

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031519\
 Data File : VL033349.D
 Acq On : 16 Mar 2019 3:04
 Operator : SY/AP
 Sample : K1827-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 A-3

Manual Integrations
 APPROVED

MMDadoda
 3/19/2019 10:01:43 AM

Quant Time: Mar 16 06:46:35 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 06:46:35 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	691260	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1557016	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	1742288	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	1329907	10.30	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	29770	0.245	ppbv	98
3) Chlorodifluoromethane	3.01	51	98154m	1.237	ppbv	
4) Chloromethane	3.17	50	23900	0.556	ppbv	98
9) Propene	3.05	41	62986m	1.778	ppbv	
10) Heptane	8.25	43	136423	1.553	ppbv	100
11) Trichlorofluoromethane	4.01	101	30964	0.256	ppbv	96
13) Ethanol	3.65	45	2072158	122.724	ppbv	98
15) Acetone	3.90	43	785414	7.309	ppbv	95
19) Isopropyl Alcohol	4.03	45	706503	13.822	ppbv	100
20) Methylene Chloride	4.41	84	79775	2.276	ppbv	97
25) Ethyl Acetate	5.77	43	336223	2.152	ppbv	98
26) Hexane	5.78	57	167196	2.394	ppbv	89
34) 2-Butanone	5.33	43	80151	0.784	ppbv	99
36) Benzene	7.01	78	36239m	0.260	ppbv	
44) 2,2,4-Trimethylpentane	7.99	57	46913	0.203	ppbv #	69
50) 4-Methyl-2-Pentanone	8.88	43	144107	0.998	ppbv	98
52) Tetrachloroethene	11.37	164	8707m	0.150	ppbv	
53) Toluene	9.95	91	4850528	30.635	ppbv	99
58) Ethyl Benzene	12.87	91	167271	0.679	ppbv	100
59) m/p-Xylene	13.12	91	139166m	0.657	ppbv	
60) o-Xylene	13.85	91	52072	0.252	ppbv	99
61) Styrene	13.68	104	25247m	0.175	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	32256	0.133	ppbv #	63

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

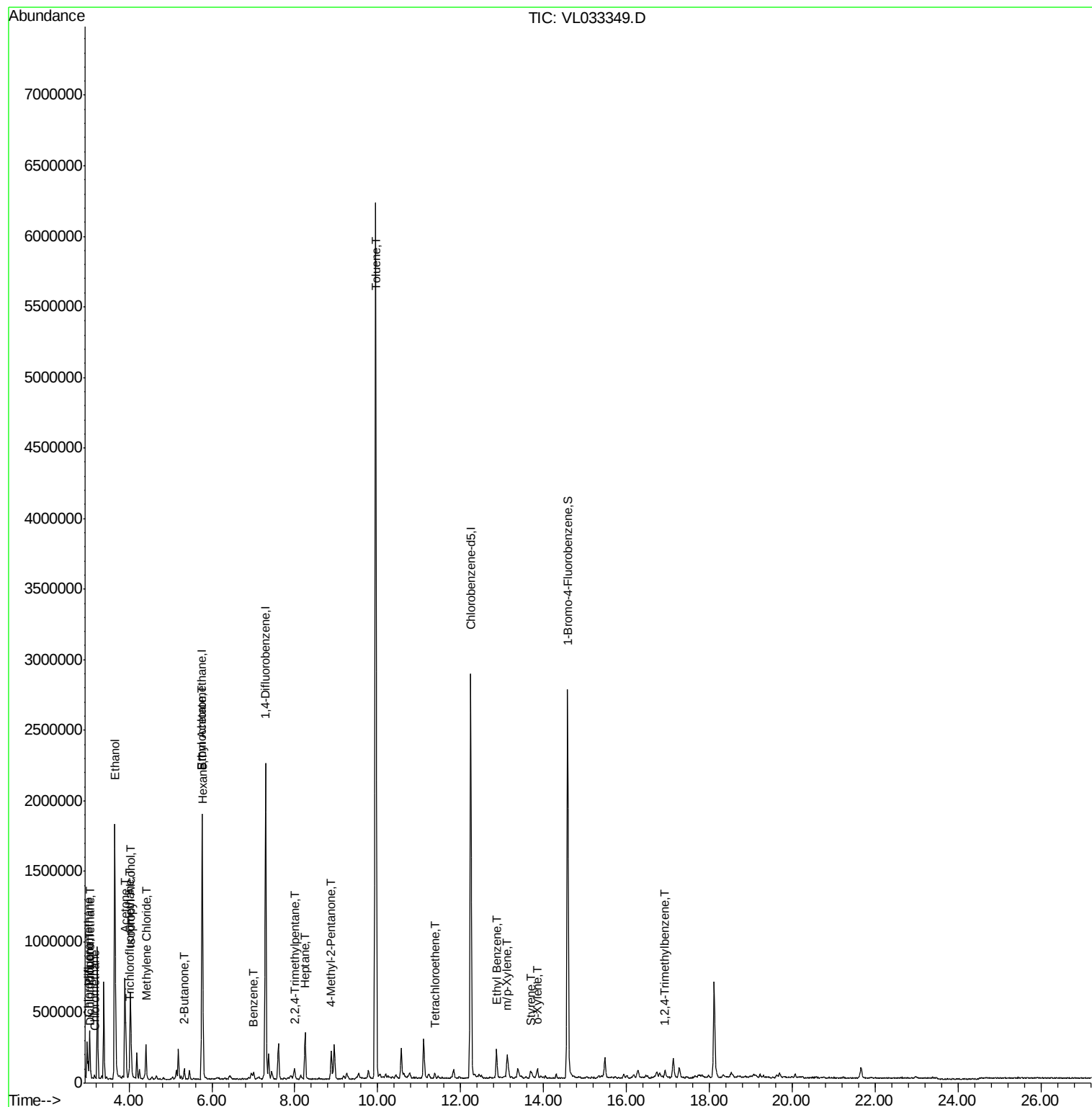
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL031519\
Data File : VL033349.D
Acq On : 16 Mar 2019 3:04
Operator : SY/AP
Sample : K1827-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

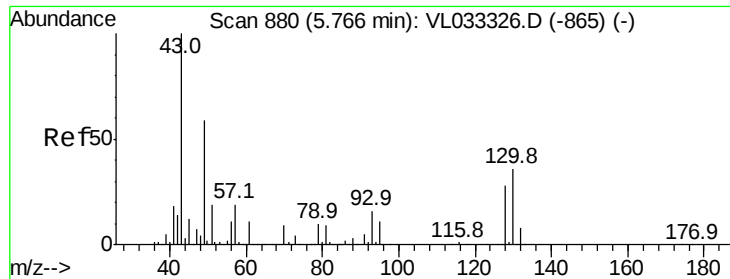
Instrument :
MSVOA_L
ClientSampleId :
A-3

Manual Integrations
APPROVED

MMDadoda
3/19/2019 10:01:43 AM

Quant Time: Mar 16 06:46:35 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





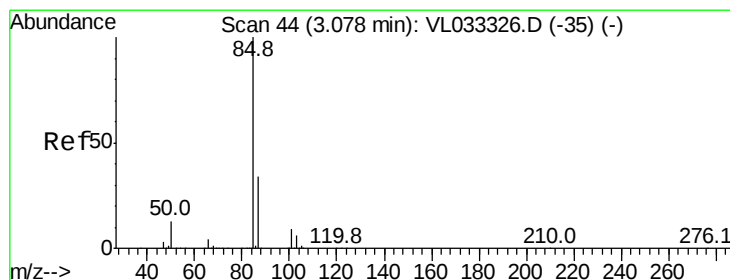
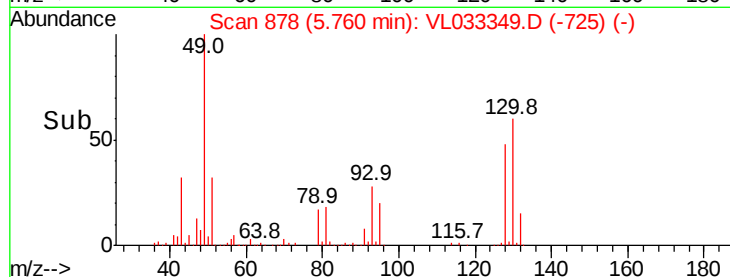
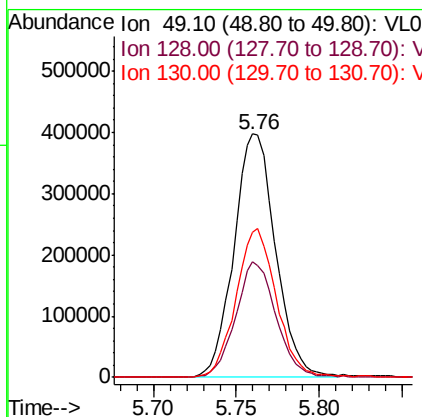
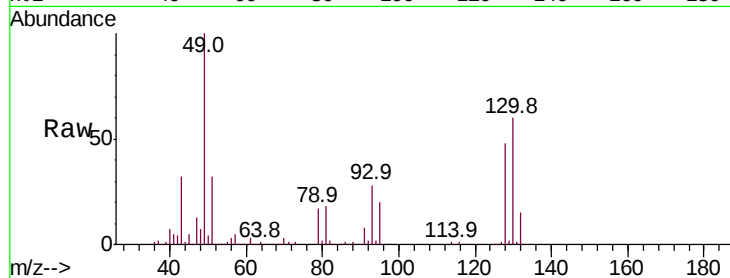
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.76 min Scan# 878
Delta R.T. -0.01 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Instrument :
MSVOA_L
Client Sampled :
A-3

Tot Ion	Ratio	Lower	Upper
49	100		
128	46.5	23.5	70.6
130	59.4	30.1	90.3

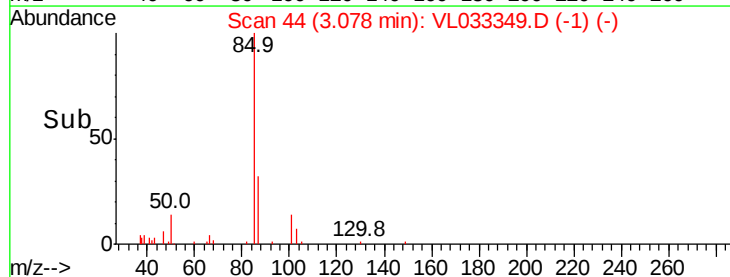
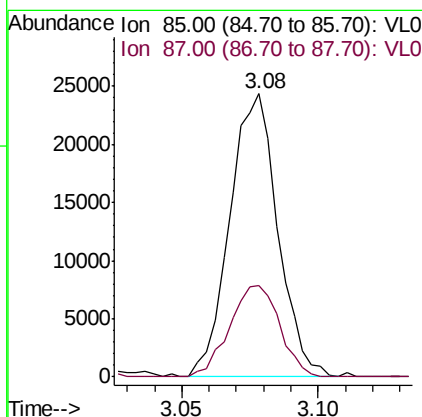
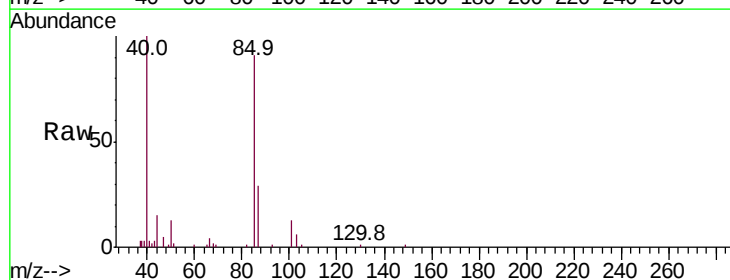
Manual Integrations
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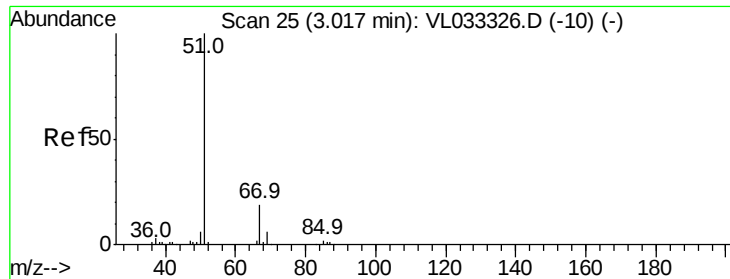
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#2
Dichlorodifluoromethane
Concen: 0.245 ppbv
RT: 3.08 min Scan# 44
Delta R.T. -0.00 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.9	40.3





#3

Chlorodifluoromethane

Concen: 1.237 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

ClientSampled :

A-3

Tot Ion: 51 Resp: 98154

Ion Ratio Lower Upper

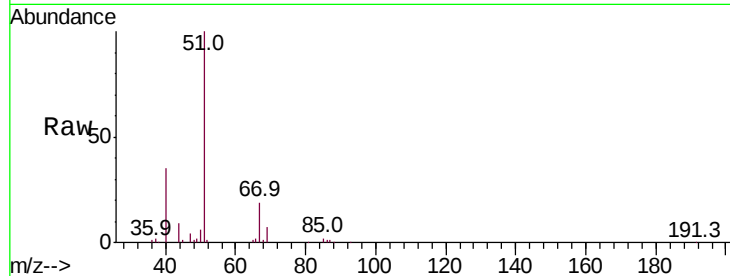
51 100

67 18.9 14.9 22.3

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

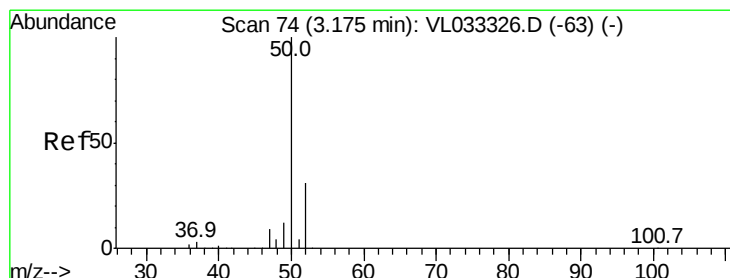
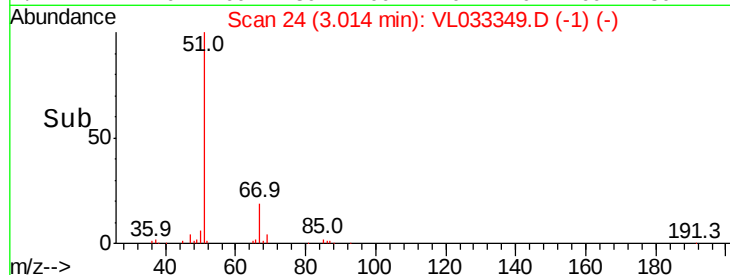
100000

50000

0

3.01

Time-->



#4

Chloromethane

Concen: 0.556 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033349.D

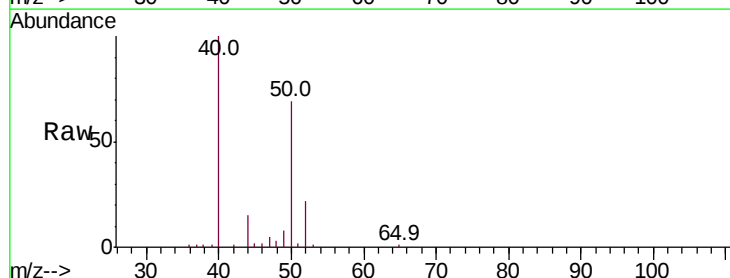
Acq: 16 Mar 2019 3:04

Tgt Ion: 50 Resp: 23900

Ion Ratio Lower Upper

50 100

52 32.2 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

20000

15000

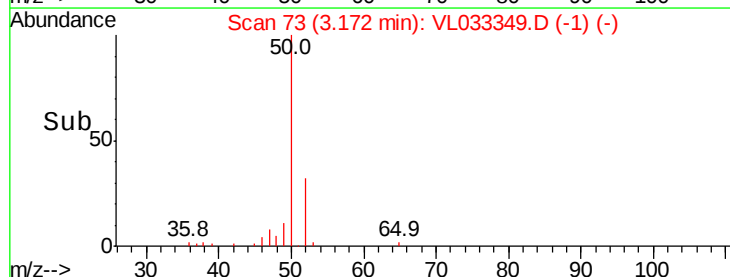
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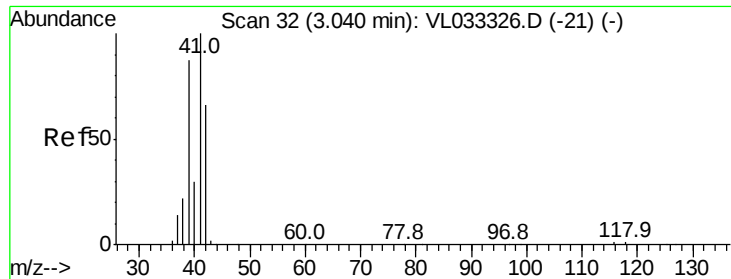
5000

0

3.17

Time-->





#9

Propene

Concen: 1.778 ppbv m

RT: 3.05 min Scan# 34

Delta R.T. 0.01 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

ClientSampled :

A-3

Tot Ion: 41 Resp: 62986

Ion Ratio Lower Upper

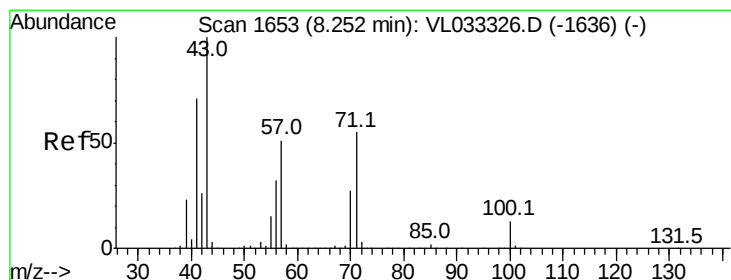
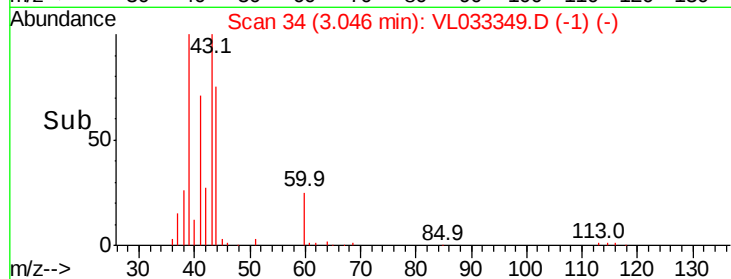
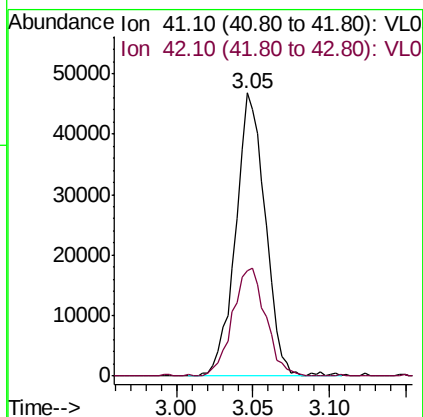
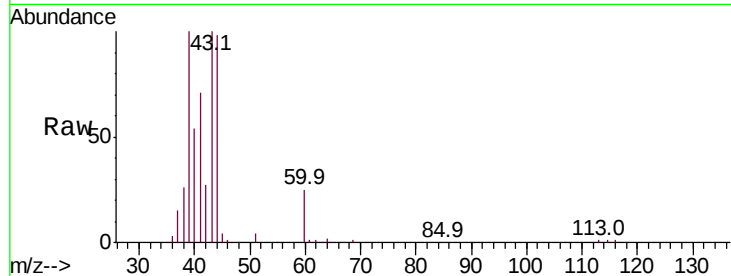
41 100

42 257.8 55.2 82.8#

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#10

Heptane

Concen: 1.553 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. -0.00 min

Lab File: VL033349.D

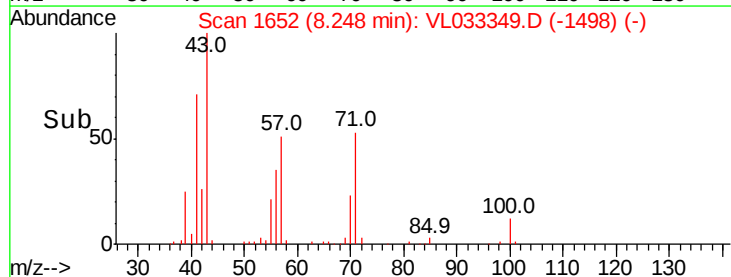
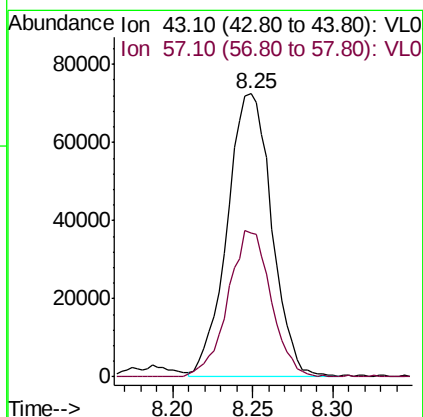
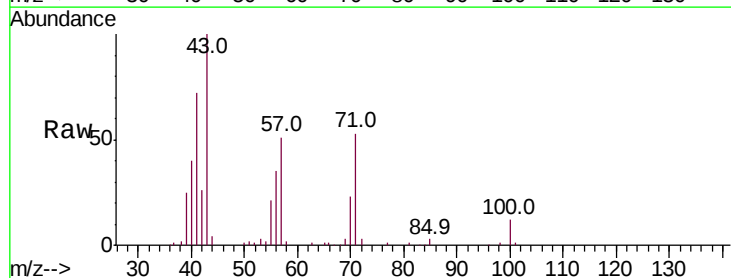
Acq: 16 Mar 2019 3:04

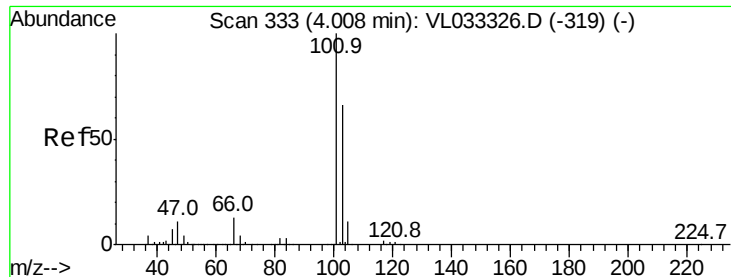
Tgt Ion: 43 Resp: 136423

Ion Ratio Lower Upper

43 100

57 50.2 40.4 60.6





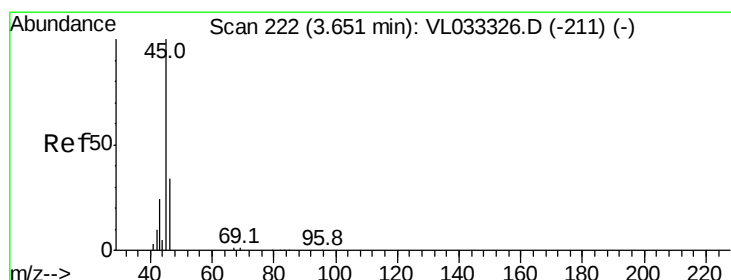
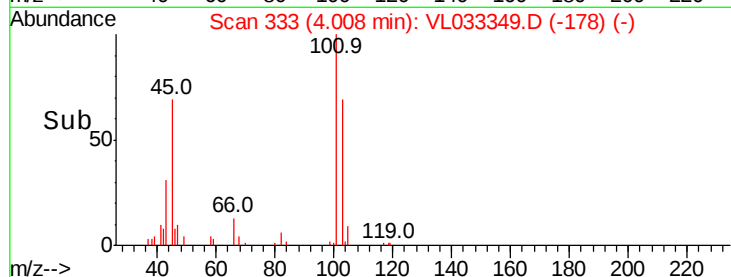
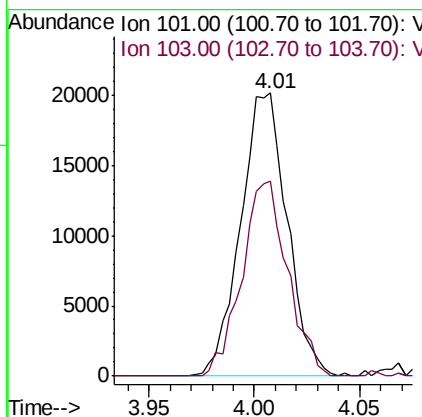
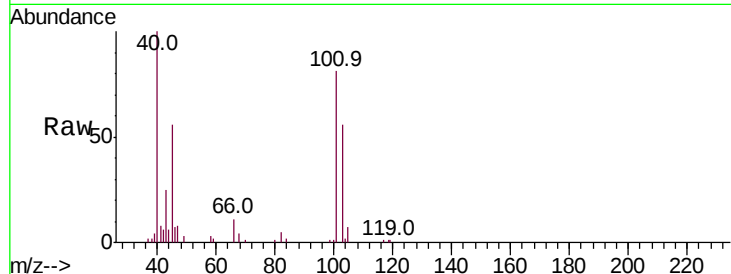
#11
 Trichlorofluoromethane
 Concen: 0.256 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. -0.00 min
 Lab File: VL033349.D
 Acq: 16 Mar 2019 3:04

Instrument :
 MSVOA_L
 ClientSampleId :
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Tot Ion:101 Resp: 30964
 Ion Ratio Lower Upper
 101 100
 103 69.0 52.9 79.3

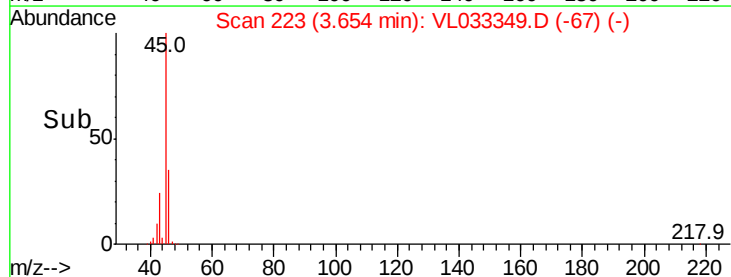
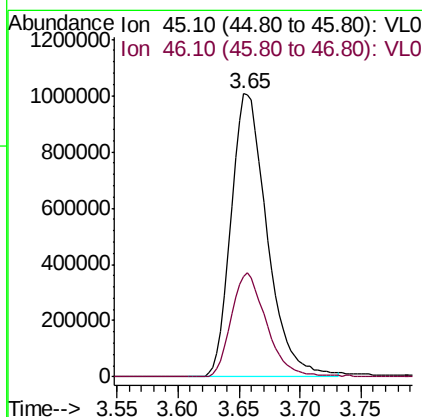
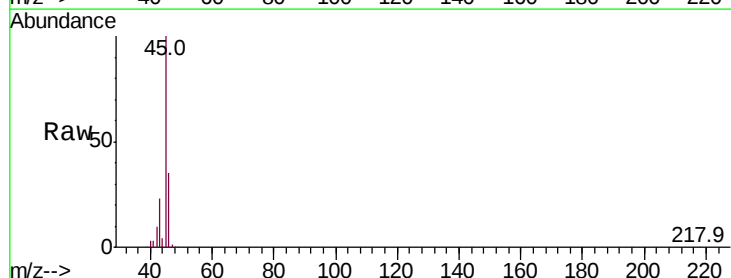
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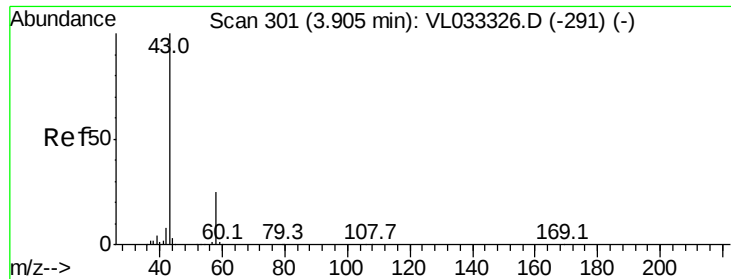
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#13
 Ethanol
 Concen: 122.724 ppbv
 RT: 3.65 min Scan# 223
 Delta R.T. 0.00 min
 Lab File: VL033349.D
 Acq: 16 Mar 2019 3:04

Tgt Ion: 45 Resp: 2072158
 Ion Ratio Lower Upper
 45 100
 46 36.3 14.9 59.7





#15

Acetone

Concen: 7.309 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.01 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

ClientSampled :

A-3

Tot Ion: 43 Resp: 785414

Ion Ratio Lower Upper

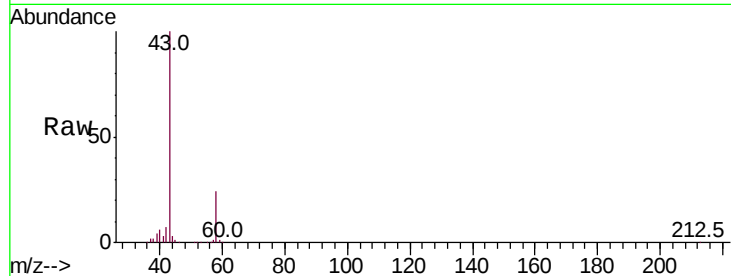
43 100

58 22.8 20.4 30.6

Manual Integrations
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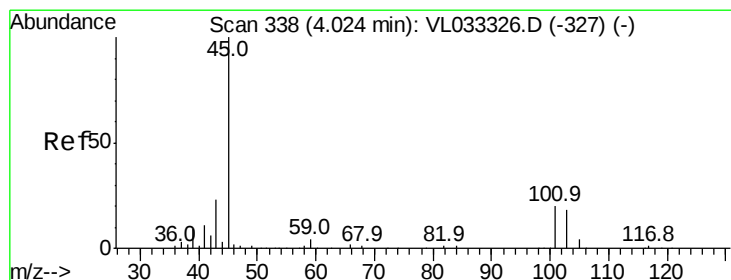
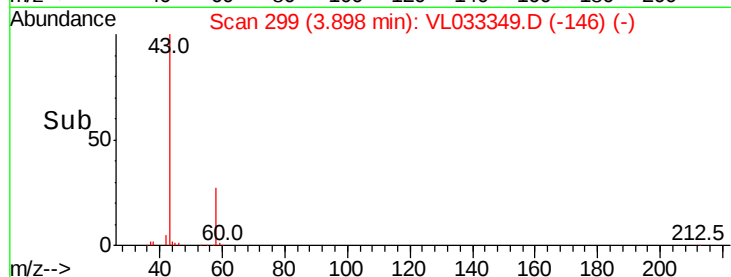
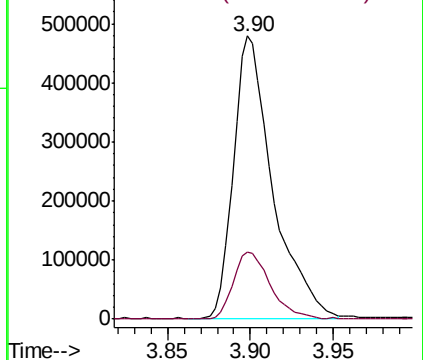
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 13.822 ppbv

RT: 4.03 min Scan# 341

Delta R.T. 0.01 min

Lab File: VL033349.D

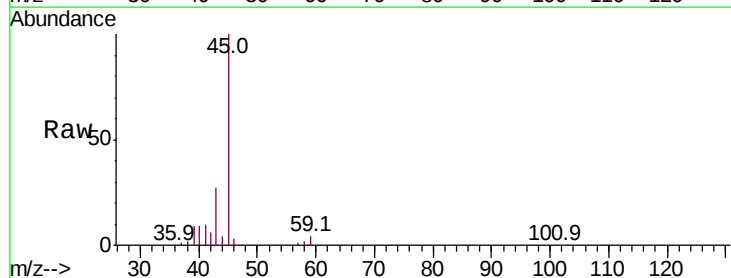
Acq: 16 Mar 2019 3:04

Tgt Ion: 45 Resp: 706503

Ion Ratio Lower Upper

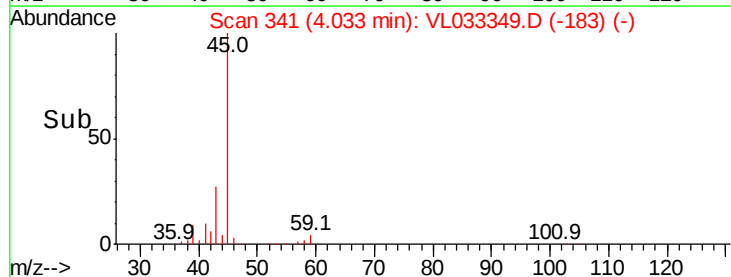
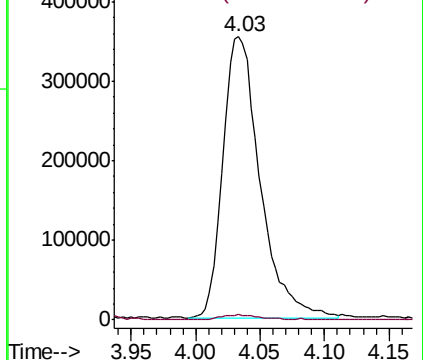
45 100

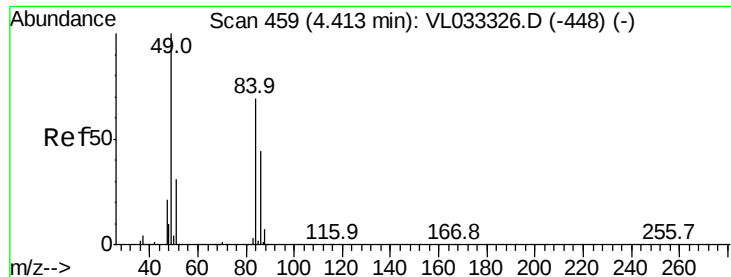
58 1.9 1.5 2.3



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





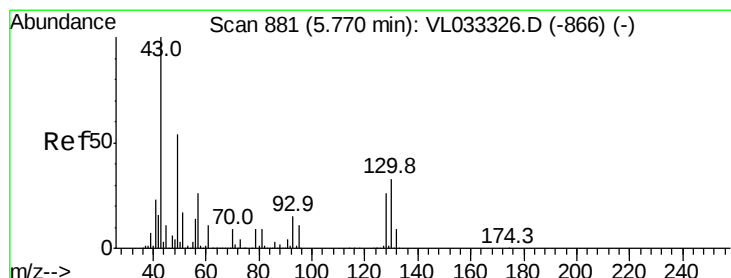
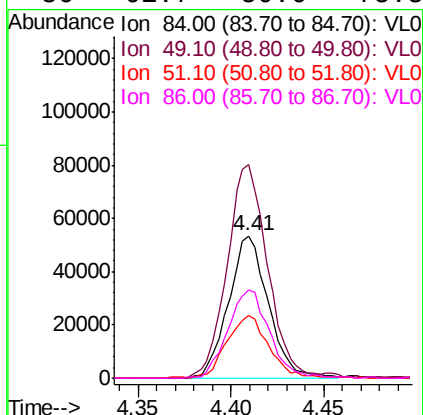
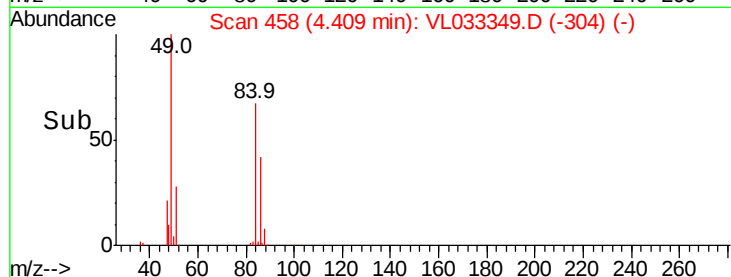
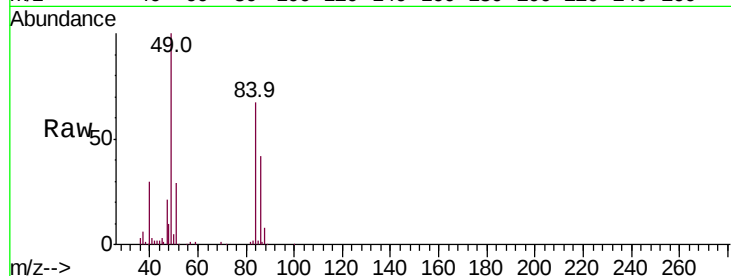
#20
Methvlene Chloride
Concen: 2.276 ppbv
RT: 4.41 min Scan# 458
Delta R.T. -0.00 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Instrument :
MSVOA_L
ClientSampleId :
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Tot Ion	84	Resp	79775
Ion	Ratio	Lower	Upper
84	100		
49	148.8	115.4	173.0
51	43.7	35.8	53.6
86	61.7	50.6	75.8

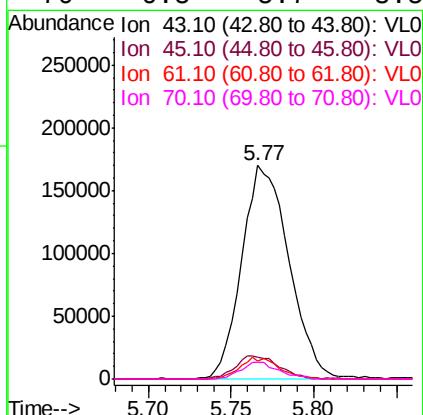
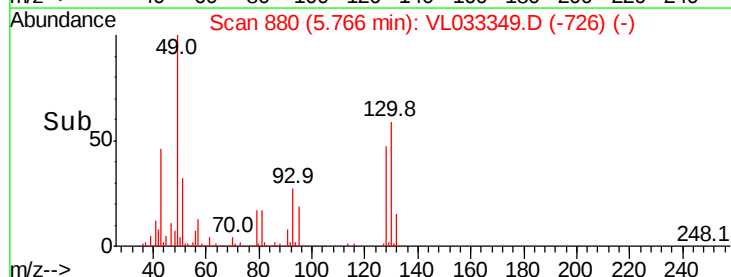
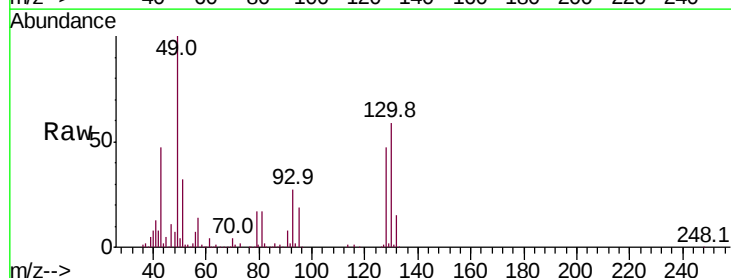
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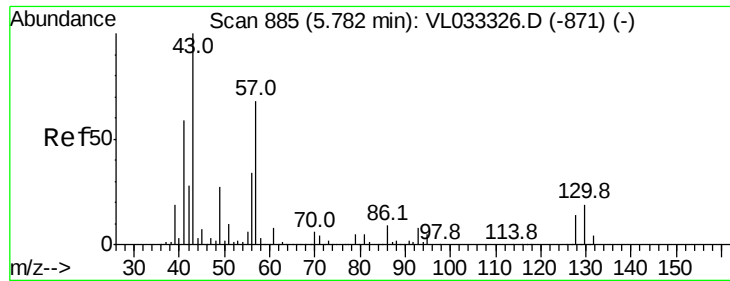
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3/19/2019 10:01:43 AM



#25
Ethyl Acetate
Concen: 2.152 ppbv
RT: 5.77 min Scan# 880
Delta R.T. -0.00 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Tgt Ion	43	Resp	336223
Ion	Ratio	Lower	Upper
43	100		
45	10.3	7.9	11.9
61	8.4	7.4	11.2
70	6.5	5.7	8.5





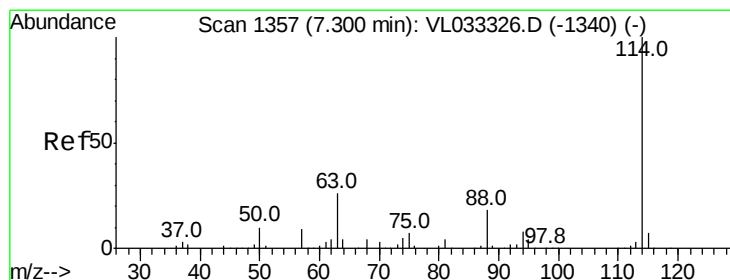
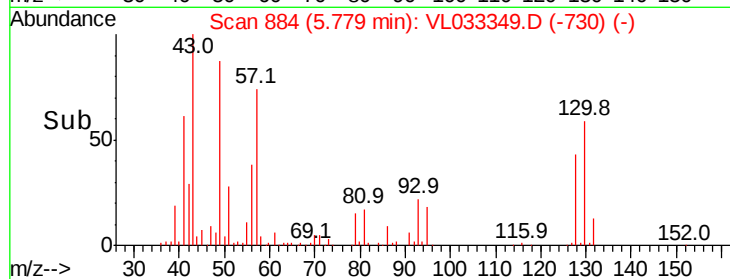
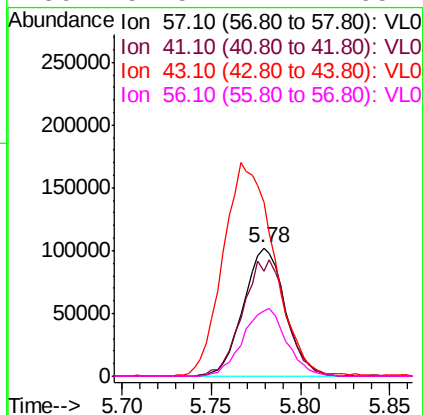
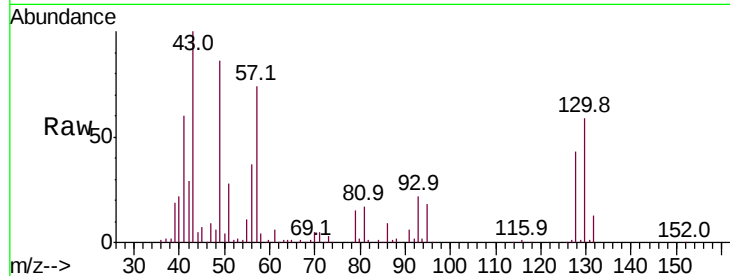
#26
Hexane
Concen: 2.394 ppbv
RT: 5.78 min Scan# 884
Delta R.T. -0.00 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Instrument :
MSVOA_L
ClientSampled :
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Tot Ion	57	Resp	167196
Ion Ratio	Lower	Upper	
57	100		
41	96.1	70.5	105.7
43	203.6	181.8	272.8
56	54.5	42.2	63.2

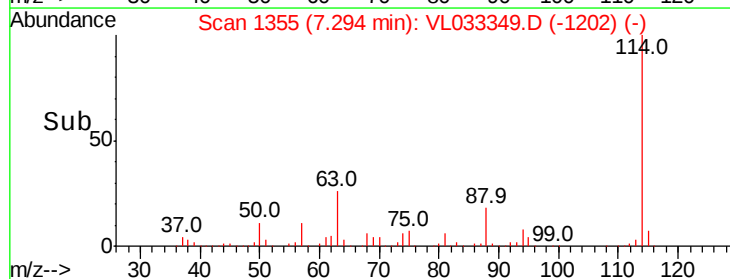
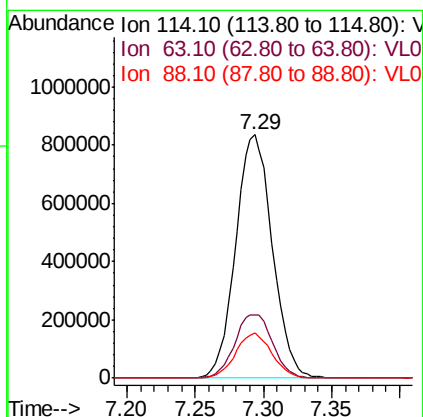
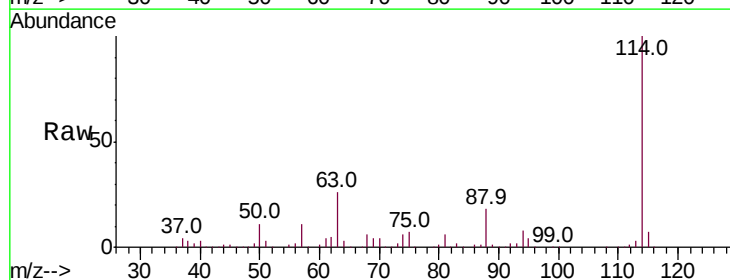
Manual Integrations
APPROVED

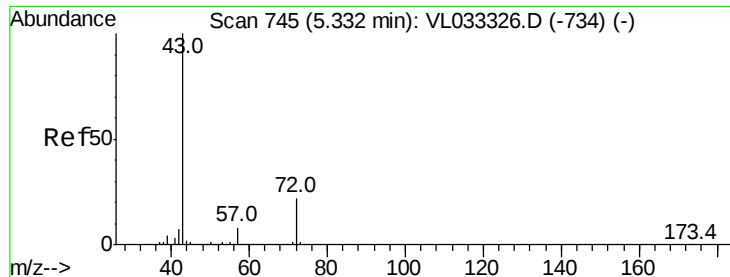
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3/19/2019 10:01:43 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1355
Delta R.T. -0.01 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Tgt Ion	114	Resp	1557016
Ion Ratio	Lower	Upper	
114	100		
63	27.2	21.4	32.2
88	18.2	14.5	21.7





#34

2-Butanone

Concen: 0.784 ppbv

RT: 5.33 min Scan# 745

Delta R.T. -0.00 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

ClientSampled :

A-3

Tot Ion: 43 Resp: 80151

Ion Ratio Lower Upper

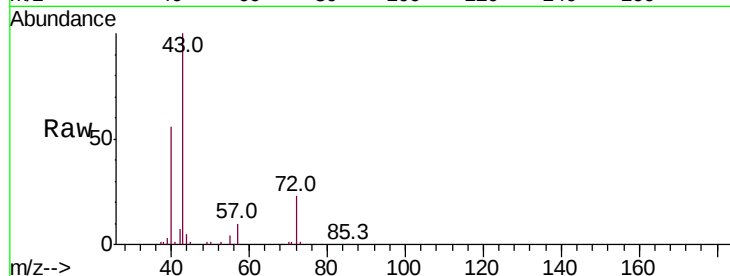
43 100

72 21.7 17.7 26.5

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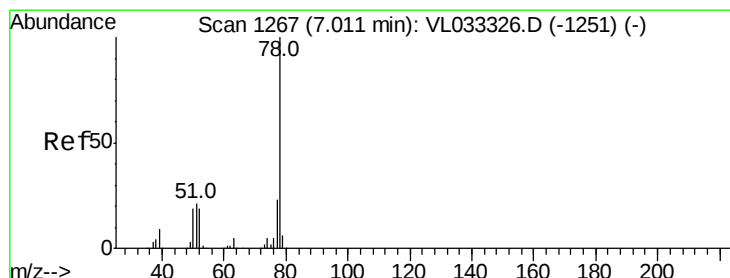
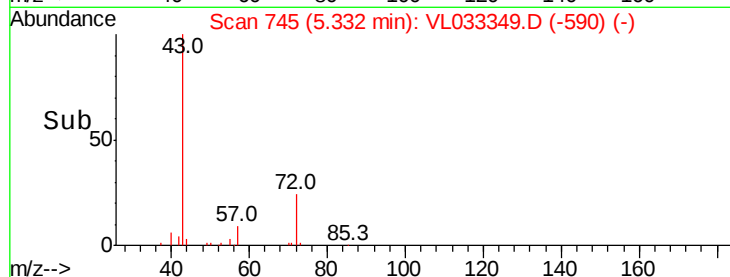
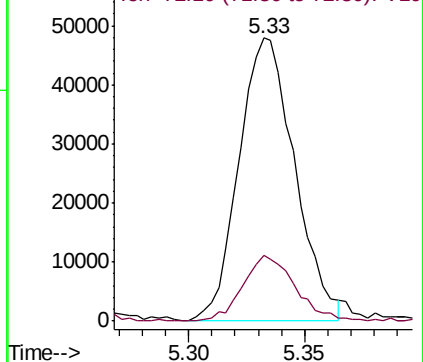
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#36

Benzene

Concen: 0.260 ppbv m

RT: 7.01 min Scan# 1266

Delta R.T. -0.00 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

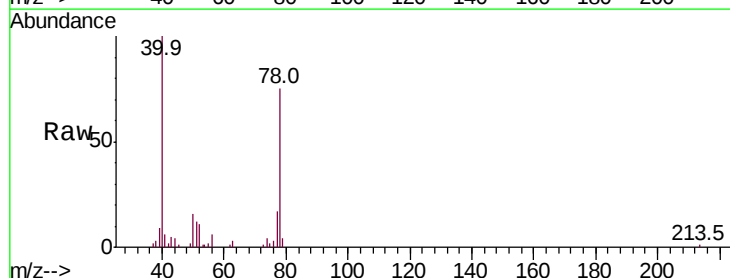
Tgt Ion: 78 Resp: 36239

Ion Ratio Lower Upper

78 100

77 22.7 18.1 27.1

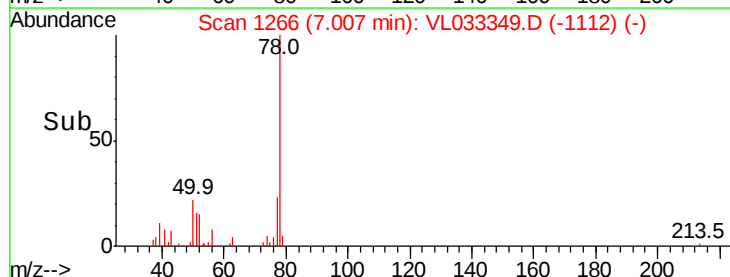
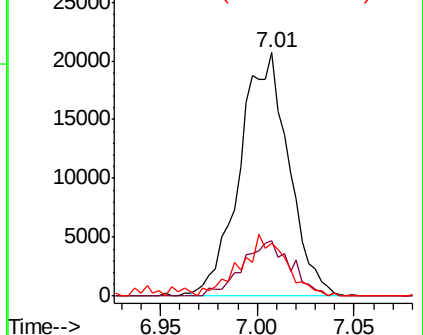
50 21.8 15.2 22.8

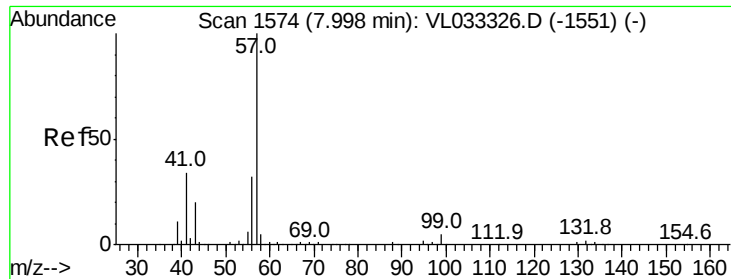


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





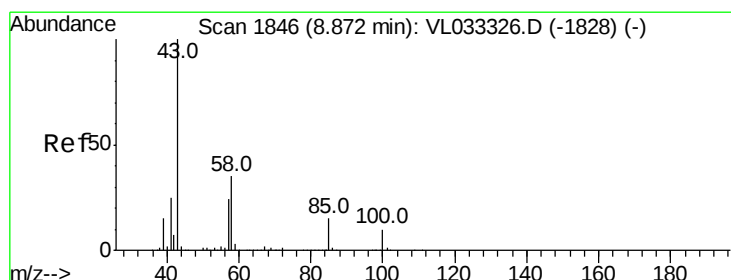
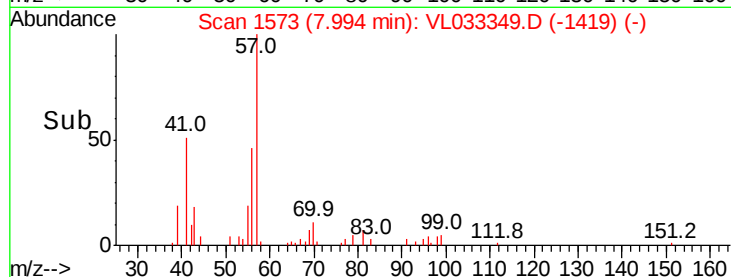
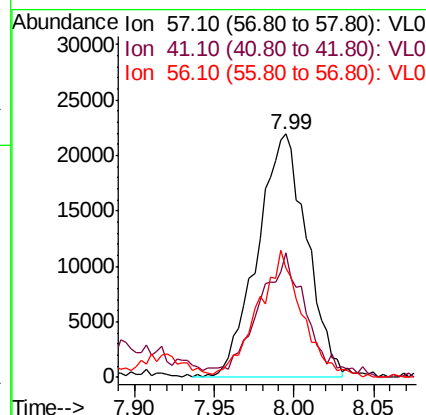
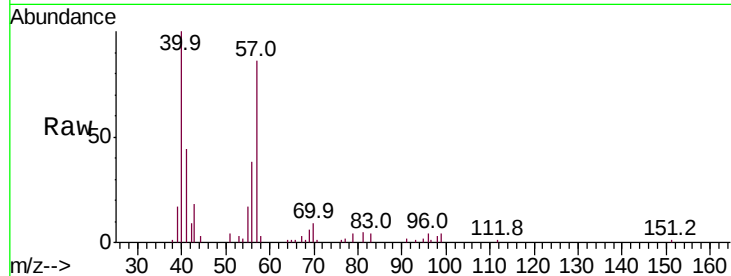
#44
 2,2,4-Trimethylpentane
 Concen: 0.203 ppbv
 RT: 7.99 min Scan# 1573
 Delta R.T. -0.00 min
 Lab File: VL033349.D
 Acq: 16 Mar 2019 3:04

Instrument :
 MSVOA_L
 ClientSampled :
 A-3

Tot Ion	Ratio	Lower	Upper
57	100		
41	50.8	26.0	39.0#
56	47.2	24.6	36.8#

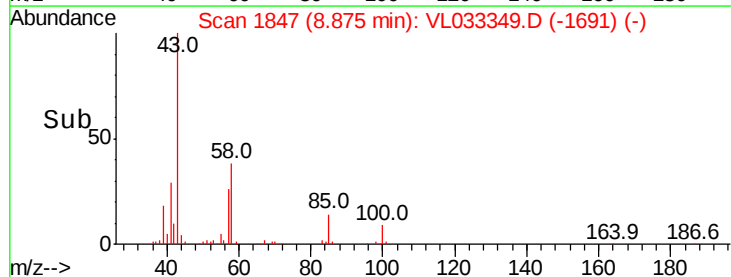
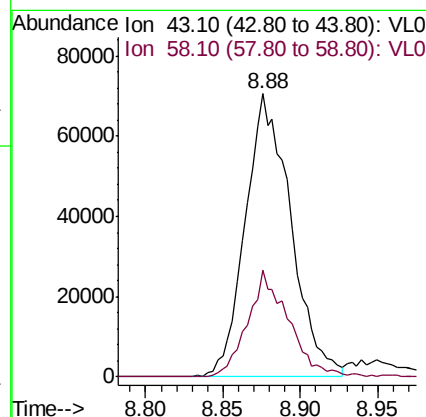
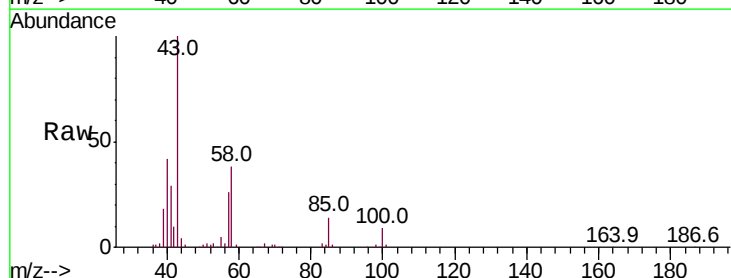
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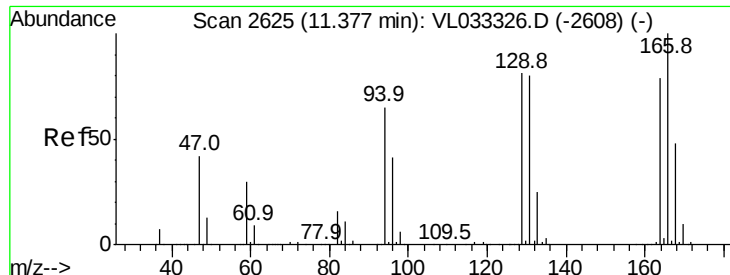
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#50
 4-Methyl-2-Pentanone
 Concen: 0.998 ppbv
 RT: 8.88 min Scan# 1847
 Delta R.T. 0.00 min
 Lab File: VL033349.D
 Acq: 16 Mar 2019 3:04

Tgt Ion	Ratio	Lower	Upper
43	100		
58	34.2	28.4	42.6





#52

Tetrachloroethene

Concen: 0.150 ppbv m

RT: 11.37 min Scan# 2623

Delta R.T. -0.01 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

ClientSampled :

A-3

Tot Ion:164 Resp: 8707

Ion Ratio Lower Upper

164 100

166 103.4 101.5 152.3

129 81.2 82.2 123.2#

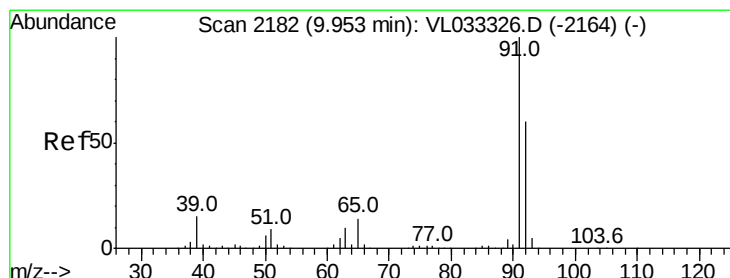
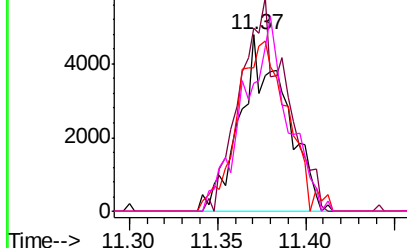
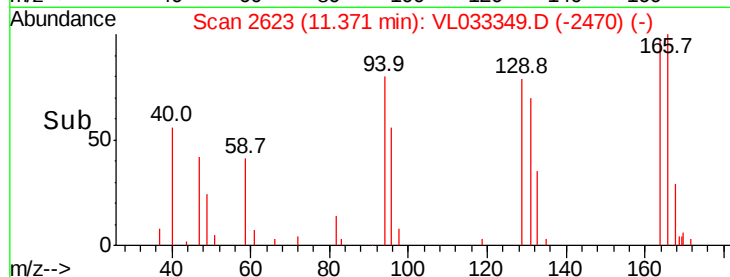
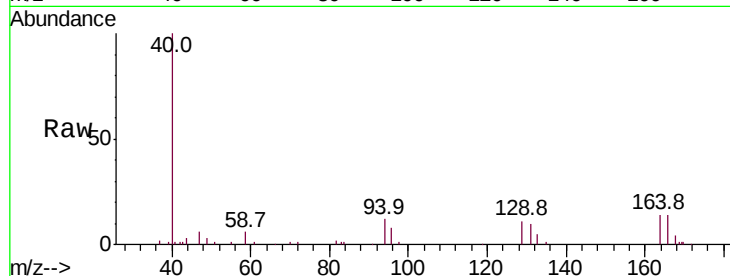
131 72.7 81.1 121.7#

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#53

Toluene

Concen: 30.635 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.00 min

Lab File: VL033349.D

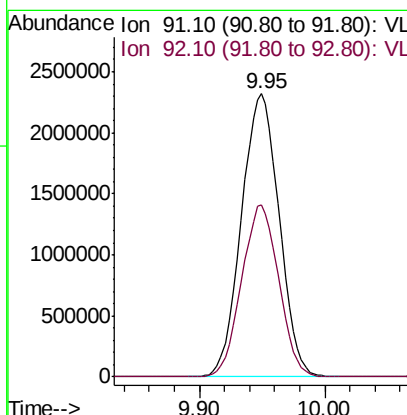
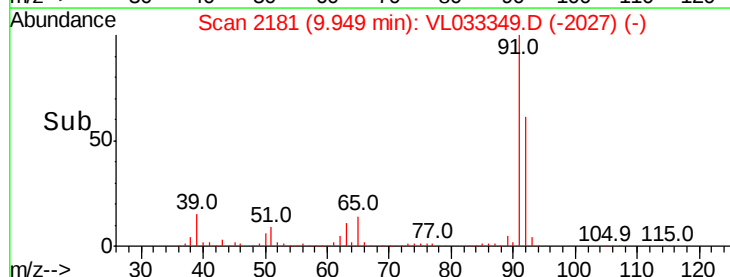
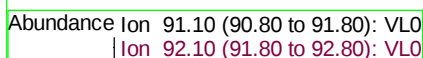
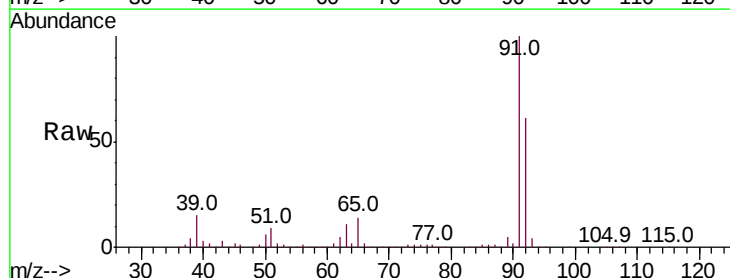
Acq: 16 Mar 2019 3:04

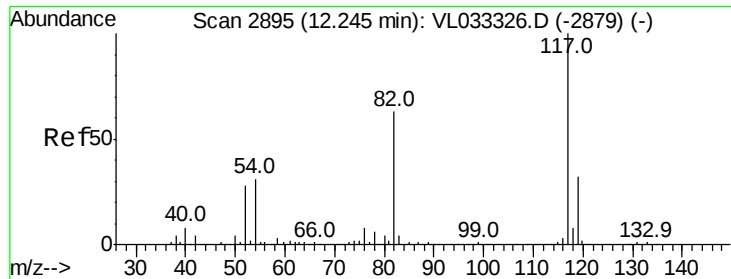
Tgt Ion: 91 Resp: 4850528

Ion Ratio Lower Upper

91 100

92 59.9 47.4 71.0





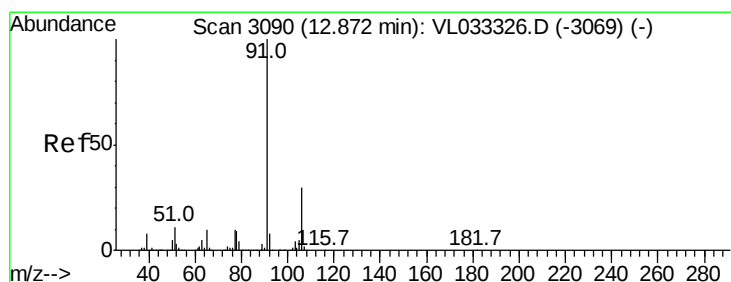
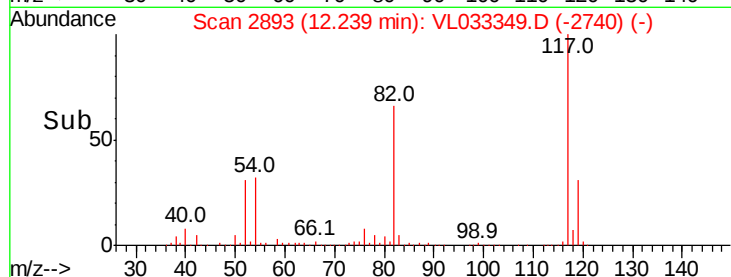
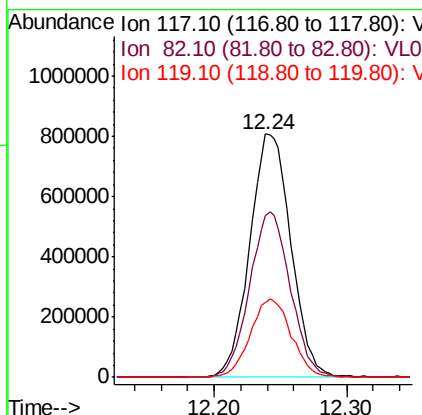
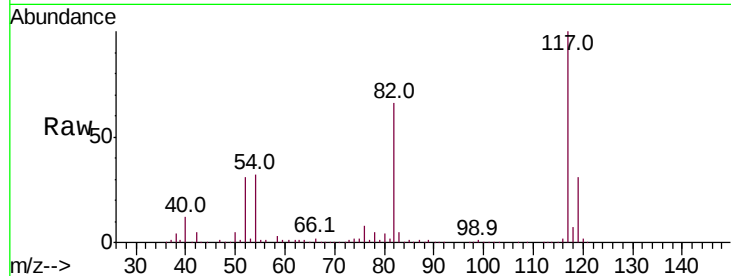
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. -0.01 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Instrument :
MSVOA_L
ClientSampled :
A-3

Tot Ion:117 Resp: 1742288
Ion Ratio Lower Upper
117 100
82 67.5 53.4 80.2
119 32.1 27.3 40.9

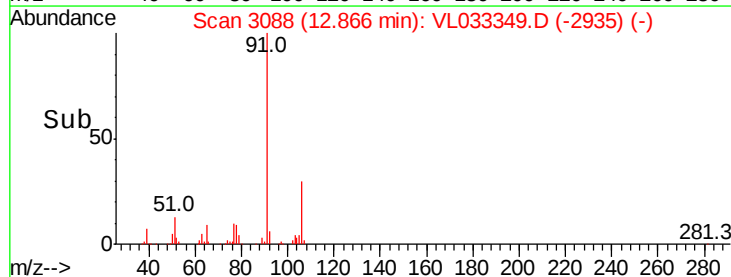
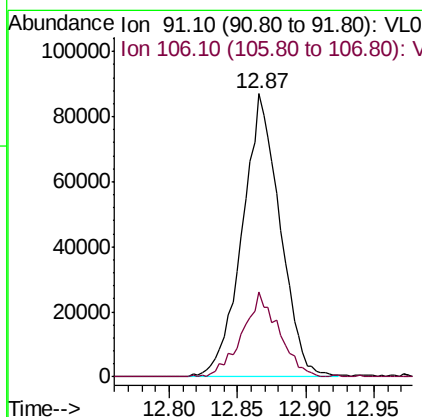
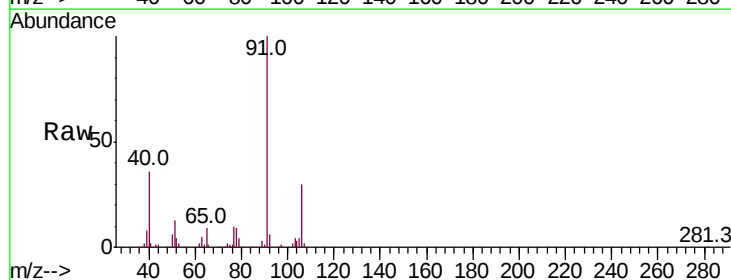
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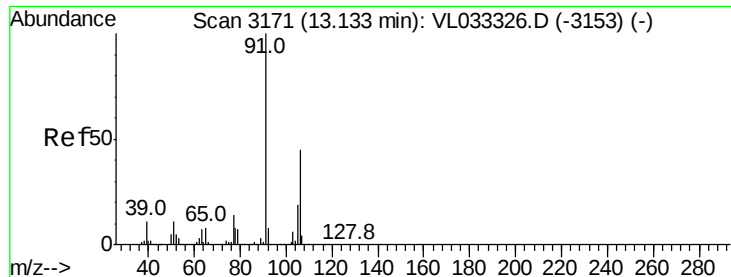
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#58
Ethyl Benzene
Concen: 0.679 ppbv
RT: 12.87 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Tgt Ion: 91 Resp: 167271
Ion Ratio Lower Upper
91 100
106 30.1 24.2 36.2





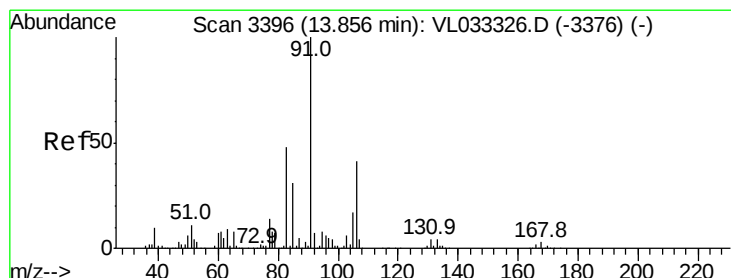
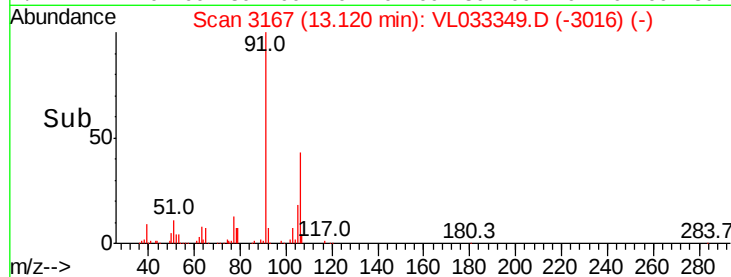
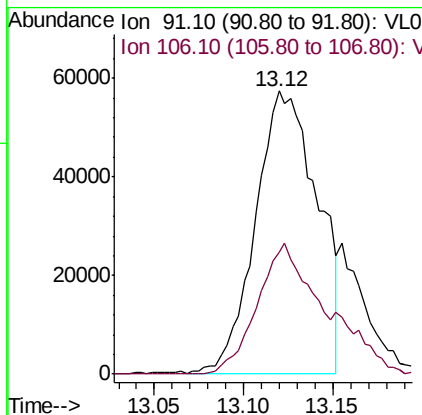
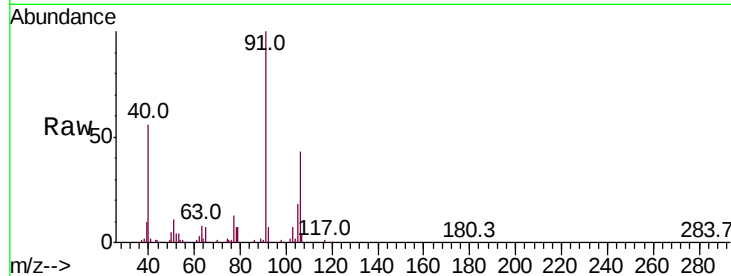
#59
m/p-Xylene
Concen: 0.657 ppbv m
RT: 13.12 min Scan# 3167
Delta R.T. -0.01 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Instrument :
MSVOA_L
ClientSampled :
A-3

Tot Ion: 91 Resp: 139166
Ion Ratio Lower Upper
91 100
106 51.3 0.0 0.0#

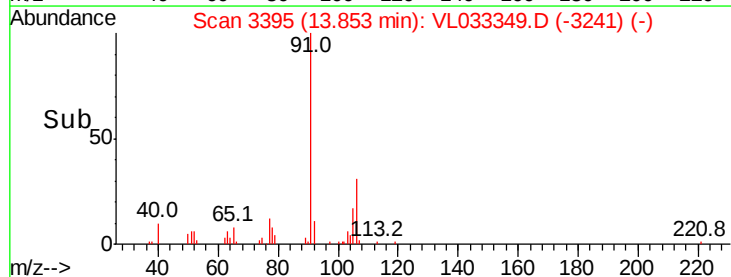
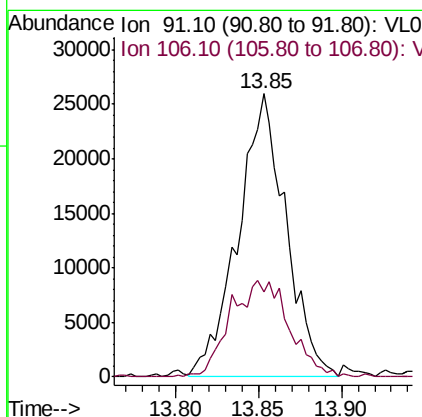
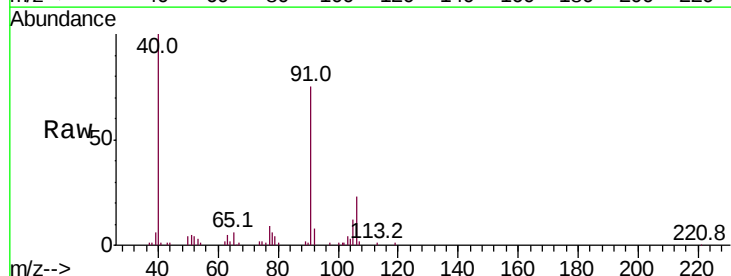
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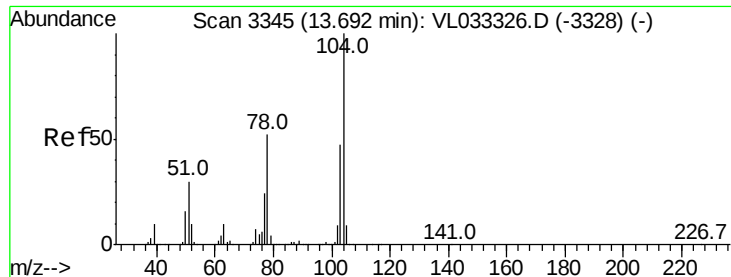
MMDadoda
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#60
o-Xylene
Concen: 0.252 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. -0.00 min
Lab File: VL033349.D
Acq: 16 Mar 2019 3:04

Tgt Ion: 91 Resp: 52072
Ion Ratio Lower Upper
91 100
106 41.8 21.3 63.9





#61

Stvrene

Concen: 0.175 ppbv m

RT: 13.68 min Scan# 3342

Delta R.T. -0.01 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

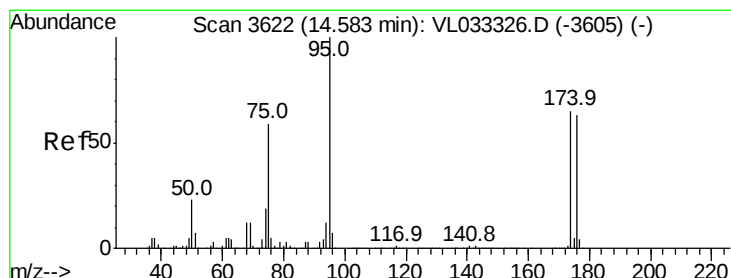
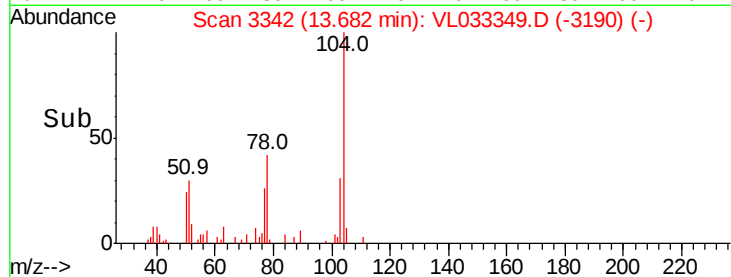
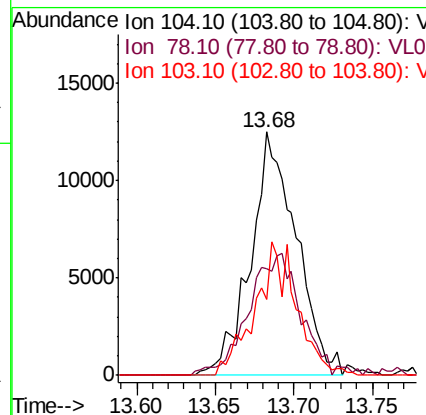
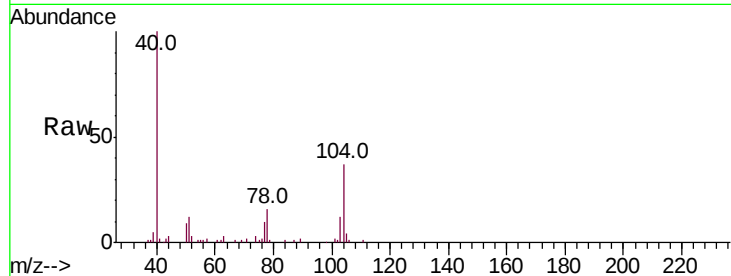
ClientSampleId :

A-3

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	42.7	64.1#
103	0.0	38.0	57.0#

Manual Integrations
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3/19/2019 10:01:43 AM



#68

1-Bromo-4-Fluorobenzene

Concen: 10.301 ppbv

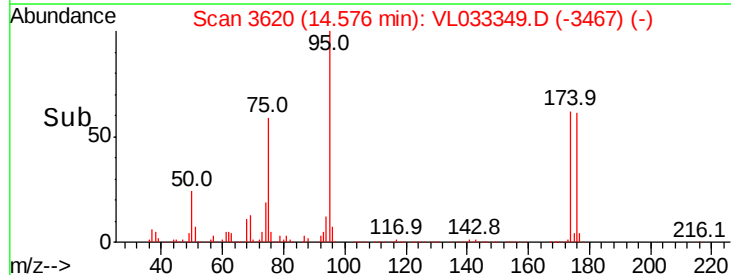
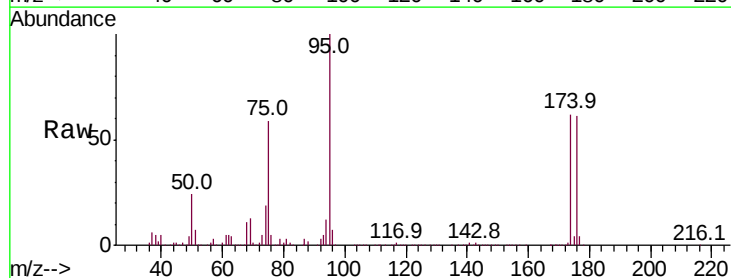
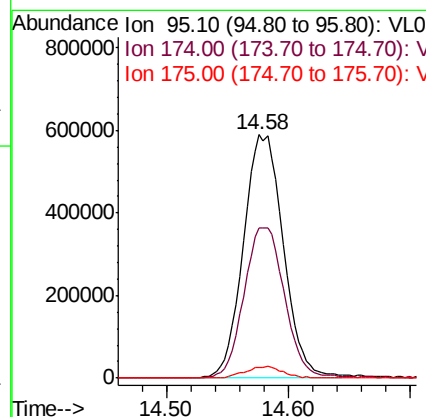
RT: 14.58 min Scan# 3620

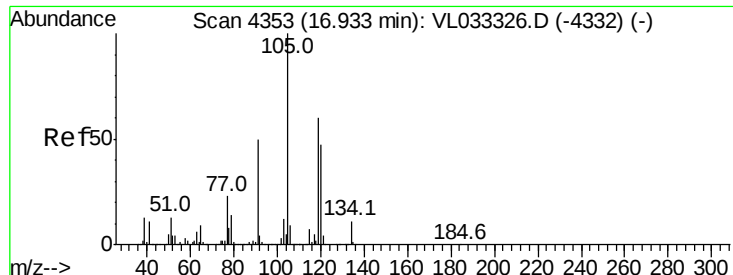
Delta R.T. -0.01 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Tgt Ion	Ratio	Lower	Upper
95	100		
174	63.8	51.5	77.3
175	4.6	3.8	5.6





#74

1,2,4-Trimethylbenzene

Concen: 0.133 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. -0.00 min

Lab File: VL033349.D

Acq: 16 Mar 2019 3:04

Instrument :

MSVOA_L

ClientSampleId :

A-3

Tot Ion	Ion	Ratio	Resp Lower	Upper
105	100			
120	27.3	37.4	56.2#	
91	14.2	41.0	61.4#	
77	15.7	18.5	27.7#	

Manual Integrations
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MMDadoda
3/19/2019 10:01:43 AM

