

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL070819\
 Data File : VL034011.D
 Acq On : 8 Jul 2019 14:48
 Operator : SY/AP
 Sample : K3591-15 0.4 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 8:50:00 AM

Quant Time: Jul 09 04:27:20 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	1021500	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.25	114	2958653	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.20	117	2744912	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.53	95	2190016	9.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.50%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	119166	0.565	ppbv	99
3) Chlorodifluoromethane	2.99	51	58879	0.467	ppbv	98
4) Chloromethane	3.15	50	32484	0.448	ppbv	95
5) Vinyl Chloride	3.27	62	35093	0.430	ppbv	100
6) Bromomethane	3.49	94	21798	0.453	ppbv	85
7) Chloroethane	3.58	64	13262	0.455	ppbv #	86
8) Dichlorotetrafluoroethane	3.20	85	93003	0.453	ppbv	89
9) Propene	3.01	41	19414	0.418	ppbv	95
10) Heptane	8.21	43	38655m	0.333	ppbv	
11) Trichlorofluoromethane	3.98	101	102613	0.433	ppbv	88
12) 1,1,2-Trichlorotrifluoroet	4.52	101	72671m	0.433	ppbv	
13) Ethanol	3.63	45	13380m	0.928	ppbv	
14) Bromoethene	3.77	108	27390	0.437	ppbv	98
15) Acetone	3.89	43	86552	0.504	ppbv	91
16) 1,3-Butadiene	3.34	39	24734m	0.408	ppbv	
17) tert-Butyl alcohol	4.35	59	57365m	0.419	ppbv	
18) 1,1-Dichloroethene	4.33	96	29954m	0.401	ppbv	
19) Isopropyl Alcohol	4.01	45	50580m	0.439	ppbv	
20) Methylene Chloride	4.38	84	33545	0.448	ppbv	94
21) Allyl Chloride	4.45	41	40115	0.375	ppbv	90
22) trans-1,2-Dichloroethene	4.93	96	30411m	0.427	ppbv	
23) Vinyl Acetate	5.12	43	66435	0.388	ppbv	98
24) 1,1-Dichloroethane	5.06	63	68750	0.453	ppbv #	96
25) Ethyl Acetate	5.74	43	91962	0.391	ppbv #	97
26) Hexane	5.74	57	41771m	0.389	ppbv	
27) Carbon Disulfide	4.59	76	68583	0.375	ppbv #	87
28) Methyl tert-Butyl Ether	5.09	73	70357	0.386	ppbv	97
29) Chloroform	5.81	83	86310	0.427	ppbv	85
30) Cyclohexane	7.21	84	32727m	0.394	ppbv	
31) cis-1,2-Dichloroethene	5.61	61	36219m	0.349	ppbv	
32) 1,1,1-Trichloroethane	6.59	97	78427	0.383	ppbv	95
34) 2-Butanone	5.31	43	54809	0.350	ppbv	100
35) Carbon Tetrachloride	7.10	117	92571	0.395	ppbv	88
36) Benzene	6.97	78	73942	0.319	ppbv #	95
37) 1,2-Dichloroethane	6.38	62	68526	0.402	ppbv	99
38) Trichloroethene	7.92	130	34721m	0.337	ppbv	
39) 1,2-Dichloropropane	7.70	63	29536m	0.343	ppbv	
40) 1,4-Dioxane	7.96	88	13932m	0.351	ppbv	
41) Tetrahydrofuran	6.14	42	20724m	0.270	ppbv	
42) Bromodichloromethane	7.88	83	84015m	0.367	ppbv	
43) Methyl Methacrylate	8.11	69	22107m	0.252	ppbv	

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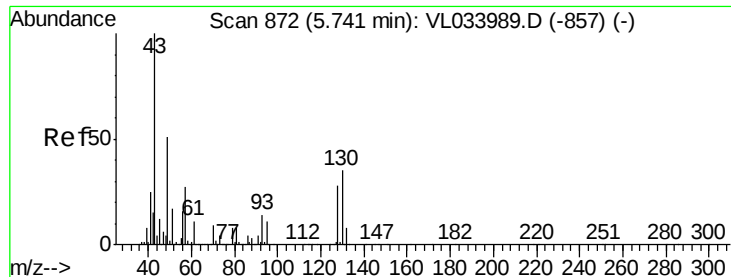
MMDadoda
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 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 09
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

44) 2,2,4-Trimethylpentane	7.95	57	121471m	0.304	ppbv	
45) t-1,3-Dichloropropene	9.37	75	29679m	0.258	ppbv	
46) cis-1,3-Dichloropropene	8.80	75	36875m	0.277	ppbv	
47) 1,1,2-Trichloroethane	9.57	97	41111m	0.380	ppbv	
48) Dibromochloromethane	10.41	129	63895m	0.309	ppbv	
49) Bromoform	13.16	173	61358	0.348	ppbv	97
50) 4-Methyl-2-Pentanone	8.85	43	62658m	0.270	ppbv	
51) 2-Hexanone	10.25	43	43519m	0.232	ppbv	
52) Tetrachloroethene	11.33	164	33432m	0.336	ppbv	
53) Toluene	9.91	91	67674	0.255	ppbv	97
54) 1,2-Dibromoethane	10.72	107	57790m	0.362	ppbv	
56) 1,1,1,2-Tetrachloroethane	12.24	131	54670m	0.446	ppbv	
57) Chlorobenzene	12.25	112	92908m	0.425	ppbv	
58) Ethyl Benzene	12.83	91	94774m	0.287	ppbv	
59) m/p-Xylene	13.11	91	202642m	0.678	ppbv	
60) o-Xylene	13.80	91	94577	0.316	ppbv	96
61) Styrene	13.64	104	48895m	0.247	ppbv	
62) Isopropylbenzene	14.78	105	135682	0.295	ppbv	98
63) 1,1,2,2-Tetrachloroethane	13.79	83	94164m	0.407	ppbv	
64) n-propylbenzene	15.69	120	33486m	0.281	ppbv	
65) tert-Butylbenzene	16.87	119	110579m	0.283	ppbv	
66) Benzyl Chloride	17.11	91	56661m	0.283	ppbv	
67) sec-Butylbenzene	17.42	105	171576m	0.313	ppbv	
69) p-Isopropyltoluene	17.78	119	125431	0.277	ppbv	96
70) n-Butylbenzene	18.68	91	141030m	0.297	ppbv	
71) 2-Chlorotoluene	15.58	91	89865m	0.267	ppbv	
72) 4-Ethyltoluene	15.96	105	95097m	0.248	ppbv	
73) 1,3,5-Trimethylbenzene	16.11	105	104870m	0.294	ppbv	
74) 1,2,4-Trimethylbenzene	16.89	105	132019m	0.334	ppbv	
75) 1,3-Dichlorobenzene	17.12	146	96515	0.384	ppbv	93
76) 1,4-Dichlorobenzene	17.27	146	86997m	0.367	ppbv	
77) 1,2-Dichlorobenzene	17.95	146	87215	0.375	ppbv	96
78) Hexachloro-1,3-Butadiene	23.50	225	82053m	0.414	ppbv	
79) Naphthalene	22.36	128	81782m	0.246	ppbv	
80) Naphthalene, 2-methyl-	25.08	142	37913	0.313	ppbv	96
81) 1,2,4-Trichlorobenzene	22.09	180	64811m	0.303	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: VL034011.D

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ClientSampleId :

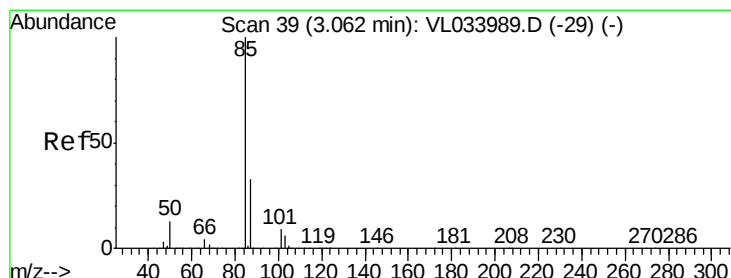
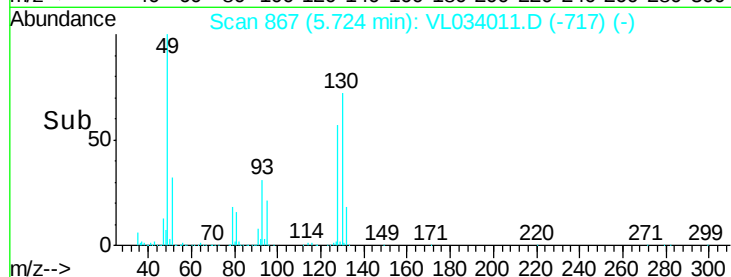
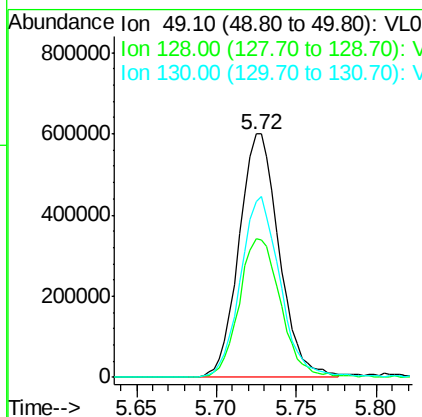
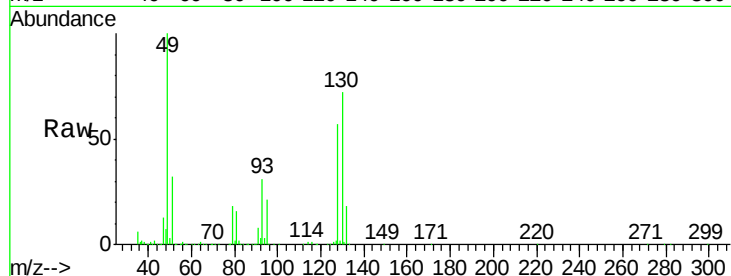
MDL-MDL-AIR-03-QT3-2019

Tot Ion: 49 Resp: 1021500

Ion	Ratio	Lower	Upper
49	100		
128	59.4	27.9	83.6
130	73.7	35.8	107.4

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#2

Dichlorodifluoromethane

Concen: 0.565 ppbv

RT: 3.06 min Scan# 37

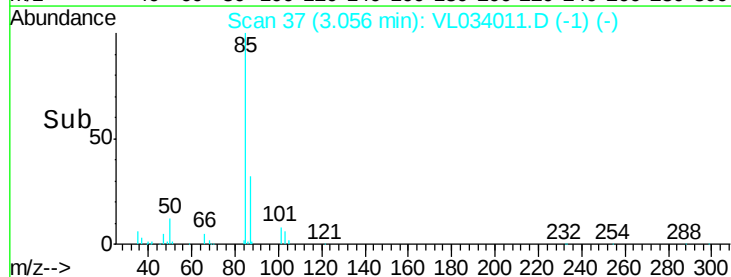
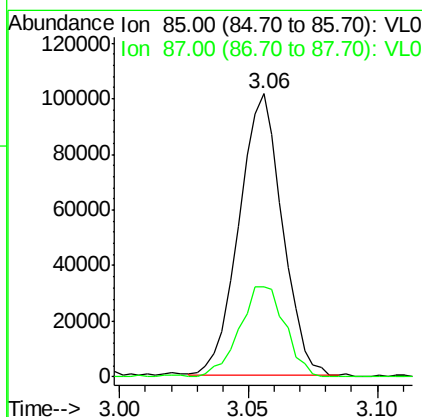
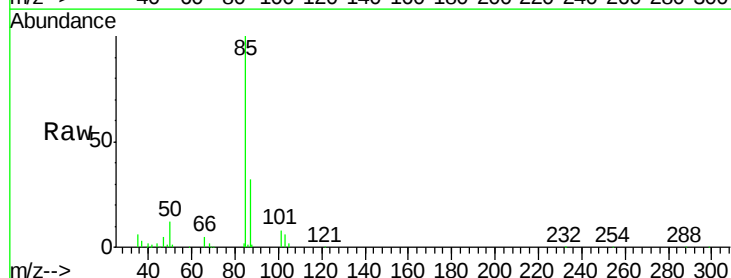
Delta R.T. -0.01 min

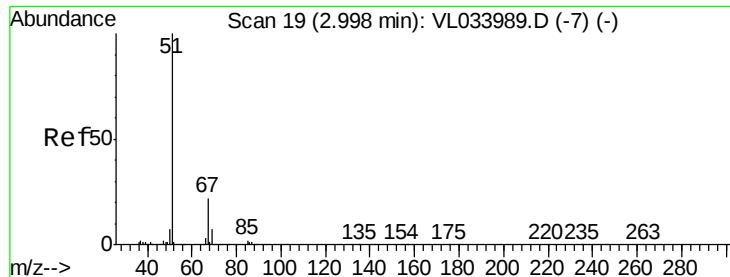
Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion: 85 Resp: 119166

Ion	Ratio	Lower	Upper
85	100		
87	31.9	26.0	39.0





#3

Chlorodifluoromethane

Concen: 0.467 ppbv

RT: 2.99 min Scan# 18

Delta R.T. -0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 51 Resp: 58879

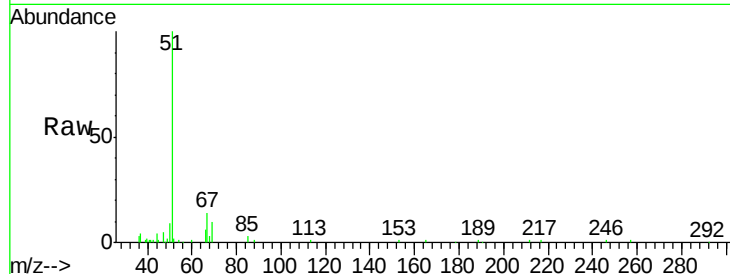
Ion Ratio Lower Upper

51 100

67 20.6 17.3 25.9

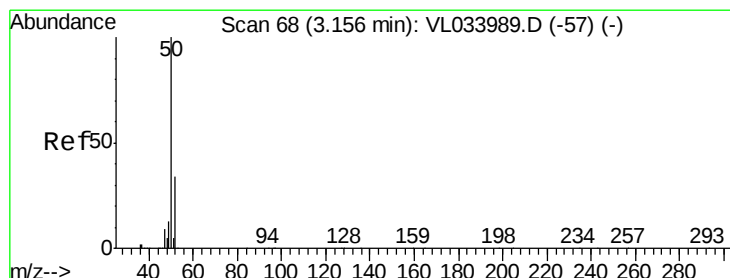
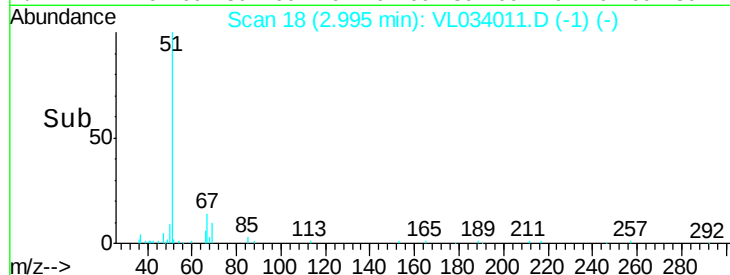
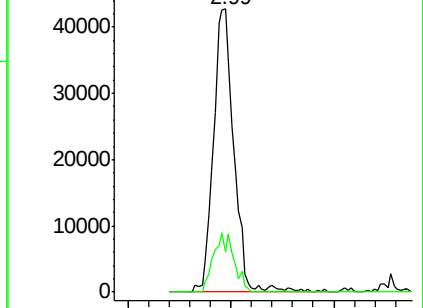
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.448 ppbv

RT: 3.15 min Scan# 65

Delta R.T. -0.01 min

Lab File: VL034011.D

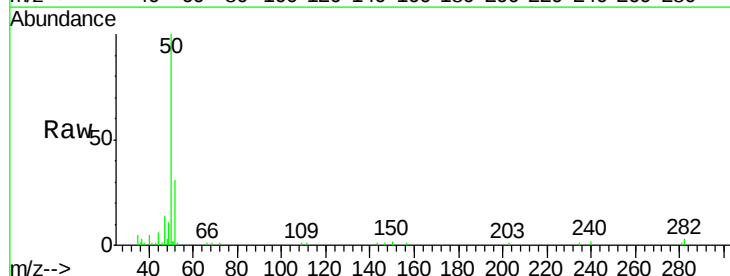
Acq: 8 Jul 2019 14:48

Tgt Ion: 50 Resp: 32484

Ion Ratio Lower Upper

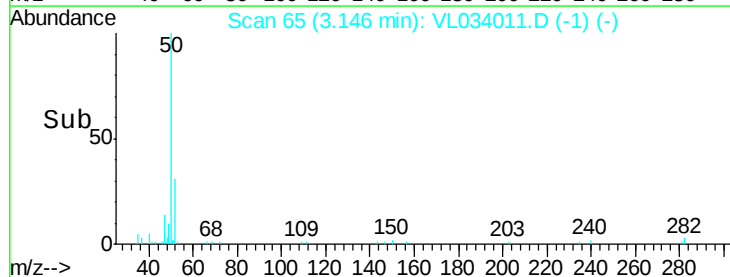
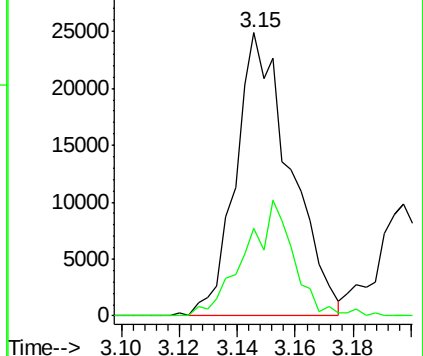
50 100

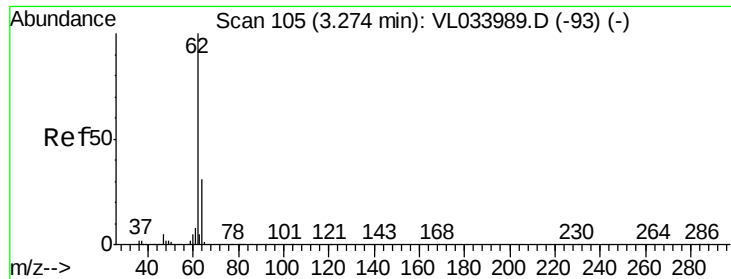
52 31.1 27.4 41.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.430 ppbv

RT: 3.27 min Scan# 103

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 62 Resp: 35093

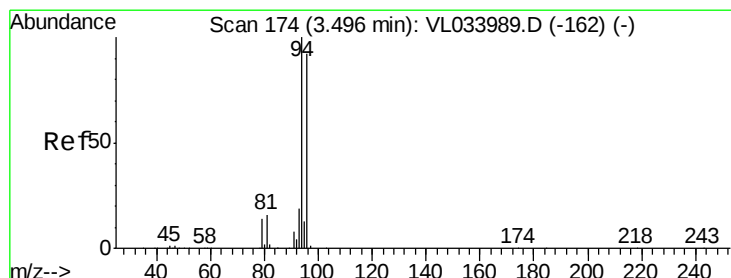
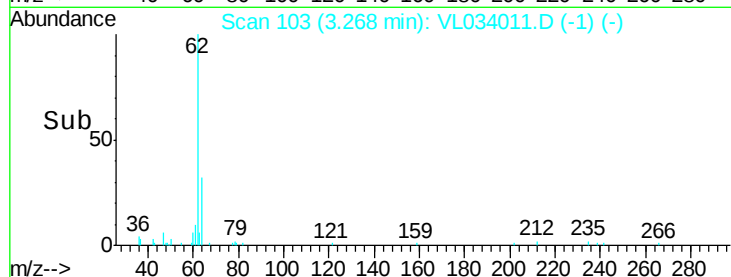
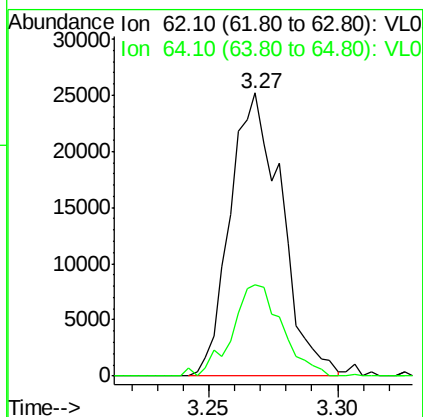
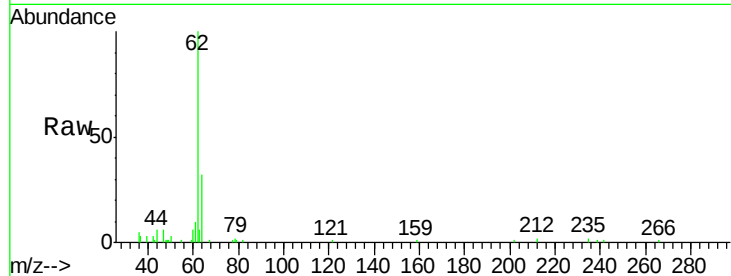
Ion Ratio Lower Upper

62 100

64 30.4 24.4 36.6

Manual Integrations
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#6

Bromomethane

Concen: 0.453 ppbv

RT: 3.49 min Scan# 173

Delta R.T. -0.00 min

Lab File: VL034011.D

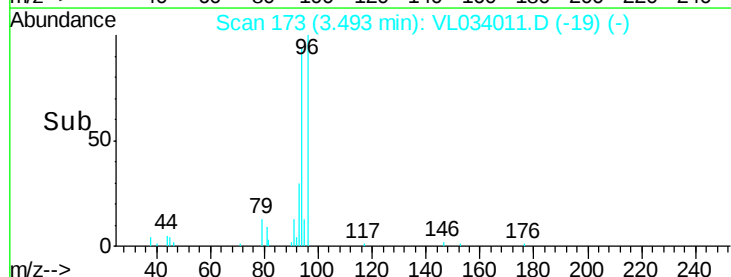
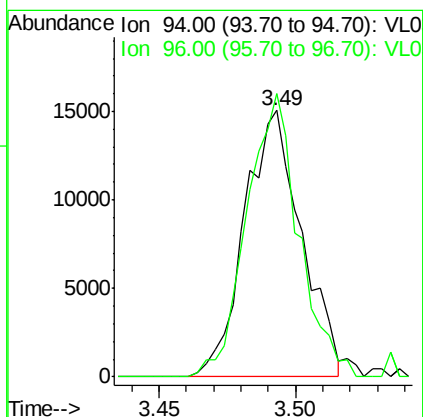
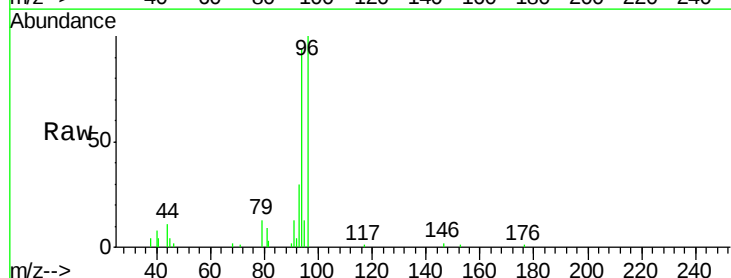
Acq: 8 Jul 2019 14:48

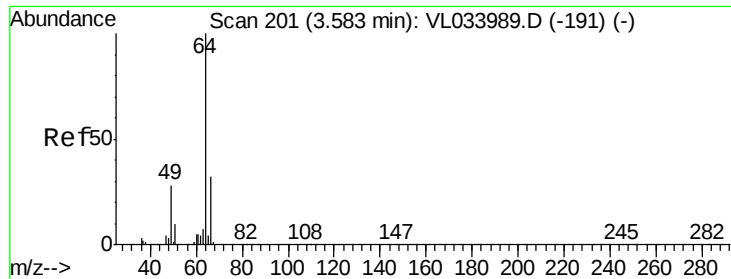
Tgt Ion: 94 Resp: 21798

Ion Ratio Lower Upper

94 100

96 106.3 73.8 110.8





#7

Chloroethane

Concen: 0.455 ppbv

RT: 3.58 min Scan# 199

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 64 Resp: 13262

Ion Ratio Lower Upper

64 100

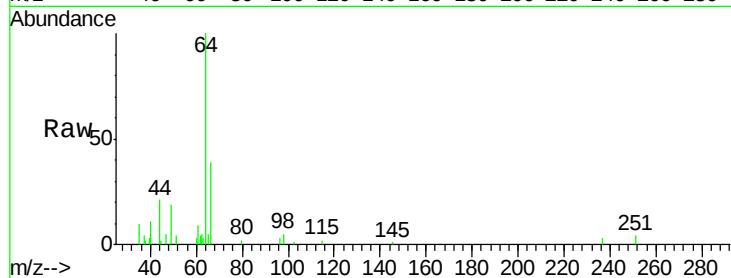
66 39.3 25.3 37.9#

Manual Integrations

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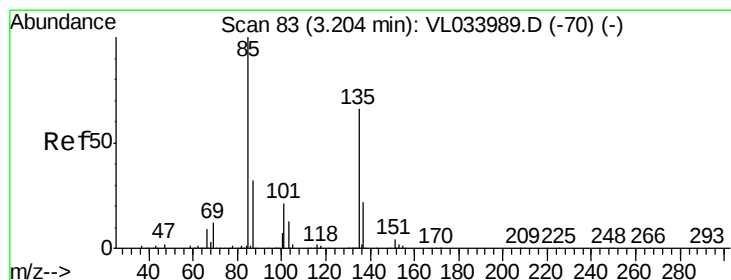
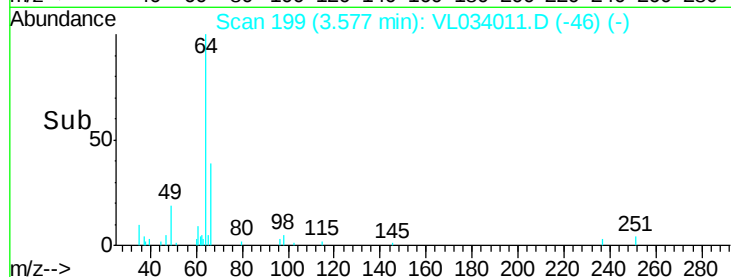
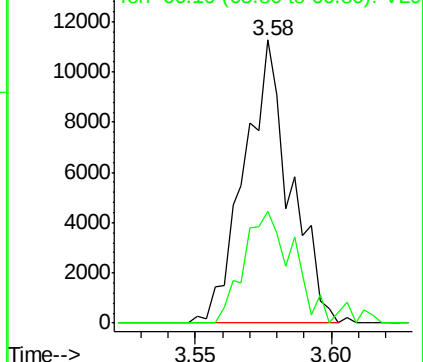
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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.453 ppbv

RT: 3.20 min Scan# 81

Delta R.T. -0.01 min

Lab File: VL034011.D

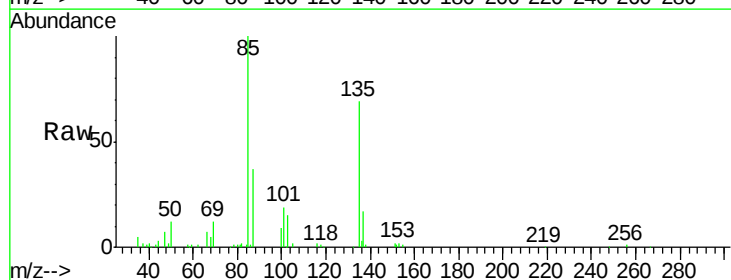
Acq: 8 Jul 2019 14:48

Tgt Ion: 85 Resp: 93003

Ion Ratio Lower Upper

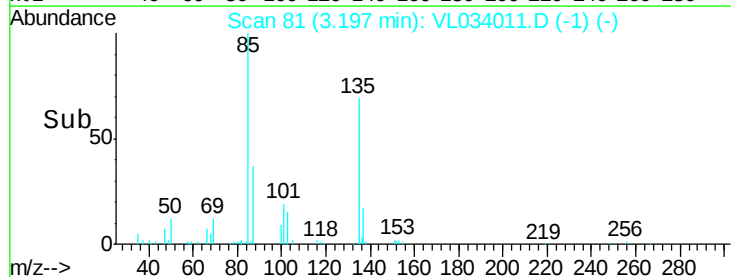
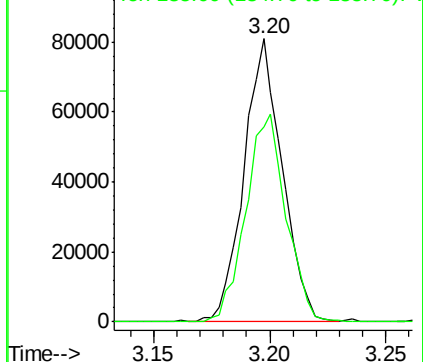
85 100

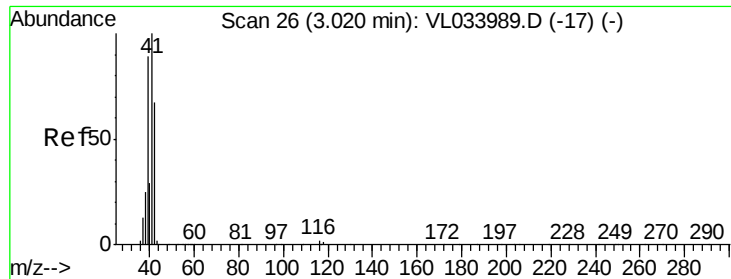
135 77.3 55.0 82.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.418 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 41 Resp: 19414

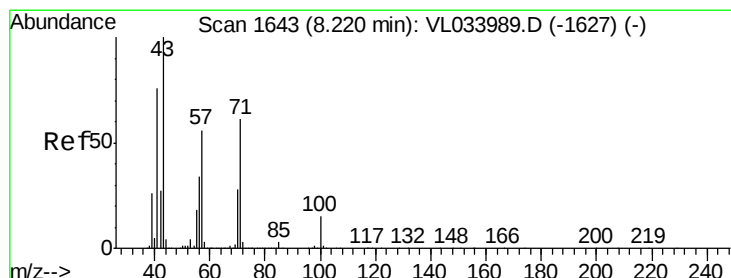
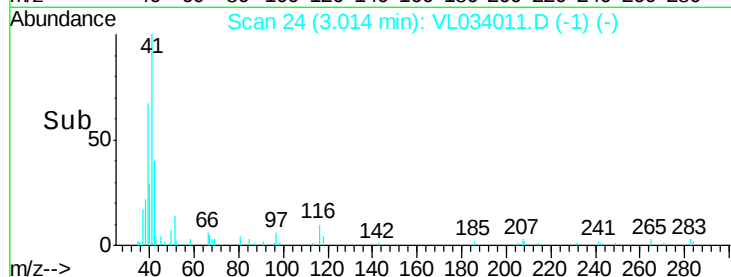
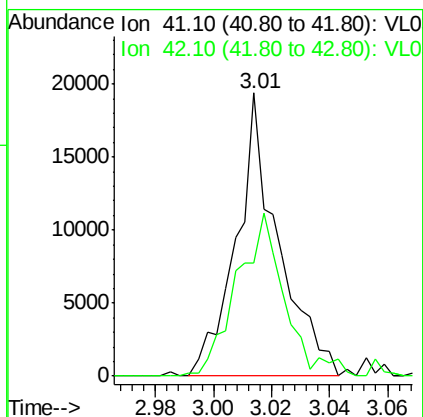
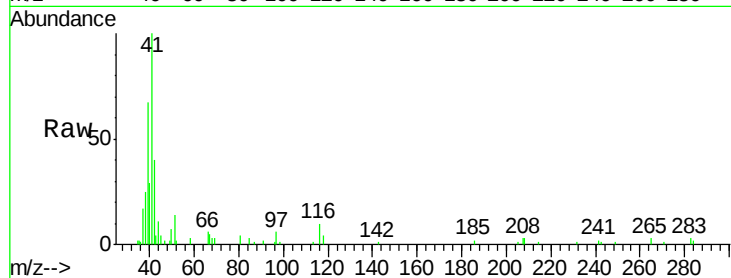
Ion Ratio Lower Upper

41 100

42 67.4 57.1 85.7

Manual Integrations
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7/10/2019 8:50:00 AM



#10

Heptane

Concen: 0.333 ppbv m

RT: 8.21 min Scan# 1641

Delta R.T. -0.01 min

Lab File: VL034011.D

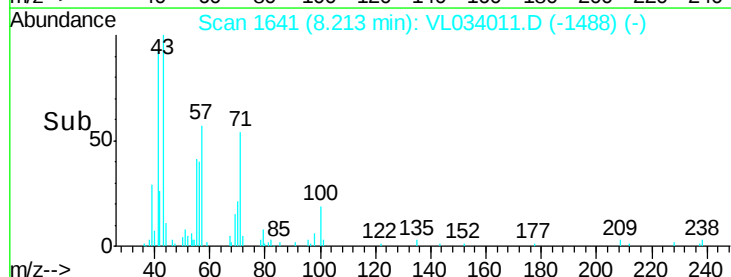
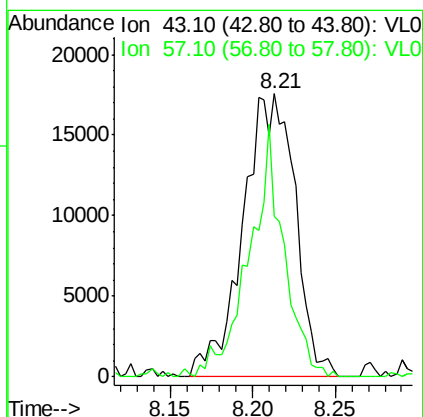
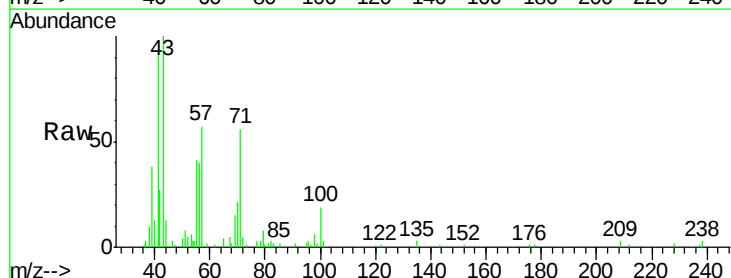
Acq: 8 Jul 2019 14:48

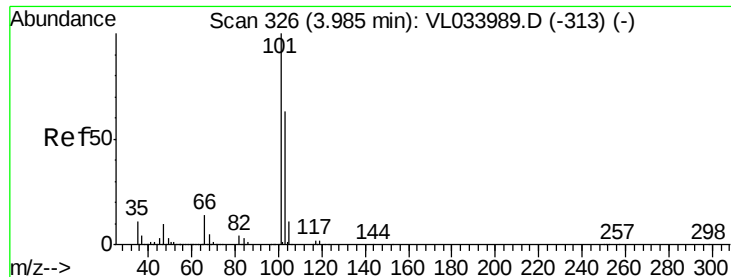
Tgt Ion: 43 Resp: 38655

Ion Ratio Lower Upper

43 100

57 0.0 44.6 66.8#





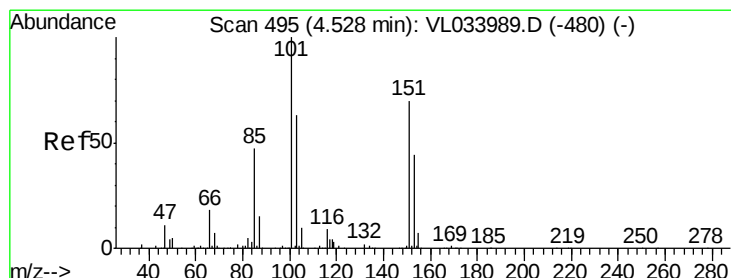
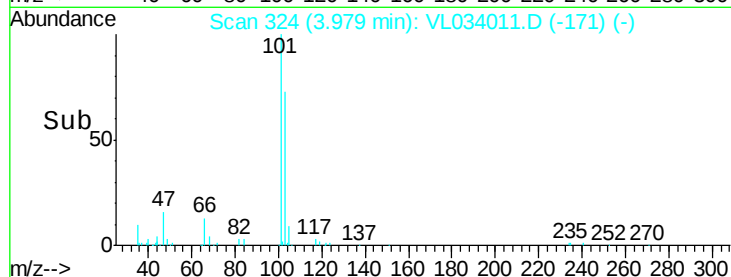
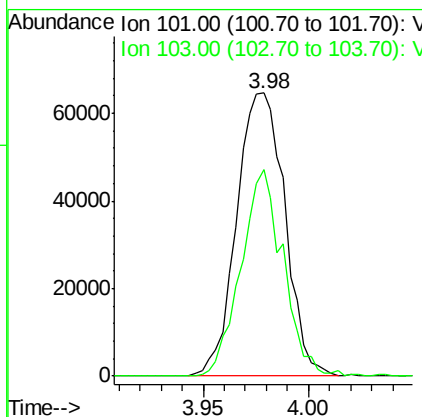
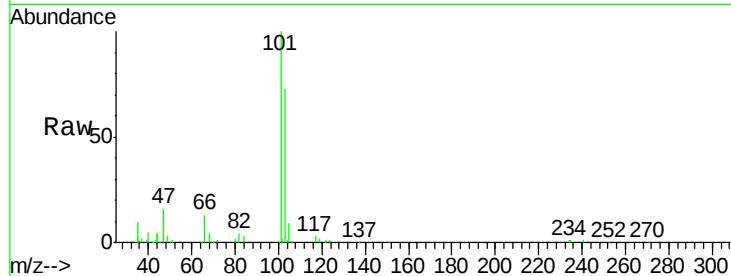
#11
 Trichlorofluoromethane
 Concen: 0.433 ppbv
 RT: 3.98 min Scan# 324
 Delta R.T. -0.01 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Resp	Lower	Upper
101	100	102613		
103	73.0	50.8	76.2	

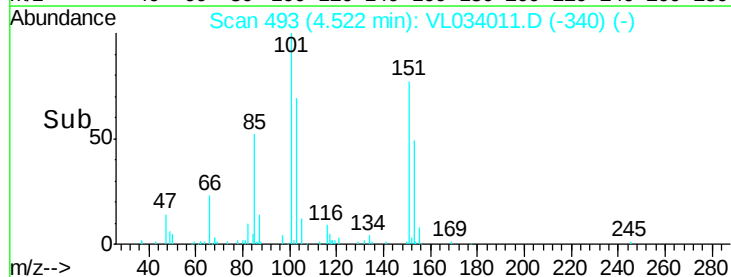
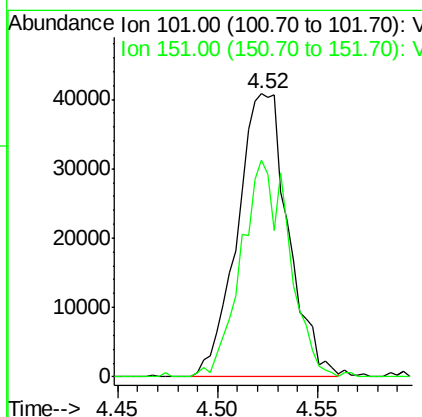
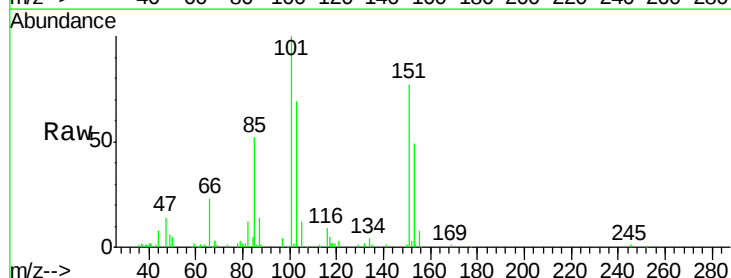
Manual Integrations
 APPROVED

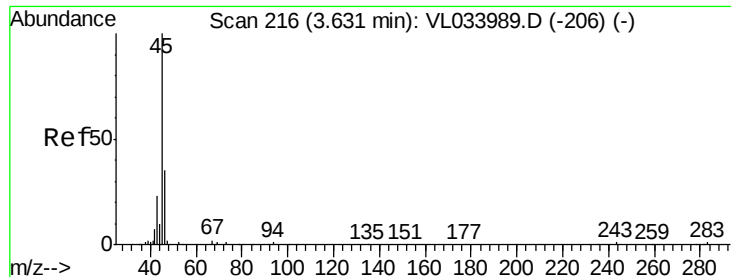
MMDadoda
 7/10/2019 8:50:00 AM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.433 ppbv m
 RT: 4.52 min Scan# 493
 Delta R.T. -0.01 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Resp	Lower	Upper
101	100	72671		
151	72.3	59.0	88.4	





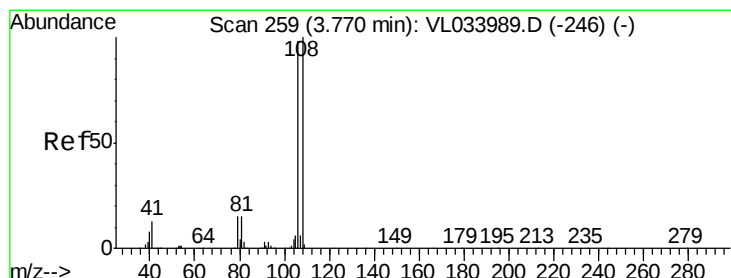
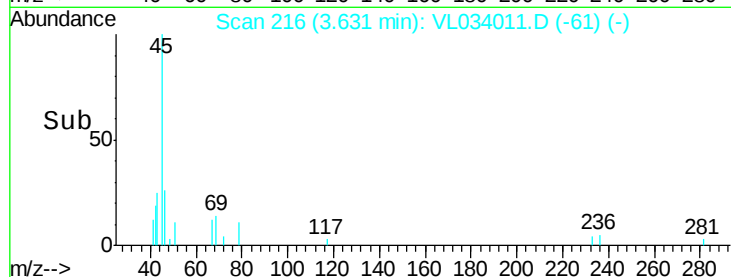
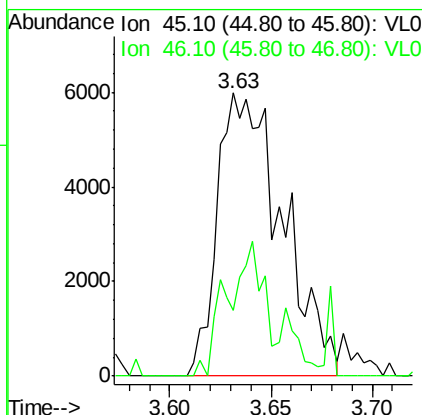
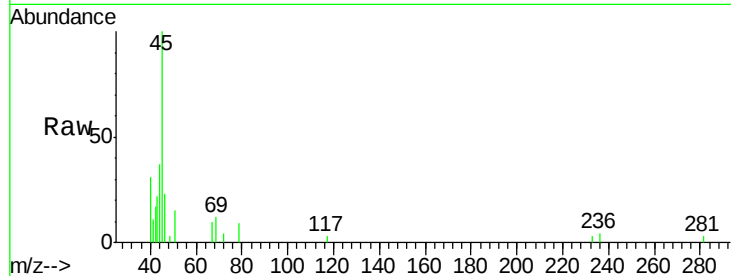
#13
Ethanol
Concen: 0.928 ppbv m
RT: 3.63 min Scan# 216
Delta R.T. -0.00 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	45	Resp	13380
Ion Ratio	100	Lower	Upper
46	36.6	16.2	64.6

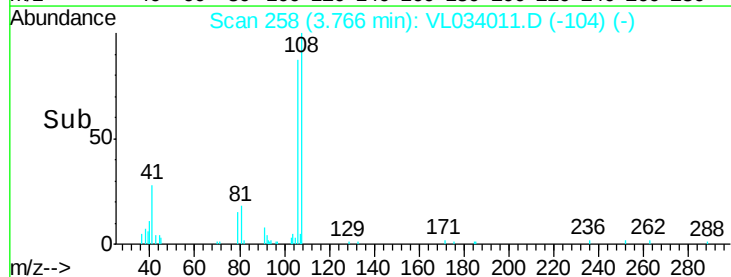
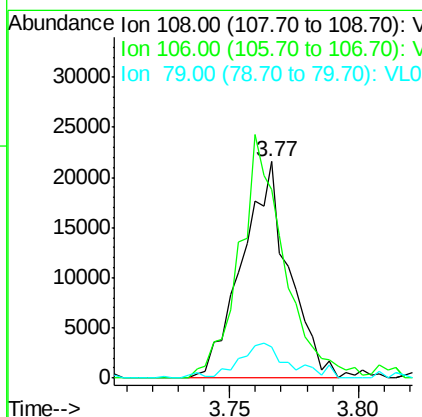
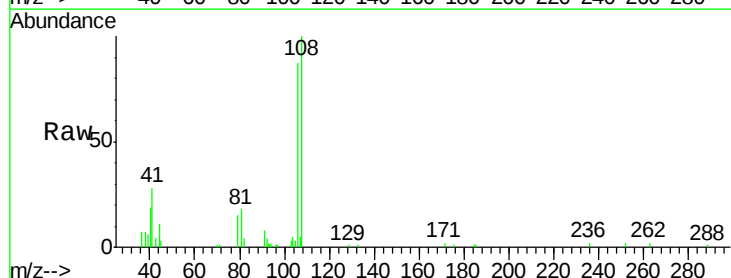
Manual Integrations
APPROVED

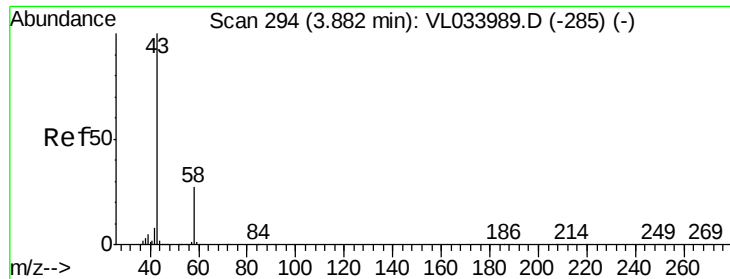
MMDadoda
7/10/2019 8:50:00 AM



#14
Bromoethene
Concen: 0.437 ppbv
RT: 3.77 min Scan# 258
Delta R.T. -0.00 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	108	Resp	27390
Ion Ratio	100	Lower	Upper
106	109.9	85.6	128.4
79	17.6	14.0	21.0





#15

Acetone

Concen: 0.504 ppbv

RT: 3.89 min Scan# 295

Delta R.T. 0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 43 Resp: 86552

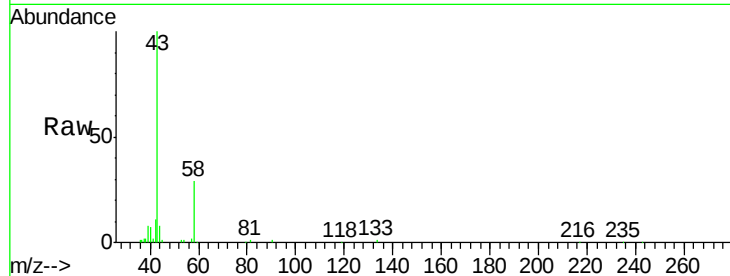
Ion Ratio Lower Upper

43 100

58 31.3 21.4 32.0

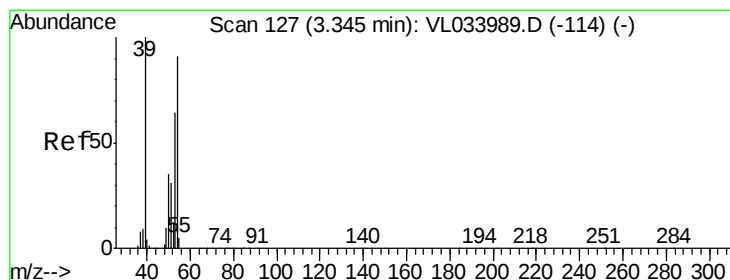
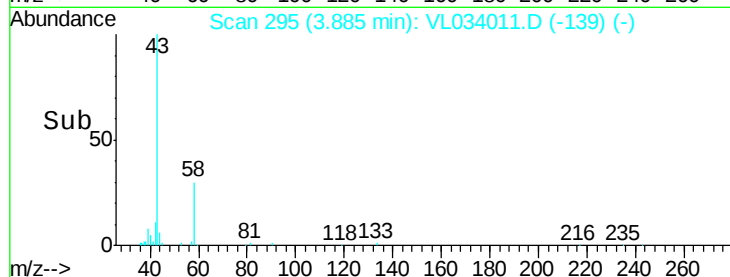
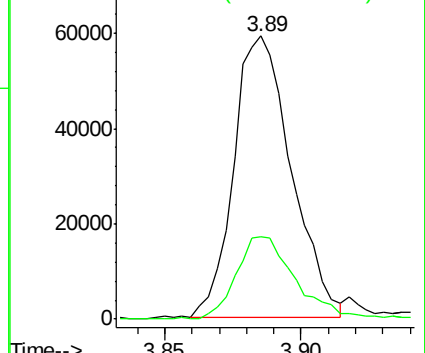
Manual Integrations
APPROVED

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7/10/2019 8:50:00 AM



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.408 ppbv m

RT: 3.34 min Scan# 125

Delta R.T. -0.01 min

Lab File: VL034011.D

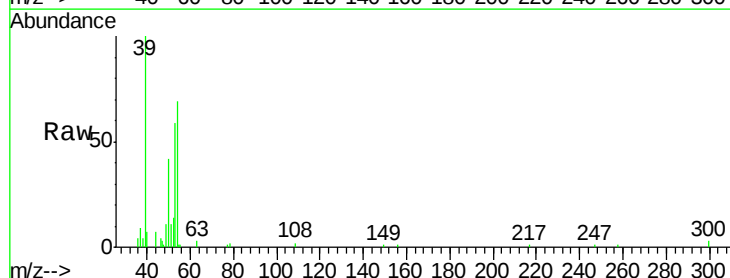
Acq: 8 Jul 2019 14:48

Tgt Ion: 39 Resp: 24734

Ion Ratio Lower Upper

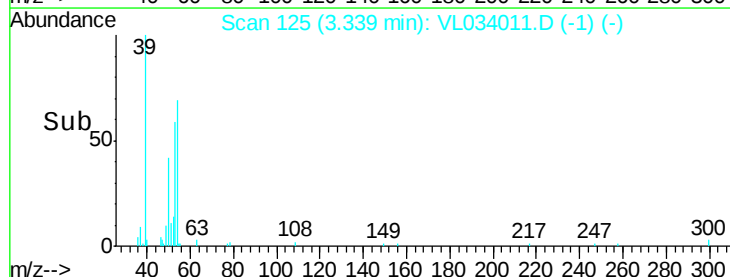
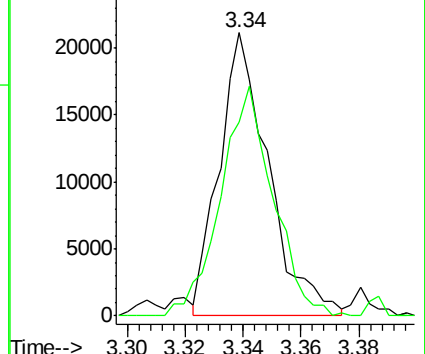
39 100

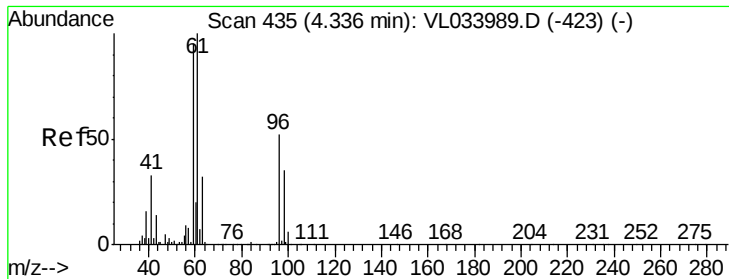
54 88.7 71.4 107.2



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

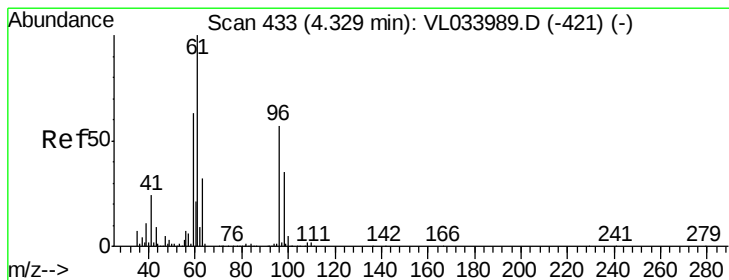
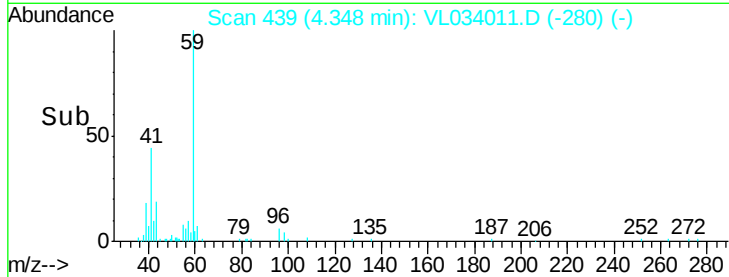
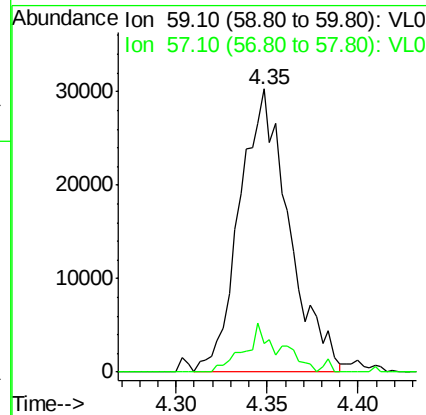
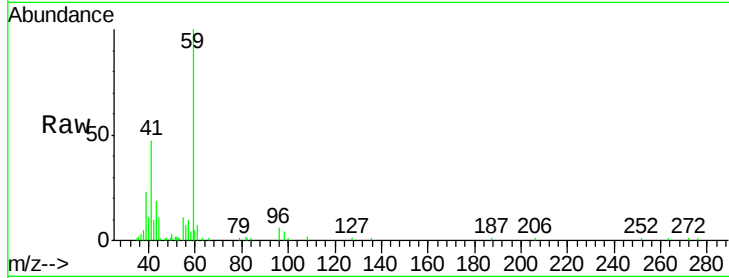
tert-Butyl alcohol
Concen: 0.419 ppbv m
RT: 4.35 min Scan# 439
Delta R.T. 0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
59	100		
57	12.9	8.2	12.2#

Manual Integrations
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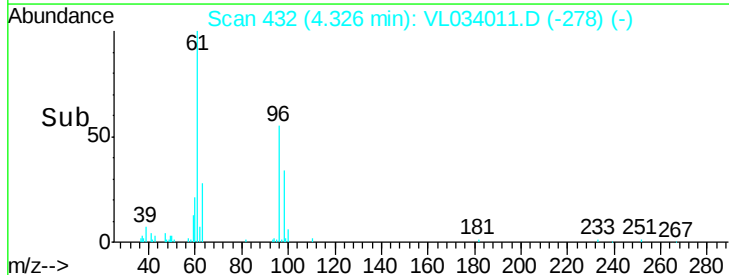
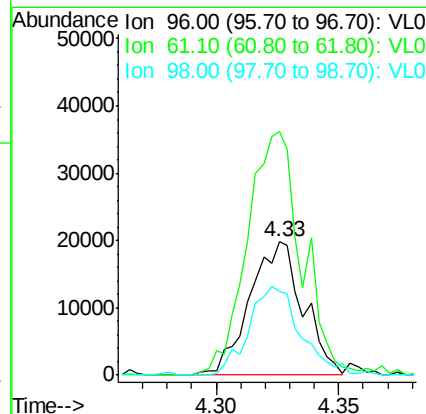
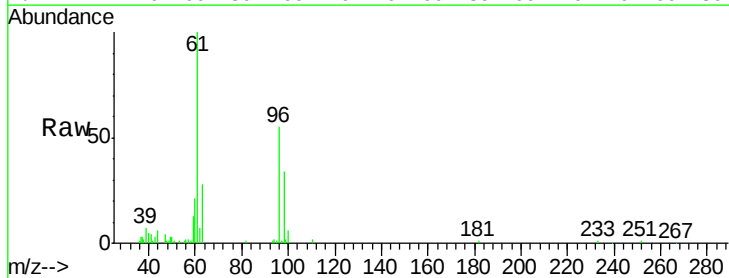
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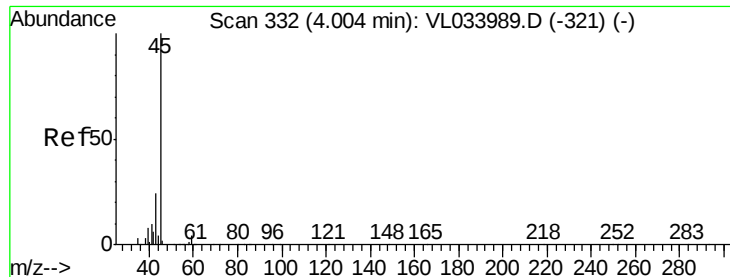


#18

1,1-Dichloroethene
Concen: 0.401 ppbv m
RT: 4.33 min Scan# 432
Delta R.T. -0.00 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
96	100		
61	182.5	139.4	209.0
98	62.5	49.4	74.0





#19

Isopropyl Alcohol

Concen: 0.439 ppbv m

RT: 4.01 min Scan# 334

Delta R.T. 0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 45 Resp: 50580

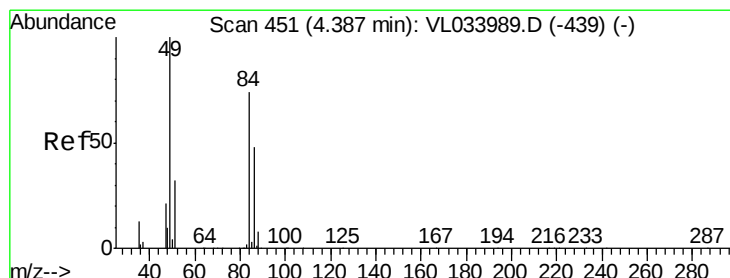
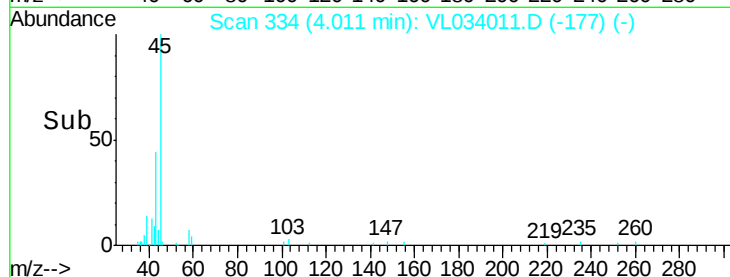
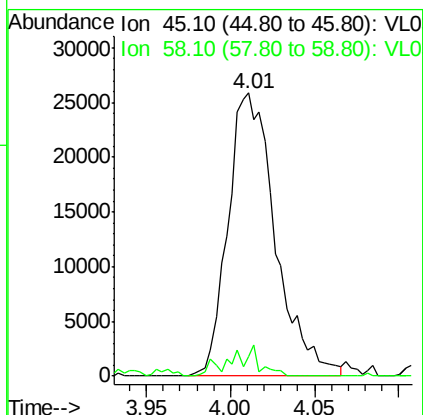
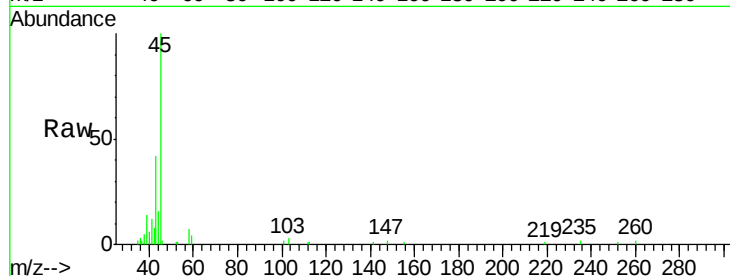
Ion Ratio Lower Upper

45 100

58 6.4 1.7 2.5#

Manual Integrations
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#20

Methylene Chloride

Concen: 0.448 ppbv

RT: 4.38 min Scan# 449

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion: 84 Resp: 33545

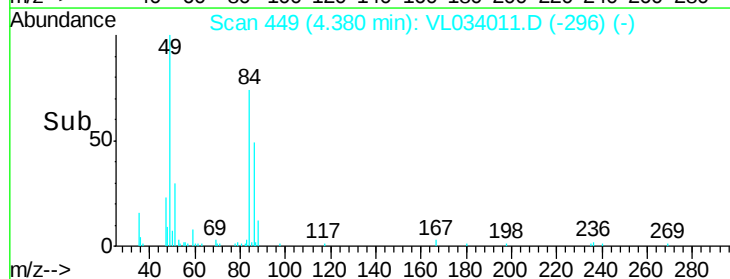
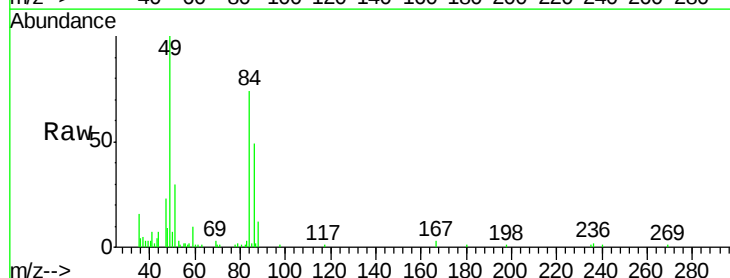
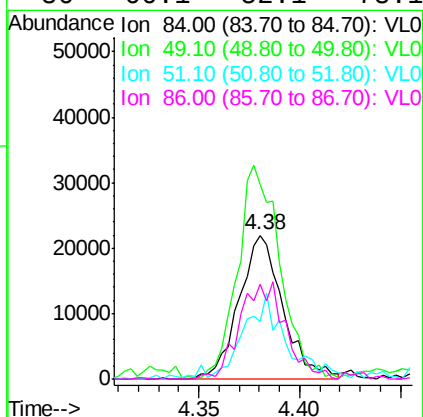
Ion Ratio Lower Upper

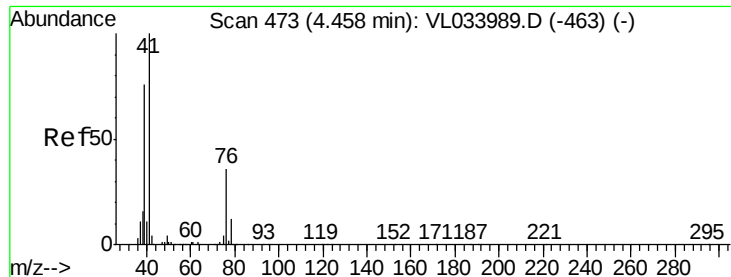
84 100

49 142.8 107.6 161.4

51 36.4 35.0 52.6

86 66.1 52.1 78.1





#21

Allvl Chloride

Concen: 0.375 ppbv

RT: 4.45 min Scan# 472

Delta R.T. -0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

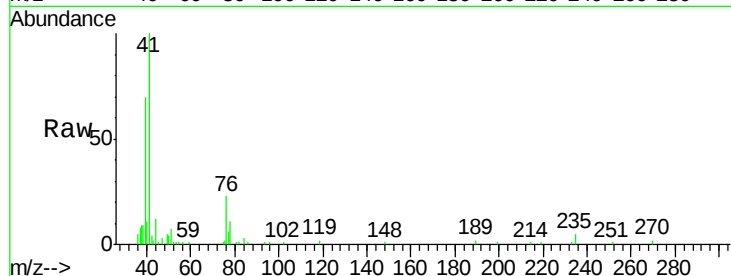
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

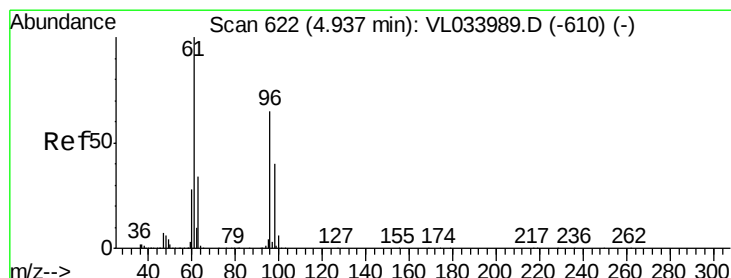
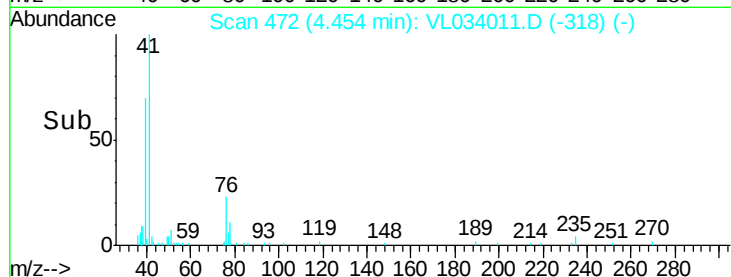
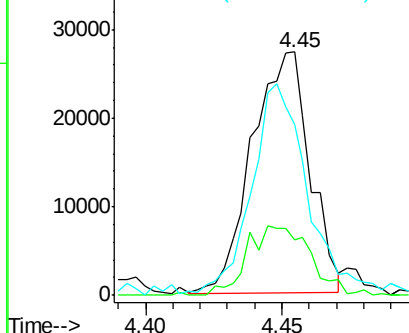
Tot Ion:	41	Resp:	40115
Ion	Ratio	Lower	Upper
41	100		
76	31.7	26.8	40.2
39	90.3	63.1	94.7

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Abundance Ion 41.10 (40.80 to 41.80): VL0
Ion 76.10 (75.80 to 76.80): VL0
Ion 39.10 (38.80 to 39.80): VL0



#22

trans-1,2-Dichloroethene

Concen: 0.427 ppbv

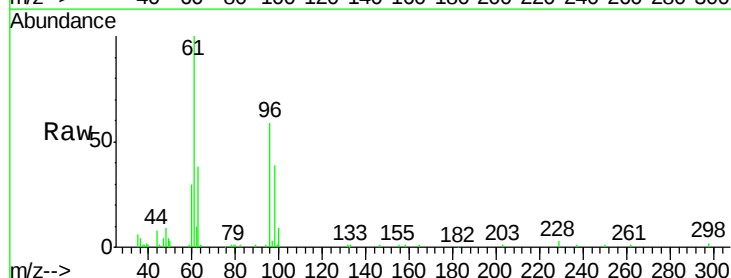
RT: 4.93 min Scan# 621

Delta R.T. -0.00 min

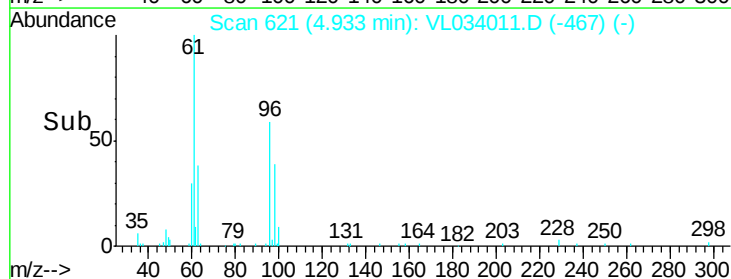
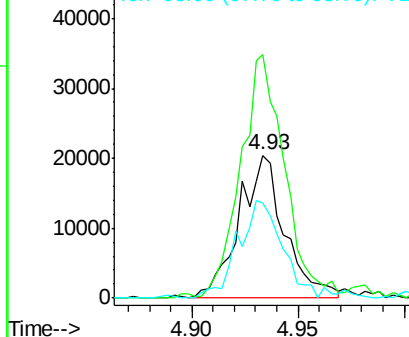
Lab File: VL034011.D

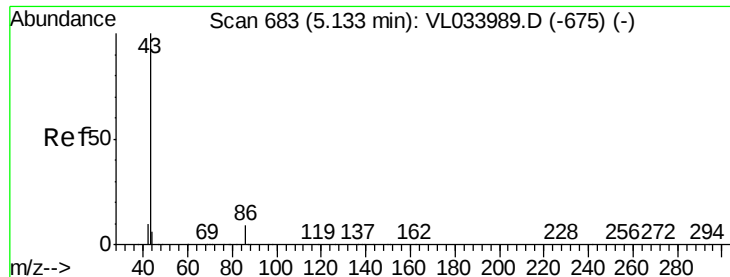
Acq: 8 Jul 2019 14:48

Tgt Ion:	96	Resp:	30411
Ion	Ratio	Lower	Upper
96	100		
61	170.7	122.9	184.3
98	66.7	49.6	74.4



Abundance Ion 96.00 (95.70 to 96.70): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 98.00 (97.70 to 98.70): VL0





#23

Vinyl Acetate

Concen: 0.388 ppbv

RT: 5.12 min Scan# 680

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

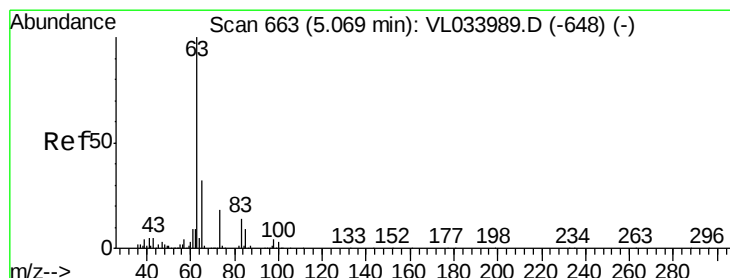
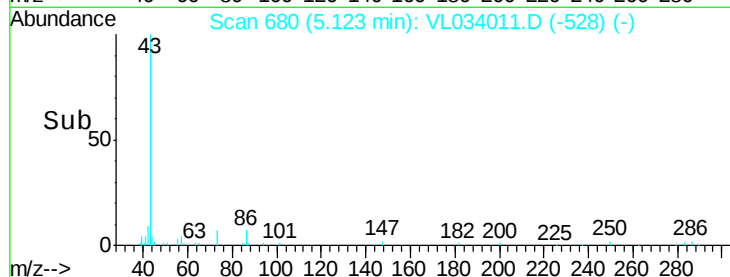
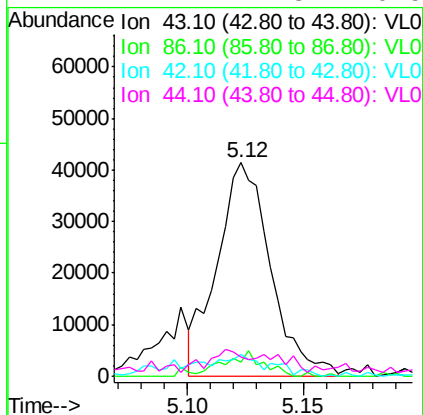
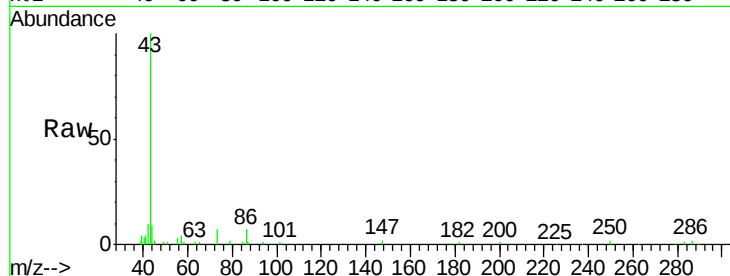
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ion	Ratio	Resp	Lower	Upper
43	100		66435		
86	6.6	6.6	9.8		
42	10.4	8.3	12.5		
44	4.4	4.3	6.5		

Manual Integrations
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#24

1,1-Dichloroethane

Concen: 0.453 ppbv

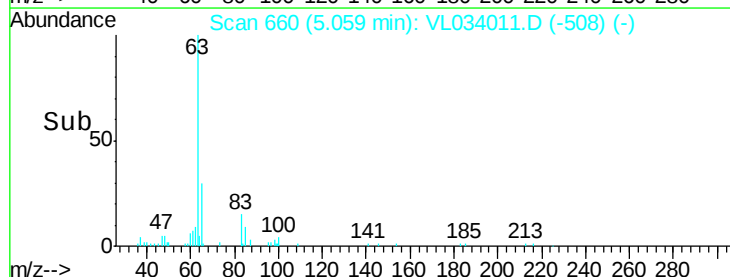
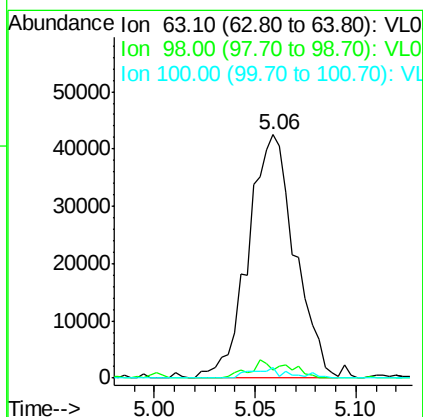
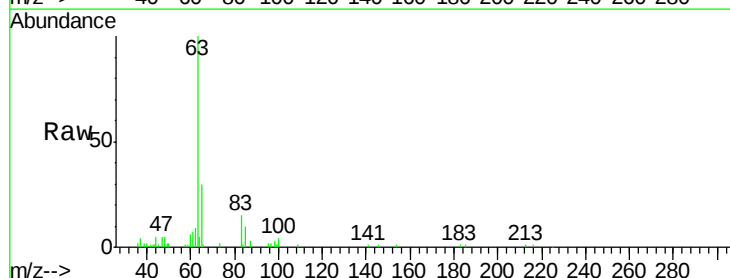
RT: 5.06 min Scan# 660

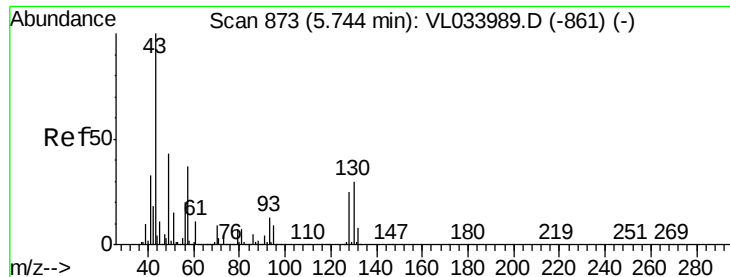
Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
63	100		68750		
98	3.3	2.2	6.6		
100	4.4	1.4	4.2#		





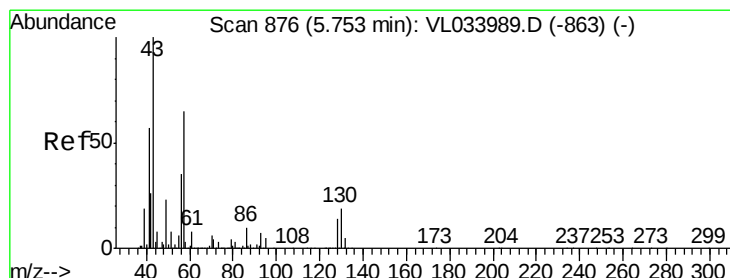
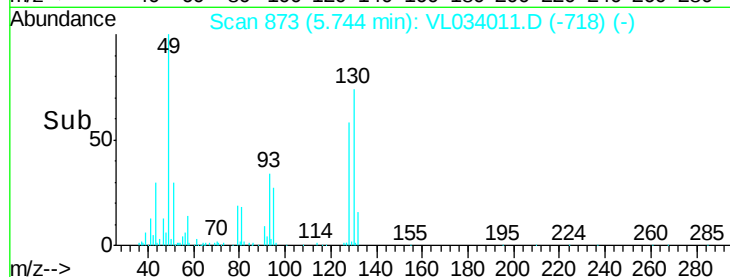
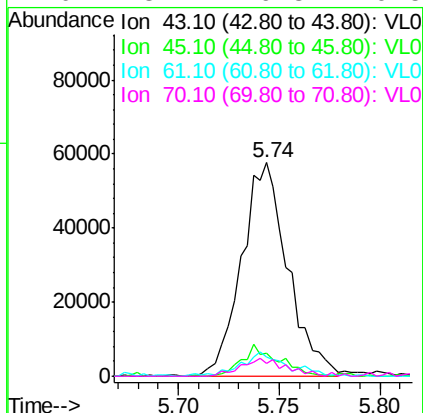
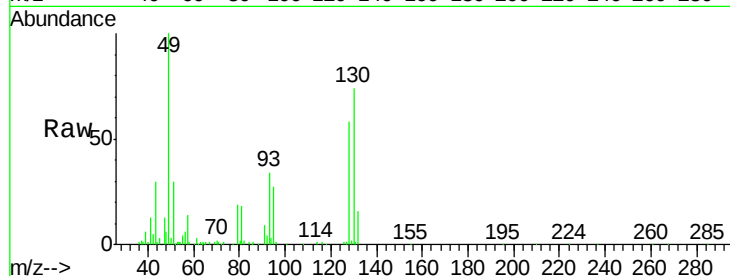
#25
Ethyl Acetate
Concen: 0.391 ppbv
RT: 5.74 min Scan# 873
Delta R.T. -0.00 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
43	100		
45	12.1	8.1	12.1#
61	11.3	8.1	12.1
70	8.4	6.3	9.5

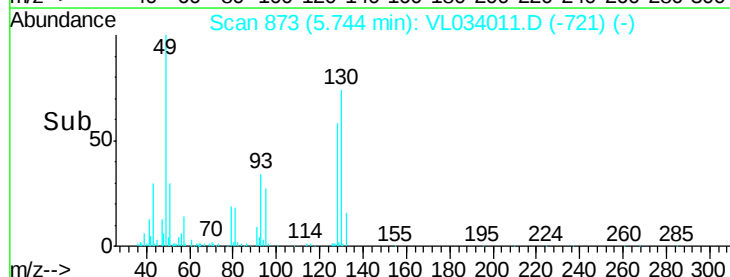
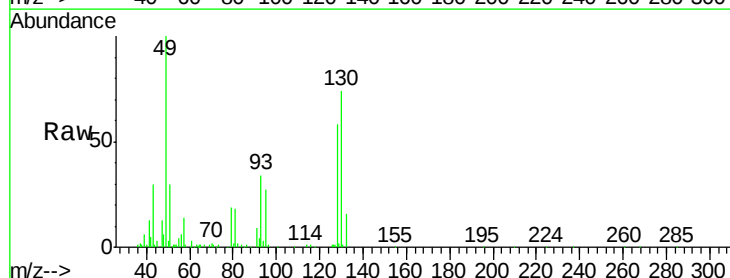
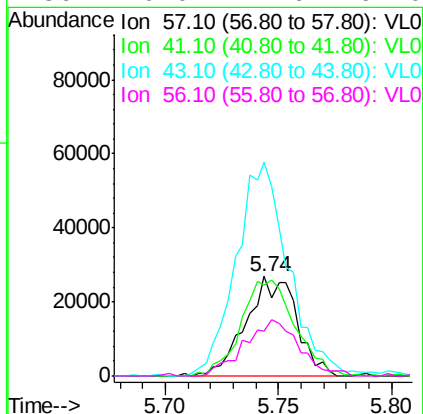
Manual Integrations
APPROVED

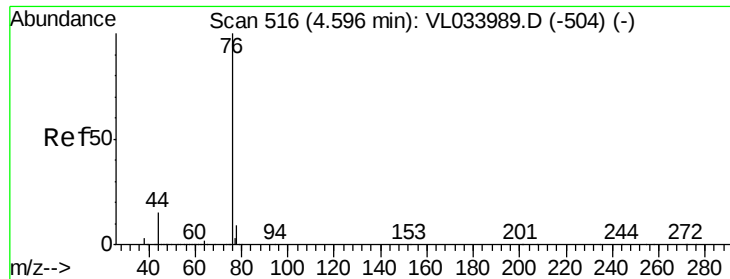
MMDadoda
7/10/2019 8:50:00 AM



#26
Hexane
Concen: 0.389 ppbv m
RT: 5.74 min Scan# 873
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	70.6	105.8#
43	225.2	177.6	266.4
56	0.0	42.6	64.0#





#27

Carbon Disulfide

Concen: 0.375 ppbv

RT: 4.59 min Scan# 515

Delta R.T. -0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

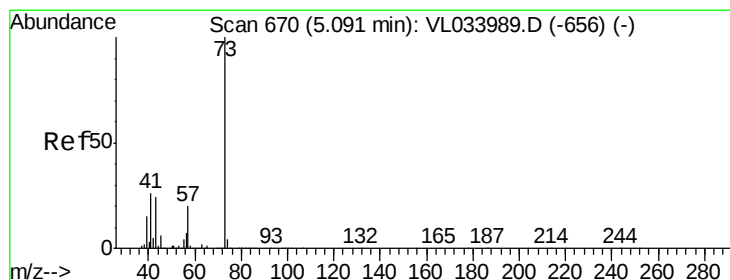
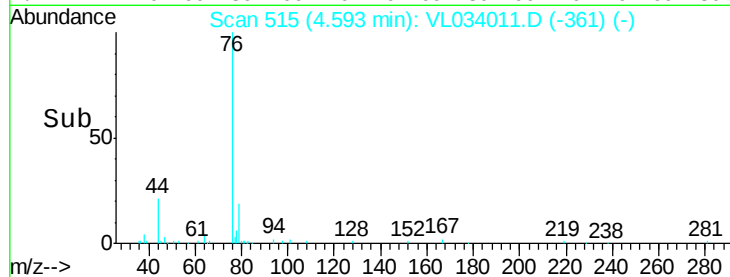
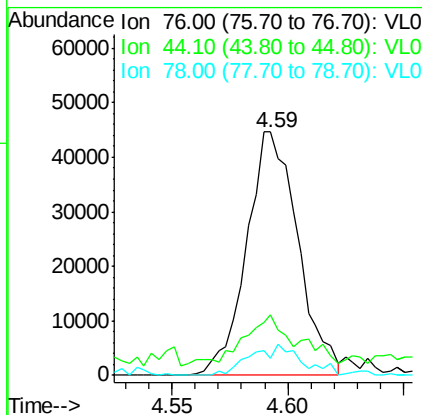
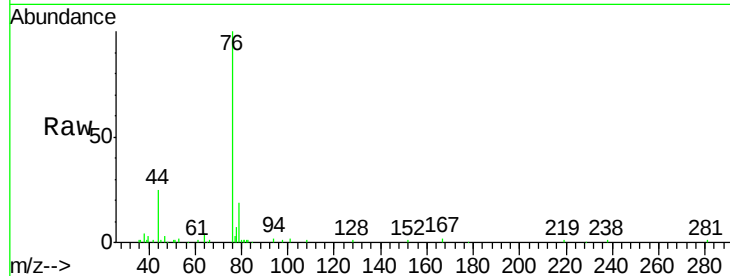
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion	Ratio	Lower	Upper
76	100		
44	21.3	12.6	18.8#
78	13.2	7.2	10.8#

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#28

Methyl tert-Butyl Ether

Concen: 0.386 ppbv

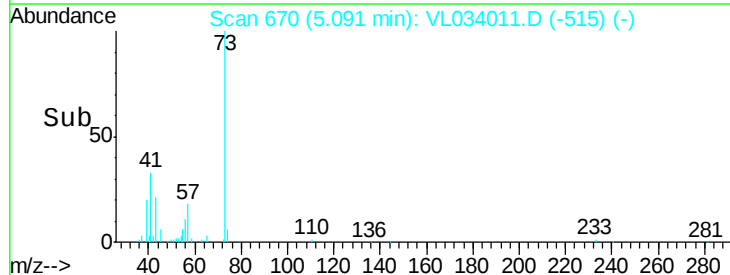
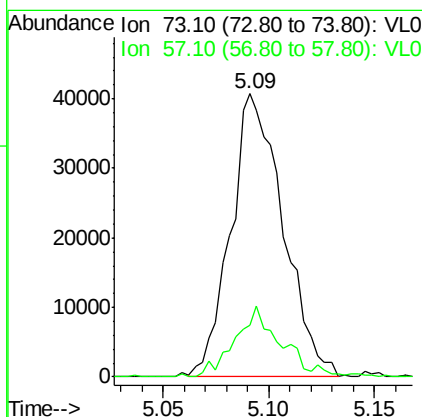
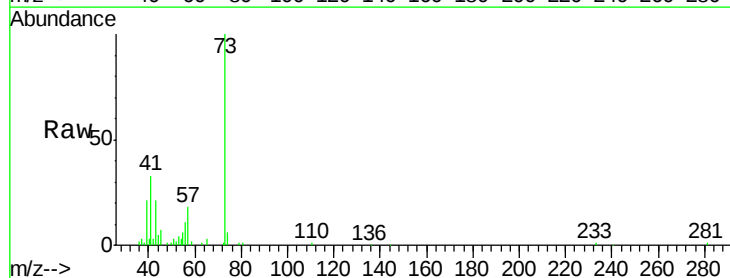
RT: 5.09 min Scan# 670

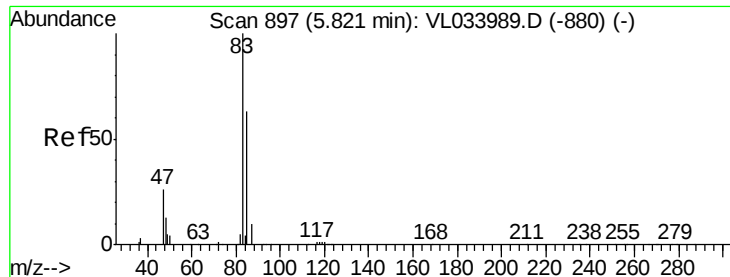
Delta R.T. -0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
73	100		
57	22.3	16.9	25.3





#29

Chloroform

Concen: 0.427 ppbv

RT: 5.81 min Scan# 894

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 83 Resp: 86310

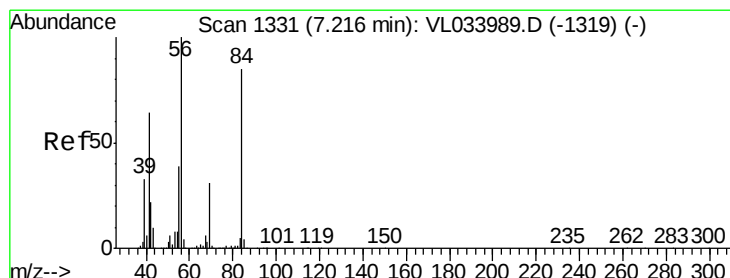
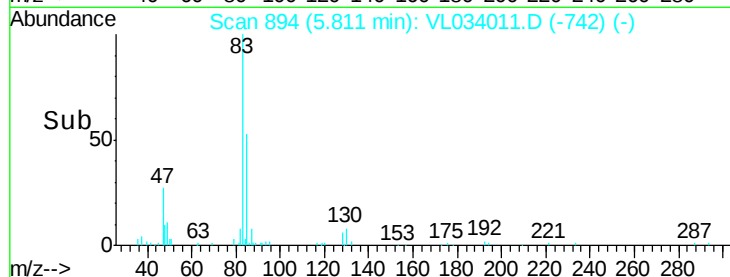
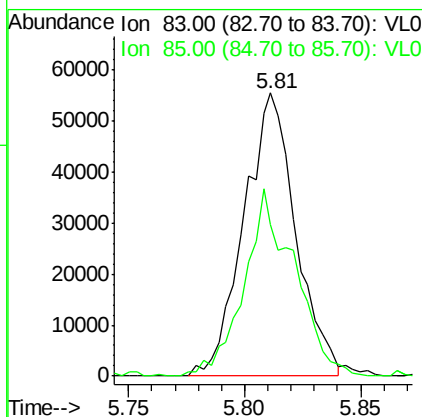
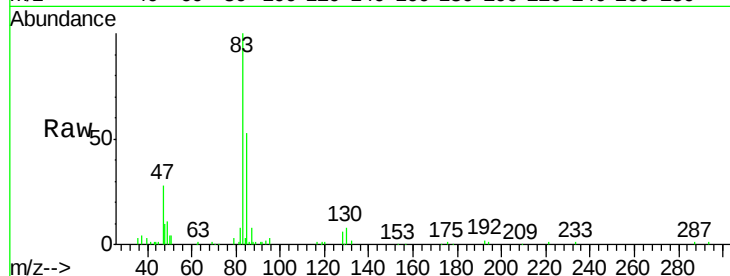
Ion Ratio Lower Upper

83 100

85 51.9 50.6 75.8

Manual Integrations
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#30

Cyclohexane

Concen: 0.394 ppbv m

RT: 7.21 min Scan# 1328

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

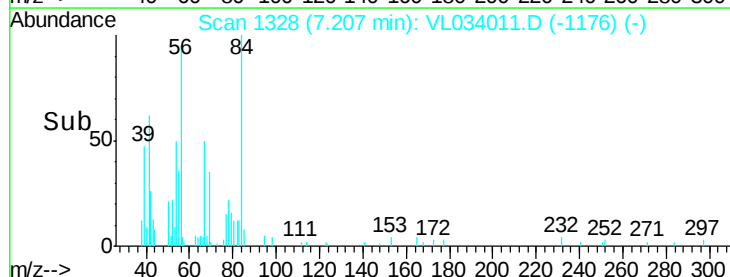
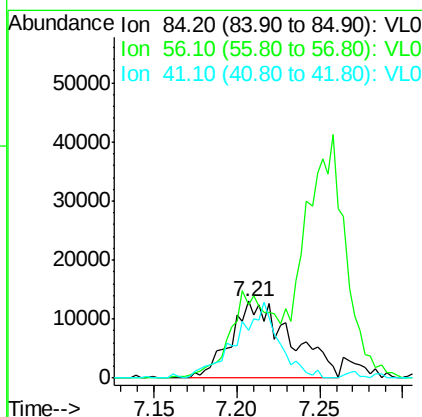
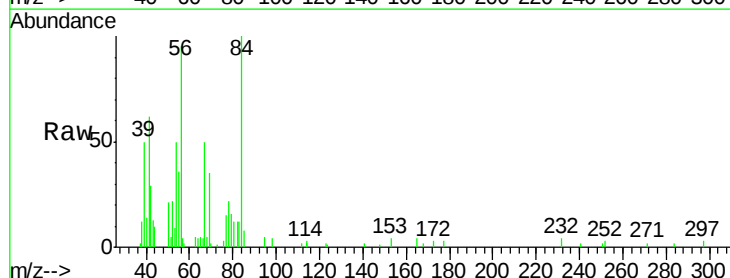
Tgt Ion: 84 Resp: 32727

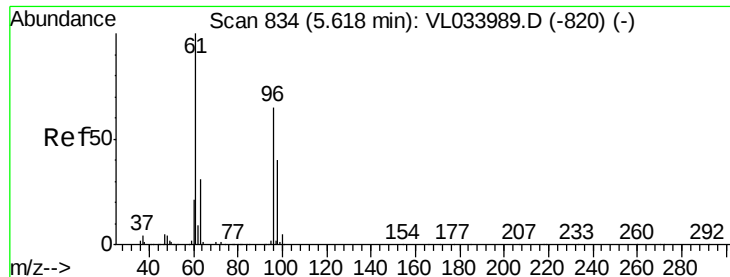
Ion Ratio Lower Upper

84 100

56 0.0 103.7 155.5#

41 0.0 62.6 94.0#





#31

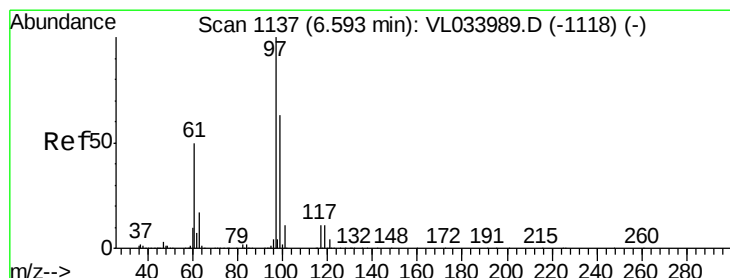
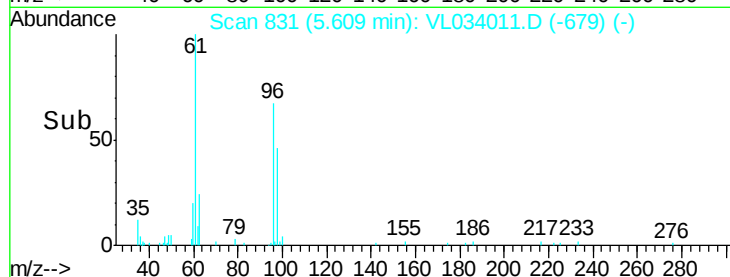
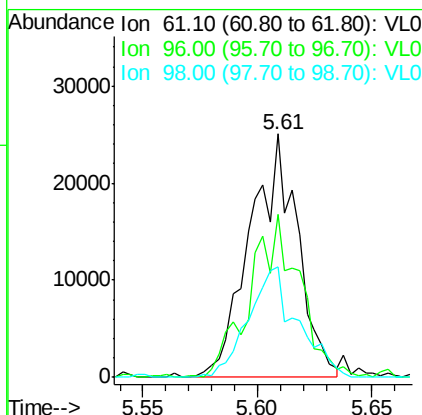
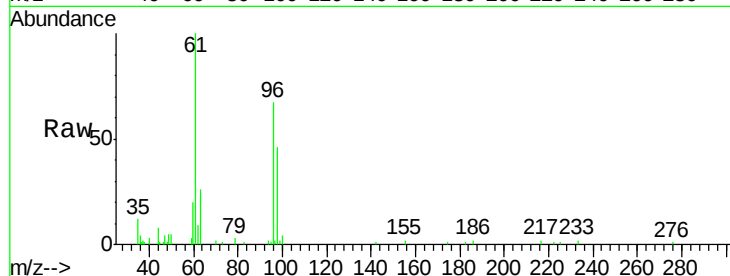
cis-1,2-Dichloroethene
Concen: 0.349 ppbv m
RT: 5.61 min Scan# 831
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
61	100		
96	66.9	51.8	77.6
98	45.6	32.1	48.1

Manual Integrations
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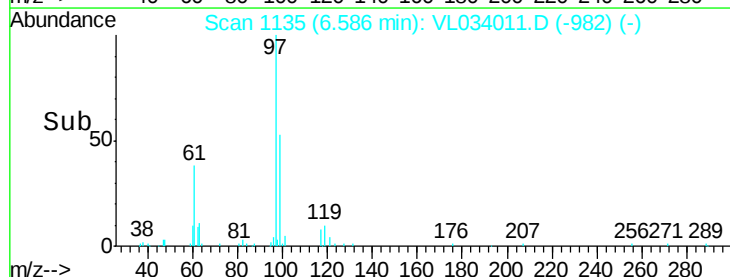
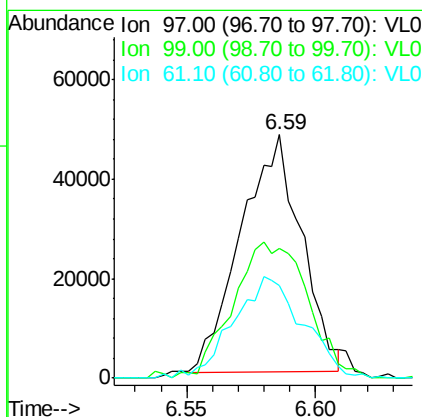
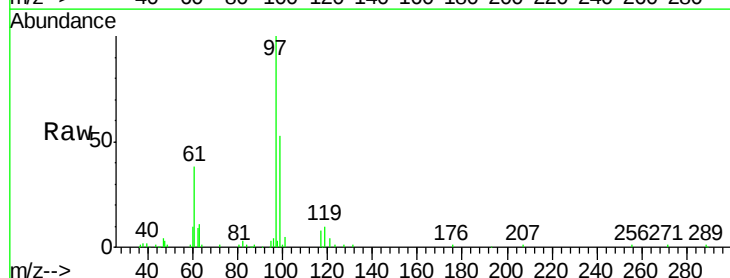
MMDadoda
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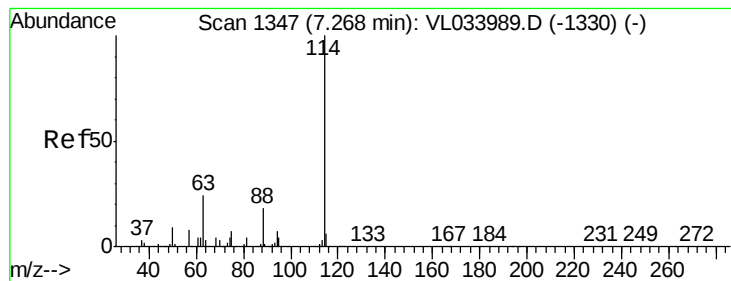


#32

1,1,1-Trichloroethane
Concen: 0.383 ppbv
RT: 6.59 min Scan# 1135
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
97	100		
99	71.2	51.9	77.9
61	49.3	39.8	59.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.25 min Scan# 1342

Delta R.T. -0.02 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:114 Resp: 2958653

Ion Ratio Lower Upper

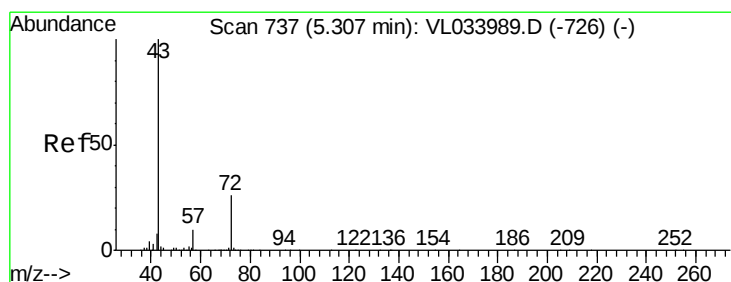
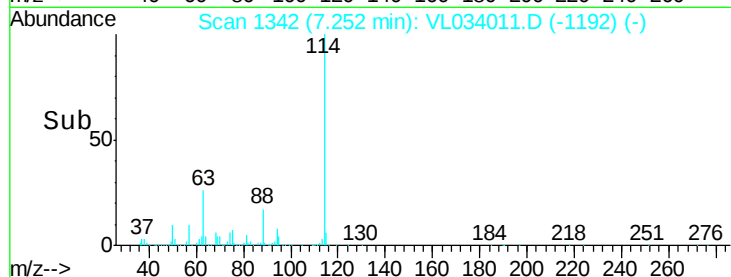
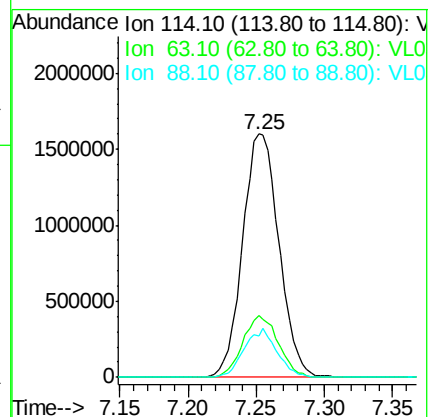
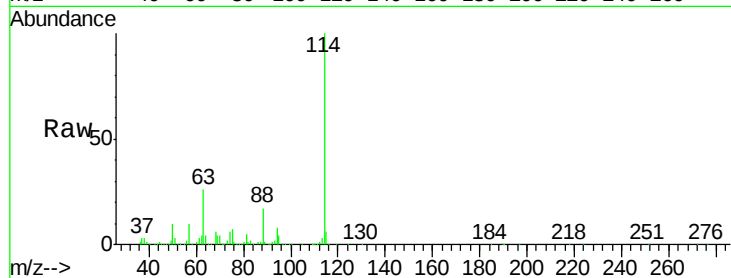
114 100

63 25.1 20.2 30.2

88 18.1 14.1 21.1

Manual Integrations
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#34

2-Butanone

Concen: 0.350 ppbv

RT: 5.31 min Scan# 738

Delta R.T. 0.00 min

Lab File: VL034011.D

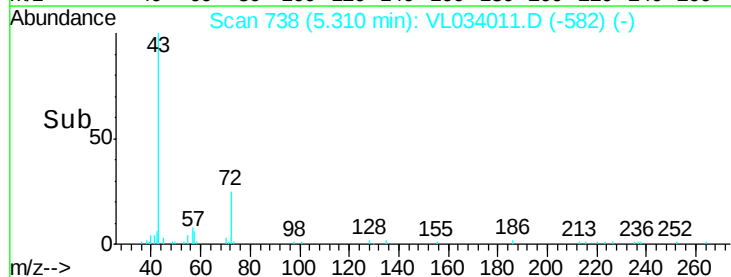
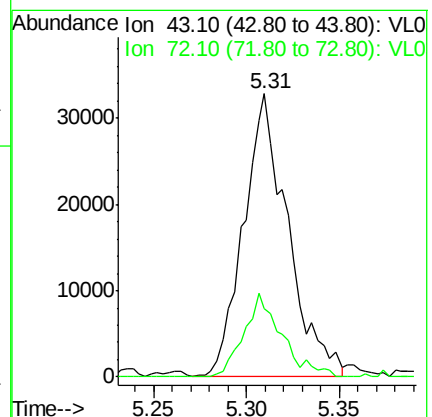
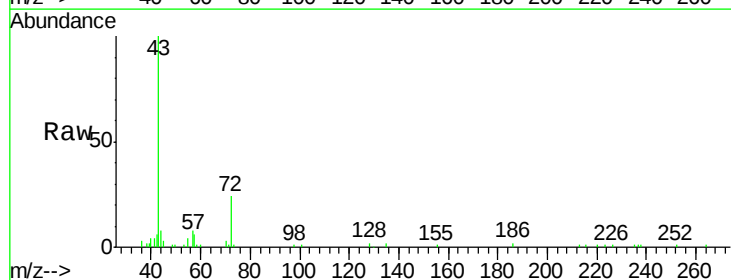
Acq: 8 Jul 2019 14:48

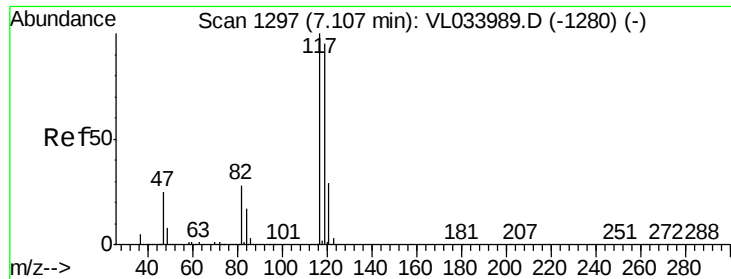
Tgt Ion: 43 Resp: 54809

Ion Ratio Lower Upper

43 100

72 25.0 19.9 29.9





#35

Carbon Tetrachloride

Concen: 0.395 ppbv

RT: 7.10 min Scan# 1294

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

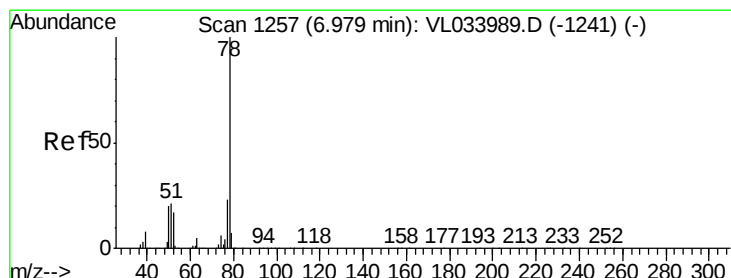
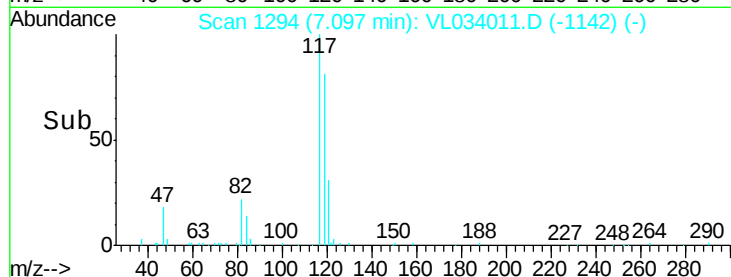
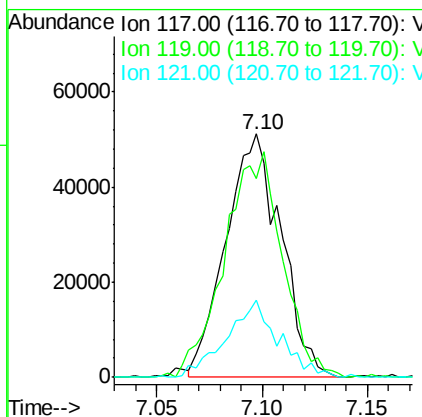
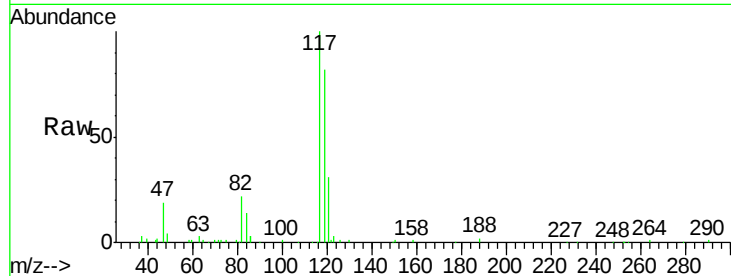
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	117	Resp:	92571
Ion Ratio	Lower	Upper	
117	100		
119	80.3	75.8	113.6
121	31.5	23.4	35.2

Manual Integrations
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#36

Benzene

Concen: 0.319 ppbv

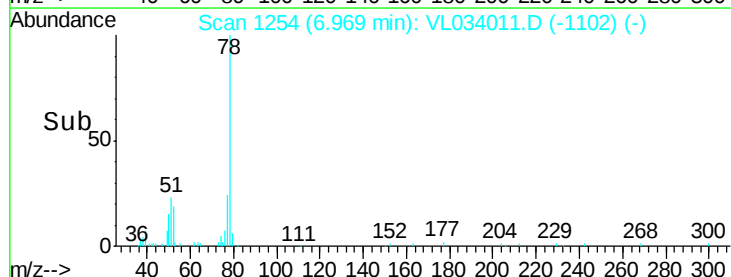
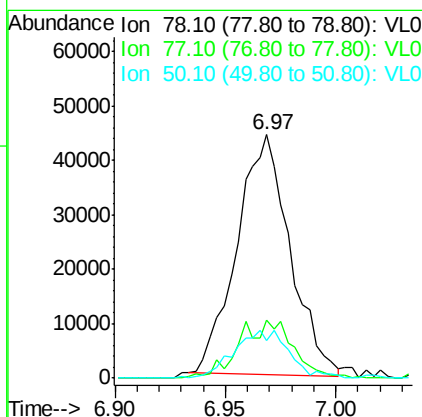
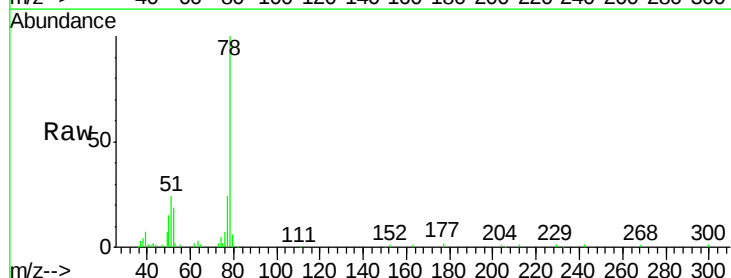
RT: 6.97 min Scan# 1254

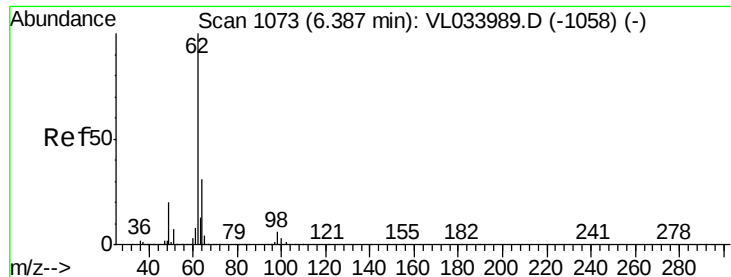
Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:	78	Resp:	73942
Ion Ratio	Lower	Upper	
78	100		
77	23.6	18.7	28.1
50	15.7	16.2	24.2#





#37

1,2-Dichloroethane

Concen: 0.402 ppbv

RT: 6.38 min Scan# 1070

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 62 Resp: 68526

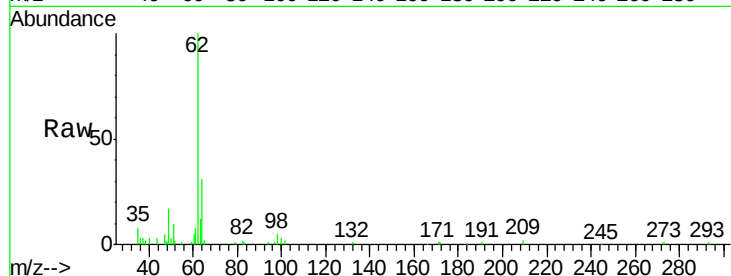
Ion Ratio Lower Upper

62 100

98 5.8 4.4 6.6

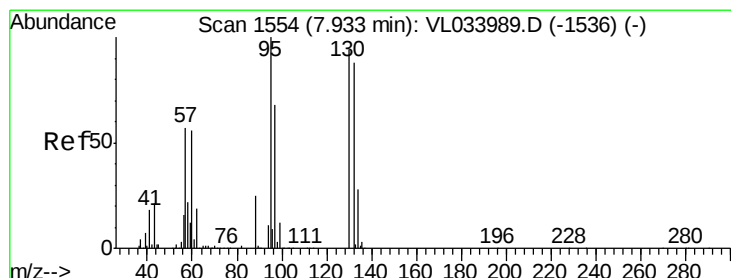
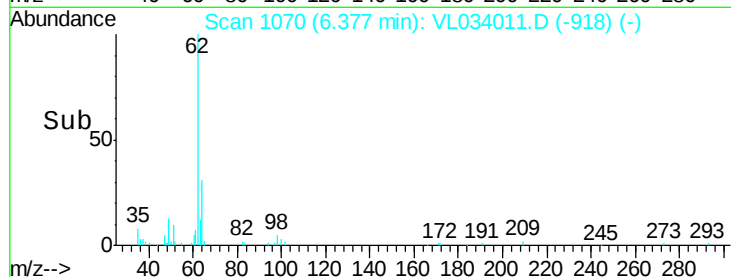
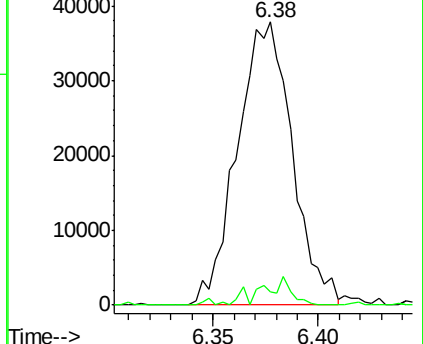
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 98.00 (97.70 to 98.70): VL0



#38

Trichloroethene

Concen: 0.337 ppbv m

RT: 7.92 min Scan# 1549

Delta R.T. -0.02 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion: 130 Resp: 34721

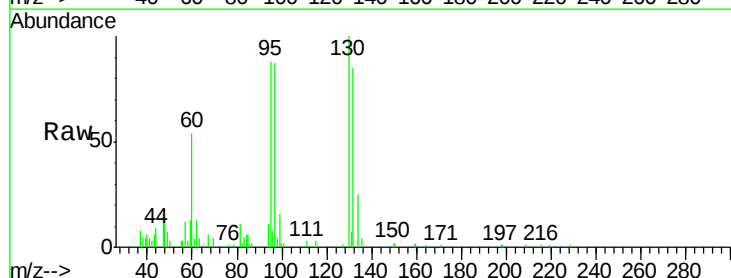
Ion Ratio Lower Upper

130 100

95 88.4 85.5 128.3

132 84.7 75.1 112.7

97 86.9 58.1 87.1

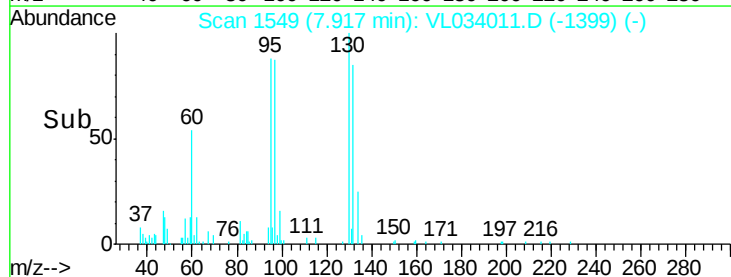
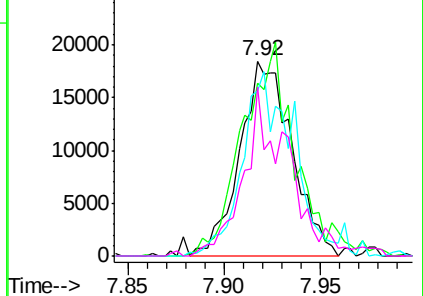


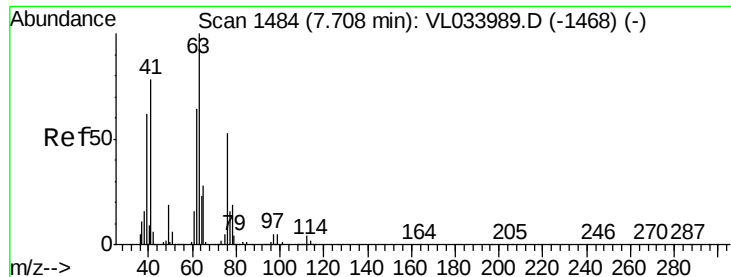
Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0





#39

1,2-Dichloropropane

Concen: 0.343 ppbv m

RT: 7.70 min Scan# 1482

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

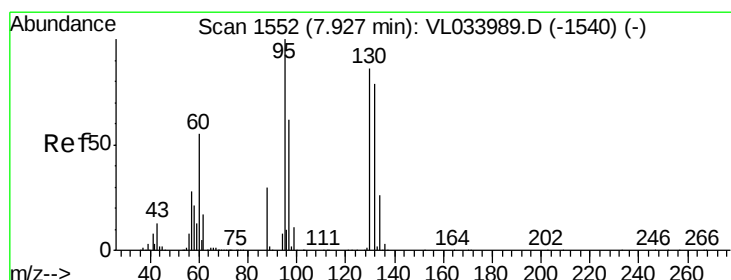
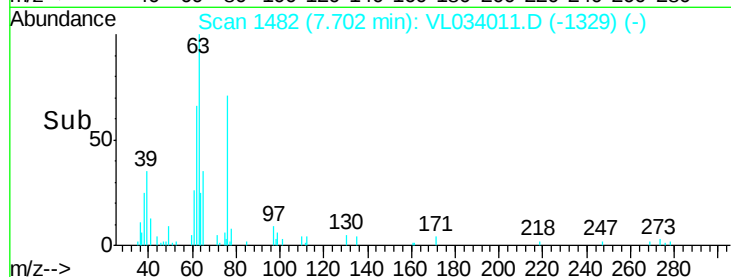
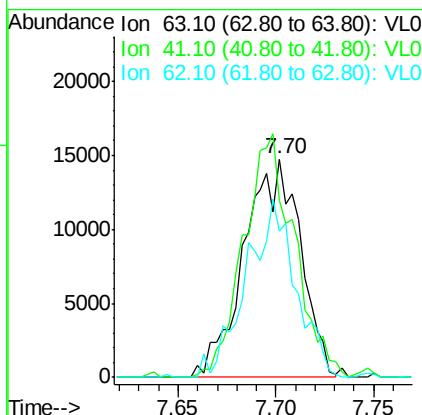
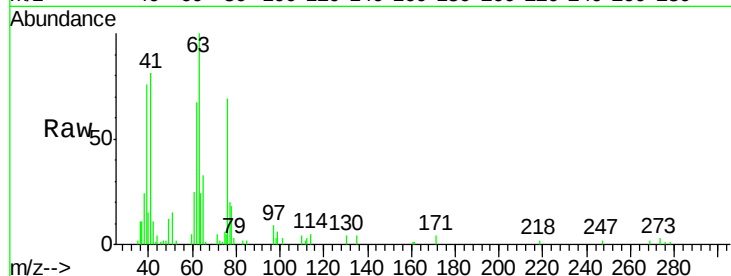
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	63	Resp:	29536
Ion Ratio	Lower	Upper	
63	100		
41	80.9	62.3	93.5
62	67.0	51.4	77.2

Manual Integrations
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#40

1,4-Dioxane

Concen: 0.351 ppbv m

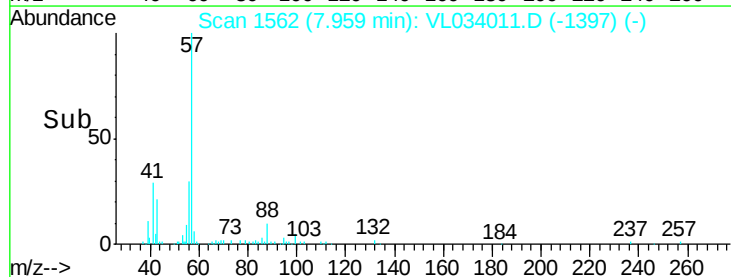
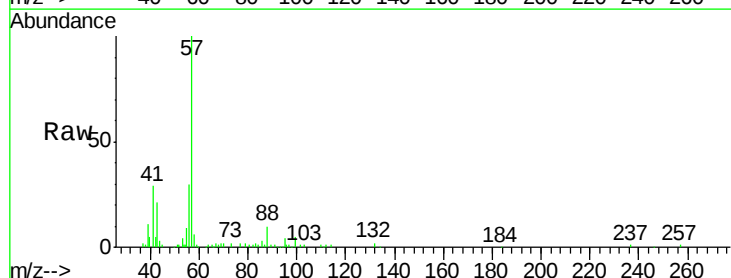
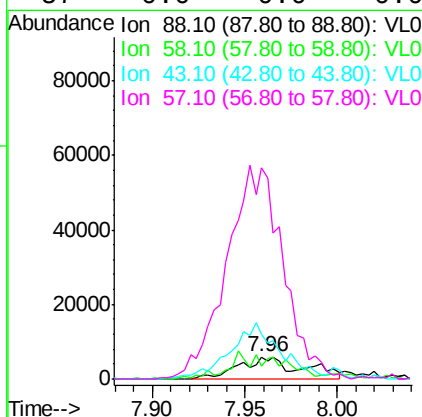
RT: 7.96 min Scan# 1562

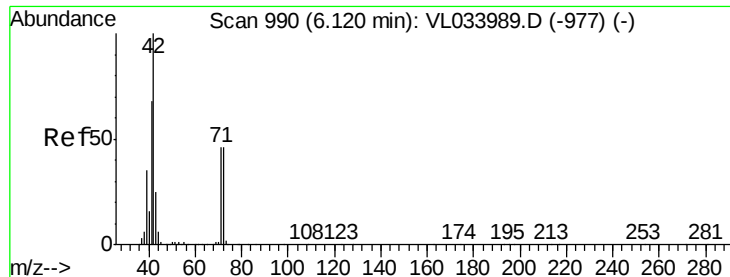
Delta R.T. 0.03 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:	88	Resp:	13932
Ion Ratio	Lower	Upper	
88	100		
58	0.0	99.1	148.7#
43	0.0	0.0	0.0
57	0.0	0.0	0.0





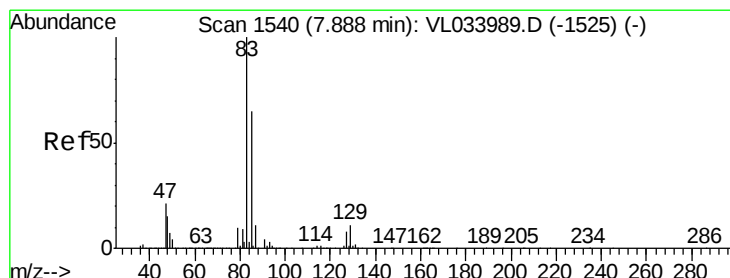
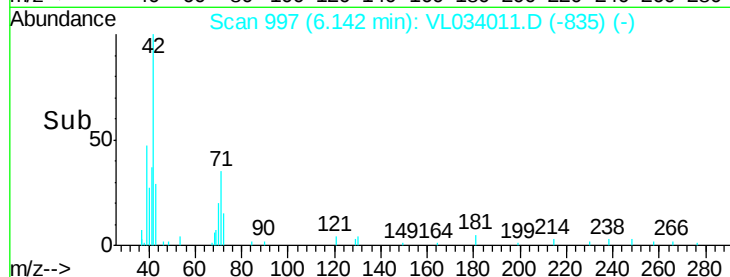
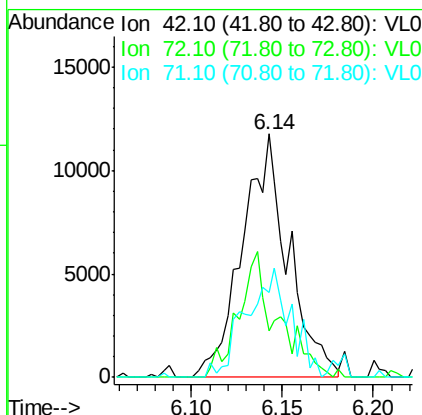
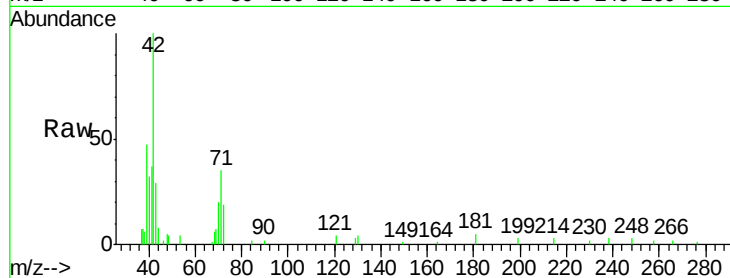
#41
Tetrahydrofuran
Concen: 0.270 ppbv m
RT: 6.14 min Scan# 997
Delta R.T. 0.02 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
42	100		
72	43.8	37.3	55.9
71	0.0	36.2	54.2#

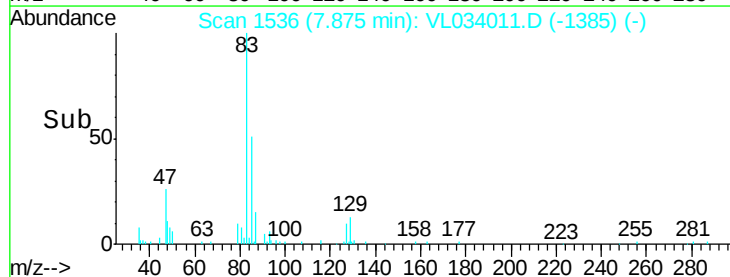
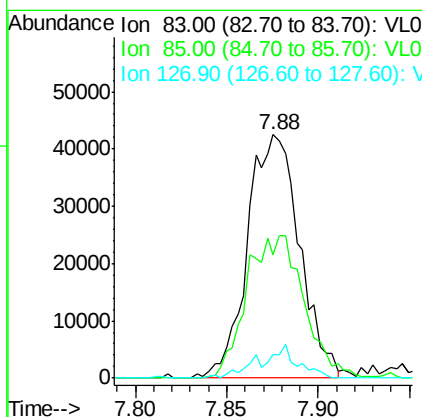
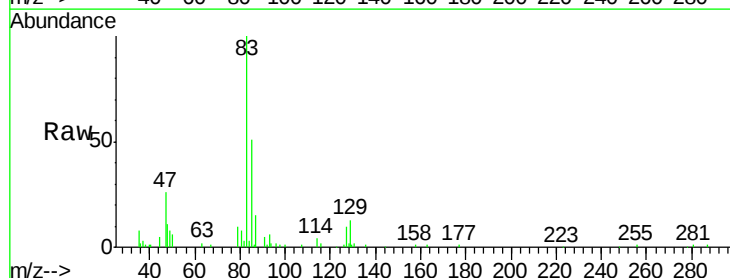
Manual Integrations
APPROVED

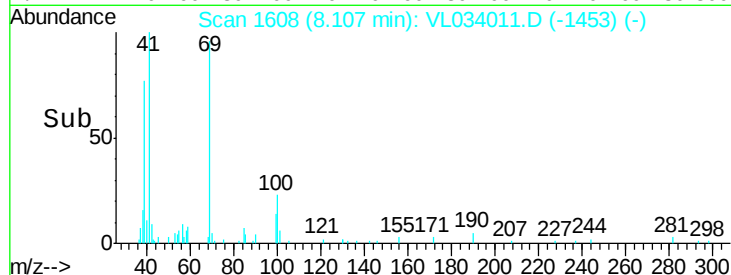
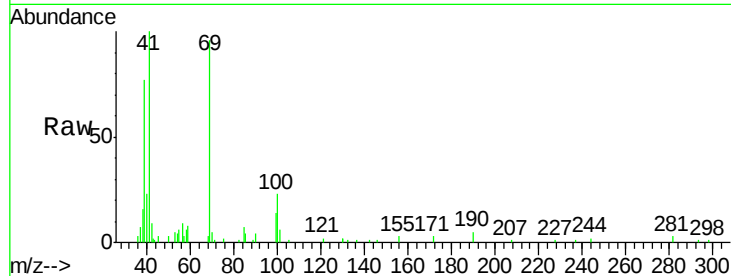
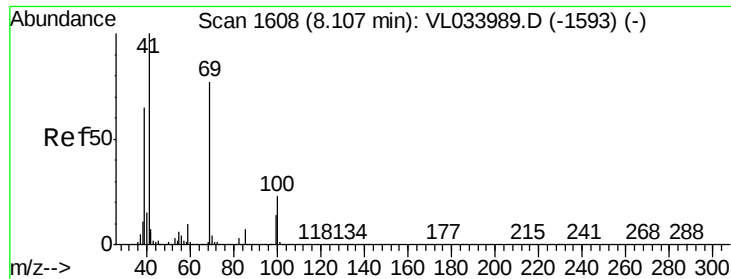
MMDadoda
7/10/2019 8:50:00 AM



#42
Bromodichloromethane
Concen: 0.367 ppbv m
RT: 7.88 min Scan# 1536
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
83	100		
85	50.7	51.8	77.8#
127	9.6	6.5	9.7





#43

Methvl Methacrylate

Concen: 0.252 ppbv m

RT: 8.11 min Scan# 1608

Delta R.T. -0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

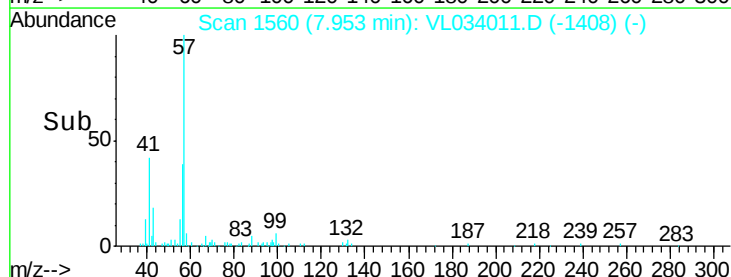
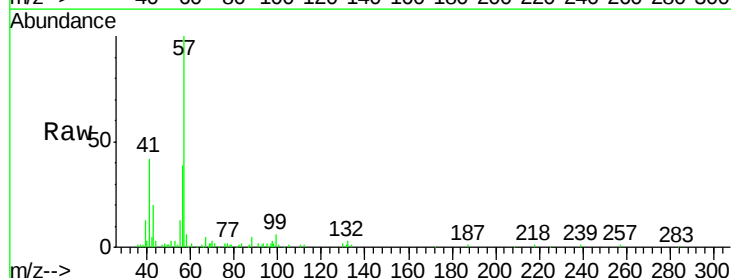
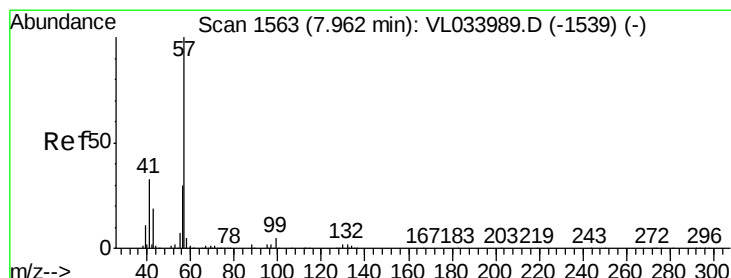
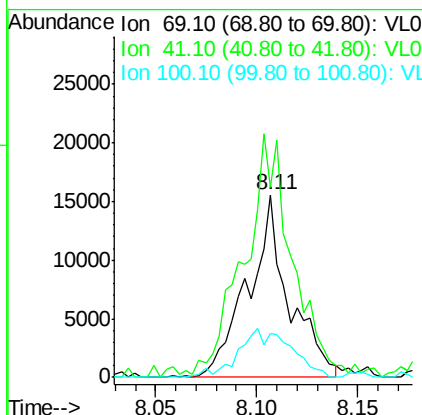
Tot Ion	Ratio	Lower	Upper
69	100		
41	0.0	109.1	163.7#
100	0.0	25.3	37.9#

Instrument :
MSVOA_L

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

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7/10/2019 8:50:00 AM



#44

2,2,4-Trimethylpentane

Concen: 0.304 ppbv m

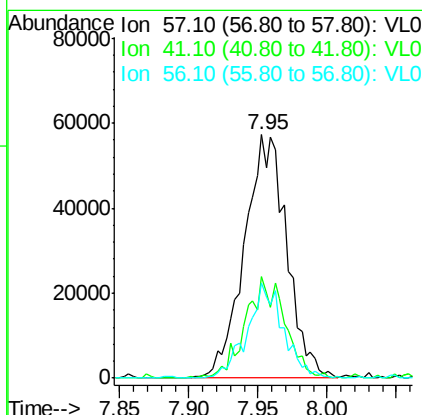
RT: 7.95 min Scan# 1560

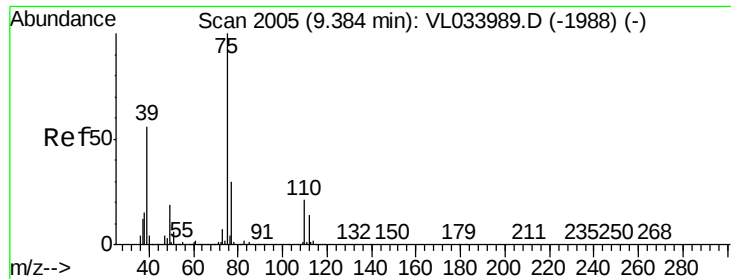
Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
57	100		
41	39.3	26.1	39.1#
56	33.0	24.4	36.6





#45

t-1,3-Dichloropropene

Concen: 0.258 ppbv m

RT: 9.37 min Scan# 2000

Delta R.T. -0.02 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 75 Resp: 29679

Ion Ratio Lower Upper

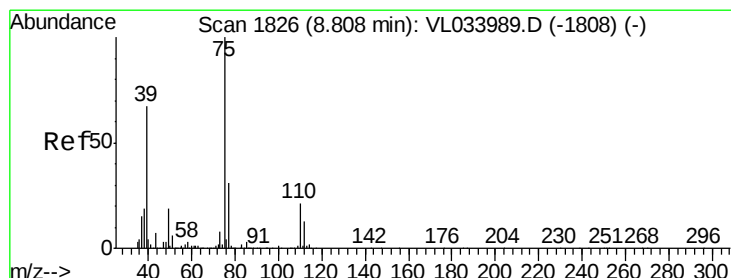
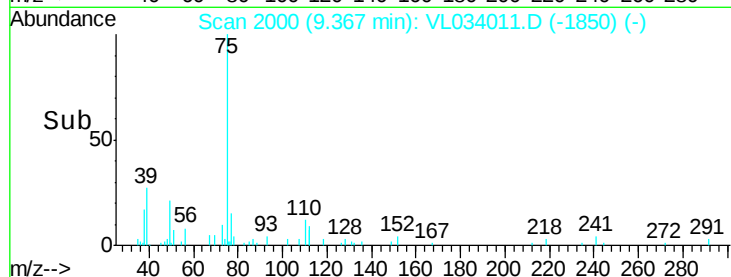
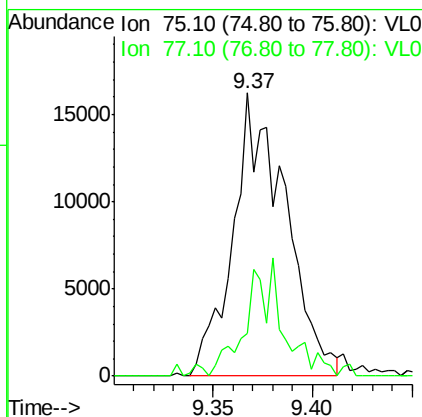
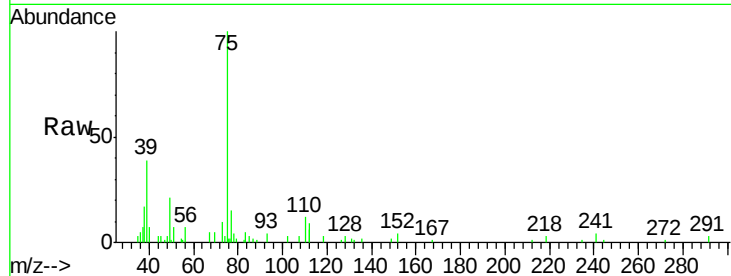
75 100

77 15.3 24.3 36.5#

Manual Integrations
APPROVED

MMDadoda

7/10/2019 8:50:00 AM



#46

cis-1,3-Dichloropropene

Concen: 0.277 ppbv m

RT: 8.80 min Scan# 1822

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

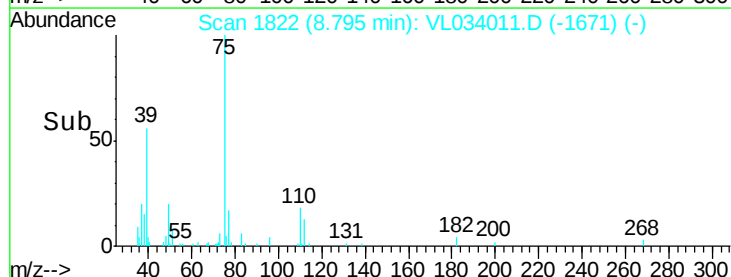
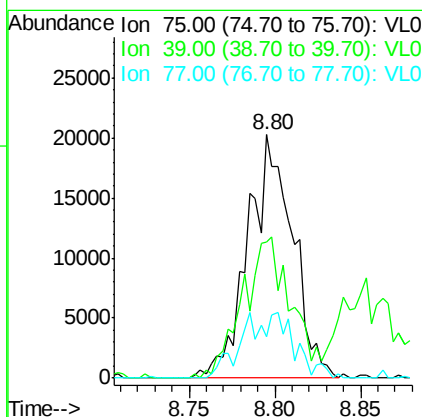
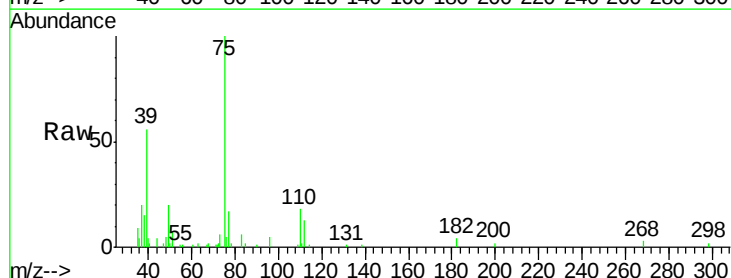
Tgt Ion: 75 Resp: 36875

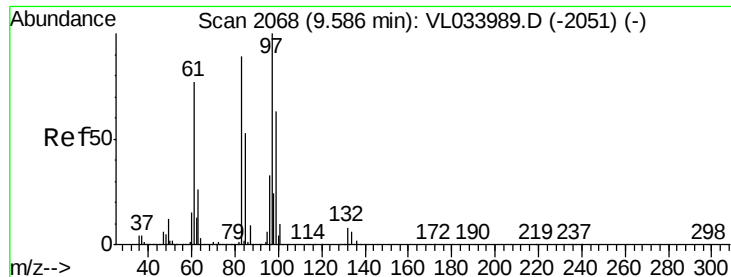
Ion Ratio Lower Upper

75 100

39 55.9 53.8 80.6

77 17.0 24.5 36.7#





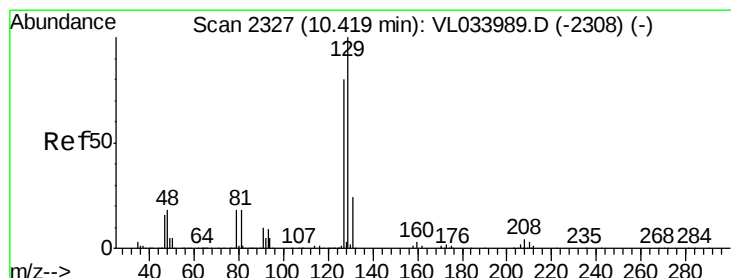
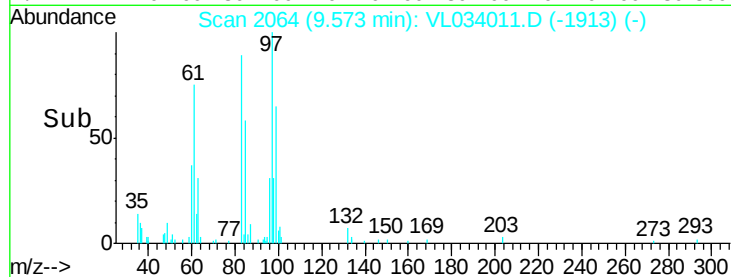
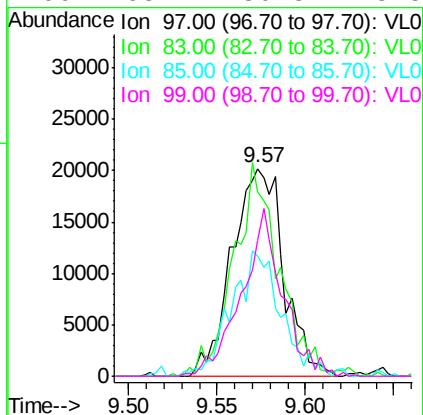
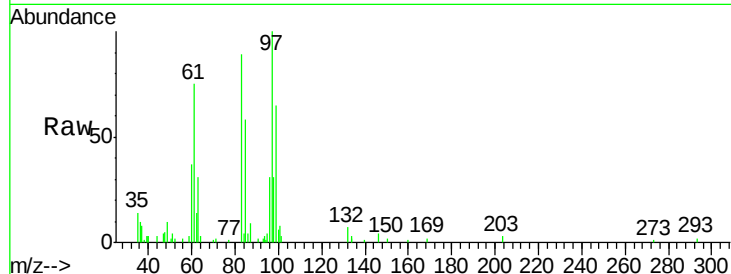
#47
 1,1,2-Trichloroethane
 Concen: 0.380 ppbv m
 RT: 9.57 min Scan# 2064
 Delta R.T. -0.01 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

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

Tot Ion	Ion	Ratio	Resp	Lower	Upper
97	100		41111		
83	89.1	71.1	106.7		
85	57.9	42.6	64.0		
99	65.2	50.3	75.5		

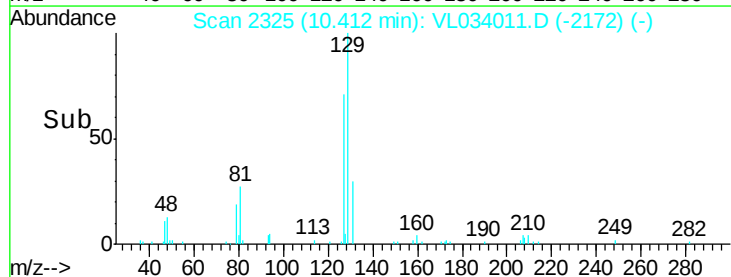
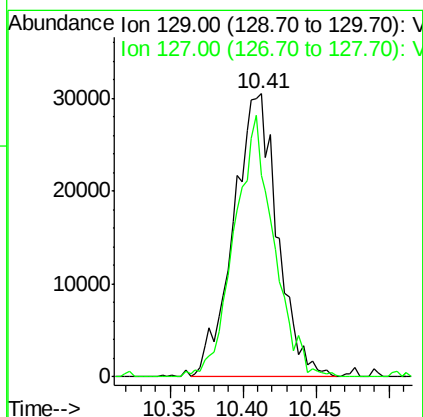
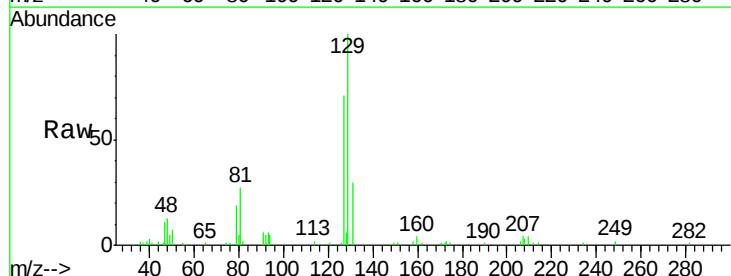
Manual Integrations
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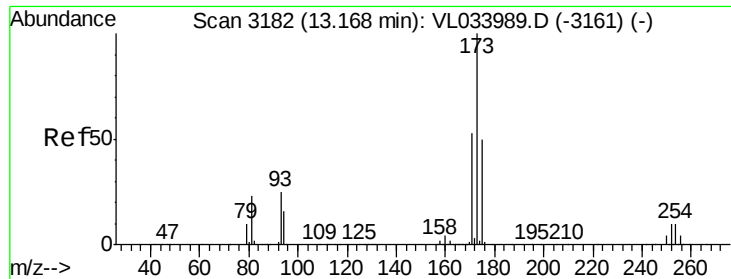
MMDadoda
 7/10/2019 8:50:00 AM



#48
 Dibromochloromethane
 Concen: 0.309 ppbv m
 RT: 10.41 min Scan# 2325
 Delta R.T. -0.01 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
129	100		63895		
127	82.4	39.1	117.3		





#49

Bromoform

Concen: 0.348 ppbv

RT: 13.16 min Scan# 3179

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

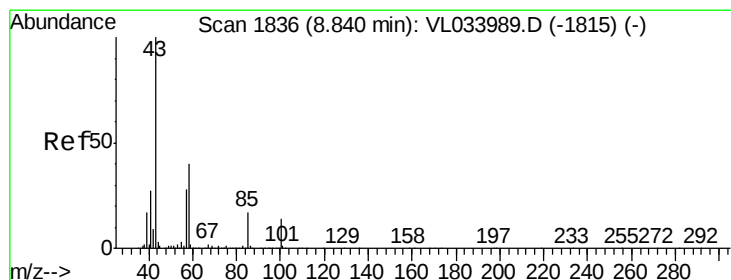
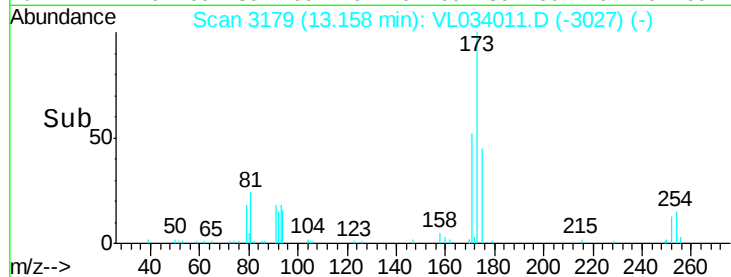
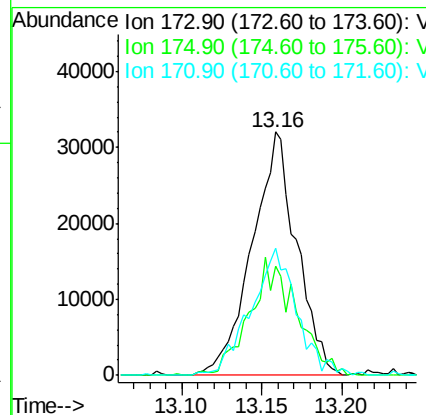
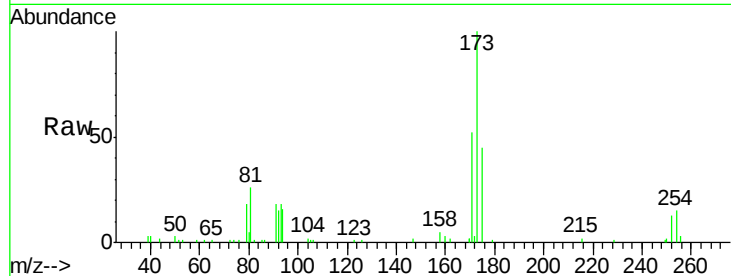
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	173	Resp:	61358
Ion Ratio	Lower	Upper	
173	100		
175	51.0	39.3	58.9
171	54.3	41.4	62.0

Manual Integrations
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#50

4-Methyl-2-Pentanone

Concen: 0.270 ppbv m

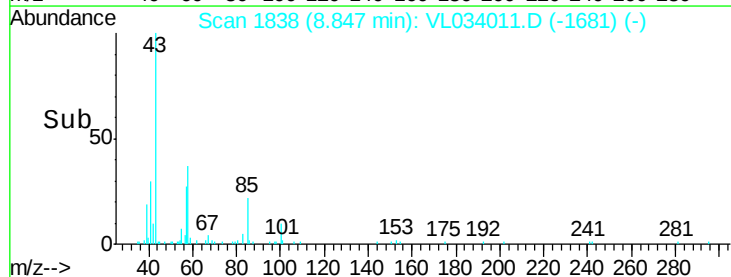
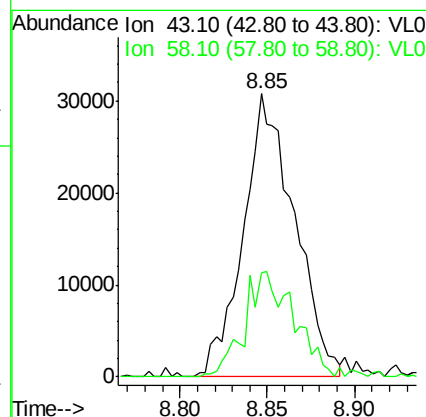
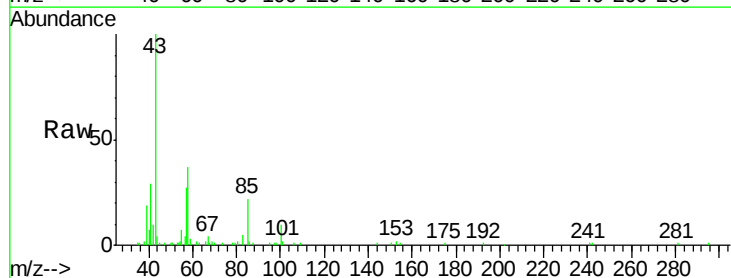
RT: 8.85 min Scan# 1838

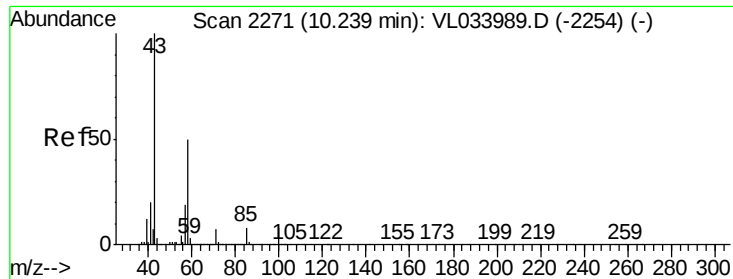
Delta R.T. 0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:	43	Resp:	62658
Ion Ratio	Lower	Upper	
43	100		
58	0.0	30.3	45.5#





#51

2-Hexanone

Concen: 0.232 ppbv m

RT: 10.25 min Scan# 2275

Delta R.T. 0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

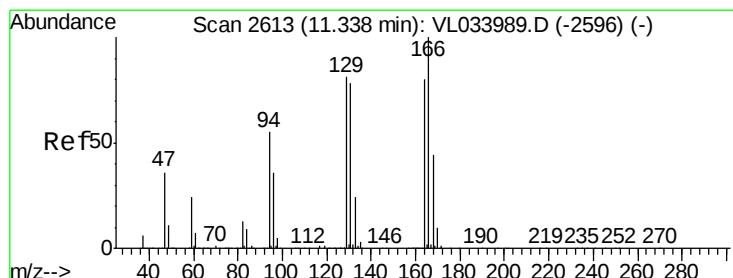
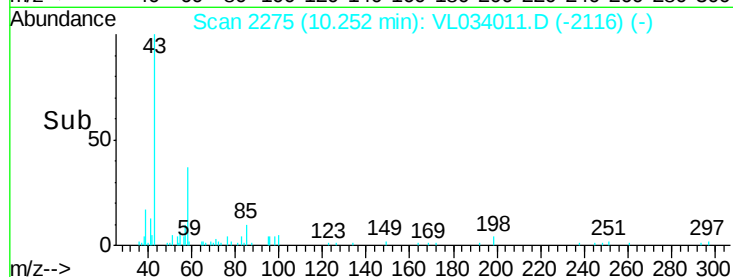
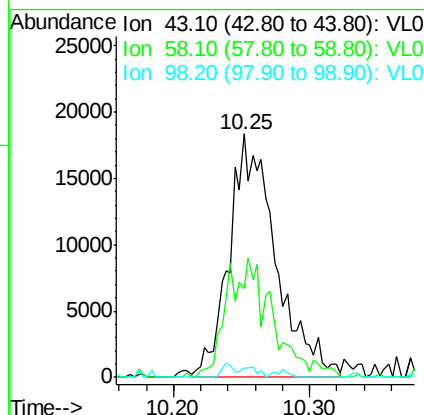
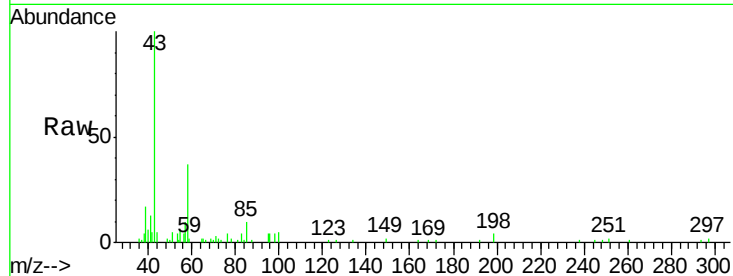
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	43	Resp:	43519
Ion Ratio	Lower	Upper	
43	100		
58	0.0	41.0	61.4#
98	0.0	0.2	0.2#

Manual Integrations
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#52

Tetrachloroethene

Concen: 0.336 ppbv m

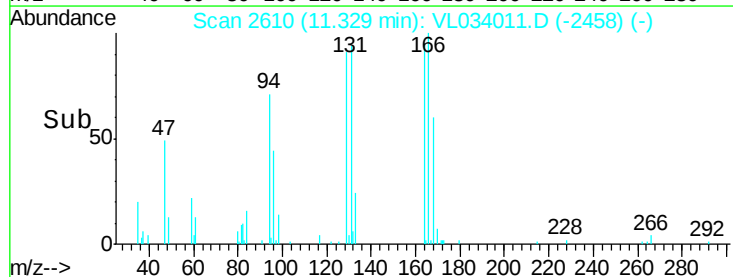
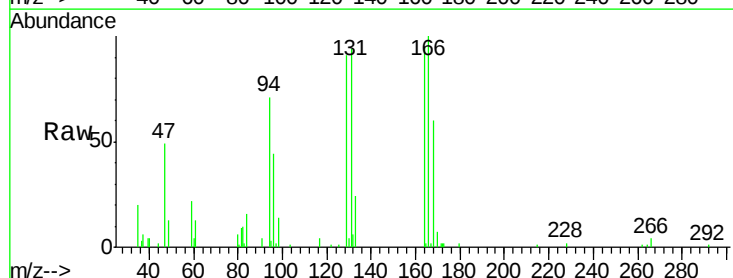
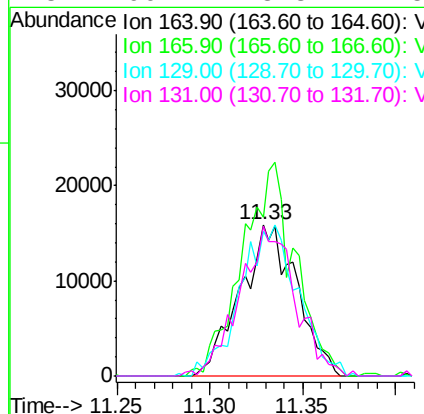
RT: 11.33 min Scan# 2610

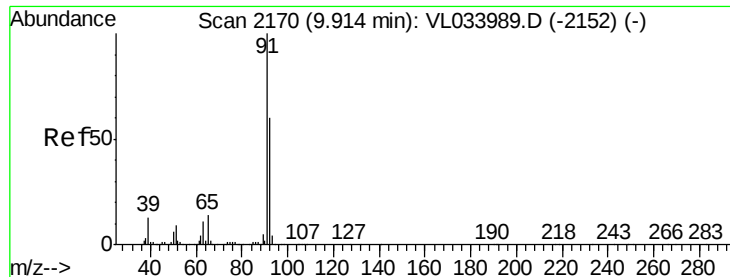
Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:	164	Resp:	33432
Ion Ratio	Lower	Upper	
164	100		
166	105.2	100.2	150.2
129	95.3	81.0	121.6
131	99.1	78.3	117.5





#53

Toluene

Concen: 0.255 ppbv

RT: 9.91 min Scan# 2168

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 91 Resp: 67674

Ion Ratio Lower Upper

91 100

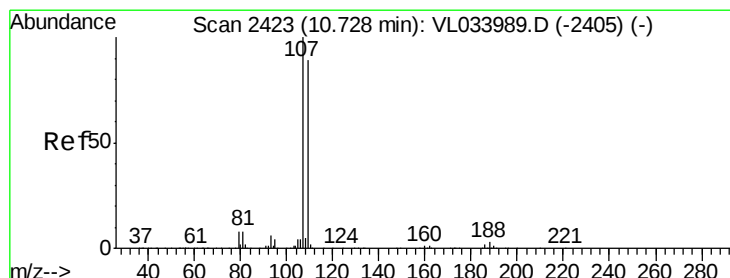
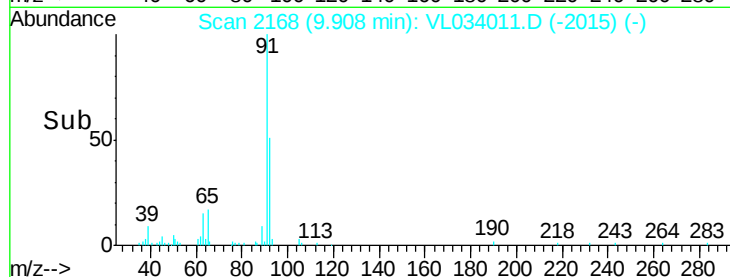
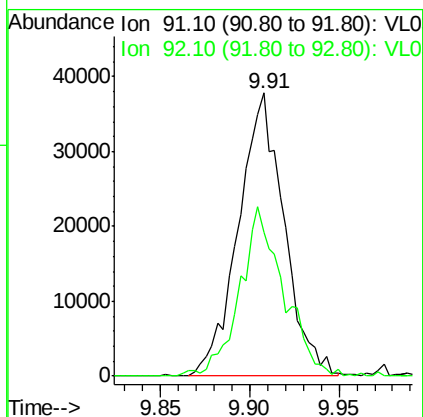
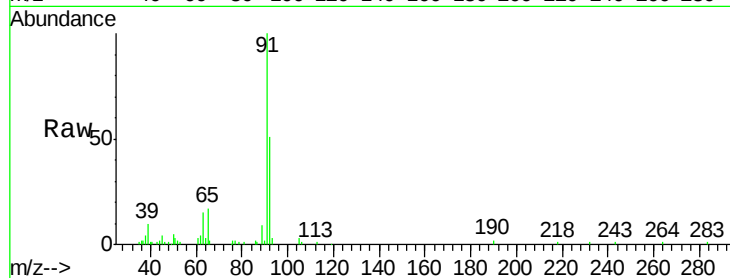
92 57.4 47.7 71.5

Manual Integrations

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#54

1,2-Dibromoethane

Concen: 0.362 ppbv m

RT: 10.72 min Scan# 2420

Delta R.T. -0.01 min

Lab File: VL034011.D

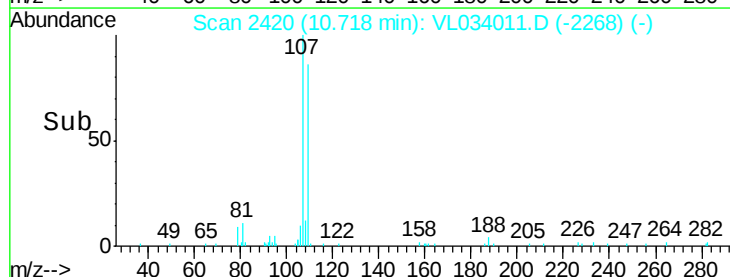
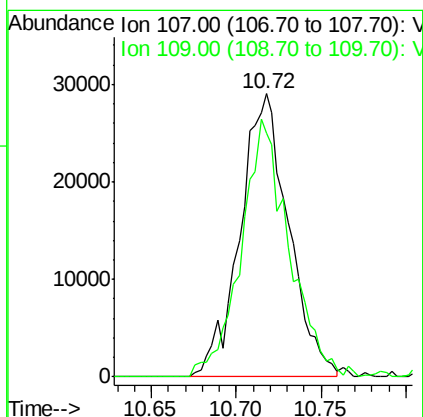
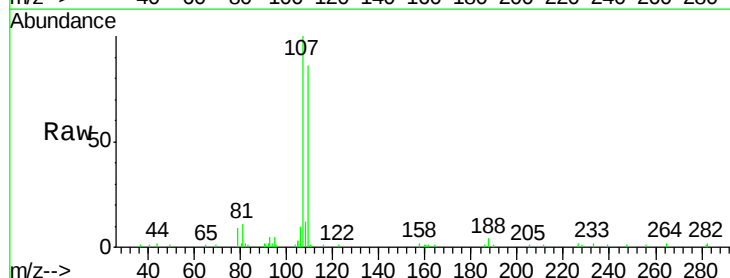
Acq: 8 Jul 2019 14:48

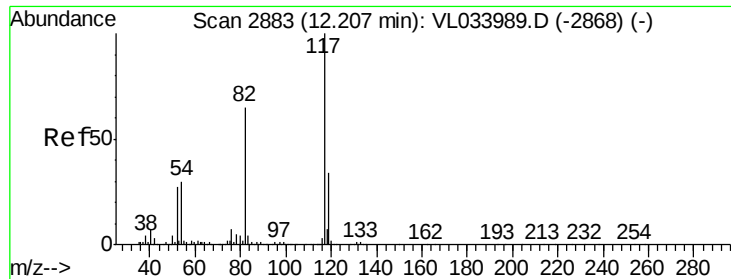
Tgt Ion: 107 Resp: 57790

Ion Ratio Lower Upper

107 100

109 86.2 71.5 107.3





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.20 min Scan# 2880

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:117 Resp: 2744912

Ion Ratio Lower Upper

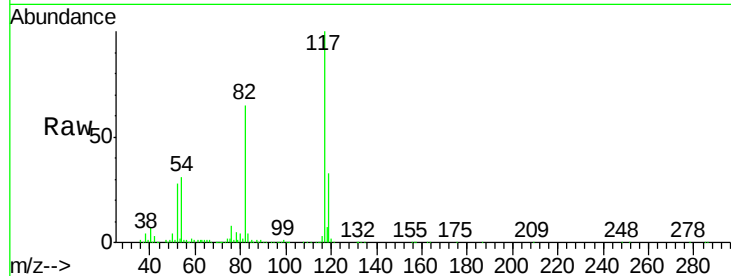
117 100

82 65.5 50.8 76.2

119 33.6 24.0 36.0

Manual Integrations
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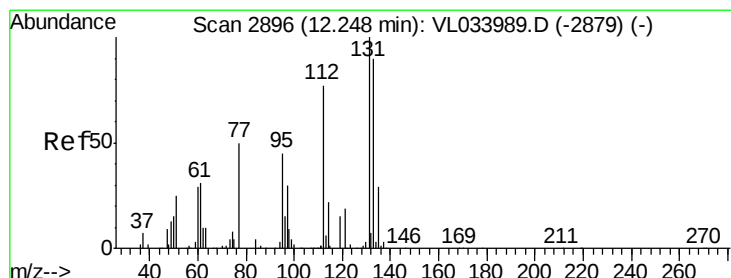
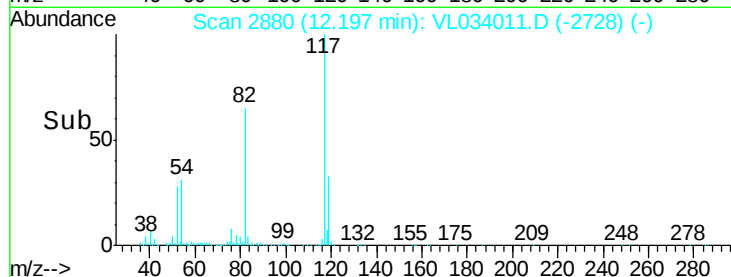
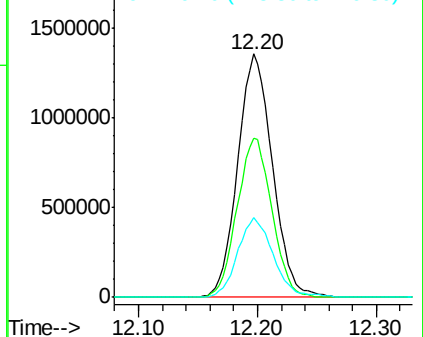
MMDadoda
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 0.446 ppbv m

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

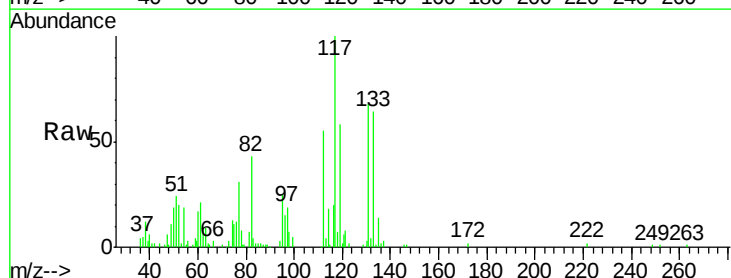
Tgt Ion:131 Resp: 54670

Ion Ratio Lower Upper

131 100

133 0.0 76.2 114.2#

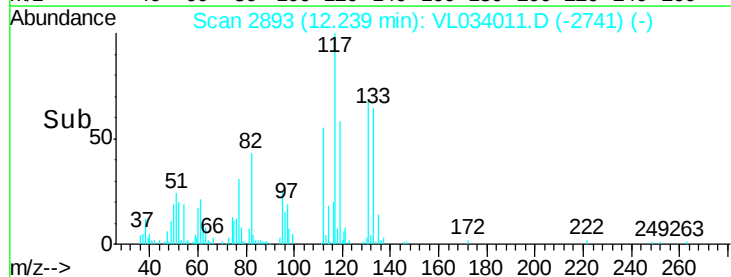
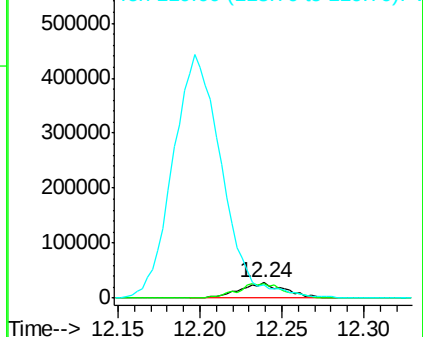
119 0.0 43.1 64.7#

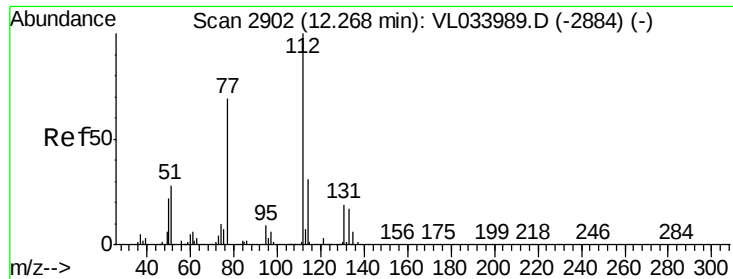


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V





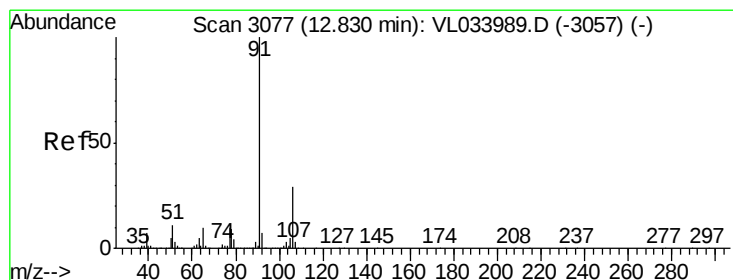
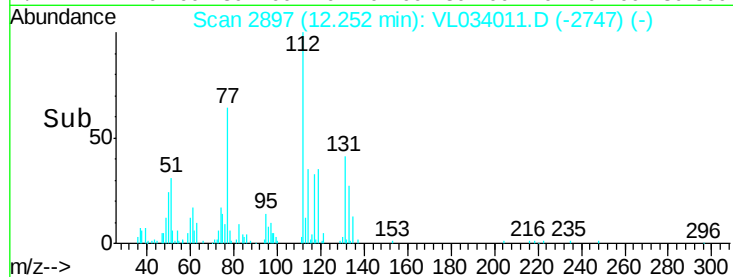
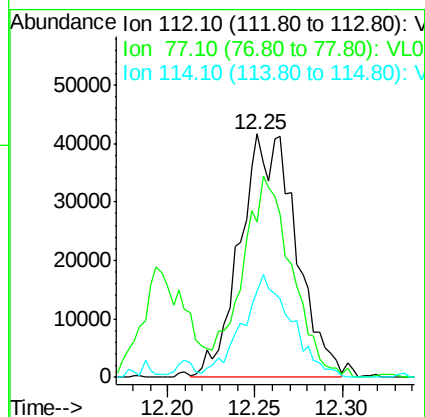
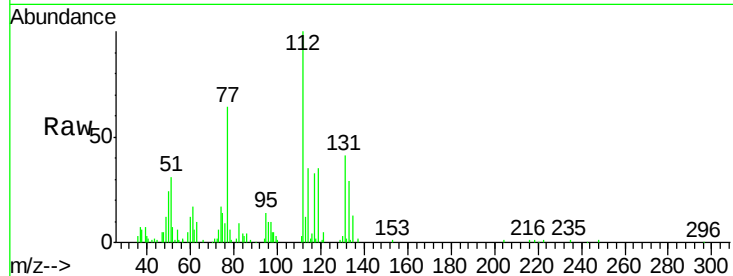
#57
Chlorobenzene
Concen: 0.425 ppbv m
RT: 12.25 min Scan# 2897
Delta R.T. -0.02 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
112	100		
77	63.5	55.9	83.9
114	35.1	27.6	33.8

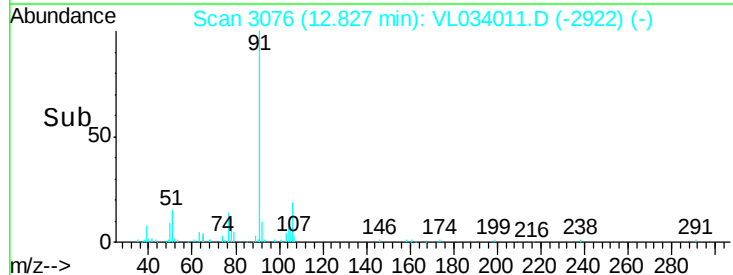
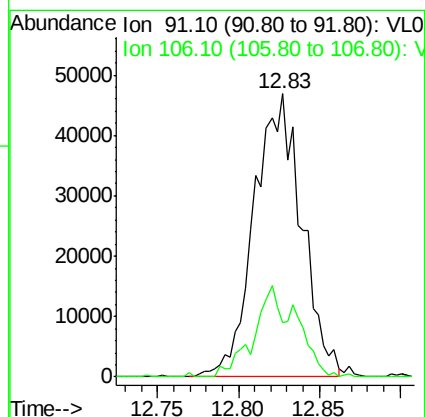
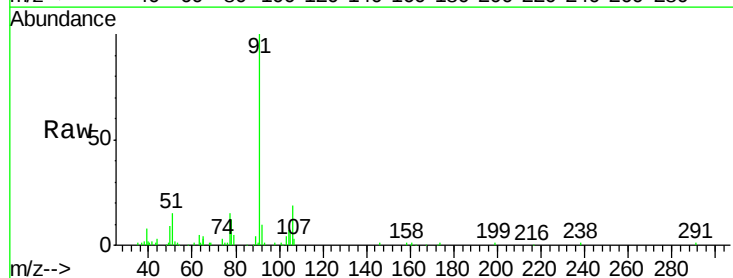
Manual Integrations
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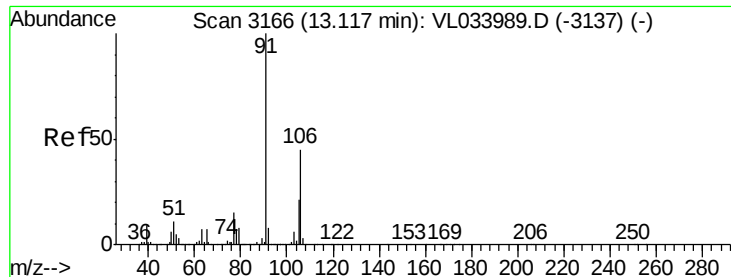
MMDadoda
7/10/2019 8:50:00 AM



#58
Ethyl Benzene
Concen: 0.287 ppbv m
RT: 12.83 min Scan# 3076
Delta R.T. -0.00 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
91	100		
106	19.2	23.3	34.9





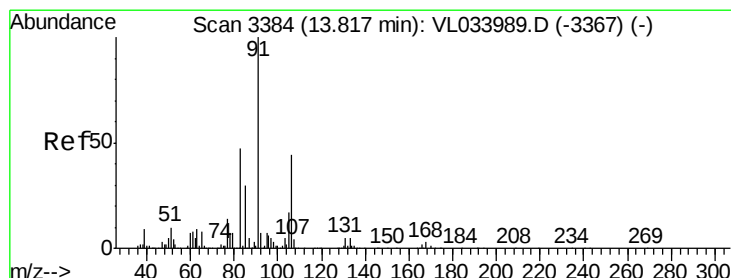
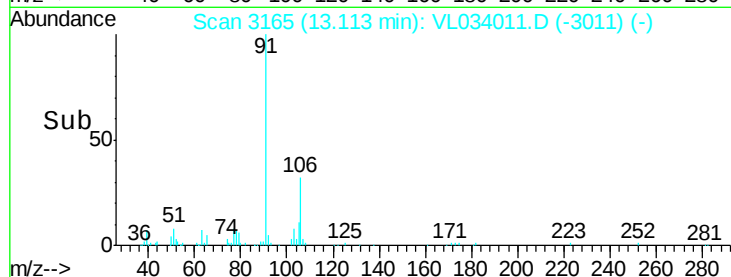
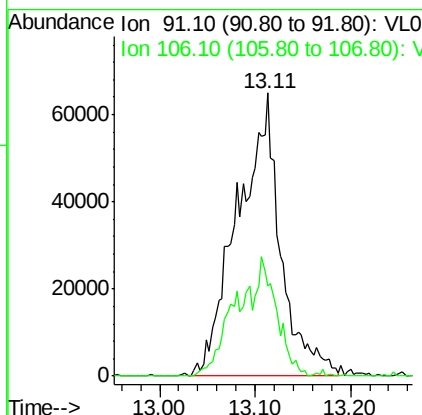
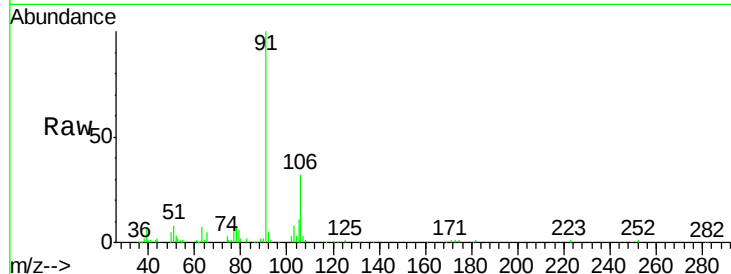
#59
m/p-Xylene
Concen: 0.678 ppbv m
RT: 13.11 min Scan# 3165
Delta R.T. -0.00 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion: 91 Resp: 202642
Ion Ratio Lower Upper
91 100
106 39.2 35.7 53.5

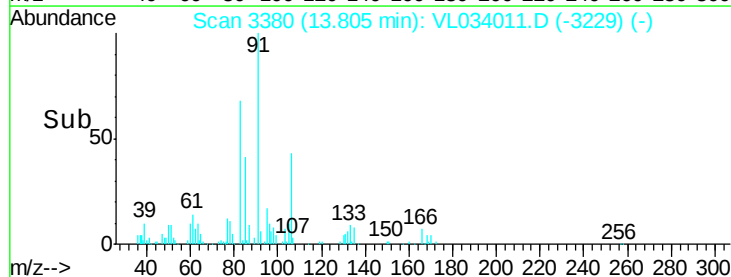
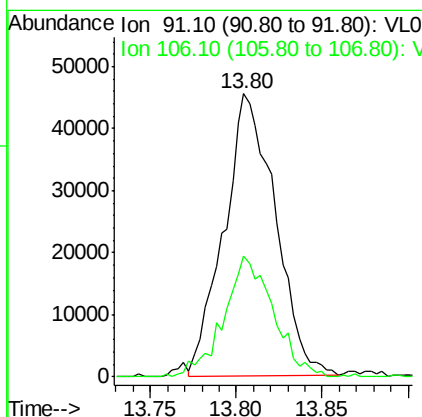
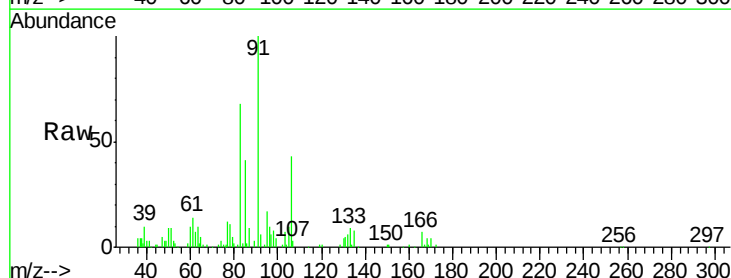
Manual Integrations
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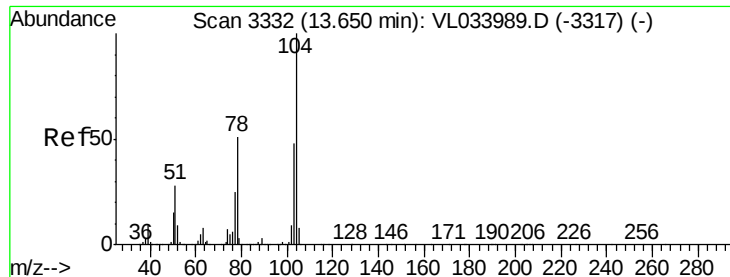
MMDadoda
7/10/2019 8:50:00 AM



#60
o-Xylene
Concen: 0.316 ppbv
RT: 13.80 min Scan# 3380
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion: 91 Resp: 94577
Ion Ratio Lower Upper
91 100
106 41.2 21.9 65.7





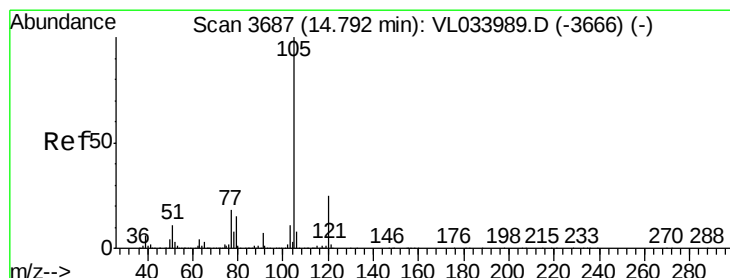
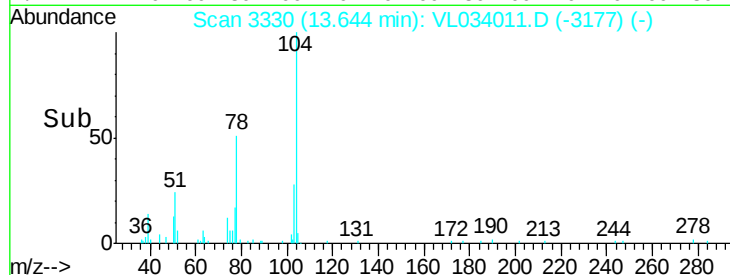
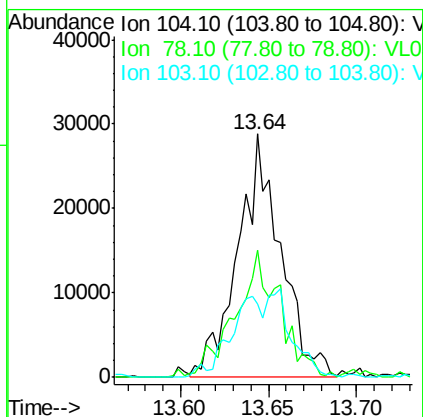
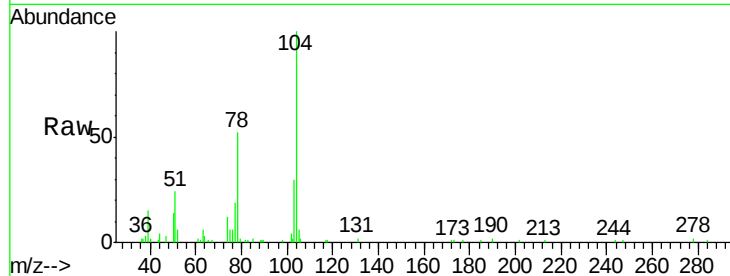
#61
Stvrene
Concen: 0.247 ppbv m
RT: 13.64 min Scan# 3330
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Resp	Lower	Upper
104	100	48895		
78	0.0	43.9	65.9#	
103	0.0	38.1	57.1#	

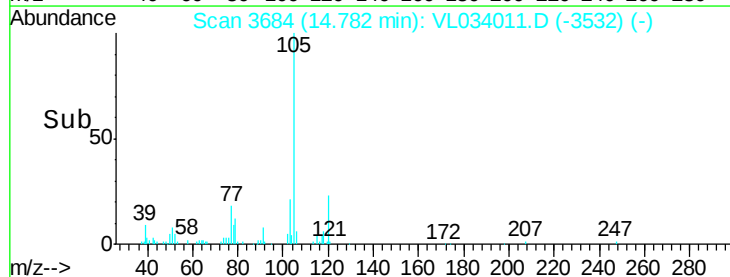
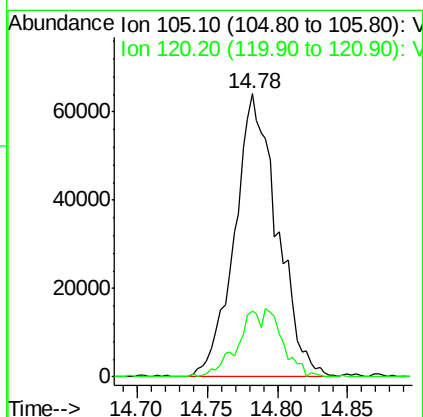
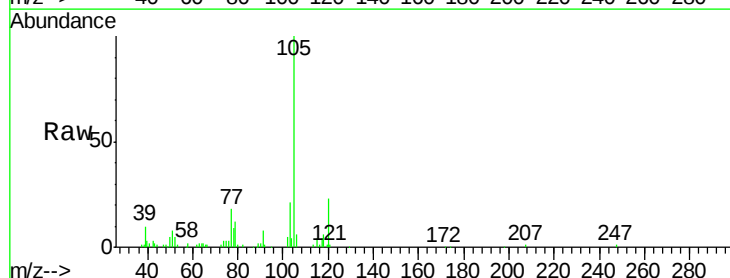
Manual Integrations
APPROVED

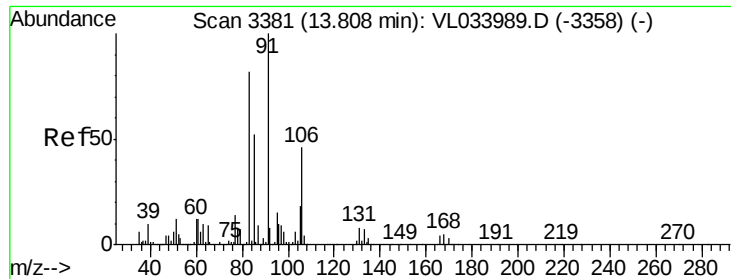
MMDadoda
7/10/2019 8:50:00 AM



#62
Isopropylbenzene
Concen: 0.295 ppbv
RT: 14.78 min Scan# 3684
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	135682		
120	24.7	20.4	30.6	





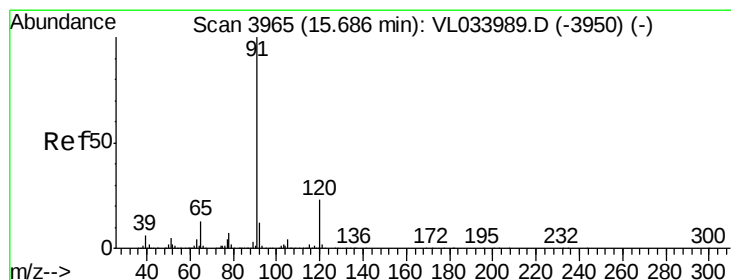
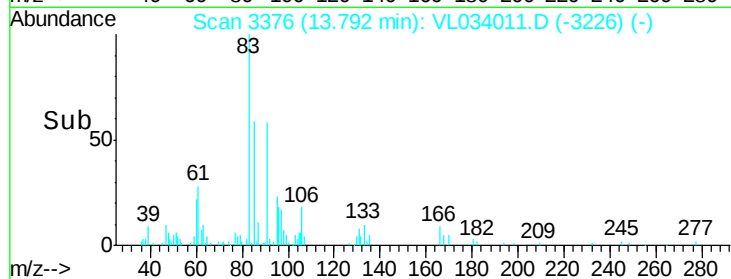
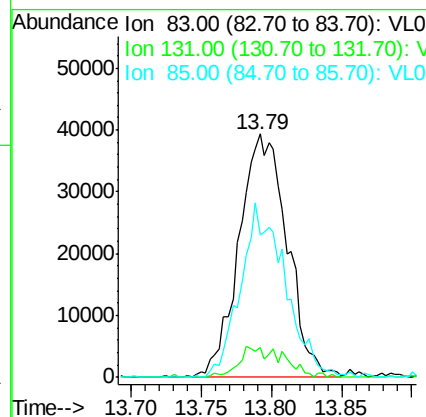
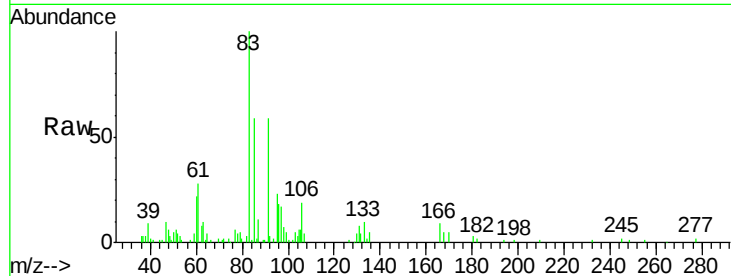
#63
 1,1,2,2-Tetrachloroethane
 Concen: 0.407 ppbv m
 RT: 13.79 min Scan# 3376
 Delta R.T. -0.02 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
83	100		
131	0.0	5.0	14.9#
85	0.0	32.8	98.3#

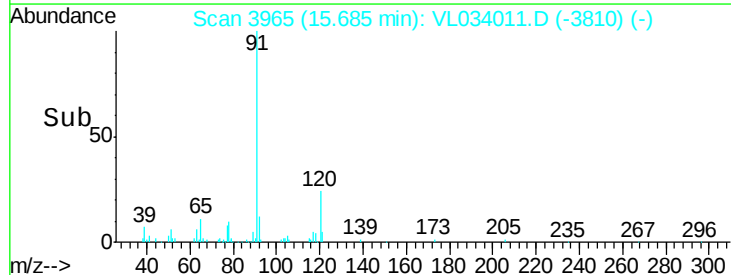
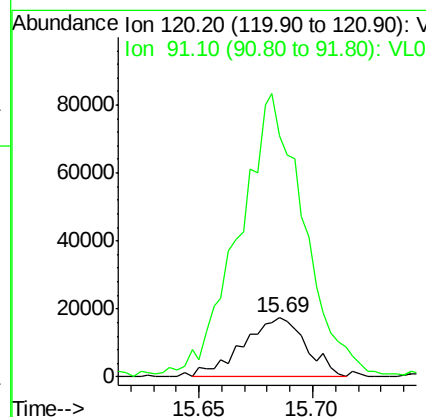
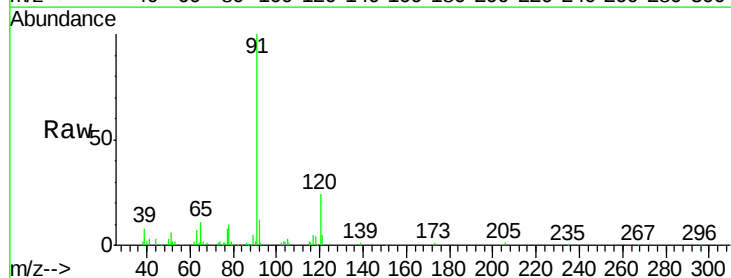
Manual Integrations
 APPROVED

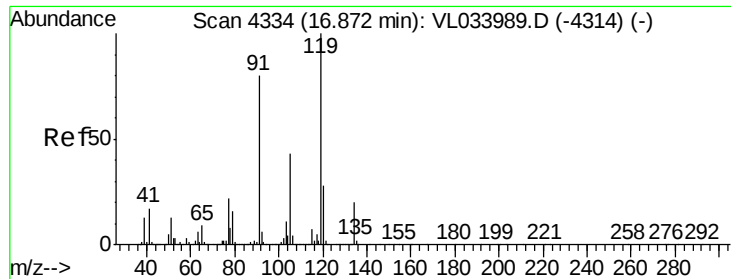
MMDadoda
 7/10/2019 8:50:00 AM



#64
 n-propylbenzene
 Concen: 0.281 ppbv m
 RT: 15.69 min Scan# 3965
 Delta R.T. -0.00 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
120	100		
91	507.2	386.6	579.8





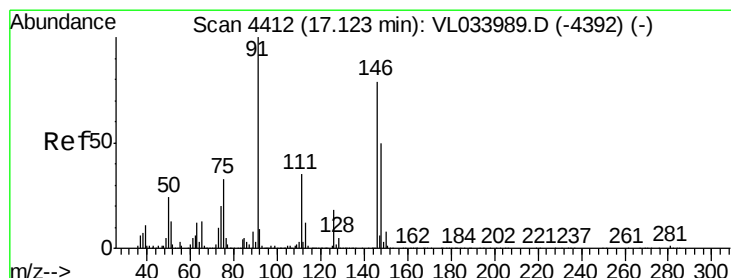
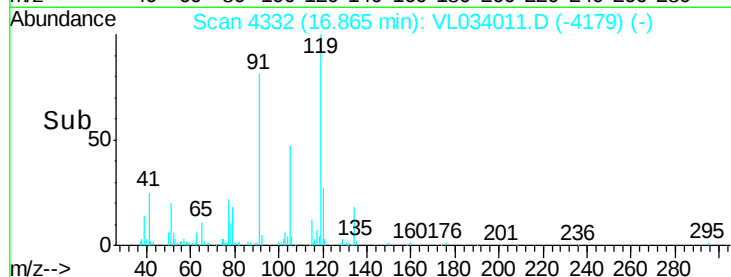
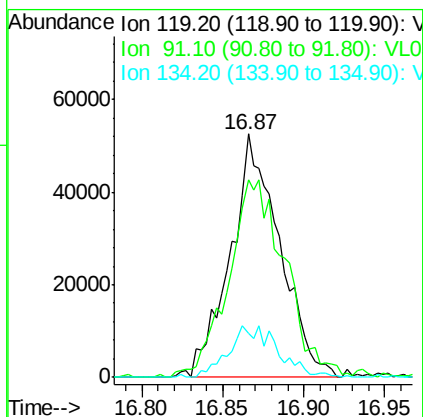
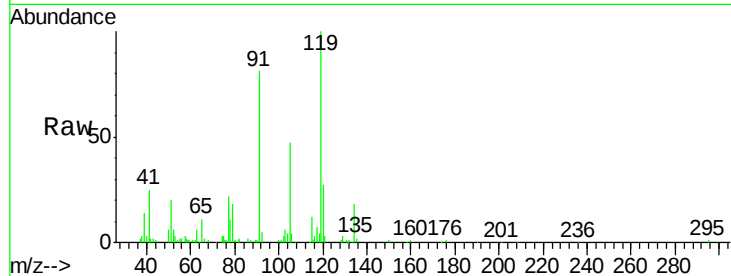
#65
tert-Butylbenzene
Concen: 0.283 ppbv m
RT: 16.87 min Scan# 4332
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Resp	Lower	Upper
119	100	110579		
91	95.1	67.0	100.6	
134	21.0	15.8	23.6	

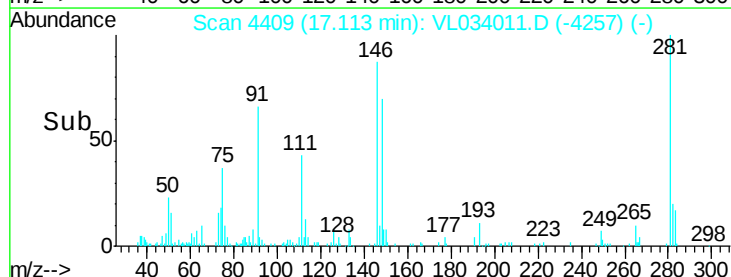
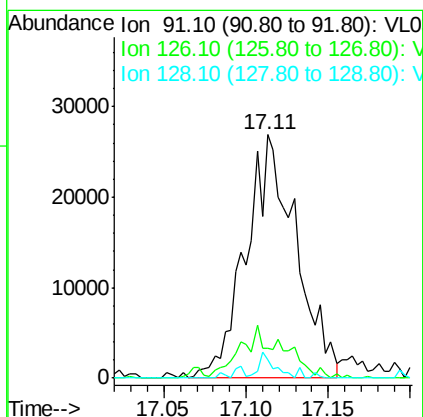
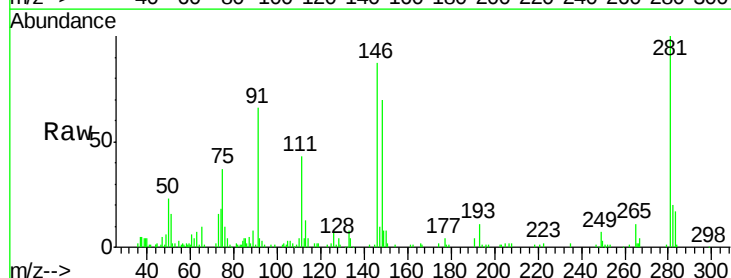
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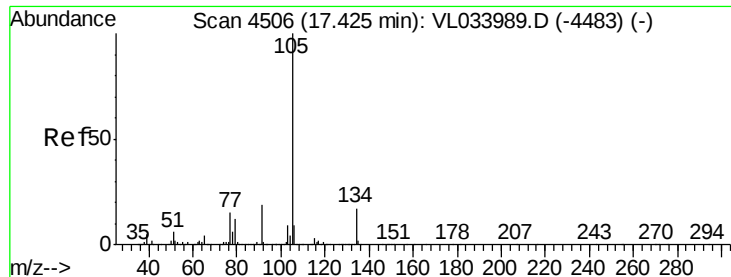
MMDadoda
7/10/2019 8:50:00 AM



#66
Benzyl Chloride
Concen: 0.283 ppbv m
RT: 17.11 min Scan# 4409
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	56661		
126	19.9	13.9	20.9	
128	4.8	4.6	7.0	





#67

sec-Butylbenzene

Concen: 0.313 ppbv m

RT: 17.42 min Scan# 4503

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 105 Resp: 171576

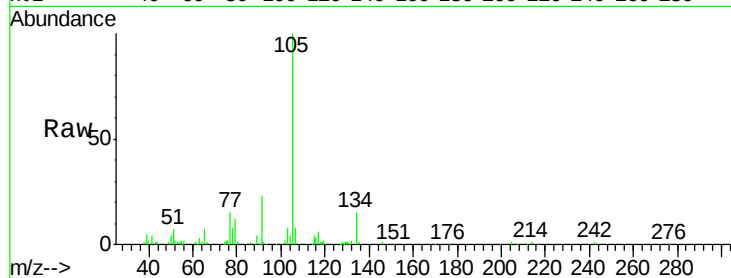
Ion Ratio Lower Upper

105 100

134 0.0 14.7 22.1#

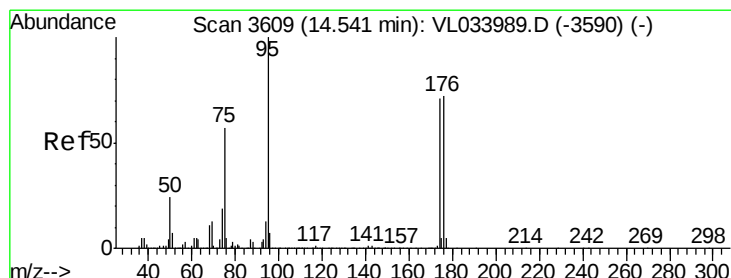
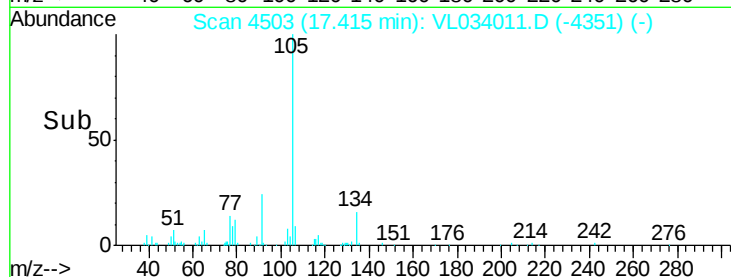
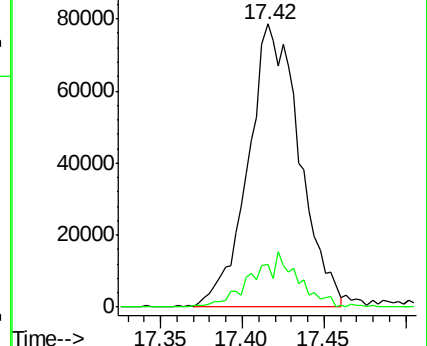
Manual Integrations
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.355 ppbv

RT: 14.53 min Scan# 3607

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

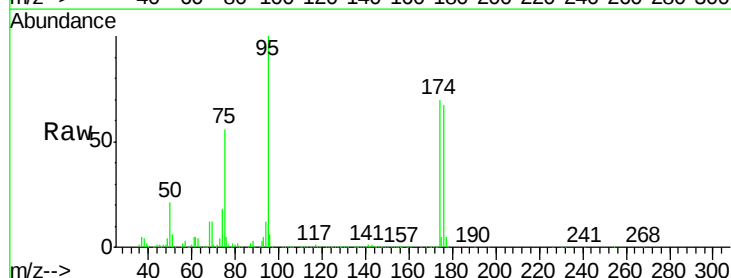
Tgt Ion: 95 Resp: 2190016

Ion Ratio Lower Upper

95 100

174 72.9 60.5 90.7

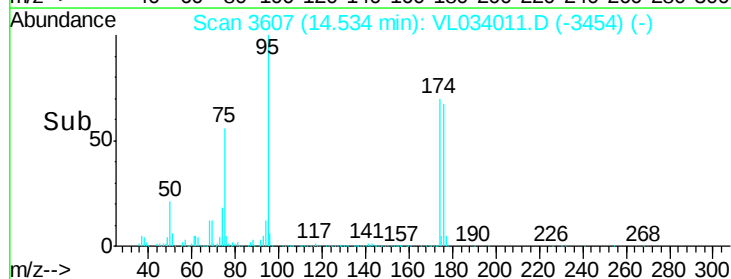
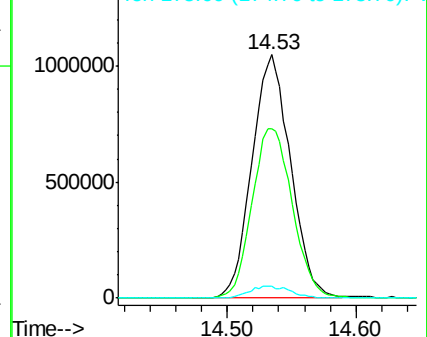
175 5.3 4.0 6.0

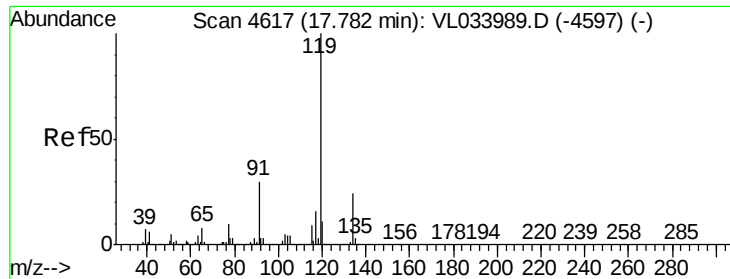


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





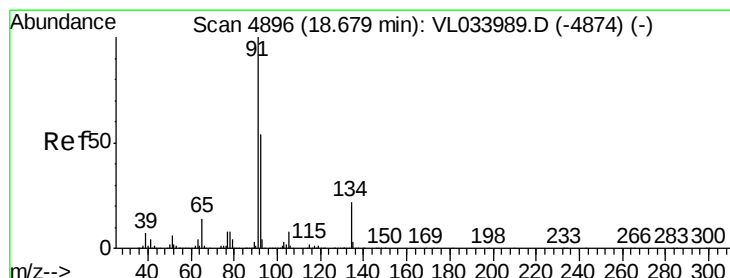
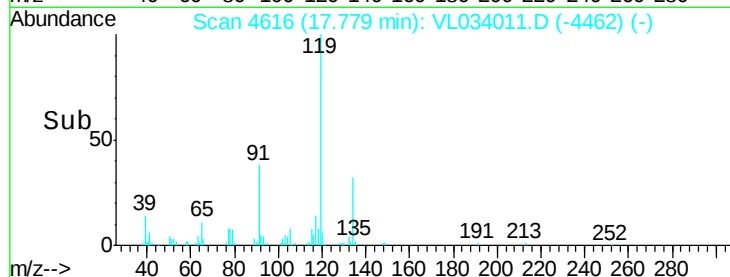
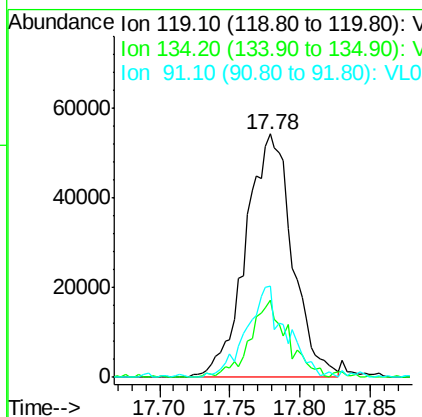
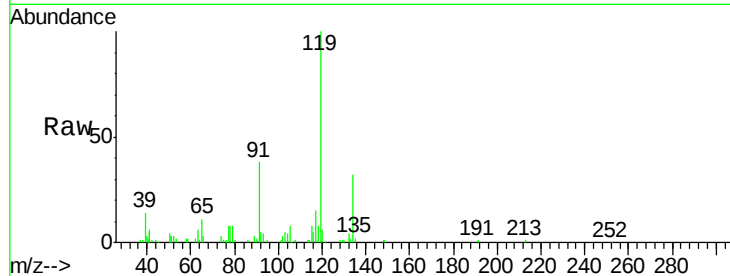
#69
 p-Isopropyltoluene
 Concen: 0.277 ppbv
 RT: 17.78 min Scan# 4616
 Delta R.T. -0.00 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
119	100		
134	26.6	20.1	30.1
91	31.9	23.6	35.4

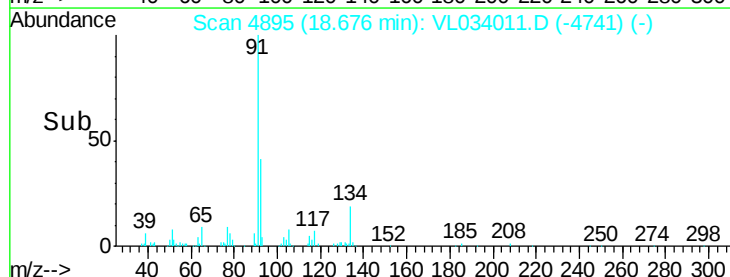
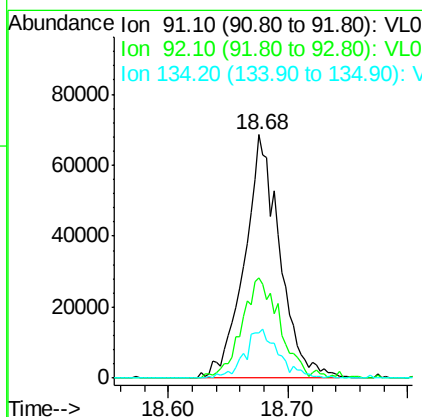
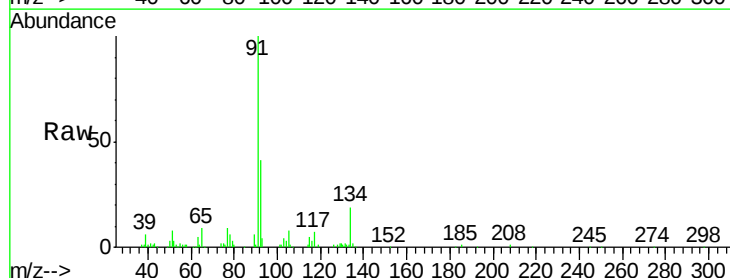
Manual Integrations
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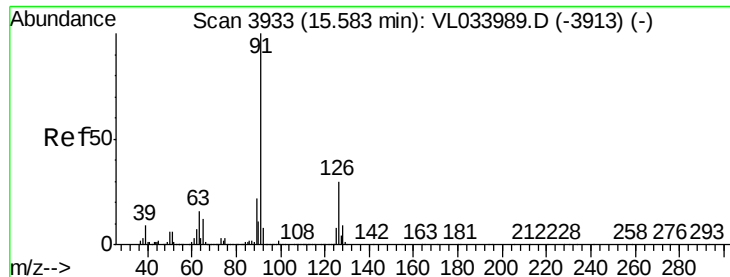
MMDadoda
 7/10/2019 8:50:00 AM



#70
 n-Butylbenzene
 Concen: 0.297 ppbv m
 RT: 18.68 min Scan# 4895
 Delta R.T. -0.00 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
91	100		
92	45.5	42.0	63.0
134	19.4	17.9	26.9





#71

2-Chlorotoluene

Concen: 0.267 ppbv m

RT: 15.58 min Scan# 3931

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion: 91 Resp: 89865

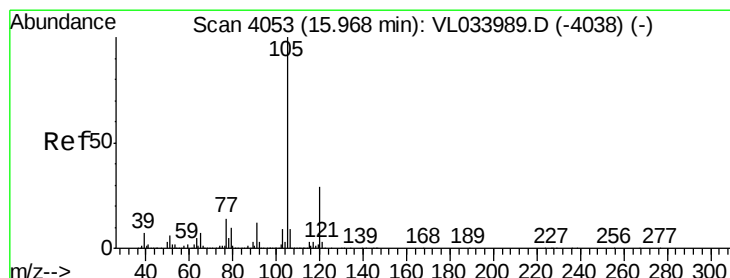
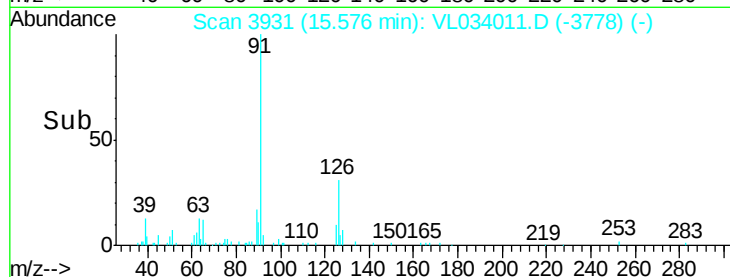
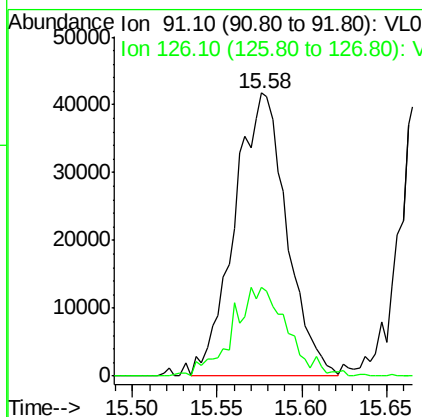
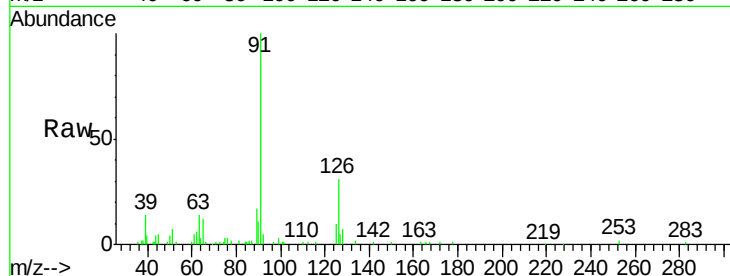
Ion Ratio Lower Upper

91 100

126 32.9 12.3 49.3

Manual Integrations
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7/10/2019 8:50:00 AM



#72

4-Ethyltoluene

Concen: 0.248 ppbv m

RT: 15.96 min Scan# 4050

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:105 Resp: 95097

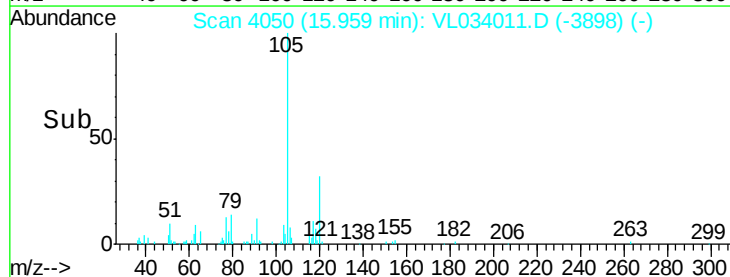
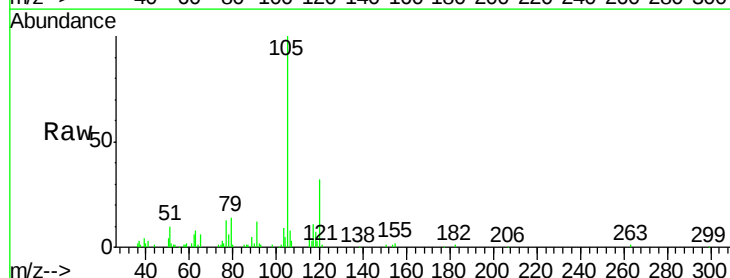
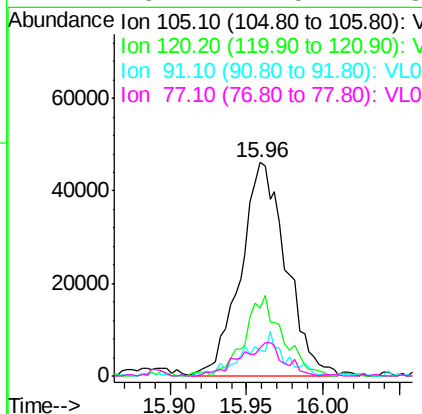
Ion Ratio Lower Upper

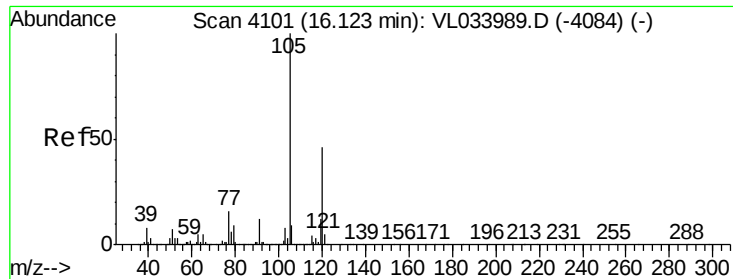
105 100

120 31.9 24.1 36.1

91 17.2 10.6 16.0#

77 15.2 11.5 17.3





#73

1,3,5-Trimethylbenzene

Concen: 0.294 ppbv m

RT: 16.11 min Scan# 4098

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:105 Resp: 104870

Ion Ratio Lower Upper

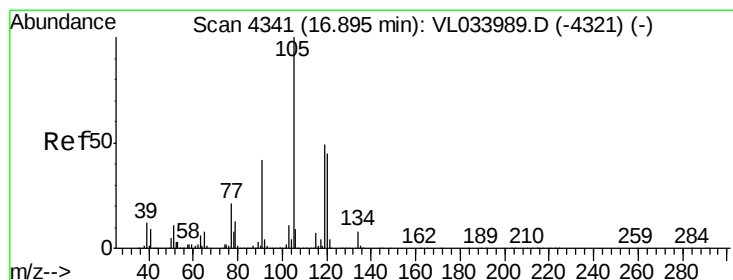
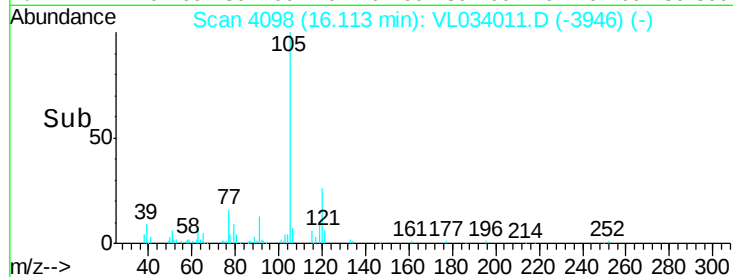
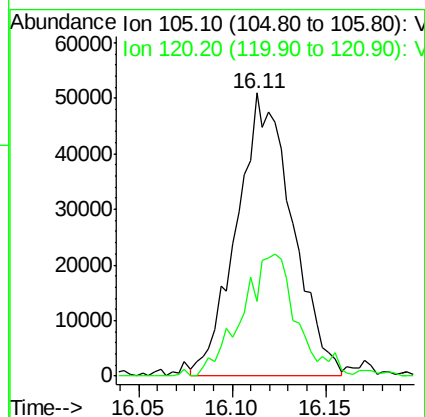
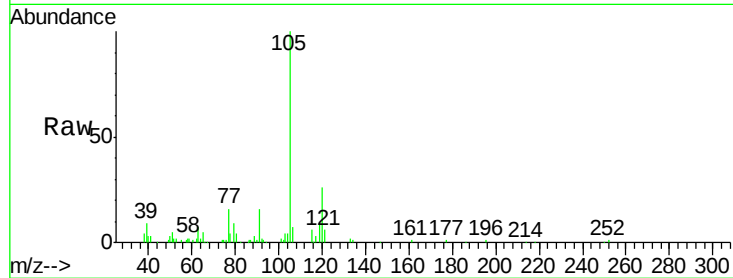
105 100

120 26.3 36.4 54.6#

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#74

1,2,4-Trimethylbenzene

Concen: 0.334 ppbv m

RT: 16.89 min Scan# 4340

Delta R.T. -0.00 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:105 Resp: 132019

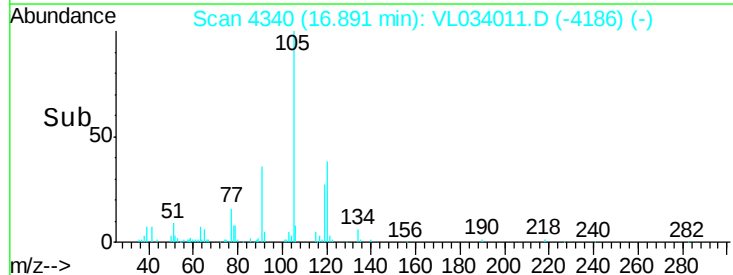
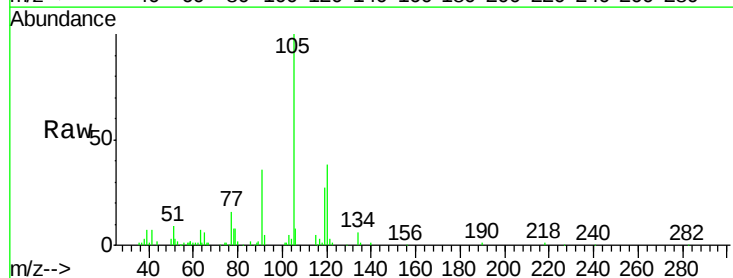
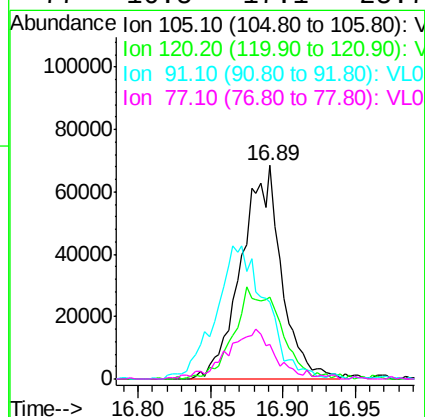
Ion Ratio Lower Upper

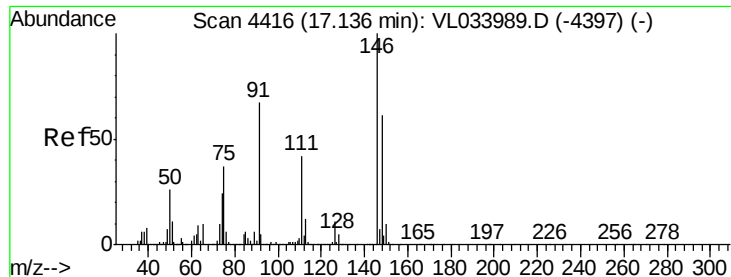
105 100

120 38.4 36.2 54.2

91 35.9 34.3 51.5

77 16.5 17.1 25.7#





#75

1,3-Dichlorobenzene

Concen: 0.384 ppbv

RT: 17.12 min Scan# 4412

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

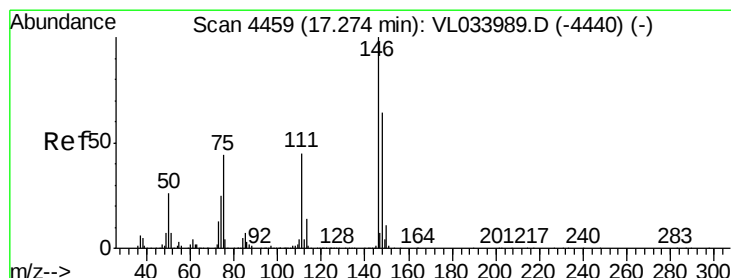
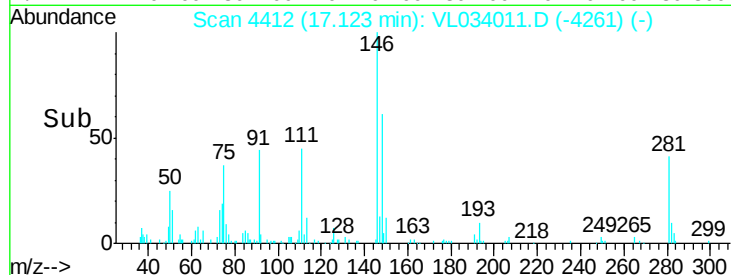
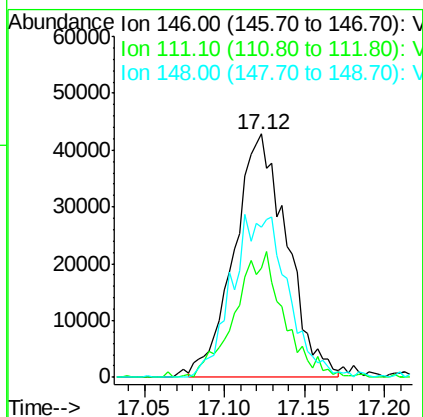
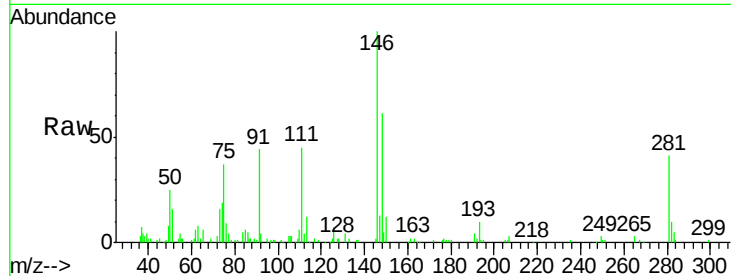
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	146	Resp:	96515
Ion Ratio	Lower	Upper	
146	100		
111	48.1	22.3	66.9
148	70.3	32.0	96.2

Manual Integrations
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#76

1,4-Dichlorobenzene

Concen: 0.367 ppbv m

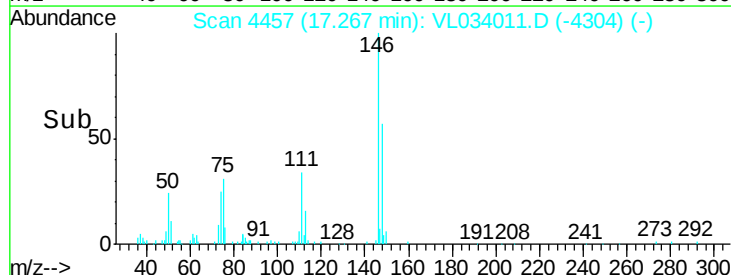
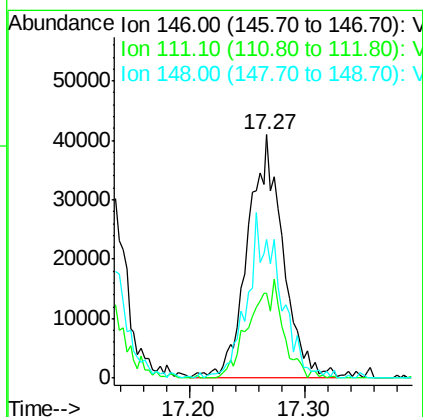
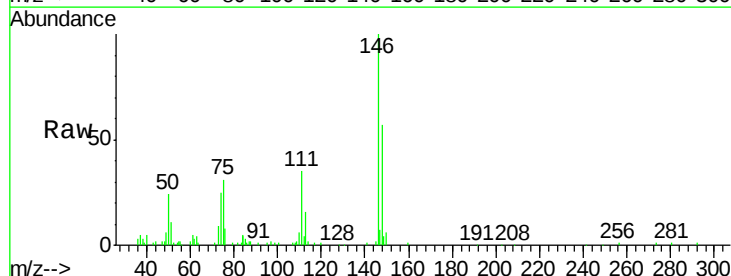
RT: 17.27 min Scan# 4457

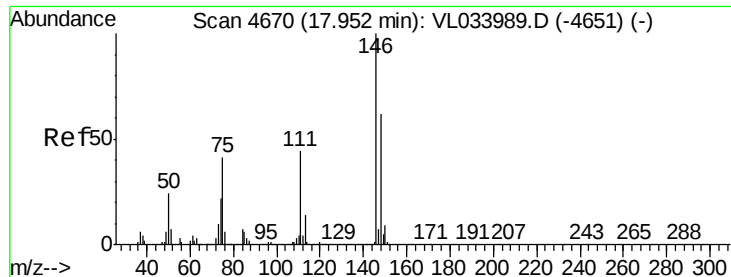
Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:	146	Resp:	86997
Ion Ratio	Lower	Upper	
146	100		
111	0.0	21.9	65.5#
148	0.0	32.5	97.5#





#77

1,2-Dichlorobenzene

Concen: 0.375 ppbv

RT: 17.95 min Scan# 4668

Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Instrument :

MSVOA_L

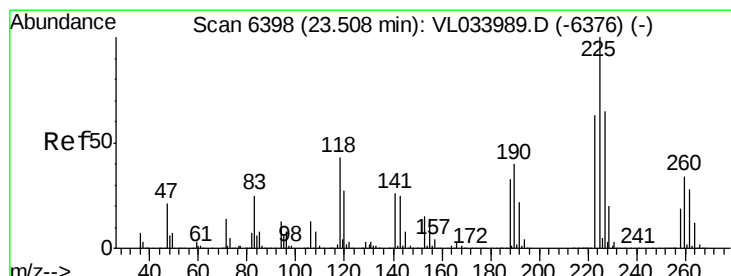
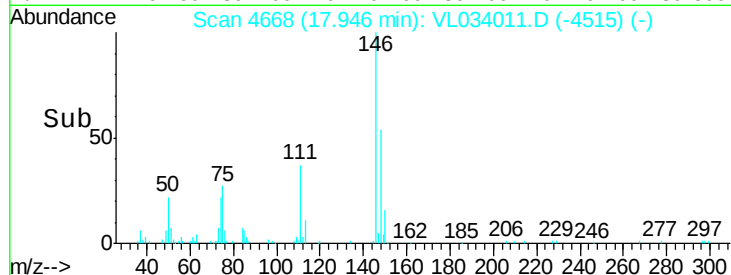
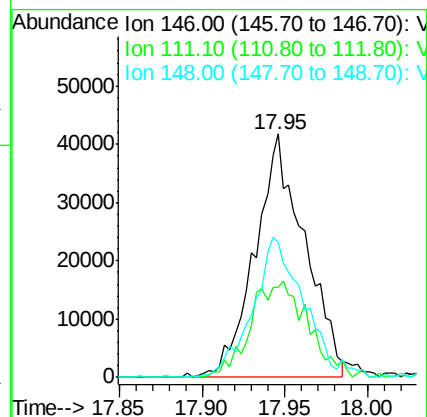
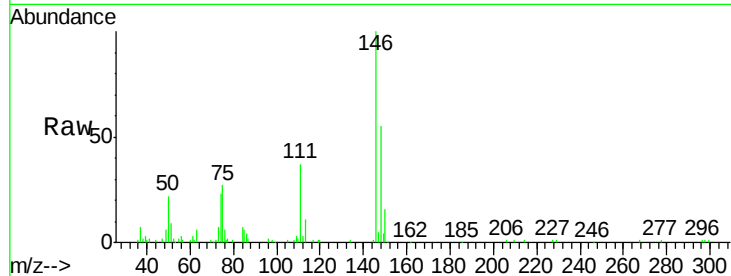
ClientSampleId :

MDL-MDL-AIR-03-QT3-2019

Tot Ion:	146	Resp:	87215
Ion Ratio	Lower	Upper	
146	100		
111	46.4	22.7	68.1
148	59.6	32.1	96.3

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#78

Hexachloro-1,3-Butadiene

Concen: 0.414 ppbv m

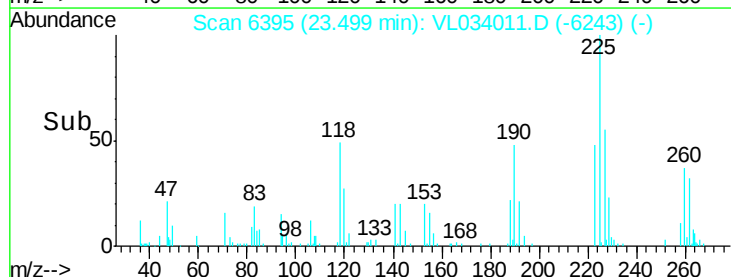
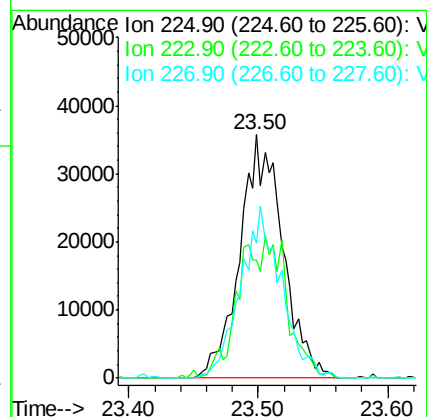
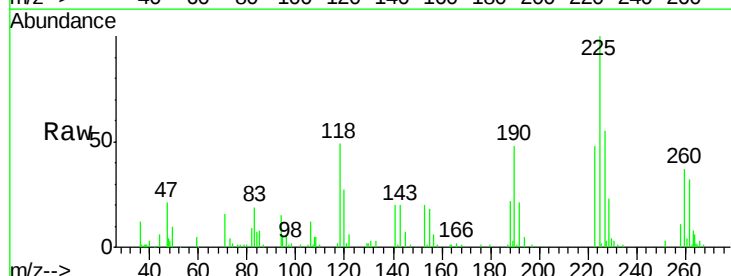
RT: 23.50 min Scan# 6395

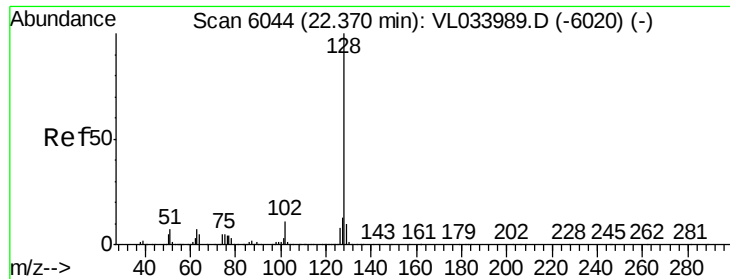
Delta R.T. -0.01 min

Lab File: VL034011.D

Acq: 8 Jul 2019 14:48

Tgt Ion:	225	Resp:	82053
Ion Ratio	Lower	Upper	
225	100		
223	0.0	51.5	77.3#
227	0.0	52.1	78.1#





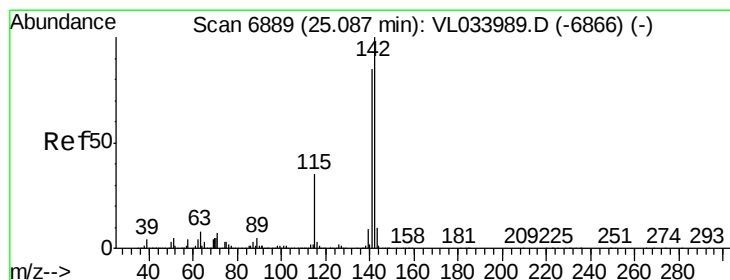
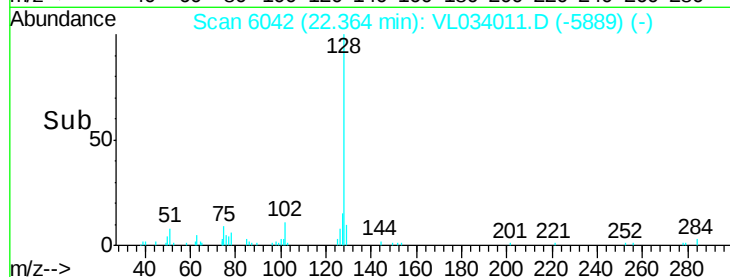
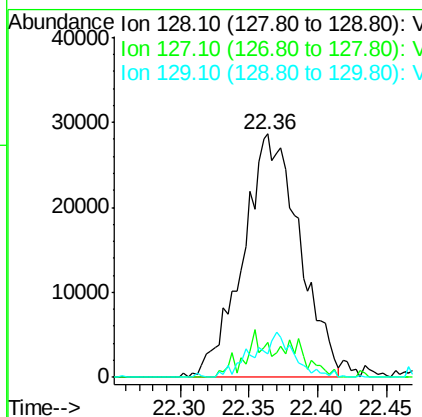
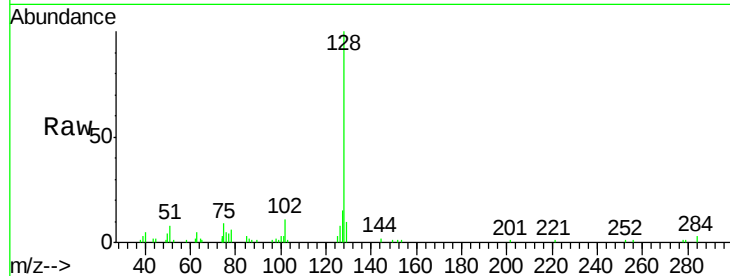
#79
Naphthalene
Concen: 0.246 ppbv m
RT: 22.36 min Scan# 6042
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Lower	Upper
128	100		
127	14.6	10.6	15.8
129	9.5	8.3	12.5

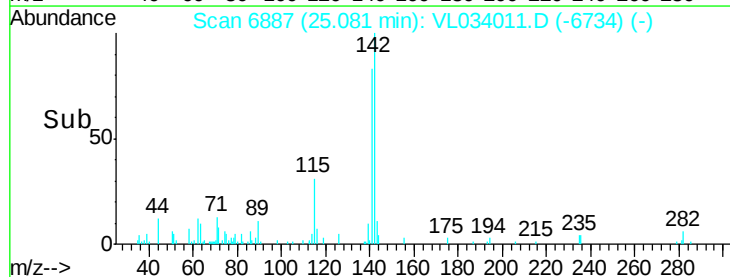
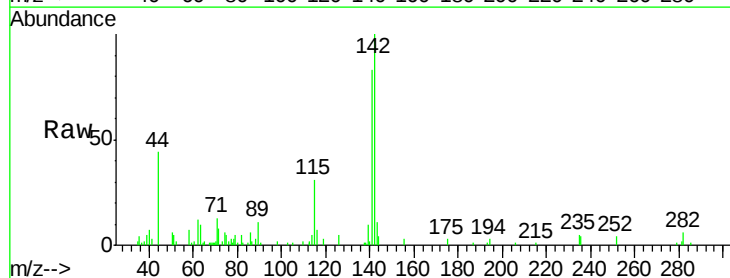
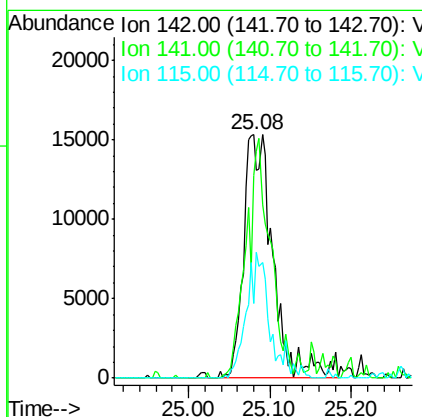
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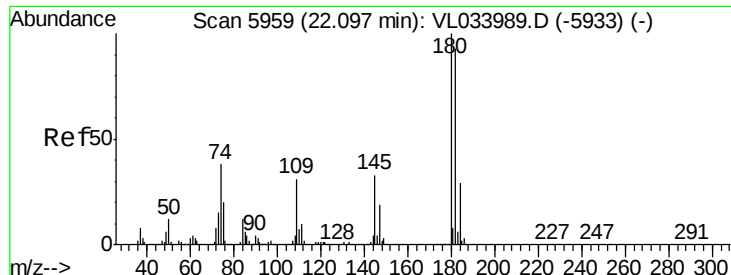
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#80
Naphthalene, 2-methyl-
Concen: 0.313 ppbv
RT: 25.08 min Scan# 6887
Delta R.T. -0.01 min
Lab File: VL034011.D
Acq: 8 Jul 2019 14:48

Tgt Ion	Ratio	Lower	Upper
142	100		
141	82.2	68.2	102.2
115	40.5	29.9	44.9





#81
 1,2,4-Trichlorobenzene
 Concen: 0.303 ppbv m
 RT: 22.09 min Scan# 5956
 Delta R.T. -0.01 min
 Lab File: VL034011.D
 Acq: 8 Jul 2019 14:48

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

Tot Ion	Ratio	Resp	Lower	Upper
180	100	64811		
182	105.9		76.6	114.8
184	0.0		24.6	36.8#

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