

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
 Data File : VL042204.D
 Acq On : 31 Mar 2025 11:06
 Operator : SY/MD
 Sample : Q1669-06
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-DUP-1-3262025

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
 Supervised By :Mahesh Dadoda 04/01/2025

Quant Time: Apr 01 03:33:11 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Fri Mar 28 02:00:52 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.806	49	184538	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.984	114	528809	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.907	117	477707	10.000	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.399 95 395364 10.078 ppbv 0.03
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.800%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.505	85	12624	0.463	ppbv	99
3) Chlorodifluoromethane	1.483	51	8664	0.311	ppbv	99
4) Chloromethane	1.538	50	4783	0.430	ppbv #	87
9) Propene	1.489	41	219989	17.243	ppbv	96
10) Heptane	5.017	43	54482	1.605	ppbv	97
11) Trichlorofluoromethane	1.890	101	5277	0.199	ppbv	85
13) Ethanol	1.732	45	129111	107.052	ppbv	83
15) Acetone	1.845	43	618335m	23.958	ppbv	
20) Methylene Chloride	2.075	84	4857	0.505	ppbv #	91
26) Hexane	2.845	57	114579	4.428	ppbv #	34
30) Cyclohexane	3.887	84	33602	1.496	ppbv	93
34) 2-Butanone	2.577	43	238611	6.223	ppbv	98
35) Carbon Tetrachloride	3.793	117	2894	0.070	ppbv #	45
36) Benzene	3.683	78	295232	5.632	ppbv	98
41) Tetrahydrofuran	3.081	42	44873	2.032	ppbv	99
44) 2,2,4-Trimethylpentane	4.677	57	203749	2.300	ppbv #	86
50) 4-Methyl-2-Pentanone	5.816	43	24529m	0.404	ppbv	
53) Toluene	6.969	91	601582	9.680	ppbv	99
58) Ethyl Benzene	9.380	91	112145	1.322	ppbv	97
59) m/p-Xylene	9.555	91	343493	5.070	ppbv	99
60) o-Xylene	9.988	91	127965	1.884	ppbv	100
61) Styrene	9.895	104	46841	1.394	ppbv	98
64) n-propylbenzene	11.011	120	6017	0.230	ppbv	89
72) 4-Ethyltoluene	11.144	105	37267	0.441	ppbv #	55
73) 1,3,5-Trimethylbenzene	11.222	105	31497	0.426	ppbv	93
74) 1,2,4-Trimethylbenzene	11.555	105	117257	1.378	ppbv #	63
79) Naphthalene	13.529	128	40082	0.431	ppbv	96

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

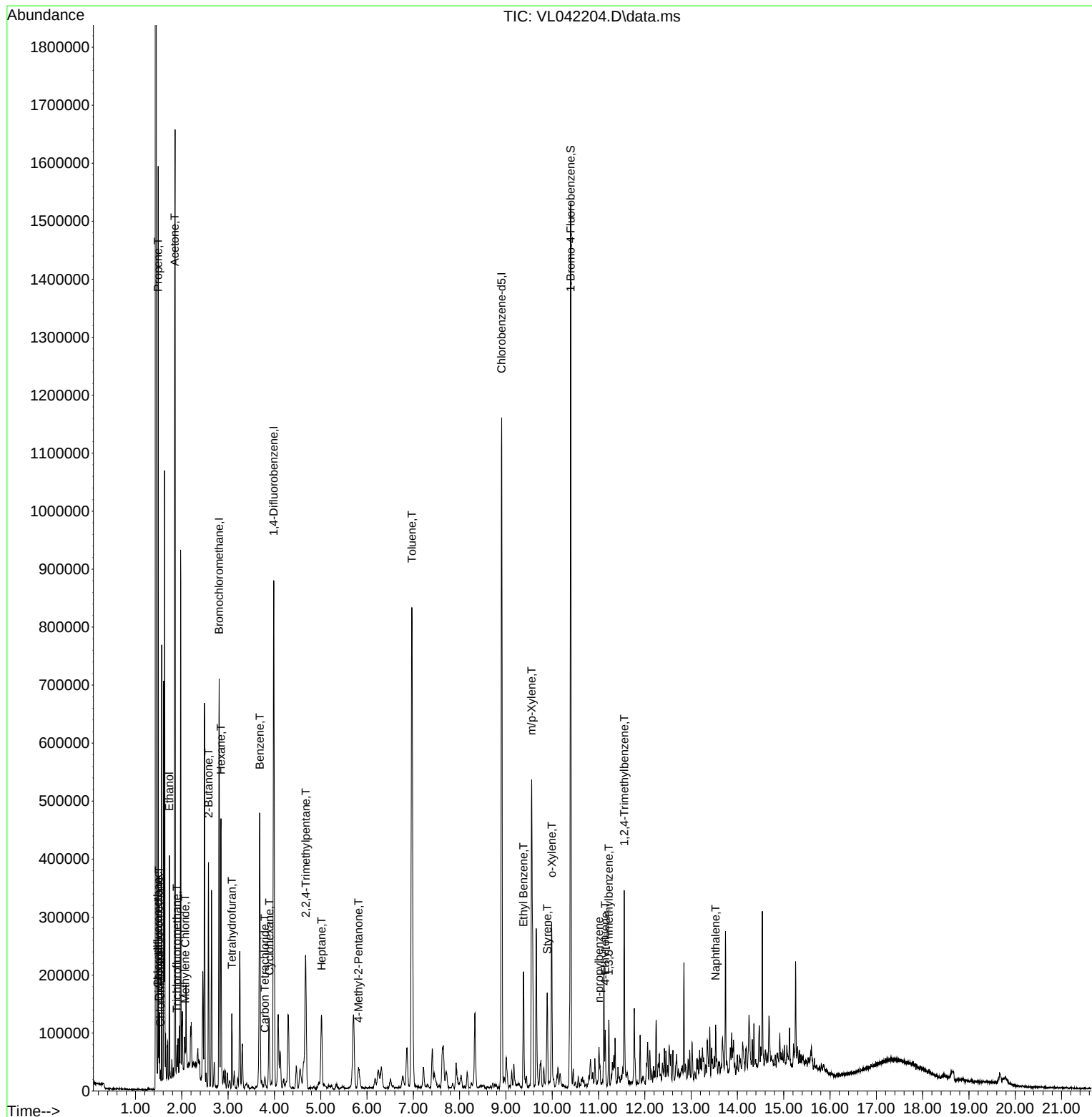
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Time: Apr 01 03:33:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

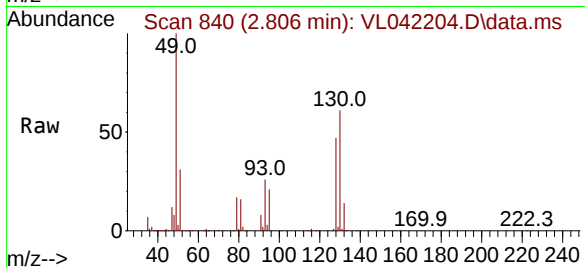
Reviewed By : Semsettin Yesilyurt 04/01/2025
Supervised By : Mahesh Dadoda 04/01/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.806 min Scan# 84
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

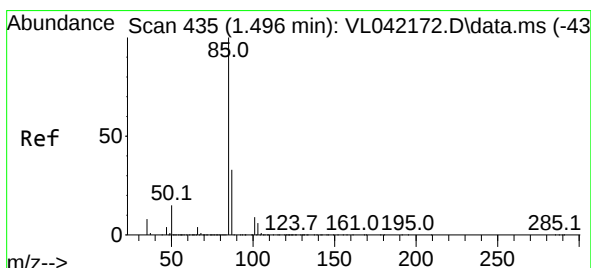
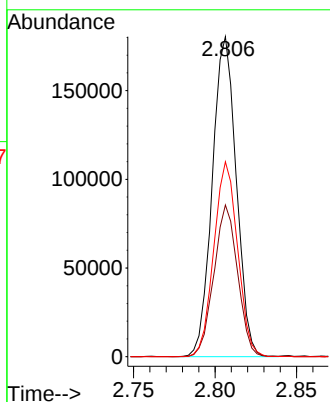
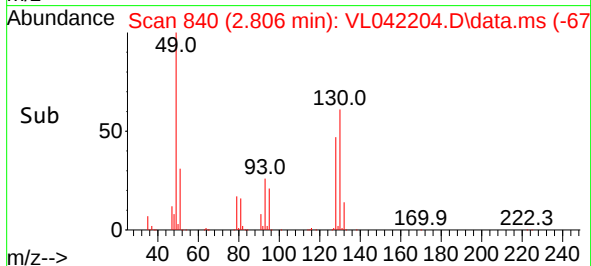
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



Tgt Ion: 49 Resp: 184538
Ion Ratio Lower Upper
49 100
128 46.8 22.9 68.5
130 60.3 28.8 86.4

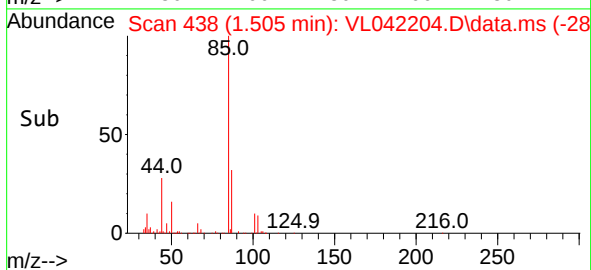
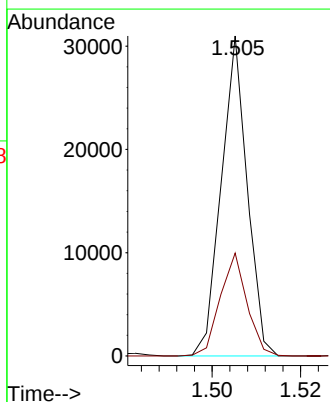
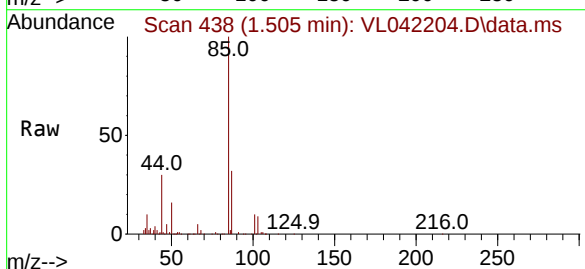
Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#2
Dichlorodifluoromethane
Concen: 0.463 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

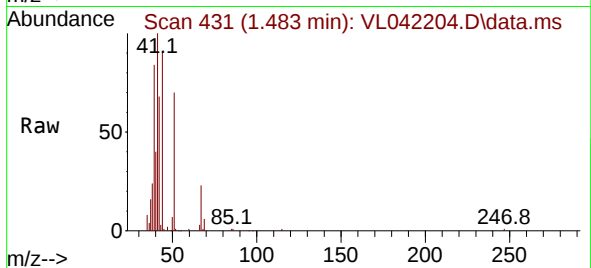
Tgt Ion: 85 Resp: 12624
Ion Ratio Lower Upper
85 100
87 32.1 26.1 39.1





#3
Chlorodifluoromethane
Concen: 0.311 ppbv
RT: 1.483 min Scan# 41
Delta R.T. 0.009 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

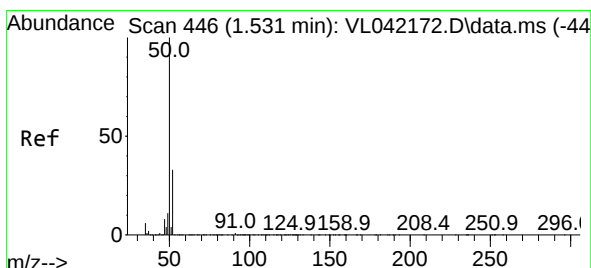
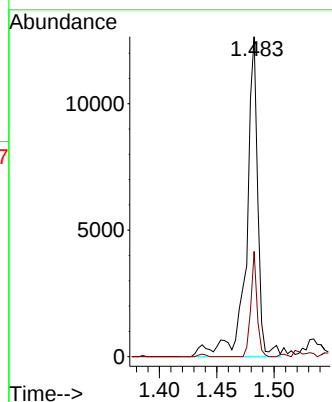
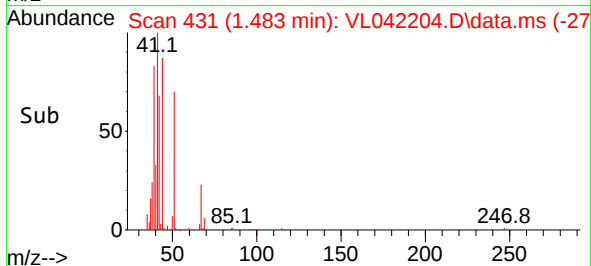
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



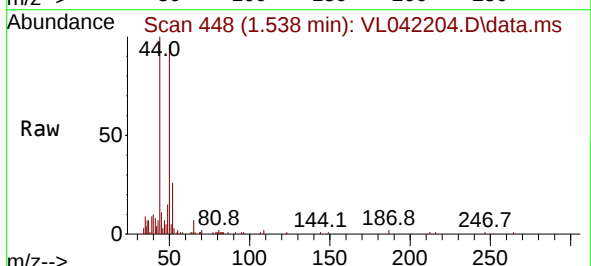
Tgt Ion: 51 Resp: 866
Ion Ratio Lower Upper
51 100
67 18.5 15.0 22.6

Manual Integrations
APPROVED

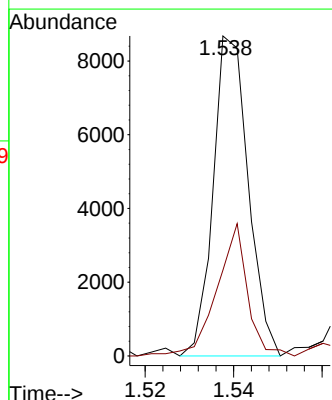
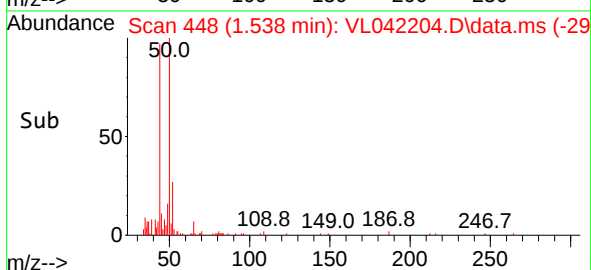
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

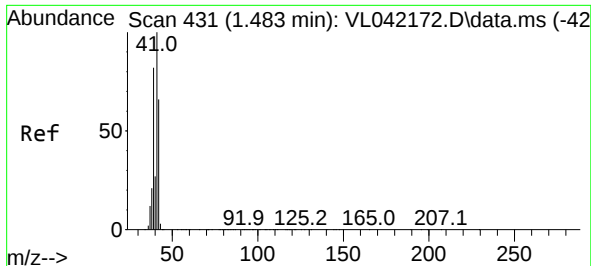


#4
Chloromethane
Concen: 0.430 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06



Tgt Ion: 50 Resp: 4783
Ion Ratio Lower Upper
50 100
52 25.3 26.1 39.1#





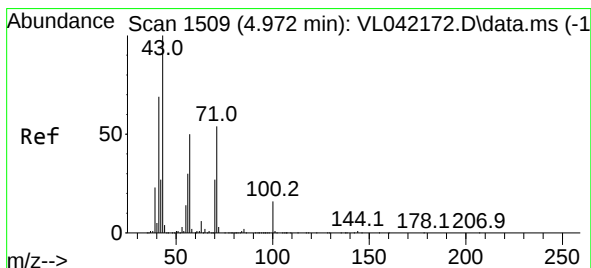
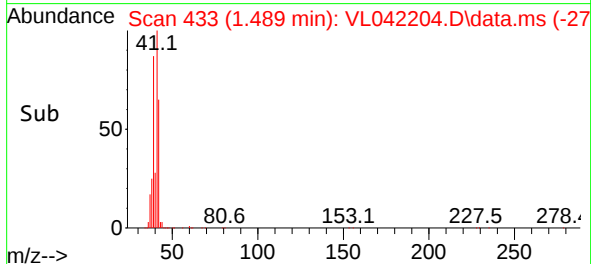
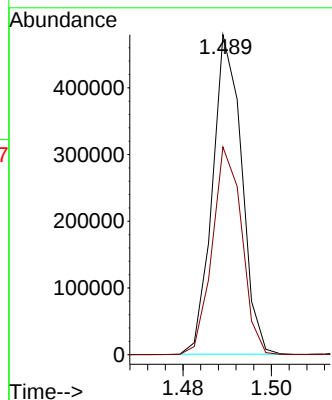
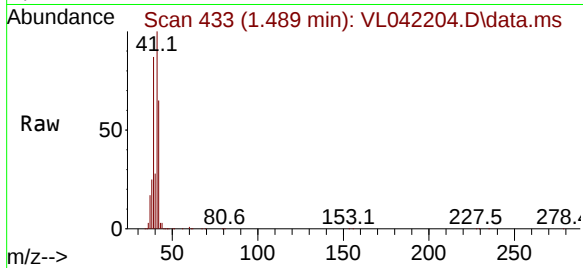
#9
Propene
Concen: 17.243 ppbv
RT: 1.489 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 41 Resp: 219989
Ion Ratio Lower Upper
41 100
42 66.0 55.4 83.2

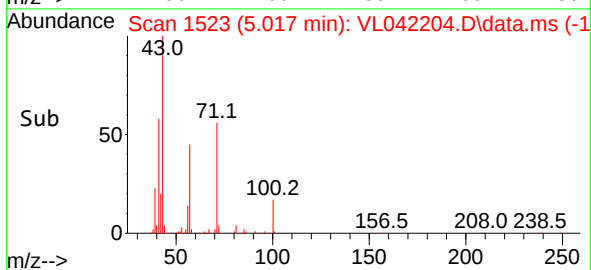
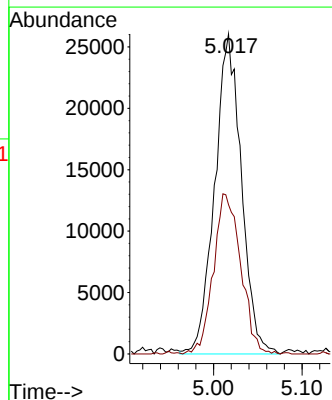
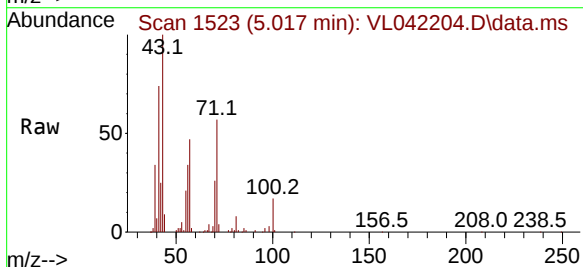
Manual Integrations
APPROVED

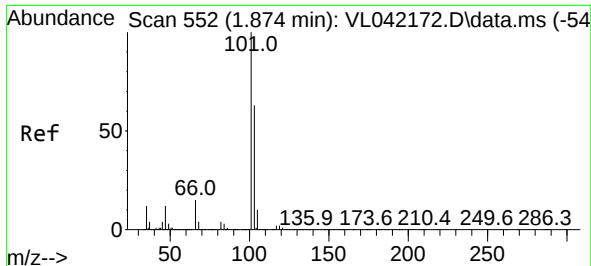
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#10
Heptane
Concen: 1.605 ppbv
RT: 5.017 min Scan# 1523
Delta R.T. 0.045 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

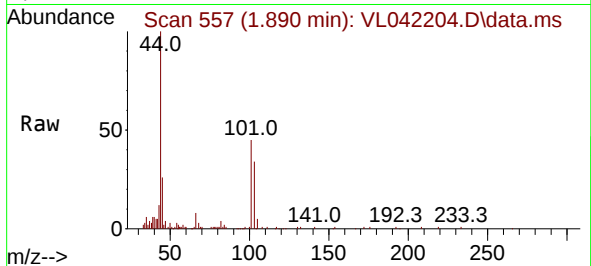
Tgt Ion: 43 Resp: 54482
Ion Ratio Lower Upper
43 100
57 51.4 39.4 59.2





#11
Trichlorofluoromethane
Concen: 0.199 ppbv
RT: 1.890 min Scan# 508
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

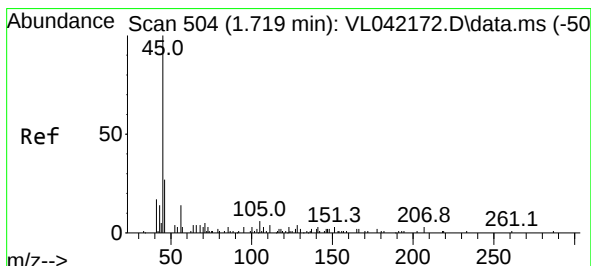
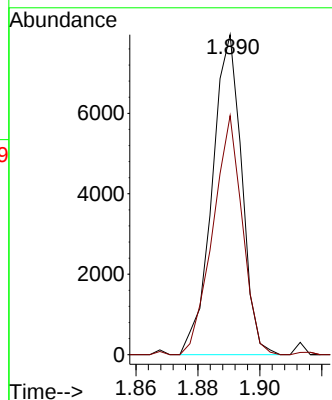
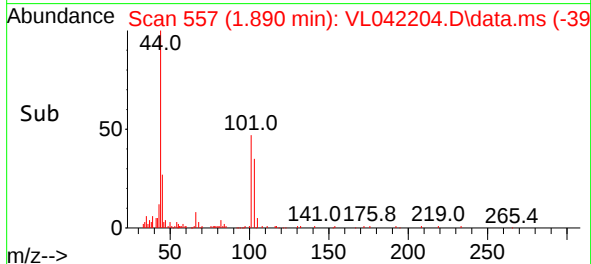
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



Tgt Ion:101 Resp: 527
Ion Ratio Lower Upper
101 100
103 74.7 50.2 75.2

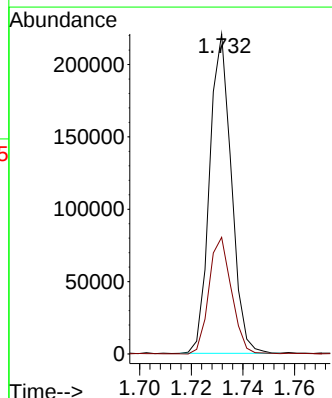
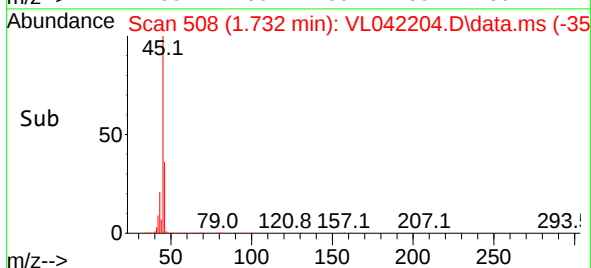
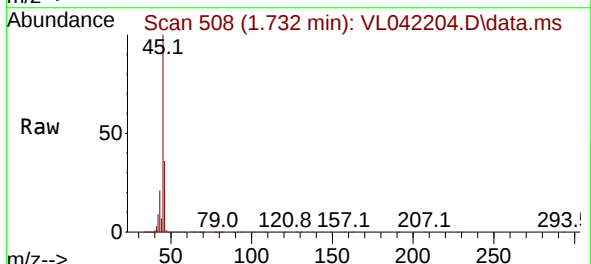
Manual Integrations
APPROVED

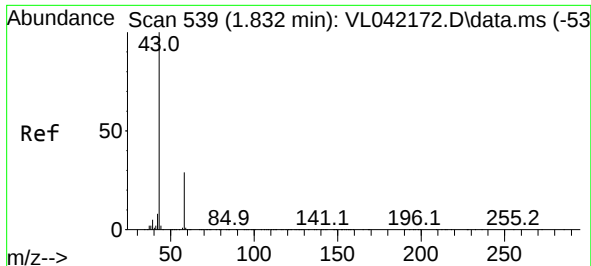
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#13
Ethanol
Concen: 107.052 ppbv
RT: 1.732 min Scan# 508
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

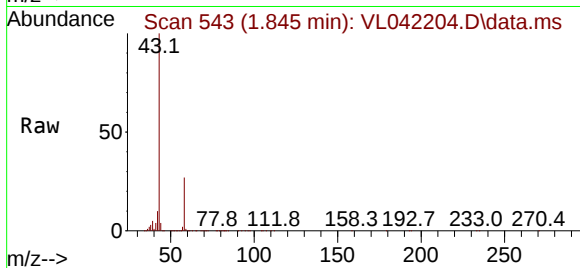
Tgt Ion: 45 Resp: 129111
Ion Ratio Lower Upper
45 100
46 38.6 20.2 80.8





#15
Acetone
Concen: 23.958 ppbv m
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

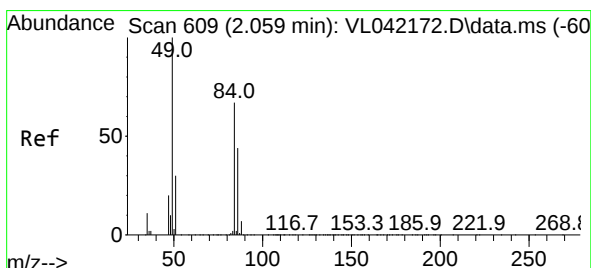
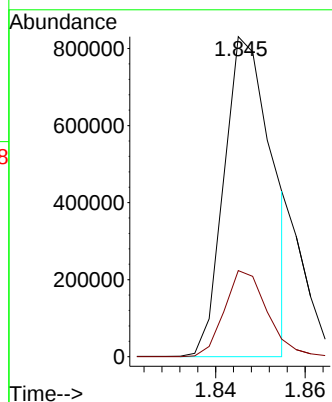
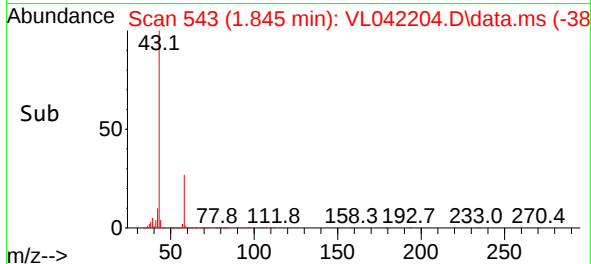
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



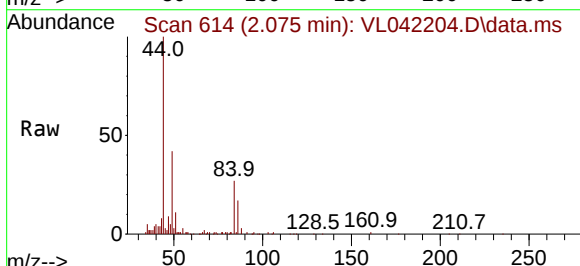
Tgt Ion: 43 Resp: 61833
Ion Ratio Lower Upper
43 100
58 24.2 23.2 34.8

Manual Integrations
APPROVED

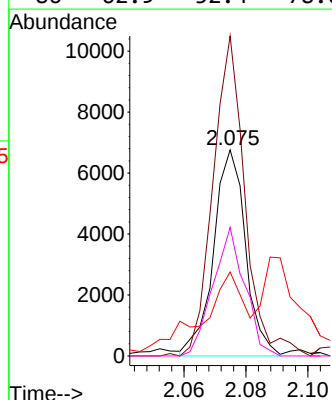
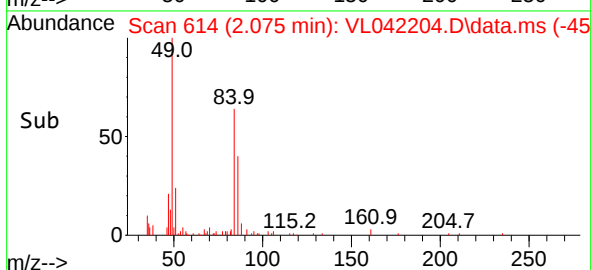
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

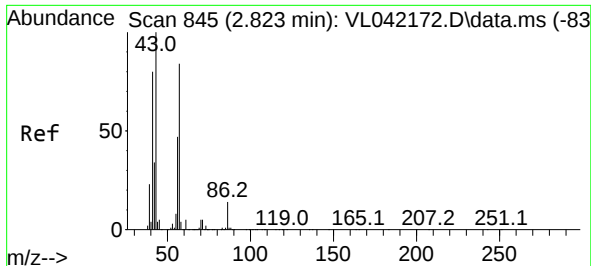


#20
Methylene Chloride
Concen: 0.505 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06



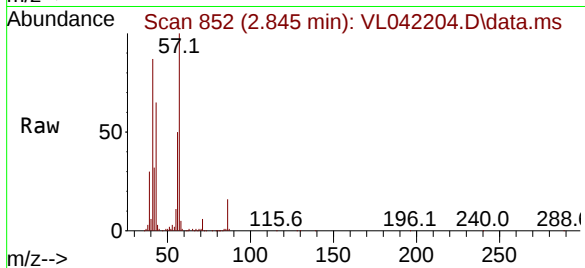
Tgt Ion: 84 Resp: 4857
Ion Ratio Lower Upper
84 100
49 156.5 120.2 180.4
51 27.1 37.4 56.0#
86 62.9 52.4 78.6





#26
Hexane
Concen: 4.428 ppbv
RT: 2.845 min Scan# 81
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

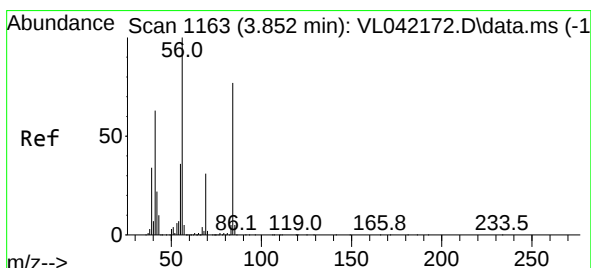
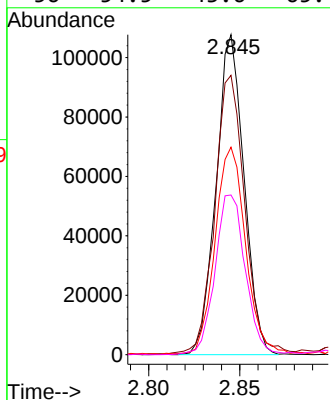
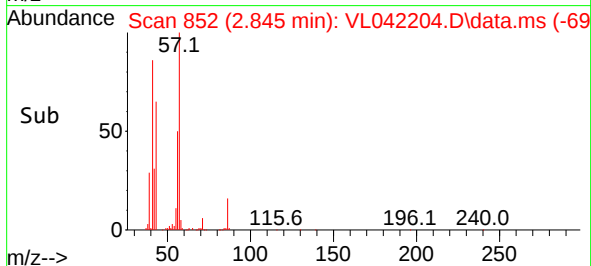
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



Tgt Ion: 57 Resp: 114579
Ion Ratio Lower Upper
57 100
41 95.4 76.6 114.8
43 73.9 207.8 311.8
56 54.5 43.6 65.4

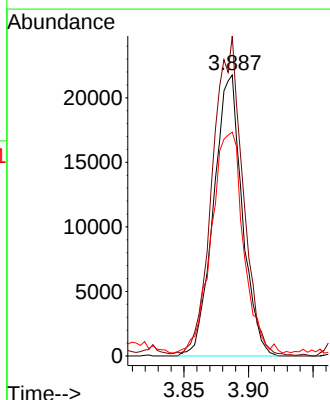
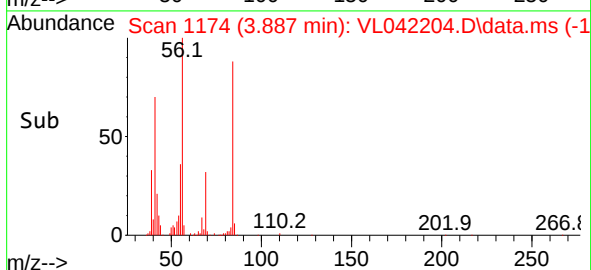
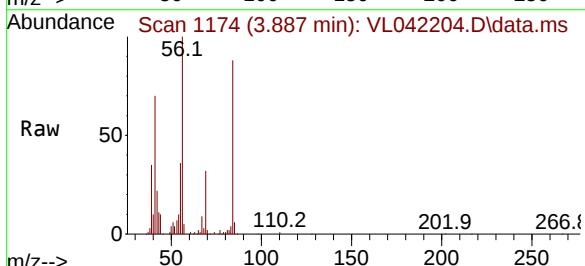
Manual Integrations
APPROVED

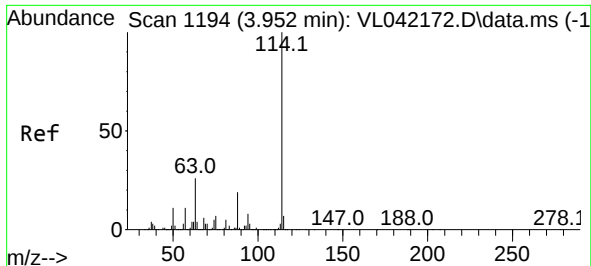
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#30
Cyclohexane
Concen: 1.496 ppbv
RT: 3.887 min Scan# 1174
Delta R.T. 0.035 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 84 Resp: 33602
Ion Ratio Lower Upper
84 100
56 118.8 102.8 154.2
41 87.3 66.5 99.7





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.984 min Scan# 1194

Delta R.T. 0.032 min

Lab File: VL042204.D

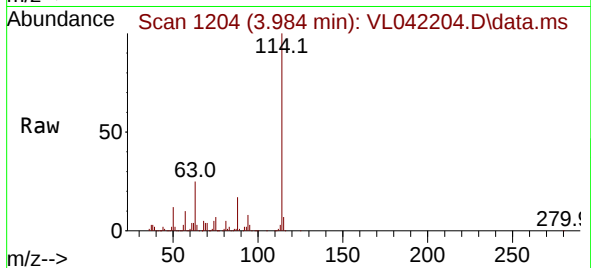
Acq: 31 Mar 2025 11:06

Instrument :

MSVOA_L

ClientSampleId :

SSSG-DUP-1-3262025



Tgt Ion:114 Resp: 528809

Ion Ratio Lower Upper

114 100

63 25.9 20.7 31.1

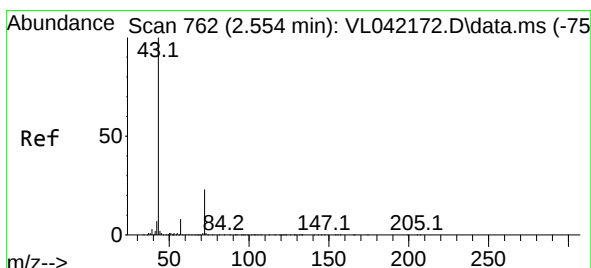
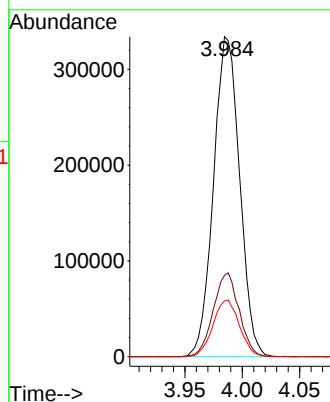
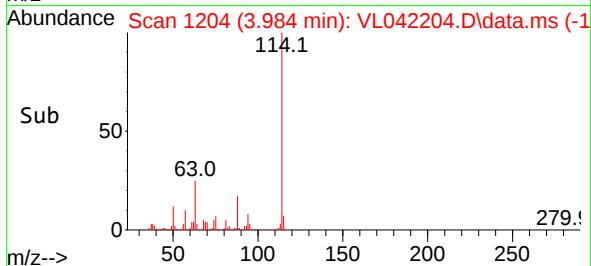
88 17.9 15.0 22.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025

Supervised By :Mahesh Dadoda 04/01/2025



#34

2-Butanone

Concen: 6.223 ppbv

RT: 2.577 min Scan# 769

Delta R.T. 0.022 min

Lab File: VL042204.D

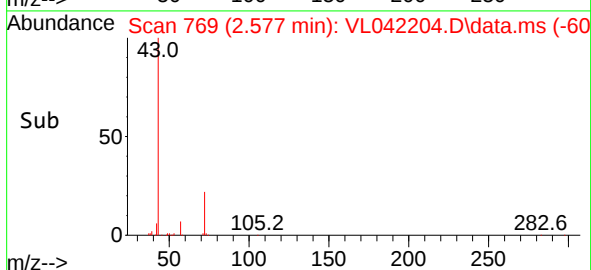
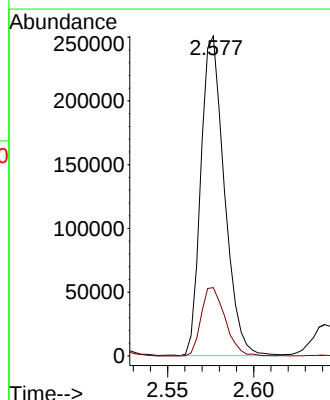
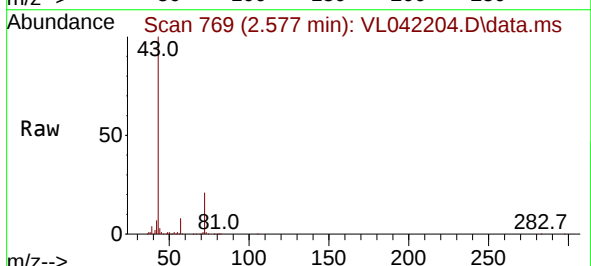
Acq: 31 Mar 2025 11:06

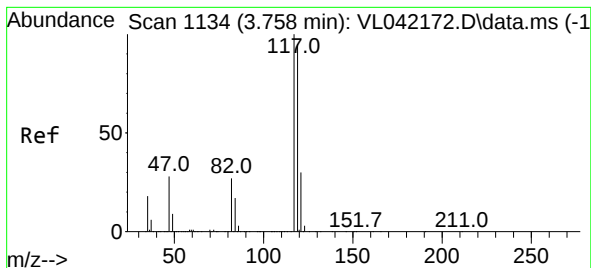
Tgt Ion: 43 Resp: 238611

Ion Ratio Lower Upper

43 100

72 21.9 18.2 27.2





#35

Carbon Tetrachloride

Concen: 0.070 ppbv

RT: 3.793 min Scan# 1114

Delta R.T. 0.035 min

Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Instrument :

MSVOA_L

ClientSampleId :

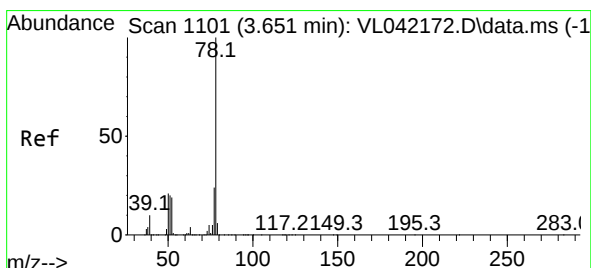
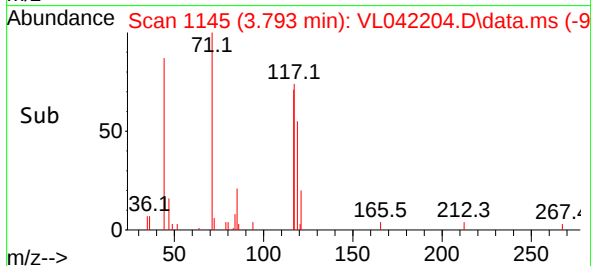
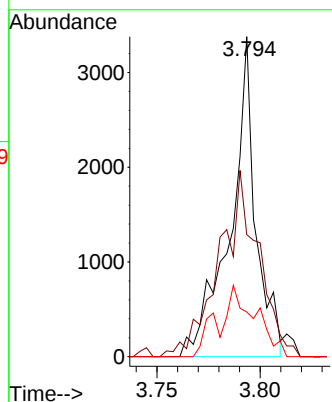
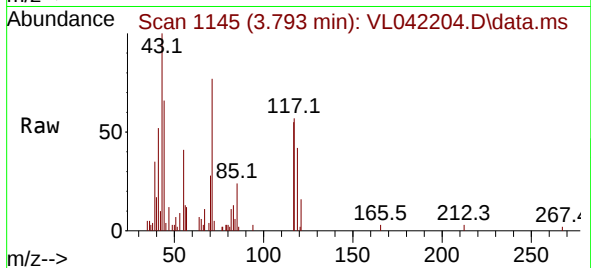
SSSG-DUP-1-3262025

Tgt Ion:	117	Resp:	2894
Ion	Ratio	Lower	Upper
117	100		
119	33.5	76.2	114.2
121	14.0	24.2	36.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#36

Benzene

Concen: 5.632 ppbv

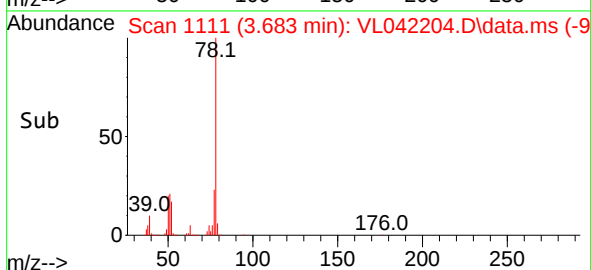
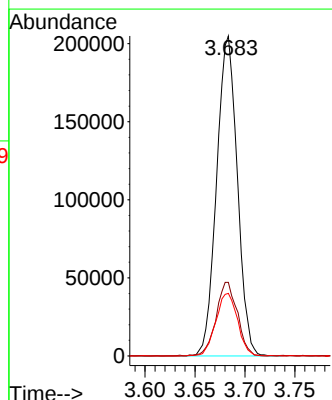
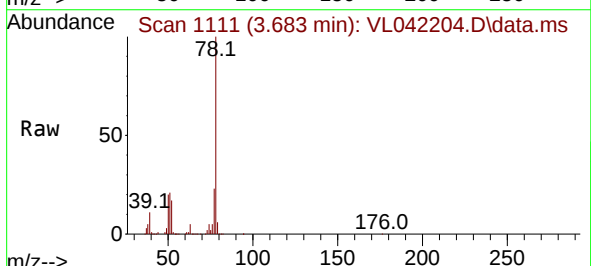
RT: 3.683 min Scan# 1111

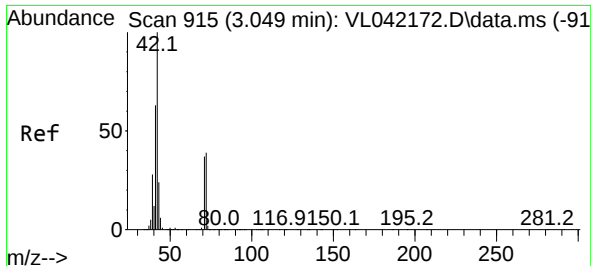
Delta R.T. 0.032 min

Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Tgt Ion:	78	Resp:	295232
Ion	Ratio	Lower	Upper
78	100		
77	22.8	19.1	28.7
50	19.5	16.6	24.8





#41

Tetrahydrofuran

Concen: 2.032 ppbv

RT: 3.081 min Scan# 915

Delta R.T. 0.032 min

Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Instrument :

MSVOA_L

ClientSampleId :

SSSG-DUP-1-3262025

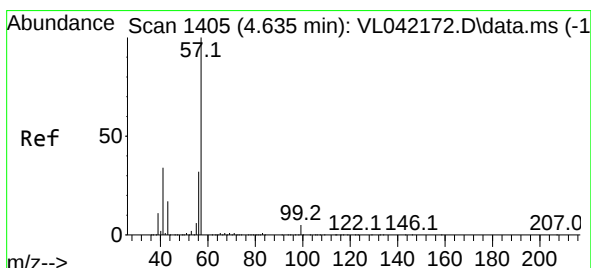
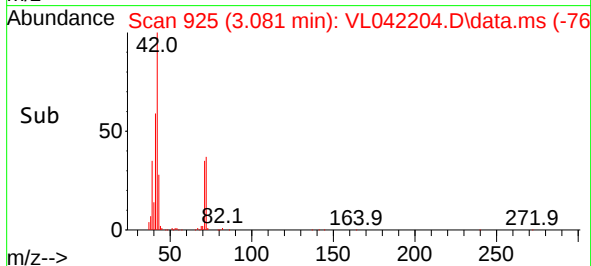
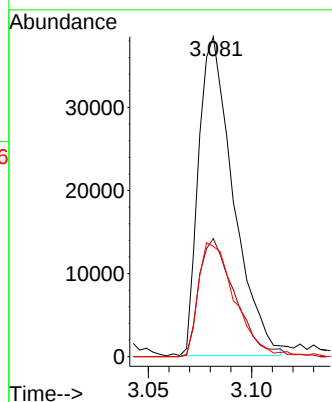
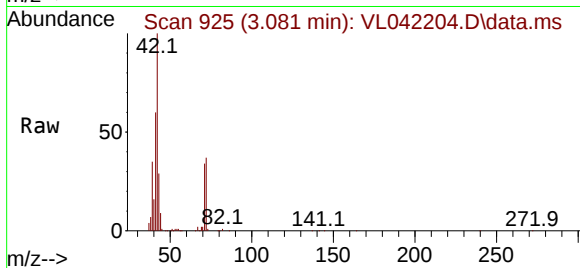
Tgt Ion: 42 Resp: 4487

Ion	Ratio	Lower	Upper
42	100		
72	38.6	31.4	47.0
71	37.9	30.2	45.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#44

2,2,4-Trimethylpentane

Concen: 2.300 ppbv

RT: 4.677 min Scan# 1418

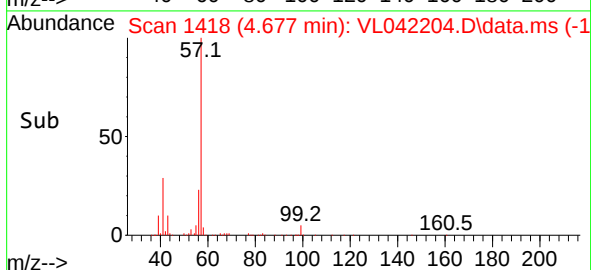
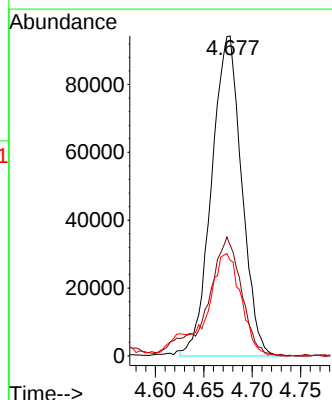
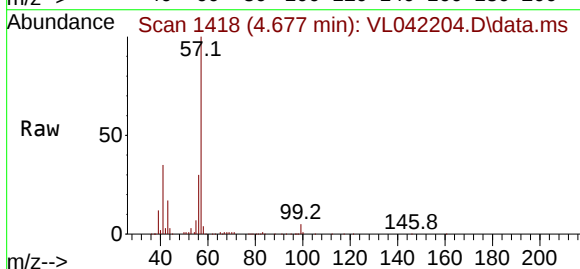
Delta R.T. 0.042 min

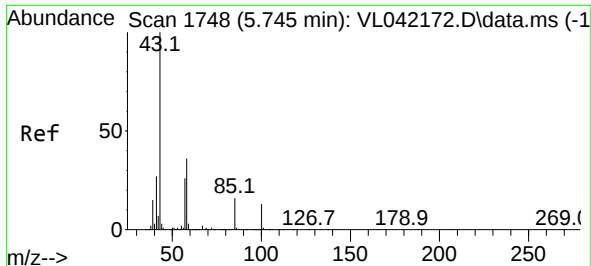
Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Tgt Ion: 57 Resp: 203749

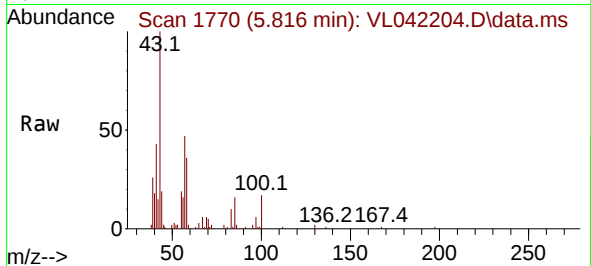
Ion	Ratio	Lower	Upper
57	100		
41	42.2	26.8	40.2#
56	38.6	25.6	38.4#





#50
4-Methyl-2-Pentanone
Concen: 0.404 ppbv m
RT: 5.816 min Scan# 11
Delta R.T. 0.071 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

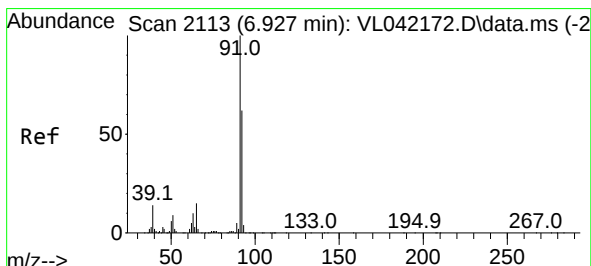
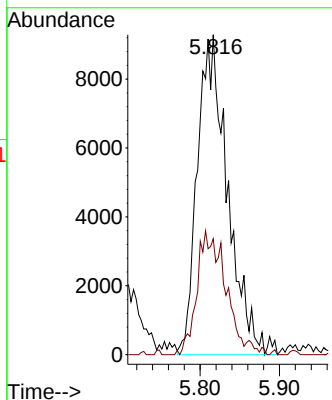
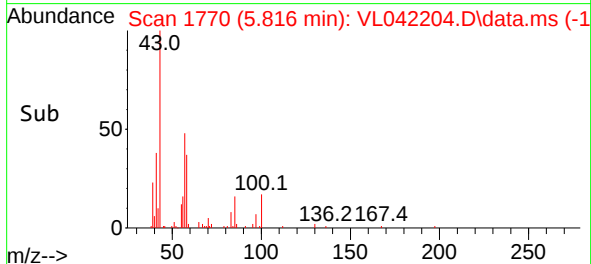
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



Tgt Ion: 43 Resp: 24529
Ion Ratio Lower Upper
43 100
58 37.2 29.0 43.6

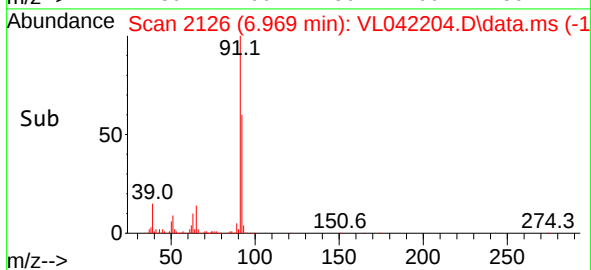
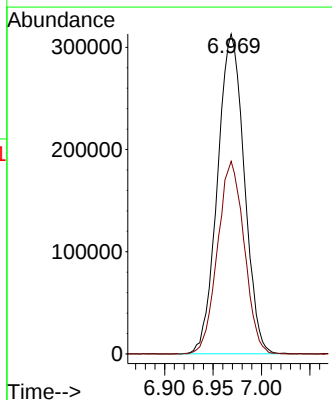
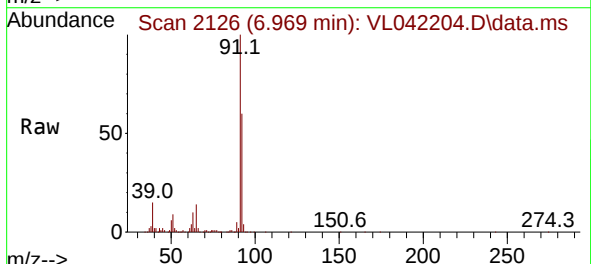
Manual Integrations
APPROVED

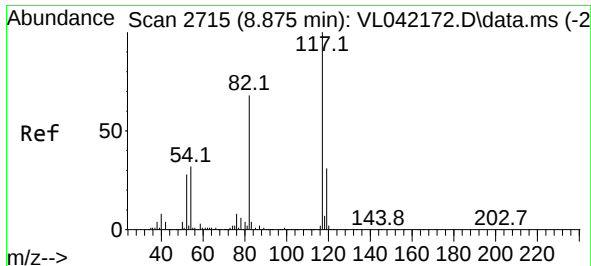
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#53
Toluene
Concen: 9.680 ppbv
RT: 6.969 min Scan# 2126
Delta R.T. 0.042 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

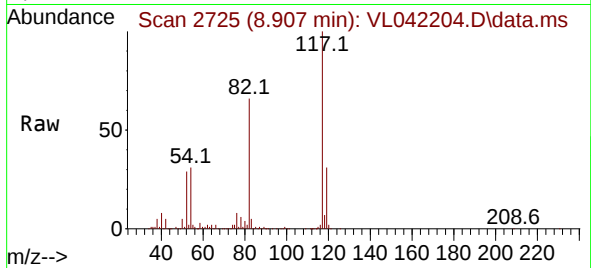
Tgt Ion: 91 Resp: 601582
Ion Ratio Lower Upper
91 100
92 60.0 48.4 72.6





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.907 min Scan# 21
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

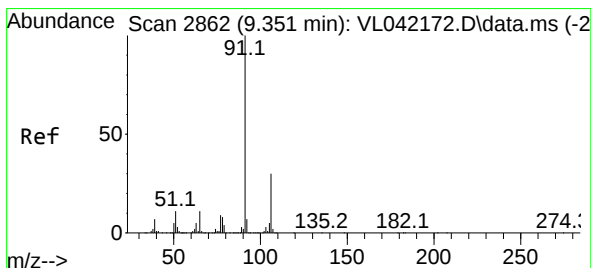
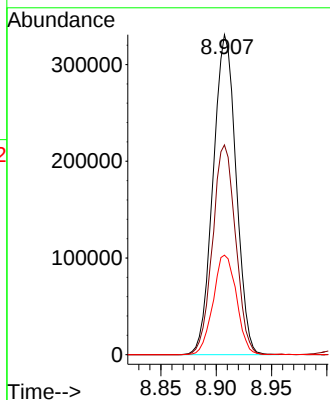
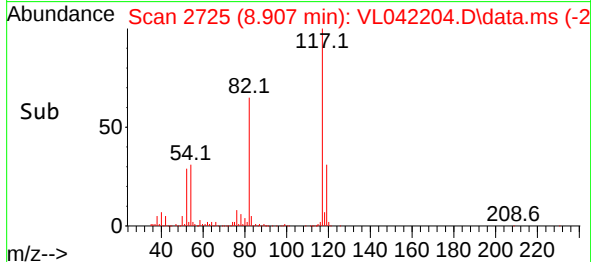
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



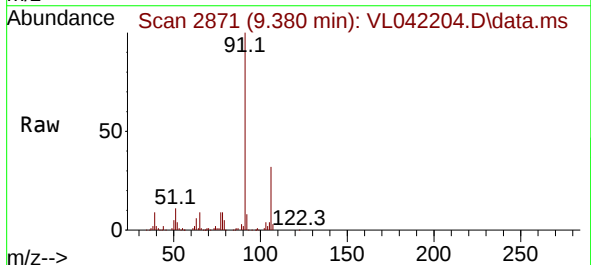
Tgt Ion: 117 Resp: 47770
Ion Ratio Lower Upper
117 100
82 65.6 55.8 83.6
119 31.7 25.5 38.3

Manual Integrations
APPROVED

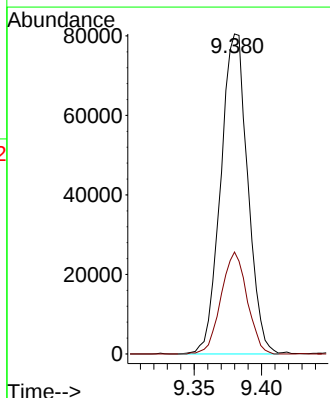
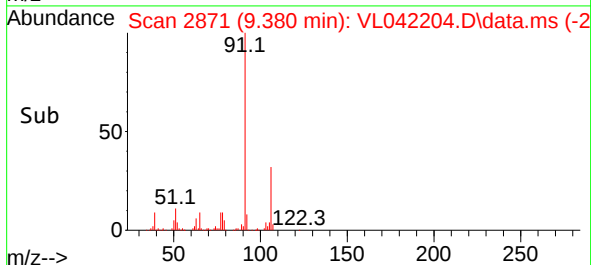
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

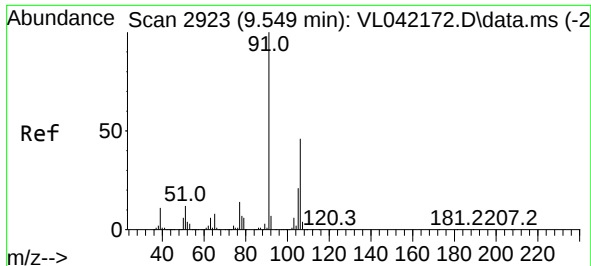


#58
Ethyl Benzene
Concen: 1.322 ppbv
RT: 9.380 min Scan# 2871
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06



Tgt Ion: 91 Resp: 112145
Ion Ratio Lower Upper
91 100
106 31.9 24.2 36.2





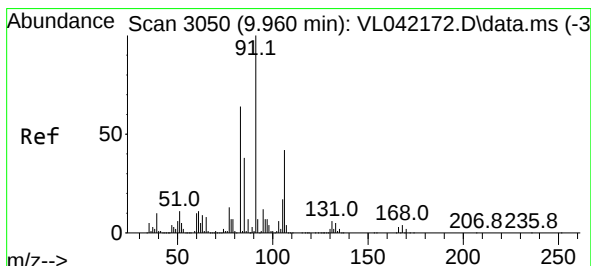
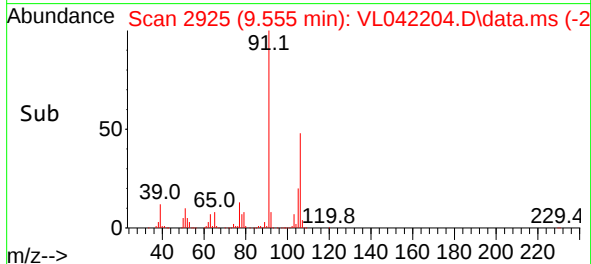
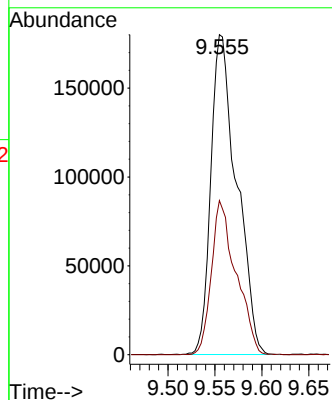
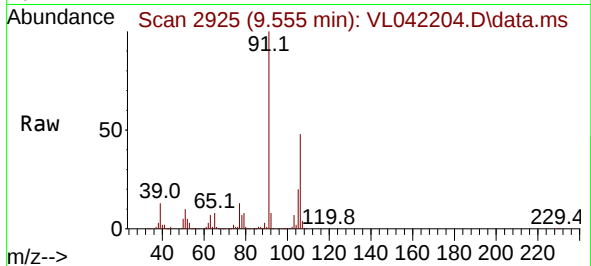
#59
m/p-Xylene
Concen: 5.070 ppbv
RT: 9.555 min Scan# 2925
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 91 Resp: 34349
Ion Ratio Lower Upper
91 100
106 46.1 36.4 54.6

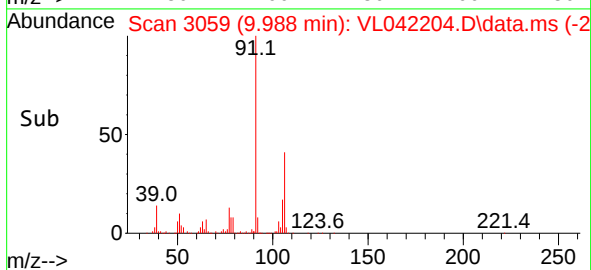
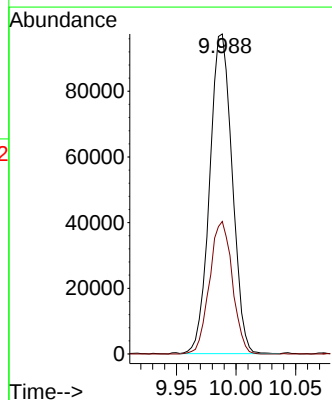
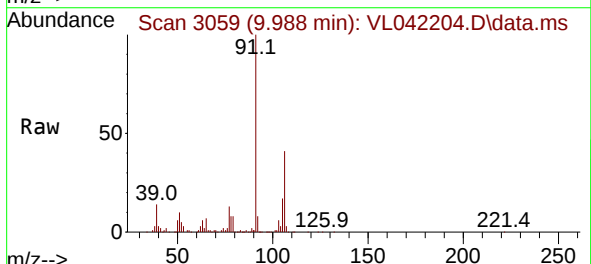
Manual Integrations
APPROVED

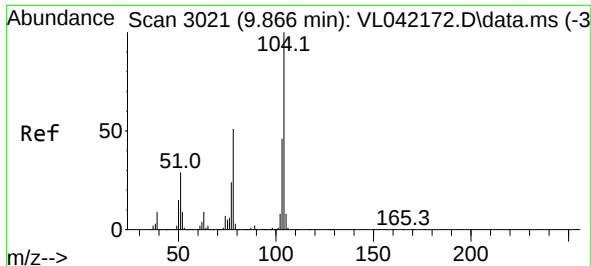
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#60
o-Xylene
Concen: 1.884 ppbv
RT: 9.988 min Scan# 3059
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 127965
Ion Ratio Lower Upper
91 100
106 41.9 20.8 62.5





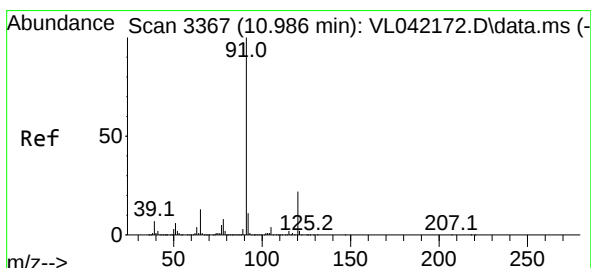
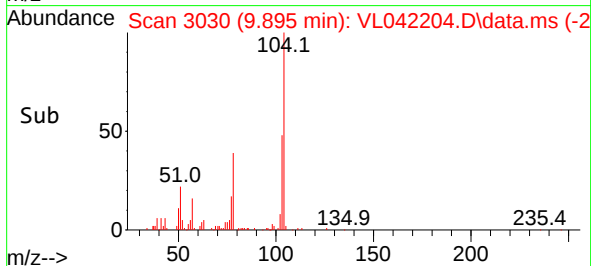
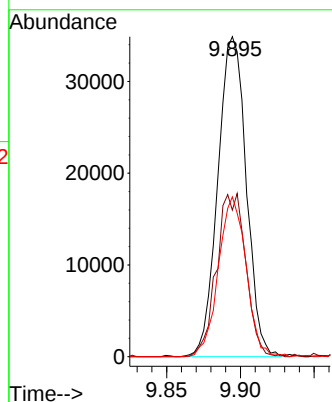
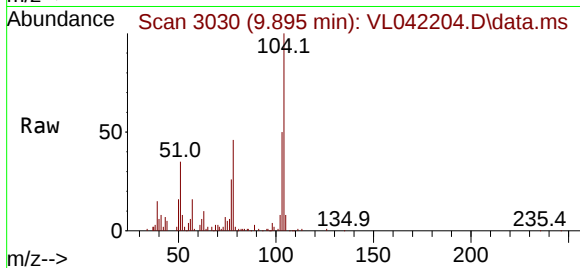
#61
Styrene
Concen: 1.394 ppbv
RT: 9.895 min Scan# 3021
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:104 Resp: 4684
Ion Ratio Lower Upper
104 100
78 52.3 41.8 62.6
103 48.8 37.0 55.4

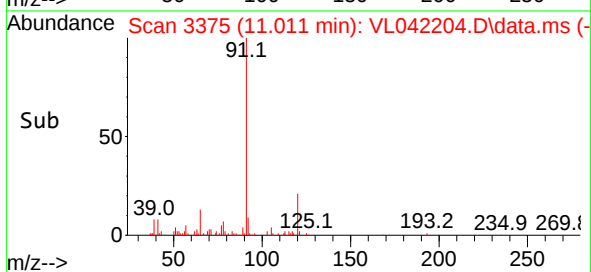
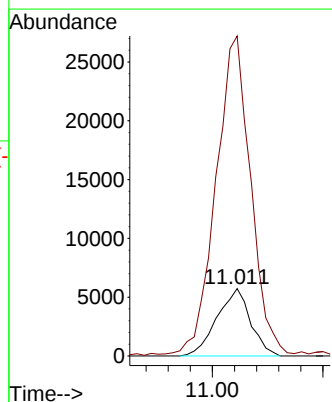
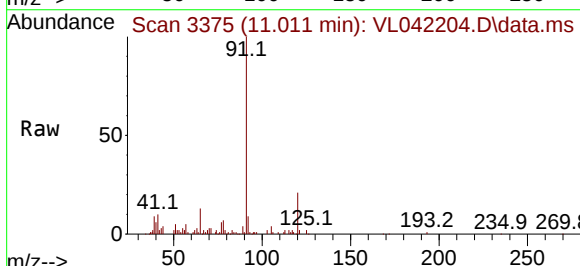
Manual Integrations
APPROVED

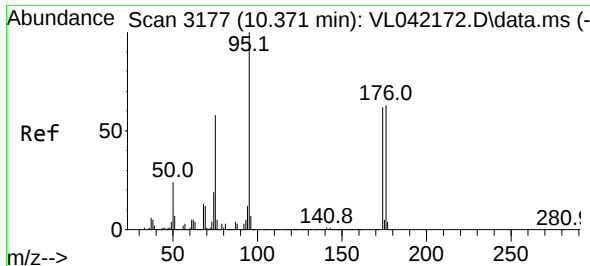
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#64
n-propylbenzene
Concen: 0.230 ppbv
RT: 11.011 min Scan# 3375
Delta R.T. 0.026 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

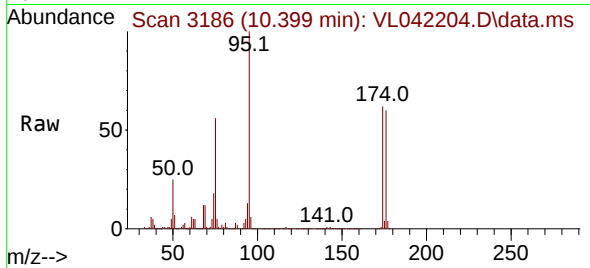
Tgt Ion:120 Resp: 6017
Ion Ratio Lower Upper
120 100
91 499.2 376.9 565.3





#68
1-Bromo-4-Fluorobenzene
Concen: 10.078 ppbv
RT: 10.399 min Scan# 3177
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

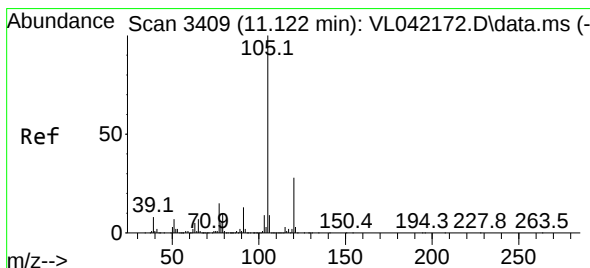
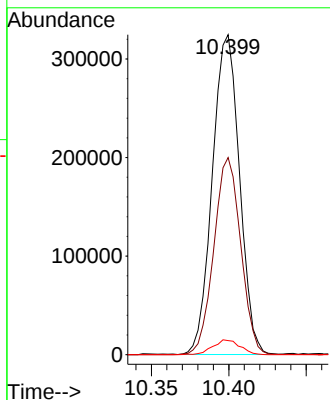
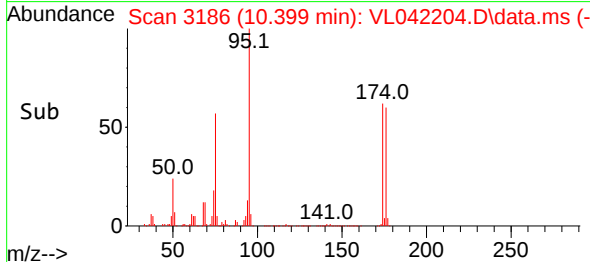
Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025



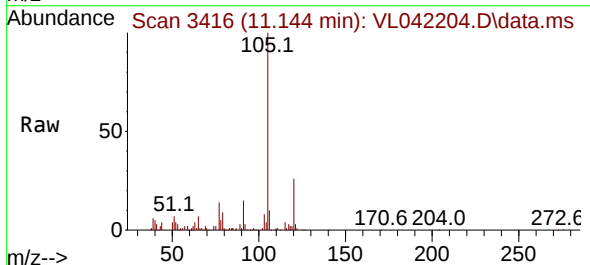
Tgt Ion: 95 Resp: 395364
Ion Ratio Lower Upper
95 100
174 61.0 50.6 76.0
175 4.6 3.8 5.6

Manual Integrations
APPROVED

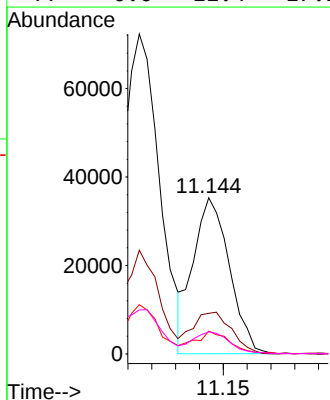
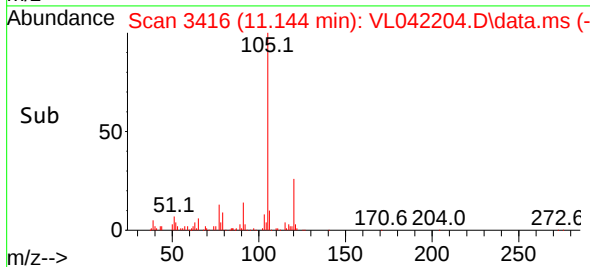
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

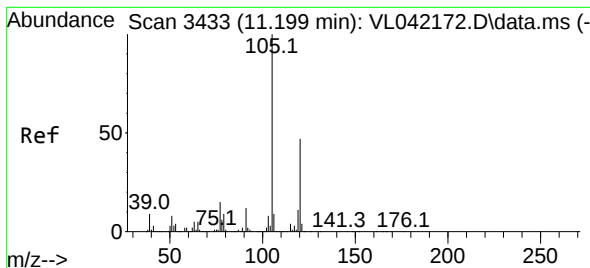


#72
4-Ethyltoluene
Concen: 0.441 ppbv
RT: 11.144 min Scan# 3416
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06



Tgt Ion:105 Resp: 37267
Ion Ratio Lower Upper
105 100
120 0.0 23.4 35.0#
91 0.0 10.3 15.5#
77 0.0 11.4 17.2#





#73

1,3,5-Trimethylbenzene

Concen: 0.426 ppbv

RT: 11.222 min Scan# 34

Delta R.T. 0.022 min

Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Instrument :

MSVOA_L

ClientSampleId :

SSSG-DUP-1-3262025

Tgt Ion:105 Resp: 3149

Ion Ratio Lower Upper

105 100

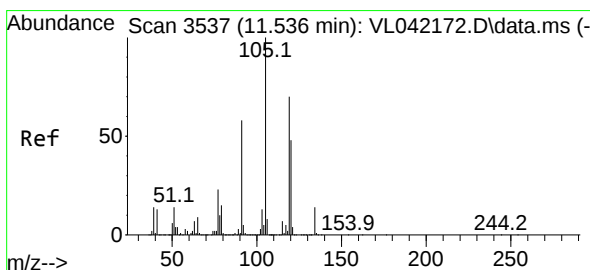
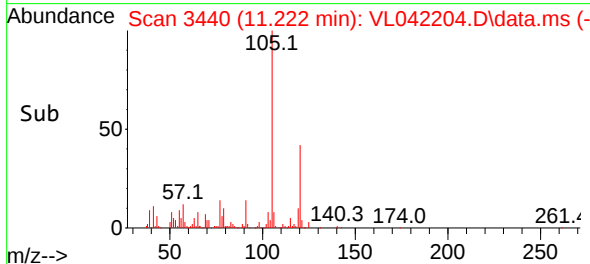
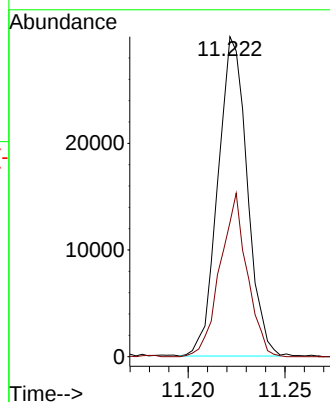
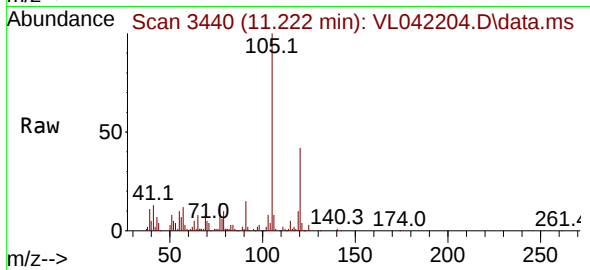
120 42.0 37.4 56.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025

Supervised By :Mahesh Dadoda 04/01/2025



#74

1,2,4-Trimethylbenzene

Concen: 1.378 ppbv

RT: 11.555 min Scan# 3543

Delta R.T. 0.019 min

Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 117257

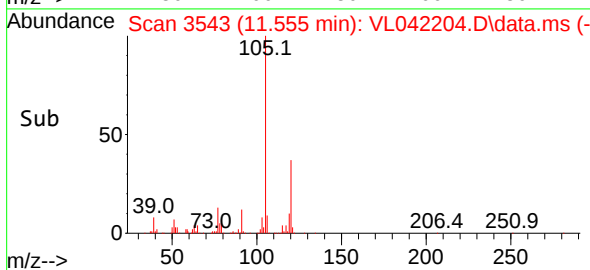
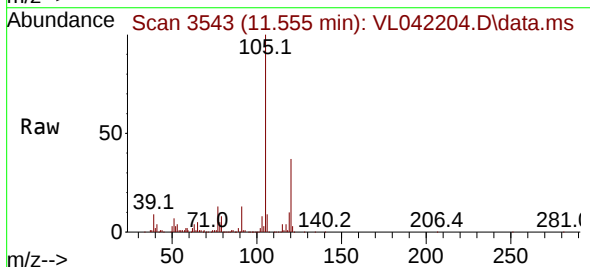
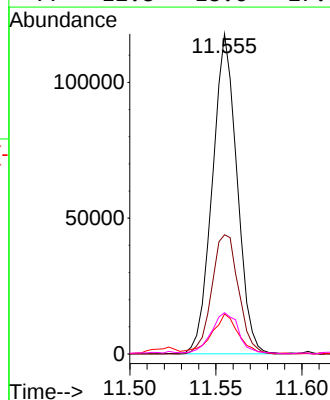
Ion Ratio Lower Upper

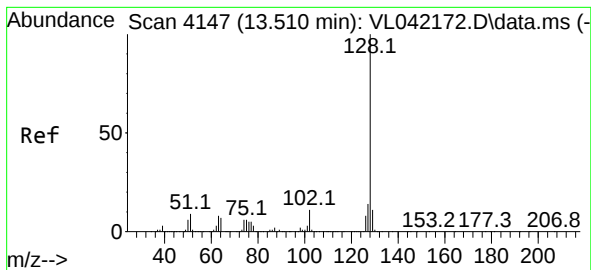
105 100

120 37.3 38.6 58.0#

91 12.2 46.2 69.2#

77 12.8 18.6 27.8#





#79

Naphthalene

Concen: 0.431 ppbv

RT: 13.529 min Scan# 41

Delta R.T. 0.019 min

Lab File: VL042204.D

Acq: 31 Mar 2025 11:06

Instrument :

MSVOA_L

ClientSampleId :

SSSG-DUP-1-3262025

Tgt Ion:128 Resp: 4008

Ion Ratio Lower Upper

128 100

127 11.0 10.8 16.2

129 10.8 9.0 13.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025

Supervised By :Mahesh Dadoda 04/01/2025

