

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL052424\  
 Data File : VL041293.D  
 Acq On : 24 May 2024 16:23  
 Operator : SY/MD  
 Sample : P2599-04DL 20X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV4DL

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 05/28/2024  
 Supervised By :Mahesh Dadoda 05/28/2024

Quant Time: May 24 23:23:15 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL042924AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Fri May 24 23:11:50 2024

Response via : Initial Calibration

| Compound                    | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|--------|----------|
| -----                       |        |       |          |          |        |          |
| Internal Standards          |        |       |          |          |        |          |
| 1) Bromochloromethane       | 5.214  | 49    | 992977   | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene     | 6.671  | 114   | 2593477  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5        | 11.481 | 117   | 2368418  | 10.000   | ppbv   | 0.00     |
|                             |        |       |          |          |        |          |
| System Monitoring Compounds |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.786 | 95    | 1876457  | 10.495   | ppbv   | 0.00     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =      | 104.900% |
|                             |        |       |          |          |        |          |
| Target Compounds            |        |       |          |          |        | Qvalue   |
| 9) Propene                  | 2.729  | 41    | 245155   | 4.154    | ppbv   | 96       |
| 10) Heptane                 | 7.594  | 43    | 19266    | 0.135    | ppbv   | 89       |
| 11) Trichlorofluoromethane  | 3.590  | 101   | 591476   | 4.333    | ppbv   | 99       |
| 13) Ethanol                 | 3.282  | 45    | 17417    | 1.316    | ppbv   | 99       |
| 15) Acetone                 | 3.494  | 43    | 1306169  | 11.146   | ppbv   | 100      |
| 16) 1,3-Butadiene           | 3.002  | 39    | 189021m  | 3.195    | ppbv   |          |
| 17) tert-Butyl alcohol      | 3.922  | 59    | 11877    | 0.094    | ppbv # | 82       |
| 20) Methylene Chloride      | 3.957  | 84    | 51429    | 1.262    | ppbv   | 95       |
| 25) Ethyl Acetate           | 5.234  | 43    | 82757    | 0.354    | ppbv # | 78       |
| 26) Hexane                  | 5.237  | 57    | 120321   | 1.153    | ppbv # | 41       |
| 29) Chloroform              | 5.301  | 83    | 20676m   | 0.144    | ppbv   |          |
| 32) 1,1,1-Trichloroethane   | 6.021  | 97    | 20468m   | 0.142    | ppbv   |          |
| 34) 2-Butanone              | 4.812  | 43    | 580294   | 4.396    | ppbv   | 97       |
| 36) Benzene                 | 6.388  | 78    | 124831   | 0.574    | ppbv   | 96       |
| 50) 4-Methyl-2-Pentanone    | 8.211  | 43    | 34501m   | 0.146    | ppbv   |          |
| 51) 2-Hexanone              | 9.574  | 43    | 87159m   | 0.496    | ppbv   |          |
| 52) Tetrachloroethene       | 10.629 | 164   | 31062m   | 0.406    | ppbv   |          |
| 53) Toluene                 | 9.240  | 91    | 100398   | 0.398    | ppbv   | 94       |
| 58) Ethyl Benzene           | 12.101 | 91    | 21511    | 0.066    | ppbv   | 98       |
| 59) m/p-Xylene              | 12.349 | 91    | 44380m   | 0.163    | ppbv   |          |
| 60) o-Xylene                | 13.072 | 91    | 25542m   | 0.100    | ppbv   |          |
| 74) 1,2,4-Trimethylbenzene  | 16.111 | 105   | 42985m   | 0.150    | ppbv   |          |
| -----                       |        |       |          |          |        |          |

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

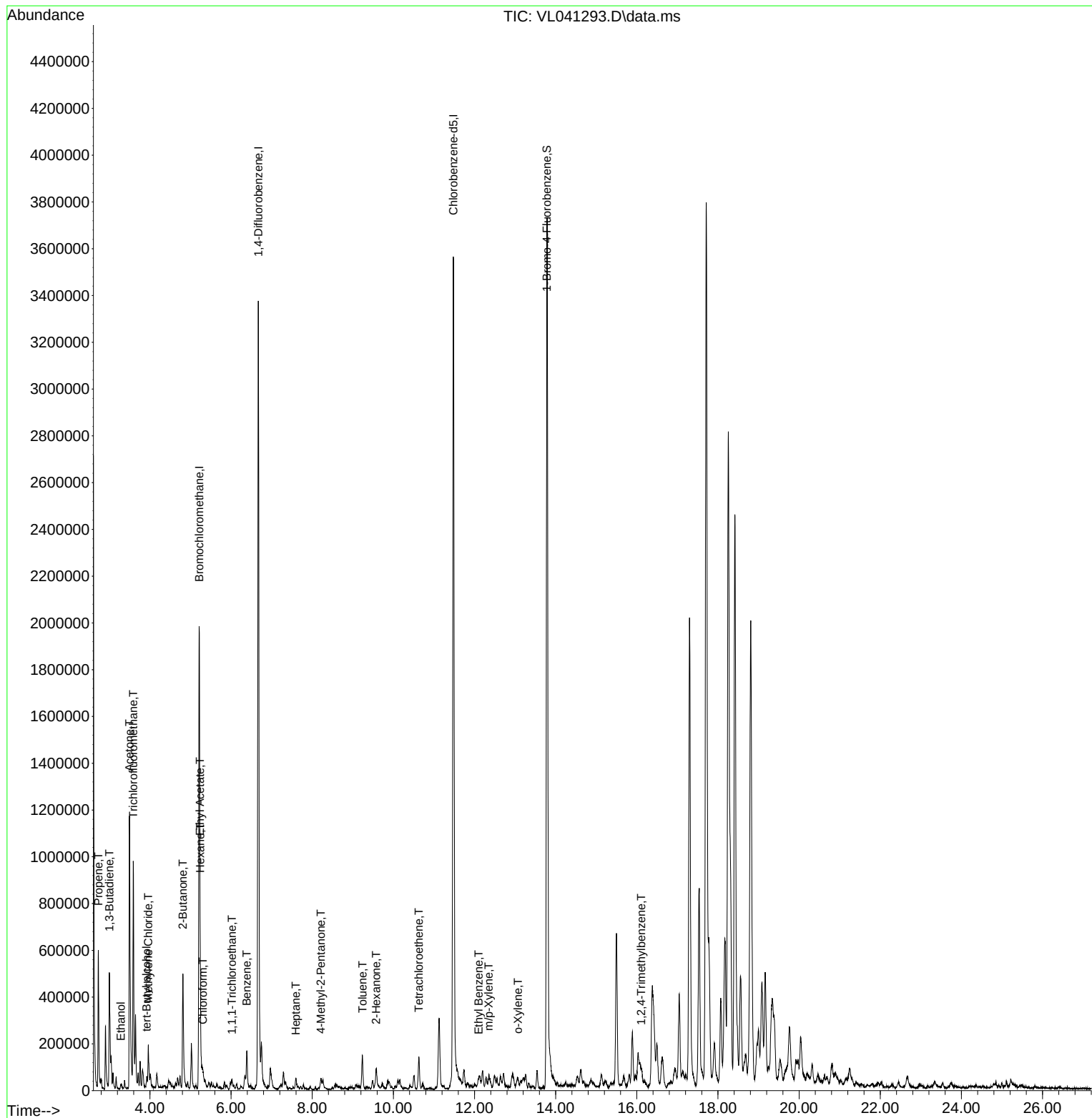
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL052424\  
Data File : VL041293.D  
Acq On : 24 May 2024 16:23  
Operator : SY/MD  
Sample : P2599-04DL 20X  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

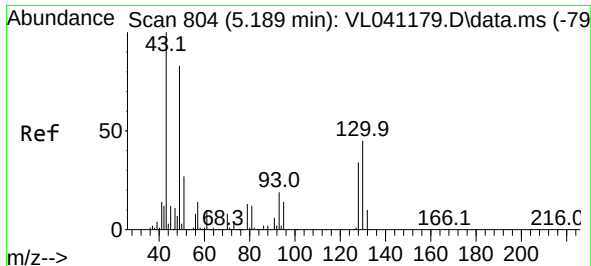
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL

Quant Time: May 24 23:23:15 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL042924AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Fri May 24 23:11:50 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

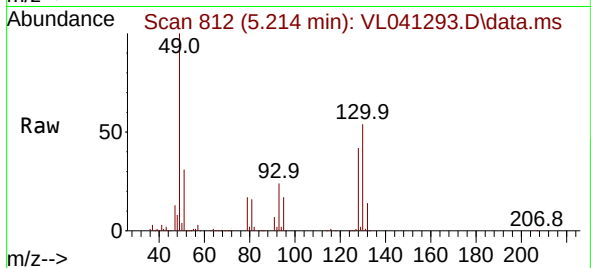
Reviewed By : Semsettin Yesilyurt 05/28/2024  
Supervised By : Mahesh Dadoda 05/28/2024





#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.214 min Scan# 81  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

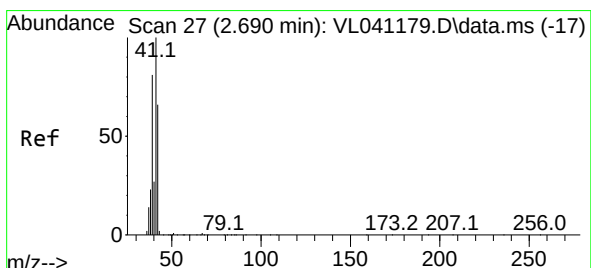
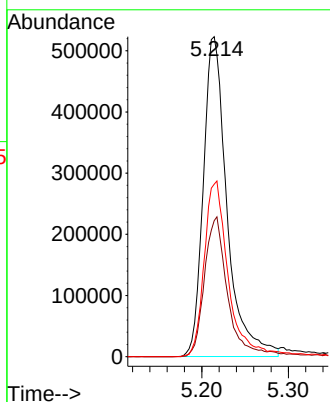
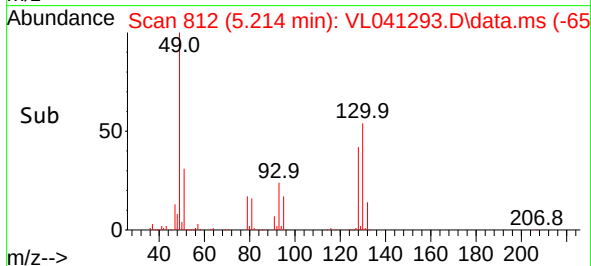
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



Tgt Ion: 49 Resp: 99297  
Ion Ratio Lower Upper  
49 100  
128 44.2 21.5 64.5  
130 57.0 27.2 81.6

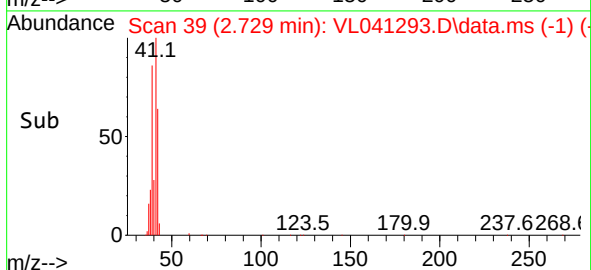
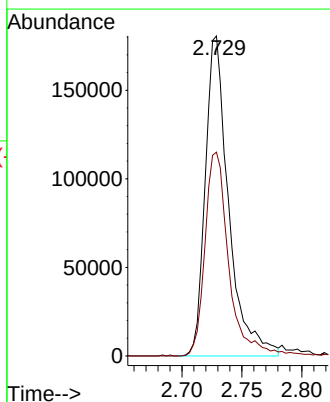
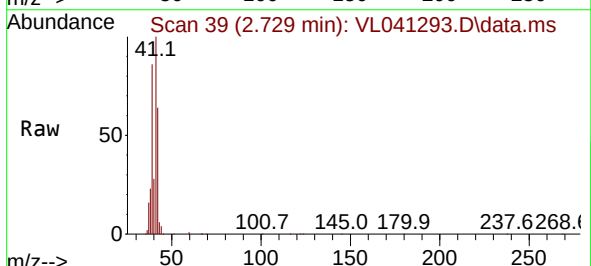
Manual Integrations  
APPROVED

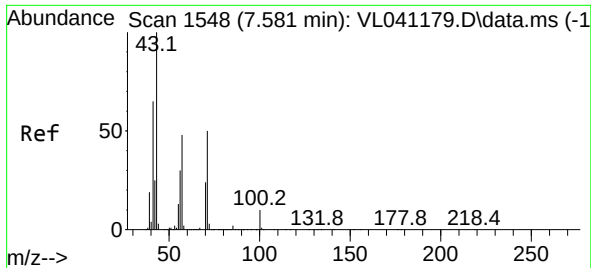
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#9  
Propene  
Concen: 4.154 ppbv  
RT: 2.729 min Scan# 39  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Tgt Ion: 41 Resp: 245155  
Ion Ratio Lower Upper  
41 100  
42 65.6 55.3 82.9





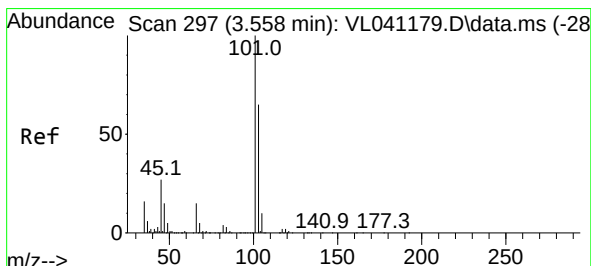
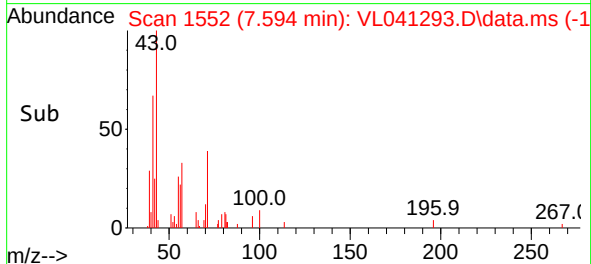
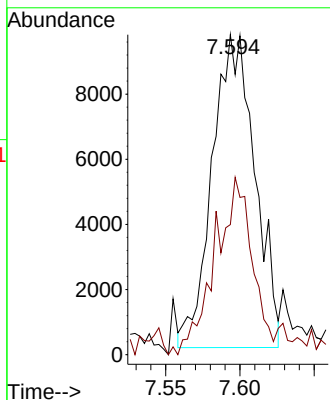
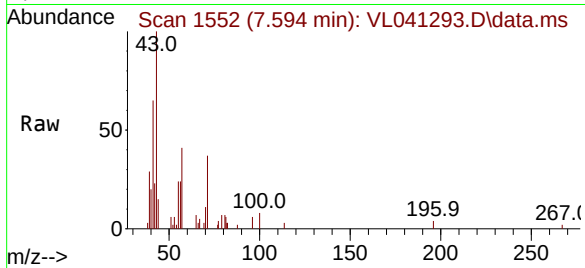
#10  
Heptane  
Concen: 0.135 ppbv  
RT: 7.594 min Scan# 11  
Delta R.T. 0.003 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL

Tgt Ion: 43 Resp: 19260  
Ion Ratio Lower Upper  
43 100  
57 55.8 38.7 58.1

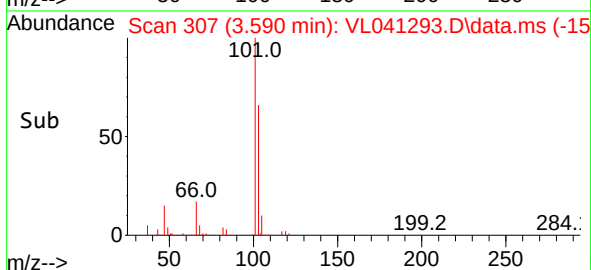
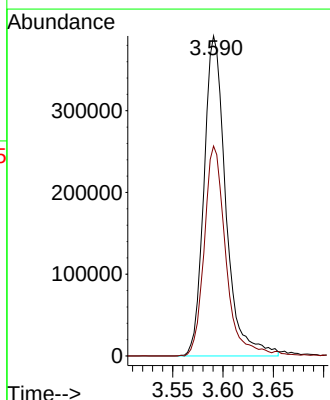
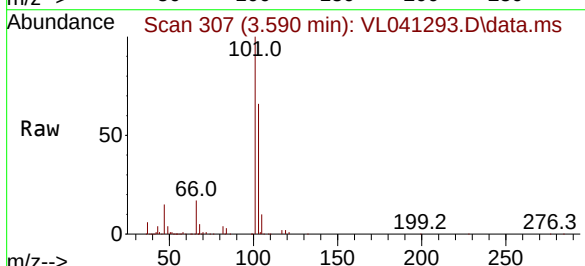
Manual Integrations  
APPROVED

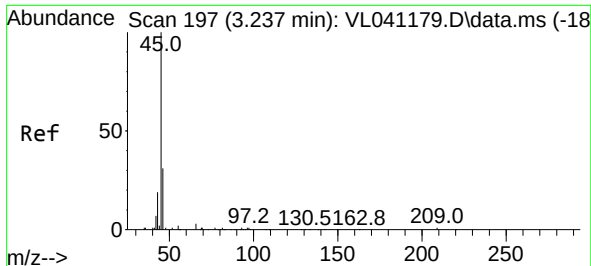
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#11  
Trichlorofluoromethane  
Concen: 4.333 ppbv  
RT: 3.590 min Scan# 307  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Tgt Ion:101 Resp: 591476  
Ion Ratio Lower Upper  
101 100  
103 65.5 51.6 77.4





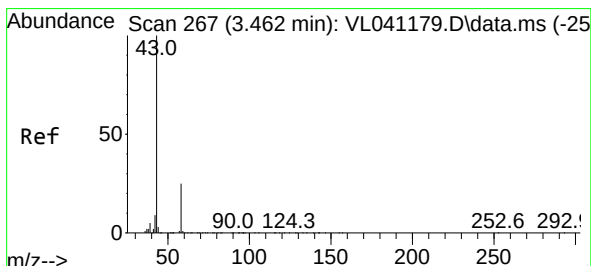
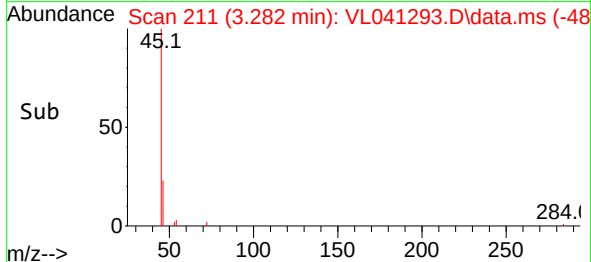
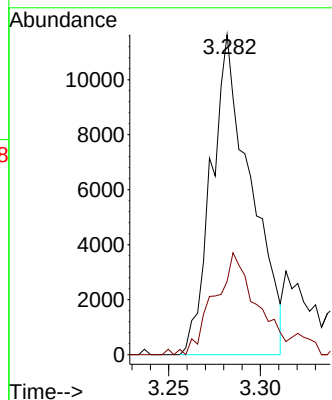
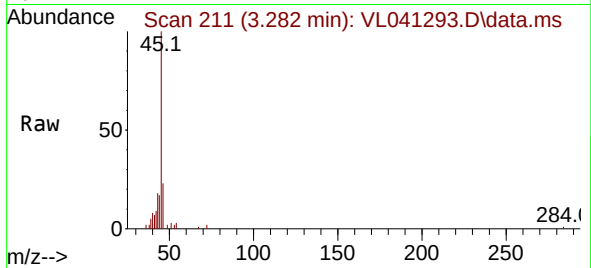
#13  
Ethanol  
Concen: 1.316 ppbv  
RT: 3.282 min Scan# 211  
Delta R.T. 0.022 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL

Tgt Ion: 45 Resp: 1741  
Ion Ratio Lower Upper  
45 100  
46 37.7 14.8 59.0

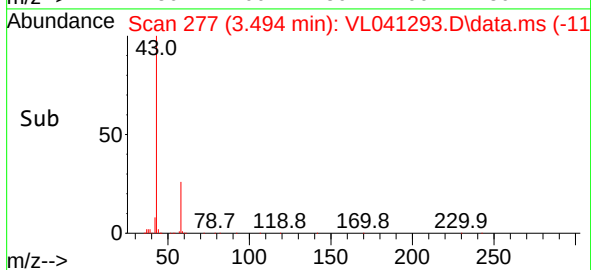
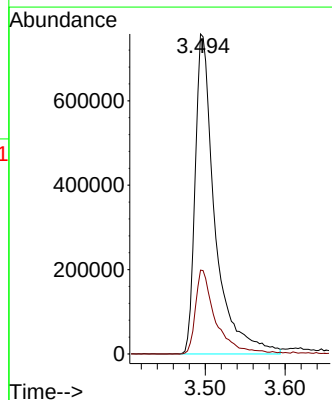
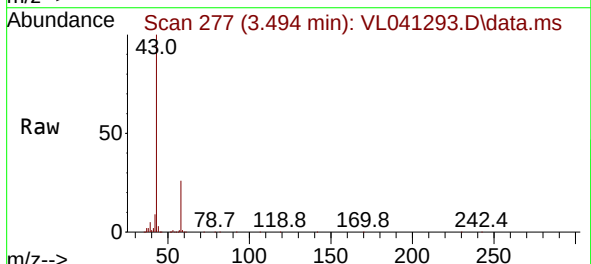
Manual Integrations  
APPROVED

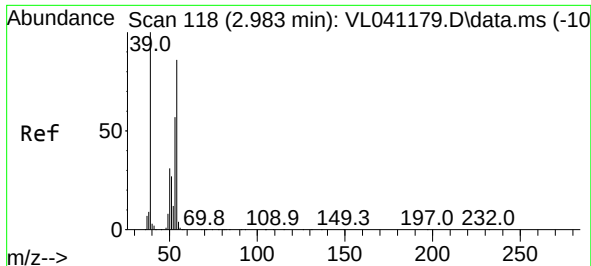
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#15  
Acetone  
Concen: 11.146 ppbv  
RT: 3.494 min Scan# 277  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Tgt Ion: 43 Resp: 1306169  
Ion Ratio Lower Upper  
43 100  
58 26.8 21.4 32.0





#16

1,3-Butadiene

Concen: 3.195 ppbv m

RT: 3.002 min Scan# 11

Delta R.T. -0.006 min

Lab File: VL041293.D

Acq: 24 May 2024 16:23

Instrument :

MSVOA\_L

ClientSampleId :

SV4DL

Tgt Ion: 39 Resp: 18902

Ion Ratio Lower Upper

39 100

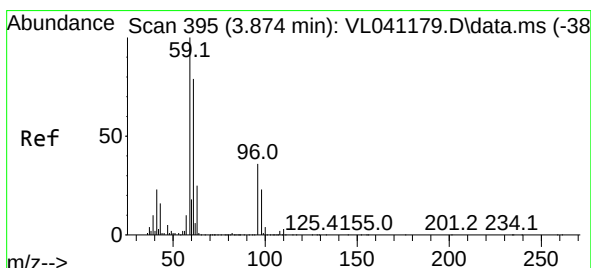
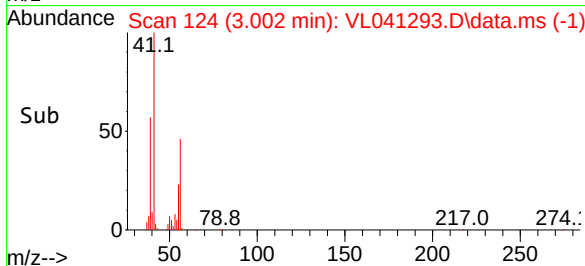
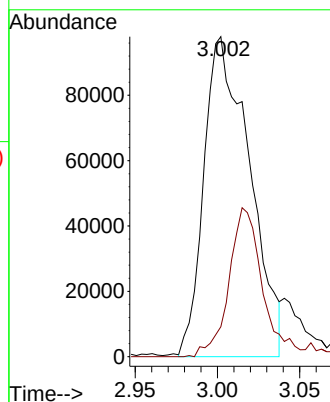
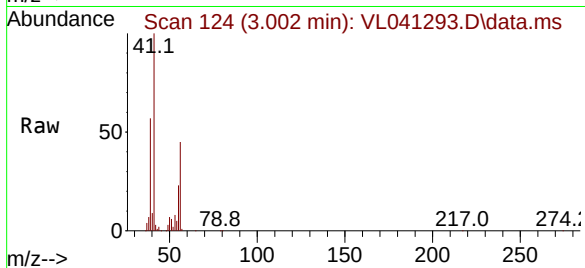
54 35.5 62.2 93.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/28/2024

Supervised By :Mahesh Dadoda 05/28/2024



#17

tert-Butyl alcohol

Concen: 0.094 ppbv

RT: 3.922 min Scan# 410

Delta R.T. 0.026 min

Lab File: VL041293.D

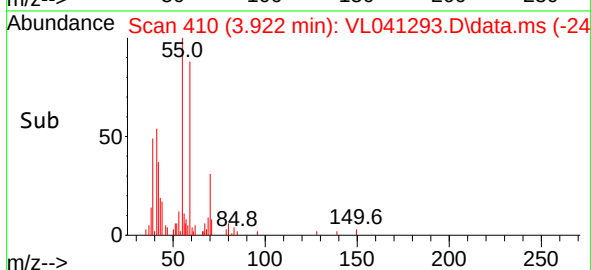
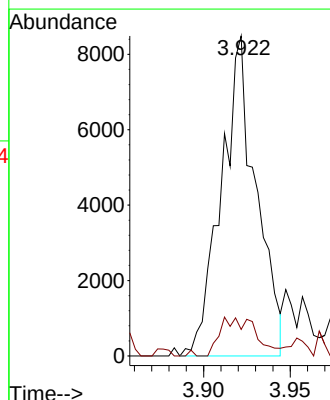
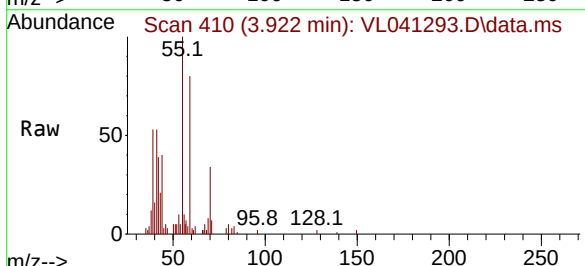
Acq: 24 May 2024 16:23

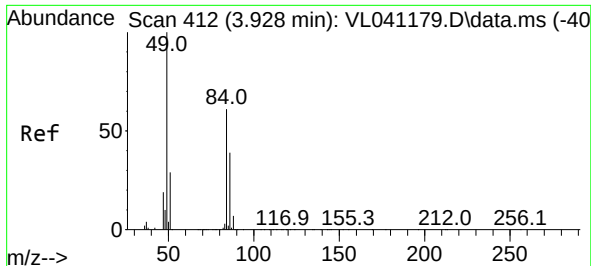
Tgt Ion: 59 Resp: 11877

Ion Ratio Lower Upper

59 100

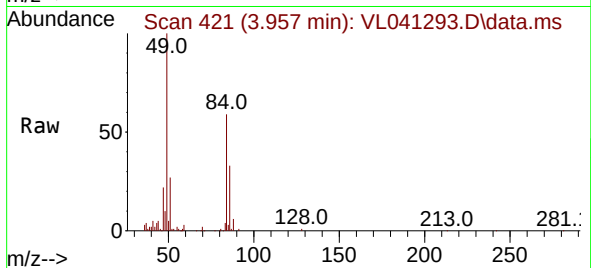
57 17.4 8.4 12.6





#20  
Methylene Chloride  
Concen: 1.262 ppbv  
RT: 3.957 min Scan# 412  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

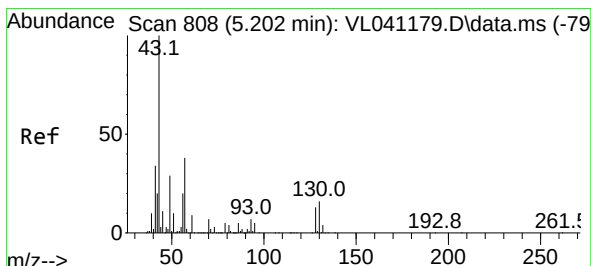
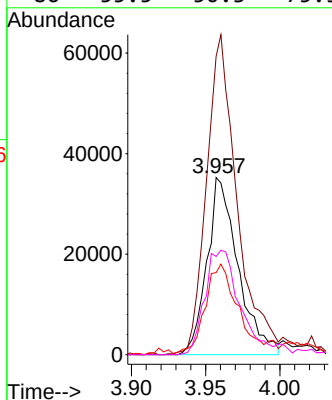
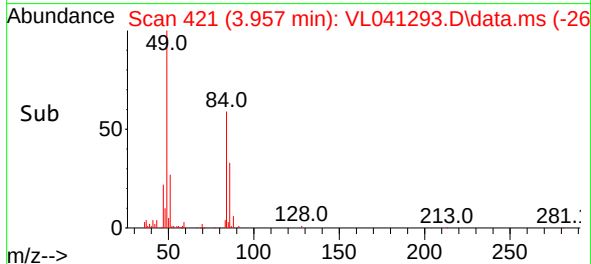
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



Tgt Ion: 84 Resp: 51429  
Ion Ratio Lower Upper  
84 100  
49 167.0 130.4 195.6  
51 45.1 38.0 57.0  
86 55.5 50.3 75.5

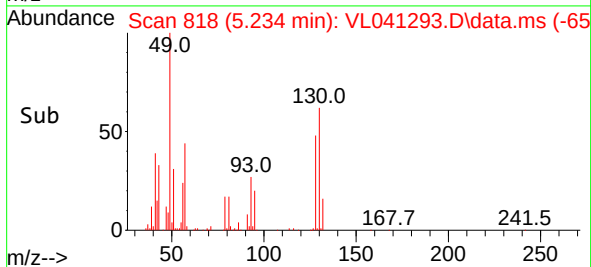
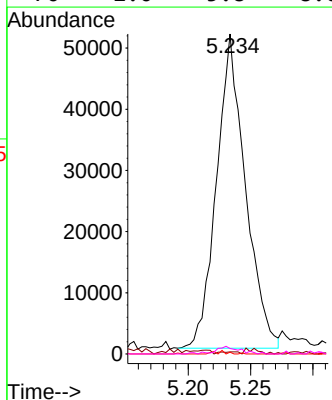
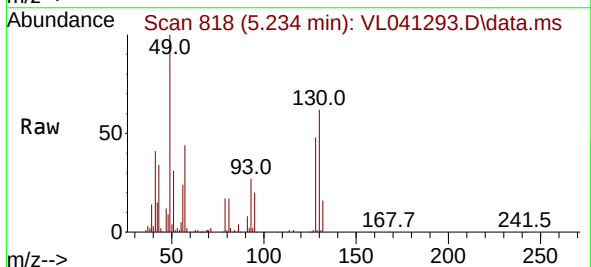
Manual Integrations  
APPROVED

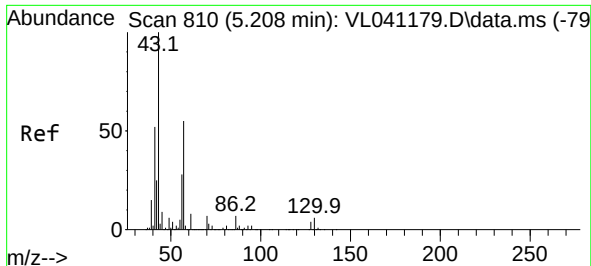
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#25  
Ethyl Acetate  
Concen: 0.354 ppbv  
RT: 5.234 min Scan# 818  
Delta R.T. 0.016 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

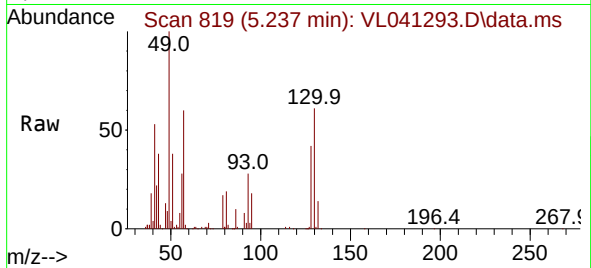
Tgt Ion: 43 Resp: 82757  
Ion Ratio Lower Upper  
43 100  
45 0.8 8.2 12.2#  
61 0.4 7.7 11.5#  
70 2.0 5.8 8.6#





#26  
Hexane  
Concen: 1.153 ppbv  
RT: 5.237 min Scan# 810  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

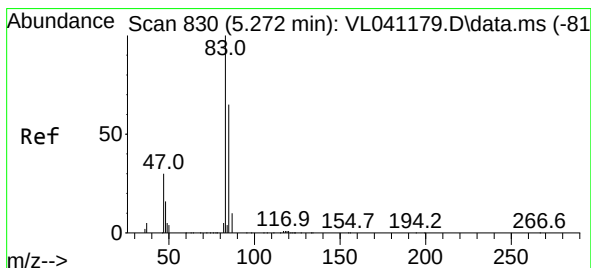
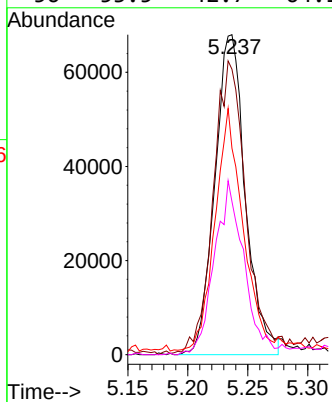
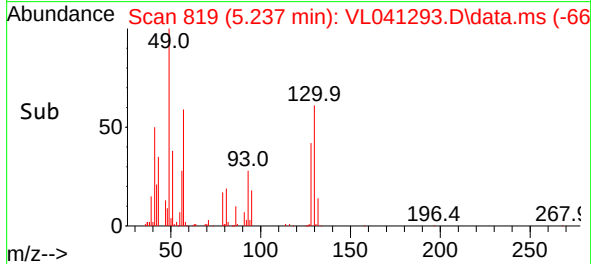
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



Tgt Ion: 57 Resp: 12032  
Ion Ratio Lower Upper  
57 100  
41 99.0 75.8 113.8  
43 74.4 187.0 280.4  
56 53.5 42.7 64.1

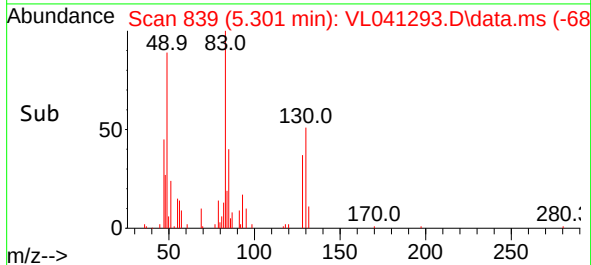
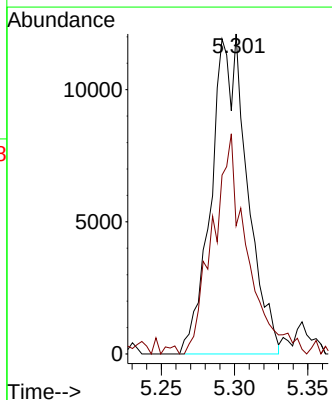
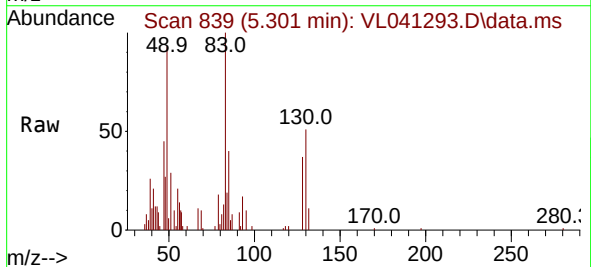
Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024

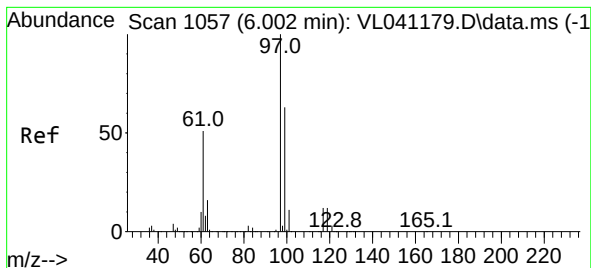


#29  
Chloroform  
Concen: 0.144 ppbv m  
RT: 5.301 min Scan# 839  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Tgt Ion: 83 Resp: 20676  
Ion Ratio Lower Upper  
83 100  
85 40.1 51.7 77.5#







#32

1,1,1-Trichloroethane

Concen: 0.142 ppbv m

RT: 6.021 min Scan# 1057

Delta R.T. 0.003 min

Lab File: VL041293.D

Acq: 24 May 2024 16:23

Instrument :

MSVOA\_L

ClientSampleId :

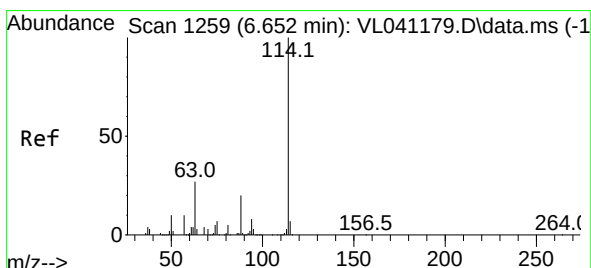
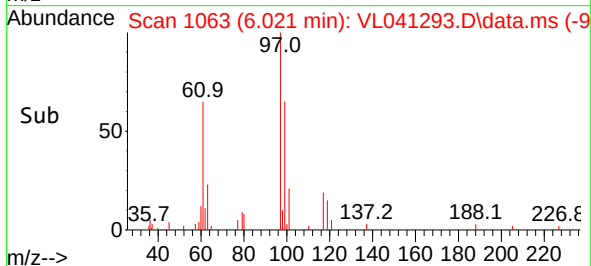
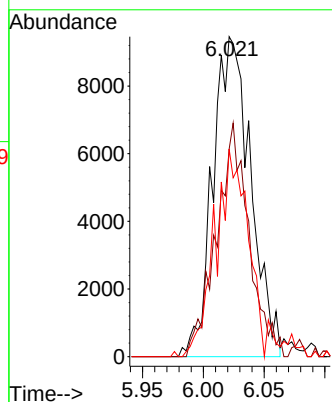
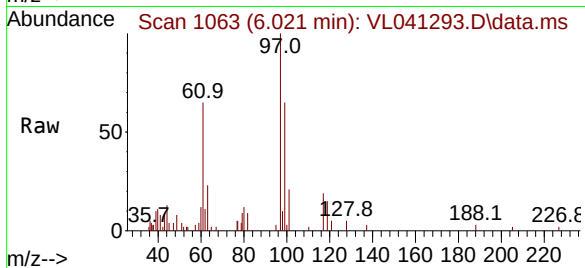
SV4DL

|             |             |
|-------------|-------------|
| Tgt Ion: 97 | Resp: 2046  |
| Ion Ratio   | Lower Upper |
| 97 100      |             |
| 99 64.3     | 51.7 77.5   |
| 61 60.8     | 41.1 61.7   |

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

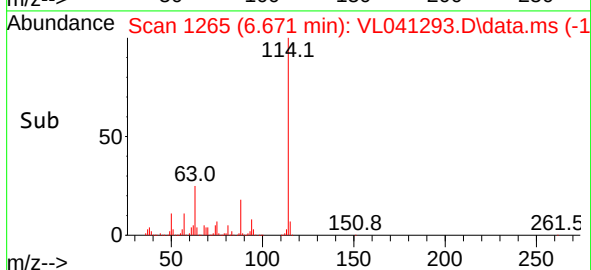
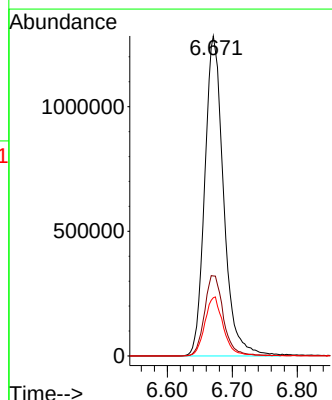
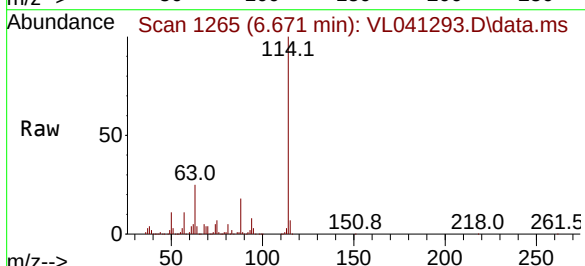
RT: 6.671 min Scan# 1265

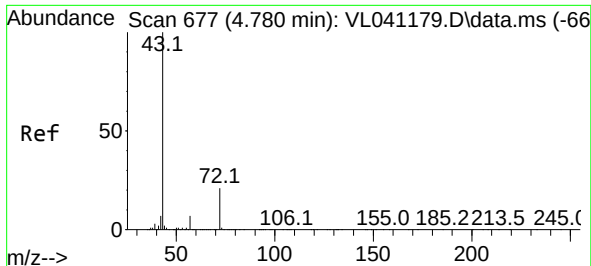
Delta R.T. 0.003 min

Lab File: VL041293.D

Acq: 24 May 2024 16:23

|             |               |
|-------------|---------------|
| Tgt Ion:114 | Resp: 2593477 |
| Ion Ratio   | Lower Upper   |
| 114 100     |               |
| 63 25.5     | 21.8 32.6     |
| 88 18.2     | 15.2 22.8     |





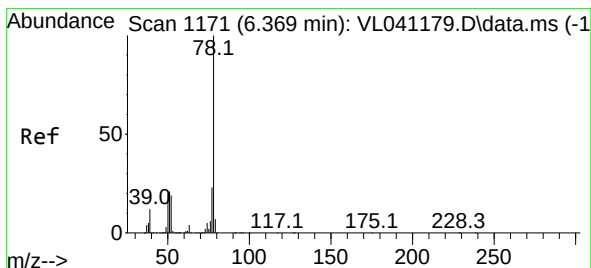
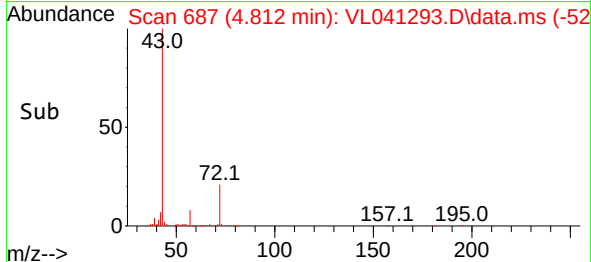
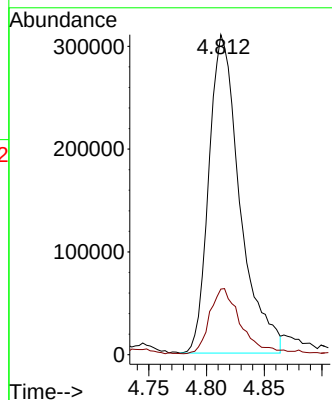
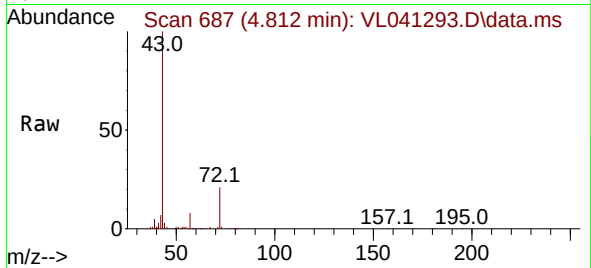
#34  
2-Butanone  
Concen: 4.396 ppbv  
RT: 4.812 min Scan# 61  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL

Tgt Ion: 43 Resp: 580294  
Ion Ratio Lower Upper  
43 100  
72 23.0 17.3 25.9

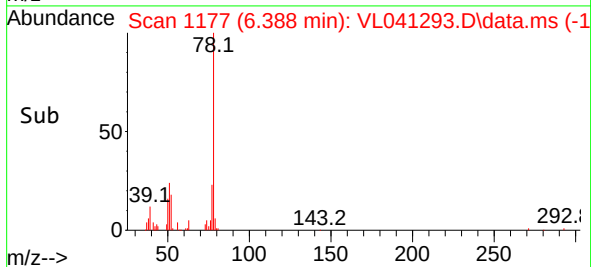
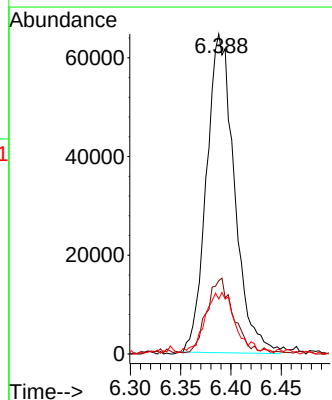
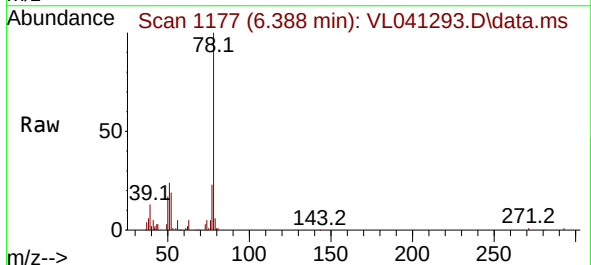
Manual Integrations  
APPROVED

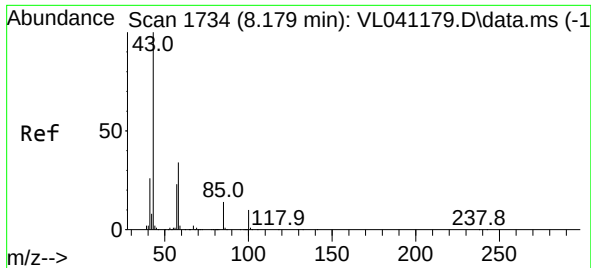
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#36  
Benzene  
Concen: 0.574 ppbv  
RT: 6.388 min Scan# 1177  
Delta R.T. 0.003 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

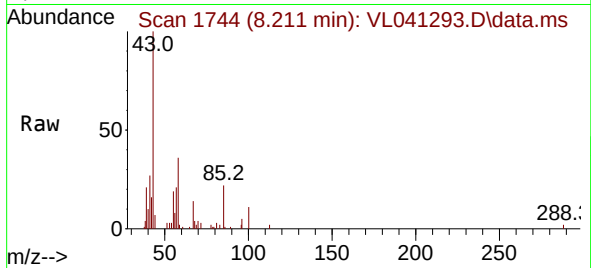
Tgt Ion: 78 Resp: 124831  
Ion Ratio Lower Upper  
78 100  
77 22.5 18.3 27.5  
50 16.8 15.9 23.9





#50  
4-Methyl-2-Pentanone  
Concen: 0.146 ppbv m  
RT: 8.211 min Scan# 1744  
Delta R.T. 0.022 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

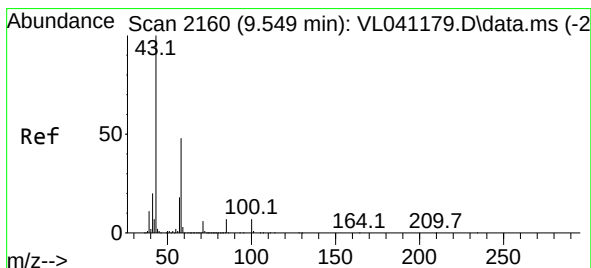
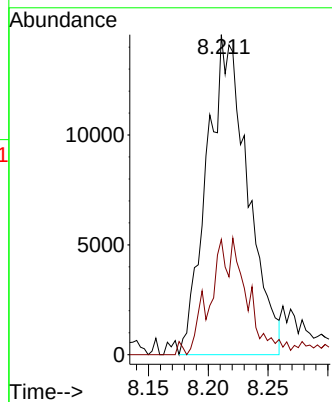
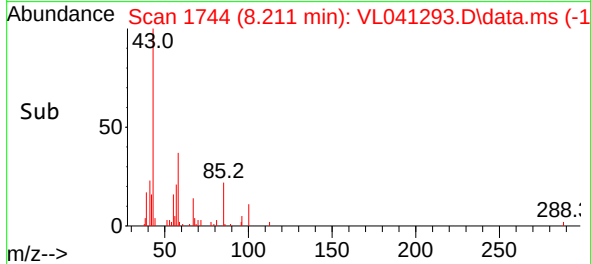
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



Tgt Ion: 43 Resp: 3450  
Ion Ratio Lower Upper  
43 100  
58 0.0 27.7 41.5

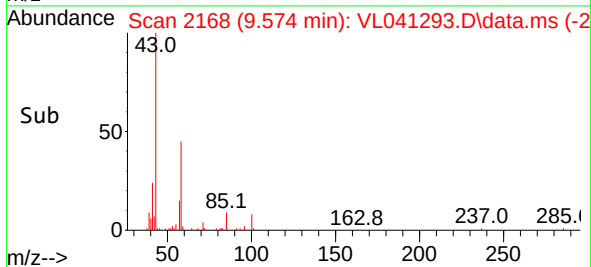
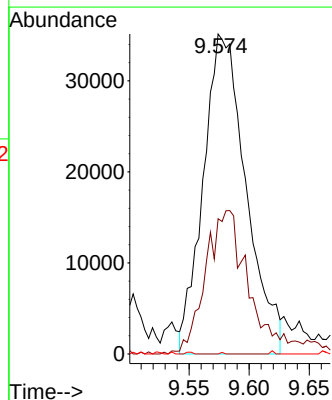
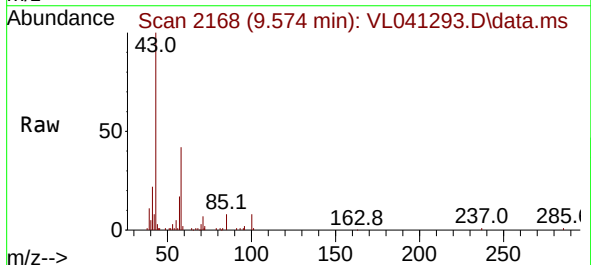
Manual Integrations  
APPROVED

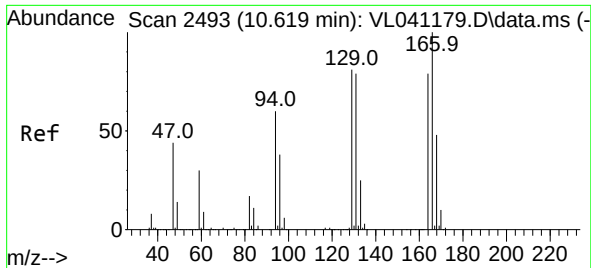
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#51  
2-Hexanone  
Concen: 0.496 ppbv m  
RT: 9.574 min Scan# 2168  
Delta R.T. 0.016 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

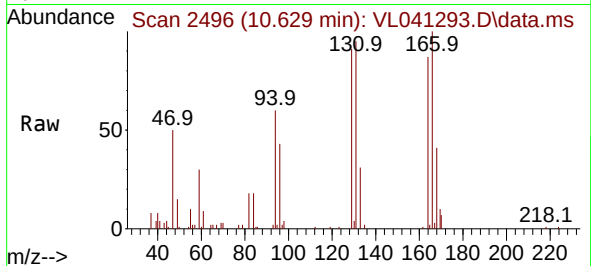
Tgt Ion: 43 Resp: 87159  
Ion Ratio Lower Upper  
43 100  
58 0.0 38.4 57.6  
98 0.0 0.0 0.0





#52  
Tetrachloroethene  
Concen: 0.406 ppbv m  
RT: 10.629 min Scan# 2493  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

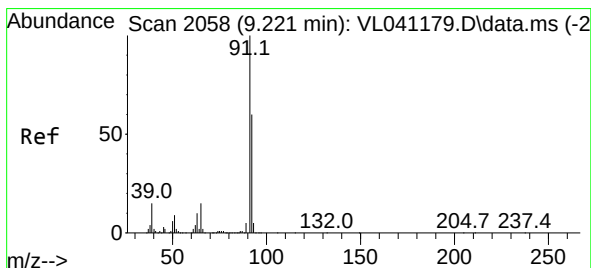
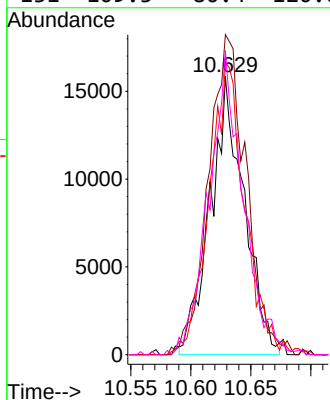
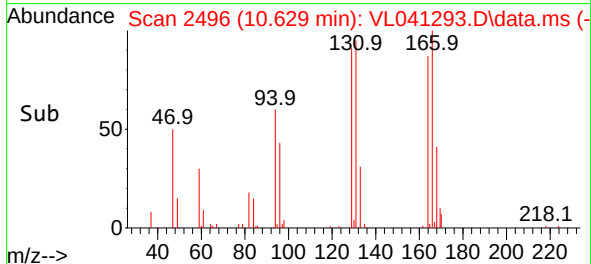
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



Tgt Ion:164 Resp: 31062  
Ion Ratio Lower Upper  
164 100  
166 115.0 101.1 151.7  
129 105.2 81.7 122.5  
131 109.3 80.4 120.6

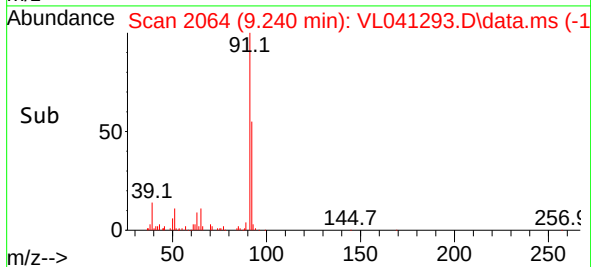
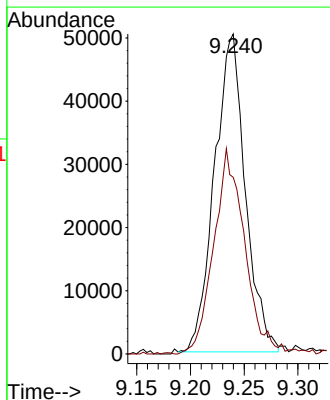
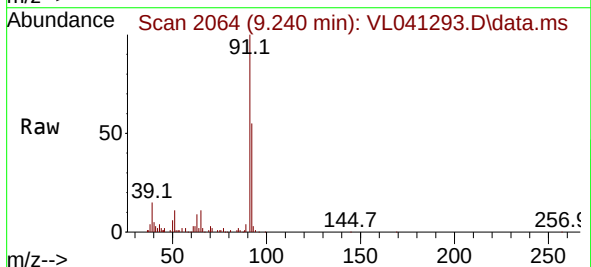
Manual Integrations  
APPROVED

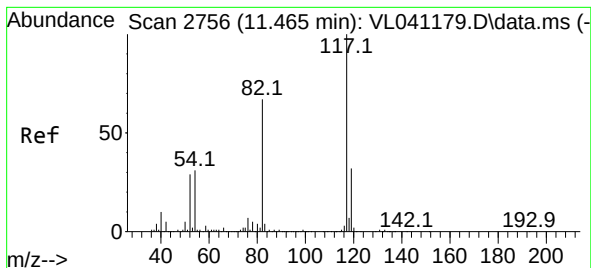
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#53  
Toluene  
Concen: 0.398 ppbv  
RT: 9.240 min Scan# 2064  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

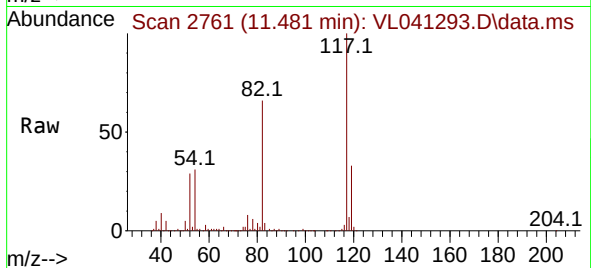
Tgt Ion: 91 Resp: 100398  
Ion Ratio Lower Upper  
91 100  
92 65.1 48.2 72.4





#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 11.481 min Scan# 21  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

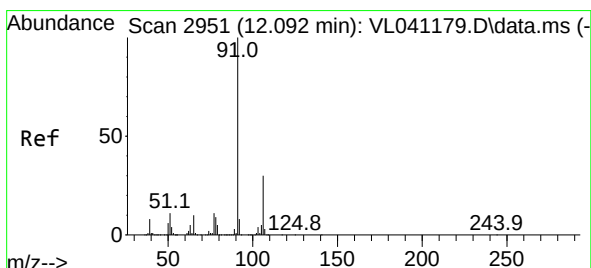
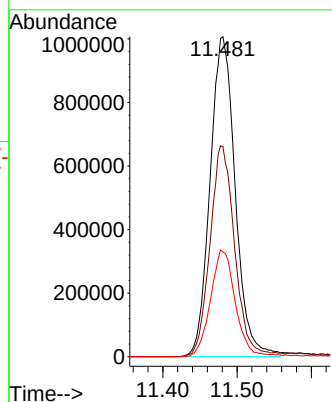
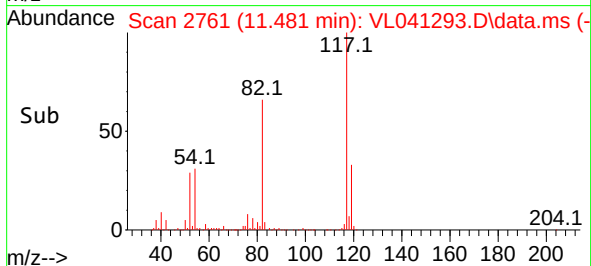
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



Tgt Ion: 117 Resp: 2368418  
Ion Ratio Lower Upper  
117 100  
82 64.9 53.6 80.4  
119 33.1 27.2 40.8

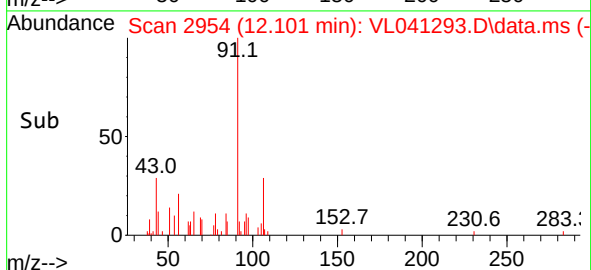
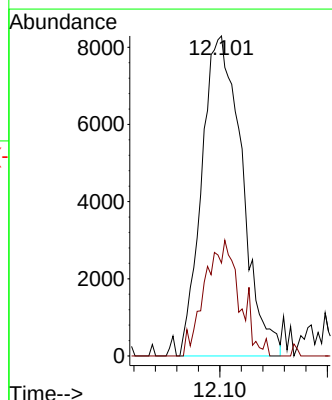
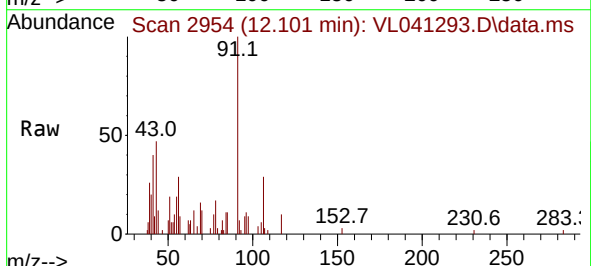
Manual Integrations  
APPROVED

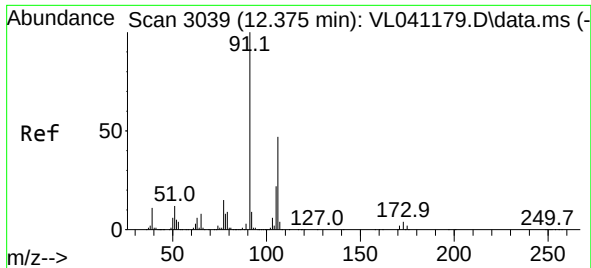
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#58  
Ethyl Benzene  
Concen: 0.066 ppbv  
RT: 12.101 min Scan# 2954  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Tgt Ion: 91 Resp: 21511  
Ion Ratio Lower Upper  
91 100  
106 29.0 24.3 36.5





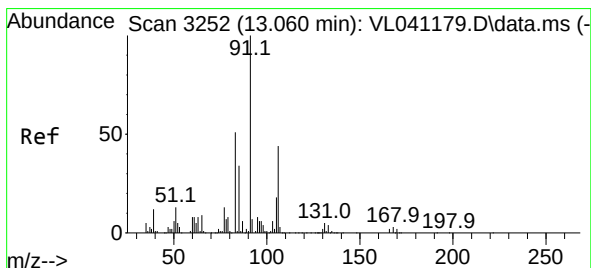
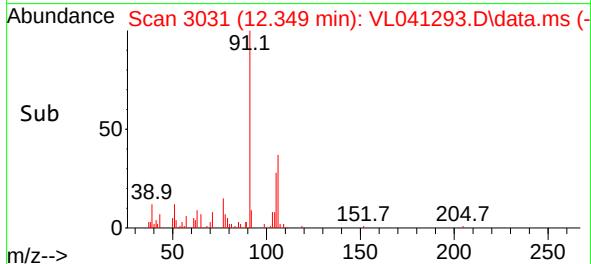
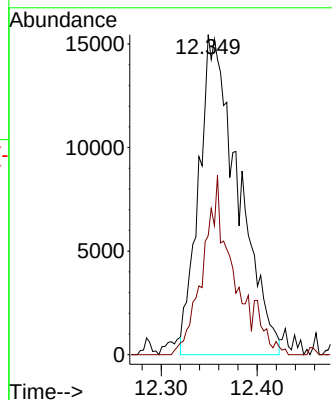
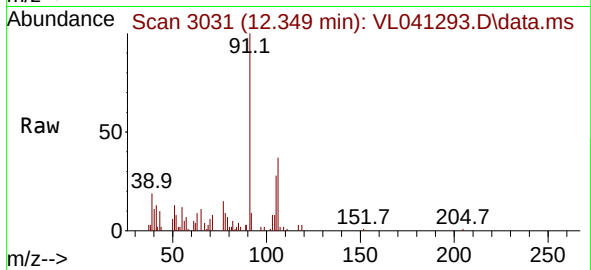
#59  
m/p-Xylene  
Concen: 0.163 ppbv m  
RT: 12.349 min Scan# 3031  
Delta R.T. -0.029 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL

Tgt Ion: 91 Resp: 44380  
Ion Ratio Lower Upper  
91 100  
106 0.0 35.7 53.5

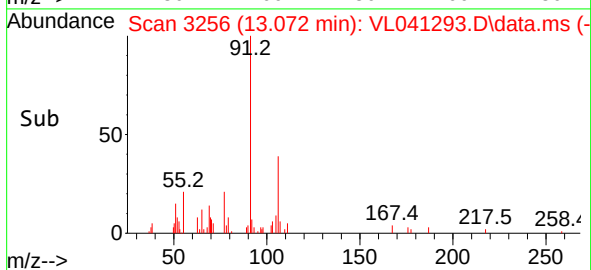
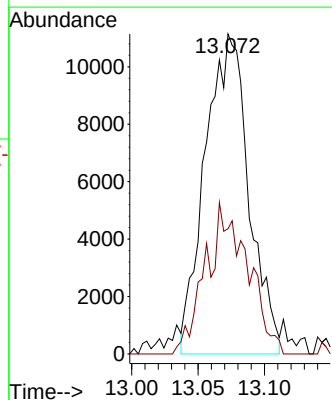
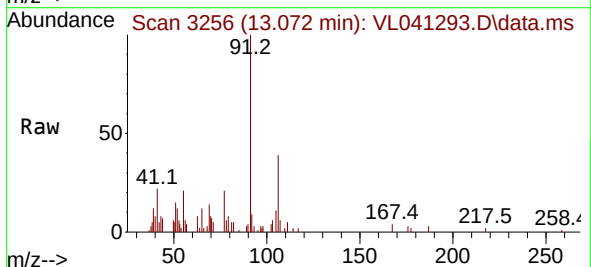
Manual Integrations  
APPROVED

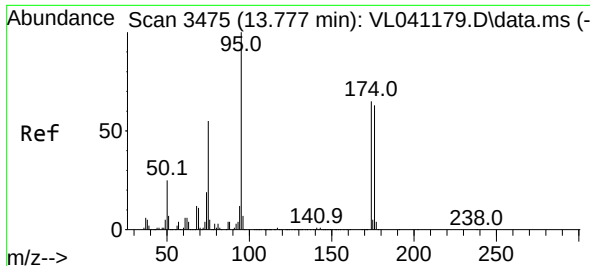
Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#60  
o-Xylene  
Concen: 0.100 ppbv m  
RT: 13.072 min Scan# 3256  
Delta R.T. 0.010 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

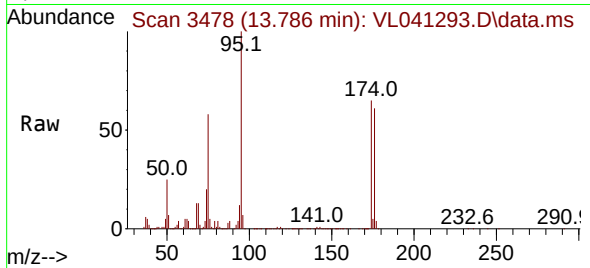
Tgt Ion: 91 Resp: 25542  
Ion Ratio Lower Upper  
91 100  
106 0.0 22.4 67.3





#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.495 ppbv  
RT: 13.786 min Scan# 3475  
Delta R.T. 0.006 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23

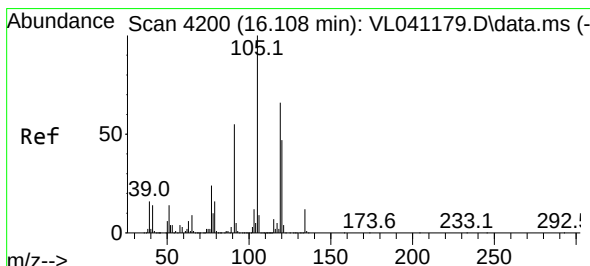
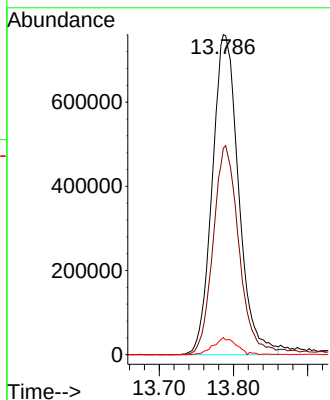
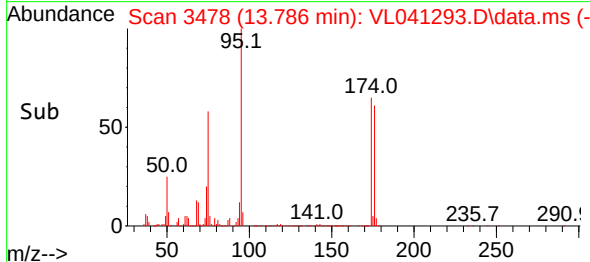
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV4DL



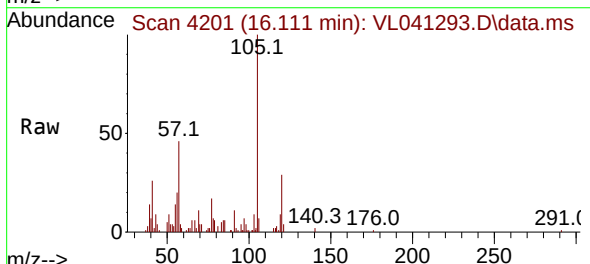
Tgt Ion: 95 Resp: 187645  
Ion Ratio Lower Upper  
95 100  
174 66.4 53.6 80.4  
175 4.8 4.2 6.4

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 05/28/2024  
Supervised By :Mahesh Dadoda 05/28/2024



#74  
1,2,4-Trimethylbenzene  
Concen: 0.150 ppbv m  
RT: 16.111 min Scan# 4201  
Delta R.T. -0.000 min  
Lab File: VL041293.D  
Acq: 24 May 2024 16:23



Tgt Ion:105 Resp: 42985  
Ion Ratio Lower Upper  
105 100  
120 29.5 37.8 56.6#  
91 10.8 44.3 66.5#  
77 16.5 19.0 28.4#

