

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090518\
 Data File : VL032475.D
 Acq On : 6 Sep 2018 3:50
 Operator : SY/AP
 Sample : J4745-02 4X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-03

Manual Integrations
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MMDadoda
 9/7/2018 10:46:10 AM

Quant Time: Sep 07 08:56:03 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	5.80	49	1531690	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.34	114	3064440	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.29	117	3003299	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.63	95	2295988	10.30	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.00%

Target Compounds

						Ovalue
3) Chlorodifluoromethane	3.04	51	37206	0.27	ppbv	99
9) Propene	3.06	41	1351087	24.16	ppbv	95
10) Heptane	8.30	43	121485	0.61	ppbv	99
11) Trichlorofluoromethane	4.04	101	241188	1.37	ppbv	98
13) Ethanol	3.68	45	153207	8.79	ppbv	96
15) Acetone	3.93	43	2188071	15.86	ppbv	96
16) 1,3-Butadiene	3.38	39	260286m	4.01	ppbv	
17) tert-Butyl alcohol	4.40	59	346849	16.34	ppbv #	100
26) Hexane	5.82	57	176834	1.21	ppbv #	42
27) Carbon Disulfide	4.66	76	59146	0.44	ppbv	94
29) Chloroform	5.89	83	82112	0.37	ppbv	92
34) 2-Butanone	5.37	43	781949	3.84	ppbv	99
36) Benzene	7.05	78	295634	1.13	ppbv	98
38) Trichloroethene	8.01	130	10861m	0.11	ppbv	
41) Tetrahydrofuran	6.21	42	25952	0.23	ppbv	95
44) 2,2,4-Trimethylpentane	8.04	57	61893	0.12	ppbv #	13
50) 4-Methyl-2-Pentanone	8.92	43	135469m	0.44	ppbv	
51) 2-Hexanone	10.33	43	125249	0.63	ppbv #	94
52) Tetrachloroethene	11.42	164	294347	3.64	ppbv	93
53) Toluene	10.00	91	1248360	4.58	ppbv	100
58) Ethyl Benzene	12.92	91	465860	1.30	ppbv	94
59) m/p-Xylene	13.17	91	1473955	4.60	ppbv	99
60) o-Xylene	13.90	91	432650m	1.37	ppbv	
61) Styrene	13.73	104	31749	0.16	ppbv	95
70) n-Butylbenzene	18.77	91	110669	0.22	ppbv #	66
72) 4-Ethyltoluene	16.05	105	315468	0.92	ppbv	98
73) 1,3,5-Trimethylbenzene	16.20	105	170729m	0.50	ppbv	
74) 1,2,4-Trimethylbenzene	16.97	105	730523	1.94	ppbv #	69
79) Naphthalene	22.47	128	92453	0.30	ppbv #	94

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

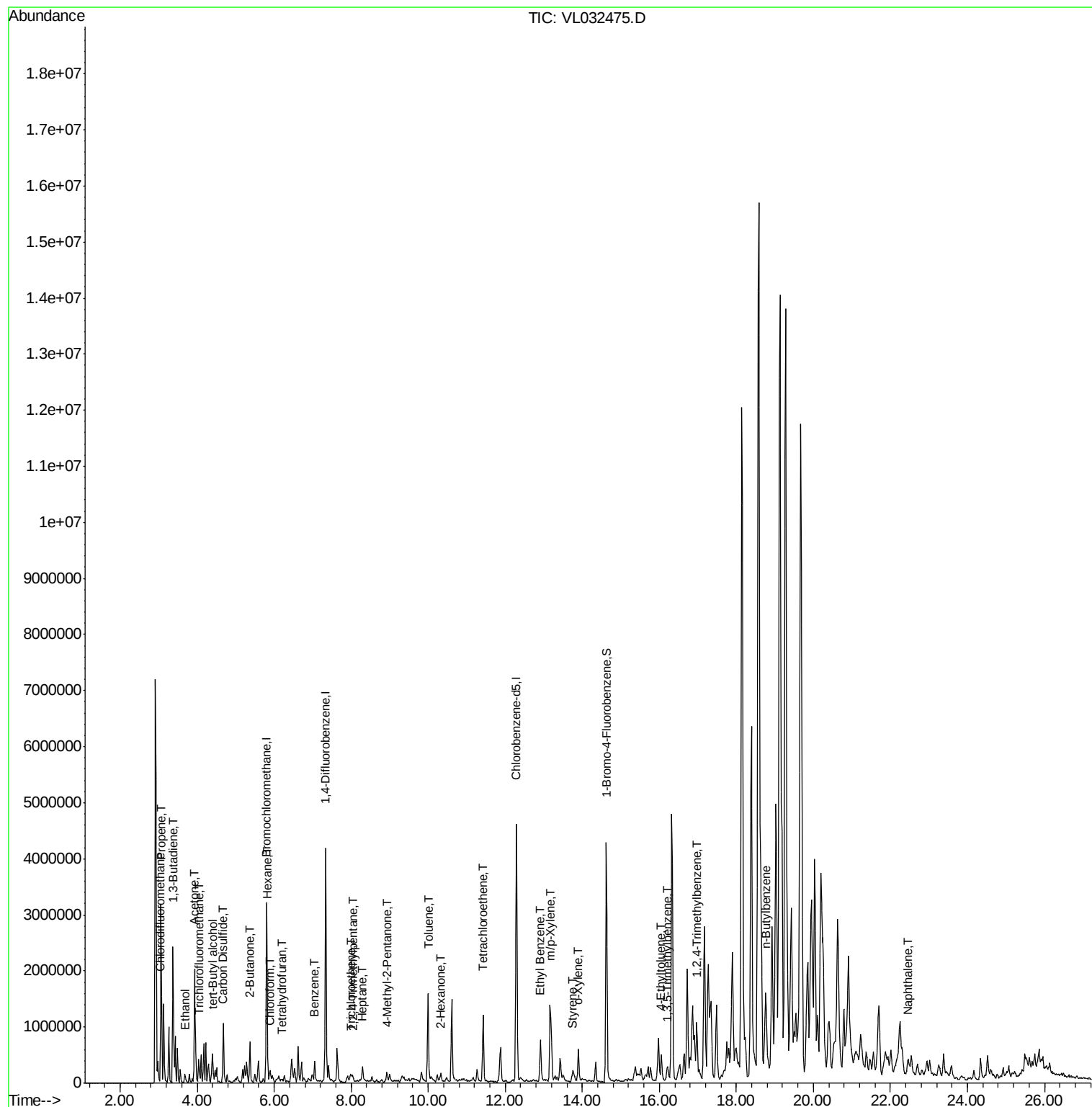
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL090518\
Data File : VL032475.D
Acq On : 6 Sep 2018 3:50
Operator : SY/AP
Sample : J4745-02 4X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

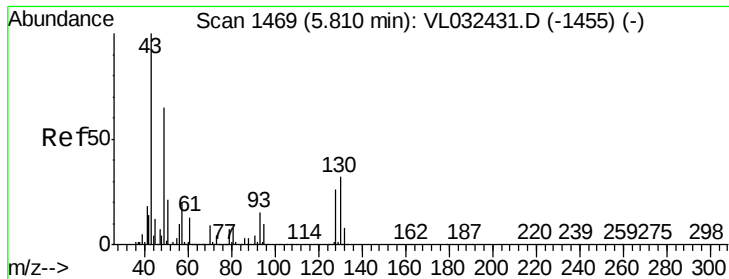
Instrument :
MSVOA_L
ClientSampleId :
VP-03

Manual Integrations
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Quant Time: Sep 07 08:56:03 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri Aug 31 21:33:46 2018
Response via : Initial Calibration





#1

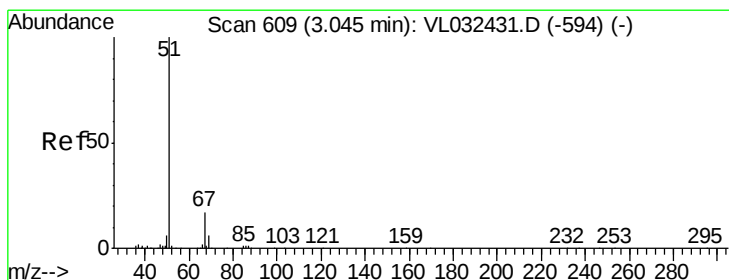
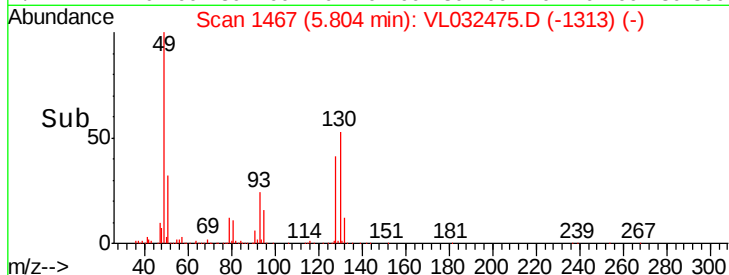
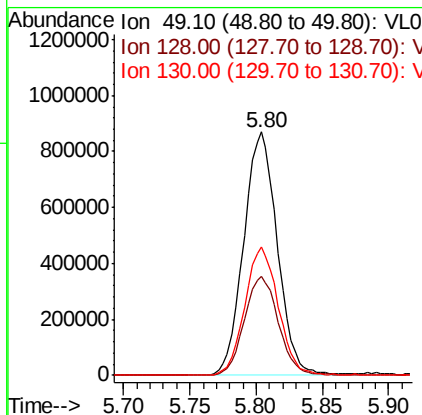
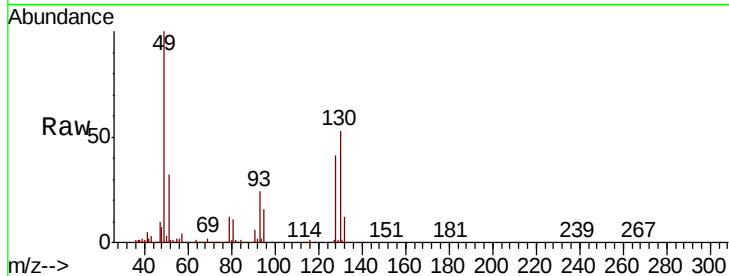
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.80 min Scan# 1467
 Delta R.T. -0.01 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Instrument :
 MSVOA_L
 ClientSampled :
 VP-03

Tot Ion: 49 Resp: 1531690
 Ion Ratio Lower Upper
 49 100
 128 41.8 20.7 62.1
 130 52.8 26.6 79.7

Manual Integrations
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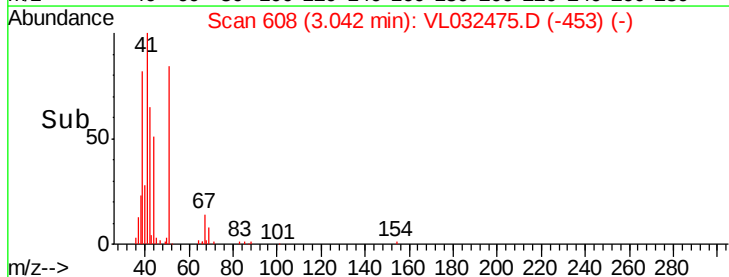
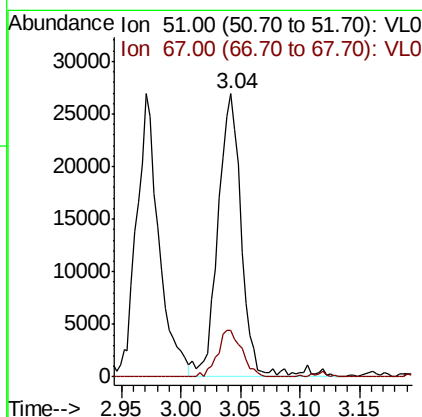
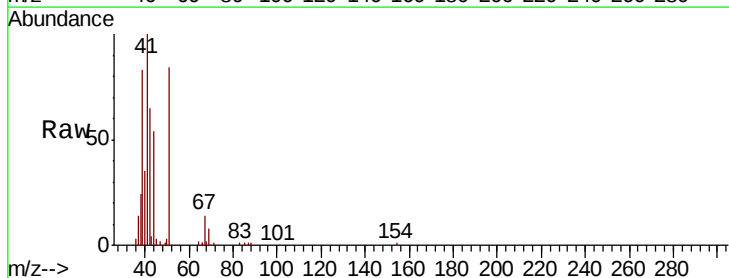
MMDadoda
 9/7/2018 10:46:10 AM

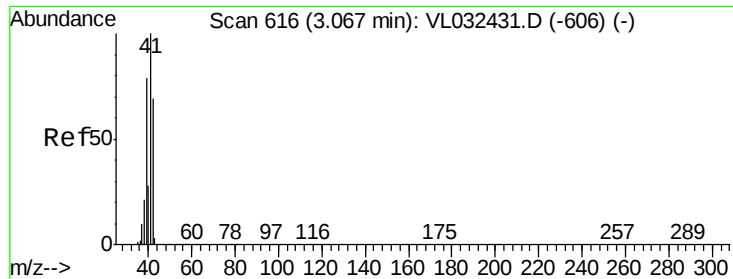


#3

Chlorodifluoromethane
 Concen: 0.27 ppbv
 RT: 3.04 min Scan# 608
 Delta R.T. -0.00 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Tgt Ion: 51 Resp: 37206
 Ion Ratio Lower Upper
 51 100
 67 16.7 13.8 20.8





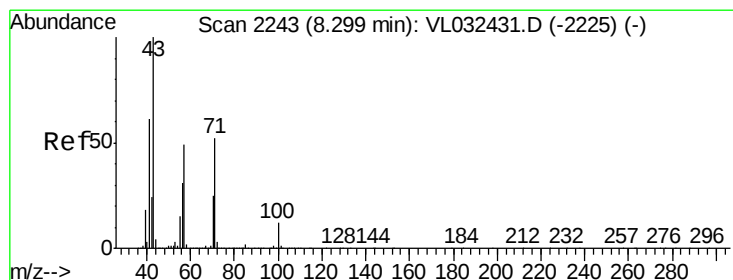
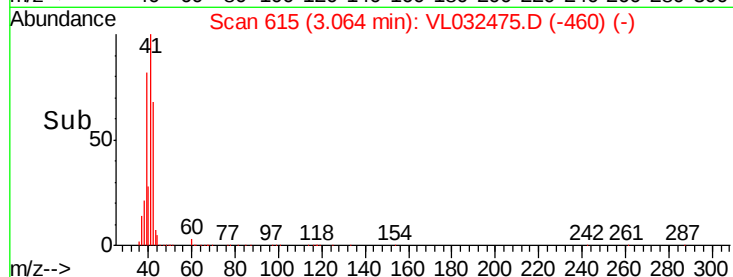
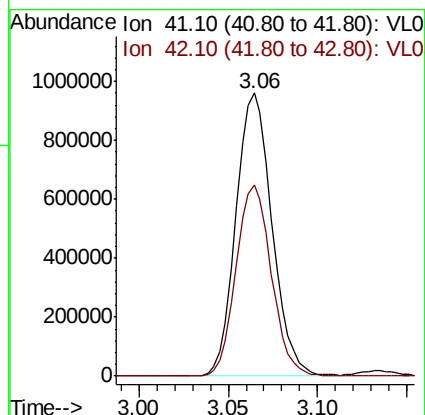
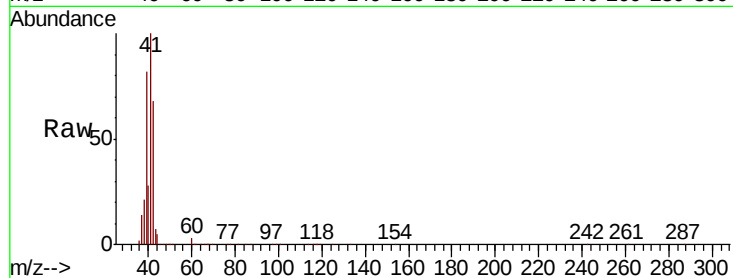
#9
 Propene
 Concen: 24.16 ppbv
 RT: 3.06 min Scan# 615
 Delta R.T. -0.00 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Instrument :
 MSVOA_L
 ClientSampled :
 VP-03

Tot Ion: 41 Resp: 1351087
 Ion Ratio Lower Upper
 41 100
 42 66.4 56.6 84.8

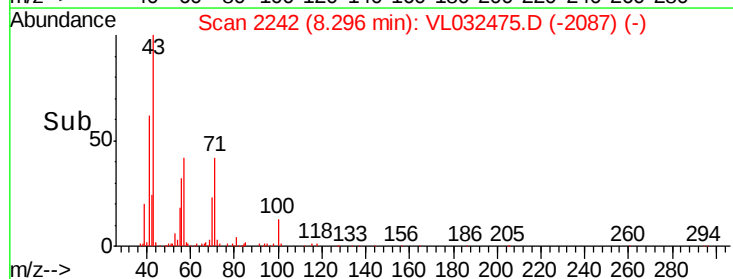
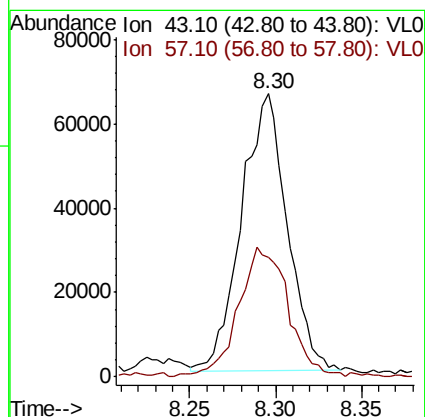
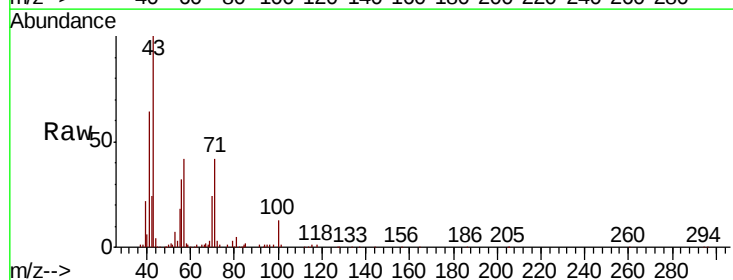
Manual Integrations
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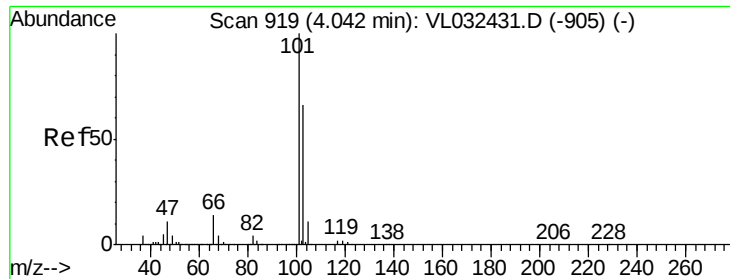
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#10
 Heptane
 Concen: 0.61 ppbv
 RT: 8.30 min Scan# 2242
 Delta R.T. -0.00 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Tgt Ion: 43 Resp: 121485
 Ion Ratio Lower Upper
 43 100
 57 49.1 39.6 59.4





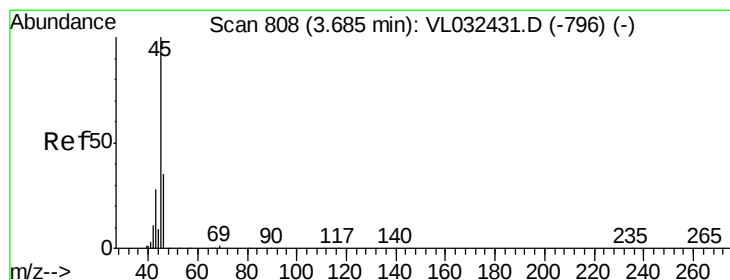
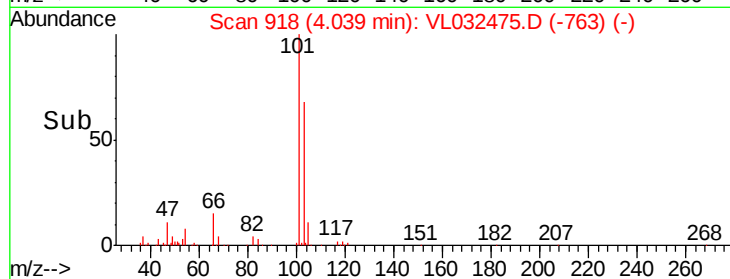
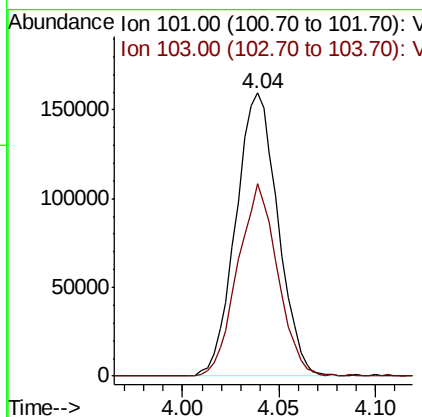
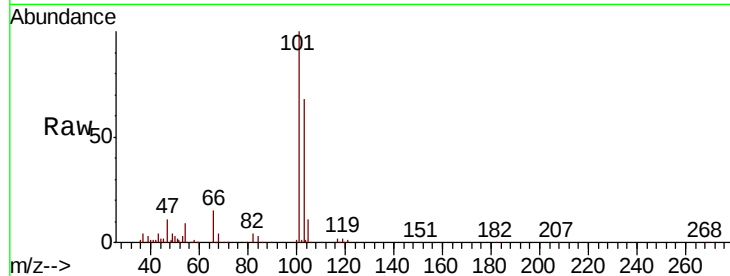
#11
 Trichlorofluoromethane
 Concen: 1.37 ppbv
 RT: 4.04 min Scan# 918
 Delta R.T. -0.00 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Instrument :
 MSVOA_L
 ClientSampled :
 VP-03

Tot Ion	Ratio	Lower	Upper
101	100		
103	67.9	52.8	79.2

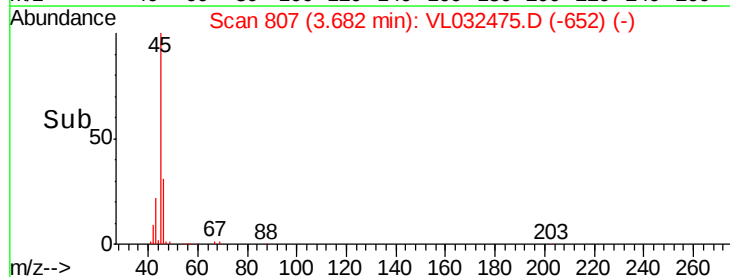
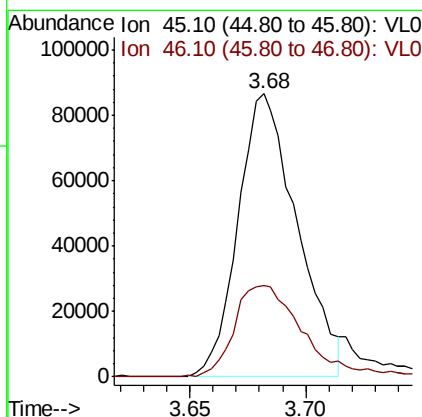
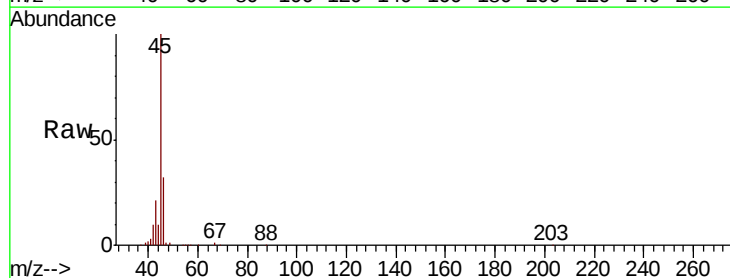
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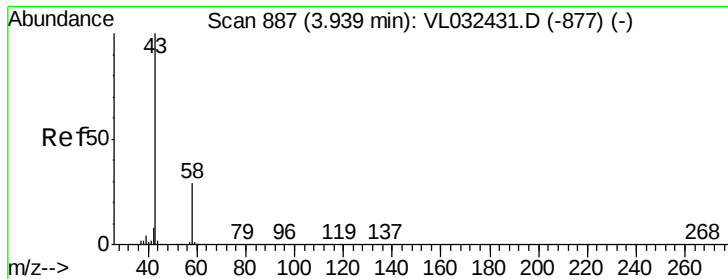
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#13
 Ethanol
 Concen: 8.79 ppbv
 RT: 3.68 min Scan# 807
 Delta R.T. -0.00 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Tgt Ion	Ratio	Lower	Upper
45	100		
46	38.1	14.2	56.8





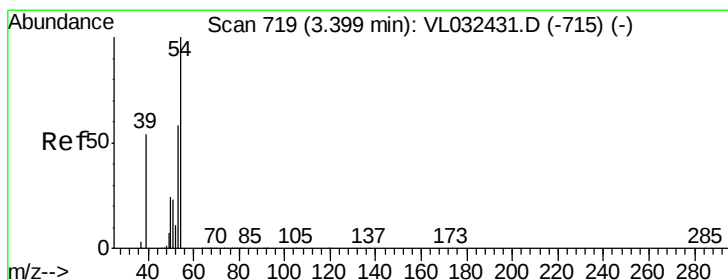
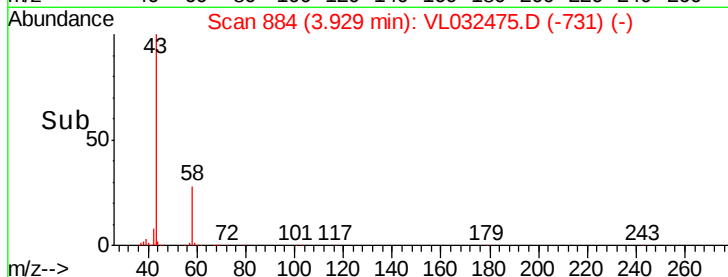
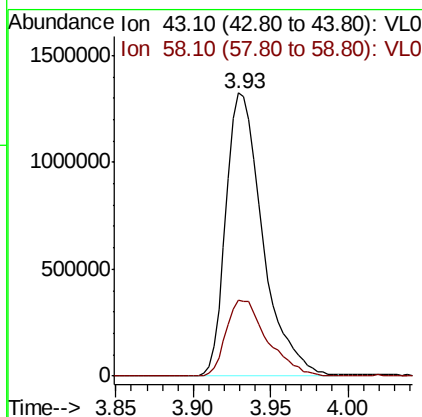
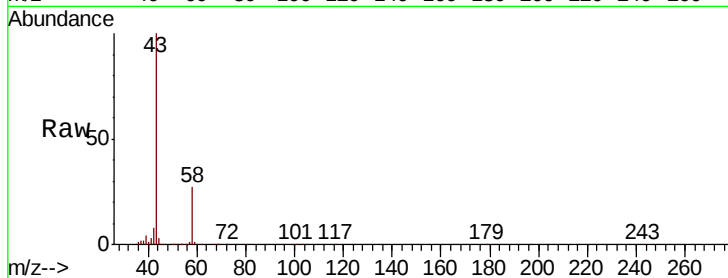
#15
Acetone
Concen: 15.86 ppbv
RT: 3.93 min Scan# 884
Delta R.T. -0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Instrument :
MSVOA_L
ClientSampled :
VP-03

Tot Ion: 43 Resp: 2188071
Ion Ratio Lower Upper
43 100
58 30.1 22.6 33.8

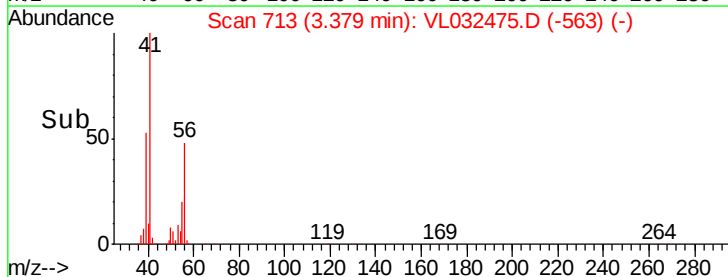
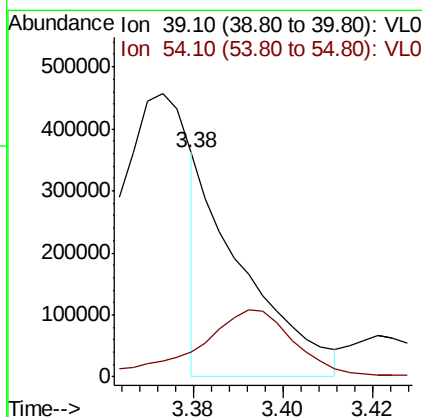
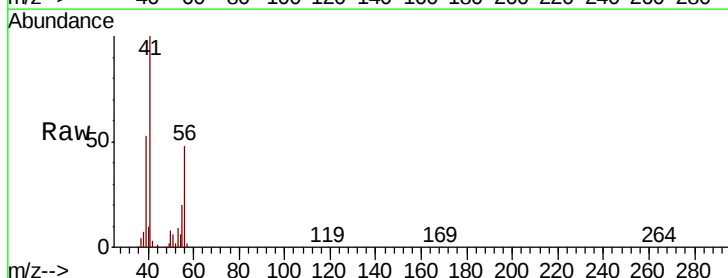
Manual Integrations
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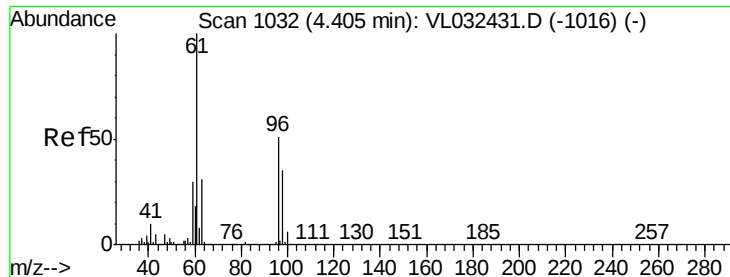
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#16
1,3-Butadiene
Concen: 4.01 ppbv m
RT: 3.38 min Scan# 713
Delta R.T. -0.02 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Tgt Ion: 39 Resp: 260286
Ion Ratio Lower Upper
39 100
54 63.3 80.8 121.2#





#17

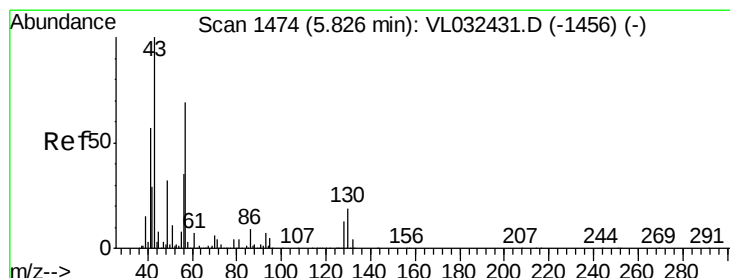
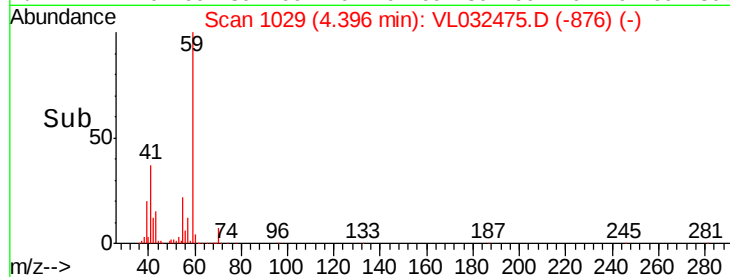
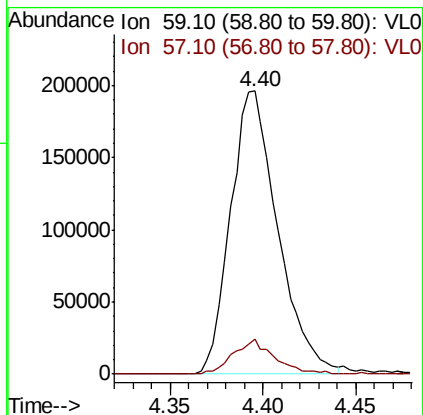
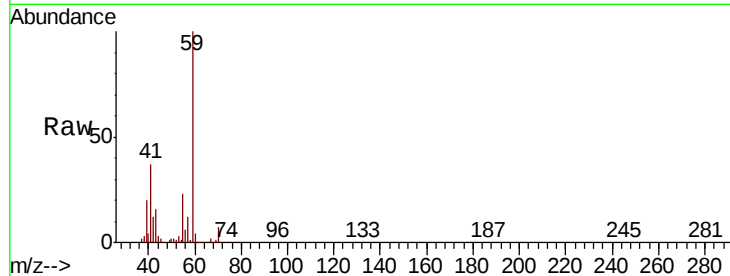
tert-Butyl alcohol
 Concen: 16.34 ppbv
 RT: 4.40 min Scan# 1029
 Delta R.T. -0.01 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Instrument :
 MSVOA_L
 ClientSampled :
 VP-03

Tot Ion	Ratio	Lower	Upper
59	100		
57	11.2	0.0	0.0#

Manual Integrations
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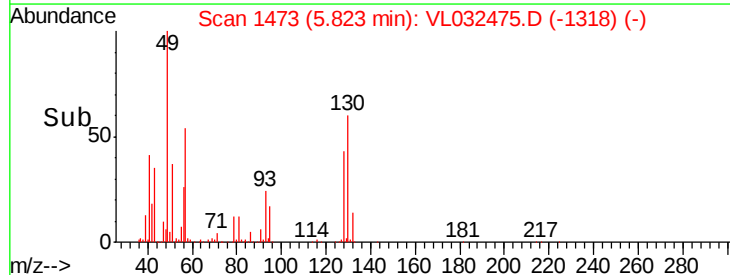
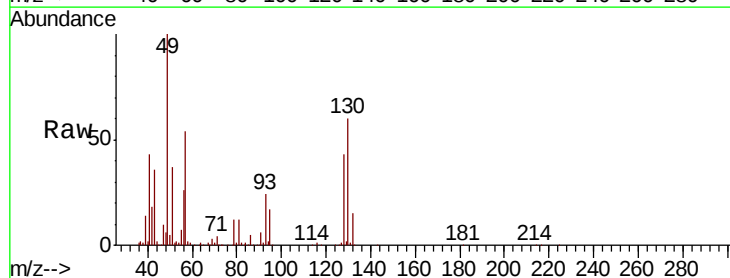
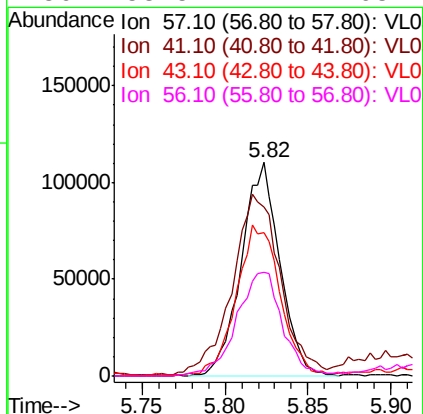
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 9/7/2018 10:46:10 AM

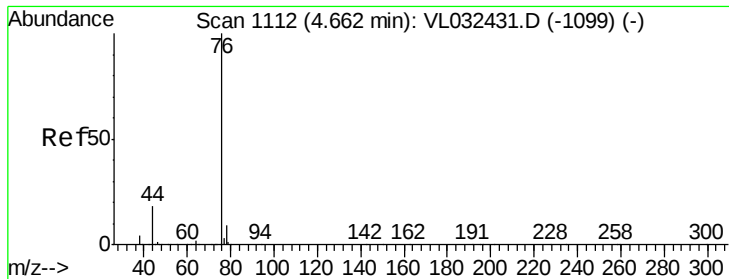


#26

Hexane
 Concen: 1.21 ppbv
 RT: 5.82 min Scan# 1473
 Delta R.T. -0.00 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Tgt Ion	Ratio	Lower	Upper
57	100		
41	106.1	69.0	103.4#
43	79.7	172.1	258.1#
56	58.5	42.2	63.2





#27

Carbon Disulfide

Concen: 0.44 ppbv

RT: 4.66 min Scan# 1111

Delta R.T. -0.00 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Instrument :

MSVOA_L

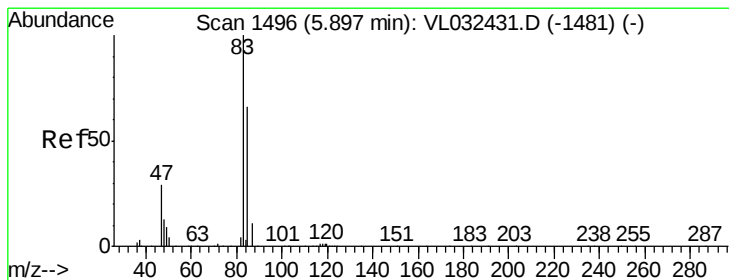
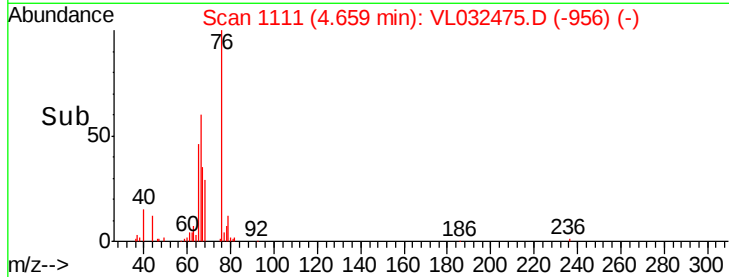
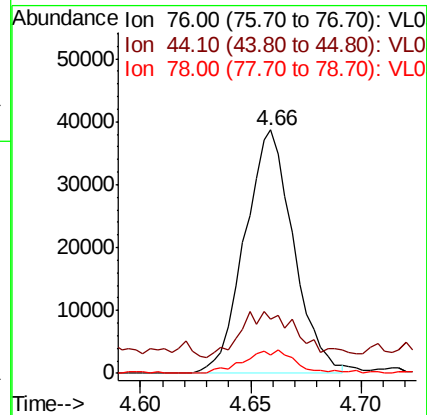
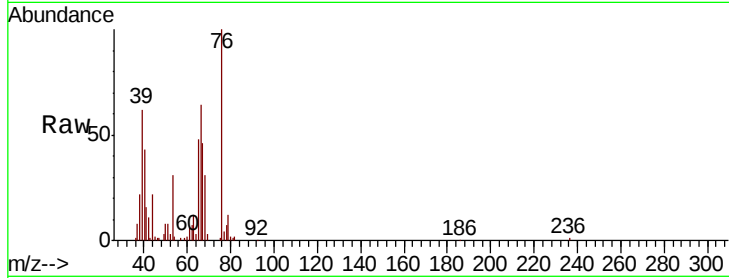
ClientSampled :

VP-03

Tot Ion:	76	Resp:	59146
Ion Ratio	Lower	Upper	
76	100		
44	20.9	14.0	21.0
78	10.9	7.5	11.3

Manual Integrations
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9/7/2018 10:46:10 AM



#29

Chloroform

Concen: 0.37 ppbv

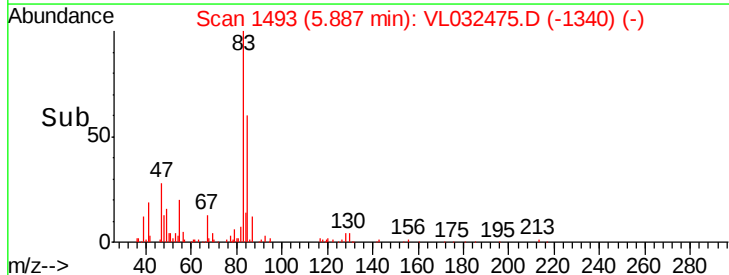
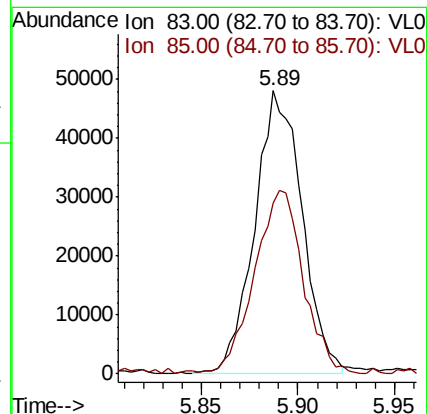
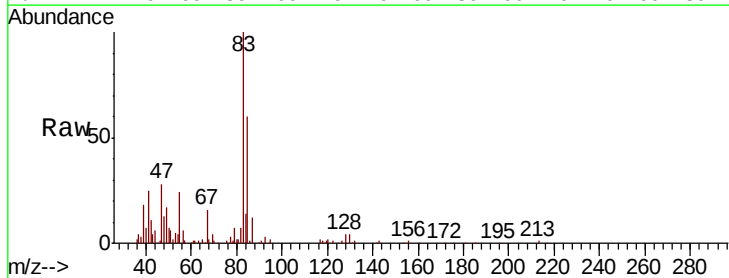
RT: 5.89 min Scan# 1493

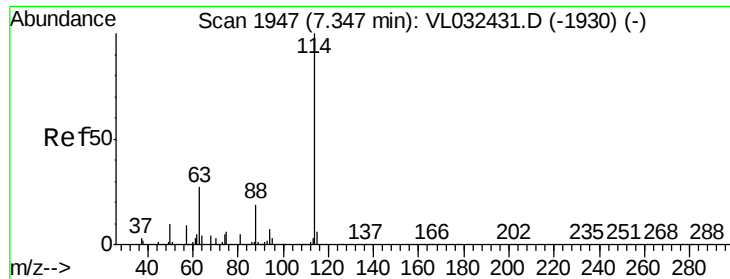
Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Tgt Ion:	83	Resp:	82112
Ion Ratio	Lower	Upper	
83	100		
85	59.5	52.5	78.7





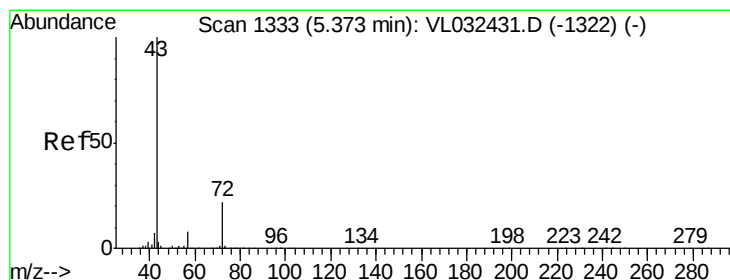
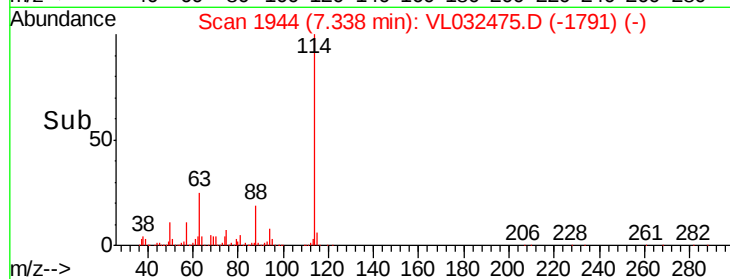
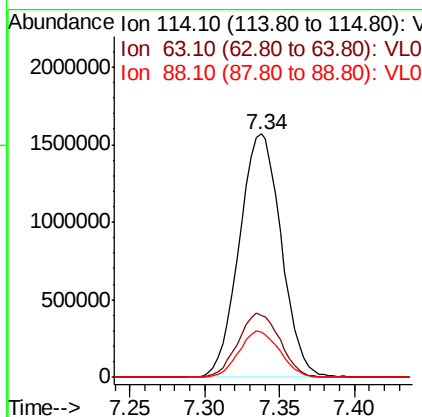
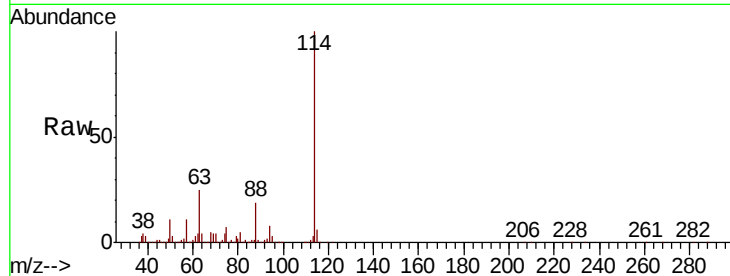
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.34 min Scan# 1944
 Delta R.T. -0.01 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-03

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.6	22.2	33.4
88	18.5	15.0	22.4

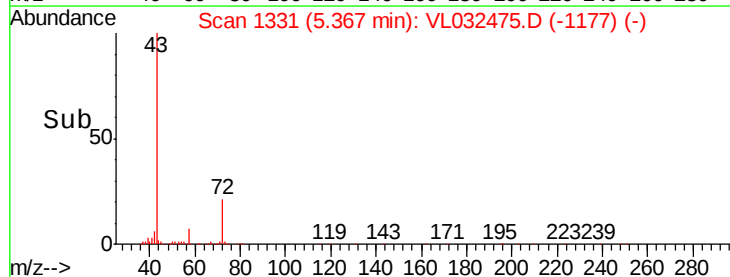
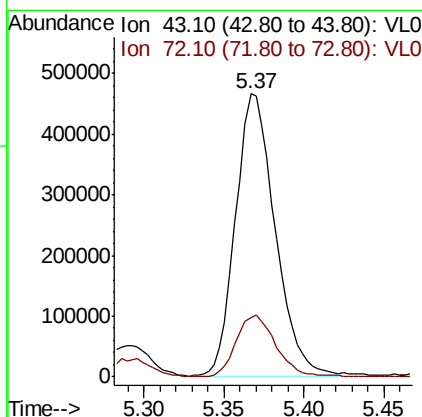
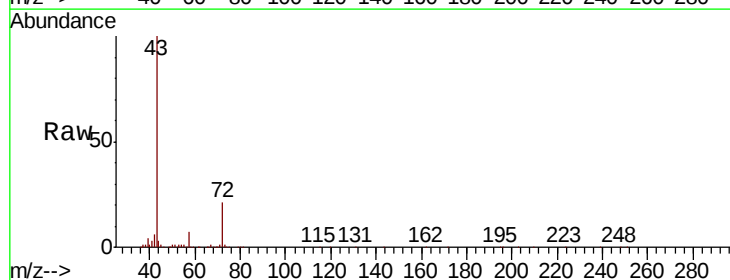
Manual Integrations
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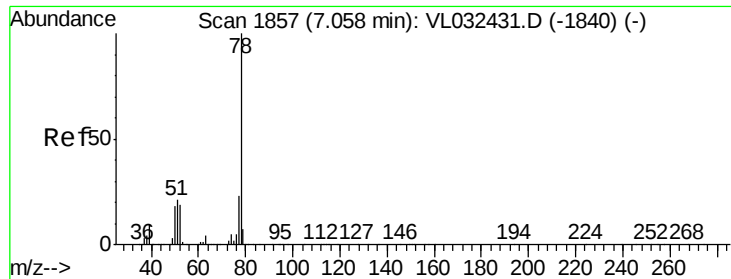
MMDadoda
 9/7/2018 10:46:10 AM



#34
 2-Butanone
 Concen: 3.84 ppbv
 RT: 5.37 min Scan# 1331
 Delta R.T. -0.01 min
 Lab File: VL032475.D
 Acq: 6 Sep 2018 3:50

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.7	17.8	26.6





#36

Benzene

Concen: 1.13 ppbv

RT: 7.05 min Scan# 1854

Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Instrument :

MSVOA_L

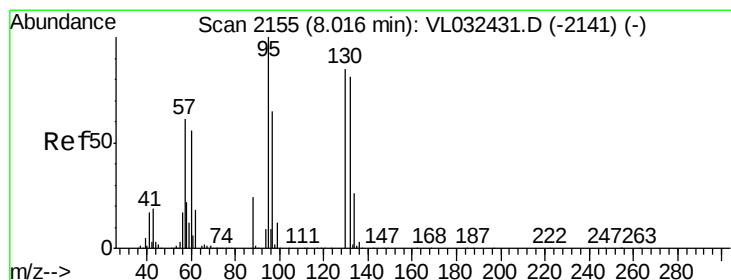
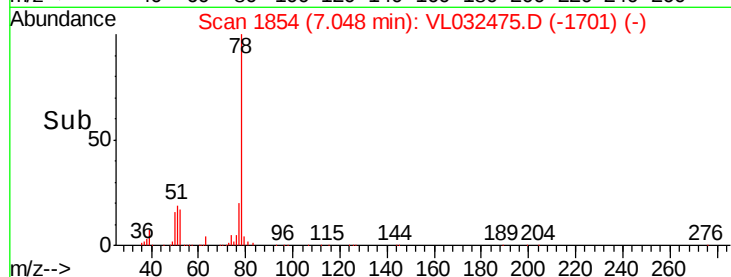
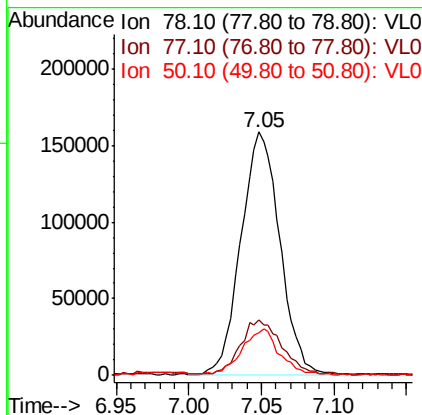
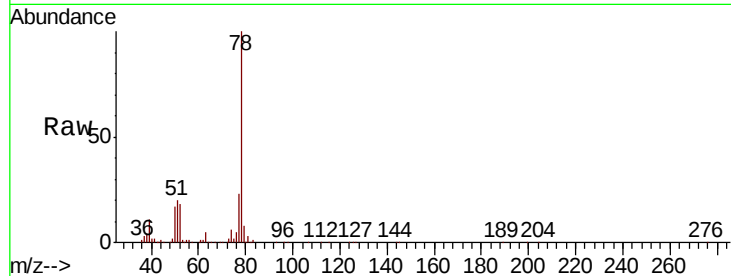
ClientSampleId :

VP-03

Tot Ion:	78	Resp:	295634
Ion	Ratio	Lower	Upper
78	100		
77	22.0	18.4	27.6
50	17.0	14.4	21.6

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#38

Trichloroethene

Concen: 0.11 ppbv m

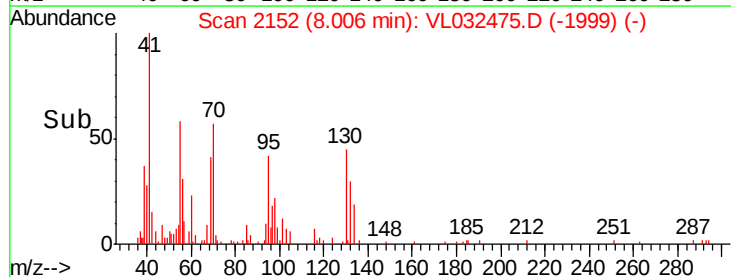
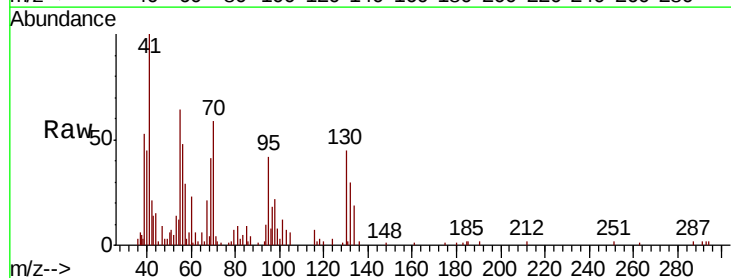
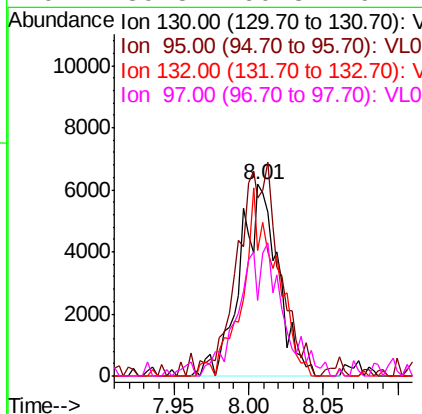
RT: 8.01 min Scan# 2152

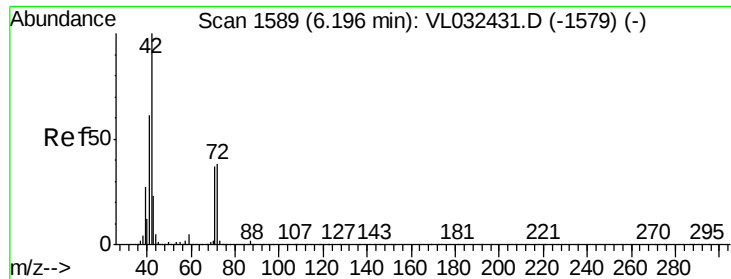
Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Tgt Ion:	130	Resp:	10861
Ion	Ratio	Lower	Upper
130	100		
95	93.1	94.2	141.4#
132	65.8	76.2	114.4#
97	39.8	60.8	91.2#





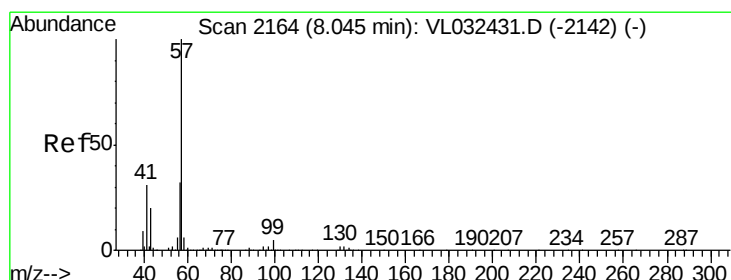
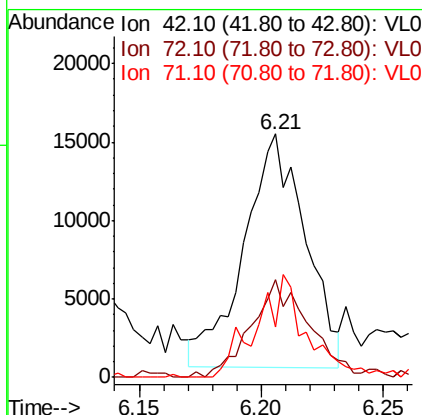
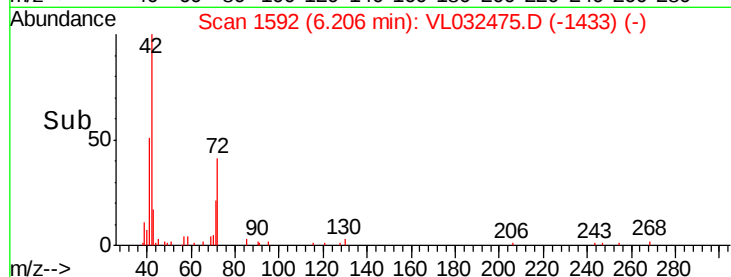
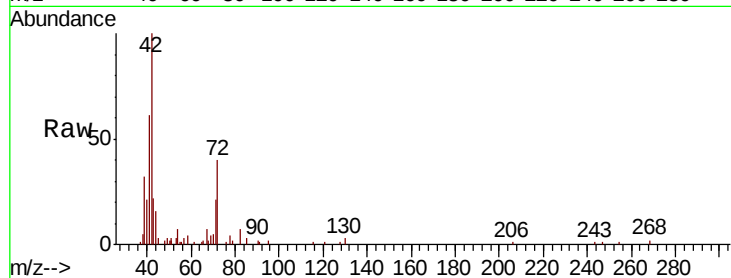
#41
Tetrahydrofuran
Concen: 0.23 ppbv
RT: 6.21 min Scan# 1592
Delta R.T. 0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Instrument :
MSVOA_L
ClientSampled :
VP-03

Tot Ion	Ratio	Lower	Upper
42	100		
72	41.2	29.5	44.3
71	37.0	28.3	42.5

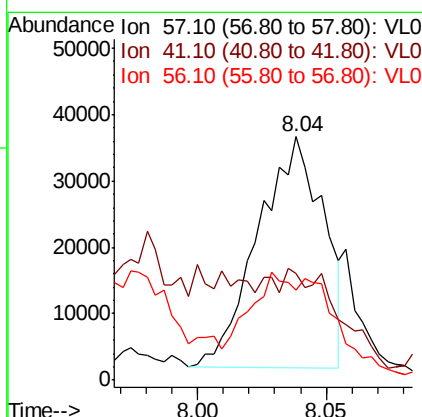
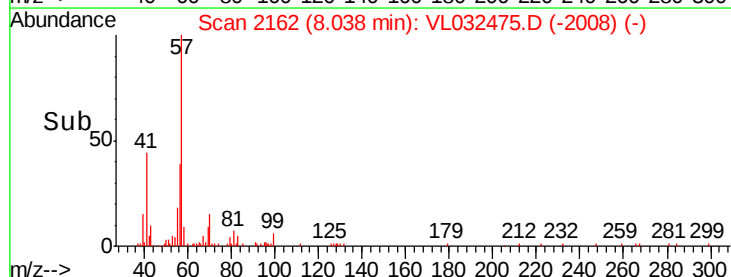
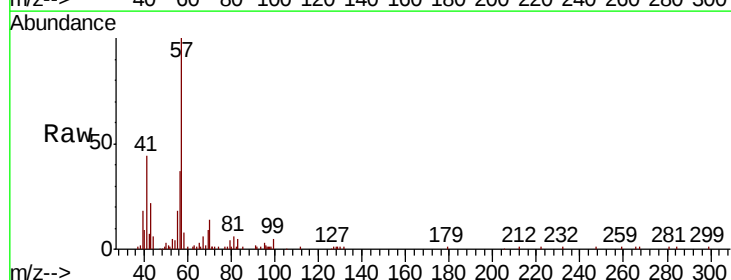
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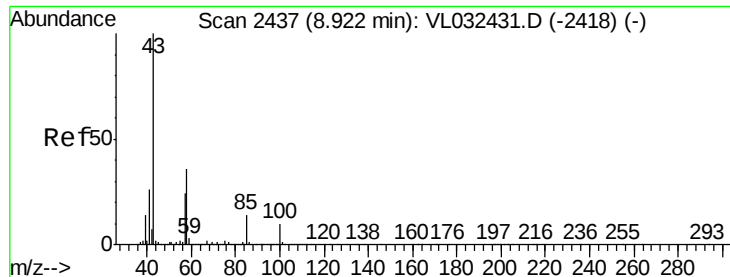
MMDadoda
9/7/2018 10:46:10 AM



#44
2,2,4-Trimethylpentane
Concen: 0.12 ppbv
RT: 8.04 min Scan# 2162
Delta R.T. -0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Tgt Ion	Ratio	Lower	Upper
57	100		
41	89.0	24.4	36.6#
56	70.3	25.7	38.5#





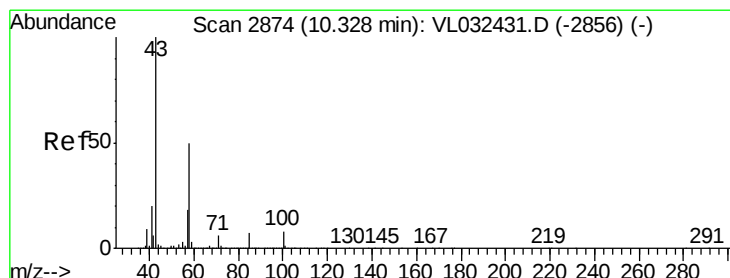
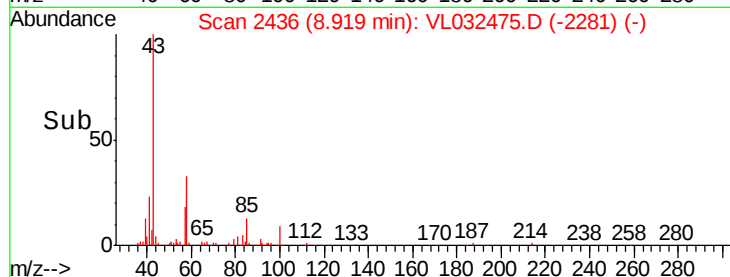
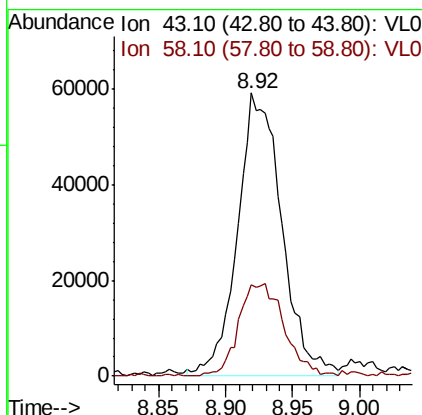
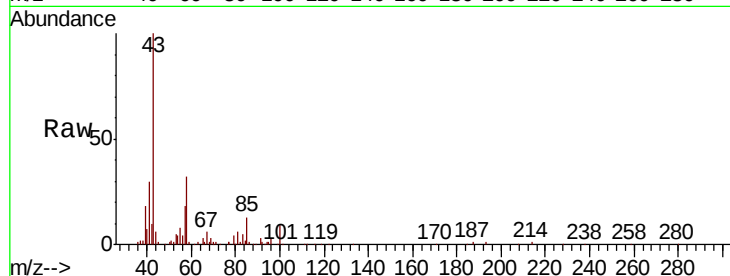
#50
4-Methyl-2-Pentanone
Concen: 0.44 ppbv m
RT: 8.92 min Scan# 2436
Delta R.T. -0.00 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Instrument :
MSVOA_L
ClientSampled :
VP-03

Tot Ion: 43 Resp: 135469
Ion Ratio Lower Upper
43 100
58 0.0 29.0 43.4#

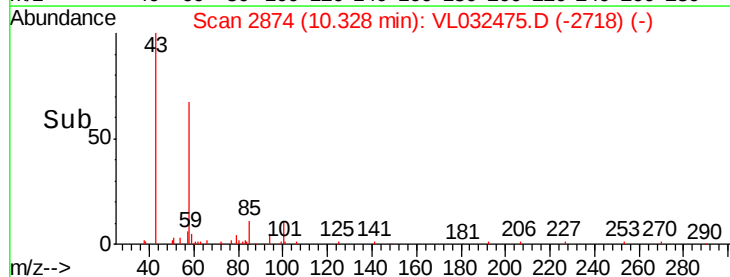
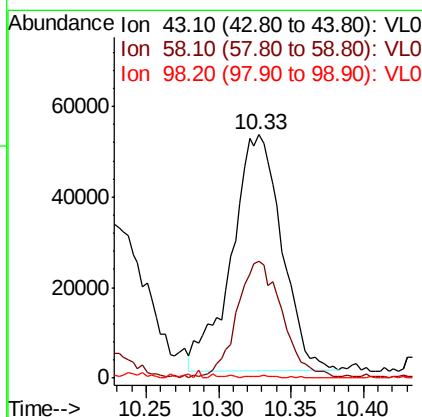
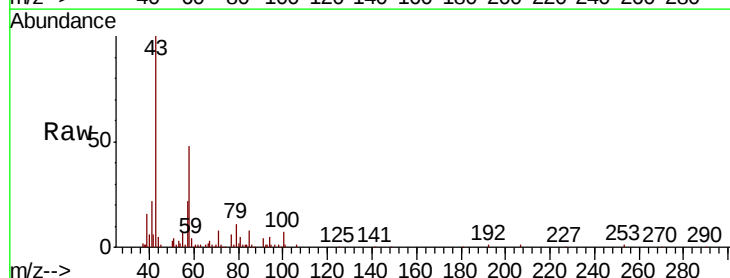
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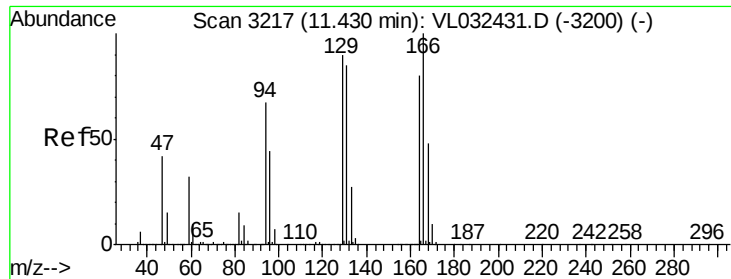
MMDadoda
9/7/2018 10:46:10 AM



#51
2-Hexanone
Concen: 0.63 ppbv
RT: 10.33 min Scan# 2874
Delta R.T. 0.00 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Tgt Ion: 43 Resp: 125249
Ion Ratio Lower Upper
43 100
58 44.6 39.2 58.8
98 1.2 0.4 0.6#





#52

Tetrachloroethene

Concen: 3.64 ppbv

RT: 11.42 min Scan# 3215

Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Instrument :

MSVOA_L

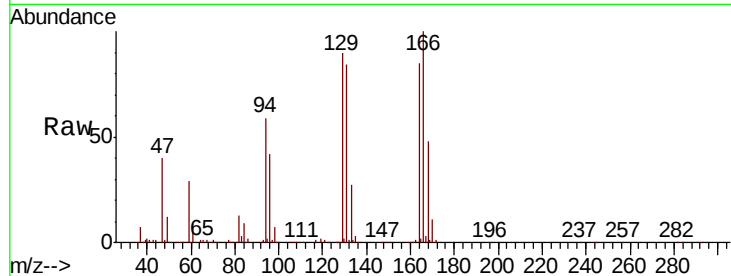
ClientSampled :

VP-03

Tot Ion	Ratio	Lower	Upper
164	100		
166	117.6	100.6	150.8
129	106.3	89.9	134.9
131	98.7	85.9	128.9

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MMDadoda
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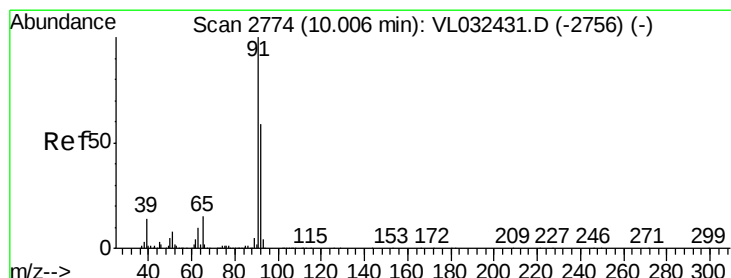
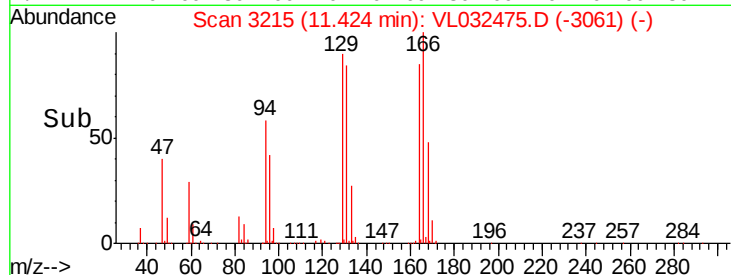
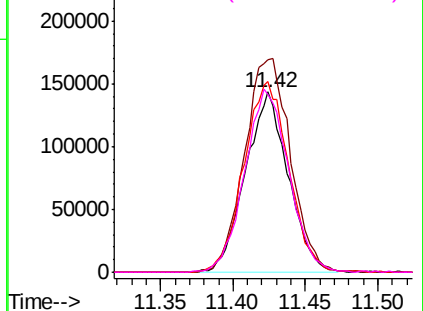
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 4.58 ppbv

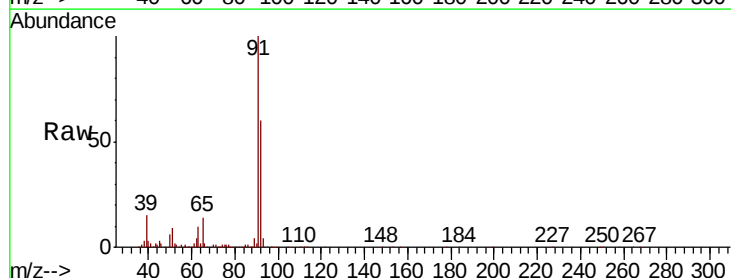
RT: 10.00 min Scan# 2771

Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

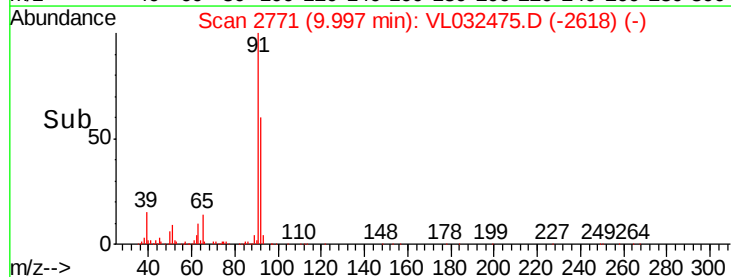
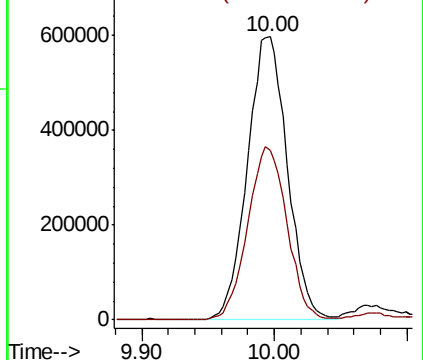
Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.1	72.1

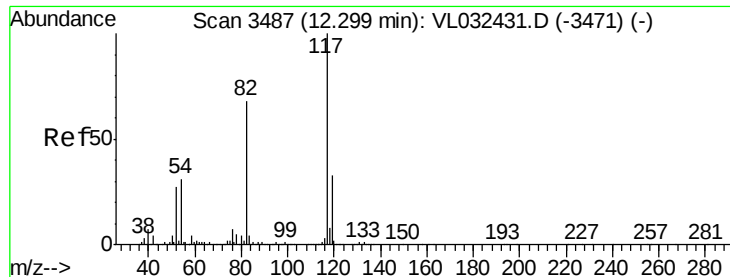


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





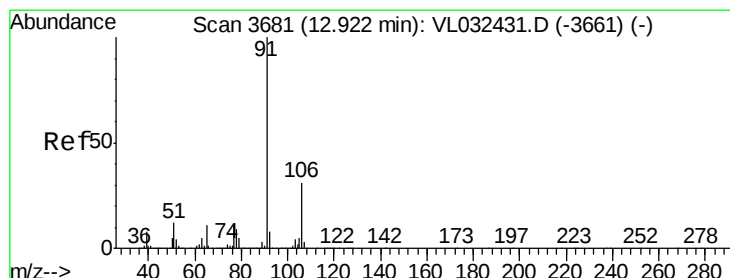
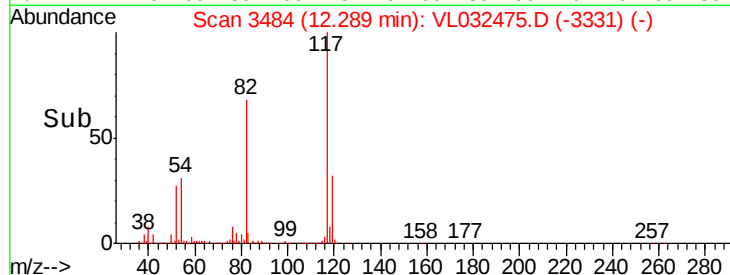
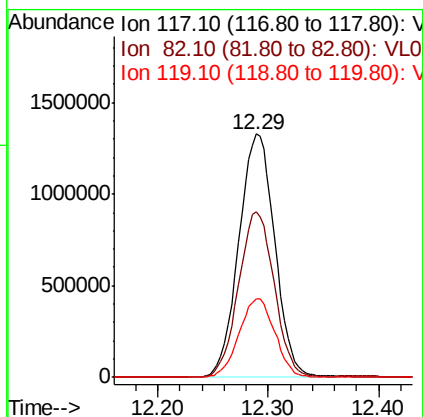
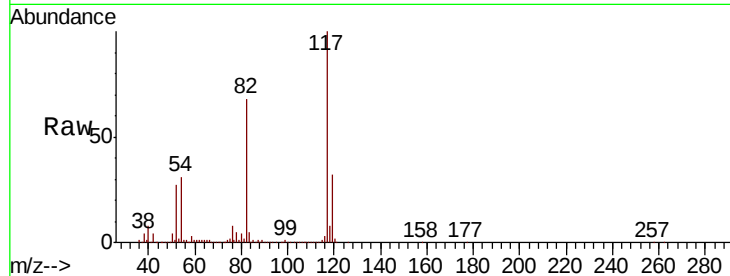
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.29 min Scan# 3484
Delta R.T. -0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Instrument :
MSVOA_L
ClientSampleId :
VP-03

Tot Ion	Ratio	Lower	Upper
117	100		
82	67.4	53.0	79.6
119	32.3	45.9	68.9

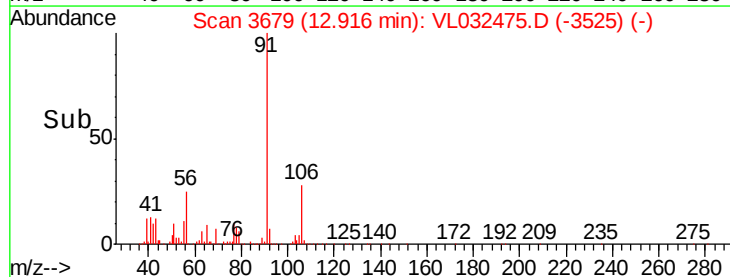
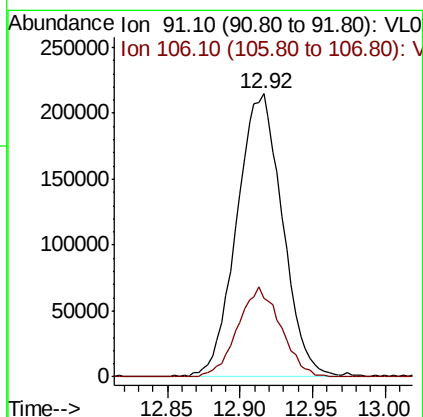
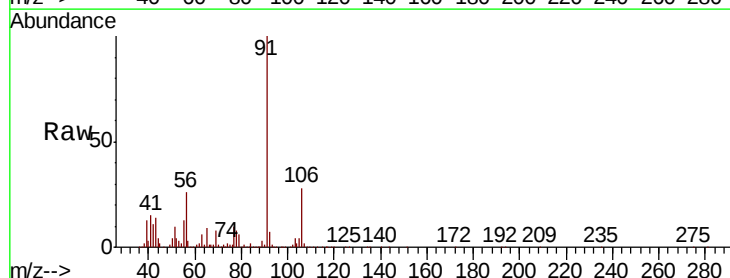
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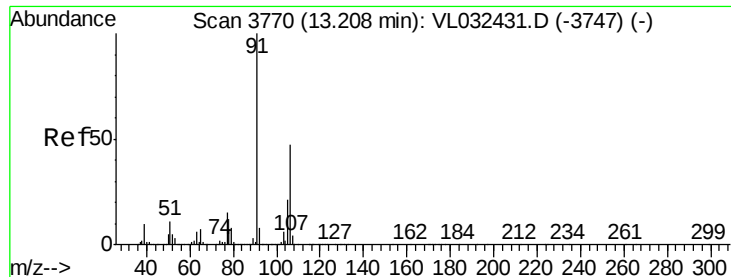
MMDadoda
9/7/2018 10:46:10 AM



#58
Ethyl Benzene
Concen: 1.30 ppbv
RT: 12.92 min Scan# 3679
Delta R.T. -0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Tgt Ion	Ratio	Lower	Upper
91	100		
106	27.9	24.8	37.2





#59

m/p-Xylene

Concen: 4.60 ppbv

RT: 13.17 min Scan# 3758

Delta R.T. -0.04 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Instrument :

MSVOA_L

ClientSampleId :

VP-03

Tot Ion: 91 Resp: 1473955

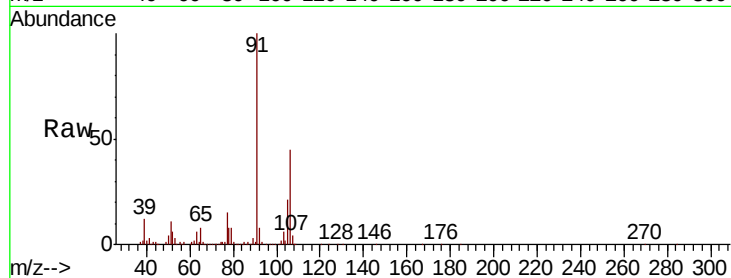
Ion Ratio Lower Upper

91 100

106 46.2 36.6 55.0

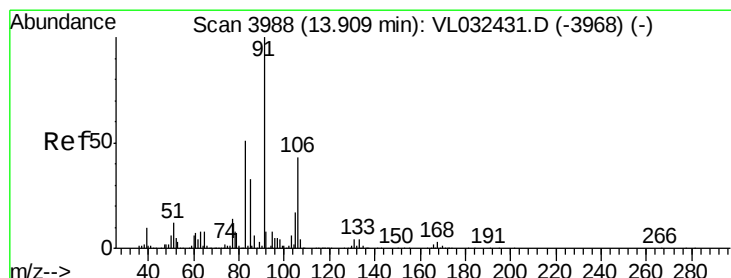
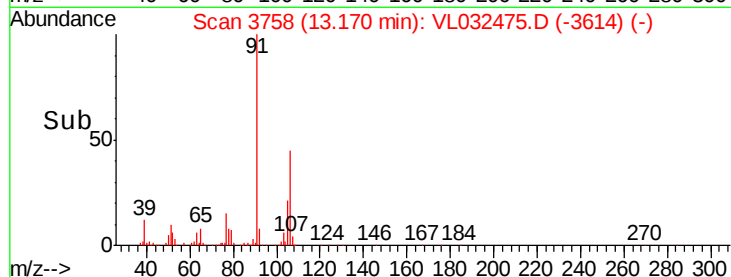
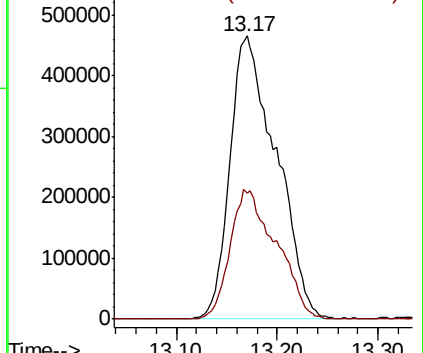
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 1.37 ppbv m

RT: 13.90 min Scan# 3984

Delta R.T. -0.01 min

Lab File: VL032475.D

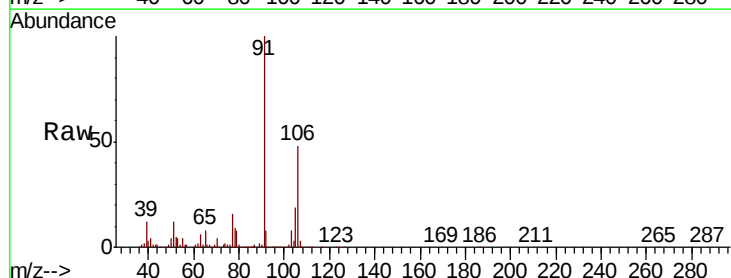
Acq: 6 Sep 2018 3:50

Tgt Ion: 91 Resp: 432650

Ion Ratio Lower Upper

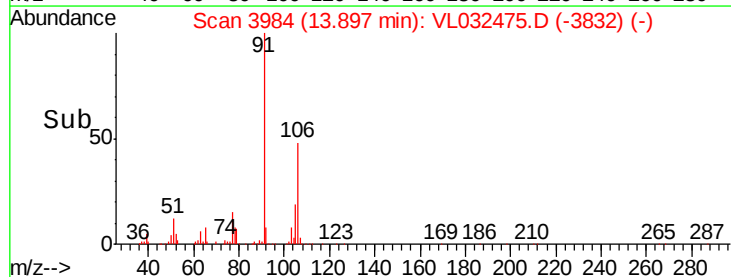
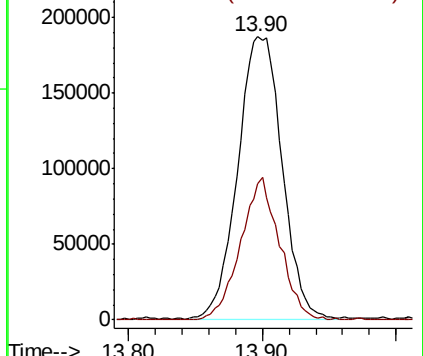
91 100

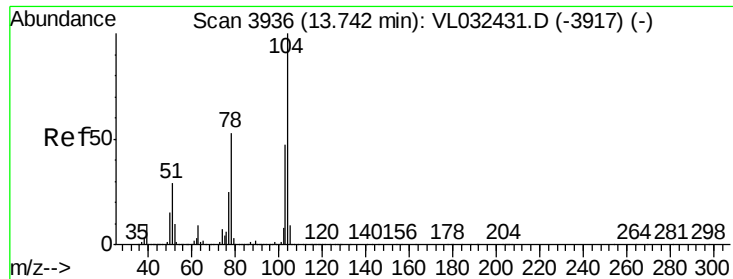
106 0.0 21.9 65.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#61

Stvrene

Concen: 0.16 ppbv

RT: 13.73 min Scan# 3933

Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Instrument :

MSVOA_L

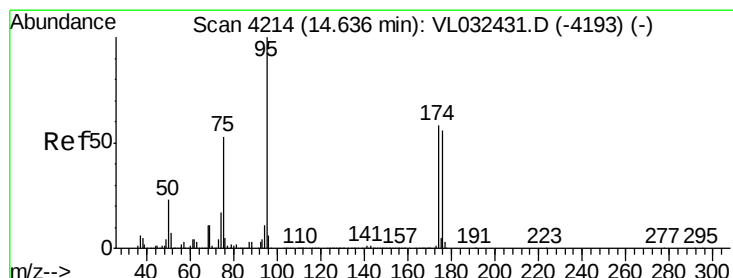
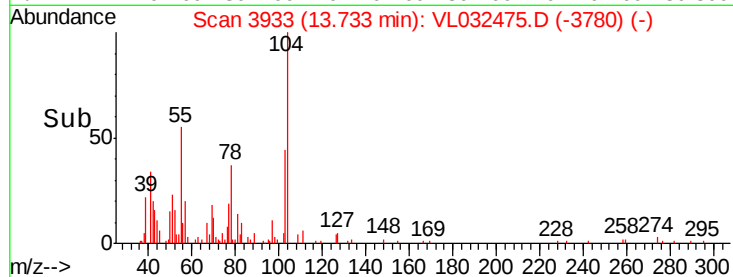
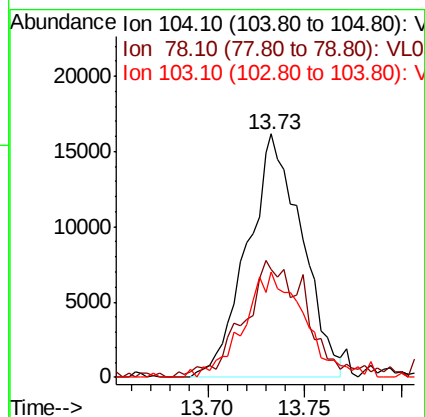
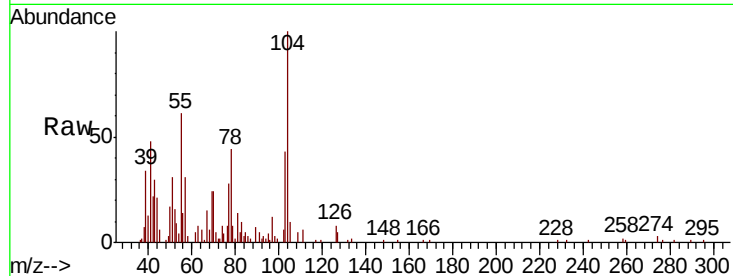
ClientSampleId :

VP-03

Tot Ion:	104	Resp:	31749
Ion Ratio	Lower	Upper	
104	100		
78	58.8	41.8	62.8
103	48.3	38.0	57.0

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#68

1-Bromo-4-Fluorobenzene

Concen: 10.30 ppbv

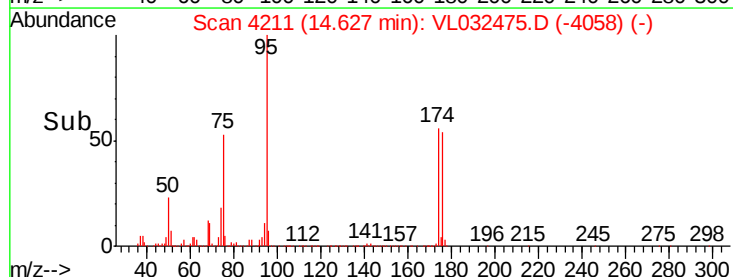
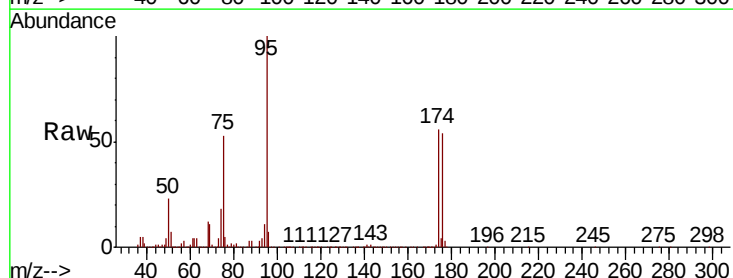
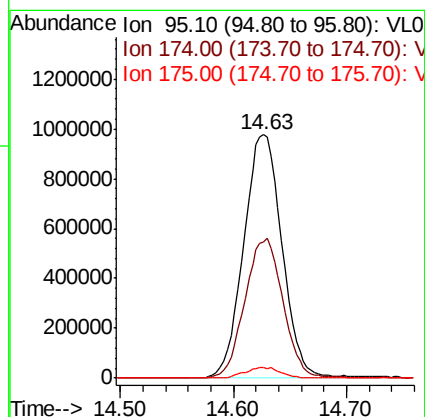
RT: 14.63 min Scan# 4211

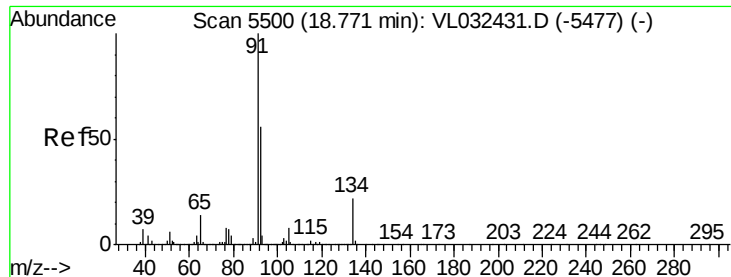
Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Tgt Ion:	95	Resp:	2295988
Ion Ratio	Lower	Upper	
95	100		
174	57.1	46.3	69.5
175	4.2	3.4	5.0





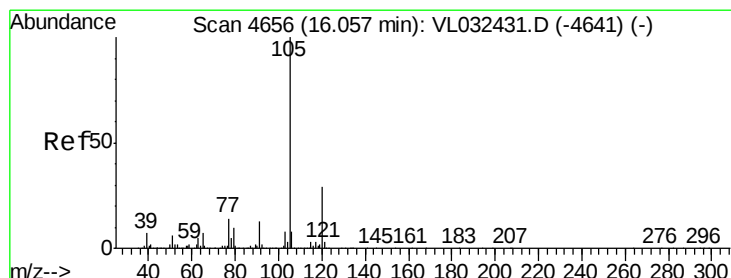
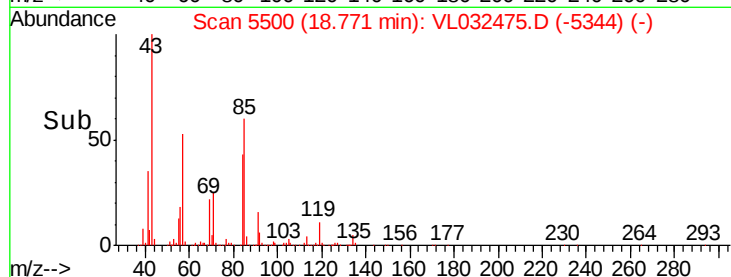
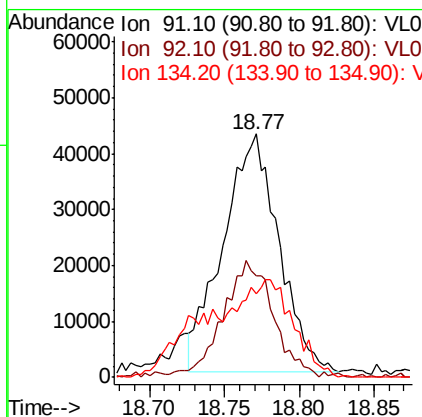
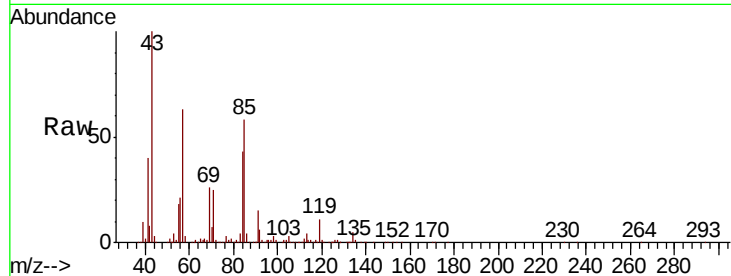
#70
n-Butylbenzene
Concen: 0.22 ppbv
RT: 18.77 min Scan# 5500
Delta R.T. 0.00 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Instrument :
MSVOA_L
ClientSampled :
VP-03

Tot Ion	Ratio	Resp	Lower	Upper
91	100	110669		
92	45.6		43.8	65.8
134	63.7		17.4	26.0#

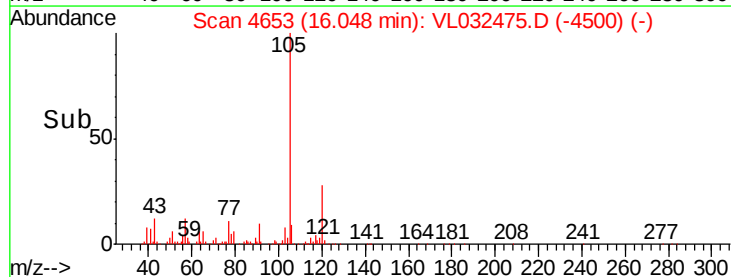
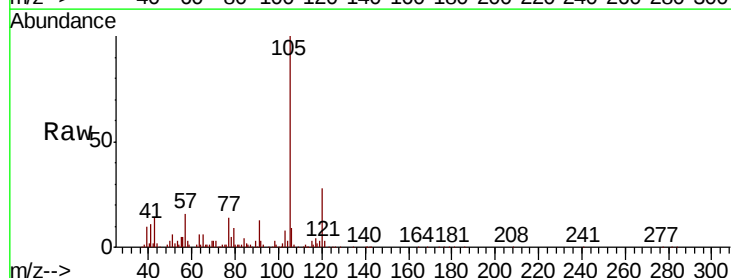
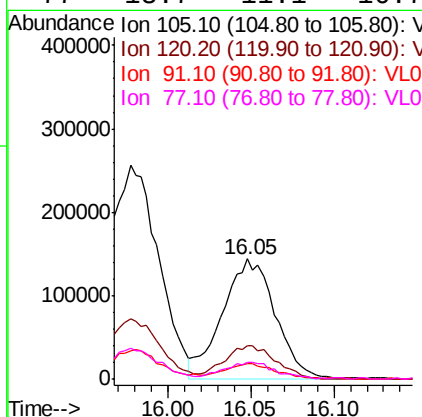
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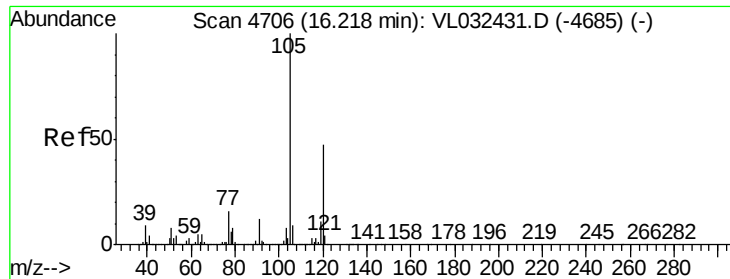
MMDadoda
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#72
4-Ethyltoluene
Concen: 0.92 ppbv
RT: 16.05 min Scan# 4653
Delta R.T. -0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	315468		
120	27.4		23.5	35.3
91	12.5		10.2	15.2
77	13.7		11.1	16.7





#73

1,3,5-Trimethylbenzene

Concen: 0.50 ppbv m

RT: 16.20 min Scan# 4701

Delta R.T. -0.02 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Instrument :

MSVOA_L

ClientSampled :

VP-03

Tot Ion:105 Resp: 170729

Ion Ratio Lower Upper

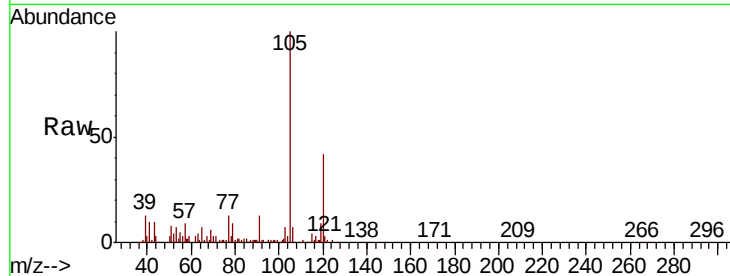
105 100

120 42.2 37.9 56.9

Manual Integrations
APPROVED

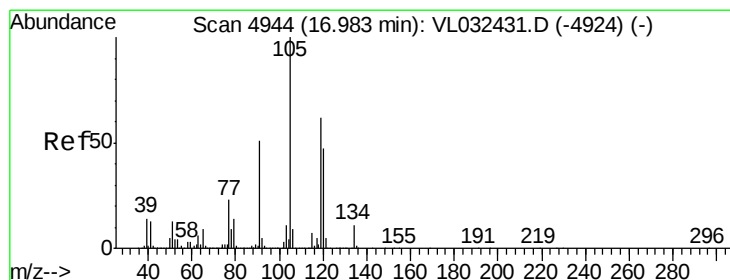
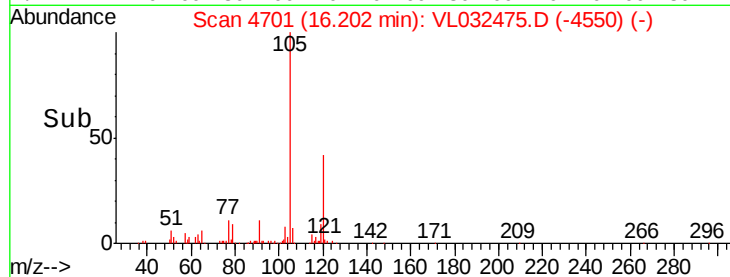
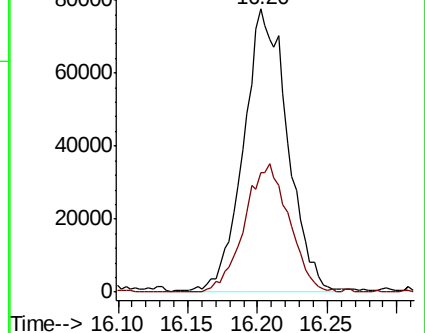
MMDadoda

9/7/2018 10:46:10 AM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 1.94 ppbv

RT: 16.97 min Scan# 4941

Delta R.T. -0.01 min

Lab File: VL032475.D

Acq: 6 Sep 2018 3:50

Tgt Ion:105 Resp: 730523

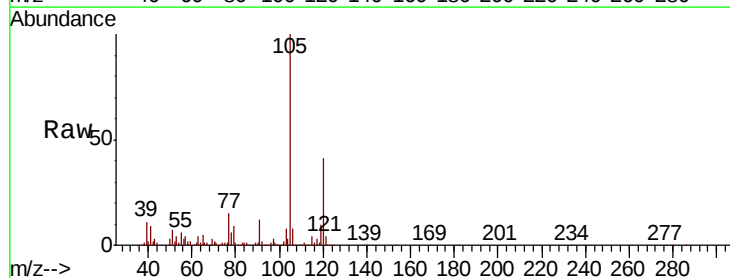
Ion Ratio Lower Upper

105 100

120 40.5 37.8 56.8

91 11.9 41.4 62.0#

77 14.7 18.6 28.0#

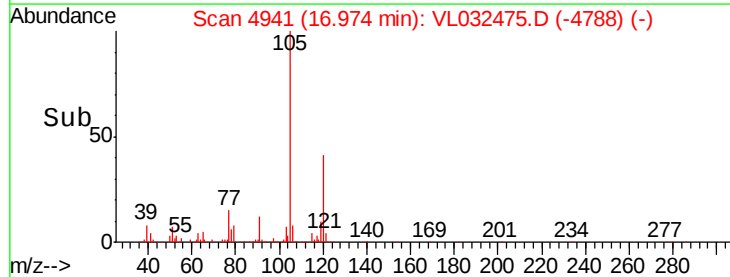
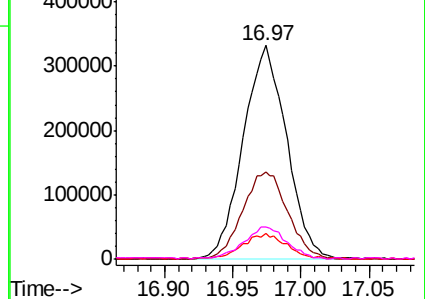


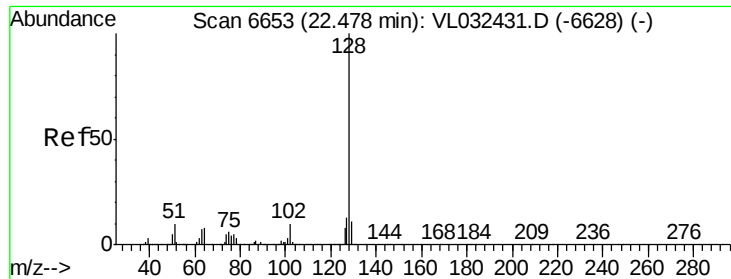
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VLO

Ion 77.10 (76.80 to 77.80): VLO





#79
Naphthalene
Concen: 0.30 ppbv
RT: 22.47 min Scan# 6650
Delta R.T. -0.01 min
Lab File: VL032475.D
Acq: 6 Sep 2018 3:50

Instrument :
MSVOA_L
ClientSampleId :
VP-03

Tot Ion	Ratio	Resp Lower	Upper
128	100		
127	10.3	10.2	15.2
129	12.8	8.5	12.7#

Manual Integrations
APPROVED

MMDadoda
9/7/2018 10:46:10 AM

