

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101719\
 Data File : VL034321.D
 Acq On : 17 Oct 2019 18:02
 Operator : SY/AP
 Sample : K5111-15 0.1 PPB MDL
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Manual Integrations
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 10/22/2019 2:54:54 PM

Quant Time: Oct 20 19:07:19 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 17 2019
 QLast Update : Thu Oct 17 05:12:37 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	973621	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.21	114	1859874	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.15	117	1885572	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1613594	10.10	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	21019	0.125	ppbv	# 75
3) Chlorodifluoromethane	2.97	51	14825	0.130	ppbv	98
4) Chloromethane	3.12	50	9494m	0.141	ppbv	
5) Vinyl Chloride	3.24	62	6939m	0.108	ppbv	
6) Bromomethane	3.46	94	4405m	0.140	ppbv	
7) Chloroethane	3.55	64	2708	0.120	ppbv	98
8) Dichlorotetrafluoroethane	3.17	85	16816	0.116	ppbv	97
9) Propene	2.99	41	7542m	0.149	ppbv	
10) Heptane	8.17	43	10516m	0.081	ppbv	
11) Trichlorofluoromethane	3.94	101	20361	0.128	ppbv	87
12) 1,1,2-Trichlorotrifluoroet	4.49	101	13785	0.132	ppbv	95
13) Ethanol	3.61	45	2527m	0.223	ppbv	
14) Bromoethene	3.74	108	4539m	0.110	ppbv	
15) Acetone	3.86	43	44421m	0.319	ppbv	
16) 1,3-Butadiene	3.31	39	4856m	0.086	ppbv	
17) tert-Butyl alcohol	4.33	59	14770m	0.166	ppbv	
18) 1,1-Dichloroethene	4.29	96	4642	0.102	ppbv	97
19) Isopropyl Alcohol	3.99	45	12082m	0.156	ppbv	
20) Methylene Chloride	4.35	84	13045m	0.259	ppbv	
21) Allyl Chloride	4.42	41	8784m	0.114	ppbv	
22) trans-1,2-Dichloroethene	4.90	96	5889m	0.129	ppbv	
23) Vinyl Acetate	5.10	43	20456m	0.118	ppbv	
24) 1,1-Dichloroethane	5.02	63	15678m	0.121	ppbv	
25) Ethyl Acetate	5.71	43	26093m	0.111	ppbv	
26) Hexane	5.71	57	10333m	0.103	ppbv	
27) Carbon Disulfide	4.56	76	10593m	0.102	ppbv	
28) Methyl tert-Butyl Ether	5.07	73	13669m	0.090	ppbv	
29) Chloroform	5.77	83	15524	0.098	ppbv	# 79
30) Cyclohexane	7.21	84	12797m	0.174	ppbv	
31) cis-1,2-Dichloroethene	5.56	61	9906m	0.097	ppbv	
32) 1,1,1-Trichloroethane	6.55	97	16272m	0.106	ppbv	
34) 2-Butanone	5.28	43	16110	0.106	ppbv	99
35) Carbon Tetrachloride	7.05	117	16653m	0.103	ppbv	
36) Benzene	6.93	78	16337m	0.092	ppbv	
37) 1,2-Dichloroethane	6.34	62	16264	0.122	ppbv	98
38) Trichloroethene	7.88	130	8592m	0.120	ppbv	
39) 1,2-Dichloropropane	7.65	63	8016m	0.104	ppbv	
40) 1,4-Dioxane	7.94	88	2885m	0.107	ppbv	
41) Tetrahydrofuran	6.11	42	7307m	0.087	ppbv	
42) Bromodichloromethane	7.83	83	17968m	0.110	ppbv	
43) Methyl Methacrylate	8.06	69	5323m	0.072	ppbv	

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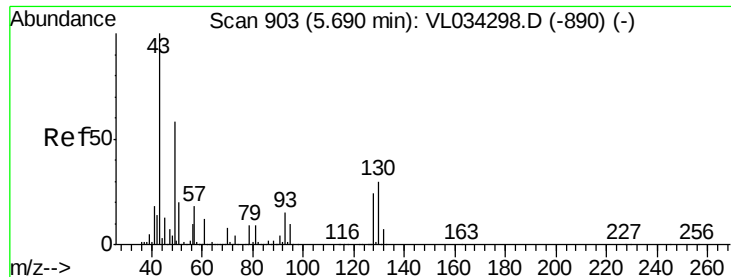
Manual Integrations
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 10/22/2019 2:54:54 PM

Quant Time: Oct 20 19:07:19 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 18 19:07:19 2019
 QLast Update : Thu Oct 17 05:12:37 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.91	57	27018m	0.082	ppbv	
45) t-1,3-Dichloropropene	9.34	75	6935m	0.077	ppbv	
46) cis-1,3-Dichloropropene	8.75	75	8380m	0.081	ppbv	
47) 1,1,2-Trichloroethane	9.54	97	8537m	0.110	ppbv	
48) Dibromochloromethane	10.36	129	10576m	0.083	ppbv	
49) Bromoform	13.11	173	10137m	0.090	ppbv	
50) 4-Methyl-2-Pentanone	8.82	43	17643m	0.081	ppbv	
51) 2-Hexanone	10.23	43	10267m	0.058	ppbv	
52) Tetrachloroethene	11.29	164	8044m	0.115	ppbv	
53) Toluene	9.87	91	14595m	0.074	ppbv	
54) 1,2-Dibromoethane	10.67	107	11607m	0.101	ppbv	
56) 1,1,1,2-Tetrachloroethane	12.19	131	8771m	0.101	ppbv	
57) Chlorobenzene	12.22	112	19619m	0.125	ppbv	
58) Ethyl Benzene	12.78	91	18954m	0.072	ppbv	
59) m/p-Xylene	13.06	91	35444m	0.155	ppbv	
60) o-Xylene	13.76	91	18744m	0.082	ppbv	
61) Styrene	13.60	104	9547m	0.060	ppbv	
62) Isopropylbenzene	14.74	105	25565m	0.085	ppbv	
63) 1,1,2,2-Tetrachloroethane	13.76	83	20360m	0.111	ppbv	
64) n-propylbenzene	15.64	120	5785m	0.075	ppbv	
65) tert-Butylbenzene	16.81	119	19035m	0.072	ppbv	
66) Benzyl Chloride	17.08	91	8456m	0.080	ppbv	
67) sec-Butylbenzene	17.38	105	28648m	0.077	ppbv	
69) p-Isopropyltoluene	17.73	119	22012m	0.072	ppbv	
70) n-Butylbenzene	18.64	91	24369m	0.073	ppbv	
71) 2-Chlorotoluene	15.52	91	19010m	0.082	ppbv	
72) 4-Ethyltoluene	15.92	105	17440m	0.068	ppbv	
73) 1,3,5-Trimethylbenzene	16.08	105	18133m	0.072	ppbv	
74) 1,2,4-Trimethylbenzene	16.84	105	19466m	0.074	ppbv	
75) 1,3-Dichlorobenzene	17.07	146	18370m	0.116	ppbv	
76) 1,4-Dichlorobenzene	17.23	146	14694	0.095	ppbv	93
77) 1,2-Dichlorobenzene	17.91	146	16382m	0.105	ppbv	
78) Hexachloro-1,3-Butadiene	23.46	225	11725	0.091	ppbv #	53
79) Naphthalene	22.32	128	13652m	0.071	ppbv	
80) Naphthalene, 2-methyl-	25.06	142	2694	0.048	ppbv #	83
81) 1,2,4-Trichlorobenzene	22.03	180	9983m	0.079	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 903

Delta R.T. 0.00 min

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Instrument :

MSVOA_L

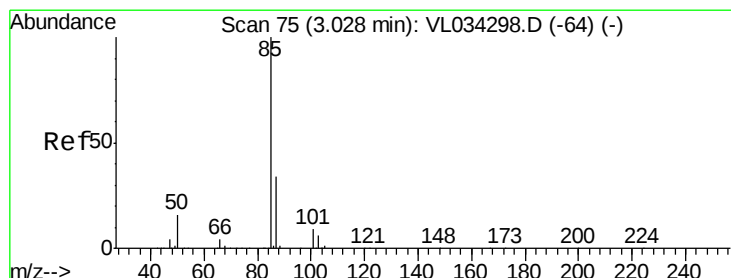
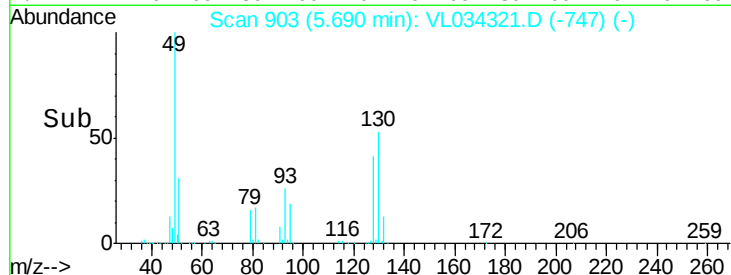
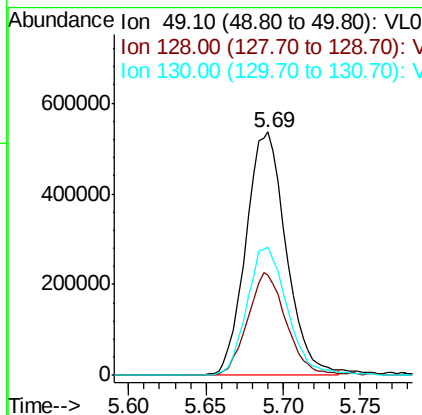
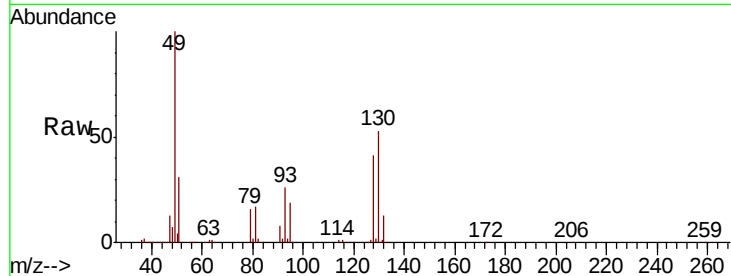
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	49	Resp:	973621
Ion	Ratio	Lower	Upper
49	100		
128	41.2	20.6	61.8
130	53.5	26.2	78.5

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#2

Dichlorodifluoromethane

Concen: 0.125 ppbv

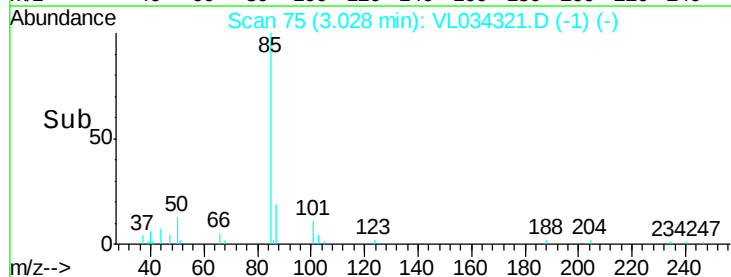
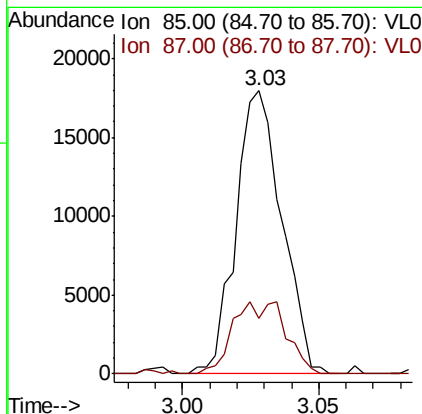
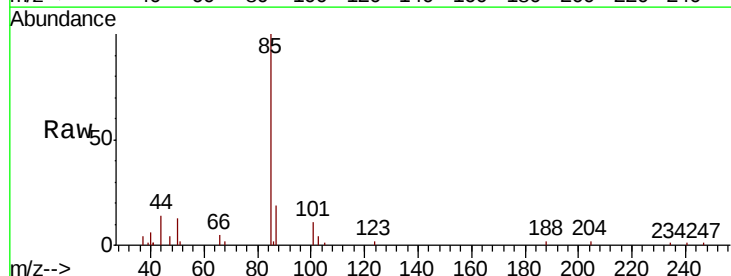
RT: 3.03 min Scan# 75

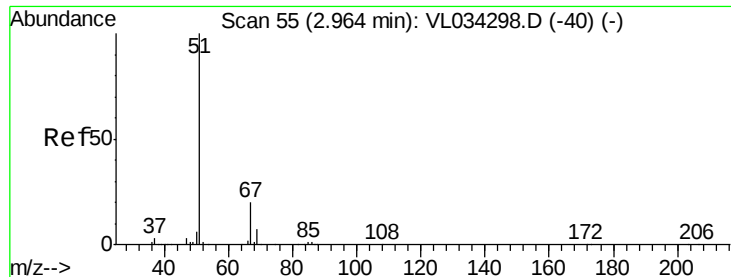
Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	85	Resp:	21019
Ion	Ratio	Lower	Upper
85	100		
87	19.5	27.0	40.6





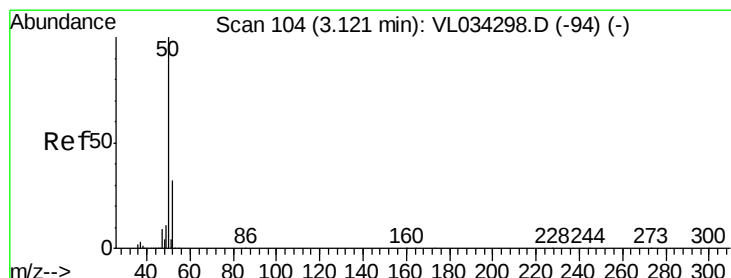
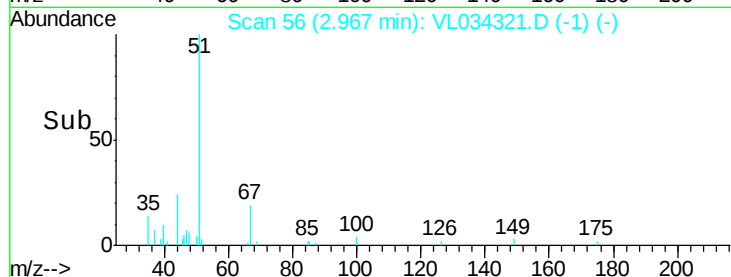
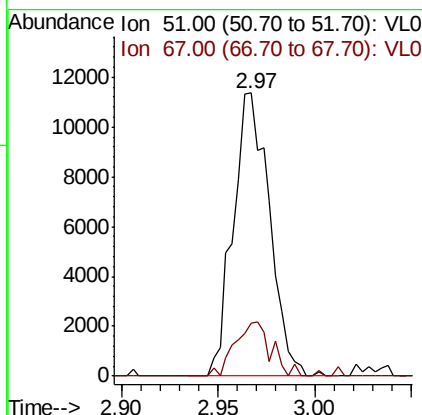
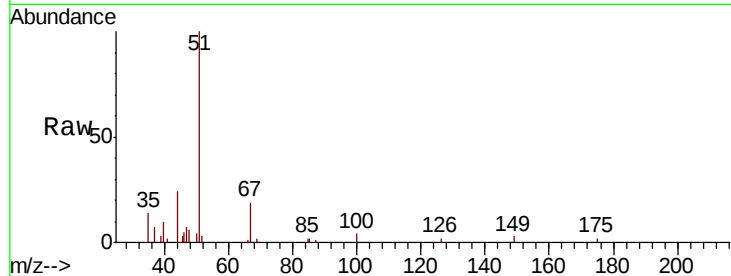
#3
Chlorodifluoromethane
Concen: 0.130 ppbv
RT: 2.97 min Scan# 56
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	51	Resp	14825
Ion Ratio	Lower	Upper	
51	100		
67	18.9	15.8	23.8

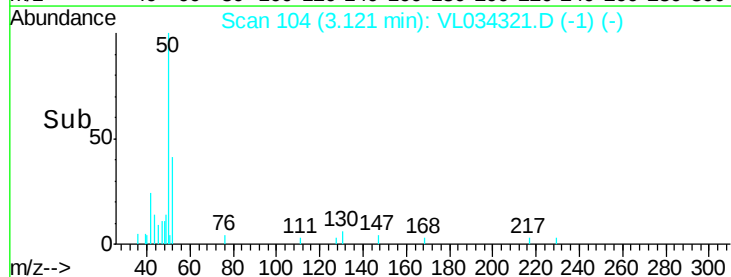
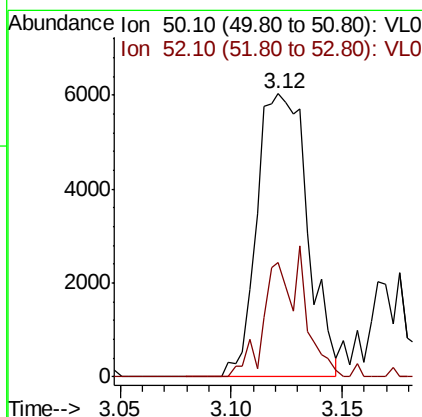
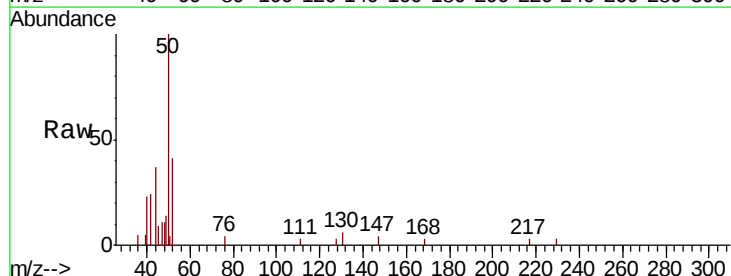
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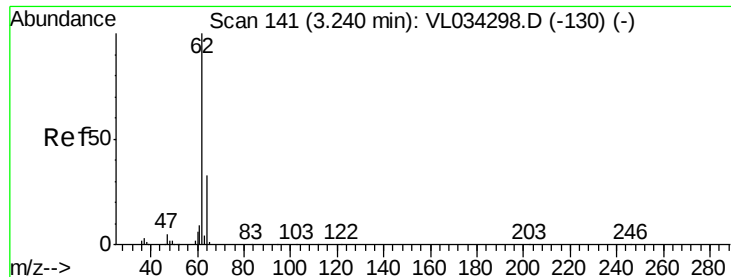
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#4
Chloromethane
Concen: 0.141 ppbv m
RT: 3.12 min Scan# 104
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	50	Resp	9494
Ion Ratio	Lower	Upper	
50	100		
52	40.6	25.4	38.2#





#5

Vinyl Chloride

Concen: 0.108 ppbv m

RT: 3.24 min Scan# 142

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 62 Resp: 6939

Ion Ratio Lower Upper

62 100

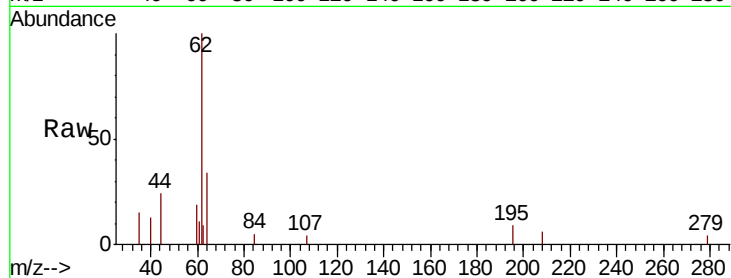
64 33.8 26.0 39.0

Manual Integrations

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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

6000

5000

4000

3000

2000

1000

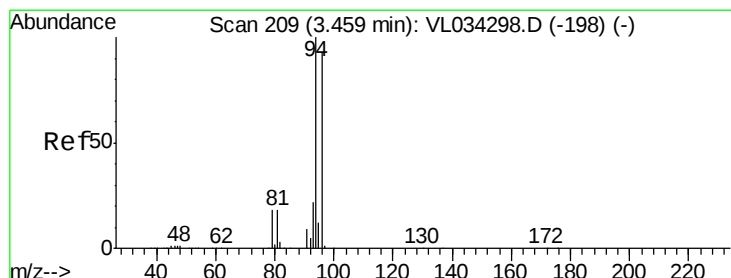
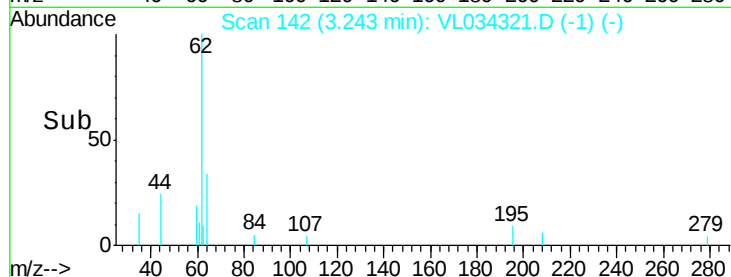
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Time-->

3.20

3.25

3.30



#6

Bromomethane

Concen: 0.140 ppbv m

RT: 3.46 min Scan# 210

Delta R.T. 0.00 min

Lab File: VL034321.D

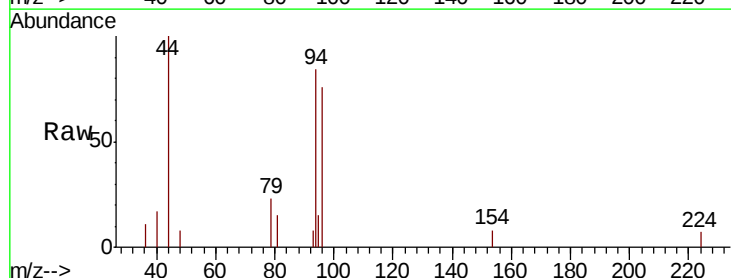
Acq: 17 Oct 2019 18:02

Tgt Ion: 94 Resp: 4405

Ion Ratio Lower Upper

94 100

96 90.6 74.6 112.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

3000

2000

1000

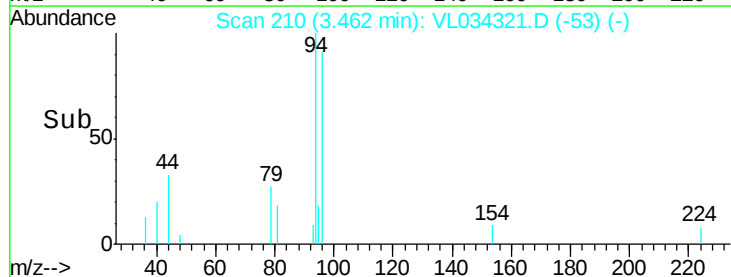
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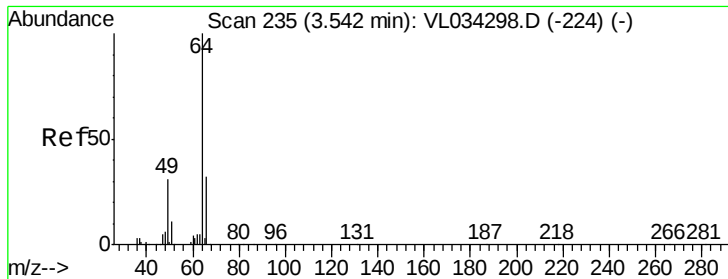
Time-->

3.40

3.45

3.50





#7

Chloroethane

Concen: 0.120 ppbv

RT: 3.55 min Scan# 236

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 64 Resp: 2708

Ion Ratio Lower Upper

64 100

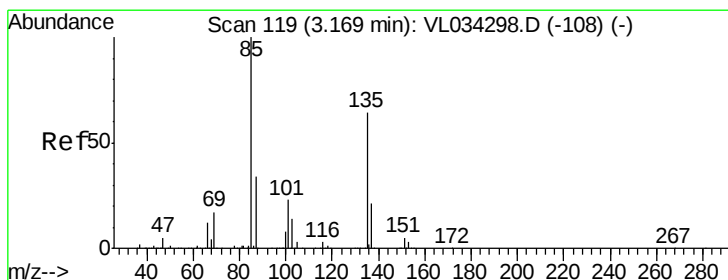
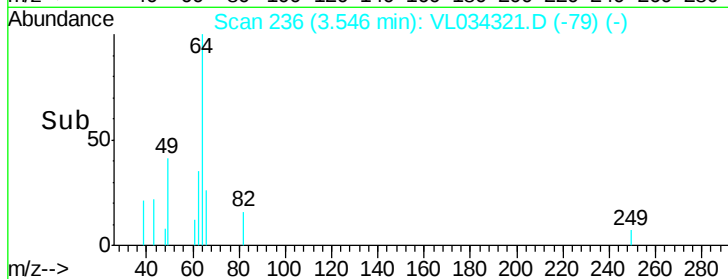
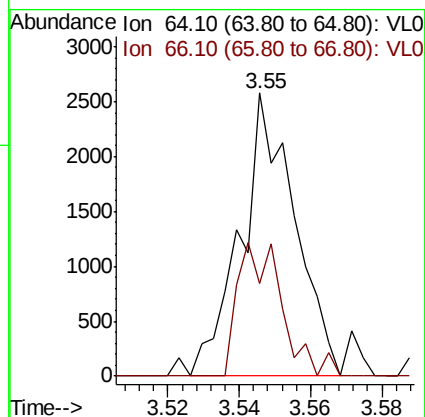
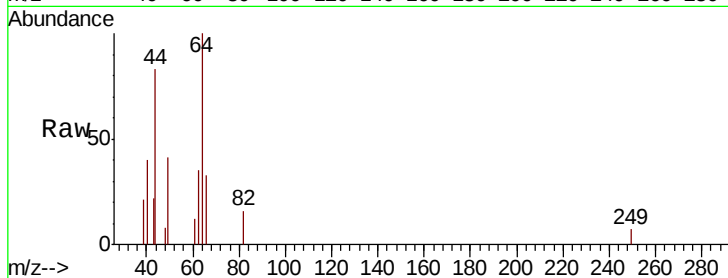
66 32.7 25.4 38.0

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#8

Dichlorotetrafluoroethane

Concen: 0.116 ppbv

RT: 3.17 min Scan# 120

Delta R.T. 0.00 min

Lab File: VL034321.D

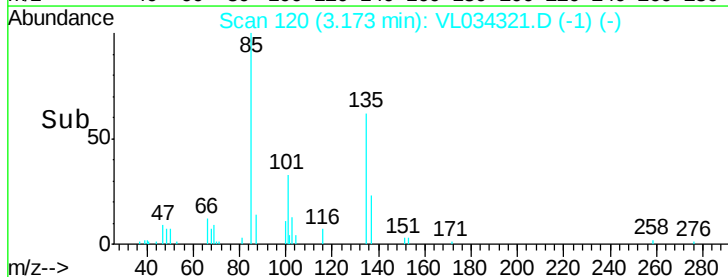
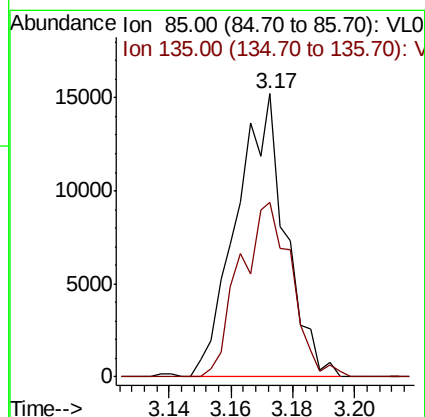
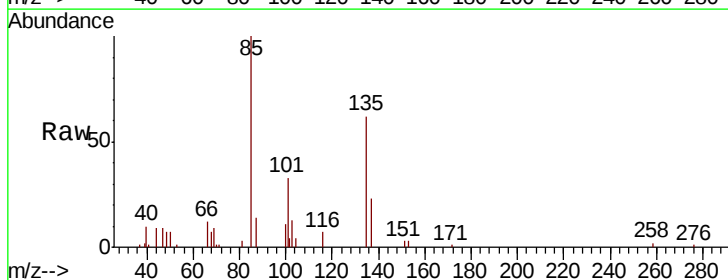
Acq: 17 Oct 2019 18:02

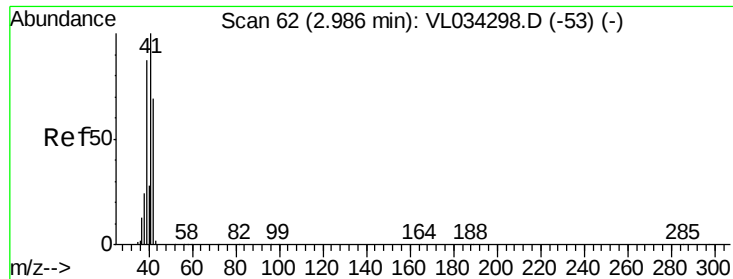
Tgt Ion: 85 Resp: 16816

Ion Ratio Lower Upper

85 100

135 64.7 50.2 75.2





#9

Propene

Concen: 0.149 ppbv m

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 41 Resp: 7542

Ion Ratio Lower Upper

41 100

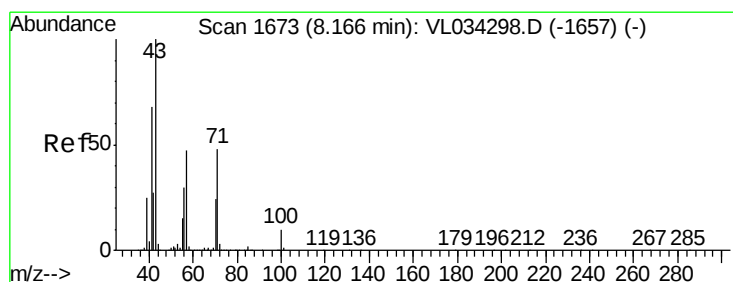
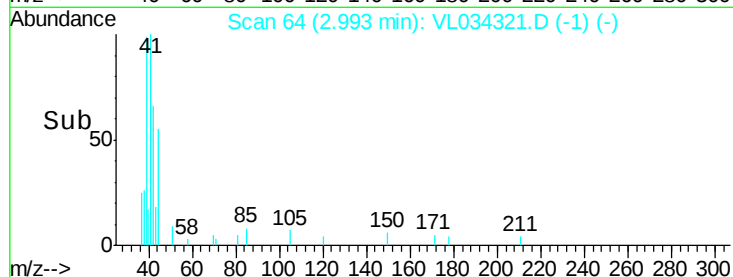
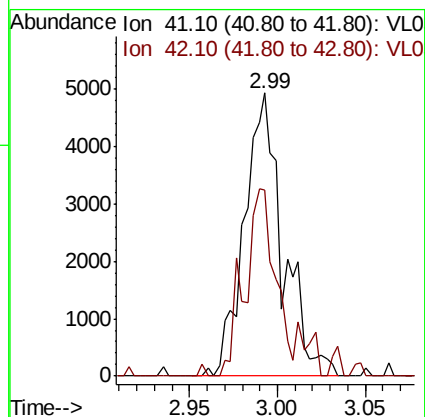
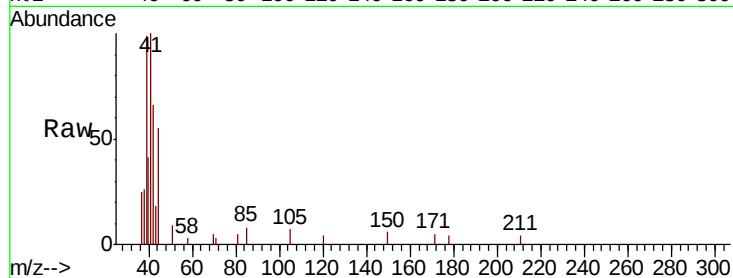
42 2.0 53.9 80.9#

Manual Integrations

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#10

Heptane

Concen: 0.081 ppbv m

RT: 8.17 min Scan# 1674

Delta R.T. 0.00 min

Lab File: VL034321.D

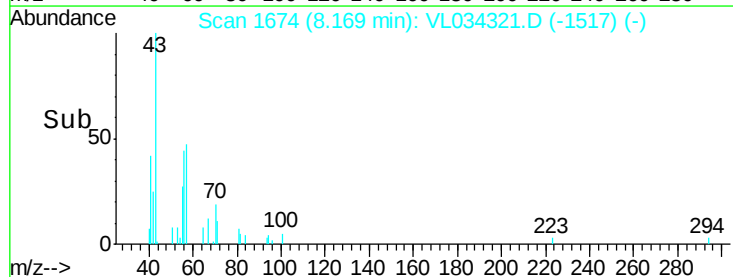
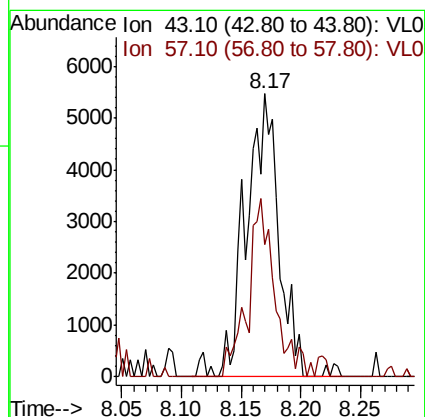
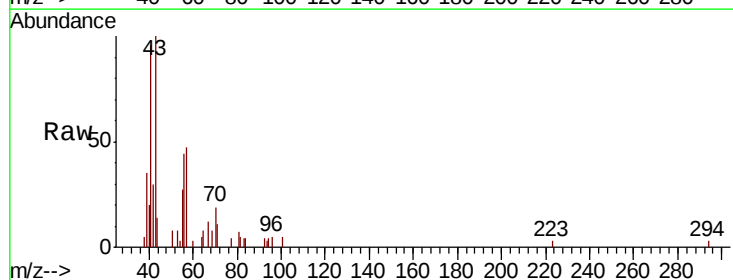
Acq: 17 Oct 2019 18:02

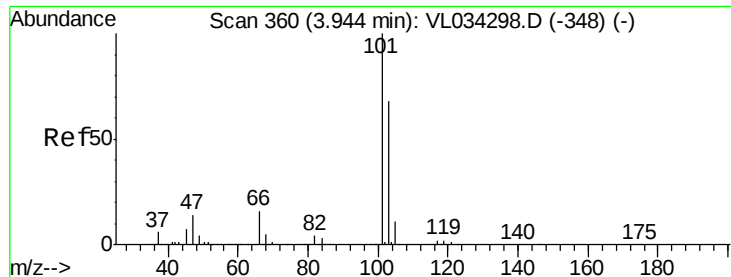
Tgt Ion: 43 Resp: 10516

Ion Ratio Lower Upper

43 100

57 53.4 39.5 59.3





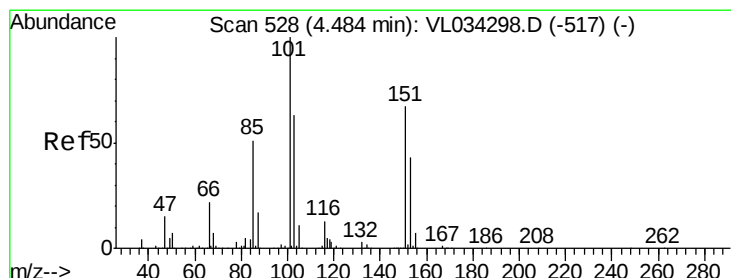
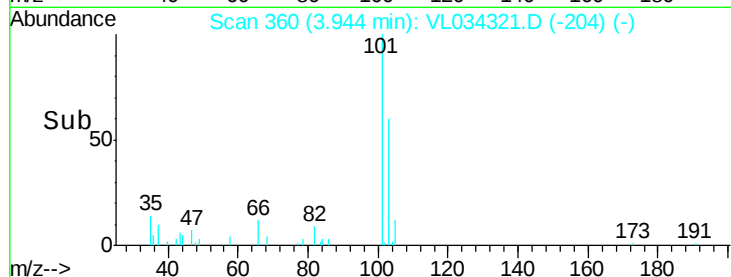
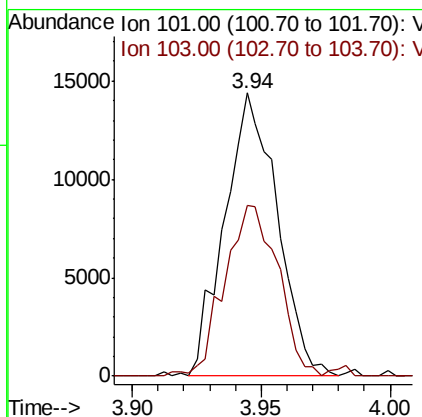
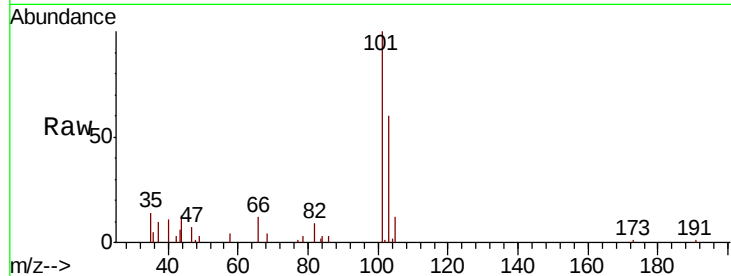
#11
 Trichlorofluoromethane
 Concen: 0.128 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. 0.00 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
101	100		
103	57.8	54.5	81.7

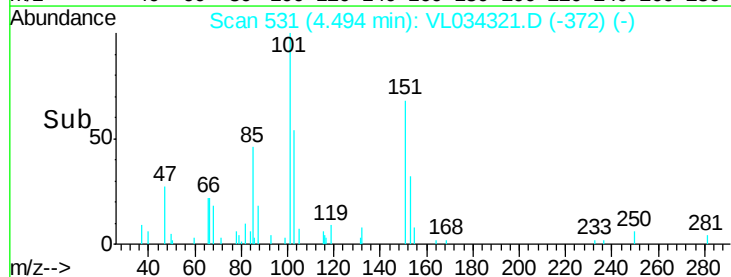
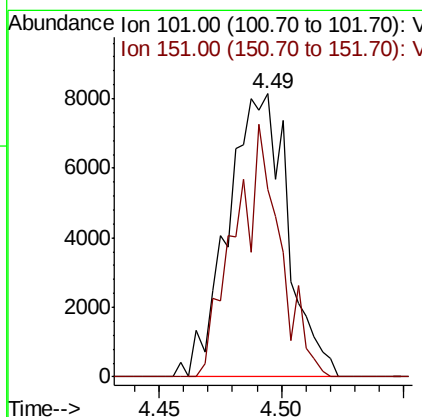
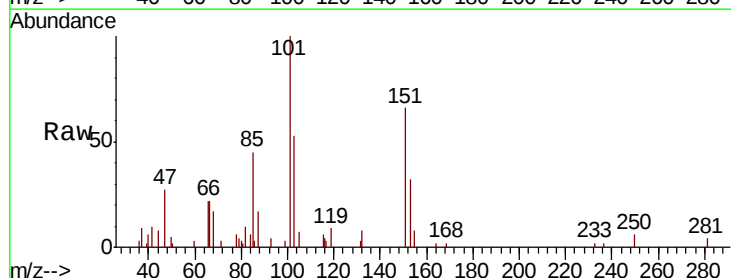
Manual Integrations
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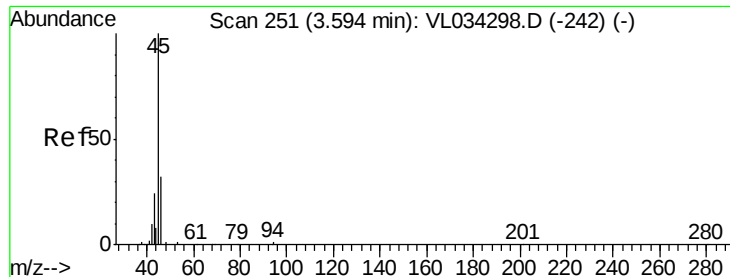
MMDadoda
 10/22/2019 2:54:54 PM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.132 ppbv
 RT: 4.49 min Scan# 531
 Delta R.T. 0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
101	100		
151	67.5	57.4	86.2





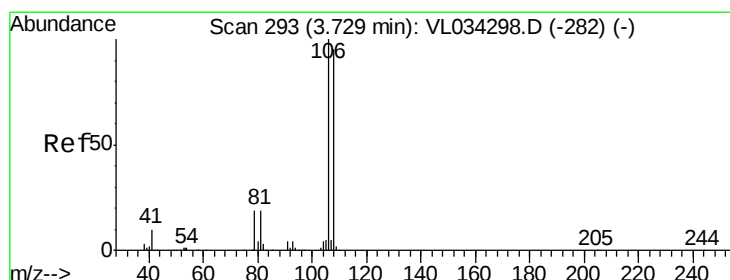
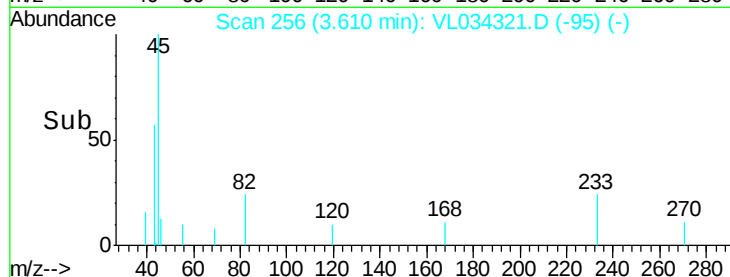
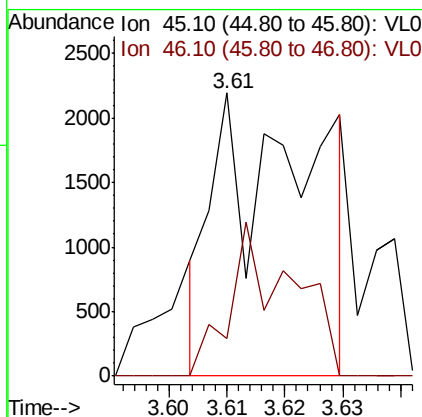
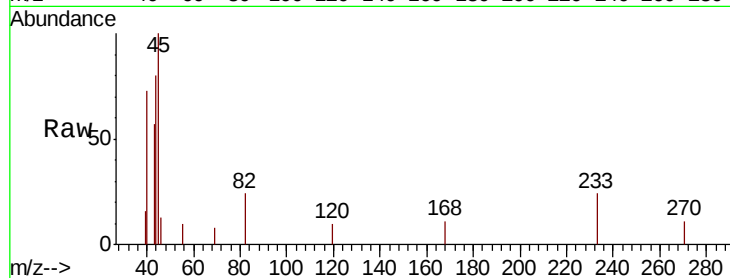
#13
Ethanol
Concen: 0.223 ppbv m
RT: 3.61 min Scan# 256
Delta R.T. 0.02 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 45 Resp: 2527
Ion Ratio Lower Upper
45 100
46 0.0 15.8 63.2#

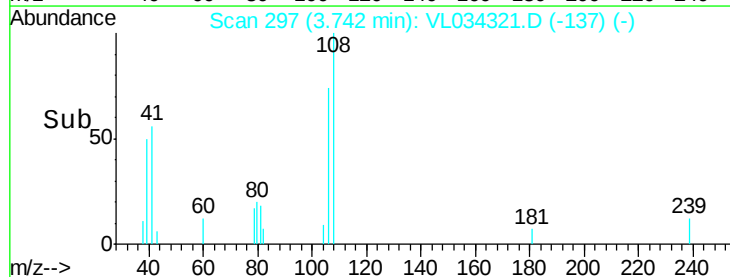
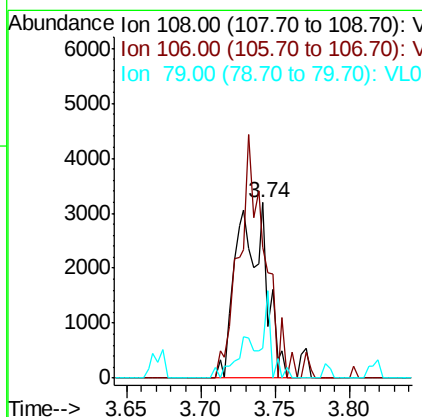
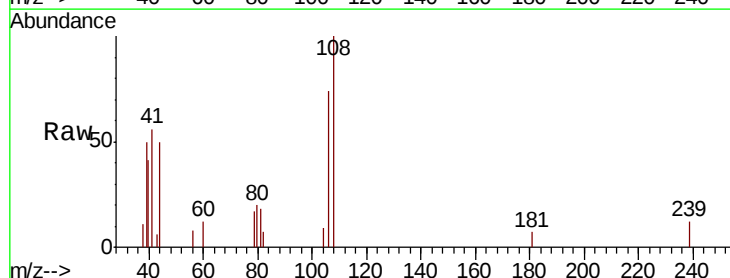
Manual Integrations
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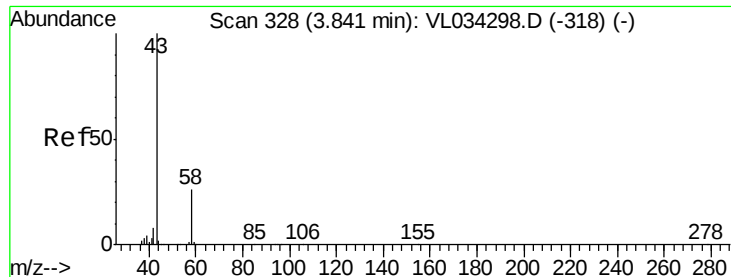
MMDadoda
10/22/2019 2:54:54 PM



#14
Bromoethene
Concen: 0.110 ppbv m
RT: 3.74 min Scan# 297
Delta R.T. 0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion: 108 Resp: 4539
Ion Ratio Lower Upper
108 100
106 114.9 84.8 127.2
79 0.0 17.0 25.4#





#15

Acetone

Concen: 0.319 ppbv m

RT: 3.86 min Scan# 335

Delta R.T. 0.02 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 43 Resp: 44421

Ion Ratio Lower Upper

43 100

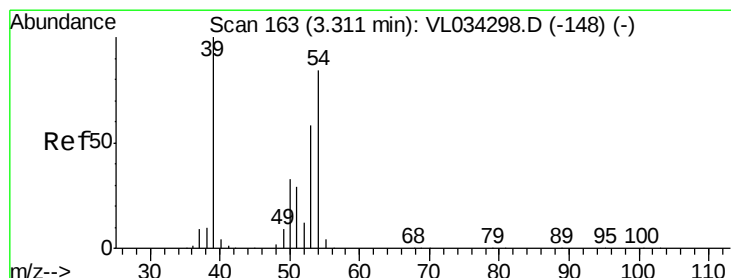
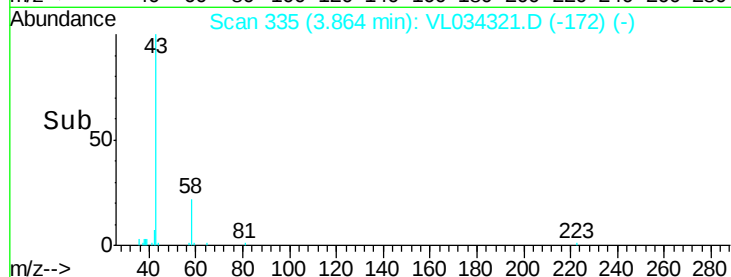
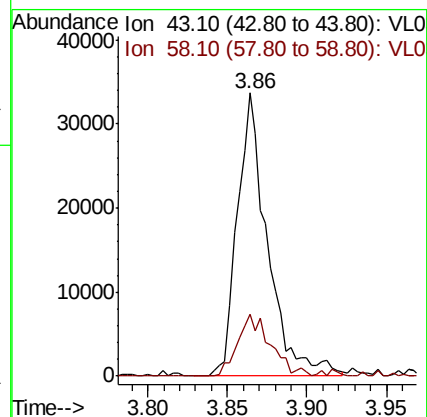
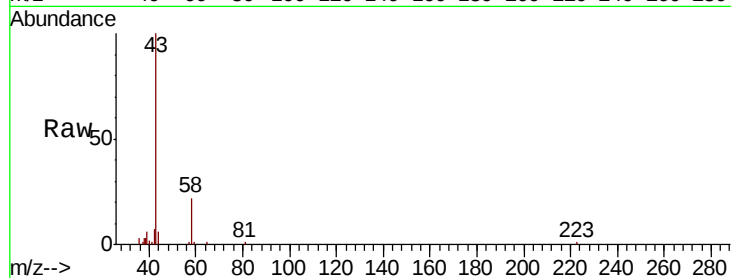
58 25.2 20.4 30.6

Manual Integrations

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MMDadoda

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#16

1,3-Butadiene

Concen: 0.086 ppbv m

RT: 3.31 min Scan# 164

Delta R.T. 0.00 min

Lab File: VL034321.D

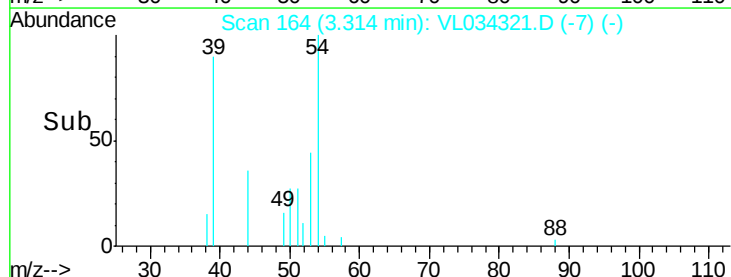
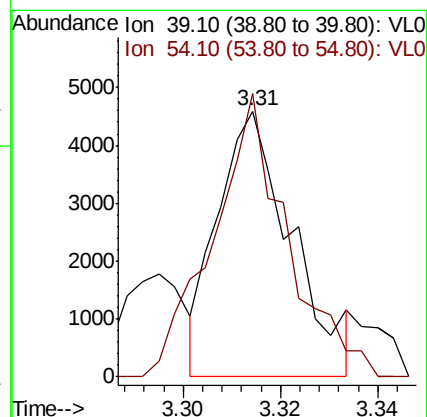
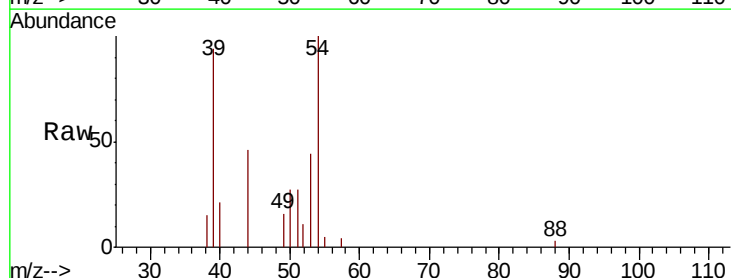
Acq: 17 Oct 2019 18:02

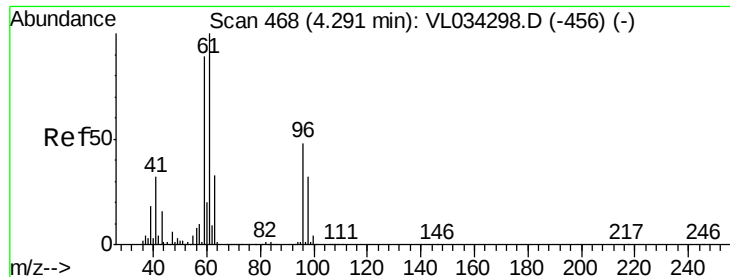
Tgt Ion: 39 Resp: 4856

Ion Ratio Lower Upper

39 100

54 107.0 63.9 95.9#





#17

tert-Butyl alcohol

Concen: 0.166 ppbv m

RT: 4.33 min Scan# 480

Delta R.T. 0.04 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 59 Resp: 14770

Ion Ratio Lower Upper

59 100

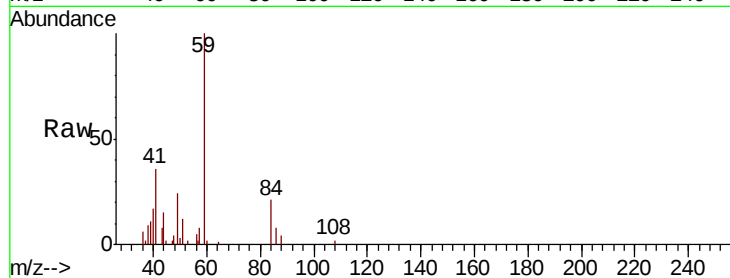
57 0.0 8.8 13.2#

Manual Integrations

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Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

12000

10000

8000

6000

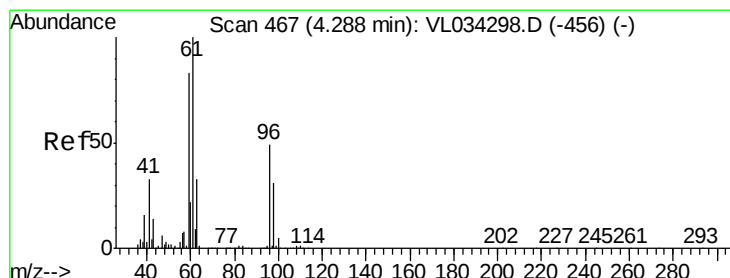
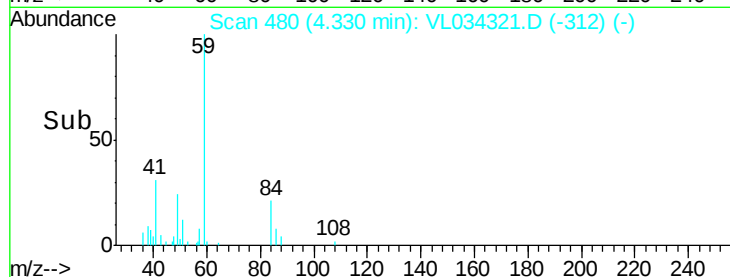
4000

2000

0

Time--> 4.20 4.30 4.40

4.33



#18

1,1-Dichloroethene

Concen: 0.102 ppbv

RT: 4.29 min Scan# 469

Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

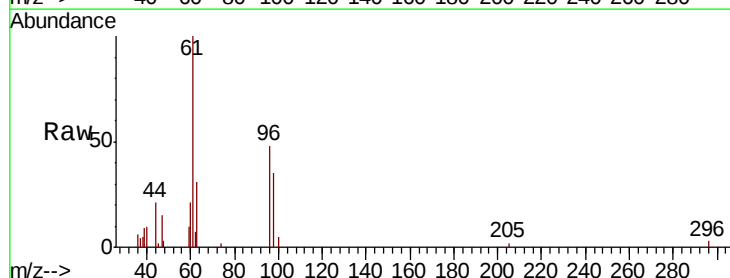
Tgt Ion: 96 Resp: 4642

Ion Ratio Lower Upper

96 100

61 206.3 164.5 246.7

98 72.3 51.7 77.5



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

10000

8000

6000

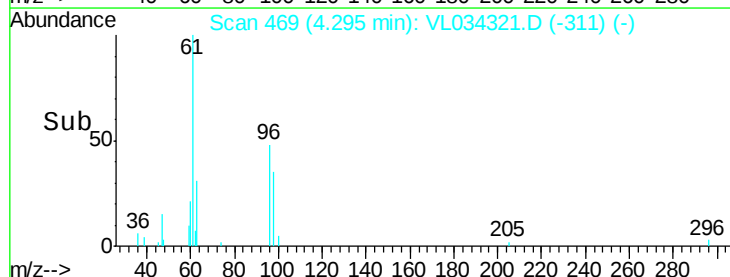
4000

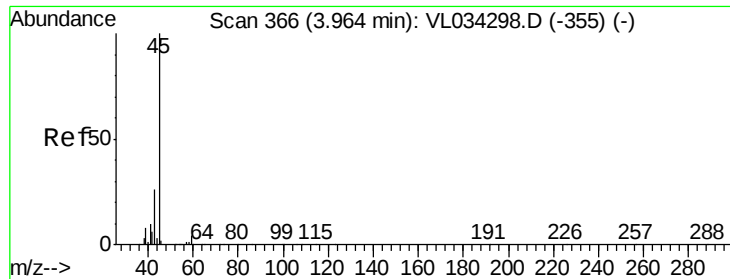
2000

0

Time--> 4.24 4.26 4.28 4.30 4.32

4.29





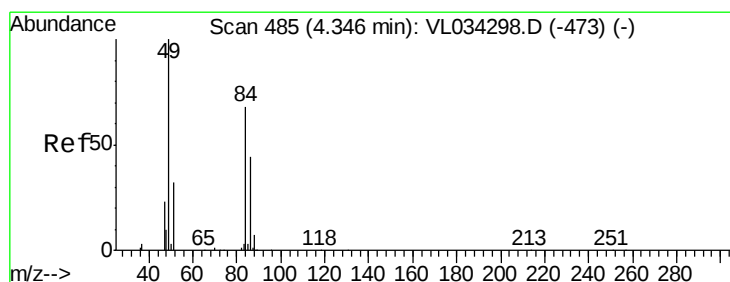
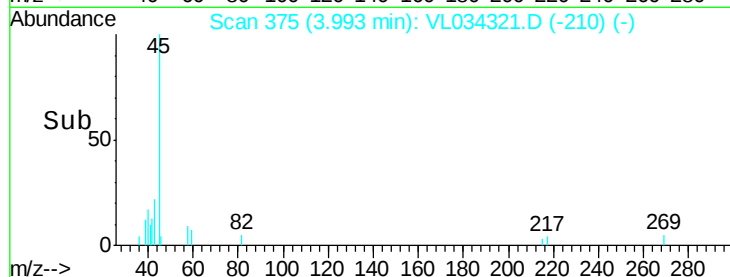
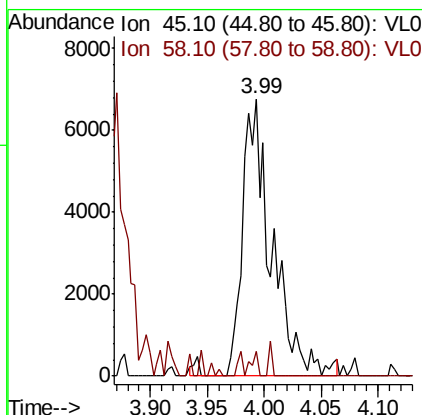
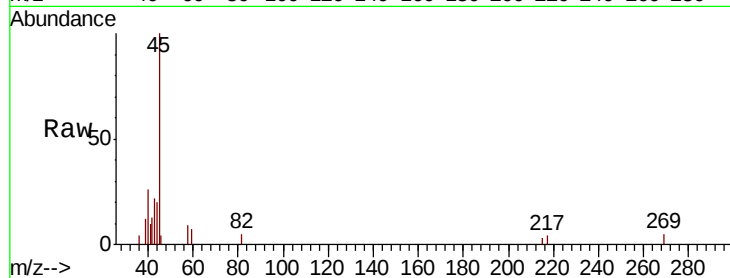
#19
Isopropyl Alcohol
Concen: 0.156 ppbv m
RT: 3.99 min Scan# 375
Delta R.T. 0.03 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
45	100		
58	0.0	1.4	2.2#

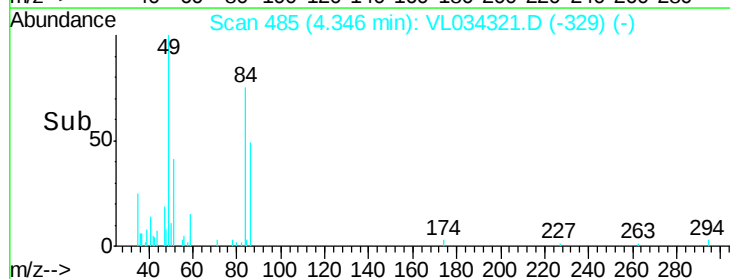
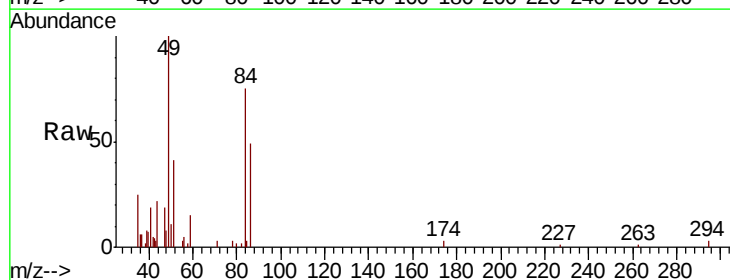
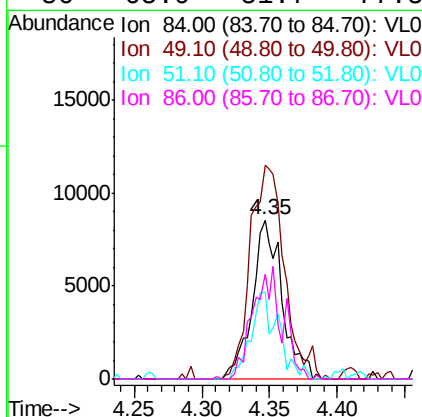
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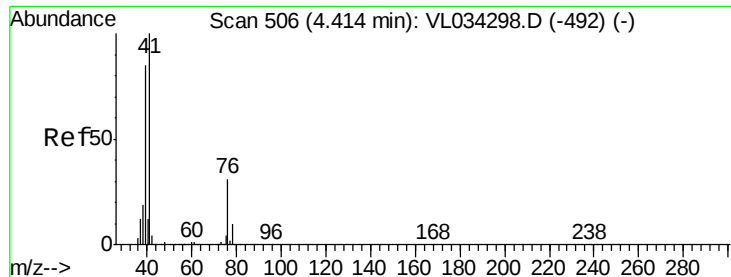
MMDadoda
10/22/2019 2:54:54 PM



#20
Methylene Chloride
Concen: 0.259 ppbv m
RT: 4.35 min Scan# 485
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
84	100		
49	134.1	118.5	177.7
51	54.4	38.8	58.2
86	65.9	51.7	77.5





#21

Allvl Chloride

Concen: 0.114 ppbv m

RT: 4.42 min Scan# 508

Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

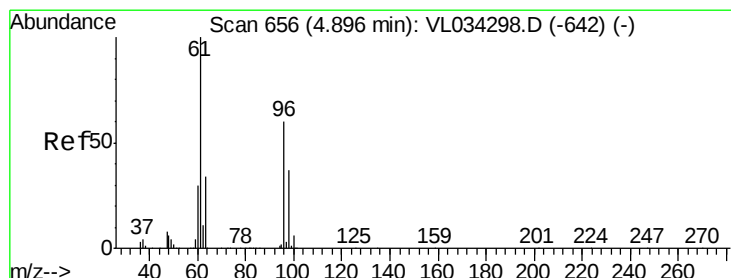
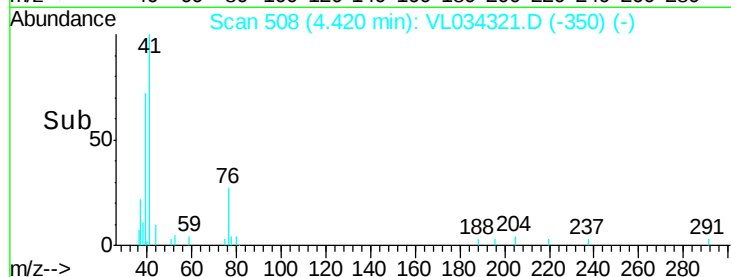
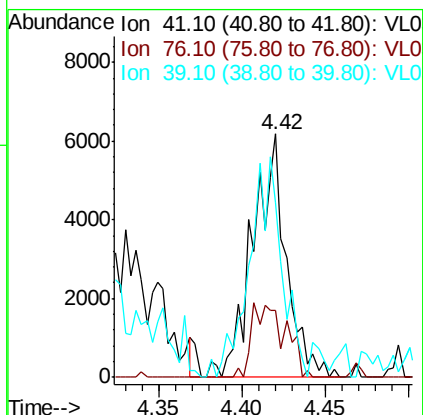
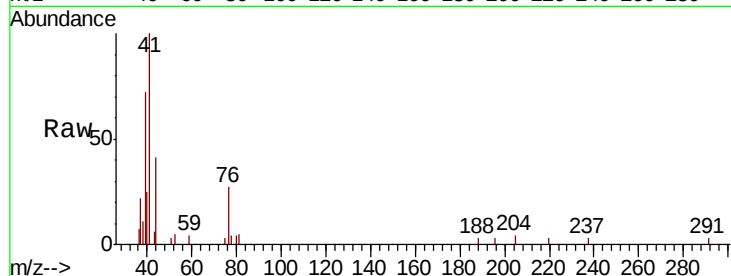
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	41	Resp:	8784
Ion Ratio	Lower	Upper	
41	100		
76	30.0	22.8	34.2
39	0.0	66.0	99.0#

Manual Integrations
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MMDadoda
10/22/2019 2:54:54 PM



#22

trans-1,2-Dichloroethene

Concen: 0.129 ppbv m

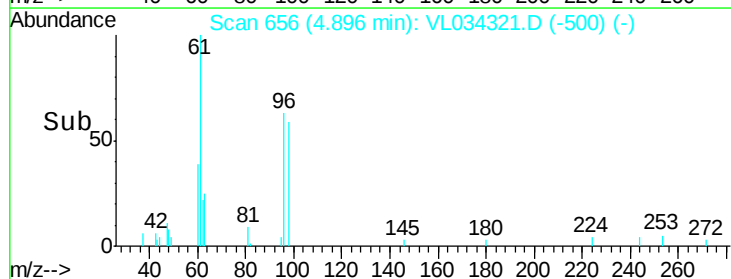
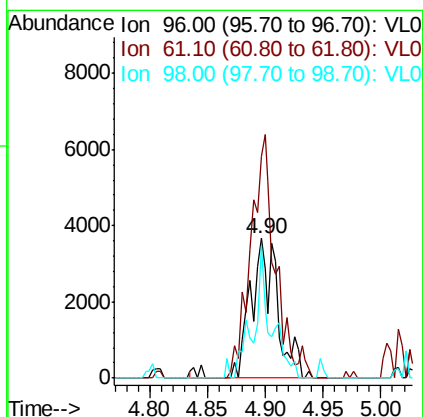
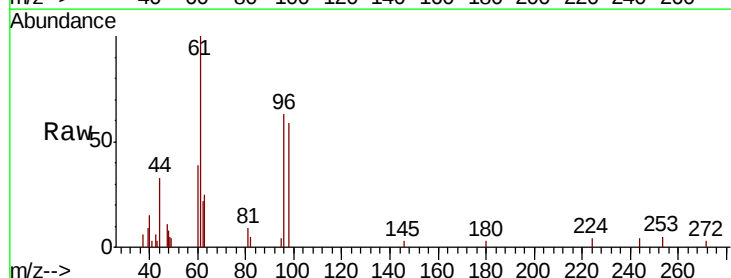
RT: 4.90 min Scan# 656

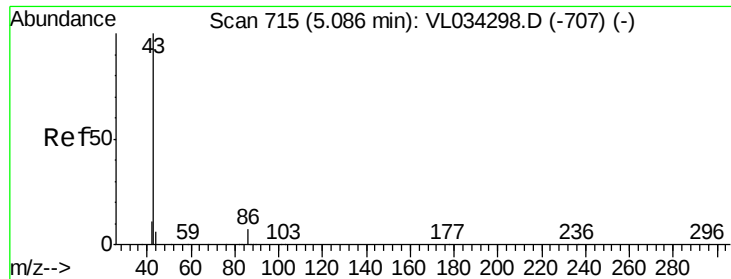
Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	96	Resp:	5889
Ion Ratio	Lower	Upper	
96	100		
61	158.9	133.8	200.6
98	94.3	49.4	74.0#





#23

Vinyl Acetate

Concen: 0.118 ppbv m

RT: 5.10 min Scan# 718

Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

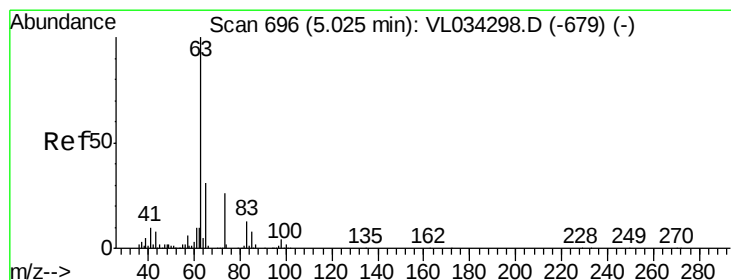
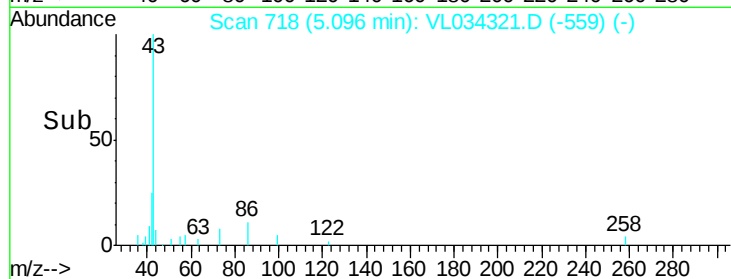
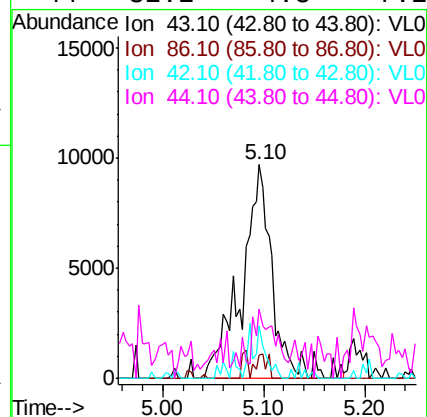
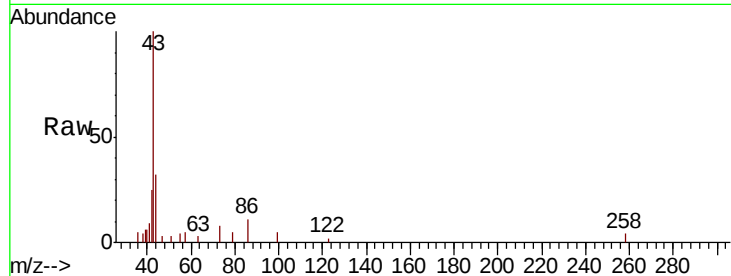
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	43	Resp:	20456
Ion Ratio	Lower	Upper	
43	100		
86	10.6	5.0	7.4#
42	24.6	8.6	13.0#
44	32.2	4.8	7.2#

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#24

1,1-Dichloroethane

Concen: 0.121 ppbv m

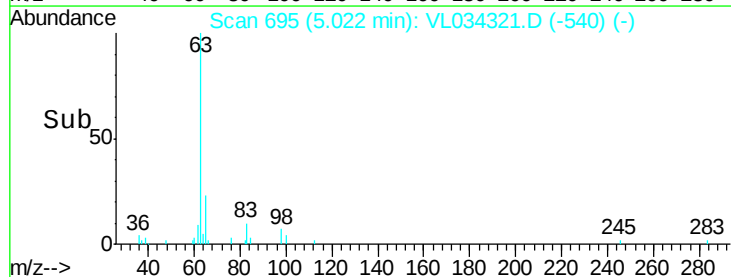
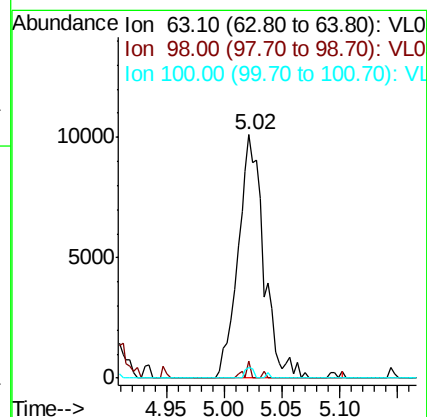
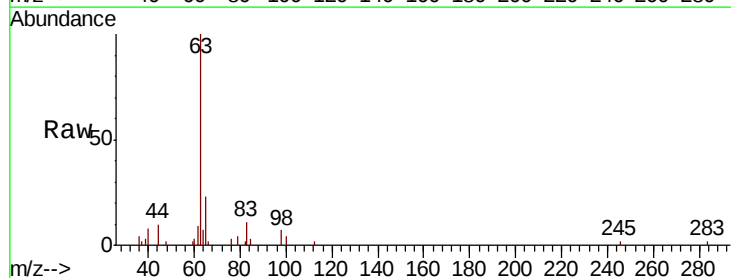
RT: 5.02 min Scan# 695

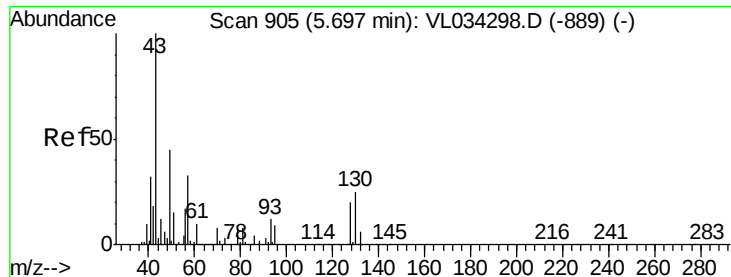
Delta R.T. -0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion	63	Resp:	15678
Ion Ratio	Lower	Upper	
63	100		
98	7.1	2.0	6.0#
100	4.4	1.1	3.5#





#25

Ethyl Acetate

Concen: 0.111 ppbv m

RT: 5.71 min Scan# 910

Delta R.T. 0.02 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

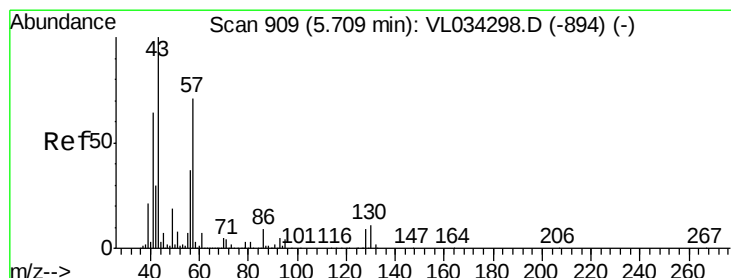
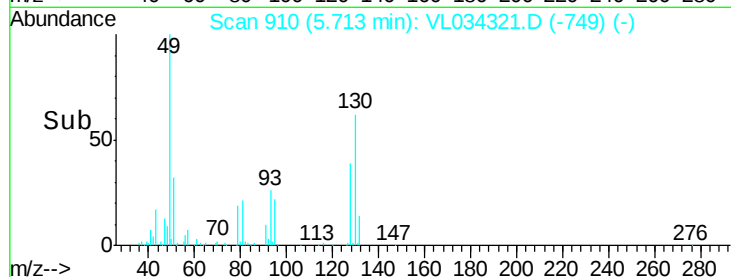
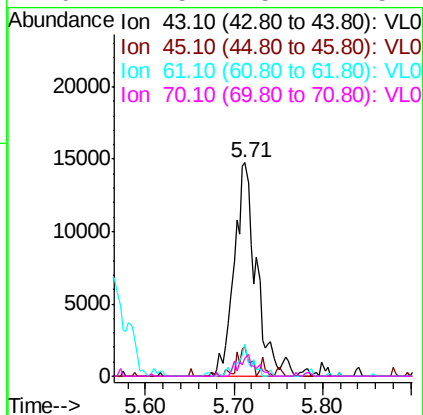
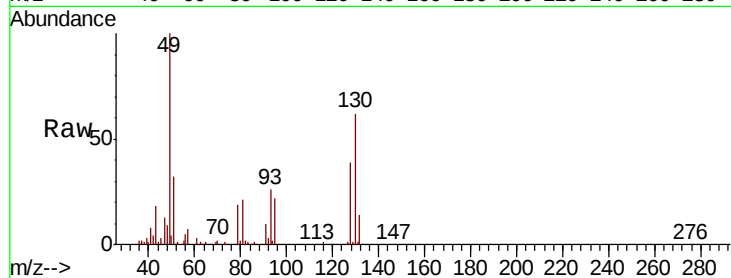
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	43	Resp	26093
Ion	Ratio	Lower	Upper
43	100		
45	11.4	8.3	12.5
61	8.7	7.7	11.5
70	7.5	5.4	8.2

Manual Integrations
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MMDadoda
10/22/2019 2:54:54 PM



#26

Hexane

Concen: 0.103 ppbv m

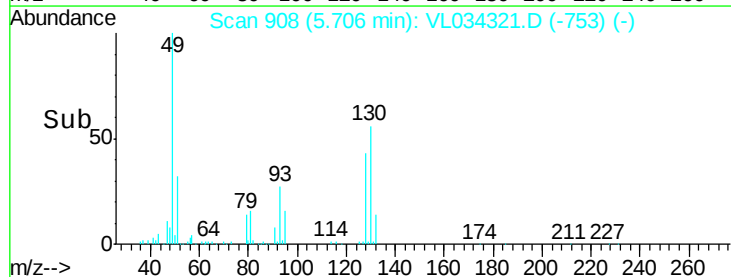
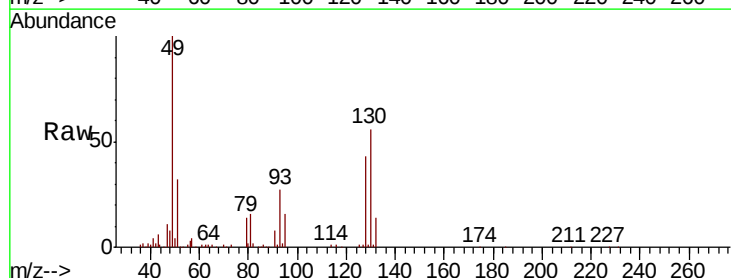
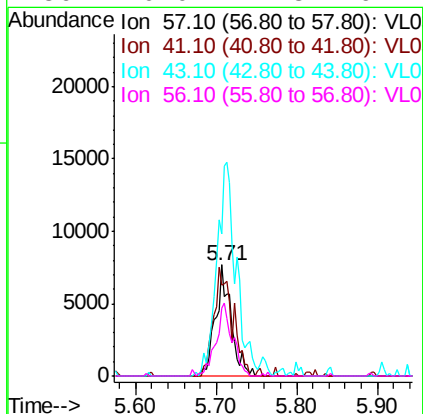
RT: 5.71 min Scan# 908

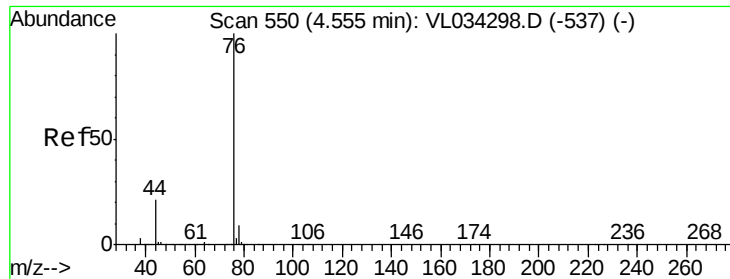
Delta R.T. -0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion	57	Resp	10333
Ion	Ratio	Lower	Upper
57	100		
41	0.0	76.5	114.7#
43	248.0	188.5	282.7
56	0.0	42.8	64.2#





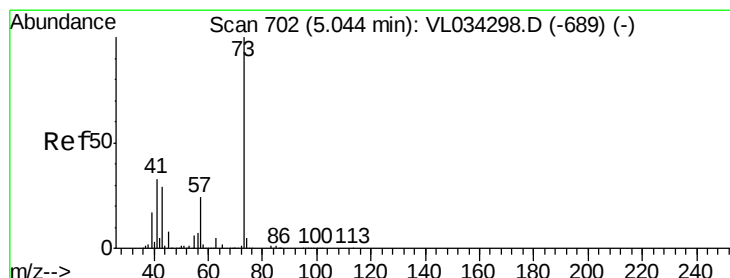
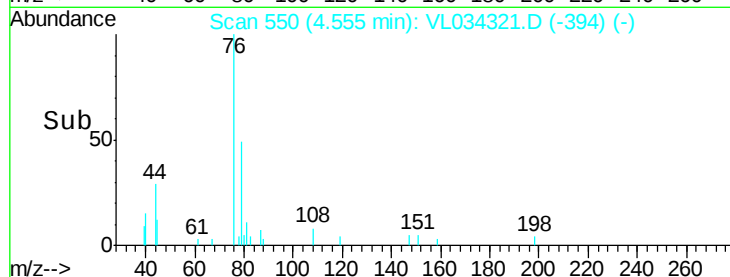
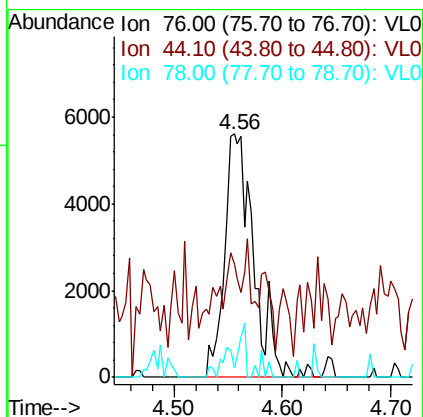
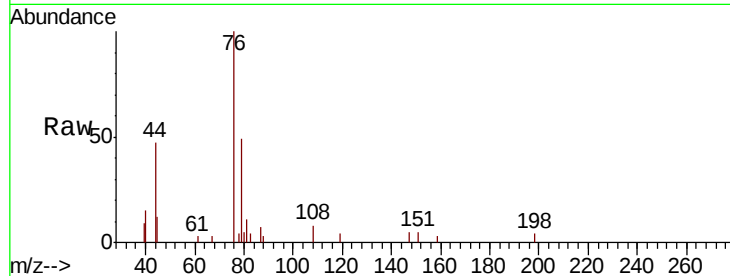
#27
Carbon Disulfide
Concen: 0.102 ppbv m
RT: 4.56 min Scan# 550
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
76	100		
44	0.0	17.3	25.9#
78	0.0	7.8	11.6#

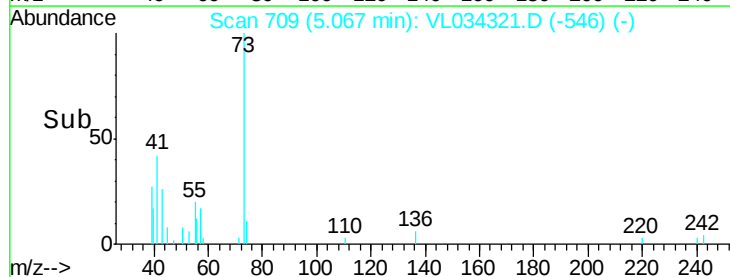
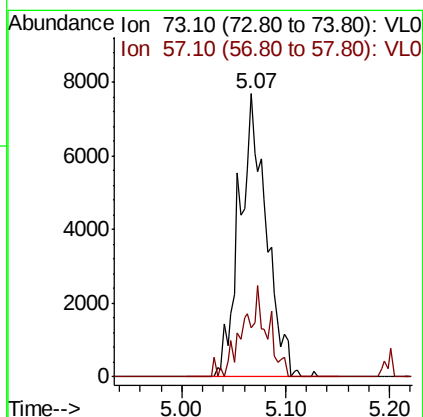
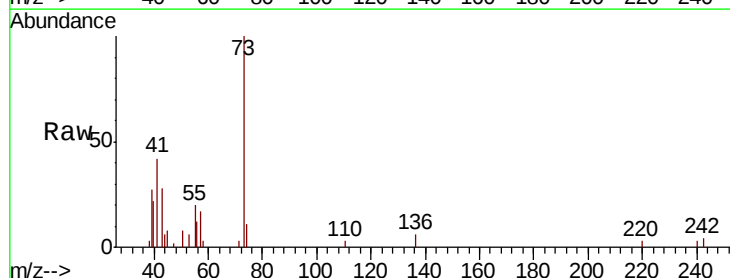
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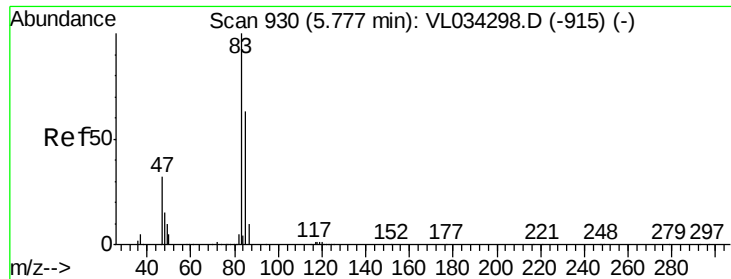
MMDadoda
10/22/2019 2:54:54 PM



#28
Methyl tert-Butyl Ether
Concen: 0.090 ppbv m
RT: 5.07 min Scan# 709
Delta R.T. 0.02 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
73	100		
57	0.0	19.2	28.8#





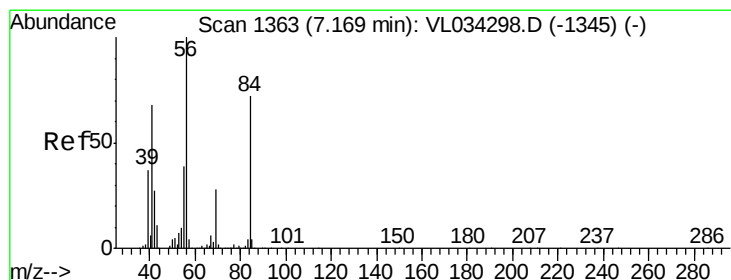
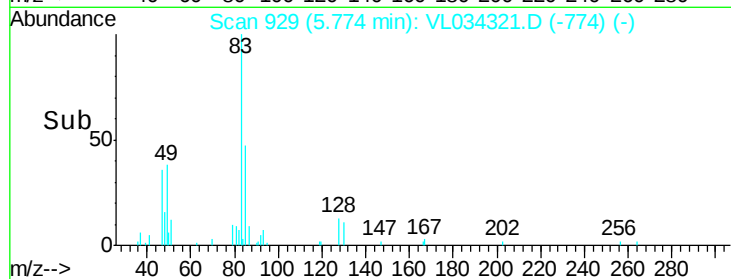
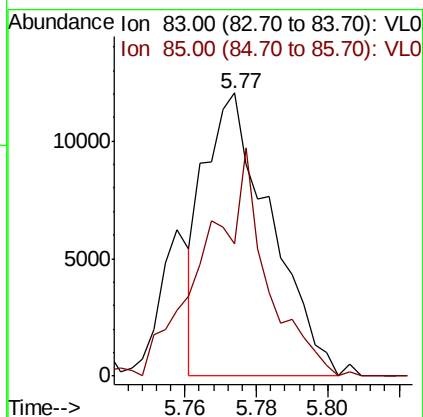
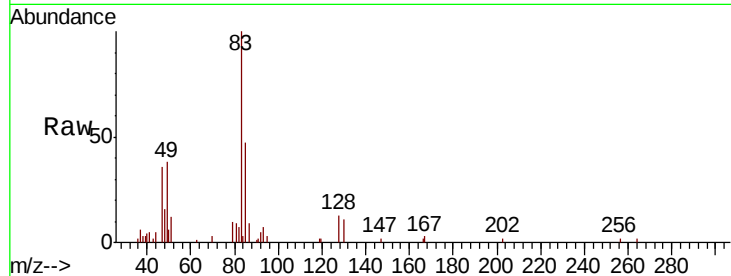
#29
Chloroform
Concen: 0.098 ppbv
RT: 5.77 min Scan# 929
Delta R.T. -0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 83 Resp: 15524
Ion Ratio Lower Upper
83 100
85 46.9 50.5 75.7#

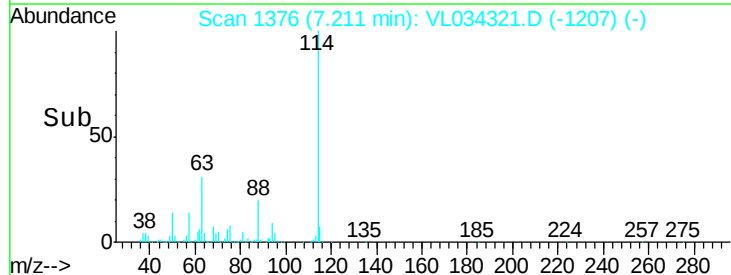
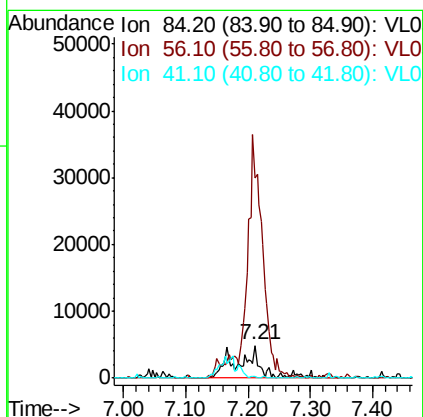
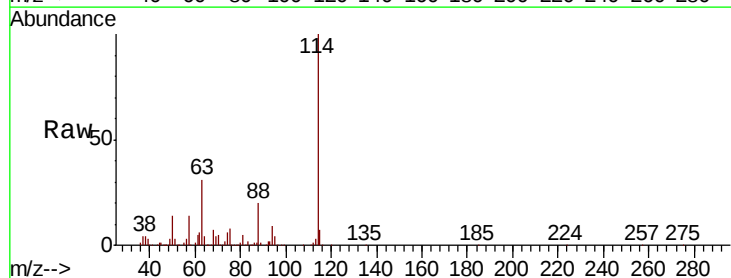
Manual Integrations
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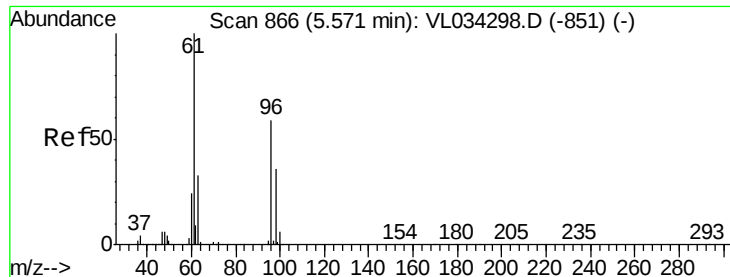
MMDadoda
10/22/2019 2:54:54 PM



#30
Cyclohexane
Concen: 0.174 ppbv m
RT: 7.21 min Scan# 1376
Delta R.T. 0.04 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion: 84 Resp: 12797
Ion Ratio Lower Upper
84 100
56 0.0 119.4 179.0#
41 49.7 78.7 118.1#





#31

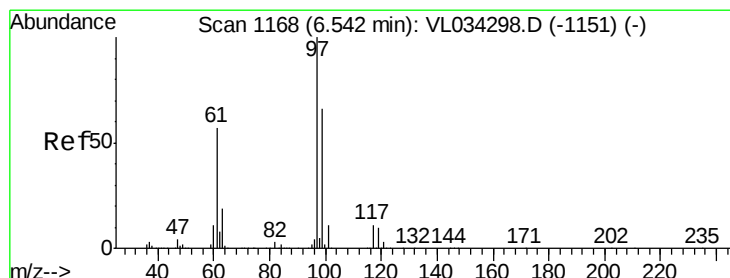
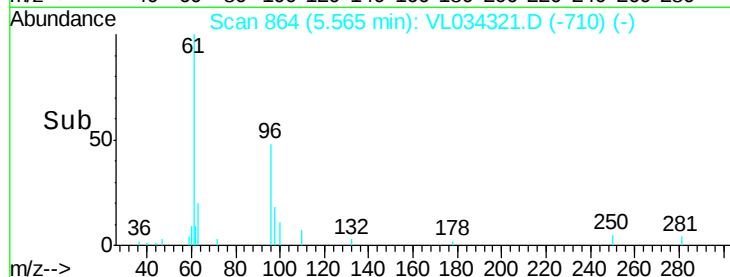
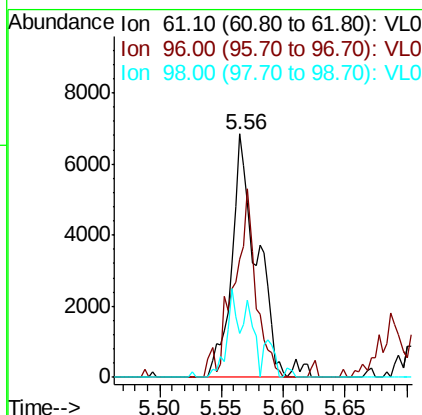
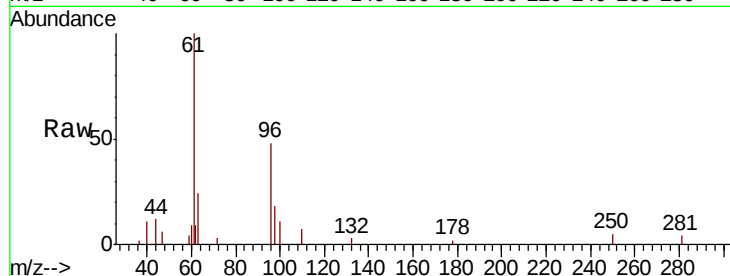
cis-1,2-Dichloroethene
 Concen: 0.097 ppbv m
 RT: 5.56 min Scan# 864
 Delta R.T. -0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
61	100		
96	48.3	47.5	71.3
98	18.1	28.8	43.2#

Manual Integrations
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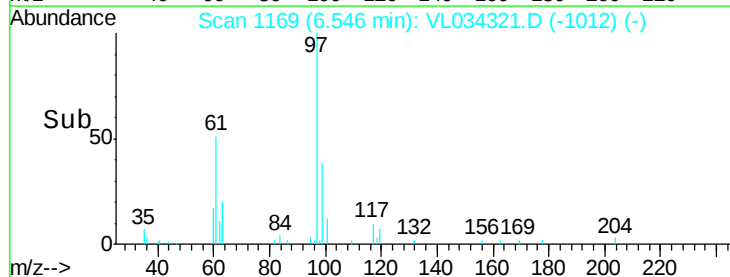
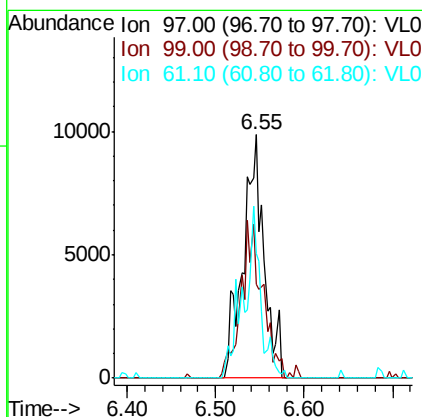
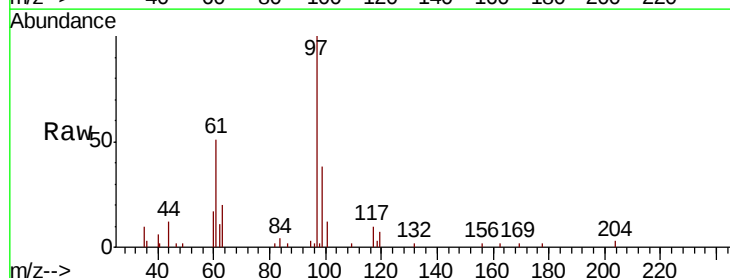
MMDadoda
 10/22/2019 2:54:54 PM

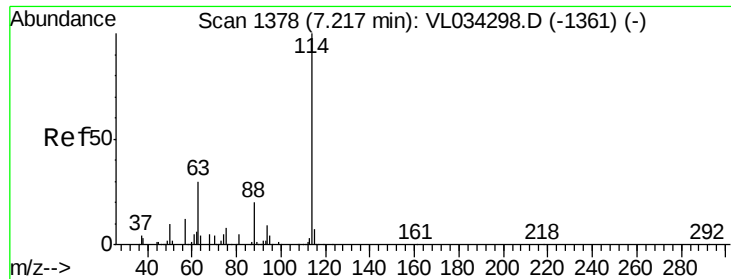


#32

1,1,1-Trichloroethane
 Concen: 0.106 ppbv m
 RT: 6.55 min Scan# 1169
 Delta R.T. 0.00 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
97	100		
99	0.0	52.6	78.8#
61	57.4	44.5	66.7





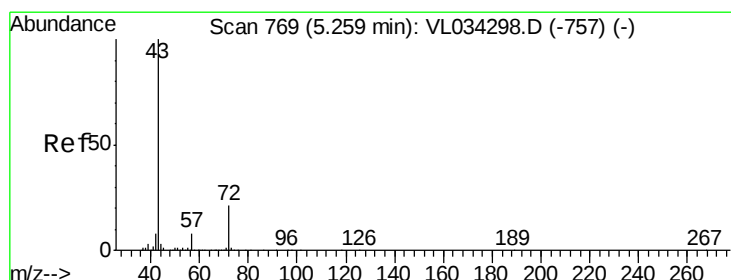
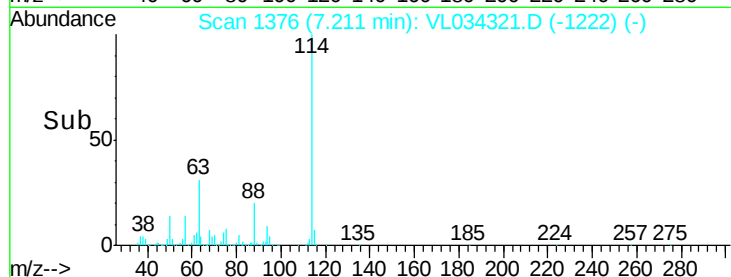
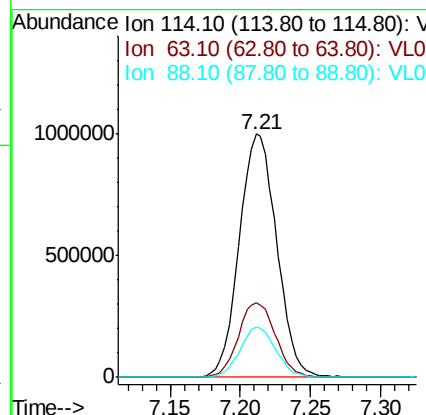
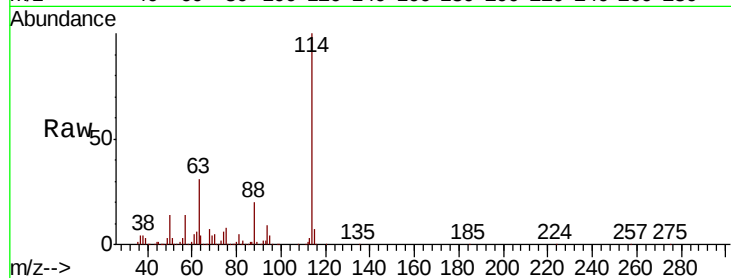
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.21 min Scan# 1376
 Delta R.T. -0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
114	100		
63	30.8	25.2	37.8
88	20.0	16.0	24.0

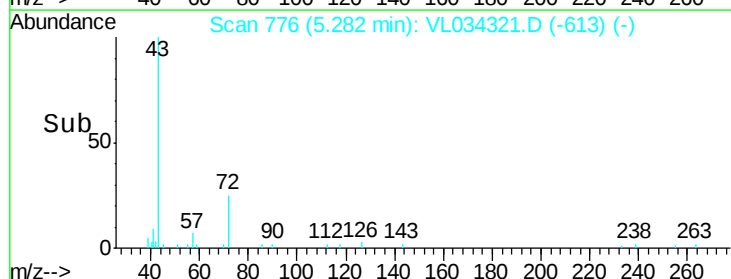
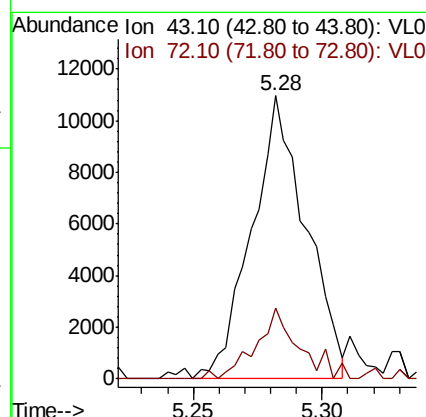
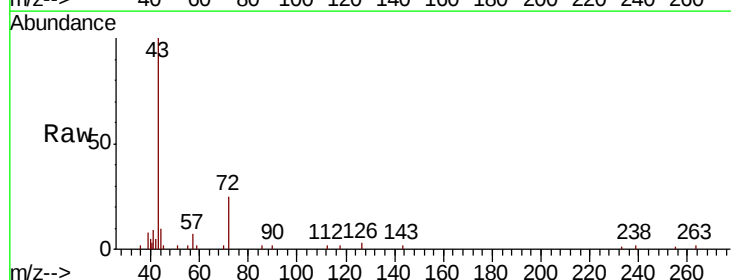
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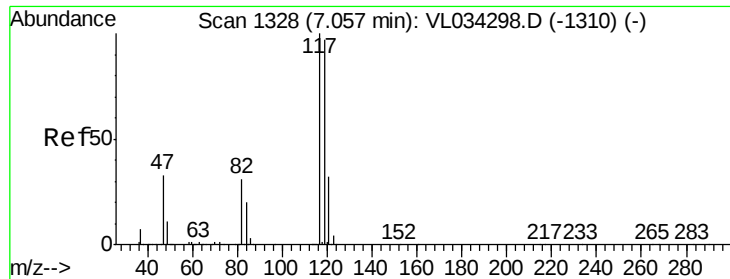
MMDadoda
 10/22/2019 2:54:54 PM



#34
 2-Butanone
 Concen: 0.106 ppbv
 RT: 5.28 min Scan# 776
 Delta R.T. 0.02 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.0	16.3	24.5





#35

Carbon Tetrachloride

Concen: 0.103 ppbv m

RT: 7.05 min Scan# 1327

Delta R.T. -0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

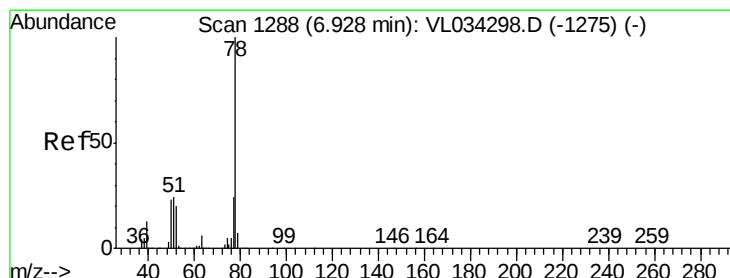
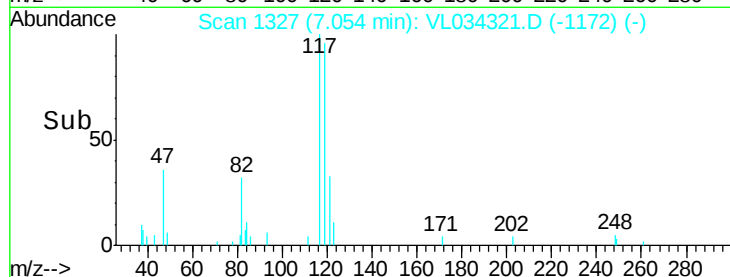
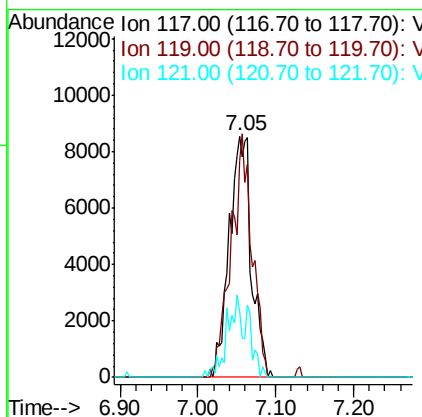
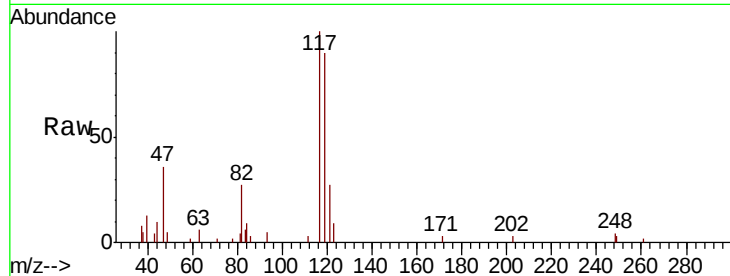
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	117	Resp:	16653
Ion Ratio	Lower	Upper	
117	100		
119	90.0	77.3	115.9
121	27.1	25.5	38.3

Manual Integrations
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10/22/2019 2:54:54 PM



#36

Benzene

Concen: 0.092 ppbv m

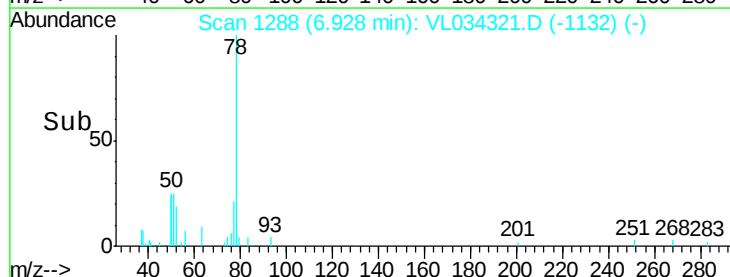
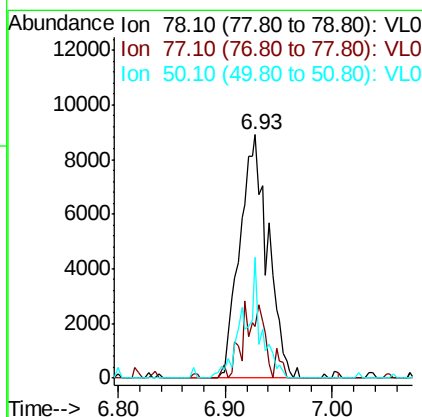
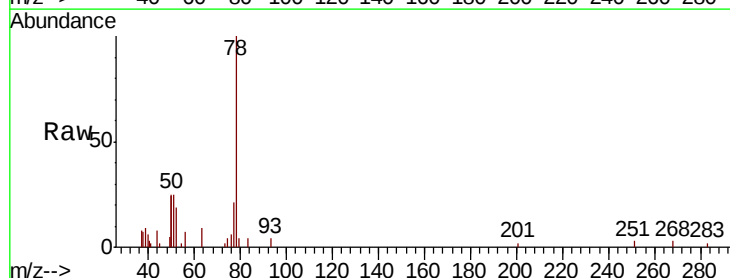
RT: 6.93 min Scan# 1288

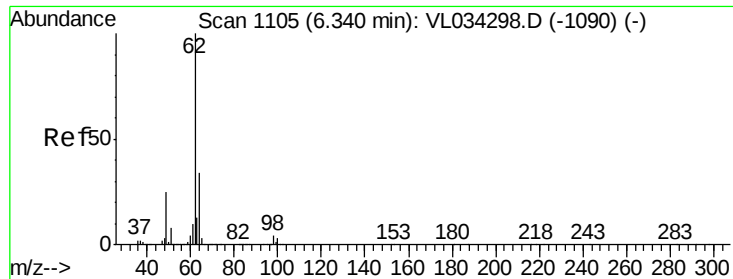
Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	78	Resp:	16337
Ion Ratio	Lower	Upper	
78	100		
77	21.1	19.0	28.4
50	25.4	18.6	27.8





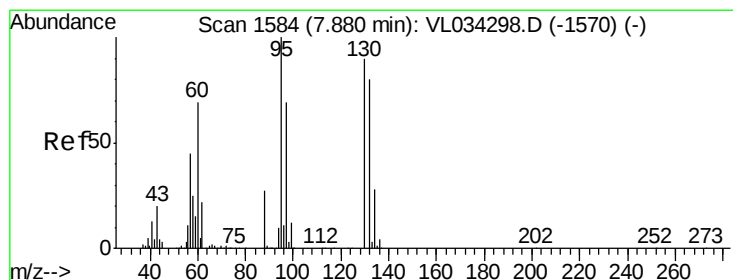
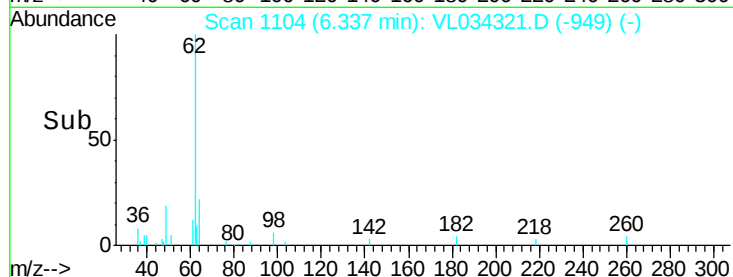
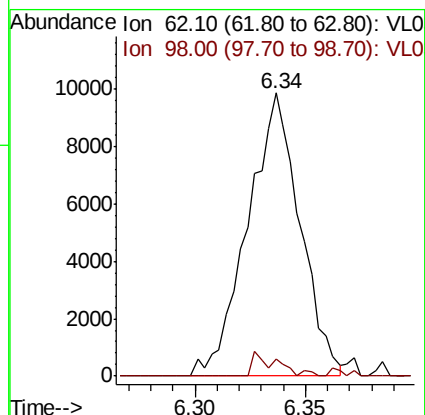
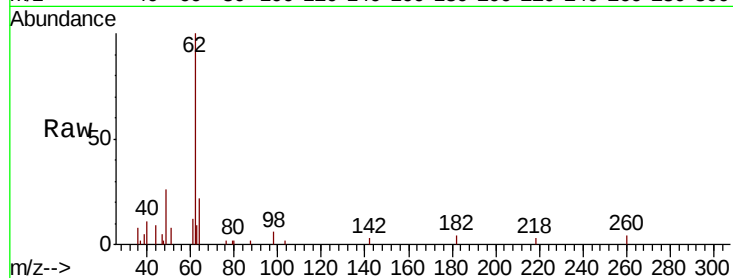
#37
 1,2-Dichloroethane
 Concen: 0.122 ppbv
 RT: 6.34 min Scan# 1104
 Delta R.T. -0.00 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Resp	Lower	Upper
62	100	16264		
98	4.0		3.8	5.6

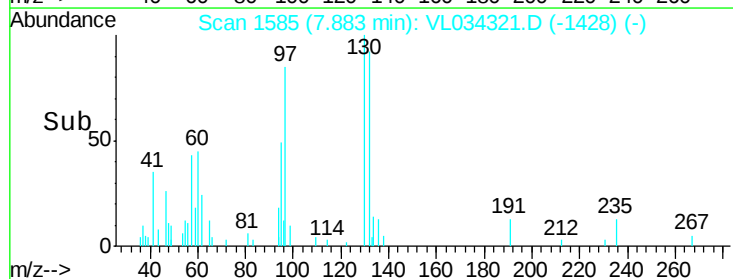
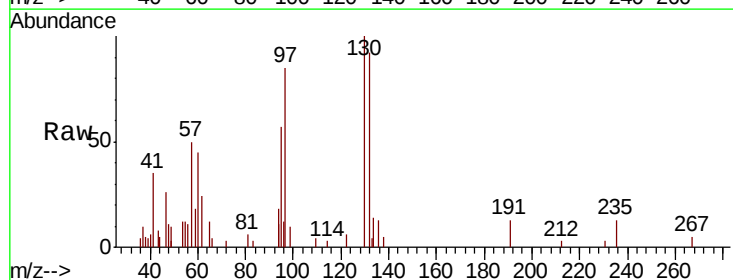
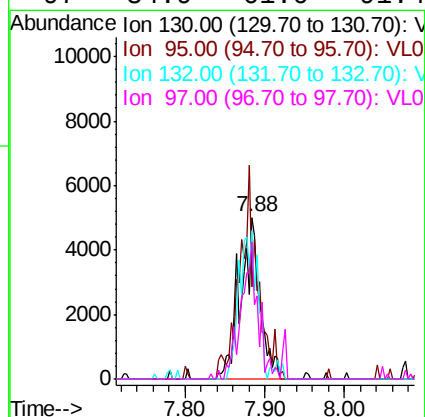
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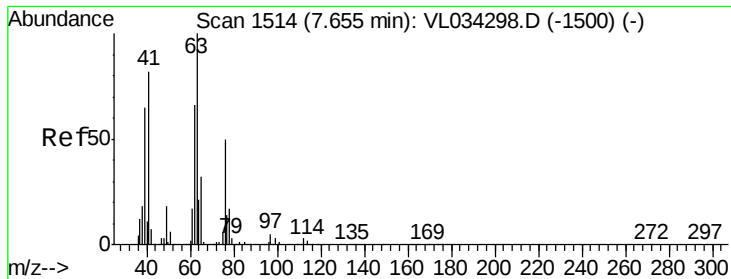
MMDadoda
 10/22/2019 2:54:54 PM



#38
 Trichloroethene
 Concen: 0.120 ppbv m
 RT: 7.88 min Scan# 1585
 Delta R.T. 0.00 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Resp	Lower	Upper
130	100	8592		
95	57.4		88.6	132.8#
132	91.6		71.2	106.8
97	84.9		61.0	91.4





#39

1,2-Dichloropropane

Concen: 0.104 ppbv m

RT: 7.65 min Scan# 1514

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

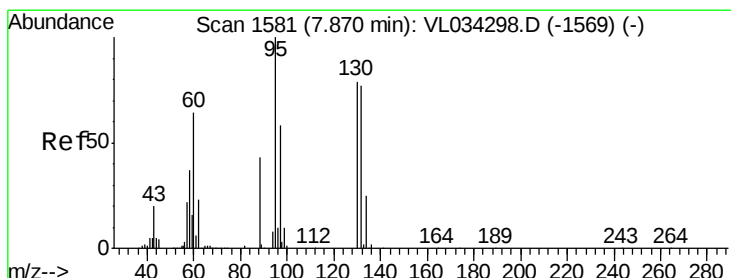
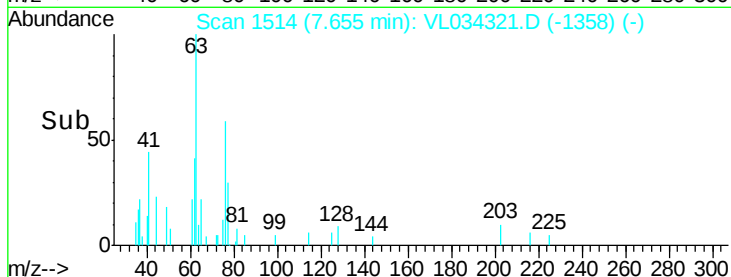
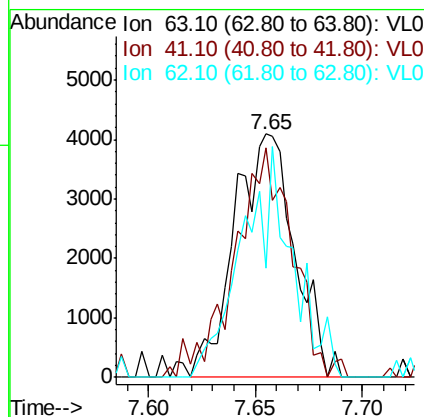
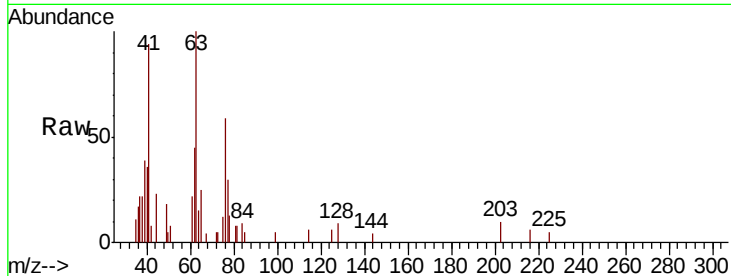
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	63	Resp:	8016
Ion	Ratio	Lower	Upper
63	100		
41	94.5	65.6	98.4
62	45.0	53.0	79.6#

Manual Integrations
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10/22/2019 2:54:54 PM



#40

1,4-Dioxane

Concen: 0.107 ppbv m

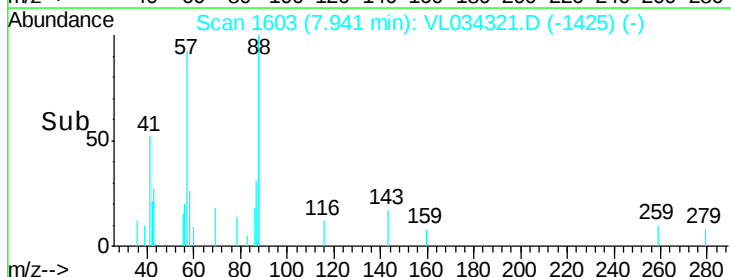
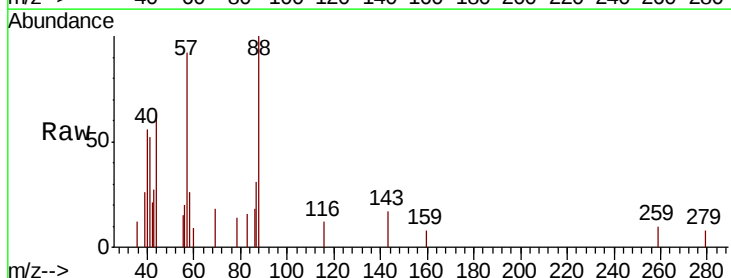
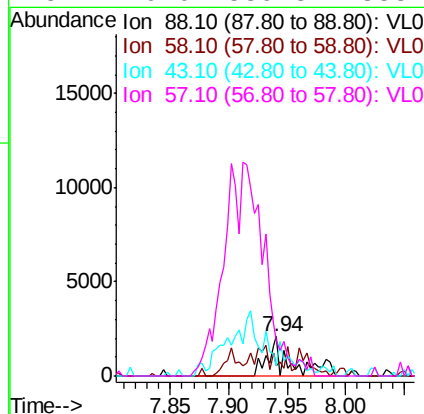
RT: 7.94 min Scan# 1603

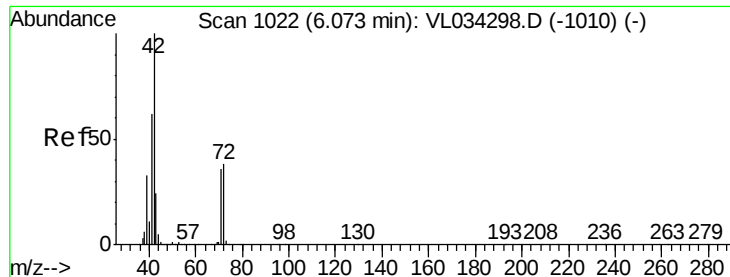
Delta R.T. 0.07 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	88	Resp:	2885
Ion	Ratio	Lower	Upper
88	100		
58	60.3	110.3	165.5#
43	0.0	228.1	342.1#
57	0.0	889.3	1333.9#





#41

Tetrahydrofuran

Concen: 0.087 ppbv m

RT: 6.11 min Scan# 1032

Delta R.T. 0.03 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

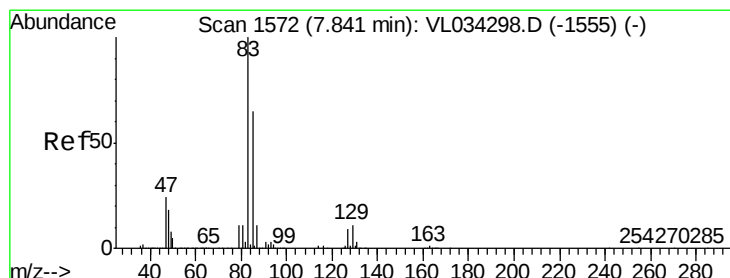
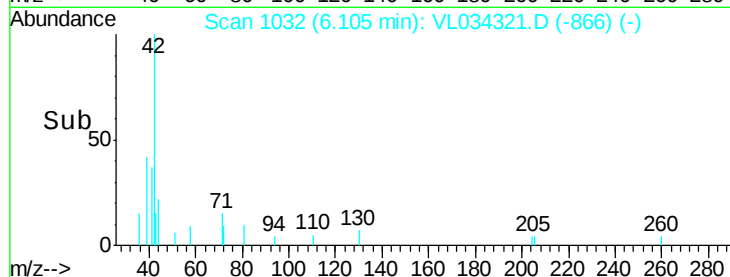
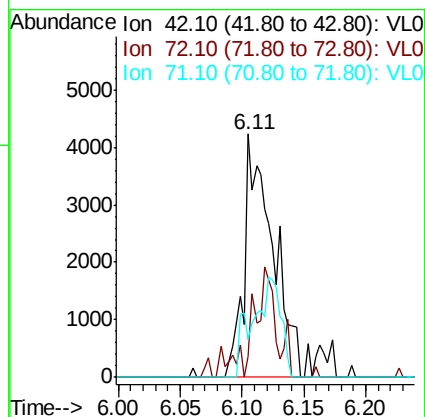
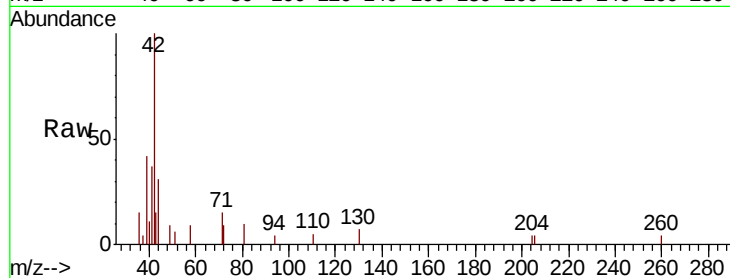
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	42	Resp:	7307
Ion Ratio		Lower	Upper
42	100		
72	0.0	28.0	42.0#
71	0.0	27.3	40.9#

Manual Integrations
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MMDadoda
10/22/2019 2:54:54 PM



#42

Bromodichloromethane

Concen: 0.110 ppbv m

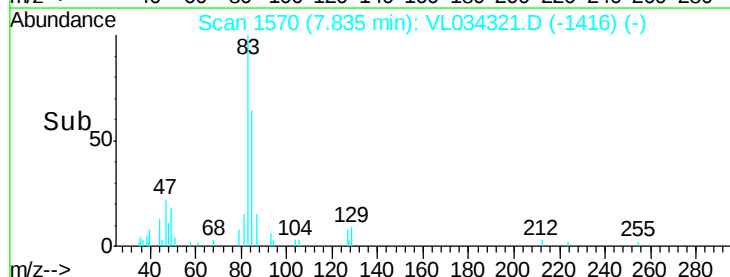
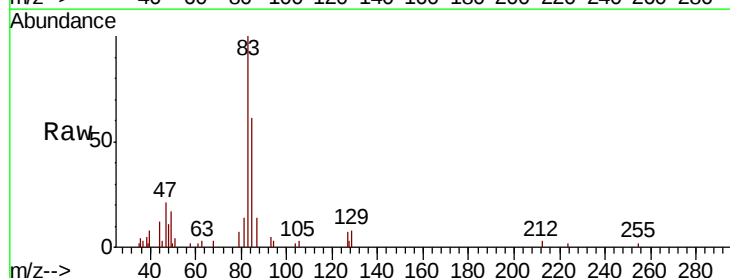
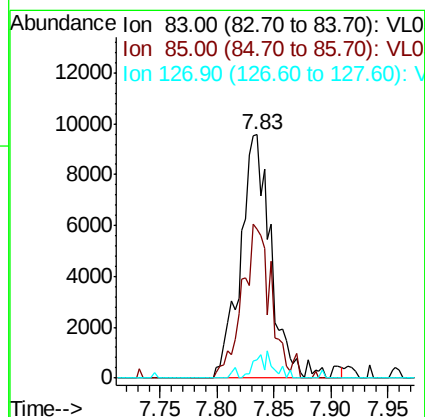
RT: 7.83 min Scan# 1570

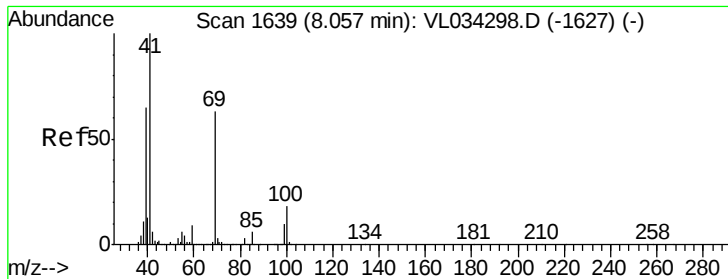
Delta R.T. -0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	83	Resp:	17968
Ion Ratio		Lower	Upper
83	100		
85	61.0	51.8	77.6
127	7.4	7.0	10.6





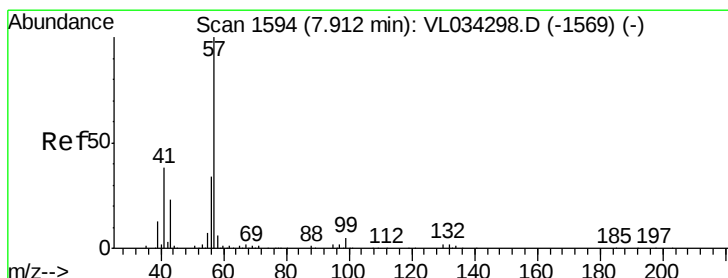
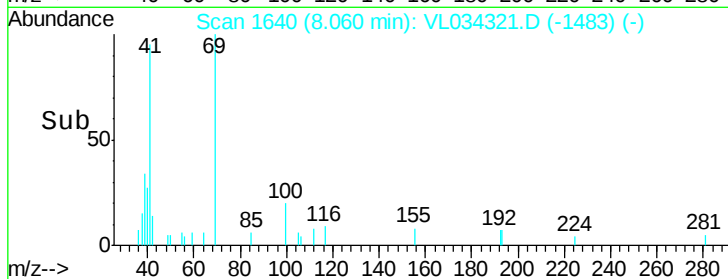
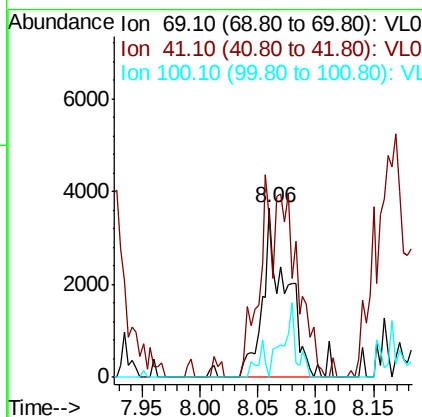
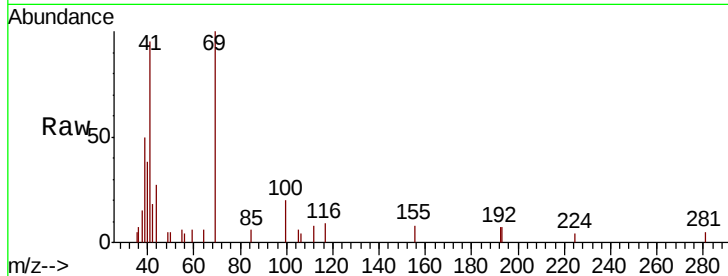
#43
Methvl Methacrylate
Concen: 0.072 ppbv m
RT: 8.06 min Scan# 1640
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
69	100		
41	0.0	132.1	198.1#
100	0.0	23.2	34.8#

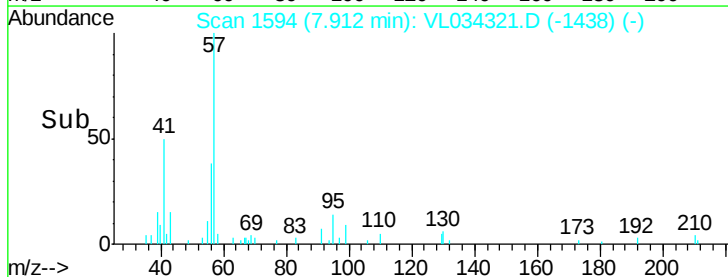
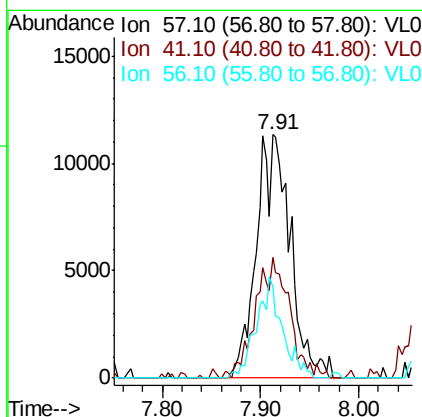
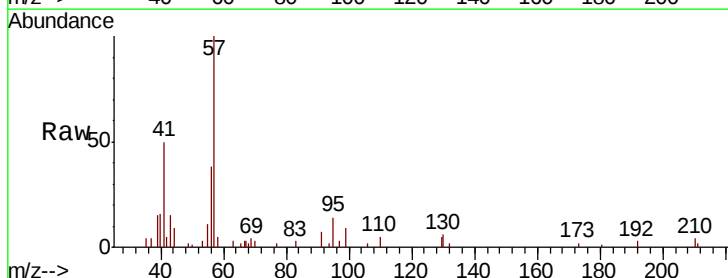
Manual Integrations
APPROVED

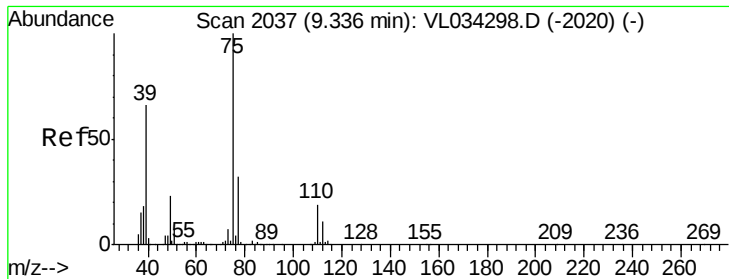
MMDadoda
10/22/2019 2:54:54 PM



#44
2,2,4-Trimethylpentane
Concen: 0.082 ppbv m
RT: 7.91 min Scan# 1594
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	29.3	43.9#
56	0.0	25.3	37.9#





#45

t-1,3-Dichloropropene

Concen: 0.077 ppbv m

RT: 9.34 min Scan# 2038

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 75 Resp: 6935

Ion Ratio Lower Upper

75 100

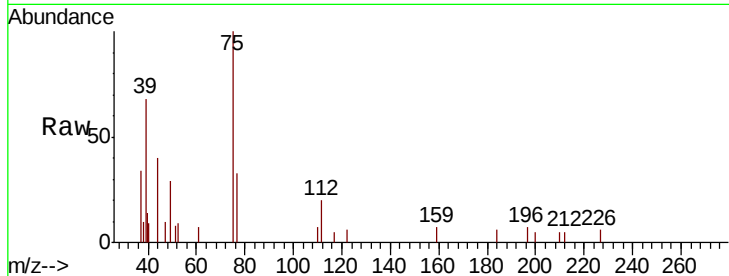
77 33.4 25.6 38.4

Manual Integrations

APPROVED

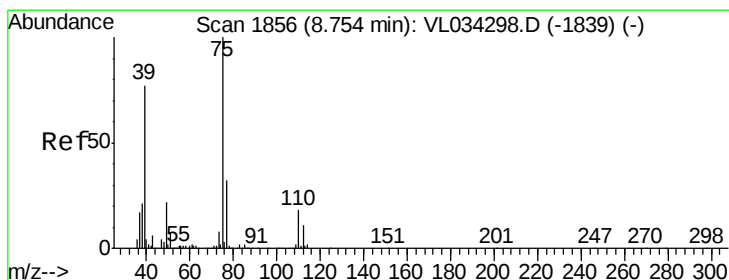
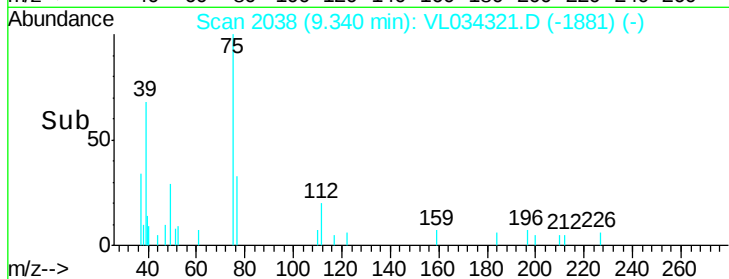
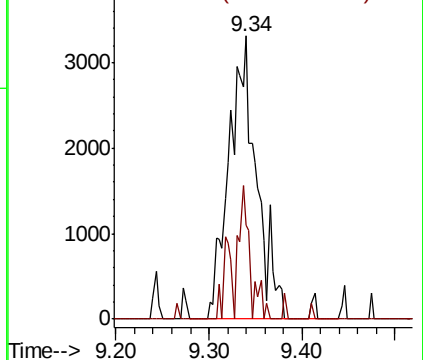
MMDadoda

10/22/2019 2:54:54 PM



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#46

cis-1,3-Dichloropropene

Concen: 0.081 ppbv m

RT: 8.75 min Scan# 1856

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

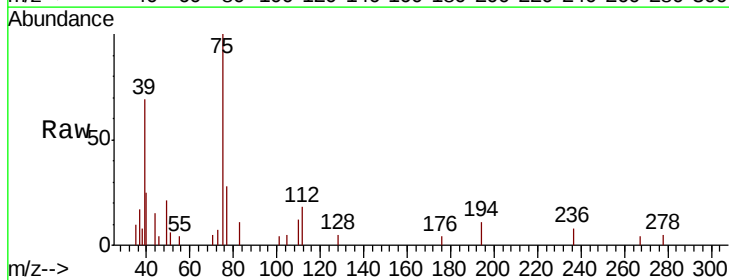
Tgt Ion: 75 Resp: 8380

Ion Ratio Lower Upper

75 100

39 68.6 61.2 91.8

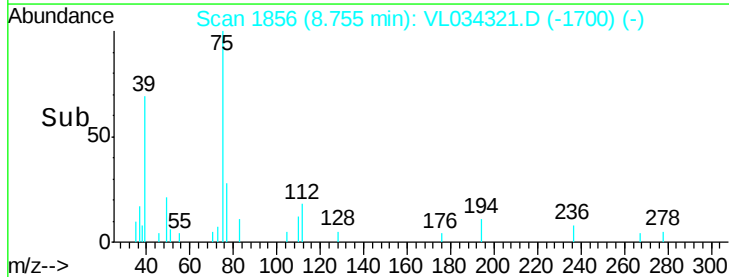
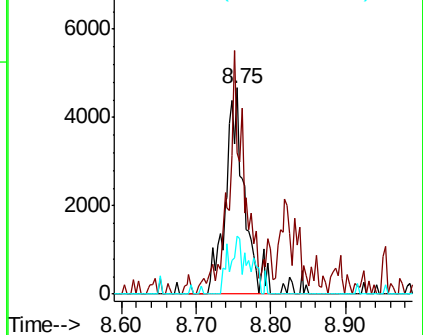
77 27.9 25.9 38.9

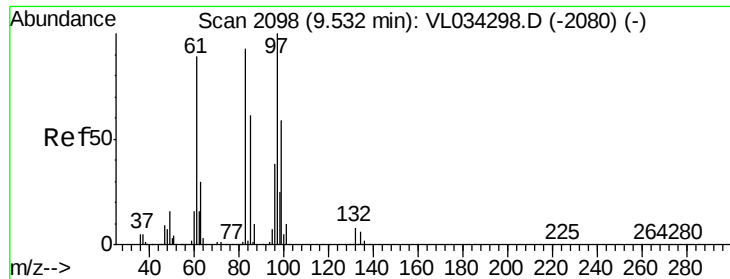


Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0





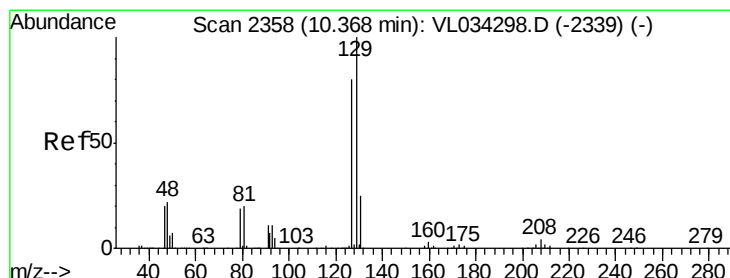
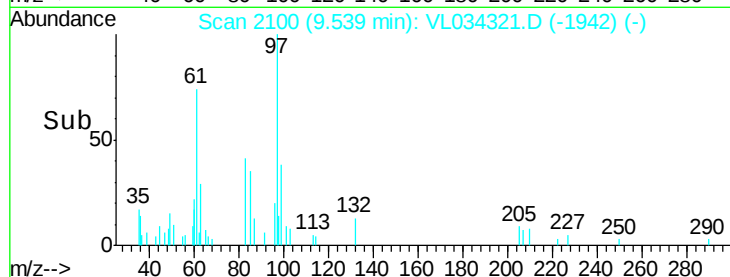
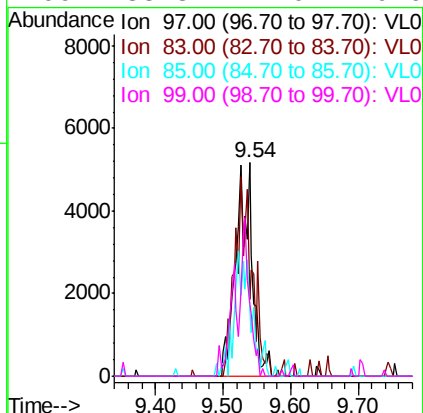
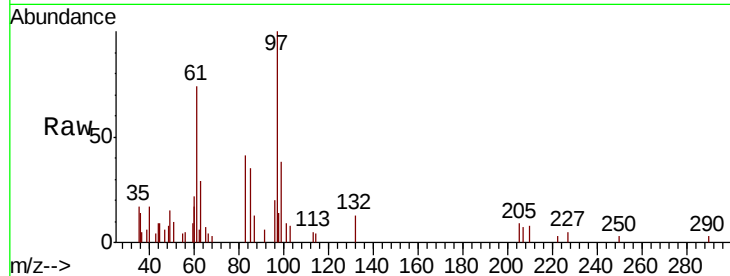
#47
 1,1,2-Trichloroethane
 Concen: 0.110 ppbv m
 RT: 9.54 min Scan# 2100
 Delta R.T. 0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
97	100		
83	40.9	74.2	111.2#
85	35.0	48.6	73.0#
99	38.3	47.0	70.6#

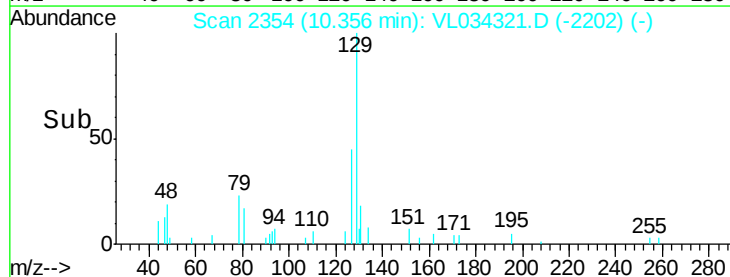
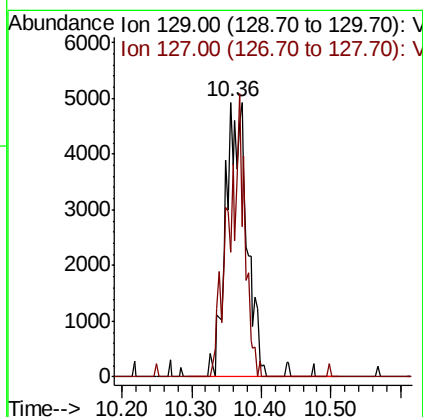
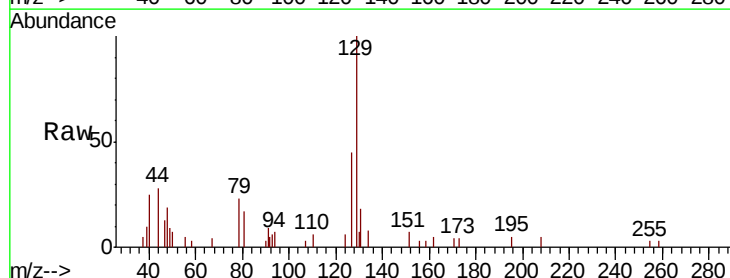
Manual Integrations
 APPROVED

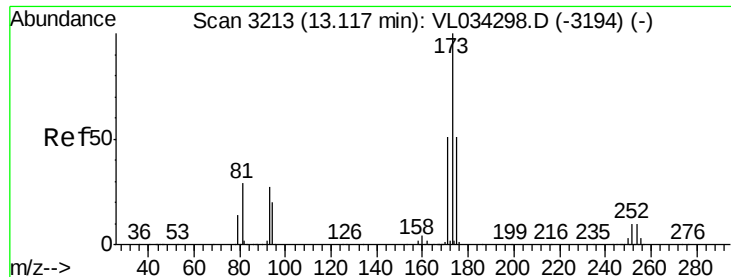
MMDadoda
 10/22/2019 2:54:54 PM



#48
 Dibromochloromethane
 Concen: 0.083 ppbv m
 RT: 10.36 min Scan# 2354
 Delta R.T. -0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
129	100		
127	0.0	39.7	119.1#





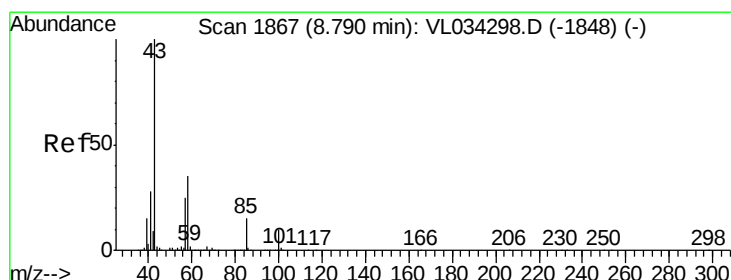
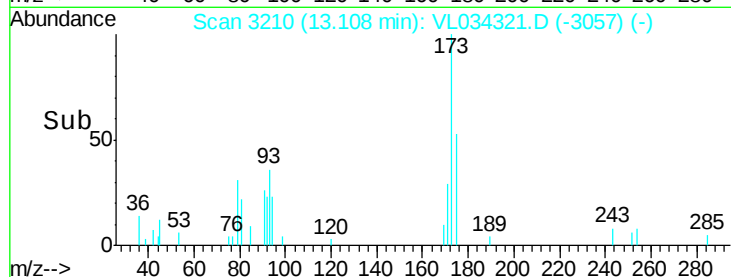
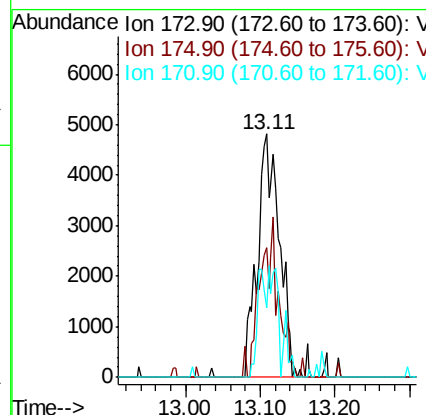
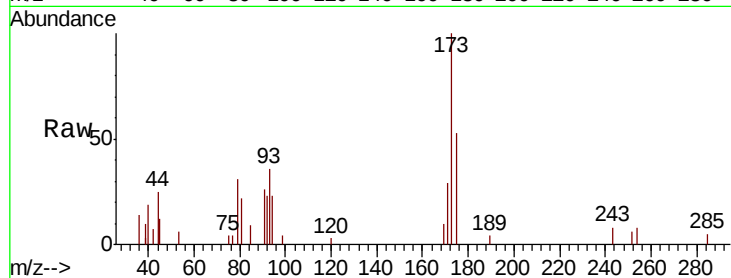
#49
Bromoform
Concen: 0.090 ppbv m
RT: 13.11 min Scan# 3210
Delta R.T. -0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
173	100		
175	0.0	39.8	59.6#
171	40.9	41.8	62.6#

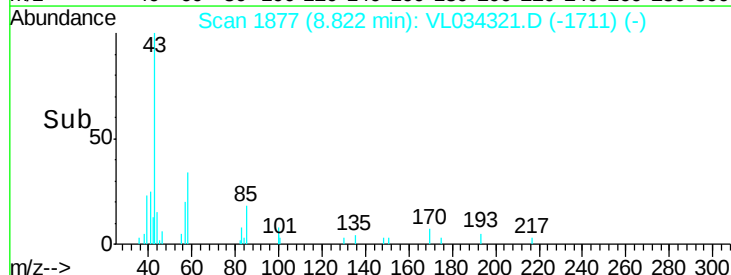
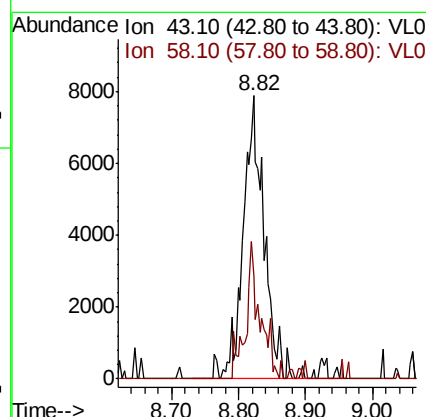
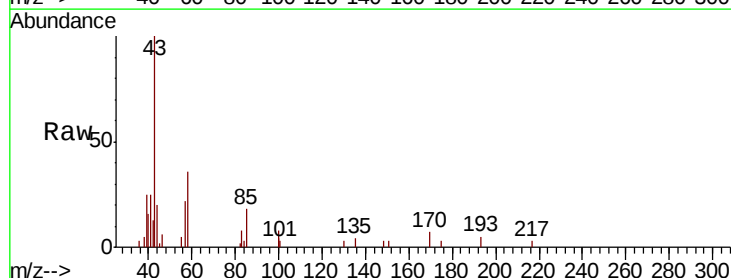
Manual Integrations
APPROVED

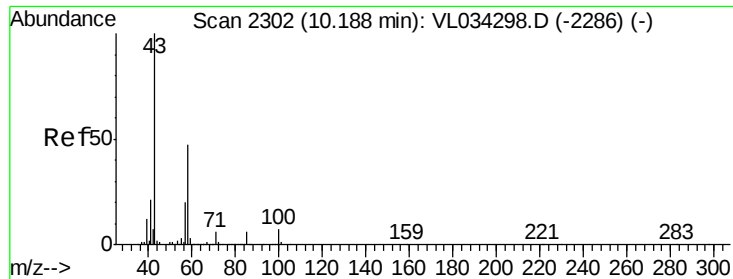
MMDadoda
10/22/2019 2:54:54 PM



#50
4-Methyl-2-Pentanone
Concen: 0.081 ppbv m
RT: 8.82 min Scan# 1877
Delta R.T. 0.03 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	27.6	41.4#





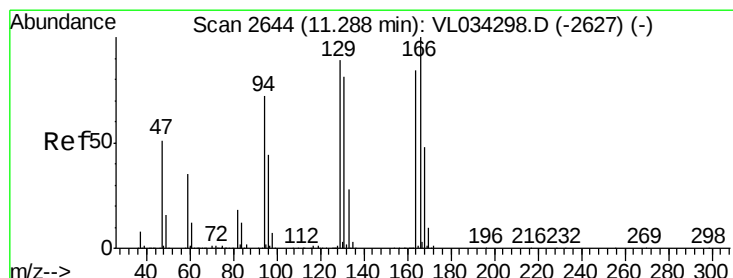
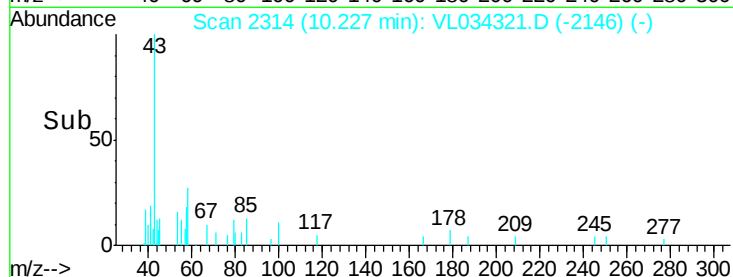
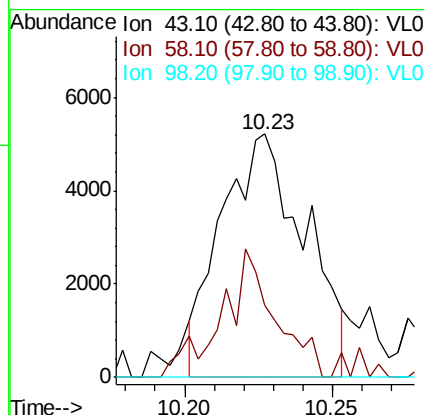
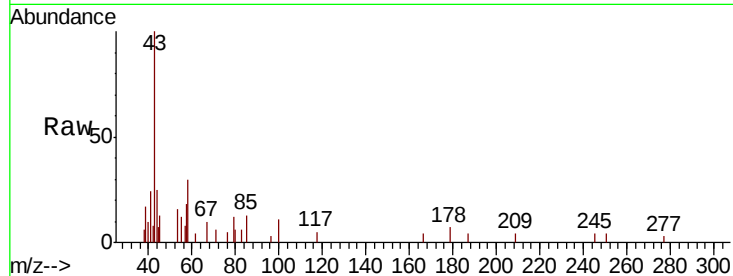
#51
2-Hexanone
Concen: 0.058 ppbv m
RT: 10.23 min Scan# 2314
Delta R.T. 0.04 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	43	Resp:	10267
Ion Ratio	Lower	Upper	
43	100		
58	0.0	37.0	55.6#
98	0.0	0.2	0.2#

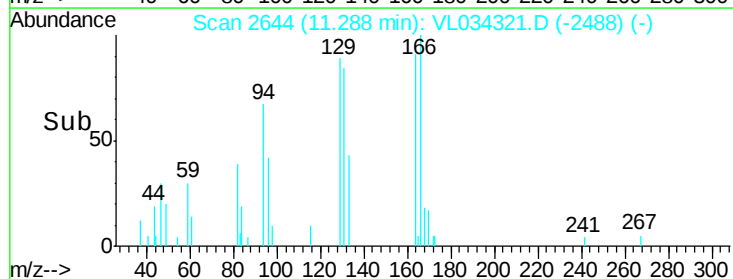
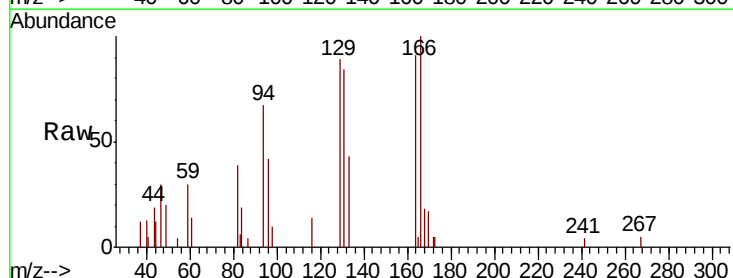
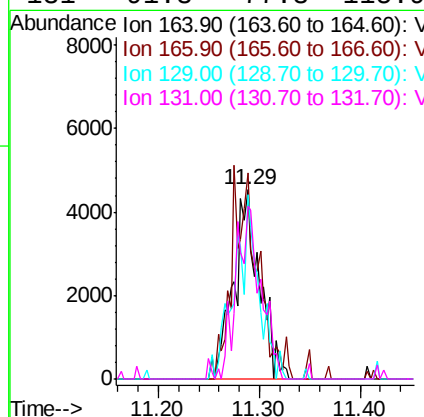
Manual Integrations
APPROVED

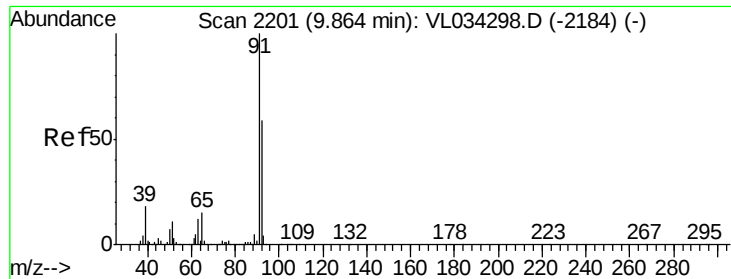
MMDadoda
10/22/2019 2:54:54 PM



#52
Tetrachloroethene
Concen: 0.115 ppbv m
RT: 11.29 min Scan# 2644
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion:	164	Resp:	8044
Ion Ratio	Lower	Upper	
164	100		
166	109.3	95.3	142.9
129	97.5	84.5	126.7
131	91.3	77.3	115.9





#53

Toluene

Concen: 0.074 ppbv m

RT: 9.87 min Scan# 2203

Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 91 Resp: 14595

Ion Ratio Lower Upper

91 100

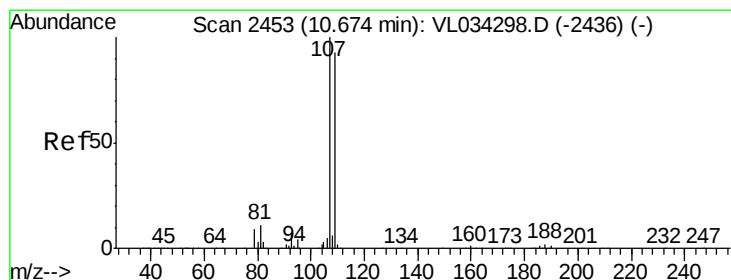
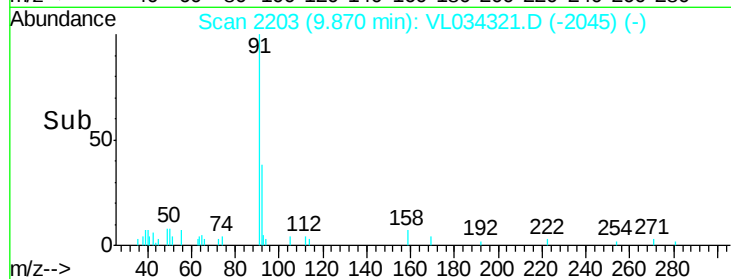
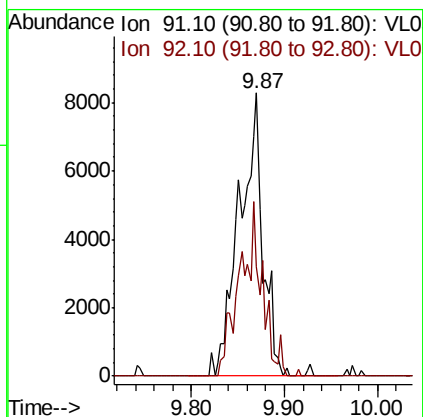
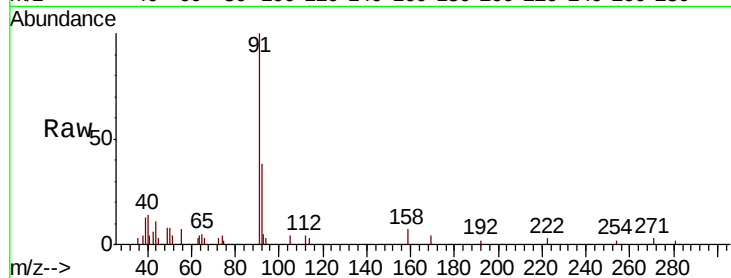
92 0.0 48.4 72.6#

Manual Integrations

APPROVED

MMDadoda

10/22/2019 2:54:54 PM



#54

1,2-Dibromoethane

Concen: 0.101 ppbv m

RT: 10.67 min Scan# 2452

Delta R.T. -0.00 min

Lab File: VL034321.D

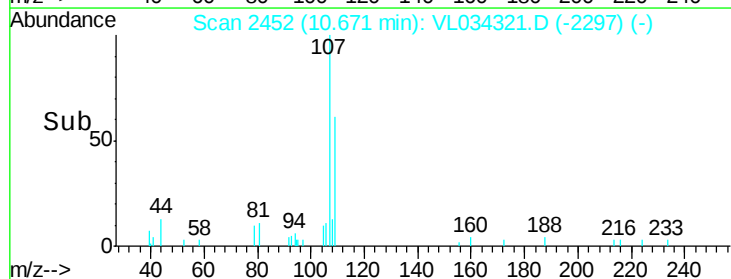
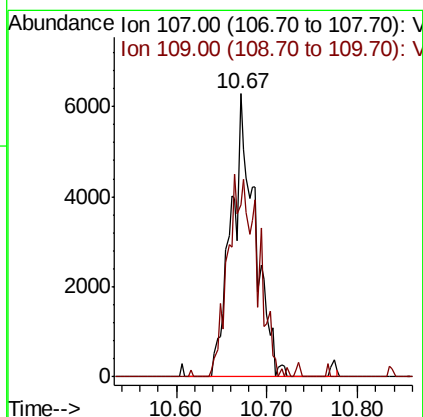
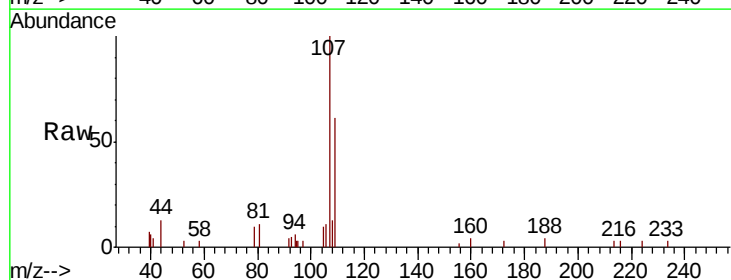
Acq: 17 Oct 2019 18:02

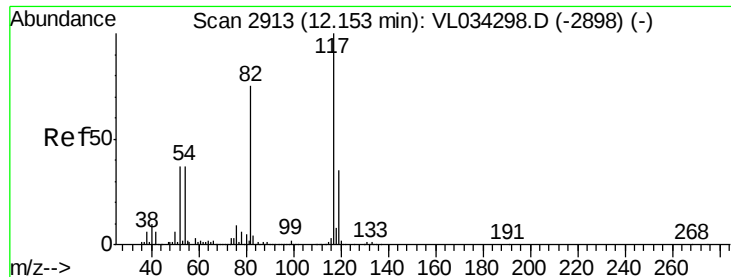
Tgt Ion: 107 Resp: 11607

Ion Ratio Lower Upper

107 100

109 60.9 74.6 112.0#





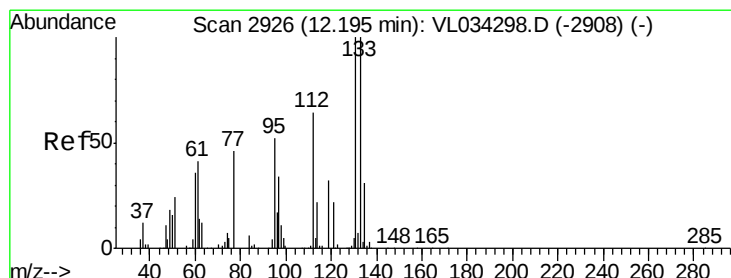
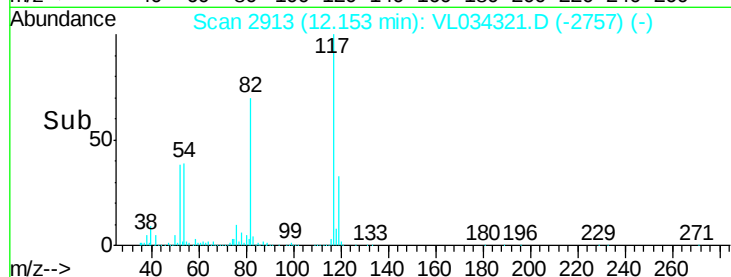
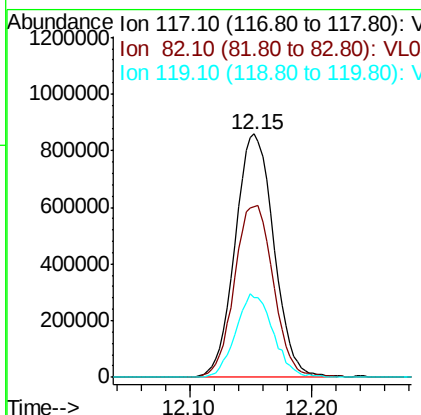
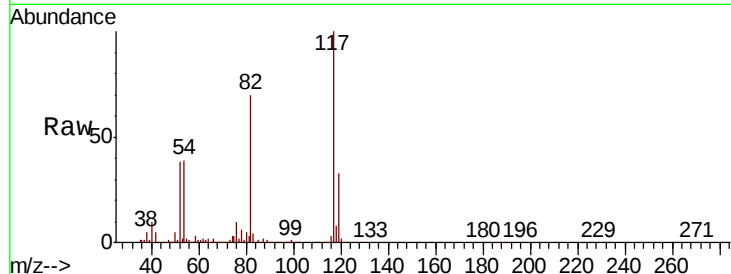
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2913
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
117	100		
82	71.6	55.5	83.3
119	33.1	26.5	39.7

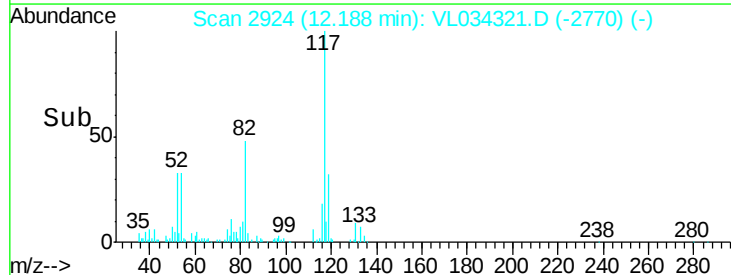
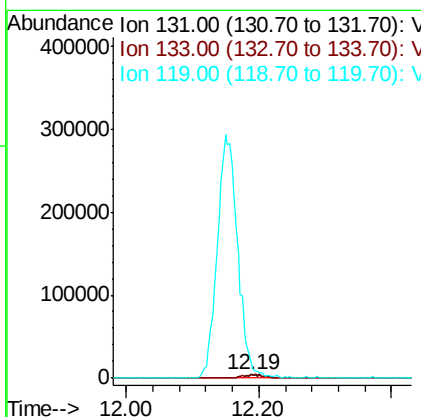
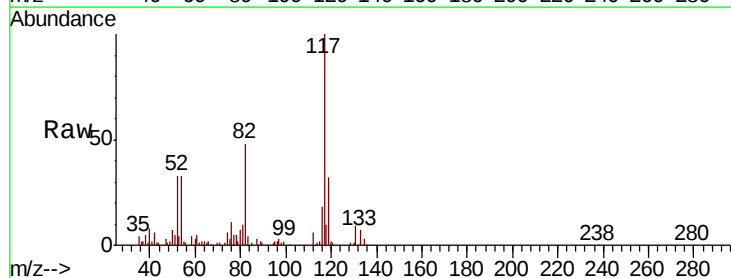
Manual Integrations
APPROVED

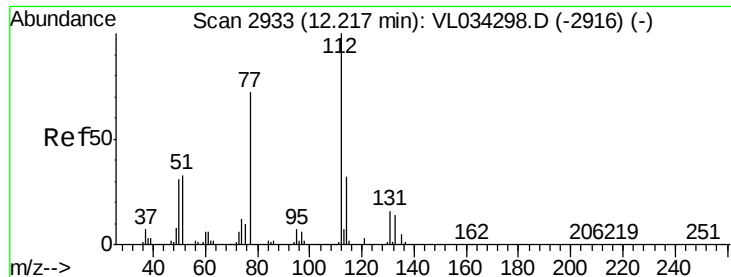
MMDadoda
10/22/2019 2:54:54 PM



#56
1,1,1,2-Tetrachloroethane
Concen: 0.101 ppbv m
RT: 12.19 min Scan# 2924
Delta R.T. -0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
131	100		
133	96.4	77.1	115.7
119	0.0	49.0	73.4#





#57

Chlorobenzene

Concen: 0.125 ppbv m

RT: 12.22 min Scan# 2933

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

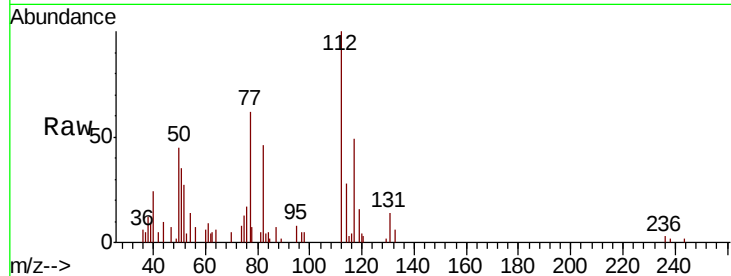
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	112	Resp:	19619
Ion Ratio	Lower	Upper	
112	100		
77	62.5	58.6	88.0
114	27.7	28.6	35.0#

Manual Integrations
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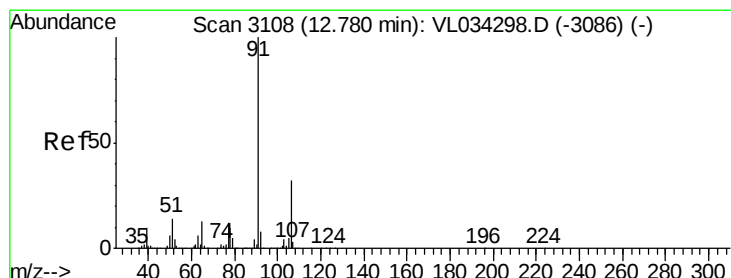
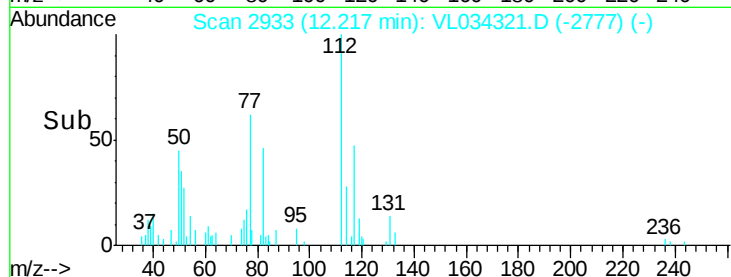
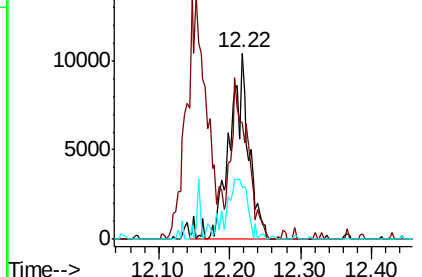
MMDadoda
10/22/2019 2:54:54 PM



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 0.072 ppbv m

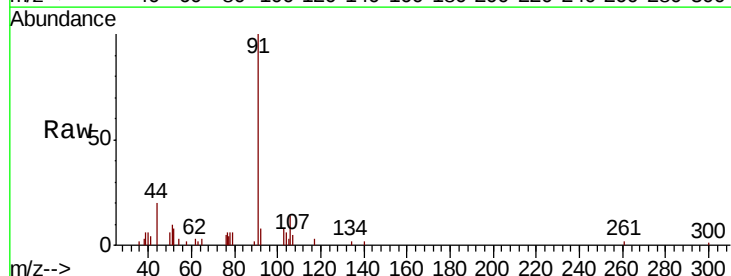
RT: 12.78 min Scan# 3108

Delta R.T. 0.00 min

Lab File: VL034321.D

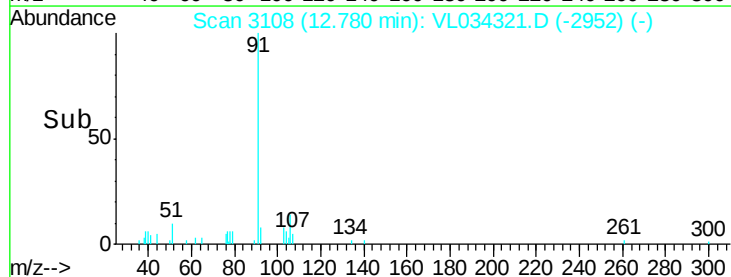
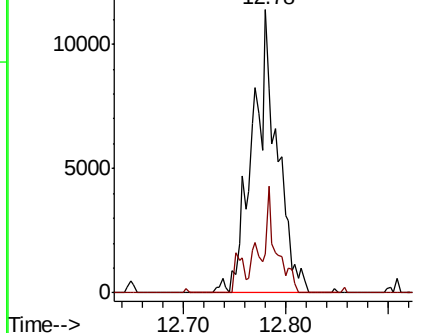
Acq: 17 Oct 2019 18:02

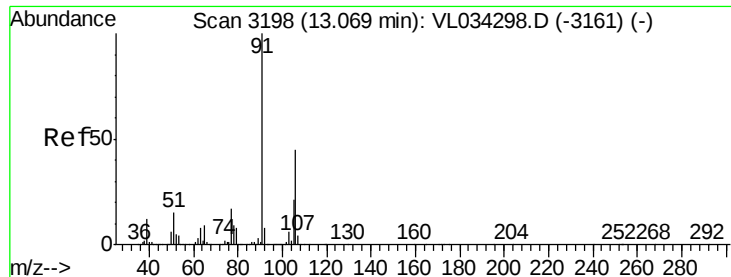
Tgt Ion:	91	Resp:	18954
Ion Ratio	Lower	Upper	
91	100		
106	13.8	25.3	37.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





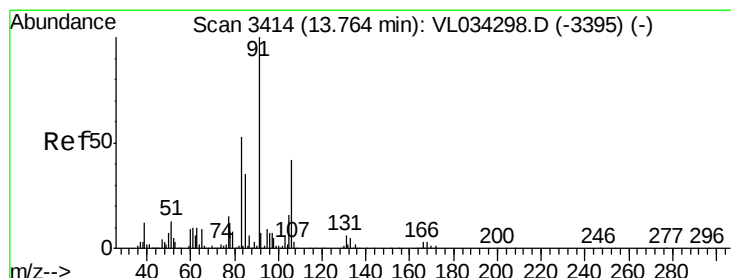
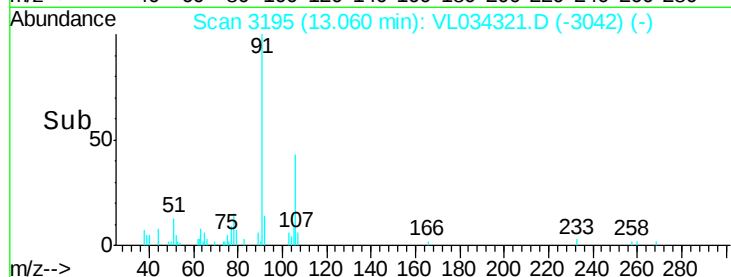
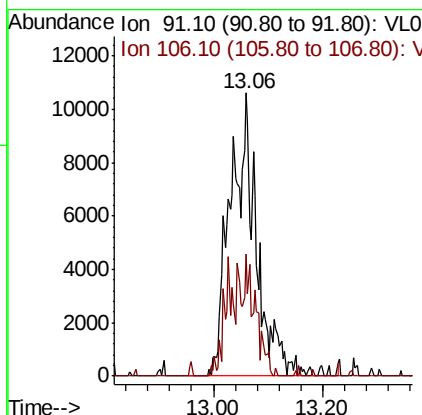
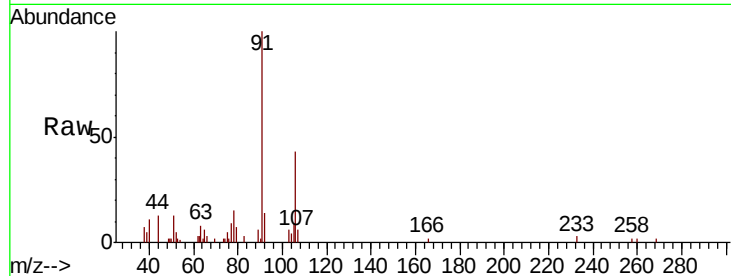
#59
m/p-Xylene
Concen: 0.155 ppbv m
RT: 13.06 min Scan# 3195
Delta R.T. -0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 91 Resp: 35444
Ion Ratio Lower Upper
91 100
106 0.0 35.4 53.2#

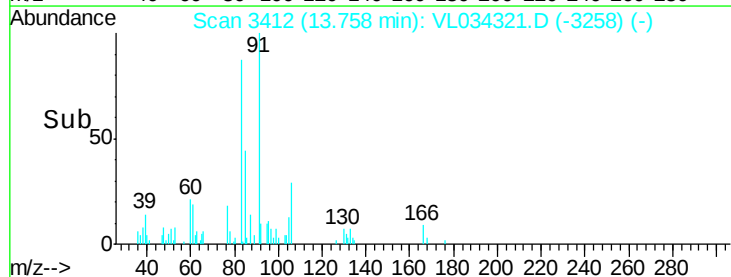
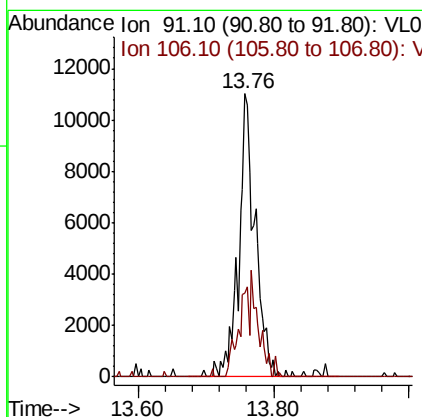
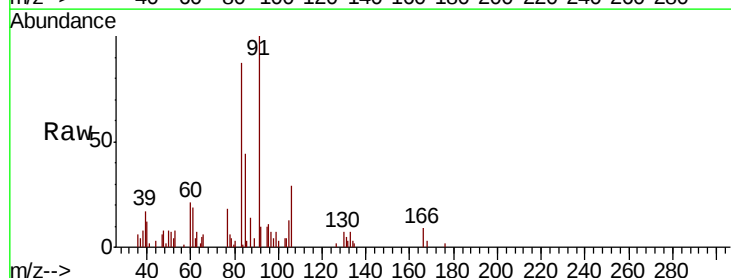
Manual Integrations
APPROVED

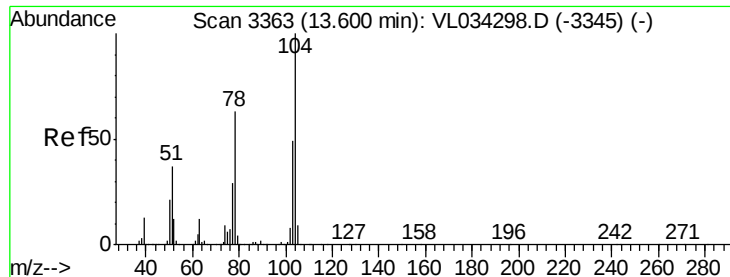
MMDadoda
10/22/2019 2:54:54 PM



#60
o-Xylene
Concen: 0.082 ppbv m
RT: 13.76 min Scan# 3412
Delta R.T. -0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion: 91 Resp: 18744
Ion Ratio Lower Upper
91 100
106 39.3 21.6 64.6





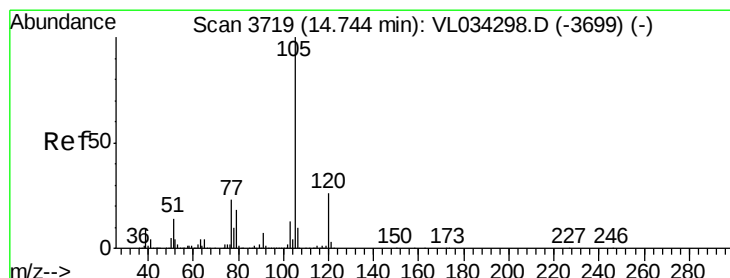
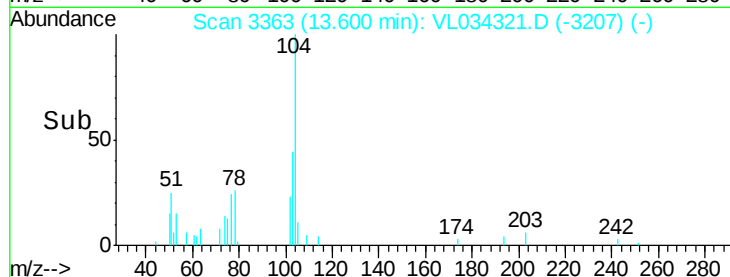
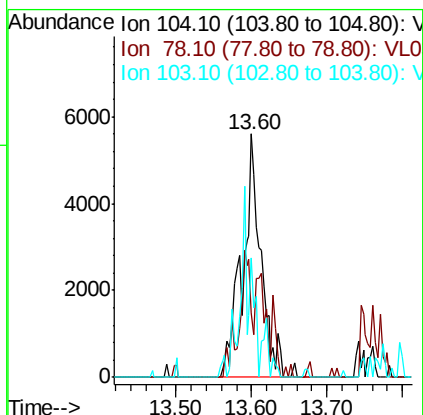
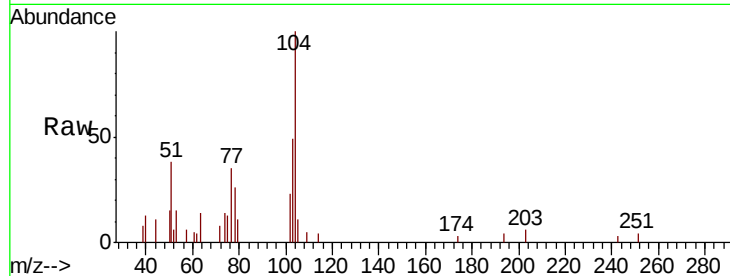
#61
Stvrene
Concen: 0.060 ppbv m
RT: 13.60 min Scan# 3363
Delta R.T. 0.00 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	47.8	71.8#
103	0.0	39.0	58.6#

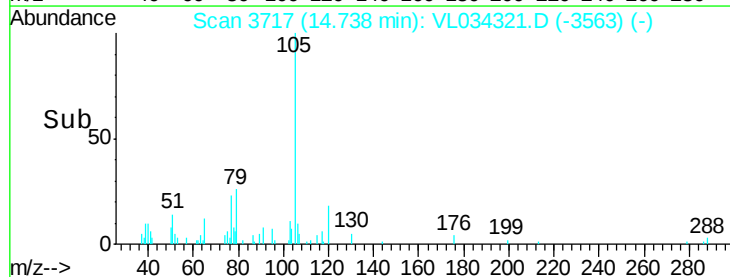
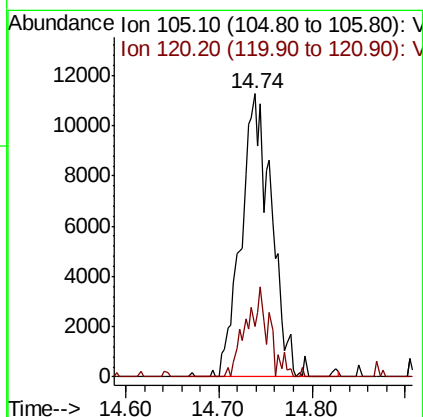
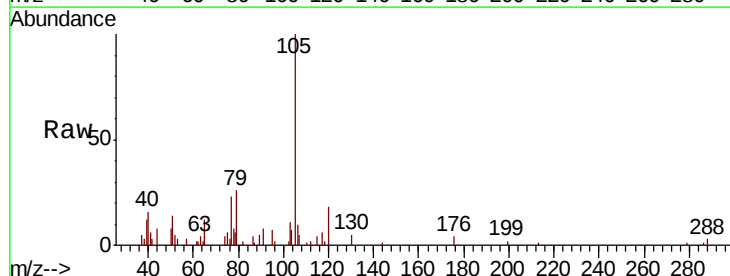
Manual Integrations
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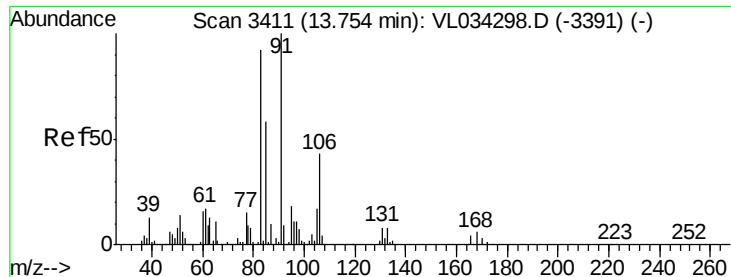
MMDadoda
10/22/2019 2:54:54 PM



#62
Isopropylbenzene
Concen: 0.085 ppbv m
RT: 14.74 min Scan# 3717
Delta R.T. -0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
105	100		
120	23.9	20.8	31.2





#63

1,1,2,2-Tetrachloroethane

Concen: 0.111 ppbv m

RT: 13.76 min Scan# 3412

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 83 Resp: 20360

Ion Ratio Lower Upper

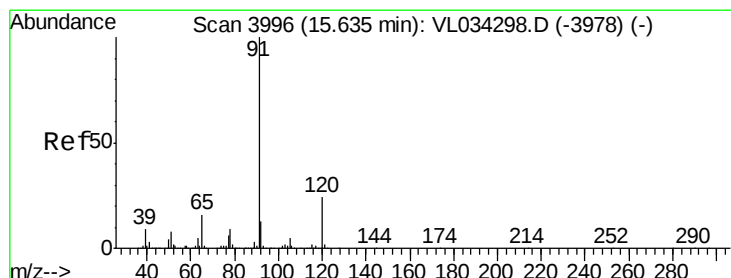
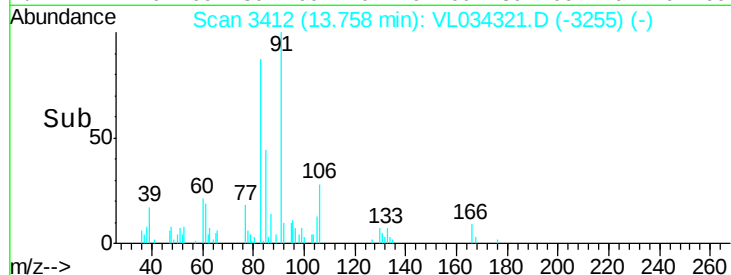
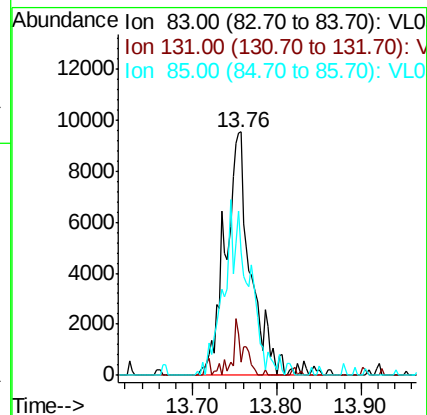
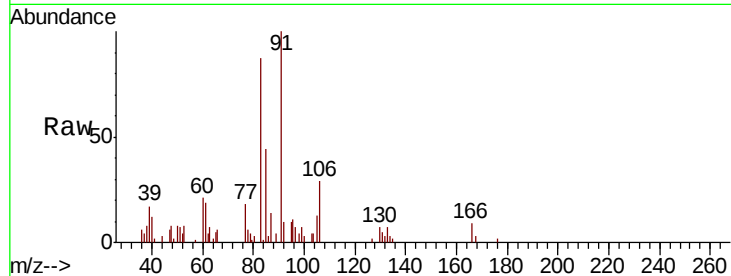
83 100

131 9.7 4.8 14.4

85 70.1 32.5 97.4

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#64

n-propylbenzene

Concen: 0.075 ppbv m

RT: 15.64 min Scan# 3999

Delta R.T. 0.01 min

Lab File: VL034321.D

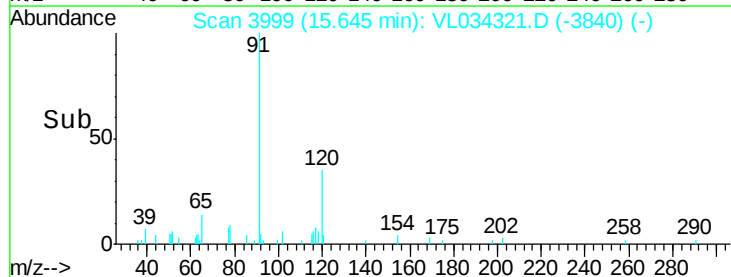
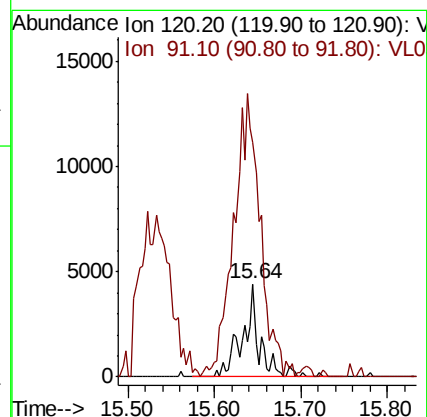
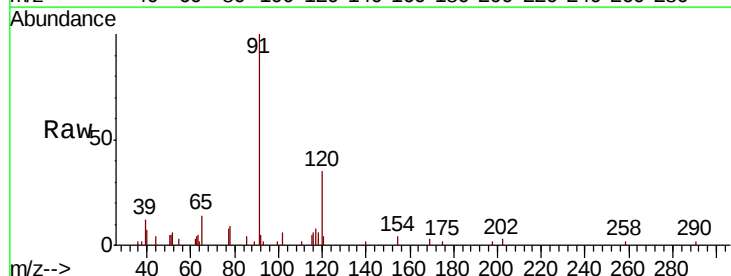
Acq: 17 Oct 2019 18:02

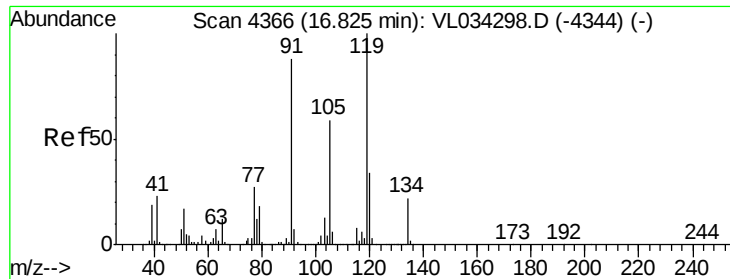
Tgt Ion:120 Resp: 5785

Ion Ratio Lower Upper

120 100

91 507.3 374.9 562.3





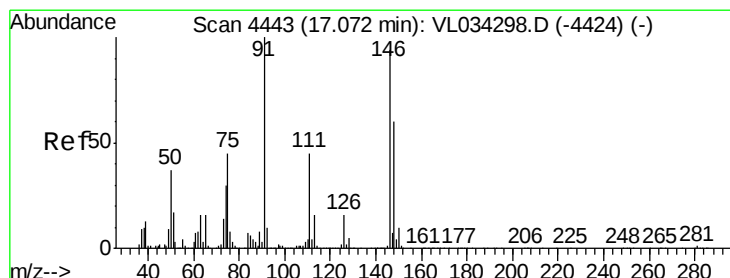
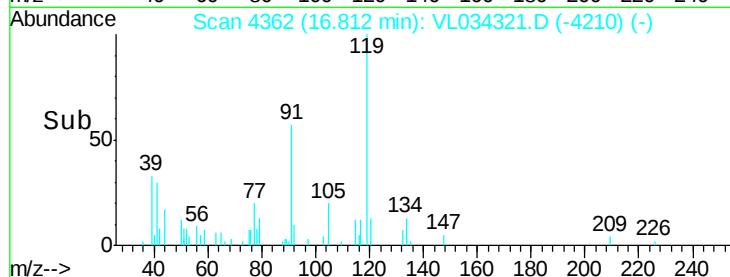
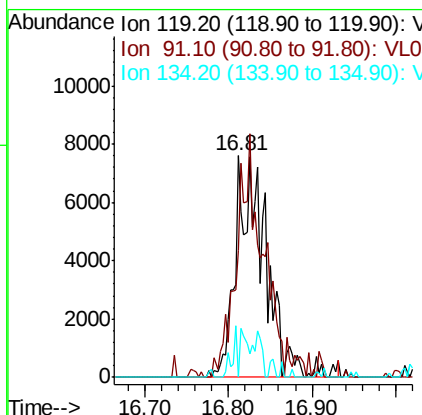
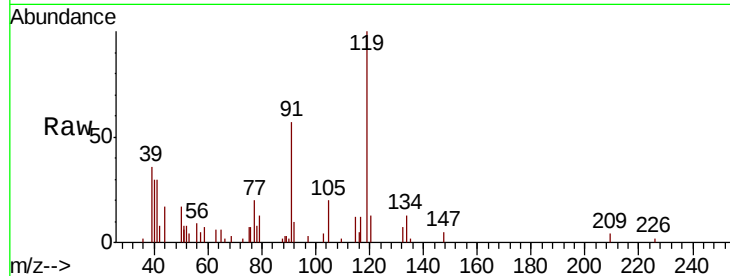
#65
 tert-Butylbenzene
 Concen: 0.072 ppbv m
 RT: 16.81 min Scan# 4362
 Delta R.T. -0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
119	100		
91	94.7	71.4	107.0
134	0.0	15.9	23.9#

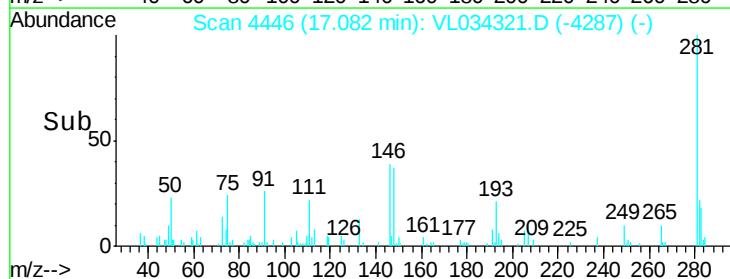
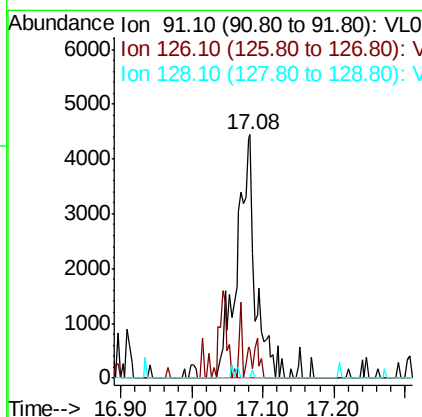
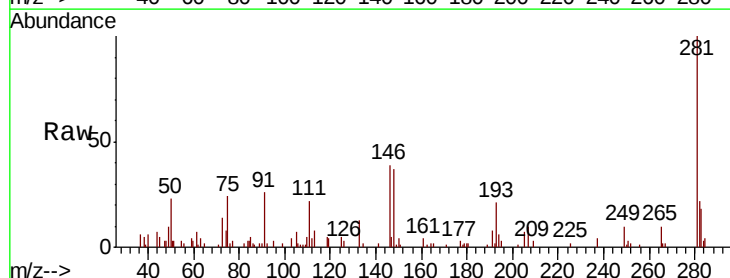
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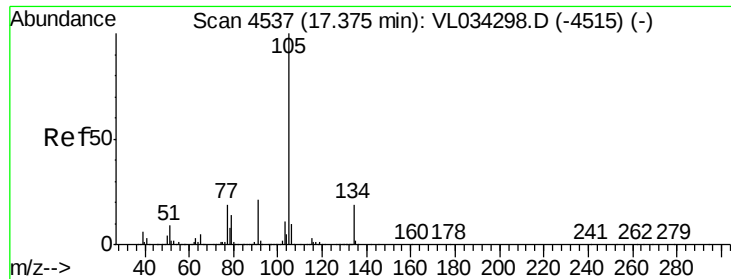
MMDadoda
 10/22/2019 2:54:54 PM



#66
 Benzyl Chloride
 Concen: 0.080 ppbv m
 RT: 17.08 min Scan# 4446
 Delta R.T. 0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
91	100		
126	0.0	12.9	19.3#
128	0.0	4.3	6.5#





#67

sec-Butylbenzene

Concen: 0.077 ppbv m

RT: 17.38 min Scan# 4538

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 105 Resp: 28648

Ion Ratio Lower Upper

105 100

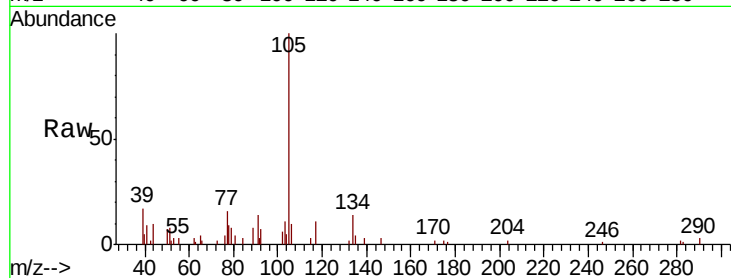
134 17.3 15.4 23.0

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

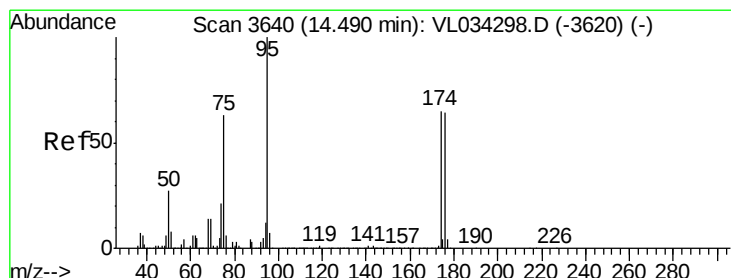
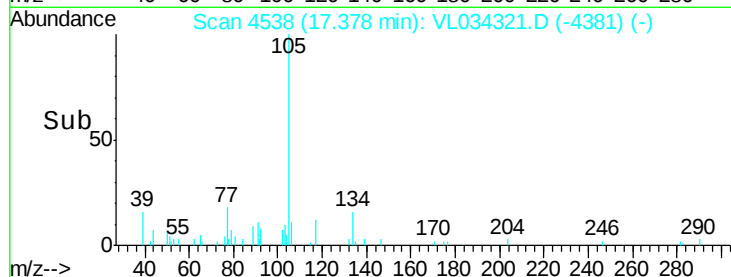
17.38

10000

5000

0

Time--> 17.20 17.40



#68

1-Bromo-4-Fluorobenzene

Concen: 10.104 ppbv

RT: 14.49 min Scan# 3640

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

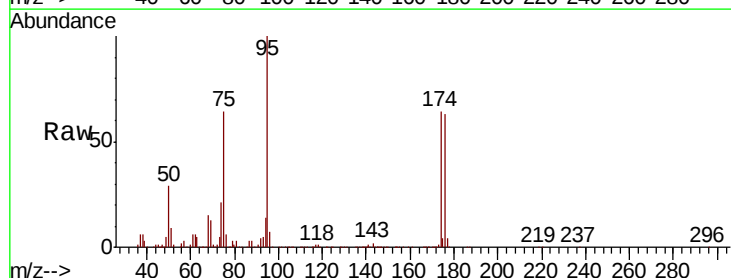
Tgt Ion: 95 Resp: 1613594

Ion Ratio Lower Upper

95 100

174 64.5 52.6 78.8

175 4.5 3.8 5.6



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

14.49

800000

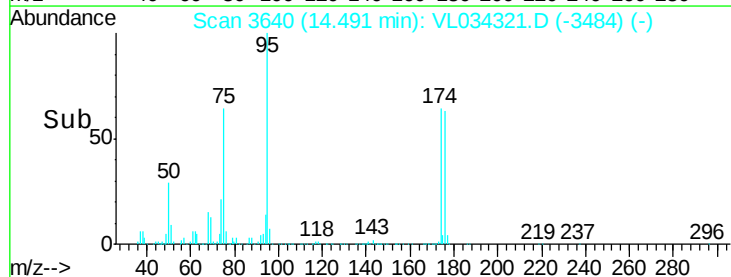
600000

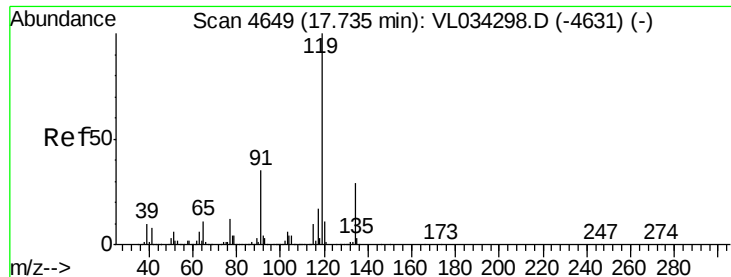
400000

200000

0

Time--> 14.40 14.45 14.50 14.55





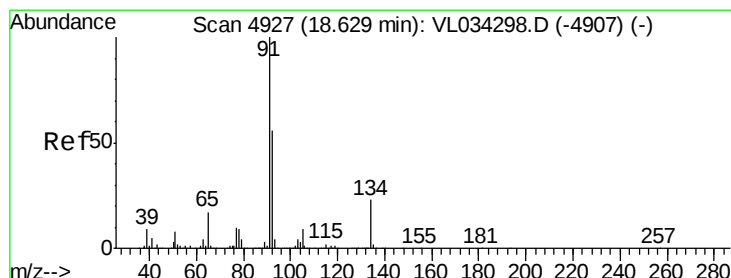
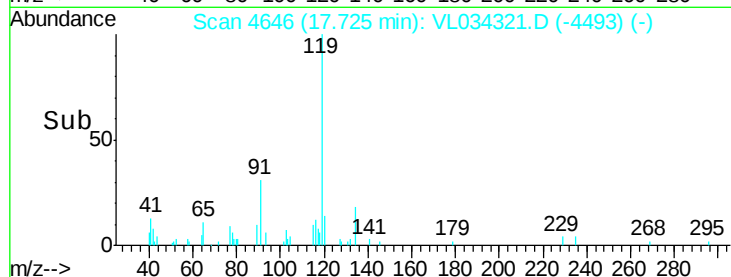
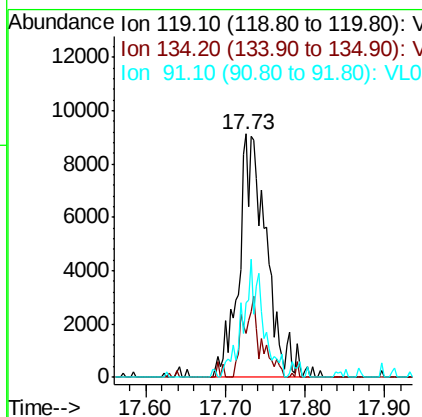
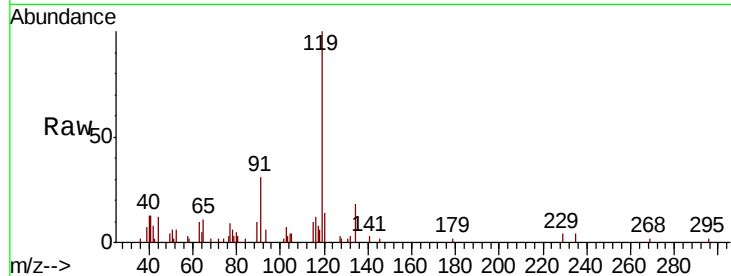
#69
p-Isopropyltoluene
Concen: 0.072 ppbv m
RT: 17.73 min Scan# 4646
Delta R.T. -0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Instrument :
MSVOA_L
ClientSampleId :
MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
119	100		
134	22.4	21.3	31.9
91	37.5	26.6	39.8

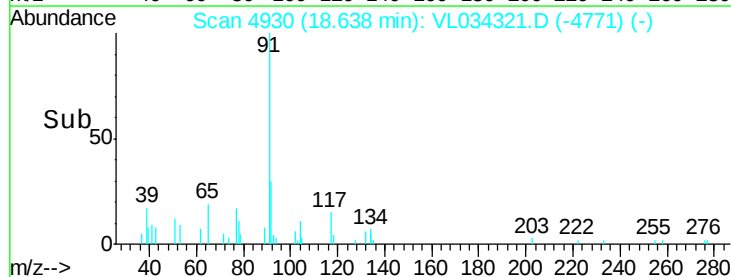
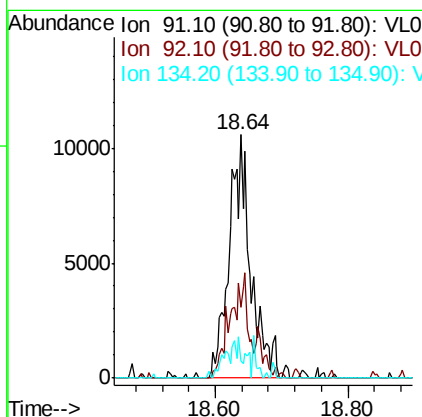
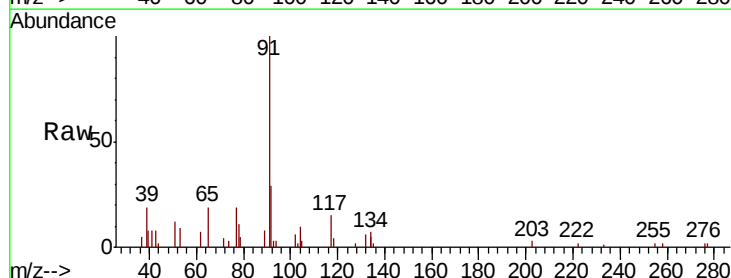
Manual Integrations
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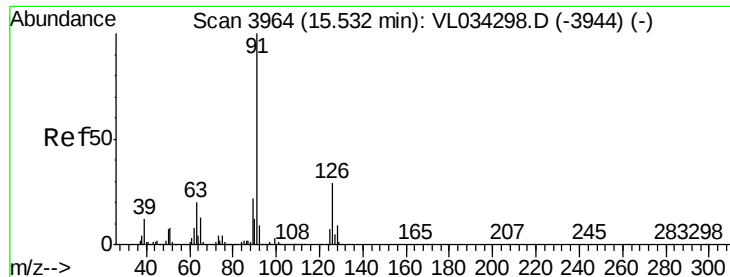
MMDadoda
10/22/2019 2:54:54 PM



#70
n-Butylbenzene
Concen: 0.073 ppbv m
RT: 18.64 min Scan# 4930
Delta R.T. 0.01 min
Lab File: VL034321.D
Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
91	100		
92	0.0	44.5	66.7#
134	0.0	18.2	27.2#





#71

2-Chlorotoluene

Concen: 0.082 ppbv m

RT: 15.52 min Scan# 3961

Delta R.T. -0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion: 91 Resp: 19010

Ion Ratio Lower Upper

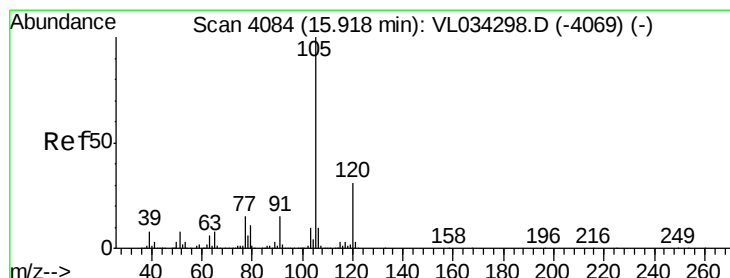
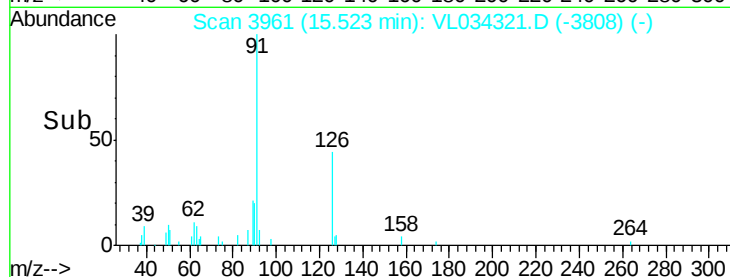
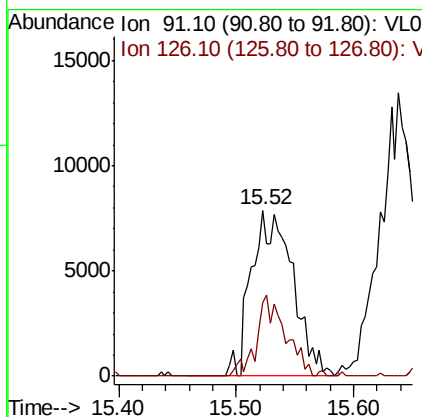
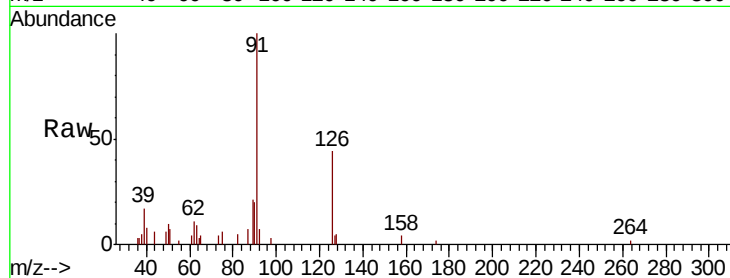
91 100

126 0.0 11.9 47.5#

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#72

4-Ethyltoluene

Concen: 0.068 ppbv m

RT: 15.92 min Scan# 4084

Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion: 105 Resp: 17440

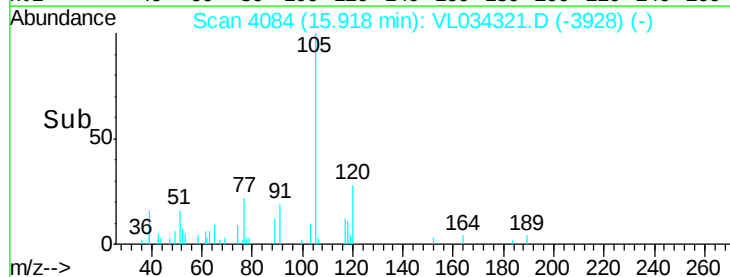
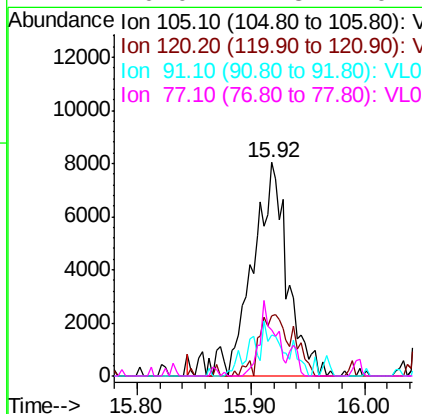
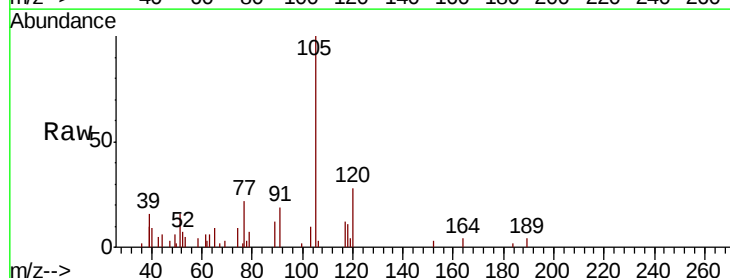
Ion Ratio Lower Upper

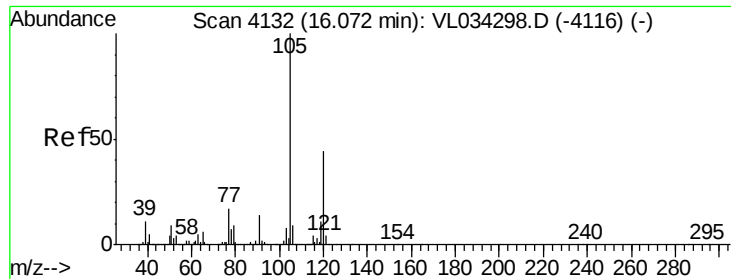
105 100

120 27.7 23.8 35.8

91 0.0 11.2 16.8#

77 0.0 12.8 19.2#





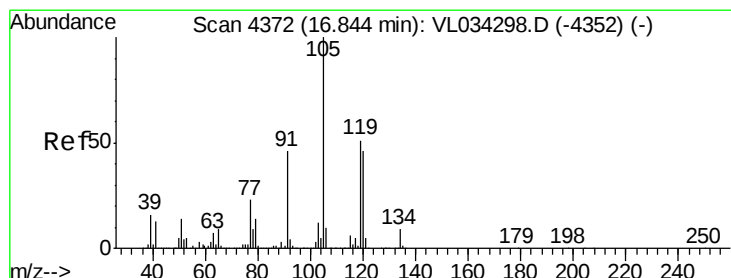
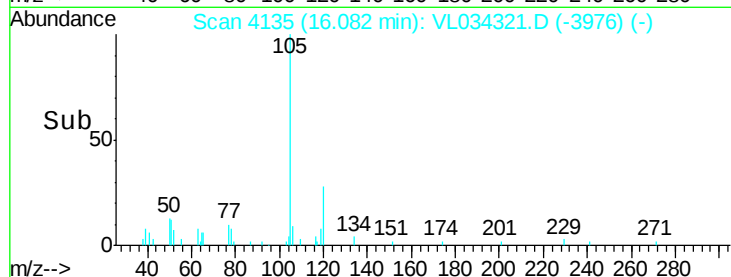
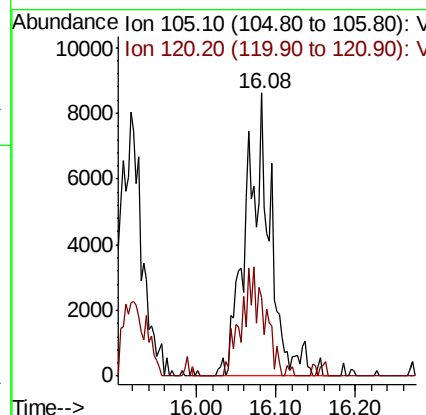
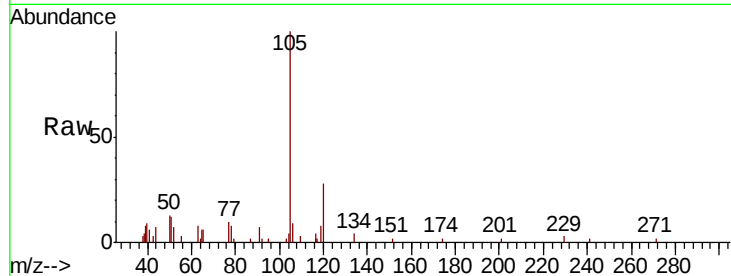
#73
 1,3,5-Trimethylbenzene
 Concen: 0.072 ppbv m
 RT: 16.08 min Scan# 4135
 Delta R.T. 0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:105 Resp: 18133
 Ion Ratio Lower Upper
 105 100
 120 27.8 35.2 52.8#

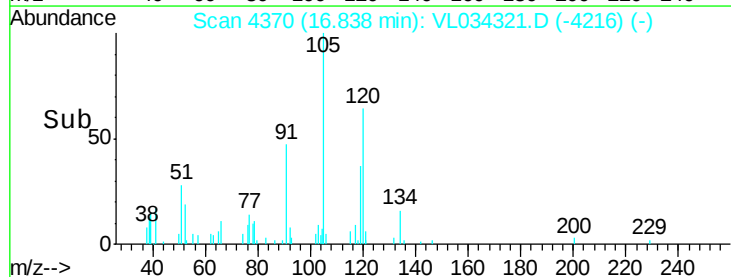
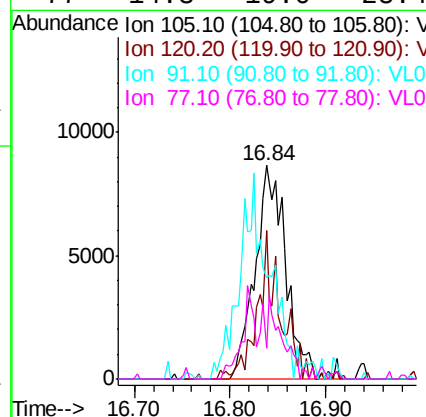
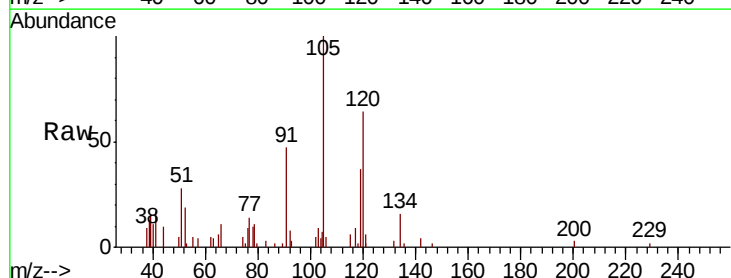
Manual Integrations
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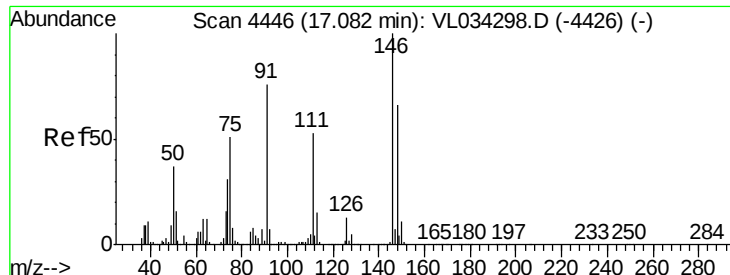
MMDadoda
 10/22/2019 2:54:54 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.074 ppbv m
 RT: 16.84 min Scan# 4370
 Delta R.T. -0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion:105 Resp: 19466
 Ion Ratio Lower Upper
 105 100
 120 63.7 37.0 55.6#
 91 47.3 38.2 57.2
 77 14.3 19.0 28.4#





#75

1,3-Dichlorobenzene

Concen: 0.116 ppbv m

RT: 17.07 min Scan# 4442

Delta R.T. -0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

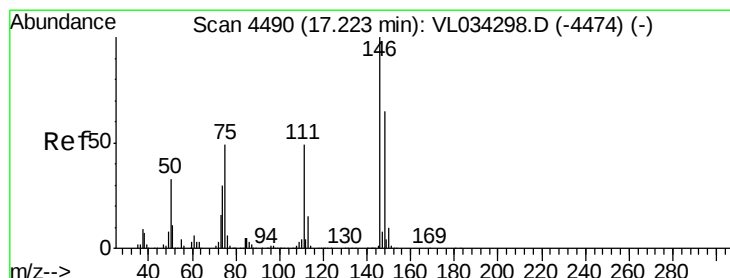
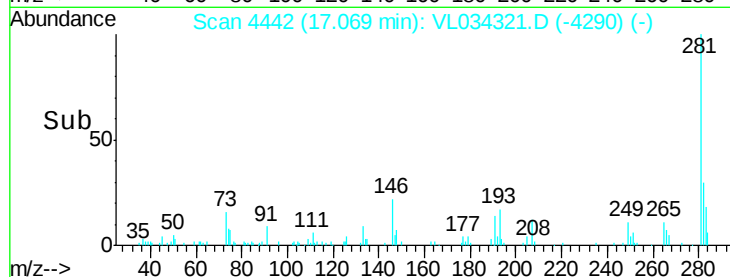
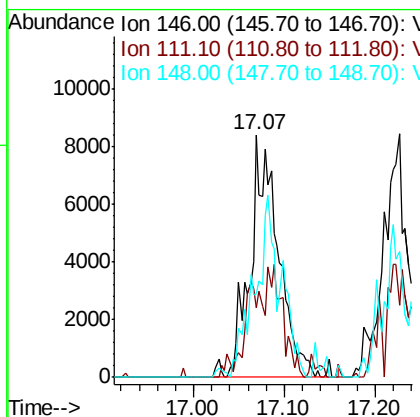
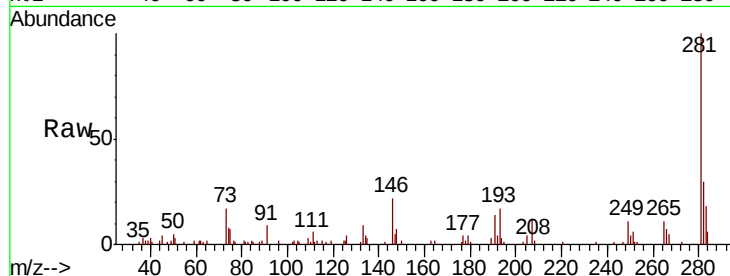
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	146	Resp:	18370
Ion Ratio	Lower	Upper	
146	100		
111	54.0	24.5	73.5
148	69.7	32.3	96.8

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#76

1,4-Dichlorobenzene

Concen: 0.095 ppbv

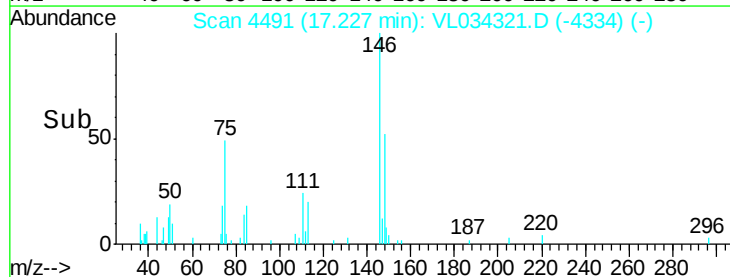
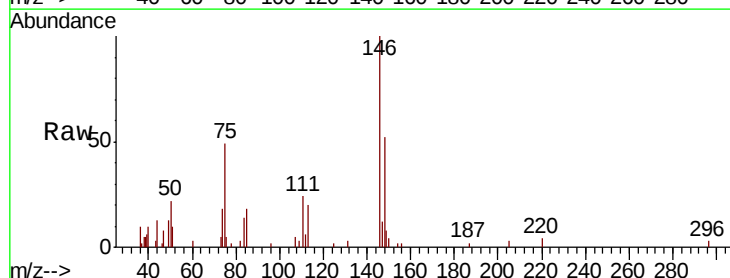
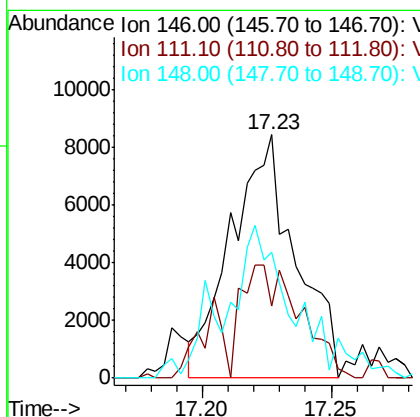
RT: 17.23 min Scan# 4491

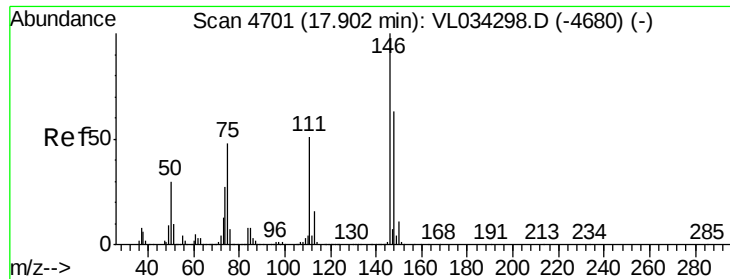
Delta R.T. 0.00 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	146	Resp:	14694
Ion Ratio	Lower	Upper	
146	100		
111	55.2	23.9	71.7
148	69.0	33.1	99.2





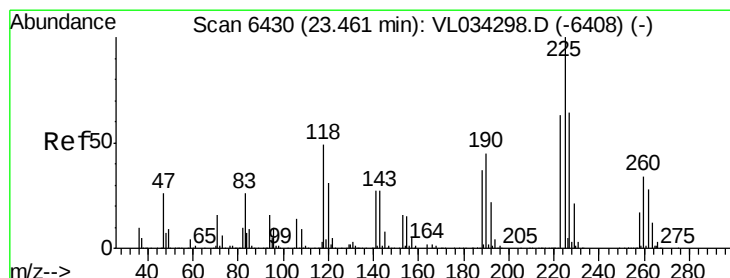
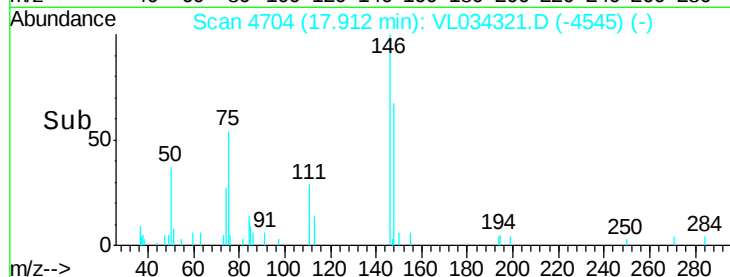
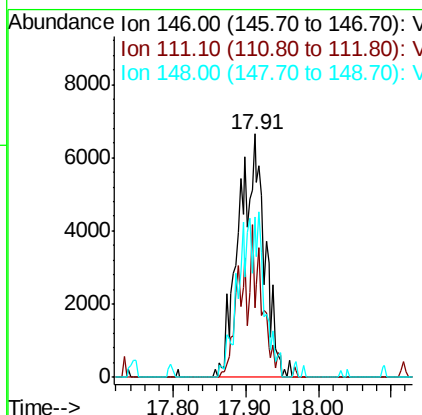
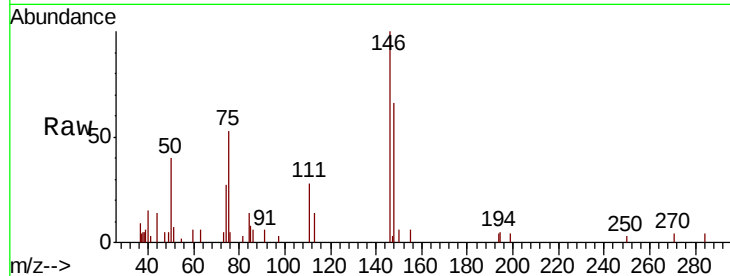
#77
 1,2-Dichlorobenzene
 Concen: 0.105 ppbv m
 RT: 17.91 min Scan# 4704
 Delta R.T. 0.01 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
146	100		
111	0.0	25.1	75.3#
148	0.0	32.3	96.8#

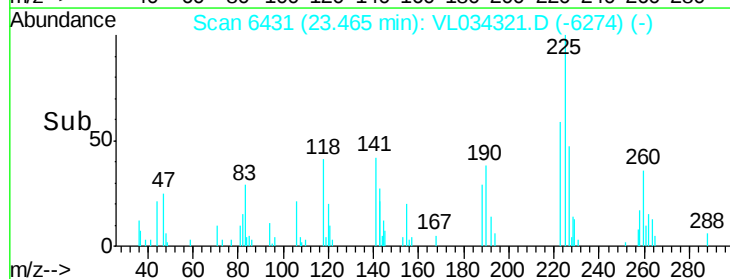
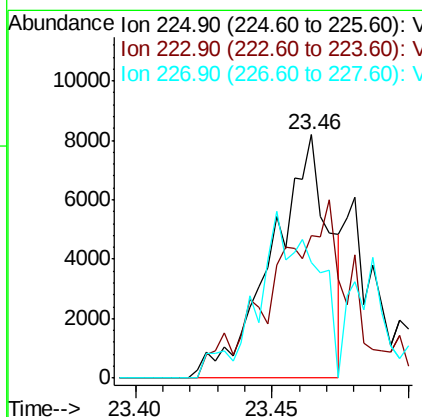
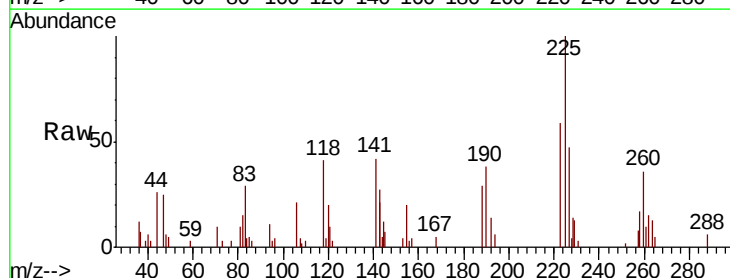
Manual Integrations
 APPROVED

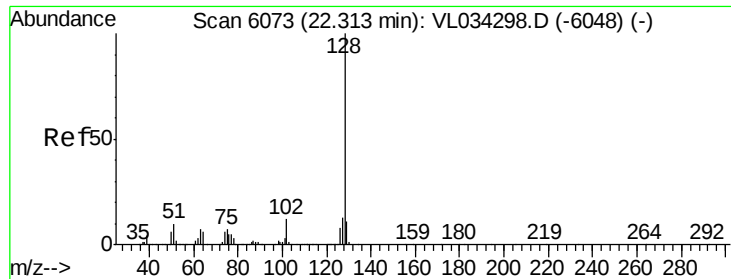
MMDadoda
 10/22/2019 2:54:54 PM



#78
 Hexachloro-1,3-Butadiene
 Concen: 0.091 ppbv
 RT: 23.46 min Scan# 6431
 Delta R.T. 0.00 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Tgt Ion	Ratio	Lower	Upper
225	100		
223	101.3	50.8	76.2#
227	99.8	51.5	77.3#





#79

Naphthalene

Concen: 0.071 ppbv m

RT: 22.32 min Scan# 6075

Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Instrument :

MSVOA_L

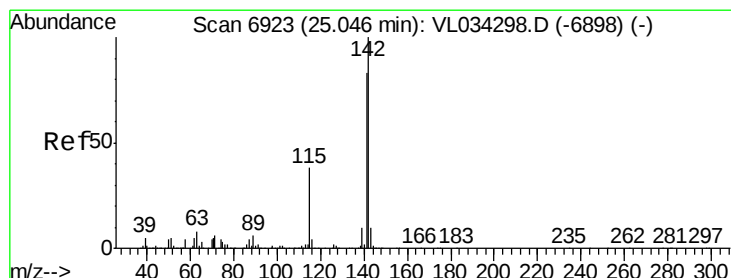
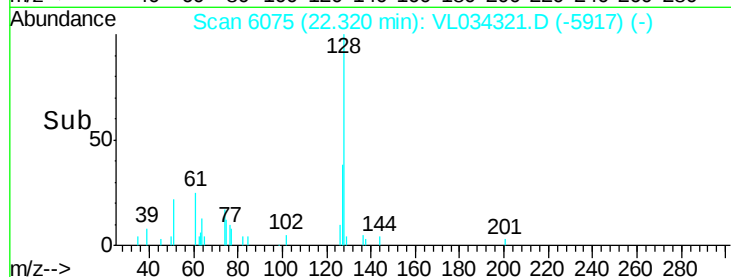
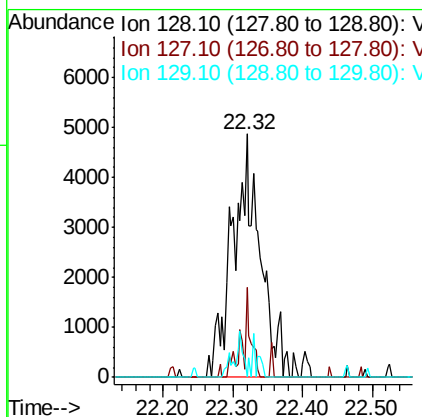
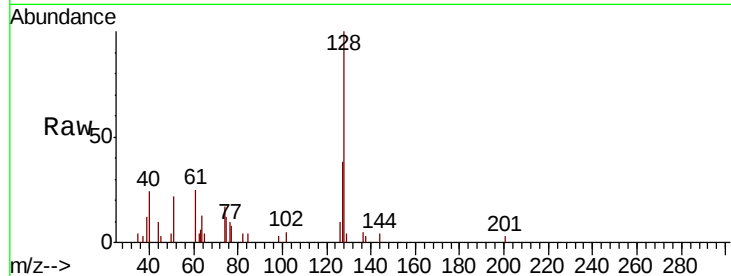
ClientSampleId :

MDL-MDL-AIR-03-QT4-2019DL

Tot Ion:	128	Resp:	13652
Ion Ratio	Lower	Upper	
128	100		
127	38.3	10.2	15.4#
129	0.0	8.9	13.3#

Manual Integrations
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#80

Naphthalene, 2-methyl-

Concen: 0.048 ppbv

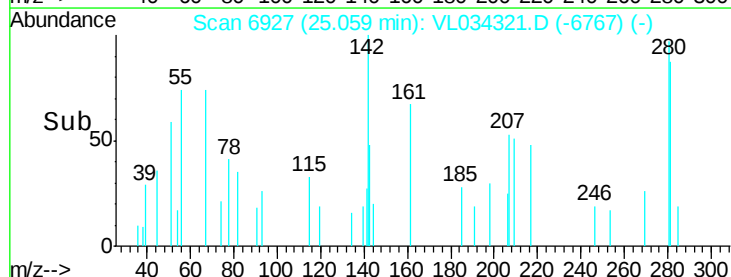
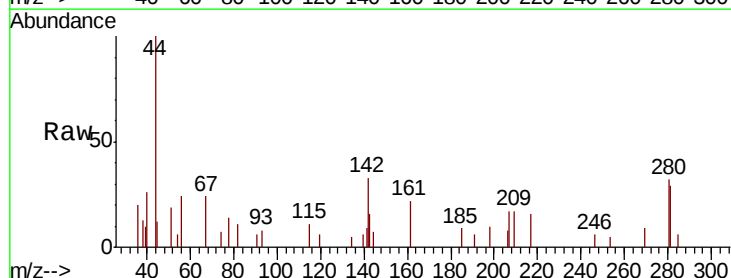
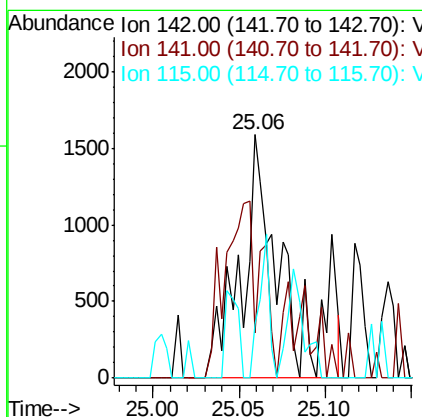
RT: 25.06 min Scan# 6927

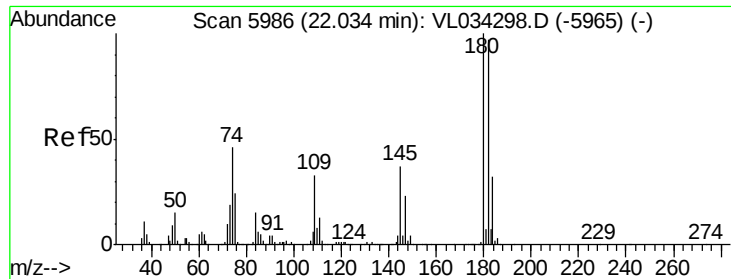
Delta R.T. 0.01 min

Lab File: VL034321.D

Acq: 17 Oct 2019 18:02

Tgt Ion:	142	Resp:	2694
Ion Ratio	Lower	Upper	
142	100		
141	62.3	65.7	98.5#
115	42.8	30.9	46.3





#81
 1,2,4-Trichlorobenzene
 Concen: 0.079 ppbv m
 RT: 22.03 min Scan# 5986
 Delta R.T. 0.00 min
 Lab File: VL034321.D
 Acq: 17 Oct 2019 18:02

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-MDL-AIR-03-QT4-2019DL

Tot Ion	Ratio	Lower	Upper
180	100		
182	0.0	77.8	116.8#
184	0.0	25.4	38.2#

Manual Integrations
 APPROVED

MMDadoda
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