

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL090723\
 Data File : VL040671.D
 Acq On : 7 Sep 2023 14:17
 Operator : SY/MD
 Sample : 04323-02DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2023
 Supervised By :Mahesh Dadoda 09/11/2023

Quant Time: Sep 07 14:47:08 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081523AIR.M

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

QLast Update : Wed Aug 16 05:43:50 2023

Response via : Initial Calibration

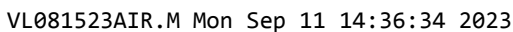
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

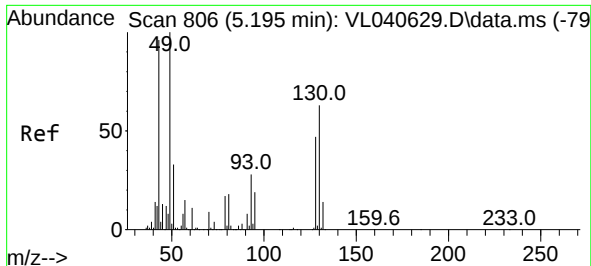
Internal Standards						
1) Bromochloromethane	5.192	49	1019320	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.658	114	2610865	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	2260606	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.786	95	1858904	10.340	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.400%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.722	85	63113	0.287	ppbv	95
3) Chlorodifluoromethane	2.661	51	61215m	0.366	ppbv	
4) Chloromethane	2.806	50	33165	0.508	ppbv	92
9) Propene	2.690	41	64183m	1.238	ppbv	
10) Heptane	7.581	43	51857m	0.434	ppbv	
11) Trichlorofluoromethane	3.555	101	59986	0.338	ppbv	97
13) Ethanol	3.234	45	100415	6.938	ppbv	96
15) Acetone	3.456	43	5376992	43.127	ppbv	98
17) tert-Butyl alcohol	3.880	59	94779	0.717	ppbv	97
20) Methylene Chloride	3.928	84	1493132	24.507	ppbv	95
25) Ethyl Acetate	5.205	43	901310	3.849	ppbv #	93
26) Hexane	5.214	57	710309	6.270	ppbv #	63
29) Chloroform	5.272	83	22908	0.128	ppbv	88
30) Cyclohexane	6.610	84	9275m	0.107	ppbv	
31) cis-1,2-Dichloroethene	5.076	61	10601m	0.104	ppbv	
34) 2-Butanone	4.790	43	114622	0.871	ppbv	98
35) Carbon Tetrachloride	6.500	117	12018m	0.074	ppbv	
36) Benzene	6.375	78	87887	0.423	ppbv	97
38) Trichloroethene	7.304	130	8985m	0.112	ppbv	
43) Methyl Methacrylate	7.478	69	37559m	0.483	ppbv	
52) Tetrachloroethene	10.626	164	2399133	36.882	ppbv	99
53) Toluene	9.230	91	379348	1.719	ppbv	100
58) Ethyl Benzene	12.102	91	59230	0.217	ppbv	97
59) m/p-Xylene	12.349	91	168128m	0.676	ppbv	
60) o-Xylene	13.066	91	70947	0.301	ppbv	100
61) Styrene	12.909	104	20501m	0.199	ppbv	
73) 1,3,5-Trimethylbenzene	15.365	105	38134m	0.160	ppbv	
74) 1,2,4-Trimethylbenzene	16.121	105	111637	0.402	ppbv #	68

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

Manual Integrations

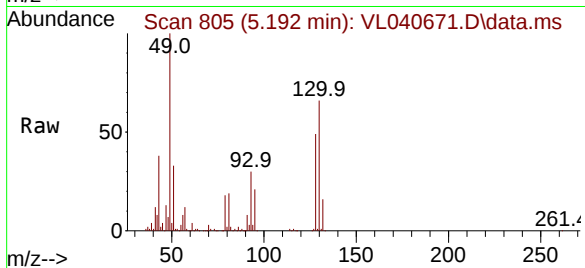
Quant Time: Sep 07 14:47:08 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081523AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Aug 16 05:43:50 2023
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 806
Delta R.T. -0.003 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

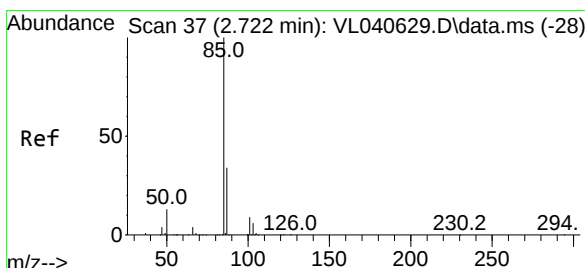
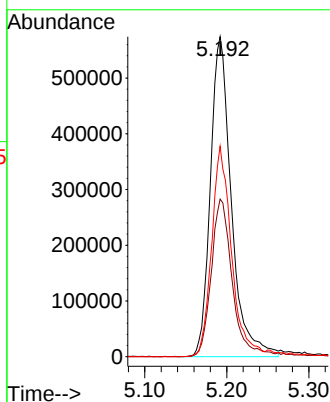
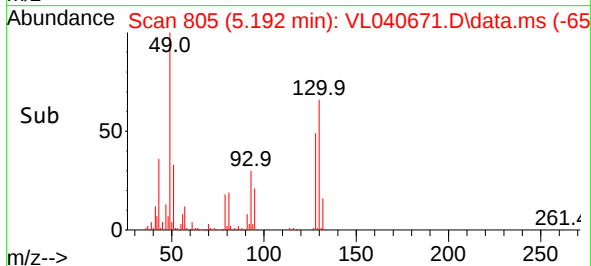
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 49 Resp: 1019320
Ion Ratio Lower Upper
49 100
128 50.5 24.9 74.7
130 65.5 32.2 96.6

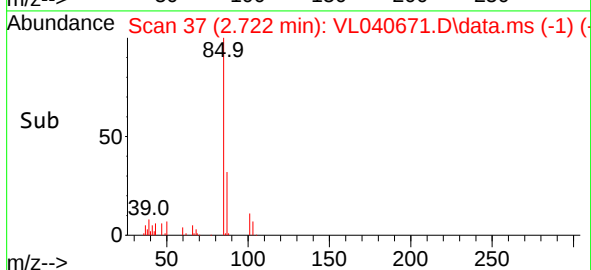
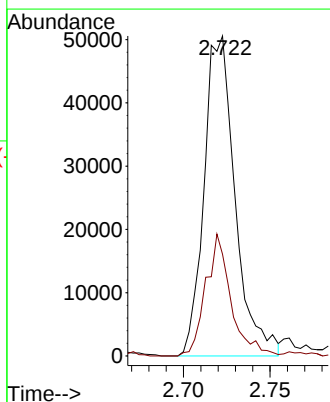
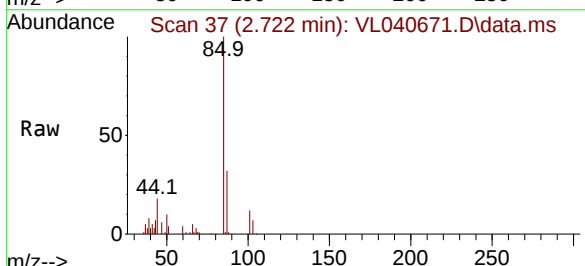
Manual Integrations
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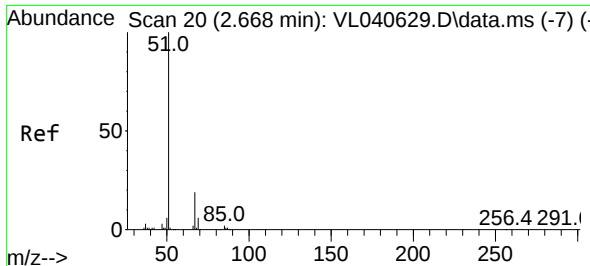
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#2
Dichlorodifluoromethane
Concen: 0.287 ppbv
RT: 2.722 min Scan# 37
Delta R.T. 0.000 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

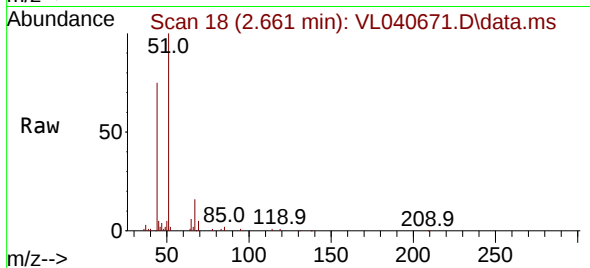
Tgt Ion: 85 Resp: 63113
Ion Ratio Lower Upper
85 100
87 31.8 27.5 41.3





#3
Chlorodifluoromethane
Concen: 0.366 ppbv m
RT: 2.661 min Scan# 18
Delta R.T. -0.006 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

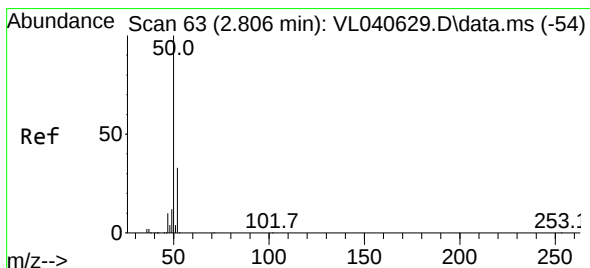
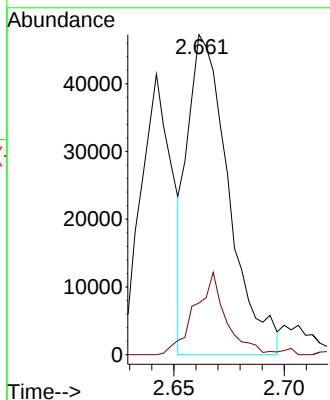
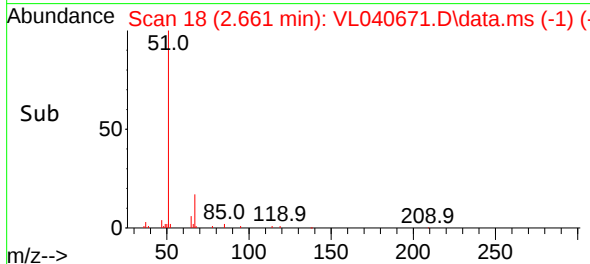
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 51 Resp: 61215
Ion Ratio Lower Upper
51 100
67 21.0 15.0 22.6

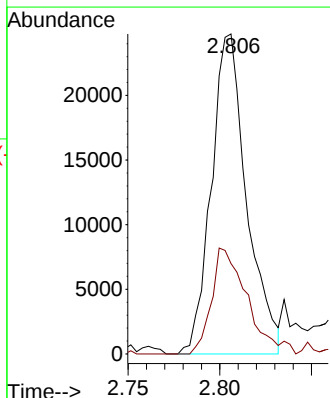
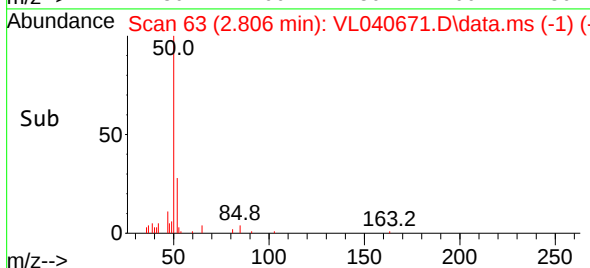
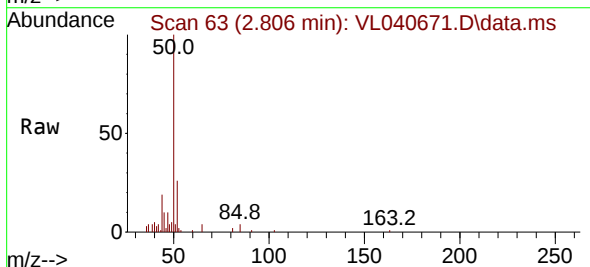
Manual Integrations
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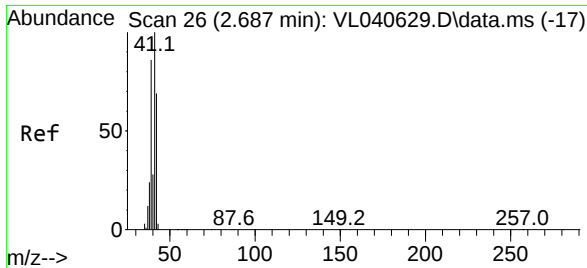
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#4
Chloromethane
Concen: 0.508 ppbv
RT: 2.806 min Scan# 63
Delta R.T. 0.000 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

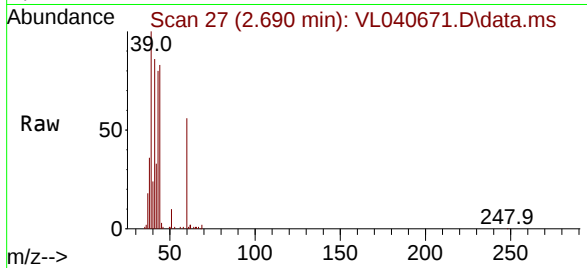
Tgt Ion: 50 Resp: 33165
Ion Ratio Lower Upper
50 100
52 28.3 26.2 39.2





#9
 Propene
 Concen: 1.238 ppbv m
 RT: 2.690 min Scan# 21
 Delta R.T. 0.003 min
 Lab File: VL040671.D
 Acq: 7 Sep 2023 14:17

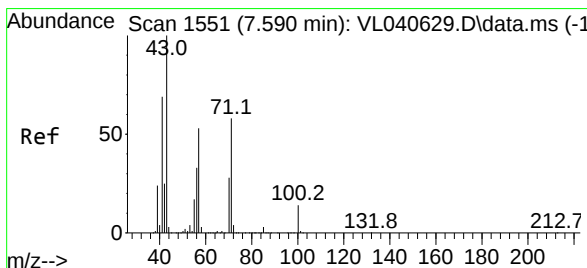
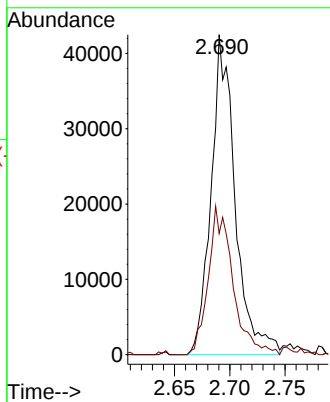
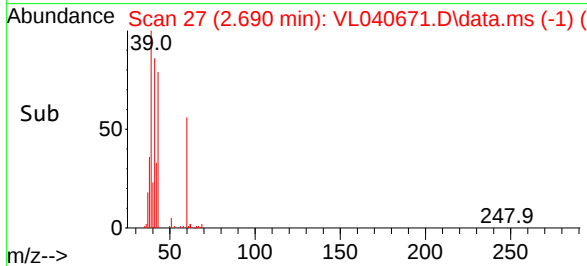
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1



Tgt Ion: 41 Resp: 6418
 Ion Ratio Lower Upper
 41 100
 42 49.0 56.5 84.7

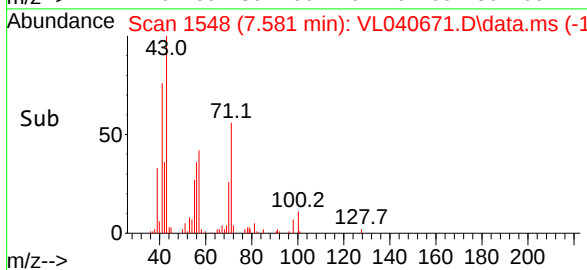
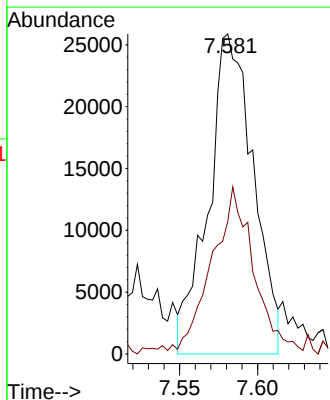
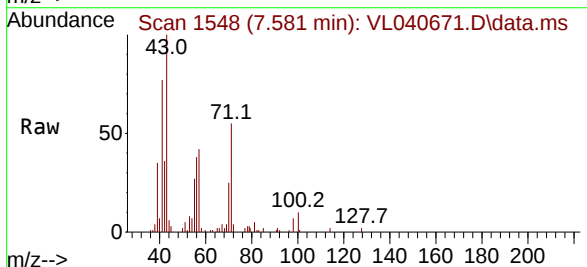
Manual Integrations
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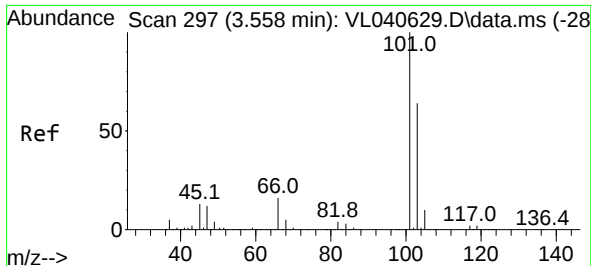
Reviewed By :Semsettin Yesilyurt 09/11/2023
 Supervised By :Mahesh Dadoda 09/11/2023



#10
 Heptane
 Concen: 0.434 ppbv m
 RT: 7.581 min Scan# 1548
 Delta R.T. -0.010 min
 Lab File: VL040671.D
 Acq: 7 Sep 2023 14:17

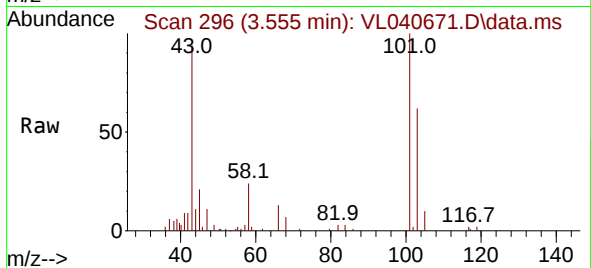
Tgt Ion: 43 Resp: 51857
 Ion Ratio Lower Upper
 43 100
 57 45.7 42.5 63.7





#11
 Trichlorofluoromethane
 Concen: 0.338 ppbv
 RT: 3.555 min Scan# 297
 Delta R.T. -0.003 min
 Lab File: VL040671.D
 Acq: 7 Sep 2023 14:17

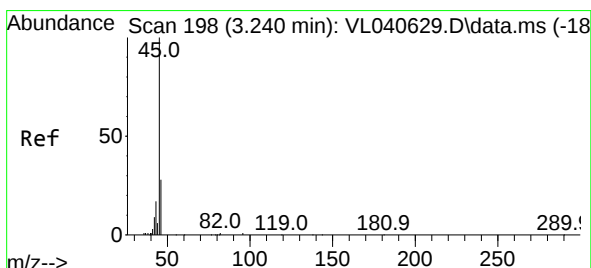
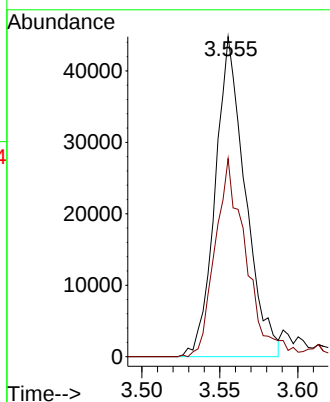
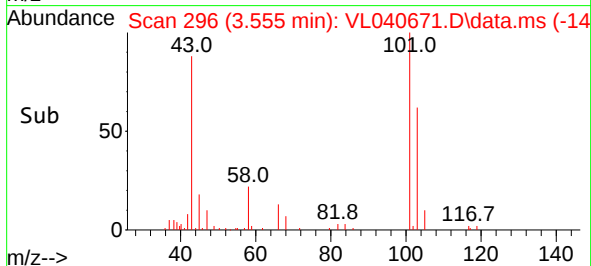
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1



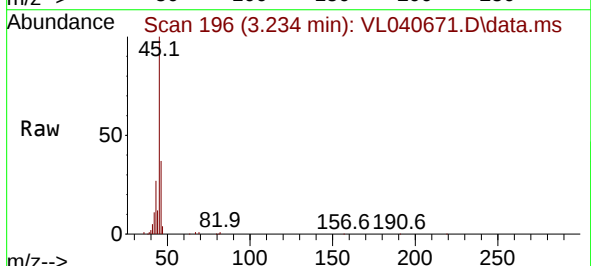
Tgt Ion:101 Resp: 59980
 Ion Ratio Lower Upper
 101 100
 103 61.9 51.1 76.7

Manual Integrations
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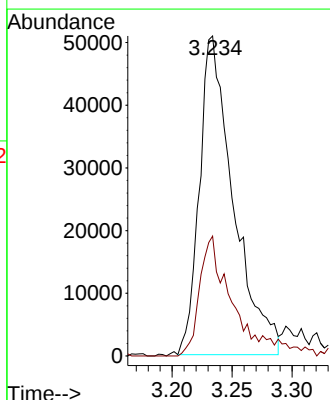
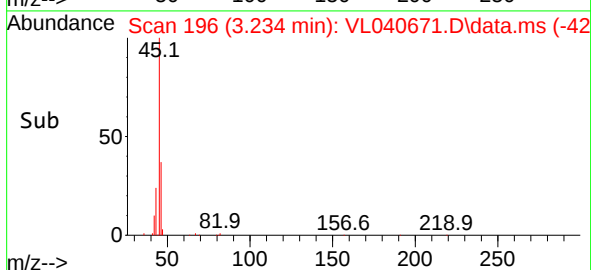
Reviewed By :Semsettin Yesilyurt 09/11/2023
 Supervised By :Mahesh Dadoda 09/11/2023

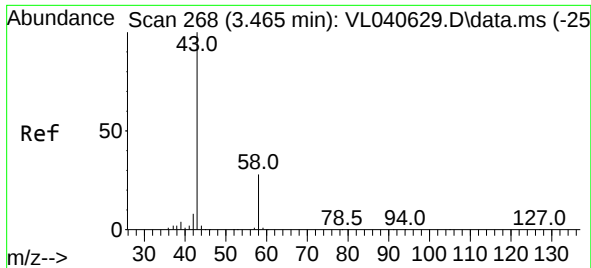


#13
 Ethanol
 Concen: 6.938 ppbv
 RT: 3.234 min Scan# 196
 Delta R.T. -0.006 min
 Lab File: VL040671.D
 Acq: 7 Sep 2023 14:17



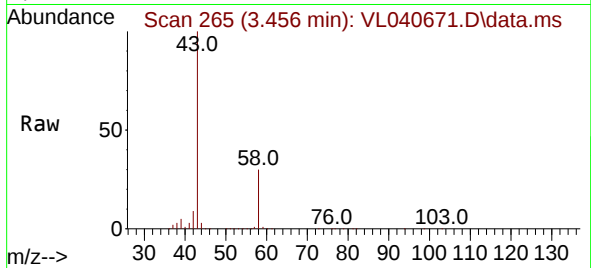
Tgt Ion: 45 Resp: 100415
 Ion Ratio Lower Upper
 45 100
 46 37.7 14.2 56.6





#15
Acetone
Concen: 43.127 ppbv
RT: 3.456 min Scan# 20
Delta R.T. -0.010 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

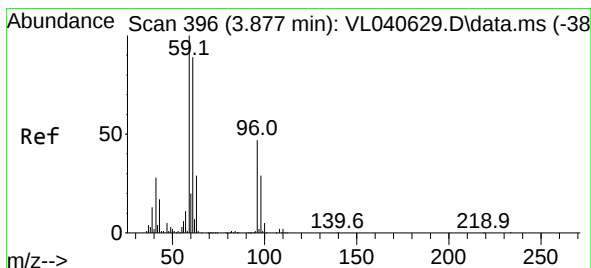
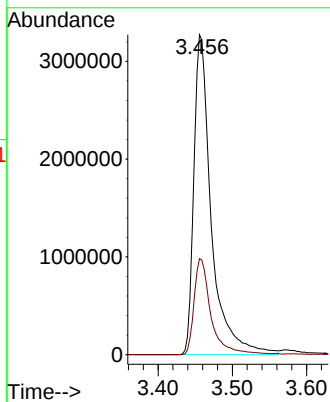
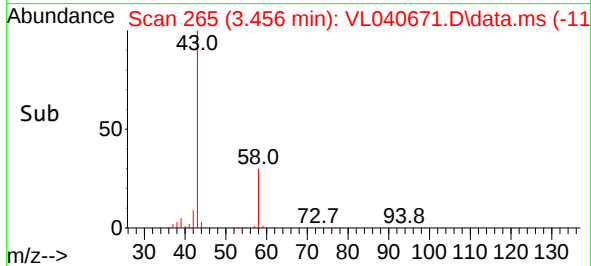
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 43 Resp: 5376992
Ion Ratio Lower Upper
43 100
58 29.2 22.4 33.6

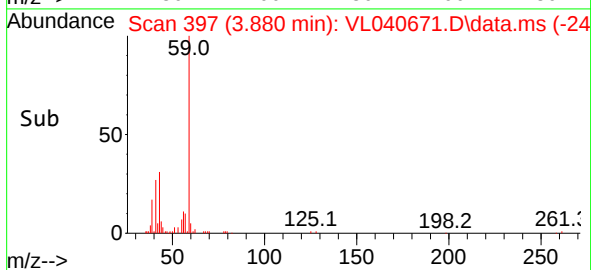
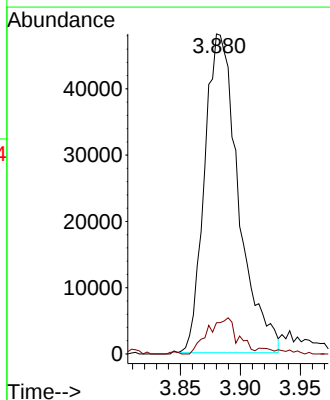
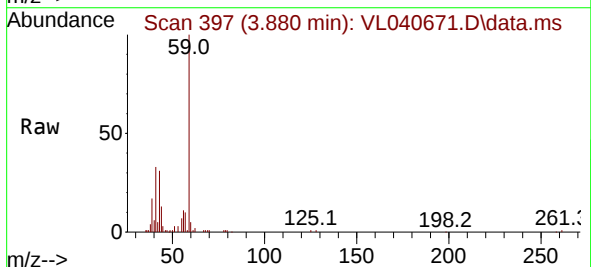
Manual Integrations
APPROVED

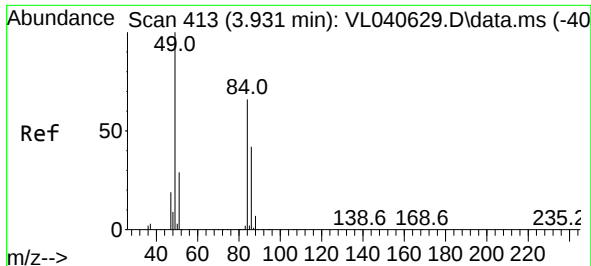
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#17
tert-Butyl alcohol
Concen: 0.717 ppbv
RT: 3.880 min Scan# 397
Delta R.T. 0.003 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

Tgt Ion: 59 Resp: 94779
Ion Ratio Lower Upper
59 100
57 11.5 8.4 12.6





#20

Methylene Chloride

Concen: 24.507 ppbv

RT: 3.928 min Scan# 413

Delta R.T. -0.003 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion: 84 Resp: 149313

Ion Ratio Lower Upper

84 100

49 145.0 122.1 183.1

51 46.6 35.4 53.2

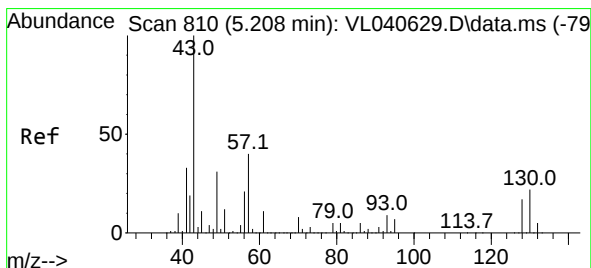
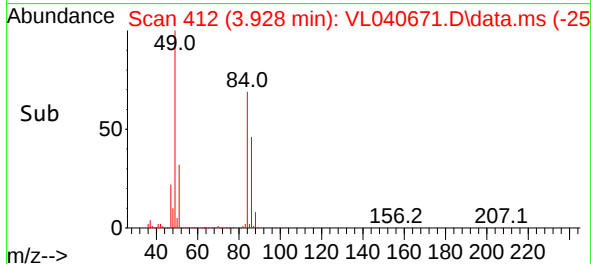
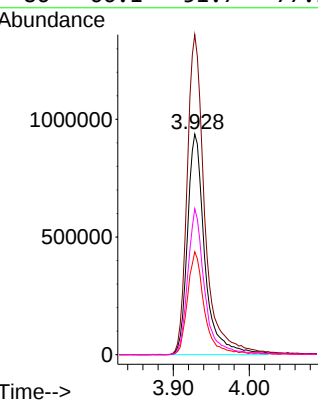
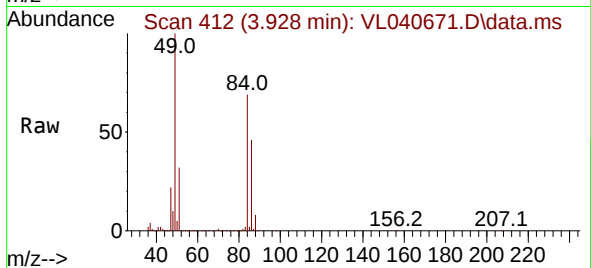
86 66.1 51.7 77.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2023

Supervised By :Mahesh Dadoda 09/11/2023



#25

Ethyl Acetate

Concen: 3.849 ppbv

RT: 5.205 min Scan# 809

Delta R.T. -0.003 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

Tgt Ion: 43 Resp: 901310

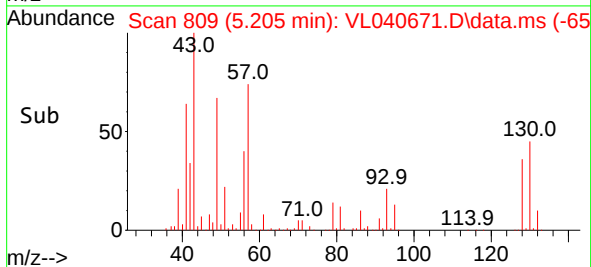
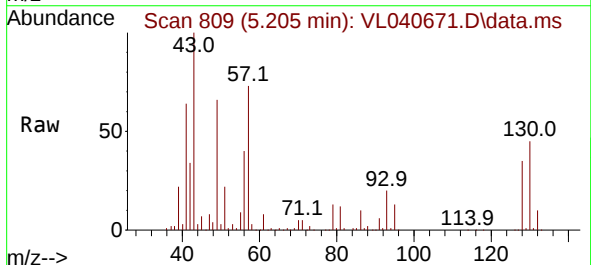
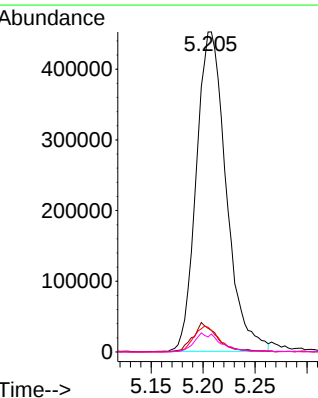
Ion Ratio Lower Upper

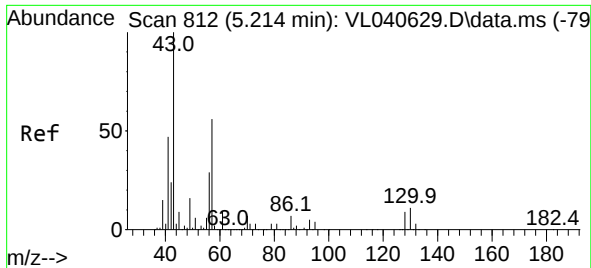
43 100

45 7.9 8.2 12.4#

61 7.3 8.3 12.5#

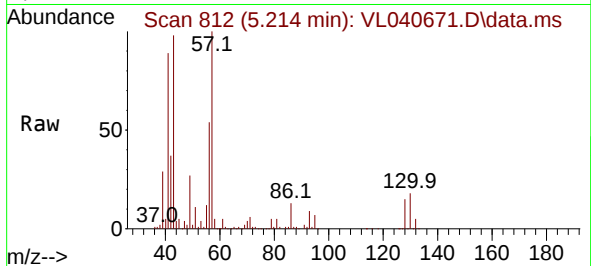
70 5.5 6.1 9.1#





#26
Hexane
Concen: 6.270 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.000 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

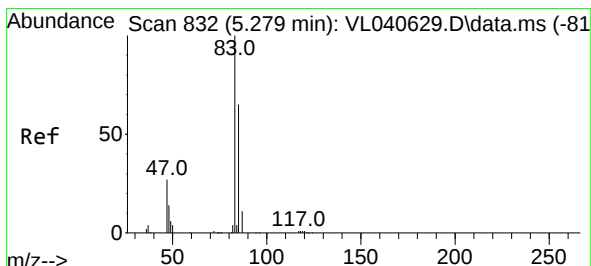
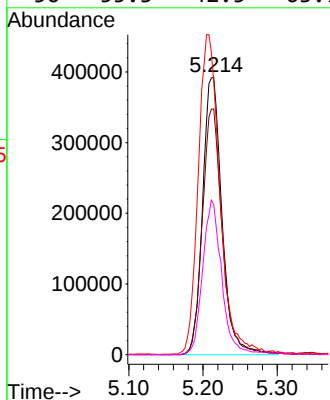
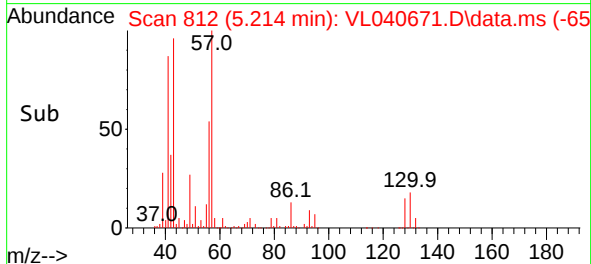
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 57 Resp: 710309
Ion Ratio Lower Upper
57 100
41 91.4 69.3 103.9
43 129.8 177.9 266.9
56 55.3 42.5 63.7

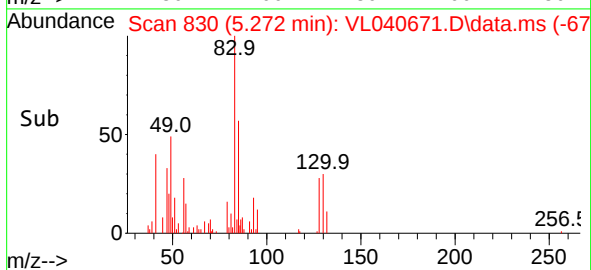
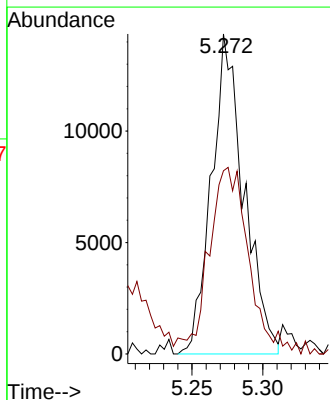
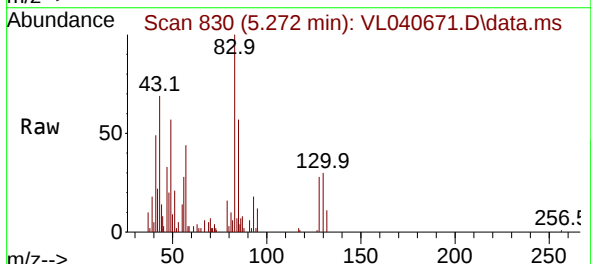
Manual Integrations
APPROVED

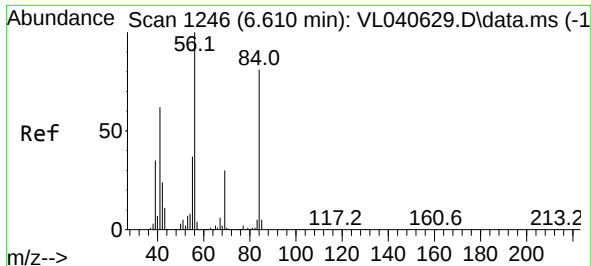
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#29
Chloroform
Concen: 0.128 ppbv
RT: 5.272 min Scan# 830
Delta R.T. -0.006 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

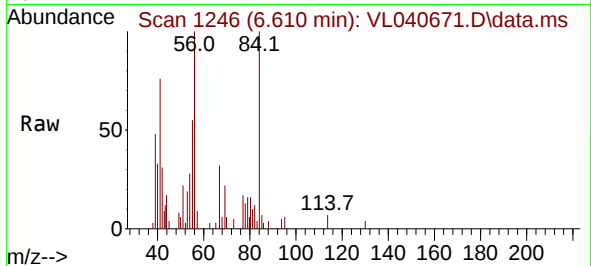
Tgt Ion: 83 Resp: 22908
Ion Ratio Lower Upper
83 100
85 55.7 52.2 78.2





#30
Cyclohexane
Concen: 0.107 ppbv m
RT: 6.610 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

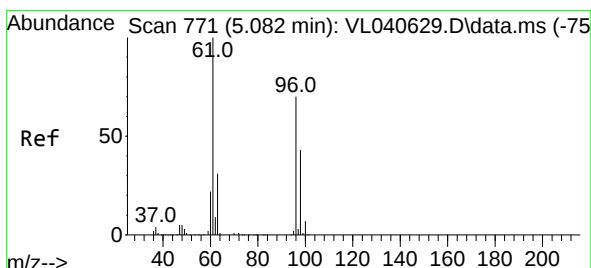
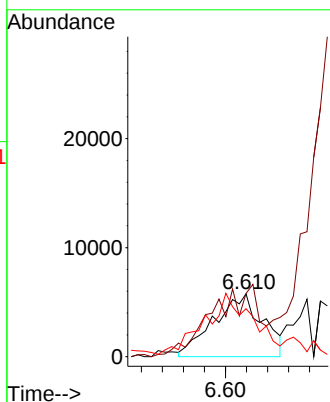
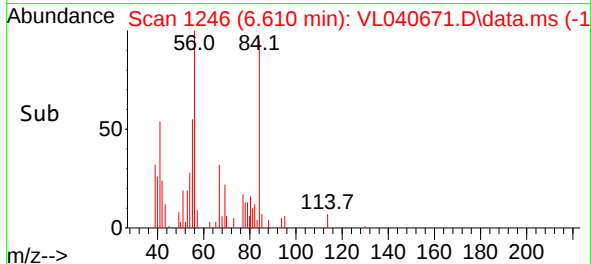
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 84 Resp: 927
Ion Ratio Lower Upper
84 100
56 105.5 105.4 158.2
41 131.6 64.2 96.2

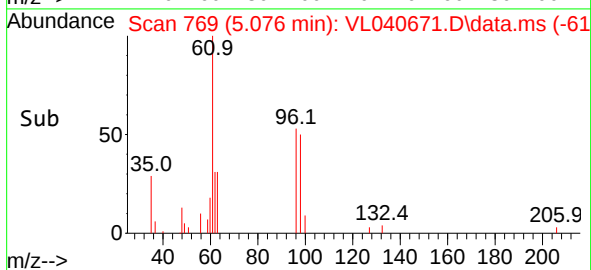
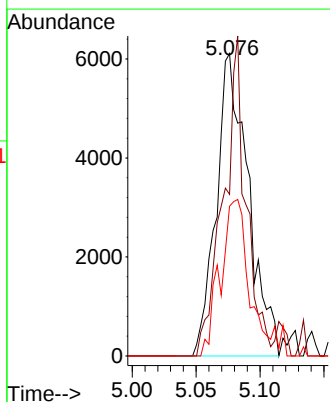
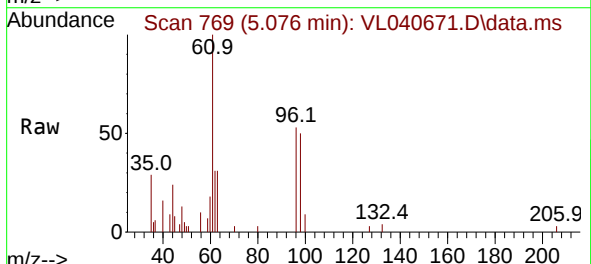
Manual Integrations
APPROVED

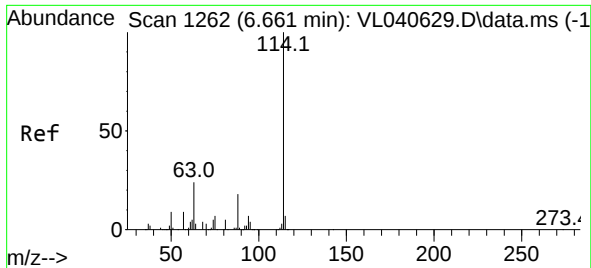
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#31
cis-1,2-Dichloroethene
Concen: 0.104 ppbv m
RT: 5.076 min Scan# 769
Delta R.T. -0.006 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

Tgt Ion: 61 Resp: 10601
Ion Ratio Lower Upper
61 100
96 53.5 55.8 83.6#
98 49.5 34.8 52.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.658 min Scan# 1

Delta R.T. -0.003 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion:114 Resp: 261086

Ion Ratio Lower Upper

114 100

63 25.8 20.2 30.2

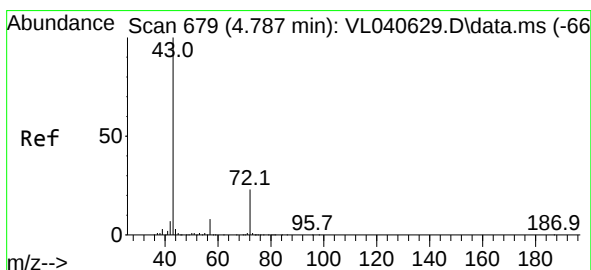
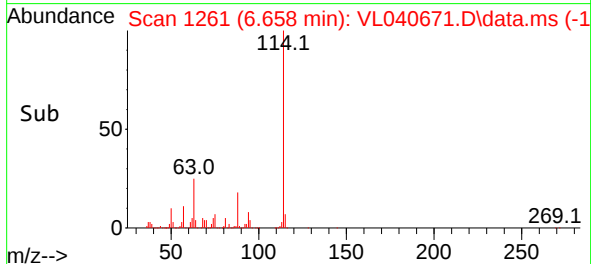
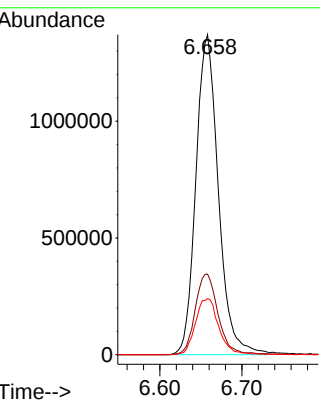
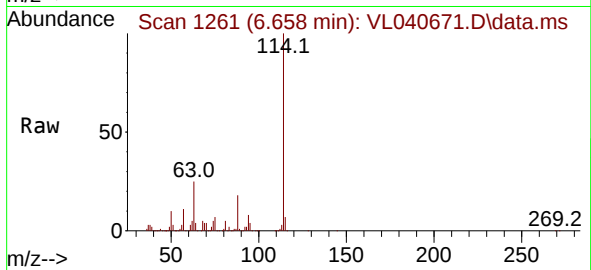
88 18.2 14.1 21.1

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 09/11/2023

Supervised By :Mahesh Dadoda 09/11/2023



#34

2-Butanone

Concen: 0.871 ppbv

RT: 4.790 min Scan# 680

Delta R.T. 0.003 min

Lab File: VL040671.D

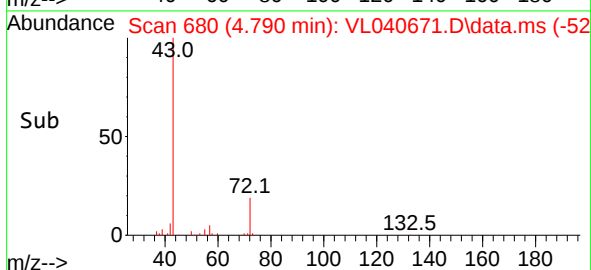
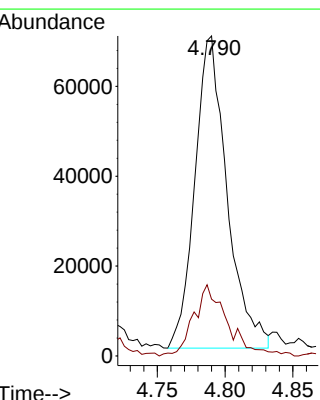
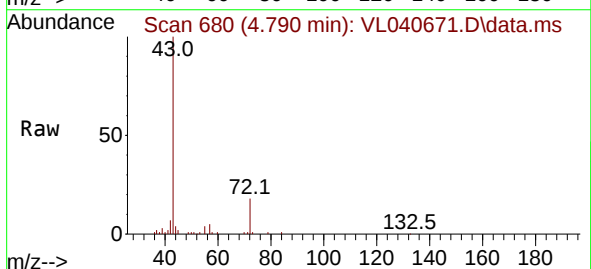
Acq: 7 Sep 2023 14:17

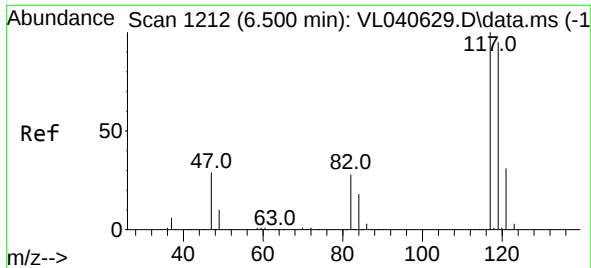
Tgt Ion: 43 Resp: 114622

Ion Ratio Lower Upper

43 100

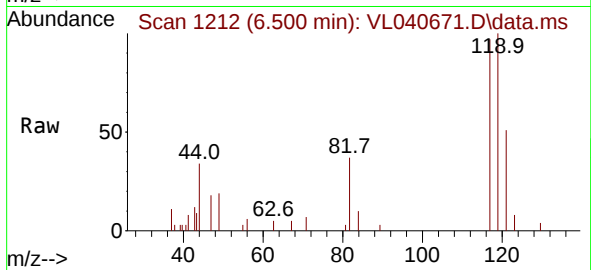
72 24.8 19.2 28.8





#35
Carbon Tetrachloride
Concen: 0.074 ppbv m
RT: 6.500 min Scan# 1173
Delta R.T. 0.000 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

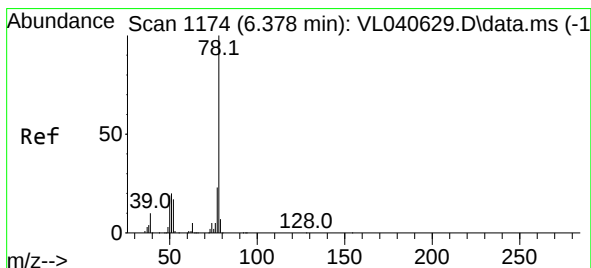
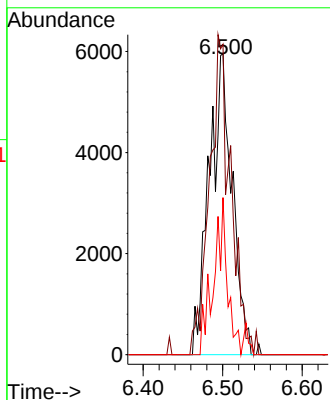
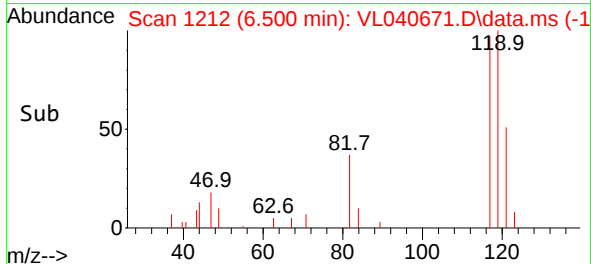
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 117 Resp: 12018
Ion Ratio Lower Upper
117 100
119 103.1 75.6 113.4
121 52.2 24.9 37.3

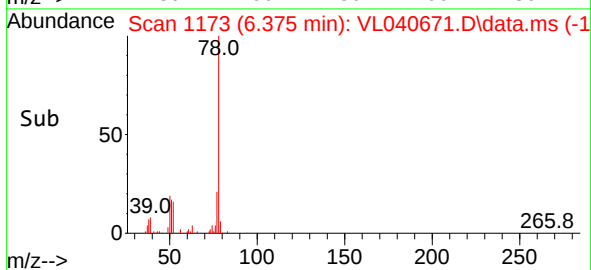
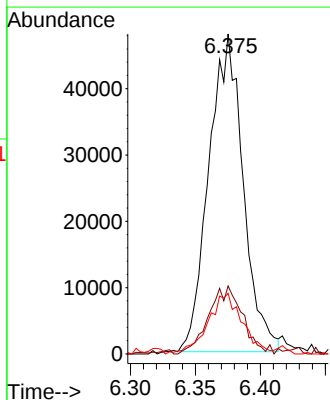
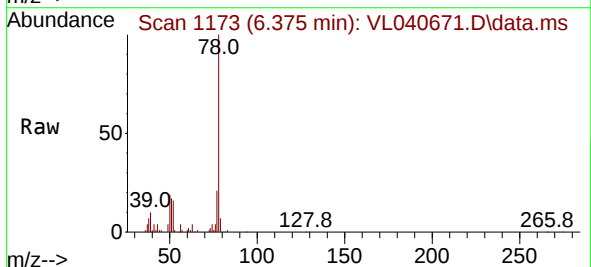
Manual Integrations
APPROVED

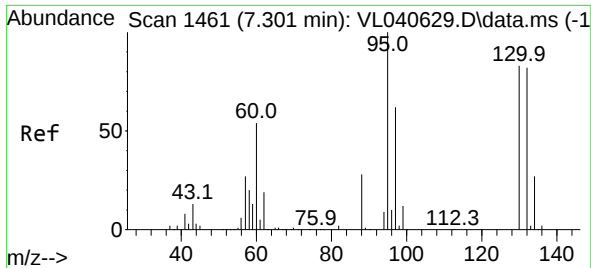
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#36
Benzene
Concen: 0.423 ppbv
RT: 6.375 min Scan# 1173
Delta R.T. -0.003 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

Tgt Ion: 78 Resp: 87887
Ion Ratio Lower Upper
78 100
77 21.4 18.2 27.2
50 17.3 15.0 22.6





#38

Trichloroethene

Concen: 0.112 ppbv m

RT: 7.304 min Scan# 1461

Delta R.T. 0.003 min

Lab File: VL040671.D

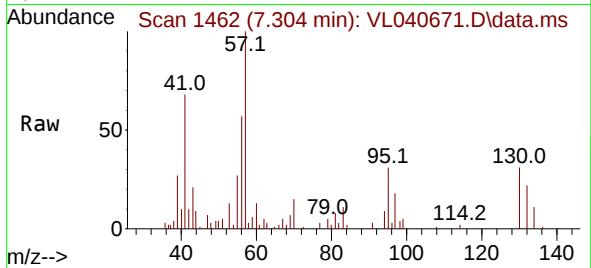
Acq: 7 Sep 2023 14:17

Instrument :

MSVOA_L

ClientSampleId :

IA1

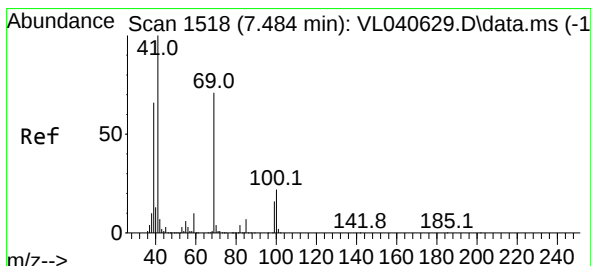
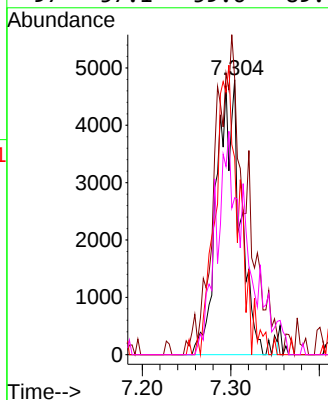
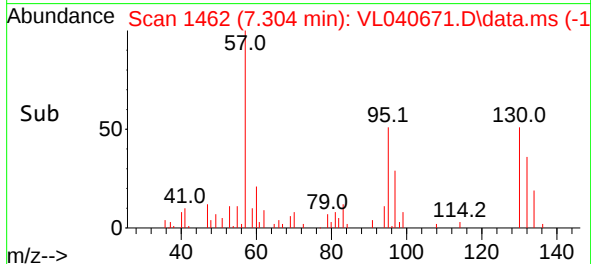


Tgt Ion:	130	Resp:	898
Ion Ratio	Lower	Upper	
130	100		
95	100.5	95.9	143.9
132	71.7	79.0	118.4
97	57.1	59.6	89.4

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#43

Methyl Methacrylate

Concen: 0.483 ppbv m

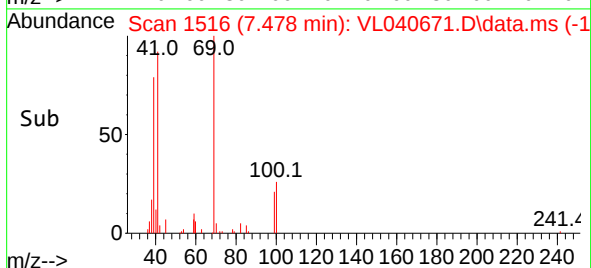
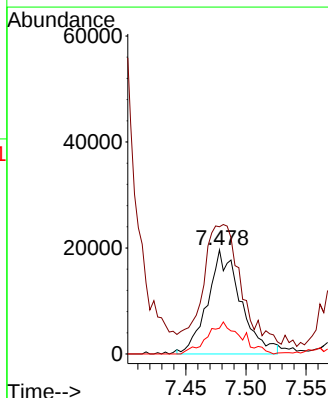
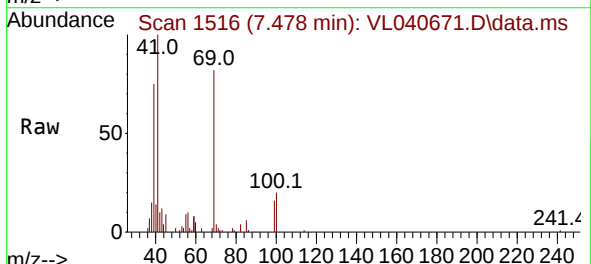
RT: 7.478 min Scan# 1516

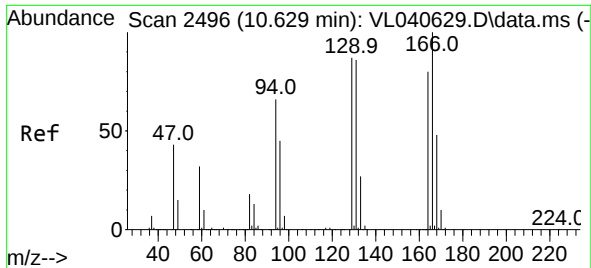
Delta R.T. -0.006 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

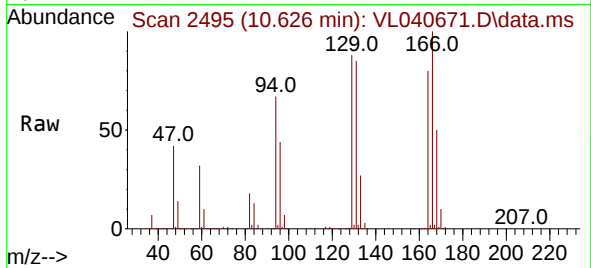
Tgt Ion:	69	Resp:	37559
Ion Ratio	Lower	Upper	
69	100		
41	0.0	111.8	167.8
100	0.0	25.8	38.6





#52
Tetrachloroethene
Concen: 36.882 ppbv
RT: 10.626 min Scan# 2495
Delta R.T. -0.003 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

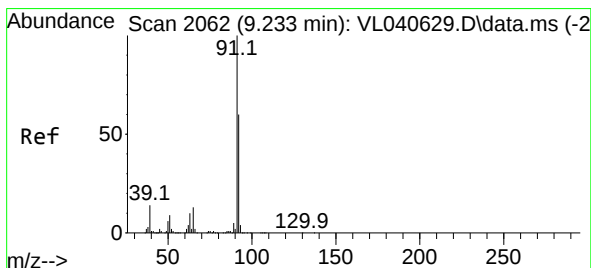
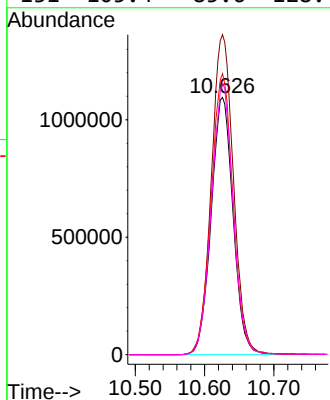
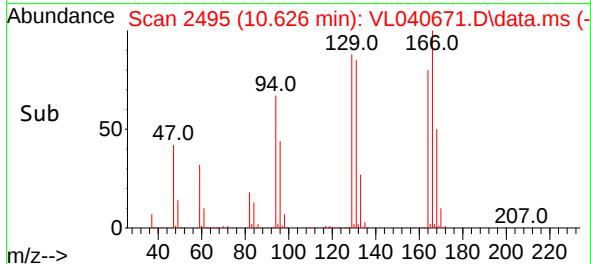
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion:164 Resp: 239913
Ion Ratio Lower Upper
164 100
166 124.4 99.5 149.3
129 109.3 86.9 130.3
131 105.4 85.6 128.4

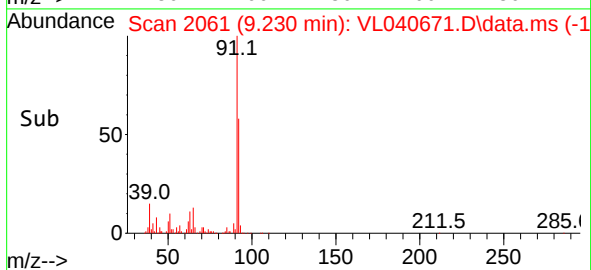
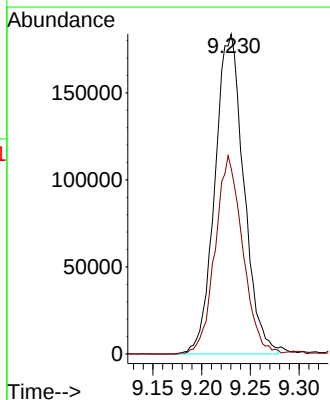
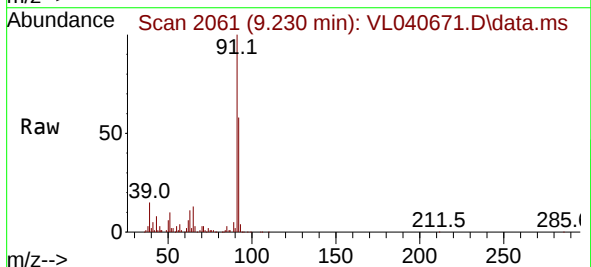
Manual Integrations
APPROVED

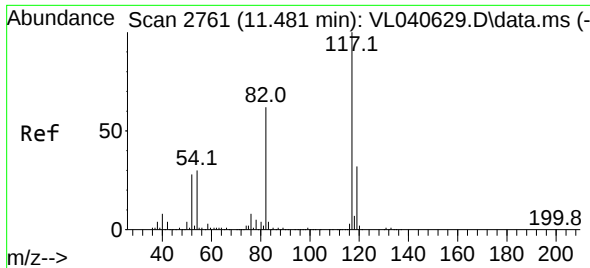
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#53
Toluene
Concen: 1.719 ppbv
RT: 9.230 min Scan# 2061
Delta R.T. -0.003 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

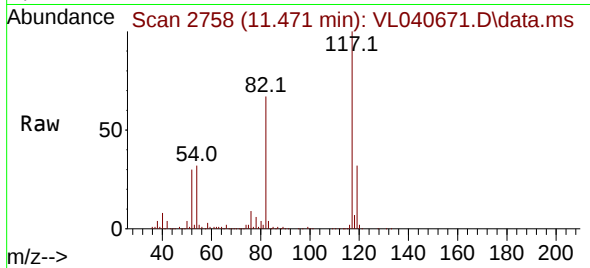
Tgt Ion: 91 Resp: 379348
Ion Ratio Lower Upper
91 100
92 59.8 48.0 72.0





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.471 min Scan# 2758
Delta R.T. -0.010 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

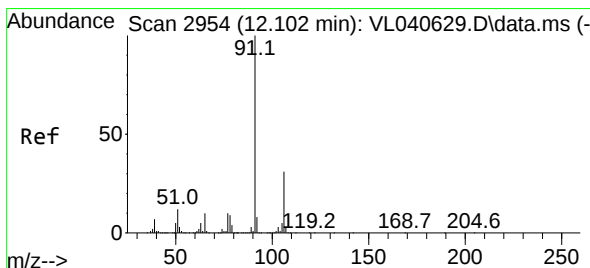
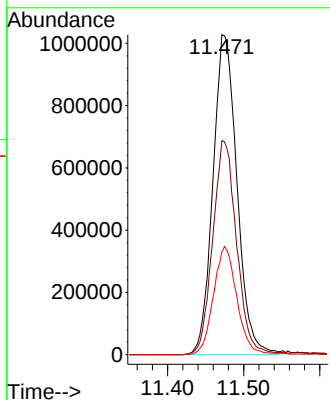
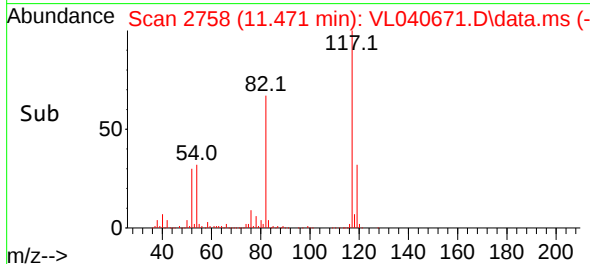
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion:117 Resp: 226060
Ion Ratio Lower Upper
117 100
82 67.2 49.5 74.3
119 33.0 24.5 36.7

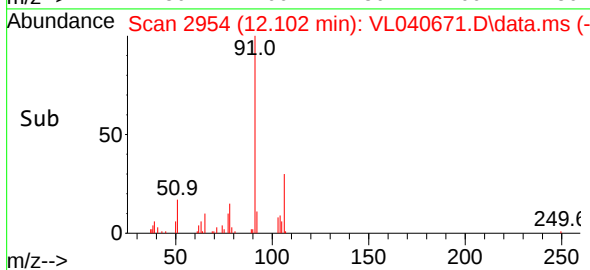
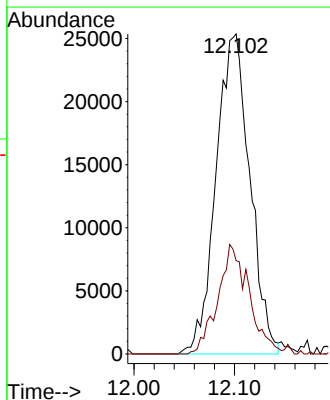
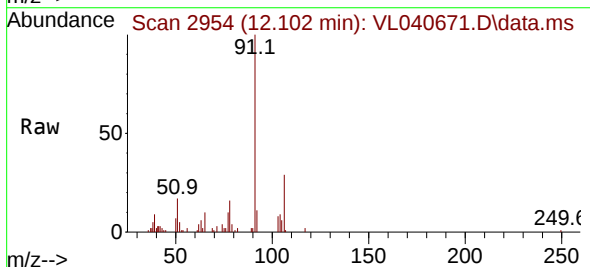
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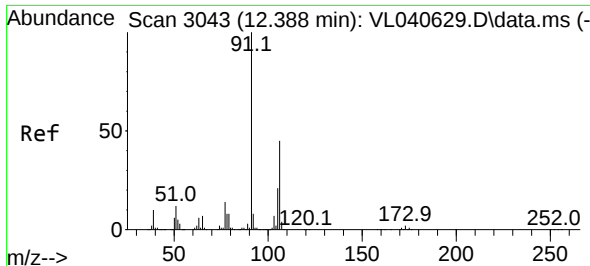
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#58
Ethyl Benzene
Concen: 0.217 ppbv
RT: 12.102 min Scan# 2954
Delta R.T. 0.000 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

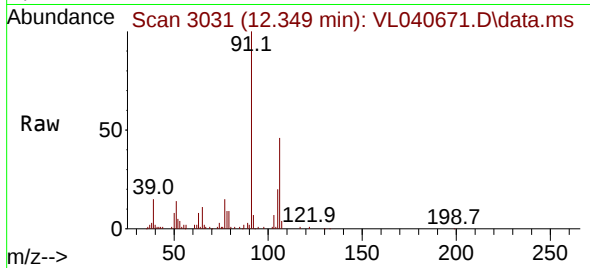
Tgt Ion: 91 Resp: 59230
Ion Ratio Lower Upper
91 100
106 29.1 24.6 36.8





#59
m/p-Xylene
Concen: 0.676 ppbv m
RT: 12.349 min Scan# 3043
Delta R.T. -0.039 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

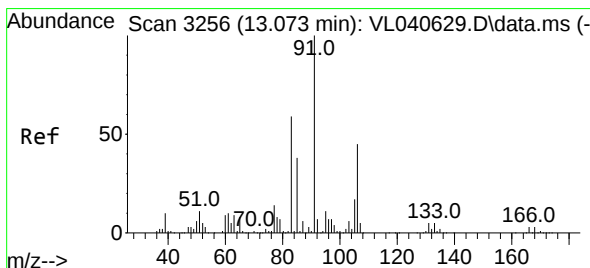
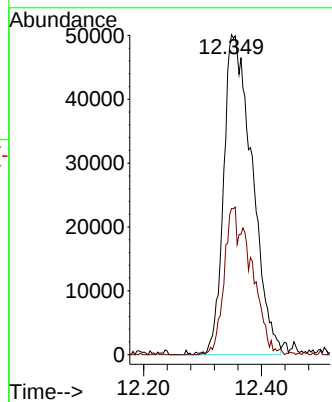
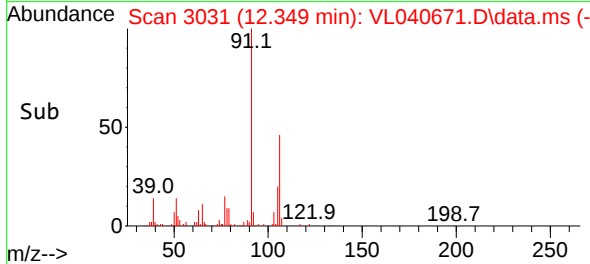
Instrument :
MSVOA_L
ClientSampleId :
IA1



Tgt Ion: 91 Resp: 168128
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9

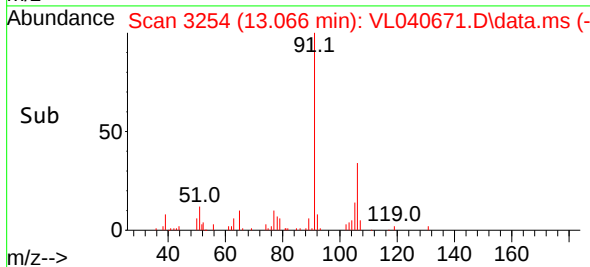
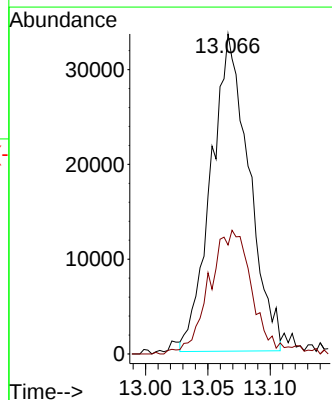
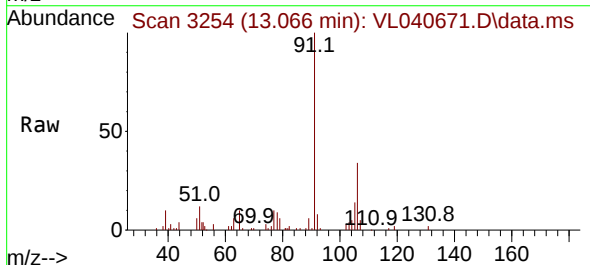
Manual Integrations
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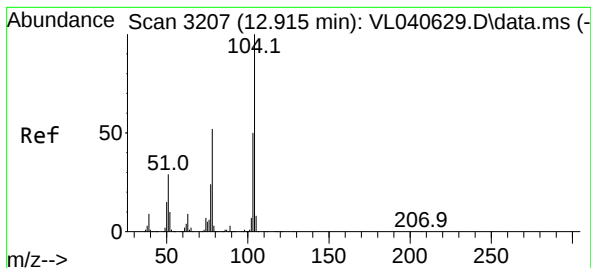
Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#60
o-Xylene
Concen: 0.301 ppbv
RT: 13.066 min Scan# 3254
Delta R.T. -0.006 min
Lab File: VL040671.D
Acq: 7 Sep 2023 14:17

Tgt Ion: 91 Resp: 70947
Ion Ratio Lower Upper
91 100
106 44.7 22.5 67.5





#61

Styrene

Concen: 0.199 ppbv m

RT: 12.909 min Scan# 31

Delta R.T. -0.006 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

Instrument :

MSVOA_L

ClientSampleId :

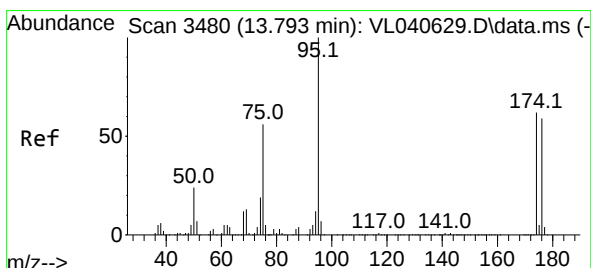
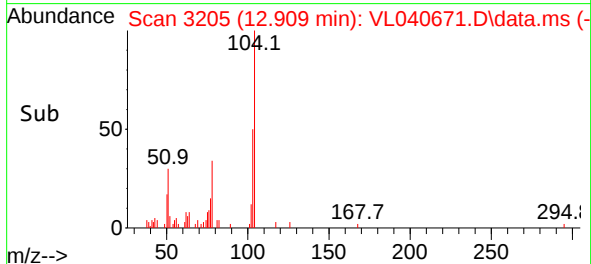
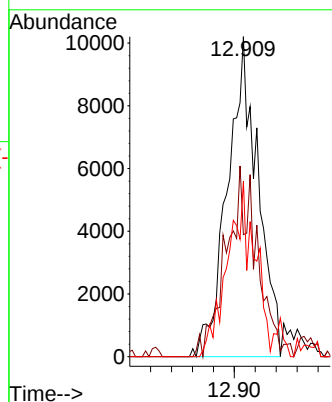
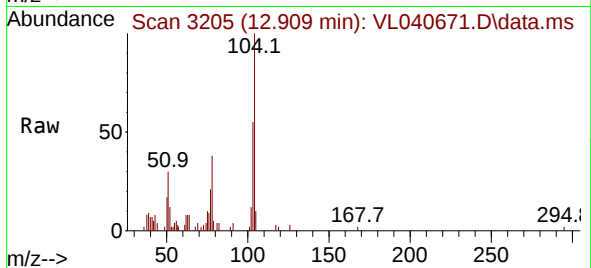
IA1

Tgt Ion:104	Resp:	2050
Ion Ratio	Lower	Upper
104	100	
78	59.8	41.0 61.4
103	52.6	37.3 55.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2023
Supervised By :Mahesh Dadoda 09/11/2023



#68

1-Bromo-4-Fluorobenzene

Concen: 10.340 ppbv

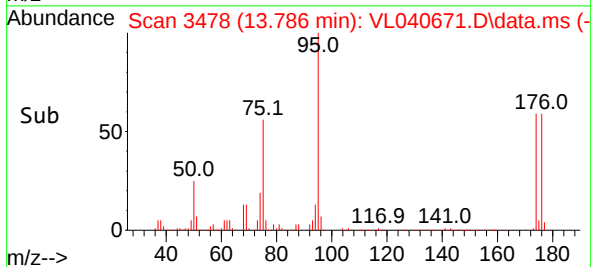
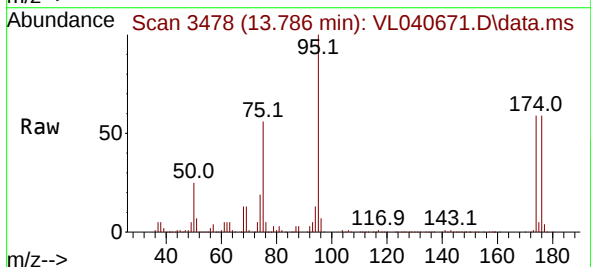
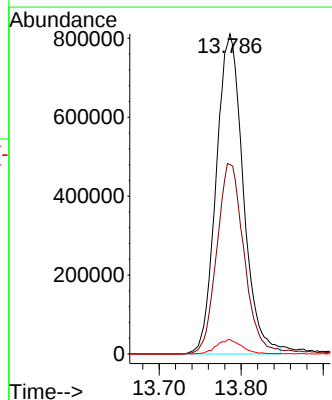
RT: 13.786 min Scan# 3478

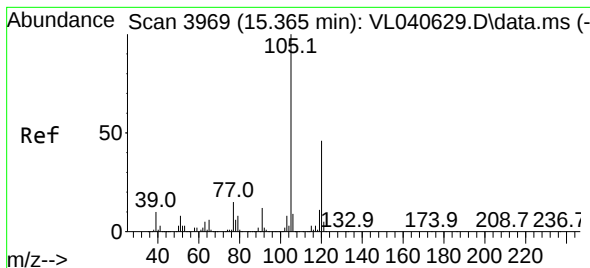
Delta R.T. -0.006 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

Tgt Ion: 95	Resp:	1858904
Ion Ratio	Lower	Upper
95	100	
174	61.8	49.1 73.7
175	4.3	3.7 5.5





#73

1,3,5-Trimethylbenzene

Concen: 0.160 ppbv m

RT: 15.365 min Scan# 3969

Delta R.T. 0.000 min

Lab File: VL040671.D

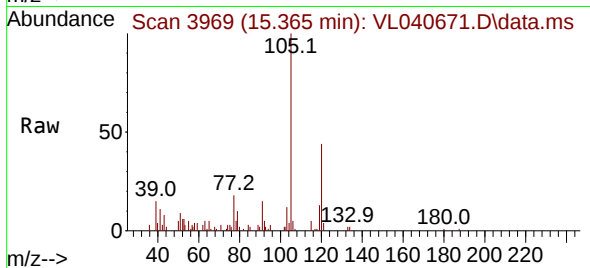
Acq: 7 Sep 2023 14:17

Instrument :

MSVOA_L

ClientSampleId :

IA1



Tgt Ion:105 Resp: 38134

Ion Ratio Lower Upper

105 100

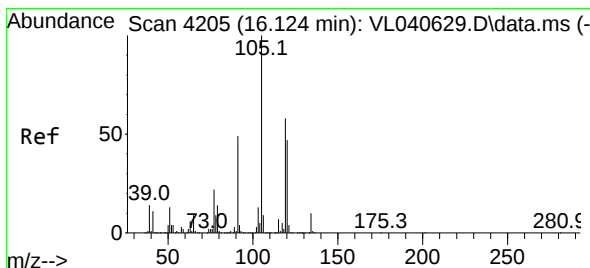
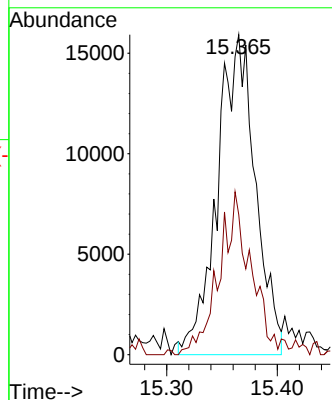
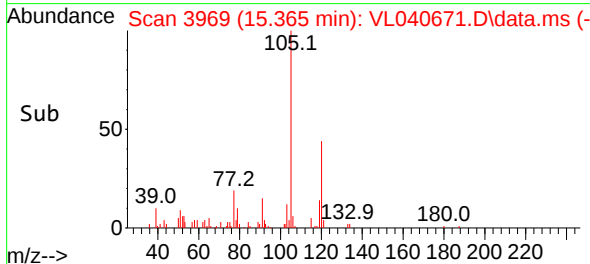
120 43.8 36.5 54.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2023

Supervised By :Mahesh Dadoda 09/11/2023



#74

1,2,4-Trimethylbenzene

Concen: 0.402 ppbv

RT: 16.121 min Scan# 4204

Delta R.T. -0.003 min

Lab File: VL040671.D

Acq: 7 Sep 2023 14:17

Tgt Ion:105 Resp: 111637

Ion Ratio Lower Upper

105 100

120 39.5 37.7 56.5

91 14.0 41.2 61.8#

77 10.8 18.3 27.5#

