

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
 Data File : VL034226.D
 Acq On : 7 Oct 2019 17:37
 Operator : SY/AP
 Sample : K5225-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA4

Manual Integrations
 APPROVED

MMDadoda
 10/11/2019 5:04:46 PM

Quant Time: Oct 09 03:05:47 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 18
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1194937	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.21	114	1946862	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.15	117	1974752	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1744608	10.17	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	46414	0.263	ppbv	99
3) Chlorodifluoromethane	2.97	51	1405899	10.034	ppbv	100
4) Chloromethane	3.12	50	37747	0.458	ppbv	98
9) Propene	3.00	41	78449m	1.135	ppbv	
11) Trichlorofluoromethane	3.95	101	47285	0.294	ppbv #	81
13) Ethanol	3.60	45	1120782	66.958	ppbv	97
15) Acetone	3.84	43	918247	5.734	ppbv	98
19) Isopropyl Alcohol	3.97	45	388935	3.949	ppbv #	98
20) Methylene Chloride	4.34	84	89517	1.939	ppbv	93
26) Hexane	5.71	57	122171	0.970	ppbv #	60
34) 2-Butanone	5.27	43	89786m	0.452	ppbv	
35) Carbon Tetrachloride	7.05	117	12465m	0.077	ppbv	
36) Benzene	6.92	78	33302m	0.155	ppbv	
44) 2,2,4-Trimethylpentane	7.92	57	52681	0.127	ppbv #	77
53) Toluene	9.86	91	122633	0.522	ppbv	94
76) 1,4-Dichlorobenzene	17.22	146	1398846	8.324	ppbv	99
79) Naphthalene	22.31	128	55520m	0.206	ppbv	

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

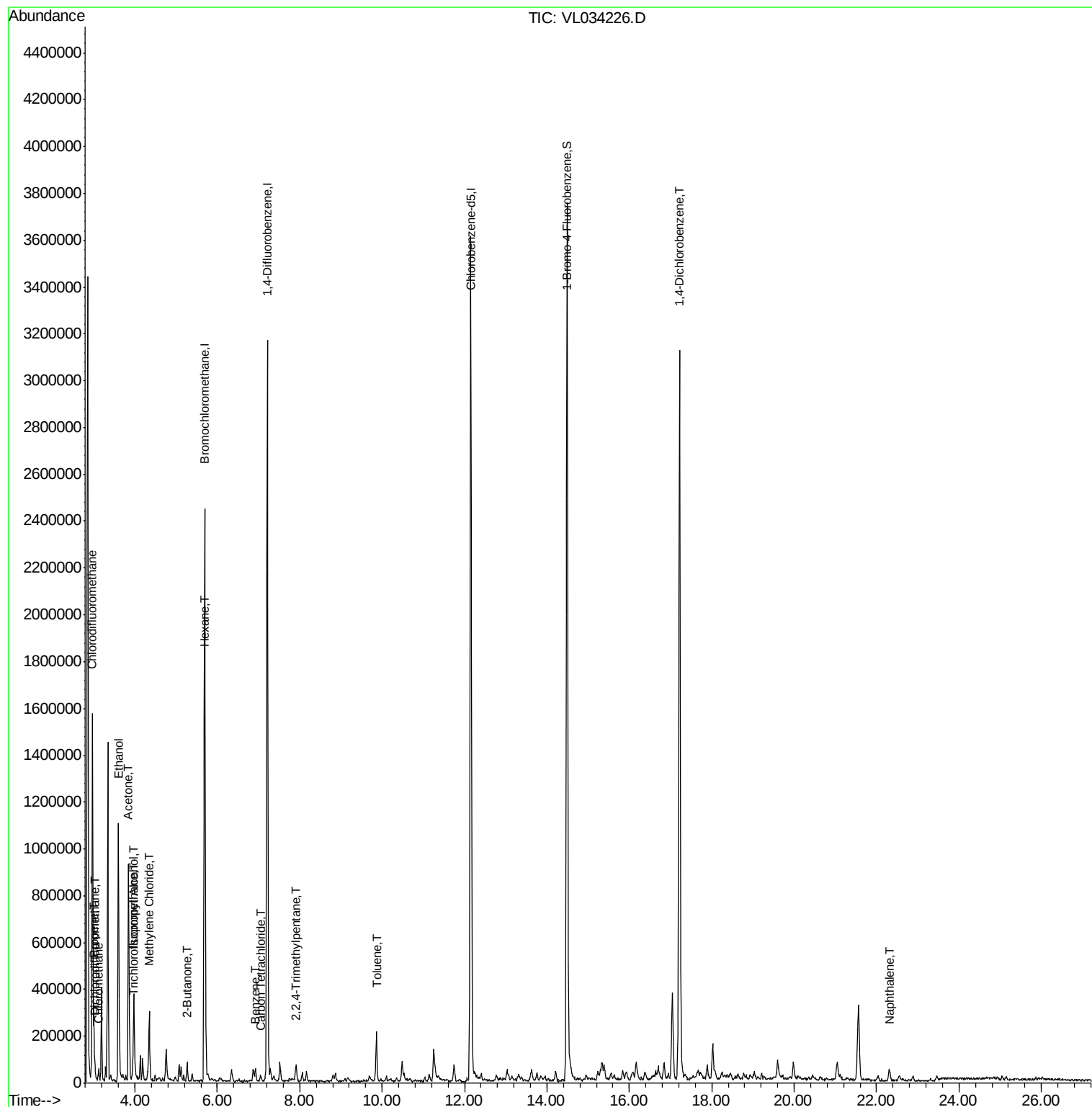
Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
Data File : VL034226.D
Acq On : 7 Oct 2019 17:37
Operator : SY/AP
Sample : K5225-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

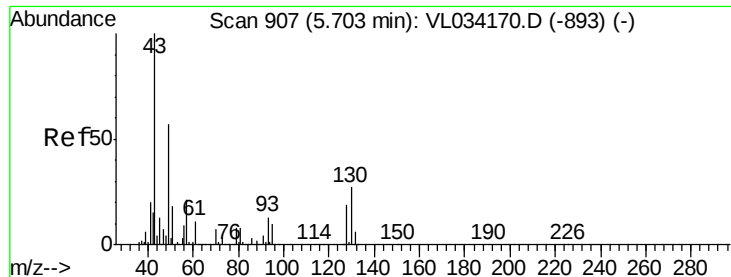
Instrument :
MSVOA_L
ClientSampleId :
IA4

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM

Quant Time: Oct 09 03:05:47 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 18 12:53:31 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. -0.02 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

Instrument :

MSVOA_L

ClientSampled :

IA4

Tgt Ion: 49 Resp: 1194937

Ion Ratio Lower Upper

49 100

128 34.5 17.6 52.9

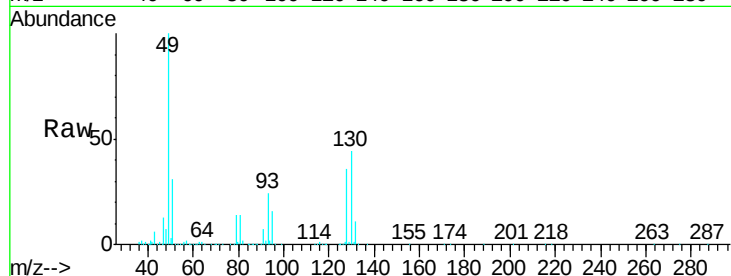
130 45.2 22.3 66.9

Manual Integrations

APPROVED

MMDadoda

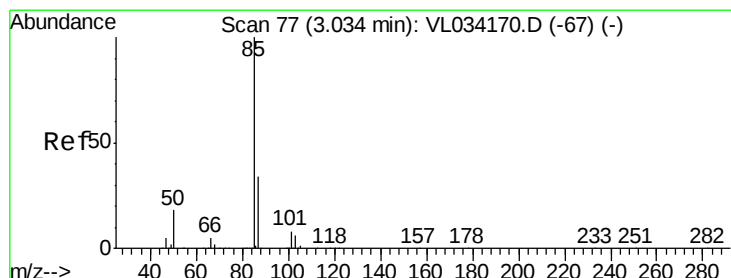
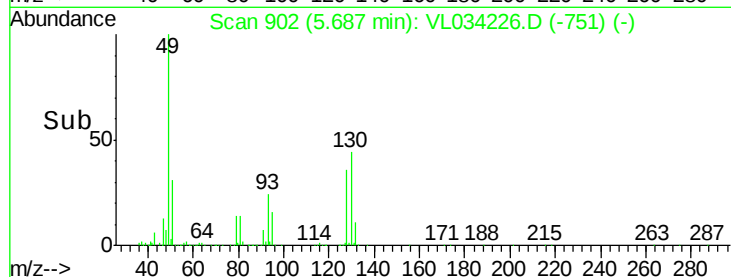
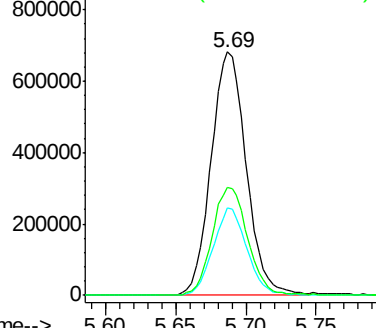
10/11/2019 5:04:46 PM



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: 0.263 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.01 min

Lab File: VL034226.D

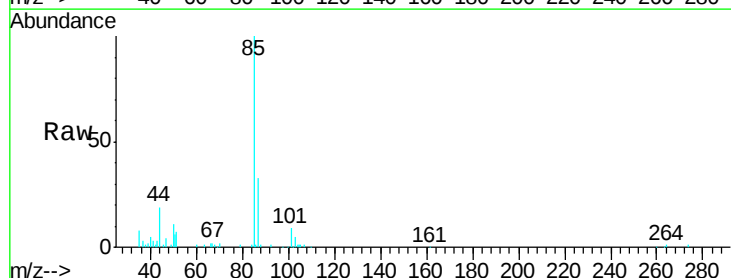
Acq: 7 Oct 2019 17:37

Tgt Ion: 85 Resp: 46414

Ion Ratio Lower Upper

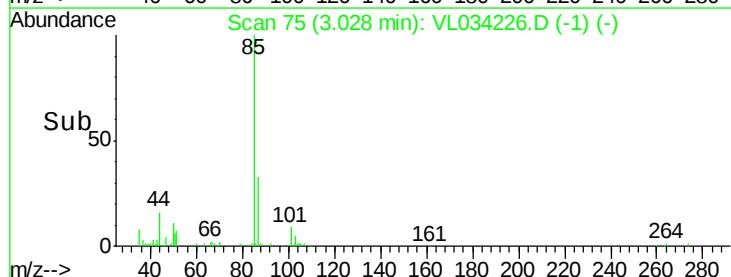
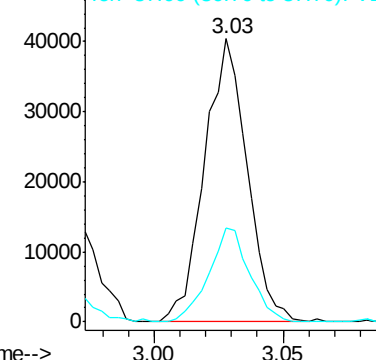
85 100

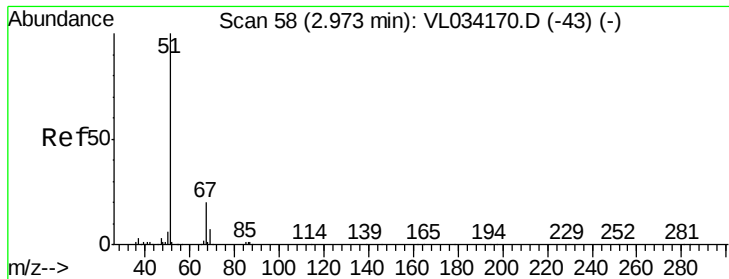
87 33.4 27.2 40.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 10.034 ppbv

RT: 2.97 min Scan# 56

Delta R.T. -0.01 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

IA4

Tgt Ion: 51 Resp: 1405899

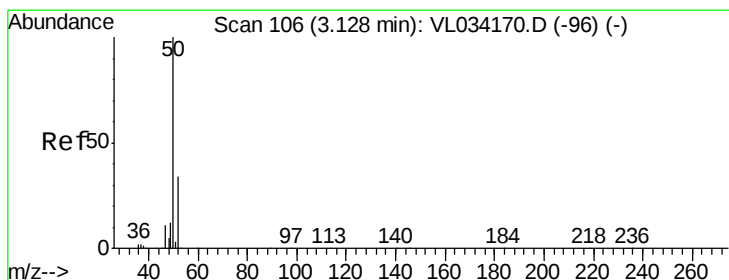
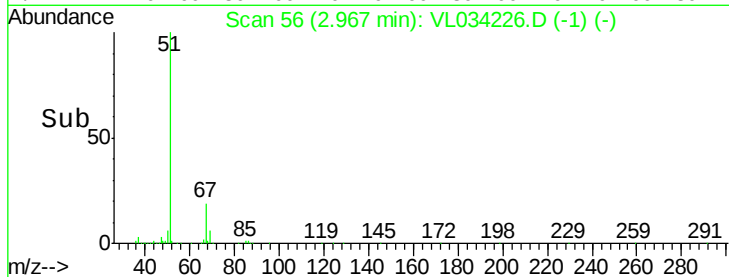
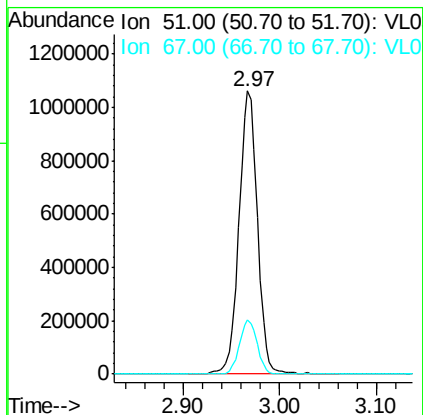
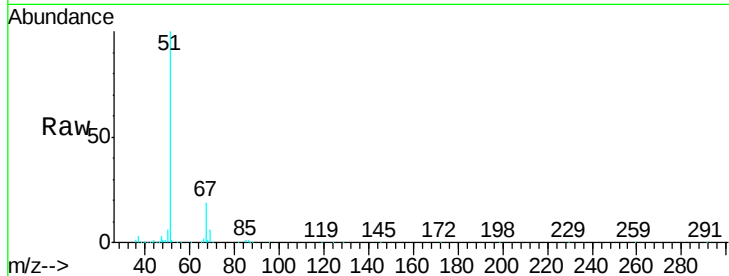
Ion Ratio Lower Upper

51 100

67 18.4 14.8 22.2

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM



#4

Chloromethane

Concen: 0.458 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.00 min

Lab File: VL034226.D

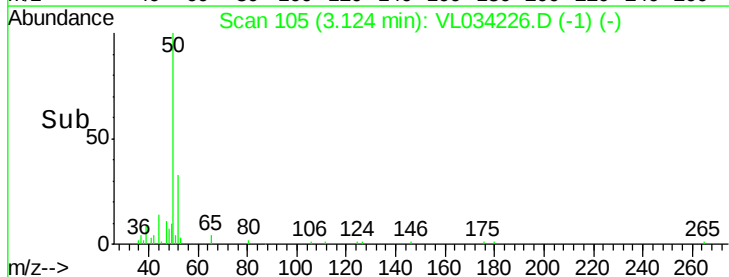
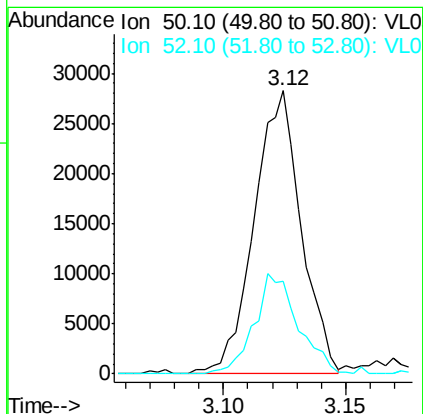
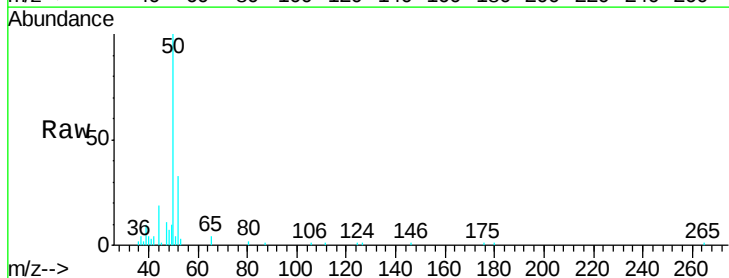
Acq: 7 Oct 2019 17:37

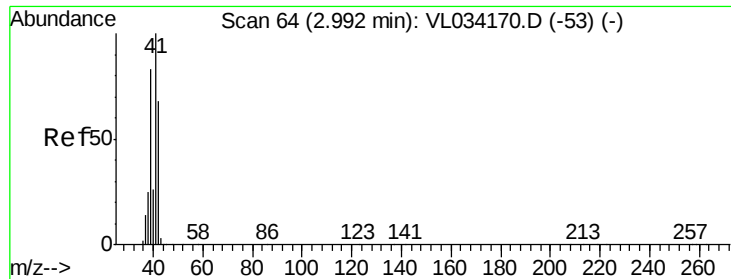
Tgt Ion: 50 Resp: 37747

Ion Ratio Lower Upper

50 100

52 32.8 27.1 40.7





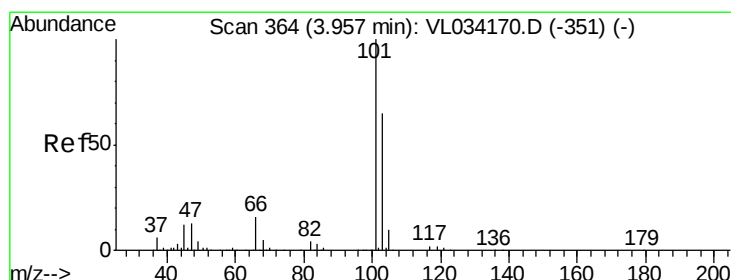
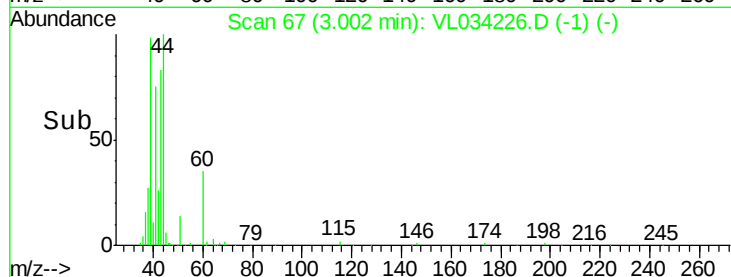
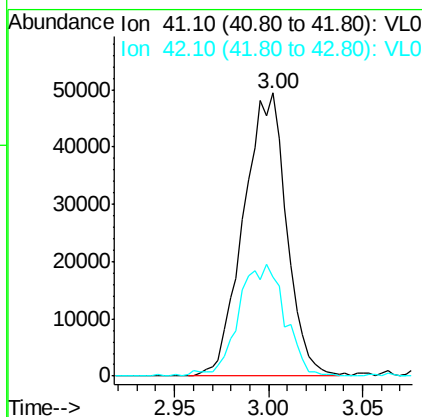
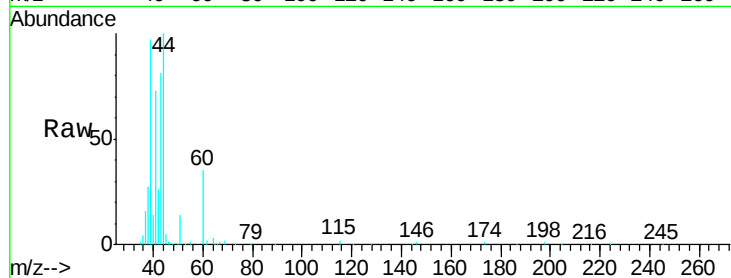
#9
 Propene
 Concen: 1.135 ppbv m
 RT: 3.00 min Scan# 67
 Delta R.T. 0.01 min
 Lab File: VL034226.D
 Acq: 7 Oct 2019 17:37

Instrument :
 MSVOA_L
 ClientSampleId :
 IA4

Tgt Ion: 41 Resp: 78449
 Ion Ratio Lower Upper
 41 100
 42 77.8 55.8 83.6

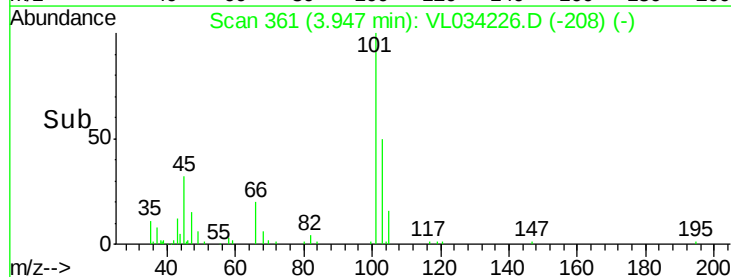
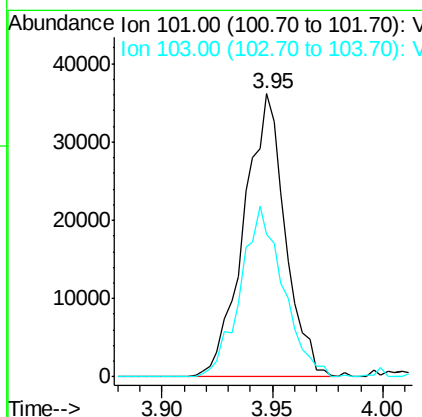
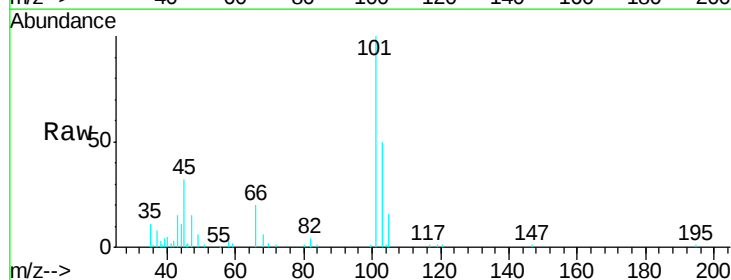
Manual Integrations
 APPROVED

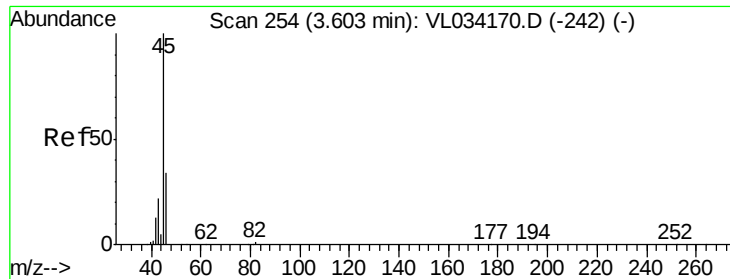
MMDadoda
 10/11/2019 5:04:46 PM



#11
 Trichlorofluoromethane
 Concen: 0.294 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. -0.01 min
 Lab File: VL034226.D
 Acq: 7 Oct 2019 17:37

Tgt Ion: 101 Resp: 47285
 Ion Ratio Lower Upper
 101 100
 103 50.3 52.1 78.1#





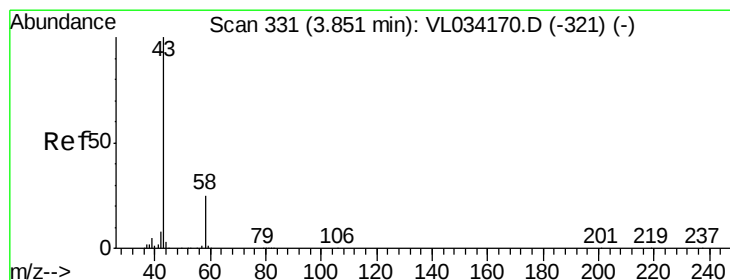
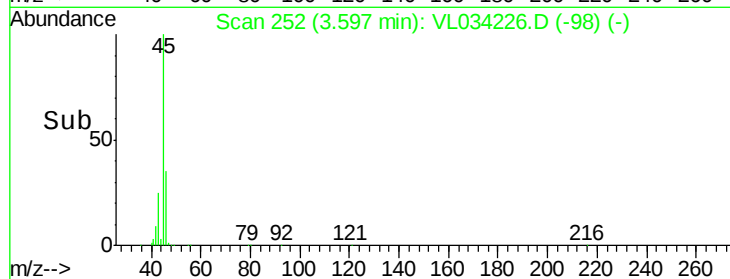
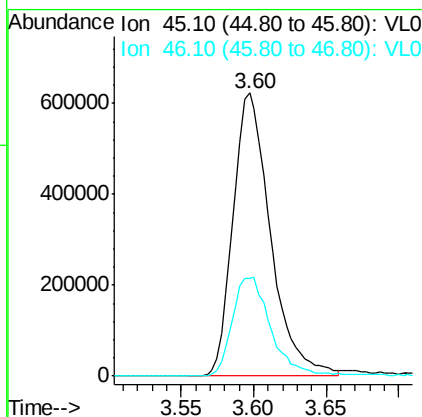
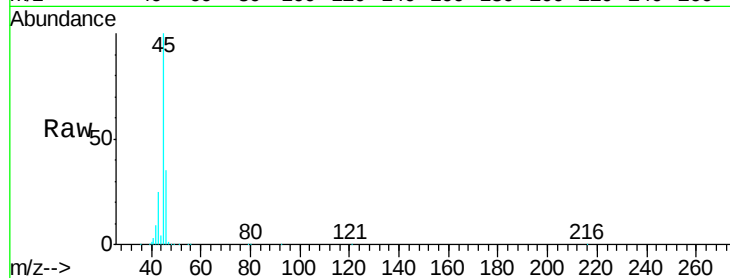
#13
Ethanol
Concen: 66.958 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL034226.D
Acq: 7 Oct 2019 17:37

Instrument :
MSVOA_L
ClientSampled :
IA4

Tgt Ion: 45 Resp: 1120782
Ion Ratio Lower Upper
45 100
46 36.9 15.5 61.9

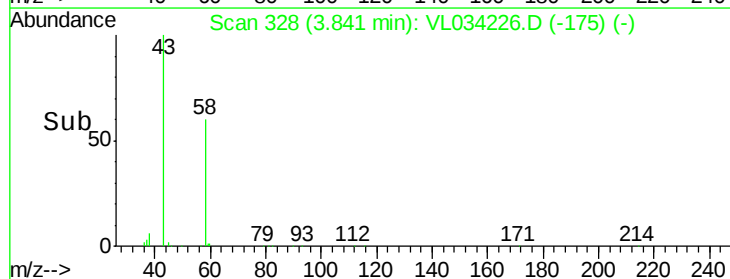
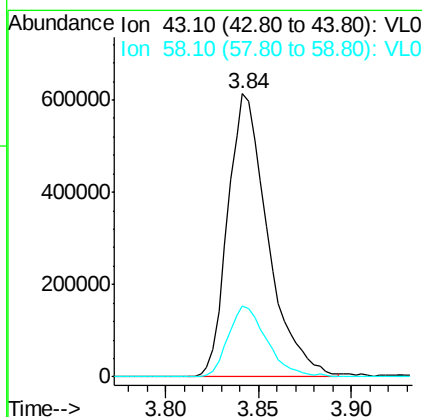
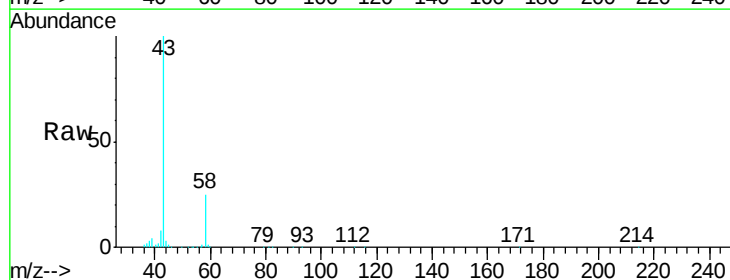
Manual Integrations
APPROVED

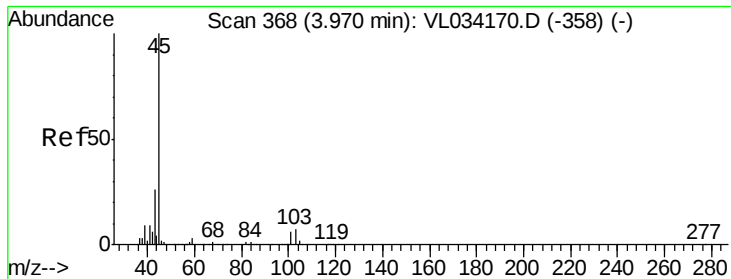
MMDadoda
10/11/2019 5:04:46 PM



#15
Acetone
Concen: 5.734 ppbv
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL034226.D
Acq: 7 Oct 2019 17:37

Tgt Ion: 43 Resp: 918247
Ion Ratio Lower Upper
43 100
58 24.6 20.5 30.7





#19

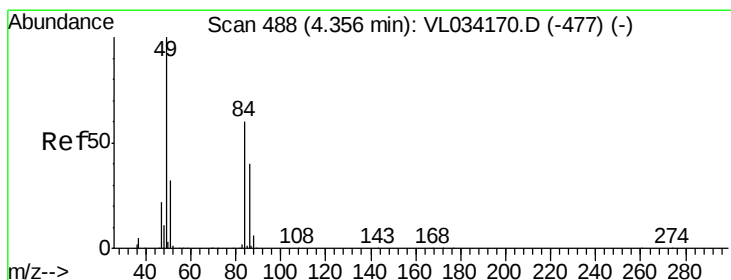
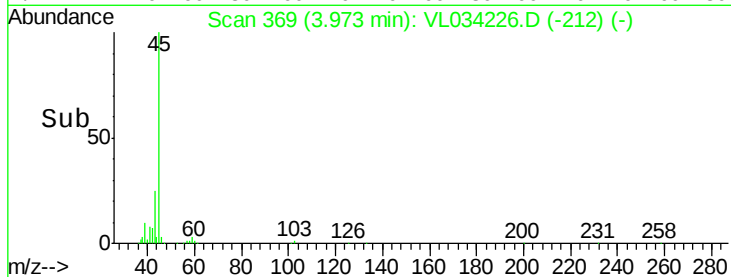
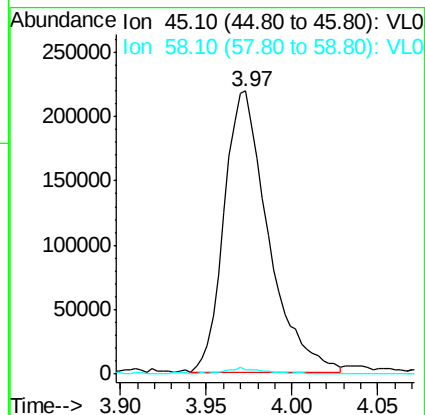
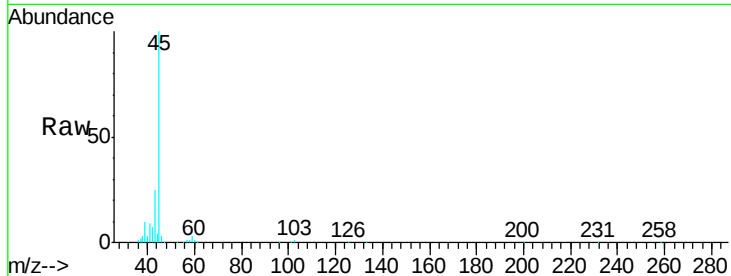
Isopropyl Alcohol
 Concen: 3.949 ppbv
 RT: 3.97 min Scan# 369
 Delta R.T. 0.00 min
 Lab File: VL034226.D
 Acq: 7 Oct 2019 17:37

Instrument :
 MSVOA_L
 ClientSampled :
 IA4

Tgt Ion	Ratio	Resp Lower	Upper
45	100		
58	2.4	1.4	2.0#

Manual Integrations
 APPROVED

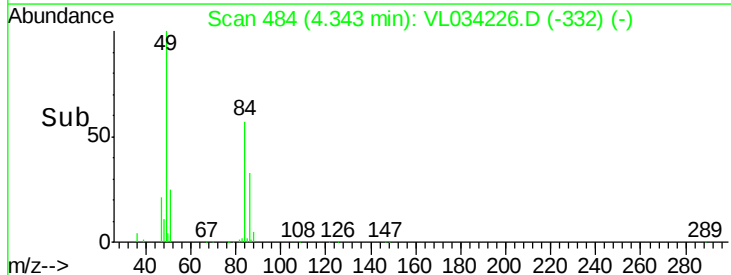
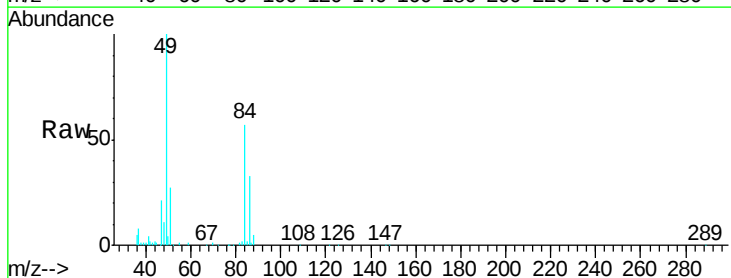
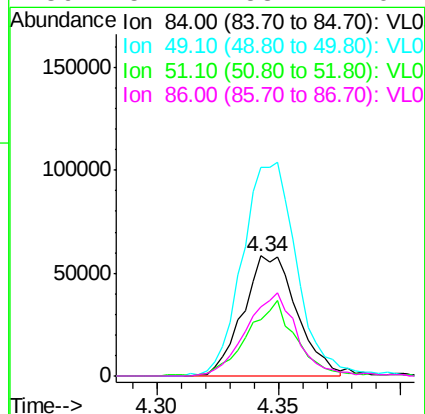
MMDadoda
 10/11/2019 5:04:46 PM

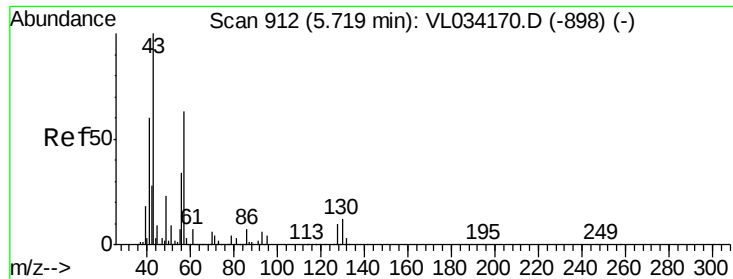


#20

Methylene Chloride
 Concen: 1.939 ppbv
 RT: 4.34 min Scan# 484
 Delta R.T. -0.01 min
 Lab File: VL034226.D
 Acq: 7 Oct 2019 17:37

Tgt Ion	Ratio	Resp Lower	Upper
84	100		
49	173.0	133.8	200.8
51	46.6	43.6	65.4
86	57.7	53.1	79.7





#26

Hexane

Concen: 0.970 ppbv

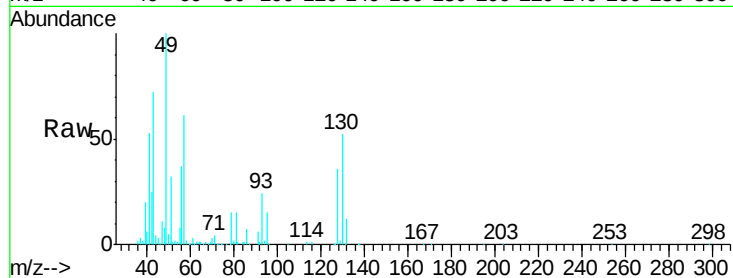
RT: 5.71 min Scan# 909

Delta R.T. -0.01 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

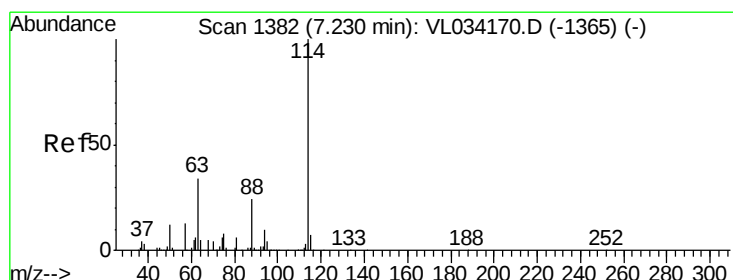
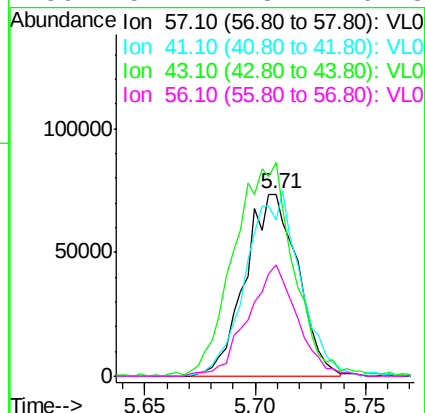
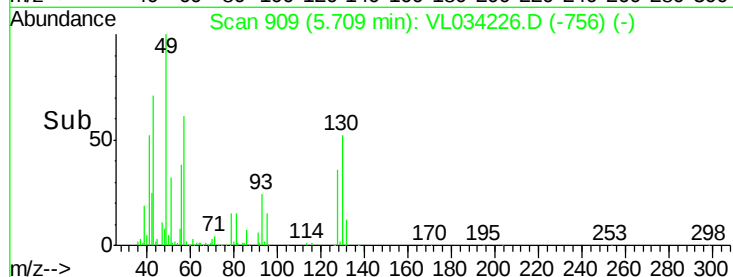
Instrument :
MSVOA_L
ClientSampled :
IA4



Tgt Ion	Ratio	Lower	Upper
57	100		
41	104.2	78.5	117.7
43	132.3	189.5	284.3#
56	57.4	43.2	64.8

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM



#33

1,4-Difluorobenzene

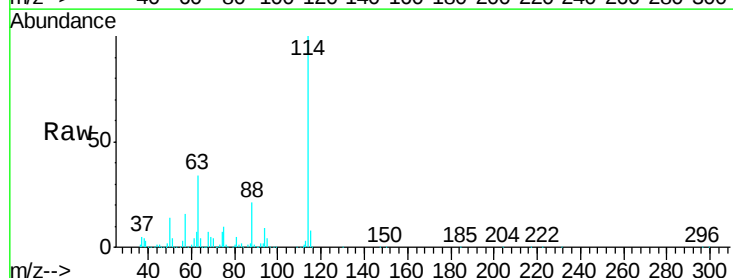
Concen: 10.000 ppbv

RT: 7.21 min Scan# 1376

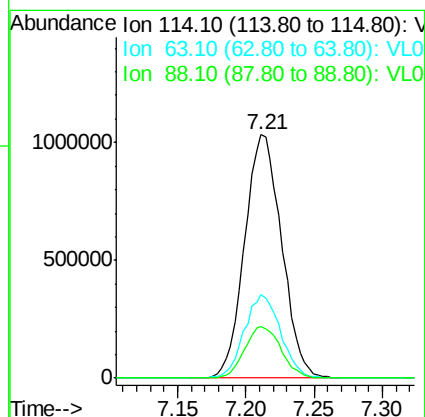
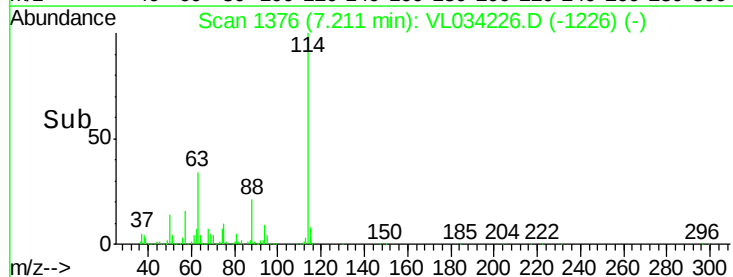
Delta R.T. -0.02 min

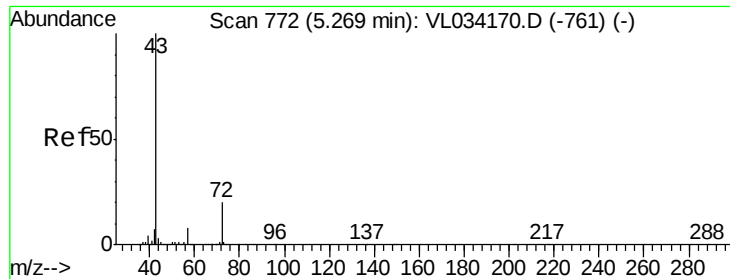
Lab File: VL034226.D

Acq: 7 Oct 2019 17:37



Tgt Ion	Ratio	Lower	Upper
114	100		
63	33.6	27.8	41.6
88	20.9	17.1	25.7





#34

2-Butanone

Concen: 0.452 ppbv m

RT: 5.27 min Scan# 771

Delta R.T. -0.00 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

IA4

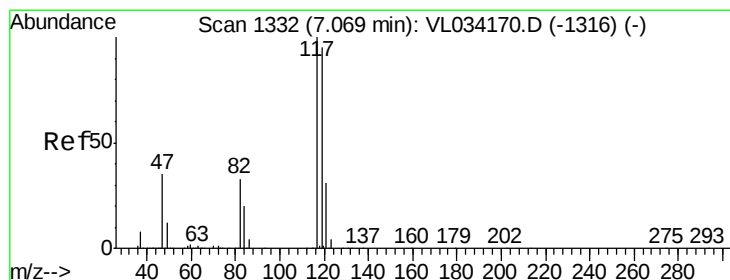
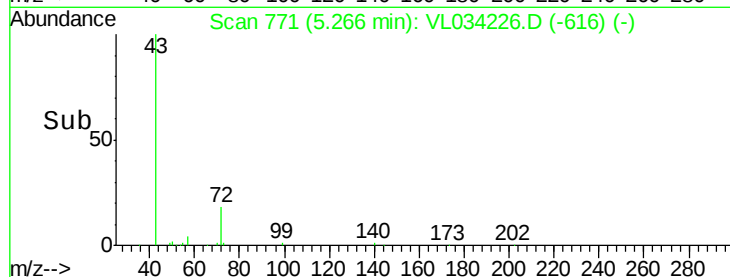
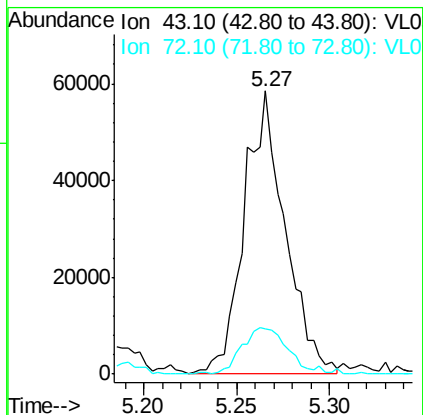
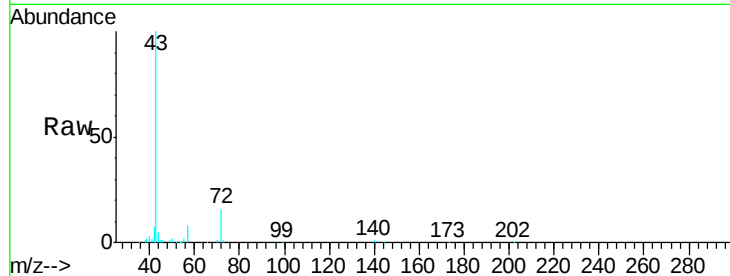
Tgt Ion: 43 Resp: 89786
Ion Ratio Lower Upper

43 100

72 0.0 15.0 22.6#

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM



#35

Carbon Tetrachloride

Concen: 0.077 ppbv m

RT: 7.05 min Scan# 1326

Delta R.T. -0.02 min

Lab File: VL034226.D

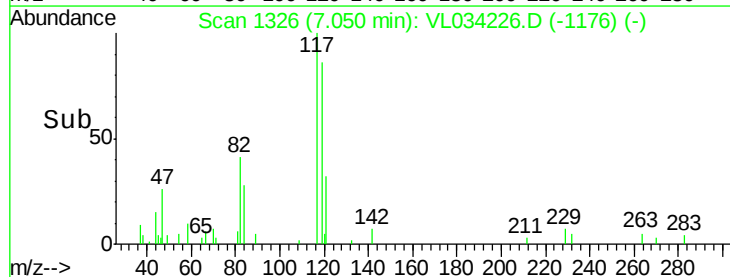
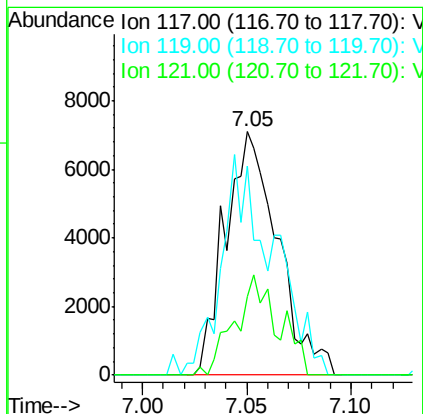
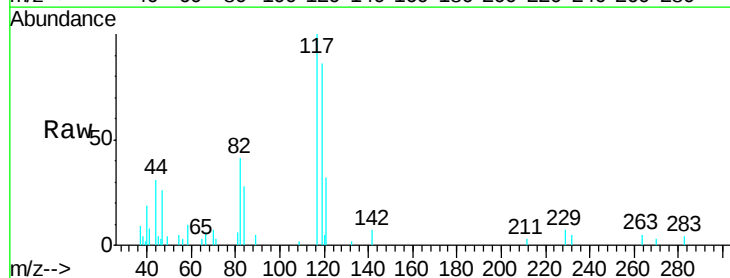
Acq: 7 Oct 2019 17:37

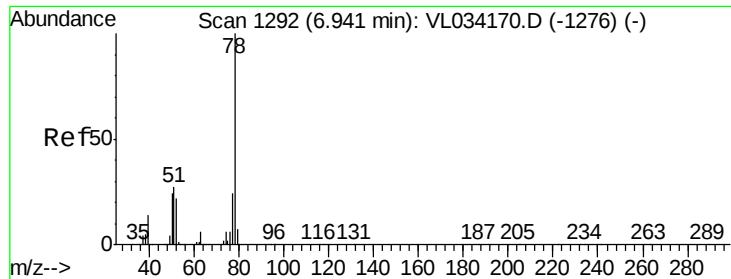
Tgt Ion: 117 Resp: 12465
Ion Ratio Lower Upper

117 100

119 86.0 75.8 113.6

121 32.1 25.0 37.6





#36

Benzene

Concen: 0.155 ppbv m

RT: 6.92 min Scan# 1286

Delta R.T. -0.02 min

Lab File: VL034226.D

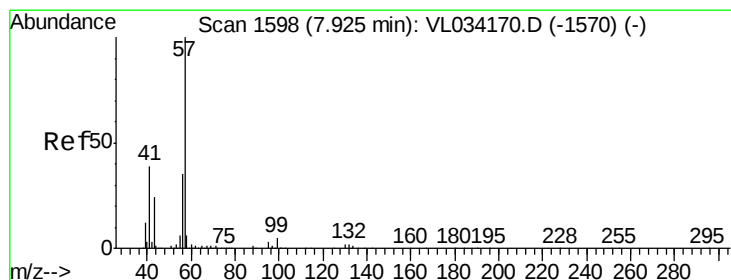
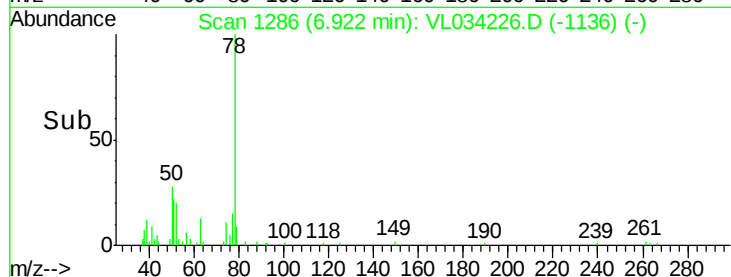
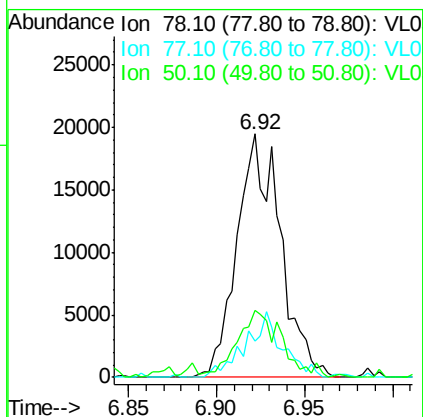
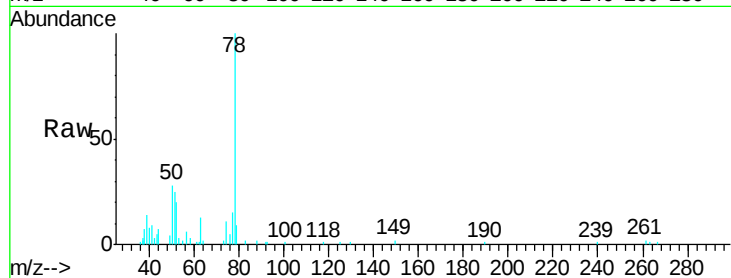
Acq: 7 Oct 2019 17:37

Instrument :
MSVOA_L
ClientSampled :
IA4

Tgt Ion:	78	Resp:	33302
Ion	Ratio	Lower	Upper
78	100		
77	14.7	19.0	28.4#
50	27.7	18.9	28.3

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM



#44

2,2,4-Trimethylpentane

Concen: 0.127 ppbv

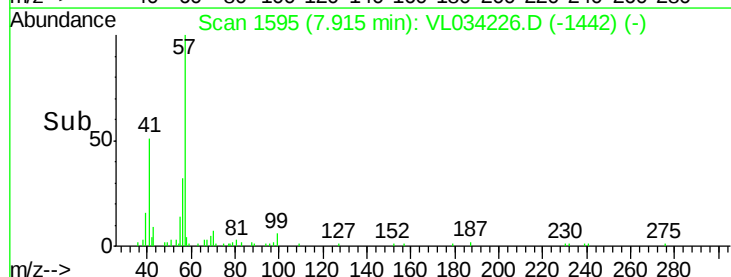
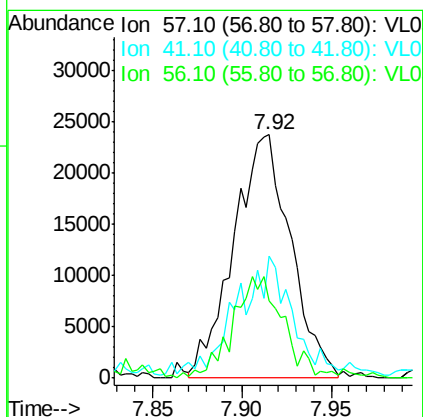
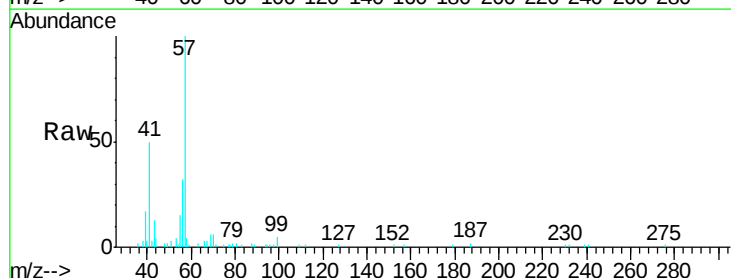
RT: 7.92 min Scan# 1595

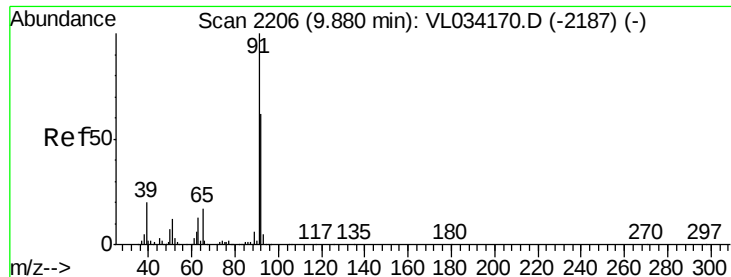
Delta R.T. -0.01 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

Tgt Ion:	57	Resp:	52681
Ion	Ratio	Lower	Upper
57	100		
41	57.1	29.8	44.6#
56	38.4	25.9	38.9





#53

Toluene

Concen: 0.522 ppbv

RT: 9.86 min Scan# 2201

Delta R.T. -0.02 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

Instrument :

MSVOA_L

ClientSampled :

IA4

Tgt Ion: 91 Resp: 122633

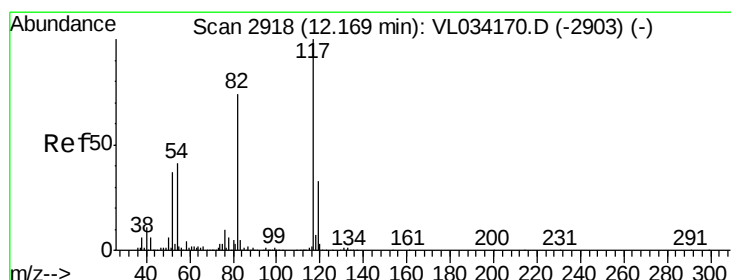
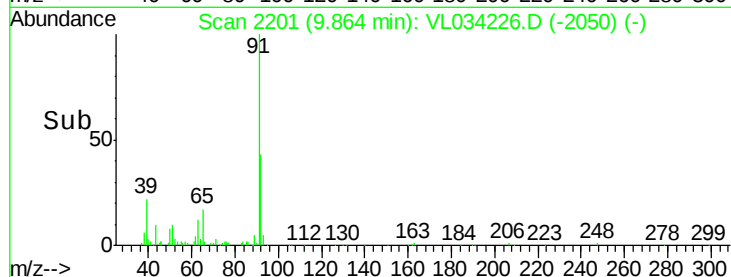
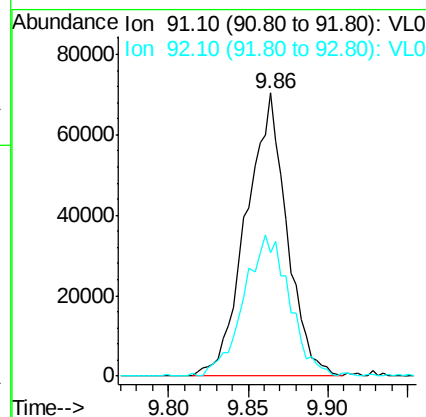
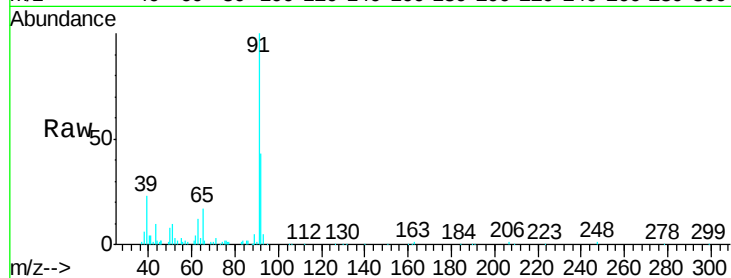
Ion Ratio Lower Upper

91 100

92 56.5 49.0 73.6

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.15 min Scan# 2912

Delta R.T. -0.02 min

Lab File: VL034226.D

Acq: 7 Oct 2019 17:37

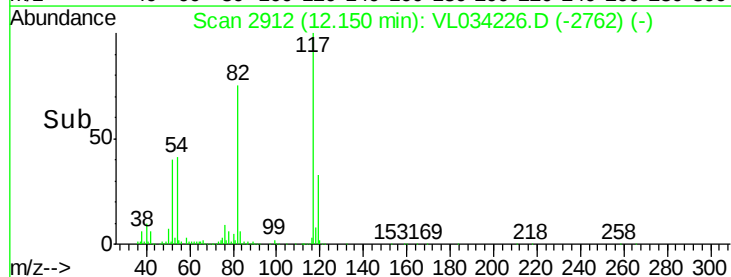
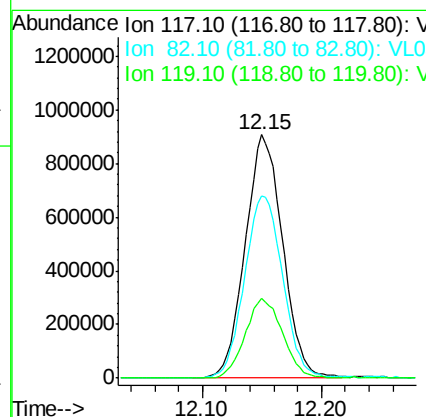
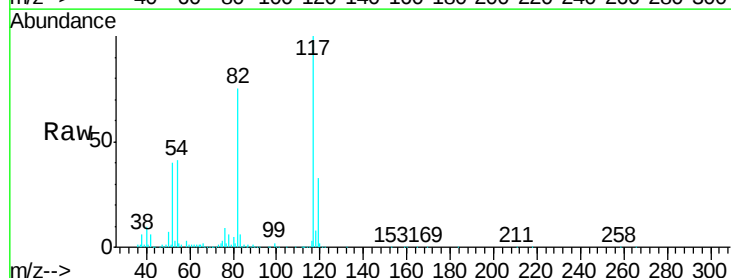
Tgt Ion: 117 Resp: 1974752

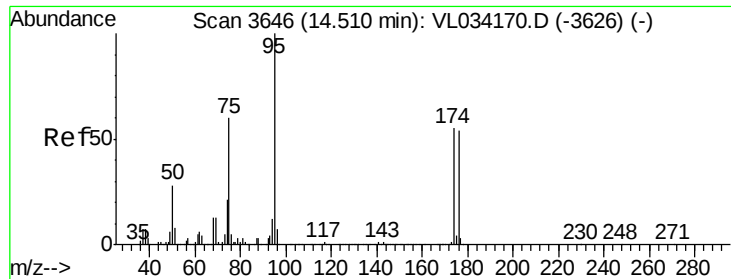
Ion Ratio Lower Upper

117 100

82 77.4 58.2 87.4

119 33.1 23.7 35.5





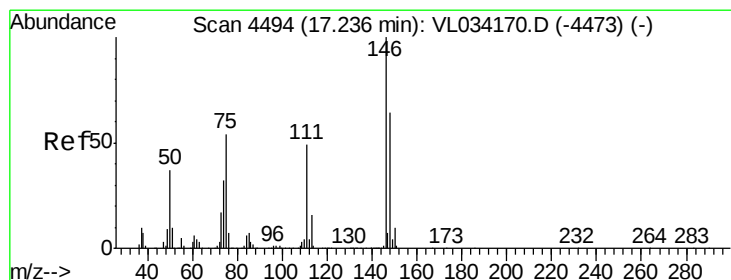
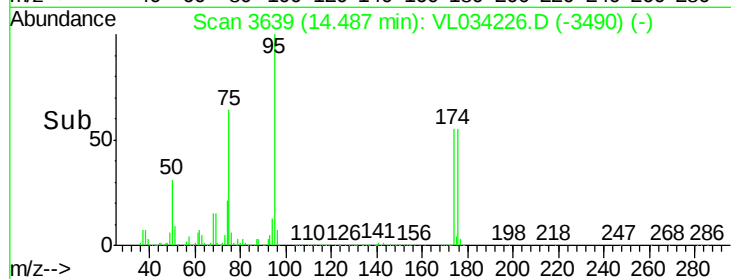
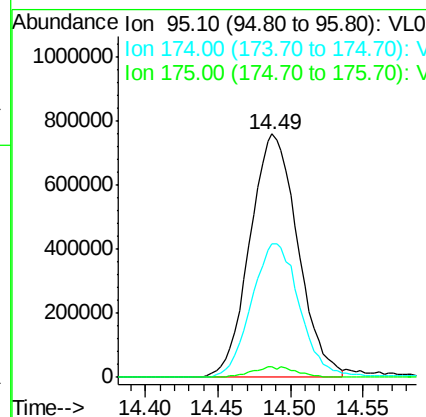
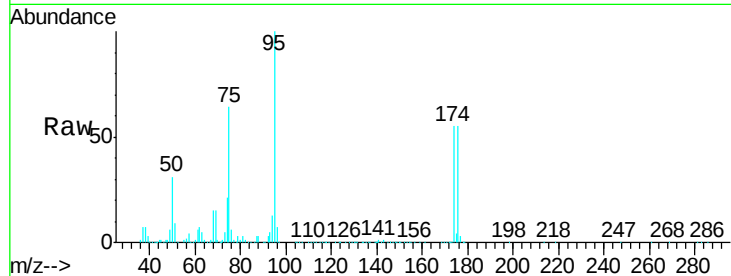
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.167 ppbv
 RT: 14.49 min Scan# 3639
 Delta R.T. -0.02 min
 Lab File: VL034226.D
 Acq: 7 Oct 2019 17:37

Instrument :
 MSVOA_L
 ClientSampled :
 IA4

Tgt Ion: 95 Resp: 1744608
 Ion Ratio Lower Upper
 95 100
 174 56.0 45.1 67.7
 175 4.2 3.3 4.9

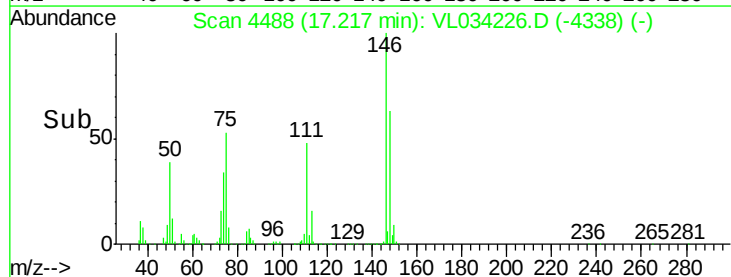
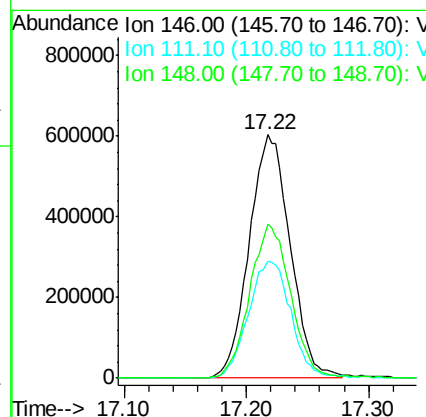
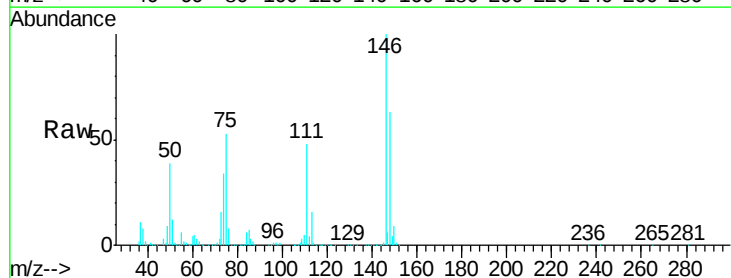
Manual Integrations
 APPROVED

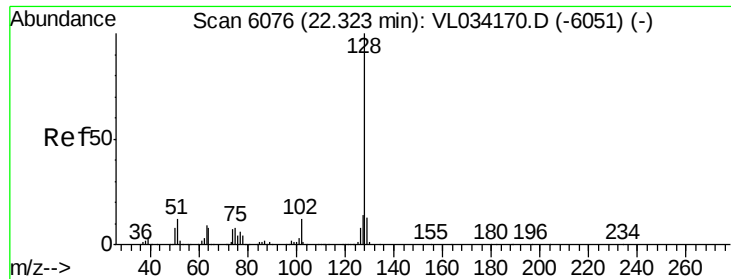
MMDadoda
 10/11/2019 5:04:46 PM



#76
 1,4-Dichlorobenzene
 Concen: 8.324 ppbv
 RT: 17.22 min Scan# 4488
 Delta R.T. -0.02 min
 Lab File: VL034226.D
 Acq: 7 Oct 2019 17:37

Tgt Ion: 146 Resp: 1398846
 Ion Ratio Lower Upper
 146 100
 111 50.2 24.6 74.0
 148 63.4 32.4 97.0





#79

Naphthalene

Concen: 0.206 ppbv m

RT: 22.31 min Scan# 6073

Delta R.T. -0.01 min

Lab File: VL034226.D

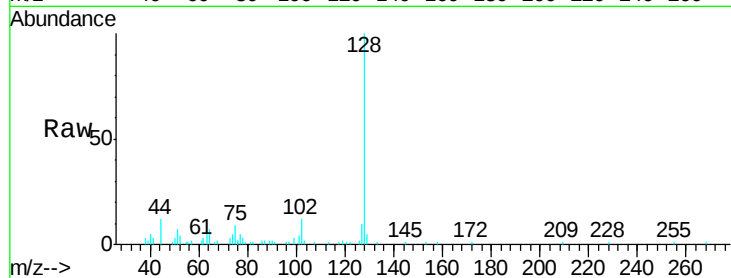
Acq: 7 Oct 2019 17:37

Instrument :

MSVOA_L

ClientSampleId :

IA4



Tgt Ion:128 Resp: 55520

Ion Ratio Lower Upper

128 100

127 10.1 11.1 16.7#

129 5.1 10.2 15.4#

Manual Integrations
APPROVED

MMDadoda
10/11/2019 5:04:46 PM

