

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091018\
 Data File : VL032496.D
 Acq On : 11 Sep 2018 2:41
 Operator : SY/AP
 Sample : J4820-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 253-BERRY

Manual Integrations
 APPROVED

MMDadoda
 9/12/2018 3:59:47 PM

Quant Time: Sep 11 16:21:23 2018

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 31

QLast Update : Fri Aug 31 21:33:46 2018

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.82	49	1349623	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.35	114	3225875	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.29	117	3189907	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.62	95	2458567	10.38	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.80%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.10	85	49954	0.29	ppbv	94
3) Chlorodifluoromethane	3.04	51	49025m	0.40	ppbv	
4) Chloromethane	3.20	50	76499	1.03	ppbv	96
7) Chloroethane	3.63	64	9055	0.36	ppbv #	87
9) Propene	3.06	41	3614971	73.35	ppbv	96
10) Heptane	8.29	43	205688	1.16	ppbv	100
11) Trichlorofluoromethane	4.04	101	66447	0.43	ppbv	92
13) Ethanol	3.70	45	503008	32.74	ppbv	98
15) Acetone	3.94	43	6824080m	56.15	ppbv	
20) Methylene Chloride	4.45	84	498307	10.75	ppbv	94
26) Hexane	5.82	57	745743	5.80	ppbv #	9
27) Carbon Disulfide	4.66	76	201970	1.70	ppbv #	93
29) Chloroform	5.91	83	864716	4.41	ppbv	98
30) Cyclohexane	7.29	84	44092	0.47	ppbv #	1
34) 2-Butanone	5.38	43	27802710	129.75	ppbv #	66
36) Benzene	7.06	78	955410	3.48	ppbv	98
51) 2-Hexanone	10.31	43	13058094	62.81	ppbv #	95
52) Tetrachloroethene	11.42	164	164696	1.93	ppbv	97
53) Toluene	10.00	91	853766	2.98	ppbv	100
58) Ethyl Benzene	12.91	91	280892	0.74	ppbv	96
59) m/p-Xylene	13.17	91	808492	2.38	ppbv	99
60) o-Xylene	13.89	91	390843	1.17	ppbv	98
61) Styrene	13.73	104	412060	1.90	ppbv	98
62) Isopropylbenzene	14.88	105	372794	0.79	ppbv	98
64) n-propylbenzene	15.77	120	30171m	0.25	ppbv	
69) p-Isopropyltoluene	17.87	119	123749m	0.26	ppbv	
72) 4-Ethyltoluene	16.05	105	154502	0.42	ppbv #	95
73) 1,3,5-Trimethylbenzene	16.20	105	169133m	0.46	ppbv	
74) 1,2,4-Trimethylbenzene	16.97	105	521056	1.30	ppbv #	69
79) Naphthalene	22.47	128	71844m	0.22	ppbv	

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

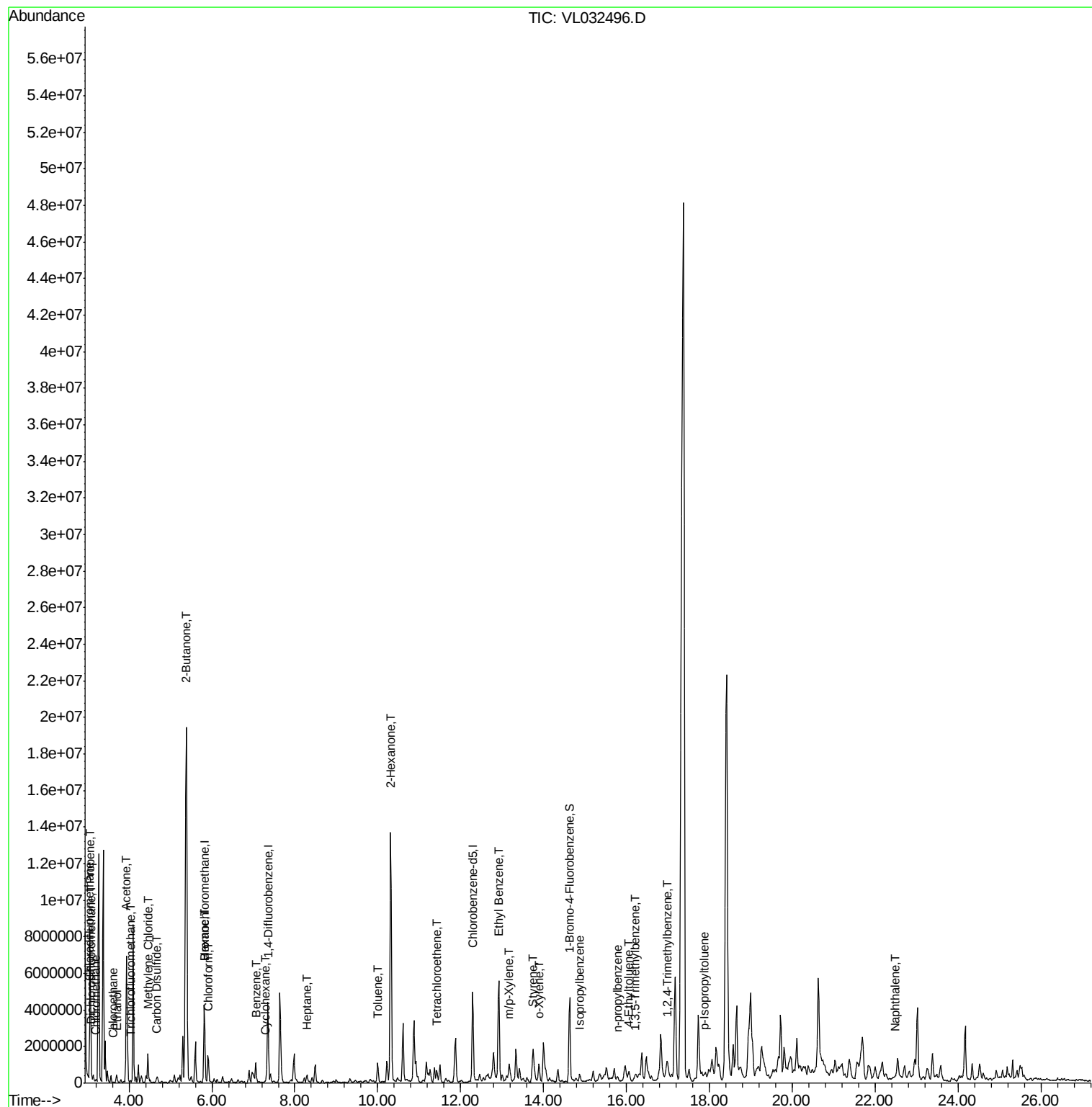
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL091018\
Data File : VL032496.D
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Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

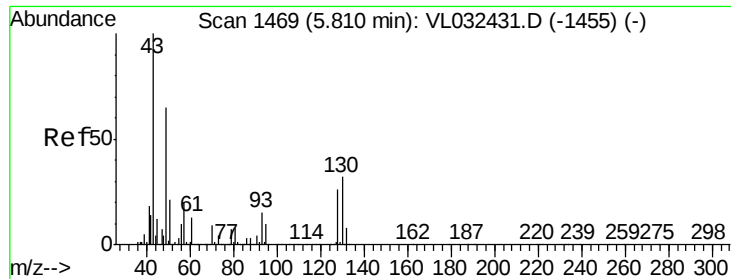
Instrument :
MSVOA_L
ClientSampleId :
253-BERRY

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
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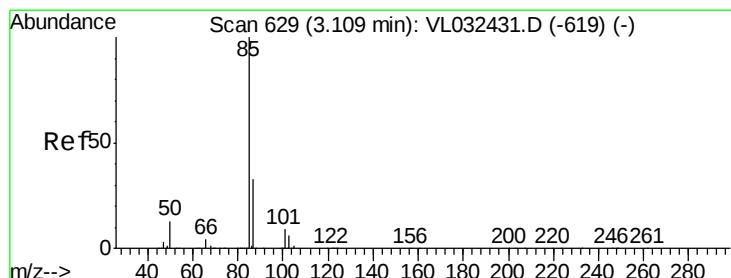
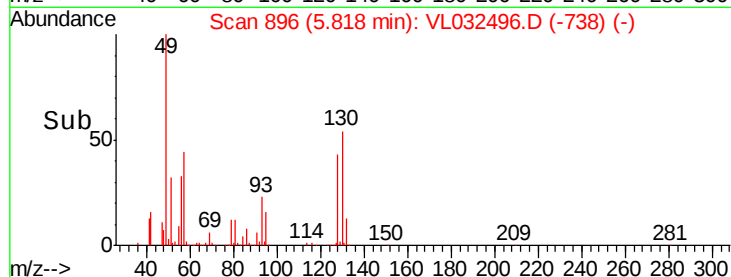
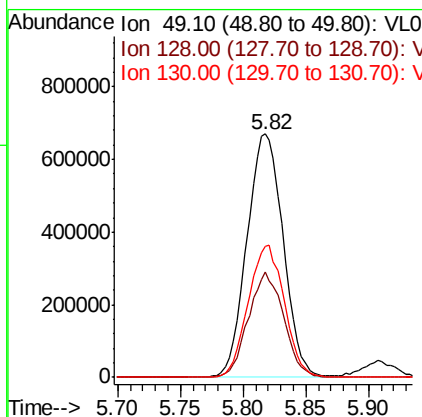
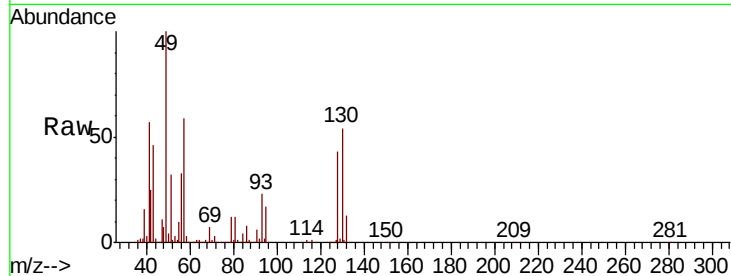
#1
 Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.82 min Scan# 896
 Delta R.T. 0.01 min
 Lab File: VL032496.D
 Acq: 11 Sep 2018 2:41

Instrument :
 MSVOA_L
 ClientSampleId :
 253-BERRY

Tot Ion: 49 Resp: 1349623
 Ion Ratio Lower Upper
 49 100
 128 41.9 20.7 62.1
 130 54.2 26.6 79.7

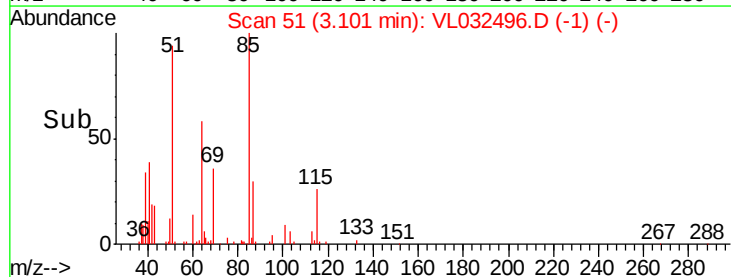
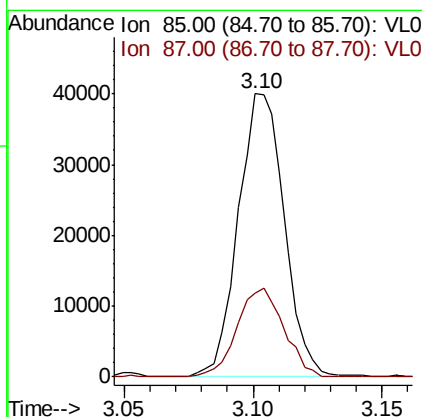
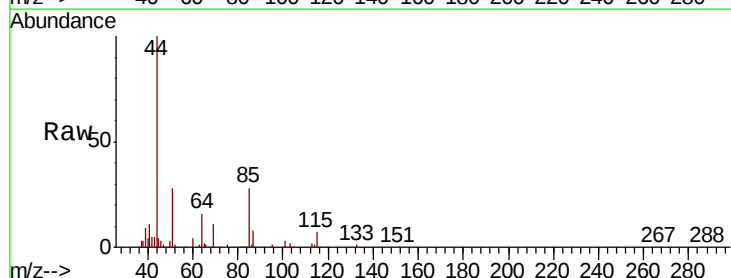
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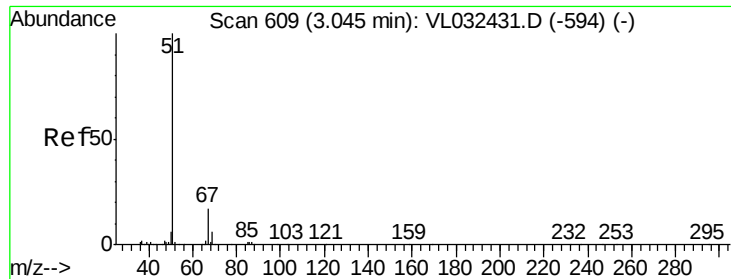
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#2
 Dichlorodifluoromethane
 Concen: 0.29 ppbv
 RT: 3.10 min Scan# 51
 Delta R.T. -0.01 min
 Lab File: VL032496.D
 Acq: 11 Sep 2018 2:41

Tgt Ion: 85 Resp: 49954
 Ion Ratio Lower Upper
 85 100
 87 29.5 26.2 39.4





#3

Chlorodifluoromethane

Concen: 0.40 ppbv m

RT: 3.04 min Scan# 32

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Tot Ion: 51 Resp: 49025

Ion Ratio Lower Upper

51 100

67 14.4 13.8 20.8

Instrument :

MSVOA_L

ClientSampleId :

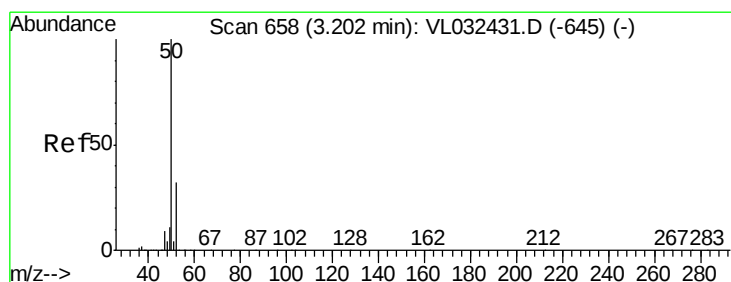
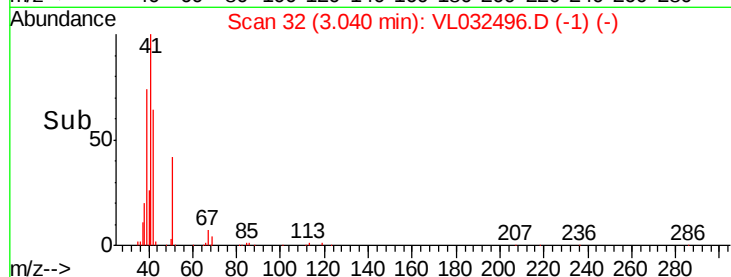
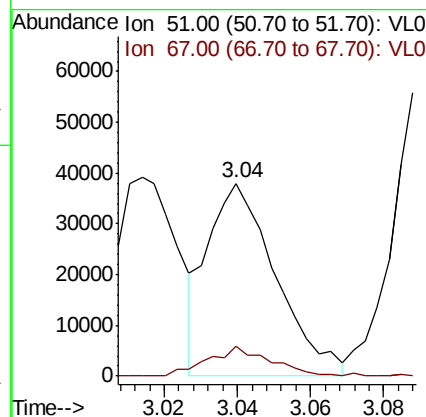
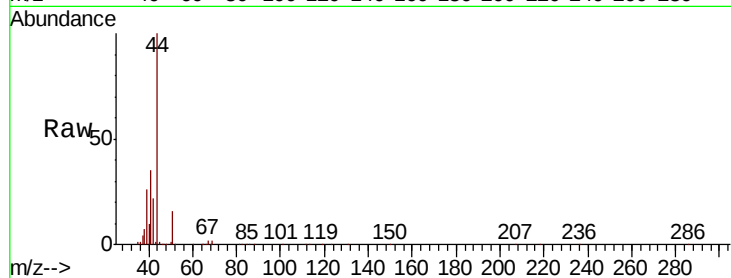
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#4

Chloromethane

Concen: 1.03 ppbv

RT: 3.20 min Scan# 82

Delta R.T. -0.00 min

Lab File: VL032496.D

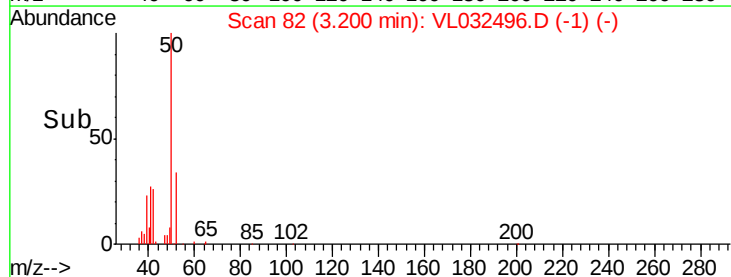
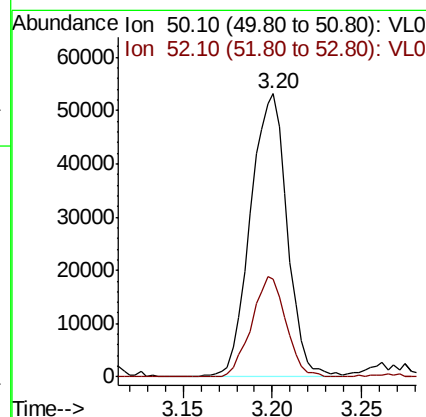
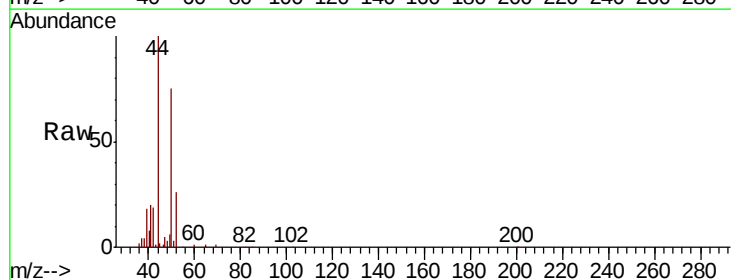
Acq: 11 Sep 2018 2:41

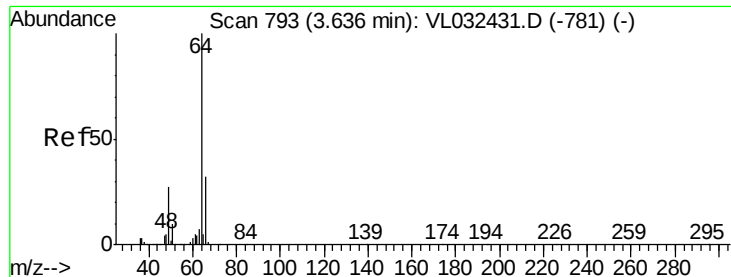
Tgt Ion: 50 Resp: 76499

Ion Ratio Lower Upper

50 100

52 34.4 25.6 38.4





#7

Chloroethane

Concen: 0.36 ppbv

RT: 3.63 min Scan# 217

Delta R.T. -0.00 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

ClientSampleId :

253-BERRY

Tot Ion: 64 Resp: 9055

Ion Ratio Lower Upper

64 100

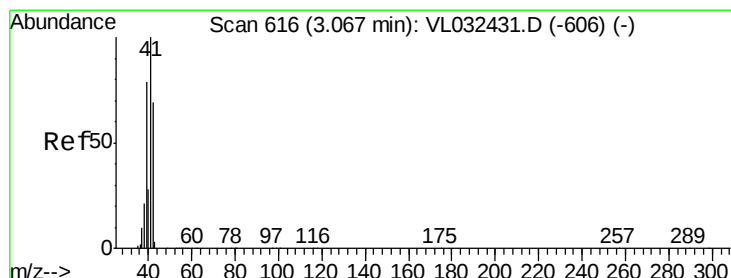
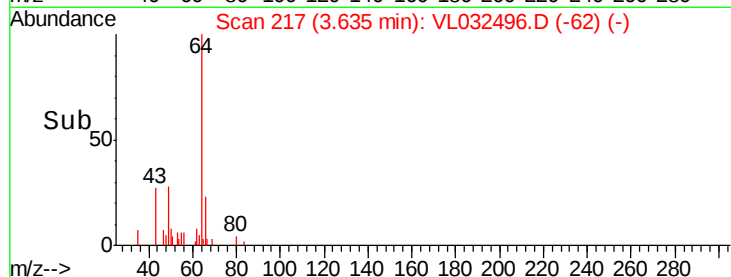
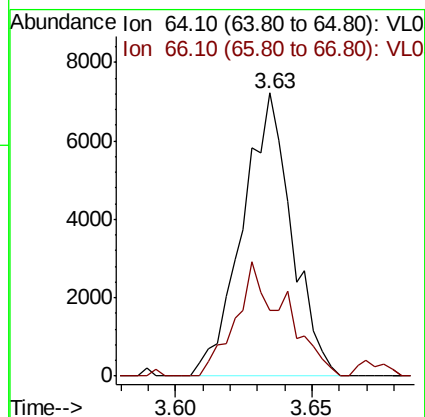
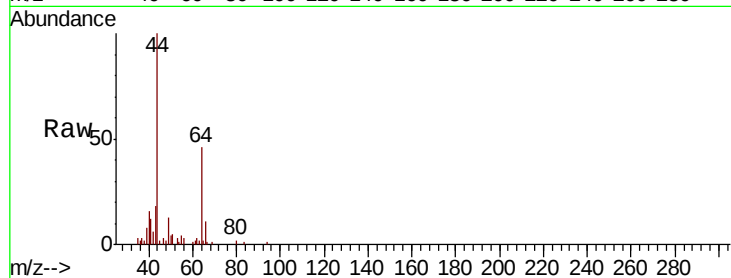
66 25.1 25.8 38.6#

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#9

Propene

Concen: 73.35 ppbv

RT: 3.06 min Scan# 39

Delta R.T. -0.01 min

Lab File: VL032496.D

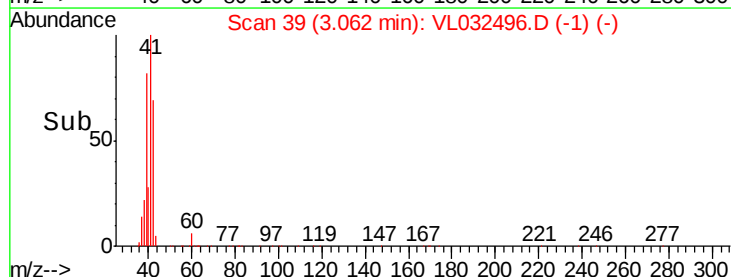
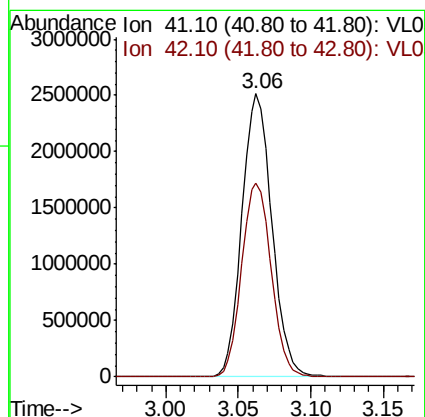
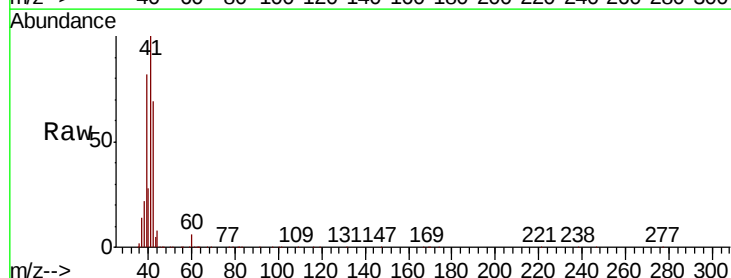
Acq: 11 Sep 2018 2:41

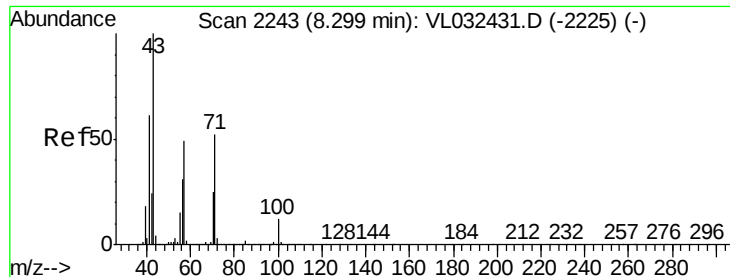
Tgt Ion: 41 Resp: 3614971

Ion Ratio Lower Upper

41 100

42 67.8 56.6 84.8





#10

Heptane

Concen: 1.16 ppbv

RT: 8.29 min Scan# 1665

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

ClientSampleId :

253-BERRY

Tot Ion: 43 Resp: 205688

Ion Ratio Lower Upper

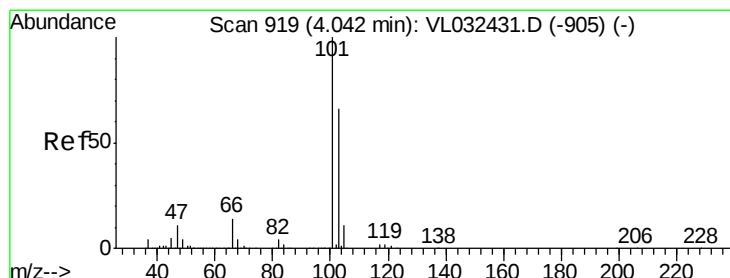
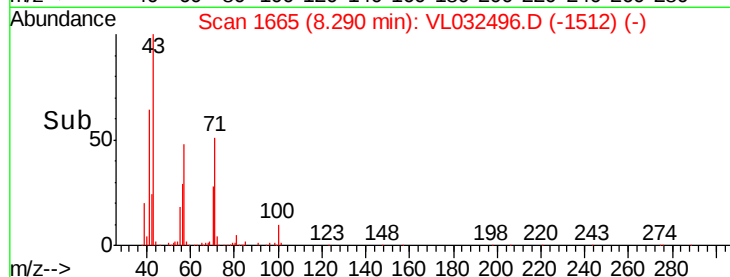
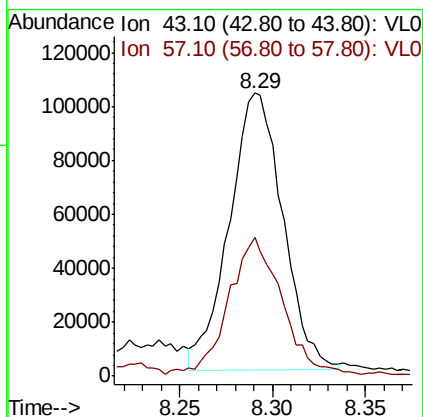
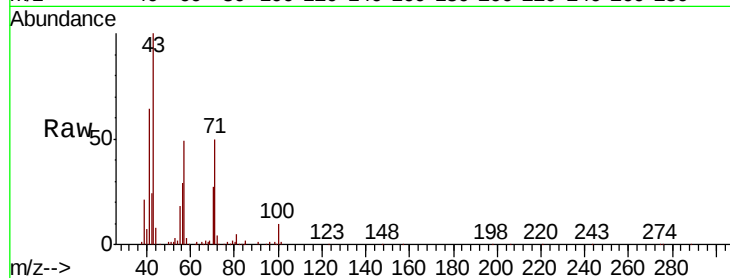
43 100

57 49.4 39.6 59.4

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#11

Trichlorofluoromethane

Concen: 0.43 ppbv

RT: 4.04 min Scan# 343

Delta R.T. -0.00 min

Lab File: VL032496.D

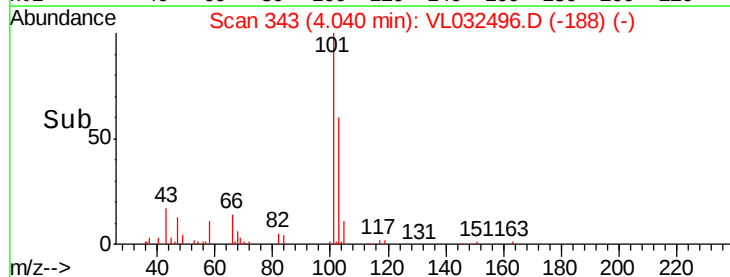
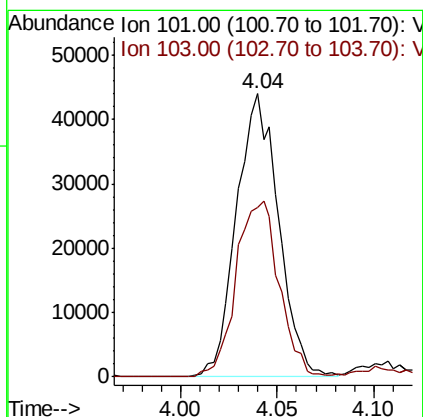
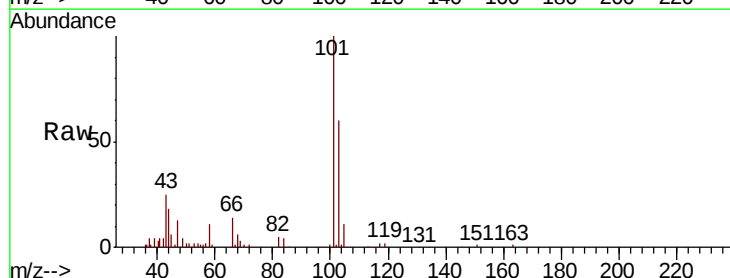
Acq: 11 Sep 2018 2:41

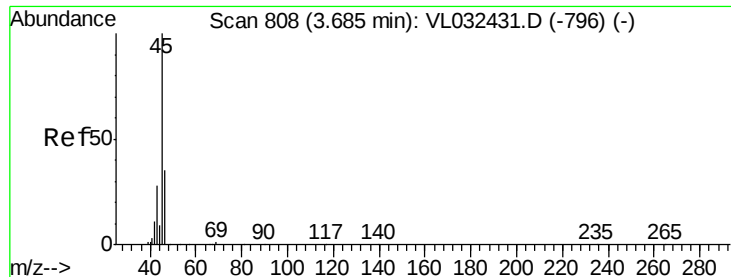
Tgt Ion: 101 Resp: 66447

Ion Ratio Lower Upper

101 100

103 60.0 52.8 79.2





#13

Ethanol

Concen: 32.74 ppbv

RT: 3.70 min Scan# 237

Delta R.T. 0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

ClientSampleId :

253-BERRY

Tot Ion: 45 Resp: 503008

Ion Ratio Lower Upper

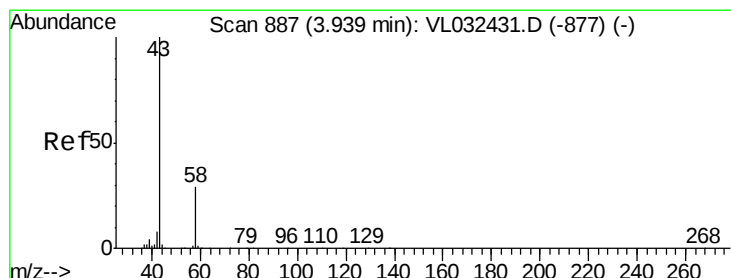
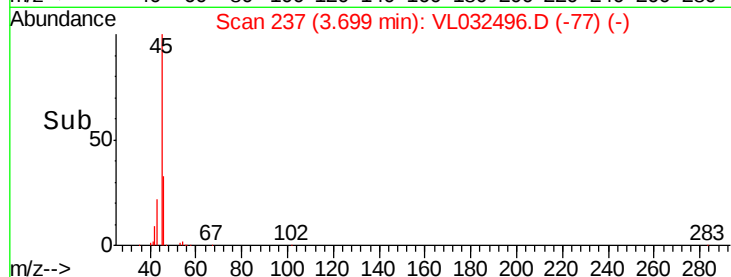
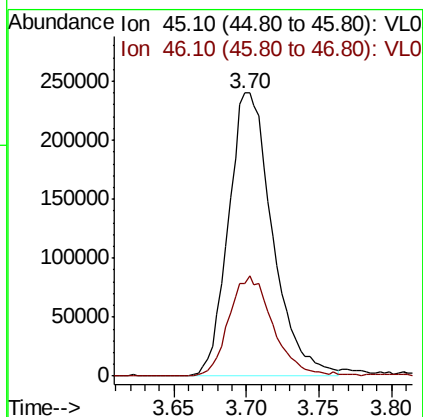
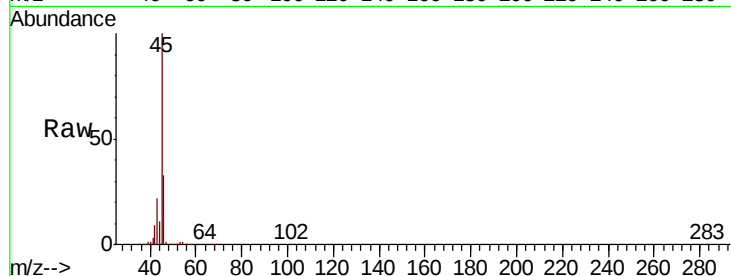
45 100

46 36.5 14.2 56.8

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#15

Acetone

Concen: 56.15 ppbv m

RT: 3.94 min Scan# 311

Delta R.T. -0.00 min

Lab File: VL032496.D

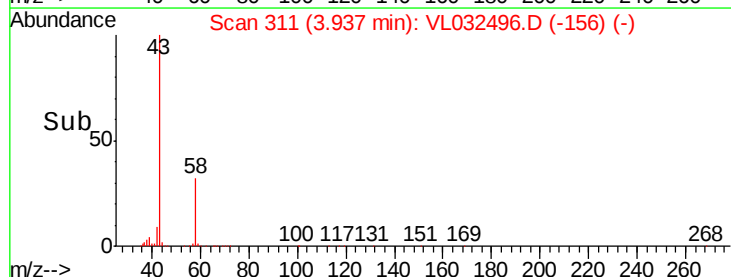
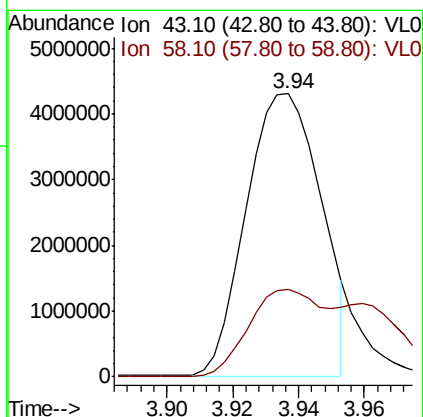
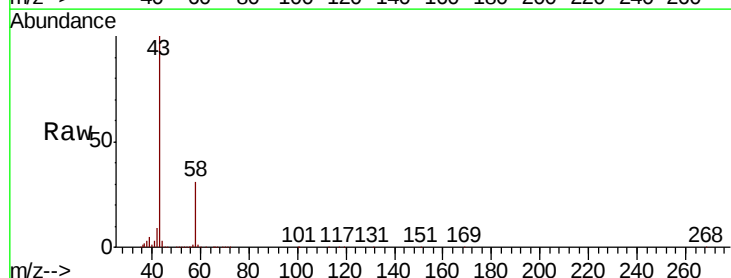
Acq: 11 Sep 2018 2:41

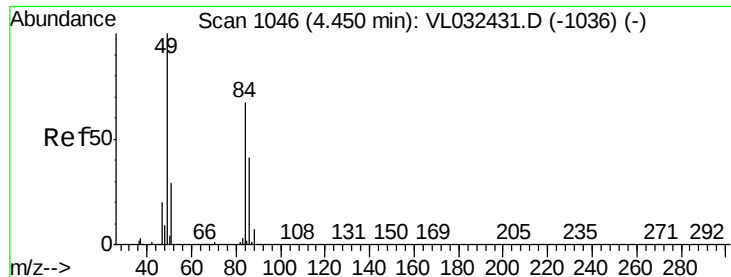
Tgt Ion: 43 Resp: 6824080

Ion Ratio Lower Upper

43 100

58 53.2 22.6 33.8#





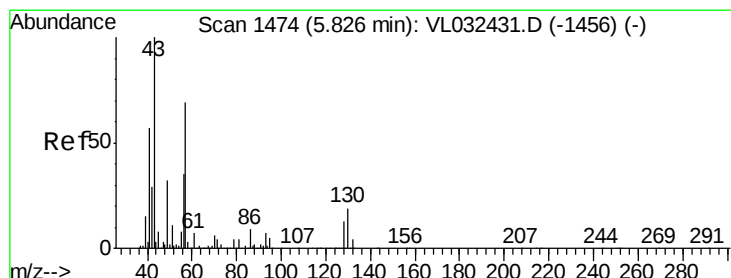
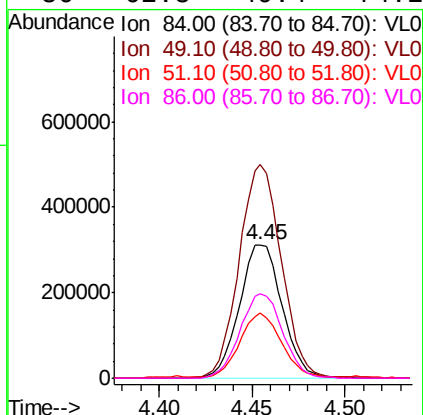
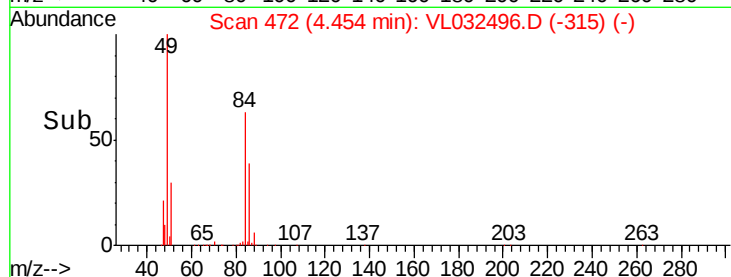
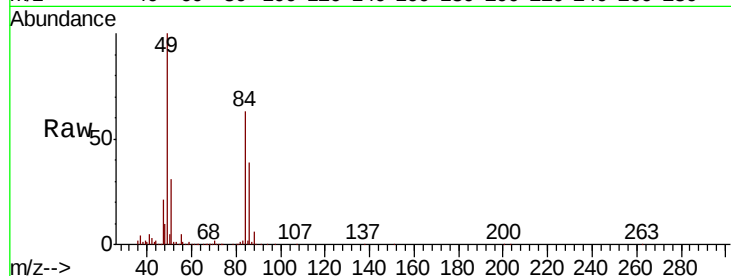
#20
Methvlene Chloride
Concen: 10.75 ppbv
RT: 4.45 min Scan# 472
Delta R.T. 0.00 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Instrument :
MSVOA_L
ClientSampleId :
253-BERRY

Tot Ion	84	Resp	498307
Ion	Ratio	Lower	Upper
84	100		
49	159.7	119.1	178.7
51	48.0	35.2	52.8
86	62.8	49.4	74.2

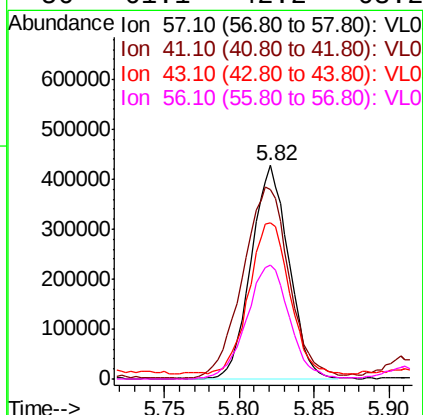
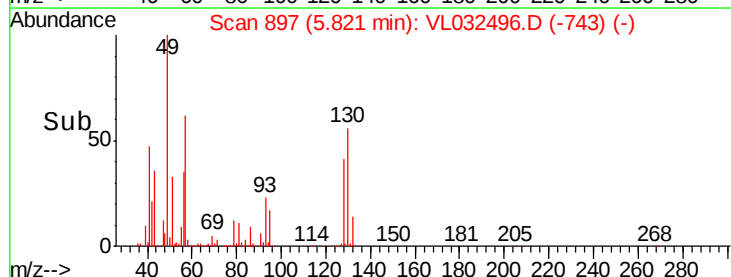
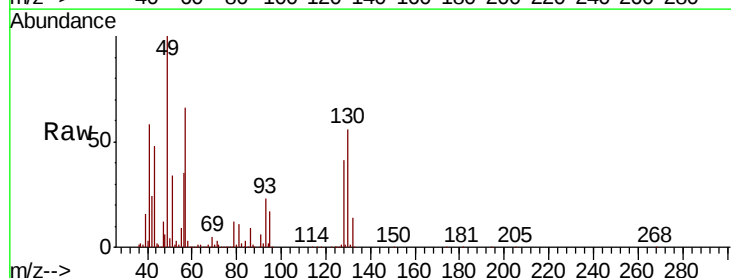
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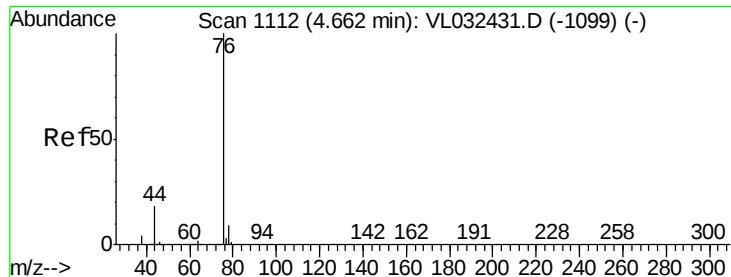
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#26
Hexane
Concen: 5.80 ppbv
RT: 5.82 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Tgt Ion	57	Resp	745743
Ion	Ratio	Lower	Upper
57	100		
41	111.3	69.0	103.4#
43	0.0	172.1	258.1#
56	61.1	42.2	63.2





#27

Carbon Disulfide

Concen: 1.70 ppbv

RT: 4.66 min Scan# 536

Delta R.T. -0.00 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

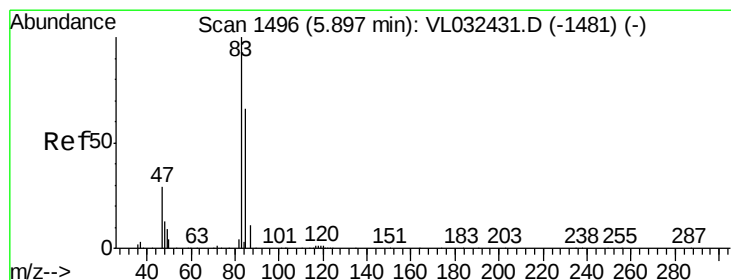
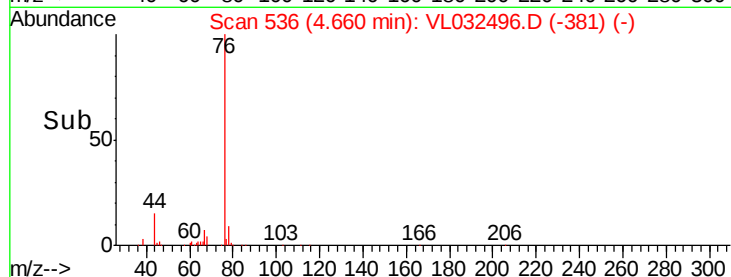
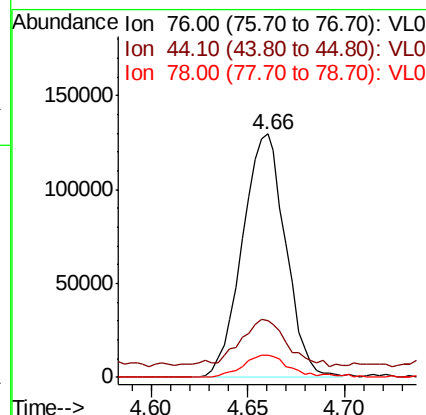
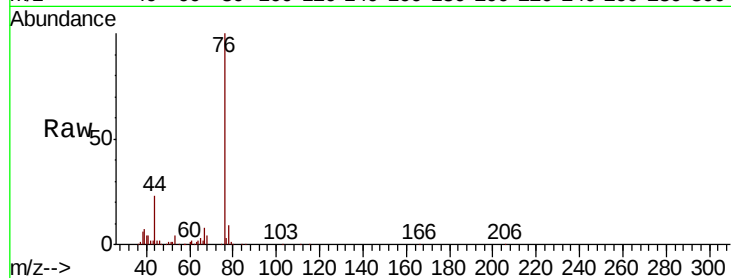
ClientSampleId :

253-BERRY

Tot Ion:	76	Resp:	201970
Ion Ratio	Lower	Upper	
76	100		
44	21.5	14.0	21.0#
78	10.2	7.5	11.3

Manual Integrations
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#29

Chloroform

Concen: 4.41 ppbv

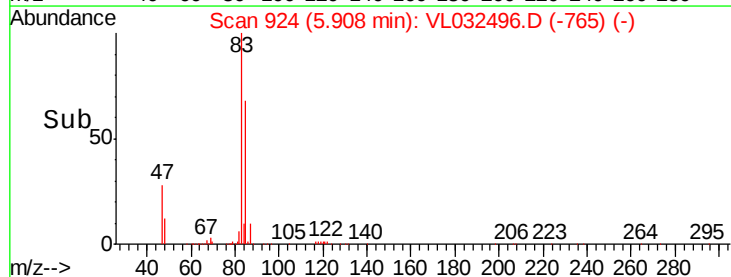
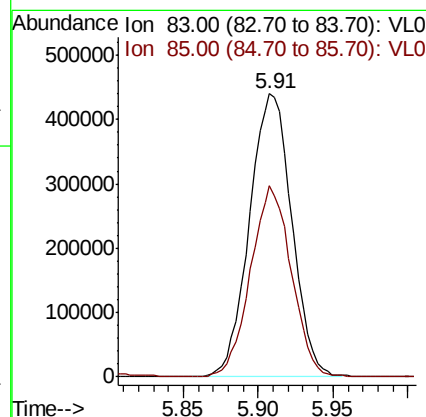
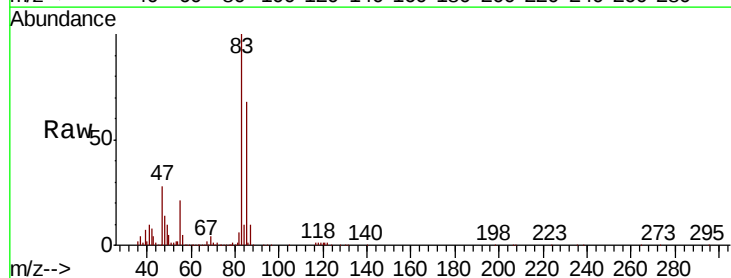
RT: 5.91 min Scan# 924

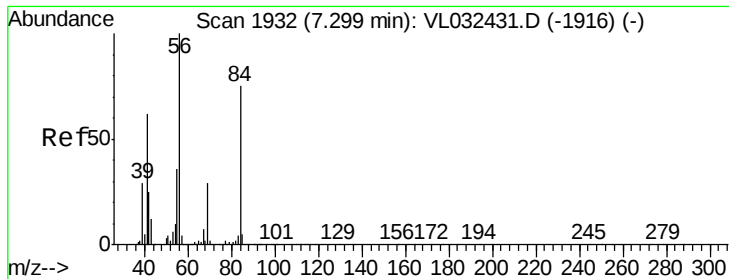
Delta R.T. 0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Tgt Ion:	83	Resp:	864716
Ion Ratio	Lower	Upper	
83	100		
85	67.5	52.5	78.7





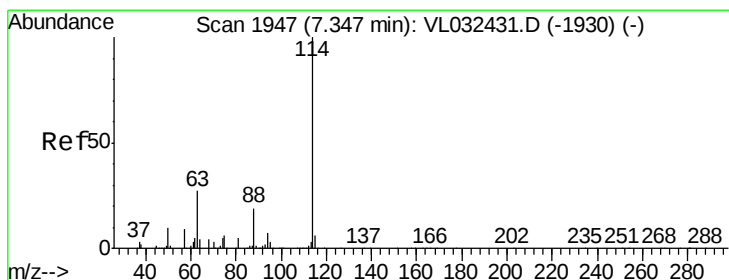
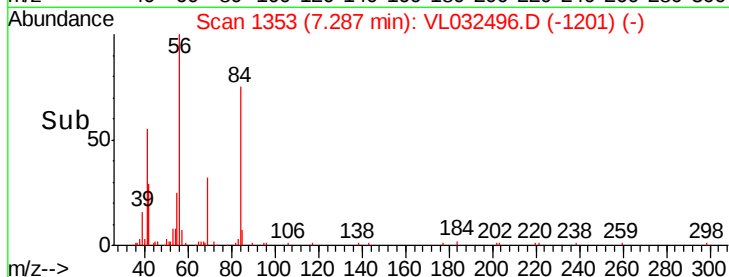
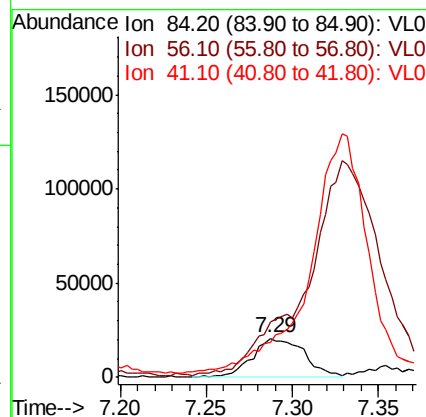
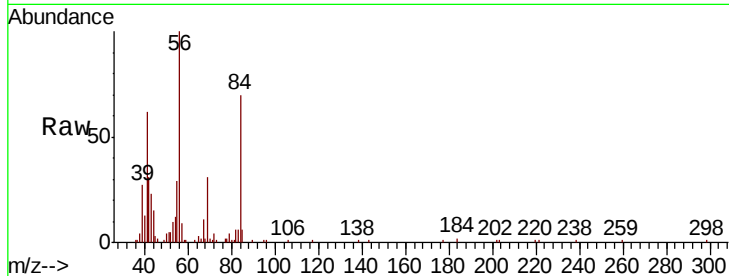
#30
Cvclohexane
Concen: 0.47 ppbv
RT: 7.29 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Instrument :
MSVOA_L
ClientSampleId :
253-BERRY

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	113.5	170.3#
41	0.0	68.1	102.1#

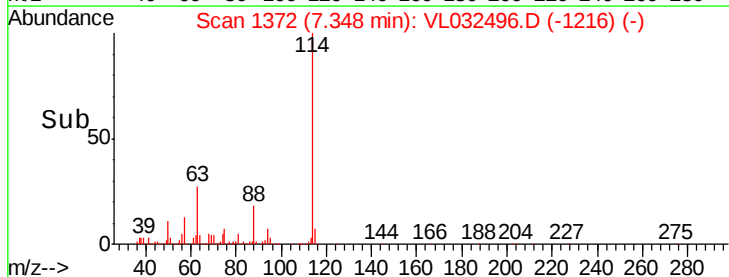
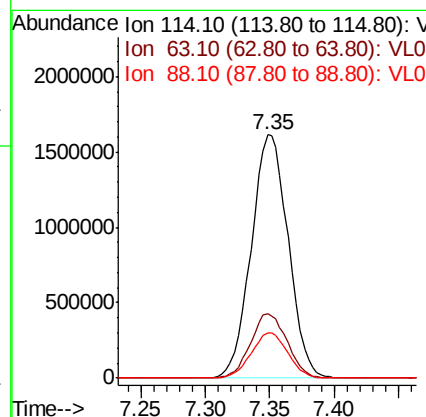
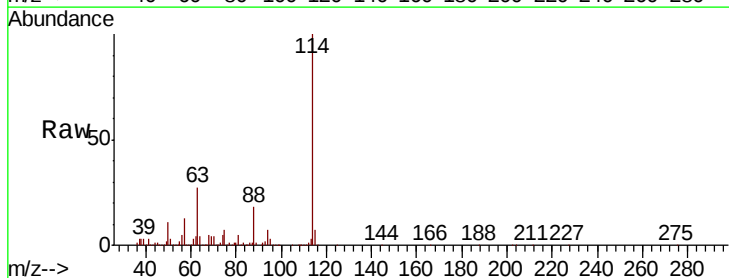
Manual Integrations
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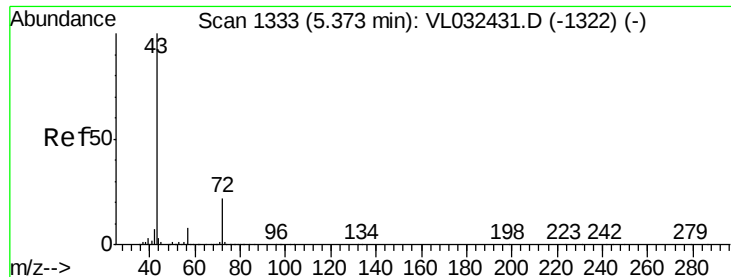
MMDadoda
9/12/2018 3:59:47 PM



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.35 min Scan# 1372
Delta R.T. 0.00 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.3	22.2	33.4
88	18.5	15.0	22.4





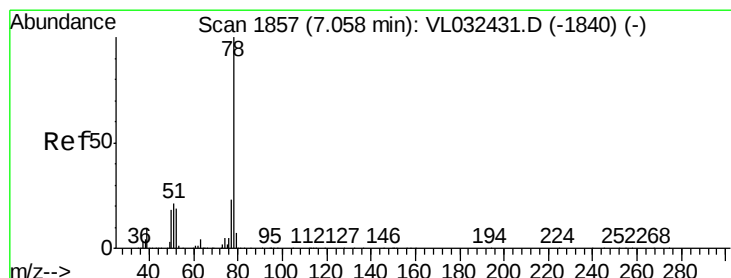
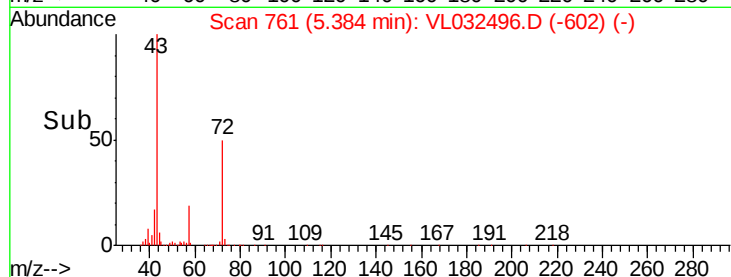
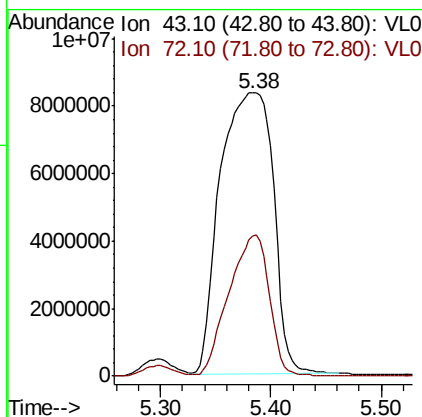
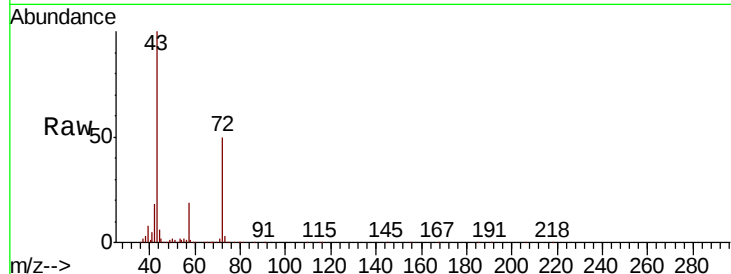
#34
2-Butanone
Concen: 129.75 ppbv
RT: 5.38 min Scan# 761
Delta R.T. 0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Instrument :
MSVOA_L
ClientSampleId :
253-BERRY

Tot Ion: 43 Resp: 27802710
Ion Ratio Lower Upper
43 100
72 38.5 17.8 26.6#

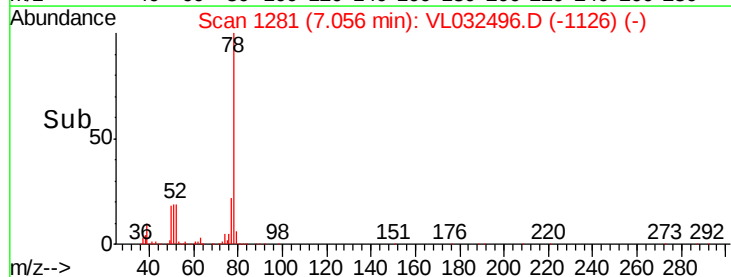
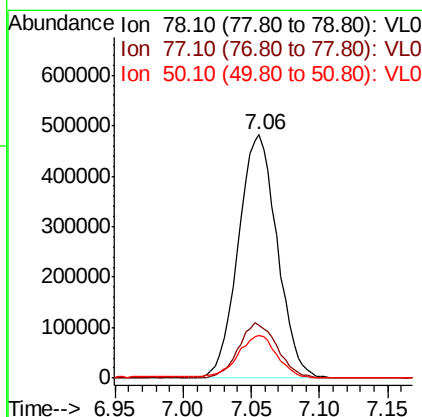
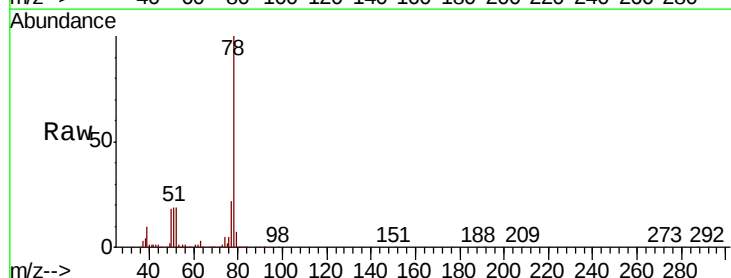
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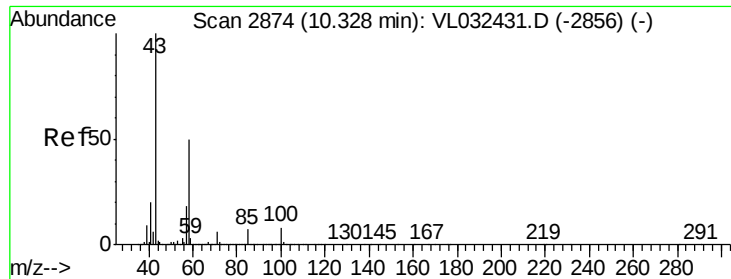
MMDadoda
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#36
Benzene
Concen: 3.48 ppbv
RT: 7.06 min Scan# 1281
Delta R.T. -0.00 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Tgt Ion: 78 Resp: 955410
Ion Ratio Lower Upper
78 100
77 21.9 18.4 27.6
50 17.5 14.4 21.6





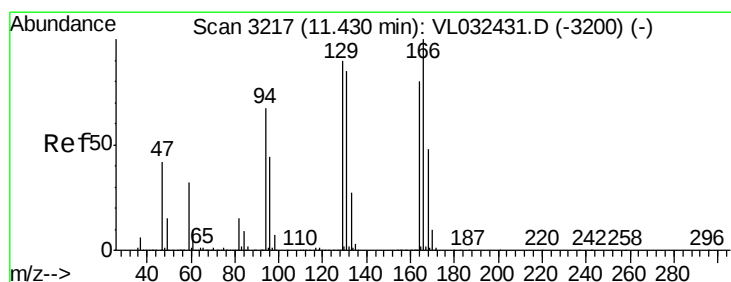
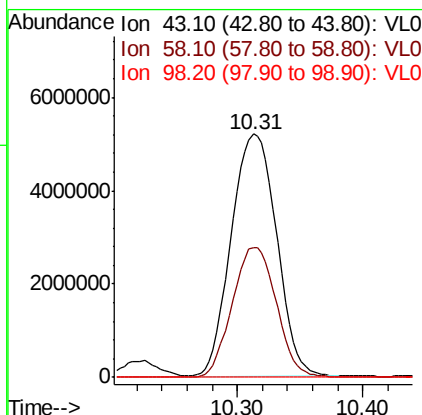
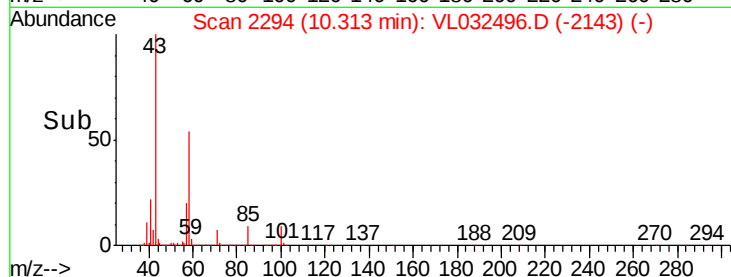
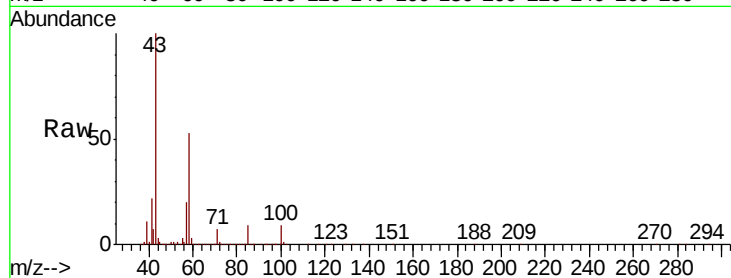
#51
2-Hexanone
Concen: 62.81 ppbv
RT: 10.31 min Scan# 2294
Delta R.T. -0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Instrument :
MSVOA_L
ClientSampleId :
253-BERRY

Tot Ion: 43 Resp: 13058094
Ion Ratio Lower Upper
43 100
58 52.2 39.2 58.8
98 0.1 0.4 0.6#

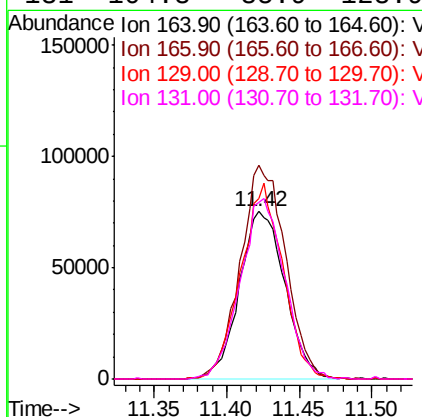
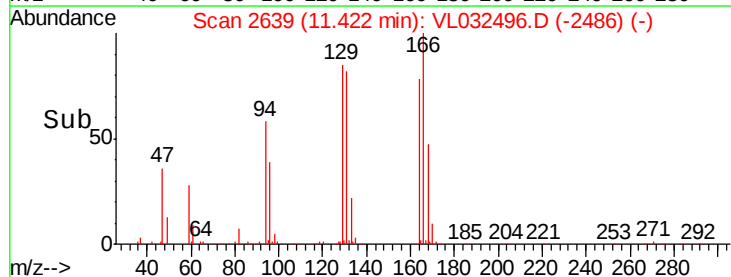
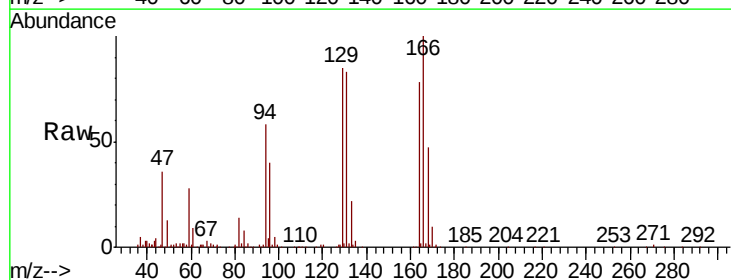
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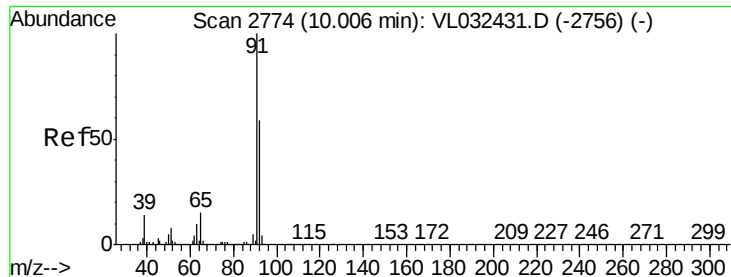
MMDadoda
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#52
Tetrachloroethene
Concen: 1.93 ppbv
RT: 11.42 min Scan# 2639
Delta R.T. -0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Tgt Ion: 164 Resp: 164696
Ion Ratio Lower Upper
164 100
166 126.9 100.6 150.8
129 107.4 89.9 134.9
131 104.8 85.9 128.9





#53

Toluene

Concen: 2.98 ppbv

RT: 10.00 min Scan# 2196

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

ClientSampleId :

253-BERRY

Tot Ion: 91 Resp: 853766

Ion Ratio Lower Upper

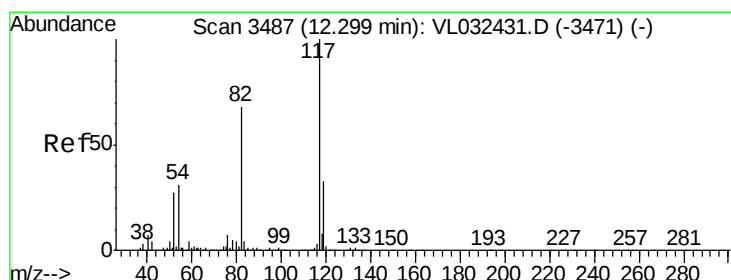
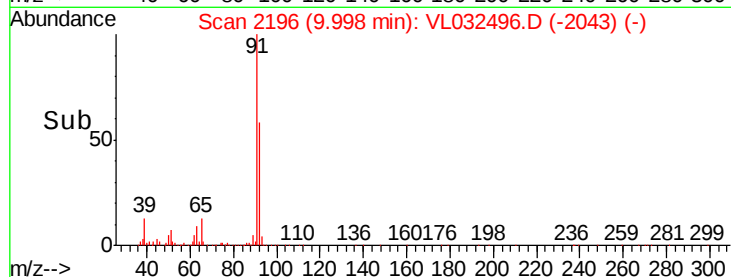
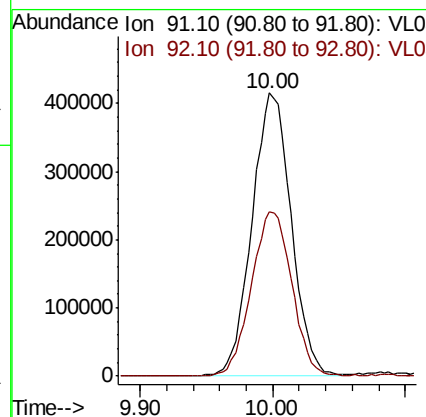
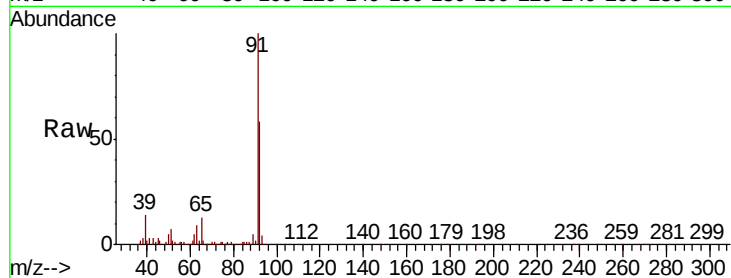
91 100

92 60.0 48.1 72.1

Manual Integrations
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#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.29 min Scan# 2909

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

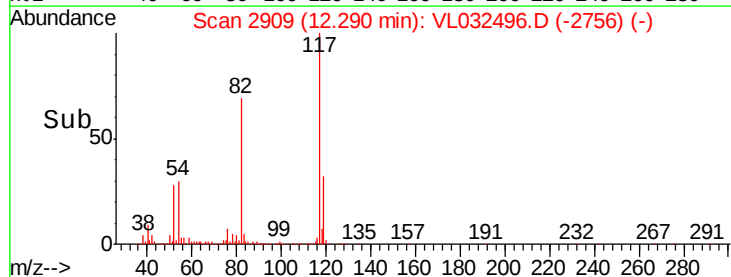
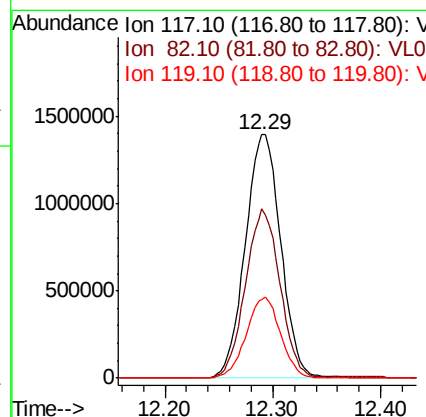
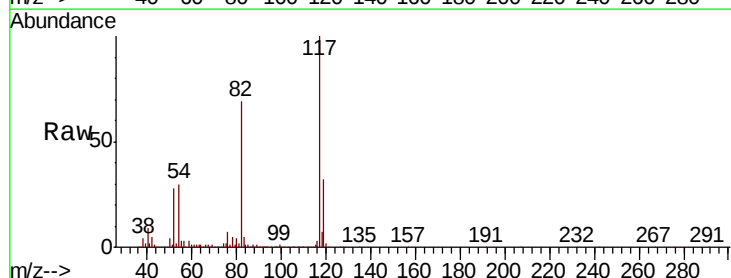
Tgt Ion: 117 Resp: 3189907

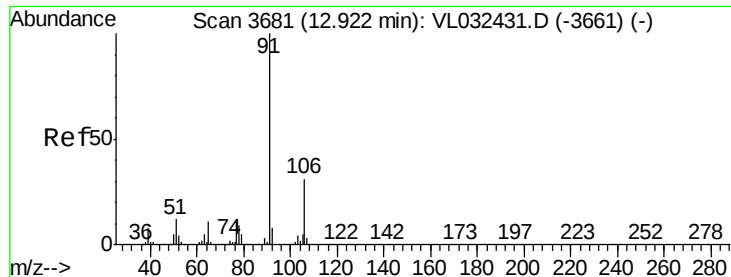
Ion Ratio Lower Upper

117 100

82 67.6 53.0 79.6

119 32.4 45.9 68.9#





#58

Ethyl Benzene

Concen: 0.74 ppbv

RT: 12.91 min Scan# 3103

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

ClientSampleId :

253-BERRY

Tot Ion: 91 Resp: 280892

Ion Ratio Lower Upper

91 100

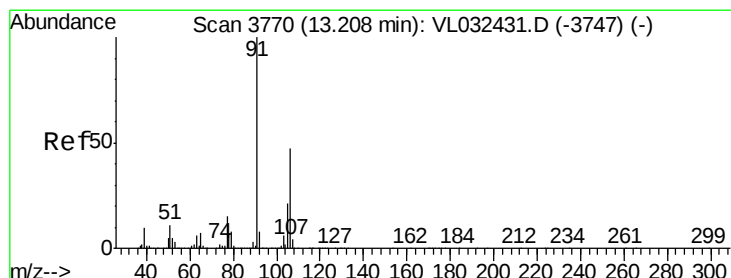
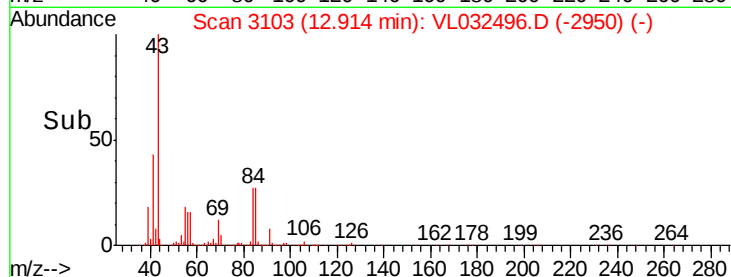
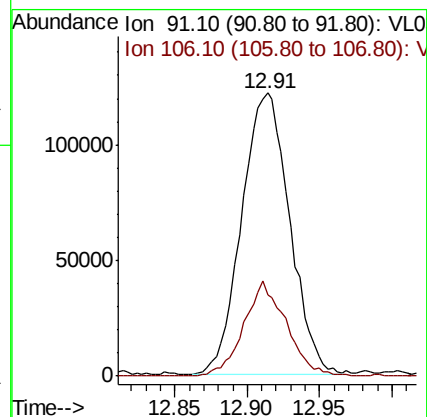
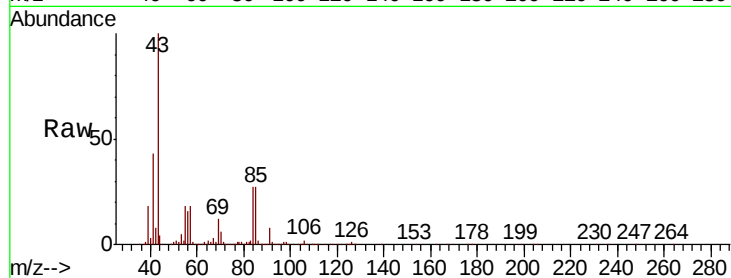
106 28.7 24.8 37.2

Manual Integrations

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#59

m/p-Xylene

Concen: 2.38 ppbv

RT: 13.17 min Scan# 3182

Delta R.T. -0.04 min

Lab File: VL032496.D

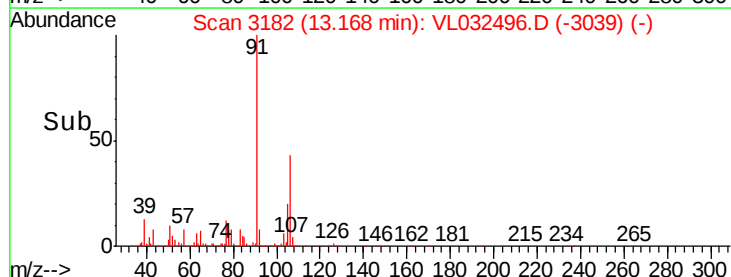
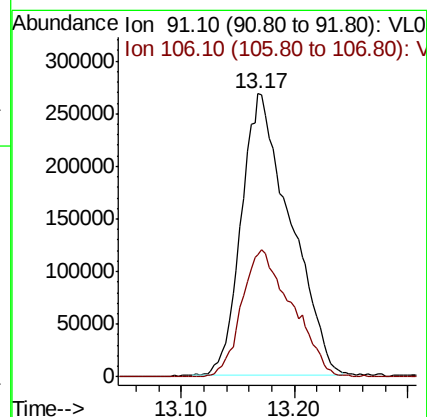
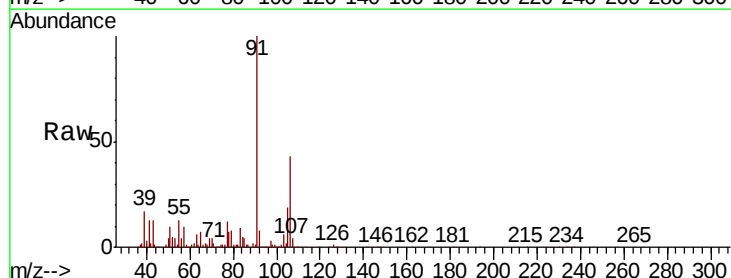
Acq: 11 Sep 2018 2:41

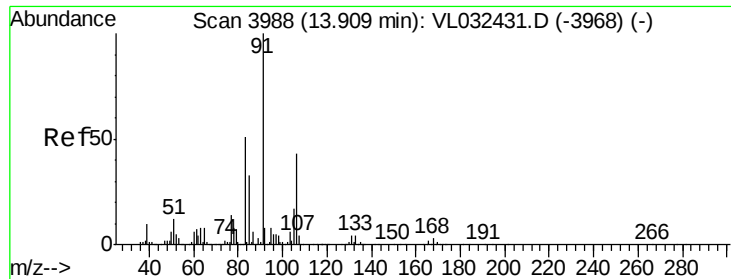
Tgt Ion: 91 Resp: 808492

Ion Ratio Lower Upper

91 100

106 46.3 36.6 55.0





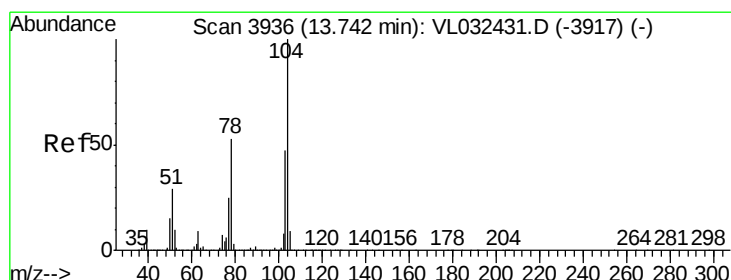
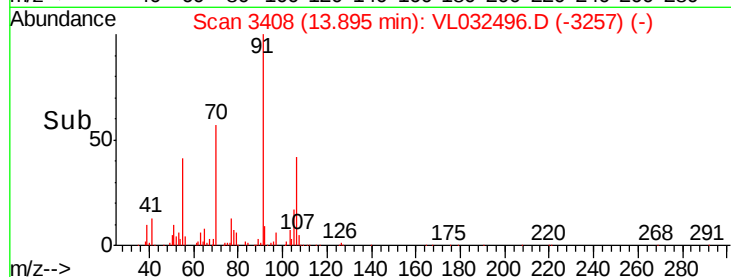
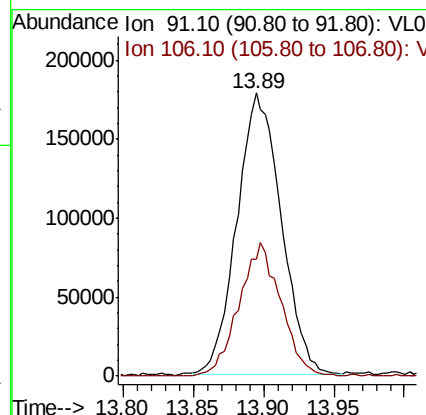
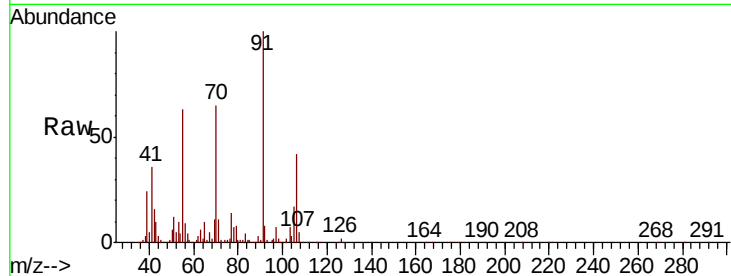
#60
o-Xylene
Concen: 1.17 ppbv
RT: 13.89 min Scan# 3408
Delta R.T. -0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Instrument :
MSVOA_L
ClientSampleId :
253-BERRY

Tot Ion	Ion	Ratio	Resp	Lower	Upper
91	100		390843		
106	45.2	21.9	65.7		

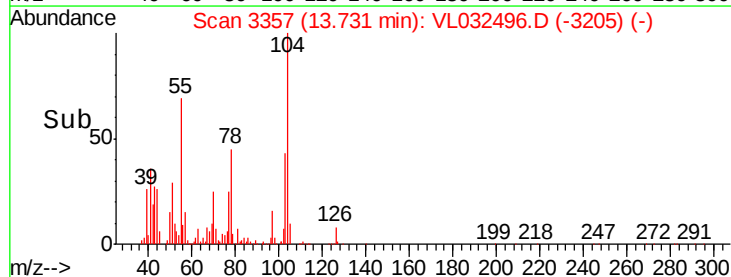
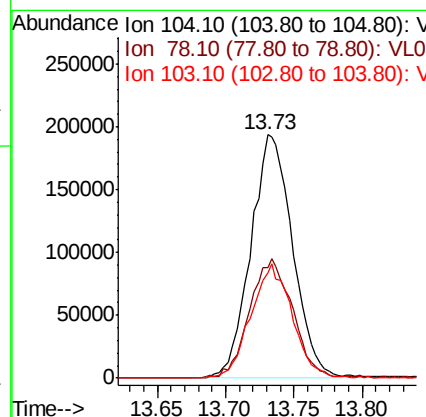
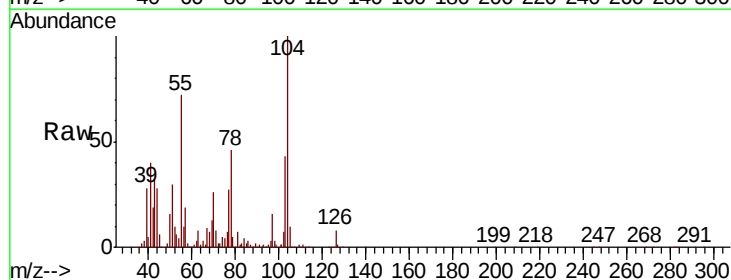
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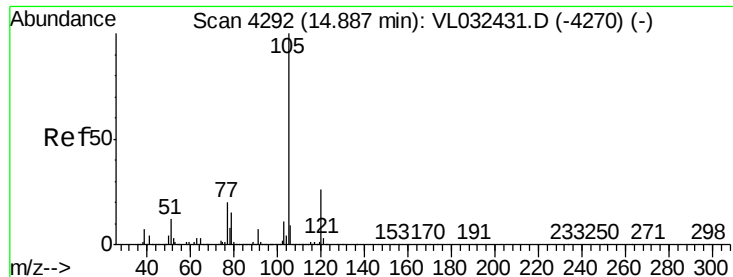
MMDadoda
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#61
Styrene
Concen: 1.90 ppbv
RT: 13.73 min Scan# 3357
Delta R.T. -0.01 min
Lab File: VL032496.D
Acq: 11 Sep 2018 2:41

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
104	100		412060		
78	50.4	41.8	62.8		
103	46.4	38.0	57.0		





#62

Isopropylbenzene

Concen: 0.79 ppbv

RT: 14.88 min Scan# 3713

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

ClientSampleId :

253-BERRY

Tot Ion:105 Resp: 372794

Ion Ratio Lower Upper

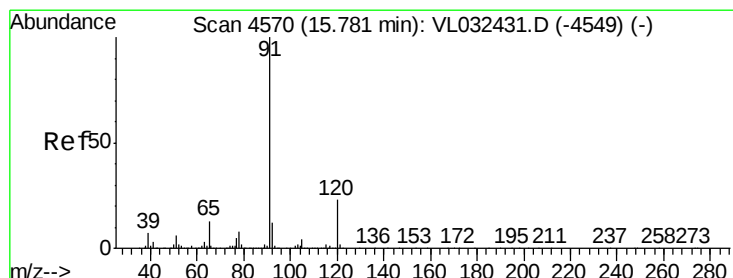
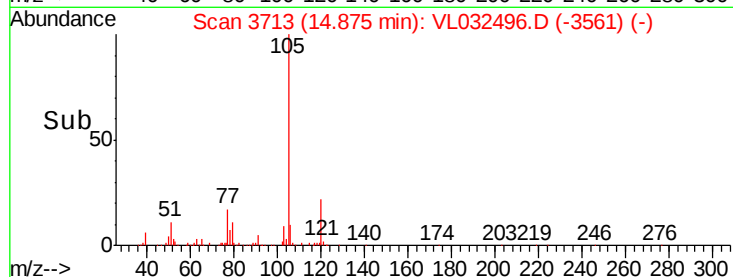
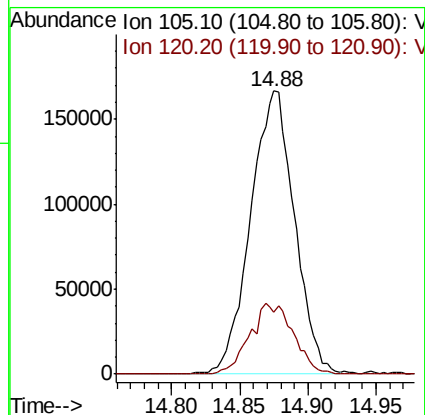
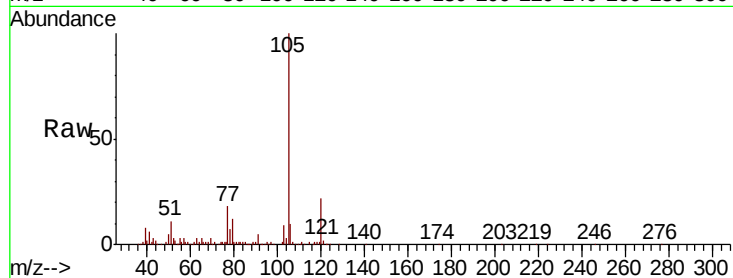
105 100

120 24.9 20.6 31.0

Manual Integrations
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#64

n-propylbenzene

Concen: 0.25 ppbv m

RT: 15.77 min Scan# 3990

Delta R.T. -0.01 min

Lab File: VL032496.D

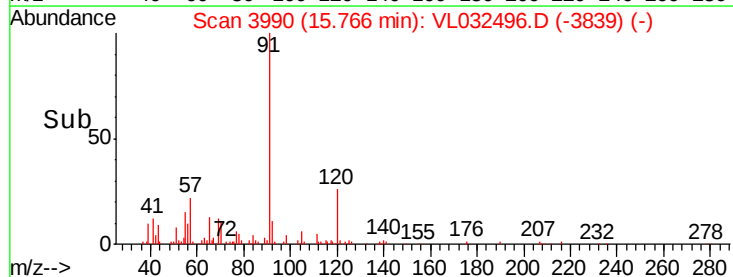
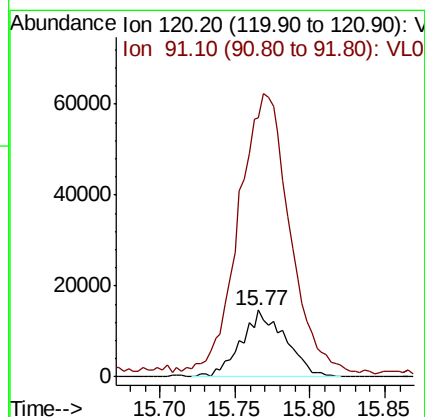
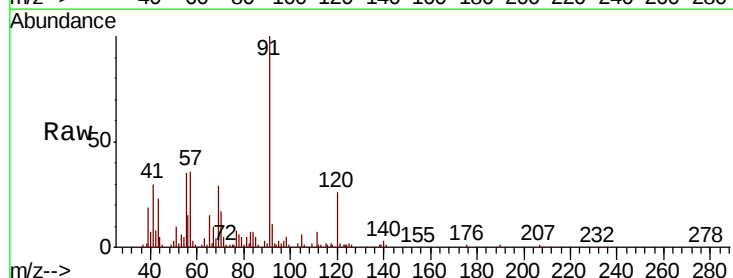
Acq: 11 Sep 2018 2:41

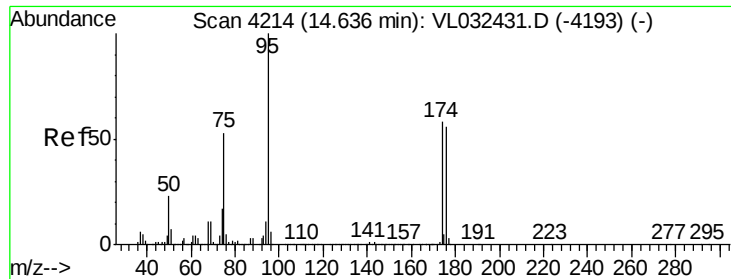
Tgt Ion:120 Resp: 30171

Ion Ratio Lower Upper

120 100

91 481.7 381.8 572.6





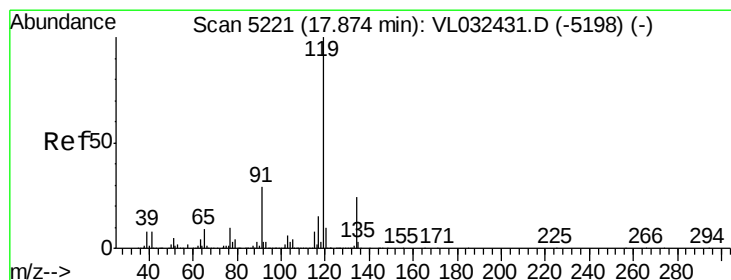
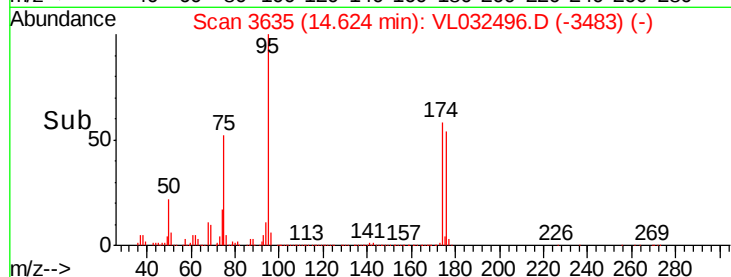
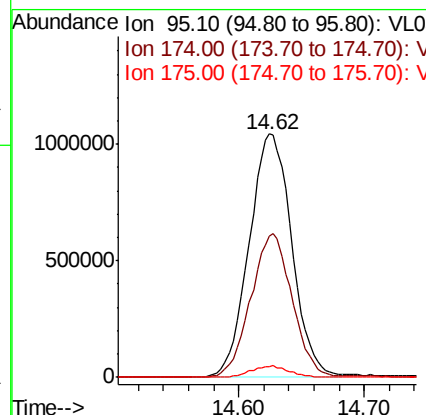
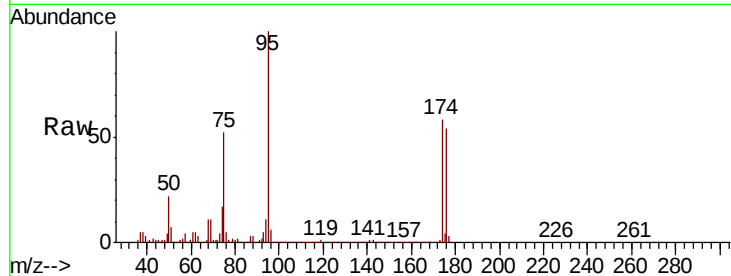
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.38 ppbv
 RT: 14.62 min Scan# 3635
 Delta R.T. -0.01 min
 Lab File: VL032496.D
 Acq: 11 Sep 2018 2:41

Instrument :
 MSVOA_L
 ClientSampled :
 253-BERRY

Tot Ion	Ratio	Lower	Upper
95	100		
174	58.3	46.3	69.5
175	4.3	3.4	5.0

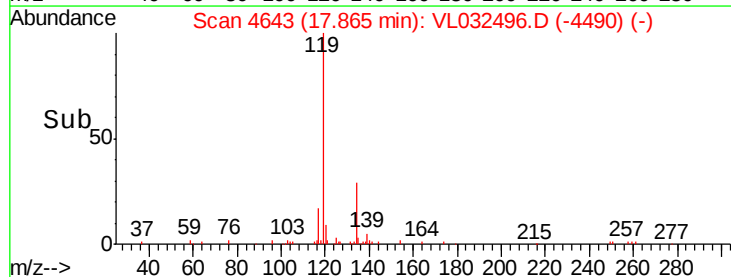
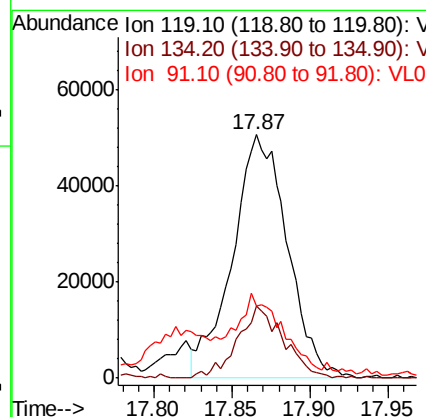
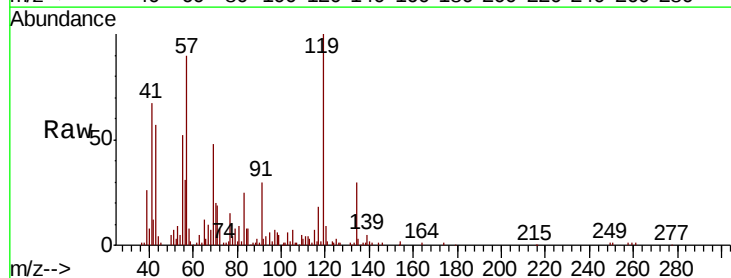
Manual Integrations
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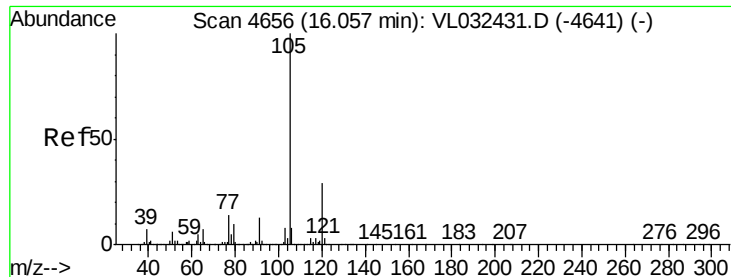
MMDadoda
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#69
 p-Isopropyltoluene
 Concen: 0.26 ppbv m
 RT: 17.87 min Scan# 4643
 Delta R.T. -0.01 min
 Lab File: VL032496.D
 Acq: 11 Sep 2018 2:41

Tgt Ion	Ratio	Lower	Upper
119	100		
134	24.9	20.4	30.6
91	29.4	23.4	35.2





#72

4-Ethyltoluene

Concen: 0.42 ppbv

RT: 16.05 min Scan# 4077

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

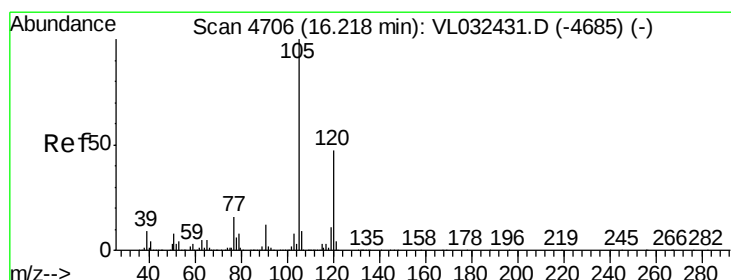
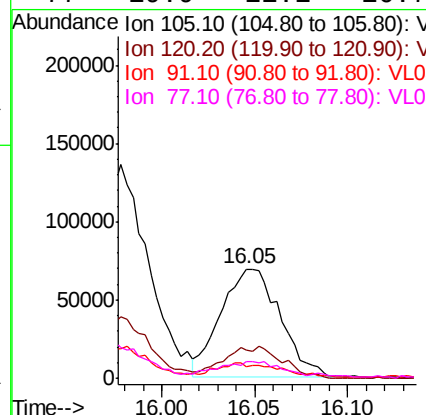
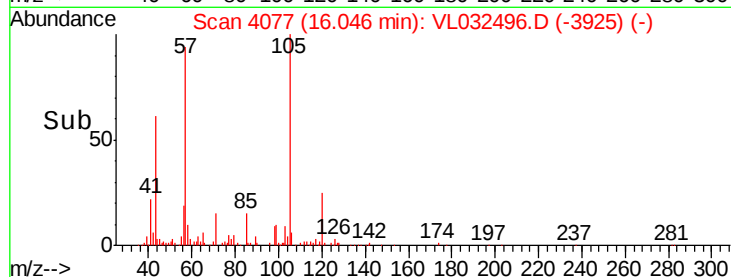
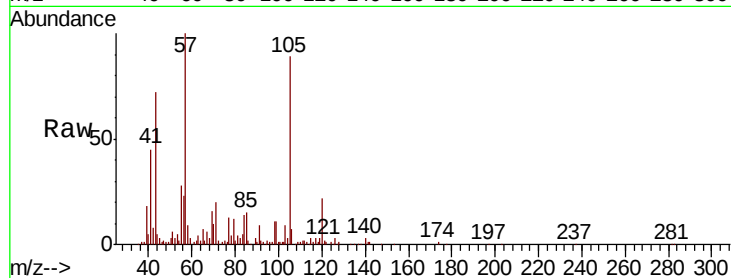
ClientSampleId :

253-BERRY

Tot Ion:	105	Resp:	154502
Ion Ratio	Lower	Upper	
105	100		
120	28.7	23.5	35.3
91	14.2	10.2	15.2
77	19.9	11.1	16.7#

Manual Integrations
APPROVED

MMDadoda
9/12/2018 3:59:47 PM



#73

1,3,5-Trimethylbenzene

Concen: 0.46 ppbv m

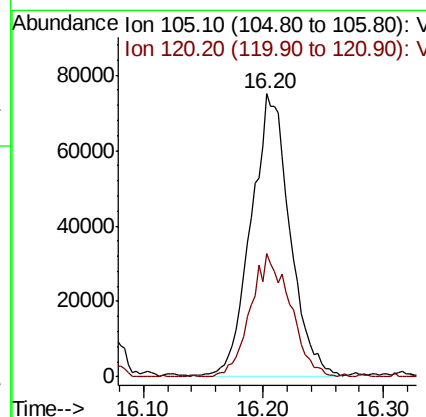
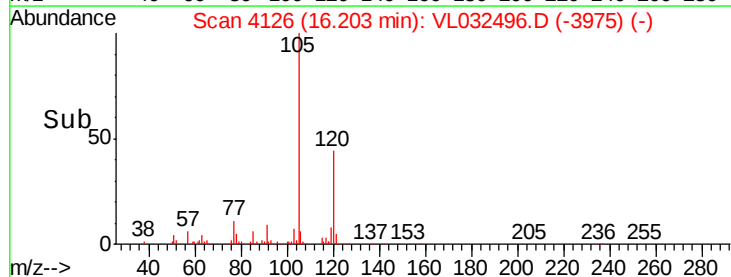
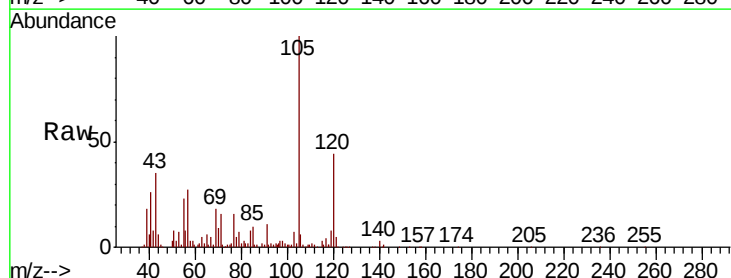
RT: 16.20 min Scan# 4126

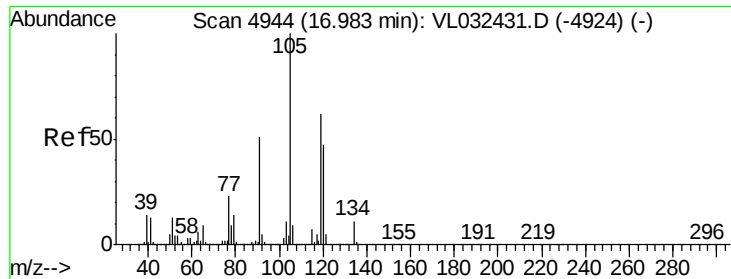
Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Tgt Ion:	105	Resp:	169133
Ion Ratio	Lower	Upper	
105	100		
120	43.8	37.9	56.9





#74

1,2,4-Trimethylbenzene

Concen: 1.30 ppbv

RT: 16.97 min Scan# 4366

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Instrument :

MSVOA_L

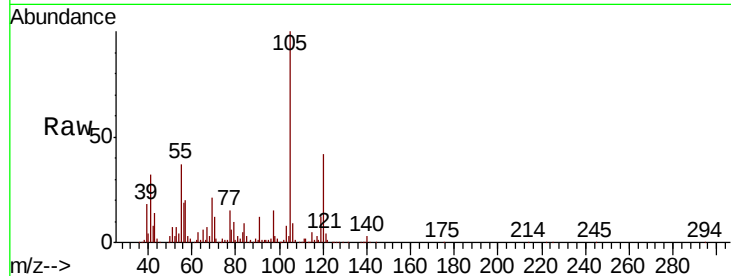
ClientSampleId :

253-BERRY

Tot Ion:	105	Resp:	521056
Ion Ratio		Lower	Upper
105	100		
120	41.9	37.8	56.8
91	11.1	41.4	62.0#
77	14.6	18.6	28.0#

Manual Integrations
APPROVED

MMDadoda
9/12/2018 3:59:47 PM

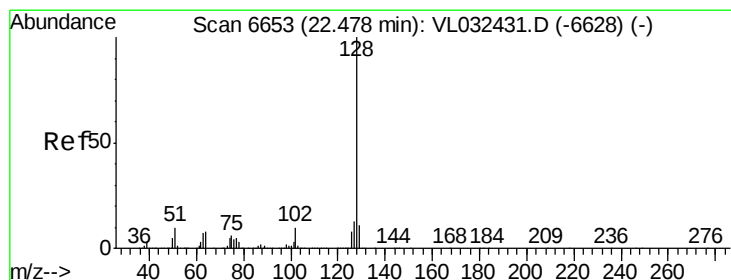
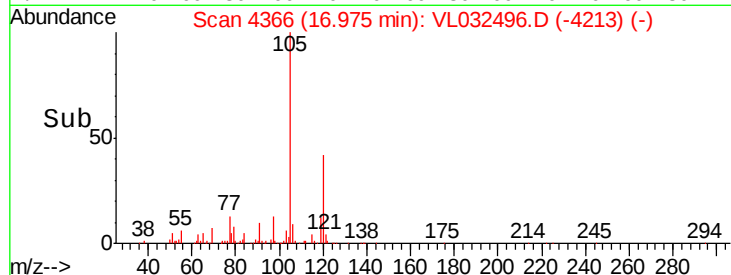
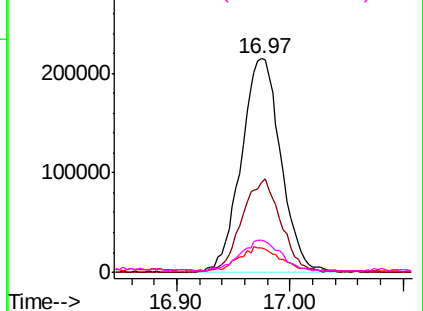


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#79

Naphthalene

Concen: 0.22 ppbv m

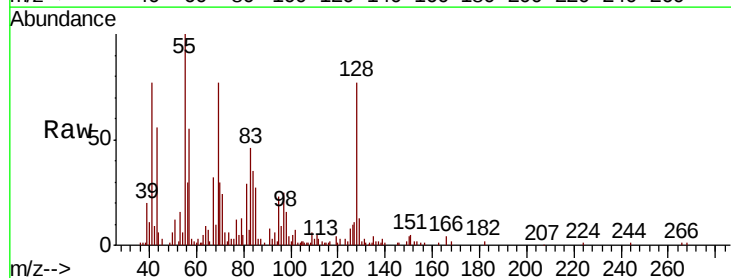
RT: 22.47 min Scan# 6076

Delta R.T. -0.01 min

Lab File: VL032496.D

Acq: 11 Sep 2018 2:41

Tgt Ion:	128	Resp:	71844
Ion Ratio		Lower	Upper
128	100		
127	14.2	10.2	15.2
129	16.5	8.5	12.7#



Abundance Ion 128.10 (127.80 to 128.80): V

Ion 127.10 (126.80 to 127.80): V

Ion 129.10 (128.80 to 129.80): V

