

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032122\
 Data File : VL038667.D
 Acq On : 22 Mar 2022 1:59
 Operator : SY/AP
 Sample : N1964-11
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P81

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 03/22/2022
 Supervised By :Mahesh Dadoda 03/24/2022

Quant Time: Mar 22 04:02:50 2022

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL032122AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 22 04:02:50 2022

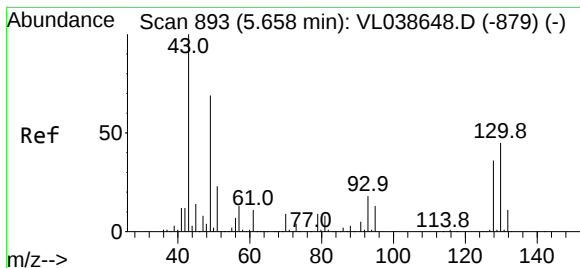
QLast Update : Mon Mar 21 17:09:26 2022

Response via : Initial Calibration

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

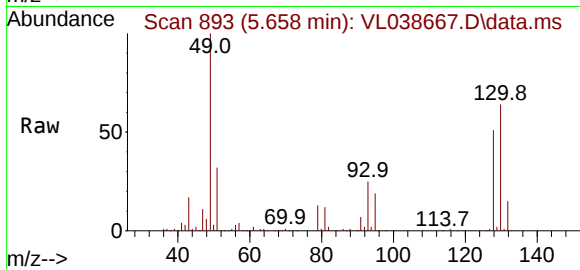
Internal Standards						
1) Bromochloromethane	5.658	49	870176	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	7.166	114	2176004	10.000	ppbv	0.00
55) Chlorobenzene-d5	12.072	117	1956712	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.404	95	1456406	9.708	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.100%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.050	85	25752	0.220	ppbv	97
3) Chlorodifluoromethane	2.986	51	47157	0.513	ppbv #	84
4) Chloromethane	3.137	50	20512	0.407	ppbv	97
7) Chloroethane	3.555	64	2911m	0.172	ppbv	
9) Propene	3.021	41	198465	4.473	ppbv #	64
11) Trichlorofluoromethane	3.944	101	23045m	0.223	ppbv	
13) Ethanol	3.597	45	196059	40.057	ppbv	99
15) Acetone	3.845	43	313424	4.174	ppbv #	58
17) tert-Butyl alcohol	4.298	59	32739	0.499	ppbv #	73
19) Isopropyl Alcohol	3.963	45	202957	4.875	ppbv #	96
20) Methylene Chloride	4.336	84	391057	12.365	ppbv	98
26) Hexane	5.680	57	216267	2.556	ppbv #	65
27) Carbon Disulfide	4.545	76	16936	0.204	ppbv #	91
30) Cyclohexane	7.121	84	17870m	0.243	ppbv	
31) cis-1,2-Dichloroethene	5.539	61	46668	0.587	ppbv	94
34) 2-Butanone	5.237	43	394614	4.582	ppbv	98
35) Carbon Tetrachloride	7.012	117	7730m	0.061	ppbv	
36) Benzene	6.883	78	27141	0.162	ppbv	93
38) Trichloroethene	7.825	130	20642m	0.293	ppbv	
41) Tetrahydrofuran	6.047	42	39590m	0.618	ppbv	
44) 2,2,4-Trimethylpentane	7.860	57	73682	0.261	ppbv #	81
52) Tetrachloroethene	11.208	164	426592	6.941	ppbv	95
53) Toluene	9.793	91	1372401	7.605	ppbv	100
58) Ethyl Benzene	12.699	91	32729	0.143	ppbv	97
59) m/p-Xylene	12.953	91	68790m	0.344	ppbv	
60) o-Xylene	13.680	91	27820m	0.146	ppbv	
61) Styrene	13.516	104	13915m	0.135	ppbv	
74) 1,2,4-Trimethylbenzene	16.751	105	21856m	0.098	ppbv	

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



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.658 min Scan# 893
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

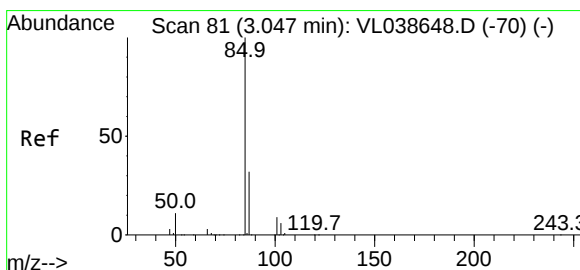
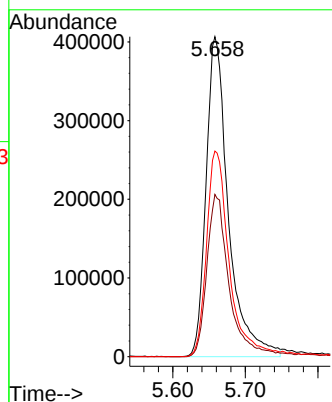
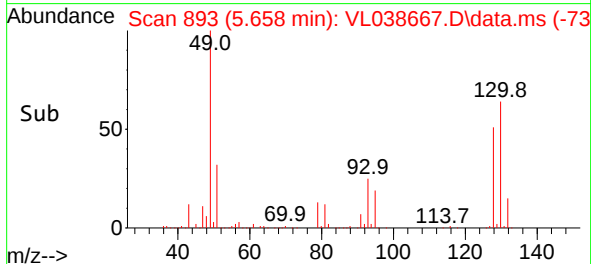
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion: 49 Resp: 870170
Ion Ratio Lower Upper
49 100
128 51.0 26.2 78.6
130 67.1 33.7 101.1

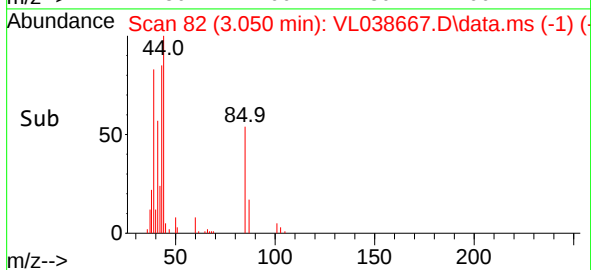
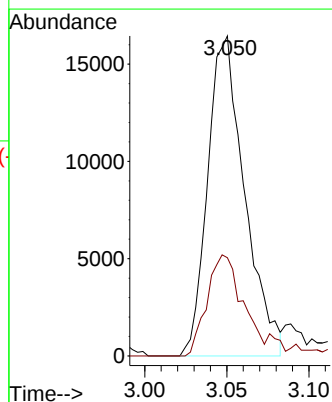
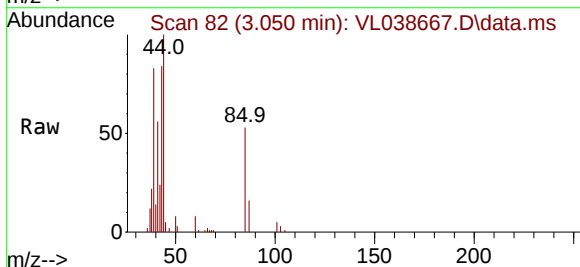
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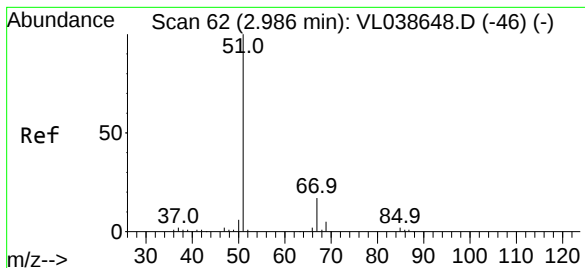
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#2
Dichlorodifluoromethane
Concen: 0.220 ppbv
RT: 3.050 min Scan# 82
Delta R.T. 0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

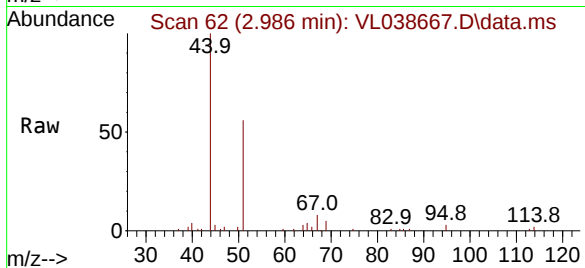
Tgt Ion: 85 Resp: 25752
Ion Ratio Lower Upper
85 100
87 30.7 26.0 39.0





#3
Chlorodifluoromethane
Concen: 0.513 ppbv
RT: 2.986 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

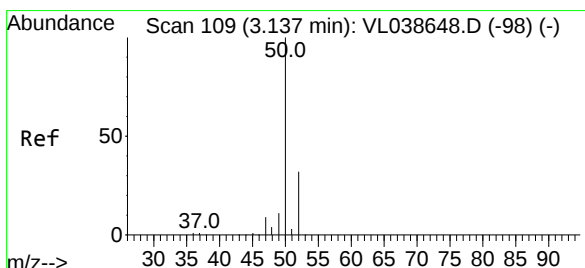
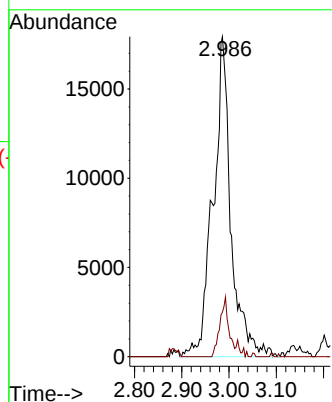
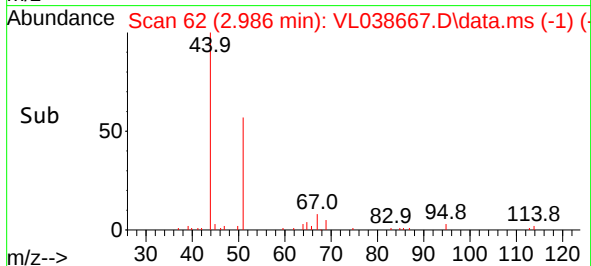
Instrument :
MSVOA_L
ClientSampleId :
COP81



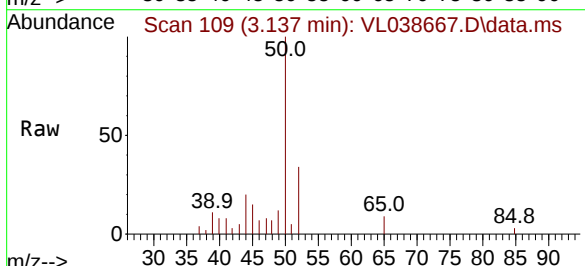
Tgt Ion: 51 Resp: 4715
Ion Ratio Lower Upper
51 100
67 10.6 14.1 21.1

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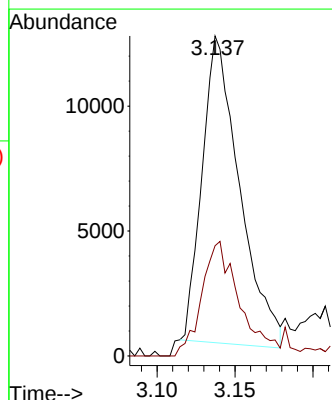
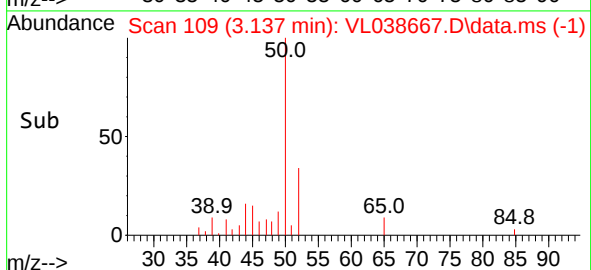
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022

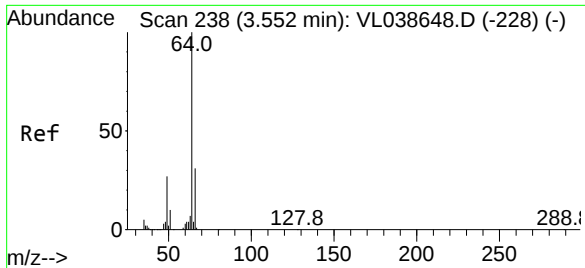


#4
Chloromethane
Concen: 0.407 ppbv
RT: 3.137 min Scan# 109
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59



Tgt Ion: 50 Resp: 20512
Ion Ratio Lower Upper
50 100
52 33.7 25.5 38.3





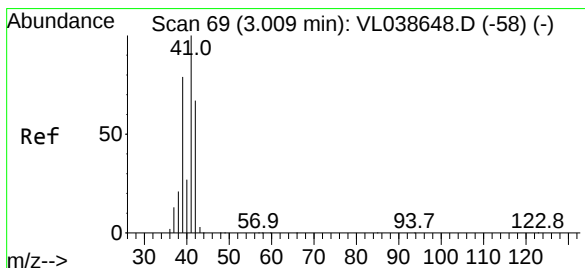
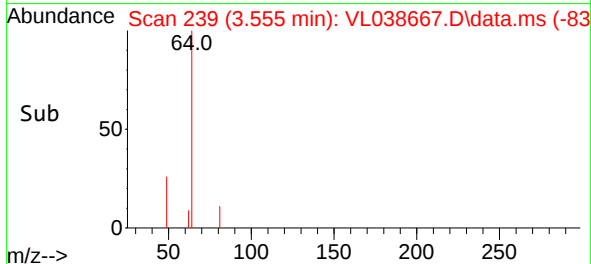
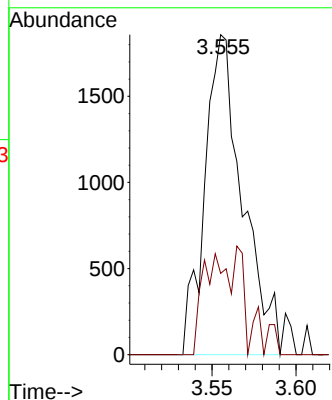
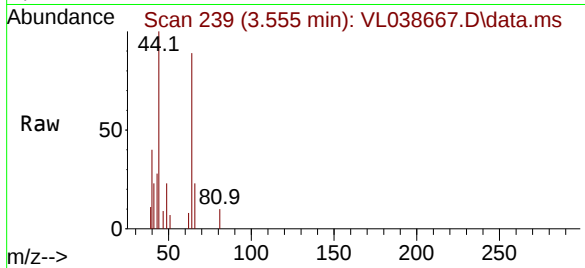
#7
Chloroethane
Concen: 0.172 ppbv m
RT: 3.555 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

Instrument :
MSVOA_L
ClientSampleId :
COP81

Tgt Ion: 64 Resp: 291
Ion Ratio Lower Upper
64 100
66 25.4 25.0 37.6

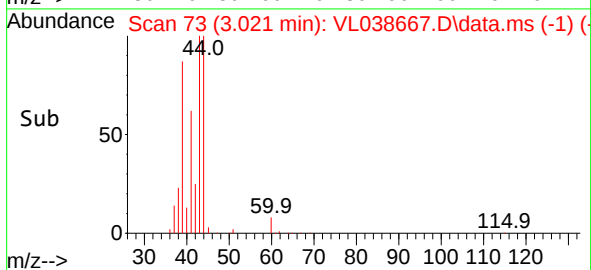
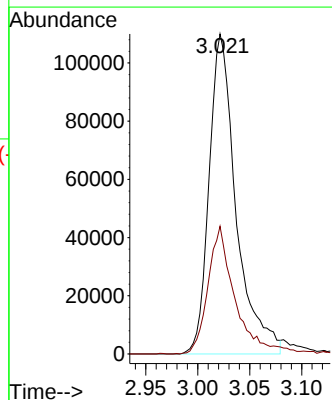
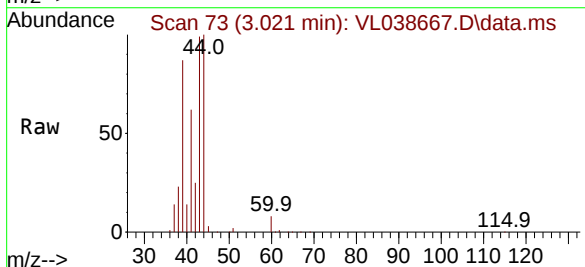
Manual Integrations
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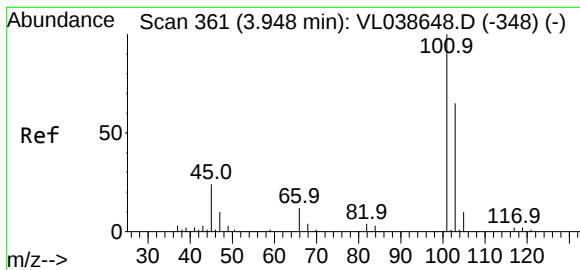
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#9
Propene
Concen: 4.473 ppbv
RT: 3.021 min Scan# 73
Delta R.T. 0.013 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

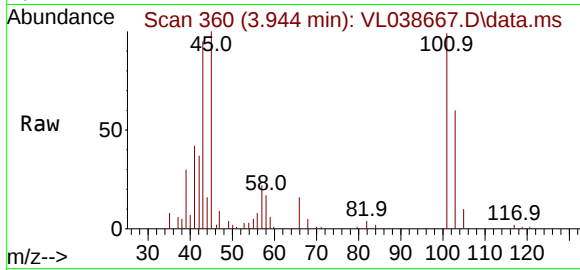
Tgt Ion: 41 Resp: 198465
Ion Ratio Lower Upper
41 100
42 40.7 56.2 84.4#





#11
Trichlorofluoromethane
Concen: 0.223 ppbv m
RT: 3.944 min Scan# 30
Delta R.T. -0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

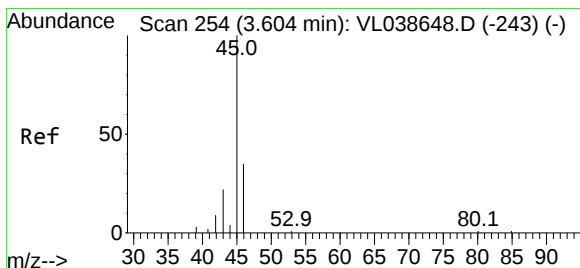
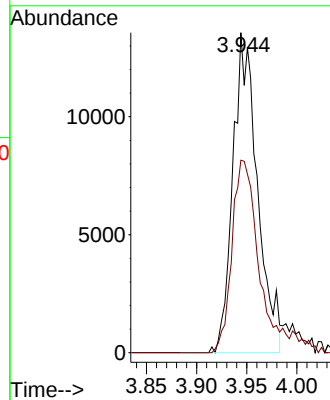
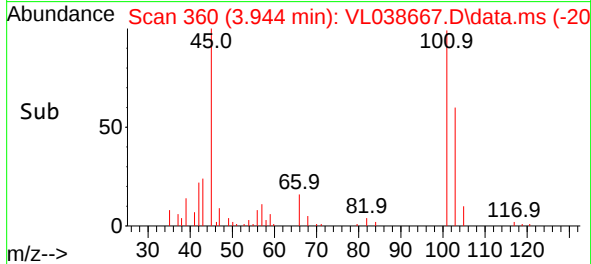
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion:101 Resp: 2304
Ion Ratio Lower Upper
101 100
103 60.1 51.9 77.9

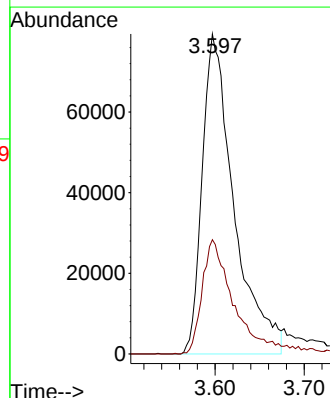
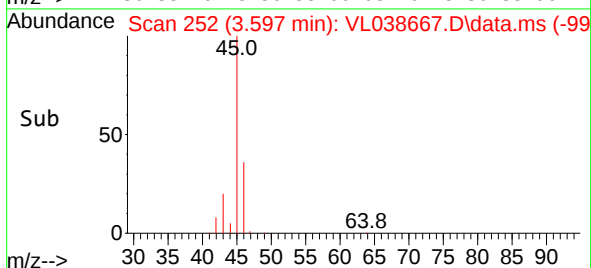
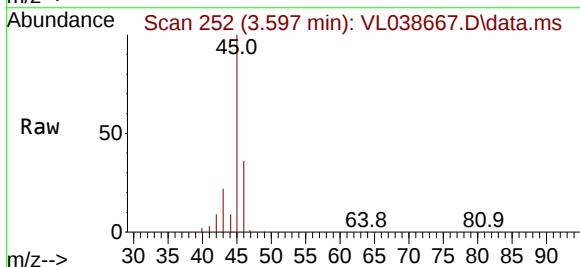
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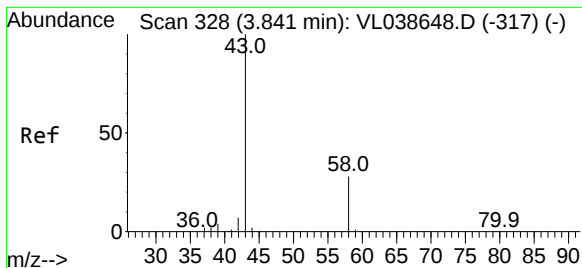
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#13
Ethanol
Concen: 40.057 ppbv
RT: 3.597 min Scan# 252
Delta R.T. -0.007 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

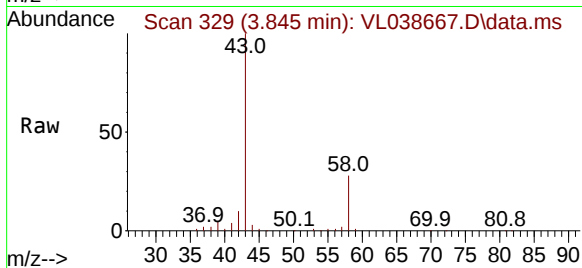
Tgt Ion: 45 Resp: 196059
Ion Ratio Lower Upper
45 100
46 36.9 15.1 60.5





#15
Acetone
Concen: 4.174 ppbv
RT: 3.845 min Scan# 313
Delta R.T. 0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

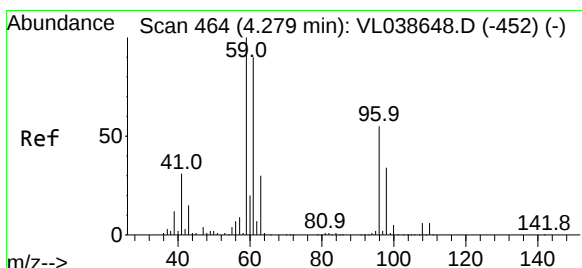
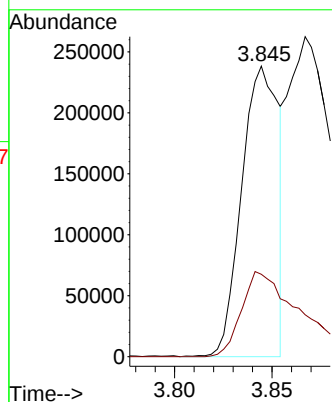
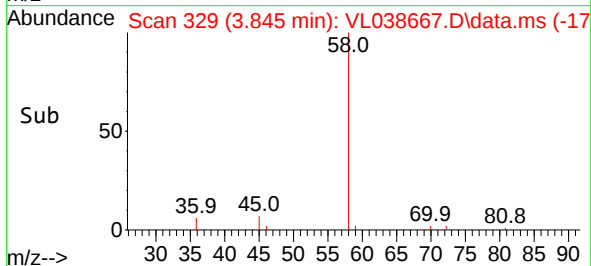
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion: 43 Resp: 313424
Ion Ratio Lower Upper
43 100
58 51.4 23.3 34.9

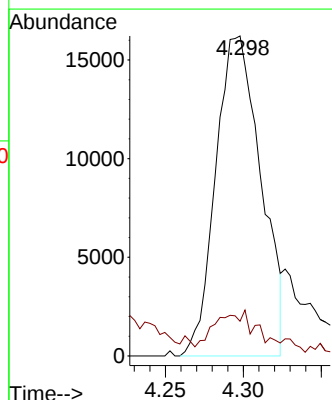
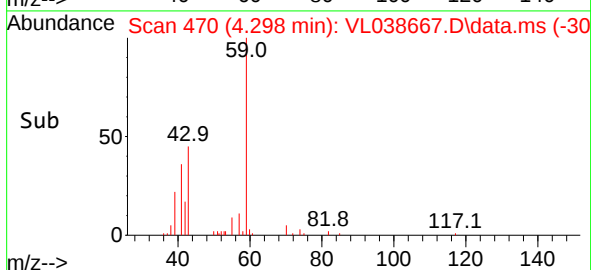
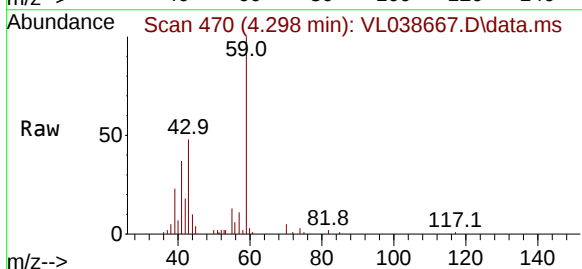
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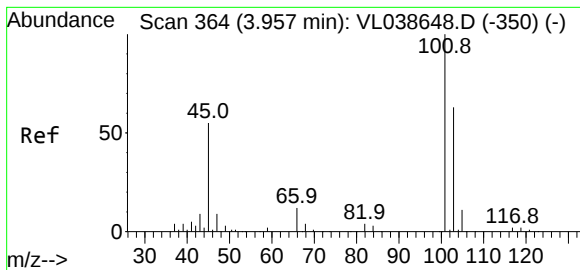
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#17
tert-Butyl alcohol
Concen: 0.499 ppbv
RT: 4.298 min Scan# 470
Delta R.T. 0.019 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

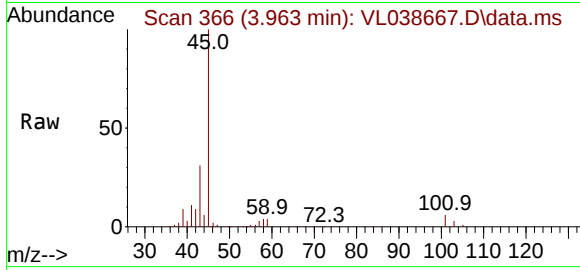
Tgt Ion: 59 Resp: 32739
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.2





#19
Isopropyl Alcohol
Concen: 4.875 ppbv
RT: 3.963 min Scan# 30
Delta R.T. 0.006 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

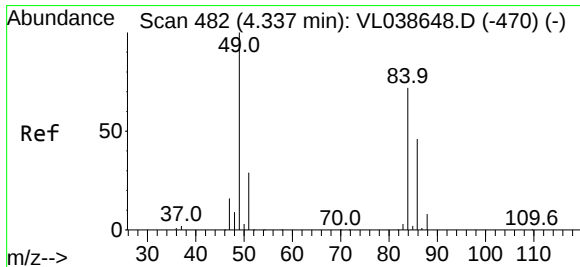
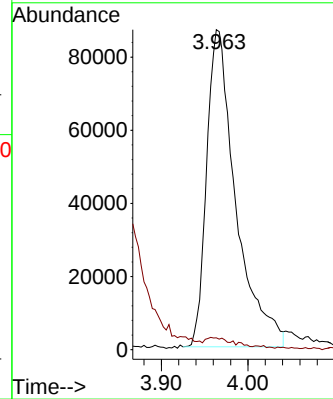
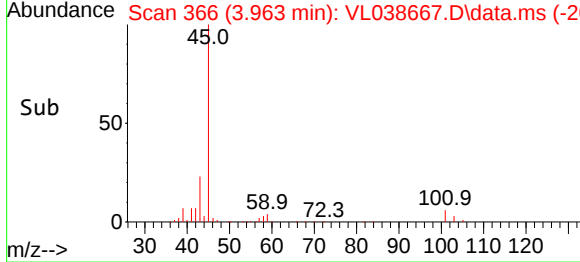
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion: 45 Resp: 20295
Ion Ratio Lower Upper
45 100
58 4.1 2.3 3.5

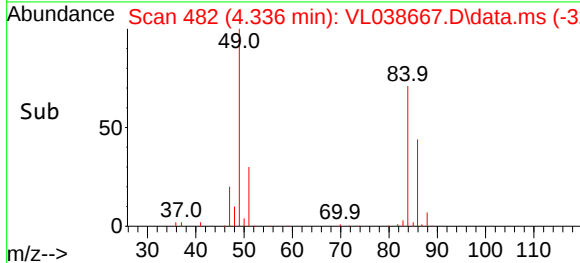
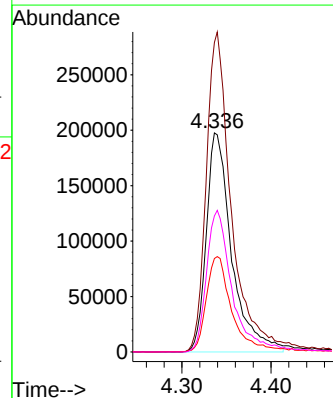
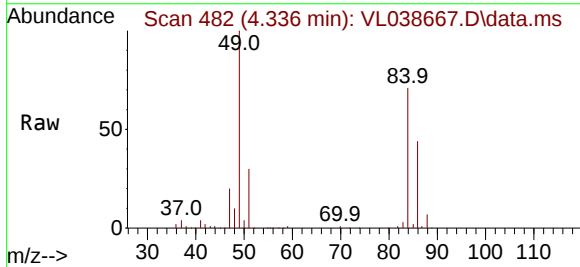
Manual Integrations
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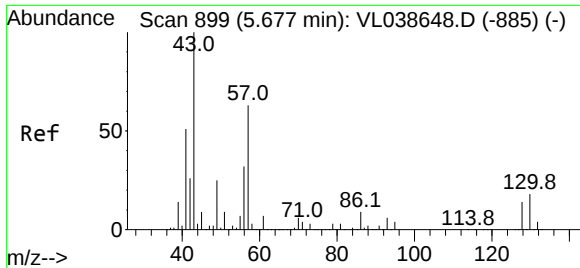
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#20
Methylene Chloride
Concen: 12.365 ppbv
RT: 4.336 min Scan# 482
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

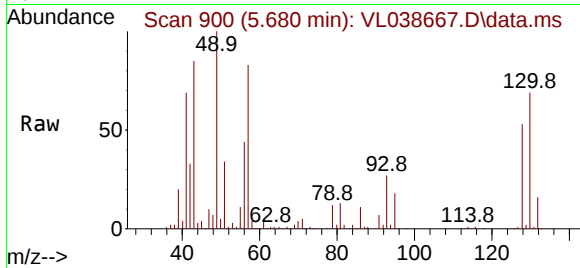
Tgt Ion: 84 Resp: 391057
Ion Ratio Lower Upper
84 100
49 141.1 111.2 166.8
51 42.5 32.8 49.2
86 62.1 51.4 77.0





#26
Hexane
Concen: 2.556 ppbv
RT: 5.680 min Scan# 900
Delta R.T. 0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

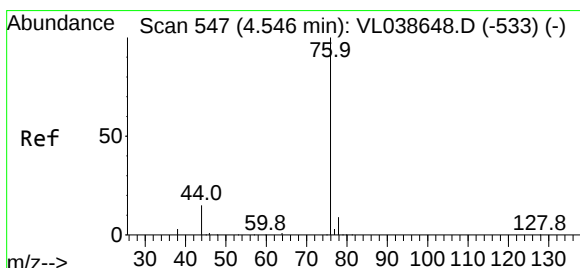
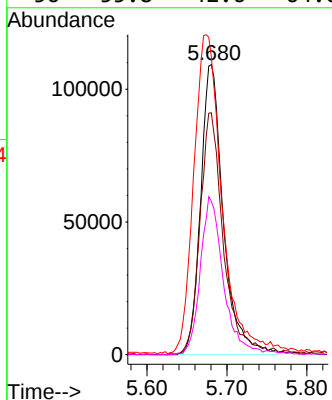
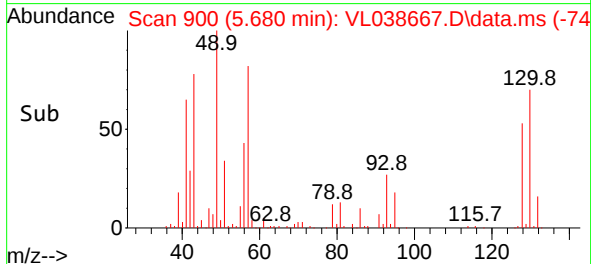
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion: 57 Resp: 21626
Ion Ratio Lower Upper
57 100
41 87.3 67.0 100.4
43 140.3 184.2 276.2
56 55.8 42.6 64.0

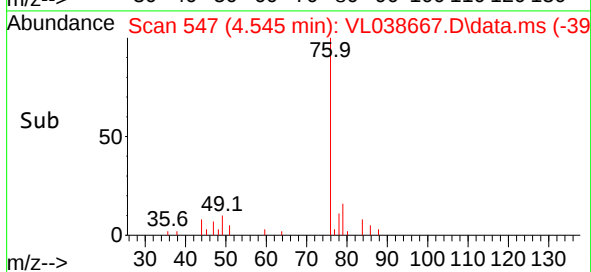
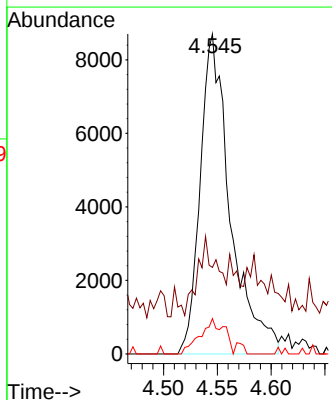
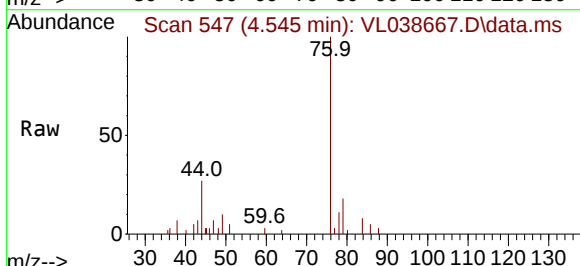
Manual Integrations
APPROVED

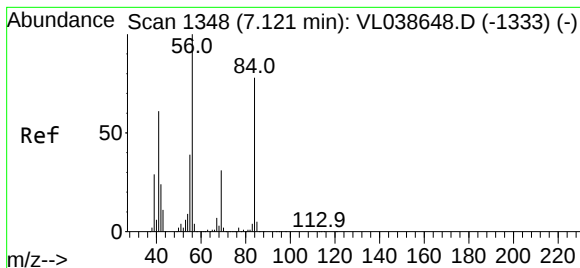
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#27
Carbon Disulfide
Concen: 0.204 ppbv
RT: 4.545 min Scan# 547
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

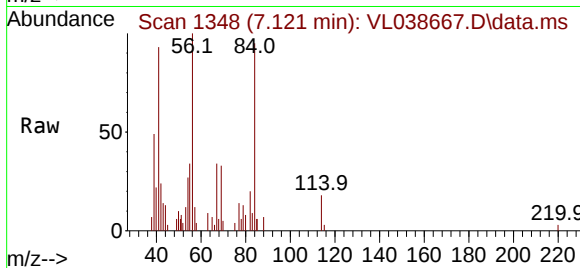
Tgt Ion: 76 Resp: 16936
Ion Ratio Lower Upper
76 100
44 21.7 12.4 18.6
78 9.7 7.8 11.8





#30
Cyclohexane
Concen: 0.243 ppbv m
RT: 7.121 min Scan# 1348
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

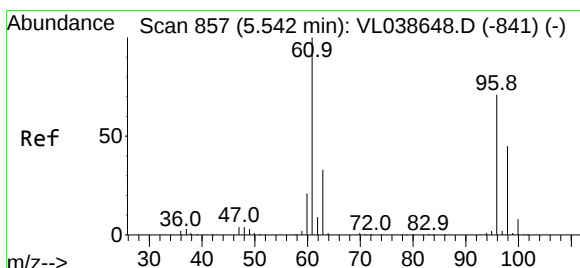
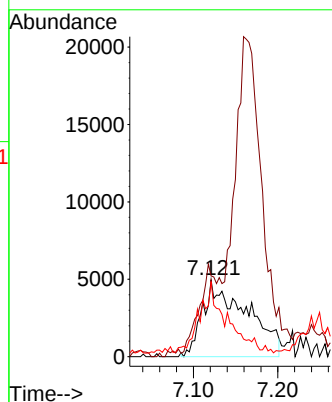
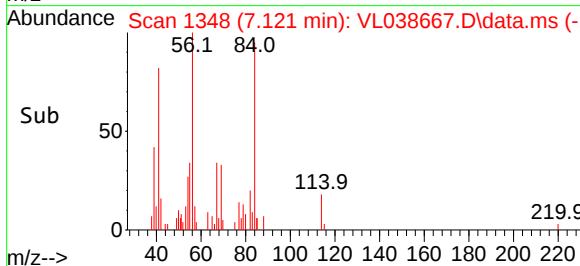
Instrument :
MSVOA_L
ClientSampleId :
COP81



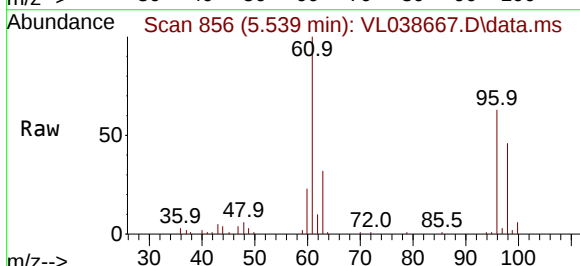
Tgt Ion: 84 Resp: 17870
Ion Ratio Lower Upper
84 100
56 0.0 108.2 162.4
41 60.4 61.8 92.6

Manual Integrations
APPROVED

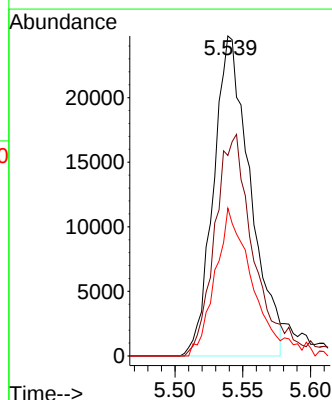
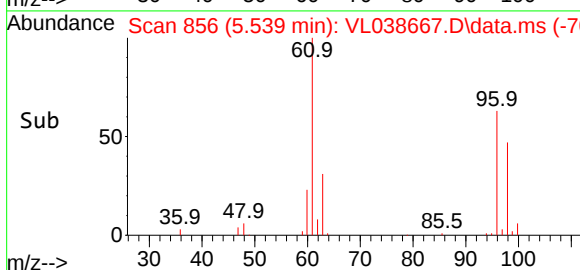
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022

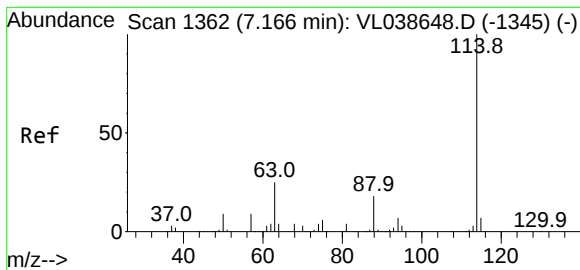


#31
cis-1,2-Dichloroethene
Concen: 0.587 ppbv
RT: 5.539 min Scan# 856
Delta R.T. -0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59



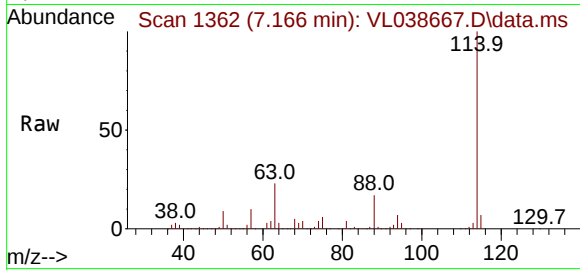
Tgt Ion: 61 Resp: 46668
Ion Ratio Lower Upper
61 100
96 62.6 56.6 84.8
98 46.2 36.3 54.5





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.166 min Scan# 114
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

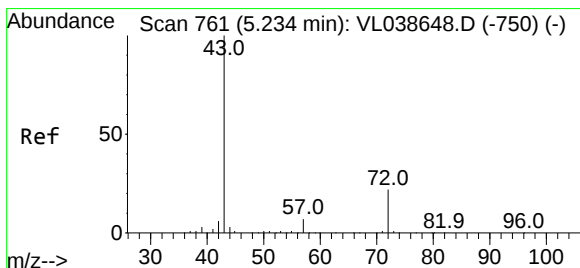
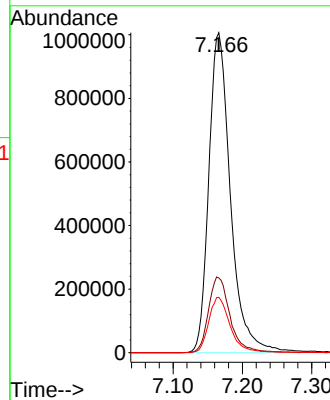
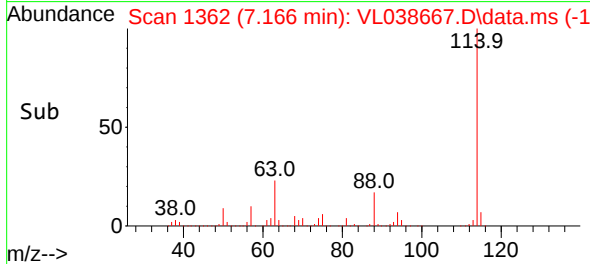
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion:114 Resp: 2176004
Ion Ratio Lower Upper
114 100
63 23.9 19.4 29.0
88 17.2 13.9 20.9

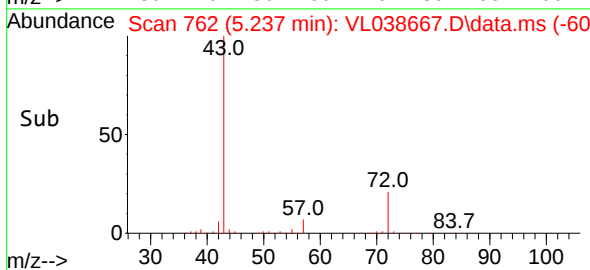
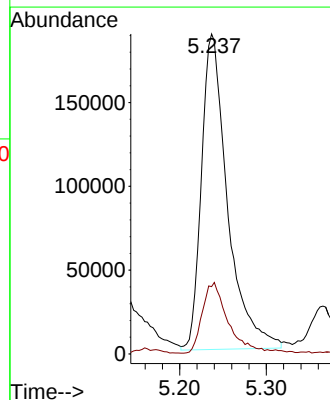
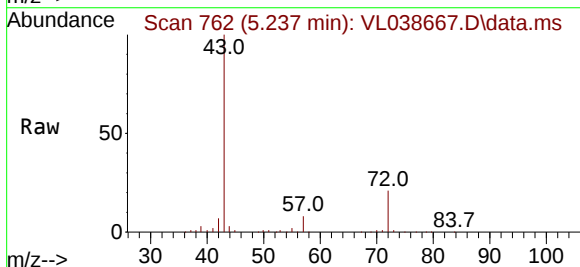
Manual Integrations
APPROVED

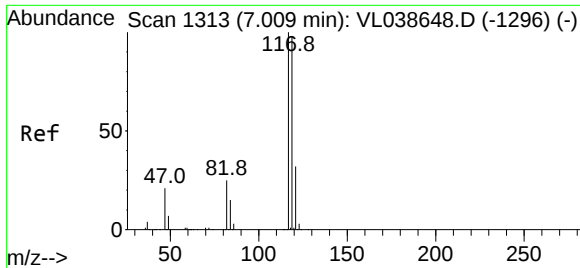
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#34
2-Butanone
Concen: 4.582 ppbv
RT: 5.237 min Scan# 762
Delta R.T. 0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

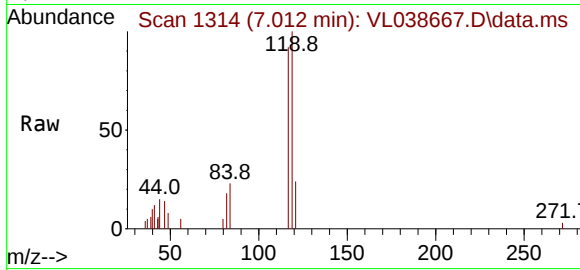
Tgt Ion: 43 Resp: 394614
Ion Ratio Lower Upper
43 100
72 23.4 17.8 26.8





#35
Carbon Tetrachloride
Concen: 0.061 ppbv m
RT: 7.012 min Scan# 117
Delta R.T. 0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

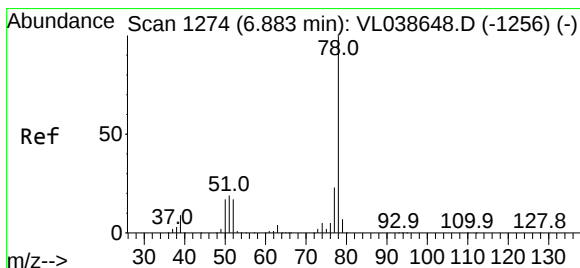
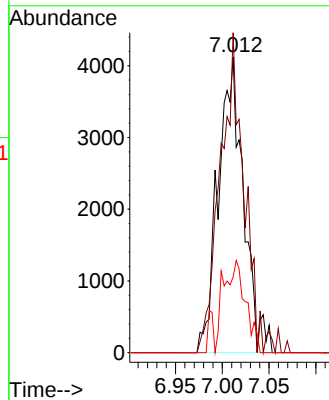
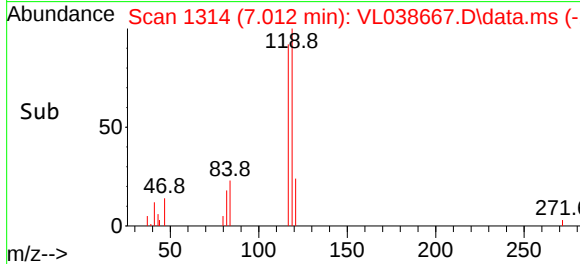
Instrument :
MSVOA_L
ClientSampleId :
COP81



Tgt Ion: 117 Resp: 7730
Ion Ratio Lower Upper
117 100
119 108.2 78.1 117.1
121 25.7 25.8 38.6

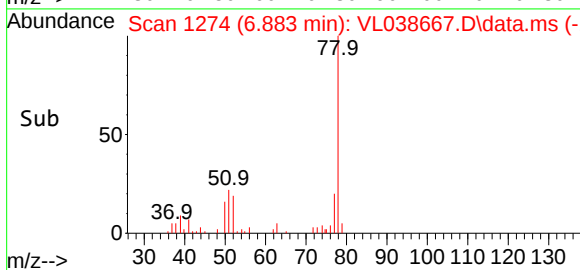
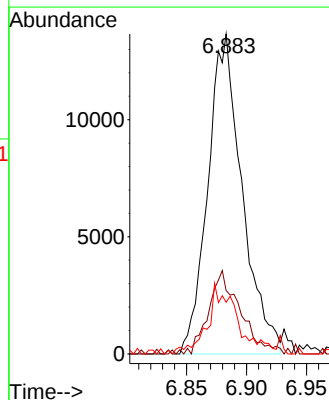
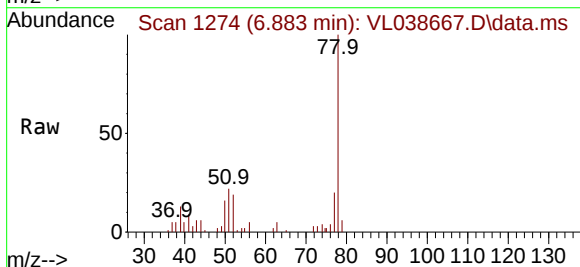
Manual Integrations
APPROVED

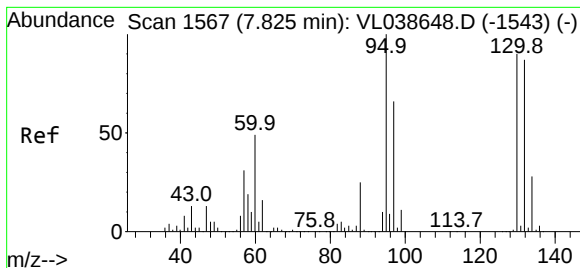
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022



#36
Benzene
Concen: 0.162 ppbv
RT: 6.883 min Scan# 1274
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

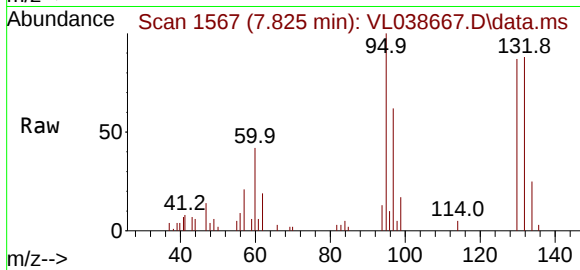
Tgt Ion: 78 Resp: 27141
Ion Ratio Lower Upper
78 100
77 18.9 18.1 27.1
50 14.4 13.6 20.4





#38
Trichloroethene
Concen: 0.293 ppbv m
RT: 7.825 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

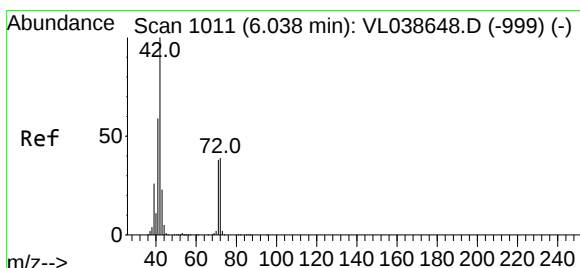
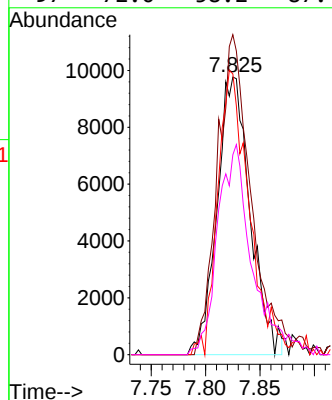
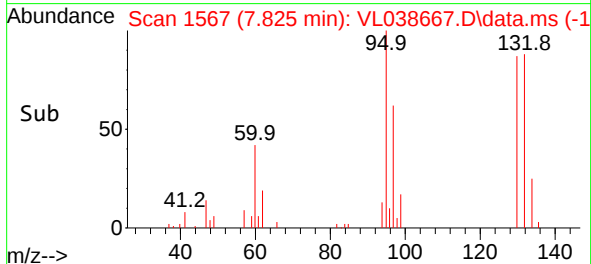
Instrument :
MSVOA_L
ClientSampleId :
COP81



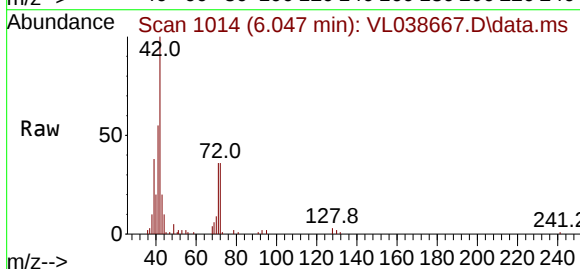
Tgt Ion:130 Resp: 2064
Ion Ratio Lower Upper
130 100
95 115.3 88.9 133.3
132 101.2 77.4 116.0
97 72.0 58.2 87.4

Manual Integrations
APPROVED

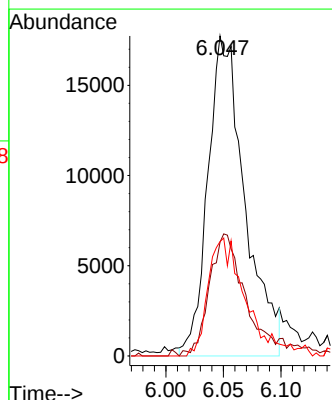
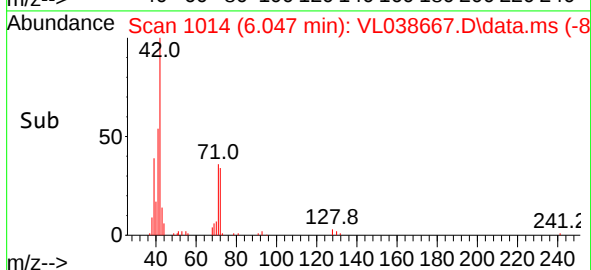
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022

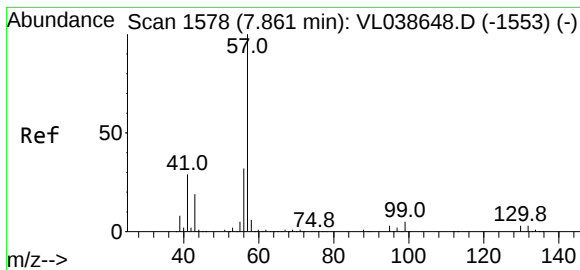


#41
Tetrahydrofuran
Concen: 0.618 ppbv m
RT: 6.047 min Scan# 1014
Delta R.T. 0.009 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59



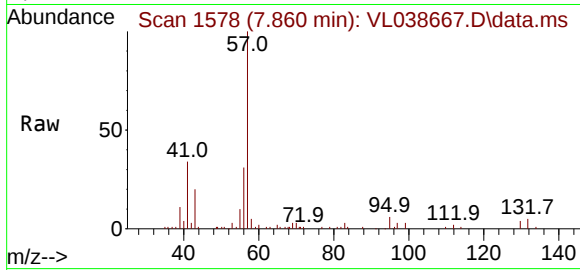
Tgt Ion: 42 Resp: 39590
Ion Ratio Lower Upper
42 100
72 40.6 32.5 48.7
71 37.8 31.4 47.2





#44
2,2,4-Trimethylpentane
Concen: 0.261 ppbv
RT: 7.860 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

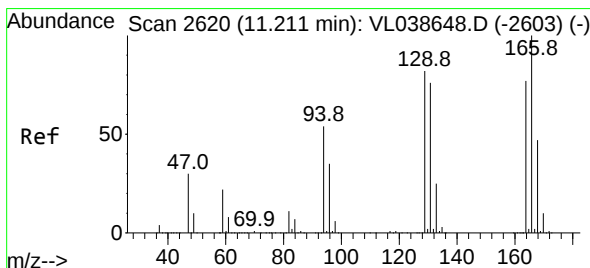
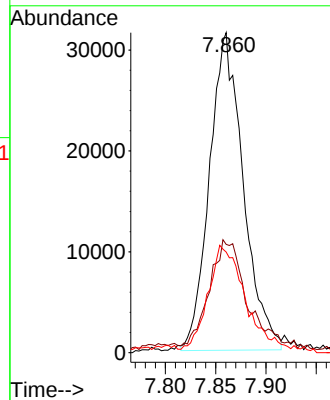
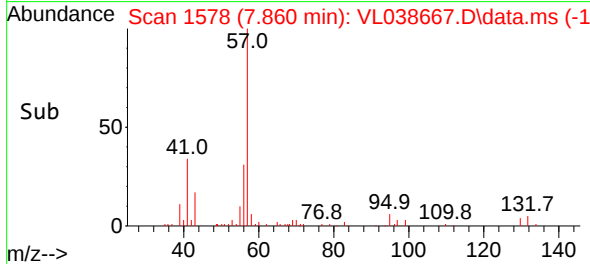
Instrument : MSVOA_L
ClientSampleId : C0P81



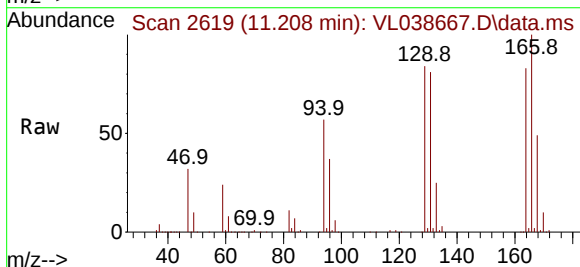
Tgt Ion: 57 Resp: 73682
Ion Ratio Lower Upper
57 100
41 42.5 23.0 34.4
56 38.7 25.3 37.9

Manual Integrations
APPROVED

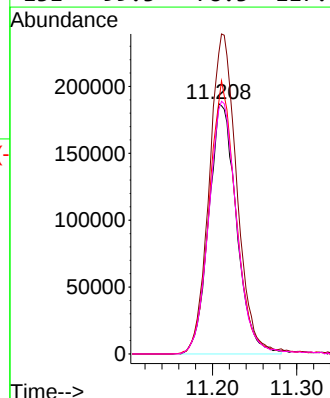
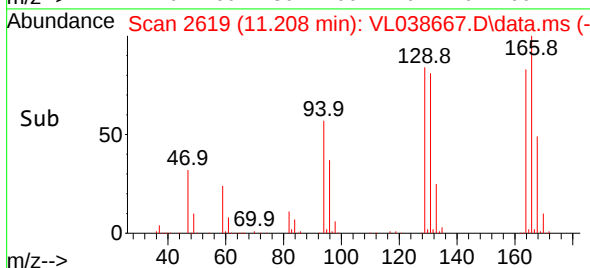
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022

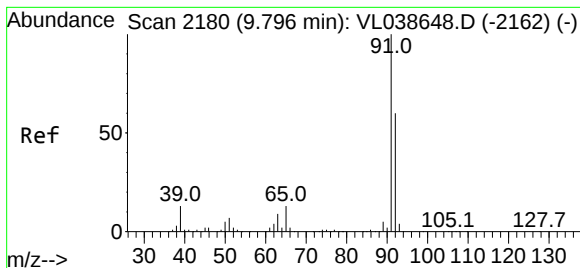


#52
Tetrachloroethene
Concen: 6.941 ppbv
RT: 11.208 min Scan# 2619
Delta R.T. -0.003 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59



Tgt Ion:164 Resp: 426592
Ion Ratio Lower Upper
164 100
166 119.9 103.3 154.9
129 100.2 85.2 127.8
131 99.3 78.3 117.5





#53

Toluene

Concen: 7.605 ppbv

RT: 9.793 min Scan# 2180

Delta R.T. -0.003 min

Lab File: VL038667.D

Acq: 22 Mar 2022 1:59

Instrument :

MSVOA_L

ClientSampleId :

COP81

Tgt Ion: 91 Resp: 137240

Ion Ratio Lower Upper

91 100

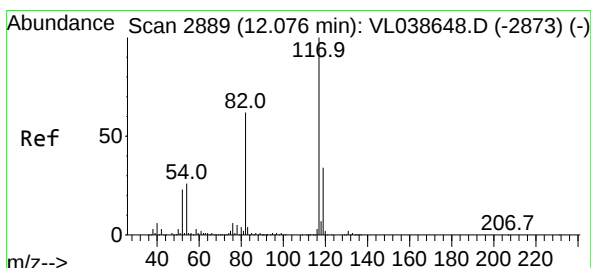
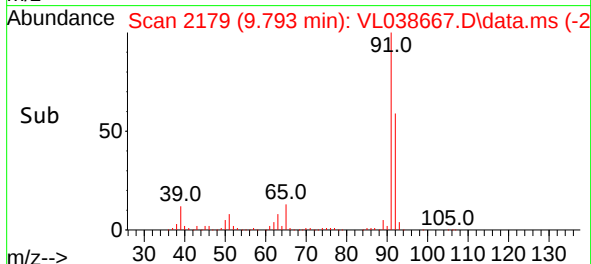
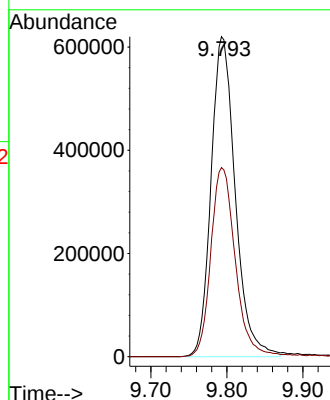
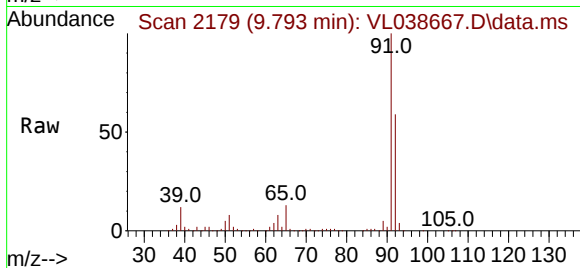
92 60.6 48.7 73.1

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/22/2022

Supervised By :Mahesh Dadoda 03/24/2022



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.072 min Scan# 2888

Delta R.T. -0.003 min

Lab File: VL038667.D

Acq: 22 Mar 2022 1:59

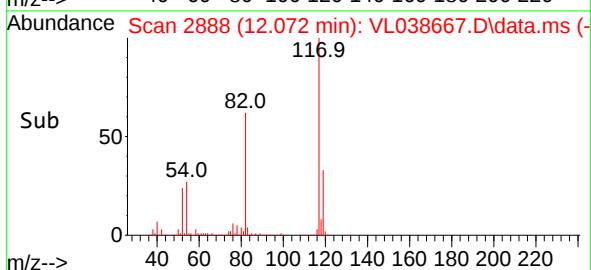
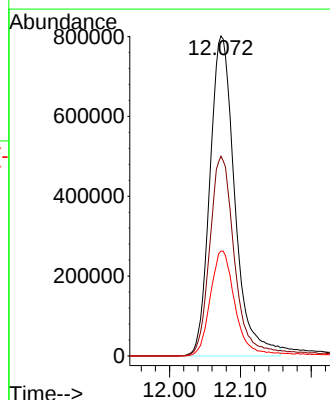
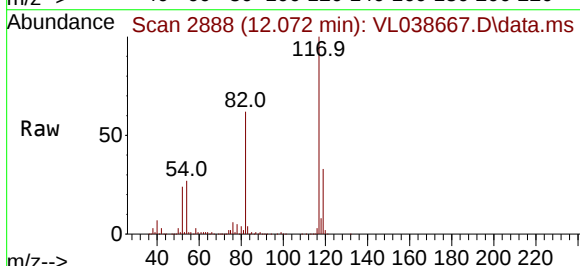
Tgt Ion:117 Resp: 1956712

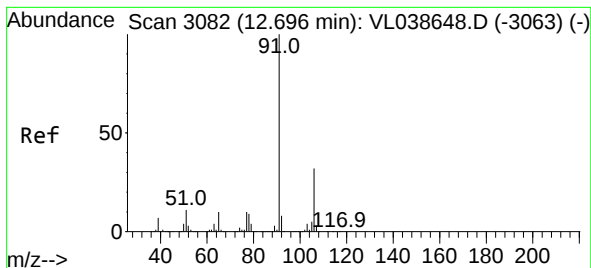
Ion Ratio Lower Upper

117 100

82 65.4 51.6 77.4

119 34.4 26.9 40.3





#58

Ethyl Benzene

Concen: 0.143 ppbv

RT: 12.699 min Scan# 3082

Delta R.T. 0.003 min

Lab File: VL038667.D

Acq: 22 Mar 2022 1:59

Instrument :

MSVOA_L

ClientSampleId :

COP81

Tgt Ion: 91 Resp: 32729

Ion Ratio Lower Upper

91 100

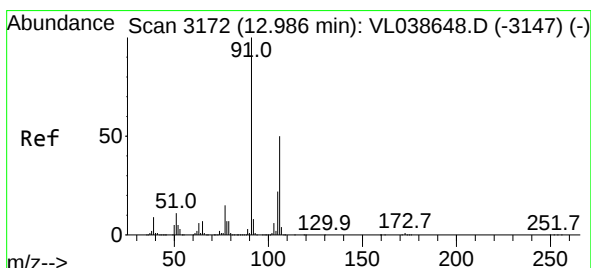
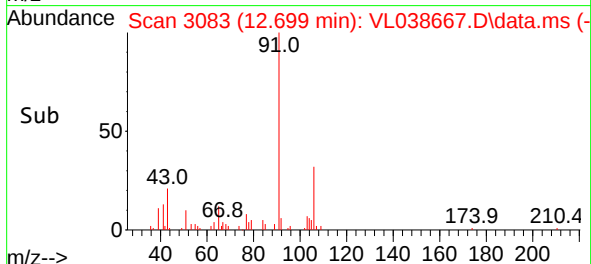
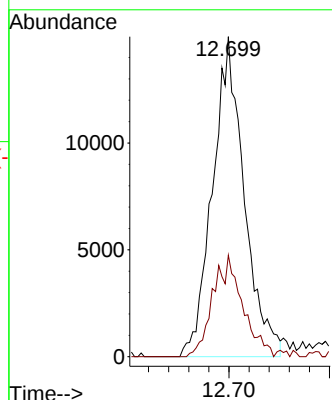
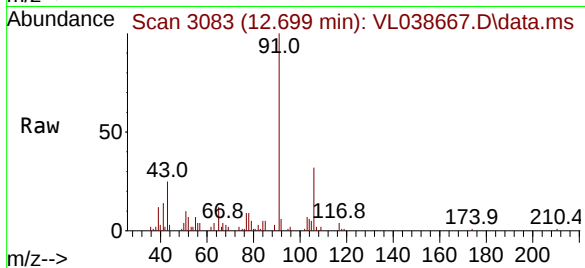
106 29.9 25.4 38.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/22/2022

Supervised By :Mahesh Dadoda 03/24/2022



#59

m/p-Xylene

Concen: 0.344 ppbv m

RT: 12.953 min Scan# 3162

Delta R.T. -0.032 min

Lab File: VL038667.D

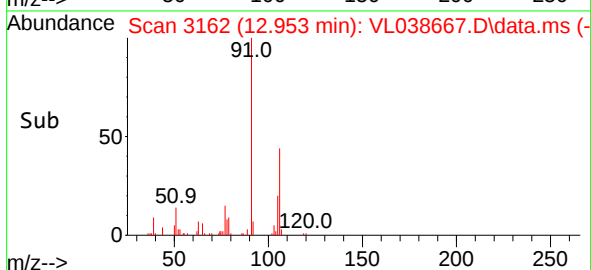
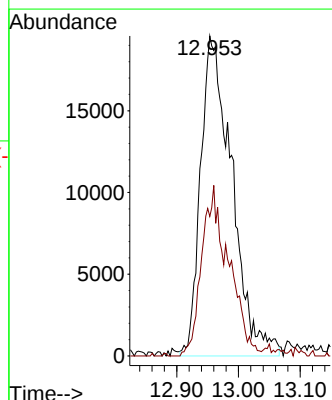
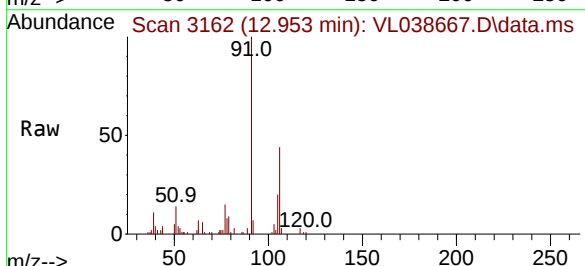
Acq: 22 Mar 2022 1:59

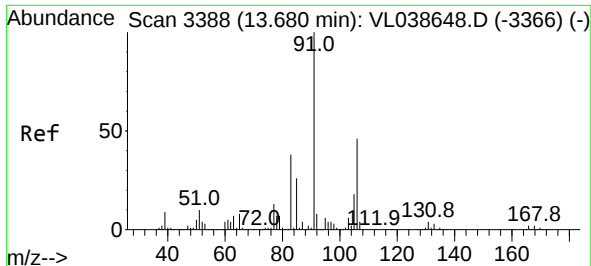
Tgt Ion: 91 Resp: 68790

Ion Ratio Lower Upper

91 100

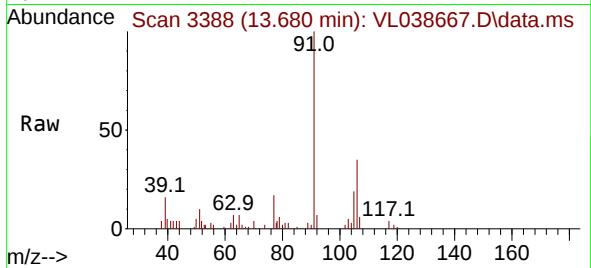
106 0.0 37.2 55.8#





#60
o-Xylene
Concen: 0.146 ppbv m
RT: 13.680 min Scan# 3388
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59

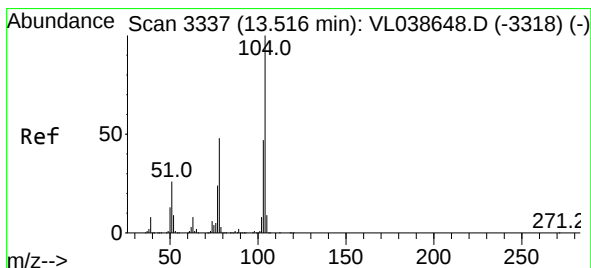
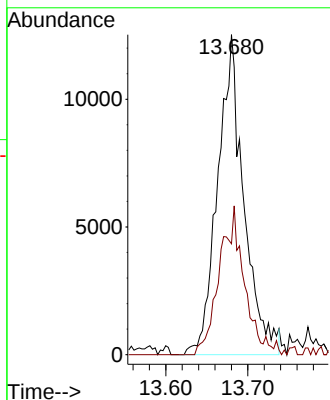
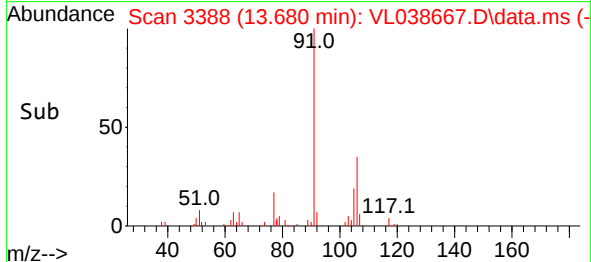
Instrument :
MSVOA_L
ClientSampleId :
COP81



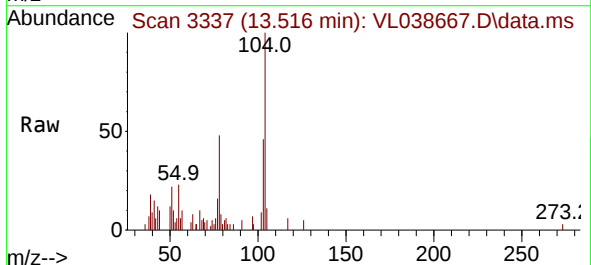
Tgt Ion: 91 Resp: 27820
Ion Ratio Lower Upper
91 100
106 46.1 23.5 70.5

Manual Integrations
APPROVED

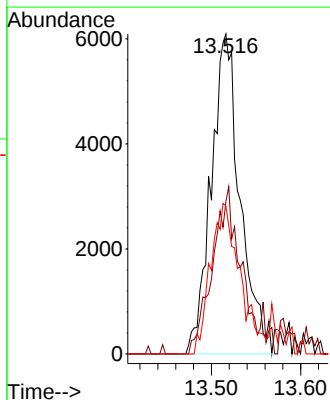
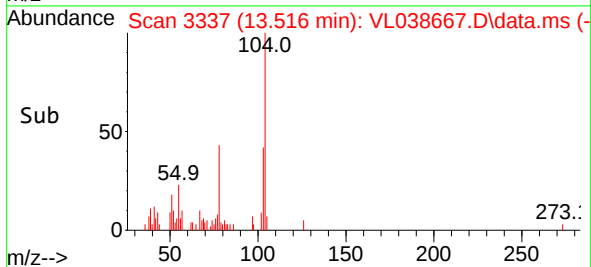
Reviewed By :Semsettin Yesilyurt 03/22/2022
Supervised By :Mahesh Dadoda 03/24/2022

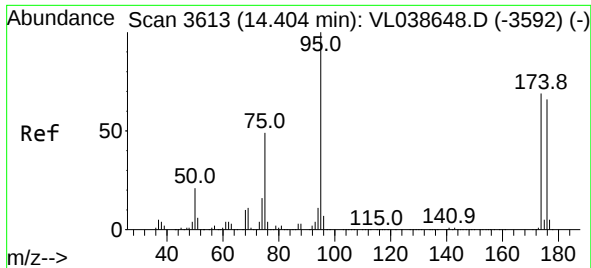


#61
Styrene
Concen: 0.135 ppbv m
RT: 13.516 min Scan# 3337
Delta R.T. -0.000 min
Lab File: VL038667.D
Acq: 22 Mar 2022 1:59



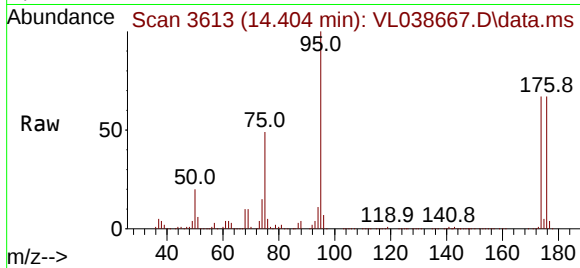
Tgt Ion:104 Resp: 13915
Ion Ratio Lower Upper
104 100
78 53.0 39.0 58.4
103 47.1 37.8 56.8





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.708 ppbv
 RT: 14.404 min Scan# 3613
 Delta R.T. -0.000 min
 Lab File: VL038667.D
 Acq: 22 Mar 2022 1:59

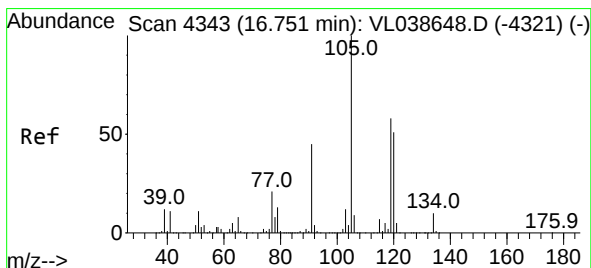
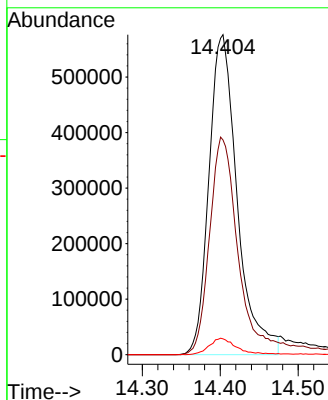
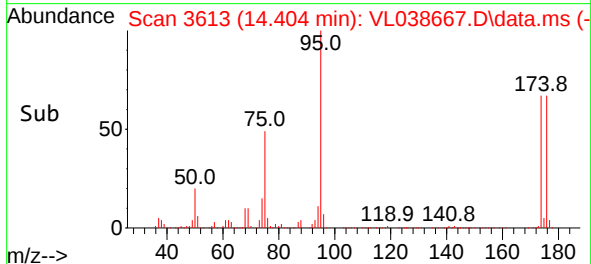
Instrument :
 MSVOA_L
 ClientSampleId :
 C0P81



Tgt Ion: 95 Resp: 1456400
 Ion Ratio Lower Upper
 95 100
 174 73.2 56.1 84.1
 175 5.2 4.2 6.2

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 03/22/2022
 Supervised By :Mahesh Dadoda 03/24/2022



#74
 1,2,4-Trimethylbenzene
 Concen: 0.098 ppbv m
 RT: 16.751 min Scan# 4343
 Delta R.T. -0.000 min
 Lab File: VL038667.D
 Acq: 22 Mar 2022 1:59

Tgt Ion:105 Resp: 21856
 Ion Ratio Lower Upper
 105 100
 120 39.4 40.5 60.7#
 91 15.8 35.9 53.9#
 77 19.0 16.6 25.0

