

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042978.D
 Acq On : 23 Sep 2025 03:33
 Operator : SY/MD
 Sample : Q3132-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 151-1A-1

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
 Supervised By :Semsettin Yesilyurt 09/24/2025

Quant Time: Sep 24 01:15:04 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

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

QLast Update : Tue Sep 23 02:39:16 2025

Response via : Initial Calibration

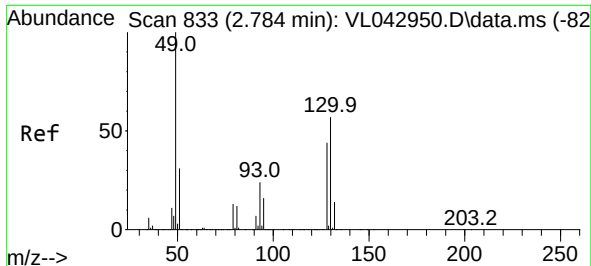
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	147886	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	425027	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	381413	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	292609	10.277	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	8962	0.451	ppbv #	88
3) Chlorodifluoromethane	1.476	51	10475m	0.423	ppbv	
4) Chloromethane	1.534	50	4832	0.537	ppbv	100
9) Propene	1.486	41	6247m	0.579	ppbv	
10) Heptane	4.985	43	11414	0.397	ppbv	93
11) Trichlorofluoromethane	1.881	101	9406	0.490	ppbv	97
13) Ethanol	1.722	45	474338	453.376	ppbv	96
15) Acetone	1.835	43	337179m	17.505	ppbv	
17) tert-Butyl alcohol	2.043	59	3020m	0.143	ppbv	
19) Isopropyl Alcohol	1.887	45	1467264	126.716	ppbv #	37
20) Methylene Chloride	2.065	84	29189	4.730	ppbv	94
26) Hexane	2.829	57	42948	1.935	ppbv #	78
29) Chloroform	2.852	83	30052	1.036	ppbv	98
30) Cyclohexane	3.865	84	5562m	0.300	ppbv	
34) 2-Butanone	2.560	43	20748	0.697	ppbv	98
35) Carbon Tetrachloride	3.764	117	2167m	0.078	ppbv	
36) Benzene	3.661	78	21071	0.528	ppbv #	94
37) 1,2-Dichloroethane	3.217	62	4072	0.194	ppbv	98
44) 2,2,4-Trimethylpentane	4.645	57	20719m	0.301	ppbv	
52) Tetrachloroethene	8.231	164	605m	0.039	ppbv	
53) Toluene	6.933	91	89031m	1.885	ppbv	
58) Ethyl Benzene	9.357	91	18057	0.288	ppbv	99
59) m/p-Xylene	9.532	91	55110	1.116	ppbv #	100
60) o-Xylene	9.966	91	18333	0.371	ppbv	96
61) Styrene	9.872	104	4240m	0.182	ppbv	
74) 1,2,4-Trimethylbenzene	11.539	105	14343	0.259	ppbv #	64

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

Manual Integrations
APPROVED

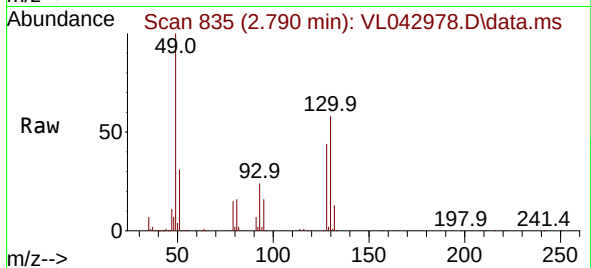
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

[illegible]



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 833
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

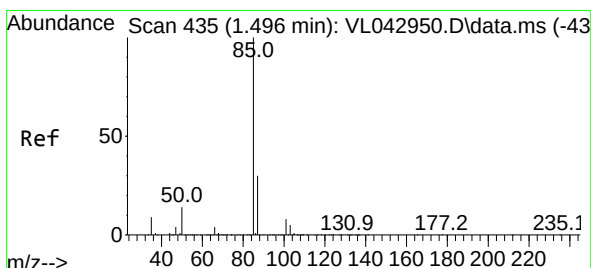
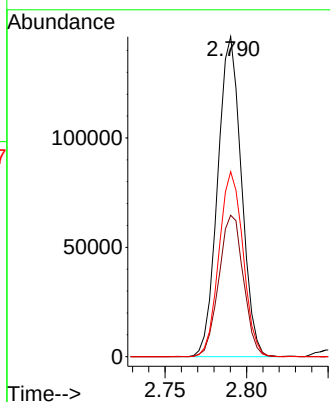
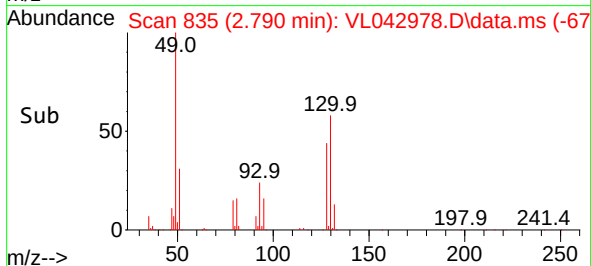
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 49 Resp: 147880
Ion Ratio Lower Upper
49 100
128 45.8 22.9 68.8
130 58.7 29.1 87.3

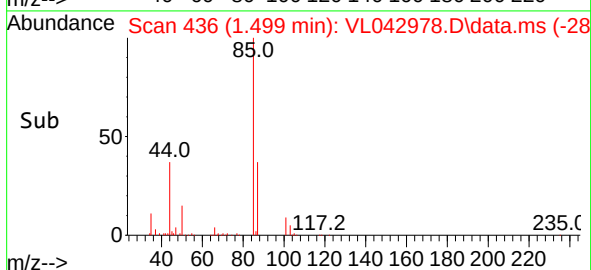
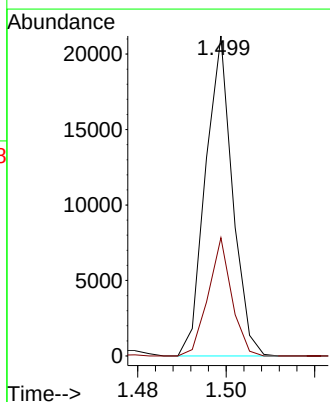
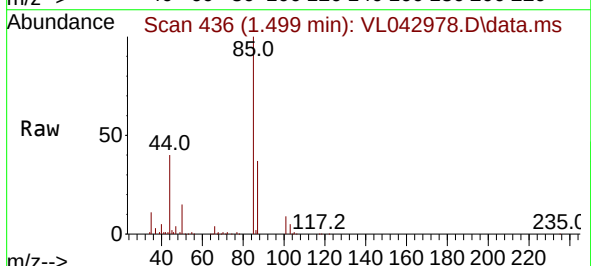
Manual Integrations
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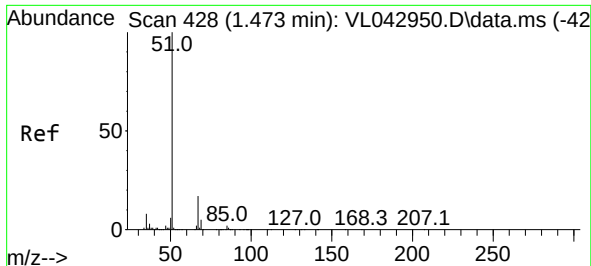
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#2
Dichlorodifluoromethane
Concen: 0.451 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

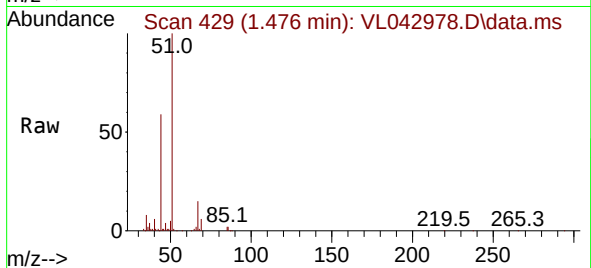
Tgt Ion: 85 Resp: 8962
Ion Ratio Lower Upper
85 100
87 37.0 24.3 36.5#





#3
Chlorodifluoromethane
Concen: 0.423 ppbv m
RT: 1.476 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

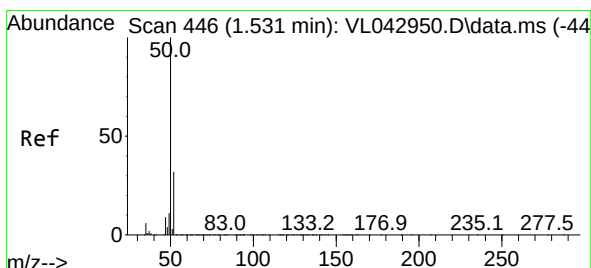
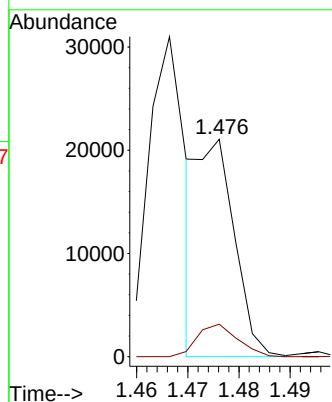
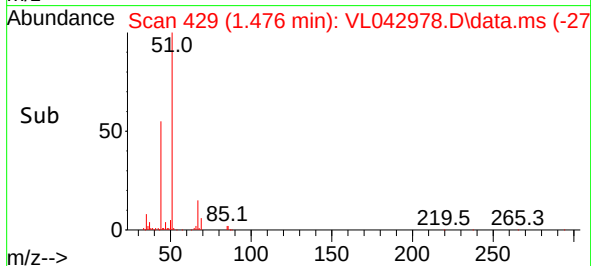
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



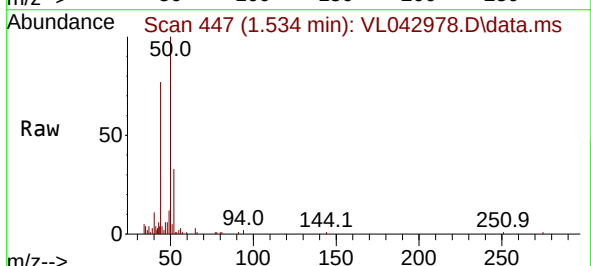
Tgt Ion: 51 Resp: 10475
Ion Ratio Lower Upper
51 100
67 3.4 13.8 20.8

Manual Integrations
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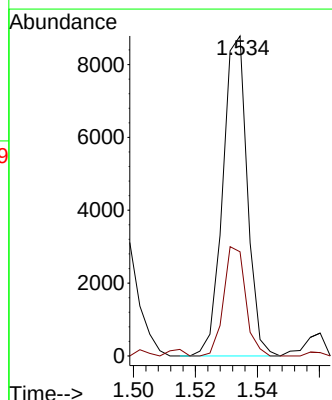
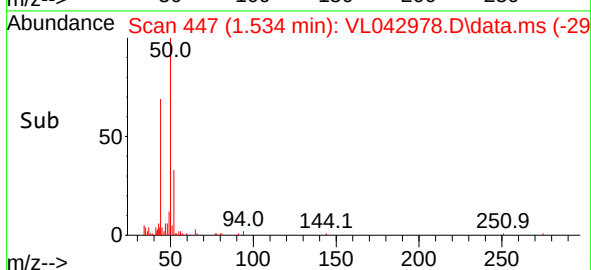
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

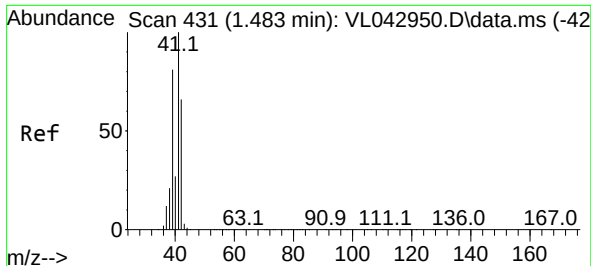


#4
Chloromethane
Concen: 0.537 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33



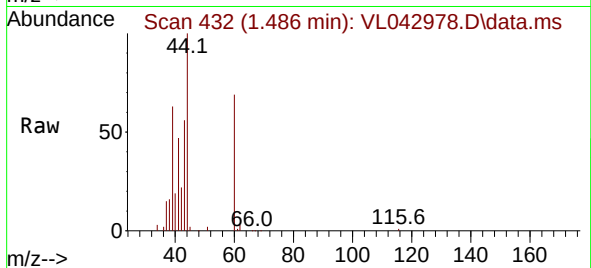
Tgt Ion: 50 Resp: 4832
Ion Ratio Lower Upper
50 100
52 32.6 25.9 38.9





#9
 Propene
 Concen: 0.579 ppbv m
 RT: 1.486 min Scan# 41
 Delta R.T. 0.003 min
 Lab File: VL042978.D
 Acq: 23 Sep 2025 03:33

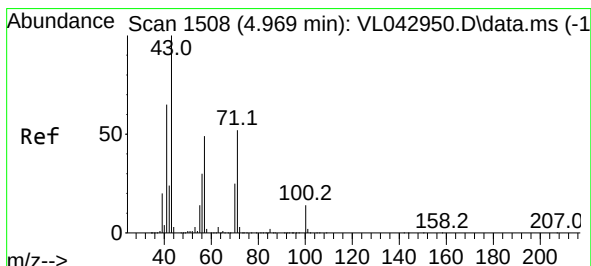
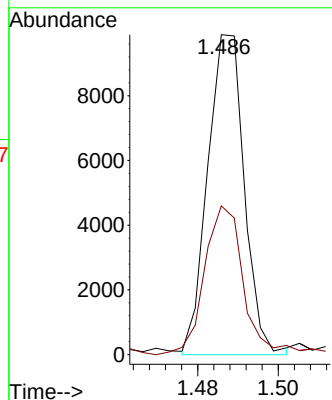
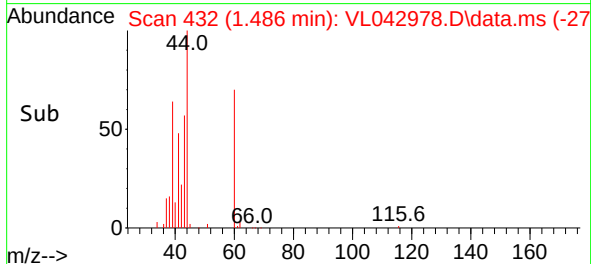
Instrument :
 MSVOA_L
 ClientSampleId :
 151-1A-1



Tgt Ion: 41 Resp: 624
 Ion Ratio Lower Upper
 41 100
 42 1414.2 57.4 86.2

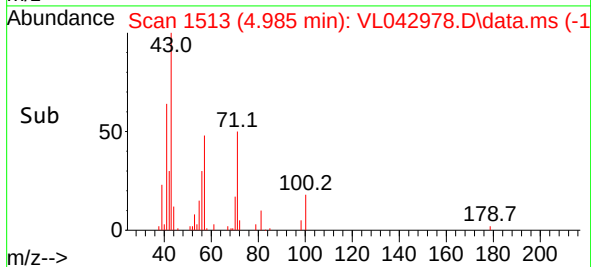
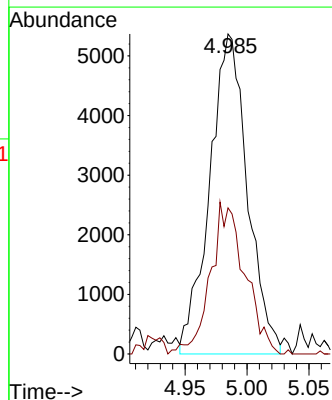
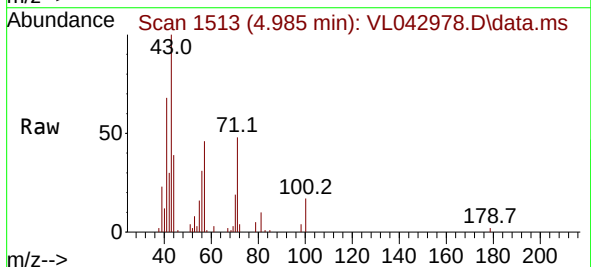
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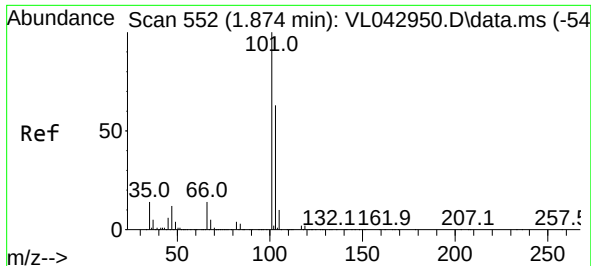
Reviewed By :Mahesh Dadoda 09/24/2025
 Supervised By :Semsettin Yesilyurt 09/24/2025



#10
 Heptane
 Concen: 0.397 ppbv
 RT: 4.985 min Scan# 1513
 Delta R.T. 0.016 min
 Lab File: VL042978.D
 Acq: 23 Sep 2025 03:33

Tgt Ion: 43 Resp: 11414
 Ion Ratio Lower Upper
 43 100
 57 43.2 38.6 57.8





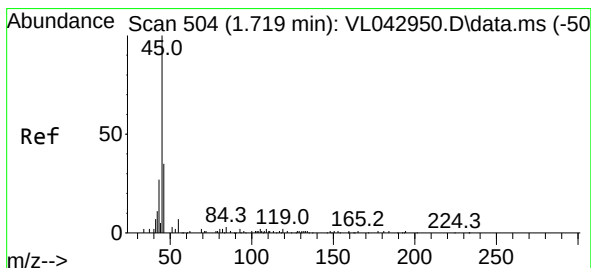
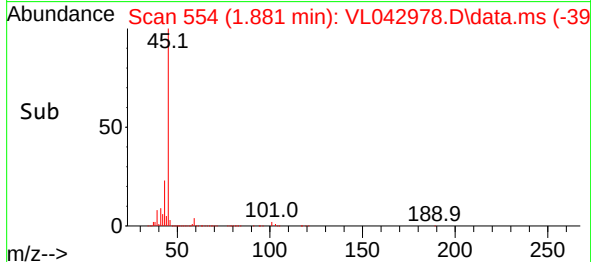
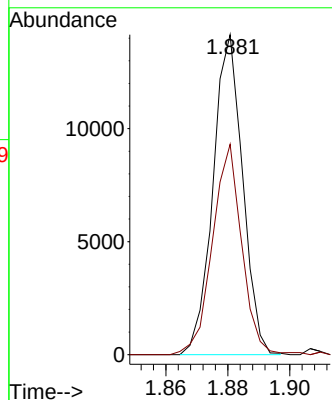
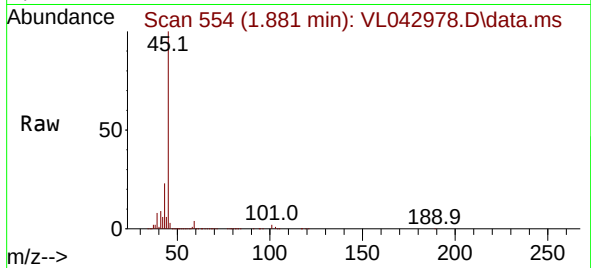
#11
Trichlorofluoromethane
Concen: 0.490 ppbv
RT: 1.881 min Scan# 505
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

Instrument :
MSVOA_L
ClientSampleId :
151-1A-1

Tgt Ion:101 Resp: 9400
Ion Ratio Lower Upper
101 100
103 65.1 50.1 75.1

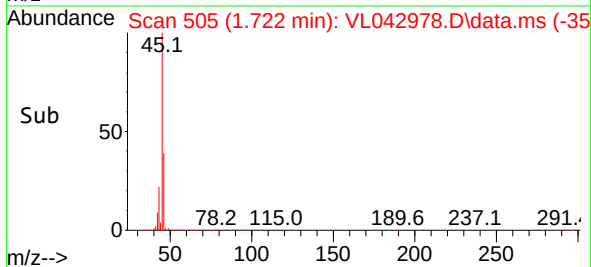
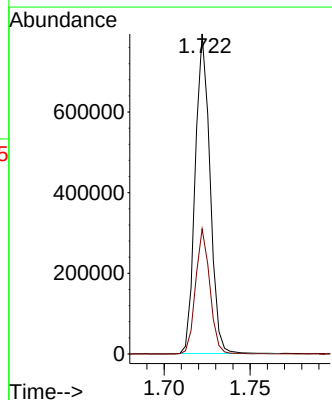
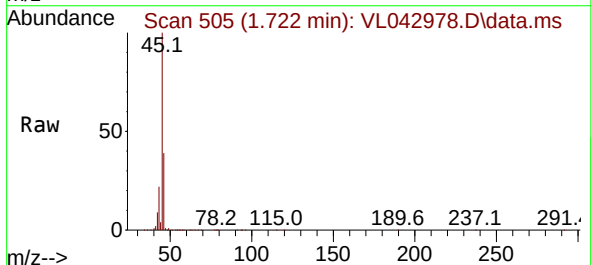
Manual Integrations
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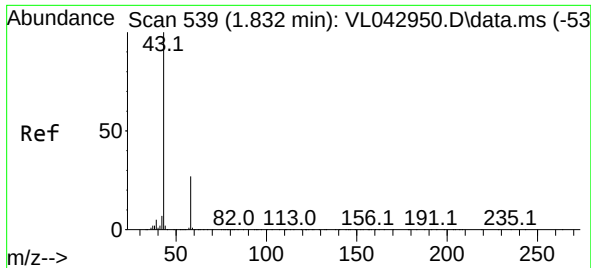
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#13
Ethanol
Concen: 453.376 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

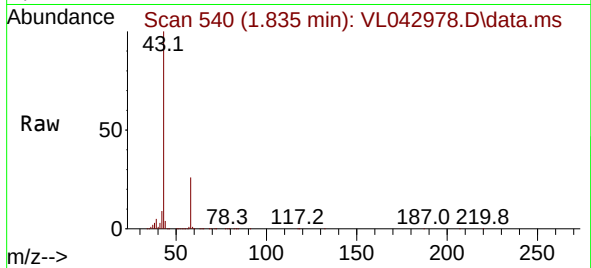
Tgt Ion: 45 Resp: 474338
Ion Ratio Lower Upper
45 100
46 38.1 16.2 64.6





#15
Acetone
Concen: 17.505 ppbv m
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

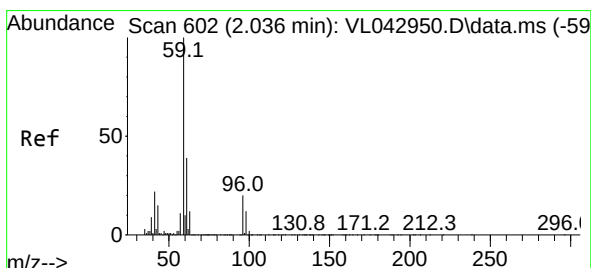
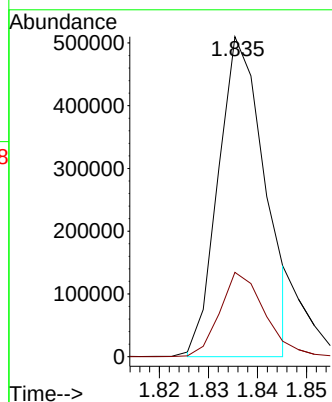
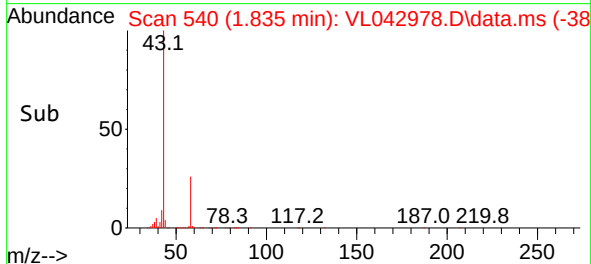
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 43 Resp: 337179
Ion Ratio Lower Upper
43 100
58 25.6 22.3 33.5

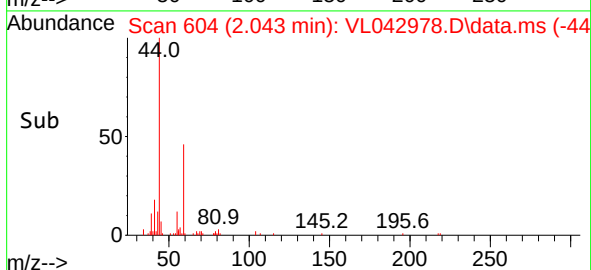
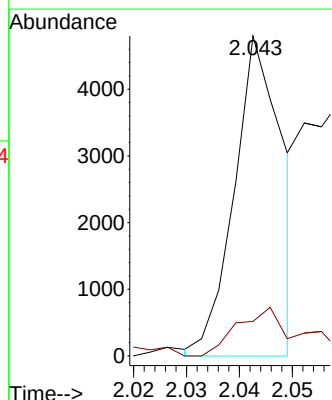
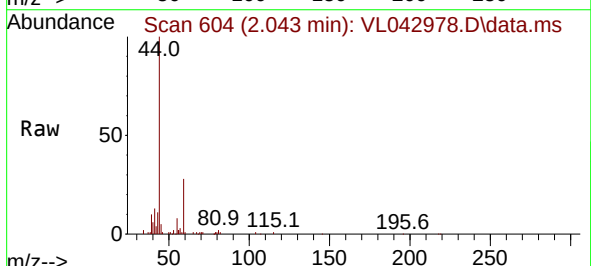
Manual Integrations
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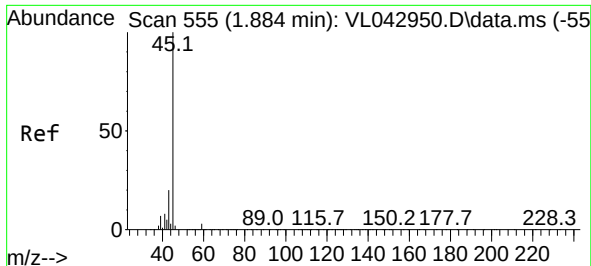
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#17
tert-Butyl alcohol
Concen: 0.143 ppbv m
RT: 2.043 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

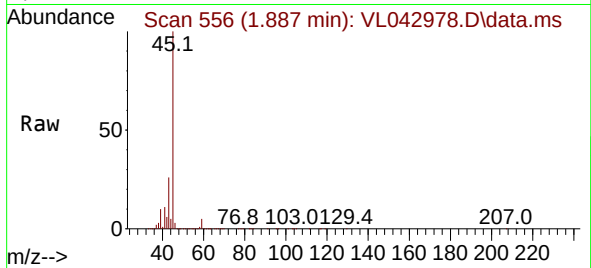
Tgt Ion: 59 Resp: 3020
Ion Ratio Lower Upper
59 100
57 190.8 8.6 12.8#





#19
Isopropyl Alcohol
Concen: 126.716 ppbv
RT: 1.887 min Scan# 511
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

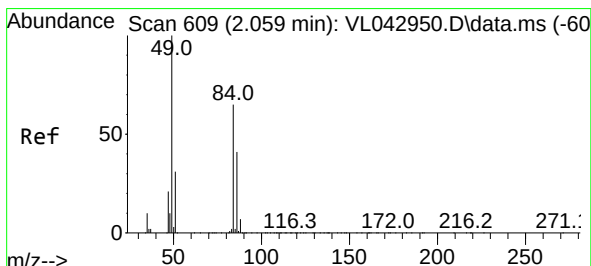
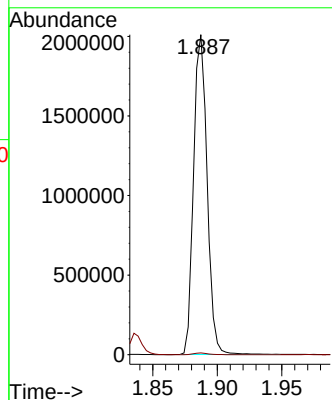
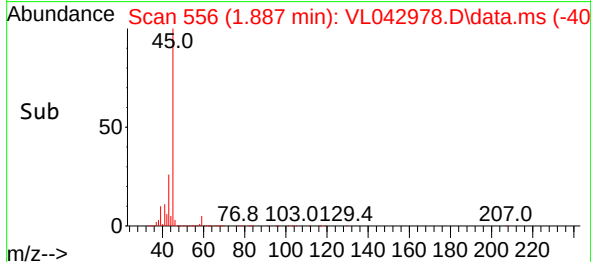
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



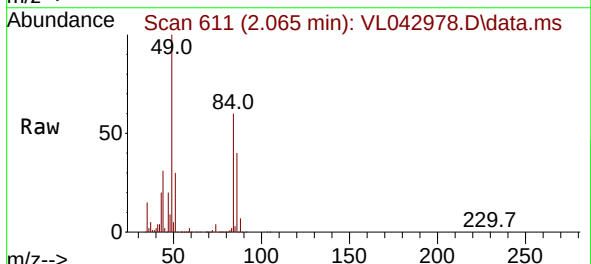
Tgt Ion: 45 Resp: 1467264
Ion Ratio Lower Upper
45 100
58 0.6 31.0 46.6

Manual Integrations
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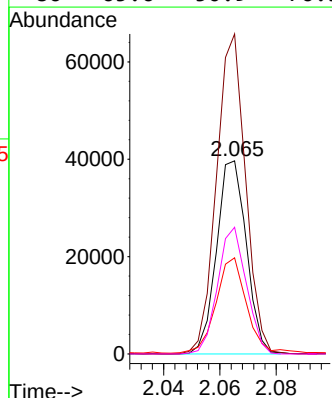
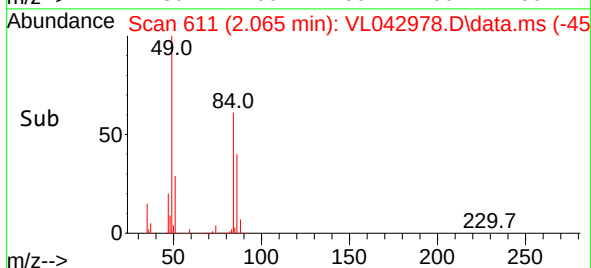
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

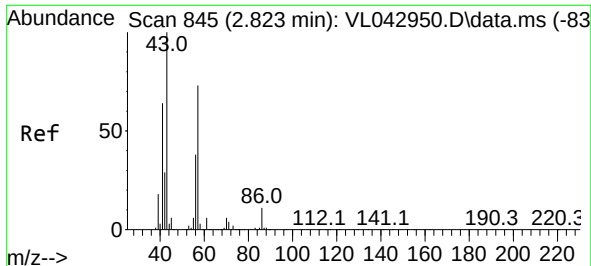


#20
Methylene Chloride
Concen: 4.730 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33



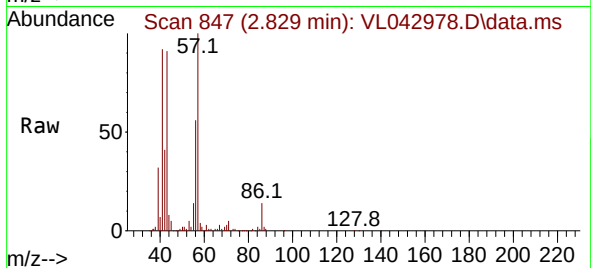
Tgt Ion: 84 Resp: 29189
Ion Ratio Lower Upper
84 100
49 165.4 124.1 186.1
51 48.5 39.8 59.8
86 65.6 50.9 76.3





#26
Hexane
Concen: 1.935 ppbv
RT: 2.829 min Scan# 845
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

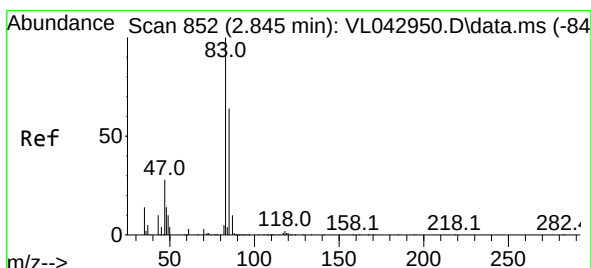
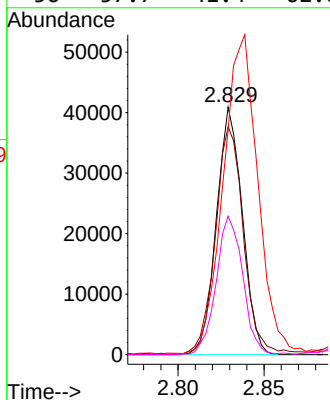
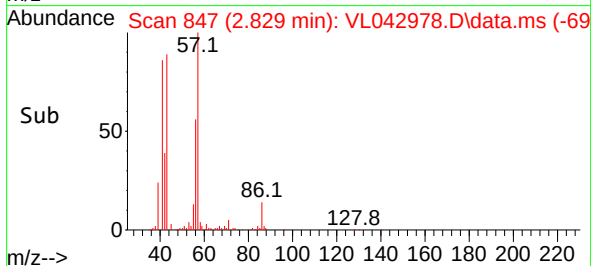
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 57 Resp: 42948
Ion Ratio Lower Upper
57 100
41 100.5 71.7 107.5
43 177.6 180.8 271.2
56 57.7 41.4 62.0

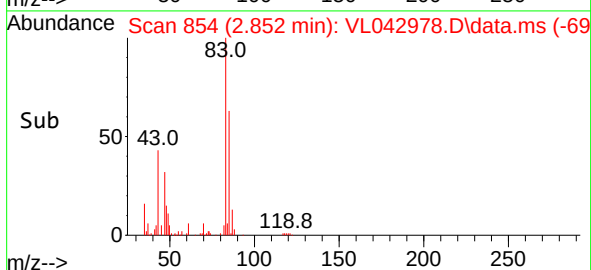
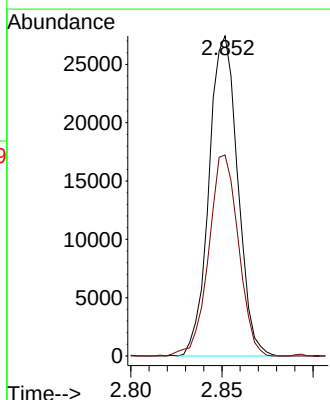
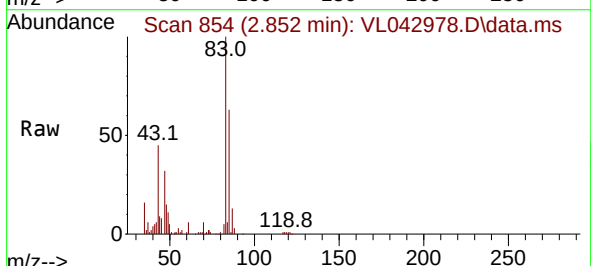
Manual Integrations
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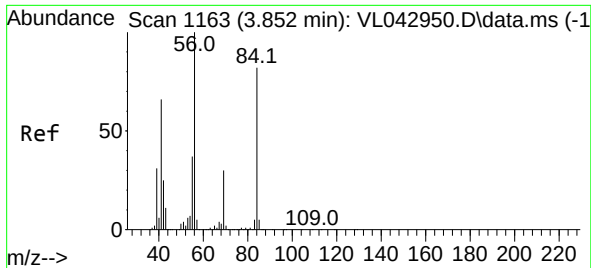
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#29
Chloroform
Concen: 1.036 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

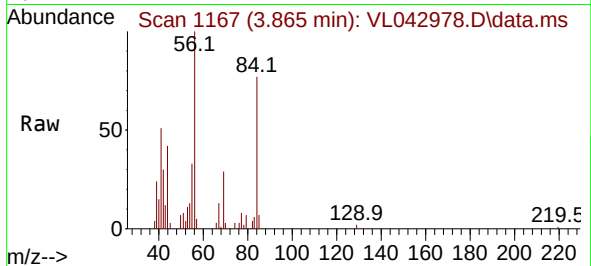
Tgt Ion: 83 Resp: 30052
Ion Ratio Lower Upper
83 100
85 62.8 51.2 76.8





#30
Cyclohexane
Concen: 0.300 ppbv m
RT: 3.865 min Scan# 1163
Delta R.T. 0.013 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

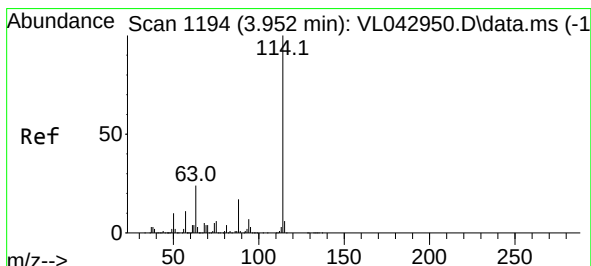
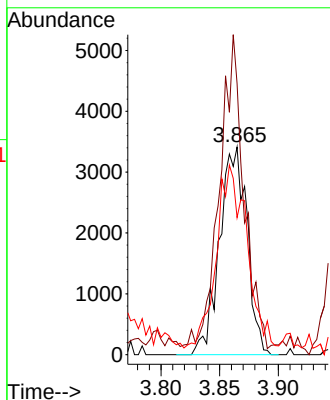
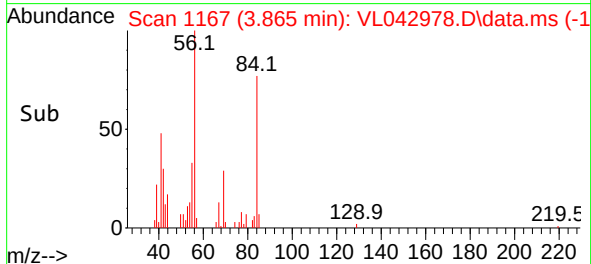
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 84 Resp: 5562
Ion Ratio Lower Upper
84 100
56 147.9 102.2 153.4
41 100.1 65.6 98.4

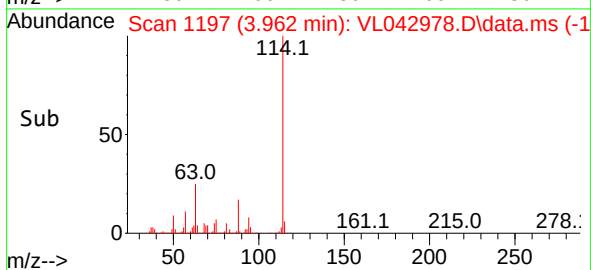
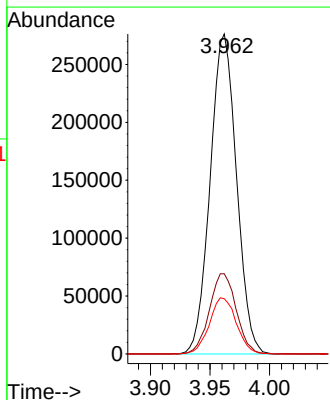
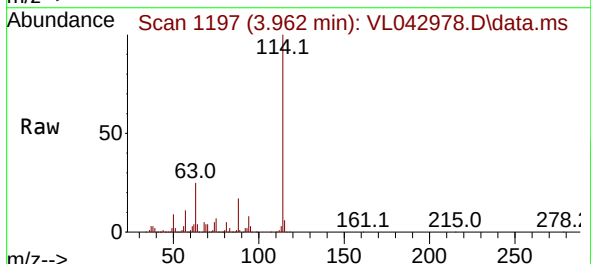
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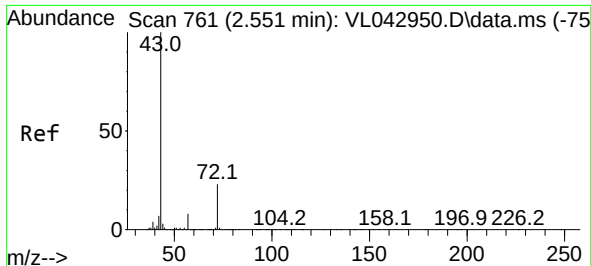
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

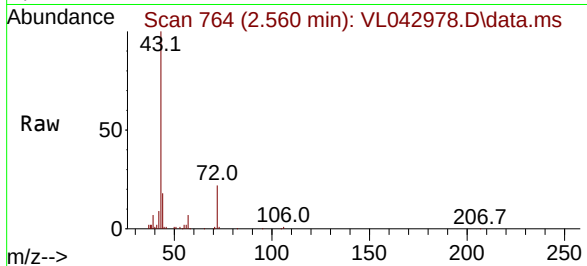
Tgt Ion:114 Resp: 425027
Ion Ratio Lower Upper
114 100
63 25.5 19.4 29.2
88 18.0 14.2 21.2





#34
2-Butanone
Concen: 0.697 ppbv
RT: 2.560 min Scan# 761
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

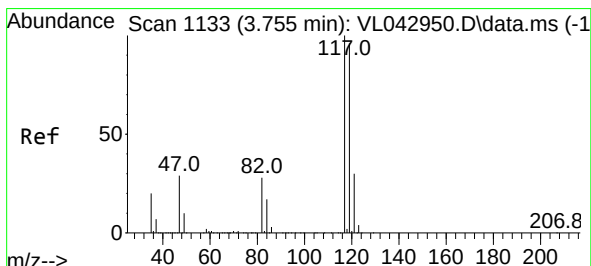
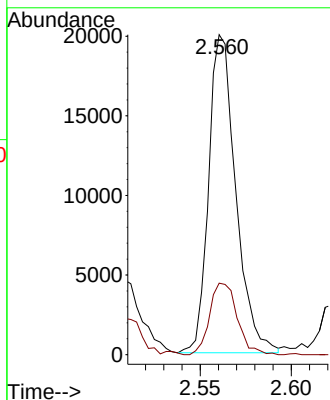
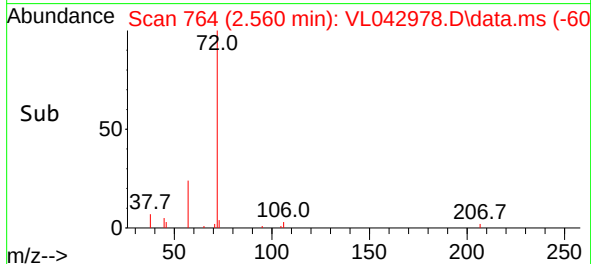
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 43 Resp: 20748
Ion Ratio Lower Upper
43 100
72 22.9 17.7 26.5

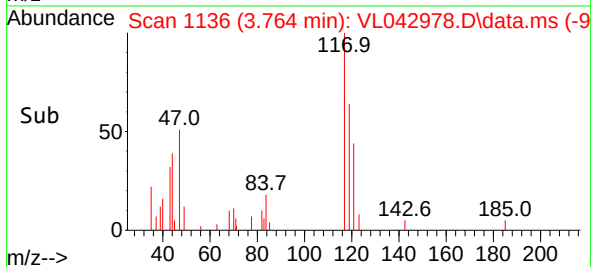
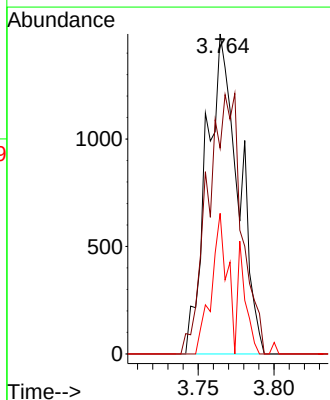
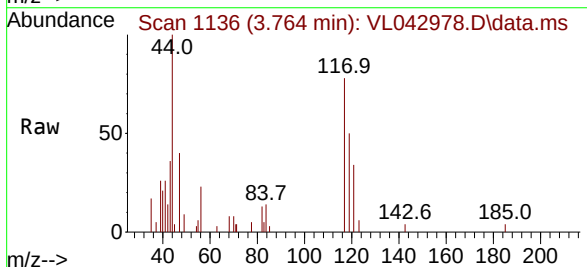
Manual Integrations
APPROVED

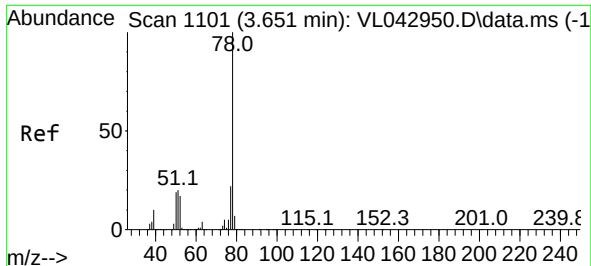
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 3.764 min Scan# 1136
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

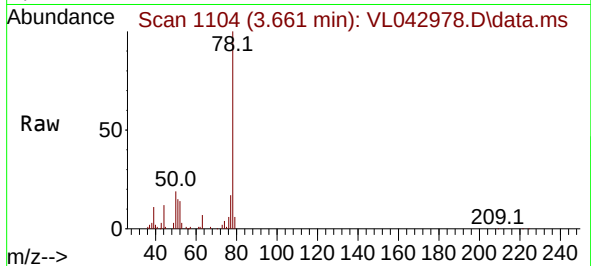
Tgt Ion:117 Resp: 2167
Ion Ratio Lower Upper
117 100
119 64.3 76.9 115.3#
121 43.9 23.7 35.5#





#36
Benzene
Concen: 0.528 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

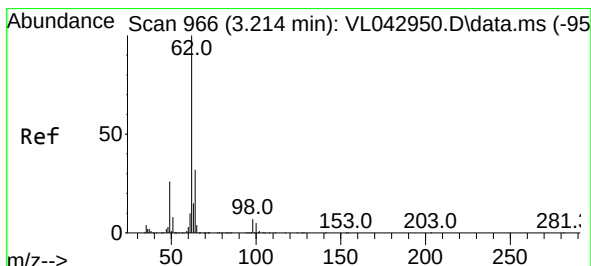
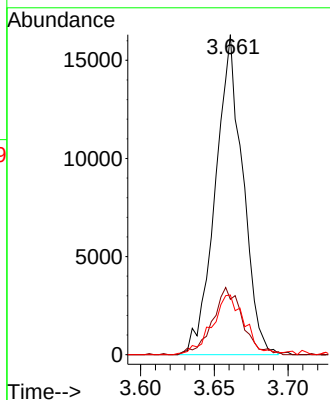
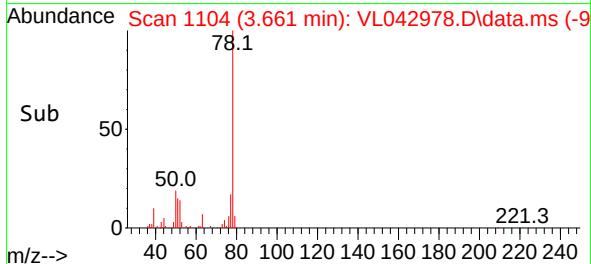
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



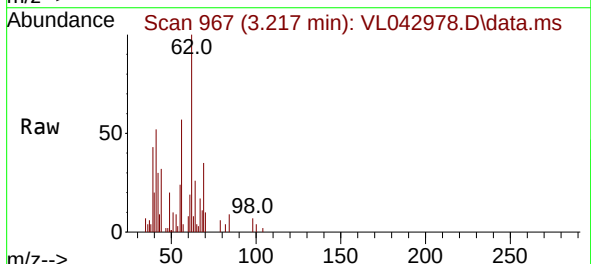
Tgt Ion: 78 Resp: 21072
Ion Ratio Lower Upper
78 100
77 17.4 17.8 26.6
50 18.3 15.0 22.4

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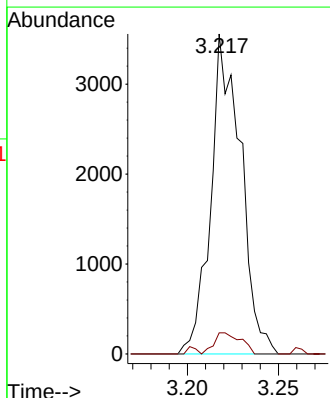
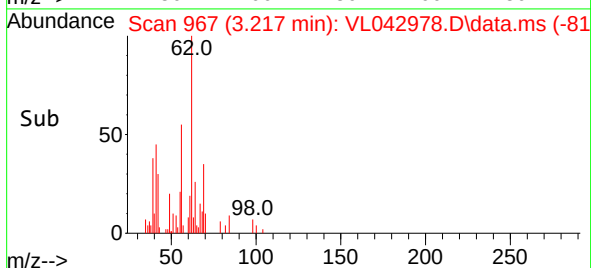
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

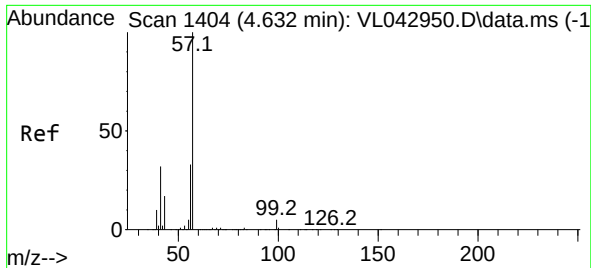


#37
1,2-Dichloroethane
Concen: 0.194 ppbv
RT: 3.217 min Scan# 967
Delta R.T. 0.003 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33



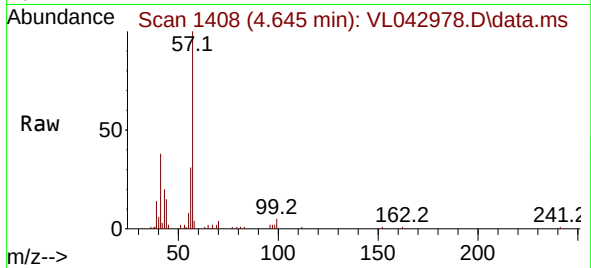
Tgt Ion: 62 Resp: 4072
Ion Ratio Lower Upper
62 100
98 6.6 5.9 8.9





#44
2,2,4-Trimethylpentane
Concen: 0.301 ppbv m
RT: 4.645 min Scan# 1404
Delta R.T. 0.013 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

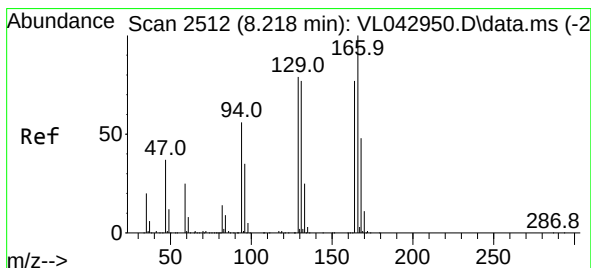
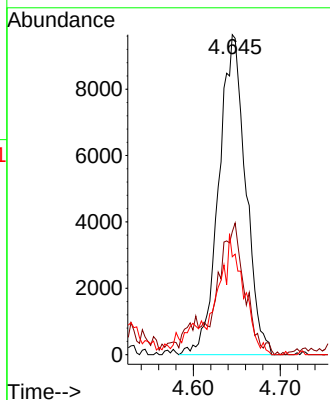
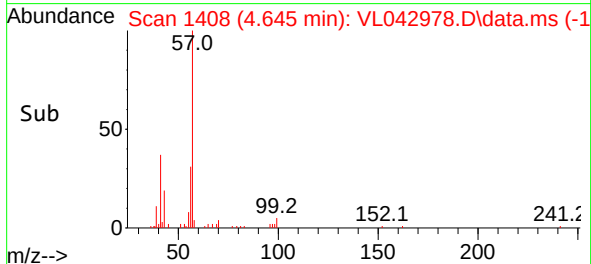
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 57 Resp: 20719
Ion Ratio Lower Upper
57 100
41 49.1 25.5 38.3
56 43.2 25.8 38.8

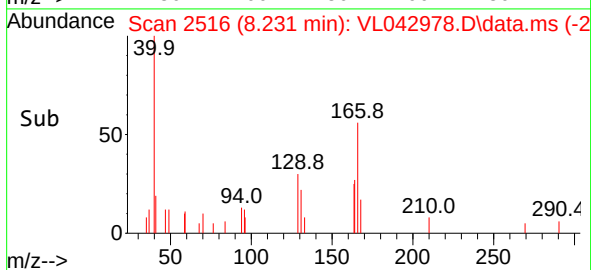
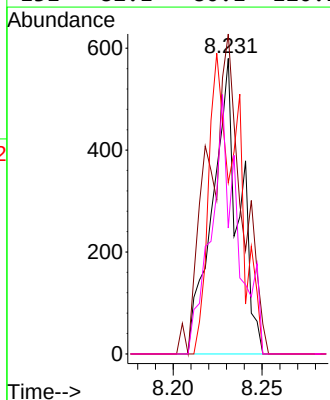
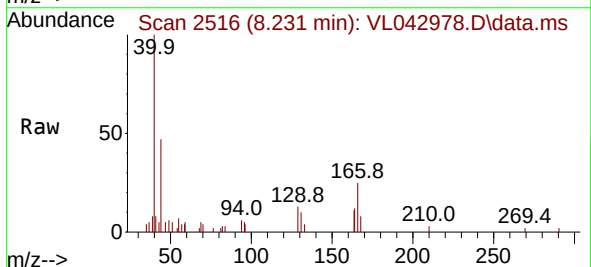
Manual Integrations
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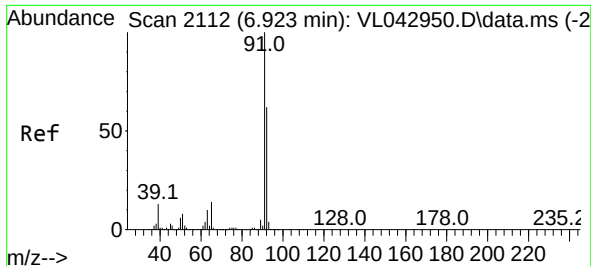
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#52
Tetrachloroethene
Concen: 0.039 ppbv m
RT: 8.231 min Scan# 2516
Delta R.T. 0.013 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

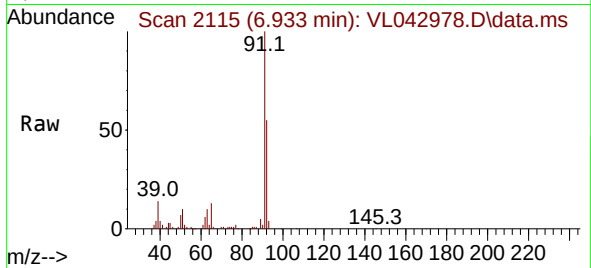
Tgt Ion:164 Resp: 605
Ion Ratio Lower Upper
164 100
166 208.6 103.5 155.3
129 111.6 82.2 123.4
131 82.1 80.1 120.1





#53
Toluene
Concen: 1.885 ppbv m
RT: 6.933 min Scan# 2112
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

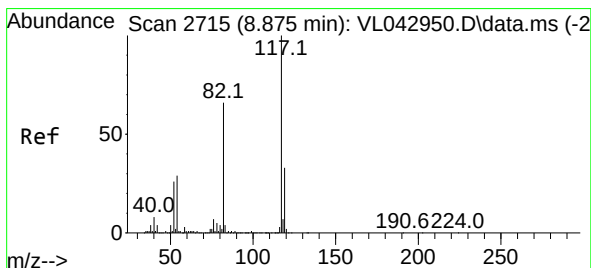
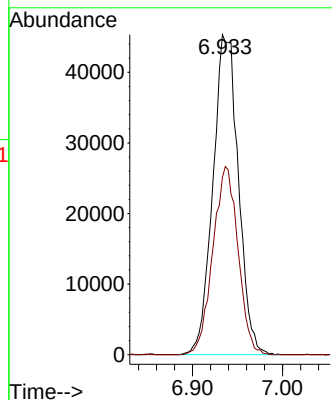
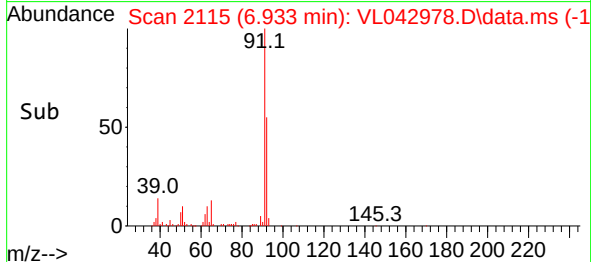
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



Tgt Ion: 91 Resp: 8903
Ion Ratio Lower Upper
91 100
92 58.1 48.2 72.2

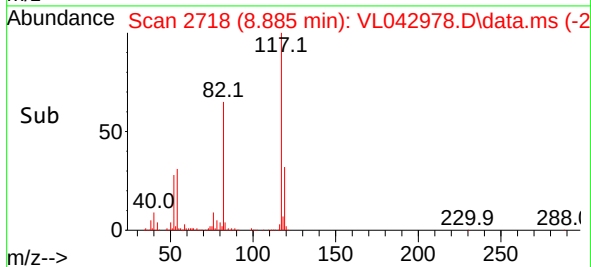
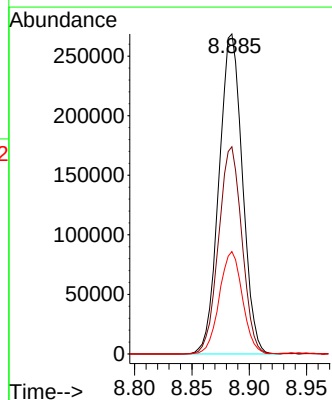
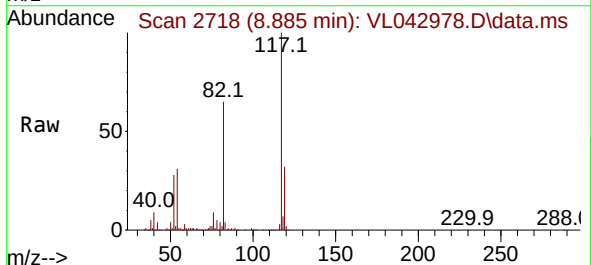
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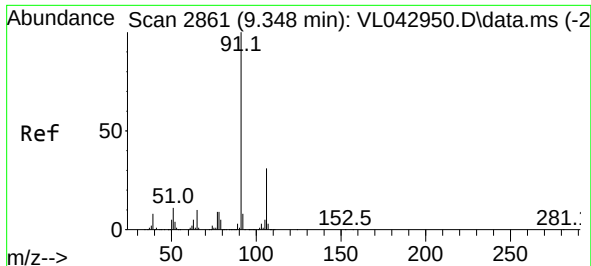
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

Tgt Ion:117 Resp: 381413
Ion Ratio Lower Upper
117 100
82 64.8 52.8 79.2
119 31.7 26.5 39.7





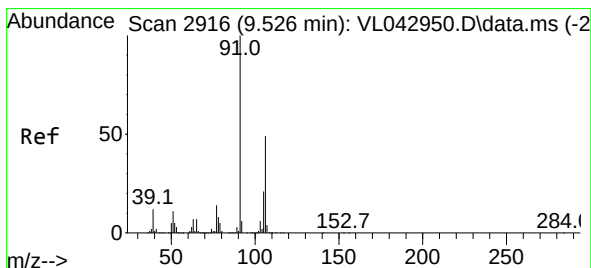
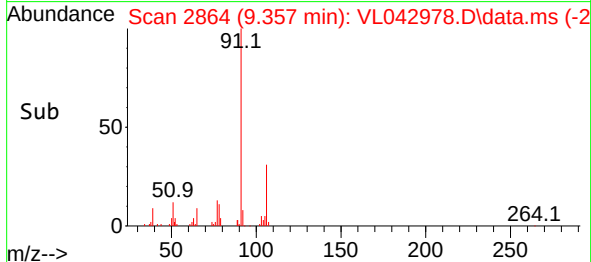
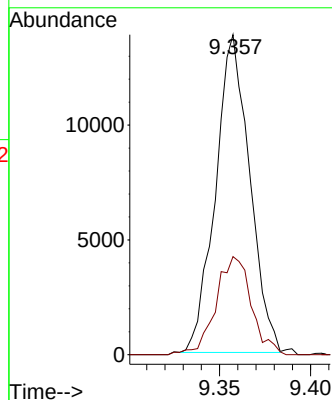
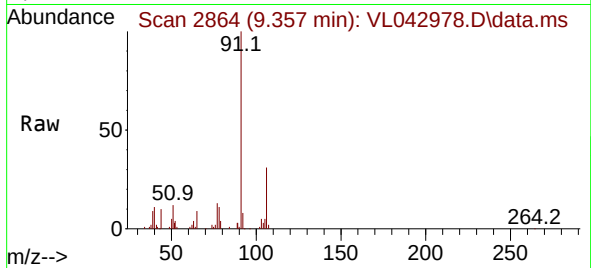
#58
Ethyl Benzene
Concen: 0.288 ppbv
RT: 9.357 min Scan# 2185
Delta R.T. 0.010 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

Instrument :
MSVOA_L
ClientSampleId :
151-1A-1

Tgt Ion: 91 Resp: 1805
Ion Ratio Lower Upper
91 100
106 30.1 24.6 37.0

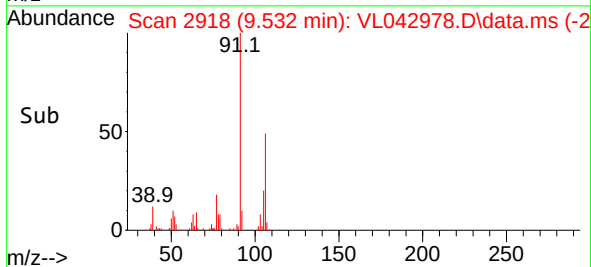
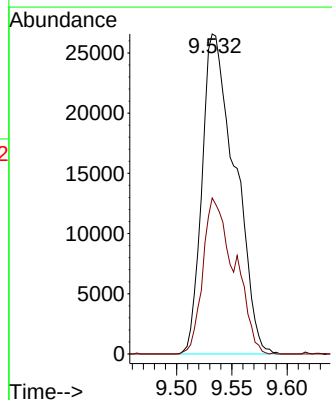
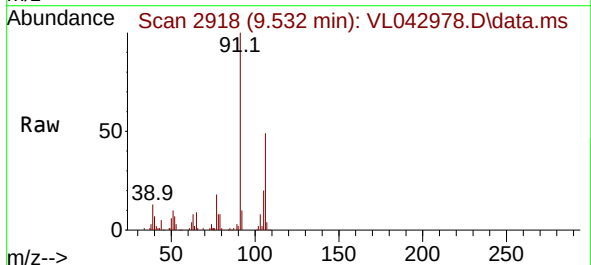
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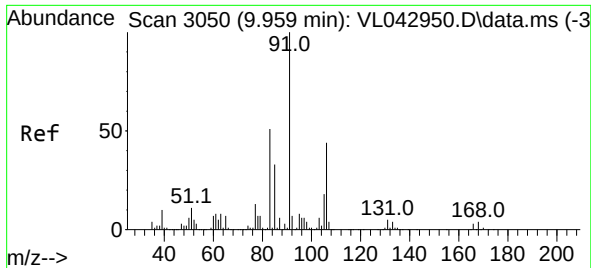
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#59
m/p-Xylene
Concen: 1.116 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

Tgt Ion: 91 Resp: 55110
Ion Ratio Lower Upper
91 100
106 46.7 0.0 0.0#





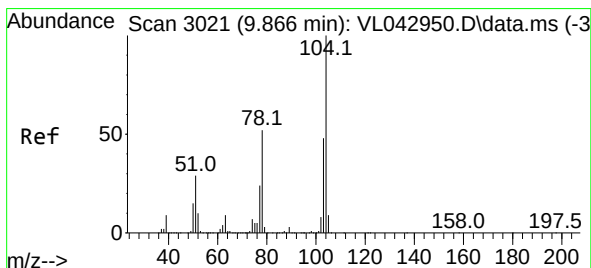
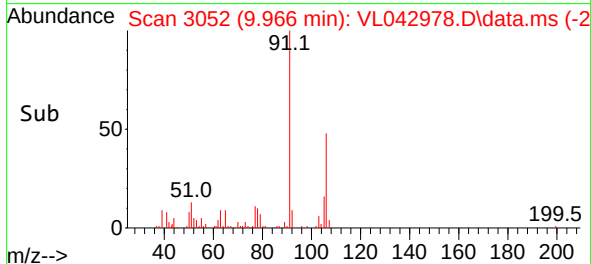
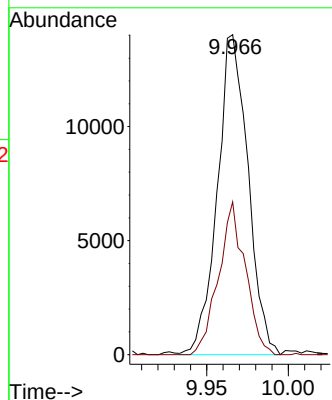
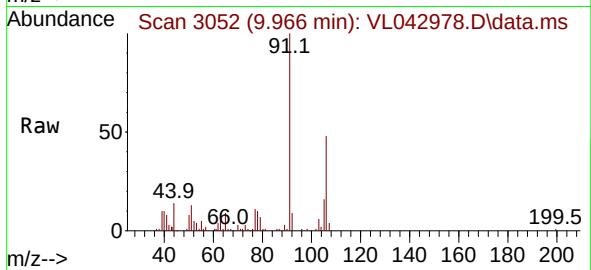
#60
o-Xylene
Concen: 0.371 ppbv
RT: 9.966 min Scan# 3050
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

Instrument :
MSVOA_L
ClientSampleId :
151-1A-1

Tgt Ion: 91 Resp: 1833
Ion Ratio Lower Upper
91 100
106 41.8 22.4 67.0

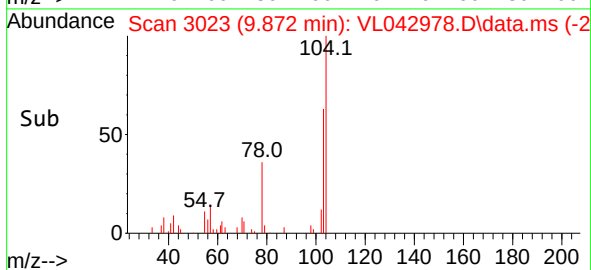
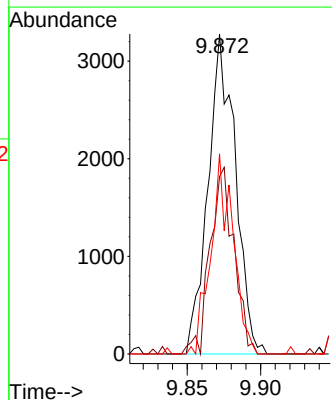
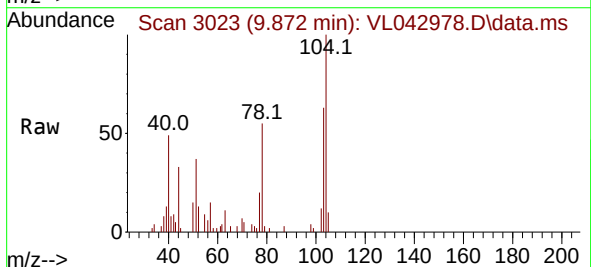
Manual Integrations
APPROVED

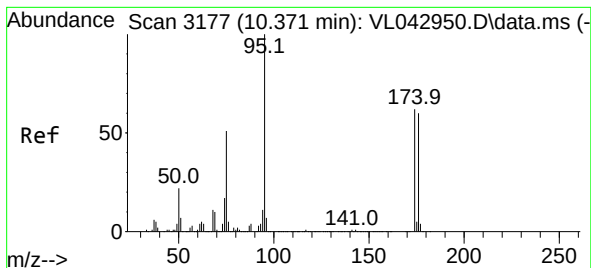
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#61
Styrene
Concen: 0.182 ppbv m
RT: 9.872 min Scan# 3023
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

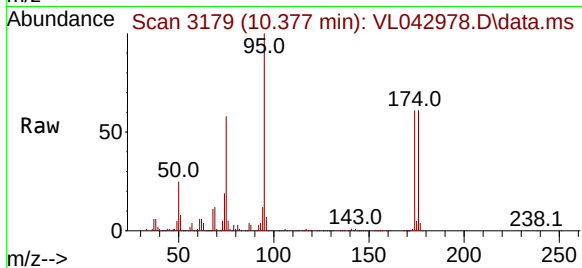
Tgt Ion:104 Resp: 4240
Ion Ratio Lower Upper
104 100
78 51.8 39.9 59.9
103 0.0 36.9 55.3#





#68
1-Bromo-4-Fluorobenzene
Concen: 10.277 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33

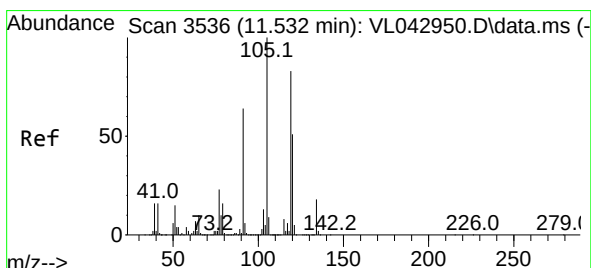
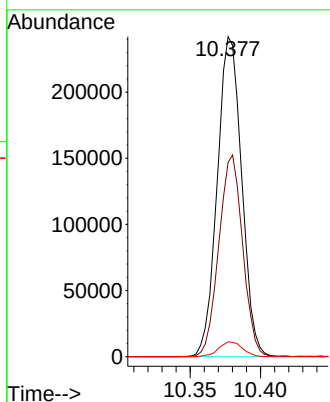
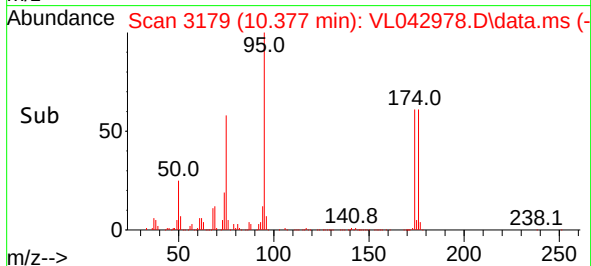
Instrument :
MSVOA_L
ClientSampleId :
151-1A-1



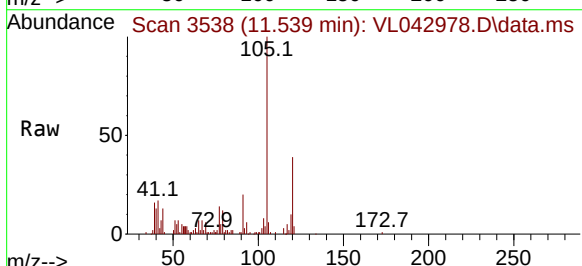
Tgt Ion: 95 Resp: 292609
Ion Ratio Lower Upper
95 100
174 61.5 51.4 77.2
175 4.5 4.0 6.0

Manual Integrations
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Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.259 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.006 min
Lab File: VL042978.D
Acq: 23 Sep 2025 03:33



Tgt Ion:105 Resp: 14343
Ion Ratio Lower Upper
105 100
120 39.0 40.9 61.3#
91 19.4 51.2 76.8#
77 12.8 18.4 27.6#

