

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL050624\
 Data File : VL041228.D
 Acq On : 6 May 2024 21:37
 Operator : SY/MD
 Sample : P2353-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 05/07/2024
 Supervised By :Mahesh Dadoda 05/07/2024

Quant Time: May 07 05:28:40 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL042924AIR.M

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

QLast Update : Tue May 07 05:19:44 2024

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.198	49	862244	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.658	114	2301413	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.468	117	2130863	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.783	95	1711236	10.637	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 106.400%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.745	85	19032	0.163	ppbv	# 88
3) Chlorodifluoromethane	2.690	51	33502	0.256	ppbv	94
9) Propene	2.709	41	32117	0.627	ppbv	97
10) Heptane	7.587	43	64621	0.520	ppbv	88
13) Ethanol	3.259	45	23308m	2.029	ppbv	
15) Acetone	3.481	43	236582	2.325	ppbv	# 74
17) tert-Butyl alcohol	3.906	59	17225m	0.157	ppbv	
19) Isopropyl Alcohol	3.597	45	23748m	0.356	ppbv	
20) Methylene Chloride	3.944	84	78782	2.226	ppbv	91
26) Hexane	5.217	57	239388	2.641	ppbv	# 40
34) 2-Butanone	4.803	43	205518	1.755	ppbv	100
36) Benzene	6.375	78	14708m	0.076	ppbv	
44) 2,2,4-Trimethylpentane	7.327	57	48885m	0.147	ppbv	
51) 2-Hexanone	9.568	43	187937	1.205	ppbv	# 93
52) Tetrachloroethene	10.616	164	21530m	0.317	ppbv	
53) Toluene	9.224	91	401861	1.795	ppbv	100
58) Ethyl Benzene	12.095	91	213048m	0.729	ppbv	
59) m/p-Xylene	12.349	91	624569	2.543	ppbv	97
60) o-Xylene	13.056	91	298719	1.298	ppbv	100
62) Isopropylbenzene	14.034	105	71890m	0.209	ppbv	
63) 1,1,2,2-Tetrachloroethane	13.027	83	10125m	0.065	ppbv	
64) n-propylbenzene	14.915	120	38668m	0.450	ppbv	
65) tert-Butylbenzene	16.111	119	49356m	0.160	ppbv	
67) sec-Butylbenzene	16.645	105	36667m	0.084	ppbv	
72) 4-Ethyltoluene	15.198	105	170954	0.656	ppbv	# 90
73) 1,3,5-Trimethylbenzene	15.359	105	148913m	0.631	ppbv	
74) 1,2,4-Trimethylbenzene	16.111	105	444726	1.726	ppbv	# 69
79) Naphthalene	21.400	128	22775m	0.093	ppbv	

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

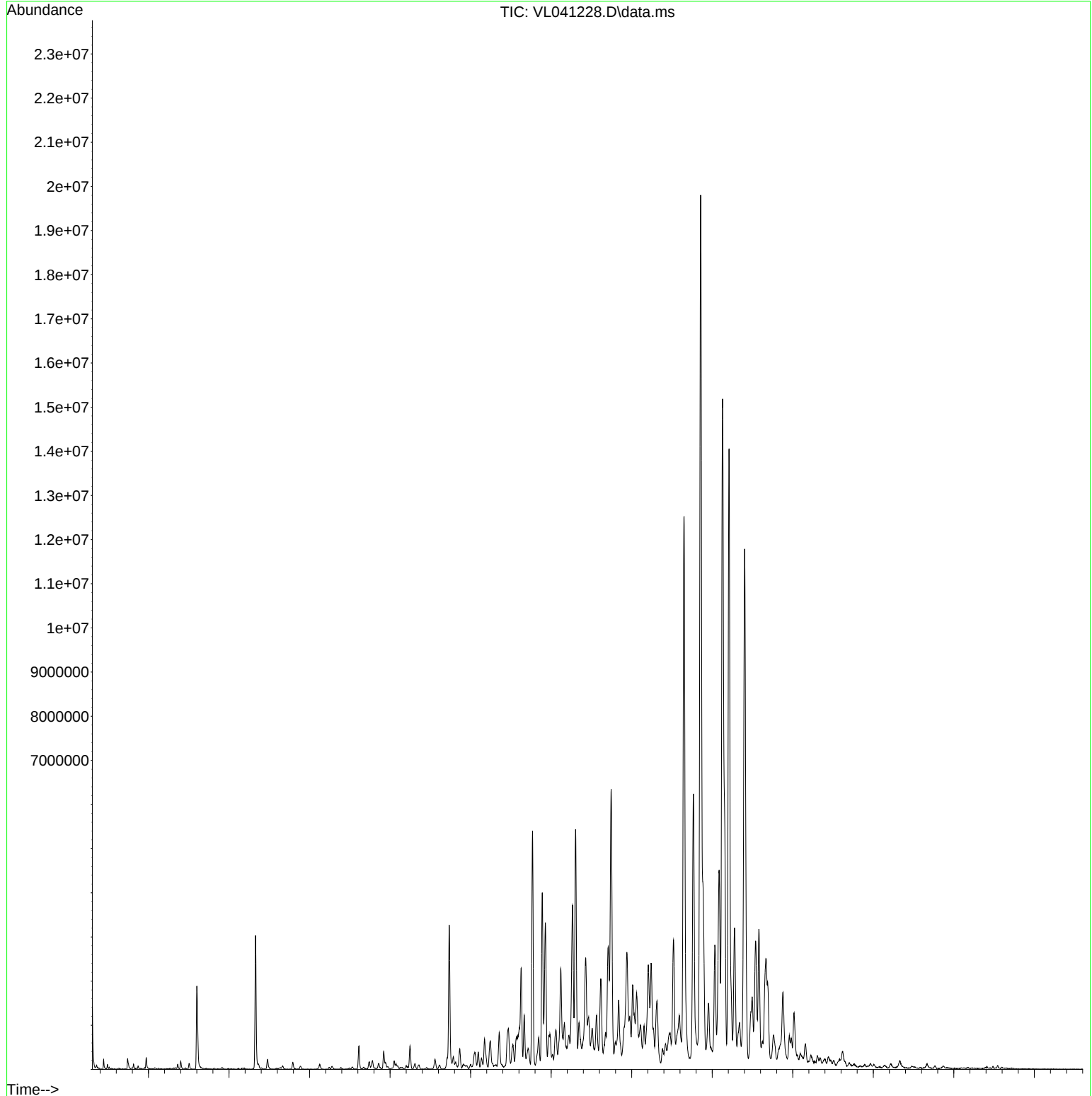
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL050624\
Data File : VL041228.D
Acq On : 6 May 2024 21:37
Operator : SY/MD
Sample : P2353-01 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

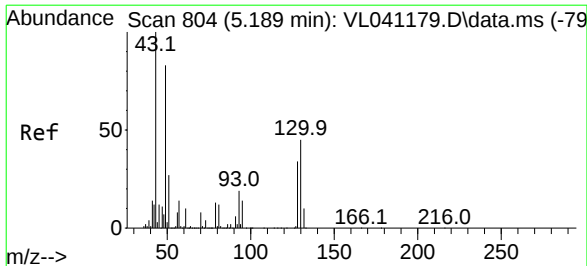
Instrument :
MSVOA_L
ClientSampleId :
SV1

Quant Time: May 07 05:28:40 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL042924AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Tue May 07 05:19:44 2024
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 05/07/2024
Supervised By : Mahesh Dadoda 05/07/2024





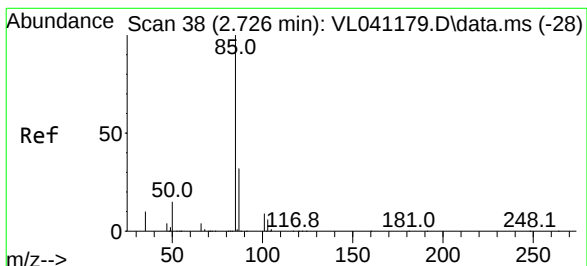
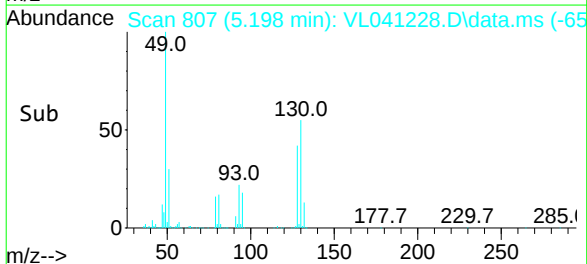
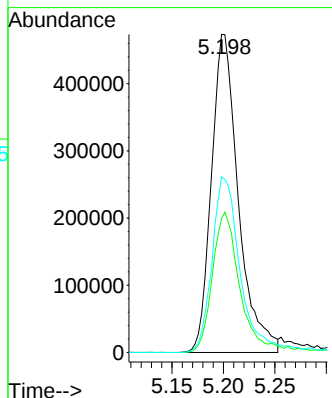
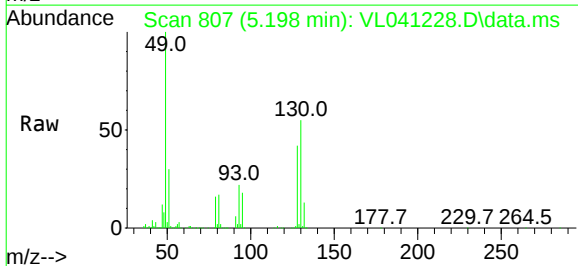
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.198 min Scan# 80
Delta R.T. 0.003 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 49 Resp: 862244
Ion Ratio Lower Upper
49 100
128 46.6 21.5 64.5
130 58.7 27.2 81.6

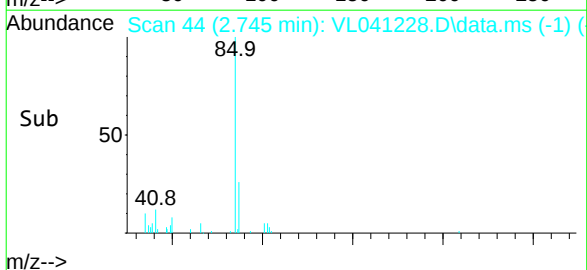
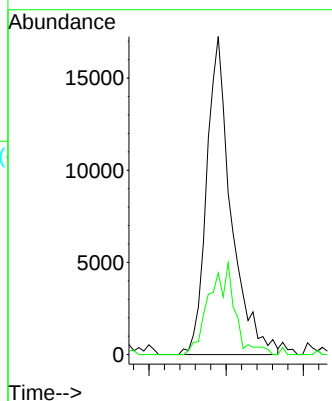
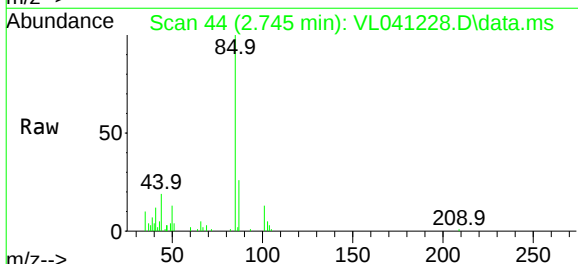
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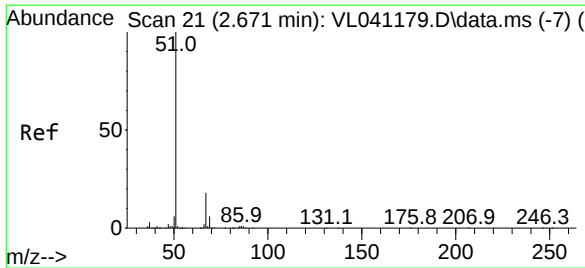
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#2
Dichlorodifluoromethane
Concen: 0.163 ppbv
RT: 2.745 min Scan# 44
Delta R.T. 0.006 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Tgt Ion: 85 Resp: 19032
Ion Ratio Lower Upper
85 100
87 25.7 25.7 38.5#





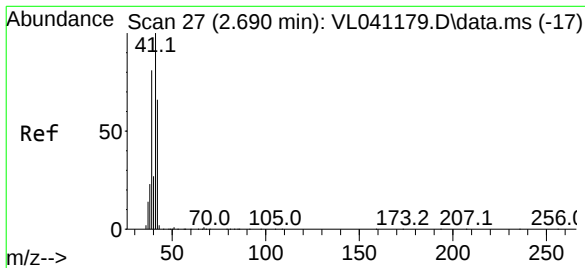
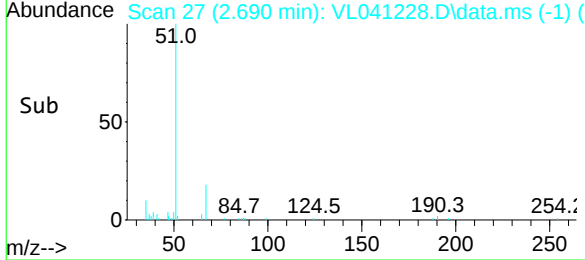
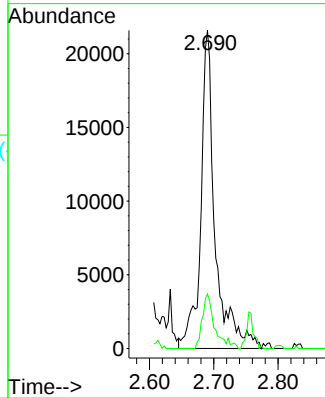
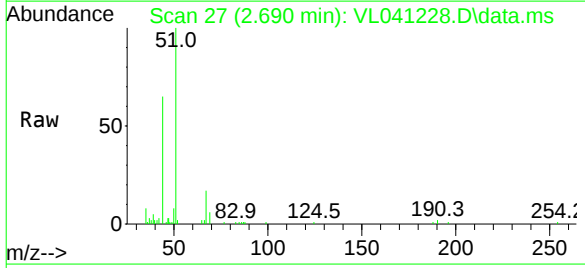
#3
Chlorodifluoromethane
Concen: 0.256 ppbv
RT: 2.690 min Scan# 27
Delta R.T. 0.006 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 51 Resp: 33502
Ion Ratio Lower Upper
51 100
67 14.8 14.0 21.0

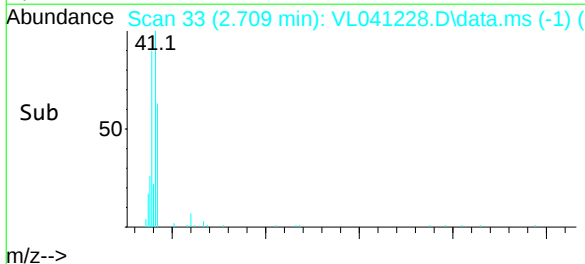
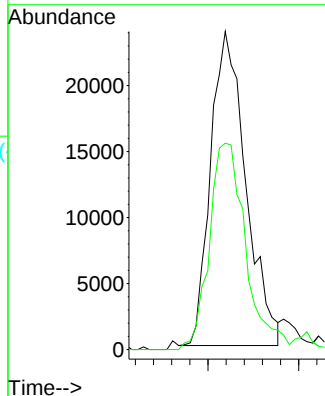
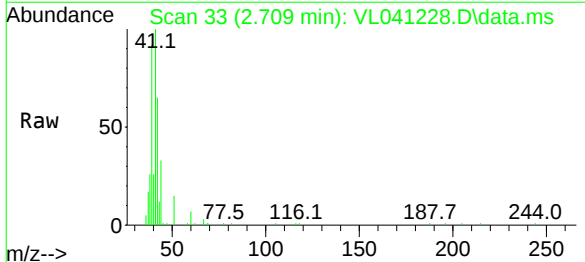
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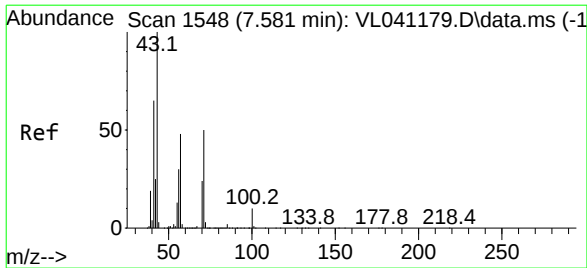
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#9
Propene
Concen: 0.627 ppbv
RT: 2.709 min Scan# 33
Delta R.T. 0.006 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Tgt Ion: 41 Resp: 32117
Ion Ratio Lower Upper
41 100
42 71.5 55.3 82.9





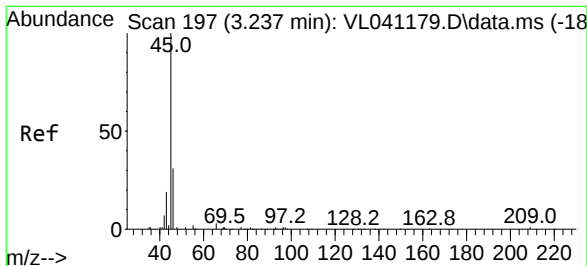
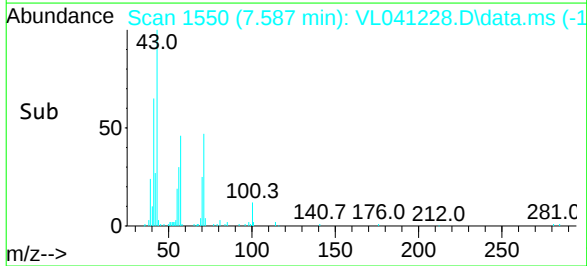
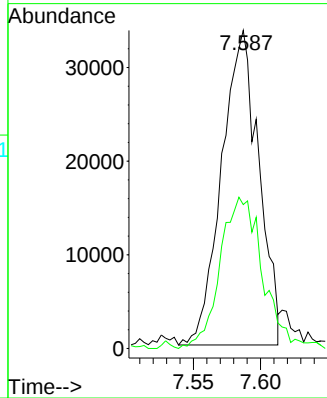
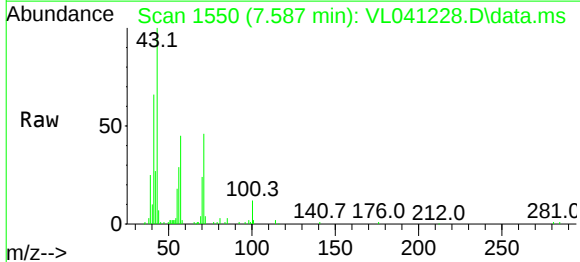
#10
Heptane
Concen: 0.520 ppbv
RT: 7.587 min Scan# 15
Delta R.T. 0.010 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 43 Resp: 64621
Ion Ratio Lower Upper
43 100
57 56.2 38.7 58.1

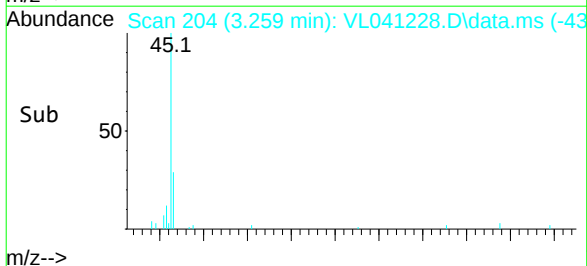
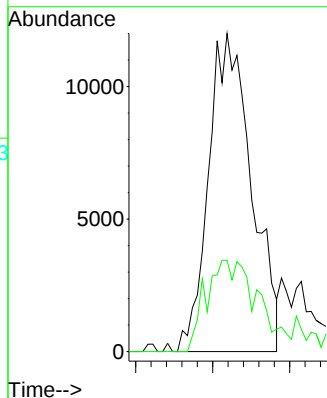
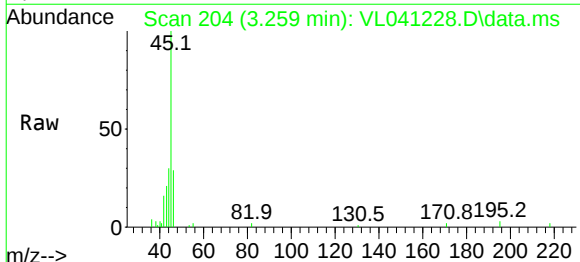
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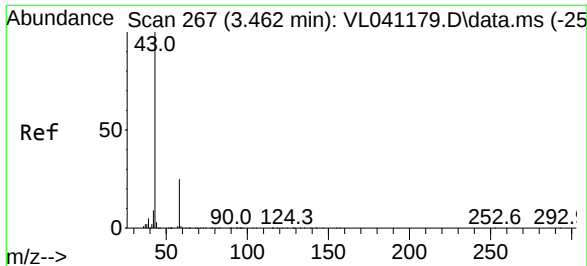
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#13
Ethanol
Concen: 2.029 ppbv m
RT: 3.259 min Scan# 204
Delta R.T. 0.016 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Tgt Ion: 45 Resp: 23308
Ion Ratio Lower Upper
45 100
46 42.9 14.8 59.0





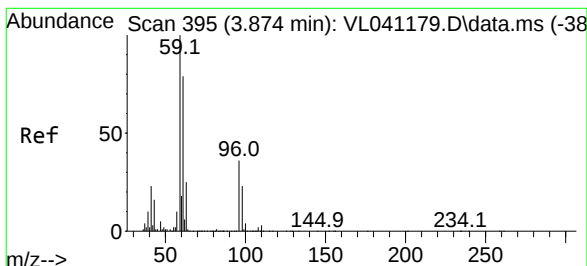
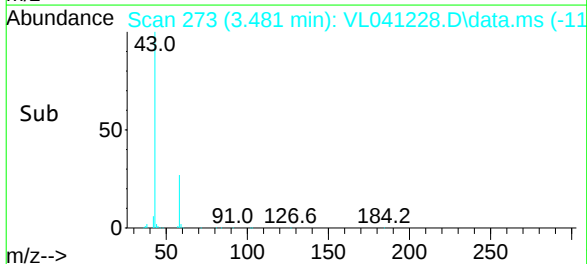
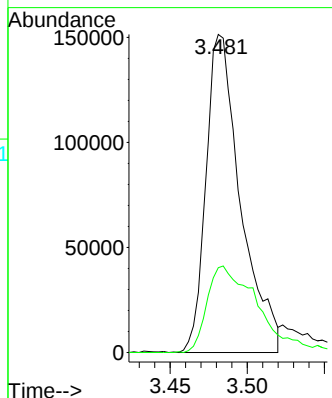
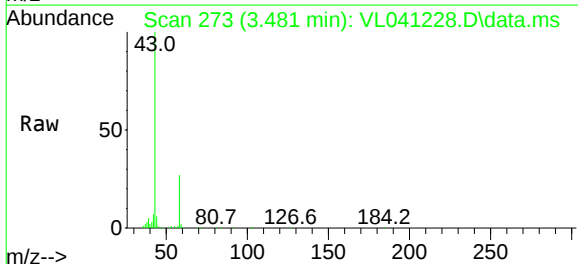
#15
Acetone
Concen: 2.325 ppbv
RT: 3.481 min Scan# 27
Delta R.T. 0.007 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 43 Resp: 236582
Ion Ratio Lower Upper
43 100
58 40.0 21.4 32.0#

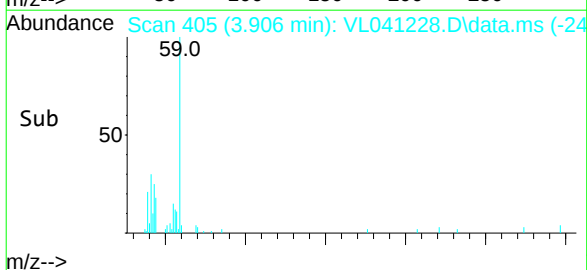
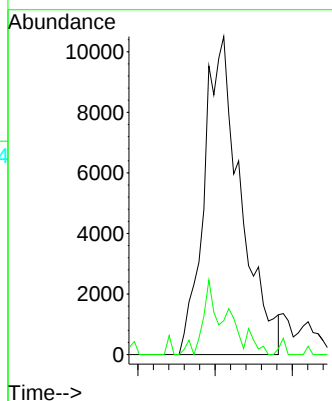
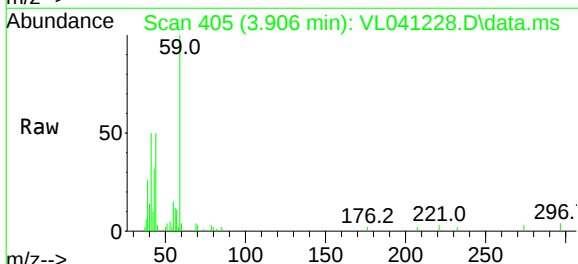
Manual Integrations
APPROVED

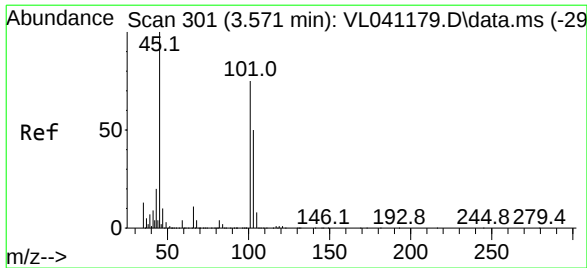
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#17
tert-Butyl alcohol
Concen: 0.157 ppbv m
RT: 3.906 min Scan# 405
Delta R.T. 0.023 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

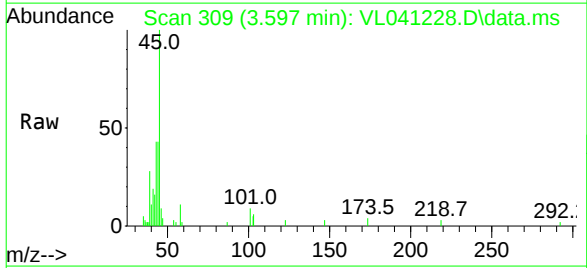
Tgt Ion: 59 Resp: 17225
Ion Ratio Lower Upper
59 100
57 15.5 8.4 12.6#





#19
Isopropyl Alcohol
Concen: 0.356 ppbv m
RT: 3.597 min Scan# 301
Delta R.T. 0.016 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

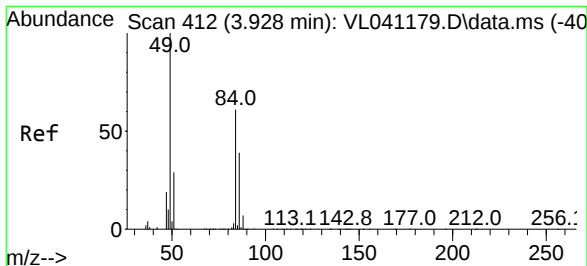
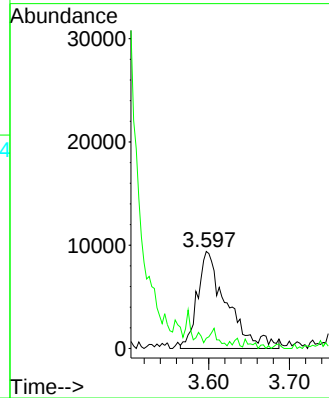
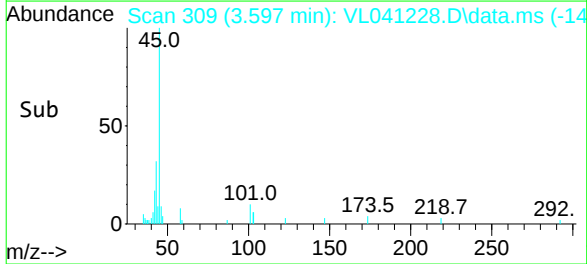
Instrument :
MSVOA_L
ClientSampleId :
SV1



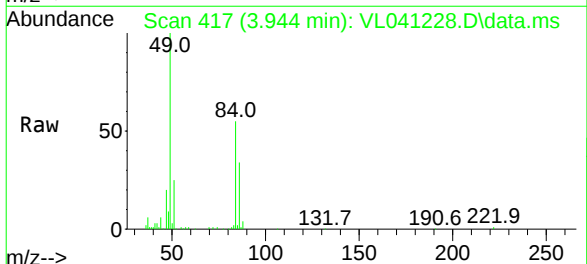
Tgt Ion: 45 Resp: 23748
Ion Ratio Lower Upper
45 100
58 0.0 26.8 40.2

Manual Integrations
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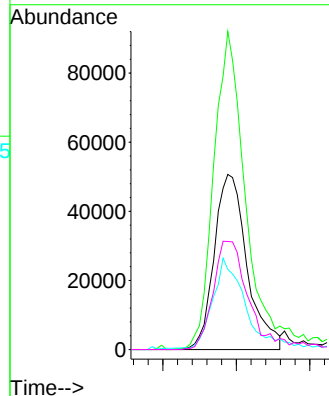
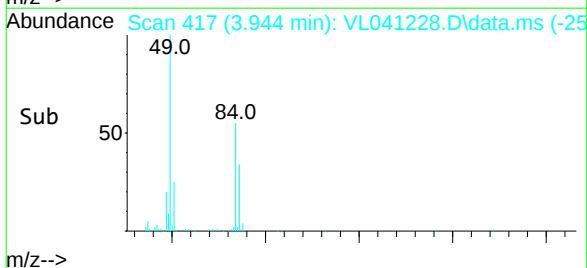
Reviewed By :Semsettin Yesilyurt 05/07/2024
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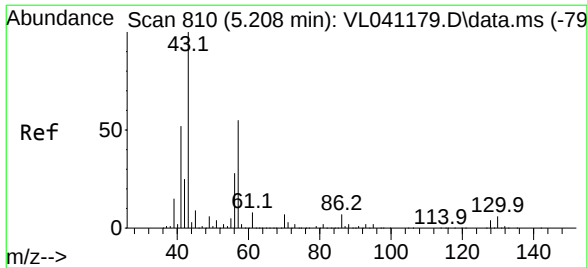


#20
Methylene Chloride
Concen: 2.226 ppbv
RT: 3.944 min Scan# 417
Delta R.T. 0.006 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37



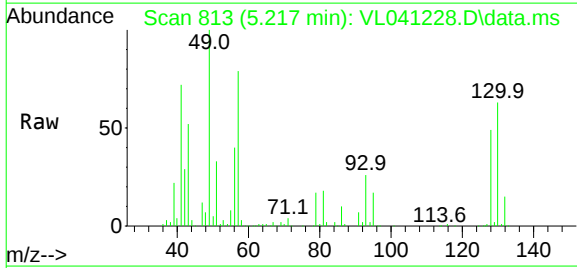
Tgt Ion: 84 Resp: 78782
Ion Ratio Lower Upper
84 100
49 180.9 130.4 195.6
51 44.9 38.0 57.0
86 61.7 50.3 75.5





#26
Hexane
Concen: 2.641 ppbv
RT: 5.217 min Scan# 810
Delta R.T. 0.003 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

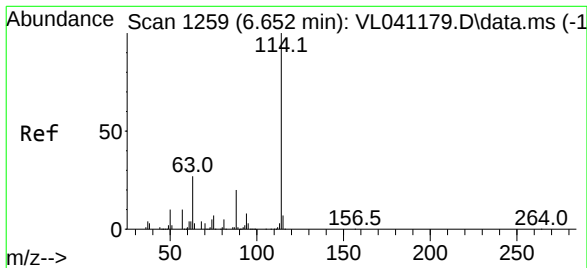
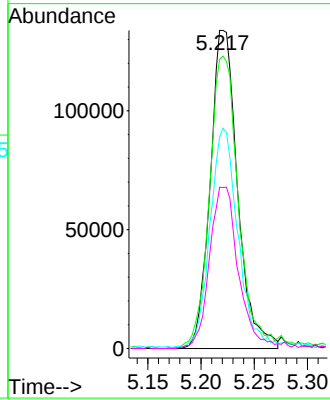
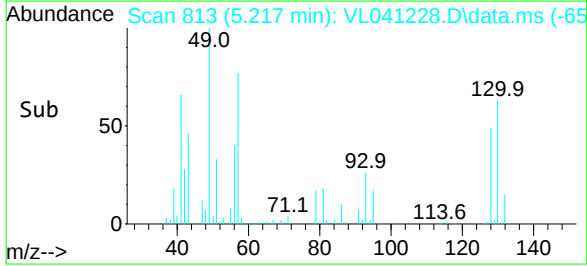
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 57 Resp: 239388
Ion Ratio Lower Upper
57 100
41 99.4 75.8 113.8
43 74.2 187.0 280.4#
56 54.3 42.7 64.1

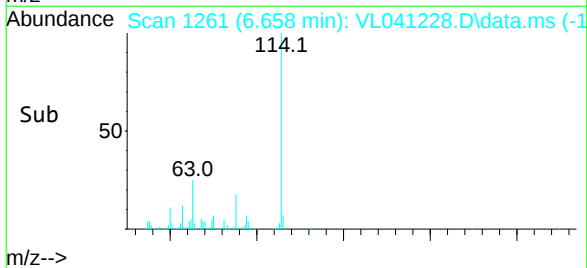
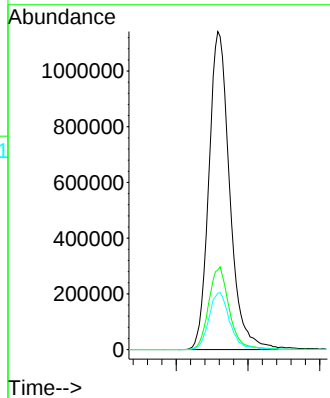
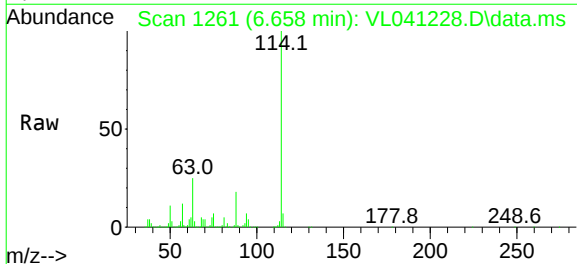
Manual Integrations
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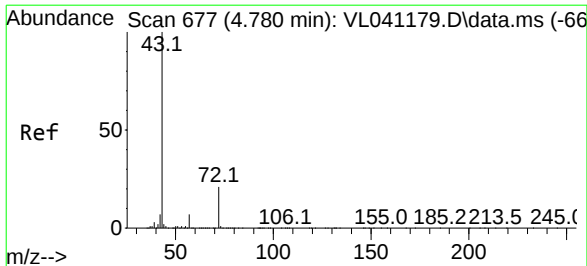
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.658 min Scan# 1261
Delta R.T. 0.003 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Tgt Ion:114 Resp: 2301413
Ion Ratio Lower Upper
114 100
63 25.8 21.8 32.6
88 18.2 15.2 22.8





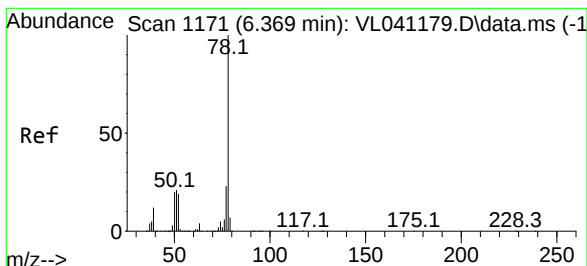
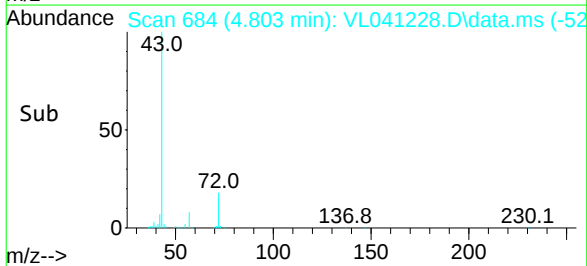
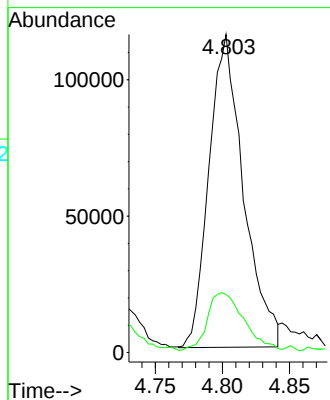
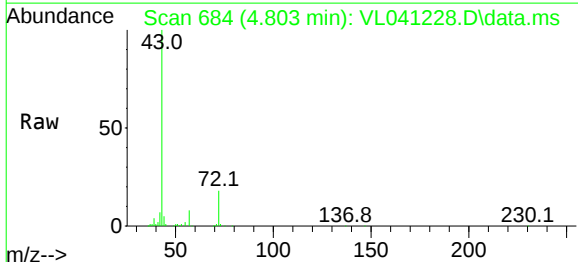
#34
2-Butanone
Concen: 1.755 ppbv
RT: 4.803 min Scan# 68
Delta R.T. 0.016 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 43 Resp: 205518
Ion Ratio Lower Upper
43 100
72 21.6 17.3 25.9

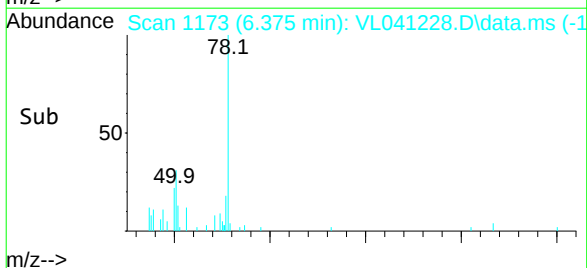
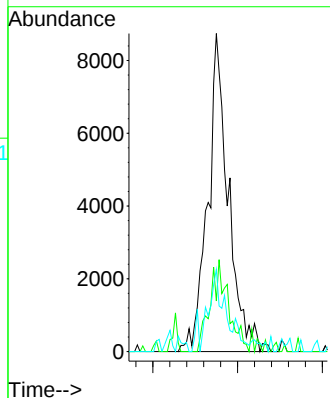
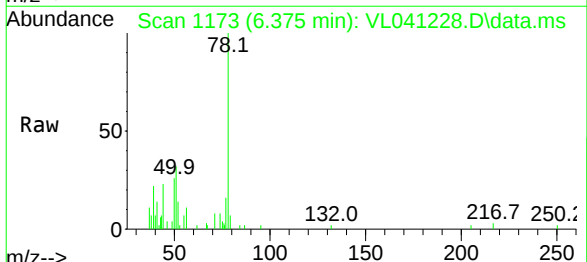
Manual Integrations
APPROVED

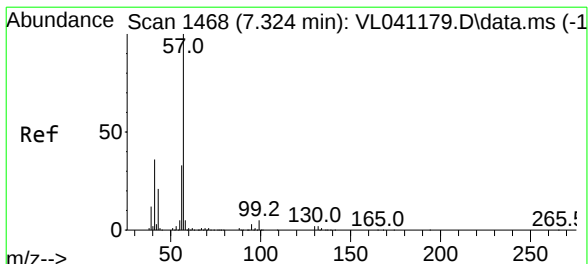
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#36
Benzene
Concen: 0.076 ppbv m
RT: 6.375 min Scan# 1173
Delta R.T. 0.003 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

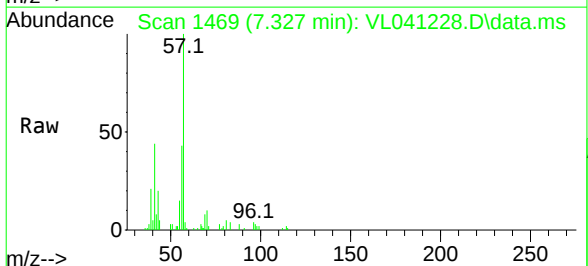
Tgt Ion: 78 Resp: 14708
Ion Ratio Lower Upper
78 100
77 15.9 18.3 27.5#
50 25.8 15.9 23.9#





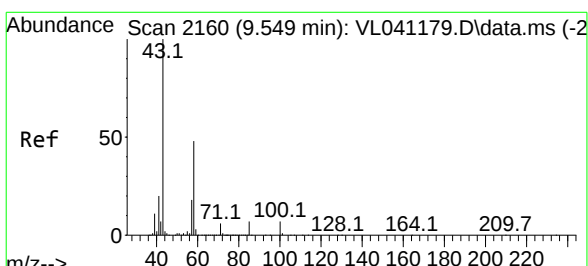
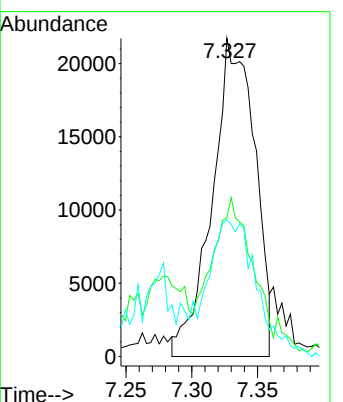
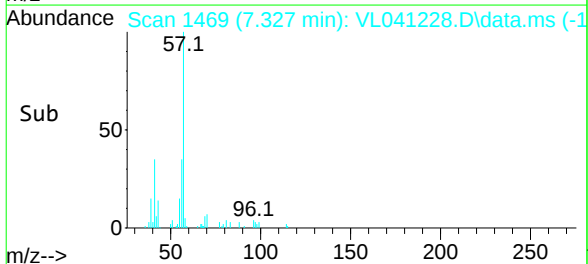
#44
 2,2,4-Trimethylpentane
 Concen: 0.147 ppbv m
 RT: 7.327 min Scan# 1468
 Delta R.T. 0.000 min
 Lab File: VL041228.D
 Acq: 6 May 2024 21:37

Instrument : MSVOA_L
 ClientSampleId : SV1

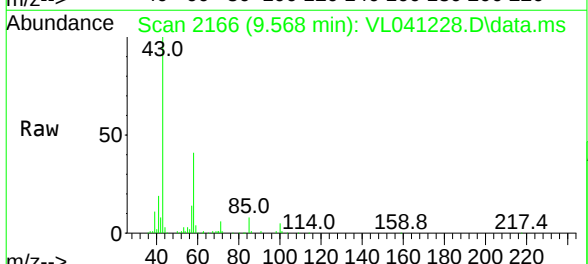


Tgt Ion:	57	Resp:	48885
Ion	Ratio	Lower	Upper
57	100		
41	49.5	29.5	44.3#
56	46.9	25.3	37.9#

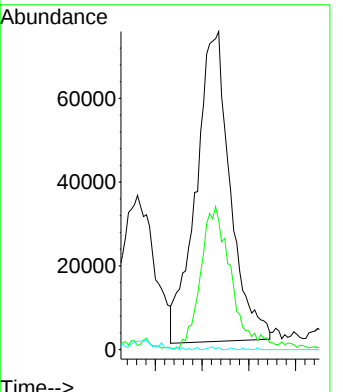
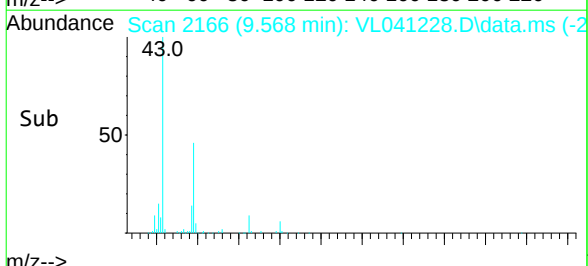
Manual Integrations
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 Reviewed By :Semsettin Yesilyurt 05/07/2024
 Supervised By :Mahesh Dadoda 05/07/2024

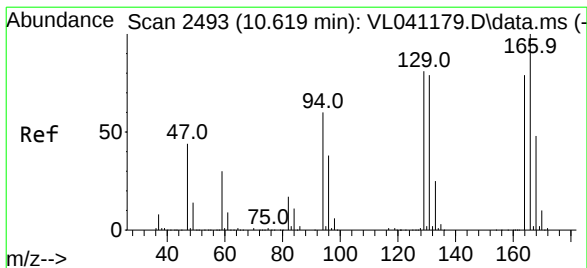


#51
 2-Hexanone
 Concen: 1.205 ppbv
 RT: 9.568 min Scan# 2166
 Delta R.T. 0.019 min
 Lab File: VL041228.D
 Acq: 6 May 2024 21:37



Tgt Ion:	43	Resp:	187937
Ion	Ratio	Lower	Upper
43	100		
58	43.3	38.4	57.6
98	0.4	0.0	0.0#





#52

Tetrachloroethene

Concen: 0.317 ppbv m

RT: 10.616 min Scan# 2493

Delta R.T. 0.003 min

Lab File: VL041228.D

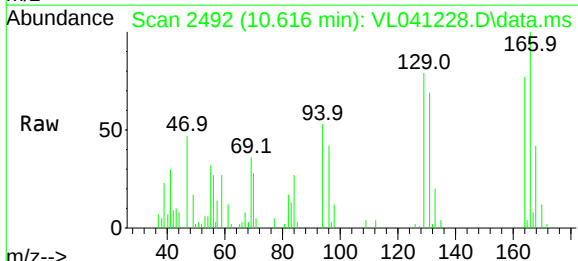
Acq: 6 May 2024 21:37

Instrument :

MSVOA_L

ClientSampleId :

SV1

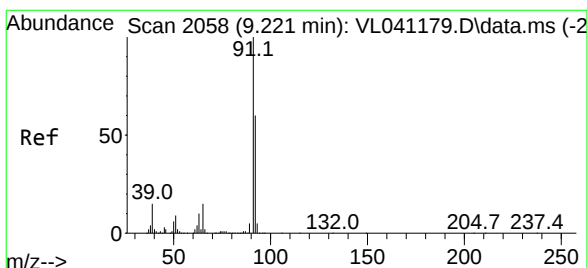
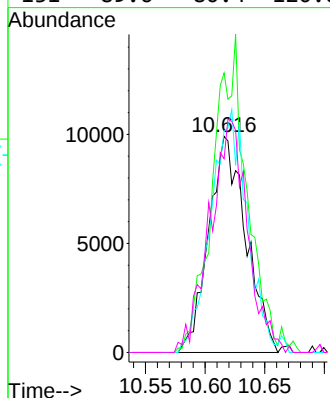
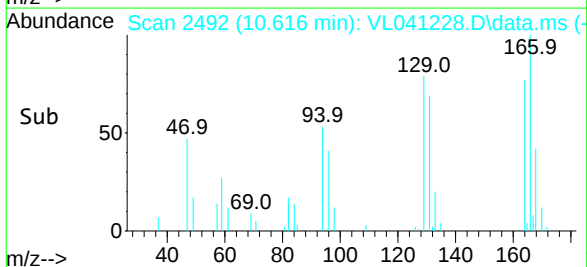


Tgt Ion:	164	Resp:	21530
Ion	Ratio	Lower	Upper
164	100		
166	129.4	101.1	151.7
129	102.4	81.7	122.5
131	89.6	80.4	120.6

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#53

Toluene

Concen: 1.795 ppbv

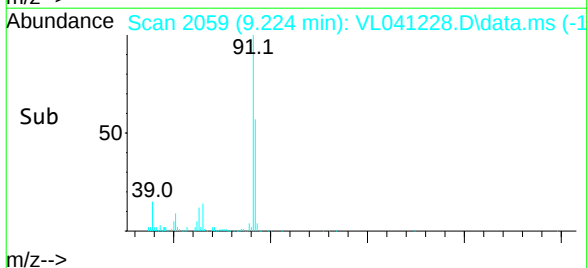
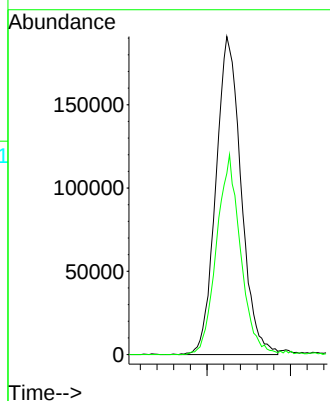
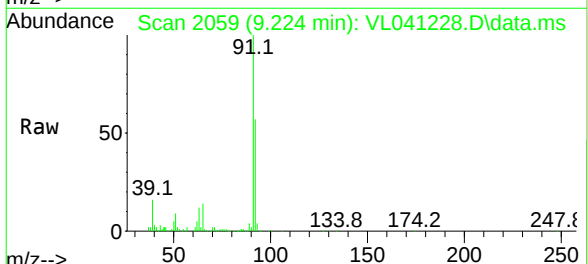
RT: 9.224 min Scan# 2059

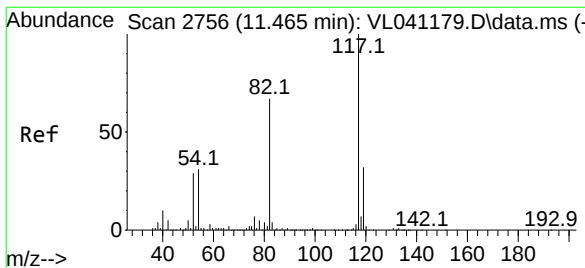
Delta R.T. 0.003 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

Tgt Ion:	91	Resp:	401861
Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.2	72.4





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.468 min Scan# 27

Delta R.T. 0.003 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion:117 Resp: 2130863

Ion Ratio Lower Upper

117 100

82 64.9 53.6 80.4

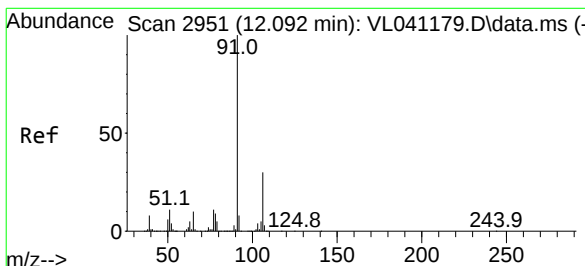
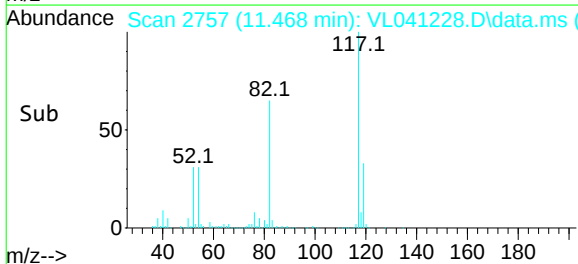
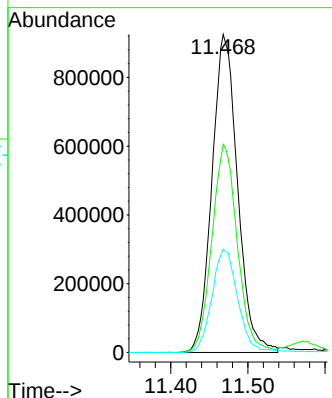
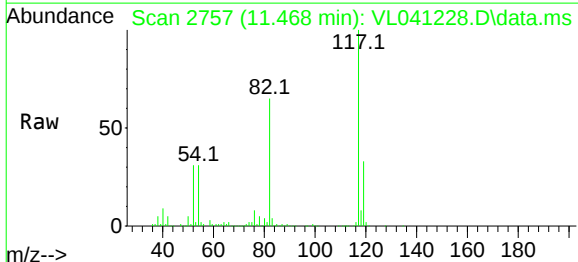
119 33.5 27.2 40.8

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 05/07/2024

Supervised By :Mahesh Dadoda 05/07/2024



#58

Ethyl Benzene

Concen: 0.729 ppbv m

RT: 12.095 min Scan# 2952

Delta R.T. 0.010 min

Lab File: VL041228.D

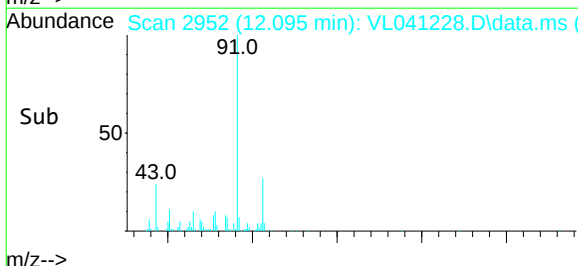
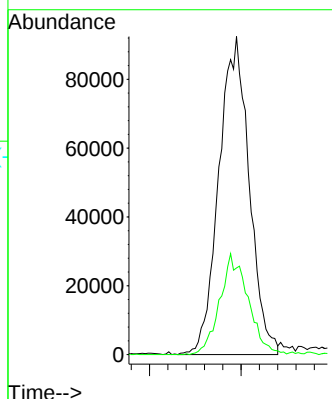
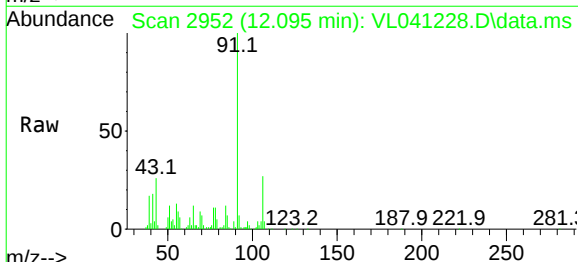
Acq: 6 May 2024 21:37

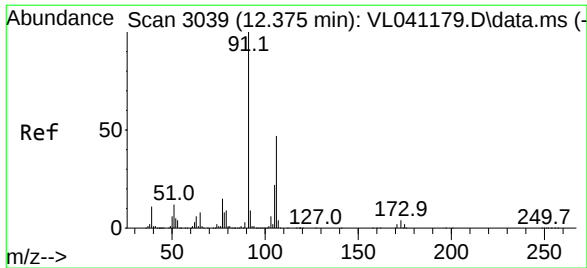
Tgt Ion: 91 Resp: 213048

Ion Ratio Lower Upper

91 100

106 27.2 24.3 36.5





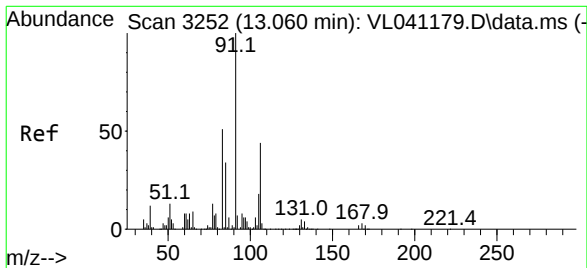
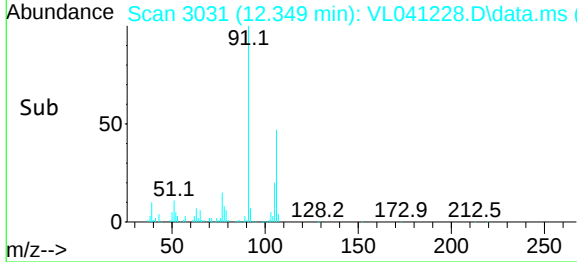
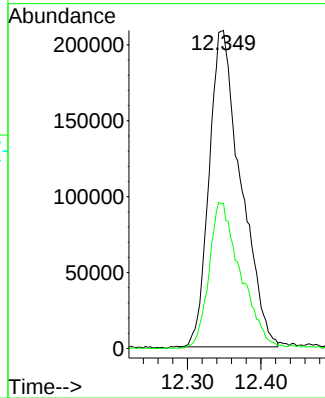
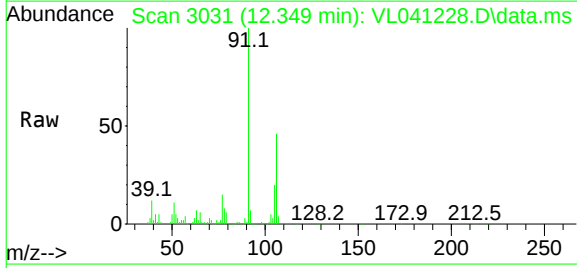
#59
m/p-Xylene
Concen: 2.543 ppbv
RT: 12.349 min Scan# 3039
Delta R.T. -0.019 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 91 Resp: 624569
Ion Ratio Lower Upper
91 100
106 46.3 35.7 53.5

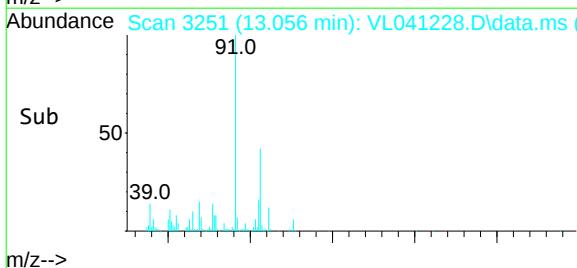
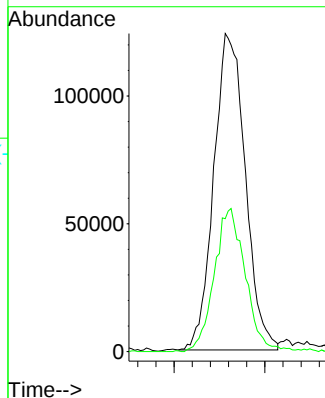
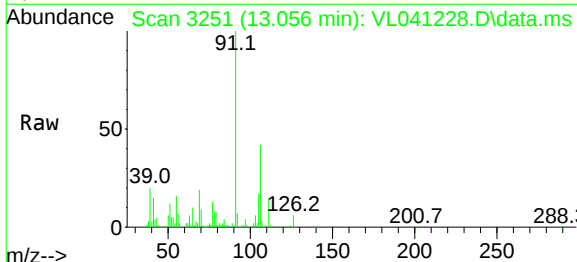
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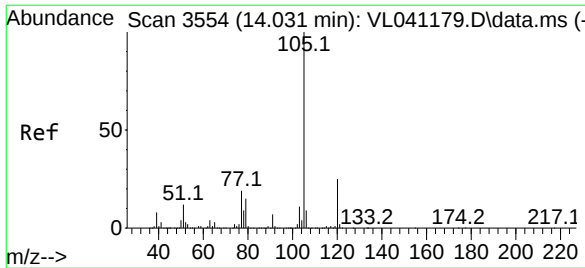
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#60
o-Xylene
Concen: 1.298 ppbv
RT: 13.056 min Scan# 3251
Delta R.T. 0.000 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

Tgt Ion: 91 Resp: 298719
Ion Ratio Lower Upper
91 100
106 44.8 22.4 67.3





#62

Isopropylbenzene

Concen: 0.209 ppbv m

RT: 14.034 min Scan# 3554

Delta R.T. 0.006 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion: 105 Resp: 71896

Ion Ratio Lower Upper

105 100

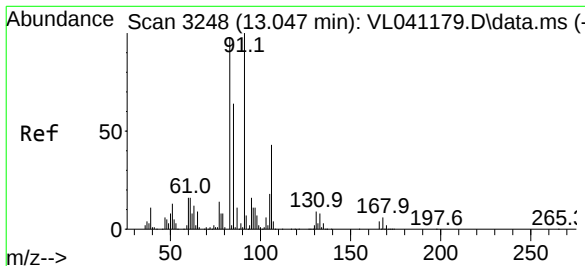
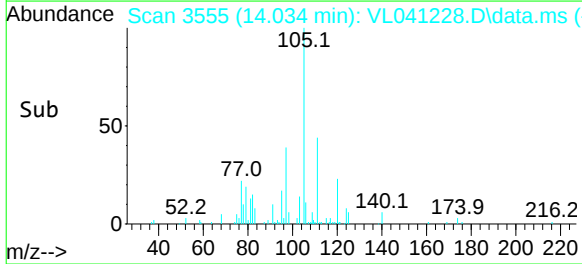
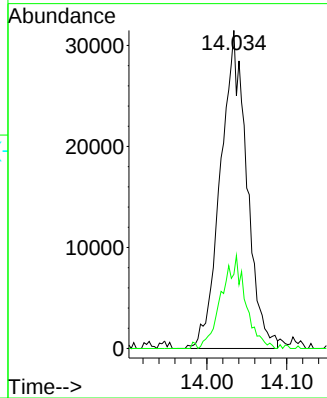
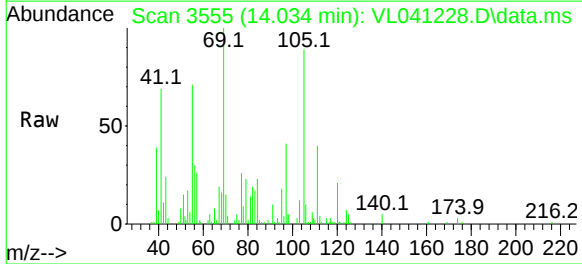
120 27.3 20.2 30.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 05/07/2024

Supervised By :Mahesh Dadoda 05/07/2024



#63

1,1,2,2-Tetrachloroethane

Concen: 0.065 ppbv m

RT: 13.027 min Scan# 3242

Delta R.T. -0.016 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

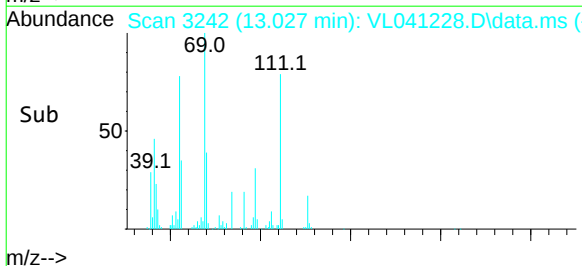
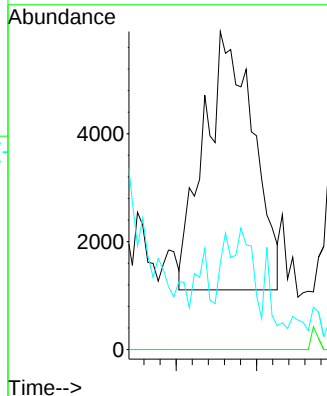
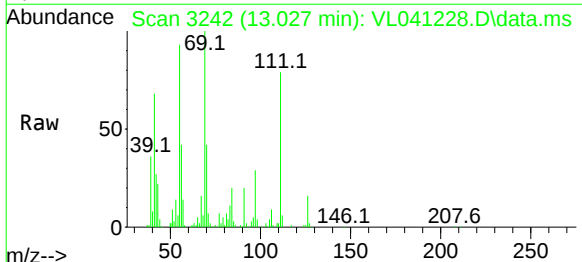
Tgt Ion: 83 Resp: 10125

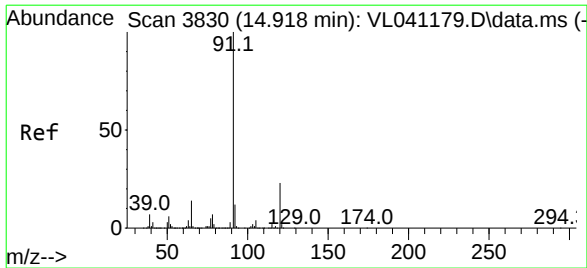
Ion Ratio Lower Upper

83 100

131 1.2 4.5 13.5#

85 0.0 32.7 98.1#





#64

n-propylbenzene

Concen: 0.450 ppbv m

RT: 14.915 min Scan# 38

Delta R.T. 0.003 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion:120 Resp: 38668

Ion Ratio Lower Upper

120 100

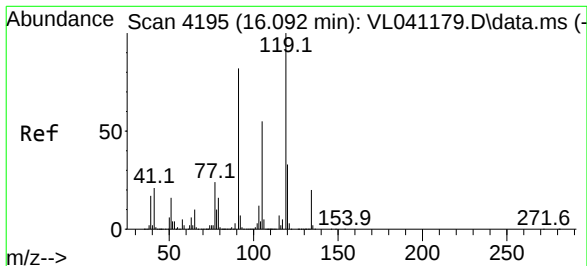
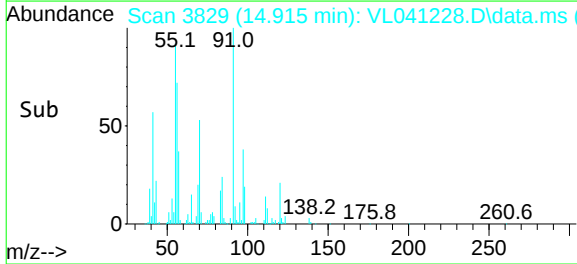
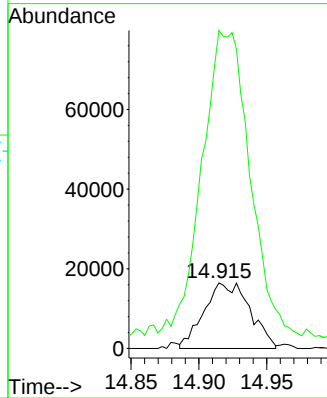
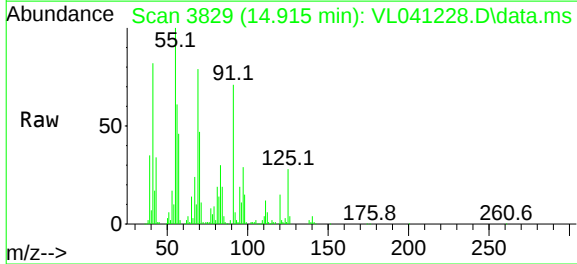
91 519.6 384.8 577.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 05/07/2024

Supervised By :Mahesh Dadoda 05/07/2024



#65

tert-Butylbenzene

Concen: 0.160 ppbv m

RT: 16.111 min Scan# 4201

Delta R.T. 0.026 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

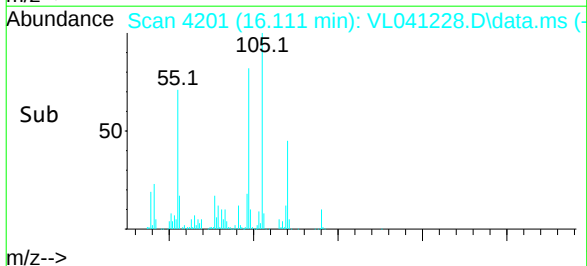
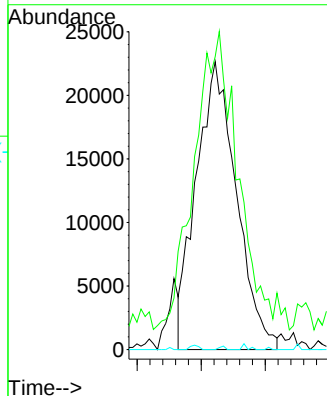
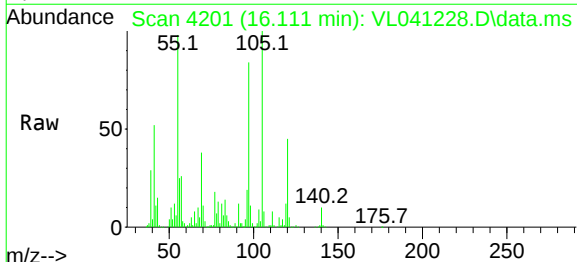
Tgt Ion:119 Resp: 49356

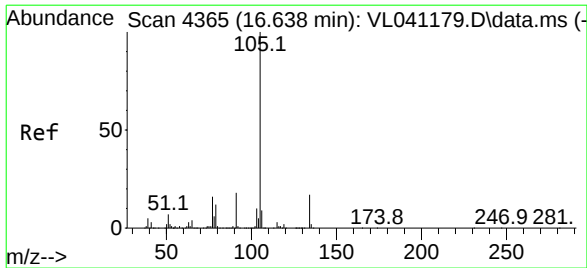
Ion Ratio Lower Upper

119 100

91 4.3 67.0 100.4#

134 0.4 15.2 22.8#





#67

sec-Butylbenzene

Concen: 0.084 ppbv m

RT: 16.645 min Scan# 43

Delta R.T. 0.013 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

Instrument :

MSVOA_L

ClientSampleId :

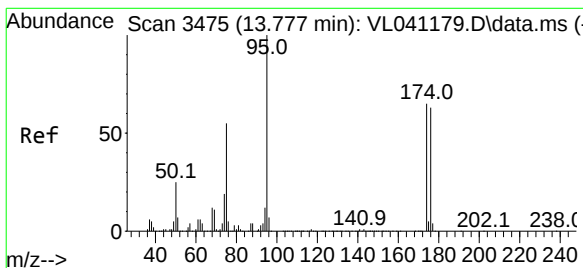
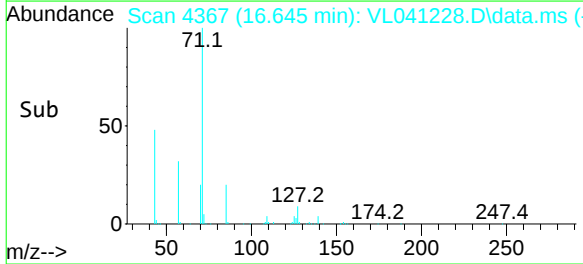
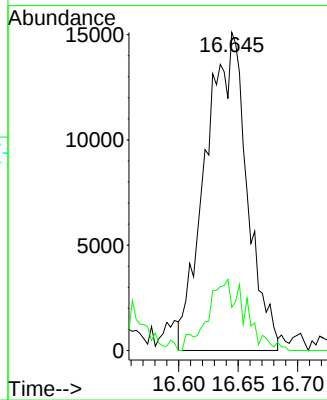
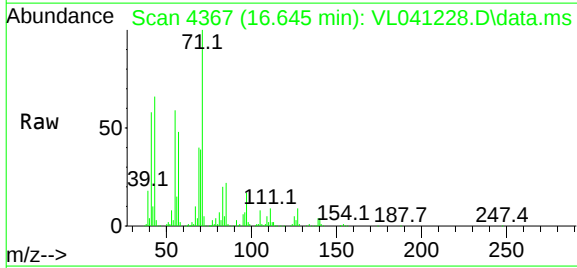
SV1

Tgt Ion:105 Resp: 36667
 Ion Ratio Lower Upper
 105 100
 134 0.0 13.8 20.8#

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Reviewed By :Semsettin Yesilyurt 05/07/2024
 Supervised By :Mahesh Dadoda 05/07/2024



#68

1-Bromo-4-Fluorobenzene

Concen: 10.637 ppbv

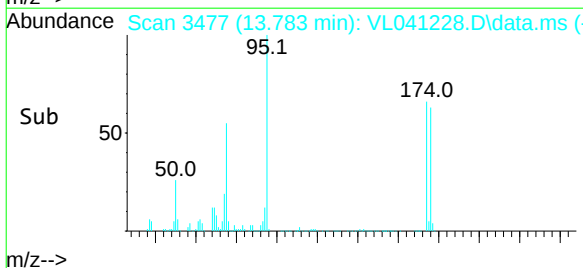
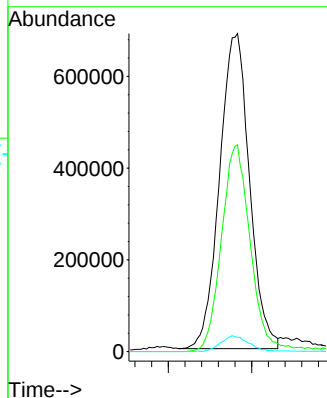
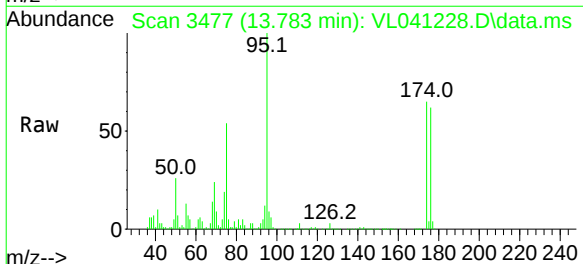
RT: 13.783 min Scan# 3477

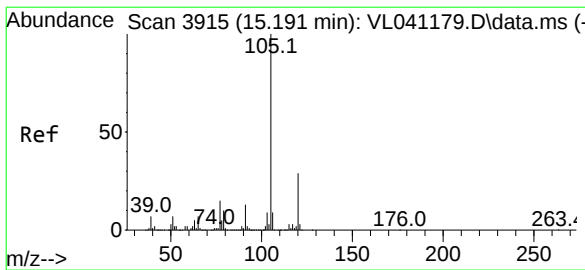
Delta R.T. 0.010 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

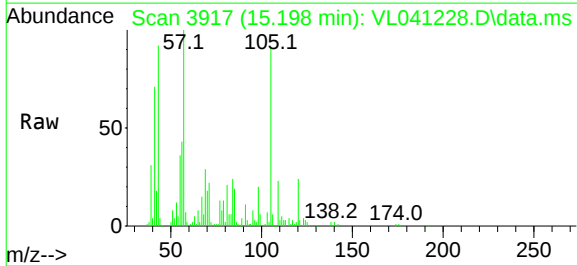
Tgt Ion: 95 Resp: 1711236
 Ion Ratio Lower Upper
 95 100
 174 65.2 53.6 80.4
 175 4.9 4.2 6.4





#72
4-Ethyltoluene
Concen: 0.656 ppbv
RT: 15.198 min Scan# 3915
Delta R.T. 0.010 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37

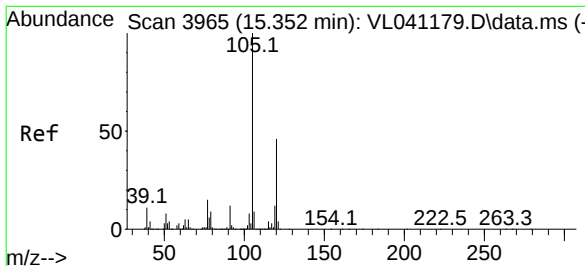
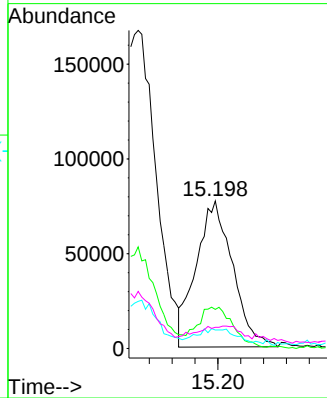
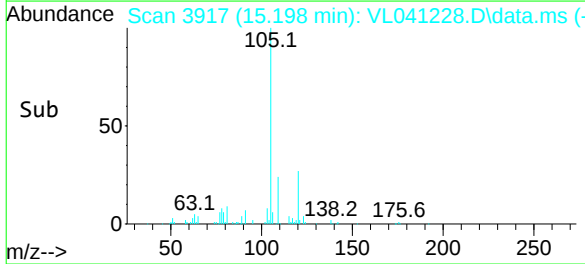
Instrument :
MSVOA_L
ClientSampleId :
SV1



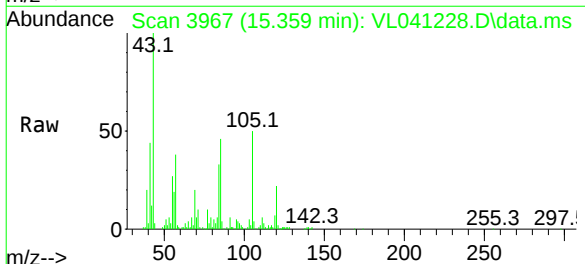
Tgt Ion	Ratio	Lower	Upper
105	100		
120	30.0	24.7	37.1
91	19.4	10.3	15.5
77	23.6	11.4	17.0

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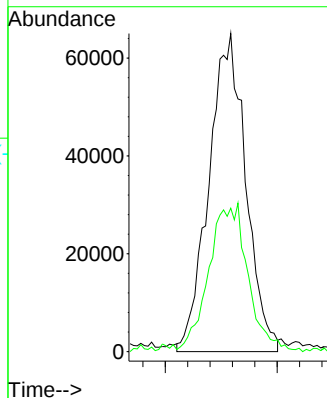
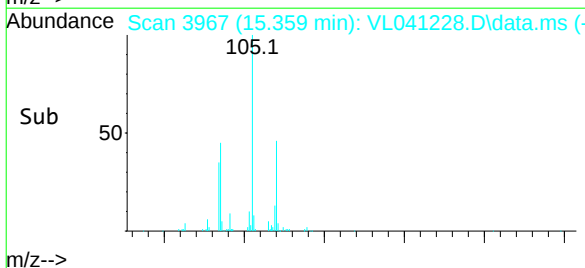
Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024

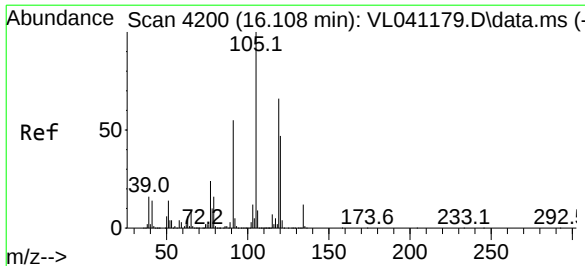


#73
1,3,5-Trimethylbenzene
Concen: 0.631 ppbv m
RT: 15.359 min Scan# 3967
Delta R.T. 0.010 min
Lab File: VL041228.D
Acq: 6 May 2024 21:37



Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.1	37.0	55.4





#74

1,2,4-Trimethylbenzene

Concen: 1.726 ppbv

RT: 16.111 min Scan# 4201

Delta R.T. 0.007 min

Lab File: VL041228.D

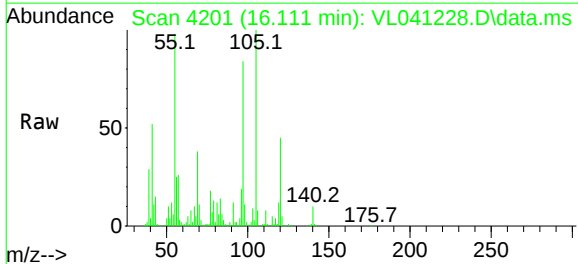
Acq: 6 May 2024 21:37

Instrument :

MSVOA_L

ClientSampleId :

SV1

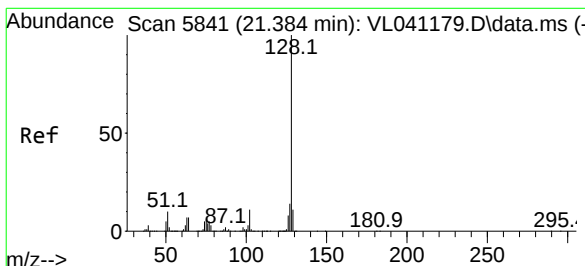
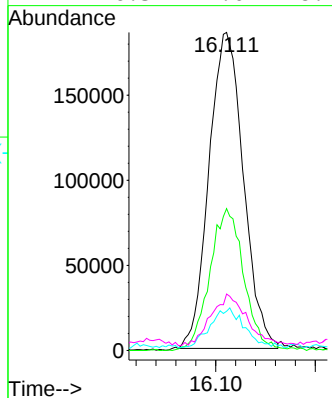
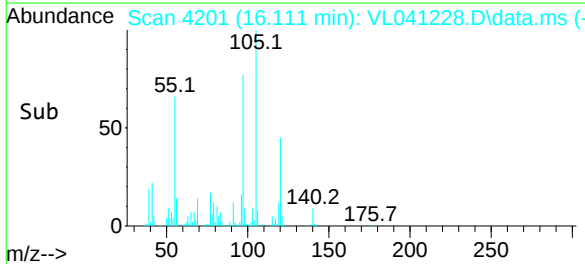


Tgt Ion:	105	Resp:	444726
Ion	Ratio	Lower	Upper
105	100		
120	44.4	37.8	56.6
91	11.6	44.3	66.5#
77	16.3	19.0	28.4#

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 05/07/2024
Supervised By :Mahesh Dadoda 05/07/2024



#79

Naphthalene

Concen: 0.093 ppbv m

RT: 21.400 min Scan# 5846

Delta R.T. 0.023 min

Lab File: VL041228.D

Acq: 6 May 2024 21:37

Tgt Ion:	128	Resp:	22775
Ion	Ratio	Lower	Upper
128	100		
127	16.0	10.8	16.2
129	16.0	8.9	13.3#

