

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032272.D
 Acq On : 18 Jul 2018 22:29
 Operator : SY/AP
 Sample : J3454-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-3

Manual Integrations
 APPROVED

MMDadoda
 7/20/2018 2:53:16 PM

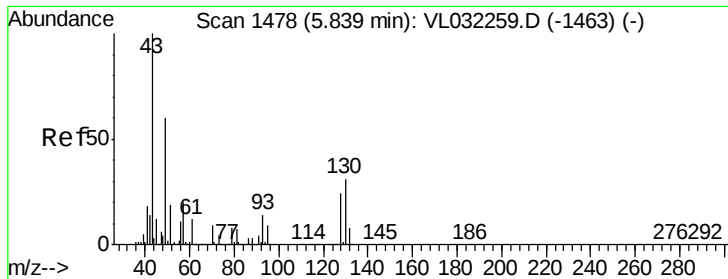
Quant Time: Jul 19 02:54:32 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 18
 QLast Update : Wed Jul 18 14:38:53 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1660448	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3638465	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	4132703	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.67	95	3296333	9.84	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	171452	0.61	ppbv	96
3) Chlorodifluoromethane	3.05	51	261605m	1.40	ppbv	
4) Chloromethane	3.22	50	66709	0.61	ppbv	98
10) Heptane	8.33	43	91632	0.35	ppbv	99
11) Trichlorofluoromethane	4.07	101	61174	0.28	ppbv	97
13) Ethanol	3.71	45	1530249	65.76	ppbv	99
15) Acetone	3.96	43	2396109	13.79	ppbv	97
19) Isopropyl Alcohol	4.09	45	335950	2.86	ppbv #	1
20) Methylene Chloride	4.47	84	340575	5.09	ppbv	98
26) Hexane	5.86	57	2639193	15.18	ppbv #	44
34) 2-Butanone	5.40	43	231725	0.93	ppbv	100
35) Carbon Tetrachloride	7.22	117	15843m	0.06	ppbv	
36) Benzene	7.08	78	59860	0.17	ppbv #	91
44) 2,2,4-Trimethylpentane	8.08	57	104761	0.17	ppbv #	70
53) Toluene	10.04	91	368406m	0.85	ppbv	
58) Ethyl Benzene	12.95	91	163454	0.28	ppbv	97
59) m/p-Xylene	13.21	91	709968	1.43	ppbv	100
60) o-Xylene	13.94	91	292467	0.59	ppbv	98
61) Styrene	13.78	104	76188	0.21	ppbv	99
74) 1,2,4-Trimethylbenzene	17.02	105	105851m	0.18	ppbv	

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



#1

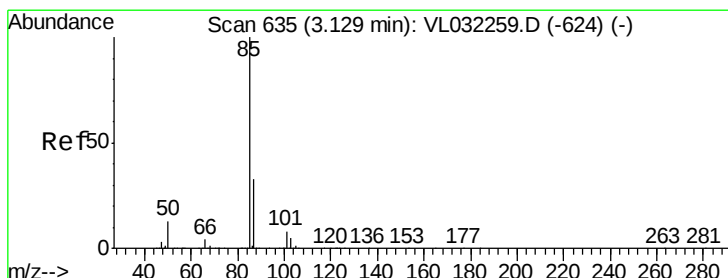
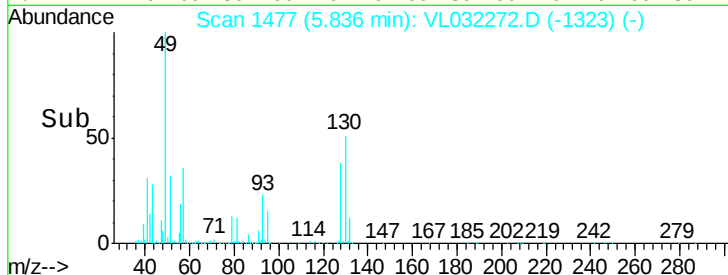
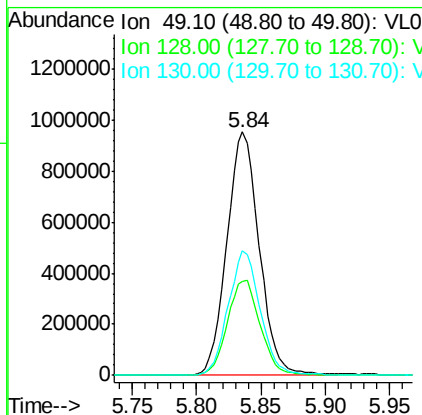
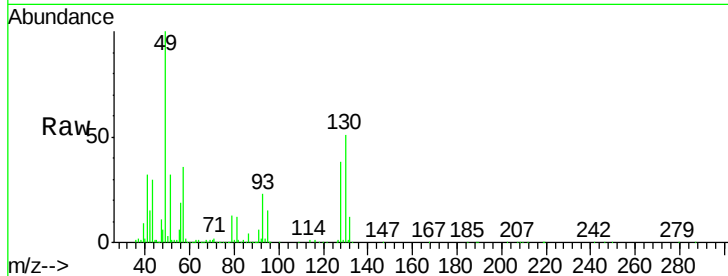
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.84 min Scan# 1477
 Delta R.T. -0.00 min
 Lab File: VL032272.D
 Acq: 18 Jul 2018 22:29

Instrument :
 MSVOA_L
 ClientSampleId :
 B-3

Tot Ion: 49 Resp: 1660448
 Ion Ratio Lower Upper
 49 100
 128 39.9 20.1 60.2
 130 51.1 25.9 77.6

Manual Integrations
 APPROVED

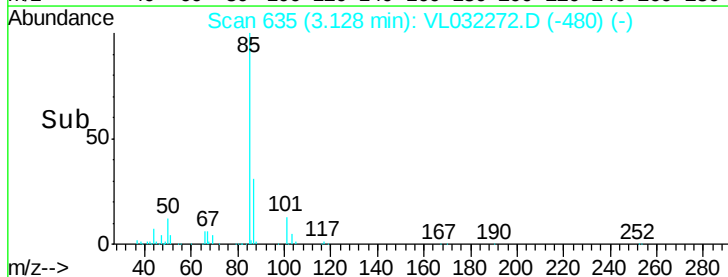
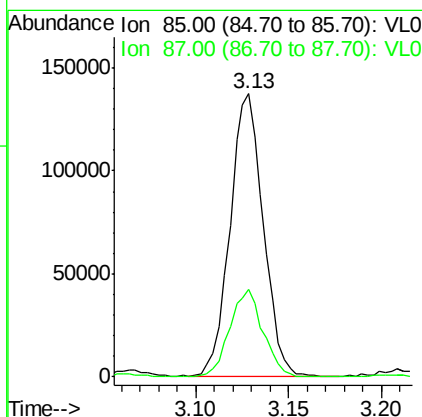
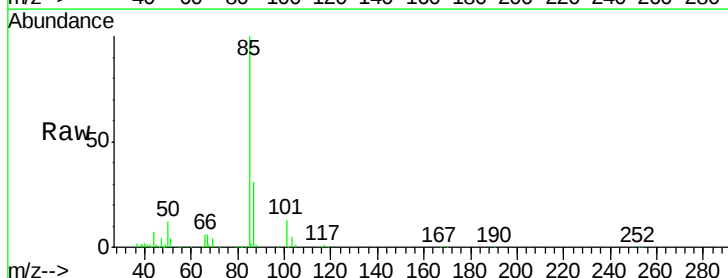
MMDadoda
 7/20/2018 2:53:16 PM

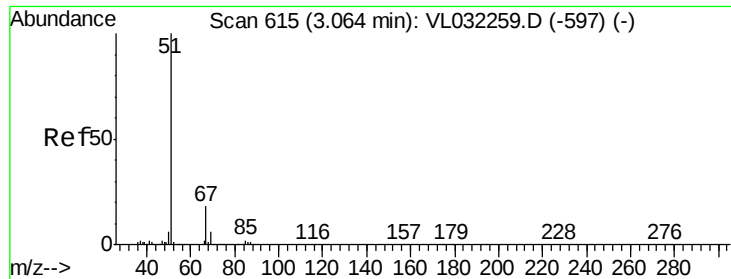


#2

Dichlorodifluoromethane
 Concen: 0.61 ppbv
 RT: 3.13 min Scan# 635
 Delta R.T. -0.00 min
 Lab File: VL032272.D
 Acq: 18 Jul 2018 22:29

Tgt Ion: 85 Resp: 171452
 Ion Ratio Lower Upper
 85 100
 87 30.7 26.2 39.2





#3

Chlorodifluoromethane

Concen: 1.40 ppbv m

RT: 3.05 min Scan# 612

Delta R.T. -0.01 min

Lab File: VL032272.D

Acq: 18 Jul 2018 22:29

Instrument :

MSVOA_L

ClientSampleId :

B-3

Tot Ion: 51 Resp: 261605

Ion Ratio Lower Upper

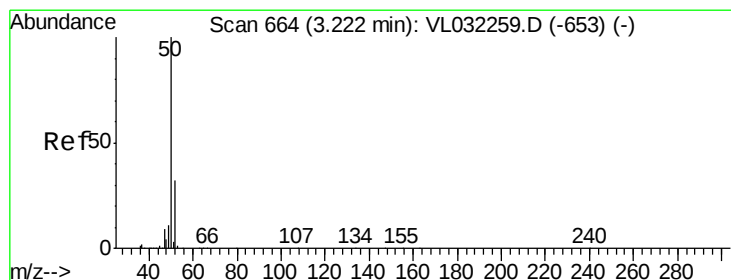
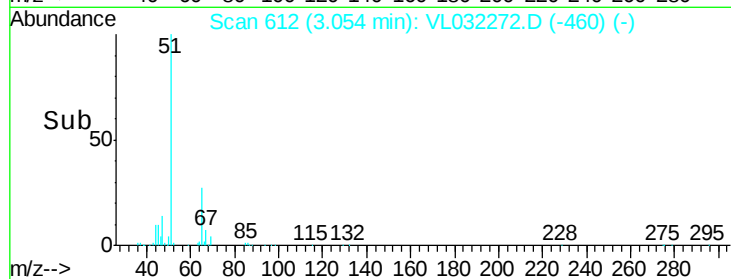
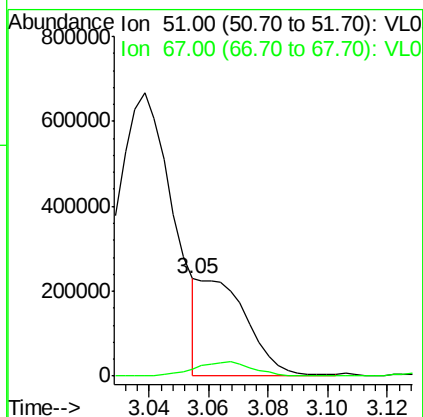
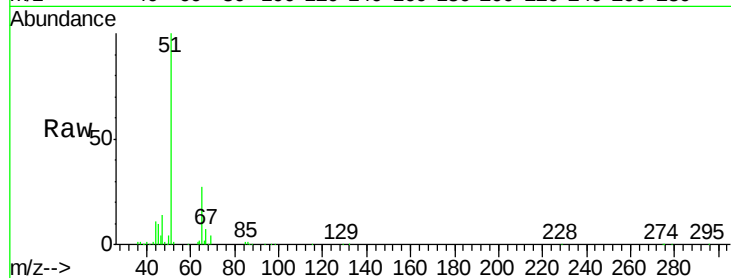
51 100

67 17.8 14.2 21.4

Manual Integrations
APPROVED

MMDadoda

7/20/2018 2:53:16 PM



#4

Chloromethane

Concen: 0.61 ppbv

RT: 3.22 min Scan# 664

Delta R.T. -0.00 min

Lab File: VL032272.D

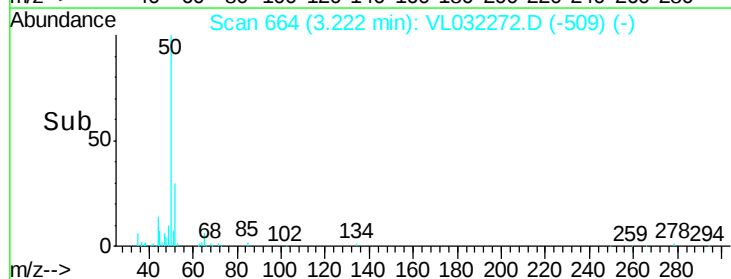
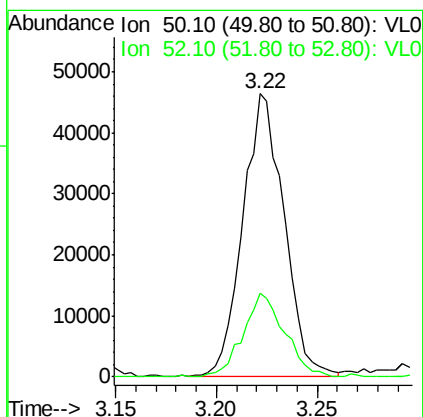
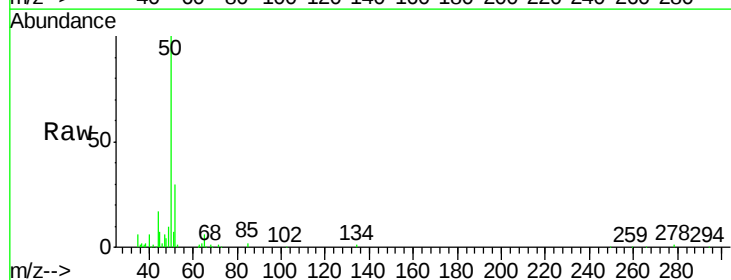
Acq: 18 Jul 2018 22:29

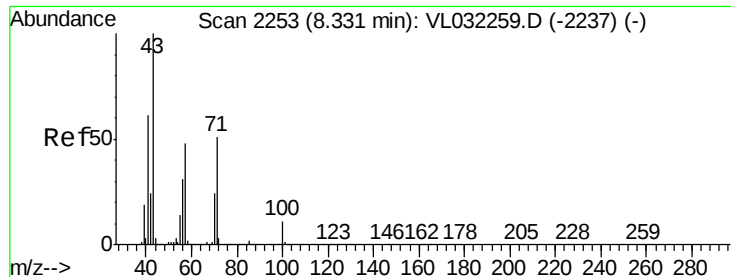
Tgt Ion: 50 Resp: 66709

Ion Ratio Lower Upper

50 100

52 30.2 25.3 37.9





#10

Heptane

Concen: 0.35 ppbv

RT: 8.33 min Scan# 2254

Delta R.T. 0.00 min

Lab File: VL032272.D

Acq: 18 Jul 2018 22:29

Instrument :

MSVOA_L

ClientSampled :

B-3

Tot Ion: 43 Resp: 91632

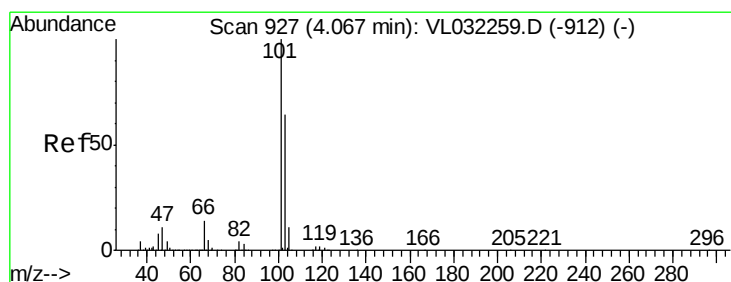
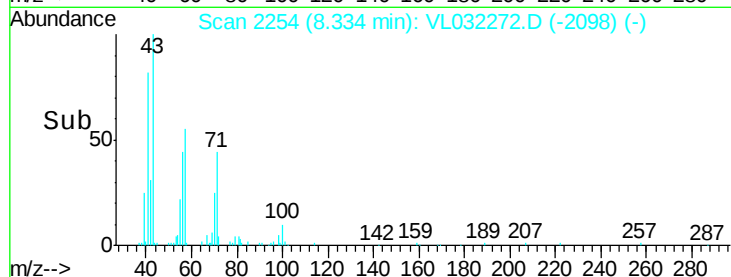
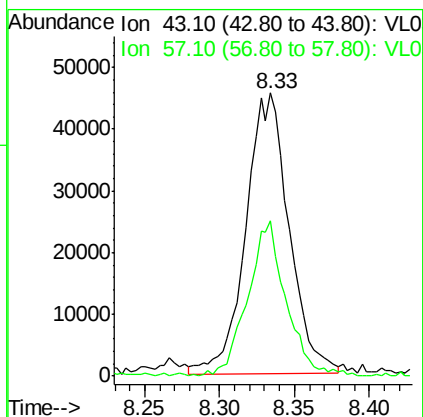
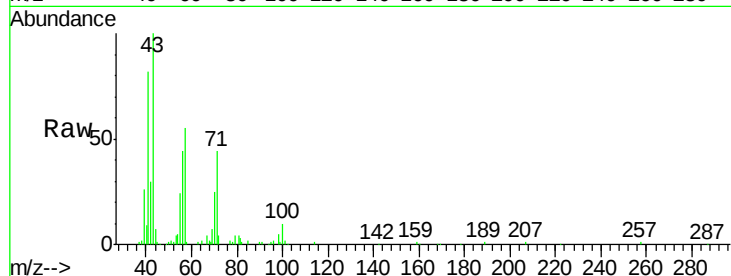
Ion Ratio Lower Upper

43 100

57 49.3 39.9 59.9

Manual Integrations
APPROVED

MMDadoda
7/20/2018 2:53:16 PM



#11

Trichlorofluoromethane

Concen: 0.28 ppbv

RT: 4.07 min Scan# 927

Delta R.T. -0.00 min

Lab File: VL032272.D

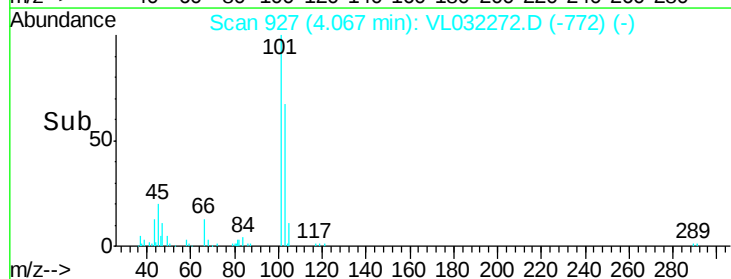
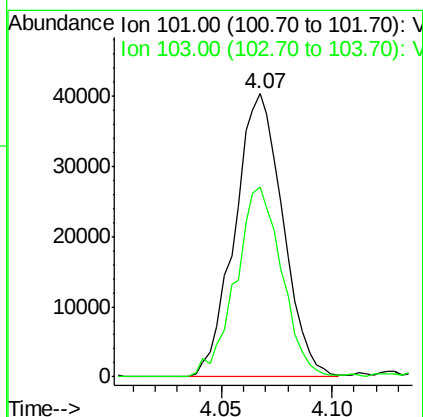
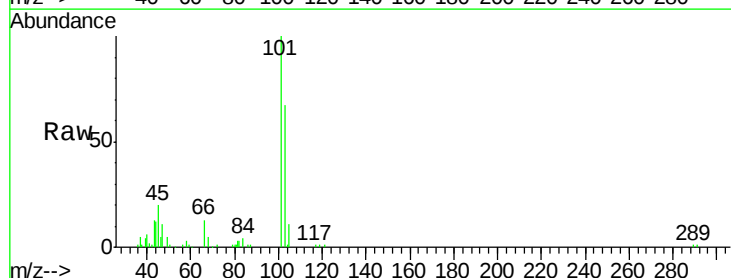
Acq: 18 Jul 2018 22:29

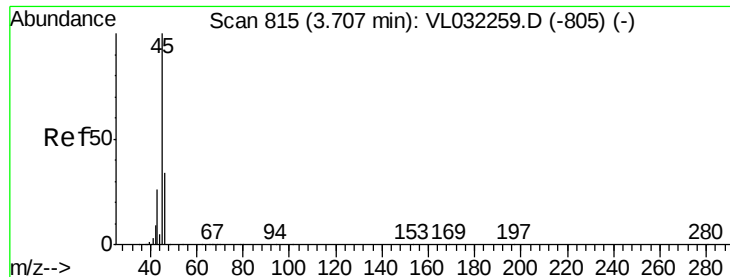
Tgt Ion: 101 Resp: 61174

Ion Ratio Lower Upper

101 100

103 67.0 51.5 77.3





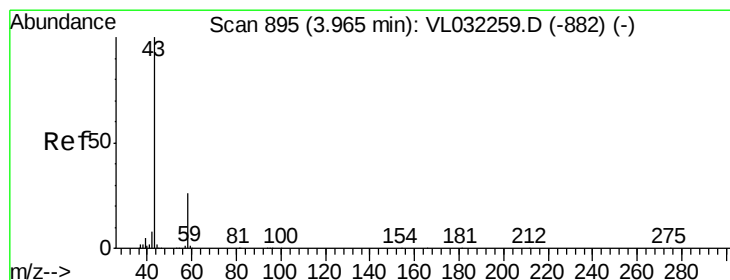
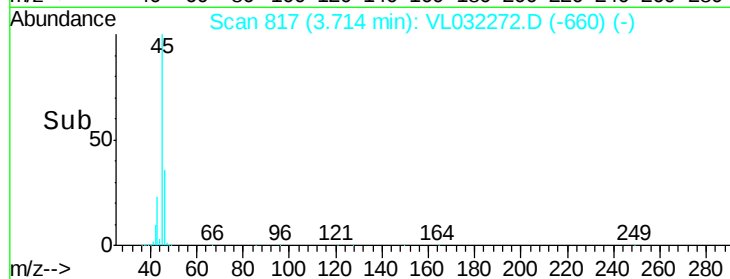
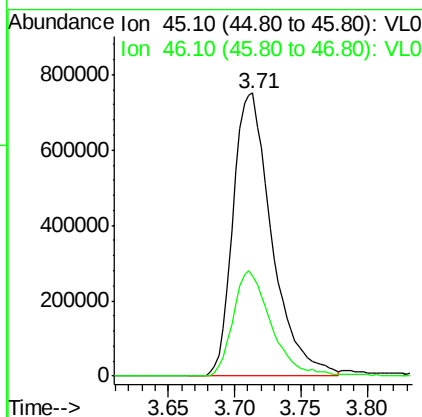
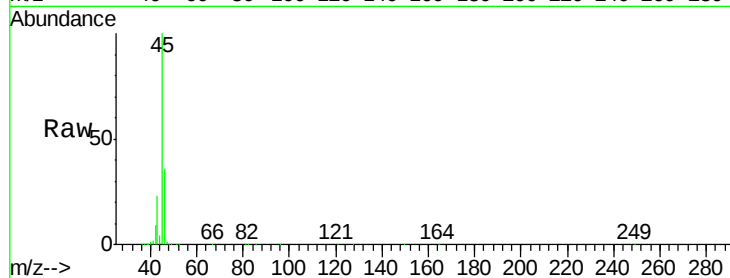
#13
Ethanol
Concen: 65.76 ppbv
RT: 3.71 min Scan# 817
Delta R.T. 0.01 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Instrument :
MSVOA_L
ClientSampleId :
B-3

Tot Ion: 45 Resp: 1530249
Ion Ratio Lower Upper
45 100
46 37.5 15.2 60.8

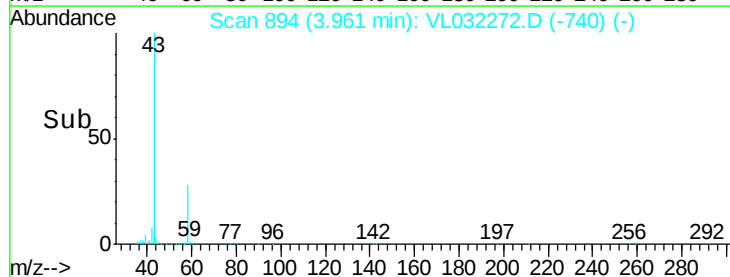
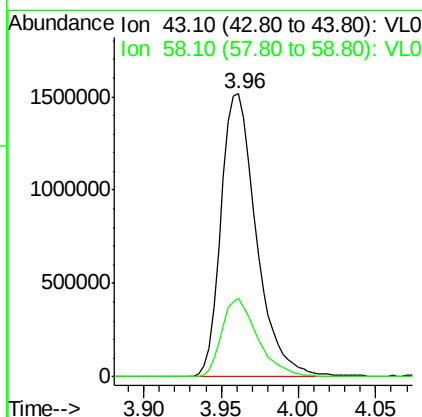
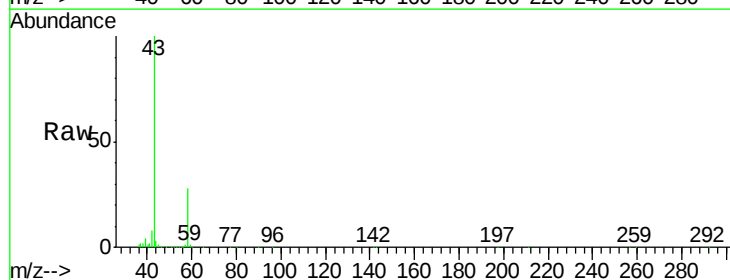
Manual Integrations
APPROVED

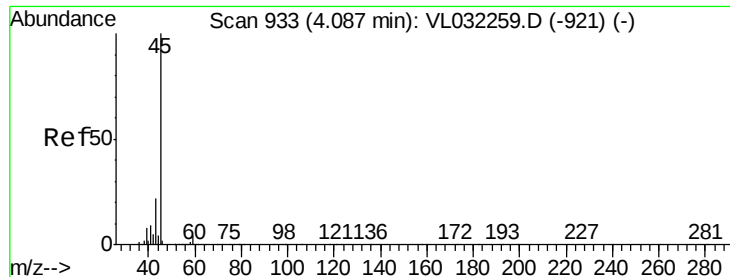
MMDadoda
7/20/2018 2:53:16 PM



#15
Acetone
Concen: 13.79 ppbv
RT: 3.96 min Scan# 894
Delta R.T. -0.00 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Tgt Ion: 43 Resp: 2396109
Ion Ratio Lower Upper
43 100
58 28.6 21.8 32.6





#19

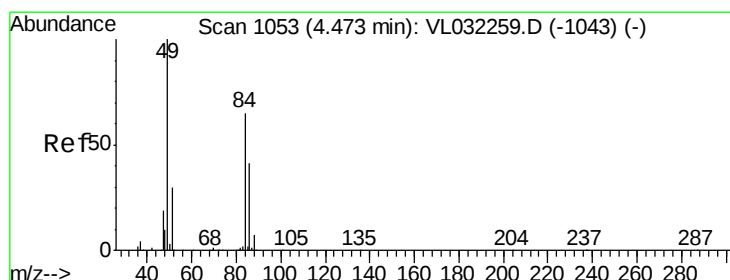
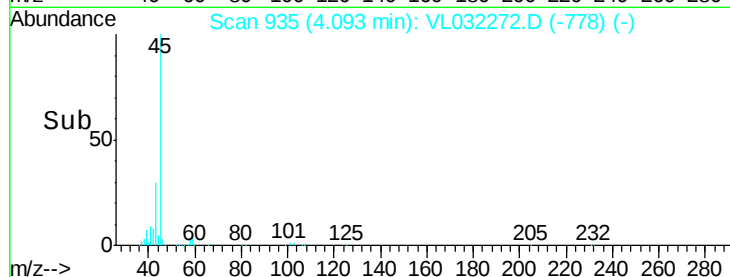
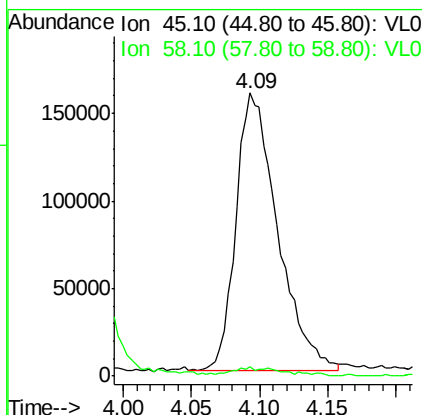
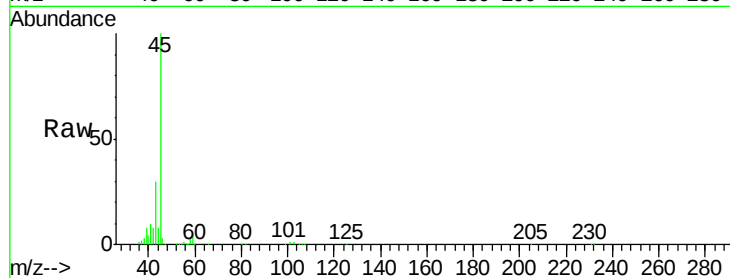
Isopropyl Alcohol
 Concen: 2.86 ppbv
 RT: 4.09 min Scan# 935
 Delta R.T. 0.01 min
 Lab File: VL032272.D
 Acq: 18 Jul 2018 22:29

Instrument :
 MSVOA_L
 ClientSampleId :
 B-3

Tot Ion	Ratio	Lower	Upper
45	100		
58	204.3	1.5	2.3#

Manual Integrations
 APPROVED

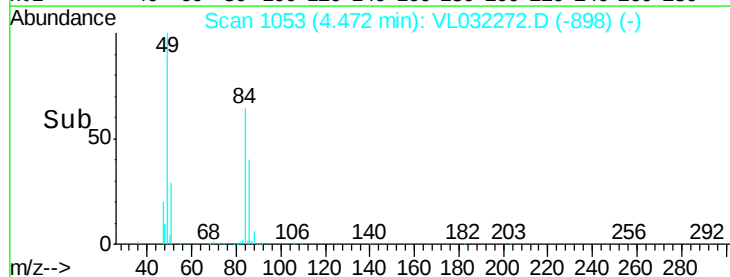
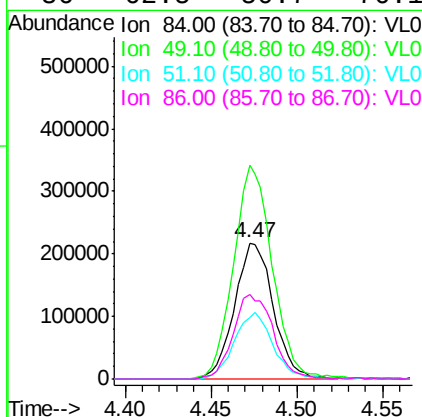
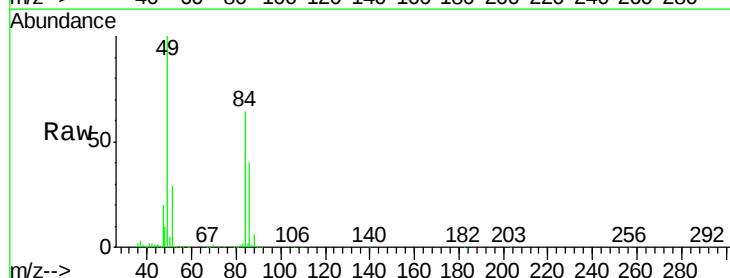
MMDadoda
 7/20/2018 2:53:16 PM

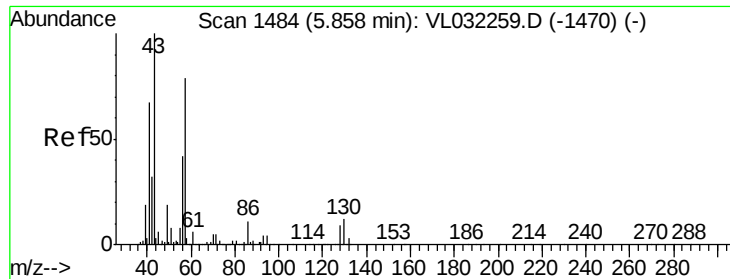


#20

Methylene Chloride
 Concen: 5.09 ppbv
 RT: 4.47 min Scan# 1053
 Delta R.T. -0.00 min
 Lab File: VL032272.D
 Acq: 18 Jul 2018 22:29

Tgt Ion	Ratio	Lower	Upper
84	100		
49	156.9	122.4	183.6
51	45.5	36.8	55.2
86	62.5	50.7	76.1





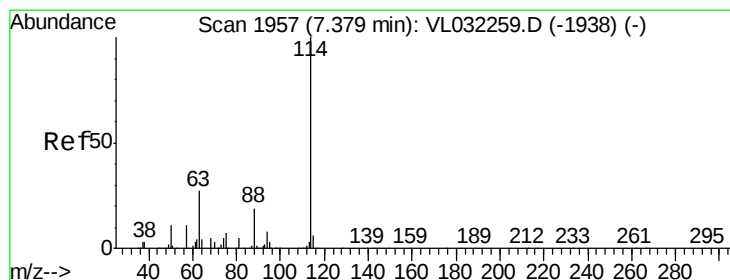
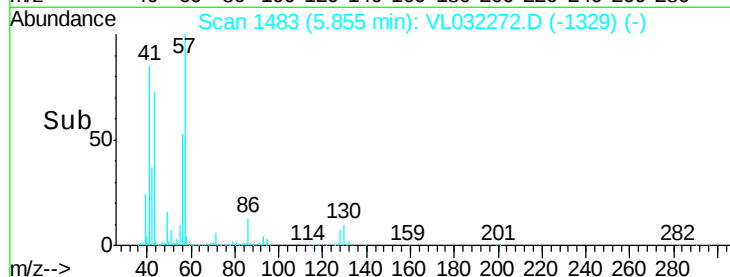
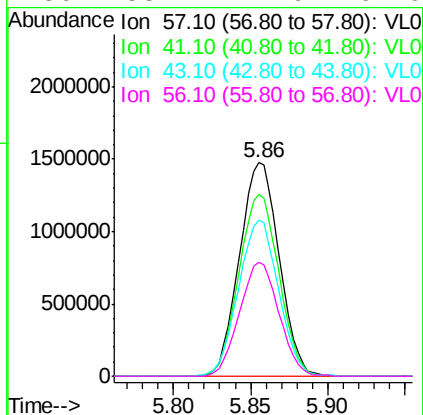
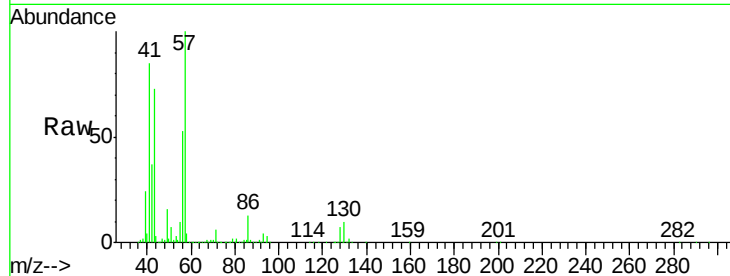
#26
Hexane
Concen: 15.18 ppbv
RT: 5.86 min Scan# 1483
Delta R.T. -0.00 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Instrument :
MSVOA_L
ClientSampleId :
B-3

Tot Ion	57	Resp	2639193
Ion	Ratio	Lower	Upper
57	100		
41	85.9	67.9	101.9
43	73.9	175.9	263.9#
56	53.1	41.9	62.9

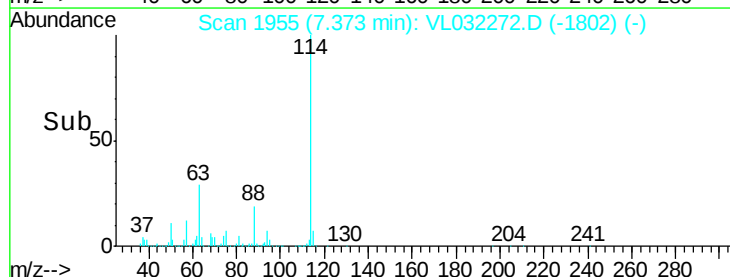
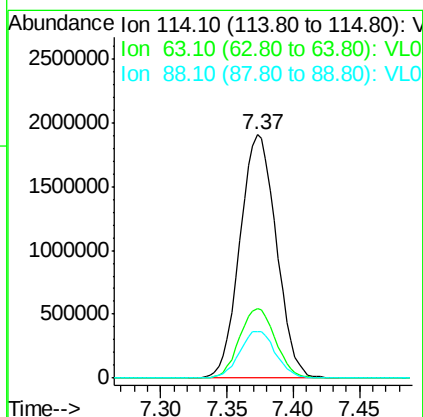
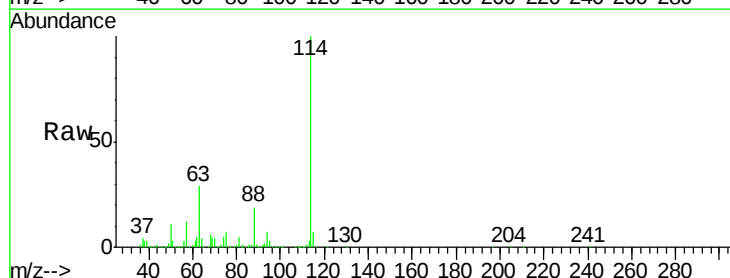
Manual Integrations
APPROVED

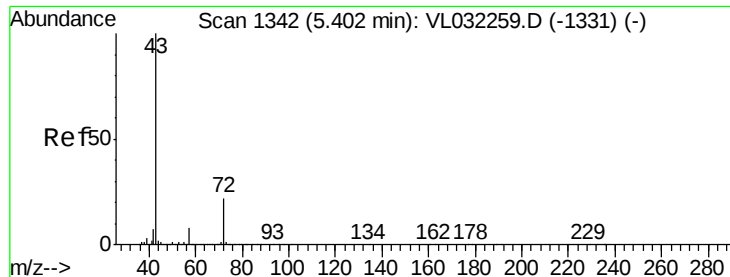
MMDadoda
7/20/2018 2:53:16 PM



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.37 min Scan# 1955
Delta R.T. -0.01 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Tgt Ion	114	Resp	3638465
Ion	Ratio	Lower	Upper
114	100		
63	28.5	22.6	33.8
88	19.0	15.2	22.8





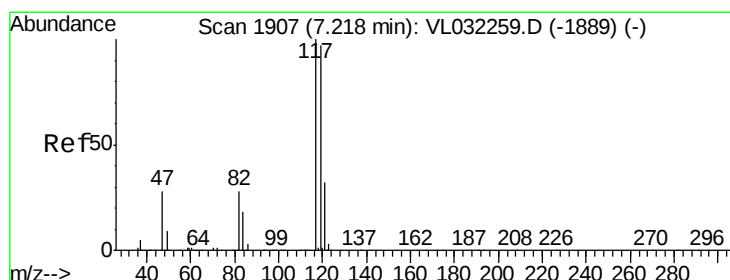
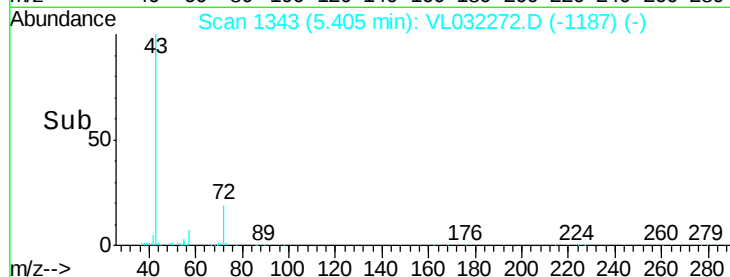
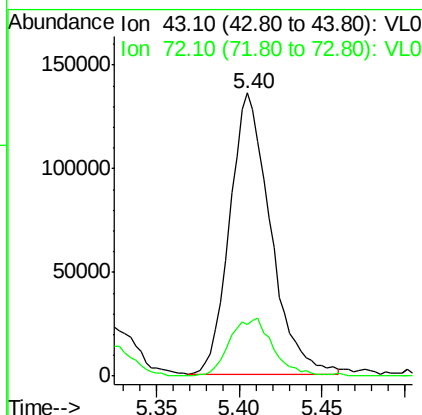
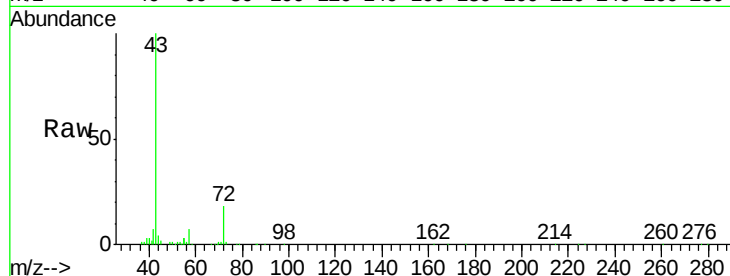
#34
2-Butanone
Concen: 0.93 ppbv
RT: 5.40 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Instrument :
MSVOA_L
ClientSampled :
B-3

Tot Ion	43	Ratio	Lower	Upper
43	100			
72	22.2		17.7	26.5

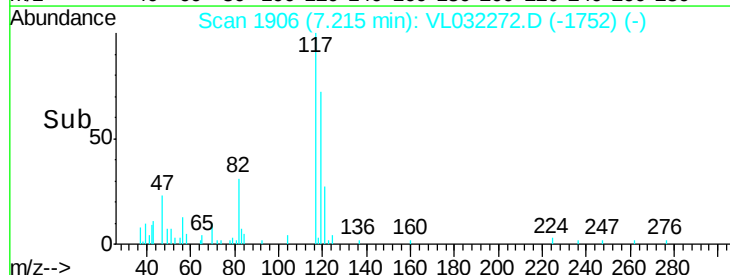
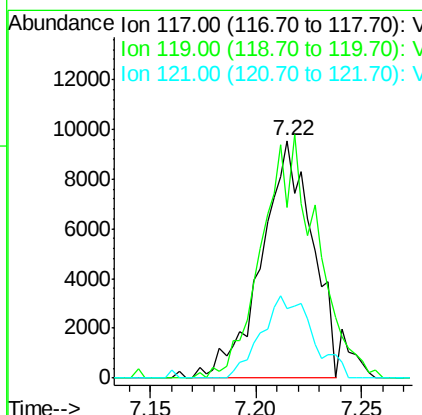
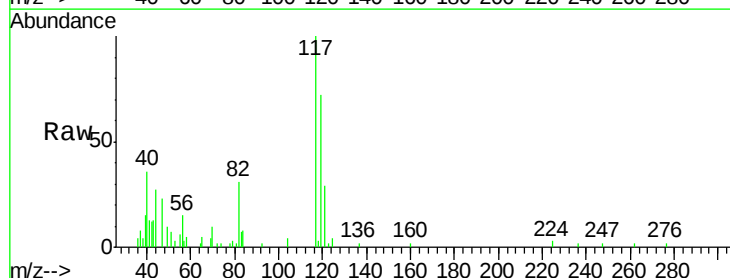
Manual Integrations
APPROVED

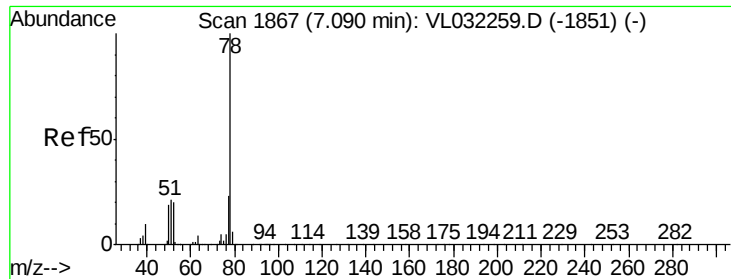
MMDadoda
7/20/2018 2:53:16 PM



#35
Carbon Tetrachloride
Concen: 0.06 ppbv m
RT: 7.22 min Scan# 1906
Delta R.T. -0.00 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Tgt Ion	117	Ratio	Lower	Upper
117	100			
119	72.2		77.4	116.0#
121	29.2		25.4	38.2





#36

Benzene

Concen: 0.17 ppbv

RT: 7.08 min Scan# 1865

Delta R.T. -0.01 min

Lab File: VL032272.D

Acq: 18 Jul 2018 22:29

Instrument :

MSVOA_L

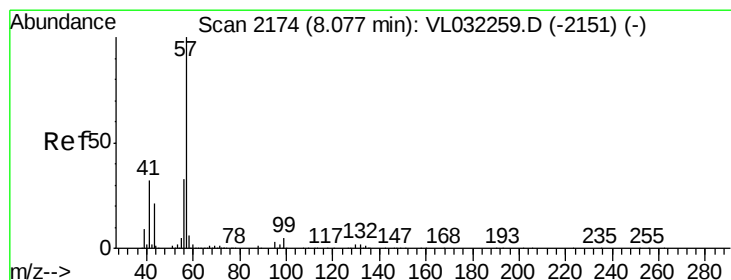
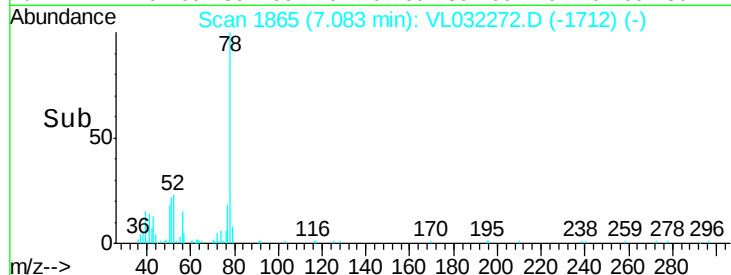
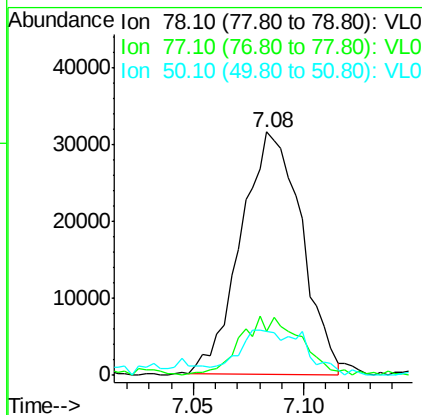
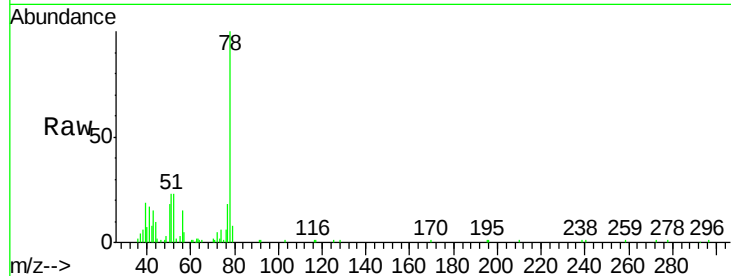
ClientSampleId :

B-3

Tot Ion:	78	Resp:	59860
Ion	Ratio	Lower	Upper
78	100		
77	17.7	18.6	27.8#
50	15.9	15.0	22.6

Manual Integrations
APPROVED

MMDadoda
7/20/2018 2:53:16 PM



#44

2,2,4-Trimethylpentane

Concen: 0.17 ppbv

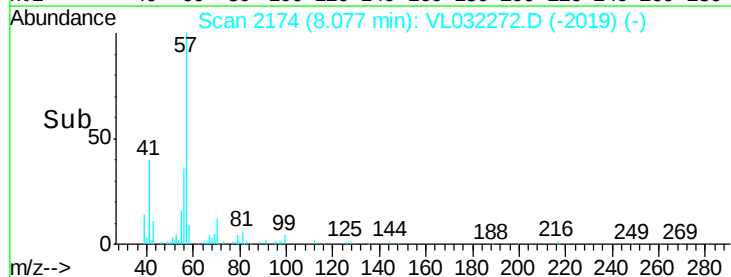
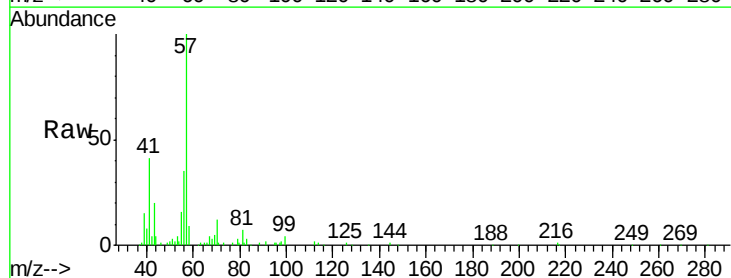
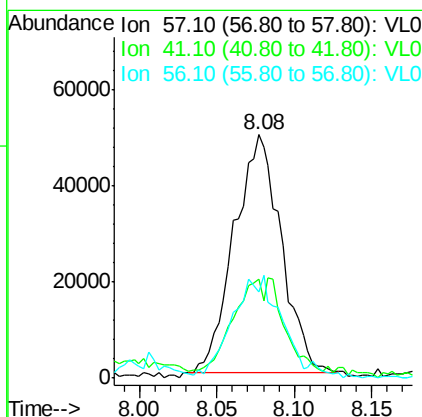
RT: 8.08 min Scan# 2174

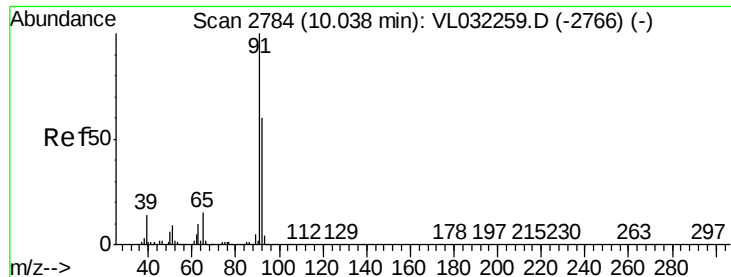
Delta R.T. -0.00 min

Lab File: VL032272.D

Acq: 18 Jul 2018 22:29

Tgt Ion:	57	Resp:	104761
Ion	Ratio	Lower	Upper
57	100		
41	49.3	24.4	36.6#
56	46.7	25.7	38.5#





#53

Toluene

Concen: 0.85 ppbv m

RT: 10.04 min Scan# 2784

Delta R.T. -0.00 min

Lab File: VL032272.D

Acq: 18 Jul 2018 22:29

Instrument :

MSVOA_L

ClientSampleId :

B-3

Tot Ion: 91 Resp: 368406

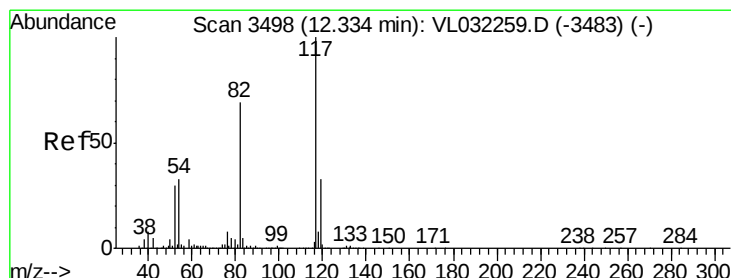
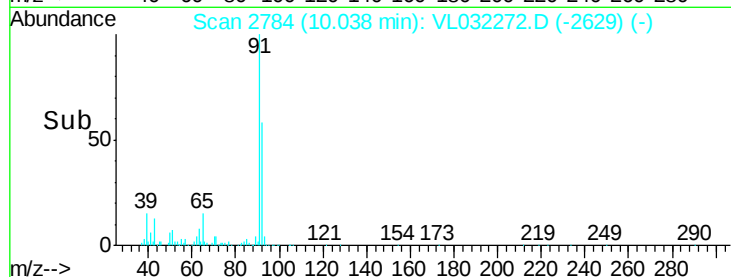
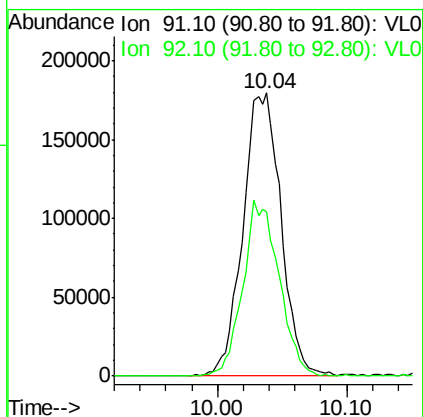
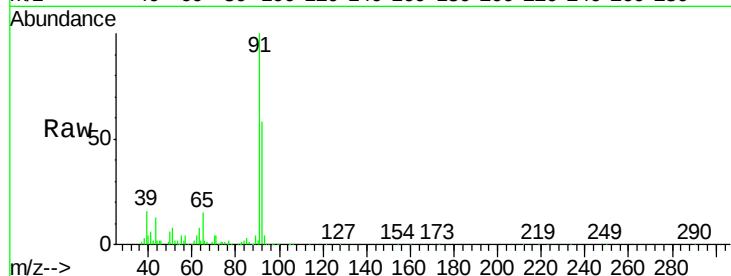
Ion Ratio Lower Upper

91 100

92 58.9 48.6 72.8

Manual Integrations
APPROVED

MMDadoda
7/20/2018 2:53:16 PM



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.33 min Scan# 3497

Delta R.T. -0.00 min

Lab File: VL032272.D

Acq: 18 Jul 2018 22:29

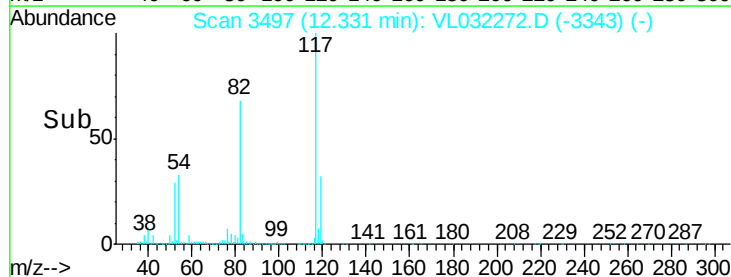
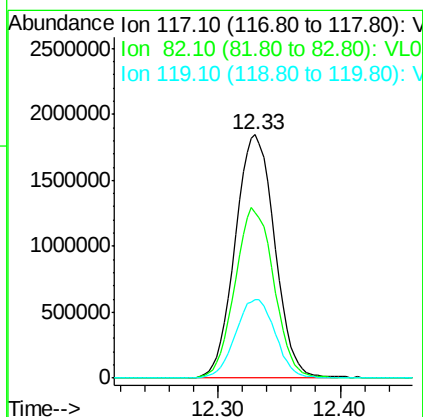
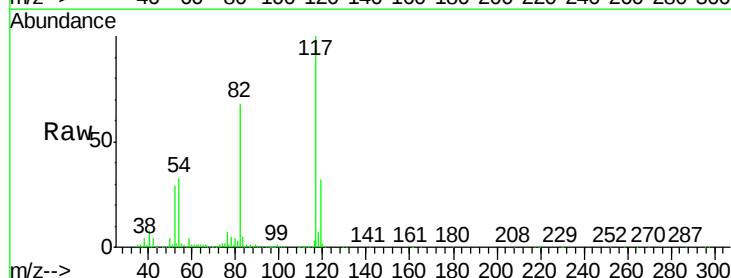
Tgt Ion: 117 Resp: 4132703

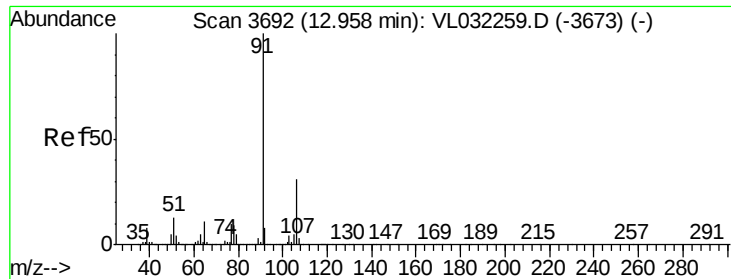
Ion Ratio Lower Upper

117 100

82 69.2 53.9 80.9

119 32.7 25.5 38.3





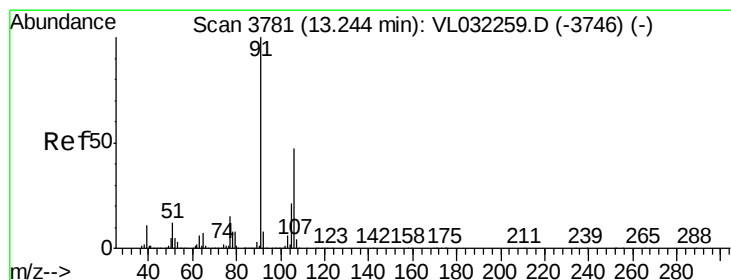
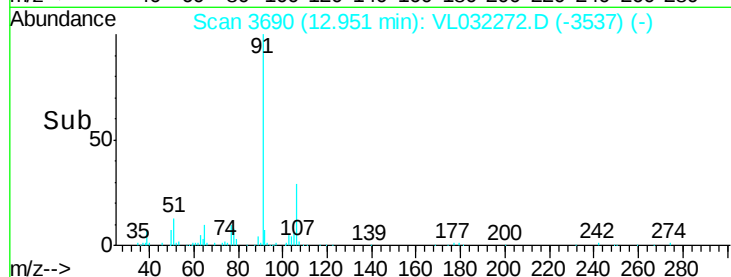
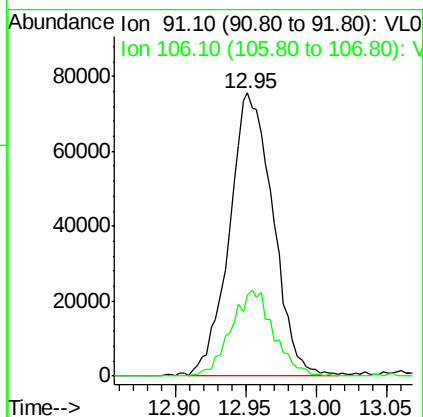
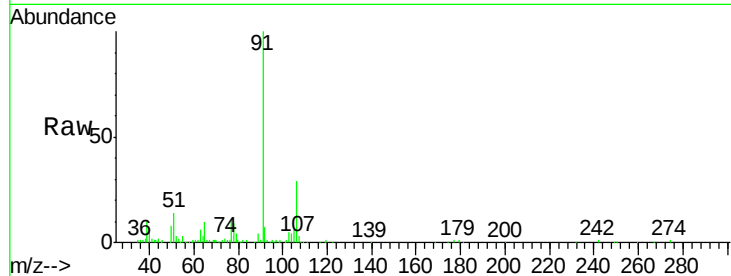
#58
Ethyl Benzene
Concen: 0.28 ppbv
RT: 12.95 min Scan# 3690
Delta R.T. -0.01 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Instrument :
MSVOA_L
ClientSampled :
B-3

Tot Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.5	36.7

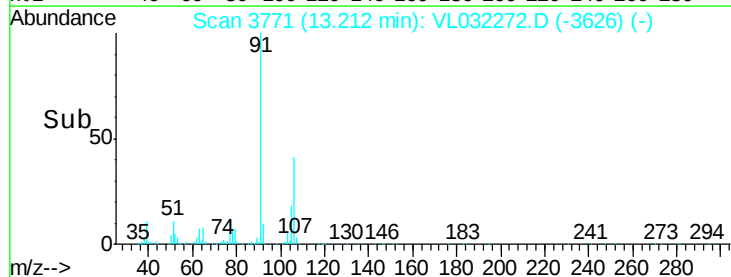
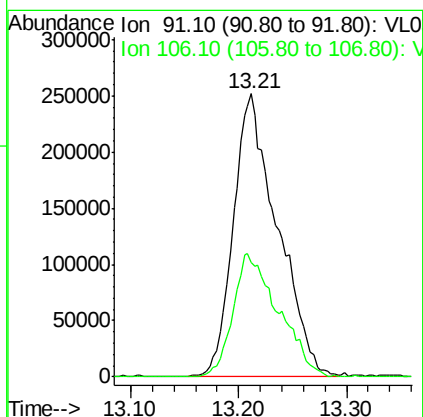
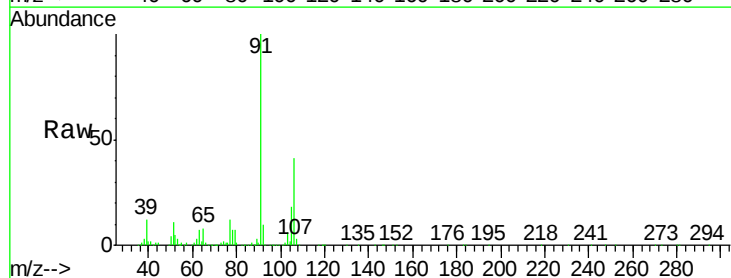
Manual Integrations
APPROVED

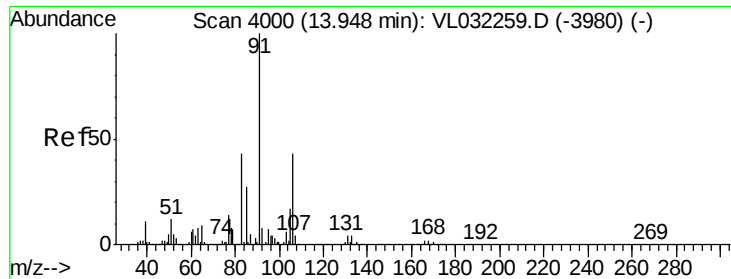
MMDadoda
7/20/2018 2:53:16 PM



#59
m/p-Xylene
Concen: 1.43 ppbv
RT: 13.21 min Scan# 3771
Delta R.T. -0.03 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Tgt Ion	Ratio	Lower	Upper
91	100		
106	45.4	36.2	54.2





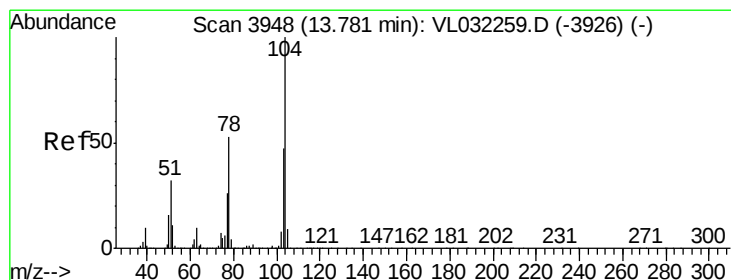
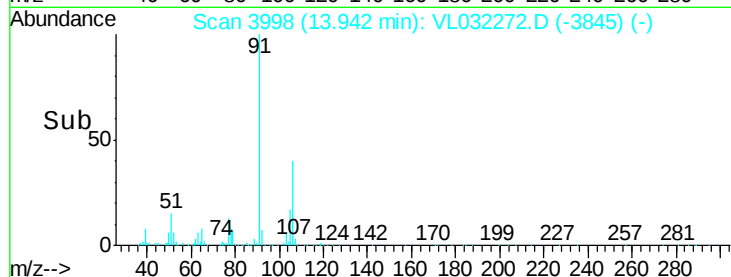
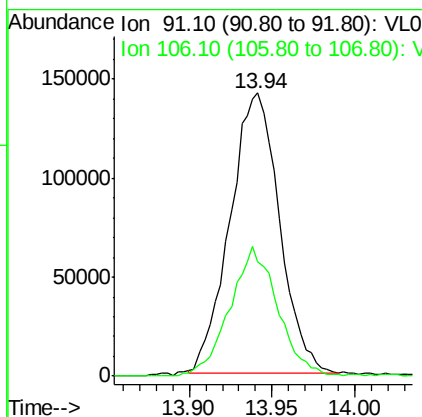
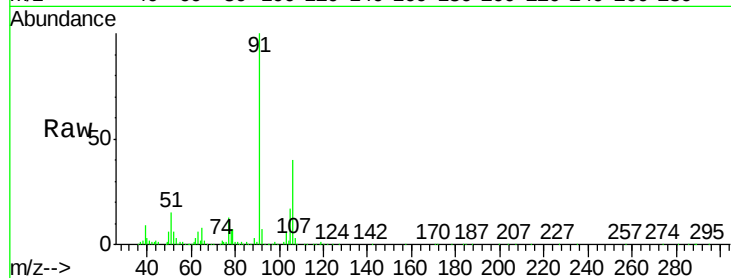
#60
o-Xylene
Concen: 0.59 ppbv
RT: 13.94 min Scan# 3998
Delta R.T. -0.01 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Instrument :
MSVOA_L
ClientSampled :
B-3

Tot Ion	91	Resp	292467
Ion Ratio	100	Lower	Upper
91	100		
106	45.0	21.7	65.1

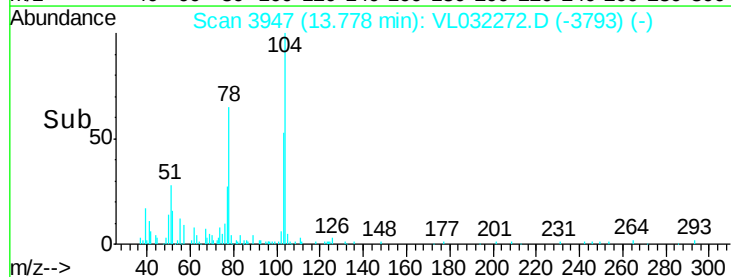
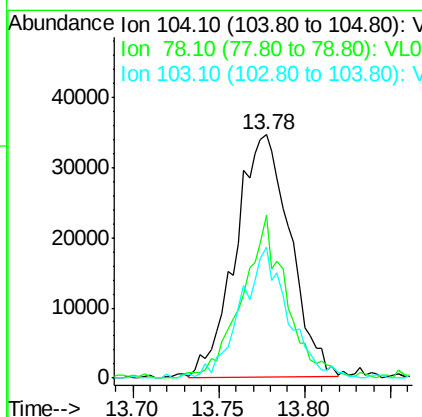
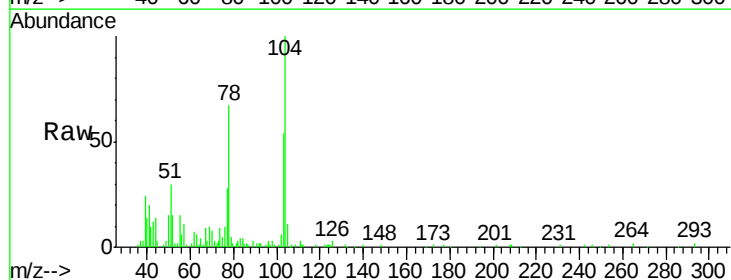
Manual Integrations
APPROVED

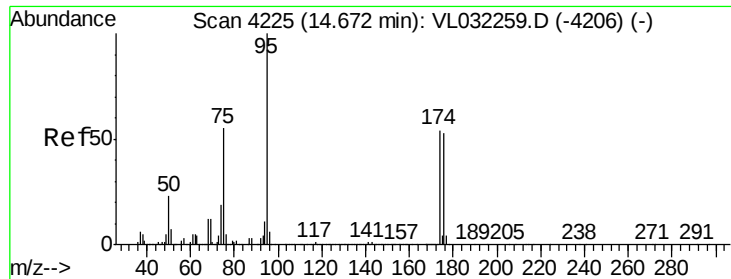
MMDadoda
7/20/2018 2:53:16 PM



#61
Styrene
Concen: 0.21 ppbv
RT: 13.78 min Scan# 3947
Delta R.T. -0.00 min
Lab File: VL032272.D
Acq: 18 Jul 2018 22:29

Tgt Ion	104	Resp	76188
Ion Ratio	100	Lower	Upper
104	100		
78	55.0	43.2	64.8
103	47.0	37.8	56.6





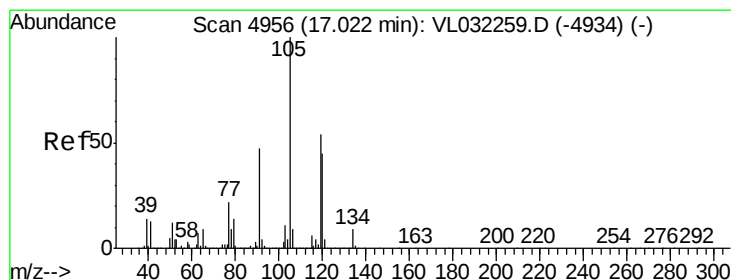
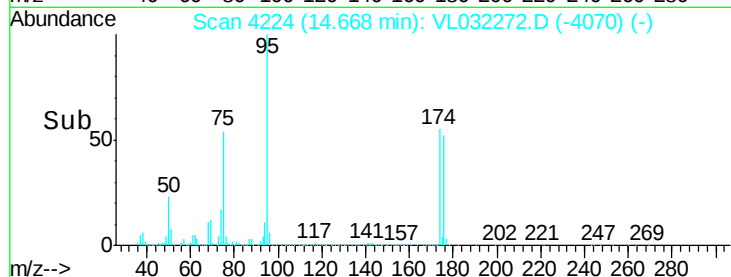
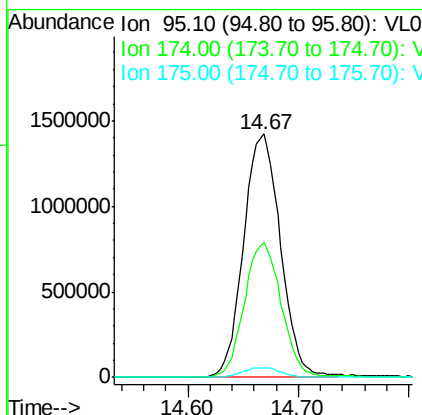
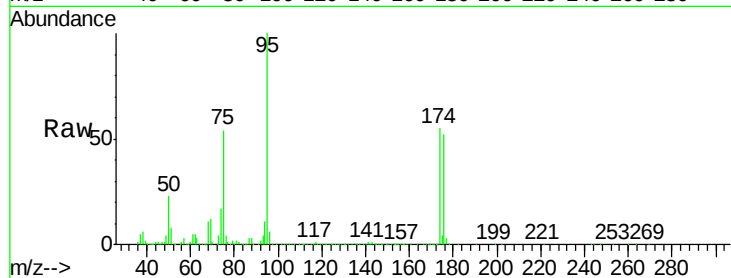
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.84 ppbv
 RT: 14.67 min Scan# 4224
 Delta R.T. -0.00 min
 Lab File: VL032272.D
 Acq: 18 Jul 2018 22:29

Instrument :
 MSVOA_L
 ClientSampled :
 B-3

Tot Ion: 95 Resp: 3296333
 Ion Ratio Lower Upper
 95 100
 174 55.7 44.3 66.5
 175 4.1 3.3 4.9

Manual Integrations
 APPROVED

MMDadoda
 7/20/2018 2:53:16 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.18 ppbv m
 RT: 17.02 min Scan# 4954
 Delta R.T. -0.01 min
 Lab File: VL032272.D
 Acq: 18 Jul 2018 22:29

Tgt Ion: 105 Resp: 105851
 Ion Ratio Lower Upper
 105 100
 120 33.7 35.8 53.6#
 91 11.7 38.2 57.4#
 77 16.9 17.5 26.3#

