

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL032422\  
 Data File : VL038762.D  
 Acq On : 25 Mar 2022 12:21  
 Operator : SY/AP  
 Sample : N2096-02  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV-02-(SB-07)

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 03/26/2022  
 Supervised By :Mahesh Dadoda 03/28/2022

Quant Time: Mar 26 10:31:53 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL032122A  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
 QLast Update : Mon Mar 21 17:09:26 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.69  | 49   | 778317   | 10.00 | ppbv  | 0.04     |
| 33) 1,4-Difluorobenzene | 7.20  | 114  | 2032197  | 10.00 | ppbv  | 0.04     |
| 55) Chlorobenzene-d5    | 12.11 | 117  | 1806511  | 10.00 | ppbv  | 0.04     |

## System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.44  | 95    | 1323556  | 9.56     | ppbv | 0.04   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 95.60% |

## Target Compounds

|                            | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 3.07  | 85   | 24577    | 0.23   | ppbv   | 91     |
| 3) Chlorodifluoromethane   | 3.01  | 51   | 26846m   | 0.33   | ppbv   |        |
| 4) Chloromethane           | 3.17  | 50   | 23351    | 0.52   | ppbv   | 98     |
| 9) Propene                 | 3.03  | 41   | 238409   | 6.01   | ppbv   | 93     |
| 10) Heptane                | 8.15  | 43   | 12033m   | 0.13   | ppbv   |        |
| 11) Trichlorofluoromethane | 3.97  | 101  | 42671    | 0.46   | ppbv   | 89     |
| 13) Ethanol                | 3.63  | 45   | 658462   | 150.41 | ppbv   | 99     |
| 15) Acetone                | 3.87  | 43   | 579505m  | 8.63   | ppbv   |        |
| 17) tert-Butyl alcohol     | 4.32  | 59   | 10302m   | 0.18   | ppbv   |        |
| 19) Isopropyl Alcohol      | 4.00  | 45   | 48125    | 1.29   | ppbv # | 1      |
| 20) Methylene Chloride     | 4.37  | 84   | 3145783  | 111.21 | ppbv   | 98     |
| 26) Hexane                 | 5.71  | 57   | 2227334  | 29.43  | ppbv # | 39     |
| 27) Carbon Disulfide       | 4.58  | 76   | 62279    | 0.84   | ppbv   | 98     |
| 30) Cyclohexane            | 7.16  | 84   | 37618m   | 0.57   | ppbv   |        |
| 32) 1,1,1-Trichloroethane  | 6.54  | 97   | 12764m   | 0.11   | ppbv   |        |
| 34) 2-Butanone             | 5.28  | 43   | 19102    | 0.24   | ppbv # | 89     |
| 35) Carbon Tetrachloride   | 7.04  | 117  | 18882    | 0.16   | ppbv   | 98     |
| 36) Benzene                | 6.92  | 78   | 37864m   | 0.24   | ppbv   |        |
| 38) Trichloroethene        | 7.86  | 130  | 10564m   | 0.16   | ppbv   |        |
| 52) Tetrachloroethene      | 11.25 | 164  | 2709m    | 0.05   | ppbv   |        |
| 53) Toluene                | 9.83  | 91   | 53018m   | 0.31   | ppbv   |        |
| 59) m/p-Xylene             | 12.99 | 91   | 45682m   | 0.25   | ppbv   |        |
| 74) 1,2,4-Trimethylbenzene | 16.79 | 105  | 25627    | 0.12   | ppbv # | 72     |

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

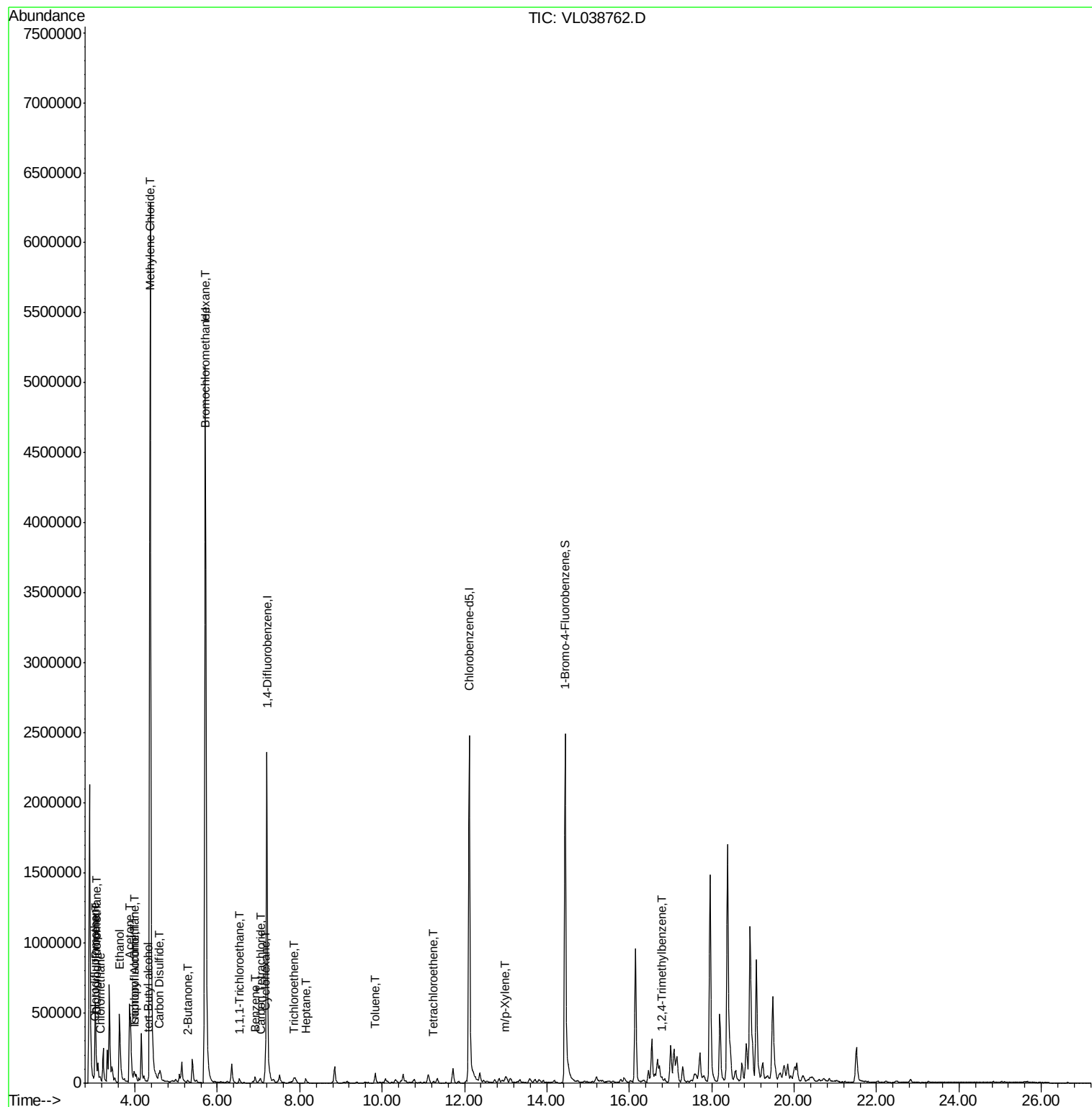
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_L\DATA\VL032422\  
Data File : VL038762.D  
Acq On : 25 Mar 2022 12:21  
Operator : SY/AP  
Sample : N2096-02  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

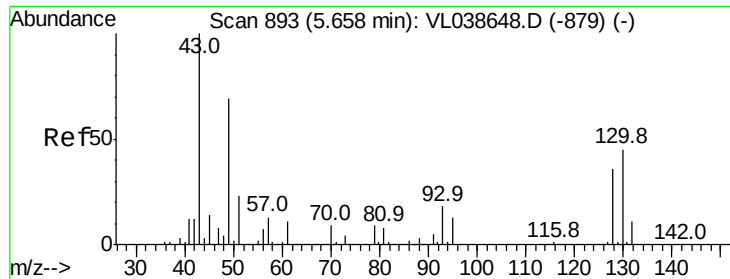
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV-02-(SB-07)

Quant Time: Mar 26 10:31:53 2022  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_L\METHODS\VL032122  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
QLast Update : Mon Mar 21 17:09:26 2022  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 03/26/2022  
Supervised By :Mahesh Dadoda 03/28/2022





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.69 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21 SV-02-(SB-07)

Tgt Ion:

Ion Ratio

49 100

128 54.

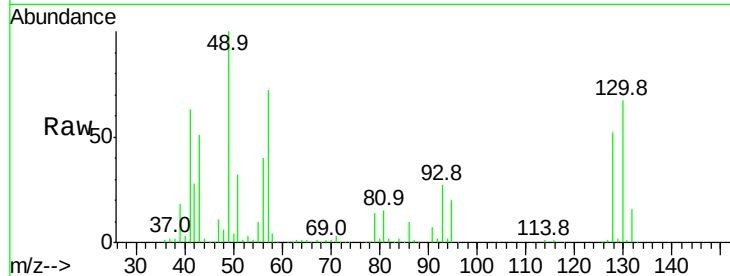
130 69.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/26/2022

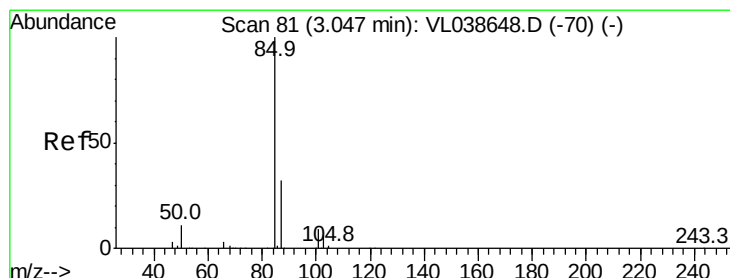
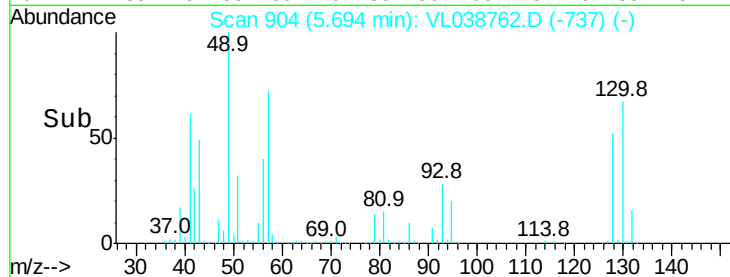
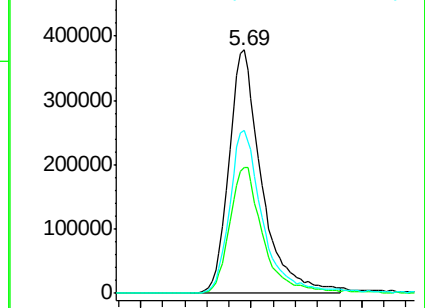
Supervised By :Mahesh Dadoda 03/28/2022



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.23 ppbv

RT: 3.07 min Scan# 89

Delta R.T. 0.03 min

Lab File: VL038762.D

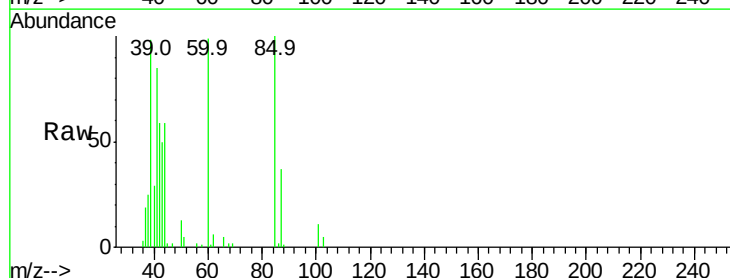
Acq: 25 Mar 2022 12:21

Tgt Ion: 85 Resp: 24577

Ion Ratio Lower Upper

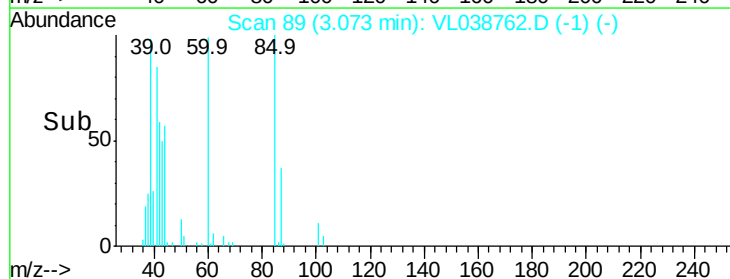
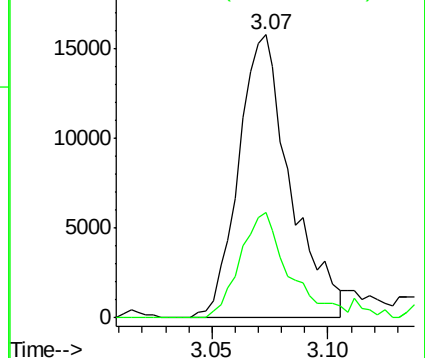
85 100

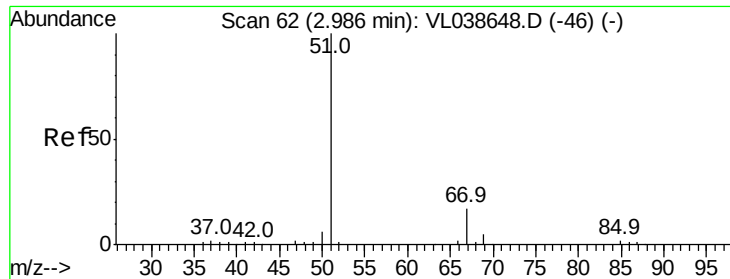
87 37.3 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.33 ppbv m

RT: 3.01 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21

Tgt Ion:

Ion Ratio

51 100

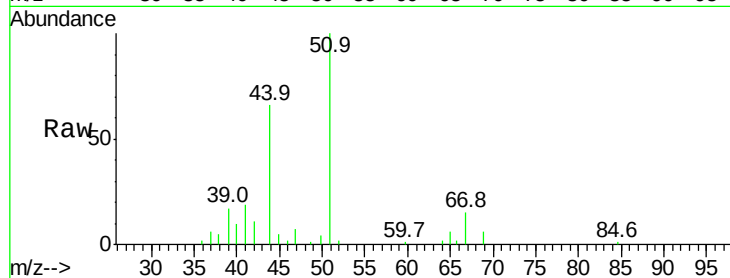
67 17.

Manual Integrations

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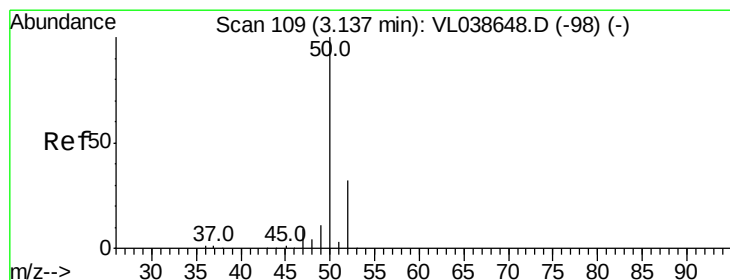
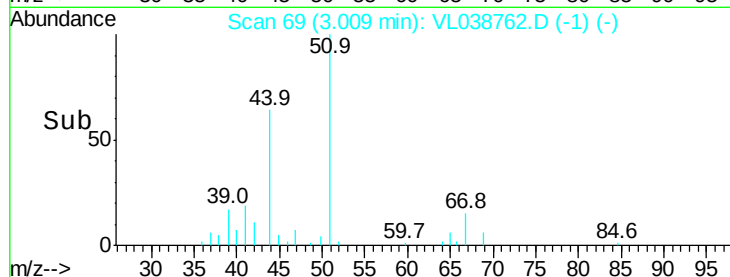
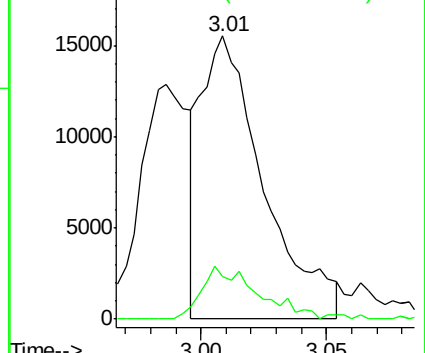
Reviewed By :Semsettin Yesilyurt 03/26/2022

Supervised By :Mahesh Dadoda 03/28/2022



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.52 ppbv

RT: 3.17 min Scan# 118

Delta R.T. 0.03 min

Lab File: VL038762.D

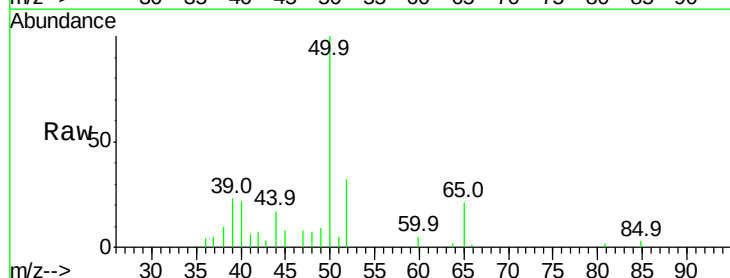
Acq: 25 Mar 2022 12:21

Tgt Ion: 50 Resp: 23351

Ion Ratio Lower Upper

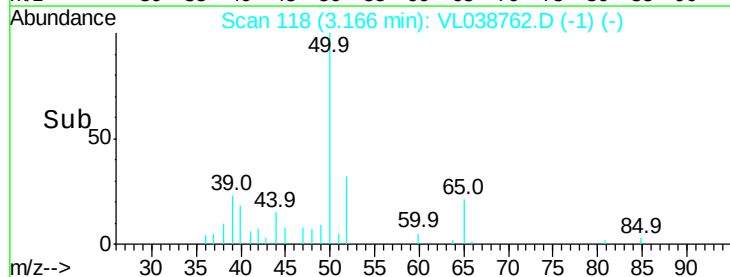
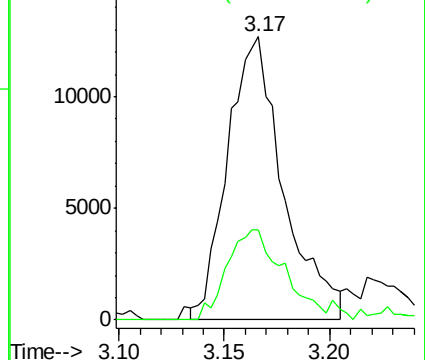
50 100

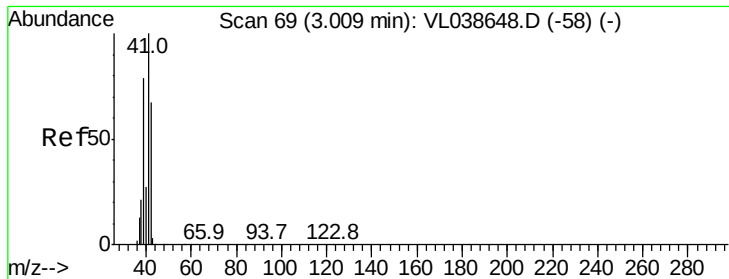
52 33.2 25.5 38.3



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 6.01 ppbv

RT: 3.03

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 25 Mar 2022 12:21

Tgt Ion:

Ion Ratio

41 100

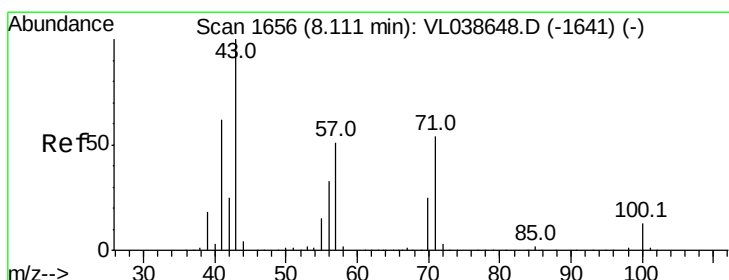
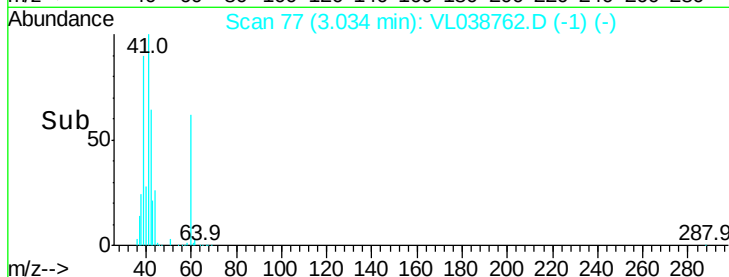
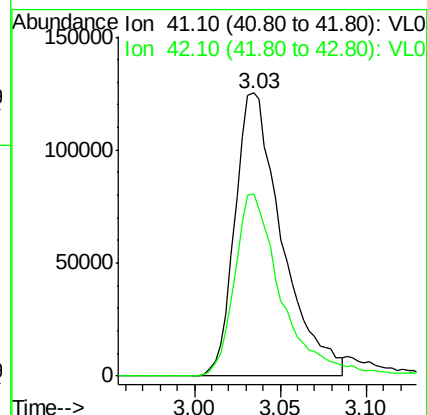
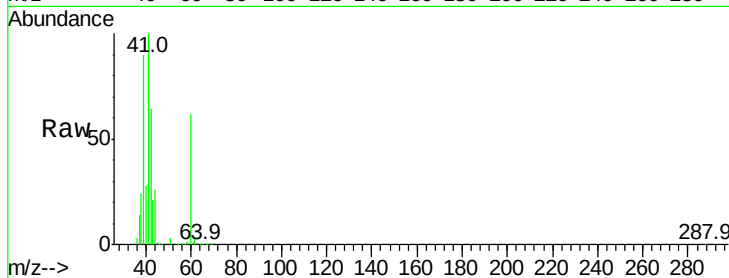
42 64.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/26/2022

Supervised By :Mahesh Dadoda 03/28/2022



#10

Heptane

Concen: 0.13 ppbv m

RT: 8.15 min Scan# 1669

Delta R.T. 0.04 min

Lab File: VL038762.D

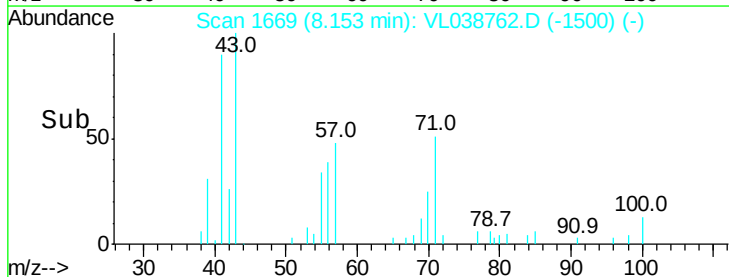
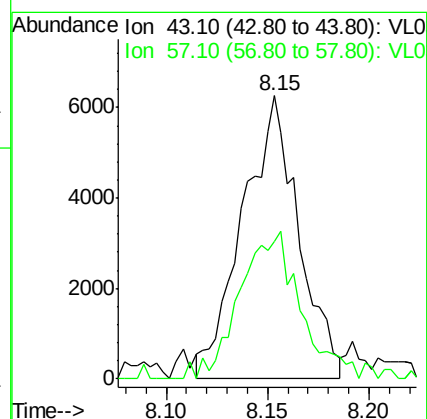
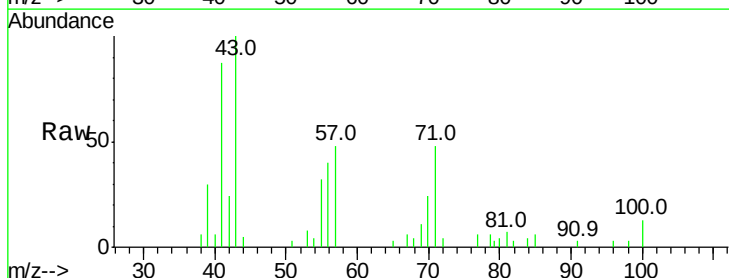
Acq: 25 Mar 2022 12:21

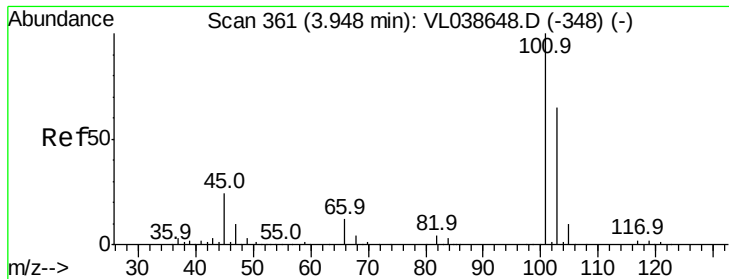
Tgt Ion: 43 Resp: 12033

Ion Ratio Lower Upper

43 100

57 58.3 41.4 62.2



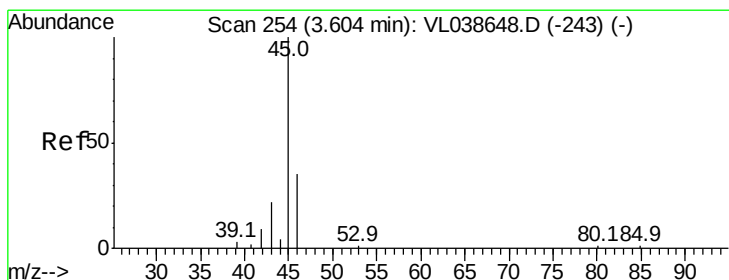
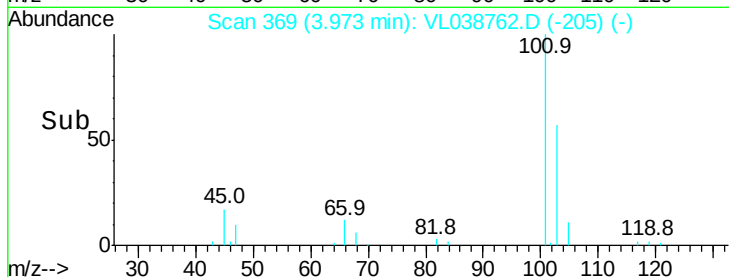
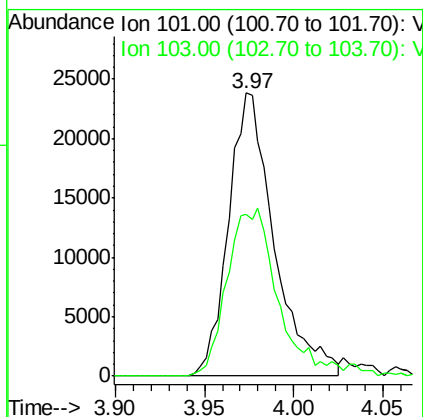
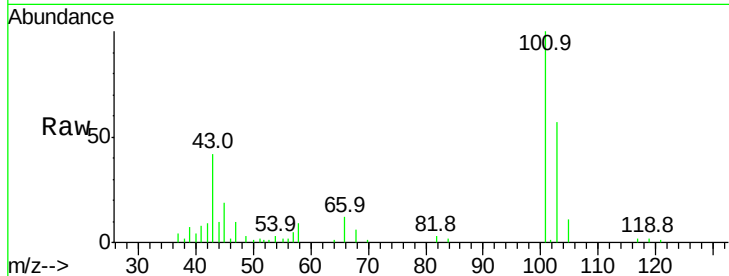


#11  
 Trichlorofluoromethane  
 Concen: 0.46 ppbv  
 RT: 3.97  
 Instrument: MSVOA\_L  
 Delta R.T.  
 Lab File: ClientSampleId :  
 SV-02-(SB-07)  
 Acq: 25 Mar 2022 12:21

Tgt Ion: 101  
 Ion Ratio  
 101 100  
 103 56.

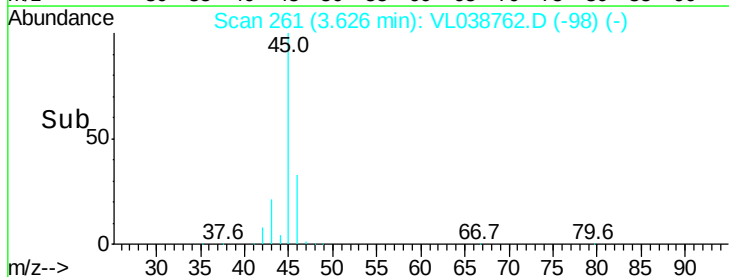
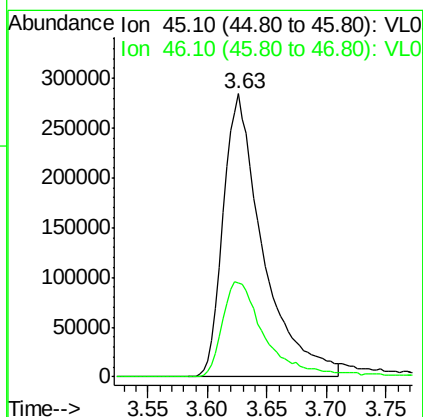
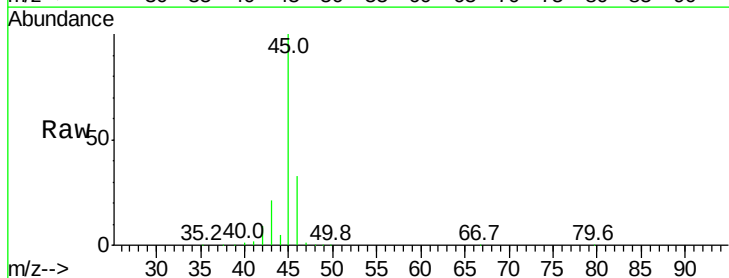
Manual Integrations  
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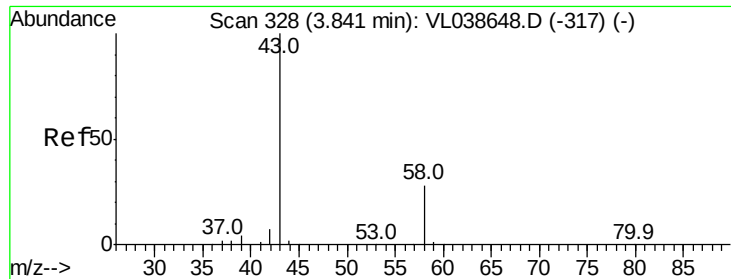
Reviewed By : Semsettin Yesilyurt 03/26/2022  
 Supervised By : Mahesh Dadoda 03/28/2022



#13  
 Ethanol  
 Concen: 150.41 ppbv  
 RT: 3.63 min Scan# 261  
 Delta R.T. 0.02 min  
 Lab File: VL038762.D  
 Acq: 25 Mar 2022 12:21

Tgt Ion: 45 Resp: 658462  
 Ion Ratio Lower Upper  
 45 100  
 46 37.5 15.1 60.5





#15

Acetone

Concen: 8.63 ppbv m

RT: 3.87

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 25 Mar 2022 12:21

Tgt Ion:

Ion Ratio

43 100

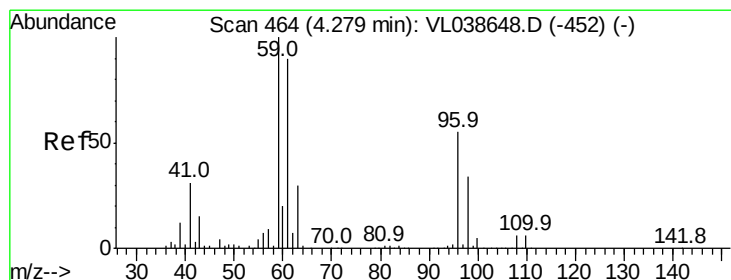
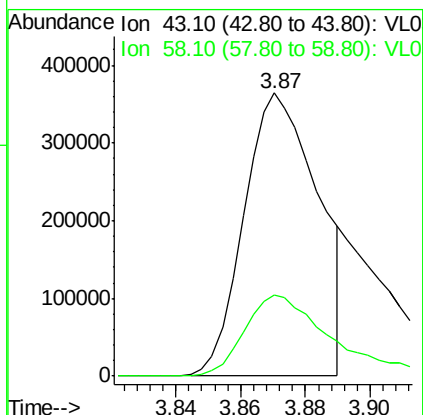
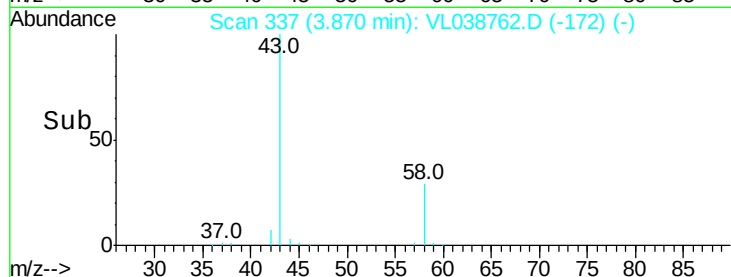
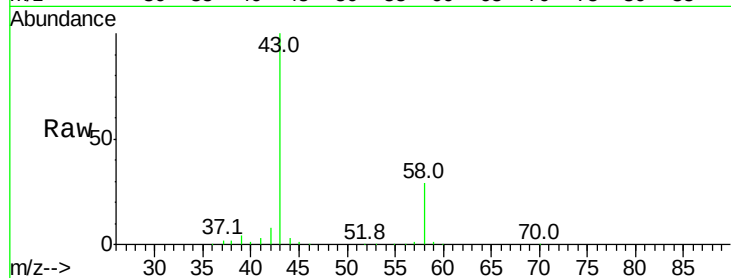
58 37.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/26/2022

Supervised By :Mahesh Dadoda 03/28/2022



#17

tert-Butyl alcohol

Concen: 0.18 ppbv m

RT: 4.32 min Scan# 478

Delta R.T. 0.05 min

Lab File: VL038762.D

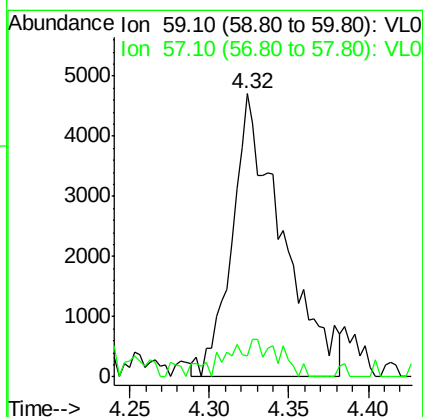
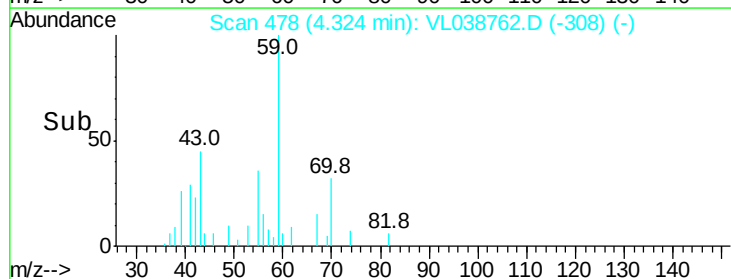
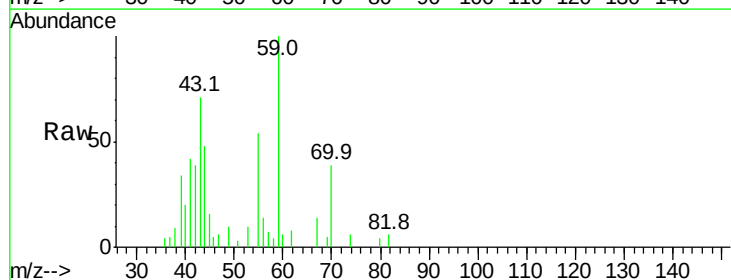
Acq: 25 Mar 2022 12:21

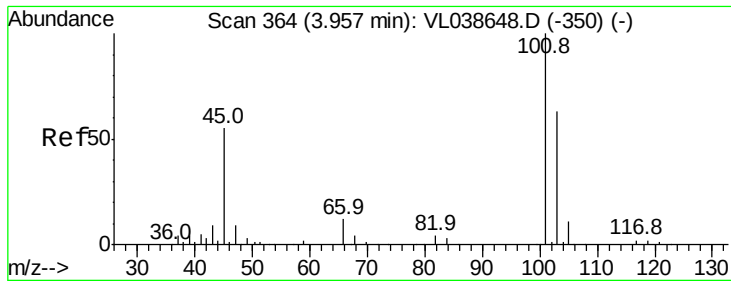
Tgt Ion: 59 Resp: 10302

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#



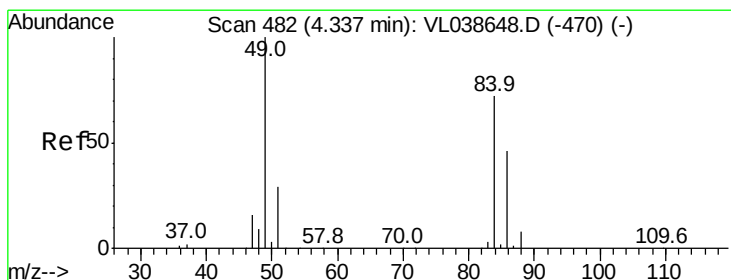
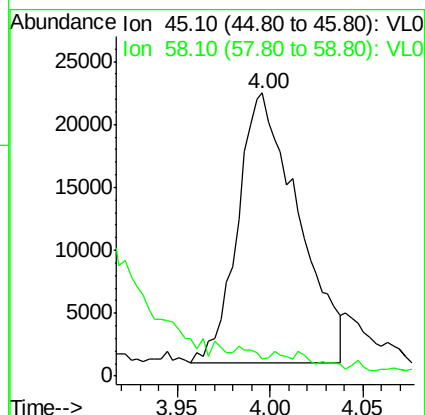
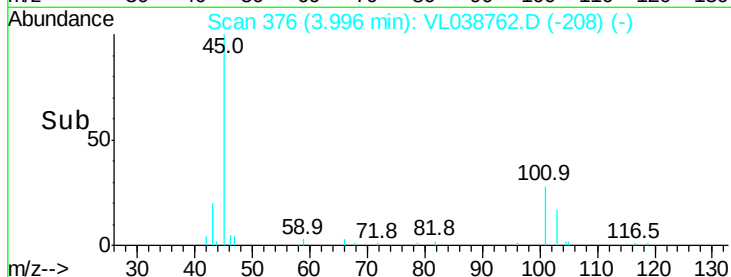
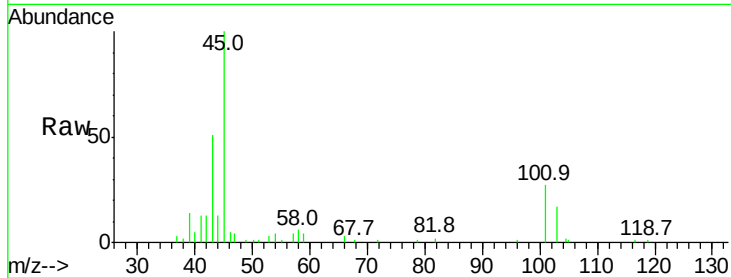


#19  
Isopropyl Alcohol  
Concen: 1.29 ppbv  
RT: 4.00  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
SV-02-(SB-07)  
Acq: 25 Mar 2022 12:21

Tgt Ion:  
Ion Ratio  
45 100  
58 450.

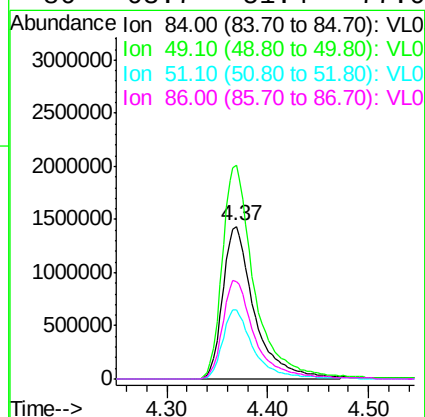
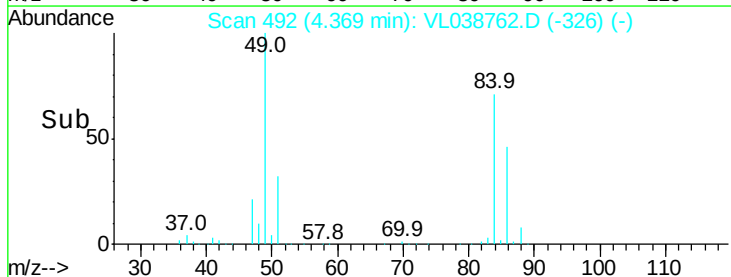
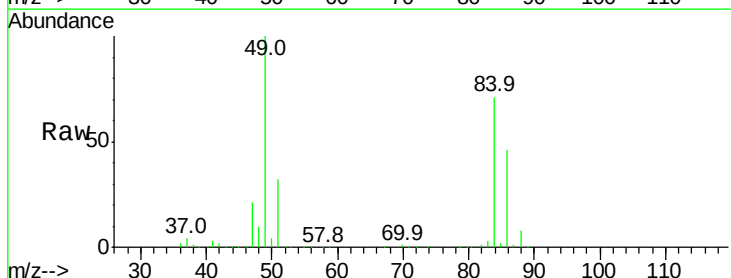
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 03/26/2022  
Supervised By :Mahesh Dadoda 03/28/2022

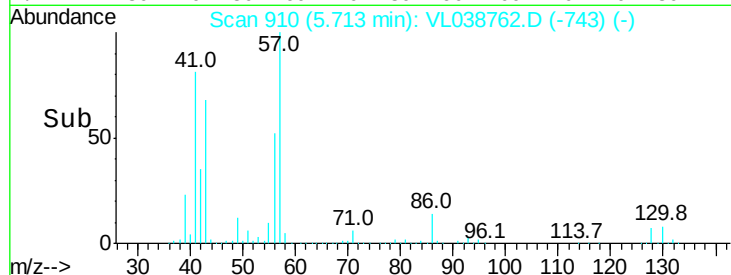
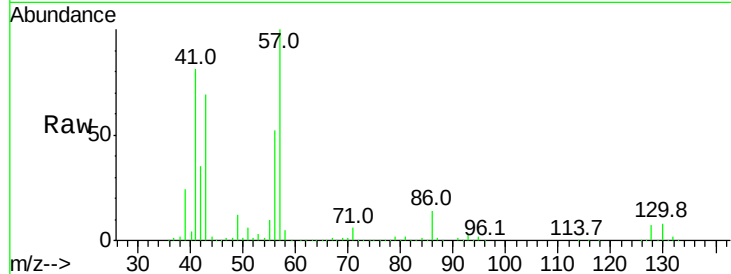
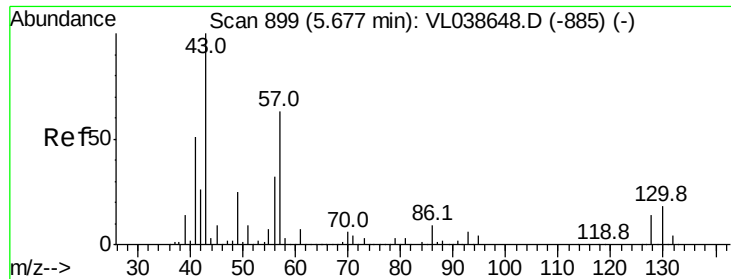


#20  
Methylene Chloride  
Concen: 111.21 ppbv  
RT: 4.37 min Scan# 492  
Delta R.T. 0.03 min  
Lab File: VL038762.D  
Acq: 25 Mar 2022 12:21

Tgt Ion: 84 Resp: 3145783  
Ion Ratio Lower Upper  
84 100  
49 139.9 111.2 166.8  
51 44.9 32.8 49.2  
86 63.7 51.4 77.0





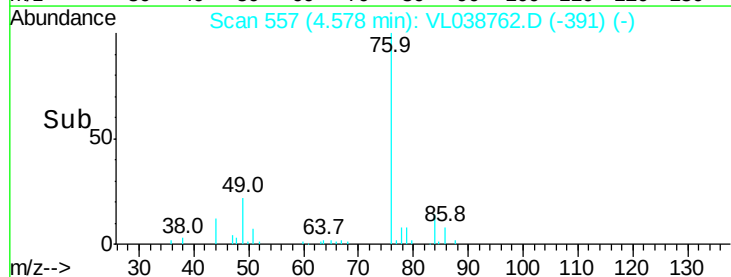
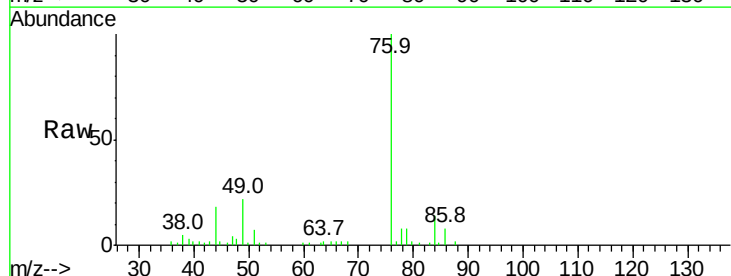
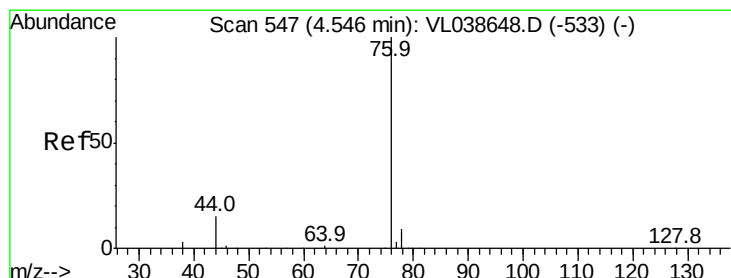
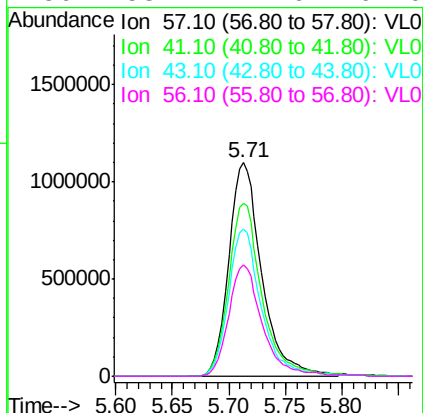


#26  
Hexane  
Concen: 29.43 ppbv  
RT: 5.71 min  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId :  
Acq: 25 Mar 2022 12:21

Tgt Ion: 57.10 (56.80 to 57.80): VL0  
Ion Ratio  
57 100  
41 82.0  
43 69.0  
56 53.7 42.6 64.0

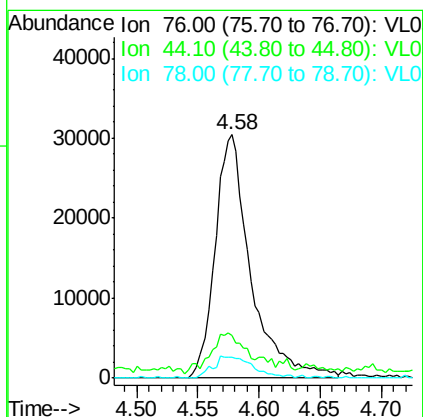
Manual Integrations  
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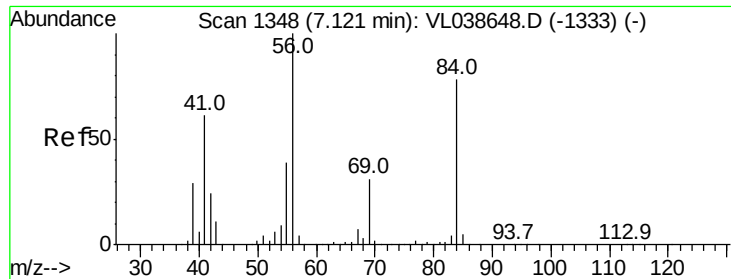
Reviewed By :Semsettin Yesilyurt 03/26/2022  
Supervised By :Mahesh Dadoda 03/28/2022



#27  
Carbon Disulfide  
Concen: 0.84 ppbv  
RT: 4.58 min Scan# 557  
Delta R.T.: 0.03 min  
Lab File: VL038762.D  
Acq: 25 Mar 2022 12:21

Tgt Ion: 76 Resp: 62279  
Ion Ratio Lower Upper  
76 100  
44 16.7 12.4 18.6  
78 10.1 7.8 11.8



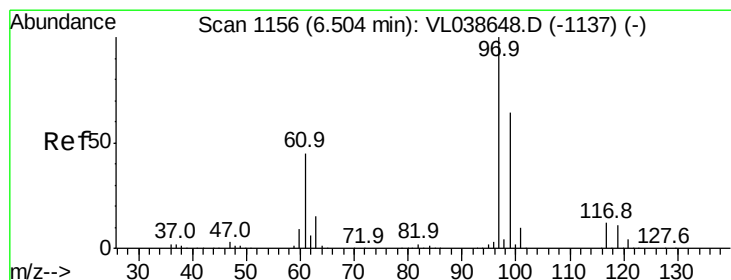
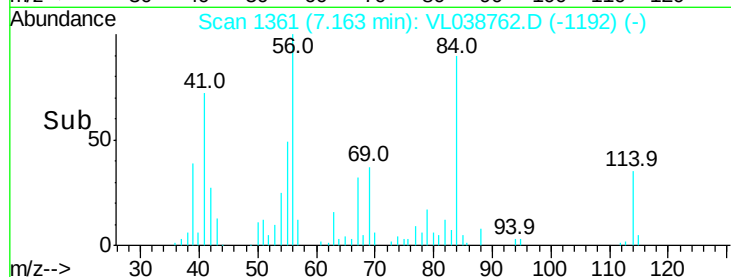
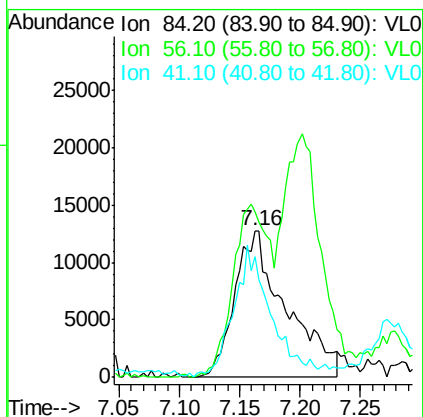
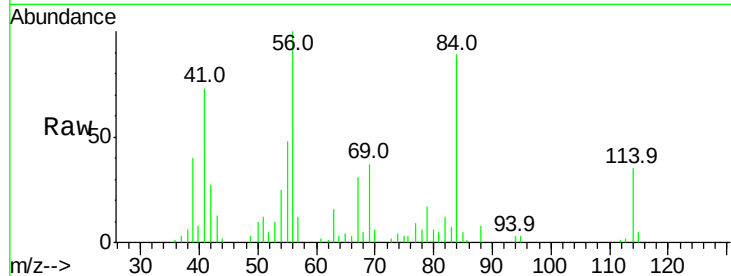


#30  
Cyclohexane  
Concen: 0.57 ppbv m  
RT: 7.16  
Instrument: MSVOA\_L  
Delta R.T.:  
Lab File: ClientSampleId :  
SV-02-(SB-07)  
Acq: 25 Mar 2022 12:21

Tgt Ion:  
Ion Ratio  
84 100  
56 74.  
41 68.

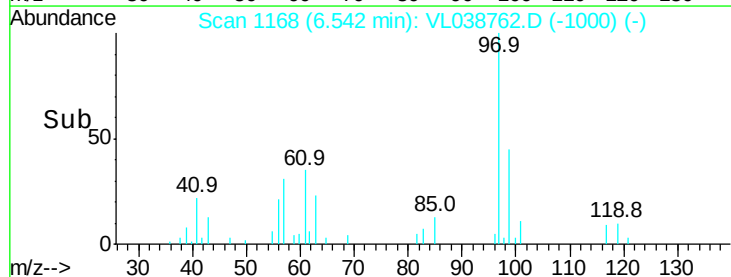
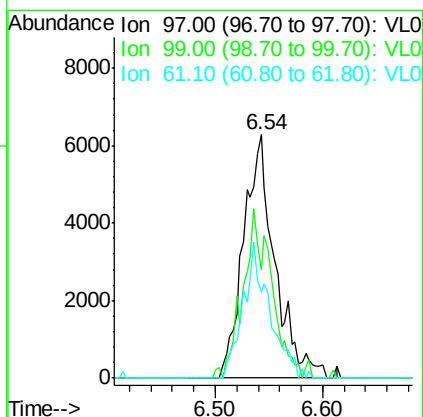
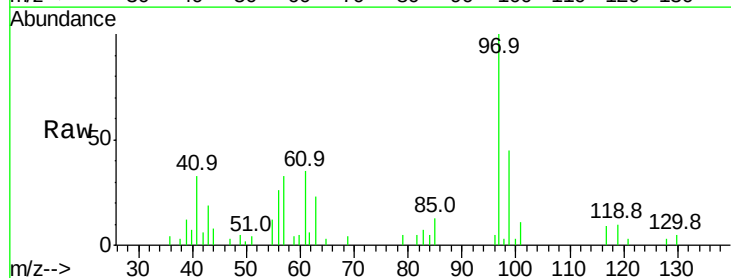
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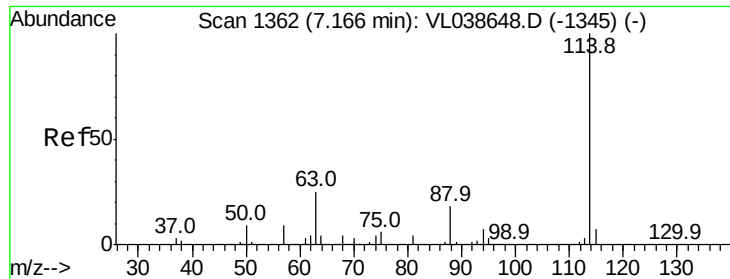
Reviewed By :Semsettin Yesilyurt 03/26/2022  
Supervised By :Mahesh Dadoda 03/28/2022



#32  
1,1,1-Trichloroethane  
Concen: 0.11 ppbv m  
RT: 6.54 min Scan# 1168  
Delta R.T. 0.04 min  
Lab File: VL038762.D  
Acq: 25 Mar 2022 12:21

Tgt Ion: 97 Resp: 12764  
Ion Ratio Lower Upper  
97 100  
99 63.9 51.8 77.8  
61 46.8 36.7 55.1



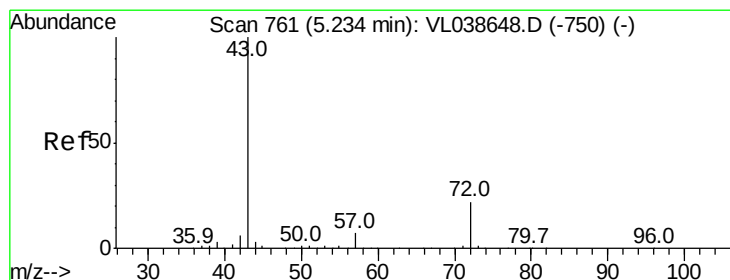
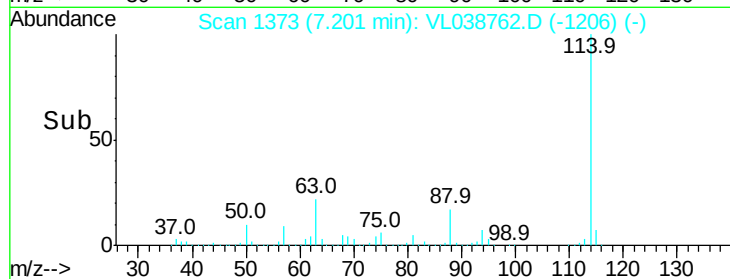
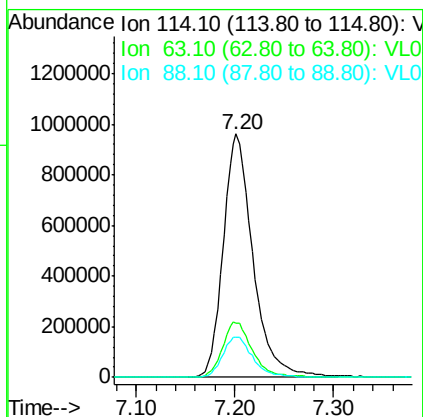
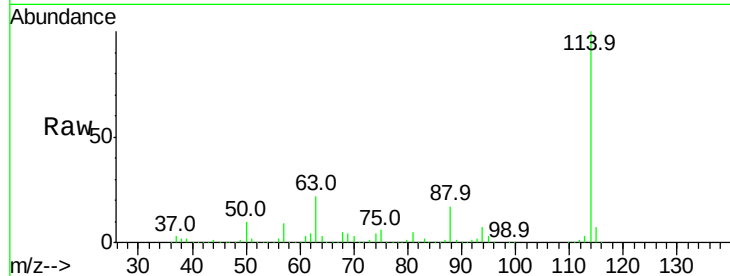


#33  
 1,4-Difluorobenzene  
 Concen: 10.00 ppbv  
 RT: 7.20  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId :  
 SV-02-(SB-07)  
 Acq: 25 Mar 2022 12:21

Tgt Ion: 1  
 Ion Ratio  
 114 100  
 63 23.  
 88 17.

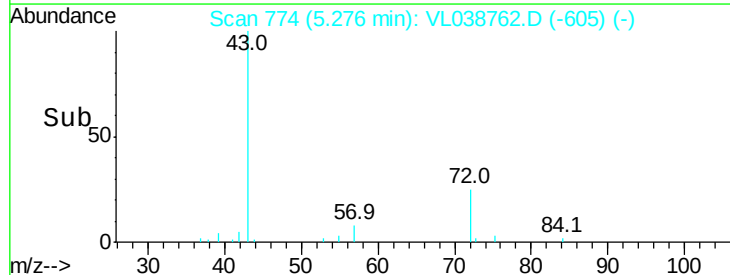
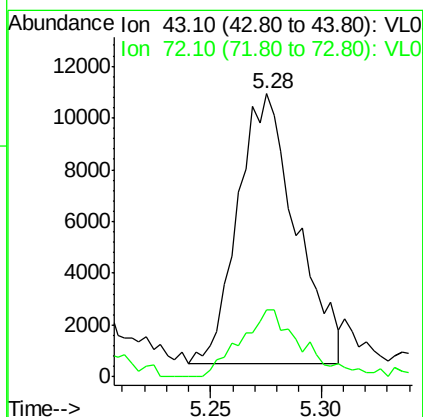
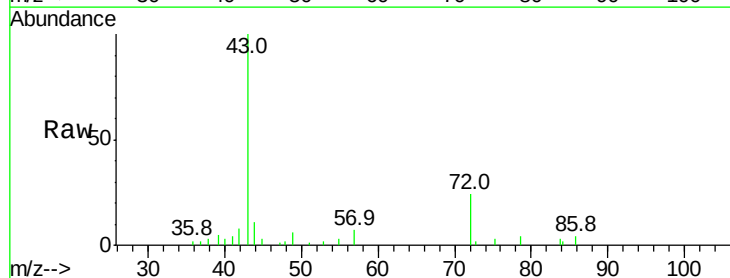
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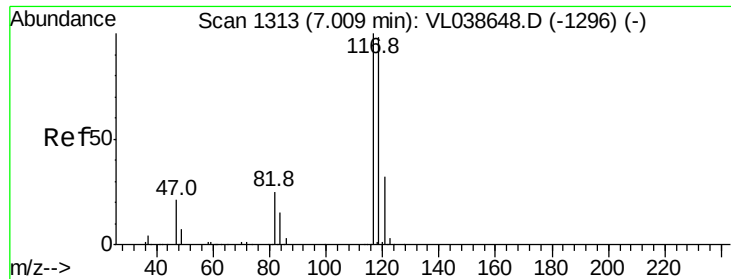
Reviewed By : Semsettin Yesilyurt 03/26/2022  
 Supervised By : Mahesh Dadoda 03/28/2022



#34  
 2-Butanone  
 Concen: 0.24 ppbv  
 RT: 5.28 min Scan# 774  
 Delta R.T.: 0.04 min  
 Lab File: VL038762.D  
 Acq: 25 Mar 2022 12:21

Tgt Ion: 43 Resp: 19102  
 Ion Ratio Lower Upper  
 43 100  
 72 27.5 17.8 26.8#



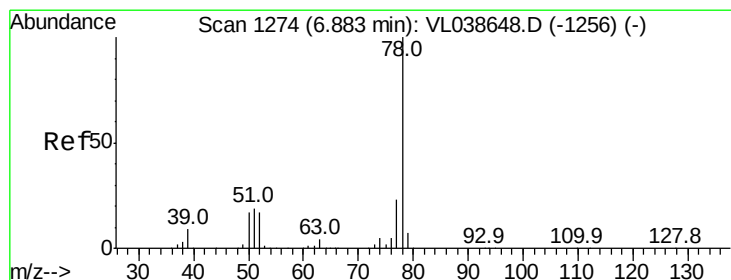
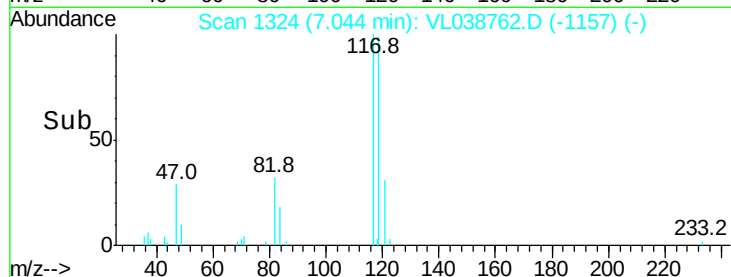
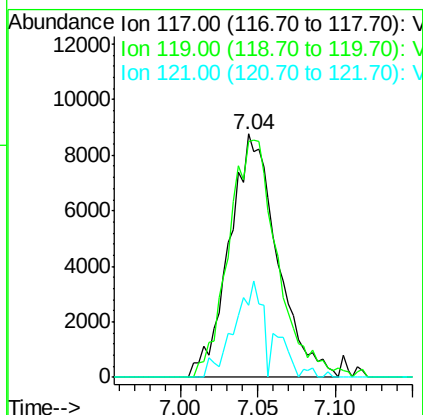
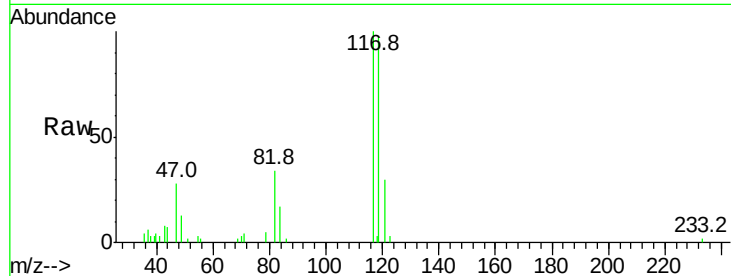


#35  
Carbon Tetrachloride  
Concen: 0.16 ppbv  
RT: 7.04  
Instrument: MSVOA\_L  
Delta R.T.:  
Lab File: ClientSampleId :  
SV-02-(SB-07)  
Acq: 25 Mar 2022 12:21

Tgt Ion: 117  
Ion Ratio: 100  
117 100  
119 96.  
121 29.

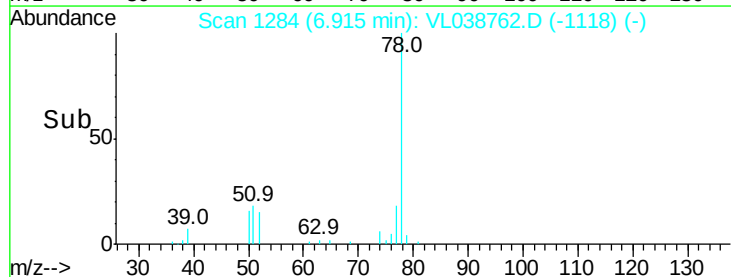
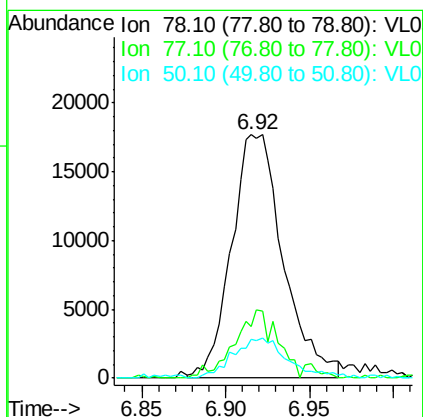
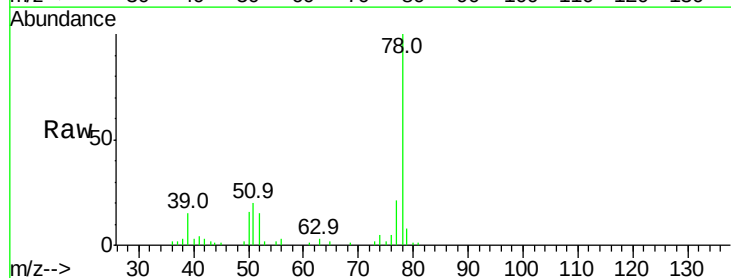
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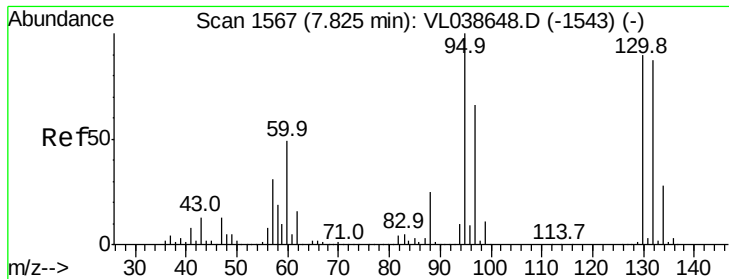
Reviewed By : Semsettin Yesilyurt 03/26/2022  
Supervised By : Mahesh Dadoda 03/28/2022



#36  
Benzene  
Concen: 0.24 ppbv m  
RT: 6.92 min Scan# 1284  
Delta R.T. 0.03 min  
Lab File: VL038762.D  
Acq: 25 Mar 2022 12:21

Tgt Ion: 78 Resp: 37864  
Ion Ratio Lower Upper  
78 100  
77 21.4 18.1 27.1  
50 16.0 13.6 20.4





#38

Trichloroethene

Concen: 0.16 ppbv m

RT: 7.86 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21 SV-02-(SB-07)

Tgt Ion:1

Ion Ratio

130 100

95 105.

132 83.

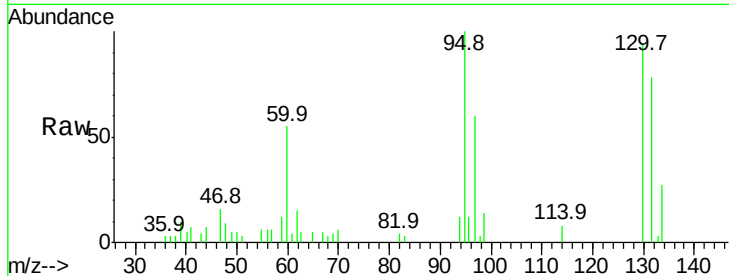
97 63.3 58.2 87.4

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Reviewed By :Semsettin Yesilyurt 03/26/2022

Supervised By :Mahesh Dadoda 03/28/2022

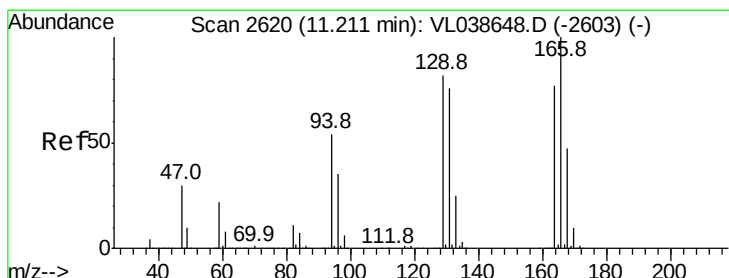
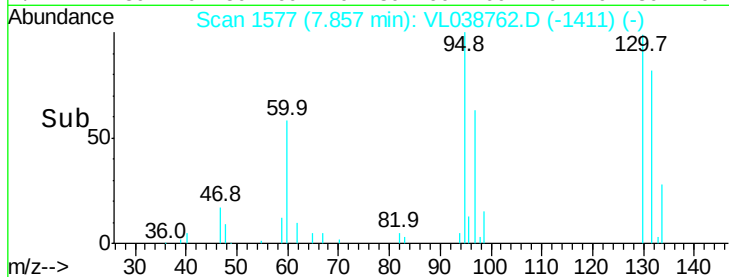
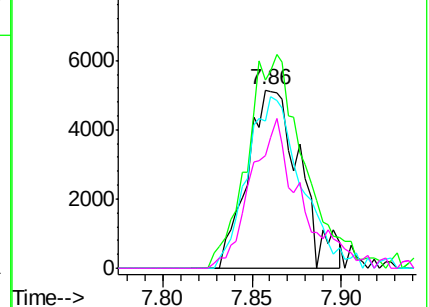


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#52

Tetrachloroethene

Concen: 0.05 ppbv m

RT: 11.25 min Scan# 2632

Delta R.T. 0.04 min

Lab File: VL038762.D

Acq: 25 Mar 2022 12:21

Tgt Ion:164 Resp: 2709

Ion Ratio Lower Upper

164 100

166 155.7 103.3 154.9#

129 124.7 85.2 127.8

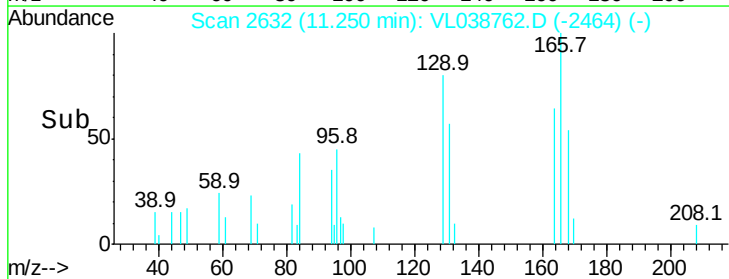
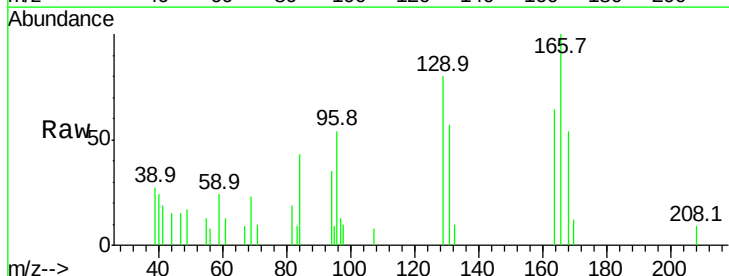
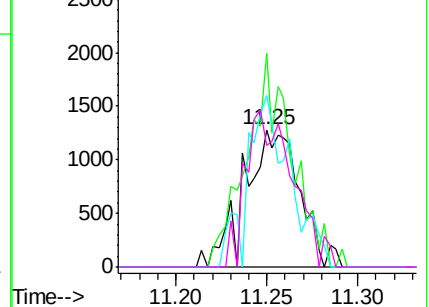
131 88.2 78.3 117.5

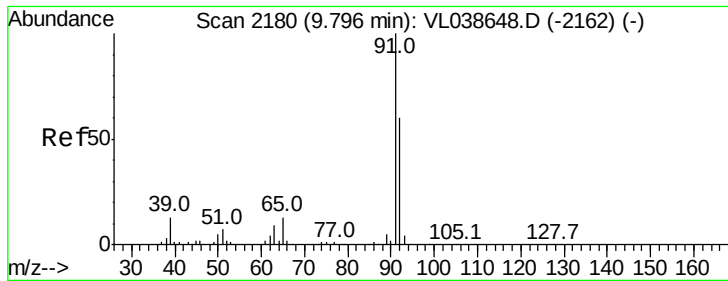
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 0.31 ppbv m

RT: 9.83 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 25 Mar 2022 12:21 SV-02-(SB-07)

Tgt Ion:

Ion Ratio

91 100

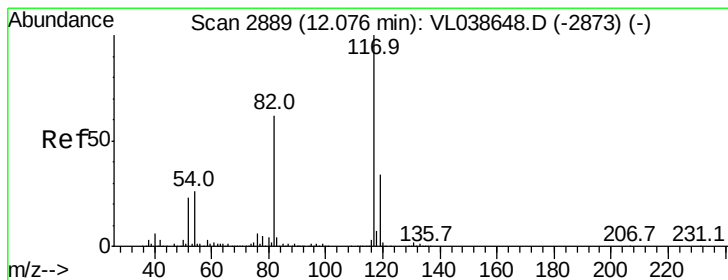
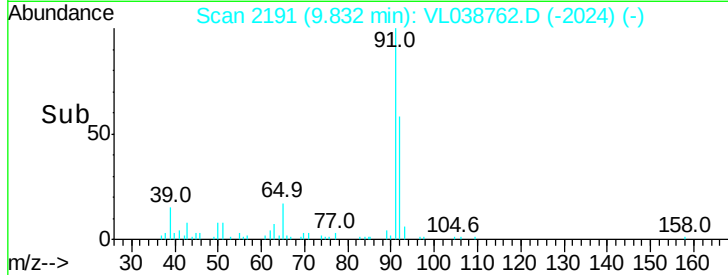
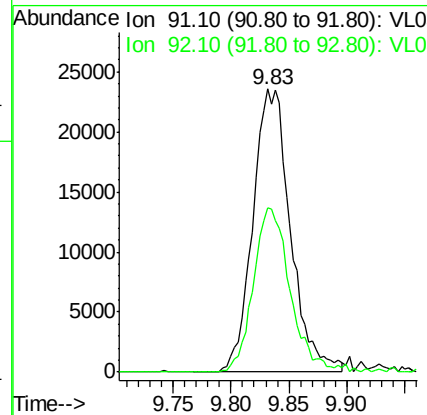
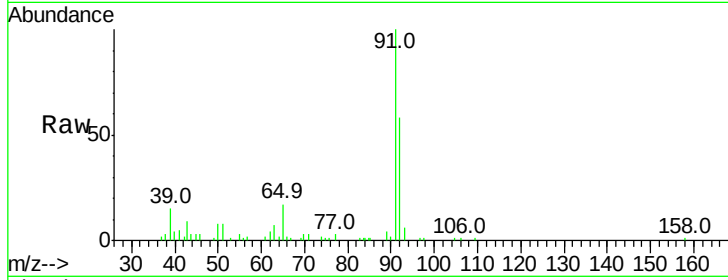
92 0.

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Reviewed By :Semsettin Yesilyurt 03/26/2022

Supervised By :Mahesh Dadoda 03/28/2022



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.11 min Scan# 2901

Delta R.T. 0.04 min

Lab File: VL038762.D

Acq: 25 Mar 2022 12:21

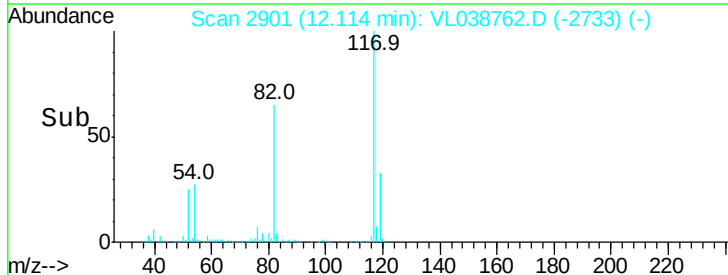
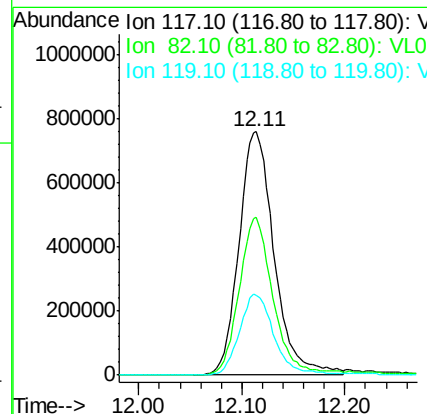
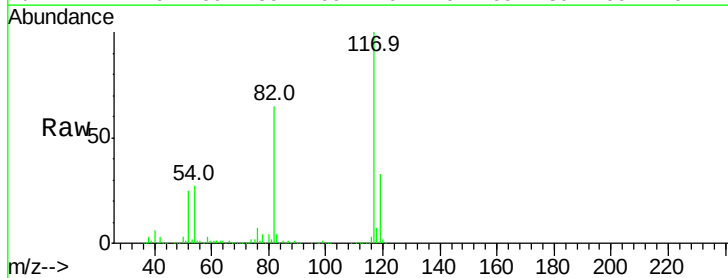
Tgt Ion:117 Resp: 1806511

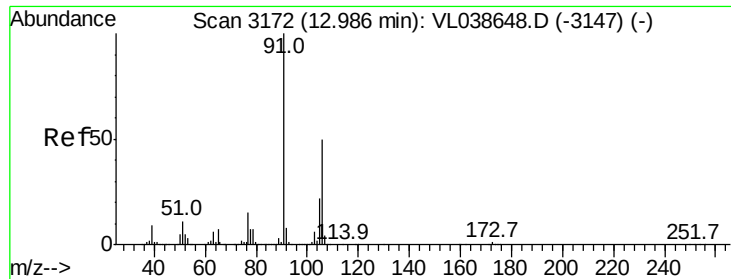
Ion Ratio Lower Upper

117 100

82 64.9 51.6 77.4

119 33.3 26.9 40.3



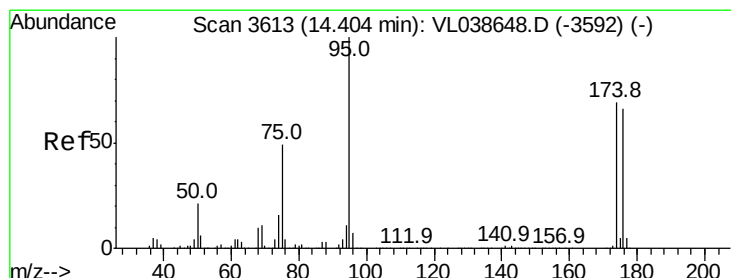
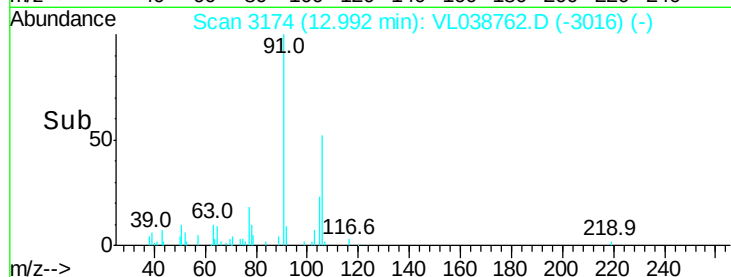
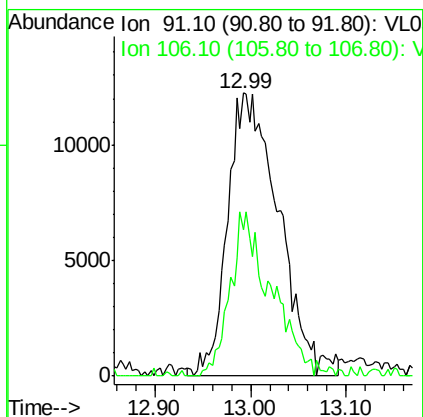
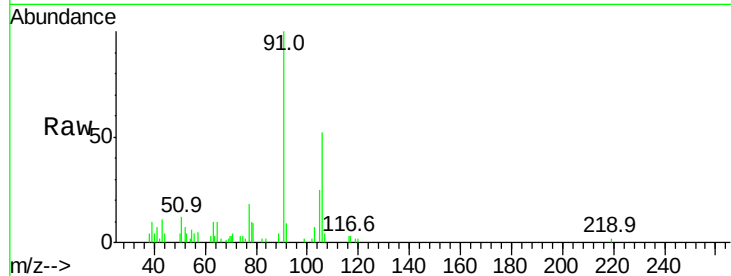


#59  
m/p-Xylene  
Concen: 0.25 ppbv m  
RT: 12.99  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId:  
SV-02-(SB-07)  
Acq: 25 Mar 2022 12:21

Tgt Ion:  
Ion Ratio  
91 100  
106 0.

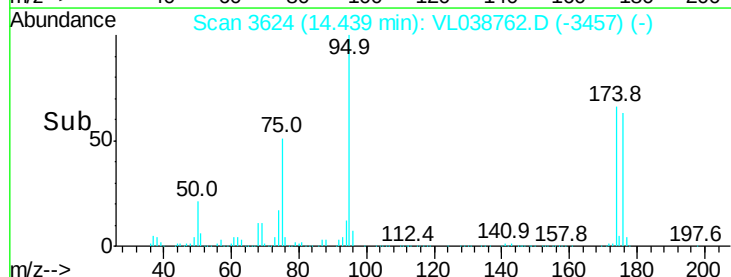
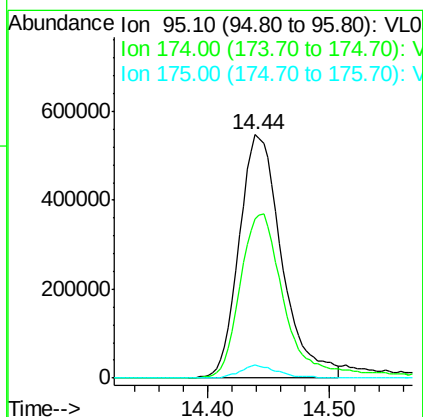
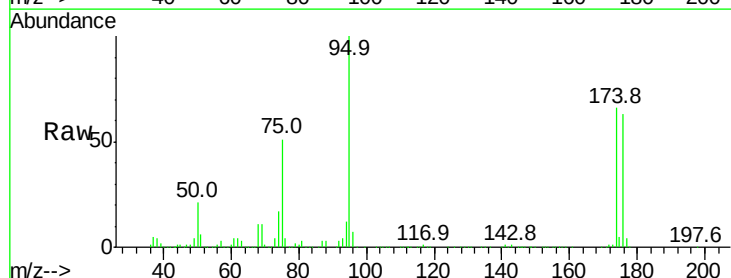
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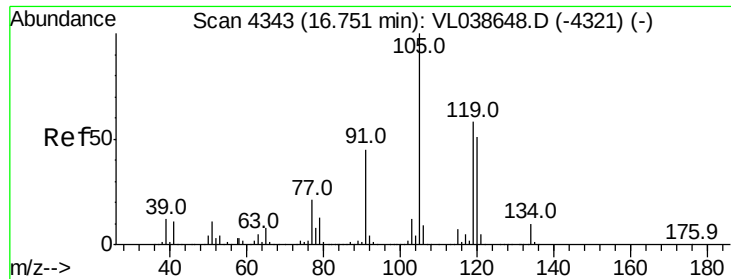
Reviewed By :Semsettin Yesilyurt 03/26/2022  
Supervised By :Mahesh Dadoda 03/28/2022



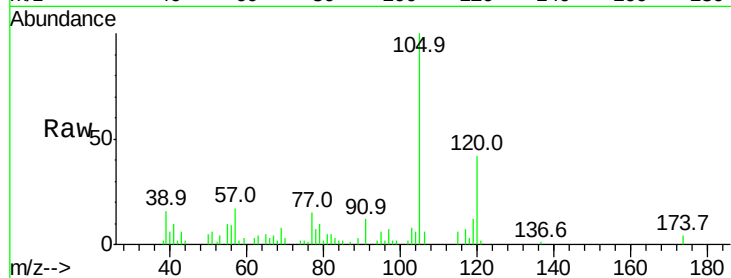
#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.56 ppbv  
RT: 14.44 min Scan# 3624  
Delta R.T. 0.04 min  
Lab File: VL038762.D  
Acq: 25 Mar 2022 12:21

Tgt Ion: 95 Resp: 1323556  
Ion Ratio Lower Upper  
95 100  
174 72.4 56.1 84.1  
175 5.1 4.2 6.2





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.12 ppbv  
 RT: 16.79  
 Delta R.T: MSVOA\_L  
 Lab File: ClientSampleId :  
 SV-02-(SB-07)  
 Acq: 25 Mar 2022 12.21



Tgt Ion:1  
 Ion Rati  
 105 100  
 120 44.  
 91 8.  
 77 12.6 16.6 25.0#

Manual Integrations  
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Reviewed By :Semsettin Yesilyurt 03/26/2022  
 Supervised By :Mahesh Dadoda 03/28/2022

