

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032285.D
 Acq On : 19 Jul 2018 7:04
 Operator : SY/AP
 Sample : J3454-08
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-13

Manual Integrations
 APPROVED

MMDadoda
 7/20/2018 2:53:31 PM

Quant Time: Jul 19 08:14:44 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	5.83	49	1573040	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3367343	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.32	117	3977753	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.66	95	3133636	9.72	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	142877	0.53	ppbv	97
3) Chlorodifluoromethane	3.06	51	268461m	1.52	ppbv	
4) Chloromethane	3.22	50	62034	0.60	ppbv	91
9) Propene	3.10	41	54649	0.71	ppbv #	75
10) Heptane	8.33	43	98418m	0.40	ppbv	
11) Trichlorofluoromethane	4.06	101	61108	0.29	ppbv	86
13) Ethanol	3.71	45	1575177m	71.46	ppbv	
15) Acetone	3.96	43	1738854	10.56	ppbv	97
17) tert-Butyl alcohol	4.44	59	22662	0.44	ppbv	95
19) Isopropyl Alcohol	4.09	45	326380	2.93	ppbv #	1
20) Methylene Chloride	4.48	84	72406	1.14	ppbv #	89
26) Hexane	5.86	57	3005378	18.25	ppbv #	44
34) 2-Butanone	5.40	43	212527	0.92	ppbv	97
35) Carbon Tetrachloride	7.22	117	16872m	0.07	ppbv	
36) Benzene	7.08	78	67207m	0.20	ppbv	
44) 2,2,4-Trimethylpentane	8.07	57	122638	0.21	ppbv #	81
50) 4-Methyl-2-Pentanone	8.97	43	38158m	0.10	ppbv	
53) Toluene	10.03	91	508440	1.27	ppbv	98
58) Ethyl Benzene	12.95	91	214313	0.38	ppbv	93
59) m/p-Xylene	13.21	91	1004004	2.10	ppbv	99
60) o-Xylene	13.94	91	423844	0.89	ppbv	98
61) Styrene	13.77	104	106367	0.30	ppbv	96
72) 4-Ethyltoluene	16.08	105	68726m	0.12	ppbv	
74) 1,2,4-Trimethylbenzene	17.01	105	161387	0.29	ppbv #	74

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

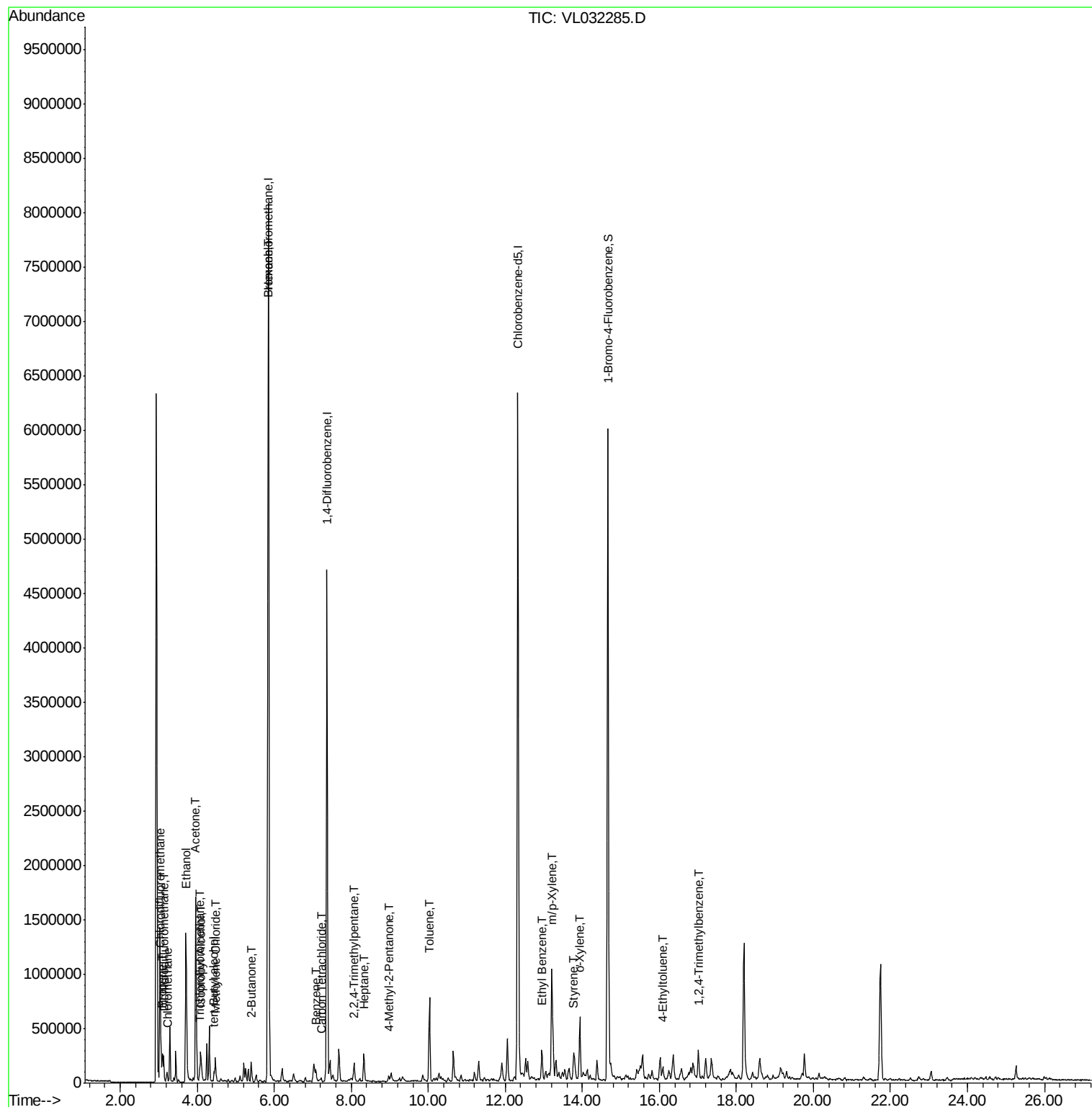
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL071818\
Data File : VL032285.D
Acq On : 19 Jul 2018 7:04
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

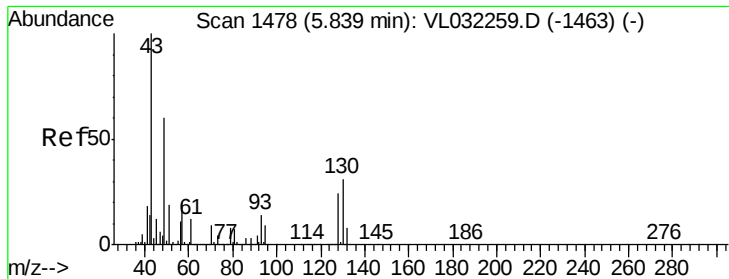
Instrument :
MSVOA_L
ClientSampleId :
B-13

Manual Integrations
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Quant Time: Jul 19 08:14:44 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul
QLast Update : Wed Jul 18 14:38:53 2018
Response via : Initial Calibration





#1

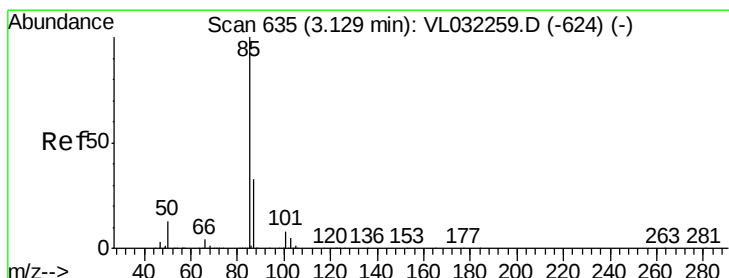
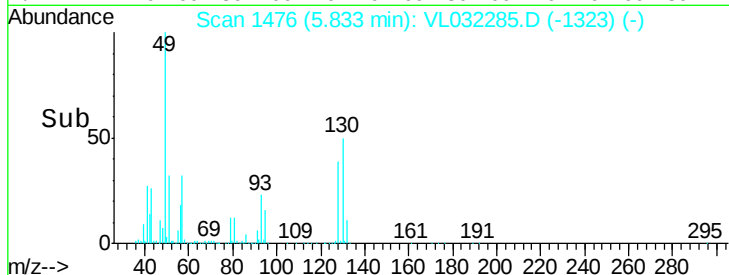
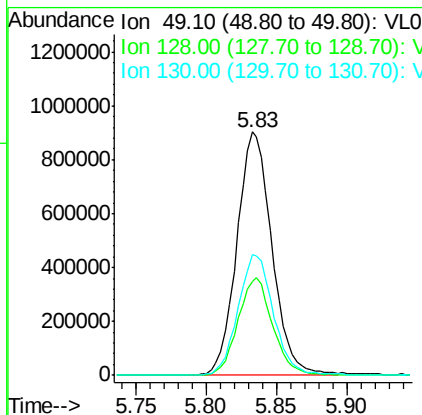
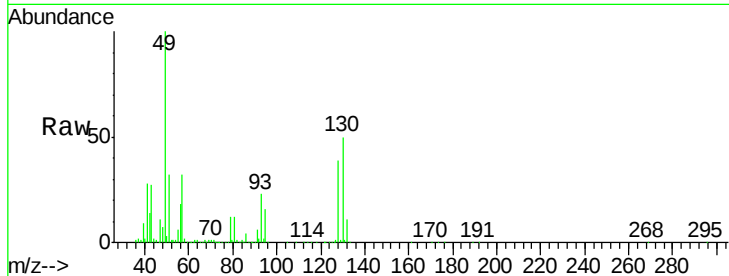
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.83 min Scan# 1476
 Delta R.T. -0.01 min
 Lab File: VL032285.D
 Acq: 19 Jul 2018 7:04

Instrument :
 MSVOA_L
 ClientSampleId :
 B-13

Tot Ion: 49 Resp: 1573040
 Ion Ratio Lower Upper
 49 100
 128 39.9 20.1 60.2
 130 50.6 25.9 77.6

Manual Integrations
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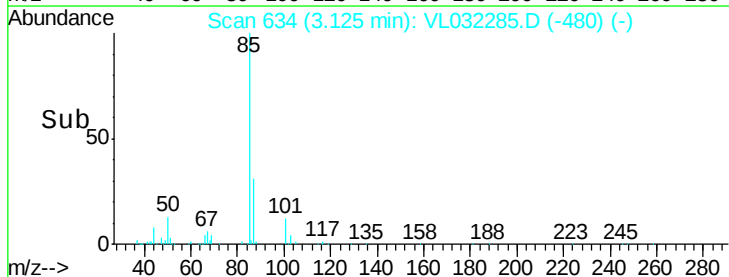
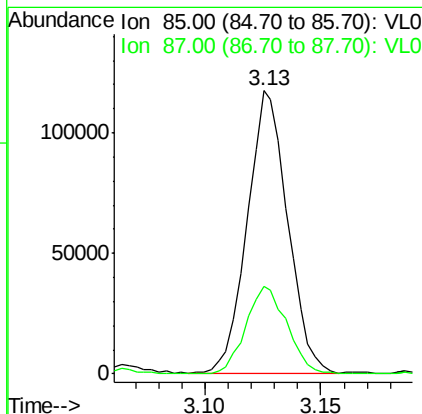
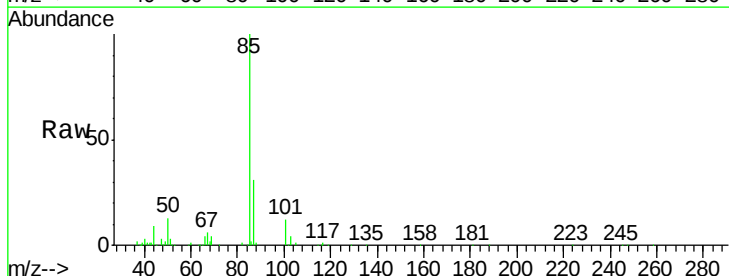
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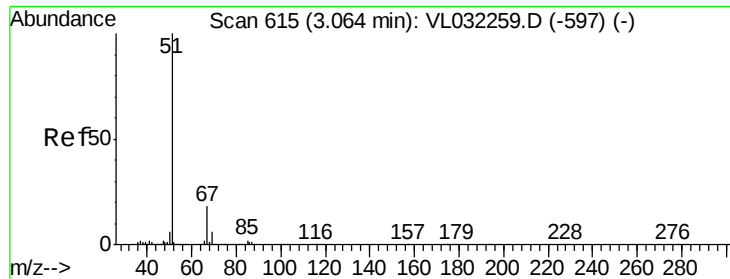


#2

Dichlorodifluoromethane
 Concen: 0.53 ppbv
 RT: 3.13 min Scan# 634
 Delta R.T. -0.00 min
 Lab File: VL032285.D
 Acq: 19 Jul 2018 7:04

Tgt Ion: 85 Resp: 142877
 Ion Ratio Lower Upper
 85 100
 87 30.9 26.2 39.2





#3

Chlorodifluoromethane

Concen: 1.52 ppbv m

RT: 3.06 min Scan# 613

Delta R.T. -0.01 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Instrument :

MSVOA_L

ClientSampleId :

B-13

Tot Ion: 51 Resp: 268461

Ion Ratio Lower Upper

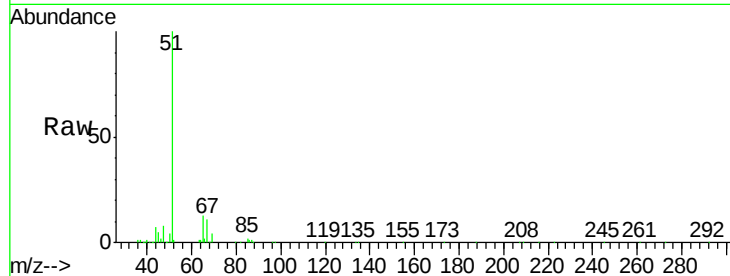
51 100

67 17.9 14.2 21.4

Manual Integrations
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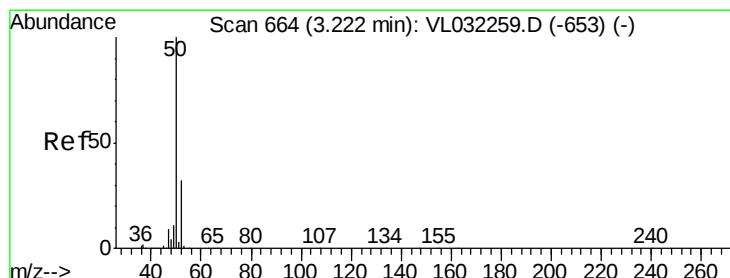
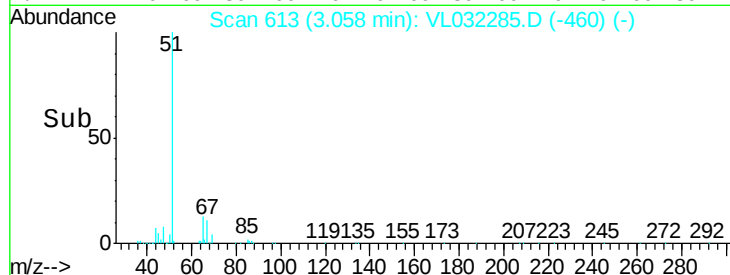
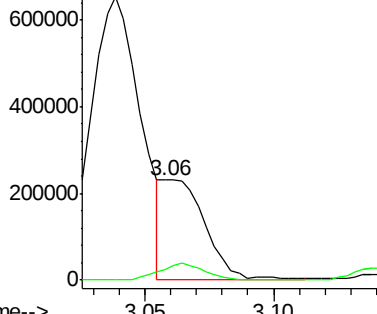
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.60 ppbv

RT: 3.22 min Scan# 665

Delta R.T. 0.00 min

Lab File: VL032285.D

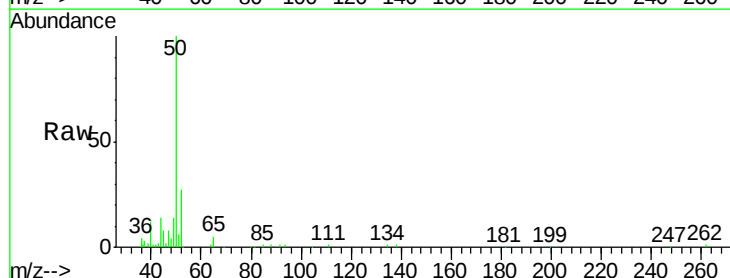
Acq: 19 Jul 2018 7:04

Tgt Ion: 50 Resp: 62034

Ion Ratio Lower Upper

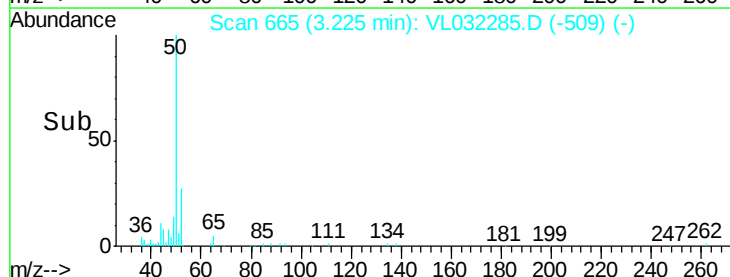
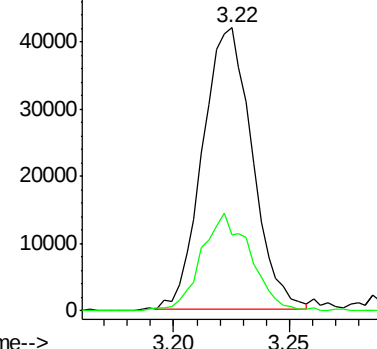
50 100

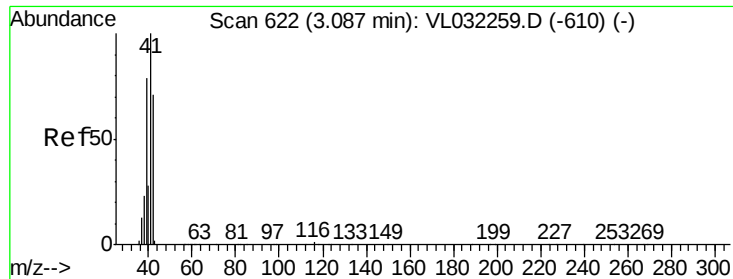
52 26.8 25.3 37.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





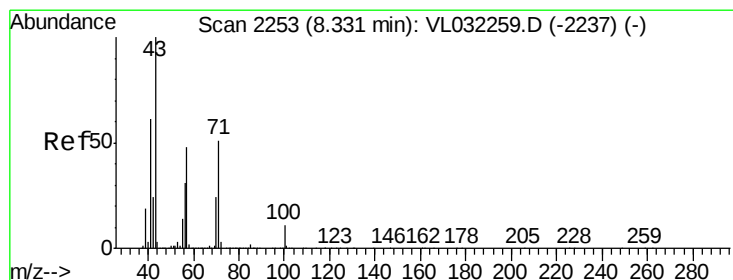
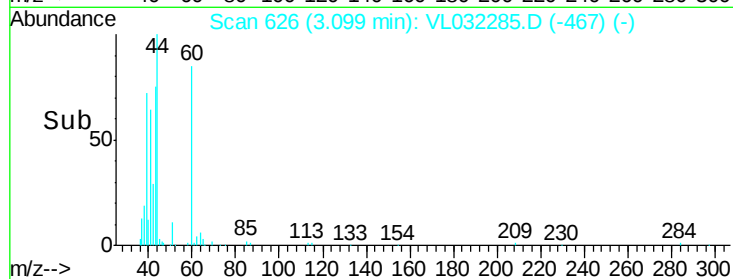
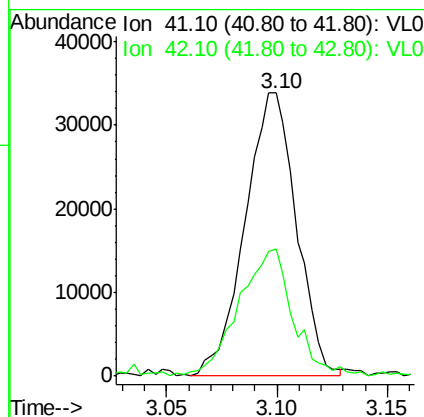
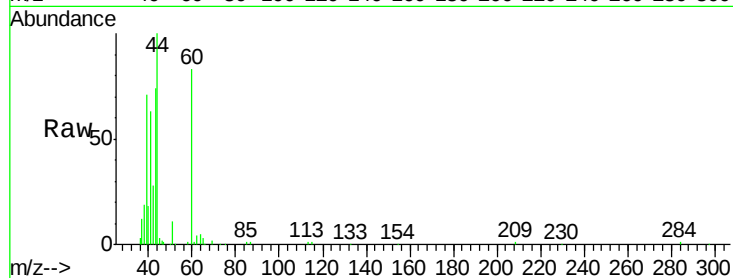
#9
 Propene
 Concen: 0.71 ppbv
 RT: 3.10 min Scan# 626
 Delta R.T. 0.01 min
 Lab File: VL032285.D
 Acq: 19 Jul 2018 7:04

Instrument :
 MSVOA_L
 ClientSampleId :
 B-13

Tot Ion	Ratio	Lower	Upper
41	100		
42	50.1	56.2	84.4#

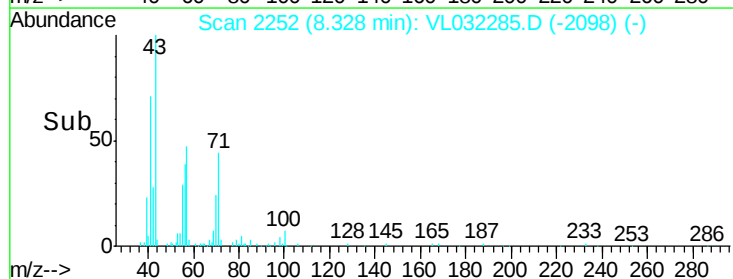
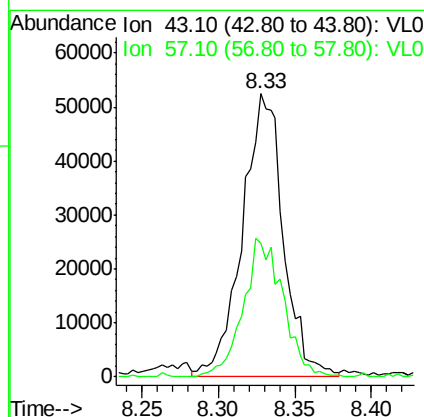
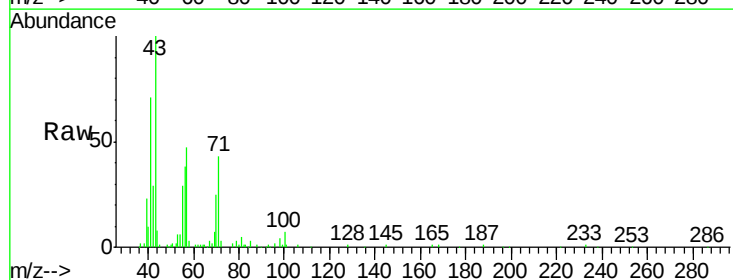
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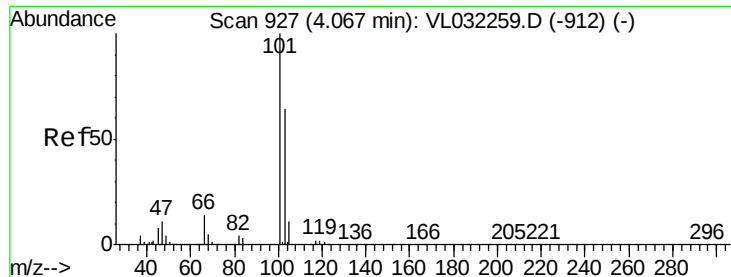
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#10
 Heptane
 Concen: 0.40 ppbv m
 RT: 8.33 min Scan# 2252
 Delta R.T. -0.00 min
 Lab File: VL032285.D
 Acq: 19 Jul 2018 7:04

Tgt Ion	Ratio	Lower	Upper
43	100		
57	47.3	39.9	59.9





#11

Trichlorofluoromethane

Concen: 0.29 ppbv

RT: 4.06 min Scan# 926

Delta R.T. -0.00 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Instrument :

MSVOA_L

ClientSampled :

B-13

Tot Ion:101 Resp: 61108

Ion Ratio Lower Upper

101 100

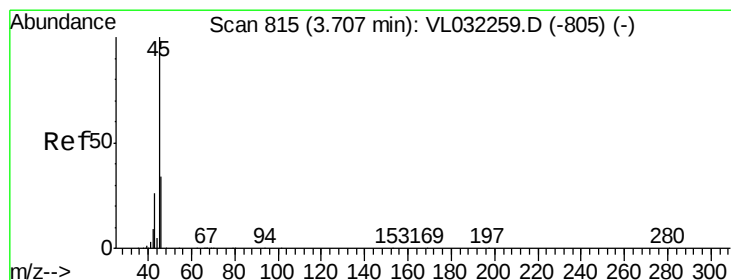
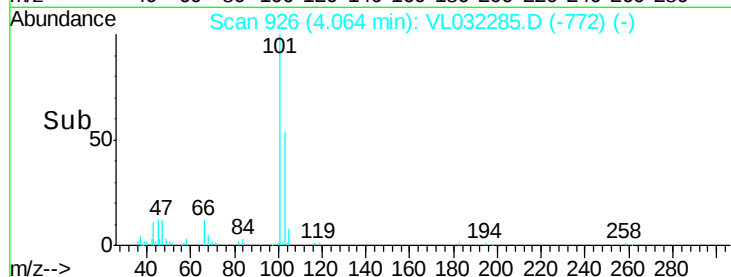
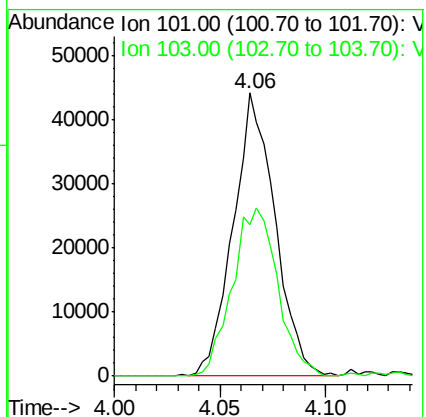
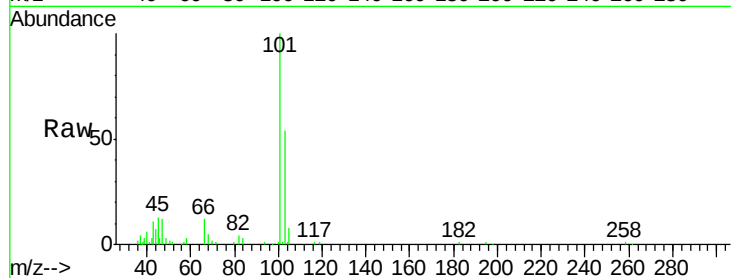
103 53.7 51.5 77.3

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#13

Ethanol

Concen: 71.46 ppbv m

RT: 3.71 min Scan# 816

Delta R.T. 0.00 min

Lab File: VL032285.D

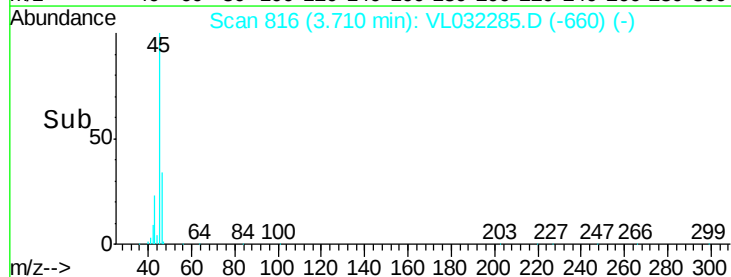
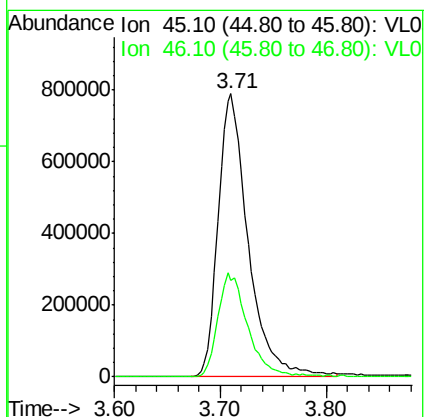
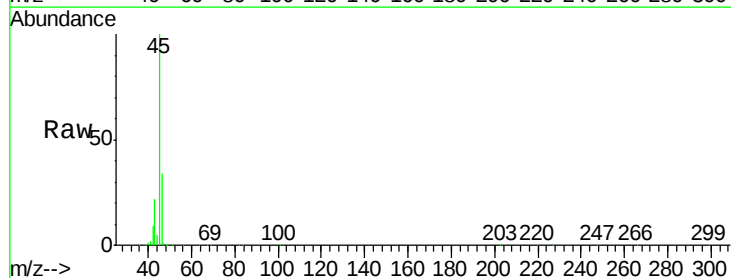
Acq: 19 Jul 2018 7:04

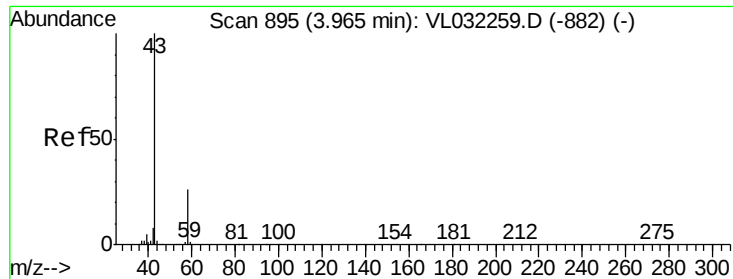
Tgt Ion: 45 Resp: 1575177

Ion Ratio Lower Upper

45 100

46 36.8 15.2 60.8





#15

Acetone

Concen: 10.56 ppbv

RT: 3.96 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Instrument :

MSVOA_L

ClientSampleId :

B-13

Tot Ion: 43 Resp: 1738854

Ion Ratio Lower Upper

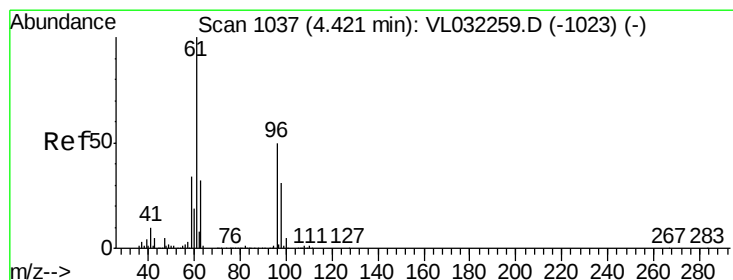
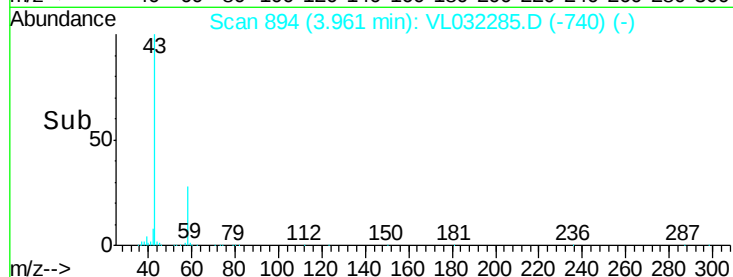
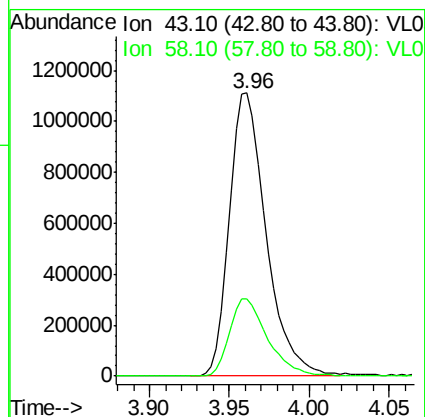
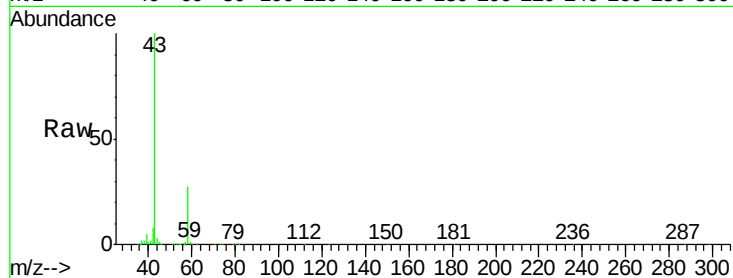
43 100

58 28.6 21.8 32.6

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 0.44 ppbv

RT: 4.44 min Scan# 1044

Delta R.T. 0.02 min

Lab File: VL032285.D

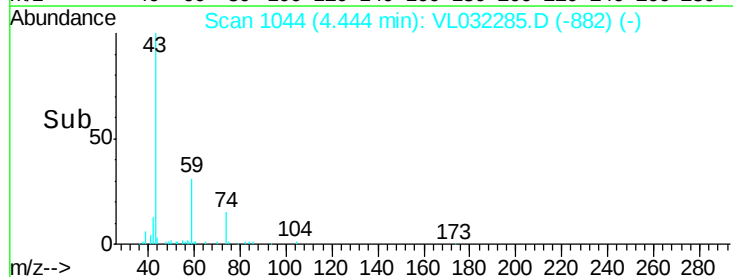
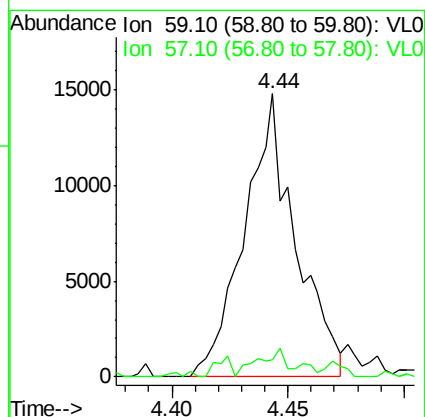
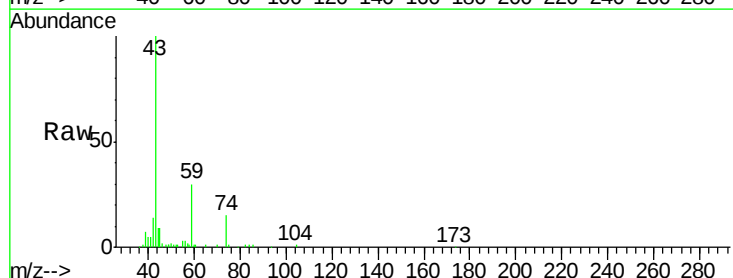
Acq: 19 Jul 2018 7:04

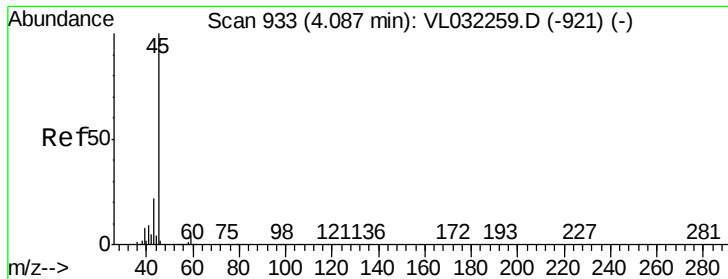
Tgt Ion: 59 Resp: 22662

Ion Ratio Lower Upper

59 100

57 12.2 8.2 12.4





#19

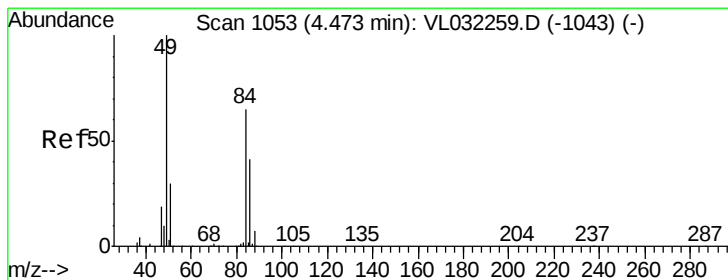
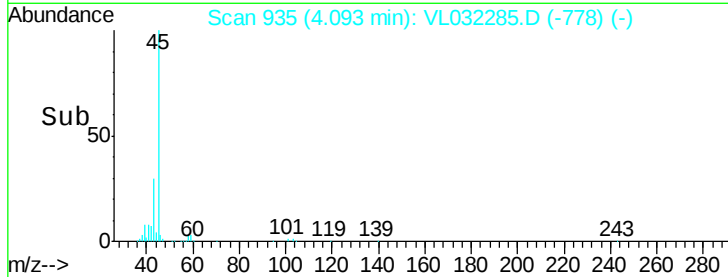
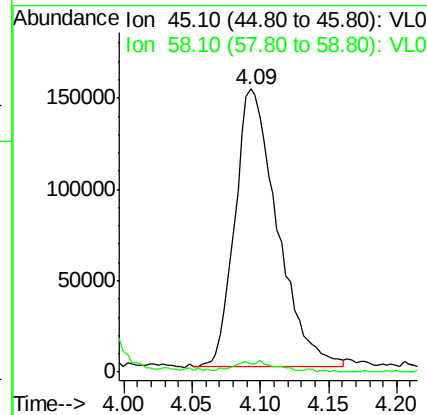
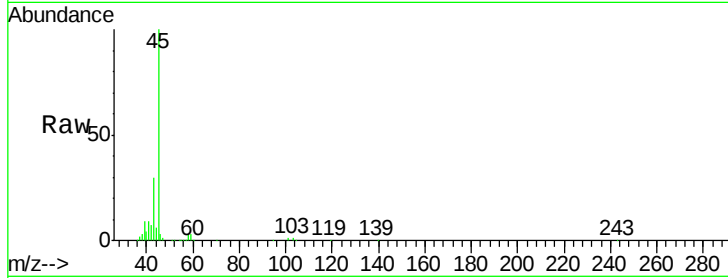
Isopropyl Alcohol
 Concen: 2.93 ppbv
 RT: 4.09 min Scan# 935
 Delta R.T. 0.01 min
 Lab File: VL032285.D
 Acq: 19 Jul 2018 7:04

Instrument :
 MSVOA_L
 ClientSampleId :
 B-13

Tot Ion	Ratio	Lower	Upper
45	100		
58	151.5	1.5	2.3#

Manual Integrations
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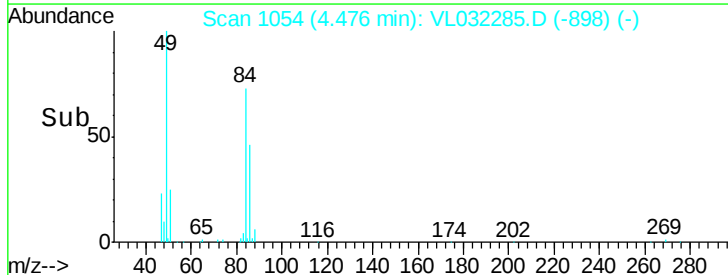
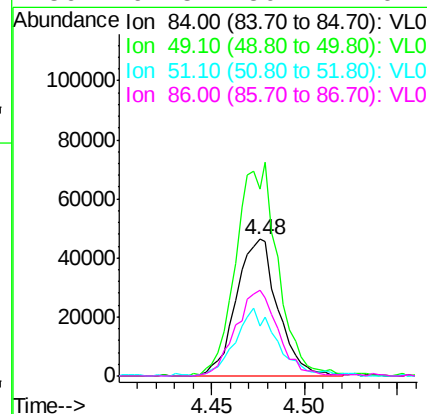
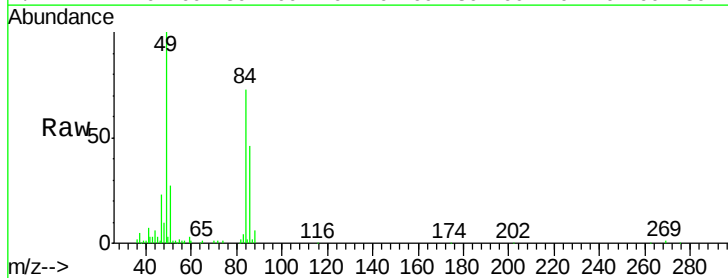
MMDadoda
 7/20/2018 2:53:31 PM

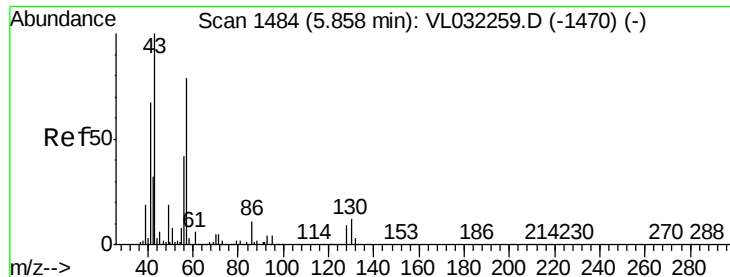


#20

Methylene Chloride
 Concen: 1.14 ppbv
 RT: 4.48 min Scan# 1054
 Delta R.T. 0.00 min
 Lab File: VL032285.D
 Acq: 19 Jul 2018 7:04

Tgt Ion	Ratio	Lower	Upper
84	100		
49	135.3	122.4	183.6
51	36.5	36.8	55.2#
86	62.5	50.7	76.1





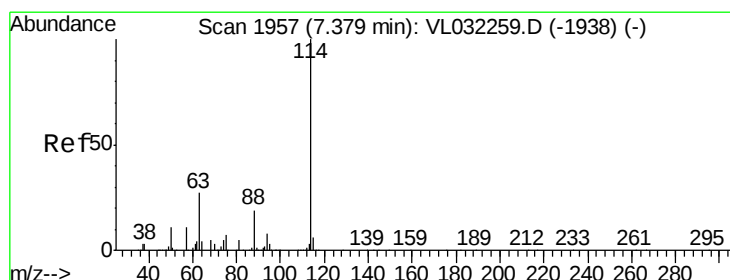
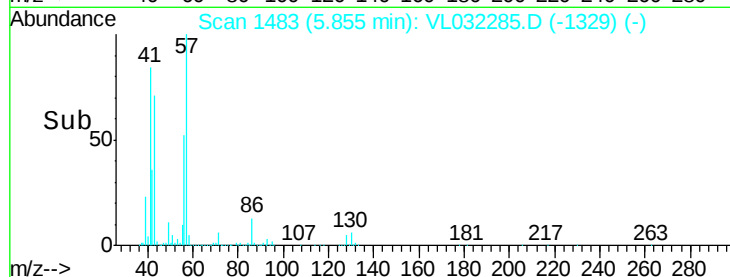
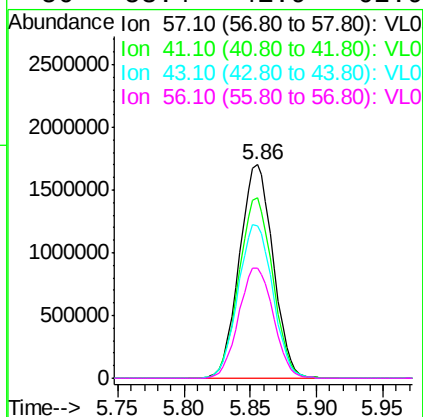
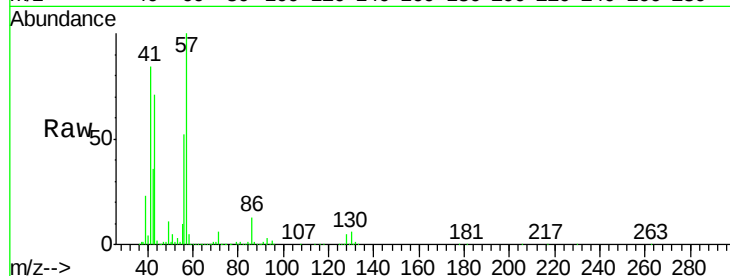
#26
Hexane
Concen: 18.25 ppbv
RT: 5.86 min Scan# 1483
Delta R.T. -0.00 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Instrument :
MSVOA_L
ClientSampled :
B-13

Tot Ion	Ratio	Lower	Upper
57	100		
41	85.2	67.9	101.9
43	74.2	175.9	263.9#
56	53.4	41.9	62.9

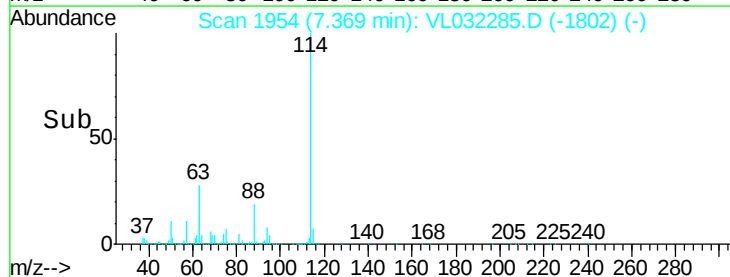
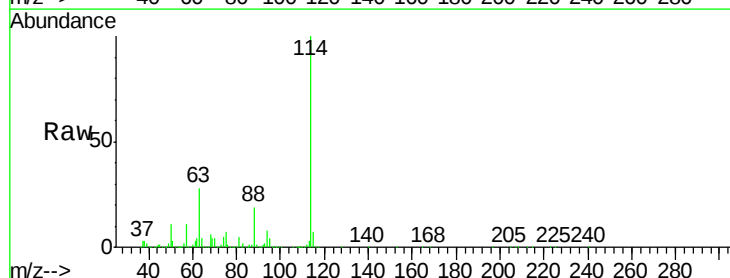
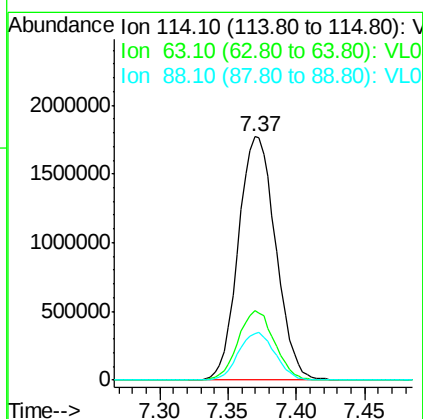
Manual Integrations
APPROVED

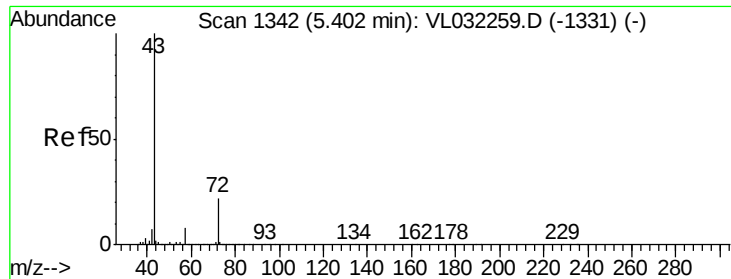
MMDadoda
7/20/2018 2:53:31 PM



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.37 min Scan# 1954
Delta R.T. -0.01 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.9	22.6	33.8
88	19.3	15.2	22.8





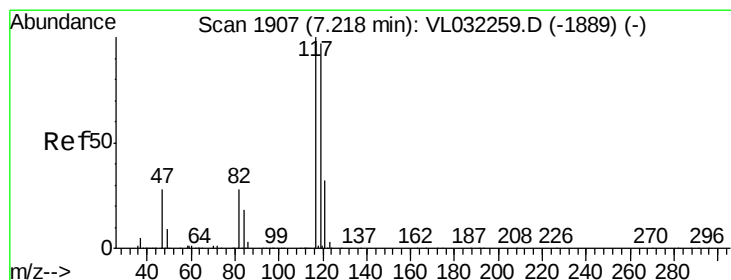
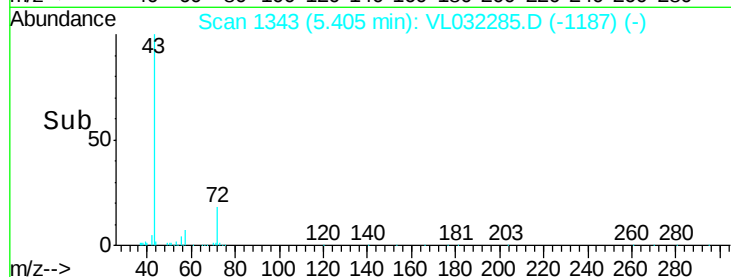
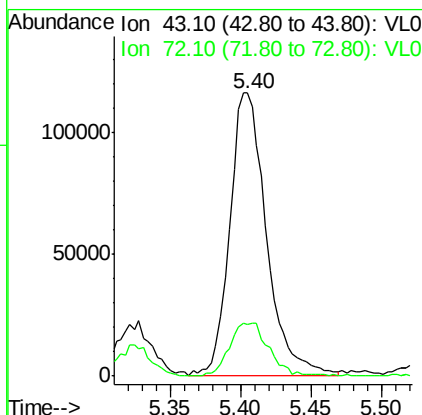
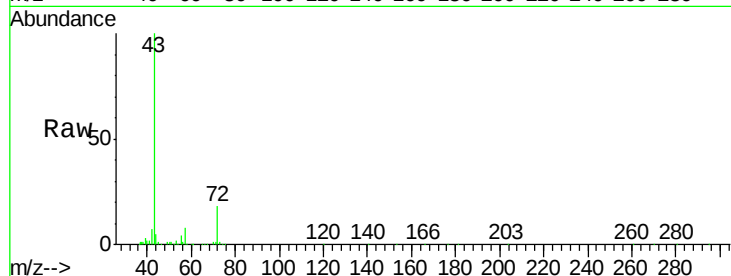
#34
2-Butanone
Concen: 0.92 ppbv
RT: 5.40 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Instrument :
MSVOA_L
ClientSampled :
B-13

Tot Ion	43	Resp	212527
Ion Ratio	Lower	Upper	
43	100		
72	20.4	17.7	26.5

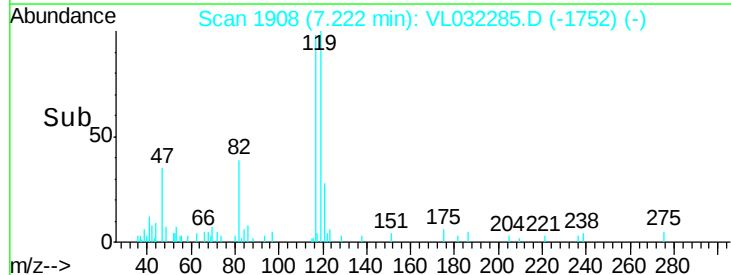
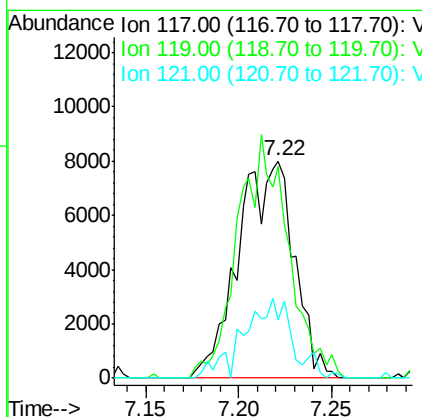
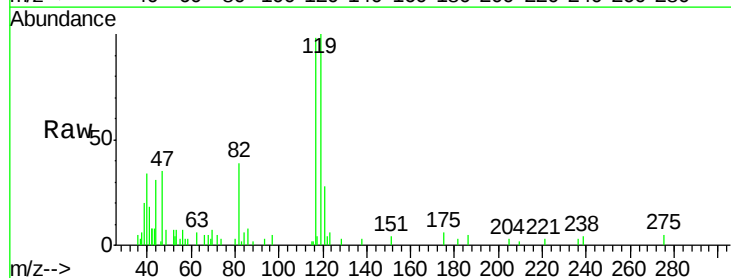
Manual Integrations
APPROVED

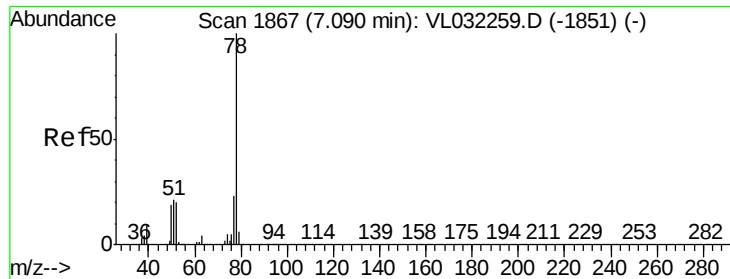
MMDadoda
7/20/2018 2:53:31 PM



#35
Carbon Tetrachloride
Concen: 0.07 ppbv m
RT: 7.22 min Scan# 1908
Delta R.T. 0.00 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Tgt Ion	117	Resp	16872
Ion Ratio	Lower	Upper	
117	100		
119	102.0	77.4	116.0
121	28.1	25.4	38.2





#36

Benzene

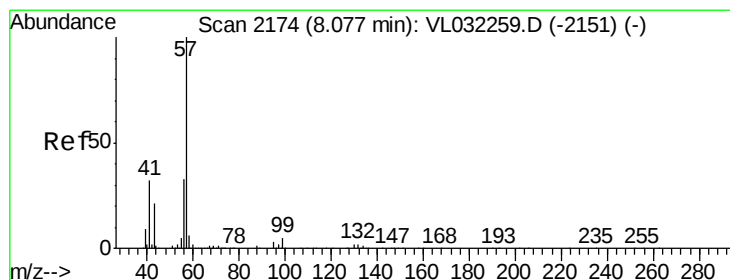
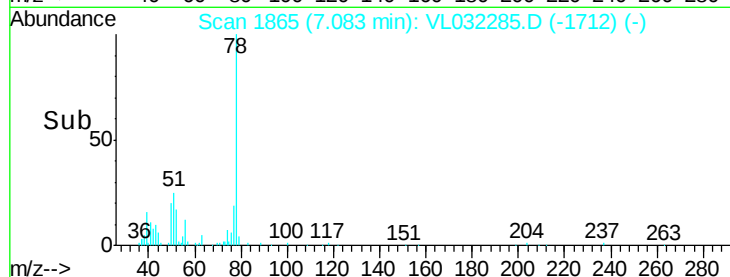
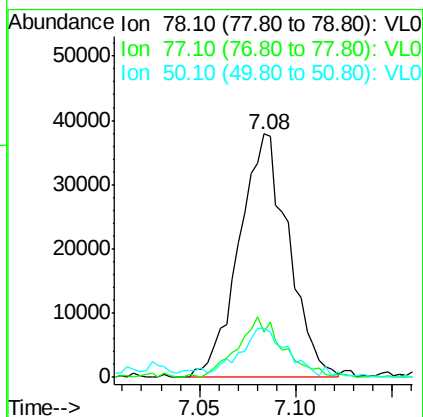
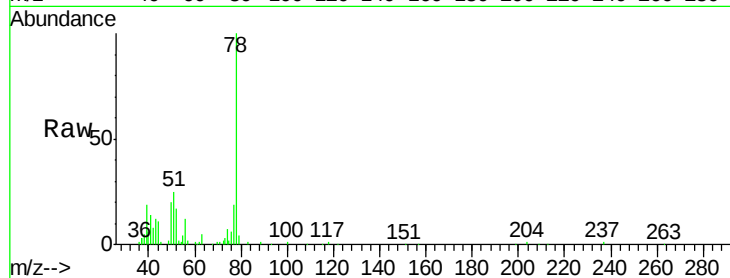
Concen: 0.20 ppbv m
RT: 7.08 min Scan# 1865
Delta R.T. -0.01 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Instrument :
MSVOA_L
ClientSampleId :
B-13

Tot Ion	Ratio	Lower	Upper
78	100		
77	18.5	18.6	27.8#
50	20.3	15.0	22.6

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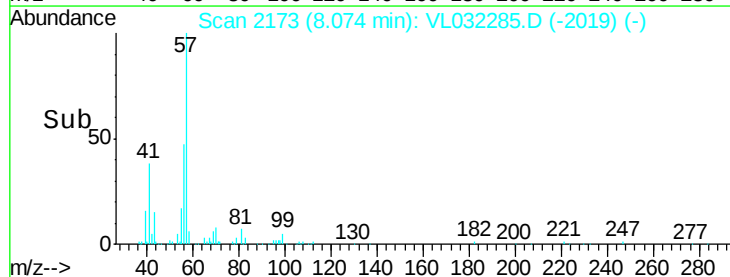
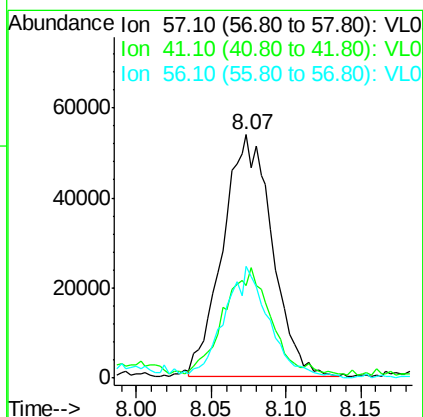
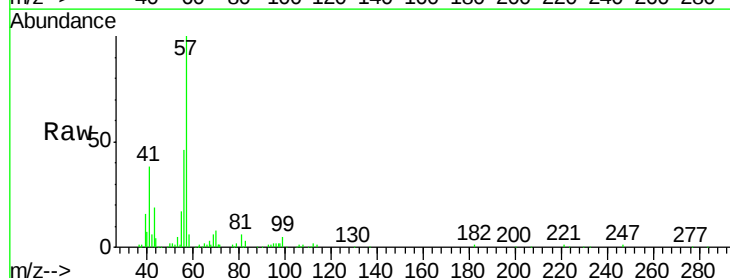


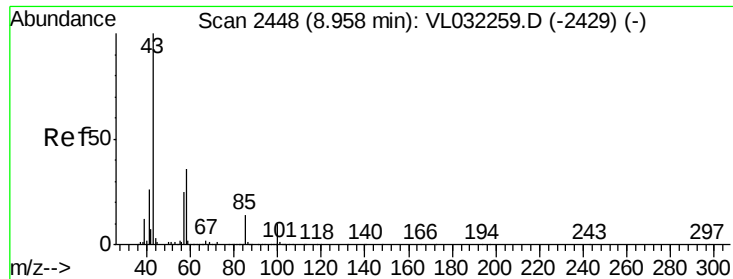
#44

2,2,4-Trimethylpentane

Concen: 0.21 ppbv
RT: 8.07 min Scan# 2173
Delta R.T. -0.00 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Tgt Ion	Ratio	Lower	Upper
57	100		
41	42.3	24.4	36.6#
56	41.6	25.7	38.5#





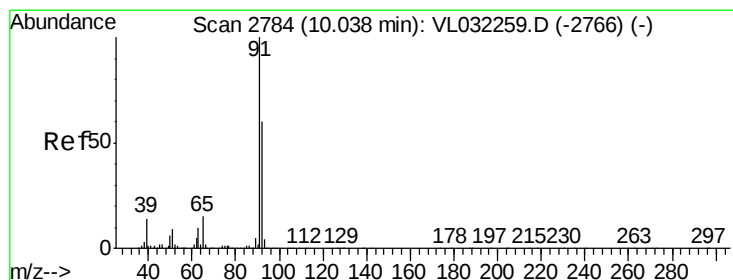
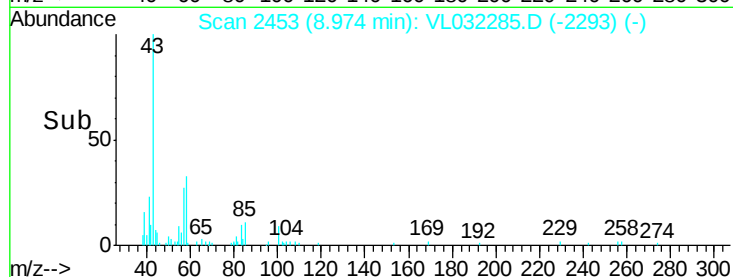
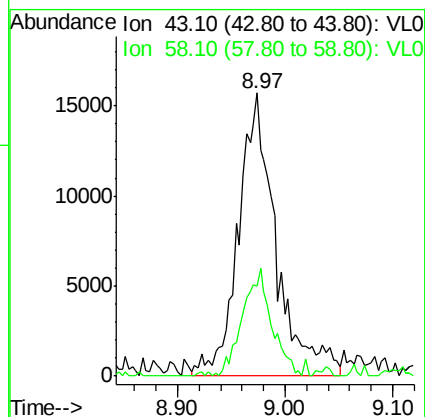
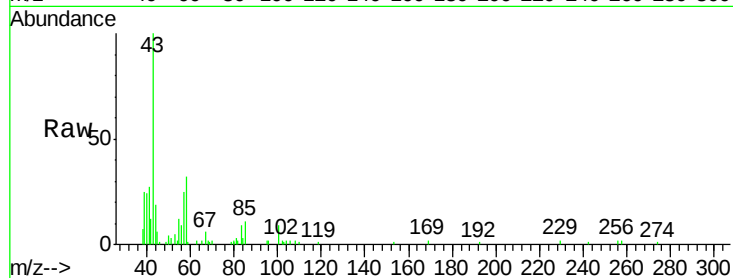
#50
4-Methyl-2-Pentanone
Concen: 0.10 ppbv m
RT: 8.97 min Scan# 2453
Delta R.T. 0.02 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Instrument :
MSVOA_L
ClientSampleId :
B-13

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.2	43.8#

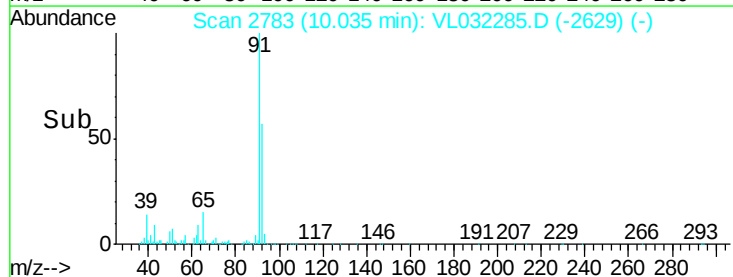
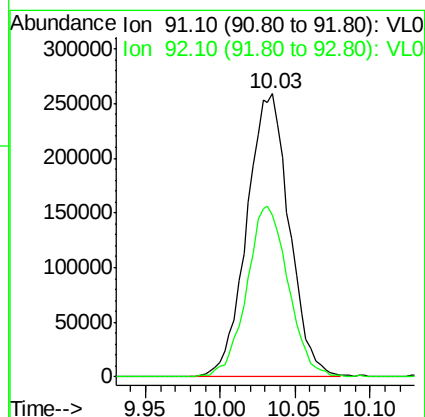
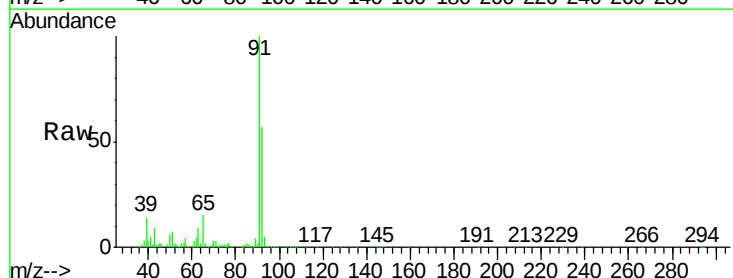
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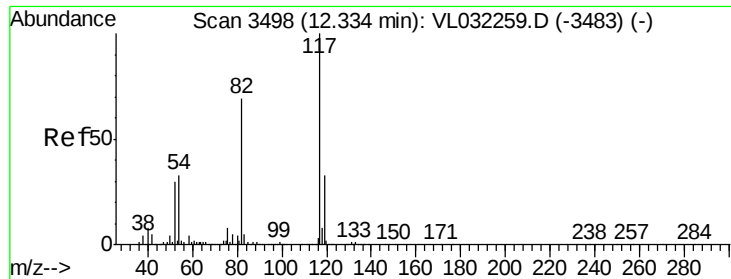
MMDadoda
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#53
Toluene
Concen: 1.27 ppbv
RT: 10.03 min Scan# 2783
Delta R.T. -0.00 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.4	48.6	72.8





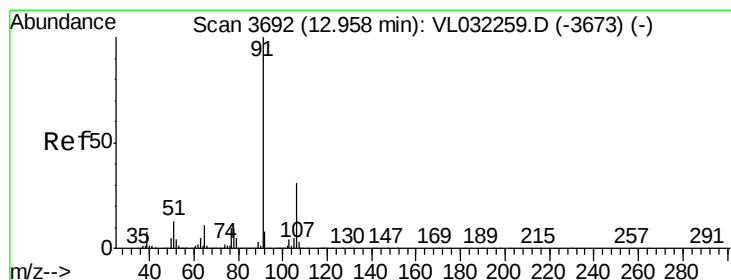
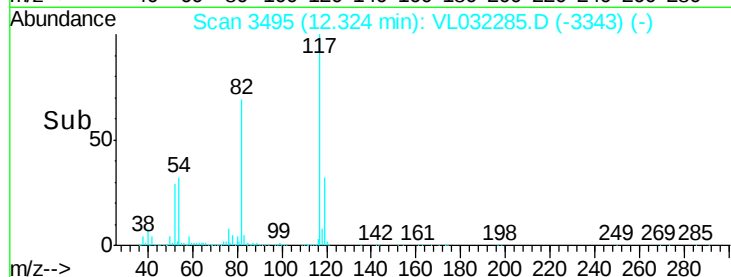
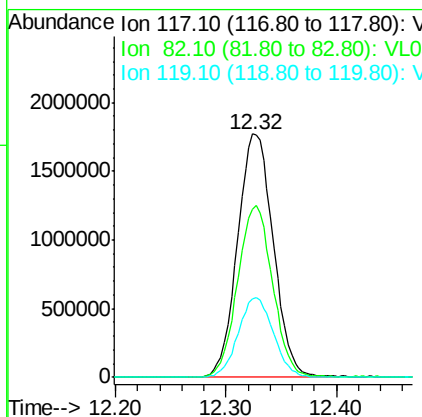
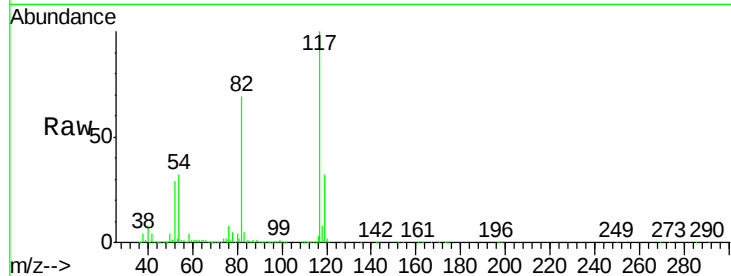
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.32 min Scan# 3495
Delta R.T. -0.01 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Instrument :
MSVOA_L
ClientSampleId :
B-13

Tot Ion	Ratio	Lower	Upper
117	100		
82	69.3	53.9	80.9
119	32.5	25.5	38.3

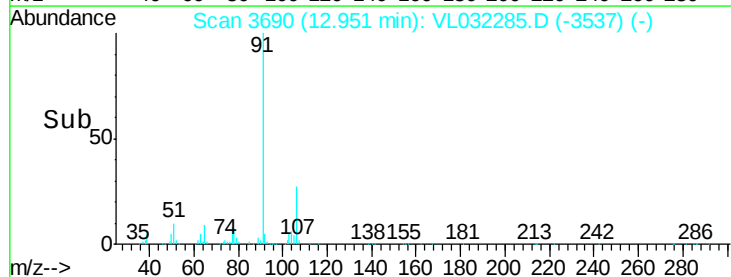
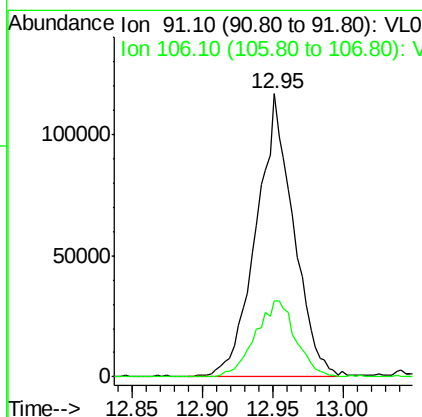
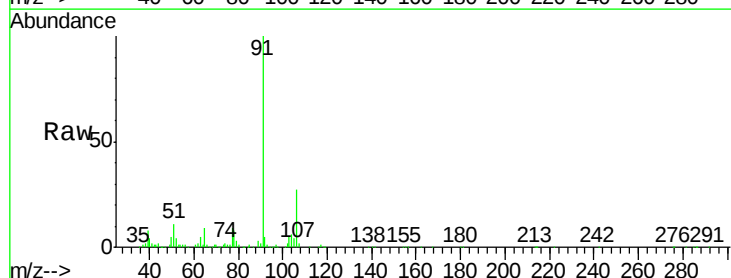
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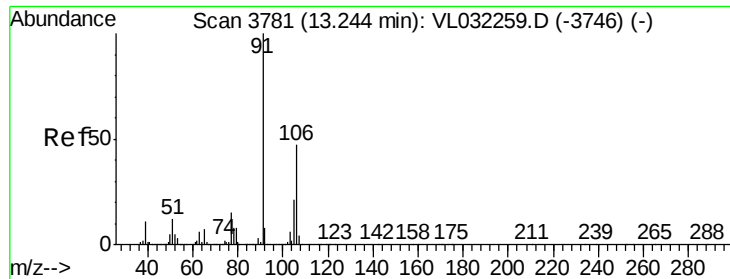
MMDadoda
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#58
Ethyl Benzene
Concen: 0.38 ppbv
RT: 12.95 min Scan# 3690
Delta R.T. -0.01 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Tgt Ion	Ratio	Lower	Upper
91	100		
106	26.9	24.5	36.7





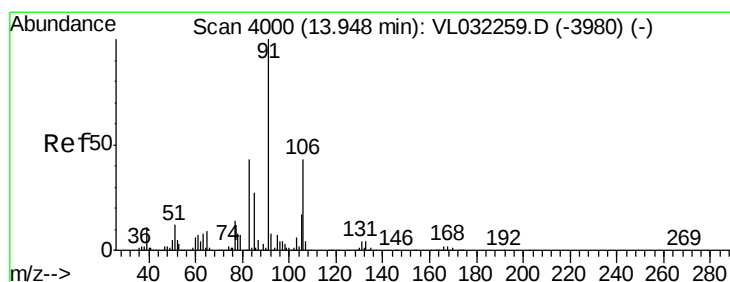
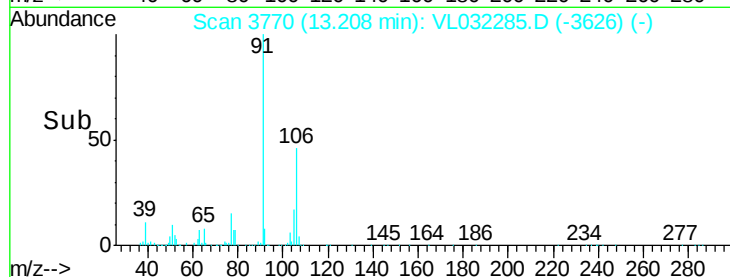
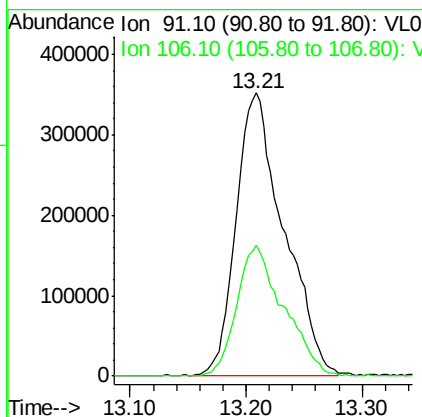
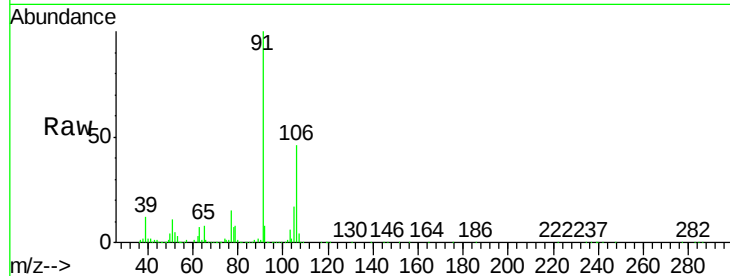
#59
m/p-Xylene
Concen: 2.10 ppbv
RT: 13.21 min Scan# 3770
Delta R.T. -0.04 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Instrument :
MSVOA_L
ClientSampled :
B-13

Tot Ion: 91 Resp: 1004004
Ion Ratio Lower Upper
91 100
106 45.8 36.2 54.2

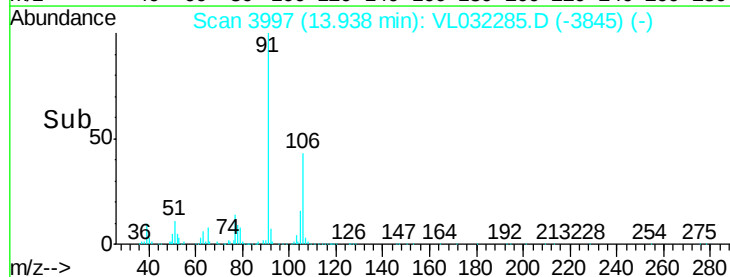
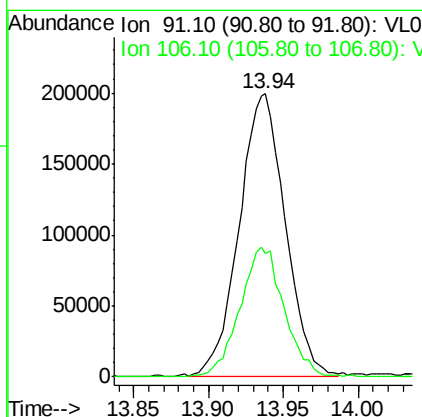
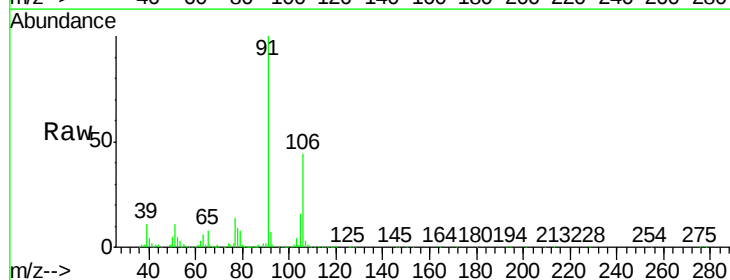
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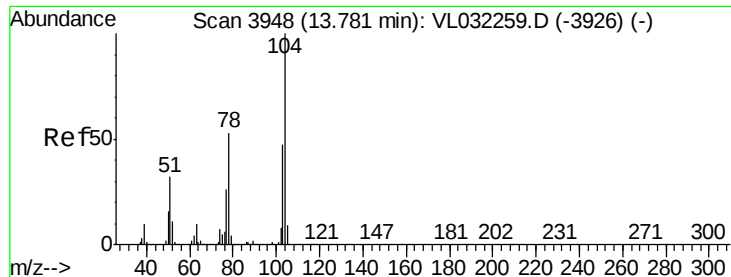
MMDadoda
7/20/2018 2:53:31 PM



#60
o-Xylene
Concen: 0.89 ppbv
RT: 13.94 min Scan# 3997
Delta R.T. -0.01 min
Lab File: VL032285.D
Acq: 19 Jul 2018 7:04

Tgt Ion: 91 Resp: 423844
Ion Ratio Lower Upper
91 100
106 44.5 21.7 65.1





#61

Stvrene

Concen: 0.30 ppbv

RT: 13.77 min Scan# 3945

Delta R.T. -0.01 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Instrument :

MSVOA_L

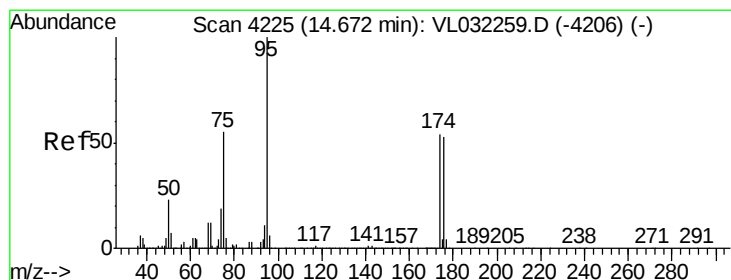
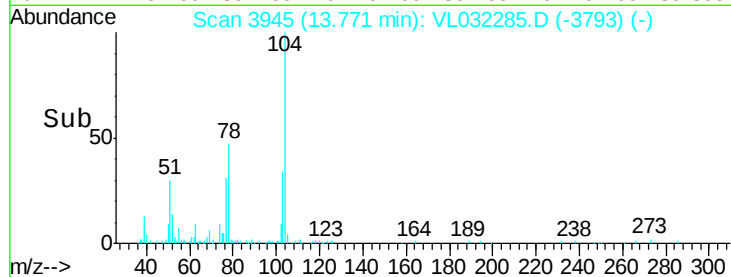
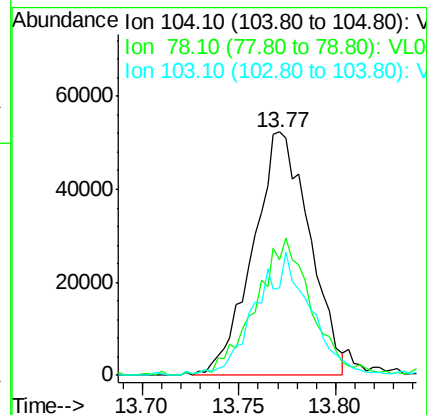
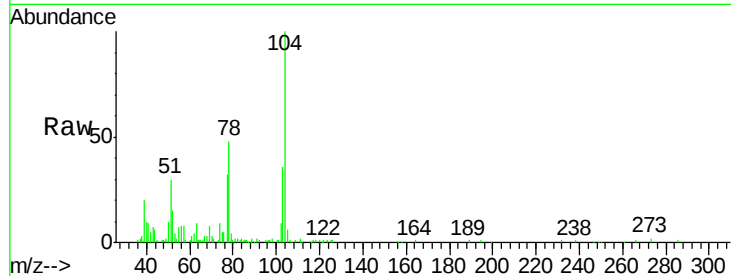
ClientSampled :

B-13

Tot Ion:	104	Resp:	106367
Ion Ratio	Lower	Upper	
104	100		
78	57.5	43.2	64.8
103	49.0	37.8	56.6

Manual Integrations
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#68

1-Bromo-4-Fluorobenzene

Concen: 9.72 ppbv

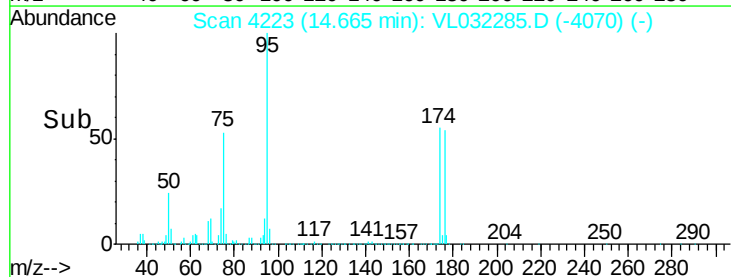
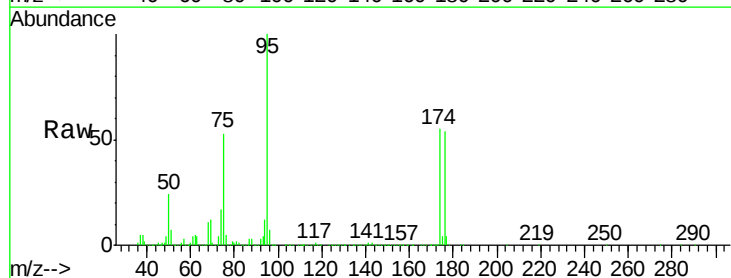
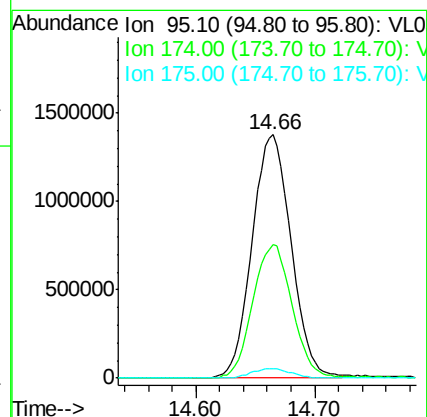
RT: 14.66 min Scan# 4223

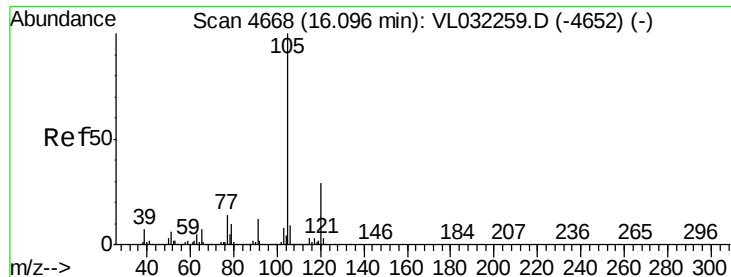
Delta R.T. -0.01 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Tgt Ion:	95	Resp:	3133636
Ion Ratio	Lower	Upper	
95	100		
174	56.1	44.3	66.5
175	4.0	3.3	4.9





#72

4-Ethyltoluene

Concen: 0.12 ppbv m

RT: 16.08 min Scan# 4664

Delta R.T. -0.01 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Instrument :

MSVOA_L

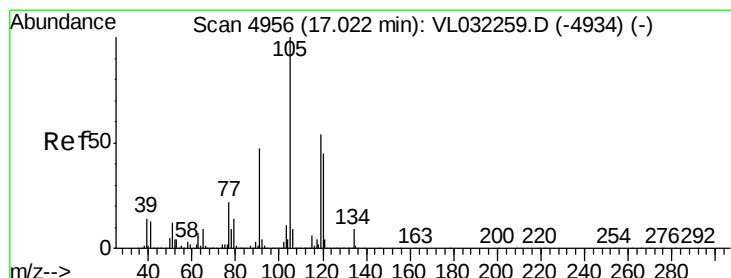
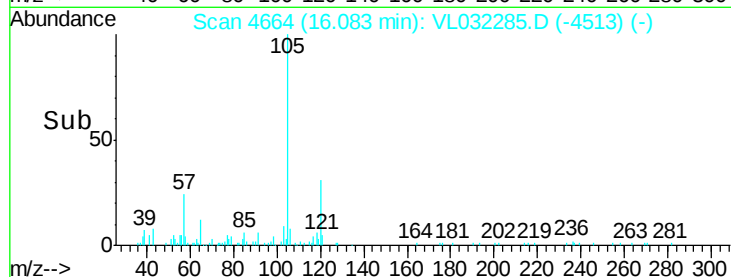
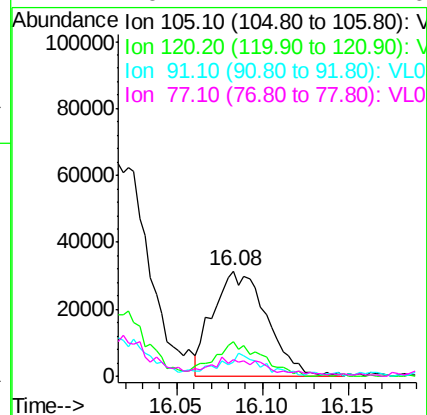
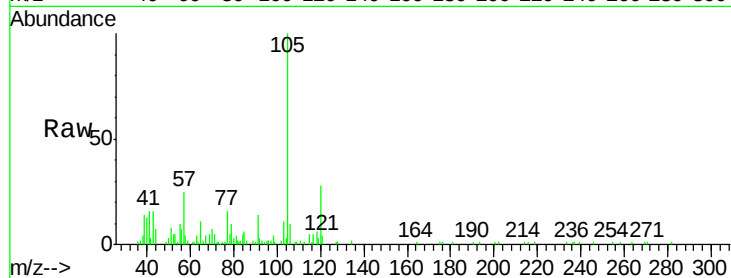
ClientSampled :

B-13

Tot Ion:	105	Resp:	68726
Ion Ratio	Lower	Upper	
105	100		
120	29.4	23.0	34.6
91	0.0	10.1	15.1#
77	19.1	11.4	17.0#

Manual Integrations
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#74

1,2,4-Trimethylbenzene

Concen: 0.29 ppbv

RT: 17.01 min Scan# 4953

Delta R.T. -0.01 min

Lab File: VL032285.D

Acq: 19 Jul 2018 7:04

Tgt Ion:	105	Resp:	161387
Ion Ratio	Lower	Upper	
105	100		
120	39.7	35.8	53.6
91	13.3	38.2	57.4#
77	16.8	17.5	26.3#

