

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121621\
 Data File : VL038198.D
 Acq On : 16 Dec 2021 20:50
 Operator : SY/AP
 Sample : M5136-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 EFFLUENT

Manual Integrations
 APPROVED

Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021

Quant Time: Dec 17 06:47:22 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	988178	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2464056	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2123673	10.00	ppbv	0.00

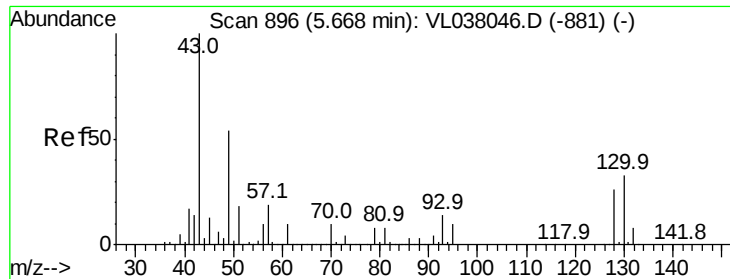
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 14.42 95 1640995 10.71 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 107.10%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.06	85	25915m	0.159	ppbv	
3) Chlorodifluoromethane	3.00	51	28336m	0.137	ppbv	
7) Chloroethane	3.57	64	4692	0.191	ppbv	88
9) Propene	3.03	41	32291	0.423	ppbv #	82
11) Trichlorofluoromethane	3.96	101	22974	0.148	ppbv	85
12) 1,1,2-Trichlorotrifluoroet	4.49	101	97338	0.886	ppbv	98
13) Ethanol	3.61	45	273144	36.983	ppbv	93
15) Acetone	3.86	43	297283	3.470	ppbv	92
17) tert-Butyl alcohol	4.30	59	31022m	0.298	ppbv	
18) 1,1-Dichloroethene	4.29	96	64205	1.275	ppbv	97
19) Isopropyl Alcohol	3.98	45	468564	7.569	ppbv #	97
20) Methylene Chloride	4.35	84	518406	10.803	ppbv	98
22) trans-1,2-Dichloroethene	4.89	96	10684m	0.209	ppbv	
24) 1,1-Dichloroethane	5.02	63	261417	2.531	ppbv	99
26) Hexane	5.69	57	284188	2.071	ppbv #	50
32) 1,1,1-Trichloroethane	6.51	97	2591119	12.622	ppbv	97
34) 2-Butanone	5.26	43	35268	0.355	ppbv	94
52) Tetrachloroethene	11.23	164	5035m	0.055	ppbv	
53) Toluene	9.81	91	56693	0.200	ppbv	96
59) m/p-Xylene	12.97	91	103716m	0.351	ppbv	
60) o-Xylene	13.69	91	42594m	0.155	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	53625m	0.179	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_L

Delta R.T. ClientSampleId:

Lab File: EFFLUENT

Acq: 16 Dec 2021 20:50

Tot Ion:

Ion Ratio

49 100

128 45.

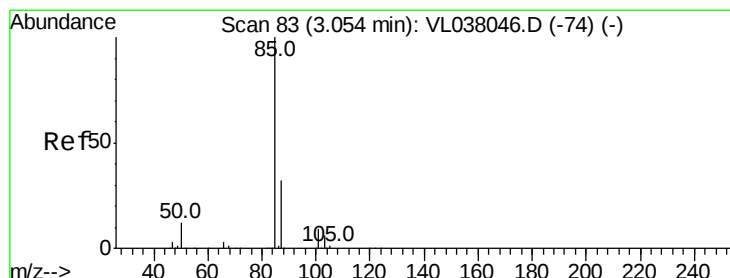
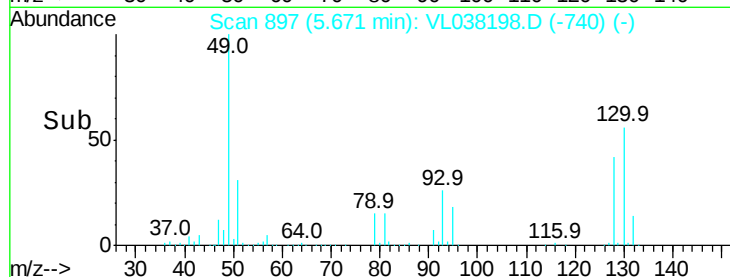
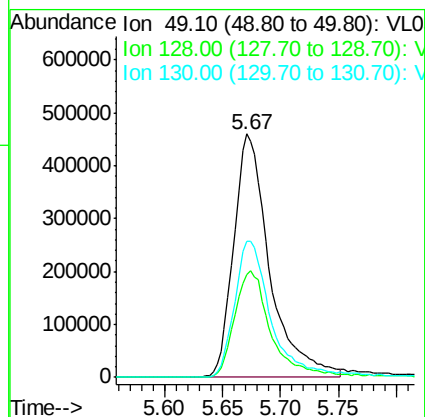
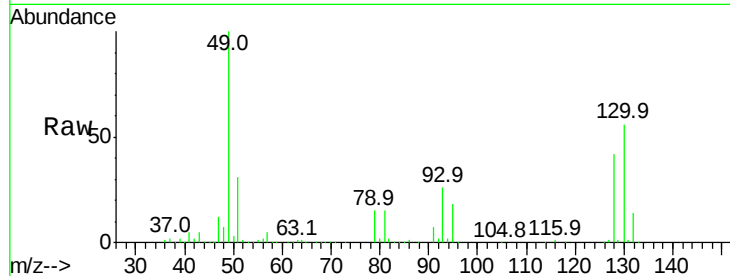
130 58.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#2

Dichlorodifluoromethane

Concen: 0.159 ppbv m

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL038198.D

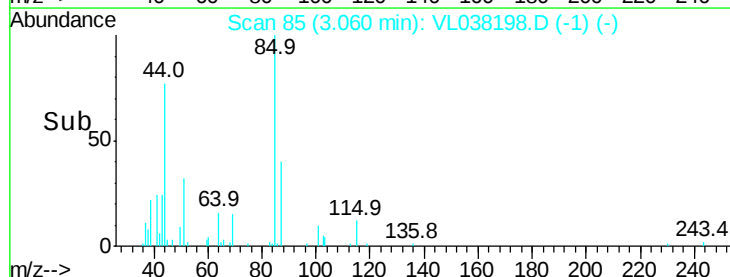
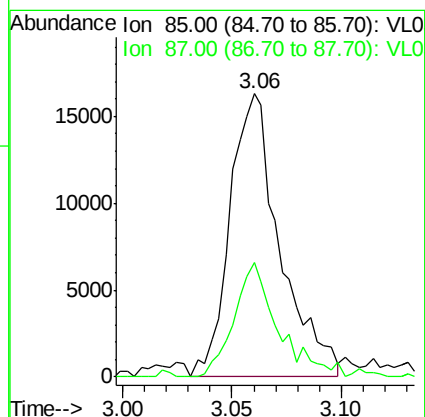
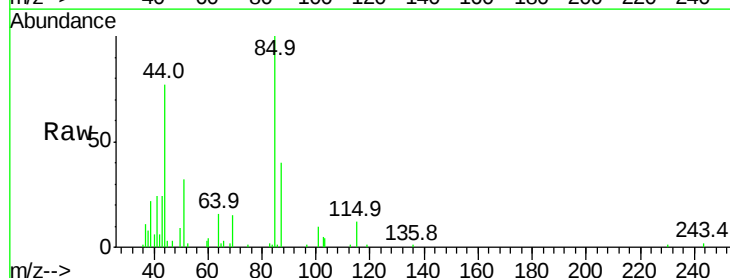
Acq: 16 Dec 2021 20:50

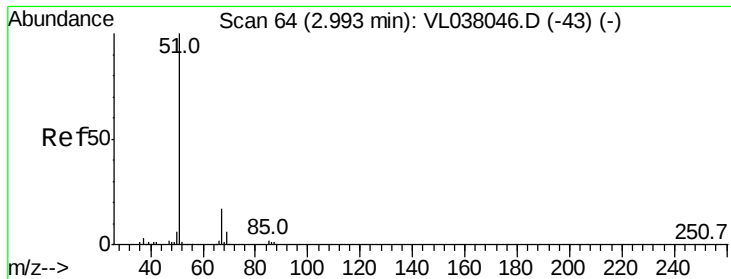
Tgt Ion: 85 Resp: 25915

Ion Ratio Lower Upper

85 100

87 40.4 25.8 38.6#





#3

Chlorodifluoromethane

Concen: 0.137 ppbv m

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 20:50 EFFLUENT

Tot Ion:

Ion Ratio

51 100

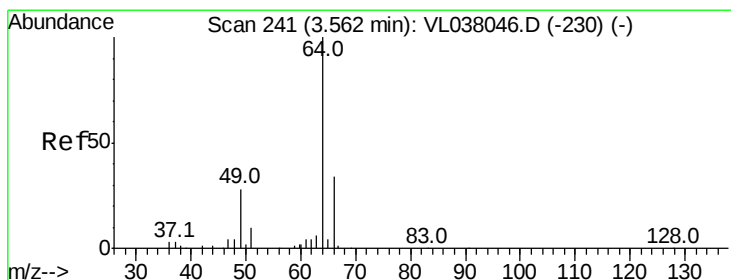
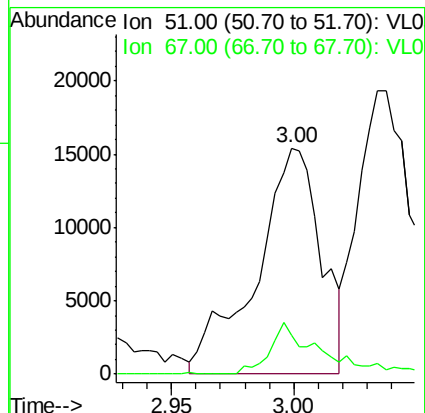
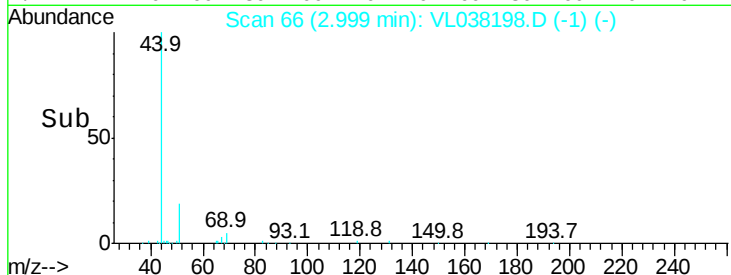
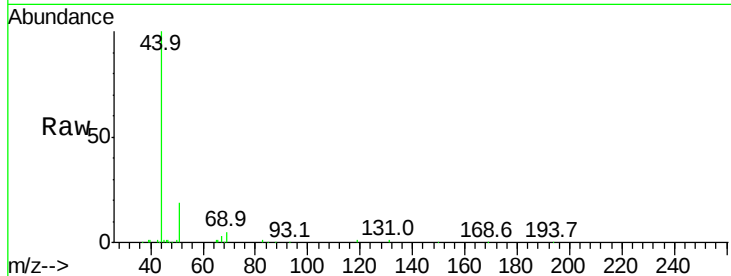
67 17.

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#7

Chloroethane

Concen: 0.191 ppbv

RT: 3.57 min Scan# 243

Delta R.T. 0.01 min

Lab File: VL038198.D

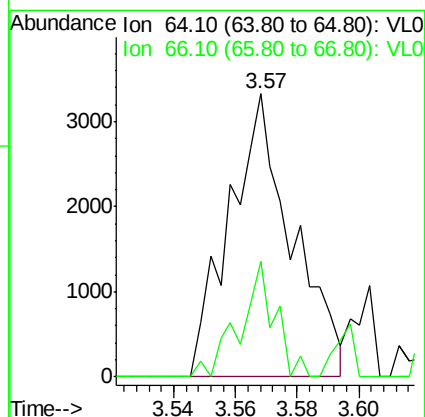
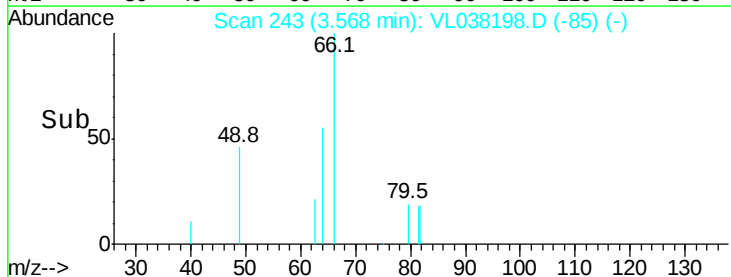
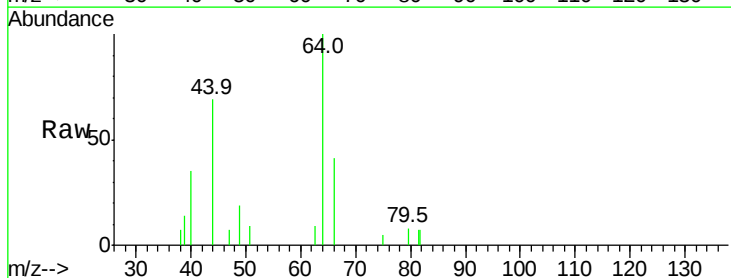
Acq: 16 Dec 2021 20:50

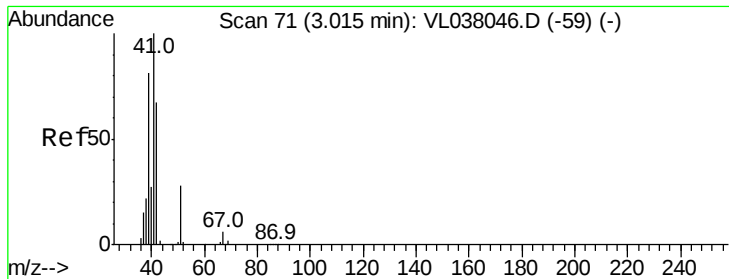
Tgt Ion: 64 Resp: 4692

Ion Ratio Lower Upper

64 100

66 40.6 27.2 40.8





#9

Propene

Concen: 0.423 ppbv

RT: 3.03

Delta R.T.

Lab File:

Acq: 16 Dec 2021 20:50

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion:

Ion Ratio

41 100

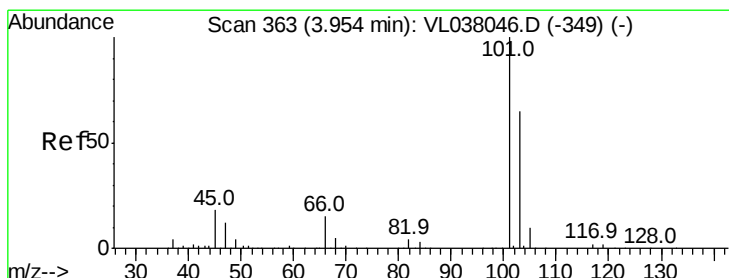
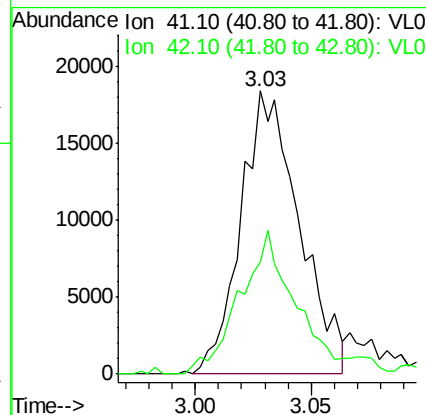
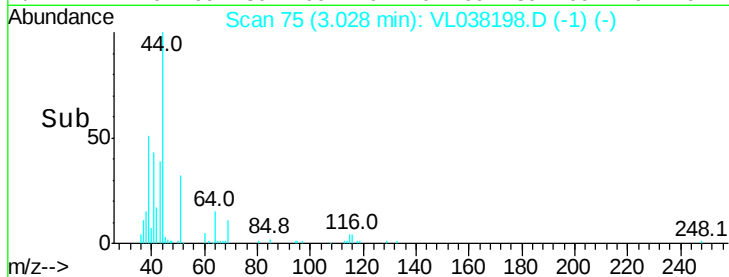
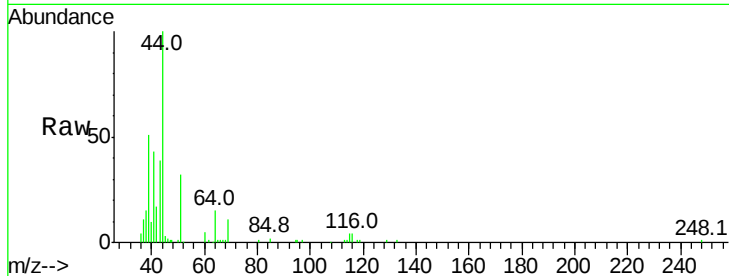
42 53.

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#11

Trichlorofluoromethane

Concen: 0.148 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.00 min

Lab File: VL038198.D

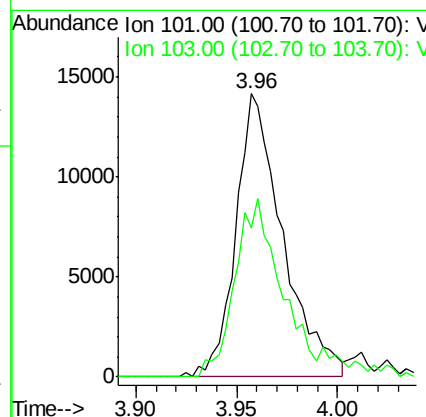
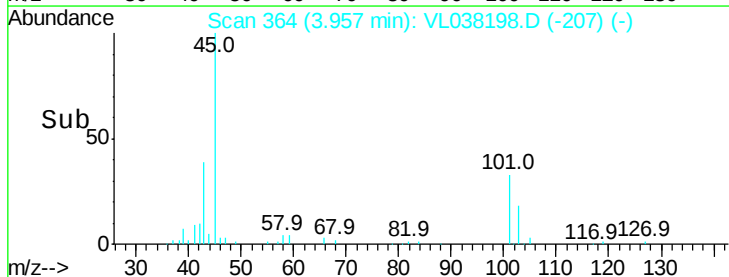
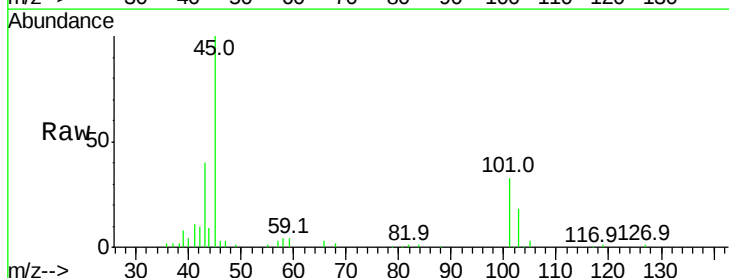
Acq: 16 Dec 2021 20:50

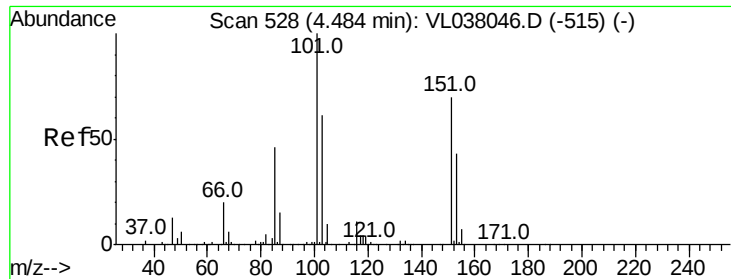
Tgt Ion:101 Resp: 22974

Ion Ratio Lower Upper

101 100

103 52.7 51.8 77.6



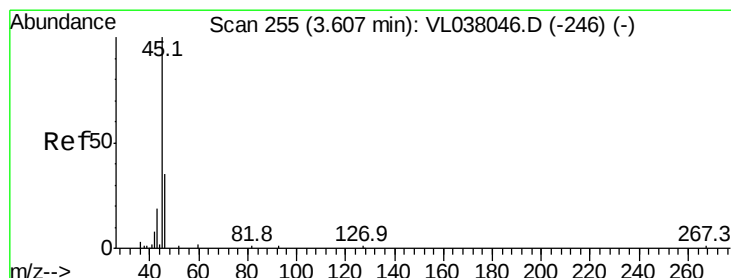
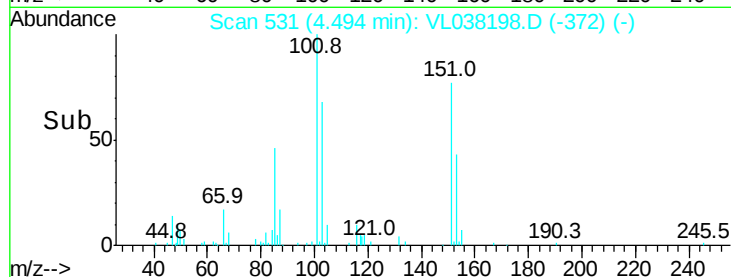
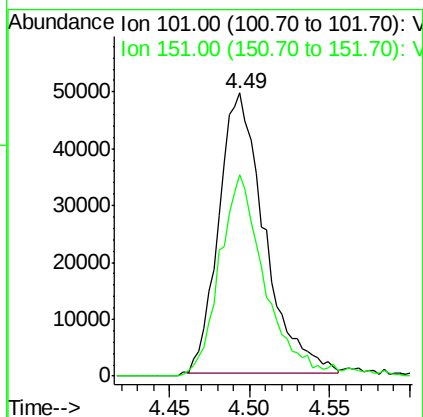
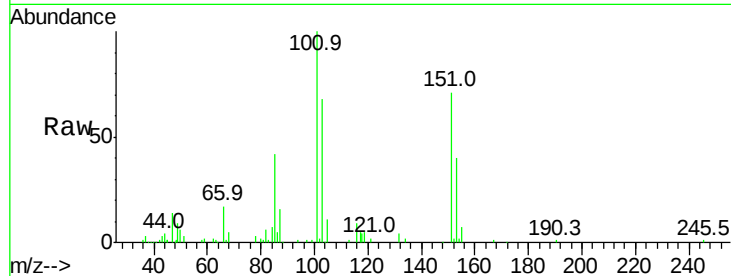


#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.886 ppbv
 RT: 4.49
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 16 Dec 2021 20:50

Tot Ion:1
 Ion Rati
 101 100
 151 72.

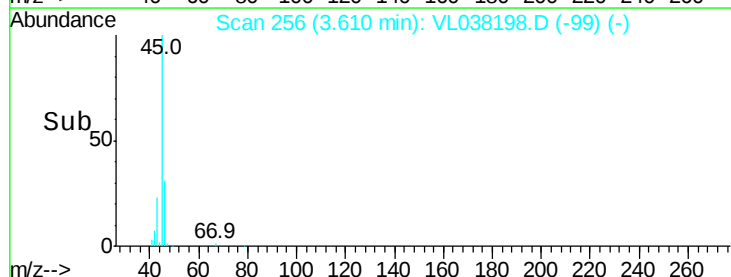
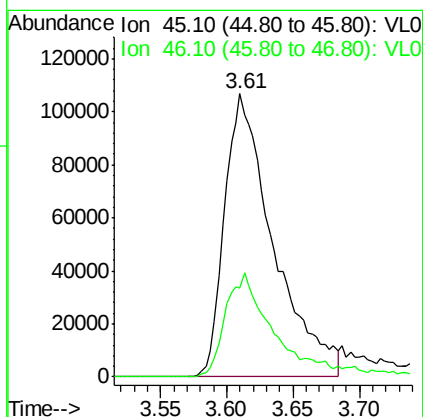
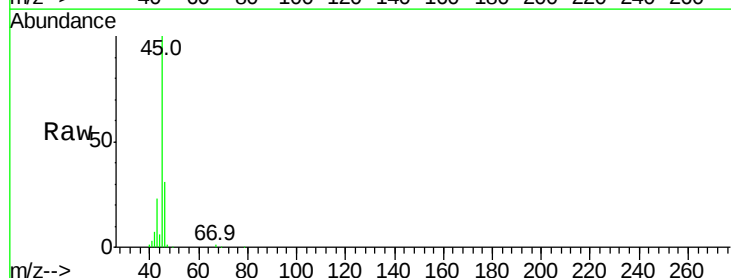
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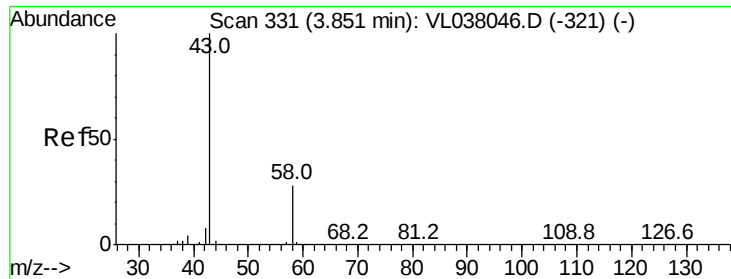
Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021



#13
 Ethanol
 Concen: 36.983 ppbv
 RT: 3.61 min Scan# 256
 Delta R.T. 0.00 min
 Lab File: VL038198.D
 Acq: 16 Dec 2021 20:50

Tgt Ion: 45 Resp: 273144
 Ion Ratio Lower Upper
 45 100
 46 39.4 17.6 70.2





#15

Acetone

Concen: 3.470 ppbv

RT: 3.86

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 20:50

Tot Ion:

Ion Ratio

43 100

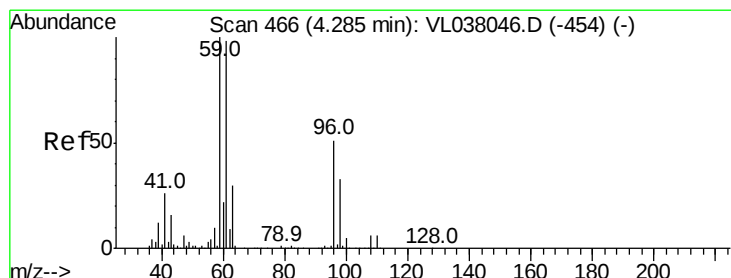
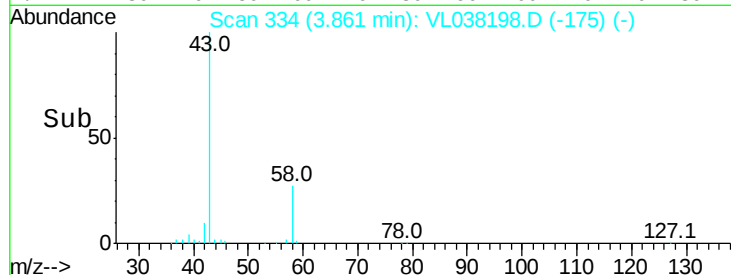
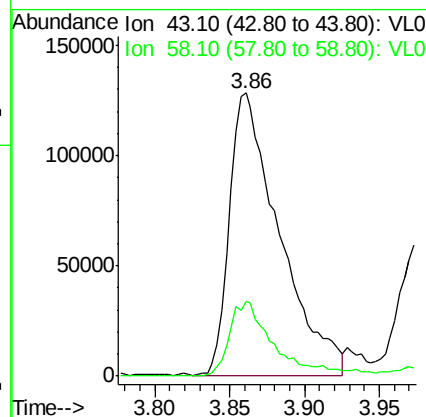
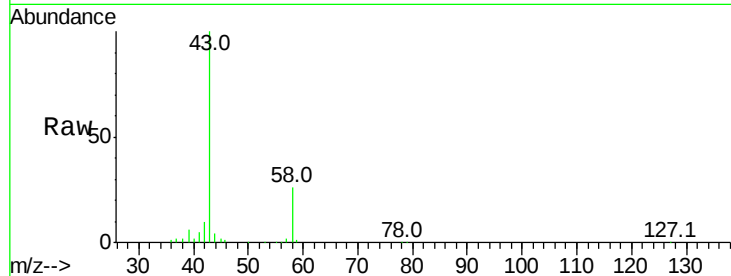
58 23.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#17

tert-Butyl alcohol

Concen: 0.298 ppbv m

RT: 4.30 min Scan# 472

Delta R.T. 0.02 min

Lab File: VL038198.D

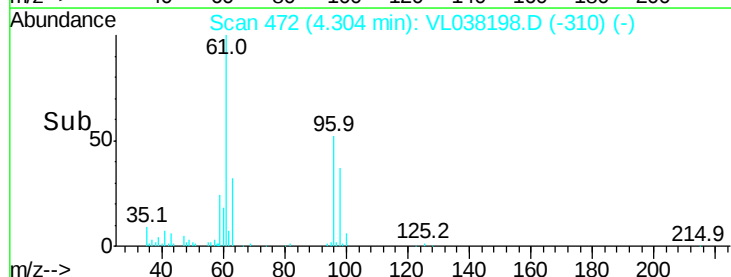
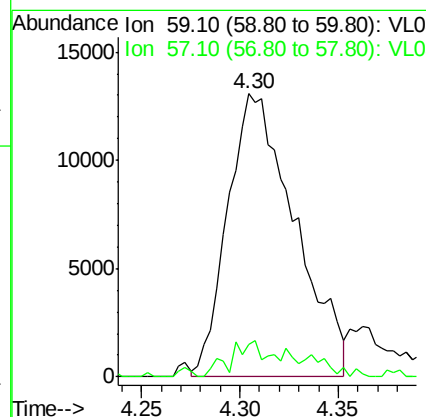
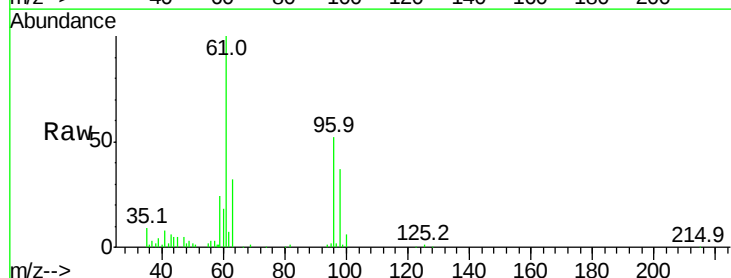
Acq: 16 Dec 2021 20:50

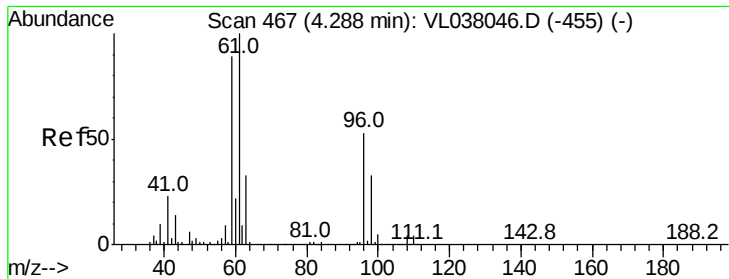
Tgt Ion: 59 Resp: 31022

Ion Ratio Lower Upper

59 100

57 5.9 8.6 13.0#





#18

1,1-Dichloroethene

Concen: 1.275 ppbv

RT: 4.29 Instrument: MSVOA_L

Delta R.T. ClientSampleId:

Lab File: EFFLUENT

Acq: 16 Dec 2021 20:50

Tot Ion:

Ion Ratio

96 100

61 185.

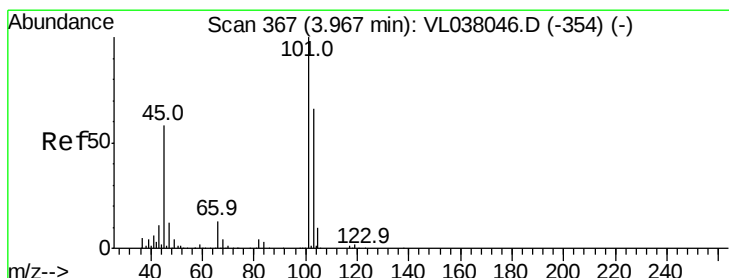
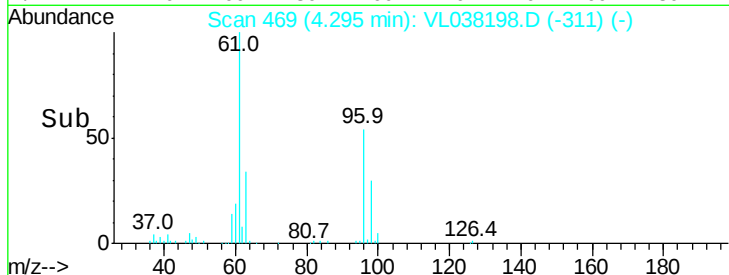
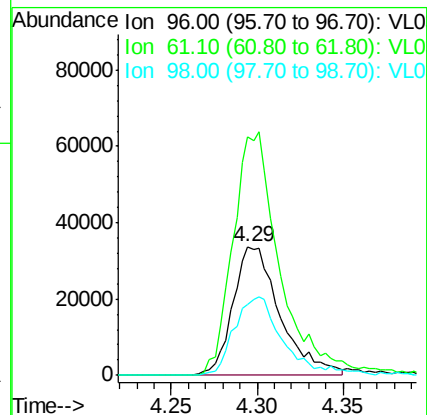
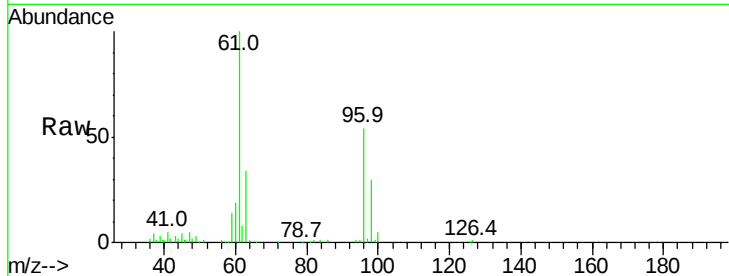
98 55.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#19

Isopropyl Alcohol

Concen: 7.569 ppbv

RT: 3.98 min Scan# 370

Delta R.T. 0.01 min

Lab File: VL038198.D

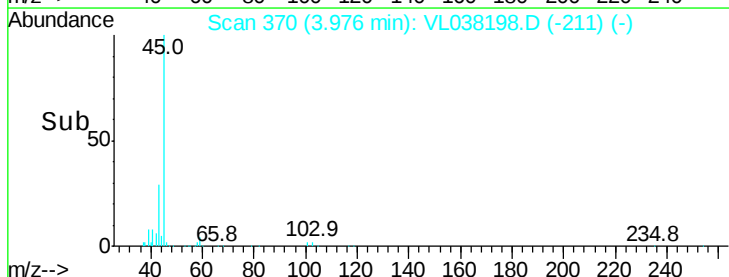
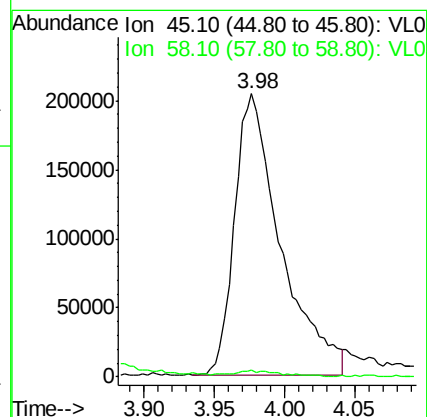
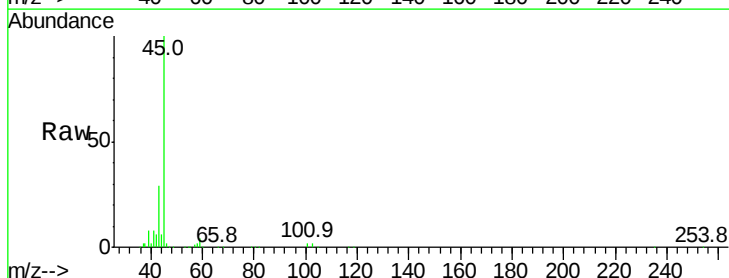
Acq: 16 Dec 2021 20:50

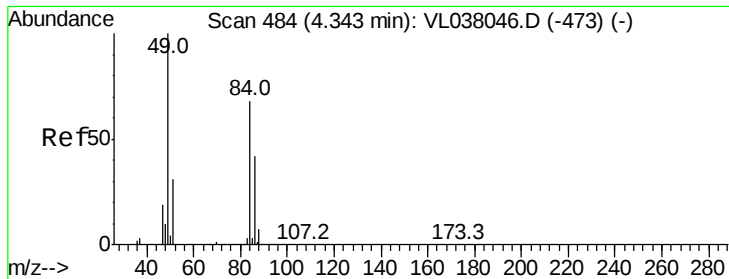
Tgt Ion: 45 Resp: 468564

Ion Ratio Lower Upper

45 100

58 2.9 1.4 2.0#



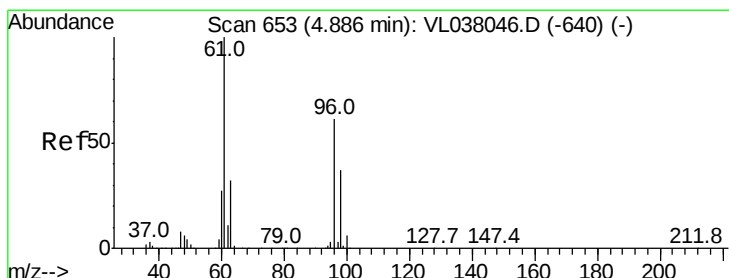
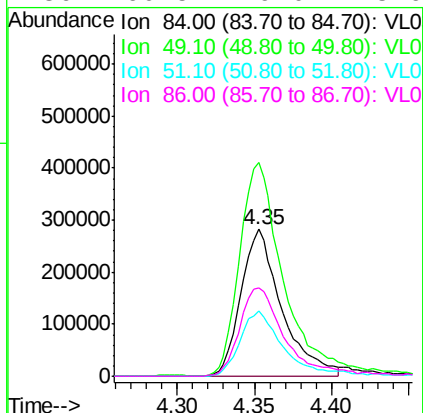
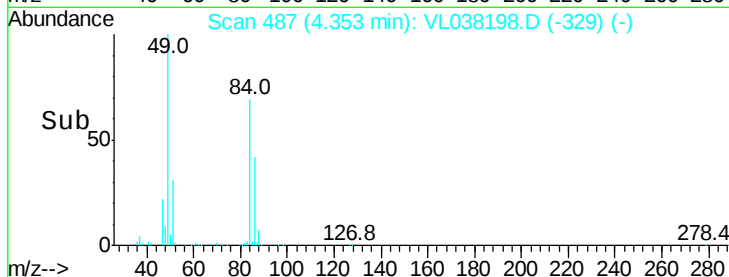
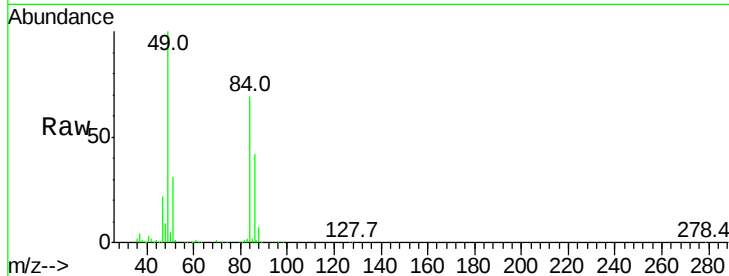


#20
Methvlene Chloride
Concen: 10.803 ppbv
RT: 4.35
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
EFFLUENT
Acq: 16 Dec 2021 20:50

Tot Ion:
Ion Ratio
84 100
49 144.
51 44.
86 60.5 49.0 73.6

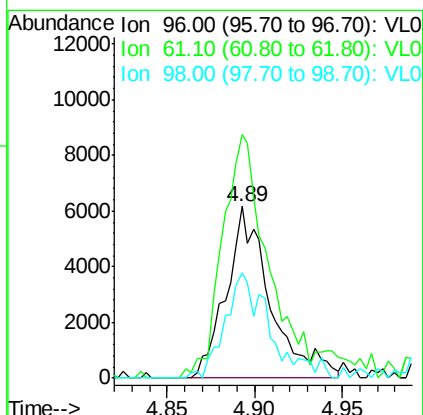
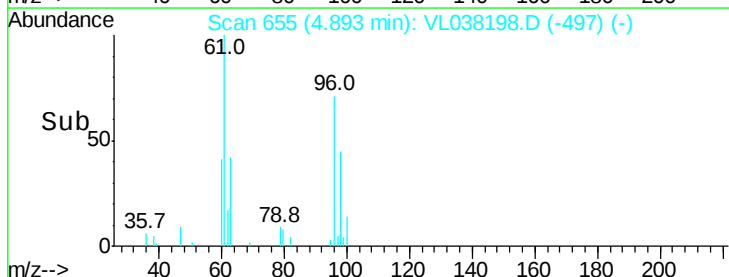
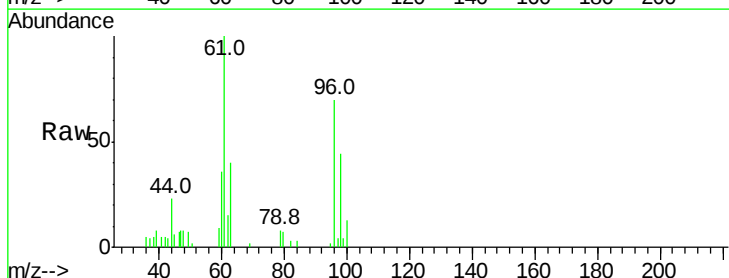
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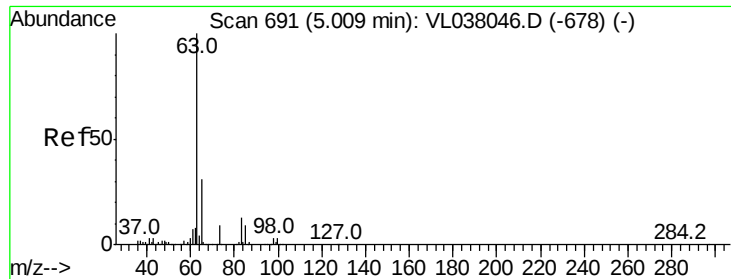
Reviewed By :Amit Patel 12/20/2021
Supervised By :Mahesh Dadoda 12/20/2021



#22
trans-1,2-Dichloroethene
Concen: 0.209 ppbv m
RT: 4.89 min Scan# 655
Delta R.T. 0.01 min
Lab File: VL038198.D
Acq: 16 Dec 2021 20:50

Tgt Ion: 96 Resp: 10684
Ion Ratio Lower Upper
96 100
61 141.9 131.6 197.4
98 61.8 48.4 72.6



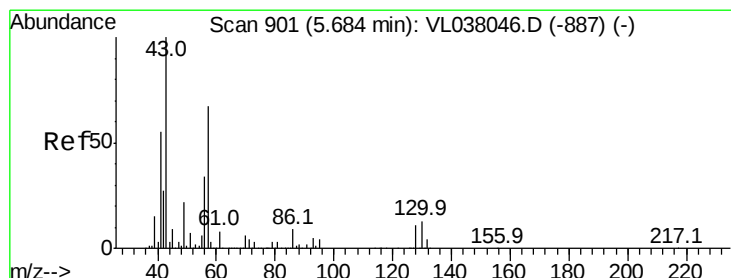
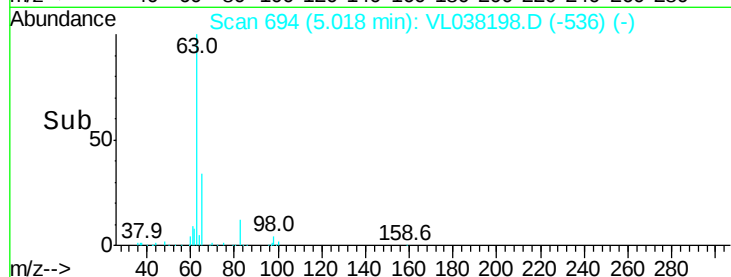
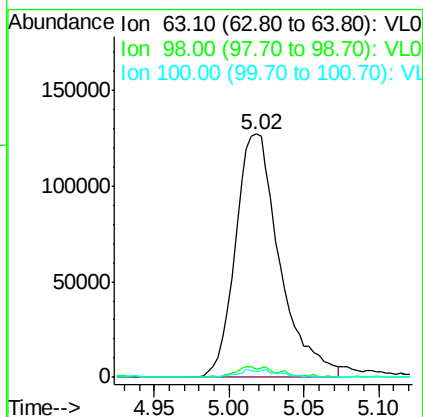
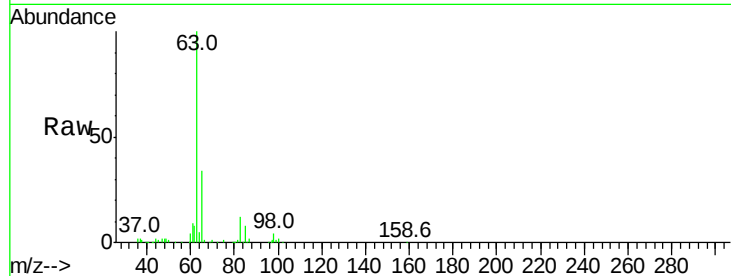


#24
 1,1-Dichloroethane
 Concen: 2.531 ppbv
 RT: 5.02
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 16 Dec 2021 20:50

Tot Ion:
 Ion Ratio
 63 100
 98 3.
 100 2.

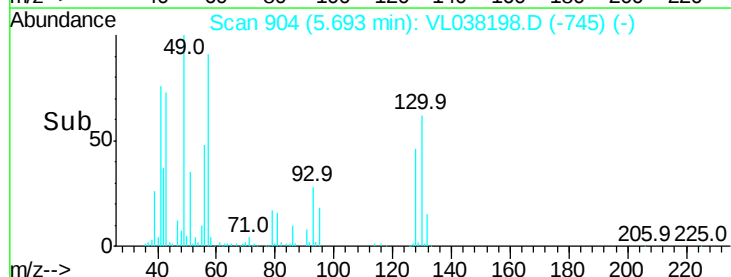
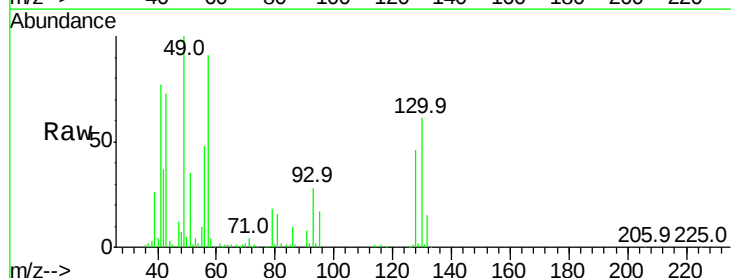
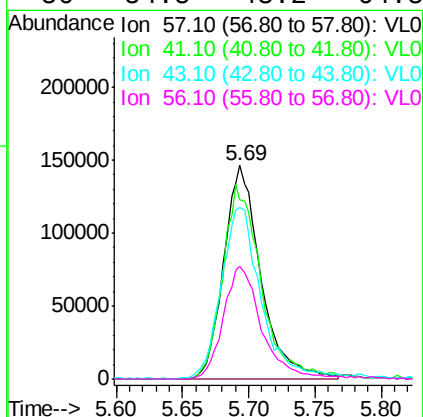
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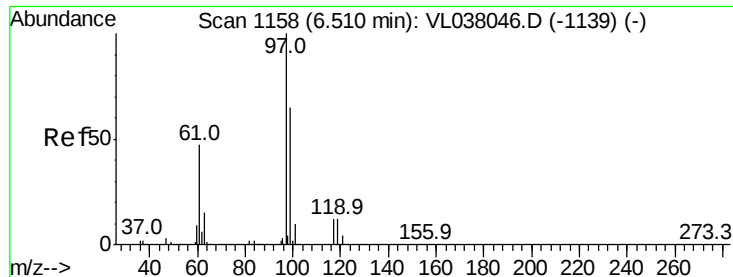
Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021



#26
 Hexane
 Concen: 2.071 ppbv
 RT: 5.69 min Scan# 904
 Delta R.T. 0.01 min
 Lab File: VL038198.D
 Acq: 16 Dec 2021 20:50

Tgt Ion: 57 Resp: 284188
 Ion Ratio Lower Upper
 57 100
 41 95.5 71.4 107.2
 43 89.0 174.6 261.8#
 56 54.5 43.2 64.8





#32

1,1,1-Trichloroethane

Concen: 12.622 ppbv

RT: 6.51 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 20:50 EFFLUENT

Tot Ion:

Ion Ratio

97 100

99 65.

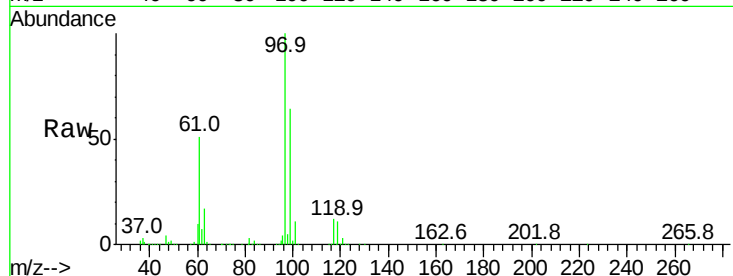
61 50.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

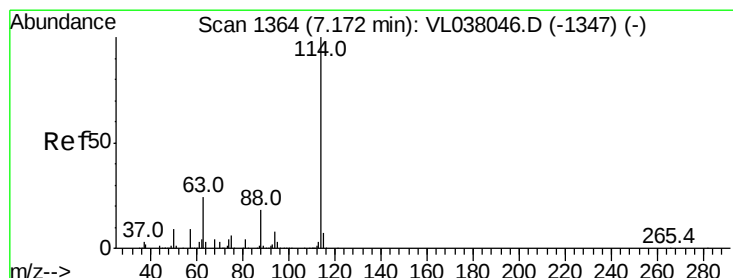
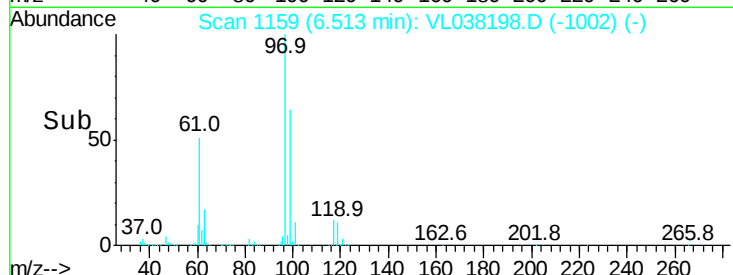
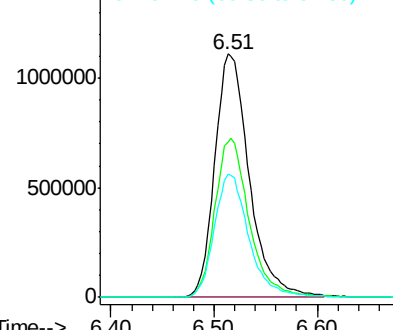
Supervised By :Mahesh Dadoda 12/20/2021



Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. 0.01 min

Lab File: VL038198.D

Acq: 16 Dec 2021 20:50

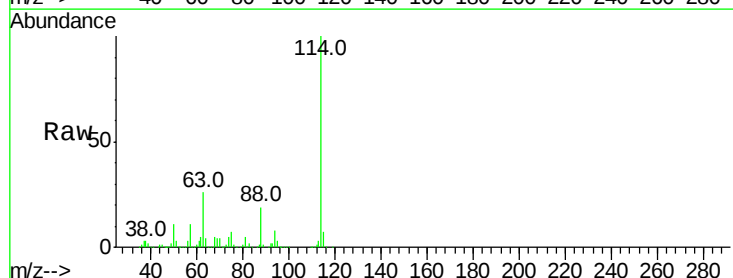
Tgt Ion:114 Resp: 2464056

Ion Ratio Lower Upper

114 100

63 27.8 19.7 29.5

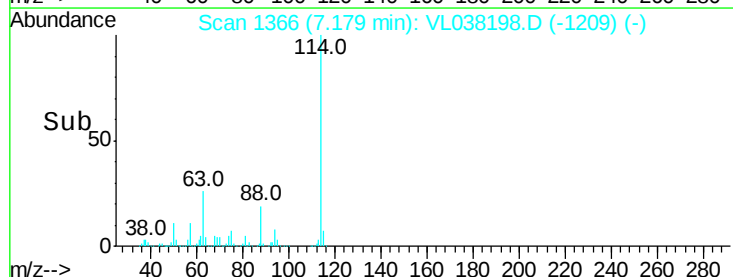
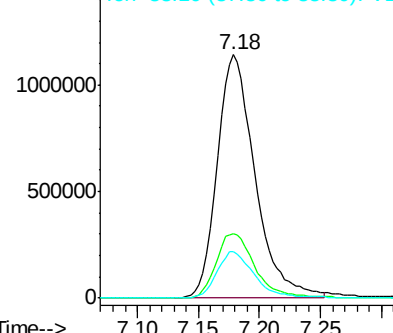
88 19.2 14.4 21.6

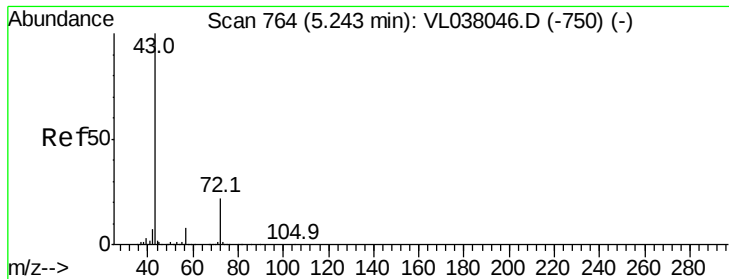


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



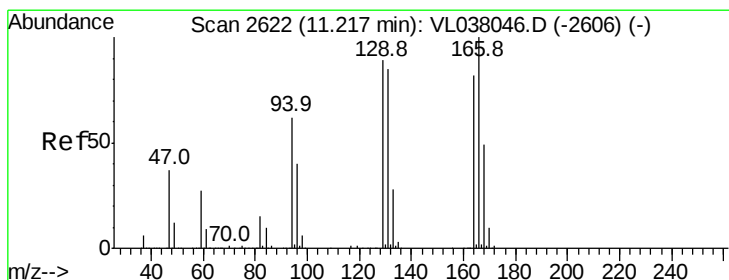
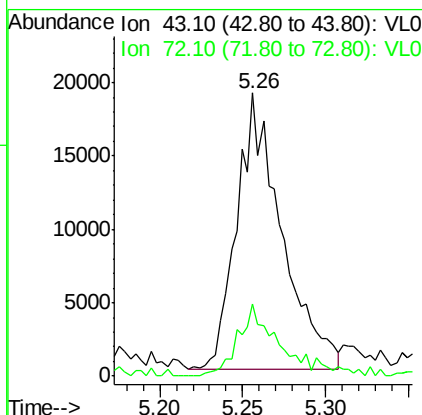
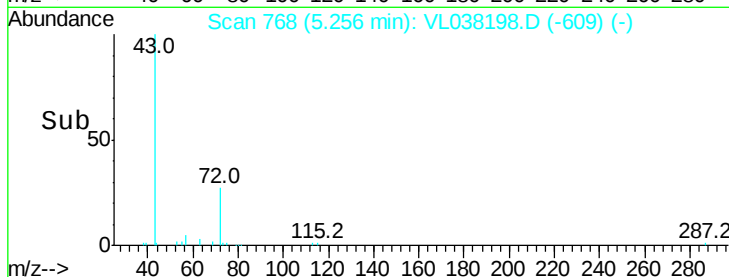
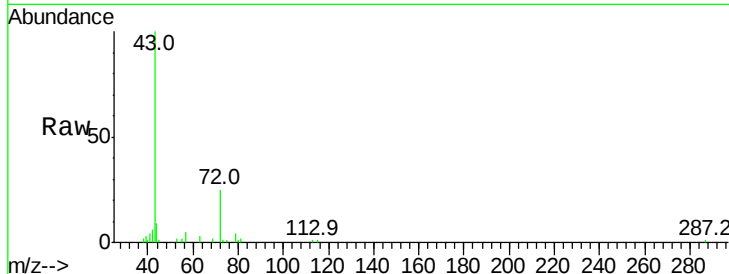


#34
2-Butanone
Concen: 0.355 ppbv
RT: 5.26
Delta R.T.: MSVOA_L
Lab File: ClientSampled :
Acq: 16 Dec 2021 20:50

Tot Ion:
Ion Ratio
43 100
72 26.

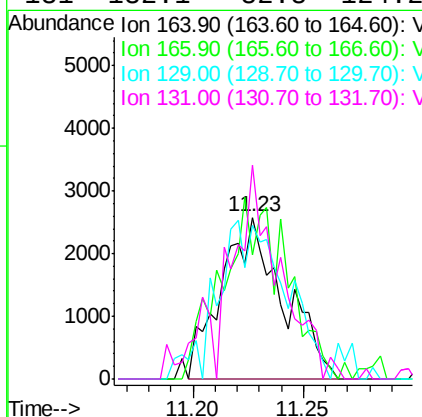
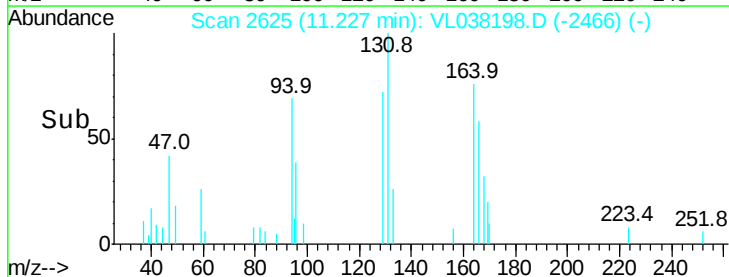
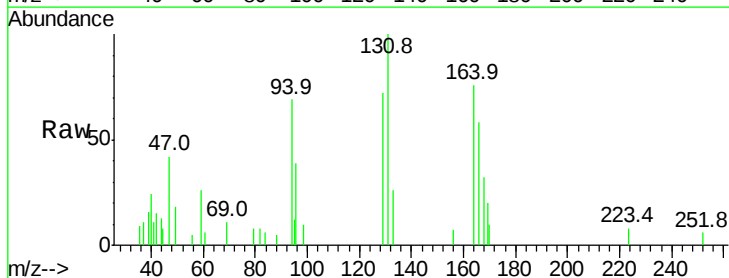
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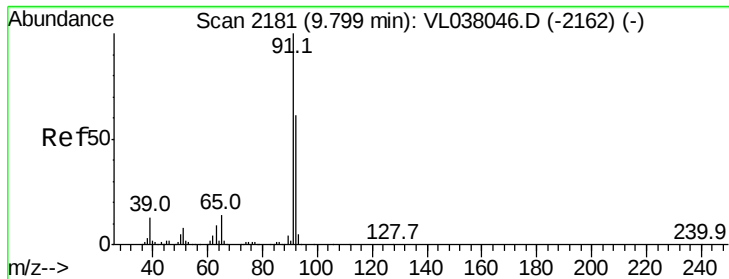
Reviewed By :Amit Patel 12/20/2021
Supervised By :Mahesh Dadoda 12/20/2021



#52
Tetrachloroethene
Concen: 0.055 ppbv m
RT: 11.23 min Scan# 2625
Delta R.T.: 0.01 min
Lab File: VL038198.D
Acq: 16 Dec 2021 20:50

Tgt Ion:164 Resp: 5035
Ion Ratio Lower Upper
164 100
166 76.9 97.2 145.8#
129 95.2 86.9 130.3
131 132.1 82.8 124.2#





#53

Toluene

Concen: 0.200 ppbv

RT: 9.81 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampled:

Acq: 16 Dec 2021 20:50 EFFLUENT

Tot Ion:

Ion Ratio

91 100

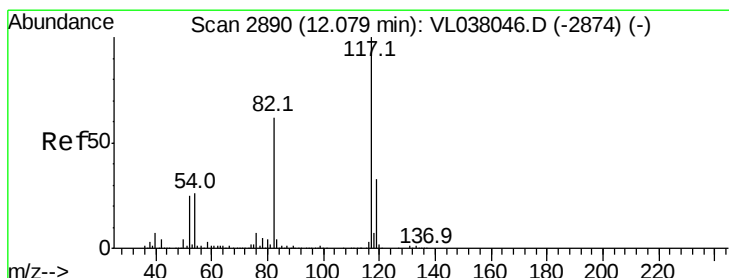
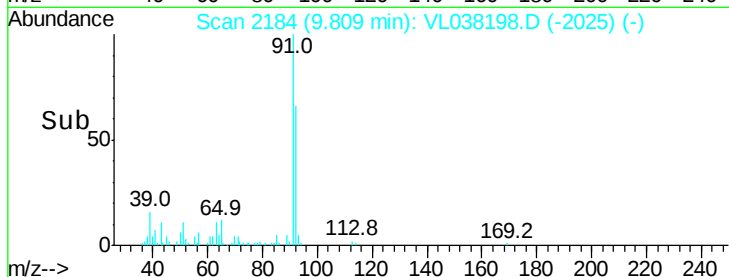
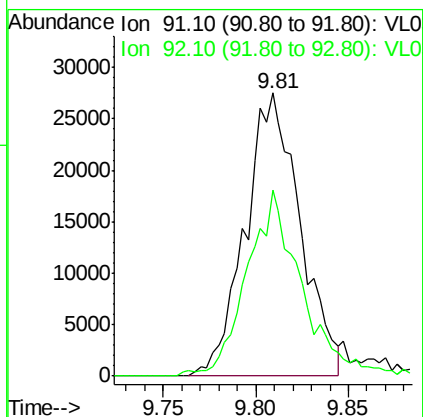
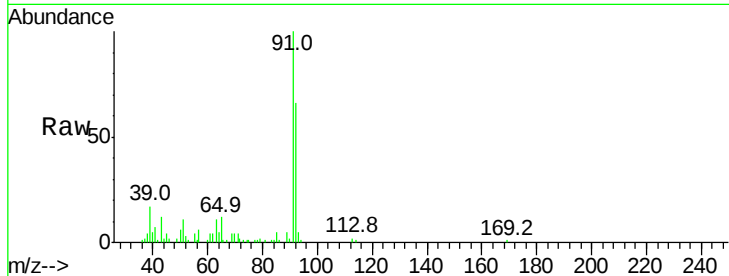
92 65.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2893

Delta R.T. 0.01 min

Lab File: VL038198.D

Acq: 16 Dec 2021 20:50

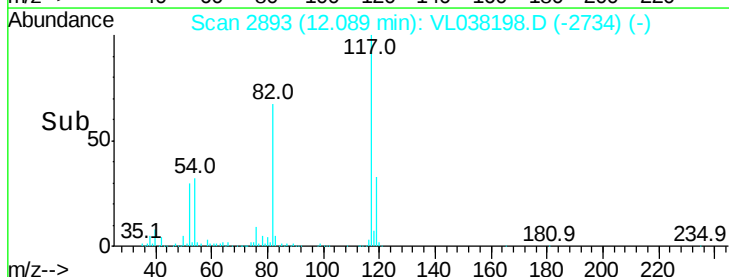
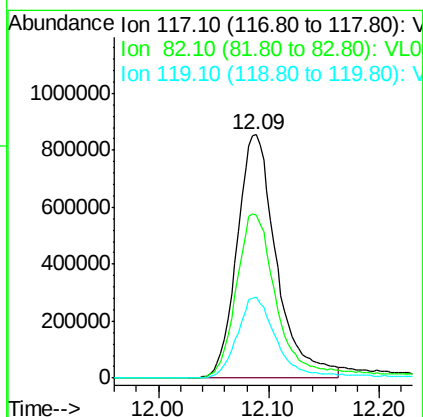
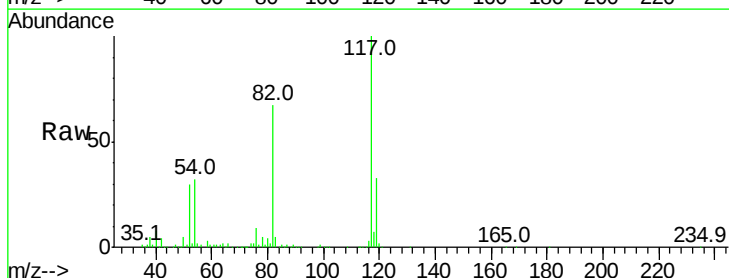
Tgt Ion:117 Resp: 2123673

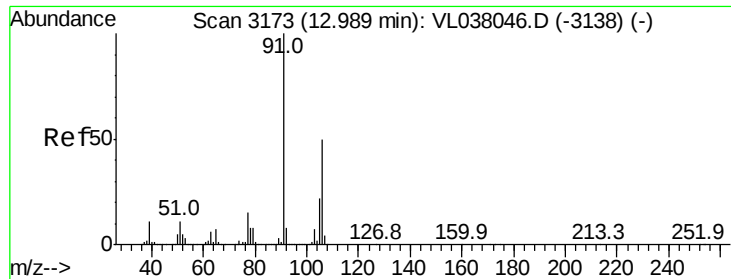
Ion Ratio Lower Upper

117 100

82 72.8 52.8 79.2

119 35.3 26.8 40.2



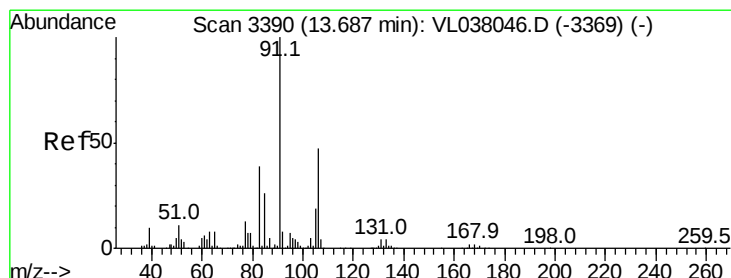
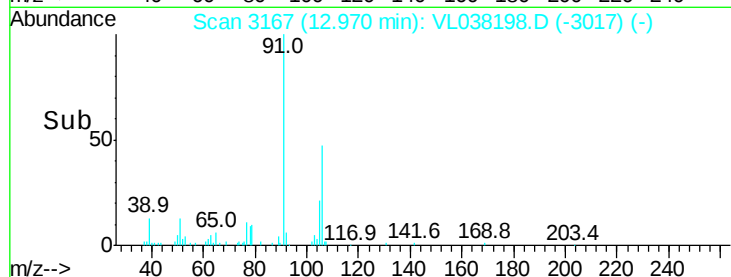
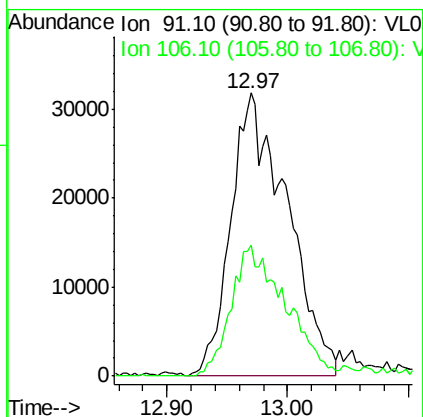
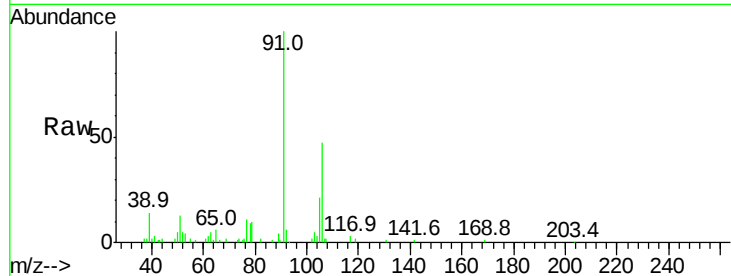


#59
m/p-Xylene
Concen: 0.351 ppbv m
RT: 12.97
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 16 Dec 2021 20:50

Tot Ion:
Ion Ratio
91 100
106 0.

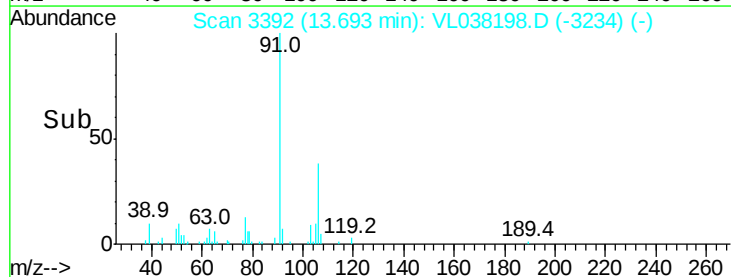
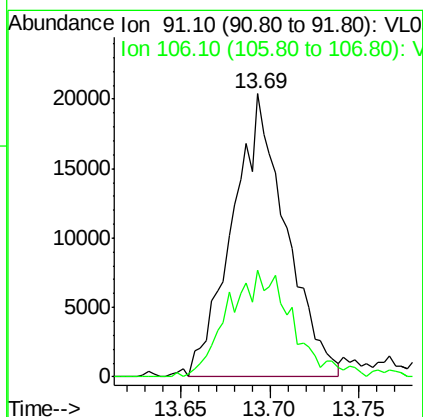
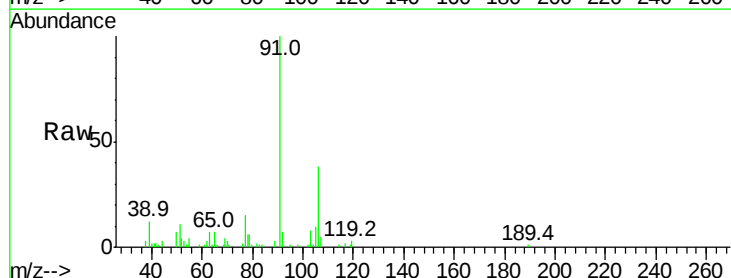
Manual Integrations
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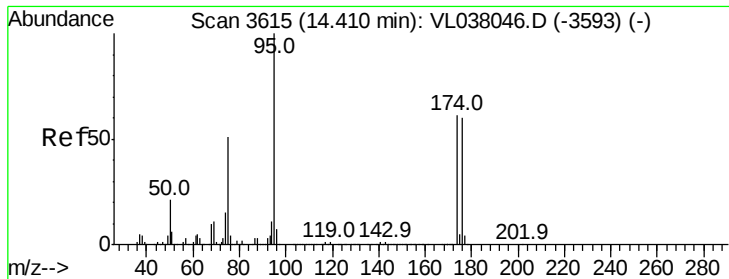
Reviewed By :Amit Patel 12/20/2021
Supervised By :Mahesh Dadoda 12/20/2021



#60
o-Xylene
Concen: 0.155 ppbv m
RT: 13.69 min Scan# 3392
Delta R.T. 0.01 min
Lab File: VL038198.D
Acq: 16 Dec 2021 20:50

Tgt Ion: 91 Resp: 42594
Ion Ratio Lower Upper
91 100
106 46.1 24.2 72.6





#68

1-Bromo-4-Fluorobenzene

Concen: 10.713 ppbv

RT: 14.42

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 20:50

Tot Ion:

Ion Ratio

95 100

174 63.

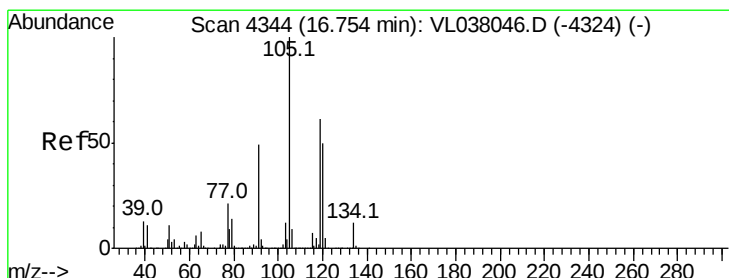
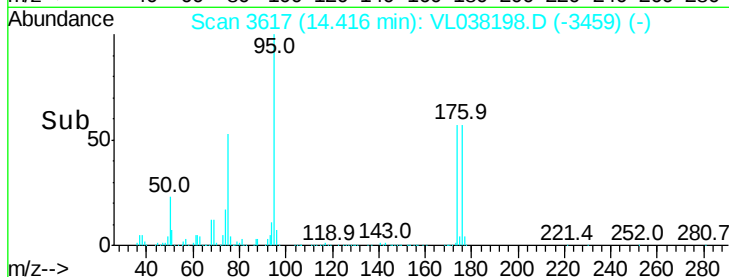
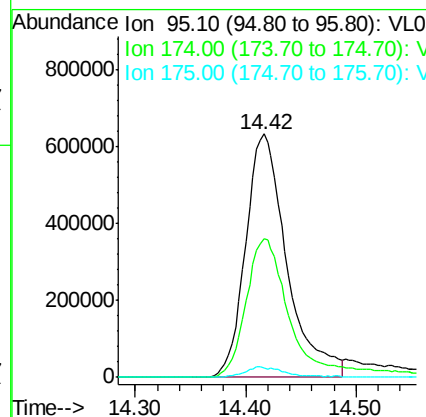
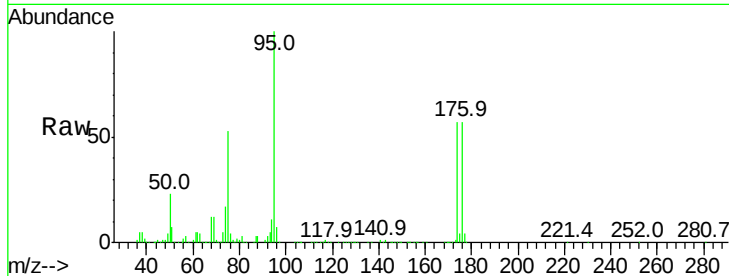
175 4.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.179 ppbv m

RT: 16.76 min Scan# 4347

Delta R.T. 0.01 min

Lab File: VL038198.D

Acq: 16 Dec 2021 20:50

Tgt Ion:105 Resp: 53625

Ion Ratio Lower Upper

105 100

120 49.0 40.1 60.1

91 15.3 39.8 59.8#

77 17.3 16.6 25.0

