

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042974.D
 Acq On : 23 Sep 2025 01:11
 Operator : SY/MD
 Sample : Q3131-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 141-1A-1

Manual Integrations
 APPROVED

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

Quant Time: Sep 24 01:12:51 2025

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

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

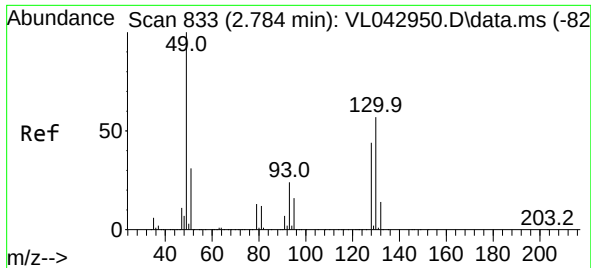
QLast Update : Tue Sep 23 02:39:16 2025

Response via : Initial Calibration

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

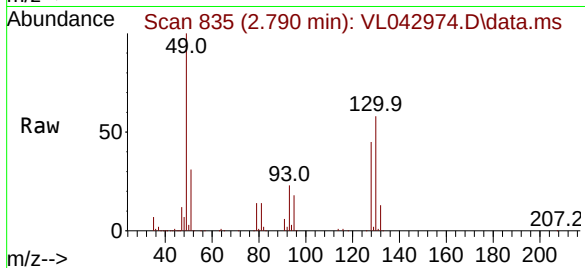
Internal Standards						
1) Bromochloromethane	2.790	49	144572	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	424417	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	377395	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	294613	10.458	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.600%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	66916	3.441	ppbv	97
3) Chlorodifluoromethane	1.476	51	5787m	0.239	ppbv	
4) Chloromethane	1.534	50	3662	0.416	ppbv	97
9) Propene	1.489	41	45403m	4.306	ppbv	
10) Heptane	4.985	43	11334m	0.403	ppbv	
11) Trichlorofluoromethane	1.881	101	7357	0.392	ppbv	93
13) Ethanol	1.722	45	127657	124.813	ppbv	96
15) Acetone	1.835	43	334321m	17.755	ppbv	
17) tert-Butyl alcohol	2.046	59	5337	0.258	ppbv #	72
19) Isopropyl Alcohol	1.887	45	23221	2.051	ppbv #	1
20) Methylene Chloride	2.065	84	14219	1.997	ppbv	95
26) Hexane	2.829	57	140710	6.486	ppbv #	43
29) Chloroform	2.855	83	3737	0.132	ppbv	94
30) Cyclohexane	3.865	84	9104m	0.502	ppbv	
34) 2-Butanone	2.560	43	44238	1.487	ppbv	99
35) Carbon Tetrachloride	3.771	117	2523m	0.091	ppbv	
36) Benzene	3.661	78	26130	0.656	ppbv #	95
37) 1,2-Dichloroethane	3.224	62	4122m	0.197	ppbv	
41) Tetrahydrofuran	3.065	42	6951	0.407	ppbv #	80
44) 2,2,4-Trimethylpentane	4.648	57	77020	1.119	ppbv #	88
50) 4-Methyl-2-Pentanone	5.778	43	10779m	0.270	ppbv	
51) 2-Hexanone	7.451	43	8807m	0.277	ppbv	
53) Toluene	6.940	91	87271	1.850	ppbv	97
58) Ethyl Benzene	9.357	91	24797	0.400	ppbv	91
59) m/p-Xylene	9.535	91	75106	1.537	ppbv #	100
60) o-Xylene	9.969	91	26261	0.538	ppbv	96
61) Styrene	9.875	104	5433	0.235	ppbv	99
73) 1,3,5-Trimethylbenzene	11.209	105	5102	0.103	ppbv	90
74) 1,2,4-Trimethylbenzene	11.536	105	15880	0.290	ppbv #	62
79) Naphthalene	13.513	128	5520	0.114	ppbv #	95

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



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 835
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

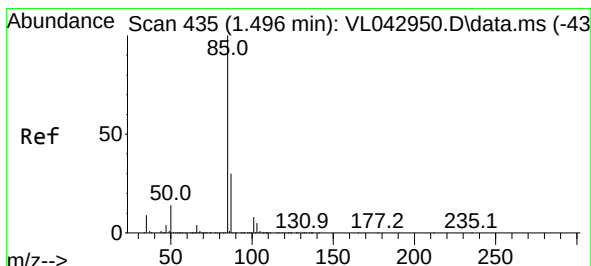
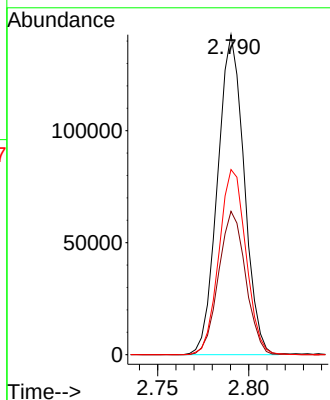
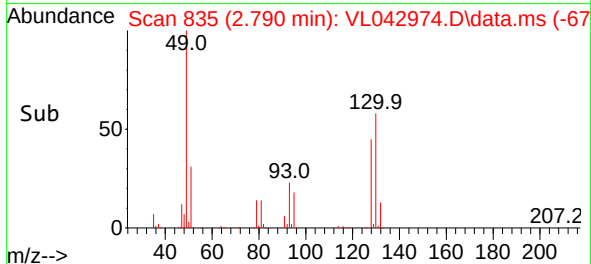
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



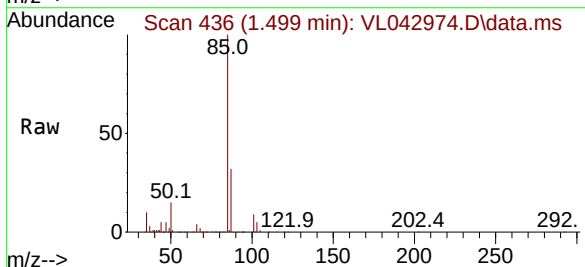
Tgt Ion: 49 Resp: 144572
Ion Ratio Lower Upper
49 100
128 45.6 22.9 68.8
130 58.9 29.1 87.3

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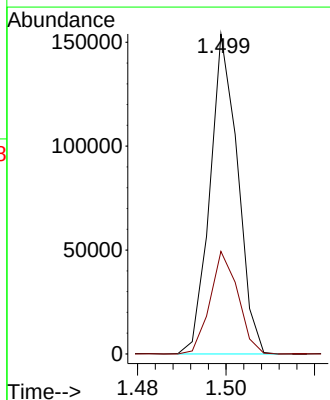
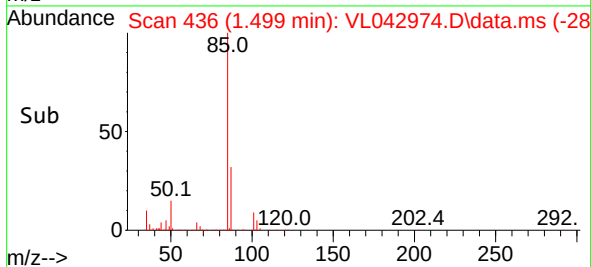
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

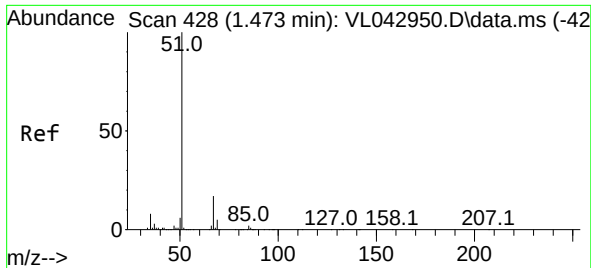


#2
Dichlorodifluoromethane
Concen: 3.441 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



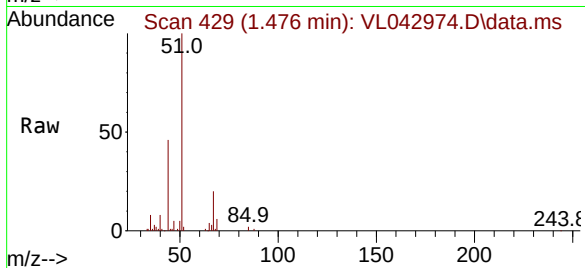
Tgt Ion: 85 Resp: 66916
Ion Ratio Lower Upper
85 100
87 32.1 24.3 36.5





#3
Chlorodifluoromethane
Concen: 0.239 ppbv m
RT: 1.476 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

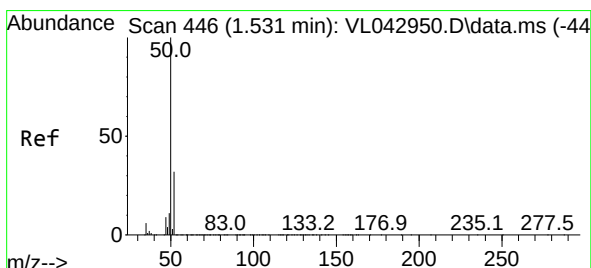
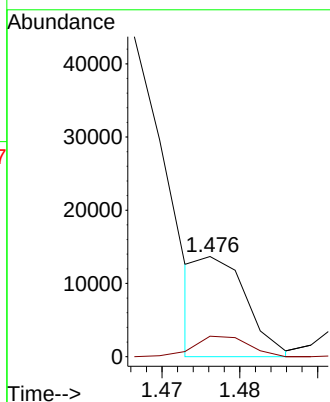
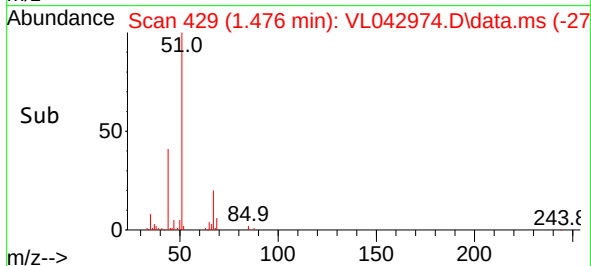
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



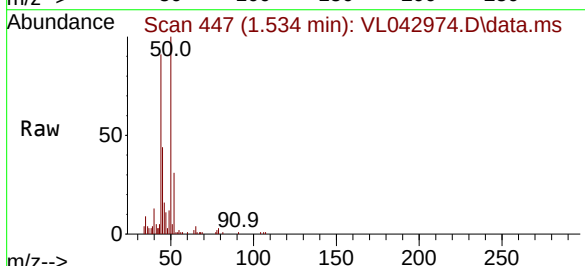
Tgt Ion: 51 Resp: 578
Ion Ratio Lower Upper
51 100
67 24.1 13.8 20.8

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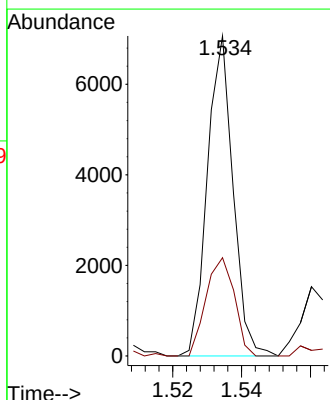
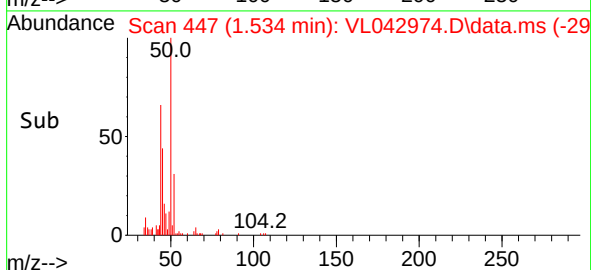
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

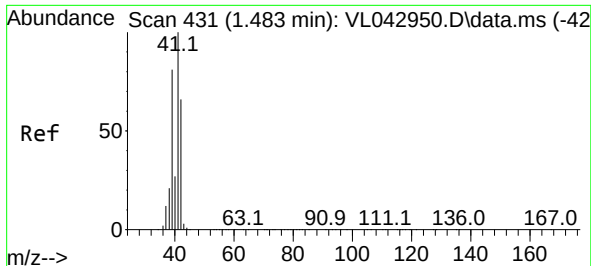


#4
Chloromethane
Concen: 0.416 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



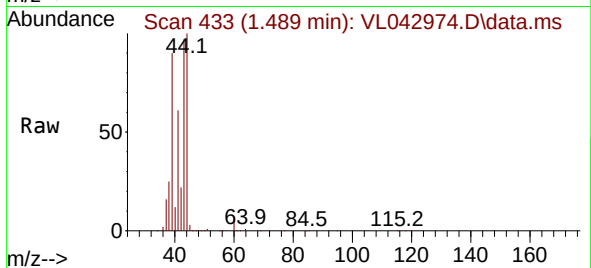
Tgt Ion: 50 Resp: 3662
Ion Ratio Lower Upper
50 100
52 30.7 25.9 38.9





#9
 Propene
 Concen: 4.306 ppbv m
 RT: 1.489 min Scan# 41
 Delta R.T. 0.006 min
 Lab File: VL042974.D
 Acq: 23 Sep 2025 01:11

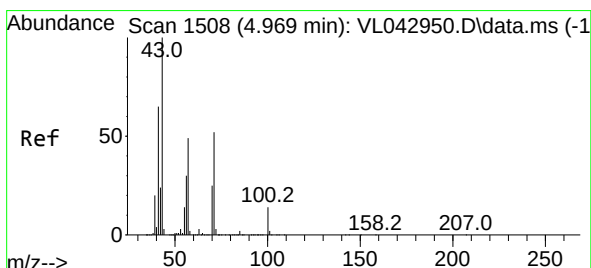
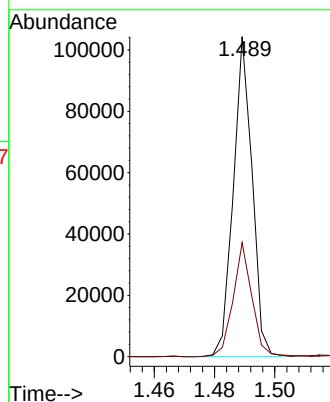
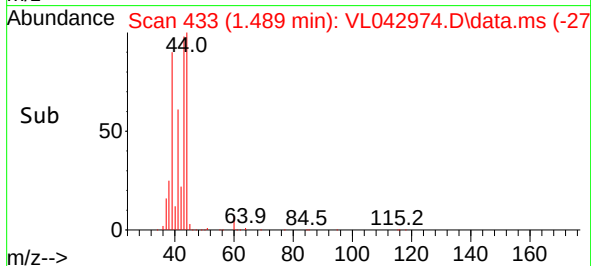
Instrument :
 MSVOA_L
 ClientSampleId :
 141-1A-1



Tgt Ion: 41 Resp: 4540
 Ion Ratio Lower Upper
 41 100
 42 40.0 57.4 86.2

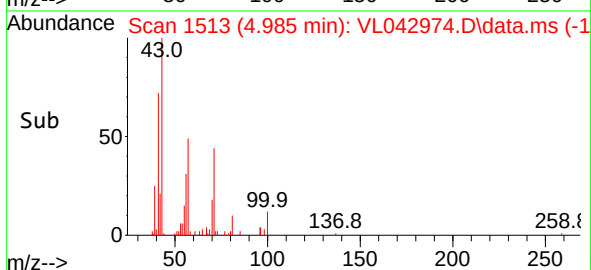
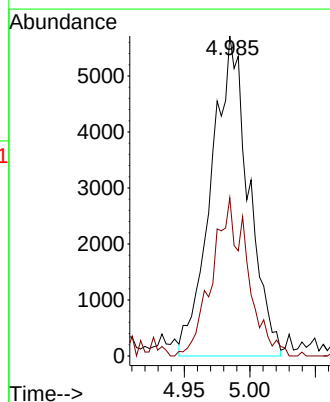
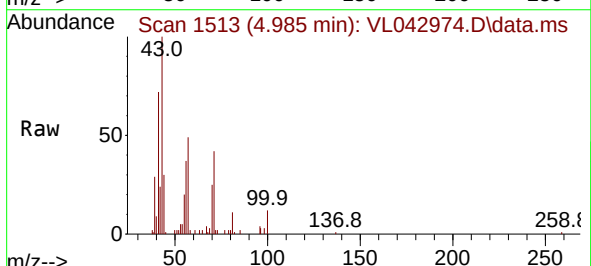
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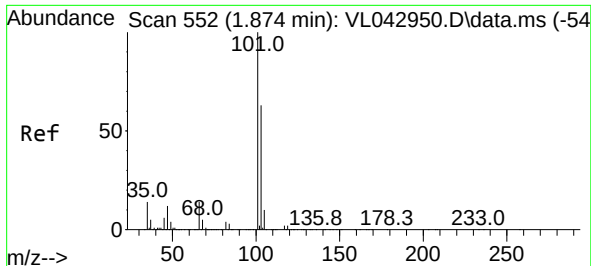
Reviewed By :Mahesh Dadoda 09/24/2025
 Supervised By :Semsettin Yesilyurt 09/24/2025



#10
 Heptane
 Concen: 0.403 ppbv m
 RT: 4.985 min Scan# 1513
 Delta R.T. 0.016 min
 Lab File: VL042974.D
 Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 11334
 Ion Ratio Lower Upper
 43 100
 57 0.0 38.6 57.8





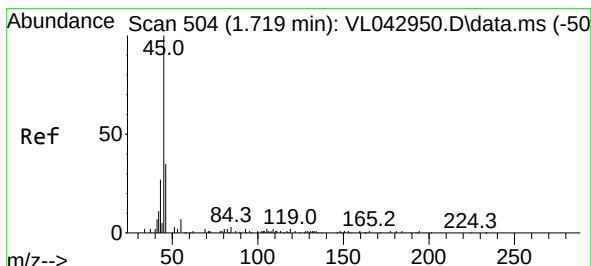
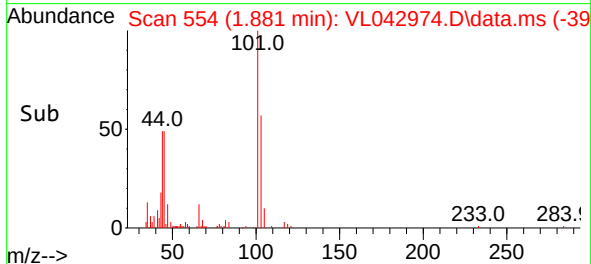
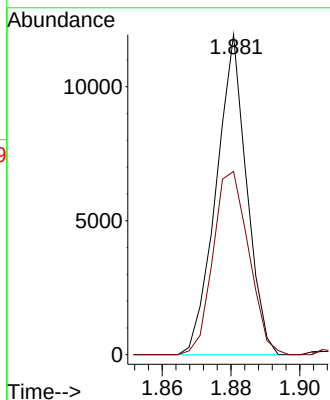
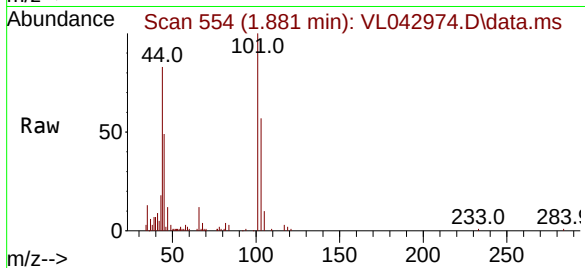
#11
 Trichlorofluoromethane
 Concen: 0.392 ppbv
 RT: 1.881 min Scan# 505
 Delta R.T. 0.006 min
 Lab File: VL042974.D
 Acq: 23 Sep 2025 01:11

Instrument :
 MSVOA_L
 ClientSampleId :
 141-1A-1

Tgt Ion:101 Resp: 735
 Ion Ratio Lower Upper
 101 100
 103 57.3 50.1 75.1

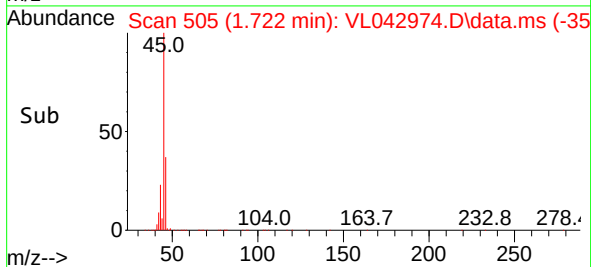
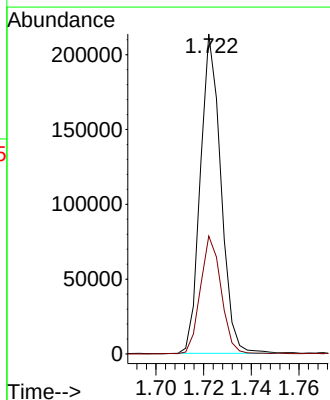
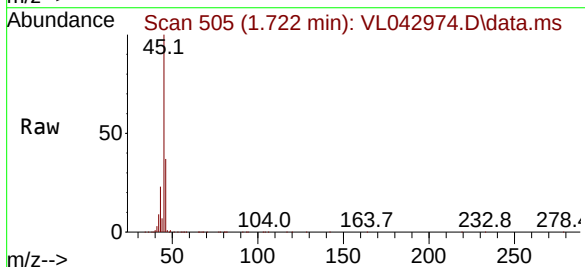
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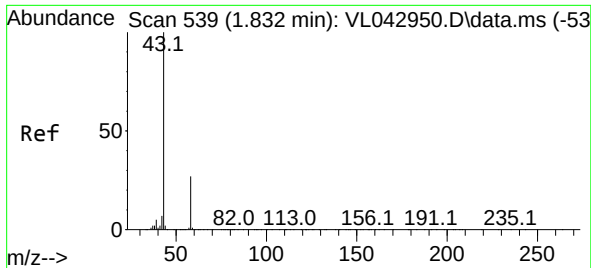
Reviewed By :Mahesh Dadoda 09/24/2025
 Supervised By :Semsettin Yesilyurt 09/24/2025



#13
 Ethanol
 Concen: 124.813 ppbv
 RT: 1.722 min Scan# 505
 Delta R.T. 0.003 min
 Lab File: VL042974.D
 Acq: 23 Sep 2025 01:11

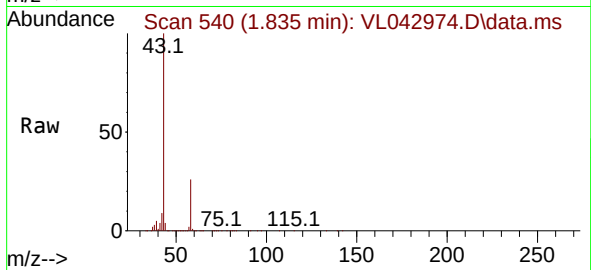
Tgt Ion: 45 Resp: 127657
 Ion Ratio Lower Upper
 45 100
 46 38.1 16.2 64.6





#15
Acetone
Concen: 17.755 ppbv m
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

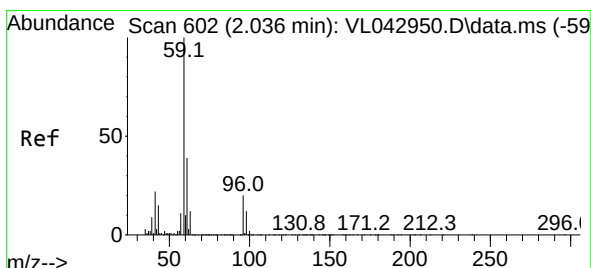
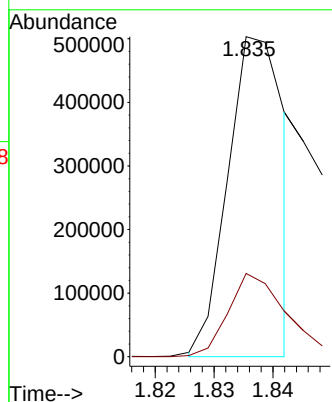
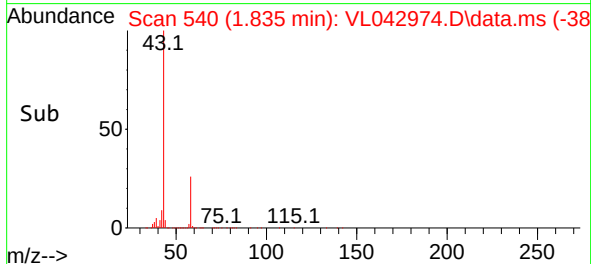
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Tgt Ion: 43 Resp: 33432
Ion Ratio Lower Upper
43 100
58 27.1 22.3 33.5

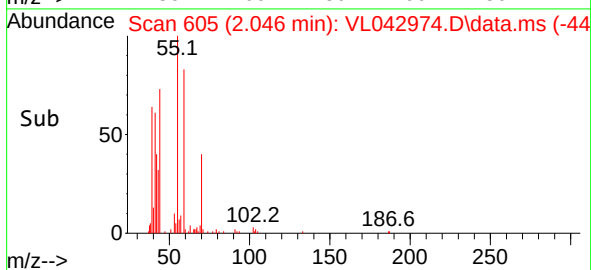
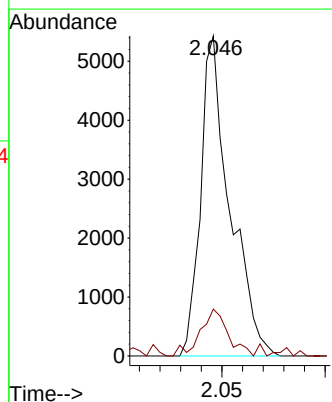
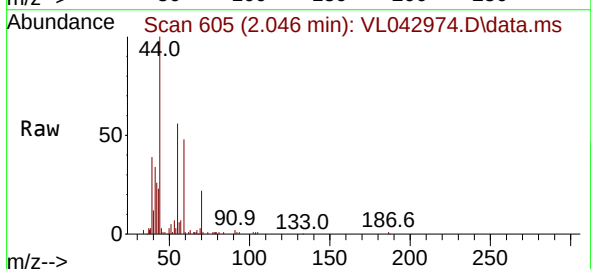
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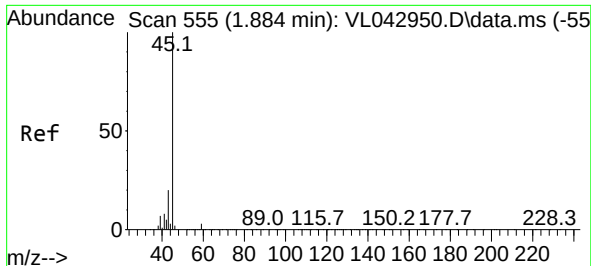
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#17
tert-Butyl alcohol
Concen: 0.258 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

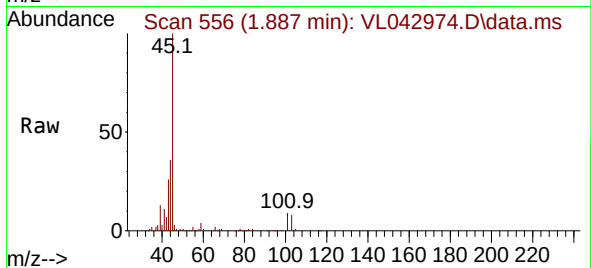
Tgt Ion: 59 Resp: 5337
Ion Ratio Lower Upper
59 100
57 0.0 8.6 12.8#





#19
Isopropyl Alcohol
Concen: 2.051 ppbv
RT: 1.887 min Scan# 511
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

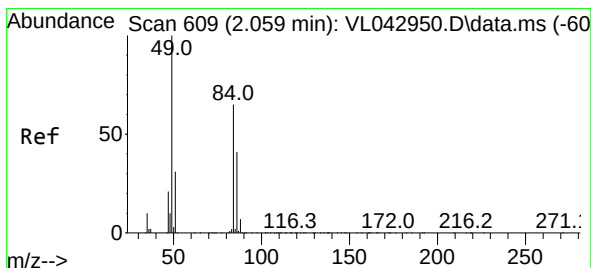
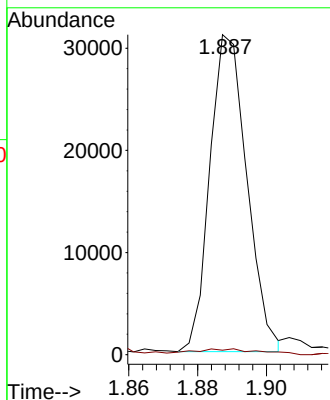
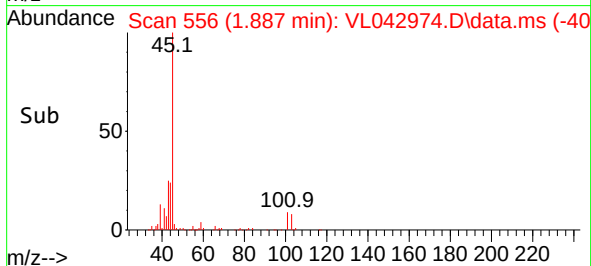
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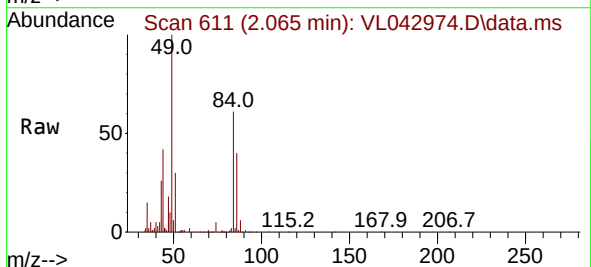
Tgt Ion: 45 Resp: 2322
Ion Ratio Lower Upper
45 100
58 392.1 31.0 46.6

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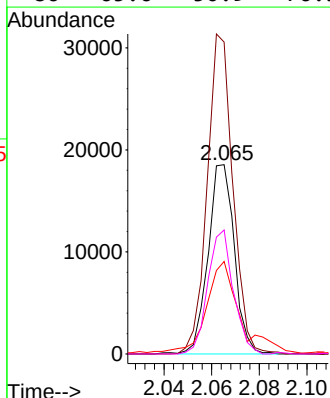
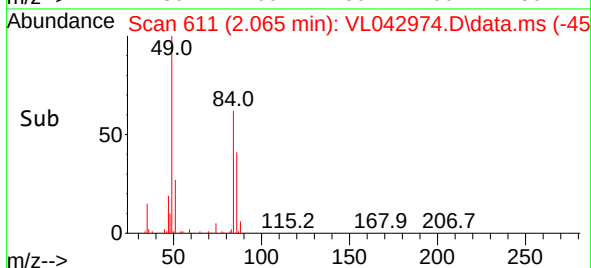
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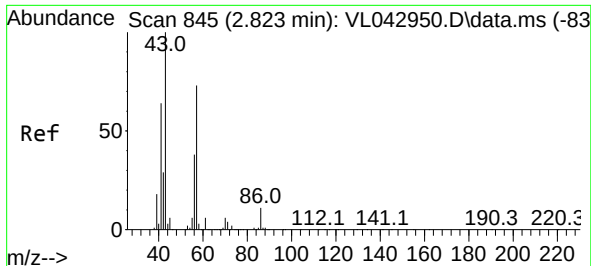


#20
Methylene Chloride
Concen: 1.997 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



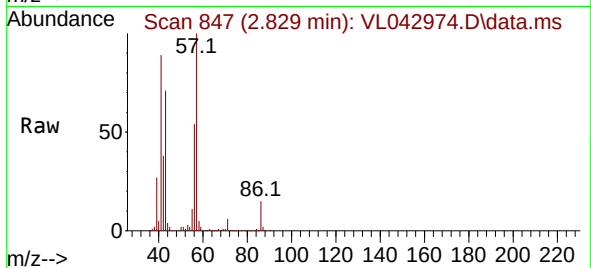
Tgt Ion: 84 Resp: 14219
Ion Ratio Lower Upper
84 100
49 163.8 124.1 186.1
51 46.0 39.8 59.8
86 65.6 50.9 76.3





#26
Hexane
Concen: 6.486 ppbv
RT: 2.829 min Scan# 845
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

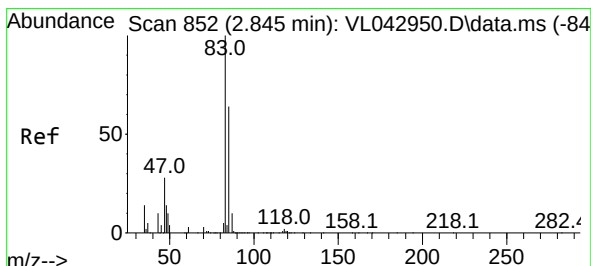
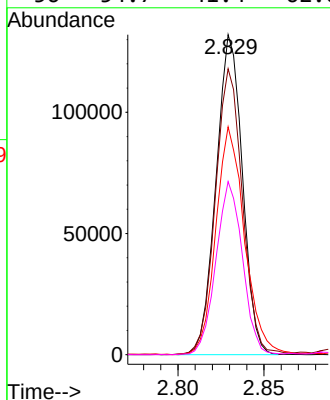
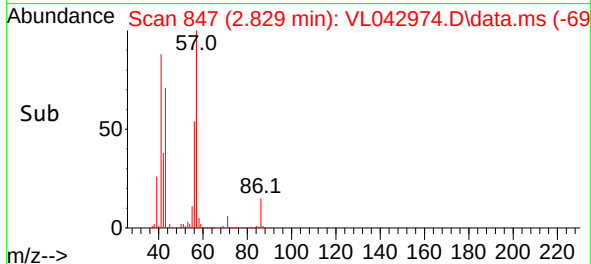
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



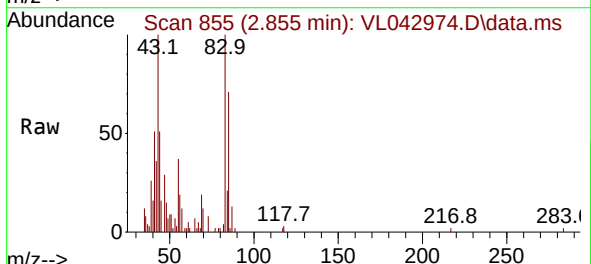
Tgt Ion: 57 Resp: 140710
Ion Ratio Lower Upper
57 100
41 91.9 71.7 107.5
43 77.9 180.8 271.2
56 54.7 41.4 62.0

Manual Integrations
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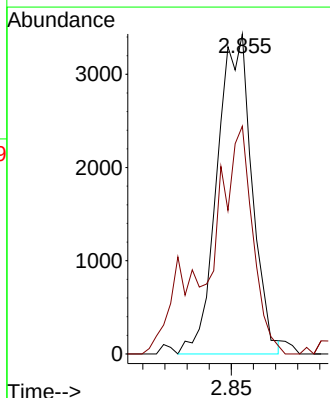
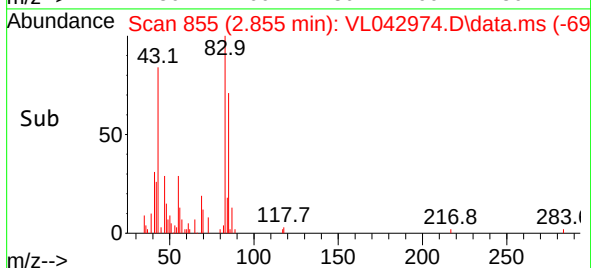
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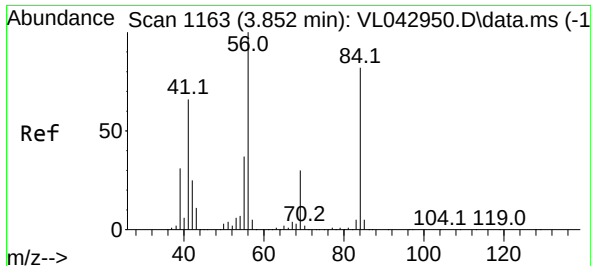


#29
Chloroform
Concen: 0.132 ppbv
RT: 2.855 min Scan# 855
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



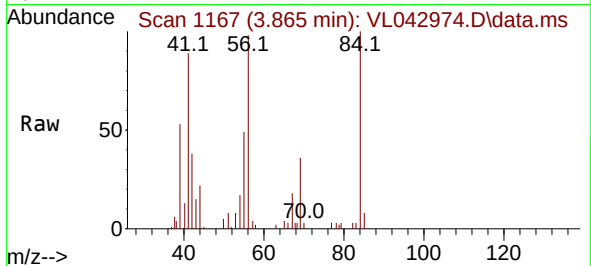
Tgt Ion: 83 Resp: 3737
Ion Ratio Lower Upper
83 100
85 68.6 51.2 76.8





#30
Cyclohexane
Concen: 0.502 ppbv m
RT: 3.865 min Scan# 1163
Delta R.T. 0.013 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

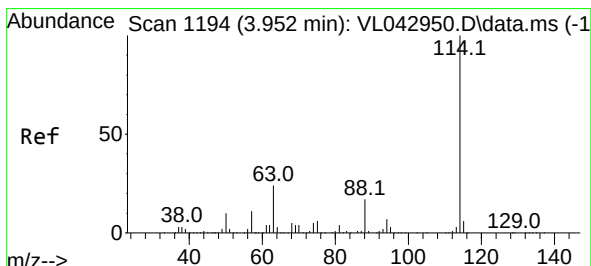
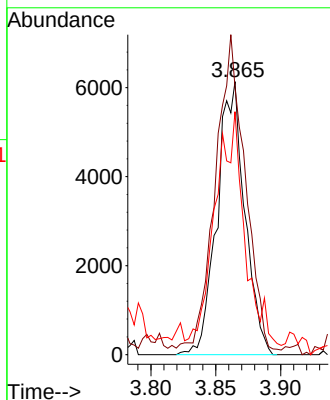
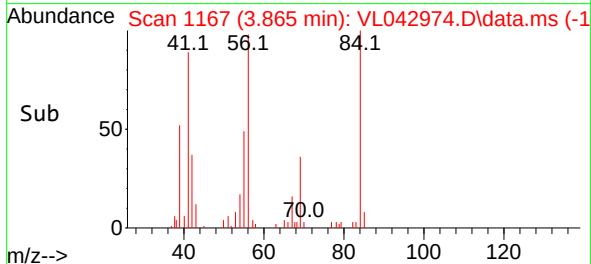
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



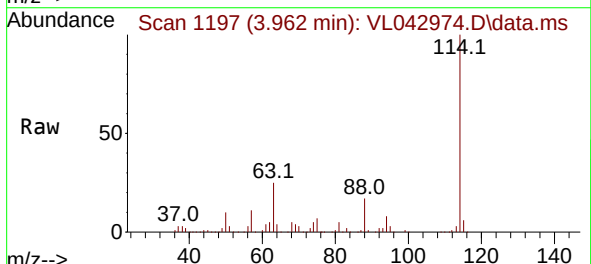
Tgt Ion: 84 Resp: 9104
Ion Ratio Lower Upper
84 100
56 0.0 102.2 153.4
41 0.0 65.6 98.4

Manual Integrations
APPROVED

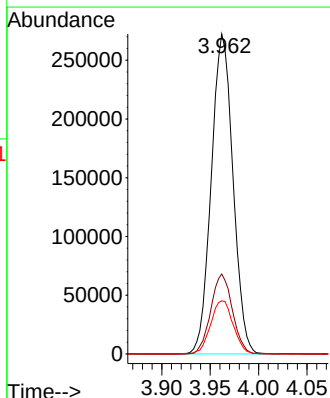
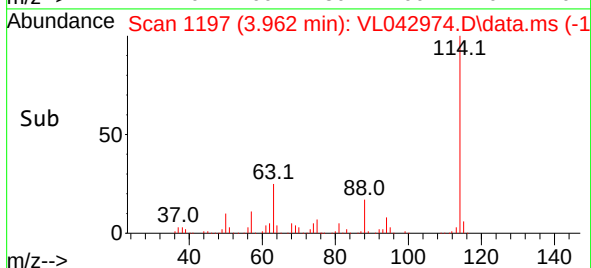
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

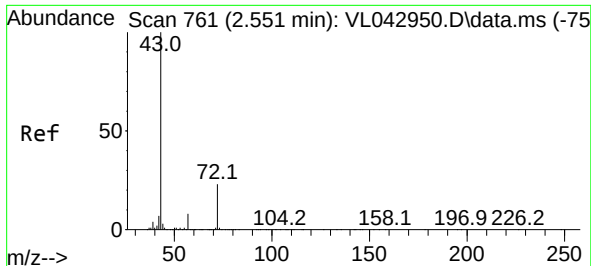


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



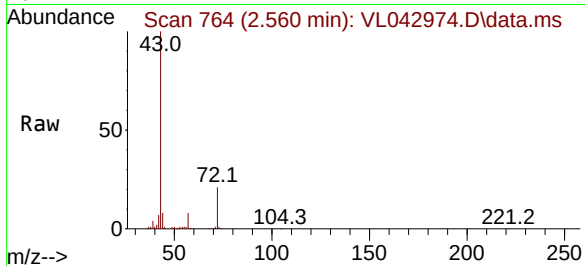
Tgt Ion:114 Resp: 424417
Ion Ratio Lower Upper
114 100
63 24.9 19.4 29.2
88 17.3 14.2 21.2





#34
2-Butanone
Concen: 1.487 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

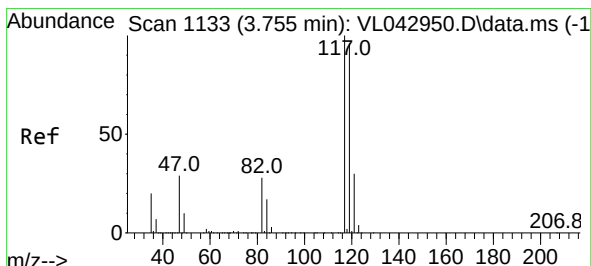
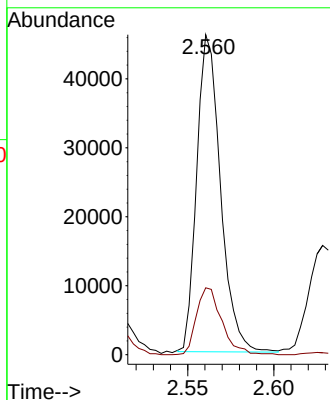
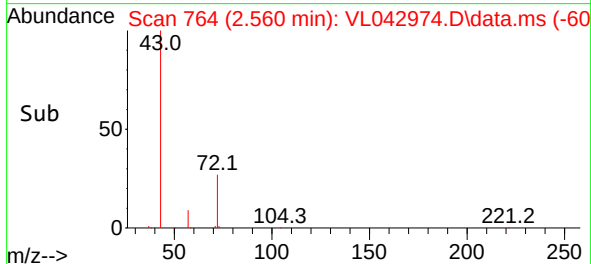
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



Tgt Ion: 43 Resp: 44238
Ion Ratio Lower Upper
43 100
72 22.4 17.7 26.5

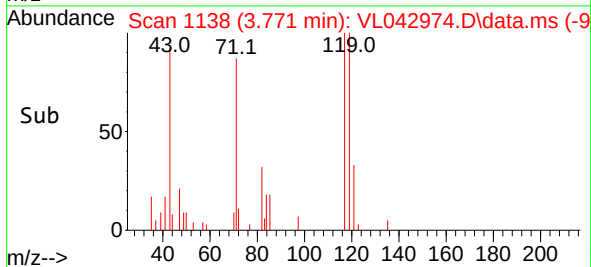
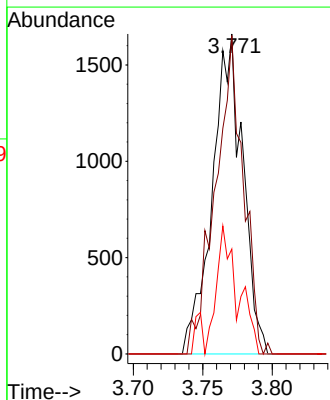
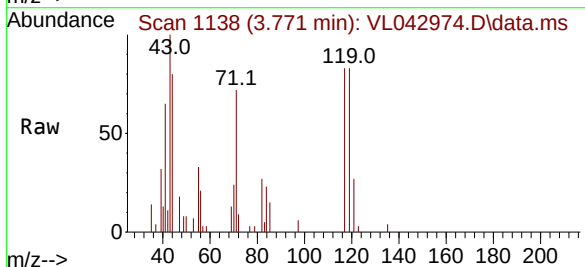
Manual Integrations
APPROVED

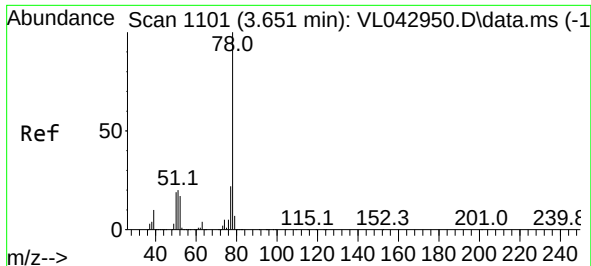
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#35
Carbon Tetrachloride
Concen: 0.091 ppbv m
RT: 3.771 min Scan# 1138
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

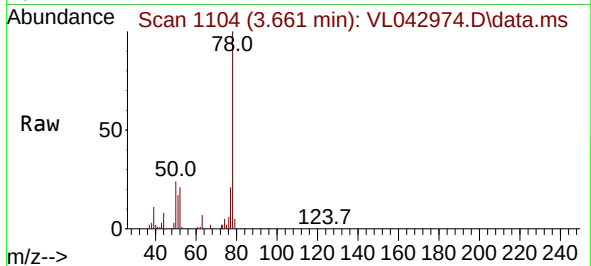
Tgt Ion:117 Resp: 2523
Ion Ratio Lower Upper
117 100
119 99.5 76.9 115.3
121 32.8 23.7 35.5





#36
Benzene
Concen: 0.656 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

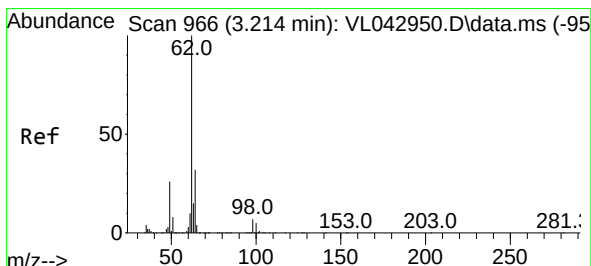
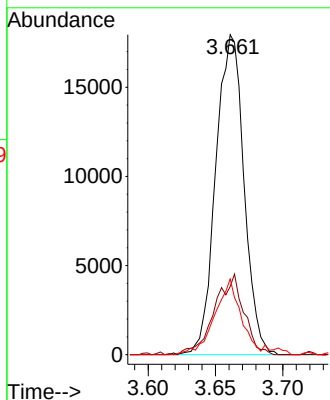
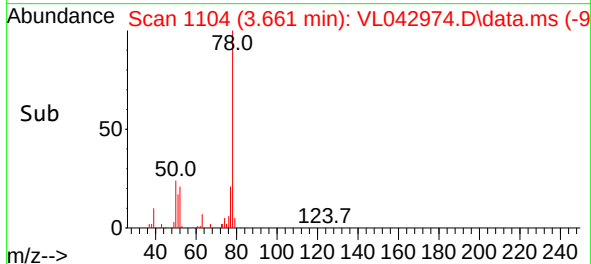
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



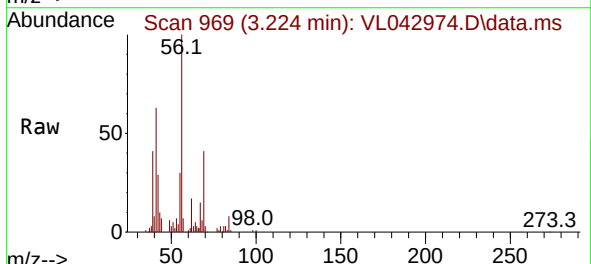
Tgt Ion: 78 Resp: 26130
Ion Ratio Lower Upper
78 100
77 21.3 17.8 26.6
50 22.6 15.0 22.4

Manual Integrations
APPROVED

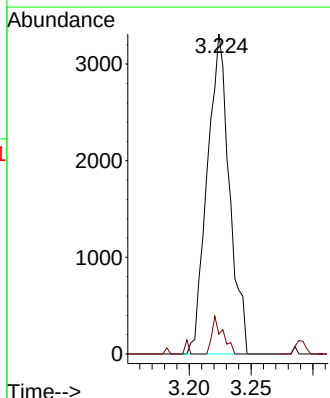
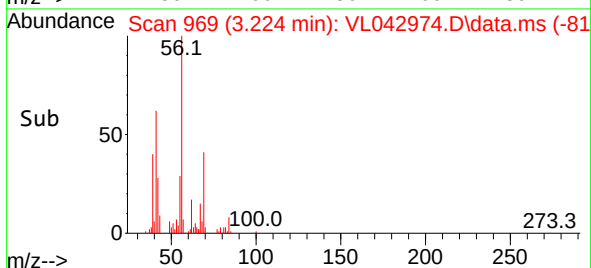
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

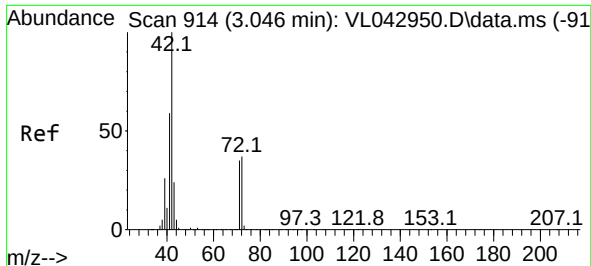


#37
1,2-Dichloroethane
Concen: 0.197 ppbv m
RT: 3.224 min Scan# 969
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



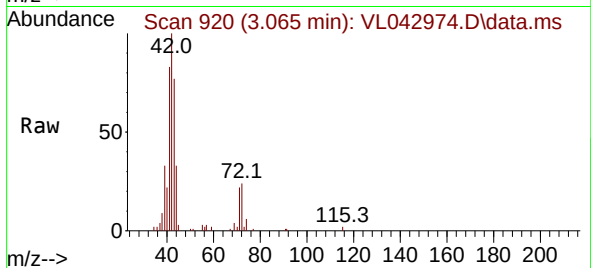
Tgt Ion: 62 Resp: 4122
Ion Ratio Lower Upper
62 100
98 6.7 5.9 8.9





#41
Tetrahydrofuran
Concen: 0.407 ppbv
RT: 3.065 min Scan# 914
Delta R.T. 0.019 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

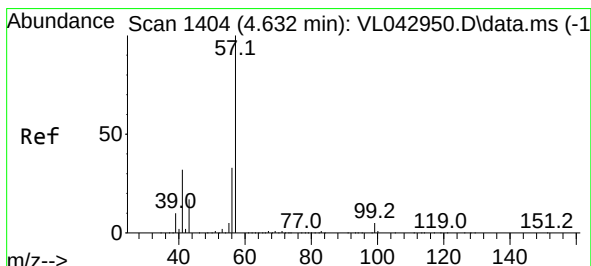
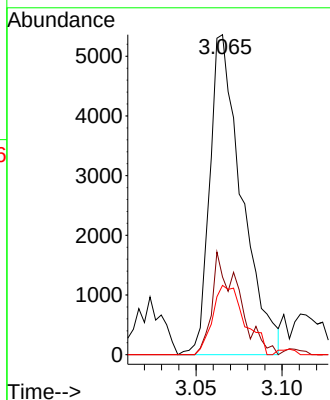
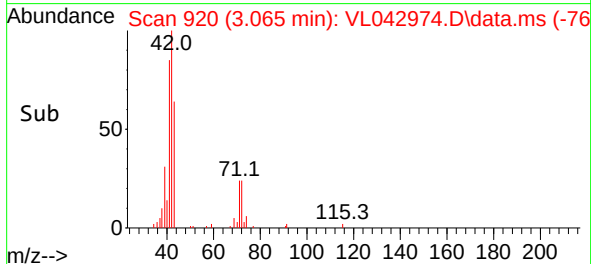
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



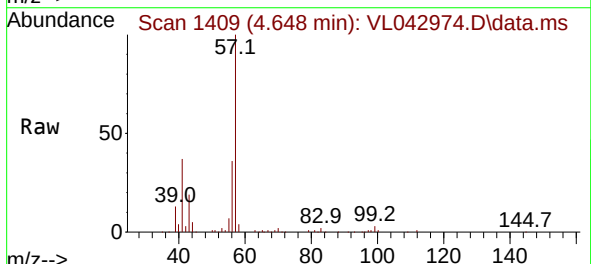
Tgt Ion: 42 Resp: 695
Ion Ratio Lower Upper
42 100
72 27.6 30.0 45.0
71 22.4 28.8 43.2

Manual Integrations
APPROVED

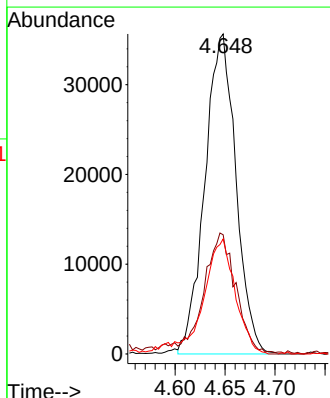
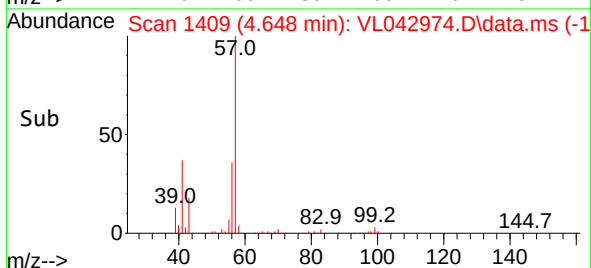
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

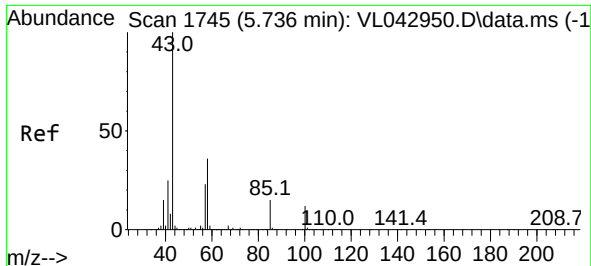


#44
2,2,4-Trimethylpentane
Concen: 1.119 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11



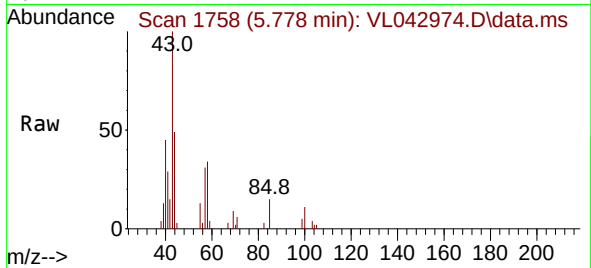
Tgt Ion: 57 Resp: 77020
Ion Ratio Lower Upper
57 100
41 40.1 25.5 38.3
56 37.9 25.8 38.8





#50
4-Methyl-2-Pentanone
Concen: 0.270 ppbv m
RT: 5.778 min Scan# 1758
Delta R.T. 0.042 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

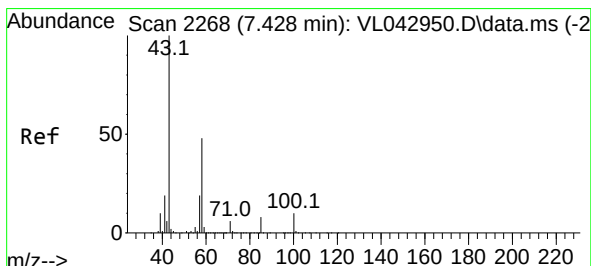
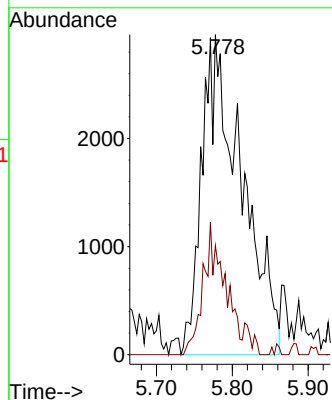
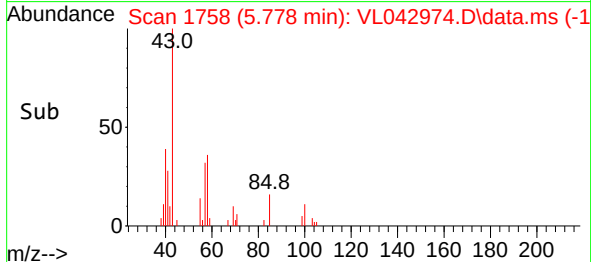
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



Tgt Ion: 43 Resp: 10779
Ion Ratio Lower Upper
43 100
58 0.0 28.4 42.6

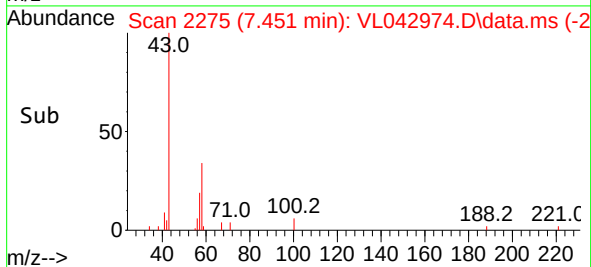
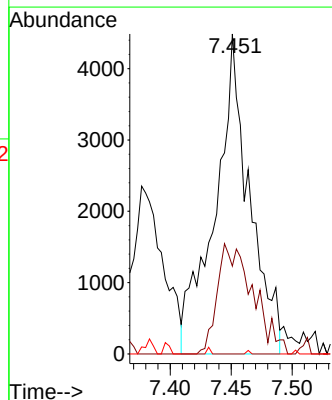
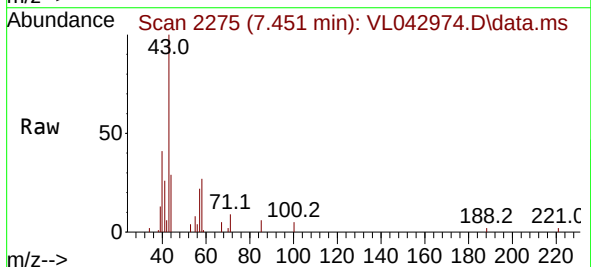
Manual Integrations
APPROVED

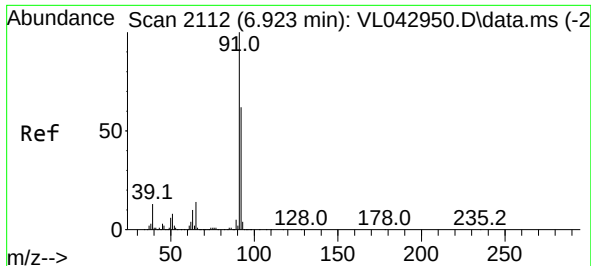
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#51
2-Hexanone
Concen: 0.277 ppbv m
RT: 7.451 min Scan# 2275
Delta R.T. 0.023 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 8807
Ion Ratio Lower Upper
43 100
58 36.5 39.7 59.5#
98 0.2 0.1 0.1#





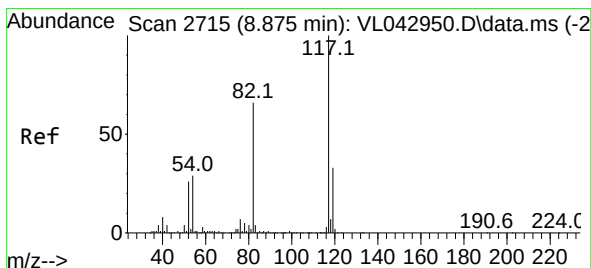
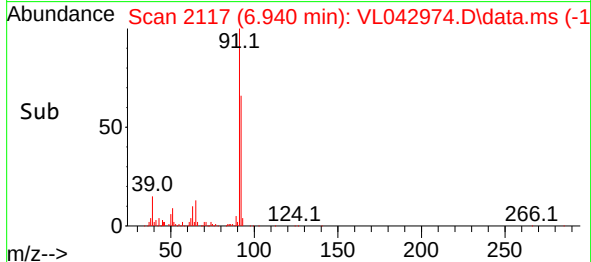
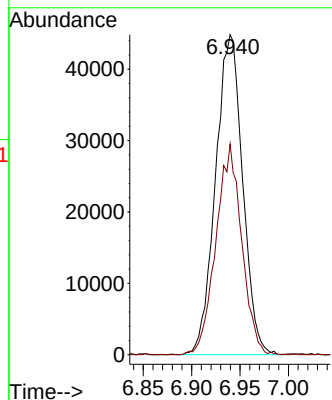
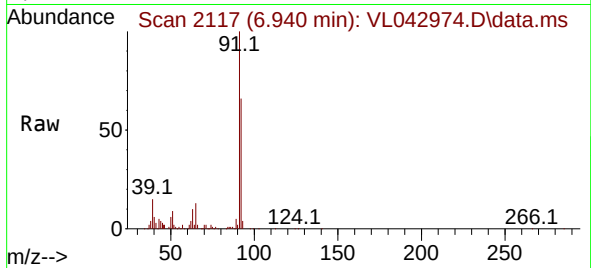
#53
Toluene
Concen: 1.850 ppbv
RT: 6.940 min Scan# 2112
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 91 Resp: 8727
Ion Ratio Lower Upper
91 100
92 62.5 48.2 72.2

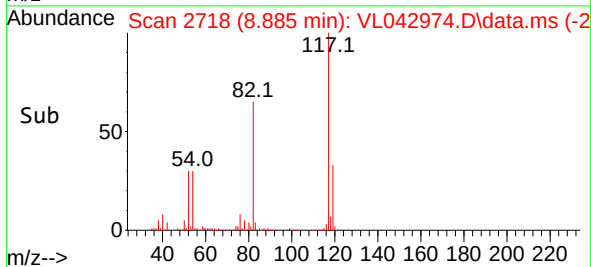
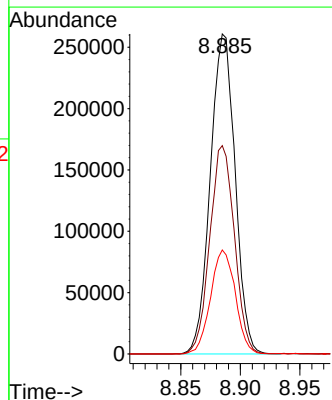
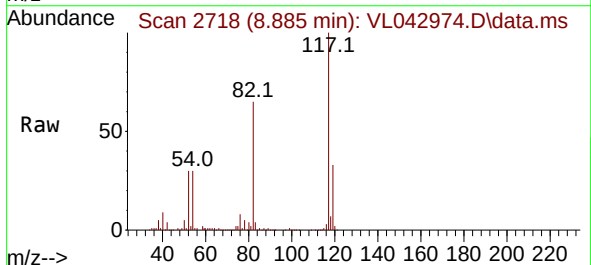
Manual Integrations
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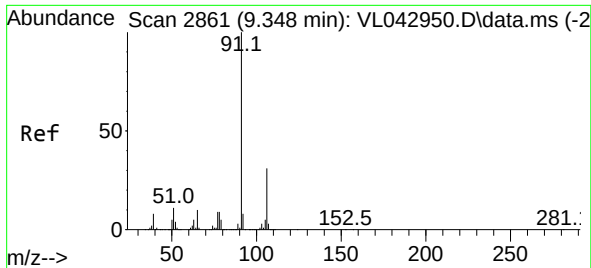
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:117 Resp: 377395
Ion Ratio Lower Upper
117 100
82 64.9 52.8 79.2
119 32.6 26.5 39.7





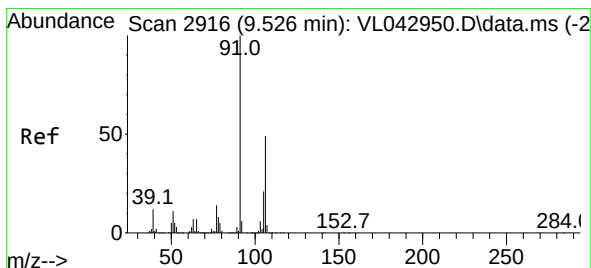
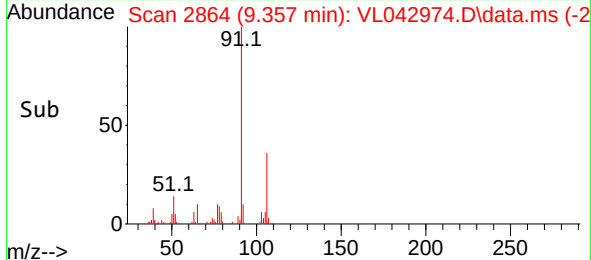
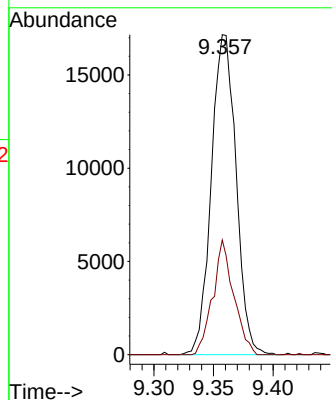
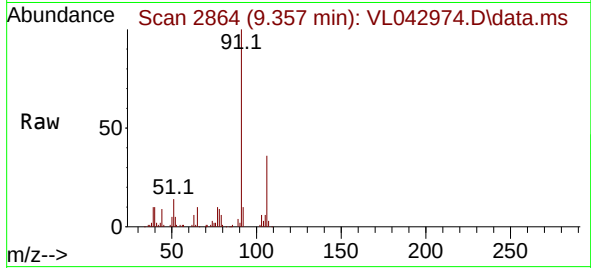
#58
Ethyl Benzene
Concen: 0.400 ppbv
RT: 9.357 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 91 Resp: 2479
Ion Ratio Lower Upper
91 100
106 35.9 24.6 37.0

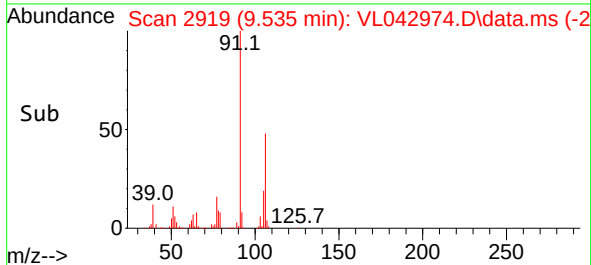
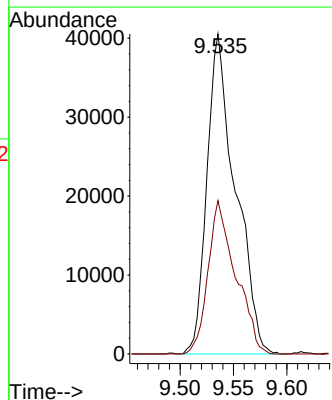
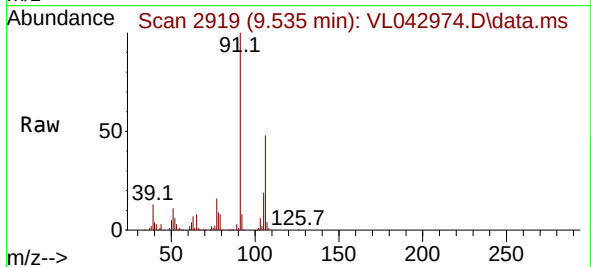
Manual Integrations
APPROVED

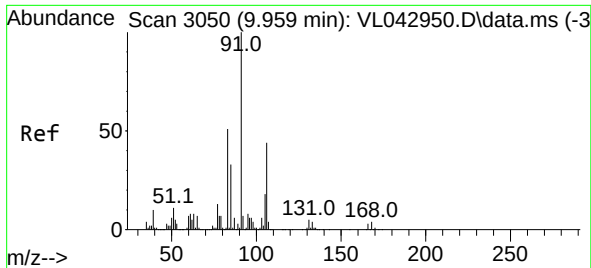
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#59
m/p-Xylene
Concen: 1.537 ppbv
RT: 9.535 min Scan# 2919
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

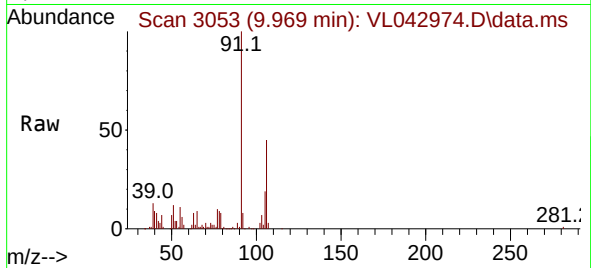
Tgt Ion: 91 Resp: 75106
Ion Ratio Lower Upper
91 100
106 46.6 0.0 0.0#





#60
o-Xylene
Concen: 0.538 ppbv
RT: 9.969 min Scan# 3050
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

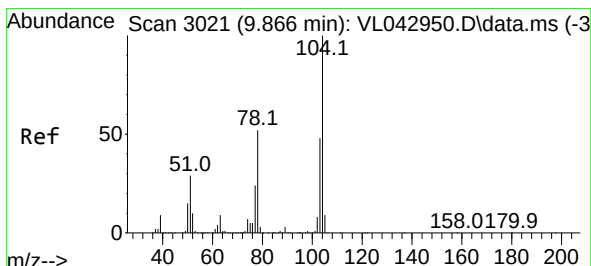
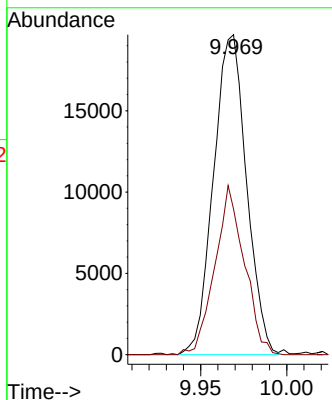
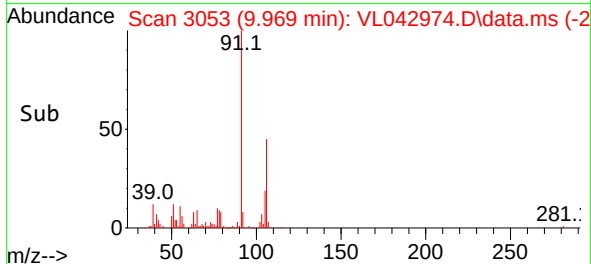
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



Tgt Ion: 91 Resp: 2626
Ion Ratio Lower Upper
91 100
106 47.2 22.4 67.0

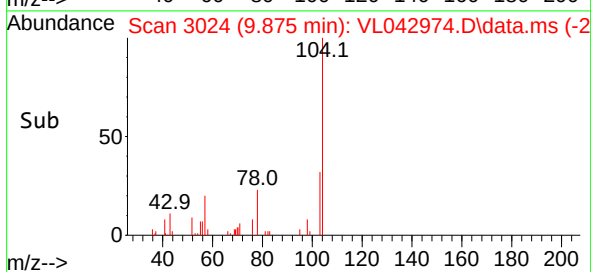
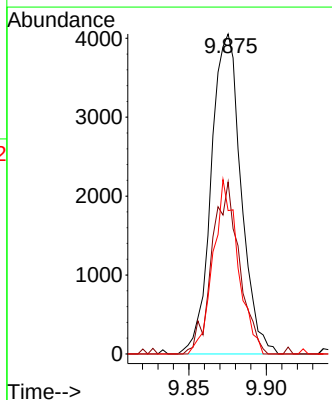
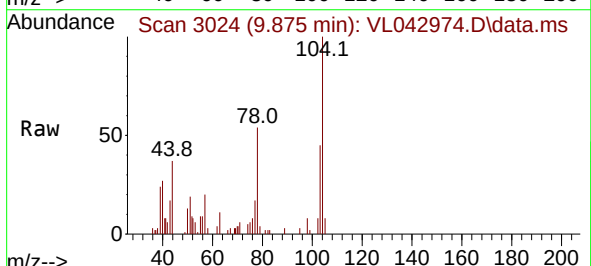
Manual Integrations
APPROVED

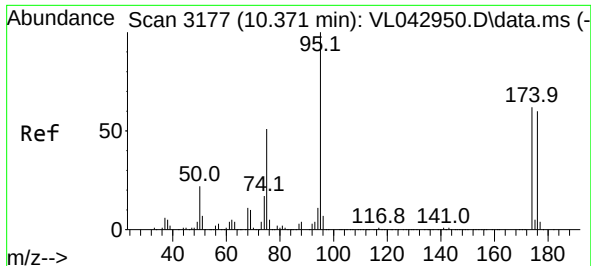
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#61
Styrene
Concen: 0.235 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

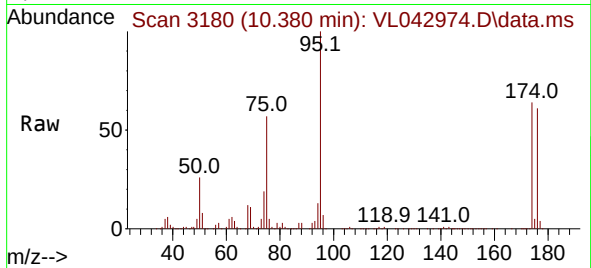
Tgt Ion:104 Resp: 5433
Ion Ratio Lower Upper
104 100
78 49.3 39.9 59.9
103 45.3 36.9 55.3





#68
1-Bromo-4-Fluorobenzene
Concen: 10.458 ppbv
RT: 10.380 min Scan# 3177
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

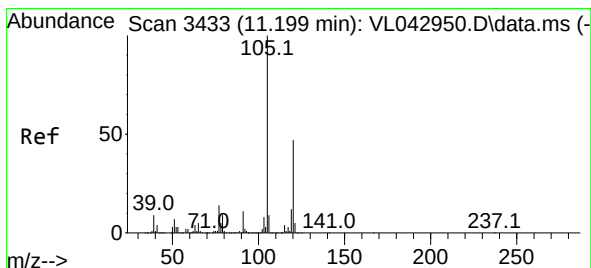
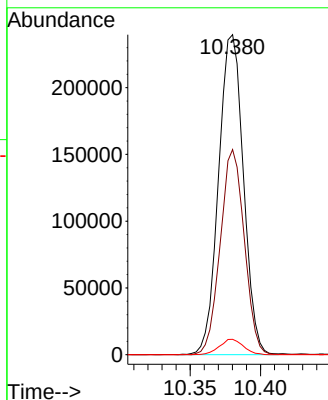
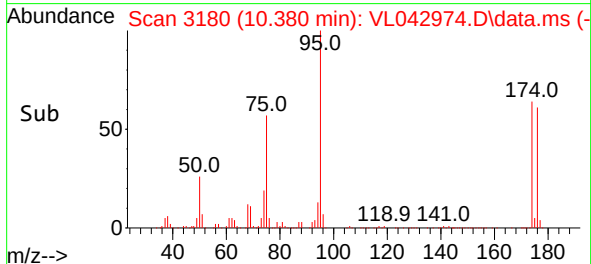
Instrument :
MSVOA_L
ClientSampleId :
141-1A-1



Tgt Ion: 95 Resp: 29461
Ion Ratio Lower Upper
95 100
174 62.1 51.4 77.2
175 4.6 4.0 6.0

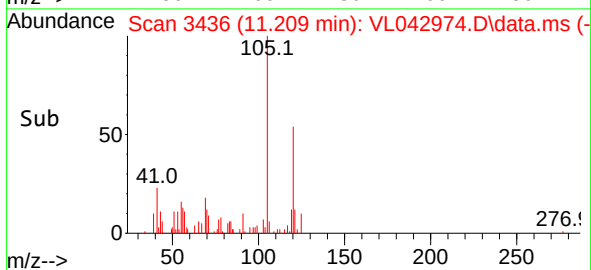
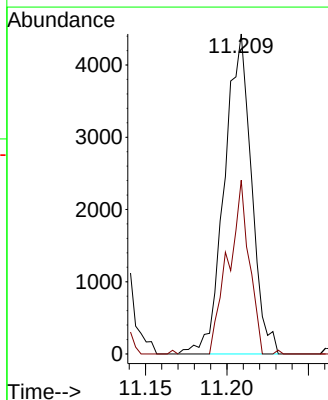
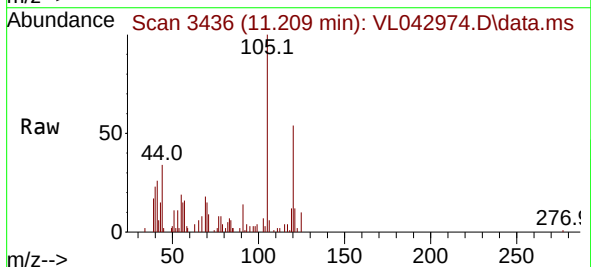
Manual Integrations
APPROVED

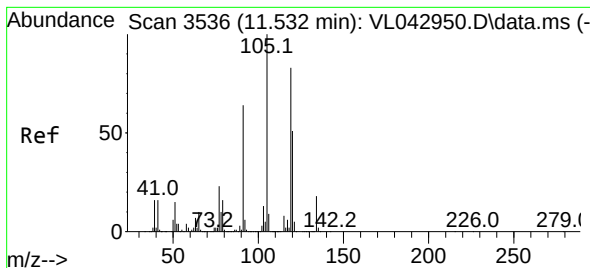
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025



#73
1,3,5-Trimethylbenzene
Concen: 0.103 ppbv
RT: 11.209 min Scan# 3436
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:105 Resp: 5102
Ion Ratio Lower Upper
105 100
120 54.3 38.0 57.0





#74

1,2,4-Trimethylbenzene

Concen: 0.290 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.003 min

Lab File: VL042974.D

Acq: 23 Sep 2025 01:11

Instrument :

MSVOA_L

ClientSampleId :

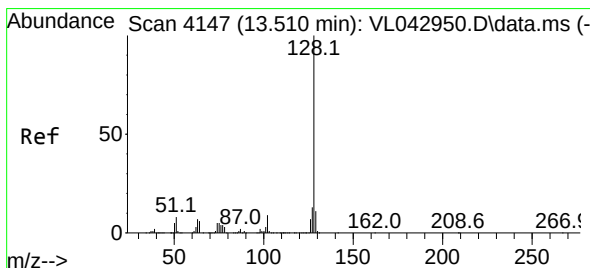
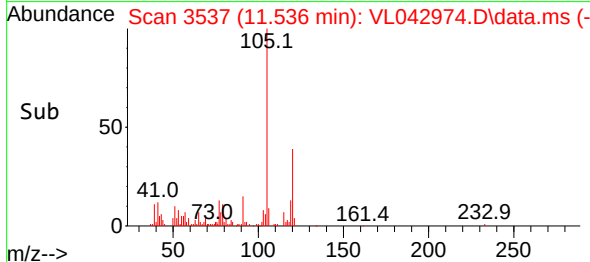
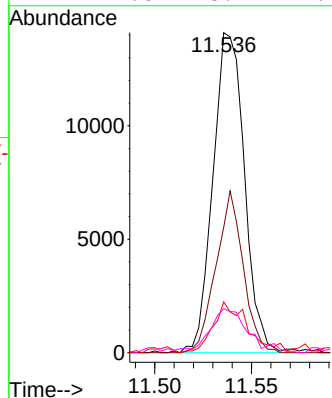
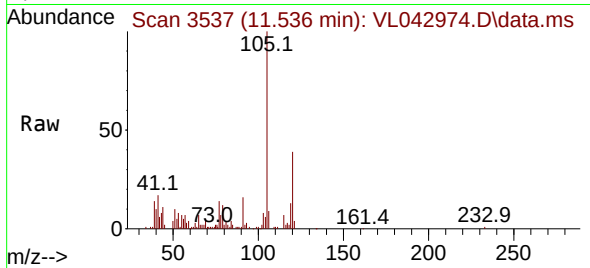
141-1A-1

Tgt Ion:	105	Resp:	15880
Ion Ratio	Lower	Upper	
105	100		
120	39.2	40.9	61.3
91	15.9	51.2	76.8
77	12.6	18.4	27.6

Manual Integrations

APPROVED

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



#79

Naphthalene

Concen: 0.114 ppbv

RT: 13.513 min Scan# 4148

Delta R.T. 0.003 min

Lab File: VL042974.D

Acq: 23 Sep 2025 01:11

Tgt Ion:	128	Resp:	5520
Ion Ratio	Lower	Upper	
128	100		
127	14.5	10.6	15.8
129	9.0	9.0	13.6

