

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071918\
 Data File : VL032302.D
 Acq On : 20 Jul 2018 00:15
 Operator : SY/AP
 Sample : J4029-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 AIR-01

Manual Integrations
 APPROVED

MMDadoda
 7/20/2018 2:06:26 PM

Quant Time: Jul 20 04:22:03 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 18
 QLast Update : Wed Jul 18 14:38:53 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1540289	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.38	114	3253857	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	3843933	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.67	95	2978636	9.56	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	57509	0.22	ppbv	97
3) Chlorodifluoromethane	3.06	51	6632983	38.37	ppbv	96
4) Chloromethane	3.22	50	56579	0.56	ppbv	99
11) Trichlorofluoromethane	4.06	101	2717490	13.27	ppbv	99
13) Ethanol	3.73	45	2084698	96.58	ppbv	99
15) Acetone	3.96	43	3751459	23.27	ppbv	92
17) tert-Butyl alcohol	4.44	59	270452m	5.32	ppbv	
19) Isopropyl Alcohol	4.11	45	719737	6.60	ppbv #	1
20) Methylene Chloride	4.47	84	1712670	27.60	ppbv	98
22) trans-1,2-Dichloroethene	5.03	96	14665	0.23	ppbv	84
26) Hexane	5.86	57	2250761	13.96	ppbv #	43
27) Carbon Disulfide	4.69	76	973815	6.82	ppbv	100
29) Chloroform	5.93	83	3101320	13.04	ppbv	99
31) cis-1,2-Dichloroethene	5.72	61	221651	1.43	ppbv	99
34) 2-Butanone	5.40	43	204212	0.91	ppbv	99
35) Carbon Tetrachloride	7.22	117	10321m	0.05	ppbv	
36) Benzene	7.09	78	42963m	0.13	ppbv	
37) 1,2-Dichloroethane	6.49	62	81441	0.43	ppbv #	96
38) Trichloroethene	8.05	130	4100m	0.04	ppbv	
47) 1,1,2-Trichloroethane	9.71	97	63991	0.47	ppbv	94
52) Tetrachloroethene	11.46	164	46219m	0.42	ppbv	
53) Toluene	10.03	91	178244	0.46	ppbv	97
59) m/p-Xylene	13.21	91	85915m	0.19	ppbv	
61) Styrene	13.78	104	115329m	0.34	ppbv	
74) 1,2,4-Trimethylbenzene	17.02	105	86693	0.16	ppbv #	72

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

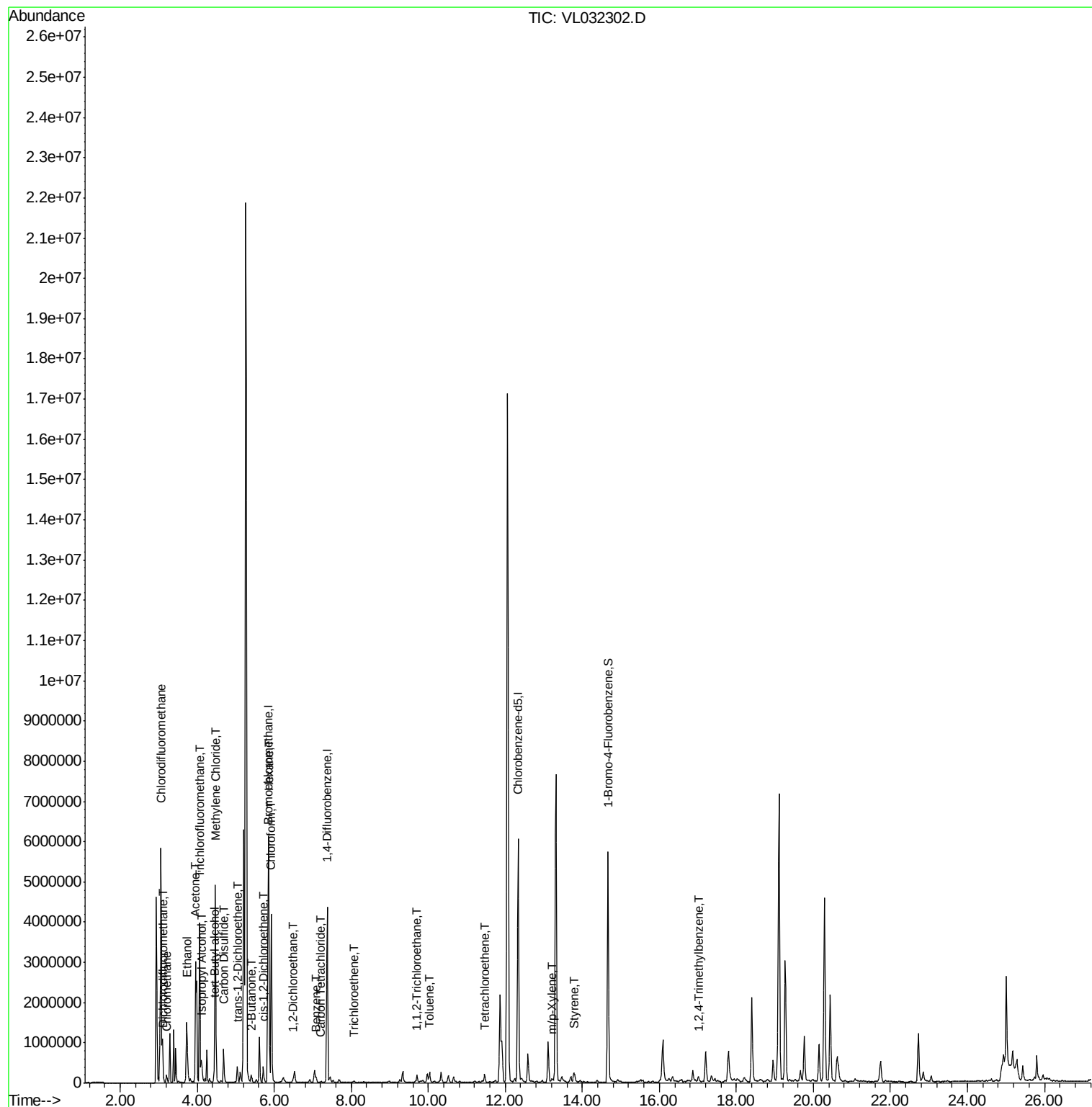
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL071918\
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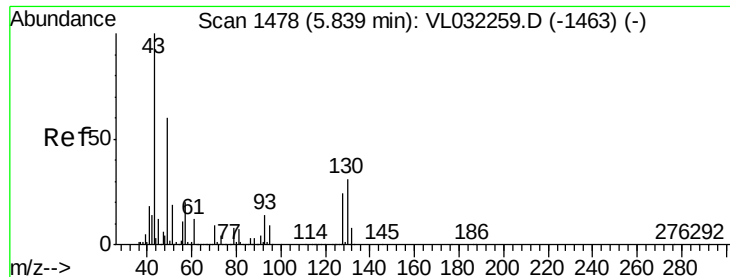
Instrument :
MSVOA_L
ClientSampleId :
AIR-01

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Quant Time: Jul 20 04:22:03 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul
QLast Update : Wed Jul 18 14:38:53 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.84 min Scan# 1477

Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

ClientSampleId :

AIR-01

Tot Ion: 49 Resp: 1540289

Ion Ratio Lower Upper

49 100

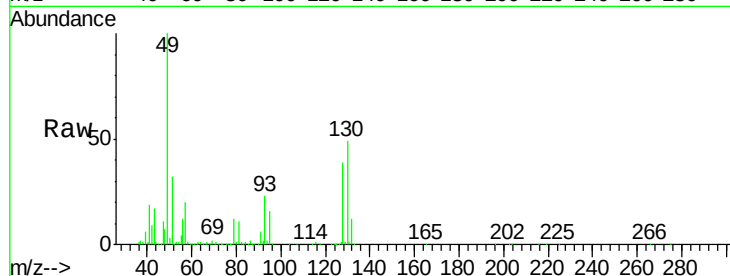
128 40.0 20.1 60.2

130 50.7 25.9 77.6

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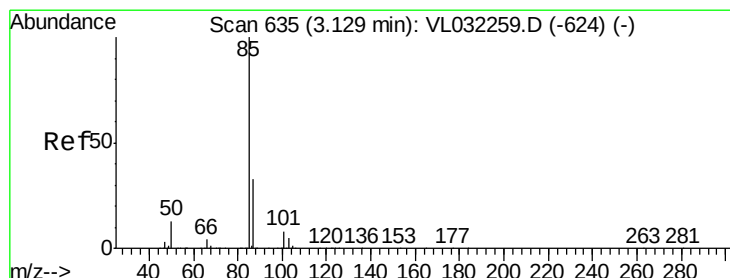
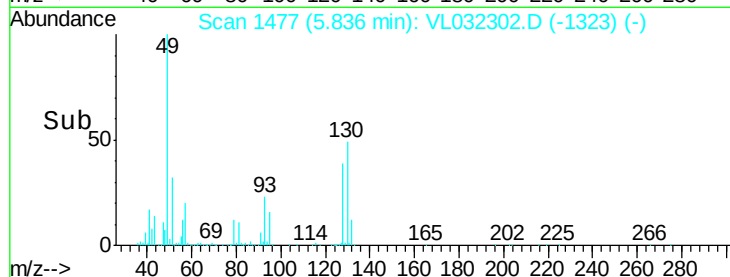
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.84

Time-->



#2

Dichlorodifluoromethane

Concen: 0.22 ppbv

RT: 3.13 min Scan# 634

Delta R.T. -0.00 min

Lab File: VL032302.D

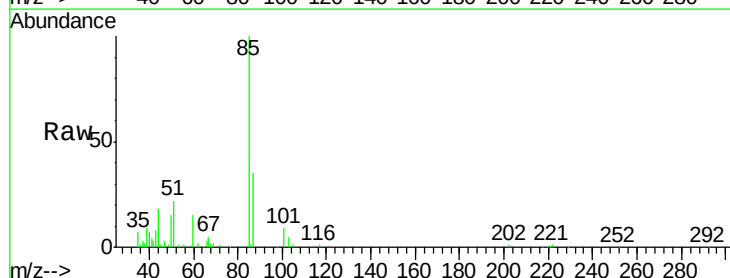
Acq: 20 Jul 2018 00:15

Tgt Ion: 85 Resp: 57509

Ion Ratio Lower Upper

85 100

87 34.4 26.2 39.2

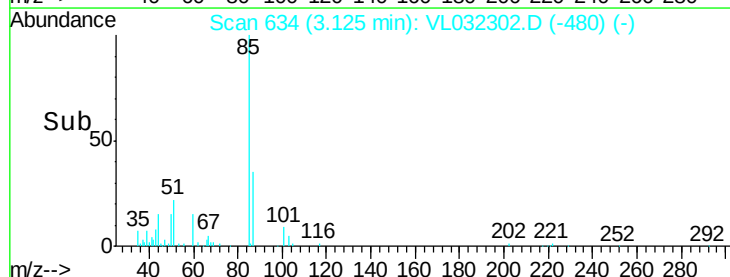


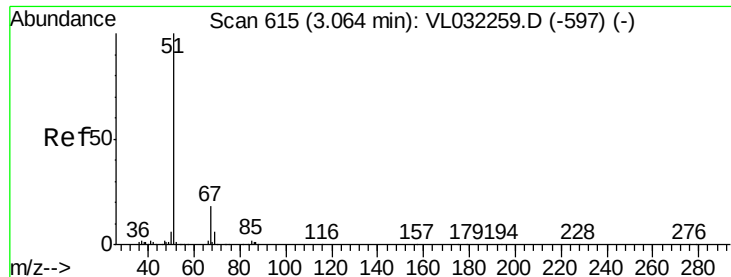
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.13

Time-->





#3

Chlorodifluoromethane

Concen: 38.37 ppbv

RT: 3.06 min Scan# 615

Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

ClientSampleId :

AIR-01

Tot Ion: 51 Resp: 6632983

Ion Ratio Lower Upper

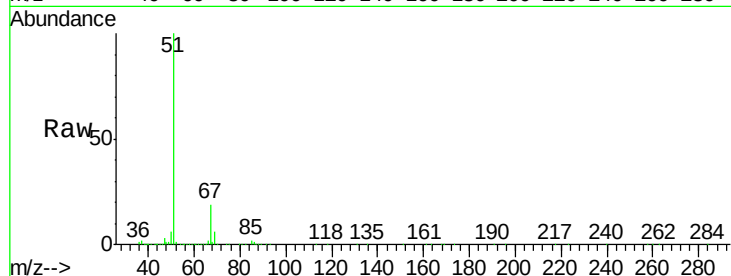
51 100

67 15.8 14.2 21.4

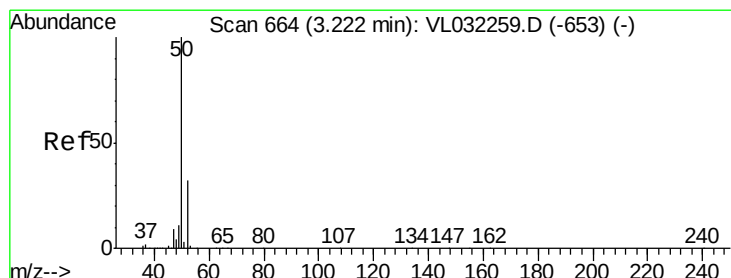
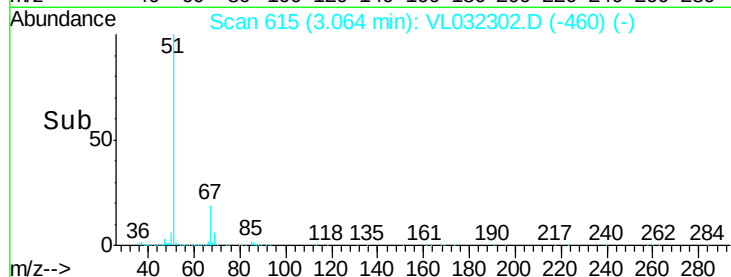
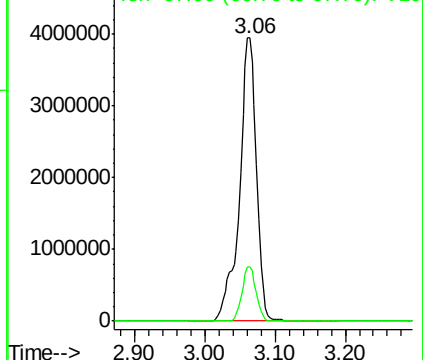
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Abundance Ion 51.00 (50.70 to 51.70): VL0
Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.56 ppbv

RT: 3.22 min Scan# 664

Delta R.T. -0.00 min

Lab File: VL032302.D

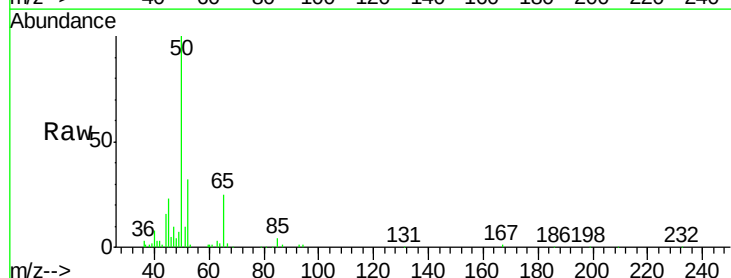
Acq: 20 Jul 2018 00:15

Tgt Ion: 50 Resp: 56579

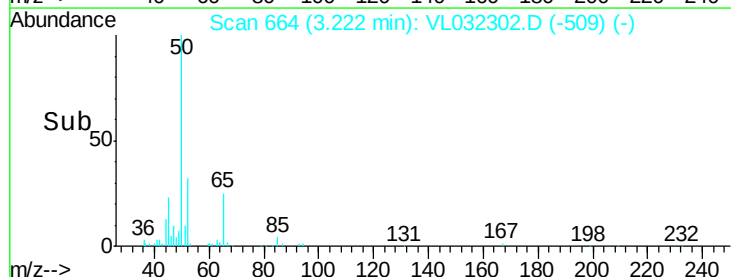
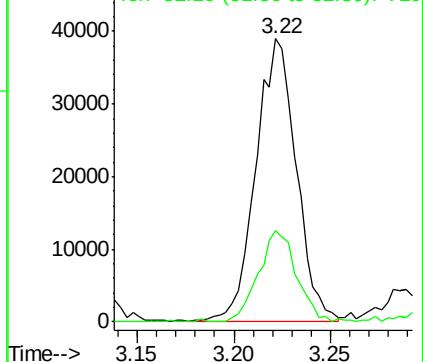
Ion Ratio Lower Upper

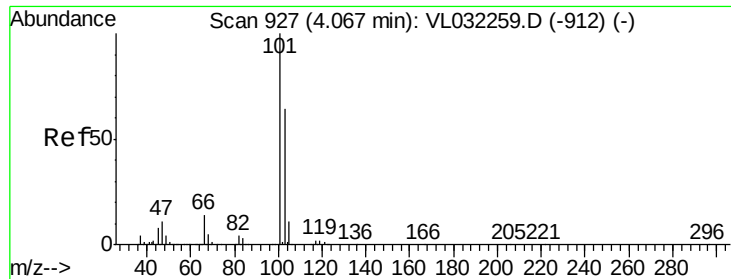
50 100

52 32.3 25.3 37.9



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





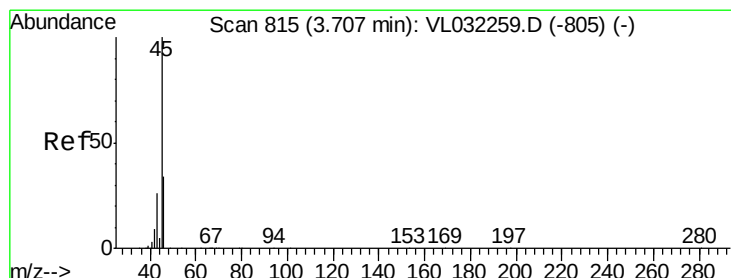
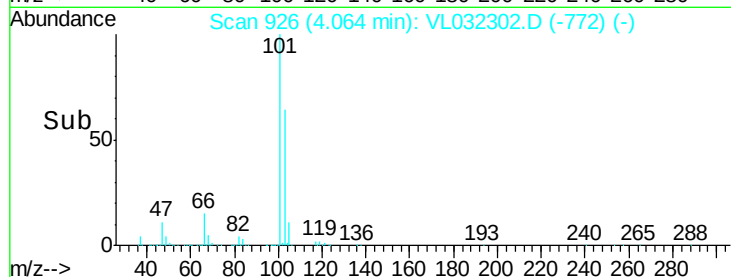
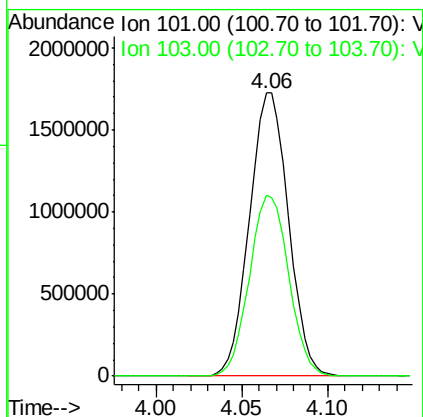
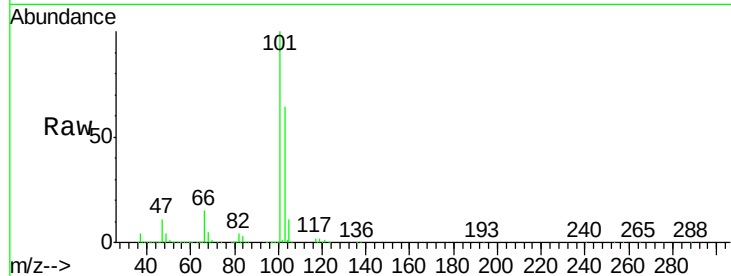
#11
 Trichlorofluoromethane
 Concen: 13.27 ppbv
 RT: 4.06 min Scan# 926
 Delta R.T. -0.00 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Instrument :
 MSVOA_L
 ClientSampleId :
 AIR-01

Tot Ion:101 Resp: 2717490
 Ion Ratio Lower Upper
 101 100
 103 64.0 51.5 77.3

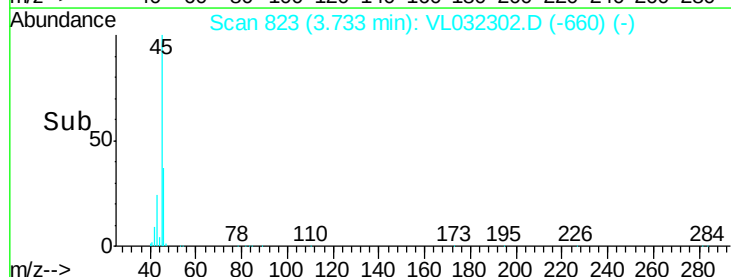
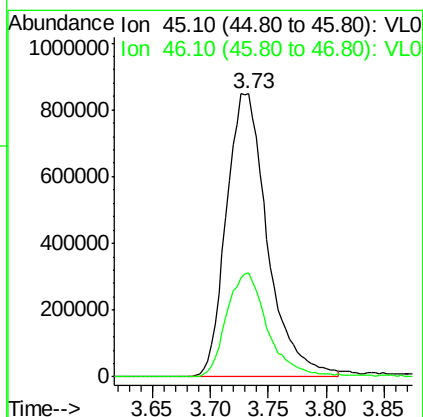
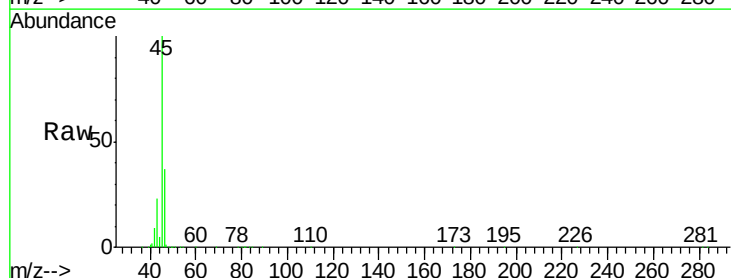
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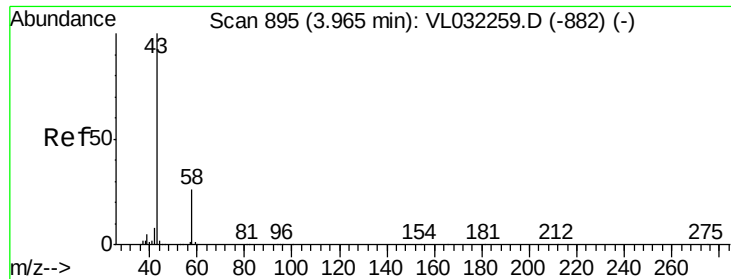
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#13
 Ethanol
 Concen: 96.58 ppbv
 RT: 3.73 min Scan# 823
 Delta R.T. 0.03 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Tgt Ion: 45 Resp: 2084698
 Ion Ratio Lower Upper
 45 100
 46 37.1 15.2 60.8





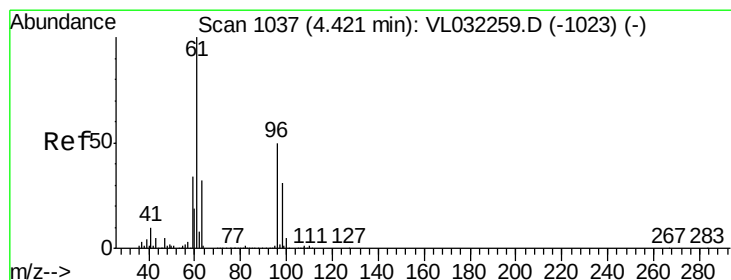
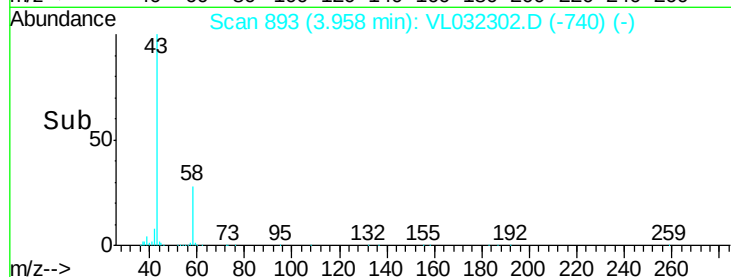
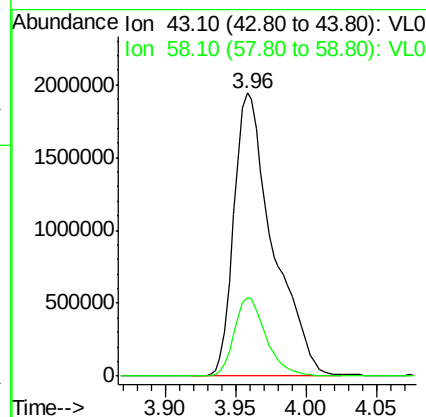
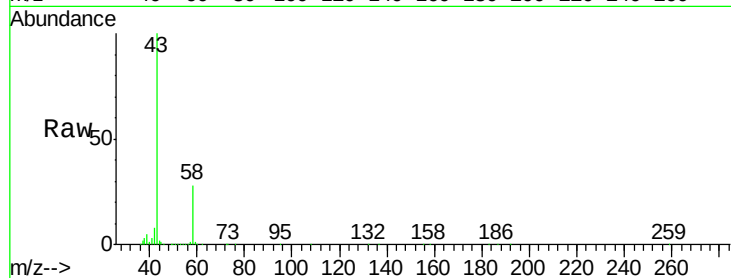
#15
Acetone
Concen: 23.27 ppbv
RT: 3.96 min Scan# 893
Delta R.T. -0.01 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion: 43 Resp: 3751459
Ion Ratio Lower Upper
43 100
58 22.9 21.8 32.6

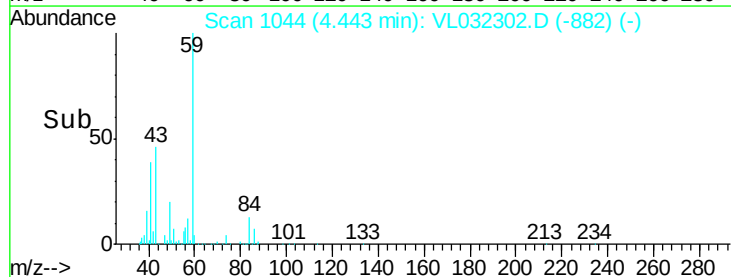
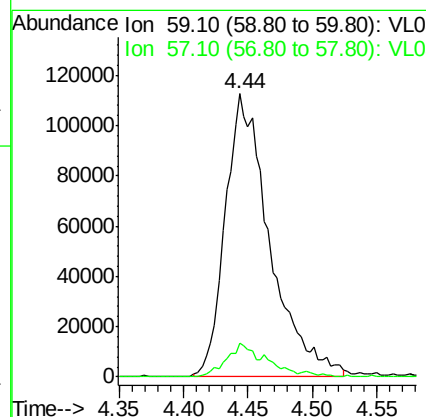
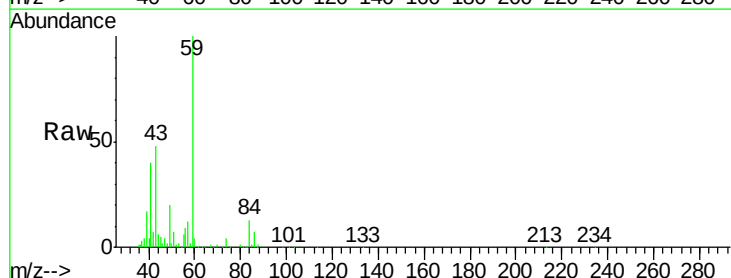
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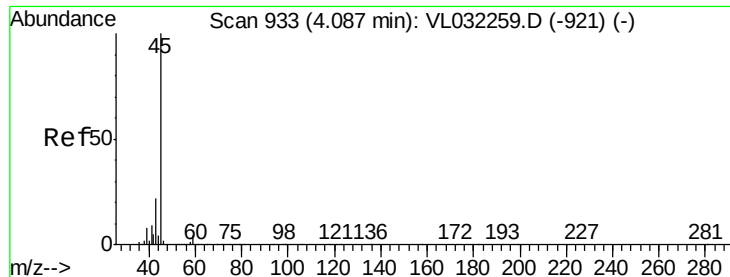
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#17
tert-Butyl alcohol
Concen: 5.32 ppbv m
RT: 4.44 min Scan# 1044
Delta R.T. 0.02 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Tgt Ion: 59 Resp: 270452
Ion Ratio Lower Upper
59 100
57 11.4 8.2 12.4





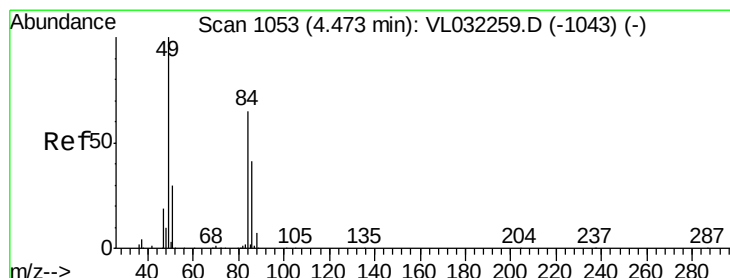
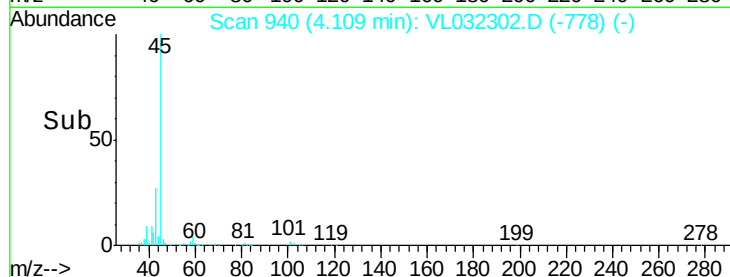
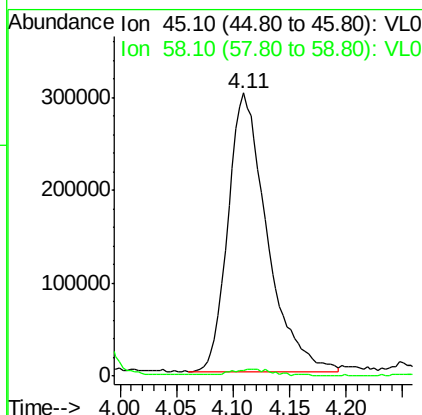
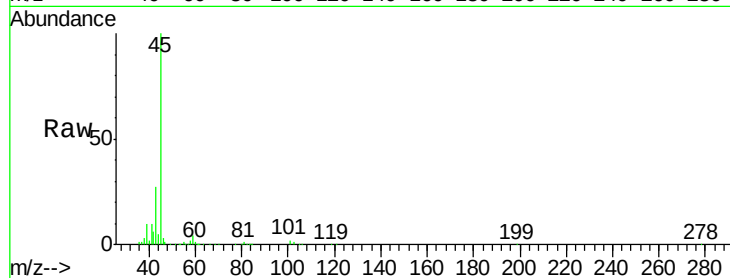
#19
Isopropyl Alcohol
Concen: 6.60 ppbv
RT: 4.11 min Scan# 940
Delta R.T. 0.02 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Instrument :
MSVOA_L
ClientSampleId :
AIR-01

Tot Ion: 45 Resp: 719737
Ion Ratio Lower Upper
45 100
58 119.6 1.5 2.3#

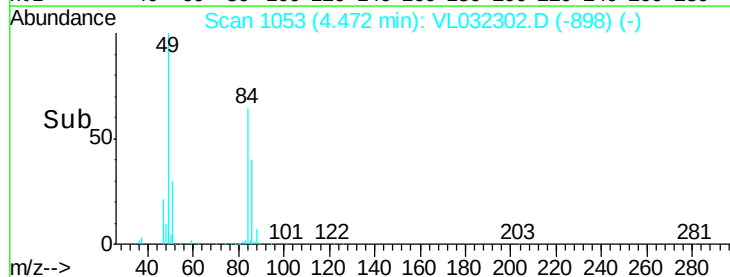
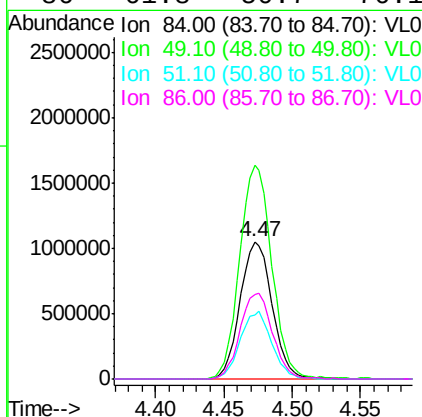
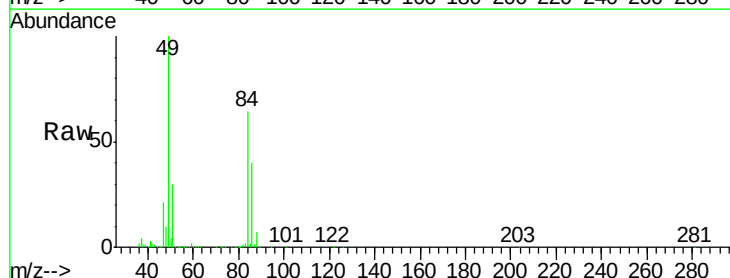
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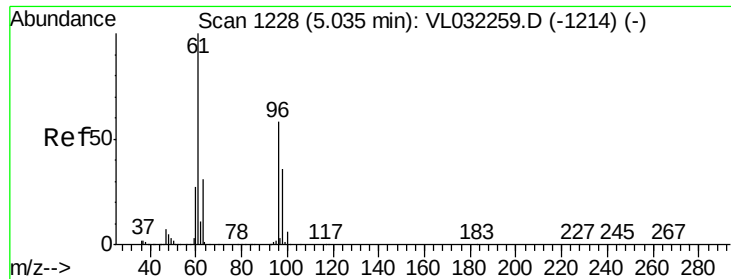
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#20
Methylene Chloride
Concen: 27.60 ppbv
RT: 4.47 min Scan# 1053
Delta R.T. -0.00 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Tgt Ion: 84 Resp: 1712670
Ion Ratio Lower Upper
84 100
49 155.5 122.4 183.6
51 46.9 36.8 55.2
86 61.8 50.7 76.1





#22

trans-1,2-Dichloroethene

Concen: 0.23 ppbv

RT: 5.03 min Scan# 1227

Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

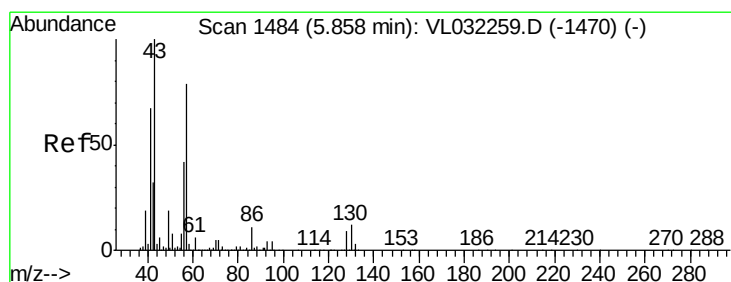
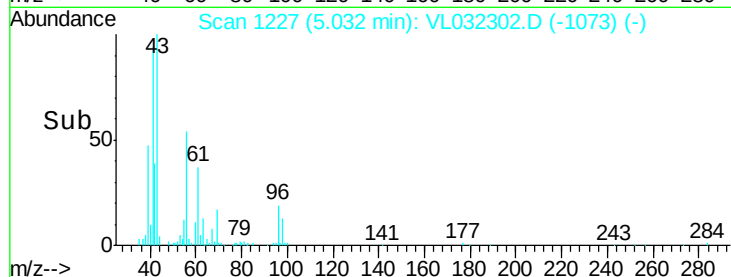
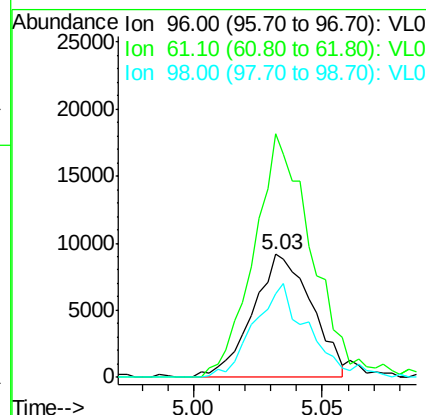
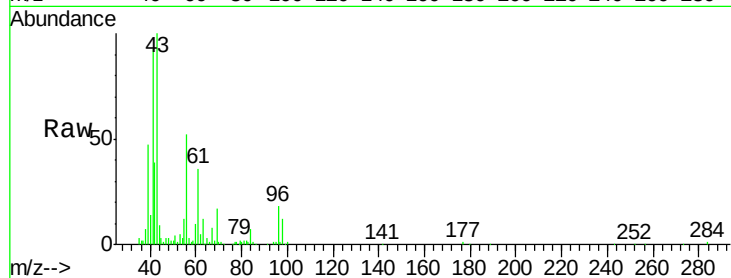
ClientSampled :

AIR-01

Tot Ion:	96	Resp:	14665
Ion	Ratio	Lower	Upper
96	100		
61	198.3	137.4	206.0
98	67.9	49.6	74.4

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#26

Hexane

Concen: 13.96 ppbv

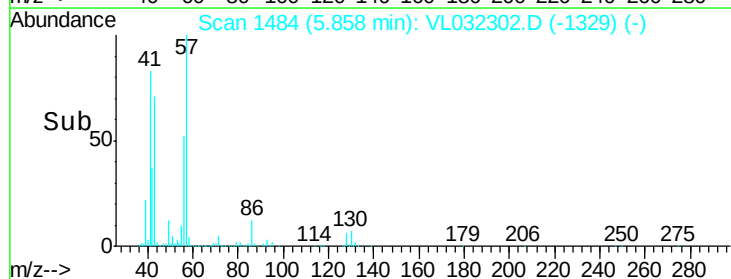
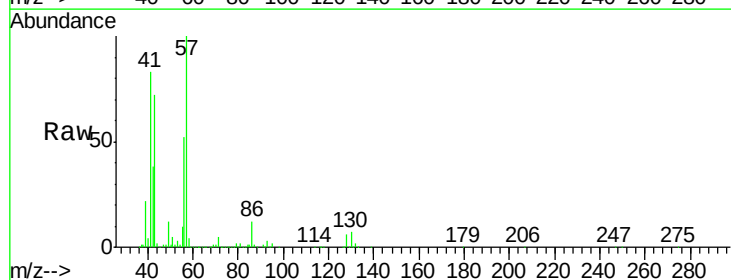
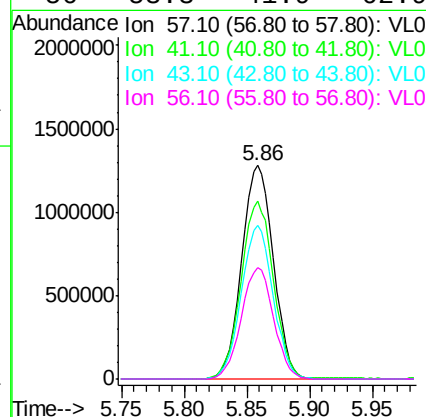
RT: 5.86 min Scan# 1484

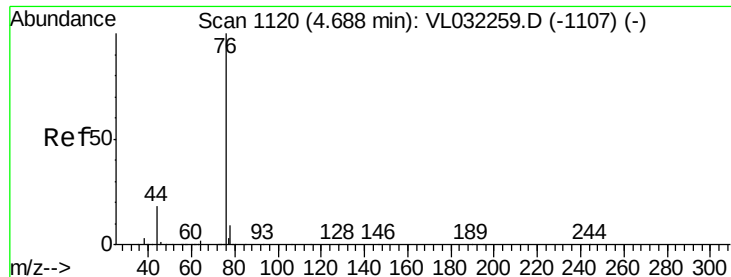
Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Tgt Ion:	57	Resp:	2250761
Ion	Ratio	Lower	Upper
57	100		
41	86.1	67.9	101.9
43	72.1	175.9	263.9#
56	53.3	41.9	62.9





#27

Carbon Disulfide

Concen: 6.82 ppbv

RT: 4.69 min Scan# 1120

Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

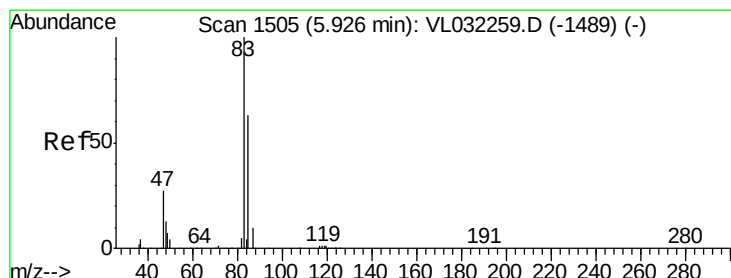
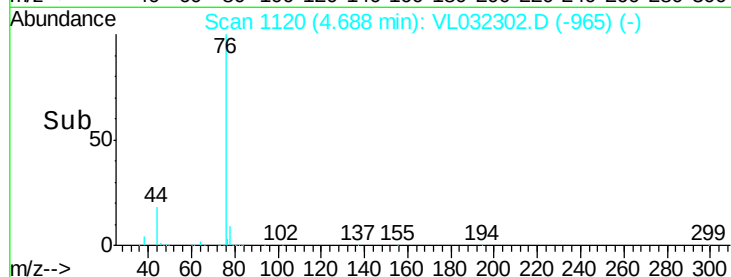
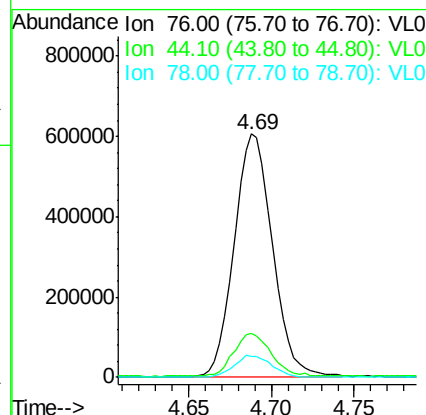
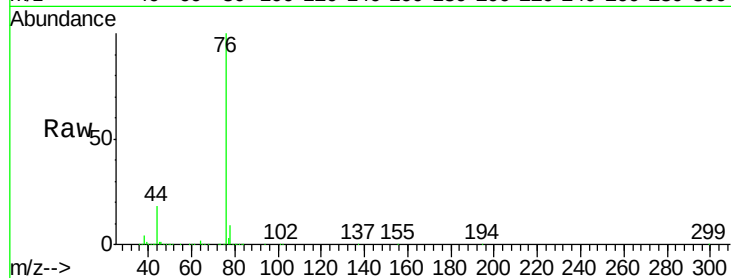
ClientSampled :

AIR-01

Tot Ion:	76	Resp:	973815
Ion	Ratio	Lower	Upper
76	100		
44	17.8	14.3	21.5
78	9.0	7.4	11.0

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#29

Chloroform

Concen: 13.04 ppbv

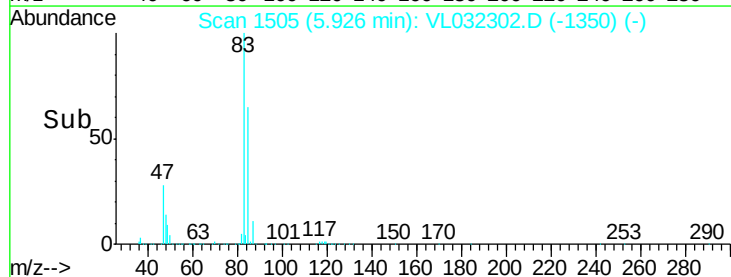
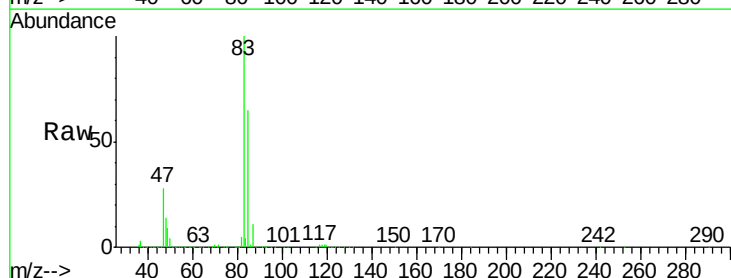
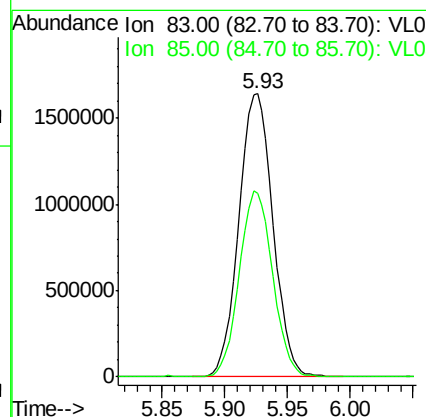
RT: 5.93 min Scan# 1505

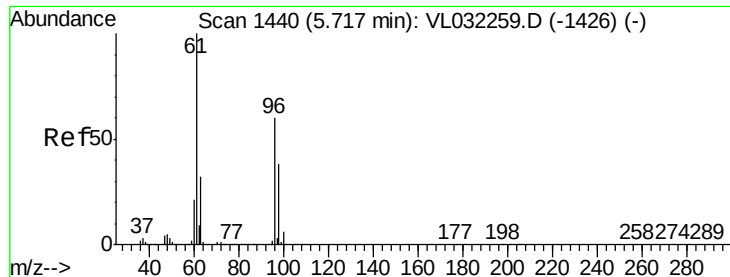
Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Tgt Ion:	83	Resp:	3101320
Ion	Ratio	Lower	Upper
83	100		
85	64.5	50.7	76.1





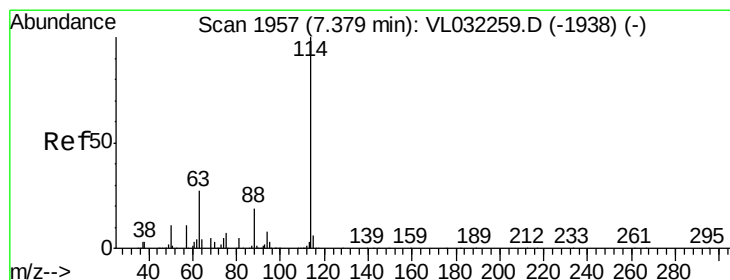
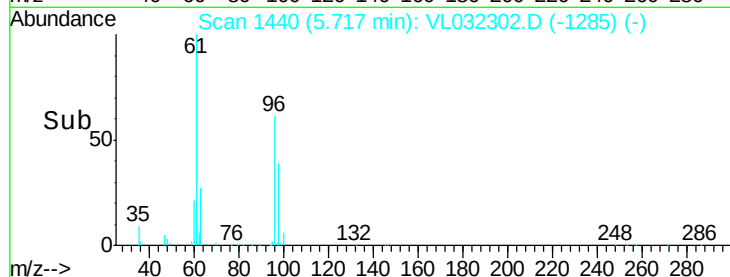
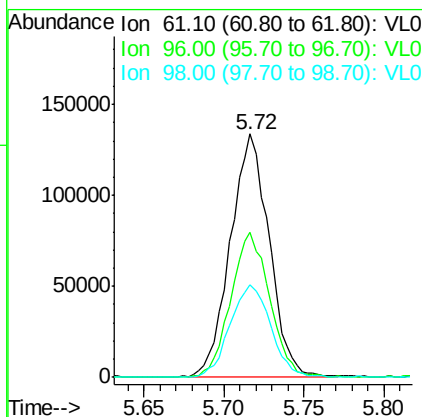
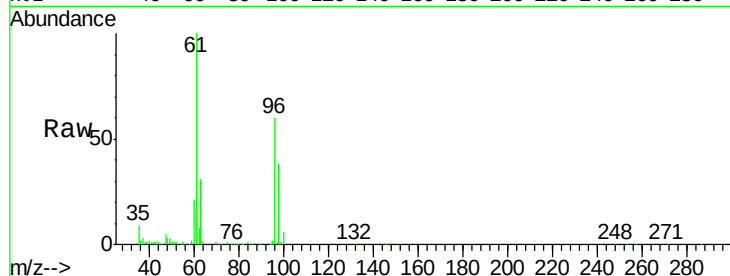
#31
 cis-1,2-Dichloroethene
 Concen: 1.43 ppbv
 RT: 5.72 min Scan# 1440
 Delta R.T. -0.00 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Instrument :
 MSVOA_L
 ClientSampled :
 AIR-01

Tot Ion	Ratio	Lower	Upper
61	100		
96	59.4	47.9	71.9
98	37.8	30.5	45.7

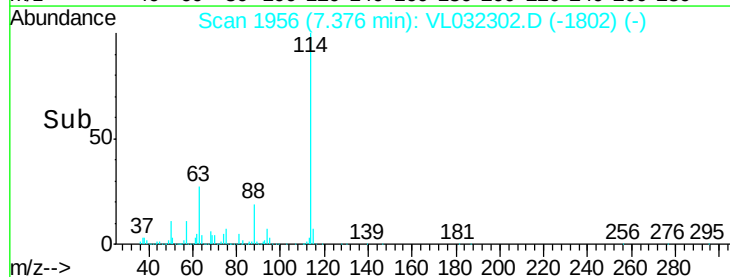
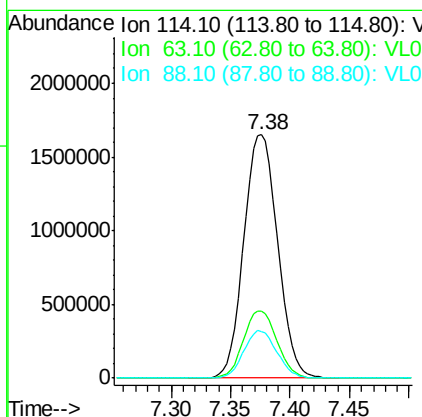
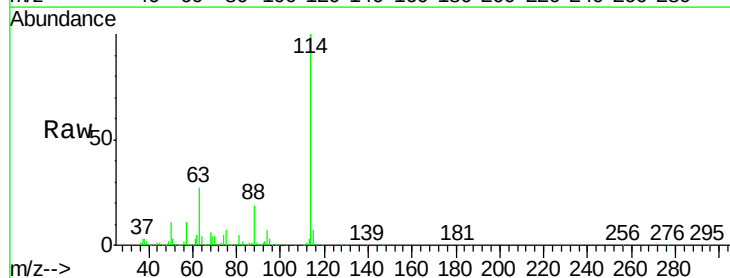
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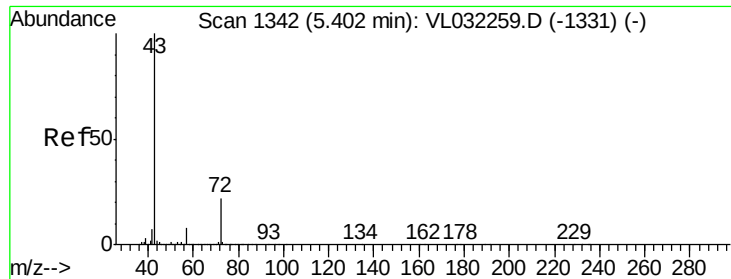
MMDadoda
 7/20/2018 2:06:26 PM



#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.38 min Scan# 1956
 Delta R.T. -0.00 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.5	22.6	33.8
88	19.1	15.2	22.8





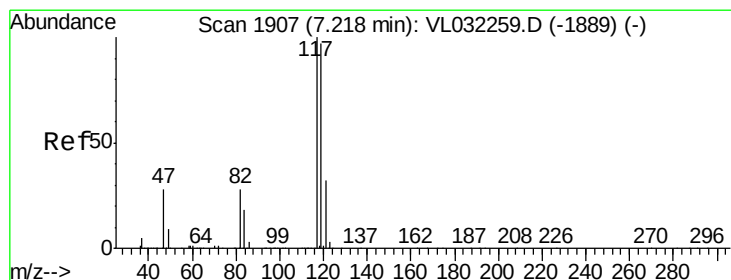
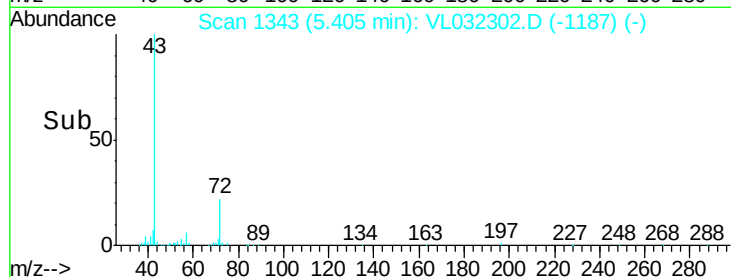
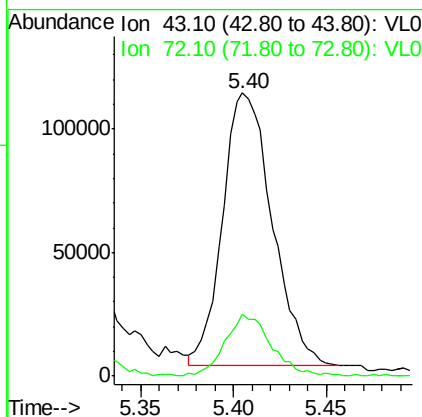
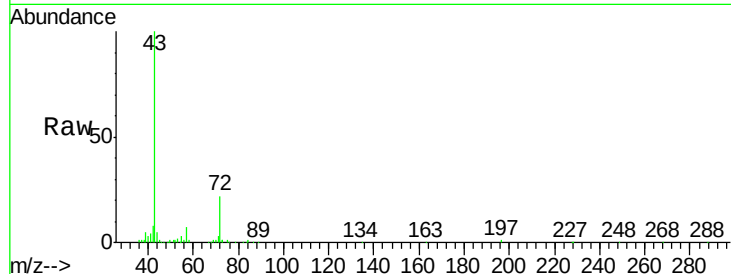
#34
2-Butanone
Concen: 0.91 ppbv
RT: 5.40 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion	43	Resp	204212
Ion Ratio	Lower	Upper	
43	100		
72	21.5	17.7	26.5

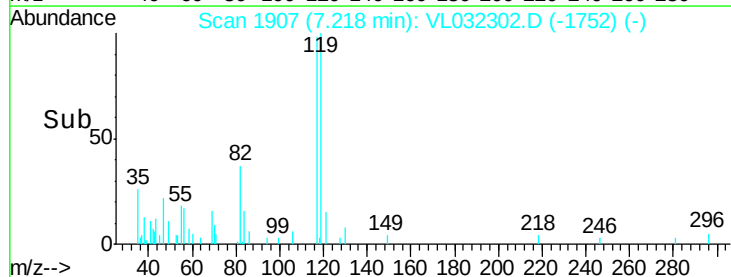
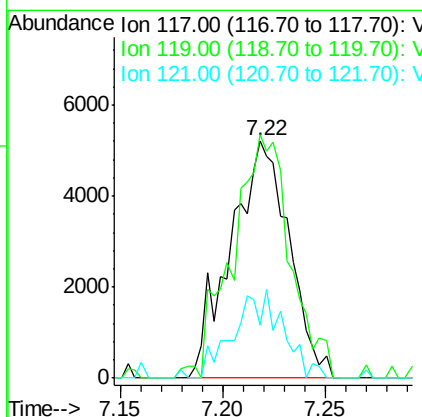
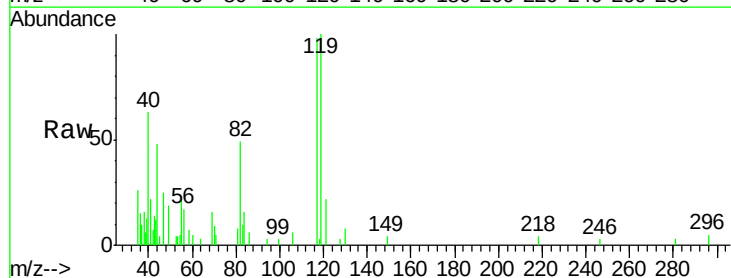
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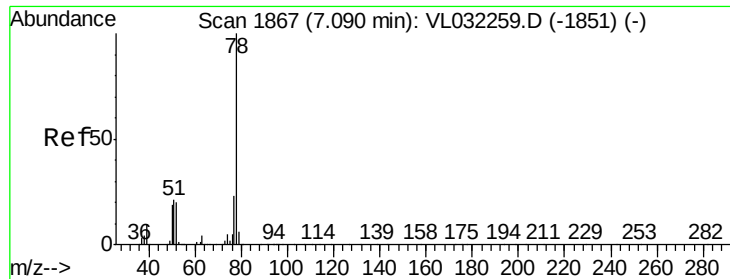
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#35
Carbon Tetrachloride
Concen: 0.05 ppbv m
RT: 7.22 min Scan# 1907
Delta R.T. -0.00 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Tgt Ion	117	Resp	10321
Ion Ratio	Lower	Upper	
117	100		
119	102.4	77.4	116.0
121	22.4	25.4	38.2#





#36

Benzene

Concen: 0.13 ppbv m

RT: 7.09 min Scan# 1867

Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

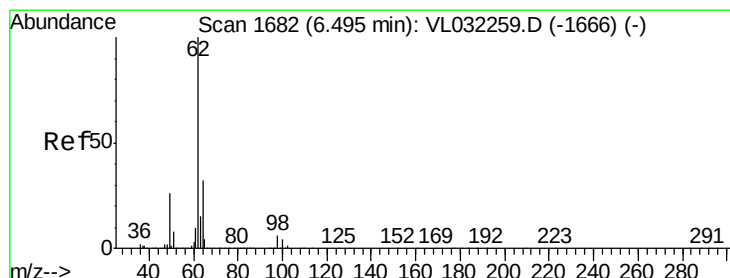
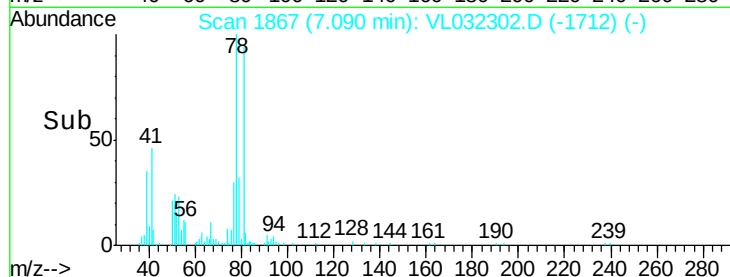
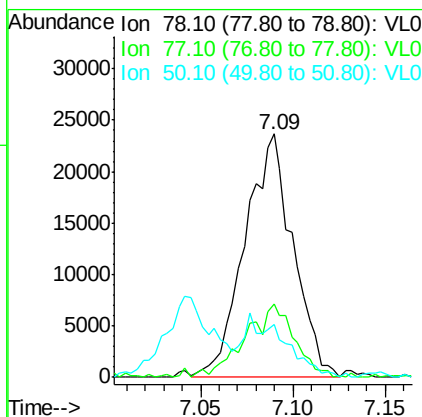
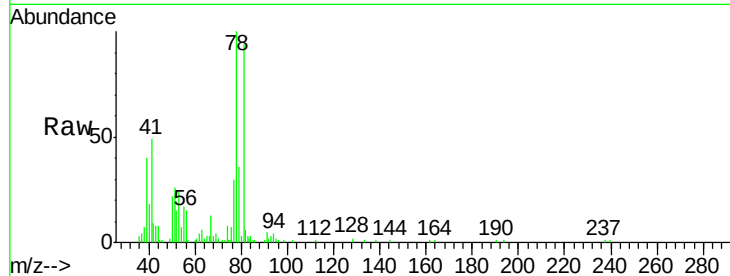
ClientSampleId :

AIR-01

Tot Ion:	78	Resp:	42963
Ion	Ratio	Lower	Upper
78	100		
77	30.0	18.6	27.8#
50	21.5	15.0	22.6

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7/20/2018 2:06:26 PM



#37

1,2-Dichloroethane

Concen: 0.43 ppbv

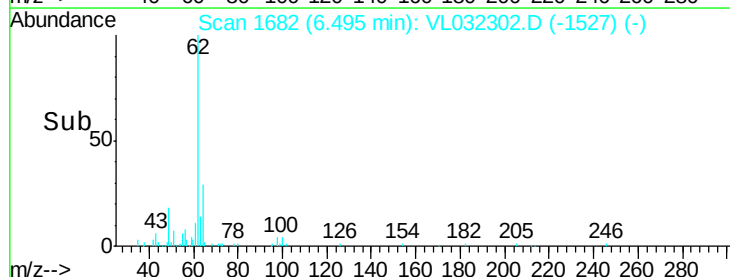
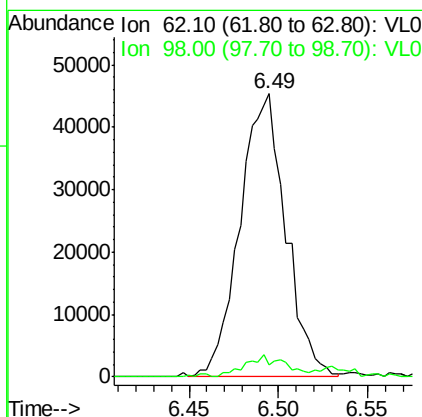
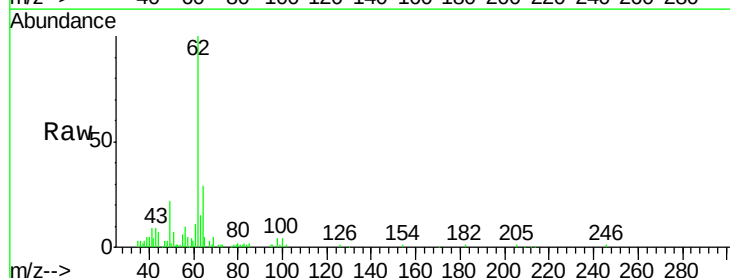
RT: 6.49 min Scan# 1682

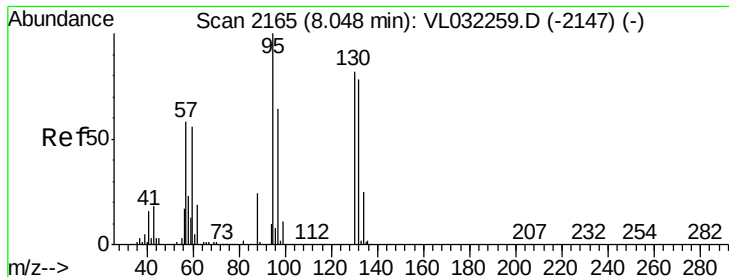
Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Tgt Ion:	62	Resp:	81441
Ion	Ratio	Lower	Upper
62	100		
98	7.5	4.9	7.3#





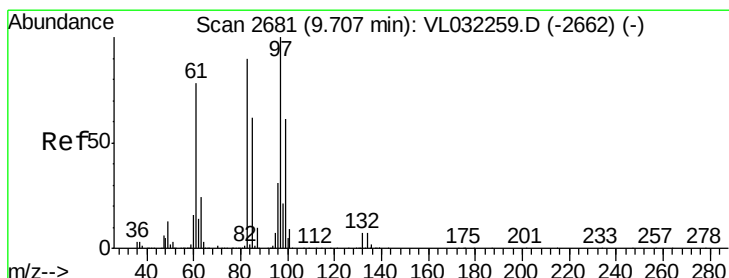
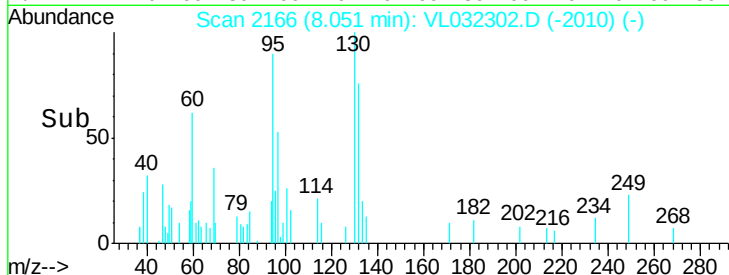
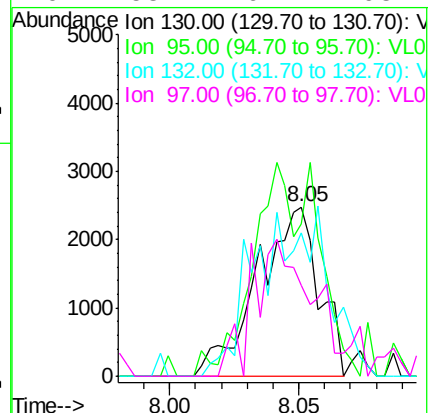
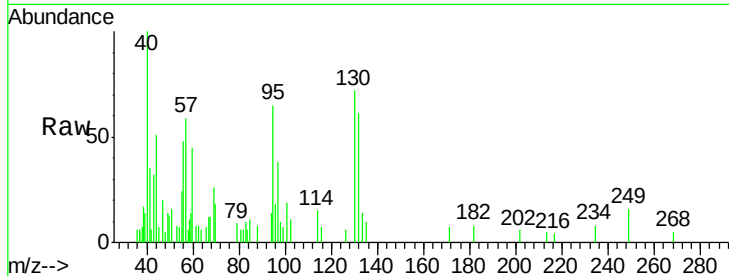
#38
 Trichloroethene
 Concen: 0.04 ppbv m
 RT: 8.05 min Scan# 2166
 Delta R.T. 0.00 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Instrument :
 MSVOA_L
 ClientSampled :
 AIR-01

Tot Ion	Ratio	Lower	Upper
130	100		
95	90.2	97.1	145.7#
132	84.4	75.6	113.4
97	53.2	62.1	93.1#

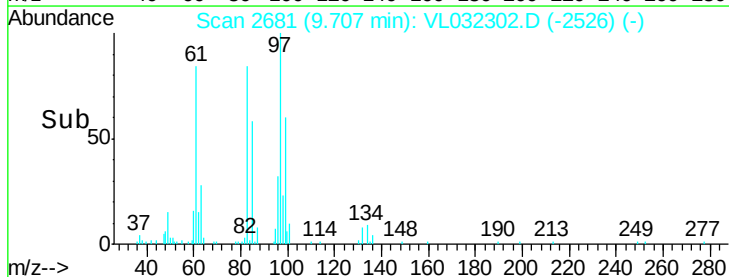
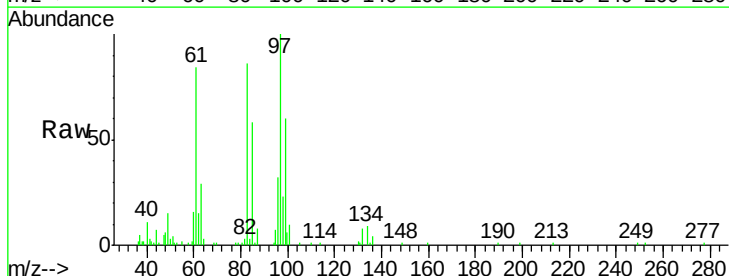
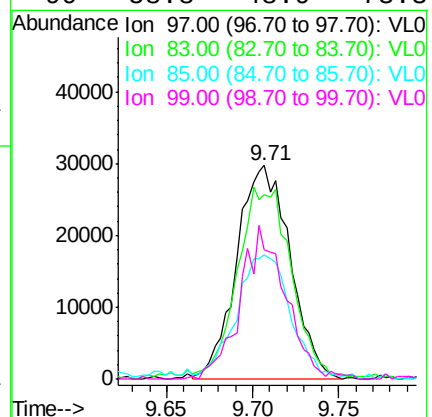
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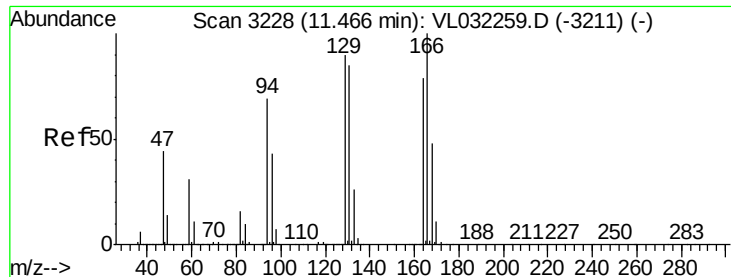
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#47
 1,1,2-Trichloroethane
 Concen: 0.47 ppbv
 RT: 9.71 min Scan# 2681
 Delta R.T. -0.00 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Tgt Ion	Ratio	Lower	Upper
97	100		
83	83.5	72.3	108.5
85	56.7	49.5	74.3
99	58.8	48.9	73.3





#52

Tetrachloroethene

Concen: 0.42 ppbv m

RT: 11.46 min Scan# 3226

Delta R.T. -0.01 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

ClientSampled :

AIR-01

Tot Ion:164 Resp: 46219

Ion Ratio Lower Upper

164 100

166 131.9 101.7 152.5

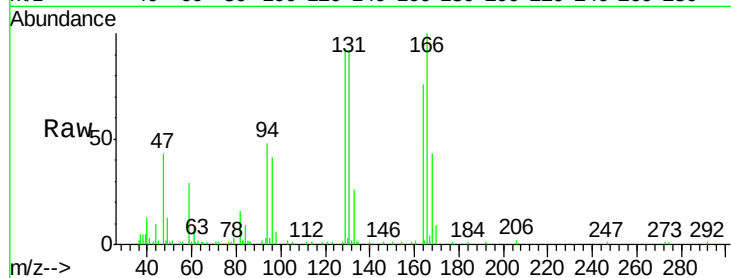
129 121.6 91.5 137.3

131 121.3 86.6 129.8

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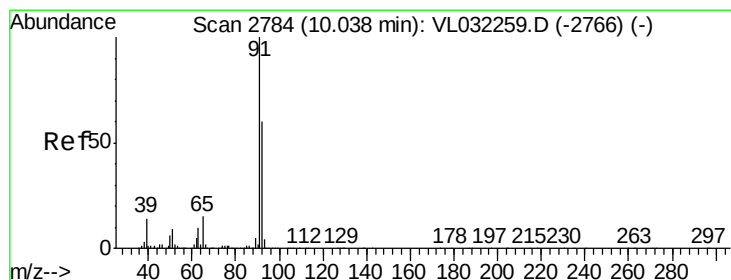
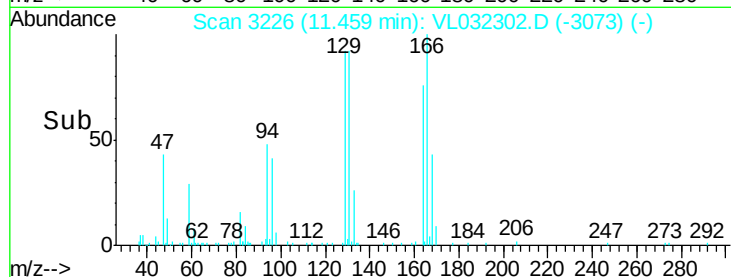
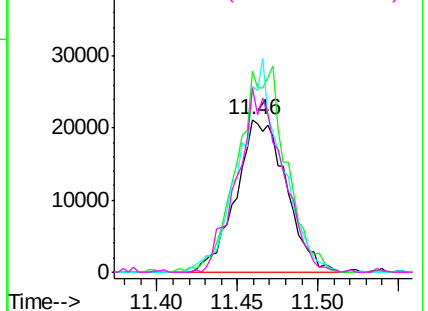


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.46 ppbv

RT: 10.03 min Scan# 2783

Delta R.T. -0.00 min

Lab File: VL032302.D

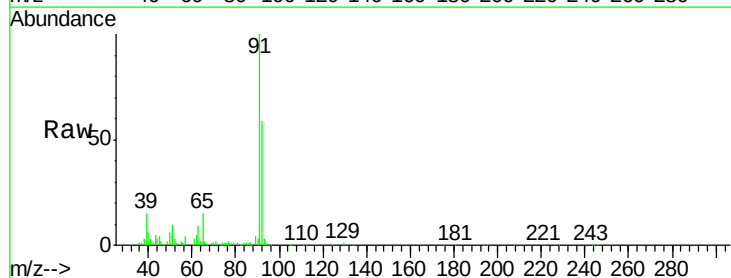
Acq: 20 Jul 2018 00:15

Tgt Ion: 91 Resp: 178244

Ion Ratio Lower Upper

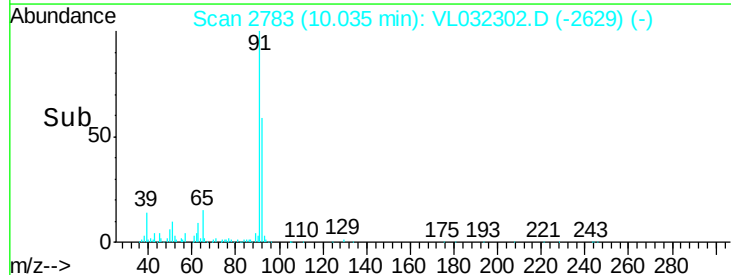
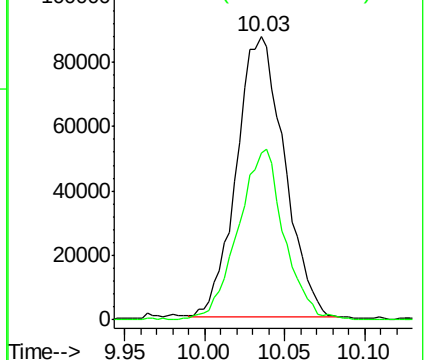
91 100

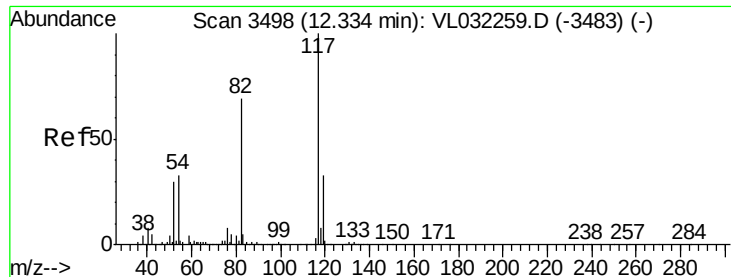
92 58.6 48.6 72.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





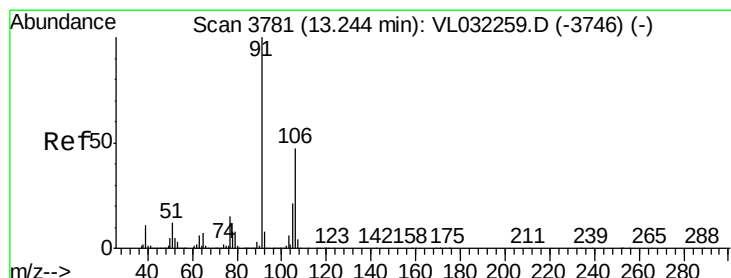
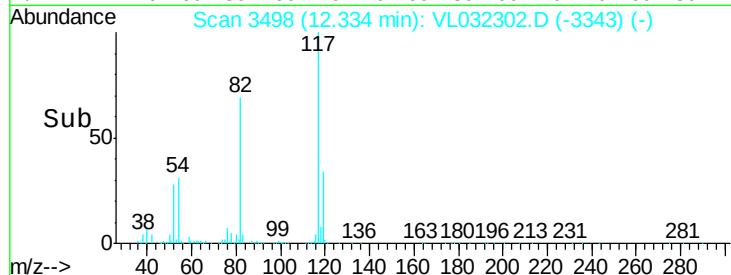
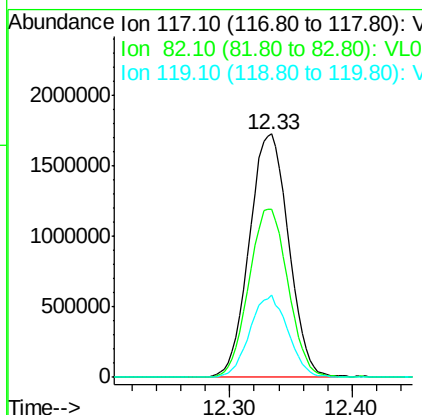
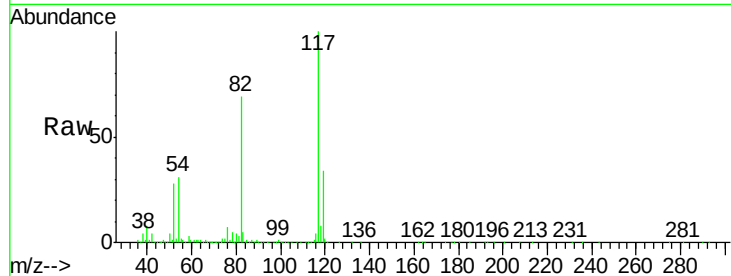
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.33 min Scan# 3498
Delta R.T. -0.00 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Instrument :
MSVOA_L
ClientSampled :
AIR-01

Tot Ion	Ratio	Lower	Upper
117	100		
82	69.4	53.9	80.9
119	32.9	25.5	38.3

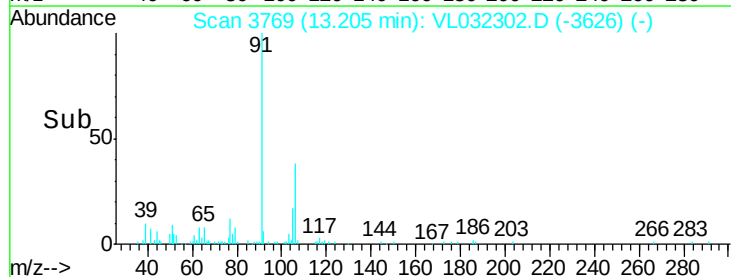
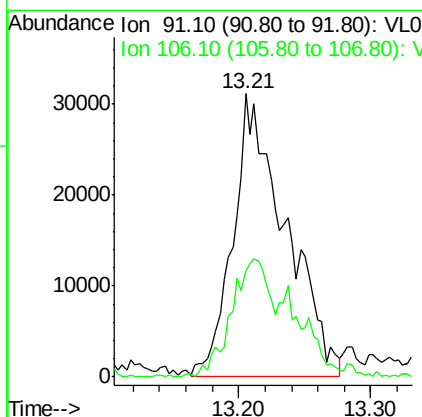
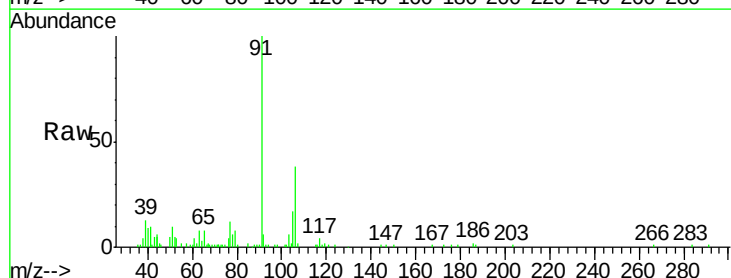
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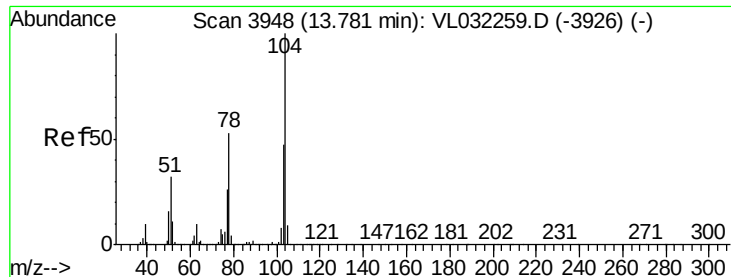
MMDadoda
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#59
m/p-Xylene
Concen: 0.19 ppbv m
RT: 13.21 min Scan# 3769
Delta R.T. -0.04 min
Lab File: VL032302.D
Acq: 20 Jul 2018 00:15

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.2	54.2#





#61

Stvrene

Concen: 0.34 ppbv m

RT: 13.78 min Scan# 3947

Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Instrument :

MSVOA_L

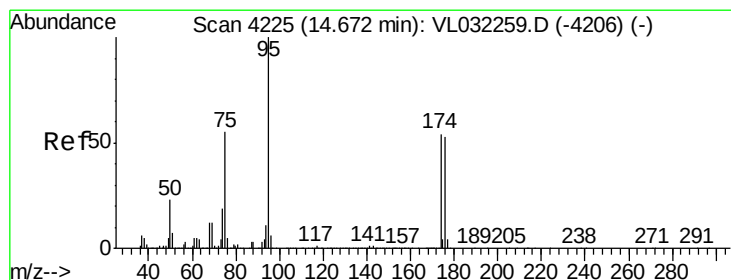
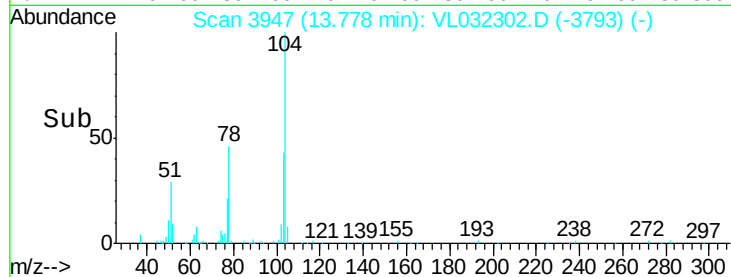
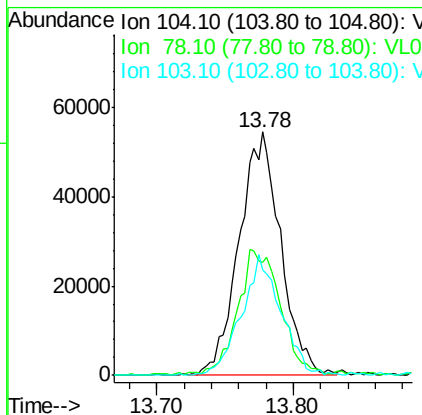
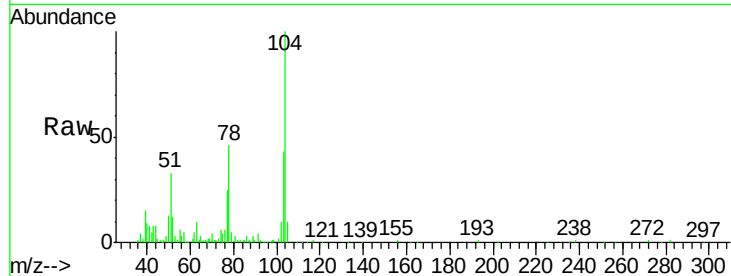
ClientSampled :

AIR-01

Tot Ion	Ratio	Lower	Upper
104	100		
78	0.0	43.2	64.8#
103	47.3	37.8	56.6

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.56 ppbv

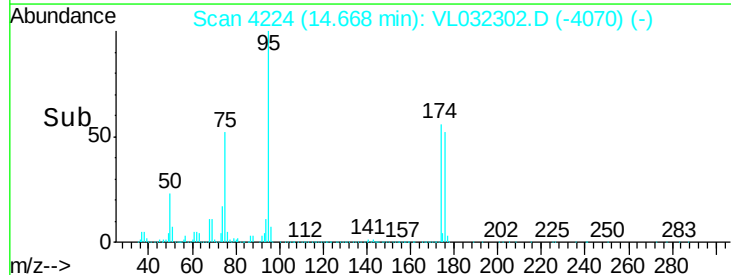
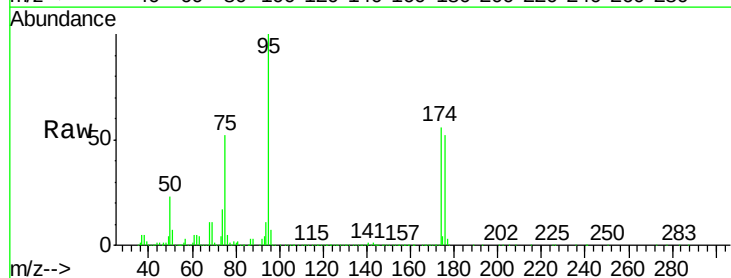
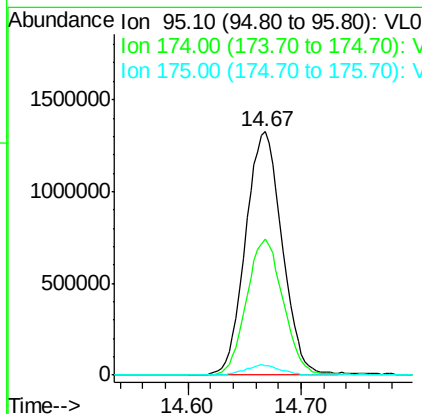
RT: 14.67 min Scan# 4224

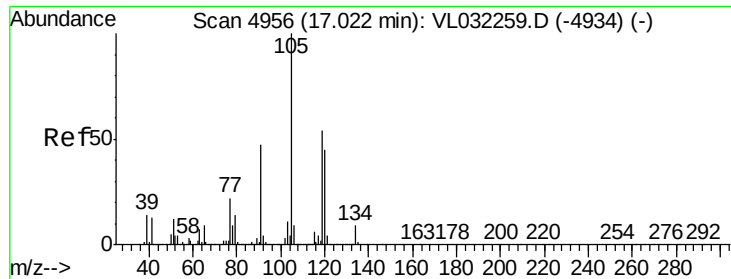
Delta R.T. -0.00 min

Lab File: VL032302.D

Acq: 20 Jul 2018 00:15

Tgt Ion	Ratio	Lower	Upper
95	100		
174	56.5	44.3	66.5
175	4.1	3.3	4.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.16 ppbv
 RT: 17.02 min Scan# 4954
 Delta R.T. -0.01 min
 Lab File: VL032302.D
 Acq: 20 Jul 2018 00:15

Instrument :
 MSVOA_L
 ClientSampleId :
 AIR-01

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	43.2	35.8	53.6
91	10.9	38.2	57.4#
77	11.8	17.5	26.3#

Manual Integrations
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