

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101625\
 Data File : VL043126.D
 Acq On : 16 Oct 2025 10:26
 Operator : SY/MD
 Sample : Q3247-01DL 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 RR-VOAS-AIRDL

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 10/17/2025
 Supervised By :Mahesh Dadoda 10/17/2025

Quant Time: Oct 17 01:12:43 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2025

QLast Update : Wed Oct 15 02:12:58 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.793	49	90785	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	286778	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	249452	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	207856	10.720	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.200%
Target Compounds						
					Qvalue	
5) Vinyl Chloride	1.586	62	170	0.034	ppbv #	81
15) Acetone	1.842	43	1329m	0.109	ppbv	
18) 1,1-Dichloroethene	2.039	96	483m	0.109	ppbv	
19) Isopropyl Alcohol	1.894	45	1760m	0.231	ppbv	
20) Methylene Chloride	2.068	84	1389	0.287	ppbv #	86
22) trans-1,2-Dichloroethene	2.347	96	27009	5.099	ppbv	86
24) 1,1-Dichloroethane	2.415	63	86684	8.471	ppbv	98
29) Chloroform	2.855	83	311004	15.351	ppbv	99
31) cis-1,2-Dichloroethene	2.729	61	129758	9.718	ppbv	94
32) 1,1,1-Trichloroethane	3.382	97	822m	0.039	ppbv	
36) Benzene	3.664	78	55384	2.050	ppbv	99
37) 1,2-Dichloroethane	3.224	62	183305	11.781	ppbv	97
38) Trichloroethene	4.557	130	5378	0.477	ppbv	94
39) 1,2-Dichloropropane	4.321	63	81449m	8.248	ppbv	
47) 1,1,2-Trichloroethane	6.590	97	74016	6.941	ppbv	95
52) Tetrachloroethene	8.231	164	99913	10.258	ppbv	95
53) Toluene	6.943	91	176460	5.505	ppbv	98
58) Ethyl Benzene	9.361	91	339931	7.940	ppbv	96
59) m/p-Xylene	9.558	91	541661	15.863	ppbv	96
60) o-Xylene	9.969	91	116992	3.469	ppbv	98
63) 1,1,2,2-Tetrachloroethane	9.969	83	108714	4.814	ppbv	99
65) tert-Butylbenzene	11.542	119	42919	0.798	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.209	105	646782	18.912	ppbv	93
74) 1,2,4-Trimethylbenzene	11.542	105	407966	10.660	ppbv #	49
75) 1,3-Dichlorobenzene	11.613	146	131803	5.938	ppbv	99
76) 1,4-Dichlorobenzene	11.678	146	217615	9.723	ppbv	97

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

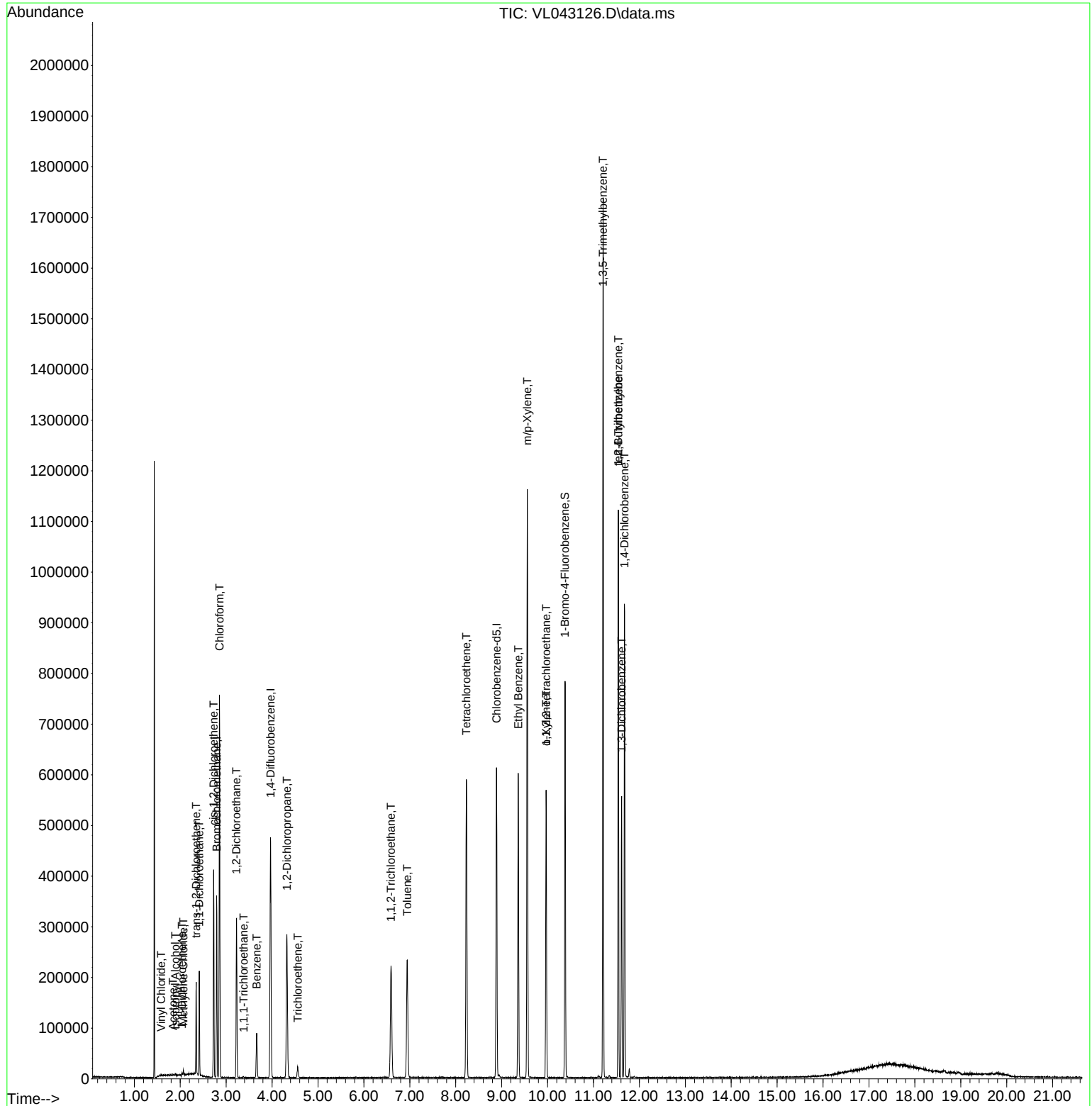
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101625\
Data File : VL043126.D
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Operator : SY/MD
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Misc : 400mL/MSVOA_L
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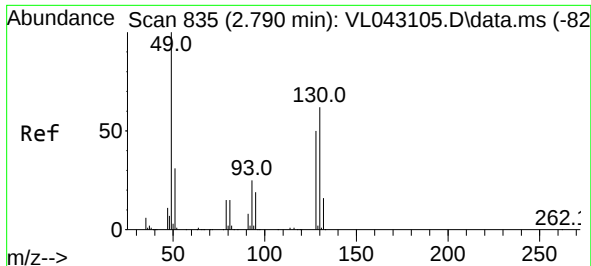
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025

Quant Time: Oct 17 01:12:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Wed Oct 15 02:12:58 2025
Response via : Initial Calibration





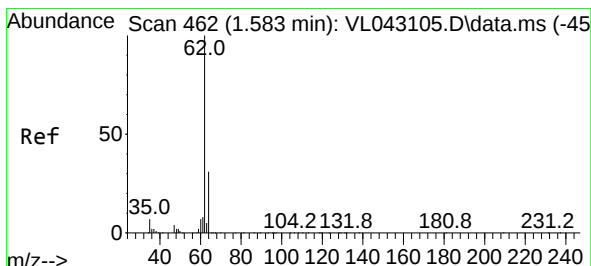
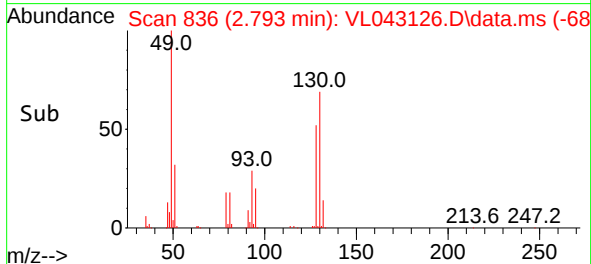
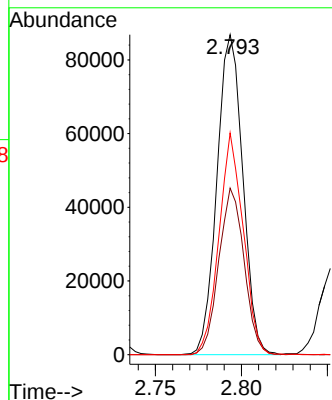
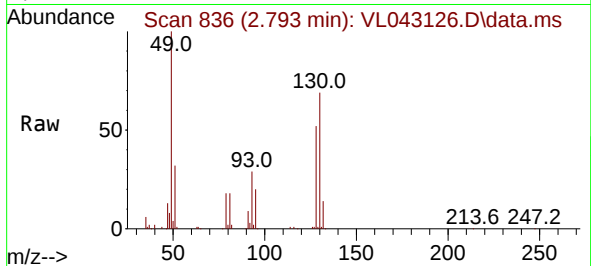
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.793 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL

Tgt Ion: 49 Resp: 9078
Ion Ratio Lower Upper
49 100
128 51.0 24.4 73.4
130 65.1 31.0 93.0

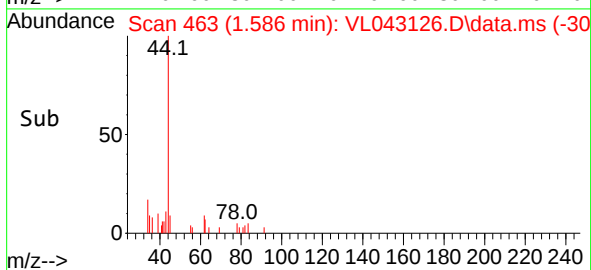
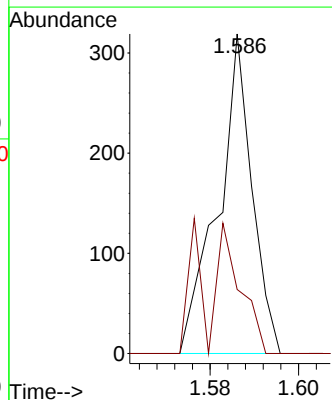
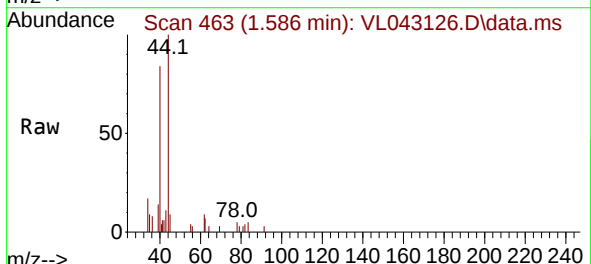
Manual Integrations
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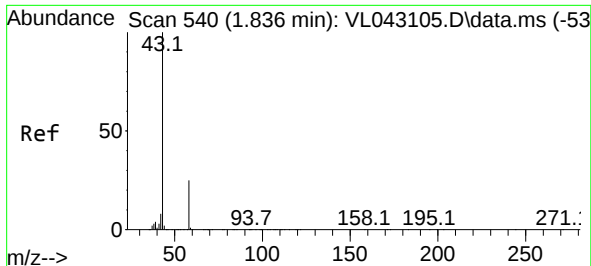
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#5
Vinyl Chloride
Concen: 0.034 ppbv
RT: 1.586 min Scan# 463
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

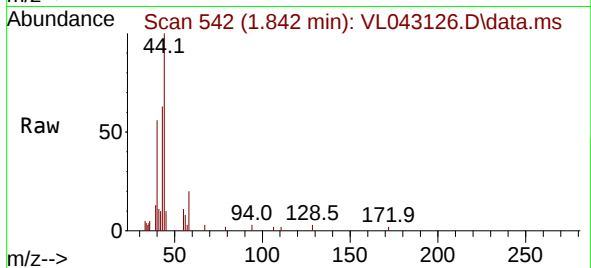
Tgt Ion: 62 Resp: 170
Ion Ratio Lower Upper
62 100
64 20.1 24.6 36.8





#15
Acetone
Concen: 0.109 ppbv m
RT: 1.842 min Scan# 540
Delta R.T. 0.006 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

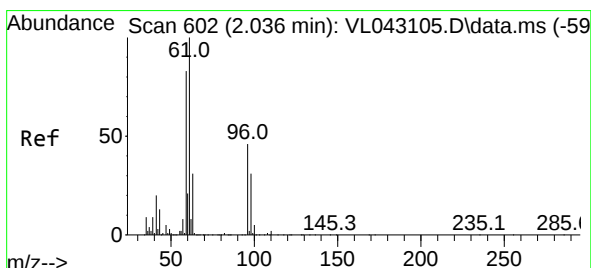
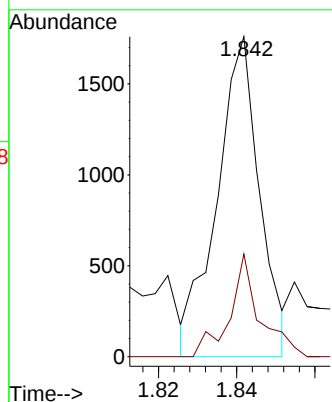
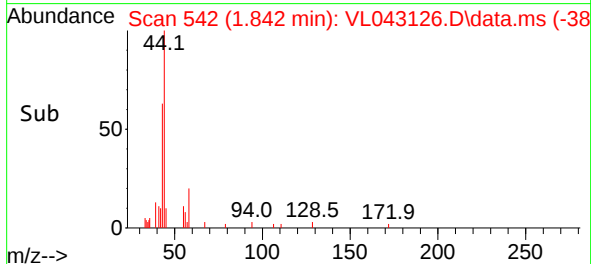
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



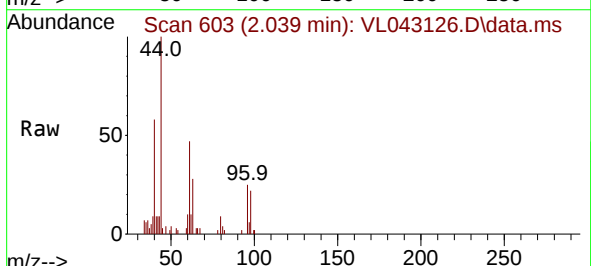
Tgt Ion: 43 Resp: 1329
Ion Ratio Lower Upper
43 100
58 22.6 20.8 31.2

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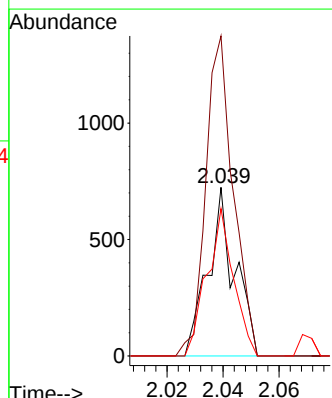
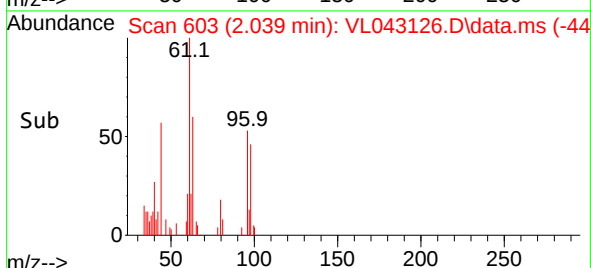
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Supervised By :Mahesh Dadoda 10/17/2025

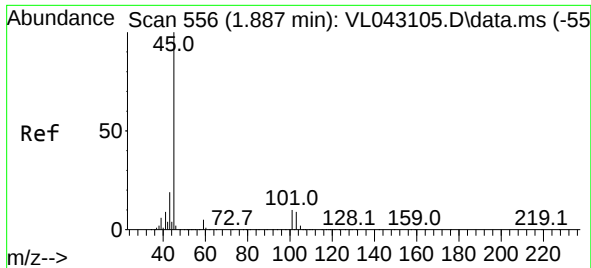


#18
1,1-Dichloroethene
Concen: 0.109 ppbv m
RT: 2.039 min Scan# 603
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26



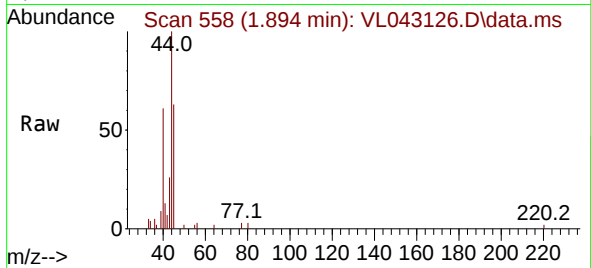
Tgt Ion: 96 Resp: 483
Ion Ratio Lower Upper
96 100
61 189.8 173.4 260.0
98 87.4 53.2 79.8#





#19
Isopropyl Alcohol
Concen: 0.231 ppbv m
RT: 1.894 min Scan# 51
Delta R.T. 0.006 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

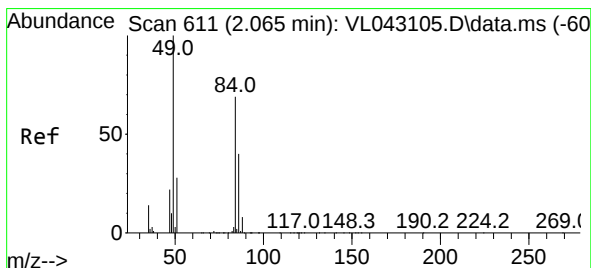
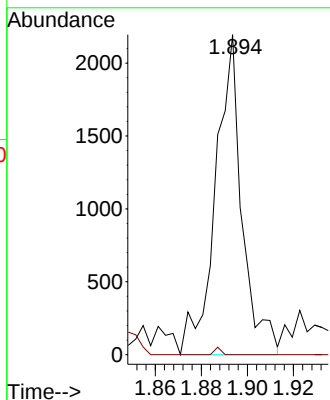
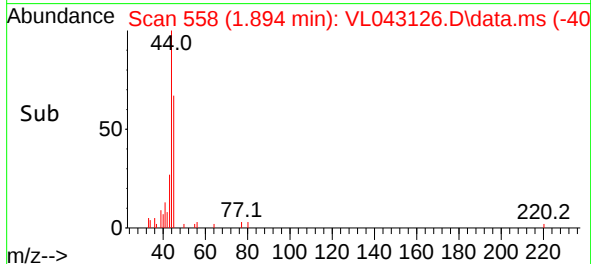
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



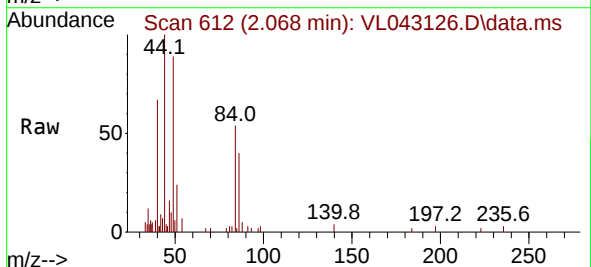
Tgt Ion: 45 Resp: 1760
Ion Ratio Lower Upper
45 100
58 17.0 31.3 46.9

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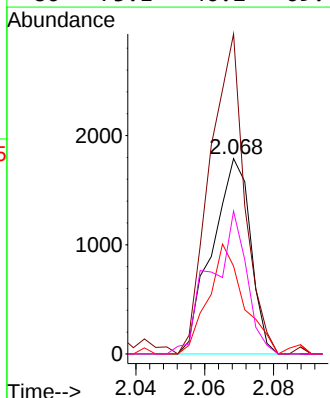
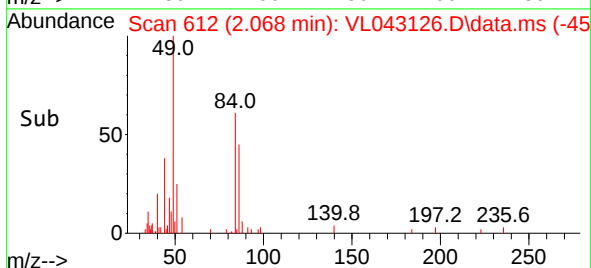
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025

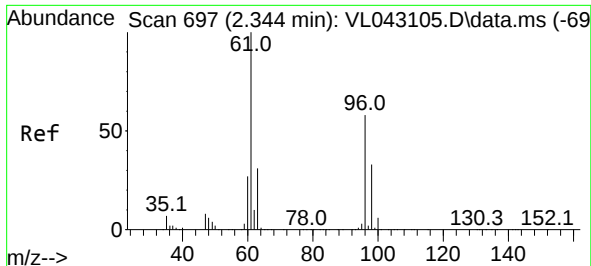


#20
Methylene Chloride
Concen: 0.287 ppbv
RT: 2.068 min Scan# 612
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26



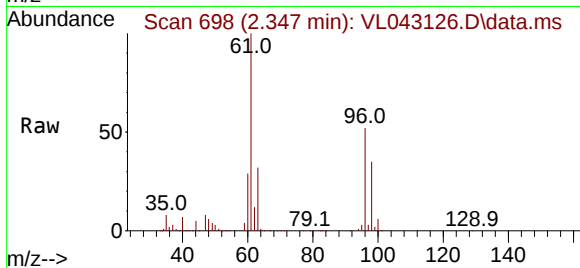
Tgt Ion: 84 Resp: 1389
Ion Ratio Lower Upper
84 100
49 163.8 116.6 175.0
51 44.9 34.8 52.2
86 73.1 46.2 69.4





#22
trans-1,2-Dichloroethene
Concen: 5.099 ppbv
RT: 2.347 min Scan# 697
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

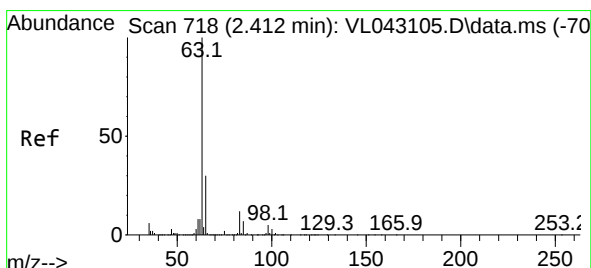
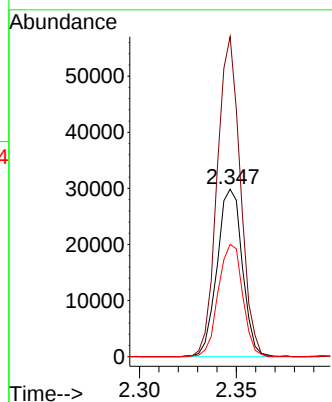
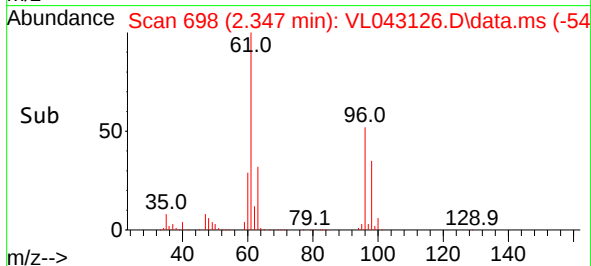
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



Tgt Ion: 96 Resp: 27009
Ion Ratio Lower Upper
96 100
61 190.9 137.0 205.6
98 67.0 45.5 68.3

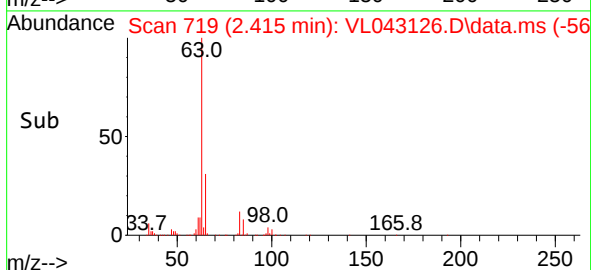
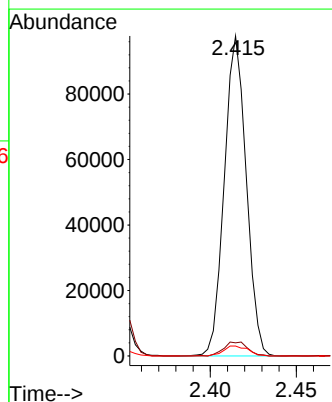
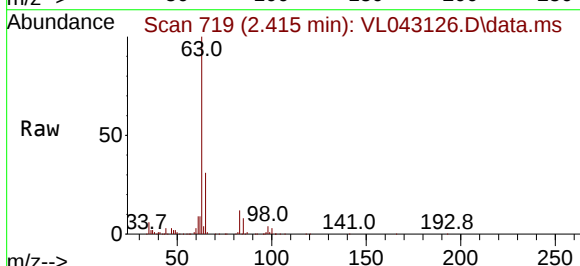
Manual Integrations
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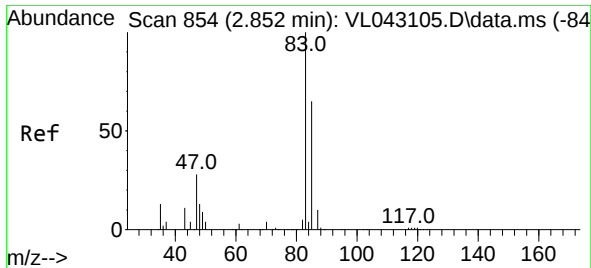
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#24
1,1-Dichloroethane
Concen: 8.471 ppbv
RT: 2.415 min Scan# 719
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Tgt Ion: 63 Resp: 86684
Ion Ratio Lower Upper
63 100
98 4.1 2.6 7.8
100 3.1 1.5 4.4





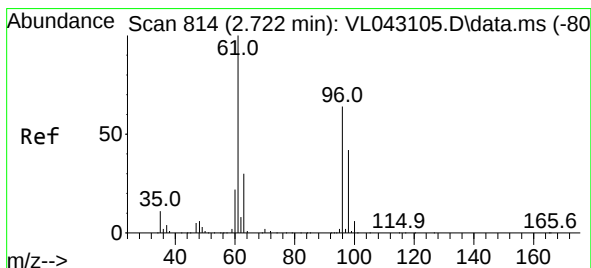
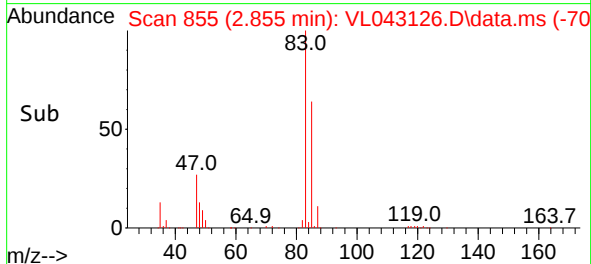
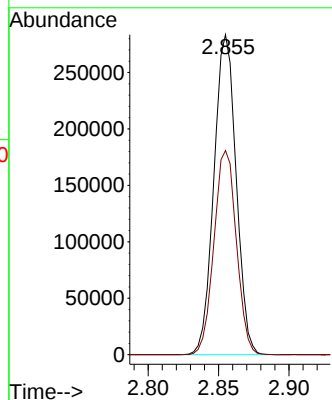
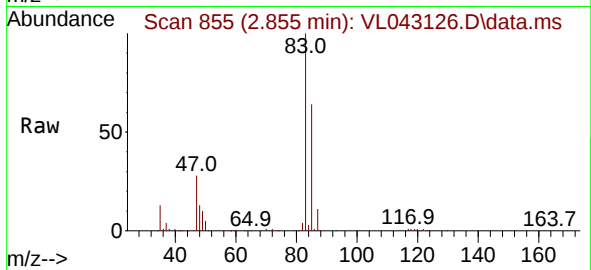
#29
Chloroform
Concen: 15.351 ppbv
RT: 2.855 min Scan# 811
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL

Tgt Ion: 83 Resp: 311004
Ion Ratio Lower Upper
83 100
85 63.8 51.8 77.6

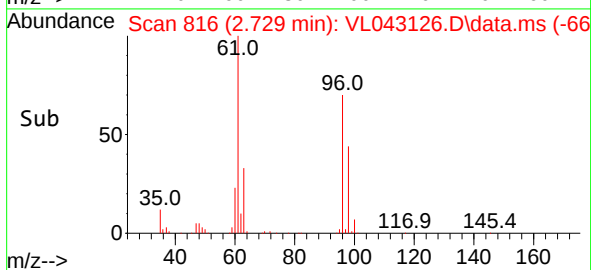
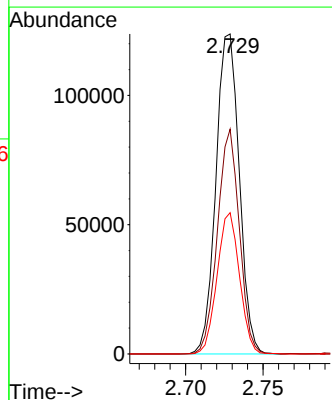
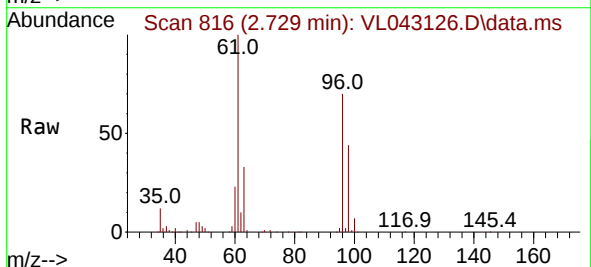
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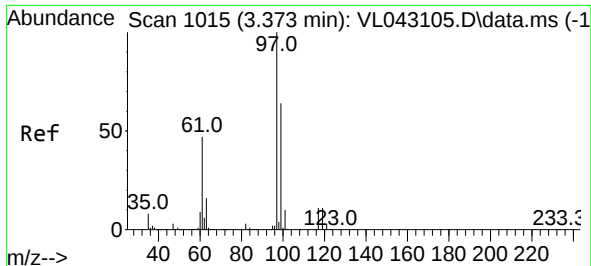
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#31
cis-1,2-Dichloroethene
Concen: 9.718 ppbv
RT: 2.729 min Scan# 816
Delta R.T. 0.006 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Tgt Ion: 61 Resp: 129758
Ion Ratio Lower Upper
61 100
96 70.3 51.0 76.6
98 44.2 33.5 50.3





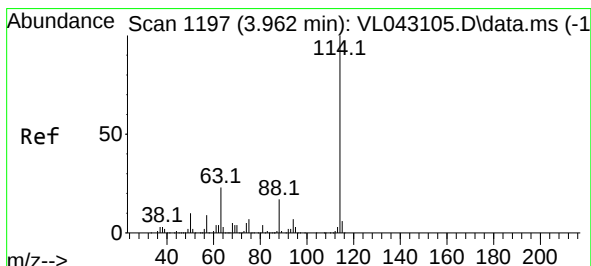
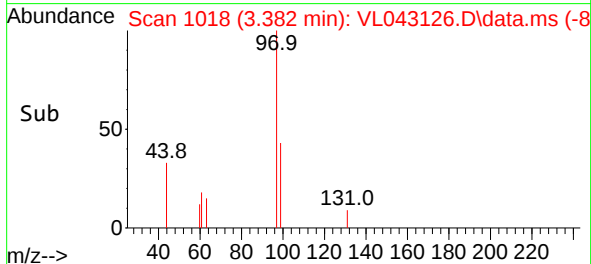
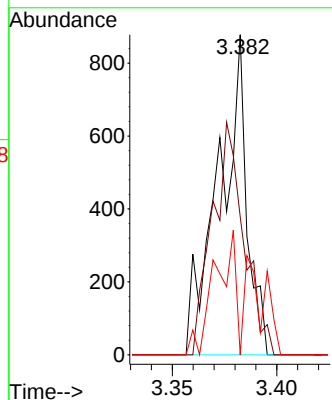
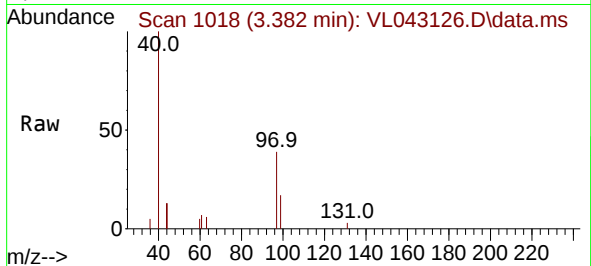
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1,1,1-Trichloroethane
Concen: 0.039 ppbv m
RT: 3.382 min Scan# 1015
Delta R.T. 0.009 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL

Tgt Ion: 97 Resp: 822
Ion Ratio Lower Upper
97 100
99 81.4 51.3 76.9
61 0.0 38.4 57.6

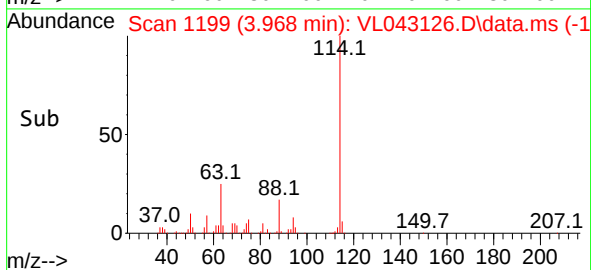
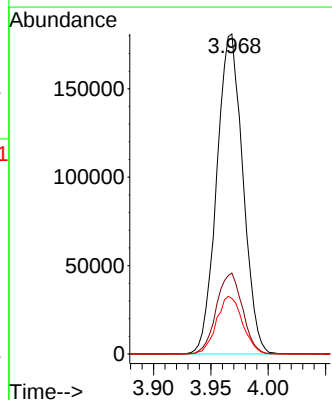
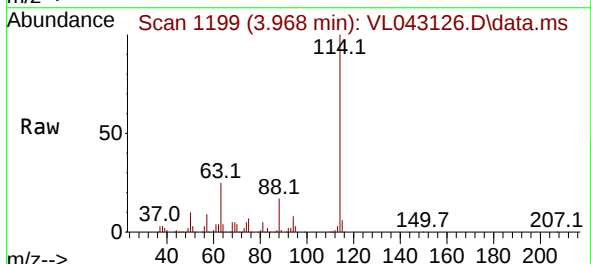
Manual Integrations
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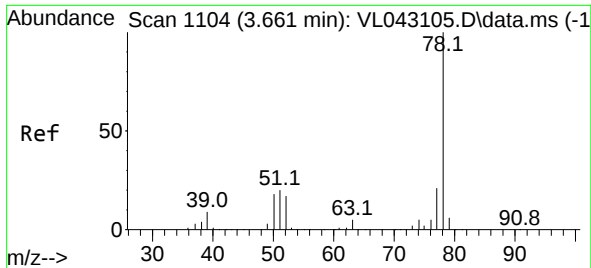
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.968 min Scan# 1199
Delta R.T. 0.006 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

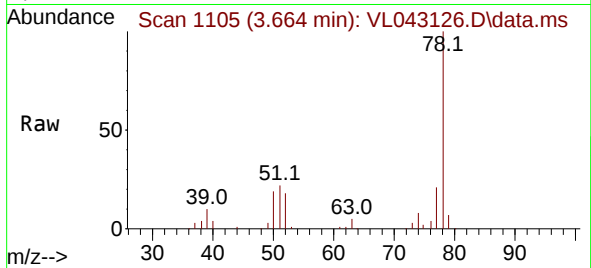
Tgt Ion:114 Resp: 286778
Ion Ratio Lower Upper
114 100
63 25.2 19.3 28.9
88 17.9 13.9 20.9





#36
Benzene
Concen: 2.050 ppbv
RT: 3.664 min Scan# 1104
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

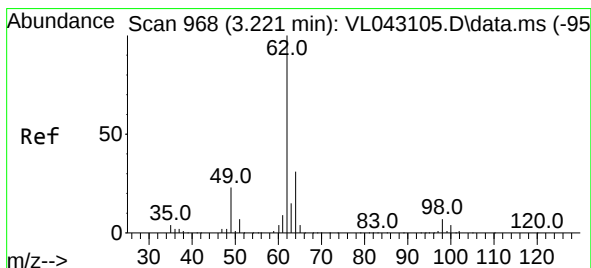
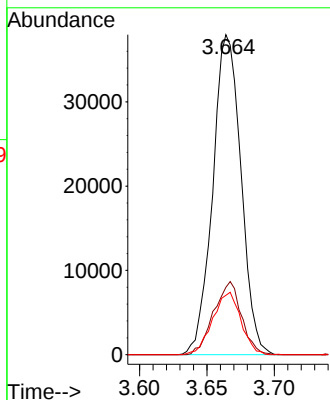
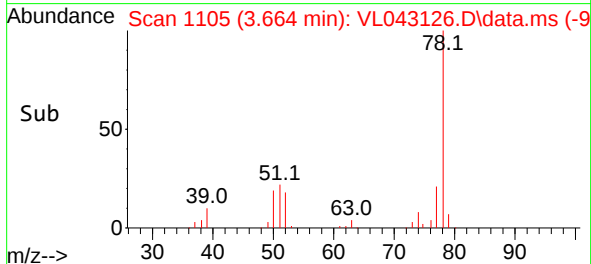
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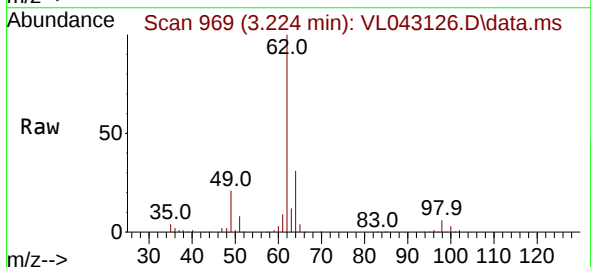
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Ion Ratio Lower Upper
78 100
77 21.1 17.0 25.6
50 18.6 14.6 22.0

Manual Integrations
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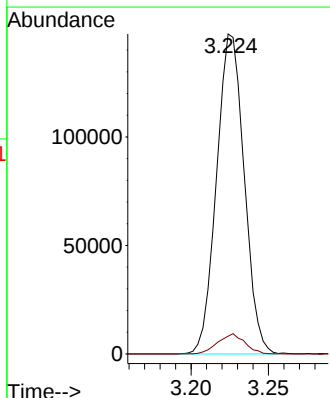
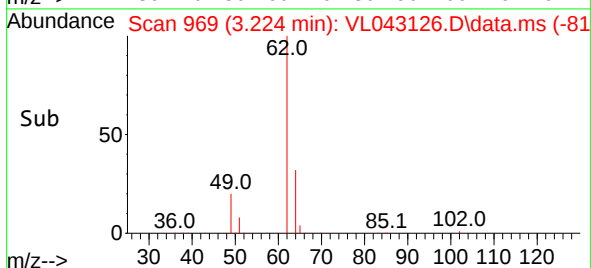
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025

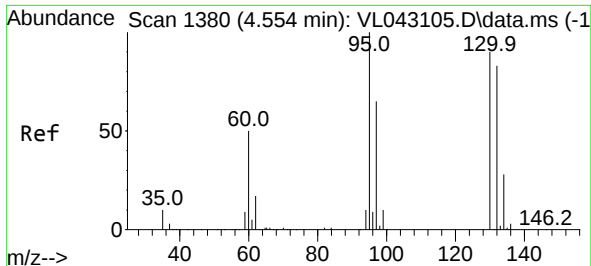


#37
1,2-Dichloroethane
Concen: 11.781 ppbv
RT: 3.224 min Scan# 969
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26



Tgt Ion: 62 Resp: 183305
Ion Ratio Lower Upper
62 100
98 6.2 5.8 8.6





#38

Trichloroethene

Concen: 0.477 ppbv

RT: 4.557 min Scan# 1381

Delta R.T. 0.003 min

Lab File: VL043126.D

Acq: 16 Oct 2025 10:26

Instrument :

MSVOA_L

ClientSampleId :

RR-VOAS-AIRDL

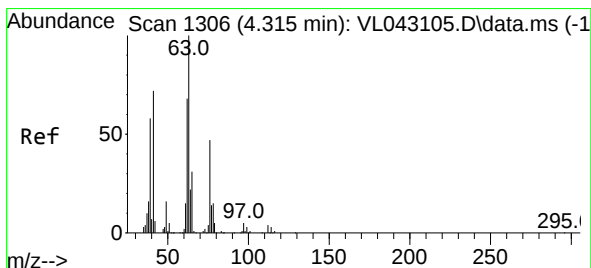
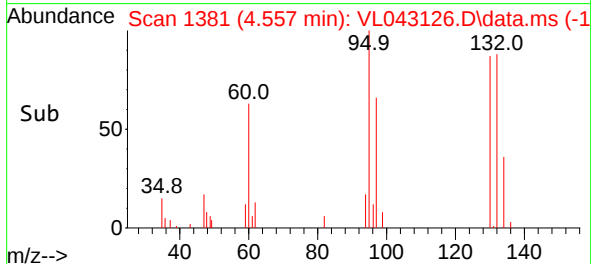
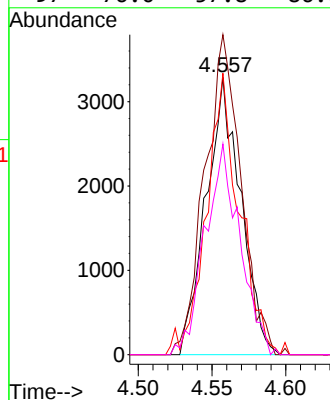
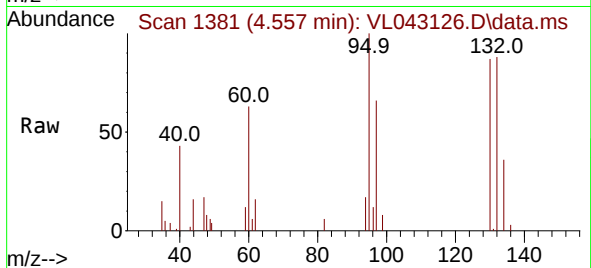
Tgt Ion:130 Resp: 5378

Ion	Ratio	Lower	Upper
130	100		
95	115.4	88.6	133.0
132	101.5	73.4	110.0
97	76.0	57.8	86.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#39

1,2-Dichloropropane

Concen: 8.248 ppbv m

RT: 4.321 min Scan# 1308

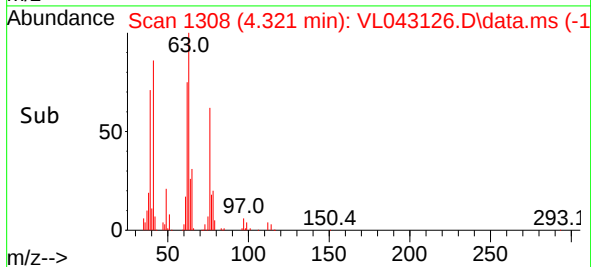
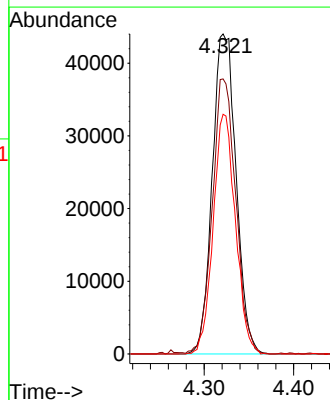
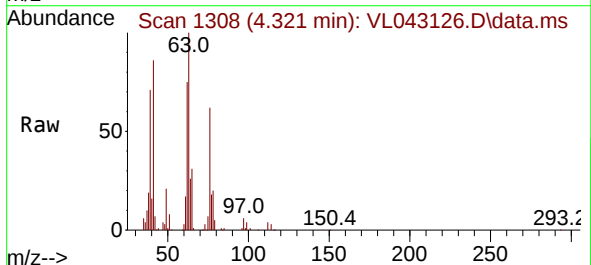
Delta R.T. 0.006 min

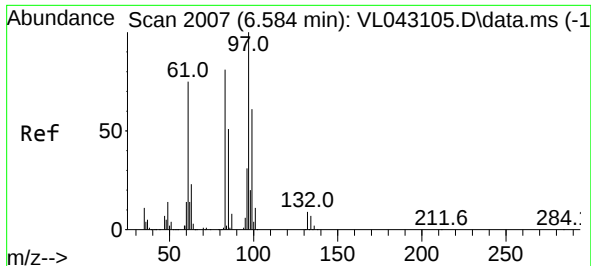
Lab File: VL043126.D

Acq: 16 Oct 2025 10:26

Tgt Ion: 63 Resp: 81449

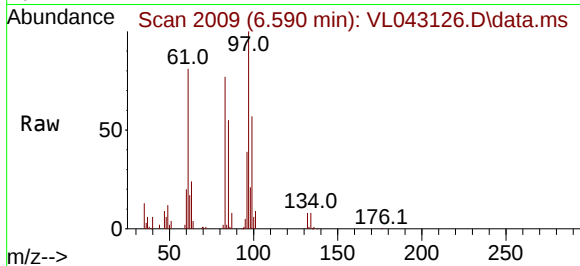
Ion	Ratio	Lower	Upper
63	100		
41	86.0	58.0	87.0
62	74.9	54.7	82.1





#47
1,1,2-Trichloroethane
Concen: 6.941 ppbv
RT: 6.590 min Scan# 2009
Delta R.T. 0.006 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

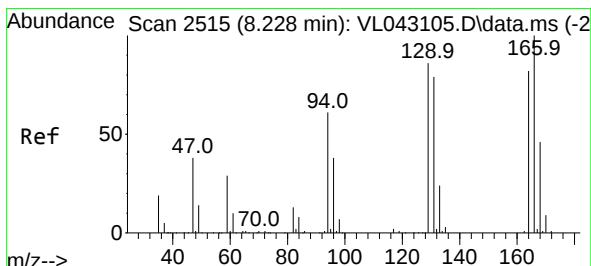
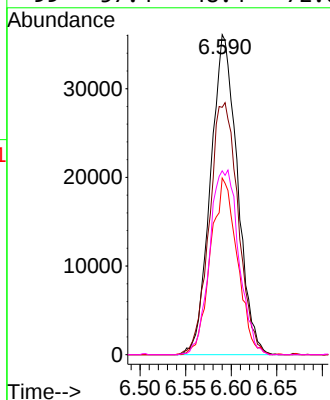
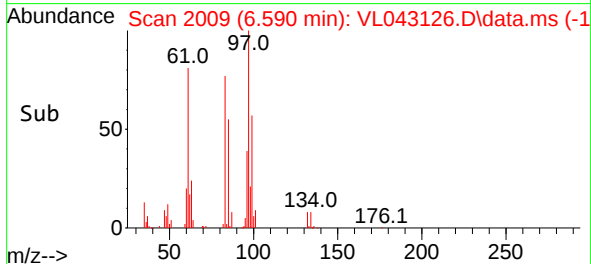
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



Tgt Ion: 97 Resp: 74010
Ion Ratio Lower Upper
97 100
83 77.3 64.6 96.8
85 54.9 40.6 60.8
99 57.4 48.4 72.6

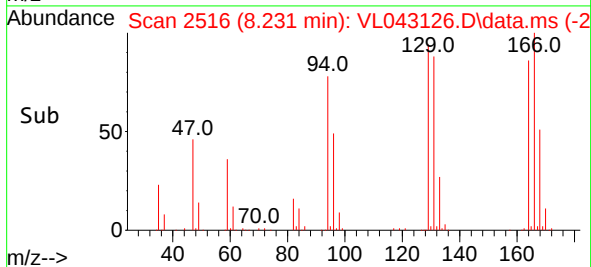
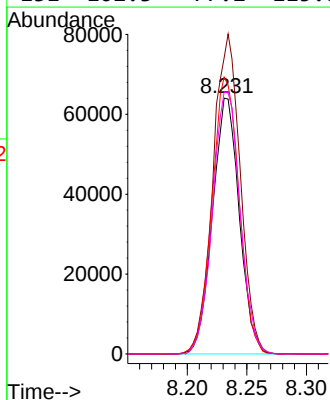
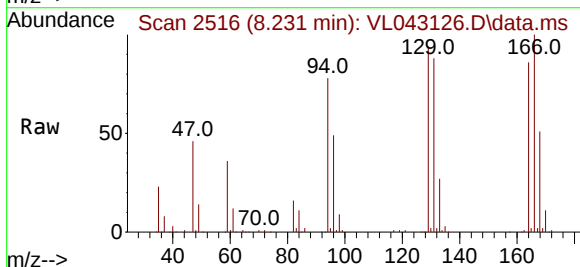
Manual Integrations
APPROVED

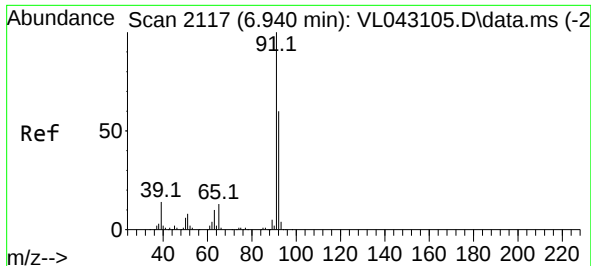
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#52
Tetrachloroethene
Concen: 10.258 ppbv
RT: 8.231 min Scan# 2516
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

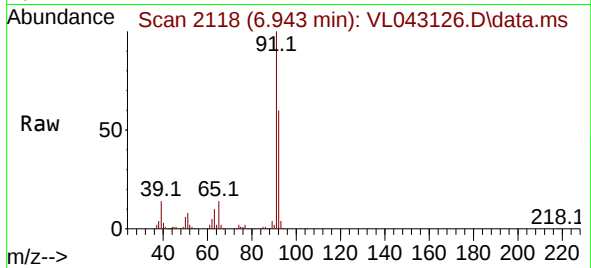
Tgt Ion:164 Resp: 99913
Ion Ratio Lower Upper
164 100
166 115.7 97.6 146.4
129 108.2 84.5 126.7
131 102.3 77.2 115.8





#53
Toluene
Concen: 5.505 ppbv
RT: 6.943 min Scan# 2117
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

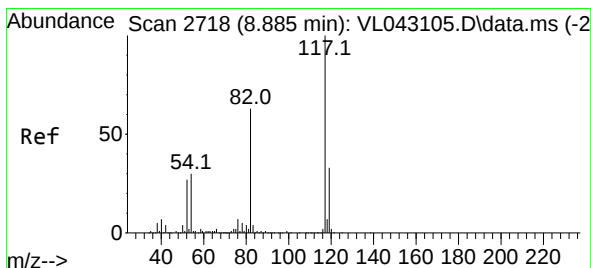
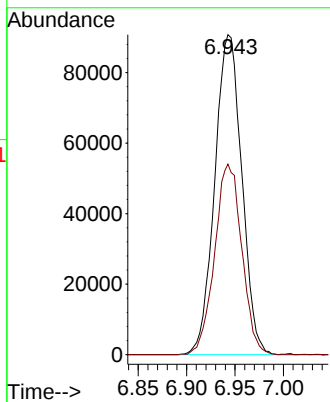
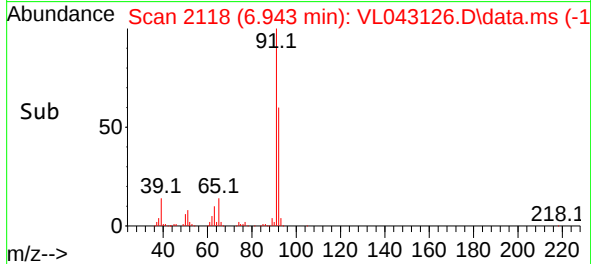
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



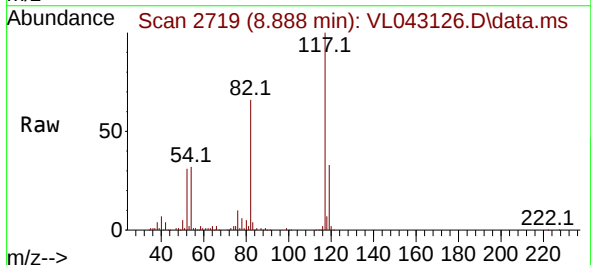
Tgt Ion: 91 Resp: 176460
Ion Ratio Lower Upper
91 100
92 59.7 48.8 73.2

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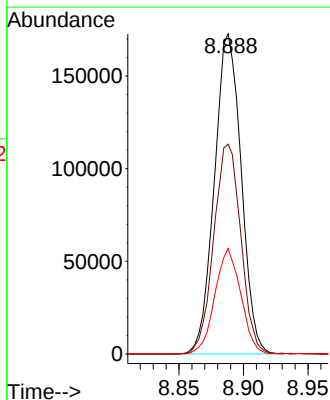
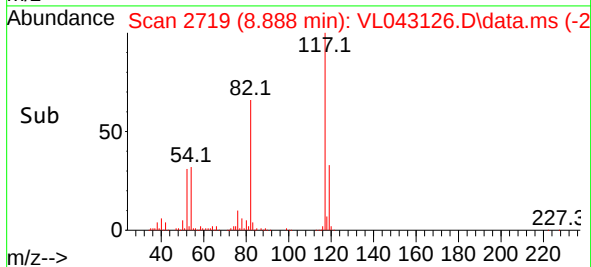
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025

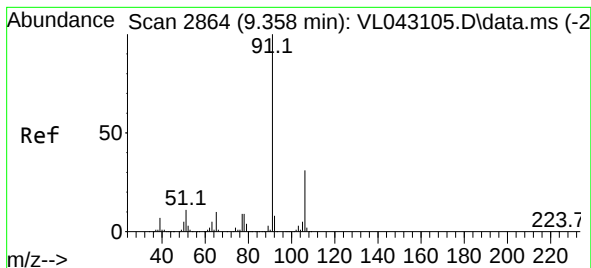


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26



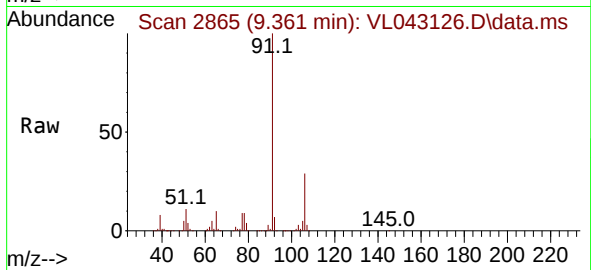
Tgt Ion:117 Resp: 249452
Ion Ratio Lower Upper
117 100
82 66.3 53.8 80.8
119 32.0 25.4 38.0





#58
Ethyl Benzene
Concen: 7.940 ppbv
RT: 9.361 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

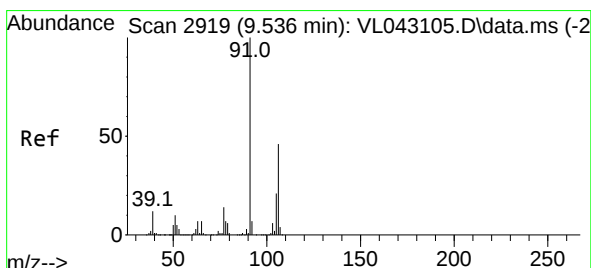
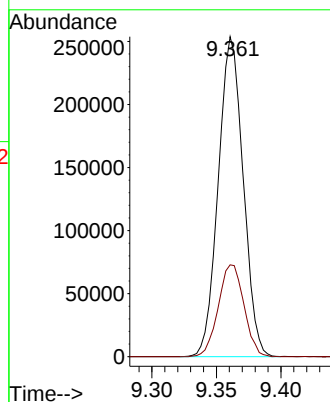
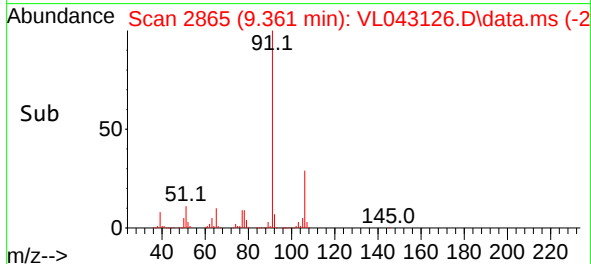
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



Tgt Ion: 91 Resp: 33993
Ion Ratio Lower Upper
91 100
106 28.7 24.8 37.2

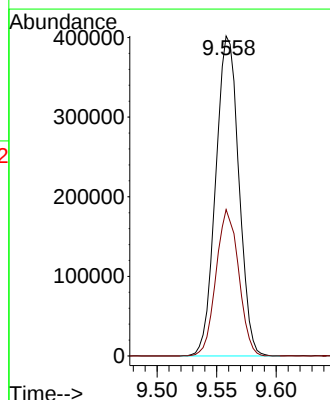
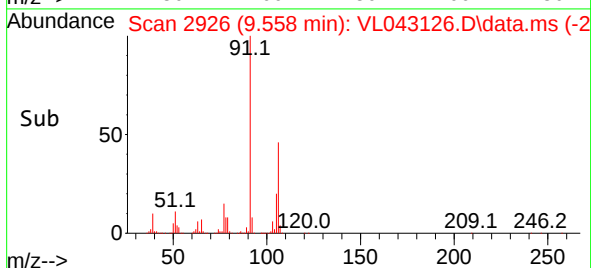
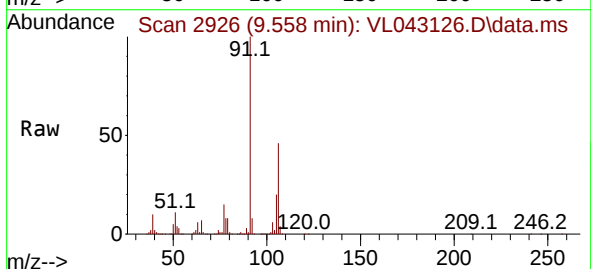
Manual Integrations
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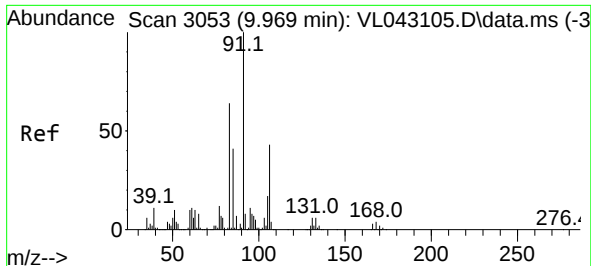
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#59
m/p-Xylene
Concen: 15.863 ppbv
RT: 9.558 min Scan# 2926
Delta R.T. 0.022 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Tgt Ion: 91 Resp: 541661
Ion Ratio Lower Upper
91 100
106 44.9 38.0 57.0





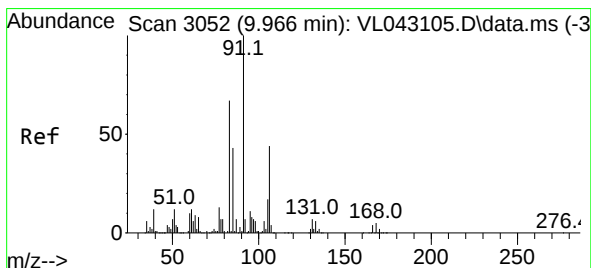
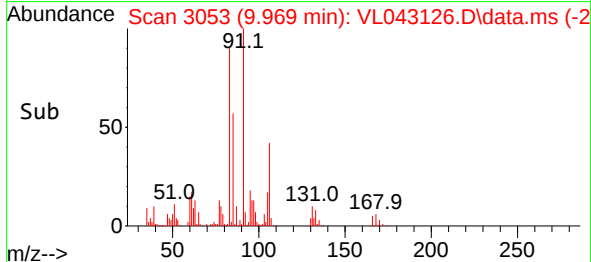
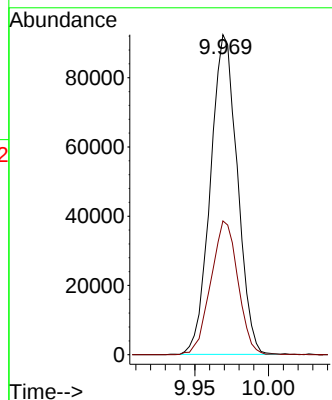
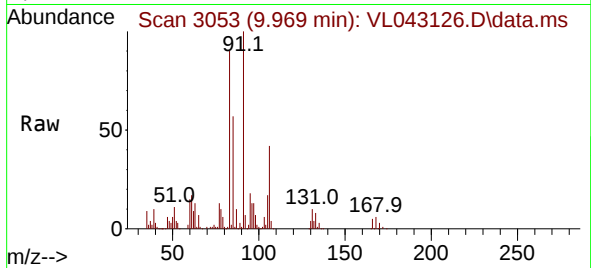
#60
o-Xylene
Concen: 3.469 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. -0.000 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL

Tgt Ion: 91 Resp: 116992
Ion Ratio Lower Upper
91 100
106 42.3 21.9 65.8

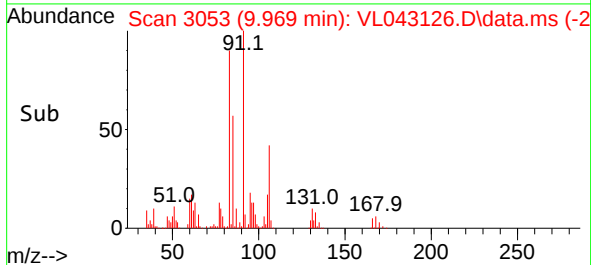
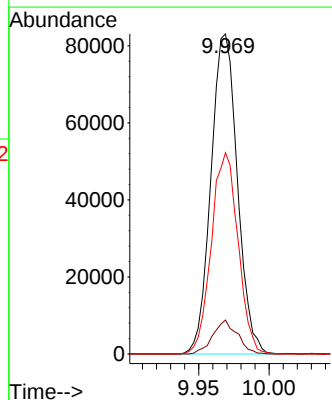
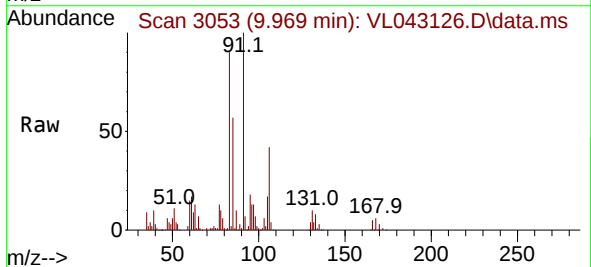
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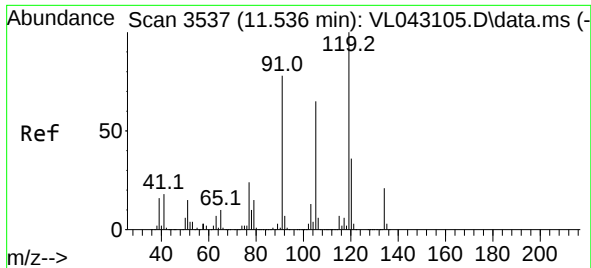
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#63
1,1,2,2-Tetrachloroethane
Concen: 4.814 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

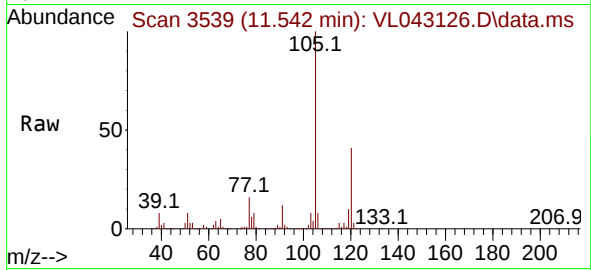
Tgt Ion: 83 Resp: 108714
Ion Ratio Lower Upper
83 100
131 9.8 4.8 14.3
85 63.4 32.0 96.0





#65
tert-Butylbenzene
Concen: 0.798 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.006 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

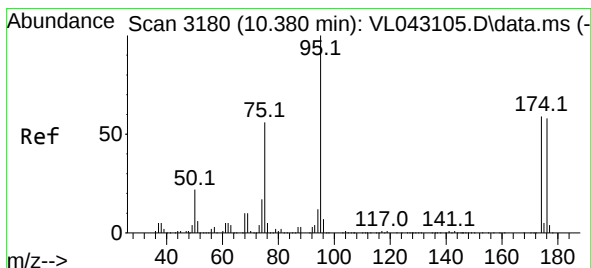
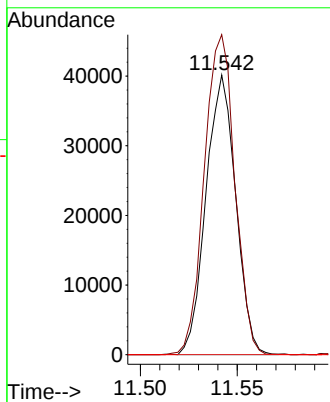
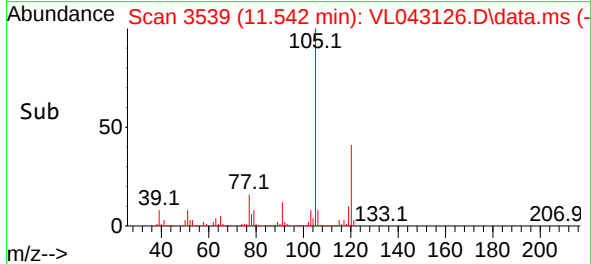
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



Tgt Ion: 119 Resp: 42919
Ion Ratio Lower Upper
119 100
91 117.3 63.4 95.0
134 0.1 17.3 25.9

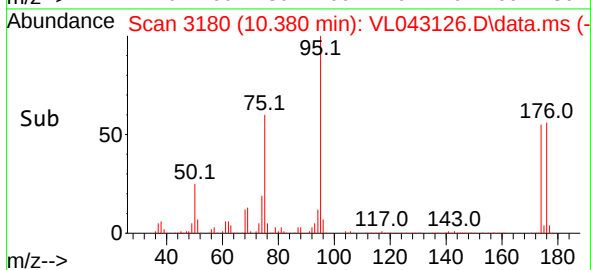
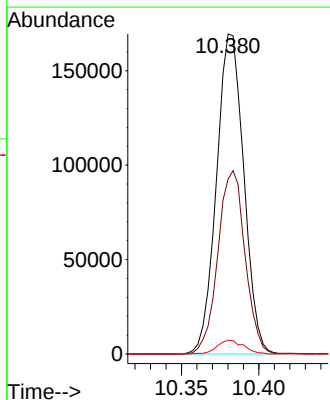
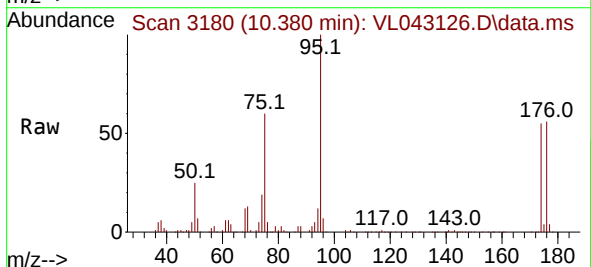
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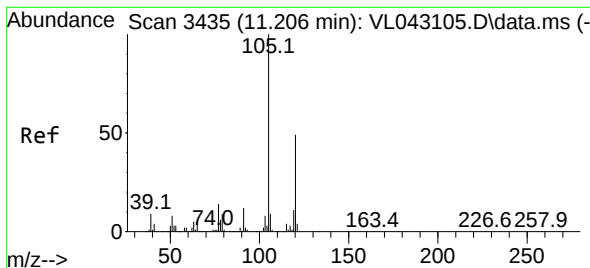
Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 10.720 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. -0.000 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

Tgt Ion: 95 Resp: 207856
Ion Ratio Lower Upper
95 100
174 57.1 48.3 72.5
175 4.2 3.8 5.8





#73

1,3,5-Trimethylbenzene

Concen: 18.912 ppbv

RT: 11.209 min Scan# 3435

Delta R.T. 0.003 min

Lab File: VL043126.D

Acq: 16 Oct 2025 10:26

Instrument :

MSVOA_L

ClientSampleId :

RR-VOAS-AIRDL

Tgt Ion:105 Resp: 64678

Ion Ratio Lower Upper

105 100

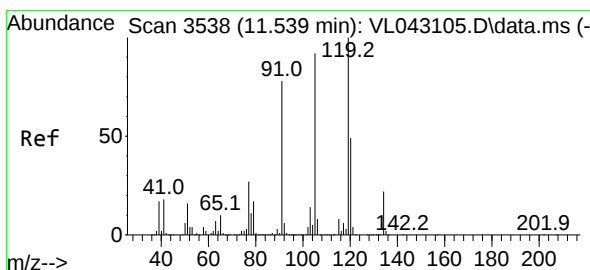
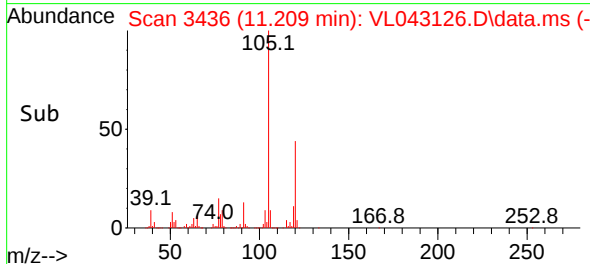
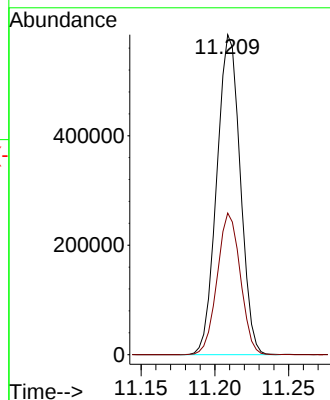
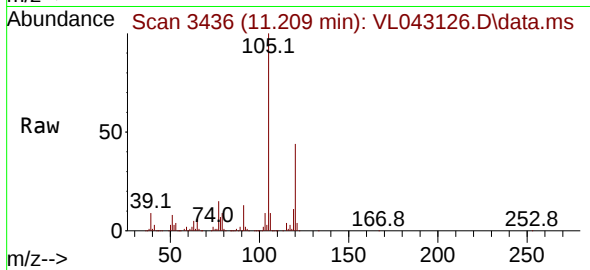
120 44.2 39.0 58.6

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/17/2025

Supervised By :Mahesh Dadoda 10/17/2025



#74

1,2,4-Trimethylbenzene

Concen: 10.660 ppbv

RT: 11.542 min Scan# 3539

Delta R.T. 0.003 min

Lab File: VL043126.D

Acq: 16 Oct 2025 10:26

Tgt Ion:105 Resp: 407966

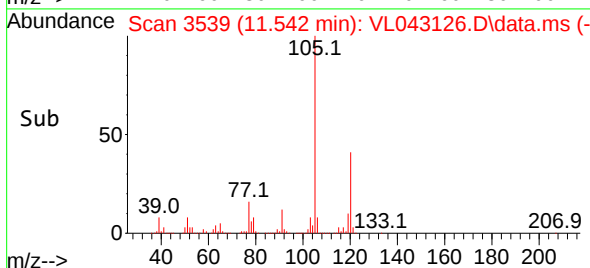
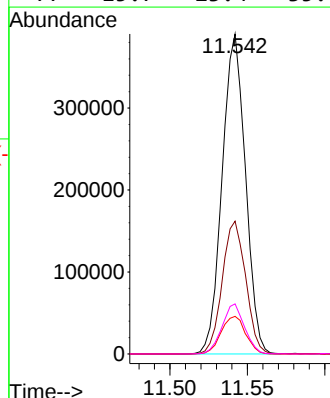
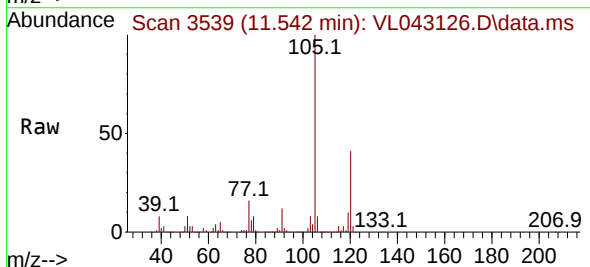
Ion Ratio Lower Upper

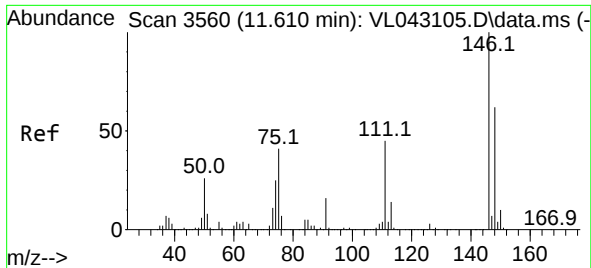
105 100

120 41.5 42.8 64.2#

91 11.8 68.3 102.5#

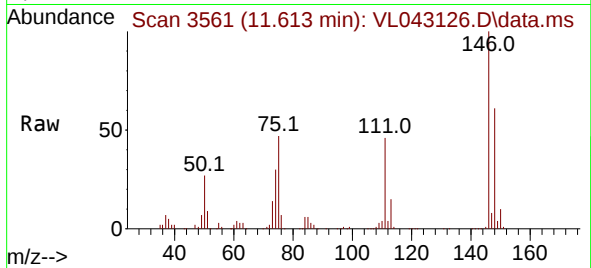
77 15.7 23.4 35.0#





#75
1,3-Dichlorobenzene
Concen: 5.938 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26

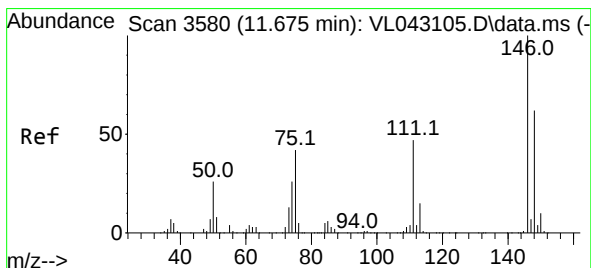
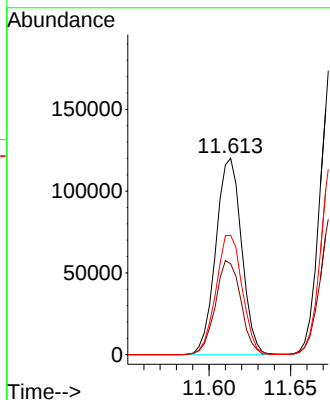
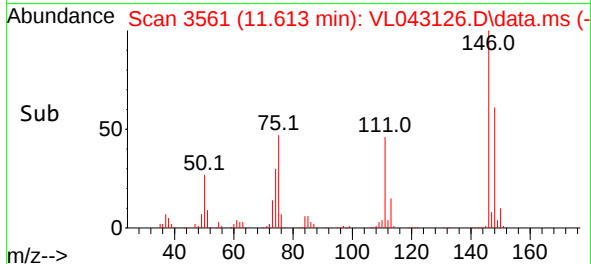
Instrument :
MSVOA_L
ClientSampleId :
RR-VOAS-AIRDL



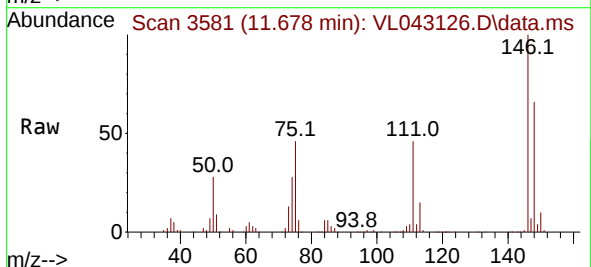
Tgt Ion:146 Resp: 131800
Ion Ratio Lower Upper
146 100
111 47.5 23.3 69.9
148 62.2 31.6 95.0

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 10/17/2025
Supervised By :Mahesh Dadoda 10/17/2025



#76
1,4-Dichlorobenzene
Concen: 9.723 ppbv
RT: 11.678 min Scan# 3581
Delta R.T. 0.003 min
Lab File: VL043126.D
Acq: 16 Oct 2025 10:26



Tgt Ion:146 Resp: 217615
Ion Ratio Lower Upper
146 100
111 46.5 22.4 67.0
148 65.4 31.6 94.7

