

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL070518\
 Data File : VL032225.D
 Acq On : 6 Jul 2018 8:55
 Operator : SY/AP
 Sample : J3867-01DL 2X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 539BDL

Manual Integrations
 APPROVED

MMDadoda
 7/9/2018 10:48:00 AM

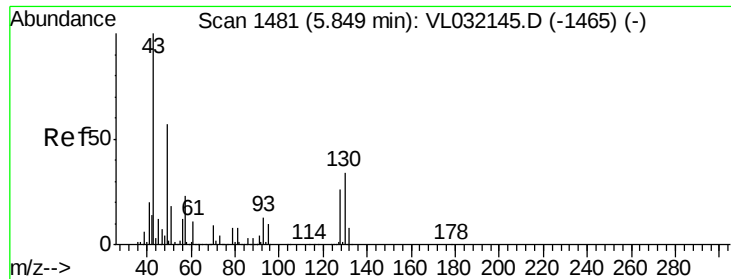
Quant Time: Jul 06 17:07:30 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 2
 QLast Update : Fri Jun 29 22:27:58 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1660620	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.38	114	4076300	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.34	117	4136780	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.67	95	3120469	9.87	ppbv	-0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.70%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	55491	0.25	ppbv	94
3) Chlorodifluoromethane	3.07	51	78039	0.38	ppbv	95
4) Chloromethane	3.22	50	35376	0.33	ppbv #	86
9) Propene	3.10	41	62593	0.66	ppbv	85
11) Trichlorofluoromethane	4.07	101	38514	0.16	ppbv	99
13) Ethanol	3.73	45	545997	19.05	ppbv	99
15) Acetone	3.96	43	2666342	13.73	ppbv	99
19) Isopropyl Alcohol	4.12	45	121417	0.75	ppbv #	1
20) Methylene Chloride	4.48	84	1324652	18.67	ppbv	96
26) Hexane	5.86	57	2975825	16.09	ppbv #	45
27) Carbon Disulfide	4.69	76	43266	0.24	ppbv #	56
30) Cyclohexane	7.35	84	24637m	0.14	ppbv	
34) 2-Butanone	5.41	43	116968	0.45	ppbv	100
35) Carbon Tetrachloride	7.22	117	11230m	0.04	ppbv	
36) Benzene	7.08	78	56616	0.14	ppbv #	93
38) Trichloroethene	8.05	130	18052m	0.12	ppbv	
44) 2,2,4-Trimethylpentane	8.08	57	115363	0.17	ppbv #	77
53) Toluene	10.04	91	165297	0.35	ppbv	99
58) Ethyl Benzene	12.96	91	42991m	0.06	ppbv	
59) m/p-Xylene	13.21	91	105619m	0.20	ppbv	
60) o-Xylene	13.94	91	41075	0.08	ppbv	97
74) 1,2,4-Trimethylbenzene	17.02	105	110431	0.17	ppbv #	71

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.84 min Scan# 1478

Delta R.T. -0.02 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

Instrument :

MSVOA_L

ClientSampleId :

539BDL

Tot Ion: 49 Resp: 1660620

Ion Ratio Lower Upper

49 100

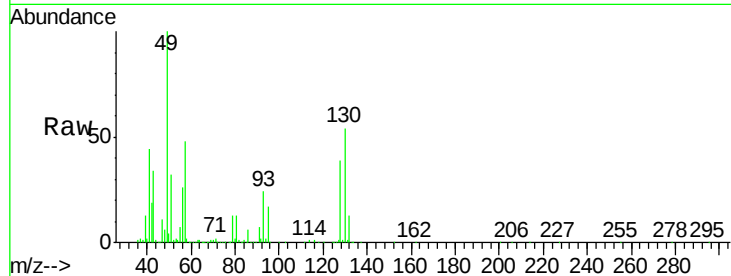
128 41.5 23.4 70.0

130 53.2 30.3 90.9

Manual Integrations
APPROVED

MMDadoda

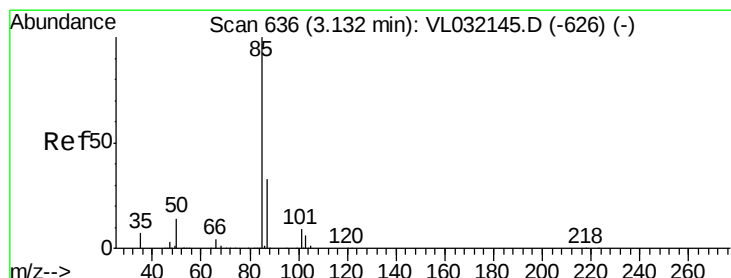
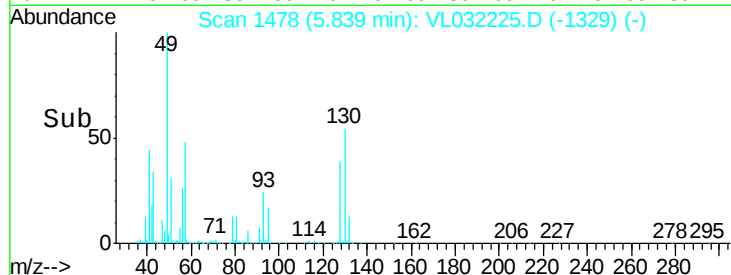
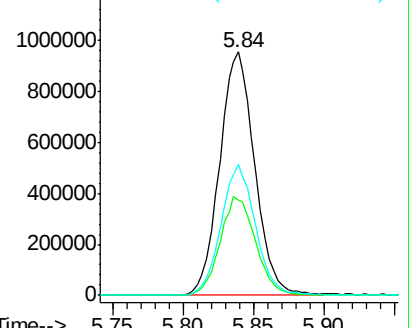
7/9/2018 10:48:00 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.25 ppbv

RT: 3.13 min Scan# 635

Delta R.T. -0.01 min

Lab File: VL032225.D

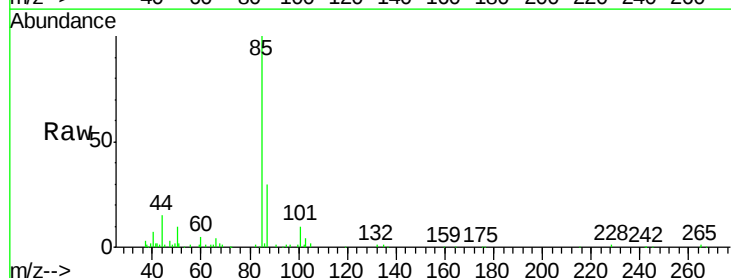
Acq: 6 Jul 2018 8:55

Tgt Ion: 85 Resp: 55491

Ion Ratio Lower Upper

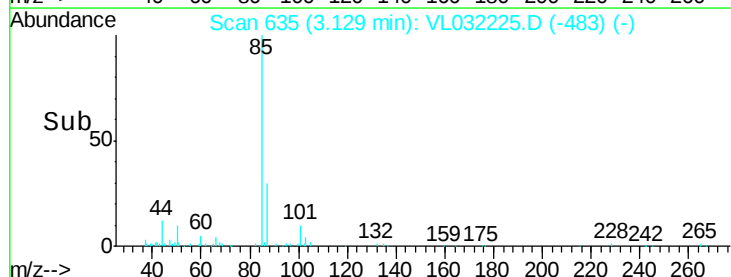
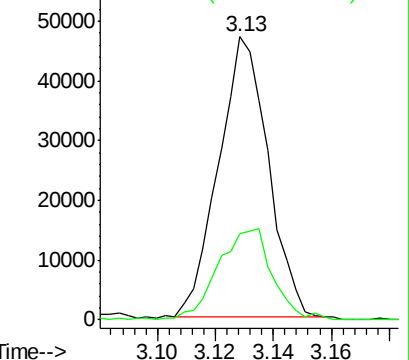
85 100

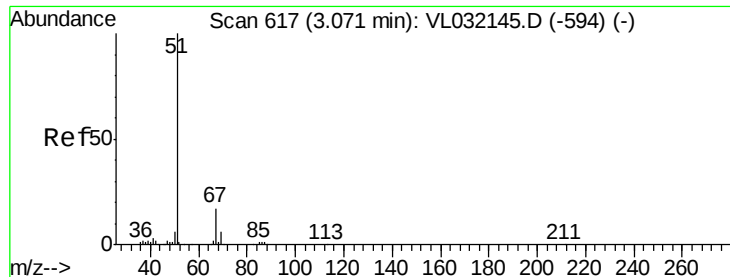
87 30.2 26.7 40.1



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.38 ppbv

RT: 3.07 min Scan# 616

Delta R.T. -0.01 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

Instrument :

MSVOA_L

ClientSampleId :

539BDL

Tot Ion: 51 Resp: 78039

Ion Ratio Lower Upper

51 100

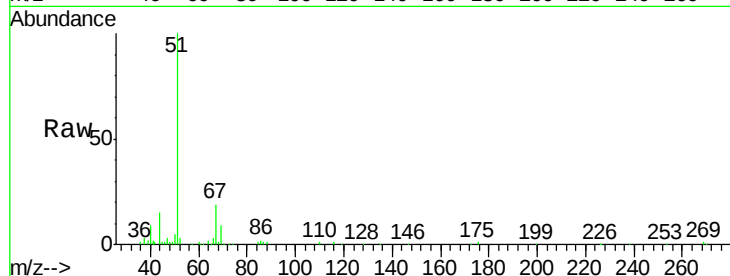
67 14.2 13.2 19.8

Manual Integrations

APPROVED

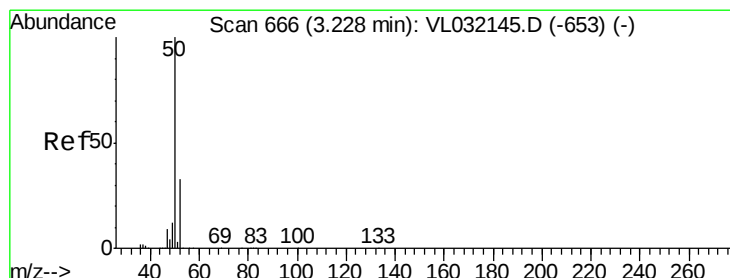
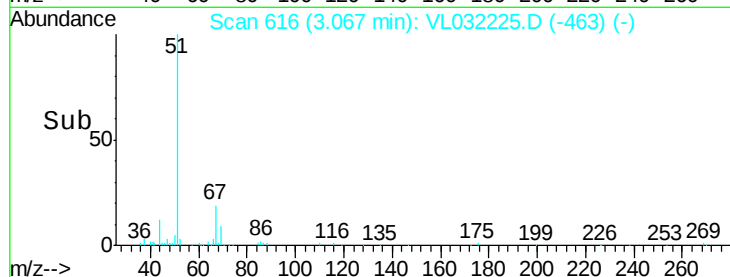
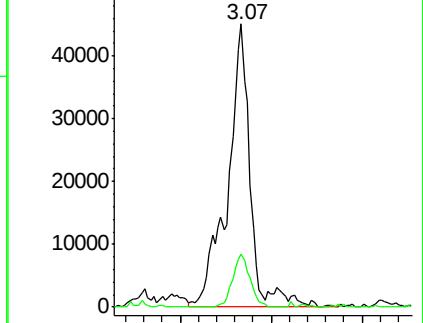
MMDadoda

7/9/2018 10:48:00 AM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.33 ppbv

RT: 3.22 min Scan# 664

Delta R.T. -0.02 min

Lab File: VL032225.D

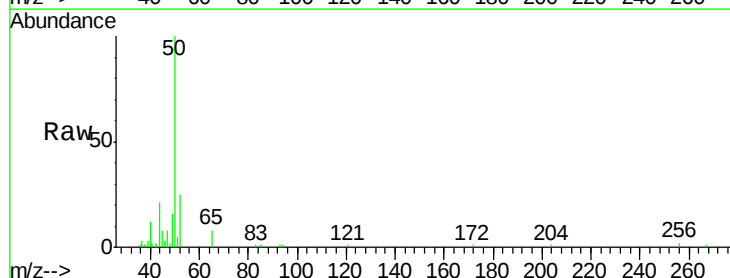
Acq: 6 Jul 2018 8:55

Tgt Ion: 50 Resp: 35376

Ion Ratio Lower Upper

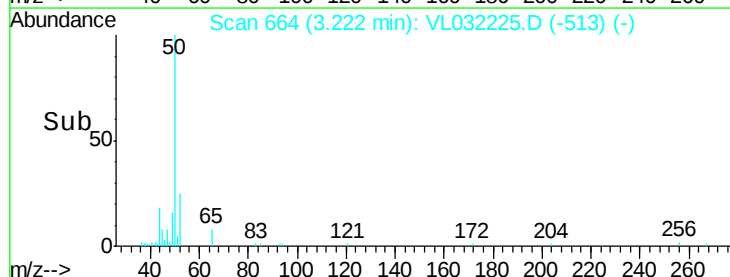
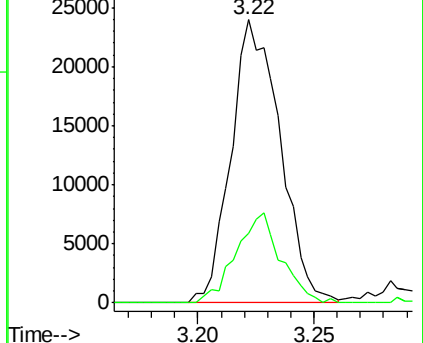
50 100

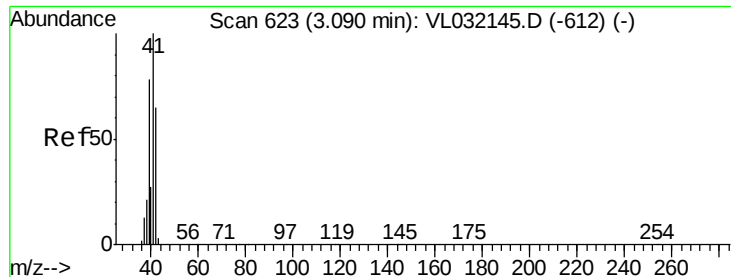
52 24.6 26.0 39.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.66 ppbv

RT: 3.10 min Scan# 626

Delta R.T. 0.00 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

Instrument :

MSVOA_L

ClientSampleId :

539BDL

Tot Ion: 41 Resp: 62593

Ion Ratio Lower Upper

41 100

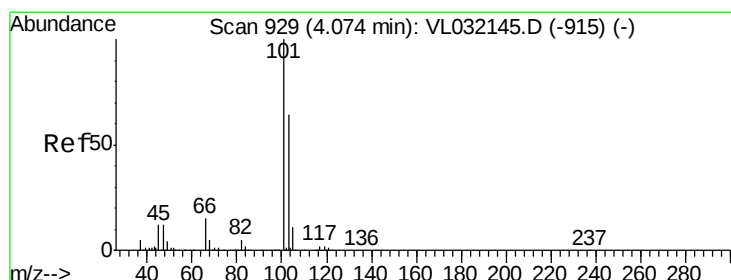
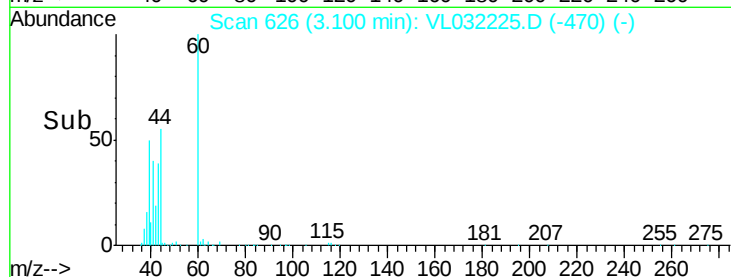
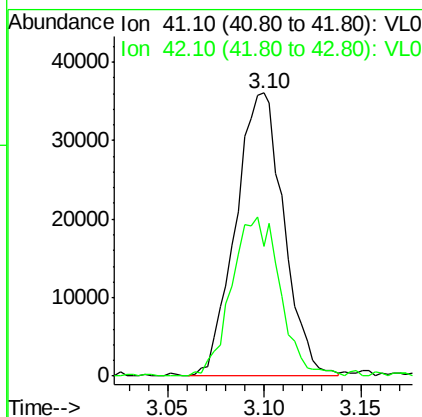
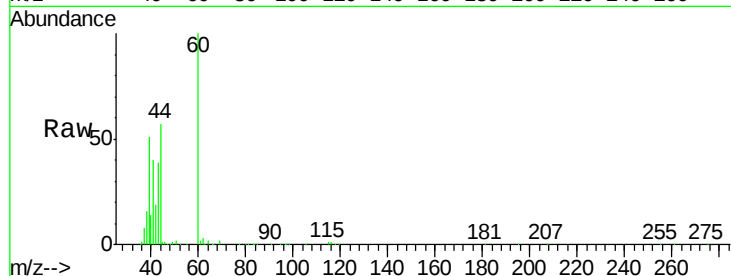
42 57.6 56.2 84.4

Manual Integrations

APPROVED

MMDadoda

7/9/2018 10:48:00 AM



#11

Trichlorofluoromethane

Concen: 0.16 ppbv

RT: 4.07 min Scan# 928

Delta R.T. -0.01 min

Lab File: VL032225.D

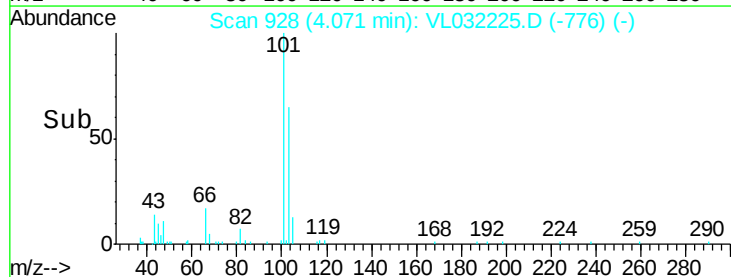
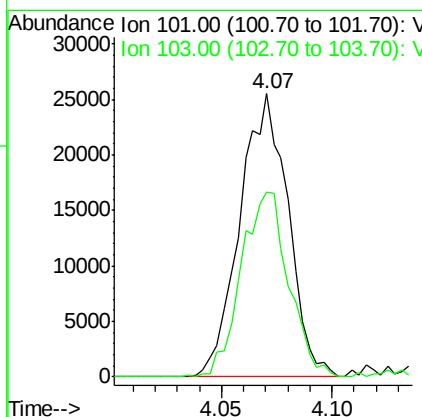
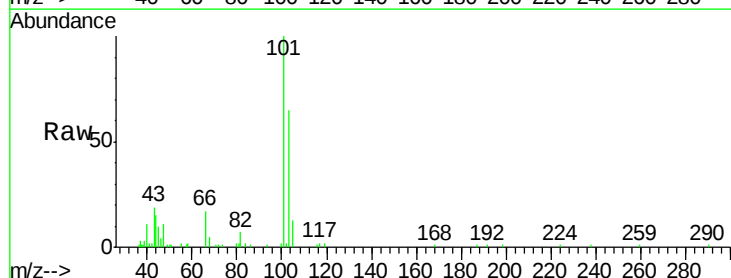
Acq: 6 Jul 2018 8:55

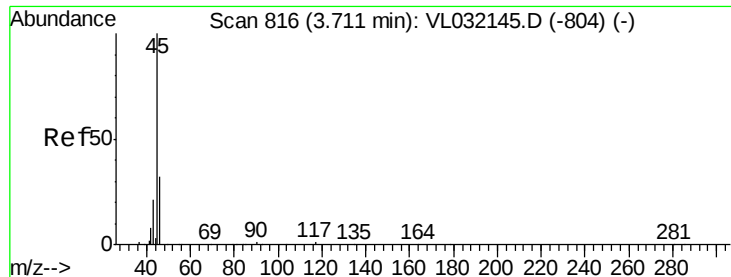
Tgt Ion: 101 Resp: 38514

Ion Ratio Lower Upper

101 100

103 65.2 51.4 77.0





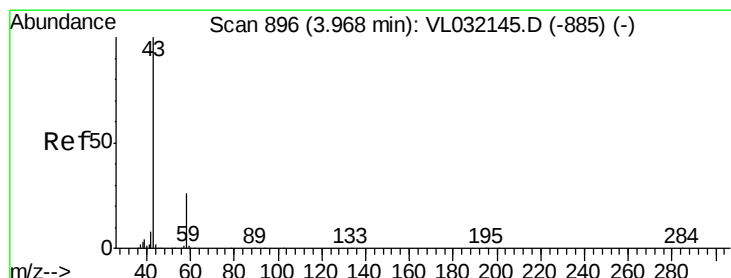
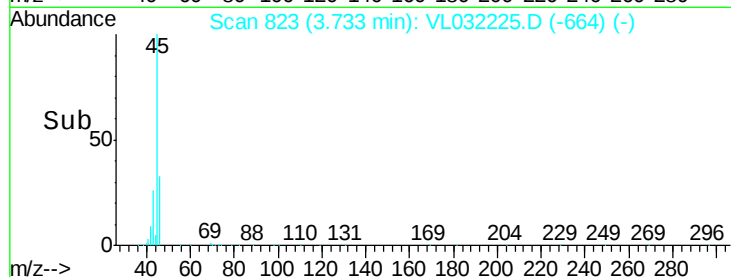
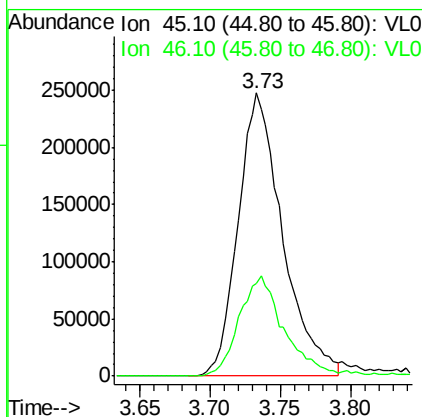
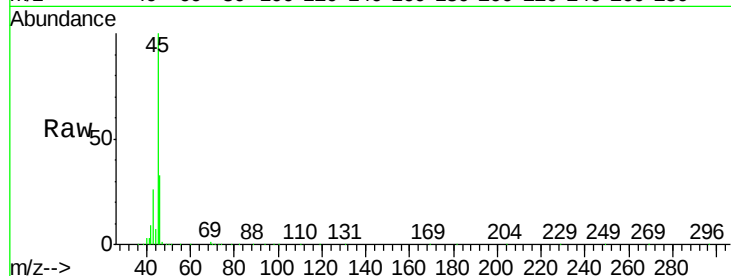
#13
Ethanol
Concen: 19.05 ppbv
RT: 3.73 min Scan# 823
Delta R.T. 0.01 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Instrument :
MSVOA_L
ClientSampleId :
539BDL

Tot Ion	45	Resp	545997
Ion Ratio	100	Lower	Upper
46	37.1	14.6	58.4

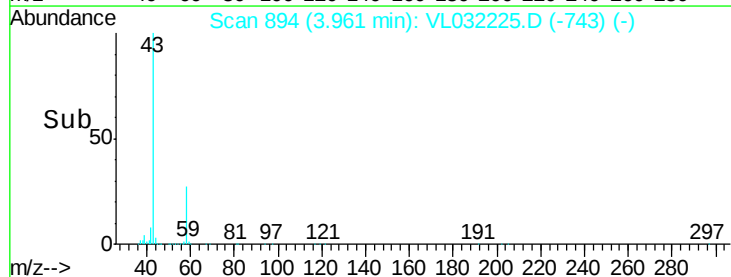
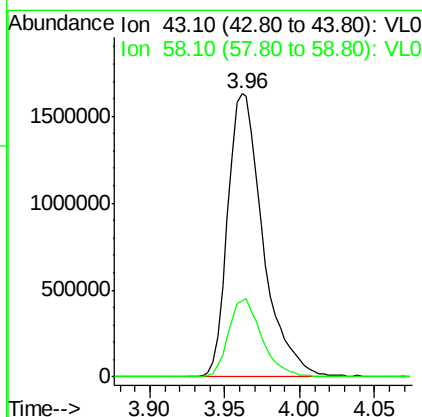
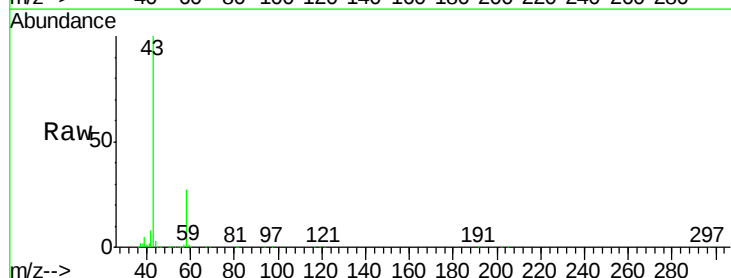
Manual Integrations
APPROVED

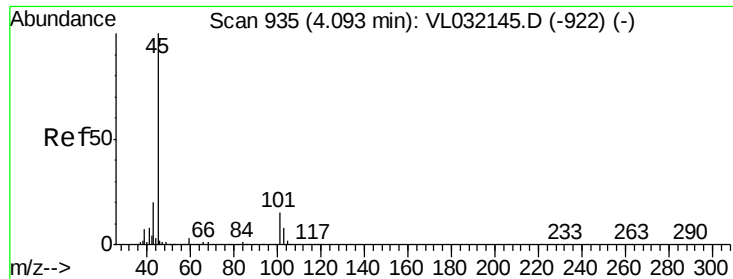
MMDadoda
7/9/2018 10:48:00 AM



#15
Acetone
Concen: 13.73 ppbv
RT: 3.96 min Scan# 894
Delta R.T. -0.02 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Tgt Ion	43	Resp	2666342
Ion Ratio	100	Lower	Upper
58	26.3	21.4	32.0





#19

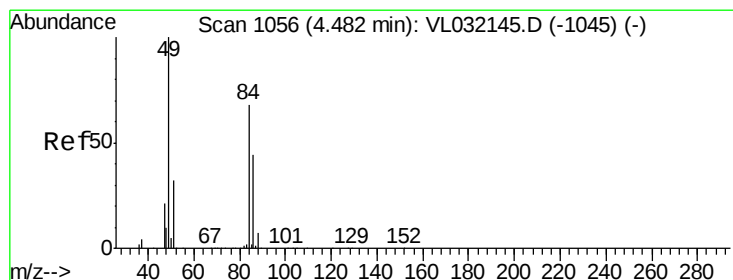
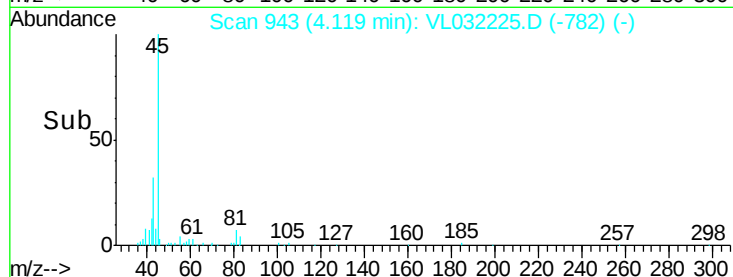
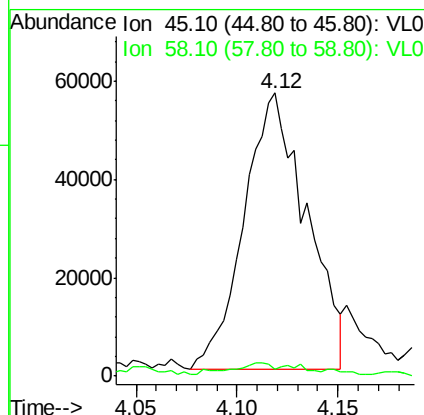
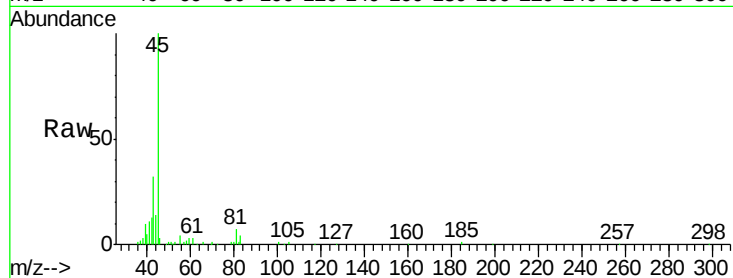
Isopropyl Alcohol
 Concen: 0.75 ppbv
 RT: 4.12 min Scan# 943
 Delta R.T. 0.02 min
 Lab File: VL032225.D
 Acq: 6 Jul 2018 8:55

Instrument :
 MSVOA_L
 ClientSampleId :
 539BDL

Tot Ion	Ratio	Lower	Upper
45	100		
58	577.1	29.4	44.0#

Manual Integrations
 APPROVED

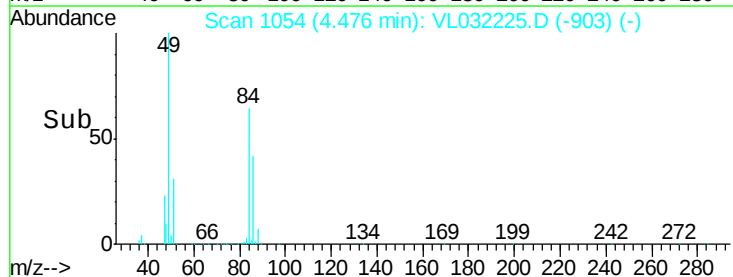
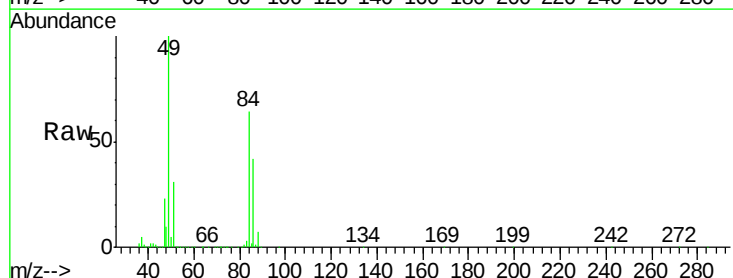
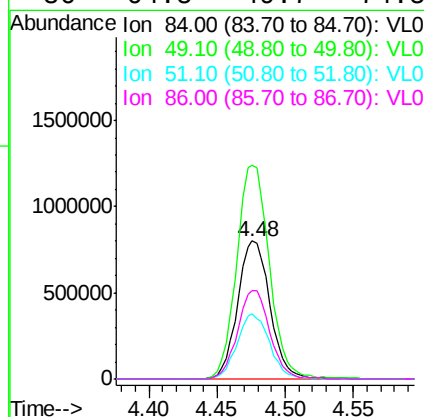
MMDadoda
 7/9/2018 10:48:00 AM

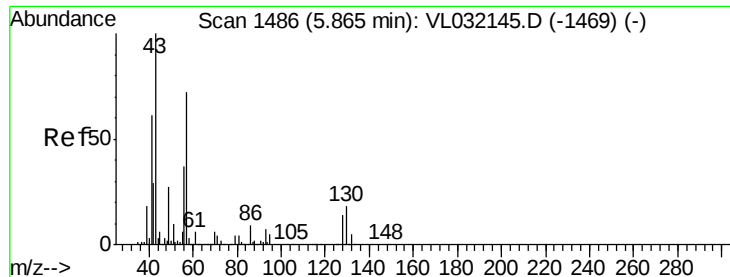


#20

Methylene Chloride
 Concen: 18.67 ppbv
 RT: 4.48 min Scan# 1054
 Delta R.T. -0.02 min
 Lab File: VL032225.D
 Acq: 6 Jul 2018 8:55

Tgt Ion	Ratio	Lower	Upper
84	100		
49	155.2	119.6	179.4
51	47.8	36.3	54.5
86	64.5	49.7	74.5





#26

Hexane

Concen: 16.09 ppbv

RT: 5.86 min Scan# 1484

Delta R.T. -0.02 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

Instrument :

MSVOA_L

ClientSampled :

539BDL

Tot Ion: 57 Resp: 2975825

Ion Ratio Lower Upper

57 100

41 85.2 68.6 103.0

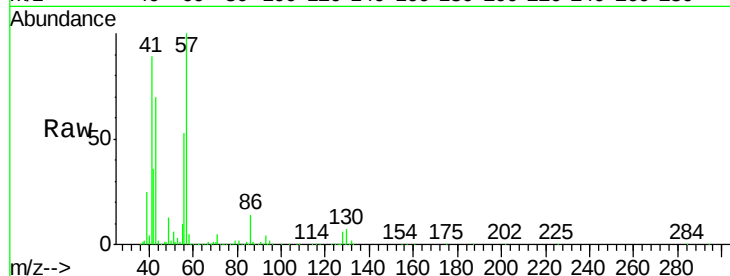
43 69.9 168.6 252.8#

56 52.8 41.0 61.6

Manual Integrations
APPROVED

MMDadoda

7/9/2018 10:48:00 AM

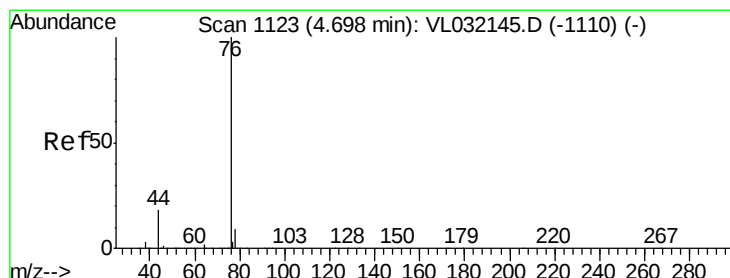
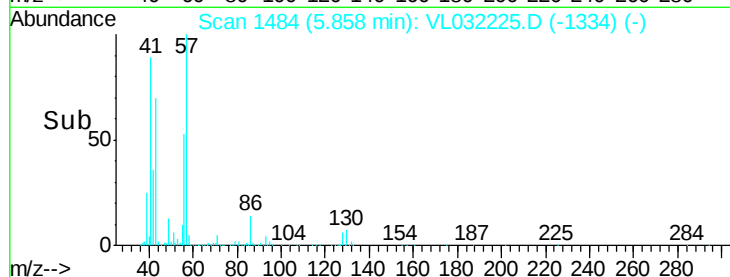
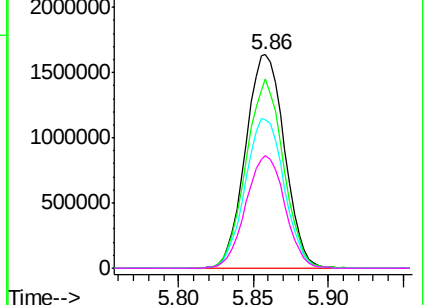


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#27

Carbon Disulfide

Concen: 0.24 ppbv

RT: 4.69 min Scan# 1122

Delta R.T. -0.01 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

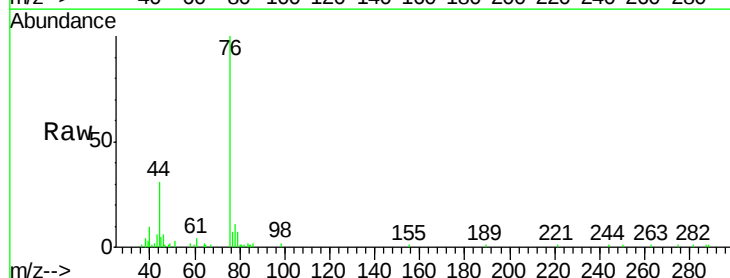
Tgt Ion: 76 Resp: 43266

Ion Ratio Lower Upper

76 100

44 45.7 15.1 22.7#

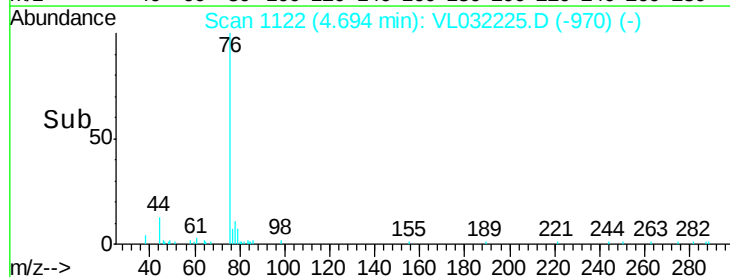
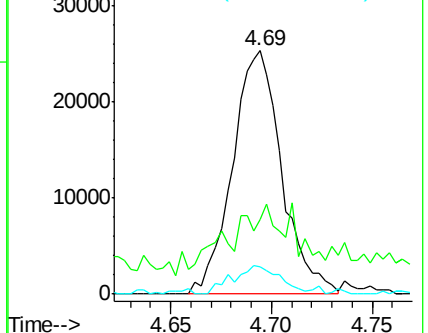
78 12.9 7.2 10.8#

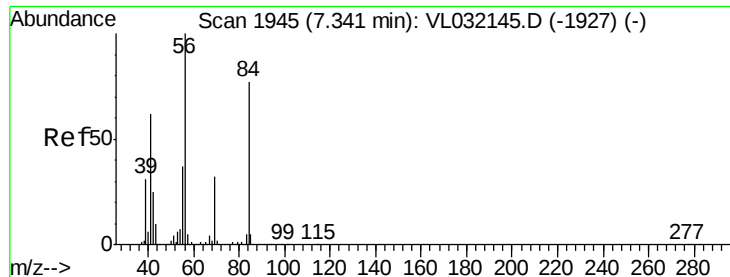


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





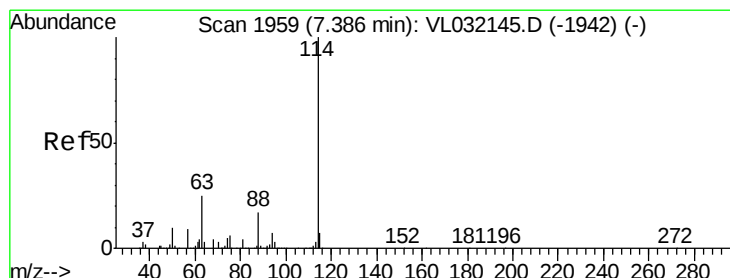
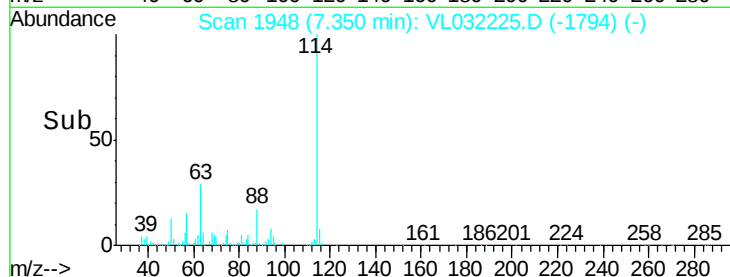
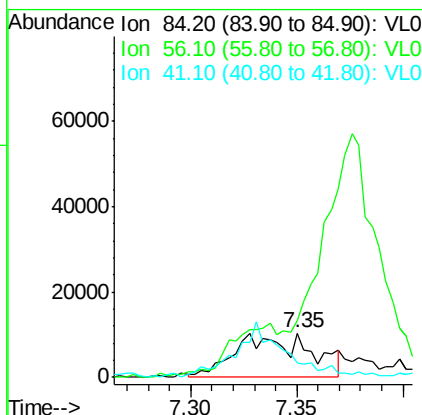
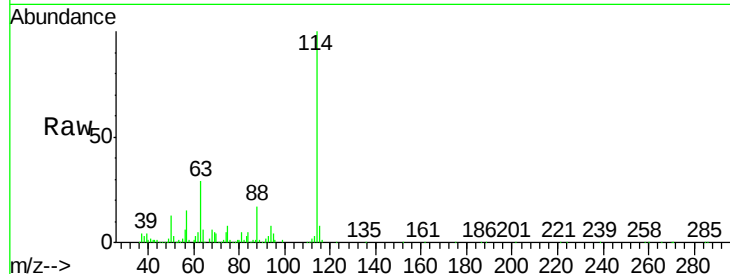
#30
Cvclohexane
Concen: 0.14 ppbv m
RT: 7.35 min Scan# 1948
Delta R.T. -0.01 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Instrument :
MSVOA_L
ClientSampleId :
539BDL

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	109.1	163.7#
41	0.0	64.6	96.8#

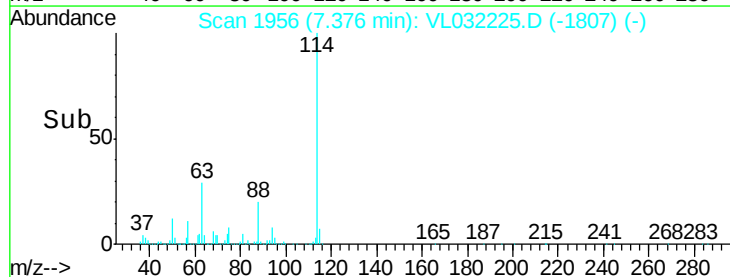
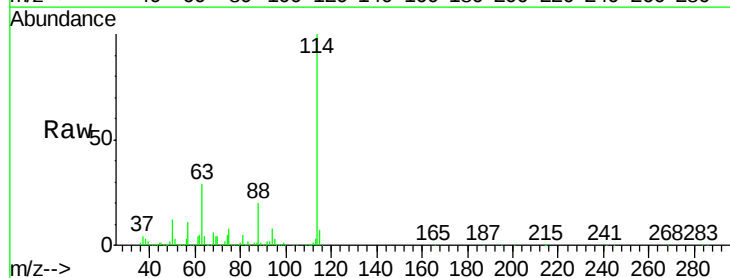
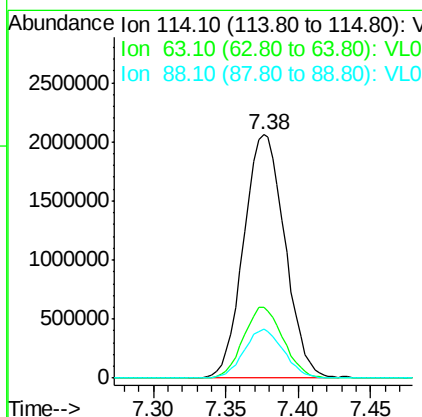
Manual Integrations
APPROVED

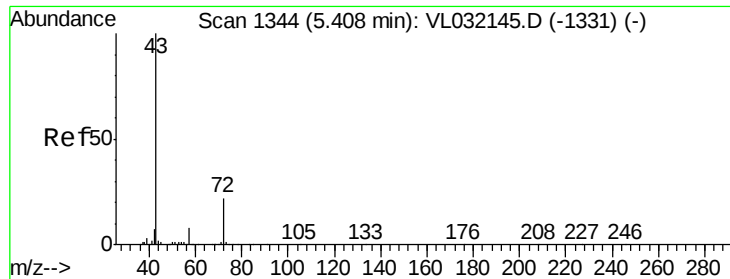
MMDadoda
7/9/2018 10:48:00 AM



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.38 min Scan# 1956
Delta R.T. -0.02 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Tgt Ion	Ratio	Lower	Upper
114	100		
63	28.2	19.1	28.7
88	19.3	13.9	20.9





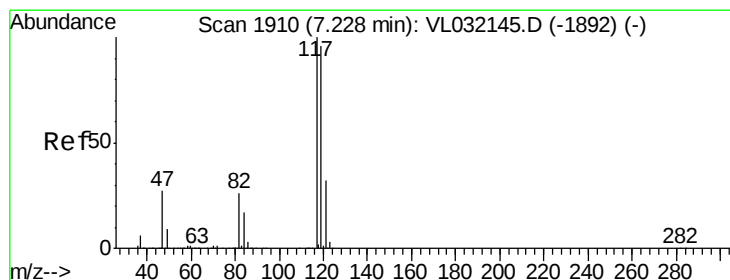
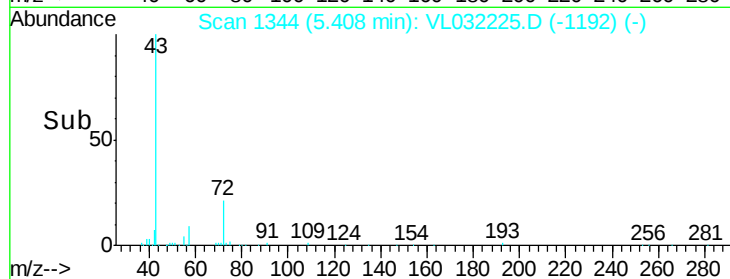
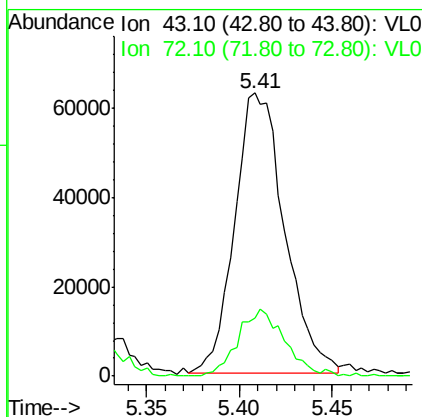
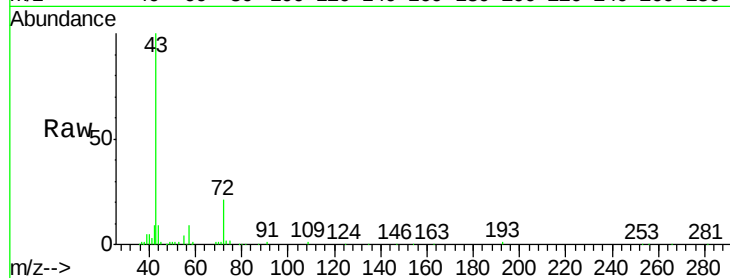
#34
2-Butanone
Concen: 0.45 ppbv
RT: 5.41 min Scan# 1344
Delta R.T. -0.01 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Instrument :
MSVOA_L
ClientSampleId :
539BDL

Tot Ion	43	Resp	116968
Ion Ratio	43	100	
Lower	72	22.8	18.4
Upper			27.6

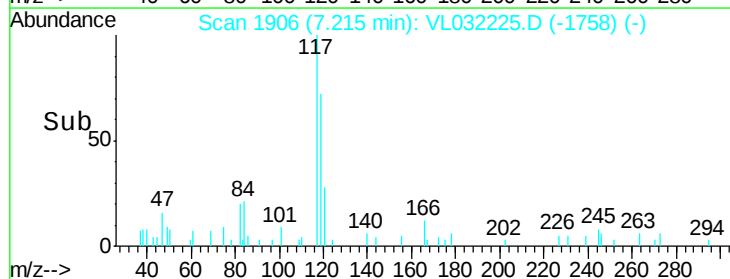
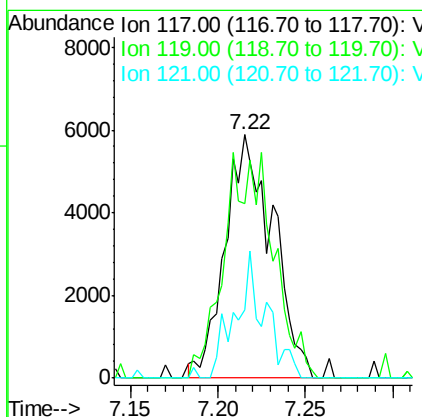
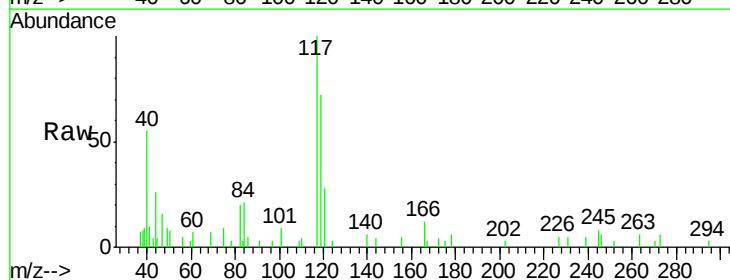
Manual Integrations
APPROVED

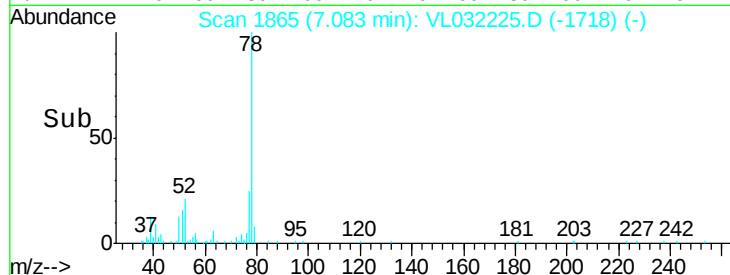
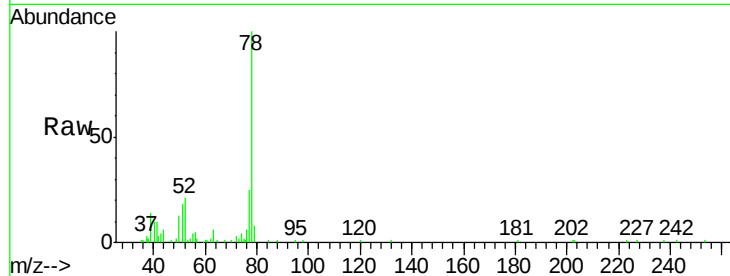
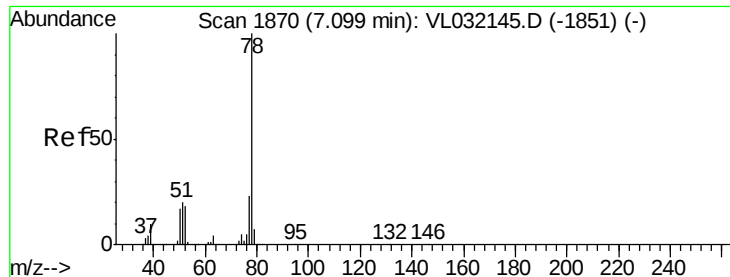
MMDadoda
7/9/2018 10:48:00 AM



#35
Carbon Tetrachloride
Concen: 0.04 ppbv m
RT: 7.22 min Scan# 1906
Delta R.T. -0.03 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Tgt Ion	117	Resp	11230
Ion Ratio	117	100	
Lower	119	71.7	74.8
Upper	121	28.3	24.0
			36.0





#36

Benzene

Concen: 0.14 ppbv

RT: 7.08 min Scan# 1865

Delta R.T. -0.03 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

Tot Ion:	78	Resp:	56616
Ion Ratio	Lower	Upper	
78	100		
77	21.1	17.7	26.5
50	11.6	14.0	21.0#

Instrument :

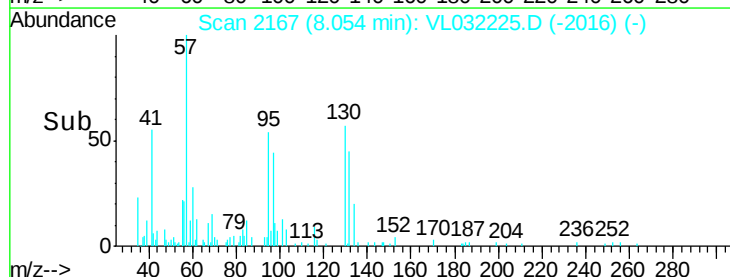
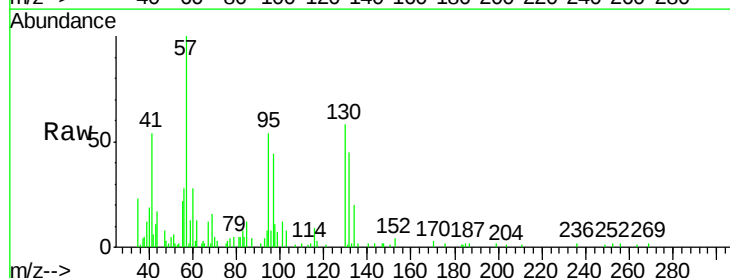
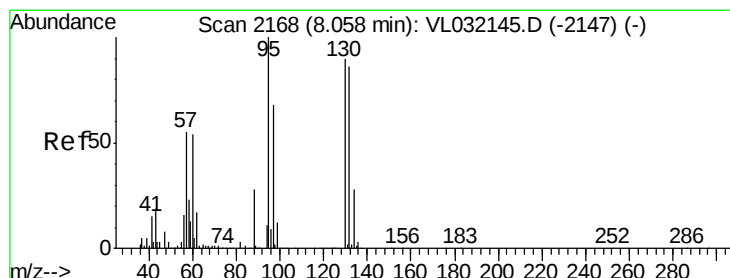
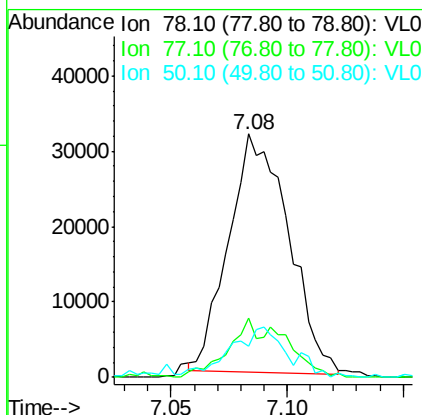
MSVOA_L

ClientSampleId :

539BDL

Manual Integrations
APPROVED

MMDadoda
7/9/2018 10:48:00 AM



#38

Trichloroethene

Concen: 0.12 ppbv m

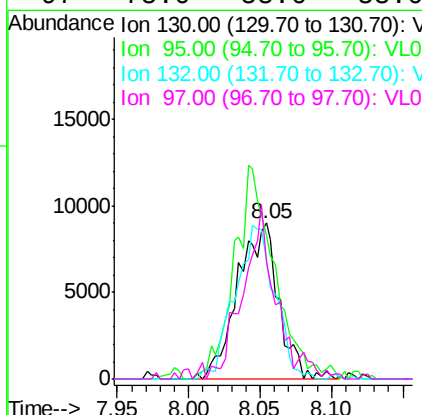
RT: 8.05 min Scan# 2167

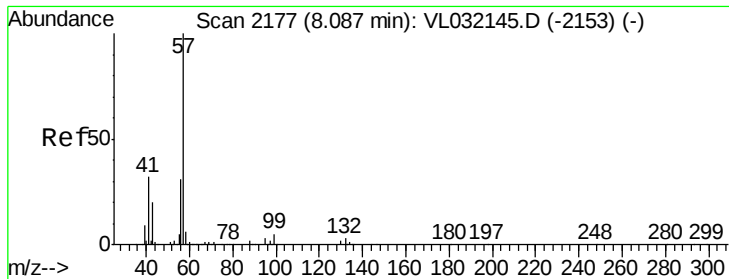
Delta R.T. -0.02 min

Lab File: VL032225.D

Acq: 6 Jul 2018 8:55

Tgt Ion:	130	Resp:	18052
Ion Ratio	Lower	Upper	
130	100		
95	92.4	88.1	132.1
132	76.6	74.6	112.0
97	75.0	58.6	88.0





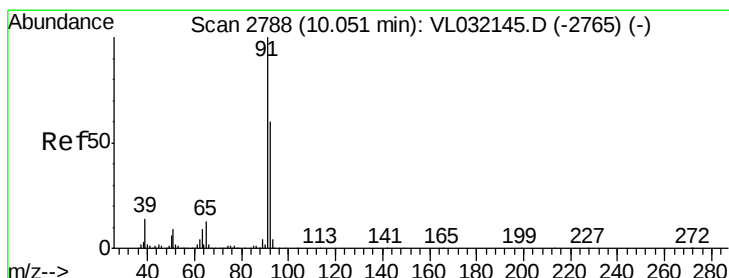
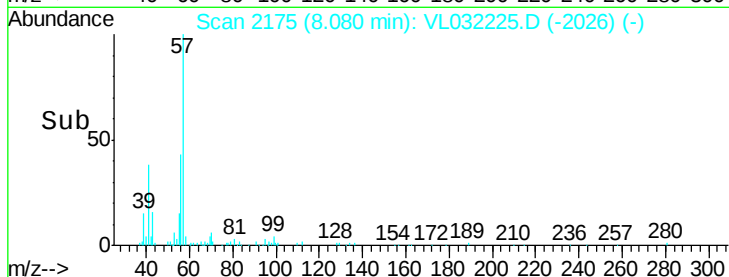
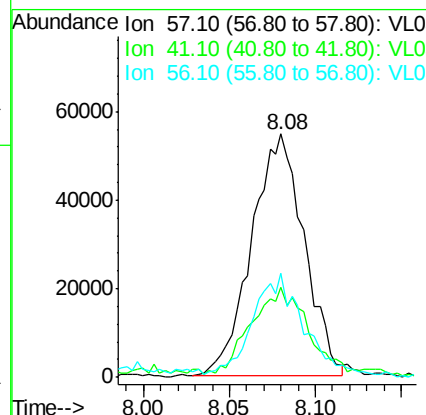
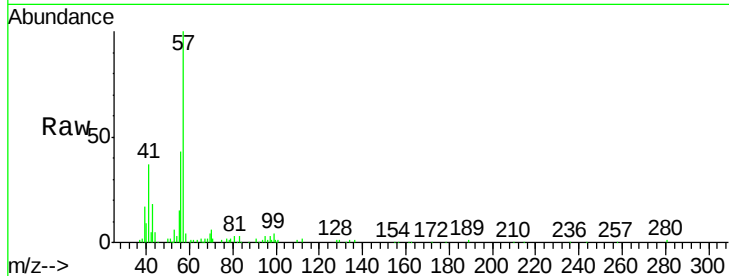
#44
 2,2,4-Trimethylpentane
 Concen: 0.17 ppbv
 RT: 8.08 min Scan# 2175
 Delta R.T. -0.02 min
 Lab File: VL032225.D
 Acq: 6 Jul 2018 8:55

Instrument :
 MSVOA_L
 ClientSampleId :
 539BDL

Tot Ion	Ratio	Lower	Upper
57	100		
41	42.0	24.3	36.5#
56	45.1	25.1	37.7#

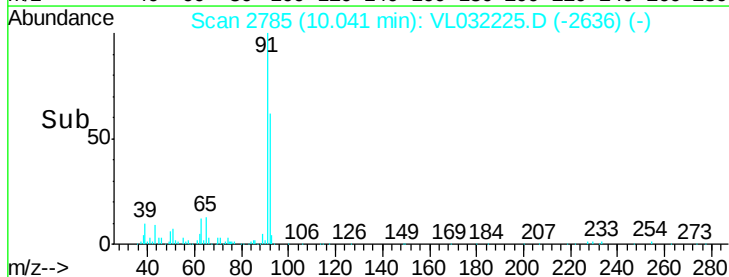
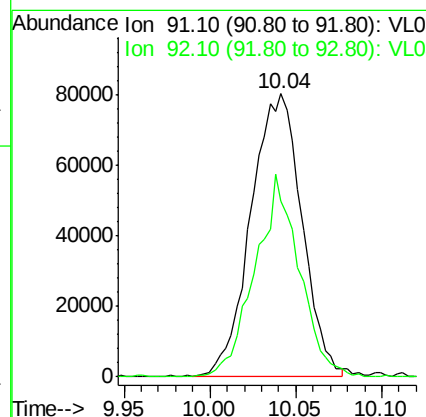
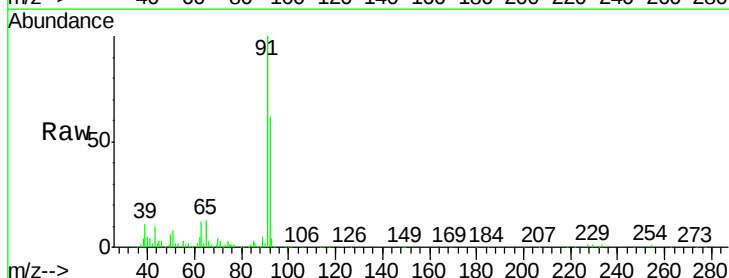
Manual Integrations
 APPROVED

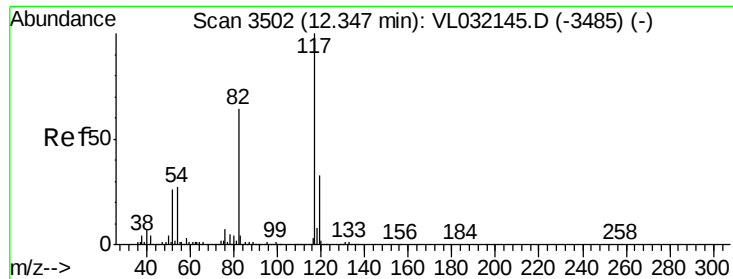
MMDadoda
 7/9/2018 10:48:00 AM



#53
 Toluene
 Concen: 0.35 ppbv
 RT: 10.04 min Scan# 2785
 Delta R.T. -0.02 min
 Lab File: VL032225.D
 Acq: 6 Jul 2018 8:55

Tgt Ion	Ratio	Lower	Upper
91	100		
92	62.3	49.2	73.8





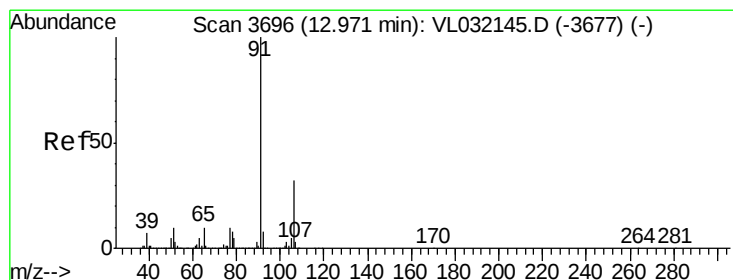
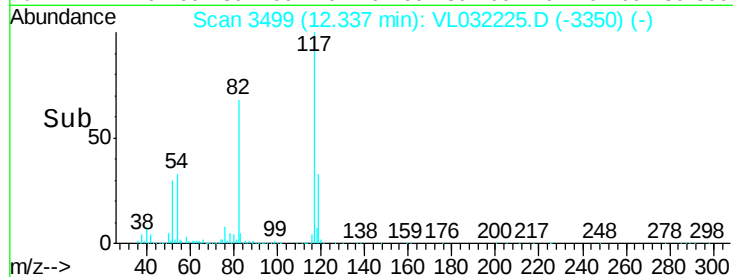
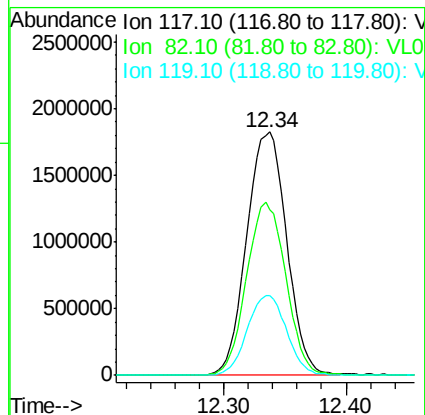
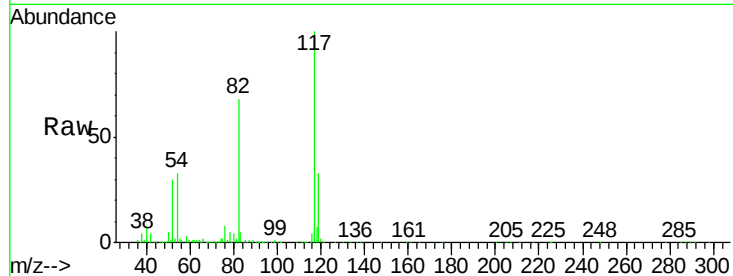
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.34 min Scan# 3499
Delta R.T. -0.02 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Instrument :
MSVOA_L
ClientSampleId :
539BDL

Tot Ion	Ratio	Lower	Upper
117	100		
82	70.4	47.8	71.8
119	32.5	43.3	64.9#

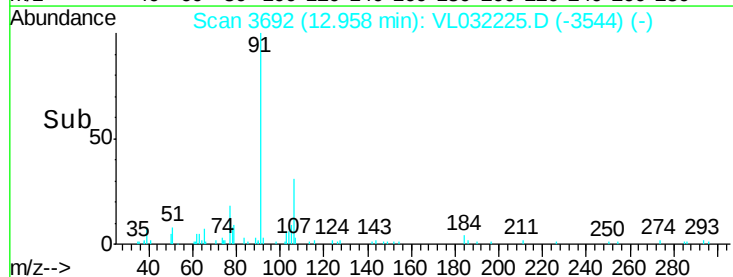
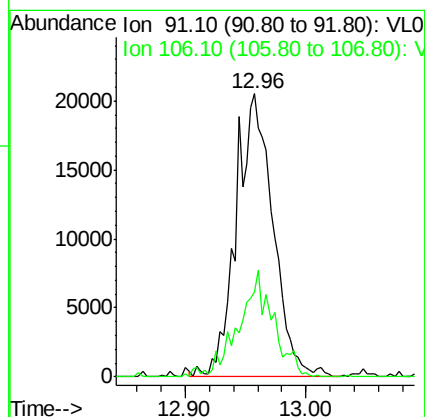
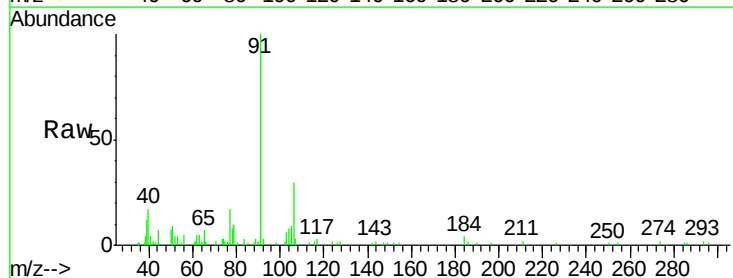
Manual Integrations
APPROVED

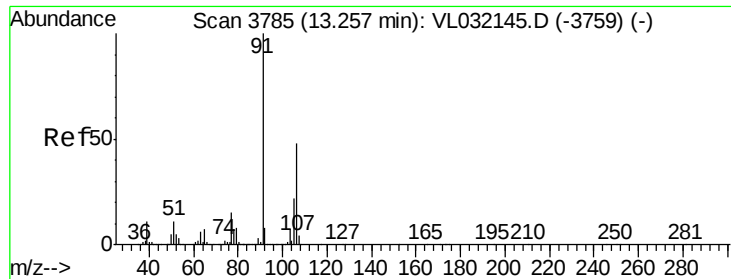
MMDadoda
7/9/2018 10:48:00 AM



#58
Ethyl Benzene
Concen: 0.06 ppbv m
RT: 12.96 min Scan# 3692
Delta R.T. -0.03 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.0	26.5	39.7





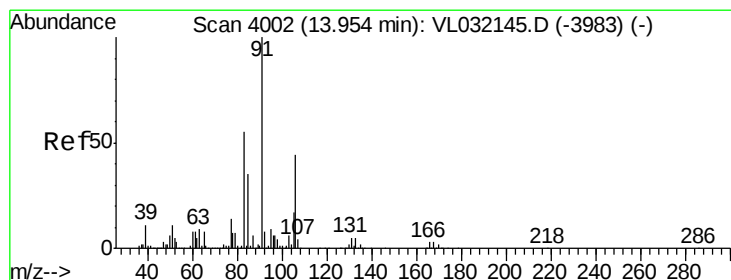
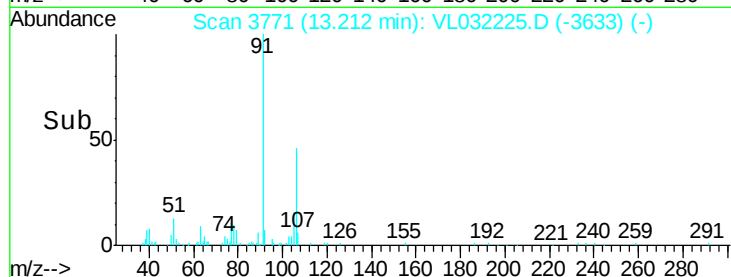
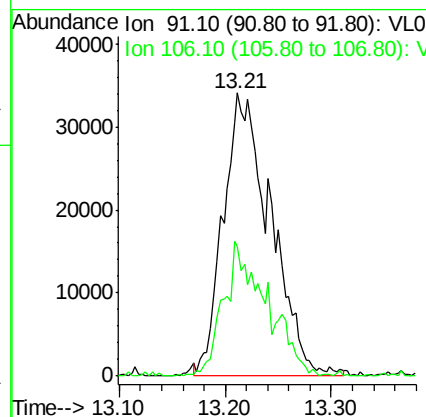
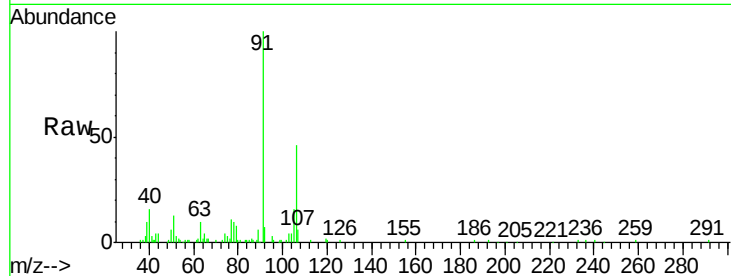
#59
m/p-Xylene
Concen: 0.20 ppbv m
RT: 13.21 min Scan# 3771
Delta R.T. -0.06 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Instrument :
MSVOA_L
ClientSampled :
539BDL

Tot Ion: 91 Resp: 105619
Ion Ratio Lower Upper
91 100
106 0.0 38.6 58.0#

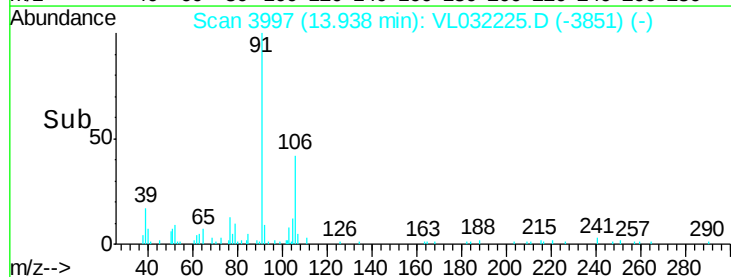
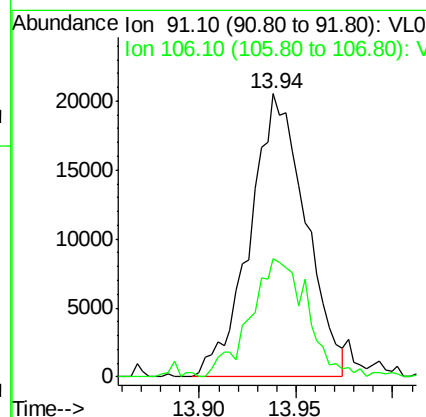
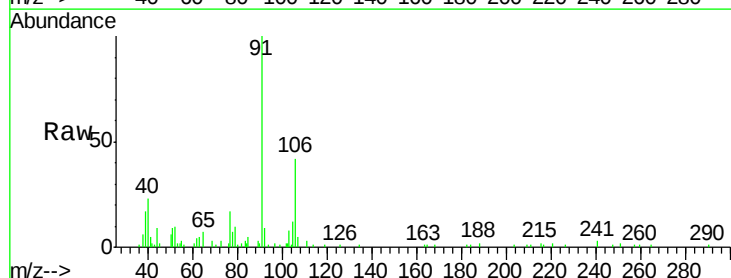
Manual Integrations
APPROVED

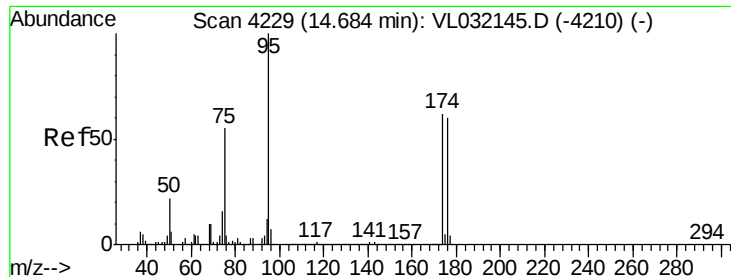
MMDadoda
7/9/2018 10:48:00 AM



#60
o-Xylene
Concen: 0.08 ppbv
RT: 13.94 min Scan# 3997
Delta R.T. -0.03 min
Lab File: VL032225.D
Acq: 6 Jul 2018 8:55

Tgt Ion: 91 Resp: 41075
Ion Ratio Lower Upper
91 100
106 44.4 23.3 69.8





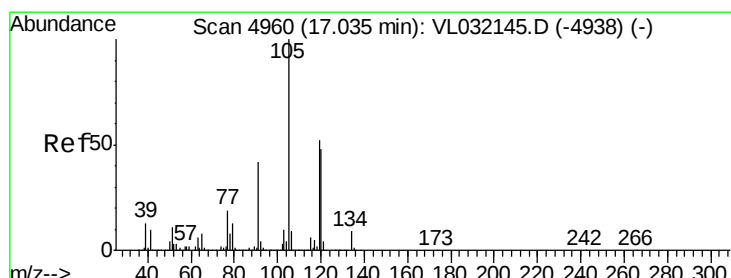
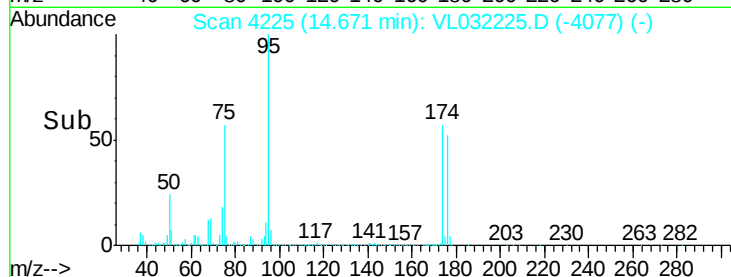
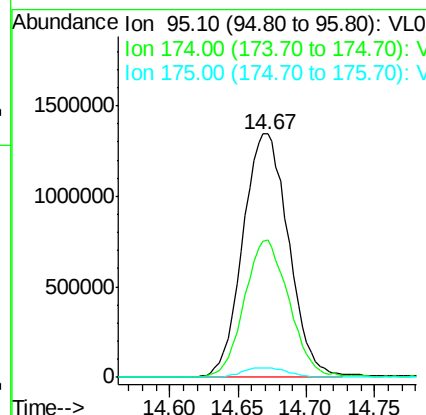
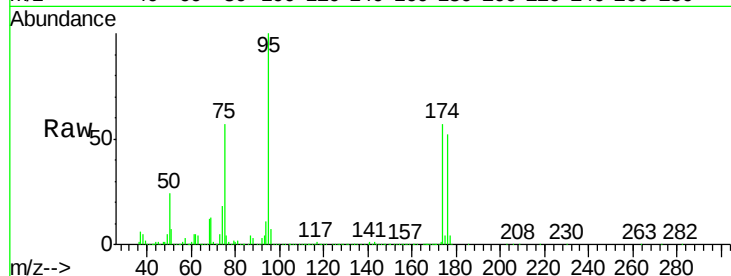
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.87 ppbv
 RT: 14.67 min Scan# 4225
 Delta R.T. -0.03 min
 Lab File: VL032225.D
 Acq: 6 Jul 2018 8:55

Instrument :
 MSVOA_L
 ClientSampled :
 539BDL

Tot Ion: 95 Resp: 3120469
 Ion Ratio Lower Upper
 95 100
 174 55.4 52.1 78.1
 175 4.0 4.0 6.0#

Manual Integrations
 APPROVED

MMDadoda
 7/9/2018 10:48:00 AM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.17 ppbv
 RT: 17.02 min Scan# 4955
 Delta R.T. -0.03 min
 Lab File: VL032225.D
 Acq: 6 Jul 2018 8:55

Tgt Ion: 105 Resp: 110431
 Ion Ratio Lower Upper
 105 100
 120 34.9 38.8 58.2#
 91 12.8 33.6 50.4#
 77 12.7 16.0 24.0#

