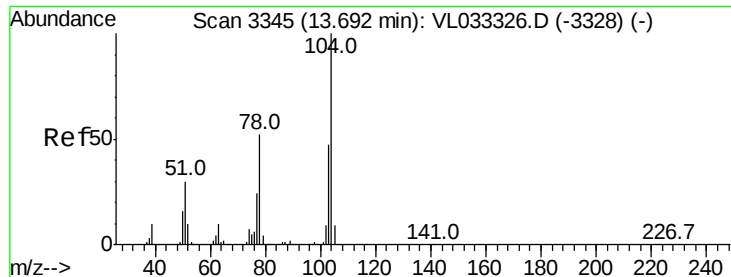
Tgt Ion: 91 Resp: 2659657

Ion Ratio Lower Upper

91 100

106 42.9 21.3 63.9





#61

Stvrene

Concen: 10.858 ppbv

RT: 13.69 min Scan# 3343

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:104 Resp: 1983838

Ion Ratio Lower Upper

104 100

78 54.2 42.7 64.1

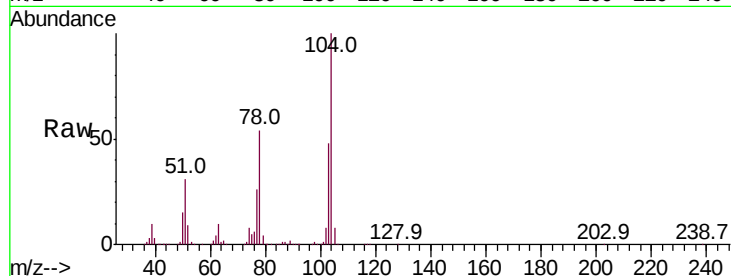
103 47.4 38.0 57.0

Manual Integrations

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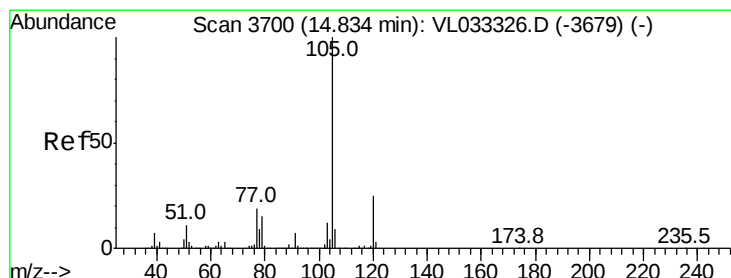
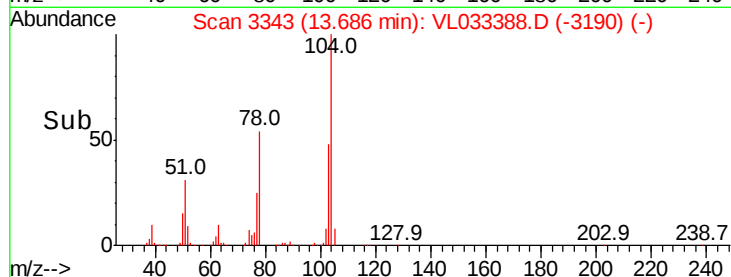
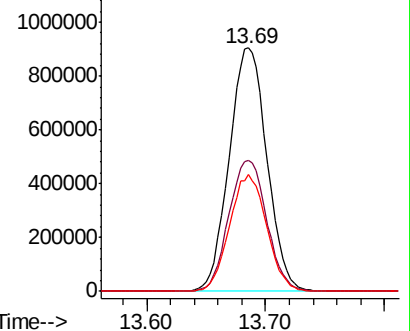
3/21/2019 12:16:09 PM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 10.245 ppbv

RT: 14.83 min Scan# 3698

Delta R.T. -0.01 min

Lab File: VL033388.D

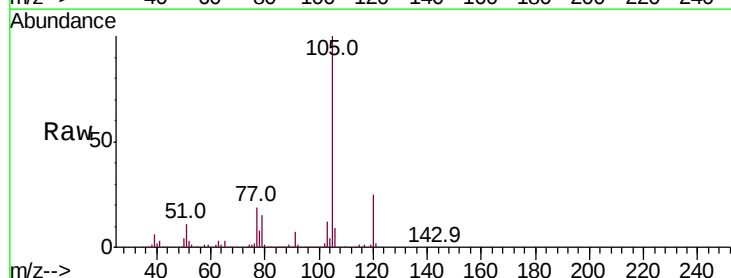
Acq: 19 Mar 2019 12:53

Tgt Ion:105 Resp: 3716855

Ion Ratio Lower Upper

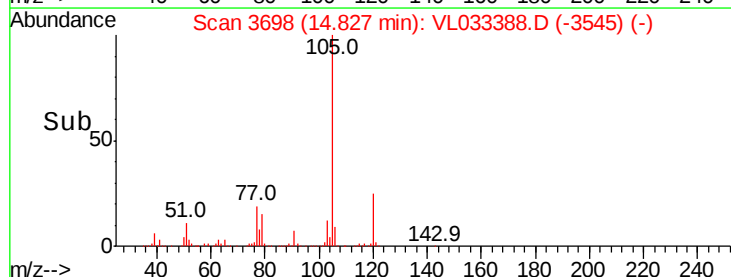
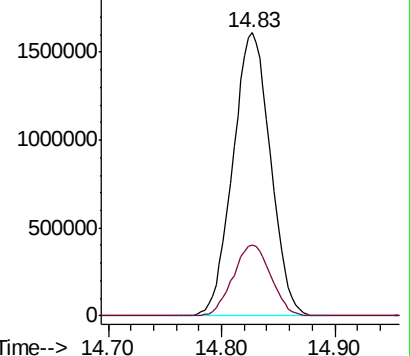
105 100

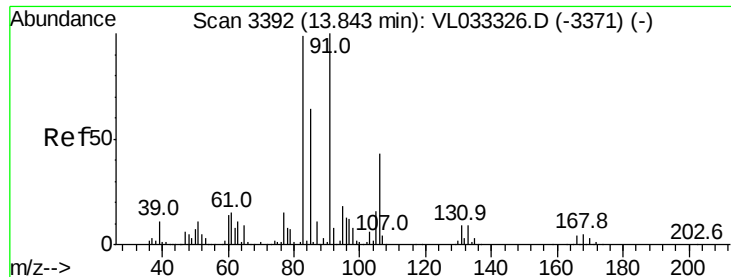
120 25.2 19.9 29.9



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 9.701 ppbv

RT: 13.84 min Scan# 3390

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 83 Resp: 1829927

Ion Ratio Lower Upper

83 100

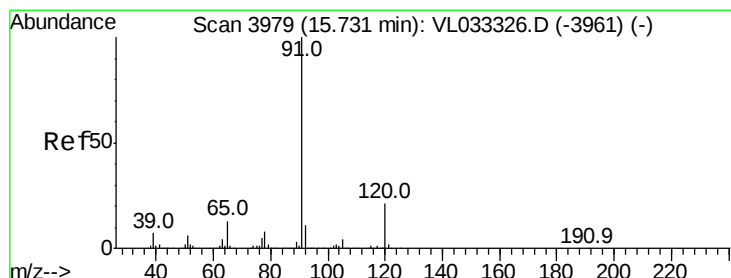
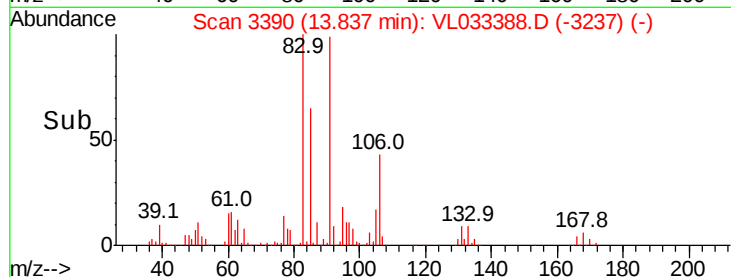
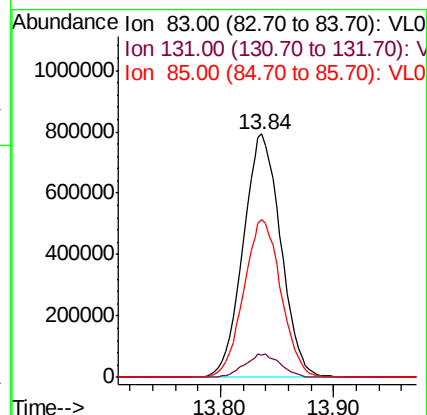
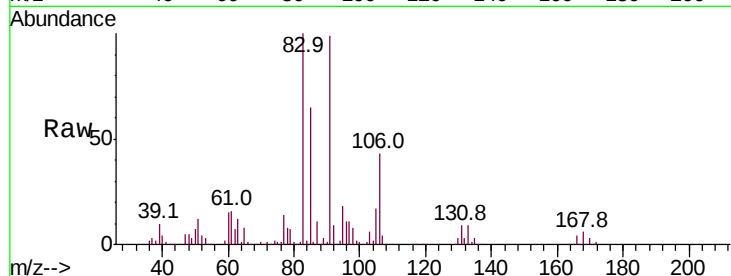
131 9.3 4.7 14.0

85 64.3 32.5 97.4

Manual Integrations  
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#64

n-propylbenzene

Concen: 10.431 ppbv

RT: 15.72 min Scan# 3977

Delta R.T. -0.01 min

Lab File: VL033388.D

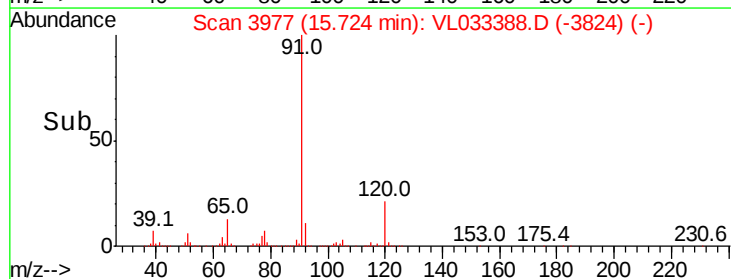
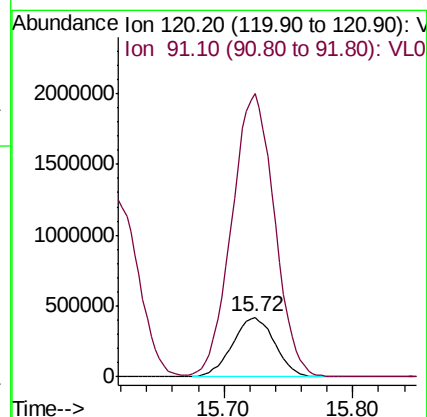
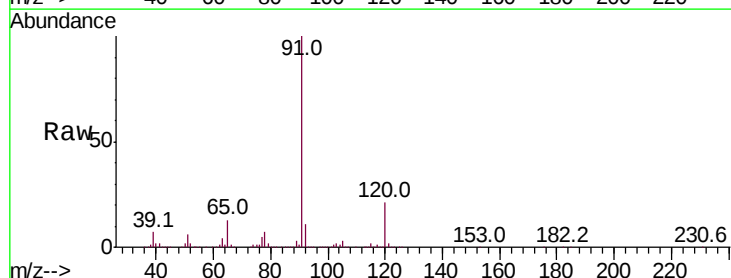
Acq: 19 Mar 2019 12:53

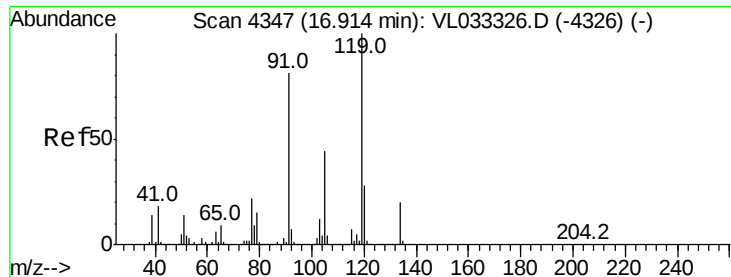
Tgt Ion: 120 Resp: 957593

Ion Ratio Lower Upper

120 100

91 481.5 389.8 584.6





#65

tert-Butylbenzene

Concen: 10.096 ppbv

RT: 16.91 min Scan# 4346

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:119 Resp: 3297664

Ion Ratio Lower Upper

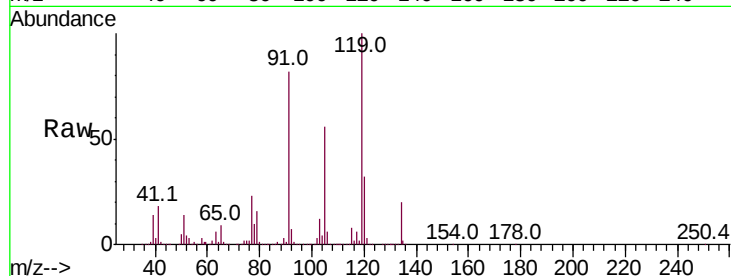
119 100

91 83.9 67.2 100.8

134 19.5 15.4 23.2

Manual Integrations  
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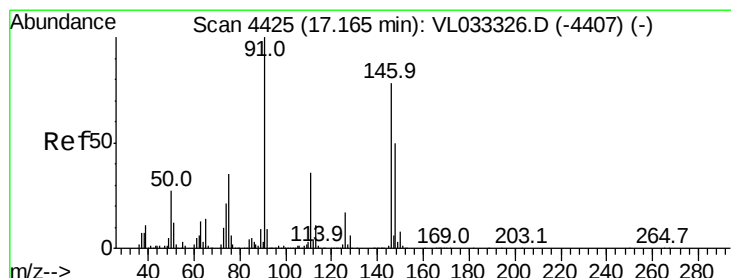
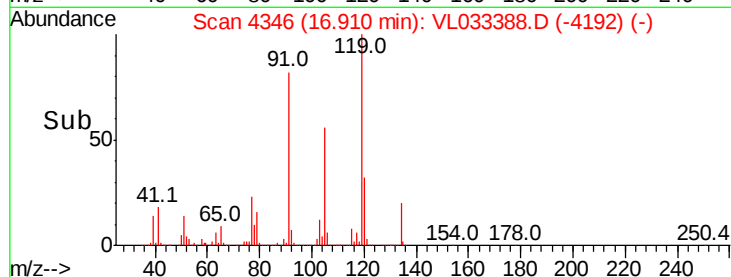
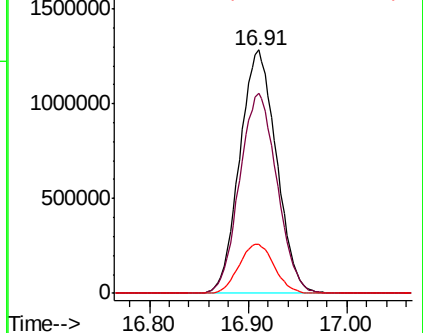
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Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 12.723 ppbv

RT: 17.16 min Scan# 4423

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

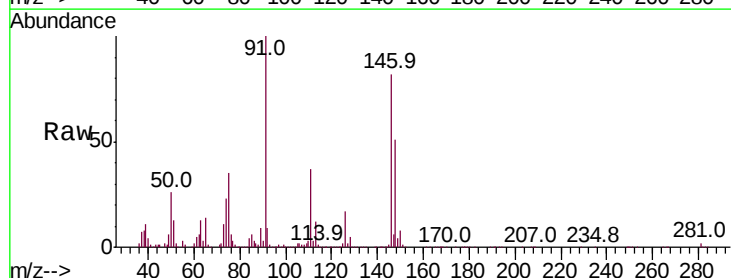
Tgt Ion: 91 Resp: 1717243

Ion Ratio Lower Upper

91 100

126 16.6 13.2 19.8

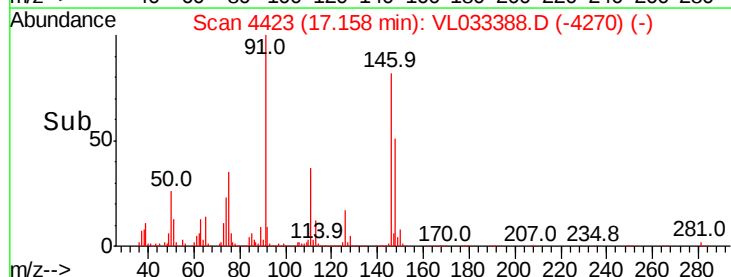
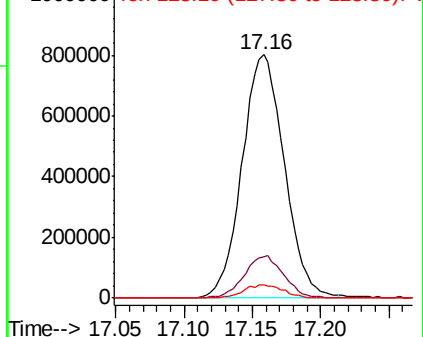
128 5.3 4.2 6.4

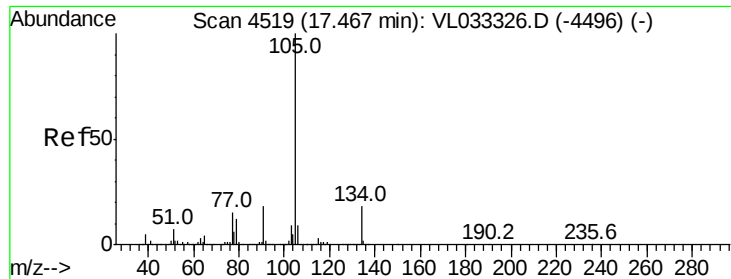


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 10.196 ppbv

RT: 17.46 min Scan# 4519

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 105 Resp: 4718922

Ion Ratio Lower Upper

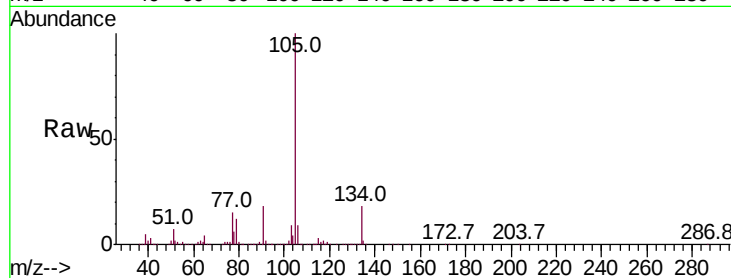
105 100

134 18.0 14.2 21.4

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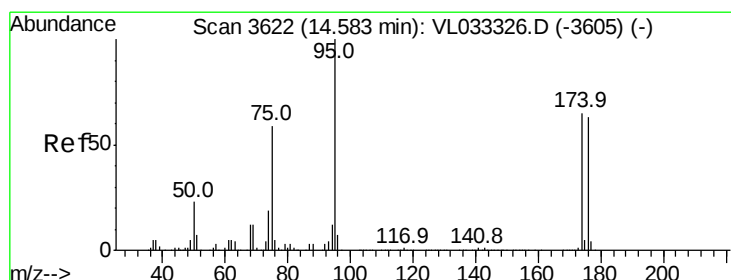
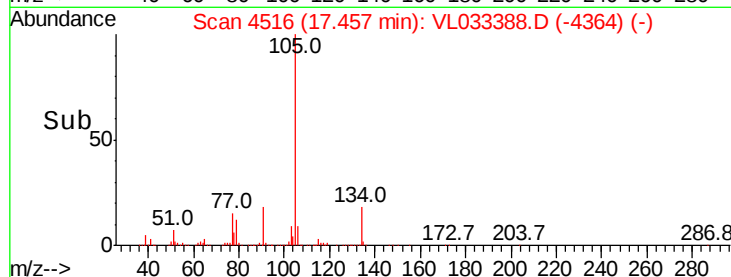
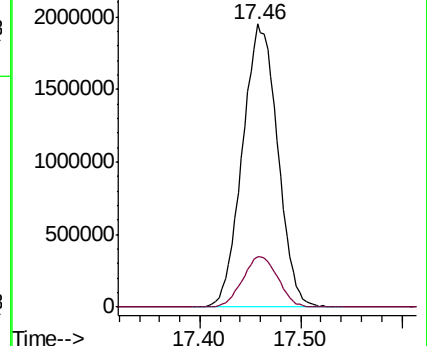
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.427 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

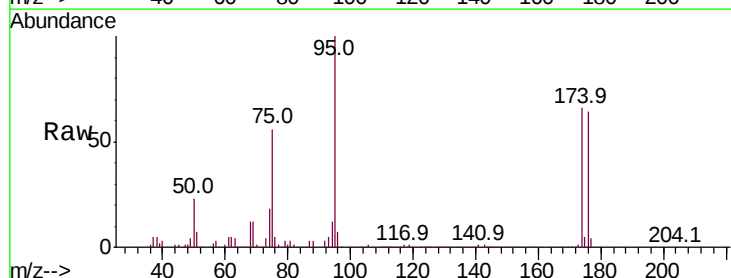
Tgt Ion: 95 Resp: 1536958

Ion Ratio Lower Upper

95 100

174 65.9 51.5 77.3

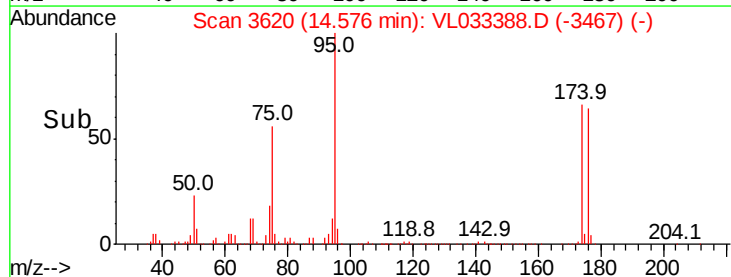
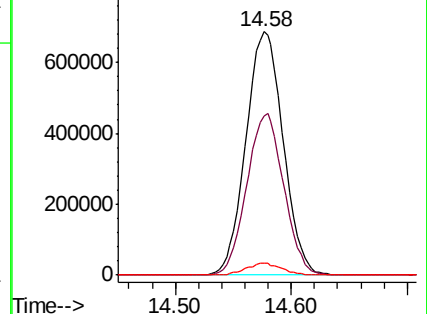
175 4.7 3.8 5.6

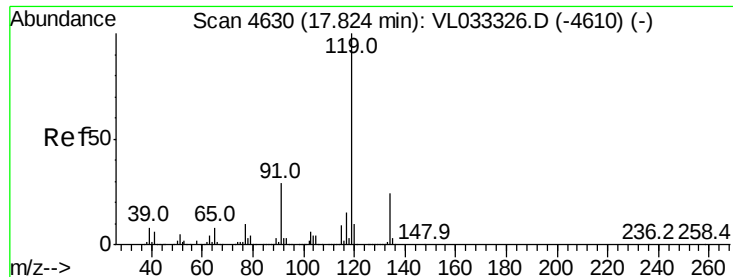


Abundance Ion 95.10 (94.80 to 95.80): V

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#69

p-Isopropyltoluene

Concen: 10.346 ppbv

RT: 17.81 min Scan# 4627

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 119 Resp: 3912160

Ion Ratio Lower Upper

119 100

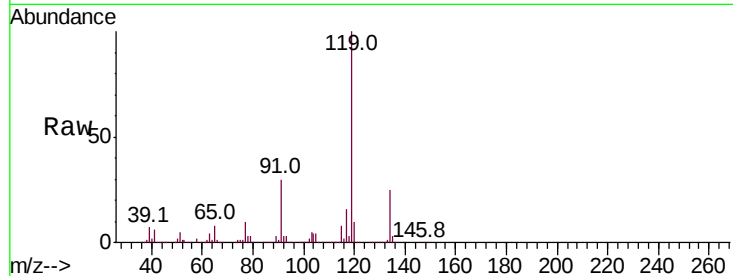
134 24.8 19.8 29.6

91 29.6 23.4 35.2

Manual Integrations  
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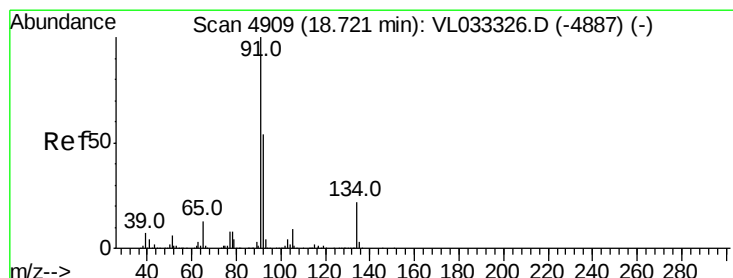
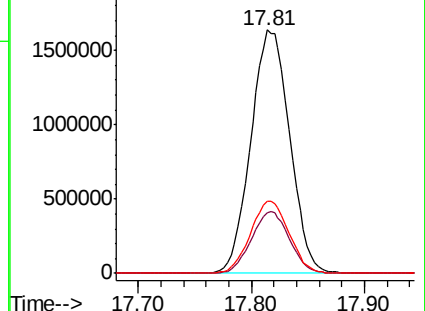
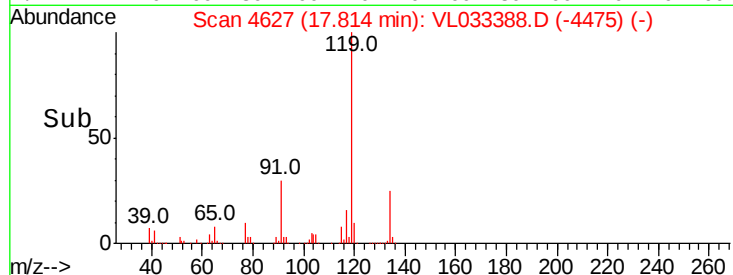
3/21/2019 12:16:09 PM



Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V



#70

n-Butylbenzene

Concen: 10.254 ppbv

RT: 18.72 min Scan# 4908

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

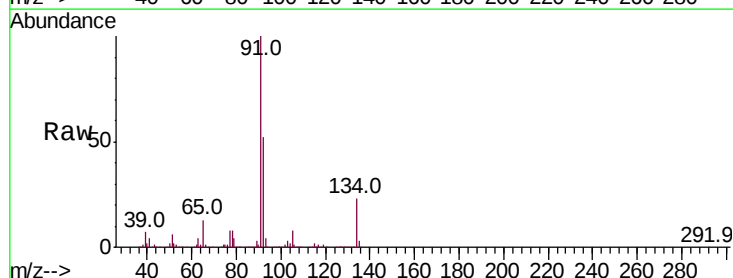
Tgt Ion: 91 Resp: 4134208

Ion Ratio Lower Upper

91 100

92 53.3 42.8 64.2

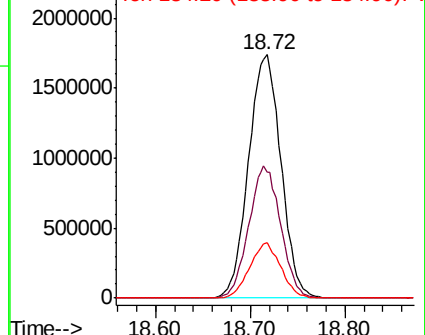
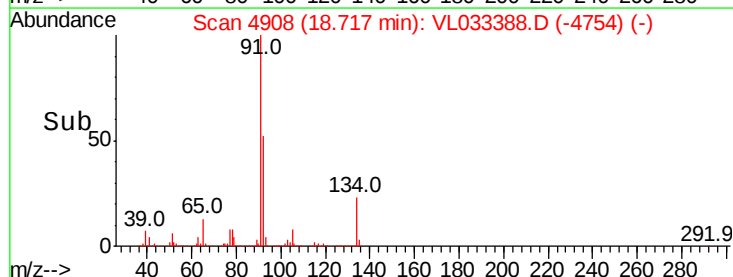
134 21.9 17.4 26.0

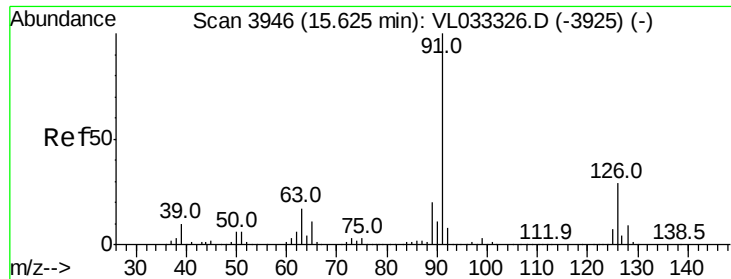


Abundance Ion 91.10 (90.80 to 91.80): V

Ion 92.10 (91.80 to 92.80): V

Ion 134.20 (133.90 to 134.90): V





#71

2-Chlorotoluene

Concen: 10.212 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion: 91 Resp: 2883877

Ion Ratio Lower Upper

91 100

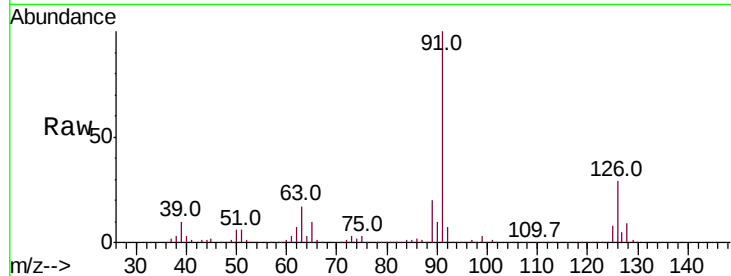
126 29.4 11.6 46.6

Manual Integrations

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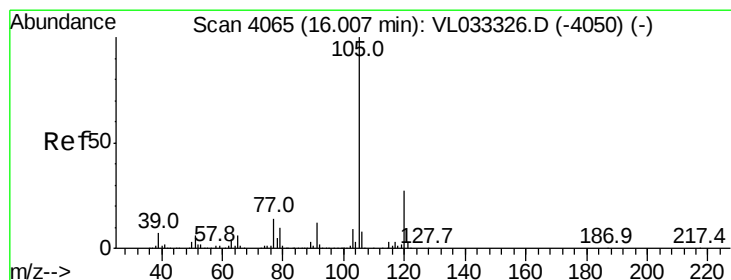
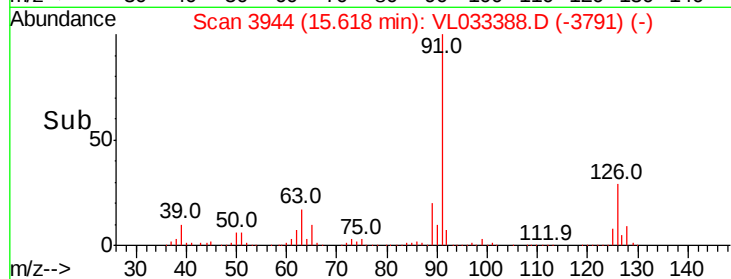
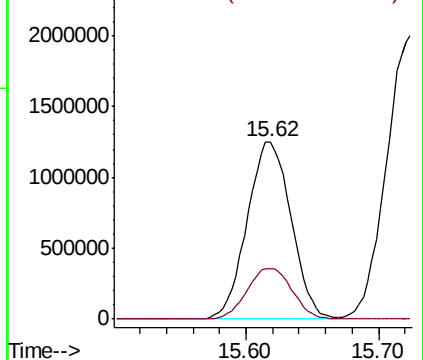
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 10.523 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Tgt Ion:105 Resp: 3118362

Ion Ratio Lower Upper

105 100

120 28.9 22.9 34.3

91 12.8 10.2 15.2

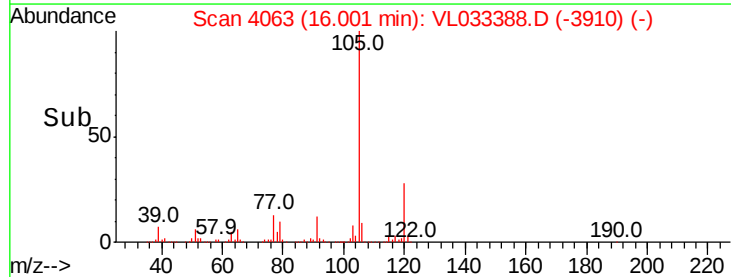
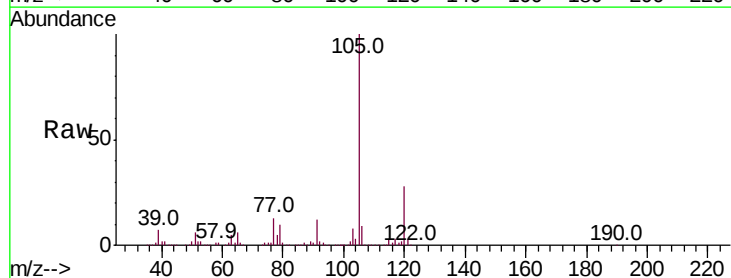
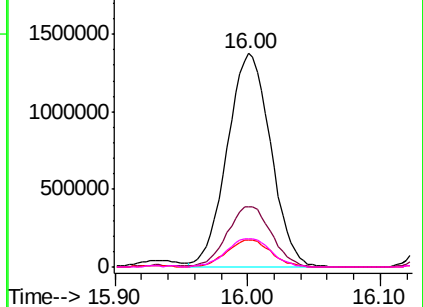
77 14.1 11.1 16.7

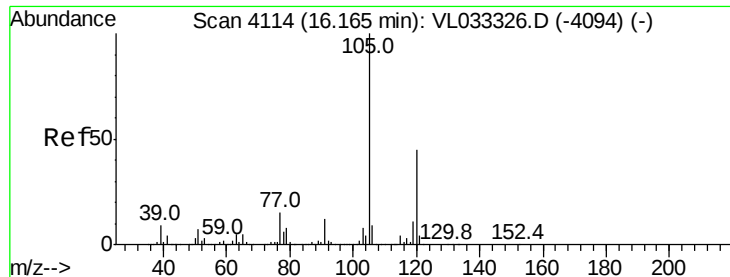
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#73

1,3,5-Trimethylbenzene

Concen: 10.307 ppbv

RT: 16.16 min Scan# 4113

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:105 Resp: 2975533

Ion Ratio Lower Upper

105 100

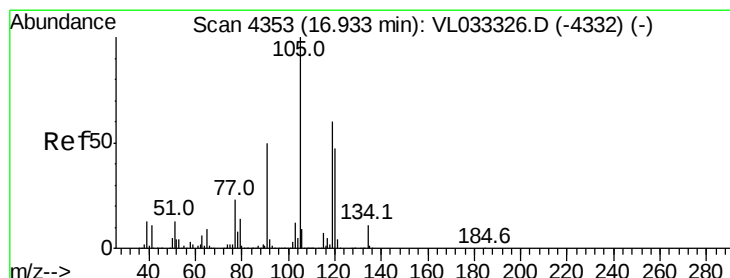
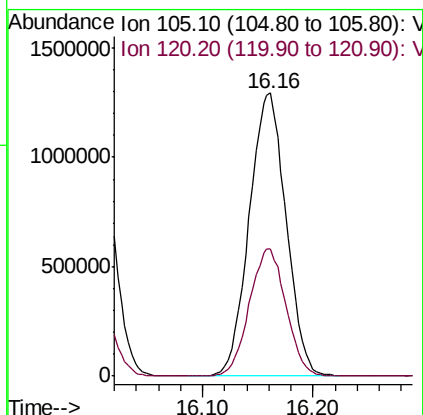
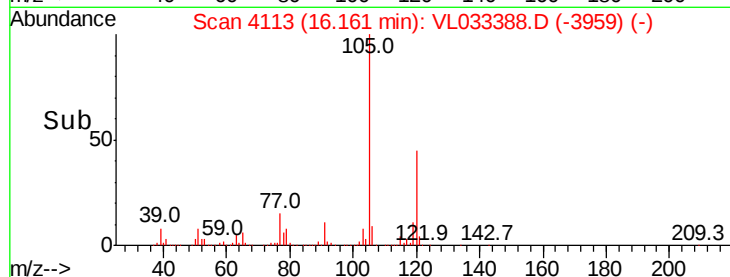
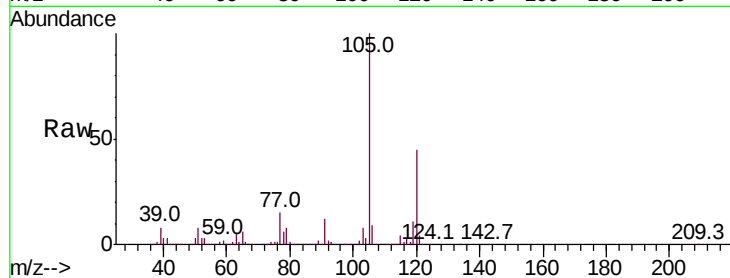
120 44.8 36.2 54.4

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#74

1,2,4-Trimethylbenzene

Concen: 9.971 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Tgt Ion:105 Resp: 3048656

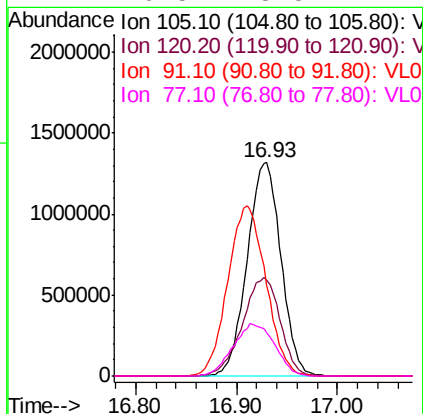
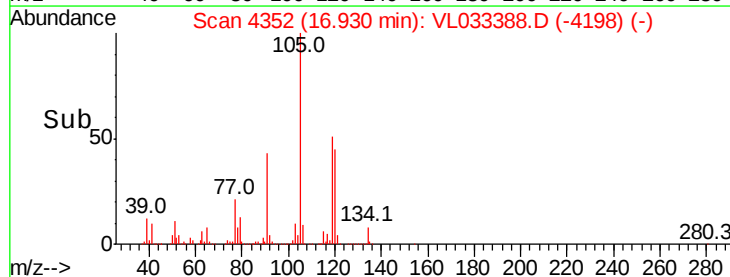
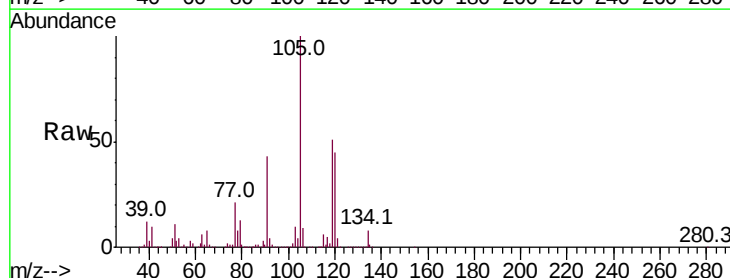
Ion Ratio Lower Upper

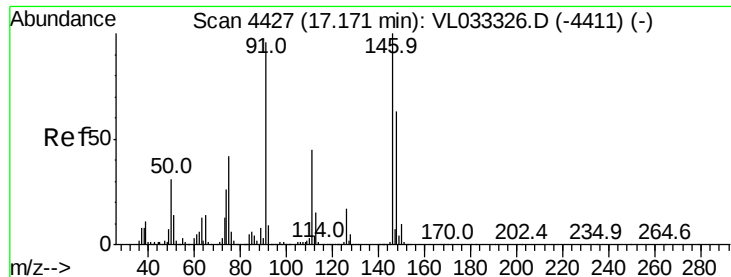
105 100

120 45.2 37.4 56.2

91 42.6 41.0 61.4

77 20.5 18.5 27.7





#75

1,3-Dichlorobenzene

Concen: 9.851 ppbv

RT: 17.17 min Scan# 4426

Delta R.T. -0.00 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:146 Resp: 1775233

Ion Ratio Lower Upper

146 100

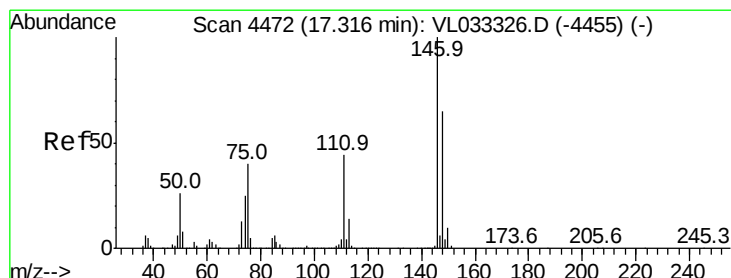
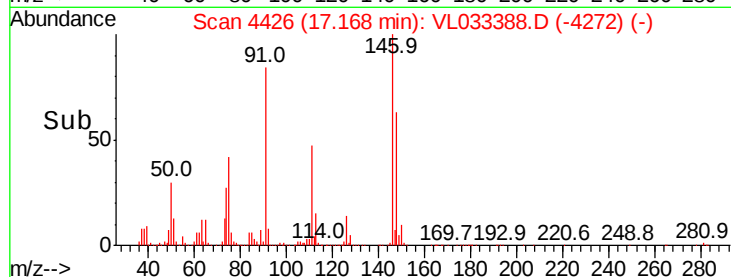
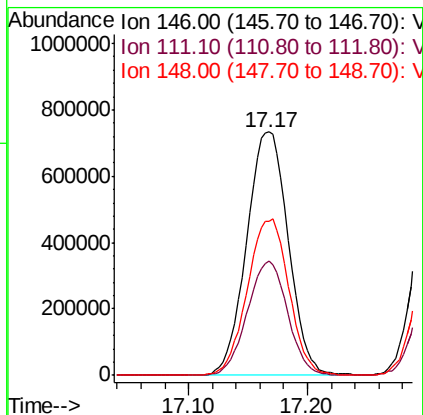
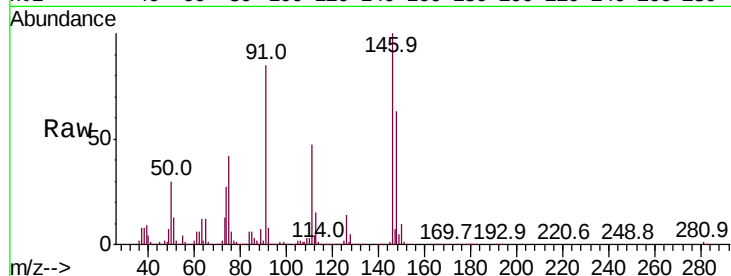
111 45.4 22.8 68.3

148 64.3 31.9 95.7

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#76

1,4-Dichlorobenzene

Concen: 10.151 ppbv

RT: 17.31 min Scan# 4470

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

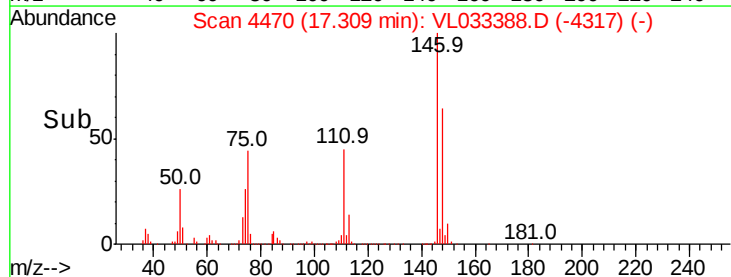
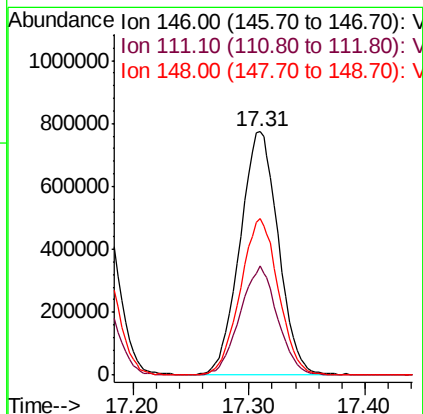
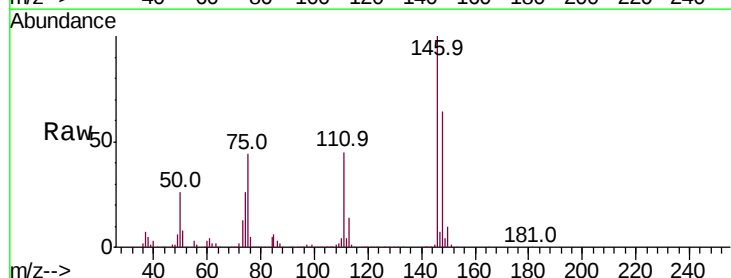
Tgt Ion:146 Resp: 1771171

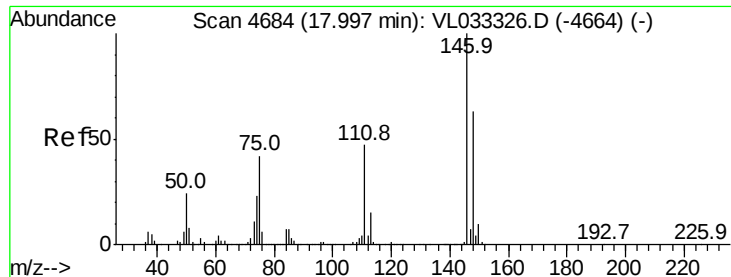
Ion Ratio Lower Upper

146 100

111 44.1 21.9 65.7

148 64.4 32.1 96.5





#77

1,2-Dichlorobenzene

Concen: 10.125 ppbv

RT: 17.99 min Scan# 4681

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:146 Resp: 1728055

Ion Ratio Lower Upper

146 100

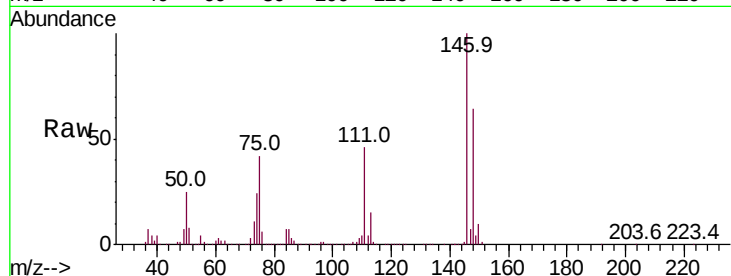
111 46.7 23.5 70.6

148 64.1 31.9 95.9

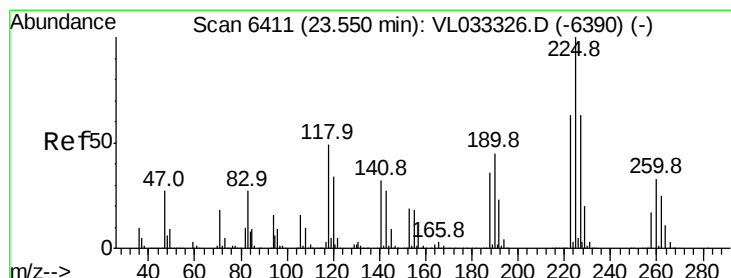
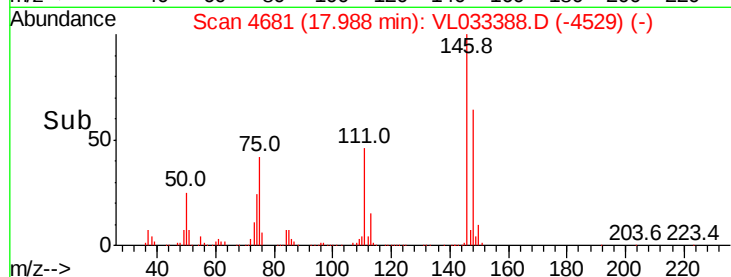
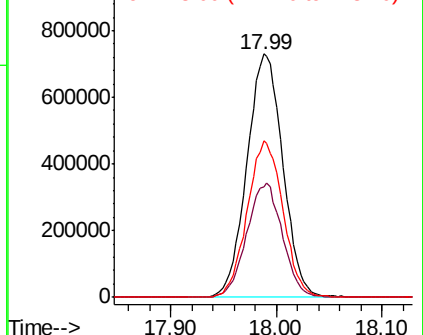
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Abundance Ion 146.00 (145.70 to 146.70): V  
1000000  
Ion 111.10 (110.80 to 111.80): V  
Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 9.402 ppbv

RT: 23.54 min Scan# 6409

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

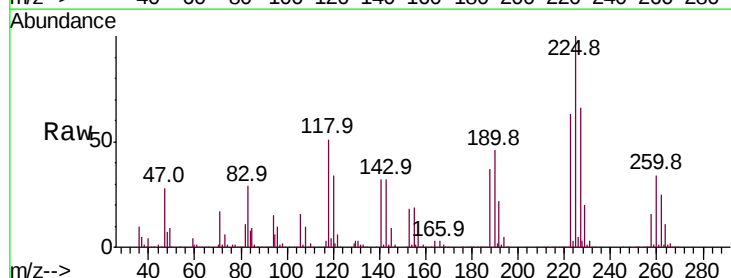
Tgt Ion:225 Resp: 962122

Ion Ratio Lower Upper

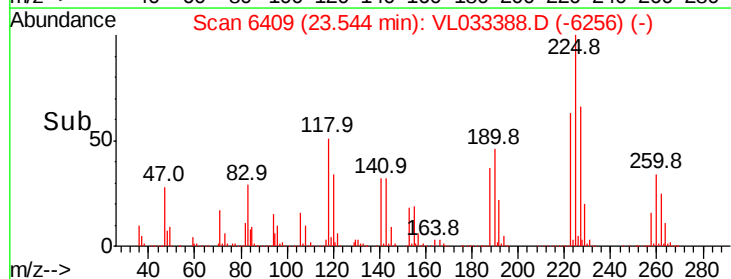
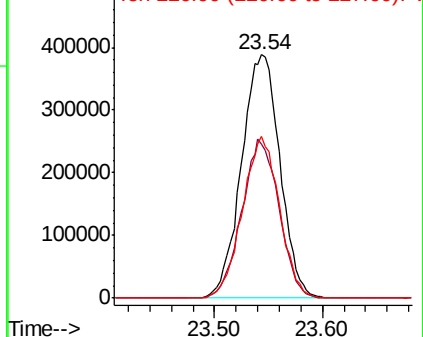
225 100

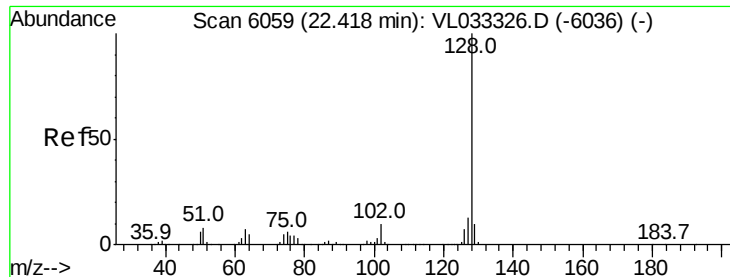
223 62.9 50.4 75.6

227 63.9 50.5 75.7



Abundance Ion 224.90 (224.60 to 225.60): V  
500000  
Ion 222.90 (222.60 to 223.60): V  
Ion 226.90 (226.60 to 227.60): V





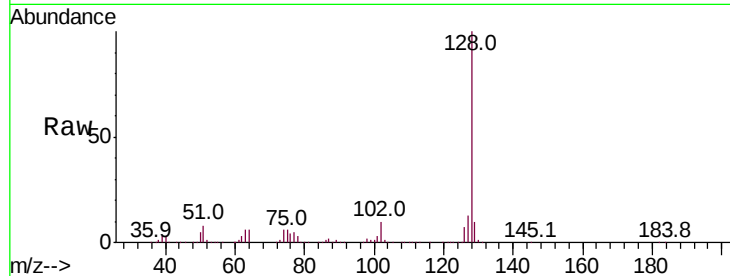
#79  
Naphthalene  
Concen: 10.100 ppbv  
RT: 22.41 min Scan# 6056  
Delta R.T. -0.01 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010EC

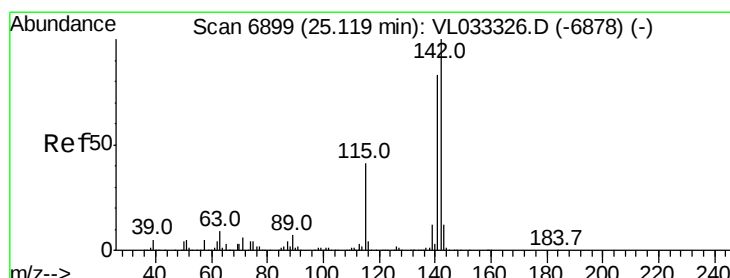
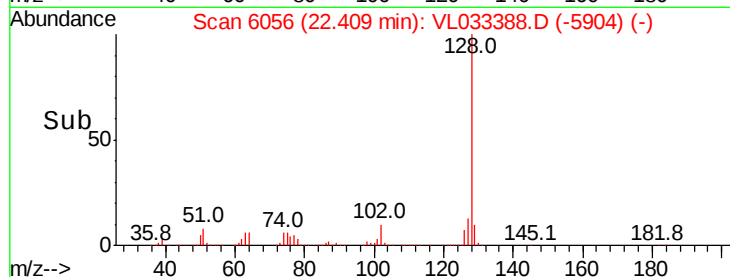
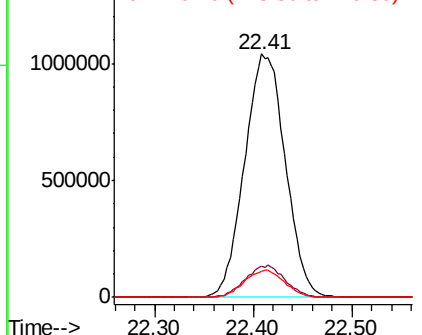
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 12.7  | 10.1  | 15.1  |
| 129     | 10.4  | 8.2   | 12.2  |

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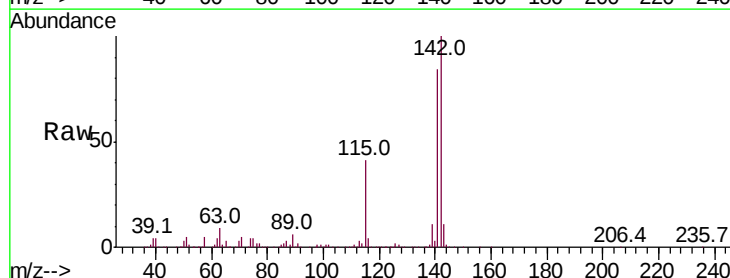


Abundance Ion 128.10 (127.80 to 128.80): V  
Ion 127.10 (126.80 to 127.80): V  
Ion 129.10 (128.80 to 129.80): V

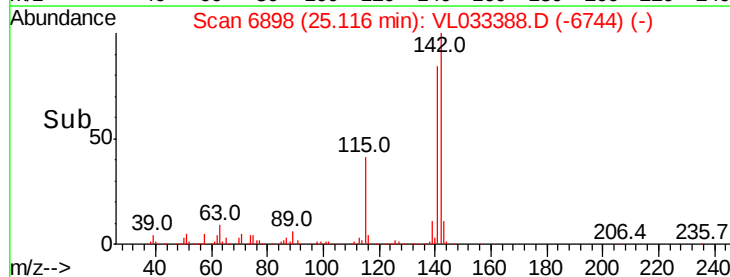
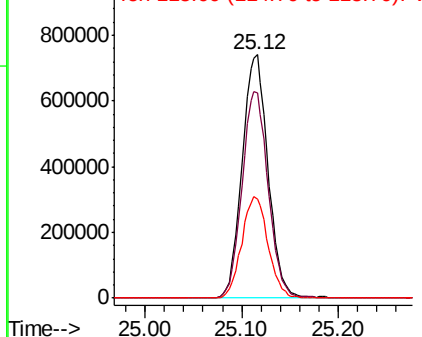


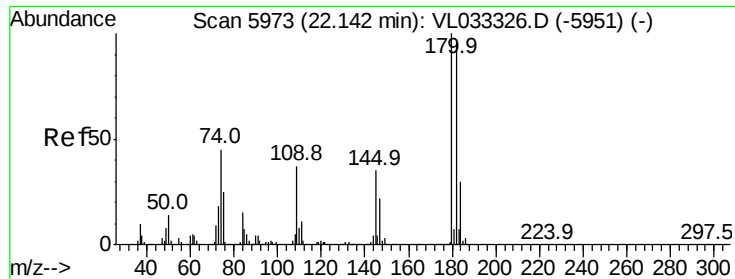
#80  
Naphthalene, 2-methyl-  
Concen: 9.867 ppbv  
RT: 25.12 min Scan# 6898  
Delta R.T. -0.00 min  
Lab File: VL033388.D  
Acq: 19 Mar 2019 12:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 85.8  | 67.1  | 100.7 |
| 115     | 42.6  | 33.8  | 50.6  |



Abundance Ion 142.00 (141.70 to 142.70): V  
Ion 141.00 (140.70 to 141.70): V  
Ion 115.00 (114.70 to 115.70): V





#81

1,2,4-Trichlorobenzene

Concen: 10.008 ppbv

RT: 22.14 min Scan# 5971

Delta R.T. -0.01 min

Lab File: VL033388.D

Acq: 19 Mar 2019 12:53

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010EC

Tot Ion:180 Resp: 1503624

Ion Ratio Lower Upper

180 100

182 95.6 76.1 114.1

184 30.6 24.6 37.0

Manual Integrations

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