

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120418\
 Data File : VL032894.D
 Acq On : 5 Dec 2018 2:38
 Operator : SY/AP
 Sample : J6176-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Manual Integrations
 APPROVED

MMDadoda
 12/10/2018 1:01:35 PM

Quant Time: Dec 05 15:52:11 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 07:00:23 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1294746	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3478782	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	3485920	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2511082	9.63	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	85892	0.462	ppbv	95
3) Chlorodifluoromethane	3.06	51	952720	9.281	ppbv #	56
4) Chloromethane	3.17	50	13583	0.239	ppbv	89
9) Propene	3.04	41	919928	22.395	ppbv	98
10) Heptane	8.25	43	52812	0.337	ppbv	99
11) Trichlorofluoromethane	4.01	101	38093	0.217	ppbv #	83
13) Ethanol	3.66	45	700727m	52.080	ppbv	
15) Acetone	3.90	43	4452863	37.660	ppbv #	73
20) Methylene Chloride	4.42	84	169515	2.769	ppbv	98
27) Carbon Disulfide	4.62	76	597102	3.839	ppbv	98
29) Chloroform	5.86	83	35533m	0.163	ppbv	
34) 2-Butanone	5.33	43	14878340	82.460	ppbv #	89
35) Carbon Tetrachloride	7.15	117	16394m	0.059	ppbv	
36) Benzene	7.01	78	386277	1.394	ppbv	95
38) Trichloroethene	7.97	130	9003m	0.080	ppbv	
51) 2-Hexanone	10.27	43	1957526	10.782	ppbv #	98
52) Tetrachloroethene	11.38	164	16672m	0.173	ppbv	
53) Toluene	9.95	91	528659	1.829	ppbv	99
58) Ethyl Benzene	12.87	91	110958	0.264	ppbv	95
59) m/p-Xylene	13.13	91	276395m	0.740	ppbv	
60) o-Xylene	13.85	91	126111m	0.336	ppbv	
61) Styrene	13.69	104	70809	0.290	ppbv	96
74) 1,2,4-Trimethylbenzene	16.93	105	98873	0.230	ppbv #	65

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

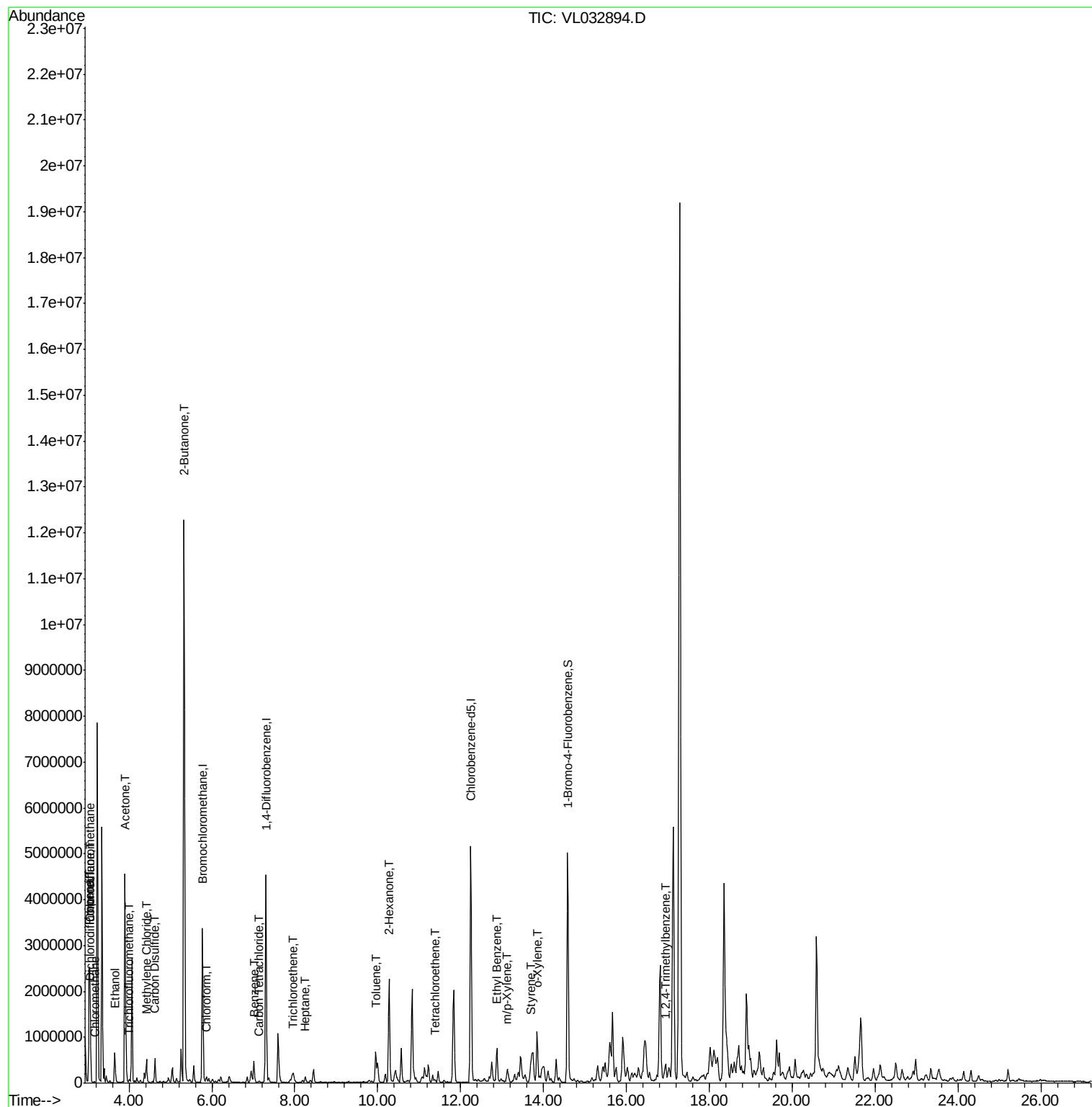
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120418\
Data File : VL032894.D
Acq On : 5 Dec 2018 2:38
Operator : SY/AP
Sample : J6176-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

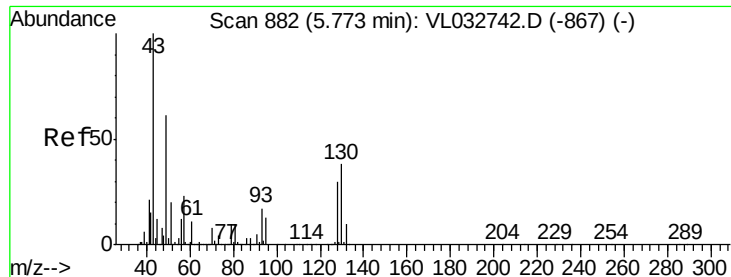
Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Manual Integrations
APPROVED

MMDadoda
12/10/2018 1:01:35 PM

Quant Time: Dec 05 15:52:11 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.00 min

Lab File: VL032894.D

Acq: 5 Dec 2018 2:38

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tot Ion: 49 Resp: 1294746

Ion Ratio Lower Upper

49 100

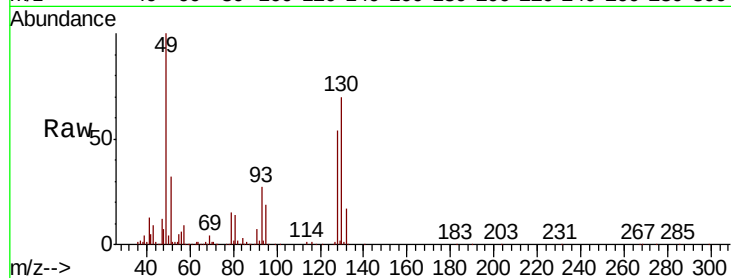
128 52.3 24.9 74.6

130 67.6 31.4 94.2

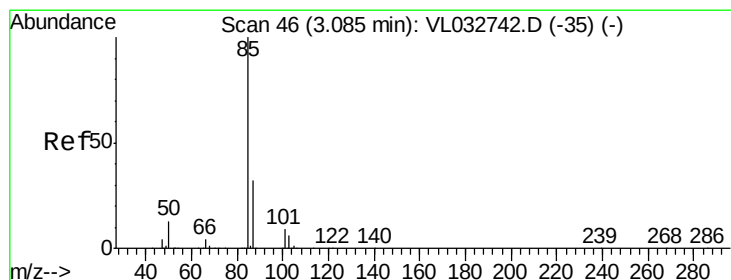
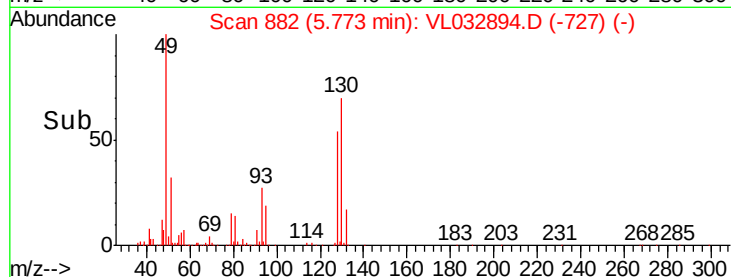
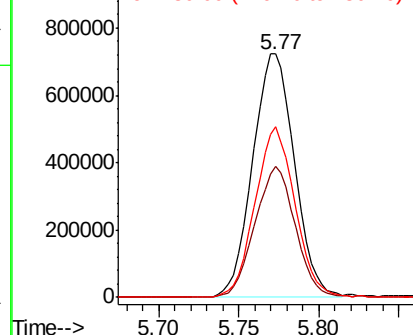
Manual Integrations
APPROVED

MMDadoda

12/10/2018 1:01:35 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.462 ppbv

RT: 3.08 min Scan# 45

Delta R.T. -0.00 min

Lab File: VL032894.D

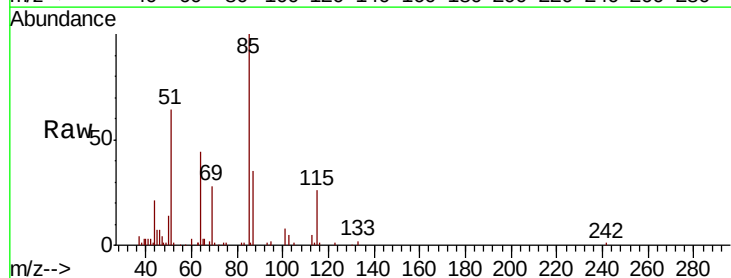
Acq: 5 Dec 2018 2:38

Tgt Ion: 85 Resp: 85892

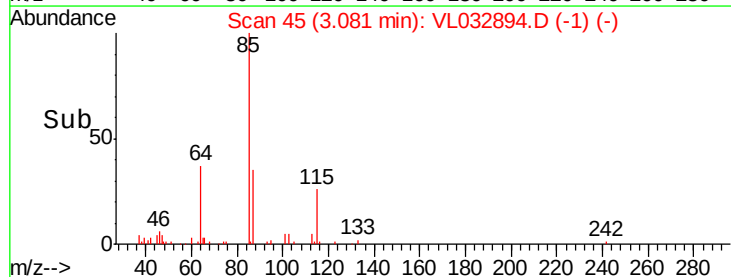
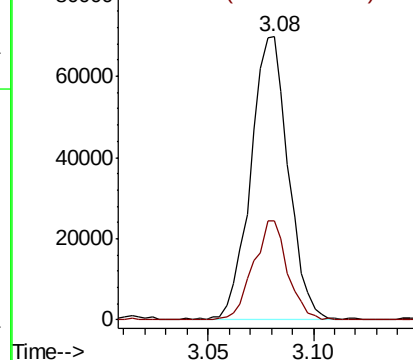
Ion Ratio Lower Upper

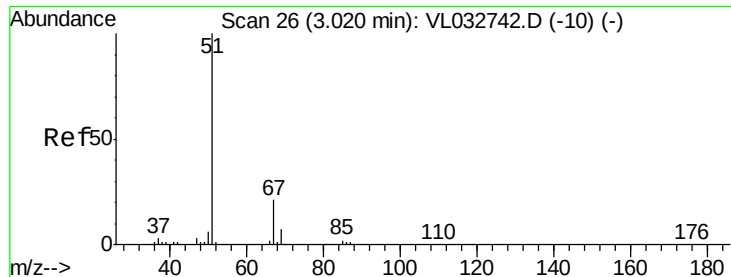
85 100

87 35.3 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 9.281 ppbv

RT: 3.06 min Scan# 39

Delta R.T. 0.04 min

Lab File: VL032894.D

Acq: 5 Dec 2018 2:38

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tot Ion: 51 Resp: 952720

Ion Ratio Lower Upper

51 100

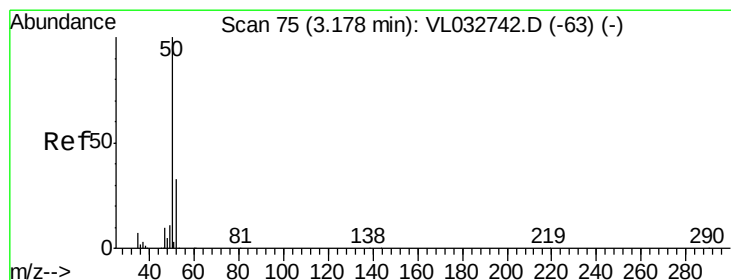
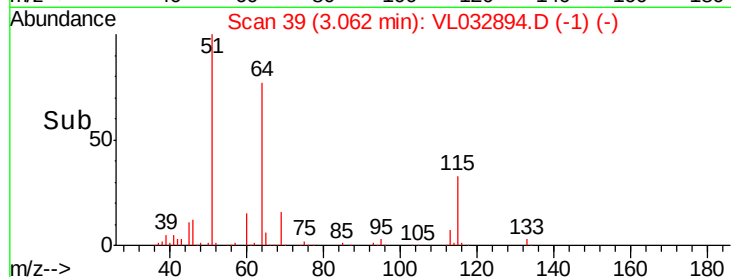
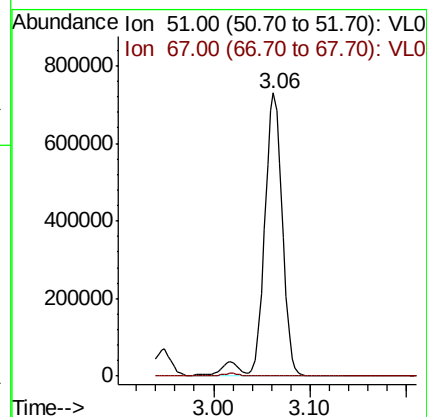
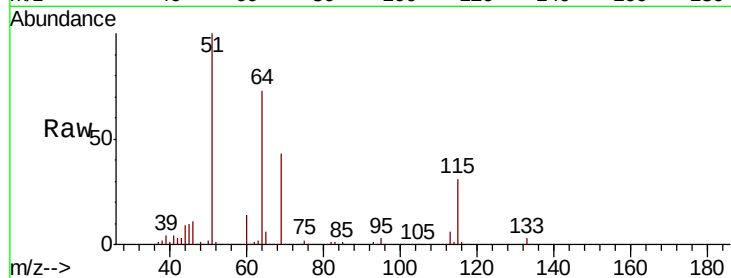
67 0.1 16.1 24.1#

Manual Integrations

APPROVED

MMDadoda

12/10/2018 1:01:35 PM



#4

Chloromethane

Concen: 0.239 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.01 min

Lab File: VL032894.D

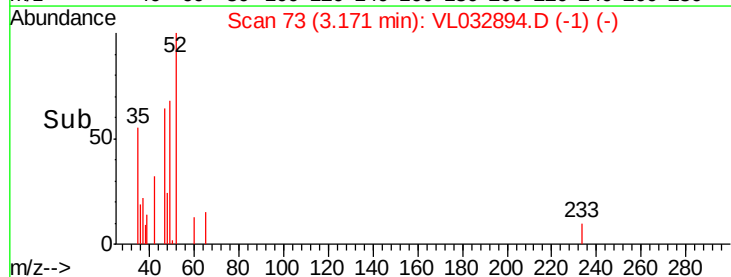
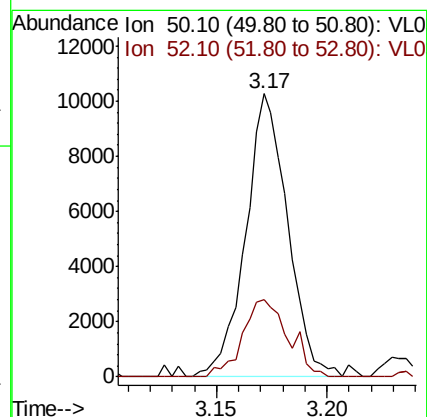
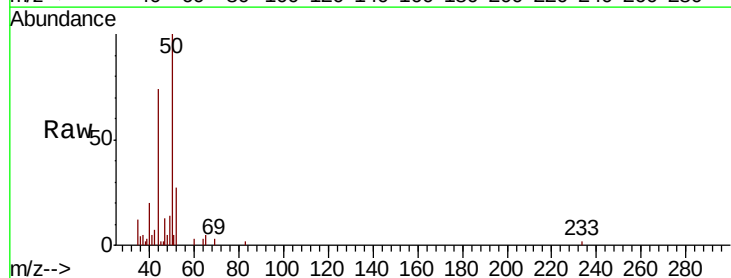
Acq: 5 Dec 2018 2:38

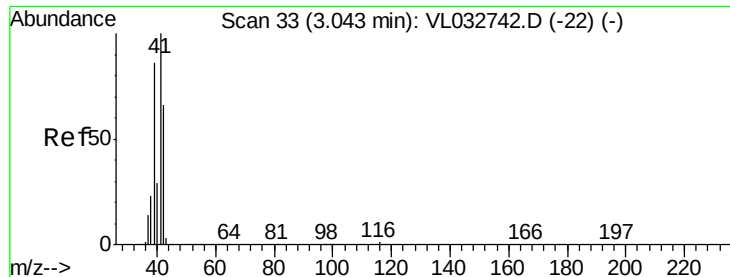
Tgt Ion: 50 Resp: 13583

Ion Ratio Lower Upper

50 100

52 27.2 26.6 40.0





#9

Propene

Concen: 22.395 ppbv

RT: 3.04 min Scan# 32

Delta R.T. -0.00 min

Lab File: VL032894.D

Acq: 5 Dec 2018 2:38

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tot Ion: 41 Resp: 919928

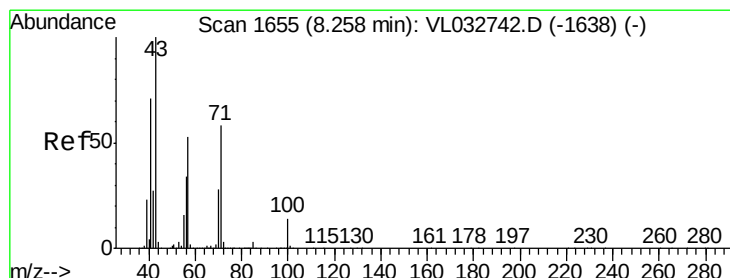
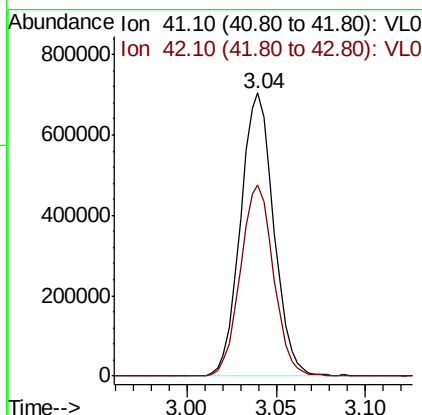
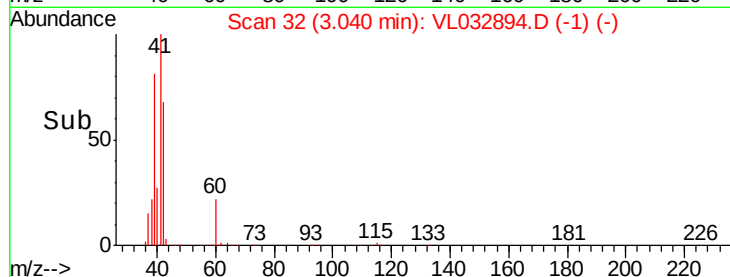
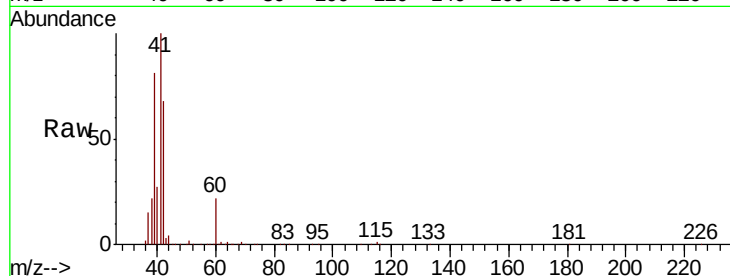
Ion Ratio Lower Upper

41 100

42 67.5 55.0 82.6

Manual Integrations
APPROVED

MMDadoda
12/10/2018 1:01:35 PM



#10

Heptane

Concen: 0.337 ppbv

RT: 8.25 min Scan# 1653

Delta R.T. -0.01 min

Lab File: VL032894.D

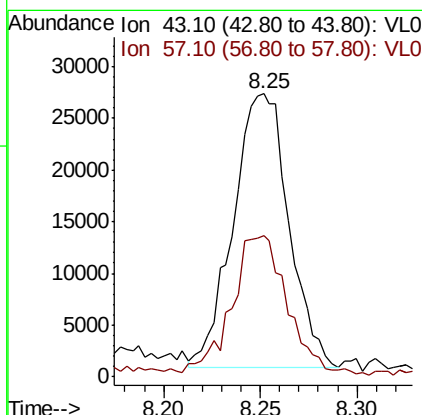
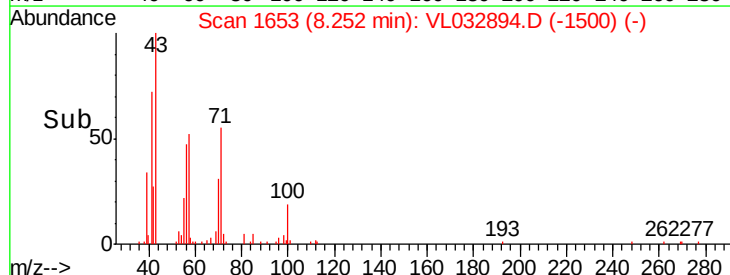
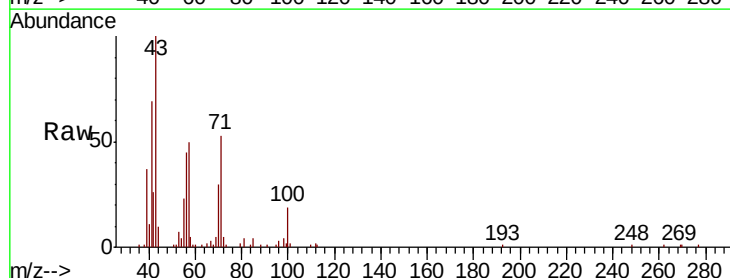
Acq: 5 Dec 2018 2:38

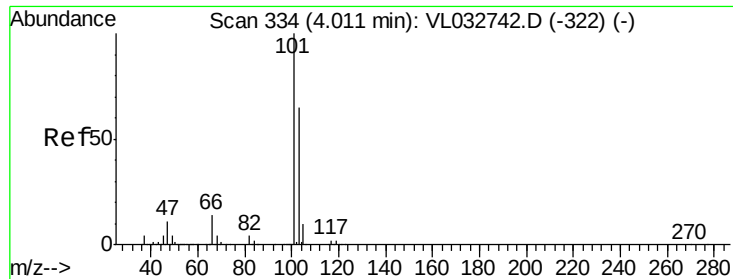
Tgt Ion: 43 Resp: 52812

Ion Ratio Lower Upper

43 100

57 51.6 41.8 62.8





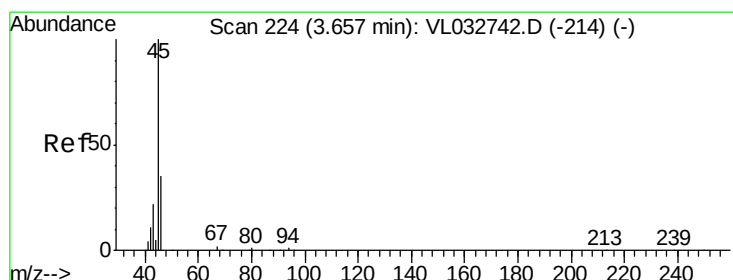
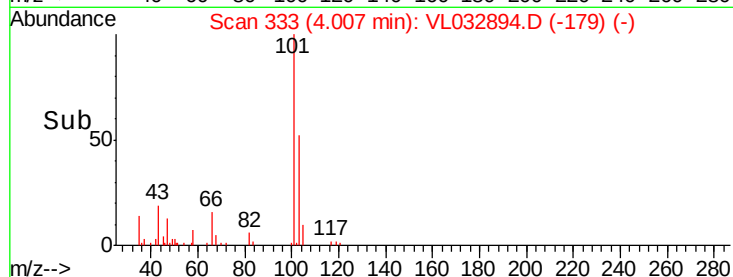
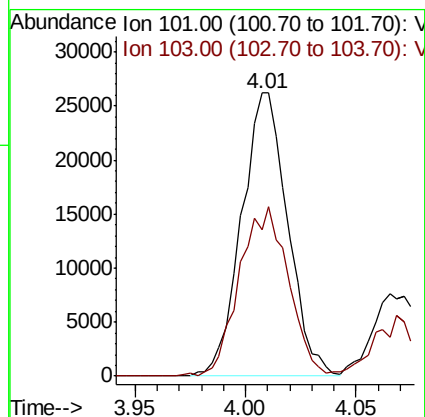
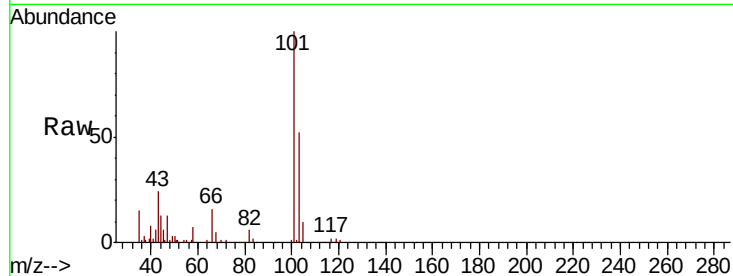
#11
 Trichlorofluoromethane
 Concen: 0.217 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Tot Ion:101 Resp: 38093
 Ion Ratio Lower Upper
 101 100
 103 50.8 51.6 77.4#

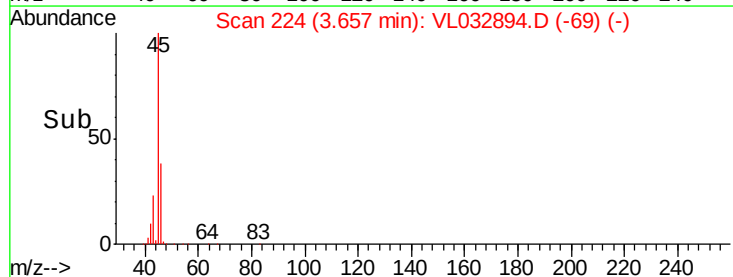
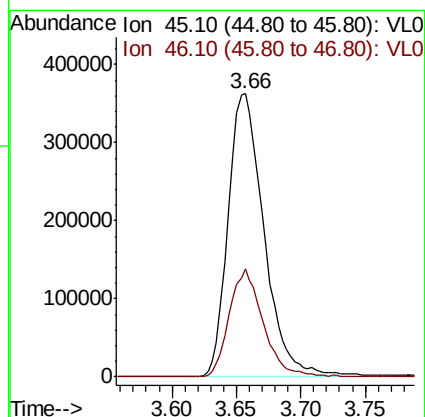
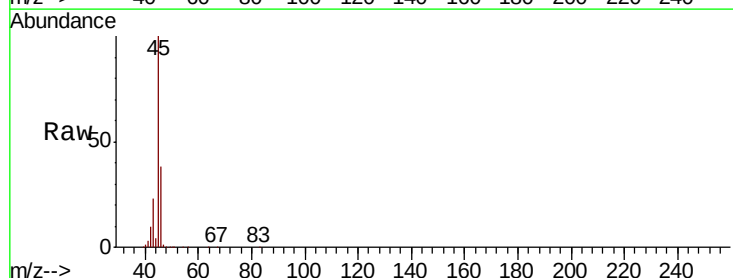
Manual Integrations
 APPROVED

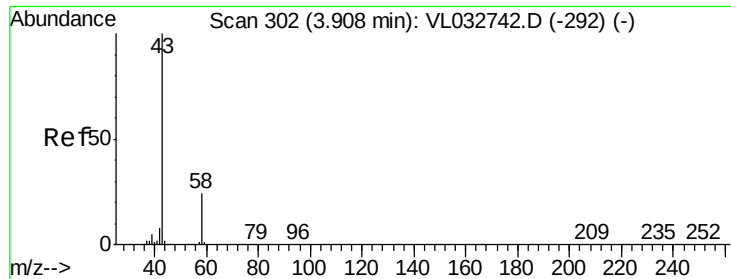
MMDadoda
 12/10/2018 1:01:35 PM



#13
 Ethanol
 Concen: 52.080 ppbv m
 RT: 3.66 min Scan# 224
 Delta R.T. -0.00 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Tgt Ion: 45 Resp: 700727
 Ion Ratio Lower Upper
 45 100
 46 36.5 14.5 57.9





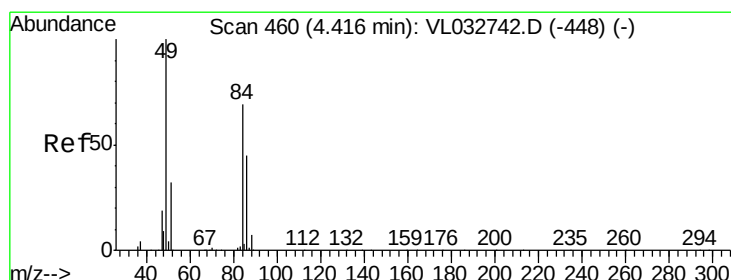
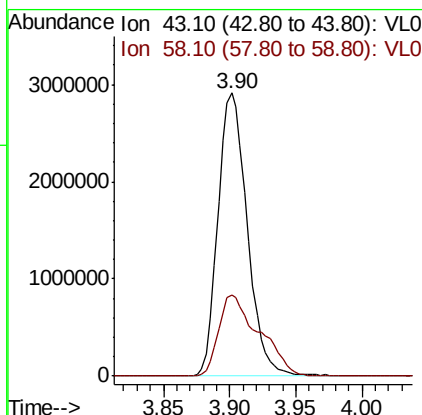
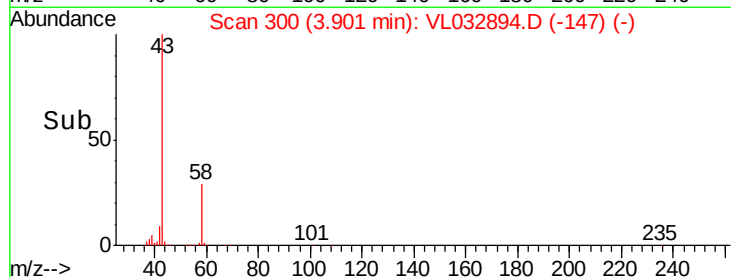
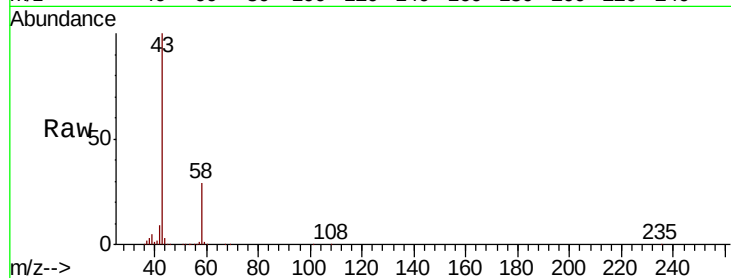
#15
Acetone
Concen: 37.660 ppbv
RT: 3.90 min Scan# 300
Delta R.T. -0.01 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tot Ion: 43 Resp: 4452863
Ion Ratio Lower Upper
43 100
58 40.1 21.1 31.7#

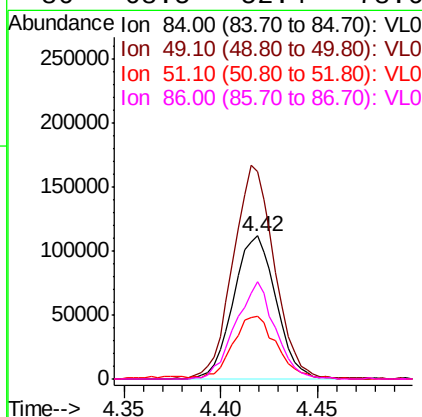
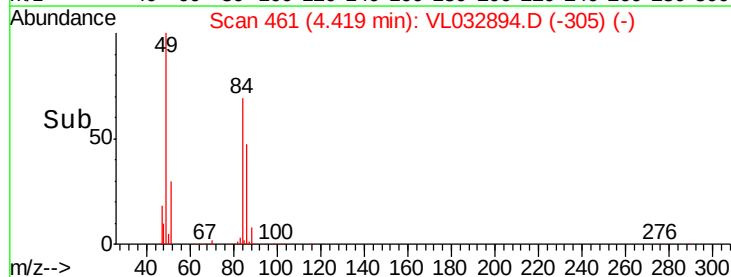
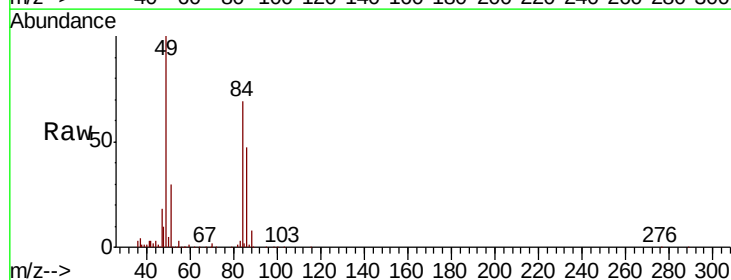
Manual Integrations
APPROVED

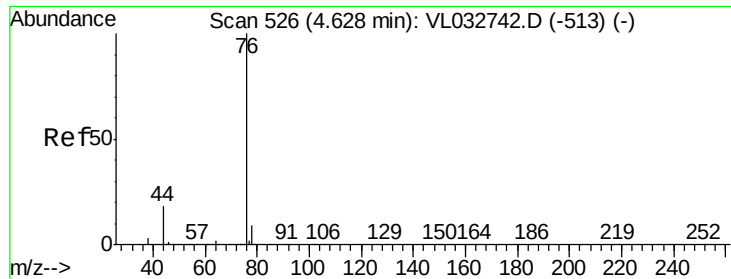
MMDadoda
12/10/2018 1:01:35 PM



#20
Methylene Chloride
Concen: 2.769 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Tgt Ion: 84 Resp: 169515
Ion Ratio Lower Upper
84 100
49 144.7 115.8 173.6
51 43.6 36.9 55.3
86 68.5 52.4 78.6





#27

Carbon Disulfide

Concen: 3.839 ppbv

RT: 4.62 min Scan# 525

Delta R.T. -0.00 min

Lab File: VL032894.D

Acq: 5 Dec 2018 2:38

Instrument :

MSVOA_L

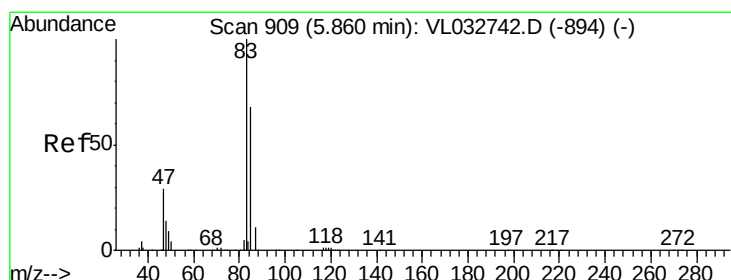
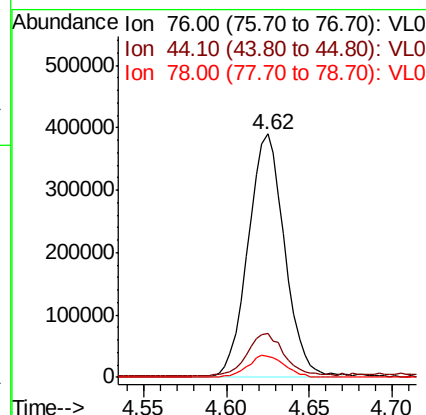
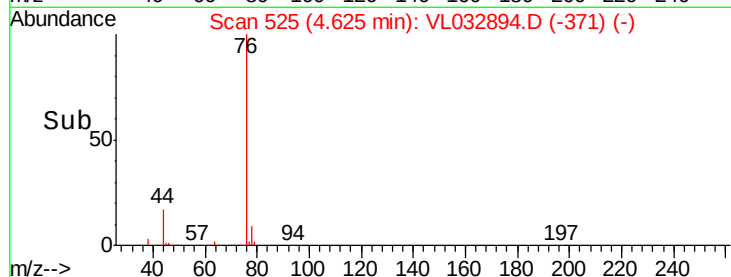
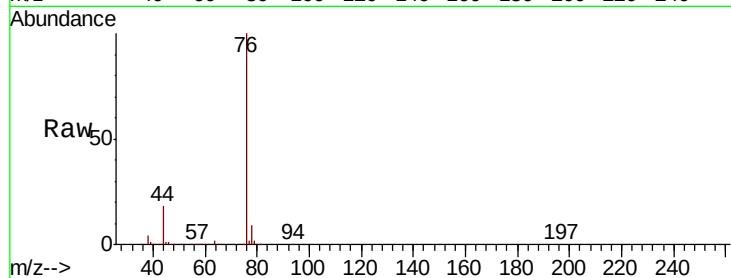
ClientSampled :

MMSV-08

Tot Ion:	76	Resp:	597102
Ion Ratio	Lower	Upper	
76	100		
44	18.9	14.4	21.6
78	9.3	7.7	11.5

Manual Integrations
APPROVED

MMDadoda
12/10/2018 1:01:35 PM



#29

Chloroform

Concen: 0.163 ppbv m

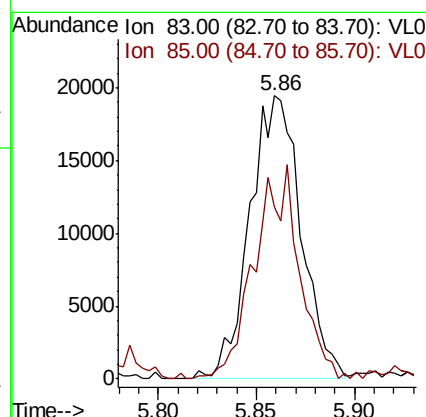
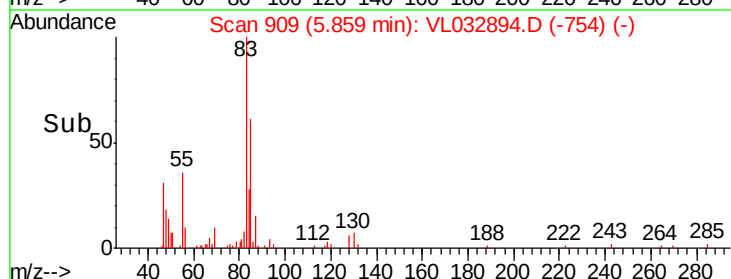
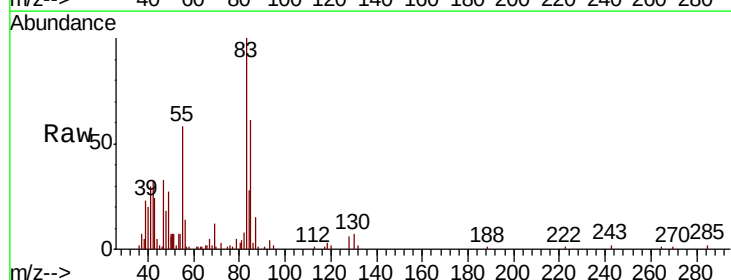
RT: 5.86 min Scan# 909

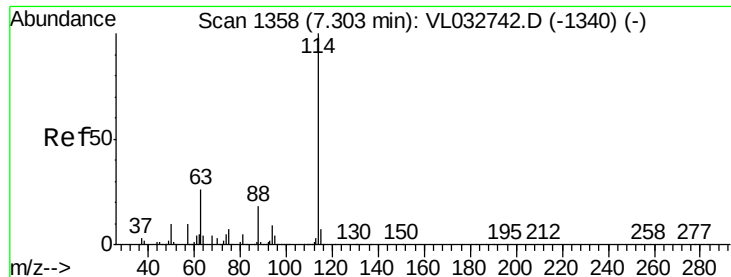
Delta R.T. -0.00 min

Lab File: VL032894.D

Acq: 5 Dec 2018 2:38

Tgt Ion:	83	Resp:	35533
Ion Ratio	Lower	Upper	
83	100		
85	60.9	54.2	81.4





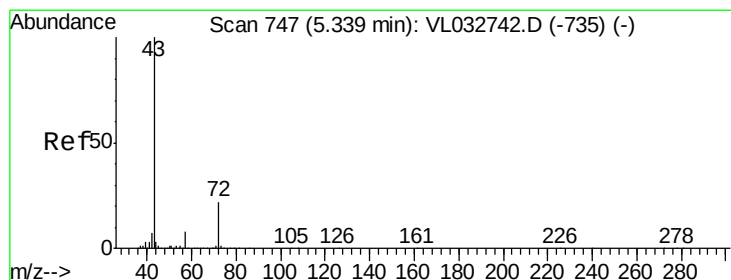
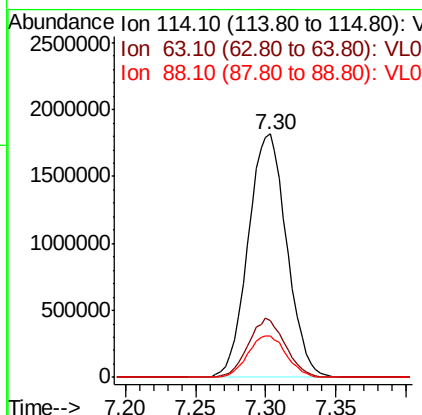
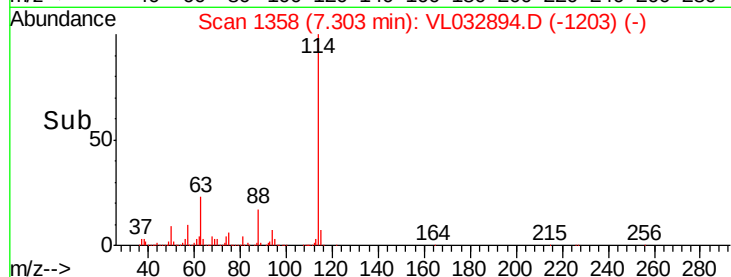
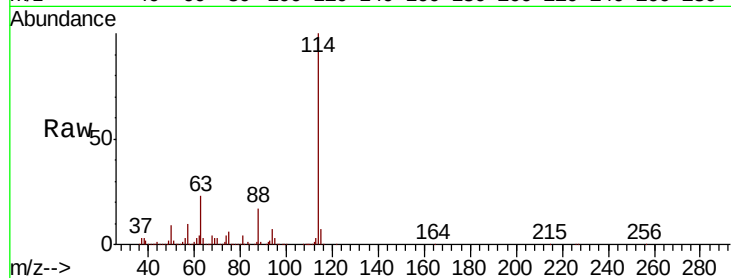
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1358
 Delta R.T. -0.00 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Tot Ion	Ratio	Lower	Upper
114	100		
63	23.2	20.9	31.3
88	17.2	14.4	21.6

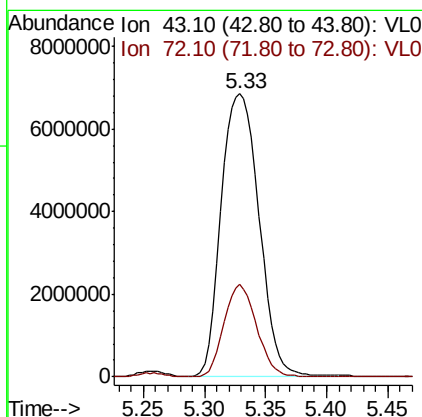
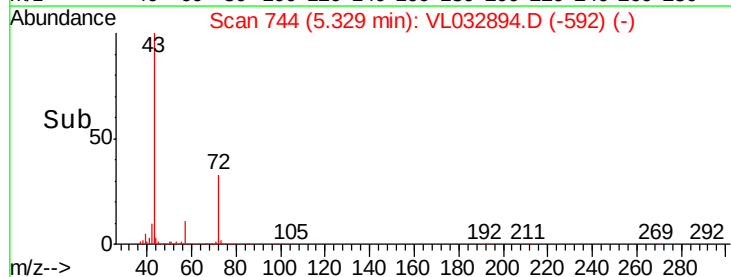
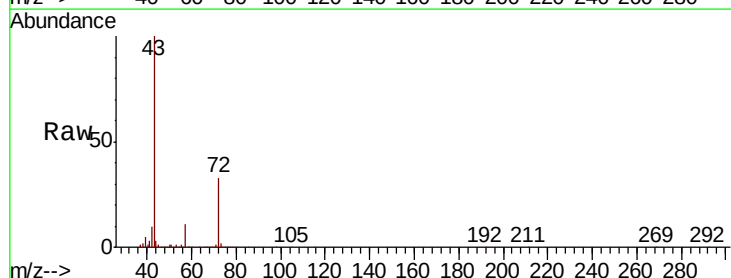
Manual Integrations
 APPROVED

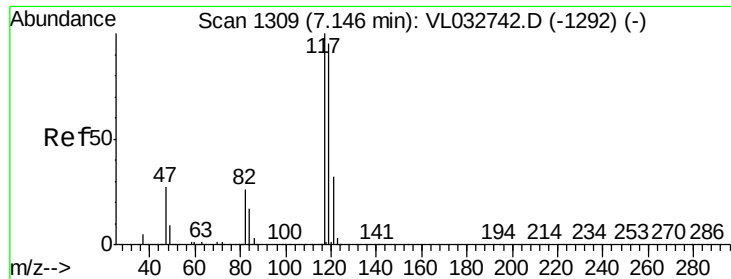
MMDadoda
 12/10/2018 1:01:35 PM



#34
 2-Butanone
 Concen: 82.460 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. -0.01 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Tgt Ion	Ratio	Lower	Upper
43	100		
72	28.4	18.4	27.6#





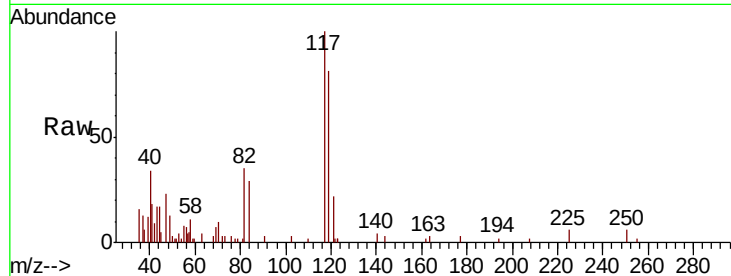
#35
Carbon Tetrachloride
Concen: 0.059 ppbv m
RT: 7.15 min Scan# 1309
Delta R.T. -0.00 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tot Ion	Ratio	Lower	Upper
117	100		
119	80.5	76.1	114.1
121	21.8	25.4	38.0#

Manual Integrations
APPROVED

MMDadoda
12/10/2018 1:01:35 PM

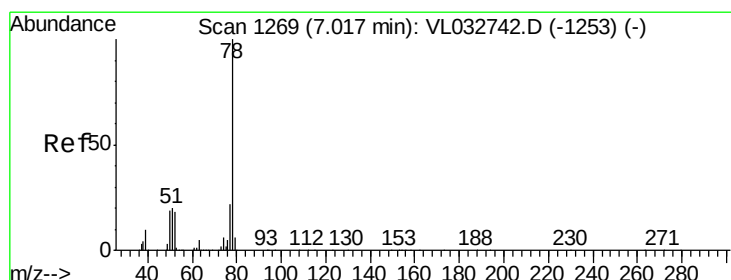
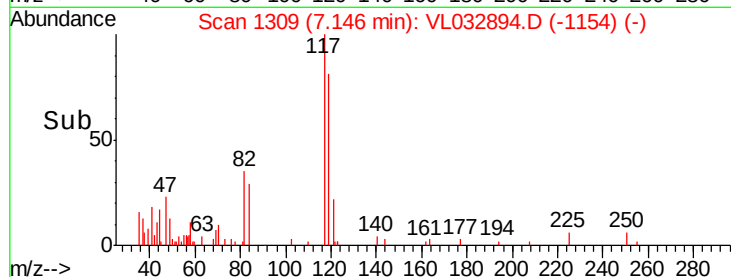
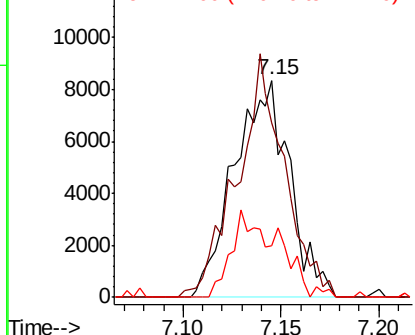


Abundance

Ion 117.00 (116.70 to 117.70): V

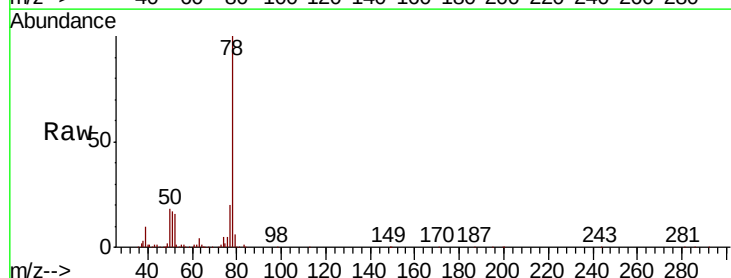
Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36
Benzene
Concen: 1.394 ppbv
RT: 7.01 min Scan# 1268
Delta R.T. -0.00 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.9	17.8	26.8
50	17.2	15.4	23.0

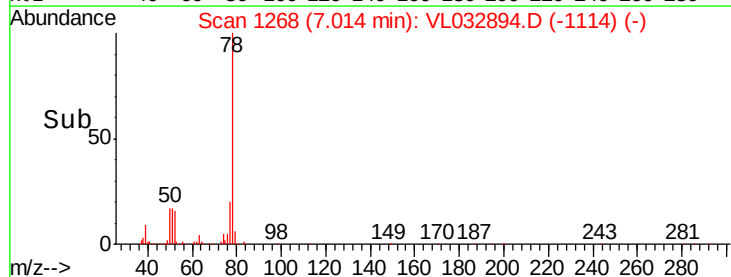
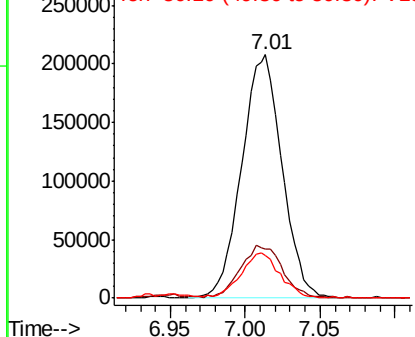


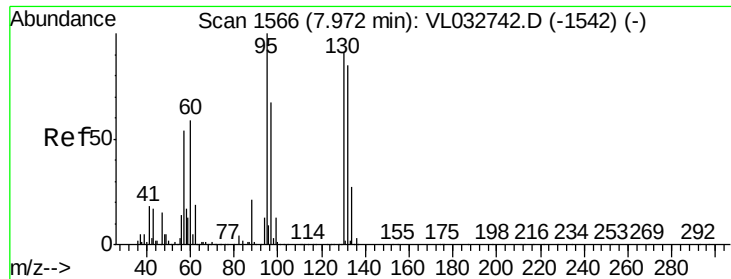
Abundance

Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





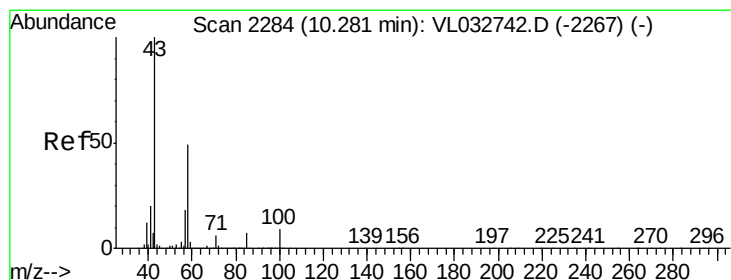
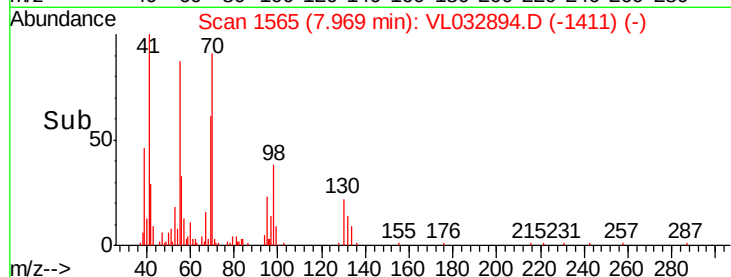
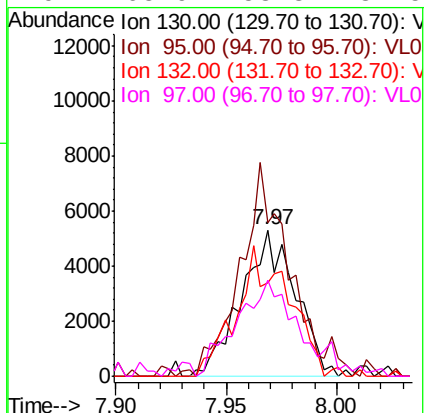
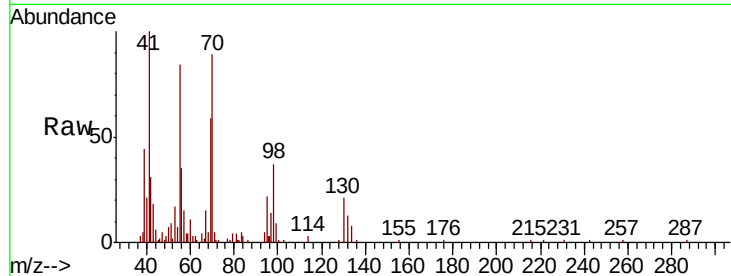
#38
 Trichloroethene
 Concen: 0.080 ppbv m
 RT: 7.97 min Scan# 1565
 Delta R.T. -0.00 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Tot Ion	Ratio	Lower	Upper
130	100		
95	105.1	87.7	131.5
132	64.0	74.6	111.8#
97	65.9	58.3	87.5

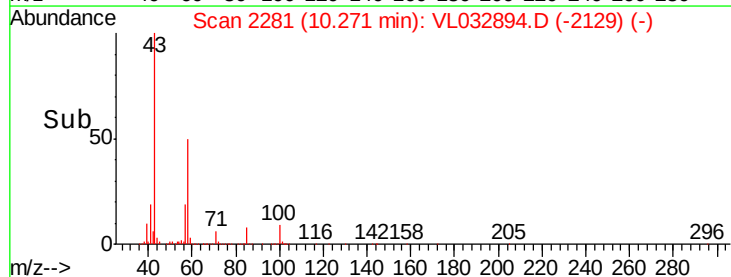
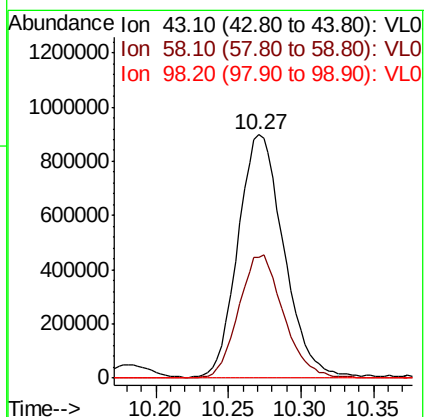
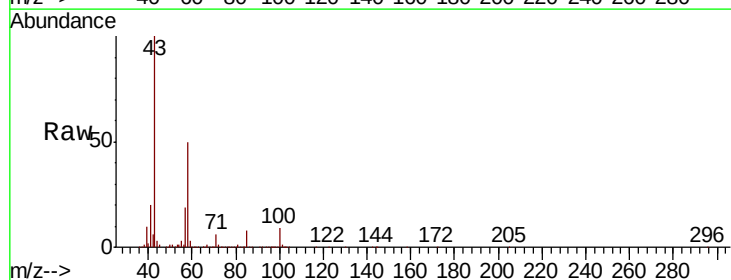
Manual Integrations
 APPROVED

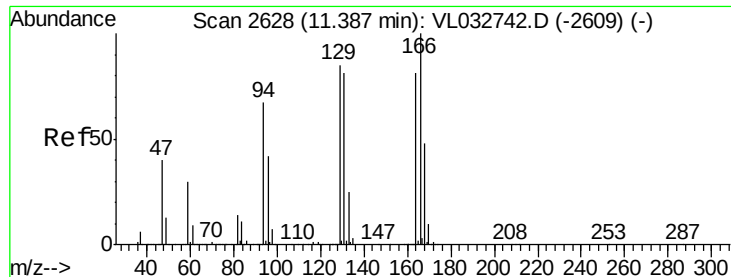
MMDadoda
 12/10/2018 1:01:35 PM



#51
 2-Hexanone
 Concen: 10.782 ppbv
 RT: 10.27 min Scan# 2281
 Delta R.T. -0.01 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Tgt Ion	Ratio	Lower	Upper
43	100		
58	49.8	38.9	58.3
98	0.4	0.2	0.4#





#52

Tetrachloroethene

Concen: 0.173 ppbv m

RT: 11.38 min Scan# 2625

Delta R.T. -0.01 min

Lab File: VL032894.D

Acq: 5 Dec 2018 2:38

Instrument :

MSVOA_L

ClientSampleId :

MMSV-08

Tot Ion:164 Resp: 16672

Ion Ratio Lower Upper

164 100

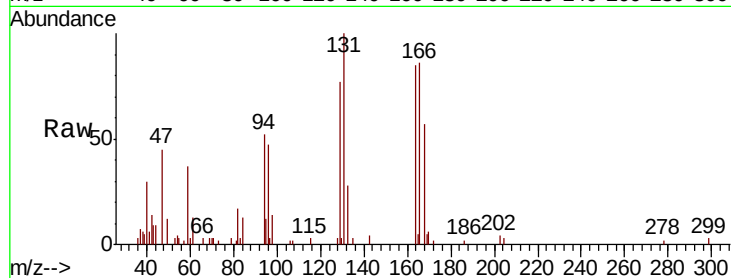
166 100.8 99.3 148.9

129 90.8 83.9 125.9

131 117.7 80.8 121.2

Manual Integrations
APPROVED

MMDadoda
12/10/2018 1:01:35 PM

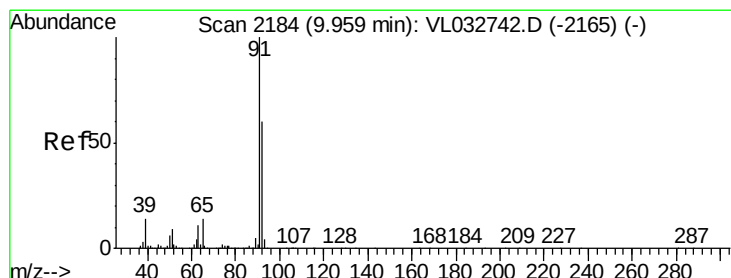
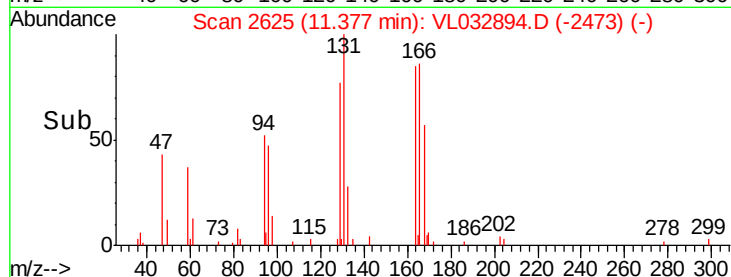
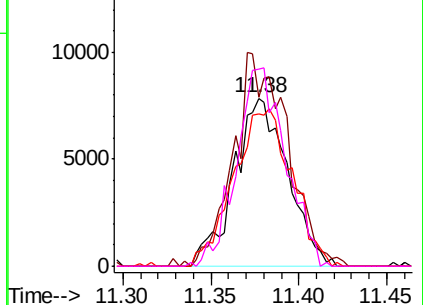


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 1.829 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032894.D

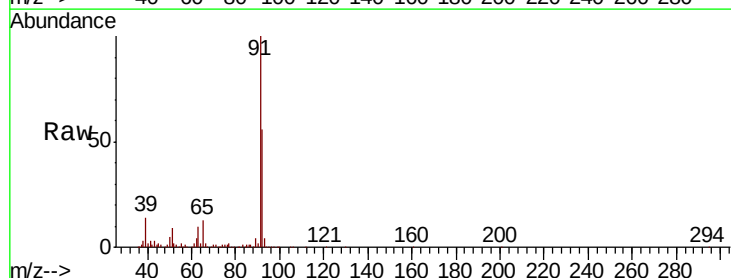
Acq: 5 Dec 2018 2:38

Tgt Ion: 91 Resp: 528659

Ion Ratio Lower Upper

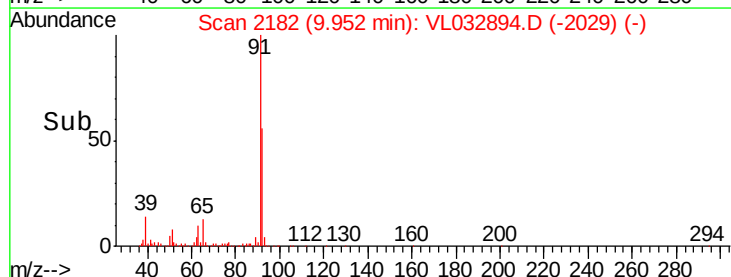
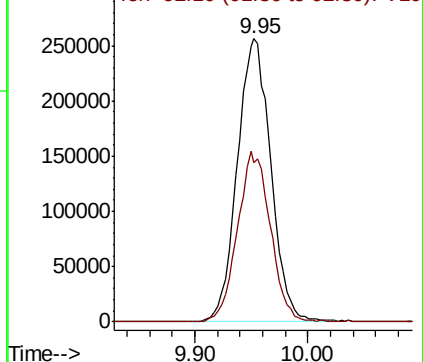
91 100

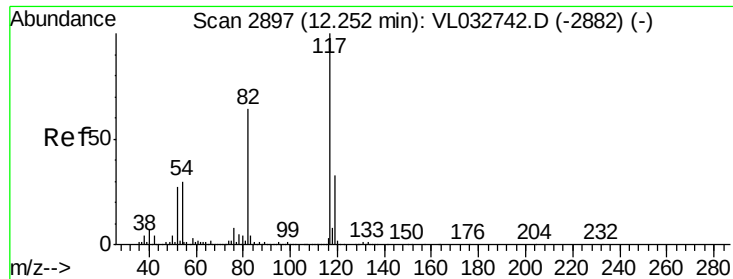
92 58.9 47.9 71.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





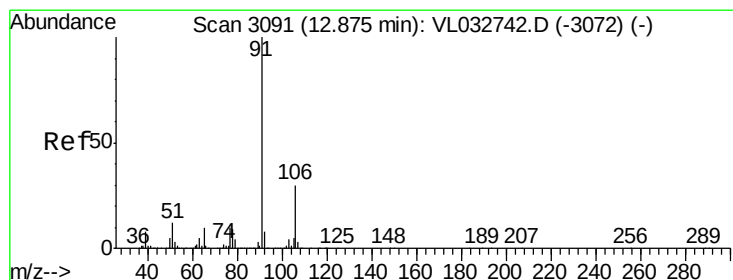
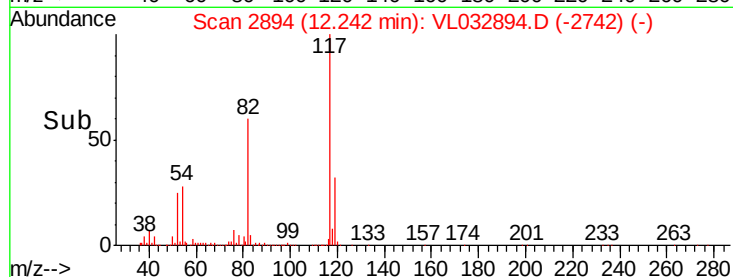
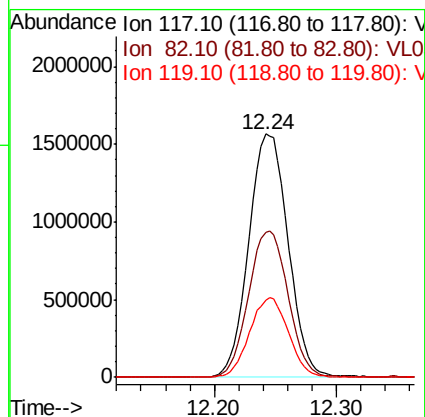
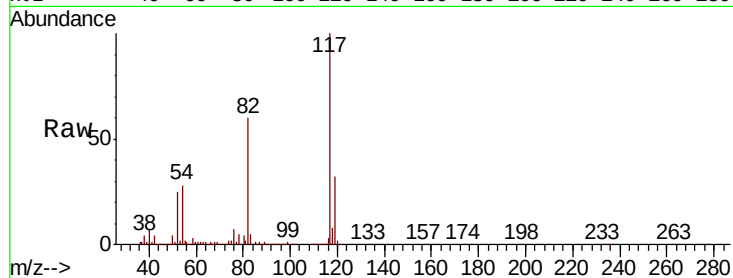
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2894
Delta R.T. -0.01 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tot Ion:117 Resp: 3485920
Ion Ratio Lower Upper
117 100
82 61.0 51.0 76.6
119 32.3 28.0 42.0

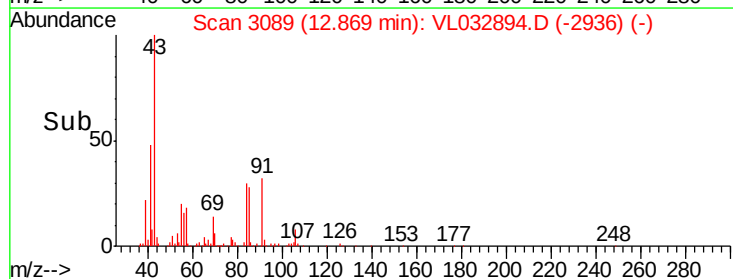
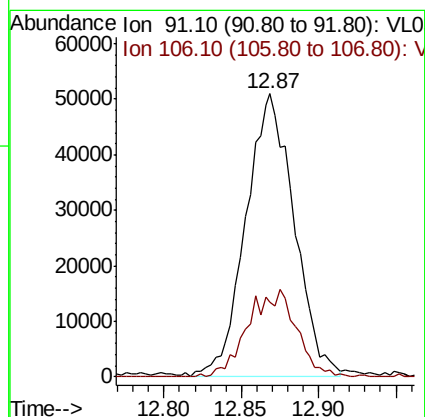
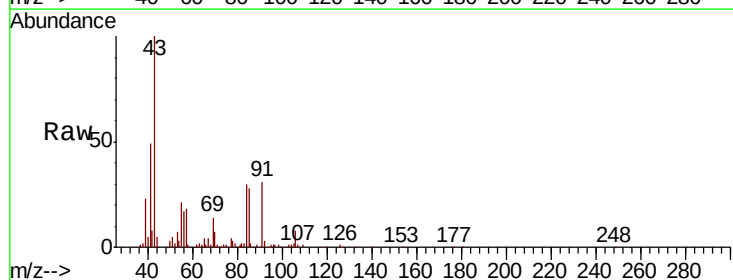
Manual Integrations
APPROVED

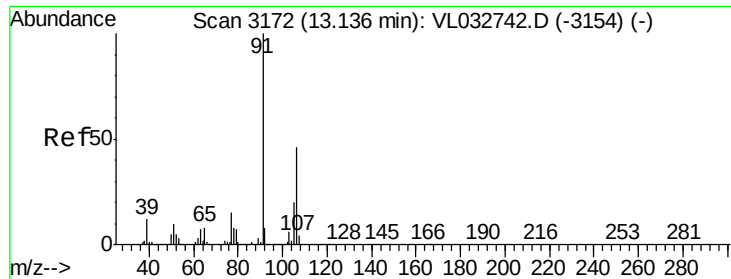
MMDadoda
12/10/2018 1:01:35 PM



#58
Ethyl Benzene
Concen: 0.264 ppbv
RT: 12.87 min Scan# 3089
Delta R.T. -0.01 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Tgt Ion: 91 Resp: 110958
Ion Ratio Lower Upper
91 100
106 26.8 23.6 35.4





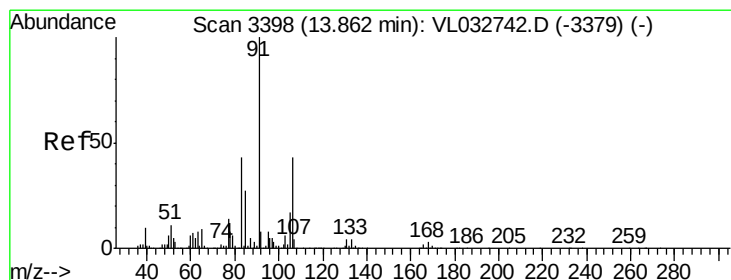
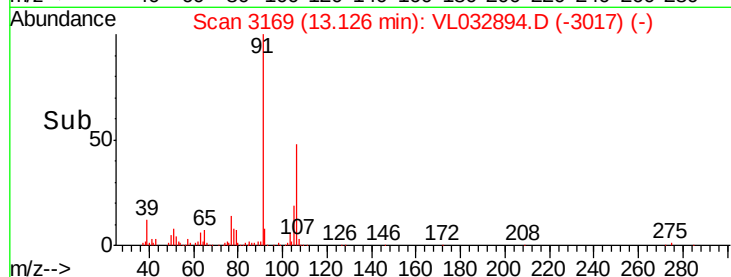
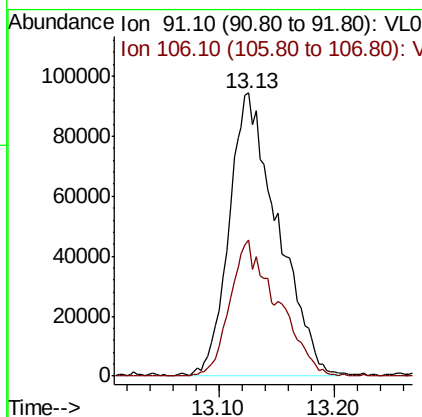
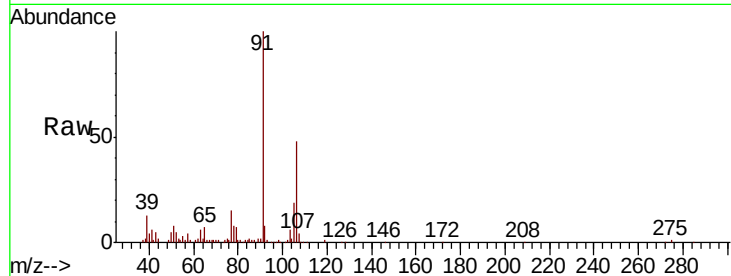
#59
m/p-Xylene
Concen: 0.740 ppbv m
RT: 13.13 min Scan# 3169
Delta R.T. -0.01 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Instrument :
MSVOA_L
ClientSampled :
MMSV-08

Tot Ion: 91 Resp: 276395
Ion Ratio Lower Upper
91 100
106 46.9 36.1 54.1

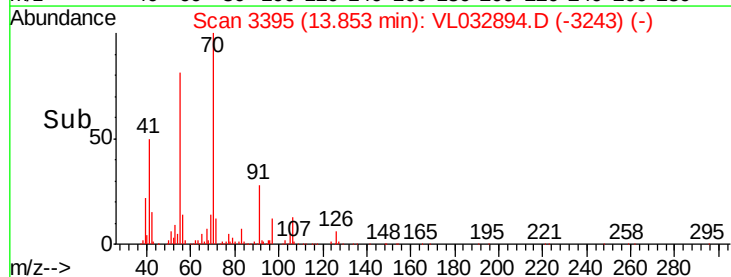
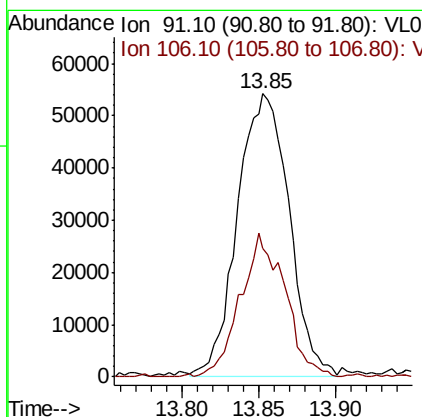
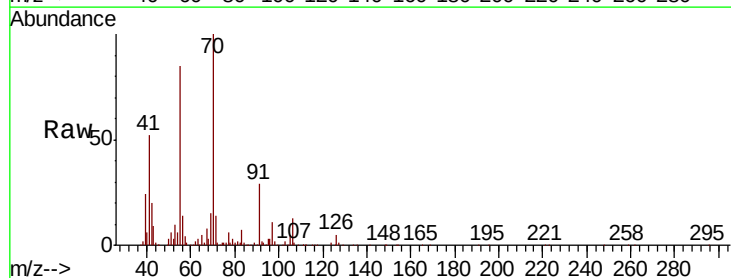
Manual Integrations
APPROVED

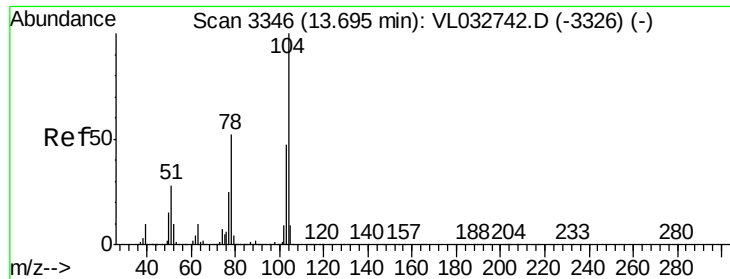
MMDadoda
12/10/2018 1:01:35 PM



#60
o-Xylene
Concen: 0.336 ppbv m
RT: 13.85 min Scan# 3395
Delta R.T. -0.01 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Tgt Ion: 91 Resp: 126111
Ion Ratio Lower Upper
91 100
106 44.5 21.9 65.7





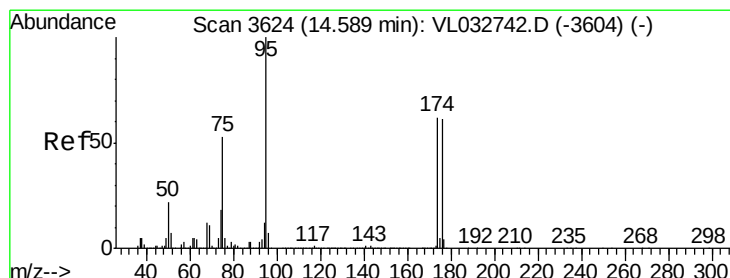
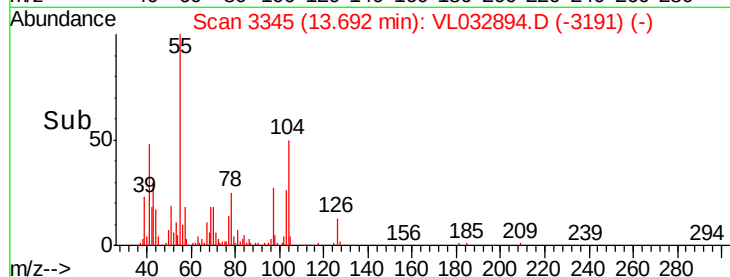
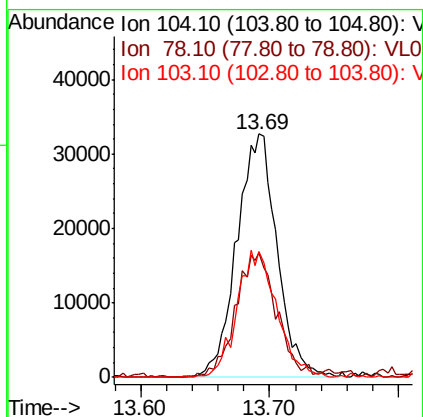
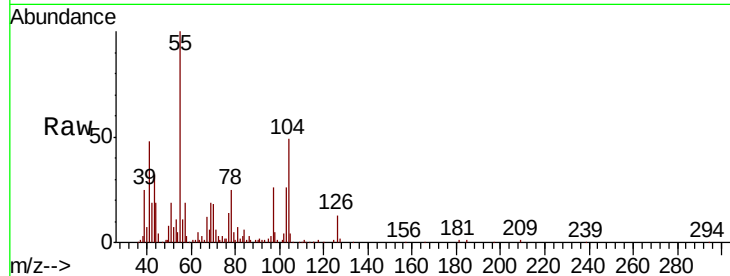
#61
Stvrene
Concen: 0.290 ppbv
RT: 13.69 min Scan# 3345
Delta R.T. -0.00 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Instrument :
MSVOA_L
ClientSampleId :
MMSV-08

Tot Ion	Ratio	Lower	Upper
104	100		
78	51.8	42.2	63.4
103	52.1	38.2	57.2

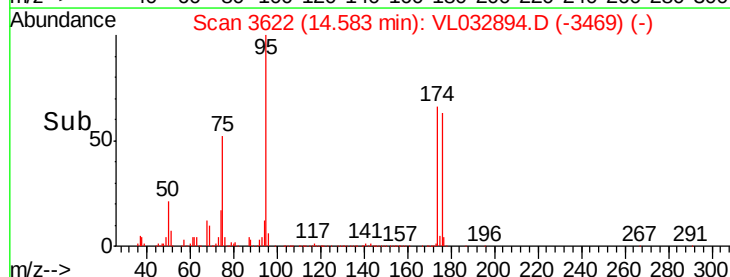
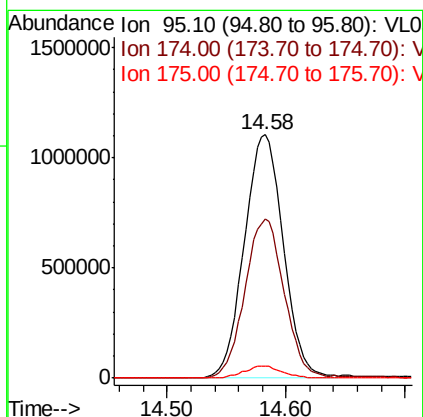
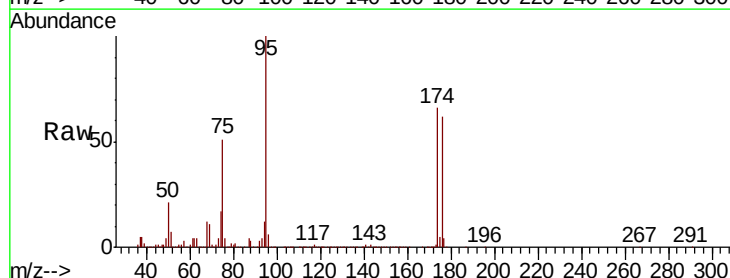
Manual Integrations
APPROVED

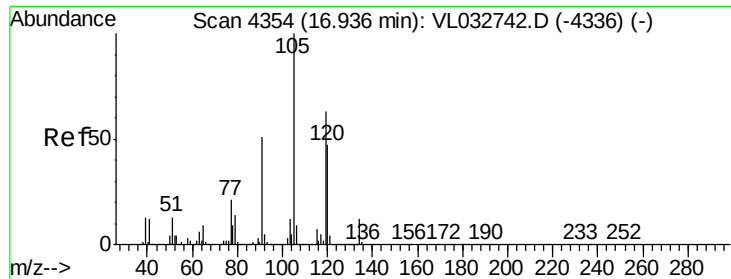
MMDadoda
12/10/2018 1:01:35 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 9.631 ppbv
RT: 14.58 min Scan# 3622
Delta R.T. -0.01 min
Lab File: VL032894.D
Acq: 5 Dec 2018 2:38

Tgt Ion	Ratio	Lower	Upper
95	100		
174	66.8	50.7	76.1
175	4.9	3.8	5.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.230 ppbv
 RT: 16.93 min Scan# 4353
 Delta R.T. -0.00 min
 Lab File: VL032894.D
 Acq: 5 Dec 2018 2:38

Instrument :
 MSVOA_L
 ClientSampleId :
 MMSV-08

Tot Ion:	105	Resp:	98873
Ion Ratio	Lower	Upper	
105	100		
120	37.4	37.6	56.4#
91	12.4	42.5	63.7#
77	8.9	17.4	26.2#

Manual Integrations
 APPROVED

MMDadoda
 12/10/2018 1:01:35 PM

