

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL122123\
 Data File : VL040937.D
 Acq On : 21 Dec 2023 19:49
 Operator : SY/MD
 Sample : 05925-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 12/22/2023
 Supervised By :Mahesh Dadoda 12/26/2023

Quant Time: Dec 22 00:10:39 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL122023AIR.M

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

QLast Update : Thu Dec 21 07:32:42 2023

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.185	49	1274164	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.642	114	3250488	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.439	117	2981139	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.744	95	2237978	10.192	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.900%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.748	85	27036	0.111	ppbv	96
4) Chloromethane	2.828	50	6830	0.097	ppbv	98
9) Propene	2.722	41	301132m	4.760	ppbv	
10) Heptane	7.568	43	79955m	0.508	ppbv	
13) Ethanol	3.253	45	64915	4.067	ppbv	83
15) Acetone	3.500	43	20190144	132.121	ppbv #	63
17) tert-Butyl alcohol	3.899	59	24556m	0.217	ppbv	
19) Isopropyl Alcohol	3.590	45	24335m	0.305	ppbv	
20) Methylene Chloride	3.938	84	29532	0.542	ppbv	97
26) Hexane	5.217	57	1530543	13.043	ppbv #	40
27) Carbon Disulfide	4.131	76	60409	0.380	ppbv #	63
28) Methyl tert-Butyl Ether	4.594	73	57794	0.531	ppbv #	53
30) Cyclohexane	6.597	84	157710	1.612	ppbv #	1
34) 2-Butanone	4.783	43	1435845	8.350	ppbv	97
36) Benzene	6.362	78	113534	0.447	ppbv #	89
44) 2,2,4-Trimethylpentane	7.323	57	24536026	56.845	ppbv #	66
47) 1,1,2-Trichloroethane	8.966	97	89917	0.849	ppbv #	56
50) 4-Methyl-2-Pentanone	8.188	43	239687m	0.920	ppbv	
51) 2-Hexanone	9.513	43	1796850	9.586	ppbv #	44
52) Tetrachloroethene	10.590	164	3802m	0.044	ppbv	
53) Toluene	9.204	91	357595	1.269	ppbv	99
58) Ethyl Benzene	12.063	91	96607m	0.252	ppbv	
59) m/p-Xylene	12.314	91	240994m	0.740	ppbv	
60) o-Xylene	13.024	91	104479m	0.340	ppbv	
72) 4-Ethyltoluene	15.162	105	42715m	0.127	ppbv	
73) 1,3,5-Trimethylbenzene	15.313	105	30527m	0.105	ppbv	
74) 1,2,4-Trimethylbenzene	16.069	105	138390m	0.428	ppbv	

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

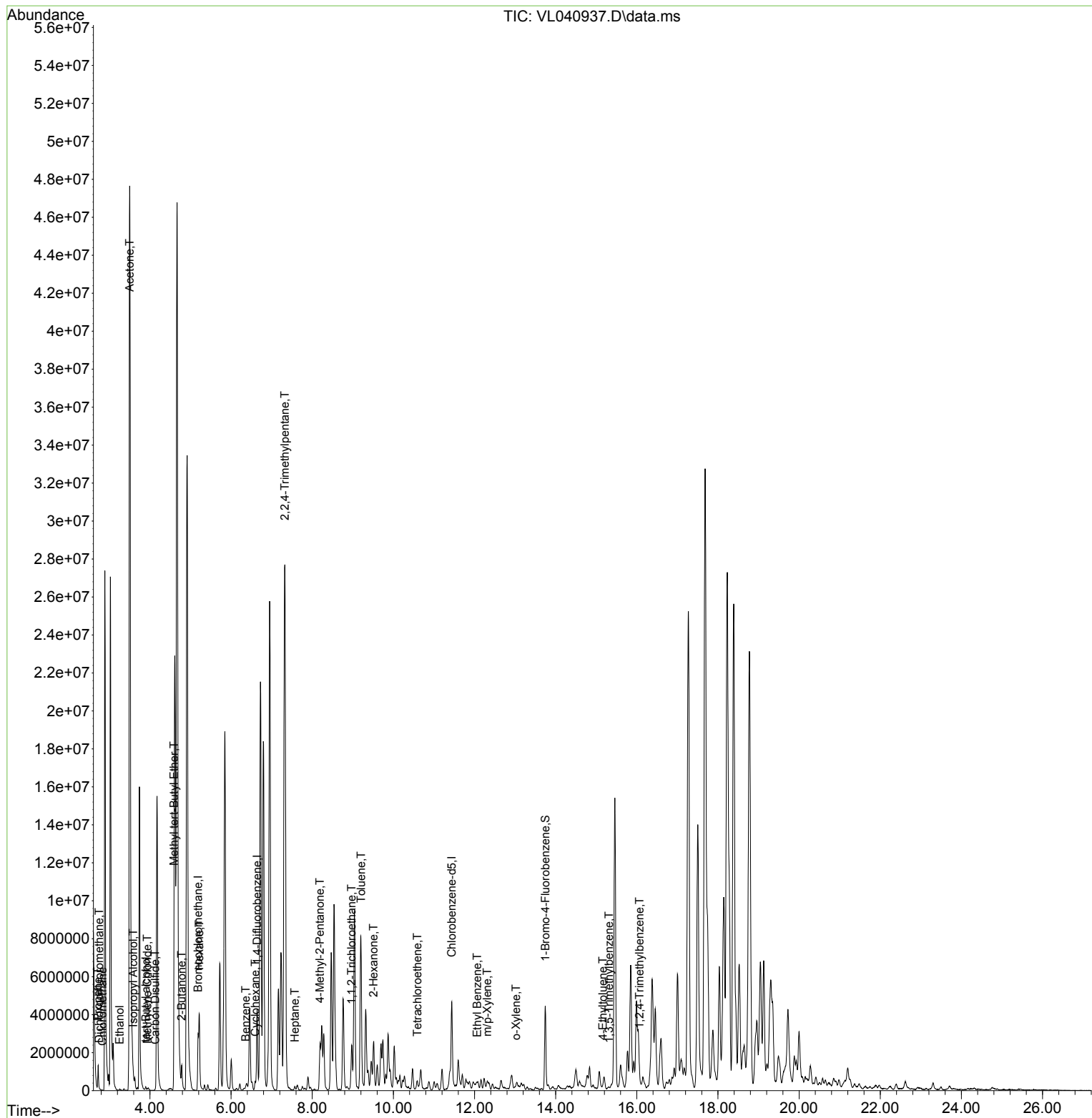
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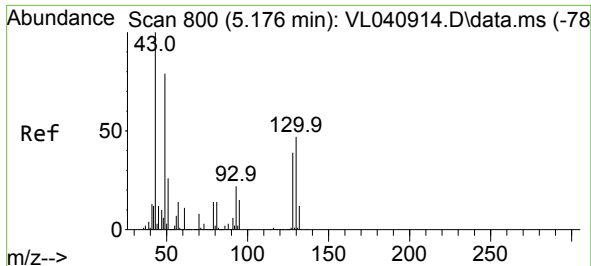
Instrument :
MSVOA_L
ClientSampleId :
SV1

Quant Time: Dec 22 00:10:39 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL122023AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Thu Dec 21 07:32:42 2023
Response via : Initial Calibration

Manual Integrations
APPROVED

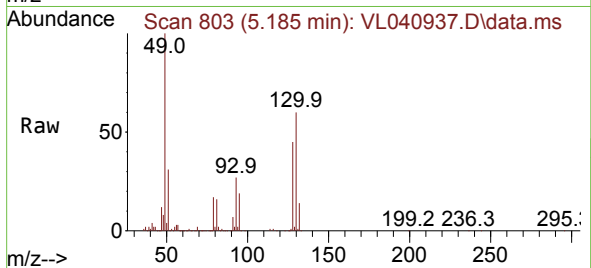
Reviewed By : Semsettin Yesilyurt 12/22/2023
Supervised By : Mahesh Dadoda 12/26/2023





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.185 min Scan# 80
Delta R.T. 0.009 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

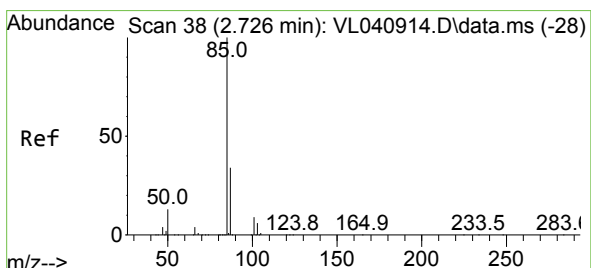
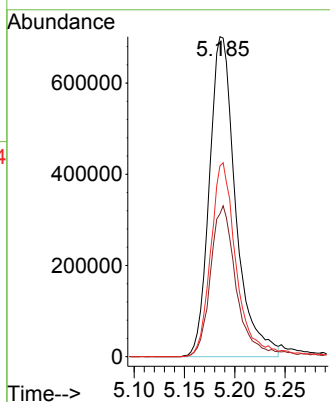
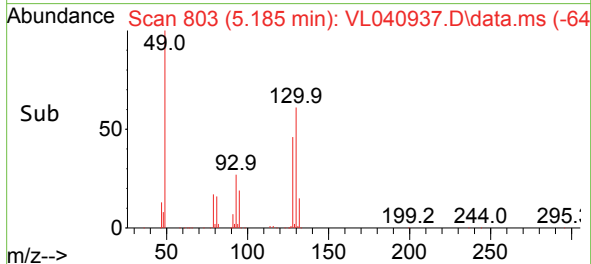
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 49 Resp: 127416
Ion Ratio Lower Upper
49 100
128 47.9 23.8 71.2
130 61.4 30.1 90.5

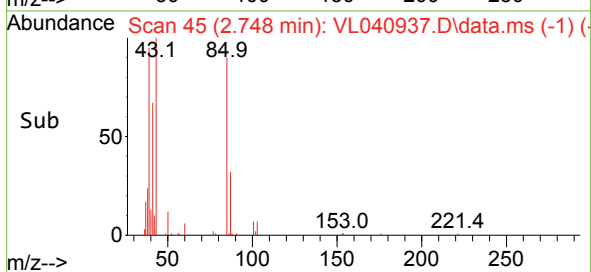
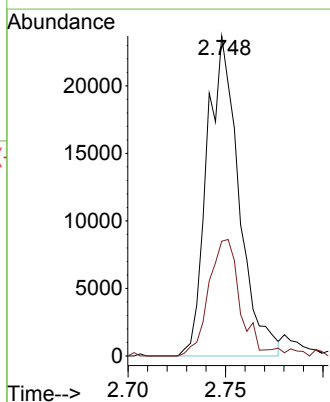
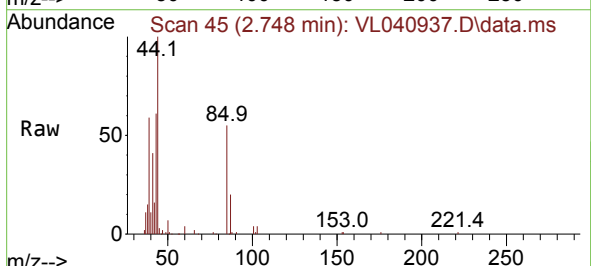
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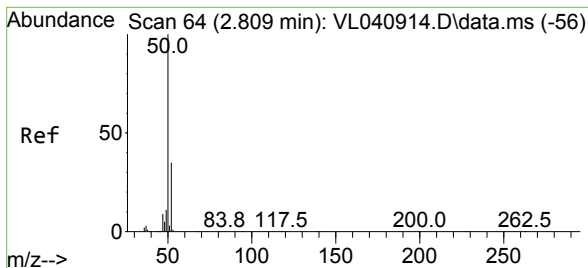
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#2
Dichlorodifluoromethane
Concen: 0.111 ppbv
RT: 2.748 min Scan# 45
Delta R.T. 0.022 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Tgt Ion: 85 Resp: 27036
Ion Ratio Lower Upper
85 100
87 35.9 27.0 40.6





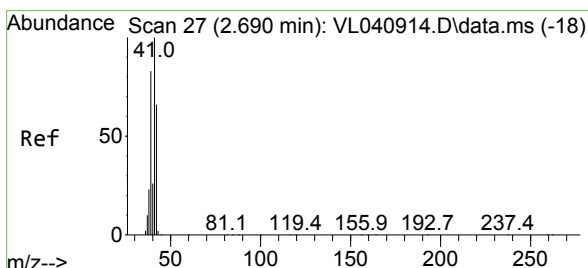
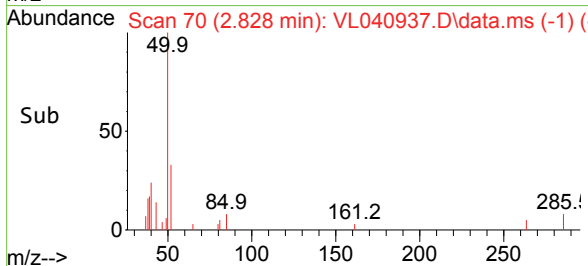
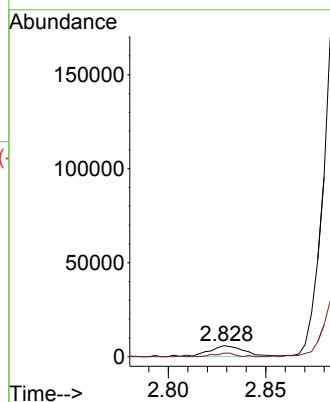
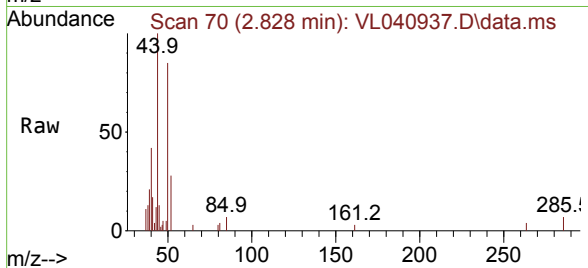
#4
Chloromethane
Concen: 0.097 ppbv
RT: 2.828 min Scan# 70
Delta R.T. 0.019 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 50 Resp: 6830
Ion Ratio Lower Upper
50 100
52 33.9 28.0 42.0

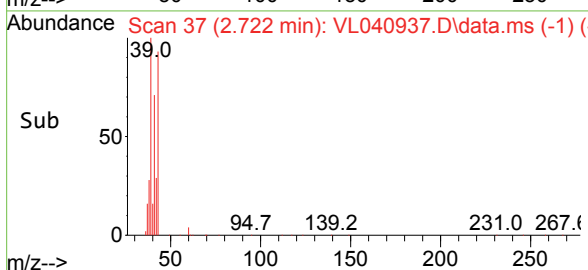
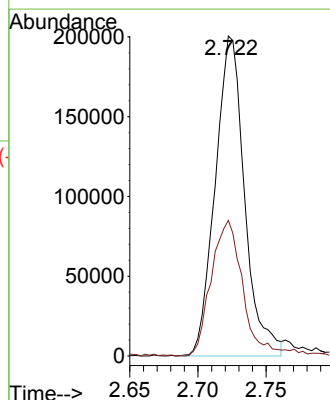
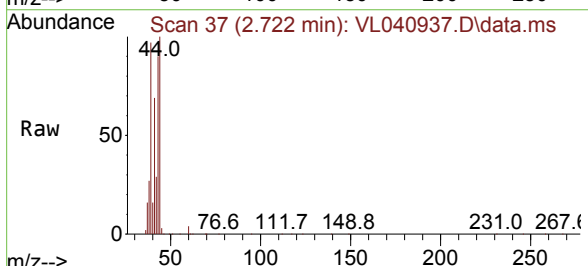
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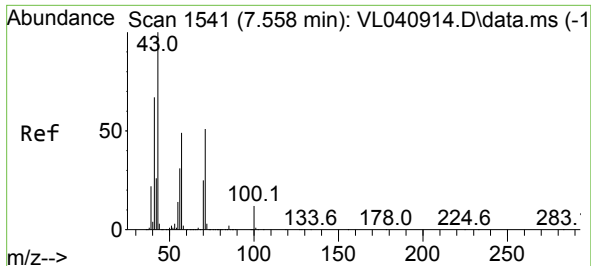
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#9
Propene
Concen: 4.760 ppbv m
RT: 2.722 min Scan# 37
Delta R.T. 0.032 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Tgt Ion: 41 Resp: 301132
Ion Ratio Lower Upper
41 100
42 0.0 55.8 83.6#





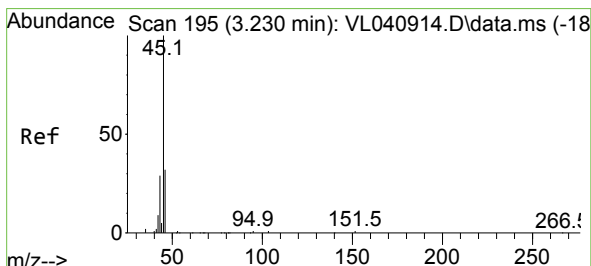
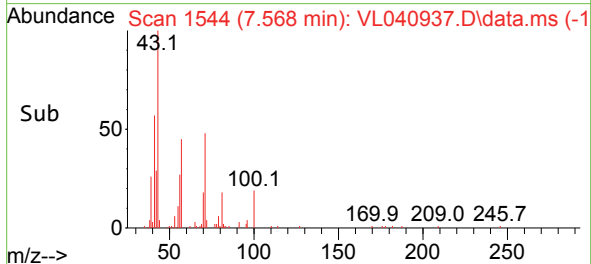
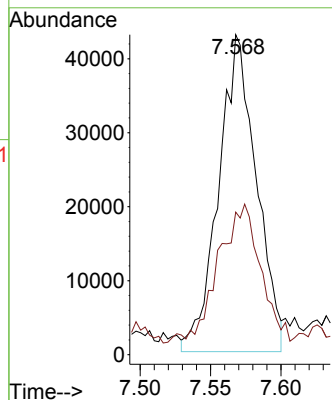
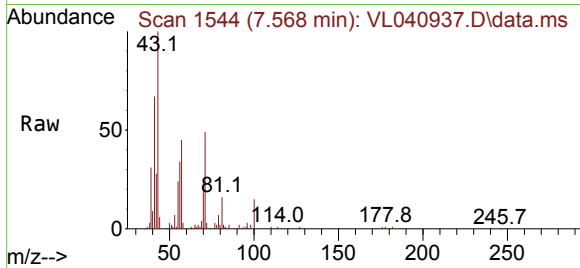
#10
Heptane
Concen: 0.508 ppbv m
RT: 7.568 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 43 Resp: 7995
Ion Ratio Lower Upper
43 100
57 30857.6 39.3 58

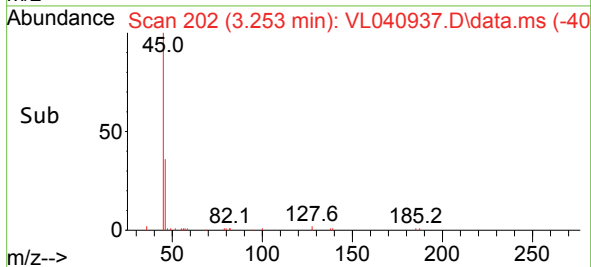
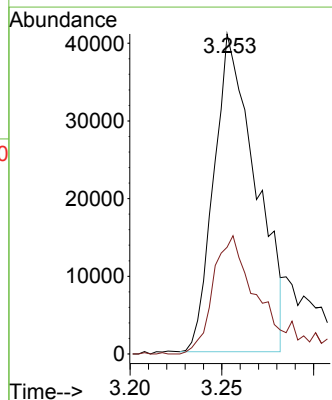
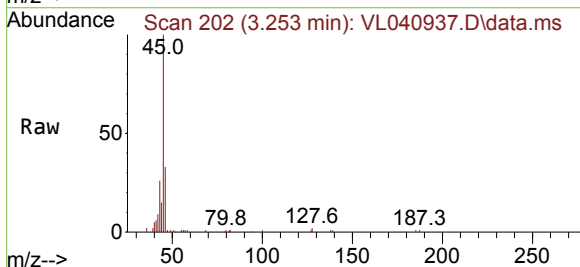
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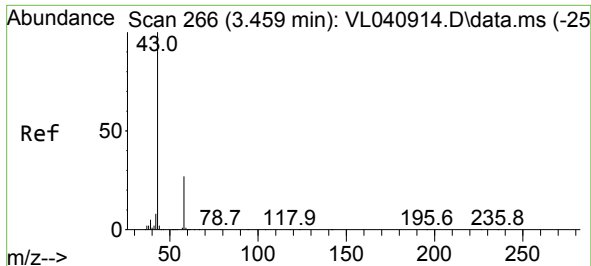
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#13
Ethanol
Concen: 4.067 ppbv
RT: 3.253 min Scan# 202
Delta R.T. 0.022 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

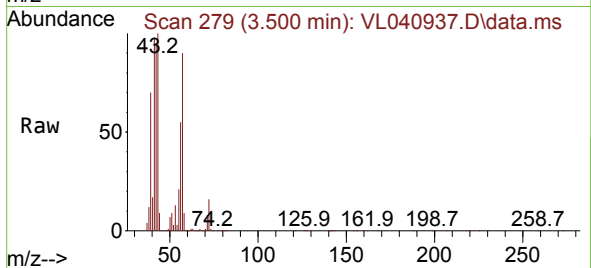
Tgt Ion: 45 Resp: 64915
Ion Ratio Lower Upper
45 100
46 47.8 15.0 60.0





#15
Acetone
Concen: 132.121 ppbv
RT: 3.500 min Scan# 210
Delta R.T. 0.042 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

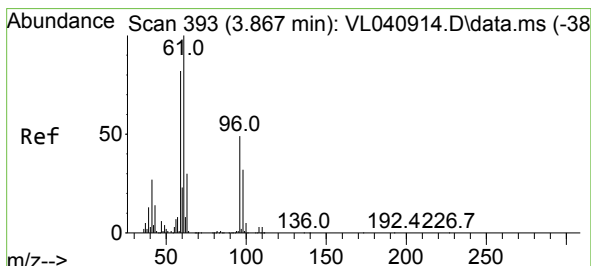
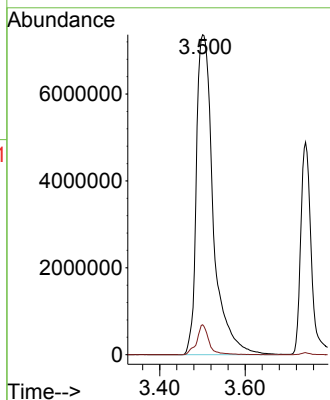
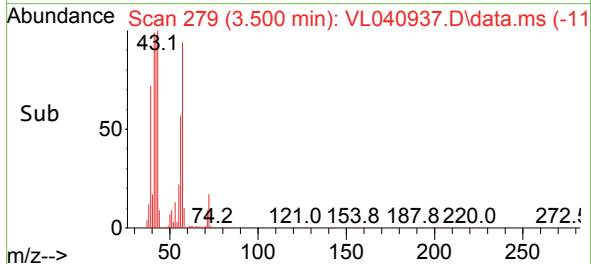
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 43 Resp: 20190144
Ion Ratio Lower Upper
43 100
58 6.8 20.6 30.8

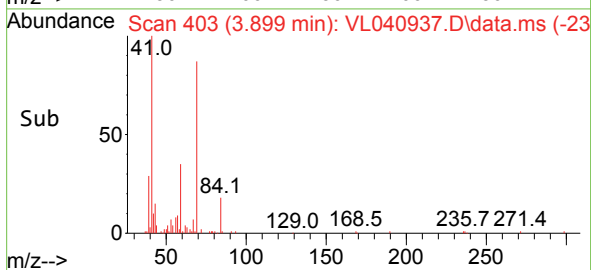
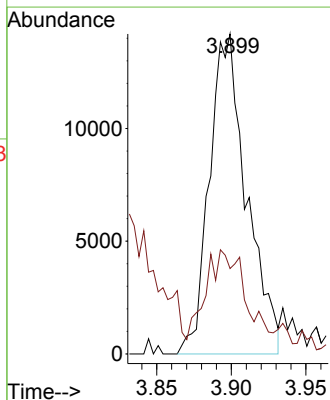
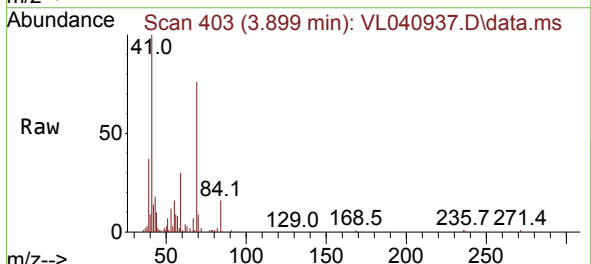
Manual Integrations
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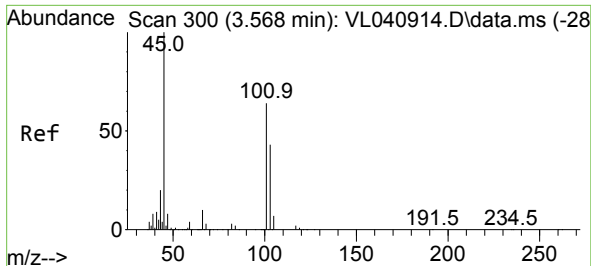
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#17
tert-Butyl alcohol
Concen: 0.217 ppbv m
RT: 3.899 min Scan# 403
Delta R.T. 0.032 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Tgt Ion: 59 Resp: 24556
Ion Ratio Lower Upper
59 100
57 0.0 8.3 12.5





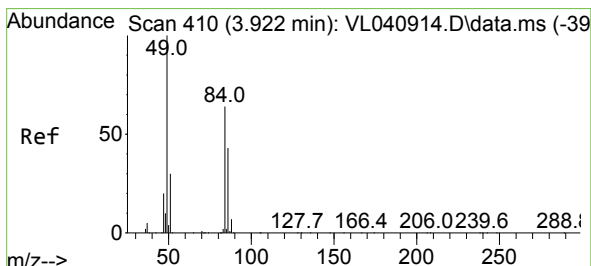
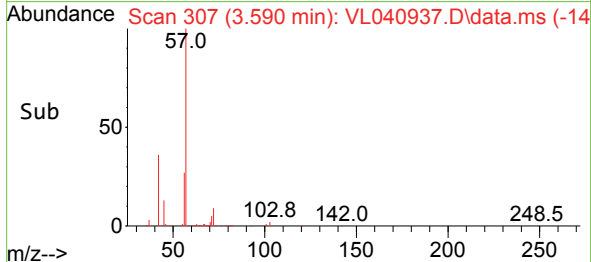
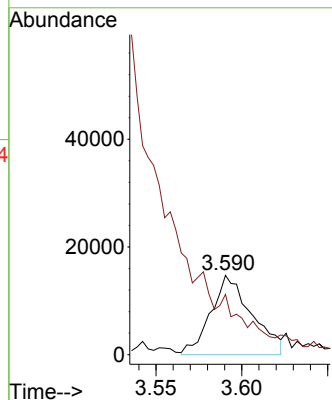
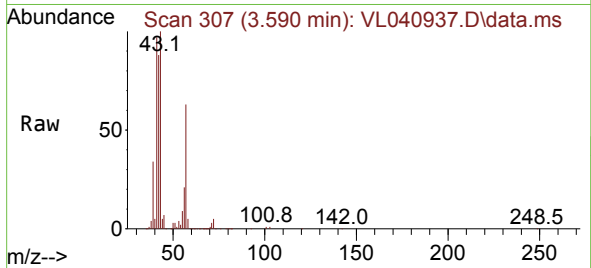
#19
Isopropyl Alcohol
Concen: 0.305 ppbv m
RT: 3.590 min Scan# 307
Delta R.T. 0.022 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 45 Resp: 2433
Ion Ratio Lower Upper
45 100
58 0.0 1.5 2.3

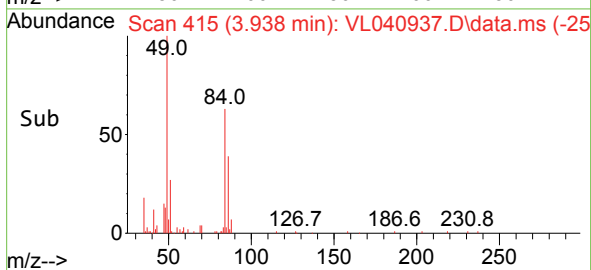
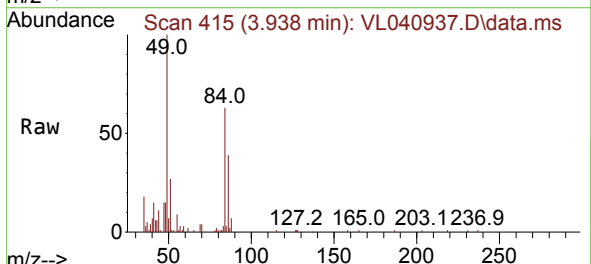
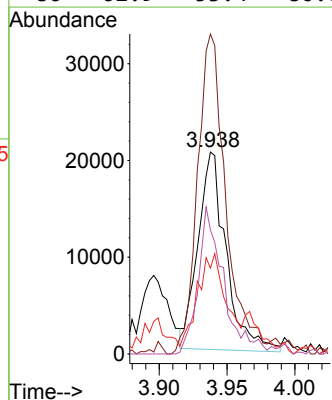
Manual Integrations
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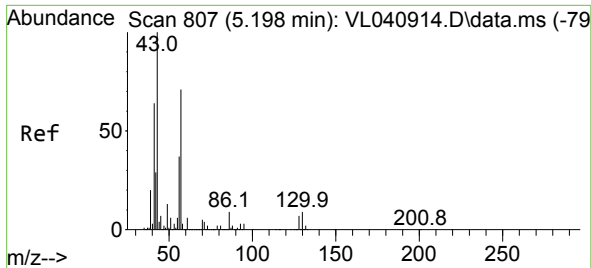
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#20
Methylene Chloride
Concen: 0.542 ppbv
RT: 3.938 min Scan# 415
Delta R.T. 0.016 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

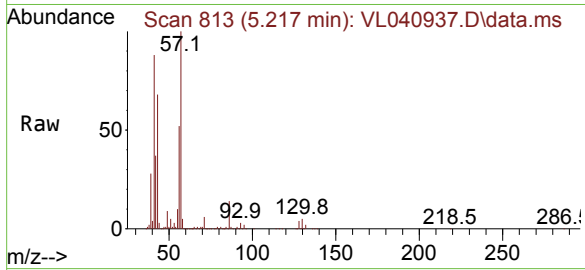
Tgt Ion: 84 Resp: 29532
Ion Ratio Lower Upper
84 100
49 156.7 124.6 187.0
51 42.1 37.2 55.8
86 62.9 53.4 80.0





#26
Hexane
Concen: 13.043 ppbv
RT: 5.217 min Scan# 813
Delta R.T. 0.019 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

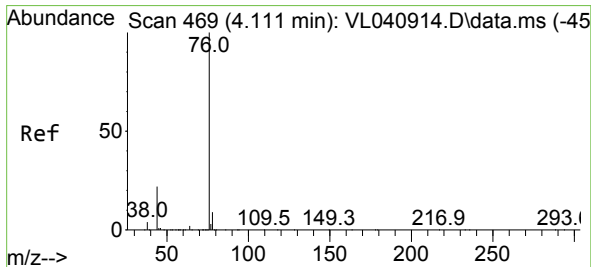
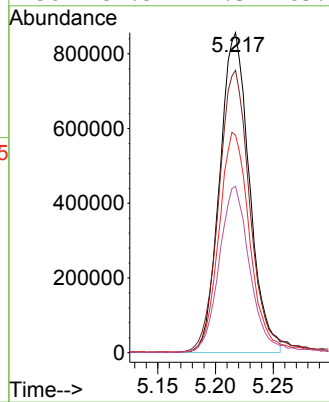
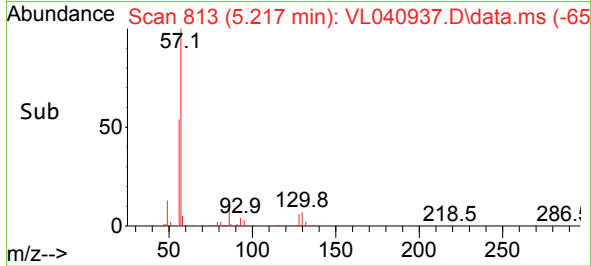
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 57 Resp: 153054
Ion Ratio Lower Upper
57 100
41 94.8 75.2 112.8
43 72.2 188.0 282.0
56 54.5 42.3 63.5

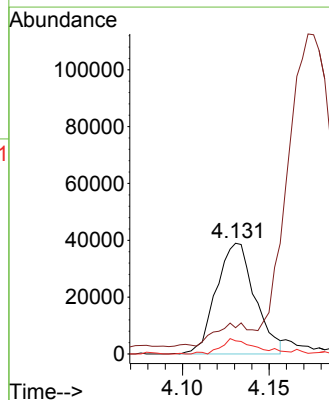
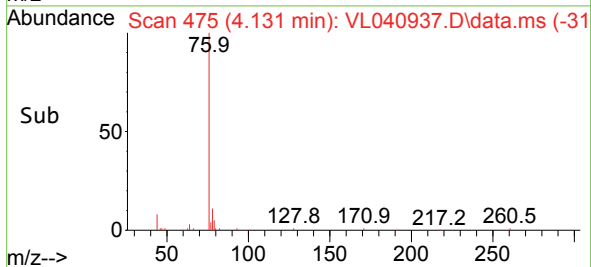
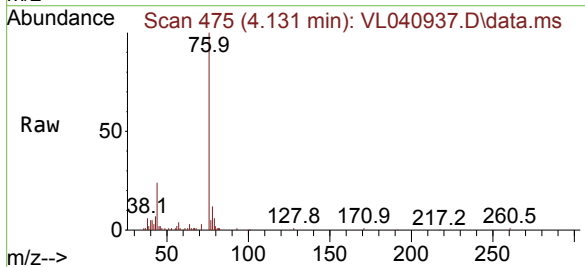
Manual Integrations
APPROVED

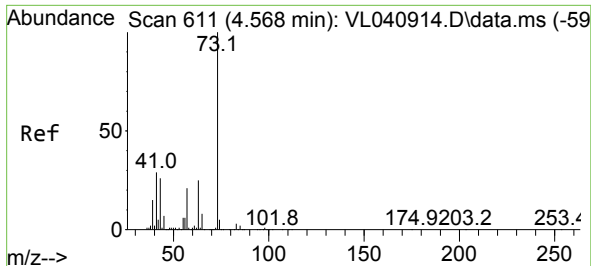
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#27
Carbon Disulfide
Concen: 0.380 ppbv
RT: 4.131 min Scan# 475
Delta R.T. 0.019 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

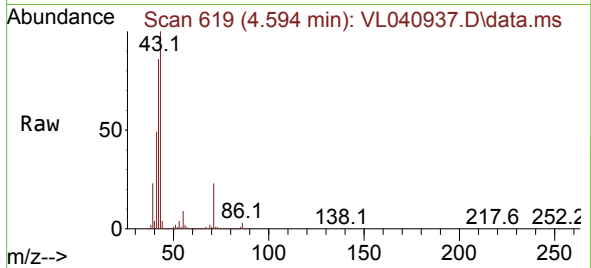
Tgt Ion: 76 Resp: 60409
Ion Ratio Lower Upper
76 100
44 0.0 18.4 27.6#
78 14.3 7.9 11.9#





#28
Methyl tert-Butyl Ether
Concen: 0.531 ppbv
RT: 4.594 min Scan# 611
Delta R.T. 0.026 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

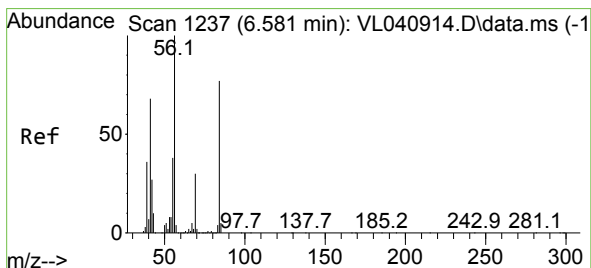
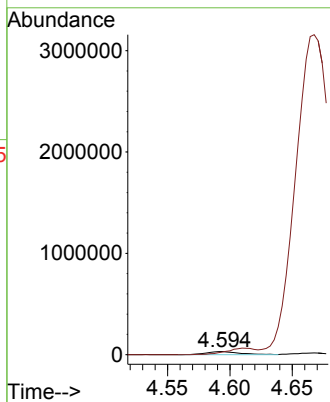
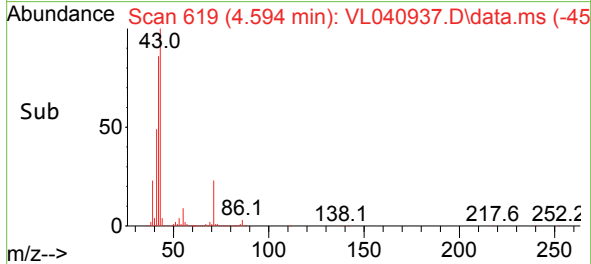
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 73 Resp: 57794
Ion Ratio Lower Upper
73 100
57 0.0 18.0 27.0

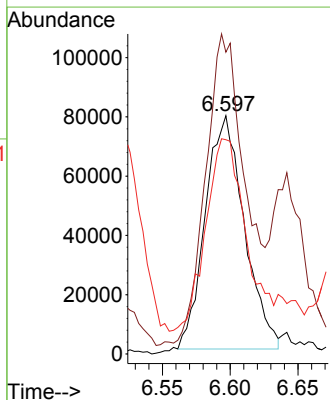
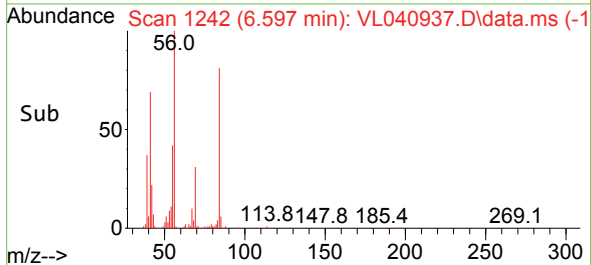
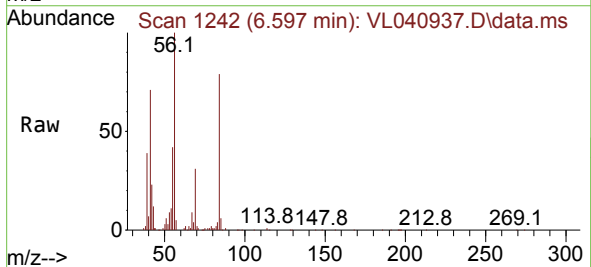
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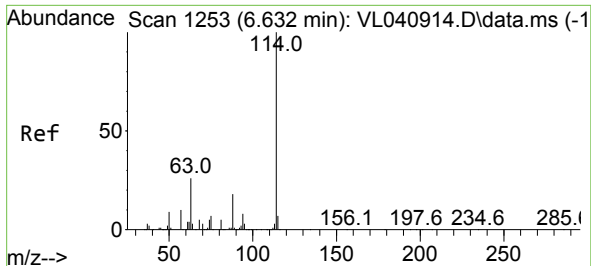
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#30
Cyclohexane
Concen: 1.612 ppbv
RT: 6.597 min Scan# 1242
Delta R.T. 0.016 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Tgt Ion: 84 Resp: 157710
Ion Ratio Lower Upper
84 100
56 0.0 111.4 167.2#
41 502.3 70.0 105.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.642 min Scan# 1

Delta R.T. 0.010 min

Lab File: VL040937.D

Acq: 21 Dec 2023 19:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion:114 Resp: 325048

Ion Ratio Lower Upper

114 100

63 25.4 21.0 31.6

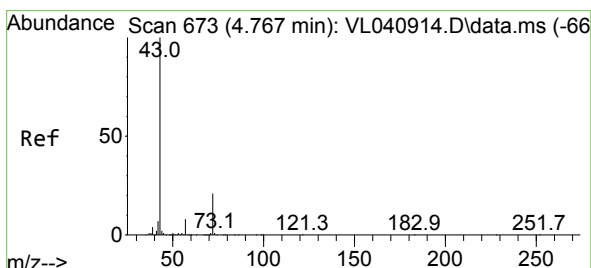
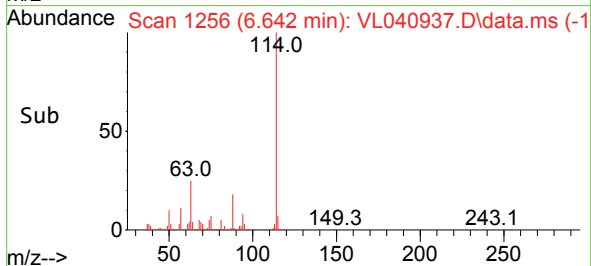
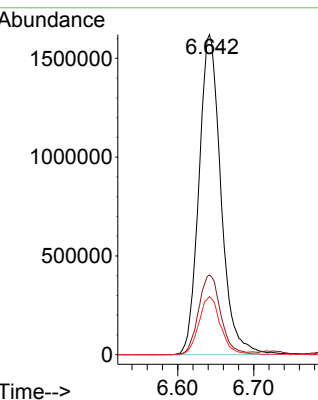
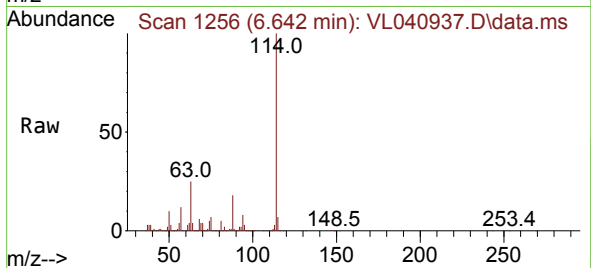
88 17.9 14.3 21.5

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Reviewed By :Semsettin Yesilyurt 12/22/2023

Supervised By :Mahesh Dadoda 12/26/2023



#34

2-Butanone

Concen: 8.350 ppbv

RT: 4.783 min Scan# 678

Delta R.T. 0.016 min

Lab File: VL040937.D

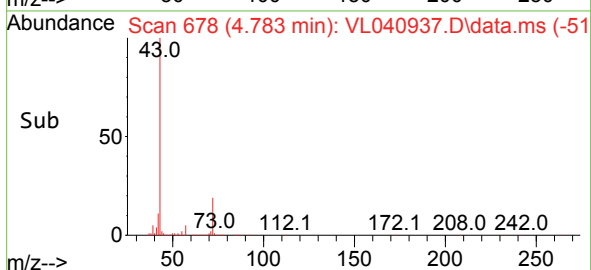
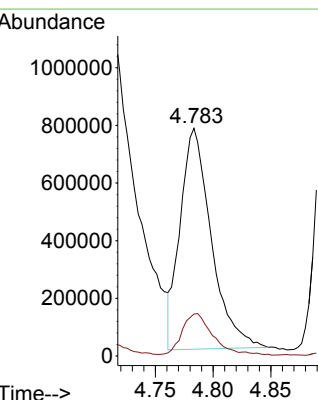
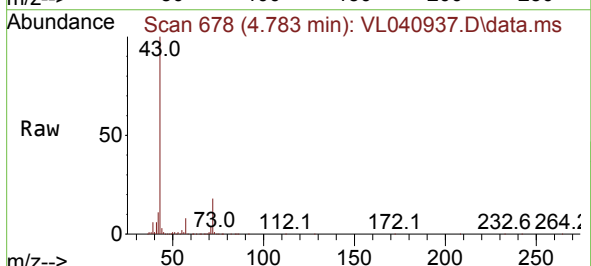
Acq: 21 Dec 2023 19:49

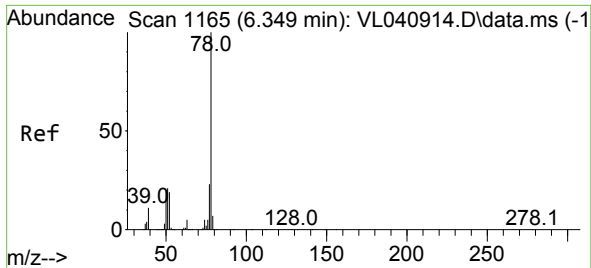
Tgt Ion: 43 Resp: 1435845

Ion Ratio Lower Upper

43 100

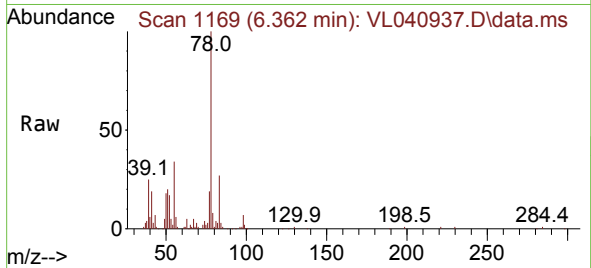
72 20.0 17.2 25.8





#36
Benzene
Concen: 0.447 ppbv
RT: 6.362 min Scan# 1169
Delta R.T. 0.013 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

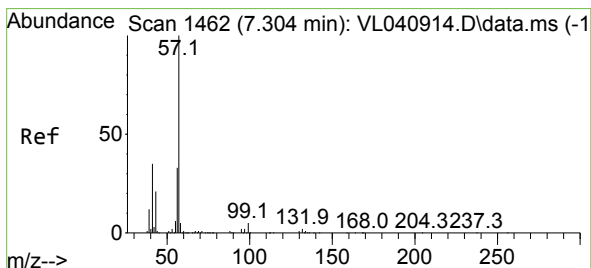
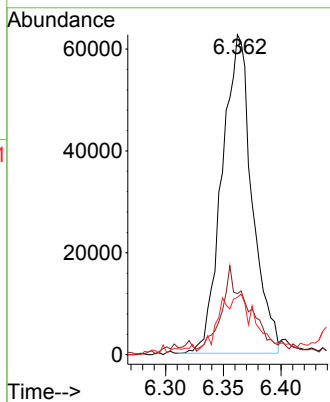
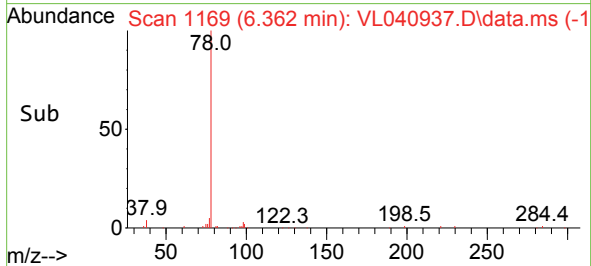
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 78 Resp: 113534
Ion Ratio Lower Upper
78 100
77 16.9 18.4 27.6
50 16.2 16.0 24.0

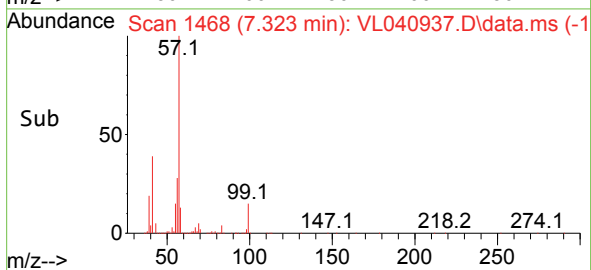
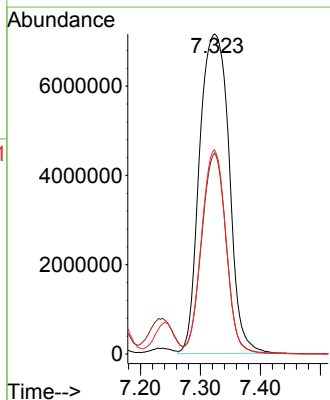
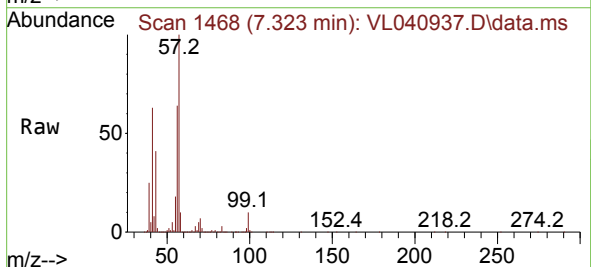
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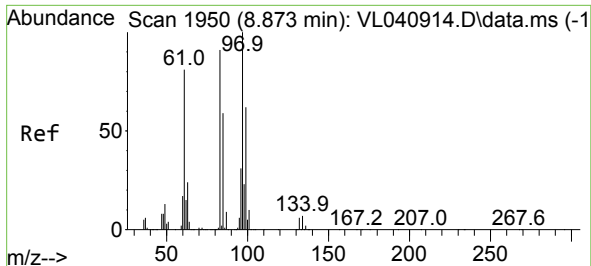
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#44
2,2,4-Trimethylpentane
Concen: 56.845 ppbv
RT: 7.323 min Scan# 1468
Delta R.T. 0.019 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Tgt Ion: 57 Resp:24536026
Ion Ratio Lower Upper
57 100
41 52.4 28.2 42.4#
56 53.1 25.3 37.9#





#47

1,1,2-Trichloroethane

Concen: 0.849 ppbv

RT: 8.966 min Scan# 1950

Delta R.T. 0.093 min

Lab File: VL040937.D

Acq: 21 Dec 2023 19:49

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion: 97 Resp: 8991

Ion Ratio Lower Upper

97 100

83 78.7 72.6 108.8

85 20.1 47.4 71.0

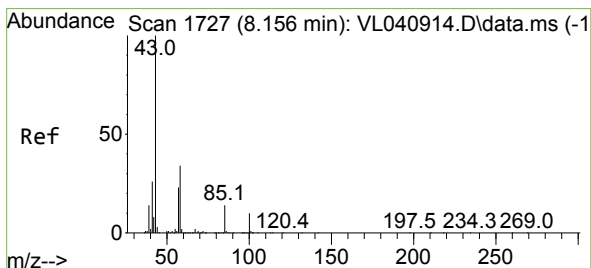
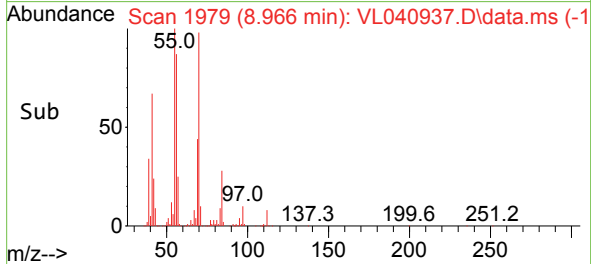
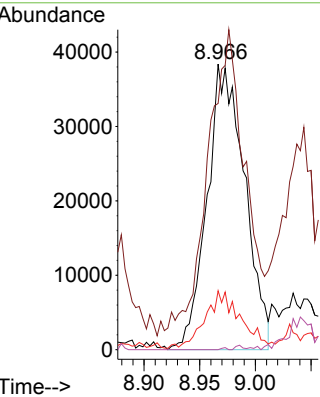
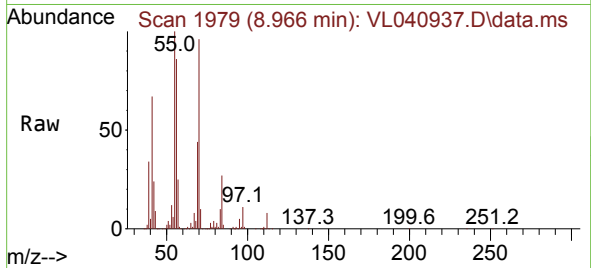
99 0.0 49.6 74.4

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Reviewed By :Semsettin Yesilyurt 12/22/2023

Supervised By :Mahesh Dadoda 12/26/2023



#50

4-Methyl-2-Pentanone

Concen: 0.920 ppbv m

RT: 8.188 min Scan# 1737

Delta R.T. 0.032 min

Lab File: VL040937.D

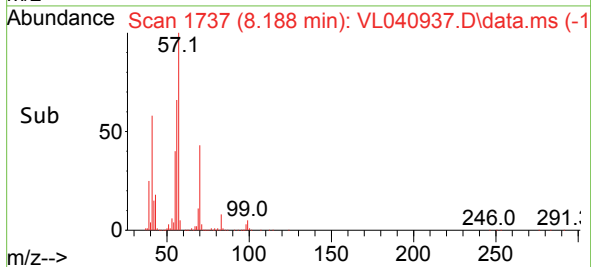
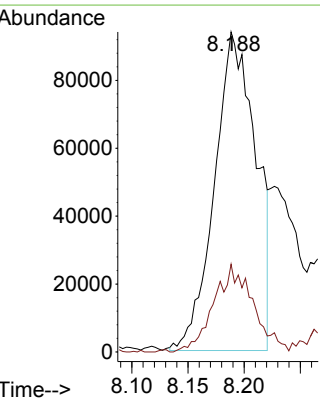
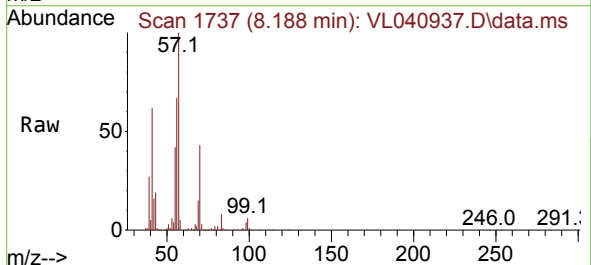
Acq: 21 Dec 2023 19:49

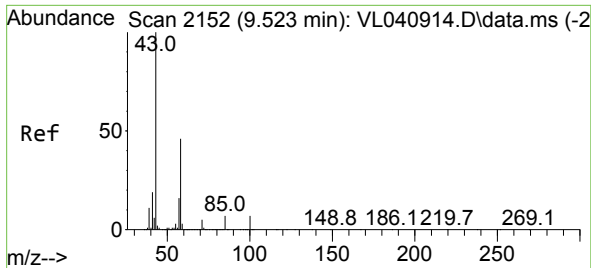
Tgt Ion: 43 Resp: 239687

Ion Ratio Lower Upper

43 100

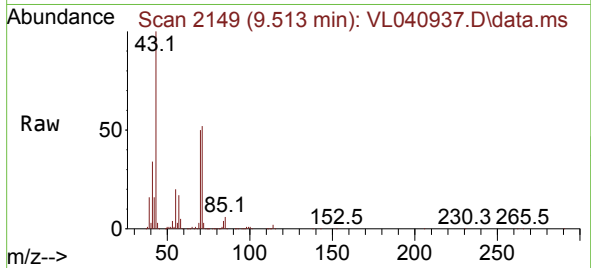
58 26.5 27.4 41.0





#51
2-Hexanone
Concen: 9.586 ppbv
RT: 9.513 min Scan# 2152
Delta R.T. -0.010 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

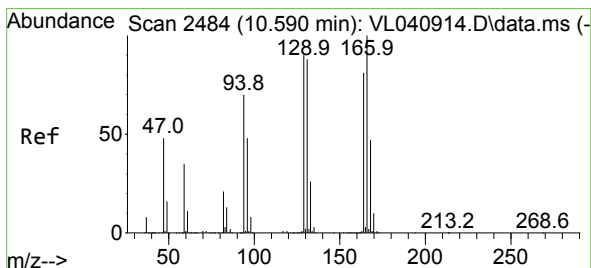
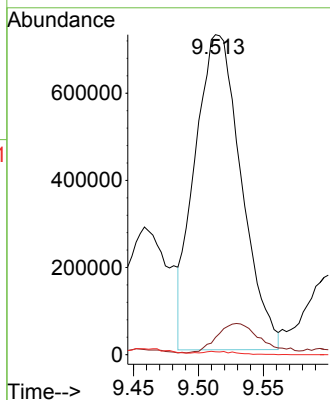
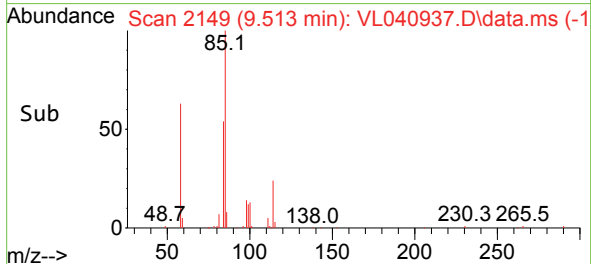
Instrument : MSVOA_L
ClientSampleId : SV1



Tgt Ion: 43 Resp: 1796850
Ion Ratio Lower Upper
43 100
58 9.5 37.3 55.9#
98 0.9 0.2 0.2#

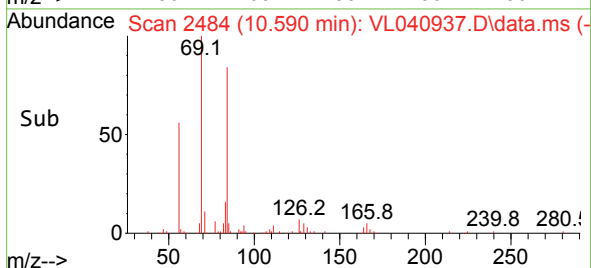
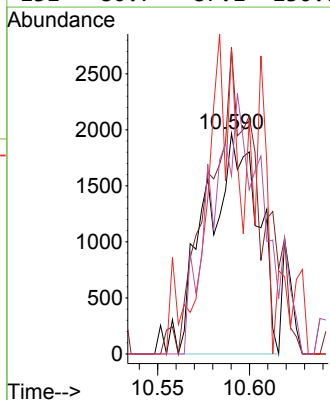
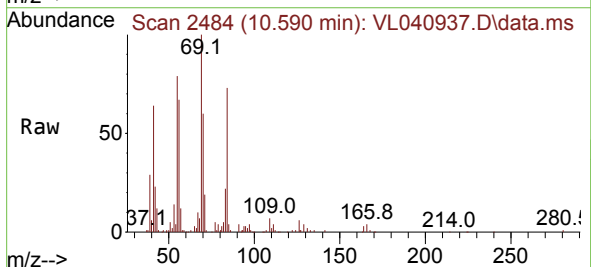
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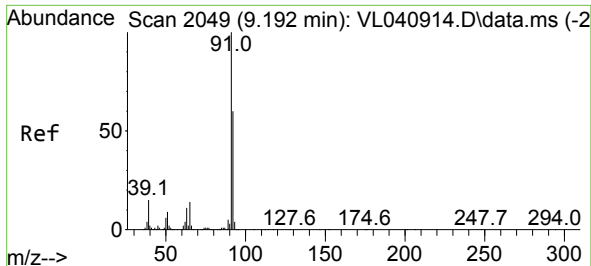
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#52
Tetrachloroethene
Concen: 0.044 ppbv m
RT: 10.590 min Scan# 2484
Delta R.T. -0.000 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

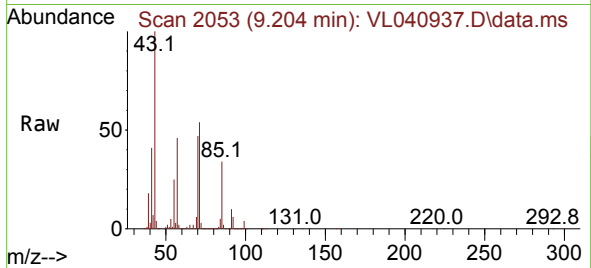
Tgt Ion:164 Resp: 3802
Ion Ratio Lower Upper
164 100
166 139.0 98.9 148.3
129 138.2 88.7 133.1#
131 80.7 87.1 130.7#





#53
Toluene
Concen: 1.269 ppbv
RT: 9.204 min Scan# 2049
Delta R.T. 0.013 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

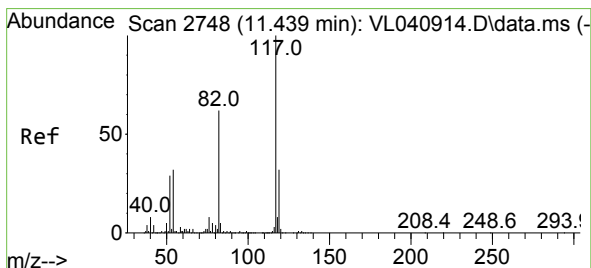
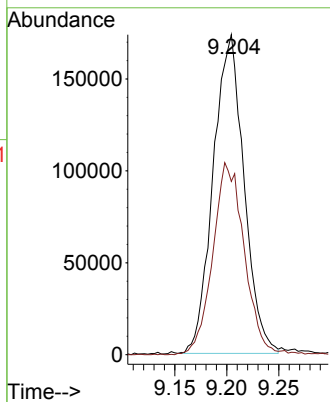
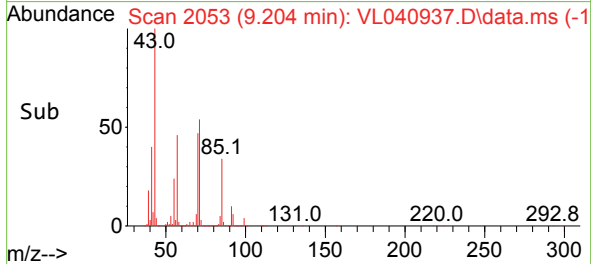
Instrument :
MSVOA_L
ClientSampleId :
SV1



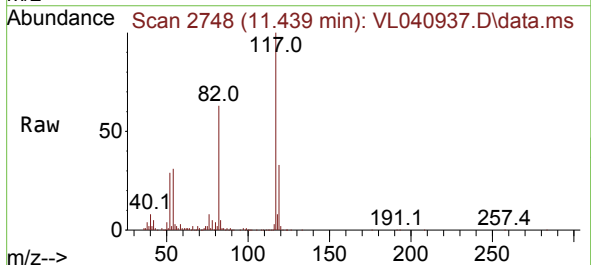
Tgt Ion: 91 Resp: 35759
Ion Ratio Lower Upper
91 100
92 62.1 49.2 73.8

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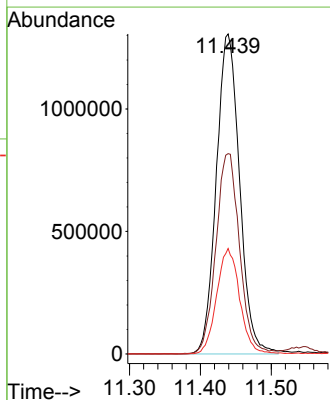
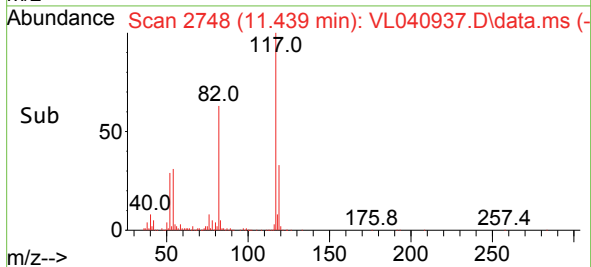
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023

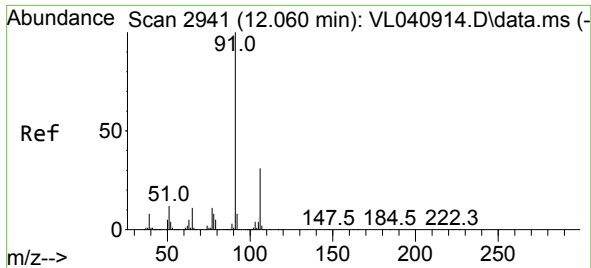


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.439 min Scan# 2748
Delta R.T. -0.000 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49



Tgt Ion:117 Resp: 2981139
Ion Ratio Lower Upper
117 100
82 63.6 49.6 74.4
119 32.8 23.4 35.0





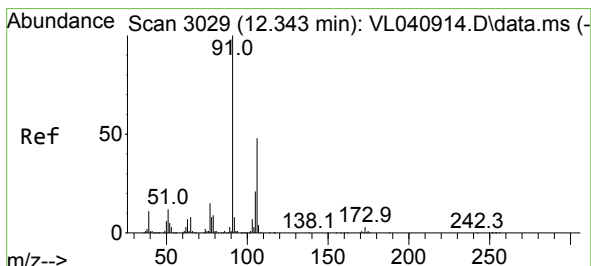
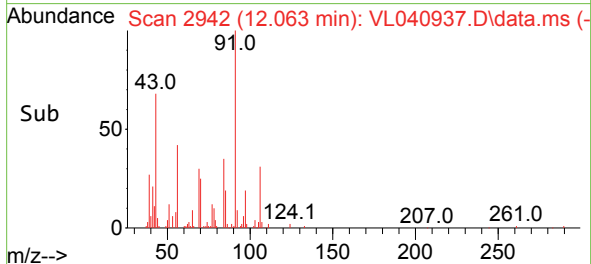
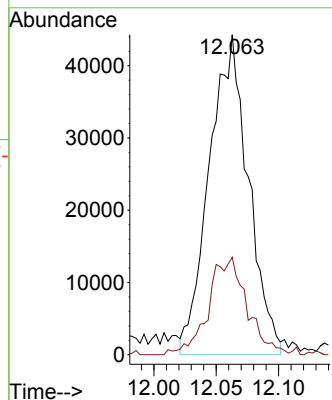
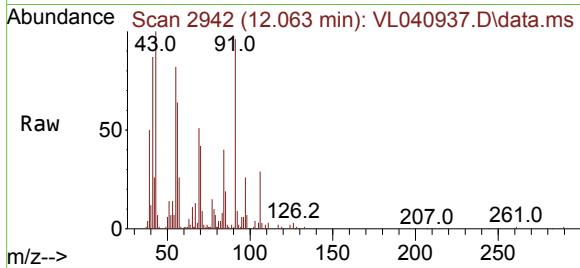
#58
Ethyl Benzene
Concen: 0.252 ppbv m
RT: 12.063 min Scan# 2941
Delta R.T. 0.003 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 91 Resp: 9660
Ion Ratio Lower Upper
91 100
106 30.4 24.9 37.3

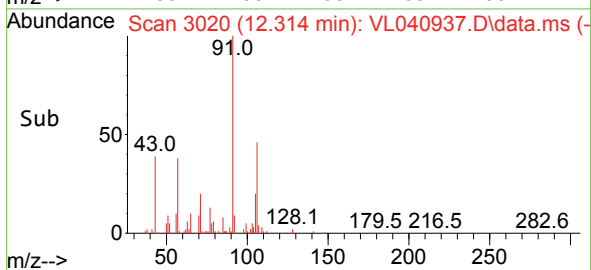
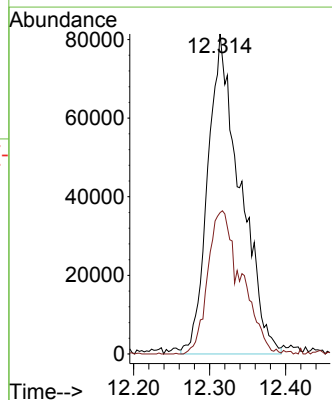
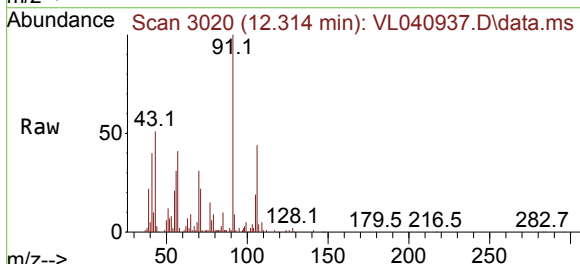
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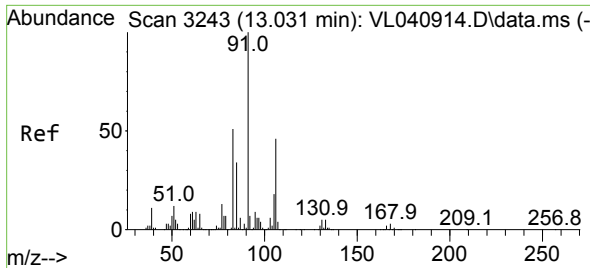
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#59
m/p-Xylene
Concen: 0.740 ppbv m
RT: 12.314 min Scan# 3020
Delta R.T. -0.029 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

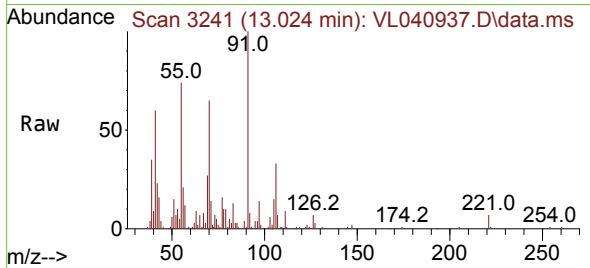
Tgt Ion: 91 Resp: 240994
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0





#60
o-Xylene
Concen: 0.340 ppbv m
RT: 13.024 min Scan# 31
Delta R.T. -0.006 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

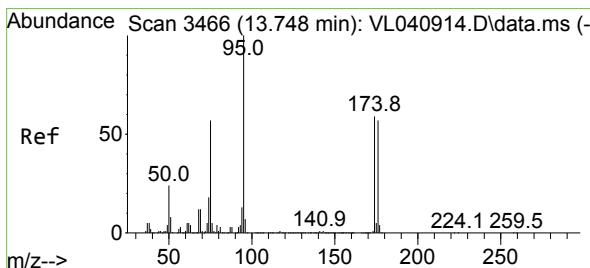
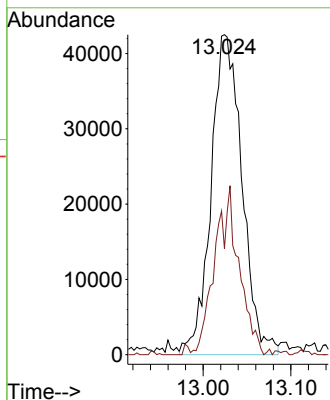
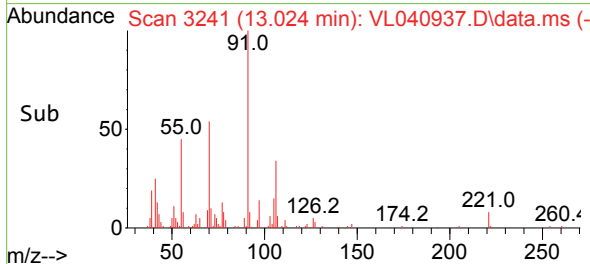
Instrument :
MSVOA_L
ClientSampleId :
SV1



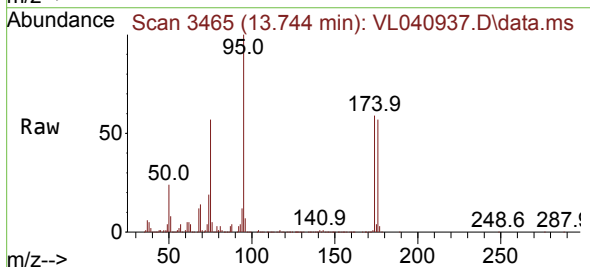
Tgt Ion: 91 Resp: 104479
Ion Ratio Lower Upper
91 100
106 41.9 22.6 67.7

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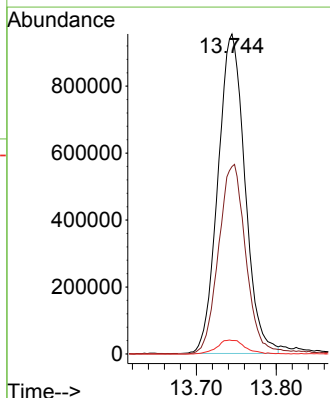
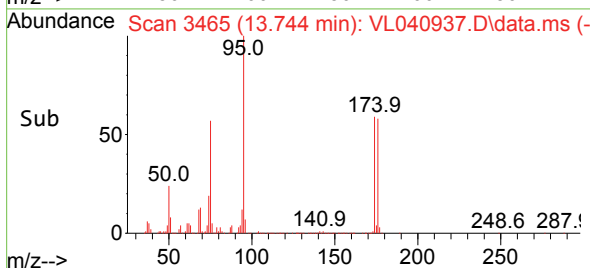
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023

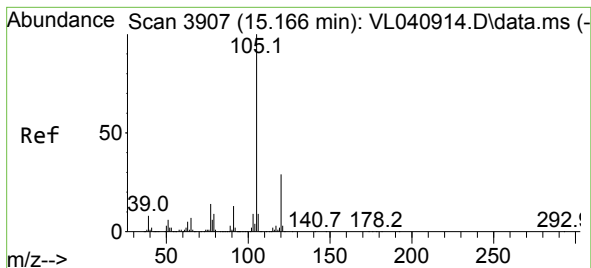


#68
1-Bromo-4-Fluorobenzene
Concen: 10.192 ppbv
RT: 13.744 min Scan# 3465
Delta R.T. -0.003 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49



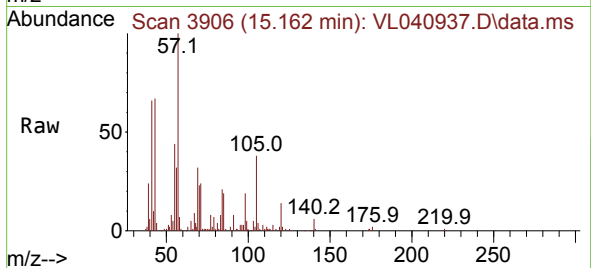
Tgt Ion: 95 Resp: 2237978
Ion Ratio Lower Upper
95 100
174 61.3 48.0 72.0
175 4.6 3.7 5.5





#72
4-Ethyltoluene
Concen: 0.127 ppbv m
RT: 15.162 min Scan# 3907
Delta R.T. -0.003 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

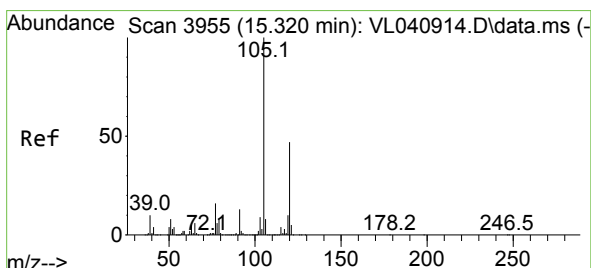
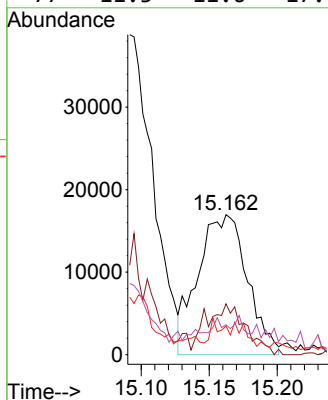
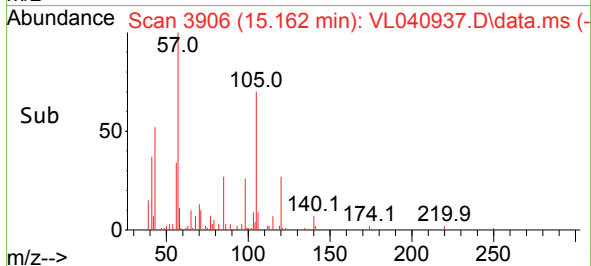
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion:105 Resp: 42715
Ion Ratio Lower Upper
105 100
120 28.2 23.8 35.8
91 0.0 10.9 16.3
77 11.3 11.6 17.4#

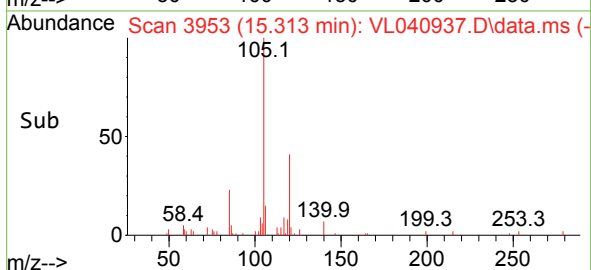
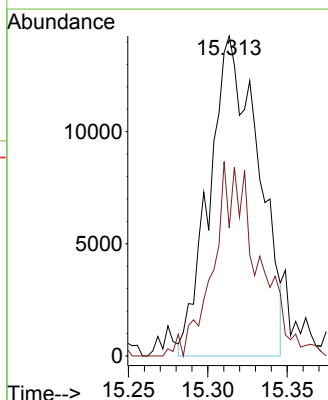
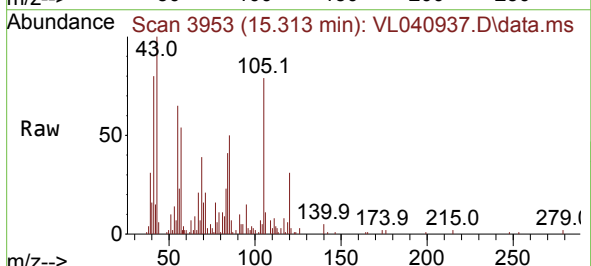
Manual Integrations
APPROVED

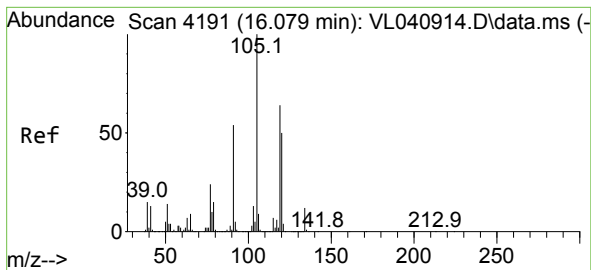
Reviewed By :Semsettin Yesilyurt 12/22/2023
Supervised By :Mahesh Dadoda 12/26/2023



#73
1,3,5-Trimethylbenzene
Concen: 0.105 ppbv m
RT: 15.313 min Scan# 3953
Delta R.T. -0.006 min
Lab File: VL040937.D
Acq: 21 Dec 2023 19:49

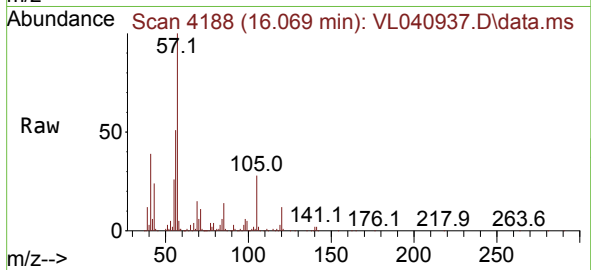
Tgt Ion:105 Resp: 30527
Ion Ratio Lower Upper
105 100
120 40.0 37.8 56.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.428 ppbv m
 RT: 16.069 min Scan# 41
 Delta R.T. -0.010 min
 Lab File: VL040937.D
 Acq: 21 Dec 2023 19:49

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1



Tgt Ion:	105	Resp:	138390
Ion Ratio	Lower	Upper	
105	100		
120	42.7	40.2	60.4
91	9.3	43.0	64.6
77	13.5	18.9	28.3

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