

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
 Data File : VL032721.D
 Acq On : 7 Nov 2018 17:40
 Operator : SY/AP
 Sample : J5823-03DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-01

Manual Integrations
 APPROVED

MMDadoda
 11/12/2018 12:30:08 PM

Quant Time: Nov 12 00:51:51 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 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	1394196	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3451342	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3415643	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2568797	10.10	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	32850	0.231	ppbv	90
3) Chlorodifluoromethane	3.02	51	44456m	0.408	ppbv	
4) Chloromethane	3.18	50	27067	0.444	ppbv	96
9) Propene	3.05	41	205304	4.576	ppbv	88
10) Heptane	8.26	43	72791	0.421	ppbv	90
11) Trichlorofluoromethane	4.01	101	44408	0.239	ppbv	98
13) Ethanol	3.67	45	97912	7.635	ppbv	96
15) Acetone	3.91	43	658256	5.113	ppbv	96
19) Isopropyl Alcohol	4.04	45	72930m	0.795	ppbv	
20) Methylene Chloride	4.42	84	130168	1.992	ppbv	92
26) Hexane	5.79	57	368437	2.628	ppbv #	48
30) Cyclohexane	7.26	84	26482	0.239	ppbv #	21
34) 2-Butanone	5.35	43	81165	0.439	ppbv	98
35) Carbon Tetrachloride	7.15	117	21091m	0.086	ppbv	
36) Benzene	7.02	78	595697	2.125	ppbv	98
44) 2,2,4-Trimethylpentane	8.00	57	821330	1.717	ppbv	92
52) Tetrachloroethene	11.38	164	22795m	0.233	ppbv	
53) Toluene	9.96	91	4946797	15.398	ppbv	99
58) Ethyl Benzene	12.88	91	452043	1.139	ppbv	98
59) m/p-Xylene	13.13	91	1595989	4.517	ppbv	100
60) o-Xylene	13.86	91	598651	1.756	ppbv	98
61) Styrene	13.70	104	41018m	0.179	ppbv	
64) n-propylbenzene	15.73	120	17099m	0.143	ppbv	
72) 4-Ethyltoluene	16.02	105	161745m	0.446	ppbv	
73) 1,3,5-Trimethylbenzene	16.17	105	125487	0.355	ppbv	98
74) 1,2,4-Trimethylbenzene	16.94	105	557798	1.477	ppbv #	76
79) Naphthalene	22.43	128	32992m	0.141	ppbv	

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

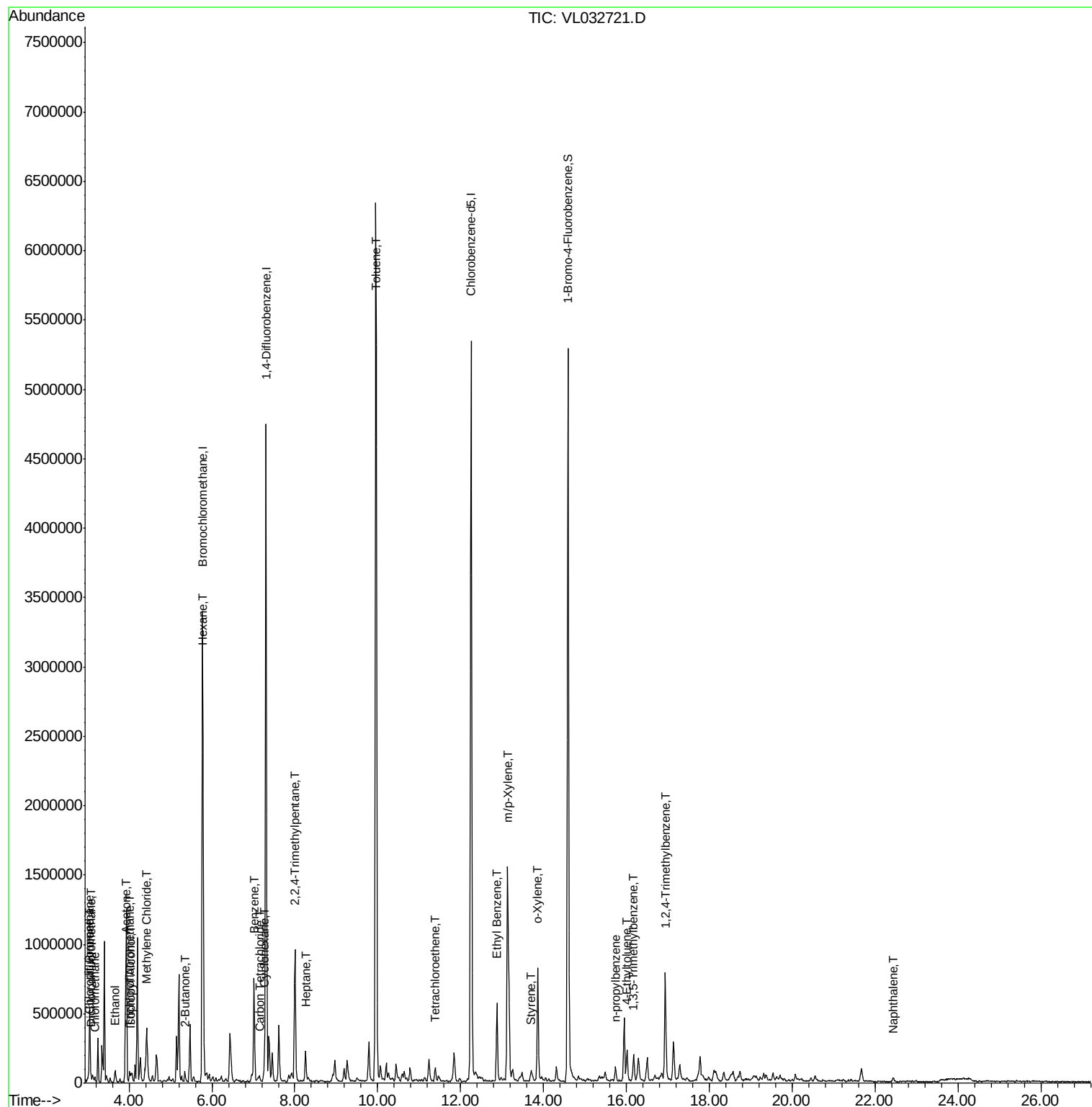
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
Data File : VL032721.D
Acq On : 7 Nov 2018 17:40
Operator : SY/AP
Sample : J5823-03DUP
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

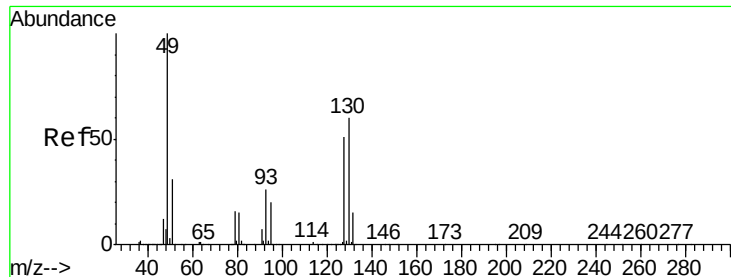
Instrument :
MSVOA_L
ClientSampleId :
SV-01

Manual Integrations
APPROVED

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11/12/2018 12:30:08 PM

Quant Time: Nov 12 00:51:51 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct
QLast Update : Thu Oct 25 05:15:43 2018
Response via : Initial Calibration





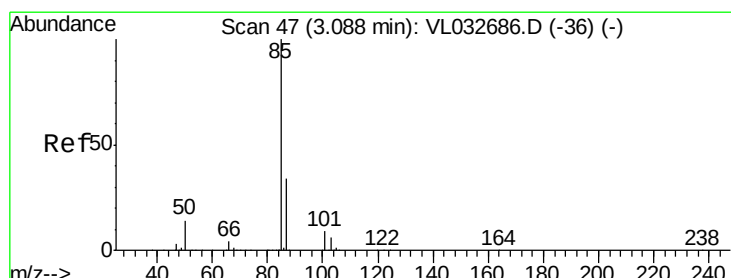
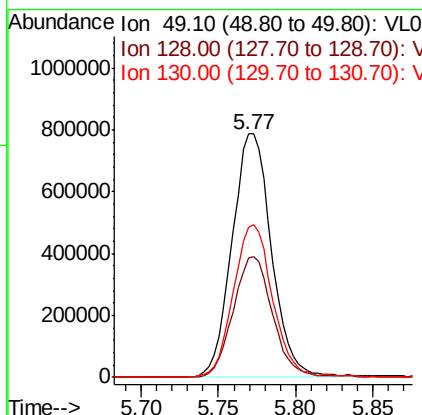
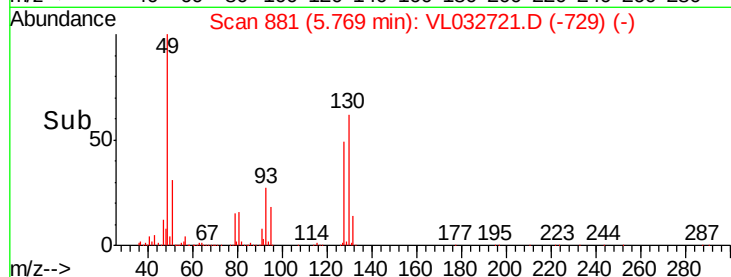
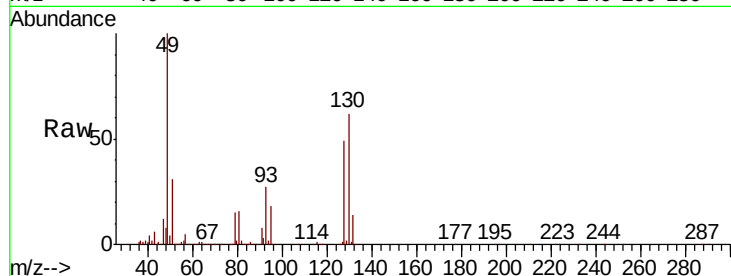
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.77 min Scan# 881
 Delta R.T. -0.01 min
 Lab File: VL032721.D
 Acq: 7 Nov 2018 17:40

Instrument :
 MSVOA_L
 ClientSampled :
 SV-01

Tot Ion	Ratio	Lower	Upper
49	100		
128	50.3	22.3	66.8
130	63.1	28.4	85.3

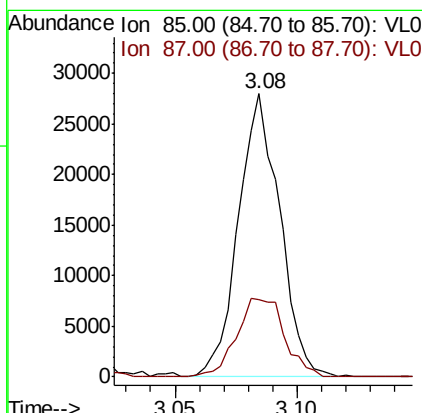
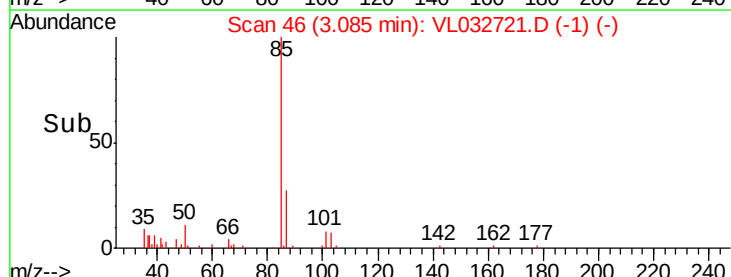
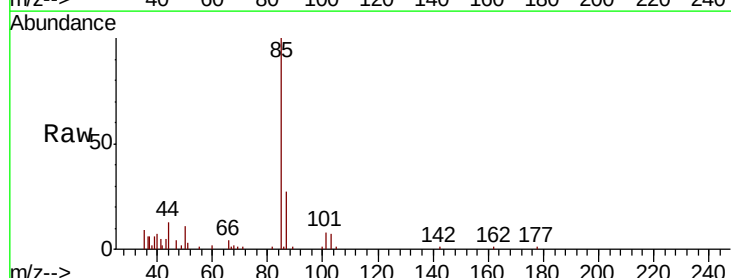
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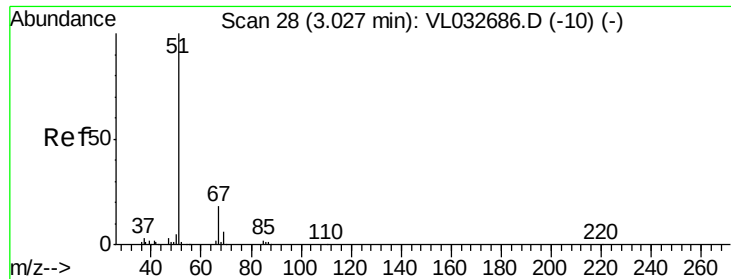
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#2
 Dichlorodifluoromethane
 Concen: 0.231 ppbv
 RT: 3.08 min Scan# 46
 Delta R.T. -0.00 min
 Lab File: VL032721.D
 Acq: 7 Nov 2018 17:40

Tgt Ion	Ratio	Lower	Upper
85	100		
87	27.2	26.2	39.2





#3

Chlorodifluoromethane

Concen: 0.408 ppbv

RT: 3.02 min Scan# 27

Delta R.T. -0.00 min

Lab File: VL032721.D

Acq: 7 Nov 2018 17:40

Instrument :

MSVOA_L

ClientSampled :

SV-01

Tot Ion: 51 Resp: 44456

Ion Ratio Lower Upper

51 100

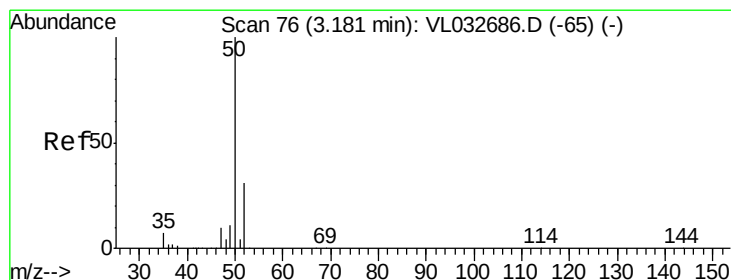
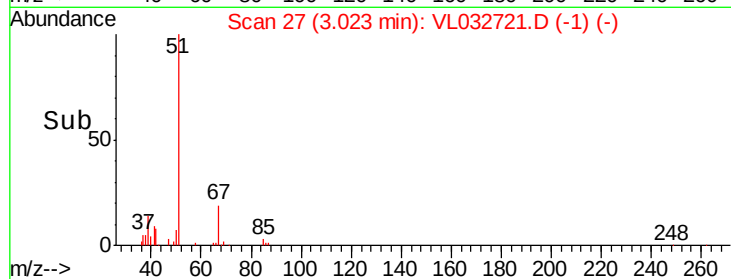
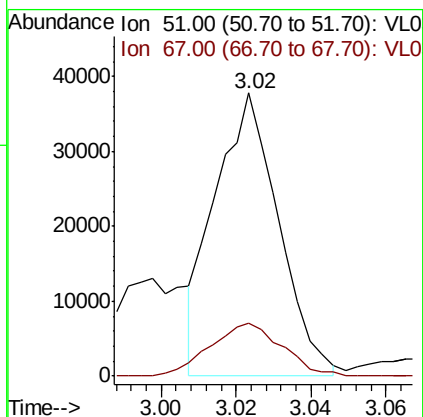
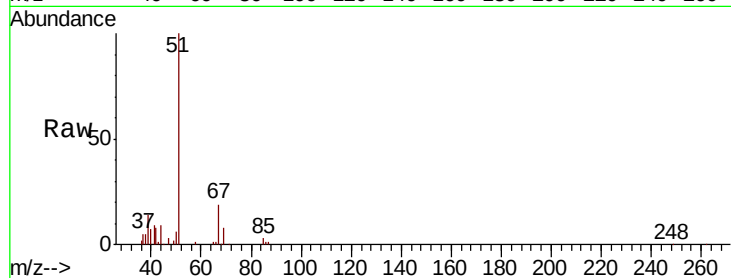
67 21.2 15.2 22.8

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#4

Chloromethane

Concen: 0.444 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL032721.D

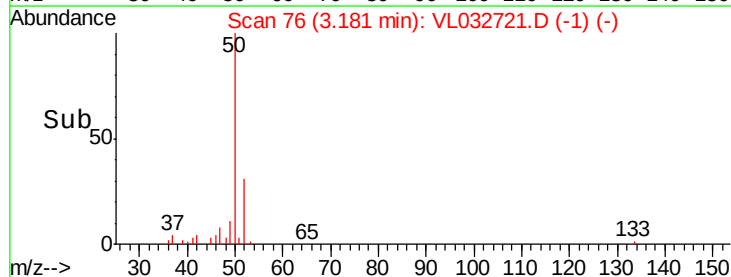
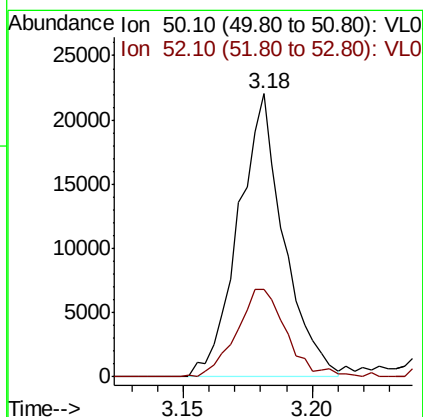
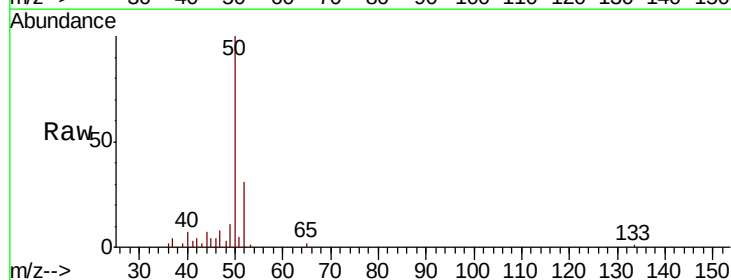
Acq: 7 Nov 2018 17:40

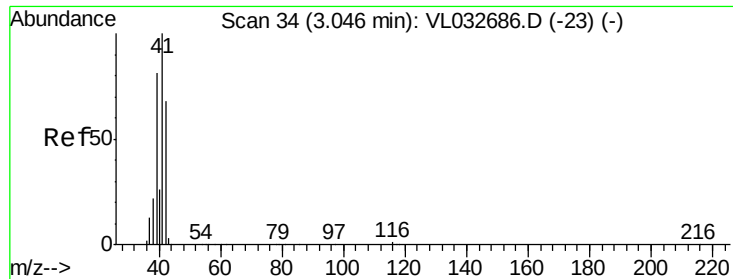
Tgt Ion: 50 Resp: 27067

Ion Ratio Lower Upper

50 100

52 30.1 25.9 38.9





#9

Propene

Concen: 4.576 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL032721.D

Acq: 7 Nov 2018 17:40

Instrument :

MSVOA_L

ClientSampled :

SV-01

Tot Ion: 41 Resp: 205304

Ion Ratio Lower Upper

41 100

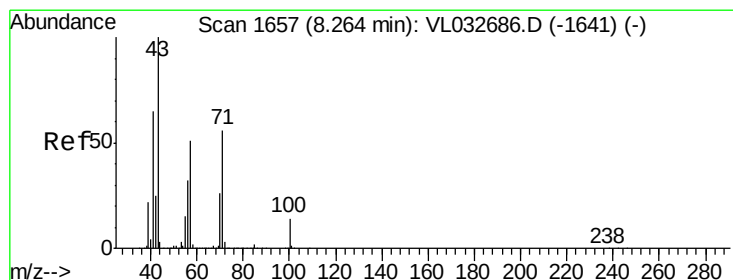
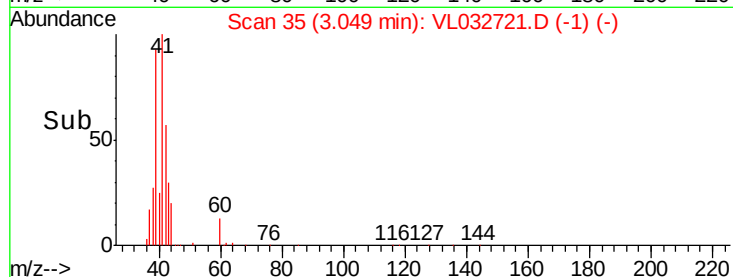
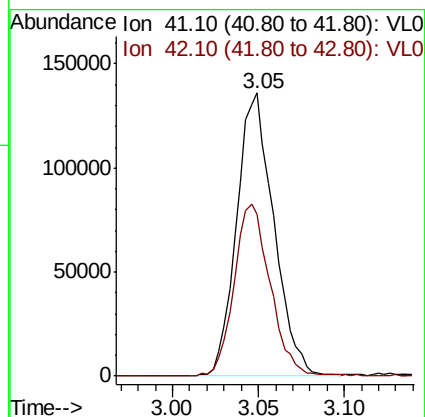
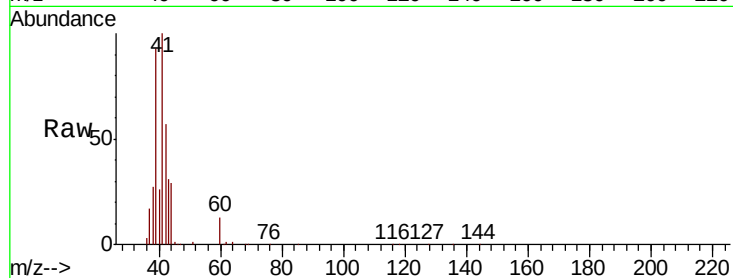
42 59.6 55.4 83.0

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#10

Heptane

Concen: 0.421 ppbv

RT: 8.26 min Scan# 1656

Delta R.T. -0.00 min

Lab File: VL032721.D

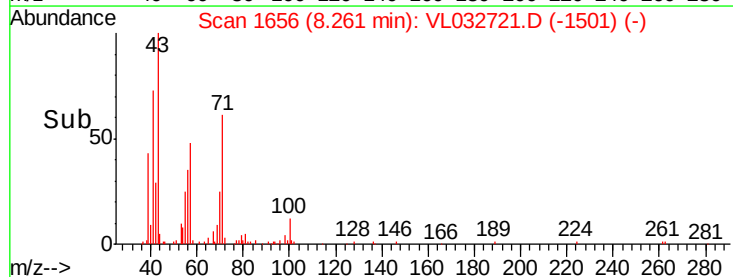
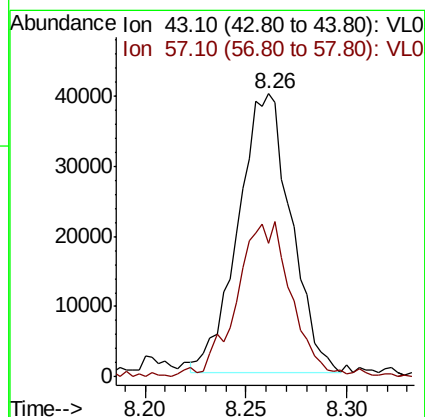
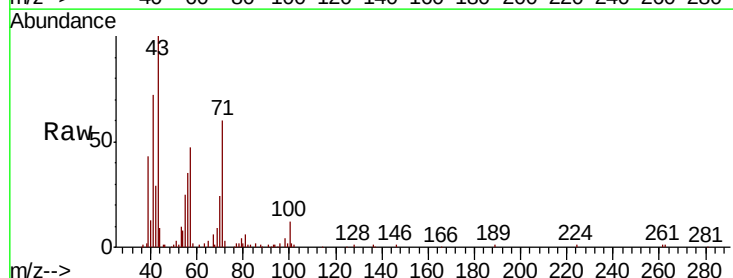
Acq: 7 Nov 2018 17:40

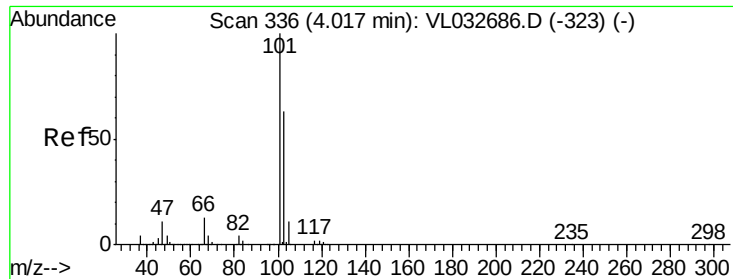
Tgt Ion: 43 Resp: 72791

Ion Ratio Lower Upper

43 100

57 58.7 41.5 62.3





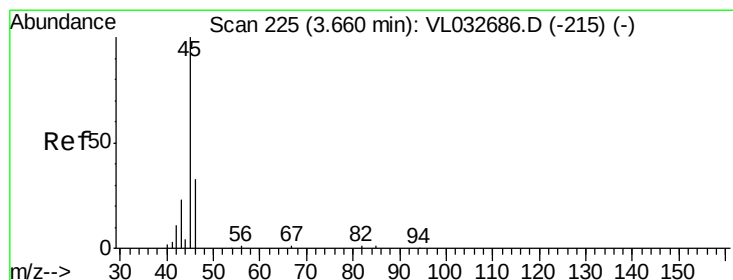
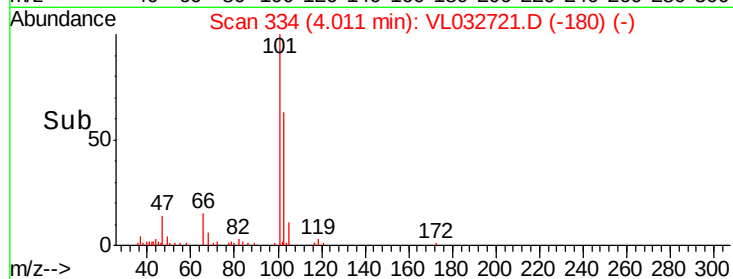
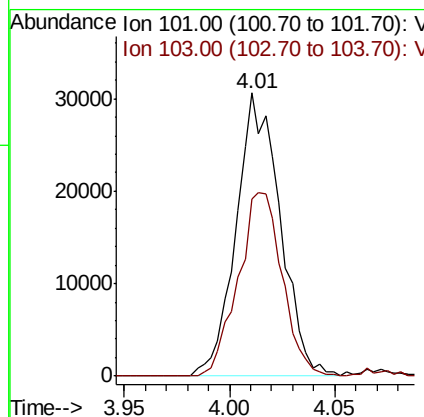
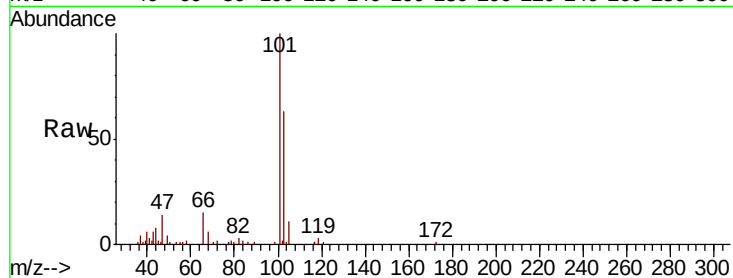
#11
Trichlorofluoromethane
Concen: 0.239 ppbv
RT: 4.01 min Scan# 334
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampleId :
SV-01

Tot Ion:101 Resp: 44408
Ion Ratio Lower Upper
101 100
103 62.7 51.4 77.2

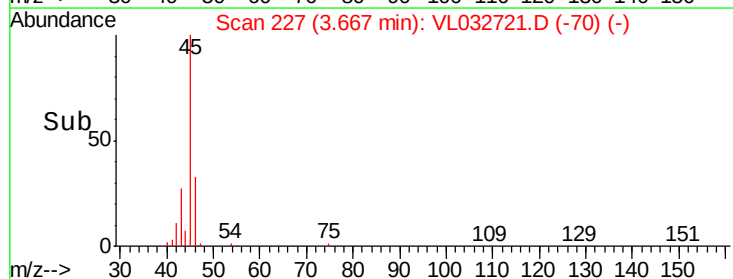
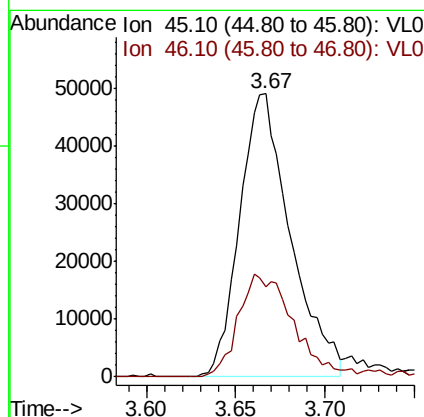
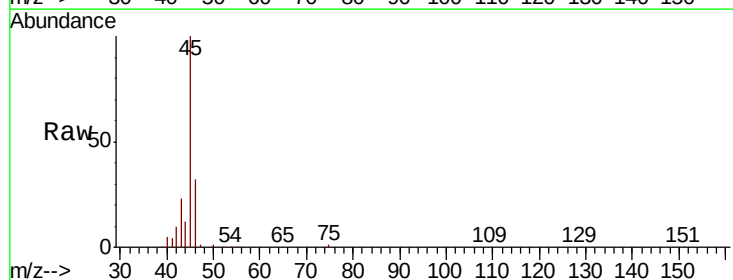
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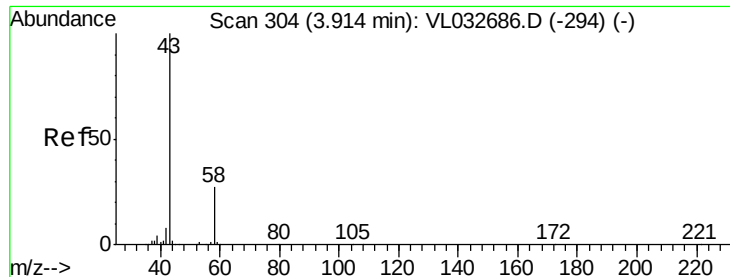
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11/12/2018 12:30:08 PM



#13
Ethanol
Concen: 7.635 ppbv
RT: 3.67 min Scan# 227
Delta R.T. 0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion: 45 Resp: 97912
Ion Ratio Lower Upper
45 100
46 41.2 15.4 61.8





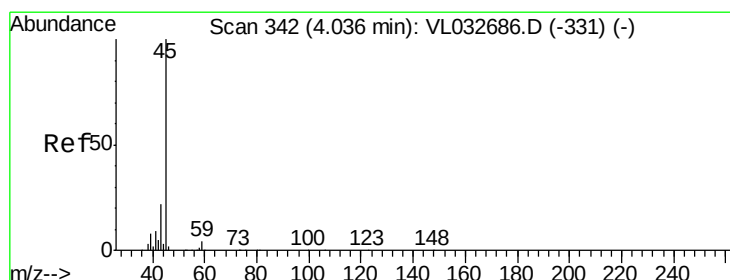
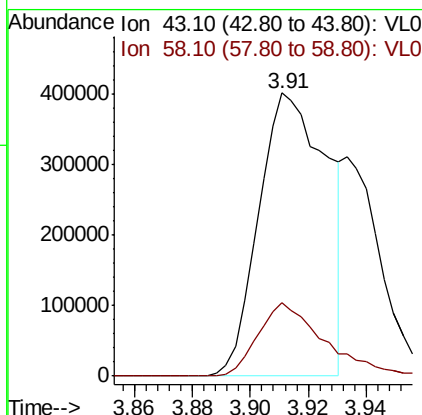
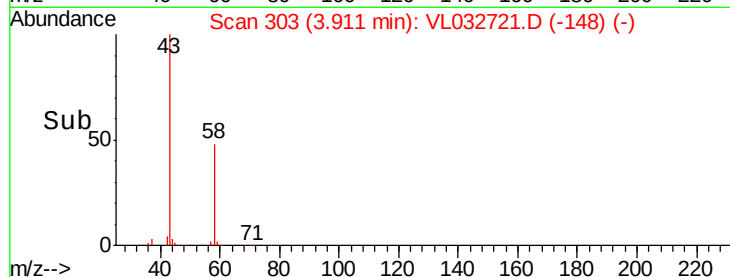
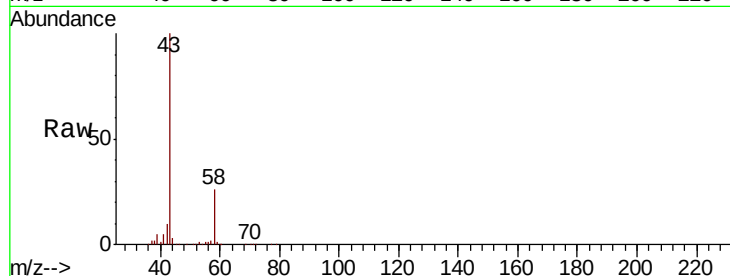
#15
Acetone
Concen: 5.113 ppbv
RT: 3.91 min Scan# 303
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion: 43 Resp: 658256
Ion Ratio Lower Upper
43 100
58 25.5 22.1 33.1

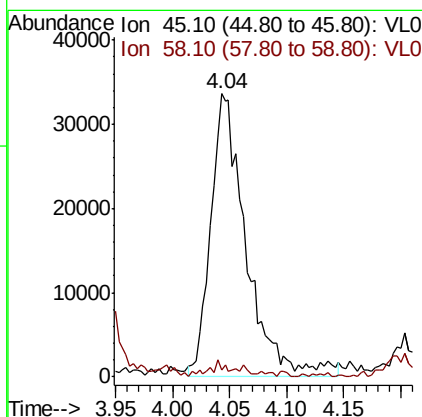
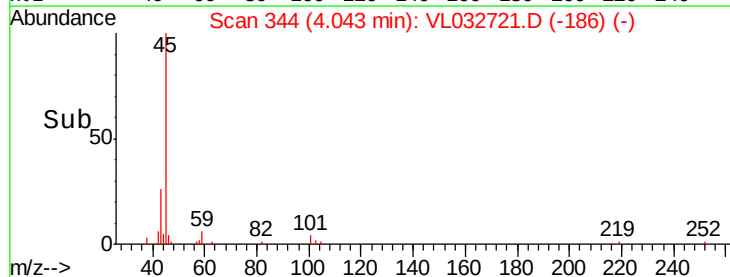
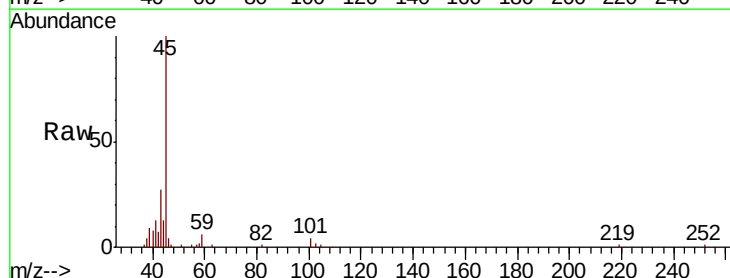
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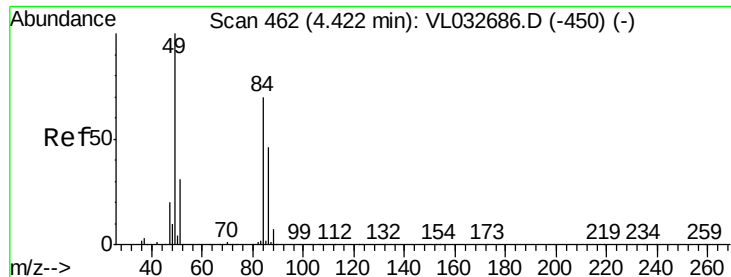
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#19
Isopropyl Alcohol
Concen: 0.795 ppbv m
RT: 4.04 min Scan# 344
Delta R.T. 0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion: 45 Resp: 72930
Ion Ratio Lower Upper
45 100
58 0.0 2.0 3.0#





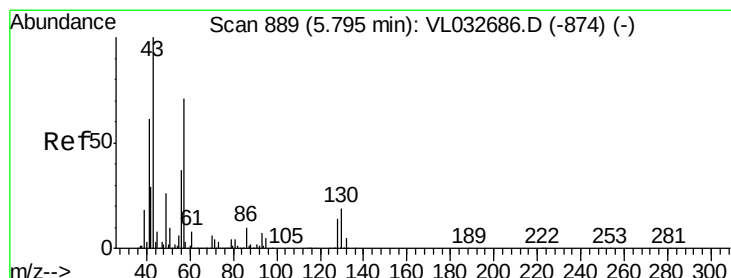
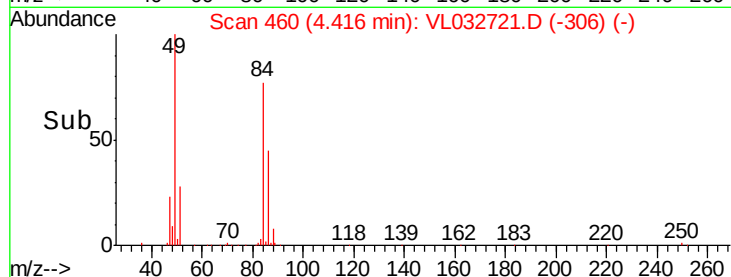
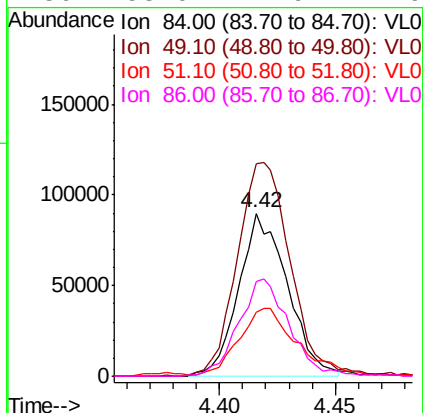
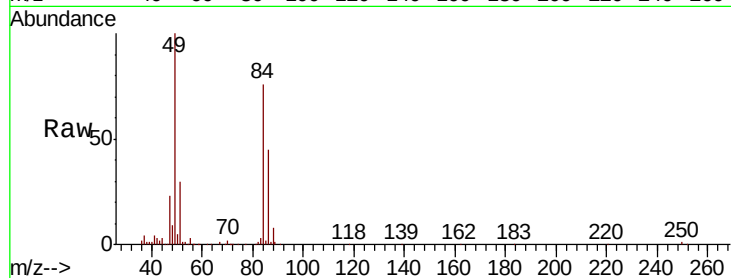
#20
Methvlene Chloride
Concen: 1.992 ppbv
RT: 4.42 min Scan# 460
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion:	84	Resp:	130168
Ion	Ratio	Lower	Upper
84	100		
49	130.1	113.5	170.3
51	38.6	34.8	52.2
86	58.0	47.9	71.9

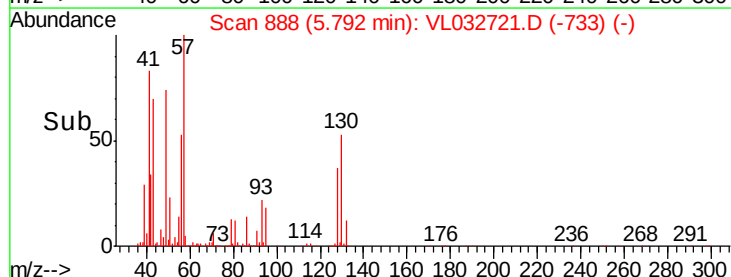
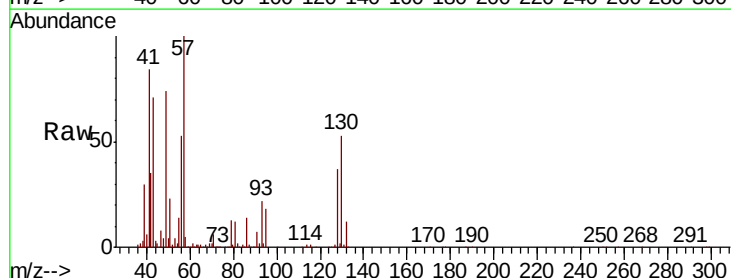
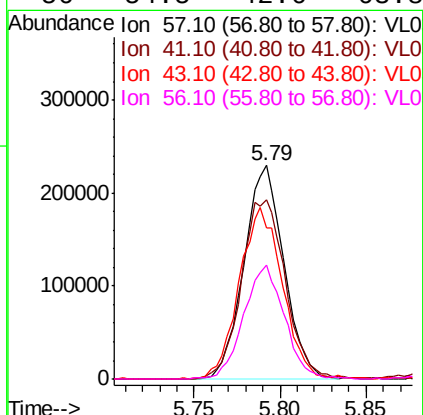
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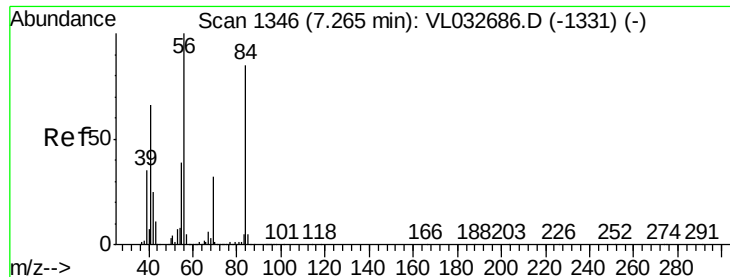
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#26
Hexane
Concen: 2.628 ppbv
RT: 5.79 min Scan# 888
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion:	57	Resp:	368437
Ion	Ratio	Lower	Upper
57	100		
41	92.8	67.4	101.0
43	87.5	171.9	257.9#
56	54.5	42.6	63.8





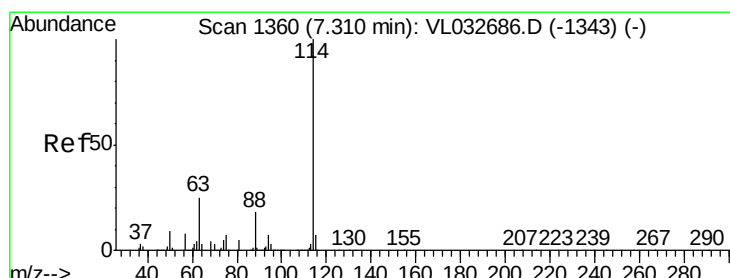
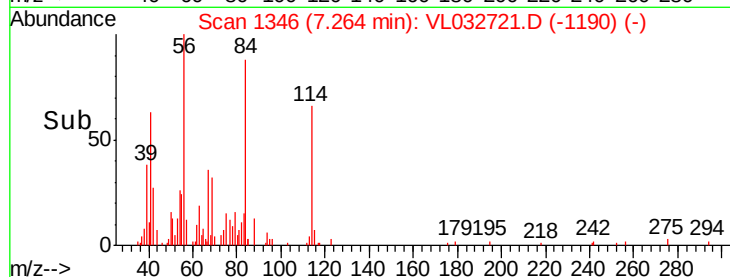
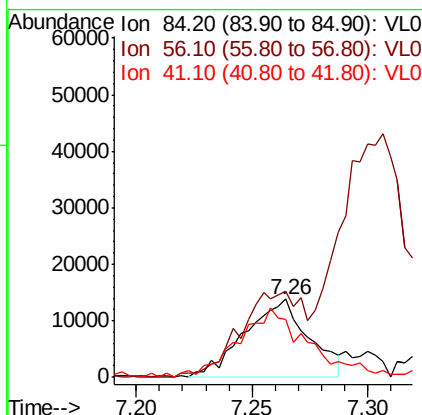
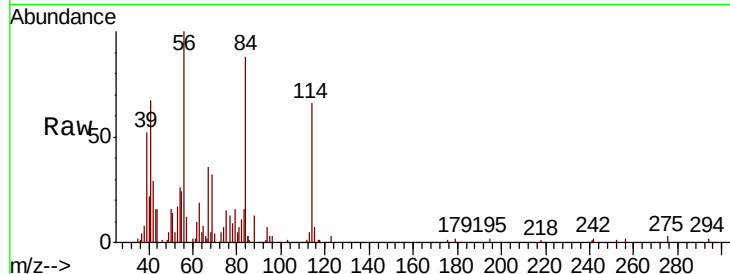
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Cvclohexane
Concen: 0.239 ppbv
RT: 7.26 min Scan# 1346
Delta R.T. 0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.3	162.5#
41	99.3	64.8	97.2#

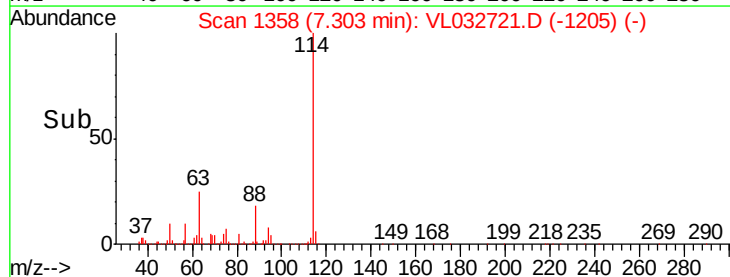
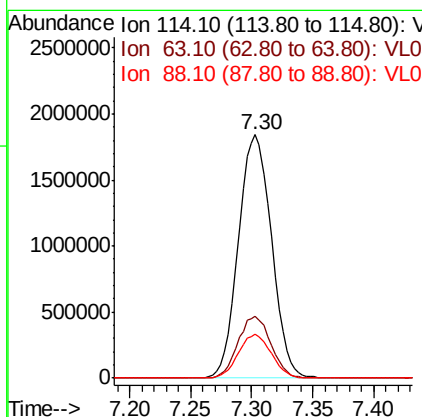
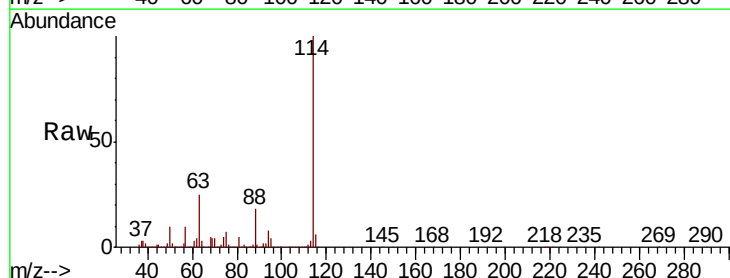
Manual Integrations
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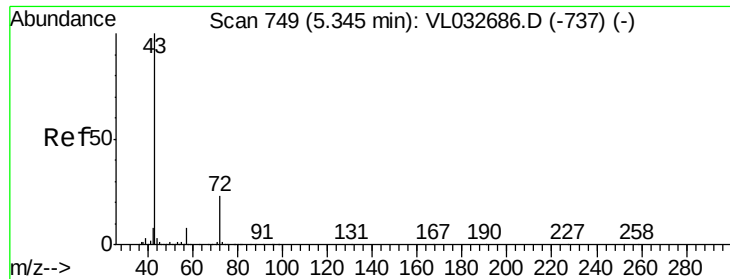
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. -0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.3	21.7	32.5
88	17.9	14.9	22.3





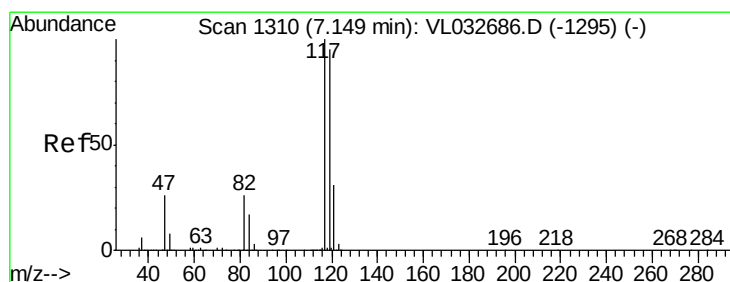
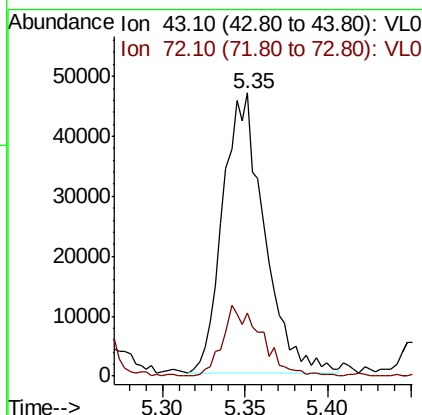
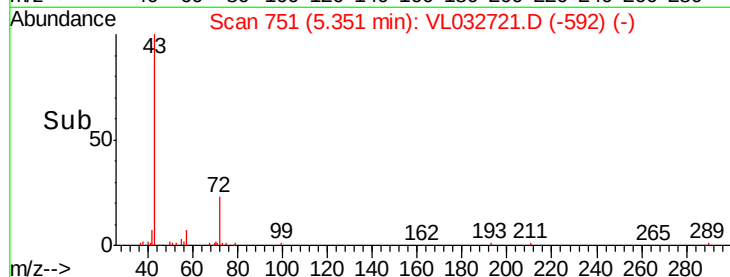
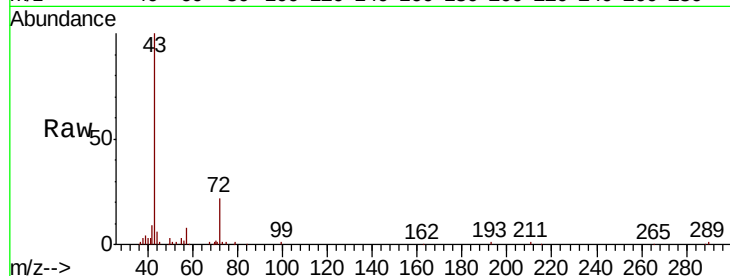
#34
2-Butanone
Concen: 0.439 ppbv
RT: 5.35 min Scan# 751
Delta R.T. 0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion: 43 Resp: 81165
Ion Ratio Lower Upper
43 100
72 24.2 18.6 27.8

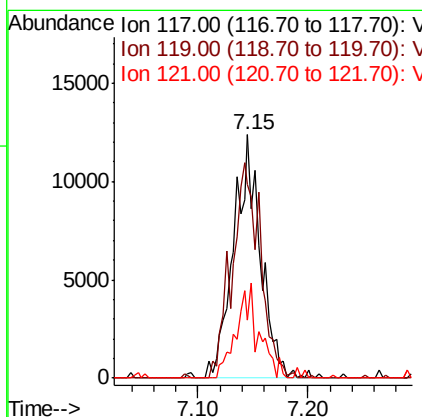
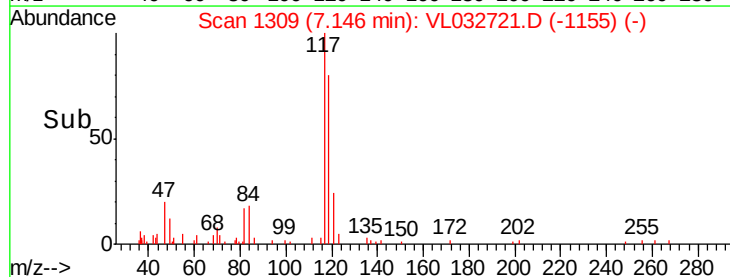
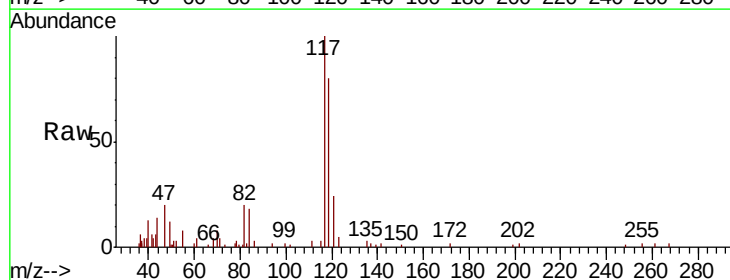
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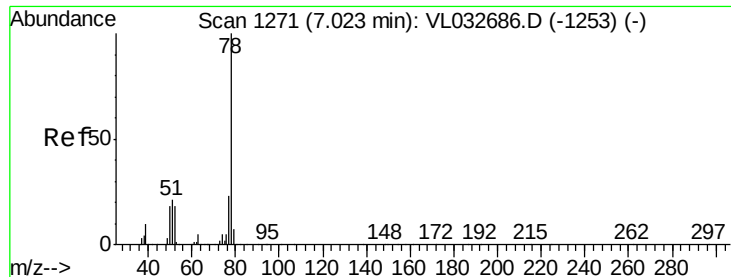
MMDadoda
11/12/2018 12:30:08 PM



#35
Carbon Tetrachloride
Concen: 0.086 ppbv m
RT: 7.15 min Scan# 1309
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion: 117 Resp: 21091
Ion Ratio Lower Upper
117 100
119 79.6 75.7 113.5
121 23.7 24.7 37.1#





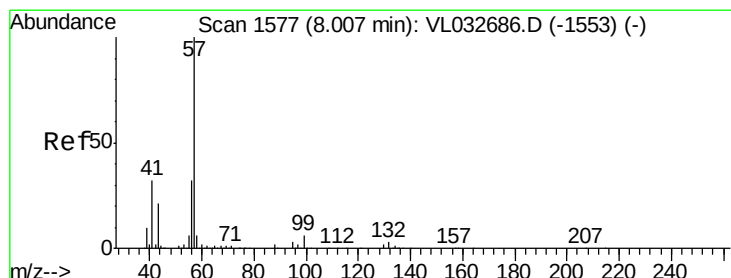
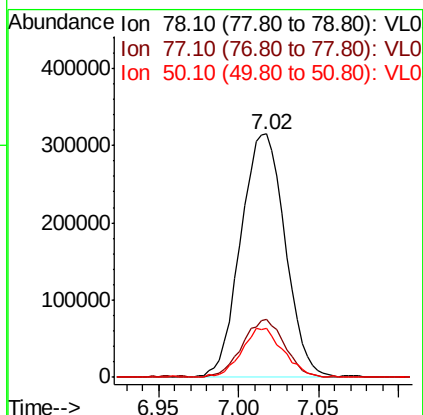
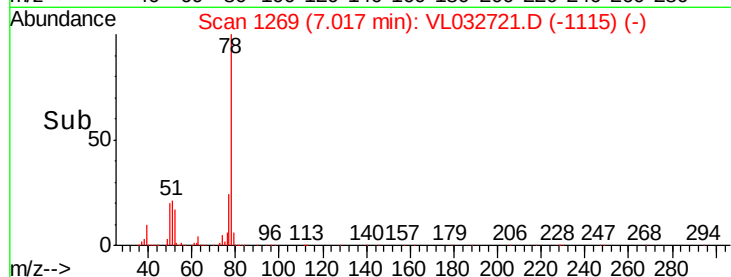
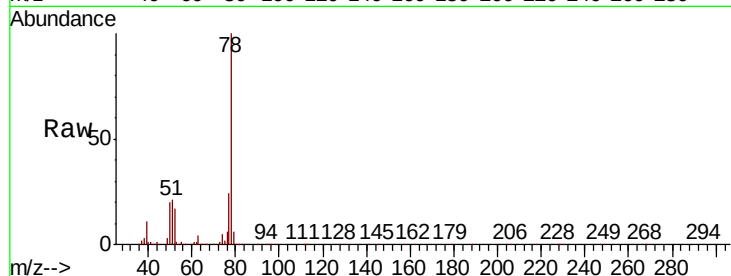
#36
Benzene
Concen: 2.125 ppbv
RT: 7.02 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampleId :
SV-01

Tot Ion	78	Resp	595697
Ion	Ratio	Lower	Upper
78	100		
77	23.4	18.1	27.1
50	20.1	15.1	22.7

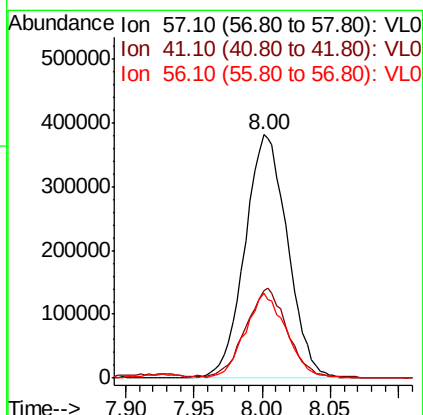
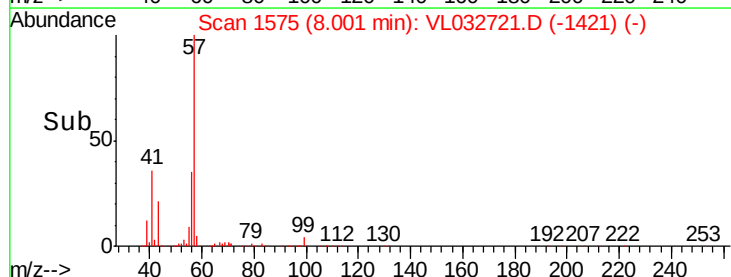
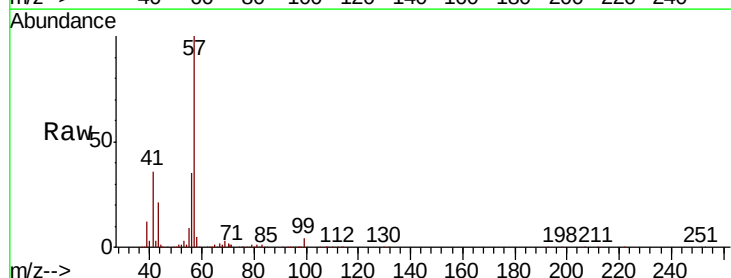
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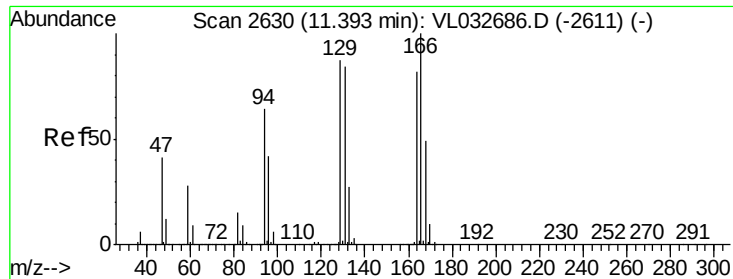
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 1.717 ppbv
RT: 8.00 min Scan# 1575
Delta R.T. -0.00 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion	57	Resp	821330
Ion	Ratio	Lower	Upper
57	100		
41	36.8	24.7	37.1
56	34.3	25.0	37.4





#52

Tetrachloroethene

Concen: 0.233 ppbv m

RT: 11.38 min Scan# 2626

Delta R.T. -0.01 min

Lab File: VL032721.D

Acq: 7 Nov 2018 17:40

Instrument :

MSVOA_L

ClientSampled :

SV-01

Tot Ion:164 Resp: 22795

Ion Ratio Lower Upper

164 100

166 153.1 100.5 150.7#

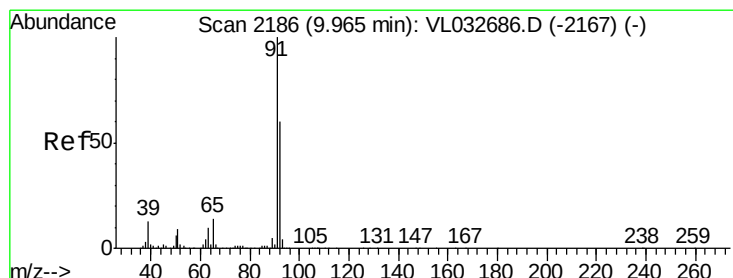
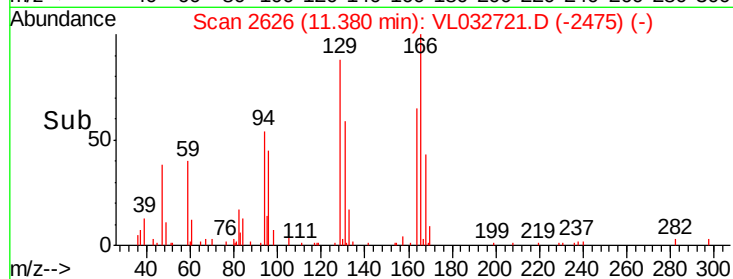
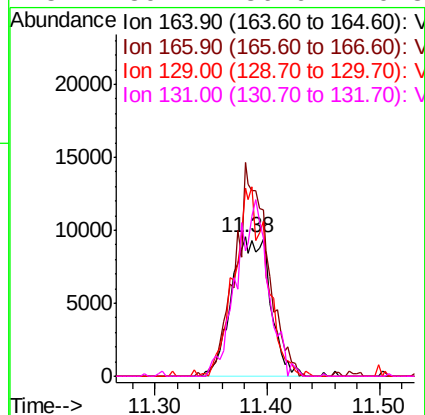
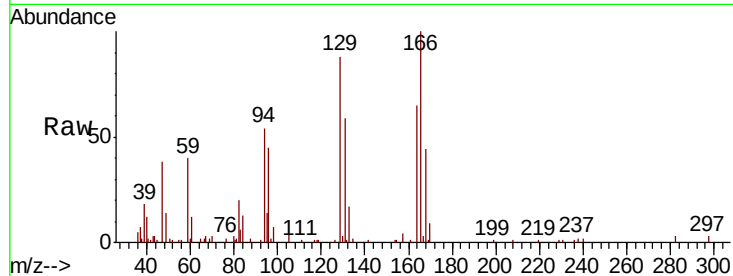
129 134.7 90.0 135.0

131 89.7 86.6 129.8

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#53

Toluene

Concen: 15.398 ppbv

RT: 9.96 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL032721.D

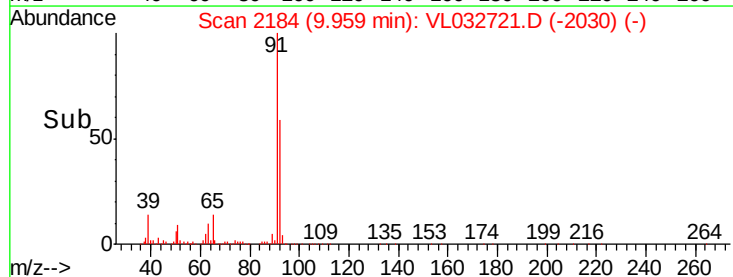
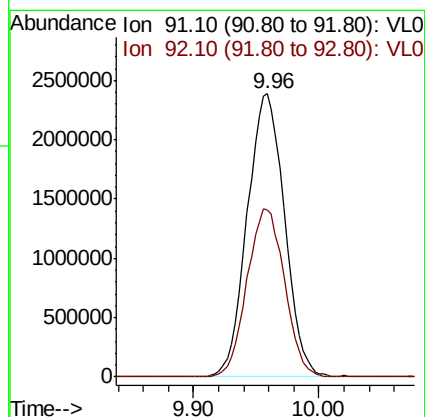
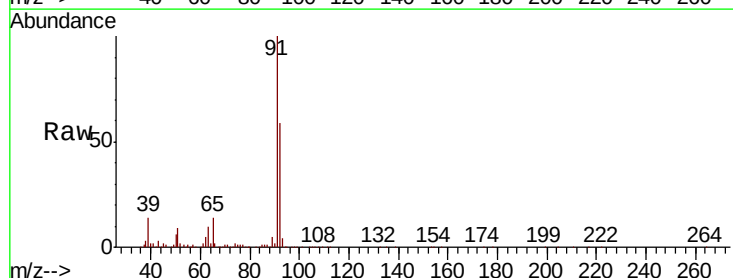
Acq: 7 Nov 2018 17:40

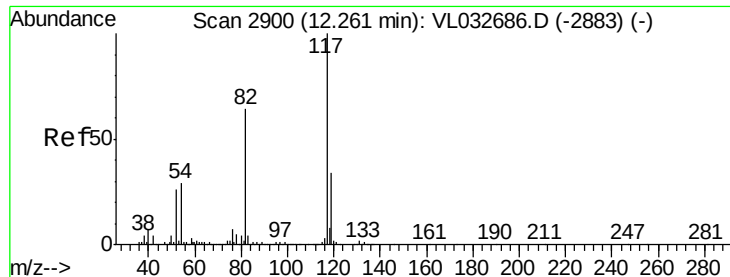
Tgt Ion: 91 Resp: 4946797

Ion Ratio Lower Upper

91 100

92 59.7 48.4 72.6





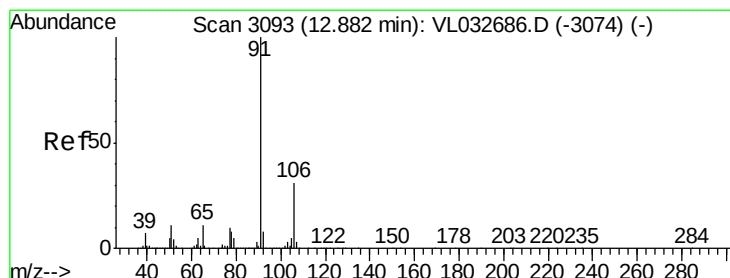
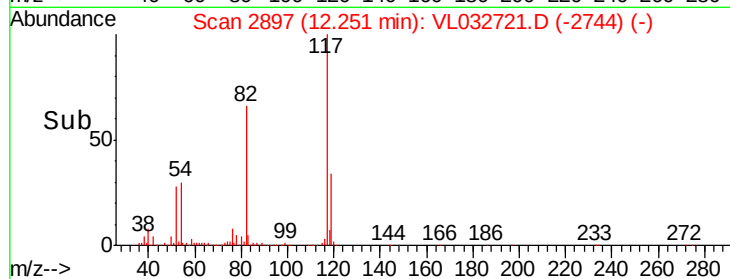
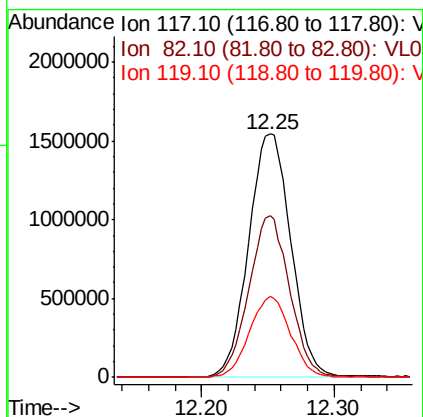
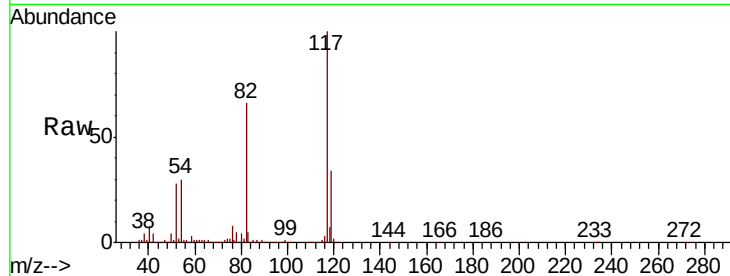
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. -0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion:117 Resp: 3415643
Ion Ratio Lower Upper
117 100
82 64.5 52.7 79.1
119 32.4 26.7 40.1

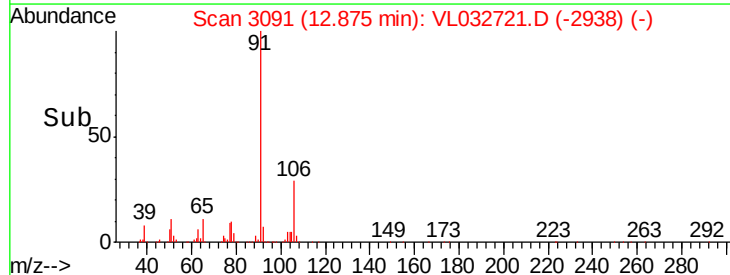
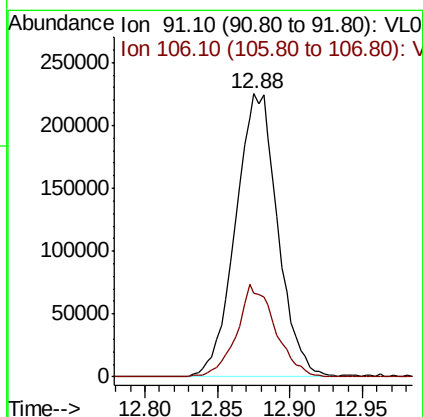
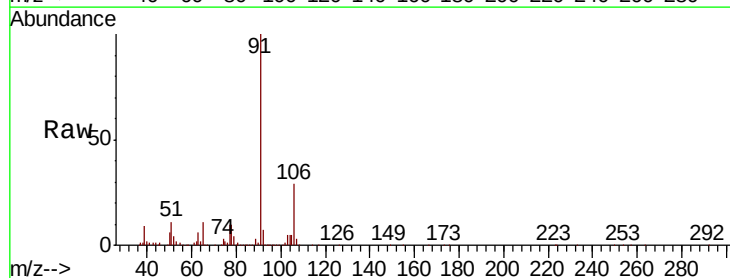
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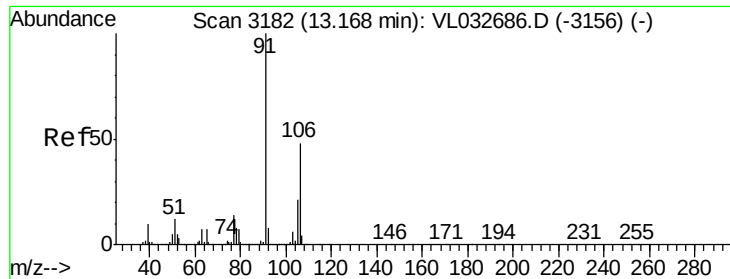
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#58
Ethyl Benzene
Concen: 1.139 ppbv
RT: 12.88 min Scan# 3091
Delta R.T. -0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion: 91 Resp: 452043
Ion Ratio Lower Upper
91 100
106 29.3 24.2 36.2





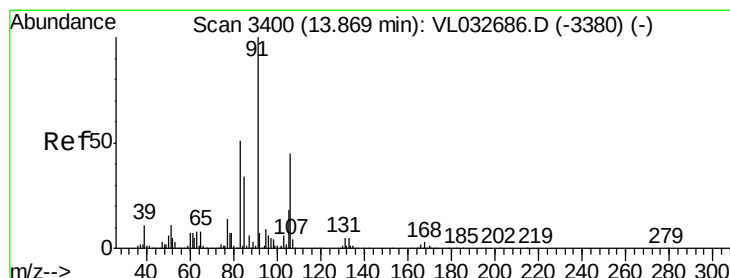
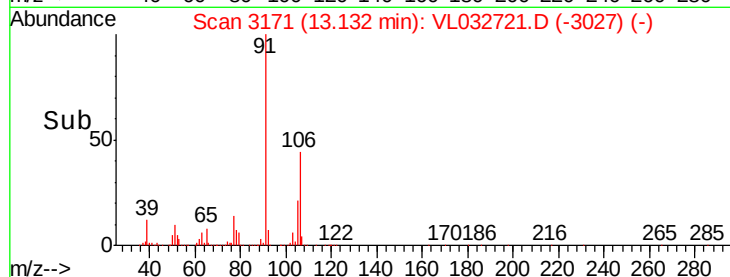
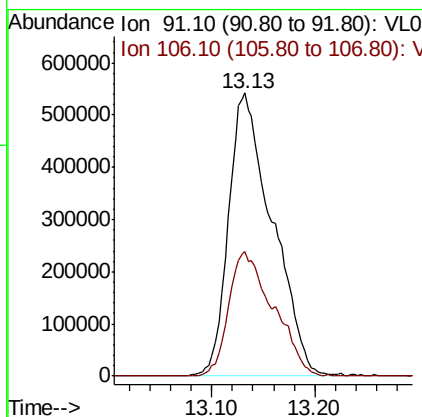
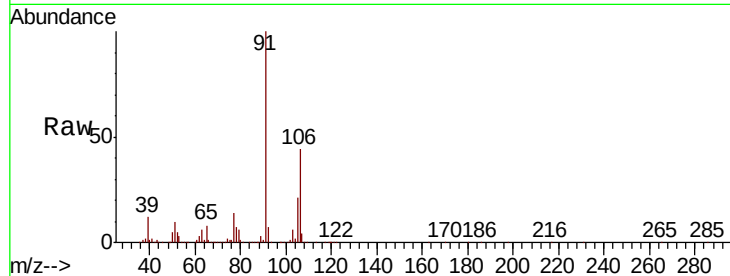
#59
m/p-Xylene
Concen: 4.517 ppbv
RT: 13.13 min Scan# 3171
Delta R.T. -0.04 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion: 91 Resp: 1595989
Ion Ratio Lower Upper
91 100
106 45.0 35.9 53.9

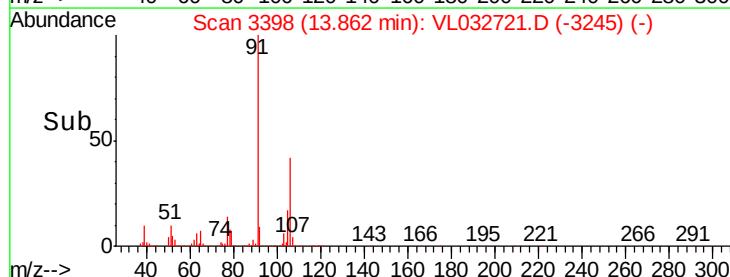
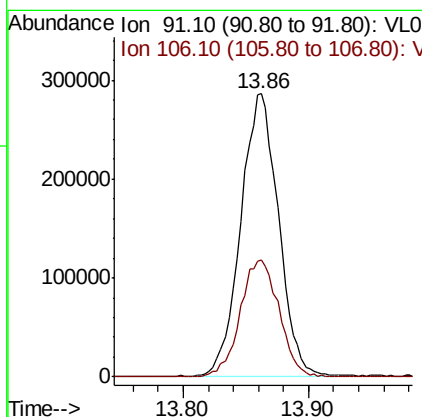
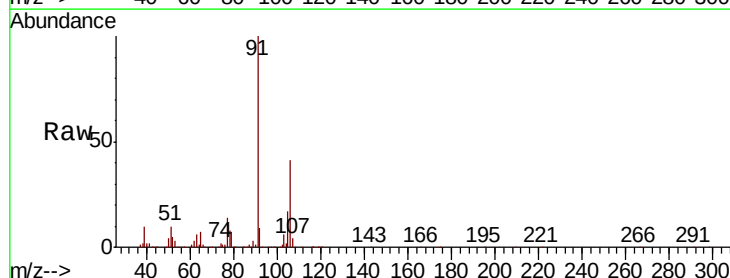
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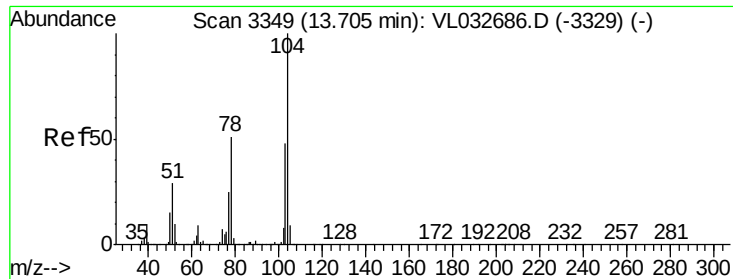
MMDadoda
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#60
o-Xylene
Concen: 1.756 ppbv
RT: 13.86 min Scan# 3398
Delta R.T. -0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion: 91 Resp: 598651
Ion Ratio Lower Upper
91 100
106 42.7 22.1 66.1





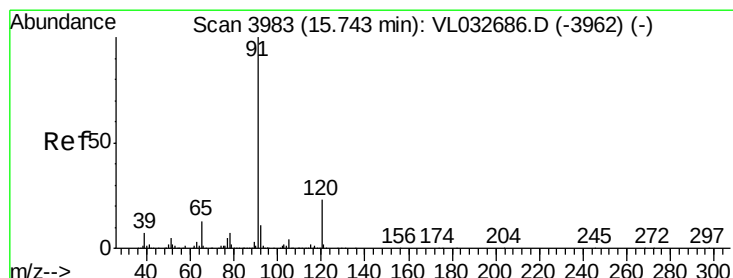
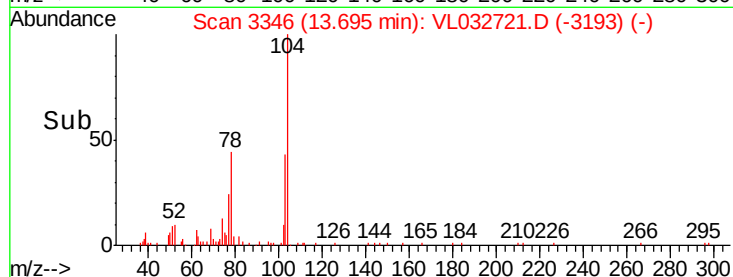
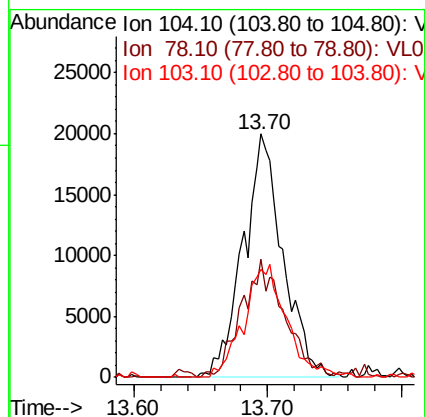
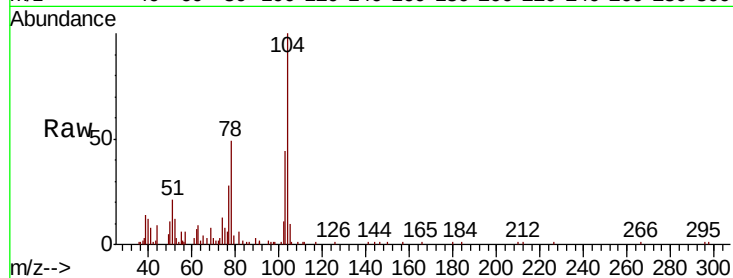
#61
Stvrene
Concen: 0.179 ppbv m
RT: 13.70 min Scan# 3346
Delta R.T. -0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion	Ratio	Lower	Upper
104	100		
78	53.5	42.8	64.2
103	49.6	37.4	56.0

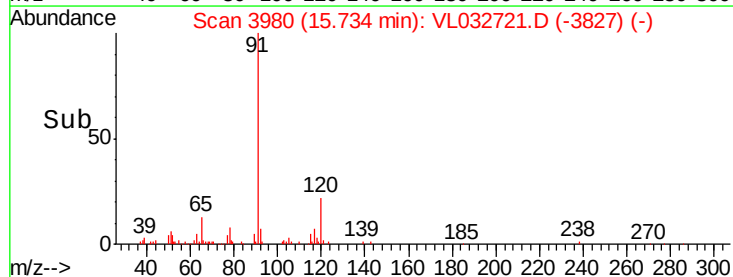
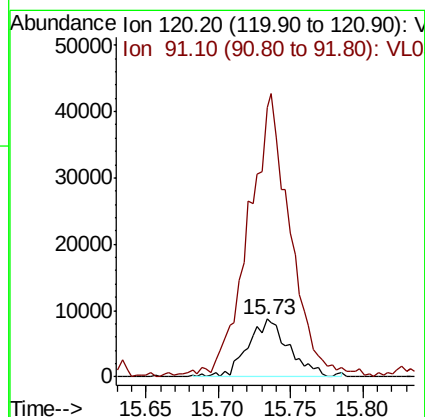
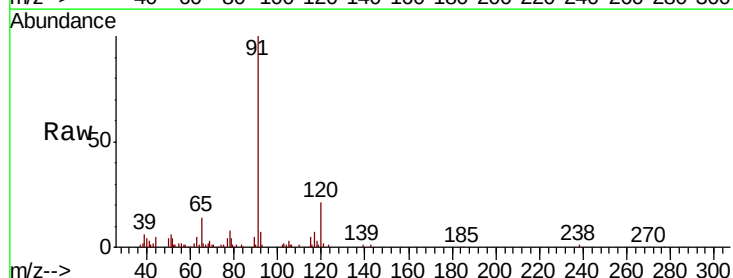
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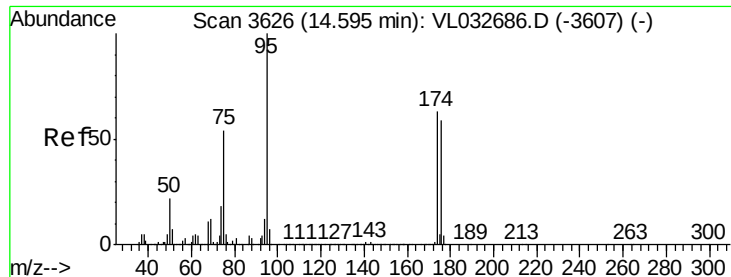
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#64
n-propylbenzene
Concen: 0.143 ppbv m
RT: 15.73 min Scan# 3980
Delta R.T. -0.01 min
Lab File: VL032721.D
Acq: 7 Nov 2018 17:40

Tgt Ion	Ratio	Lower	Upper
120	100		
91	505.7	390.2	585.2





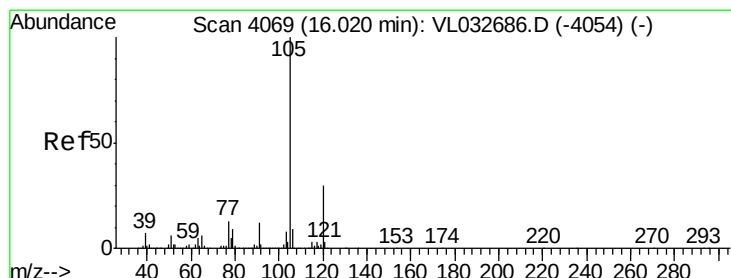
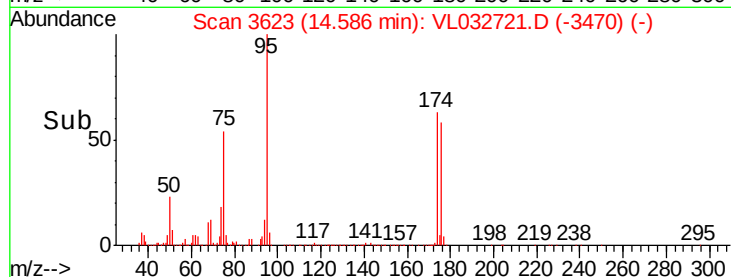
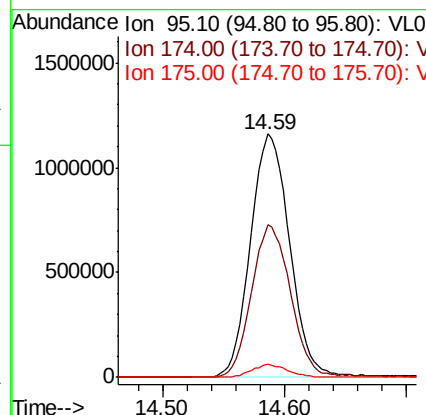
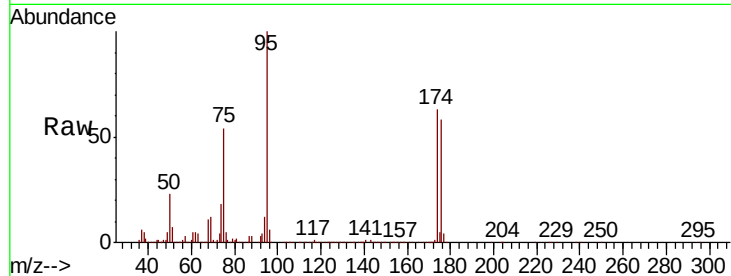
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.101 ppbv
 RT: 14.59 min Scan# 3623
 Delta R.T. -0.01 min
 Lab File: VL032721.D
 Acq: 7 Nov 2018 17:40

Instrument :
 MSVOA_L
 ClientSampled :
 SV-01

Tot Ion: 95 Resp: 2568797
 Ion Ratio Lower Upper
 95 100
 174 63.7 46.0 69.0
 175 4.8 3.4 5.0

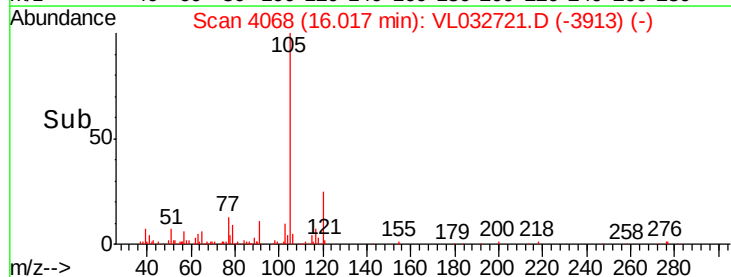
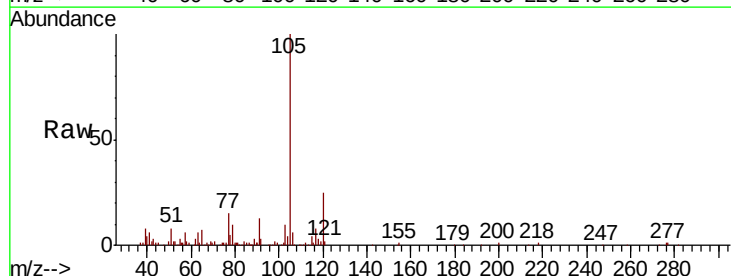
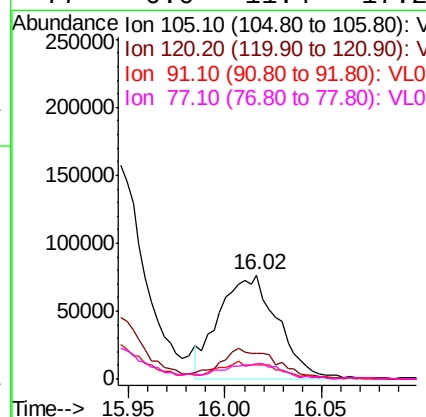
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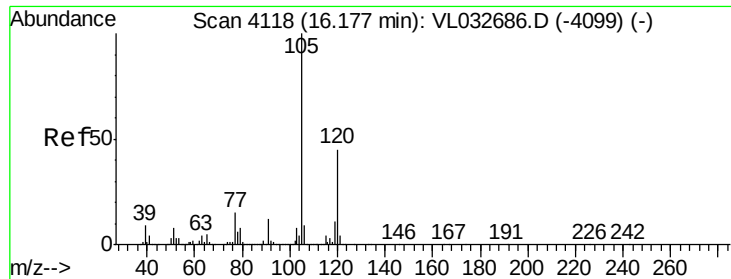
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#72
 4-Ethyltoluene
 Concen: 0.446 ppbv m
 RT: 16.02 min Scan# 4068
 Delta R.T. -0.00 min
 Lab File: VL032721.D
 Acq: 7 Nov 2018 17:40

Tgt Ion: 105 Resp: 161745
 Ion Ratio Lower Upper
 105 100
 120 28.9 23.7 35.5
 91 17.1 10.4 15.6#
 77 0.0 11.4 17.2#





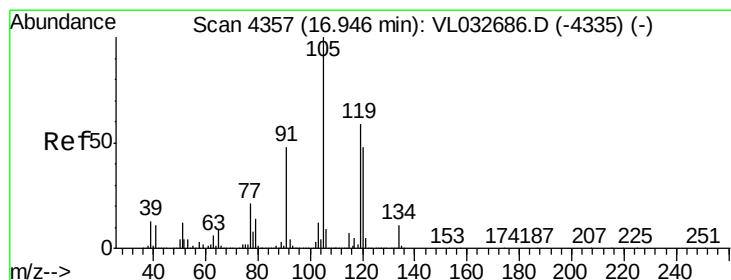
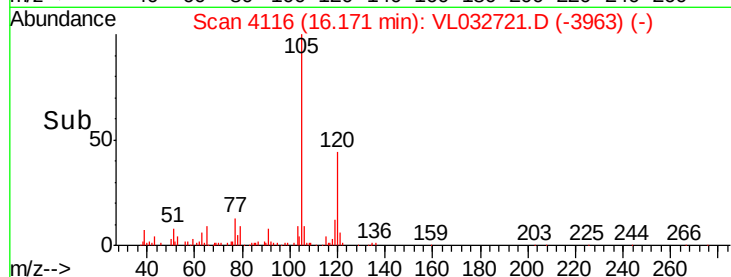
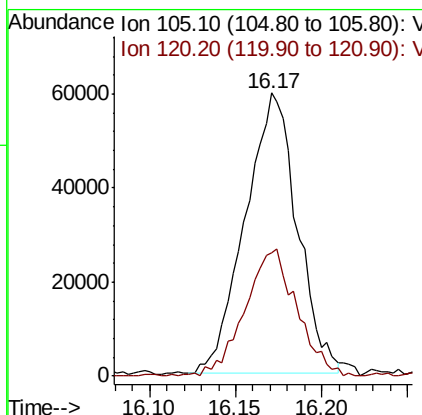
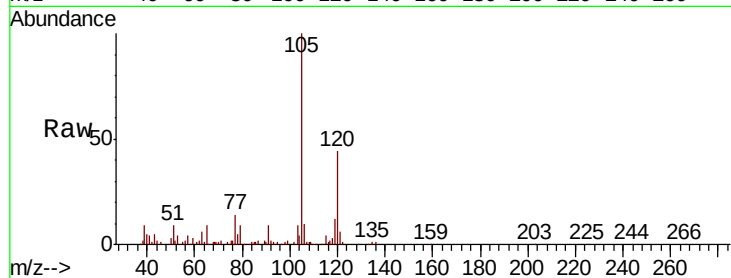
#73
 1,3,5-Trimethylbenzene
 Concen: 0.355 ppbv
 RT: 16.17 min Scan# 4116
 Delta R.T. -0.01 min
 Lab File: VL032721.D
 Acq: 7 Nov 2018 17:40

Instrument :
 MSVOA_L
 ClientSampled :
 SV-01

Tot Ion	Ratio	Lower	Upper
105	100		
120	43.2	35.4	53.2

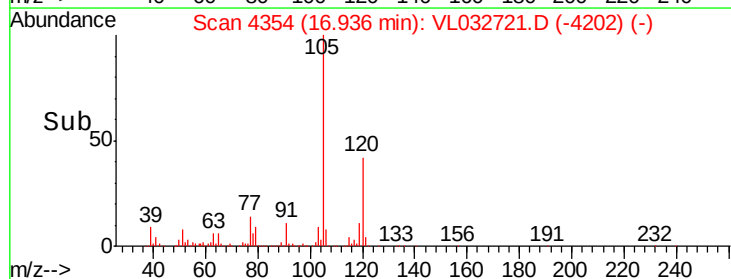
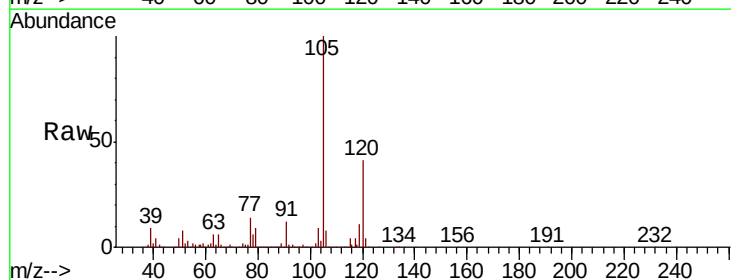
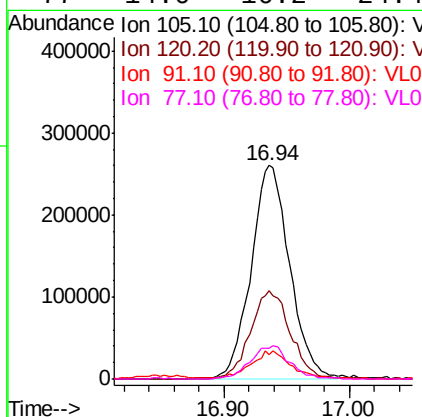
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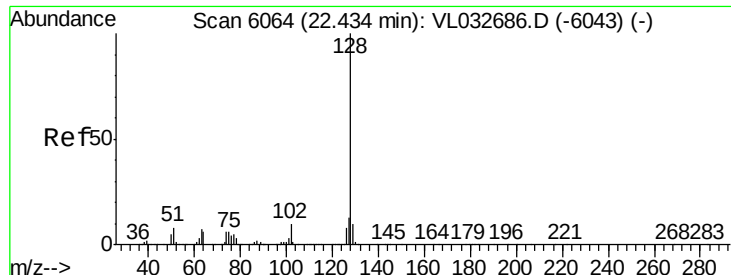
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#74
 1,2,4-Trimethylbenzene
 Concen: 1.477 ppbv
 RT: 16.94 min Scan# 4354
 Delta R.T. -0.01 min
 Lab File: VL032721.D
 Acq: 7 Nov 2018 17:40

Tgt Ion	Ratio	Lower	Upper
105	100		
120	41.5	35.8	53.8
91	10.9	33.2	49.8#
77	14.0	16.2	24.4#





#79

Naphthalene

Concen: 0.141 ppbv m

RT: 22.43 min Scan# 6062

Delta R.T. -0.01 min

Lab File: VL032721.D

Acq: 7 Nov 2018 17:40

Instrument :

MSVOA_L

ClientSampleId :

SV-01

Tot Ion:	128	Resp:	32992
Ion Ratio	Lower	Upper	
128	100		
127	11.6	10.3	15.5
129	12.8	8.6	13.0

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