

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101719\  
 Data File : VL034316.D  
 Acq On : 17 Oct 2019 13:04  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

MMDadoda  
 10/22/2019 2:54:25 PM

Quant Time: Oct 18 04:55:33 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 18 04:55:33 2019  
 QLast Update : Thu Oct 17 05:12:37 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.70  | 49   | 1081061  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.23  | 114  | 2158773  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.17 | 117  | 2375410m | 10.00 | ppbv  | 0.02     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.50  | 95    | 1922000  | 9.55     | ppbv | 0.01   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 95.50% |

| Target Compounds               |      |     |         |             | Ovalue |
|--------------------------------|------|-----|---------|-------------|--------|
| 2) Dichlorodifluoromethane     | 3.03 | 85  | 1356623 | 7.279 ppbv  | 99     |
| 3) Chlorodifluoromethane       | 2.97 | 51  | 1254924 | 9.904 ppbv  | 100    |
| 4) Chloromethane               | 3.13 | 50  | 764727  | 10.203 ppbv | 97     |
| 5) Vinyl Chloride              | 3.25 | 62  | 701292  | 9.813 ppbv  | 96     |
| 6) Bromomethane                | 3.47 | 94  | 374866  | 10.712 ppbv | 99     |
| 7) Chloroethane                | 3.55 | 64  | 260558  | 10.359 ppbv | 97     |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85  | 1577755 | 9.770 ppbv  | 98     |
| 9) Propene                     | 2.99 | 41  | 576403  | 10.262 ppbv | 97     |
| 10) Heptane                    | 8.18 | 43  | 1559172 | 10.815 ppbv | 99     |
| 11) Trichlorofluoromethane     | 3.95 | 101 | 1764391 | 9.971 ppbv  | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.49 | 101 | 1184112 | 10.215 ppbv | 99     |
| 13) Ethanol                    | 3.60 | 45  | 129524  | 10.299 ppbv | 96     |
| 14) Bromoethene                | 3.74 | 108 | 489143  | 10.717 ppbv | 98     |
| 15) Acetone                    | 3.85 | 43  | 1328807 | 8.594 ppbv  | 100    |
| 16) 1,3-Butadiene              | 3.32 | 39  | 658505  | 10.481 ppbv | 98     |
| 17) tert-Butyl alcohol         | 4.30 | 59  | 1206536 | 12.226 ppbv | 99     |
| 18) 1,1-Dichloroethene         | 4.30 | 96  | 527704  | 10.397 ppbv | 96     |
| 19) Isopropyl Alcohol          | 3.97 | 45  | 1028455 | 11.923 ppbv | # 99   |
| 20) Methylene Chloride         | 4.35 | 84  | 474892  | 8.495 ppbv  | 93     |
| 21) Allyl Chloride             | 4.42 | 41  | 919522  | 10.757 ppbv | 99     |
| 22) trans-1,2-Dichloroethene   | 4.90 | 96  | 544518  | 10.755 ppbv | 100    |
| 23) Vinyl Acetate              | 5.10 | 43  | 2132458 | 11.043 ppbv | # 98   |
| 24) 1,1-Dichloroethane         | 5.03 | 63  | 1453106 | 10.139 ppbv | 99     |
| 25) Ethyl Acetate              | 5.71 | 43  | 2621158 | 10.041 ppbv | 100    |
| 26) Hexane                     | 5.72 | 57  | 1113378 | 10.006 ppbv | 99     |
| 27) Carbon Disulfide           | 4.56 | 76  | 1360068 | 11.774 ppbv | 99     |
| 28) Methyl tert-Butyl Ether    | 5.05 | 73  | 1831314 | 10.875 ppbv | 99     |
| 29) Chloroform                 | 5.79 | 83  | 1776539 | 10.093 ppbv | 95     |
| 30) Cyclohexane                | 7.18 | 84  | 895553  | 10.944 ppbv | 96     |
| 31) cis-1,2-Dichloroethene     | 5.58 | 61  | 1214673 | 10.756 ppbv | 98     |
| 32) 1,1,1-Trichloroethane      | 6.55 | 97  | 1775574 | 10.374 ppbv | 100    |
| 34) 2-Butanone                 | 5.27 | 43  | 1767144 | 10.015 ppbv | 100    |
| 35) Carbon Tetrachloride       | 7.07 | 117 | 1861949 | 9.902 ppbv  | 97     |
| 36) Benzene                    | 6.94 | 78  | 2115376 | 10.213 ppbv | 98     |
| 37) 1,2-Dichloroethane         | 6.35 | 62  | 1541768 | 9.988 ppbv  | 100    |
| 38) Trichloroethene            | 7.89 | 130 | 834328  | 10.038 ppbv | 95     |
| 39) 1,2-Dichloropropane        | 7.67 | 63  | 901764  | 10.111 ppbv | 97     |
| 40) 1,4-Dioxane                | 7.88 | 88  | 331073  | 10.563 ppbv | # 1    |
| 41) Tetrahydrofuran            | 6.08 | 42  | 1020409 | 10.420 ppbv | 98     |
| 42) Bromodichloromethane       | 7.85 | 83  | 1952115 | 10.325 ppbv | 99     |
| 43) Methyl Methacrylate        | 8.07 | 69  | 925322  | 10.801 ppbv | 98     |

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 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 18 04:55:33 2019  
 QLast Update : Thu Oct 17 05:12:37 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.92  | 57   | 3816290  | 9.955  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.35  | 75   | 1243843  | 11.917 | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.77  | 75   | 1391239  | 11.602 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 9.55  | 97   | 913255   | 10.109 | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.38 | 129  | 1617706  | 10.916 | ppbv   | 100      |
| 49) Bromoform                 | 13.13 | 173  | 1483146  | 11.294 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.80  | 43   | 2632664  | 10.422 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.20 | 43   | 2199187  | 10.620 | ppbv # | 98       |
| 52) Tetrachloroethene         | 11.30 | 164  | 796187   | 9.807  | ppbv   | 97       |
| 53) Toluene                   | 9.87  | 91   | 2442779  | 10.687 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.69 | 107  | 1363351  | 10.182 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.21 | 131  | 1073141  | 9.803  | ppbv # | 65       |
| 57) Chlorobenzene             | 12.23 | 112  | 1857893  | 9.375  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.79 | 91   | 3385935  | 10.197 | ppbv   | 99       |
| 59) m/p-Xylene                | 13.08 | 91   | 5552095m | 19.298 | ppbv   |          |
| 60) o-Xylene                  | 13.78 | 91   | 2838412  | 9.908  | ppbv   | 100      |
| 61) Styrene                   | 13.61 | 104  | 2119340  | 10.508 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.75 | 105  | 3653830  | 9.662  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.76 | 83   | 2003988  | 8.705  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.65 | 120  | 970833   | 10.003 | ppbv   | 100      |
| 65) tert-Butylbenzene         | 16.84 | 119  | 3266881m | 9.746  | ppbv   |          |
| 66) Benzyl Chloride           | 17.09 | 91   | 1640033  | 12.389 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.39 | 105  | 4556649  | 9.660  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.74 | 119  | 3809142  | 9.905  | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.64 | 91   | 4105945  | 9.813  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.54 | 91   | 2905889  | 9.910  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.93 | 105  | 3268421  | 10.149 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.09 | 105  | 3163211  | 9.914  | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.86 | 105  | 3237707  | 9.730  | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 17.09 | 146  | 1896579  | 9.493  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.24 | 146  | 1899143  | 9.732  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.91 | 146  | 1850802  | 9.449  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.48 | 225  | 1583361  | 9.773  | ppbv   | 99       |
| 79) Naphthalene               | 22.32 | 128  | 2799010  | 11.515 | ppbv   | 97       |
| 80) Naphthalene, 2-methyl-    | 25.06 | 142  | 1537029  | 21.876 | ppbv   | 95       |
| 81) 1,2,4-Trichlorobenzene    | 22.05 | 180  | 1693383  | 10.666 | ppbv   | 99       |

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

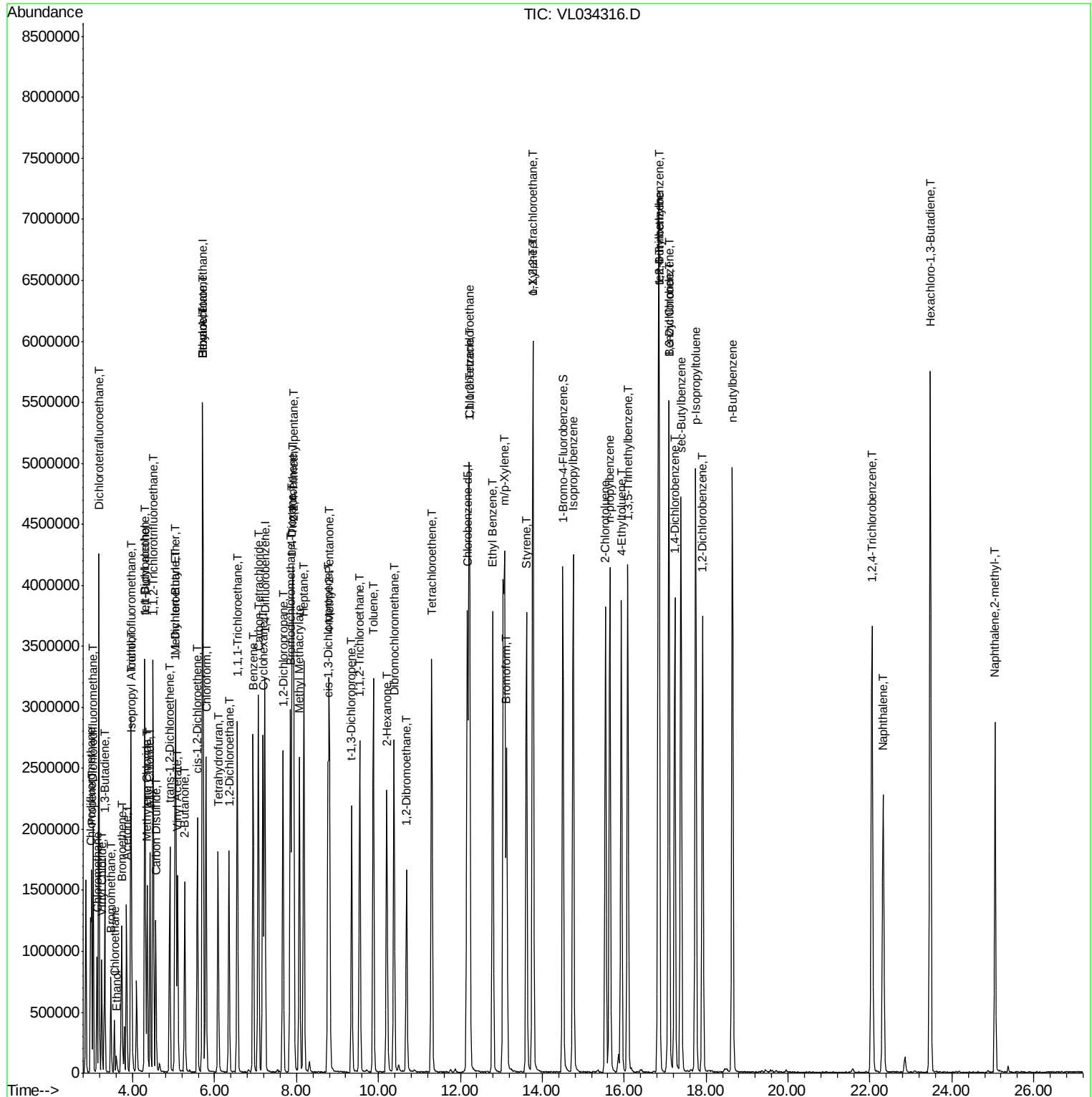
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101719\  
Data File : VL034316.D  
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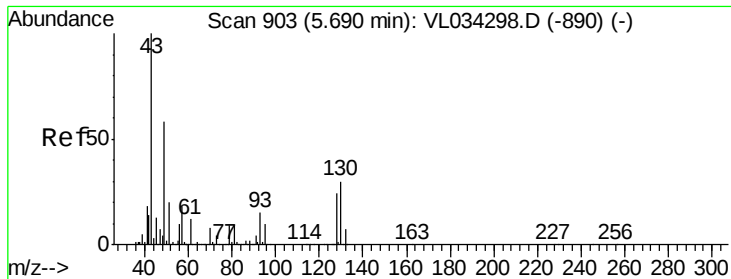
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct  
QLast Update : Thu Oct 17 05:12:37 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 906

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 49 Resp: 1081061

Ion Ratio Lower Upper

49 100

128 42.8 20.6 61.8

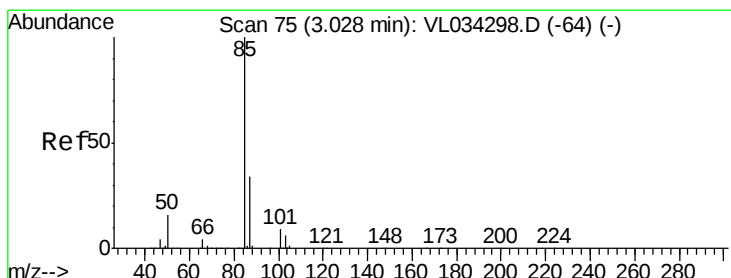
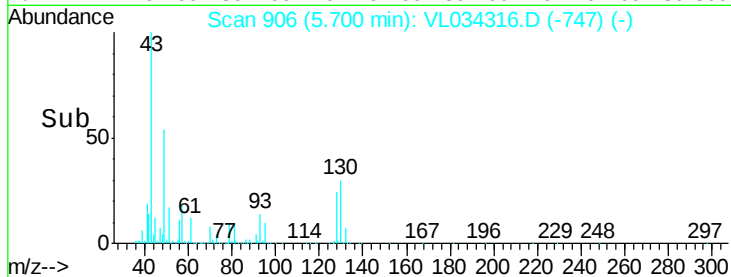
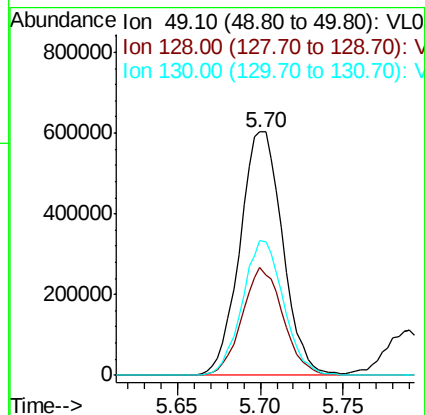
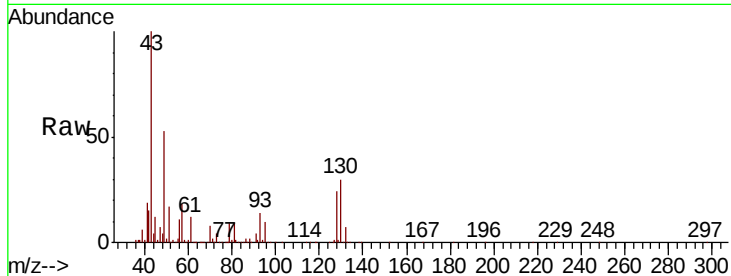
130 53.8 26.2 78.5

Manual Integrations

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10/22/2019 2:54:25 PM



#2

Dichlorodifluoromethane

Concen: 7.279 ppbv

RT: 3.03 min Scan# 77

Delta R.T. 0.01 min

Lab File: VL034316.D

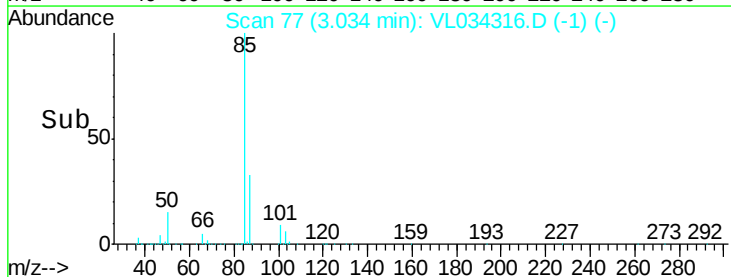
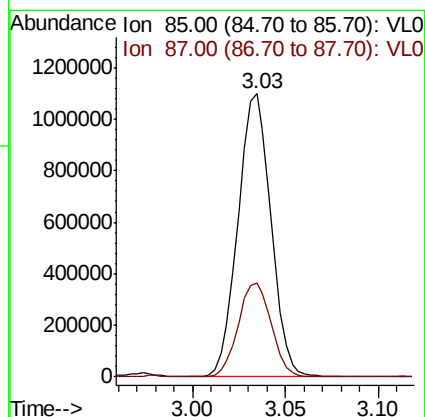
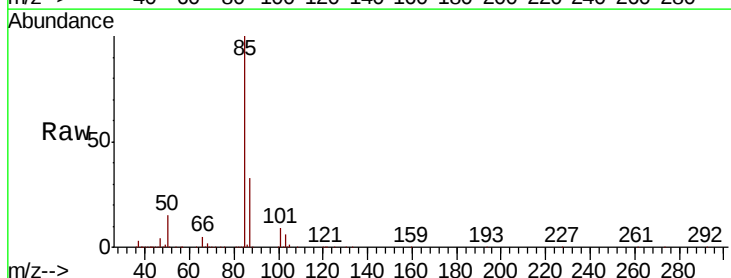
Acq: 17 Oct 2019 13:04

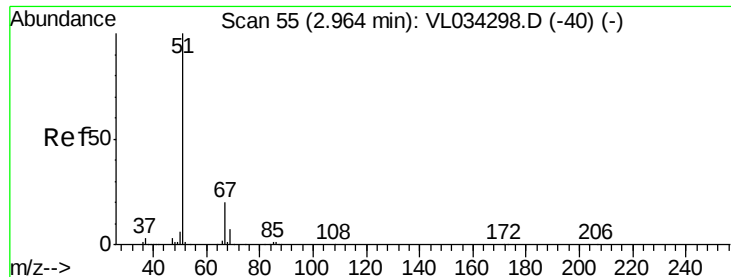
Tgt Ion: 85 Resp: 1356623

Ion Ratio Lower Upper

85 100

87 33.0 27.0 40.6





#3

Chlorodifluoromethane

Concen: 9.904 ppbv

RT: 2.97 min Scan# 58

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Tot Ion: 51 Resp: 1254924

Ion Ratio Lower Upper

51 100

67 20.0 15.8 23.8

Instrument :

MSVOA\_L

ClientSampleId :

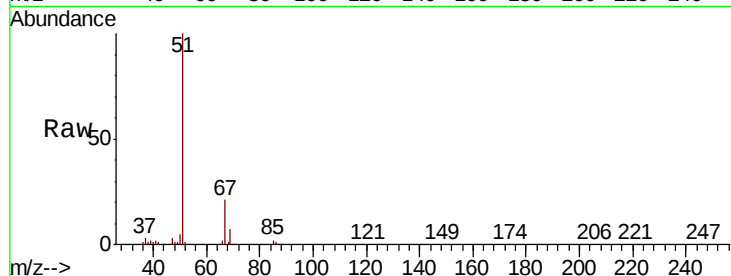
VSTDCCC010

Manual Integrations

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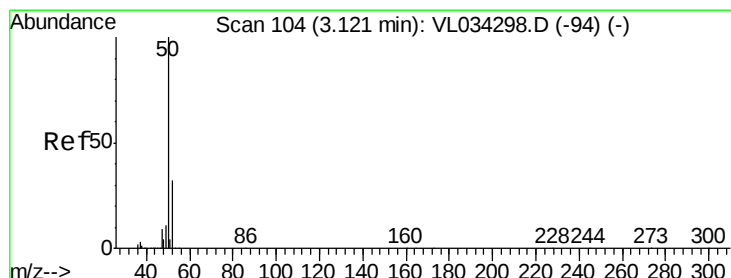
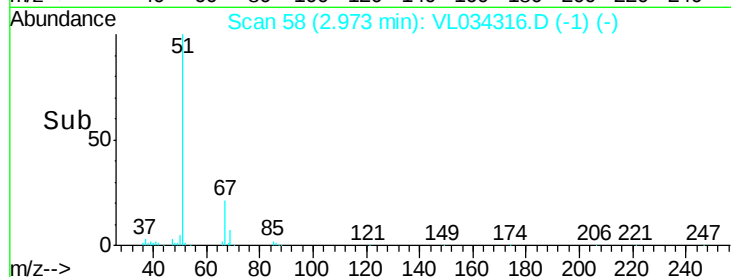
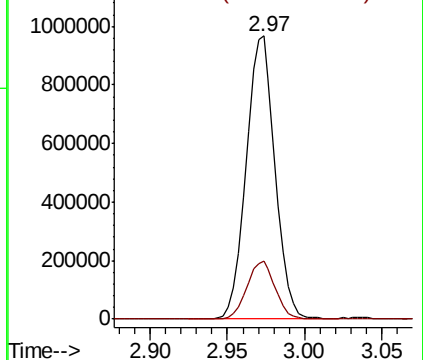
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 10.203 ppbv

RT: 3.13 min Scan# 106

Delta R.T. 0.01 min

Lab File: VL034316.D

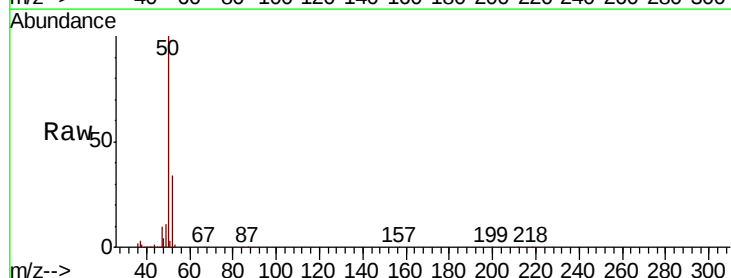
Acq: 17 Oct 2019 13:04

Tgt Ion: 50 Resp: 764727

Ion Ratio Lower Upper

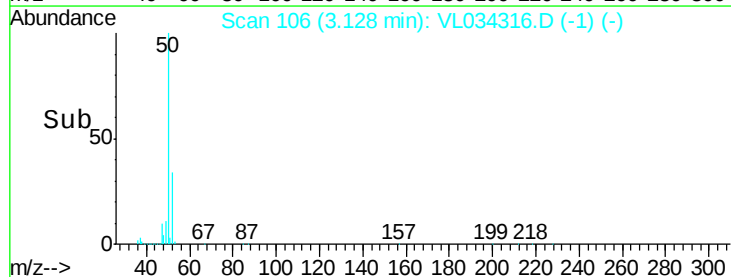
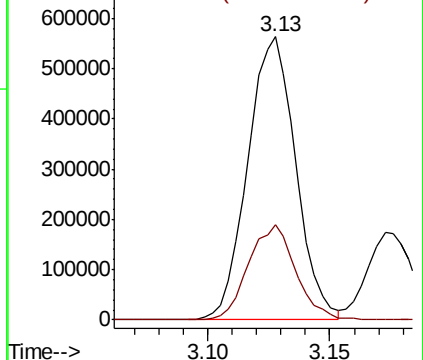
50 100

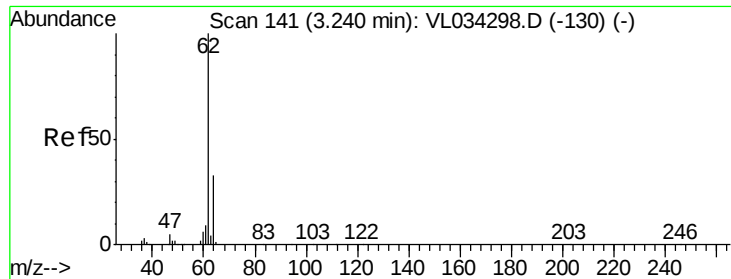
52 33.6 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 9.813 ppbv

RT: 3.25 min Scan# 143

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 62 Resp: 701292

Ion Ratio Lower Upper

62 100

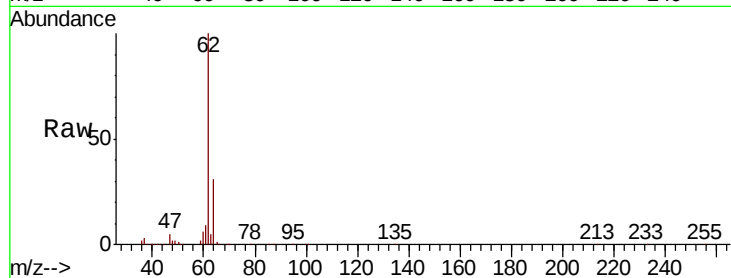
64 30.5 26.0 39.0

Manual Integrations

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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

3.25

600000

500000

400000

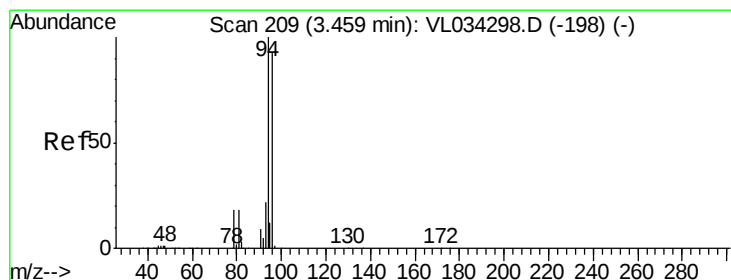
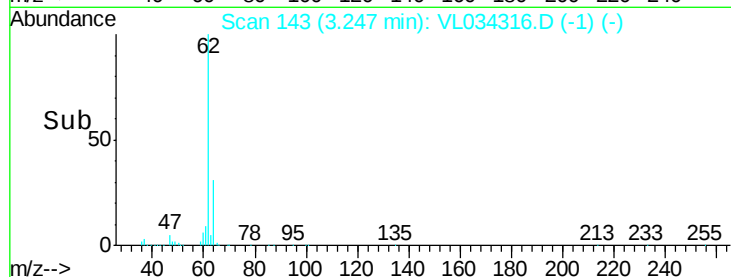
300000

200000

100000

0

Time-->



#6

Bromomethane

Concen: 10.712 ppbv

RT: 3.47 min Scan# 211

Delta R.T. 0.01 min

Lab File: VL034316.D

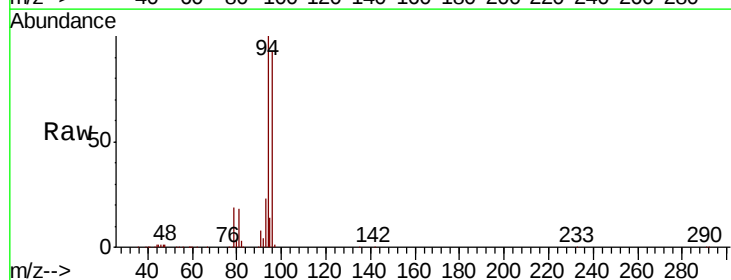
Acq: 17 Oct 2019 13:04

Tgt Ion: 94 Resp: 374866

Ion Ratio Lower Upper

94 100

96 92.6 74.6 112.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

3.47

300000

250000

200000

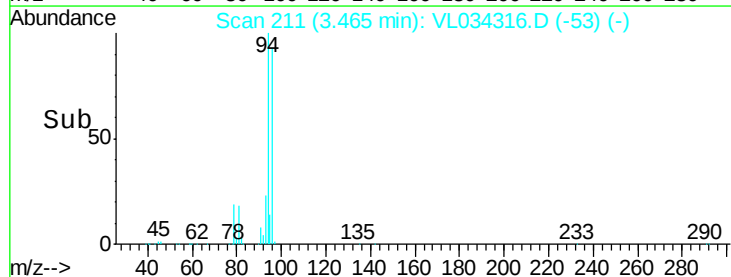
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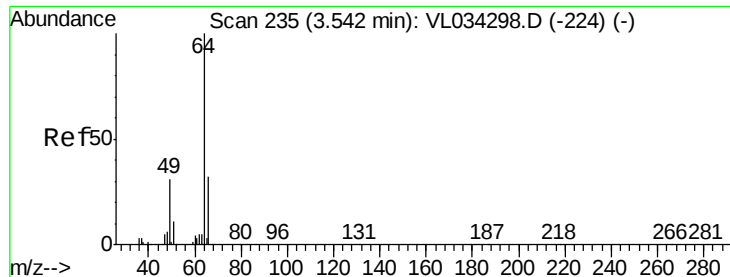
100000

50000

0

Time-->





#7

Chloroethane

Concen: 10.359 ppbv

RT: 3.55 min Scan# 238

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 64 Resp: 260558

Ion Ratio Lower Upper

64 100

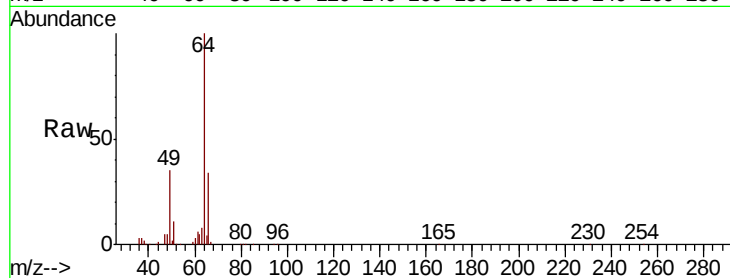
66 33.6 25.4 38.0

Manual Integrations

APPROVED

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10/22/2019 2:54:25 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.55

200000

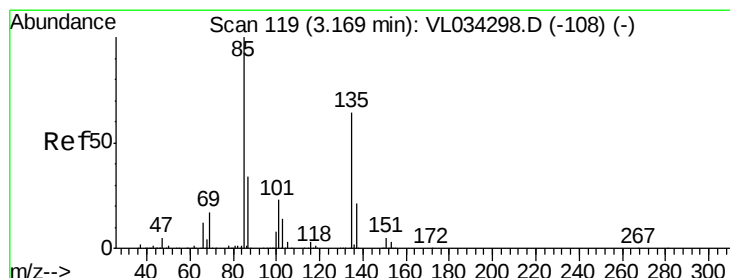
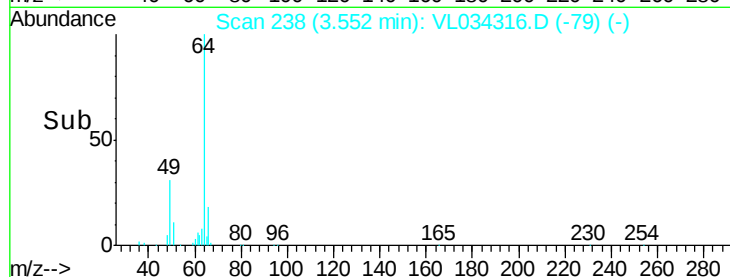
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 9.770 ppbv

RT: 3.18 min Scan# 121

Delta R.T. 0.01 min

Lab File: VL034316.D

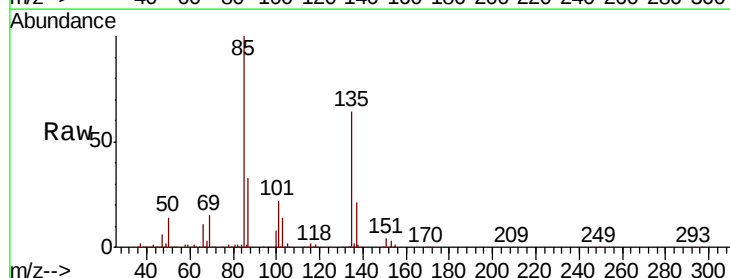
Acq: 17 Oct 2019 13:04

Tgt Ion: 85 Resp: 1577755

Ion Ratio Lower Upper

85 100

135 64.3 50.2 75.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

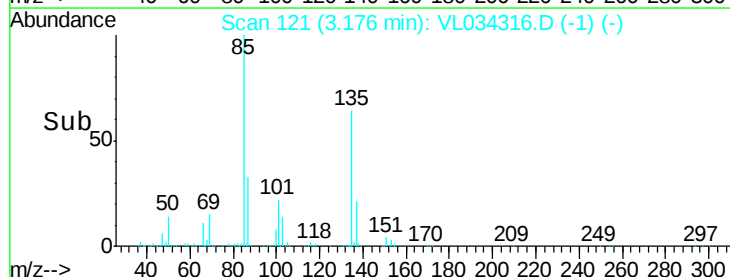
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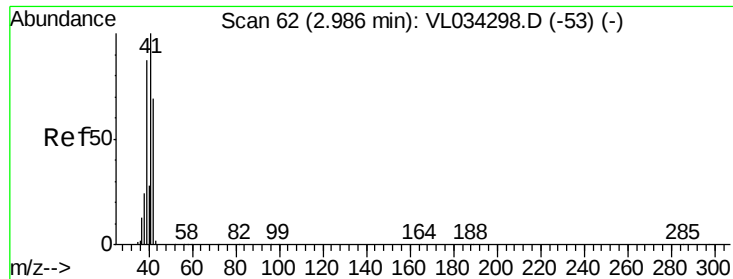
1000000

500000

0

Time-->





#9

Propene

Concen: 10.262 ppbv

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 41 Resp: 576403

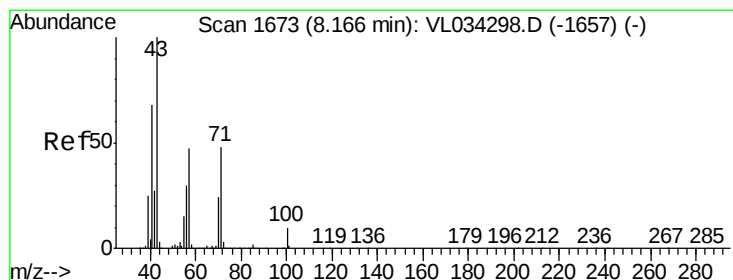
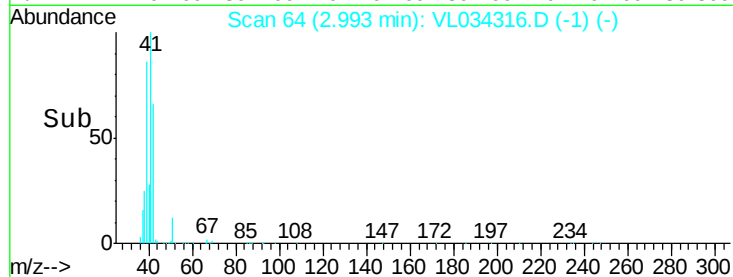
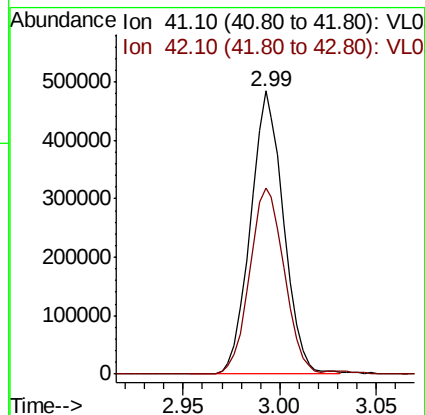
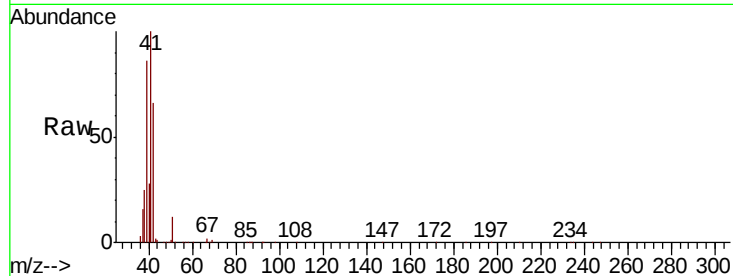
Ion Ratio Lower Upper

41 100

42 69.9 53.9 80.9

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#10

Heptane

Concen: 10.815 ppbv

RT: 8.18 min Scan# 1677

Delta R.T. 0.01 min

Lab File: VL034316.D

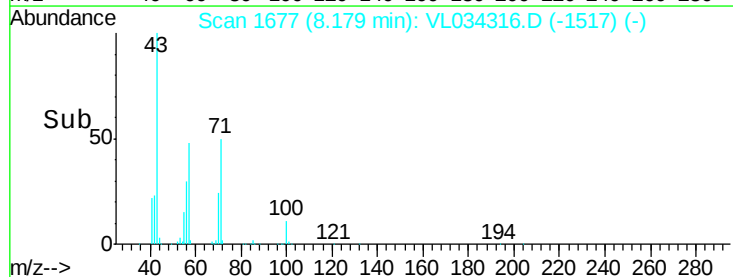
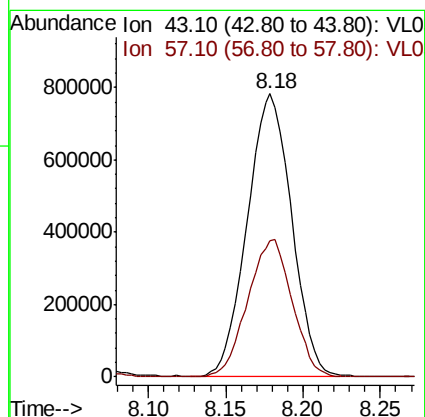
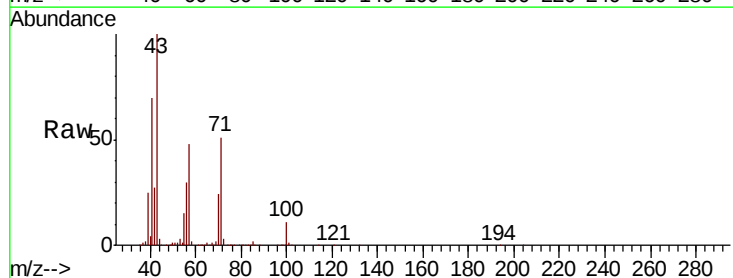
Acq: 17 Oct 2019 13:04

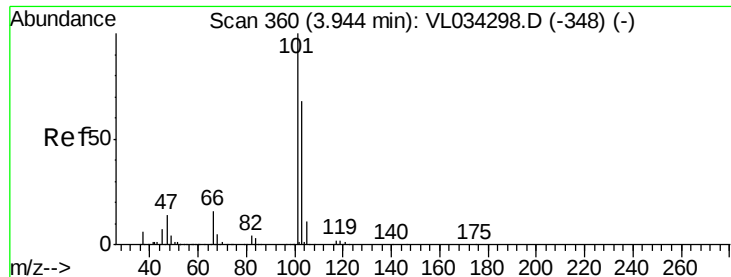
Tgt Ion: 43 Resp: 1559172

Ion Ratio Lower Upper

43 100

57 48.5 39.5 59.3





#11

Trichlorofluoromethane

Concen: 9.971 ppbv

RT: 3.95 min Scan# 362

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:101 Resp: 1764391

Ion Ratio Lower Upper

101 100

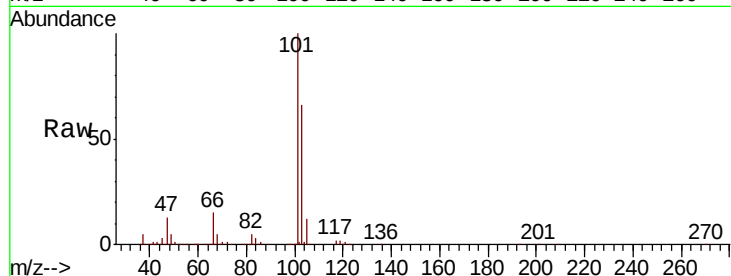
103 66.4 54.5 81.7

Manual Integrations

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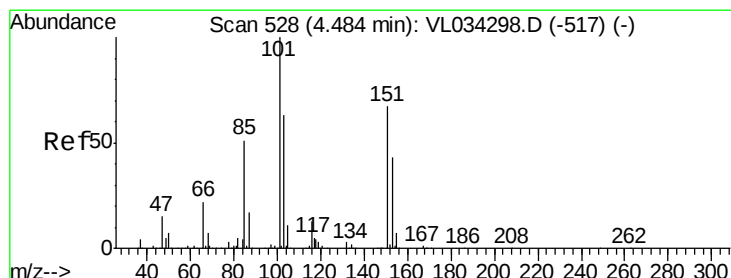
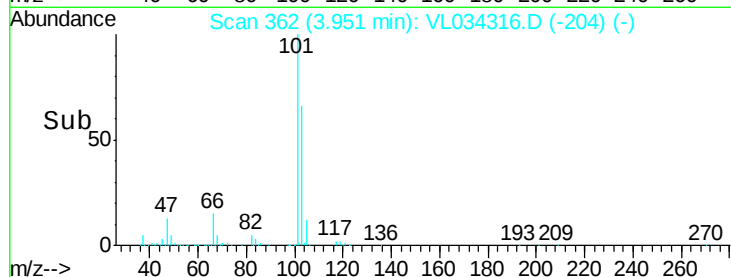
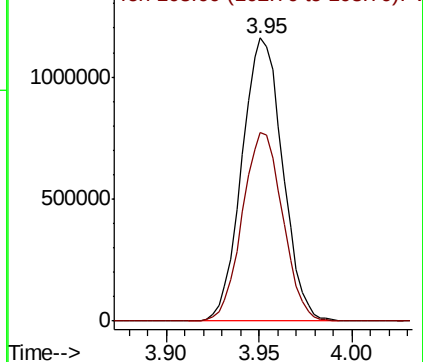
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 10.215 ppbv

RT: 4.49 min Scan# 531

Delta R.T. 0.01 min

Lab File: VL034316.D

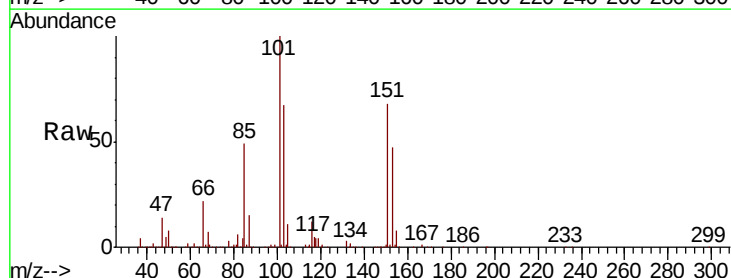
Acq: 17 Oct 2019 13:04

Tgt Ion:101 Resp: 1184112

Ion Ratio Lower Upper

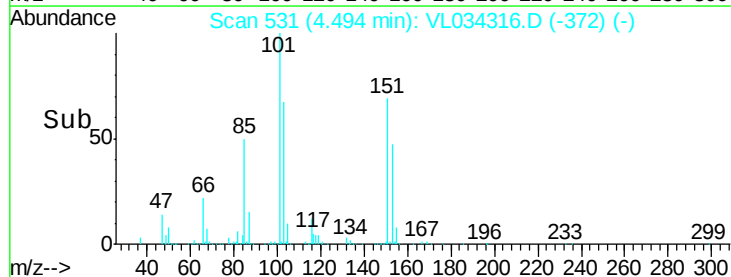
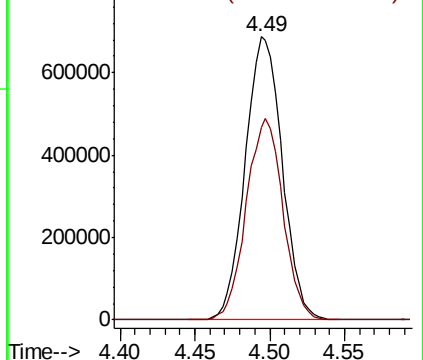
101 100

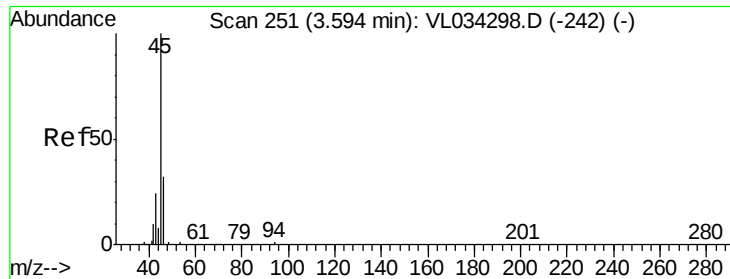
151 70.6 57.4 86.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 10.299 ppbv

RT: 3.60 min Scan# 254

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 45 Resp: 129524

Ion Ratio Lower Upper

45 100

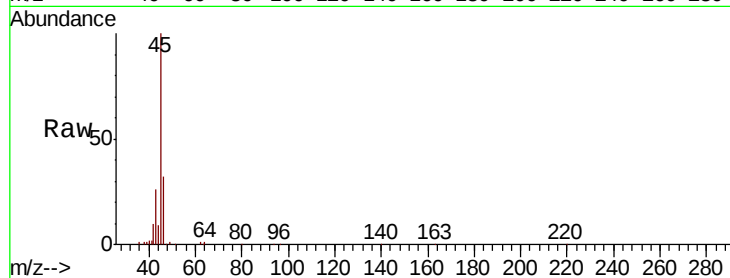
46 37.0 15.8 63.2

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0

80000

60000

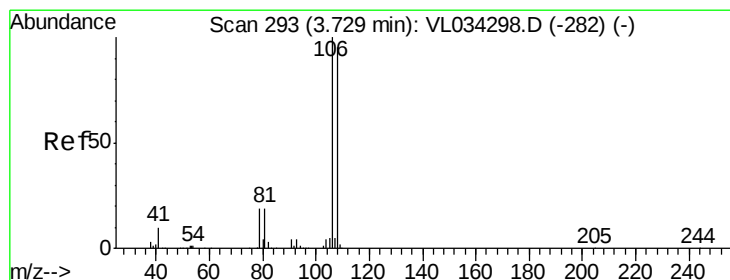
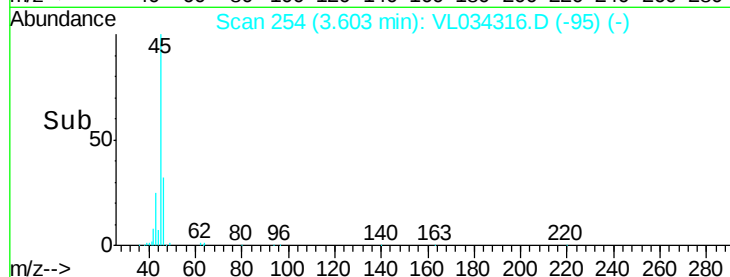
40000

20000

0

3.55 3.60 3.65

Time-->



#14

Bromoethene

Concen: 10.717 ppbv

RT: 3.74 min Scan# 295

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

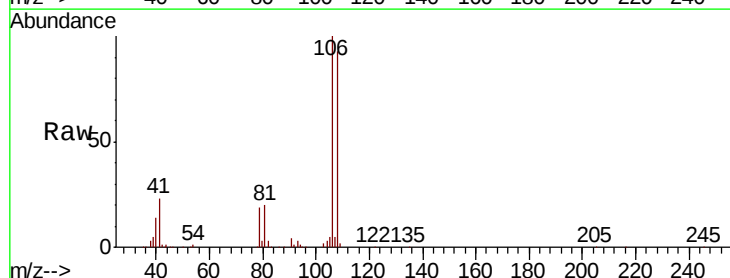
Tgt Ion: 108 Resp: 489143

Ion Ratio Lower Upper

108 100

106 108.7 84.8 127.2

79 21.4 17.0 25.4



Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0

500000

400000

300000

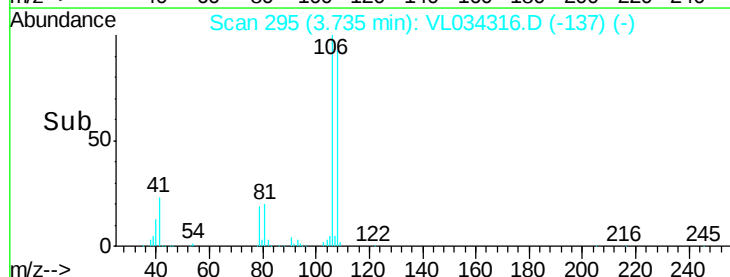
200000

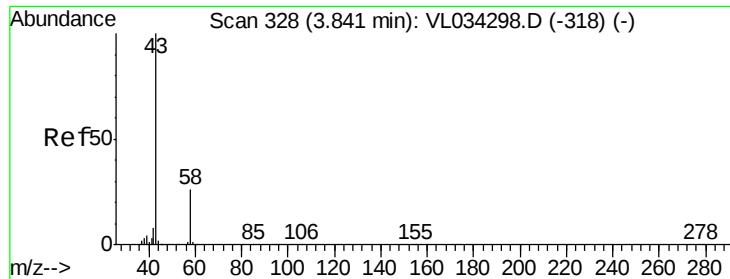
100000

0

3.70 3.75 3.80

Time-->





#15

Acetone

Concen: 8.594 ppbv

RT: 3.85 min Scan# 330

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Tot Ion: 43 Resp: 1328807

Ion Ratio Lower Upper

43 100

58 25.3 20.4 30.6

Instrument :

MSVOA\_L

ClientSampleId :

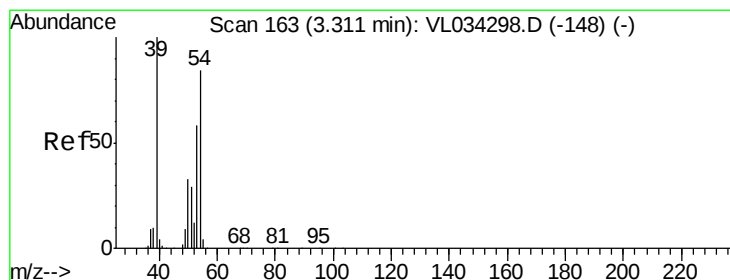
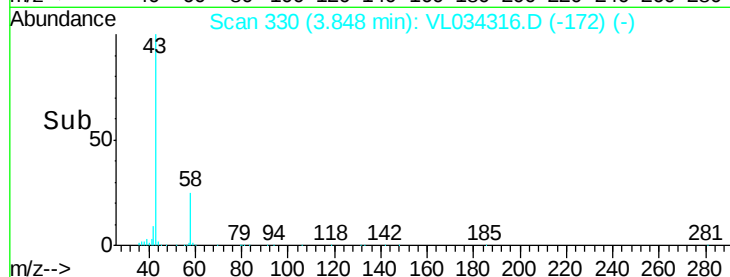
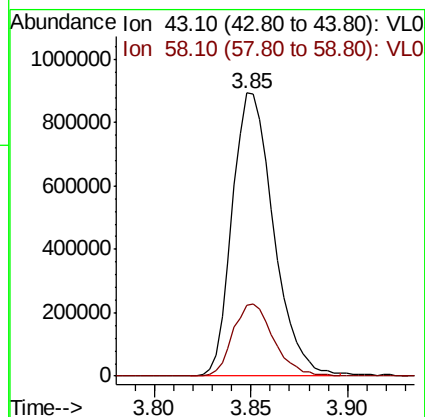
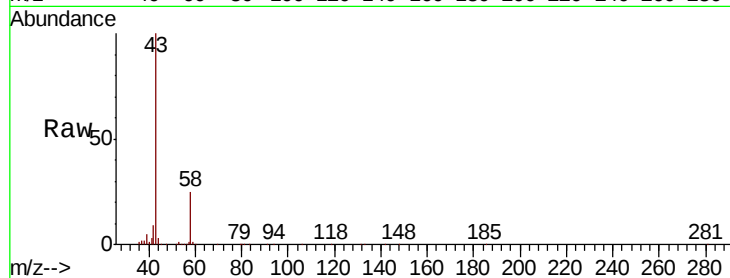
VSTDCCC010

Manual Integrations

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#16

1,3-Butadiene

Concen: 10.481 ppbv

RT: 3.32 min Scan# 165

Delta R.T. 0.01 min

Lab File: VL034316.D

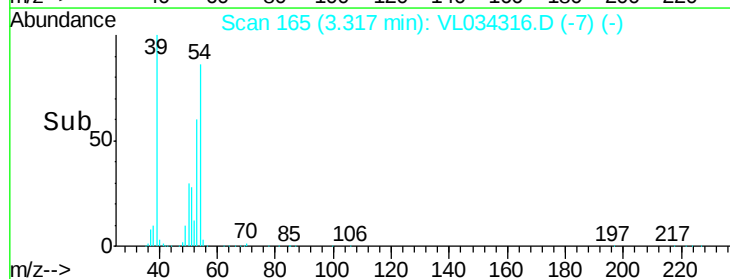
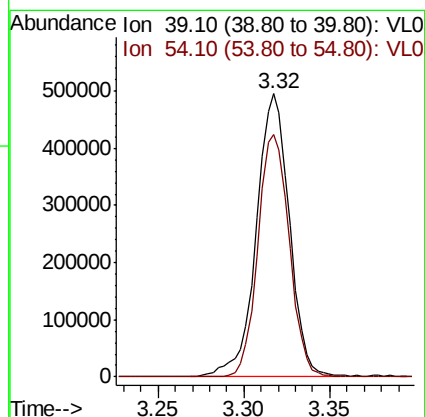
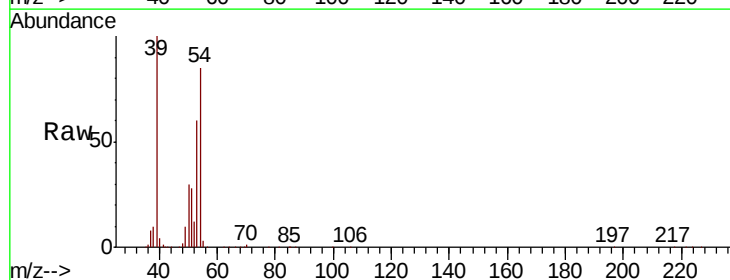
Acq: 17 Oct 2019 13:04

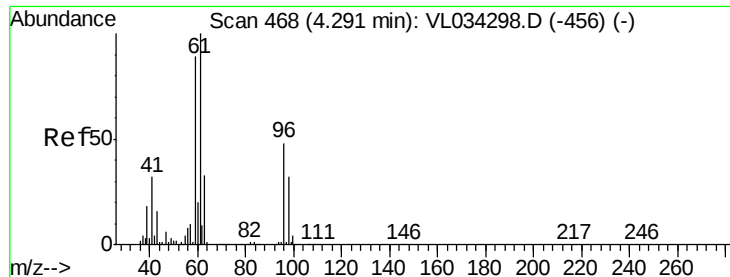
Tgt Ion: 39 Resp: 658505

Ion Ratio Lower Upper

39 100

54 81.7 63.9 95.9





#17

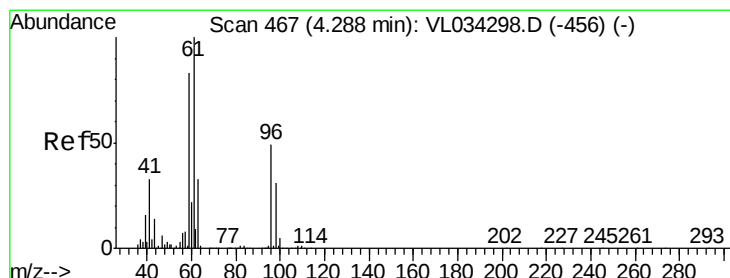
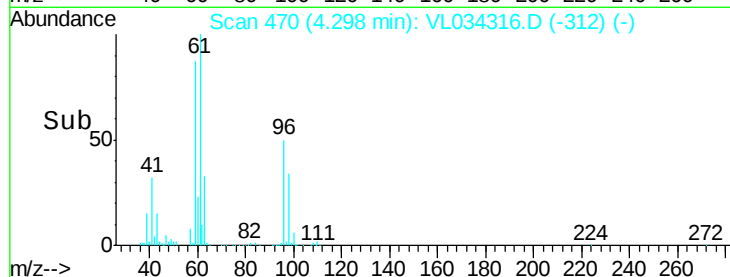
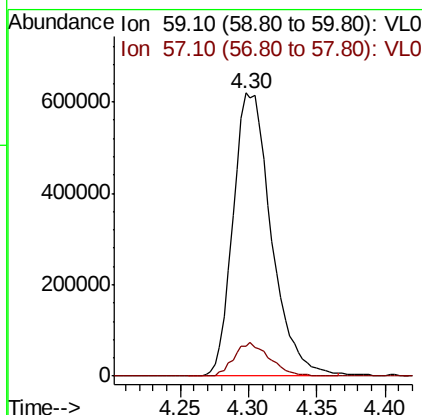
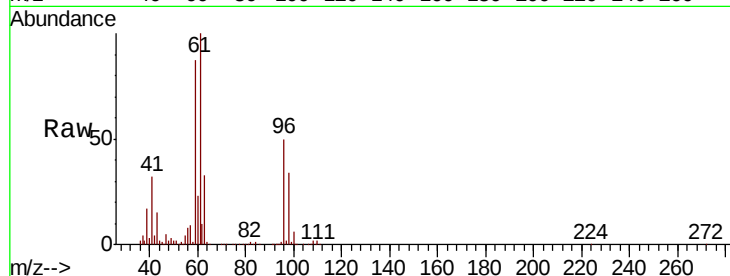
tert-Butyl alcohol  
Concen: 12.226 ppbv  
RT: 4.30 min Scan# 470  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 59 Resp: 1206536  
Ion Ratio Lower Upper  
59 100  
57 11.3 8.8 13.2

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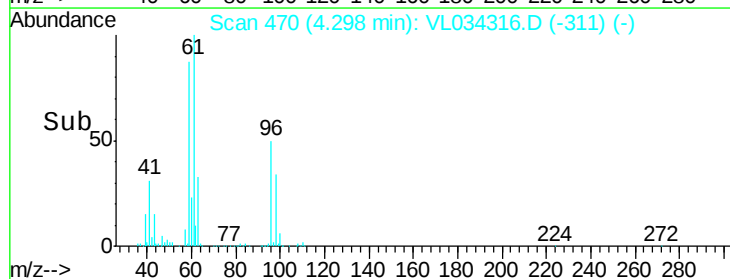
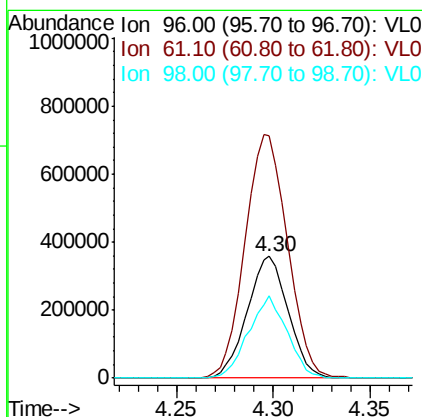
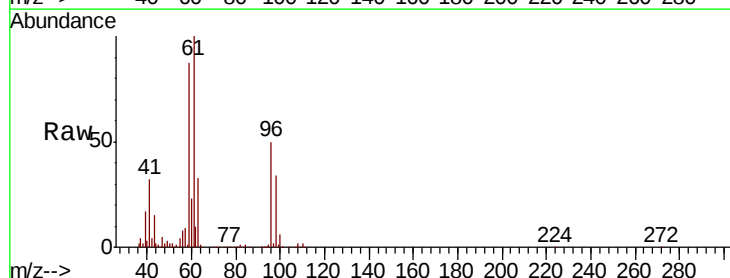
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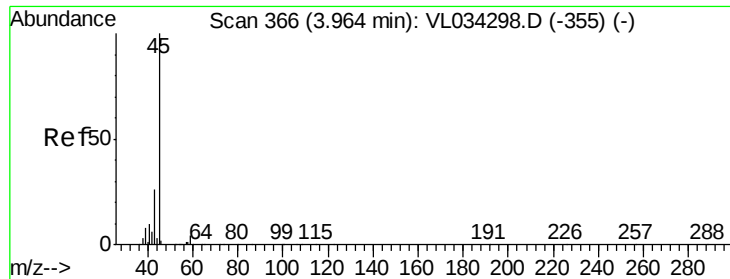


#18

1,1-Dichloroethene  
Concen: 10.397 ppbv  
RT: 4.30 min Scan# 470  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 96 Resp: 527704  
Ion Ratio Lower Upper  
96 100  
61 198.3 164.5 246.7  
98 67.3 51.7 77.5





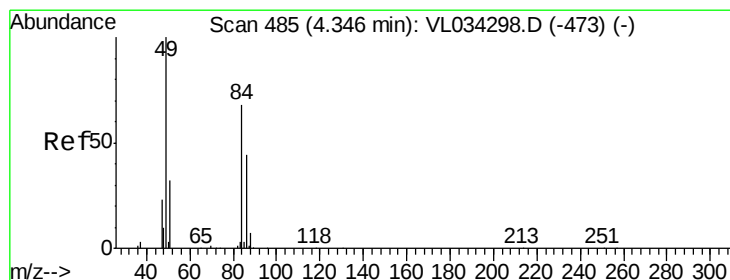
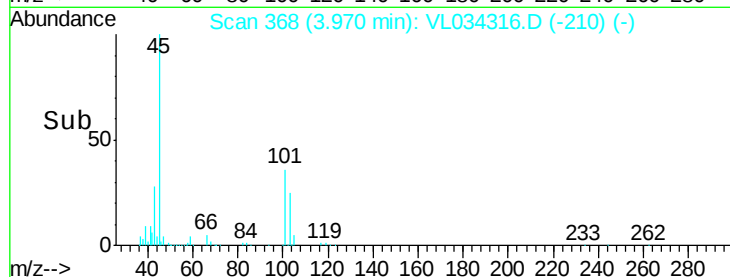
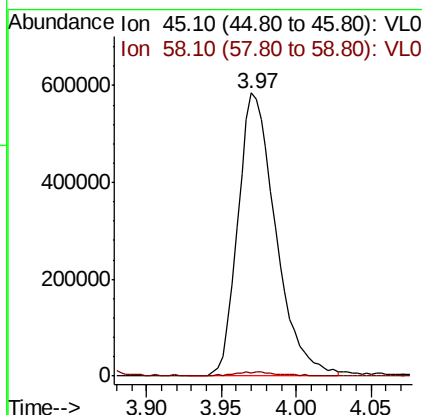
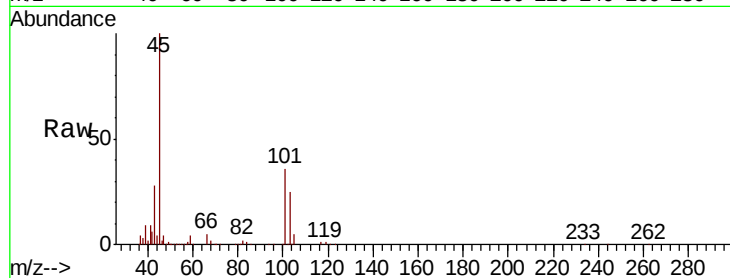
#19  
Isopropyl Alcohol  
Concen: 11.923 ppbv  
RT: 3.97 min Scan# 368  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 45 Resp: 1028455  
Ion Ratio Lower Upper  
45 100  
58 2.3 1.4 2.2#

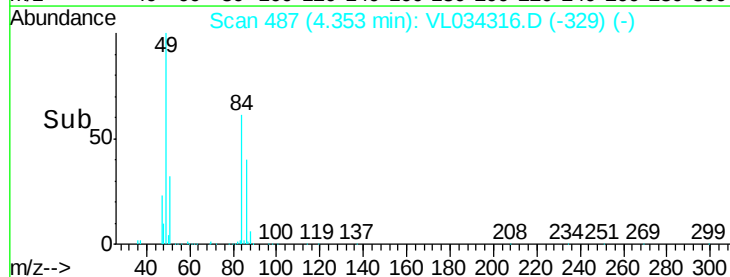
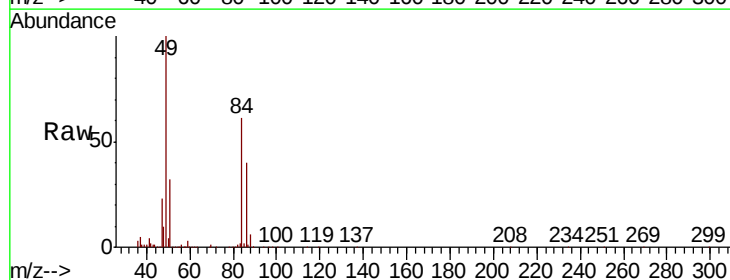
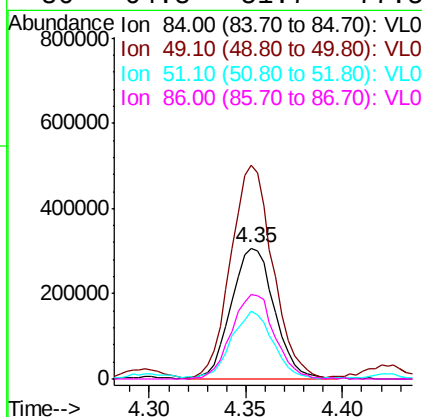
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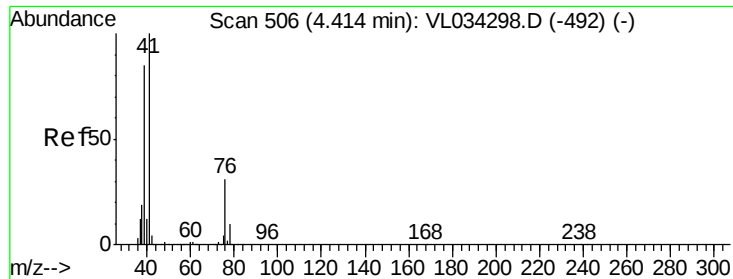
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#20  
Methylene Chloride  
Concen: 8.495 ppbv  
RT: 4.35 min Scan# 487  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 84 Resp: 474892  
Ion Ratio Lower Upper  
84 100  
49 162.5 118.5 177.7  
51 51.2 38.8 58.2  
86 64.8 51.7 77.5





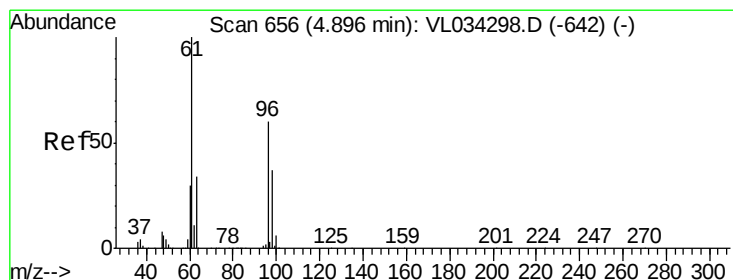
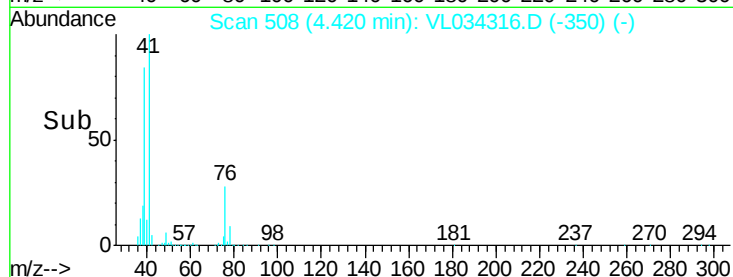
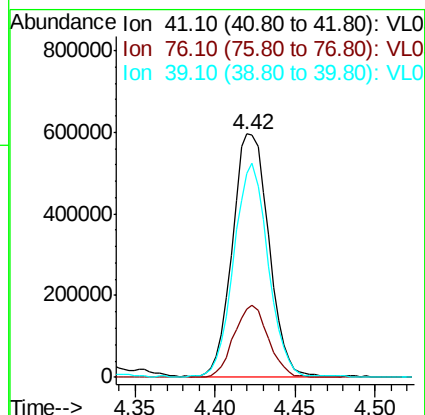
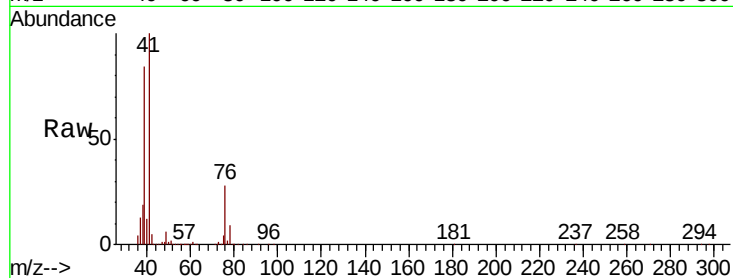
#21  
Allvl Chloride  
Concen: 10.757 ppbv  
RT: 4.42 min Scan# 508  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 28.0  | 22.8  | 34.2  |
| 39      | 83.2  | 66.0  | 99.0  |

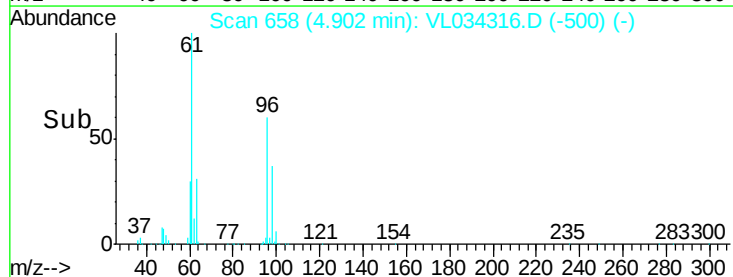
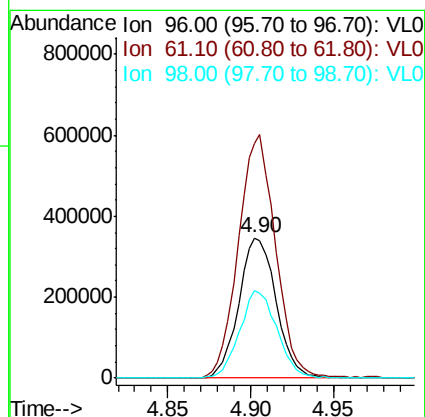
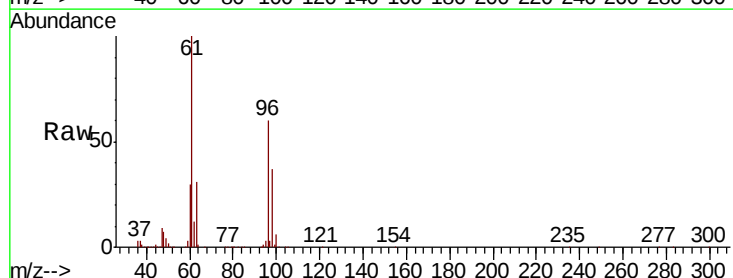
Manual Integrations  
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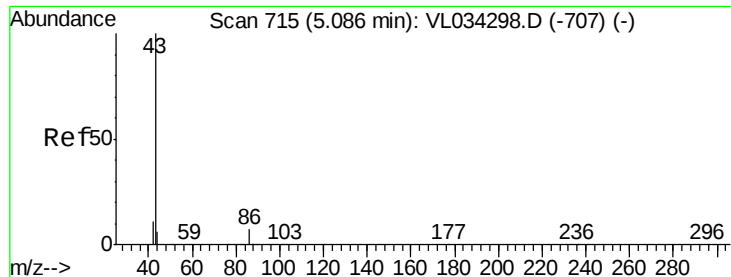
MMDadoda  
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#22  
trans-1,2-Dichloroethene  
Concen: 10.755 ppbv  
RT: 4.90 min Scan# 658  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 166.7 | 133.8 | 200.6 |
| 98      | 62.2  | 49.4  | 74.0  |





#23

Vinyl Acetate

Concen: 11.043 ppbv

RT: 5.10 min Scan# 718

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 43 Resp: 2132458

Ion Ratio Lower Upper

43 100

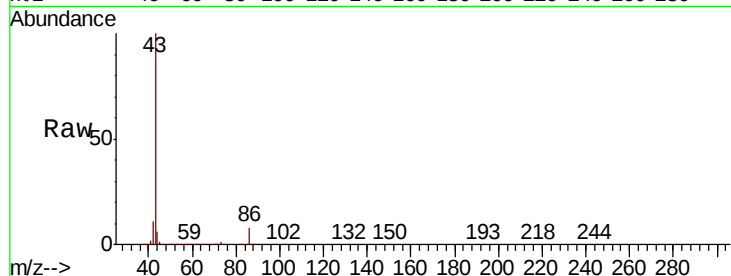
86 7.8 5.0 7.4#

42 10.4 8.6 13.0

44 6.0 4.8 7.2

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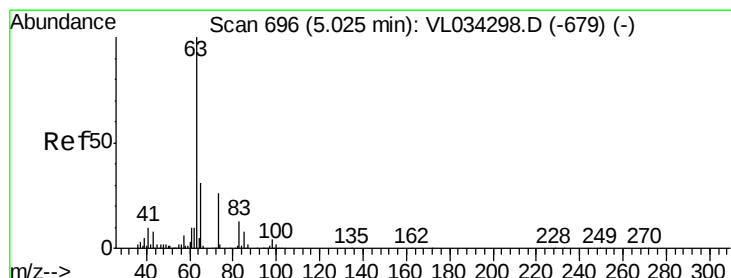
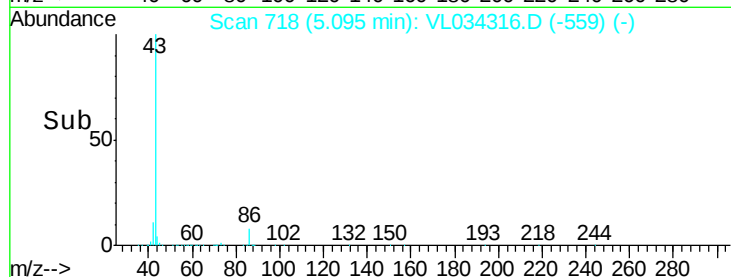
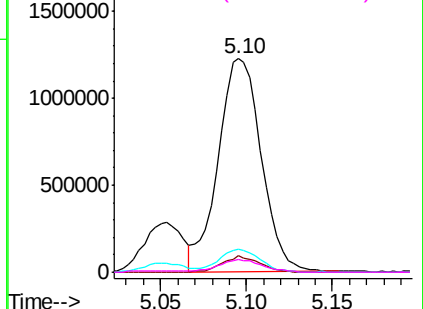


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 10.139 ppbv

RT: 5.03 min Scan# 699

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

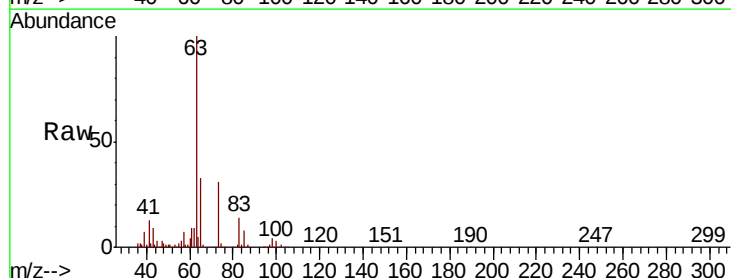
Tgt Ion: 63 Resp: 1453106

Ion Ratio Lower Upper

63 100

98 4.2 2.0 6.0

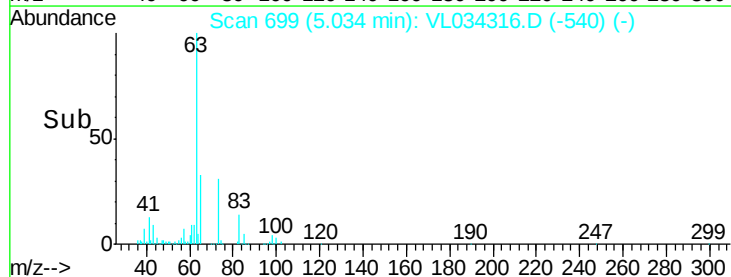
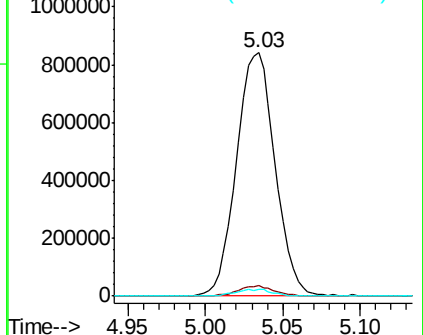
100 2.6 1.1 3.5

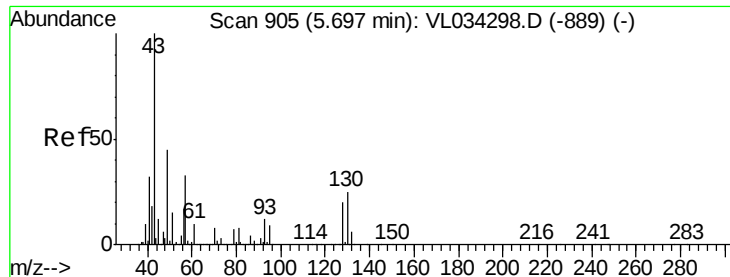


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





#25

Ethyl Acetate

Concen: 10.041 ppbv

RT: 5.71 min Scan# 909

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 43 Resp: 2621158

Ion Ratio Lower Upper

43 100

45 10.5 8.3 12.5

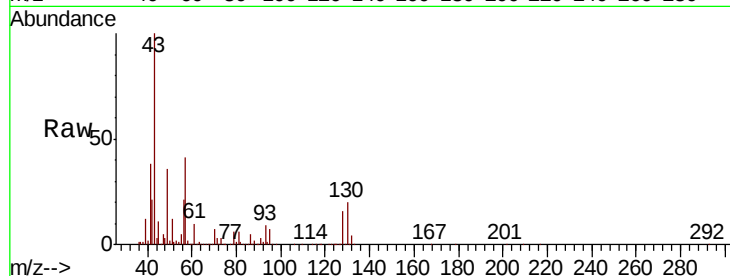
61 9.7 7.7 11.5

70 7.0 5.4 8.2

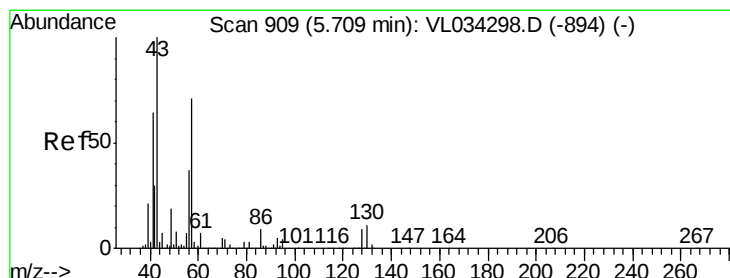
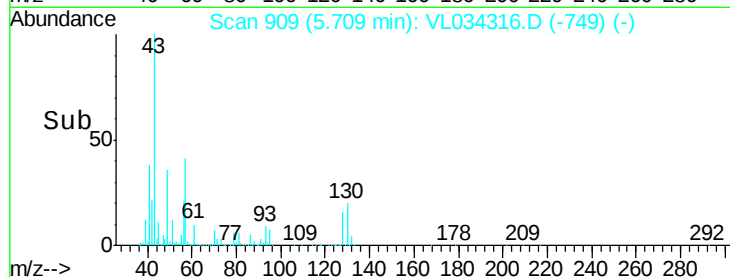
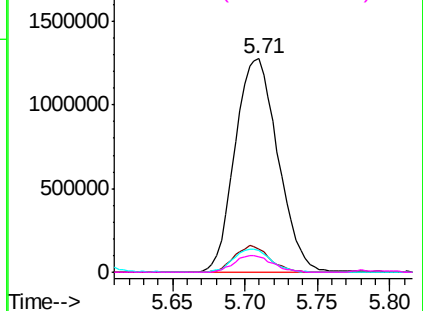
Manual Integrations  
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Abundance Ion 43.10 (42.80 to 43.80): VL0  
2000000 Ion 45.10 (44.80 to 45.80): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 10.006 ppbv

RT: 5.72 min Scan# 912

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Tgt Ion: 57 Resp: 1113378

Ion Ratio Lower Upper

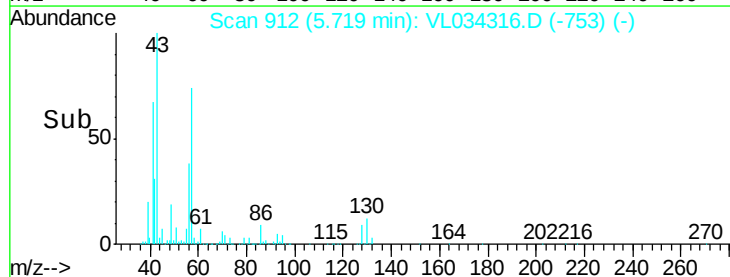
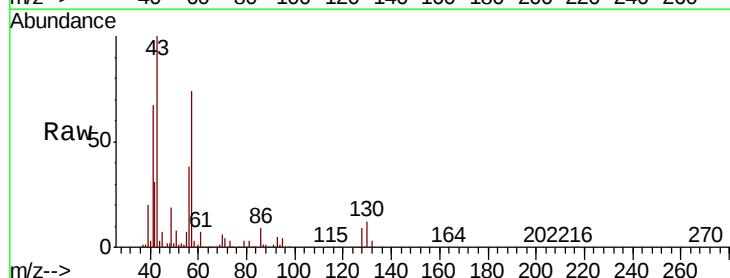
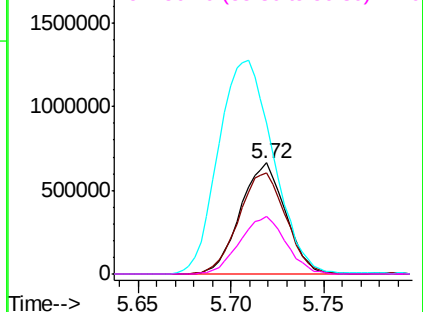
57 100

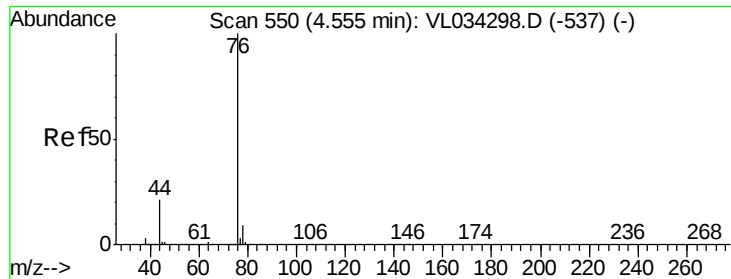
41 95.8 76.5 114.7

43 237.4 188.5 282.7

56 53.1 42.8 64.2

Abundance Ion 57.10 (56.80 to 57.80): VL0  
2000000 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





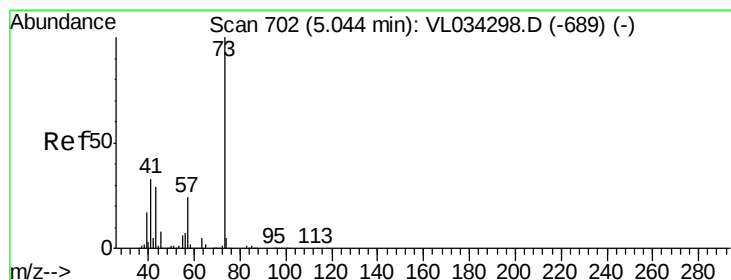
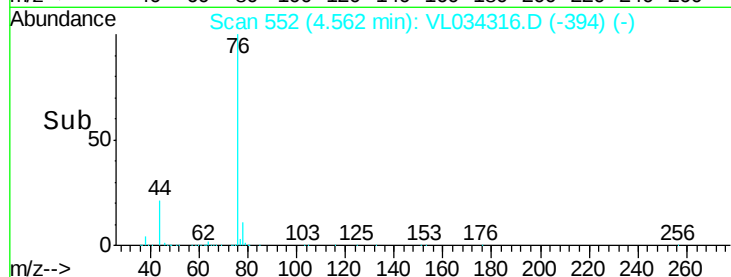
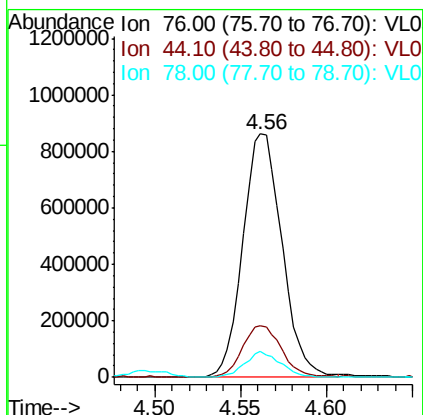
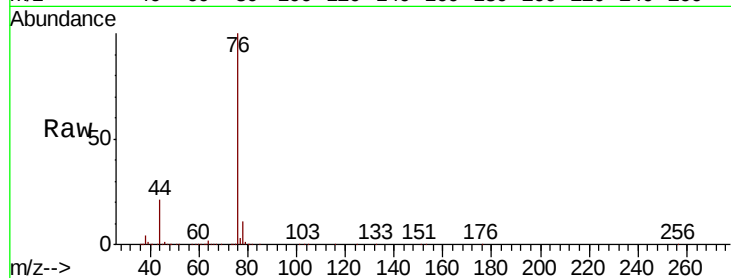
#27  
Carbon Disulfide  
Concen: 11.774 ppbv  
RT: 4.56 min Scan# 552  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 76 Resp: 1360068  
Ion Ratio Lower Upper  
76 100  
44 21.2 17.3 25.9  
78 9.5 7.8 11.6

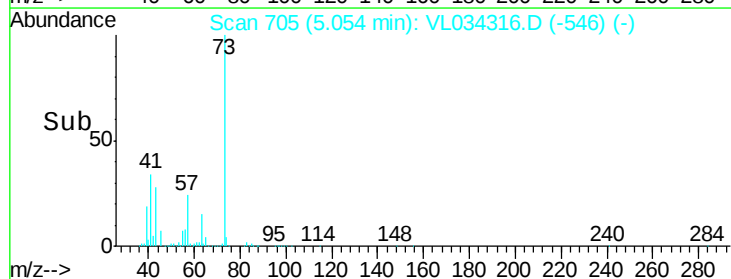
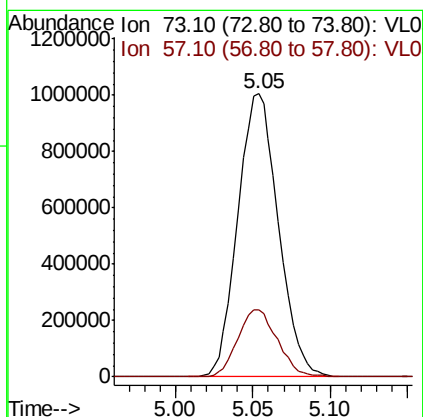
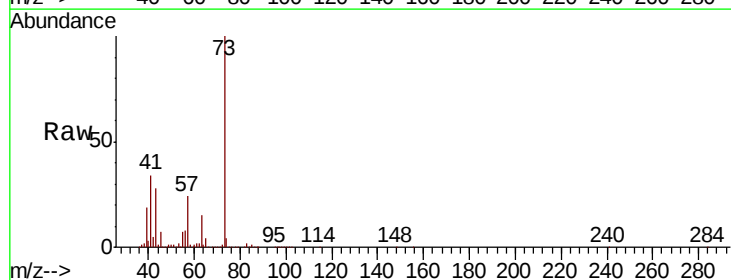
Manual Integrations  
APPROVED

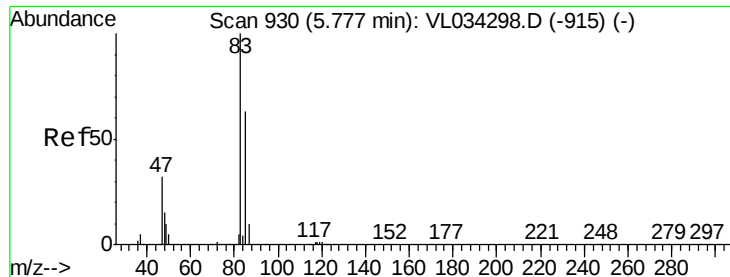
MMDadoda  
10/22/2019 2:54:25 PM



#28  
Methyl tert-Butyl Ether  
Concen: 10.875 ppbv  
RT: 5.05 min Scan# 705  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 73 Resp: 1831314  
Ion Ratio Lower Upper  
73 100  
57 23.5 19.2 28.8





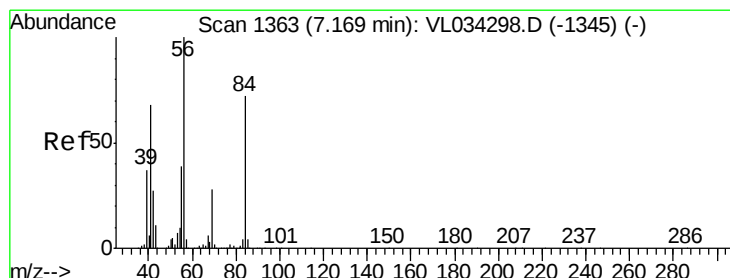
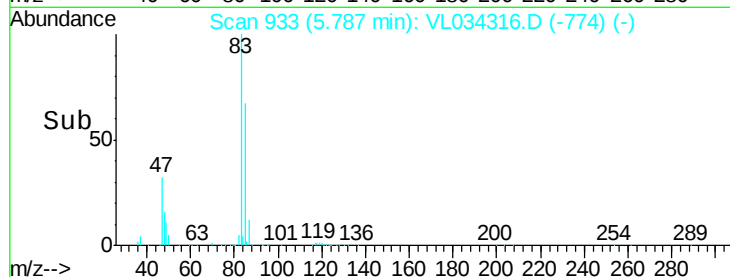
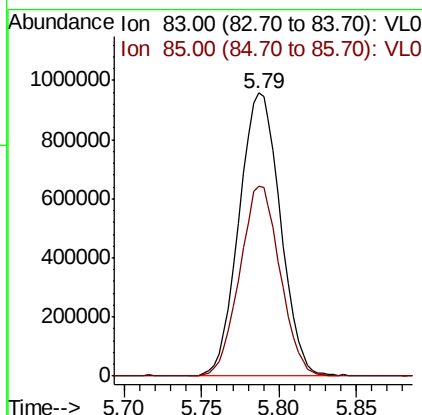
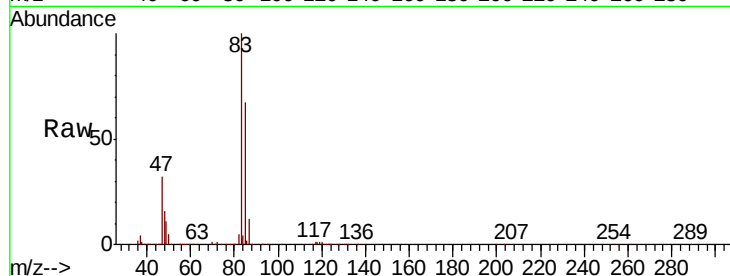
#29  
Chloroform  
Concen: 10.093 ppbv  
RT: 5.79 min Scan# 933  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 83 Resp: 1776539  
Ion Ratio Lower Upper  
83 100  
85 66.8 50.5 75.7

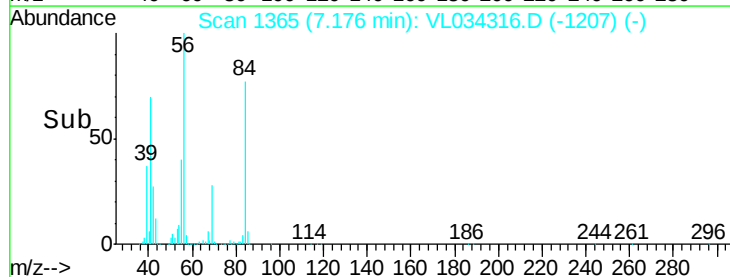
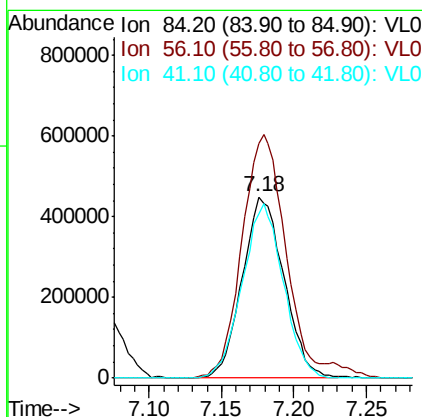
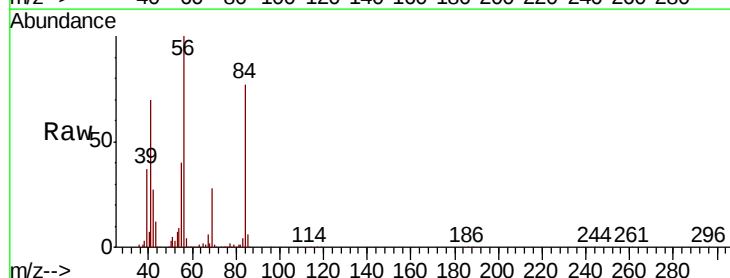
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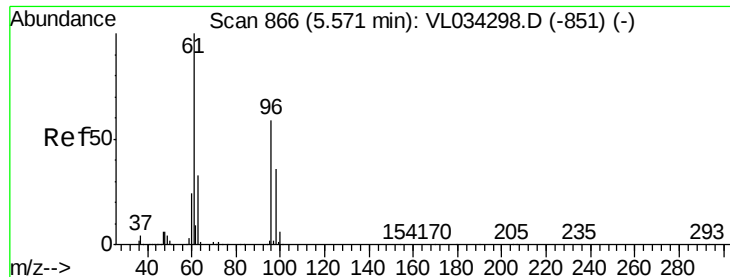
MMDadoda  
10/22/2019 2:54:25 PM



#30  
Cyclohexane  
Concen: 10.944 ppbv  
RT: 7.18 min Scan# 1365  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 84 Resp: 895553  
Ion Ratio Lower Upper  
84 100  
56 144.4 119.4 179.0  
41 94.6 78.7 118.1





#31

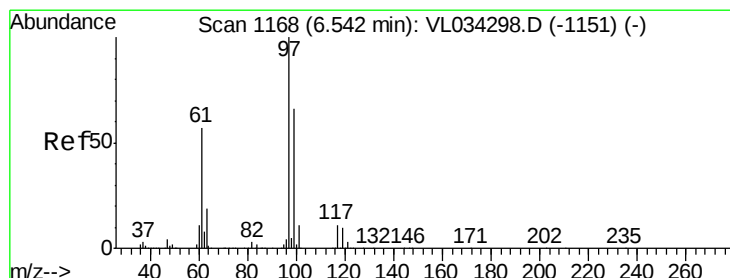
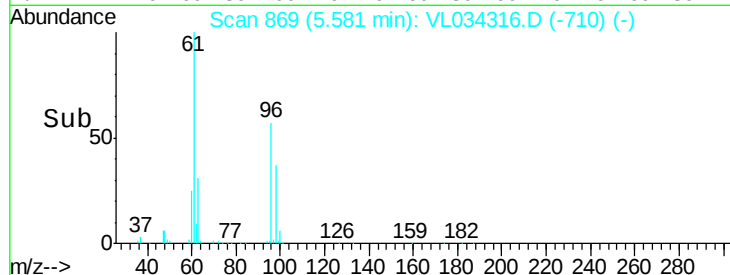
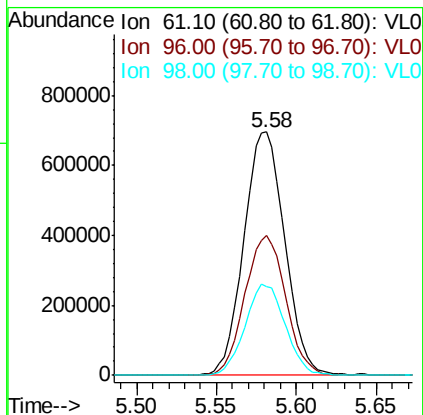
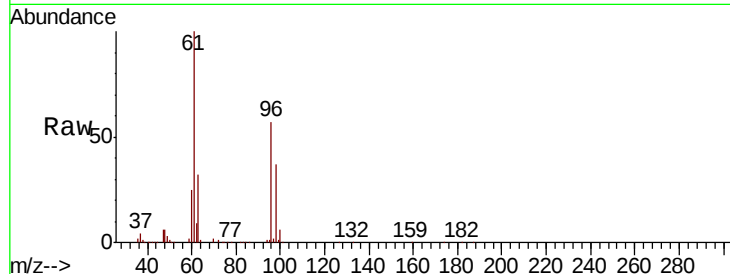
cis-1,2-Dichloroethene  
 Concen: 10.756 ppbv  
 RT: 5.58 min Scan# 869  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 57.3  | 47.5  | 71.3  |
| 98      | 36.7  | 28.8  | 43.2  |

Manual Integrations  
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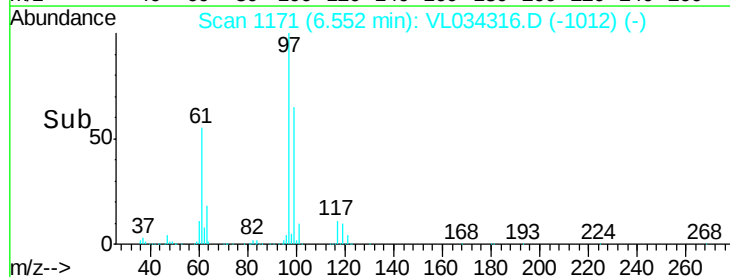
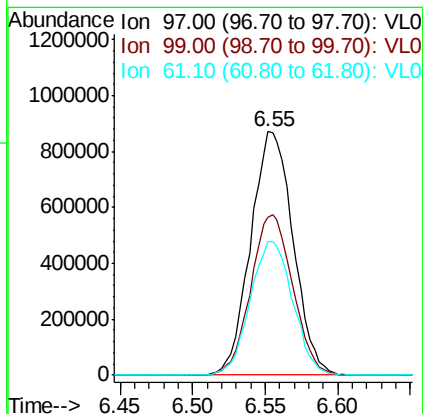
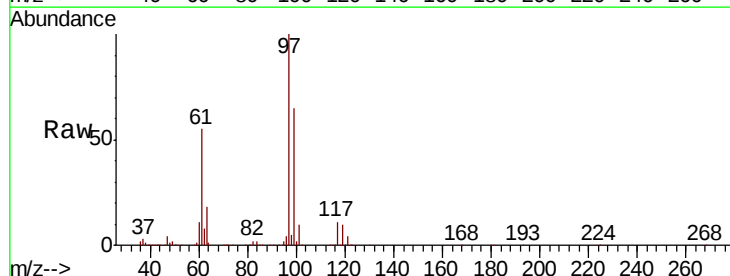
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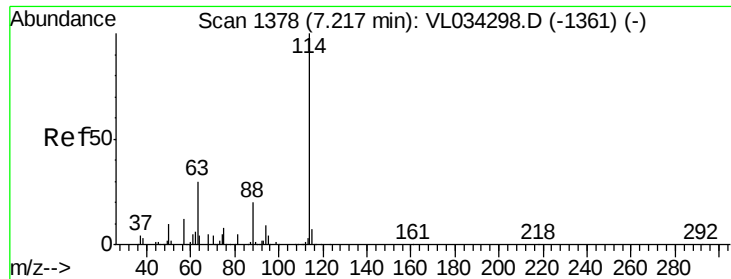


#32

1,1,1-Trichloroethane  
 Concen: 10.374 ppbv  
 RT: 6.55 min Scan# 1171  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 65.2  | 52.6  | 78.8  |
| 61      | 55.4  | 44.5  | 66.7  |





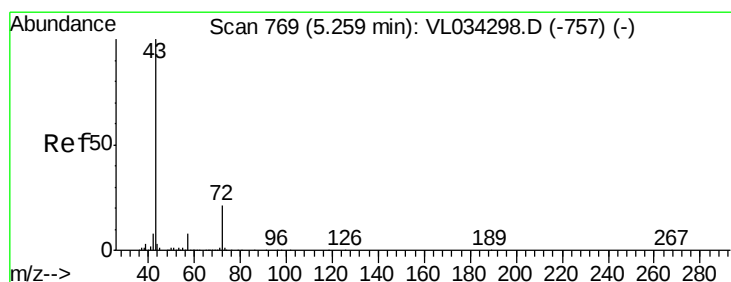
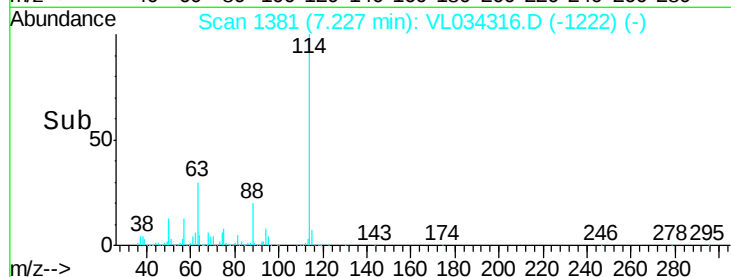
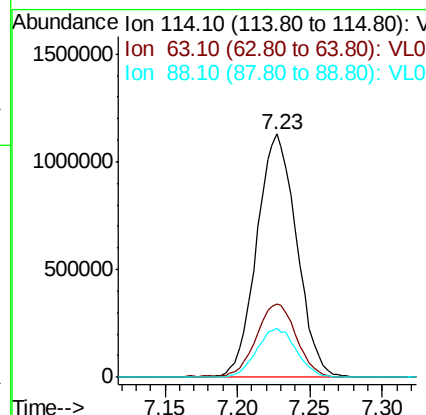
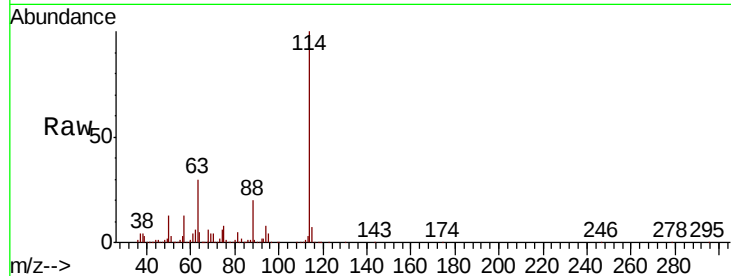
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.23 min Scan# 1381  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 30.8  | 25.2  | 37.8  |
| 88      | 19.9  | 16.0  | 24.0  |

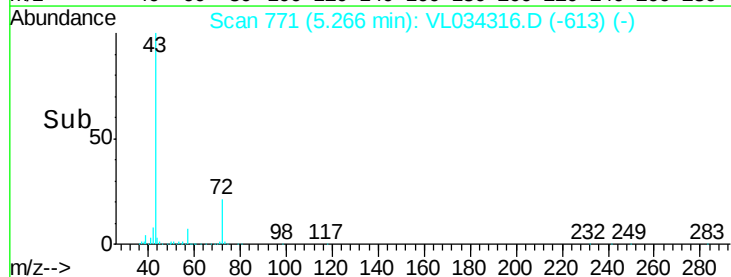
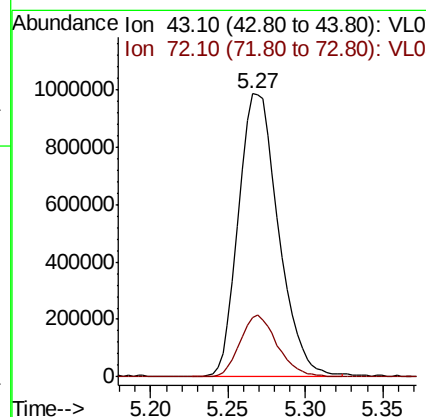
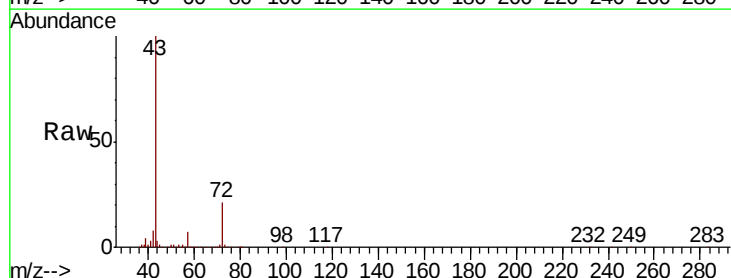
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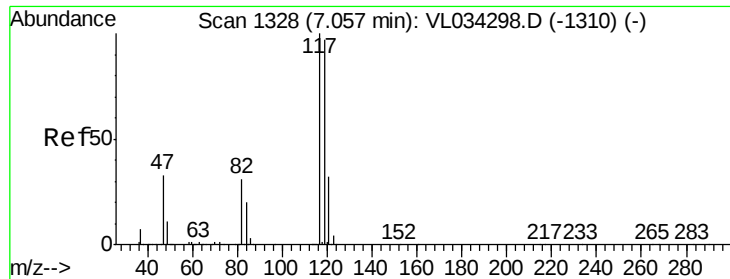
MMDadoda  
 10/22/2019 2:54:25 PM



#34  
 2-Butanone  
 Concen: 10.015 ppbv  
 RT: 5.27 min Scan# 771  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 20.5  | 16.3  | 24.5  |





#35

Carbon Tetrachloride

Concen: 9.902 ppbv

RT: 7.07 min Scan# 1332

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:117 Resp: 1861949

Ion Ratio Lower Upper

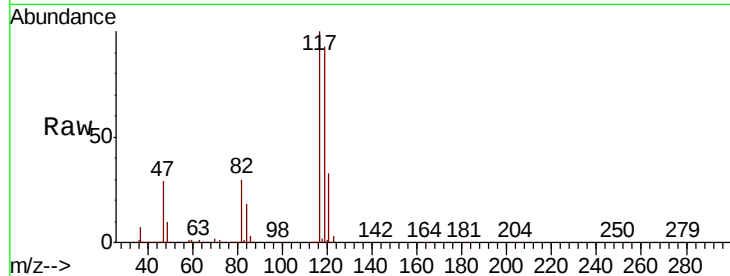
117 100

119 92.9 77.3 115.9

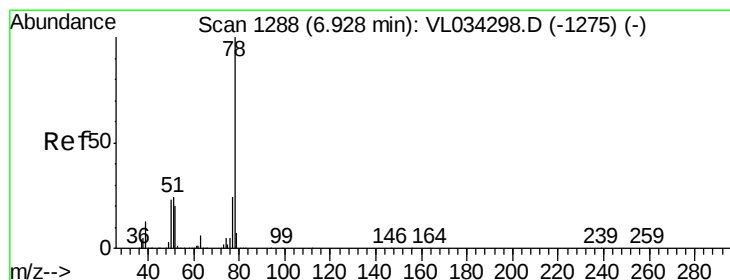
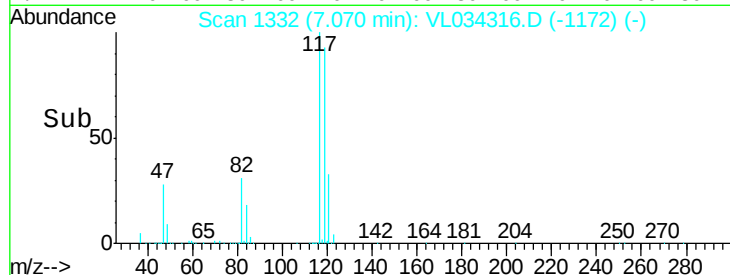
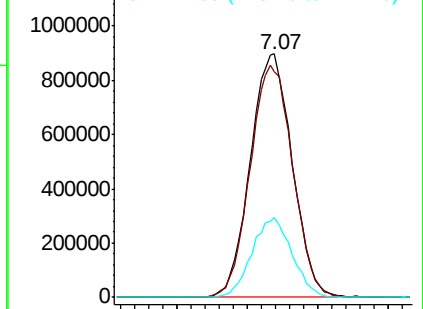
121 33.0 25.5 38.3

Manual Integrations  
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Abundance Ion 117.00 (116.70 to 117.70): V  
1200000 Ion 119.00 (118.70 to 119.70): V  
1000000 Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 10.213 ppbv

RT: 6.94 min Scan# 1292

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

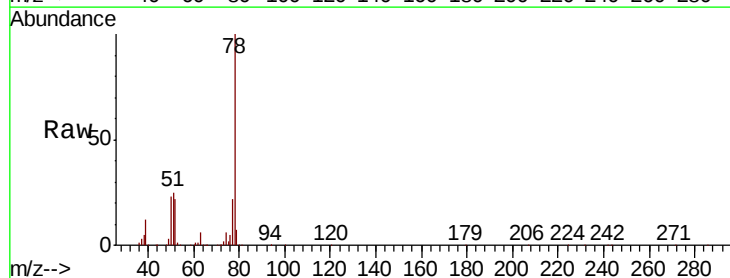
Tgt Ion: 78 Resp: 2115376

Ion Ratio Lower Upper

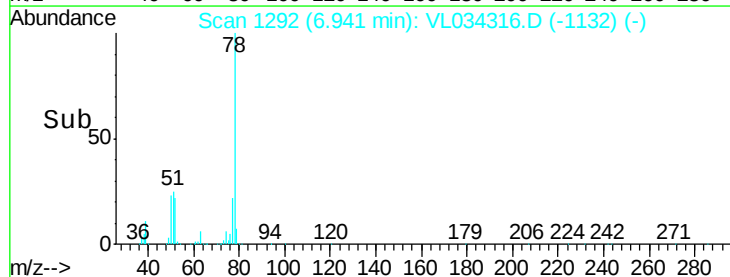
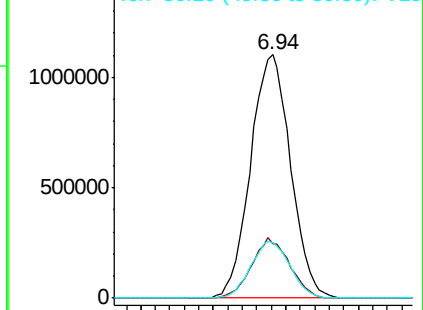
78 100

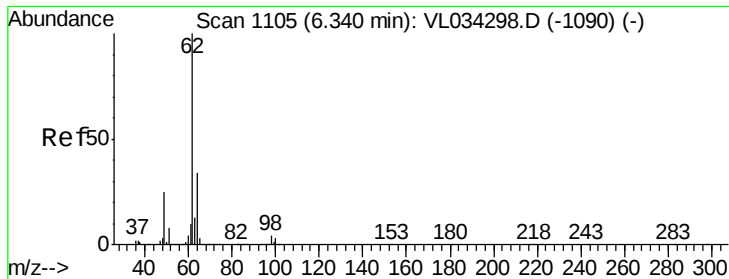
77 22.1 19.0 28.4

50 22.6 18.6 27.8



Abundance Ion 78.10 (77.80 to 78.80): VL0  
1500000 Ion 77.10 (76.80 to 77.80): VL0  
1000000 Ion 50.10 (49.80 to 50.80): VL0





#37

1,2-Dichloroethane

Concen: 9.988 ppbv

RT: 6.35 min Scan# 1108

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 62 Resp: 1541768

Ion Ratio Lower Upper

62 100

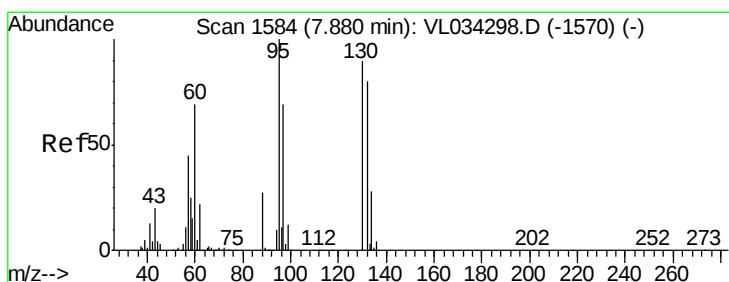
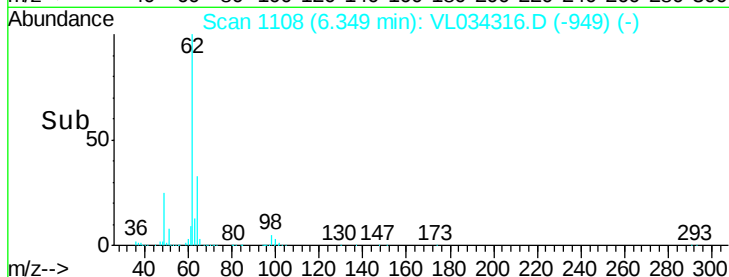
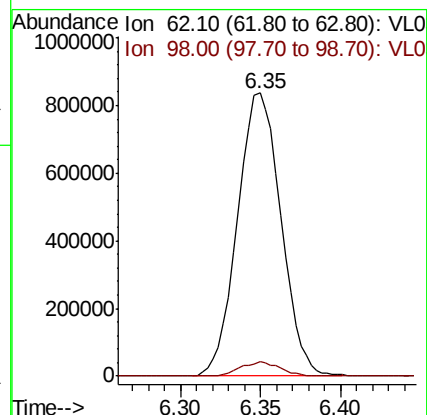
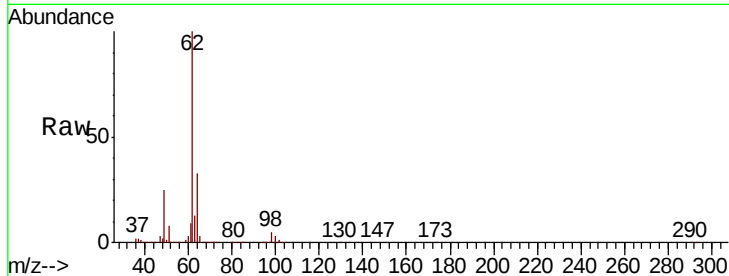
98 4.7 3.8 5.6

Manual Integrations

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#38

Trichloroethene

Concen: 10.038 ppbv

RT: 7.89 min Scan# 1588

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Tgt Ion: 130 Resp: 834328

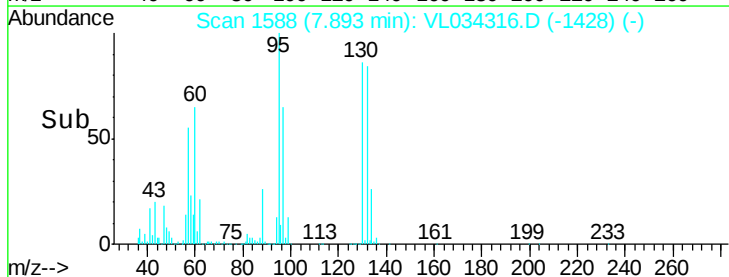
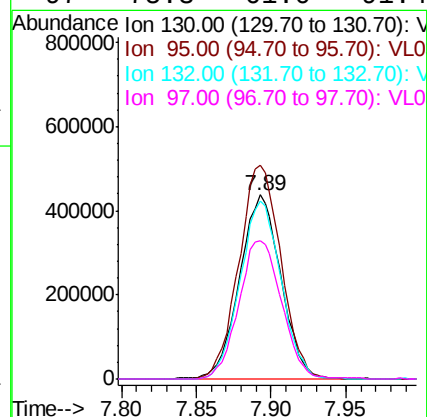
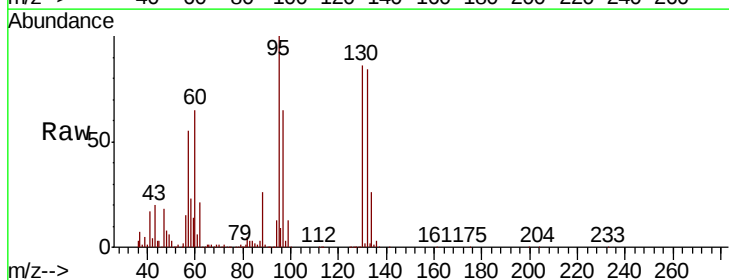
Ion Ratio Lower Upper

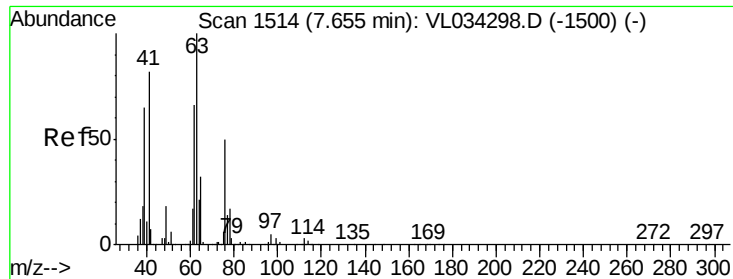
130 100

95 116.1 88.6 132.8

132 97.2 71.2 106.8

97 75.3 61.0 91.4





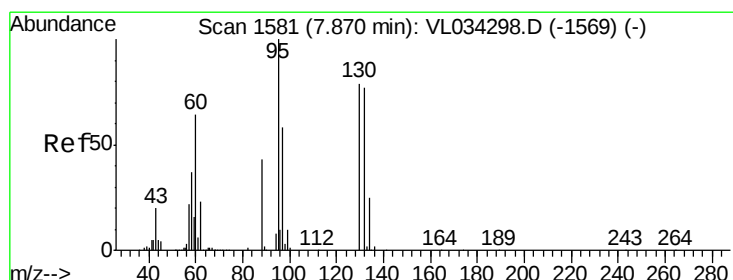
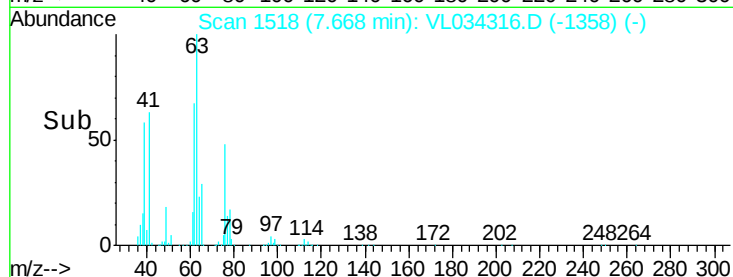
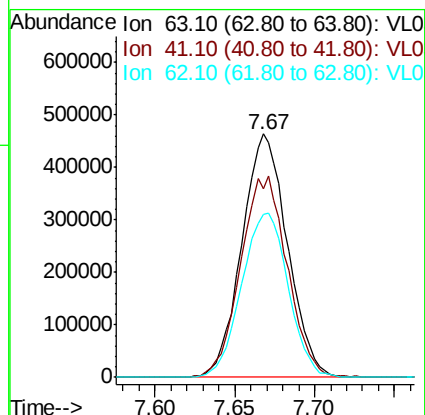
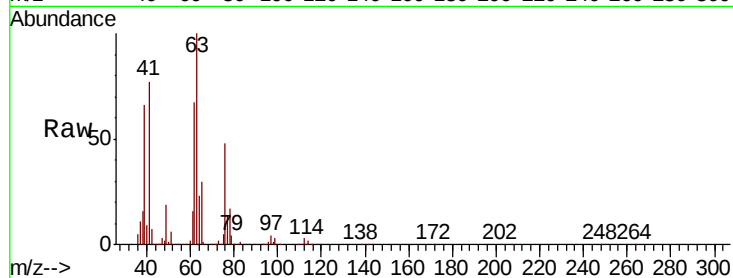
#39  
 1,2-Dichloropropane  
 Concen: 10.111 ppbv  
 RT: 7.67 min Scan# 1518  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 77.0  | 65.6  | 98.4  |
| 62      | 66.5  | 53.0  | 79.6  |

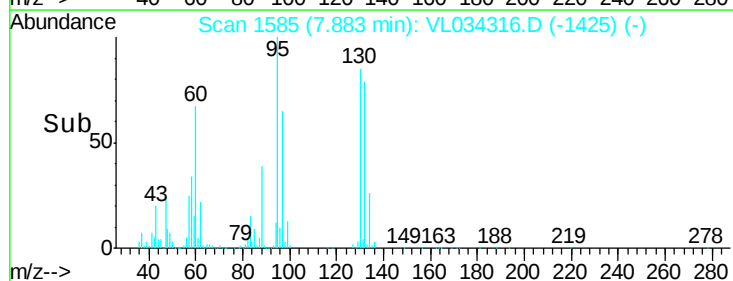
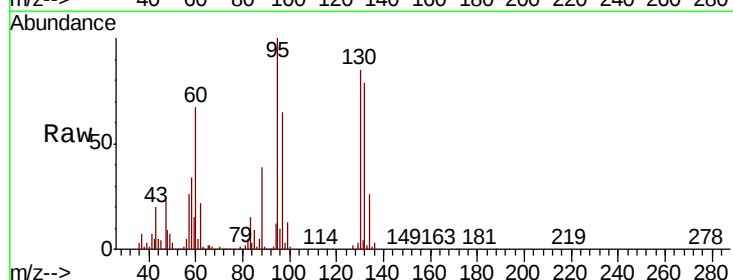
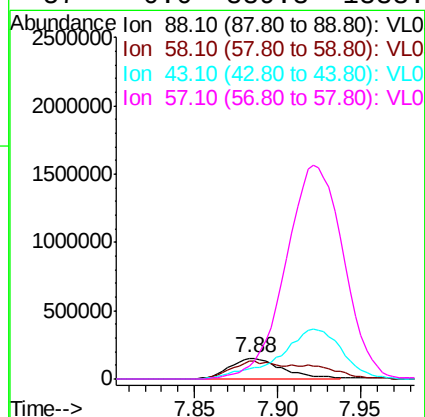
Manual Integrations  
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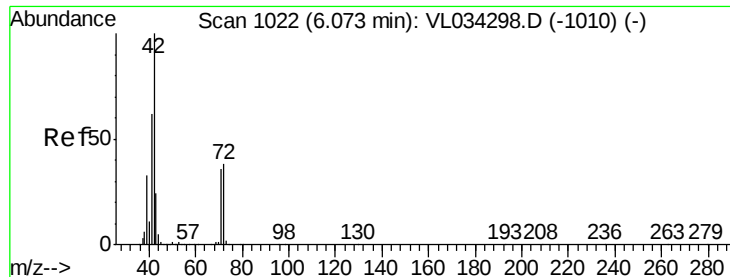
MMDadoda  
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#40  
 1,4-Dioxane  
 Concen: 10.563 ppbv  
 RT: 7.88 min Scan# 1585  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper   |
|---------|-------|-------|---------|
| 88      | 100   |       |         |
| 58      | 142.0 | 110.3 | 165.5   |
| 43      | 0.0   | 228.1 | 342.1#  |
| 57      | 0.0   | 889.3 | 1333.9# |





#41

Tetrahydrofuran

Concen: 10.420 ppbv

RT: 6.08 min Scan# 1025

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

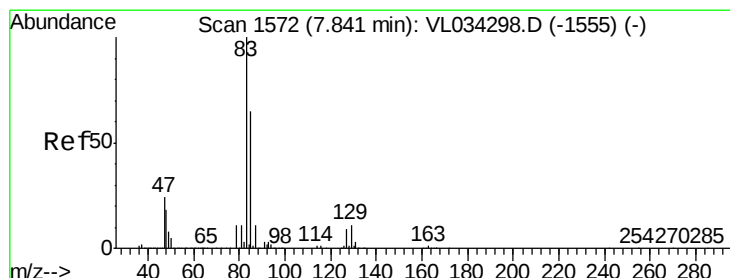
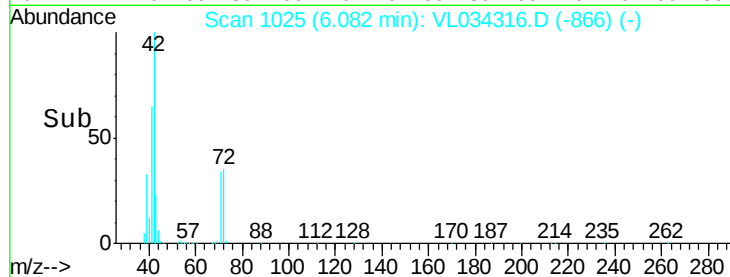
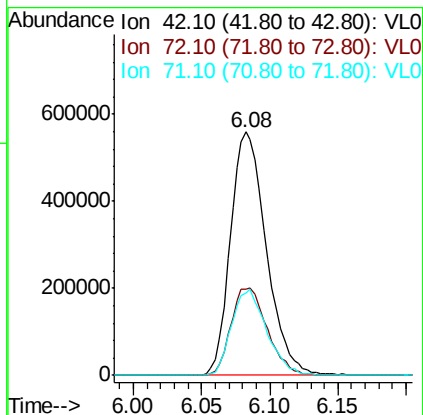
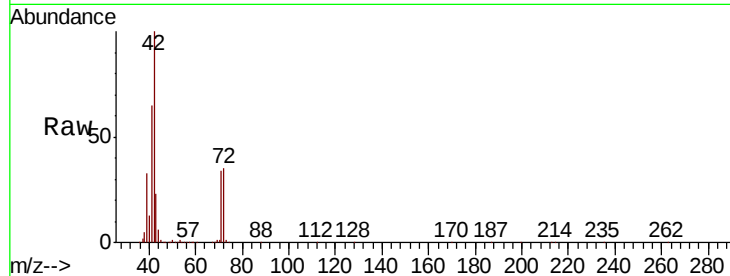
ClientSampleId :

VSTDCCC010

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 42    | Resp: | 1020409 |
| Ion      | Ratio | Lower | Upper   |
| 42       | 100   |       |         |
| 72       | 36.8  | 28.0  | 42.0    |
| 71       | 34.8  | 27.3  | 40.9    |

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#42

Bromodichloromethane

Concen: 10.325 ppbv

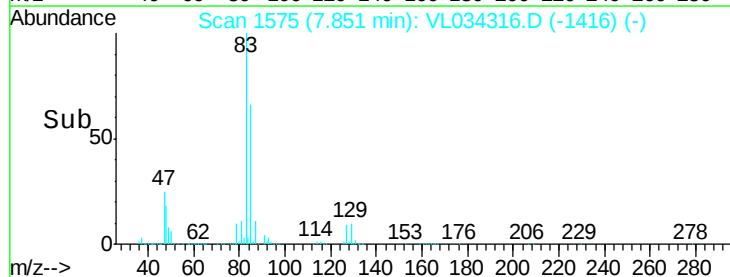
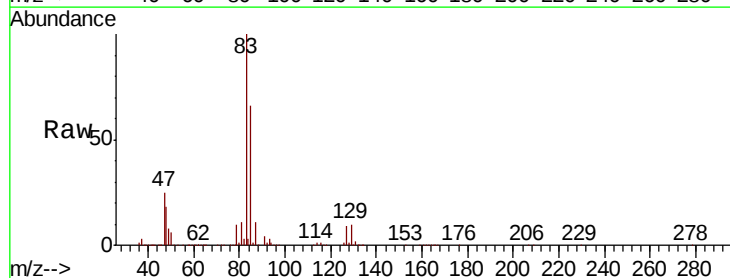
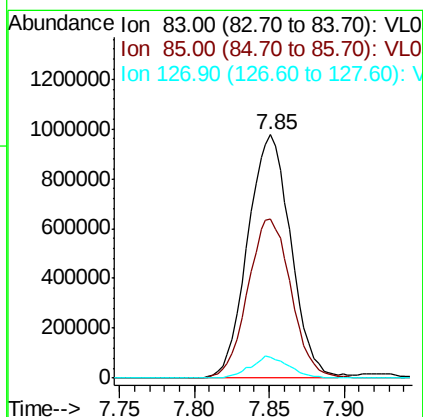
RT: 7.85 min Scan# 1575

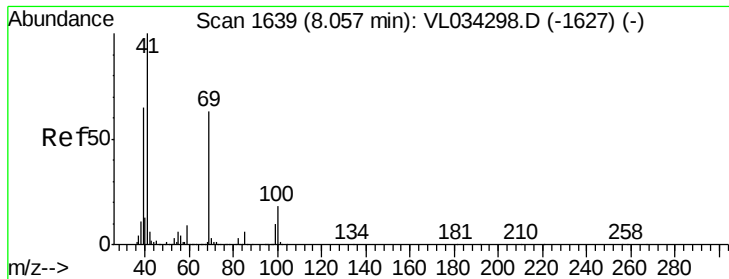
Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 83    | Resp: | 1952115 |
| Ion      | Ratio | Lower | Upper   |
| 83       | 100   |       |         |
| 85       | 65.5  | 51.8  | 77.6    |
| 127      | 8.8   | 7.0   | 10.6    |





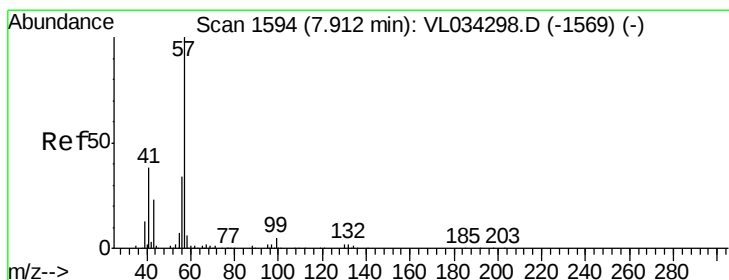
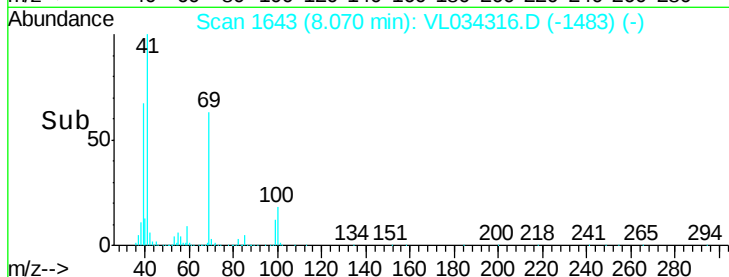
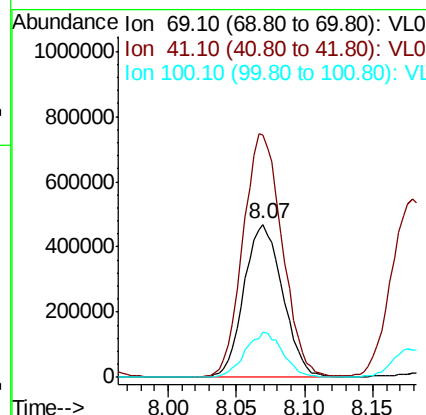
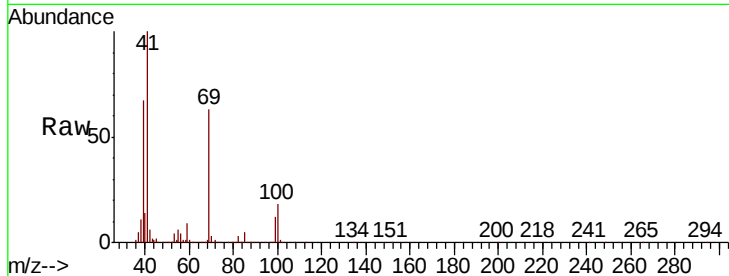
#43  
Methvl Methacrilate  
Concen: 10.801 ppbv  
RT: 8.07 min Scan# 1643  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tot Ion | Ion   | Ratio | Lower | Upper |
|---------|-------|-------|-------|-------|
| 69      | 100   |       |       |       |
| 41      | 161.4 | 132.1 | 198.1 |       |
| 100     | 28.8  | 23.2  | 34.8  |       |

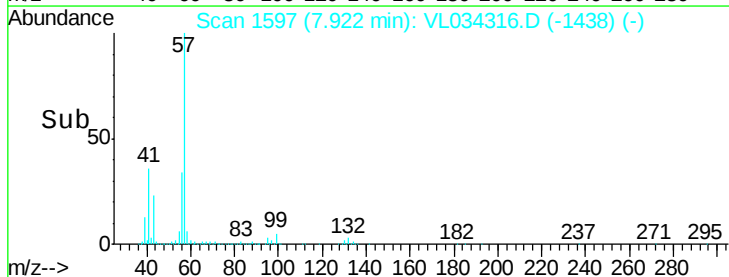
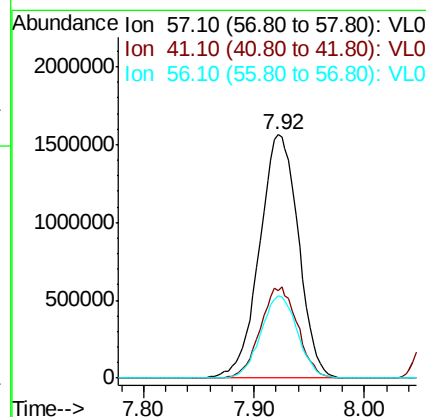
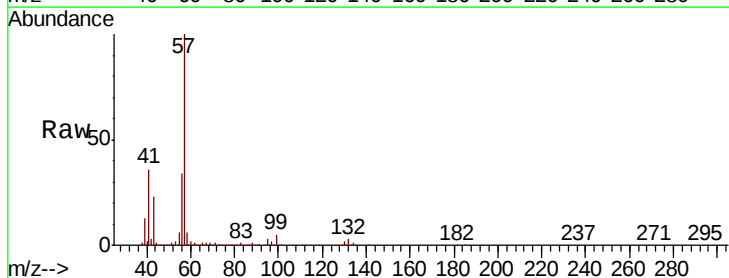
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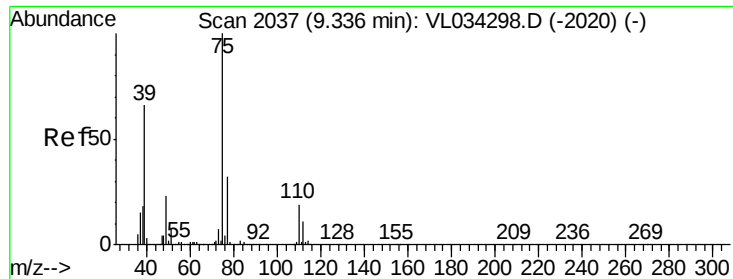
MMDadoda  
10/22/2019 2:54:25 PM



#44  
2,2,4-Trimethylpentane  
Concen: 9.955 ppbv  
RT: 7.92 min Scan# 1597  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

| Tgt Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 57      | 100  |       |       |       |
| 41      | 35.8 | 29.3  | 43.9  |       |
| 56      | 31.9 | 25.3  | 37.9  |       |





#45

t-1,3-Dichloropropene

Concen: 11.917 ppbv

RT: 9.35 min Scan# 2040

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 75 Resp: 1243843

Ion Ratio Lower Upper

75 100

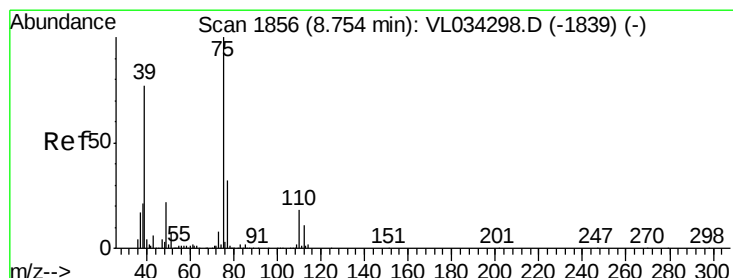
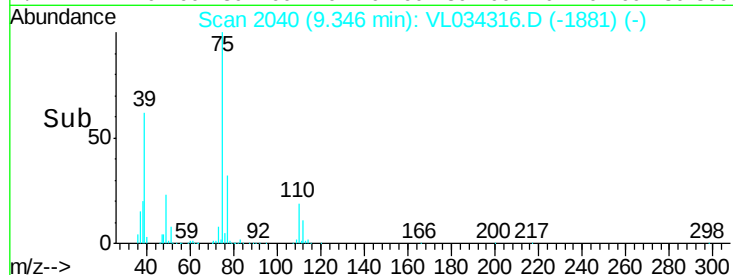
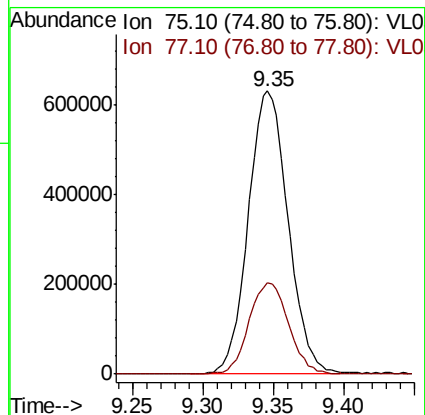
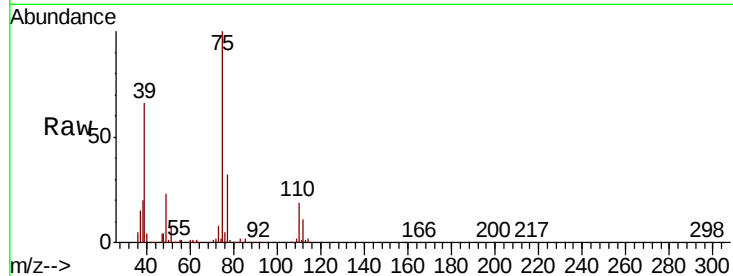
77 32.4 25.6 38.4

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#46

cis-1,3-Dichloropropene

Concen: 11.602 ppbv

RT: 8.77 min Scan# 1860

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

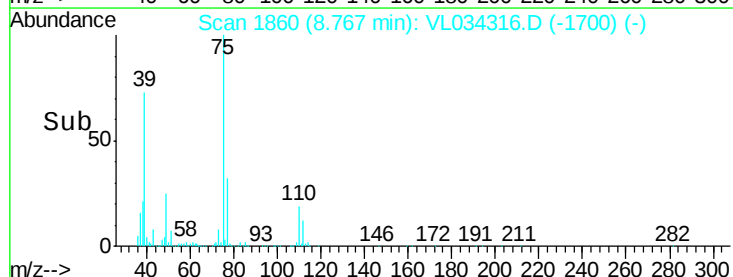
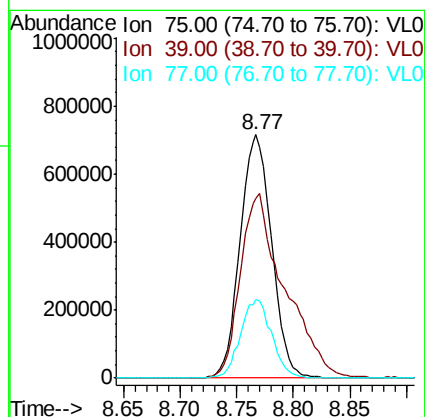
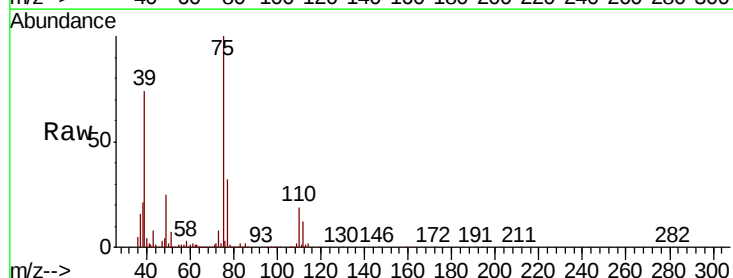
Tgt Ion: 75 Resp: 1391239

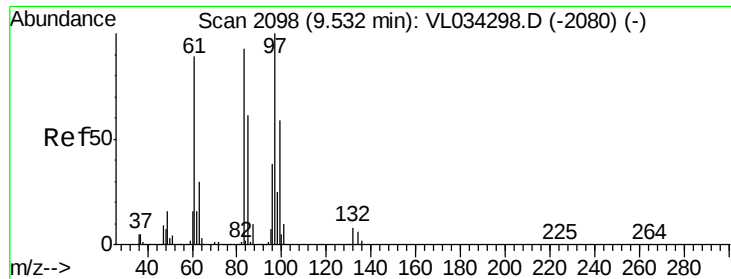
Ion Ratio Lower Upper

75 100

39 73.6 61.2 91.8

77 32.2 25.9 38.9





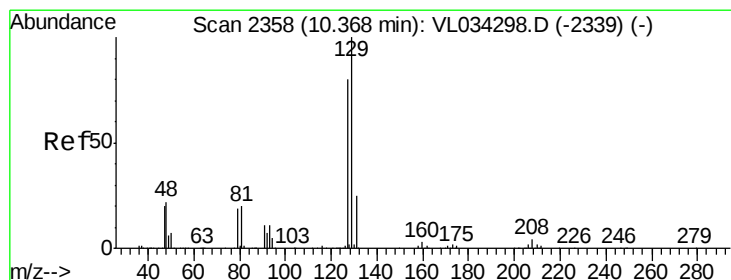
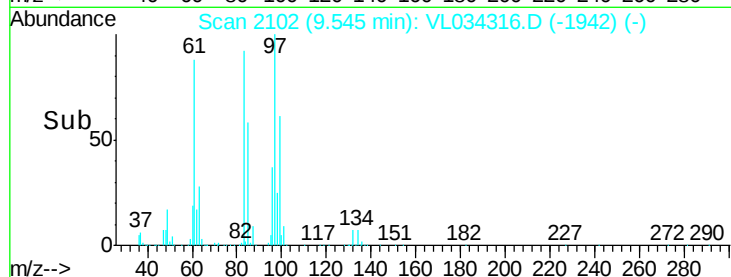
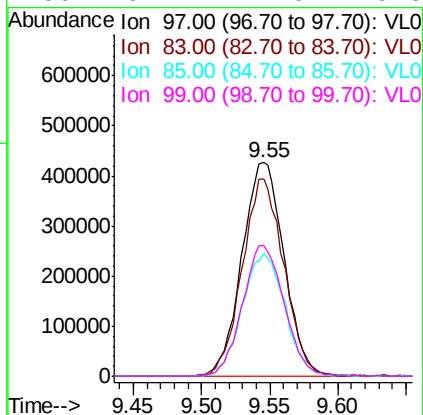
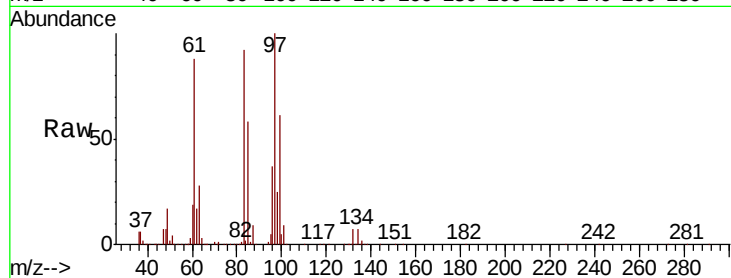
#47  
 1,1,2-Trichloroethane  
 Concen: 10.109 ppbv  
 RT: 9.55 min Scan# 2102  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 92.3  | 74.2  | 111.2 |
| 85      | 57.6  | 48.6  | 73.0  |
| 99      | 61.4  | 47.0  | 70.6  |

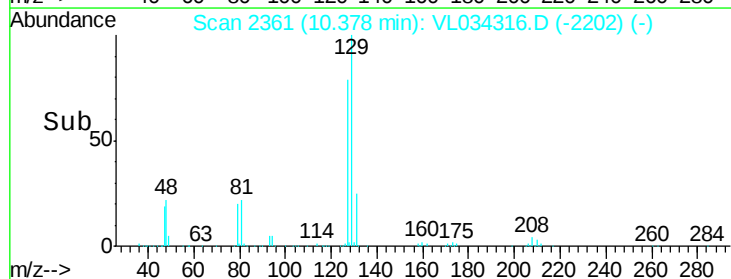
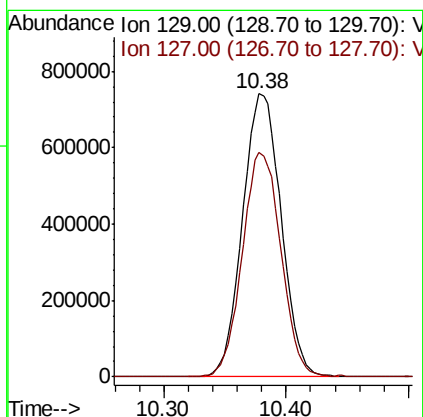
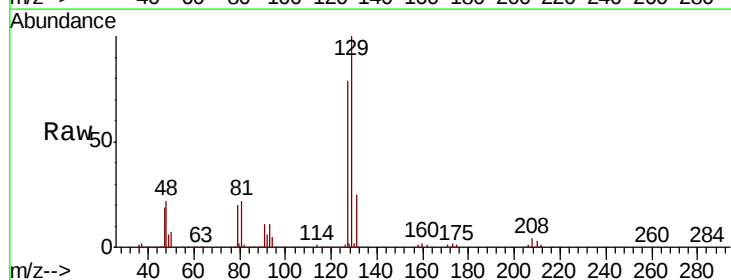
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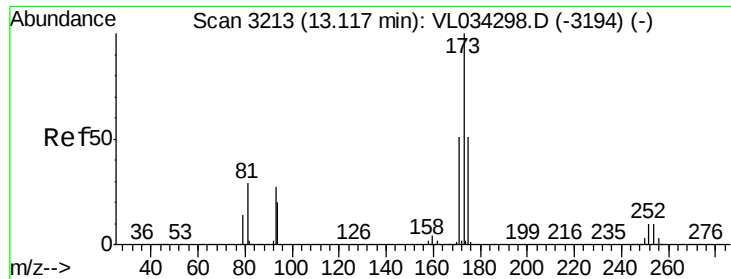
MMDadoda  
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#48  
 Dibromochloromethane  
 Concen: 10.916 ppbv  
 RT: 10.38 min Scan# 2361  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 79.2  | 39.7  | 119.1 |





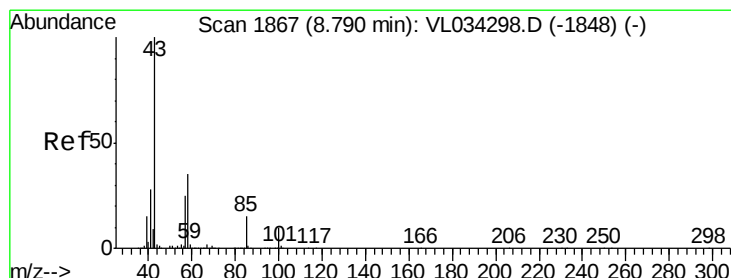
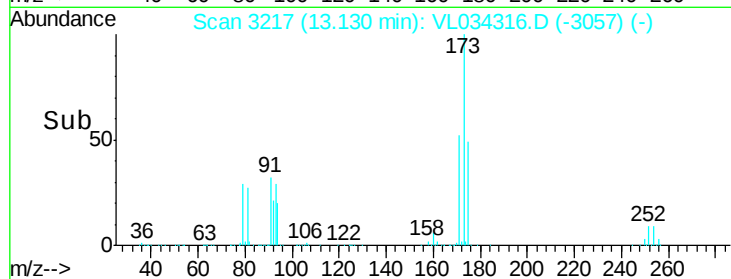
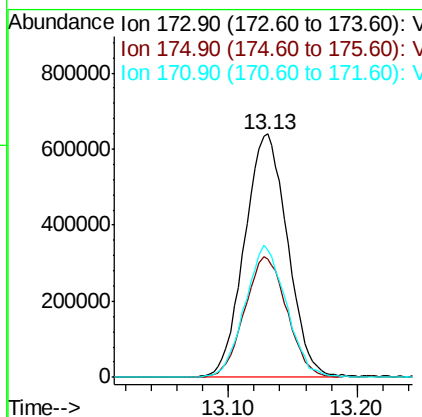
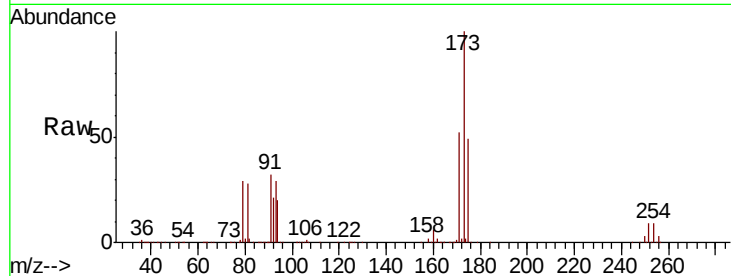
#49  
Bromoform  
Concen: 11.294 ppbv  
RT: 13.13 min Scan# 3217  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion:173 Resp: 1483146  
Ion Ratio Lower Upper  
173 100  
175 49.2 39.8 59.6  
171 52.1 41.8 62.6

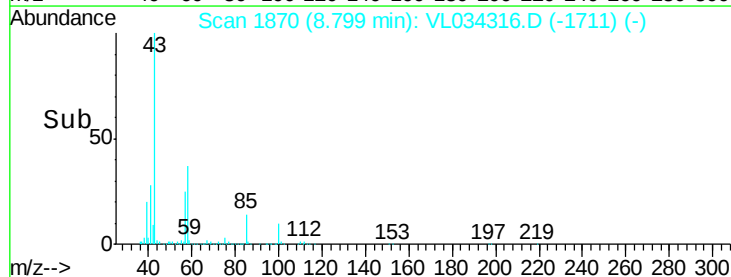
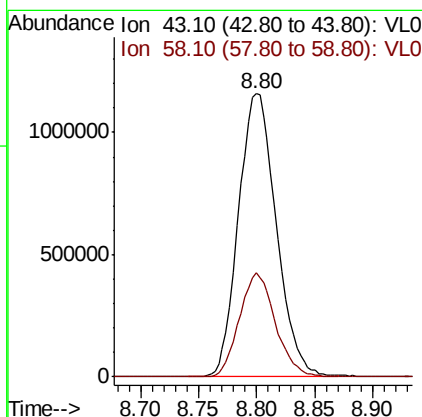
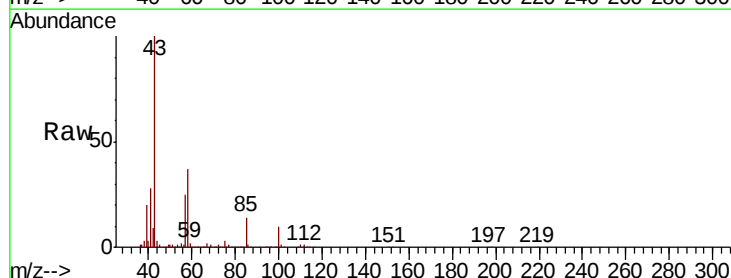
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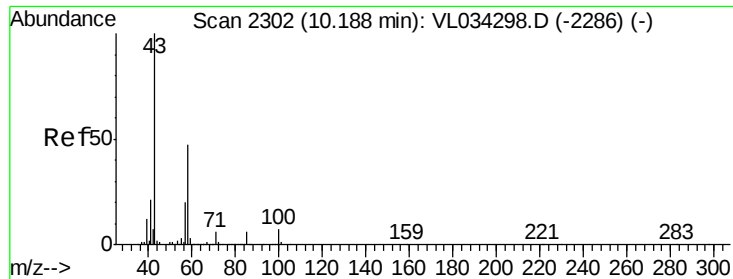
MMDadoda  
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#50  
4-Methyl-2-Pentanone  
Concen: 10.422 ppbv  
RT: 8.80 min Scan# 1870  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 43 Resp: 2632664  
Ion Ratio Lower Upper  
43 100  
58 35.0 27.6 41.4





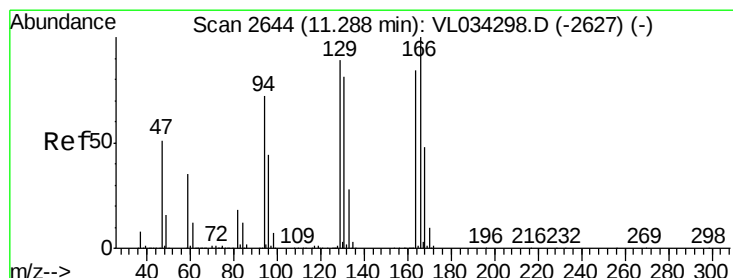
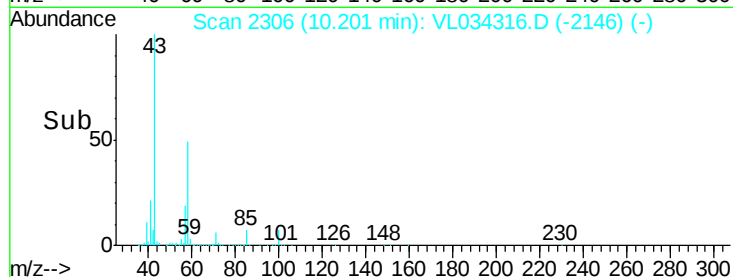
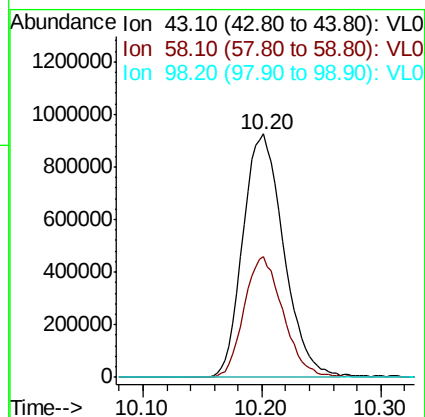
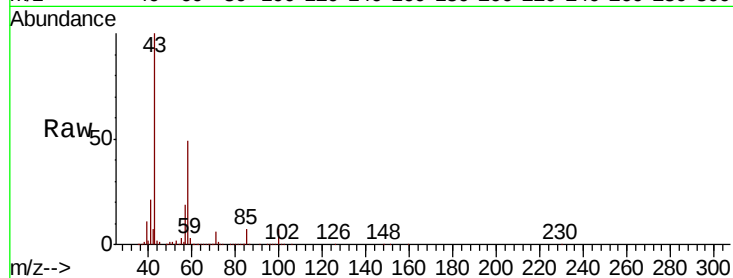
#51  
2-Hexanone  
Concen: 10.620 ppbv  
RT: 10.20 min Scan# 2306  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 43 Resp: 2199187  
Ion Ratio Lower Upper  
43 100  
58 47.5 37.0 55.6  
98 0.2 0.2 0.2#

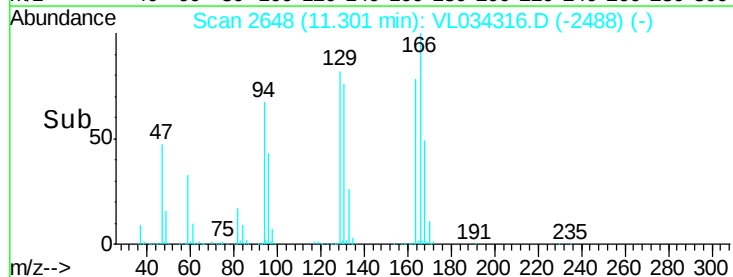
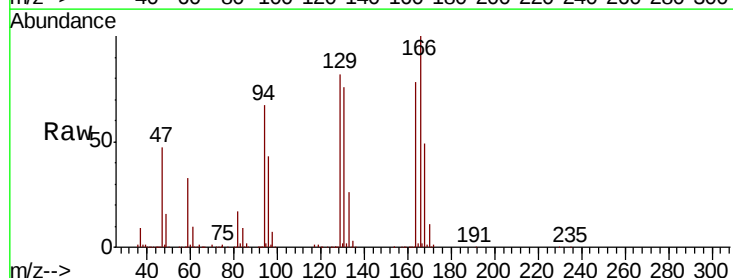
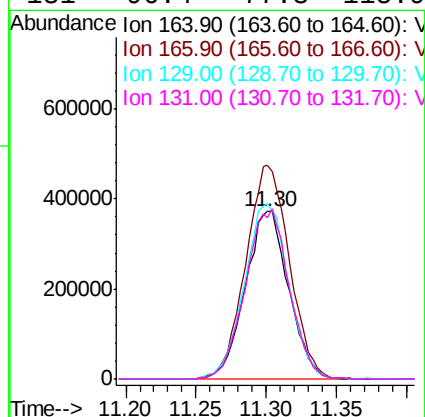
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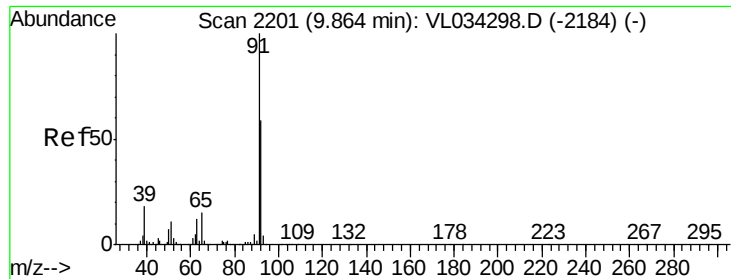
MMDadoda  
10/22/2019 2:54:25 PM



#52  
Tetrachloroethene  
Concen: 9.807 ppbv  
RT: 11.30 min Scan# 2648  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 164 Resp: 796187  
Ion Ratio Lower Upper  
164 100  
166 127.4 95.3 142.9  
129 105.1 84.5 126.7  
131 96.4 77.3 115.9





#53

Toluene

Concen: 10.687 ppbv

RT: 9.87 min Scan# 2204

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 91 Resp: 2442779

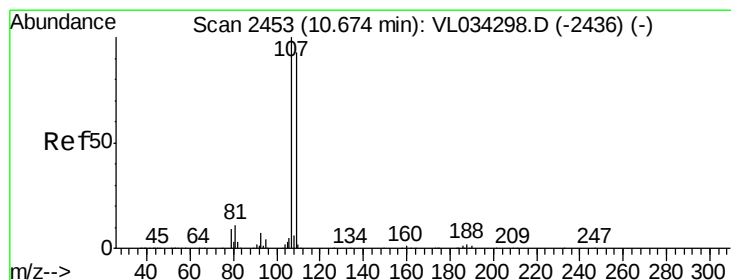
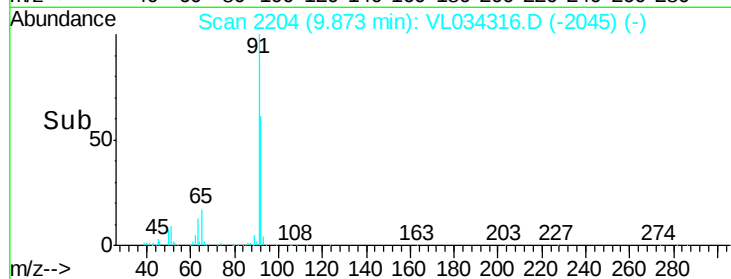
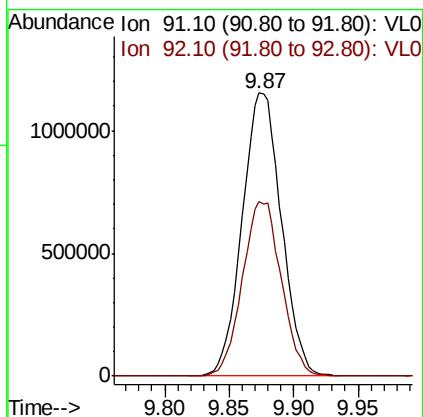
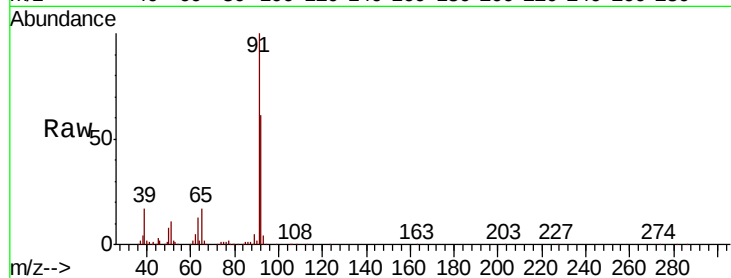
Ion Ratio Lower Upper

91 100

92 61.3 48.4 72.6

Manual Integrations  
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#54

1,2-Dibromoethane

Concen: 10.182 ppbv

RT: 10.69 min Scan# 2457

Delta R.T. 0.01 min

Lab File: VL034316.D

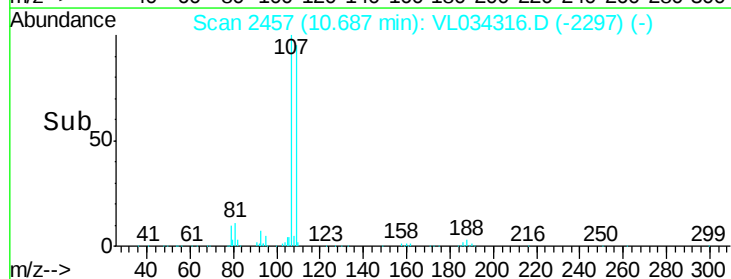
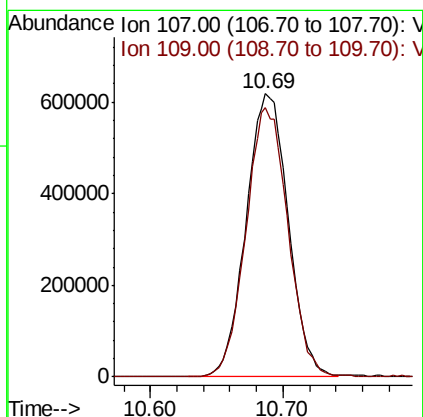
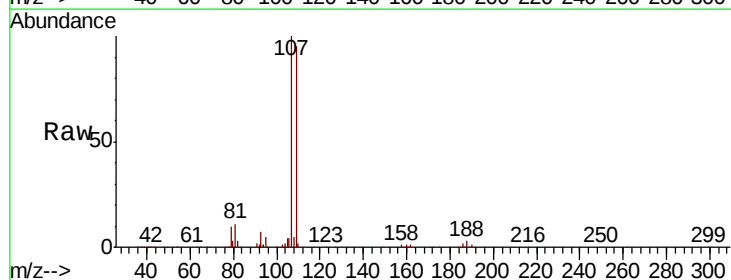
Acq: 17 Oct 2019 13:04

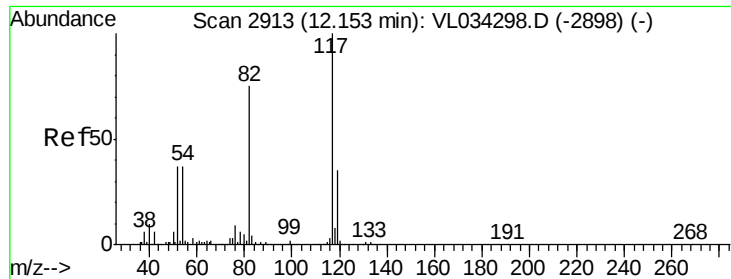
Tgt Ion: 107 Resp: 1363351

Ion Ratio Lower Upper

107 100

109 95.3 74.6 112.0





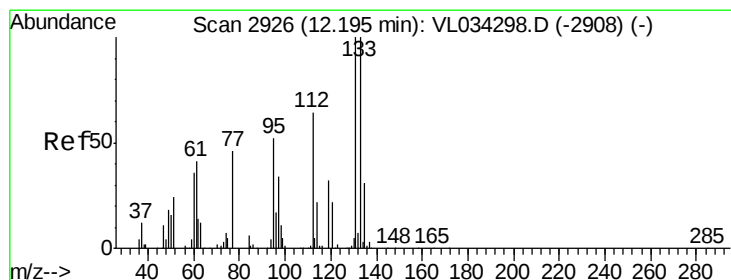
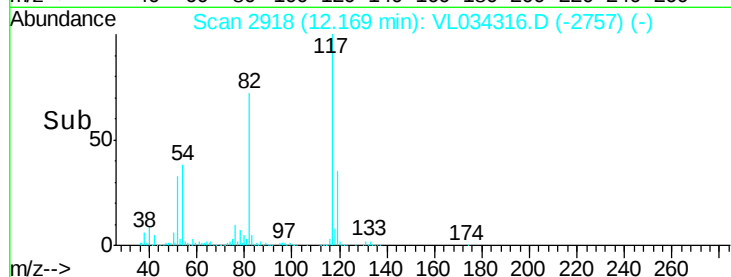
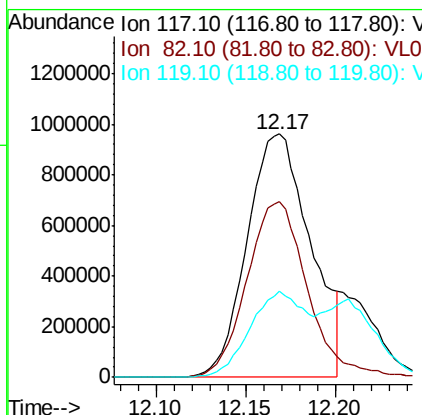
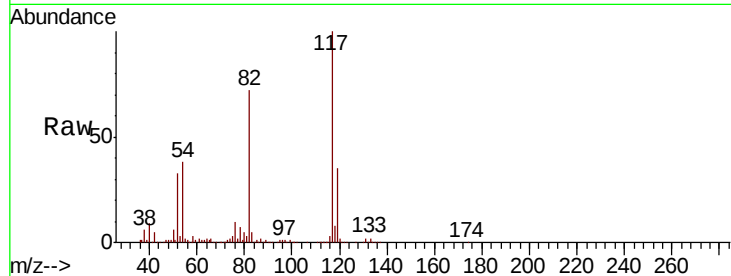
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv m  
RT: 12.17 min Scan# 2918  
Delta R.T. 0.02 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion:117 Resp: 2375410  
Ion Ratio Lower Upper  
117 100  
82 68.8 55.5 83.3  
119 31.3 26.5 39.7

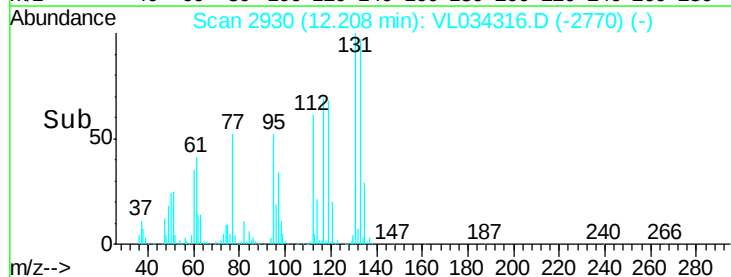
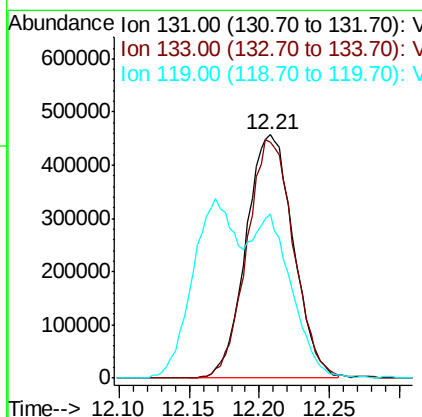
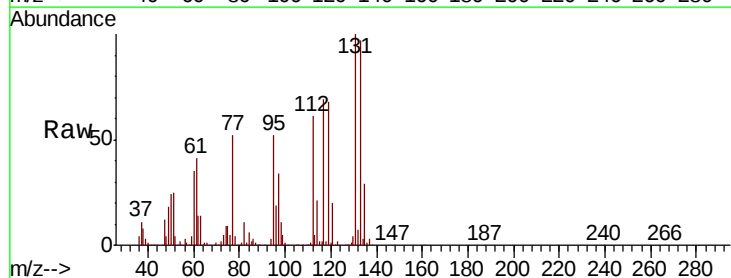
Manual Integrations  
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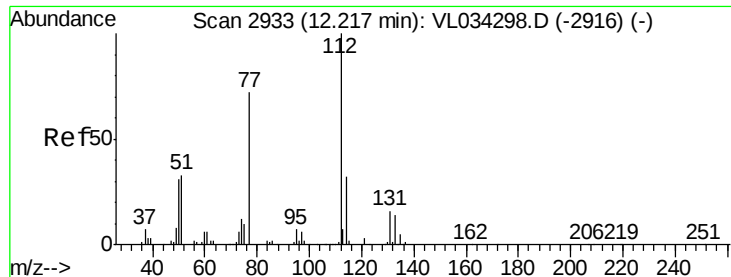
MMDadoda  
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#56  
1,1,1,2-Tetrachloroethane  
Concen: 9.803 ppbv  
RT: 12.21 min Scan# 2930  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion:131 Resp: 1073141  
Ion Ratio Lower Upper  
131 100  
133 97.0 77.1 115.7  
119 128.4 49.0 73.4#





#57

Chlorobenzene

Concen: 9.375 ppbv

RT: 12.23 min Scan# 2936

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:112 Resp: 1857893

Ion Ratio Lower Upper

112 100

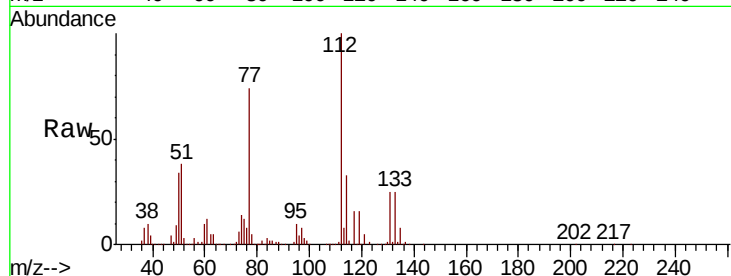
77 73.9 58.6 88.0

114 32.9 28.6 35.0

Manual Integrations  
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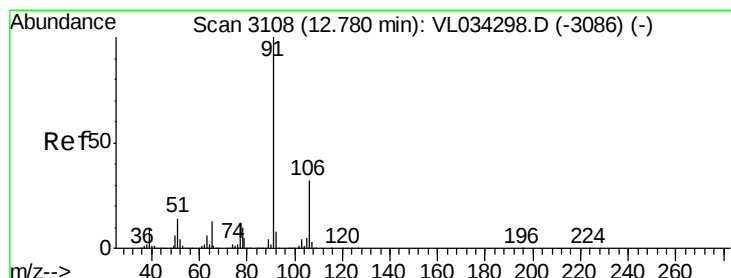
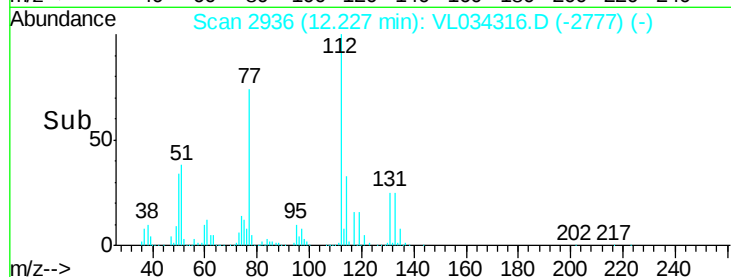
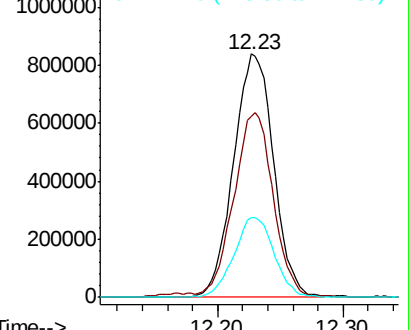
10/22/2019 2:54:25 PM



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: 10.197 ppbv

RT: 12.79 min Scan# 3111

Delta R.T. 0.01 min

Lab File: VL034316.D

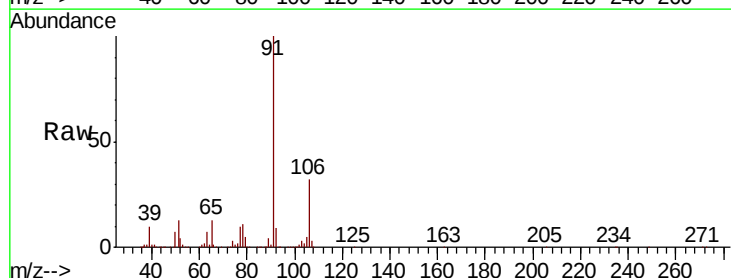
Acq: 17 Oct 2019 13:04

Tgt Ion: 91 Resp: 3385935

Ion Ratio Lower Upper

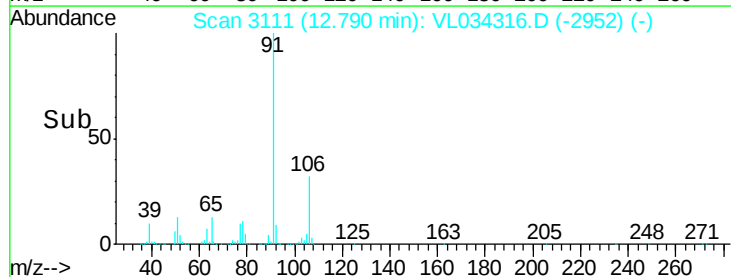
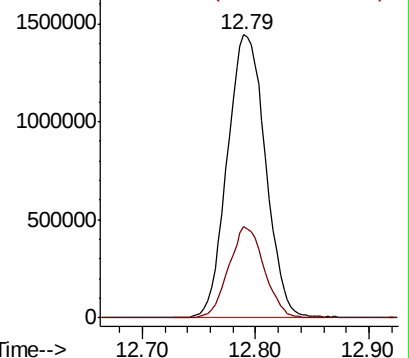
91 100

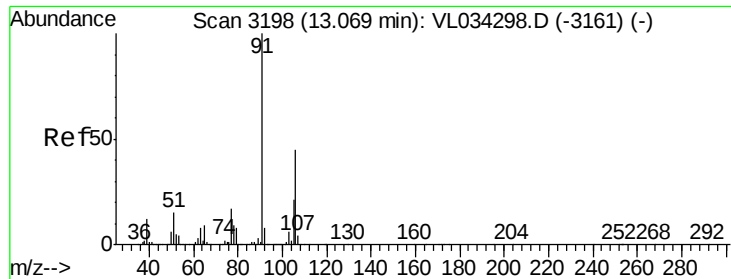
106 32.3 25.3 37.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





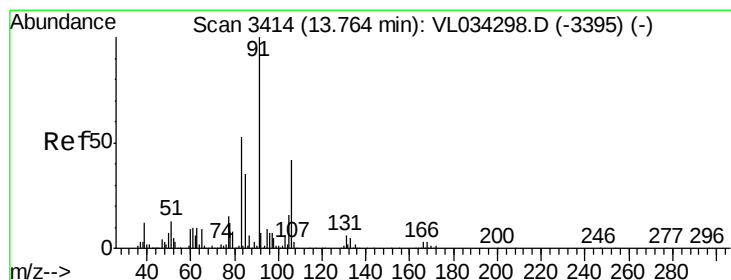
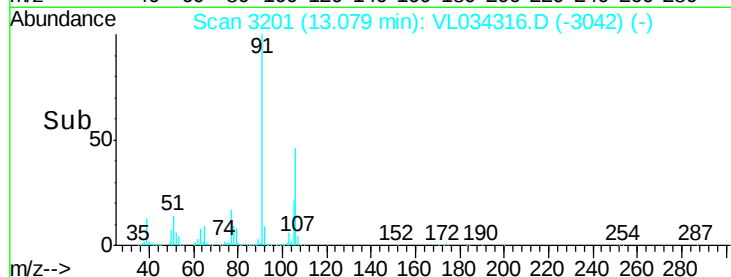
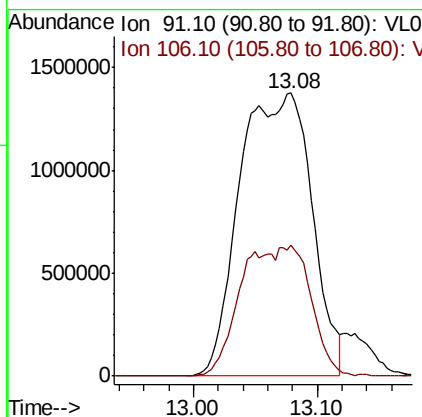
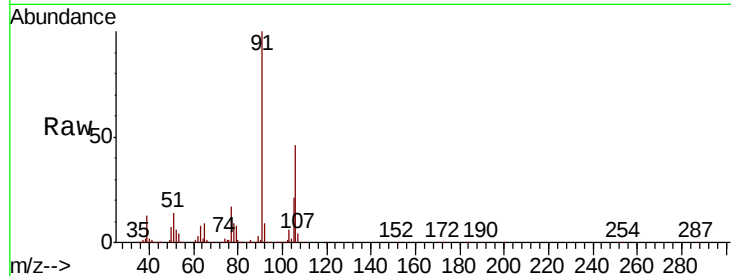
#59  
m/p-Xylene  
Concen: 19.298 ppbv m  
RT: 13.08 min Scan# 3201  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

Tot Ion: 91 Resp: 5552095  
Ion Ratio Lower Upper  
91 100  
106 44.9 35.4 53.2

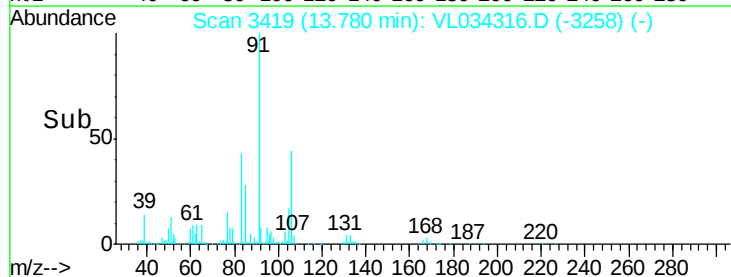
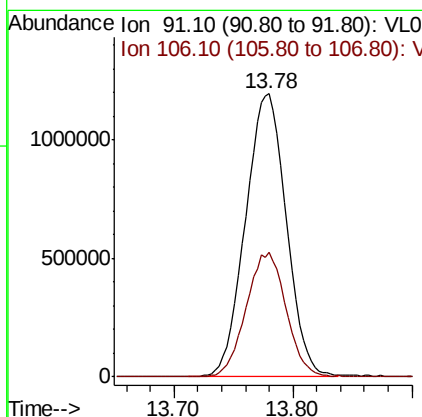
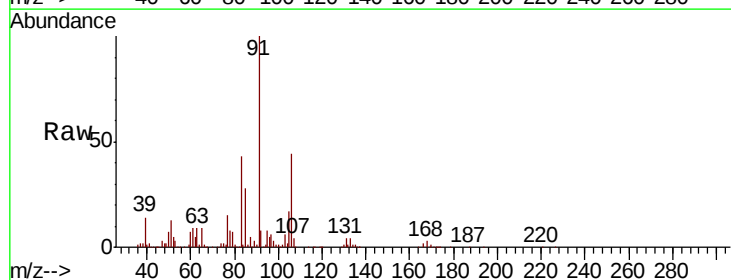
Manual Integrations  
APPROVED

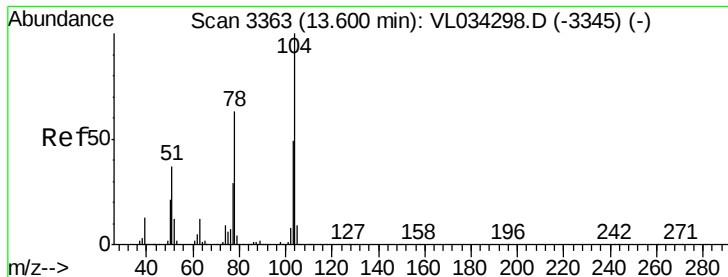
MMDadoda  
10/22/2019 2:54:25 PM



#60  
o-Xylene  
Concen: 9.908 ppbv  
RT: 13.78 min Scan# 3419  
Delta R.T. 0.02 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Tgt Ion: 91 Resp: 2838412  
Ion Ratio Lower Upper  
91 100  
106 43.2 21.6 64.6





#61

Stvrene

Concen: 10.508 ppbv

RT: 13.61 min Scan# 3367

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:104 Resp: 2119340

Ion Ratio Lower Upper

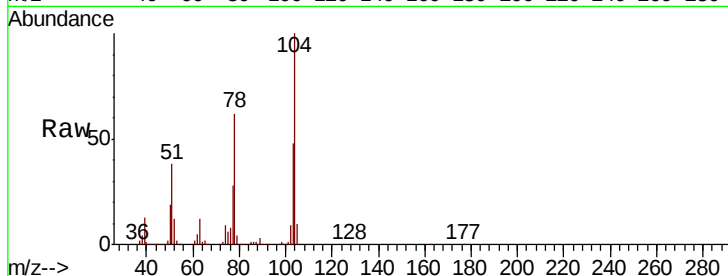
104 100

78 60.2 47.8 71.8

103 48.4 39.0 58.6

Manual Integrations  
APPROVED

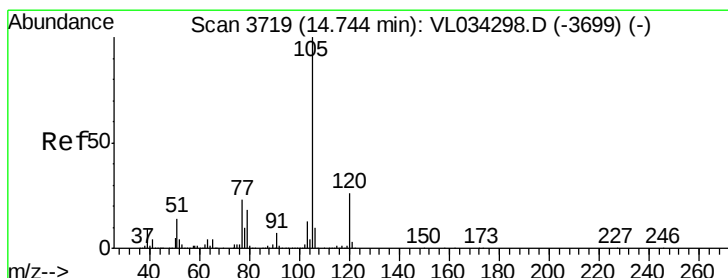
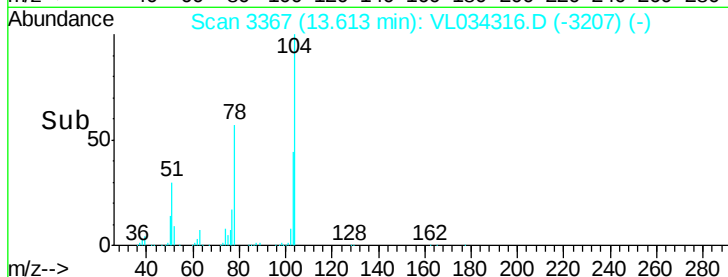
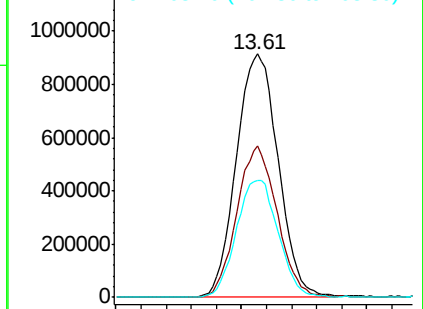
MMDadoda  
10/22/2019 2:54:25 PM



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: 9.662 ppbv

RT: 14.75 min Scan# 3722

Delta R.T. 0.01 min

Lab File: VL034316.D

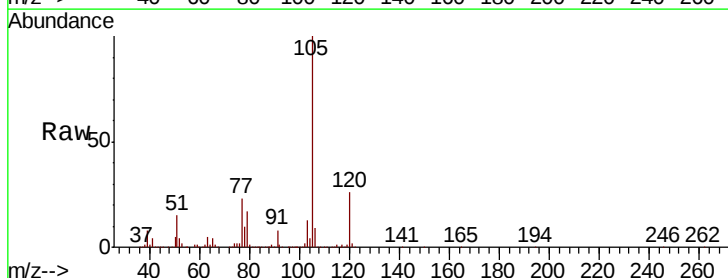
Acq: 17 Oct 2019 13:04

Tgt Ion:105 Resp: 3653830

Ion Ratio Lower Upper

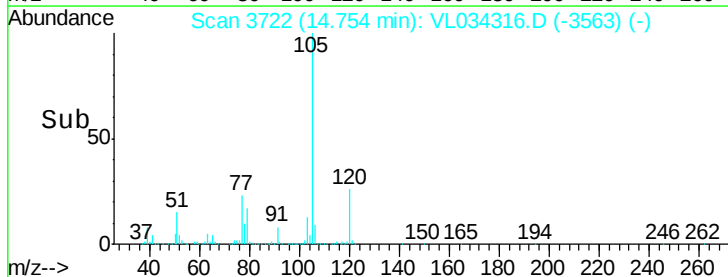
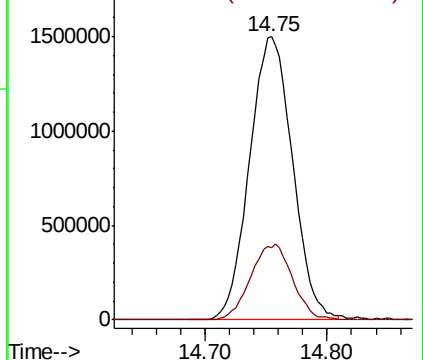
105 100

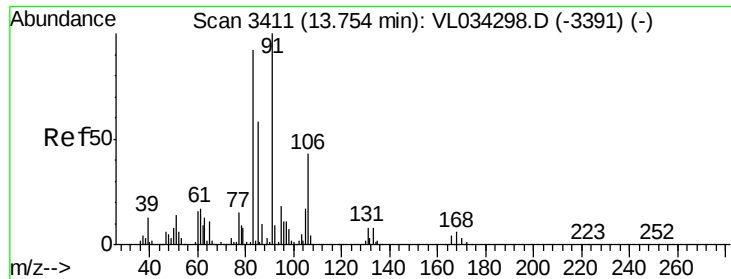
120 26.3 20.8 31.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





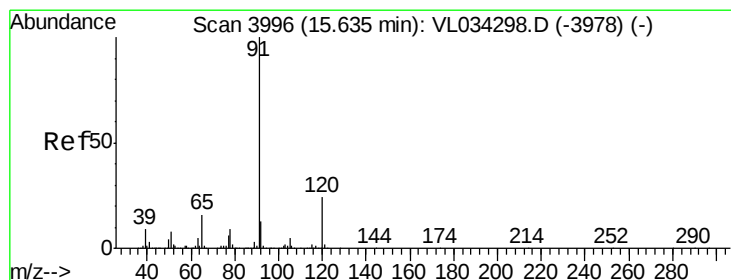
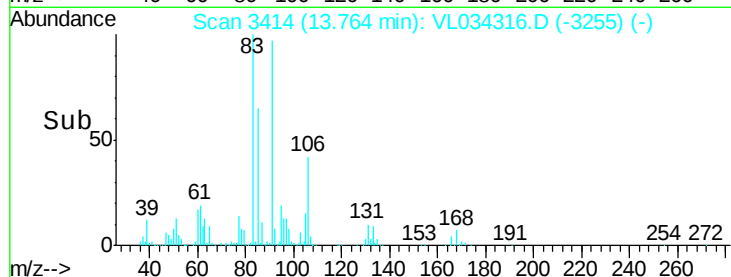
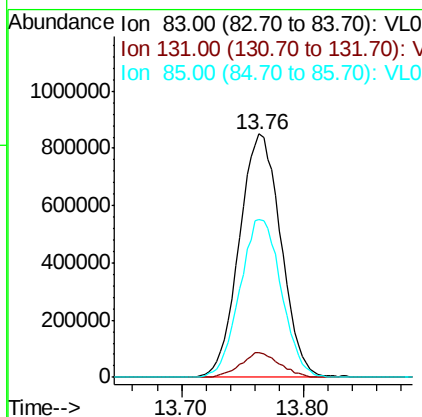
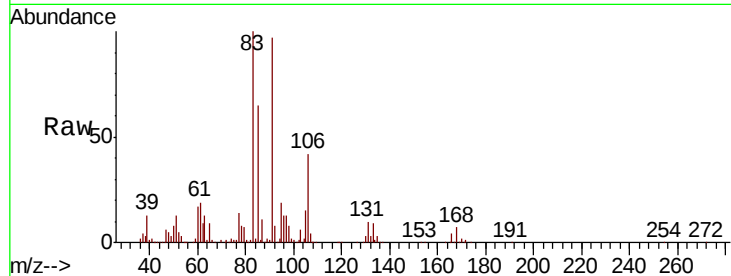
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.705 ppbv  
 RT: 13.76 min Scan# 3414  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 131     | 9.6   | 4.8   | 14.4  |
| 85      | 65.1  | 32.5  | 97.4  |

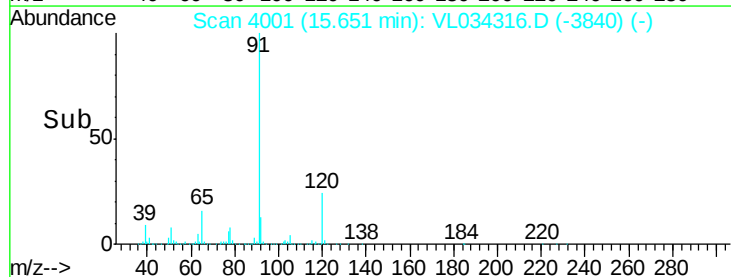
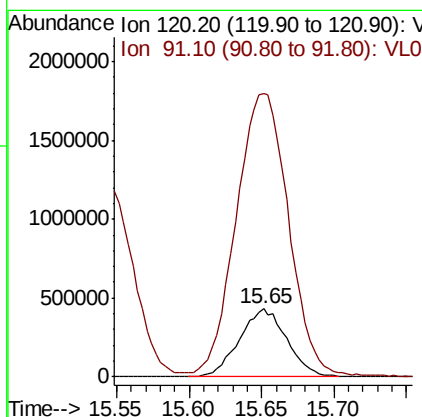
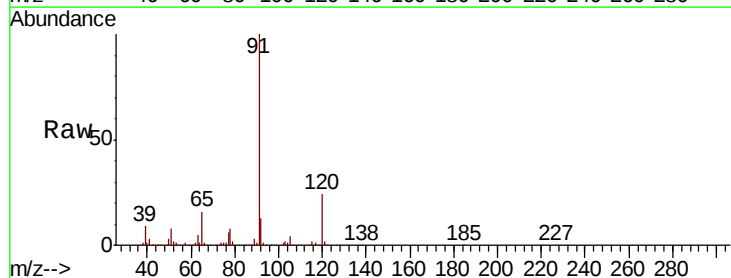
Manual Integrations  
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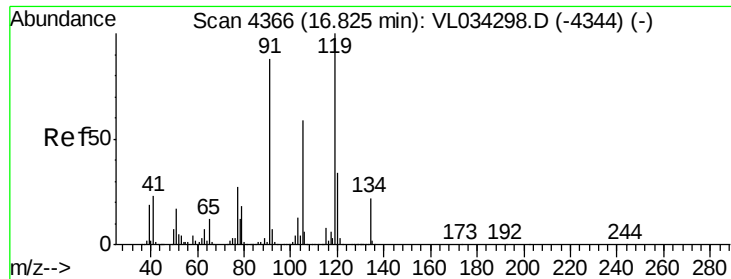
MMDadoda  
 10/22/2019 2:54:25 PM



#64  
 n-propylbenzene  
 Concen: 10.003 ppbv  
 RT: 15.65 min Scan# 4001  
 Delta R.T. 0.02 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 120     | 100   |       |       |
| 91      | 469.6 | 374.9 | 562.3 |





#65

tert-Butylbenzene

Concen: 9.746 ppbv m

RT: 16.84 min Scan# 4371

Delta R.T. 0.02 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:119 Resp: 3266881

Ion Ratio Lower Upper

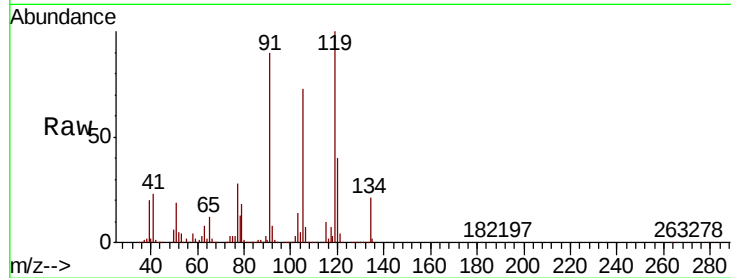
119 100

91 90.3 71.4 107.0

134 20.2 15.9 23.9

Manual Integrations  
APPROVED

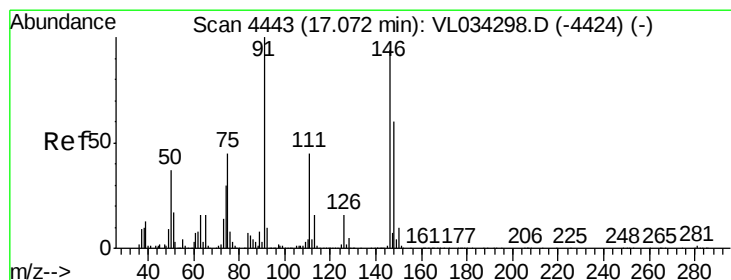
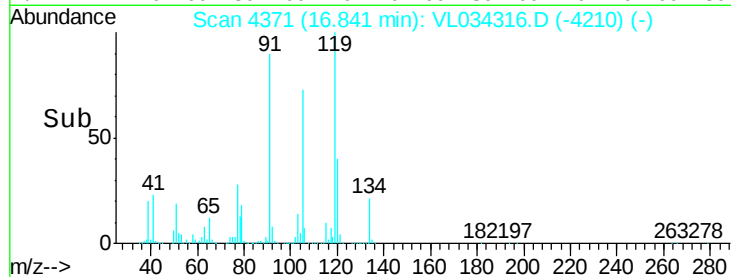
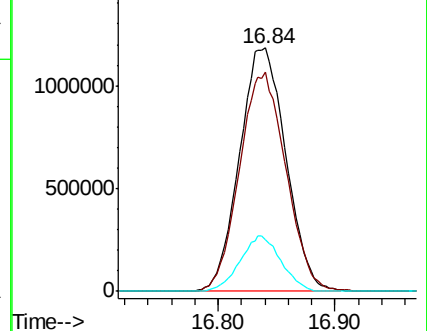
MMDadoda  
10/22/2019 2:54:25 PM



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: 12.389 ppbv

RT: 17.09 min Scan# 4447

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

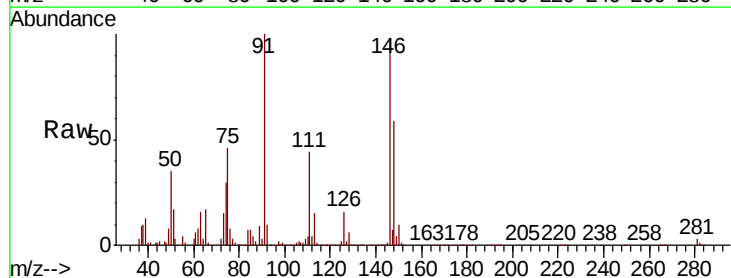
Tgt Ion: 91 Resp: 1640033

Ion Ratio Lower Upper

91 100

126 16.2 12.9 19.3

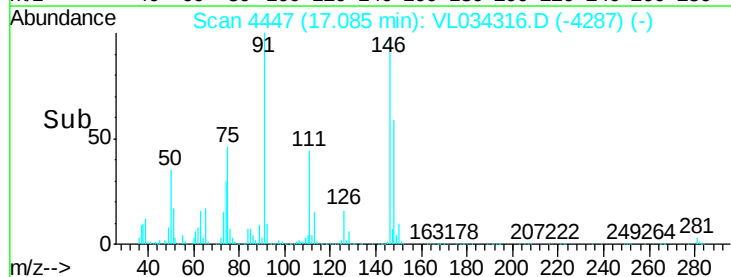
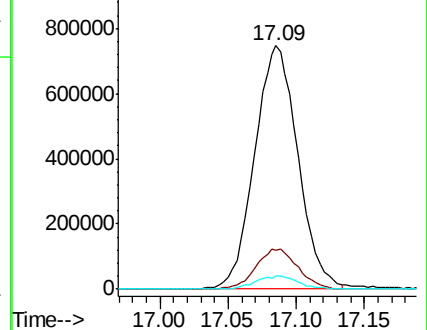
128 5.3 4.3 6.5

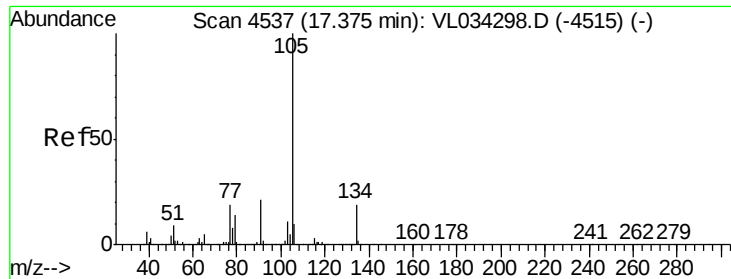


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 9.660 ppbv

RT: 17.39 min Scan# 4541

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 105 Resp: 4556649

Ion Ratio Lower Upper

105 100

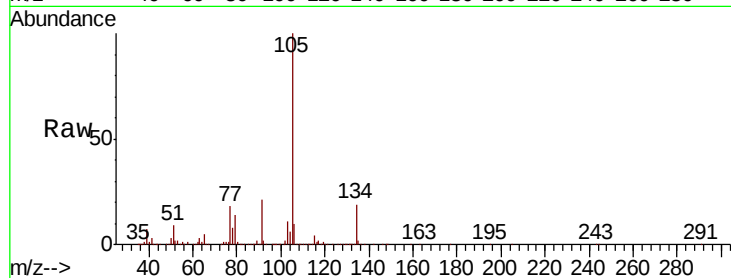
134 19.3 15.4 23.0

Manual Integrations

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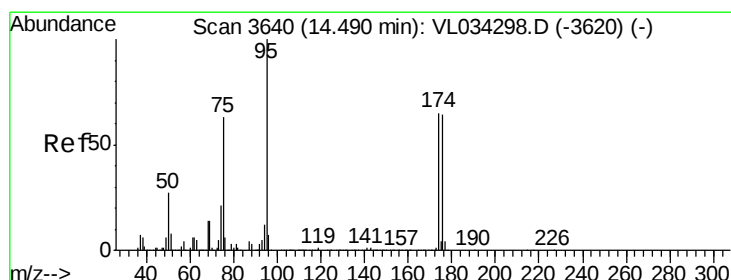
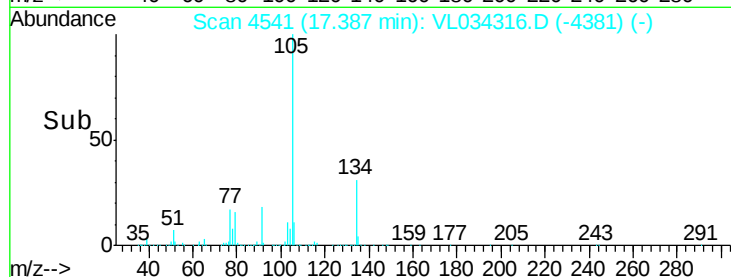
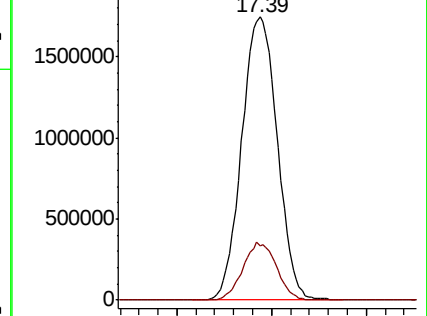
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.554 ppbv

RT: 14.50 min Scan# 3644

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

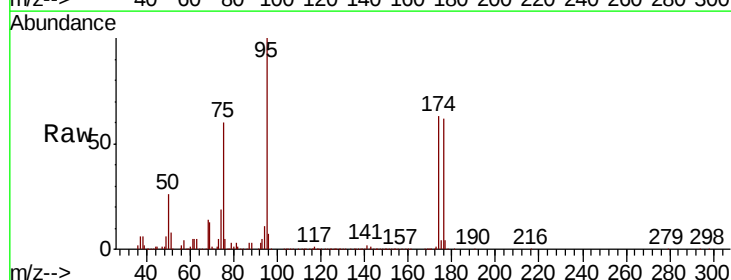
Tgt Ion: 95 Resp: 1922000

Ion Ratio Lower Upper

95 100

174 65.9 52.6 78.8

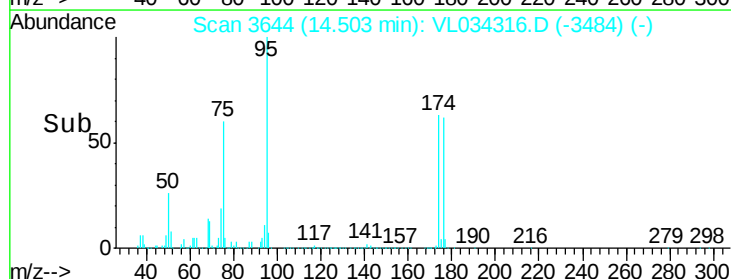
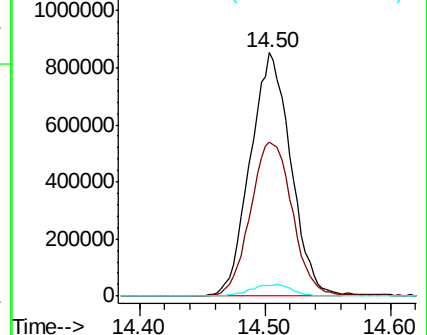
175 4.9 3.8 5.6

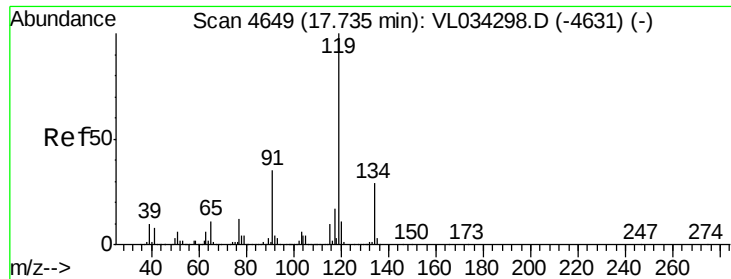


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





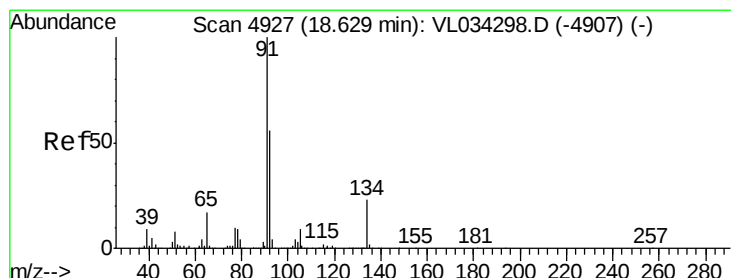
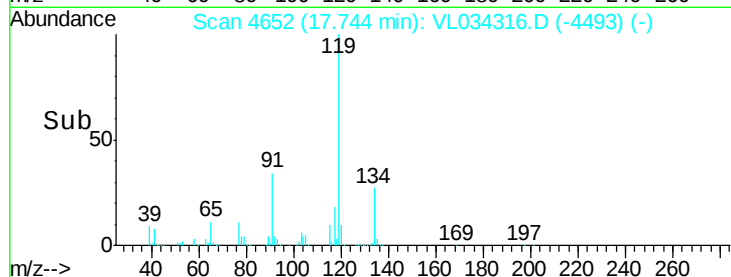
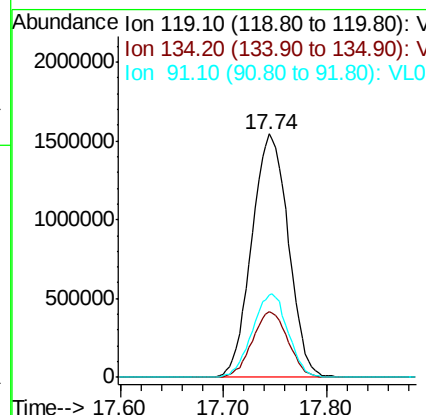
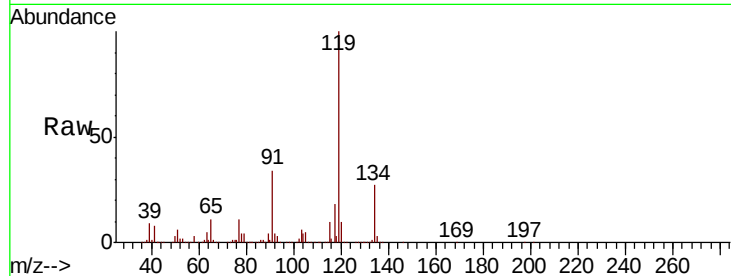
#69  
 p-Isopropyltoluene  
 Concen: 9.905 ppbv  
 RT: 17.74 min Scan# 4652  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 26.2  | 21.3  | 31.9  |
| 91      | 33.4  | 26.6  | 39.8  |

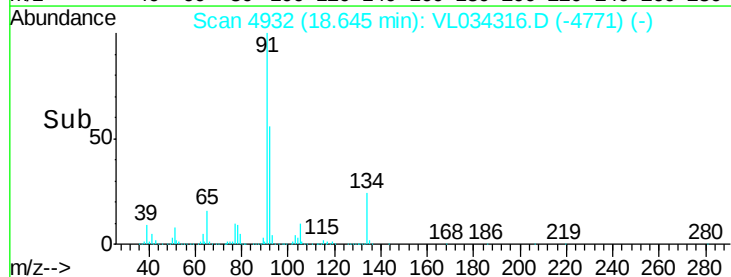
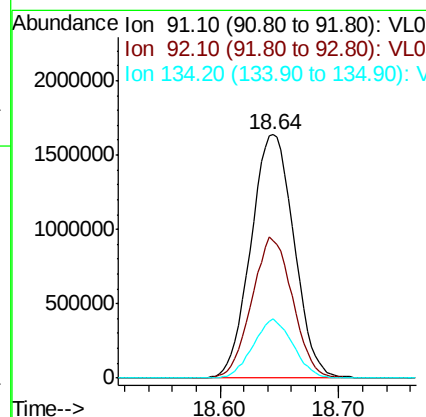
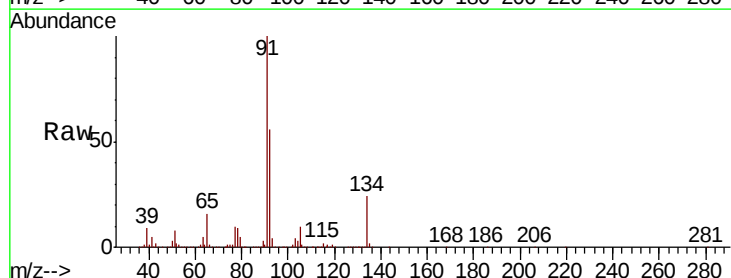
Manual Integrations  
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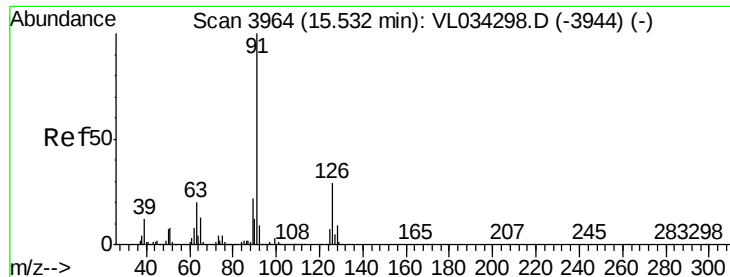
MMDadoda  
 10/22/2019 2:54:25 PM



#70  
 n-Butylbenzene  
 Concen: 9.813 ppbv  
 RT: 18.64 min Scan# 4932  
 Delta R.T. 0.02 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 54.9  | 44.5  | 66.7  |
| 134     | 22.6  | 18.2  | 27.2  |





#71

2-Chlorotoluene

Concen: 9.910 ppbv

RT: 15.54 min Scan# 3967

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion: 91 Resp: 2905889

Ion Ratio Lower Upper

91 100

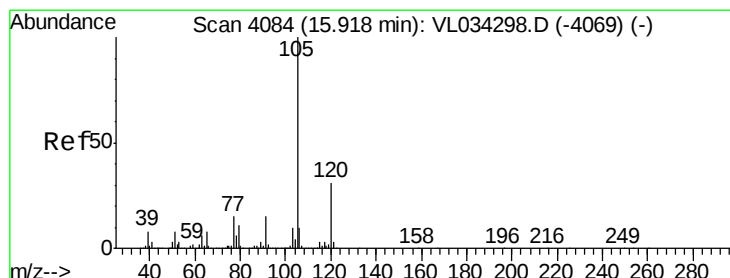
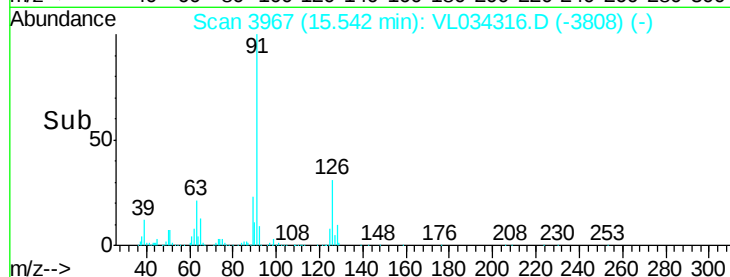
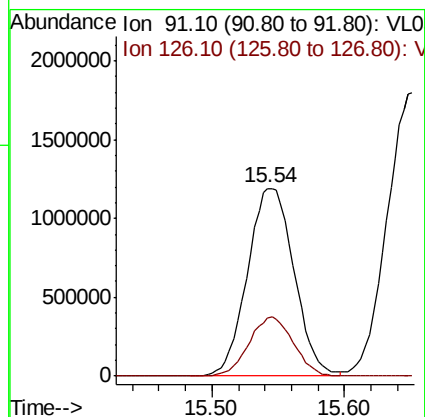
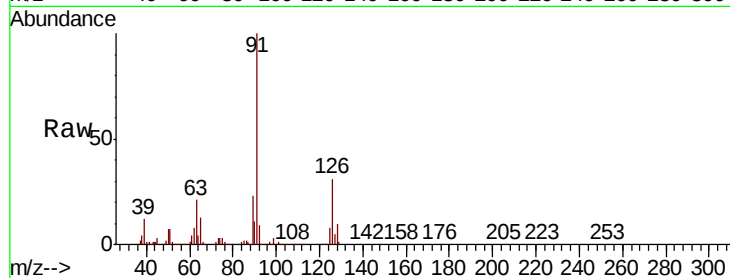
126 30.3 11.9 47.5

Manual Integrations

APPROVED

MMDadoda

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#72

4-Ethyltoluene

Concen: 10.149 ppbv

RT: 15.93 min Scan# 4087

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Tgt Ion: 105 Resp: 3268421

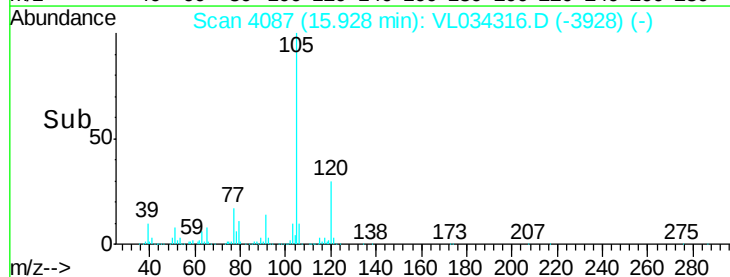
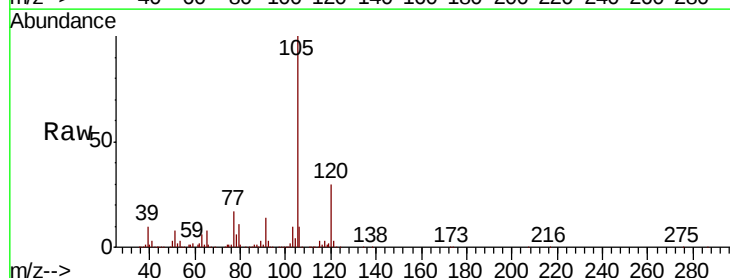
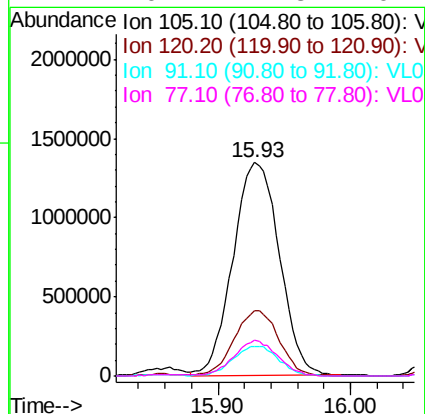
Ion Ratio Lower Upper

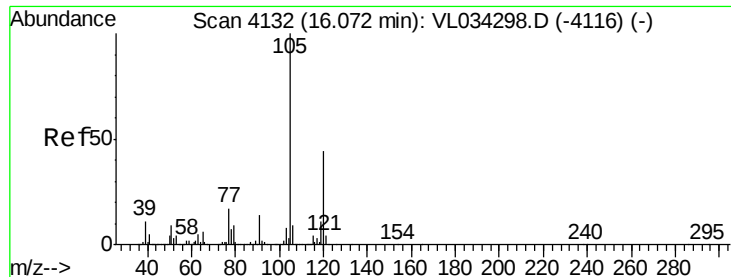
105 100

120 29.8 23.8 35.8

91 13.9 11.2 16.8

77 16.4 12.8 19.2





#73

1,3,5-Trimethylbenzene

Concen: 9.914 ppbv

RT: 16.09 min Scan# 4137

Delta R.T. 0.02 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:105 Resp: 3163211

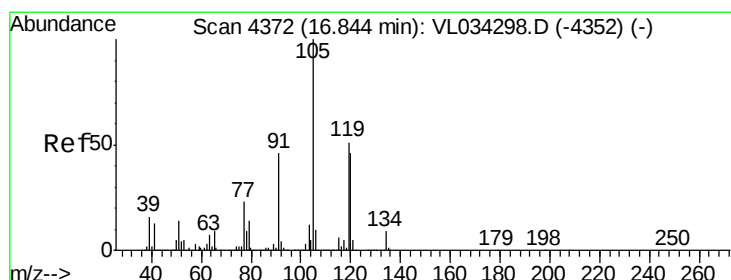
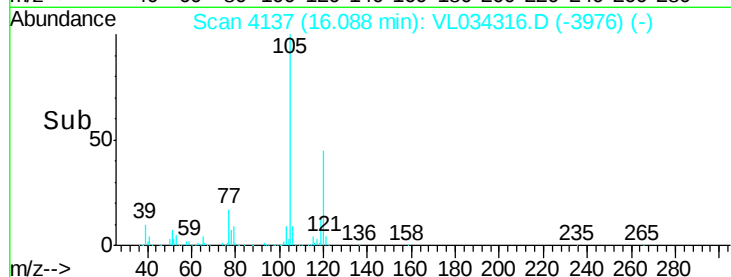
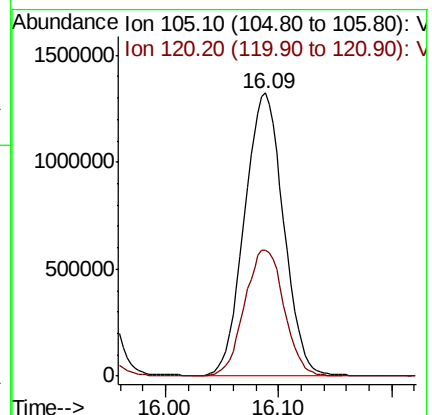
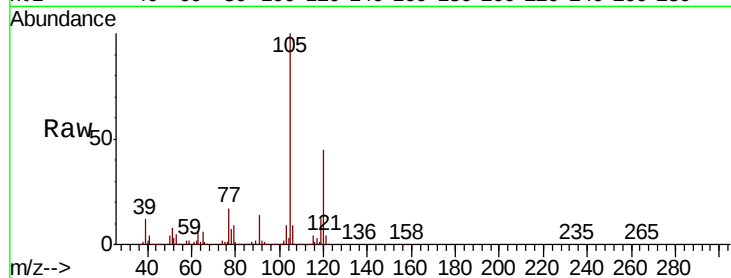
Ion Ratio Lower Upper

105 100

120 44.6 35.2 52.8

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#74

1,2,4-Trimethylbenzene

Concen: 9.730 ppbv

RT: 16.86 min Scan# 4376

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Tgt Ion:105 Resp: 3237707

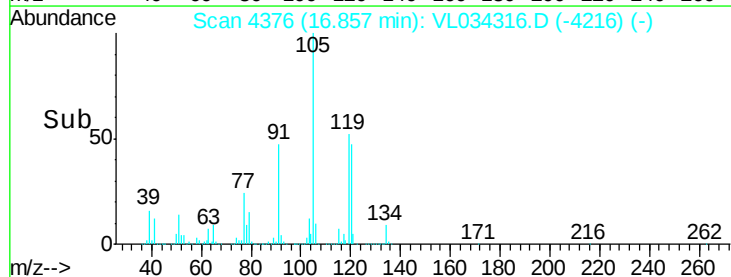
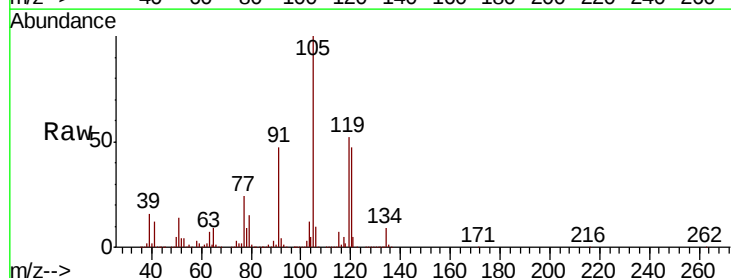
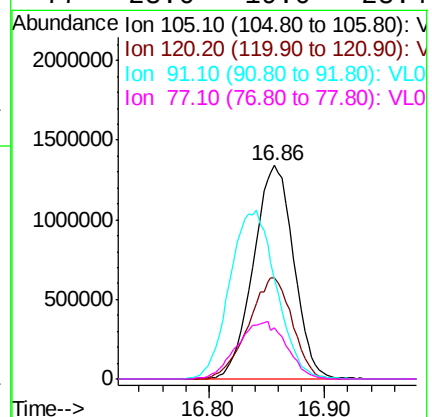
Ion Ratio Lower Upper

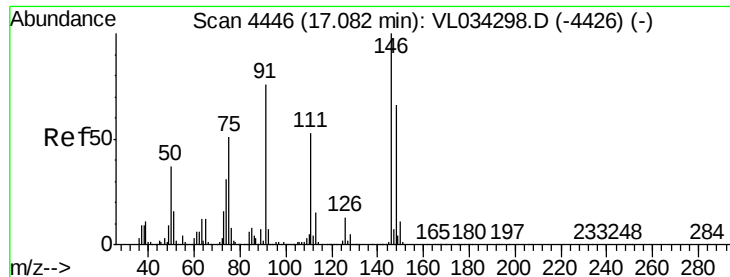
105 100

120 47.3 37.0 55.6

91 46.6 38.2 57.2

77 23.6 19.0 28.4





#75

1,3-Dichlorobenzene

Concen: 9.493 ppbv

RT: 17.09 min Scan# 4449

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

Instrument :

MSVOA\_L

ClientSampleId :

VSTDCCC010

Tot Ion:146 Resp: 1896579

Ion Ratio Lower Upper

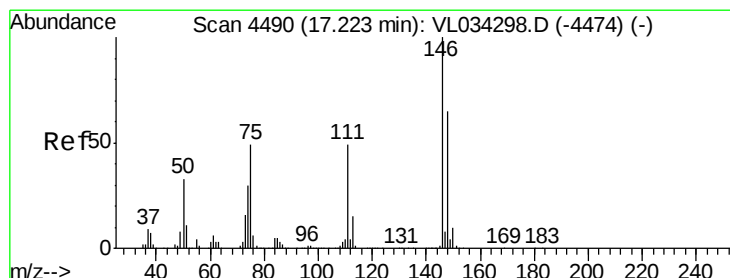
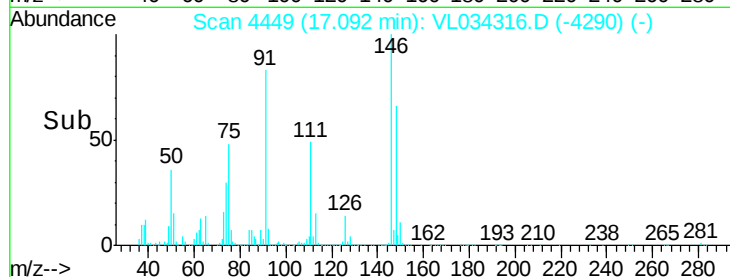
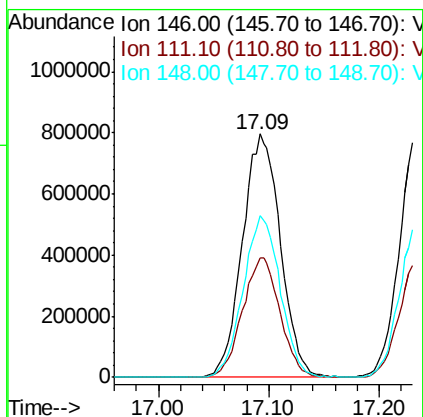
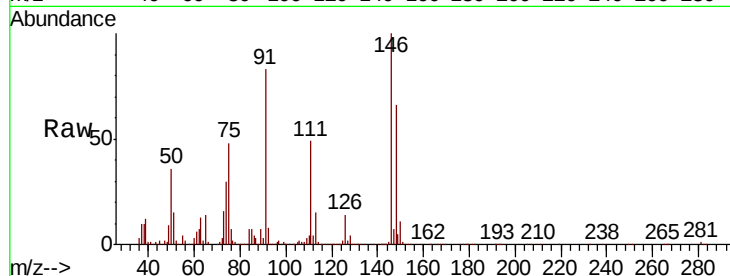
146 100

111 48.6 24.5 73.5

148 64.9 32.3 96.8

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#76

1,4-Dichlorobenzene

Concen: 9.732 ppbv

RT: 17.24 min Scan# 4494

Delta R.T. 0.01 min

Lab File: VL034316.D

Acq: 17 Oct 2019 13:04

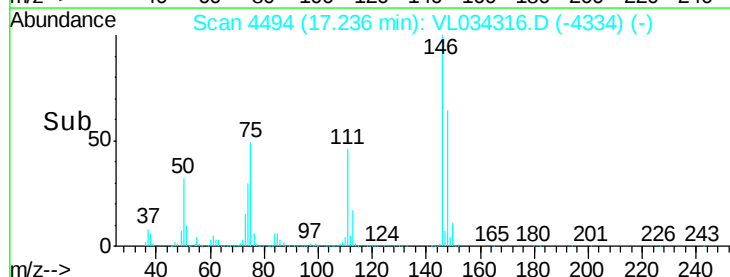
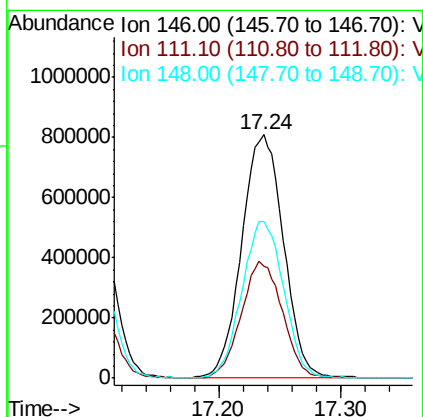
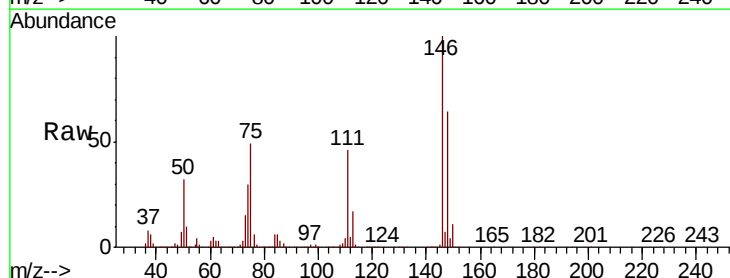
Tgt Ion:146 Resp: 1899143

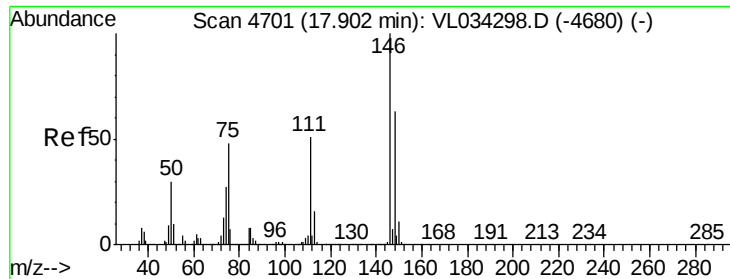
Ion Ratio Lower Upper

146 100

111 47.8 23.9 71.7

148 65.1 33.1 99.2





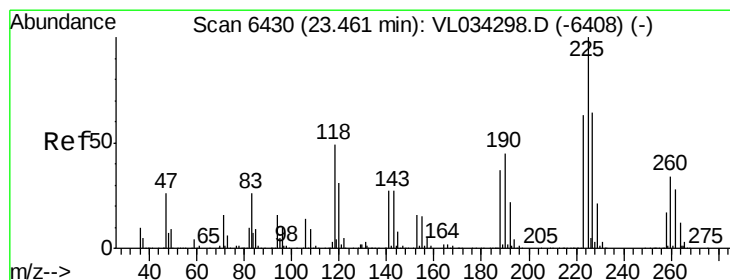
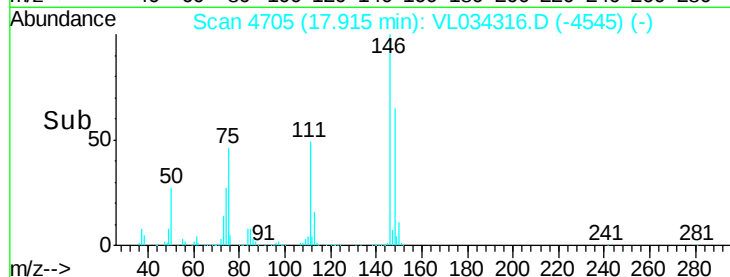
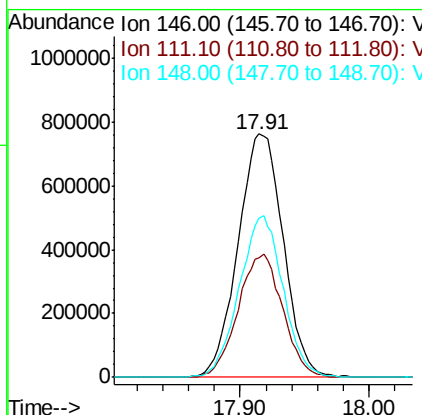
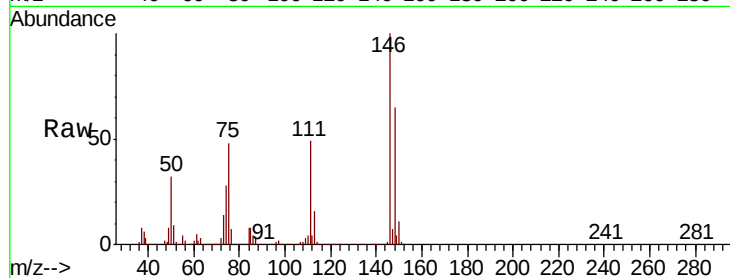
#77  
 1,2-Dichlorobenzene  
 Concen: 9.449 ppbv  
 RT: 17.91 min Scan# 4705  
 Delta R.T. 0.01 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Tot Ion:146 Resp: 1850802  
 Ion Ratio Lower Upper  
 146 100  
 111 50.3 25.1 75.3  
 148 64.9 32.3 96.8

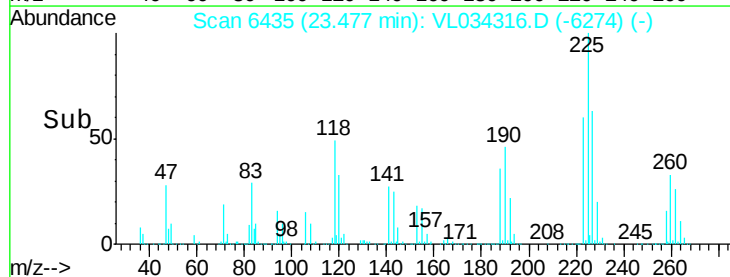
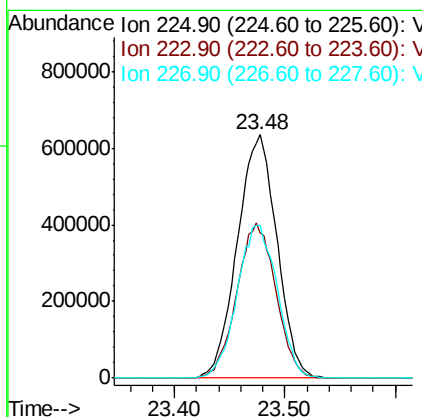
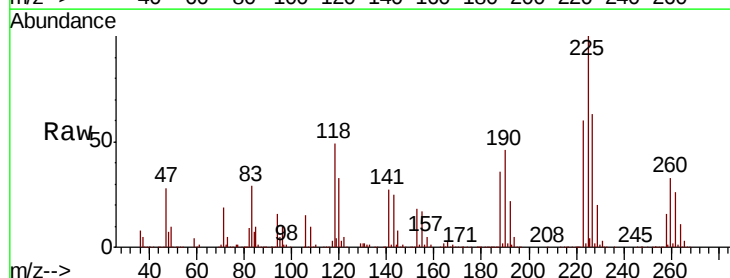
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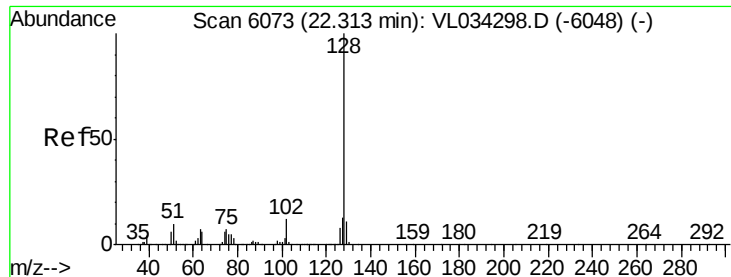
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 9.773 ppbv  
 RT: 23.48 min Scan# 6435  
 Delta R.T. 0.02 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Tgt Ion:225 Resp: 1583361  
 Ion Ratio Lower Upper  
 225 100  
 223 62.8 50.8 76.2  
 227 63.6 51.5 77.3





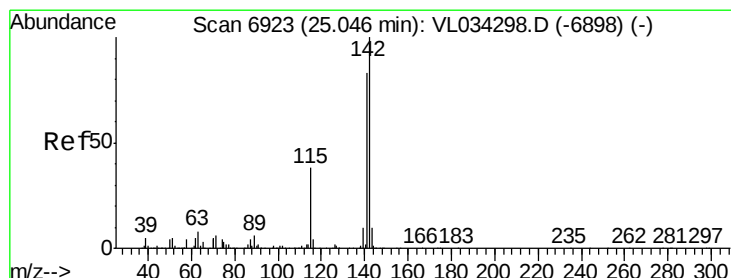
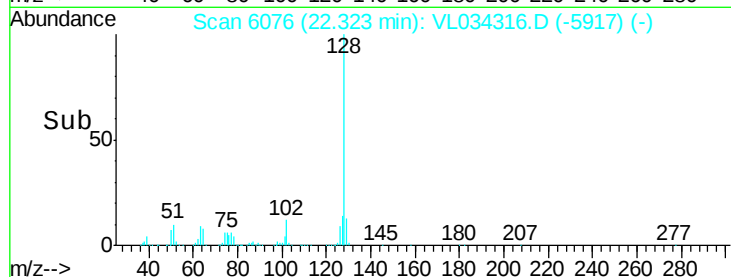
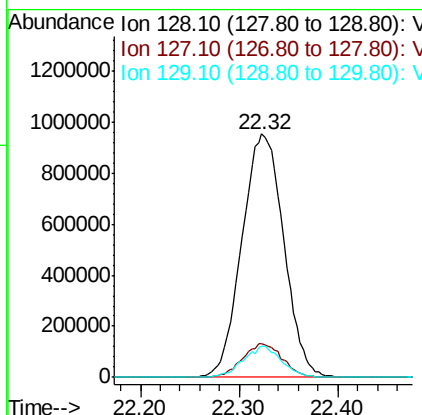
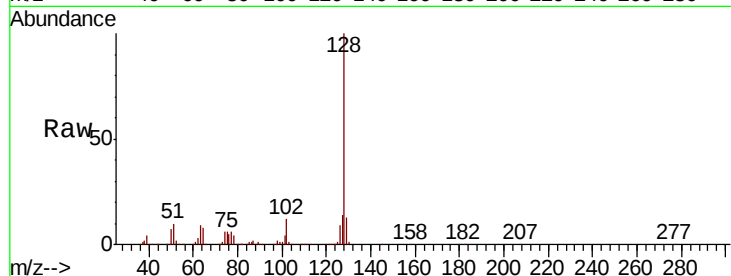
#79  
Naphthalene  
Concen: 11.515 ppbv  
RT: 22.32 min Scan# 6076  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.9  | 10.2  | 15.4  |
| 129     | 12.6  | 8.9   | 13.3  |

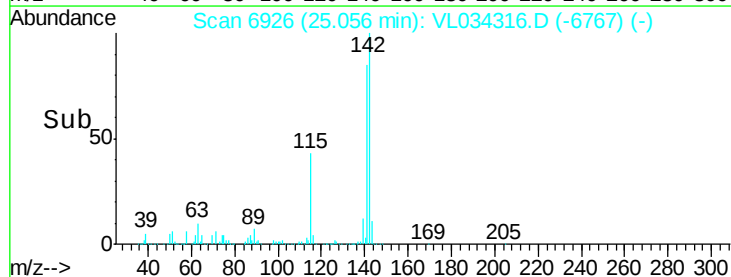
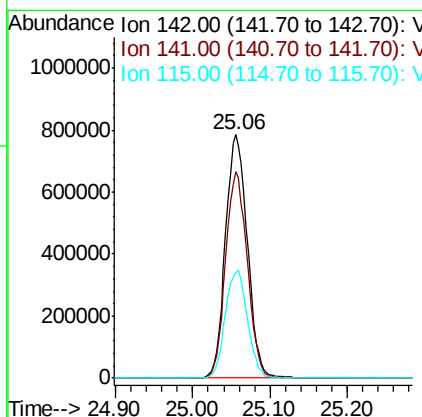
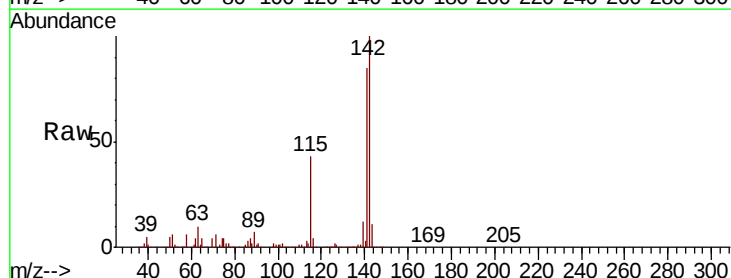
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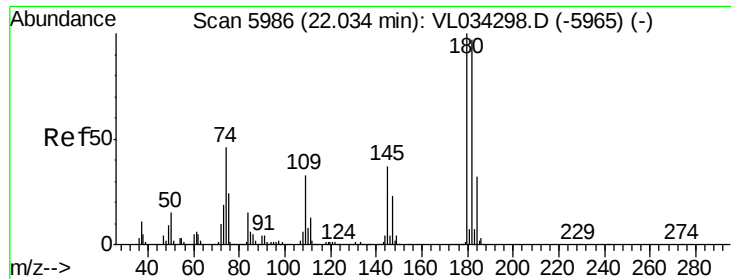
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#80  
Naphthalene, 2-methyl-  
Concen: 21.876 ppbv  
RT: 25.06 min Scan# 6926  
Delta R.T. 0.01 min  
Lab File: VL034316.D  
Acq: 17 Oct 2019 13:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 84.3  | 65.7  | 98.5  |
| 115     | 44.9  | 30.9  | 46.3  |





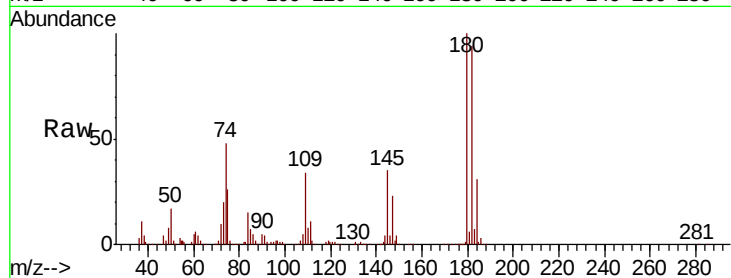
#81  
 1,2,4-Trichlorobenzene  
 Concen: 10.666 ppbv  
 RT: 22.05 min Scan# 5991  
 Delta R.T. 0.02 min  
 Lab File: VL034316.D  
 Acq: 17 Oct 2019 13:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 96.9  | 77.8  | 116.8 |
| 184     | 31.2  | 25.4  | 38.2  |

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Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

