

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL070819\
 Data File : VL034012.D
 Acq On : 8 Jul 2019 15:26
 Operator : SY/AP
 Sample : K3591-15 0.1 PPB
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Manual Integrations
 APPROVED

MMDadoda
 7/10/2019 8:50:03 AM

Quant Time: Jul 09 08:45:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070219AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 09
 QLast Update : Tue Jul 02 19:31:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.72	49	998787	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.25	114	2602086	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.19	117	2621354	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.52	95	2094939	9.37	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.70%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	33012	0.160	ppbv	95
3) Chlorodifluoromethane	2.99	51	17408	0.141	ppbv #	83
4) Chloromethane	3.15	50	9646	0.136	ppbv #	83
5) Vinyl Chloride	3.27	62	10275m	0.129	ppbv	
6) Bromomethane	3.49	94	5543	0.118	ppbv	89
7) Chloroethane	3.58	64	4564m	0.160	ppbv	
8) Dichlorotetrafluoroethane	3.20	85	25970	0.129	ppbv	98
9) Propene	3.01	41	6327m	0.139	ppbv	
10) Heptane	8.20	43	7642m	0.067	ppbv	
11) Trichlorofluoromethane	3.98	101	31315	0.135	ppbv	94
12) 1,1,2-Trichlorotrifluoroet	4.53	101	19475m	0.119	ppbv	
13) Ethanol	3.65	45	2993m	0.212	ppbv	
14) Bromoethene	3.77	108	6578	0.107	ppbv #	75
15) Acetone	3.90	43	25777	0.154	ppbv #	87
16) 1,3-Butadiene	3.35	39	6497m	0.110	ppbv	
17) tert-Butyl alcohol	4.36	59	15911m	0.119	ppbv	
18) 1,1-Dichloroethene	4.33	96	8009m	0.110	ppbv	
19) Isopropyl Alcohol	4.02	45	14530m	0.129	ppbv	
20) Methylene Chloride	4.38	84	13384m	0.183	ppbv	
21) Allyl Chloride	4.45	41	12608m	0.120	ppbv	
22) trans-1,2-Dichloroethene	4.93	96	9291m	0.133	ppbv	
23) Vinyl Acetate	5.13	43	16253m	0.097	ppbv	
24) 1,1-Dichloroethane	5.06	63	16555m	0.111	ppbv	
25) Ethyl Acetate	5.75	43	25795m	0.112	ppbv	
26) Hexane	5.74	57	10124m	0.096	ppbv	
27) Carbon Disulfide	4.59	76	17192m	0.096	ppbv	
28) Methyl tert-Butyl Ether	5.11	73	14437m	0.081	ppbv	
29) Chloroform	5.80	83	22693m	0.115	ppbv	
30) Cyclohexane	7.19	84	4617m	0.057	ppbv	
31) cis-1,2-Dichloroethene	5.60	61	11253m	0.111	ppbv	
32) 1,1,1-Trichloroethane	6.58	97	20286m	0.101	ppbv	
34) 2-Butanone	5.32	43	13763m	0.100	ppbv	
35) Carbon Tetrachloride	7.10	117	23307m	0.113	ppbv	
36) Benzene	6.98	78	17637m	0.087	ppbv	
37) 1,2-Dichloroethane	6.38	62	16519m	0.110	ppbv	
38) Trichloroethene	7.91	130	8631m	0.095	ppbv	
39) 1,2-Dichloropropane	7.69	63	7763m	0.103	ppbv	
41) Tetrahydrofuran	6.16	42	5523m	0.082	ppbv	
42) Bromodichloromethane	7.87	83	20960	0.104	ppbv #	80
43) Methyl Methacrylate	8.10	69	5065m	0.066	ppbv	
44) 2,2,4-Trimethylpentane	7.95	57	23328m	0.066	ppbv	

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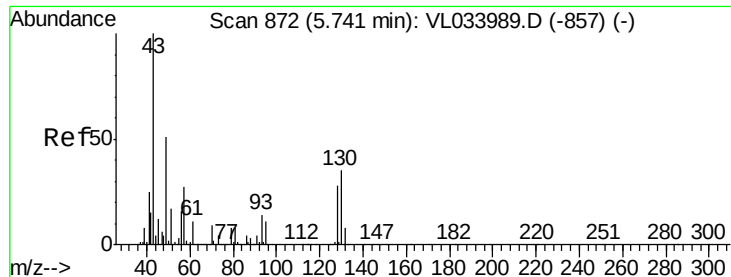
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)	
45) t-1,3-Dichloropropene	9.36	75	7250m	0.072	ppbv		
46) cis-1,3-Dichloropropene	8.79	75	9607m	0.082	ppbv		
47) 1,1,2-Trichloroethane	9.57	97	11292m	0.119	ppbv		
48) Dibromochloromethane	10.41	129	16544m	0.091	ppbv		
49) Bromoform	13.15	173	14533m	0.094	ppbv		
50) 4-Methyl-2-Pentanone	8.86	43	13765m	0.067	ppbv		
51) 2-Hexanone	10.26	43	7105m	0.043	ppbv		
52) Tetrachloroethene	11.33	164	8846m	0.101	ppbv		
53) Toluene	9.90	91	15269m	0.066	ppbv		
54) 1,2-Dibromoethane	10.72	107	12603m	0.090	ppbv		
56) 1,1,1,2-Tetrachloroethane	12.23	131	13428m	0.115	ppbv		
57) Chlorobenzene	12.25	112	25035m	0.120	ppbv		
58) Ethyl Benzene	12.81	91	20044m	0.064	ppbv		
59) m/p-Xylene	13.10	91	30942m	0.108	ppbv		
60) o-Xylene	13.80	91	15482m	0.054	ppbv		
61) Styrene	13.63	104	10739m	0.057	ppbv		
62) Isopropylbenzene	14.77	105	27472m	0.063	ppbv		
63) 1,1,2,2-Tetrachloroethane	13.79	83	23171m	0.105	ppbv		
64) n-propylbenzene	15.67	120	5762m	0.051	ppbv		
65) tert-Butylbenzene	16.85	119	18130m	0.049	ppbv		
66) Benzyl Chloride	17.11	91	14320m	0.075	ppbv		
67) sec-Butylbenzene	17.41	105	26204m	0.050	ppbv		
69) p-Isopropyltoluene	17.76	119	20613m	0.048	ppbv		
70) n-Butylbenzene	18.67	91	20439m	0.045	ppbv		
71) 2-Chlorotoluene	15.57	91	17606m	0.055	ppbv		
72) 4-Ethyltoluene	15.96	105	16736m	0.046	ppbv		
73) 1,3,5-Trimethylbenzene	16.11	105	15528m	0.046	ppbv		
74) 1,2,4-Trimethylbenzene	16.87	105	17555m	0.046	ppbv		
75) 1,3-Dichlorobenzene	17.11	146	27982m	0.117	ppbv		
76) 1,4-Dichlorobenzene	17.25	146	23165m	0.102	ppbv		
77) 1,2-Dichlorobenzene	17.95	146	19044m	0.086	ppbv		
78) Hexachloro-1,3-Butadiene	23.51	225	29465m	0.156	ppbv		
79) Naphthalene	22.38	128	15247m	0.048	ppbv		
80) Naphthalene,2-methyl-	25.09	142	9505	0.082	ppbv	#	93
81) 1,2,4-Trichlorobenzene	22.08	180	15656m	0.077	ppbv		

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.72 min Scan# 867

Delta R.T. -0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

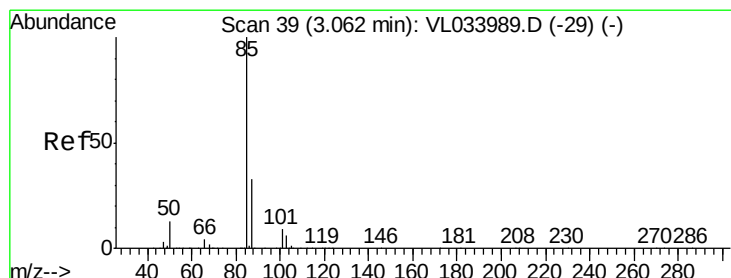
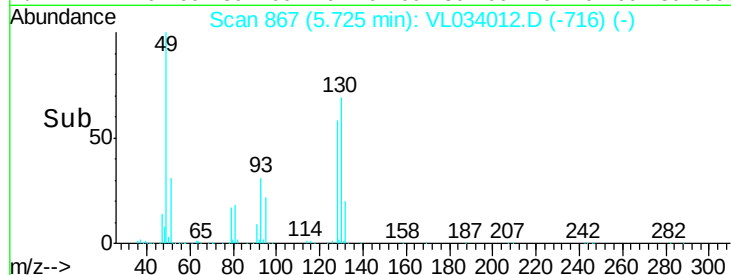
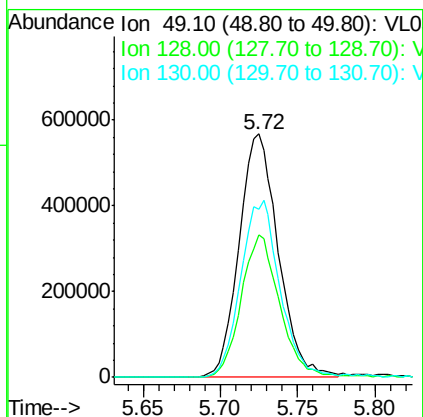
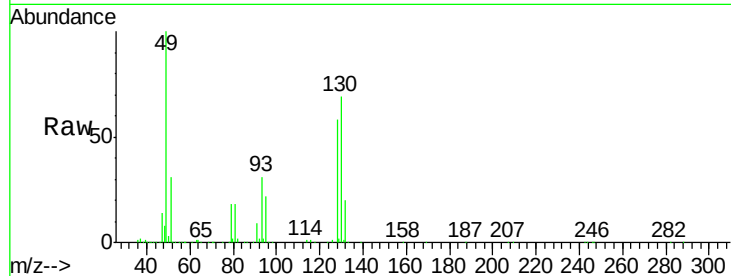
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	49	Resp:	998787
Ion	Ratio	Lower	Upper
49	100		
128	57.7	27.9	83.6
130	74.0	35.8	107.4

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#2

Dichlorodifluoromethane

Concen: 0.160 ppbv

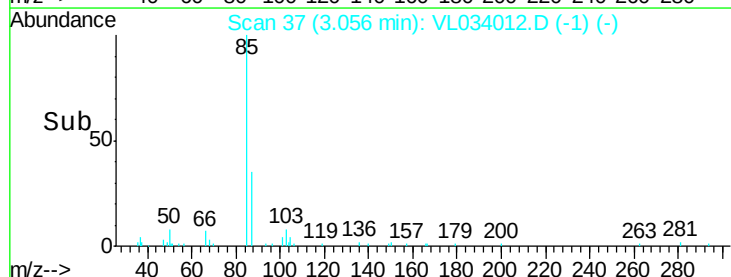
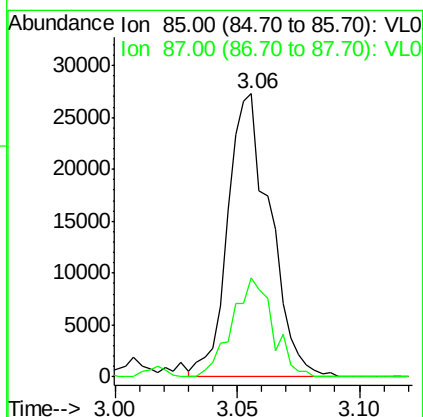
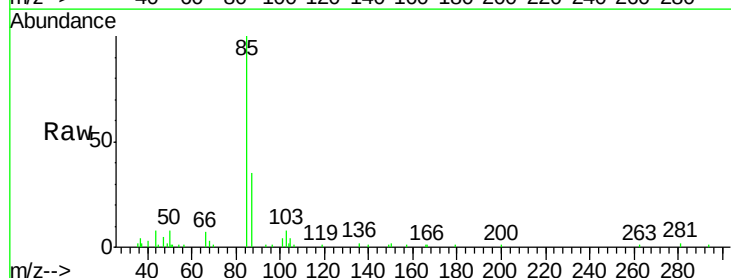
RT: 3.06 min Scan# 37

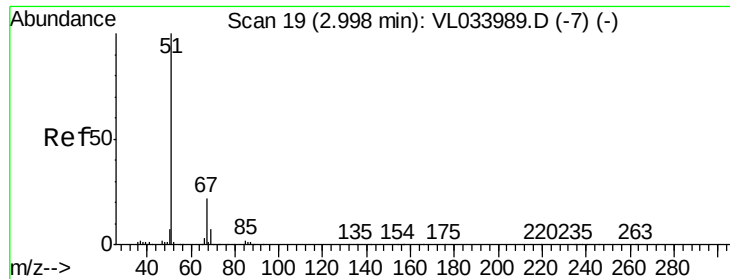
Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion:	85	Resp:	33012
Ion	Ratio	Lower	Upper
85	100		
87	35.2	26.0	39.0





#3

Chlorodifluoromethane

Concen: 0.141 ppbv

RT: 2.99 min Scan# 18

Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 51 Resp: 17408

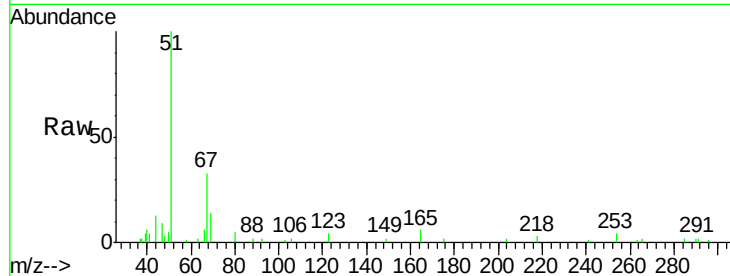
Ion Ratio Lower Upper

51 100

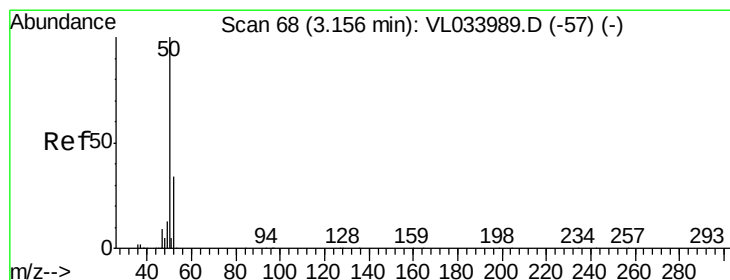
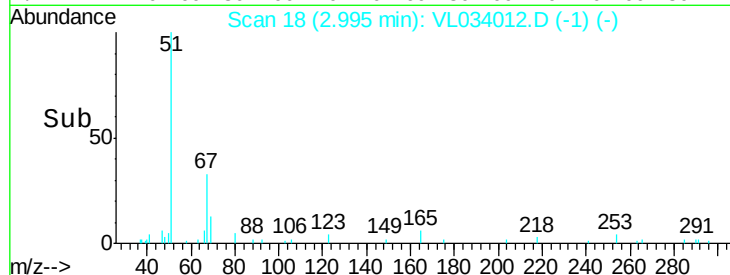
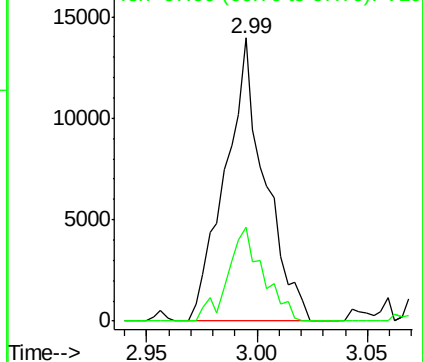
67 29.7 17.3 25.9#

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Abundance Ion 51.00 (50.70 to 51.70): VL0
Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.136 ppbv

RT: 3.15 min Scan# 67

Delta R.T. -0.00 min

Lab File: VL034012.D

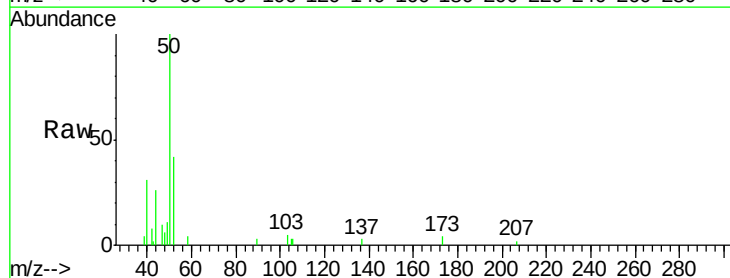
Acq: 8 Jul 2019 15:26

Tgt Ion: 50 Resp: 9646

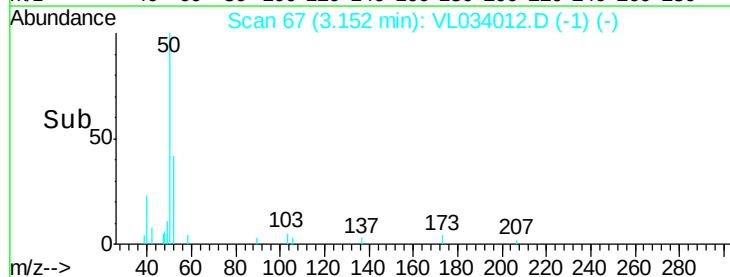
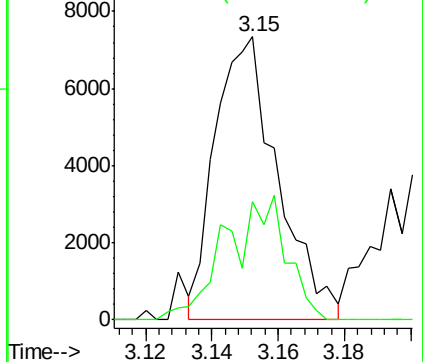
Ion Ratio Lower Upper

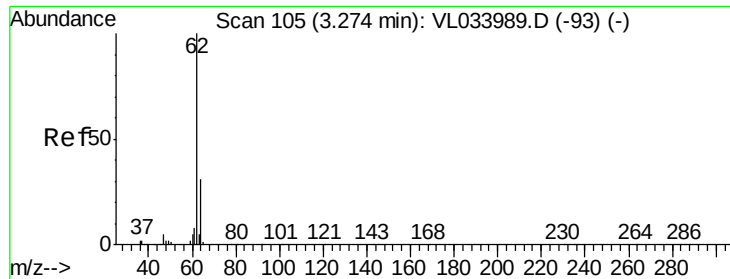
50 100

52 44.2 27.4 41.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0
Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.129 ppbv m

RT: 3.27 min Scan# 104

Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 62 Resp: 10275

Ion Ratio Lower Upper

62 100

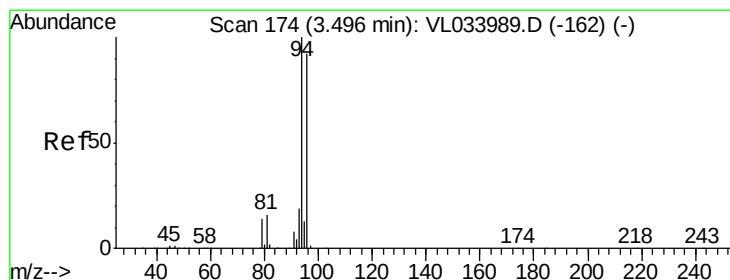
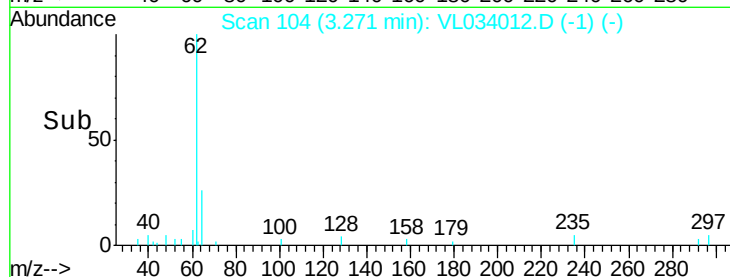
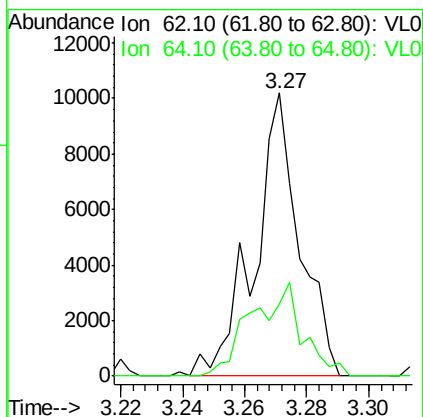
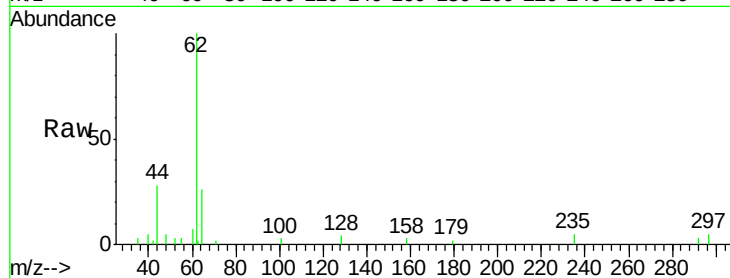
64 25.6 24.4 36.6

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#6

Bromomethane

Concen: 0.118 ppbv

RT: 3.49 min Scan# 173

Delta R.T. -0.00 min

Lab File: VL034012.D

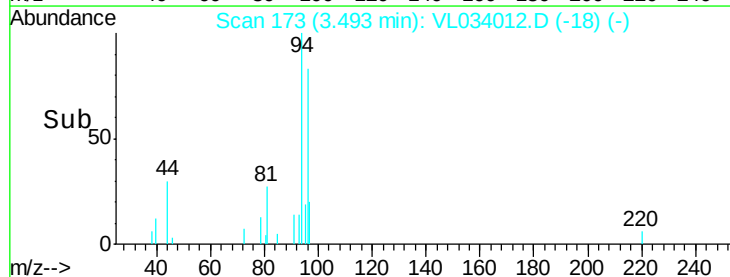
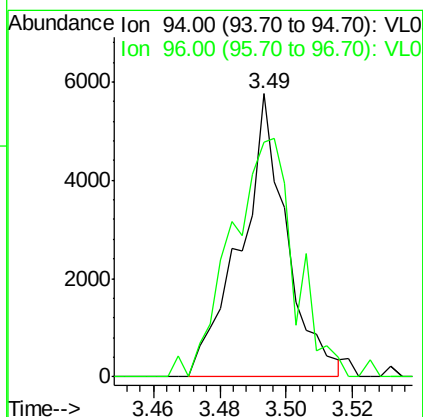
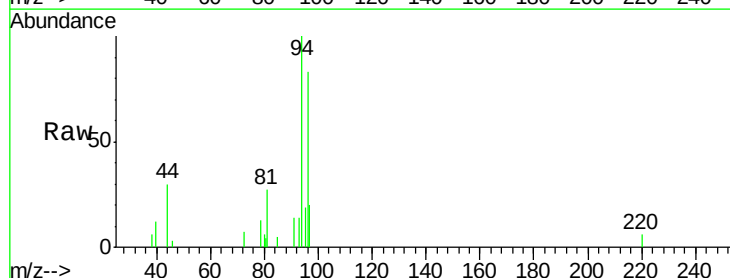
Acq: 8 Jul 2019 15:26

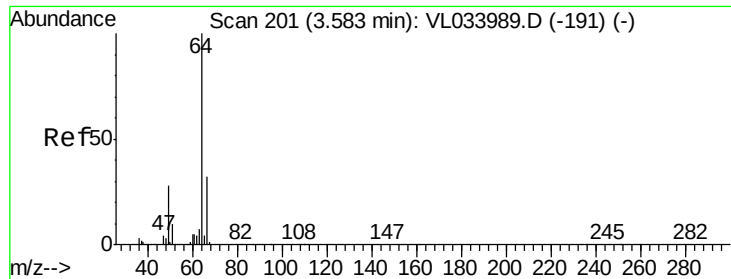
Tgt Ion: 94 Resp: 5543

Ion Ratio Lower Upper

94 100

96 103.0 73.8 110.8





#7

Chloroethane

Concen: 0.160 ppbv m

RT: 3.58 min Scan# 199

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 64 Resp: 4564

Ion Ratio Lower Upper

64 100

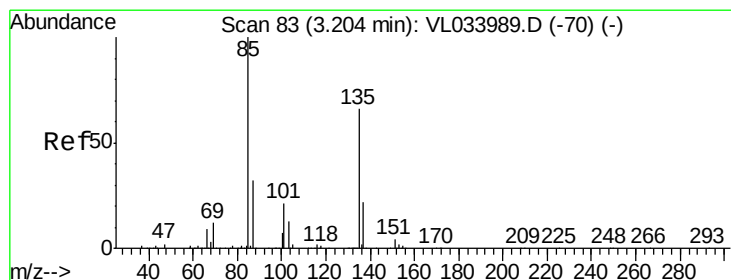
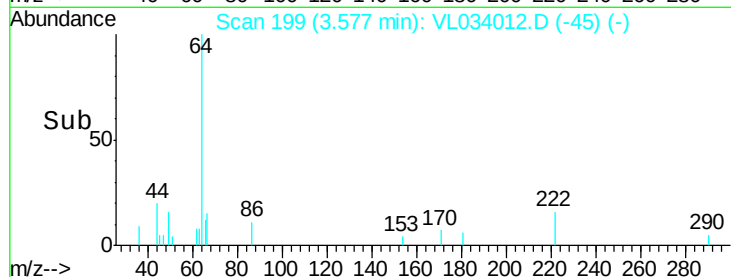
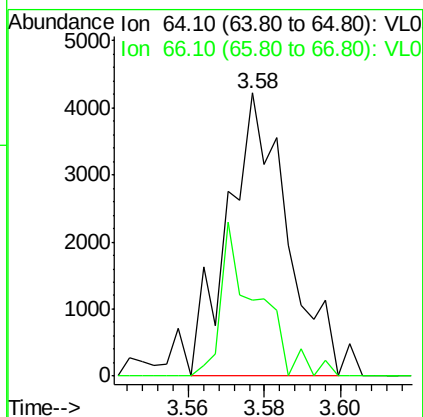
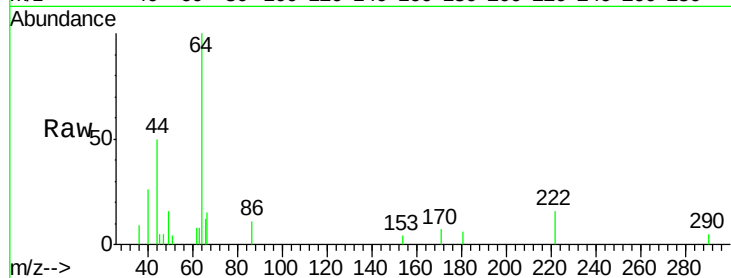
66 15.4 25.3 37.9#

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#8

Dichlorotetrafluoroethane

Concen: 0.129 ppbv

RT: 3.20 min Scan# 81

Delta R.T. -0.01 min

Lab File: VL034012.D

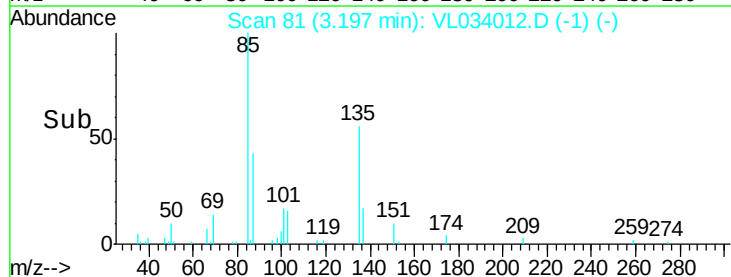
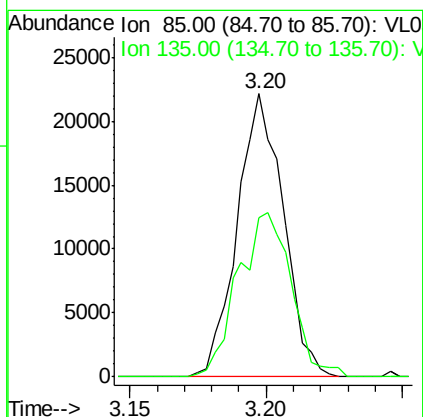
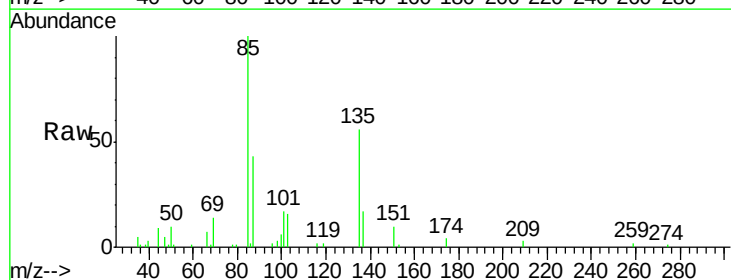
Acq: 8 Jul 2019 15:26

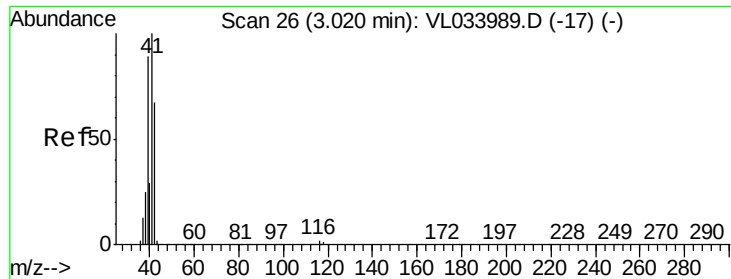
Tgt Ion: 85 Resp: 25970

Ion Ratio Lower Upper

85 100

135 67.1 55.0 82.4





#9

Propene

Concen: 0.139 ppbv m

RT: 3.01 min Scan# 24

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

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ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 41 Resp: 6327

Ion Ratio Lower Upper

41 100

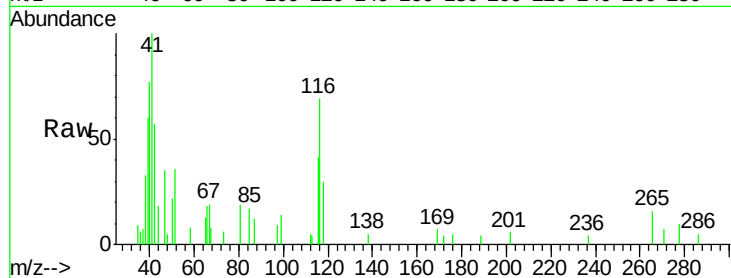
42 71.5 57.1 85.7

Manual Integrations

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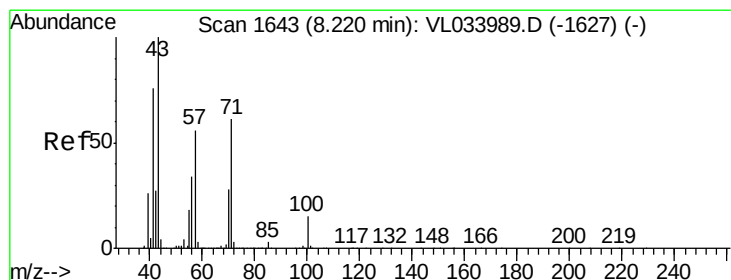
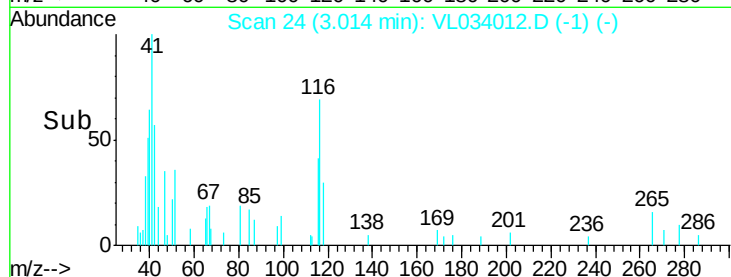
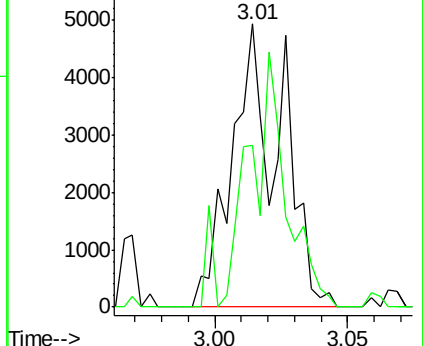
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.067 ppbv m

RT: 8.20 min Scan# 1637

Delta R.T. -0.02 min

Lab File: VL034012.D

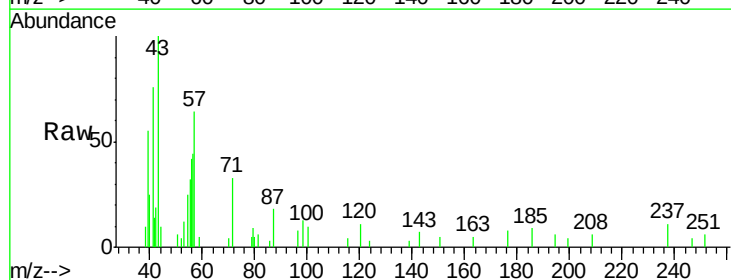
Acq: 8 Jul 2019 15:26

Tgt Ion: 43 Resp: 7642

Ion Ratio Lower Upper

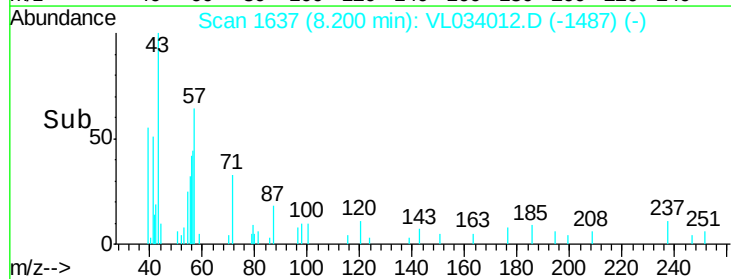
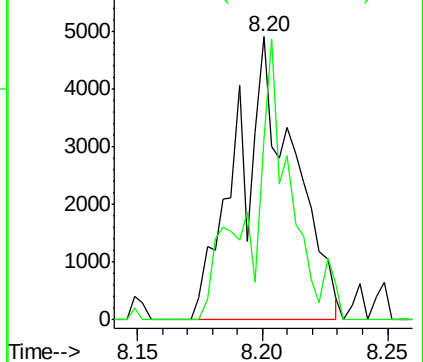
43 100

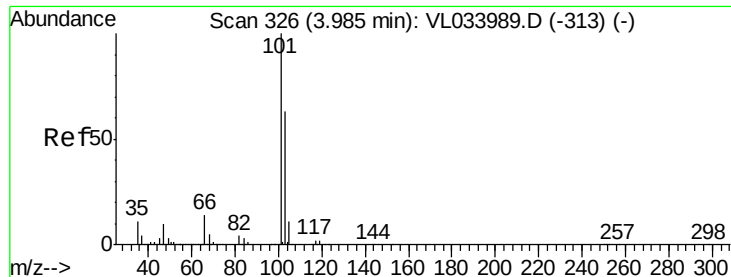
57 70.3 44.6 66.8#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





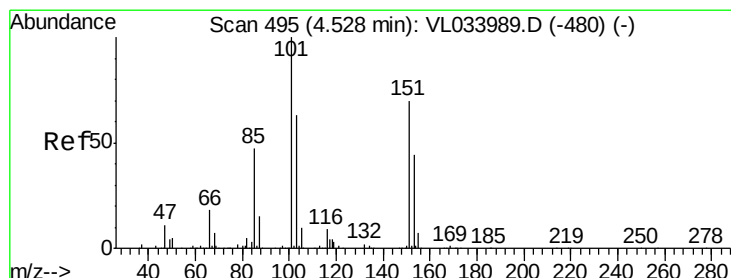
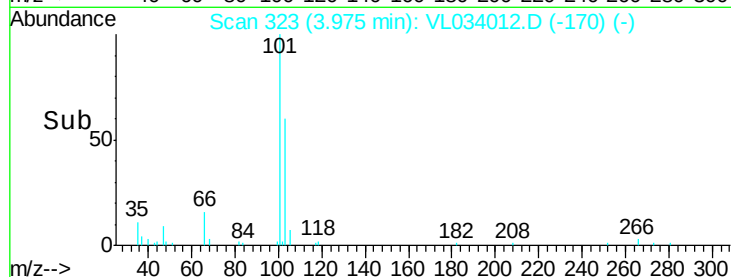
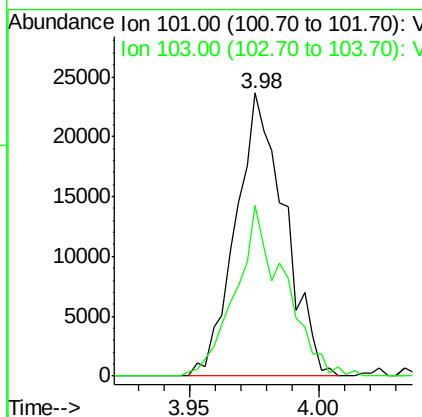
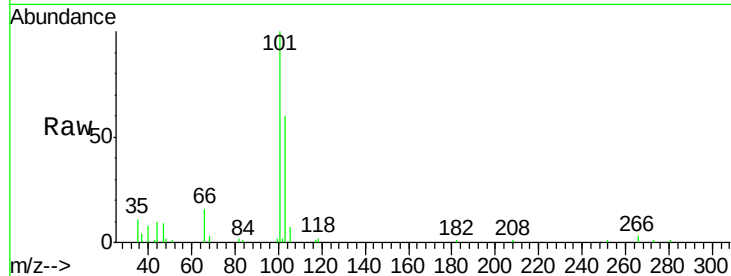
#11
 Trichlorofluoromethane
 Concen: 0.135 ppbv
 RT: 3.98 min Scan# 323
 Delta R.T. -0.01 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		31315		
103	58.9		50.8		76.2

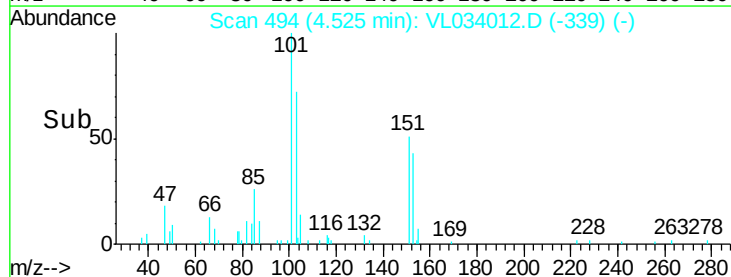
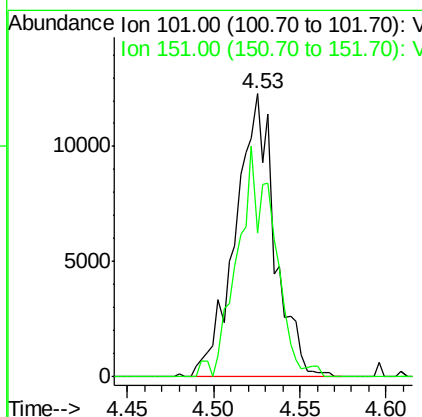
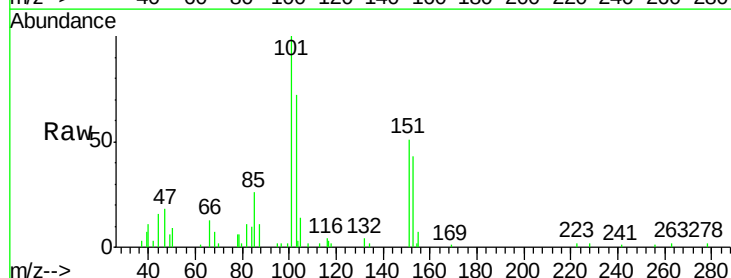
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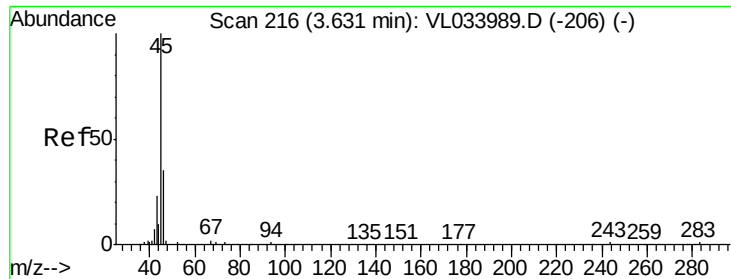
MMDadoda
 7/10/2019 8:50:03 AM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.119 ppbv m
 RT: 4.53 min Scan# 494
 Delta R.T. -0.00 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
101	100		19475		
151	75.9		59.0		88.4





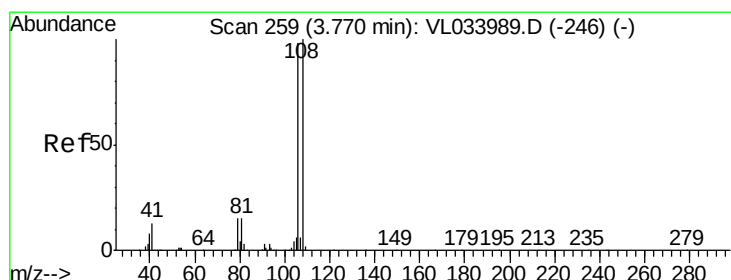
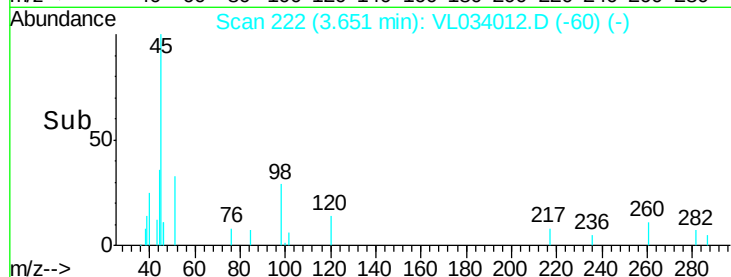
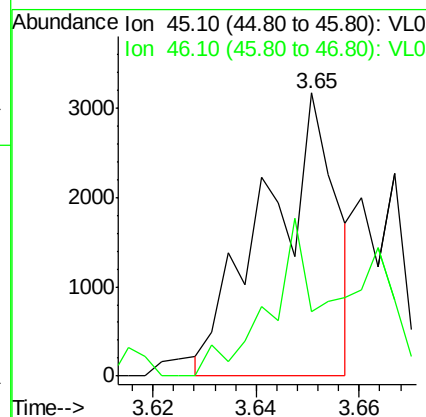
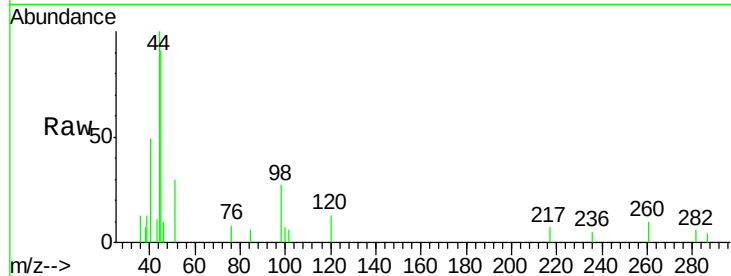
#13
Ethanol
Concen: 0.212 ppbv m
RT: 3.65 min Scan# 222
Delta R.T. 0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion: 45 Resp: 2993
Ion Ratio Lower Upper
45 100
46 0.0 16.2 64.6#

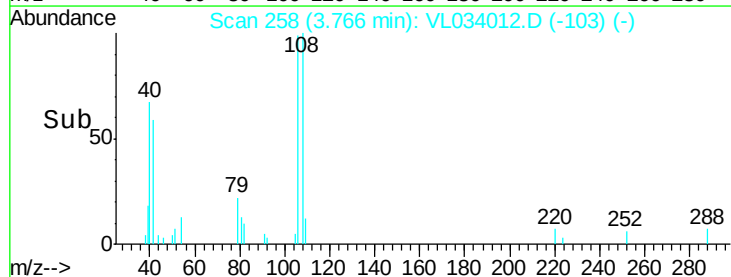
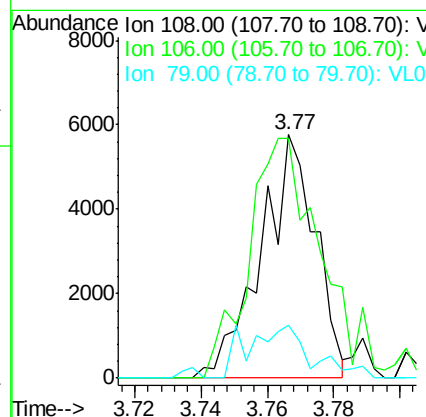
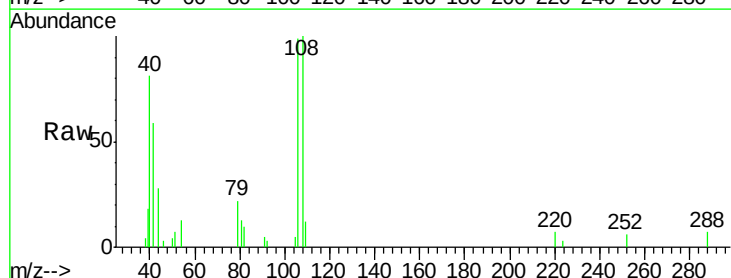
Manual Integrations
APPROVED

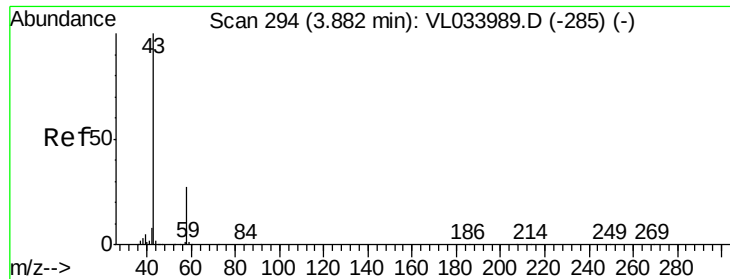
MMDadoda
7/10/2019 8:50:03 AM



#14
Bromoethene
Concen: 0.107 ppbv
RT: 3.77 min Scan# 258
Delta R.T. -0.00 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion: 108 Resp: 6578
Ion Ratio Lower Upper
108 100
106 134.3 85.6 128.4#
79 26.5 14.0 21.0#





#15

Acetone

Concen: 0.154 ppbv

RT: 3.90 min Scan# 299

Delta R.T. 0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 43 Resp: 25777

Ion Ratio Lower Upper

43 100

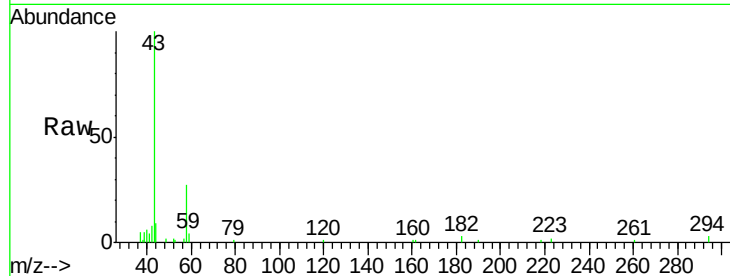
58 33.3 21.4 32.0#

Manual Integrations

APPROVED

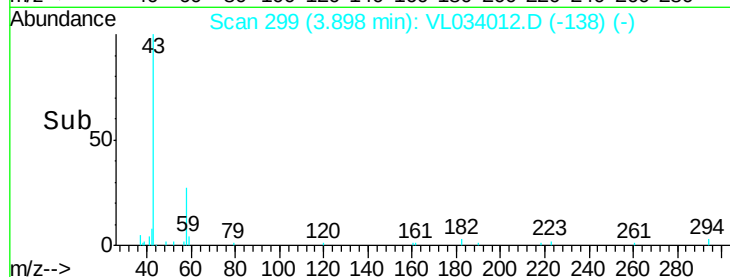
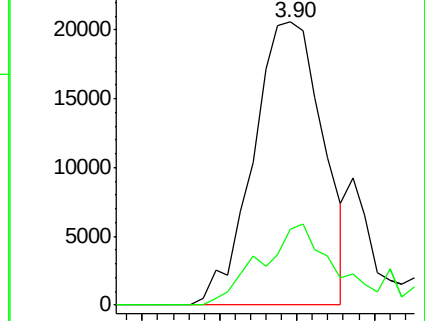
MMDadoda

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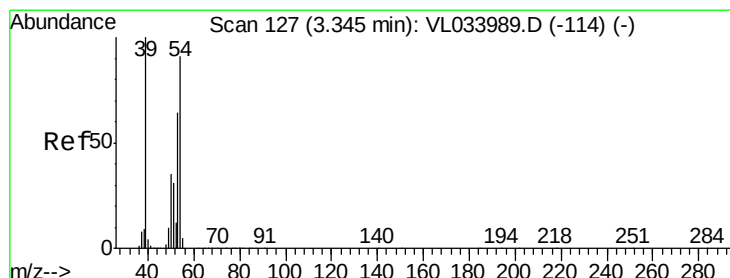


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



Time-->



#16

1,3-Butadiene

Concen: 0.110 ppbv m

RT: 3.35 min Scan# 127

Delta R.T. 0.00 min

Lab File: VL034012.D

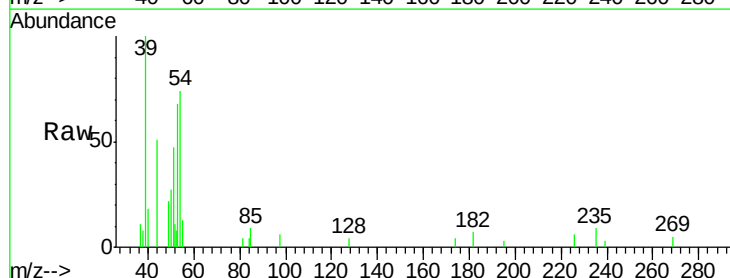
Acq: 8 Jul 2019 15:26

Tgt Ion: 39 Resp: 6497

Ion Ratio Lower Upper

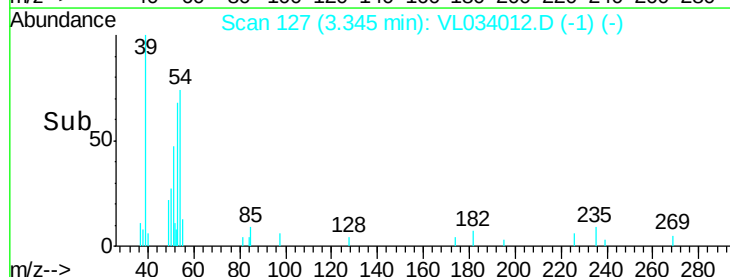
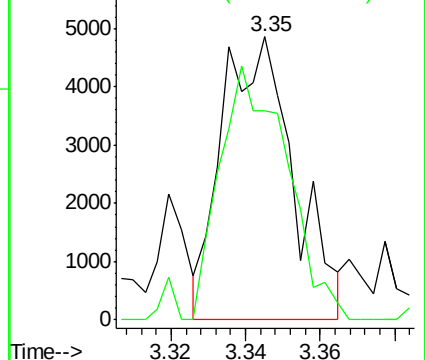
39 100

54 87.4 71.4 107.2

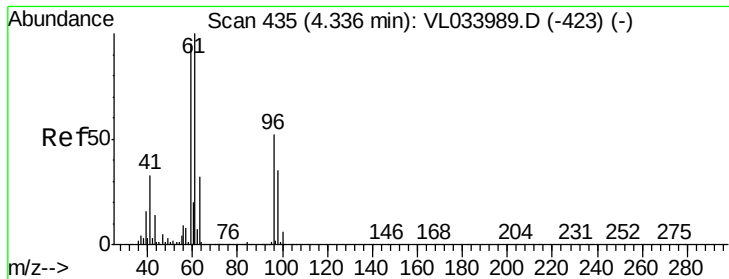


Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0



Time-->



#17

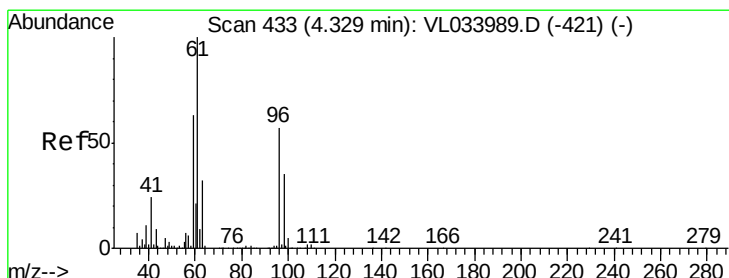
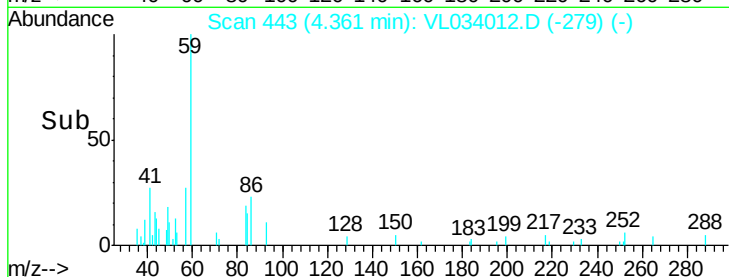
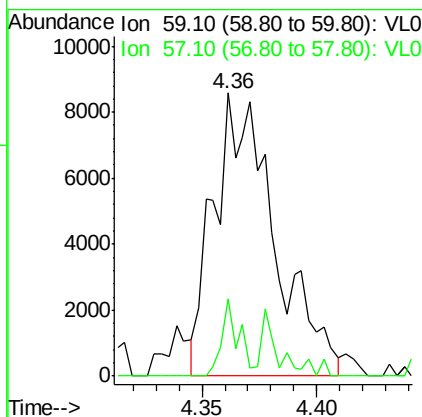
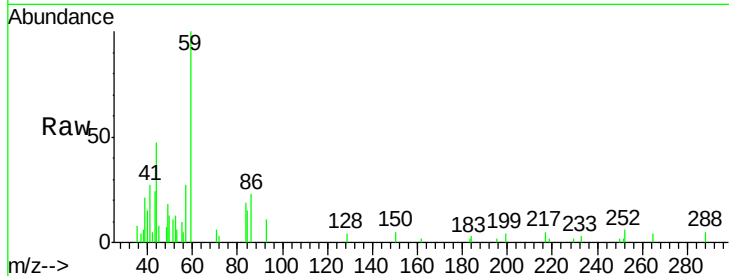
tert-Butyl alcohol
 Concen: 0.119 ppbv m
 RT: 4.36 min Scan# 443
 Delta R.T. 0.03 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion: 59 Resp: 15911
 Ion Ratio Lower Upper
 59 100
 57 1.2 8.2 12.2#

Manual Integrations
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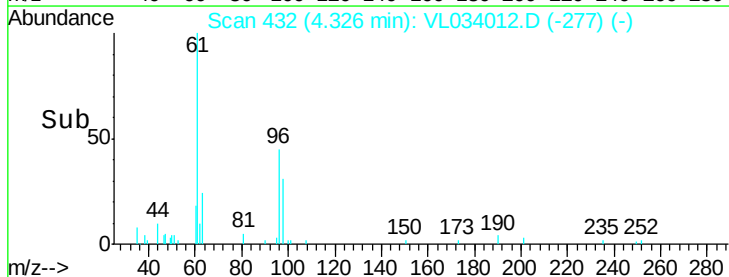
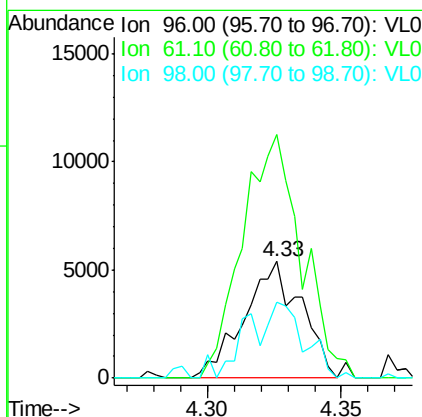
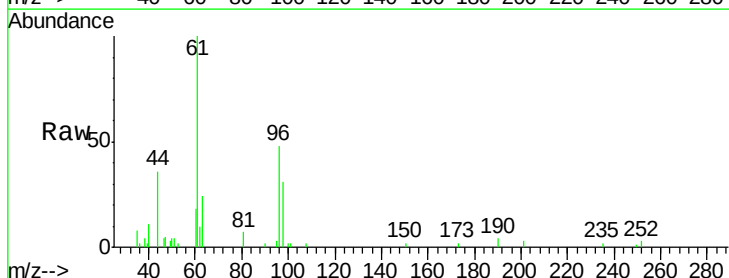
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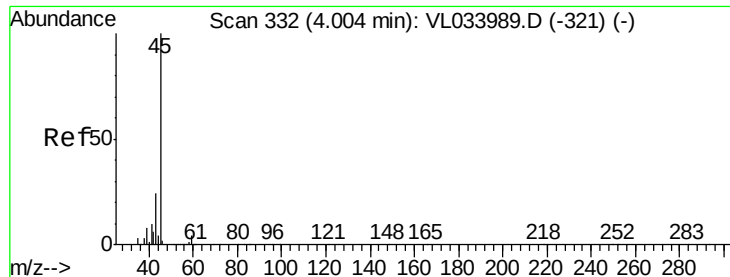


#18

1,1-Dichloroethene
 Concen: 0.110 ppbv m
 RT: 4.33 min Scan# 432
 Delta R.T. -0.00 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion: 96 Resp: 8009
 Ion Ratio Lower Upper
 96 100
 61 209.3 139.4 209.0#
 98 65.3 49.4 74.0





#19

Isopropyl Alcohol

Concen: 0.129 ppbv m

RT: 4.02 min Scan# 338

Delta R.T. 0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 45 Resp: 14530

Ion Ratio Lower Upper

45 100

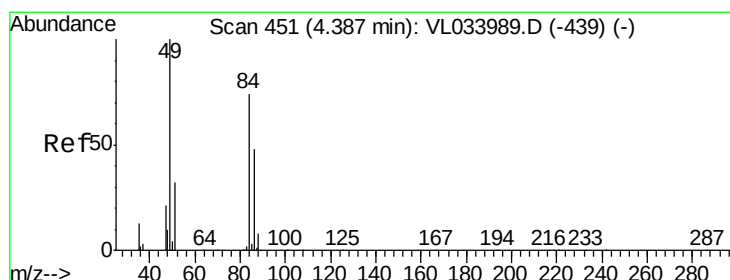
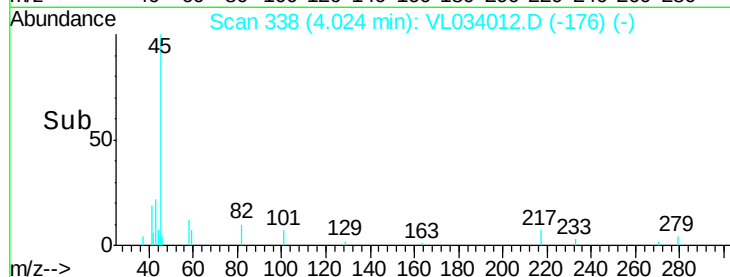
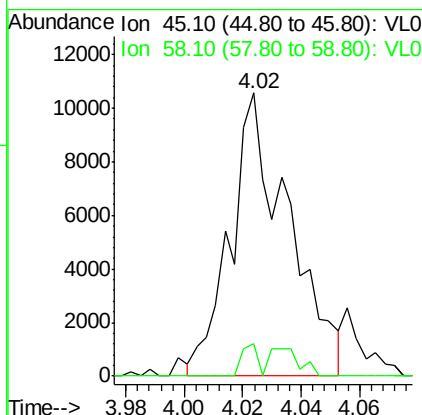
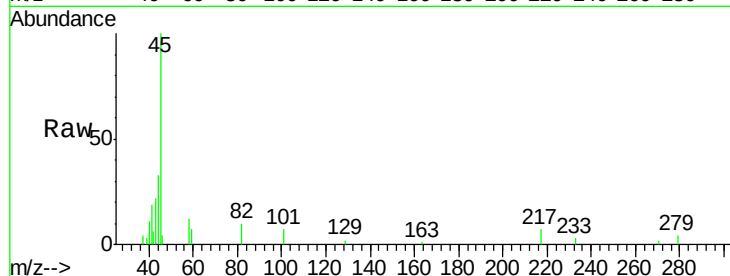
58 8.1 1.7 2.5#

Manual Integrations

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#20

Methylene Chloride

Concen: 0.183 ppbv m

RT: 4.38 min Scan# 449

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion: 84 Resp: 13384

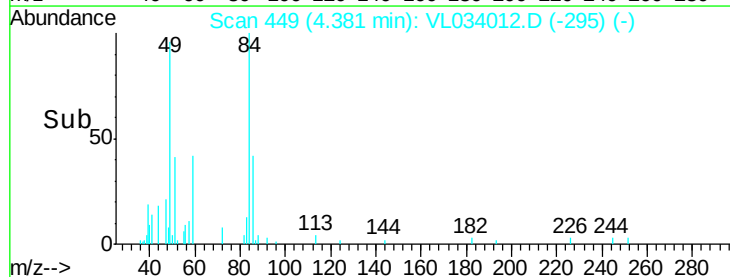
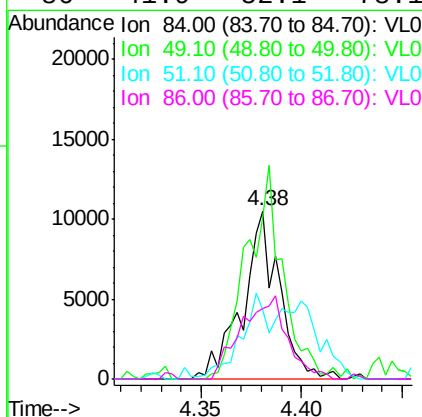
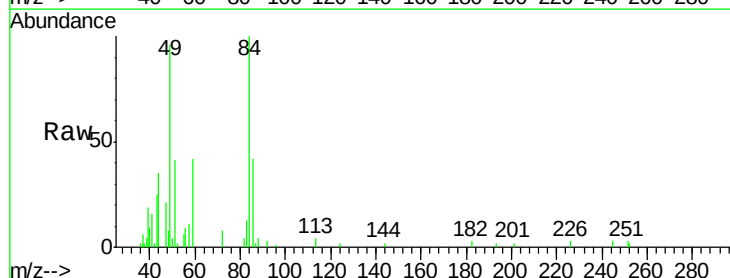
Ion Ratio Lower Upper

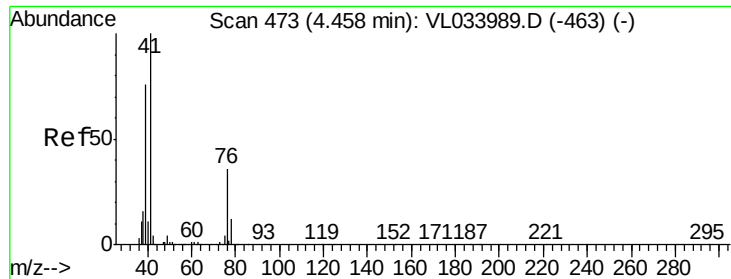
84 100

49 96.3 107.6 161.4#

51 40.9 35.0 52.6

86 41.9 52.1 78.1#





#21

Allvl Chloride

Concen: 0.120 ppbv m

RT: 4.45 min Scan# 472

Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

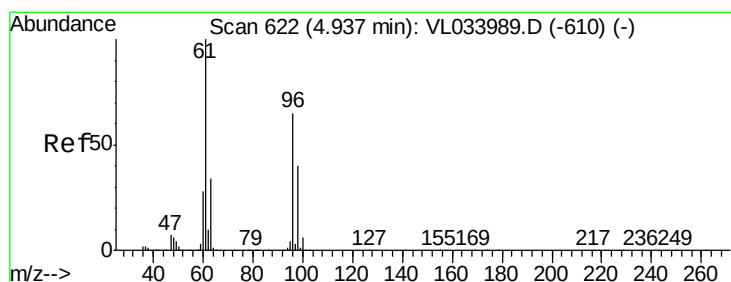
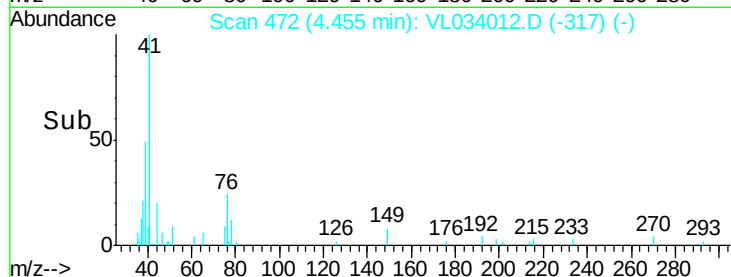
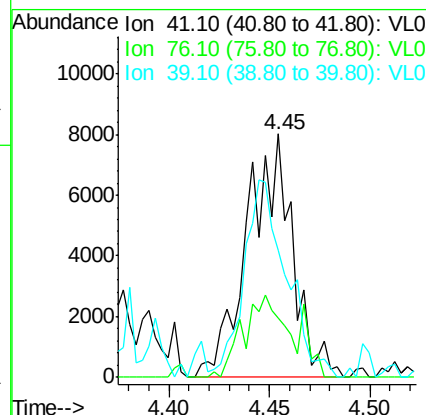
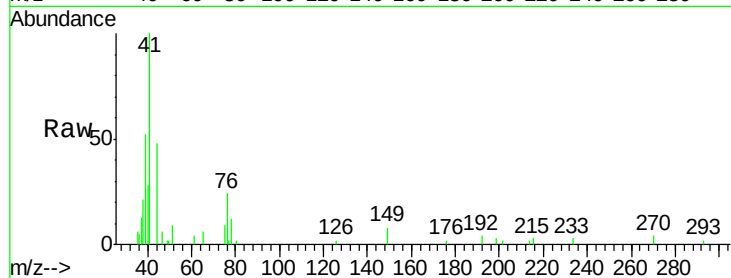
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	41	Resp:	12608
Ion	Ratio	Lower	Upper
41	100		
76	36.5	26.8	40.2
39	79.4	63.1	94.7

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#22

trans-1,2-Dichloroethene

Concen: 0.133 ppbv m

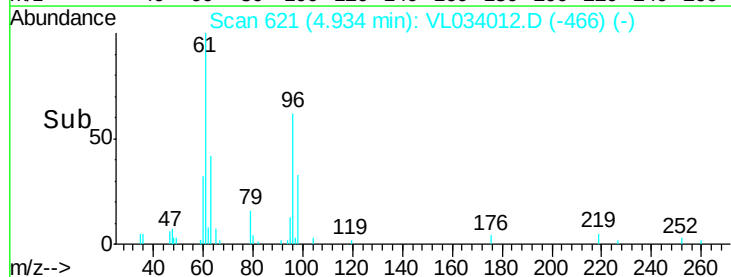
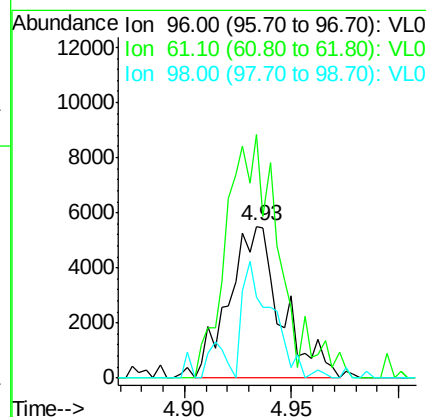
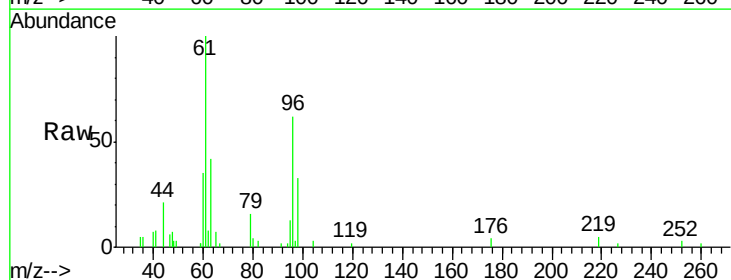
RT: 4.93 min Scan# 621

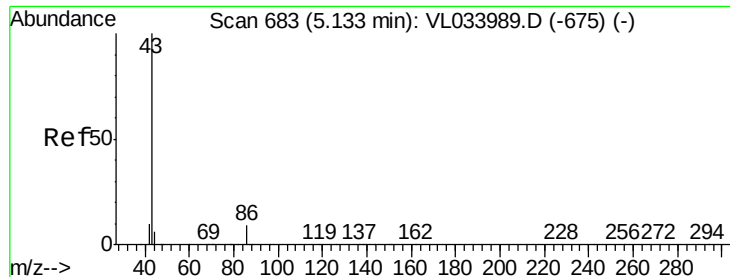
Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion:	96	Resp:	9291
Ion	Ratio	Lower	Upper
96	100		
61	160.6	122.9	184.3
98	53.7	49.6	74.4





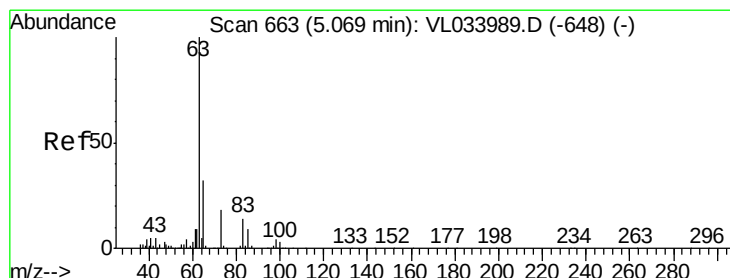
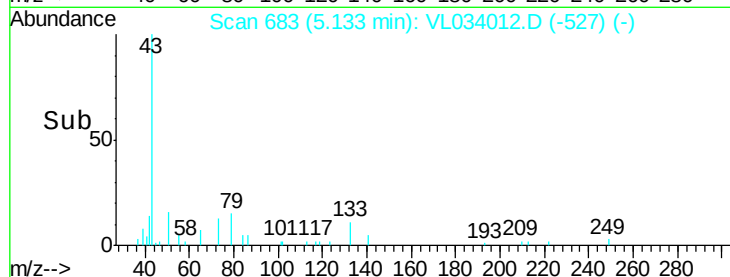
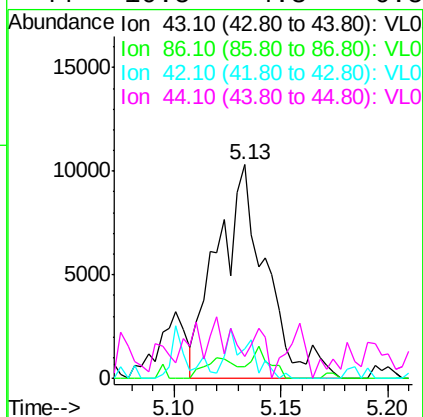
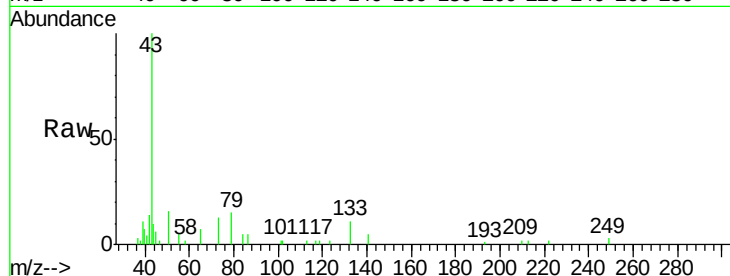
#23
 Vinyl Acetate
 Concen: 0.097 ppbv m
 RT: 5.13 min Scan# 683
 Delta R.T. 0.00 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ion	Ratio	Resp	Lower	Upper
43	100		16253		
86	5.2	6.6	9.8#		
42	13.7	8.3	12.5#		
44	10.5	4.3	6.5#		

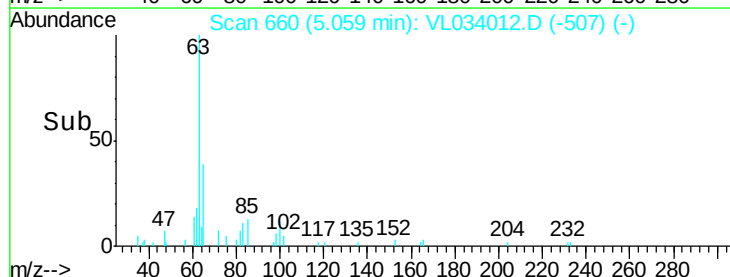
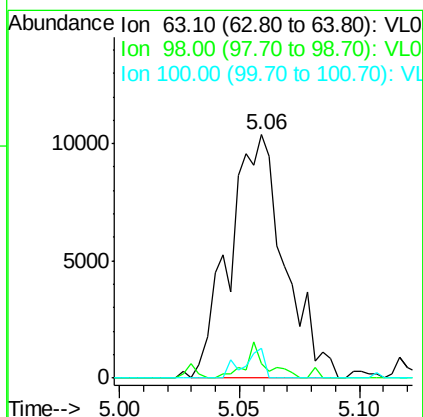
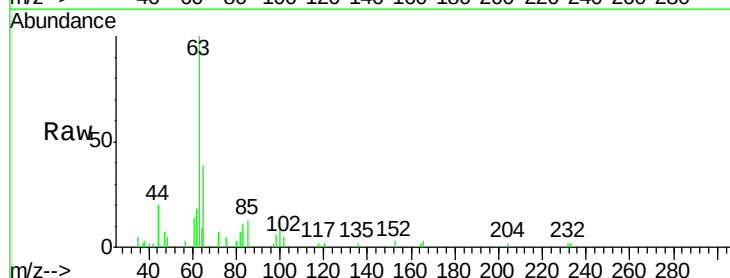
Manual Integrations
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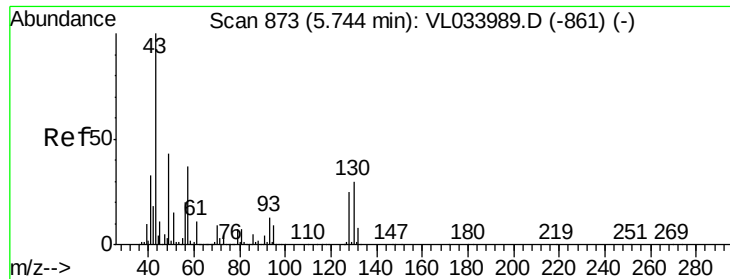
MMDadoda
 7/10/2019 8:50:03 AM



#24
 1,1-Dichloroethane
 Concen: 0.111 ppbv m
 RT: 5.06 min Scan# 660
 Delta R.T. -0.01 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
63	100		16555		
98	5.8	2.2	6.6		
100	12.1	1.4	4.2#		





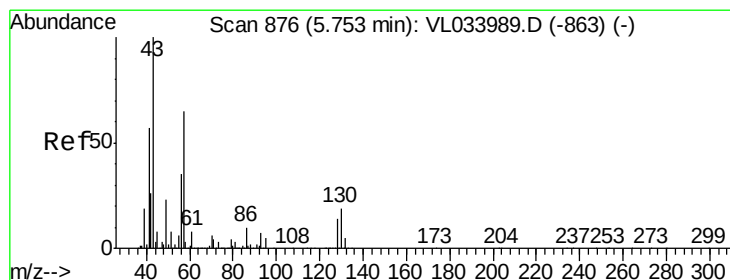
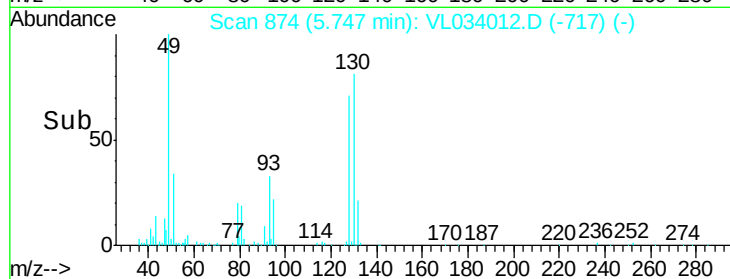
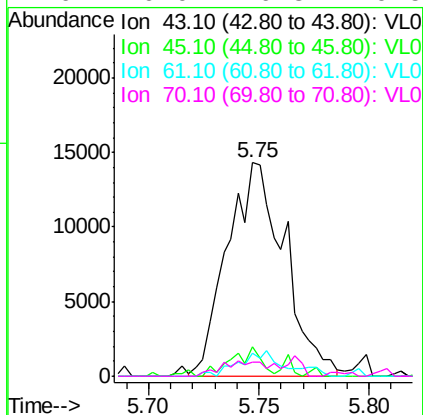
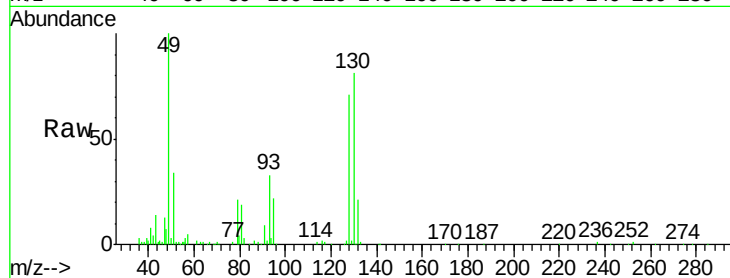
#25
Ethyl Acetate
Concen: 0.112 ppbv m
RT: 5.75 min Scan# 874
Delta R.T. 0.00 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
43	100		
45	9.2	8.1	12.1
61	10.2	8.1	12.1
70	0.0	6.3	9.5#

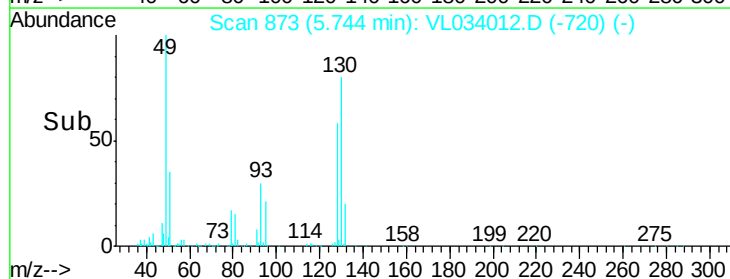
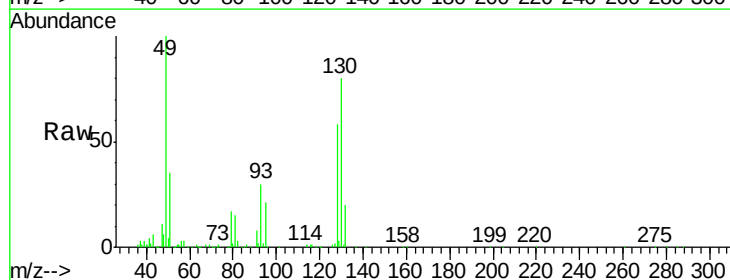
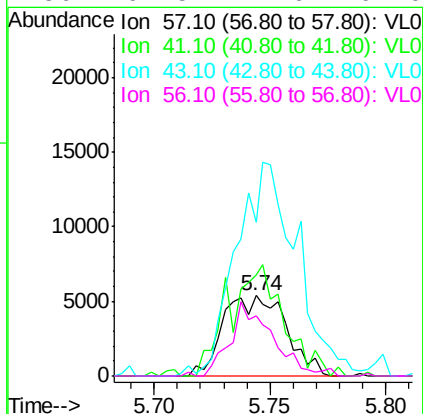
Manual Integrations
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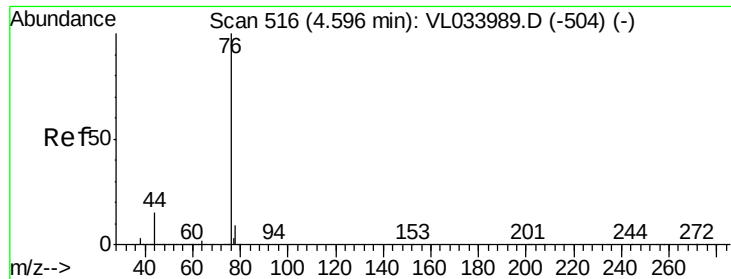
MMDadoda
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#26
Hexane
Concen: 0.096 ppbv m
RT: 5.74 min Scan# 873
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	70.6	105.8#
43	0.0	177.6	266.4#
56	62.5	42.6	64.0





#27

Carbon Disulfide

Concen: 0.096 ppbv m

RT: 4.59 min Scan# 515

Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

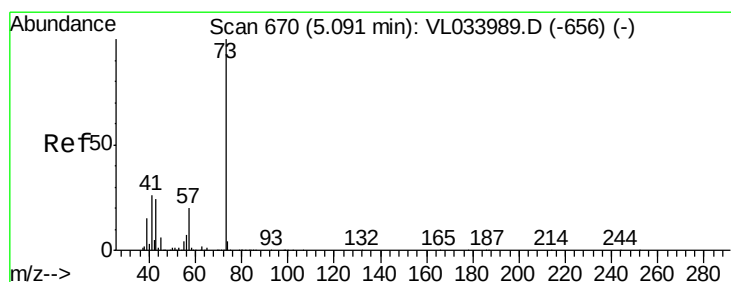
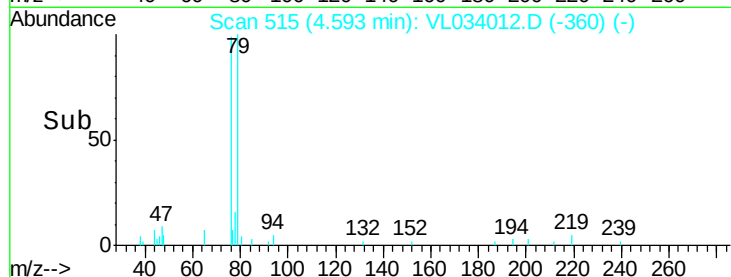
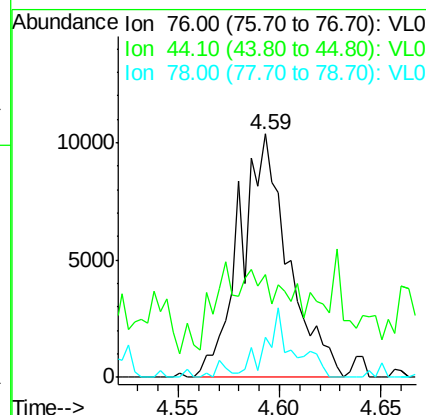
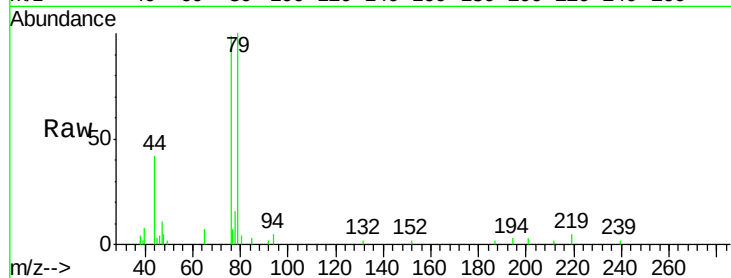
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	76	Resp:	17192
Ion	Ratio	Lower	Upper
76	100		
44	73.3	12.6	18.8#
78	17.9	7.2	10.8#

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#28

Methyl tert-Butyl Ether

Concen: 0.081 ppbv m

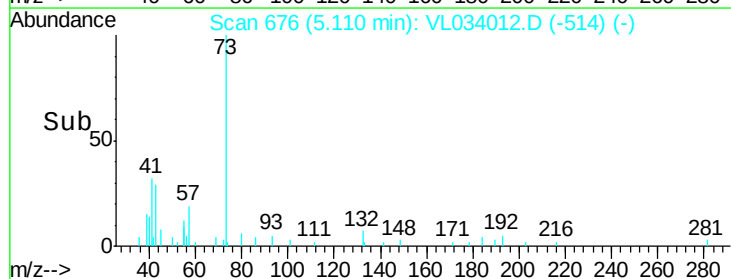
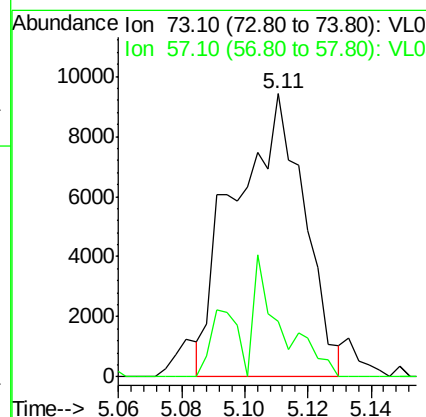
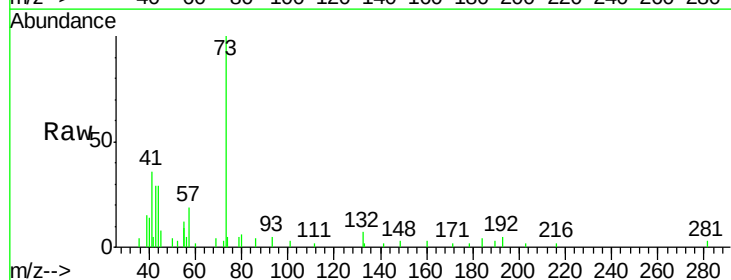
RT: 5.11 min Scan# 676

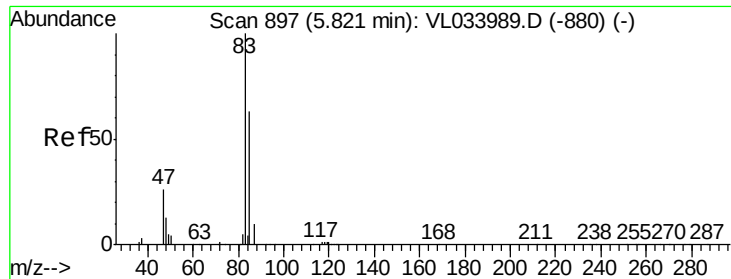
Delta R.T. 0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion:	73	Resp:	14437
Ion	Ratio	Lower	Upper
73	100		
57	0.0	16.9	25.3#





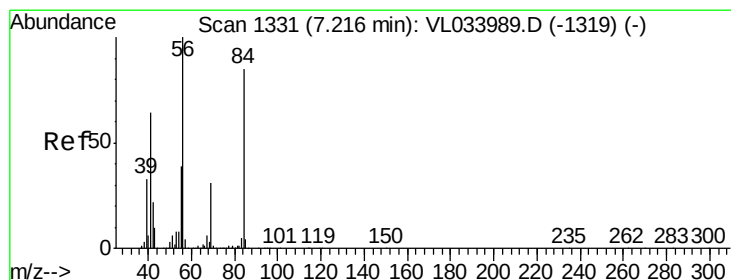
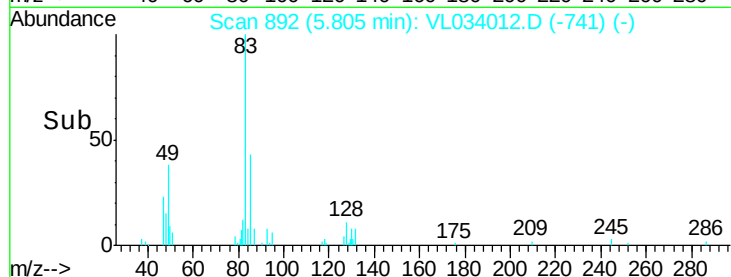
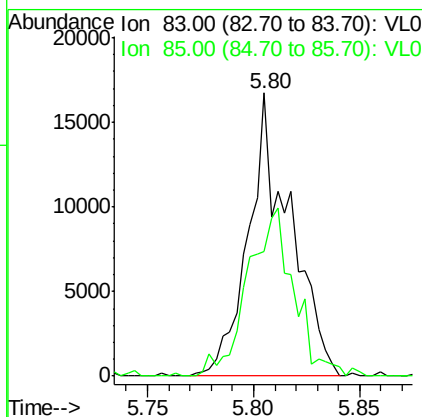
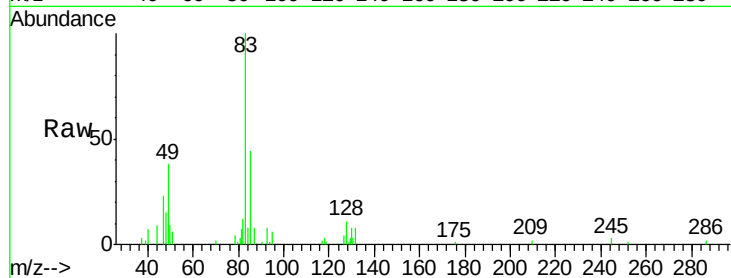
#29
Chloroform
Concen: 0.115 ppbv m
RT: 5.80 min Scan# 892
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion: 83 Resp: 22693
Ion Ratio Lower Upper
83 100
85 44.2 50.6 75.8#

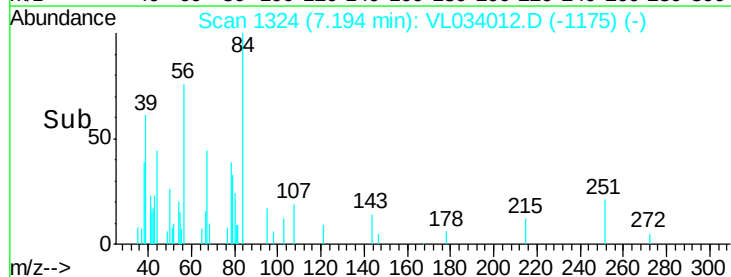
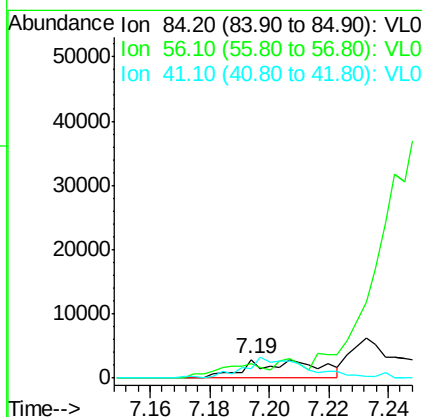
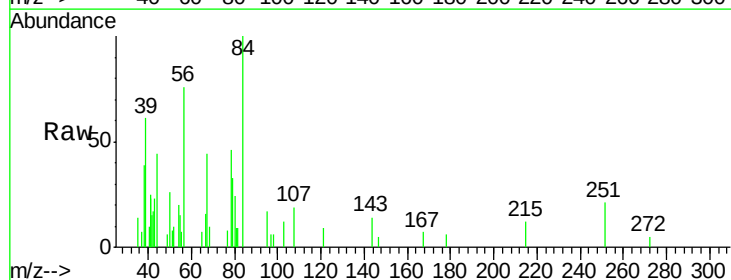
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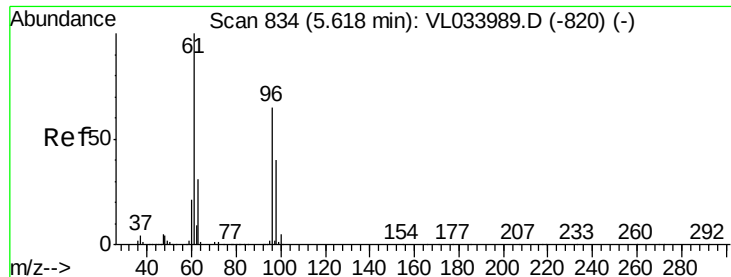
MMDadoda
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#30
Cyclohexane
Concen: 0.057 ppbv m
RT: 7.19 min Scan# 1324
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion: 84 Resp: 4617
Ion Ratio Lower Upper
84 100
56 0.0 103.7 155.5#
41 108.3 62.6 94.0#





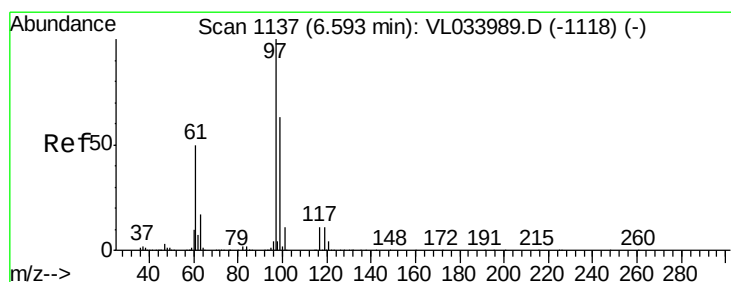
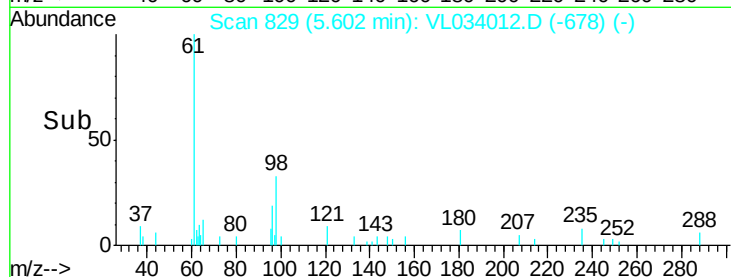
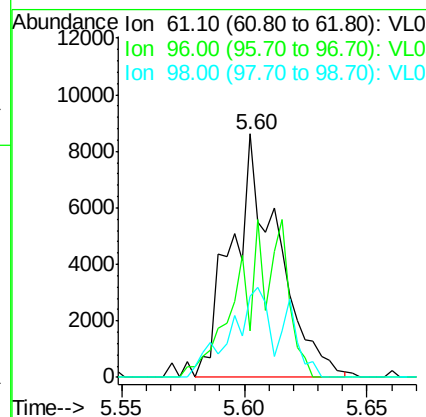
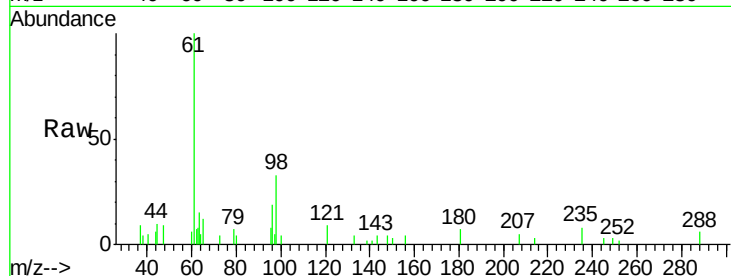
#31
 cis-1,2-Dichloroethene
 Concen: 0.111 ppbv m
 RT: 5.60 min Scan# 829
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
61	100		
96	19.0	51.8	77.6#
98	33.1	32.1	48.1

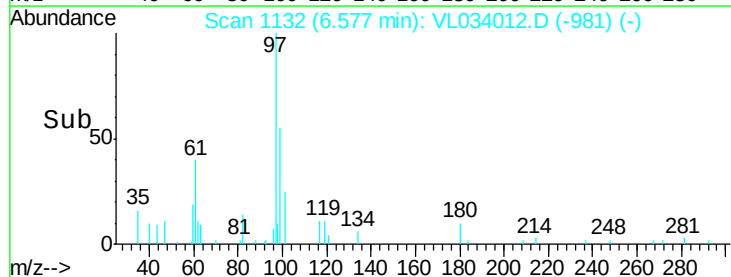
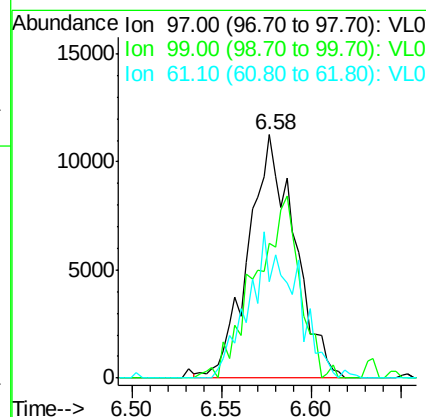
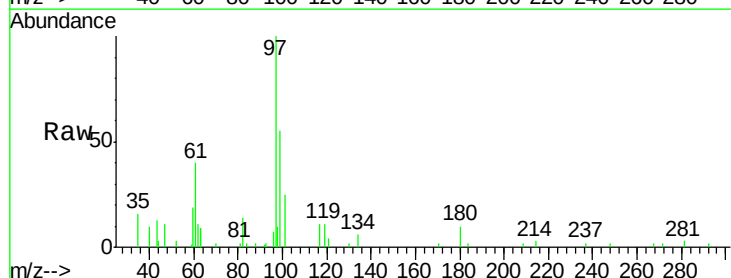
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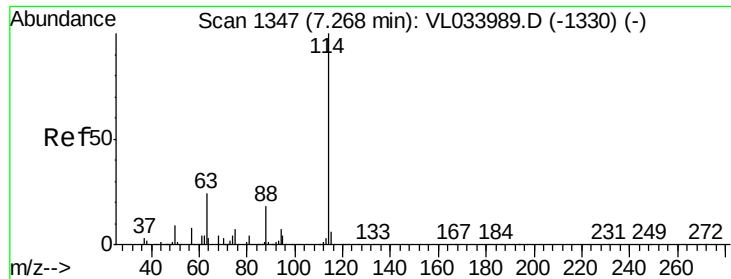
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 7/10/2019 8:50:03 AM



#32
 1,1,1-Trichloroethane
 Concen: 0.101 ppbv m
 RT: 6.58 min Scan# 1132
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	51.9	77.9#
61	60.1	39.8	59.8#





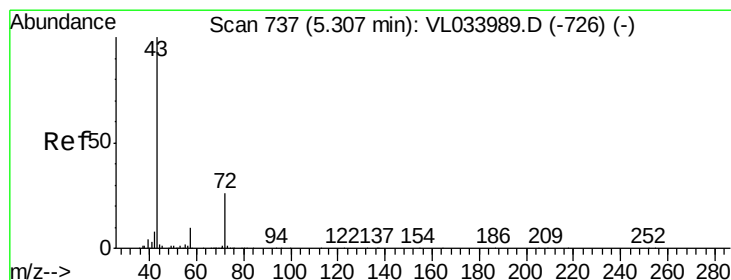
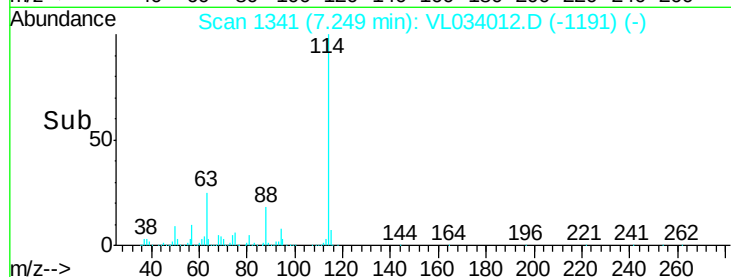
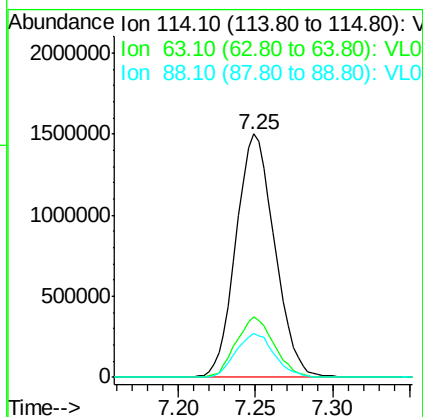
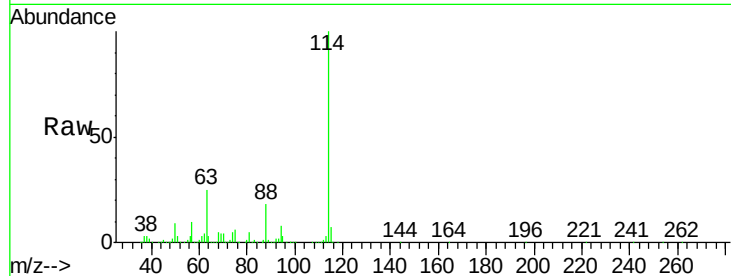
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.25 min Scan# 1341
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion:114 Resp: 2602086
 Ion Ratio Lower Upper
 114 100
 63 24.7 20.2 30.2
 88 18.1 14.1 21.1

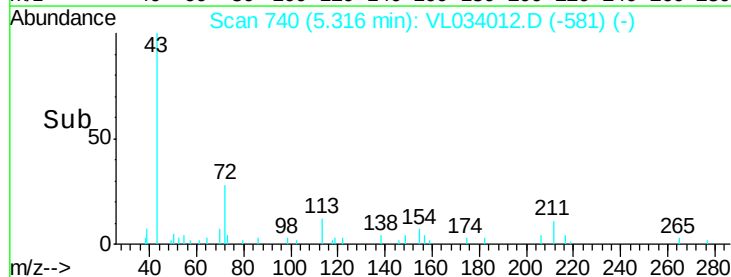
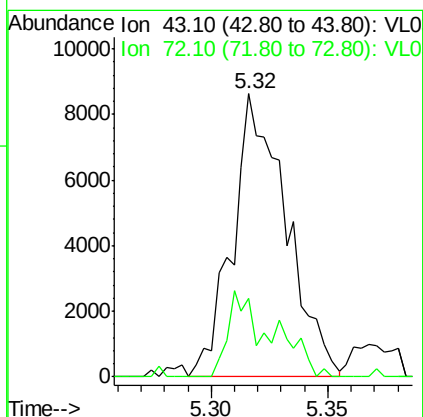
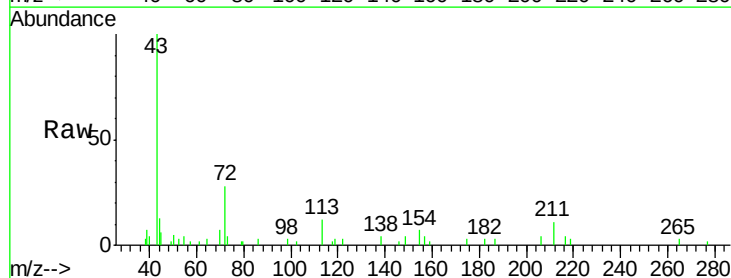
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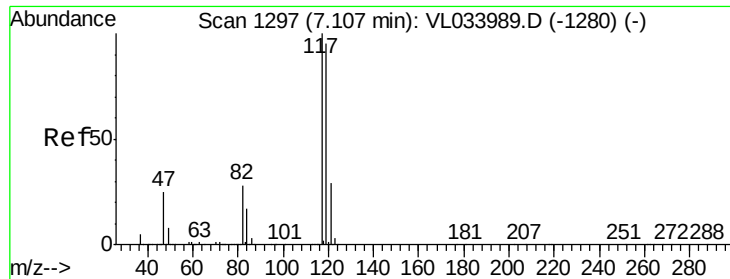
MMDadoda
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#34
 2-Butanone
 Concen: 0.100 ppbv m
 RT: 5.32 min Scan# 740
 Delta R.T. 0.01 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion: 43 Resp: 13763
 Ion Ratio Lower Upper
 43 100
 72 25.4 19.9 29.9





#35

Carbon Tetrachloride

Concen: 0.113 ppbv m

RT: 7.10 min Scan# 1295

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

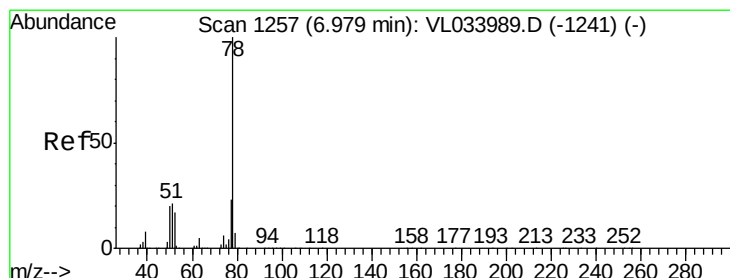
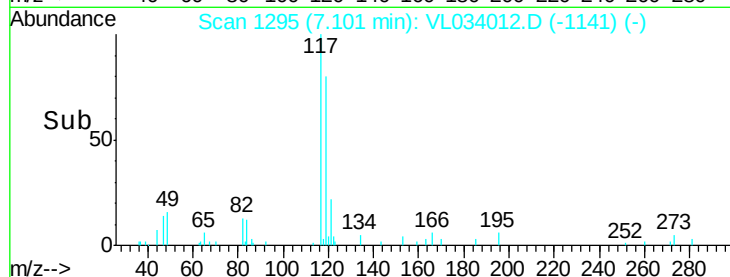
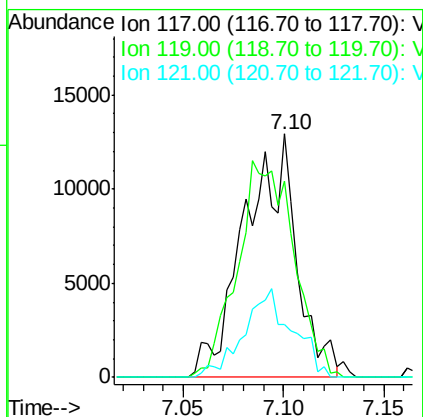
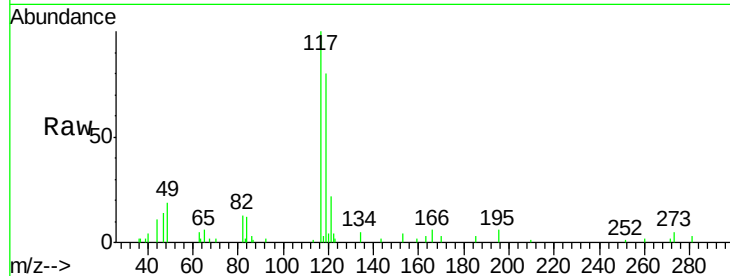
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	117	Resp:	23307
Ion Ratio	Lower	Upper	
117	100		
119	80.4	75.8	113.6
121	21.8	23.4	35.2#

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#36

Benzene

Concen: 0.087 ppbv m

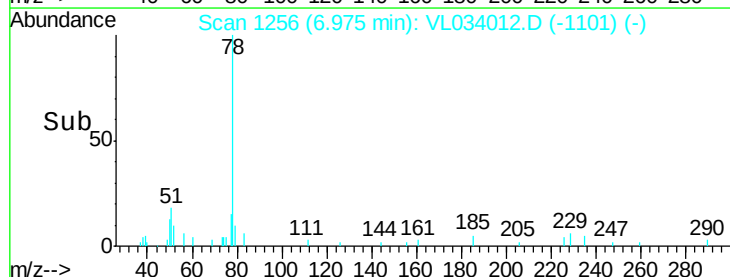
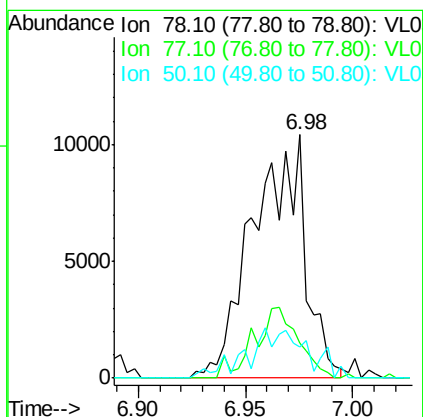
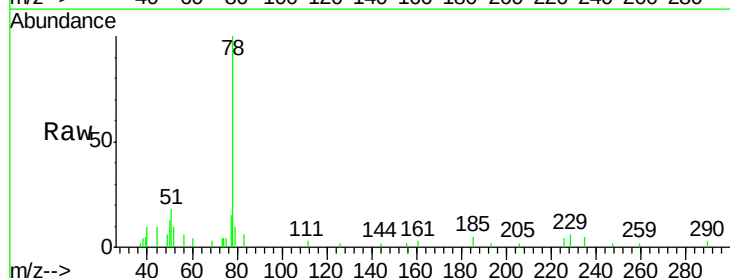
RT: 6.98 min Scan# 1256

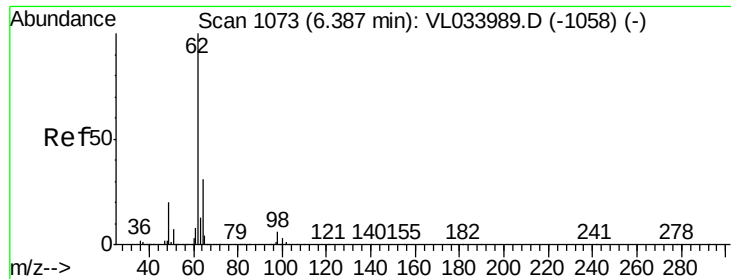
Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion:	78	Resp:	17637
Ion Ratio	Lower	Upper	
78	100		
77	14.5	18.7	28.1#
50	18.1	16.2	24.2





#37

1,2-Dichloroethane

Concen: 0.110 ppbv m

RT: 6.38 min Scan# 1070

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 62 Resp: 16519

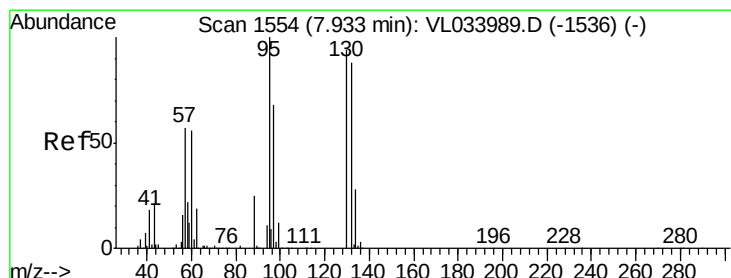
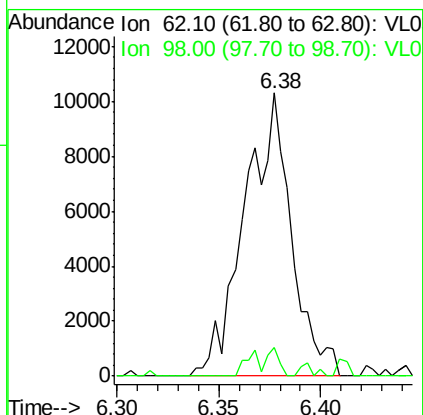
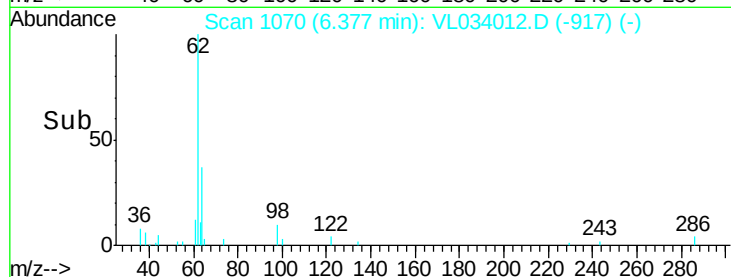
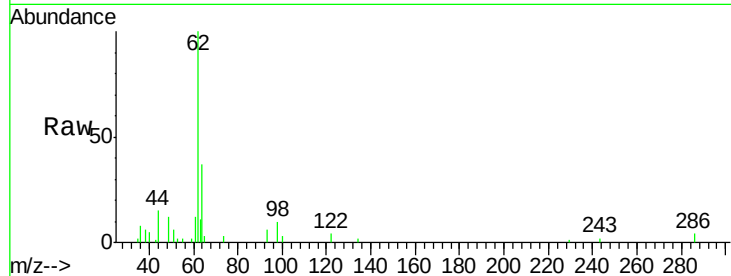
Ion Ratio Lower Upper

62 100

98 0.0 4.4 6.6#

Manual Integrations
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#38

Trichloroethene

Concen: 0.095 ppbv m

RT: 7.91 min Scan# 1548

Delta R.T. -0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion: 130 Resp: 8631

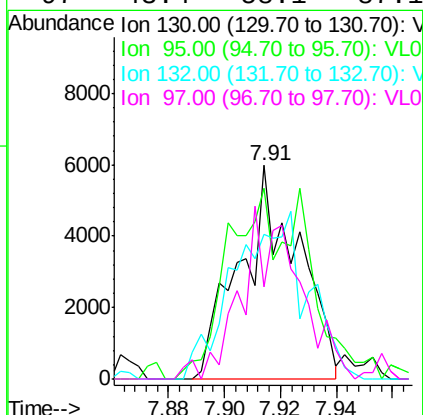
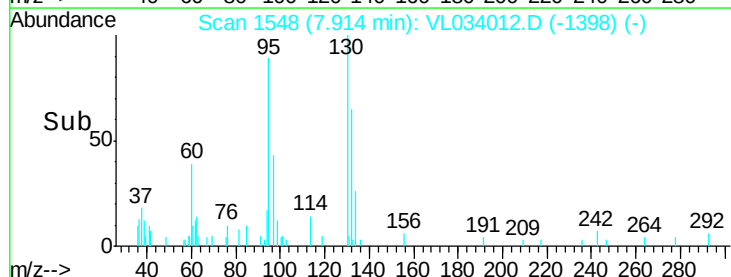
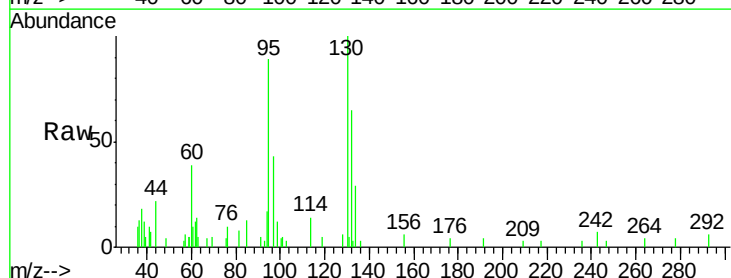
Ion Ratio Lower Upper

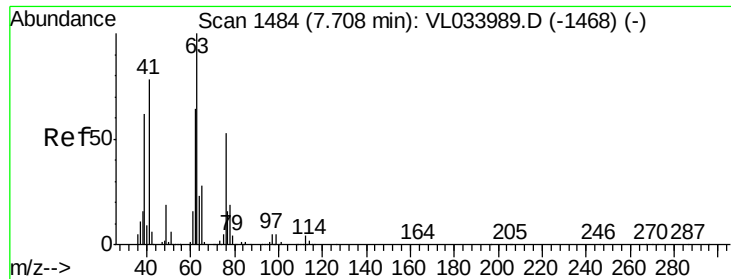
130 100

95 89.4 85.5 128.3

132 65.5 75.1 112.7#

97 43.4 58.1 87.1#





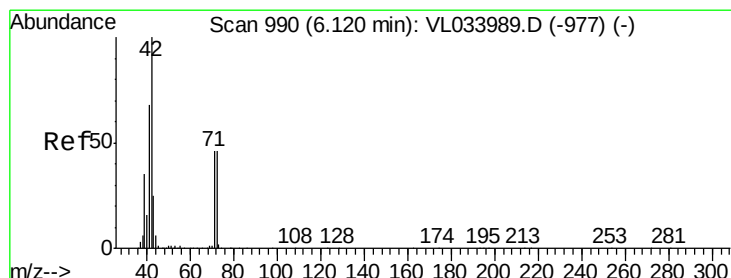
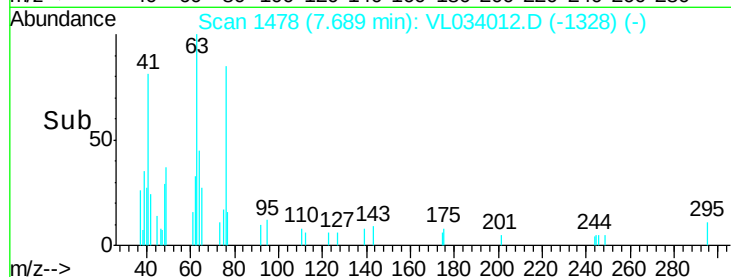
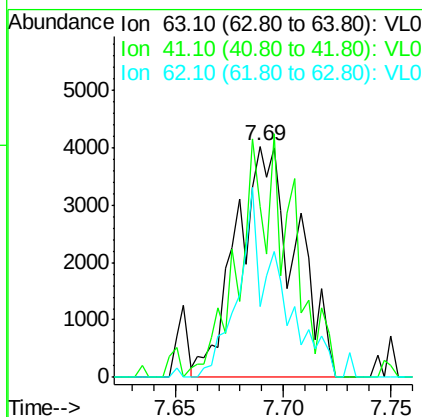
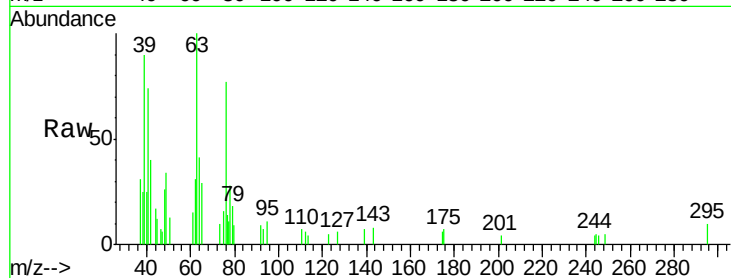
#39
 1,2-Dichloropropane
 Concen: 0.103 ppbv m
 RT: 7.69 min Scan# 1478
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
63	100		
41	73.5	62.3	93.5
62	30.5	51.4	77.2#

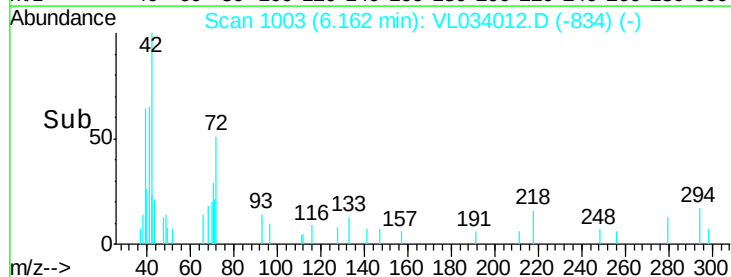
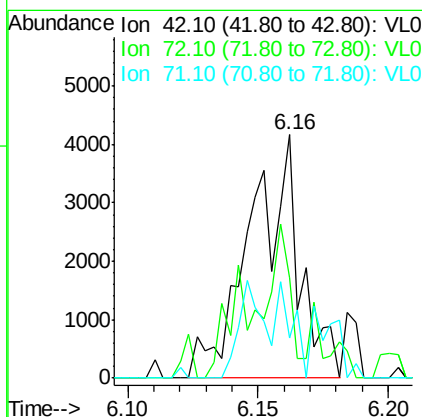
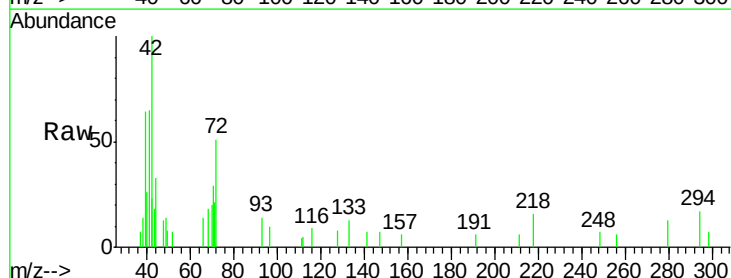
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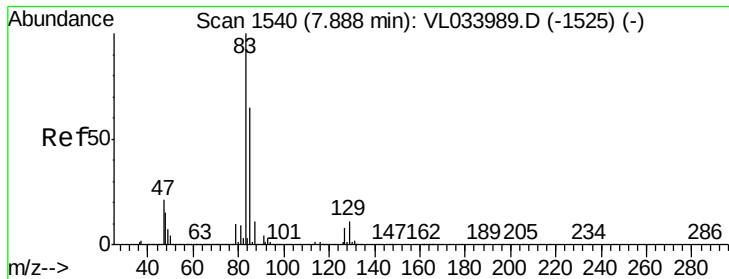
MMDadoda
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#41
 Tetrahydrofuran
 Concen: 0.082 ppbv m
 RT: 6.16 min Scan# 1003
 Delta R.T. 0.04 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.0	37.3	55.9#
71	0.0	36.2	54.2#





#42

Bromodichloromethane

Concen: 0.104 ppbv

RT: 7.87 min Scan# 1535

Delta R.T. -0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

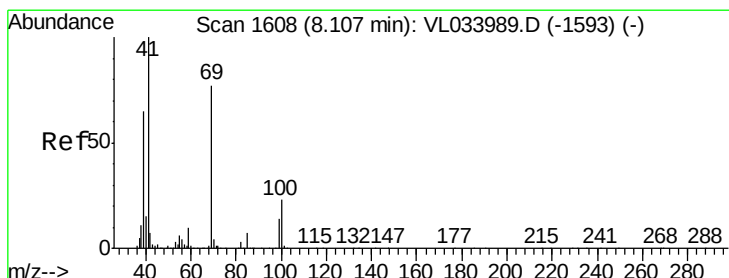
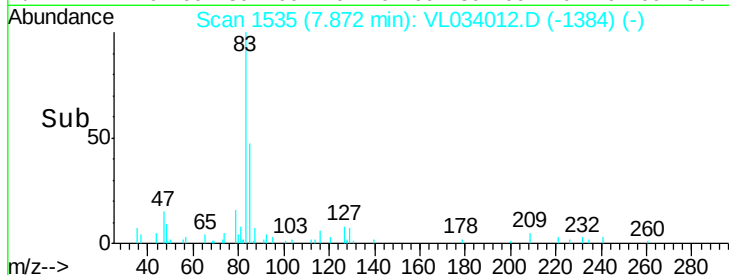
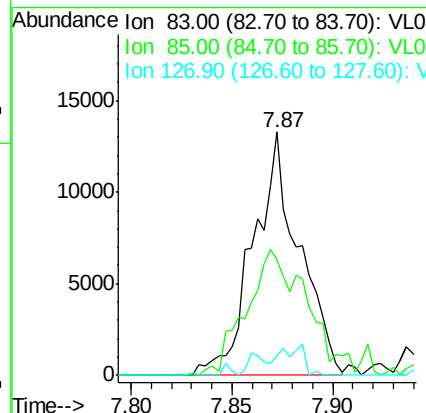
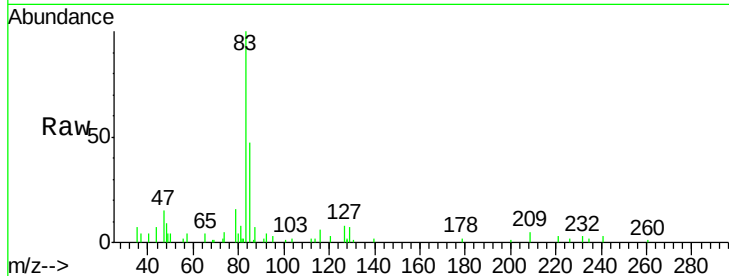
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	83	Resp:	20960
Ion Ratio	Lower	Upper	
83	100		
85	47.5	51.8	77.8#
127	8.0	6.5	9.7

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#43

Methyl Methacrylate

Concen: 0.066 ppbv m

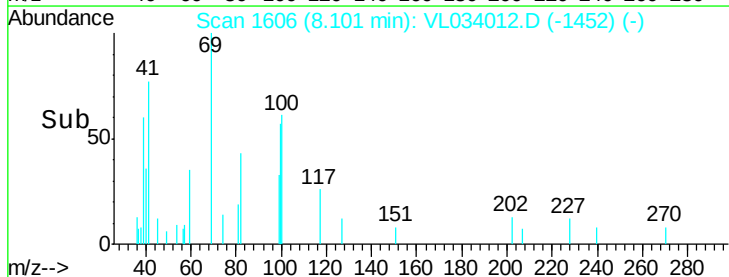
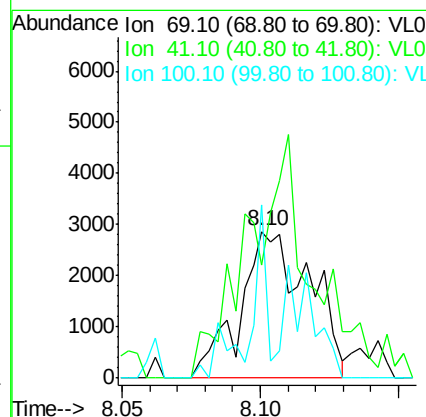
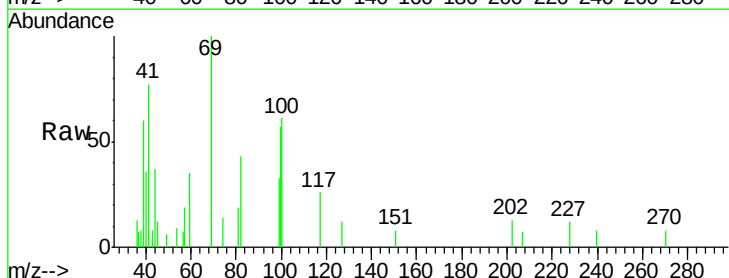
RT: 8.10 min Scan# 1606

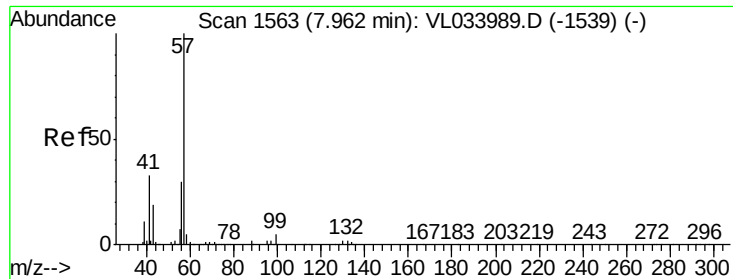
Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion:	69	Resp:	5065
Ion Ratio	Lower	Upper	
69	100		
41	0.0	109.1	163.7#
100	0.0	25.3	37.9#





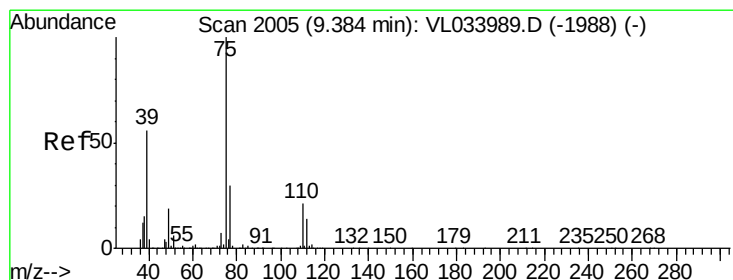
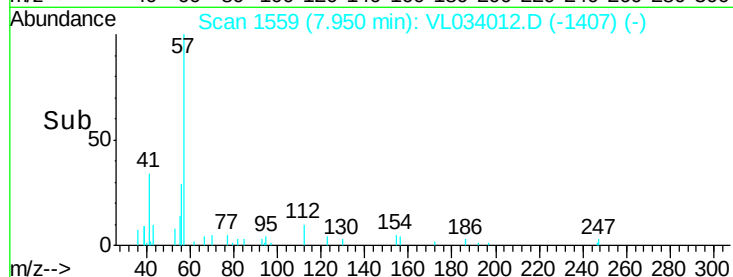
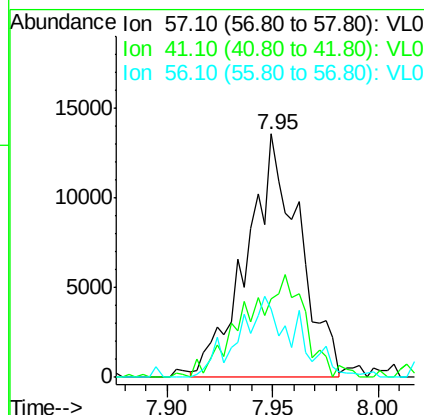
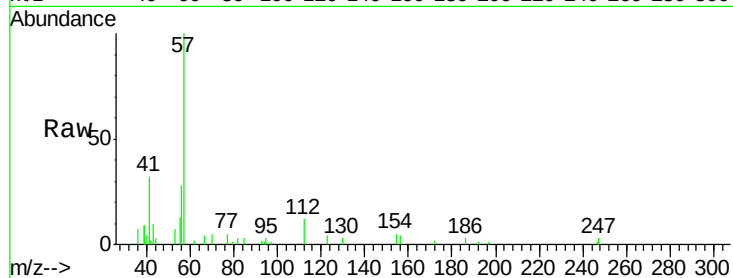
#44
 2,2,4-Trimethylpentane
 Concen: 0.066 ppbv m
 RT: 7.95 min Scan# 1559
 Delta R.T. -0.01 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.1	39.1#
56	0.0	24.4	36.6#

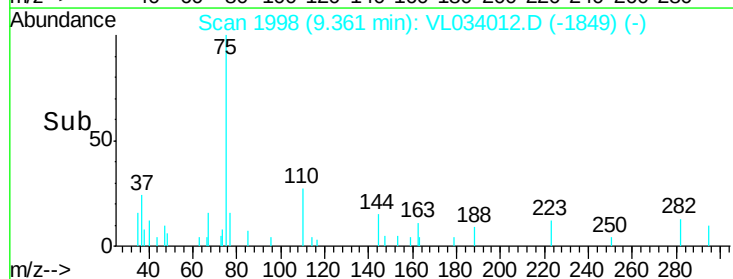
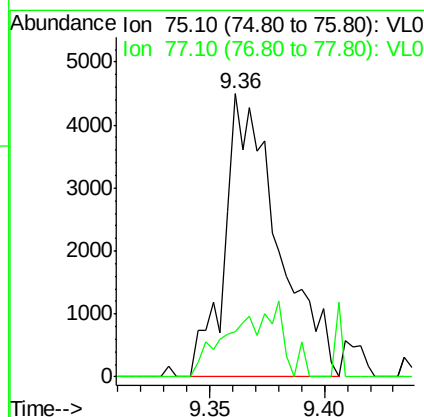
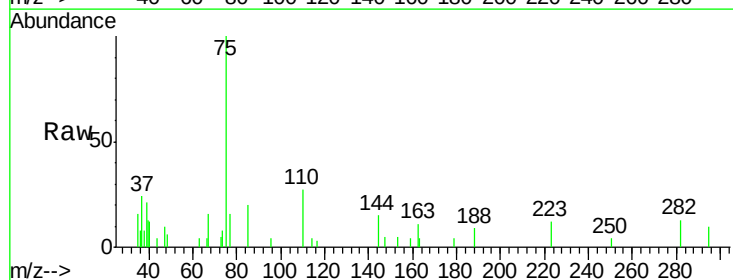
Manual Integrations
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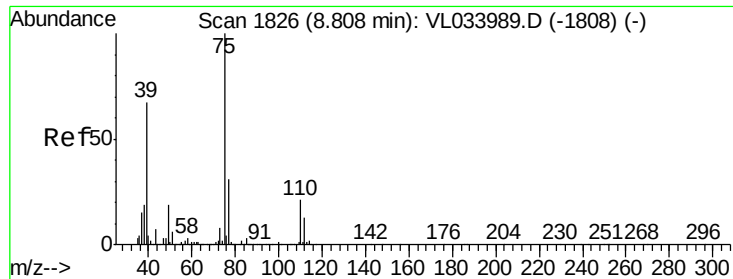
MMDadoda
 7/10/2019 8:50:03 AM



#45
 t-1,3-Dichloropropene
 Concen: 0.072 ppbv m
 RT: 9.36 min Scan# 1998
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
75	100		
77	16.1	24.3	36.5#





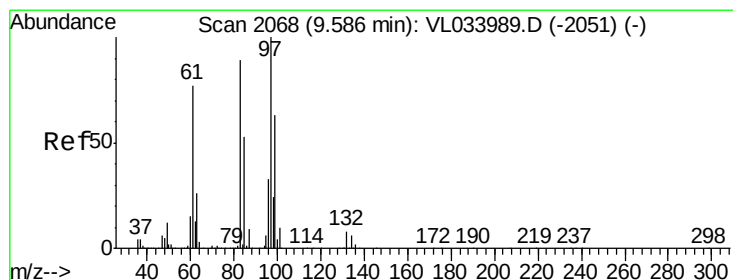
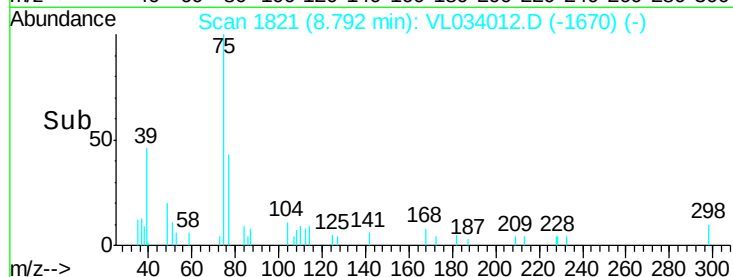
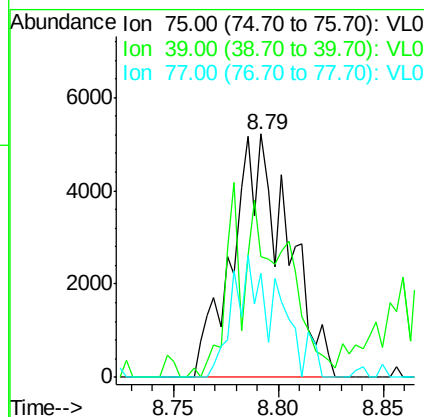
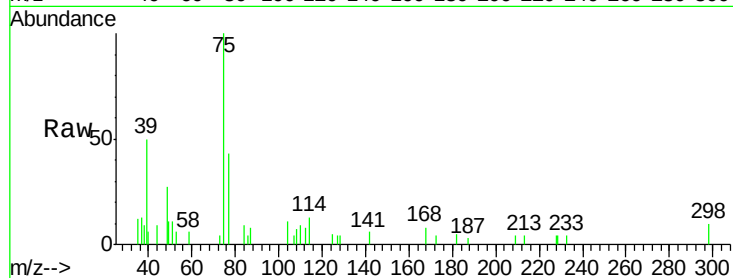
#46
 cis-1,3-Dichloropropene
 Concen: 0.082 ppbv m
 RT: 8.79 min Scan# 1821
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
75	100		
39	49.8	53.8	80.6#
77	42.8	24.5	36.7#

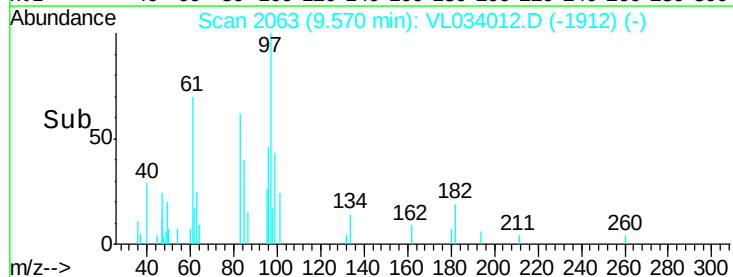
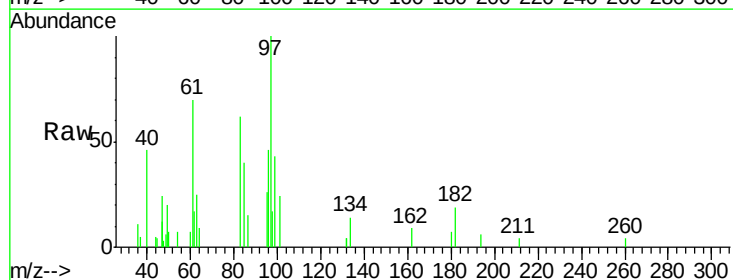
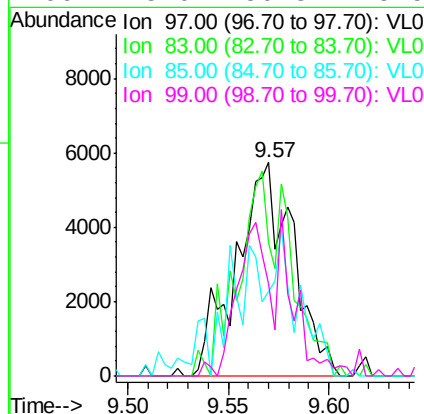
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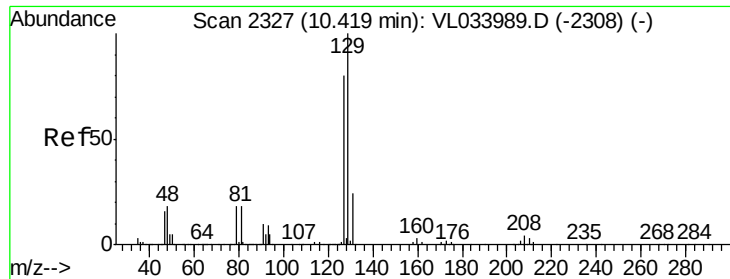
MMDadoda
 7/10/2019 8:50:03 AM



#47
 1,1,2-Trichloroethane
 Concen: 0.119 ppbv m
 RT: 9.57 min Scan# 2063
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
97	100		
83	62.4	71.1	106.7#
85	39.7	42.6	64.0#
99	43.0	50.3	75.5#





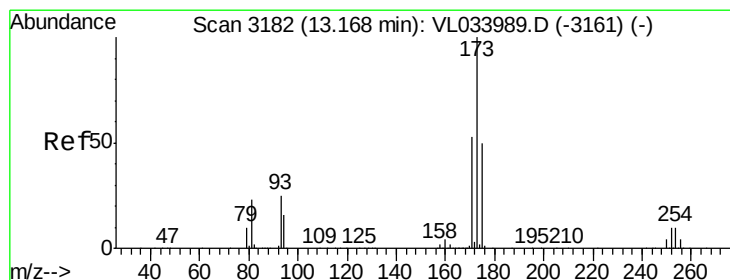
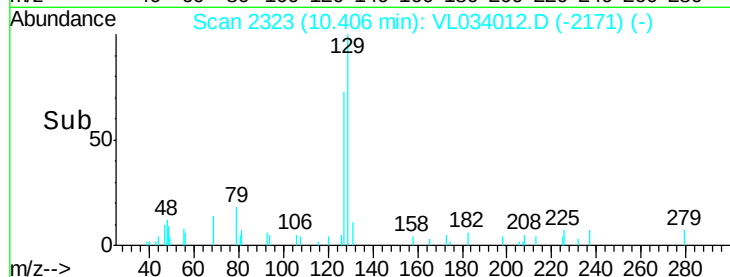
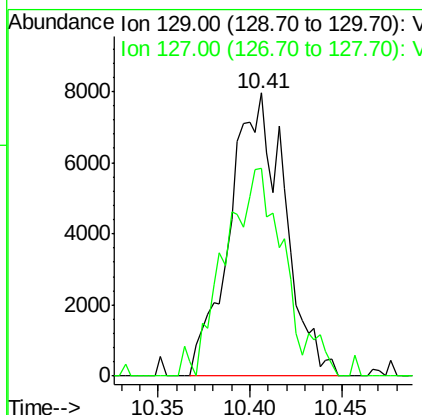
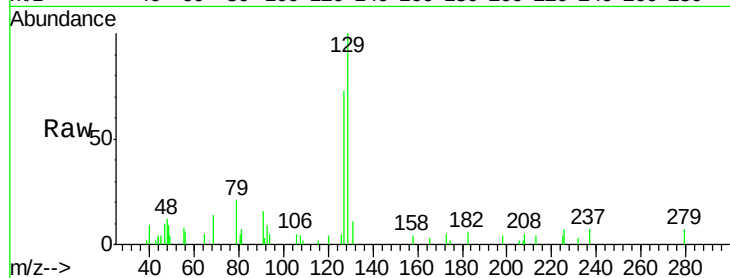
#48
 Dibromochloromethane
 Concen: 0.091 ppbv m
 RT: 10.41 min Scan# 2323
 Delta R.T. -0.01 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion:129 Resp: 16544
 Ion Ratio Lower Upper
 129 100
 127 0.0 39.1 117.3#

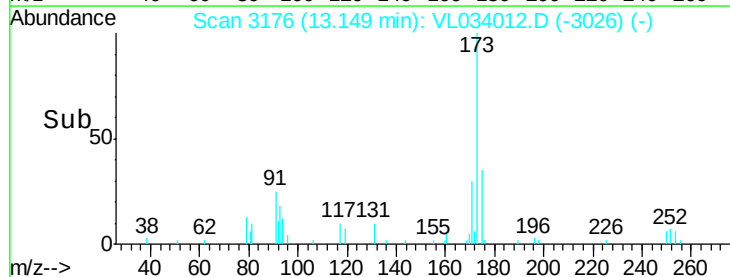
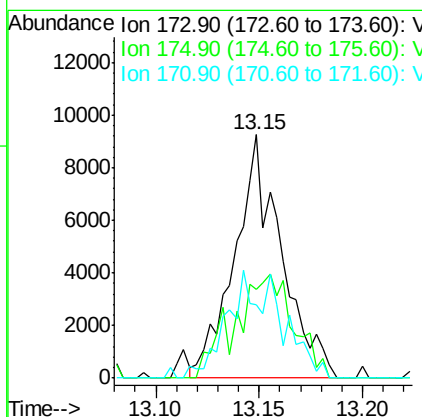
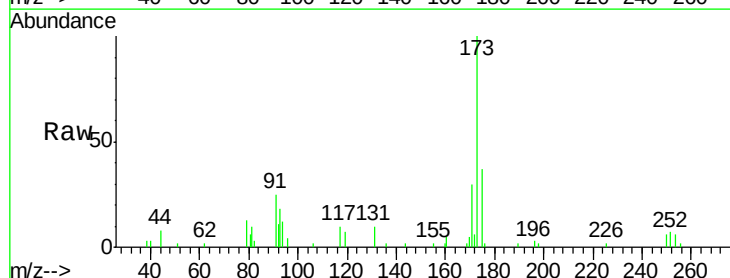
Manual Integrations
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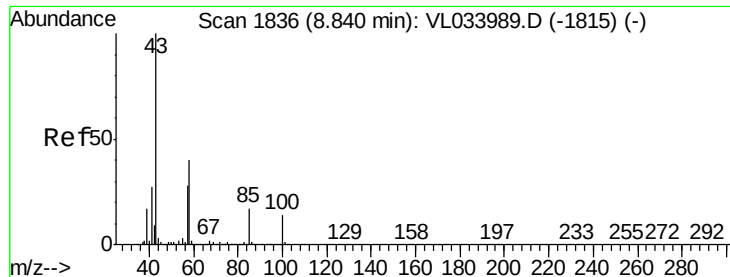
MMDadoda
 7/10/2019 8:50:03 AM



#49
 Bromoform
 Concen: 0.094 ppbv m
 RT: 13.15 min Scan# 3176
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion:173 Resp: 14533
 Ion Ratio Lower Upper
 173 100
 175 0.0 39.3 58.9#
 171 50.3 41.4 62.0





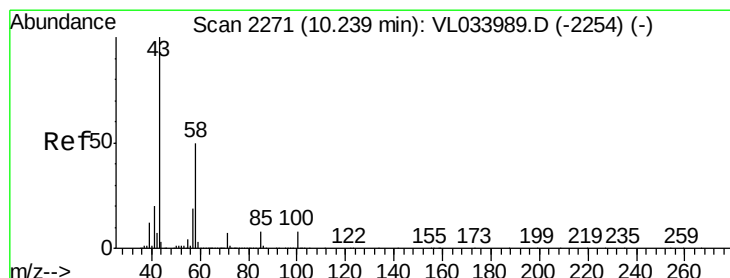
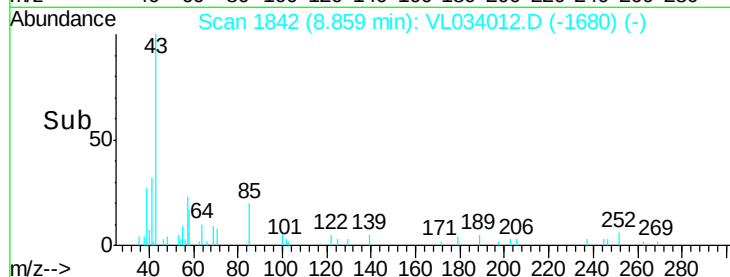
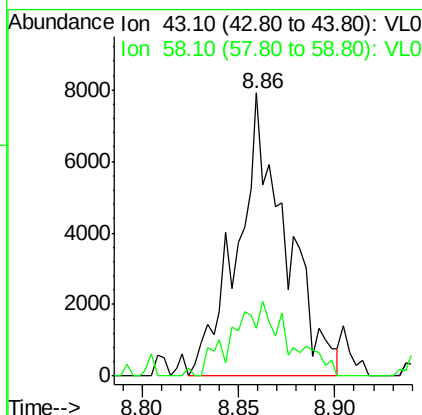
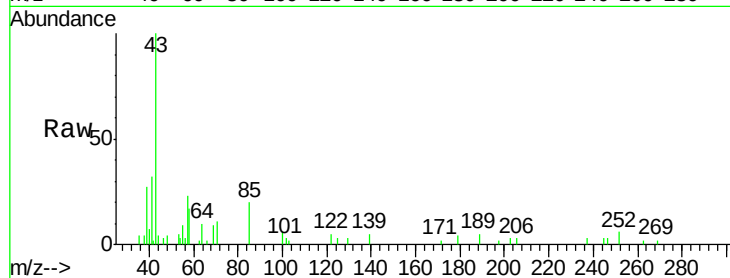
#50
4-Methyl-2-Pentanone
Concen: 0.067 ppbv m
RT: 8.86 min Scan# 1842
Delta R.T. 0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	30.3	45.5#

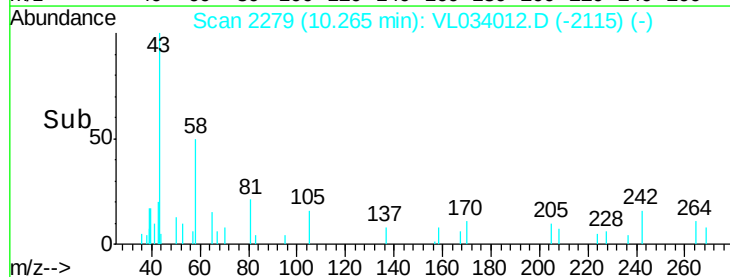
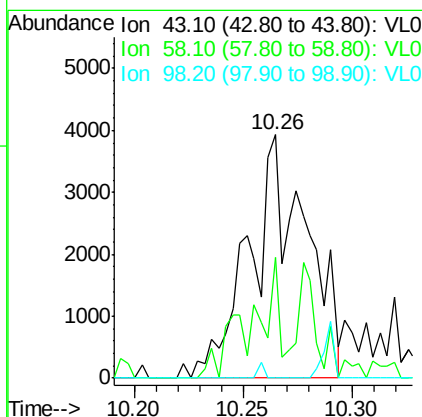
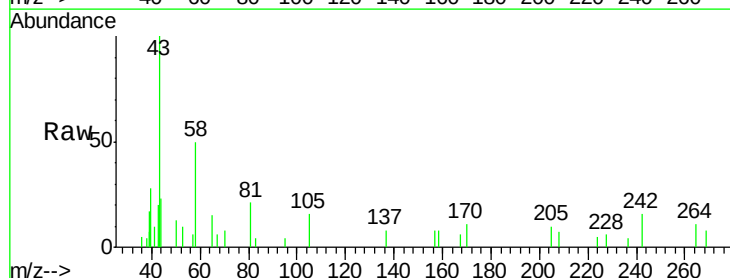
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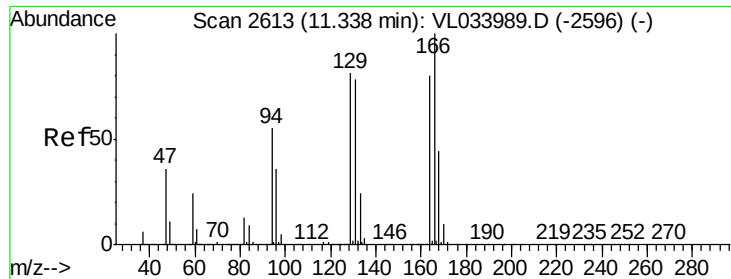
MMDadoda
7/10/2019 8:50:03 AM



#51
2-Hexanone
Concen: 0.043 ppbv m
RT: 10.26 min Scan# 2279
Delta R.T. 0.03 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	41.0	61.4#
98	0.0	0.2	0.2#





#52

Tetrachloroethene

Concen: 0.101 ppbv m

RT: 11.33 min Scan# 2609

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:164 Resp: 8846

Ion Ratio Lower Upper

164 100

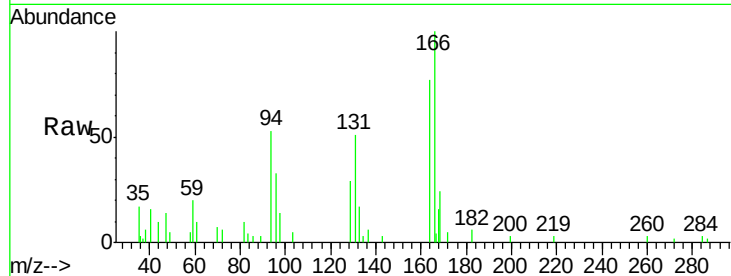
166 129.2 100.2 150.2

129 37.5 81.0 121.6#

131 65.5 78.3 117.5#

Manual Integrations
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MMDadoda
7/10/2019 8:50:03 AM

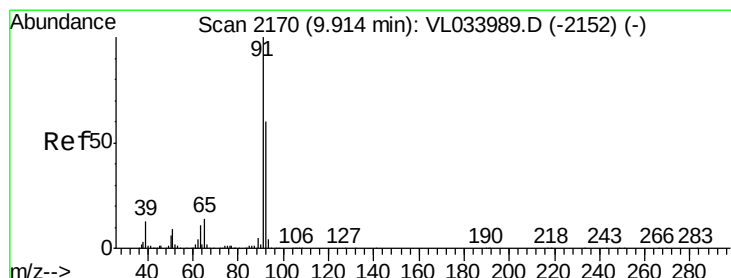
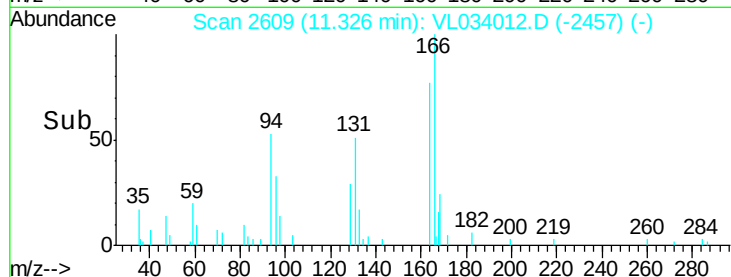
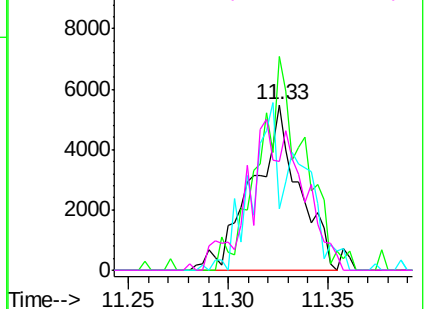


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.066 ppbv m

RT: 9.90 min Scan# 2166

Delta R.T. -0.01 min

Lab File: VL034012.D

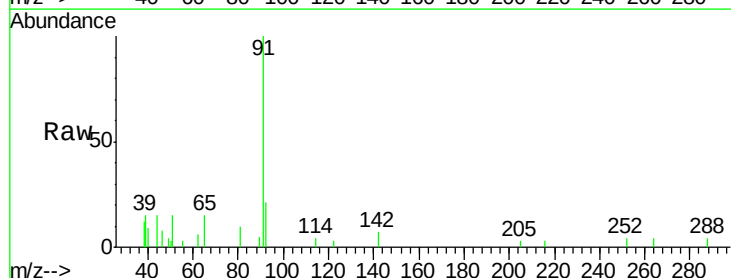
Acq: 8 Jul 2019 15:26

Tgt Ion: 91 Resp: 15269

Ion Ratio Lower Upper

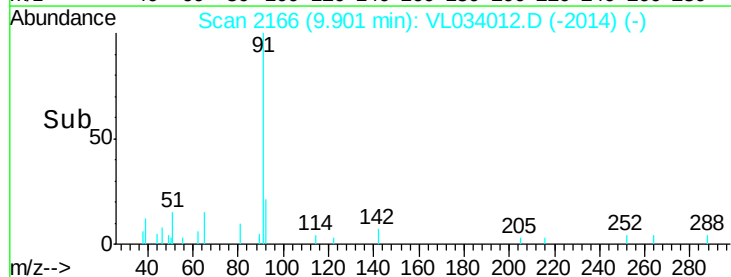
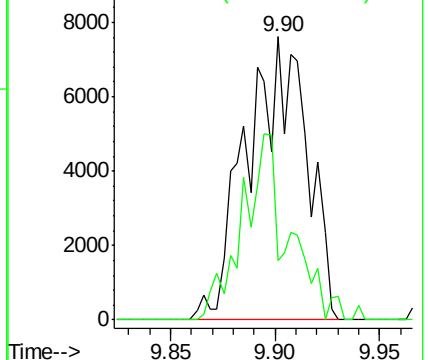
91 100

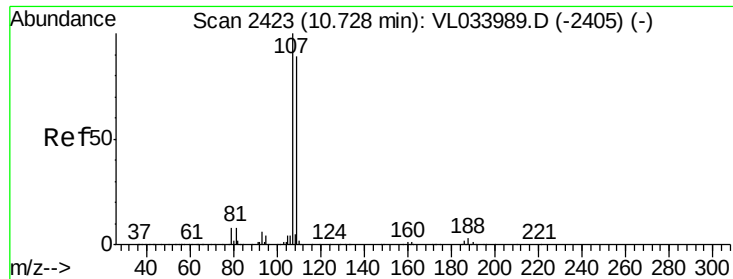
92 0.0 47.7 71.5#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





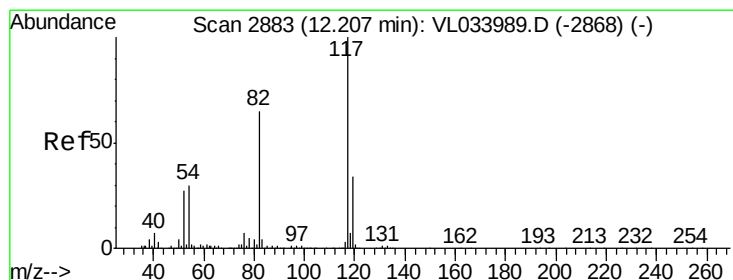
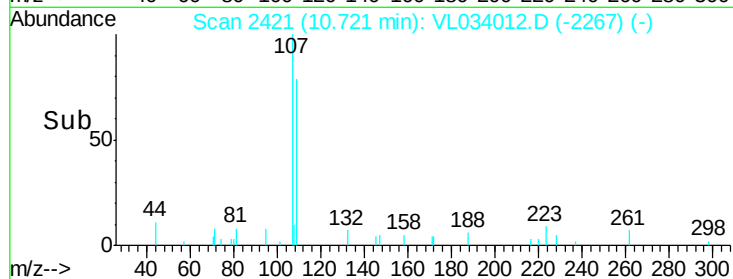
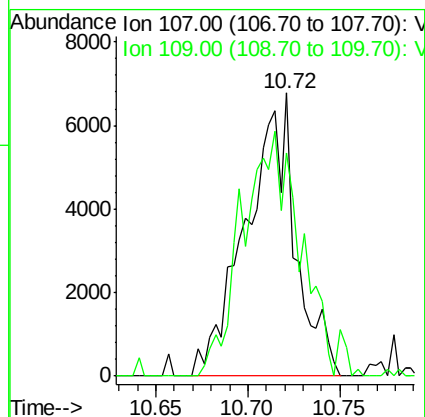
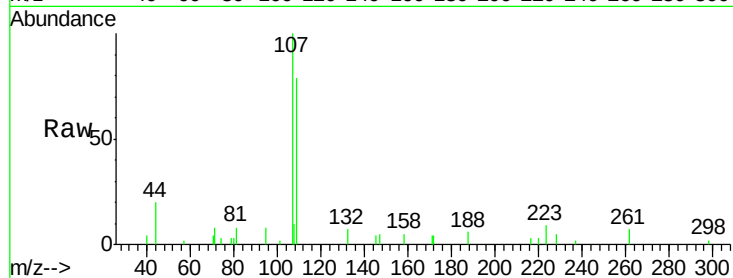
#54
1,2-Dibromoethane
Concen: 0.090 ppbv m
RT: 10.72 min Scan# 2421
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion:107 Resp: 12603
Ion Ratio Lower Upper
107 100
109 78.9 71.5 107.3

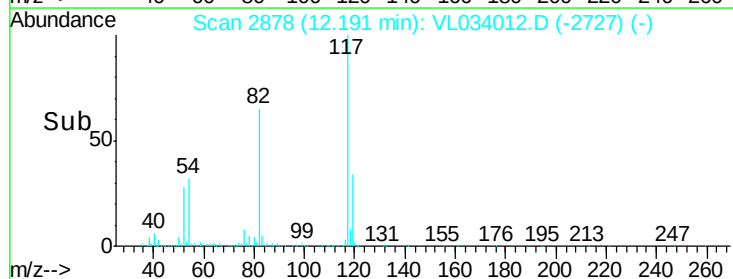
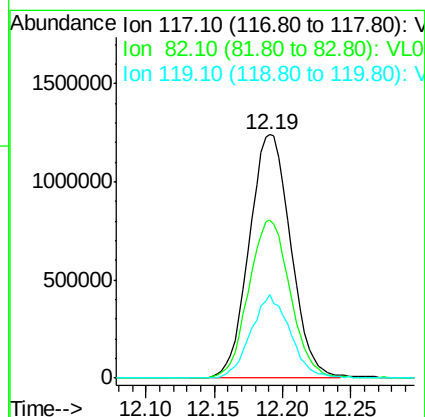
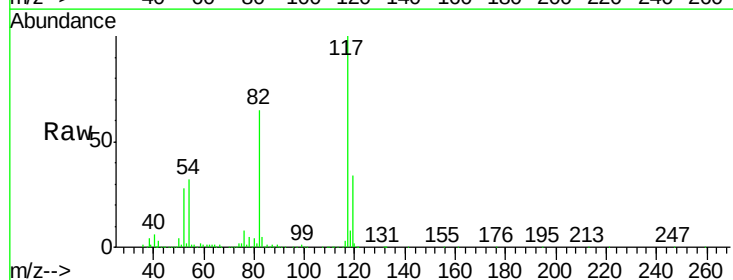
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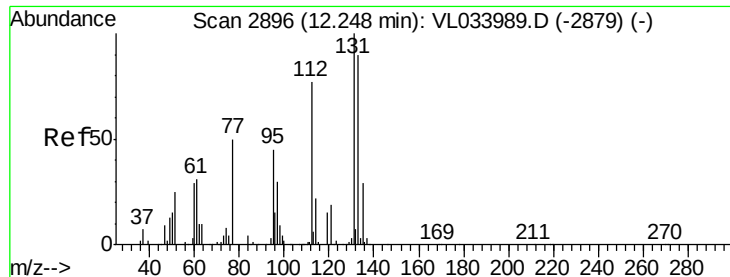
MMDadoda
7/10/2019 8:50:03 AM



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.19 min Scan# 2878
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion:117 Resp: 2621354
Ion Ratio Lower Upper
117 100
82 65.0 50.8 76.2
119 32.5 24.0 36.0





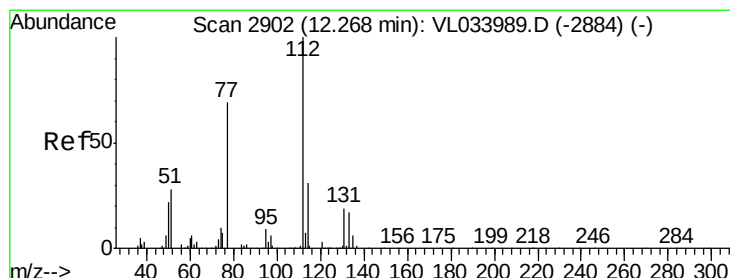
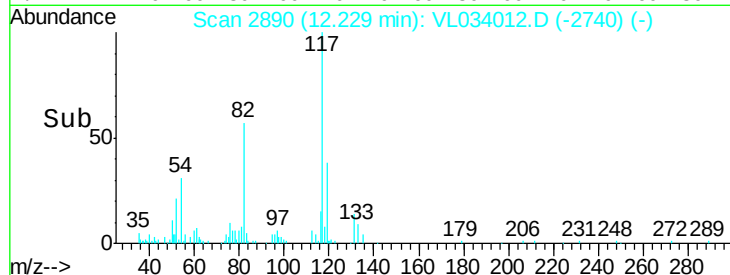
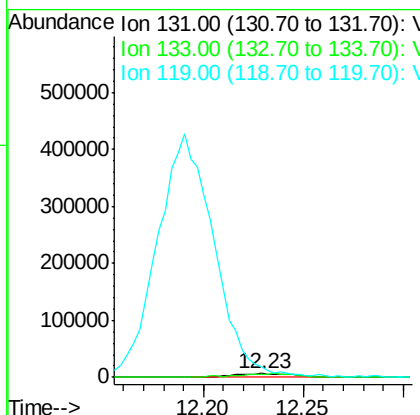
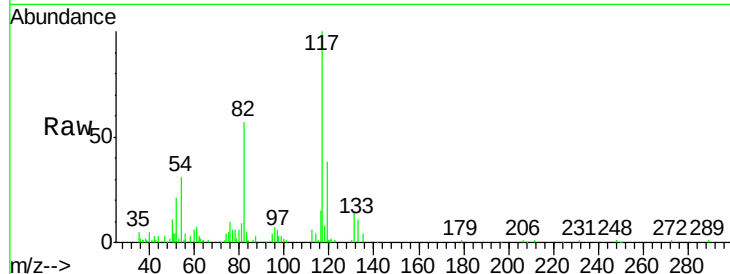
#56
 1,1,1,2-Tetrachloroethane
 Concen: 0.115 ppbv m
 RT: 12.23 min Scan# 2890
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
131	100		
133	0.0	76.2	114.2#
119	0.0	43.1	64.7#

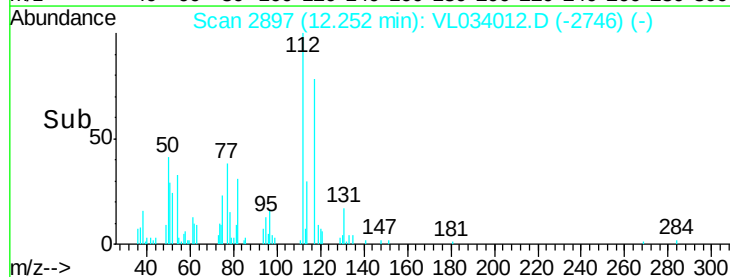
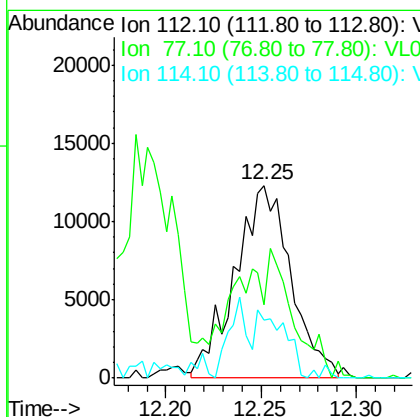
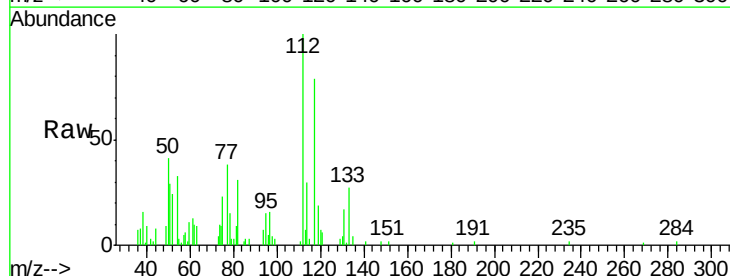
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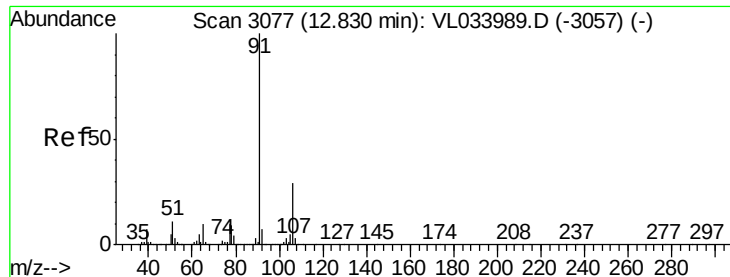
MMDadoda
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#57
 Chlorobenzene
 Concen: 0.120 ppbv m
 RT: 12.25 min Scan# 2897
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
112	100		
77	37.9	55.9	83.9#
114	30.2	27.6	33.8





#58

Ethyl Benzene

Concen: 0.064 ppbv m

RT: 12.81 min Scan# 3072

Delta R.T. -0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 91 Resp: 20044

Ion Ratio Lower Upper

91 100

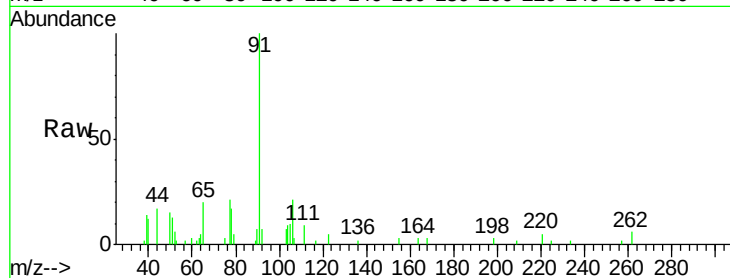
106 21.3 23.3 34.9#

Manual Integrations

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12.81

10000

8000

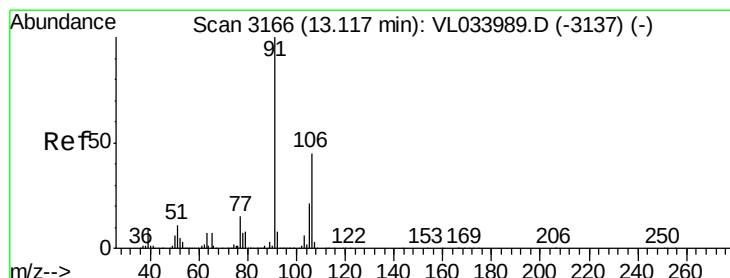
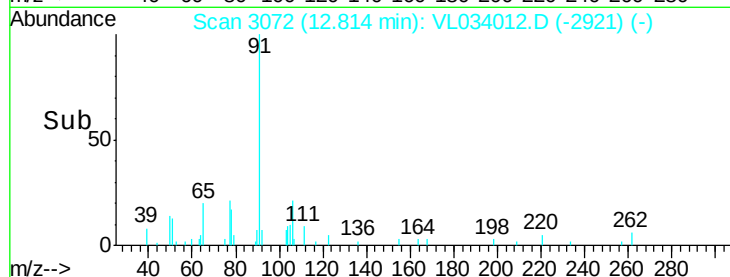
6000

4000

2000

0

Time--> 12.75 12.80 12.85



#59

m/p-Xylene

Concen: 0.108 ppbv m

RT: 13.10 min Scan# 3162

Delta R.T. -0.01 min

Lab File: VL034012.D

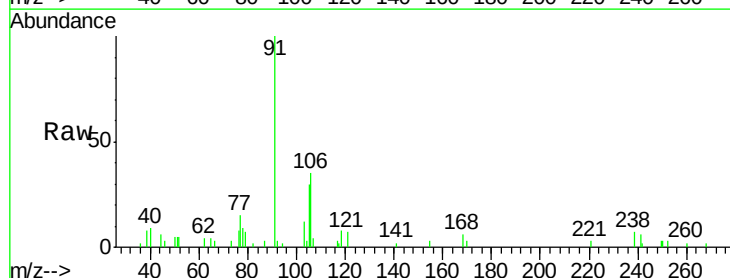
Acq: 8 Jul 2019 15:26

Tgt Ion: 91 Resp: 30942

Ion Ratio Lower Upper

91 100

106 0.0 35.7 53.5#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.10

10000

8000

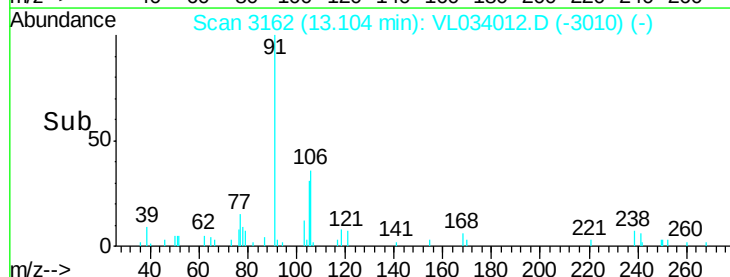
6000

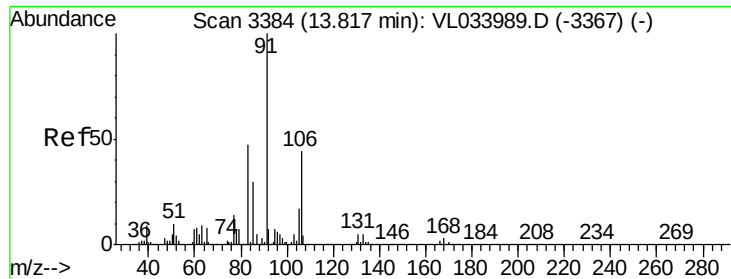
4000

2000

0

Time--> 13.00 13.05 13.10 13.15





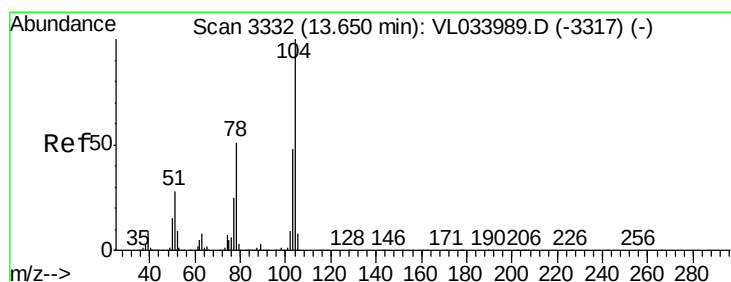
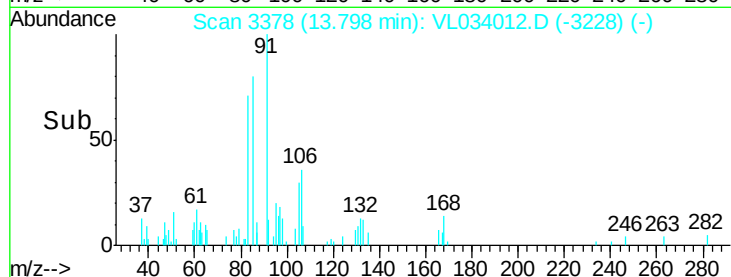
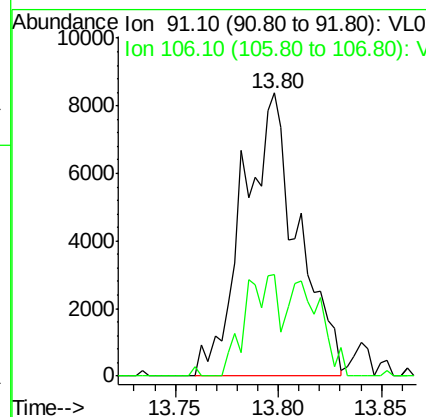
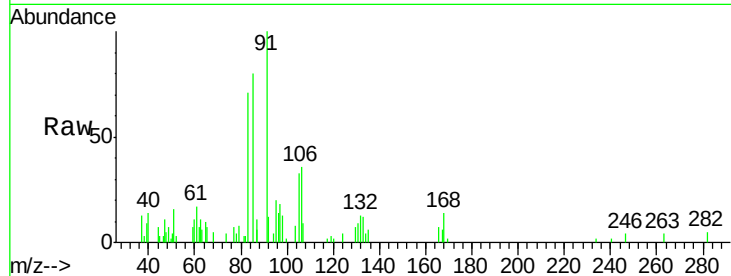
#60
o-Xylene
Concen: 0.054 ppbv m
RT: 13.80 min Scan# 3378
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion: 91 Resp: 15482
Ion Ratio Lower Upper
91 100
106 42.1 21.9 65.7

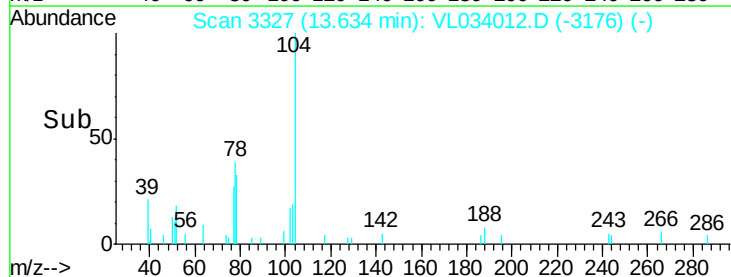
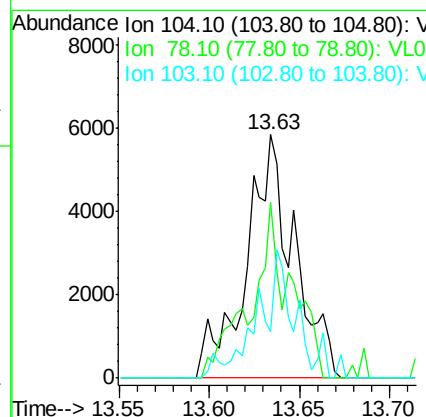
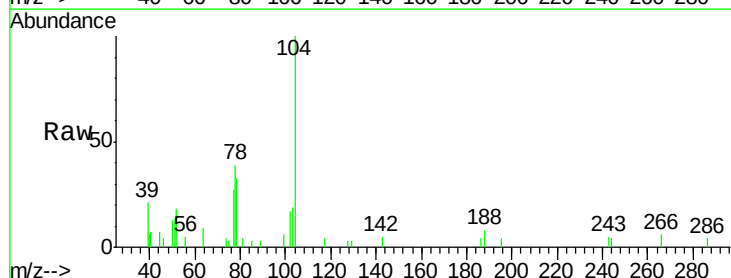
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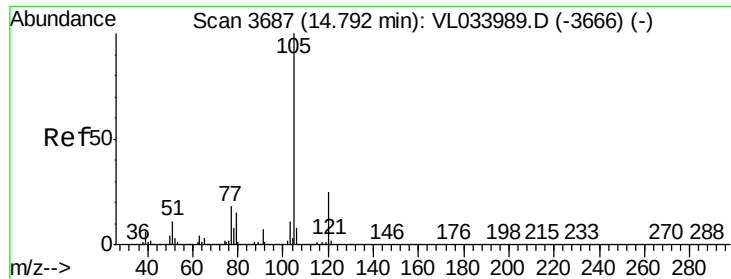
MMDadoda
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#61
Styrene
Concen: 0.057 ppbv m
RT: 13.63 min Scan# 3327
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion: 104 Resp: 10739
Ion Ratio Lower Upper
104 100
78 61.6 43.9 65.9
103 41.9 38.1 57.1





#62

Isopropylbenzene

Concen: 0.063 ppbv m

RT: 14.77 min Scan# 3681

Delta R.T. -0.02 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:105 Resp: 27472

Ion Ratio Lower Upper

105 100

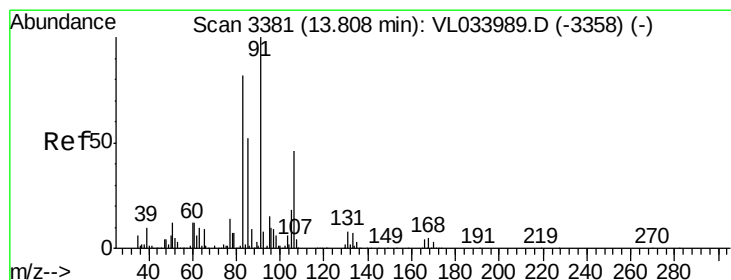
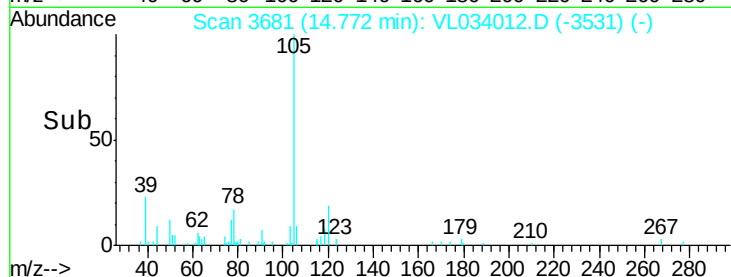
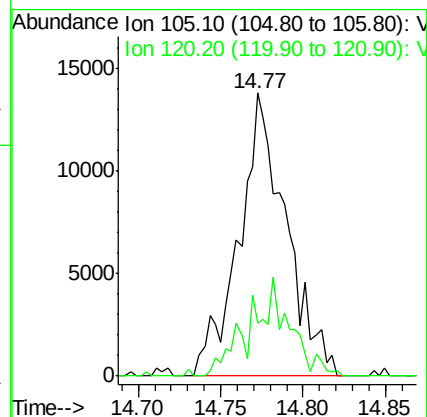
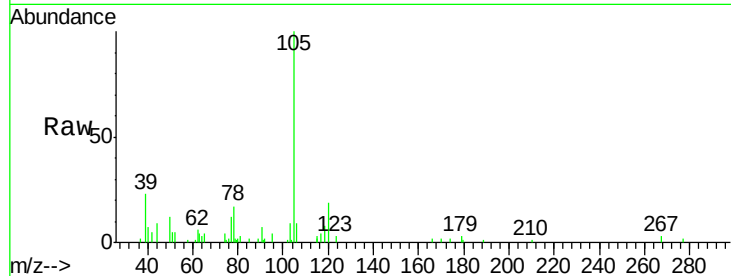
120 1.7 20.4 30.6#

Manual Integrations

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#63

1,1,2,2-Tetrachloroethane

Concen: 0.105 ppbv m

RT: 13.79 min Scan# 3377

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

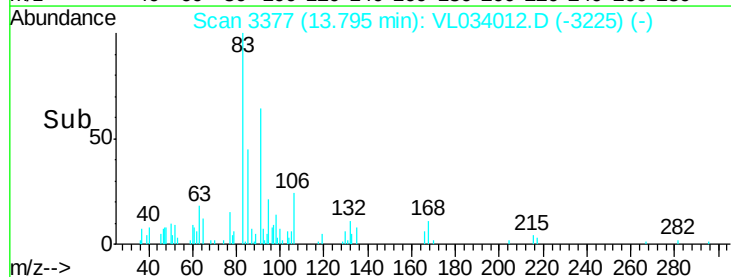
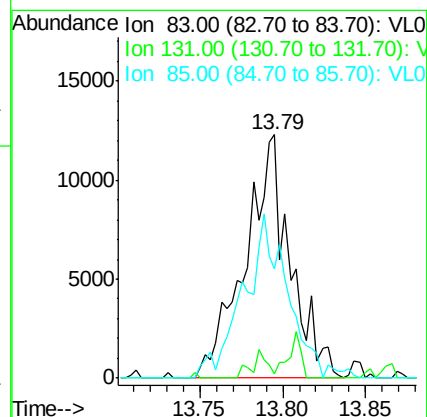
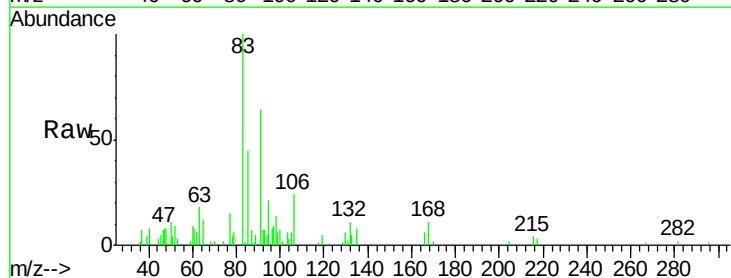
Tgt Ion: 83 Resp: 23171

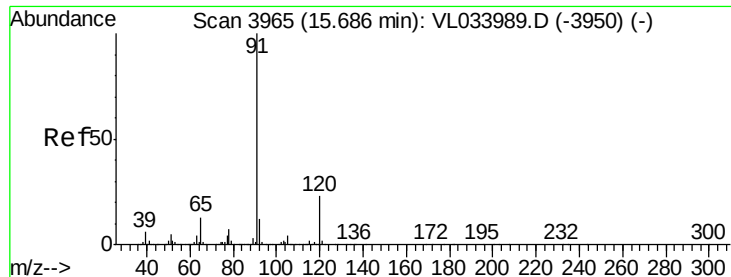
Ion Ratio Lower Upper

83 100

131 0.0 5.0 14.9#

85 67.7 32.8 98.3





#64

n-propylbenzene

Concen: 0.051 ppbv m

RT: 15.67 min Scan# 3961

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:120 Resp: 5762

Ion Ratio Lower Upper

120 100

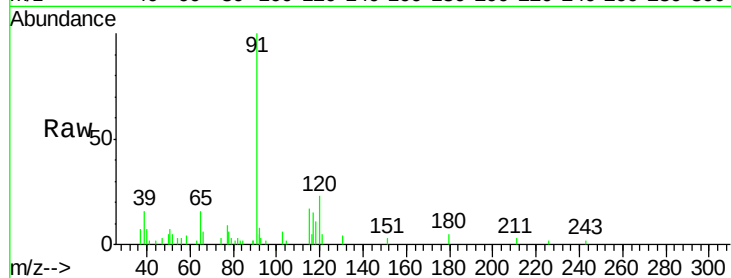
91 0.0 386.6 579.8#

Manual Integrations

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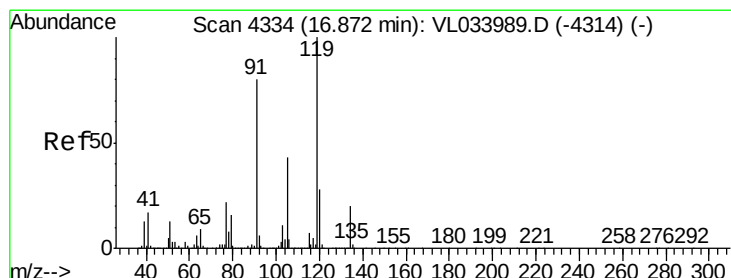
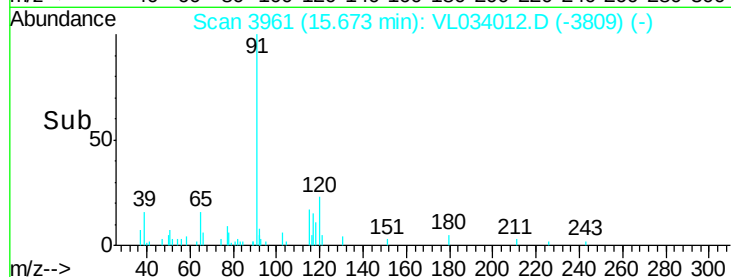
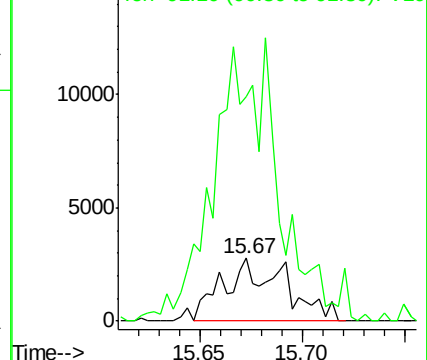
MMDadoda

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Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#65

tert-Butylbenzene

Concen: 0.049 ppbv m

RT: 16.85 min Scan# 4326

Delta R.T. -0.03 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

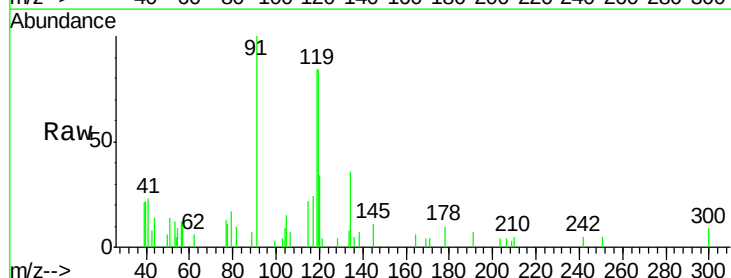
Tgt Ion:119 Resp: 18130

Ion Ratio Lower Upper

119 100

91 0.0 67.0 100.6#

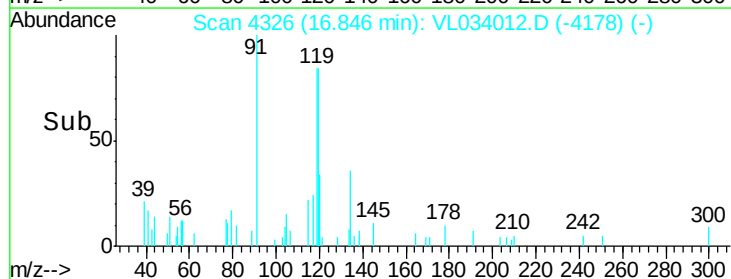
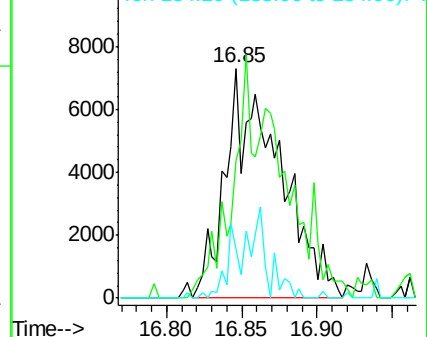
134 0.0 15.8 23.6#

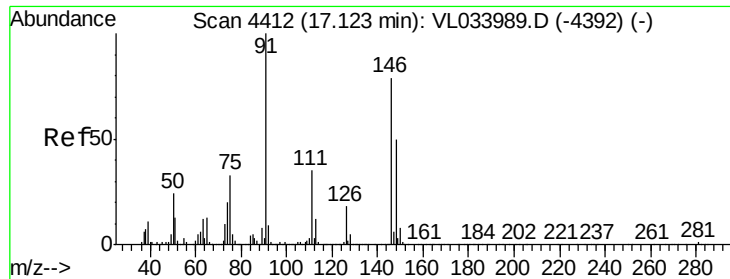


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V





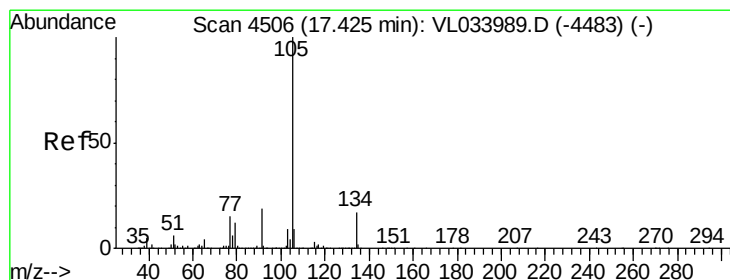
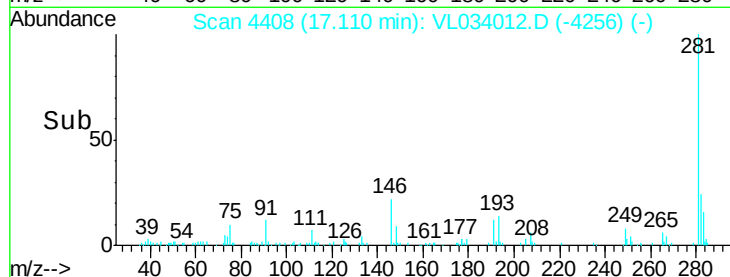
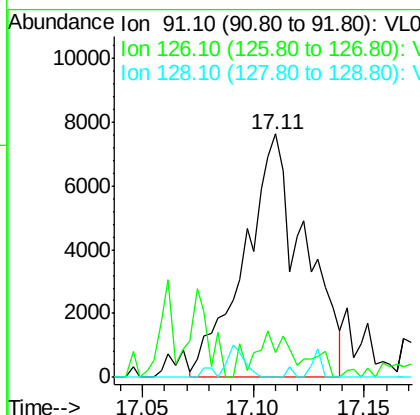
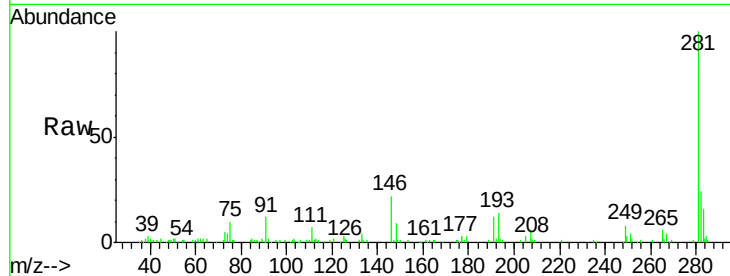
#66
Benzyl Chloride
Concen: 0.075 ppbv m
RT: 17.11 min Scan# 4408
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Resp	Lower	Upper
91	100	14320		
126	0.0	13.9	20.9#	
128	4.5	4.6	7.0#	

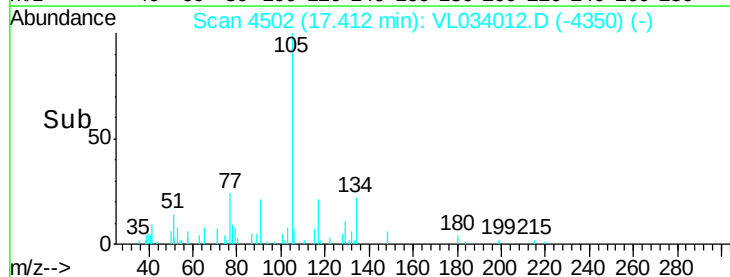
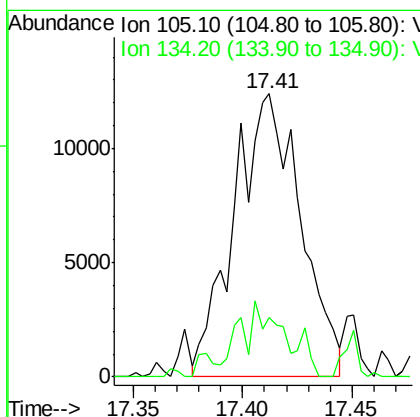
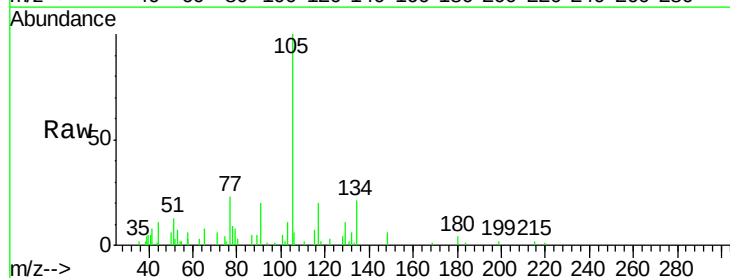
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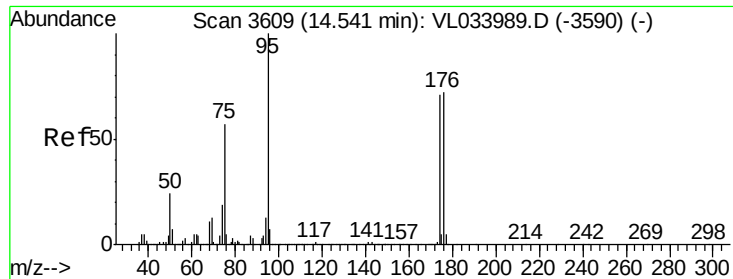
MMDadoda
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#67
sec-Butylbenzene
Concen: 0.050 ppbv m
RT: 17.41 min Scan# 4502
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	26204		
134	0.0	14.7	22.1#	





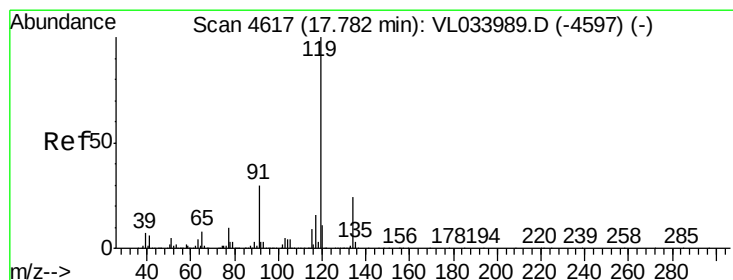
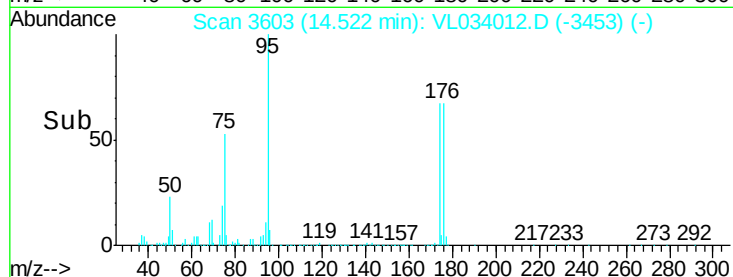
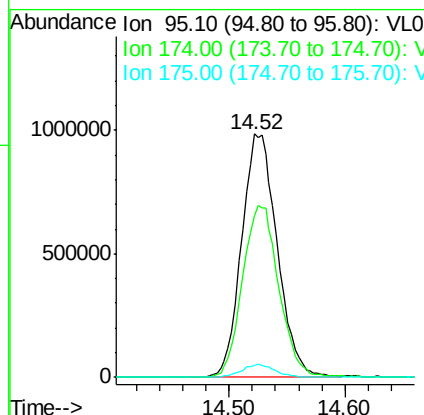
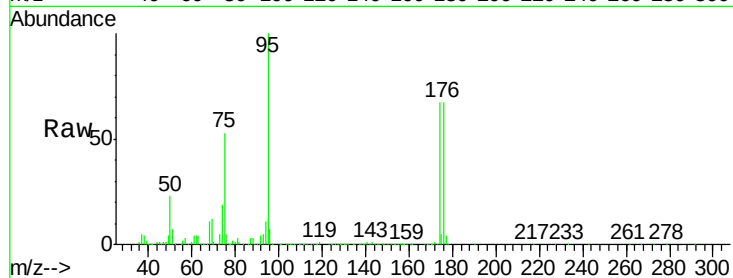
#68
1-Bromo-4-Fluorobenzene
Concen: 9.370 ppbv
RT: 14.52 min Scan# 3603
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion: 95 Resp: 2094939
Ion Ratio Lower Upper
95 100
174 72.9 60.5 90.7
175 5.1 4.0 6.0

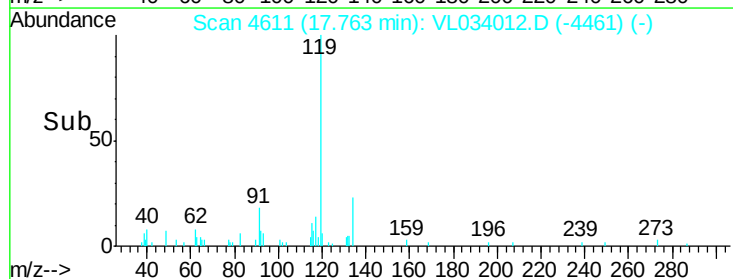
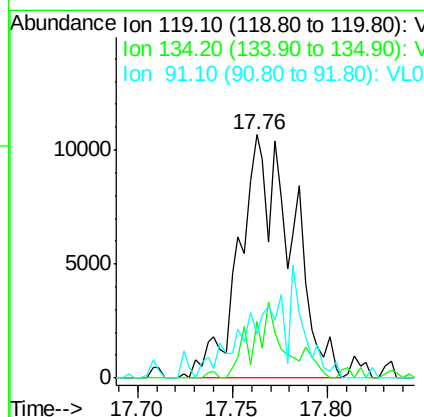
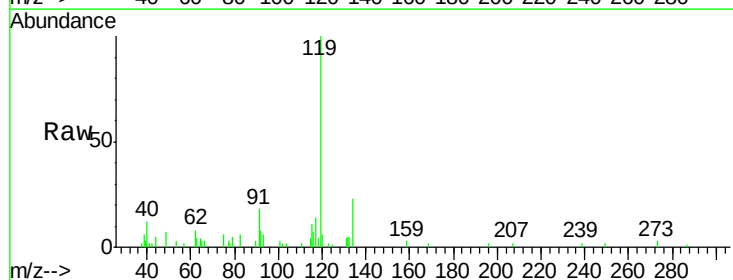
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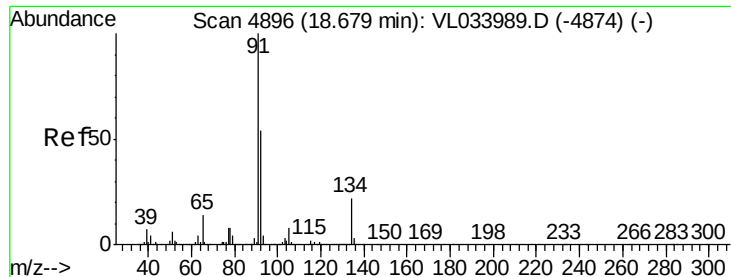
MMDadoda
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#69
p-Isopropyltoluene
Concen: 0.048 ppbv m
RT: 17.76 min Scan# 4611
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion: 119 Resp: 20613
Ion Ratio Lower Upper
119 100
134 0.0 20.1 30.1#
91 0.0 23.6 35.4#





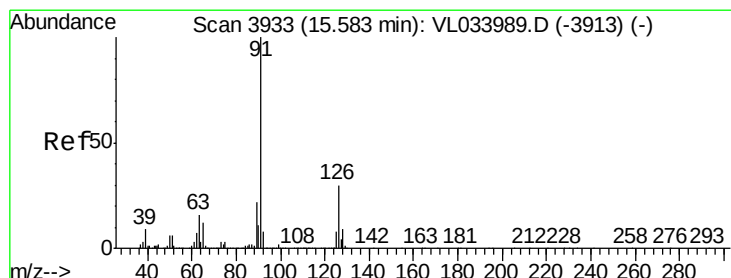
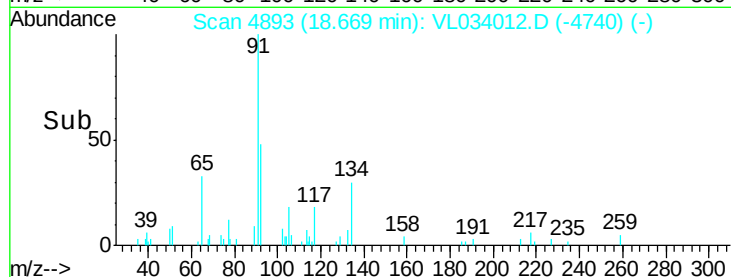
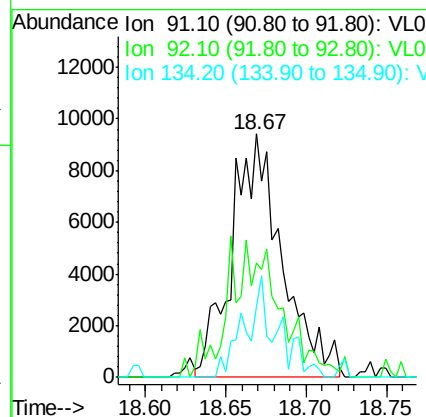
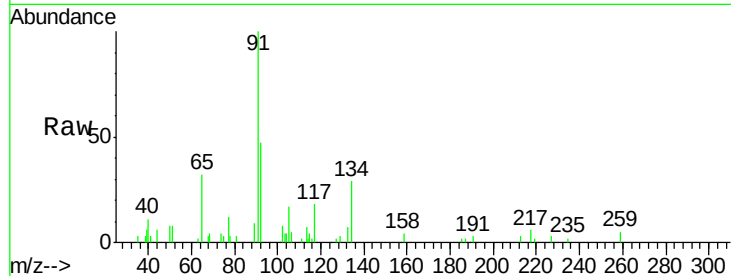
#70
n-Butylbenzene
Concen: 0.045 ppbv m
RT: 18.67 min Scan# 4893
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
91	100		
92	59.1	42.0	63.0
134	0.0	17.9	26.9

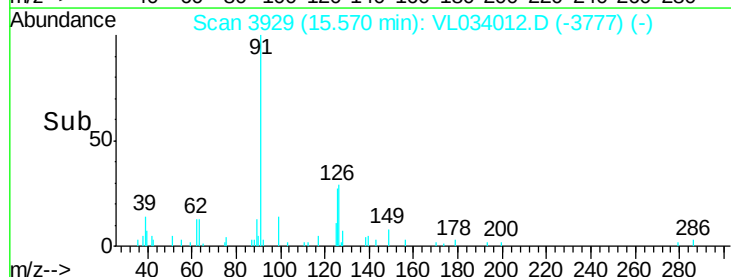
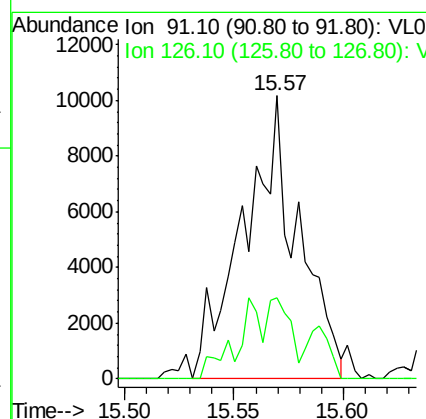
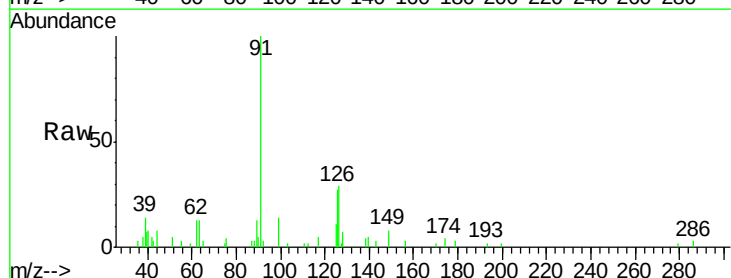
Manual Integrations
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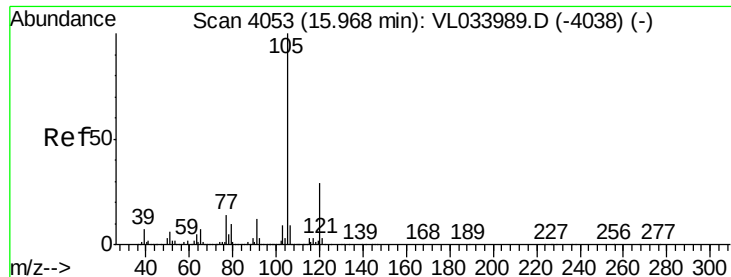
MMDadoda
7/10/2019 8:50:03 AM



#71
2-Chlorotoluene
Concen: 0.055 ppbv m
RT: 15.57 min Scan# 3929
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	12.3	49.3





#72

4-Ethyltoluene

Concen: 0.046 ppbv m

RT: 15.96 min Scan# 4049

Delta R.T. -0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

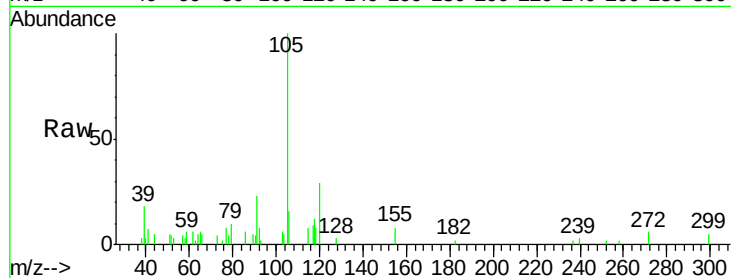
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ion	Ratio	Resp	Lower	Upper
105	105	100	16736		
120	120	31.4	24.1	36.1	
91	91	22.8	10.6	16.0	
77	77	18.2	11.5	17.3	

Manual Integrations
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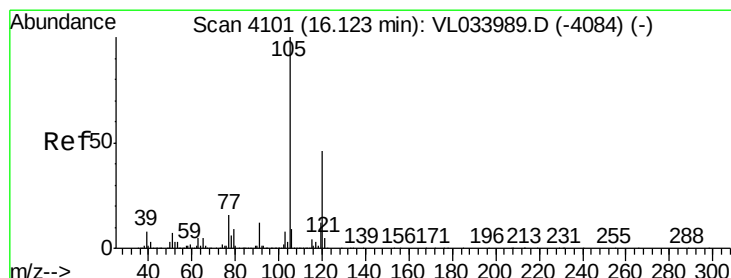
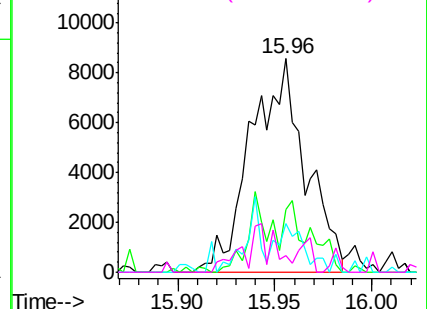
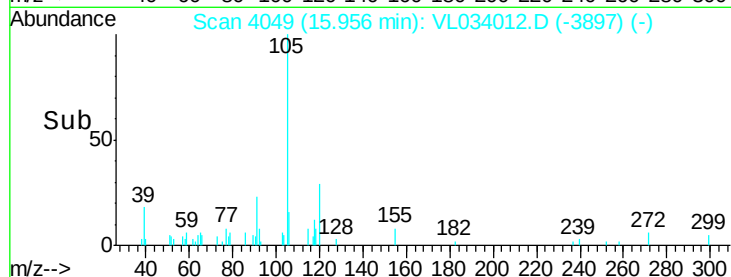


Abundance Ion 105.10 (104.80 to 105.80): V

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



#73

1,3,5-Trimethylbenzene

Concen: 0.046 ppbv m

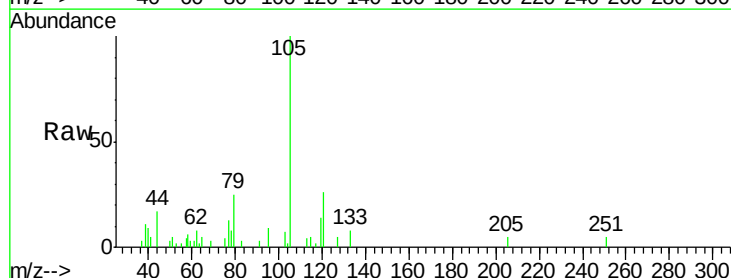
RT: 16.11 min Scan# 4098

Delta R.T. -0.01 min

Lab File: VL034012.D

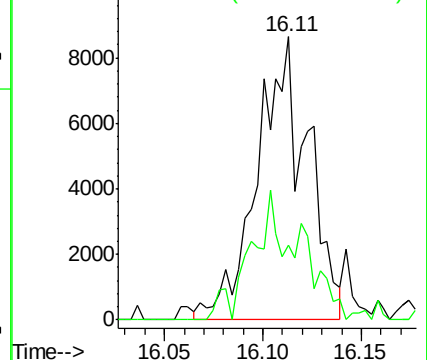
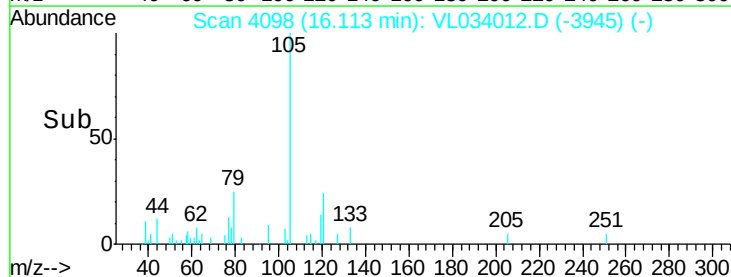
Acq: 8 Jul 2019 15:26

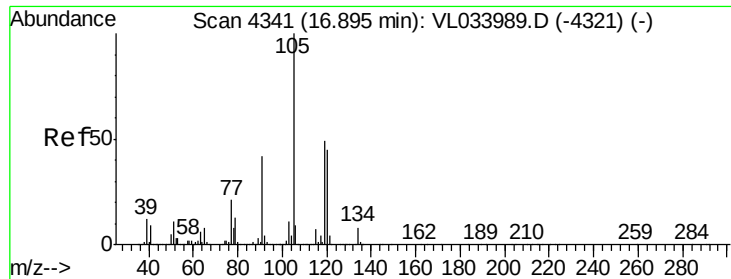
Tgt Ion	Ion	Ratio	Resp	Lower	Upper
105	105	100	15528		
120	120	26.2	36.4	54.6	



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





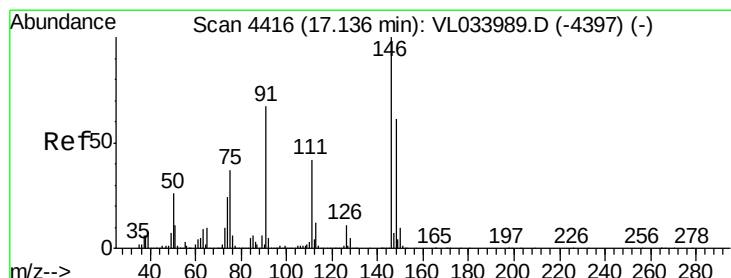
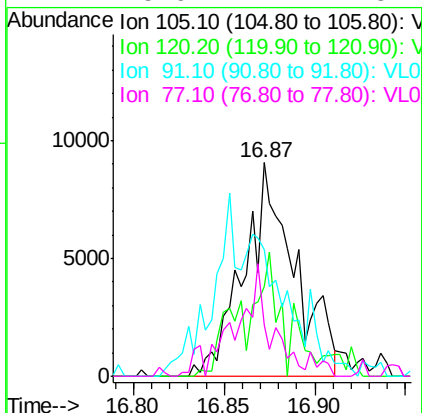
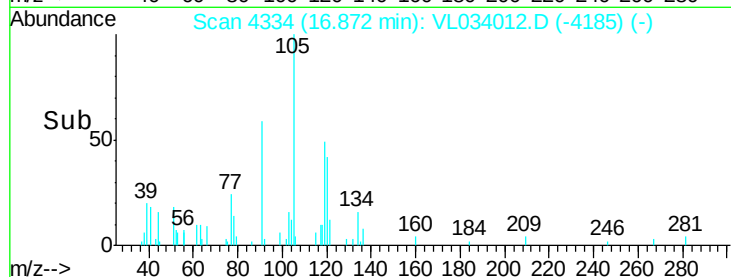
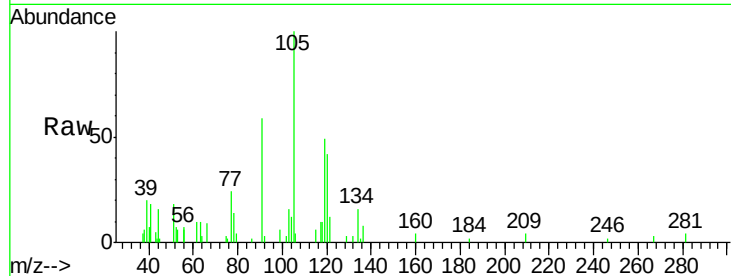
#74
 1,2,4-Trimethylbenzene
 Concen: 0.046 ppbv m
 RT: 16.87 min Scan# 4334
 Delta R.T. -0.02 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
105	100		
120	41.9	36.2	54.2
91	59.2	34.3	51.5#
77	23.9	17.1	25.7

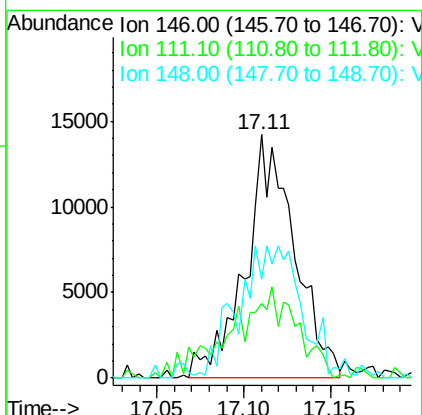
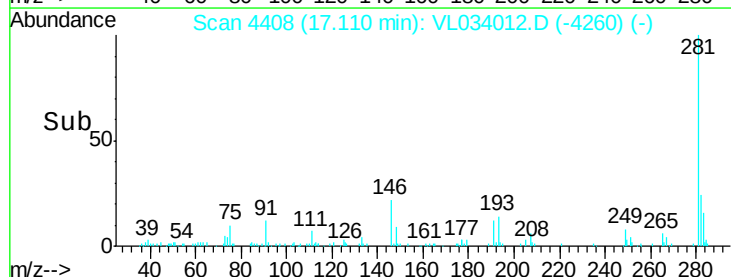
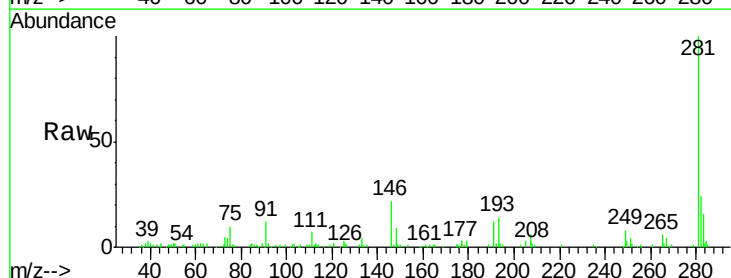
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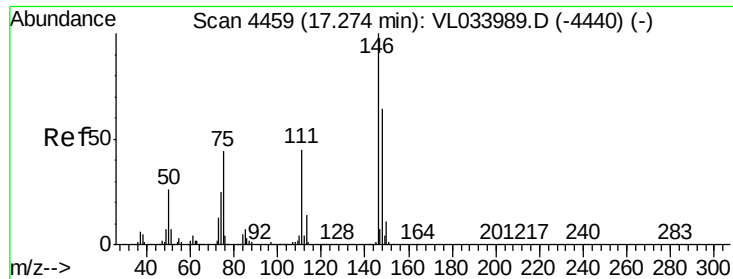
MMDadoda
 7/10/2019 8:50:03 AM



#75
 1,3-Dichlorobenzene
 Concen: 0.117 ppbv m
 RT: 17.11 min Scan# 4408
 Delta R.T. -0.03 min
 Lab File: VL034012.D
 Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
146	100		
111	51.7	22.3	66.9
148	72.4	32.0	96.2





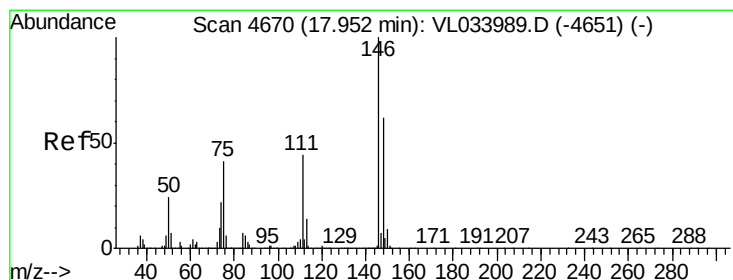
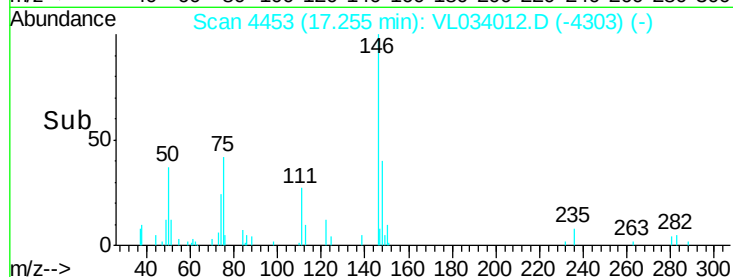
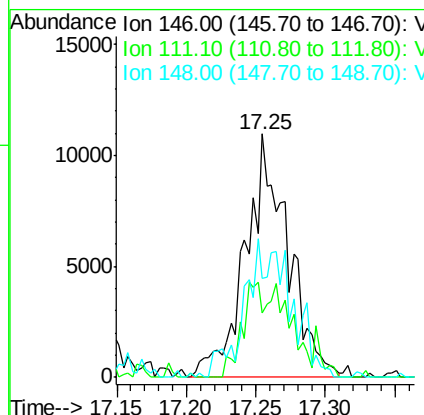
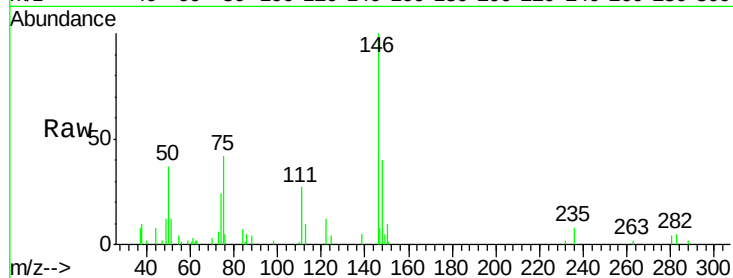
#76
1,4-Dichlorobenzene
Concen: 0.102 ppbv m
RT: 17.25 min Scan# 4453
Delta R.T. -0.02 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
146	100		
111	0.0	21.9	65.5#
148	61.8	32.5	97.5

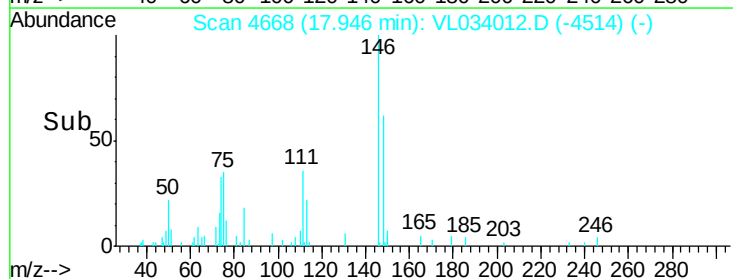
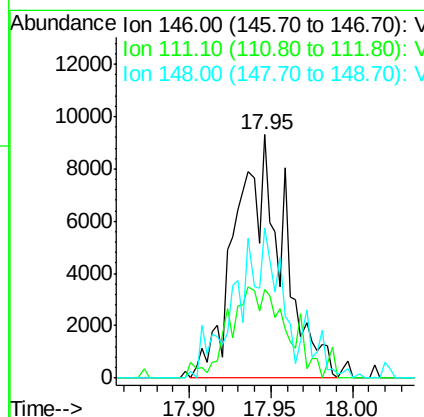
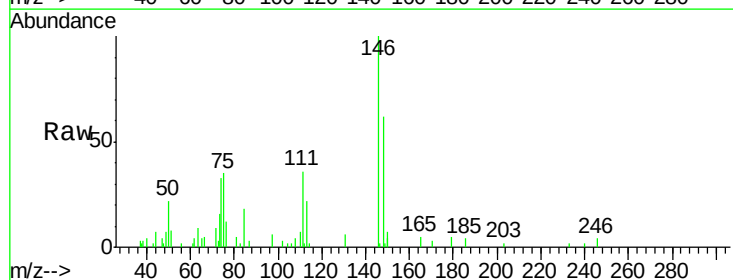
Manual Integrations
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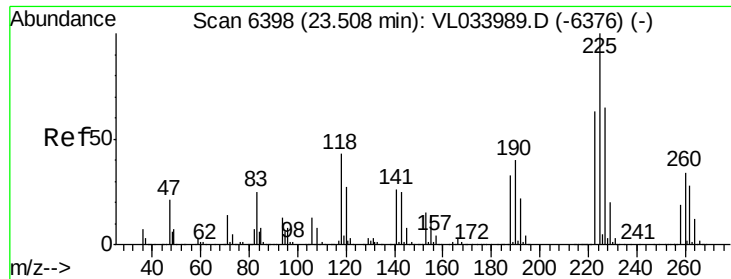
MMDadoda
7/10/2019 8:50:03 AM



#77
1,2-Dichlorobenzene
Concen: 0.086 ppbv m
RT: 17.95 min Scan# 4668
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
146	100		
111	46.3	22.7	68.1
148	0.0	32.1	96.3#





#78

Hexachloro-1,3-Butadiene

Concen: 0.156 ppbv m

RT: 23.51 min Scan# 6397

Delta R.T. -0.00 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Instrument :

MSVOA_L

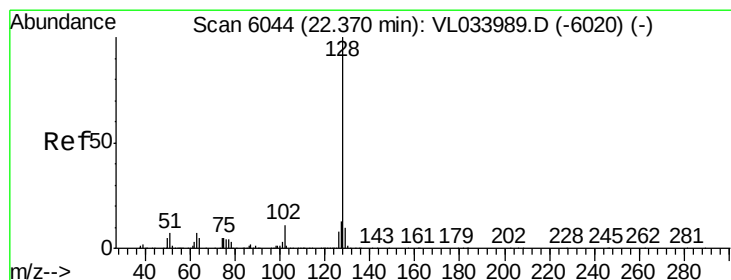
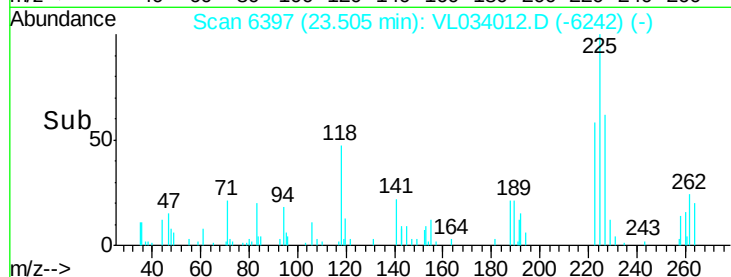
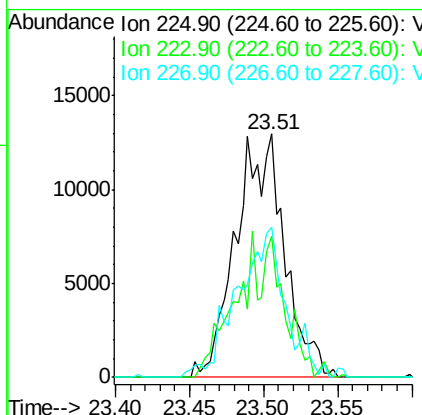
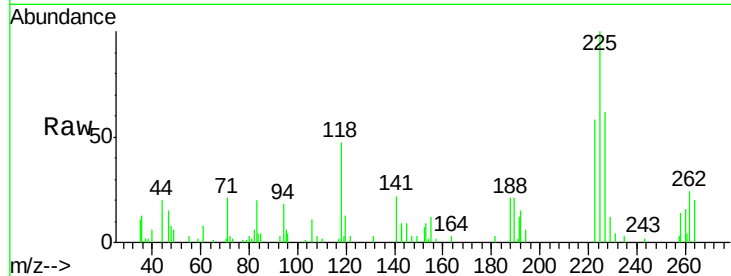
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	225	Resp:	29465
Ion Ratio	Lower	Upper	
225	100		
223	56.2	51.5	77.3
227	0.0	52.1	78.1#

Manual Integrations
APPROVED

MMDadoda
7/10/2019 8:50:03 AM



#79

Naphthalene

Concen: 0.048 ppbv m

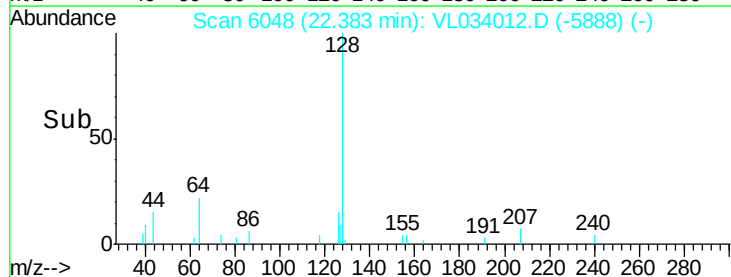
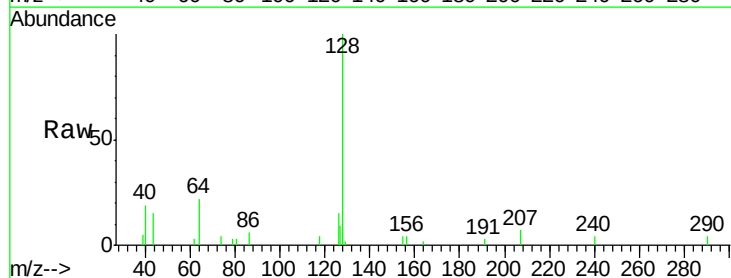
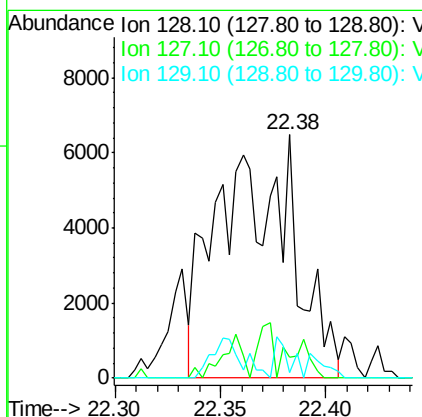
RT: 22.38 min Scan# 6048

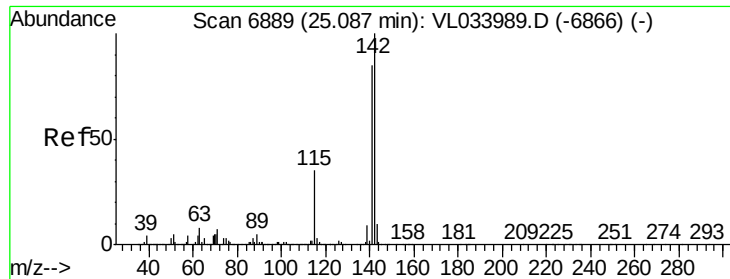
Delta R.T. 0.01 min

Lab File: VL034012.D

Acq: 8 Jul 2019 15:26

Tgt Ion:	128	Resp:	15247
Ion Ratio	Lower	Upper	
128	100		
127	8.7	10.6	15.8#
129	2.5	8.3	12.5#





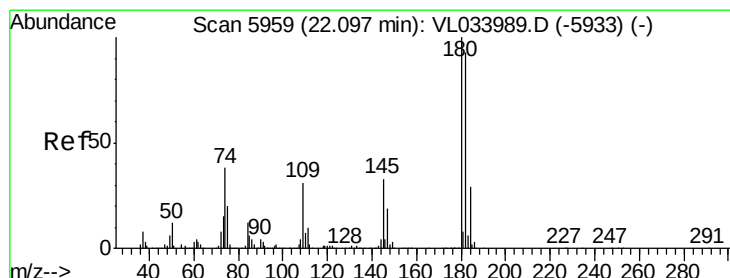
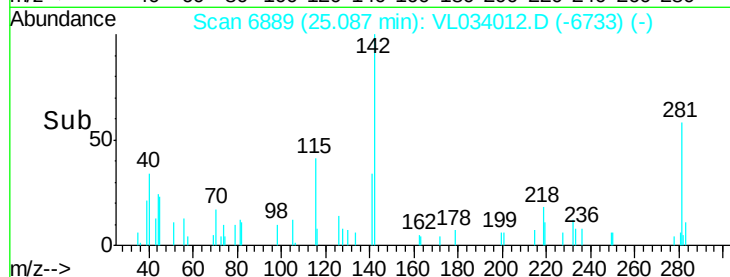
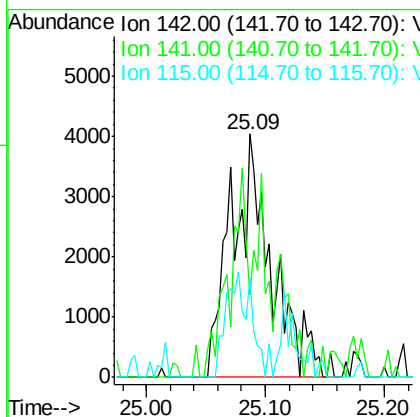
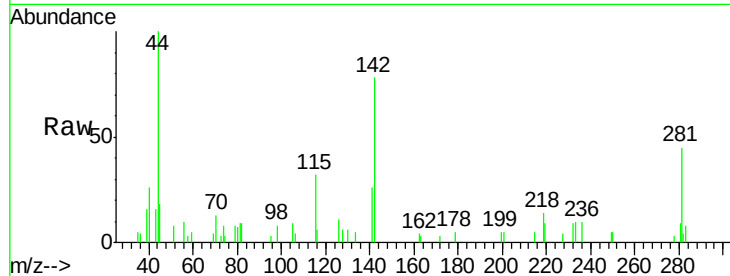
#80
Naphthalene, 2-methyl-
Concen: 0.082 ppbv
RT: 25.09 min Scan# 6889
Delta R.T. 0.00 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
142	100		
141	82.1	68.2	102.2
115	29.0	29.9	44.9#

Manual Integrations
APPROVED

MMDadoda
7/10/2019 8:50:03 AM



#81
1,2,4-Trichlorobenzene
Concen: 0.077 ppbv m
RT: 22.08 min Scan# 5955
Delta R.T. -0.01 min
Lab File: VL034012.D
Acq: 8 Jul 2019 15:26

Tgt Ion	Ratio	Lower	Upper
180	100		
182	90.2	76.6	114.8
184	0.0	24.6	36.8#

