

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051719\
 Data File : VL033714.D
 Acq On : 17 May 2019 13:23
 Operator : SY/AP
 Sample : K2904-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 S-01

Manual Integrations
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 5/20/2019 12:06:07 PM

Quant Time: May 18 01:00:17 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May 18 2019
 QLast Update : Fri May 17 08:15:41 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1074975	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2767205	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2525515	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.57	95	2065601	10.09	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	38712m	0.171	ppbv	
3) Chlorodifluoromethane	3.01	51	1745861m	14.179	ppbv	
4) Chloromethane	3.17	50	26779	0.380	ppbv	90
10) Heptane	8.25	43	16891m	0.114	ppbv	
11) Trichlorofluoromethane	4.00	101	1922284	88.902	ppbv #	74
13) Ethanol	3.66	45	2581196	152.481	ppbv	99
15) Acetone	3.90	43	3218049m	21.576	ppbv	
17) tert-Butyl alcohol	4.37	59	418398	3.469	ppbv	99
20) Methylene Chloride	4.41	84	575822	10.027	ppbv	98
26) Hexane	5.78	57	751633	6.673	ppbv #	42
27) Carbon Disulfide	4.62	76	382725	2.477	ppbv	97
29) Chloroform	5.85	83	2235670	10.776	ppbv	98
30) Cyclohexane	7.24	84	10949m	0.116	ppbv	
31) cis-1,2-Dichloroethene	5.64	61	221962	1.987	ppbv	91
32) 1,1,1-Trichloroethane	6.62	97	16224m	0.078	ppbv	
34) 2-Butanone	5.33	43	247756	1.444	ppbv	98
35) Carbon Tetrachloride	7.14	117	15865	0.072	ppbv	96
36) Benzene	7.00	78	72586m	0.288	ppbv	
38) Trichloroethene	7.96	130	2519799	26.977	ppbv	96
42) Bromodichloromethane	7.92	83	59163	0.266	ppbv	100
52) Tetrachloroethene	11.37	164	1519203	17.169	ppbv	97
53) Toluene	9.94	91	345869	1.274	ppbv	100
59) m/p-Xylene	13.11	91	68244m	0.233	ppbv	
61) Styrene	13.68	104	21201	0.107	ppbv	94
69) p-Isopropyltoluene	17.81	119	33564m	0.080	ppbv	
74) 1,2,4-Trimethylbenzene	16.92	105	36127m	0.101	ppbv	
80) Naphthalene, 2-methyl-	25.11	142	12519	0.099	ppbv	98

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

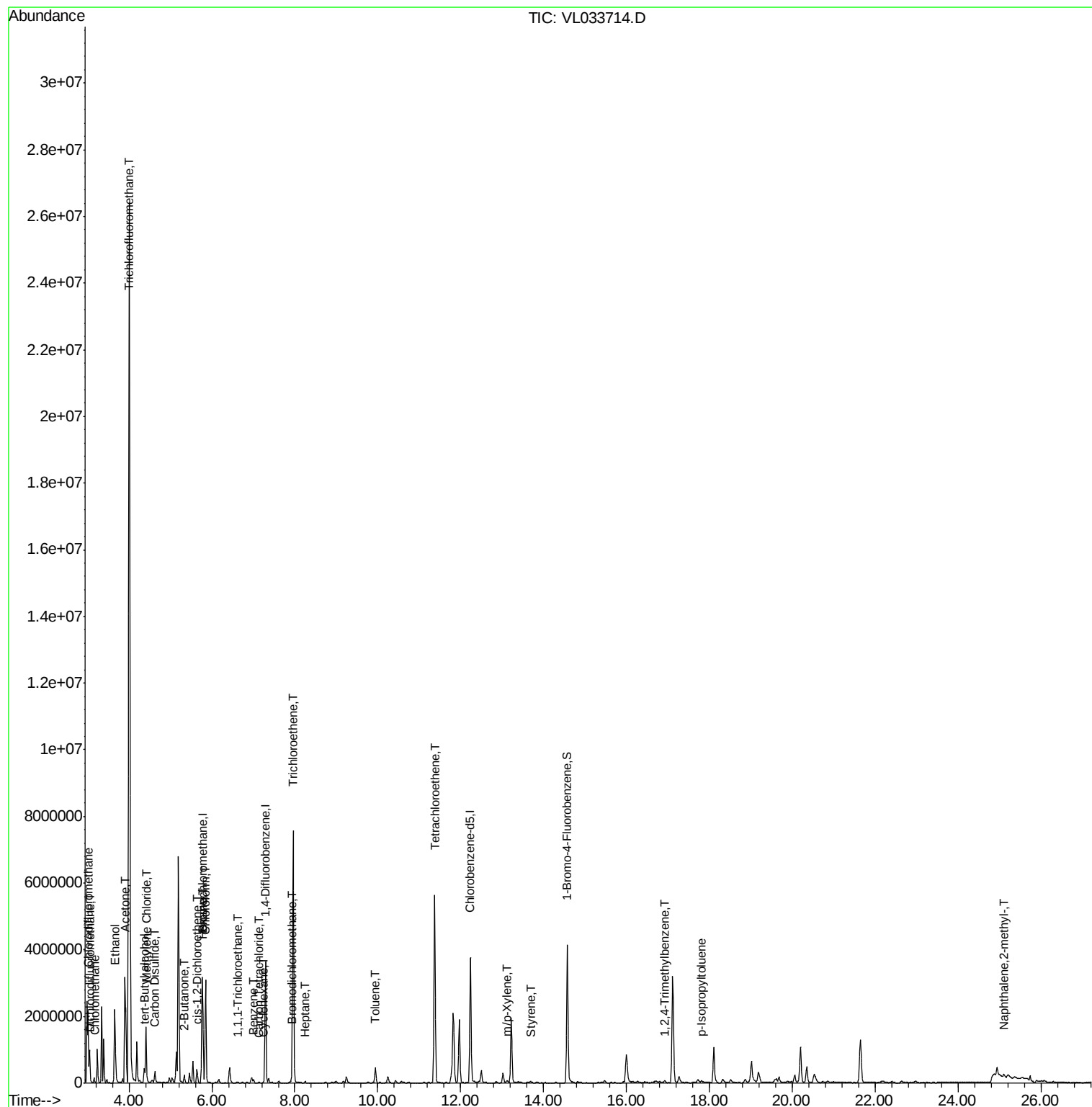
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051719\
Data File : VL033714.D
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

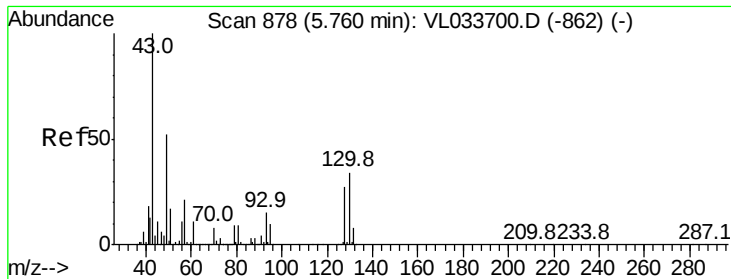
Instrument :
MSVOA_L
ClientSampleId :
S-01

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Quant Time: May 18 01:00:17 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May
QLast Update : Fri May 17 08:15:41 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. 0.00 min

Lab File: VL033714.D

Acq: 17 May 2019 13:23

Instrument :

MSVOA_L

ClientSampled :

S-01

Tot Ion: 49 Resp: 1074975

Ion Ratio Lower Upper

49 100

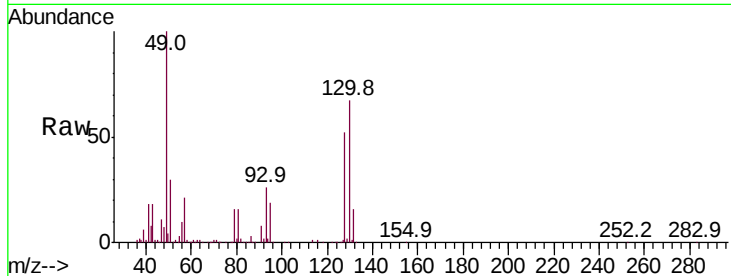
128 52.4 25.2 75.6

130 67.3 32.5 97.5

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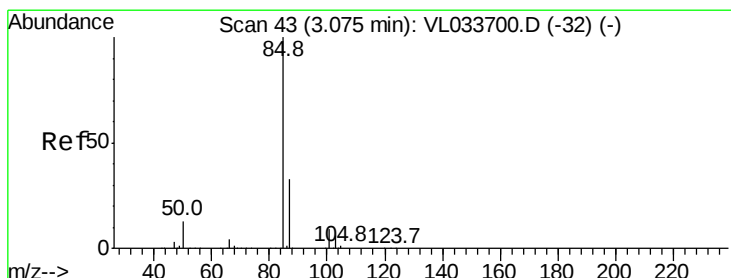
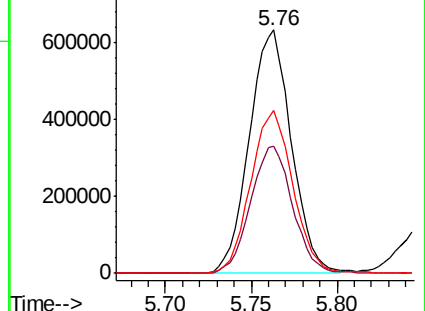
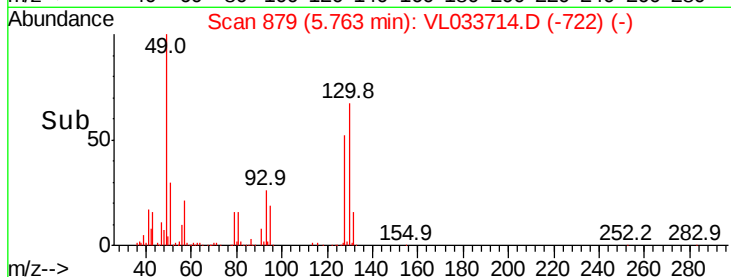


Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

5.76



#2

Dichlorodifluoromethane

Concen: 0.171 ppbv m

RT: 3.08 min Scan# 43

Delta R.T. 0.00 min

Lab File: VL033714.D

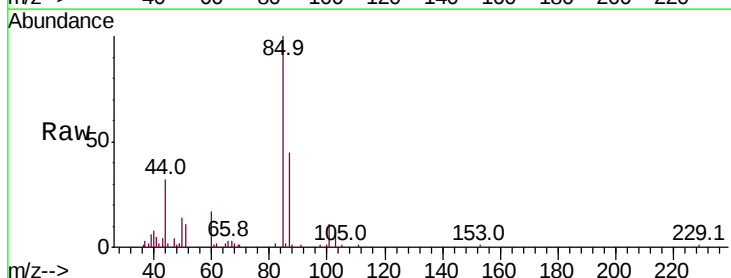
Acq: 17 May 2019 13:23

Tgt Ion: 85 Resp: 38712

Ion Ratio Lower Upper

85 100

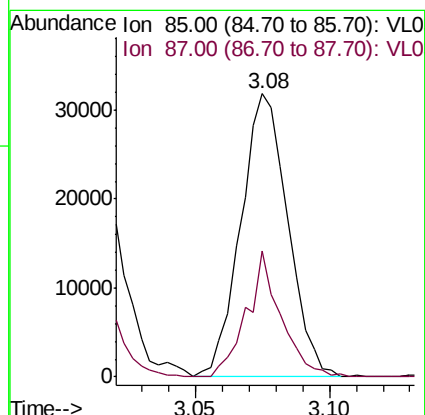
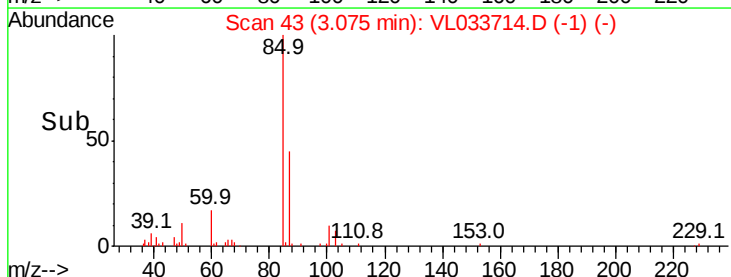
87 44.6 26.3 39.5#

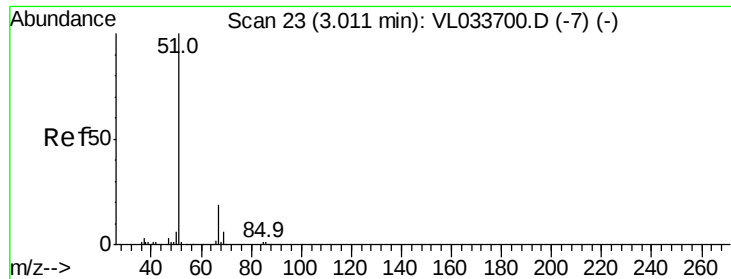


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.08





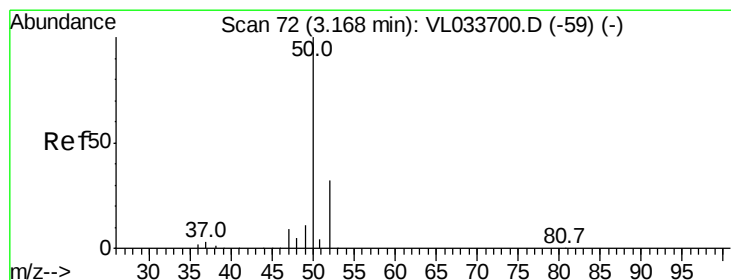
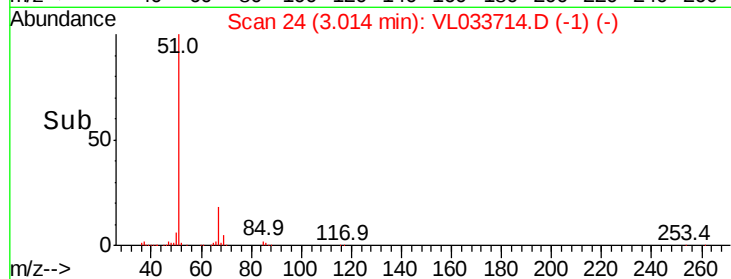
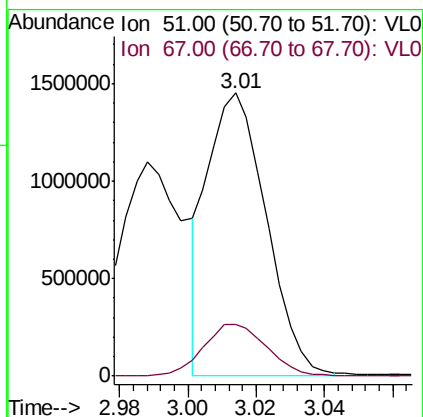
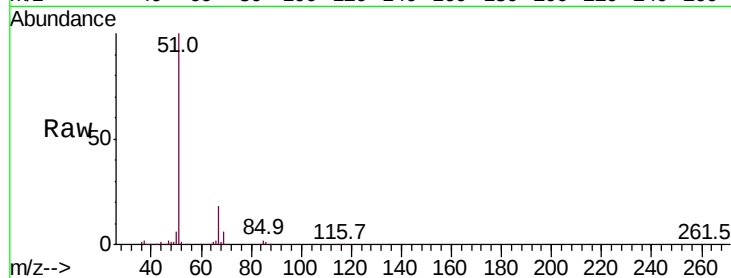
#3
Chlorodifluoromethane
Concen: 14.179 ppbv
RT: 3.01 min Scan# 24
Delta R.T. 0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion: 51 Resp: 1745861
Ion Ratio Lower Upper
51 100
67 19.9 15.6 23.4

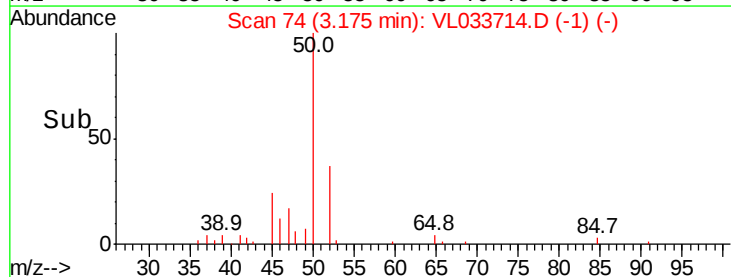
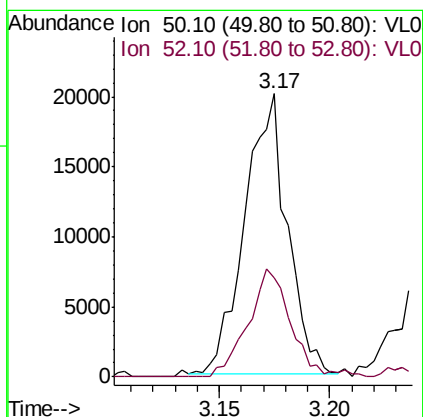
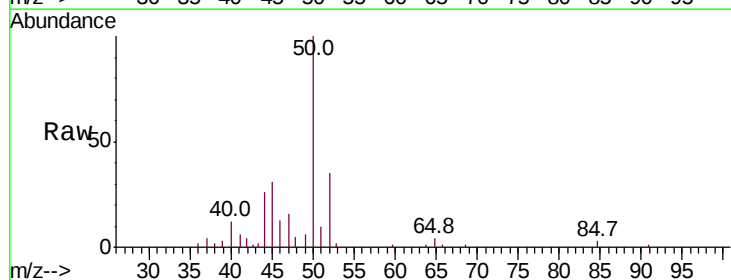
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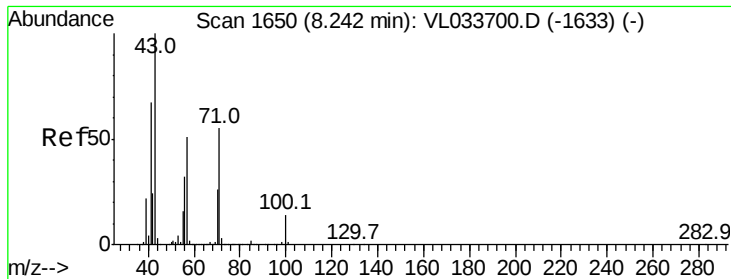
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#4
Chloromethane
Concen: 0.380 ppbv
RT: 3.17 min Scan# 74
Delta R.T. 0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion: 50 Resp: 26779
Ion Ratio Lower Upper
50 100
52 37.8 25.7 38.5





#10

Heptane

Concen: 0.114 ppbv m

RT: 8.25 min Scan# 1651

Delta R.T. 0.00 min

Lab File: VL033714.D

Acq: 17 May 2019 13:23

Instrument :

MSVOA_L

ClientSampled :

S-01

Tot Ion: 43 Resp: 16891

Ion Ratio Lower Upper

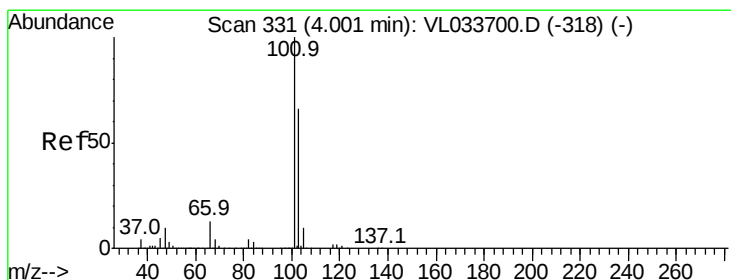
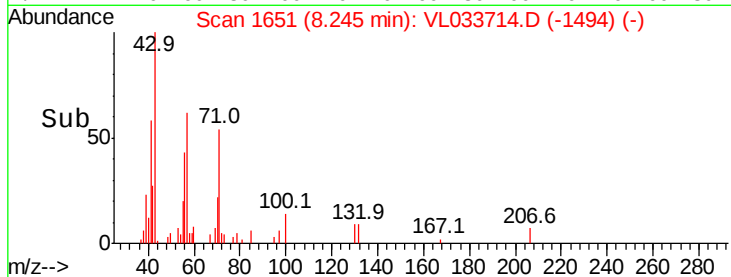
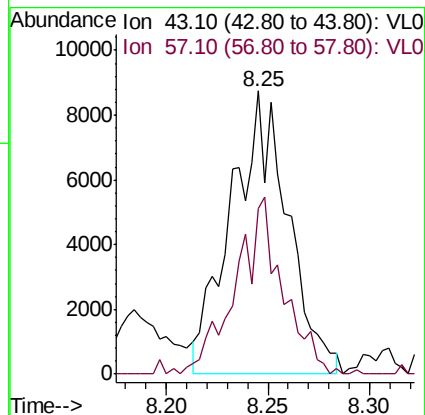
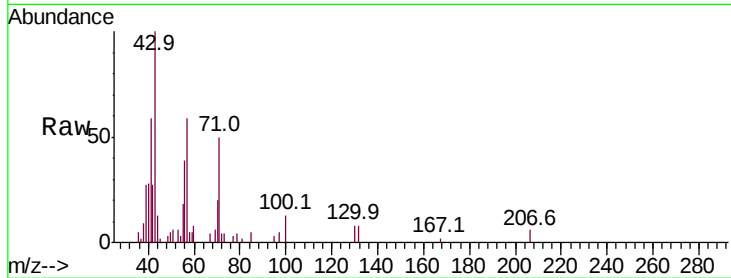
43 100

57 0.0 41.4 62.0#

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#11

Trichlorofluoromethane

Concen: 88.902 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033714.D

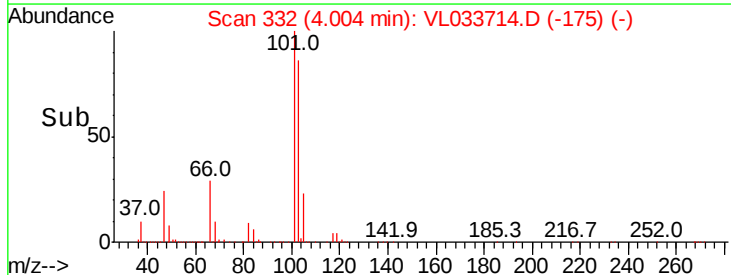
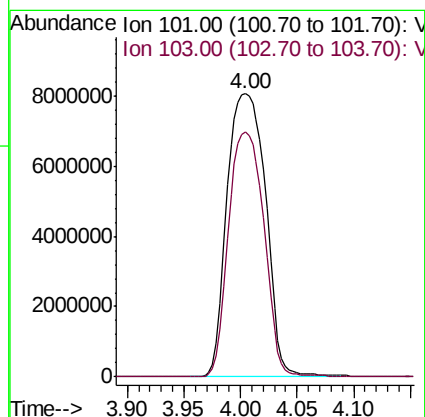
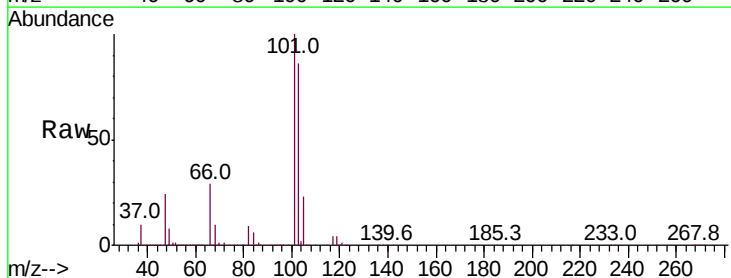
Acq: 17 May 2019 13:23

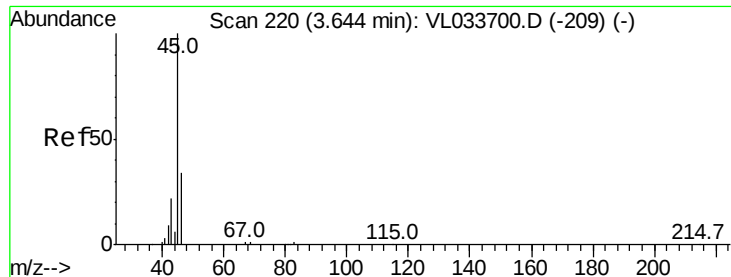
Tgt Ion: 101 Resp: 19222284

Ion Ratio Lower Upper

101 100

103 86.4 52.6 78.8#





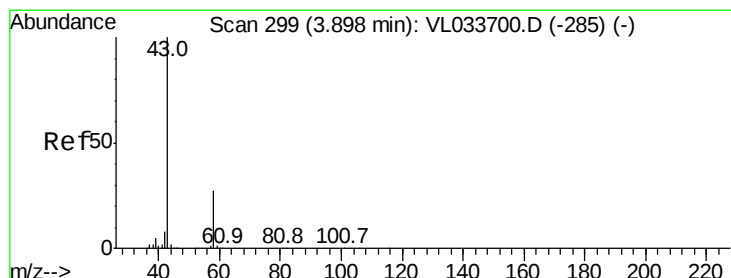
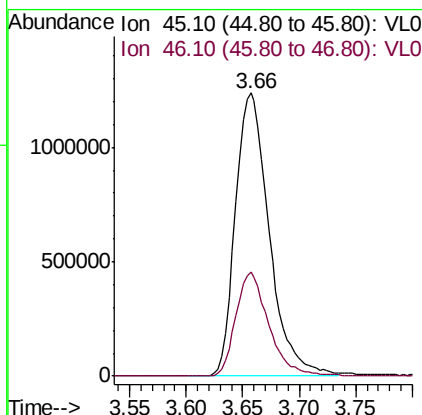
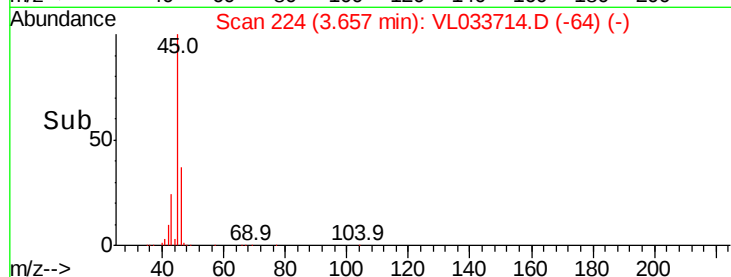
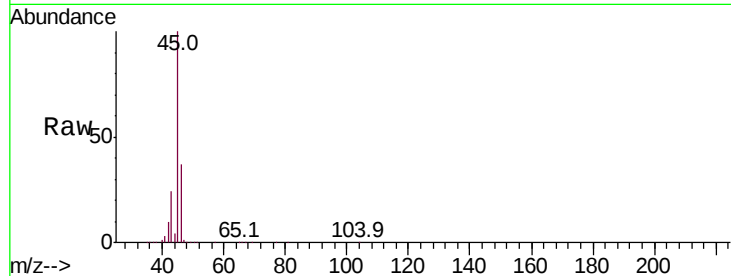
#13
Ethanol
Concen: 152.481 ppbv
RT: 3.66 min Scan# 224
Delta R.T. 0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion: 45 Resp: 2581196
Ion Ratio Lower Upper
45 100
46 36.3 14.8 59.0

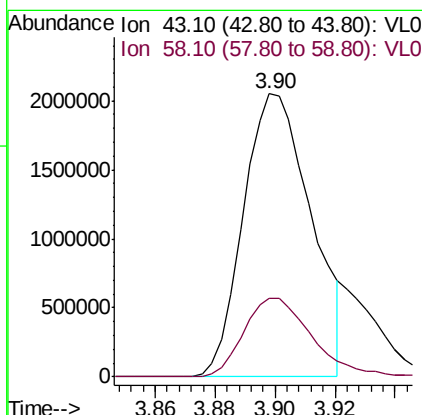
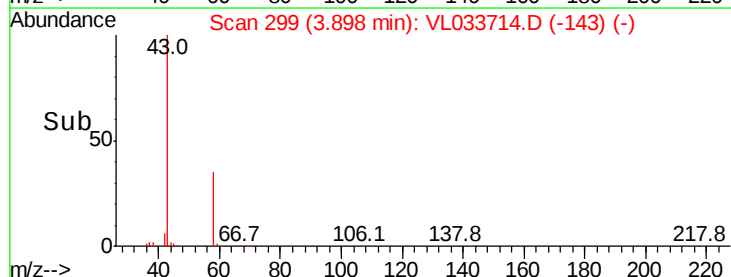
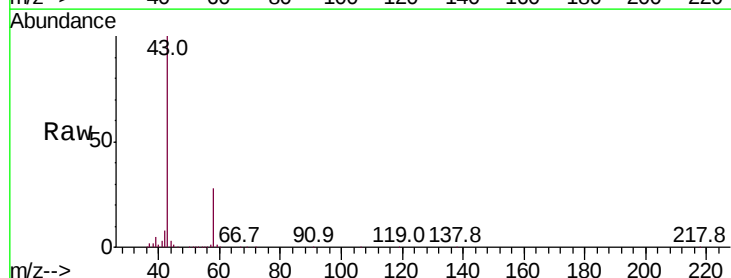
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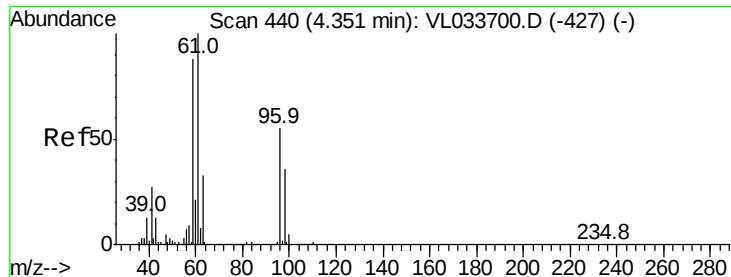
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#15
Acetone
Concen: 21.576 ppbv m
RT: 3.90 min Scan# 299
Delta R.T. 0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion: 43 Resp: 3218049
Ion Ratio Lower Upper
43 100
58 28.3 21.3 31.9





#17

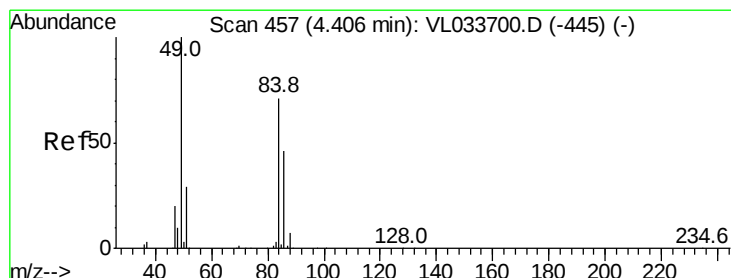
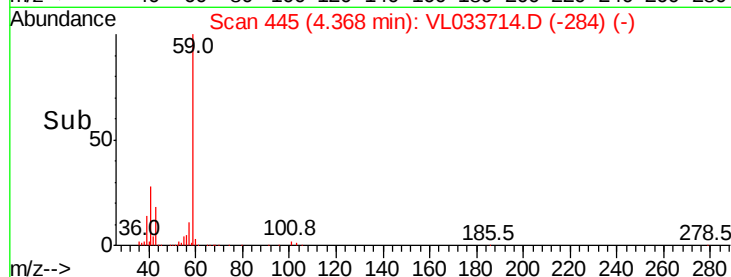
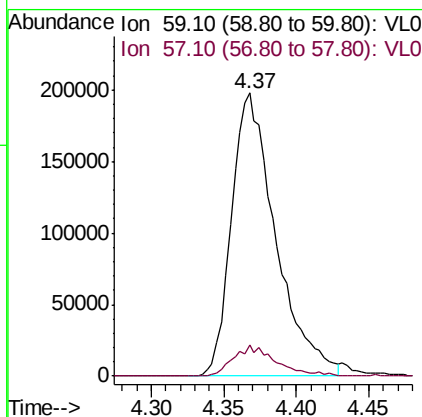
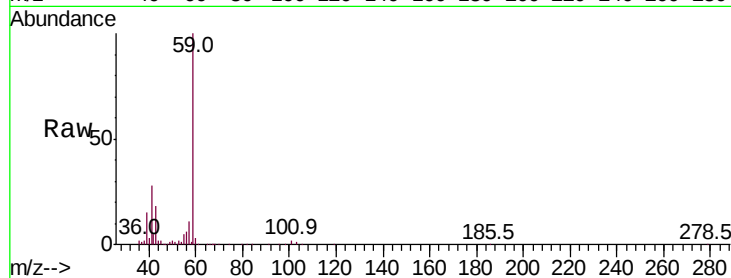
tert-Butyl alcohol
Concen: 3.469 ppbv
RT: 4.37 min Scan# 445
Delta R.T. 0.02 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion	59	Resp	418398
Ion Ratio	100	Lower	Upper
57	10.8	8.4	12.6

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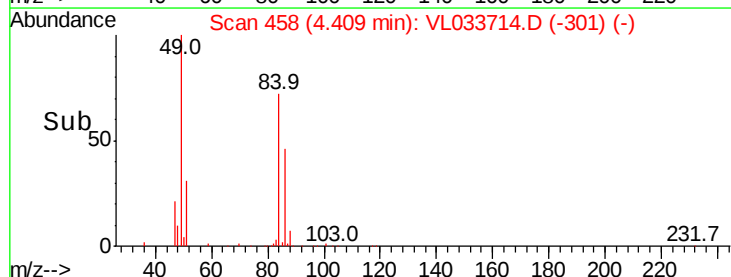
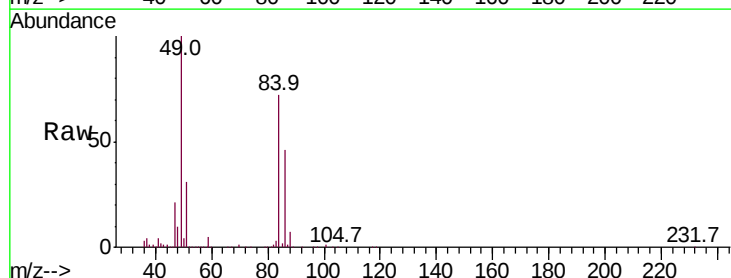
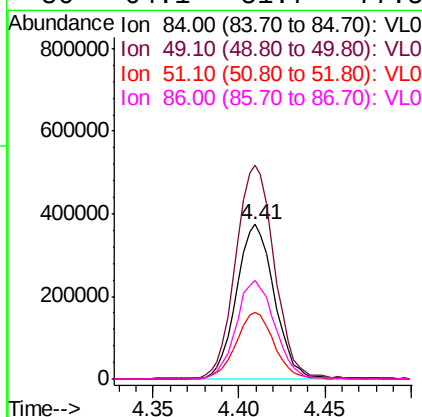
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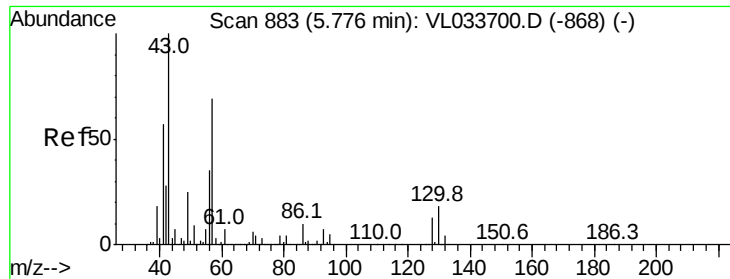


#20

Methylene Chloride
Concen: 10.027 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	84	Resp	575822
Ion Ratio	100	Lower	Upper
49	138.1	112.8	169.2
51	42.5	33.4	50.0
86	64.1	51.7	77.5





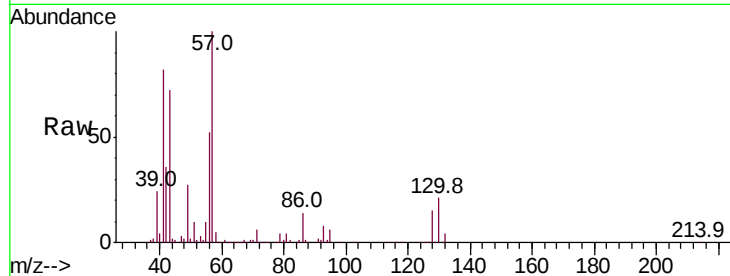
#26
Hexane
Concen: 6.673 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

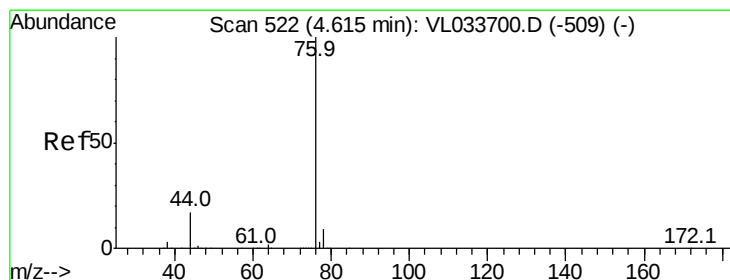
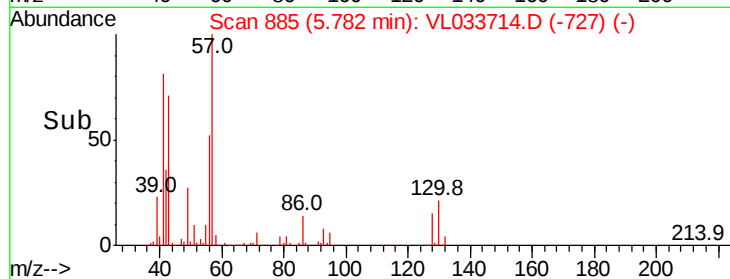
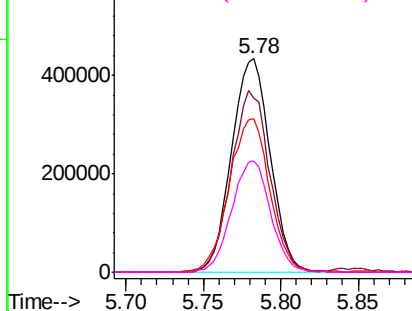
Tot Ion	Ratio	Lower	Upper
57	100		
41	84.9	69.8	104.6
43	76.0	181.8	272.6#
56	52.6	42.1	63.1

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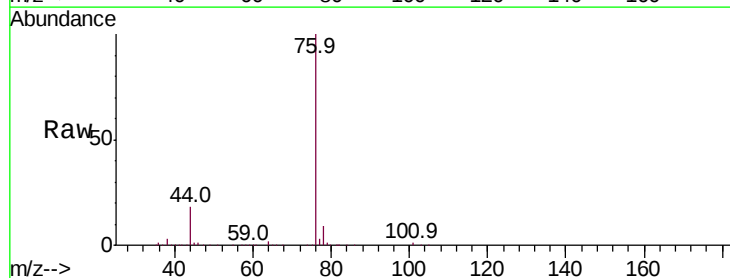


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

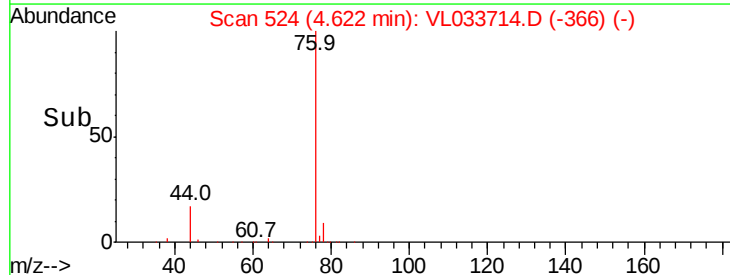
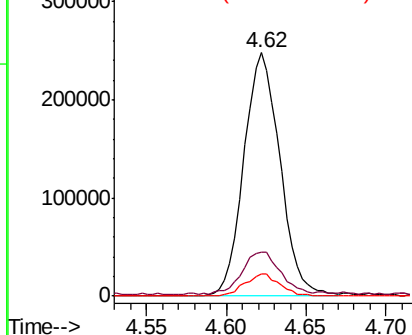


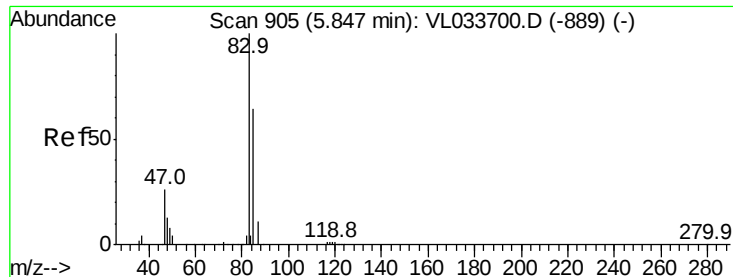
#27
Carbon Disulfide
Concen: 2.477 ppbv
RT: 4.62 min Scan# 524
Delta R.T. 0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Lower	Upper
76	100		
44	19.4	13.8	20.8
78	8.9	7.4	11.0



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





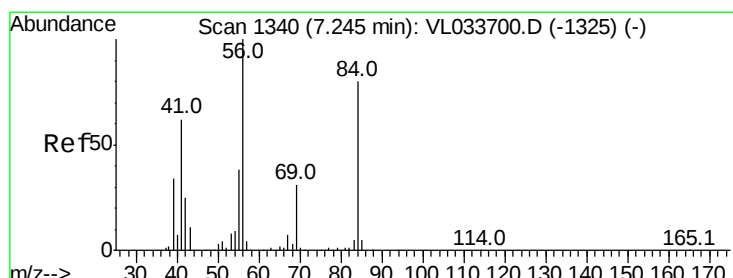
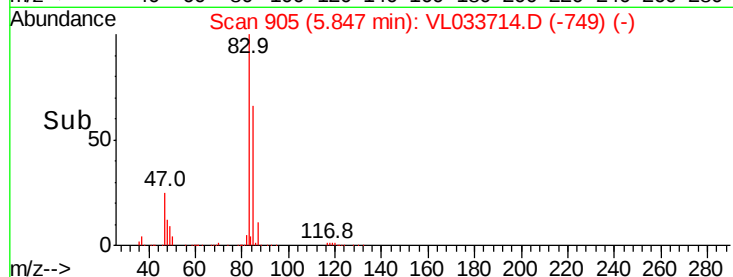
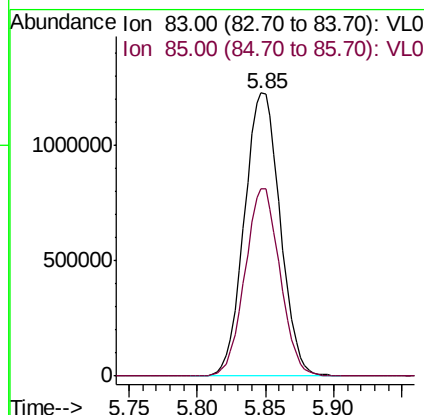
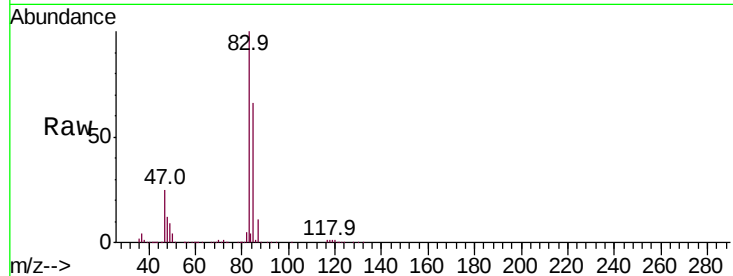
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Chloroform
Concen: 10.776 ppbv
RT: 5.85 min Scan# 905
Delta R.T. 0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion: 83 Resp: 2235670
Ion Ratio Lower Upper
83 100
85 65.9 51.5 77.3

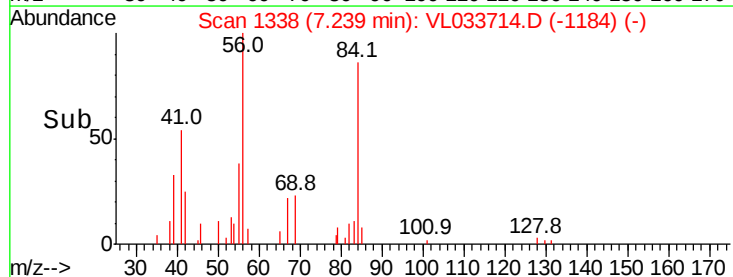
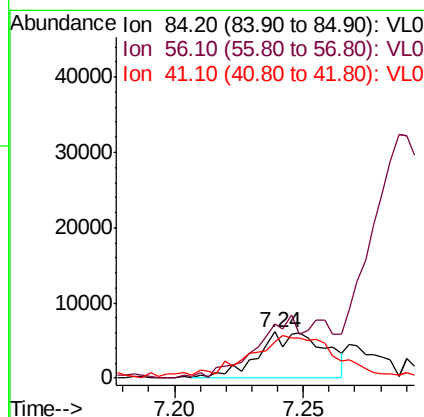
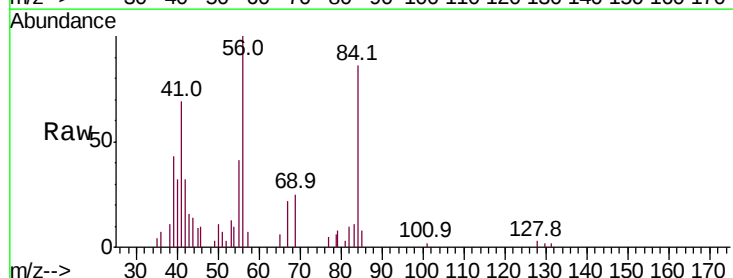
Manual Integrations
APPROVED

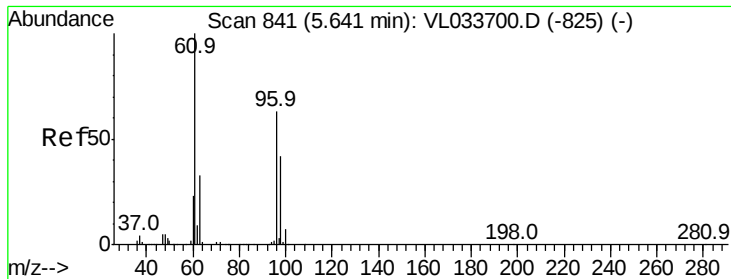
MMDadoda
5/20/2019 12:06:07 PM



#30
Cyclohexane
Concen: 0.116 ppbv m
RT: 7.24 min Scan# 1338
Delta R.T. -0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion: 84 Resp: 10949
Ion Ratio Lower Upper
84 100
56 0.0 107.7 161.5#
41 0.0 66.0 99.0#





#31

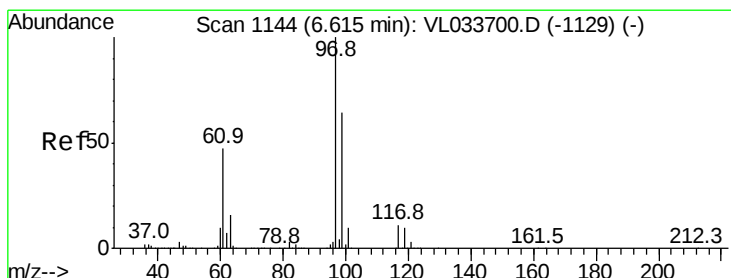
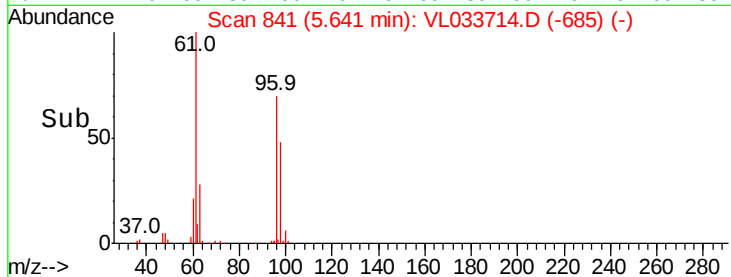
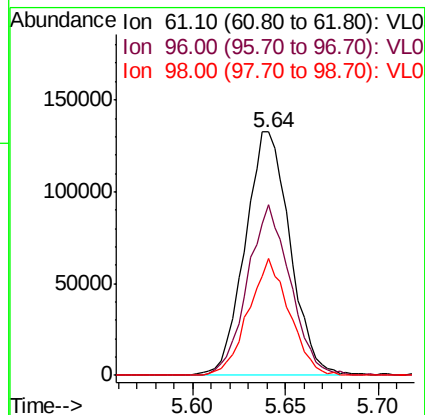
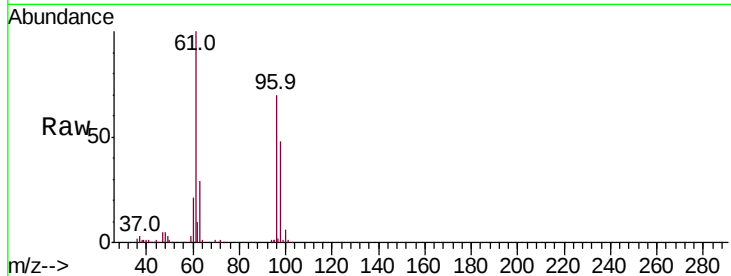
cis-1,2-Dichloroethene
Concen: 1.987 ppbv
RT: 5.64 min Scan# 841
Delta R.T. 0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion	Ratio	Resp	Lower	Upper
61	100	221962		
96	70.1		50.8	76.2
98	48.2		33.3	49.9

Manual Integrations
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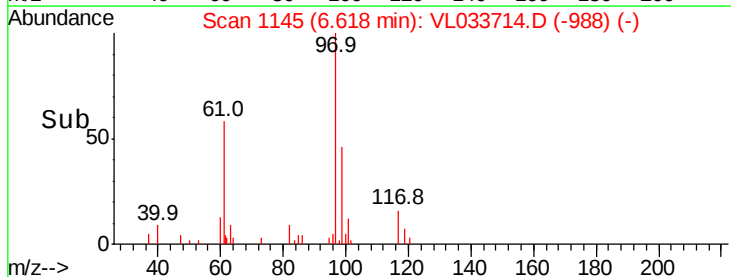
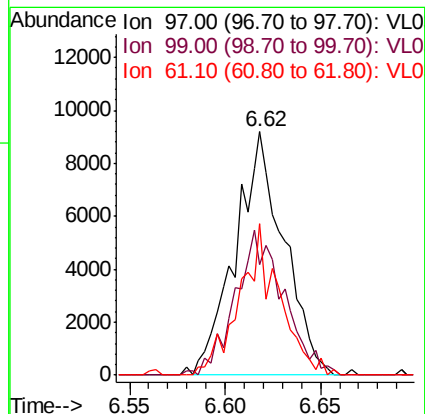
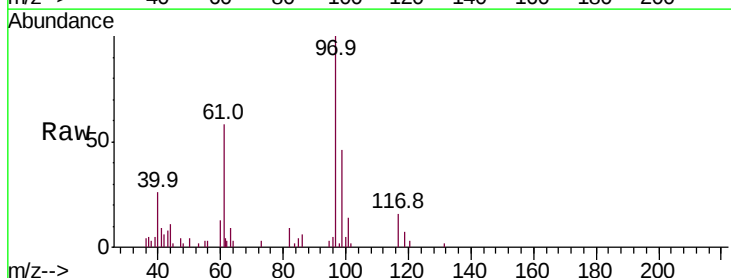
MMDadoda
5/20/2019 12:06:07 PM

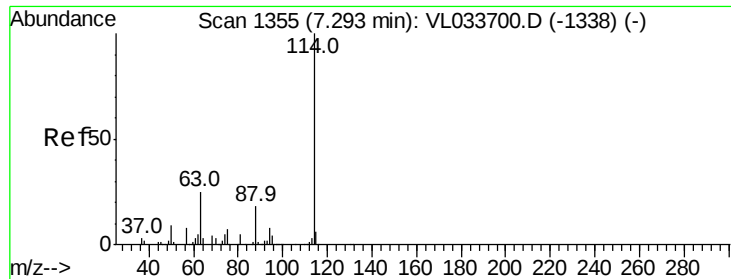


#32

1,1,1-Trichloroethane
Concen: 0.078 ppbv m
RT: 6.62 min Scan# 1145
Delta R.T. 0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Resp	Lower	Upper
97	100	16224		
99	59.0		51.5	77.3
61	51.4		37.8	56.8





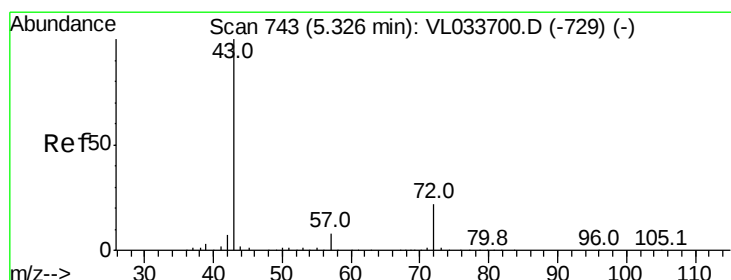
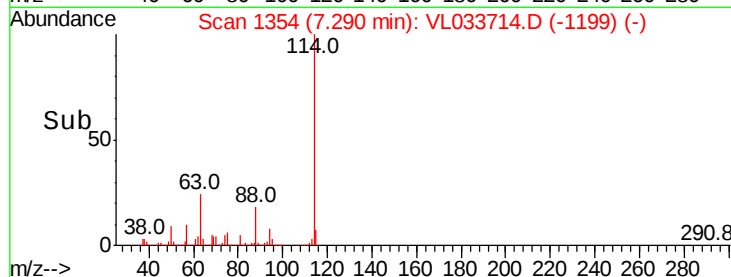
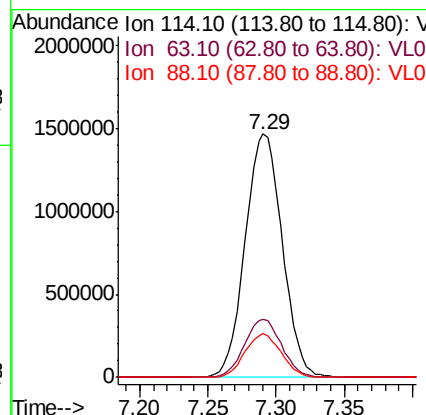
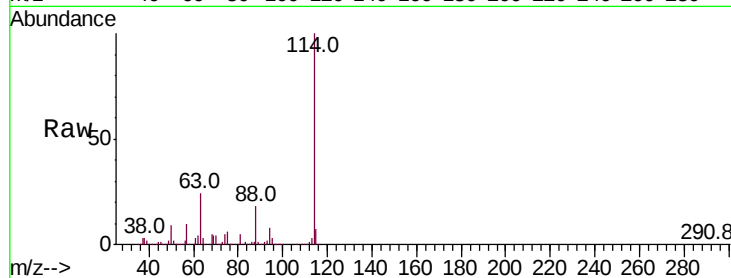
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampleId :
S-01

Tot Ion	Ratio	Lower	Upper
114	100		
63	23.9	20.9	31.3
88	17.6	14.3	21.5

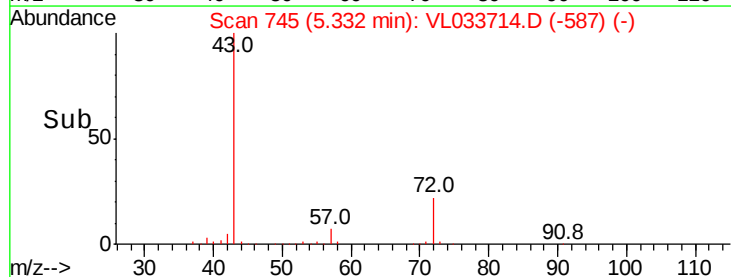
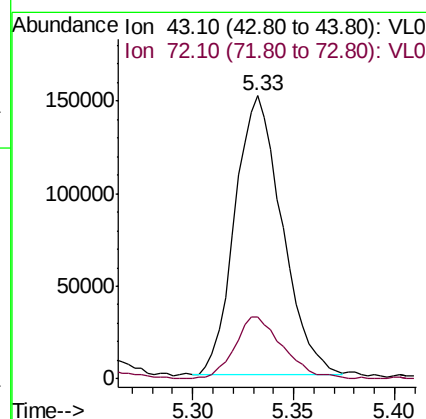
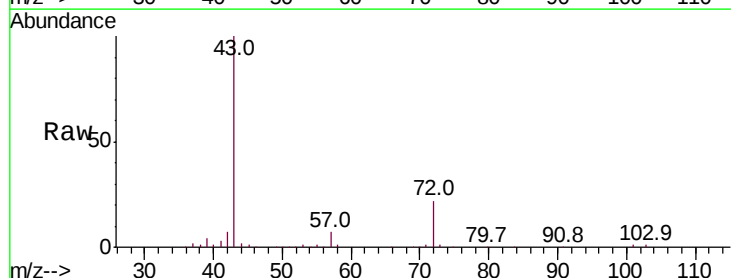
Manual Integrations
APPROVED

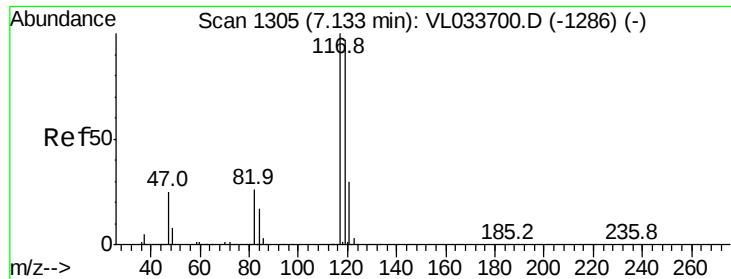
MMDadoda
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#34
2-Butanone
Concen: 1.444 ppbv
RT: 5.33 min Scan# 745
Delta R.T. 0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.1	17.8	26.6





#35

Carbon Tetrachloride

Concen: 0.072 ppbv

RT: 7.14 min Scan# 1306

Delta R.T. 0.00 min

Lab File: VL033714.D

Acq: 17 May 2019 13:23

Instrument :

MSVOA_L

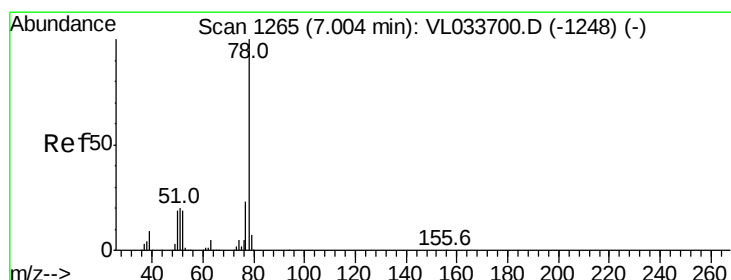
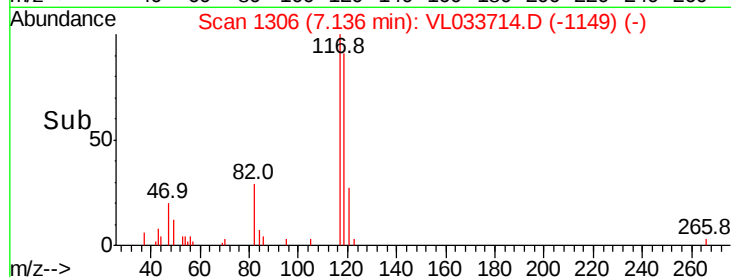
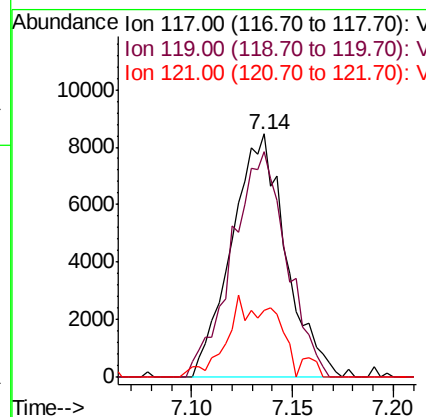
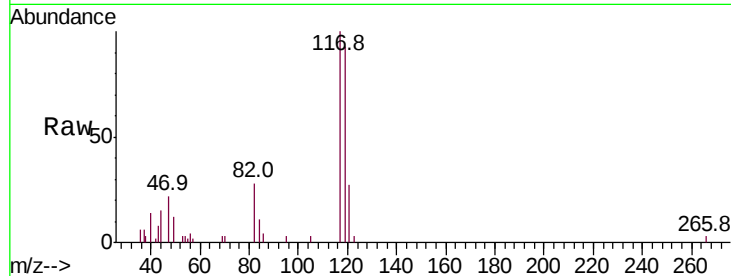
ClientSampled :

S-01

Tot Ion	Ratio	Lower	Upper
117	100		
119	92.7	77.2	115.8
121	27.5	24.1	36.1

Manual Integrations
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#36

Benzene

Concen: 0.288 ppbv m

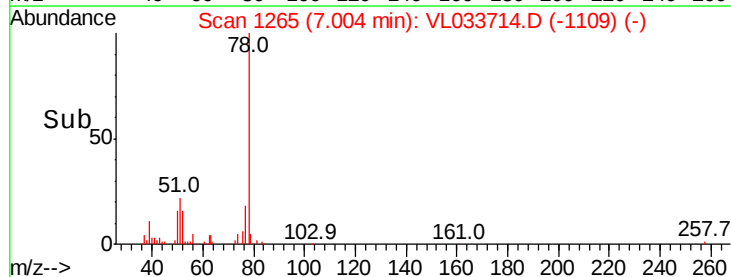
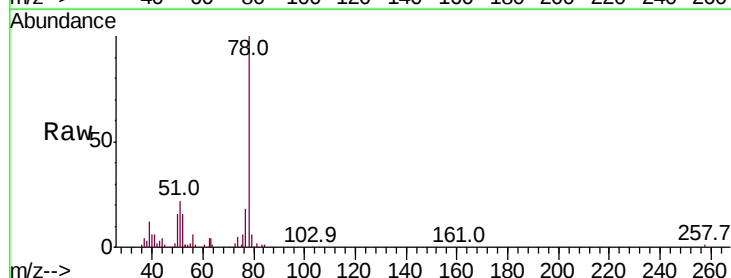
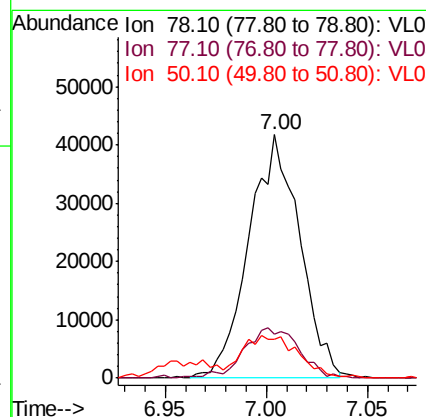
RT: 7.00 min Scan# 1265

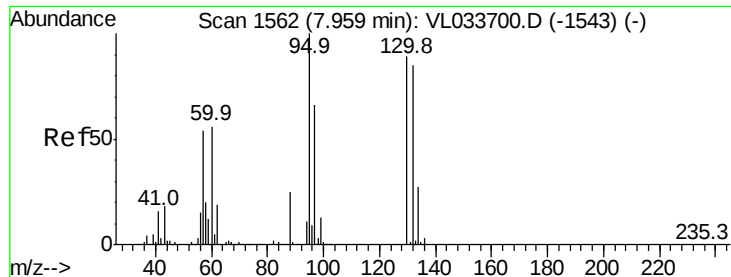
Delta R.T. 0.00 min

Lab File: VL033714.D

Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Lower	Upper
78	100		
77	17.9	18.4	27.6#
50	15.7	15.5	23.3





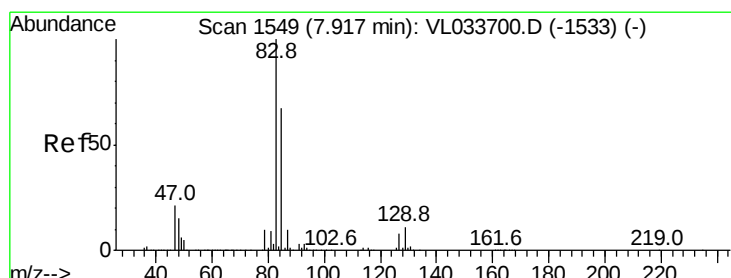
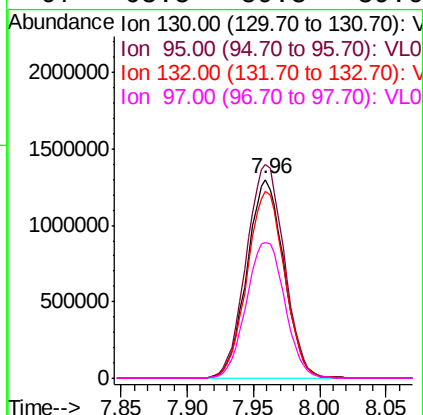
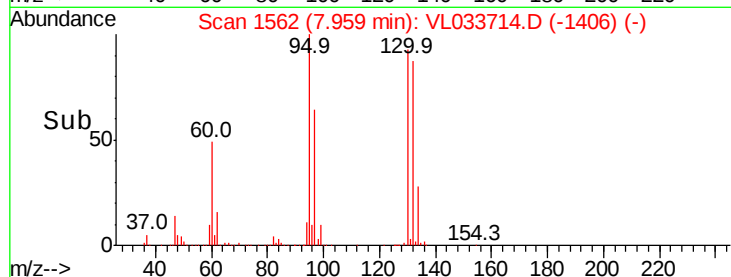
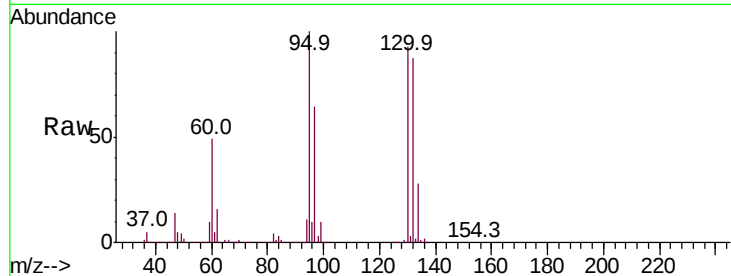
#38
 Trichloroethene
 Concen: 26.977 ppbv
 RT: 7.96 min Scan# 1562
 Delta R.T. 0.00 min
 Lab File: VL033714.D
 Acq: 17 May 2019 13:23

Instrument :
 MSVOA_L
 ClientSampleId :
 S-01

Tot Ion	Ratio	Lower	Upper
130	100		
95	107.5	90.2	135.4
132	93.8	76.4	114.6
97	68.5	59.8	89.6

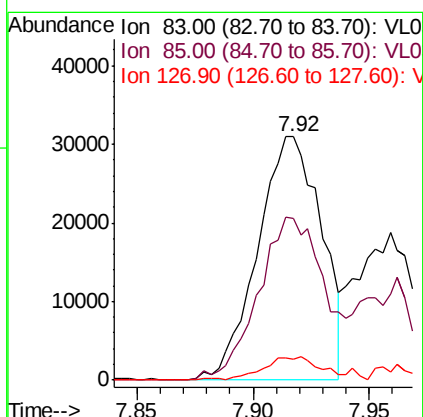
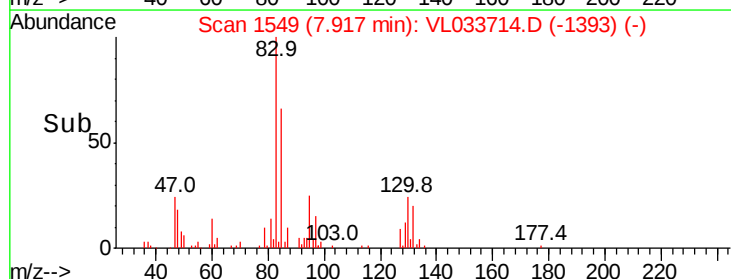
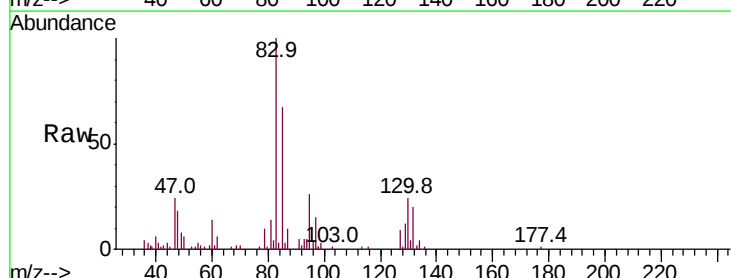
Manual Integrations
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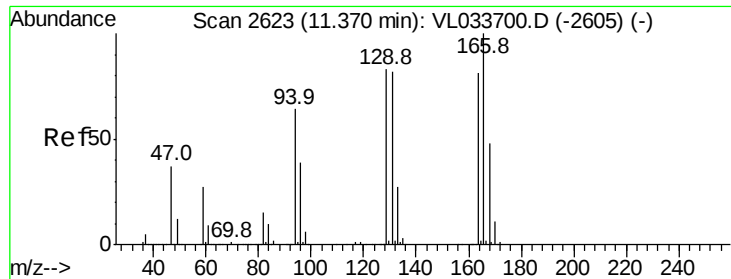
MMDadoda
 5/20/2019 12:06:07 PM



#42
 Bromodichloromethane
 Concen: 0.266 ppbv
 RT: 7.92 min Scan# 1549
 Delta R.T. 0.00 min
 Lab File: VL033714.D
 Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Lower	Upper
83	100		
85	66.5	53.3	79.9
127	8.6	6.5	9.7





#52

Tetrachloroethene

Concen: 17.169 ppbv

RT: 11.37 min Scan# 2623

Delta R.T. 0.00 min

Lab File: VL033714.D

Acq: 17 May 2019 13:23

Instrument :

MSVOA_L

ClientSampled :

S-01

Tot Ion:164 Resp: 1519203

Ion Ratio Lower Upper

164 100

166 128.9 98.9 148.3

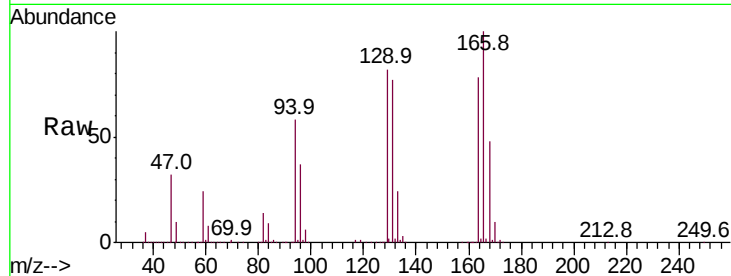
129 105.1 81.8 122.6

131 99.3 81.1 121.7

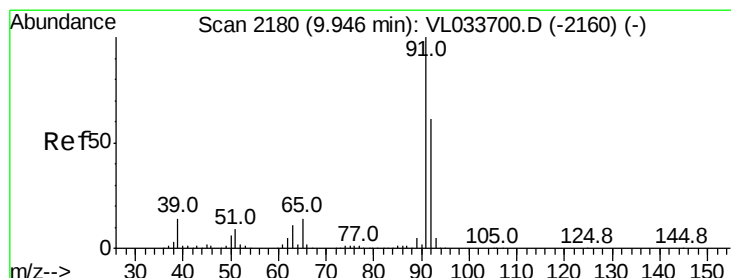
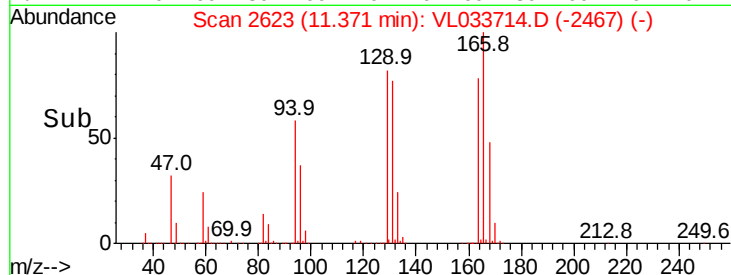
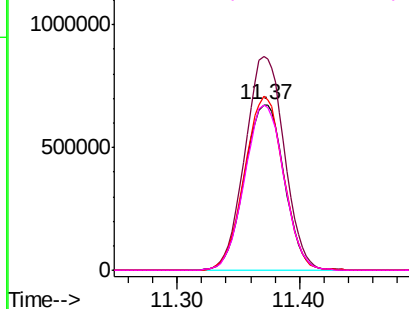
Manual Integrations
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Abundance Ion 163.90 (163.60 to 164.60): V
Ion 165.90 (165.60 to 166.60): V
Ion 129.00 (128.70 to 129.70): V
Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 1.274 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033714.D

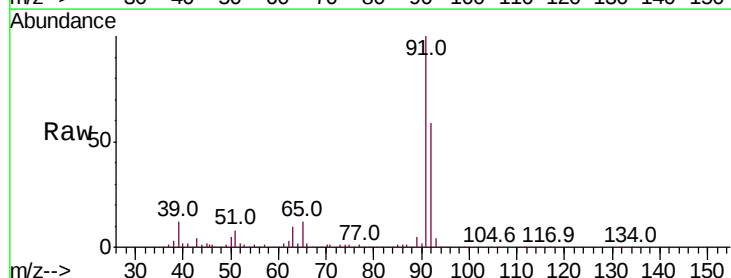
Acq: 17 May 2019 13:23

Tgt Ion: 91 Resp: 345869

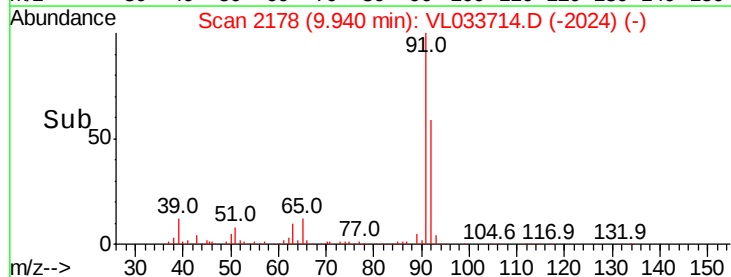
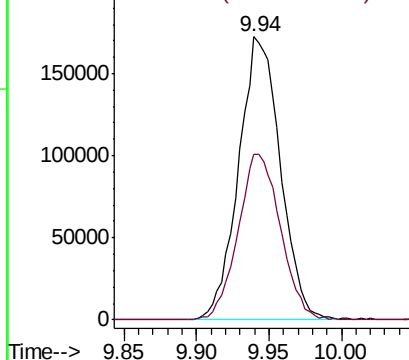
Ion Ratio Lower Upper

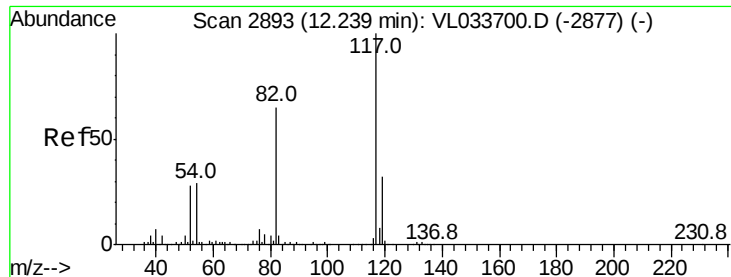
91 100

92 59.6 47.6 71.4



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0





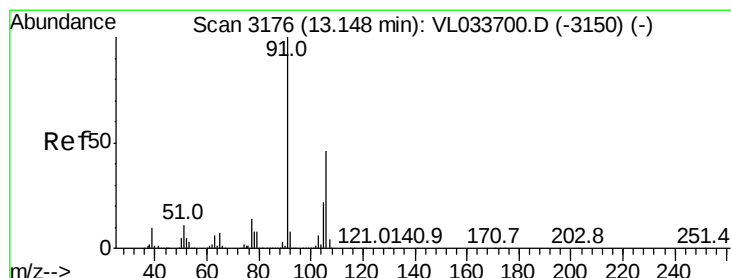
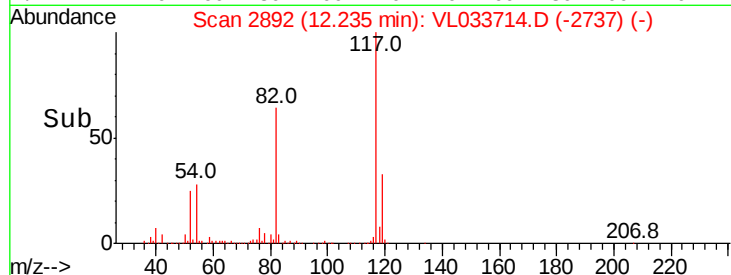
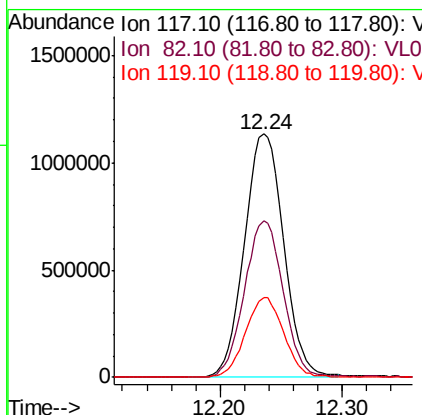
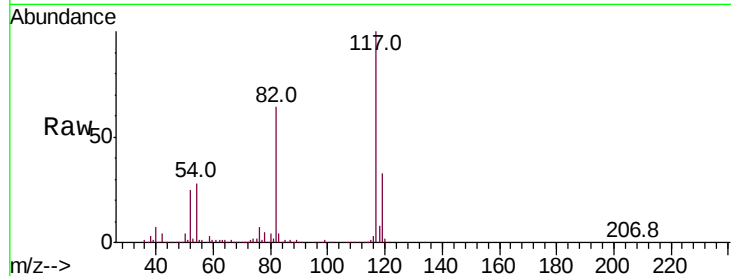
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2892
Delta R.T. -0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampleId :
S-01

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.3	49.4	74.0
119	32.3	24.9	37.3

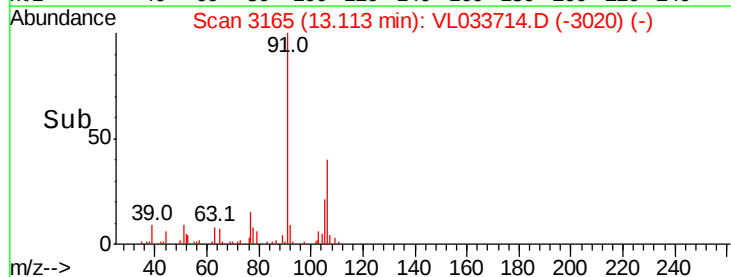
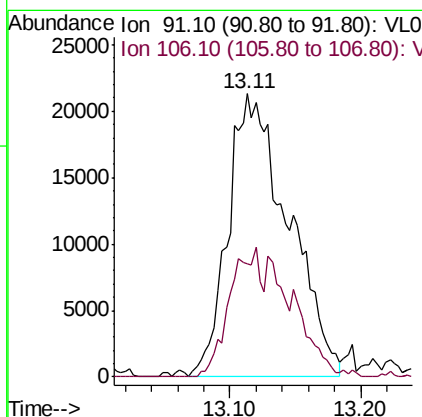
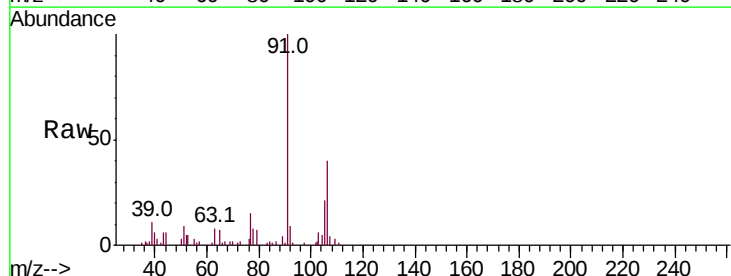
Manual Integrations
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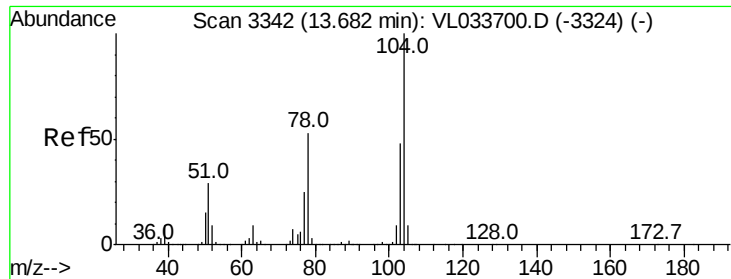
MMDadoda
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#59
m/p-Xylene
Concen: 0.233 ppbv m
RT: 13.11 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.8	53.6#





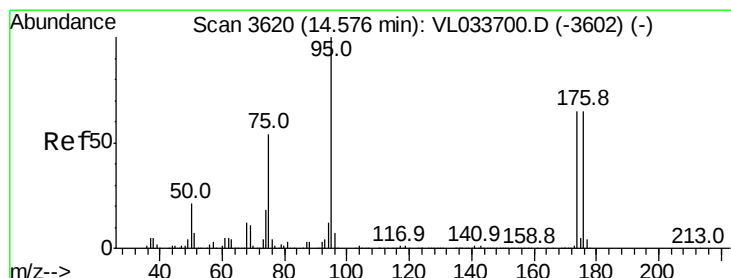
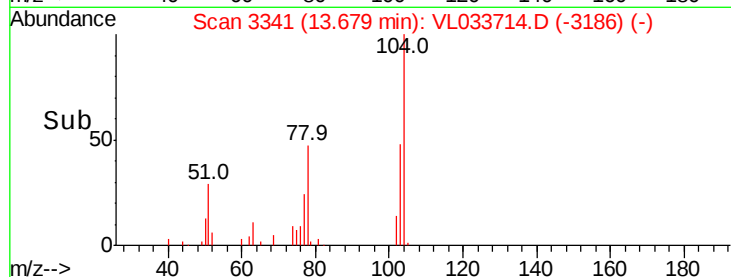
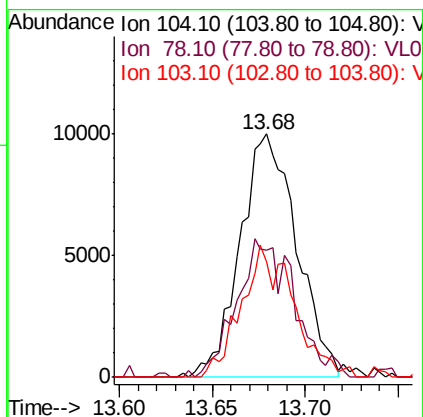
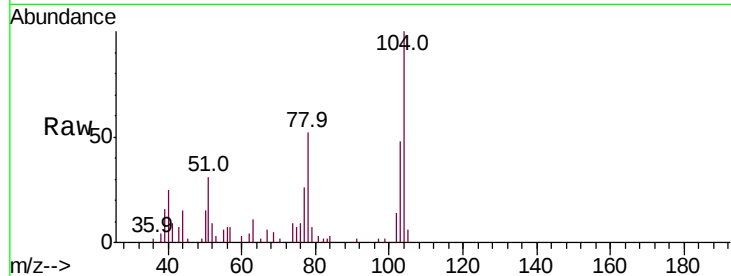
#61
Stvrene
Concen: 0.107 ppbv
RT: 13.68 min Scan# 3341
Delta R.T. -0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion	Ratio	Lower	Upper
104	100		
78	58.6	42.6	64.0
103	50.3	37.8	56.6

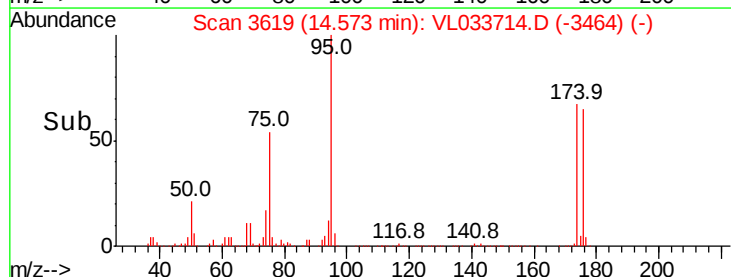
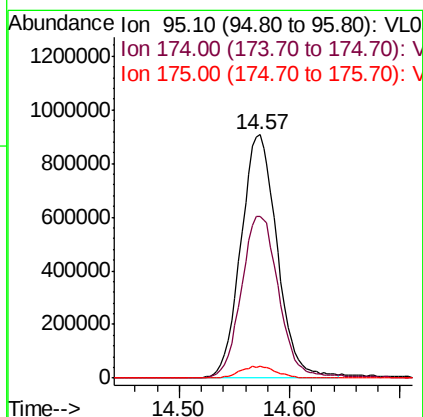
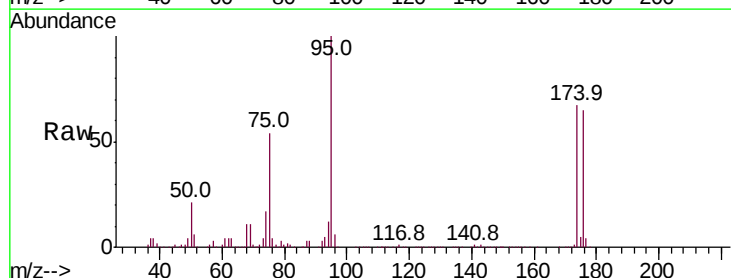
Manual Integrations
APPROVED

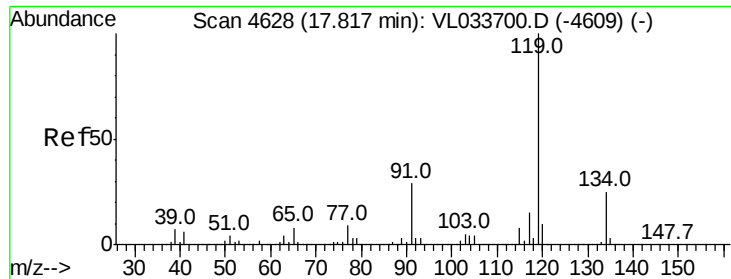
MMDadoda
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.089 ppbv
RT: 14.57 min Scan# 3619
Delta R.T. -0.00 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Lower	Upper
95	100		
174	69.8	53.9	80.9
175	4.9	3.8	5.8





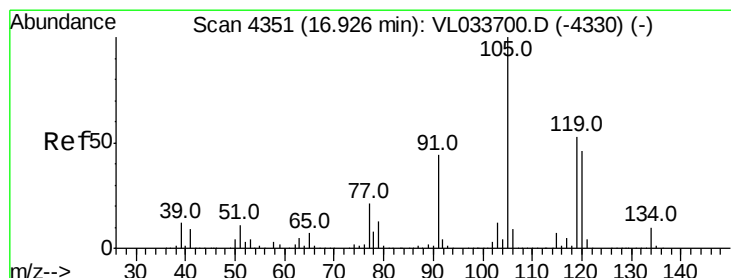
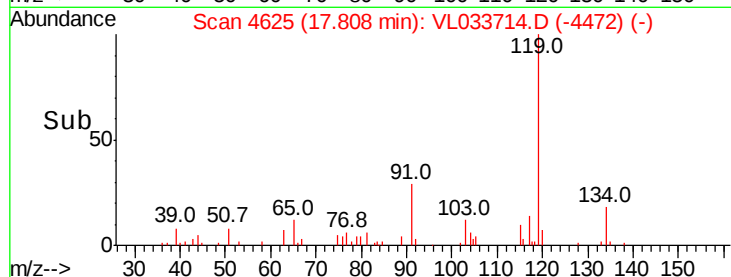
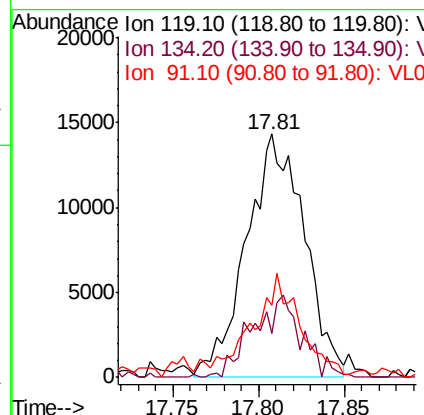
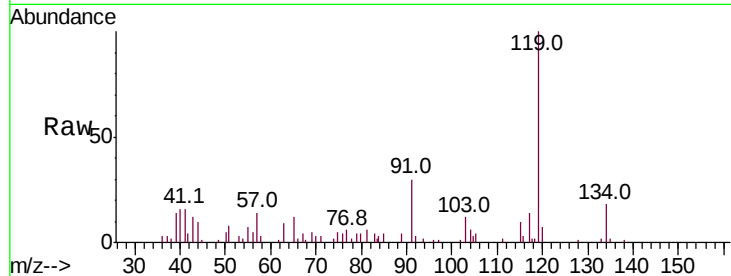
#69
p-Isopropyltoluene
Concen: 0.080 ppbv m
RT: 17.81 min Scan# 4625
Delta R.T. -0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion	Ratio	Resp	Lower	Upper
119	100	33564		
134	28.3	20.3	30.5	
91	35.1	23.1	34.7#	

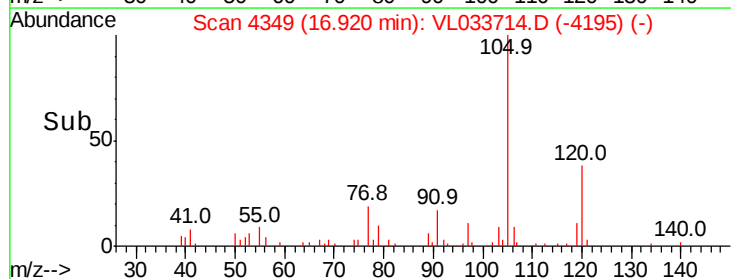
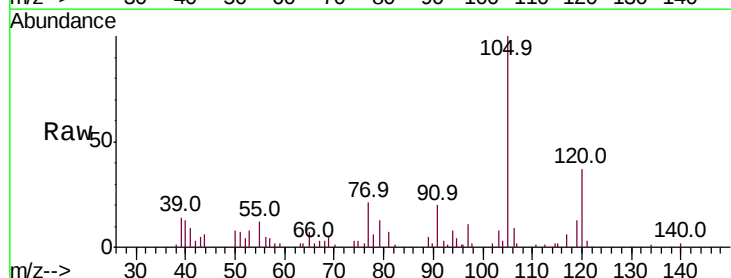
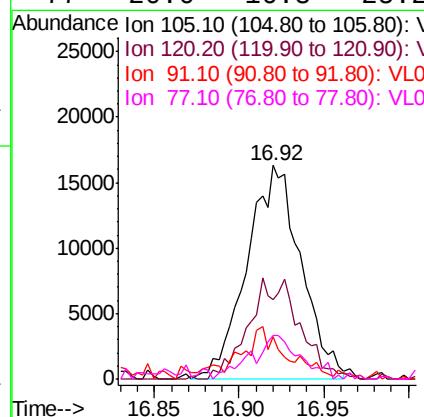
Manual Integrations
APPROVED

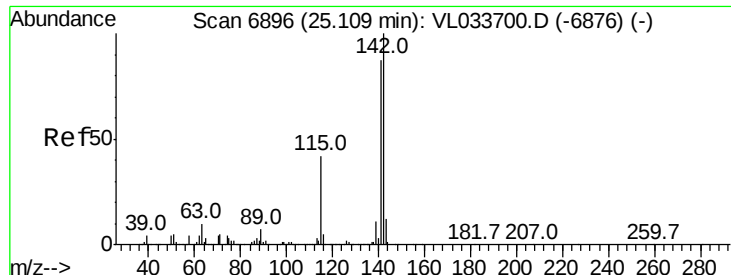
MMDadoda
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#74
1,2,4-Trimethylbenzene
Concen: 0.101 ppbv m
RT: 16.92 min Scan# 4349
Delta R.T. -0.01 min
Lab File: VL033714.D
Acq: 17 May 2019 13:23

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	36127		
120	37.3	36.8	55.2	
91	19.9	35.4	53.0#	
77	20.6	16.8	25.2	





#80
 Naphthalene, 2-methyl-
 Concen: 0.099 ppbv
 RT: 25.11 min Scan# 6897
 Delta R.T. 0.00 min
 Lab File: VL033714.D
 Acq: 17 May 2019 13:23

Instrument :
 MSVOA_L
 ClientSampleId :
 S-01

Tot Ion	Ratio	Resp Lower	Upper
142	100		
141	84.6	67.2	100.8
115	44.9	34.1	51.1

Manual Integrations
 APPROVED

MMDadoda
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