

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120721\  
 Data File : VL038149.D  
 Acq On : 7 Dec 2021 14:11  
 Operator : SY/AP  
 Sample : M4859-01  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA L  
 ClientSampleId :  
 SS-1

Manual Integrations  
 APPROVED

Reviewed By :Amit Patel 12/07/2021  
 Supervised By :Semsettin Yesilyurt 12/08/2021

Quant Time: Dec 07 15:13:57 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821A  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
 QLast Update : Thu Nov 18 13:16:09 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 871700   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.16  | 114  | 2317535  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.07 | 117  | 1973618  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.39  | 95    | 1589192  | 11.16    | ppbv | -0.02   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 111.60% |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.05  | 85   | 38596    | 0.268 | ppbv   | 94     |
| 4) Chloromethane           | 3.14  | 50   | 8493     | 0.136 | ppbv # | 76     |
| 5) Vinyl Chloride          | 3.26  | 62   | 21524    | 0.352 | ppbv   | 93     |
| 9) Propene                 | 3.02  | 41   | 276130   | 4.096 | ppbv   | 95     |
| 11) Trichlorofluoromethane | 3.95  | 101  | 29946    | 0.219 | ppbv   | 96     |
| 13) Ethanol                | 3.61  | 45   | 63757m   | 9.786 | ppbv   |        |
| 15) Acetone                | 3.84  | 43   | 572930   | 7.581 | ppbv   | 99     |
| 19) Isopropyl Alcohol      | 3.99  | 45   | 25669m   | 0.470 | ppbv   |        |
| 20) Methylene Chloride     | 4.34  | 84   | 379336   | 8.961 | ppbv   | 99     |
| 26) Hexane                 | 5.68  | 57   | 243781   | 2.014 | ppbv # | 46     |
| 31) cis-1,2-Dichloroethene | 5.54  | 61   | 130109   | 1.130 | ppbv   | 91     |
| 34) 2-Butanone             | 5.24  | 43   | 96439    | 1.032 | ppbv   | 98     |
| 35) Carbon Tetrachloride   | 7.01  | 117  | 10392m   | 0.064 | ppbv   |        |
| 36) Benzene                | 6.88  | 78   | 72401    | 0.313 | ppbv # | 92     |
| 38) Trichloroethene        | 7.83  | 130  | 57346    | 0.658 | ppbv   | 90     |
| 52) Tetrachloroethene      | 11.20 | 164  | 244205   | 2.855 | ppbv   | 96     |
| 53) Toluene                | 9.79  | 91   | 64780    | 0.244 | ppbv   | 98     |
| 74) 1,2,4-Trimethylbenzene | 16.74 | 105  | 68641    | 0.247 | ppbv # | 73     |

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

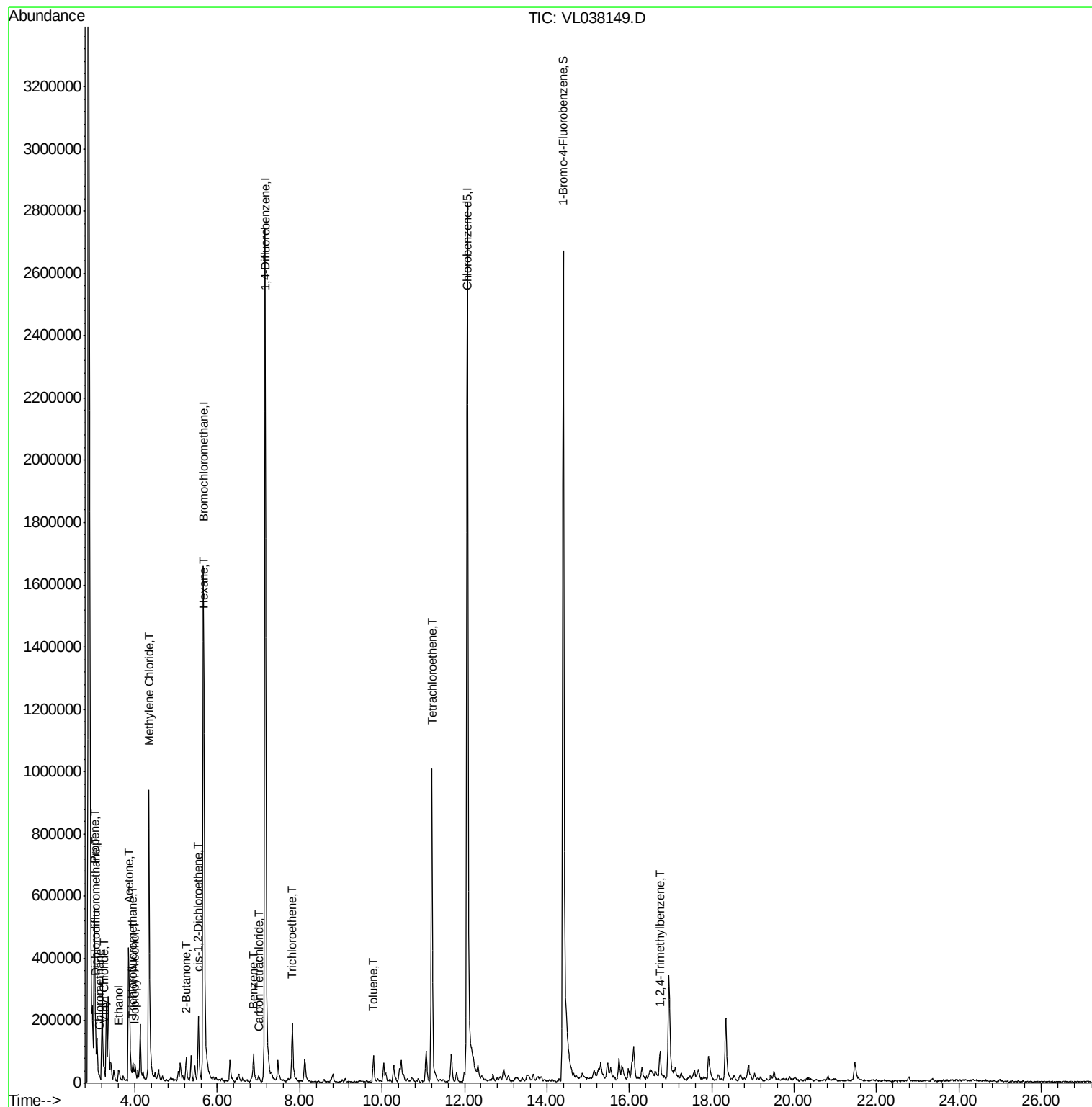
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120721\  
Data File : VL038149.D  
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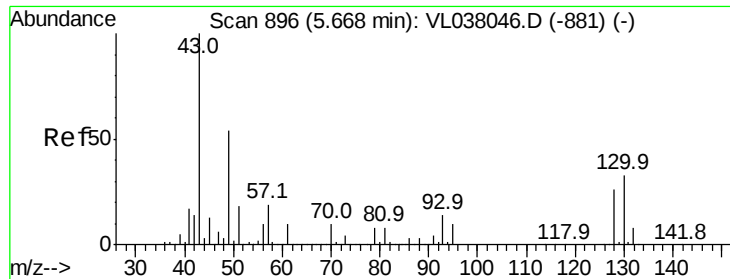
Instrument :  
MSVOA\_L  
ClientSampleId :  
SS-1

Quant Time: Dec 07 15:13:57 2021  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
QLast Update : Thu Nov 18 13:16:09 2021  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Amit Patel 12/07/2021  
Supervised By :Semsettin Yesilyurt 12/08/2021





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA\_1

Delta R.T.:

Lab File: ClientSampleId:

Acq: 7 Dec 2021 14:11

Tot Ion:

Ion Ratio

49 100

128 47.

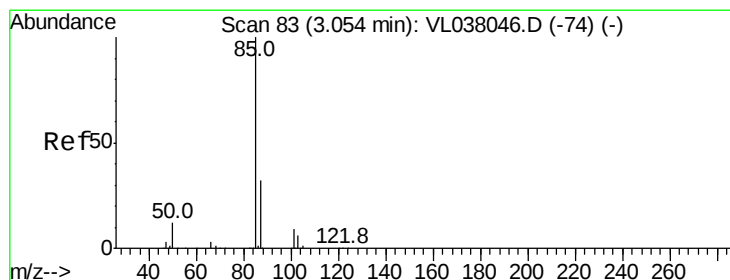
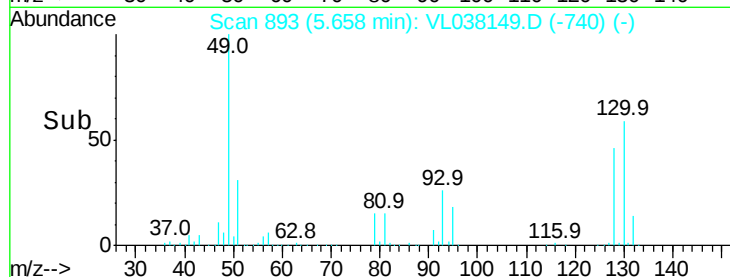
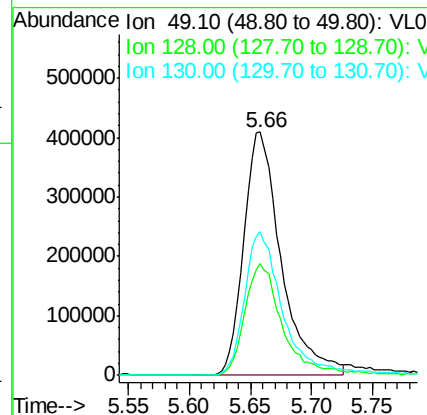
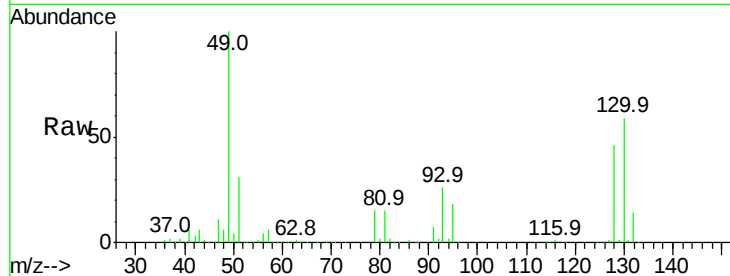
130 60.

Manual Integrations

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Reviewed By :Amit Patel 12/07/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#2

Dichlorodifluoromethane

Concen: 0.268 ppbv

RT: 3.05 min Scan# 82

Delta R.T. -0.00 min

Lab File: VL038149.D

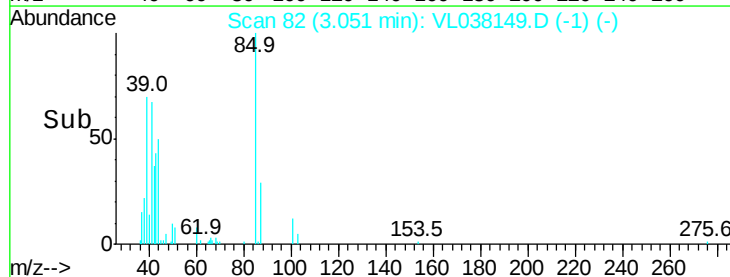
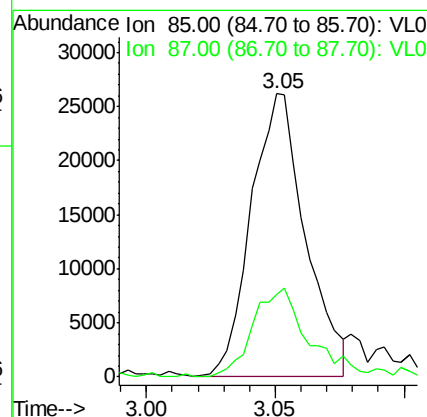
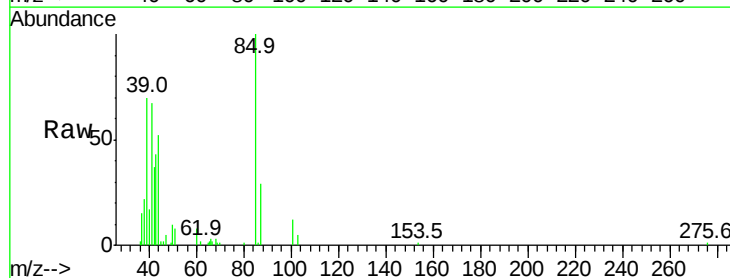
Acq: 7 Dec 2021 14:11

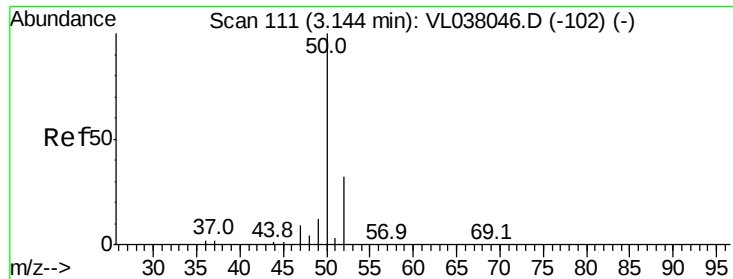
Tgt Ion: 85 Resp: 38596

Ion Ratio Lower Upper

85 100

87 29.1 25.8 38.6





#4

Chloromethane

Concen: 0.136 ppbv

RT: 3.14 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 7 Dec 2021 14:11 SS-1

Tot Ion:

Ion Ratio

50 100

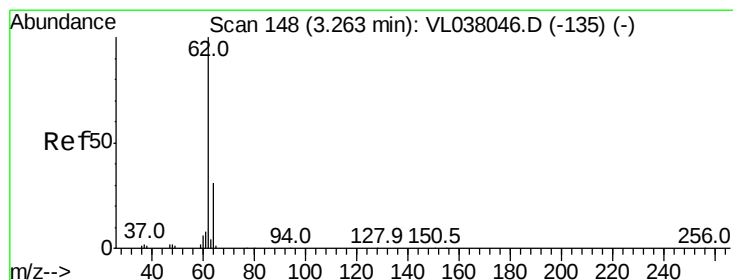
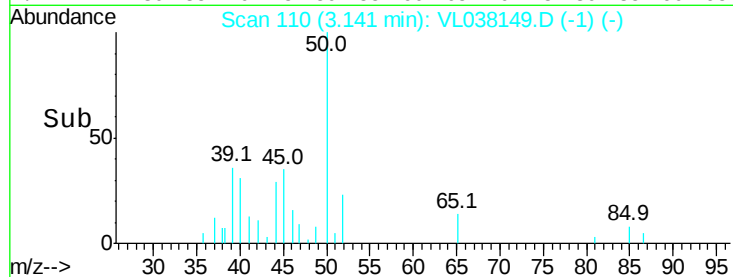
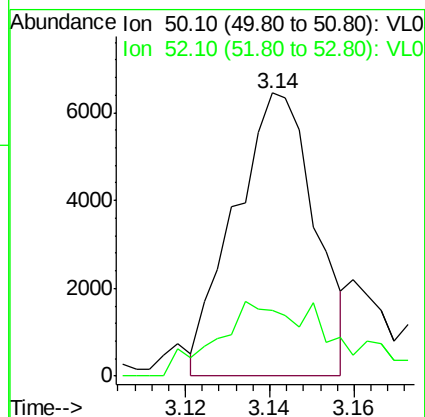
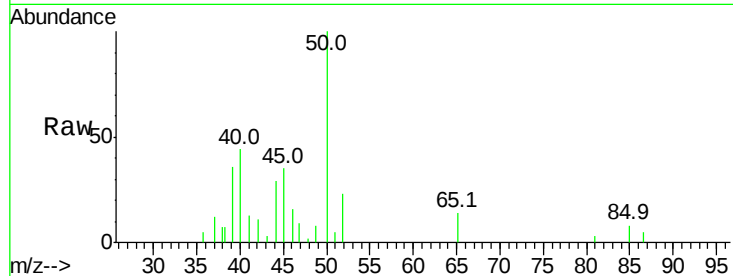
52 18.

Manual Integrations

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#5

Vinyl Chloride

Concen: 0.352 ppbv

RT: 3.26 min Scan# 146

Delta R.T. -0.01 min

Lab File: VL038149.D

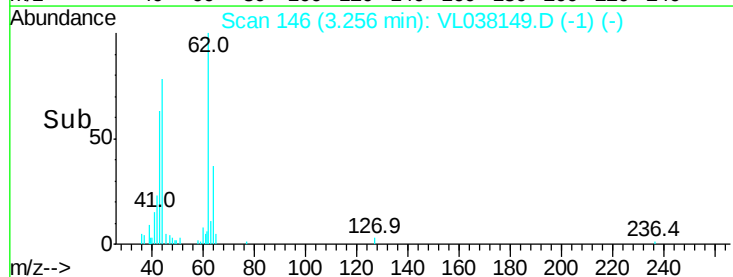
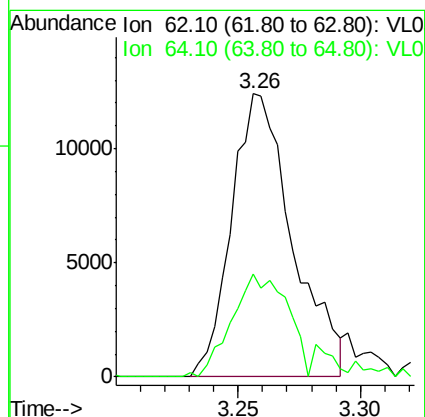
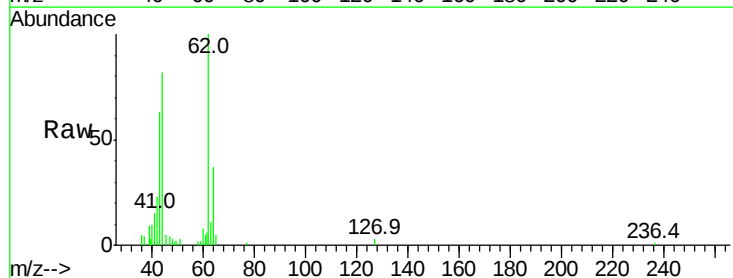
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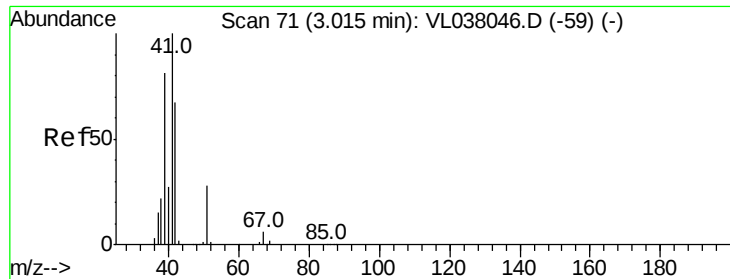
Tgt Ion: 62 Resp: 21524

Ion Ratio Lower Upper

62 100

64 35.2 25.1 37.7





#9

Propene

Concen: 4.096 ppbv

RT: 3.02

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 14:11

Tot Ion:

Ion Ratio

41 100

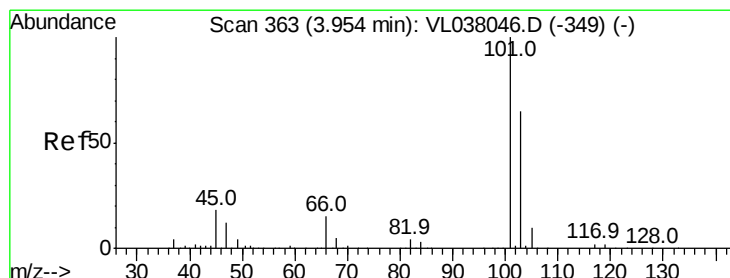
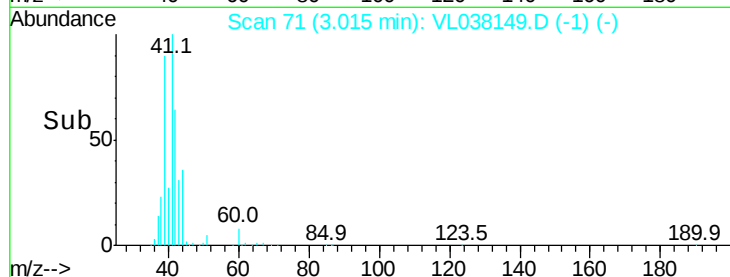
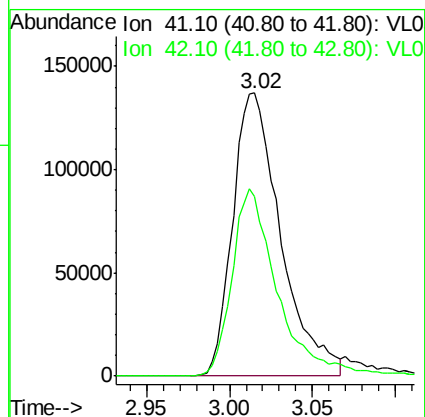
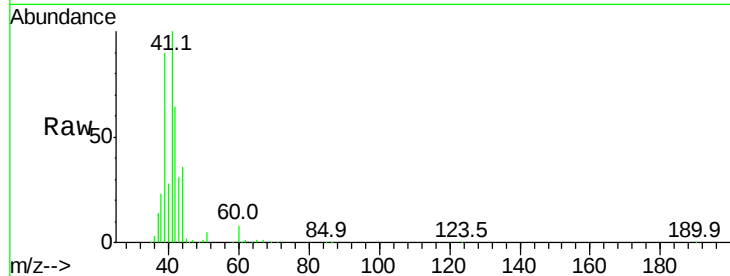
42 63.

Manual Integrations

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Reviewed By :Amit Patel 12/07/2021

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#11

Trichlorofluoromethane

Concen: 0.219 ppbv

RT: 3.95 min Scan# 362

Delta R.T. -0.00 min

Lab File: VL038149.D

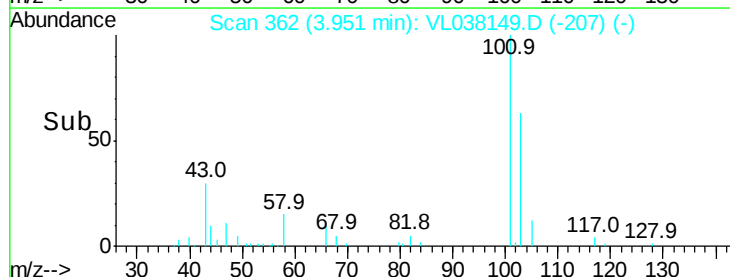
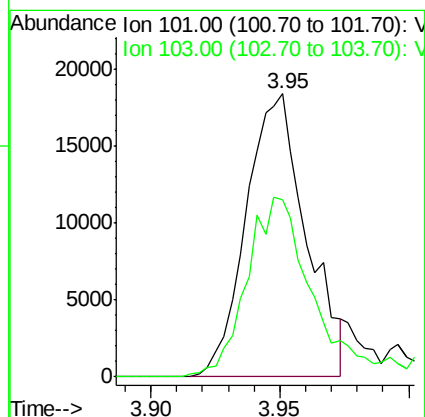
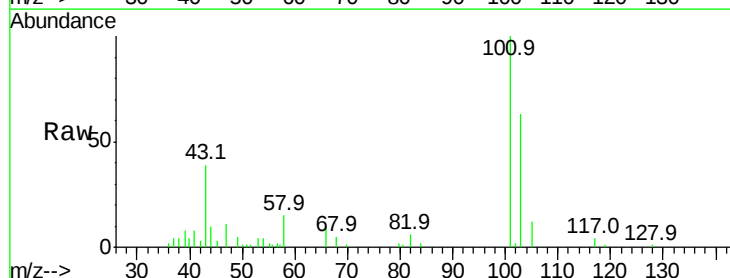
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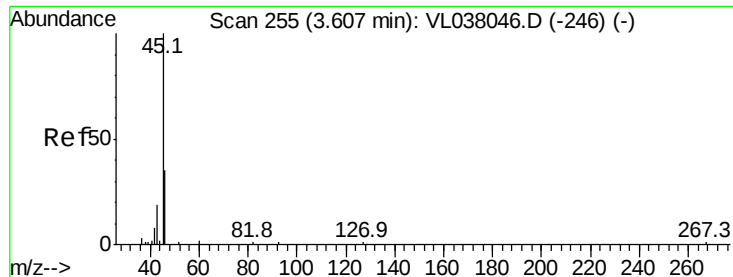
Tgt Ion:101 Resp: 29946

Ion Ratio Lower Upper

101 100

103 61.7 51.8 77.6



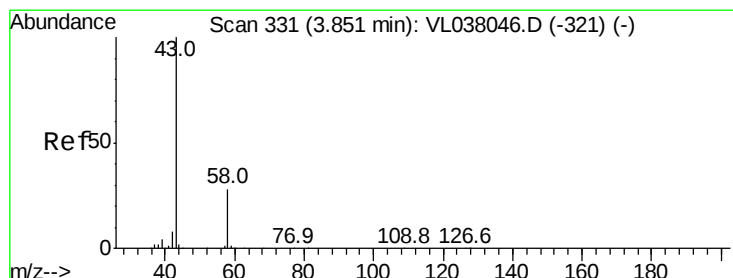
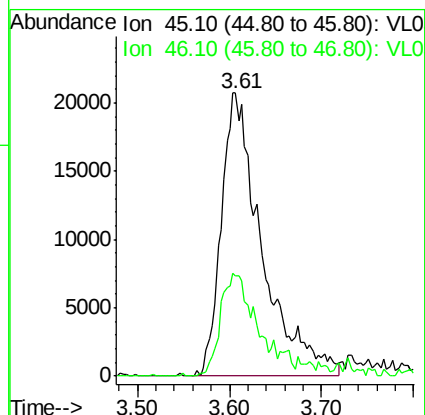
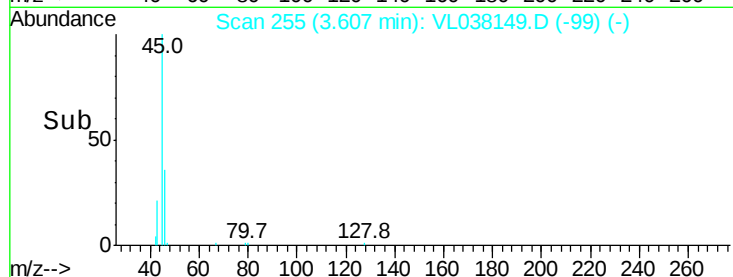
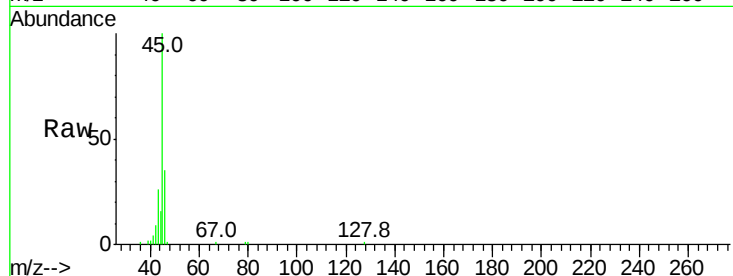


#13  
Ethanol  
Concen: 9.786 ppbv m  
RT: 3.61  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 7 Dec 2021 14:11

Tot Ion:  
Ion Ratio  
45 100  
46 36.

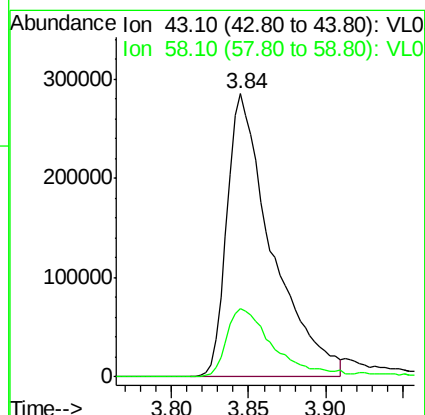
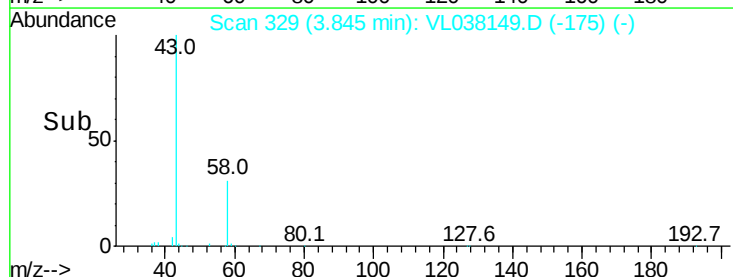
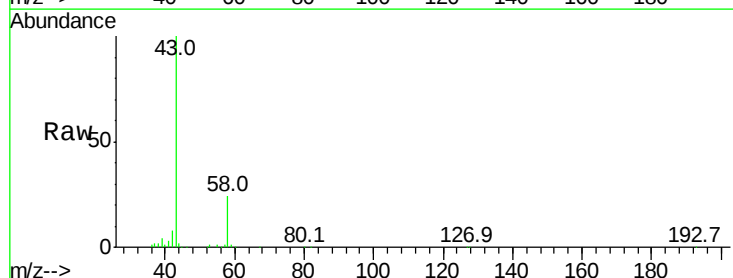
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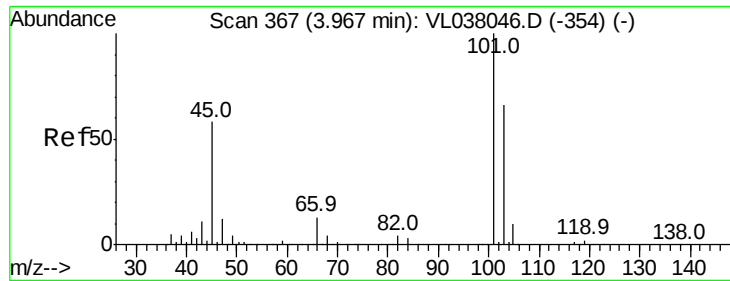
Reviewed By :Amit Patel 12/07/2021  
Supervised By :Semsettin Yesilyurt 12/08/2021



#15  
Acetone  
Concen: 7.581 ppbv  
RT: 3.84 min Scan# 329  
Delta R.T. -0.01 min  
Lab File: VL038149.D  
Acq: 7 Dec 2021 14:11

Tgt Ion: 43 Resp: 572930  
Ion Ratio Lower Upper  
43 100  
58 27.3 22.4 33.6



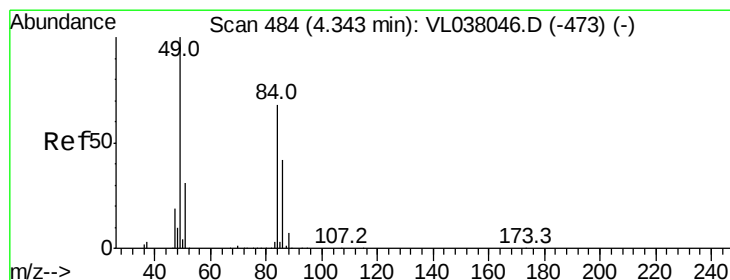
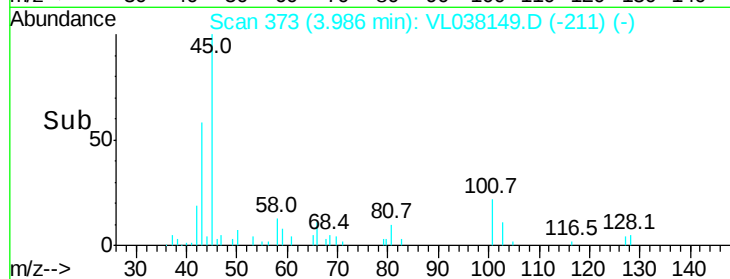
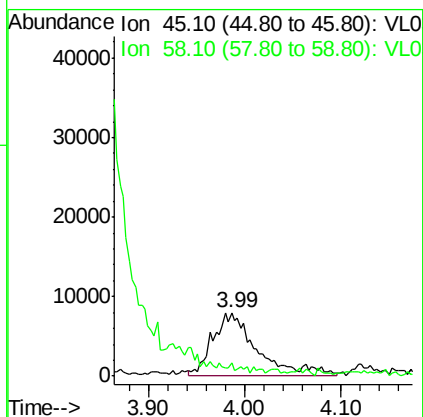
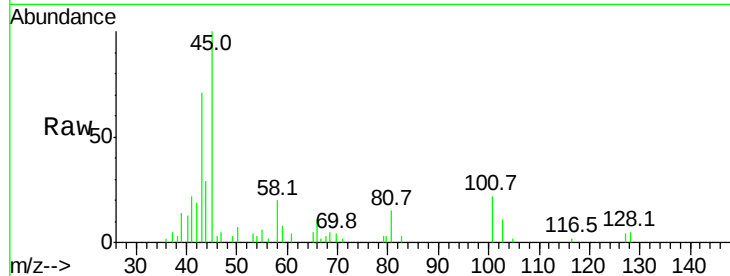


#19  
Isopropyl Alcohol  
Concen: 0.470 ppbv m  
RT: 3.99  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId :  
Acq: 7 Dec 2021 14:11

Tot Ion:  
Ion Ratio  
45 100  
58 0.

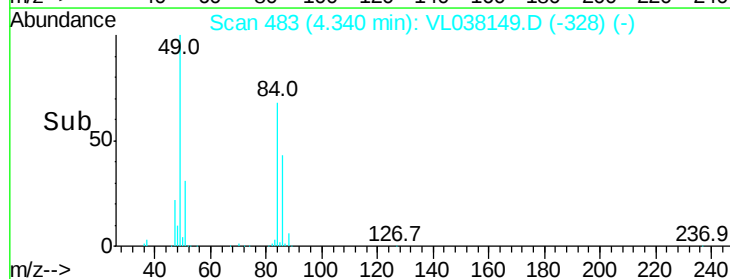
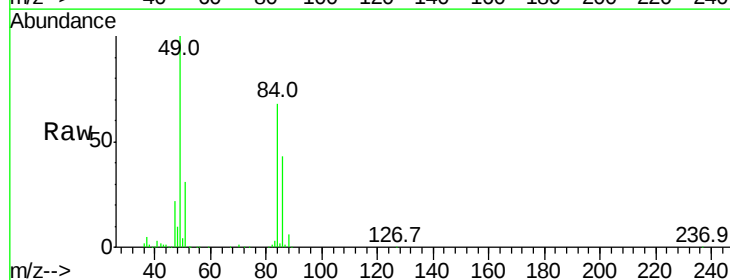
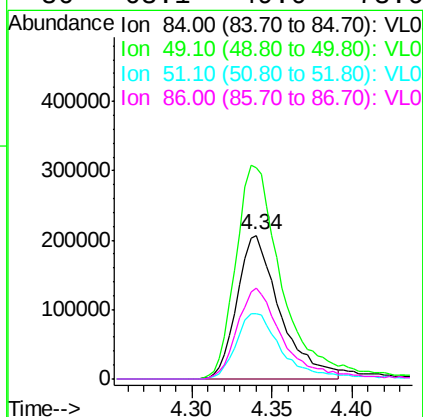
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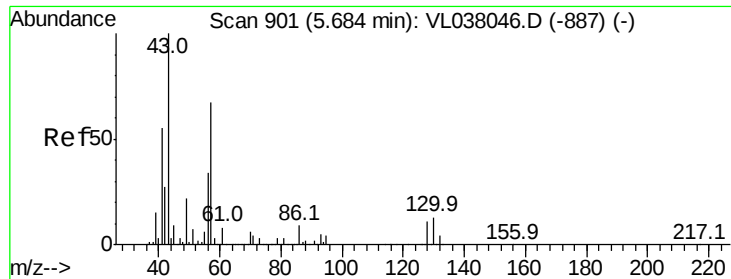
Reviewed By :Amit Patel 12/07/2021  
Supervised By :Semsettin Yesilyurt 12/08/2021



#20  
Methylene Chloride  
Concen: 8.961 ppbv  
RT: 4.34 min Scan# 483  
Delta R.T. -0.00 min  
Lab File: VL038149.D  
Acq: 7 Dec 2021 14:11

Tgt Ion: 84 Resp: 379336  
Ion Ratio Lower Upper  
84 100  
49 147.7 118.2 177.2  
51 45.5 36.8 55.2  
86 63.1 49.0 73.6



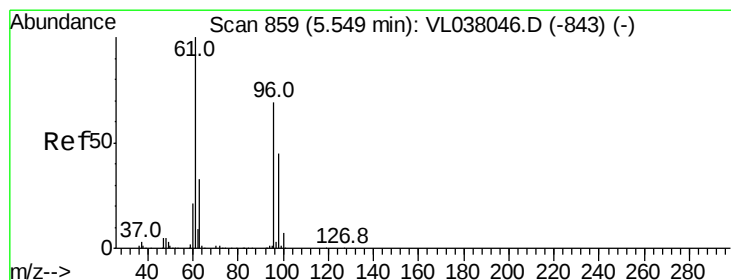
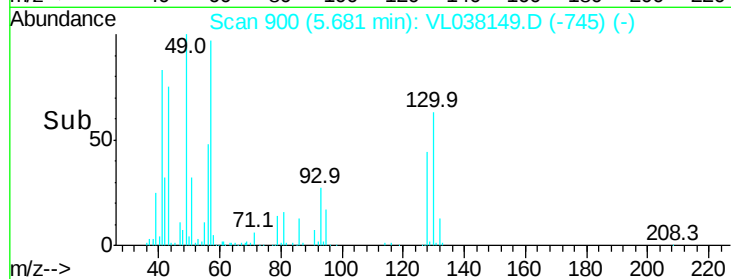
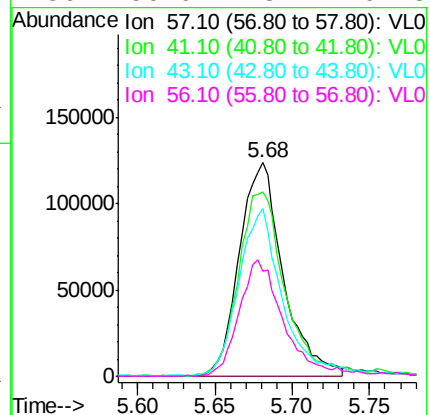
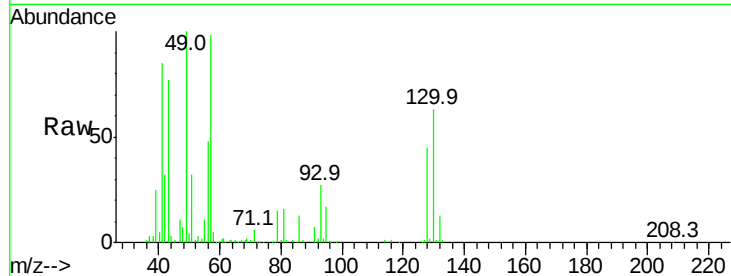


#26  
Hexane  
Concen: 2.014 ppbv  
RT: 5.68  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 7 Dec 2021 14:11

Tot Ion: 57.10 (56.80 to 57.80): VL0  
Ion Ratio: 57 100  
41 95.  
43 80.  
56 56.9 43.2 64.8

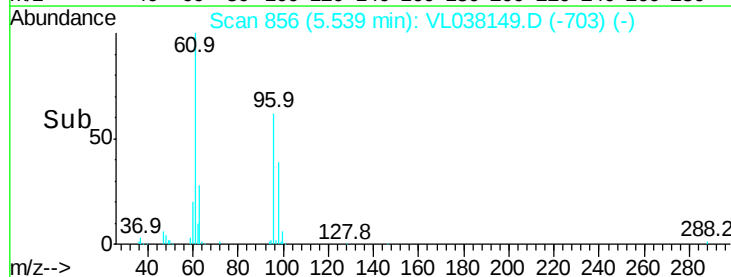
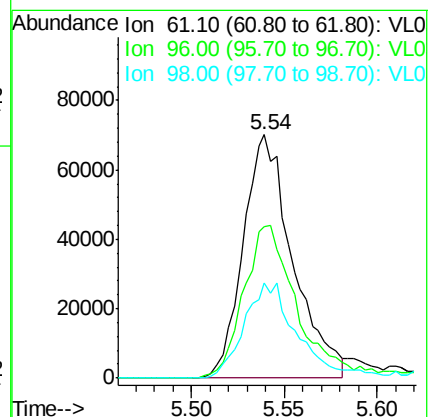
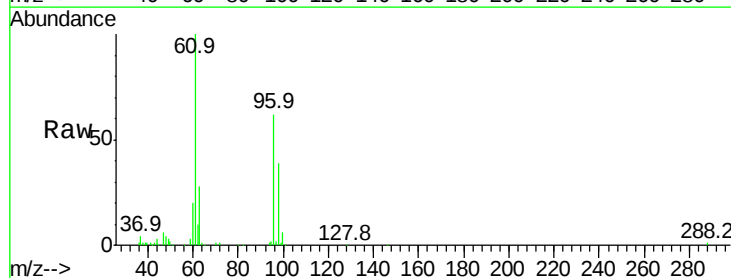
Manual Integrations  
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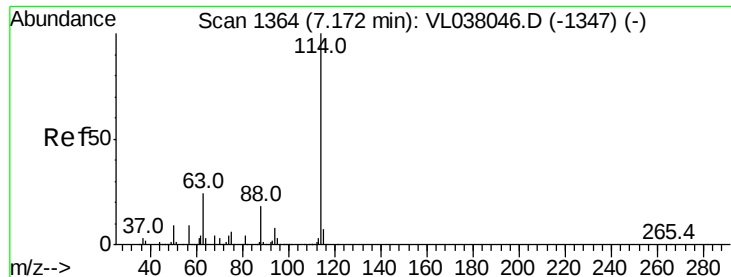
Reviewed By :Amit Patel 12/07/2021  
Supervised By :Semsettin Yesilyurt 12/08/2021



#31  
cis-1,2-Dichloroethene  
Concen: 1.130 ppbv  
RT: 5.54 min Scan# 856  
Delta R.T. -0.01 min  
Lab File: VL038149.D  
Acq: 7 Dec 2021 14:11

Tgt Ion: 61 Resp: 130109  
Ion Ratio Lower Upper  
61 100  
96 62.2 55.4 83.2  
98 39.2 35.7 53.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 14:11

Tot Ion:1

Ion Rati

114 100

63 27.

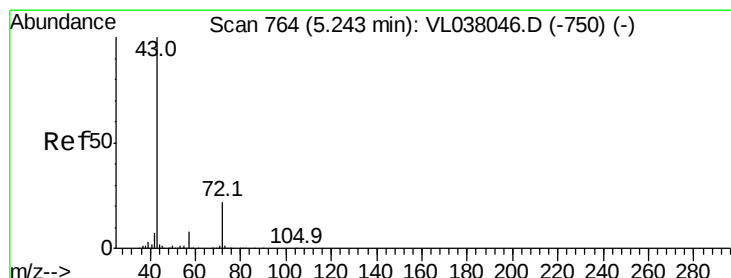
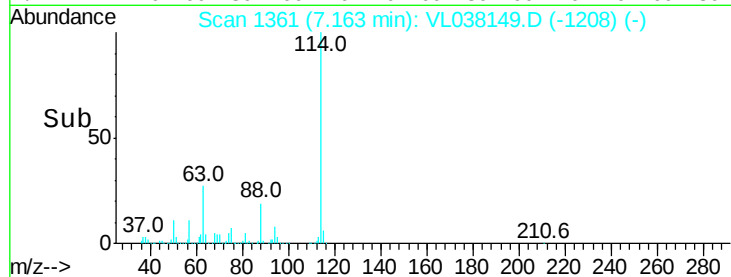
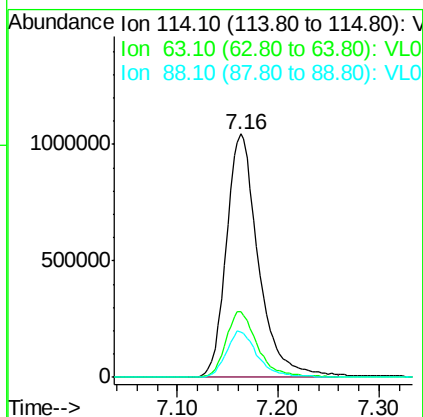
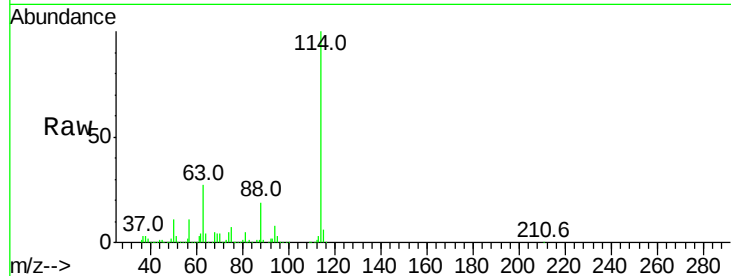
88 18.

Manual Integrations

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Reviewed By :Amit Patel 12/07/2021

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#34

2-Butanone

Concen: 1.032 ppbv

RT: 5.24 min Scan# 764

Delta R.T. 0.00 min

Lab File: VL038149.D

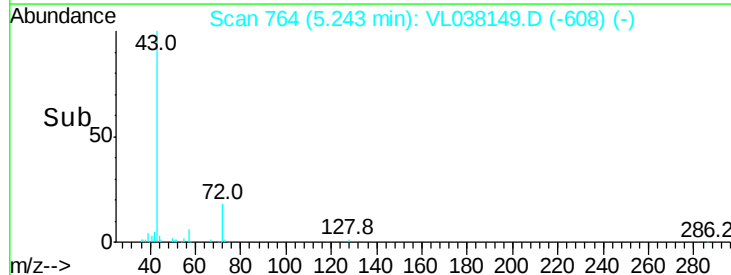
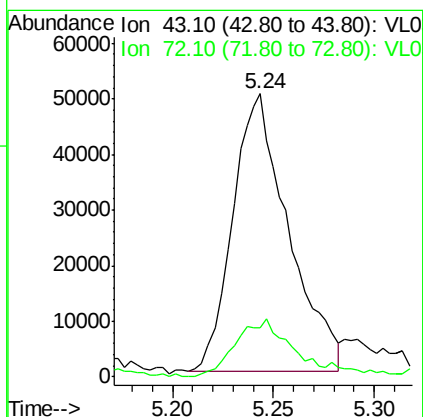
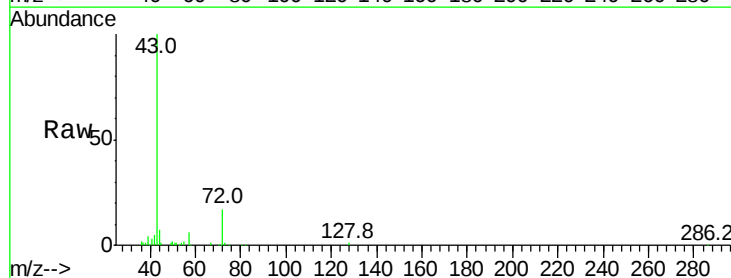
Acq: 7 Dec 2021 14:11

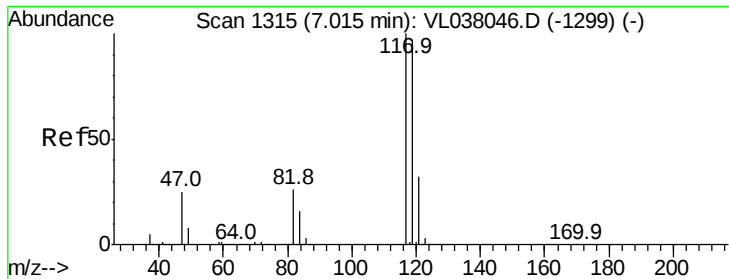
Tgt Ion: 43 Resp: 96439

Ion Ratio Lower Upper

43 100

72 24.4 18.8 28.2





#35

Carbon Tetrachloride

Concen: 0.064 ppbv m

RT: 7.01 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 7 Dec 2021 14:11 SS-1

Tot Ion:1

Ion Ratio

117 100

119 72.

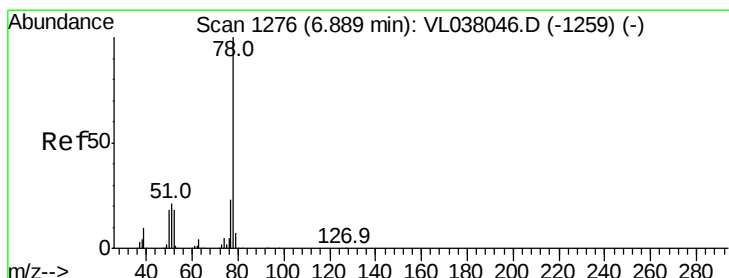
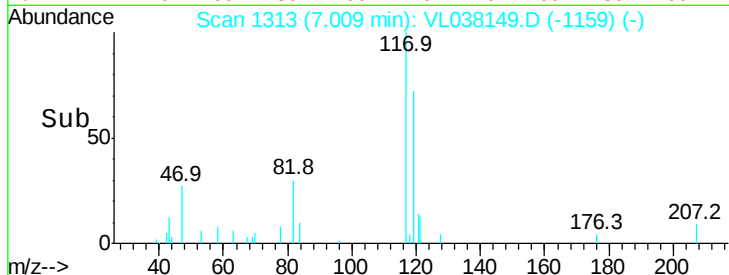
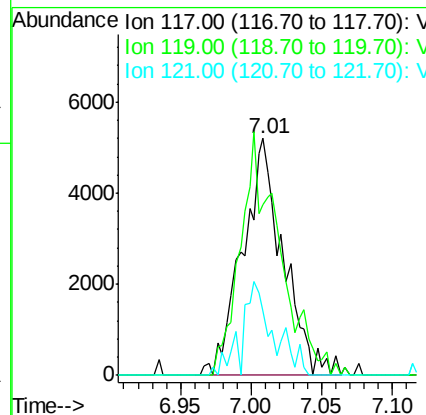
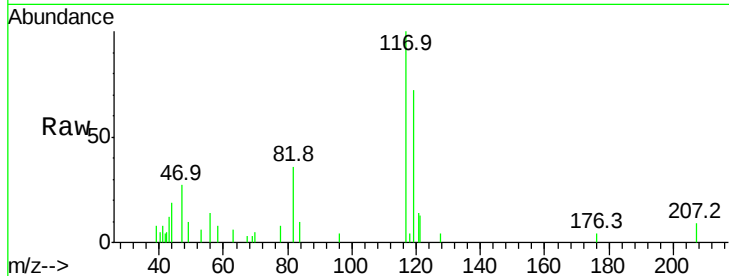
121 13.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/07/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#36

Benzene

Concen: 0.313 ppbv

RT: 6.88 min Scan# 1273

Delta R.T. -0.01 min

Lab File: VL038149.D

Acq: 7 Dec 2021 14:11

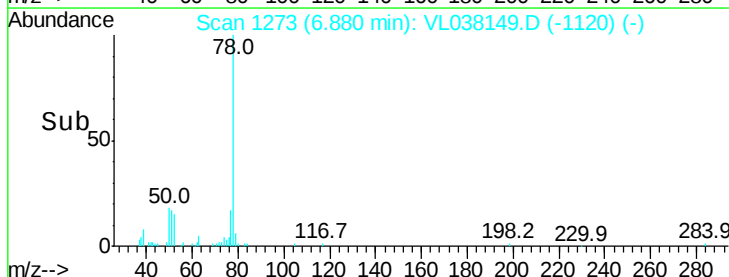
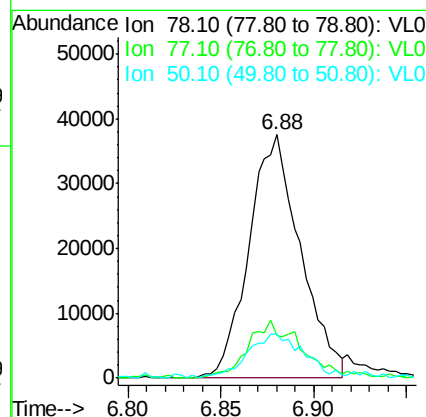
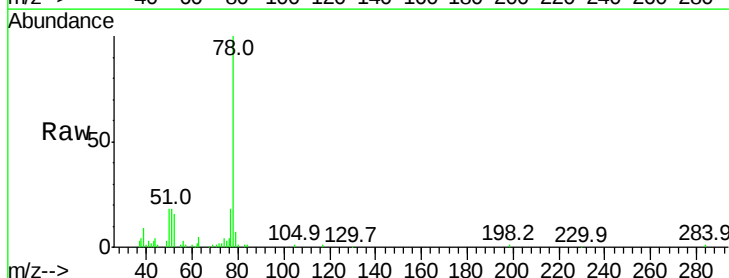
Tgt Ion: 78 Resp: 72401

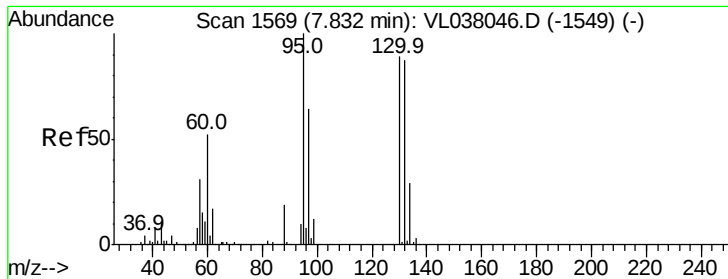
Ion Ratio Lower Upper

78 100

77 17.6 18.2 27.4#

50 16.9 14.7 22.1



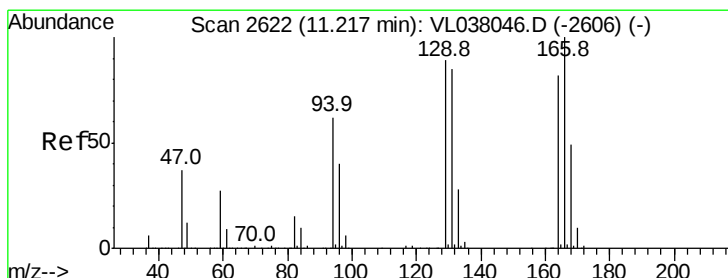
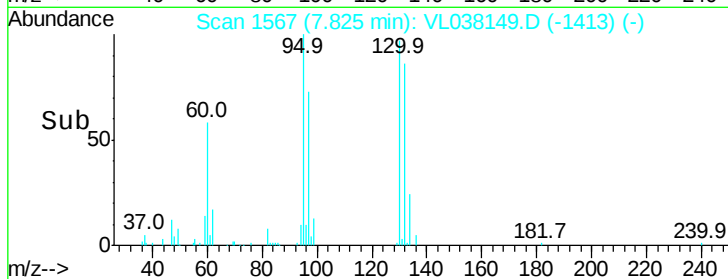
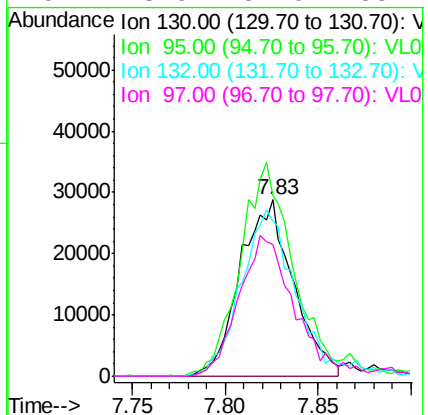
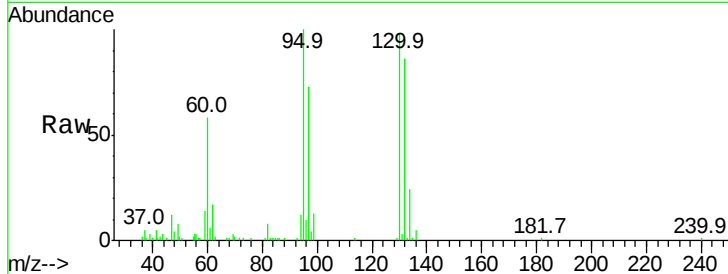


#38  
 Trichloroethene  
 Concen: 0.658 ppbv  
 RT: 7.83  
 Instrument: MSVOA\_L  
 Delta R.T.:  
 Lab File: ClientSampleId :  
 SS-1  
 Acq: 7 Dec 2021 14:11

Tot Ion:1  
 Ion Rati  
 130 100  
 95 101.  
 132 87.  
 97 78.9 57.0 85.4

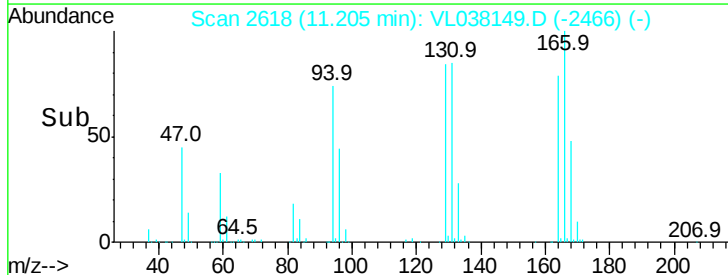
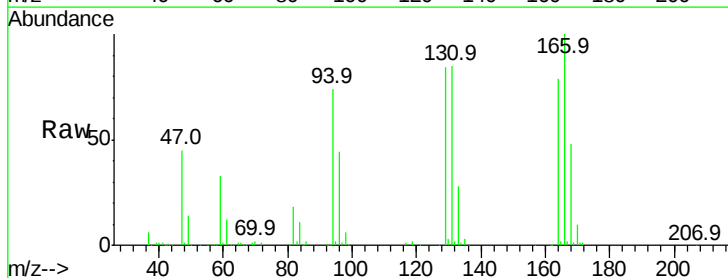
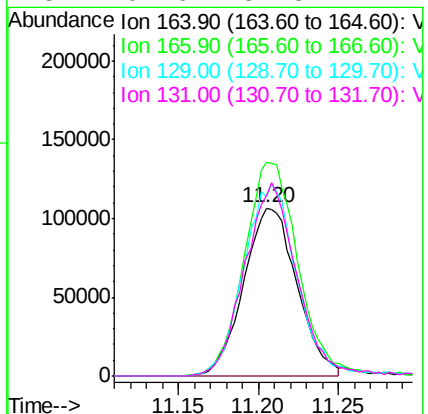
Manual Integrations  
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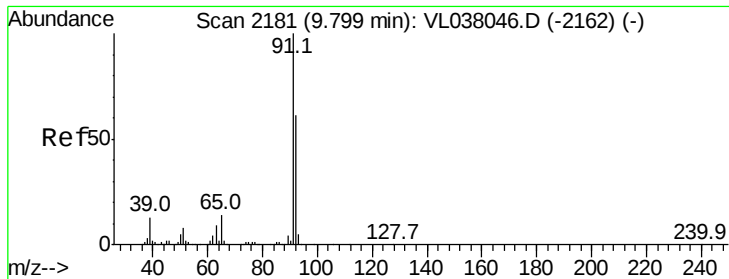
Reviewed By :Amit Patel 12/07/2021  
 Supervised By :Semsettin Yesilyurt 12/08/2021



#52  
 Tetrachloroethene  
 Concen: 2.855 ppbv  
 RT: 11.20 min Scan# 2618  
 Delta R.T. -0.01 min  
 Lab File: VL038149.D  
 Acq: 7 Dec 2021 14:11

Tgt Ion:164 Resp: 244205  
 Ion Ratio Lower Upper  
 164 100  
 166 126.6 97.2 145.8  
 129 106.1 86.9 130.3  
 131 107.6 82.8 124.2





#53

Toluene

Concen: 0.244 ppbv

RT: 9.79 Instrument: MSVOA\_1

Delta R.T. ClientSampleId:

Lab File: SS-1

Acq: 7 Dec 2021 14:11

Tot Ion:

Ion Ratio

91 100

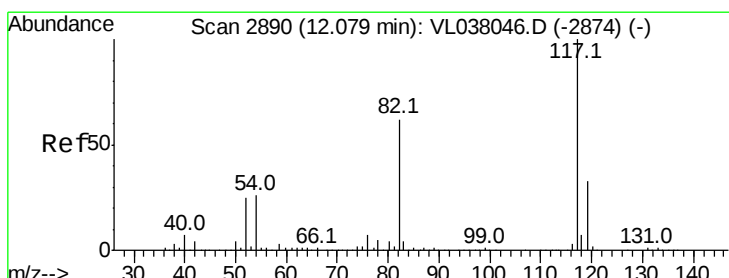
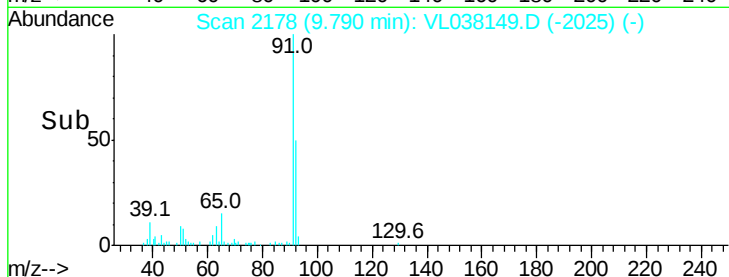
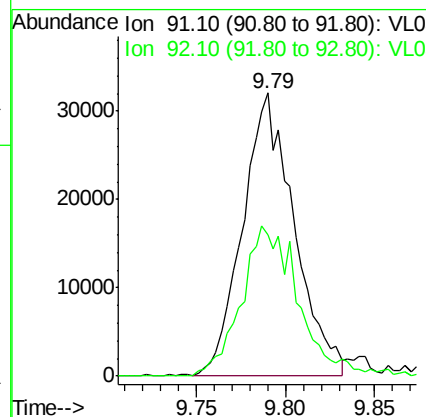
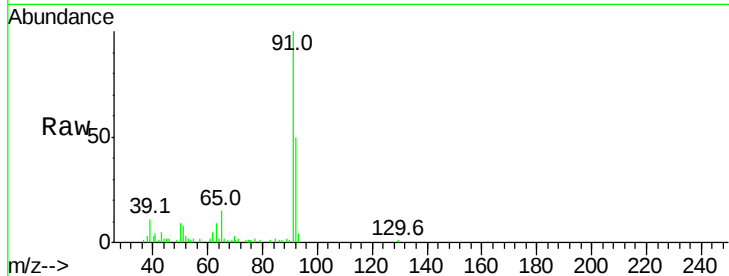
92 60.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/07/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. -0.01 min

Lab File: VL038149.D

Acq: 7 Dec 2021 14:11

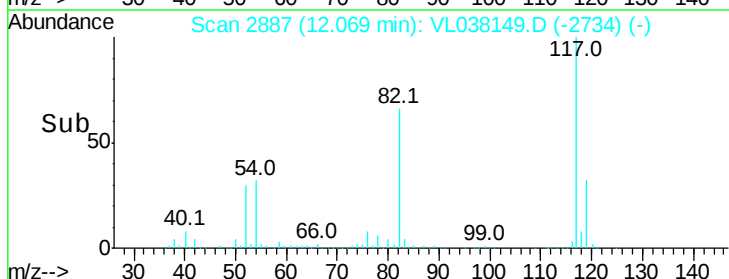
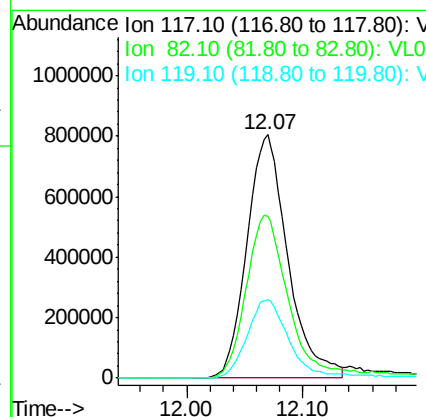
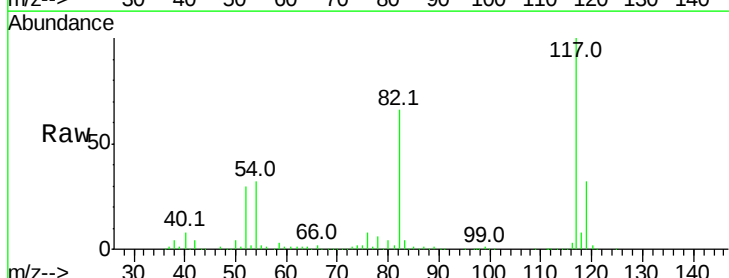
Tgt Ion:117 Resp: 1973618

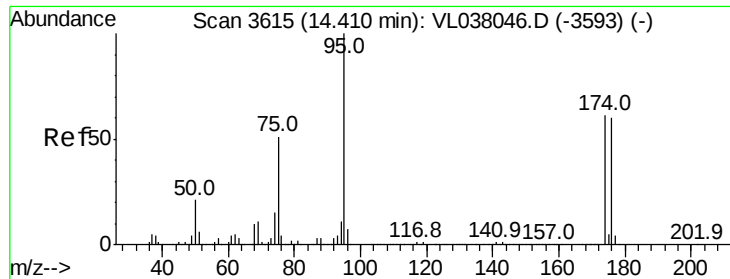
Ion Ratio Lower Upper

117 100

82 72.3 52.8 79.2

119 34.9 26.8 40.2





#68

1-Bromo-4-Fluorobenzene

Concen: 11.163 ppbv

RT: 14.39

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 14:11

Tot Ion:

Ion Ratio

95 100

174 61.

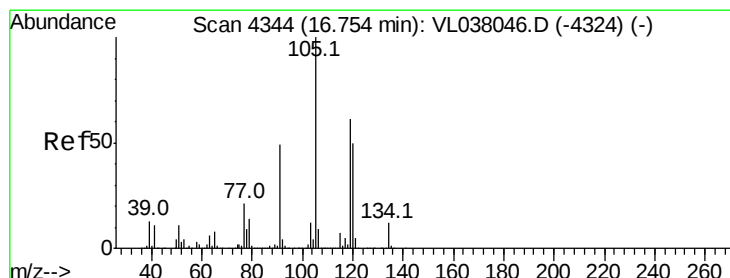
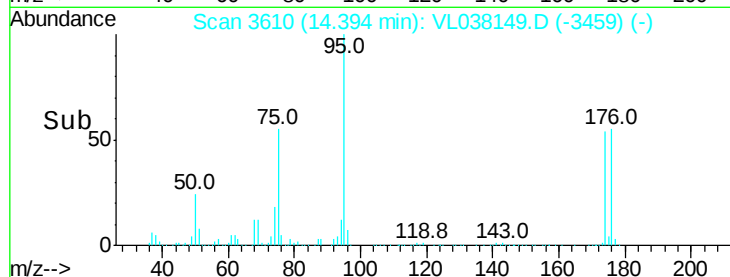
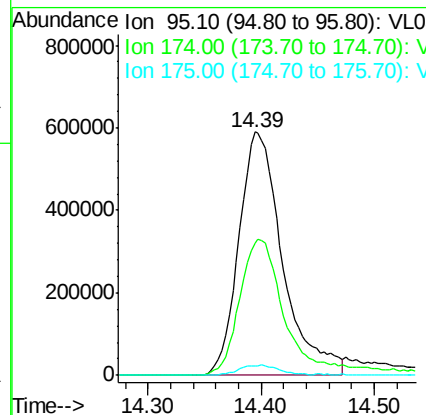
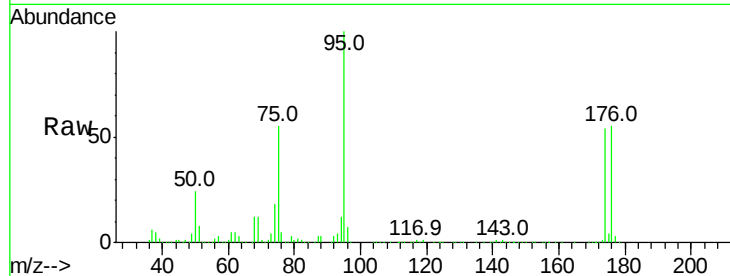
175 4.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/07/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.247 ppbv

RT: 16.74 min Scan# 4340

Delta R.T. -0.01 min

Lab File: VL038149.D

Acq: 7 Dec 2021 14:11

Tgt Ion:105 Resp: 68641

Ion Ratio Lower Upper

105 100

120 45.9 40.1 60.1

91 13.4 39.8 59.8#

77 13.5 16.6 25.0#

