

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032519\
 Data File : VL033456.D
 Acq On : 26 Mar 2019 4:07
 Operator : SY/AP
 Sample : K1991-08
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4

Manual Integrations
 APPROVED

MMDadoda
 4/1/2019 1:23:13 AM

Quant Time: Mar 31 10:52:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 2
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	678620	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1585611	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1634543	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	1253517	9.78	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	31229	0.316	ppbv	96
3) Chlorodifluoromethane	3.01	51	22971m	0.294	ppbv	
4) Chloromethane	3.17	50	25758	0.623	ppbv	99
9) Propene	3.05	41	33550	1.023	ppbv #	73
10) Heptane	8.25	43	12122m	0.138	ppbv	
11) Trichlorofluoromethane	4.00	101	31027	0.254	ppbv	95
13) Ethanol	3.65	45	95632	11.264	ppbv	68
15) Acetone	3.89	43	2303120	28.225	ppbv	97
20) Methylene Chloride	4.40	84	46151	1.332	ppbv #	87
26) Hexane	5.78	57	61328	0.911	ppbv #	59
34) 2-Butanone	5.33	43	174539	1.832	ppbv	99
35) Carbon Tetrachloride	7.13	117	7342	0.065	ppbv	88
36) Benzene	7.00	78	18885m	0.142	ppbv	
41) Tetrahydrofuran	6.16	42	15574m	0.297	ppbv	
53) Toluene	9.94	91	600975	3.887	ppbv	100
60) o-Xylene	13.85	91	21121	0.112	ppbv	99

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

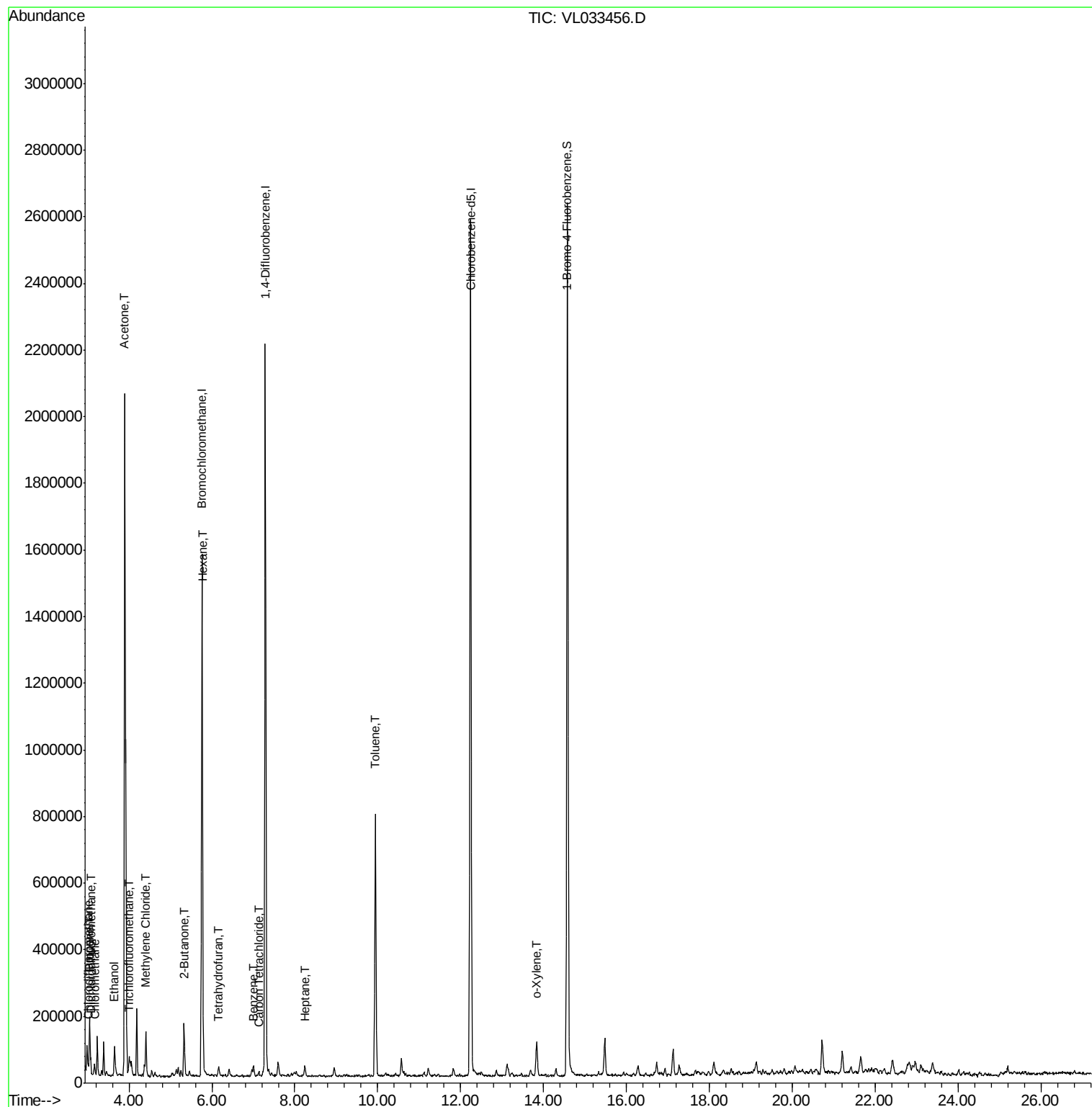
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032519\
Data File : VL033456.D
Acq On : 26 Mar 2019 4:07
Operator : SY/AP
Sample : K1991-08
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

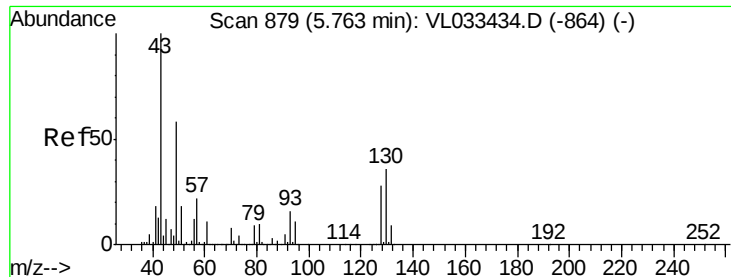
Instrument :
MSVOA_L
ClientSampleId :
IA-4

Manual Integrations
APPROVED

MMDadoda
4/1/2019 1:23:13 AM

Quant Time: Mar 31 10:52:13 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Instrument :

MSVOA_L

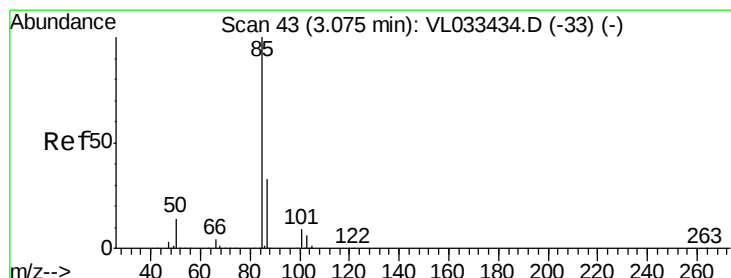
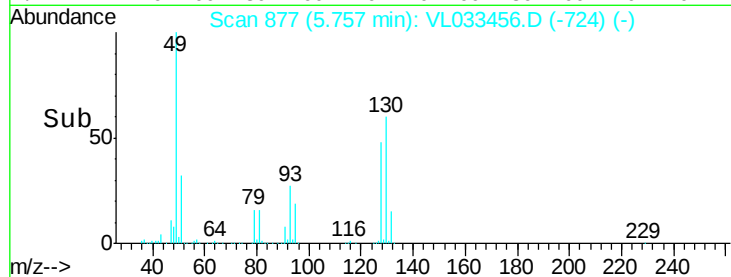
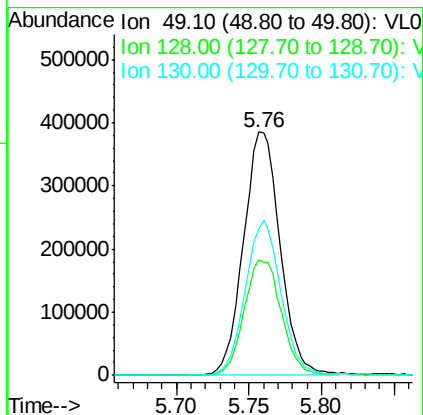
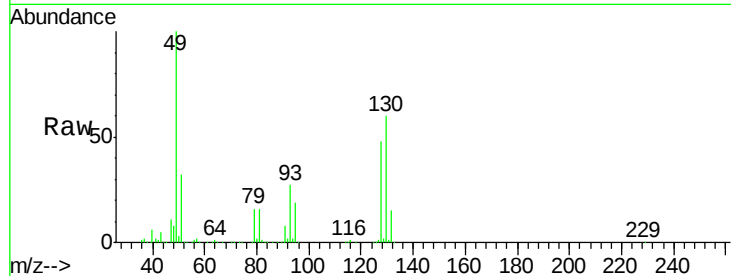
ClientSampled :

IA-4

Tot Ion:	49	Resp:	678620
Ion	Ratio	Lower	Upper
49	100		
128	48.4	24.0	72.0
130	62.9	31.2	93.6

Manual Integrations
APPROVED

MMDadoda
4/1/2019 1:23:13 AM



#2

Dichlorodifluoromethane

Concen: 0.316 ppbv

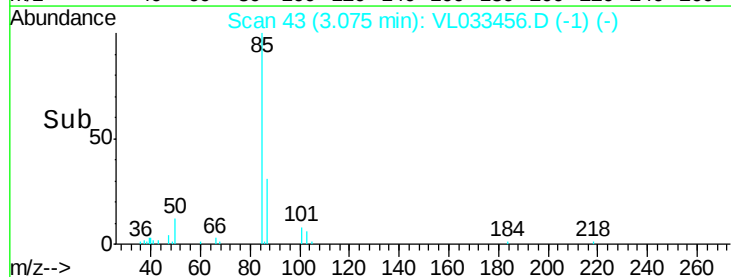
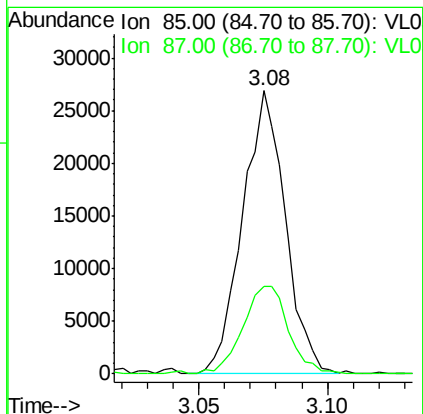
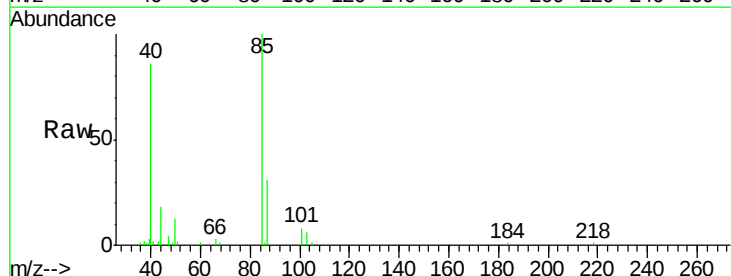
RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Tgt Ion:	85	Resp:	31229
Ion	Ratio	Lower	Upper
85	100		
87	31.0	26.7	40.1





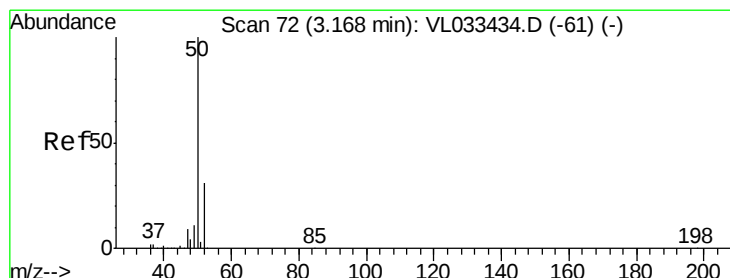
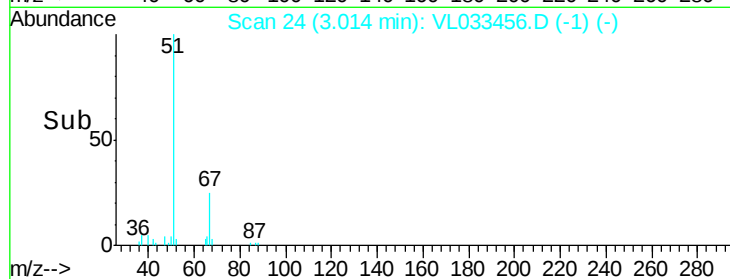
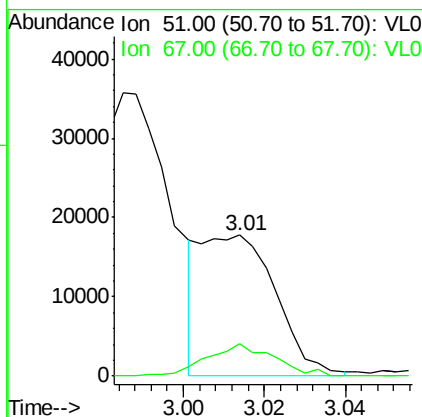
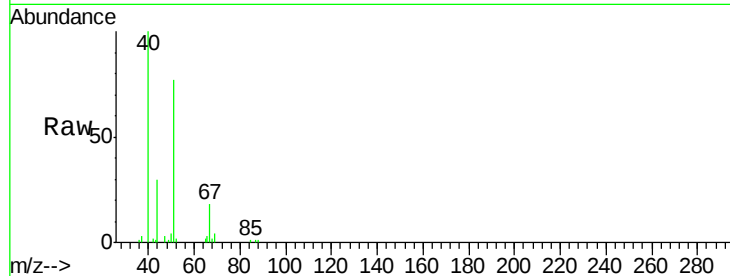
#3
Chlorodifluoromethane
Concen: 0.294 ppbv
RT: 3.01 min Scan# 24
Delta R.T. -0.00 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Instrument :
MSVOA_L
ClientSampleId :
IA-4

Tot Ion	51	Resp	22971
Ion Ratio	100	Lower	Upper
67	20.7	15.7	23.5

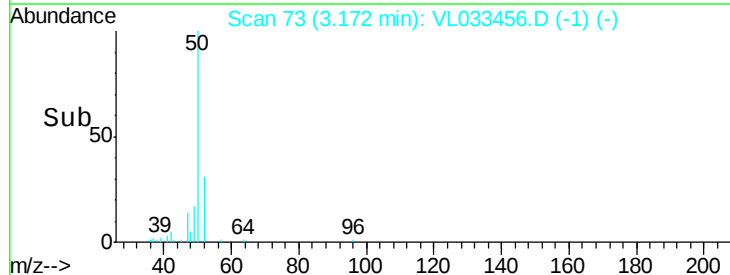
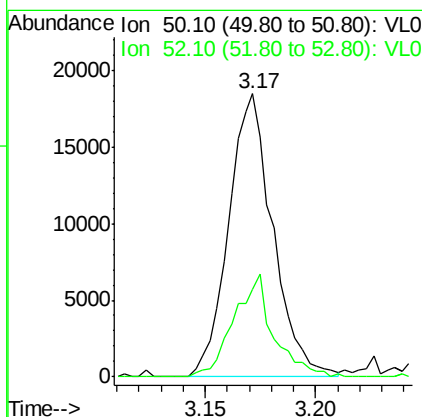
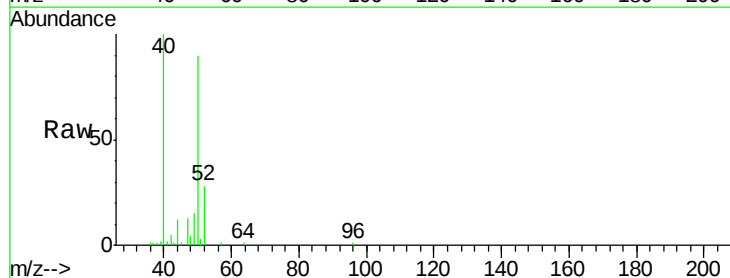
Manual Integrations
APPROVED

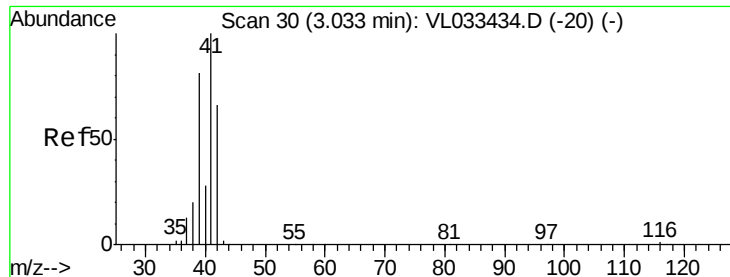
MMDadoda
4/1/2019 1:23:13 AM



#4
Chloromethane
Concen: 0.623 ppbv
RT: 3.17 min Scan# 73
Delta R.T. 0.00 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Tgt Ion	50	Resp	25758
Ion Ratio	100	Lower	Upper
52	30.8	25.0	37.6





#9

Propene

Concen: 1.023 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.02 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Instrument :

MSVOA_L

ClientSampleId :

IA-4

Tot Ion: 41 Resp: 33550

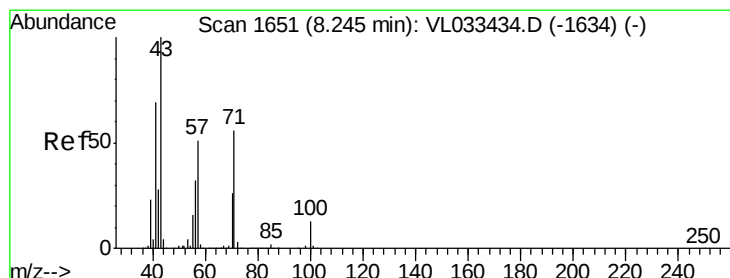
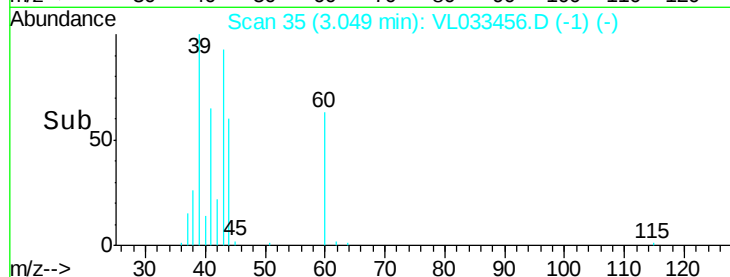
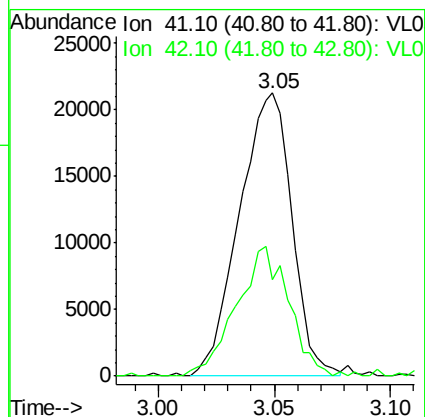
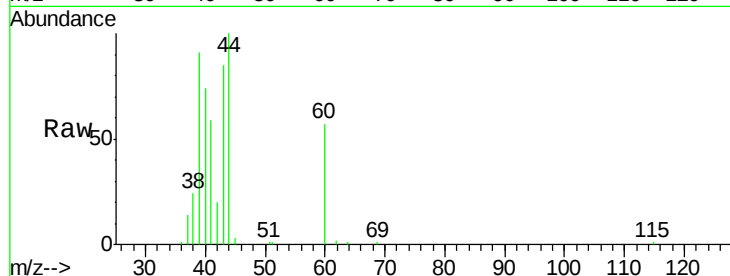
Ion Ratio Lower Upper

41 100

42 45.8 53.9 80.9#

Manual Integrations
APPROVED

MMDadoda
4/1/2019 1:23:13 AM



#10

Heptane

Concen: 0.138 ppbv m

RT: 8.25 min Scan# 1651

Delta R.T. -0.00 min

Lab File: VL033456.D

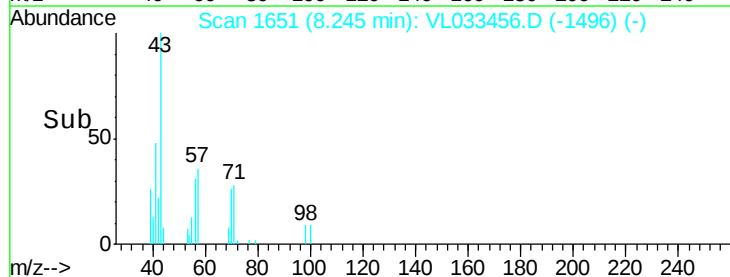
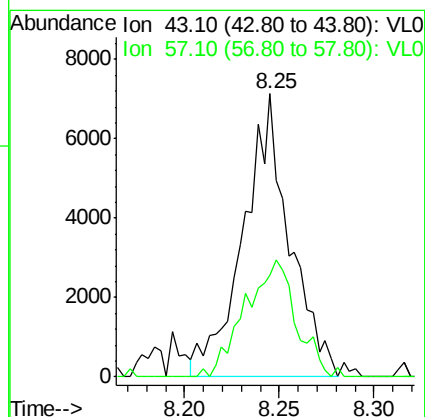
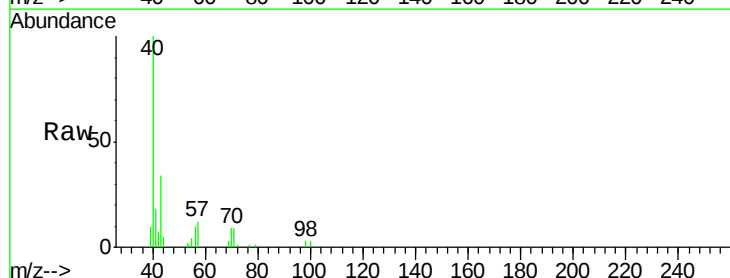
Acq: 26 Mar 2019 4:07

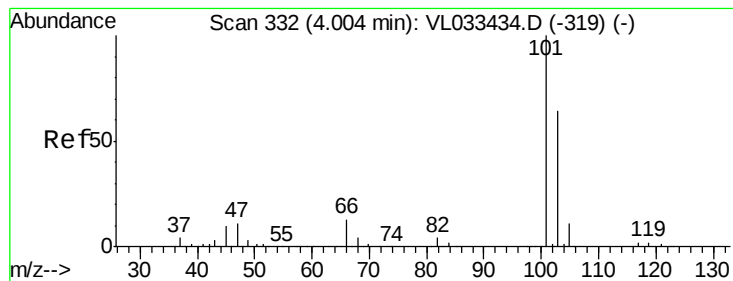
Tgt Ion: 43 Resp: 12122

Ion Ratio Lower Upper

43 100

57 45.5 40.6 60.8





#11

Trichlorofluoromethane

Concen: 0.254 ppbv

RT: 4.00 min Scan# 331

Delta R.T. -0.00 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Tot Ion: 101 Resp: 31027

Ion Ratio Lower Upper

101 100

103 68.3 51.3 76.9

Instrument :

MSVOA_L

ClientSampleId :

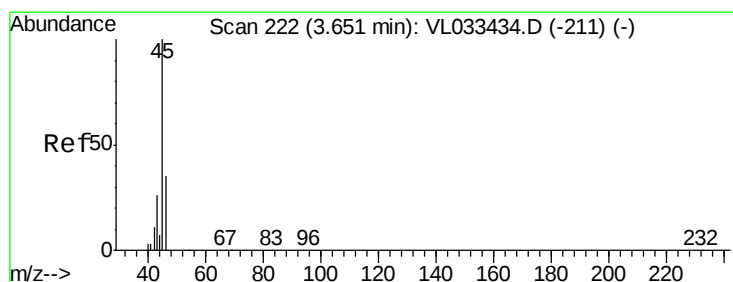
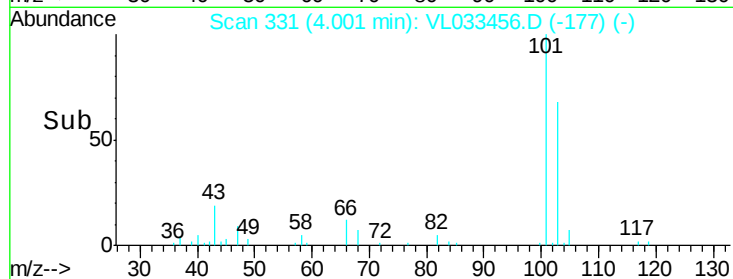
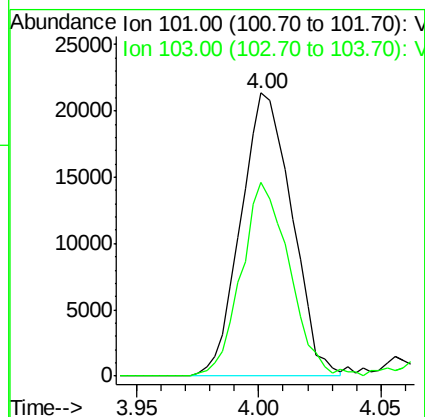
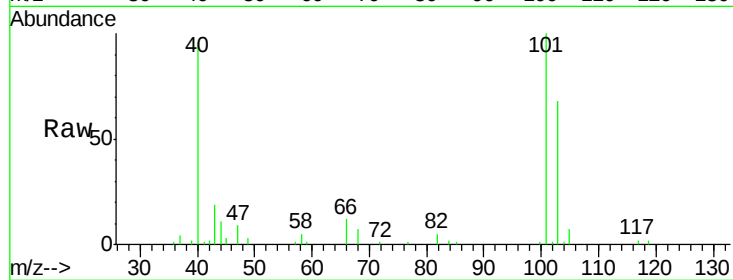
IA-4

Manual Integrations

APPROVED

MMDadoda

4/1/2019 1:23:13 AM



#13

Ethanol

Concen: 11.264 ppbv

RT: 3.65 min Scan# 222

Delta R.T. -0.00 min

Lab File: VL033456.D

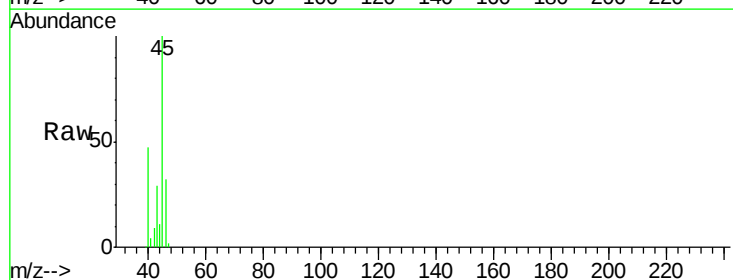
Acq: 26 Mar 2019 4:07

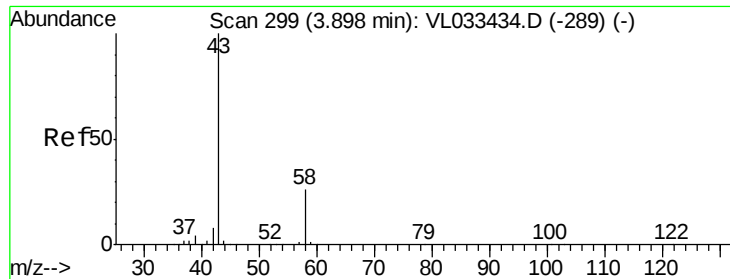
Tgt Ion: 45 Resp: 95632

Ion Ratio Lower Upper

45 100

46 38.6 25.4 101.8





#15

Acetone

Concen: 28.225 ppbv

RT: 3.89 min Scan# 298

Delta R.T. -0.00 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Instrument :

MSVOA_L

ClientSampled :

IA-4

Tot Ion: 43 Resp: 2303120

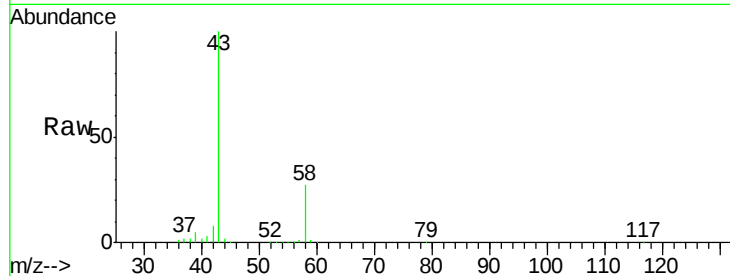
Ion Ratio Lower Upper

43 100

58 24.1 20.5 30.7

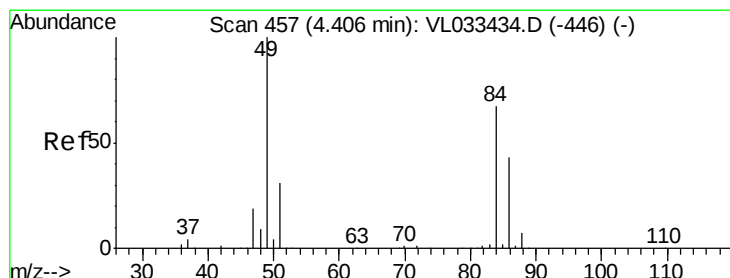
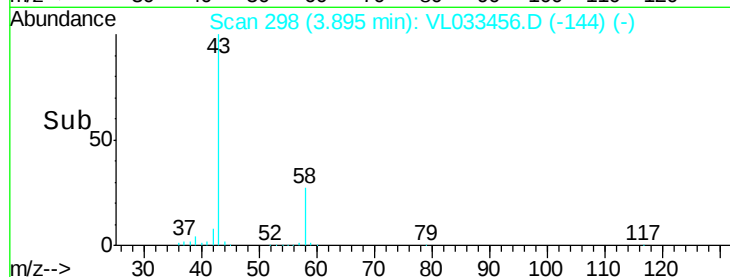
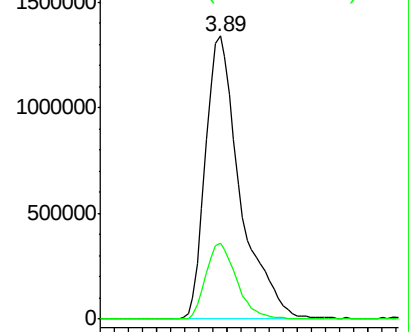
Manual Integrations
APPROVED

MMDadoda
4/1/2019 1:23:13 AM



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 1.332 ppbv

RT: 4.40 min Scan# 456

Delta R.T. -0.00 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Tgt Ion: 84 Resp: 46151

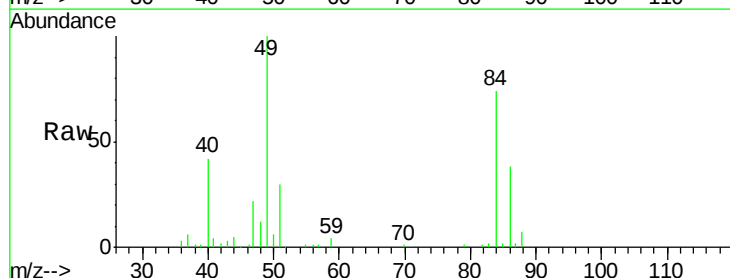
Ion Ratio Lower Upper

84 100

49 134.4 120.0 180.0

51 40.4 36.7 55.1

86 50.8 51.9 77.9#

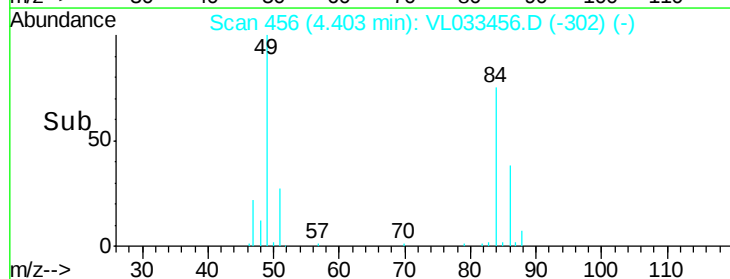
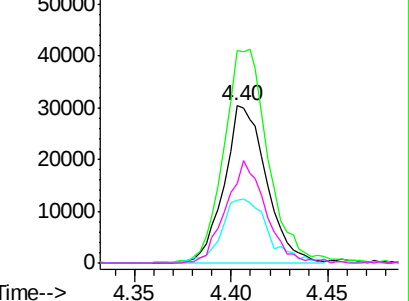


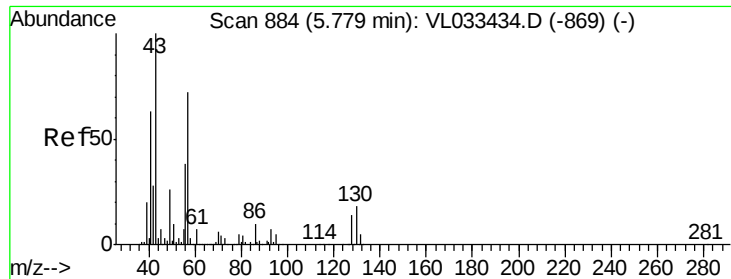
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





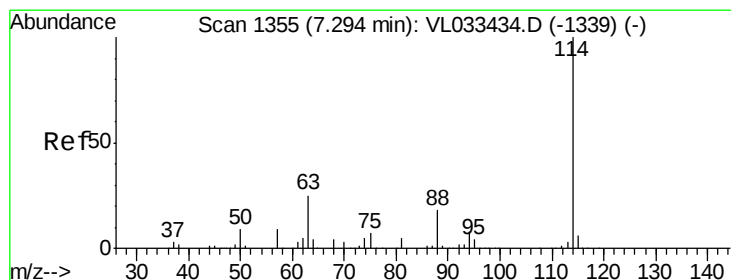
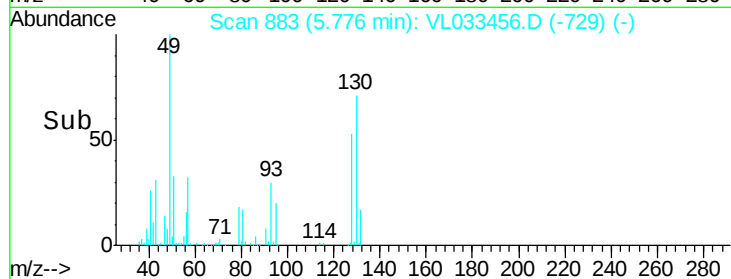
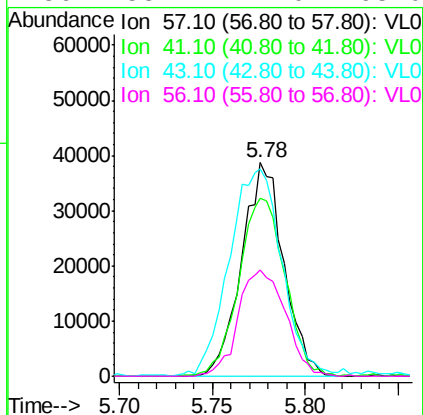
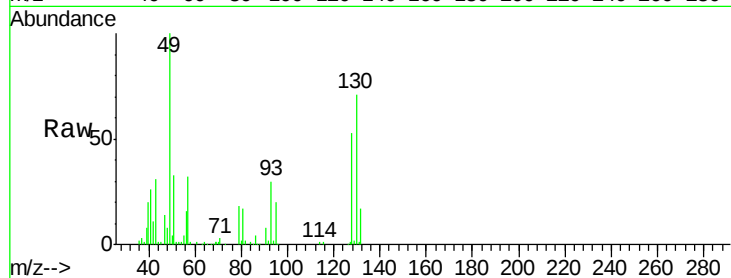
#26
Hexane
Concen: 0.911 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.00 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Instrument :
MSVOA_L
ClientSampled :
IA-4

Tot Ion	Ratio	Lower	Upper
57	100		
41	91.8	70.7	106.1
43	122.4	182.6	274.0#
56	55.7	42.0	63.0

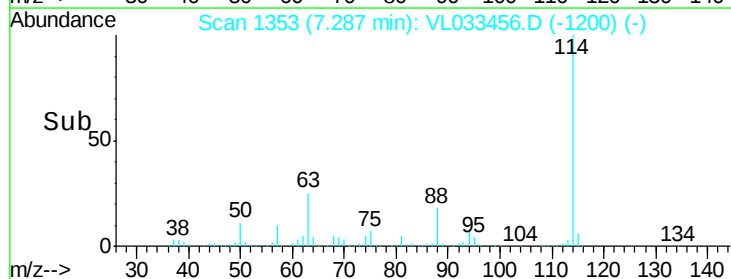
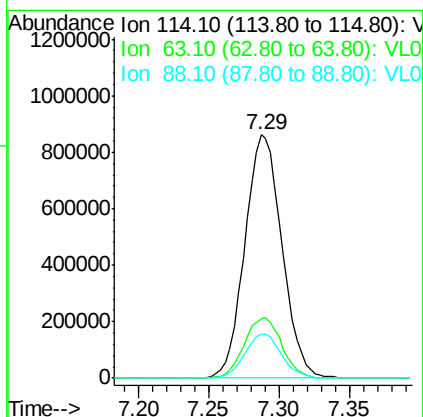
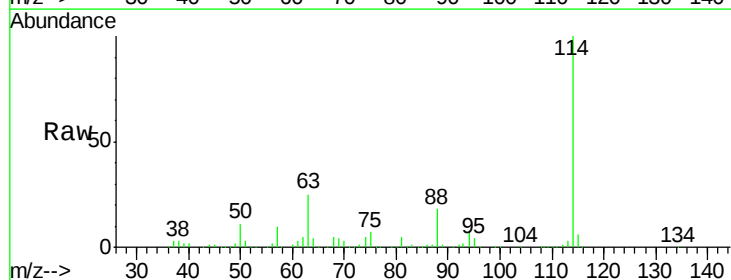
Manual Integrations
APPROVED

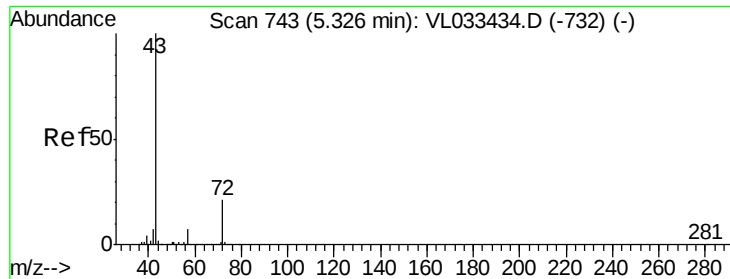
MMDadoda
4/1/2019 1:23:13 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.4	21.5	32.3
88	17.9	14.5	21.7





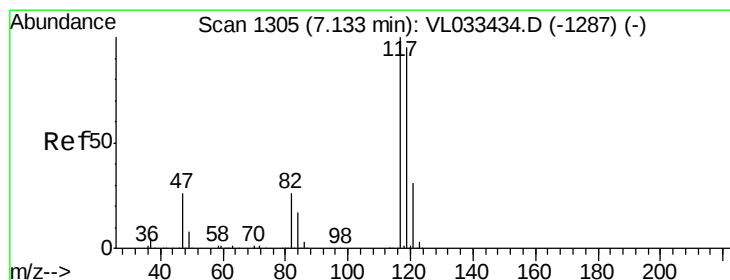
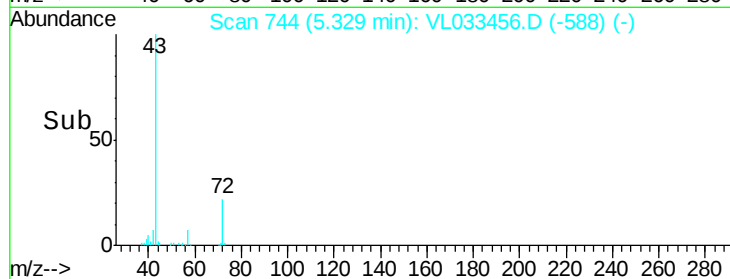
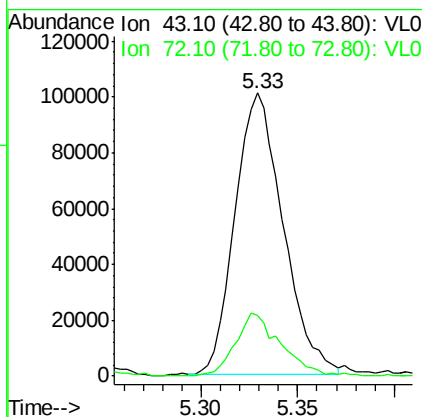
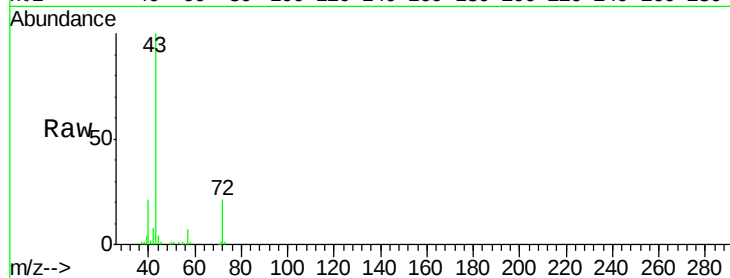
#34
2-Butanone
Concen: 1.832 ppbv
RT: 5.33 min Scan# 744
Delta R.T. 0.00 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Instrument :
MSVOA_L
ClientSampleId :
IA-4

Tot Ion: 43 Resp: 174539
Ion Ratio Lower Upper
43 100
72 21.3 17.4 26.2

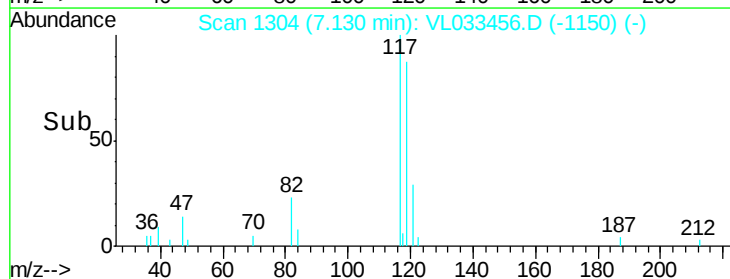
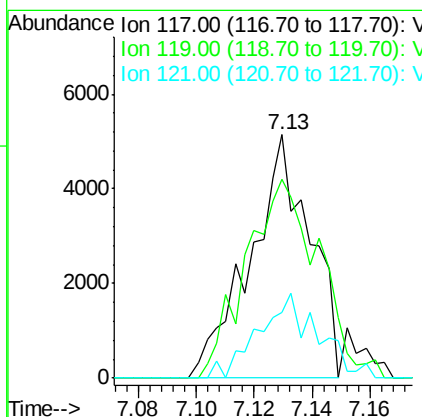
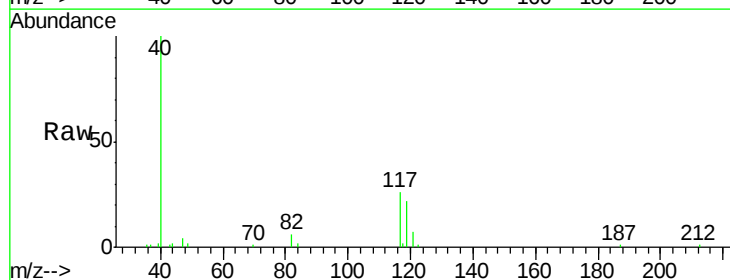
Manual Integrations
APPROVED

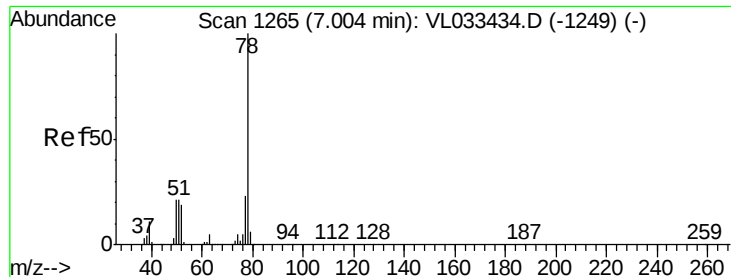
MMDadoda
4/1/2019 1:23:13 AM



#35
Carbon Tetrachloride
Concen: 0.065 ppbv
RT: 7.13 min Scan# 1304
Delta R.T. -0.00 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Tgt Ion: 117 Resp: 7342
Ion Ratio Lower Upper
117 100
119 81.6 75.8 113.8
121 27.0 24.7 37.1





#36

Benzene

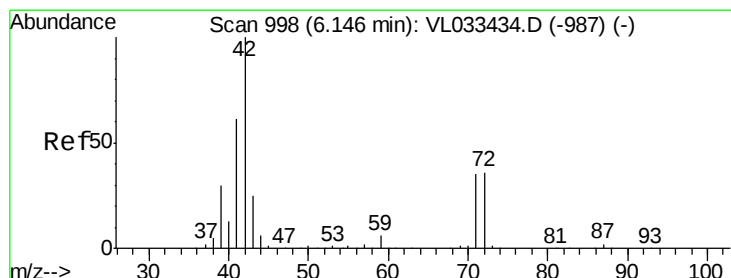
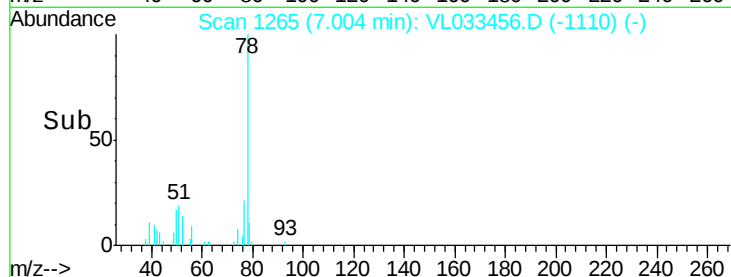
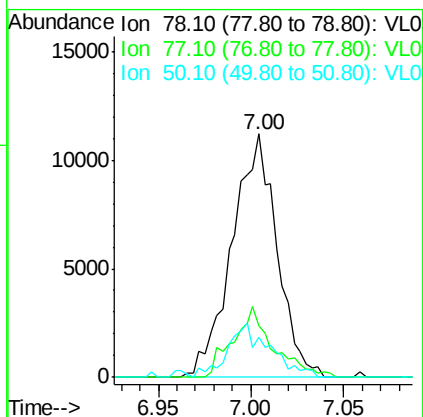
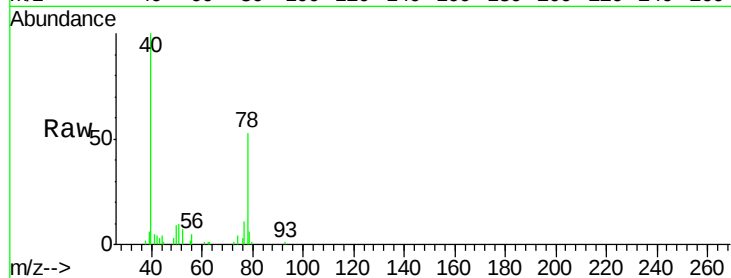
Concen: 0.142 ppbv m
 RT: 7.00 min Scan# 1265
 Delta R.T. -0.00 min
 Lab File: VL033456.D
 Acq: 26 Mar 2019 4:07

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.0	18.1	27.1
50	16.5	16.7	25.1#

Manual Integrations
 APPROVED

MMDadoda
 4/1/2019 1:23:13 AM

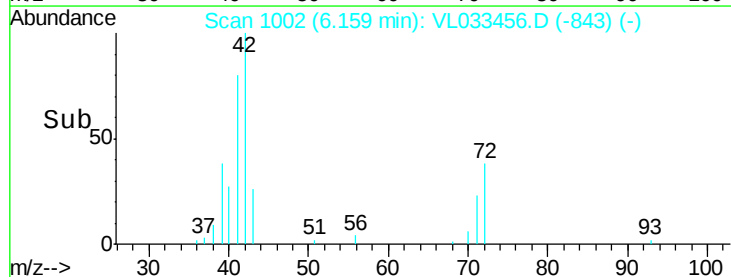
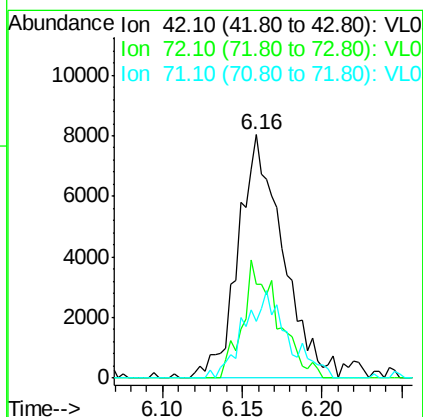
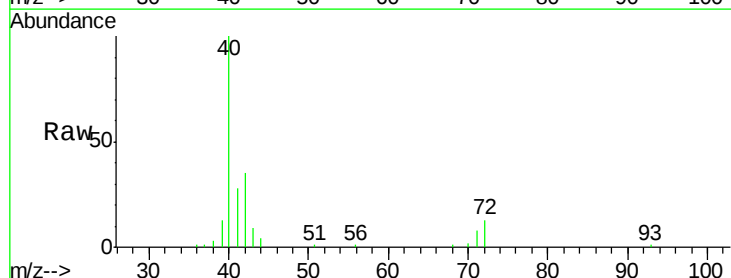


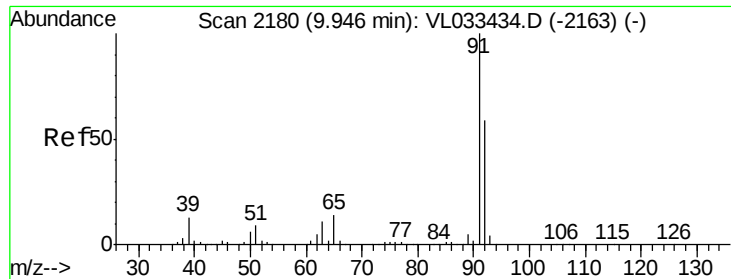
#41

Tetrahydrofuran

Concen: 0.297 ppbv m
 RT: 6.16 min Scan# 1002
 Delta R.T. 0.01 min
 Lab File: VL033456.D
 Acq: 26 Mar 2019 4:07

Tgt Ion	Ratio	Lower	Upper
42	100		
72	38.2	30.2	45.2
71	34.9	29.4	44.2





#53

Toluene

Concen: 3.887 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

Tot Ion: 91 Resp: 600975

Ion Ratio Lower Upper

91 100

92 59.0 47.4 71.0

Instrument :

MSVOA_L

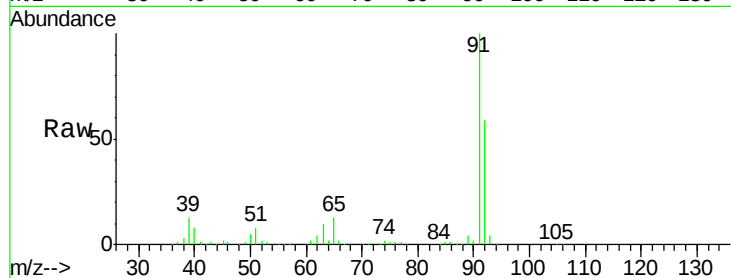
ClientSampleId :

IA-4

Manual Integrations
APPROVED

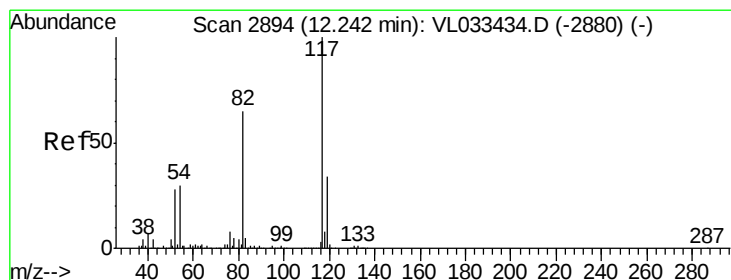
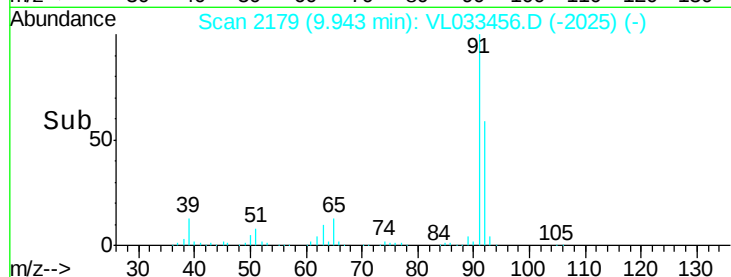
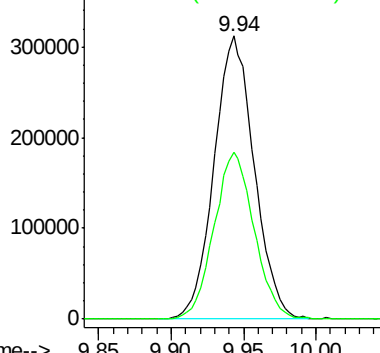
MMDadoda

4/1/2019 1:23:13 AM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.00 min

Lab File: VL033456.D

Acq: 26 Mar 2019 4:07

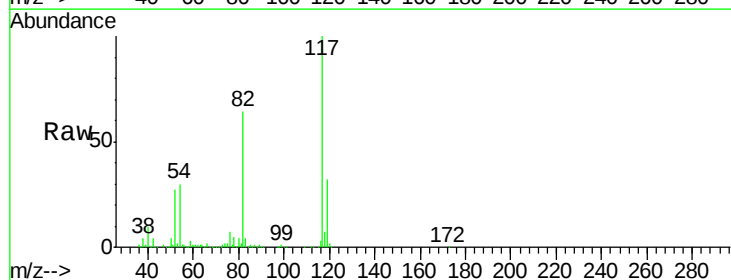
Tgt Ion: 117 Resp: 1634543

Ion Ratio Lower Upper

117 100

82 65.3 51.5 77.3

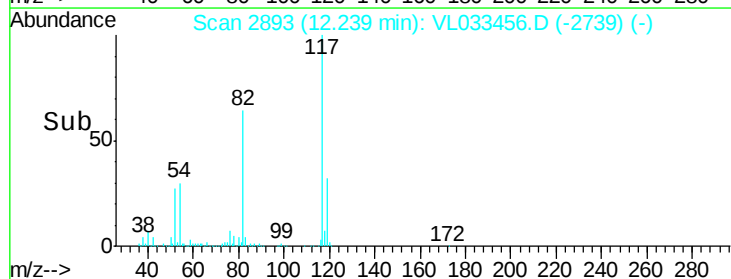
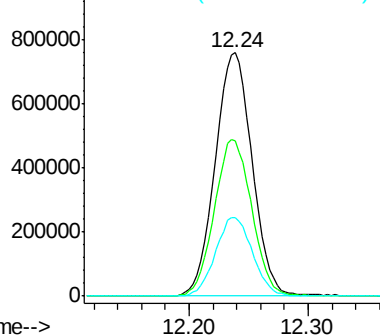
119 32.5 25.5 38.3

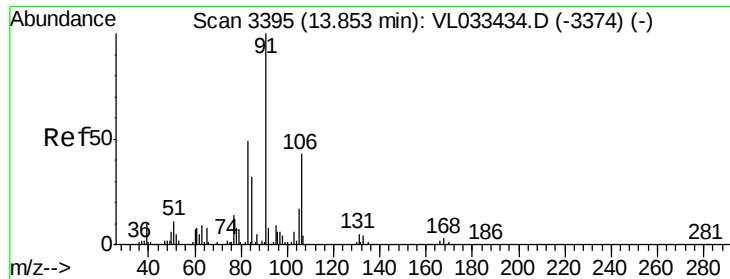


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





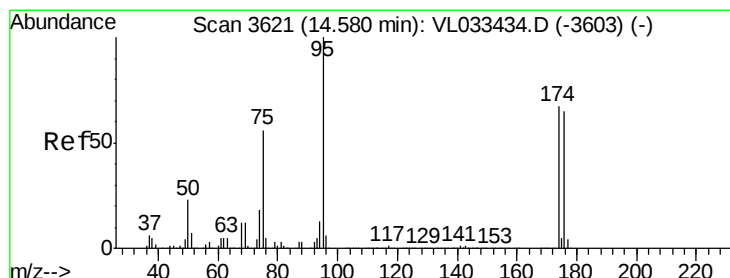
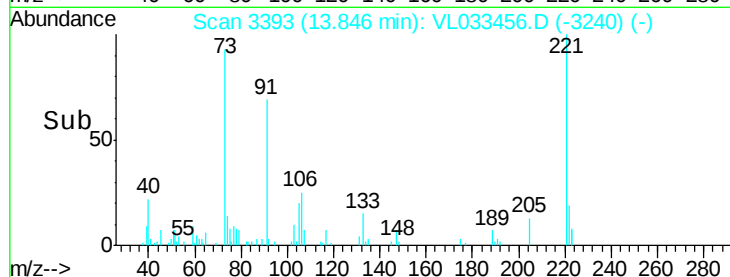
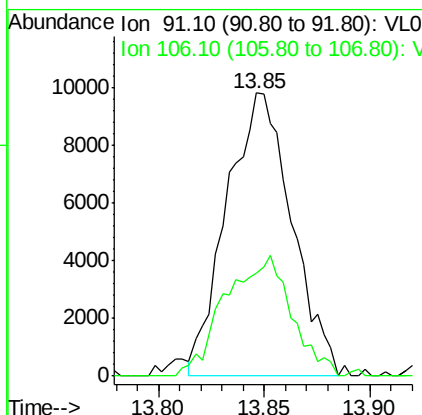
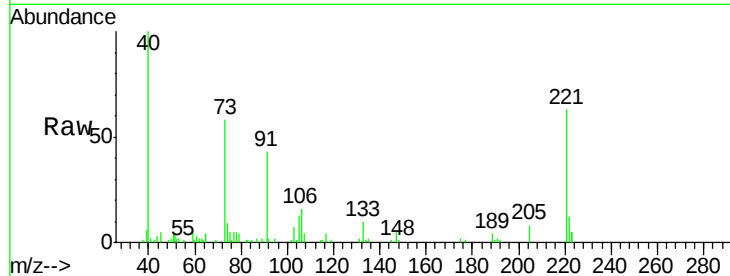
#60
o-Xylene
Concen: 0.112 ppbv
RT: 13.85 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Instrument :
MSVOA_L
ClientSampled :
IA-4

Tot Ion: 91 Resp: 21121
Ion Ratio Lower Upper
91 100
106 43.7 21.4 64.3

Manual Integrations
APPROVED

MMDadoda
4/1/2019 1:23:13 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 9.782 ppbv
RT: 14.58 min Scan# 3620
Delta R.T. -0.00 min
Lab File: VL033456.D
Acq: 26 Mar 2019 4:07

Tgt Ion: 95 Resp: 1253517
Ion Ratio Lower Upper
95 100
174 67.0 52.9 79.3
175 4.7 3.8 5.6

