

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031519\
 Data File : VL033353.D
 Acq On : 16 Mar 2019 5:46
 Operator : SY/AP
 Sample : K1827-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 A-5

Manual Integrations
 APPROVED

MMDadoda
 3/19/2019 10:01:50 AM

Quant Time: Mar 16 06:57:50 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 16 06:57:50 2019
 QLast Update : Fri Mar 15 14:52:14 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	688148	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1534527	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1698205	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1302992	10.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	34747	0.287	ppbv	98
3) Chlorodifluoromethane	3.01	51	188219m	2.383	ppbv	
4) Chloromethane	3.17	50	23786	0.556	ppbv #	89
9) Propene	3.05	41	43009m	1.220	ppbv	
10) Heptane	8.25	43	55075	0.630	ppbv	99
11) Trichlorofluoromethane	4.00	101	32543	0.270	ppbv	88
13) Ethanol	3.66	45	1933860	115.052	ppbv	98
15) Acetone	3.90	43	577053	5.394	ppbv	99
19) Isopropyl Alcohol	4.03	45	700141	13.760	ppbv	99
20) Methylene Chloride	4.41	84	59766	1.713	ppbv	93
25) Ethyl Acetate	5.77	43	259583	1.669	ppbv	99
26) Hexane	5.78	57	118509	1.705	ppbv	95
34) 2-Butanone	5.33	43	69283	0.687	ppbv	98
35) Carbon Tetrachloride	7.14	117	8588m	0.079	ppbv	
36) Benzene	7.00	78	31577	0.230	ppbv #	95
38) Trichloroethene	7.96	130	20404m	0.393	ppbv	
50) 4-Methyl-2-Pentanone	8.88	43	75528	0.531	ppbv	95
52) Tetrachloroethene	11.37	164	9035m	0.158	ppbv	
53) Toluene	9.95	91	2359100	15.118	ppbv	100
58) Ethyl Benzene	12.87	91	56014	0.233	ppbv	96
59) m/p-Xylene	13.13	91	65157m	0.316	ppbv	
60) o-Xylene	13.85	91	23379m	0.116	ppbv	

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

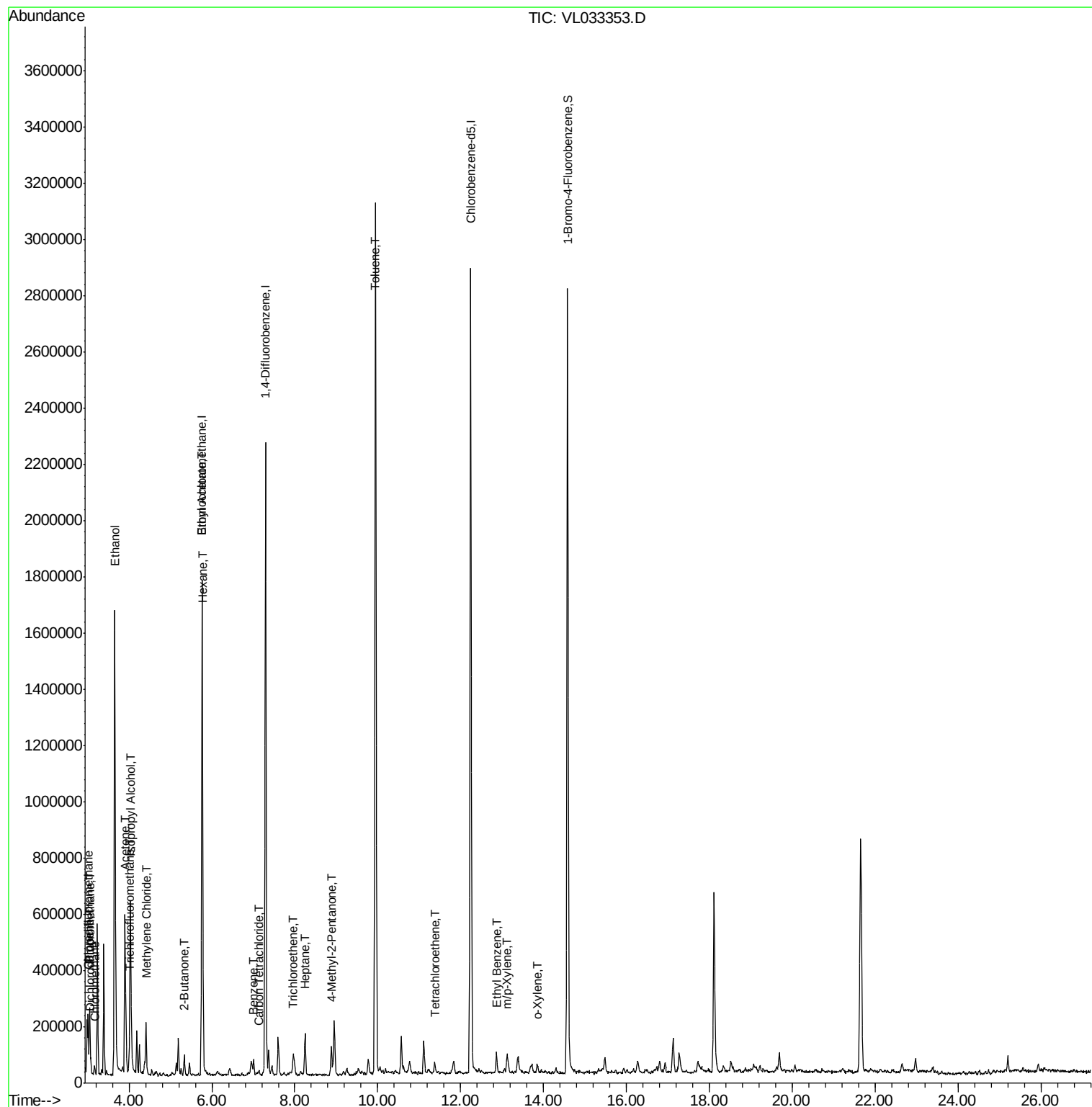
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL031519\
Data File : VL033353.D
Acq On : 16 Mar 2019 5:46
Operator : SY/AP
Sample : K1827-05
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

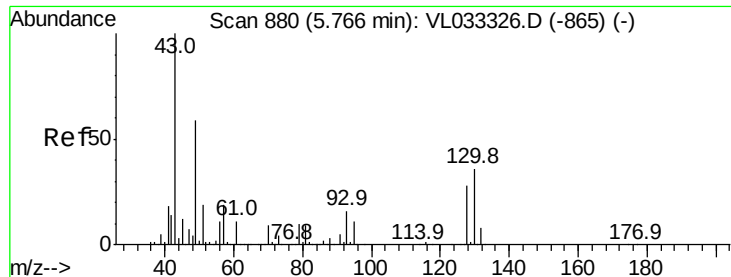
Instrument :
MSVOA_L
ClientSampleId :
A-5

Manual Integrations
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3/19/2019 10:01:50 AM

Quant Time: Mar 16 06:57:50 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL031519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar
QLast Update : Fri Mar 15 14:52:14 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033353.D

Acq: 16 Mar 2019 5:46

Instrument :

MSVOA_L

ClientSampleId :

A-5

Tot Ion: 49 Resp: 688148

Ion Ratio Lower Upper

49 100

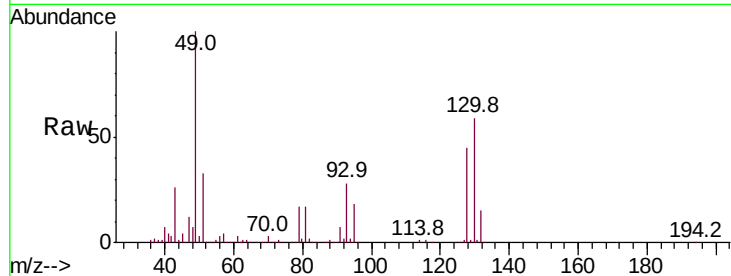
128 46.7 23.5 70.6

130 59.9 30.1 90.3

Manual Integrations
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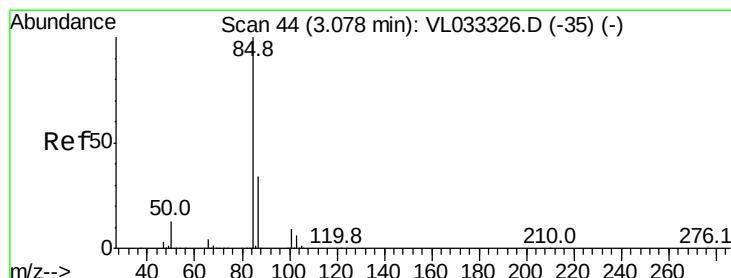
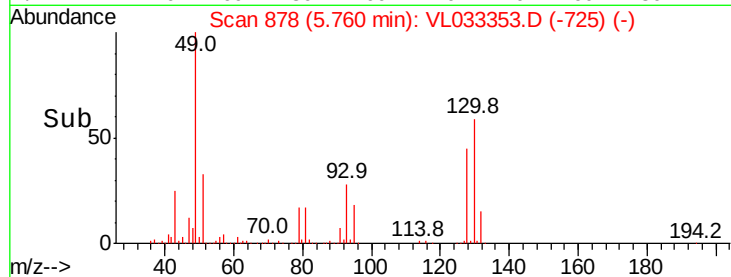
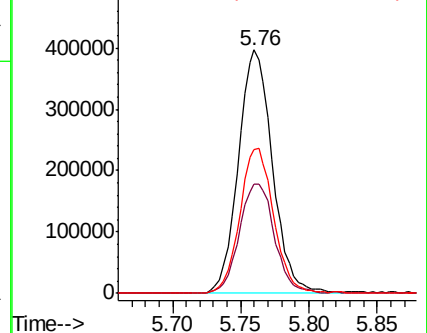
3/19/2019 10:01:50 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.287 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033353.D

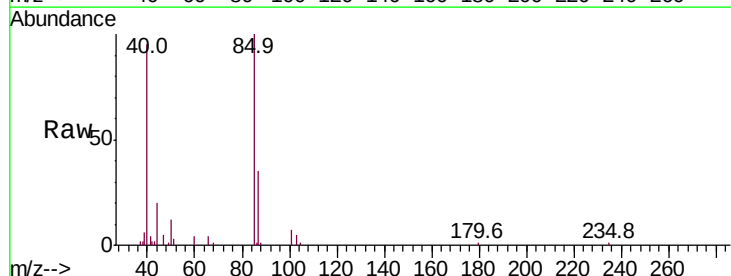
Acq: 16 Mar 2019 5:46

Tgt Ion: 85 Resp: 34747

Ion Ratio Lower Upper

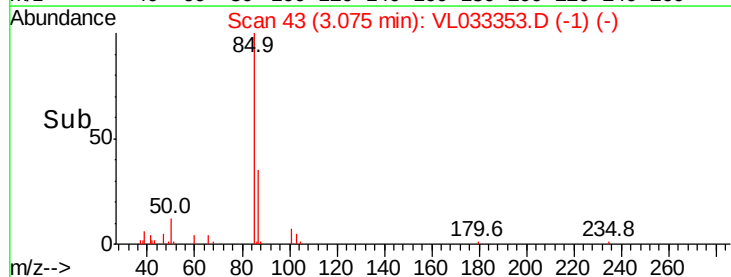
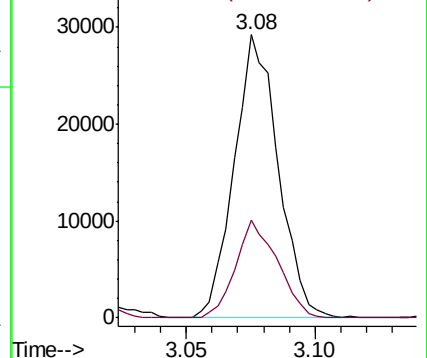
85 100

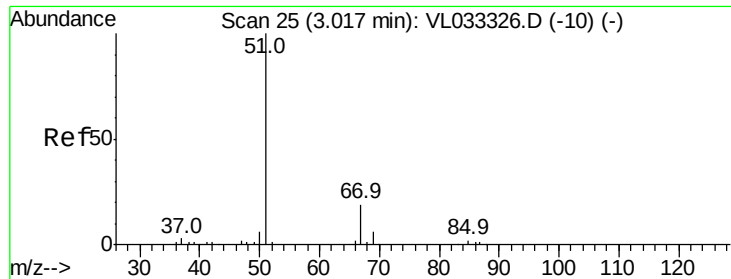
87 34.7 26.9 40.3



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 2.383 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033353.D

Acq: 16 Mar 2019 5:46

Instrument :

MSVOA_L

ClientSampleId :

A-5

Tot Ion: 51 Resp: 188219

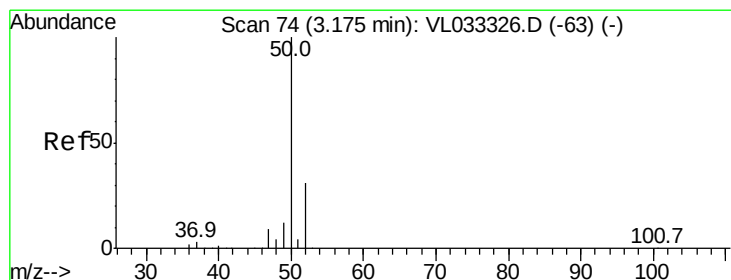
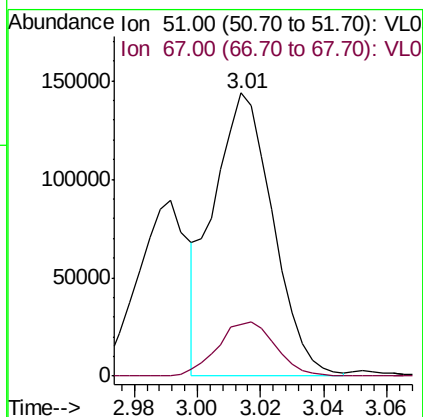
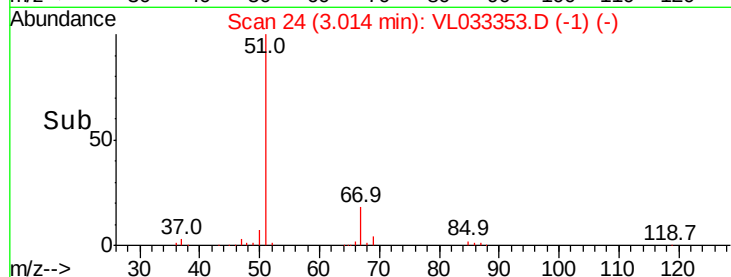
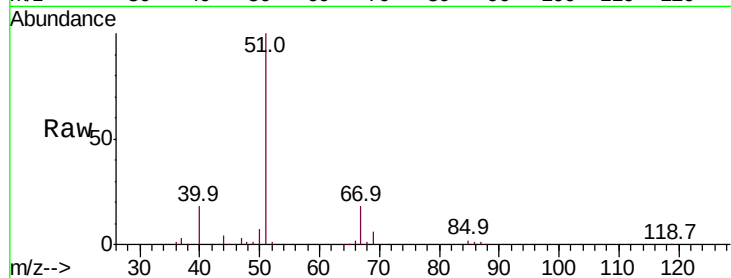
Ion Ratio Lower Upper

51 100

67 18.8 14.9 22.3

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#4

Chloromethane

Concen: 0.556 ppbv

RT: 3.17 min Scan# 74

Delta R.T. -0.00 min

Lab File: VL033353.D

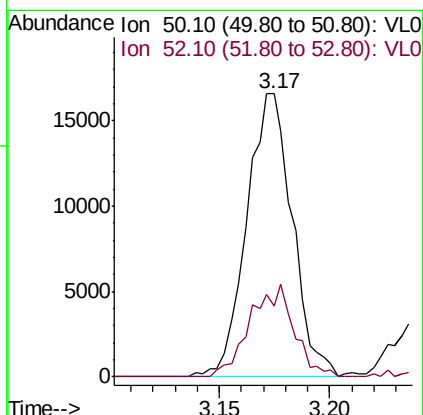
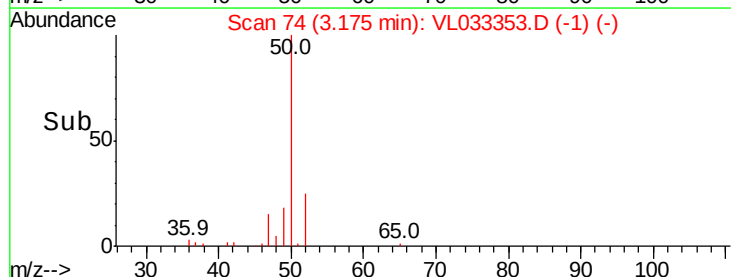
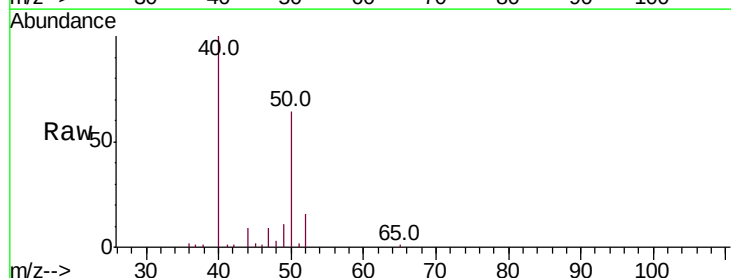
Acq: 16 Mar 2019 5:46

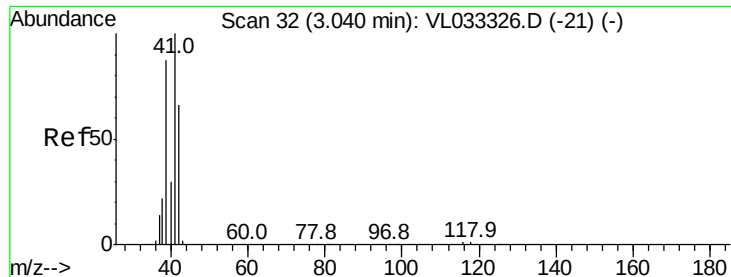
Tgt Ion: 50 Resp: 23786

Ion Ratio Lower Upper

50 100

52 25.0 25.0 37.6#





#9

Propene

Concen: 1.220 ppbv m

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033353.D

Acq: 16 Mar 2019 5:46

Instrument :

MSVOA_L

ClientSampleId :

A-5

Tot Ion: 41 Resp: 43009

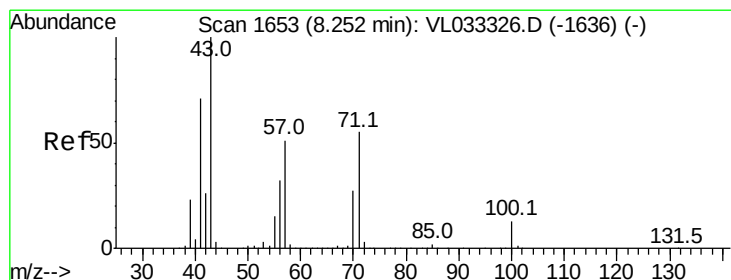
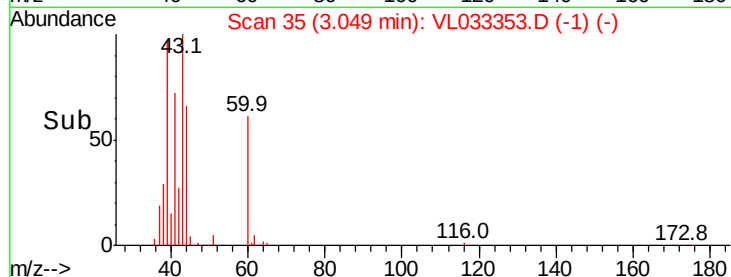
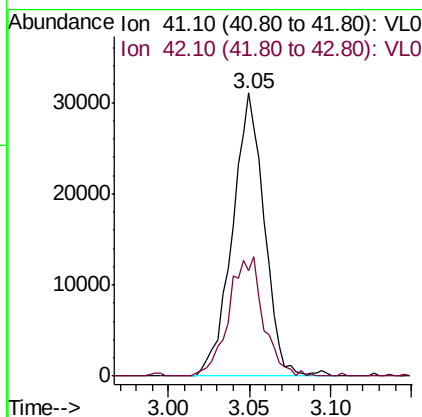
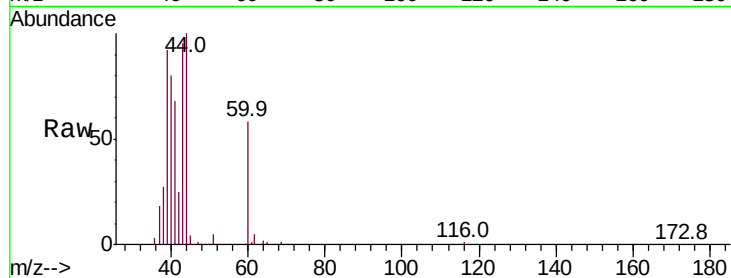
Ion Ratio Lower Upper

41 100

42 213.2 55.2 82.8#

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#10

Heptane

Concen: 0.630 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. -0.01 min

Lab File: VL033353.D

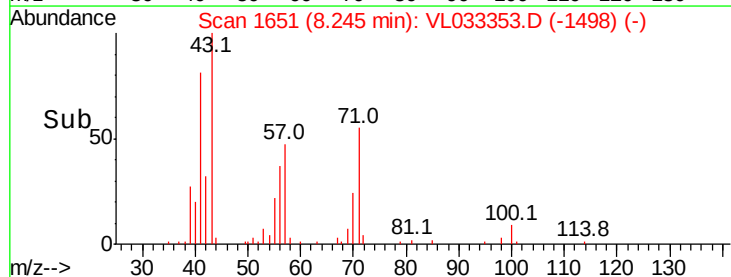
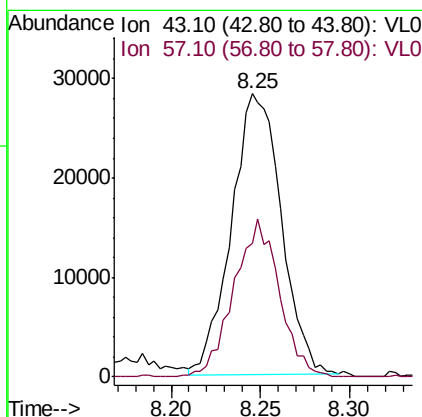
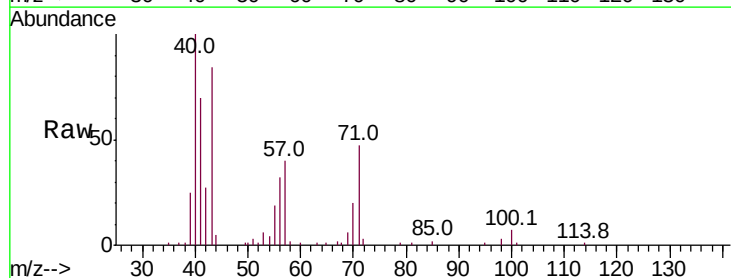
Acq: 16 Mar 2019 5:46

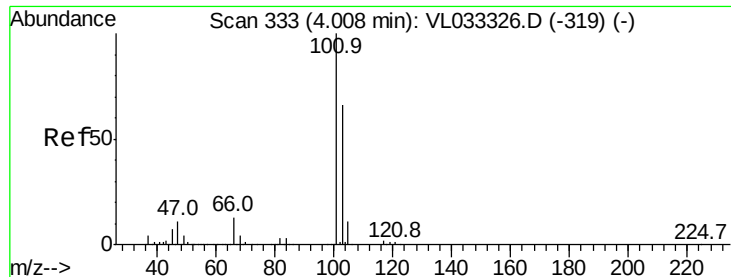
Tgt Ion: 43 Resp: 55075

Ion Ratio Lower Upper

43 100

57 51.1 40.4 60.6





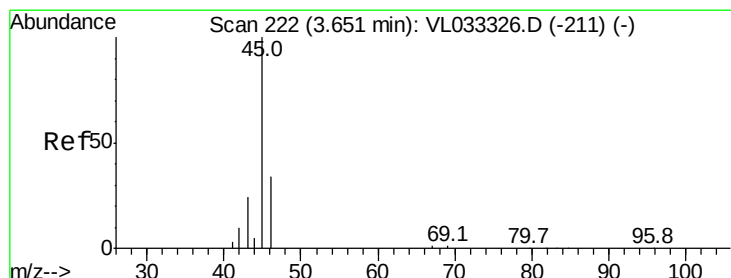
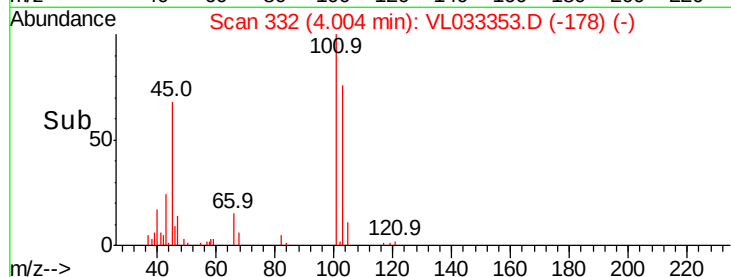
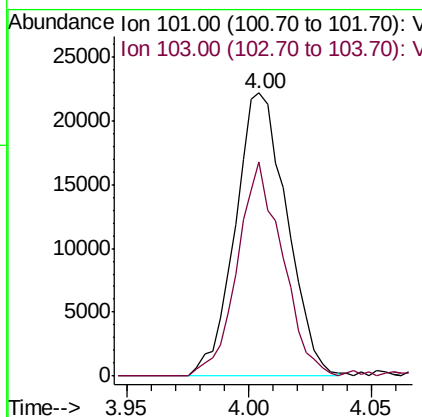
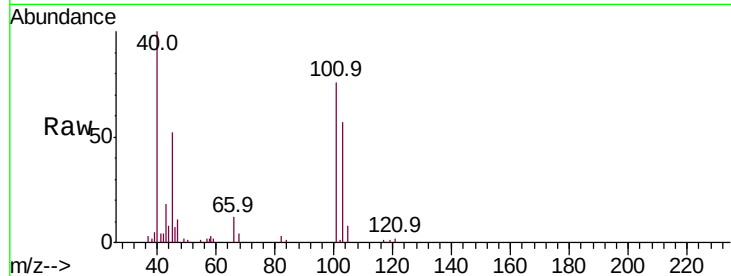
#11
 Trichlorofluoromethane
 Concen: 0.270 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. -0.00 min
 Lab File: VL033353.D
 Acq: 16 Mar 2019 5:46

Instrument :
 MSVOA_L
 ClientSampled :
 A-5

Tot Ion:101 Resp: 32543
 Ion Ratio Lower Upper
 101 100
 103 75.5 52.9 79.3

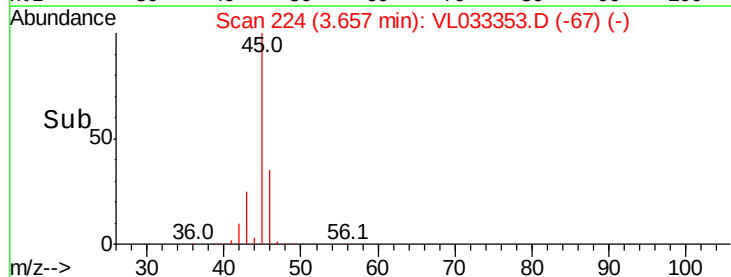
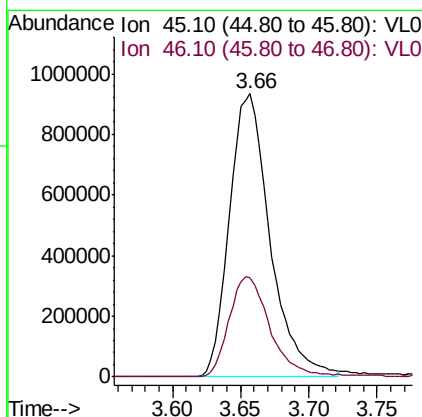
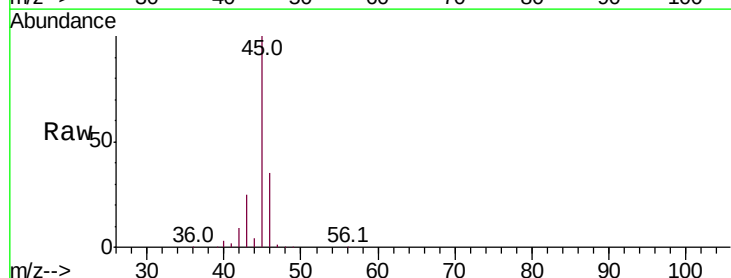
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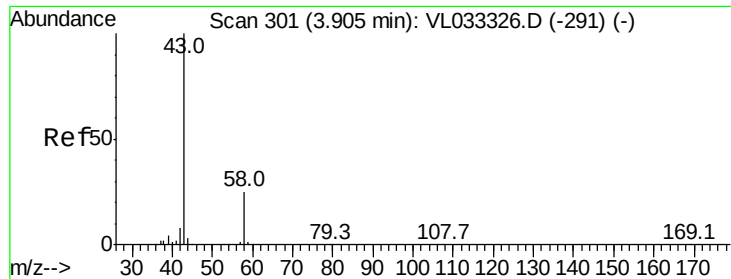
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#13
 Ethanol
 Concen: 115.052 ppbv
 RT: 3.66 min Scan# 224
 Delta R.T. 0.01 min
 Lab File: VL033353.D
 Acq: 16 Mar 2019 5:46

Tgt Ion: 45 Resp: 1933860
 Ion Ratio Lower Upper
 45 100
 46 36.4 14.9 59.7





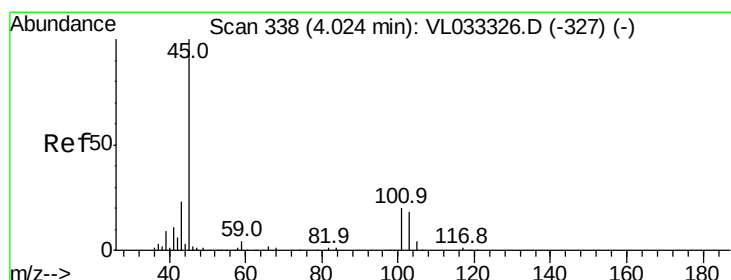
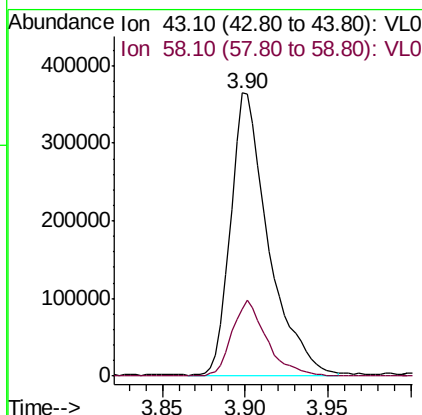
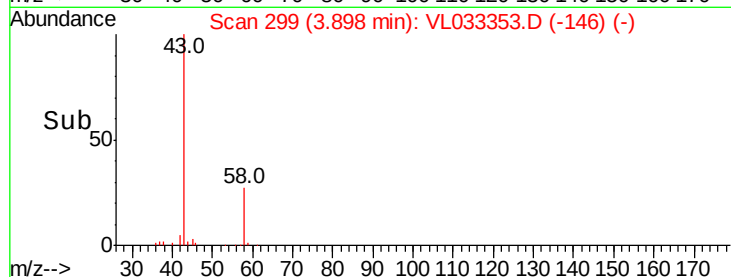
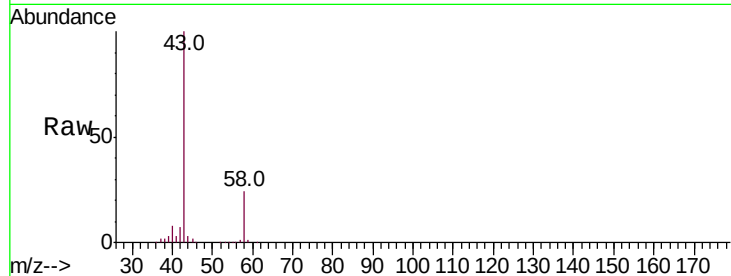
#15
Acetone
Concen: 5.394 ppbv
RT: 3.90 min Scan# 299
Delta R.T. -0.01 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampleId :
A-5

Tot Ion	43	58	Ratio	Lower	Upper
43	100				
58	25.0		20.4	30.6	

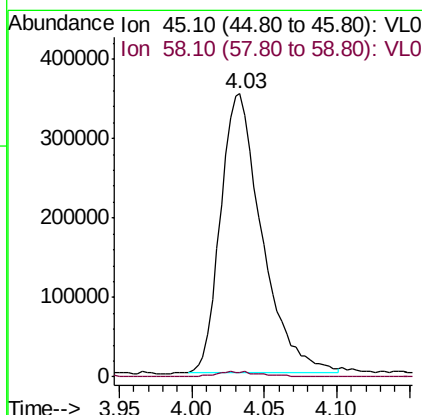
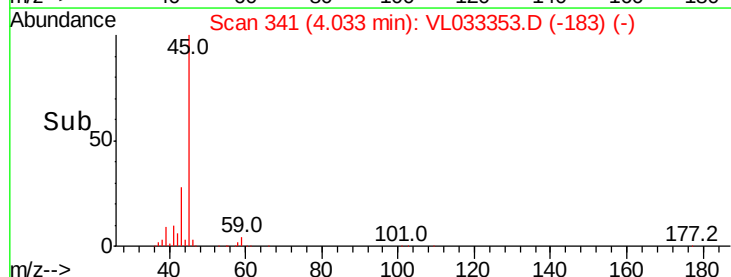
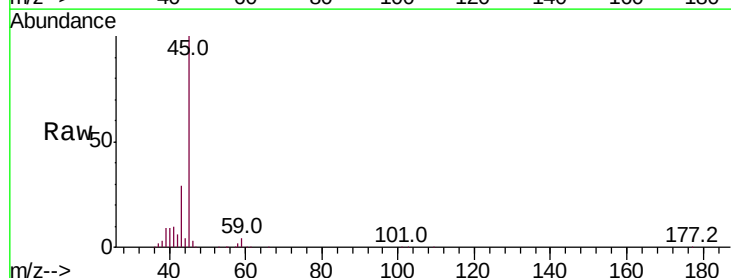
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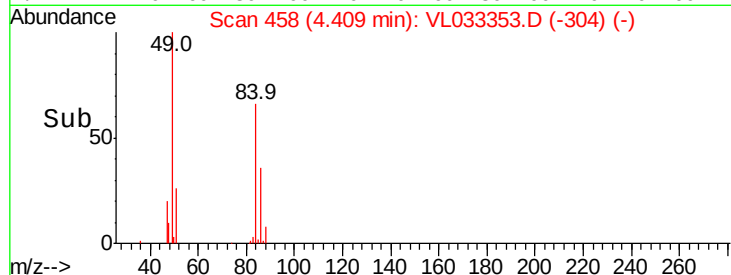
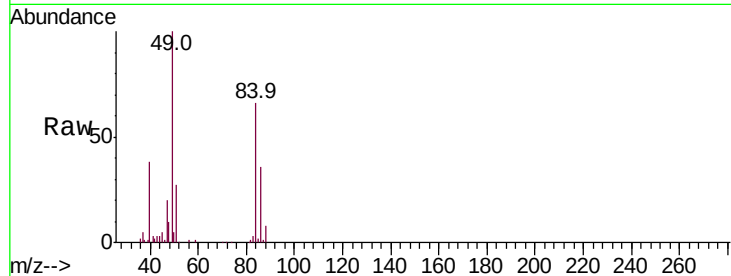
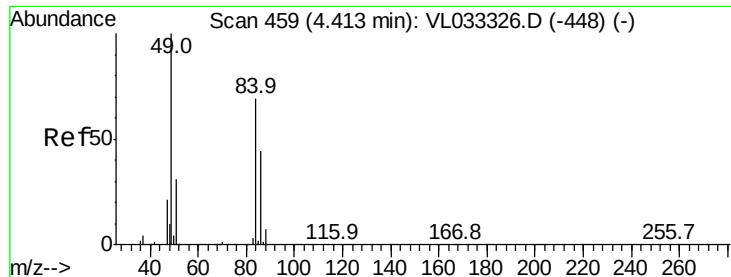
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3/19/2019 10:01:50 AM



#19
Isopropyl Alcohol
Concen: 13.760 ppbv
RT: 4.03 min Scan# 341
Delta R.T. 0.01 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion	45	58	Ratio	Lower	Upper
45	100				
58	2.2		1.5	2.3	





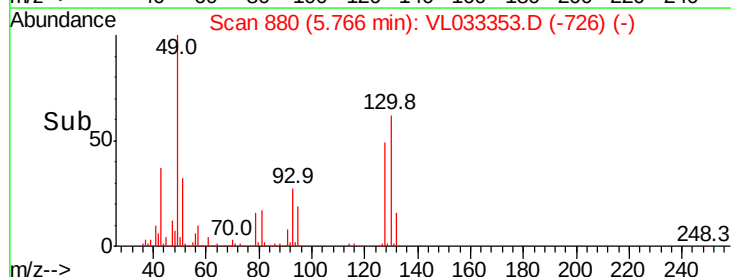
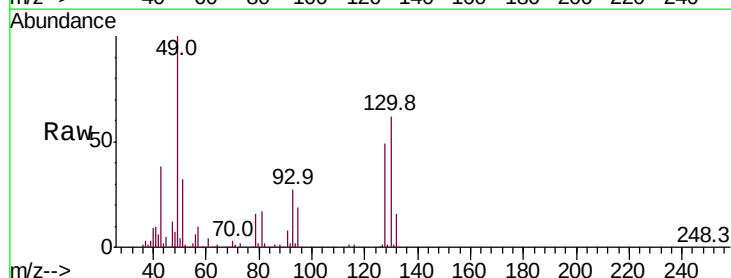
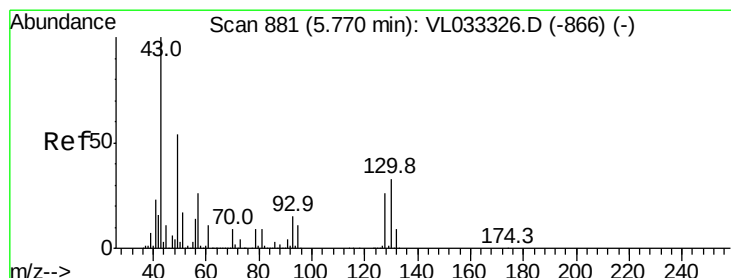
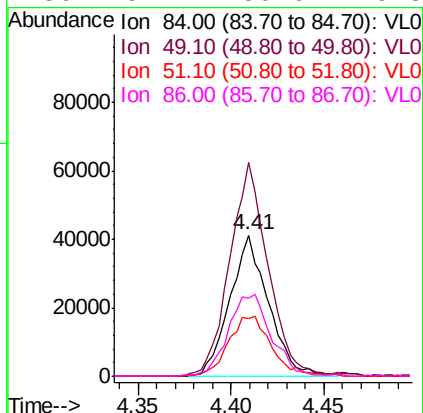
#20
Methylene Chloride
Concen: 1.713 ppbv
RT: 4.41 min Scan# 458
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tot Ion	84	Resp	59766
Ion	Ratio	Lower	Upper
84	100		
49	149.7	115.4	173.0
51	40.1	35.8	53.6
86	54.4	50.6	75.8

Instrument :
MSVOA_L
ClientSampled :
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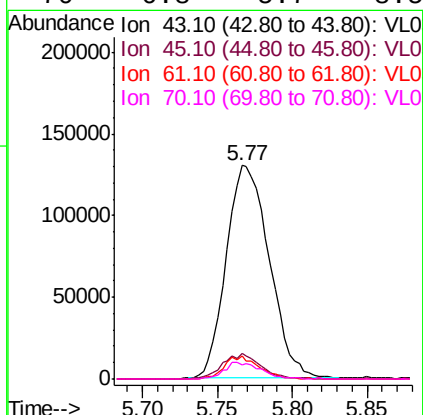
Manual Integrations
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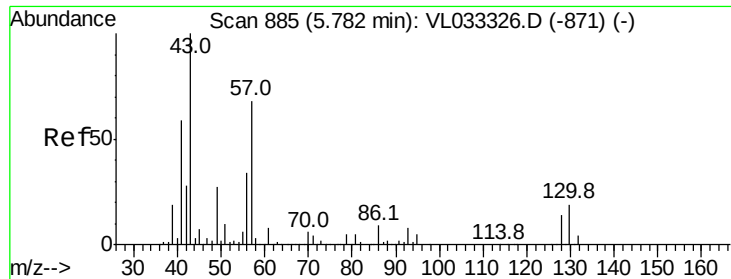
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#25
Ethyl Acetate
Concen: 1.669 ppbv
RT: 5.77 min Scan# 880
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion	43	Resp	259583
Ion	Ratio	Lower	Upper
43	100		
45	10.7	7.9	11.9
61	8.9	7.4	11.2
70	6.8	5.7	8.5





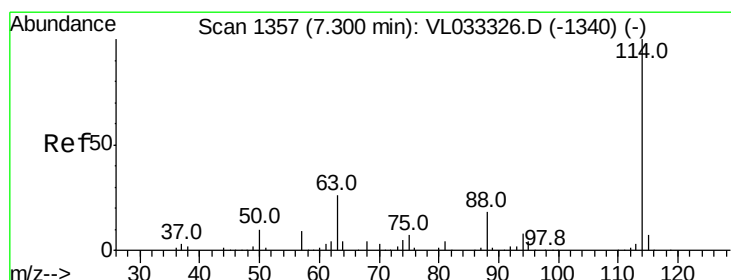
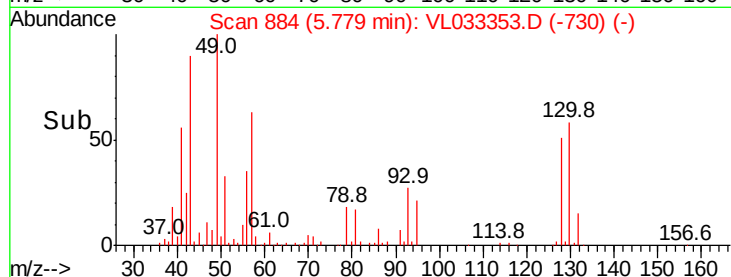
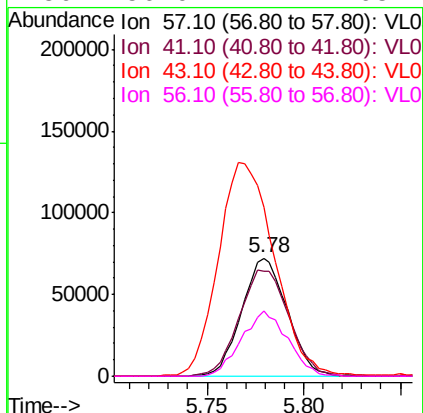
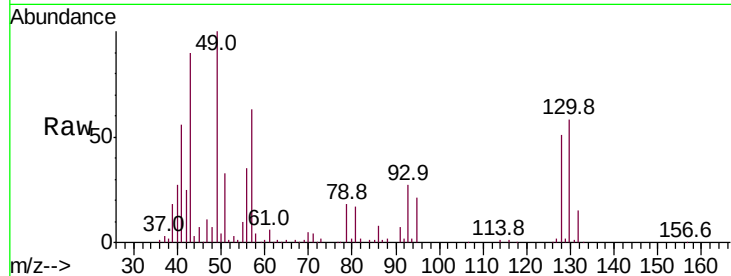
#26
Hexane
Concen: 1.705 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampled :
A-5

Tot Ion	57	Resp	118509
Ion Ratio	Lower	Upper	
57	100		
41	98.2	70.5	105.7
43	223.5	181.8	272.8
56	56.0	42.2	63.2

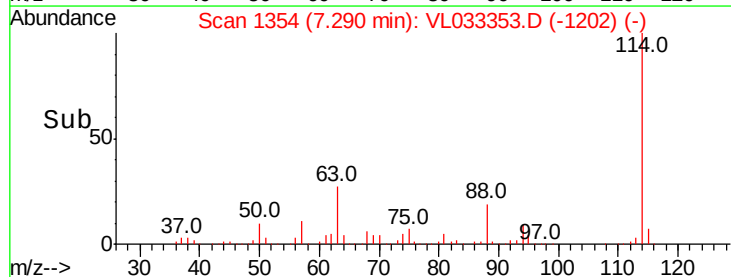
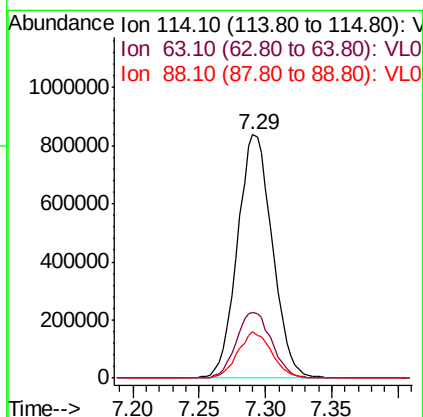
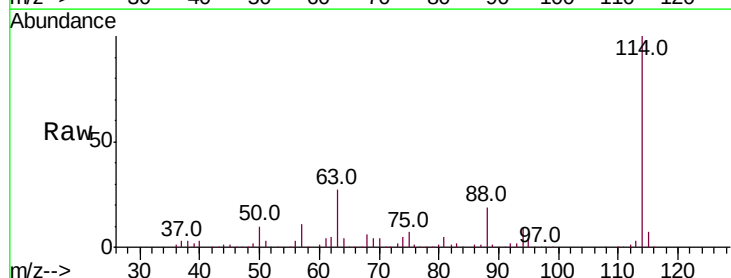
Manual Integrations
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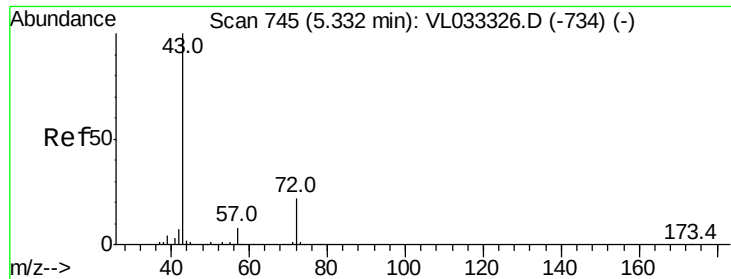
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3/19/2019 10:01:50 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.01 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion	114	Resp	1534527
Ion Ratio	Lower	Upper	
114	100		
63	27.5	21.4	32.2
88	18.5	14.5	21.7





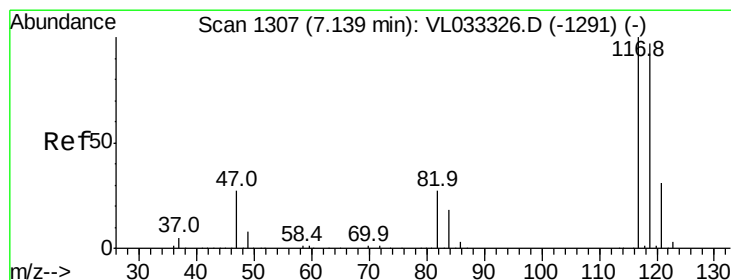
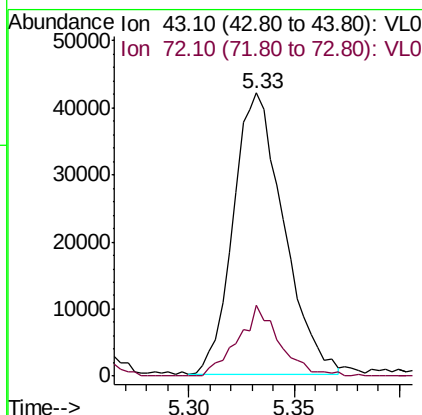
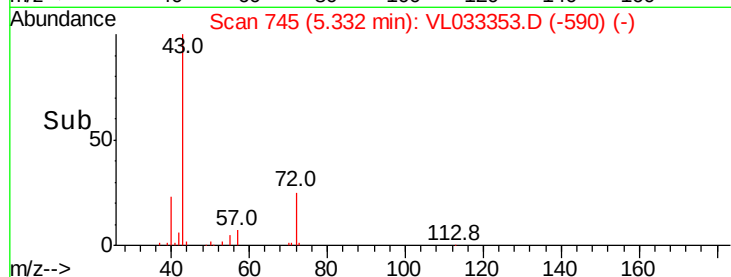
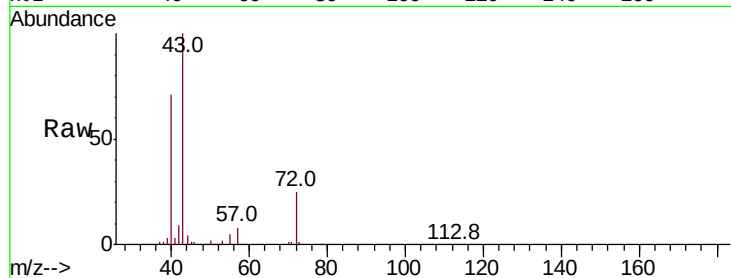
#34
2-Butanone
Concen: 0.687 ppbv
RT: 5.33 min Scan# 745
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampleId :
A-5

Tot Ion: 43 Resp: 69283
Ion Ratio Lower Upper
43 100
72 21.1 17.7 26.5

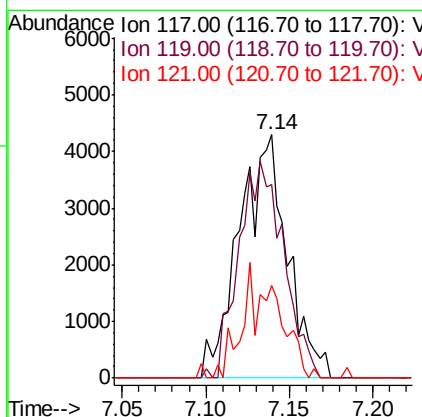
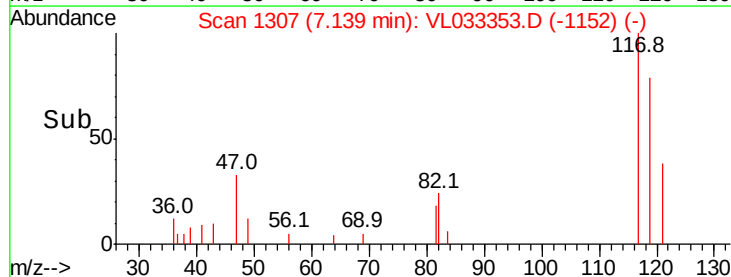
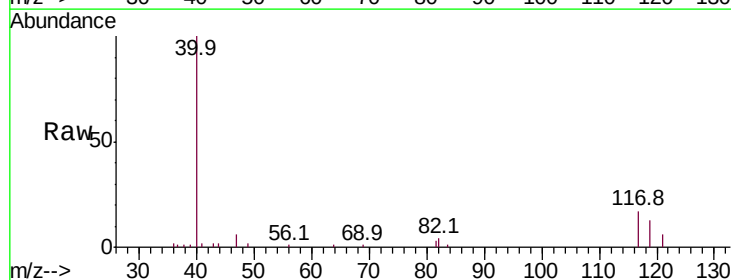
Manual Integrations
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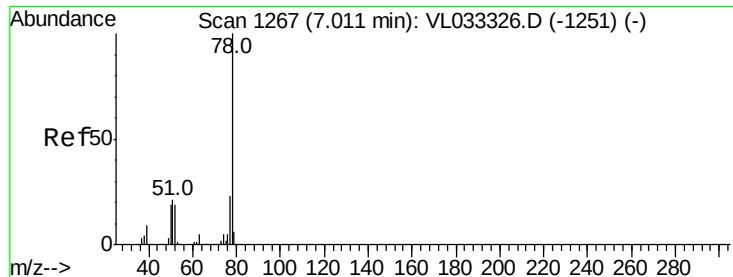
MMDadoda
3/19/2019 10:01:50 AM



#35
Carbon Tetrachloride
Concen: 0.079 ppbv m
RT: 7.14 min Scan# 1307
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion: 117 Resp: 8588
Ion Ratio Lower Upper
117 100
119 79.4 77.4 116.0
121 38.3 24.9 37.3#





#36

Benzene

Concen: 0.230 ppbv

RT: 7.00 min Scan# 1265

Delta R.T. -0.01 min

Lab File: VL033353.D

Acq: 16 Mar 2019 5:46

Instrument :

MSVOA_L

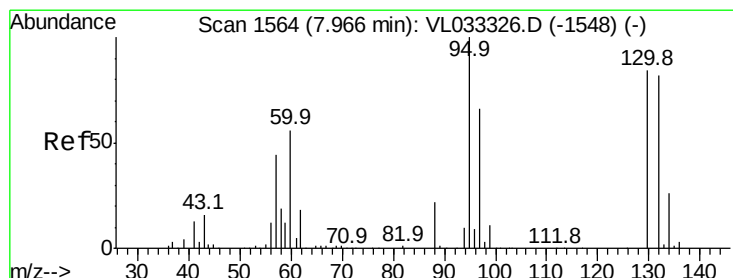
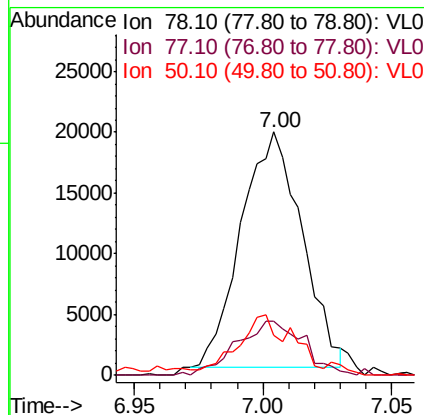
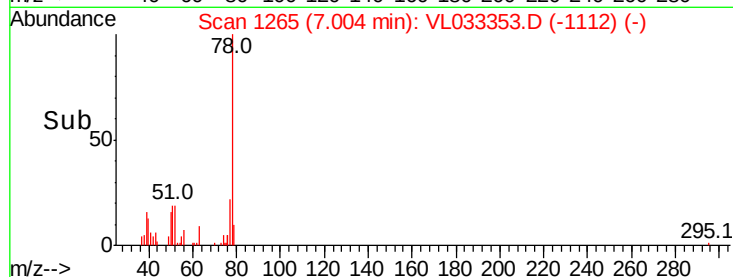
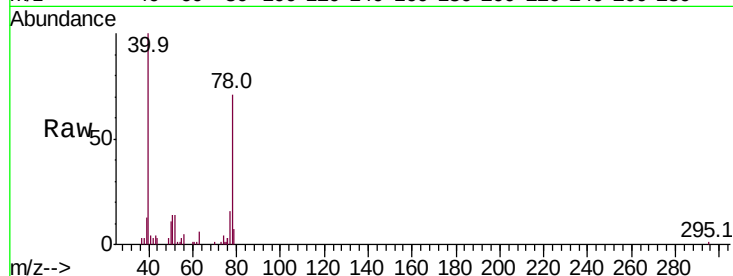
ClientSampled :

A-5

Tot Ion:	78	Resp:	31577
Ion Ratio	Lower	Upper	
78	100		
77	23.1	18.1	27.1
50	14.3	15.2	22.8#

Manual Integrations
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MMDadoda
3/19/2019 10:01:50 AM



#38

Trichloroethene

Concen: 0.393 ppbv m

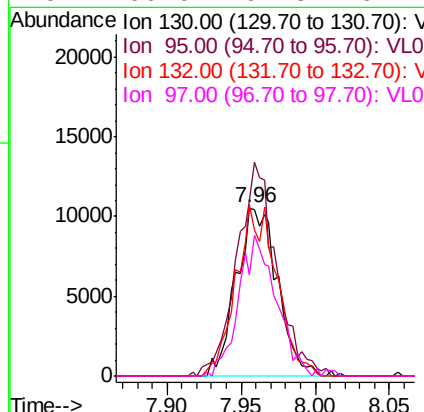
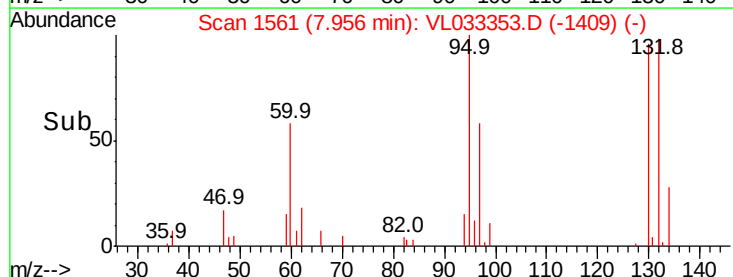
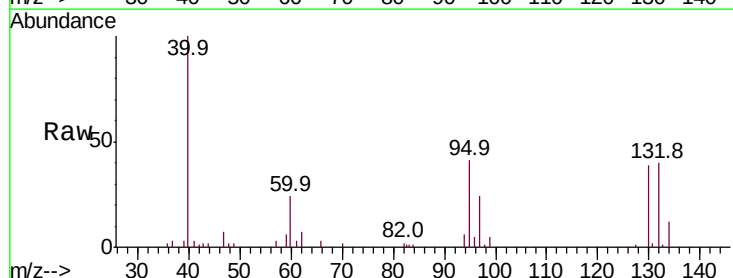
RT: 7.96 min Scan# 1561

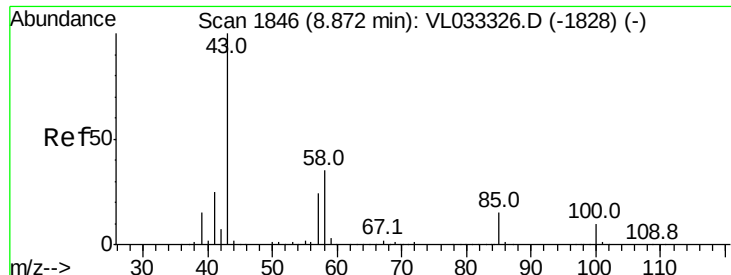
Delta R.T. -0.01 min

Lab File: VL033353.D

Acq: 16 Mar 2019 5:46

Tgt Ion:	130	Resp:	20404
Ion Ratio	Lower	Upper	
130	100		
95	104.0	95.2	142.8
132	101.7	77.7	116.5
97	60.0	62.8	94.2#





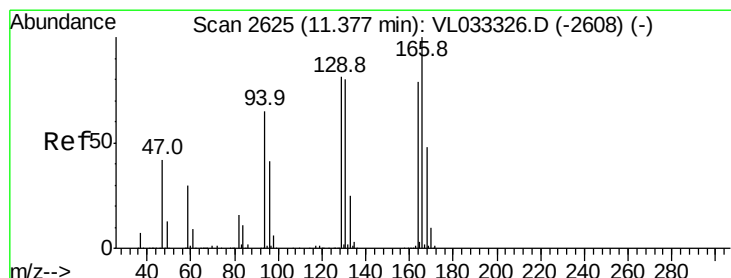
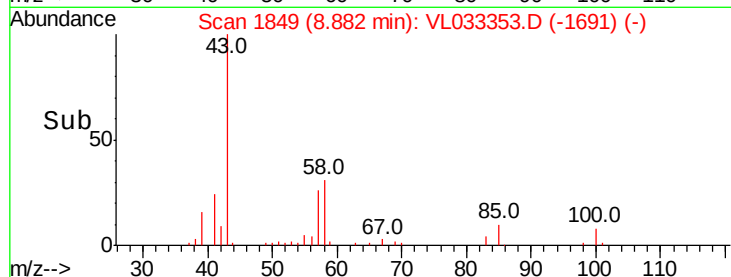
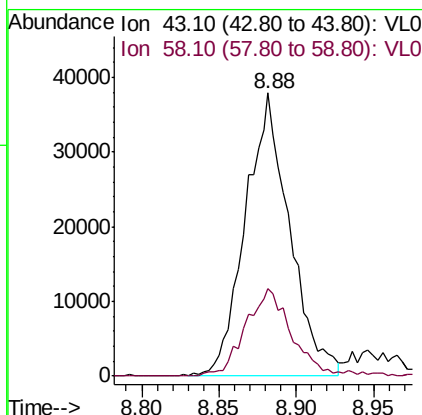
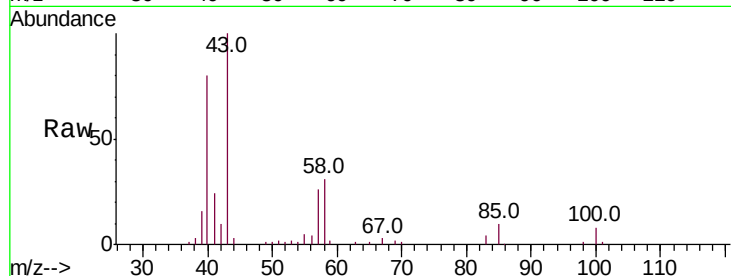
#50
4-Methyl-2-Pentanone
Concen: 0.531 ppbv
RT: 8.88 min Scan# 1849
Delta R.T. 0.01 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampleId :
A-5

Tot Ion	Ratio	Lower	Upper
43	100		
58	32.6	28.4	42.6

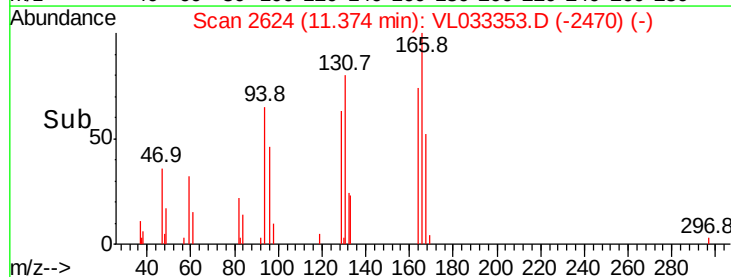
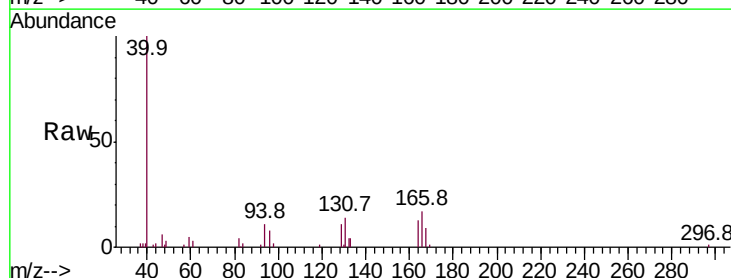
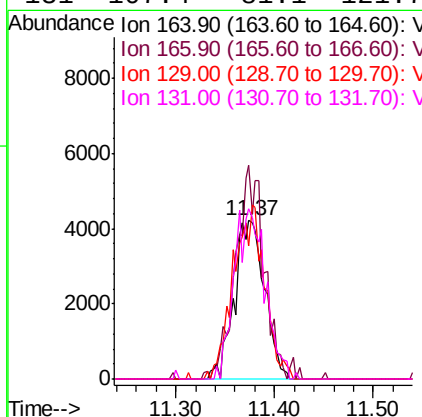
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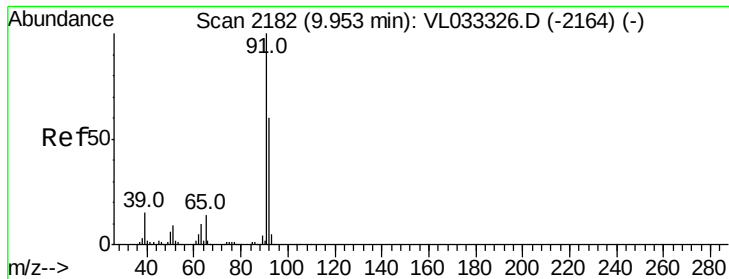
MMDadoda
3/19/2019 10:01:50 AM



#52
Tetrachloroethene
Concen: 0.158 ppbv m
RT: 11.37 min Scan# 2624
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion	Ratio	Lower	Upper
164	100		
166	135.1	101.5	152.3
129	84.6	82.2	123.2
131	107.4	81.1	121.7





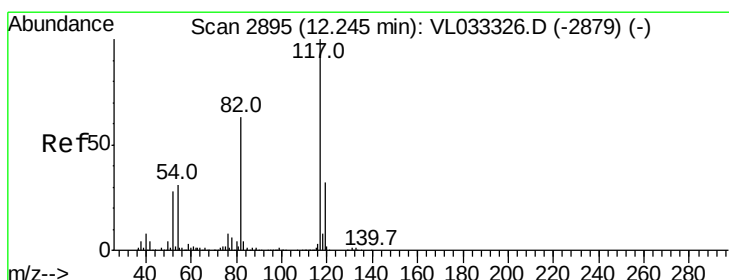
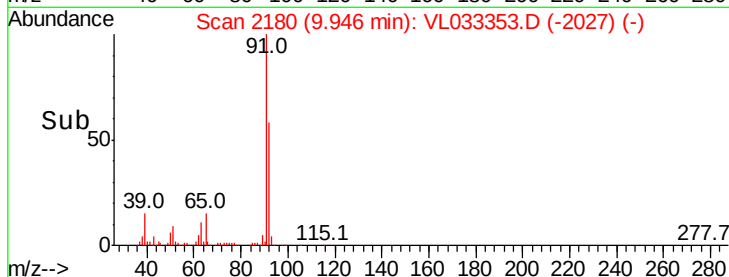
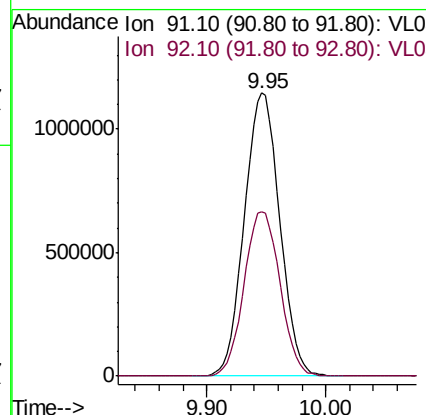
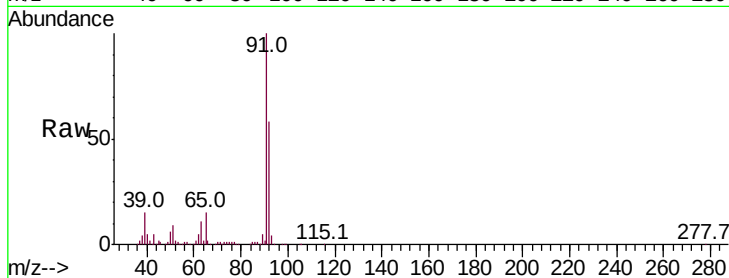
#53
Toluene
Concen: 15.118 ppbv
RT: 9.95 min Scan# 2180
Delta R.T. -0.01 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampled :
A-5

Tot Ion: 91 Resp: 2359100
Ion Ratio Lower Upper
91 100
92 59.1 47.4 71.0

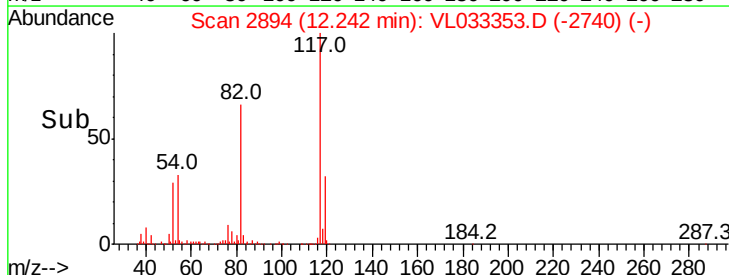
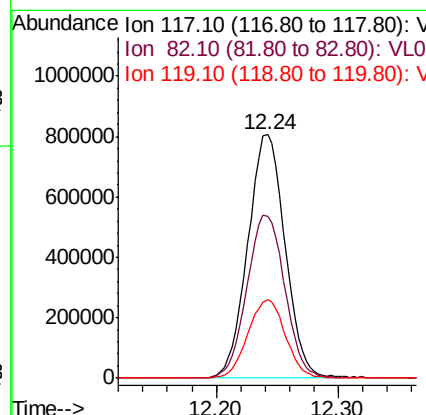
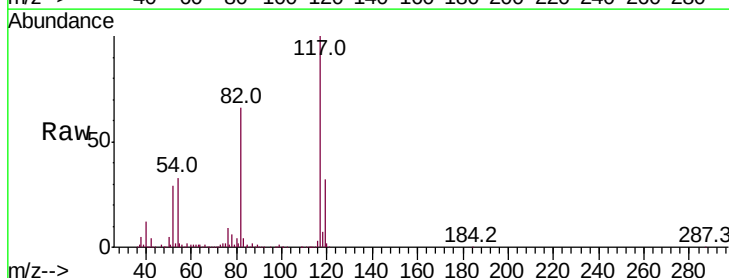
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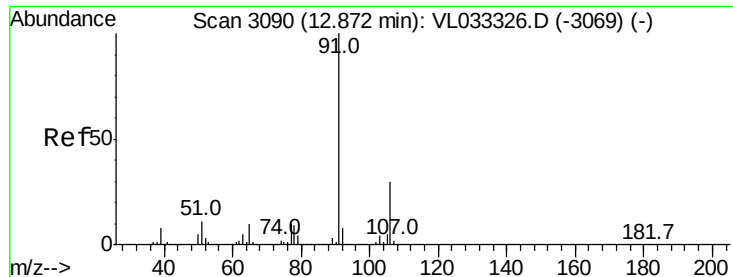
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3/19/2019 10:01:50 AM



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2894
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion: 117 Resp: 1698205
Ion Ratio Lower Upper
117 100
82 68.4 53.4 80.2
119 32.7 27.3 40.9





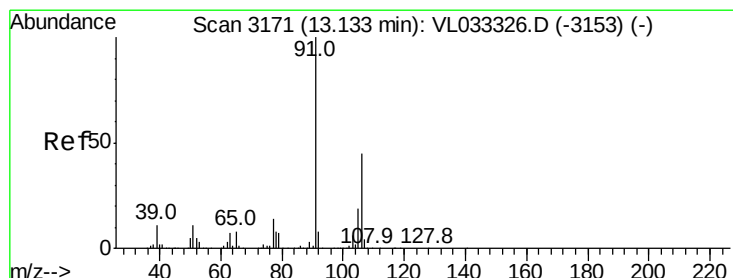
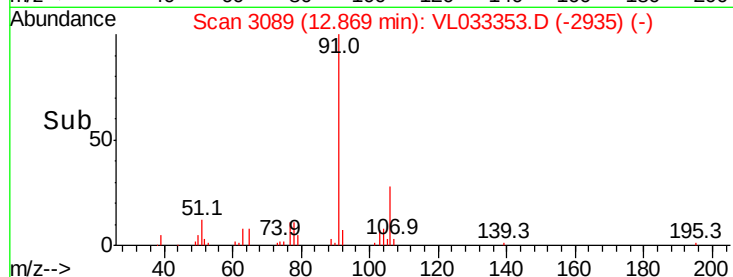
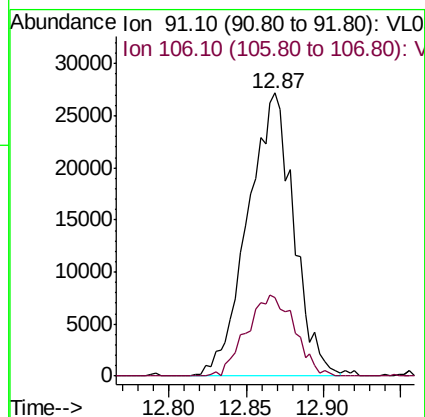
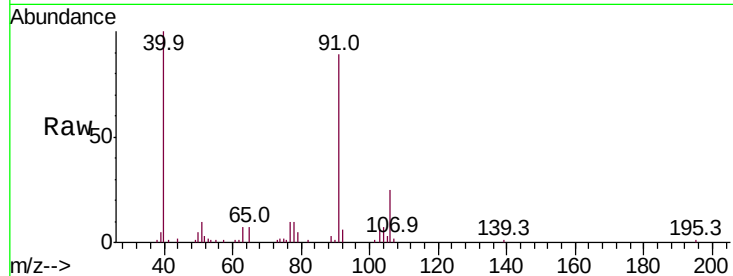
#58
Ethyl Benzene
Concen: 0.233 ppbv
RT: 12.87 min Scan# 3089
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampled :
A-5

Tot Ion: 91 Resp: 56014
Ion Ratio Lower Upper
91 100
106 27.8 24.2 36.2

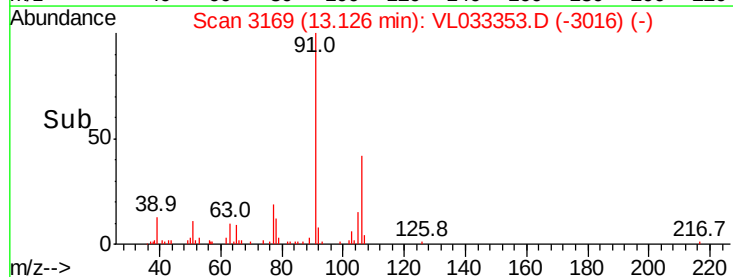
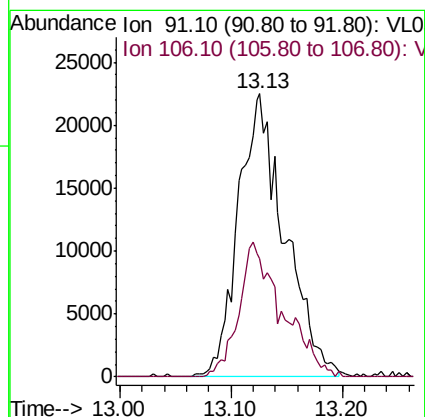
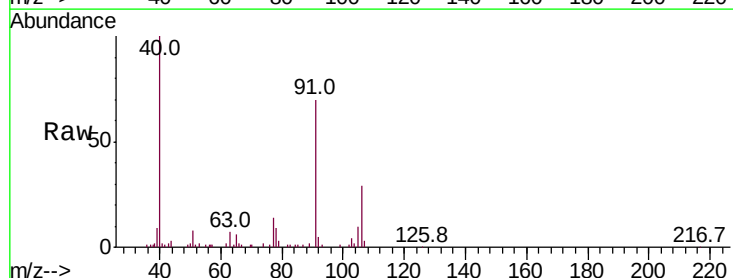
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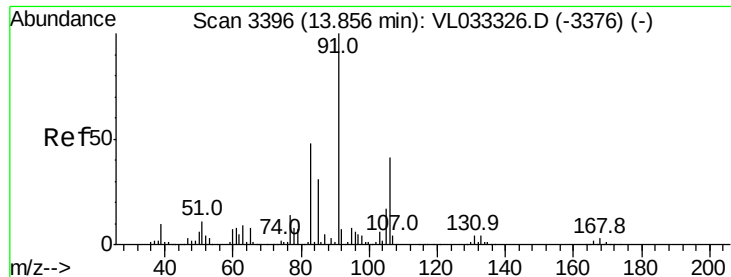
MMDadoda
3/19/2019 10:01:50 AM



#59
m/p-Xylene
Concen: 0.316 ppbv m
RT: 13.13 min Scan# 3169
Delta R.T. -0.01 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion: 91 Resp: 65157
Ion Ratio Lower Upper
91 100
106 44.6 0.0 0.0#





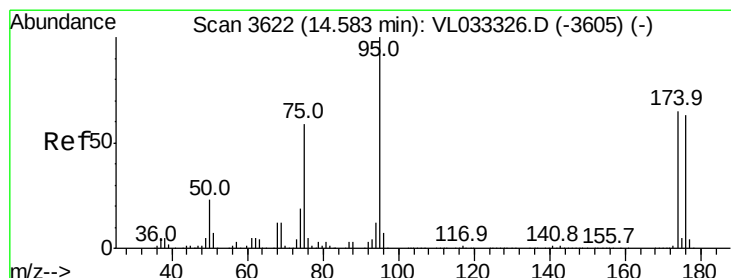
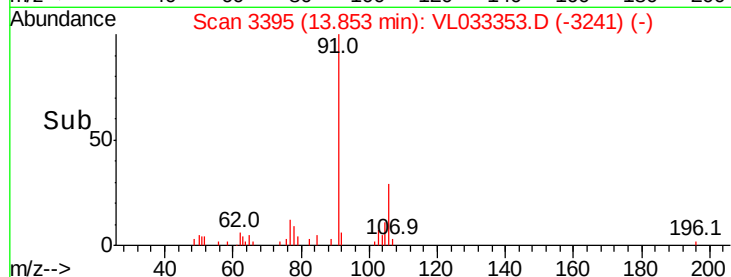
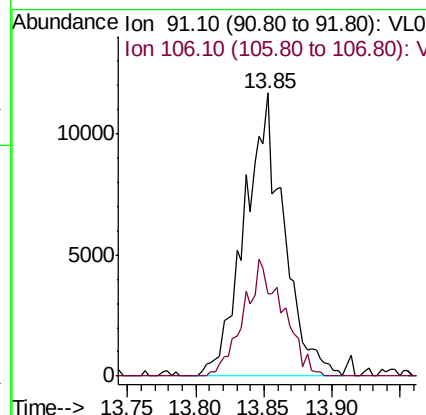
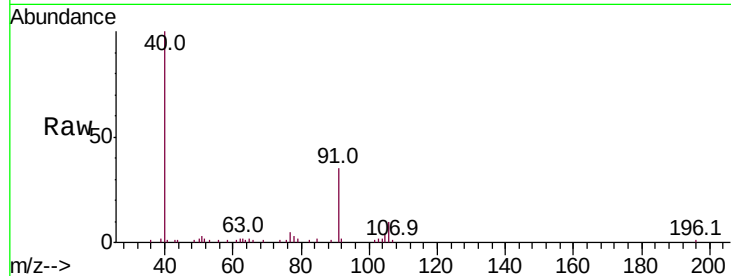
#60
o-Xylene
Concen: 0.116 ppbv m
RT: 13.85 min Scan# 3395
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Instrument :
MSVOA_L
ClientSampled :
A-5

Tot Ion: 91 Resp: 23379
Ion Ratio Lower Upper
91 100
106 41.2 21.3 63.9

Manual Integrations
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MMDadoda
3/19/2019 10:01:50 AM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.355 ppbv
RT: 14.58 min Scan# 3621
Delta R.T. -0.00 min
Lab File: VL033353.D
Acq: 16 Mar 2019 5:46

Tgt Ion: 95 Resp: 1302992
Ion Ratio Lower Upper
95 100
174 64.7 51.5 77.3
175 4.8 3.8 5.6

