

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL102418\
 Data File : VL032695.D
 Acq On : 24 Oct 2018 19:54
 Operator : SY/AP
 Sample : J5164-15 0.1 LOD
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Manual Integrations
 APPROVED

MMDadoda
 10/26/2018 3:40:32 PM

Quant Time: Oct 25 07:15:09 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 25 07:15:09 2018
 QLast Update : Thu Oct 25 05:15:43 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1445484	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.31	114	3389559	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3320759	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2511780	10.16	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.09	85	23790	0.162	ppbv	99
3) Chlorodifluoromethane	3.02	51	15043	0.133	ppbv	98
4) Chloromethane	3.18	50	8627	0.137	ppbv	96
5) Vinyl Chloride	3.31	62	7727	0.113	ppbv	91
6) Bromomethane	3.53	94	5325m	0.125	ppbv	
7) Chloroethane	3.61	64	3409m	0.135	ppbv	
8) Dichlorotetrafluoroethane	3.23	85	20394m	0.131	ppbv	
9) Propene	3.04	41	5758	0.124	ppbv	97
10) Heptane	8.25	43	11730m	0.065	ppbv	
11) Trichlorofluoromethane	4.02	101	22625	0.118	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.57	101	19398m	0.121	ppbv	
14) Bromoethene	3.80	108	6185	0.114	ppbv	92
15) Acetone	3.94	43	29711	0.223	ppbv	97
16) 1,3-Butadiene	3.37	39	5627	0.115	ppbv #	78
17) tert-Butyl alcohol	4.42	59	6663m	0.170	ppbv	
18) 1,1-Dichloroethene	4.37	96	8463m	0.120	ppbv	
19) Isopropyl Alcohol	4.07	45	11367m	0.120	ppbv	
20) Methylene Chloride	4.42	84	13706m	0.202	ppbv	
21) Allvl Chloride	4.49	41	14199m	0.130	ppbv	
22) trans-1,2-Dichloroethene	4.98	96	9449m	0.131	ppbv	
23) Vinyl Acetate	5.17	43	24458m	0.103	ppbv	
24) 1,1-Dichloroethane	5.10	63	23552m	0.127	ppbv	
25) Ethyl Acetate	5.80	43	34496	0.112	ppbv #	95
26) Hexane	5.79	57	14579m	0.100	ppbv	
27) Carbon Disulfide	4.63	76	16708m	0.095	ppbv	
28) Methyl tert-Butyl Ether	5.16	73	18581m	0.089	ppbv	
29) Chloroform	5.86	83	30831	0.133	ppbv #	82
30) Cyclohexane	7.29	84	19518m	0.170	ppbv	
31) cis-1,2-Dichloroethene	5.65	61	12008m	0.089	ppbv	
32) 1,1,1-Trichloroethane	6.63	97	26981m	0.114	ppbv	
34) 2-Butanone	5.36	43	20242m	0.111	ppbv	
35) Carbon Tetrachloride	7.15	117	30384m	0.126	ppbv	
36) Benzene	7.01	78	27289m	0.099	ppbv	
37) 1,2-Dichloroethane	6.43	62	21079m	0.125	ppbv	
38) Trichloroethene	7.97	130	10556m	0.104	ppbv	
39) 1,2-Dichloropropane	7.74	63	11980m	0.113	ppbv	
41) Tetrahydrofuran	6.22	42	8275m	0.082	ppbv	
42) Bromodichloromethane	7.93	83	28707m	0.121	ppbv	
43) Methyl Methacrylate	8.16	69	7570m	0.075	ppbv	
44) 2,2,4-Trimethylpentane	8.01	57	28024	0.060	ppbv #	63
45) t-1,3-Dichloropropene	9.43	75	9727m	0.072	ppbv	

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 MSVOA_L
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 MDL-AIR-03-QT4-2018 0.1 LOD

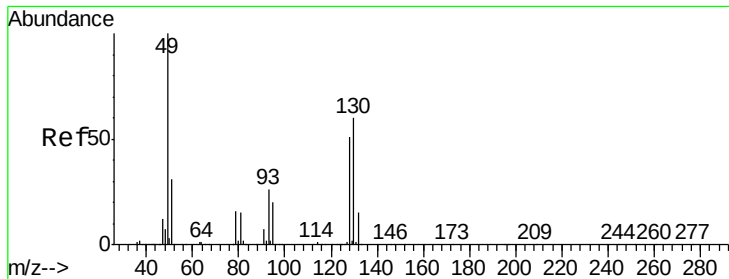
Manual Integrations
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 10/26/2018 3:40:32 PM

Quant Time: Oct 25 07:15:09 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 25 07:15:09 2018
 QLast Update : Thu Oct 25 05:15:43 2018
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	8.85	75	11977m	0.078	ppbv	
47) 1,1,2-Trichloroethane	9.64	97	14939m	0.119	ppbv	
48) Dibromochloromethane	10.47	129	19623m	0.094	ppbv	
49) Bromoform	13.21	173	16969m	0.103	ppbv	
50) 4-Methyl-2-Pentanone	8.92	43	21817m	0.081	ppbv	
51) 2-Hexanone	10.32	43	9523m	0.048	ppbv	
52) Tetrachloroethene	11.38	164	9793m	0.102	ppbv	
53) Toluene	9.97	91	19711m	0.062	ppbv	
54) 1,2-Dibromoethane	10.77	107	16092	0.094	ppbv	91
56) 1,1,1,2-Tetrachloroethane	12.29	131	17881m	0.123	ppbv	
57) Chlorobenzene	12.31	112	32410m	0.133	ppbv	
58) Ethyl Benzene	12.88	91	25837m	0.067	ppbv	
59) m/p-Xylene	13.14	91	36058m	0.105	ppbv	
60) o-Xylene	13.86	91	19010m	0.057	ppbv	
61) Styrene	13.69	104	10278m	0.046	ppbv	
62) Isopropylbenzene	14.84	105	36590m	0.078	ppbv	
63) 1,1,2,2-Tetrachloroethane	13.86	83	29576m	0.114	ppbv	
64) n-propylbenzene	15.74	120	6481m	0.056	ppbv	
65) tert-Butylbenzene	16.92	119	21682m	0.054	ppbv	
66) Benzyl Chloride	17.17	91	17209m	0.083	ppbv	
67) sec-Butylbenzene	17.47	105	40132m	0.071	ppbv	
69) p-Isopropyltoluene	17.83	119	24241m	0.054	ppbv	
70) n-Butylbenzene	18.73	91	24874m	0.054	ppbv	
71) 2-Chlorotoluene	15.63	91	21470m	0.064	ppbv	
72) 4-Ethyltoluene	16.01	105	18558	0.053	ppbv #	88
73) 1,3,5-Trimethylbenzene	16.17	105	19319m	0.056	ppbv	
74) 1,2,4-Trimethylbenzene	16.94	105	18632m	0.051	ppbv	
75) 1,3-Dichlorobenzene	17.19	146	27781m	0.132	ppbv	
76) 1,4-Dichlorobenzene	17.32	146	18752m	0.096	ppbv	
77) 1,2-Dichlorobenzene	18.00	146	18797m	0.094	ppbv	
78) Hexachloro-1,3-Butadiene	23.56	225	15589m	0.165	ppbv	
79) Naphthalene	22.45	128	9511m	0.042	ppbv	
81) 1,2,4-Trichlorobenzene	22.17	180	4944m	0.042	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

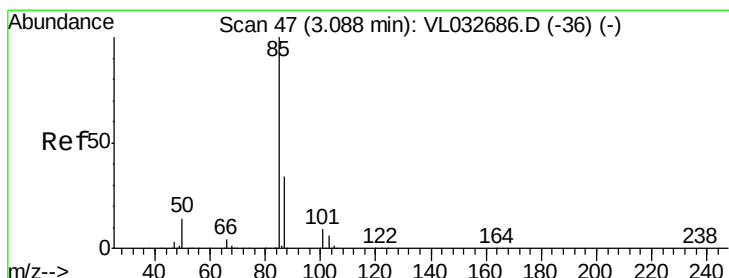
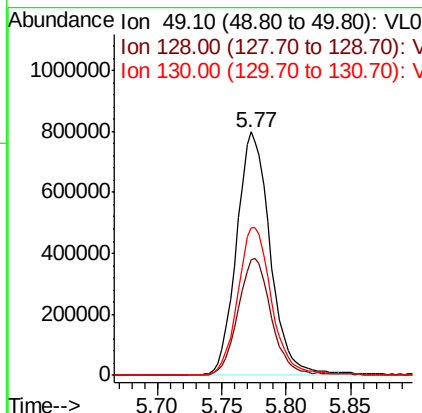
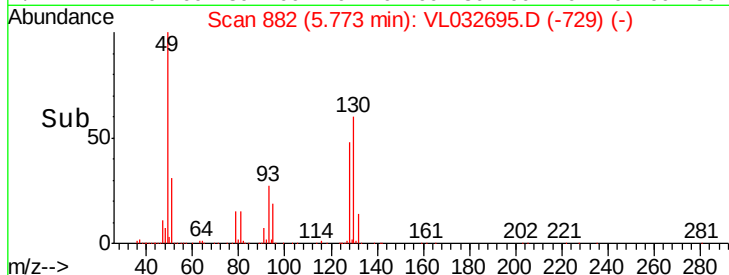
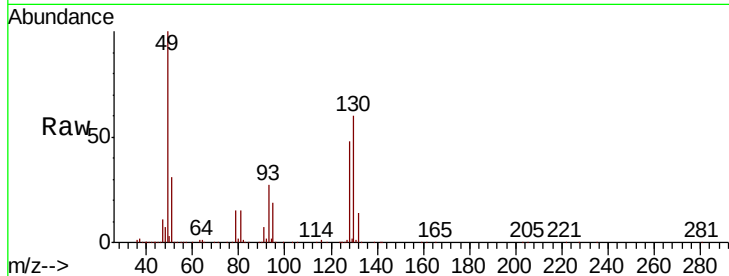
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	49	Resp:	1445484
Ion	Ratio	Lower	Upper
49	100		
128	48.1	22.3	66.8
130	61.8	28.4	85.3

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#2

Dichlorodifluoromethane

Concen: 0.162 ppbv

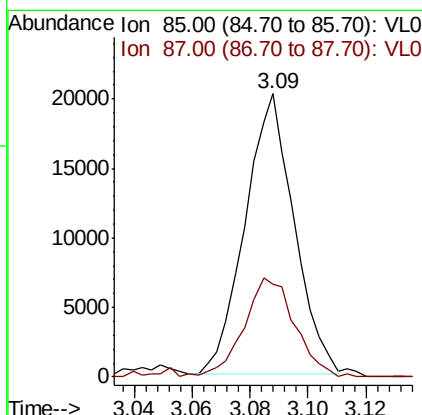
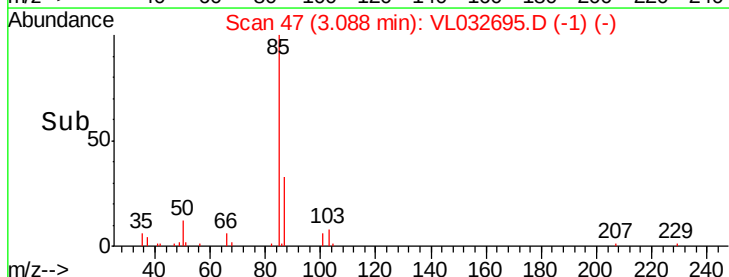
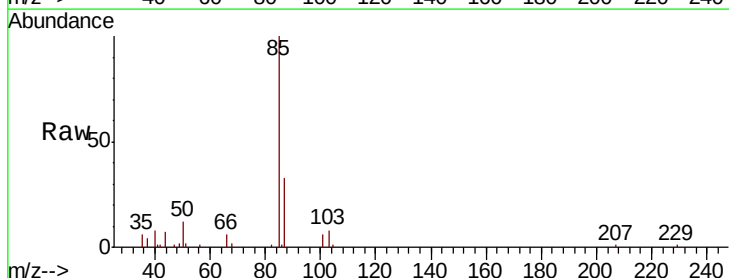
RT: 3.09 min Scan# 47

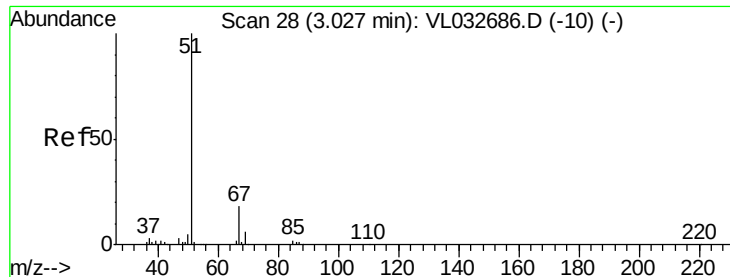
Delta R.T. 0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	85	Resp:	23790
Ion	Ratio	Lower	Upper
85	100		
87	33.0	26.2	39.2





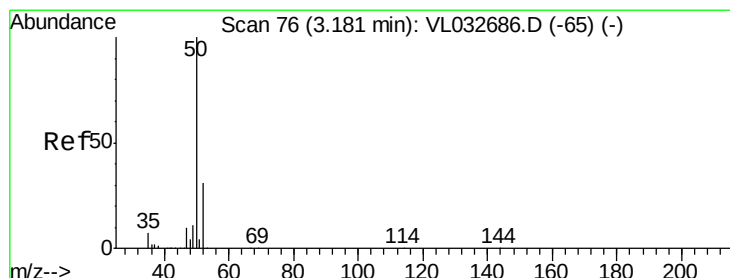
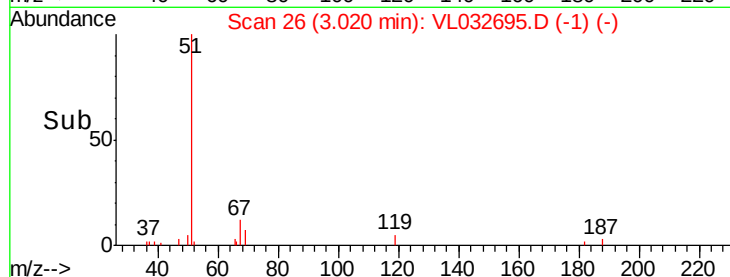
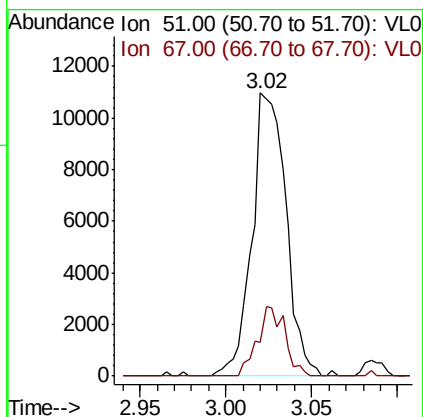
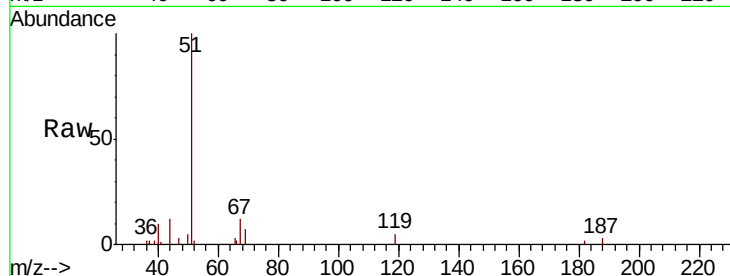
#3
Chlorodifluoromethane
Concen: 0.133 ppbv
RT: 3.02 min Scan# 26
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
51	100		
67	20.0	15.2	22.8

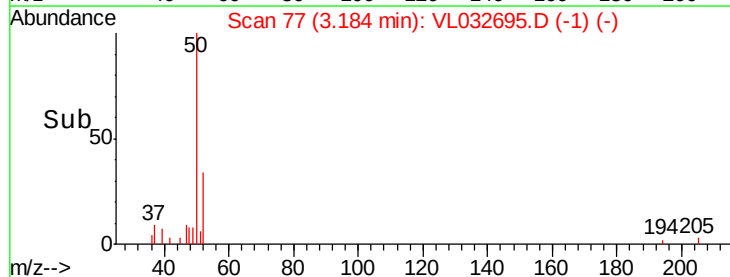
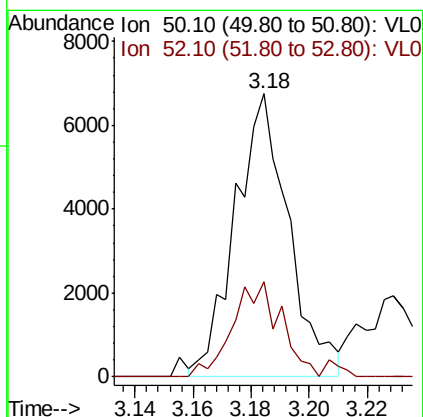
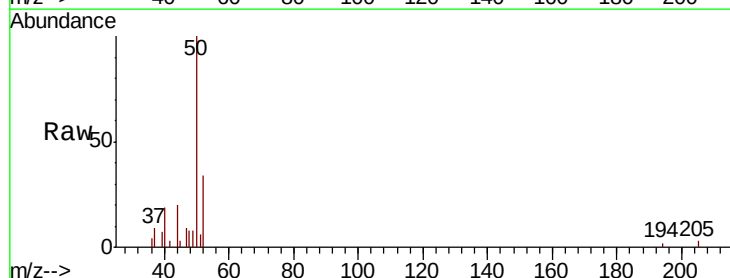
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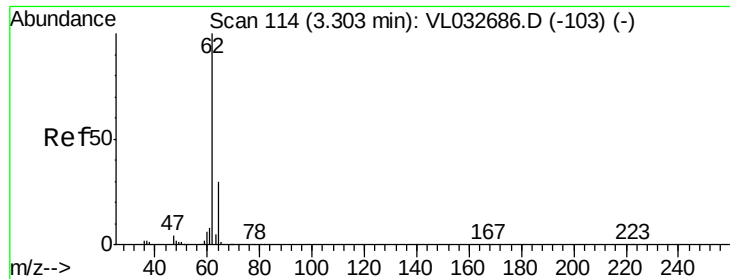
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#4
Chloromethane
Concen: 0.137 ppbv
RT: 3.18 min Scan# 77
Delta R.T. 0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
50	100		
52	34.8	25.9	38.9





#5

Vinyl Chloride

Concen: 0.113 ppbv

RT: 3.31 min Scan# 115

Delta R.T. 0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 62 Resp: 7727

Ion Ratio Lower Upper

62 100

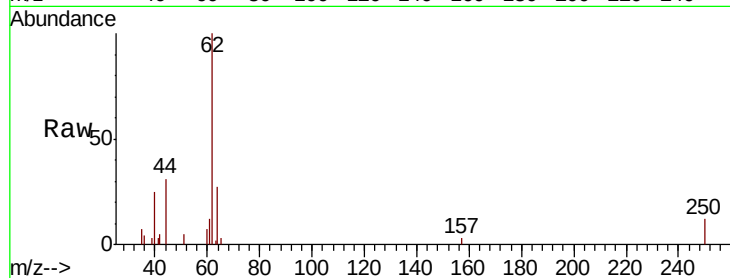
64 26.7 25.5 38.3

Manual Integrations

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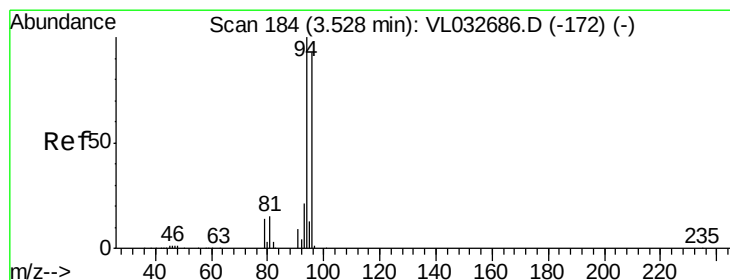
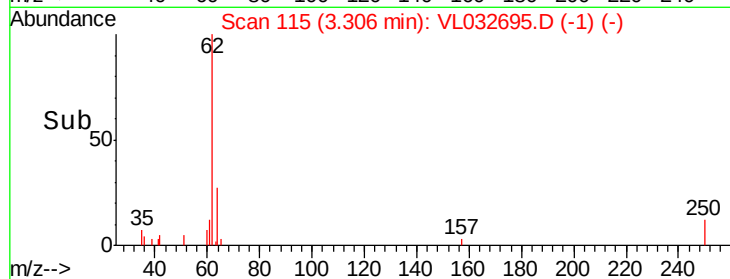
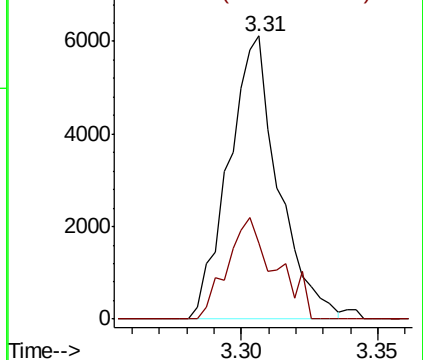
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.125 ppbv m

RT: 3.53 min Scan# 184

Delta R.T. 0.01 min

Lab File: VL032695.D

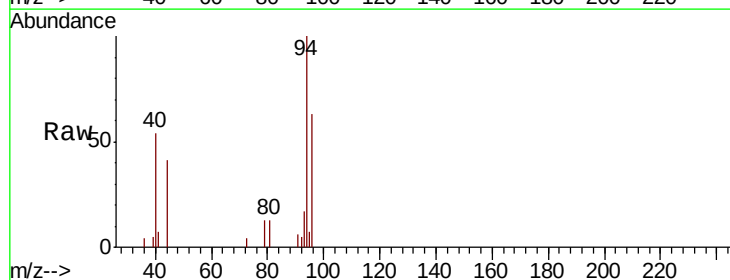
Acq: 24 Oct 2018 19:54

Tgt Ion: 94 Resp: 5325

Ion Ratio Lower Upper

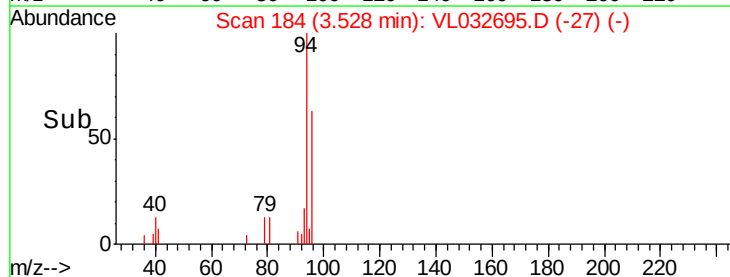
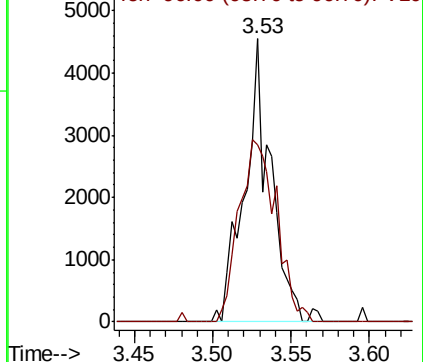
94 100

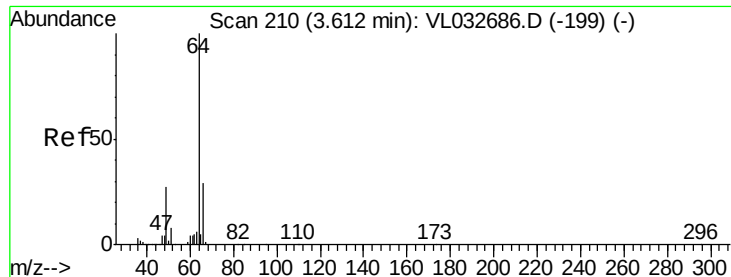
96 62.7 69.8 104.8#



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.135 ppbv m

RT: 3.61 min Scan# 209

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 64 Resp: 3409

Ion Ratio Lower Upper

64 100

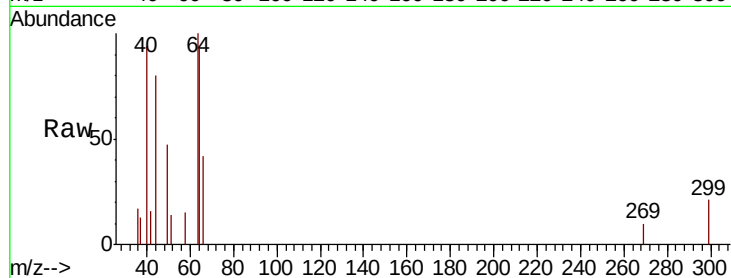
66 42.0 24.4 36.6#

Manual Integrations

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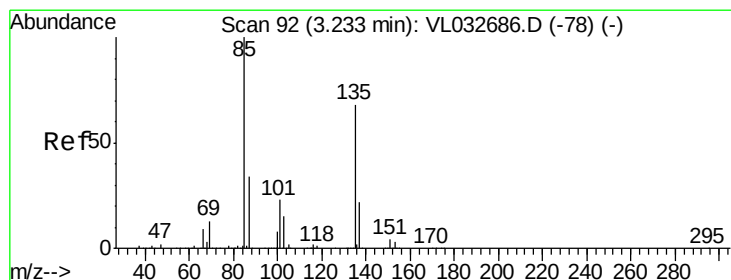
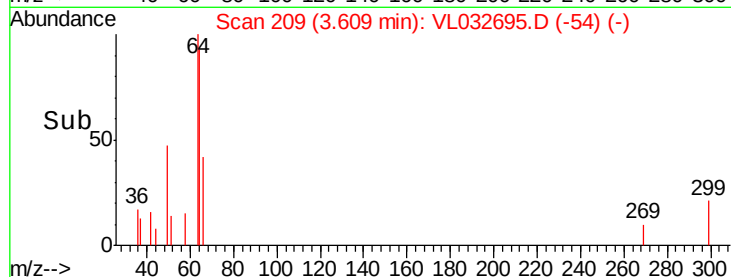
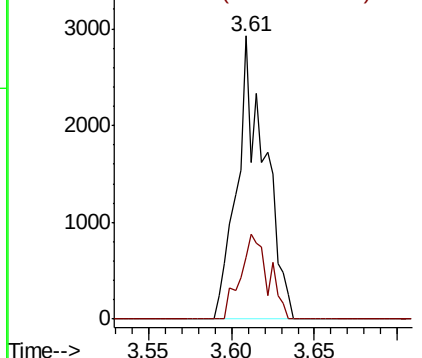
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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.131 ppbv m

RT: 3.23 min Scan# 91

Delta R.T. -0.00 min

Lab File: VL032695.D

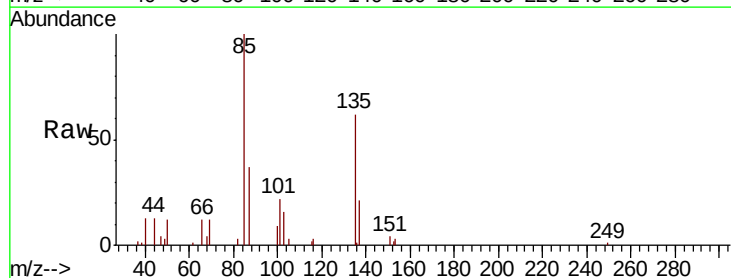
Acq: 24 Oct 2018 19:54

Tgt Ion: 85 Resp: 20394

Ion Ratio Lower Upper

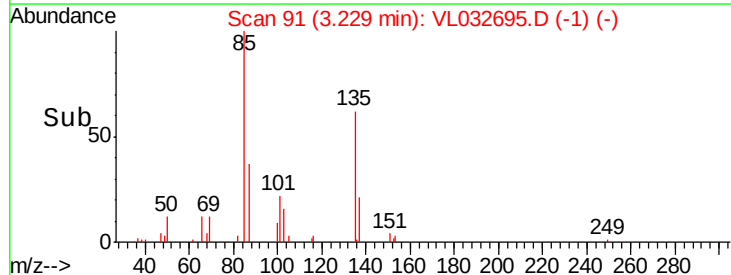
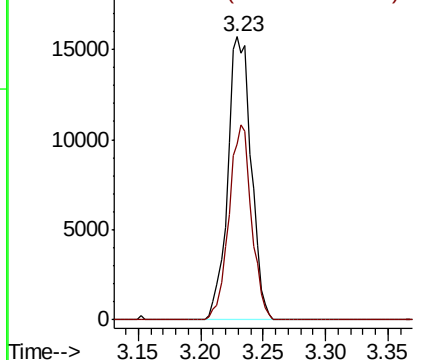
85 100

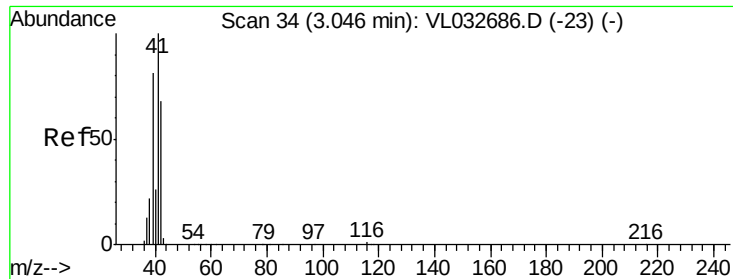
135 0.0 49.0 73.4#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.124 ppbv

RT: 3.04 min Scan# 33

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 41 Resp: 5758

Ion Ratio Lower Upper

41 100

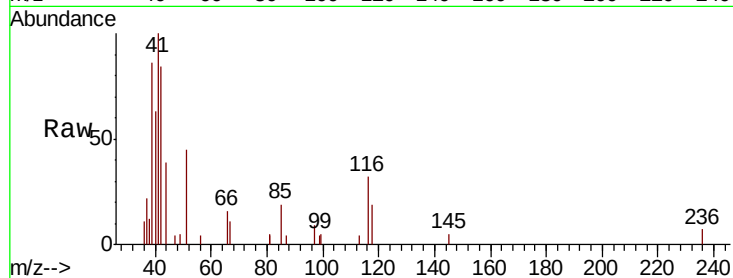
42 71.7 55.4 83.0

Manual Integrations

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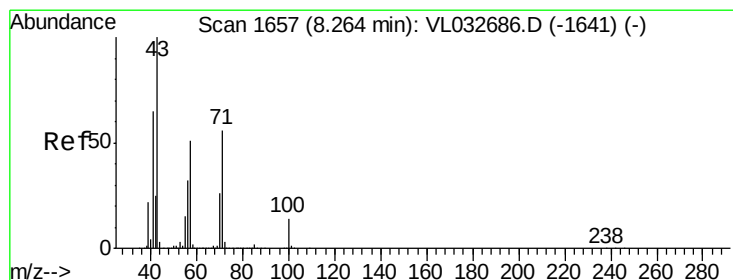
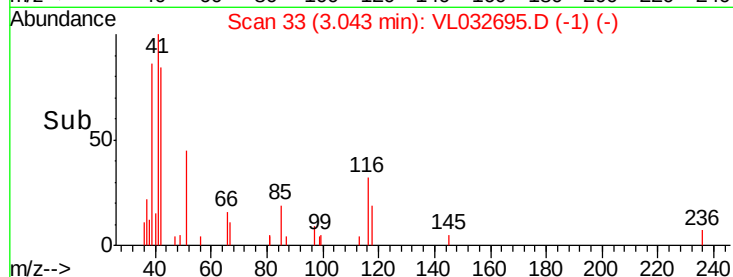
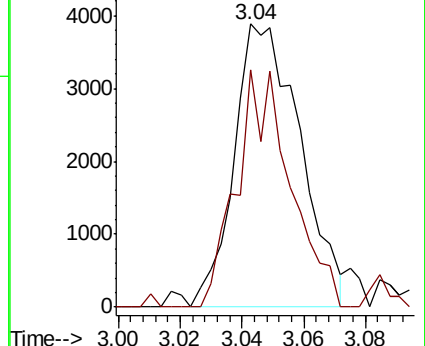
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.065 ppbv m

RT: 8.25 min Scan# 1654

Delta R.T. -0.01 min

Lab File: VL032695.D

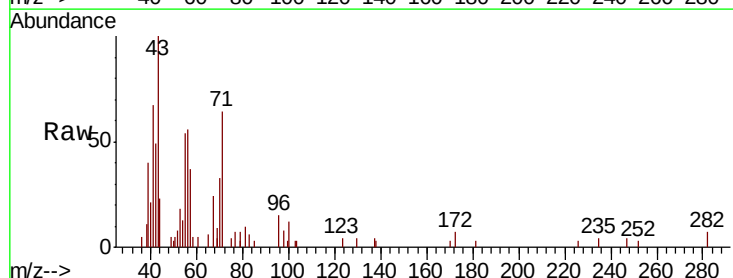
Acq: 24 Oct 2018 19:54

Tgt Ion: 43 Resp: 11730

Ion Ratio Lower Upper

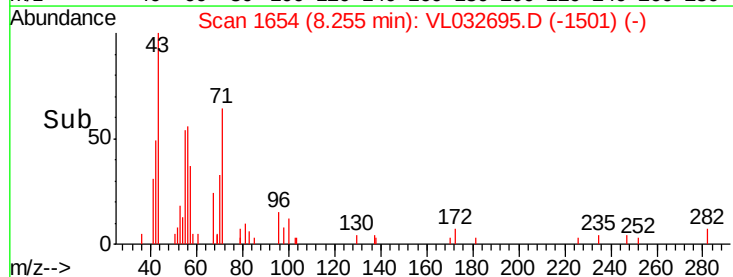
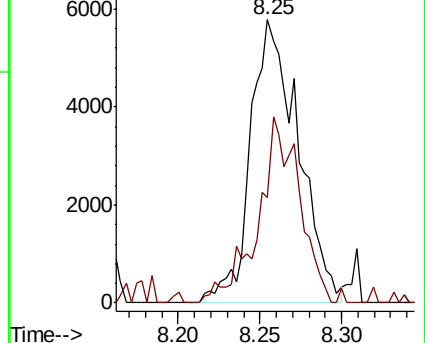
43 100

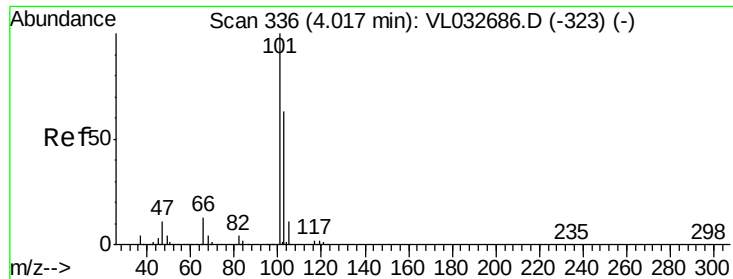
57 57.3 41.5 62.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





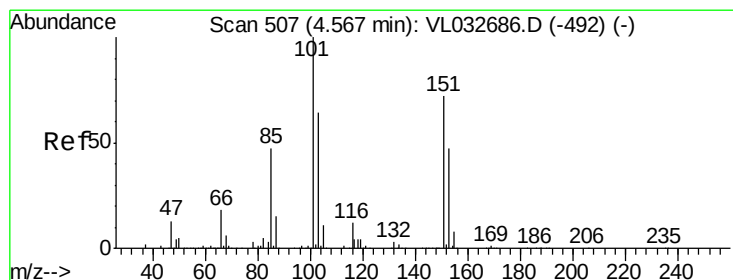
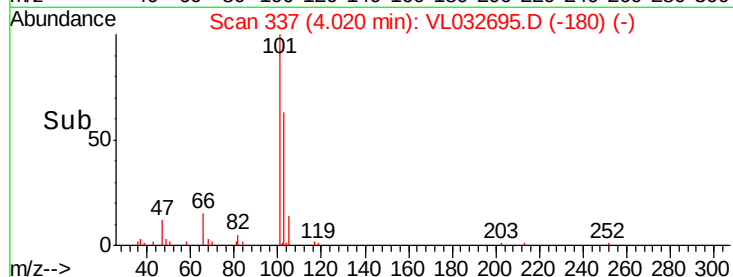
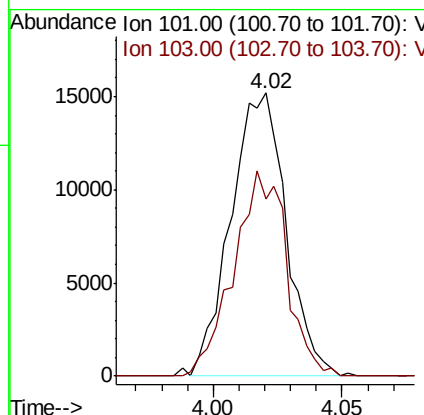
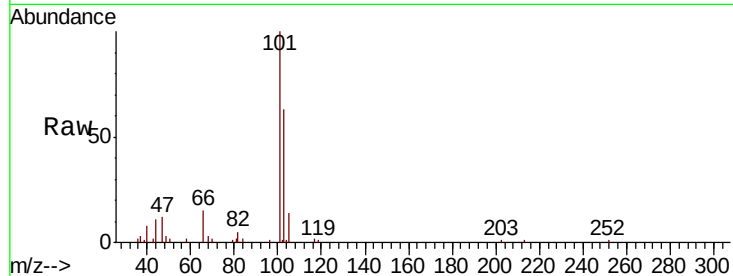
#11
 Trichlorofluoromethane
 Concen: 0.118 ppbv
 RT: 4.02 min Scan# 337
 Delta R.T. 0.01 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:101 Resp: 22625
 Ion Ratio Lower Upper
 101 100
 103 62.7 51.4 77.2

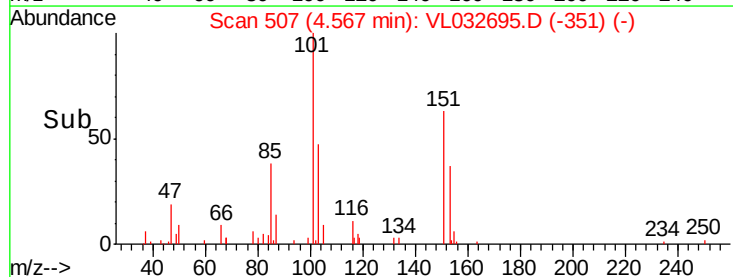
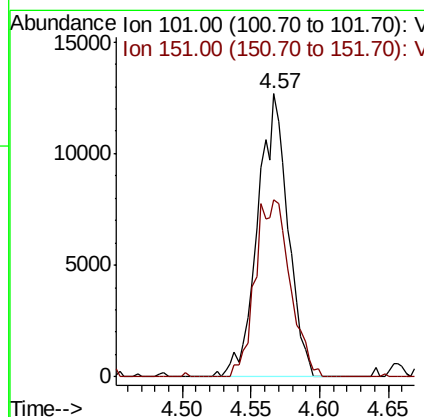
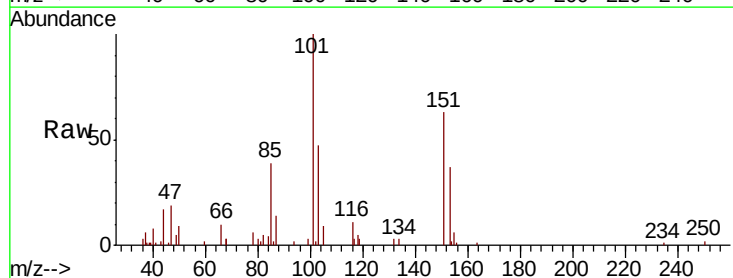
Manual Integrations
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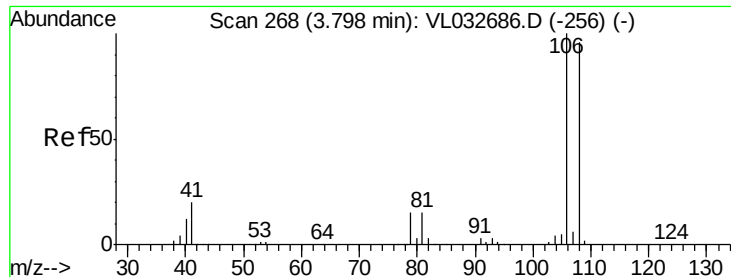
MMDadoda
 10/26/2018 3:40:32 PM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.121 ppbv m
 RT: 4.57 min Scan# 507
 Delta R.T. 0.00 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Tgt Ion:101 Resp: 19398
 Ion Ratio Lower Upper
 101 100
 151 0.0 52.3 78.5#





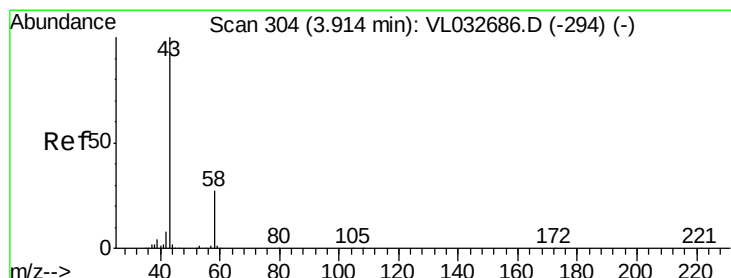
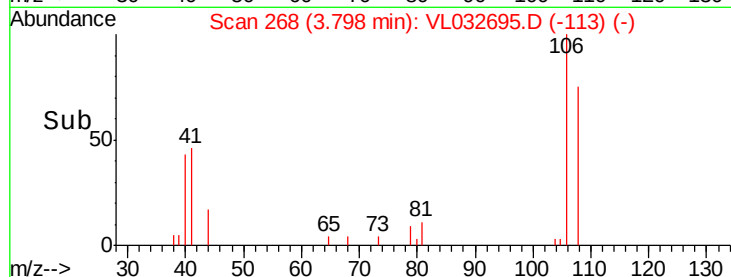
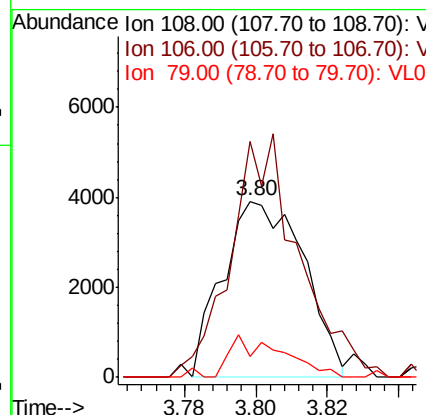
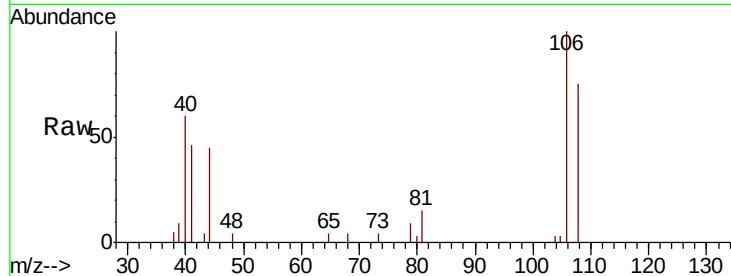
#14
Bromoethene
Concen: 0.114 ppbv
RT: 3.80 min Scan# 268
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
108	100		
106	116.1	85.0	127.4
79	17.2	13.7	20.5

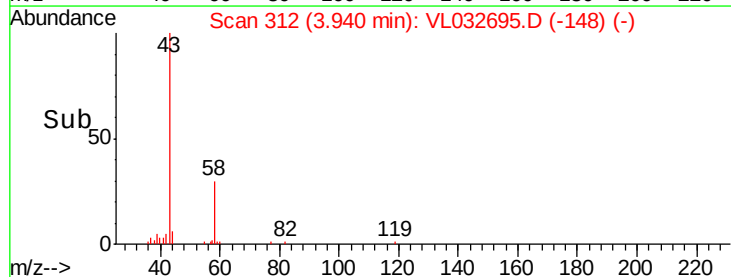
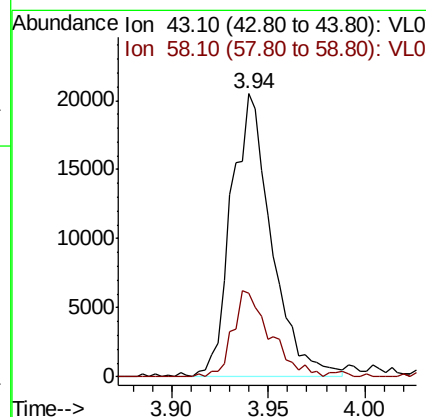
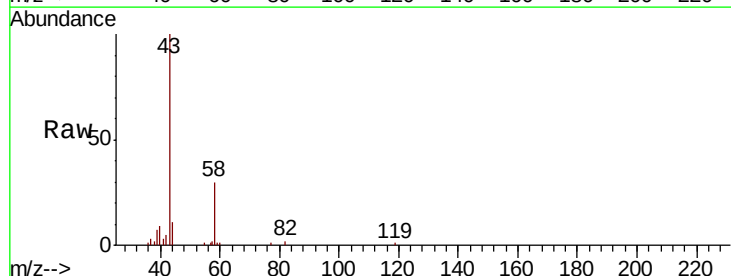
Manual Integrations
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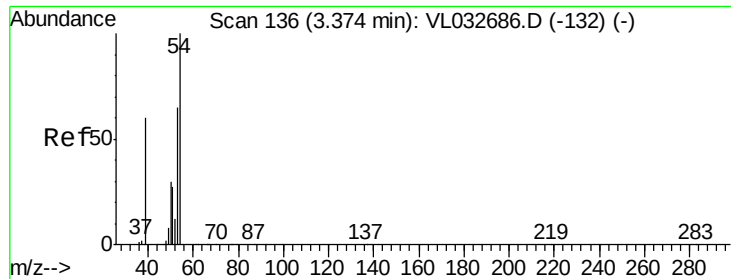
MMDadoda
10/26/2018 3:40:32 PM



#15
Acetone
Concen: 0.223 ppbv
RT: 3.94 min Scan# 312
Delta R.T. 0.03 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
43	100		
58	29.1	22.1	33.1





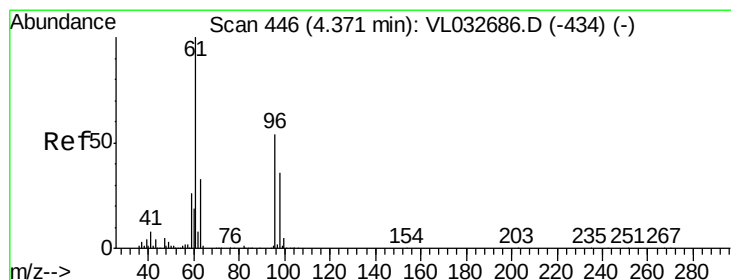
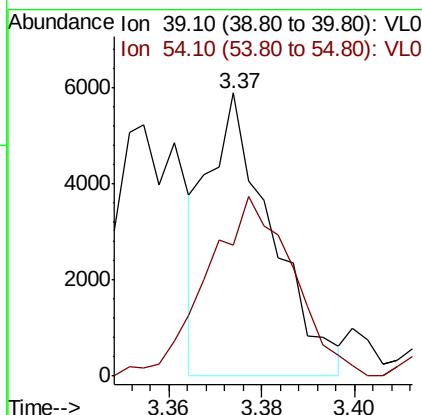
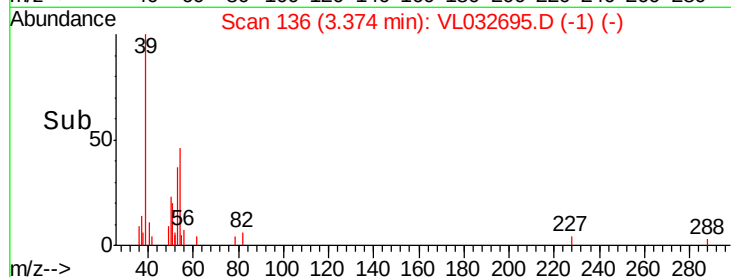
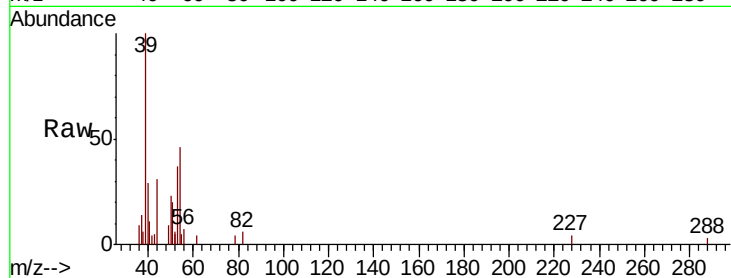
#16
 1,3-Butadiene
 Concen: 0.115 ppbv
 RT: 3.37 min Scan# 136
 Delta R.T. -0.00 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
39	100		
54	89.9	90.4	135.6#

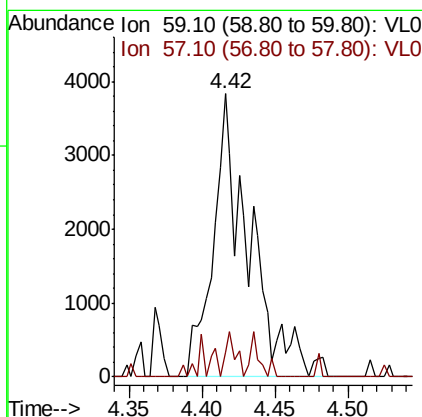
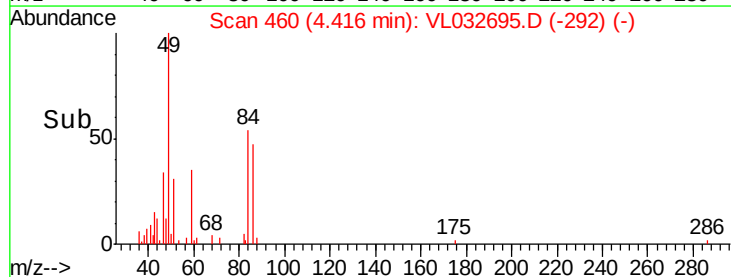
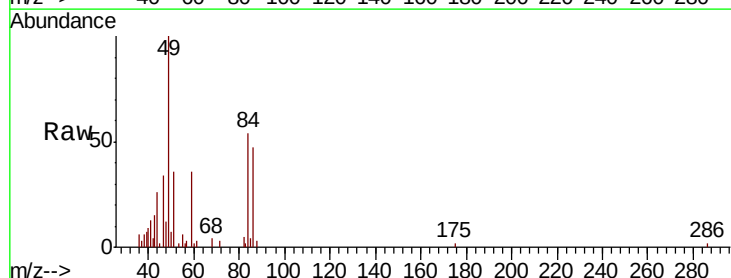
Manual Integrations
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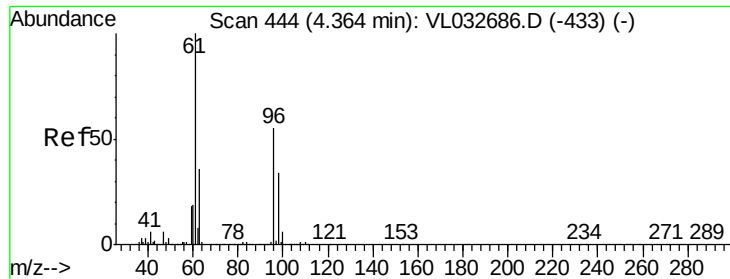
MMDadoda
 10/26/2018 3:40:32 PM



#17
 tert-Butyl alcohol
 Concen: 0.170 ppbv m
 RT: 4.42 min Scan# 460
 Delta R.T. 0.04 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	0.0





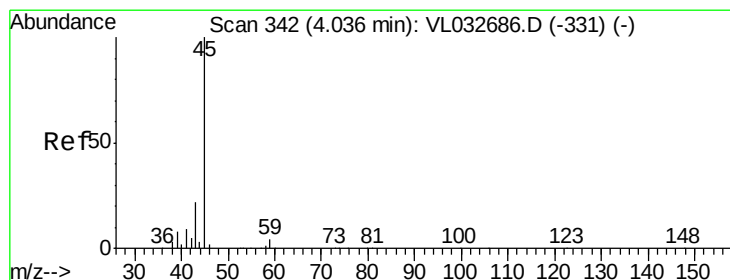
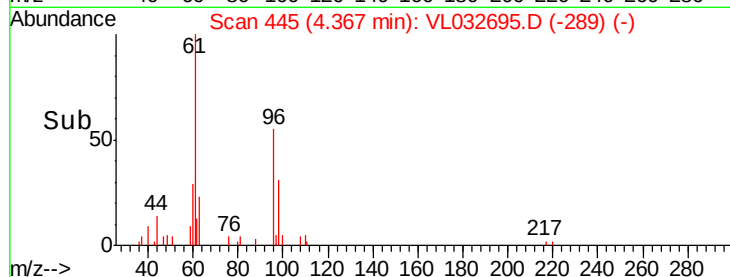
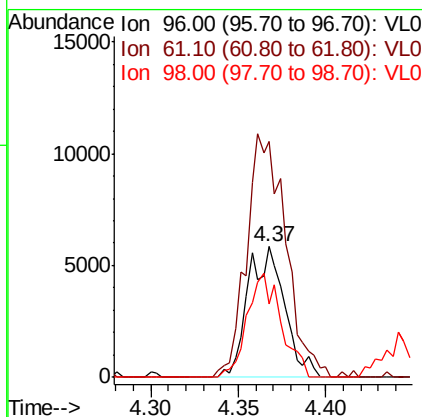
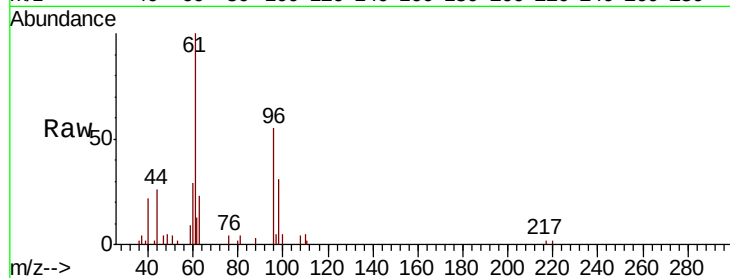
#18
 1,1-Dichloroethene
 Concen: 0.120 ppbv m
 RT: 4.37 min Scan# 445
 Delta R.T. 0.00 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
96	100		
61	181.1	151.6	227.4
98	56.6	50.6	75.8

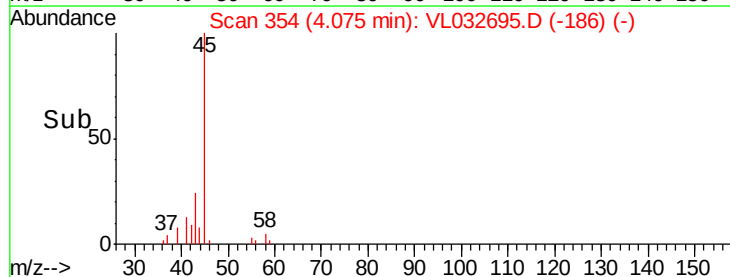
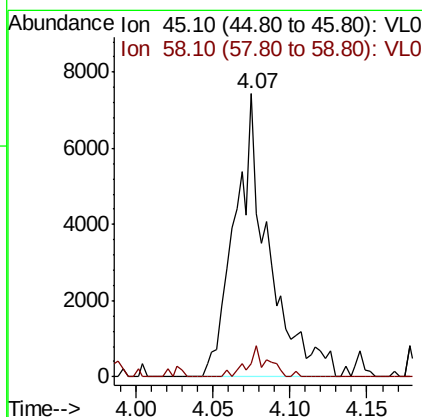
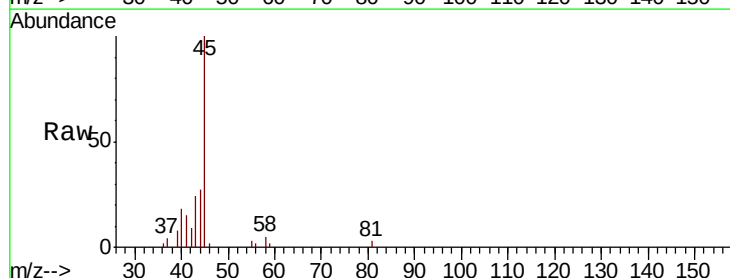
Manual Integrations
 APPROVED

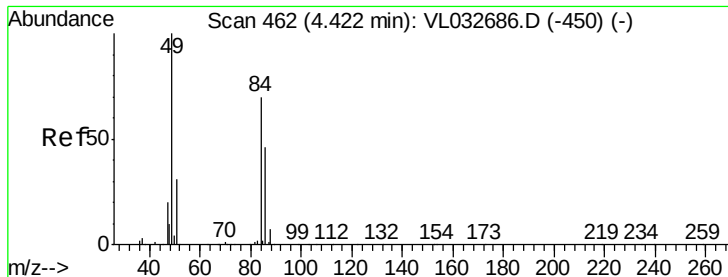
MMDadoda
 10/26/2018 3:40:32 PM



#19
 Isopropyl Alcohol
 Concen: 0.120 ppbv m
 RT: 4.07 min Scan# 354
 Delta R.T. 0.04 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
45	100		
58	0.0	2.0	3.0#





#20

Methylene Chloride

Concen: 0.202 ppbv m

RT: 4.42 min Scan# 462

Delta R.T. 0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

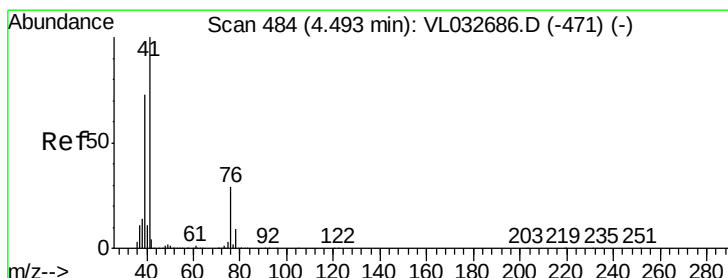
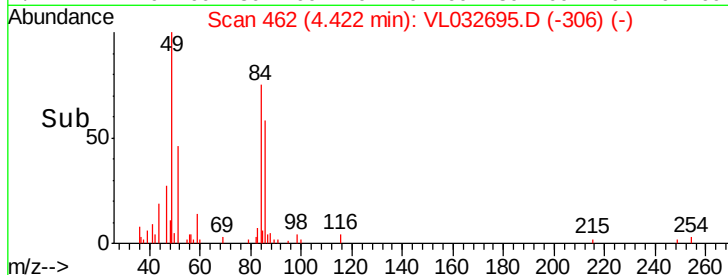
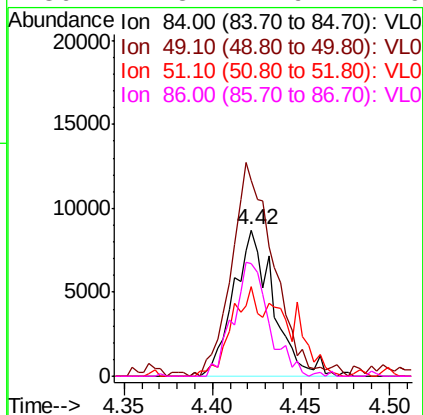
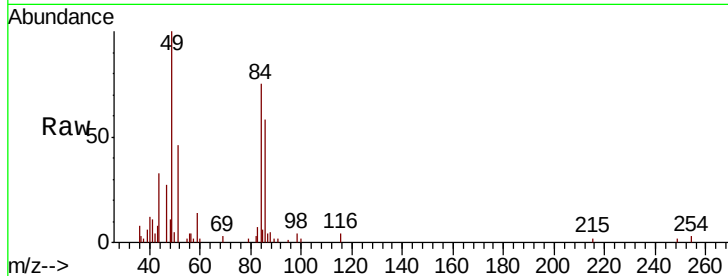
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	84	Resp:	13706
Ion	Ratio	Lower	Upper
84	100		
49	133.9	113.5	170.3
51	61.5	34.8	52.2#
86	77.3	47.9	71.9#

Manual Integrations
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10/26/2018 3:40:32 PM



#21

Allyl Chloride

Concen: 0.130 ppbv m

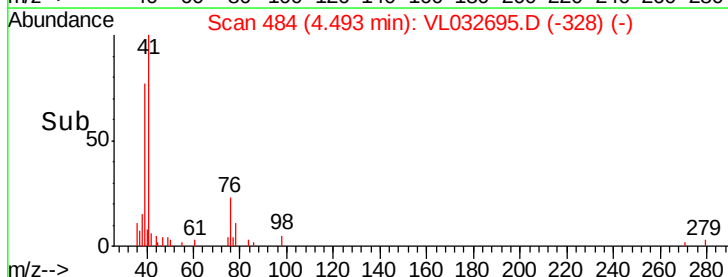
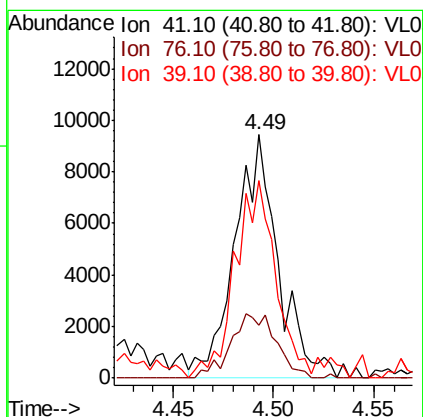
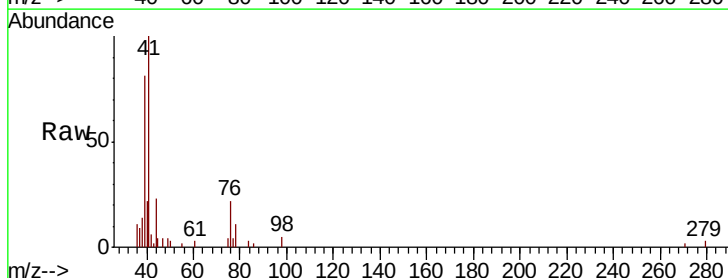
RT: 4.49 min Scan# 484

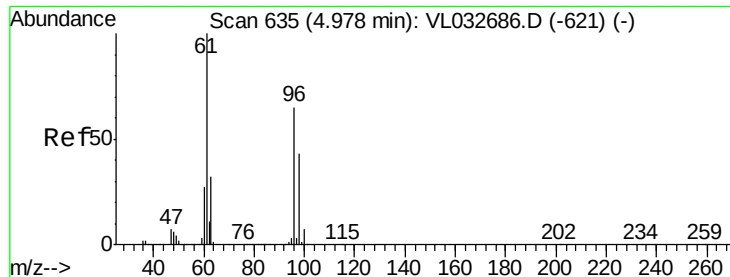
Delta R.T. 0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	41	Resp:	14199
Ion	Ratio	Lower	Upper
41	100		
76	27.8	24.3	36.5
39	79.8	60.3	90.5





#22

trans-1,2-Dichloroethene

Concen: 0.131 ppbv m

RT: 4.98 min Scan# 635

Delta R.T. 0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

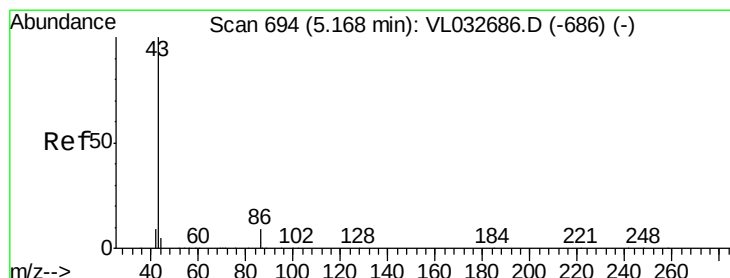
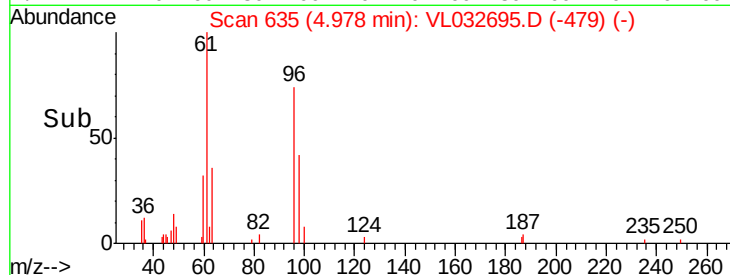
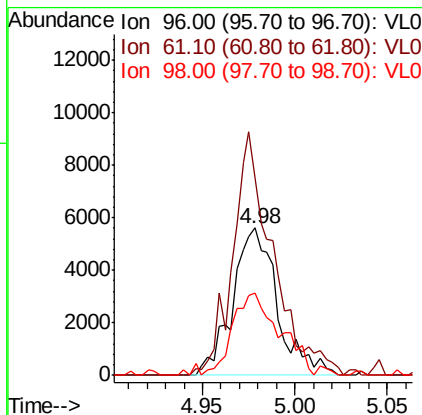
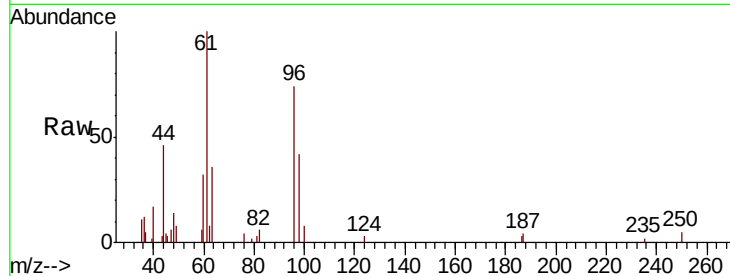
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	96	Resp:	9449
Ion	Ratio	Lower	Upper
96	100		
61	134.6	140.4	210.6#
98	55.9	55.0	82.6

Manual Integrations
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#23

Vinyl Acetate

Concen: 0.103 ppbv m

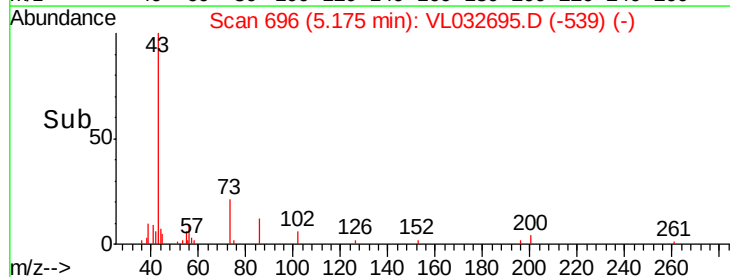
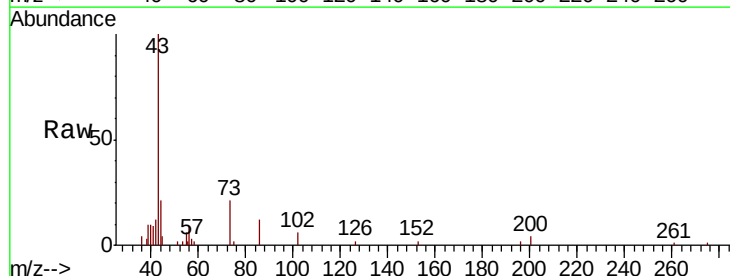
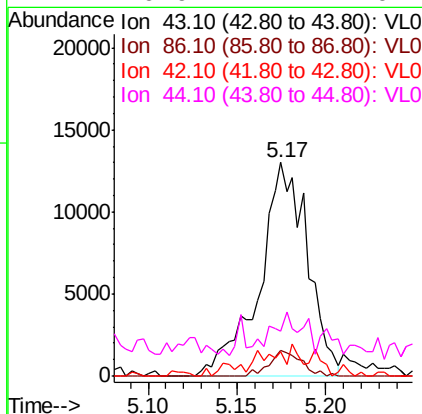
RT: 5.17 min Scan# 696

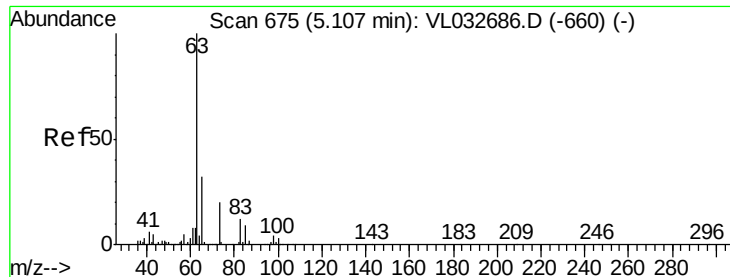
Delta R.T. 0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	43	Resp:	24458
Ion	Ratio	Lower	Upper
43	100		
86	11.9	6.1	9.1#
42	11.7	7.4	11.2#
44	20.9	4.2	6.2#





#24

1,1-Dichloroethane

Concen: 0.127 ppbv

RT: 5.10 min Scan# 673

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

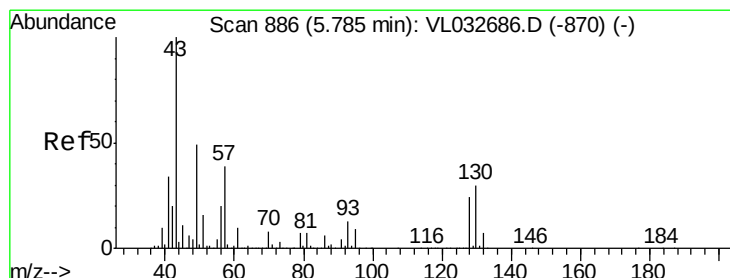
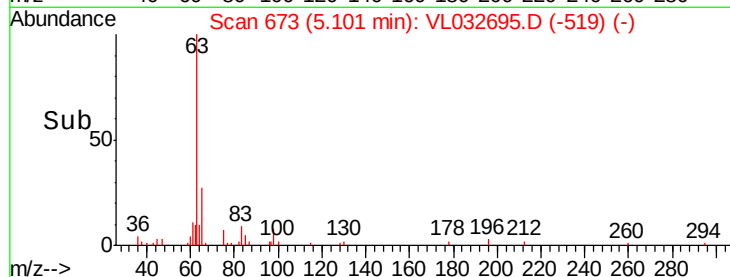
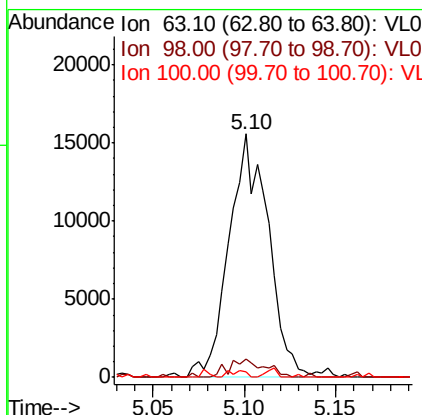
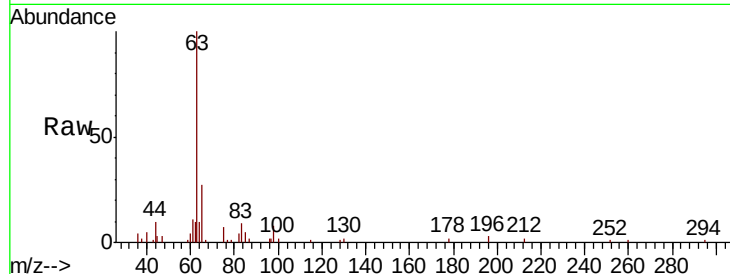
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	63	Resp:	23552
Ion Ratio	Lower	Upper	
63	100		
98	7.6	2.1	6.3#
100	2.0	1.2	3.6

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#25

Ethyl Acetate

Concen: 0.112 ppbv

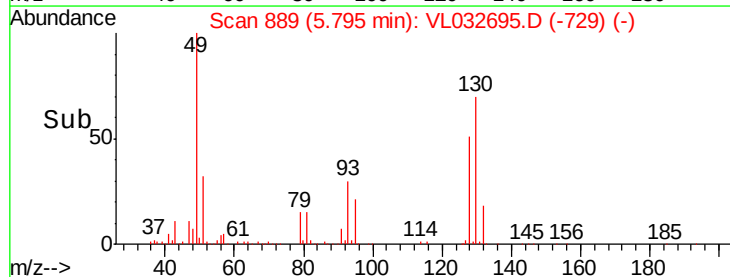
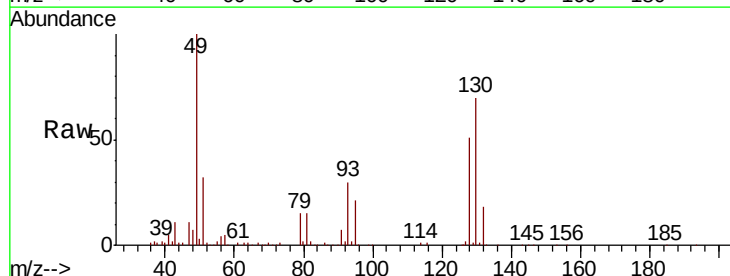
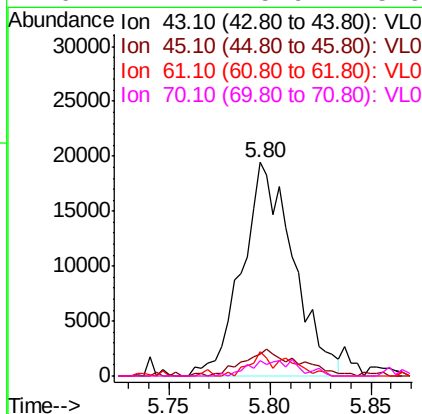
RT: 5.80 min Scan# 889

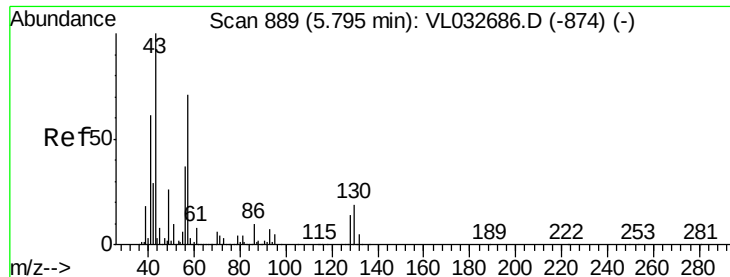
Delta R.T. 0.02 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	43	Resp:	34496
Ion Ratio	Lower	Upper	
43	100		
45	13.7	8.0	12.0#
61	8.7	8.0	12.0
70	7.1	5.9	8.9





#26

Hexane

Concen: 0.100 ppbv m

RT: 5.79 min Scan# 887

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 57 Resp: 14579

Ion Ratio Lower Upper

57 100

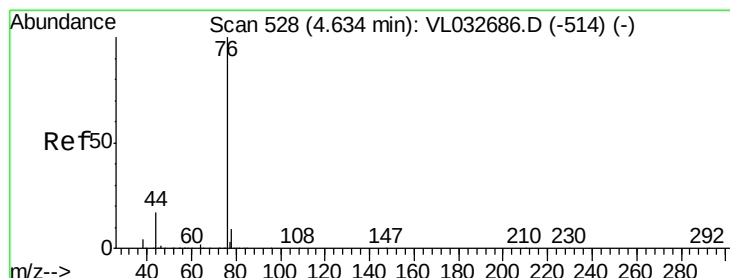
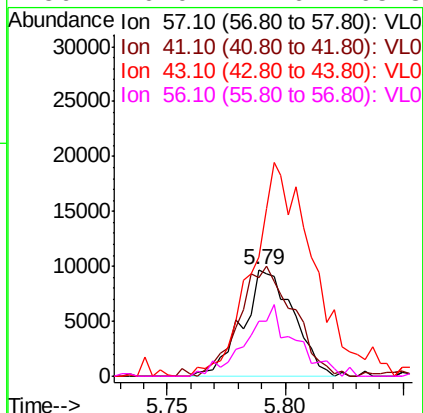
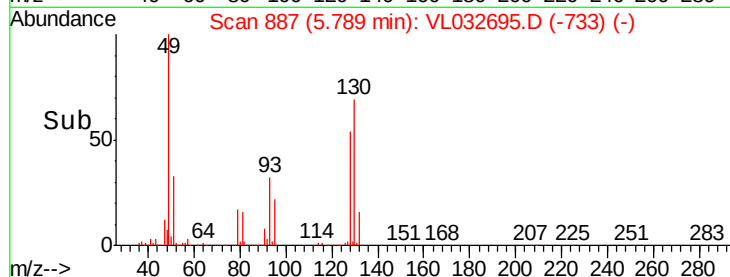
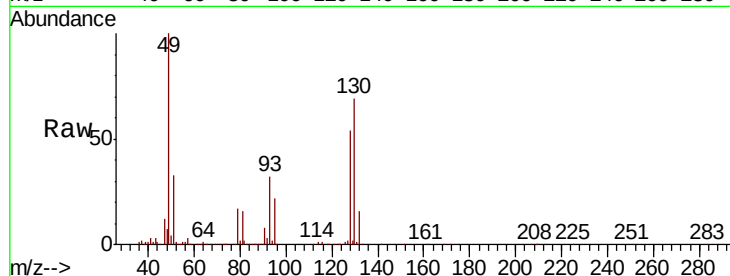
41 0.0 67.4 101.0#

43 0.0 171.9 257.9#

56 0.0 42.6 63.8#

Manual Integrations
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#27

Carbon Disulfide

Concen: 0.095 ppbv m

RT: 4.63 min Scan# 527

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

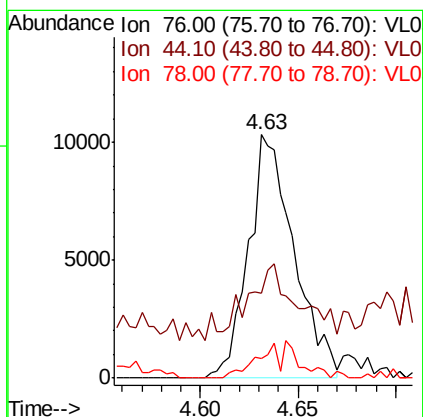
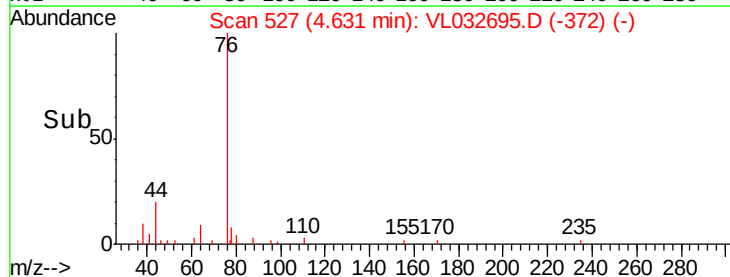
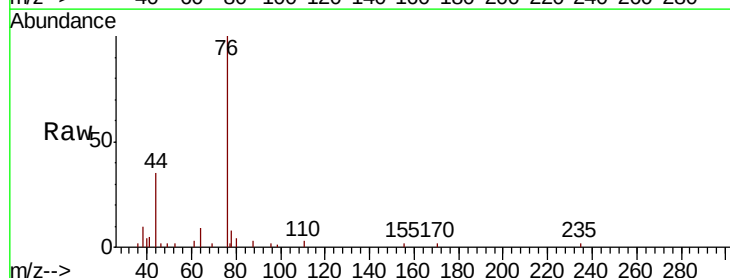
Tgt Ion: 76 Resp: 16708

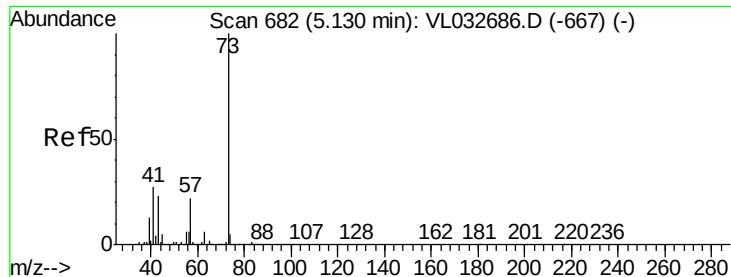
Ion Ratio Lower Upper

76 100

44 40.7 13.7 20.5#

78 13.0 7.4 11.2#





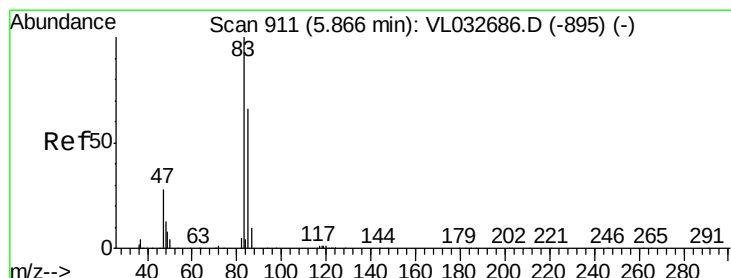
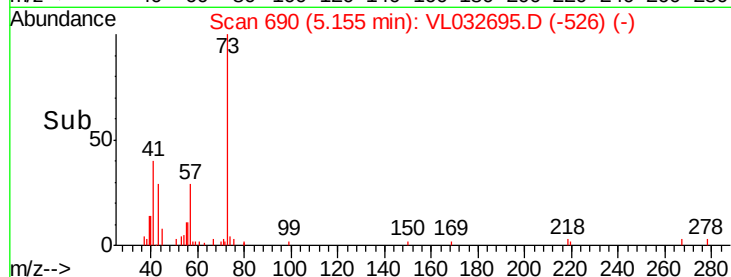
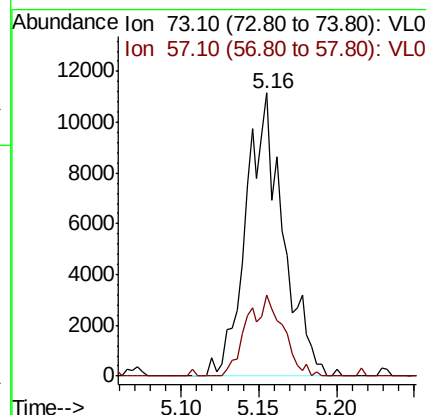
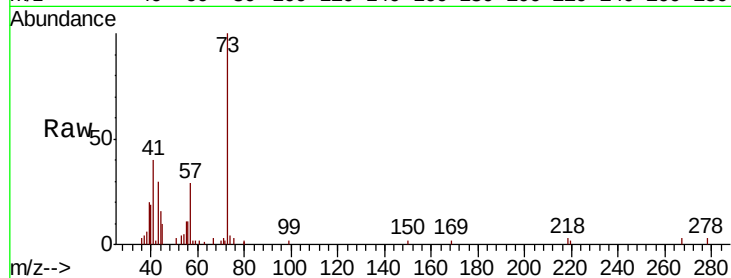
#28
Methyl tert-Butyl Ether
Concen: 0.089 ppbv
RT: 5.16 min Scan# 690
Delta R.T. 0.03 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
73	100		
57	0.0	18.0	27.0#

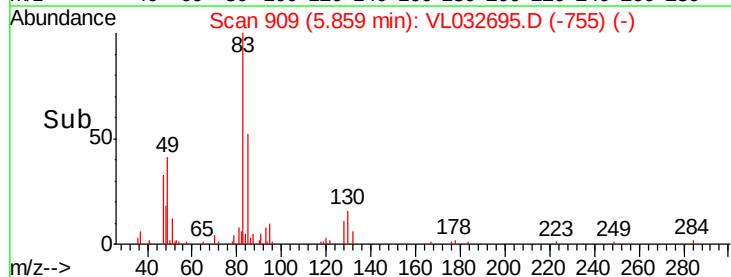
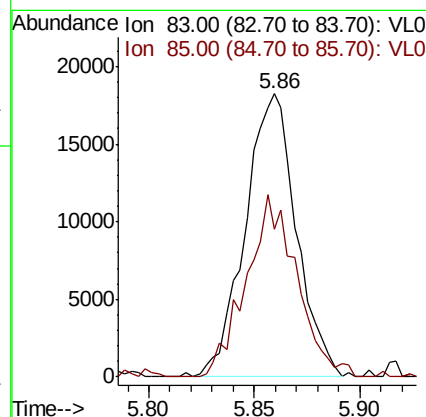
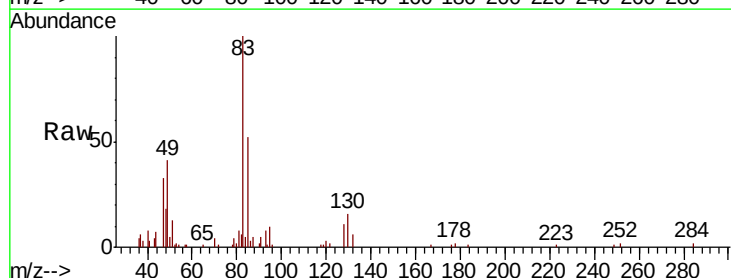
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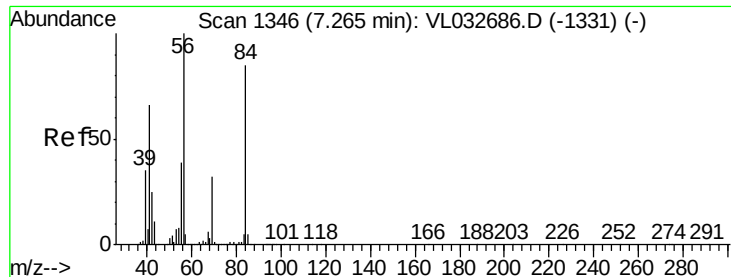
MMDadoda
10/26/2018 3:40:32 PM



#29
Chloroform
Concen: 0.133 ppbv
RT: 5.86 min Scan# 909
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
83	100		
85	52.2	53.0	79.6#





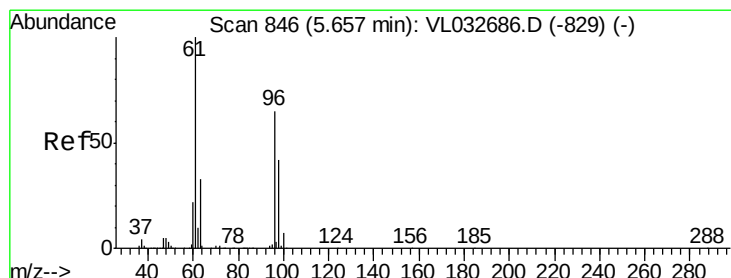
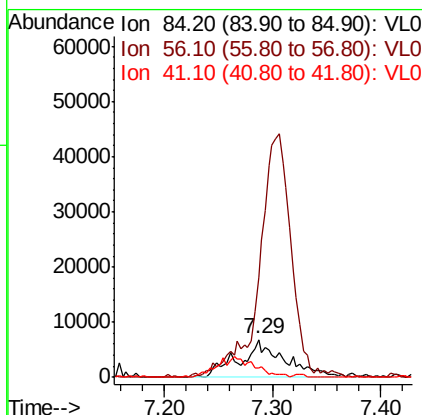
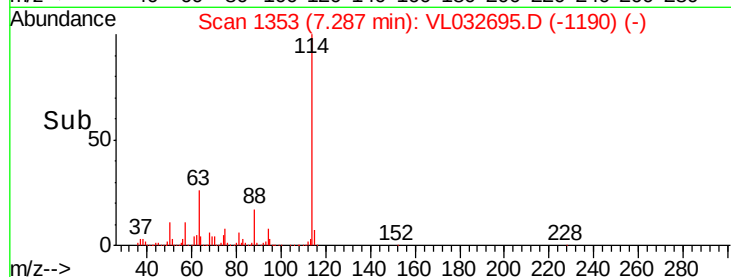
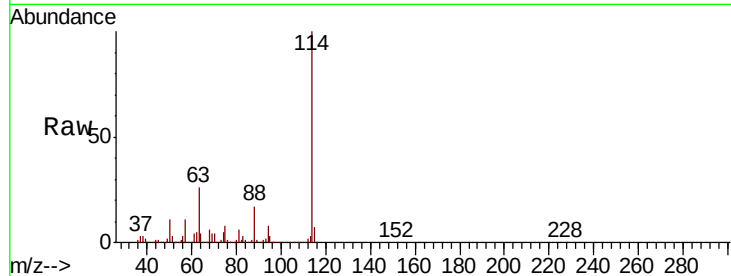
#30
Cvclohexane
Concen: 0.170 ppbv m
RT: 7.29 min Scan# 1353
Delta R.T. 0.03 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.3	162.5#
41	0.0	64.8	97.2#

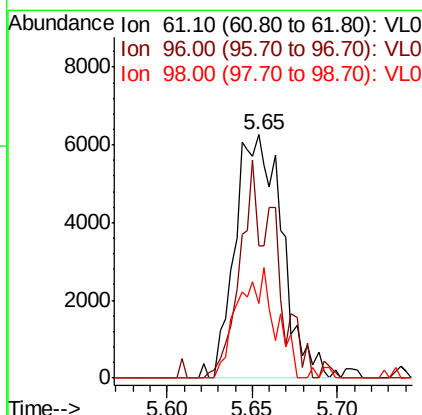
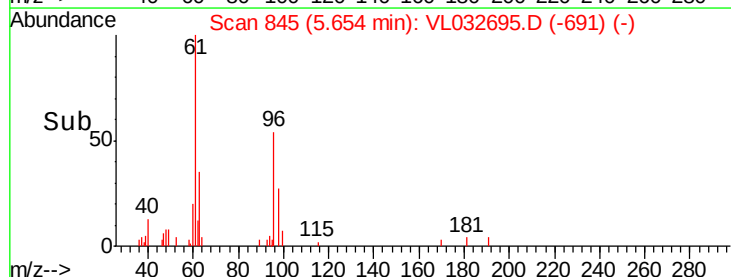
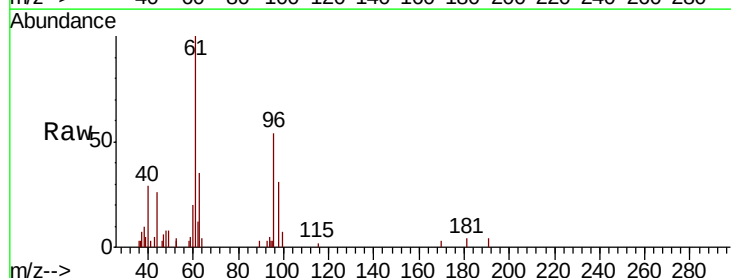
Manual Integrations
APPROVED

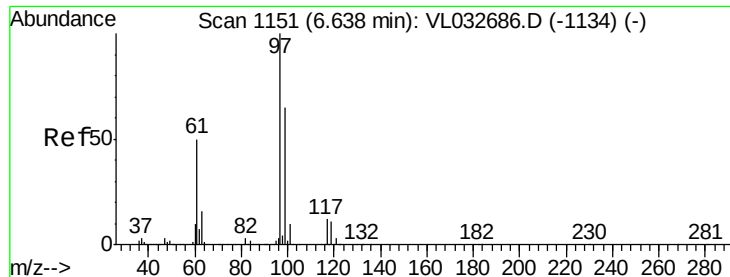
MMDadoda
10/26/2018 3:40:32 PM



#31
cis-1,2-Dichloroethene
Concen: 0.089 ppbv m
RT: 5.65 min Scan# 845
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
61	100		
96	54.5	51.8	77.6
98	30.5	33.8	50.6#





#32

1,1,1-Trichloroethane

Concen: 0.114 ppbv m

RT: 6.63 min Scan# 1149

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

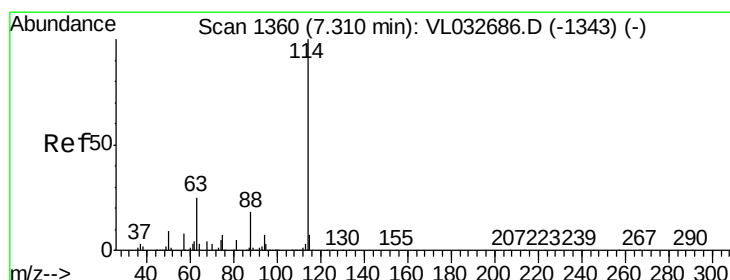
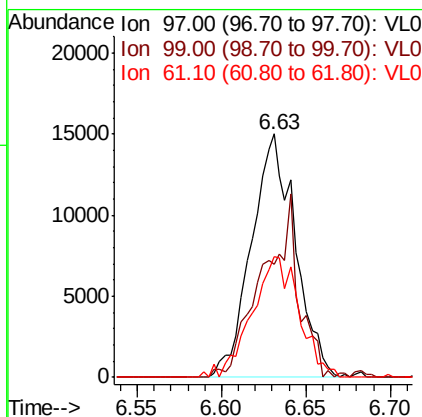
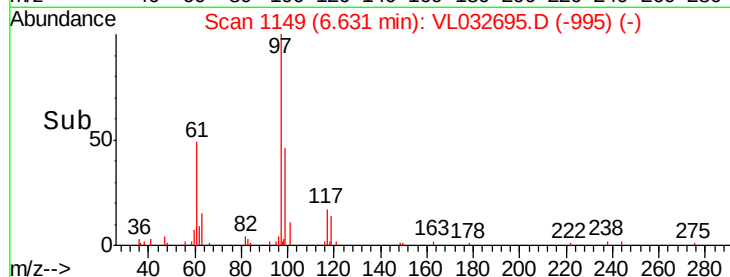
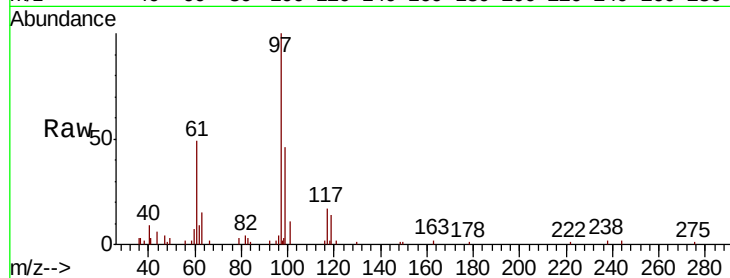
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	97	Resp:	26981
Ion Ratio	Lower	Upper	
97	100		
99	0.0	52.0	78.0#
61	53.4	40.7	61.1

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

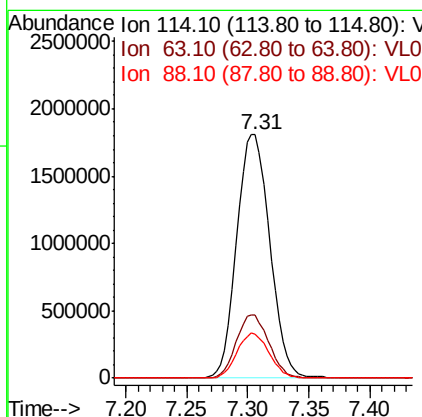
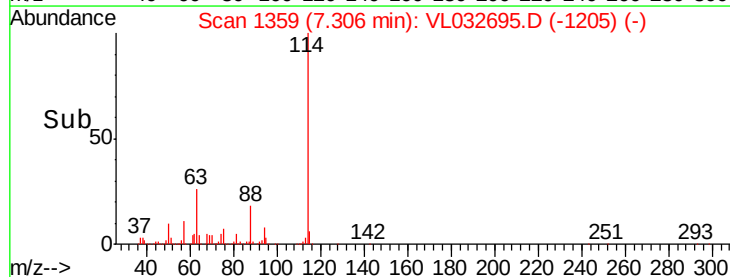
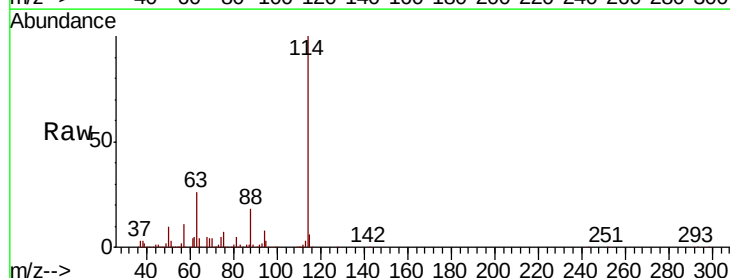
RT: 7.31 min Scan# 1359

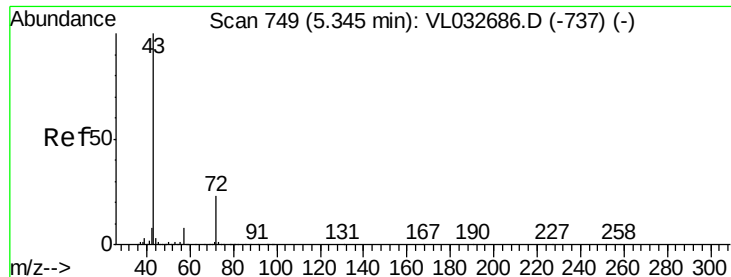
Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	114	Resp:	3389559
Ion Ratio	Lower	Upper	
114	100		
63	25.6	21.7	32.5
88	17.8	14.9	22.3





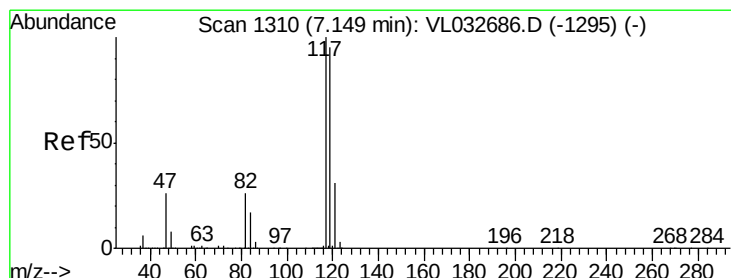
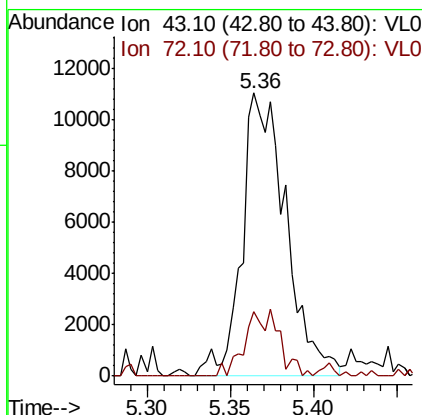
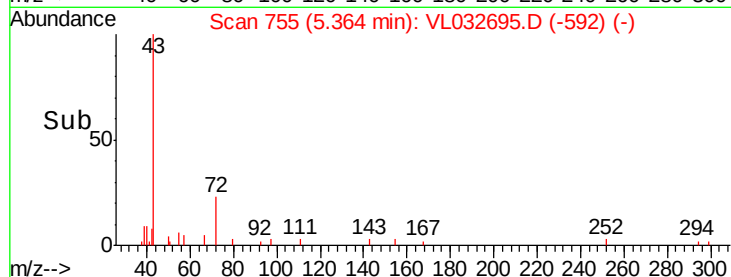
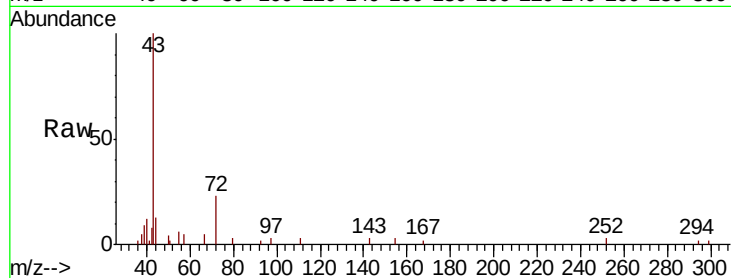
#34
2-Butanone
Concen: 0.111 ppbv m
RT: 5.36 min Scan# 755
Delta R.T. 0.03 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 43 Resp: 20242
Ion Ratio Lower Upper
43 100
72 0.0 18.6 27.8#

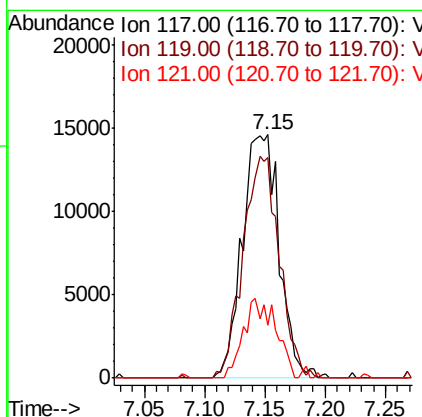
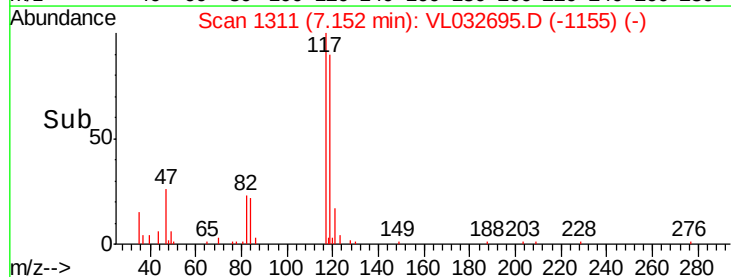
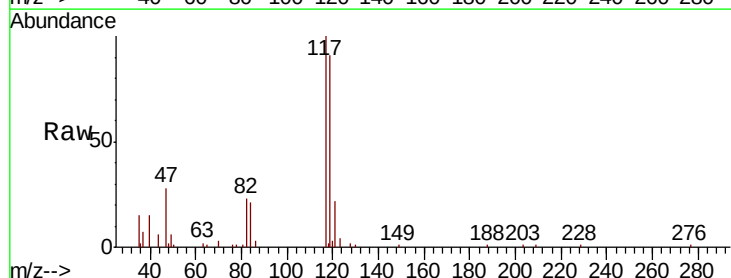
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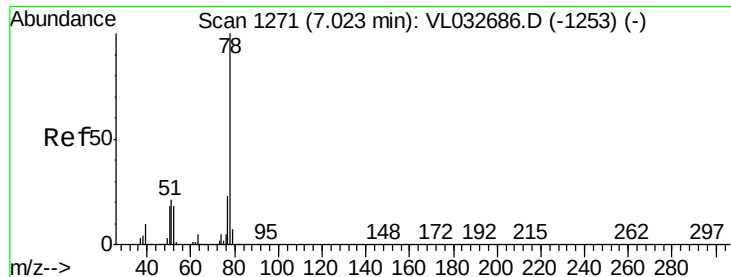
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#35
Carbon Tetrachloride
Concen: 0.126 ppbv m
RT: 7.15 min Scan# 1311
Delta R.T. 0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion: 117 Resp: 30384
Ion Ratio Lower Upper
117 100
119 90.6 75.7 113.5
121 21.6 24.7 37.1#





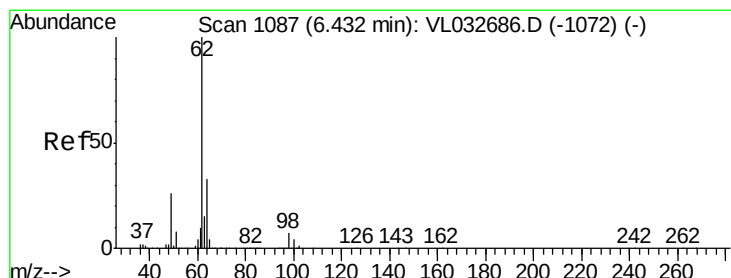
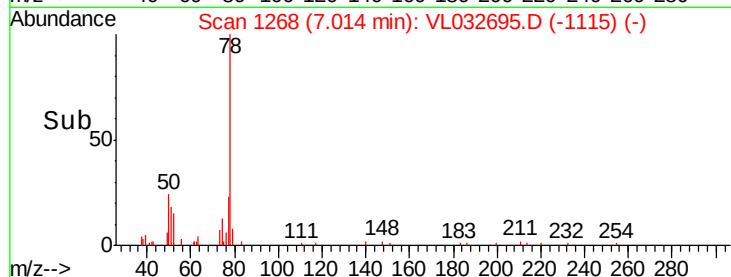
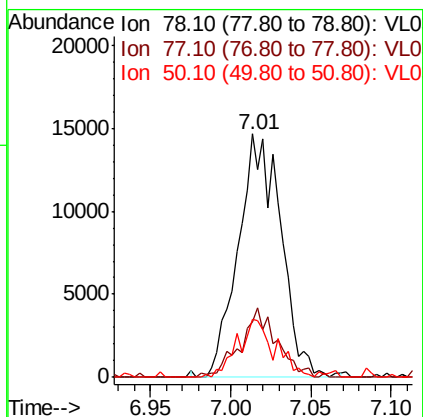
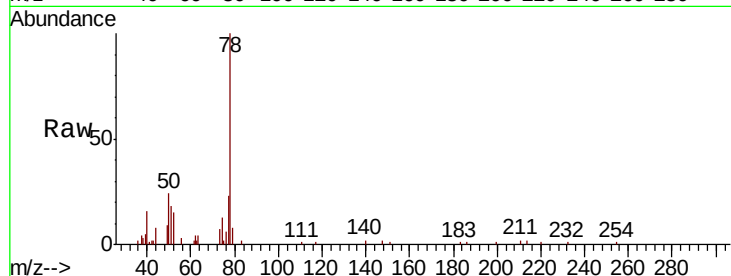
#36
Benzene
Concen: 0.099 ppbv m
RT: 7.01 min Scan# 1268
Delta R.T. -0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.6	18.1	27.1
50	23.9	15.1	22.7#

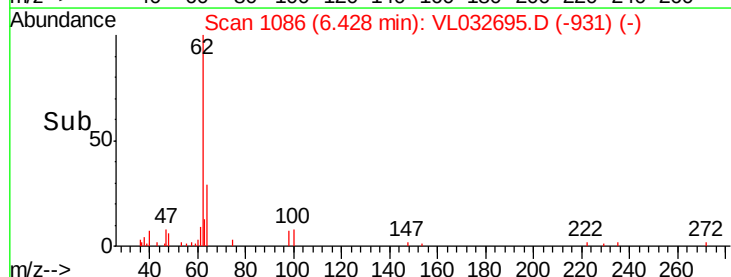
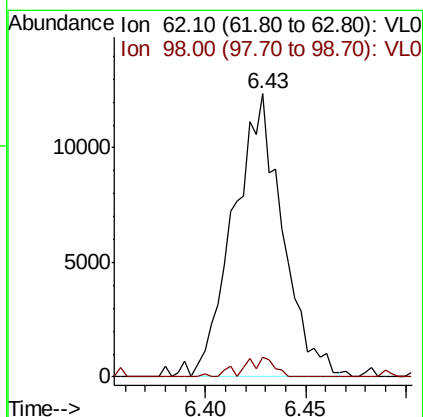
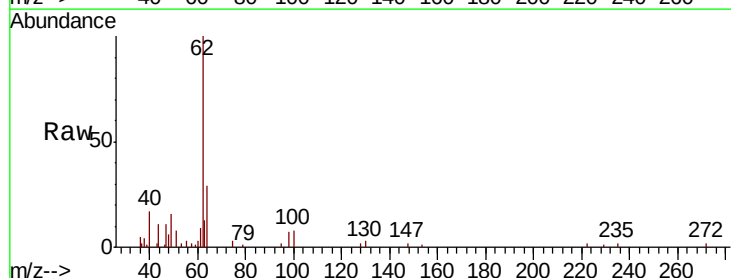
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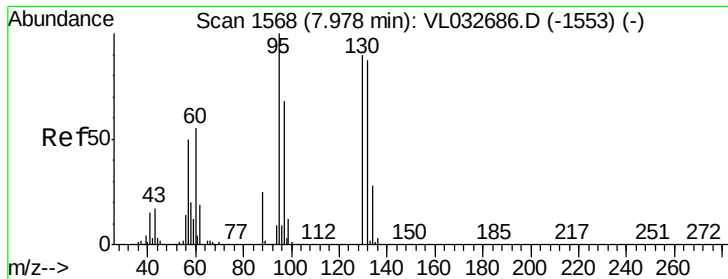
MMDadoda
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#37
1,2-Dichloroethane
Concen: 0.125 ppbv m
RT: 6.43 min Scan# 1086
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
62	100		
98	4.3	4.4	6.6#





#38

Trichloroethene

Concen: 0.104 ppbv m

RT: 7.97 min Scan# 1566

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

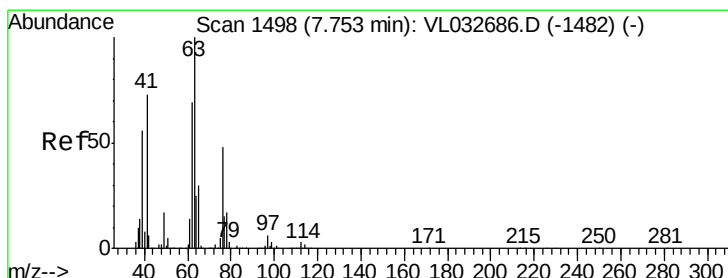
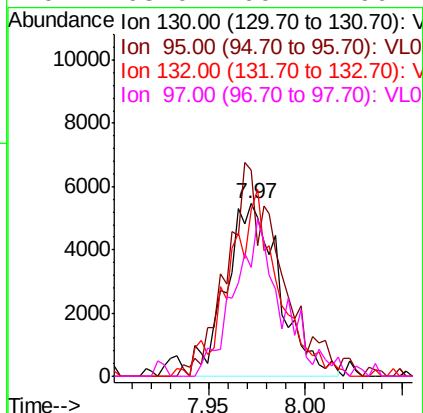
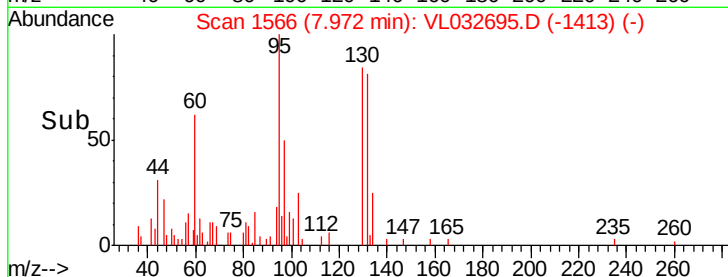
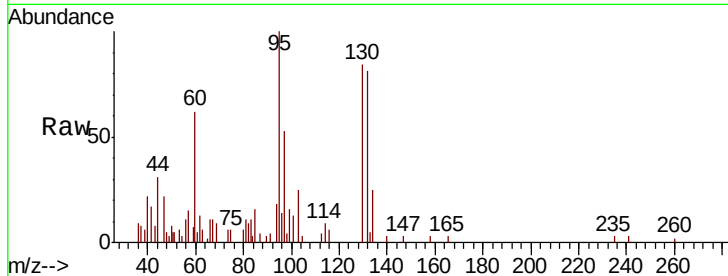
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ion	Ratio	Resp	Lower	Upper
130	100		10556		
95	119.4		93.4	140.0	
132	97.0		76.5	114.7	
97	63.0		60.2	90.2	

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#39

1,2-Dichloropropane

Concen: 0.113 ppbv m

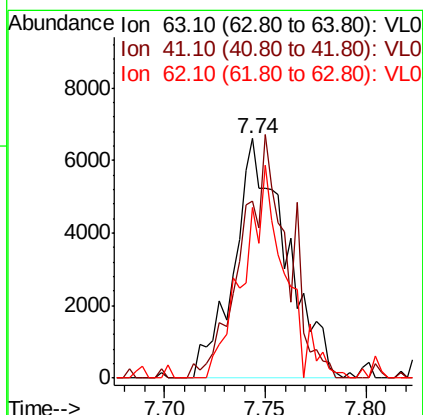
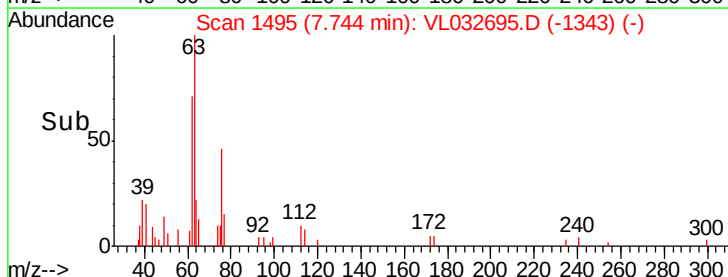
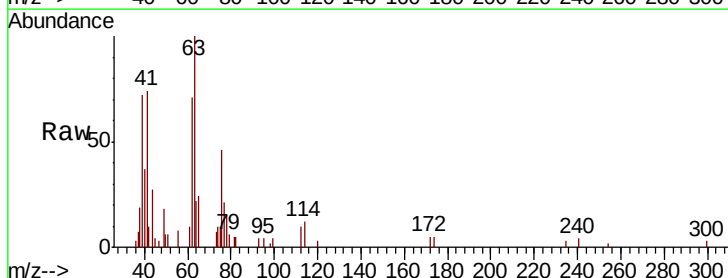
RT: 7.74 min Scan# 1495

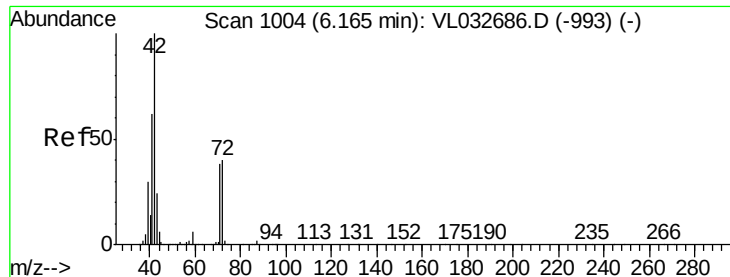
Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
63	100		11980		
41	73.8		56.2	84.4	
62	71.3		54.4	81.6	





#41

Tetrahydrofuran

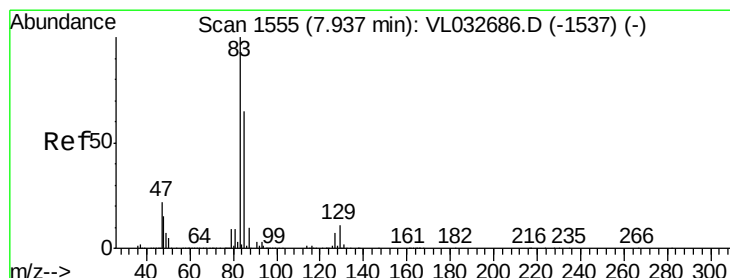
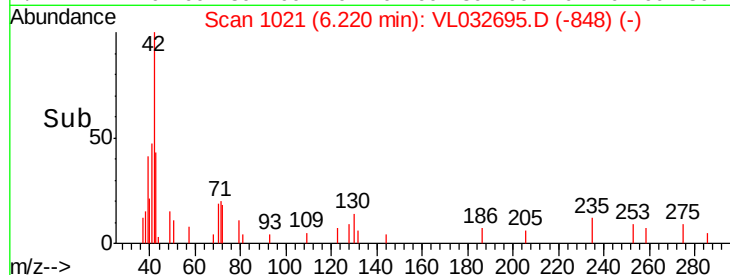
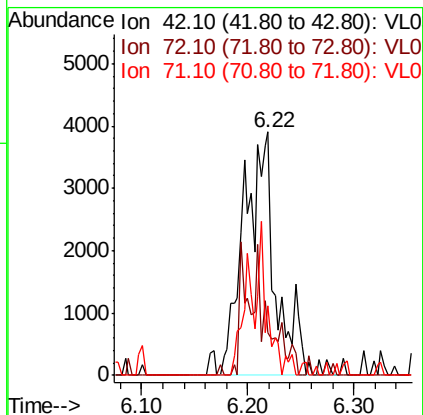
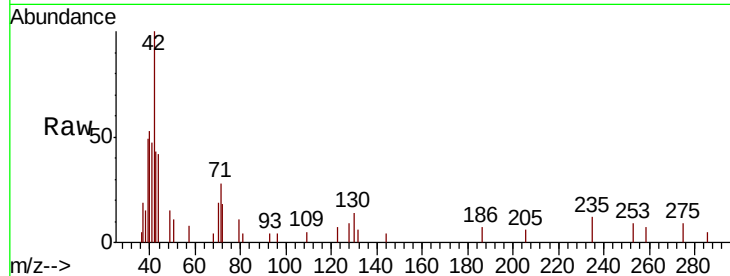
Concen: 0.082 ppbv m
RT: 6.22 min Scan# 1021
Delta R.T. 0.06 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.4	48.6#
71	0.0	31.3	46.9#

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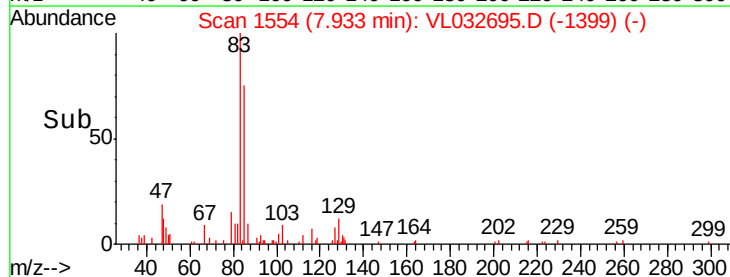
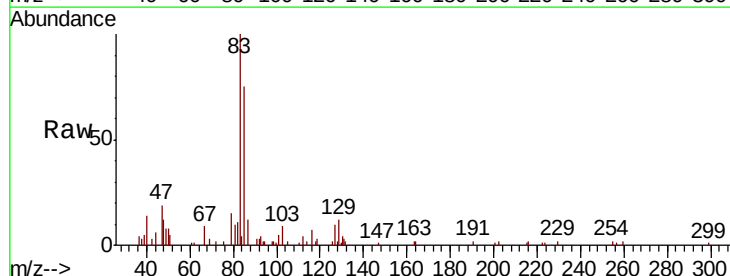
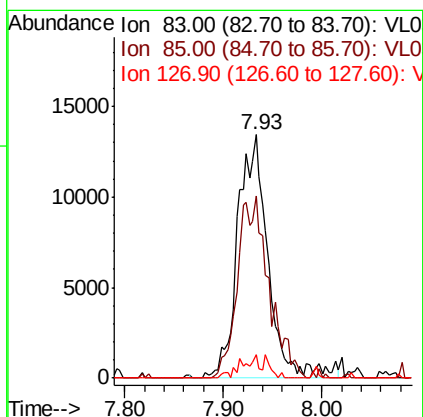


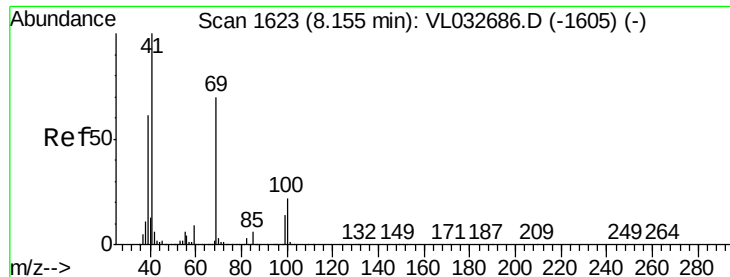
#42

Bromodichloromethane

Concen: 0.121 ppbv m
RT: 7.93 min Scan# 1554
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
83	100		
85	74.9	52.4	78.6
127	9.8	6.1	9.1#





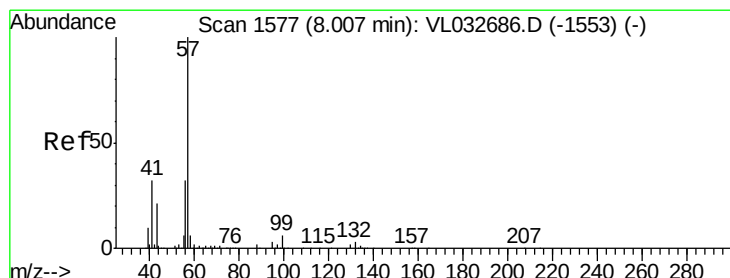
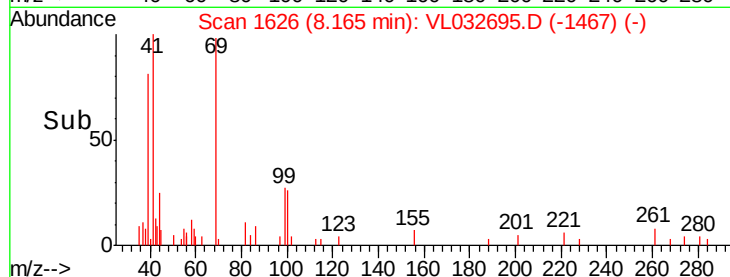
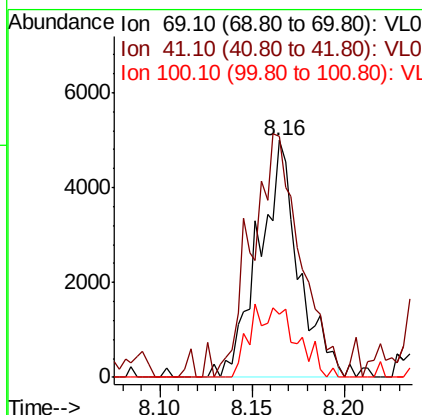
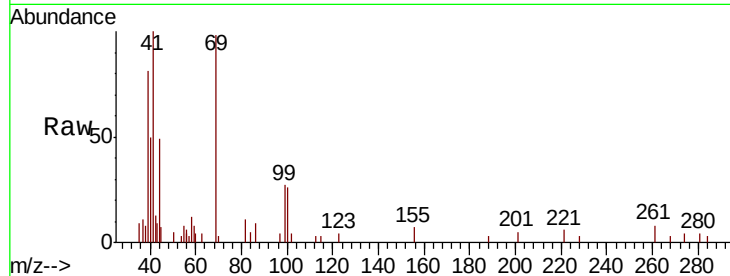
#43
Methyl Methacrylate
Concen: 0.075 ppbv m
RT: 8.16 min Scan# 1626
Delta R.T. 0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
69	100		
41	0.0	113.2	169.8#
100	34.9	24.4	36.6

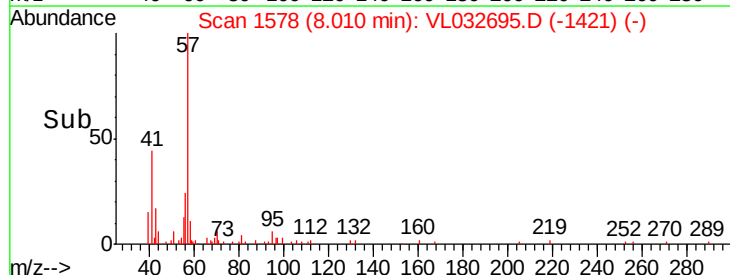
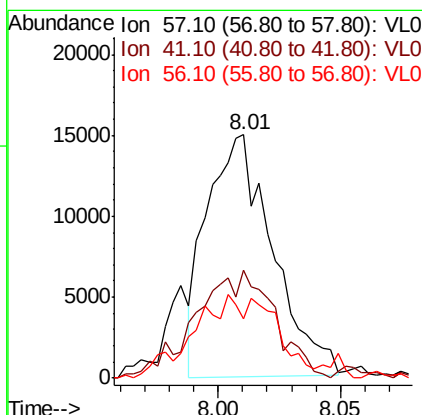
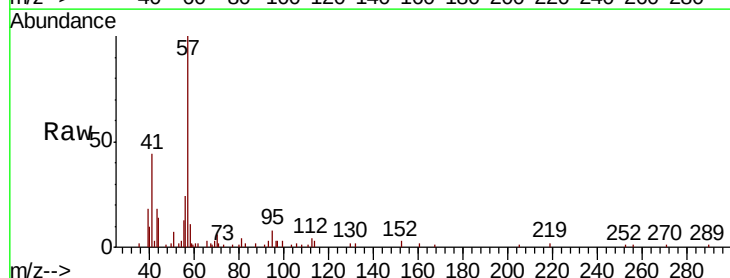
Manual Integrations
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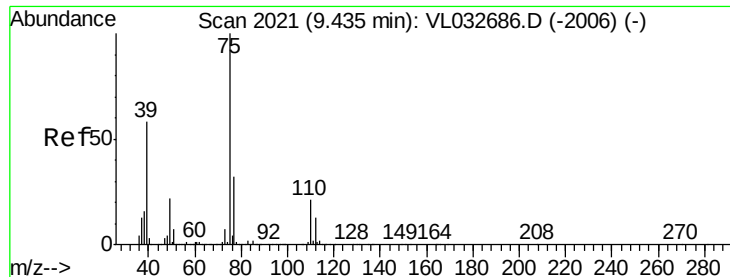
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 0.060 ppbv
RT: 8.01 min Scan# 1578
Delta R.T. 0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
57	100		
41	56.1	24.7	37.1#
56	46.3	25.0	37.4#





#45

t-1,3-Dichloropropene

Concen: 0.072 ppbv m

RT: 9.43 min Scan# 2018

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 75 Resp: 9727

Ion Ratio Lower Upper

75 100

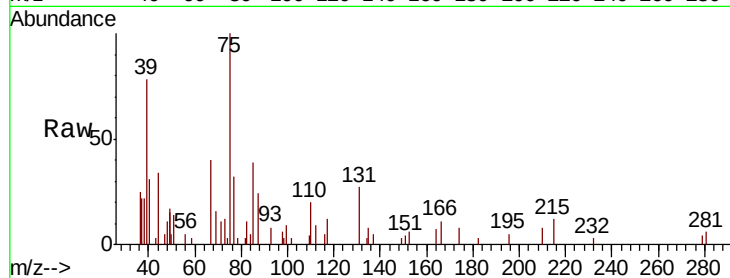
77 32.1 25.3 37.9

Manual Integrations

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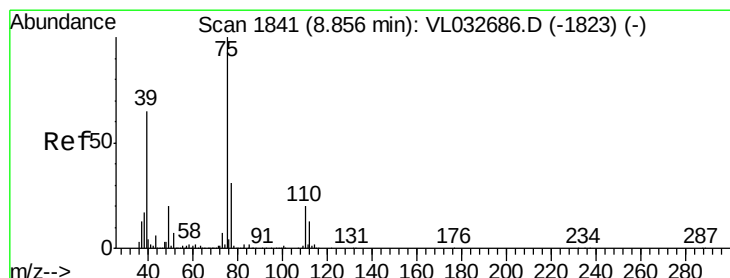
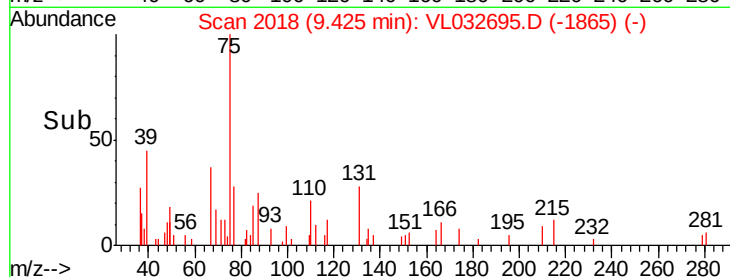
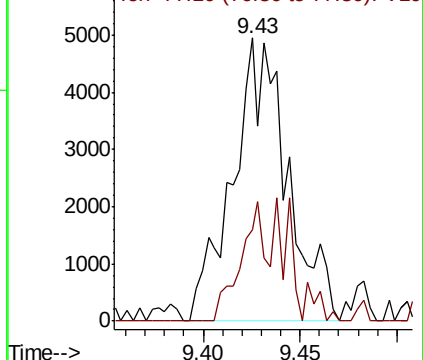
MMDadoda

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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: 0.078 ppbv m

RT: 8.85 min Scan# 1838

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

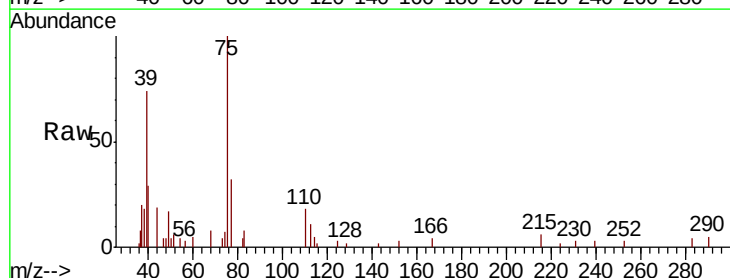
Tgt Ion: 75 Resp: 11977

Ion Ratio Lower Upper

75 100

39 74.4 50.9 76.3

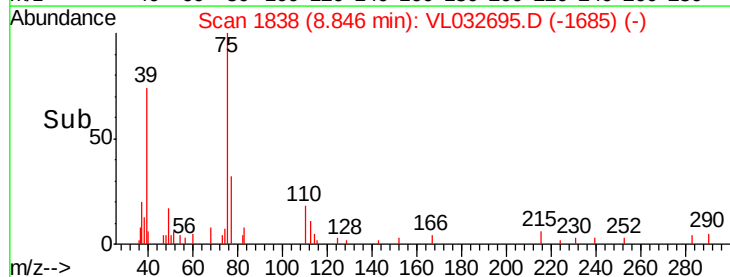
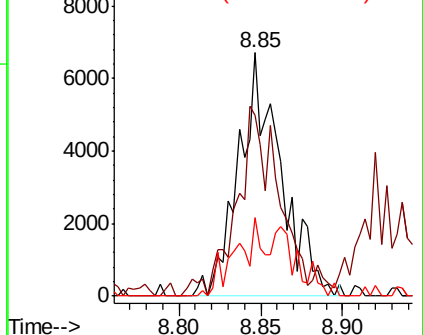
77 32.4 25.8 38.6

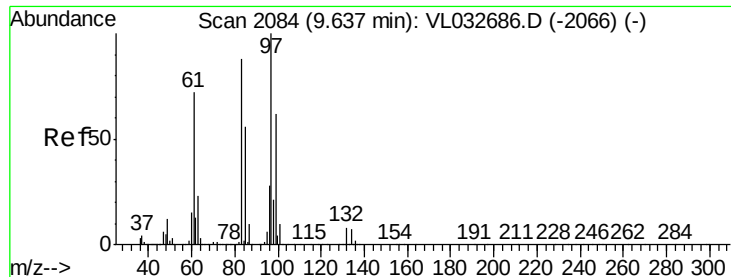


Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0





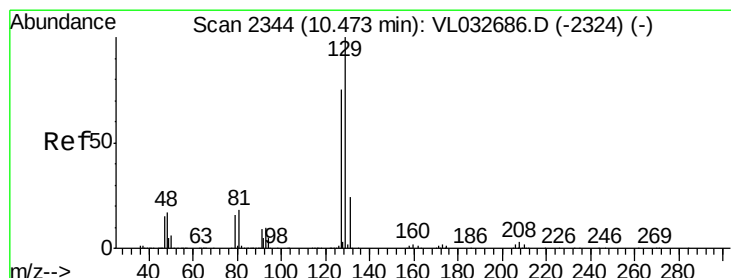
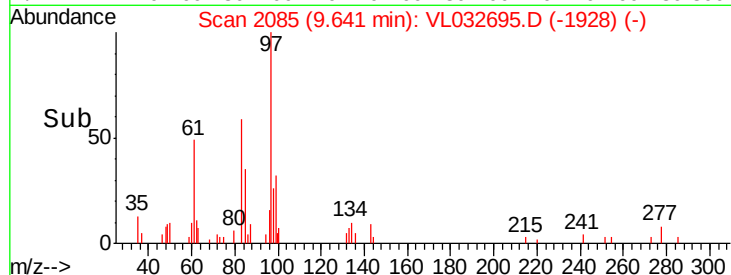
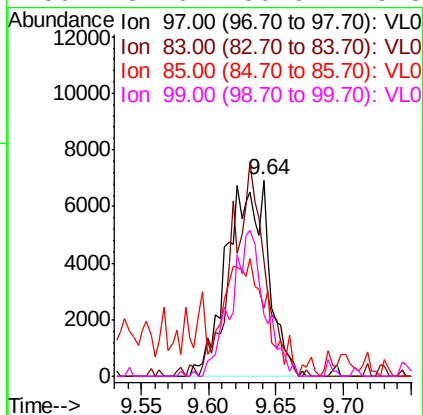
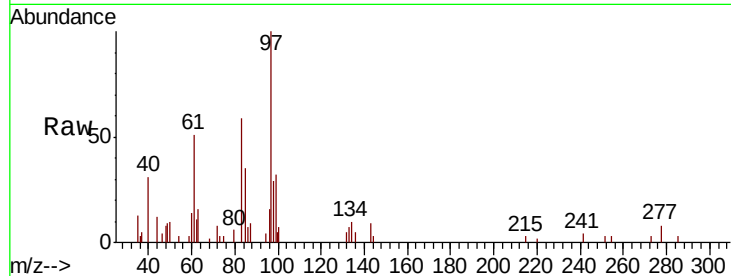
#47
 1,1,2-Trichloroethane
 Concen: 0.119 ppbv m
 RT: 9.64 min Scan# 2085
 Delta R.T. 0.01 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
97	100		
83	59.0	73.5	110.3#
85	34.9	45.8	68.6#
99	31.6	50.6	75.8#

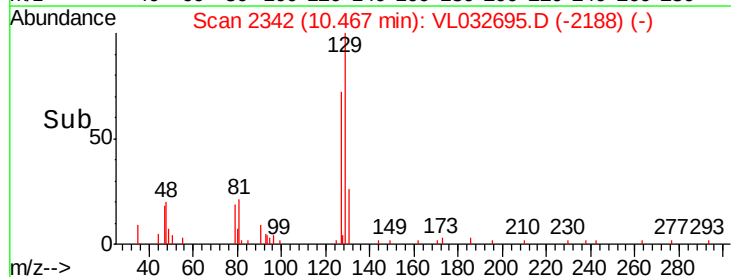
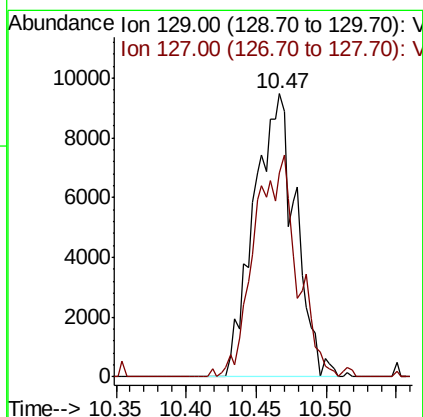
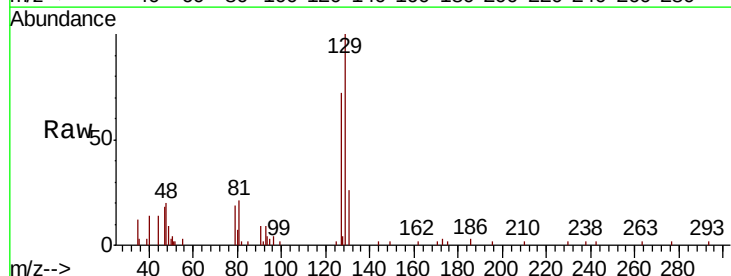
Manual Integrations
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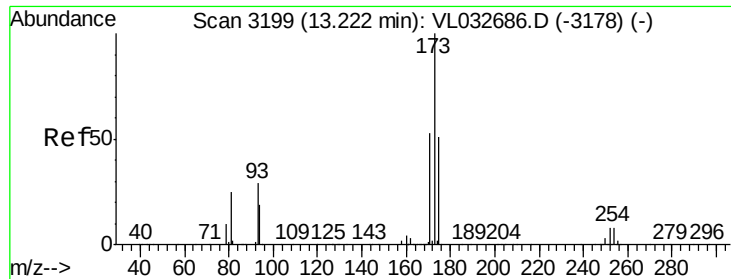
MMDadoda
 10/26/2018 3:40:32 PM



#48
 Dibromochloromethane
 Concen: 0.094 ppbv m
 RT: 10.47 min Scan# 2342
 Delta R.T. -0.00 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
129	100		
127	80.9	39.1	117.5





#49

Bromoform

Concen: 0.103 ppbv m

RT: 13.21 min Scan# 3195

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

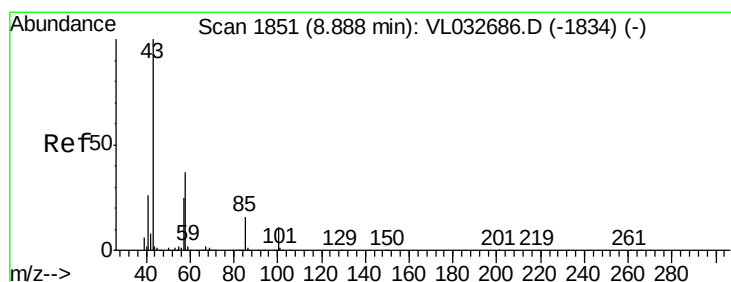
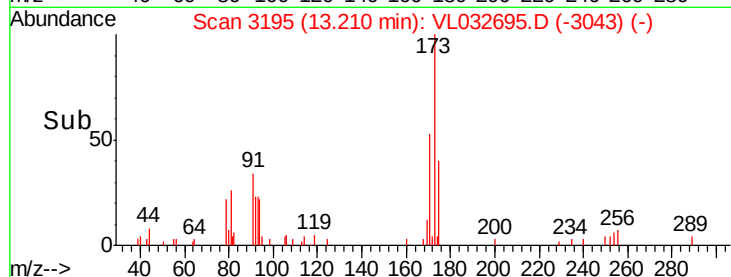
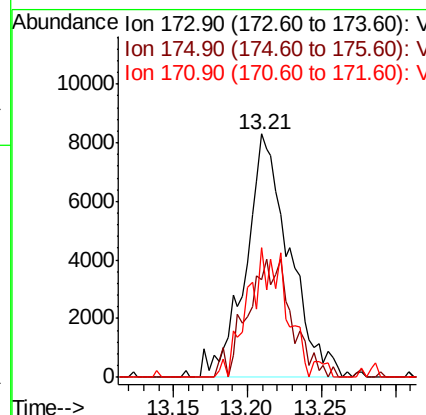
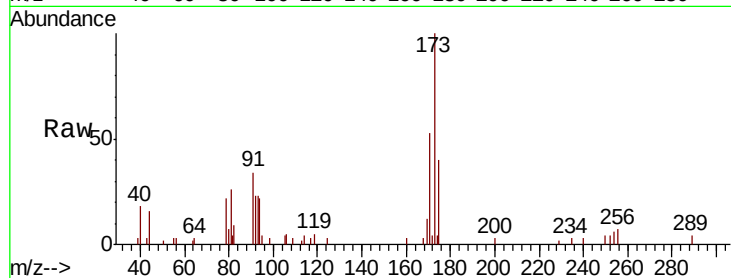
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	173	Resp:	16969
Ion Ratio	Lower	Upper	
173	100		
175	49.4	39.0	58.4
171	48.1	42.2	63.2

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#50

4-Methyl-2-Pentanone

Concen: 0.081 ppbv m

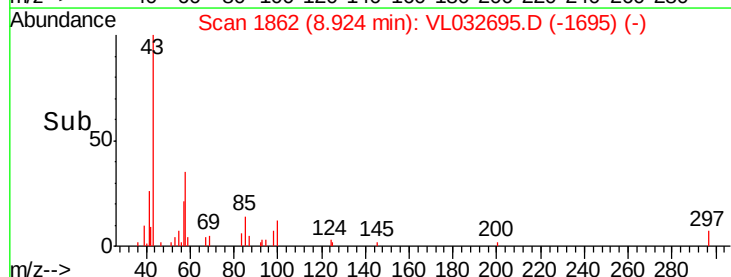
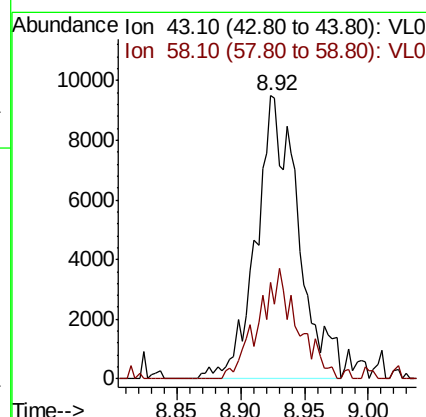
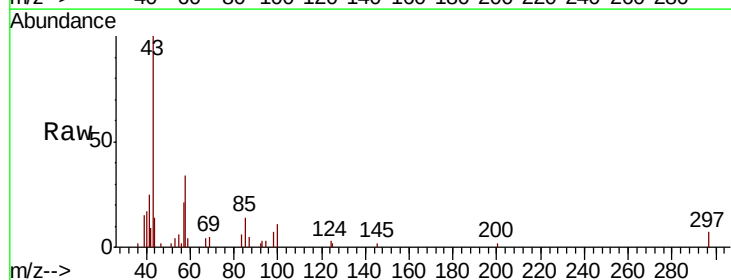
RT: 8.92 min Scan# 1862

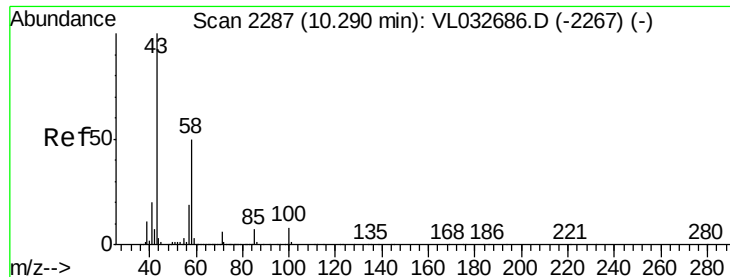
Delta R.T. 0.04 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	43	Resp:	21817
Ion Ratio	Lower	Upper	
43	100		
58	0.0	29.7	44.5#





#51

2-Hexanone

Concen: 0.048 ppbv m

RT: 10.32 min Scan# 2297

Delta R.T. 0.04 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

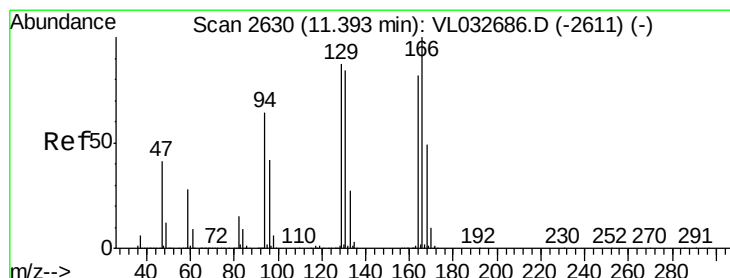
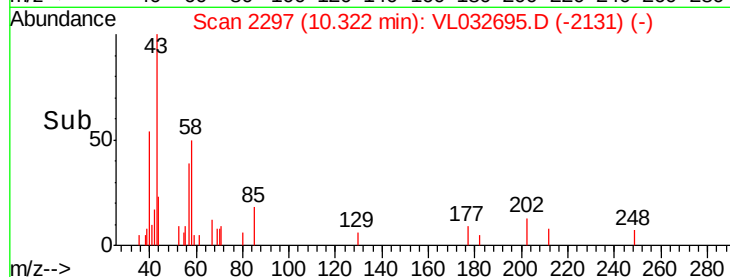
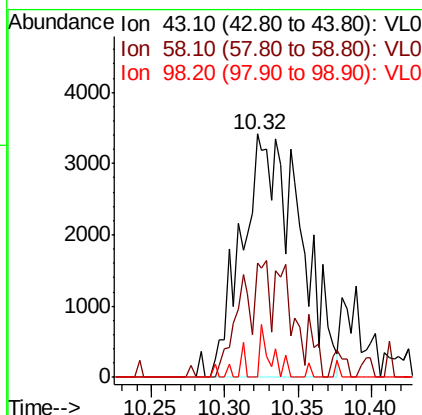
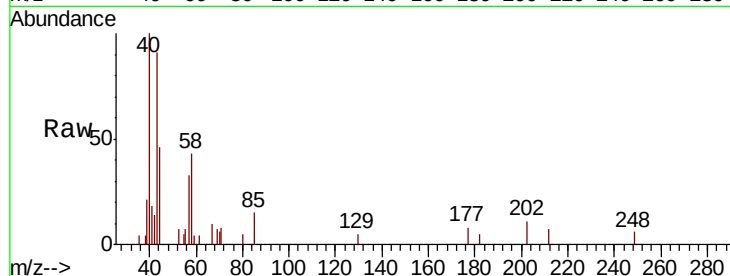
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	43	Resp:	9523
Ion Ratio	Lower	Upper	
43	100		
58	0.0	40.4	60.6#
98	0.0	0.4	0.6#

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#52

Tetrachloroethene

Concen: 0.102 ppbv m

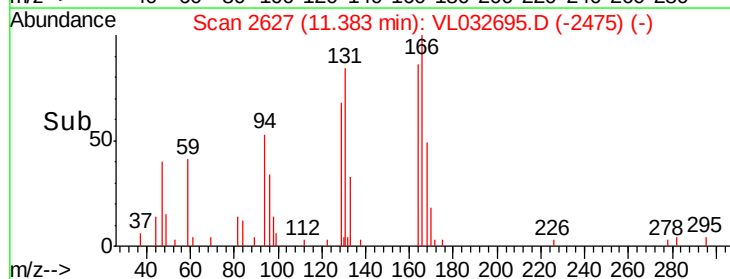
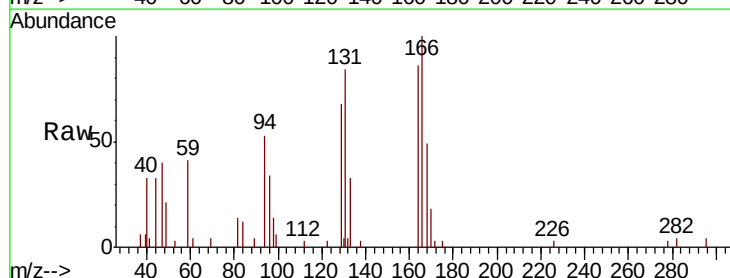
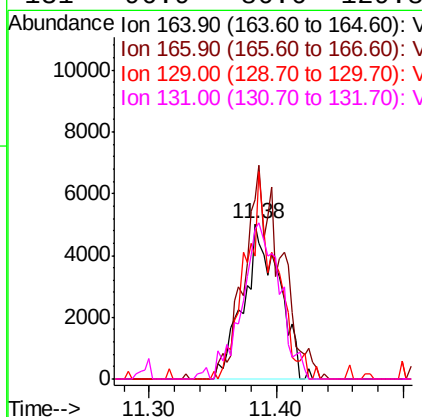
RT: 11.38 min Scan# 2627

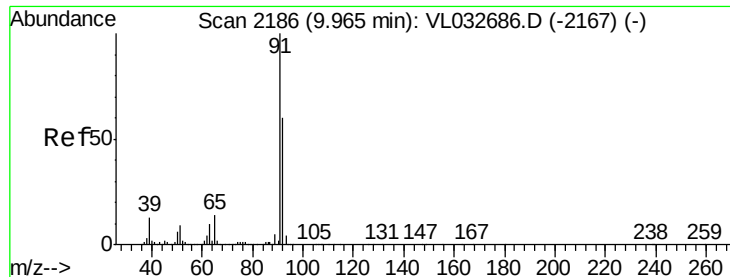
Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	164	Resp:	9793
Ion Ratio	Lower	Upper	
164	100		
166	115.9	100.5	150.7
129	79.2	90.0	135.0#
131	96.9	86.6	129.8





#53

Toluene

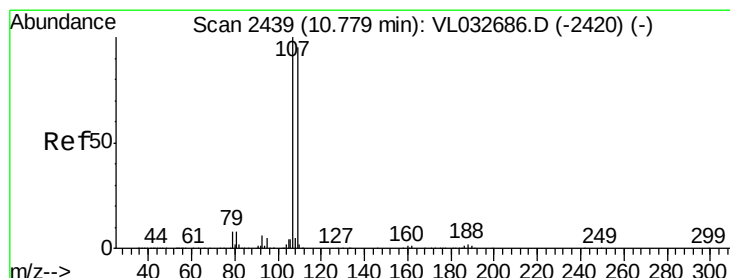
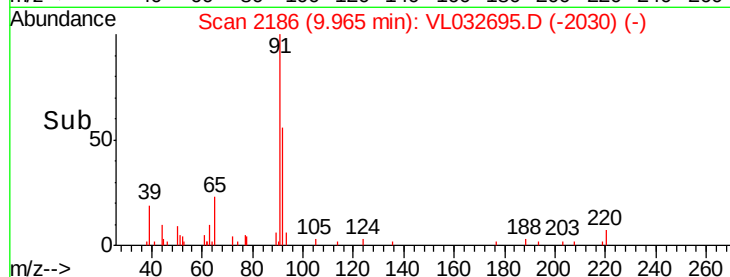
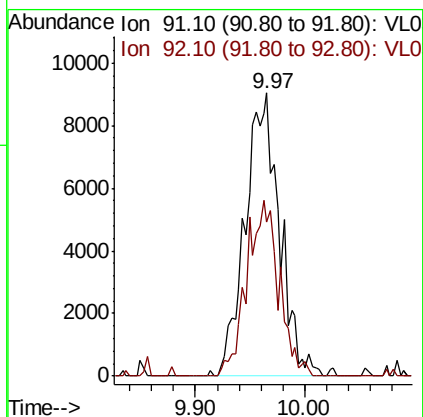
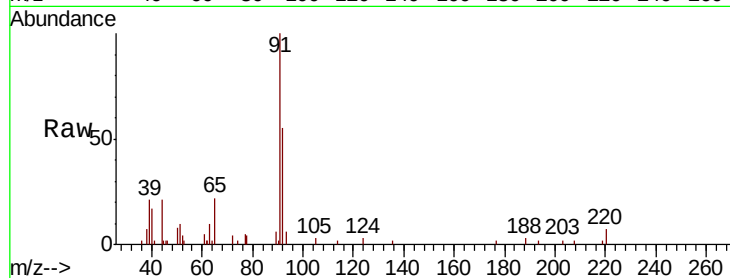
Concen: 0.062 ppbv m
RT: 9.97 min Scan# 2186
Delta R.T. 0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 91 Resp: 19711
Ion Ratio Lower Upper
91 100
92 0.0 48.4 72.6#

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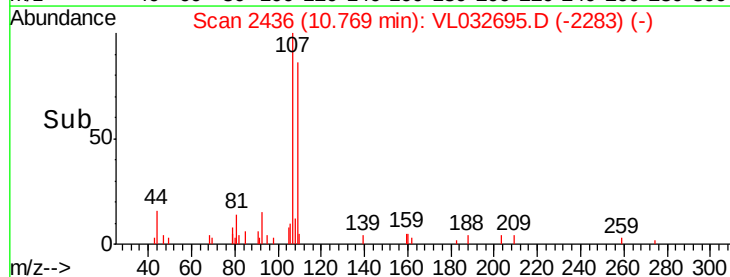
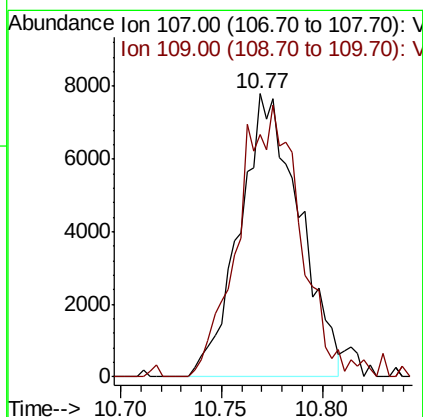
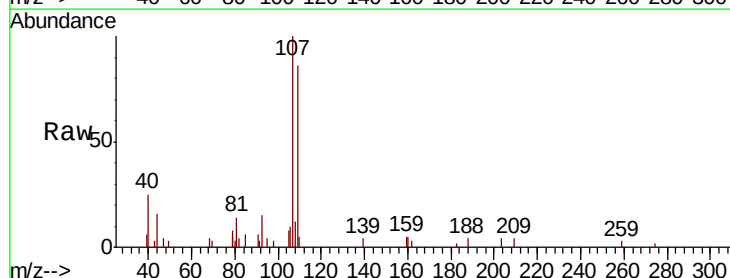


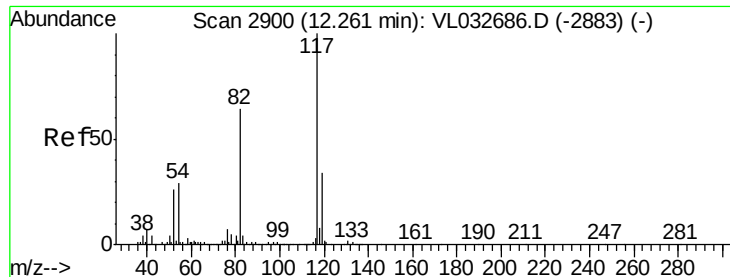
#54

1,2-Dibromoethane

Concen: 0.094 ppbv
RT: 10.77 min Scan# 2436
Delta R.T. -0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion: 107 Resp: 16092
Ion Ratio Lower Upper
107 100
109 85.5 75.3 112.9





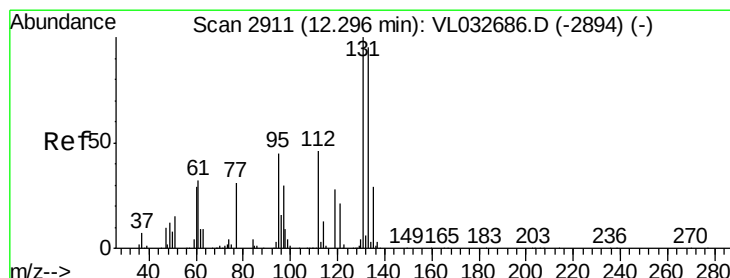
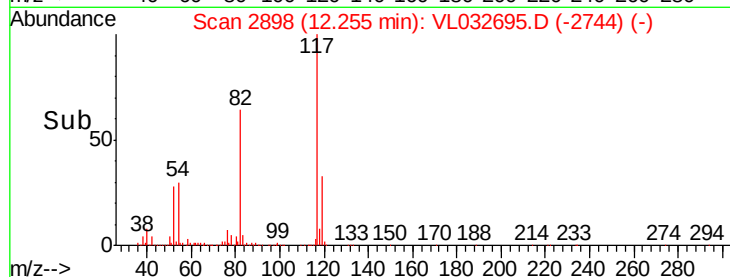
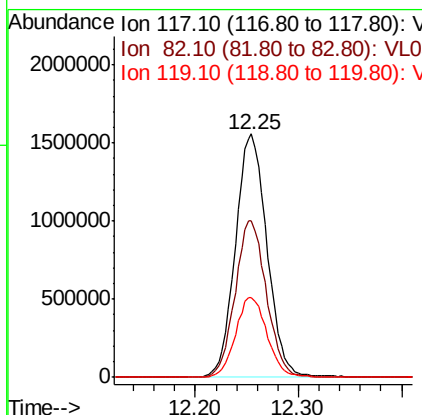
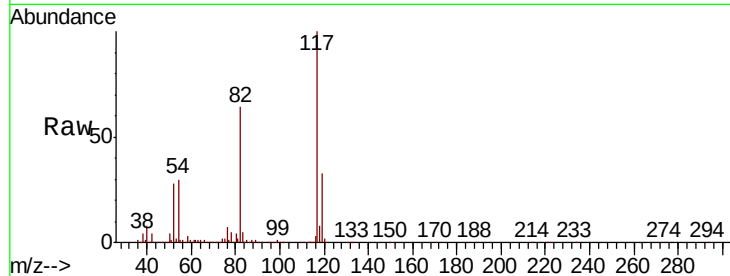
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2898
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:117 Resp: 3320759
Ion Ratio Lower Upper
117 100
82 64.2 52.7 79.1
119 33.0 26.7 40.1

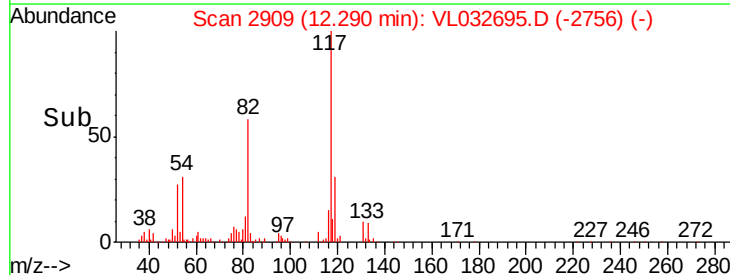
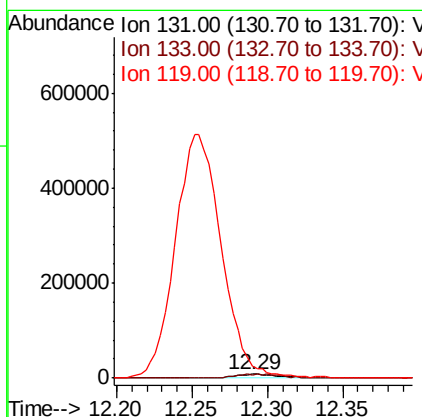
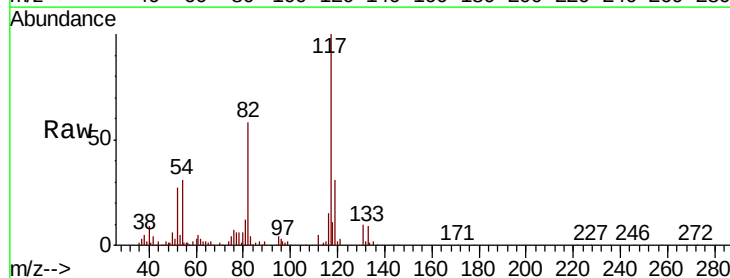
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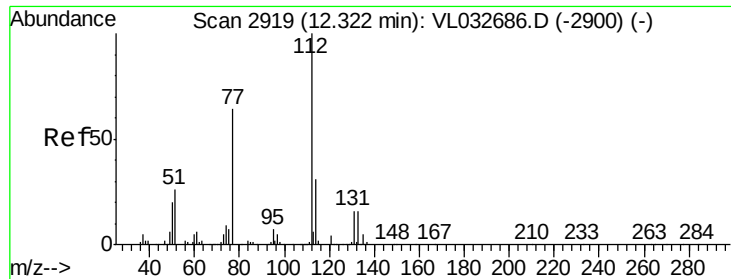
MMDadoda
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#56
1,1,1,2-Tetrachloroethane
Concen: 0.123 ppbv m
RT: 12.29 min Scan# 2909
Delta R.T. -0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion:131 Resp: 17881
Ion Ratio Lower Upper
131 100
133 104.8 75.4 113.2
119 0.0 49.1 73.7#





#57

Chlorobenzene

Concen: 0.133 ppbv m

RT: 12.31 min Scan# 2916

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

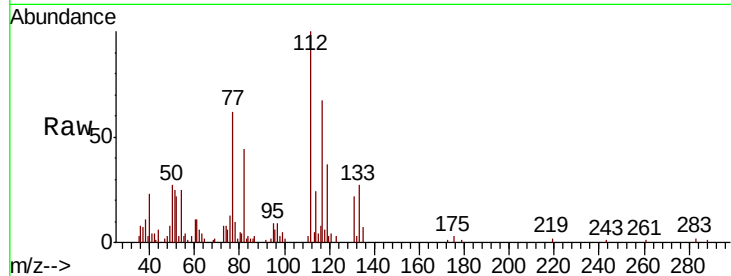
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

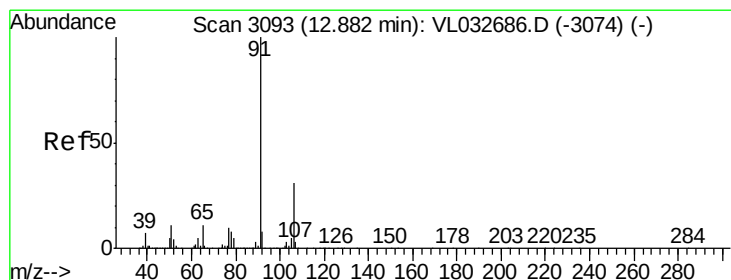
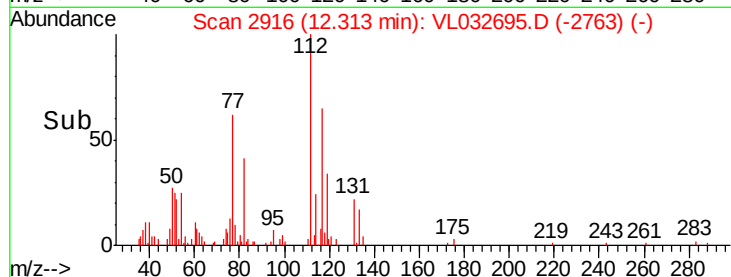
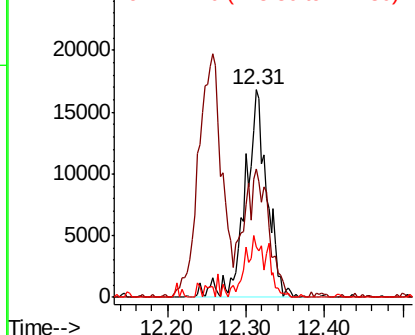
Tot Ion:	112	Resp:	32410
Ion Ratio	Lower	Upper	
112	100		
77	62.1	56.8	85.2
114	24.4	30.3	37.1#

Manual Integrations
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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: 0.067 ppbv m

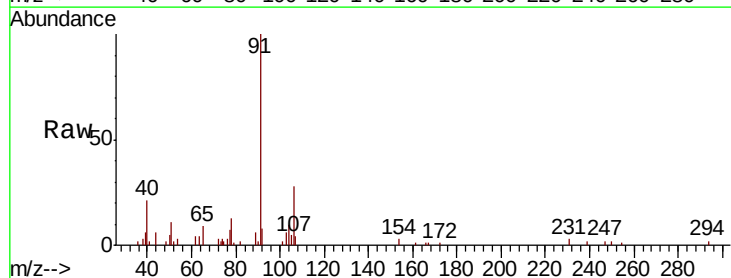
RT: 12.88 min Scan# 3092

Delta R.T. -0.00 min

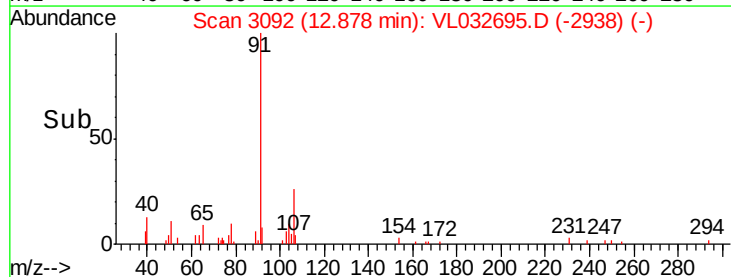
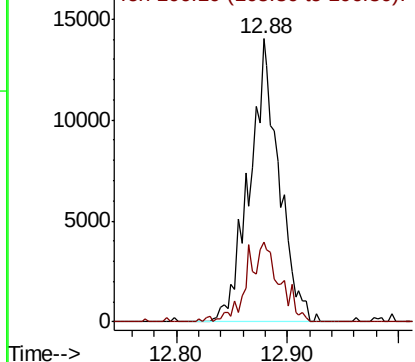
Lab File: VL032695.D

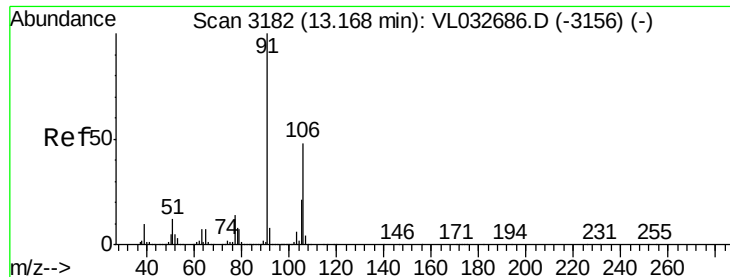
Acq: 24 Oct 2018 19:54

Tgt Ion:	91	Resp:	25837
Ion Ratio	Lower	Upper	
91	100		
106	28.1	24.2	36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





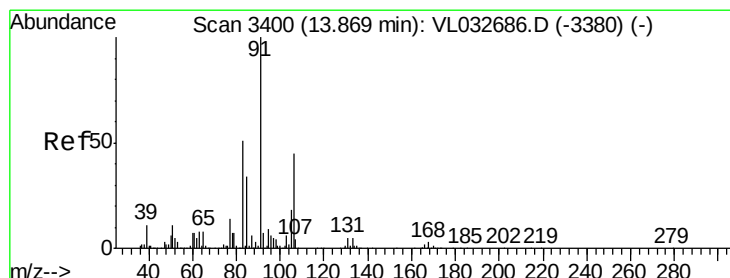
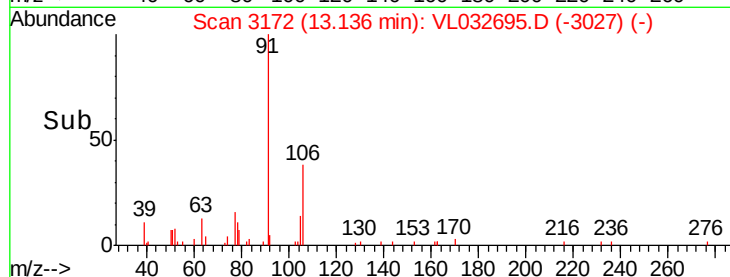
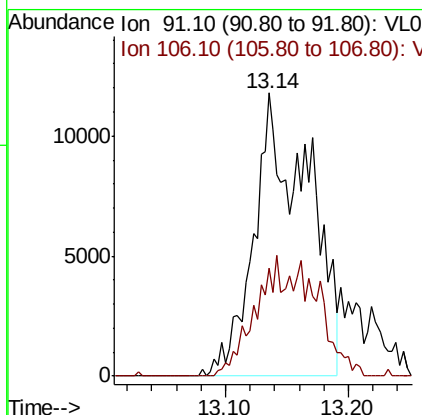
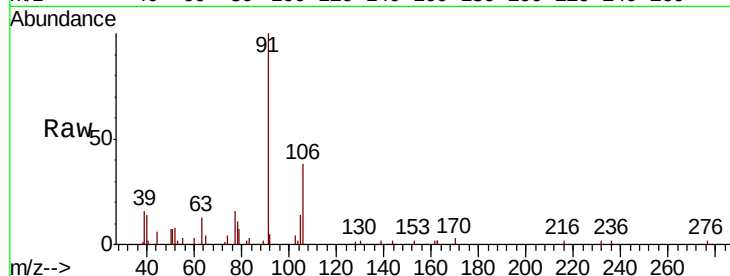
#59
m/p-Xylene
Concen: 0.105 ppbv m
RT: 13.14 min Scan# 3172
Delta R.T. -0.03 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 91 Resp: 36058
Ion Ratio Lower Upper
91 100
106 0.0 35.9 53.9#

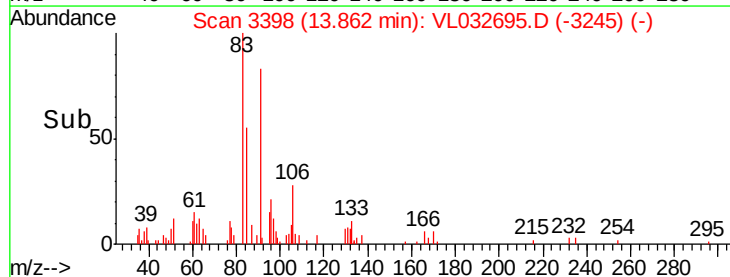
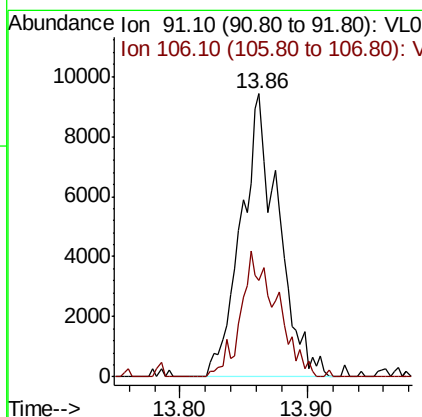
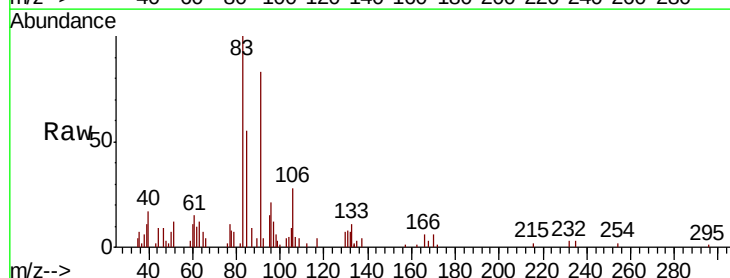
Manual Integrations
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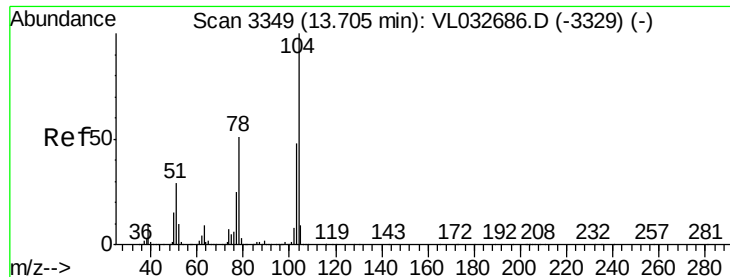
MMDadoda
10/26/2018 3:40:32 PM



#60
o-Xylene
Concen: 0.057 ppbv m
RT: 13.86 min Scan# 3398
Delta R.T. -0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion: 91 Resp: 19010
Ion Ratio Lower Upper
91 100
106 43.4 22.1 66.1





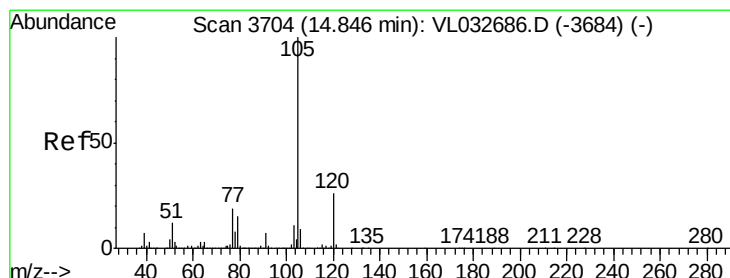
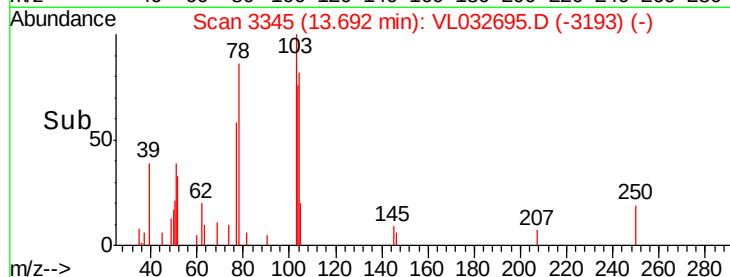
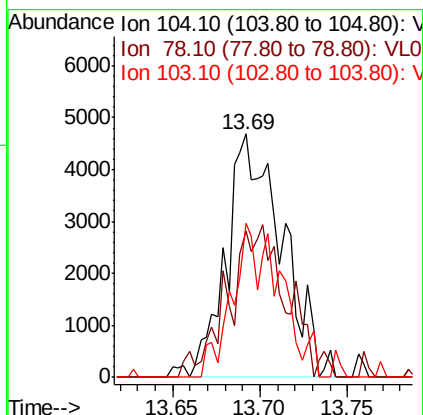
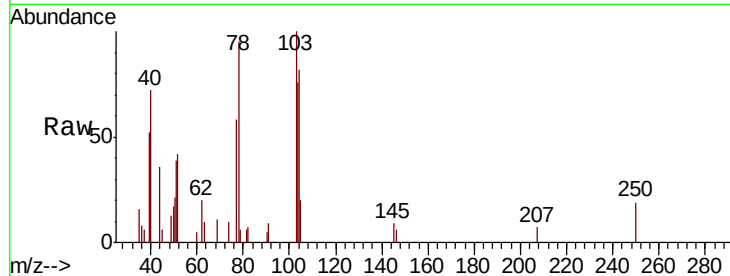
#61
Stvrene
Concen: 0.046 ppbv m
RT: 13.69 min Scan# 3345
Delta R.T. -0.01 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
104	100		
78	65.7	42.8	64.2#
103	0.0	37.4	56.0#

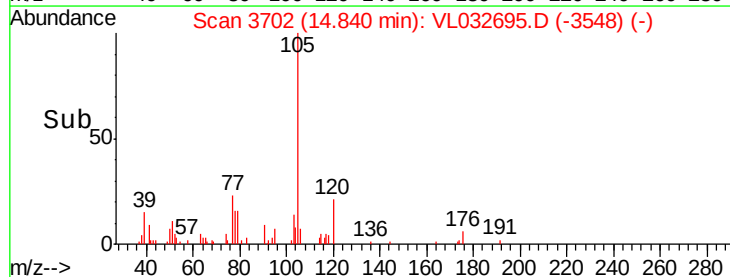
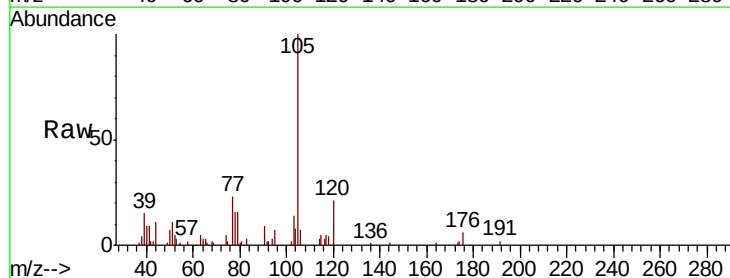
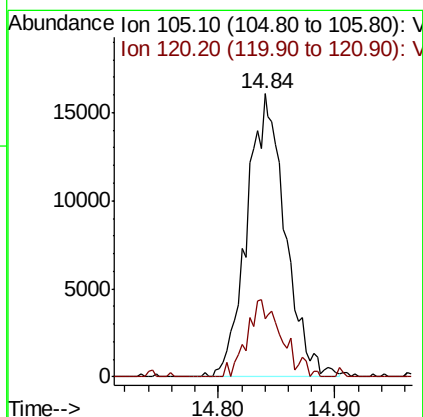
Manual Integrations
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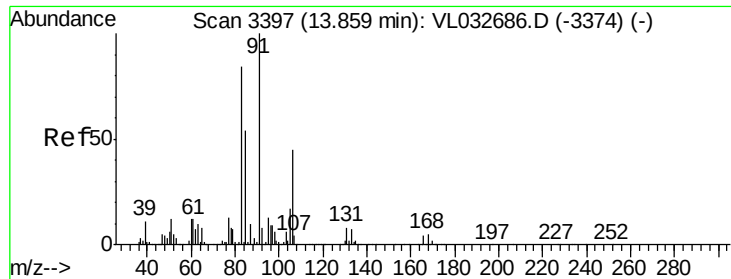
MMDadoda
10/26/2018 3:40:32 PM



#62
Isopropylbenzene
Concen: 0.078 ppbv m
RT: 14.84 min Scan# 3702
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.6	20.5	30.7





#63

1,1,2,2-Tetrachloroethane

Concen: 0.114 ppbv m

RT: 13.86 min Scan# 3397

Delta R.T. 0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

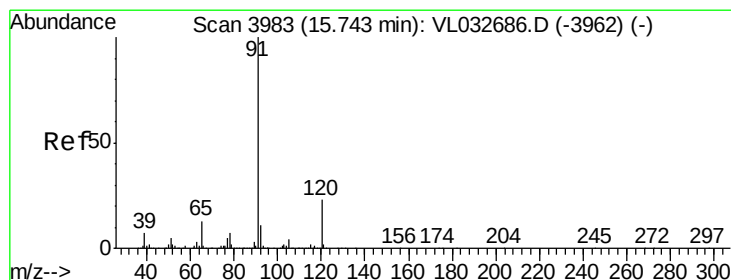
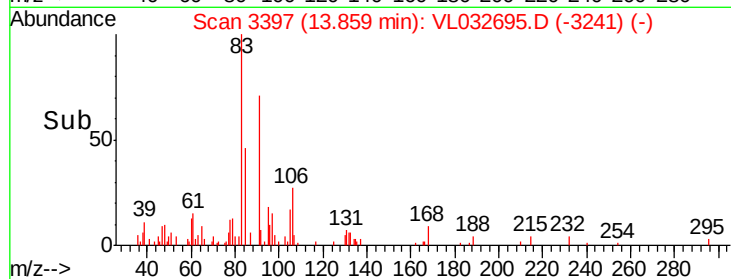
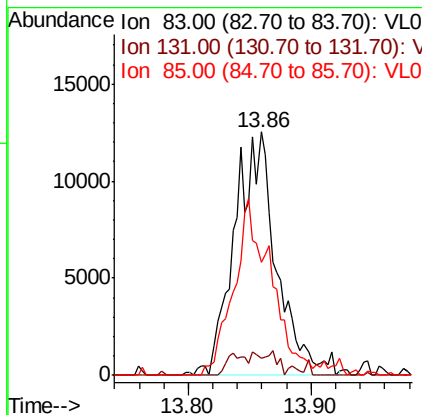
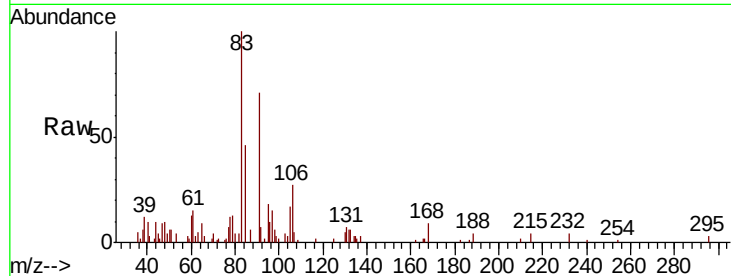
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	83	Resp	29576
Ion Ratio	100	Lower	Upper
83	100		
131	0.0	4.3	12.9#
85	67.8	32.3	96.9

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#64

n-propylbenzene

Concen: 0.056 ppbv m

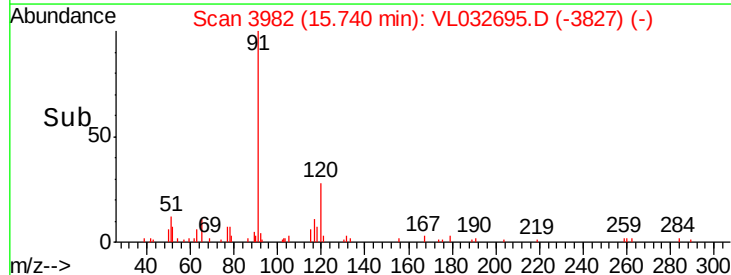
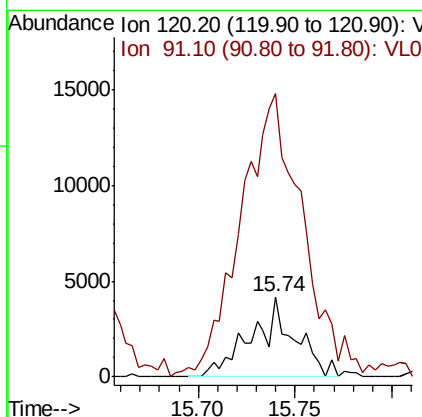
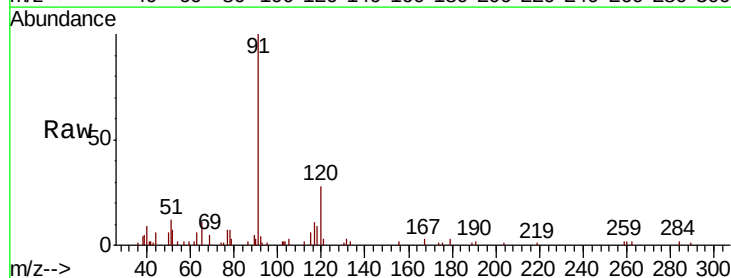
RT: 15.74 min Scan# 3982

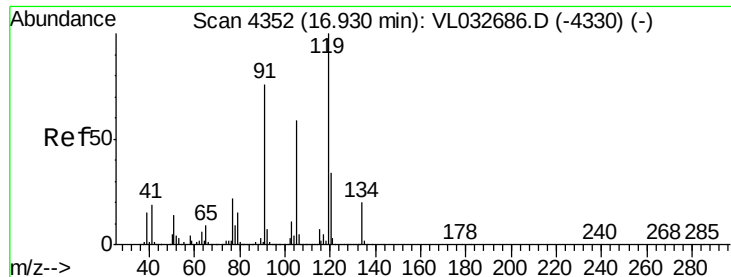
Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion	120	Resp	6481
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
120	100		
91	510.4	390.2	585.2





#65

tert-Butylbenzene

Concen: 0.054 ppbv m

RT: 16.92 min Scan# 4350

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

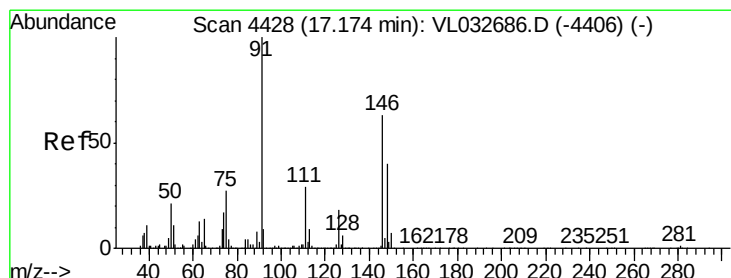
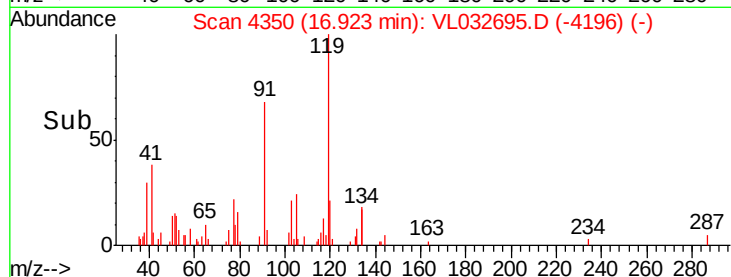
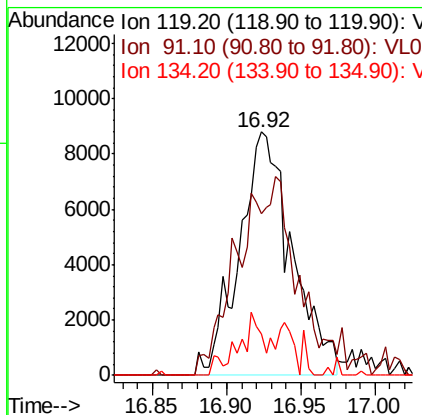
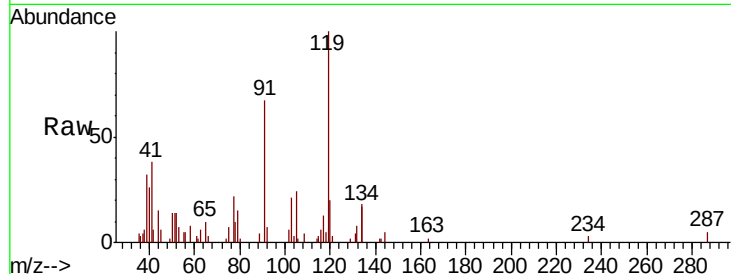
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	119	Resp:	21682
Ion Ratio	Lower	Upper	
119	100		
91	0.0	67.8	101.8#
134	20.7	15.8	23.8

Manual Integrations
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#66

Benzyl Chloride

Concen: 0.083 ppbv m

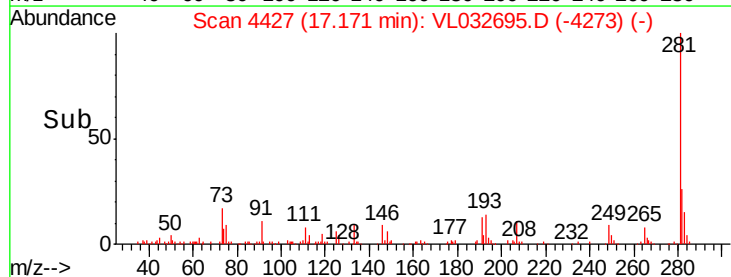
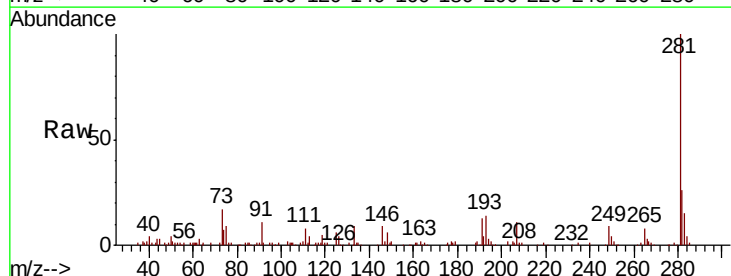
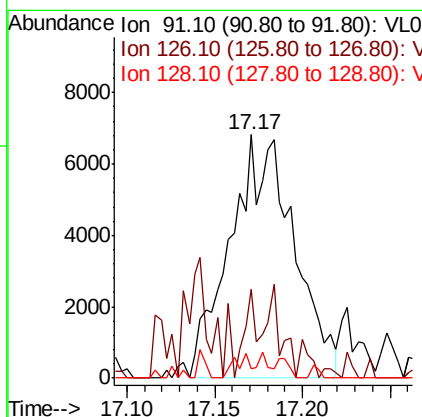
RT: 17.17 min Scan# 4427

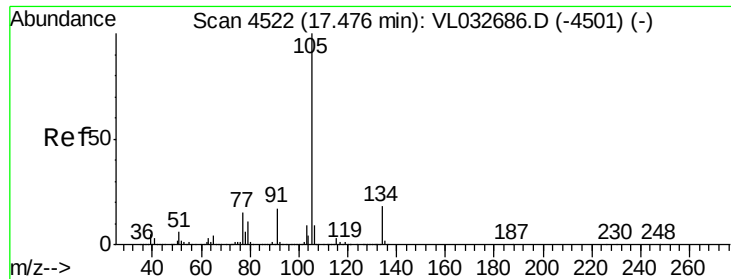
Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	91	Resp:	17209
Ion Ratio	Lower	Upper	
91	100		
126	0.0	13.9	20.9#
128	6.2	4.3	6.5





#67

sec-Butylbenzene

Concen: 0.071 ppbv m

RT: 17.47 min Scan# 4520

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 105 Resp: 40132

Ion Ratio Lower Upper

105 100

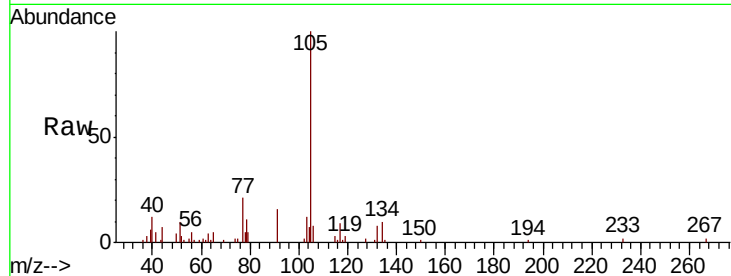
134 15.8 14.2 21.2

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.47

20000

15000

10000

5000

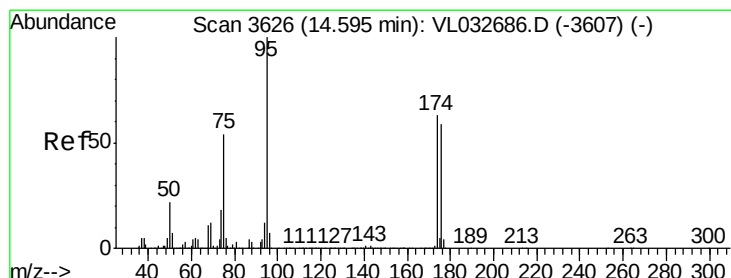
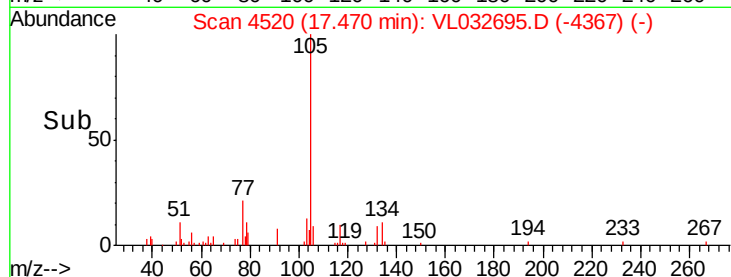
0

Time-->

17.40

17.50

17.60



#68

1-Bromo-4-Fluorobenzene

Concen: 10.159 ppbv

RT: 14.59 min Scan# 3624

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

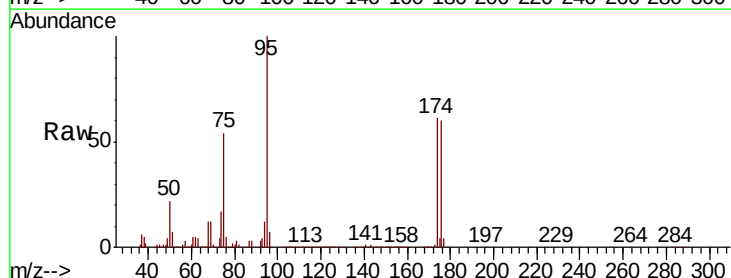
Tgt Ion: 95 Resp: 2511780

Ion Ratio Lower Upper

95 100

174 63.9 46.0 69.0

175 4.6 3.4 5.0



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

1500000

1000000

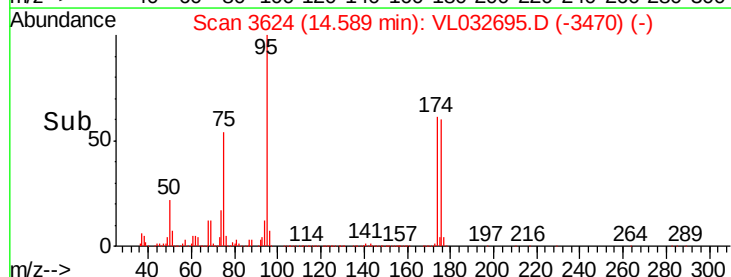
500000

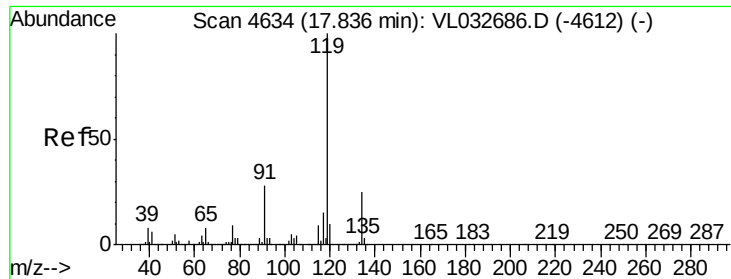
0

Time-->

14.50

14.60





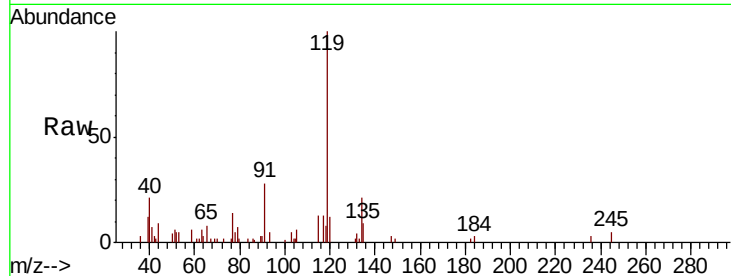
#69
p-Isopropyltoluene
Concen: 0.054 ppbv m
RT: 17.83 min Scan# 4633
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Resp	Lower	Upper
119	100	24241		
134	0.0	20.2	30.2#	
91	38.1	24.0	36.0#	

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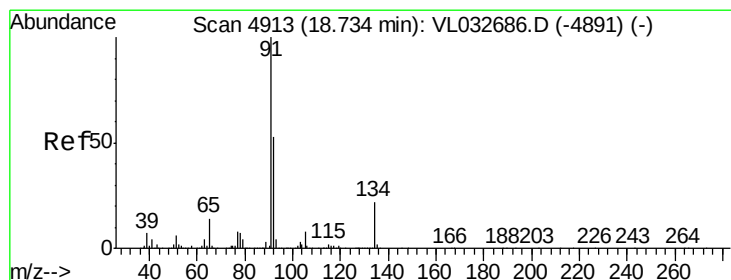
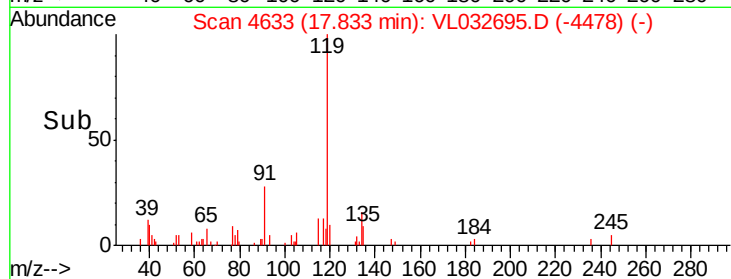
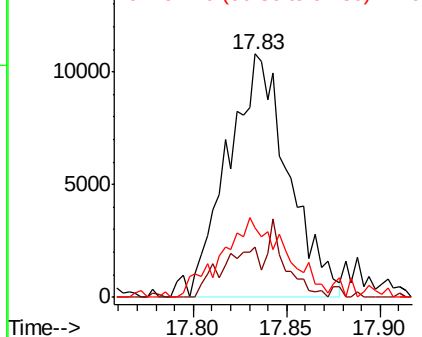


Abundance

Ion 119.10 (118.80 to 119.80): V

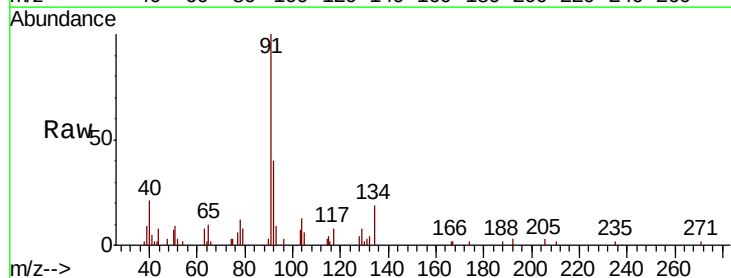
Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V



#70
n-Butylbenzene
Concen: 0.054 ppbv m
RT: 18.73 min Scan# 4911
Delta R.T. -0.00 min
Lab File: VL032695.D
Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	24874		
92	0.0	43.0	64.4#	
134	0.0	17.0	25.6#	

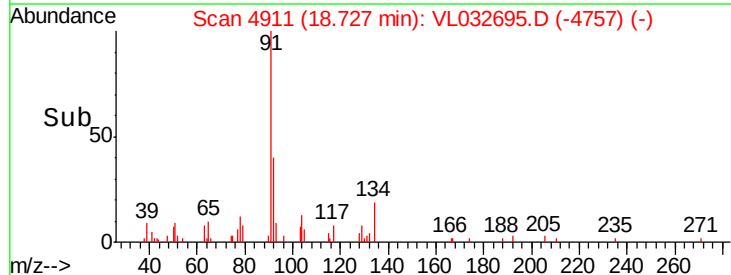
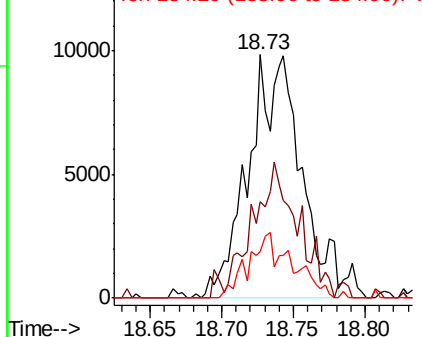


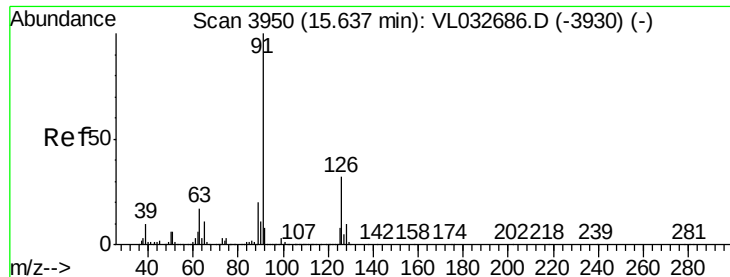
Abundance

Ion 91.10 (90.80 to 91.80): V

Ion 92.10 (91.80 to 92.80): V

Ion 134.20 (133.90 to 134.90): V





#71

2-Chlorotoluene

Concen: 0.064 ppbv m

RT: 15.63 min Scan# 3947

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion: 91 Resp: 21470

Ion Ratio Lower Upper

91 100

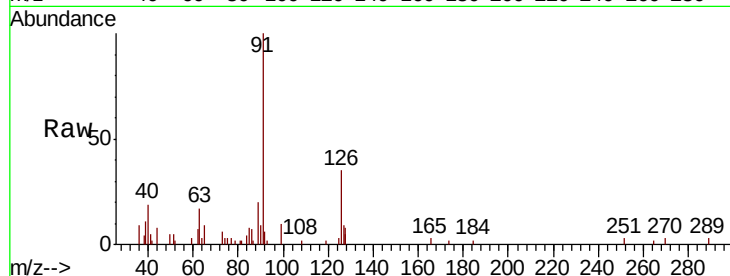
126 31.0 11.8 47.4

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

15.63

10000

8000

6000

4000

2000

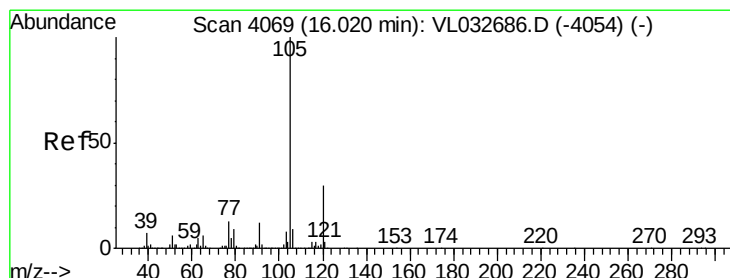
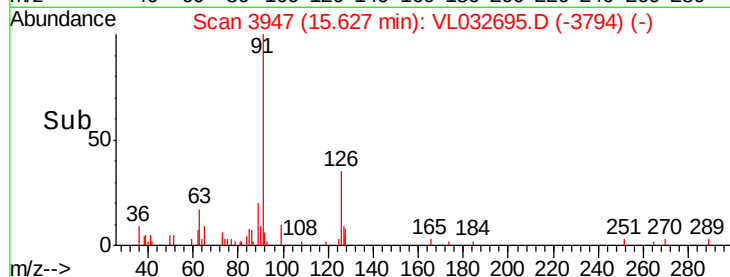
0

Time-->

15.55

15.60

15.65



#72

4-Ethyltoluene

Concen: 0.053 ppbv

RT: 16.01 min Scan# 4067

Delta R.T. -0.00 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion: 105 Resp: 18558

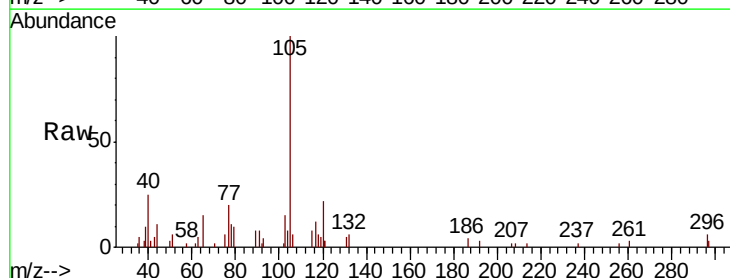
Ion Ratio Lower Upper

105 100

120 23.7 23.7 35.5

91 17.3 10.4 15.6#

77 20.3 11.4 17.2#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

16.01

10000

5000

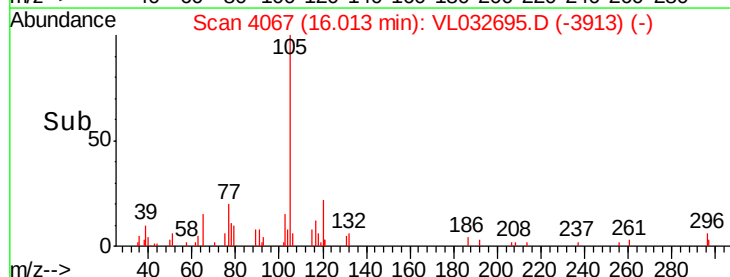
0

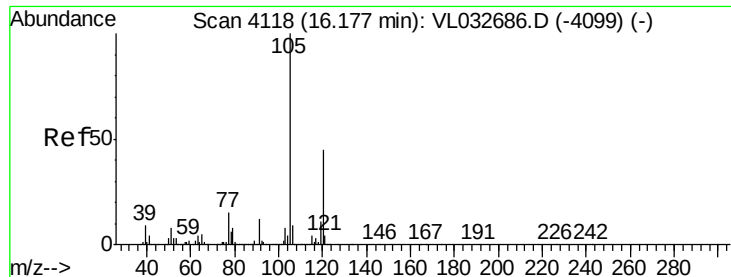
Time-->

15.95

16.00

16.05





#73

1,3,5-Trimethylbenzene

Concen: 0.056 ppbv m

RT: 16.17 min Scan# 4115

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:105 Resp: 19319

Ion Ratio Lower Upper

105 100

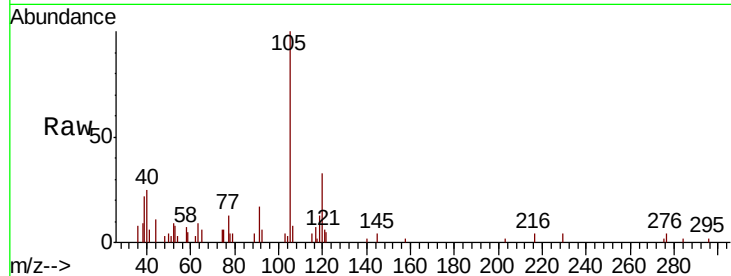
120 33.0 35.4 53.2#

Manual Integrations

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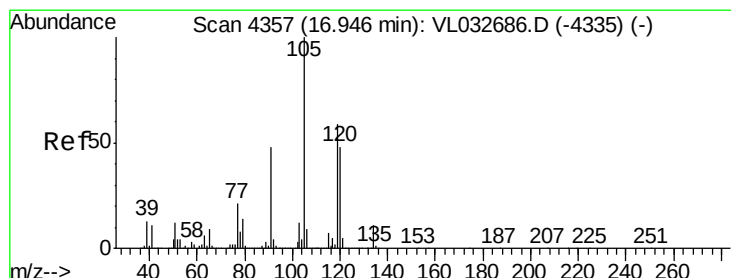
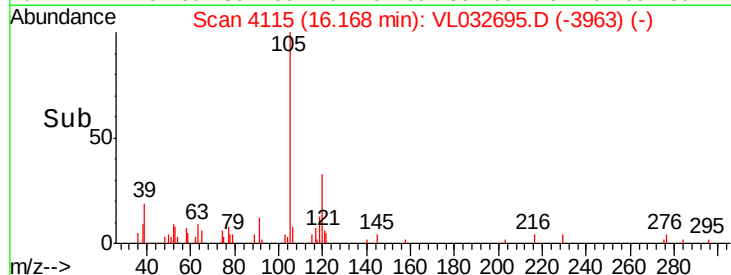
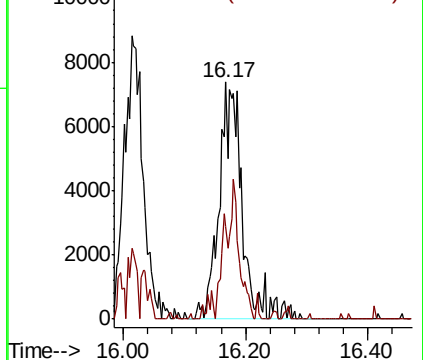
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.051 ppbv m

RT: 16.94 min Scan# 4354

Delta R.T. -0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:105 Resp: 18632

Ion Ratio Lower Upper

105 100

120 64.9 35.8 53.8#

91 80.2 33.2 49.8#

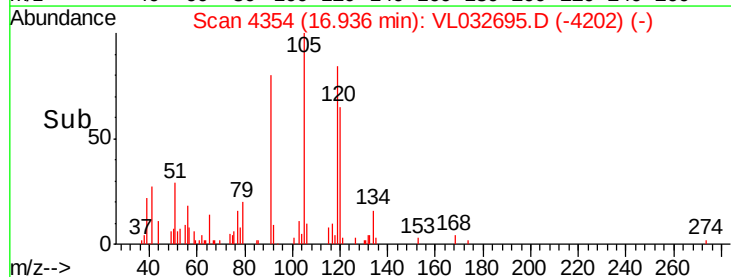
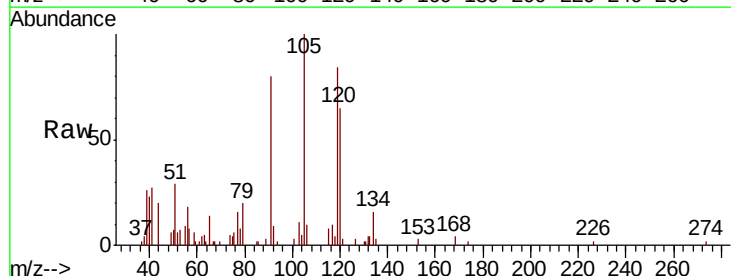
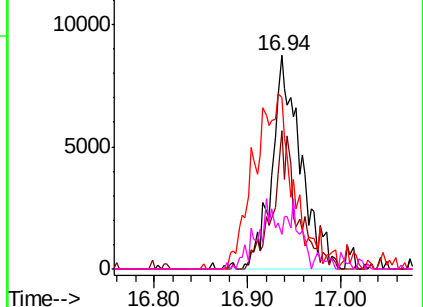
77 16.0 16.2 24.4#

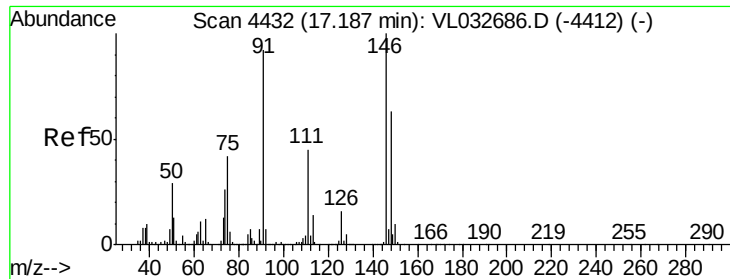
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





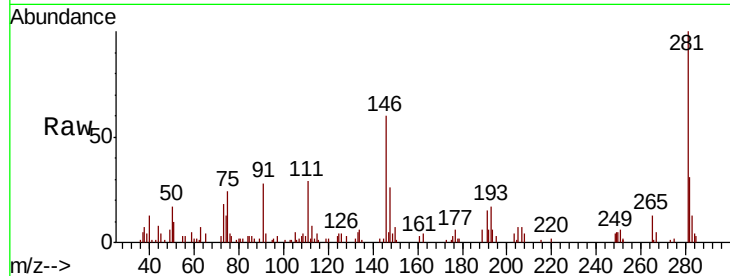
#75
 1,3-Dichlorobenzene
 Concen: 0.132 ppbv m
 RT: 17.19 min Scan# 4432
 Delta R.T. 0.00 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
146	100		
111	62.5	24.4	73.2
148	0.0	31.9	95.9#

Manual Integrations
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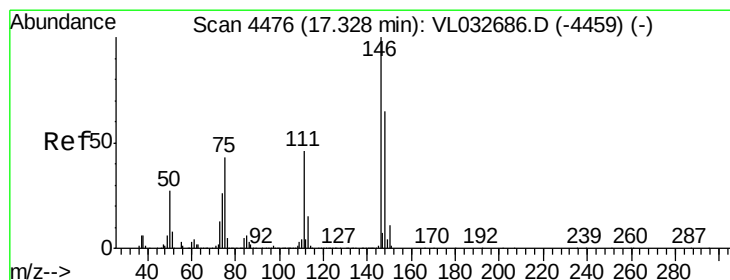
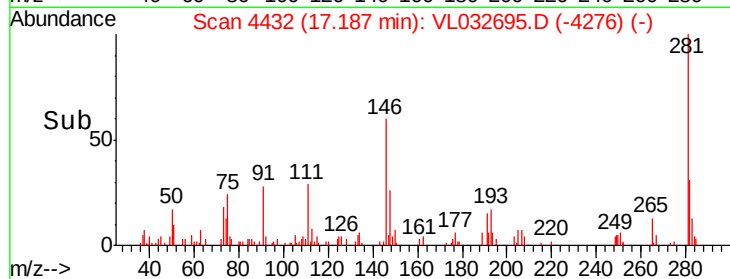
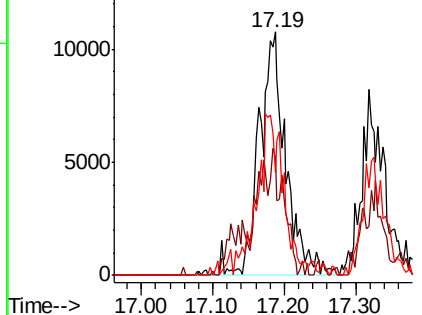


Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#76
 1,4-Dichlorobenzene
 Concen: 0.096 ppbv m
 RT: 17.32 min Scan# 4473
 Delta R.T. -0.01 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

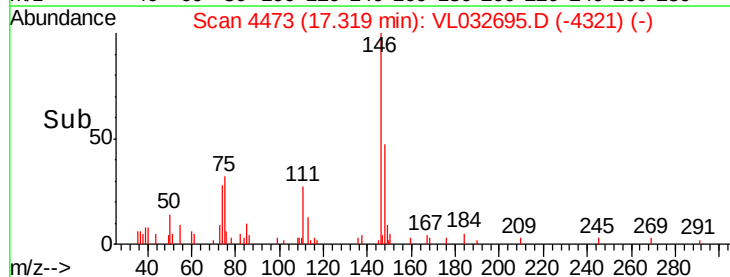
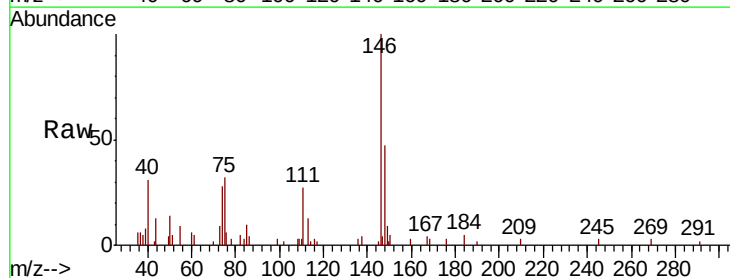
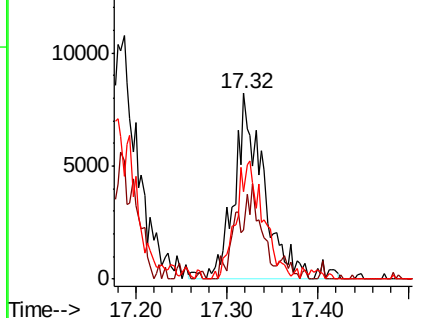
Tgt Ion	Ratio	Lower	Upper
146	100		
111	46.5	23.7	71.1
148	62.4	32.1	96.3

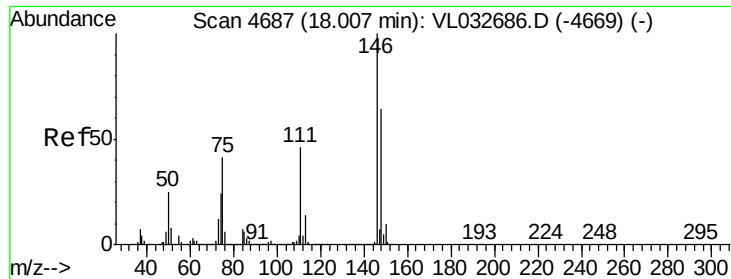
Abundance

Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





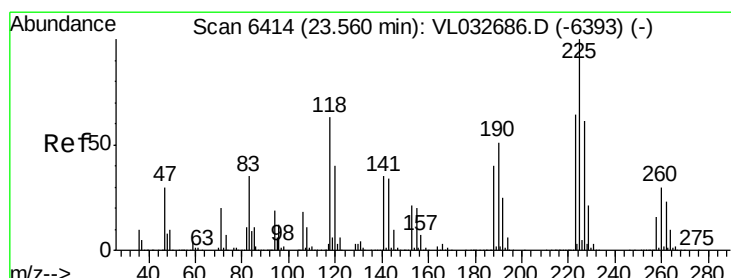
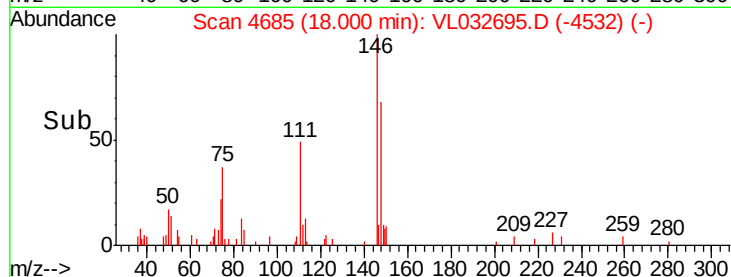
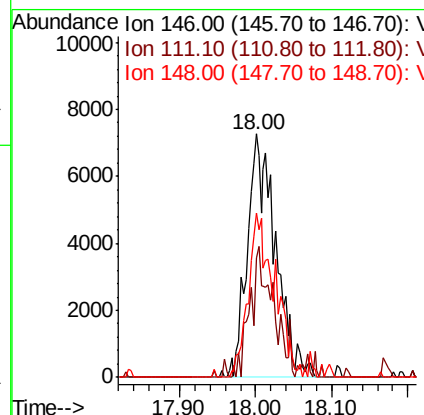
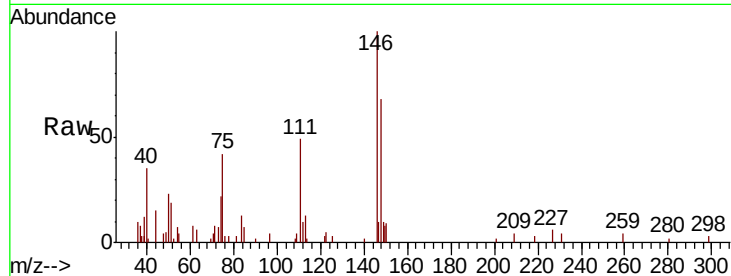
#77
 1,2-Dichlorobenzene
 Concen: 0.094 ppbv m
 RT: 18.00 min Scan# 4685
 Delta R.T. -0.01 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion	Ratio	Lower	Upper
146	100		
111	44.0	25.3	75.8
148	62.8	31.9	95.9

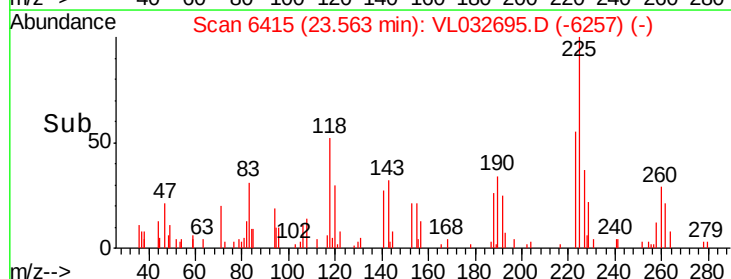
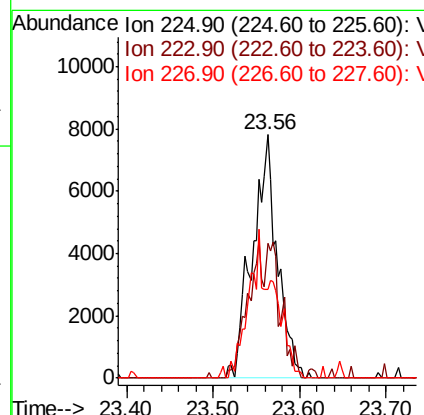
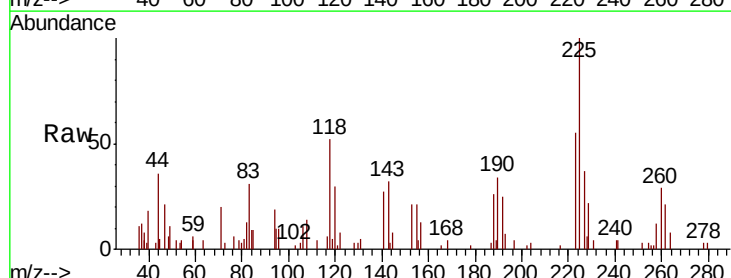
Manual Integrations
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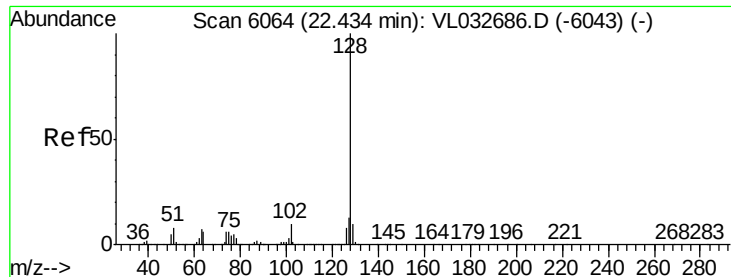
MMDadoda
 10/26/2018 3:40:32 PM



#78
 Hexachloro-1,3-Butadiene
 Concen: 0.165 ppbv m
 RT: 23.56 min Scan# 6415
 Delta R.T. 0.01 min
 Lab File: VL032695.D
 Acq: 24 Oct 2018 19:54

Tgt Ion	Ratio	Lower	Upper
225	100		
223	69.5	50.7	76.1
227	62.6	50.7	76.1





#79

Naphthalene

Concen: 0.042 ppbv m

RT: 22.45 min Scan# 6068

Delta R.T. 0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Instrument :

MSVOA_L

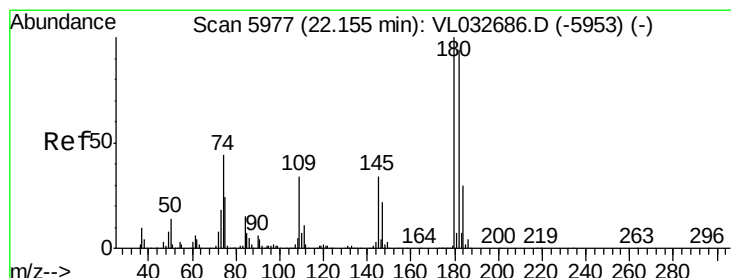
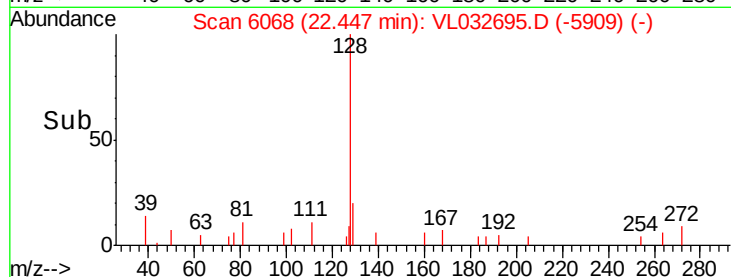
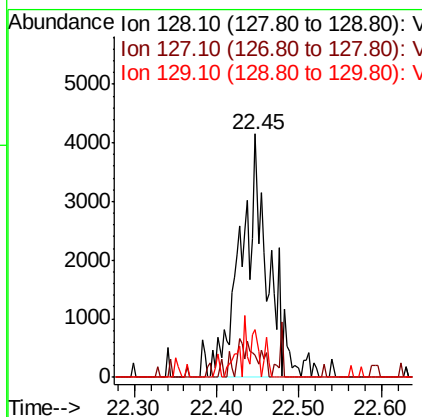
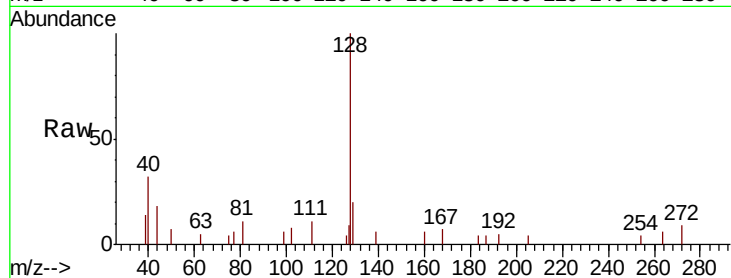
ClientSampleId :

MDL-AIR-03-QT4-2018 0.1 LOD

Tot Ion:	128	Resp:	9511
Ion Ratio	Lower	Upper	
128	100		
127	9.0	10.3	15.5#
129	19.5	8.6	13.0#

Manual Integrations
APPROVED

MMDadoda
10/26/2018 3:40:32 PM



#81

1,2,4-Trichlorobenzene

Concen: 0.042 ppbv m

RT: 22.17 min Scan# 5981

Delta R.T. 0.01 min

Lab File: VL032695.D

Acq: 24 Oct 2018 19:54

Tgt Ion:	180	Resp:	4944
Ion Ratio	Lower	Upper	
180	100		
182	0.0	76.5	114.7#
184	43.0	24.7	37.1#

