

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090518\
 Data File : VL032470.D
 Acq On : 6 Sep 2018 00:32
 Operator : SY/AP
 Sample : J4805-02DUP 4X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-2DUP

Manual Integrations
 APPROVED

MMDadoda
 9/7/2018 10:46:04 AM

Quant Time: Sep 06 16:03:13 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	1636469	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.34	114	3144800	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.29	117	3187723	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.63	95	2423625	10.24	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.40%

Target Compounds

						Ovalue
3) Chlorodifluoromethane	3.04	51	23089	0.16	ppbv	# 92
4) Chloromethane	3.20	50	57220	0.64	ppbv	97
7) Chloroethane	3.63	64	4234	0.14	ppbv	# 67
9) Propene	3.06	41	1109466	18.57	ppbv	95
10) Heptane	8.29	43	88438	0.41	ppbv	99
13) Ethanol	3.68	45	512654	27.52	ppbv	99
15) Acetone	3.93	43	1290254	8.76	ppbv	# 57
17) tert-Butyl alcohol	4.40	59	120565	5.32	ppbv	# 100
20) Methylene Chloride	4.44	84	85262	1.52	ppbv	96
26) Hexane	5.82	57	239554	1.54	ppbv	# 48
27) Carbon Disulfide	4.66	76	379096	2.64	ppbv	97
29) Chloroform	5.89	83	393768	1.66	ppbv	98
30) Cyclohexane	7.29	84	26256m	0.23	ppbv	
32) 1,1,1-Trichloroethane	6.66	97	117531	0.53	ppbv	99
34) 2-Butanone	5.36	43	4980600	23.84	ppbv	99
36) Benzene	7.05	78	173548	0.65	ppbv	98
38) Trichloroethene	8.01	130	1025471	10.09	ppbv	98
41) Tetrahydrofuran	6.20	42	45784	0.40	ppbv	92
51) 2-Hexanone	10.31	43	875253	4.32	ppbv	# 99
52) Tetrachloroethene	11.42	164	25525	0.31	ppbv	89
53) Toluene	10.00	91	303803	1.09	ppbv	99
58) Ethyl Benzene	12.91	91	56933m	0.15	ppbv	
59) m/p-Xylene	13.17	91	139108m	0.41	ppbv	
60) o-Xylene	13.90	91	53550m	0.16	ppbv	
74) 1,2,4-Trimethylbenzene	16.97	105	80457m	0.20	ppbv	
79) Naphthalene	22.47	128	1673522	5.15	ppbv	99
80) Naphthalene,2-methyl-	25.15	142	622444	7.20	ppbv	100

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

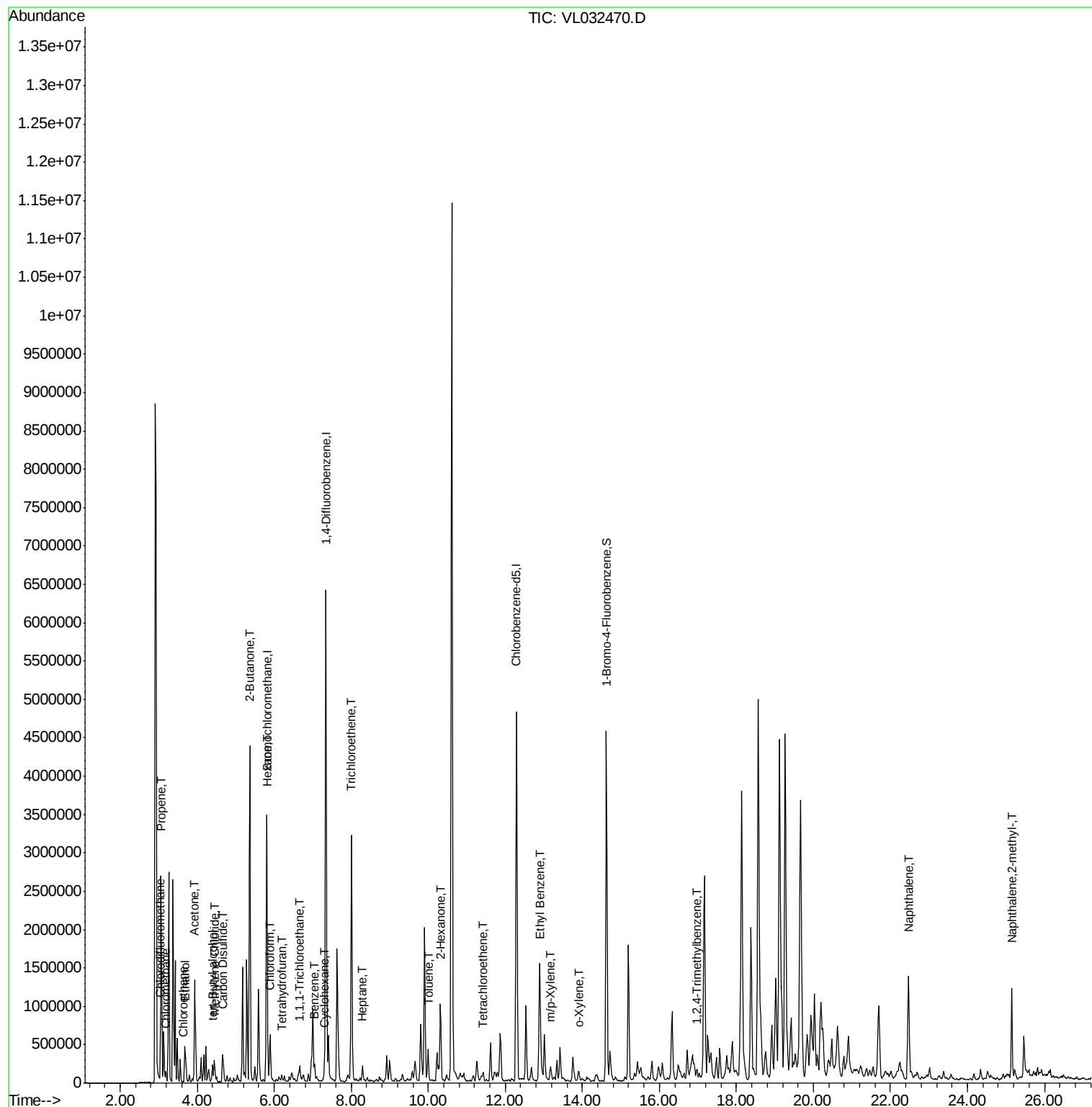
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL090518\
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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri Aug 31 21:33:46 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.80 min Scan# 1467

Delta R.T. -0.01 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Instrument :

MSVOA_L

ClientSampleId :

VP-2DUP

Tot Ion: 49 Resp: 1636469

Ion Ratio Lower Upper

49 100

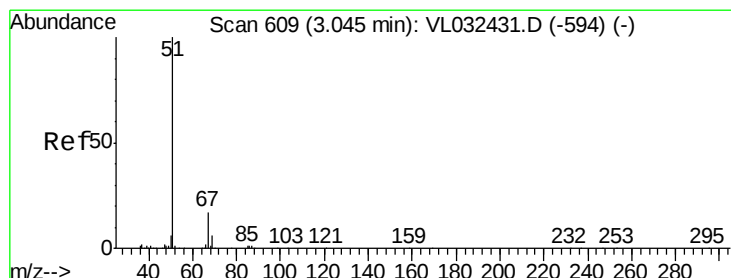
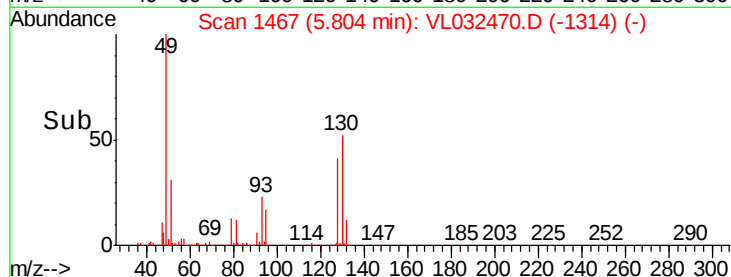
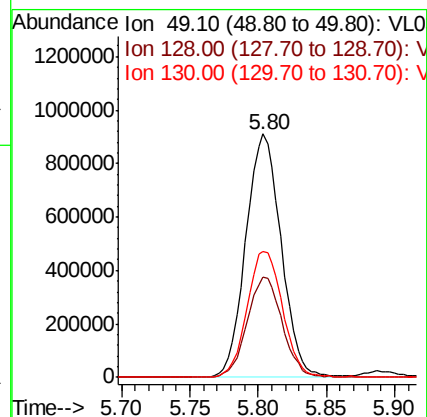
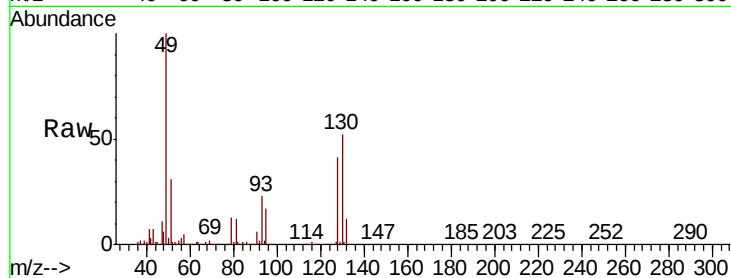
128 41.2 20.7 62.1

130 52.8 26.6 79.7

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#3

Chlorodifluoromethane

Concen: 0.16 ppbv

RT: 3.04 min Scan# 607

Delta R.T. -0.01 min

Lab File: VL032470.D

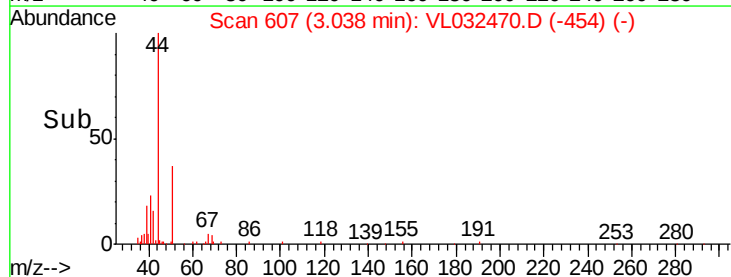
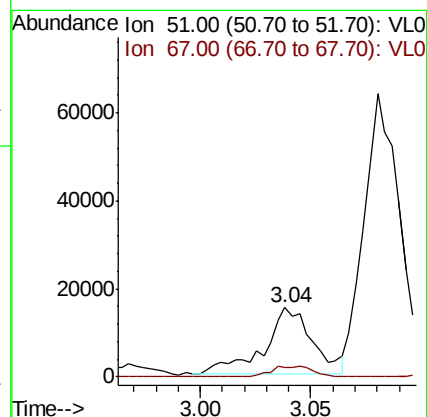
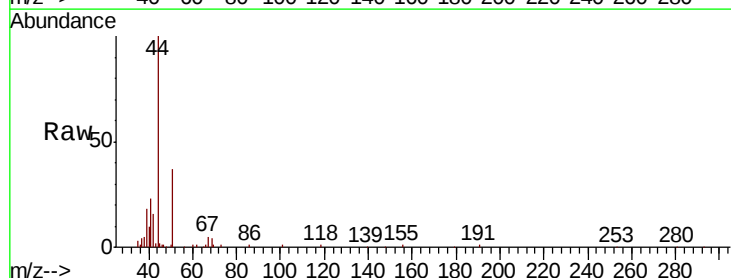
Acq: 6 Sep 2018 00:32

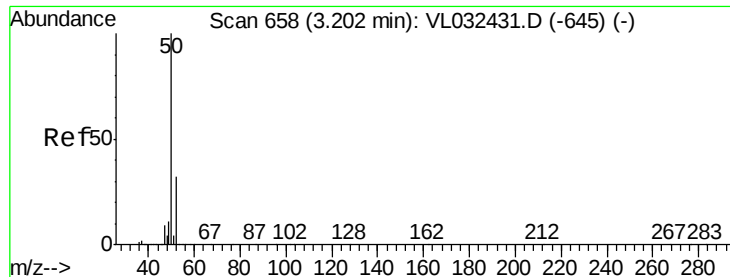
Tgt Ion: 51 Resp: 23089

Ion Ratio Lower Upper

51 100

67 13.6 13.8 20.8#





#4

Chloromethane

Concen: 0.64 ppbv

RT: 3.20 min Scan# 657

Delta R.T. -0.00 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Instrument :

MSVOA_L

ClientSampleId :

VP-2DUP

Tot Ion: 50 Resp: 57220

Ion Ratio Lower Upper

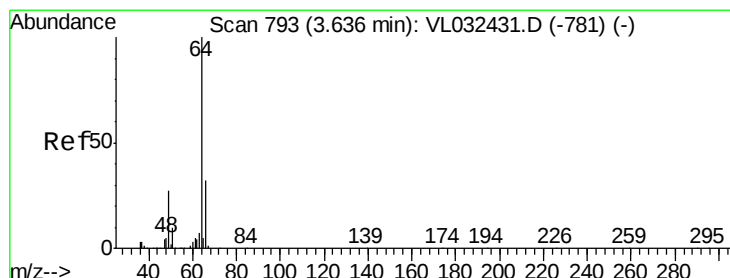
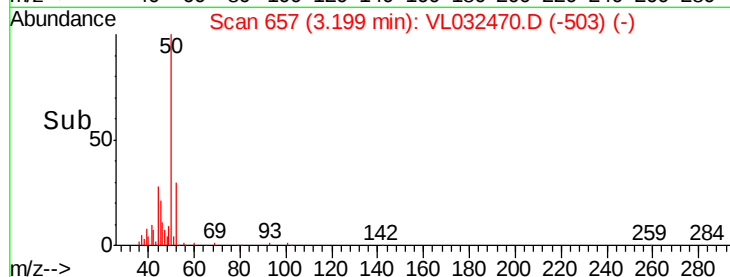
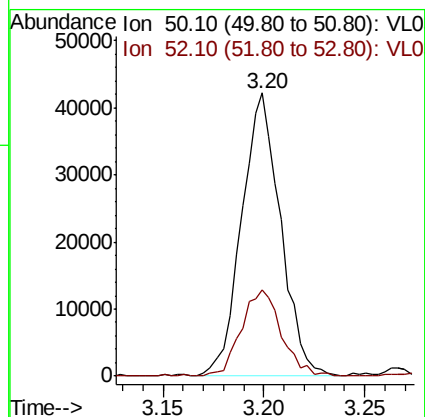
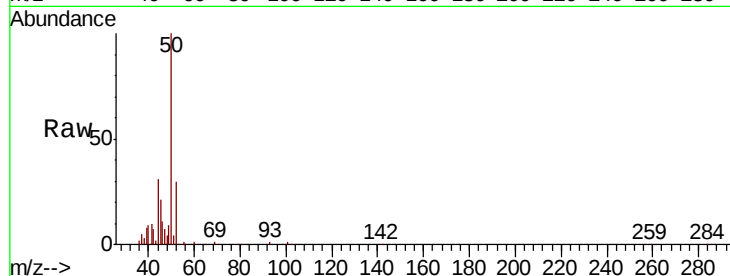
50 100

52 30.4 25.6 38.4

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#7

Chloroethane

Concen: 0.14 ppbv

RT: 3.63 min Scan# 792

Delta R.T. -0.00 min

Lab File: VL032470.D

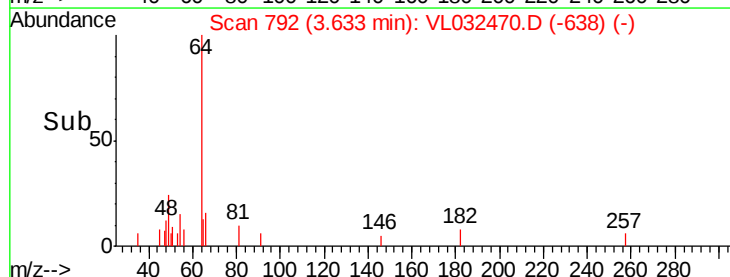
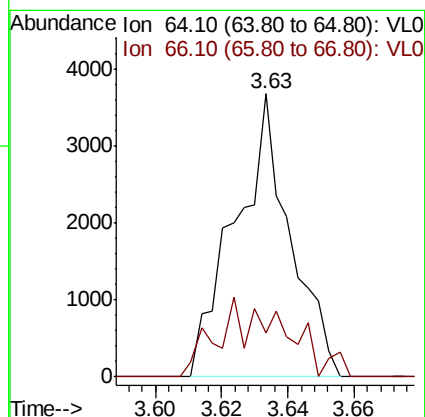
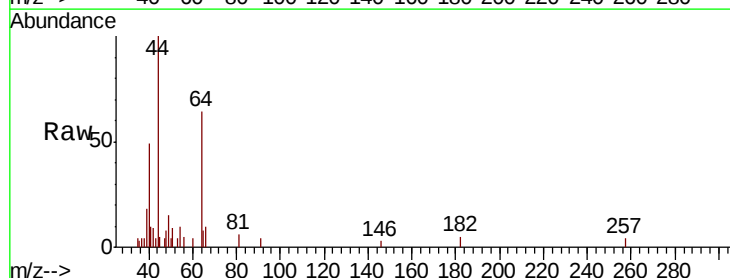
Acq: 6 Sep 2018 00:32

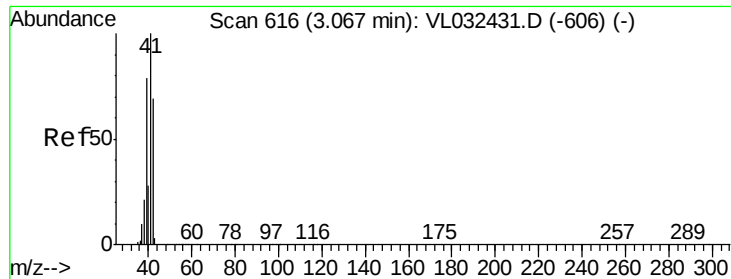
Tgt Ion: 64 Resp: 4234

Ion Ratio Lower Upper

64 100

66 13.9 25.8 38.6#





#9

Propene

Concen: 18.57 ppbv

RT: 3.06 min Scan# 615

Delta R.T. -0.00 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Instrument :

MSVOA_L

ClientSampleId :

VP-2DUP

Tot Ion: 41 Resp: 1109466

Ion Ratio Lower Upper

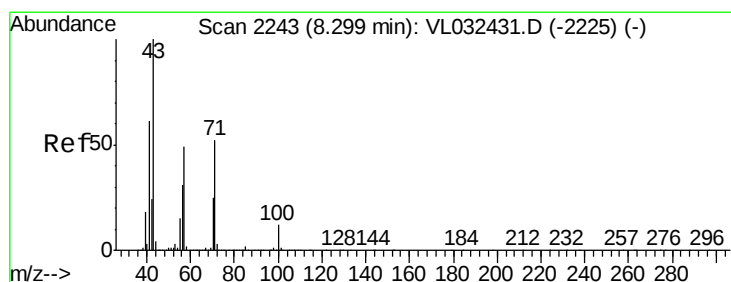
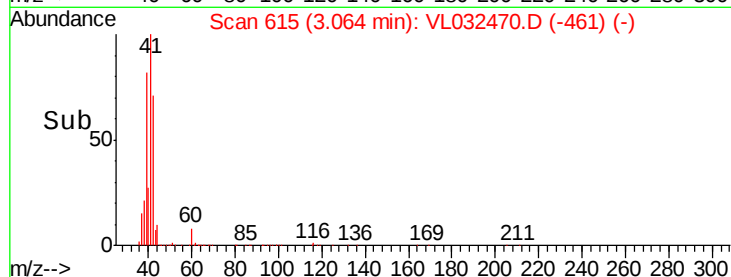
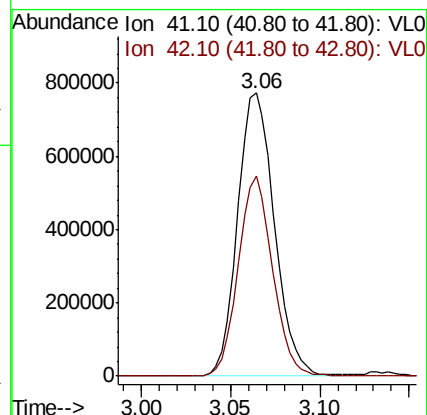
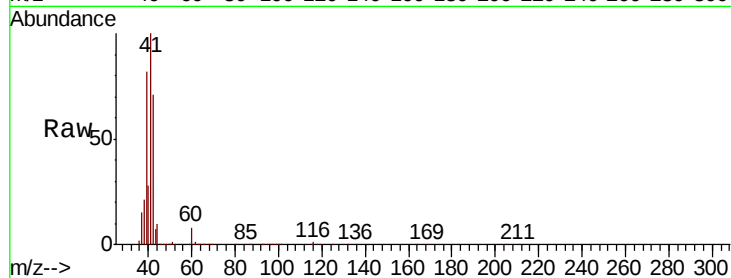
41 100

42 66.2 56.6 84.8

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#10

Heptane

Concen: 0.41 ppbv

RT: 8.29 min Scan# 2241

Delta R.T. -0.01 min

Lab File: VL032470.D

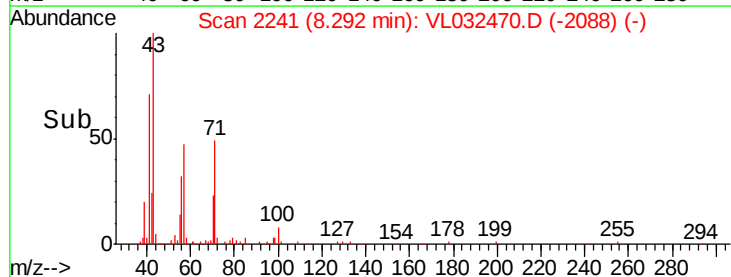
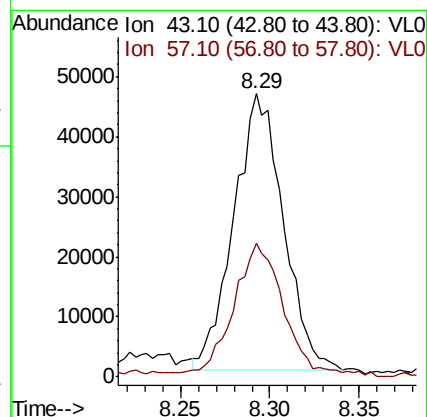
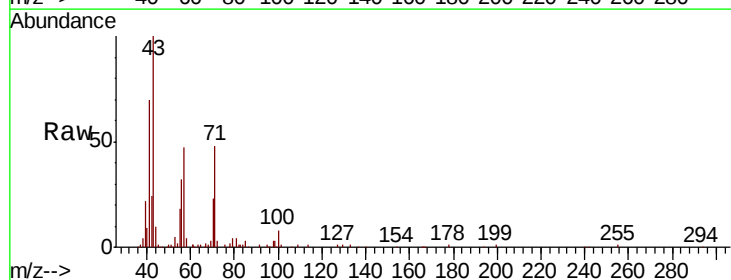
Acq: 6 Sep 2018 00:32

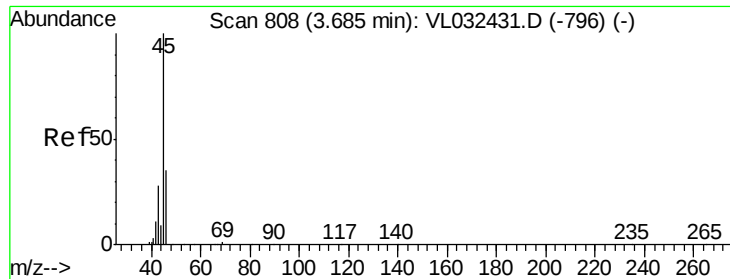
Tgt Ion: 43 Resp: 88438

Ion Ratio Lower Upper

43 100

57 50.5 39.6 59.4





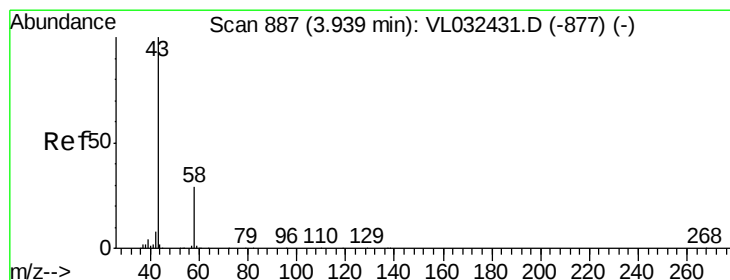
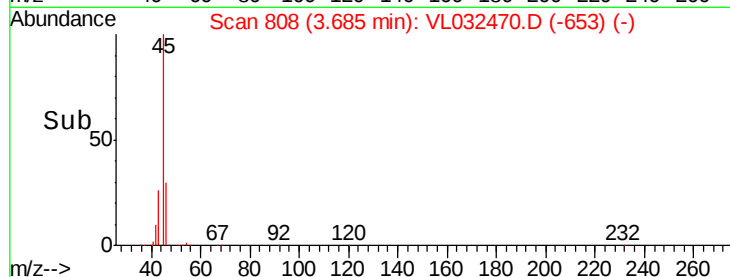
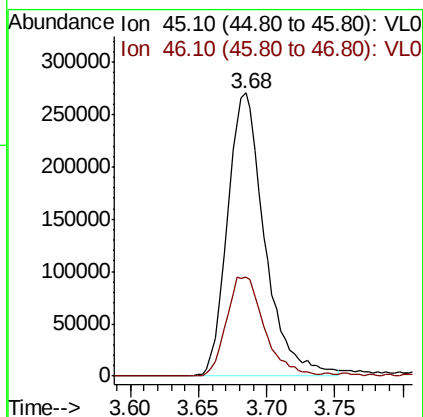
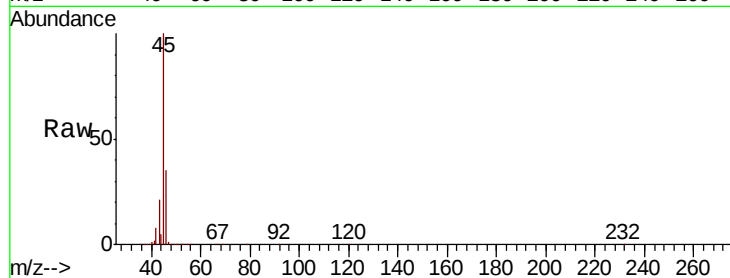
#13
Ethanol
Concen: 27.52 ppbv
RT: 3.68 min Scan# 808
Delta R.T. -0.00 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion: 45 Resp: 512654
Ion Ratio Lower Upper
45 100
46 35.9 14.2 56.8

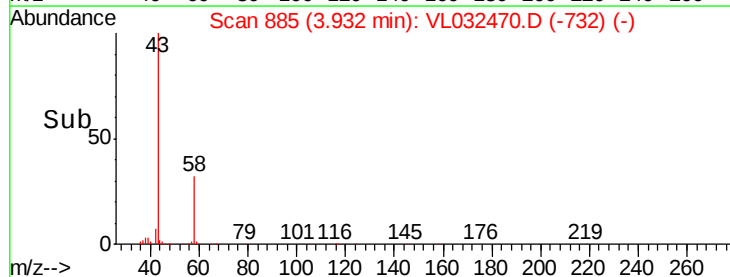
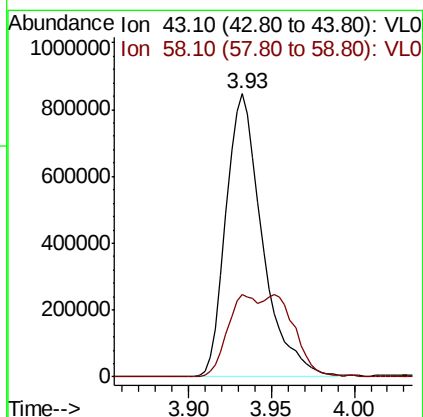
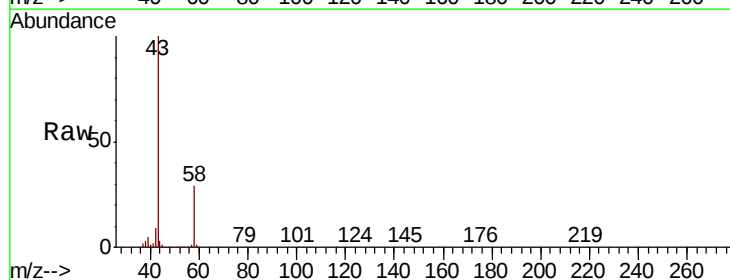
Manual Integrations
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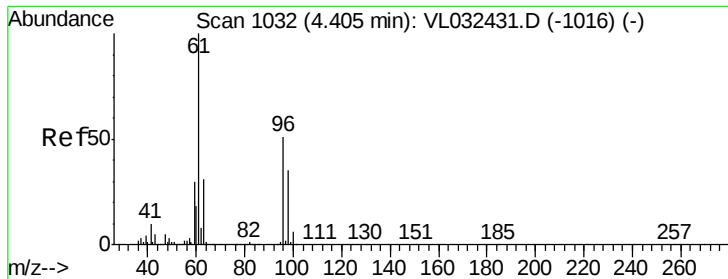
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#15
Acetone
Concen: 8.76 ppbv
RT: 3.93 min Scan# 885
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion: 43 Resp: 1290254
Ion Ratio Lower Upper
43 100
58 50.8 22.6 33.8#





#17

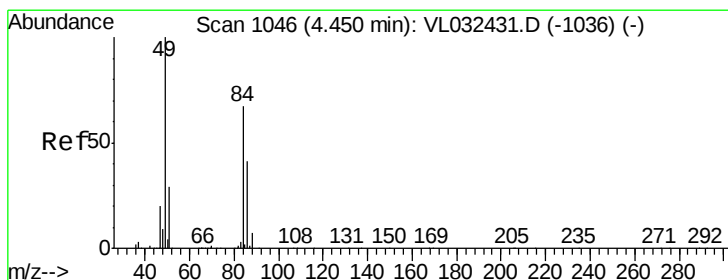
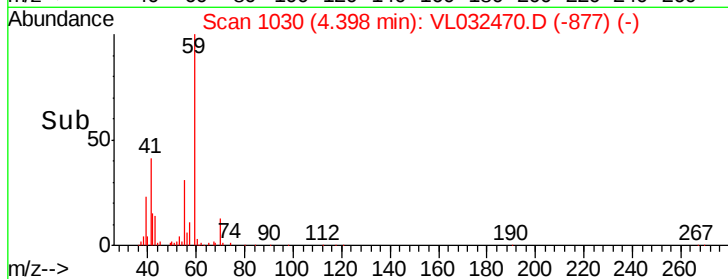
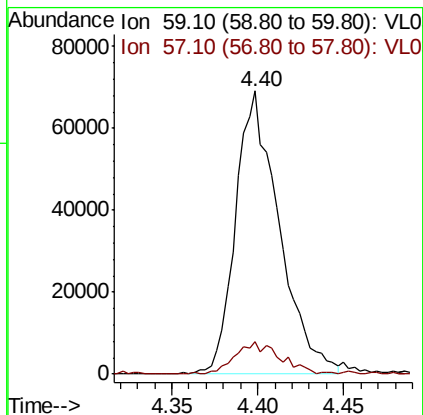
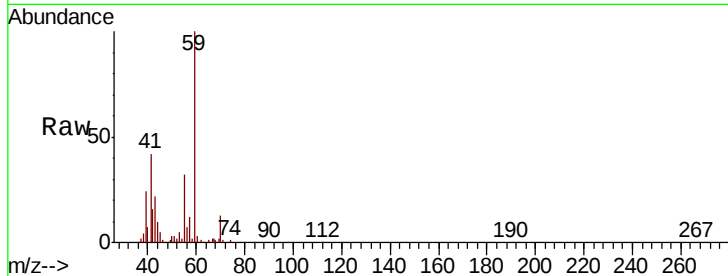
tert-Butyl alcohol
Concen: 5.32 ppbv
RT: 4.40 min Scan# 1030
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion	Ratio	Lower	Upper
59	100		
57	12.4	0.0	0.0#

Manual Integrations
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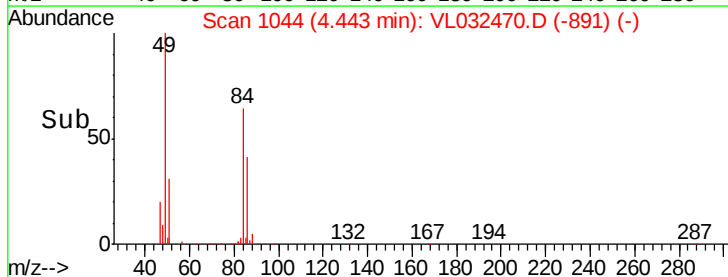
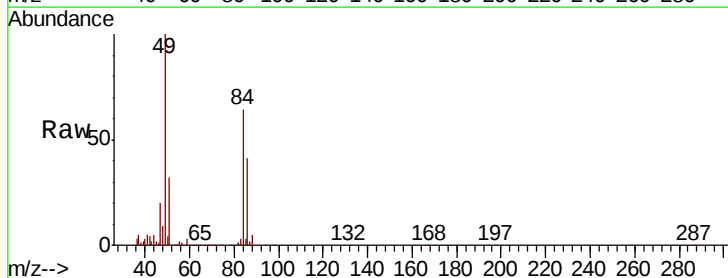
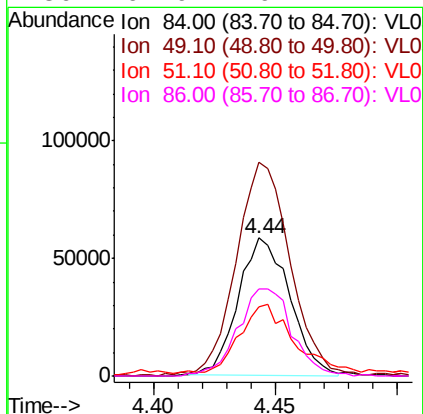
MMDadoda
9/7/2018 10:46:04 AM

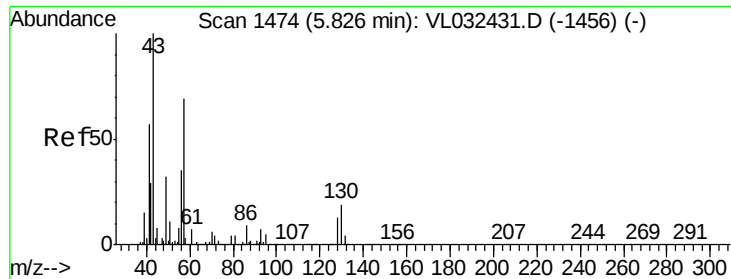


#20

Methylene Chloride
Concen: 1.52 ppbv
RT: 4.44 min Scan# 1044
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion	Ratio	Lower	Upper
84	100		
49	155.0	119.1	178.7
51	46.7	35.2	52.8
86	61.9	49.4	74.2





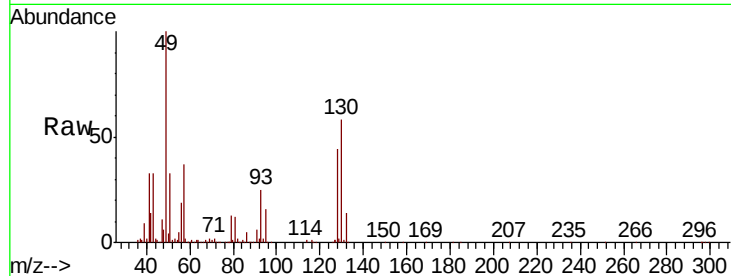
#26
Hexane
Concen: 1.54 ppbv
RT: 5.82 min Scan# 1472
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion	57	Resp	239554
Ion	Ratio	Lower	Upper
57	100		
41	107.1	69.0	103.4#
43	98.8	172.1	258.1#
56	60.1	42.2	63.2

Manual Integrations
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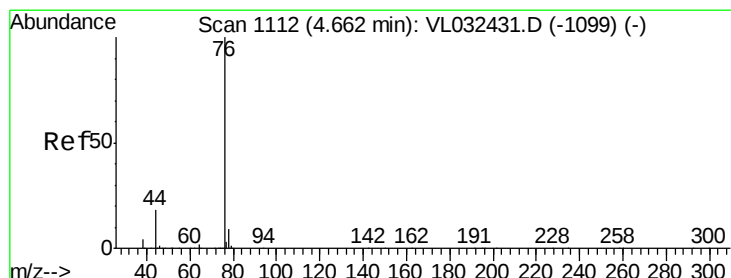
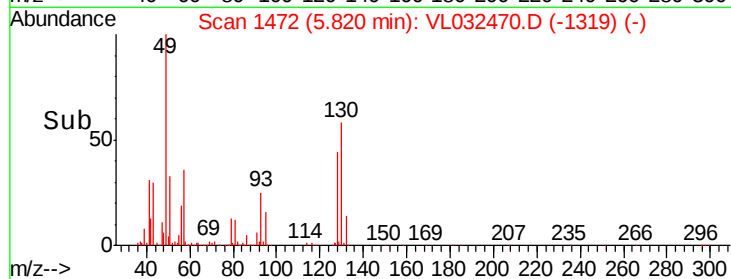
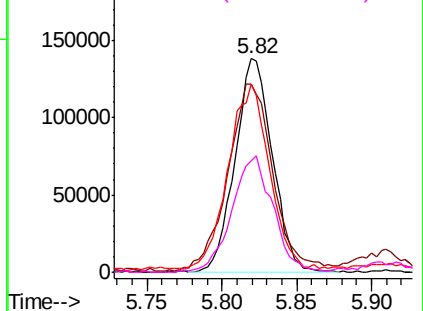
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

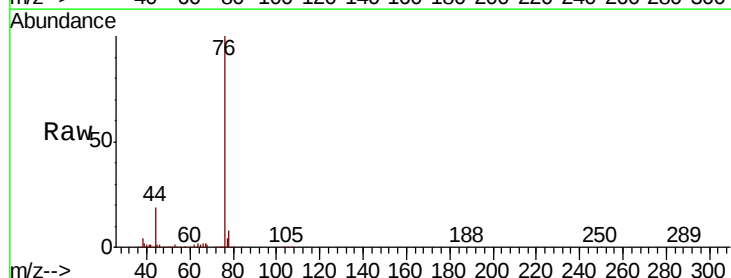
Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#27
Carbon Disulfide
Concen: 2.64 ppbv
RT: 4.66 min Scan# 1111
Delta R.T. -0.00 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion	76	Resp	379096
Ion	Ratio	Lower	Upper
76	100		
44	19.6	14.0	21.0
78	9.2	7.5	11.3

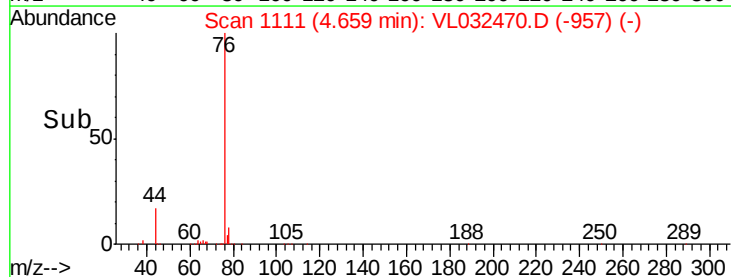
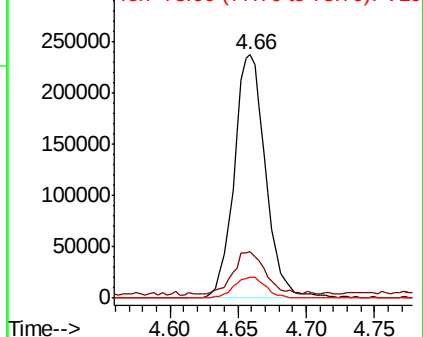


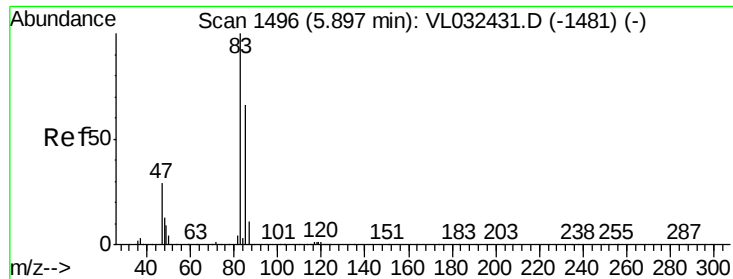
Abundance

Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





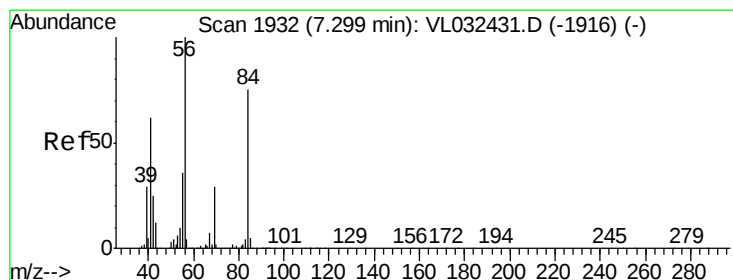
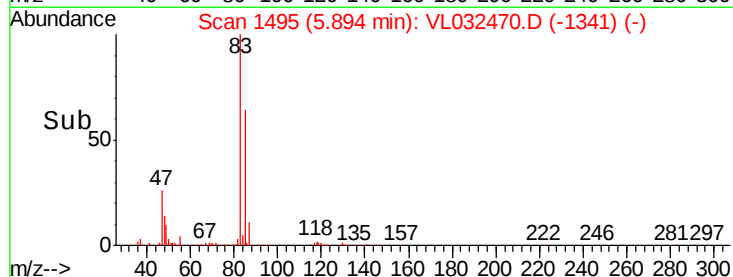
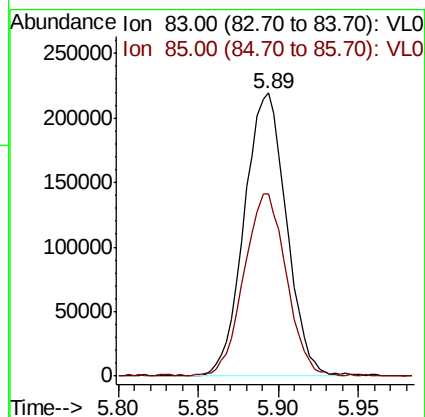
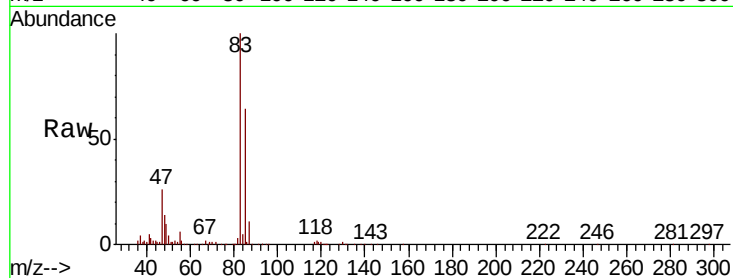
#29
Chloroform
Concen: 1.66 ppbv
RT: 5.89 min Scan# 1495
Delta R.T. -0.00 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion	83	Resp	393768
Ion Ratio	100	Lower	Upper
83	100		
85	63.9	52.5	78.7

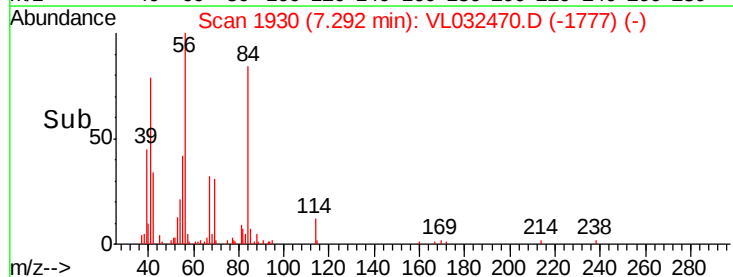
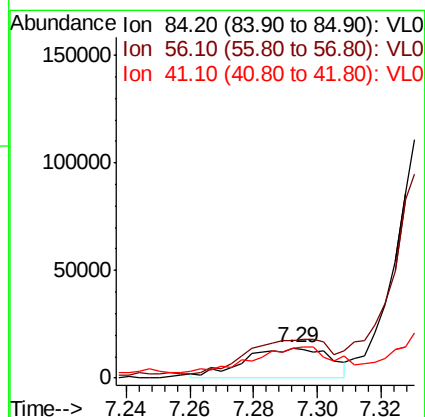
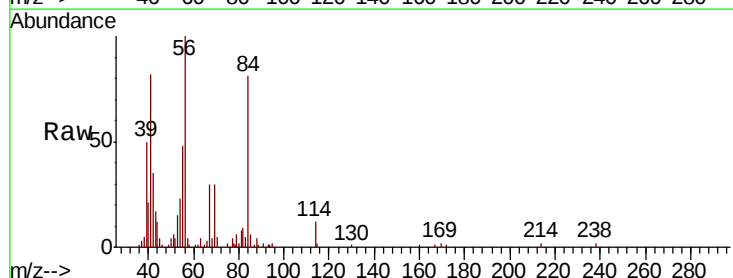
Manual Integrations
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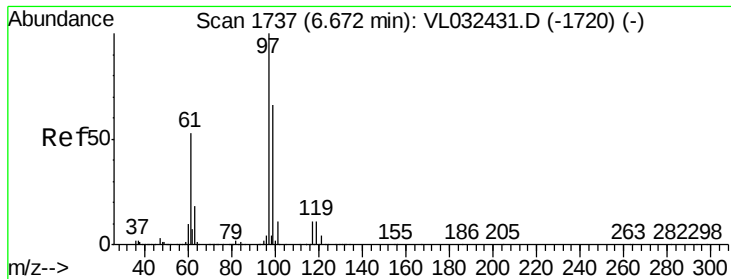
MMDadoda
9/7/2018 10:46:04 AM



#30
Cyclohexane
Concen: 0.23 ppbv m
RT: 7.29 min Scan# 1930
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion	84	Resp	26256
Ion Ratio	100	Lower	Upper
84	100		
56	0.0	113.5	170.3#
41	0.0	68.1	102.1#





#32

1,1,1-Trichloroethane

Concen: 0.53 ppbv

RT: 6.66 min Scan# 1734

Delta R.T. -0.01 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Instrument :

MSVOA_L

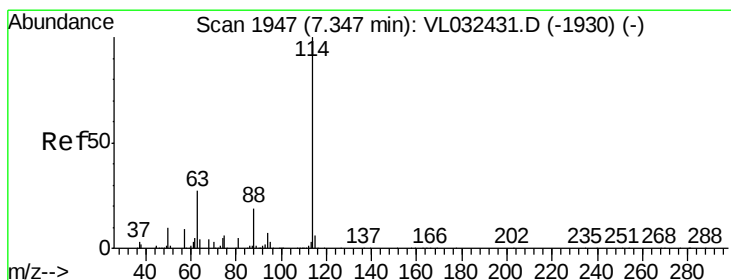
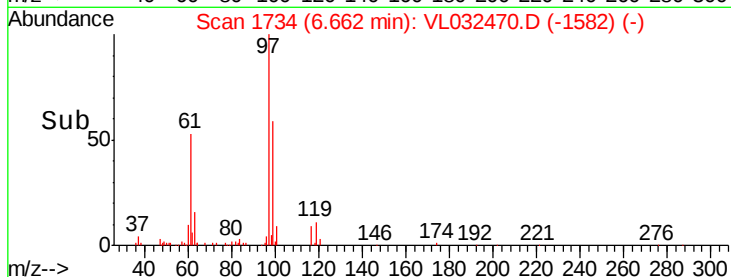
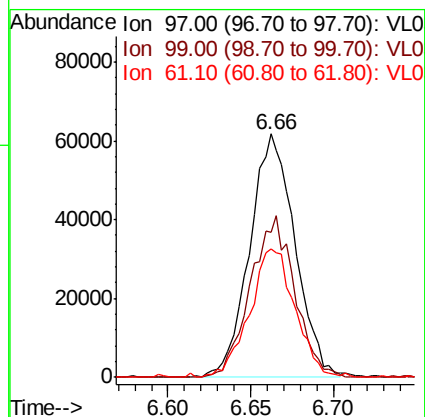
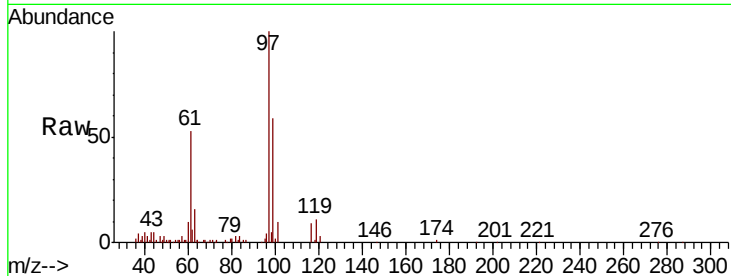
ClientSampleId :

VP-2DUP

Tot Ion:	97	Resp:	117531
Ion Ratio	Lower	Upper	
97	100		
99	64.9	52.1	78.1
61	53.7	42.5	63.7

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9/7/2018 10:46:04 AM



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

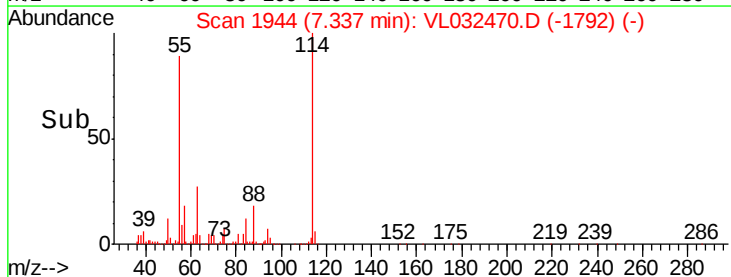
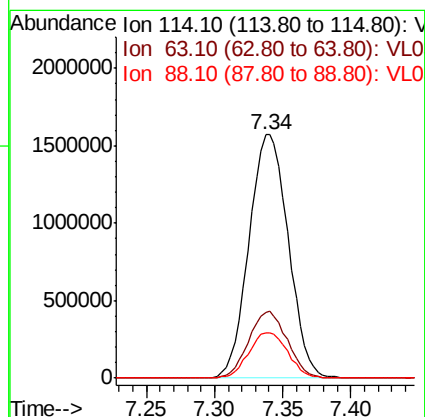
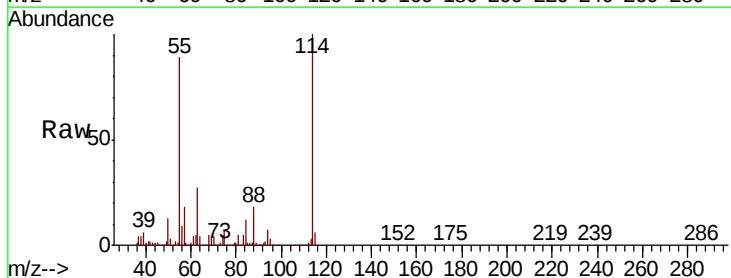
RT: 7.34 min Scan# 1944

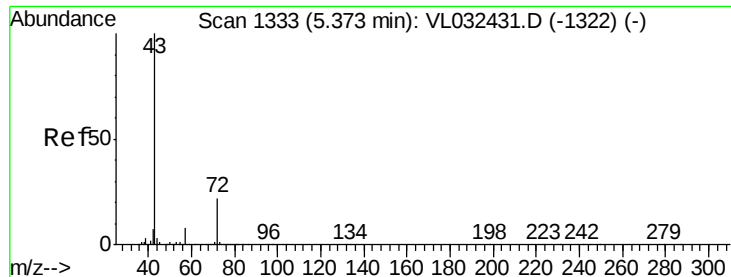
Delta R.T. -0.01 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Tgt Ion:	114	Resp:	3144800
Ion Ratio	Lower	Upper	
114	100		
63	26.8	22.2	33.4
88	18.6	15.0	22.4





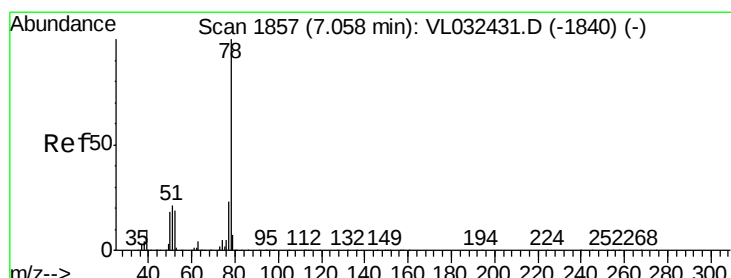
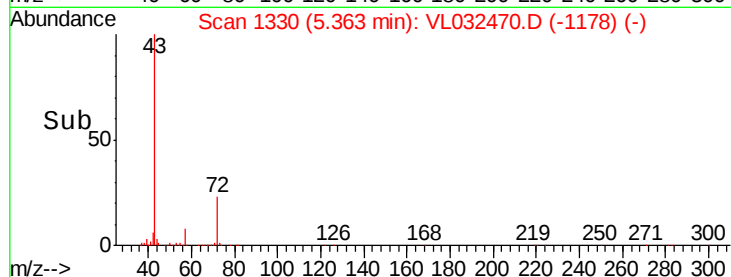
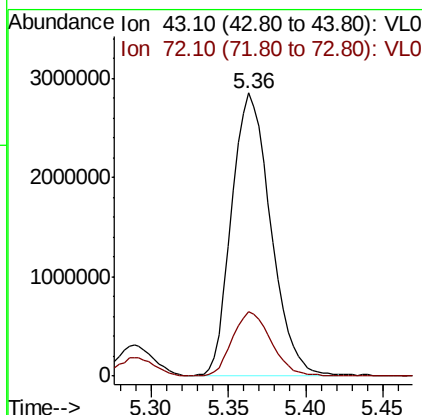
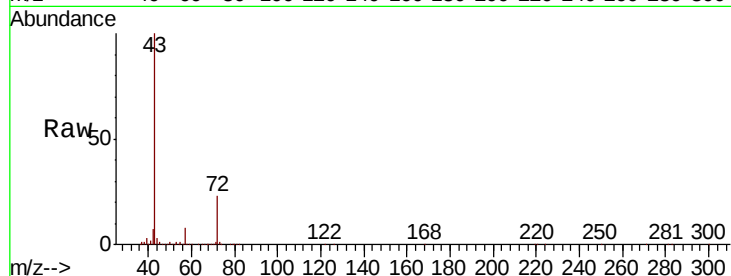
#34
2-Butanone
Concen: 23.84 ppbv
RT: 5.36 min Scan# 1330
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion: 43 Resp: 4980600
Ion Ratio Lower Upper
43 100
72 22.7 17.8 26.6

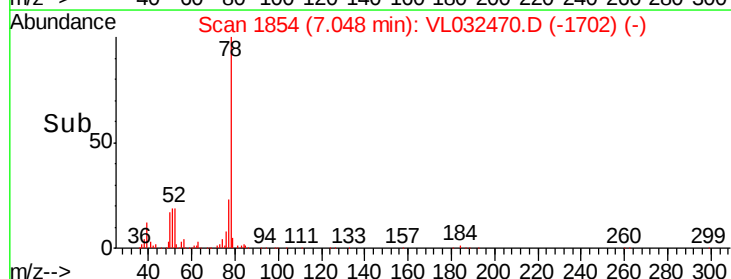
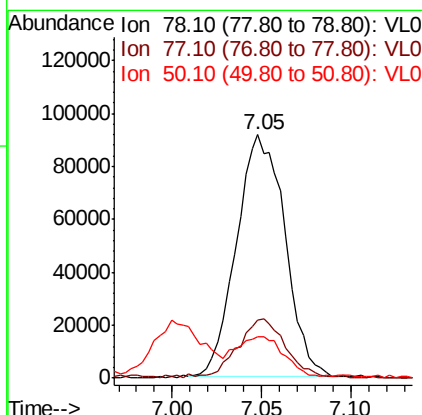
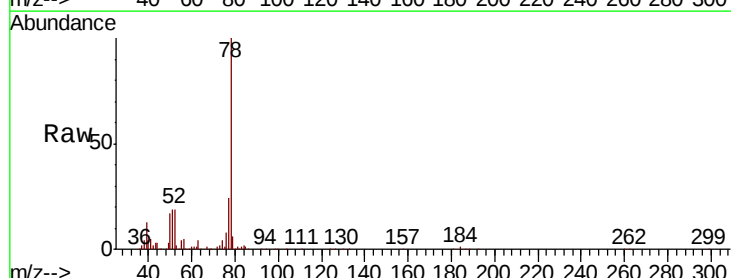
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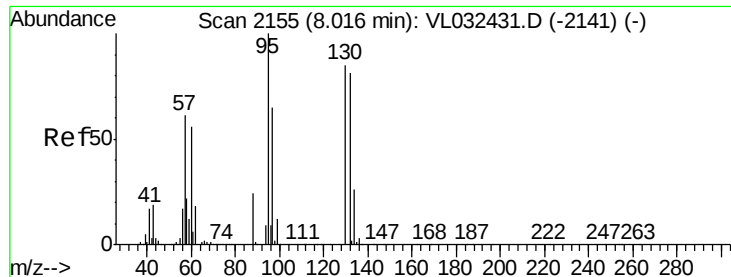
MMDadoda
9/7/2018 10:46:04 AM



#36
Benzene
Concen: 0.65 ppbv
RT: 7.05 min Scan# 1854
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion: 78 Resp: 173548
Ion Ratio Lower Upper
78 100
77 23.1 18.4 27.6
50 16.0 14.4 21.6





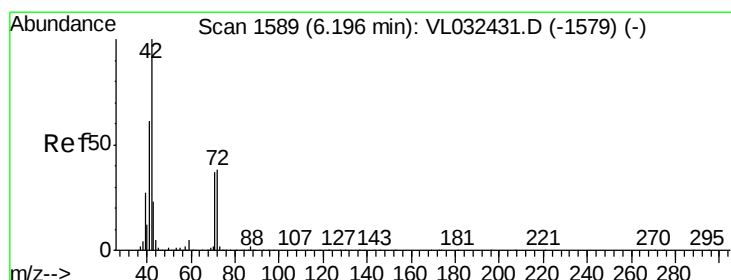
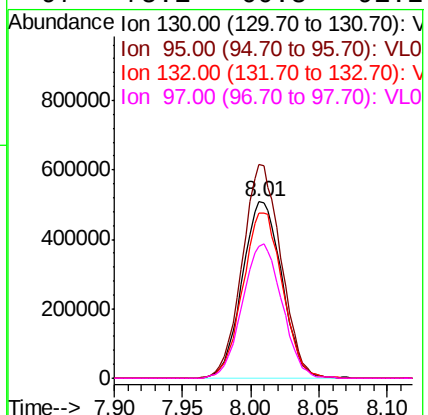
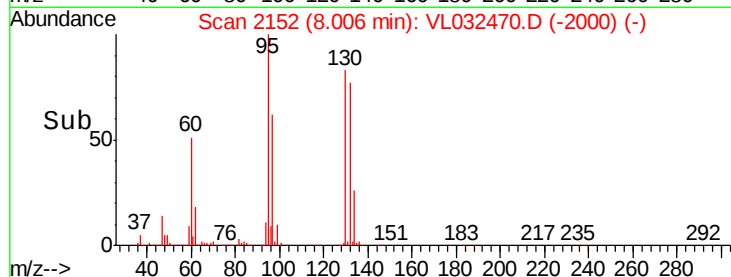
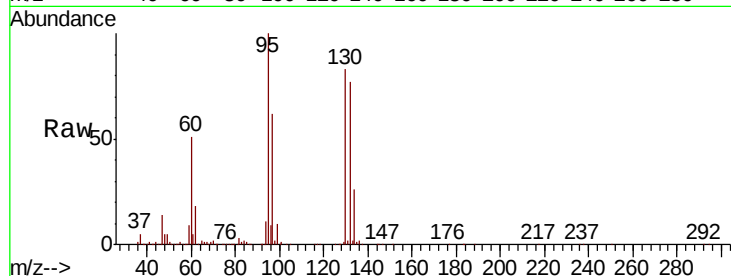
#38
 Trichloroethene
 Concen: 10.09 ppbv
 RT: 8.01 min Scan# 2152
 Delta R.T. -0.01 min
 Lab File: VL032470.D
 Acq: 6 Sep 2018 00:32

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-2DUP

Tot Ion	Ratio	Lower	Upper
130	100		
95	121.1	94.2	141.4
132	93.5	76.2	114.4
97	75.1	60.8	91.2

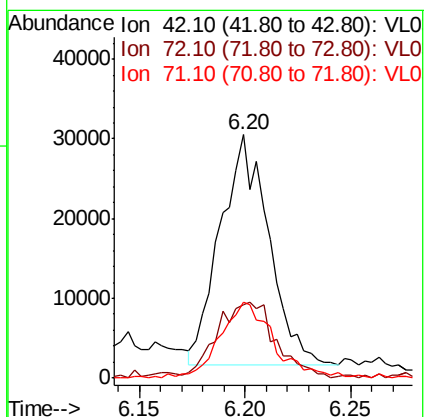
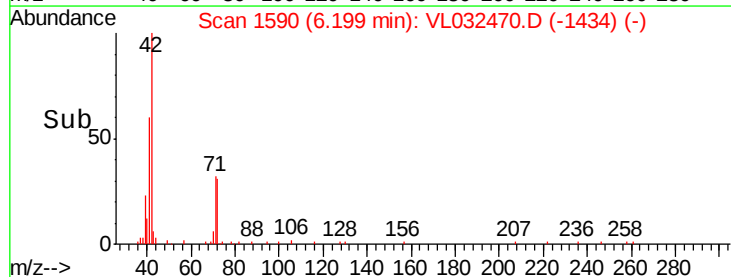
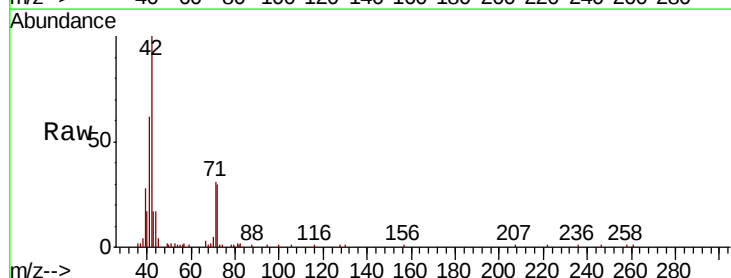
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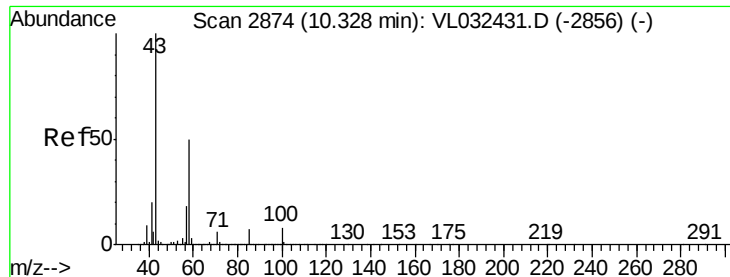
MMDadoda
 9/7/2018 10:46:04 AM



#41
 Tetrahydrofuran
 Concen: 0.40 ppbv
 RT: 6.20 min Scan# 1590
 Delta R.T. 0.00 min
 Lab File: VL032470.D
 Acq: 6 Sep 2018 00:32

Tgt Ion	Ratio	Lower	Upper
42	100		
72	43.7	29.5	44.3
71	38.1	28.3	42.5





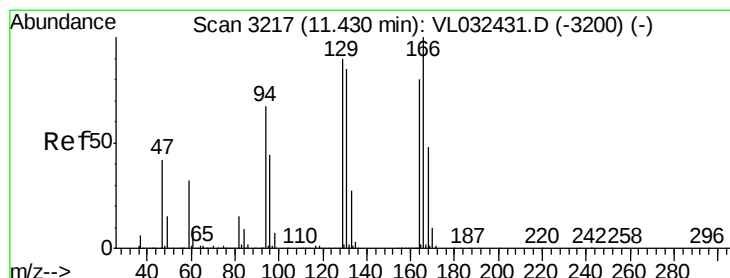
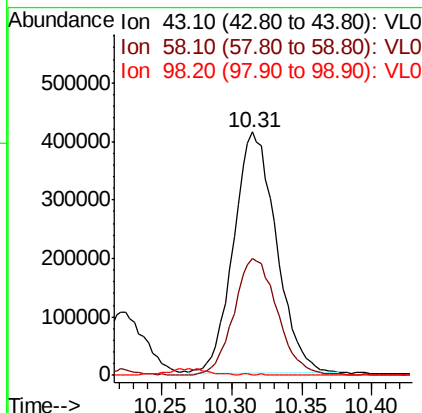
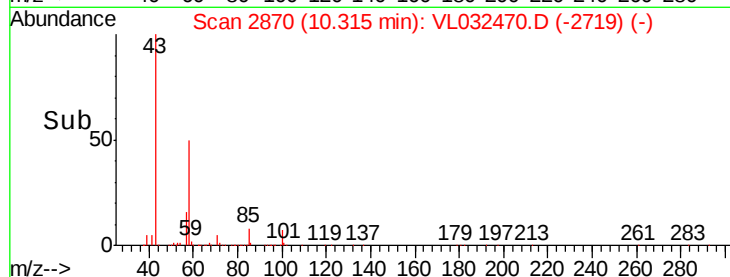
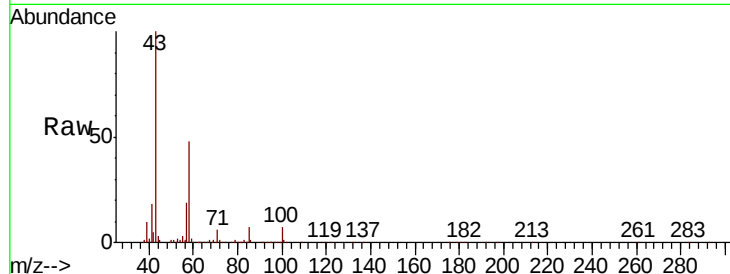
#51
2-Hexanone
Concen: 4.32 ppbv
RT: 10.31 min Scan# 2870
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion	Ratio	Lower	Upper
43	100		
58	49.3	39.2	58.8
98	3.2	0.4	0.6

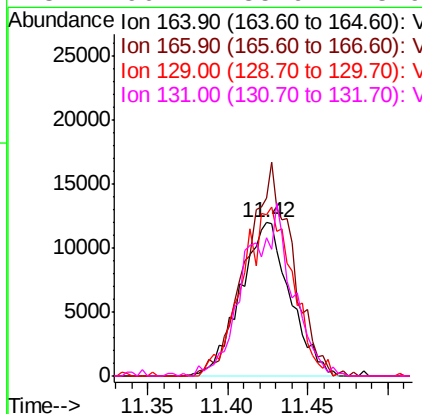
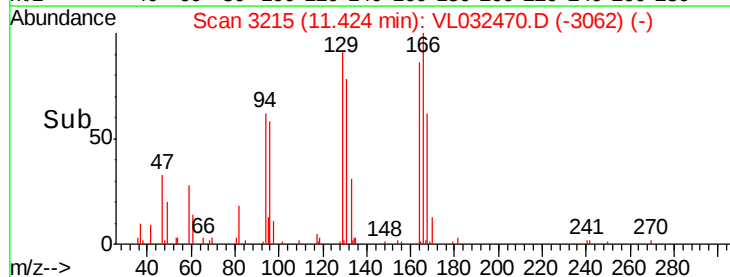
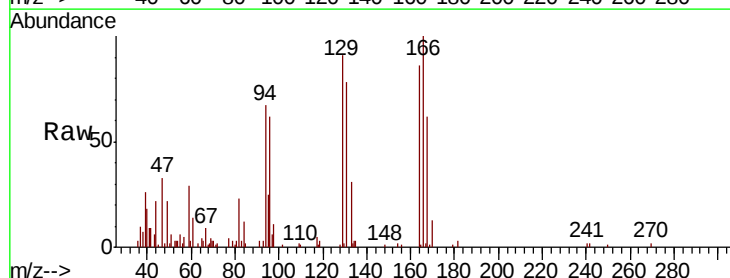
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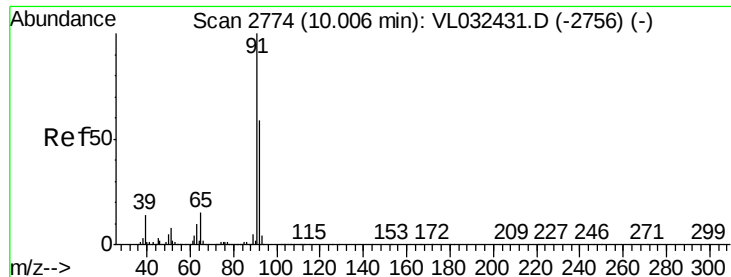
MMDadoda
9/7/2018 10:46:04 AM



#52
Tetrachloroethene
Concen: 0.31 ppbv
RT: 11.42 min Scan# 3215
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion	Ratio	Lower	Upper
164	100		
166	114.9	100.6	150.8
129	105.3	89.9	134.9
131	90.4	85.9	128.9





#53

Toluene

Concen: 1.09 ppbv

RT: 10.00 min Scan# 2771

Delta R.T. -0.01 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Instrument :

MSVOA_L

ClientSampleId :

VP-2DUP

Tot Ion: 91 Resp: 303803

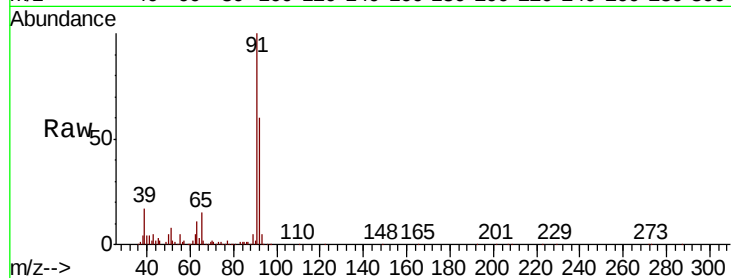
Ion Ratio Lower Upper

91 100

92 59.4 48.1 72.1

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

10.00

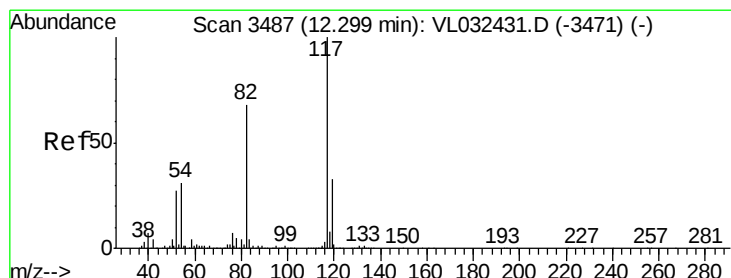
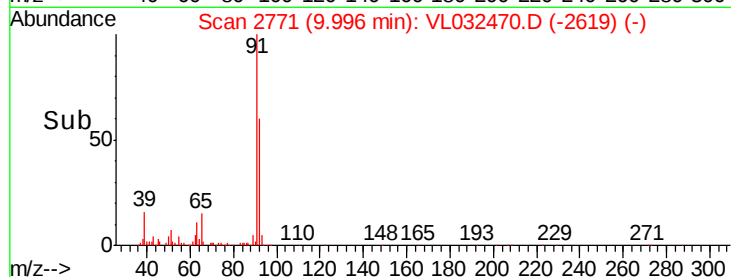
150000

100000

50000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.29 min Scan# 3485

Delta R.T. -0.01 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

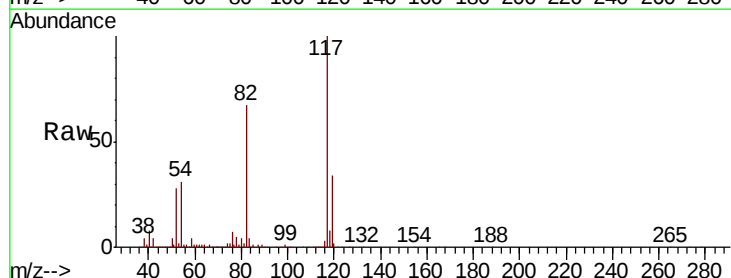
Tgt Ion: 117 Resp: 3187723

Ion Ratio Lower Upper

117 100

82 67.6 53.0 79.6

119 32.2 45.9 68.9#



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

12.29

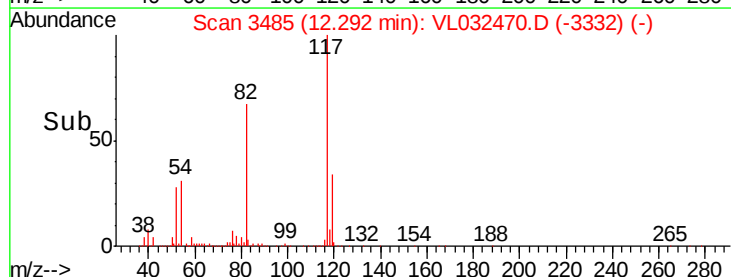
1500000

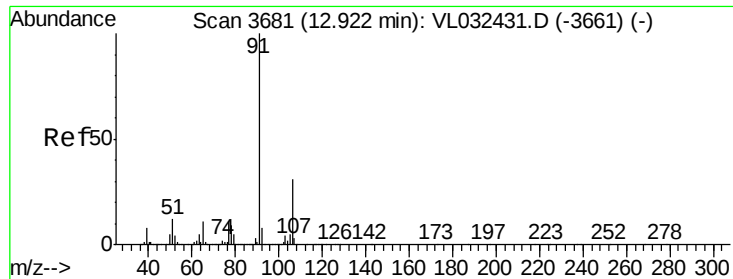
1000000

500000

0

Time-->





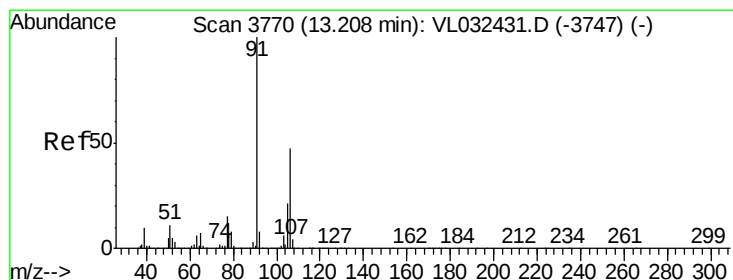
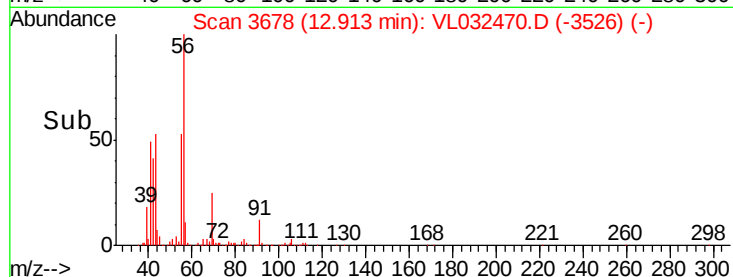
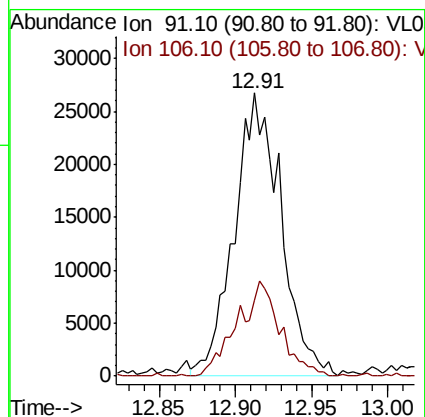
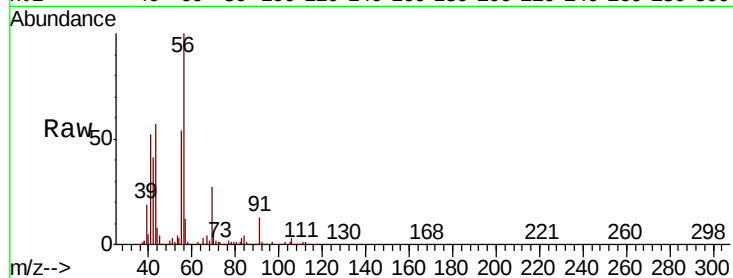
#58
Ethyl Benzene
Concen: 0.15 ppbv m
RT: 12.91 min Scan# 3678
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampleId :
VP-2DUP

Tot Ion: 91 Resp: 56933
Ion Ratio Lower Upper
91 100
106 26.9 24.8 37.2

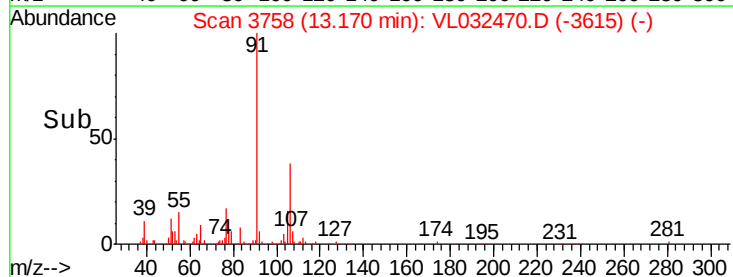
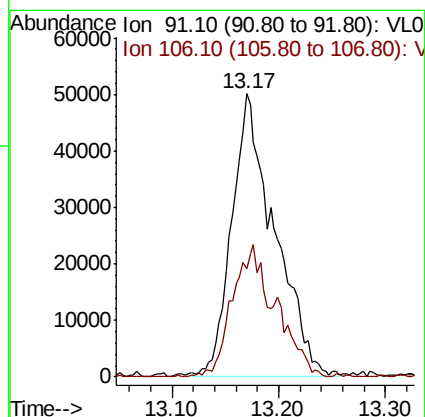
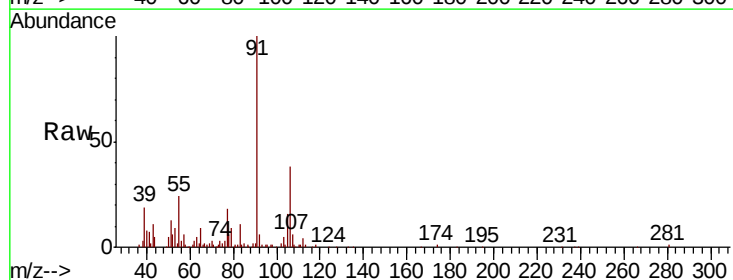
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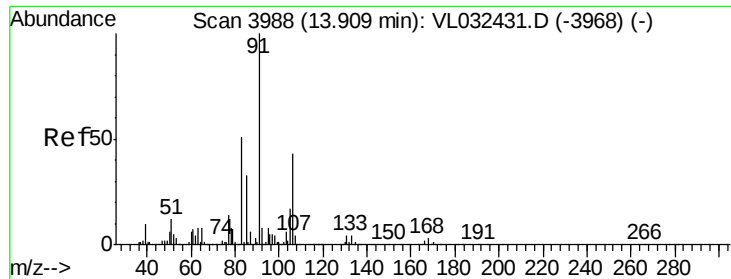
MMDadoda
9/7/2018 10:46:04 AM



#59
m/p-Xylene
Concen: 0.41 ppbv m
RT: 13.17 min Scan# 3758
Delta R.T. -0.04 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion: 91 Resp: 139108
Ion Ratio Lower Upper
91 100
106 0.0 36.6 55.0#





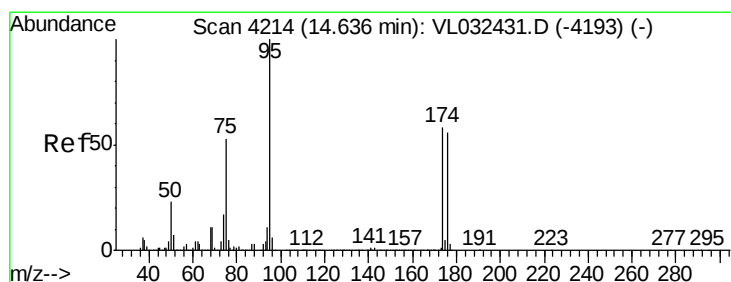
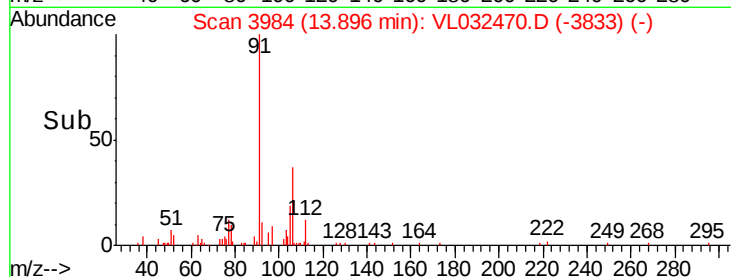
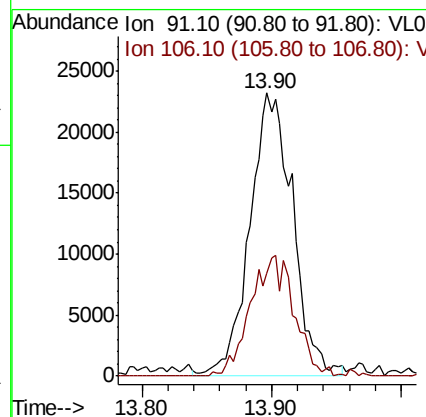
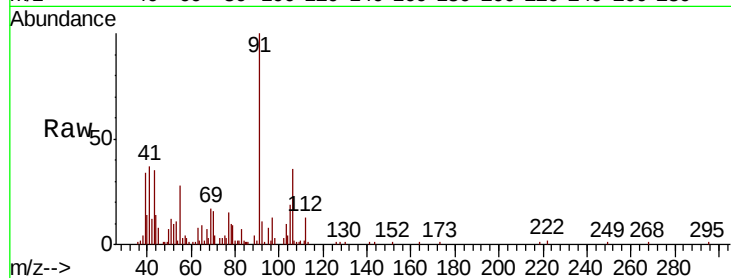
#60
o-Xylene
Concen: 0.16 ppbv m
RT: 13.90 min Scan# 3984
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Instrument :
MSVOA_L
ClientSampled :
VP-2DUP

Tot Ion	Ratio	Lower	Upper
91	100		
106	43.6	21.9	65.7

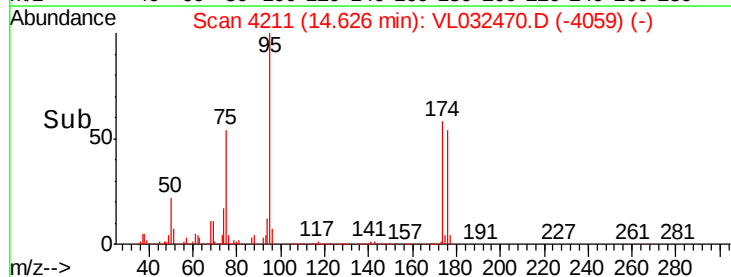
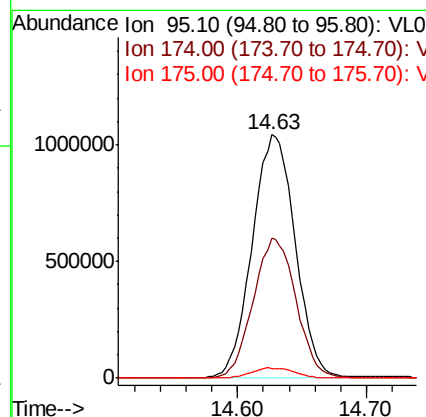
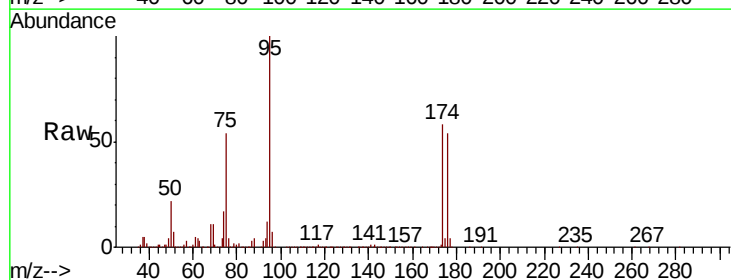
Manual Integrations
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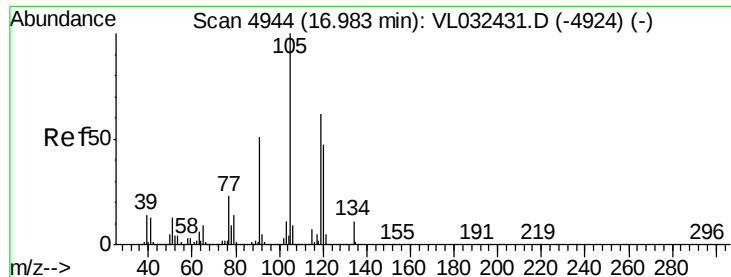
MMDadoda
9/7/2018 10:46:04 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.24 ppbv
RT: 14.63 min Scan# 4211
Delta R.T. -0.01 min
Lab File: VL032470.D
Acq: 6 Sep 2018 00:32

Tgt Ion	Ratio	Lower	Upper
95	100		
174	57.8	46.3	69.5
175	4.2	3.4	5.0





#74

1,2,4-Trimethylbenzene

Concen: 0.20 ppbv m

RT: 16.97 min Scan# 4939

Delta R.T. -0.02 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Instrument :

MSVOA_L

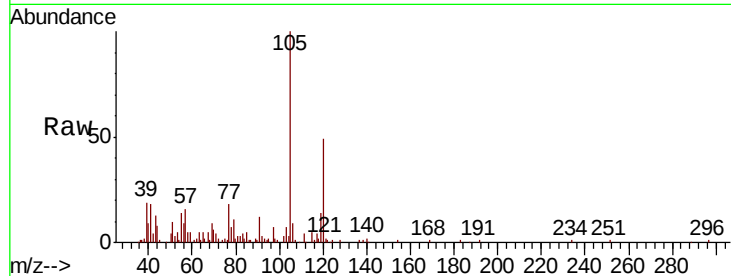
ClientSampleId :

VP-2DUP

Tot Ion:	105	Resp:	80457
Ion Ratio		Lower	Upper
105	100		
120	48.7	37.8	56.8
91	12.5	41.4	62.0#
77	17.7	18.6	28.0#

Manual Integrations
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MMDadoda
9/7/2018 10:46:04 AM



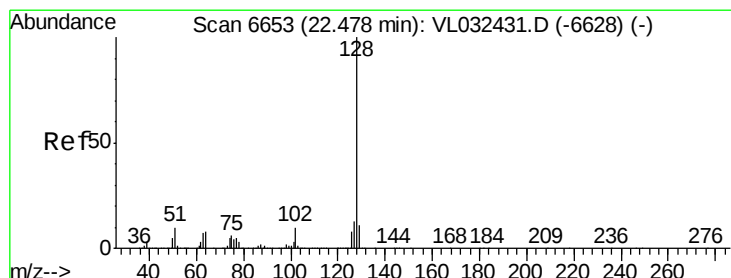
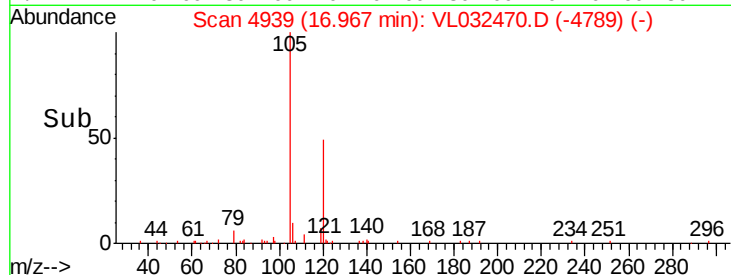
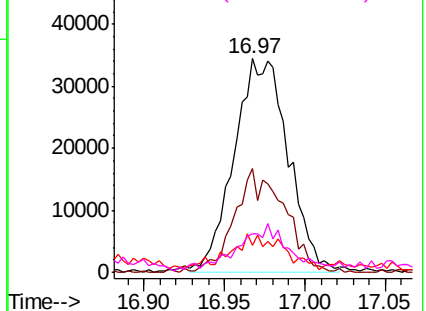
Abundance

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: 5.15 ppbv

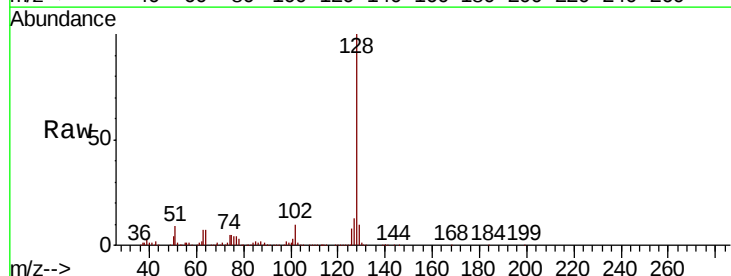
RT: 22.47 min Scan# 6651

Delta R.T. -0.01 min

Lab File: VL032470.D

Acq: 6 Sep 2018 00:32

Tgt Ion:	128	Resp:	1673522
Ion Ratio		Lower	Upper
128	100		
127	12.5	10.2	15.2
129	9.7	8.5	12.7

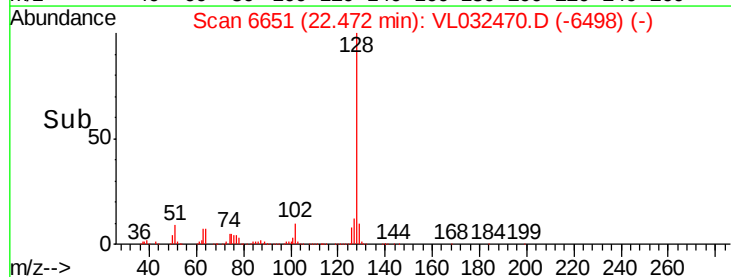
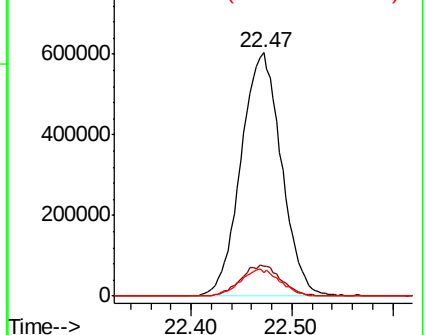


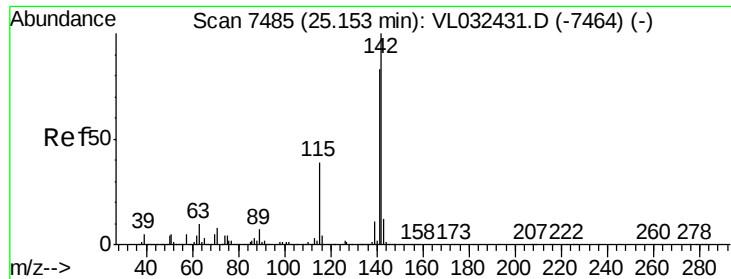
Abundance

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





#80
 Naphthalene, 2-methyl-
 Concen: 7.20 ppbv
 RT: 25.15 min Scan# 7485
 Delta R.T. -0.00 min
 Lab File: VL032470.D
 Acq: 6 Sep 2018 00:32

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-2DUP

Tot Ion:	142	Resp:	622444
Ion Ratio	Lower	Upper	
142	100		
141	84.2	67.0	100.6
115	38.9	31.3	46.9

Manual Integrations
 APPROVED

MMDadoda
 9/7/2018 10:46:04 AM

