

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121318\
 Data File : VL032995.D
 Acq On : 14 Dec 2018 10:21
 Operator : SY/AP
 Sample : J6382-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 P0068-SG001-181212-01

Manual Integrations
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 12/14/2018 11:19:26 AM

Quant Time: Dec 14 11:02:41 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1109017	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2566699	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2930924	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2277904	10.52	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	86297	0.583	ppbv	100
3) Chlorodifluoromethane	3.01	51	43025	0.512	ppbv #	87
4) Chloromethane	3.17	50	99649	2.038	ppbv	97
9) Propene	3.03	41	56452m	1.700	ppbv	
10) Heptane	8.26	43	965315	7.738	ppbv	99
11) Trichlorofluoromethane	4.01	101	40222	0.288	ppbv	96
13) Ethanol	3.68	45	2746761	240.212	ppbv	95
15) Acetone	3.91	43	1367567m	14.367	ppbv	
19) Isopropyl Alcohol	4.06	45	138048	2.309	ppbv #	6
20) Methylene Chloride	4.42	84	145166	3.120	ppbv	98
22) trans-1,2-Dichloroethene	4.98	96	105481	1.824	ppbv	97
26) Hexane	5.80	57	2698612	25.994	ppbv #	45
30) Cyclohexane	7.26	84	477049	5.544	ppbv	97
34) 2-Butanone	5.34	43	272902	2.441	ppbv	100
35) Carbon Tetrachloride	7.15	117	14166	0.070	ppbv #	88
36) Benzene	7.01	78	3156392	16.719	ppbv	98
41) Tetrahydrofuran	6.17	42	49725	0.715	ppbv	99
44) 2,2,4-Trimethylpentane	8.00	57	7395792	23.079	ppbv	96
50) 4-Methyl-2-Pentanone	8.90	43	91312	0.511	ppbv	96
52) Tetrachloroethene	11.38	164	44771m	0.652	ppbv	
53) Toluene	9.96	91	10343786	51.662	ppbv	96
58) Ethyl Benzene	12.87	91	984259	3.148	ppbv	99
59) m/p-Xylene	13.12	91	1872679	6.606	ppbv #	100
60) o-Xylene	13.85	91	568578	1.986	ppbv	99
74) 1,2,4-Trimethylbenzene	16.92	105	45322m	0.129	ppbv	
79) Naphthalene	22.43	128	21780m	0.096	ppbv	

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

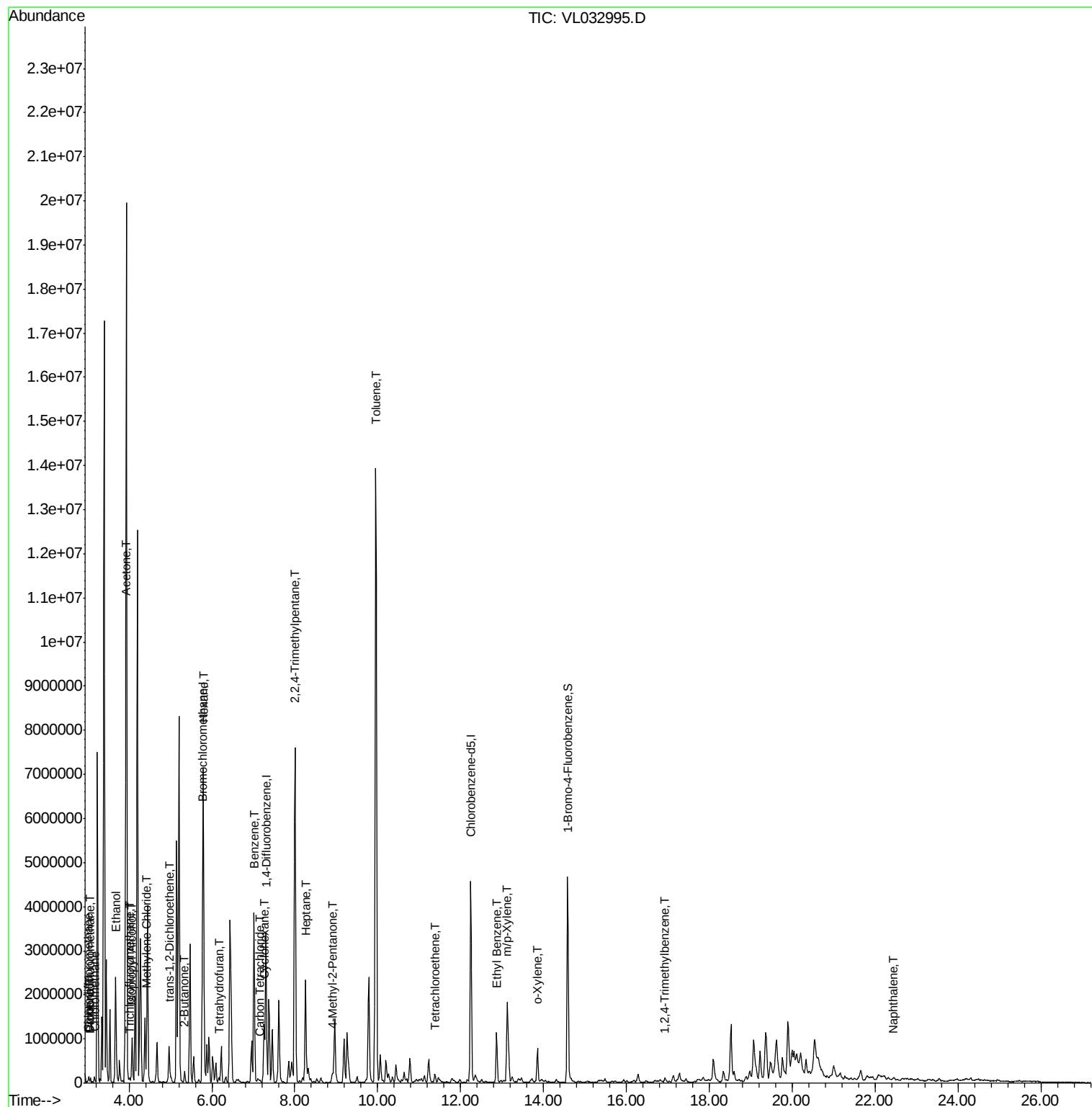
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121318\
Data File : VL032995.D
Acq On : 14 Dec 2018 10:21
Operator : SY/AP
Sample : J6382-06
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

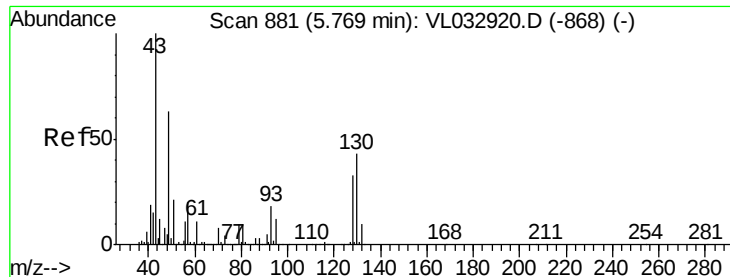
Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Manual Integrations
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12/14/2018 11:19:26 AM

Quant Time: Dec 14 11:02:41 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec
QLast Update : Fri Dec 07 09:35:17 2018
Response via : Initial Calibration





#1

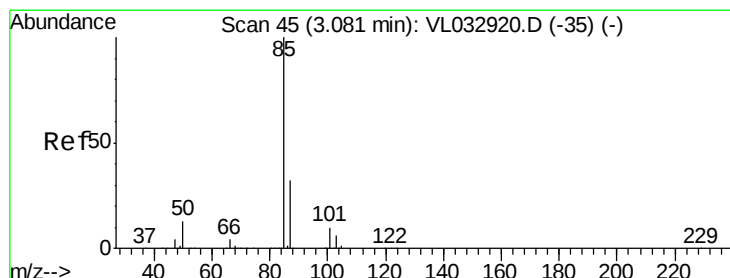
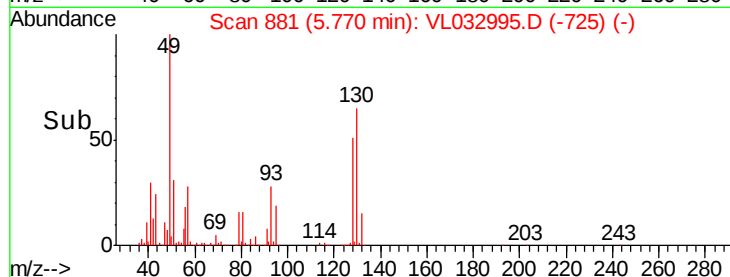
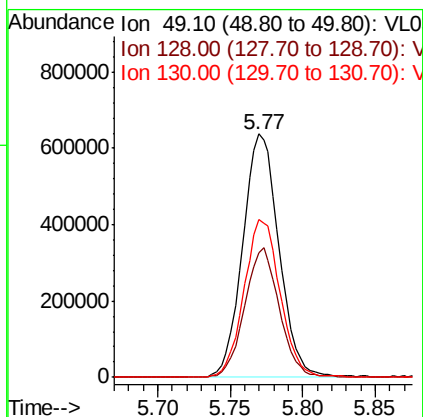
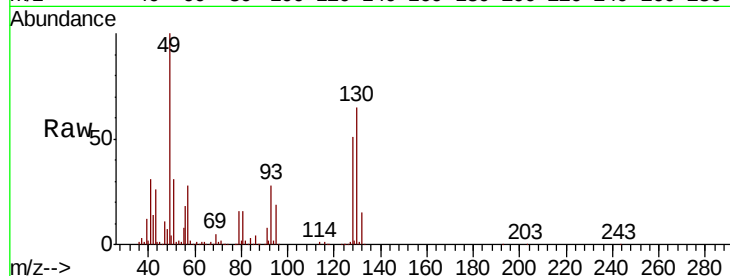
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.77 min Scan# 881
 Delta R.T. 0.00 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Instrument :
 MSVOA_L
 ClientSampleId :
 P0068-SG001-181212-01

Tot Ion: 49 Resp: 1109017
 Ion Ratio Lower Upper
 49 100
 128 51.4 26.3 78.8
 130 65.1 33.9 101.7

Manual Integrations
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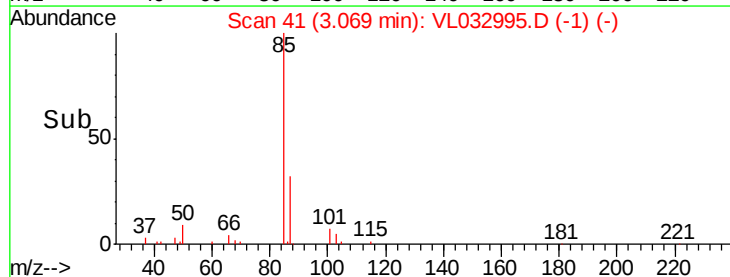
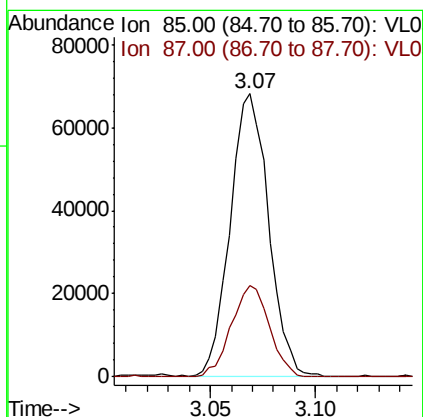
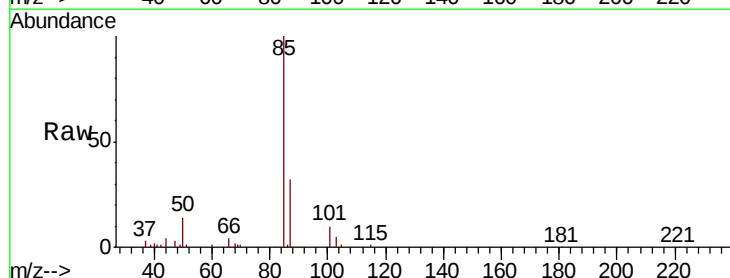
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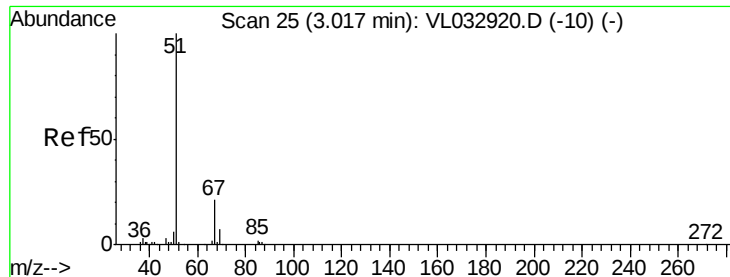


#2

Dichlorodifluoromethane
 Concen: 0.583 ppbv
 RT: 3.07 min Scan# 41
 Delta R.T. -0.01 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Tgt Ion: 85 Resp: 86297
 Ion Ratio Lower Upper
 85 100
 87 32.4 25.7 38.5





#3

Chlorodifluoromethane

Concen: 0.512 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL032995.D

Acq: 14 Dec 2018 10:21

Instrument :

MSVOA_L

ClientSampleId :

P0068-SG001-181212-01

Tot Ion: 51 Resp: 43025

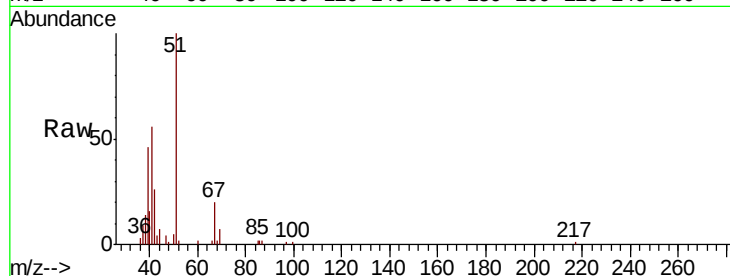
Ion Ratio Lower Upper

51 100

67 15.0 16.8 25.2#

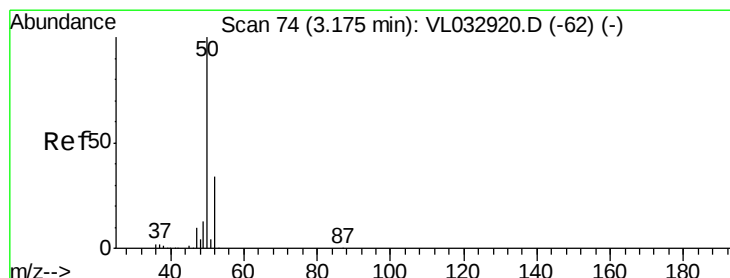
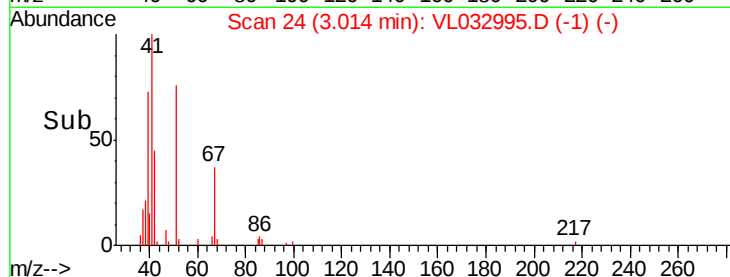
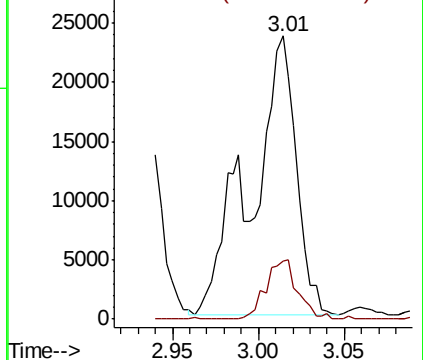
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 2.038 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL032995.D

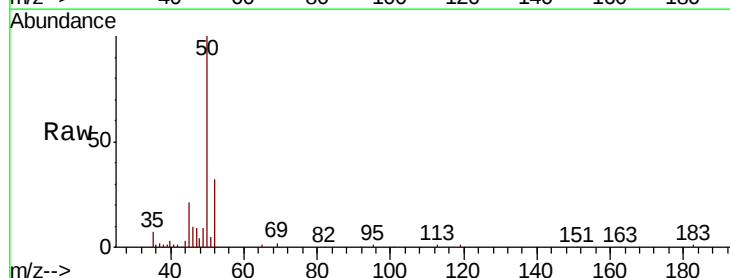
Acq: 14 Dec 2018 10:21

Tgt Ion: 50 Resp: 99649

Ion Ratio Lower Upper

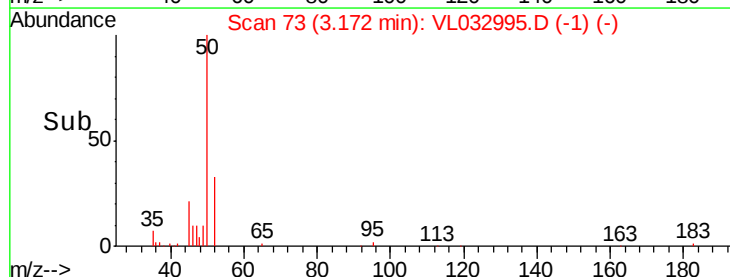
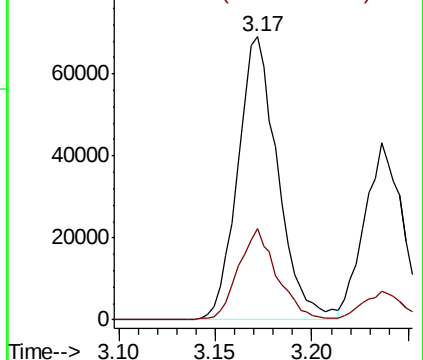
50 100

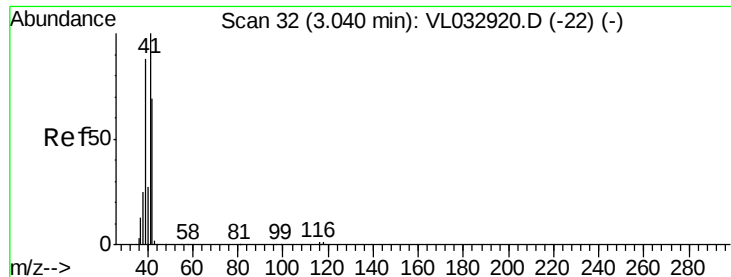
52 32.4 27.3 40.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





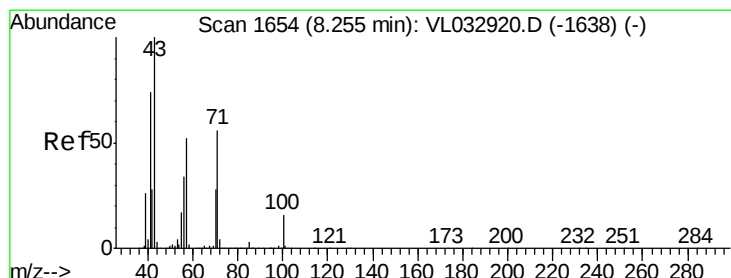
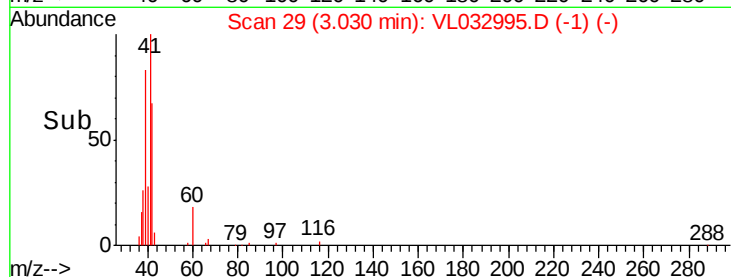
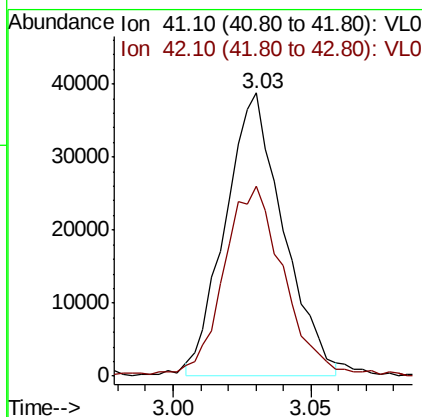
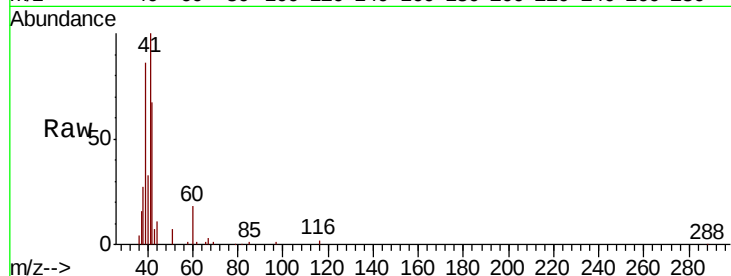
#9
 Propene
 Concen: 1.700 ppbv m
 RT: 3.03 min Scan# 29
 Delta R.T. -0.01 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Instrument :
 MSVOA_L
 ClientSampleId :
 P0068-SG001-181212-01

Tot Ion: 41 Resp: 56452
 Ion Ratio Lower Upper
 41 100
 42 2656.8 56.2 84.2

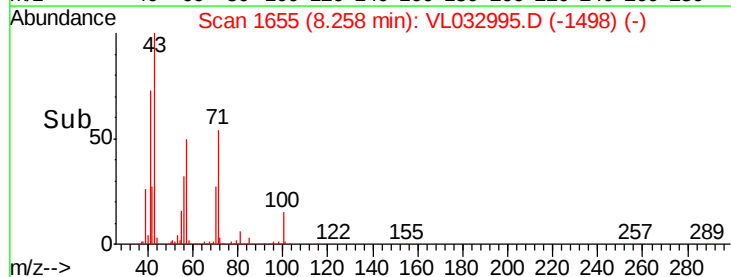
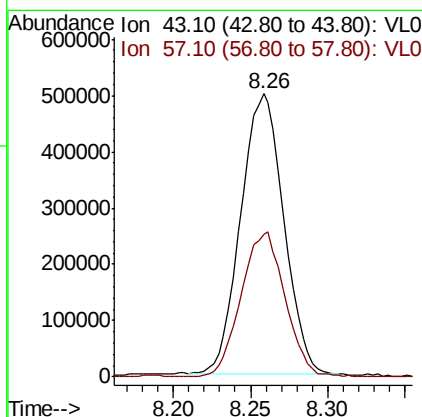
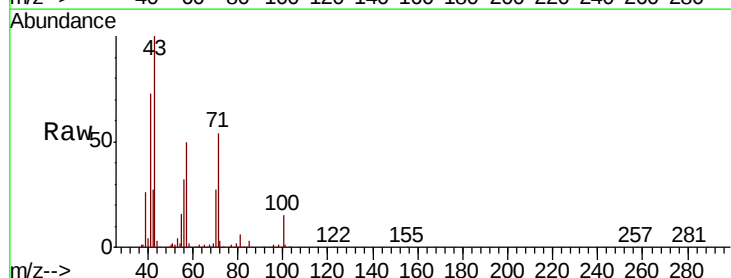
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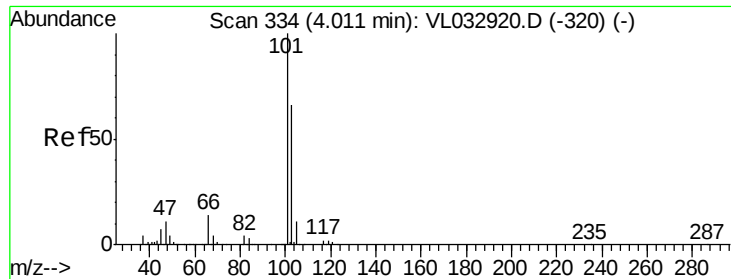
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#10
 Heptane
 Concen: 7.738 ppbv
 RT: 8.26 min Scan# 1655
 Delta R.T. 0.00 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Tgt Ion: 43 Resp: 965315
 Ion Ratio Lower Upper
 43 100
 57 52.9 41.8 62.6





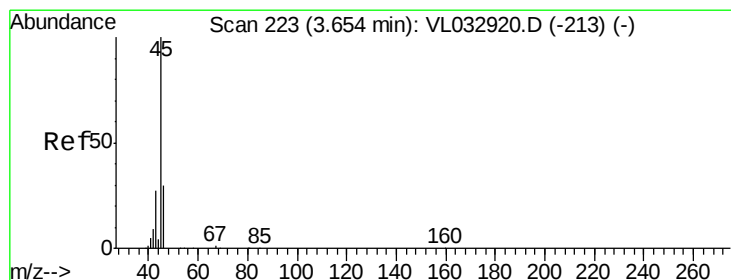
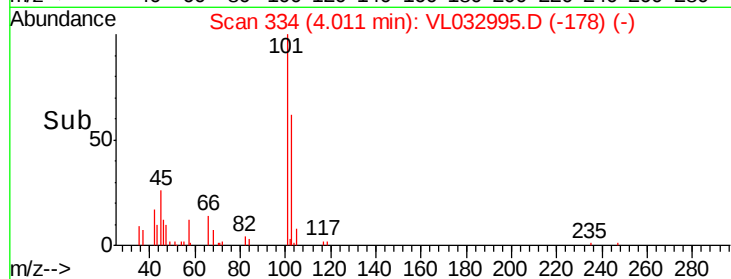
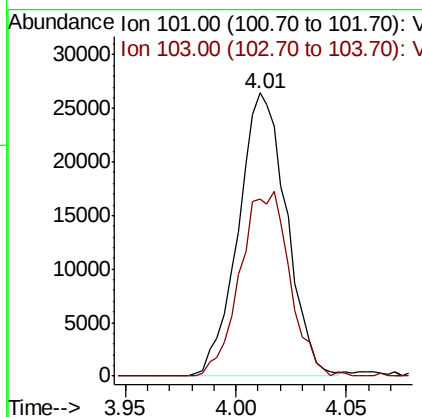
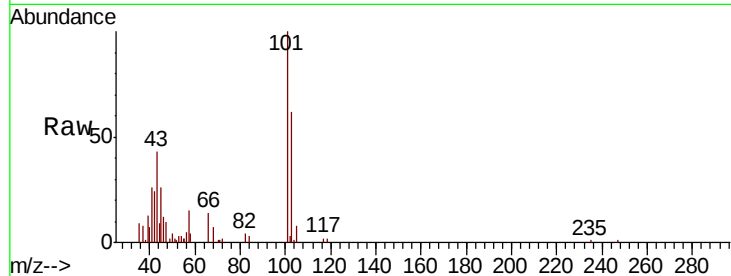
#11
 Trichlorofluoromethane
 Concen: 0.288 ppbv
 RT: 4.01 min Scan# 334
 Delta R.T. 0.00 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Instrument :
 MSVOA_L
 ClientSampleId :
 P0068-SG001-181212-01

Tot Ion:101 Resp: 40222
 Ion Ratio Lower Upper
 101 100
 103 62.4 52.7 79.1

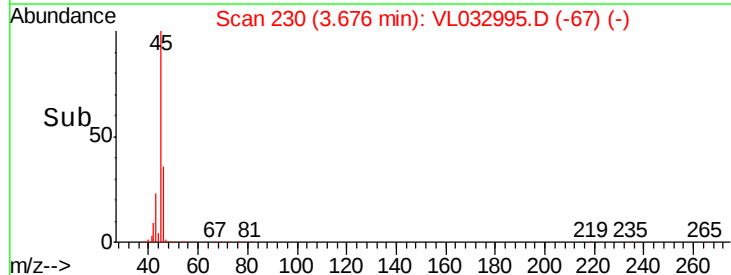
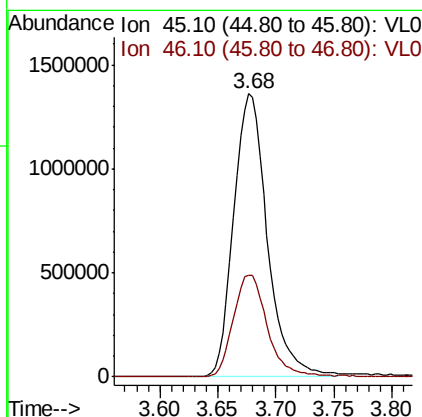
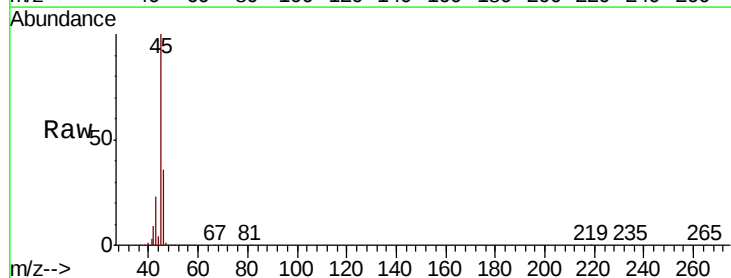
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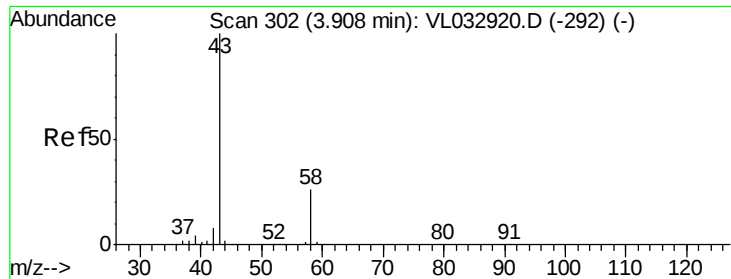
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#13
 Ethanol
 Concen: 240.212 ppbv
 RT: 3.68 min Scan# 230
 Delta R.T. 0.02 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Tgt Ion: 45 Resp: 2746761
 Ion Ratio Lower Upper
 45 100
 46 37.3 13.8 55.4





#15

Acetone

Concen: 14.367 ppbv m

RT: 3.91 min Scan# 303

Delta R.T. 0.00 min

Lab File: VL032995.D

Acq: 14 Dec 2018 10:21

Instrument :

MSVOA_L

ClientSampleId :

P0068-SG001-181212-01

Tot Ion: 43 Resp: 1367567

Ion Ratio Lower Upper

43 100

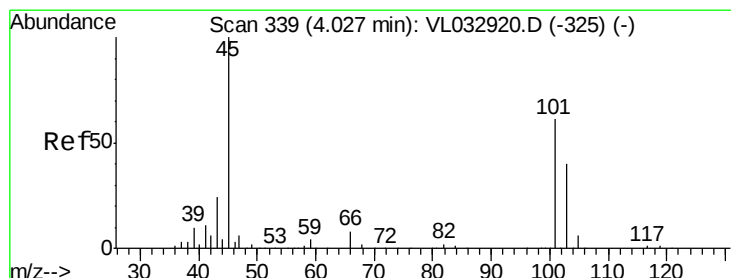
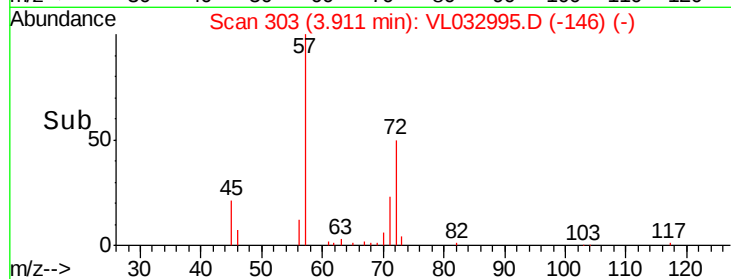
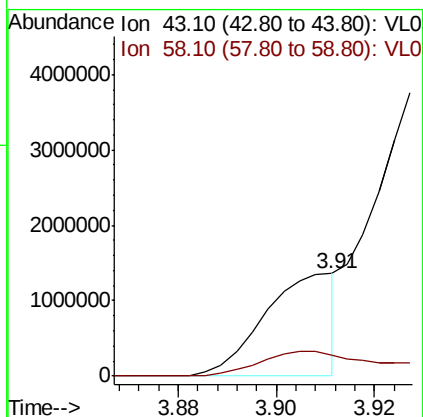
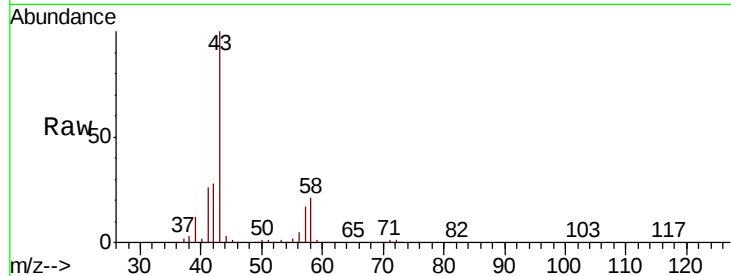
58 51.9 20.6 30.8#

Manual Integrations

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#19

Isopropyl Alcohol

Concen: 2.309 ppbv

RT: 4.06 min Scan# 348

Delta R.T. 0.03 min

Lab File: VL032995.D

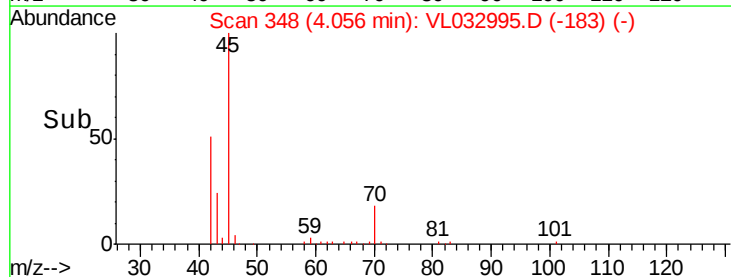
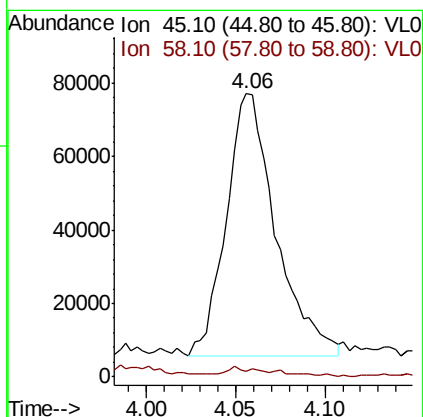
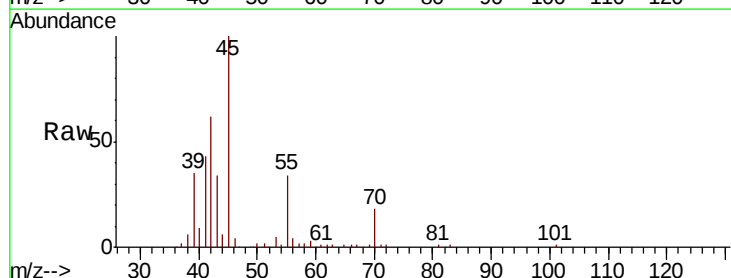
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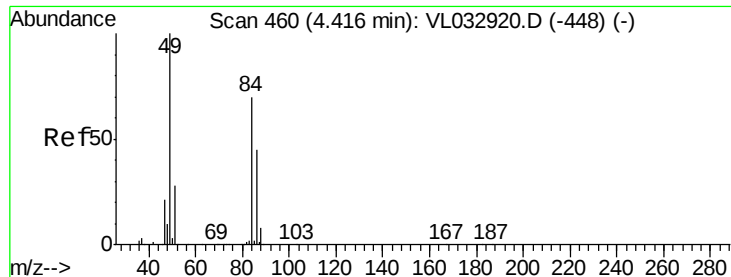
Tgt Ion: 45 Resp: 138048

Ion Ratio Lower Upper

45 100

58 36.0 1.4 2.2#





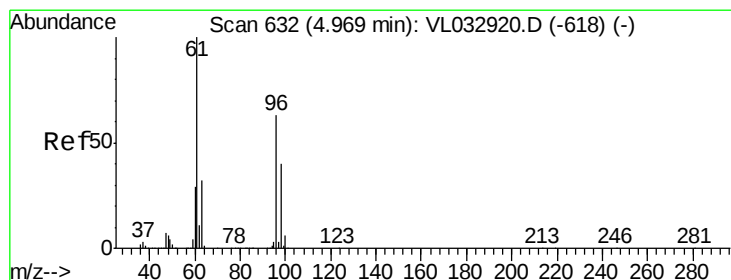
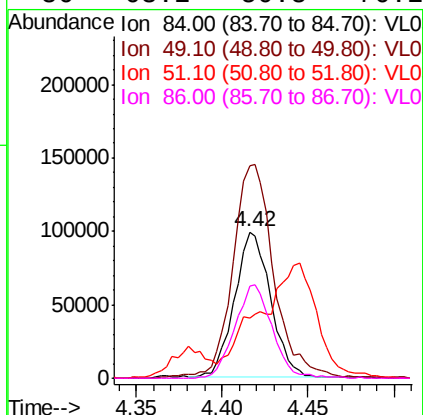
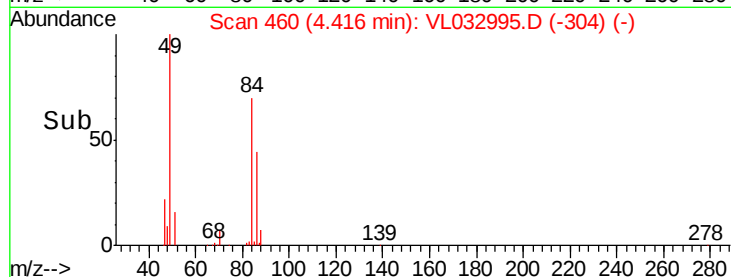
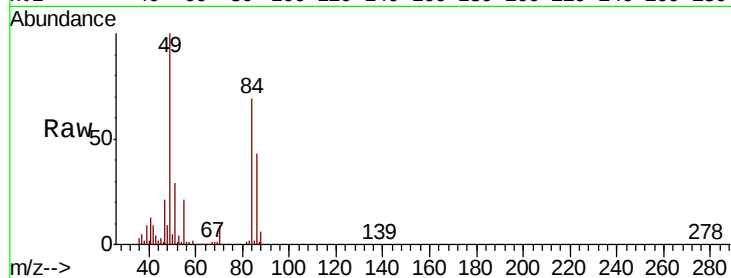
#20
Methvlene Chloride
Concen: 3.120 ppbv
RT: 4.42 min Scan# 460
Delta R.T. 0.00 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Tot Ion:	84	Resp:	145166
Ion	Ratio	Lower	Upper
84	100		
49	143.7	113.8	170.8
51	33.9	31.8	47.8
86	63.2	50.8	76.2

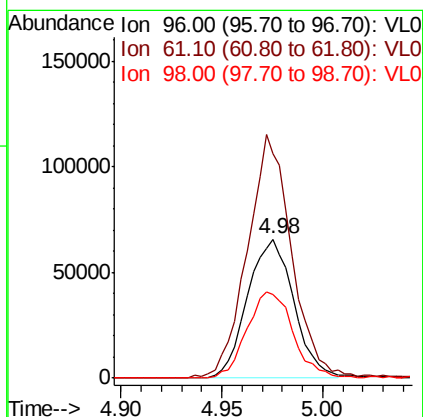
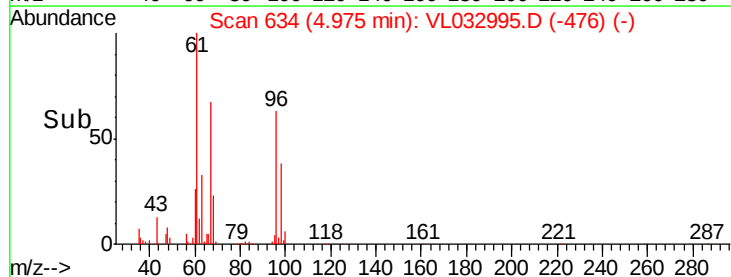
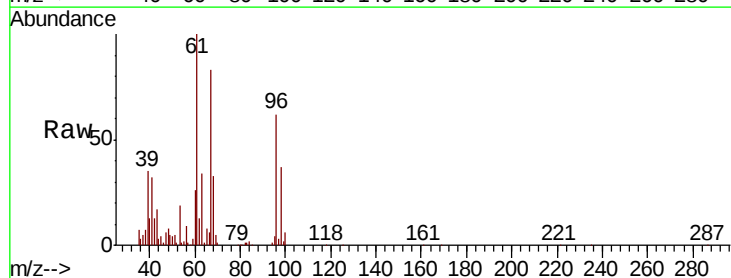
Manual Integrations
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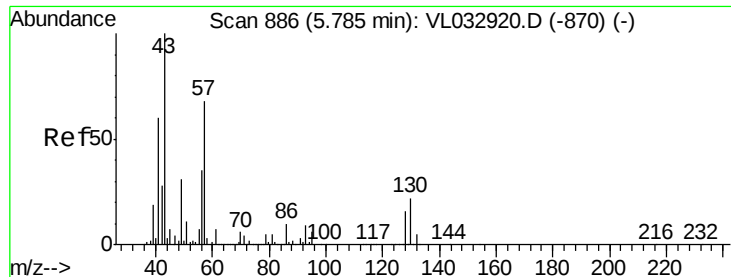
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#22
trans-1,2-Dichloroethene
Concen: 1.824 ppbv
RT: 4.98 min Scan# 634
Delta R.T. 0.01 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion:	96	Resp:	105481
Ion	Ratio	Lower	Upper
96	100		
61	160.7	127.1	190.7
98	59.7	51.3	76.9





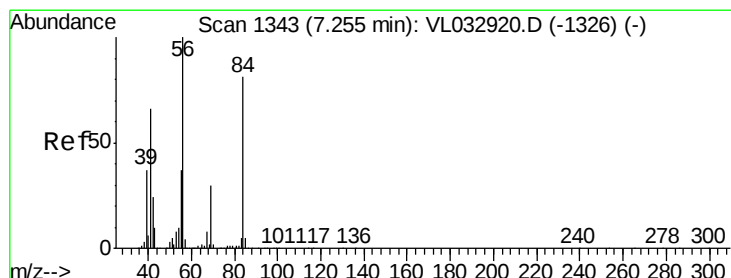
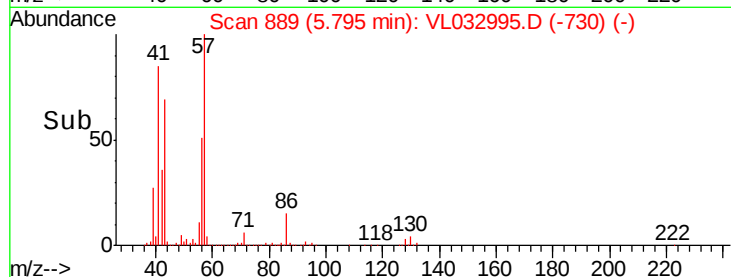
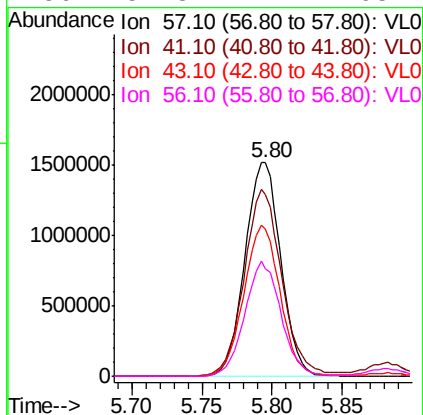
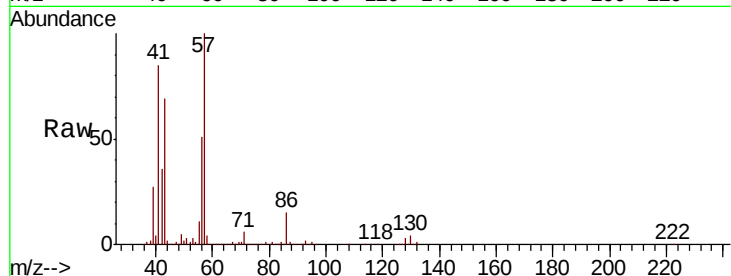
#26
Hexane
Concen: 25.994 ppbv
RT: 5.80 min Scan# 889
Delta R.T. 0.01 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Tot Ion: 57 Resp: 2698612
Ion Ratio Lower Upper
57 100
41 91.9 72.2 108.2
43 71.9 171.9 257.9#
56 54.3 42.2 63.2

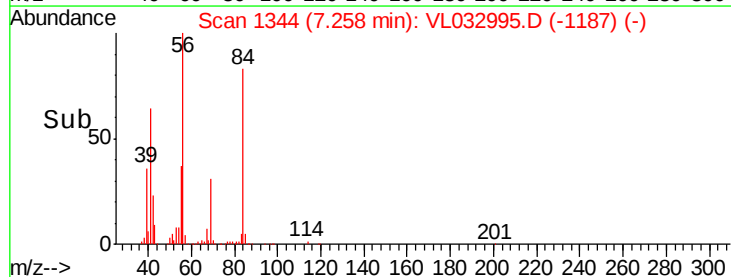
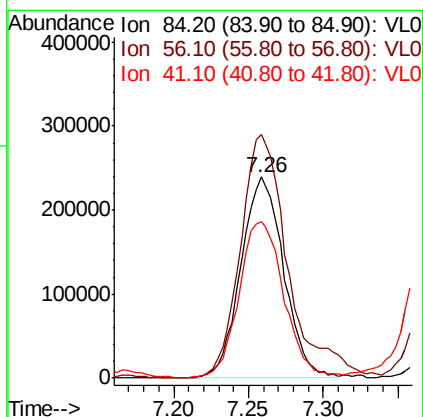
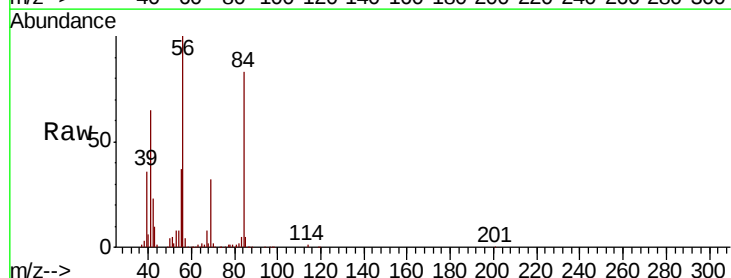
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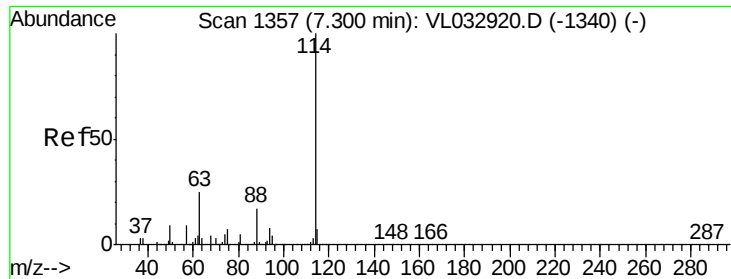
MMDadoda
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#30
Cyclohexane
Concen: 5.544 ppbv
RT: 7.26 min Scan# 1344
Delta R.T. 0.00 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion: 84 Resp: 477049
Ion Ratio Lower Upper
84 100
56 134.2 102.5 153.7
41 80.3 64.1 96.1





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1358

Delta R.T. 0.00 min

Lab File: VL032995.D

Acq: 14 Dec 2018 10:21

Instrument :

MSVOA_L

ClientSampleId :

P0068-SG001-181212-01

Tot Ion:114 Resp: 2566699

Ion Ratio Lower Upper

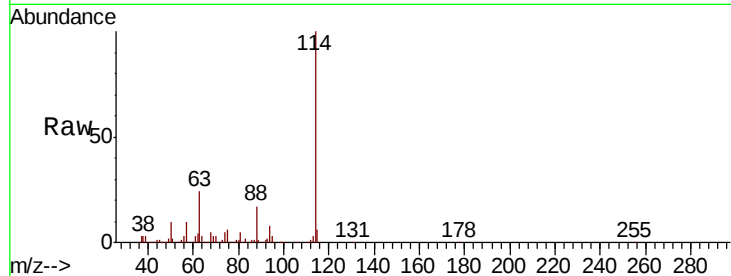
114 100

63 24.1 20.1 30.1

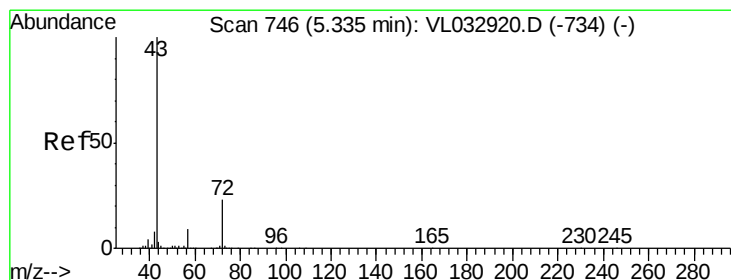
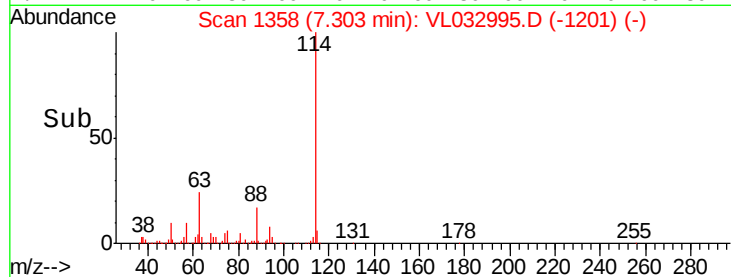
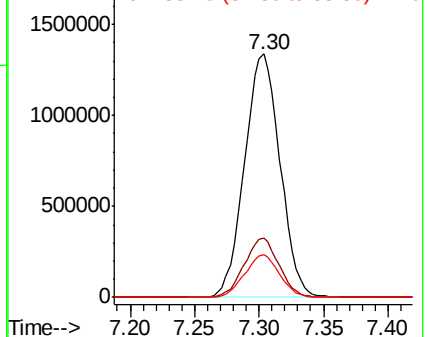
88 17.2 14.2 21.4

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Abundance Ion 114.10 (113.80 to 114.80): VL0
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 2.441 ppbv

RT: 5.34 min Scan# 748

Delta R.T. 0.01 min

Lab File: VL032995.D

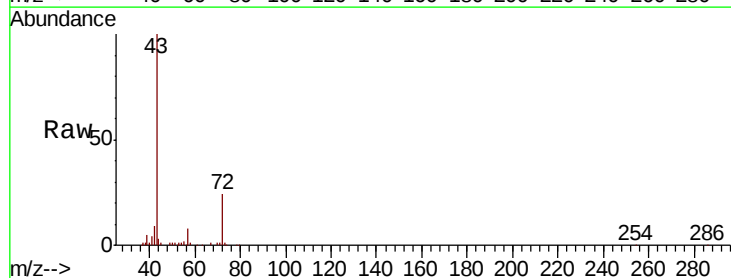
Acq: 14 Dec 2018 10:21

Tgt Ion: 43 Resp: 272902

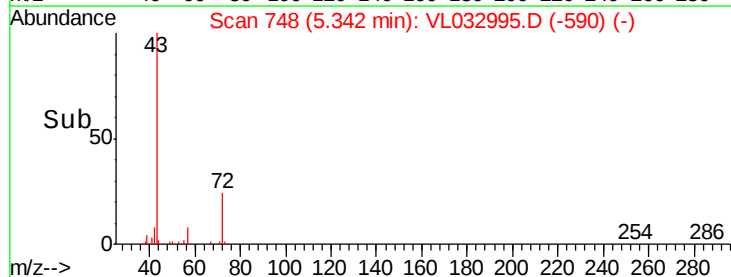
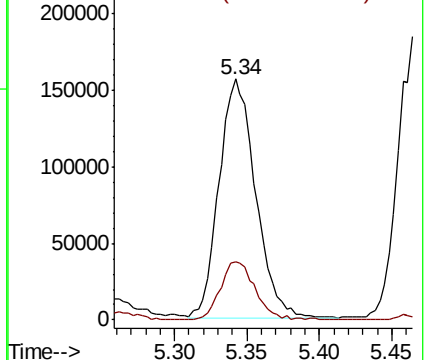
Ion Ratio Lower Upper

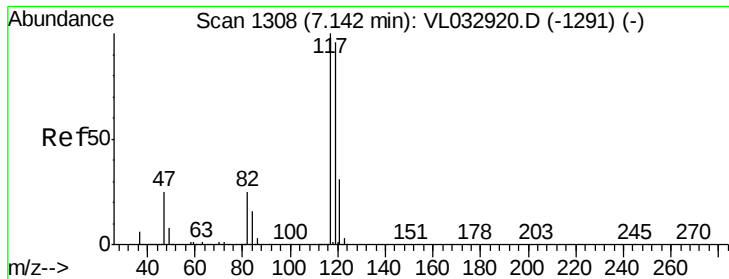
43 100

72 23.4 18.8 28.2



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 72.10 (71.80 to 72.80): VL0





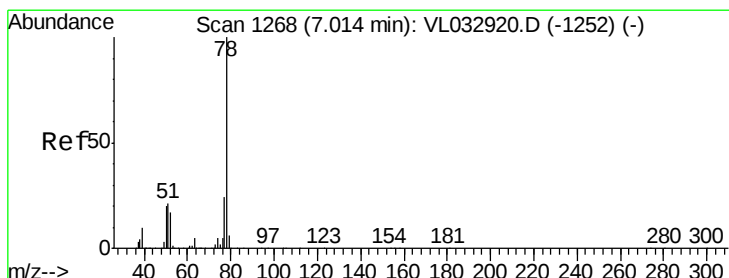
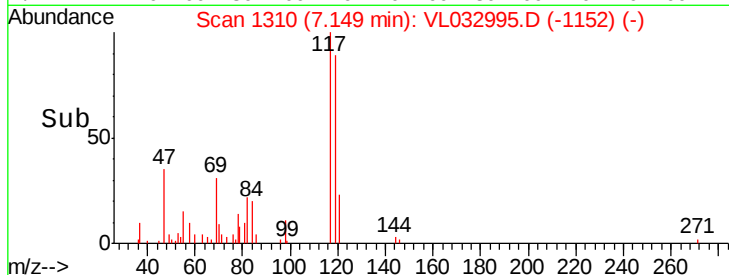
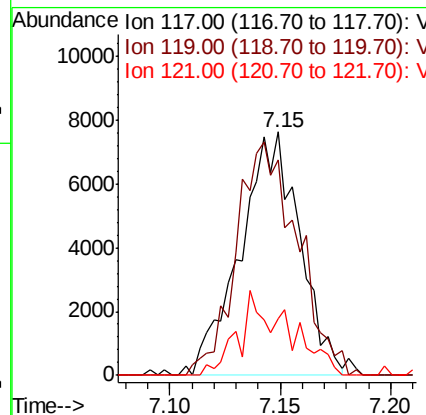
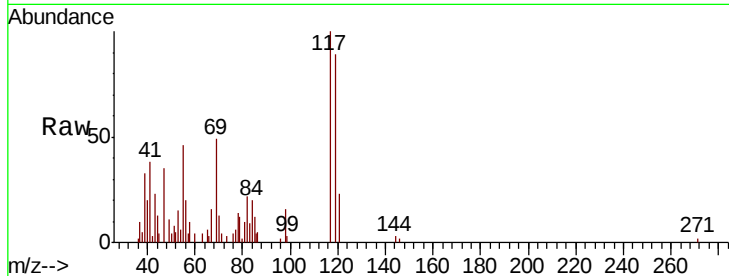
#35
Carbon Tetrachloride
Concen: 0.070 ppbv
RT: 7.15 min Scan# 1310
Delta R.T. 0.01 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Tot Ion	Ratio	Lower	Upper
117	100		
119	84.3	76.5	114.7
121	23.2	24.5	36.7#

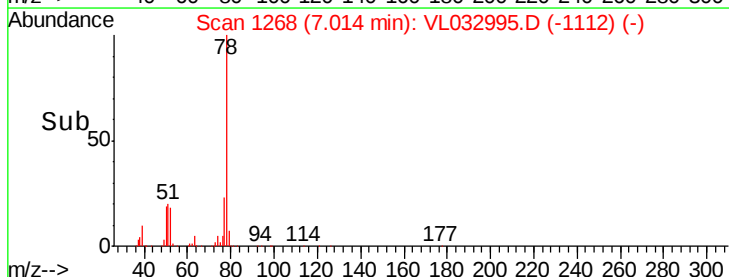
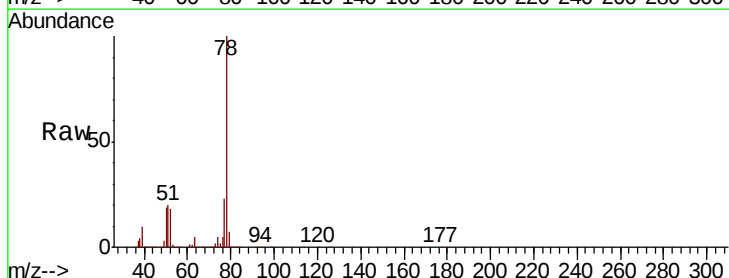
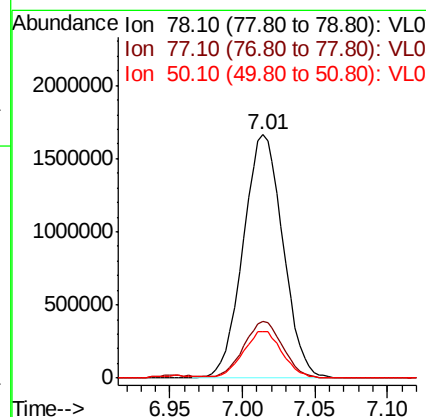
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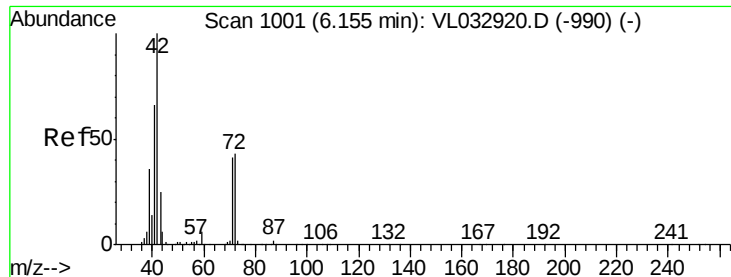
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#36
Benzene
Concen: 16.719 ppbv
RT: 7.01 min Scan# 1268
Delta R.T. 0.00 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.1	18.9	28.3
50	18.8	16.1	24.1





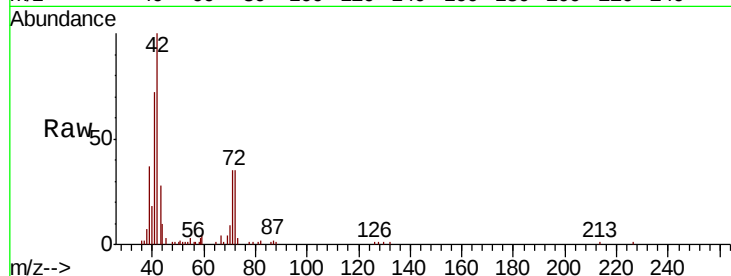
#41
Tetrahydrofuran
Concen: 0.715 ppbv
RT: 6.17 min Scan# 1005
Delta R.T. 0.01 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

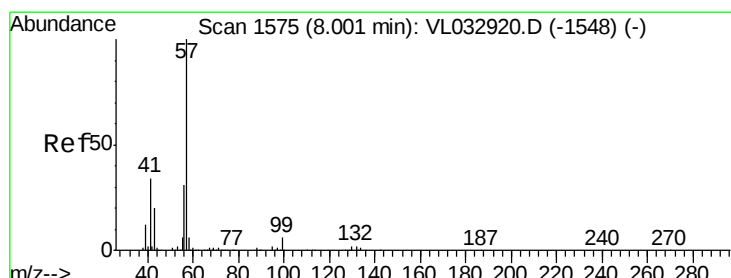
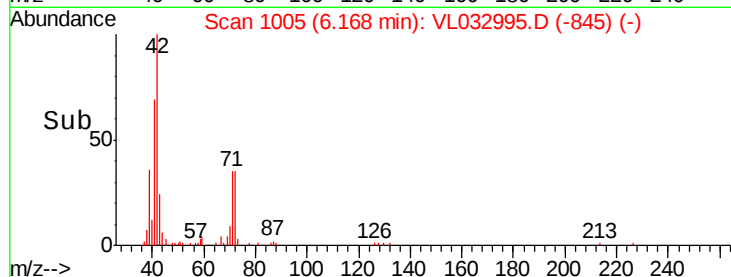
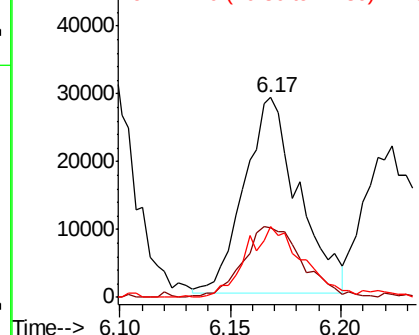
Tot Ion	Ratio	Lower	Upper
42	100		
72	40.3	32.9	49.3
71	40.0	32.0	48.0

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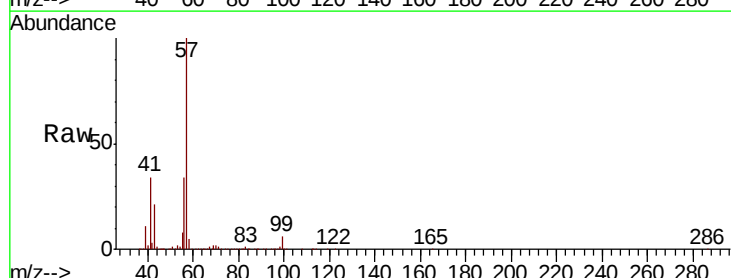


Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0

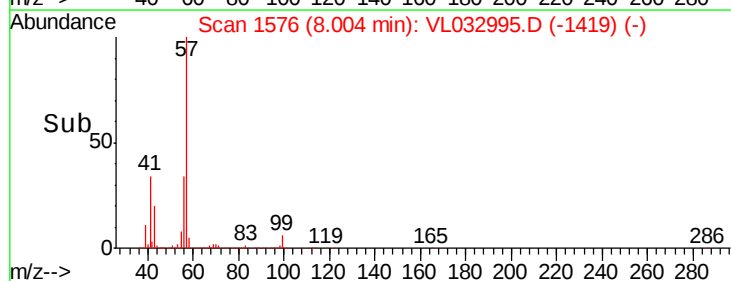
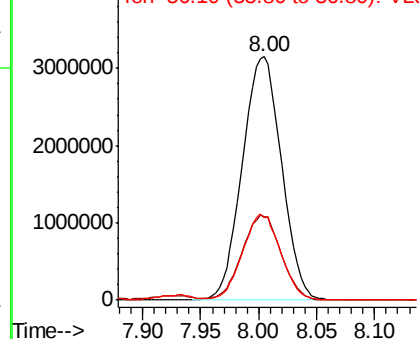


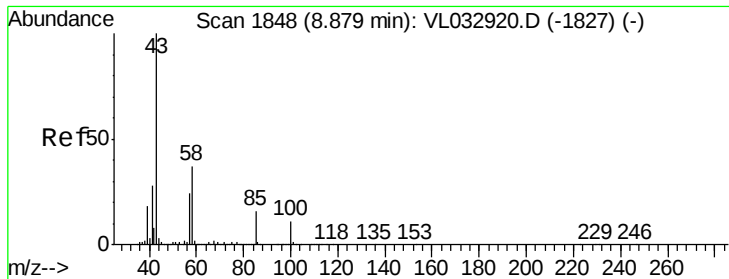
#44
2,2,4-Trimethylpentane
Concen: 23.079 ppbv
RT: 8.00 min Scan# 1576
Delta R.T. 0.00 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion	Ratio	Lower	Upper
57	100		
41	34.9	27.0	40.4
56	34.5	24.6	37.0



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





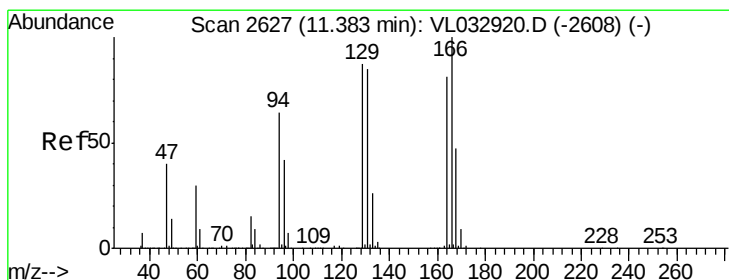
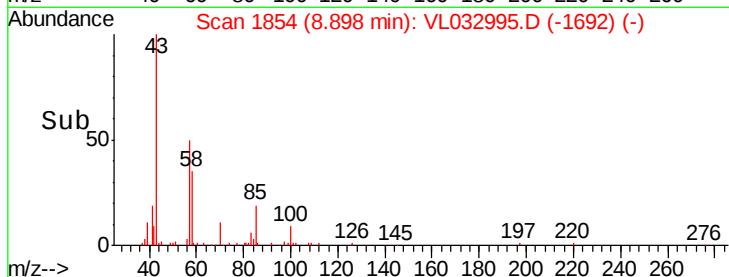
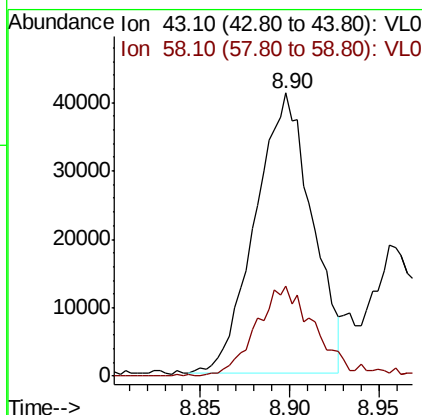
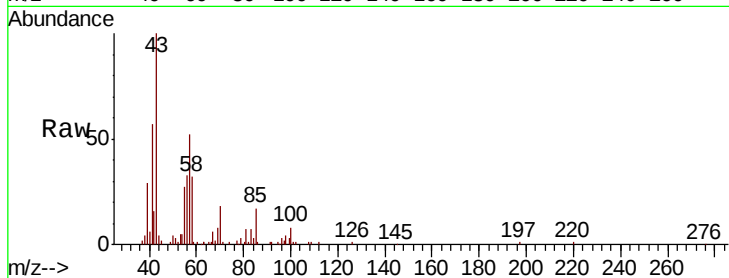
#50
4-Methyl-2-Pentanone
Concen: 0.511 ppbv
RT: 8.90 min Scan# 1854
Delta R.T. 0.02 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Tot Ion	Ratio	Lower	Upper
43	100		
58	33.8	29.0	43.4

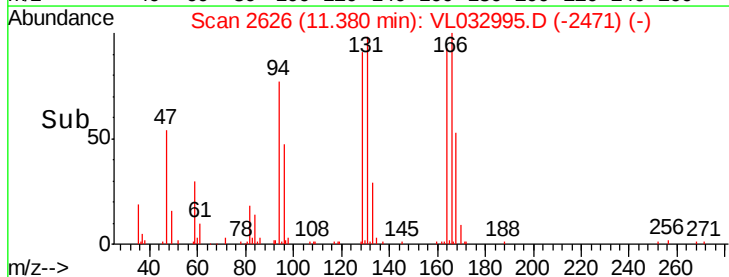
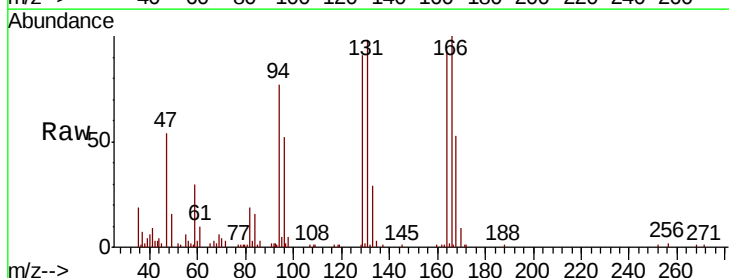
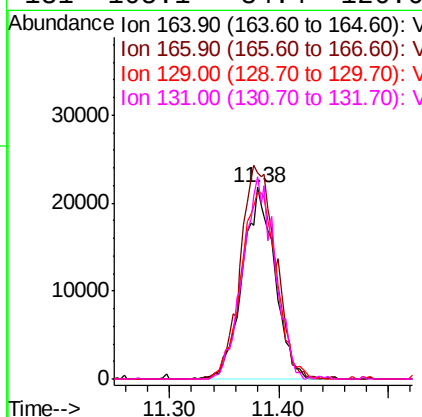
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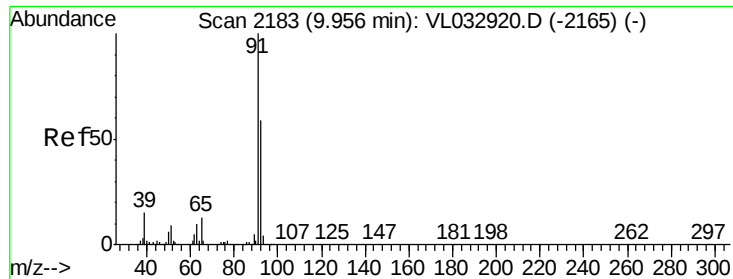
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#52
Tetrachloroethene
Concen: 0.652 ppbv m
RT: 11.38 min Scan# 2626
Delta R.T. -0.00 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion	Ratio	Lower	Upper
164	100		
166	107.3	98.8	148.2
129	97.4	85.5	128.3
131	105.1	84.4	126.6





#53

Toluene

Concen: 51.662 ppbv

RT: 9.96 min Scan# 2183

Delta R.T. 0.00 min

Lab File: VL032995.D

Acq: 14 Dec 2018 10:21

Instrument :

MSVOA_L

ClientSampleId :

P0068-SG001-181212-01

Tot Ion: 91 Resp:10343786

Ion Ratio Lower Upper

91 100

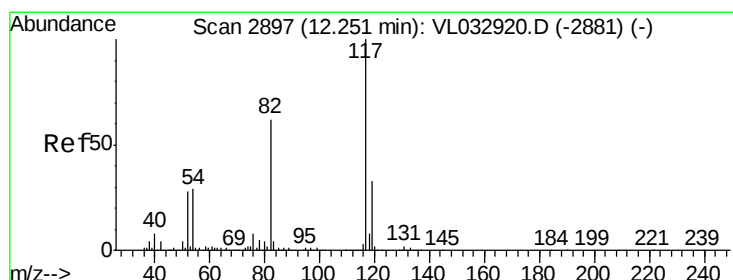
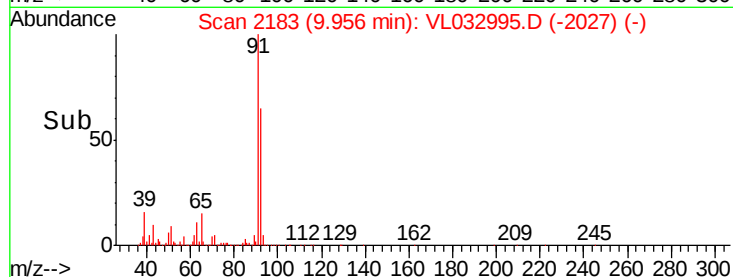
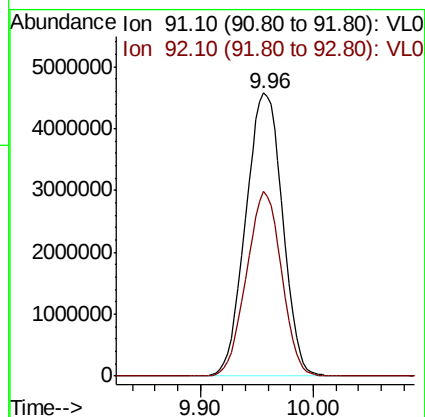
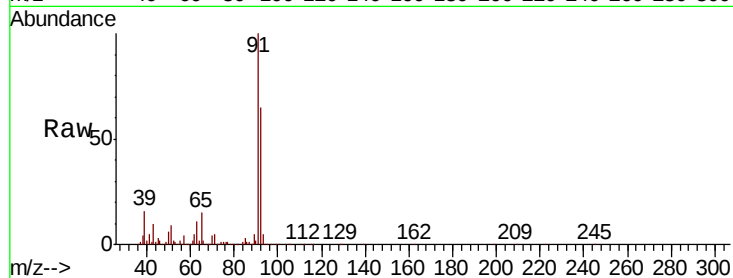
92 62.3 47.4 71.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL032995.D

Acq: 14 Dec 2018 10:21

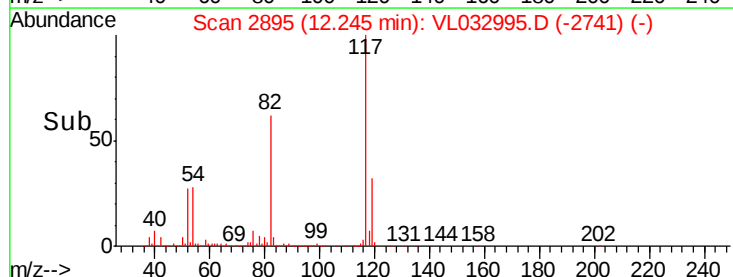
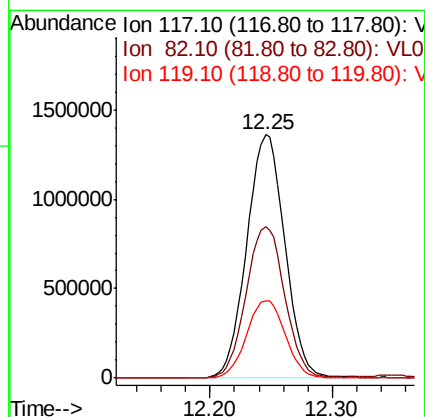
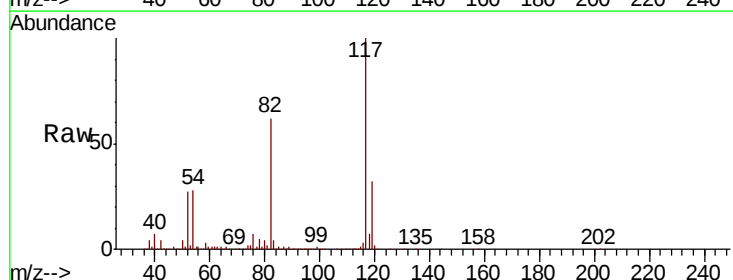
Tgt Ion:117 Resp: 2930924

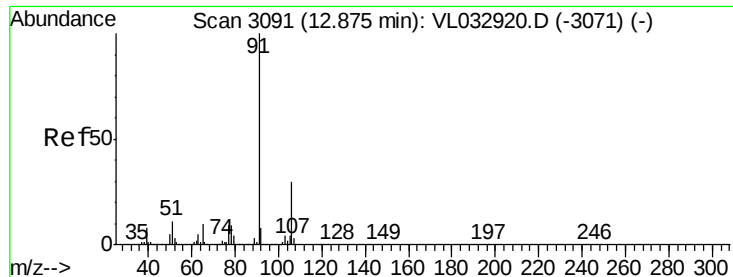
Ion Ratio Lower Upper

117 100

82 63.4 47.8 71.8

119 32.6 43.1 64.7#





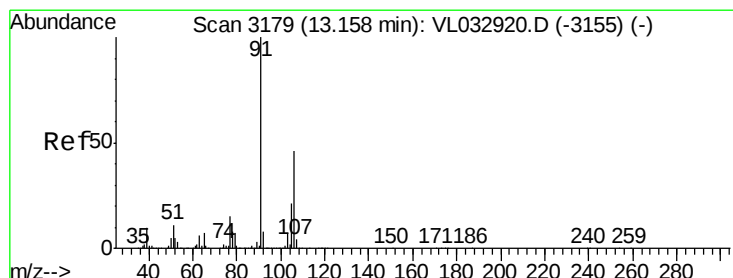
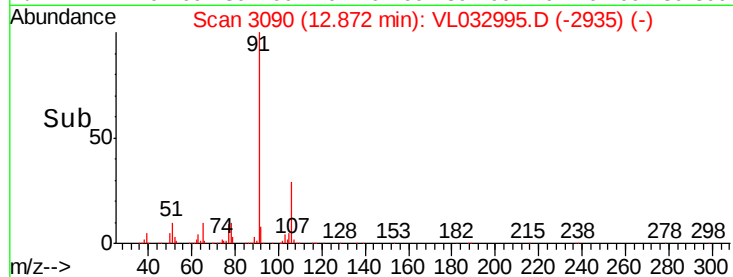
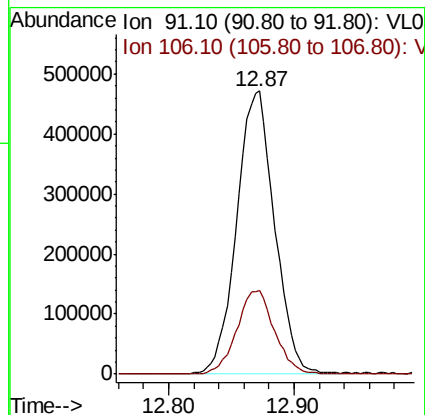
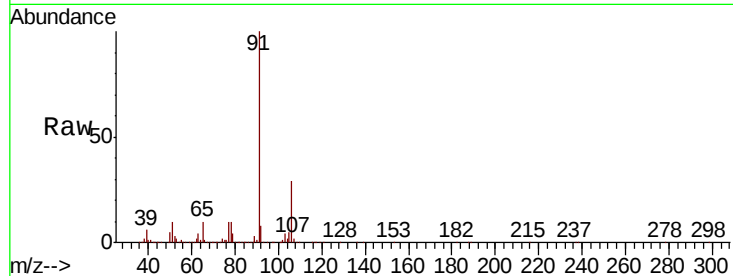
#58
Ethyl Benzene
Concen: 3.148 ppbv
RT: 12.87 min Scan# 3090
Delta R.T. -0.00 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Tot Ion: 91 Resp: 984259
Ion Ratio Lower Upper
91 100
106 29.4 23.9 35.9

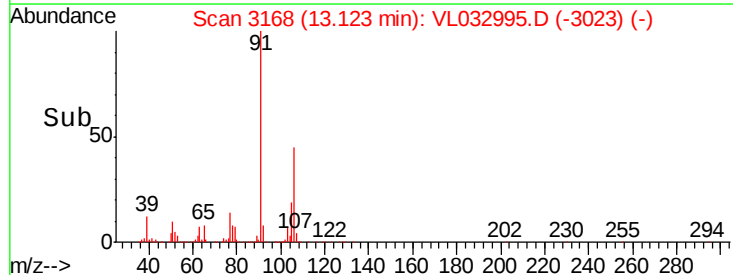
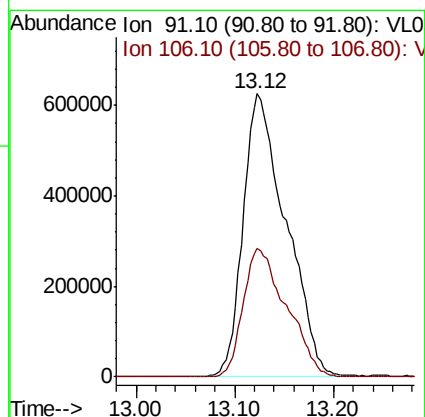
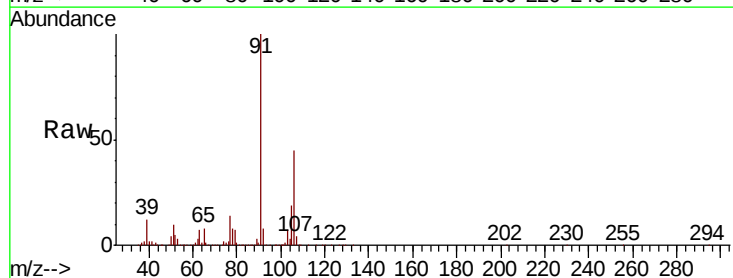
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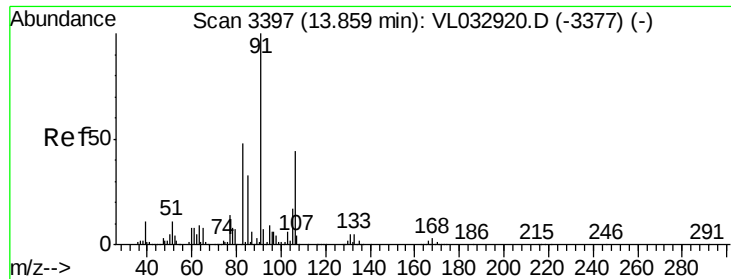
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#59
m/p-Xylene
Concen: 6.606 ppbv
RT: 13.12 min Scan# 3168
Delta R.T. -0.04 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion: 91 Resp: 1872679
Ion Ratio Lower Upper
91 100
106 46.2 0.0 0.0#





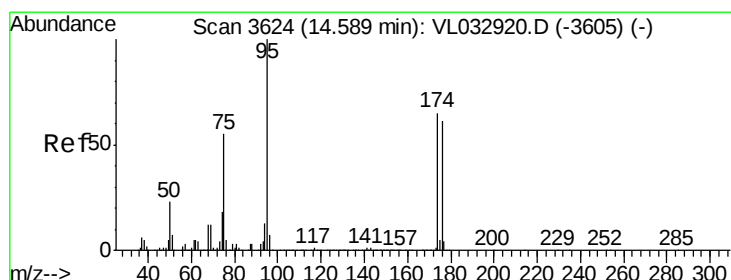
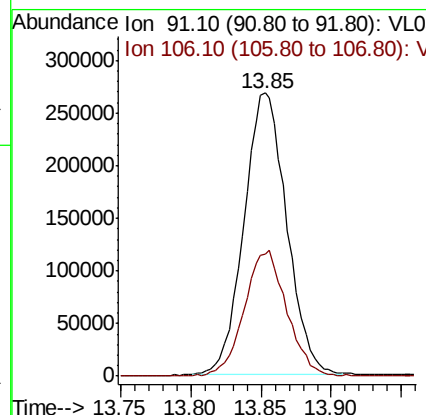
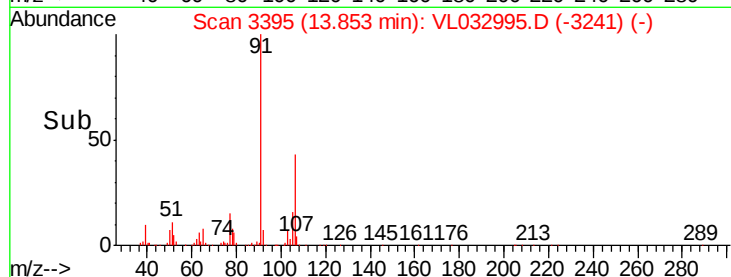
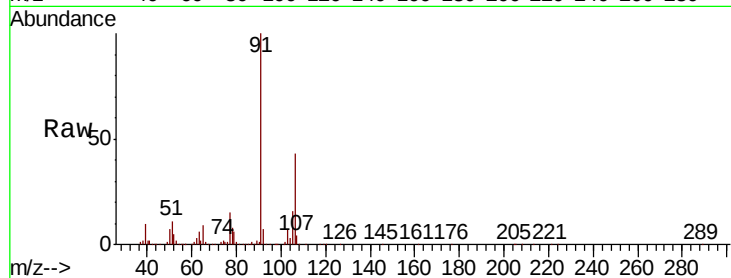
#60
o-Xylene
Concen: 1.986 ppbv
RT: 13.85 min Scan# 3395
Delta R.T. -0.01 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Instrument :
MSVOA_L
ClientSampleId :
P0068-SG001-181212-01

Tot Ion: 91 Resp: 568578
Ion Ratio Lower Upper
91 100
106 44.2 21.9 65.8

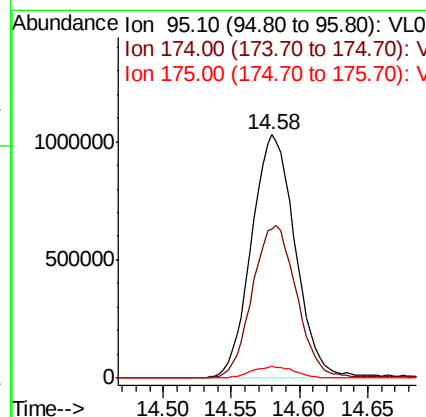
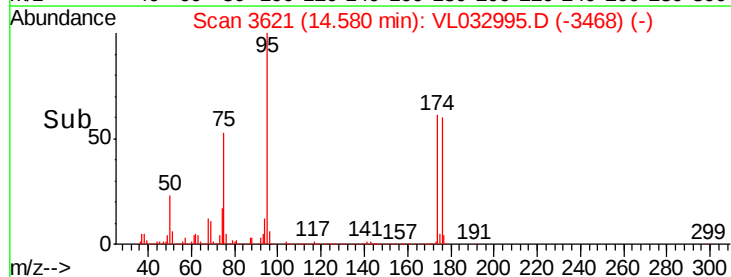
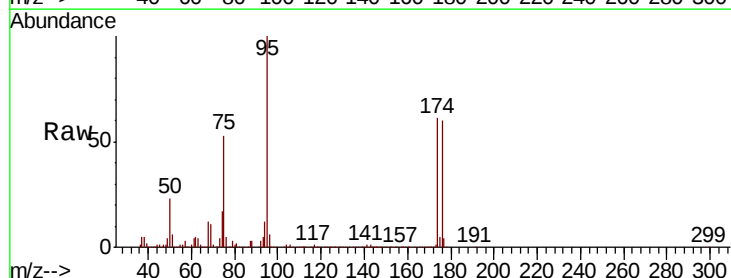
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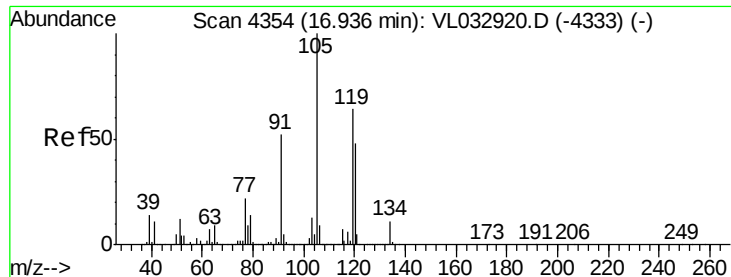
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.520 ppbv
RT: 14.58 min Scan# 3621
Delta R.T. -0.01 min
Lab File: VL032995.D
Acq: 14 Dec 2018 10:21

Tgt Ion: 95 Resp: 2277904
Ion Ratio Lower Upper
95 100
174 64.1 51.4 77.0
175 4.8 3.8 5.6





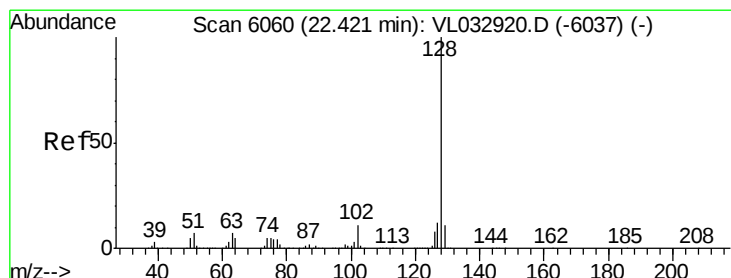
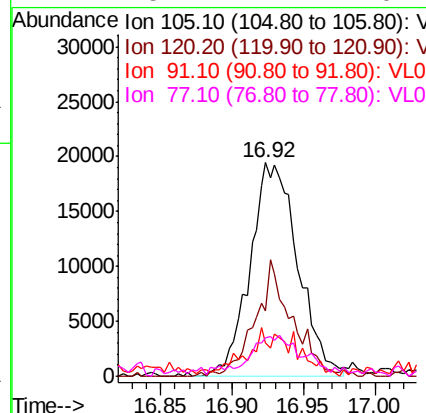
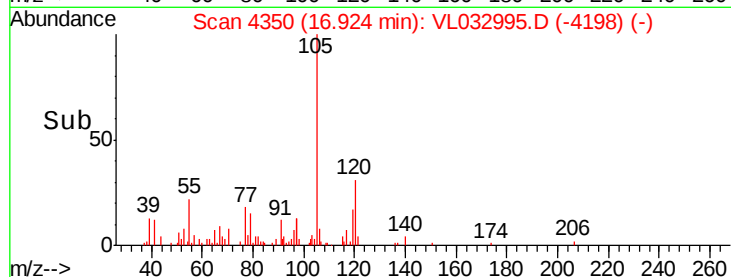
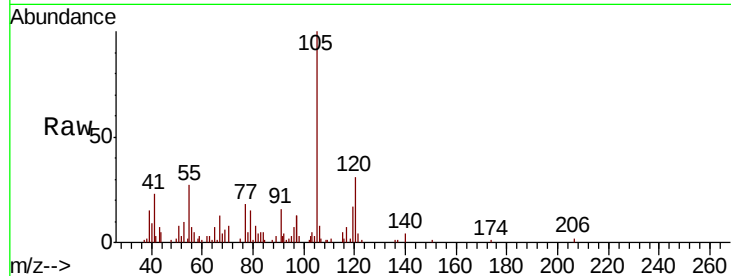
#74
 1,2,4-Trimethylbenzene
 Concen: 0.129 ppbv m
 RT: 16.92 min Scan# 4350
 Delta R.T. -0.01 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Instrument :
 MSVOA_L
 ClientSampleId :
 P0068-SG001-181212-01

Tot Ion:	105	Resp:	45322
Ion Ratio	Lower	Upper	
105	100		
120	30.8	38.6	58.0#
91	15.6	41.7	62.5#
77	18.2	17.4	26.2

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#79
 Naphthalene
 Concen: 0.096 ppbv m
 RT: 22.43 min Scan# 6062
 Delta R.T. 0.01 min
 Lab File: VL032995.D
 Acq: 14 Dec 2018 10:21

Tgt Ion:	128	Resp:	21780
Ion Ratio	Lower	Upper	
128	100		
127	19.7	9.9	14.9#
129	6.3	8.6	13.0#

