

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL060118\
 Data File : VL032037.D
 Acq On : 2 Jun 2018 1:34
 Operator : SY/AP
 Sample : J3225-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 3:35:54 PM

Quant Time: Jun 03 13:59:03 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 03 2018
 QLast Update : Fri Jun 01 02:31:35 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.86	49	1133087	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.40	114	2323874	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.36	117	2258150	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.70	95	1774711	10.17	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.15	85	40106	0.29	ppbv	98
3) Chlorodifluoromethane	3.09	51	46113m	0.43	ppbv	
4) Chloromethane	3.24	50	443217	8.20	ppbv	94
9) Propene	3.11	41	25106m	0.72	ppbv	
11) Trichlorofluoromethane	4.09	101	43551	0.21	ppbv	94
13) Ethanol	3.74	45	177480	13.05	ppbv	99
15) Acetone	3.98	43	1614767	11.82	ppbv	95
19) Isopropyl Alcohol	4.13	45	50167m	0.55	ppbv	
20) Methylene Chloride	4.50	84	89508	1.44	ppbv	94
26) Hexane	5.88	57	140944	1.12	ppbv #	49
34) 2-Butanone	5.43	43	291970	1.60	ppbv	98
35) Carbon Tetrachloride	7.25	117	16814m	0.08	ppbv	
36) Benzene	7.11	78	25467m	0.12	ppbv	
50) 4-Methyl-2-Pentanone	8.99	43	89538m	0.50	ppbv	
52) Tetrachloroethene	11.50	164	995021	12.28	ppbv	97
53) Toluene	10.07	91	127532	0.56	ppbv	100
58) Ethyl Benzene	12.98	91	46406	0.15	ppbv	96
59) m/p-Xylene	13.24	91	184123m	0.66	ppbv	
60) o-Xylene	13.98	91	54696	0.20	ppbv	100
74) 1,2,4-Trimethylbenzene	17.04	105	41600	0.14	ppbv #	64

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

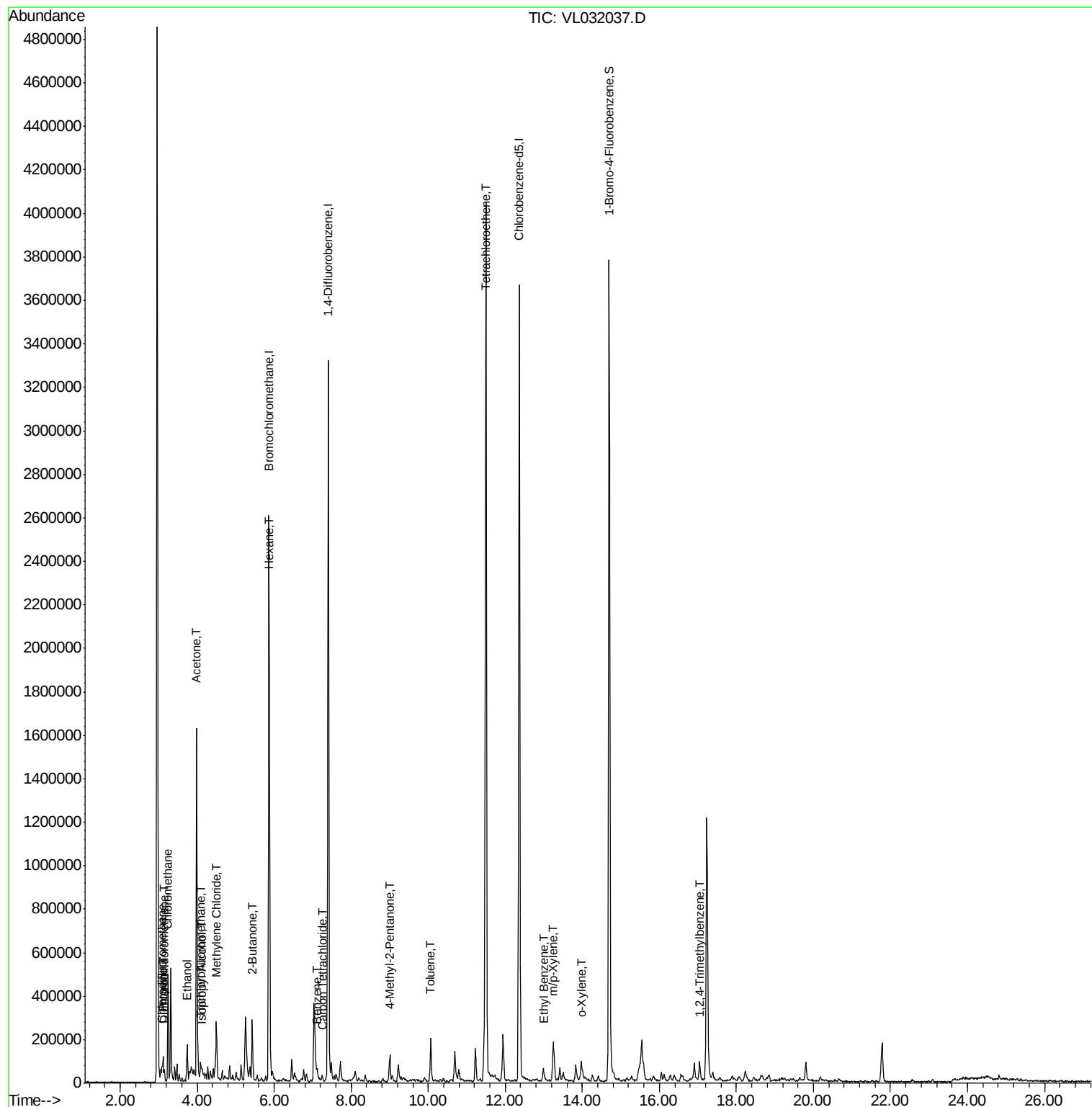
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL060118\
Data File : VL032037.D
Acq On : 2 Jun 2018 1:34
Operator : SY/AP
Sample : J3225-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

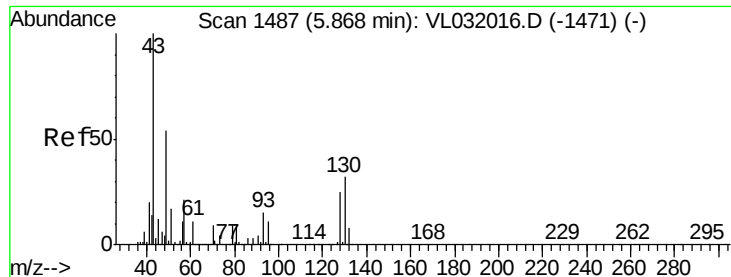
Instrument :
MSVOA_L
ClientSampleId :
OA1

Manual Integrations
APPROVED

MMDadoda
6/4/2018 3:35:54 PM

Quant Time: Jun 03 13:59:03 2018
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun
QLast Update : Fri Jun 01 02:31:35 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.86 min Scan# 1486

Delta R.T. -0.00 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Instrument :

MSVOA_L

ClientSampled :

QA1

Tot Ion: 49 Resp: 1133087

Ion Ratio Lower Upper

49 100

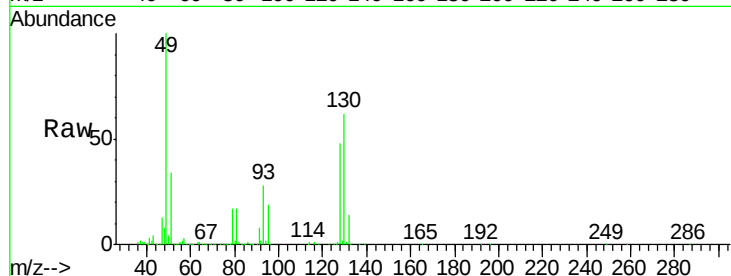
128 49.3 24.1 72.3

130 63.3 30.9 92.8

Manual Integrations
APPROVED

MMDadoda

6/4/2018 3:35:54 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

5.86

800000

600000

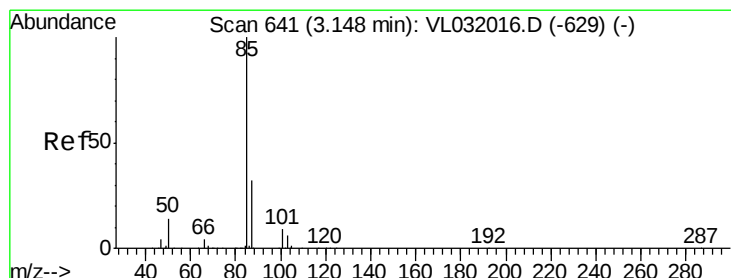
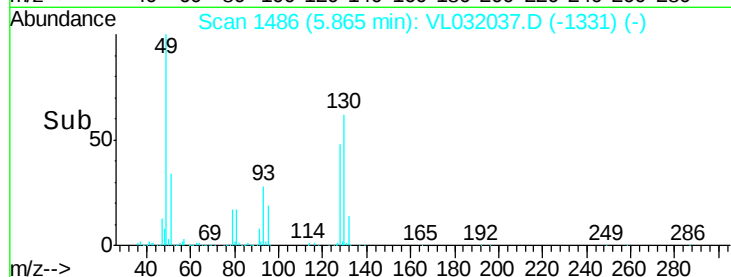
400000

200000

0

5.80 5.85 5.90

Time-->



#2

Dichlorodifluoromethane

Concen: 0.29 ppbv

RT: 3.15 min Scan# 641

Delta R.T. 0.00 min

Lab File: VL032037.D

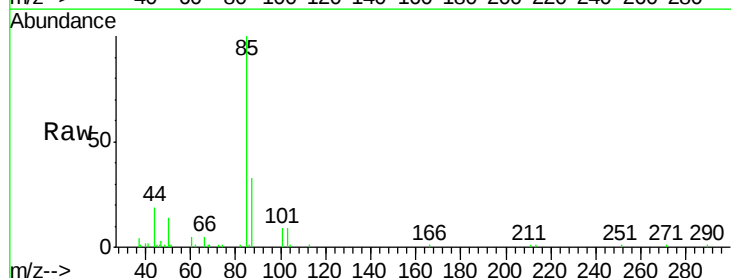
Acq: 2 Jun 2018 1:34

Tgt Ion: 85 Resp: 40106

Ion Ratio Lower Upper

85 100

87 32.9 25.5 38.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.15

30000

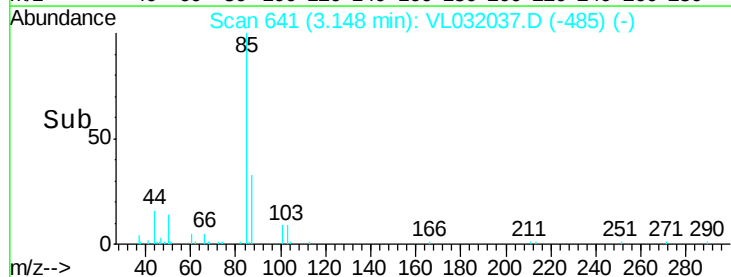
20000

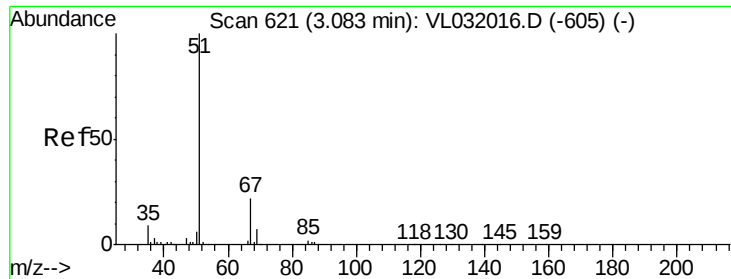
10000

0

3.10 3.15 3.20

Time-->





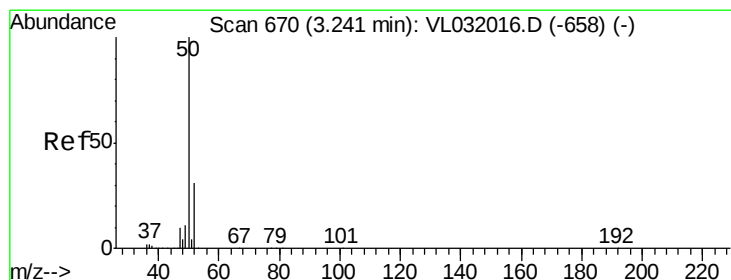
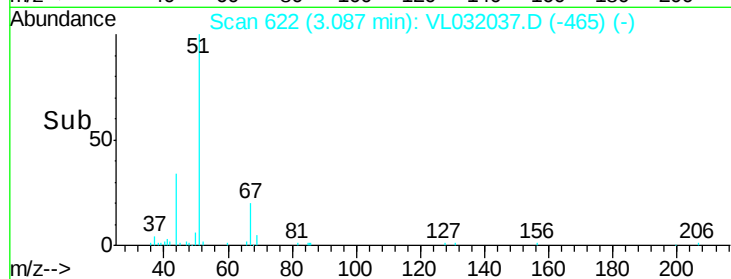
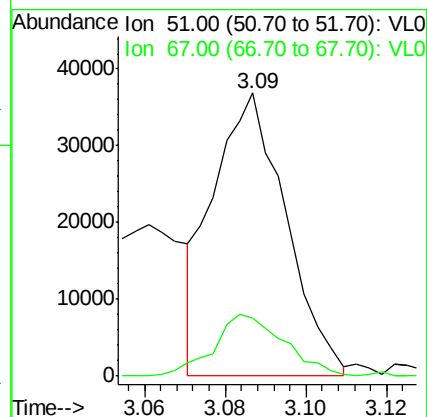
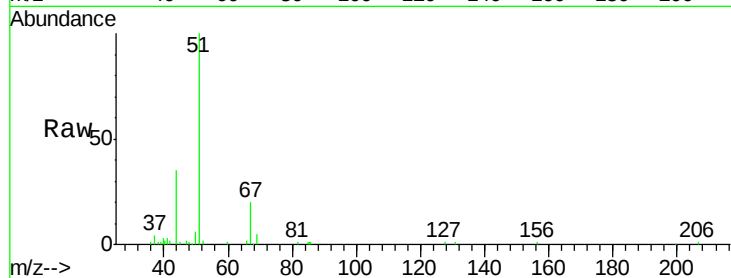
#3
Chlorodifluoromethane
Concen: 0.43 ppbv m
RT: 3.09 min Scan# 622
Delta R.T. 0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tot Ion	Ion	Ratio	Lower	Upper
51	51	100		
67	67	21.4	17.2	25.8

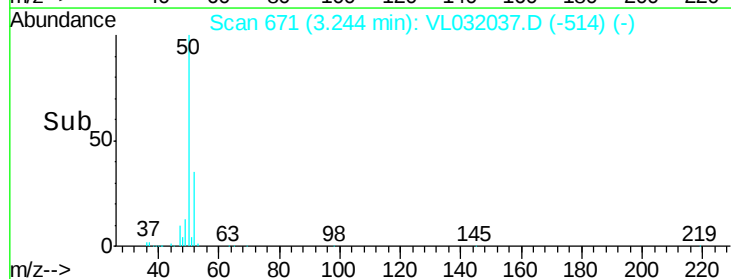
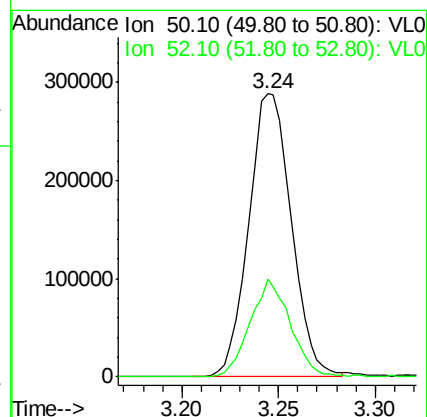
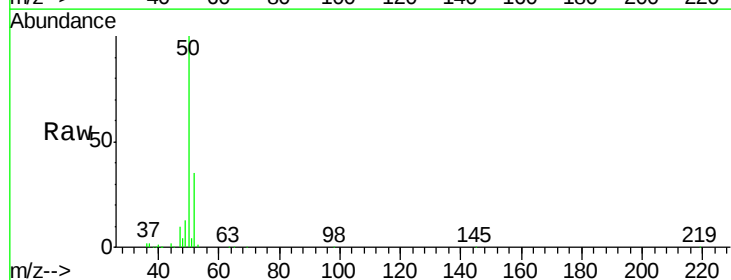
Manual Integrations
APPROVED

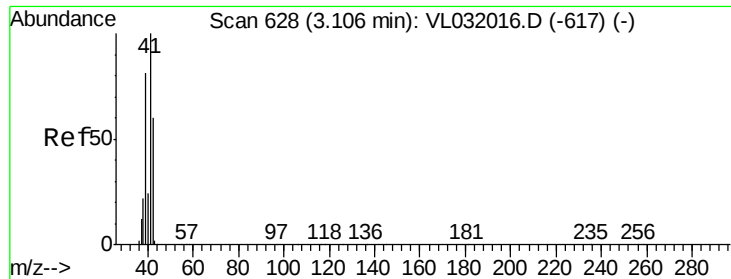
MMDadoda
6/4/2018 3:35:54 PM



#4
Chloromethane
Concen: 8.20 ppbv
RT: 3.24 min Scan# 671
Delta R.T. 0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion	Ion	Ratio	Lower	Upper
50	50	100		
52	52	34.6	25.0	37.6





#9

Propene

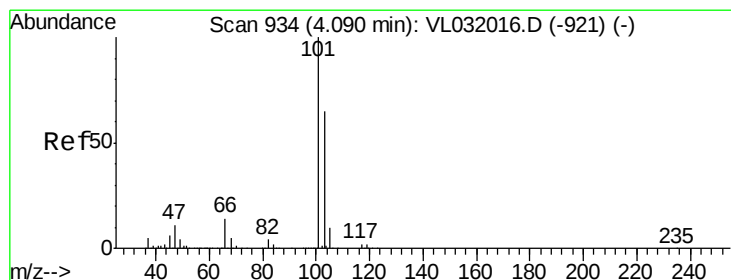
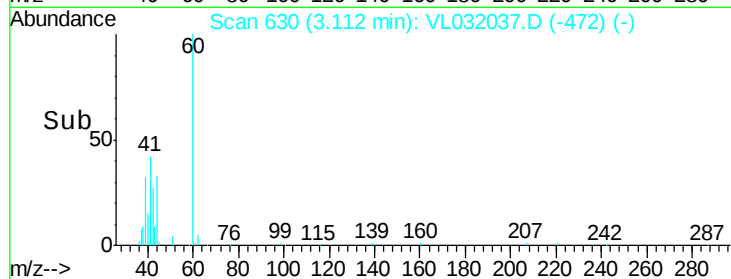
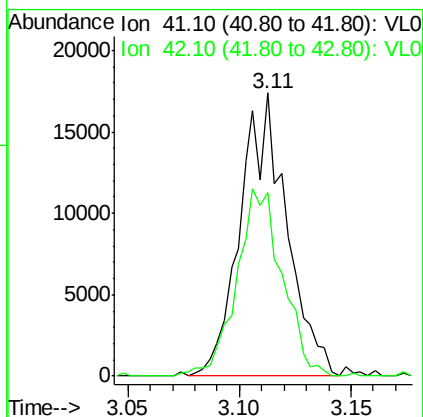
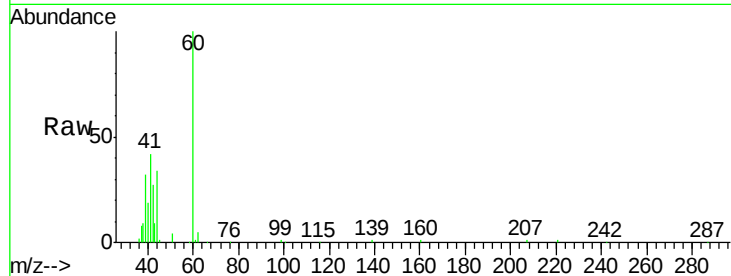
Concen: 0.72 ppbv m
RT: 3.11 min Scan# 630
Delta R.T. 0.01 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tot Ion	41	Resp	25106
Ion Ratio	100	Lower	Upper
42	65.1	54.4	81.6

Manual Integrations
APPROVED

MMDadoda
6/4/2018 3:35:54 PM

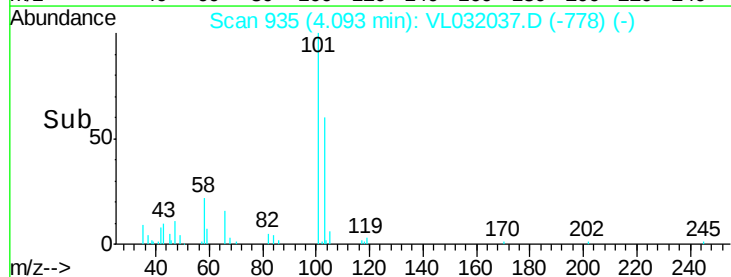
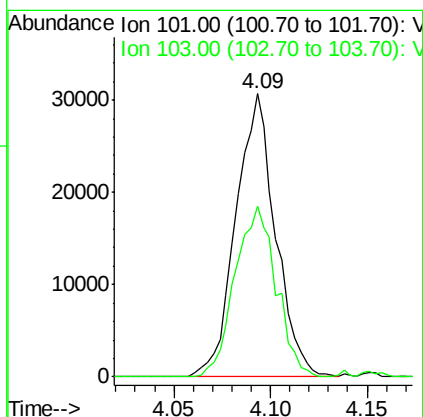
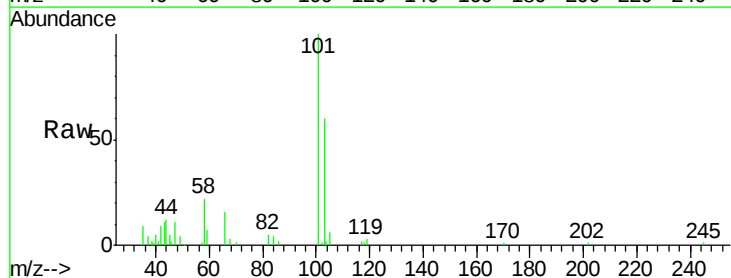


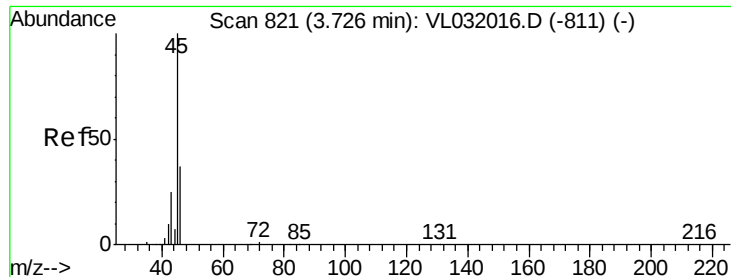
#11

Trichlorofluoromethane

Concen: 0.21 ppbv
RT: 4.09 min Scan# 935
Delta R.T. 0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion	101	Resp	43551
Ion Ratio	100	Lower	Upper
103	60.1	52.0	78.0





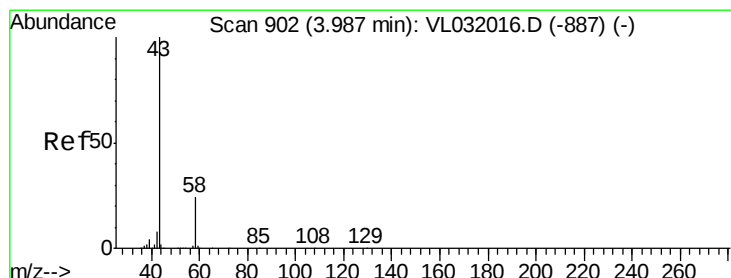
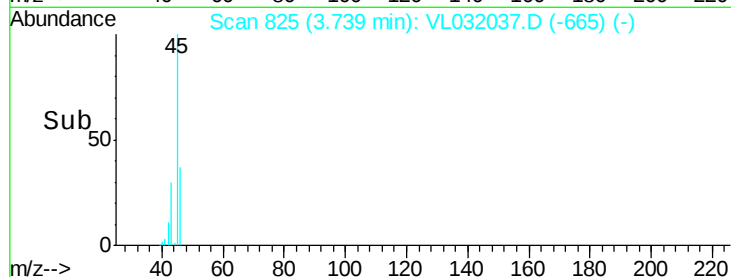
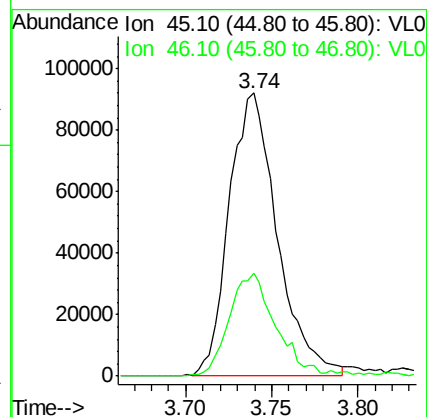
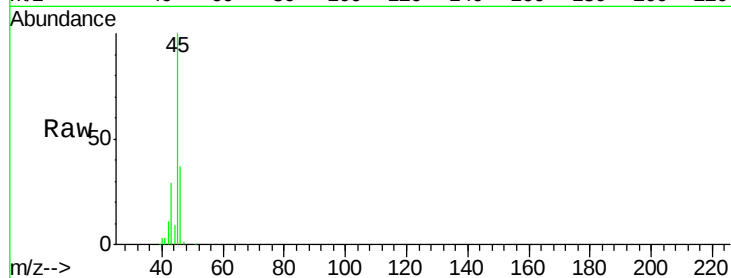
#13
Ethanol
Concen: 13.05 ppbv
RT: 3.74 min Scan# 825
Delta R.T. 0.01 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampled :
OA1

Tot Ion: 45 Resp: 177480
Ion Ratio Lower Upper
45 100
46 37.7 14.9 59.5

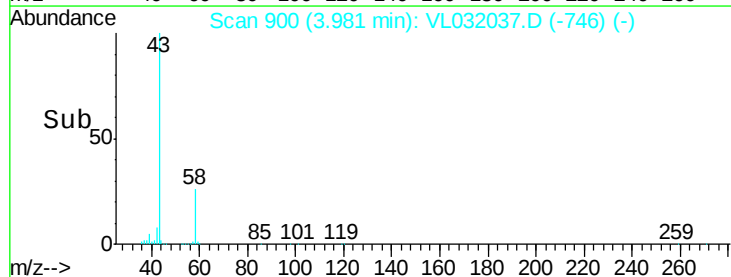
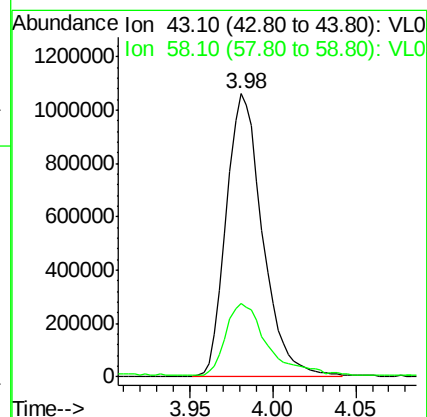
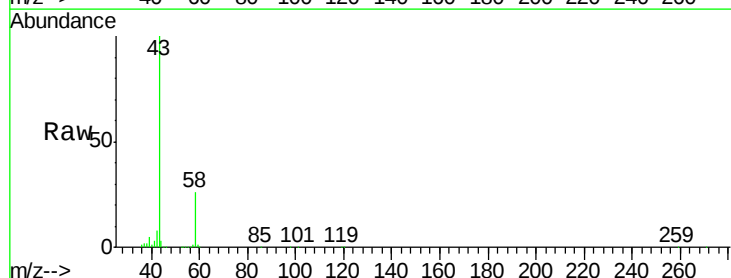
Manual Integrations
APPROVED

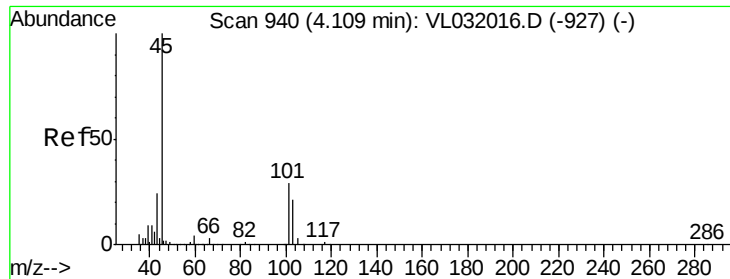
MMDadoda
6/4/2018 3:35:54 PM



#15
Acetone
Concen: 11.82 ppbv
RT: 3.98 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion: 43 Resp: 1614767
Ion Ratio Lower Upper
43 100
58 28.5 20.7 31.1





#19

Isopropyl Alcohol

Concen: 0.55 ppbv m

RT: 4.13 min Scan# 945

Delta R.T. 0.02 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Instrument :

MSVOA_L

ClientSampled :

QA1

Tot Ion: 45 Resp: 50167

Ion Ratio Lower Upper

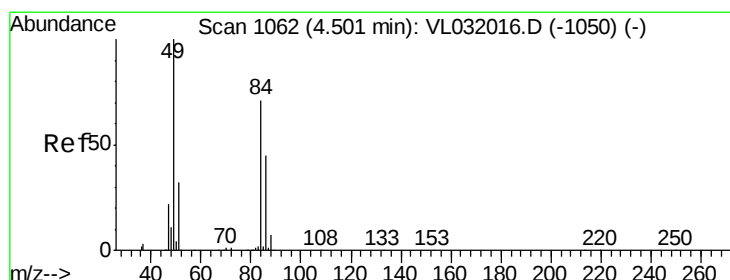
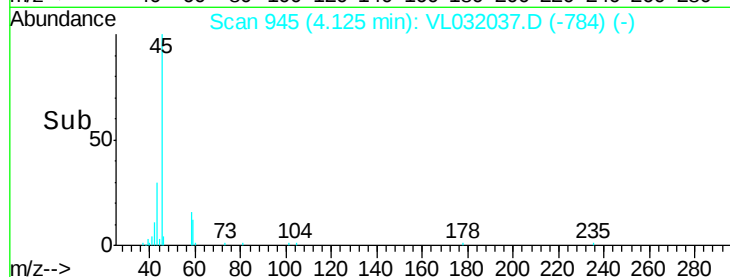
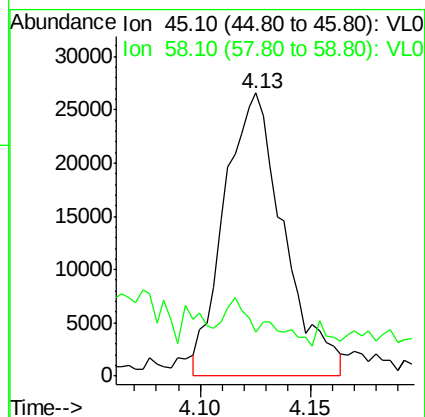
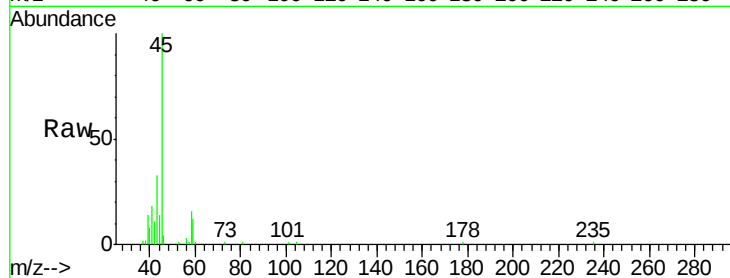
45 100

58 0.0 1.5 2.3#

Manual Integrations
APPROVED

MMDadoda

6/4/2018 3:35:54 PM



#20

Methylene Chloride

Concen: 1.44 ppbv

RT: 4.50 min Scan# 1062

Delta R.T. 0.00 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Tgt Ion: 84 Resp: 89508

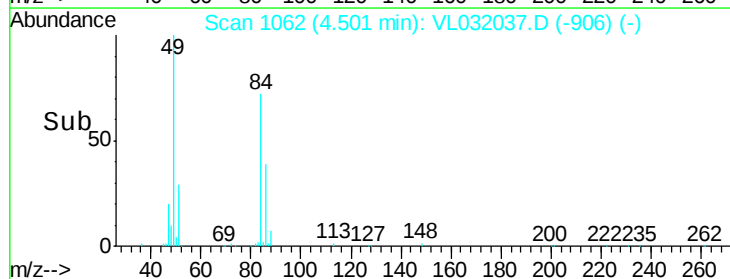
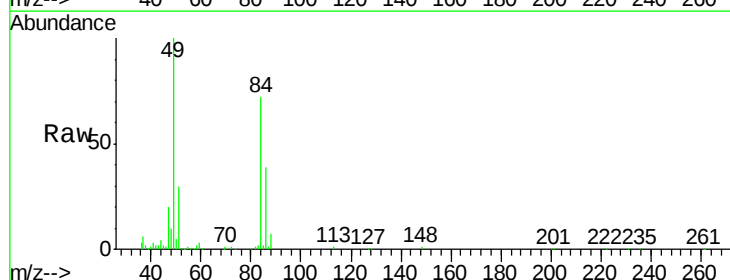
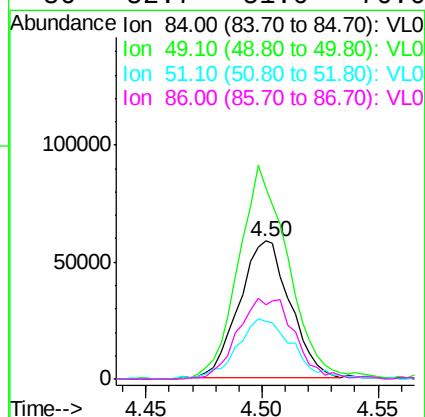
Ion Ratio Lower Upper

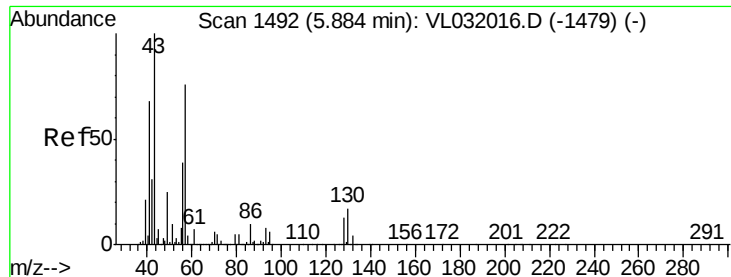
84 100

49 138.5 113.0 169.4

51 41.0 36.4 54.6

86 52.7 51.0 76.6





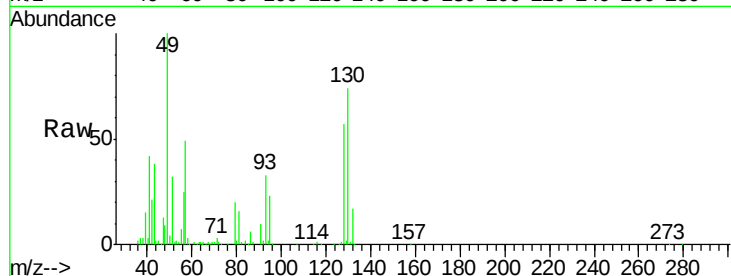
#26
Hexane
Concen: 1.12 ppbv
RT: 5.88 min Scan# 1492
Delta R.T. 0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampled :
QA1

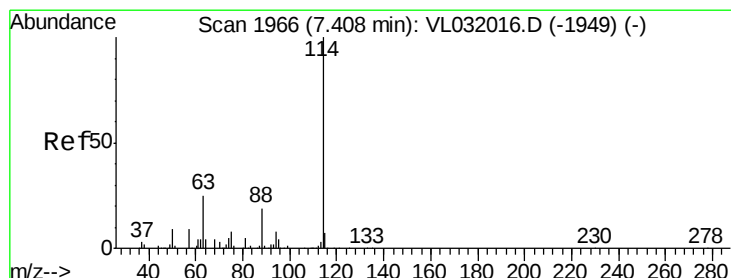
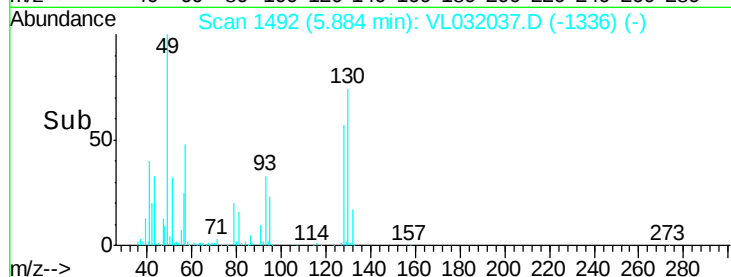
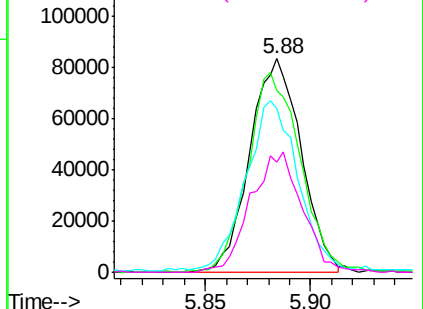
Tot Ion	Ratio	Lower	Upper
57	100		
41	96.9	71.4	107.2
43	83.2	168.6	252.8#
56	56.7	42.4	63.6

Manual Integrations
APPROVED

MMDadoda
6/4/2018 3:35:54 PM

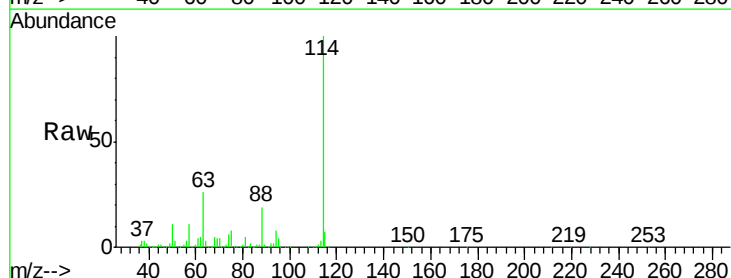


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

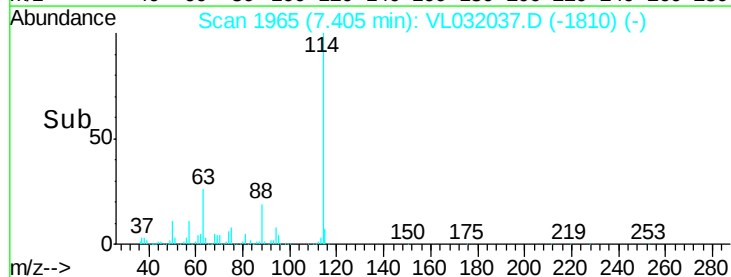
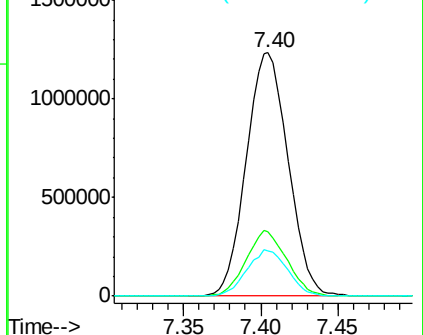


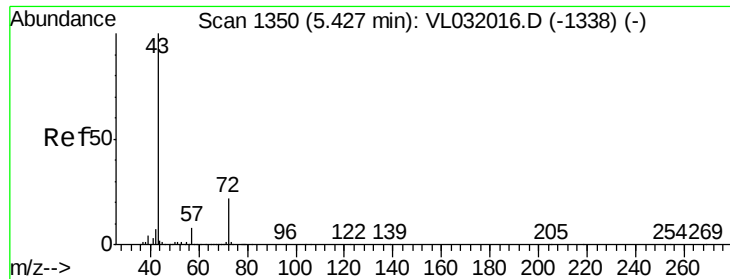
#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.40 min Scan# 1965
Delta R.T. -0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.2	21.1	31.7
88	18.6	14.8	22.2



Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





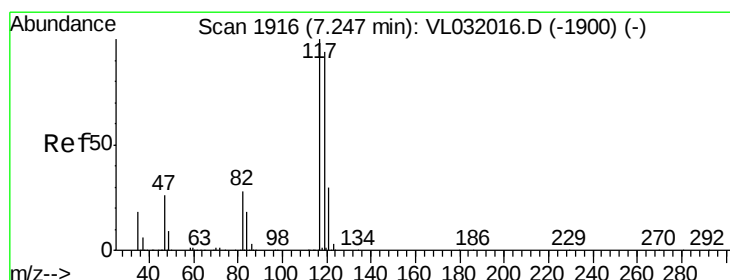
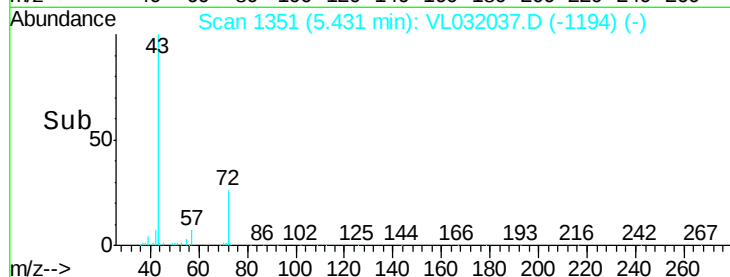
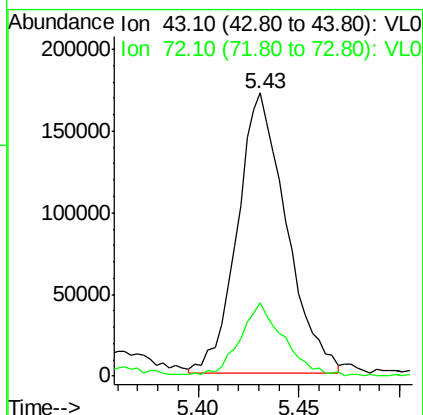
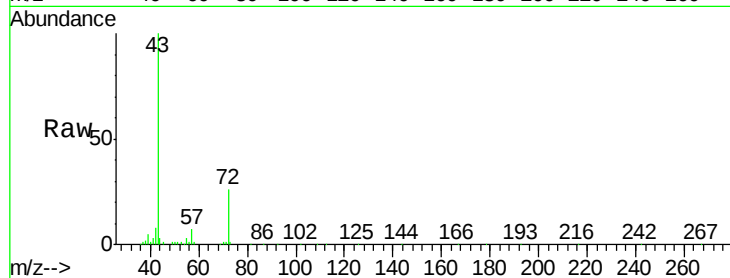
#34
2-Butanone
Concen: 1.60 ppbv
RT: 5.43 min Scan# 1351
Delta R.T. 0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tot Ion	43	Resp	291970
Ion Ratio	100	Lower	Upper
72	24.2	18.6	27.8

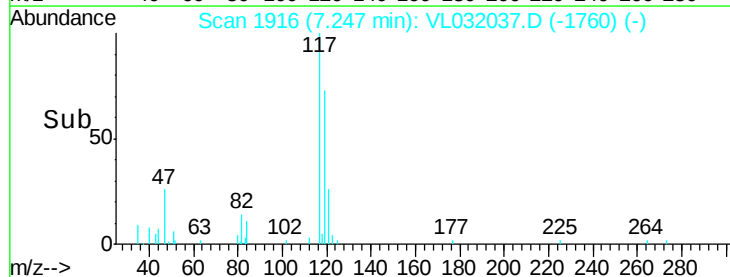
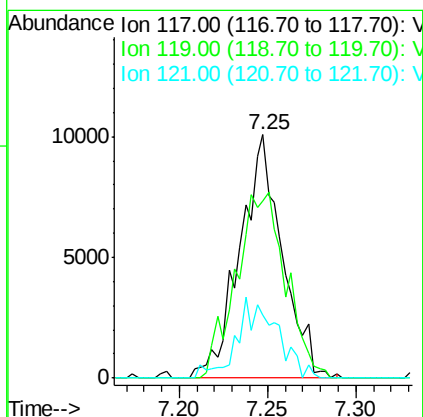
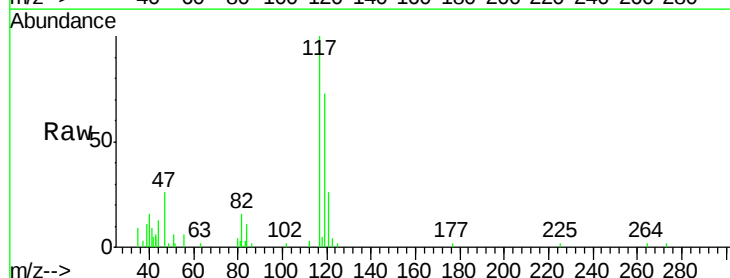
Manual Integrations
APPROVED

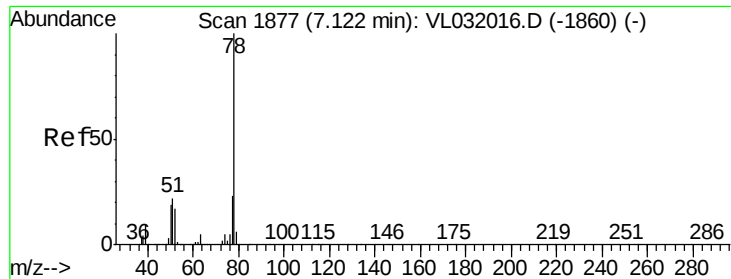
MMDadoda
6/4/2018 3:35:54 PM



#35
Carbon Tetrachloride
Concen: 0.08 ppbv m
RT: 7.25 min Scan# 1916
Delta R.T. 0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion	117	Resp	16814
Ion Ratio	100	Lower	Upper
119	72.9	75.3	112.9#
121	25.9	24.1	36.1





#36

Benzene

Concen: 0.12 ppbv m

RT: 7.11 min Scan# 1874

Delta R.T. -0.01 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Instrument :

MSVOA_L

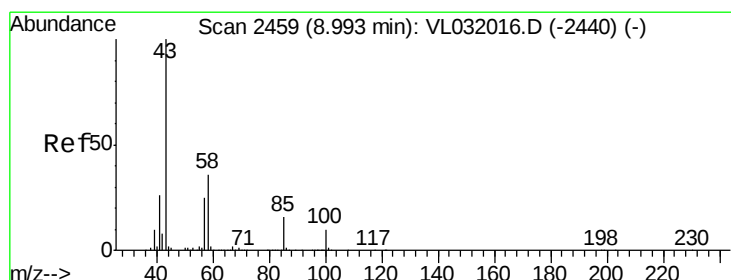
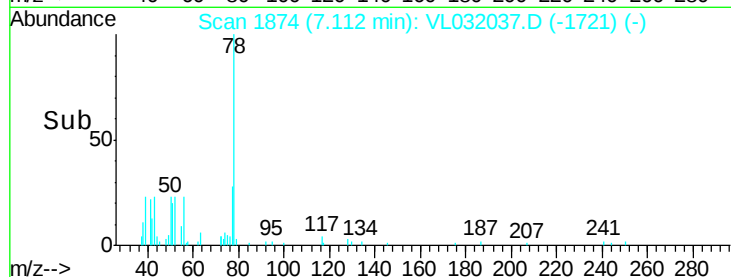
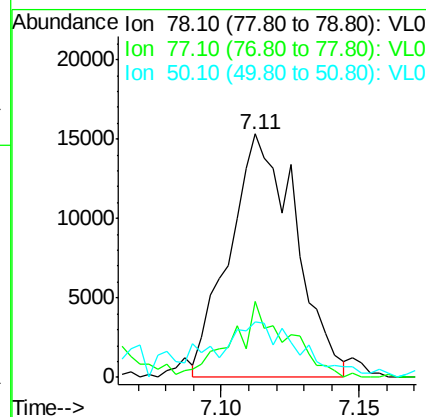
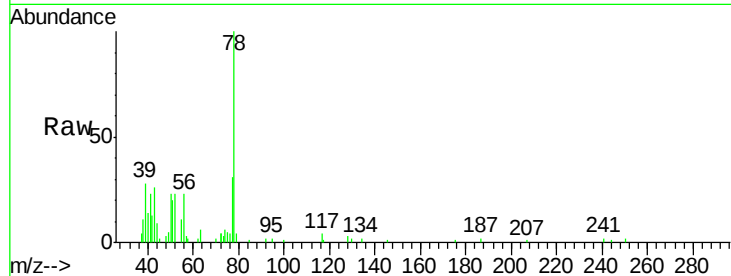
ClientSampleId :

QA1

Tot Ion:	78	Resp:	25467
Ion	Ratio	Lower	Upper
78	100		
77	31.0	18.1	27.1#
50	22.9	14.9	22.3#

Manual Integrations
APPROVED

MMDadoda
6/4/2018 3:35:54 PM



#50

4-Methyl-2-Pentanone

Concen: 0.50 ppbv m

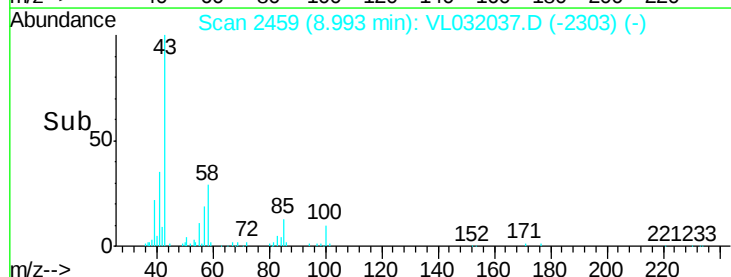
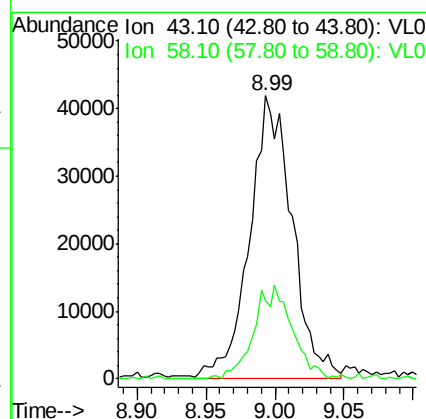
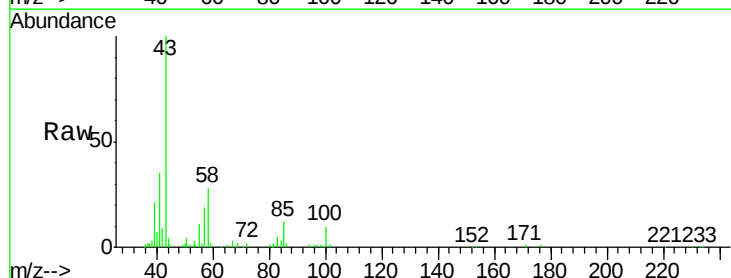
RT: 8.99 min Scan# 2459

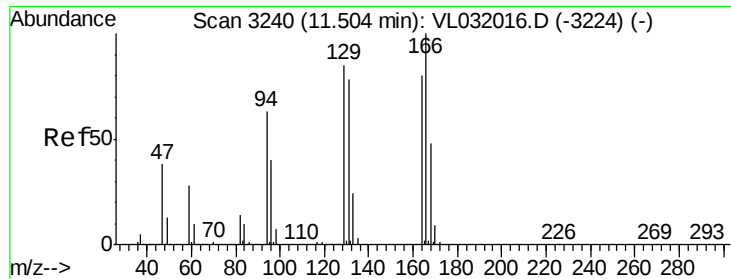
Delta R.T. 0.00 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Tgt Ion:	43	Resp:	89538
Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.1	43.7#





#52

Tetrachloroethene

Concen: 12.28 ppbv

RT: 11.50 min Scan# 3238

Delta R.T. -0.01 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Instrument :

MSVOA_L

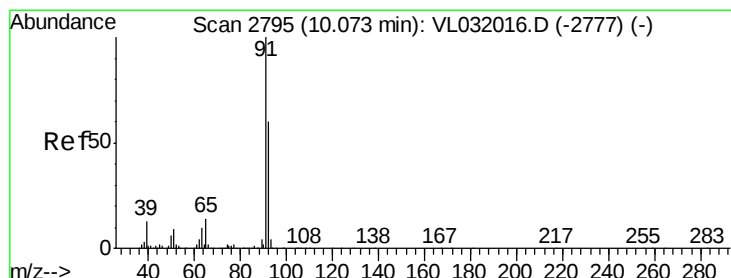
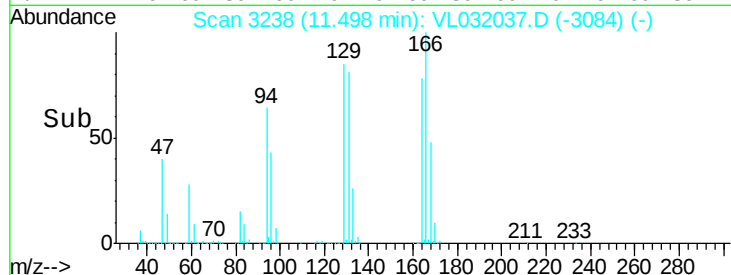
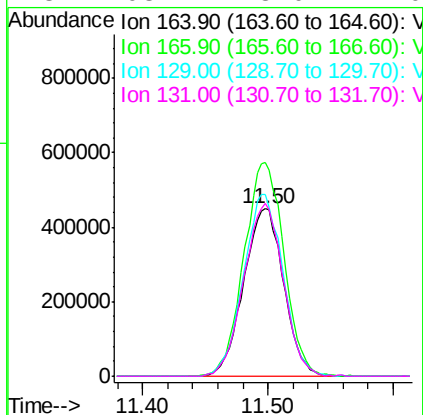
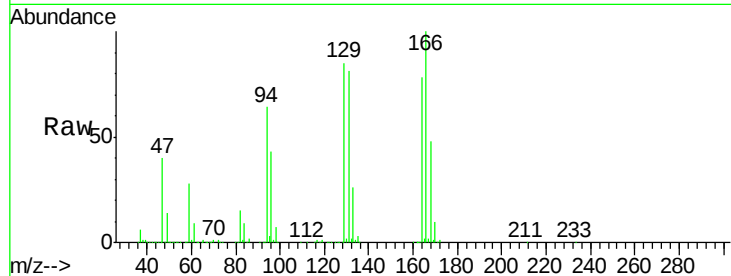
ClientSampleId :

QA1

Tot Ion:	164	Resp:	995021
Ion	Ratio	Lower	Upper
164	100		
166	127.8	100.2	150.2
129	108.9	85.4	128.0
131	103.4	78.0	117.0

Manual Integrations
APPROVED

MMDadoda
6/4/2018 3:35:54 PM



#53

Toluene

Concen: 0.56 ppbv

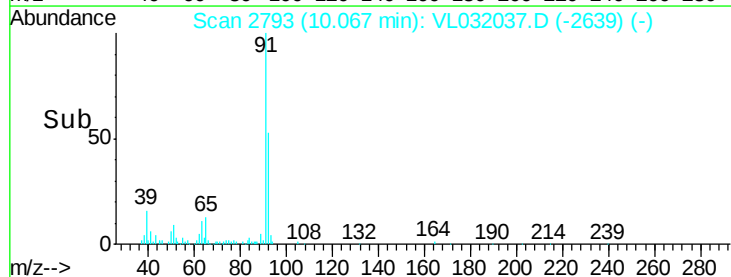
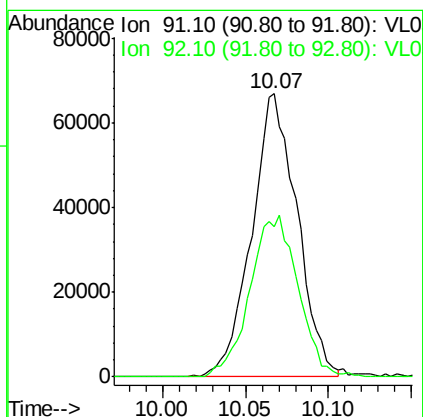
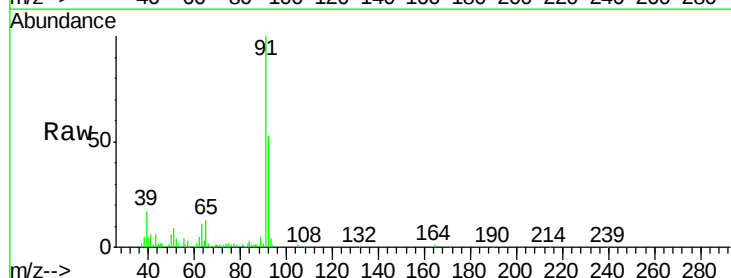
RT: 10.07 min Scan# 2793

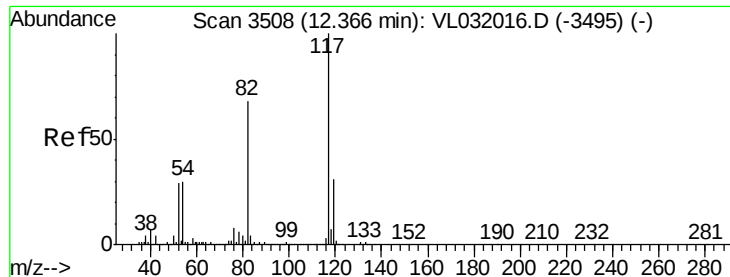
Delta R.T. -0.01 min

Lab File: VL032037.D

Acq: 2 Jun 2018 1:34

Tgt Ion:	91	Resp:	127532
Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.2	72.2





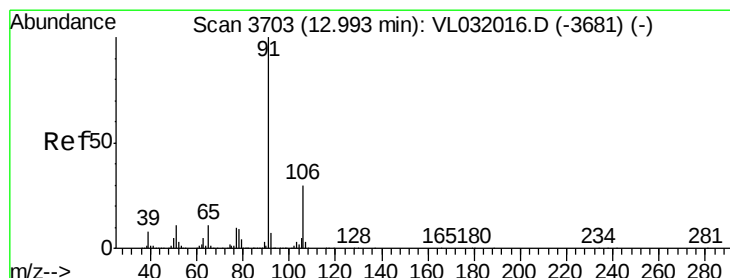
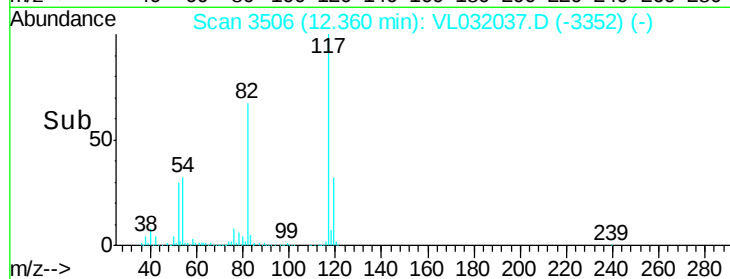
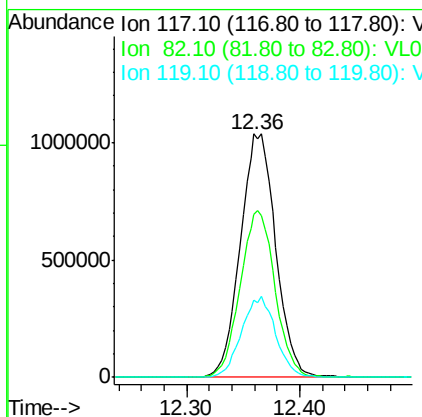
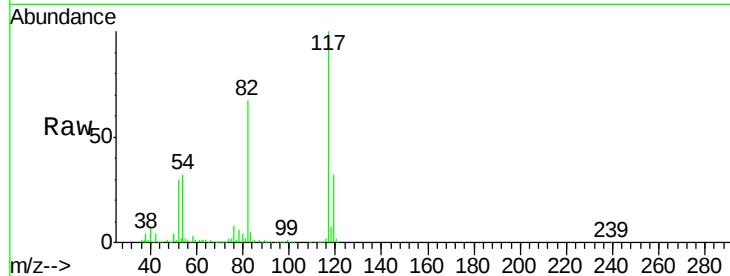
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.36 min Scan# 3506
Delta R.T. -0.01 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampleId :
OA1

Tot Ion	Ratio	Lower	Upper
117	100		
82	67.5	52.7	79.1
119	32.2	25.5	38.3

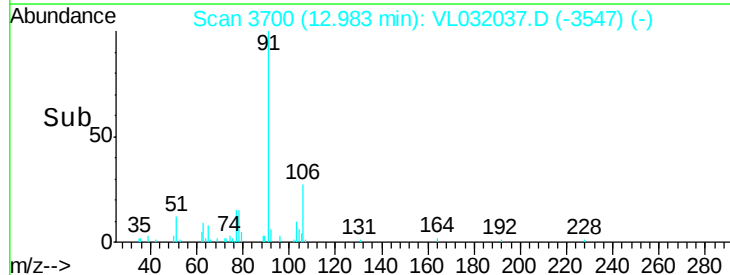
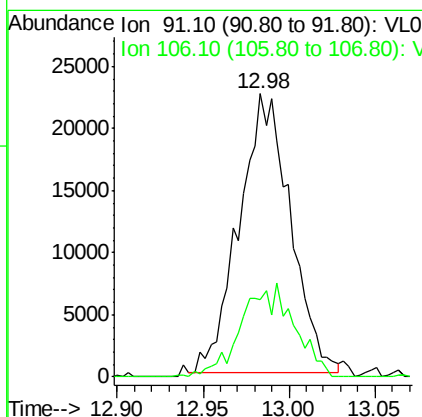
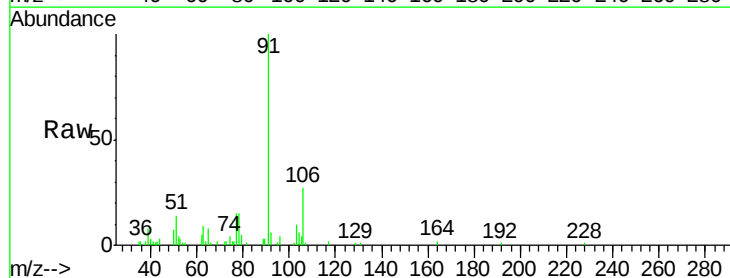
Manual Integrations
APPROVED

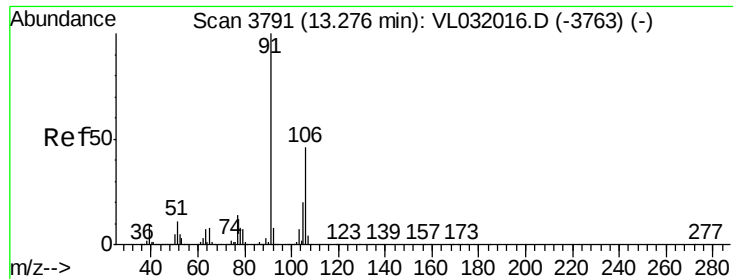
MMDadoda
6/4/2018 3:35:54 PM



#58
Ethyl Benzene
Concen: 0.15 ppbv
RT: 12.98 min Scan# 3700
Delta R.T. -0.01 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion	Ratio	Lower	Upper
91	100		
106	27.9	24.2	36.2





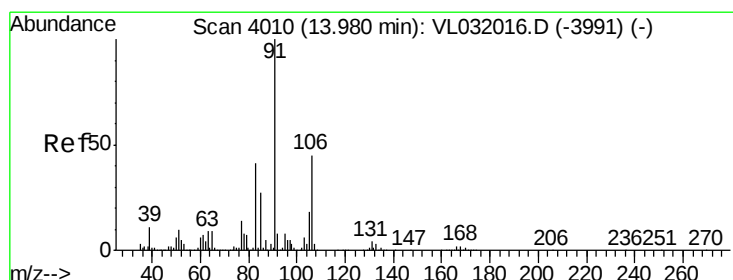
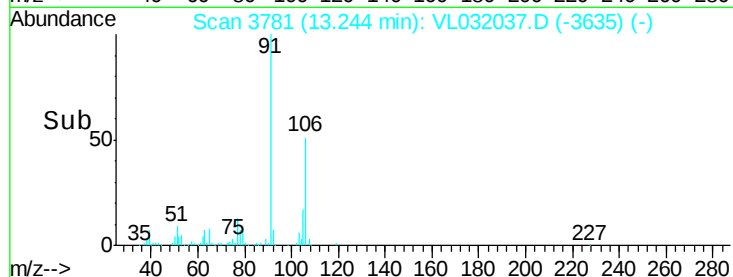
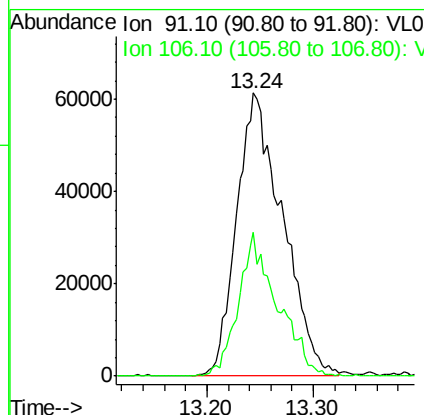
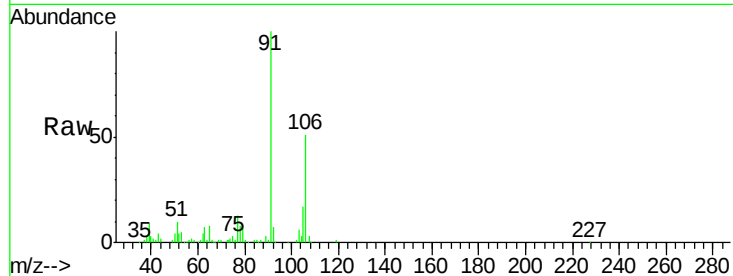
#59
m/p-Xylene
Concen: 0.66 ppbv m
RT: 13.24 min Scan# 3781
Delta R.T. -0.03 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Instrument :
MSVOA_L
ClientSampled :
OA1

Tot Ion: 91 Resp: 184123
Ion Ratio Lower Upper
91 100
106 0.0 35.7 53.5#

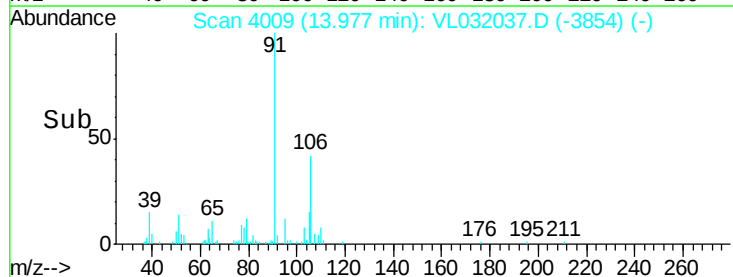
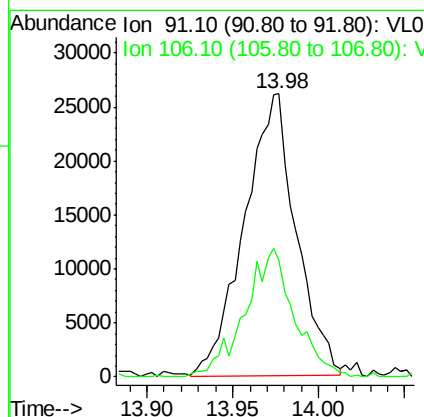
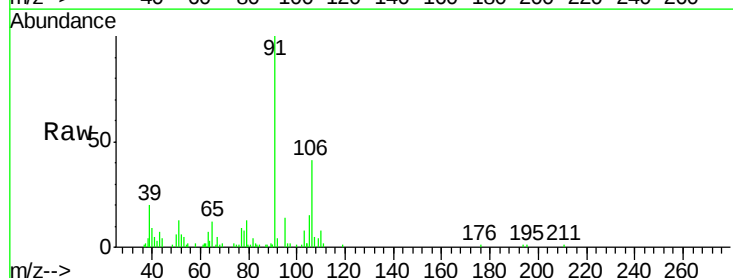
Manual Integrations
APPROVED

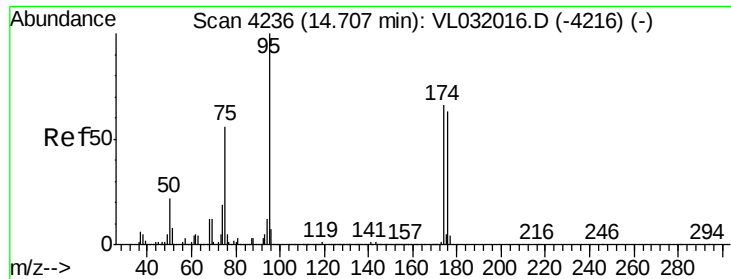
MMDadoda
6/4/2018 3:35:54 PM



#60
o-Xylene
Concen: 0.20 ppbv
RT: 13.98 min Scan# 4009
Delta R.T. -0.00 min
Lab File: VL032037.D
Acq: 2 Jun 2018 1:34

Tgt Ion: 91 Resp: 54696
Ion Ratio Lower Upper
91 100
106 43.6 21.9 65.5





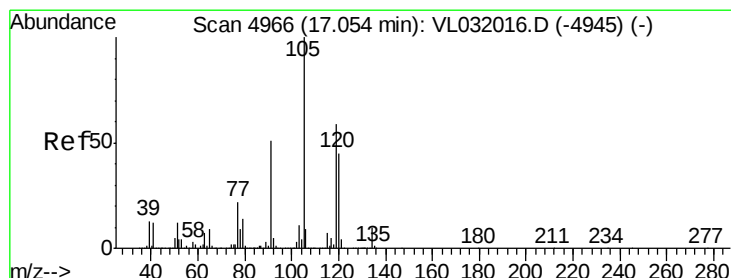
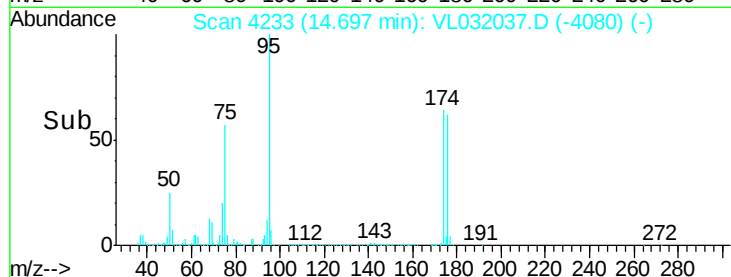
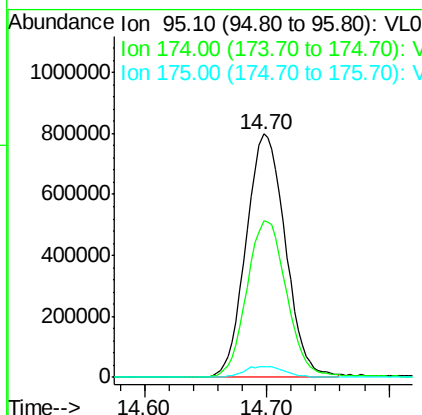
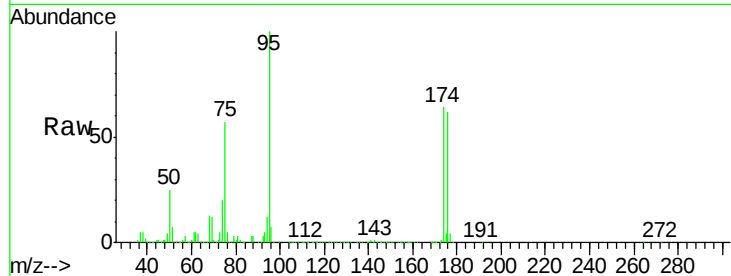
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.17 ppbv
 RT: 14.70 min Scan# 4233
 Delta R.T. -0.01 min
 Lab File: VL032037.D
 Acq: 2 Jun 2018 1:34

Instrument :
 MSVOA_L
 ClientSampled :
 OA1

Tot Ion: 95 Resp: 1774711
 Ion Ratio Lower Upper
 95 100
 174 66.2 53.2 79.8
 175 4.7 3.7 5.5

Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 3:35:54 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.14 ppbv
 RT: 17.04 min Scan# 4963
 Delta R.T. -0.01 min
 Lab File: VL032037.D
 Acq: 2 Jun 2018 1:34

Tgt Ion: 105 Resp: 41600
 Ion Ratio Lower Upper
 105 100
 120 35.2 36.0 54.0#
 91 6.9 41.4 62.0#
 77 16.0 17.3 25.9#

