

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081220\  
 Data File : VL035381.D  
 Acq On : 12 Aug 2020 11:57  
 Operator : SY/AP  
 Sample : VSTDICCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Manual Integrations  
 APPROVED

MMDadoda  
 8/17/2020 5:43:44 PM

Quant Time: Aug 12 15:21:52 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081220AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Aug 12 15:19:58 2020  
 QLast Update : Wed Aug 12 15:19:58 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 1356259  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 3293333  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.11 | 117  | 3249004  | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.44  | 95    | 2555322  | 9.43     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 94.30% |

## Target Compounds

|                                |      |     |         |        | Ovalue   |
|--------------------------------|------|-----|---------|--------|----------|
| 2) Dichlorodifluoromethane     | 3.04 | 85  | 1323689 | 7.337  | ppbv 100 |
| 3) Chlorodifluoromethane       | 2.98 | 51  | 1401414 | 9.052  | ppbv 100 |
| 4) Chloromethane               | 3.13 | 50  | 795401  | 9.074  | ppbv 100 |
| 5) Vinyl Chloride              | 3.25 | 62  | 766366  | 8.500  | ppbv 100 |
| 6) Bromomethane                | 3.47 | 94  | 434734  | 7.871  | ppbv 100 |
| 7) Chloroethane                | 3.55 | 64  | 275115  | 8.216  | ppbv 100 |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85  | 1644756 | 7.714  | ppbv 100 |
| 9) Propene                     | 3.00 | 41  | 712109  | 12.908 | ppbv 100 |
| 10) Heptane                    | 8.14 | 43  | 1851442 | 13.138 | ppbv 100 |
| 11) Trichlorofluoromethane     | 3.95 | 101 | 1719729 | 7.358  | ppbv 100 |
| 12) 1,1,2-Trichlorotrifluoroet | 4.48 | 101 | 1183550 | 7.085  | ppbv 100 |
| 13) Ethanol                    | 3.60 | 45  | 202259  | 10.630 | ppbv 100 |
| 14) Bromoethene                | 3.74 | 108 | 546281  | 8.155  | ppbv 100 |
| 15) Acetone                    | 3.85 | 43  | 1387217 | 7.203  | ppbv 100 |
| 16) 1,3-Butadiene              | 3.32 | 39  | 739667  | 9.978  | ppbv 100 |
| 17) tert-Butyl alcohol         | 4.29 | 59  | 1832262 | 10.365 | ppbv 100 |
| 18) 1,1-Dichloroethene         | 4.29 | 96  | 551372  | 7.686  | ppbv 100 |
| 19) Isopropyl Alcohol          | 3.97 | 45  | 1214739 | 9.950  | ppbv 100 |
| 20) Methylene Chloride         | 4.34 | 84  | 518706  | 6.604  | ppbv 100 |
| 21) Allyl Chloride             | 4.41 | 41  | 1016971 | 9.216  | ppbv 100 |
| 22) trans-1,2-Dichloroethene   | 4.89 | 96  | 570444  | 8.201  | ppbv 100 |
| 23) Vinyl Acetate              | 5.08 | 43  | 2398339 | 12.987 | ppbv 100 |
| 24) 1,1-Dichloroethane         | 5.01 | 63  | 1578859 | 9.097  | ppbv 100 |
| 25) Ethyl Acetate              | 5.68 | 43  | 3036658 | 10.377 | ppbv 100 |
| 26) Hexane                     | 5.69 | 57  | 1321125 | 10.408 | ppbv 100 |
| 27) Carbon Disulfide           | 4.55 | 76  | 1537897 | 8.664  | ppbv 100 |
| 28) Methyl tert-Butyl Ether    | 5.04 | 73  | 2196708 | 11.902 | ppbv 100 |
| 29) Chloroform                 | 5.76 | 83  | 1933415 | 8.835  | ppbv 100 |
| 30) Cyclohexane                | 7.14 | 84  | 1104924 | 11.479 | ppbv 100 |
| 31) cis-1,2-Dichloroethene     | 5.55 | 61  | 1356589 | 12.022 | ppbv 100 |
| 32) 1,1,1-Trichloroethane      | 6.52 | 97  | 1945559 | 8.459  | ppbv 100 |
| 34) 2-Butanone                 | 5.25 | 43  | 2023870 | 12.481 | ppbv 100 |
| 35) Carbon Tetrachloride       | 7.03 | 117 | 1928141 | 8.508  | ppbv 100 |
| 36) Benzene                    | 6.90 | 78  | 2706773 | 12.172 | ppbv 100 |
| 37) 1,2-Dichloroethane         | 6.32 | 62  | 1490608 | 9.595  | ppbv 100 |
| 38) Trichloroethene            | 7.85 | 130 | 976303  | 9.517  | ppbv 100 |
| 39) 1,2-Dichloropropane        | 7.63 | 63  | 1072506 | 11.913 | ppbv 100 |
| 40) 1,4-Dioxane                | 7.84 | 88  | 424809  | 11.018 | ppbv 100 |
| 41) Tetrahydrofuran            | 6.06 | 42  | 1234652 | 15.515 | ppbv 100 |
| 42) Bromodichloromethane       | 7.81 | 83  | 2147119 | 10.291 | ppbv 100 |
| 43) Methyl Methacrylate        | 8.03 | 69  | 1244540 | 13.302 | ppbv 100 |

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 ClientSampleId :  
 VSTDICCC010

Manual Integrations  
 APPROVED

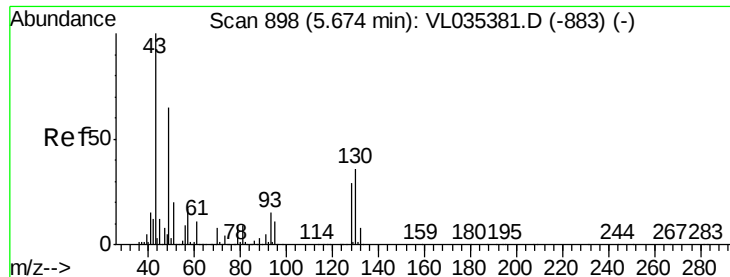
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 8/17/2020 5:43:44 PM

Quant Time: Aug 12 15:21:52 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081220AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Aug 12 15:21:52 2020  
 QLast Update : Wed Aug 12 15:19:58 2020  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|-------|------|----------|--------|-------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.88  | 57   | 4530830  | 11.468 | ppbv  | 100      |
| 45) t-1,3-Dichloropropene     | 9.30  | 75   | 1494523  | 15.399 | ppbv  | 100      |
| 46) cis-1,3-Dichloropropene   | 8.72  | 75   | 1694493  | 14.457 | ppbv  | 100      |
| 47) 1,1,2-Trichloroethane     | 9.49  | 97   | 1089730  | 10.067 | ppbv  | 100      |
| 48) Dibromochloromethane      | 10.33 | 129  | 1810933  | 10.213 | ppbv  | 100      |
| 49) Bromoform                 | 13.07 | 173  | 1552600  | 9.609  | ppbv  | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.76  | 43   | 3026911  | 12.226 | ppbv  | 100      |
| 51) 2-Hexanone                | 10.15 | 43   | 2599102  | 13.391 | ppbv  | 100      |
| 52) Tetrachloroethene         | 11.25 | 164  | 897270   | 10.177 | ppbv  | 100      |
| 53) Toluene                   | 9.83  | 91   | 3147736  | 13.012 | ppbv  | 100      |
| 54) 1,2-Dibromoethane         | 10.63 | 107  | 1694945  | 10.914 | ppbv  | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 12.15 | 131  | 1344960  | 8.770  | ppbv  | 98       |
| 57) Chlorobenzene             | 12.17 | 112  | 2305786  | 9.425  | ppbv  | 100      |
| 58) Ethyl Benzene             | 12.74 | 91   | 4255921  | 12.589 | ppbv  | 100      |
| 59) m/p-Xylene                | 13.02 | 91   | 6920187m | 21.983 | ppbv  |          |
| 60) o-Xylene                  | 13.72 | 91   | 3346952  | 10.714 | ppbv  | 100      |
| 61) Styrene                   | 13.55 | 104  | 2625612  | 13.762 | ppbv  | 100      |
| 62) Isopropylbenzene          | 14.70 | 105  | 5021398  | 10.676 | ppbv  | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.71 | 83   | 2335948  | 8.765  | ppbv  | 100      |
| 64) n-propylbenzene           | 15.59 | 120  | 1385128  | 10.958 | ppbv  | 100      |
| 65) tert-Butylbenzene         | 16.78 | 119  | 4324854  | 10.041 | ppbv  | 100      |
| 66) Benzyl Chloride           | 17.02 | 91   | 2283902  | 13.397 | ppbv  | 100      |
| 67) sec-Butylbenzene          | 17.33 | 105  | 6221043  | 10.211 | ppbv  | 100      |
| 69) p-Isopropyltoluene        | 17.68 | 119  | 5234689  | 10.539 | ppbv  | 100      |
| 70) n-Butylbenzene            | 18.58 | 91   | 5639676  | 10.615 | ppbv  | 100      |
| 71) 2-Chlorotoluene           | 15.48 | 91   | 4075649  | 11.829 | ppbv  | 100      |
| 72) 4-Ethyltoluene            | 15.87 | 105  | 4125633  | 11.583 | ppbv  | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.03 | 105  | 3869384  | 11.322 | ppbv  | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.79 | 105  | 3856128  | 9.872  | ppbv  | 100      |
| 75) 1,3-Dichlorobenzene       | 17.03 | 146  | 2195011  | 8.590  | ppbv  | 100      |
| 76) 1,4-Dichlorobenzene       | 17.17 | 146  | 2296973  | 9.706  | ppbv  | 100      |
| 77) 1,2-Dichlorobenzene       | 17.84 | 146  | 2206949  | 9.358  | ppbv  | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.41 | 225  | 1736447  | 8.654  | ppbv  | 100      |
| 79) Naphthalene               | 22.24 | 128  | 4845433  | 16.128 | ppbv  | 100      |
| 80) Naphthalene, 2-methyl-    | 24.99 | 142  | 2346204  | 34.329 | ppbv  | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.97 | 180  | 2288271  | 12.085 | ppbv  | 100      |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 49 Resp: 1356259

Ion Ratio Lower Upper

49 100

128 43.5 21.8 65.3

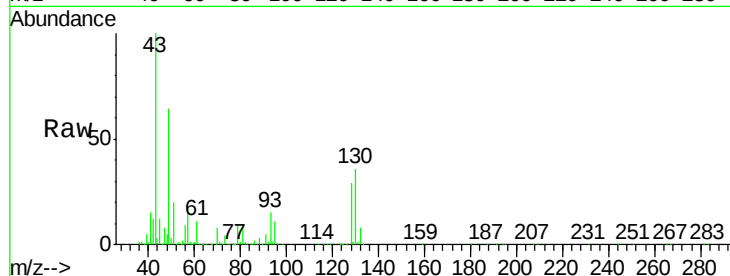
130 55.7 27.9 83.6

Manual Integrations

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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

5.67

800000

600000

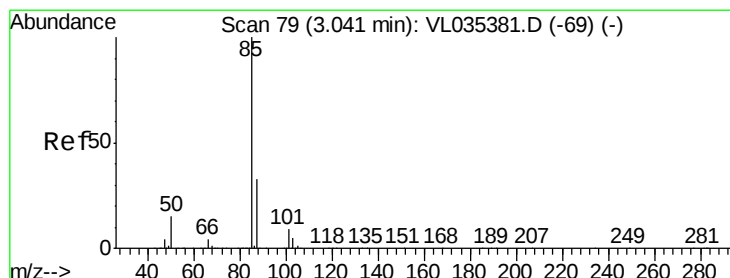
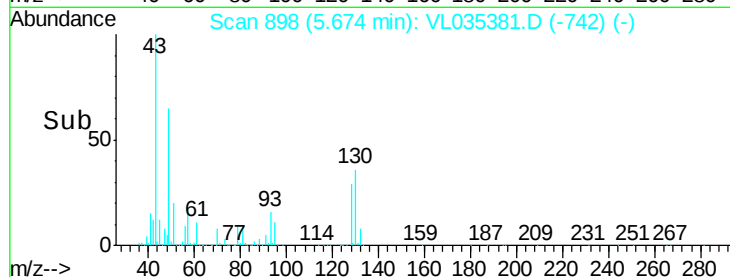
400000

200000

0

5.60 5.65 5.70 5.75

Time-->



#2

Dichlorodifluoromethane

Concen: 7.337 ppbv

RT: 3.04 min Scan# 79

Delta R.T. 0.00 min

Lab File: VL035381.D

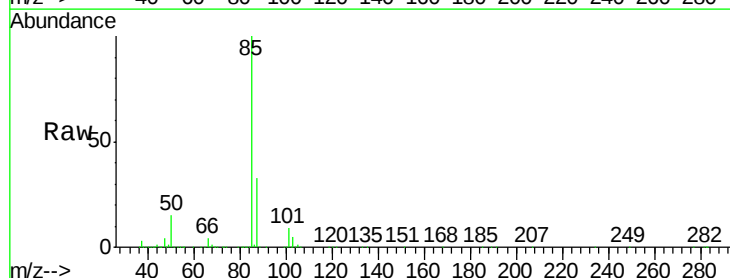
Acq: 12 Aug 2020 11:57

Tgt Ion: 85 Resp: 1323689

Ion Ratio Lower Upper

85 100

87 32.6 26.1 39.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.04

1200000

1000000

800000

600000

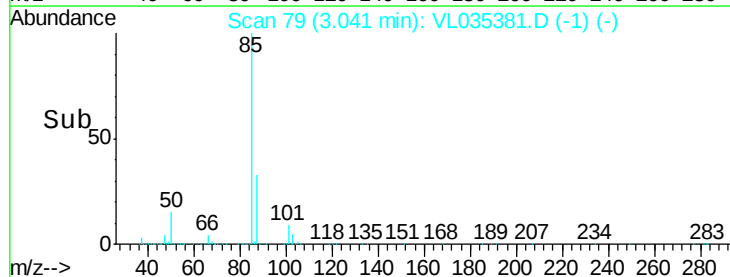
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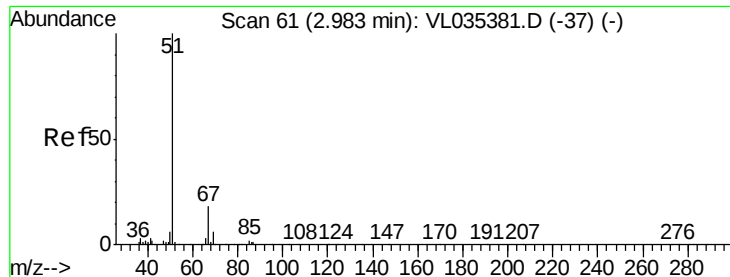
200000

0

3.00 3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 9.052 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Tot Ion: 51 Resp: 1401414

Ion Ratio Lower Upper

51 100

67 17.6 14.1 21.1

Instrument :

MSVOA\_L

ClientSampleId :

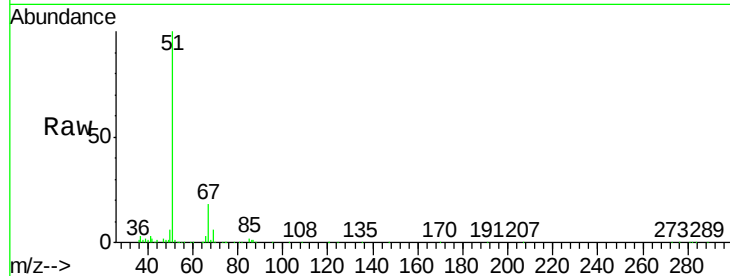
VSTDICCC010

Manual Integrations

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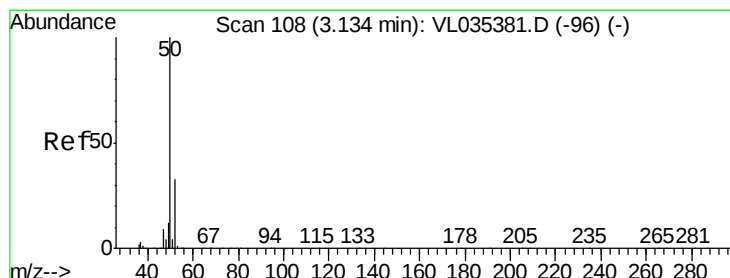
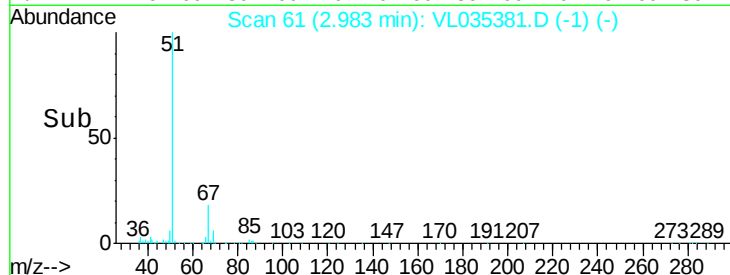
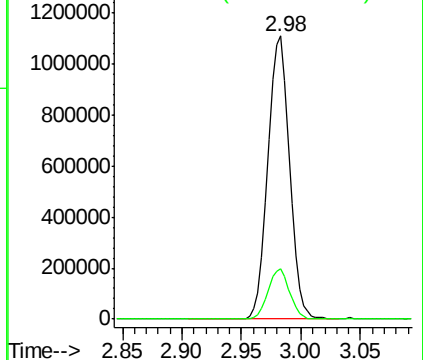
MMDadoda

8/17/2020 5:43:44 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 9.074 ppbv

RT: 3.13 min Scan# 108

Delta R.T. 0.00 min

Lab File: VL035381.D

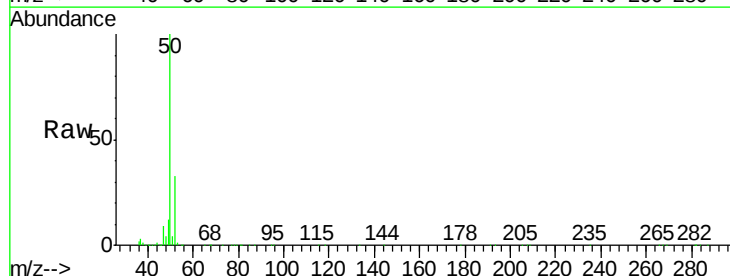
Acq: 12 Aug 2020 11:57

Tgt Ion: 50 Resp: 795401

Ion Ratio Lower Upper

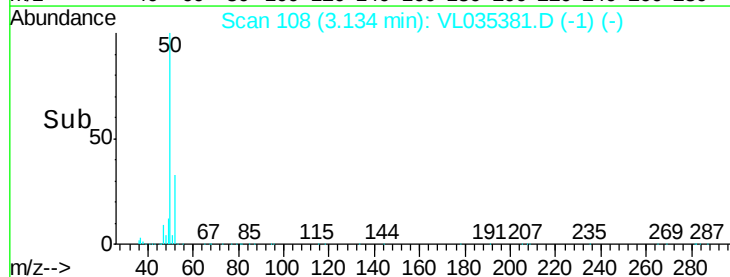
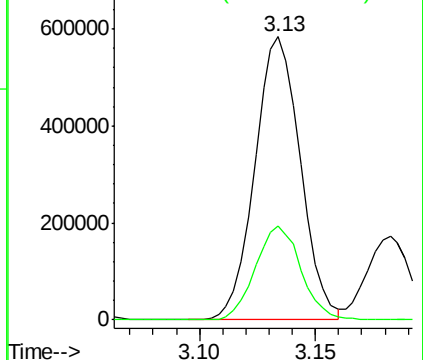
50 100

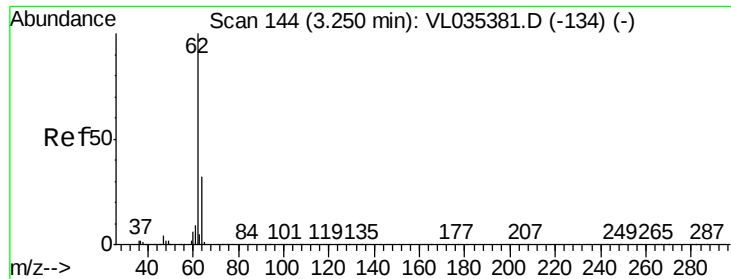
52 33.2 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 8.500 ppbv

RT: 3.25 min Scan# 144

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 62 Resp: 766366

Ion Ratio Lower Upper

62 100

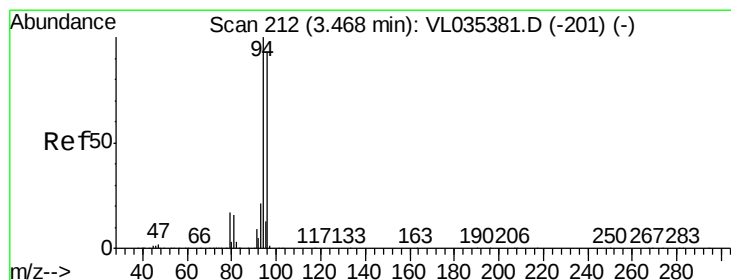
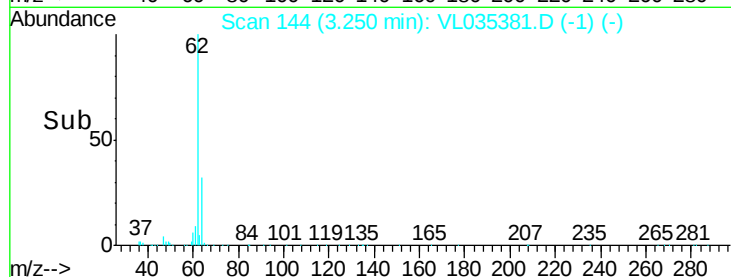
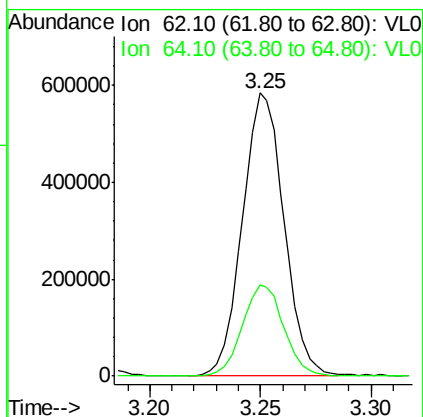
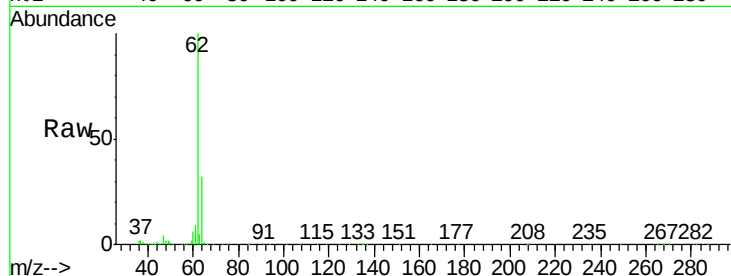
64 32.1 25.7 38.5

Manual Integrations

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#6

Bromomethane

Concen: 7.871 ppbv

RT: 3.47 min Scan# 212

Delta R.T. 0.00 min

Lab File: VL035381.D

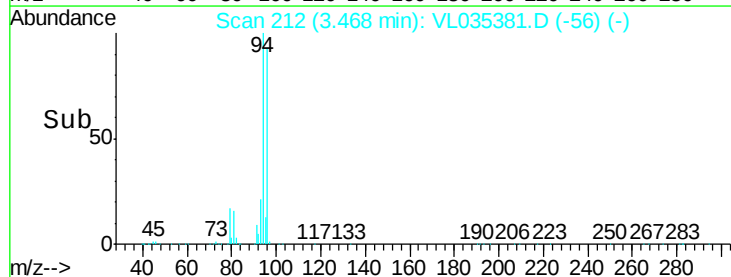
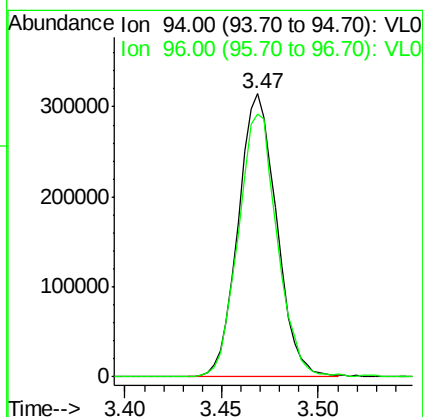
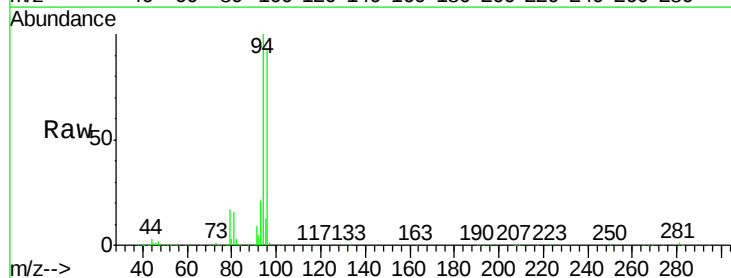
Acq: 12 Aug 2020 11:57

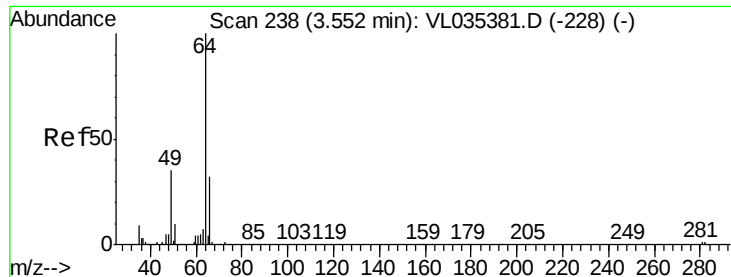
Tgt Ion: 94 Resp: 434734

Ion Ratio Lower Upper

94 100

96 93.0 74.4 111.6





#7

Chloroethane

Concen: 8.216 ppbv

RT: 3.55 min Scan# 238

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 64 Resp: 275115

Ion Ratio Lower Upper

64 100

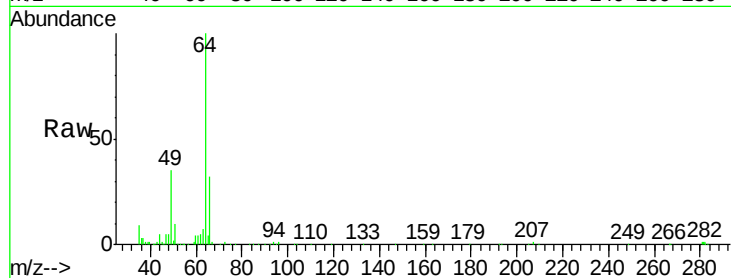
66 32.1 25.7 38.5

Manual Integrations

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8/17/2020 5:43:44 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.55

200000

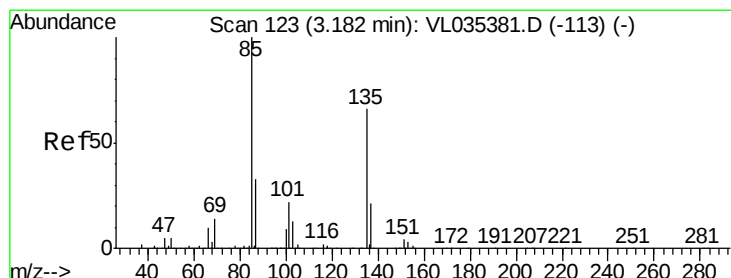
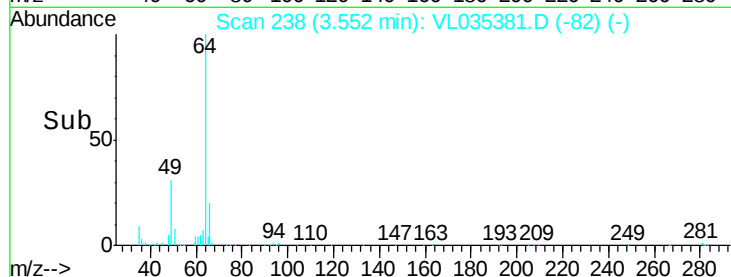
150000

100000

50000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 7.714 ppbv

RT: 3.18 min Scan# 123

Delta R.T. 0.00 min

Lab File: VL035381.D

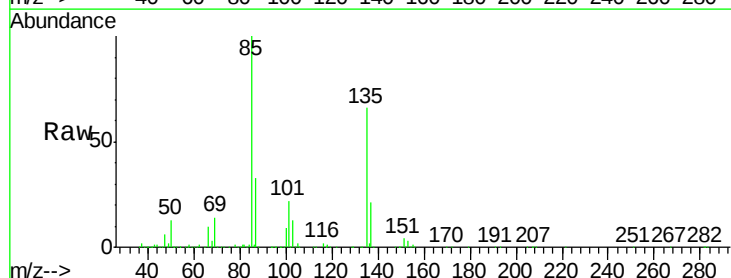
Acq: 12 Aug 2020 11:57

Tgt Ion: 85 Resp: 1644756

Ion Ratio Lower Upper

85 100

135 65.6 52.5 78.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

3.18

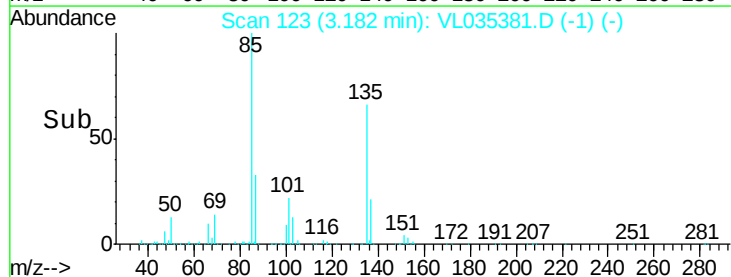
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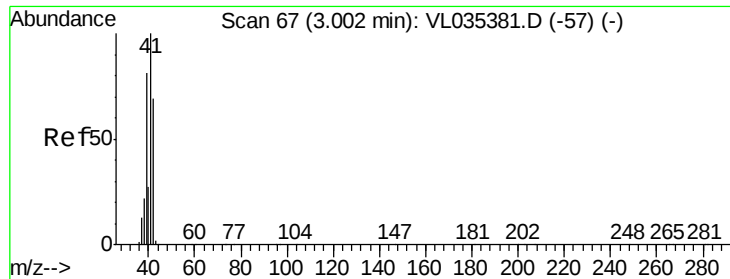
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500000

0

Time-->





#9

Propene

Concen: 12.908 ppbv

RT: 3.00 min Scan# 67

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 41 Resp: 712109

Ion Ratio Lower Upper

41 100

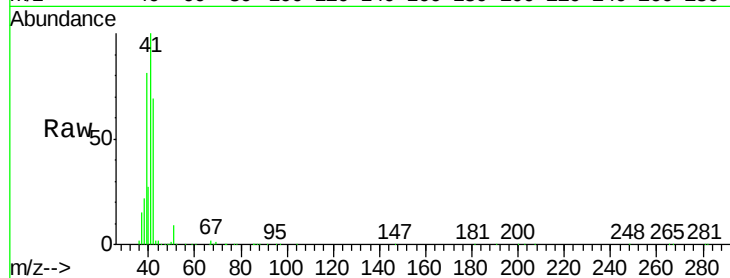
42 69.3 55.4 83.2

Manual Integrations

APPROVED

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.00

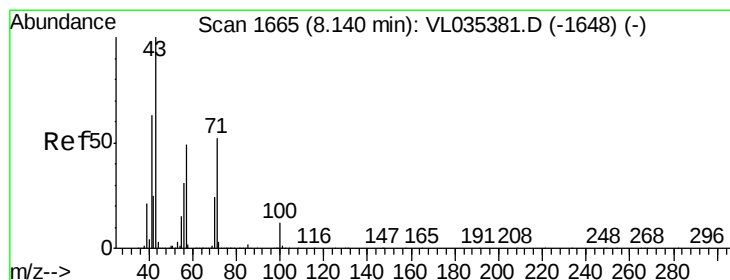
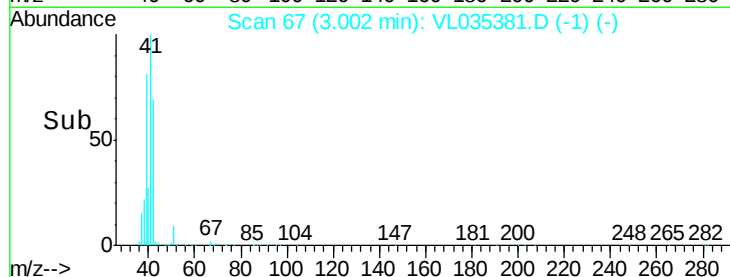
600000

400000

200000

0

Time-->



#10

Heptane

Concen: 13.138 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.00 min

Lab File: VL035381.D

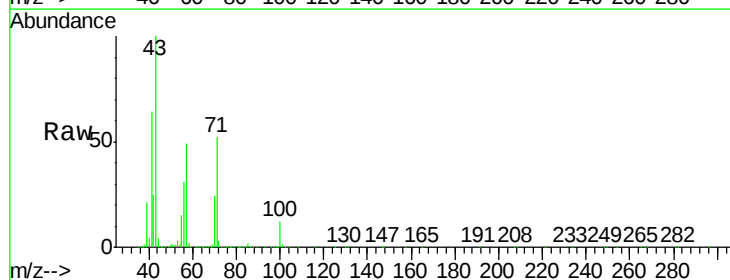
Acq: 12 Aug 2020 11:57

Tgt Ion: 43 Resp: 1851442

Ion Ratio Lower Upper

43 100

57 49.3 39.4 59.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.14

1000000

800000

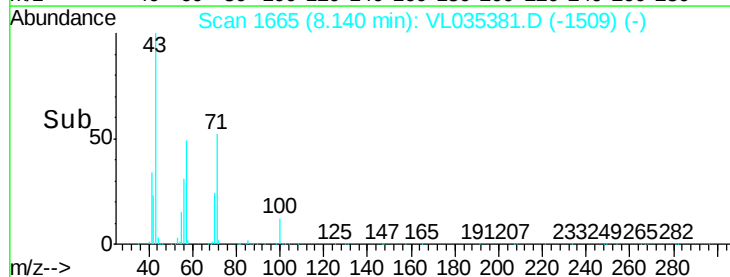
600000

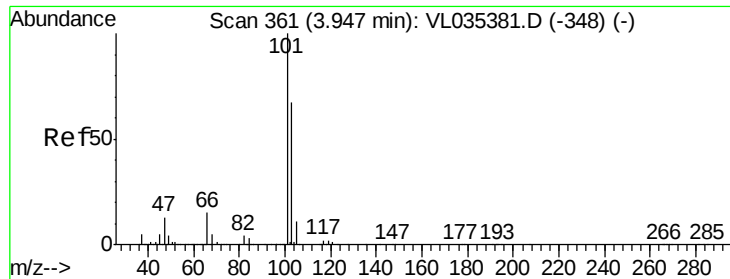
400000

200000

0

Time-->





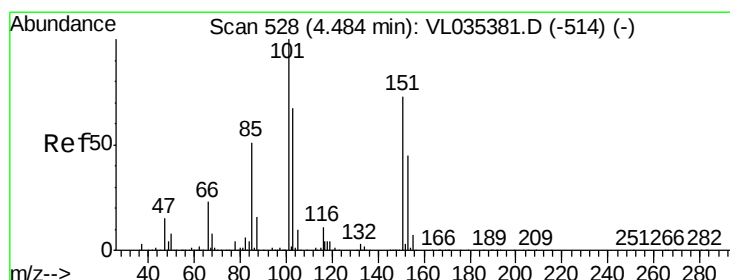
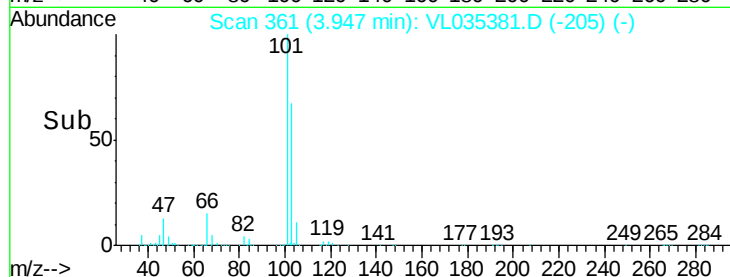
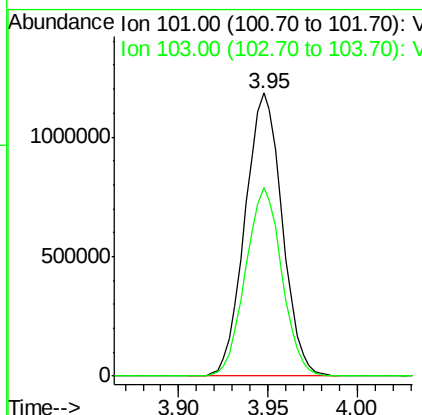
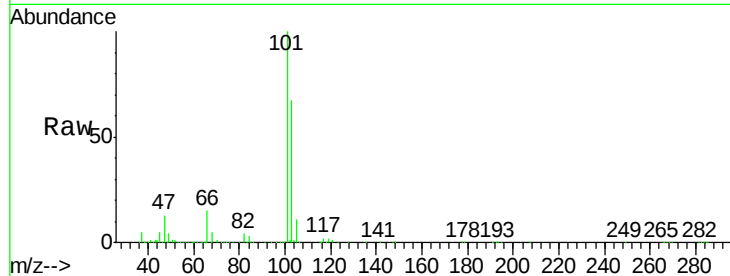
#11  
 Trichlorofluoromethane  
 Concen: 7.358 ppbv  
 RT: 3.95 min Scan# 361  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Tot Ion:101 Resp: 1719729  
 Ion Ratio Lower Upper  
 101 100  
 103 66.6 53.3 79.9

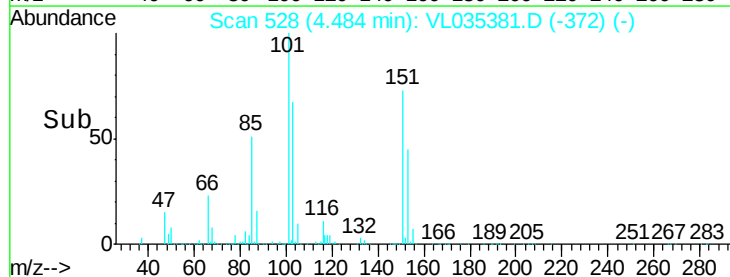
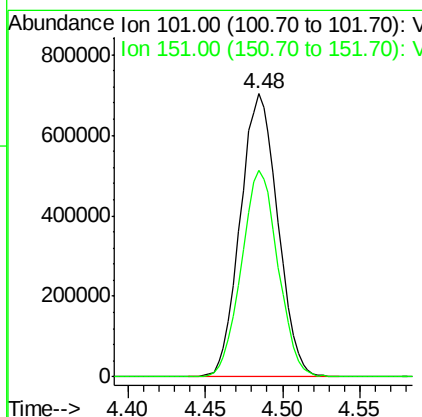
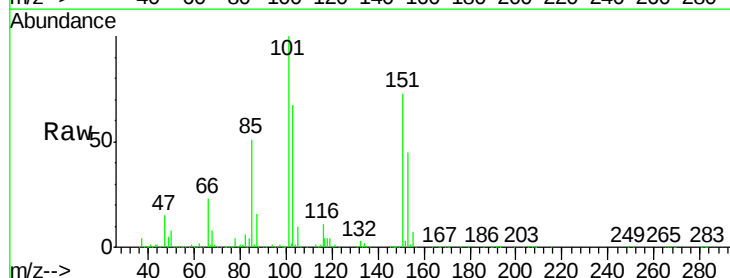
Manual Integrations  
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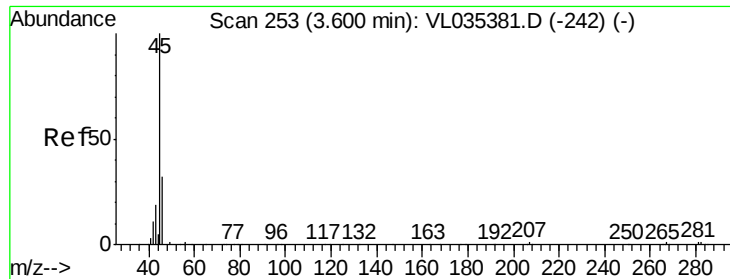
MMDadoda  
 8/17/2020 5:43:44 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 7.085 ppbv  
 RT: 4.48 min Scan# 528  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Tgt Ion:101 Resp: 1183550  
 Ion Ratio Lower Upper  
 101 100  
 151 71.3 57.0 85.6





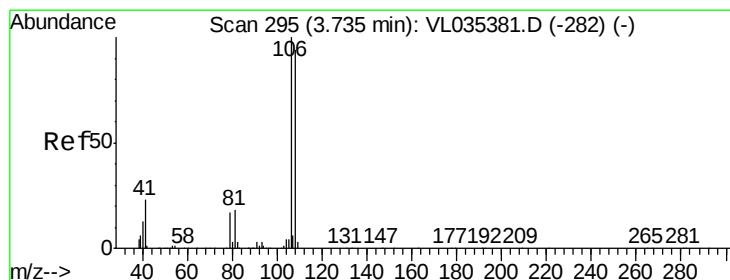
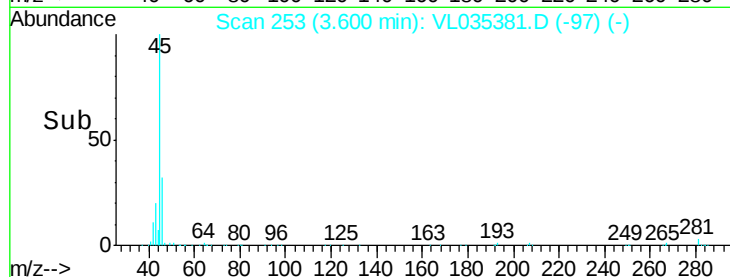
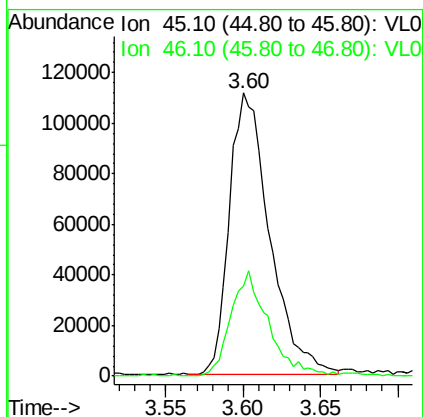
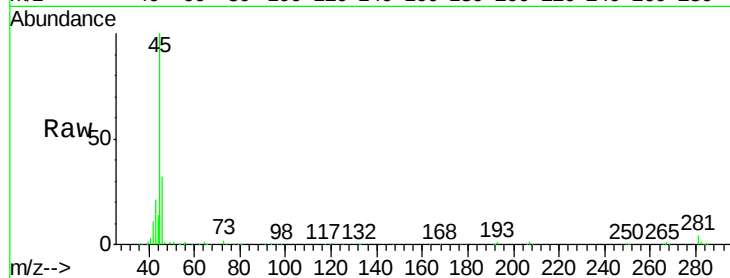
#13  
Ethanol  
Concen: 10.630 ppbv  
RT: 3.60 min Scan# 253  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 46      | 35.2  | 14.1  | 56.3  |

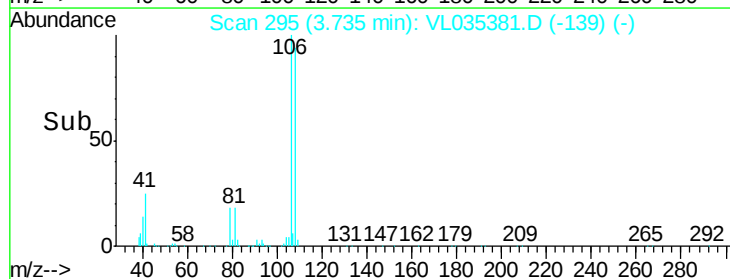
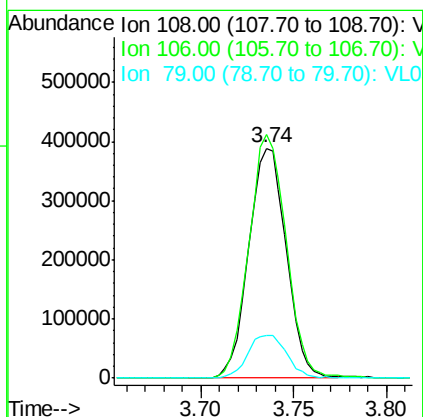
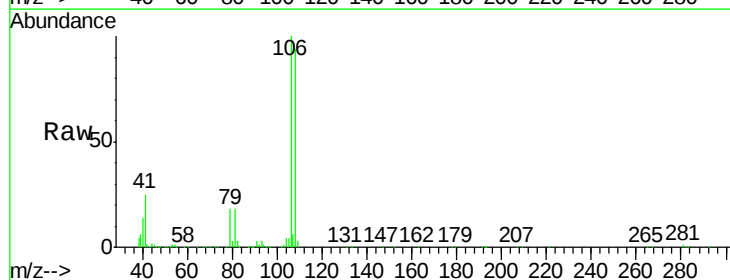
Manual Integrations  
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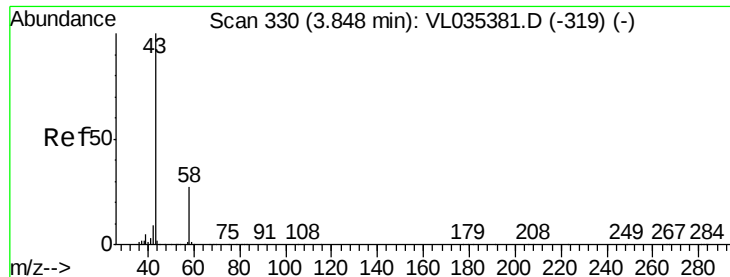
MMDadoda  
8/17/2020 5:43:44 PM



#14  
Bromoethene  
Concen: 8.155 ppbv  
RT: 3.74 min Scan# 295  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 108     | 100   |       |       |
| 106     | 106.1 | 84.9  | 127.3 |
| 79      | 19.8  | 15.8  | 23.8  |





#15

Acetone

Concen: 7.203 ppbv

RT: 3.85 min Scan# 330

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Tot Ion: 43 Resp: 1387217

Ion Ratio Lower Upper

43 100

58 27.1 21.7 32.5

Instrument :

MSVOA\_L

ClientSampleId :

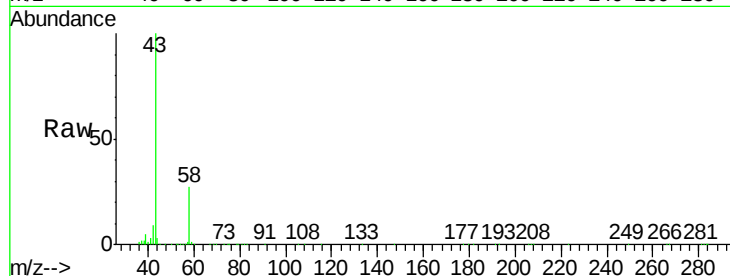
VSTDICCC010

Manual Integrations

APPROVED

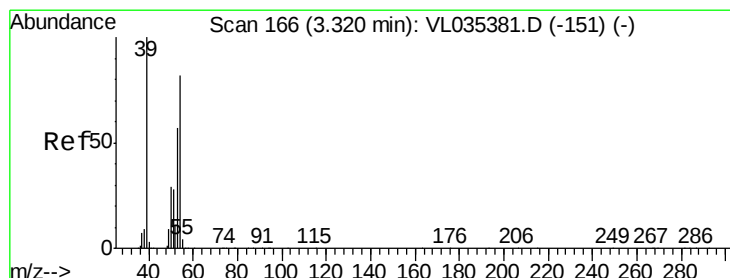
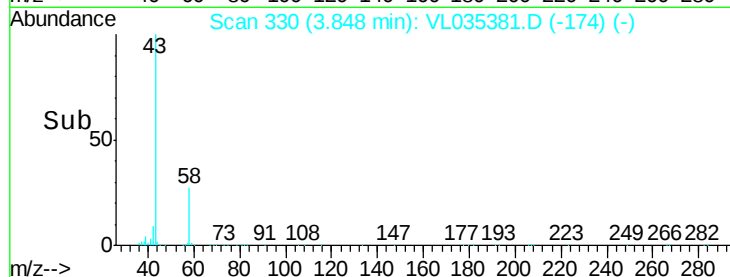
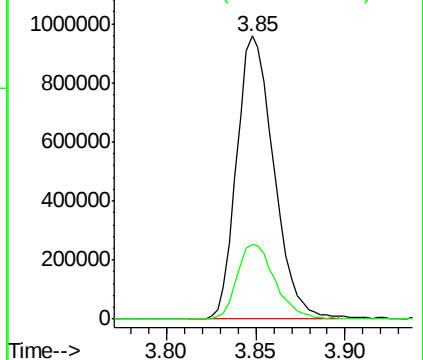
MMDadoda

8/17/2020 5:43:44 PM



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 9.978 ppbv

RT: 3.32 min Scan# 166

Delta R.T. 0.00 min

Lab File: VL035381.D

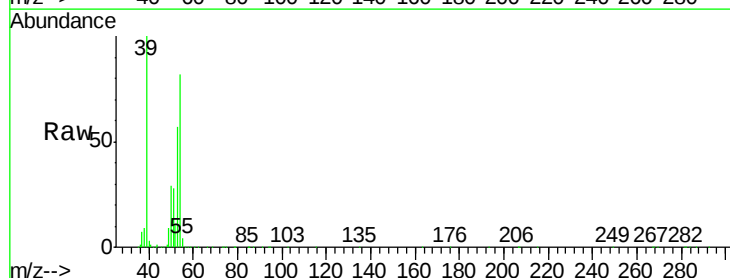
Acq: 12 Aug 2020 11:57

Tgt Ion: 39 Resp: 739667

Ion Ratio Lower Upper

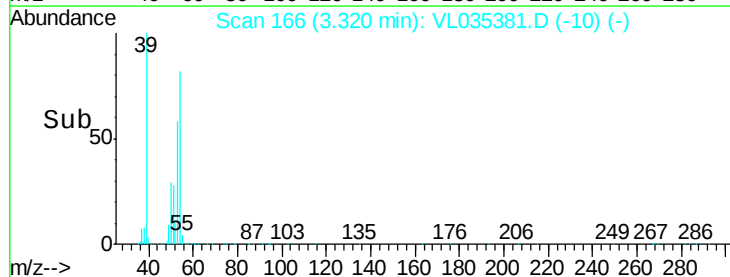
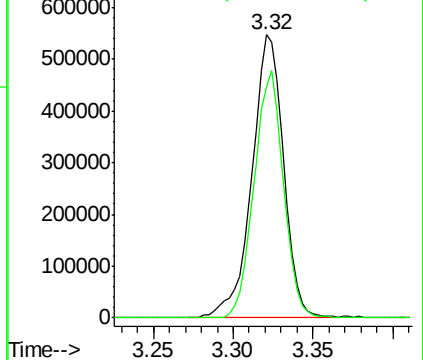
39 100

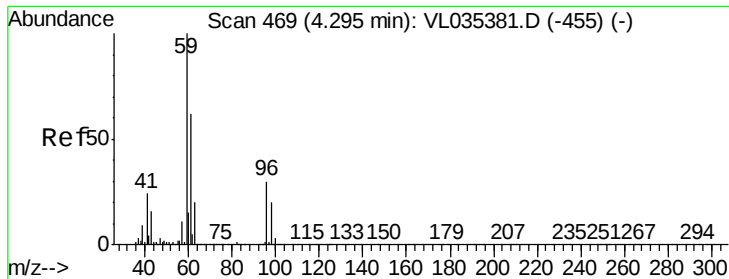
54 81.3 64.9 97.3



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

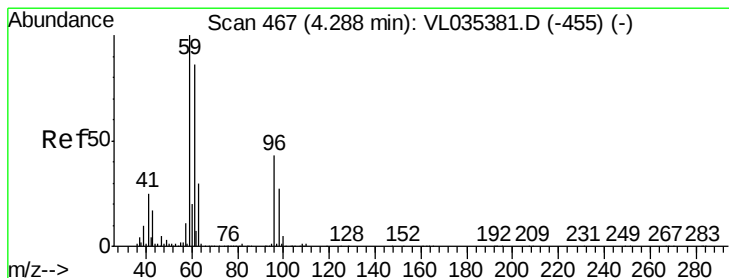
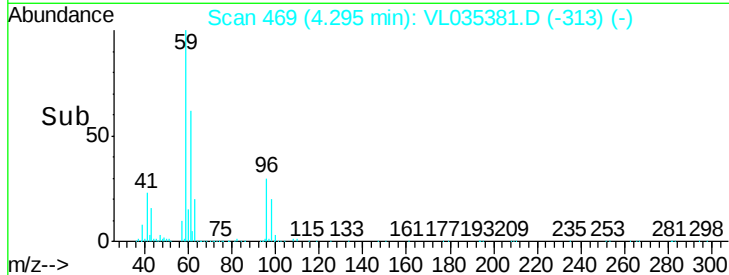
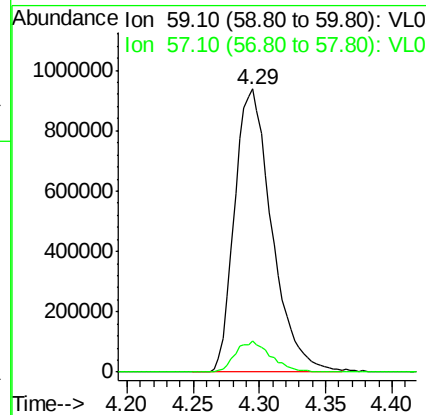
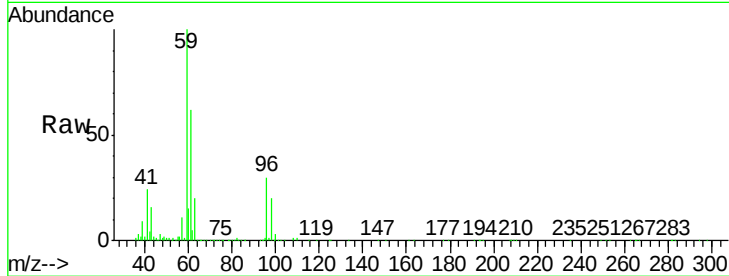
tert-Butyl alcohol  
 Concen: 10.365 ppbv  
 RT: 4.29 min Scan# 469  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDICCC010

Tot Ion: 59 Resp: 1832262  
 Ion Ratio Lower Upper  
 59 100  
 57 10.8 8.6 13.0

Manual Integrations  
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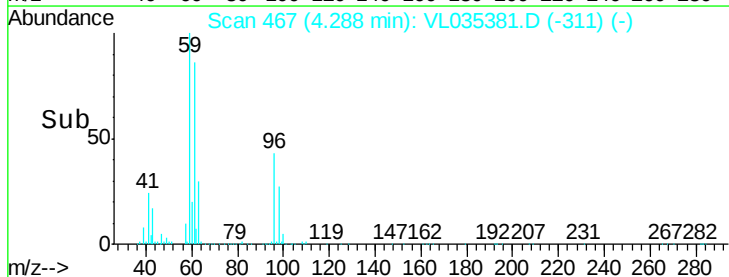
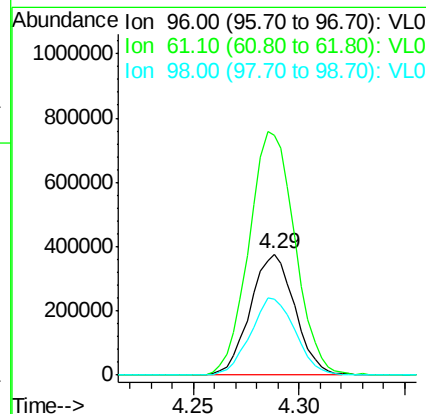
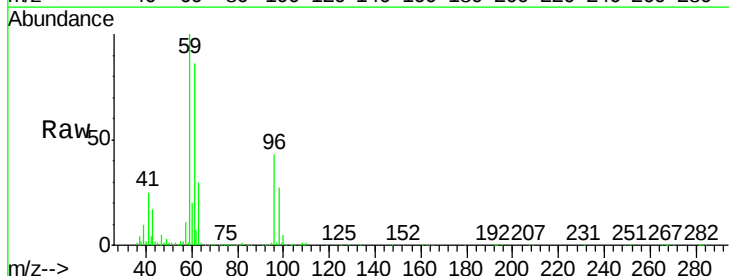
MMDadoda  
 8/17/2020 5:43:44 PM

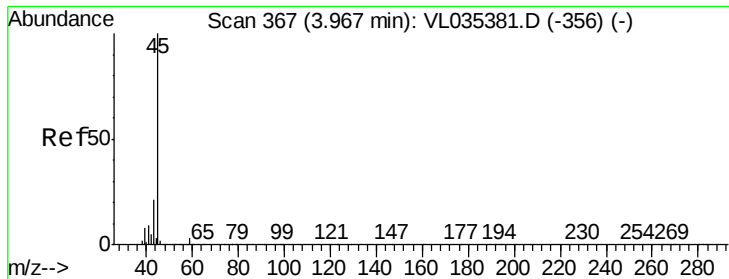


#18

1,1-Dichloroethene  
 Concen: 7.686 ppbv  
 RT: 4.29 min Scan# 467  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Tgt Ion: 96 Resp: 551372  
 Ion Ratio Lower Upper  
 96 100  
 61 198.7 159.0 238.4  
 98 62.9 50.3 75.5





#19

Isopropyl Alcohol

Concen: 9.950 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 45 Resp: 1214739

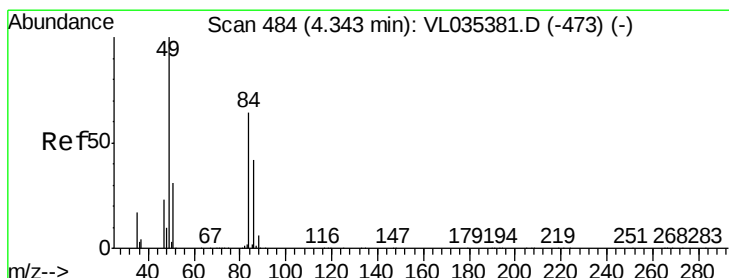
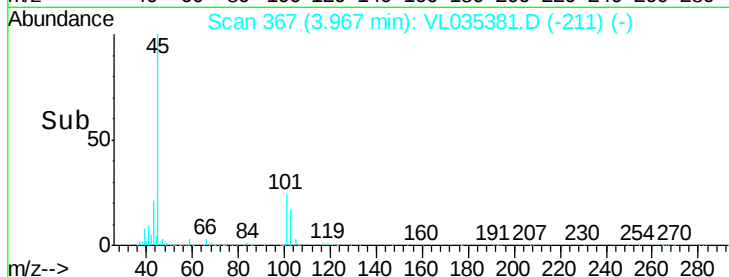
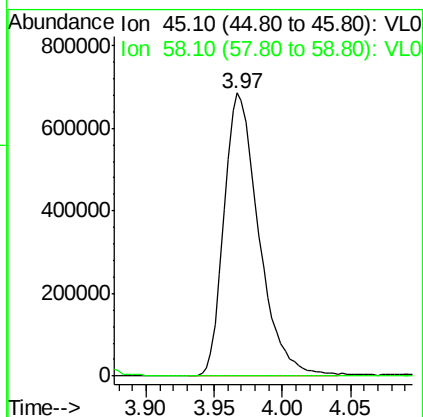
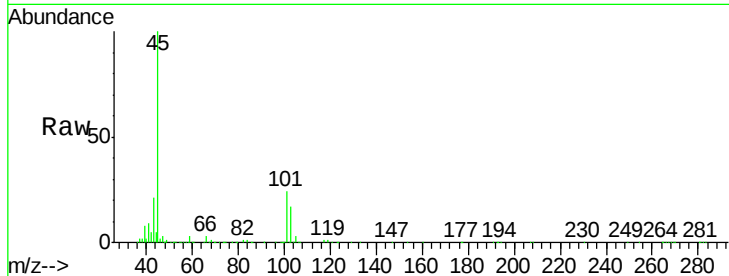
Ion Ratio Lower Upper

45 100

58 31.1 24.9 37.3

Manual Integrations  
APPROVED

MMDadoda  
8/17/2020 5:43:44 PM



#20

Methylene Chloride

Concen: 6.604 ppbv

RT: 4.34 min Scan# 484

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Tgt Ion: 84 Resp: 518706

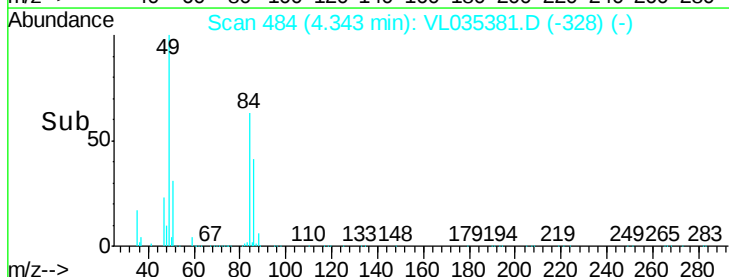
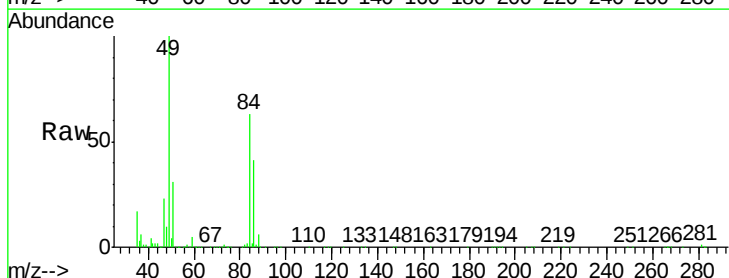
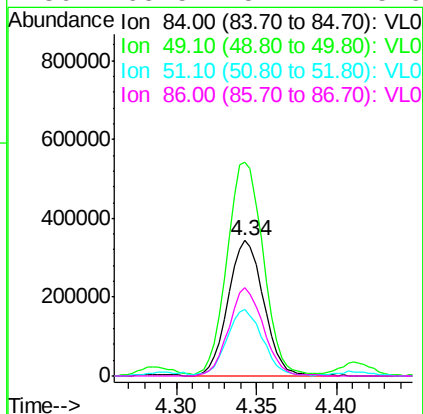
Ion Ratio Lower Upper

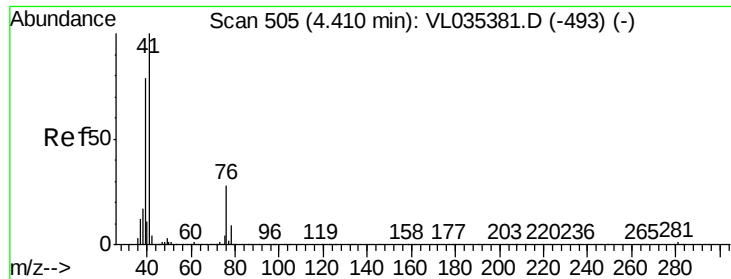
84 100

49 157.1 125.7 188.5

51 48.1 38.5 57.7

86 65.5 52.4 78.6





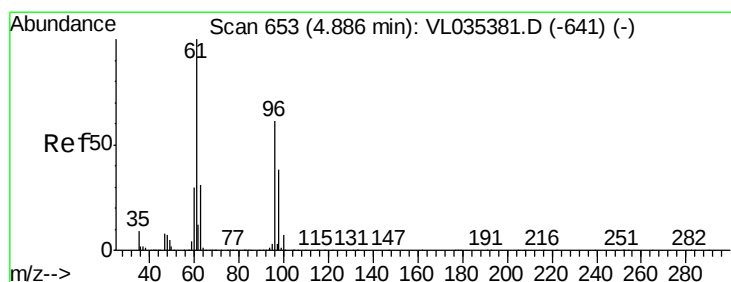
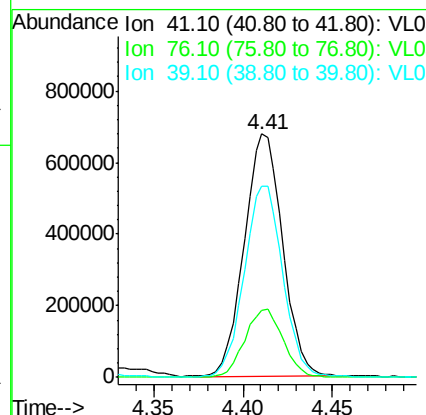
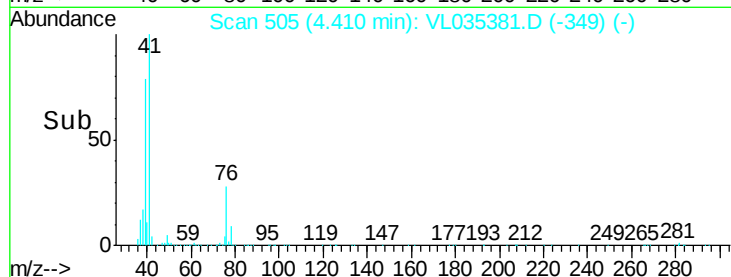
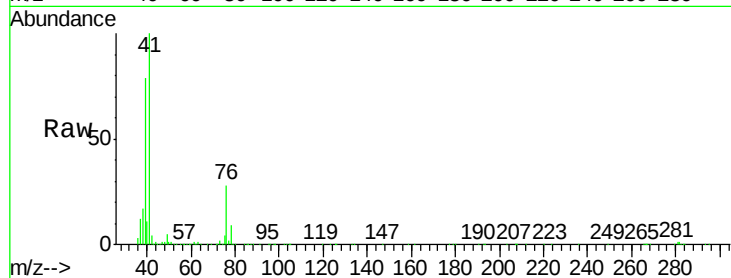
#21  
Allvl Chloride  
Concen: 9.216 ppbv  
RT: 4.41 min Scan# 505  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 28.0  | 22.4  | 33.6  |
| 39      | 78.7  | 63.0  | 94.4  |

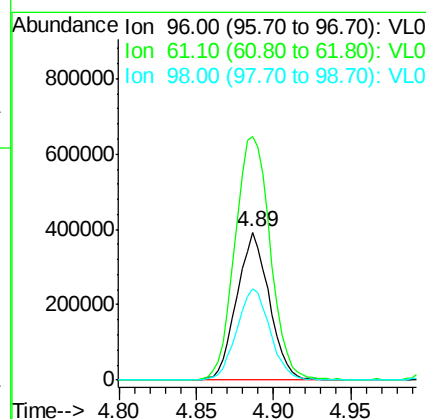
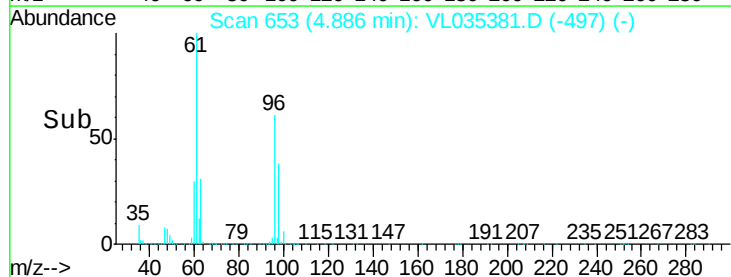
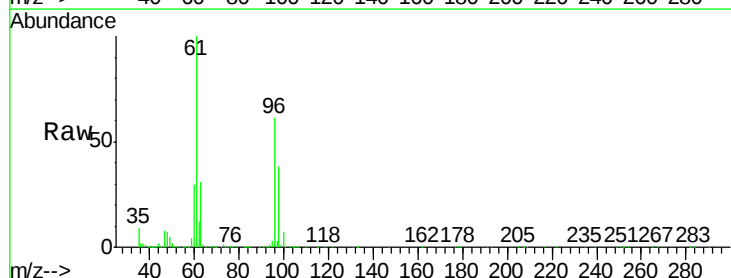
Manual Integrations  
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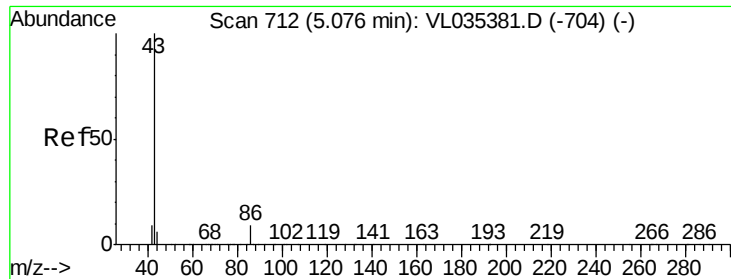
MMDadoda  
8/17/2020 5:43:44 PM



#22  
trans-1,2-Dichloroethene  
Concen: 8.201 ppbv  
RT: 4.89 min Scan# 653  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 164.7 | 131.8 | 197.6 |
| 98      | 62.0  | 49.6  | 74.4  |





#23

Vinyl Acetate

Concen: 12.987 ppbv

RT: 5.08 min Scan# 712

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 43 Resp: 2398339

Ion Ratio Lower Upper

43 100

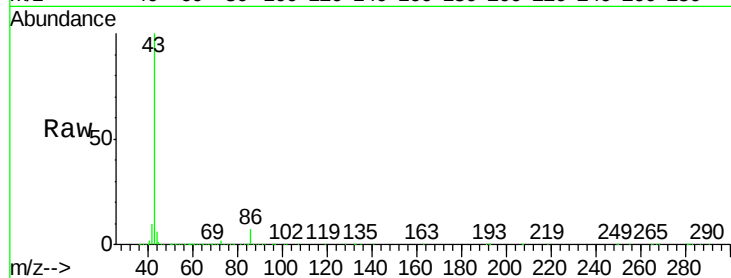
86 7.3 5.8 8.8

42 10.0 8.0 12.0

44 5.2 4.2 6.2

Manual Integrations  
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MMDadoda  
8/17/2020 5:43:44 PM

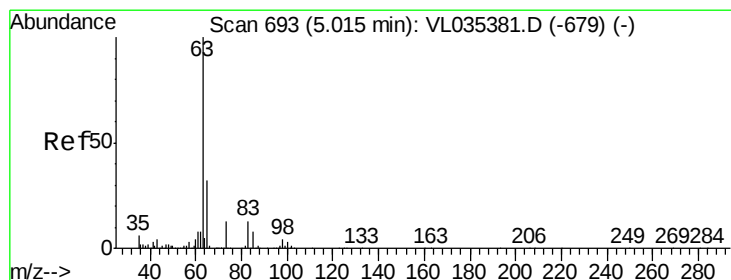
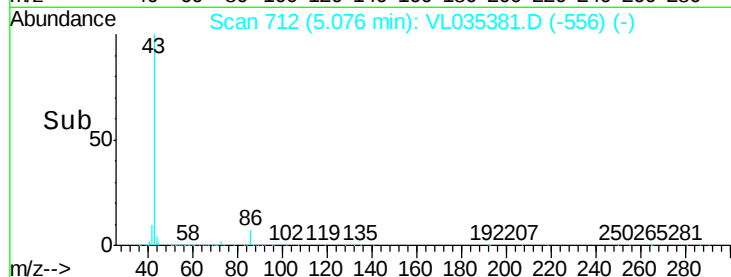
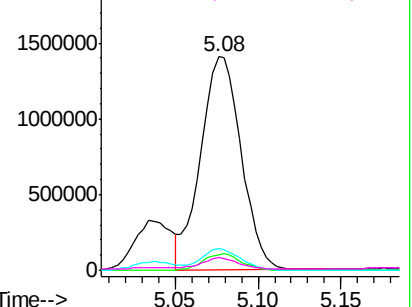


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 9.097 ppbv

RT: 5.01 min Scan# 693

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

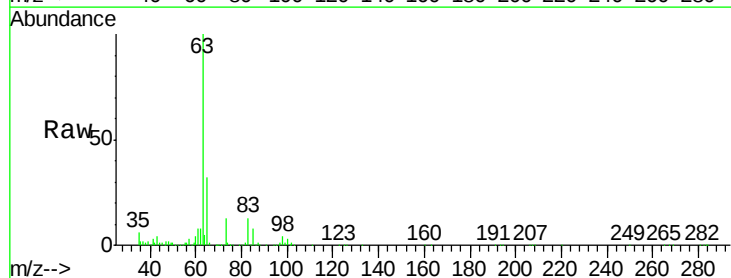
Tgt Ion: 63 Resp: 1578859

Ion Ratio Lower Upper

63 100

98 4.4 2.2 6.6

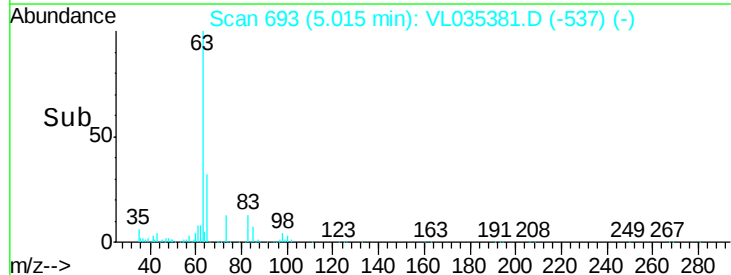
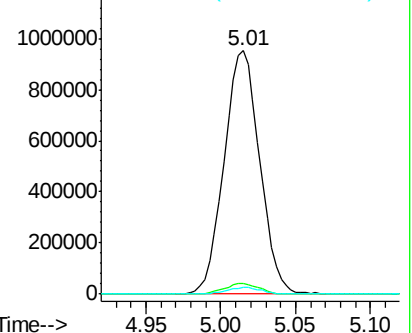
100 2.7 1.4 4.0

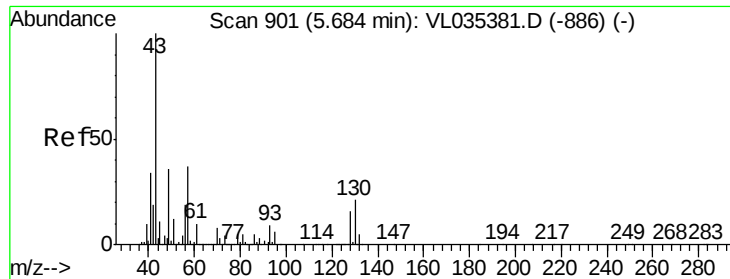


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





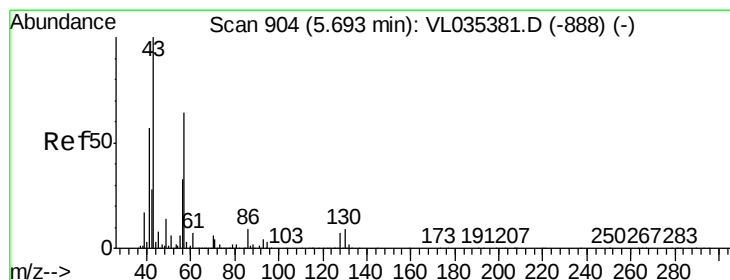
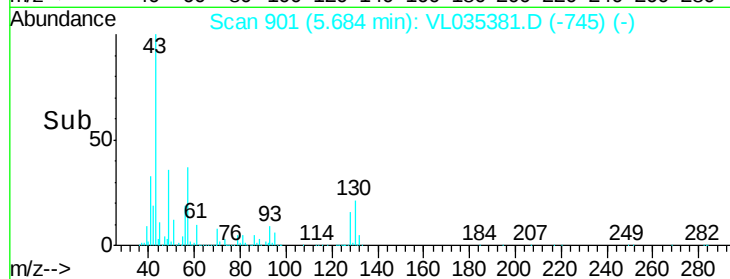
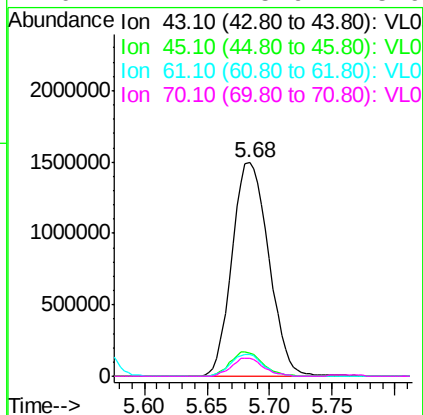
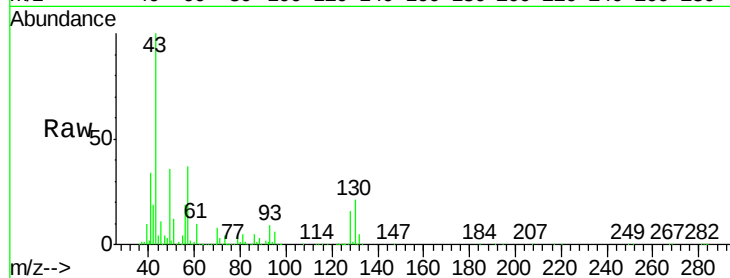
#25  
Ethyl Acetate  
Concen: 10.377 ppbv  
RT: 5.68 min Scan# 901  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | 43    | Resp  | 3036658 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 43      | 100   |       |         |
| 45      | 10.1  | 8.0   | 12.0    |
| 61      | 9.3   | 7.4   | 11.2    |
| 70      | 7.4   | 5.9   | 8.9     |

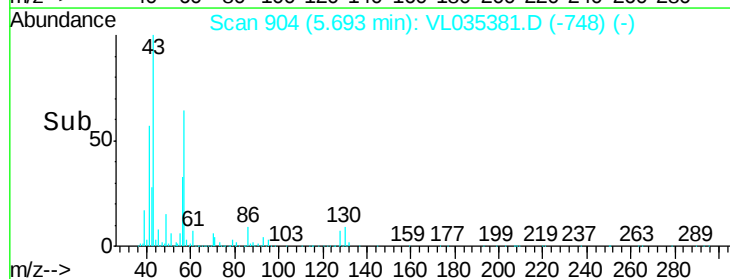
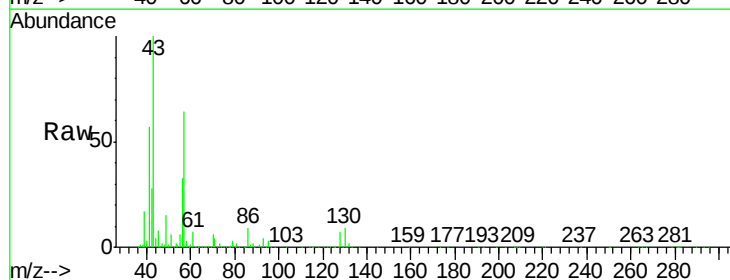
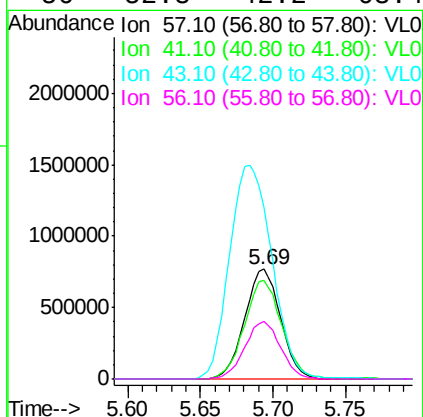
Manual Integrations  
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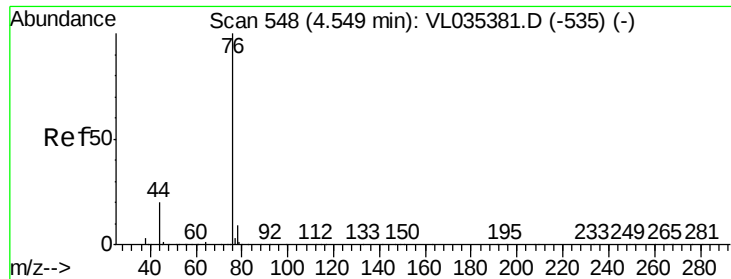
MMDadoda  
8/17/2020 5:43:44 PM



#26  
Hexane  
Concen: 10.408 ppbv  
RT: 5.69 min Scan# 904  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | 57    | Resp  | 1321125 |
|---------|-------|-------|---------|
| Ion     | Ratio | Lower | Upper   |
| 57      | 100   |       |         |
| 41      | 94.3  | 75.4  | 113.2   |
| 43      | 230.1 | 184.1 | 276.1   |
| 56      | 52.8  | 42.2  | 63.4    |





#27

Carbon Disulfide

Concen: 8.664 ppbv

RT: 4.55 min Scan# 548

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 76 Resp: 1537897

Ion Ratio Lower Upper

76 100

44 21.2 17.0 25.4

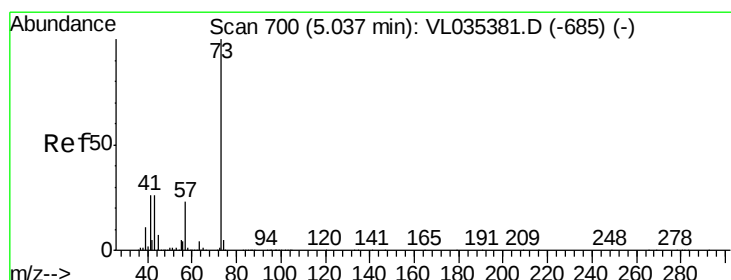
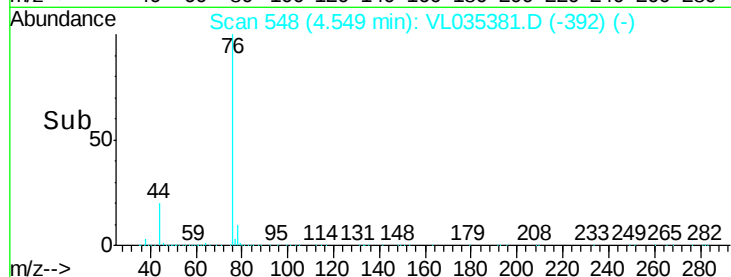
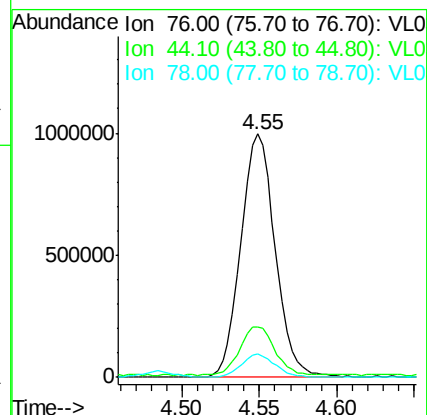
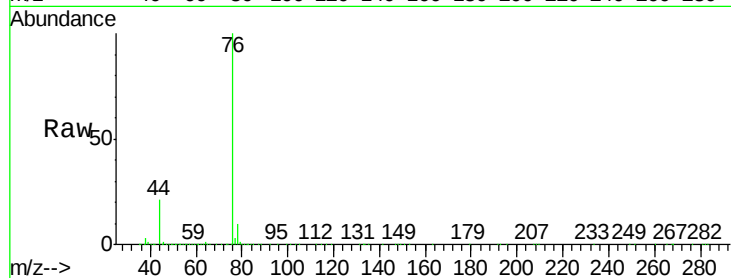
78 9.4 7.5 11.3

Manual Integrations

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8/17/2020 5:43:44 PM



#28

Methyl tert-Butyl Ether

Concen: 11.902 ppbv

RT: 5.04 min Scan# 700

Delta R.T. 0.00 min

Lab File: VL035381.D

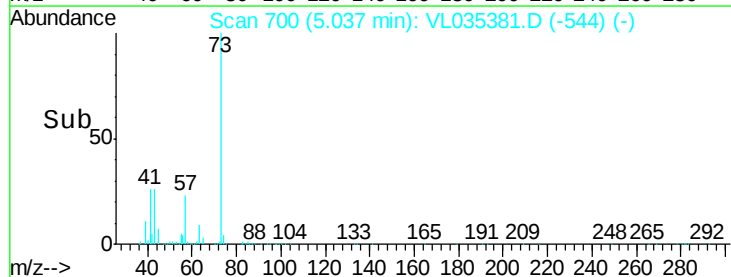
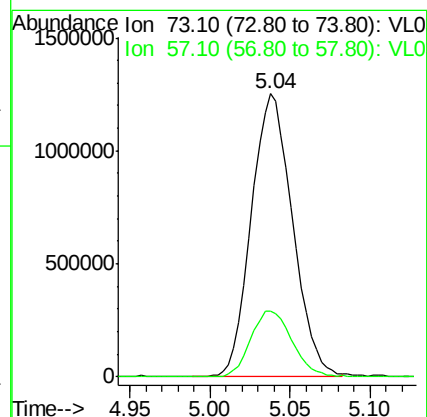
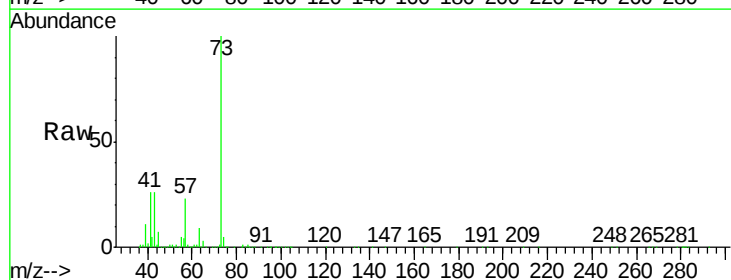
Acq: 12 Aug 2020 11:57

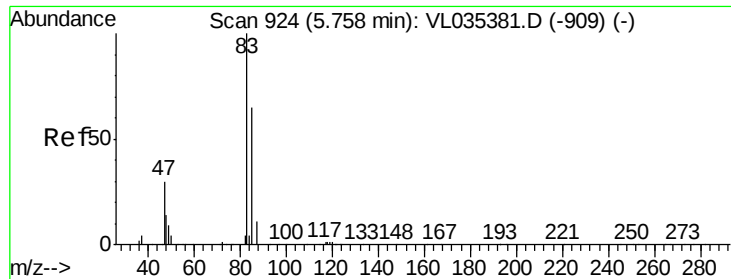
Tgt Ion: 73 Resp: 2196708

Ion Ratio Lower Upper

73 100

57 23.7 19.0 28.4





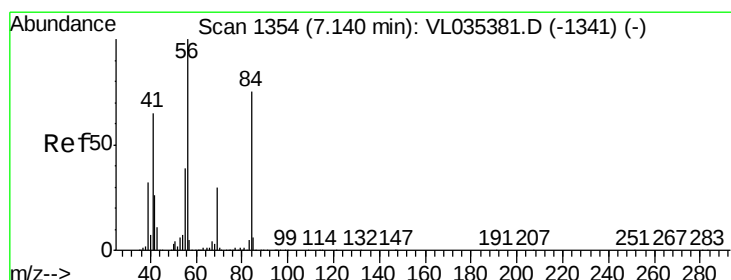
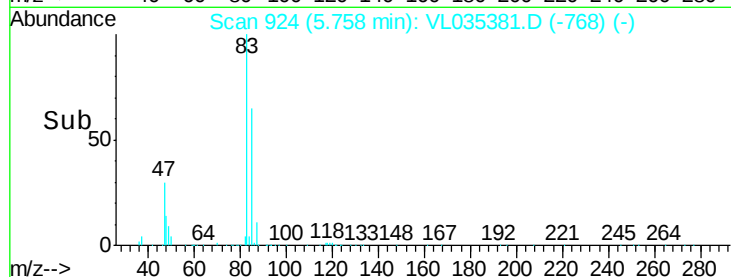
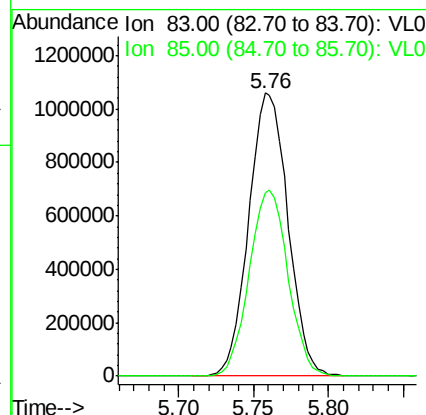
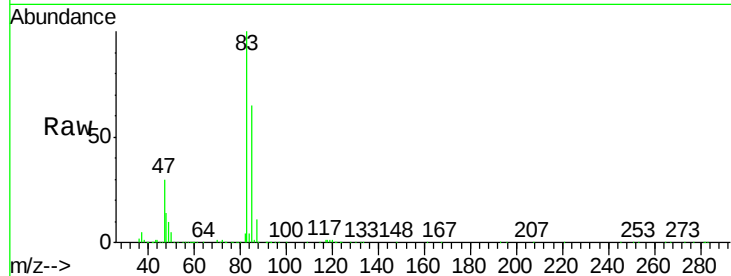
#29  
Chloroform  
Concen: 8.835 ppbv  
RT: 5.76 min Scan# 924  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tot Ion: 83 Resp: 1933415  
Ion Ratio Lower Upper  
83 100  
85 64.6 51.7 77.5

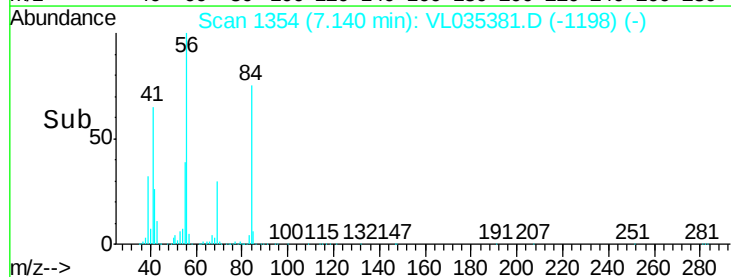
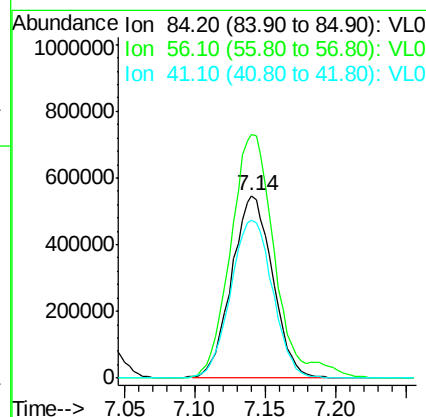
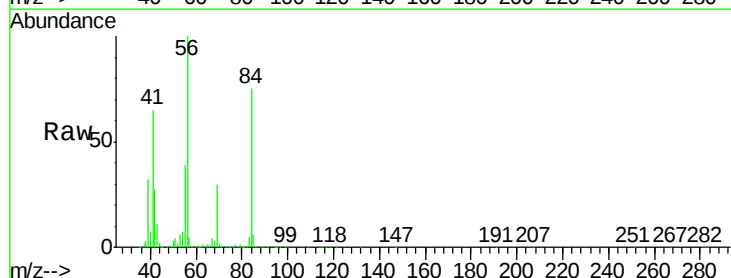
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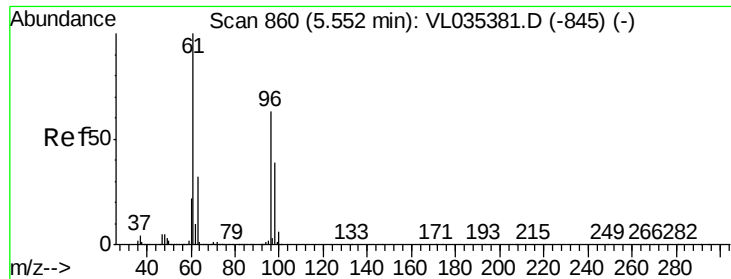
MMDadoda  
8/17/2020 5:43:44 PM



#30  
Cyclohexane  
Concen: 11.479 ppbv  
RT: 7.14 min Scan# 1354  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Tgt Ion: 84 Resp: 1104924  
Ion Ratio Lower Upper  
84 100  
56 144.7 115.8 173.6  
41 89.2 71.4 107.0





#31

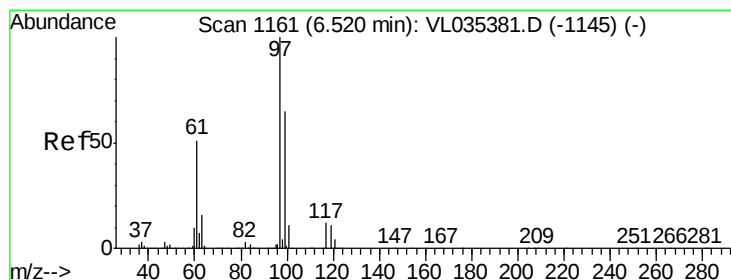
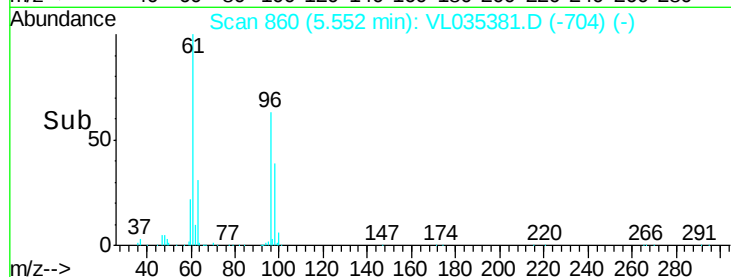
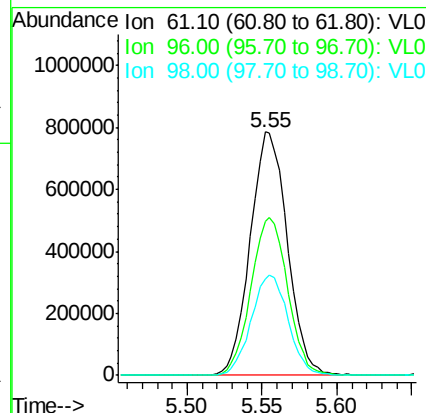
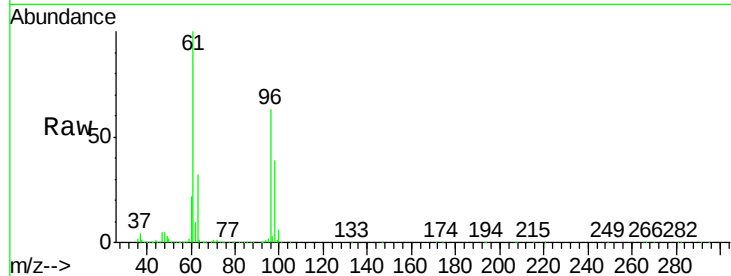
cis-1,2-Dichloroethene  
 Concen: 12.022 ppbv  
 RT: 5.55 min Scan# 860  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 63.1  | 50.5  | 75.7  |
| 98      | 39.4  | 31.5  | 47.3  |

Manual Integrations  
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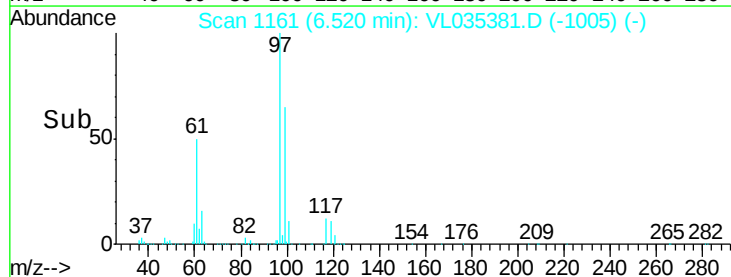
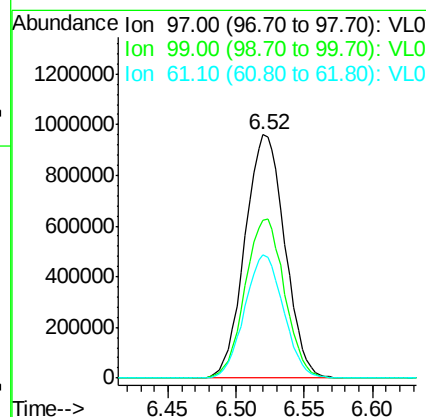
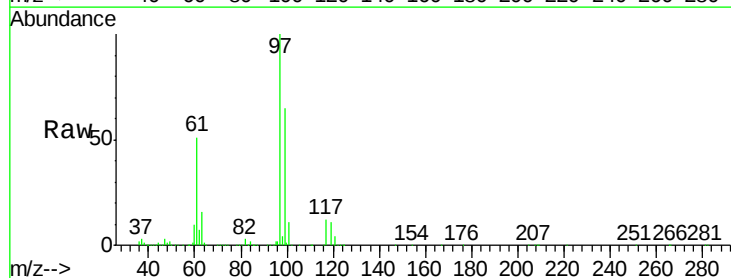
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 8/17/2020 5:43:44 PM

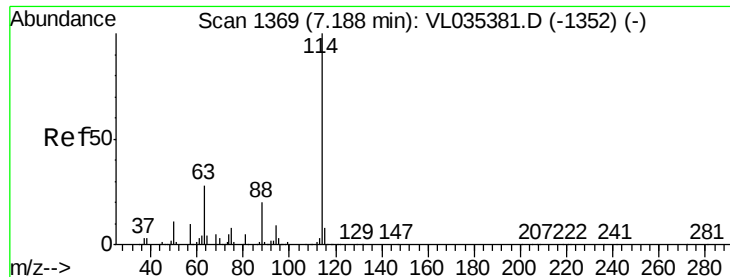


#32

1,1,1-Trichloroethane  
 Concen: 8.459 ppbv  
 RT: 6.52 min Scan# 1161  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.8  | 51.8  | 77.8  |
| 61      | 49.6  | 39.6  | 59.4  |





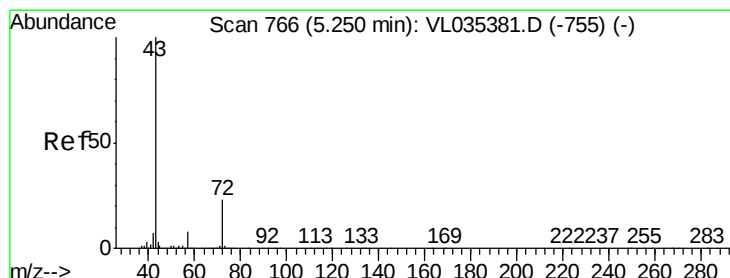
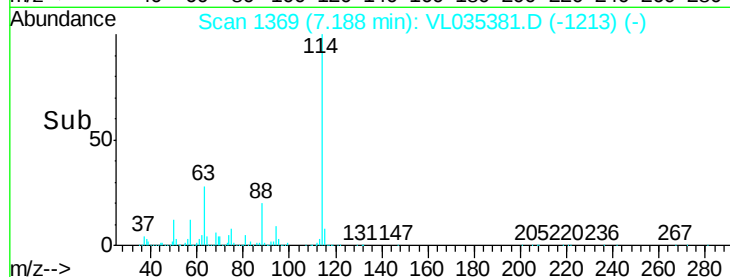
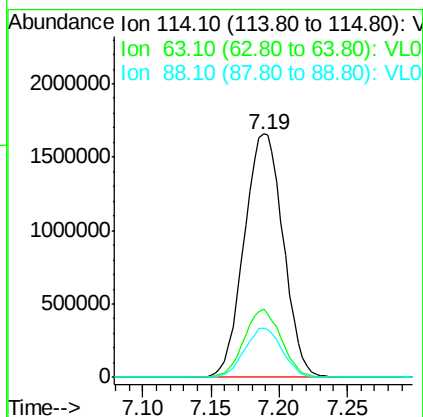
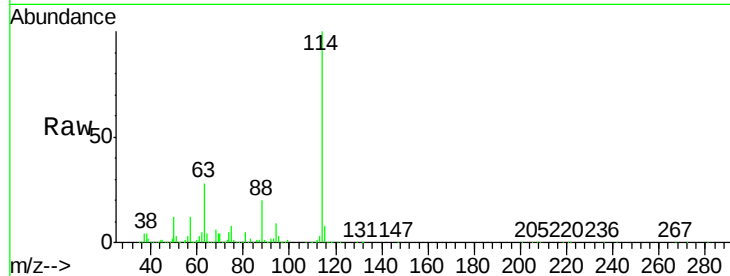
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.19 min Scan# 1369  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 26.9  | 21.5  | 32.3  |
| 88      | 19.5  | 15.6  | 23.4  |

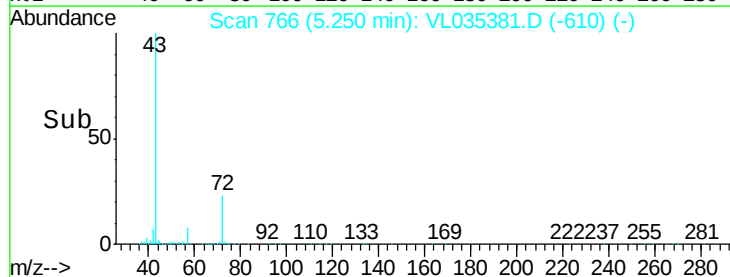
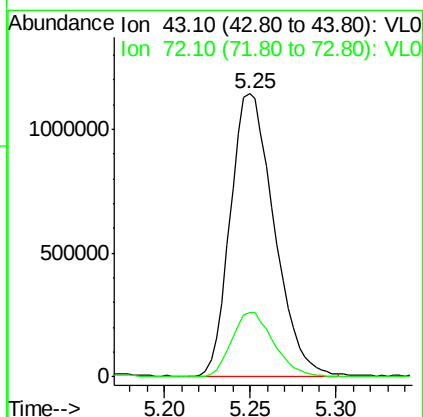
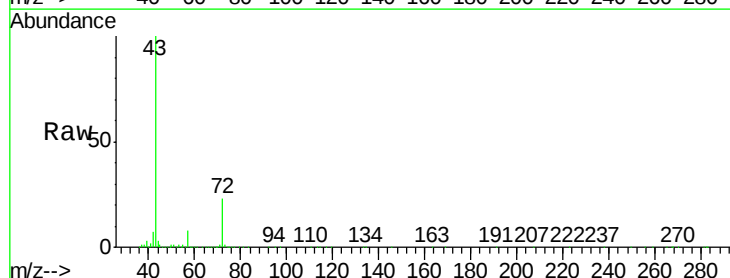
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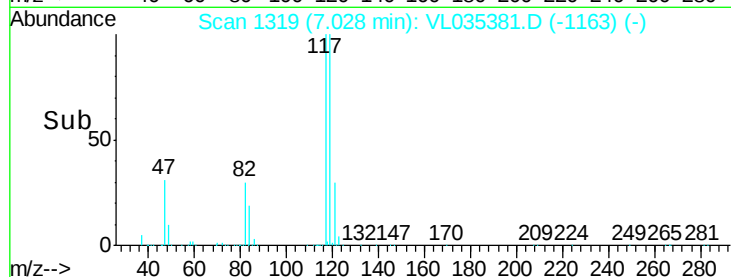
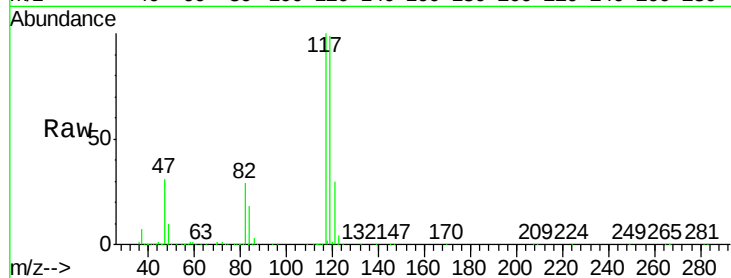
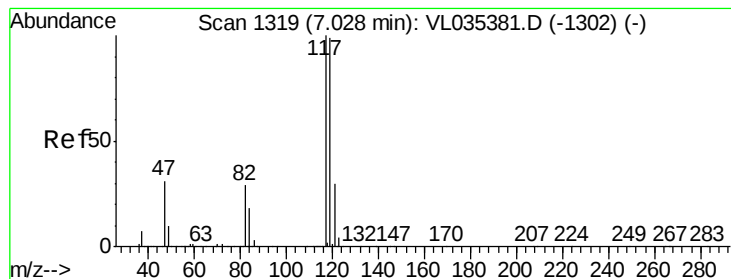
MMDadoda  
 8/17/2020 5:43:44 PM



#34  
 2-Butanone  
 Concen: 12.481 ppbv  
 RT: 5.25 min Scan# 766  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 22.1  | 17.7  | 26.5  |





#35

Carbon Tetrachloride

Concen: 8.508 ppbv

RT: 7.03 min Scan# 1319

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 119     | 99.2  | 79.4  | 119.0 |
| 121     | 30.4  | 24.3  | 36.5  |

Instrument :

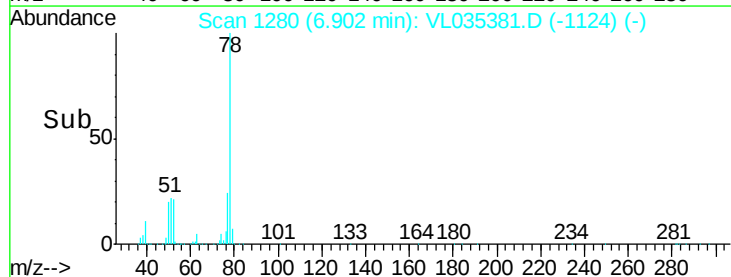
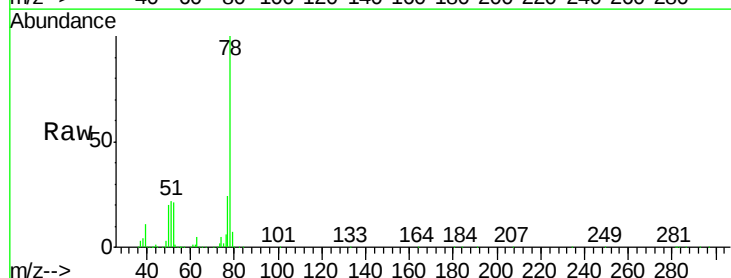
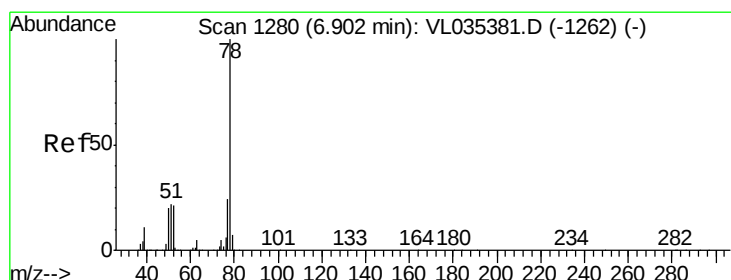
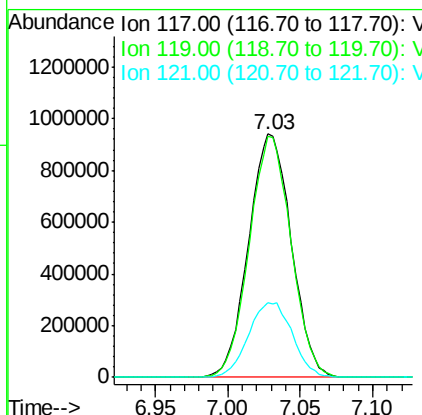
MSVOA\_L

ClientSampleId :

VSTDICCC010

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8/17/2020 5:43:44 PM



#36

Benzene

Concen: 12.172 ppbv

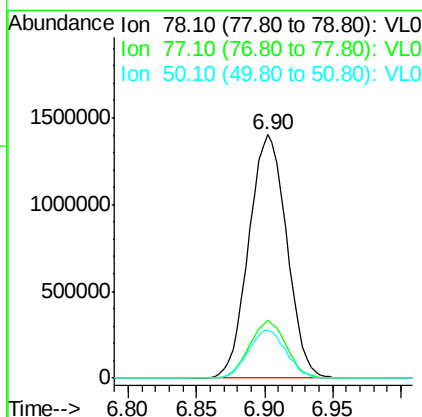
RT: 6.90 min Scan# 1280

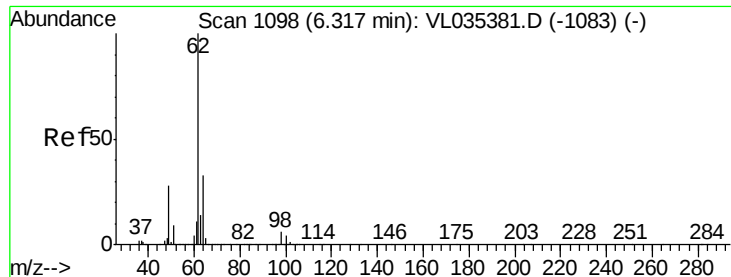
Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 23.9  | 19.1  | 28.7  |
| 50      | 19.7  | 15.8  | 23.6  |





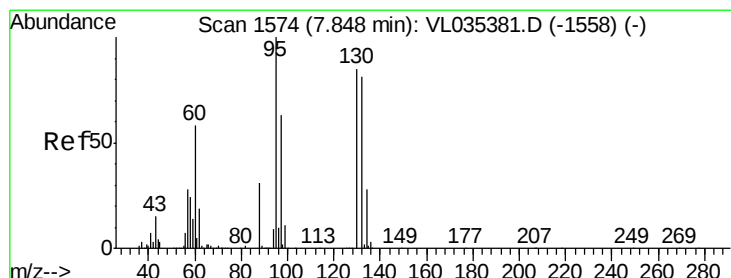
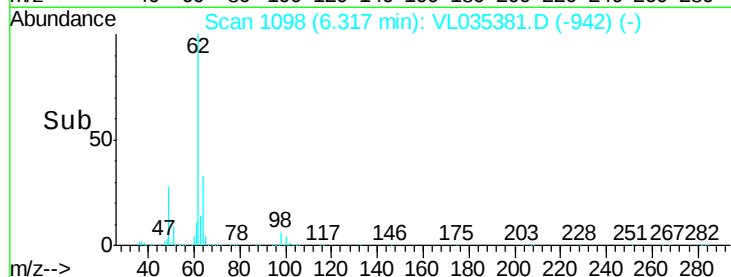
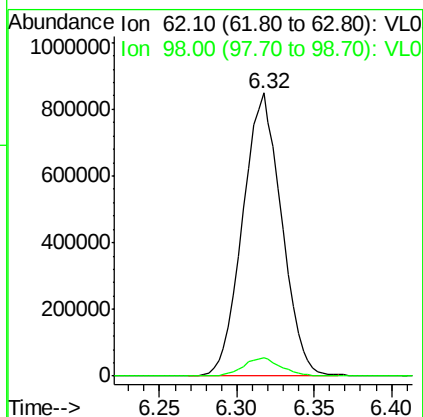
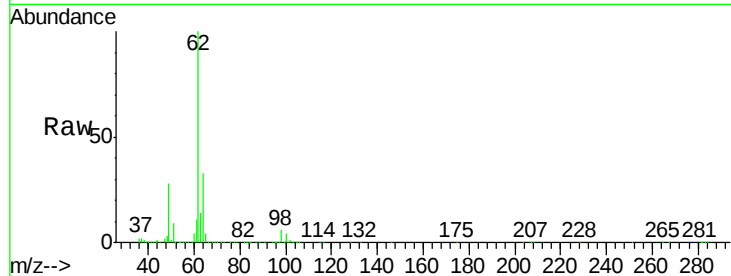
#37  
 1,2-Dichloroethane  
 Concen: 9.595 ppbv  
 RT: 6.32 min Scan# 1098  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 62      | 100   |       |       |
| 98      | 6.4   | 5.1   | 7.7   |

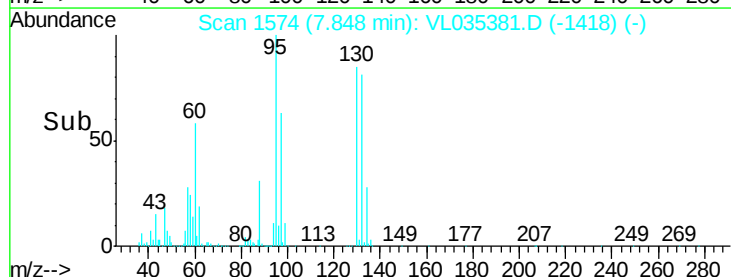
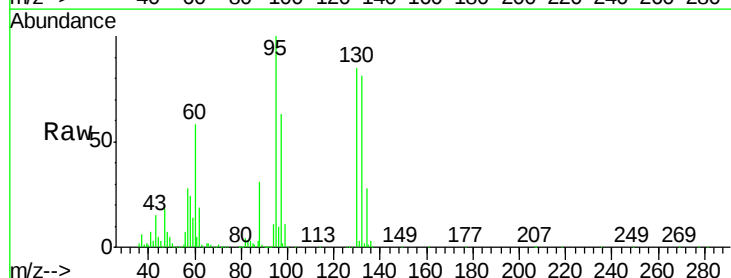
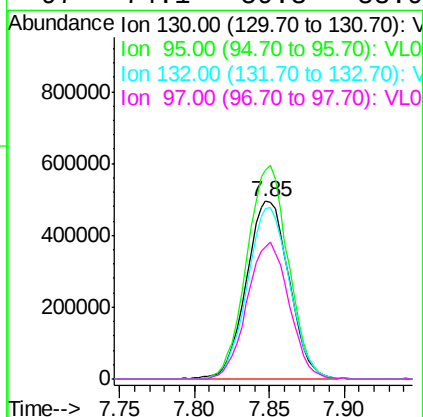
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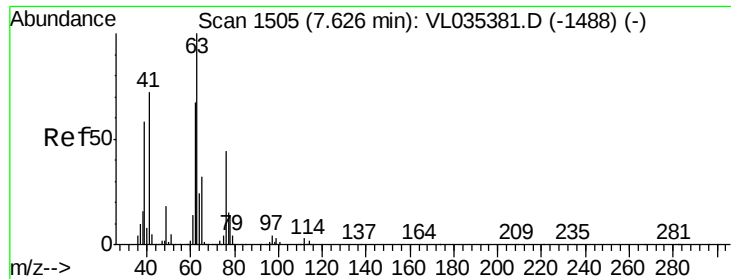
MMDadoda  
 8/17/2020 5:43:44 PM



#38  
 Trichloroethene  
 Concen: 9.517 ppbv  
 RT: 7.85 min Scan# 1574  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 130     | 100   |       |       |
| 95      | 117.8 | 94.2  | 141.4 |
| 132     | 95.7  | 76.6  | 114.8 |
| 97      | 74.1  | 59.3  | 88.9  |





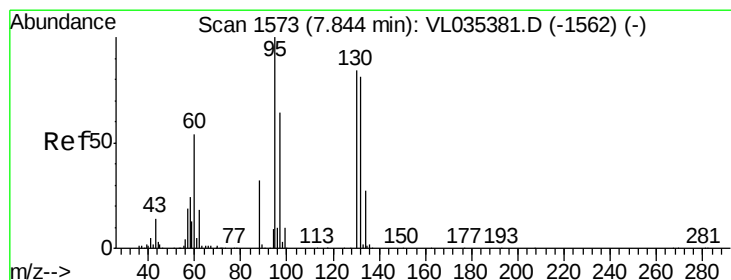
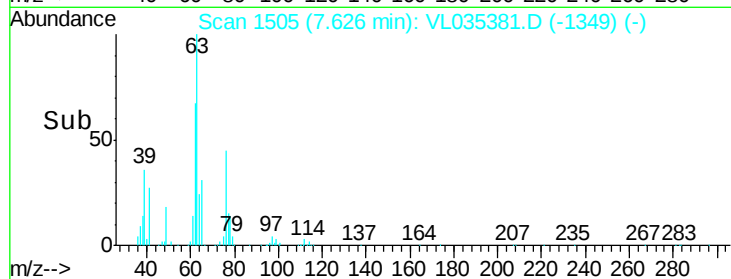
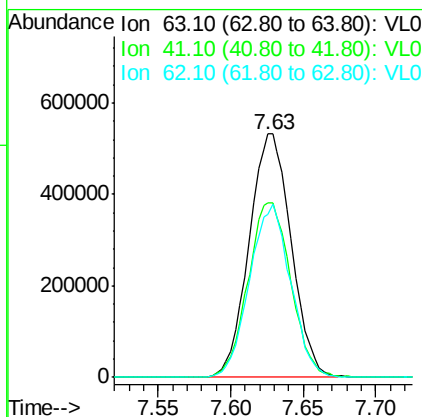
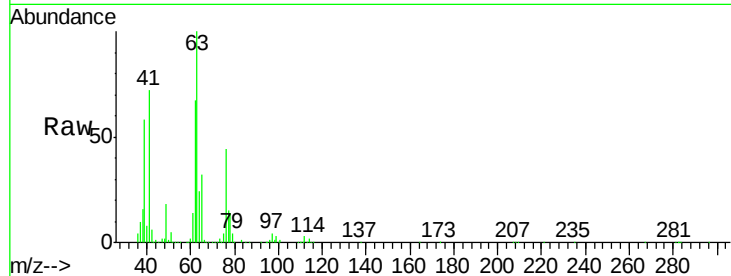
#39  
 1,2-Dichloropropane  
 Concen: 11.913 ppbv  
 RT: 7.63 min Scan# 1505  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 71.8  | 57.4  | 86.2  |
| 62      | 67.0  | 53.6  | 80.4  |

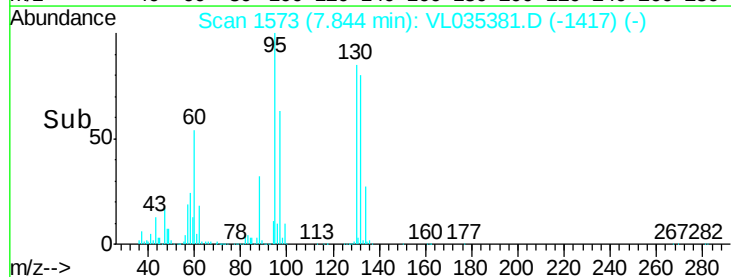
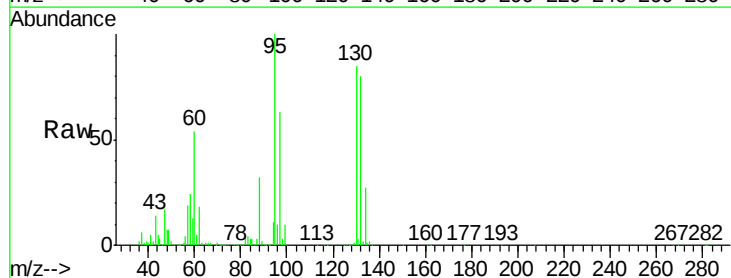
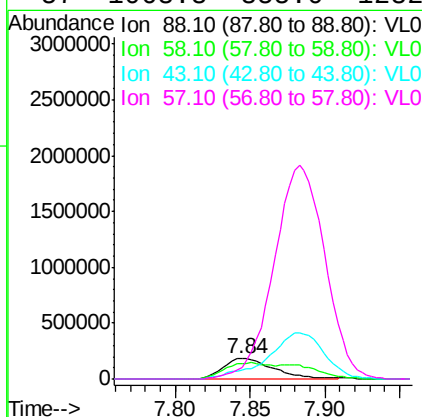
Manual Integrations  
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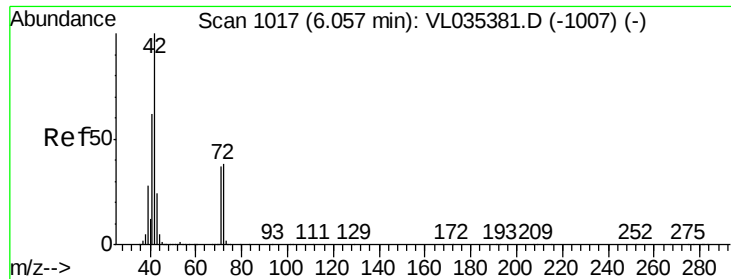
MMDadoda  
 8/17/2020 5:43:44 PM



#40  
 1,4-Dioxane  
 Concen: 11.018 ppbv  
 RT: 7.84 min Scan# 1573  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio  | Lower | Upper  |
|---------|--------|-------|--------|
| 88      | 100    |       |        |
| 58      | 130.5  | 105.0 | 157.6  |
| 43      | 254.8  | 204.2 | 306.2  |
| 57      | 1068.8 | 855.0 | 1282.4 |





#41

Tetrahydrofuran

Concen: 15.515 ppbv

RT: 6.06 min Scan# 1017

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

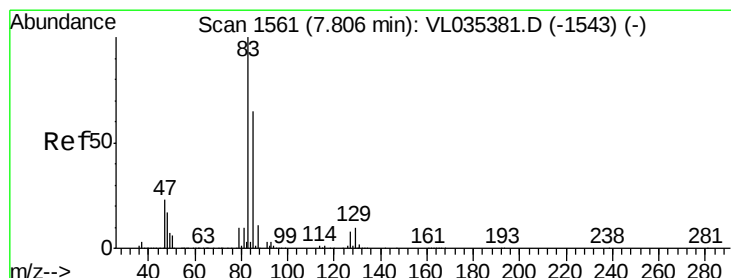
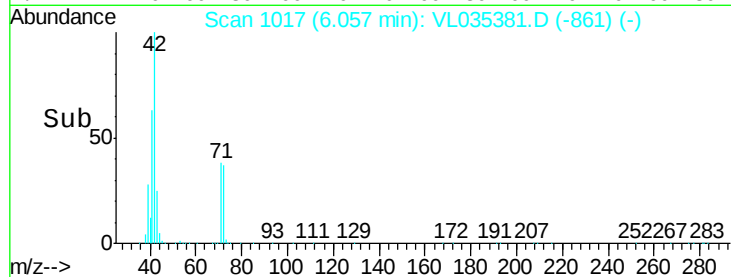
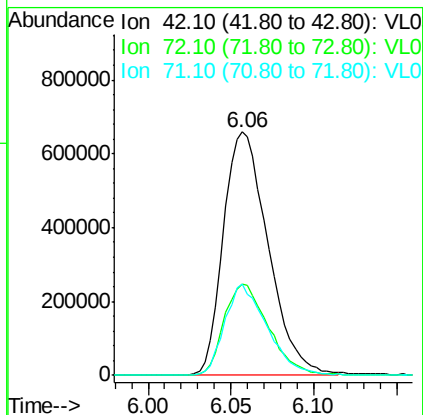
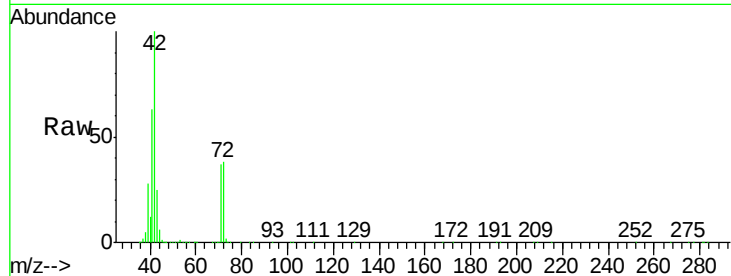
ClientSampleId :

VSTDICCC010

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 42    | Resp: | 1234652 |
| Ion      | Ratio | Lower | Upper   |
| 42       | 100   |       |         |
| 72       | 37.7  | 30.2  | 45.2    |
| 71       | 35.7  | 28.6  | 42.8    |

Manual Integrations  
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MMDadoda  
8/17/2020 5:43:44 PM



#42

Bromodichloromethane

Concen: 10.291 ppbv

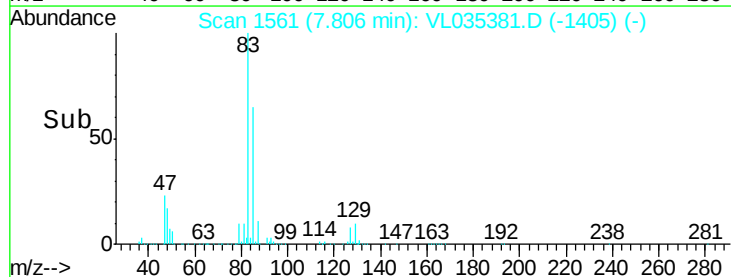
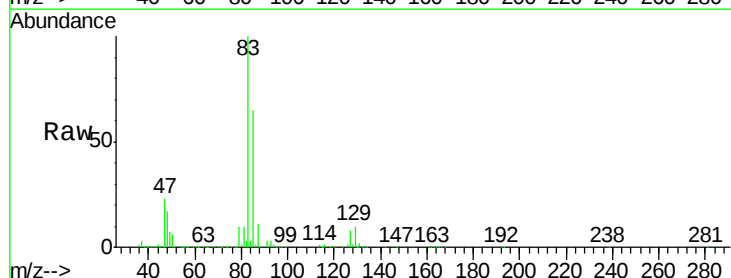
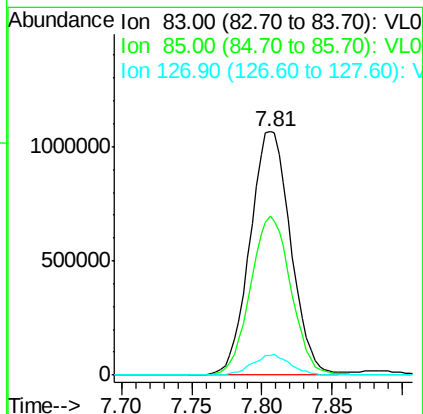
RT: 7.81 min Scan# 1561

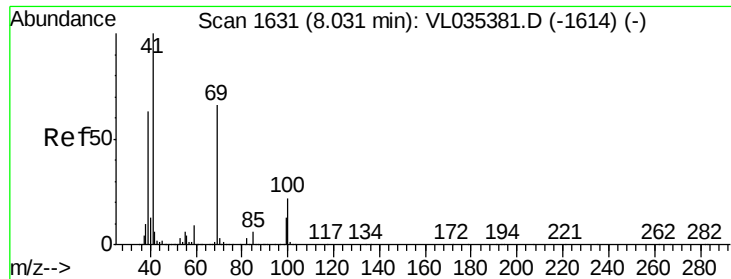
Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 83    | Resp: | 2147119 |
| Ion      | Ratio | Lower | Upper   |
| 83       | 100   |       |         |
| 85       | 65.3  | 52.2  | 78.4    |
| 127      | 7.9   | 6.3   | 9.5     |





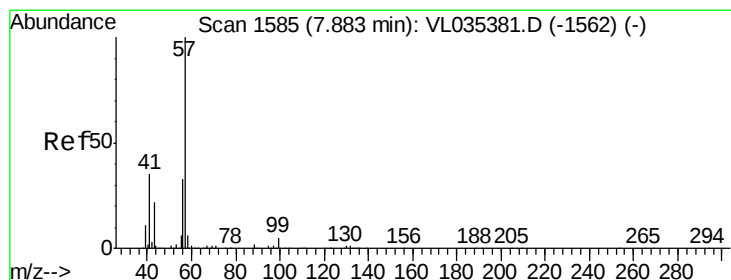
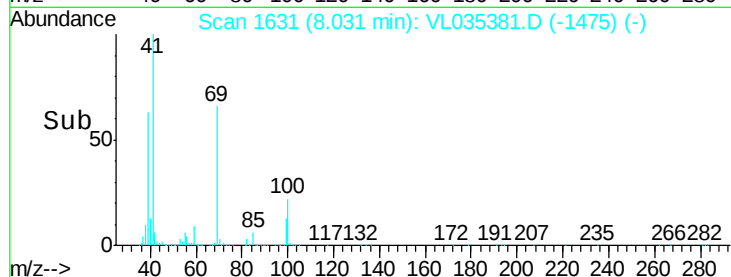
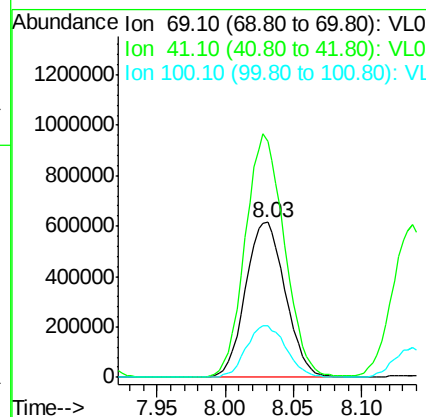
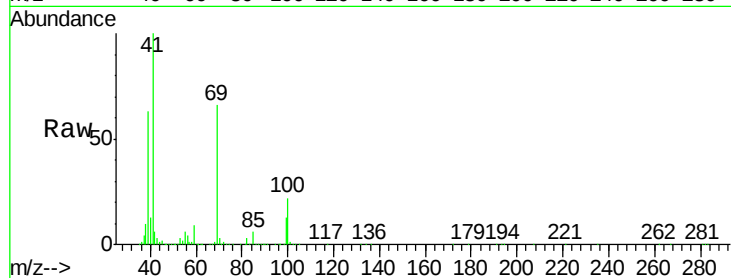
#43  
Methvl Methacrilate  
Concen: 13.302 ppbv  
RT: 8.03 min Scan# 1631  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tot Ion: 69 Resp: 1244540  
Ion Ratio Lower Upper  
69 100  
41 154.3 123.4 185.2  
100 33.4 26.7 40.1

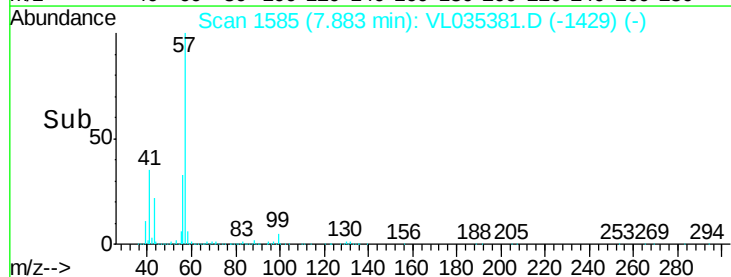
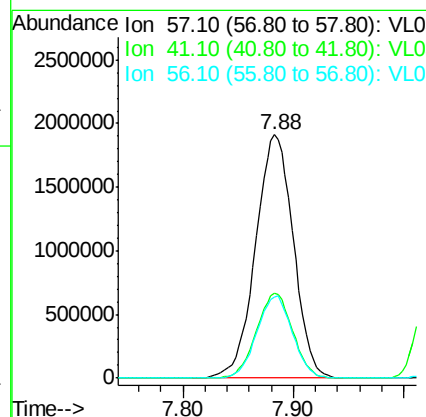
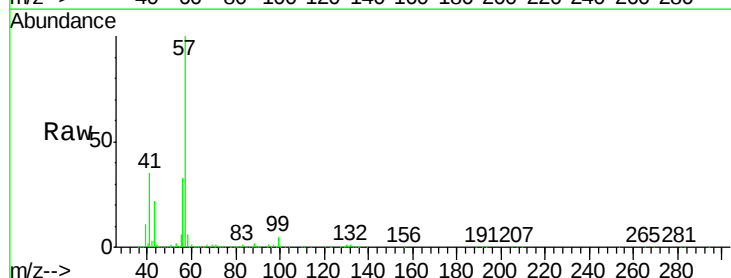
Manual Integrations  
APPROVED

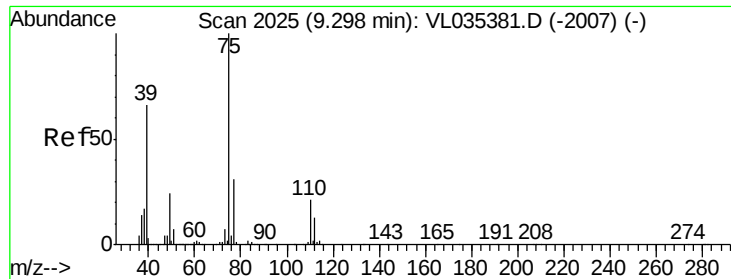
MMDadoda  
8/17/2020 5:43:44 PM



#44  
2,2,4-Trimethylpentane  
Concen: 11.468 ppbv  
RT: 7.88 min Scan# 1585  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Tgt Ion: 57 Resp: 4530830  
Ion Ratio Lower Upper  
57 100  
41 33.6 26.9 40.3  
56 32.0 25.6 38.4





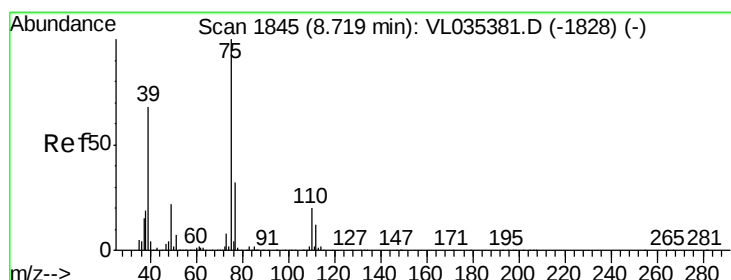
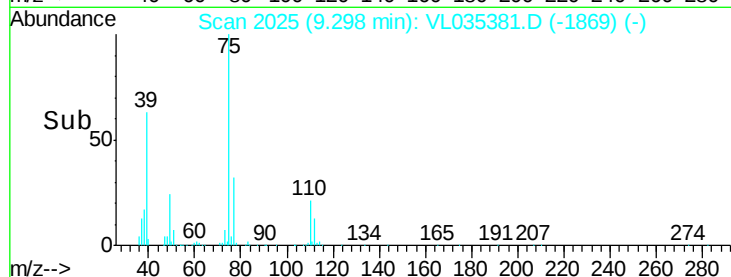
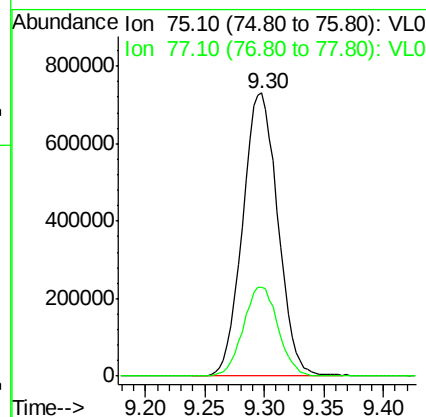
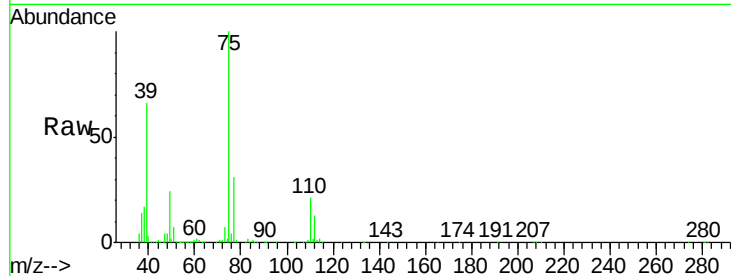
#45  
t-1,3-Dichloropropene  
Concen: 15.399 ppbv  
RT: 9.30 min Scan# 2025  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tot Ion: 75 Resp: 1494523  
Ion Ratio Lower Upper  
75 100  
77 31.5 25.2 37.8

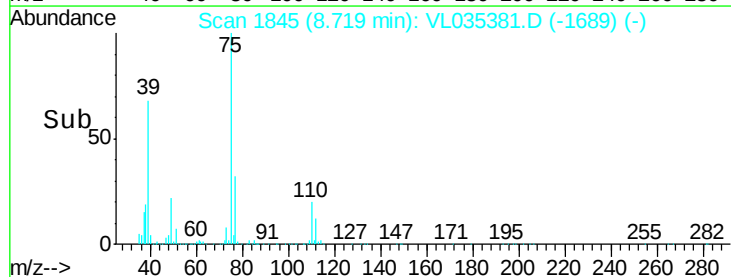
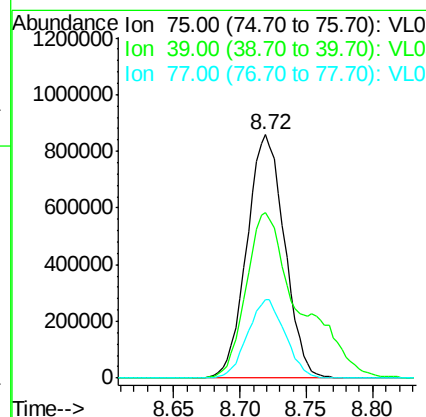
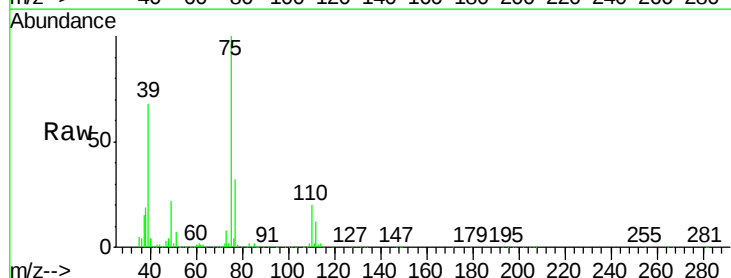
Manual Integrations  
APPROVED

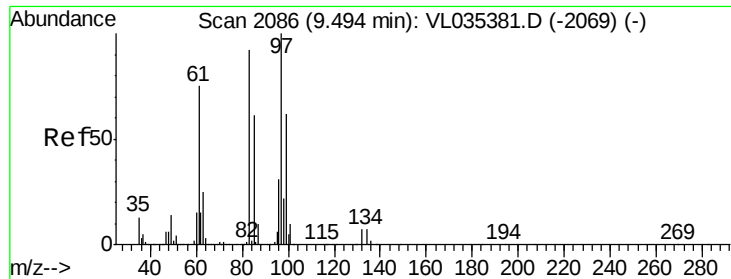
MMDadoda  
8/17/2020 5:43:44 PM



#46  
cis-1,3-Dichloropropene  
Concen: 14.457 ppbv  
RT: 8.72 min Scan# 1845  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Tgt Ion: 75 Resp: 1694493  
Ion Ratio Lower Upper  
75 100  
39 67.7 54.2 81.2  
77 32.1 25.7 38.5





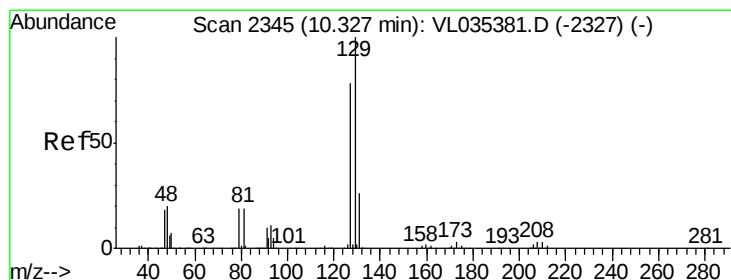
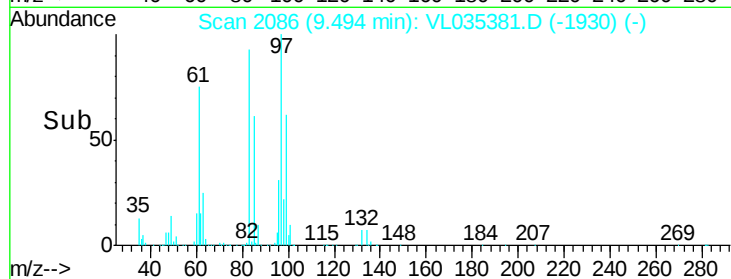
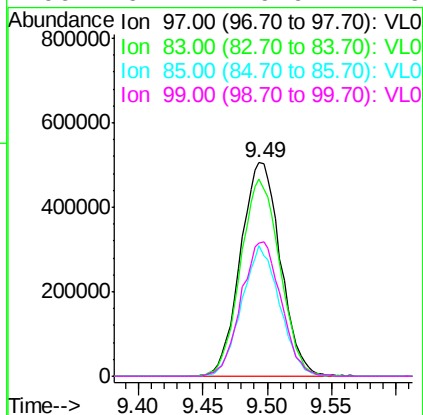
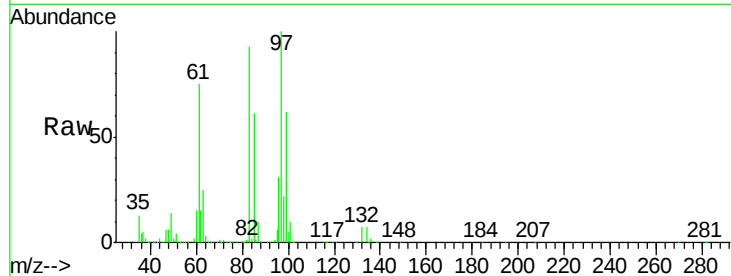
#47  
 1,1,2-Trichloroethane  
 Concen: 10.067 ppbv  
 RT: 9.49 min Scan# 2086  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 83      | 92.4  | 73.9  | 110.9 |
| 85      | 61.3  | 49.0  | 73.6  |
| 99      | 62.4  | 49.9  | 74.9  |

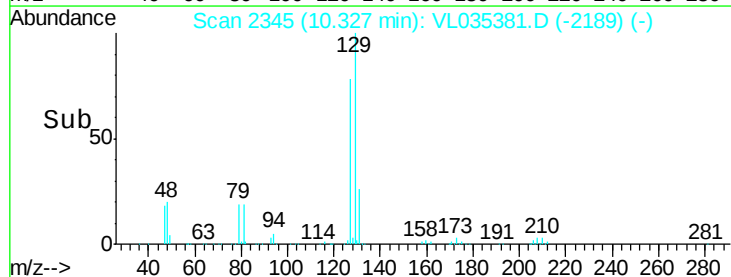
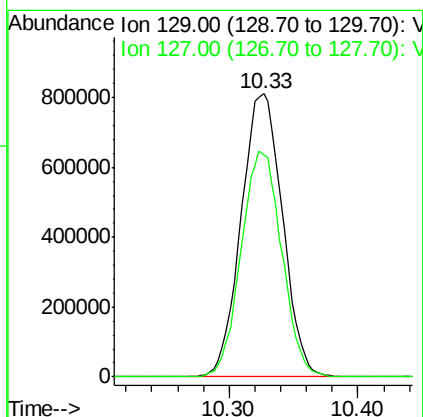
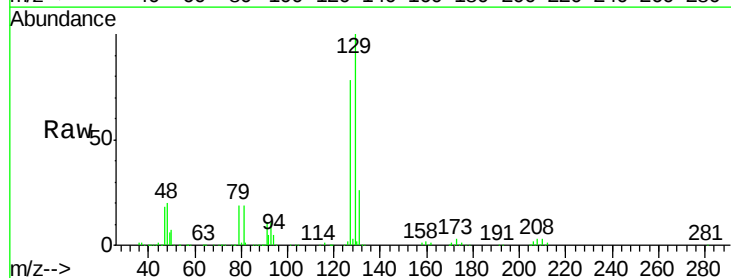
Manual Integrations  
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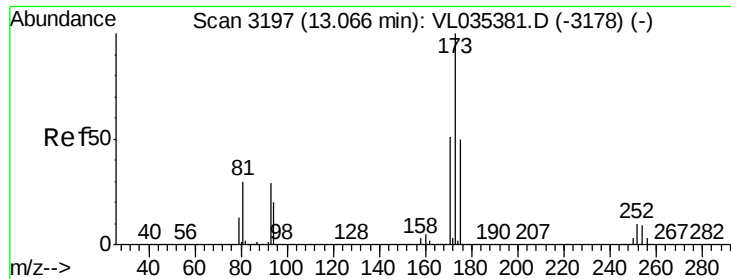
MMDadoda  
 8/17/2020 5:43:44 PM



#48  
 Dibromochloromethane  
 Concen: 10.213 ppbv  
 RT: 10.33 min Scan# 2345  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 129     | 100   |       |       |
| 127     | 78.5  | 39.3  | 117.8 |





#49

Bromoform

Concen: 9.609 ppbv

RT: 13.07 min Scan# 3197

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion:173 Resp: 1552600

Ion Ratio Lower Upper

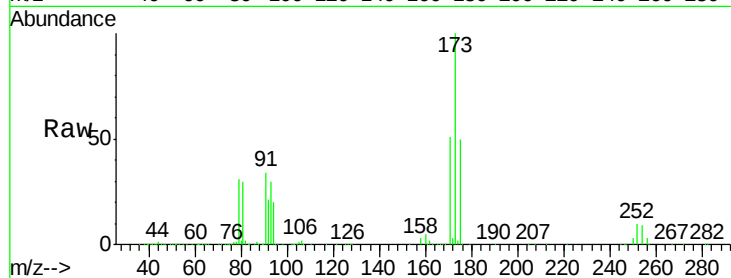
173 100

175 49.9 39.9 59.9

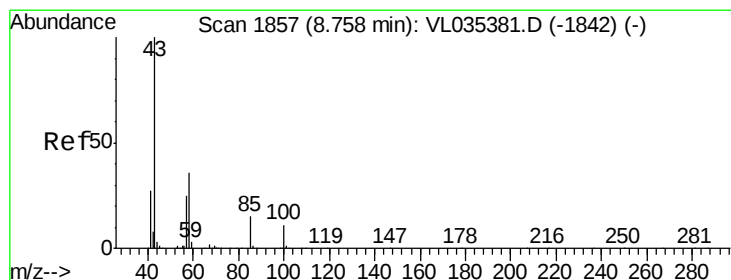
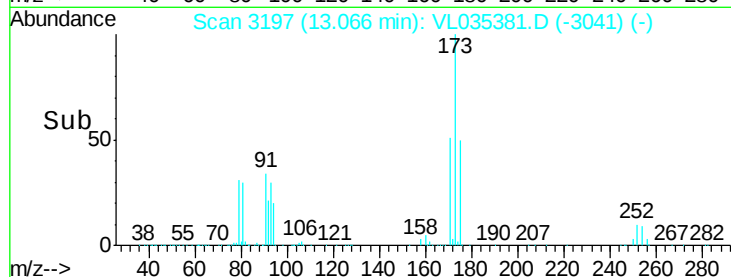
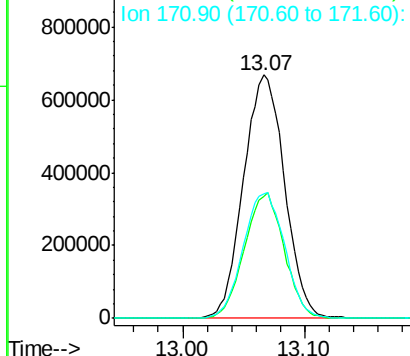
171 52.3 41.8 62.8

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8/17/2020 5:43:44 PM



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



#50

4-Methyl-2-Pentanone

Concen: 12.226 ppbv

RT: 8.76 min Scan# 1857

Delta R.T. 0.00 min

Lab File: VL035381.D

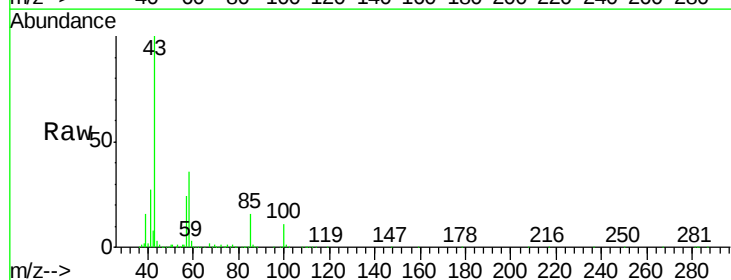
Acq: 12 Aug 2020 11:57

Tgt Ion: 43 Resp: 3026911

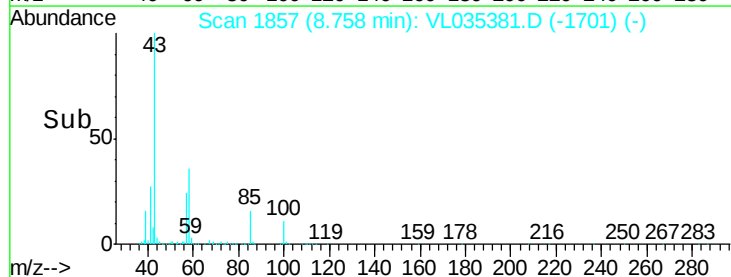
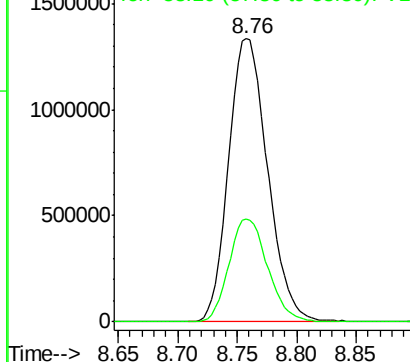
Ion Ratio Lower Upper

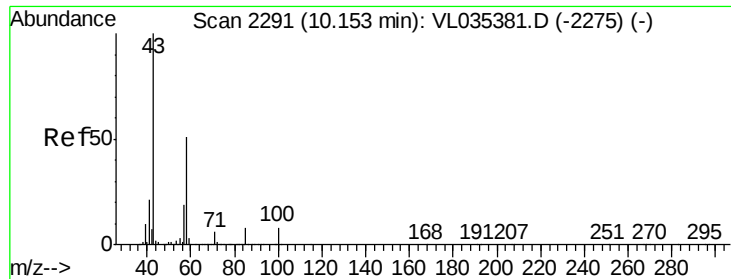
43 100

58 36.1 29.0 43.6



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





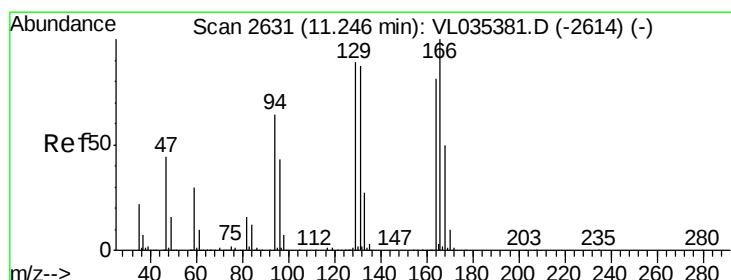
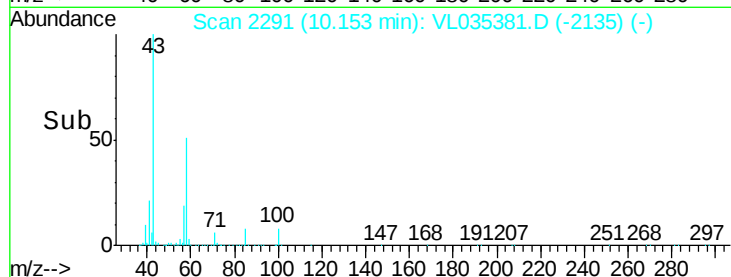
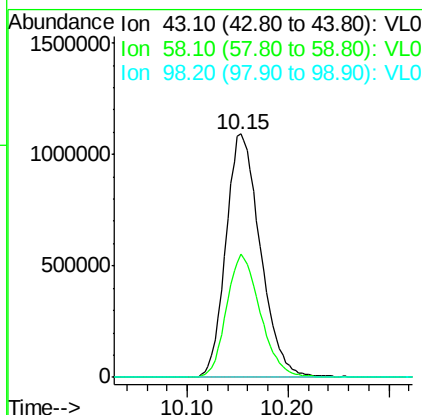
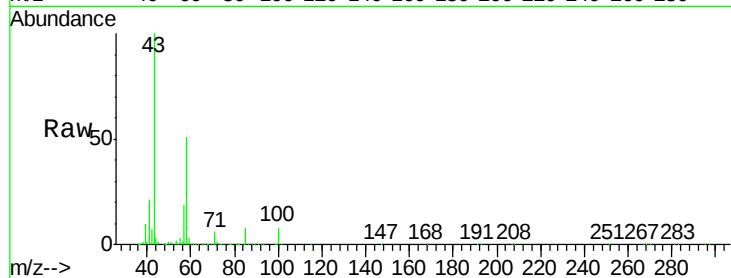
#51  
2-Hexanone  
Concen: 13.391 ppbv  
RT: 10.15 min Scan# 2291  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 49.4  | 39.5  | 59.3  |
| 98      | 0.1   | 0.1   | 0.1   |

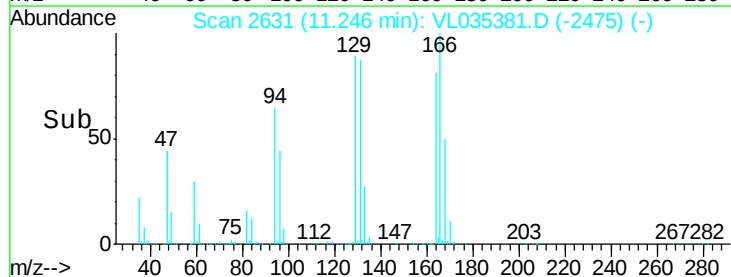
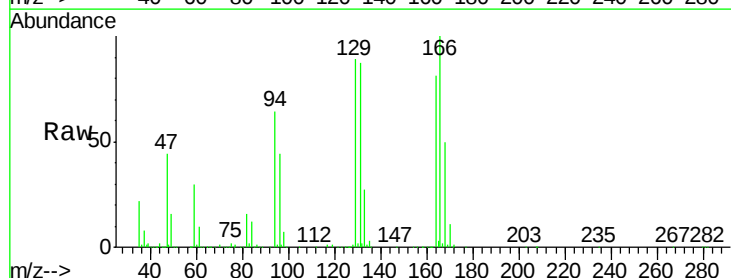
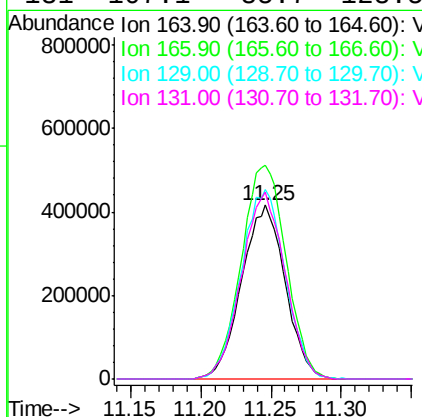
Manual Integrations  
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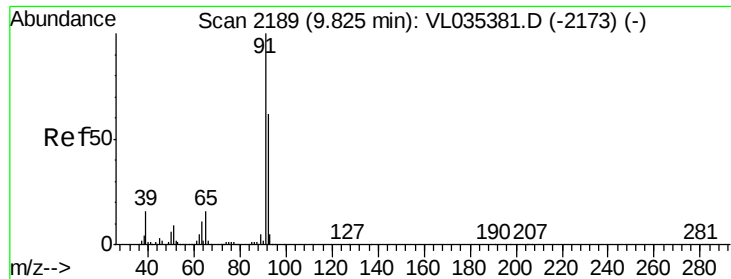
MMDadoda  
8/17/2020 5:43:44 PM



#52  
Tetrachloroethene  
Concen: 10.177 ppbv  
RT: 11.25 min Scan# 2631  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 166     | 122.7 | 98.2  | 147.2 |
| 129     | 109.1 | 87.3  | 130.9 |
| 131     | 107.1 | 85.7  | 128.5 |





#53

Toluene

Concen: 13.012 ppbv

RT: 9.83 min Scan# 2189

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 91 Resp: 3147736

Ion Ratio Lower Upper

91 100

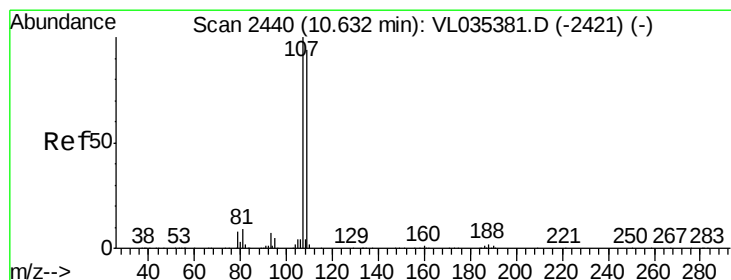
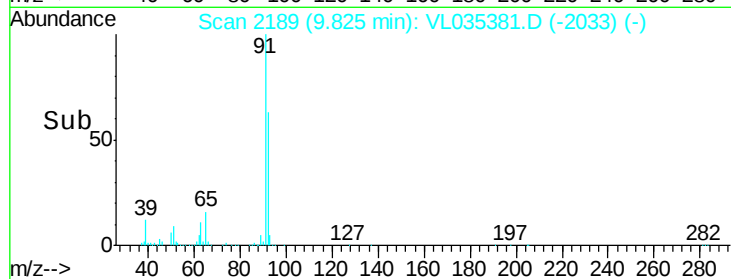
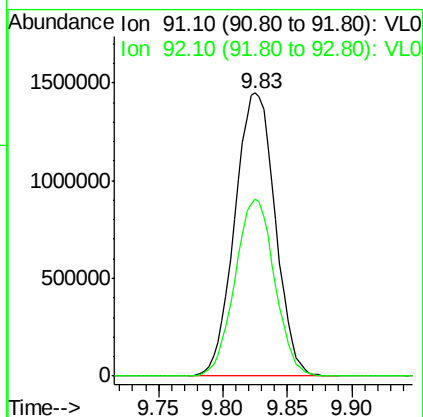
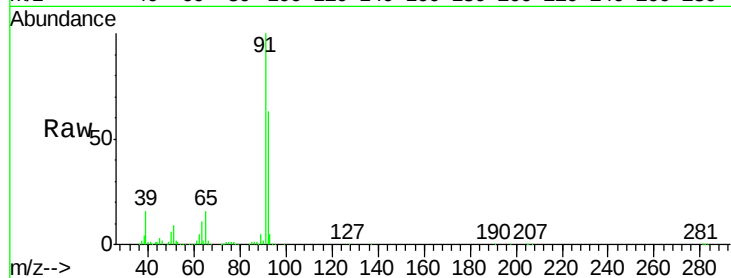
92 61.4 49.1 73.7

Manual Integrations

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#54

1,2-Dibromoethane

Concen: 10.914 ppbv

RT: 10.63 min Scan# 2440

Delta R.T. 0.00 min

Lab File: VL035381.D

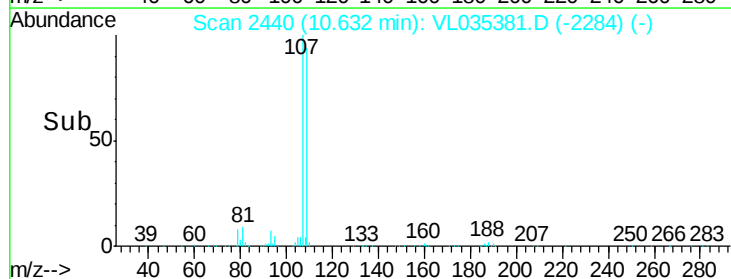
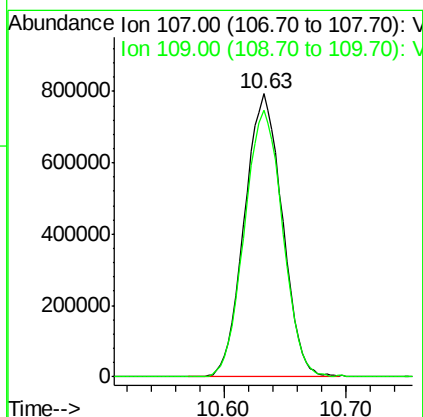
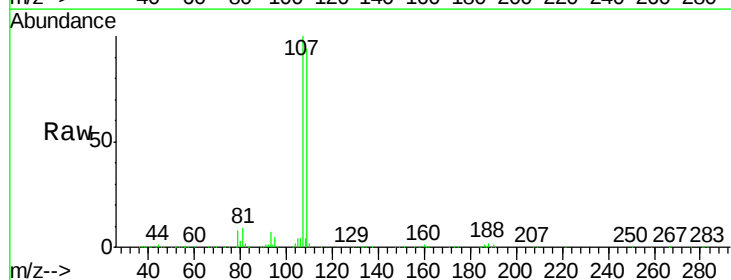
Acq: 12 Aug 2020 11:57

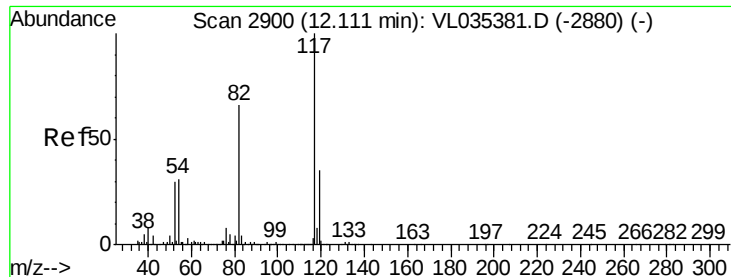
Tgt Ion: 107 Resp: 1694945

Ion Ratio Lower Upper

107 100

109 94.0 75.2 112.8





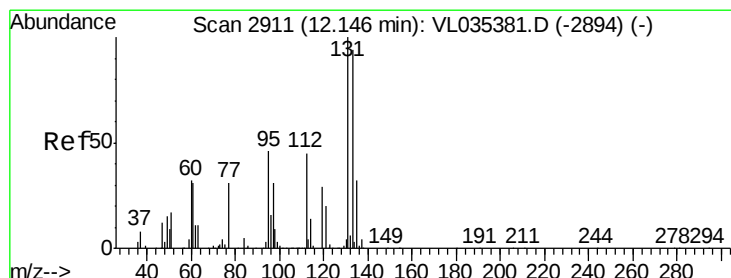
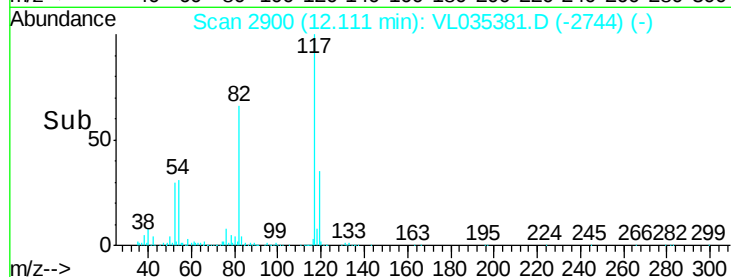
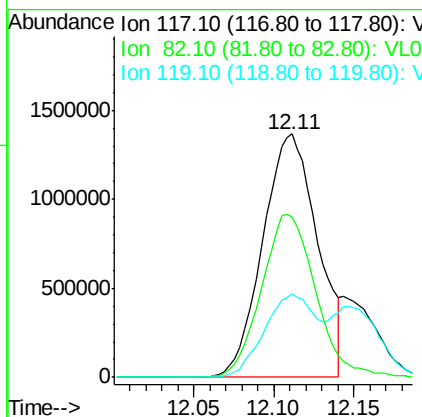
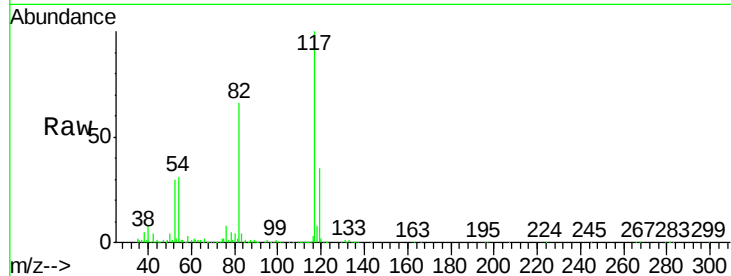
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.11 min Scan# 2900  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 66.3  | 53.0  | 79.6  |
| 119     | 32.1  | 25.7  | 38.5  |

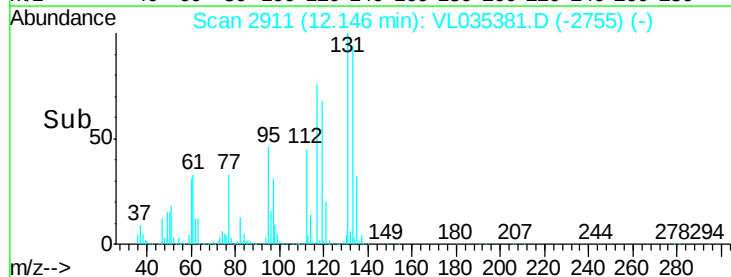
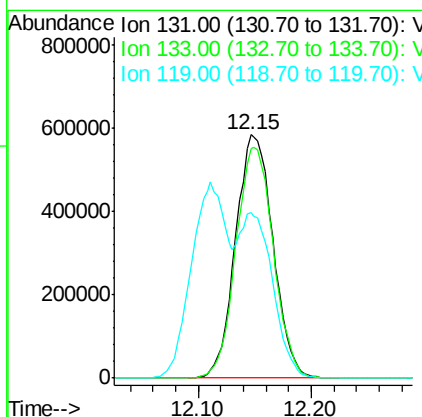
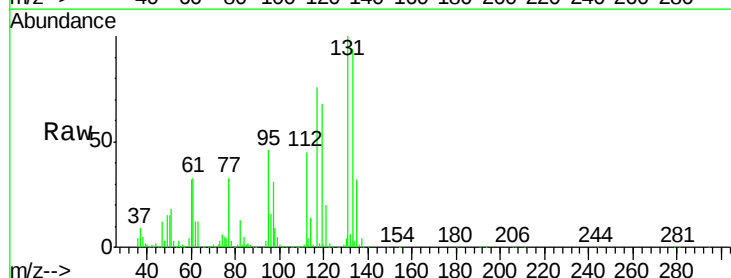
Manual Integrations  
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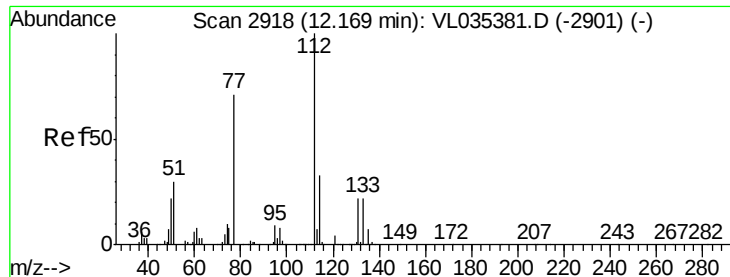
MMDadoda  
8/17/2020 5:43:44 PM



#56  
1,1,1,2-Tetrachloroethane  
Concen: 8.770 ppbv  
RT: 12.15 min Scan# 2911  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 131     | 100   |       |       |
| 133     | 95.2  | 76.1  | 114.1 |
| 119     | 63.1  | 47.0  | 70.4  |





#57

Chlorobenzene

Concen: 9.425 ppbv

RT: 12.17 min Scan# 2918

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion:112 Resp: 2305786

Ion Ratio Lower Upper

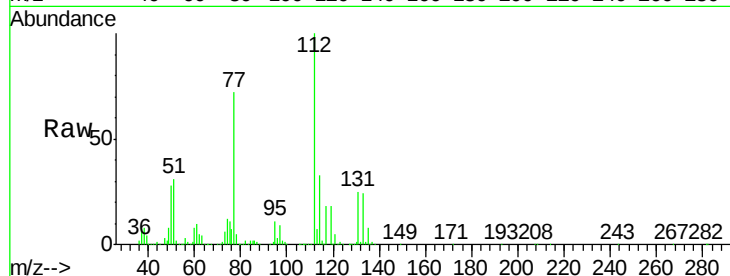
112 100

77 72.0 57.6 86.4

114 33.3 30.0 36.6

Manual Integrations  
APPROVED

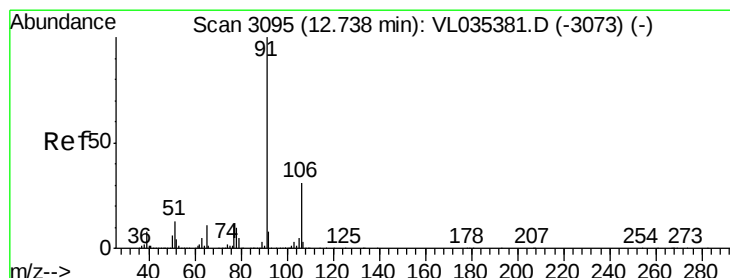
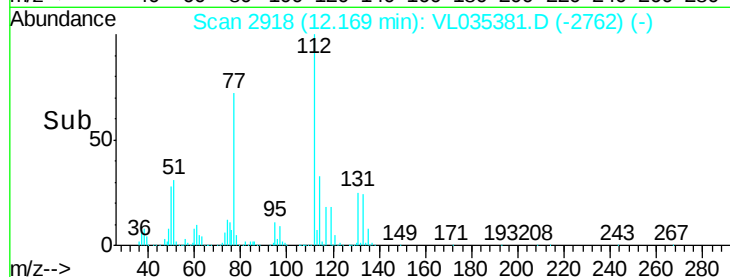
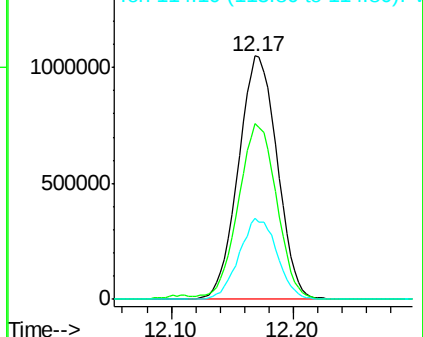
MMDadoda  
8/17/2020 5:43:44 PM



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: 12.589 ppbv

RT: 12.74 min Scan# 3095

Delta R.T. 0.00 min

Lab File: VL035381.D

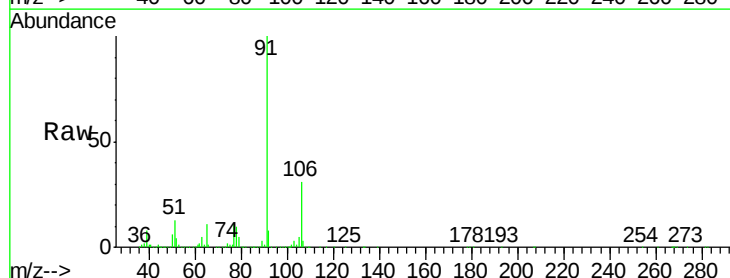
Acq: 12 Aug 2020 11:57

Tgt Ion: 91 Resp: 4255921

Ion Ratio Lower Upper

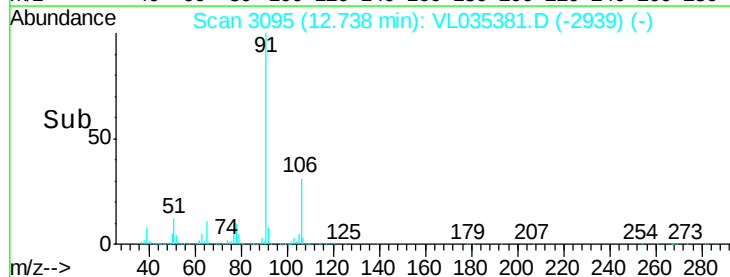
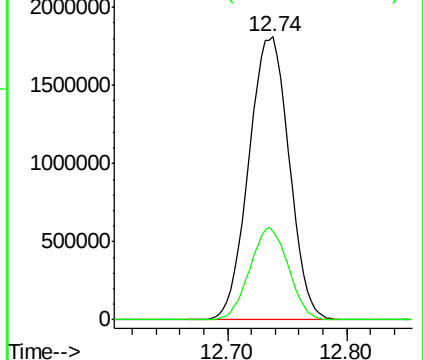
91 100

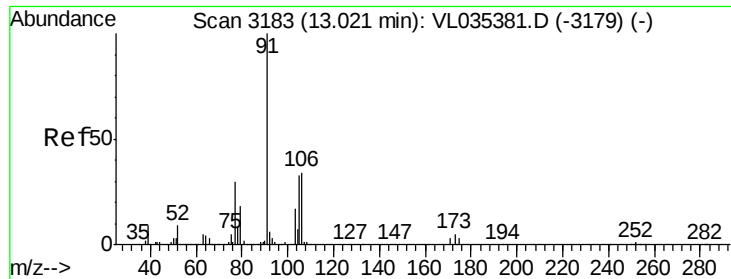
106 31.4 25.1 37.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





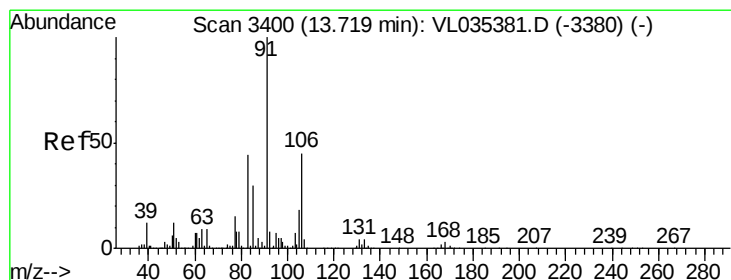
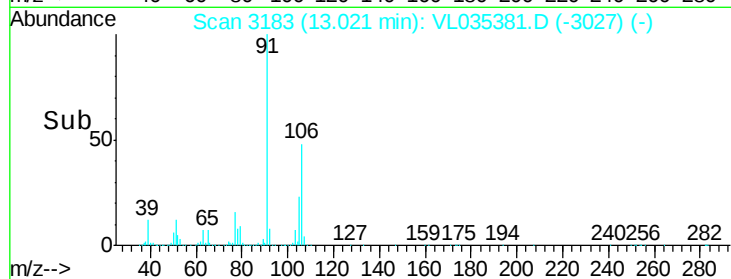
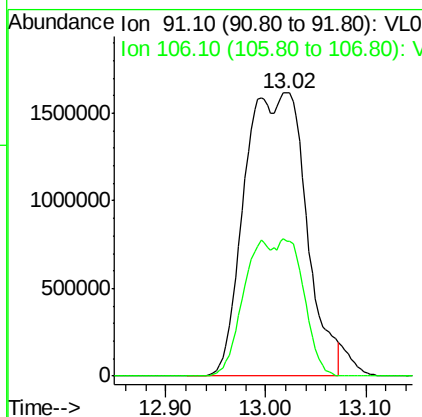
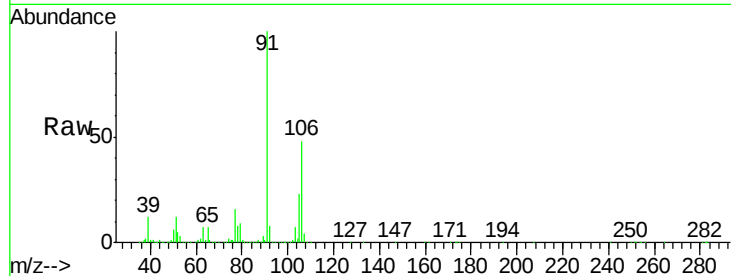
#59  
m/p-Xylene  
Concen: 21.983 ppbv m  
RT: 13.02 min Scan# 3183  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

Tot Ion: 91 Resp: 6920187  
Ion Ratio Lower Upper  
91 100  
106 45.3 36.7 55.1

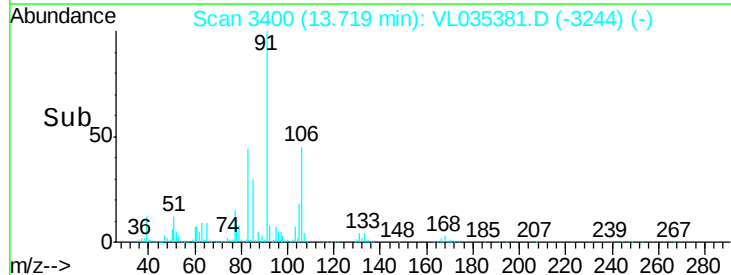
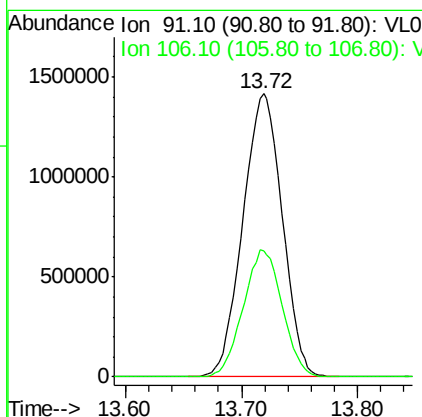
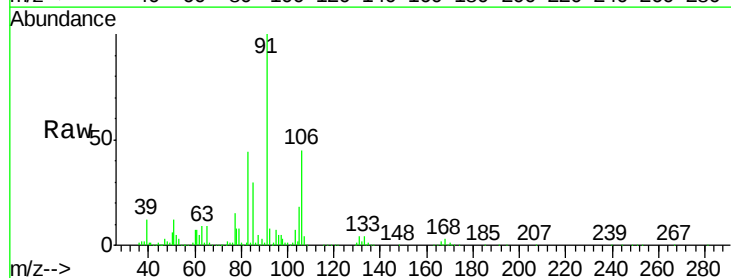
Manual Integrations  
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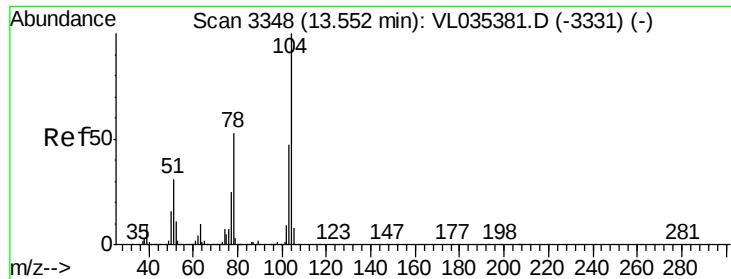
MMDadoda  
8/17/2020 5:43:44 PM



#60  
o-Xylene  
Concen: 10.714 ppbv  
RT: 13.72 min Scan# 3400  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Tgt Ion: 91 Resp: 3346952  
Ion Ratio Lower Upper  
91 100  
106 44.4 22.2 66.6





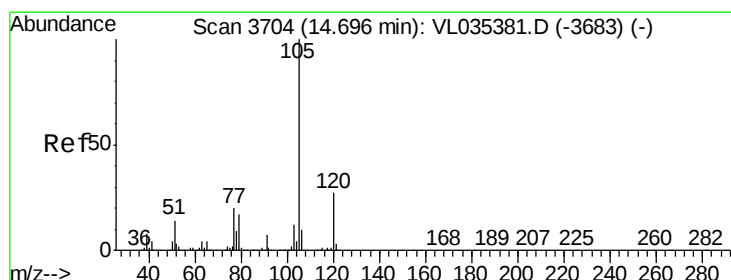
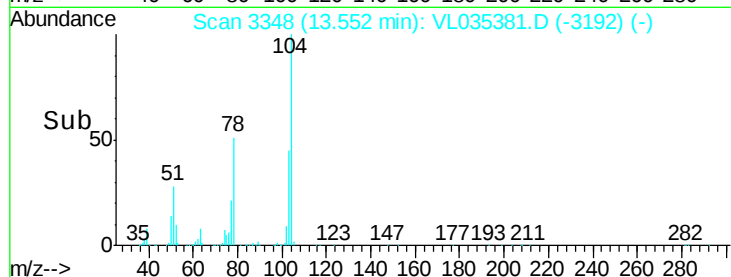
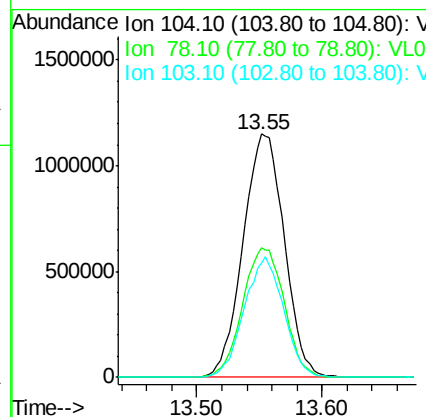
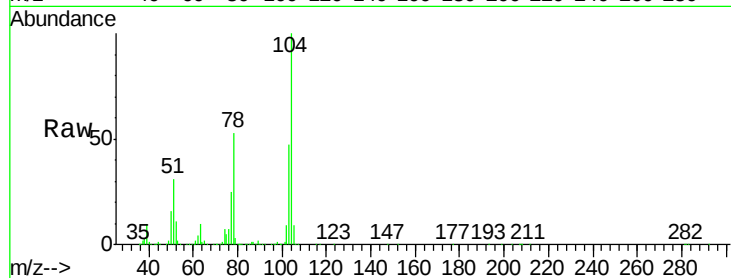
#61  
Stvrene  
Concen: 13.762 ppbv  
RT: 13.55 min Scan# 3348  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 104     | 100   |       |       |
| 78      | 53.7  | 43.0  | 64.4  |
| 103     | 47.5  | 37.9  | 56.9  |

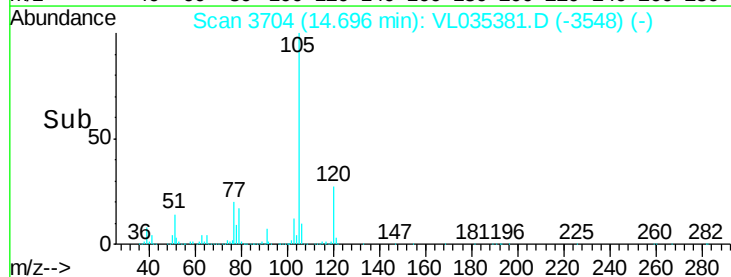
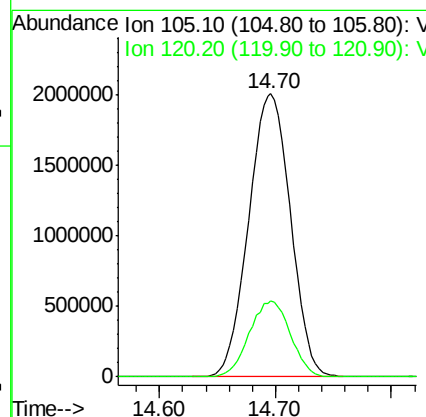
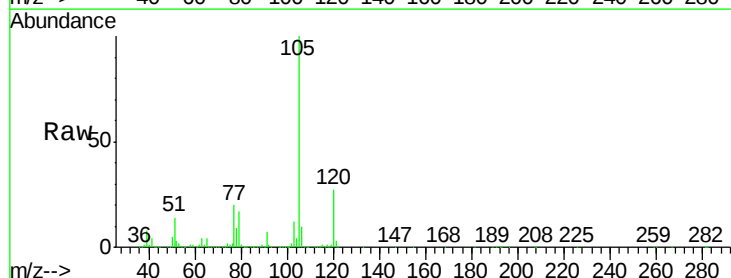
Manual Integrations  
APPROVED

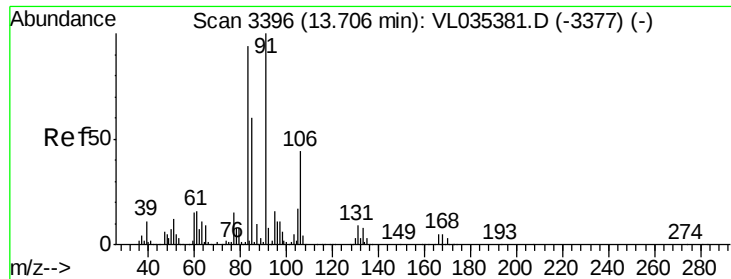
MMDadoda  
8/17/2020 5:43:44 PM



#62  
Isopropylbenzene  
Concen: 10.676 ppbv  
RT: 14.70 min Scan# 3704  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 105     | 100   |       |       |
| 120     | 26.4  | 21.1  | 31.7  |





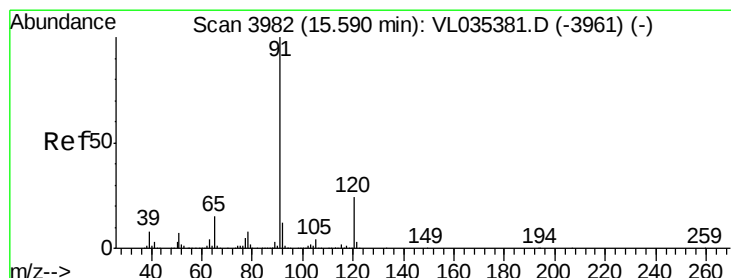
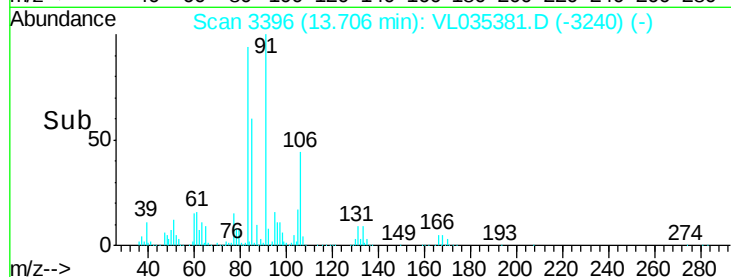
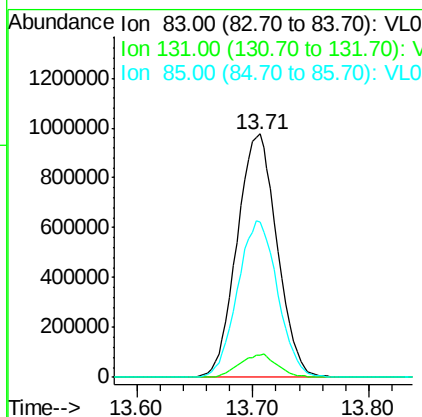
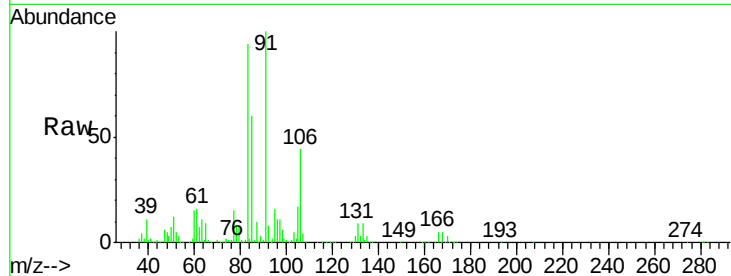
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 8.765 ppbv  
 RT: 13.71 min Scan# 3396  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Tot Ion: 83 Resp: 2335948  
 Ion Ratio Lower Upper  
 83 100  
 131 9.1 4.5 13.7  
 85 64.6 32.4 97.0

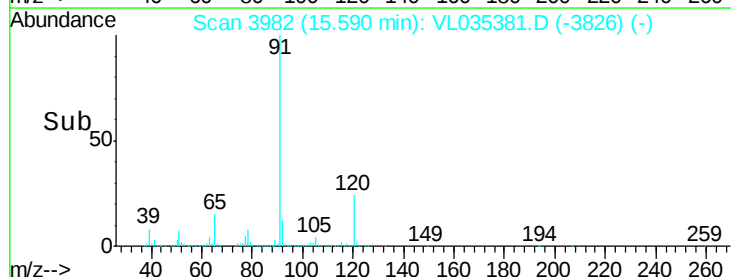
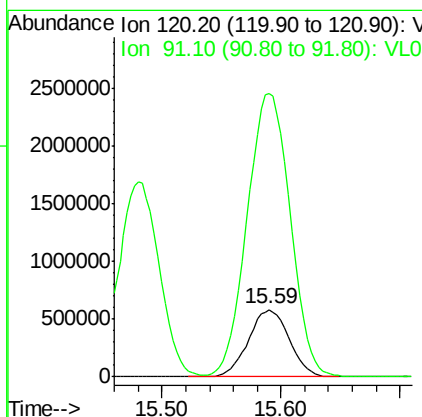
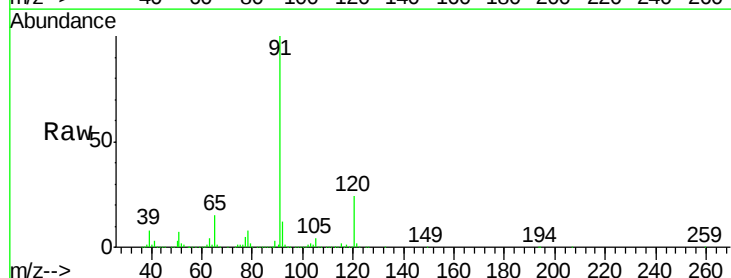
Manual Integrations  
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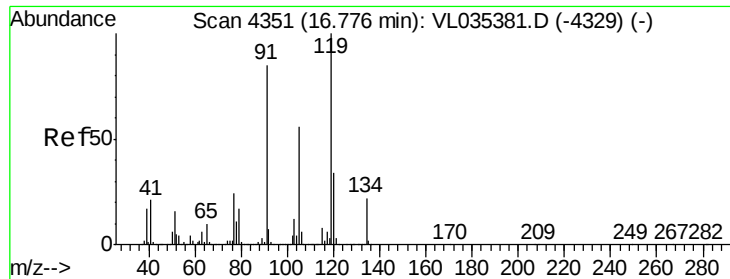
MMDadoda  
 8/17/2020 5:43:44 PM



#64  
 n-propylbenzene  
 Concen: 10.958 ppbv  
 RT: 15.59 min Scan# 3982  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Tgt Ion: 120 Resp: 1385128  
 Ion Ratio Lower Upper  
 120 100  
 91 445.4 356.2 534.4





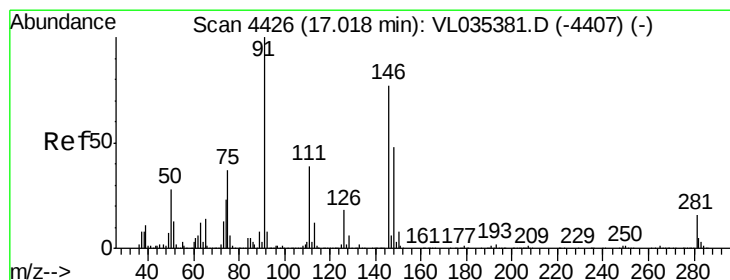
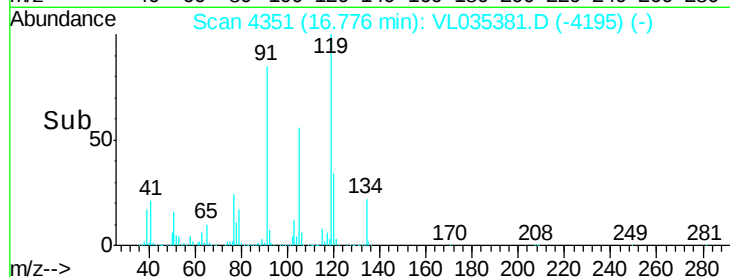
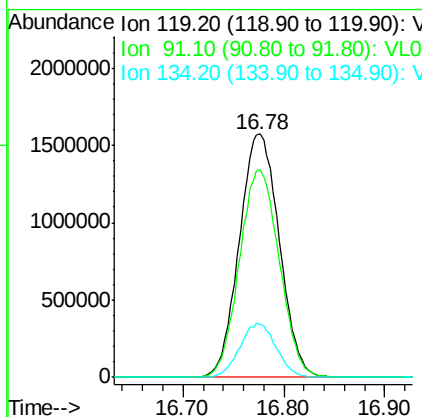
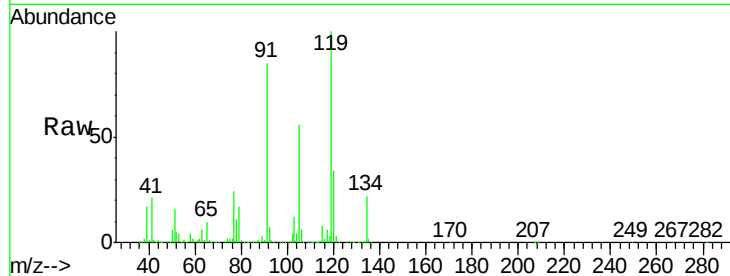
#65  
 tert-Butylbenzene  
 Concen: 10.041 ppbv  
 RT: 16.78 min Scan# 4351  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Tot Ion:119 Resp: 4324854  
 Ion Ratio Lower Upper  
 119 100  
 91 85.3 68.2 102.4  
 134 20.3 16.2 24.4

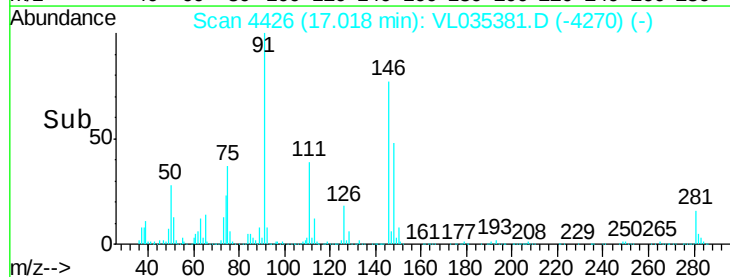
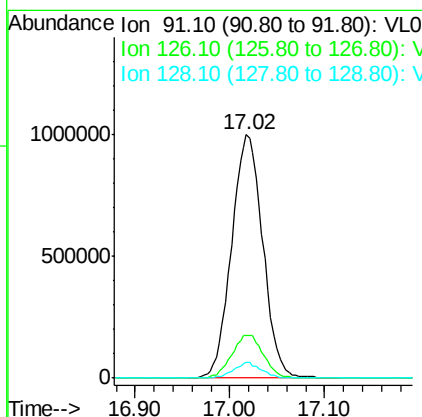
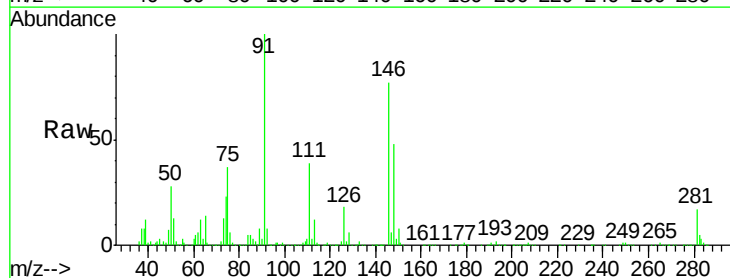
Manual Integrations  
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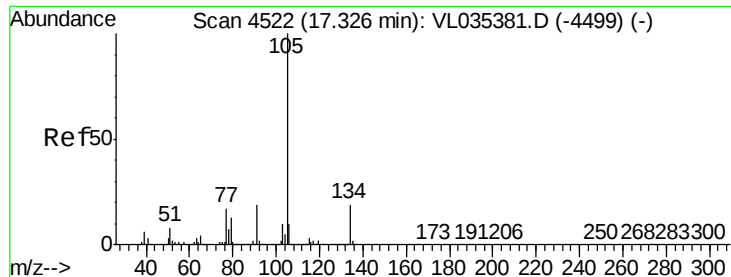
MMDadoda  
 8/17/2020 5:43:44 PM



#66  
 Benzyl Chloride  
 Concen: 13.397 ppbv  
 RT: 17.02 min Scan# 4426  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Tgt Ion: 91 Resp: 2283902  
 Ion Ratio Lower Upper  
 91 100  
 126 18.0 14.4 21.6  
 128 5.8 4.6 7.0





#67

sec-Butylbenzene

Concen: 10.211 ppbv

RT: 17.33 min Scan# 4522

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 105 Resp: 6221043

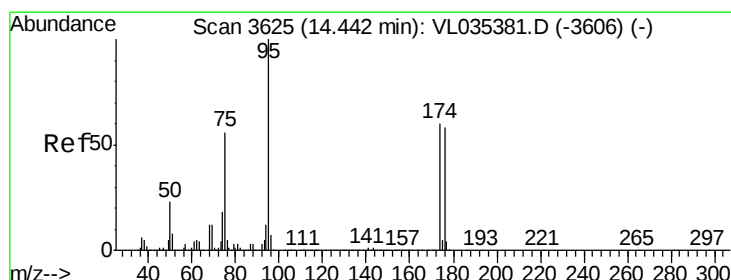
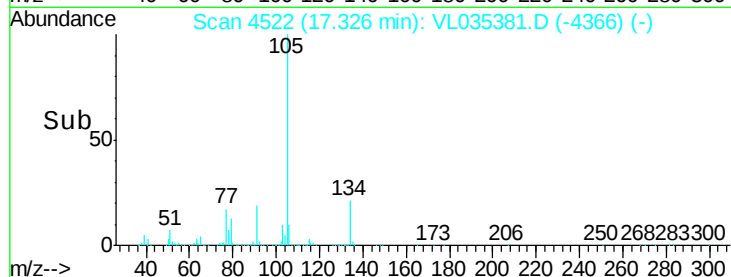
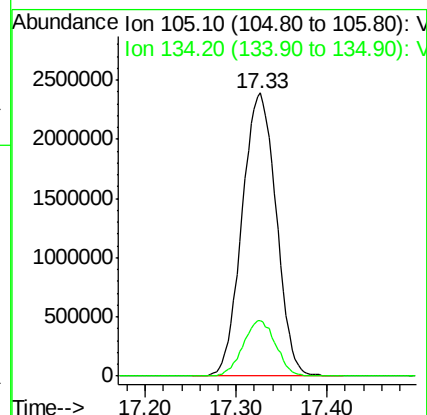
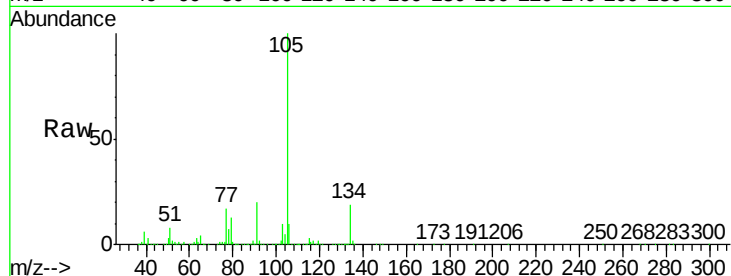
Ion Ratio Lower Upper

105 100

134 18.8 15.0 22.6

Manual Integrations  
APPROVED

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8/17/2020 5:43:44 PM



#68

1-Bromo-4-Fluorobenzene

Concen: 9.431 ppbv

RT: 14.44 min Scan# 3625

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

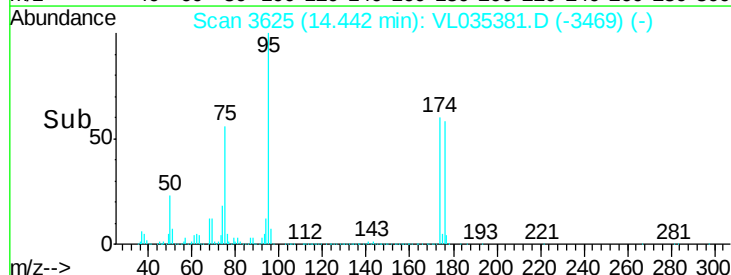
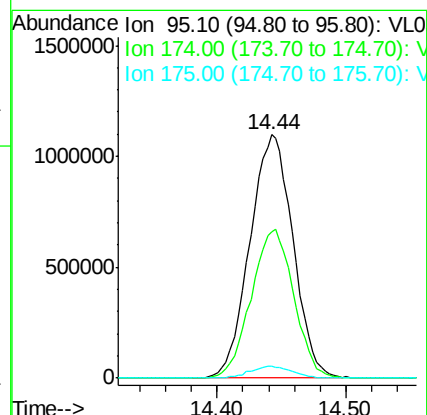
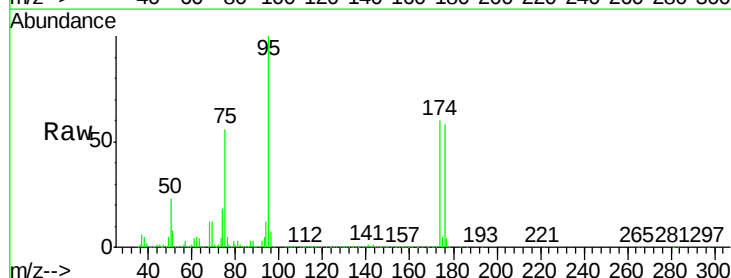
Tgt Ion: 95 Resp: 2555322

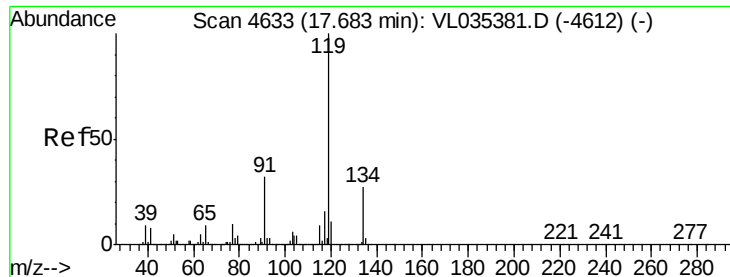
Ion Ratio Lower Upper

95 100

174 60.2 48.2 72.2

175 4.6 3.7 5.5





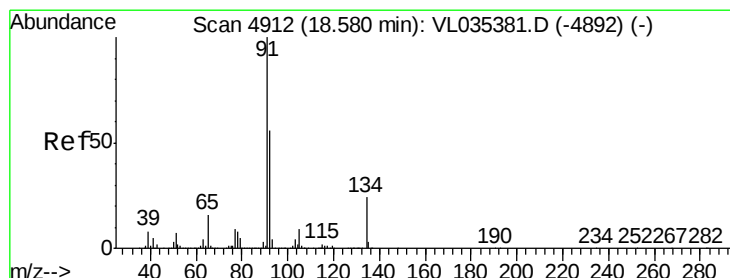
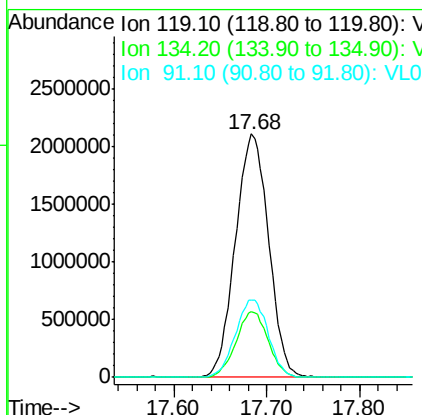
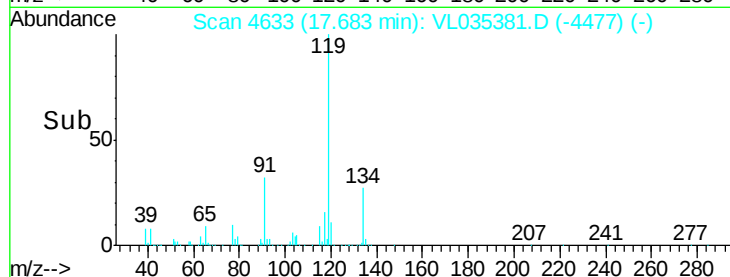
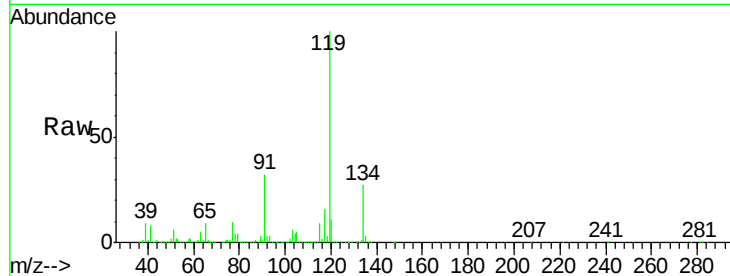
#69  
p-Isopropyltoluene  
Concen: 10.539 ppbv  
RT: 17.68 min Scan# 4633  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 119     | 100   |       |       |
| 134     | 26.2  | 20.9  | 31.3  |
| 91      | 31.6  | 25.3  | 37.9  |

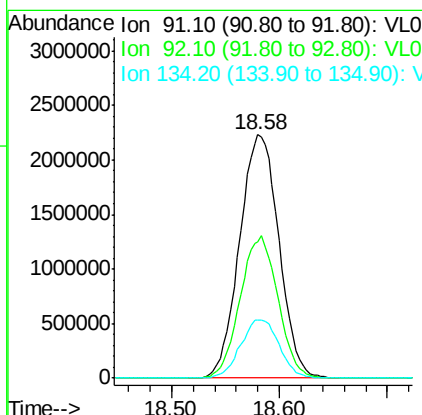
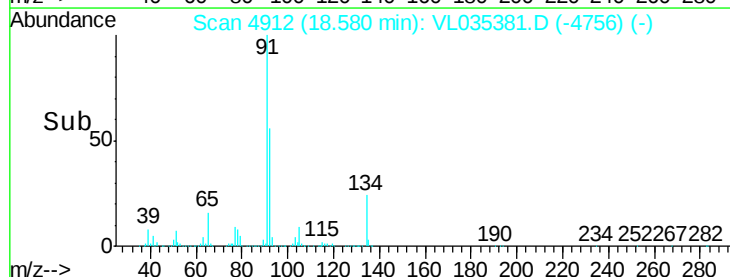
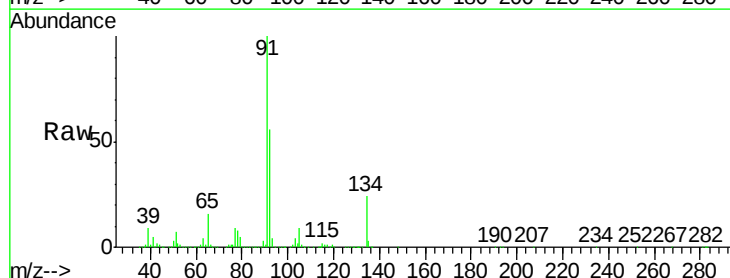
Manual Integrations  
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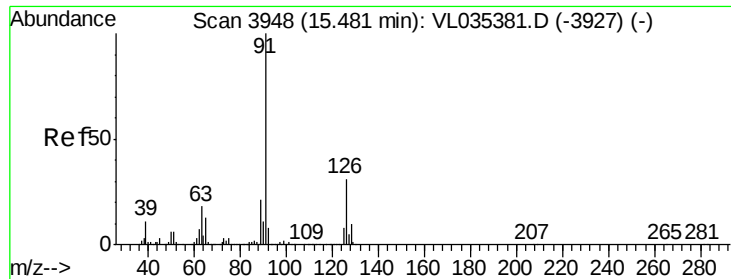
MMDadoda  
8/17/2020 5:43:44 PM



#70  
n-Butylbenzene  
Concen: 10.615 ppbv  
RT: 18.58 min Scan# 4912  
Delta R.T. 0.00 min  
Lab File: VL035381.D  
Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 56.3  | 45.0  | 67.6  |
| 134     | 23.5  | 18.8  | 28.2  |





#71

2-Chlorotoluene

Concen: 11.829 ppbv

RT: 15.48 min Scan# 3948

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion: 91 Resp: 4075649

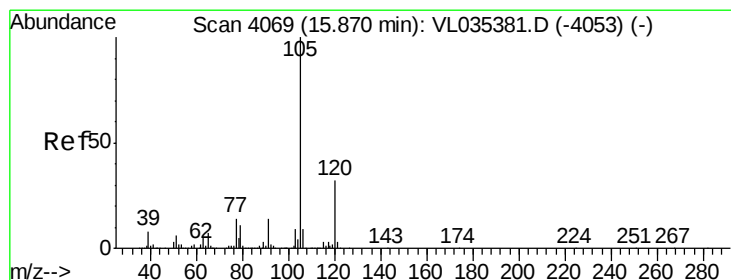
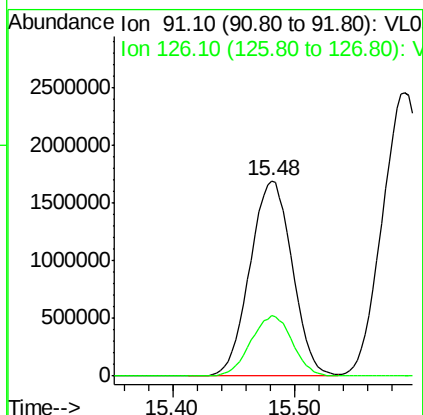
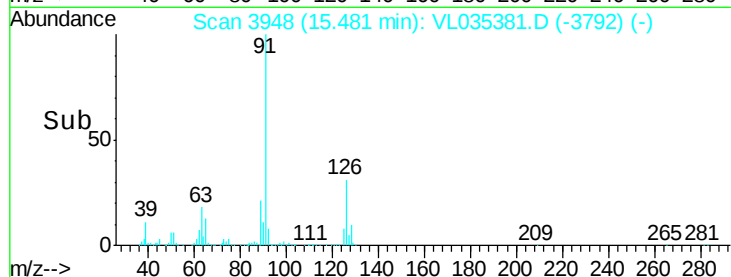
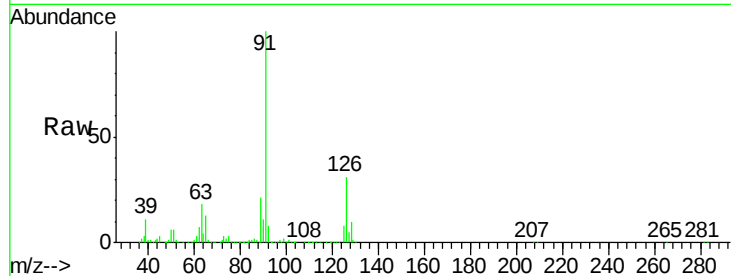
Ion Ratio Lower Upper

91 100

126 30.3 12.1 48.3

Manual Integrations  
APPROVED

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8/17/2020 5:43:44 PM



#72

4-Ethyltoluene

Concen: 11.583 ppbv

RT: 15.87 min Scan# 4069

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Tgt Ion: 105 Resp: 4125633

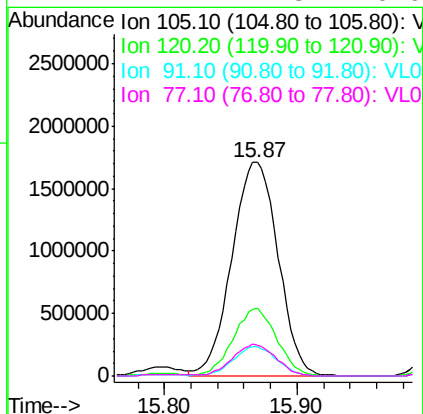
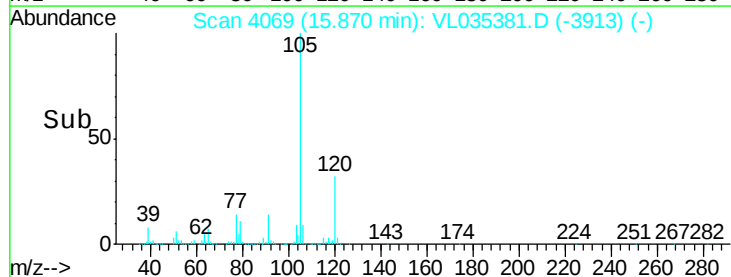
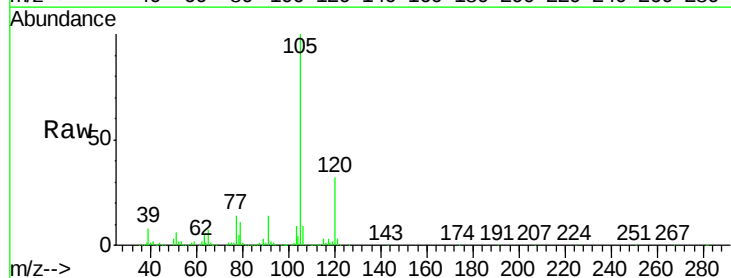
Ion Ratio Lower Upper

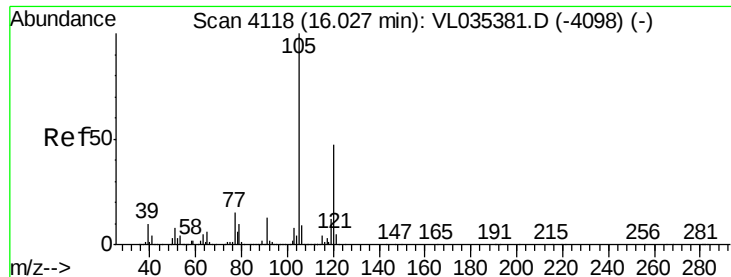
105 100

120 30.0 24.0 36.0

91 13.0 10.4 15.6

77 14.1 11.3 16.9





#73

1,3,5-Trimethylbenzene

Concen: 11.322 ppbv

RT: 16.03 min Scan# 4118

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion:105 Resp: 3869384

Ion Ratio Lower Upper

105 100

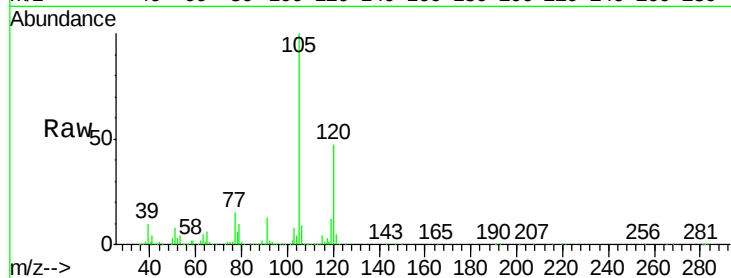
120 46.7 37.4 56.0

Manual Integrations

APPROVED

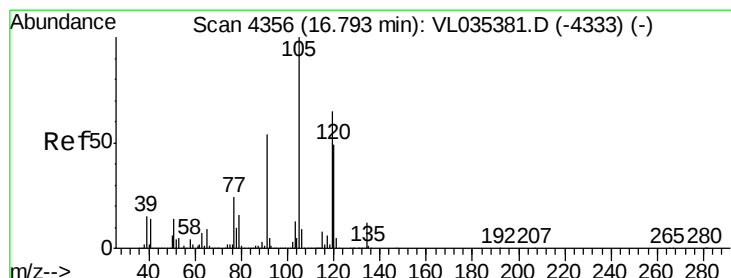
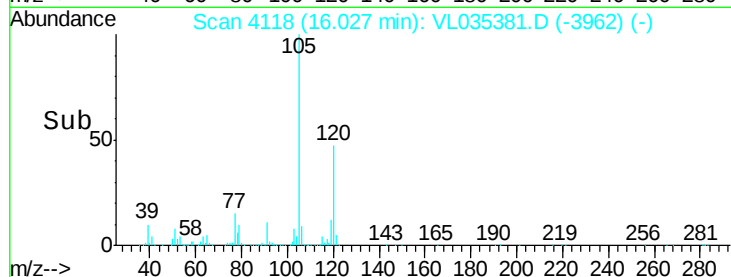
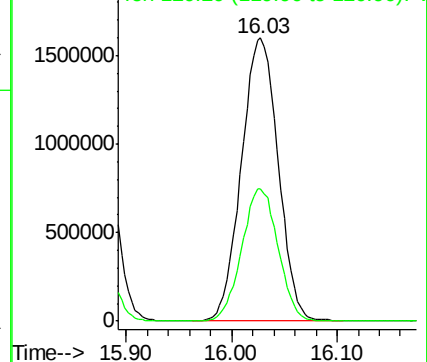
MMDadoda

8/17/2020 5:43:44 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 9.872 ppbv

RT: 16.79 min Scan# 4356

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Tgt Ion:105 Resp: 3856128

Ion Ratio Lower Upper

105 100

120 48.9 39.1 58.7

91 54.6 43.7 65.5

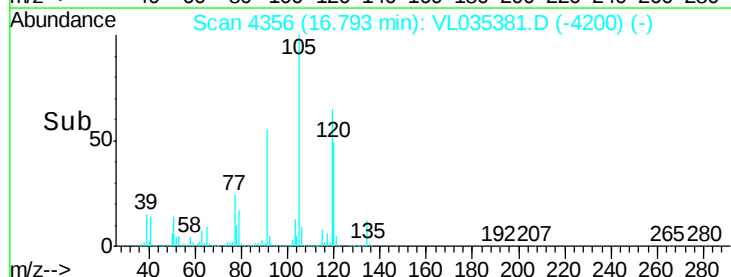
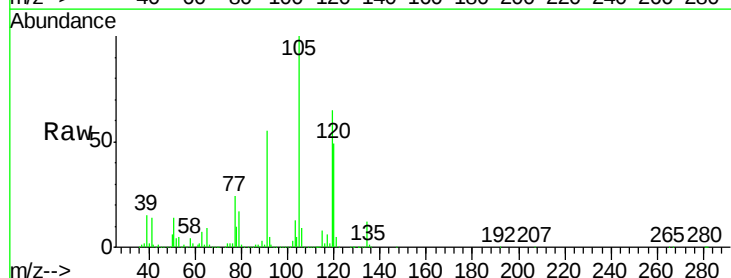
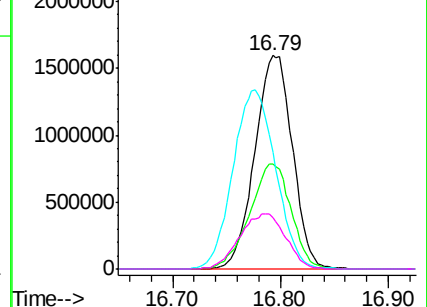
77 23.8 19.0 28.6

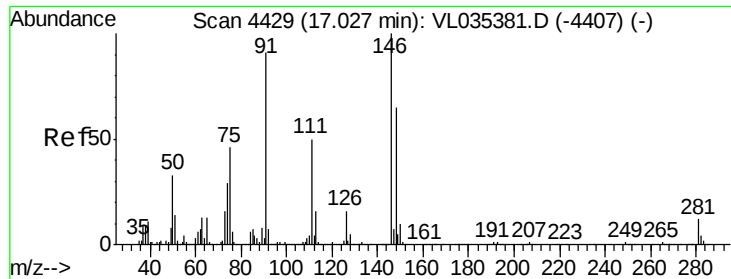
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





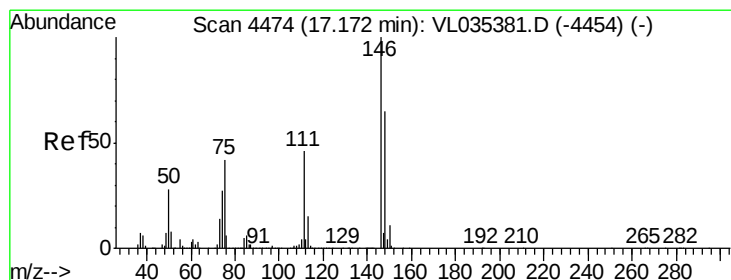
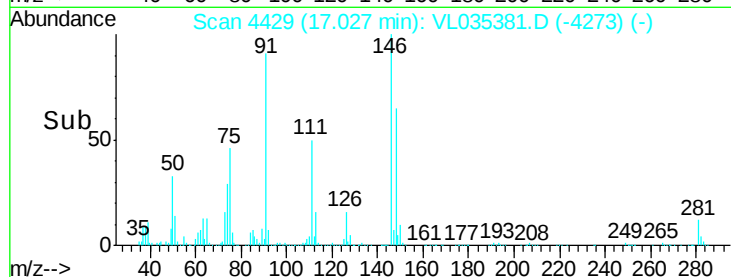
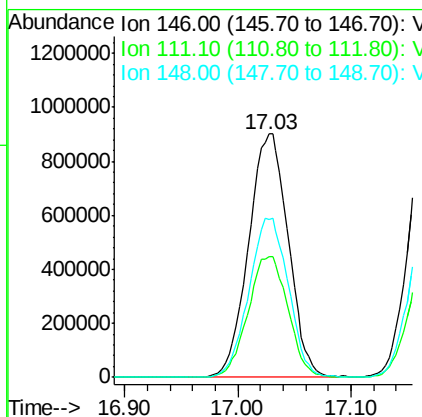
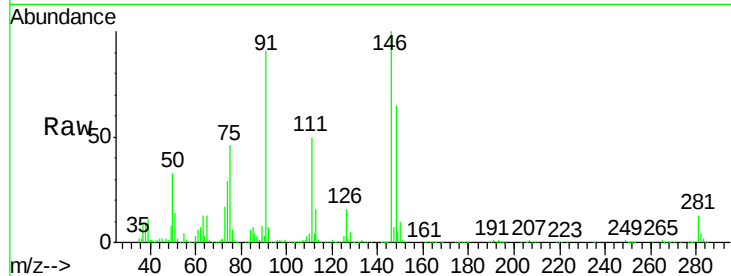
#75  
 1,3-Dichlorobenzene  
 Concen: 8.590 ppbv  
 RT: 17.03 min Scan# 4429  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 50.0  | 25.0  | 75.0  |
| 148     | 65.1  | 32.6  | 97.7  |

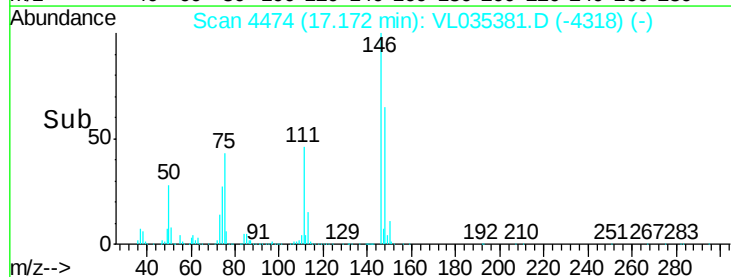
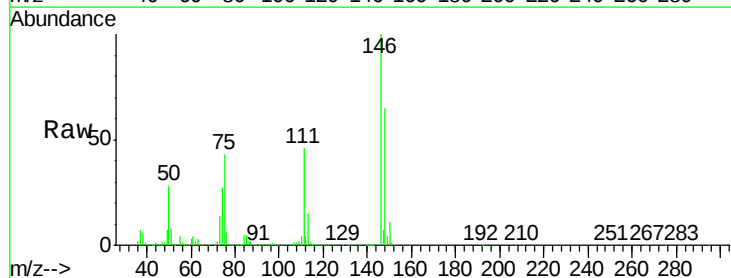
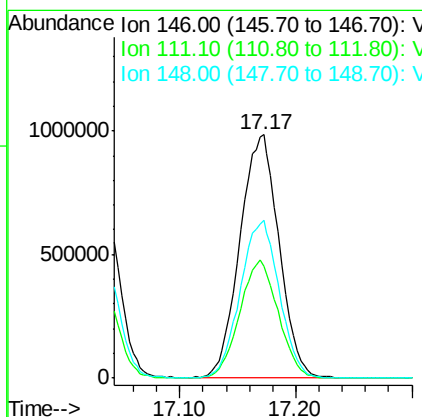
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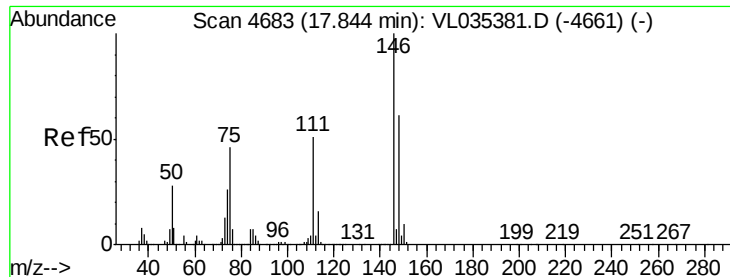
MMDadoda  
 8/17/2020 5:43:44 PM



#76  
 1,4-Dichlorobenzene  
 Concen: 9.706 ppbv  
 RT: 17.17 min Scan# 4474  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 48.0  | 24.0  | 72.0  |
| 148     | 64.8  | 32.5  | 97.5  |





#77

1,2-Dichlorobenzene

Concen: 9.358 ppbv

RT: 17.84 min Scan# 4683

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion:146 Resp: 2206949

Ion Ratio Lower Upper

146 100

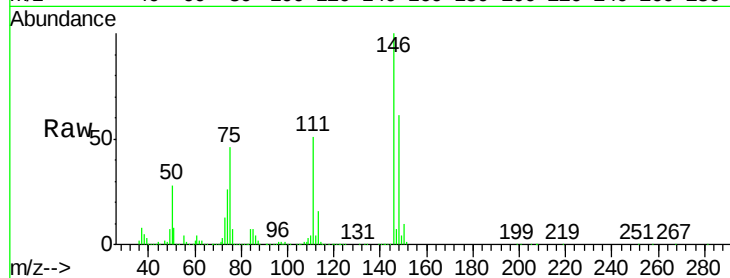
111 51.9 25.9 77.8

148 64.2 32.1 96.3

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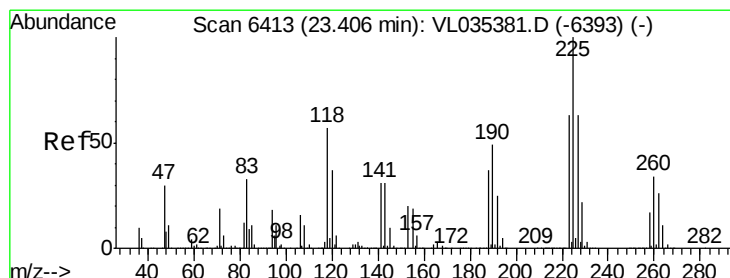
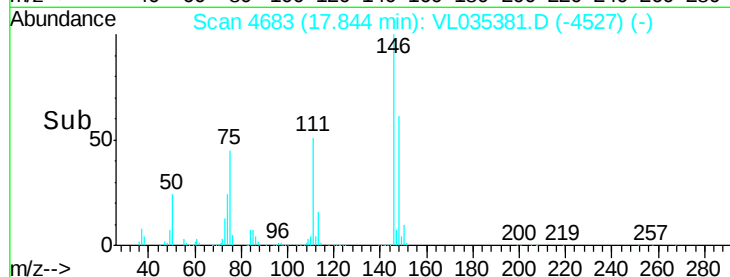
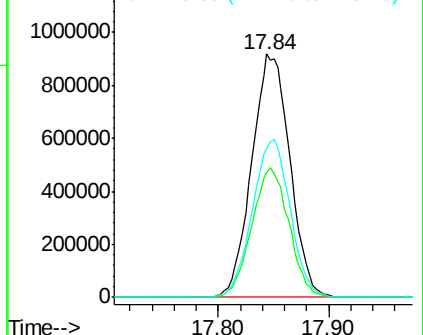


Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 8.654 ppbv

RT: 23.41 min Scan# 6413

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

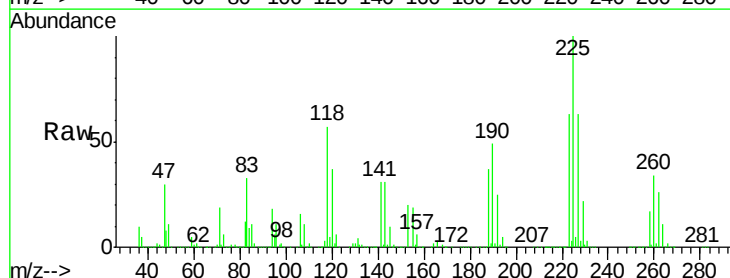
Tgt Ion:225 Resp: 1736447

Ion Ratio Lower Upper

225 100

223 63.8 51.0 76.6

227 63.8 51.0 76.6

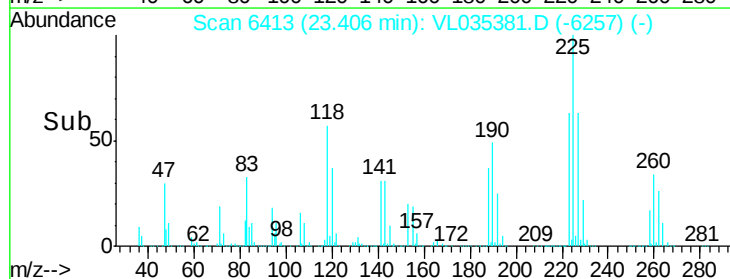
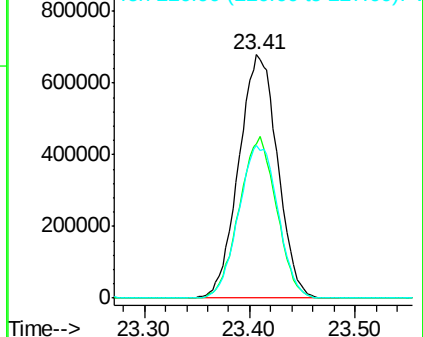


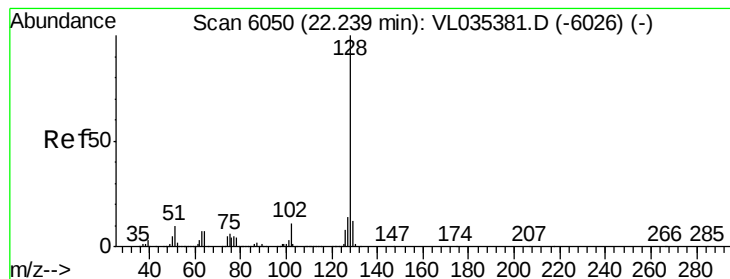
Abundance

Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V





#79

Naphthalene

Concen: 16.128 ppbv

RT: 22.24 min Scan# 6050

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

Instrument :

MSVOA\_L

ClientSampleId :

VSTDICCC010

Tot Ion:128 Resp: 4845433

Ion Ratio Lower Upper

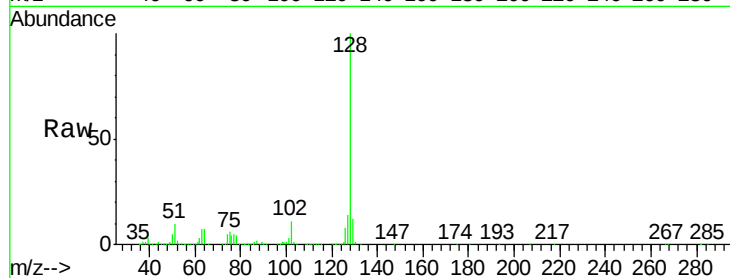
128 100

127 13.7 11.0 16.4

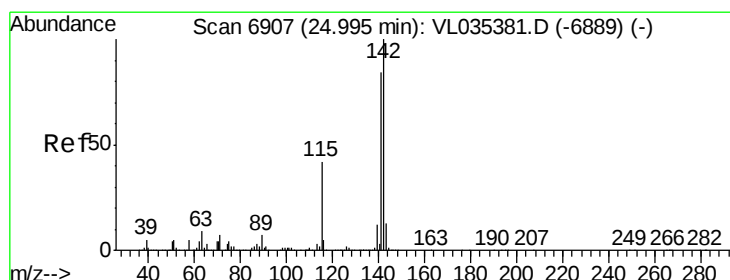
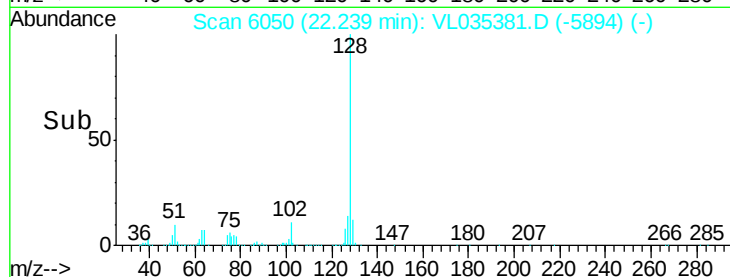
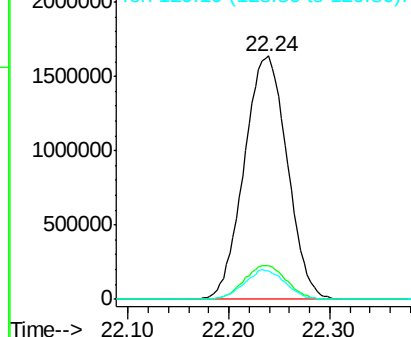
129 11.5 9.2 13.8

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



#80

Naphthalene, 2-methyl-

Concen: 34.329 ppbv

RT: 24.99 min Scan# 6907

Delta R.T. 0.00 min

Lab File: VL035381.D

Acq: 12 Aug 2020 11:57

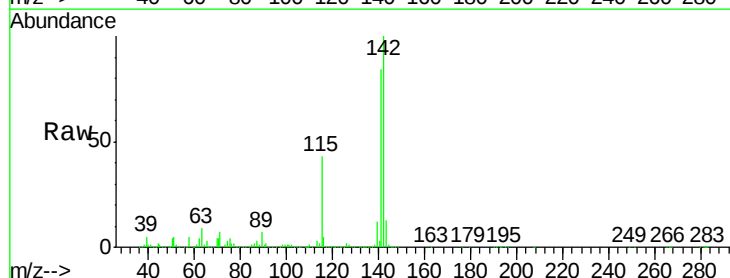
Tgt Ion:142 Resp: 2346204

Ion Ratio Lower Upper

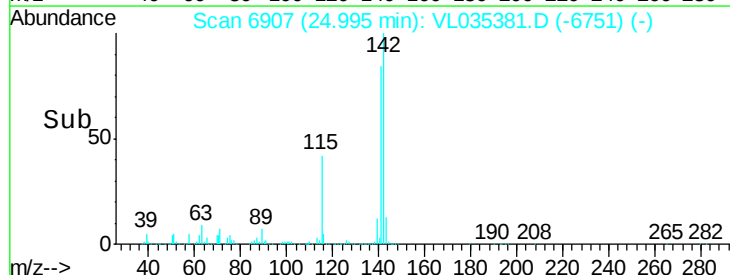
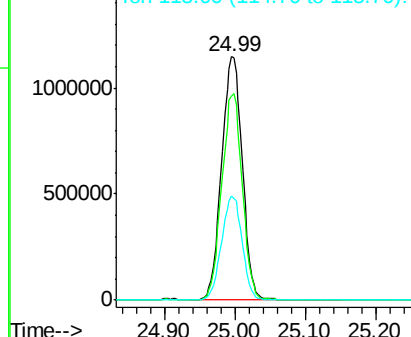
142 100

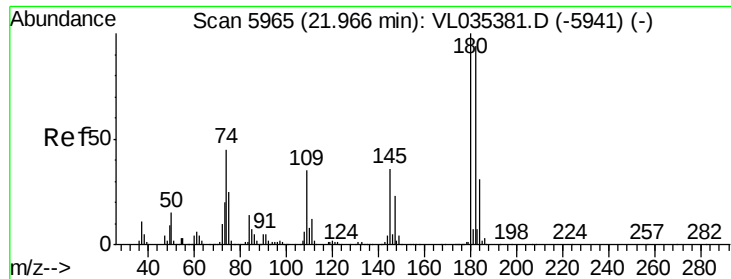
141 83.7 67.7 101.5

115 42.2 34.0 51.0



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





#81  
 1,2,4-Trichlorobenzene  
 Concen: 12.085 ppbv  
 RT: 21.97 min Scan# 5965  
 Delta R.T. 0.00 min  
 Lab File: VL035381.D  
 Acq: 12 Aug 2020 11:57

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 97.0  | 77.6  | 116.4 |
| 184     | 30.9  | 24.7  | 37.1  |

Manual Integrations  
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