

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL112918\
 Data File : VL032835.D
 Acq On : 29 Nov 2018 15:23
 Operator : SY/AP
 Sample : J6088-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1

Manual Integrations
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 12/4/2018 8:38:28 AM

Quant Time: Dec 03 12:33:59 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1231182	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3088520	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2991359	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2272679	10.16	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	97855	0.553	ppbv	97
3) Chlorodifluoromethane	3.02	51	676506m	6.931	ppbv	
4) Chloromethane	3.18	50	26503	0.490	ppbv #	86
9) Propene	3.06	41	67124m	1.718	ppbv	
10) Heptane	8.26	43	89572	0.601	ppbv	97
11) Trichlorofluoromethane	4.01	101	158927	0.953	ppbv	93
13) Ethanol	3.66	45	620964	48.535	ppbv	99
15) Acetone	3.90	43	2684262	23.874	ppbv	99
19) Isopropyl Alcohol	4.04	45	586866	7.835	ppbv #	1
20) Methylene Chloride	4.42	84	218935	3.761	ppbv	97
26) Hexane	5.79	57	415964	3.566	ppbv #	47
30) Cyclohexane	7.25	84	20147m	0.197	ppbv	
34) 2-Butanone	5.34	43	560916	3.502	ppbv	99
35) Carbon Tetrachloride	7.14	117	20117m	0.081	ppbv	
36) Benzene	7.01	78	146515	0.596	ppbv	95
38) Trichloroethene	7.97	130	90249	0.907	ppbv	98
41) Tetrahydrofuran	6.17	42	53700	0.584	ppbv	96
44) 2,2,4-Trimethylpentane	8.00	57	311261	0.757	ppbv #	83
52) Tetrachloroethene	11.38	164	74905m	0.876	ppbv	
53) Toluene	9.96	91	3286145	12.808	ppbv	99
58) Ethyl Benzene	12.88	91	275924	0.766	ppbv	90
59) m/p-Xylene	13.13	91	888149	2.771	ppbv	100
60) o-Xylene	13.86	91	267720	0.831	ppbv	96
72) 4-Ethyltoluene	16.01	105	67476	0.191	ppbv #	92
73) 1,3,5-Trimethylbenzene	16.16	105	56156m	0.163	ppbv	
74) 1,2,4-Trimethylbenzene	16.94	105	285696m	0.773	ppbv	
79) Naphthalene	22.42	128	43583m	0.180	ppbv	

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

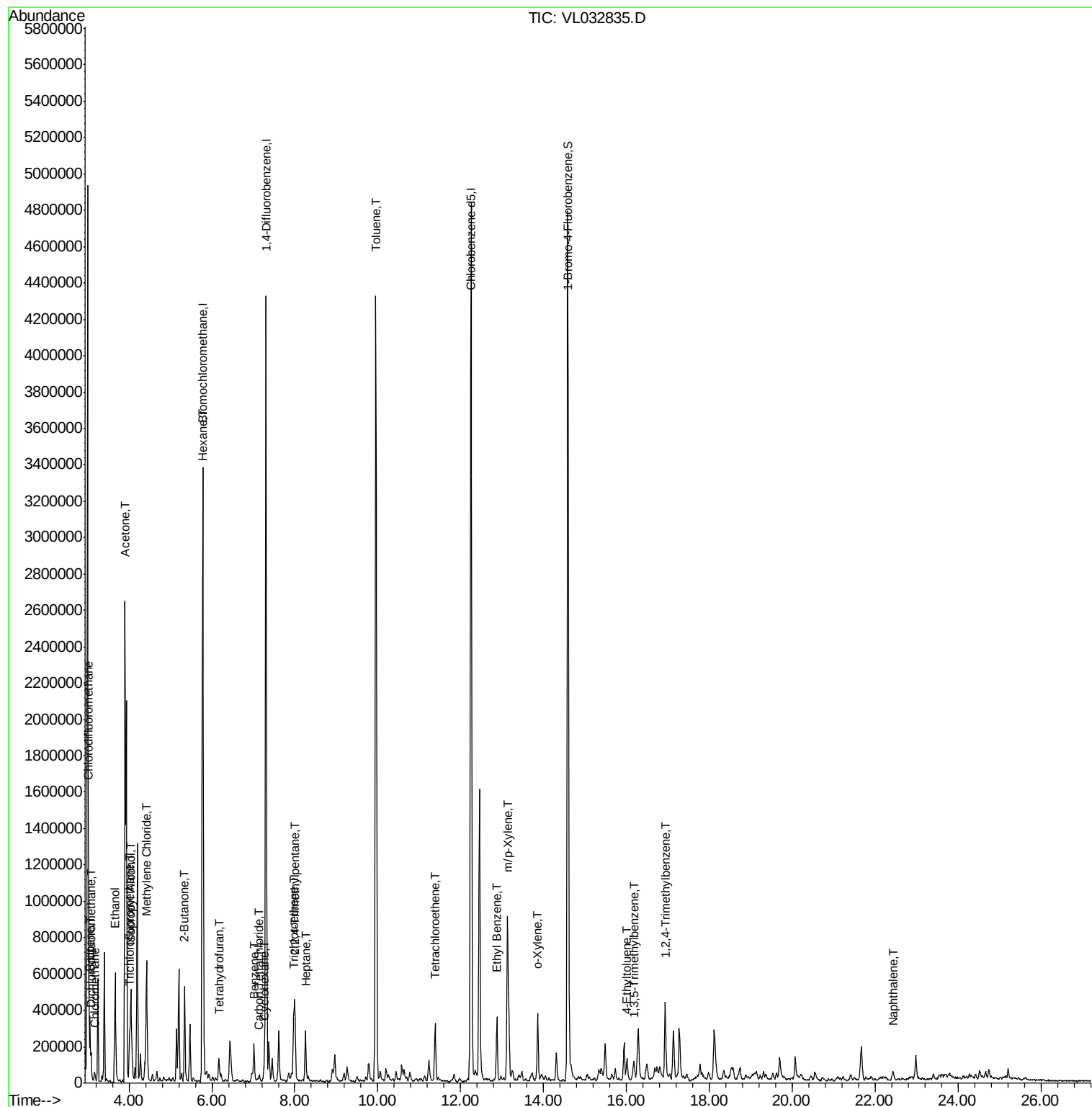
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL112918\
Data File : VL032835.D
Acq On : 29 Nov 2018 15:23
Operator : SY/AP
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Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

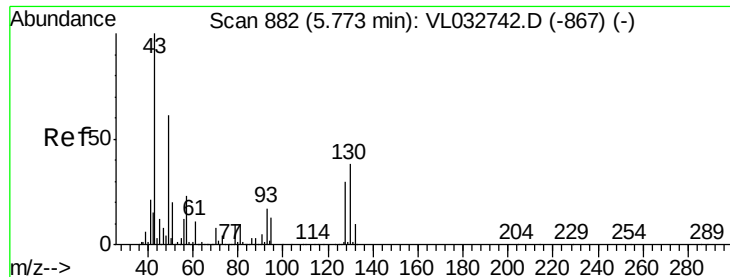
Instrument :
MSVOA_L
ClientSampleId :
IAS-1

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Quant Time: Dec 03 12:33:59 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.00 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Instrument :

MSVOA_L

ClientSampled :

IAS-1

Tgt Ion: 49 Resp: 1231182

Ion Ratio Lower Upper

49 100

128 52.2 24.9 74.6

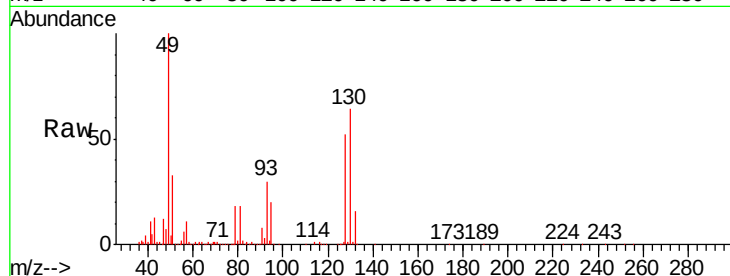
130 66.9 31.4 94.2

Manual Integrations

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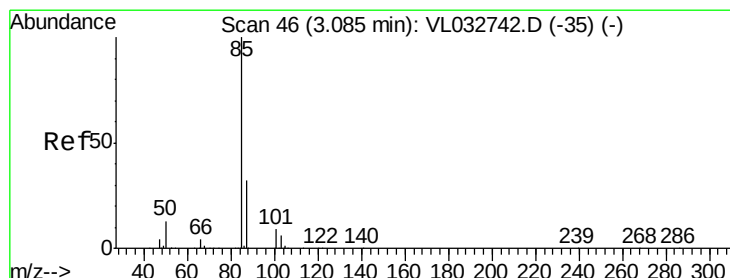
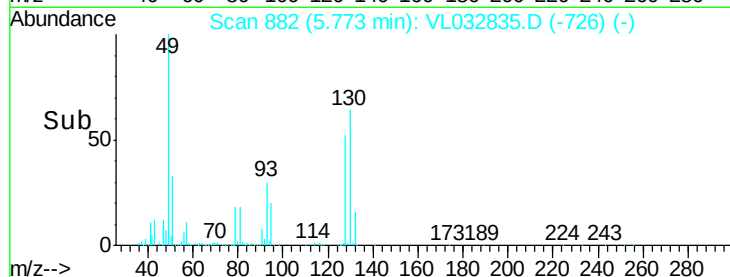
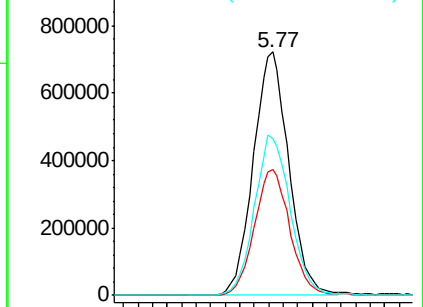
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.553 ppbv

RT: 3.08 min Scan# 45

Delta R.T. -0.00 min

Lab File: VL032835.D

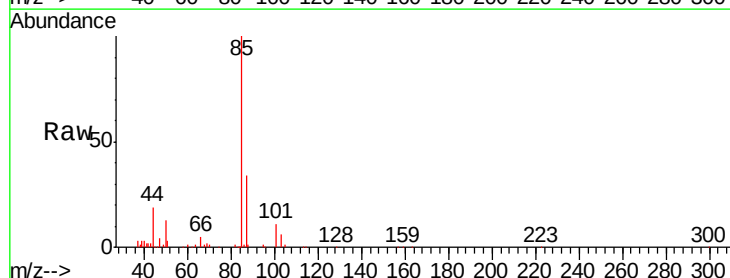
Acq: 29 Nov 2018 15:23

Tgt Ion: 85 Resp: 97855

Ion Ratio Lower Upper

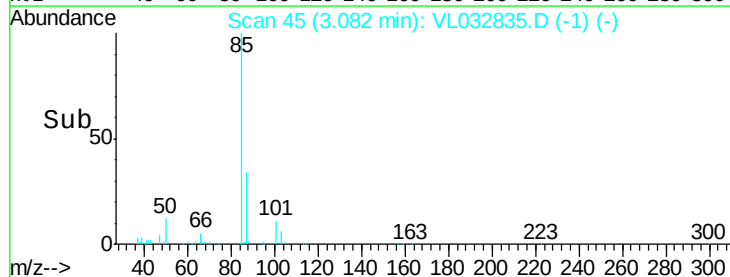
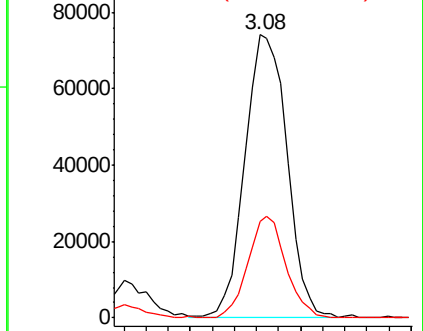
85 100

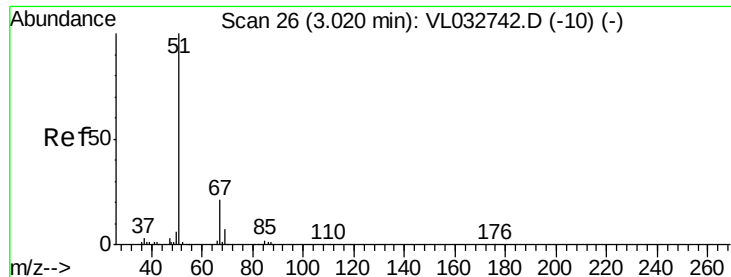
87 34.2 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





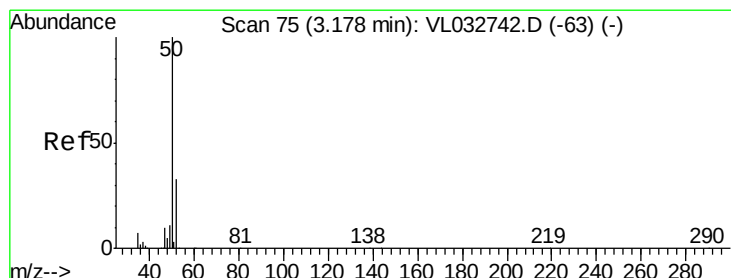
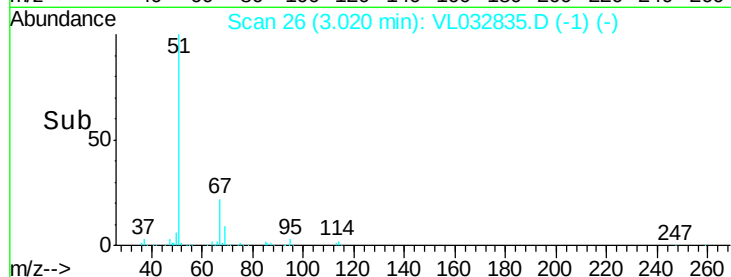
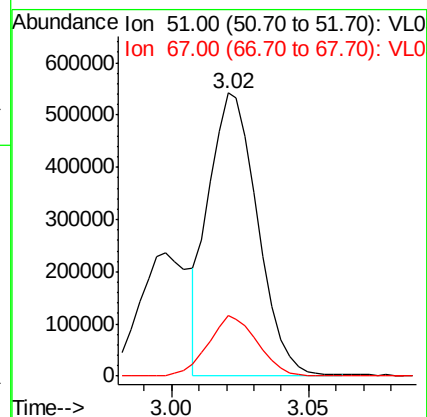
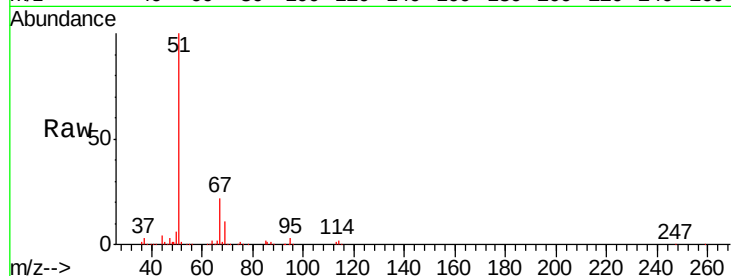
#3
Chlorodifluoromethane
Concen: 6.931 ppbv
RT: 3.02 min Scan# 26
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampleId :
IAS-1

Tgt Ion	Ratio	Lower	Upper
51	100		
67	21.6	16.1	24.1

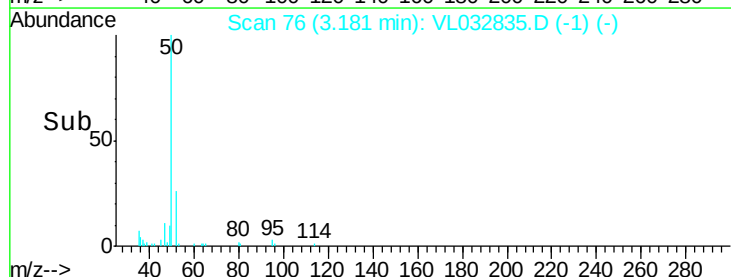
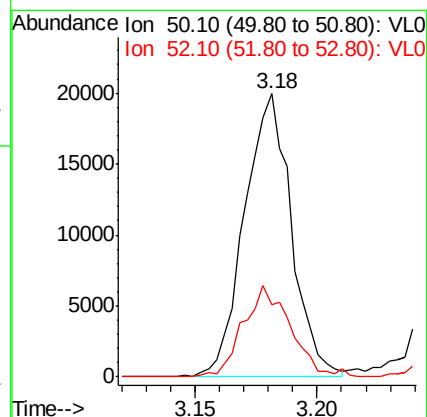
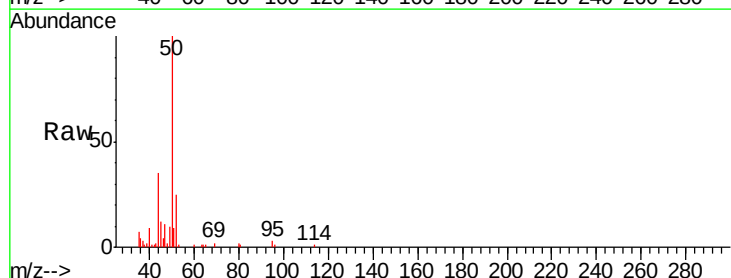
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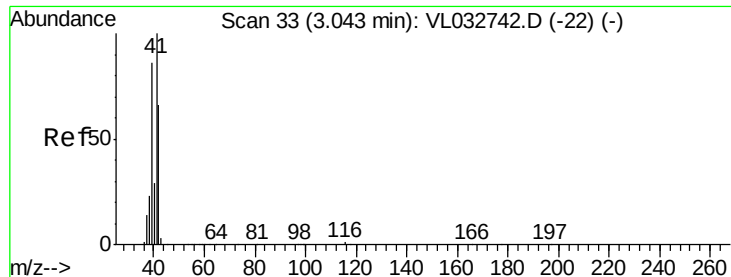
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#4
Chloromethane
Concen: 0.490 ppbv
RT: 3.18 min Scan# 76
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
50	100		
52	25.4	26.6	40.0#





#9

Propene

Concen: 1.718 ppbv m

RT: 3.06 min Scan# 37

Delta R.T. 0.01 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Instrument :

MSVOA_L

ClientSampled :

IAS-1

Tgt Ion: 41 Resp: 67124

Ion Ratio Lower Upper

41 100

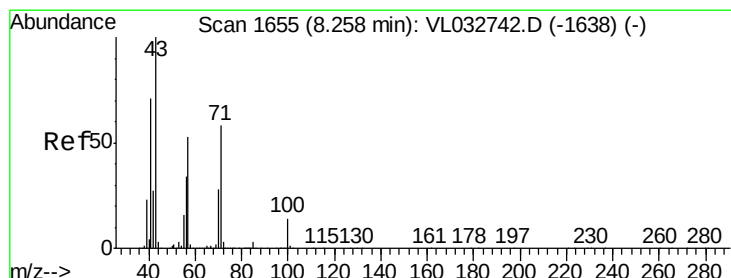
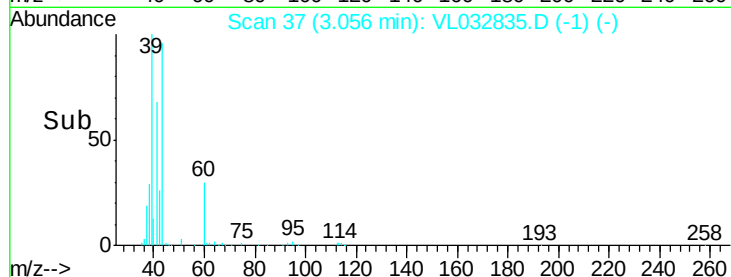
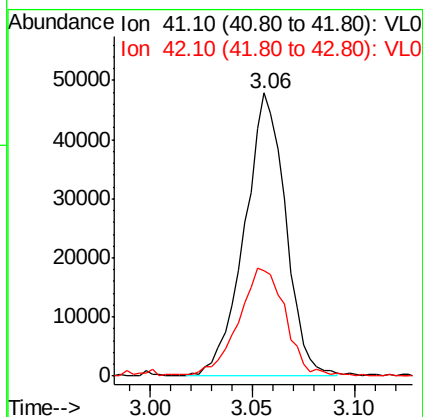
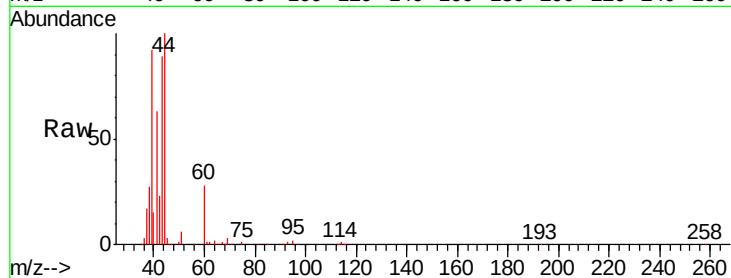
42 136.8 55.0 82.6#

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#10

Heptane

Concen: 0.601 ppbv

RT: 8.26 min Scan# 1656

Delta R.T. 0.00 min

Lab File: VL032835.D

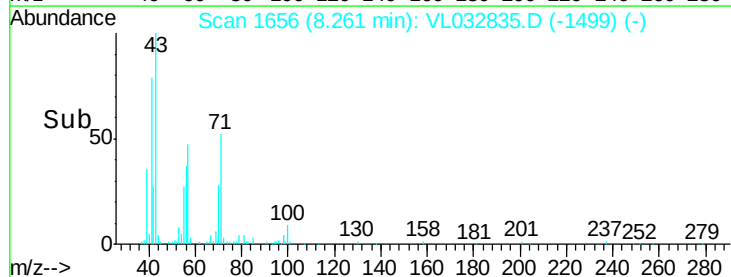
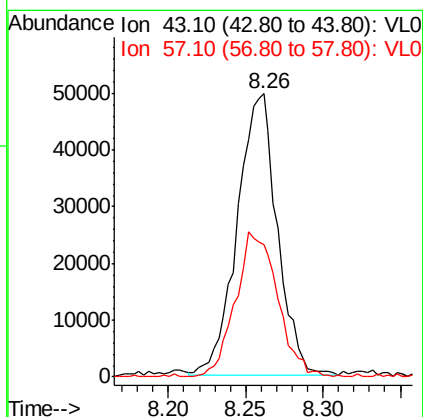
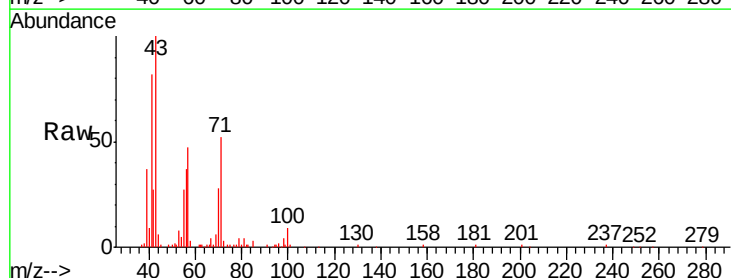
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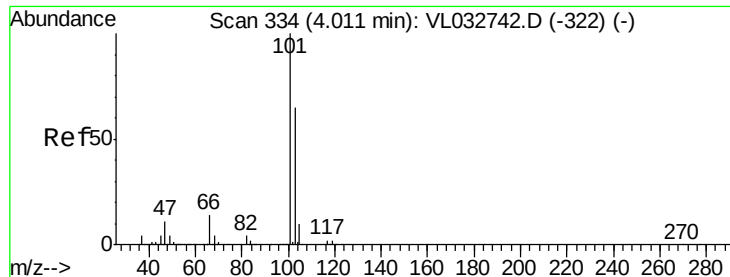
Tgt Ion: 43 Resp: 89572

Ion Ratio Lower Upper

43 100

57 54.6 41.8 62.8





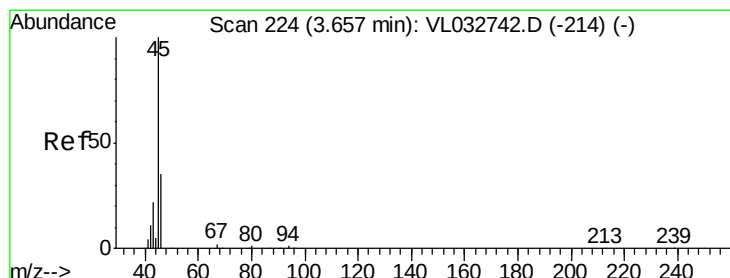
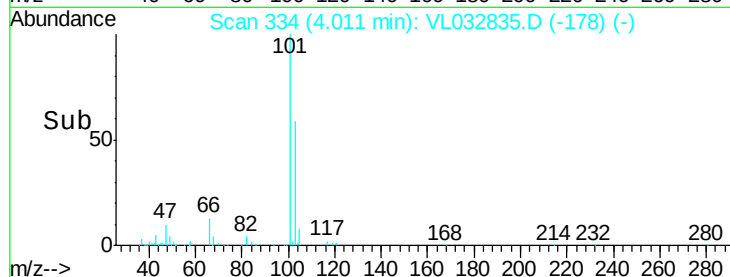
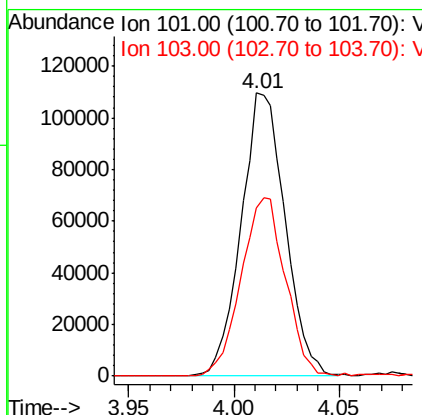
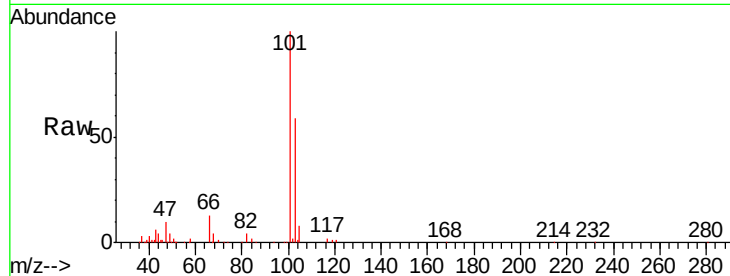
#11
 Trichlorofluoromethane
 Concen: 0.953 ppbv
 RT: 4.01 min Scan# 334
 Delta R.T. 0.00 min
 Lab File: VL032835.D
 Acq: 29 Nov 2018 15:23

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1

Tgt Ion	Ratio	Lower	Upper
101	100		
103	59.3	51.6	77.4

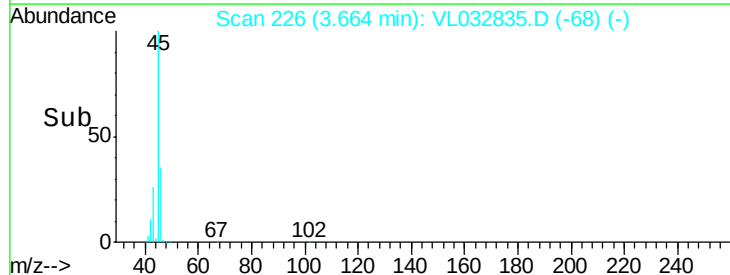
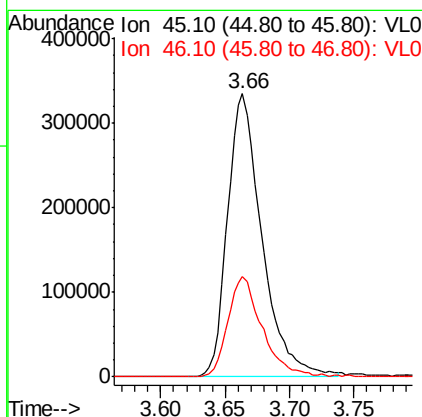
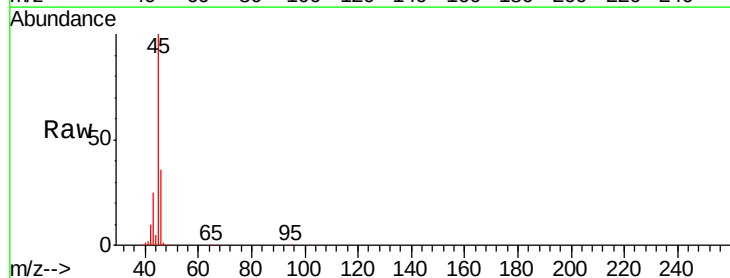
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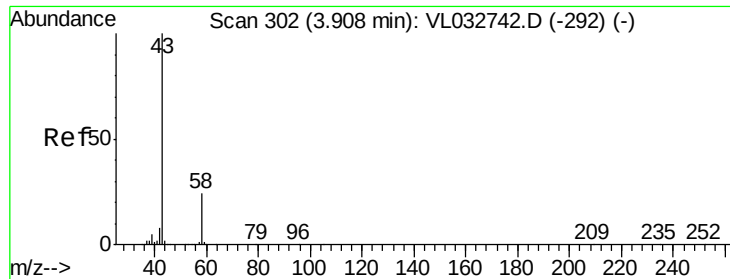
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#13
 Ethanol
 Concen: 48.535 ppbv
 RT: 3.66 min Scan# 226
 Delta R.T. 0.01 min
 Lab File: VL032835.D
 Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
45	100		
46	35.6	14.5	57.9





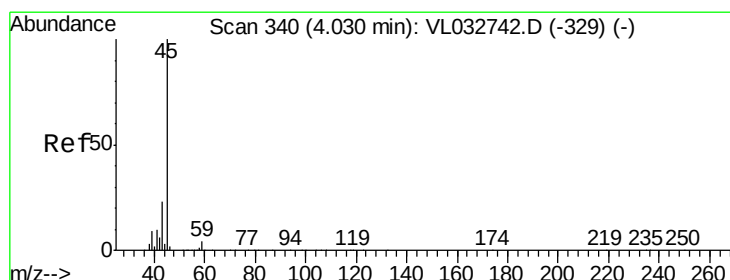
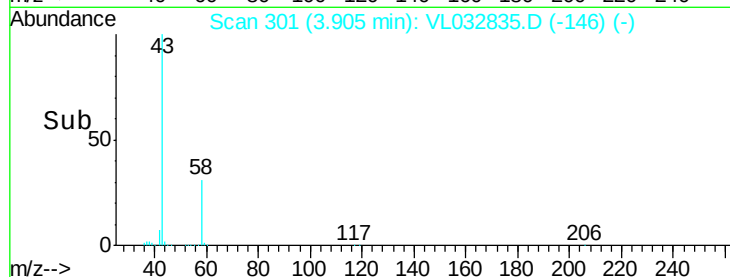
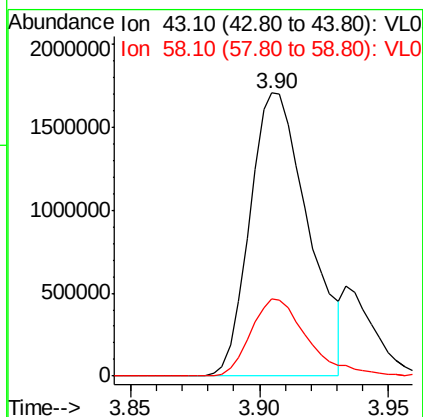
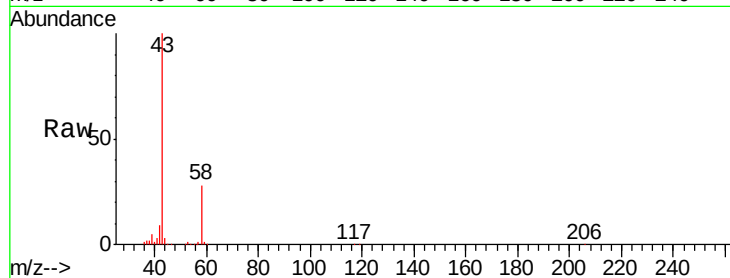
#15
Acetone
Concen: 23.874 ppbv
RT: 3.90 min Scan# 301
Delta R.T. -0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampleId :
IAS-1

Tgt Ion: 43 Resp: 2684262
Ion Ratio Lower Upper
43 100
58 27.1 21.1 31.7

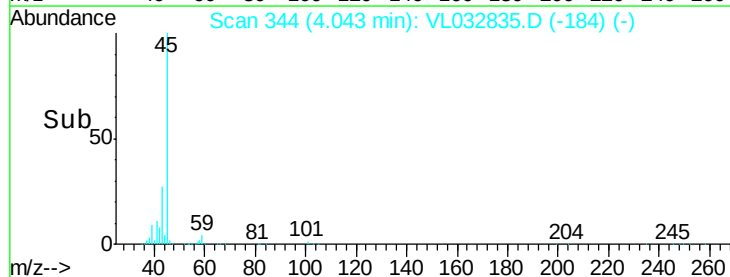
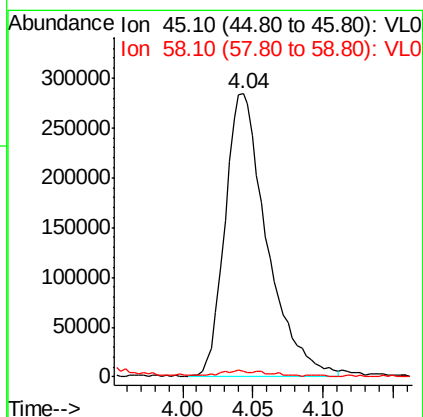
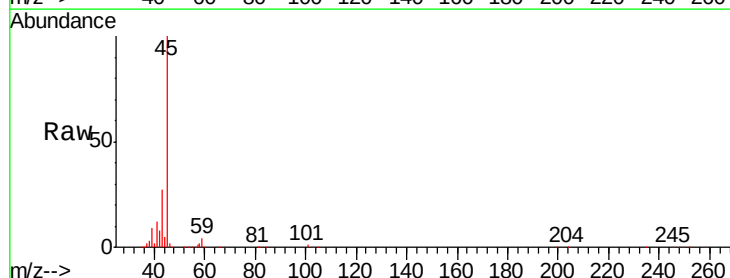
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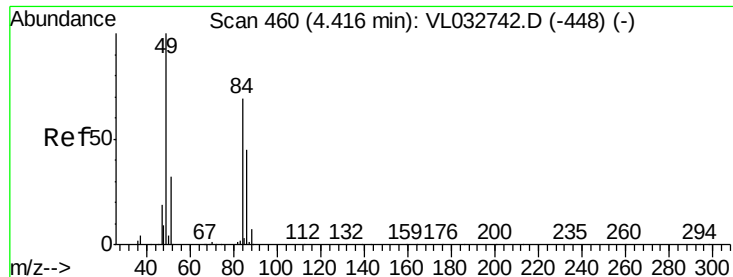
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#19
Isopropyl Alcohol
Concen: 7.835 ppbv
RT: 4.04 min Scan# 344
Delta R.T. 0.01 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion: 45 Resp: 586866
Ion Ratio Lower Upper
45 100
58 123.4 1.4 2.0#





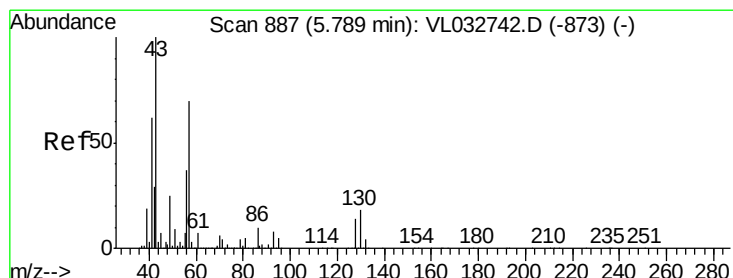
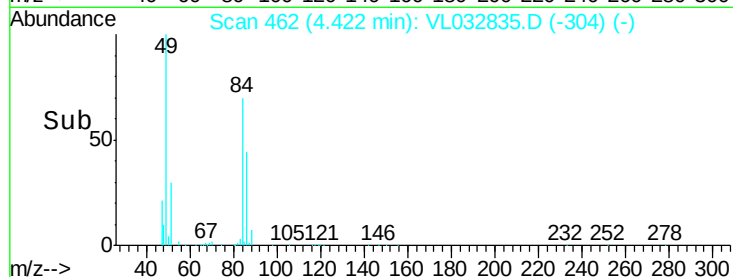
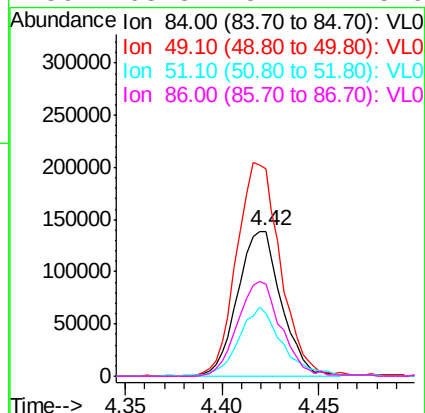
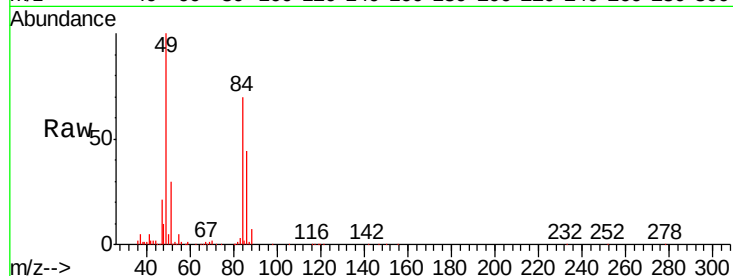
#20
Methylene Chloride
Concen: 3.761 ppbv
RT: 4.42 min Scan# 462
Delta R.T. 0.01 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampled :
IAS-1

Tgt Ion	Ratio	Lower	Upper
84	100		
49	142.2	115.8	173.6
51	42.3	36.9	55.3
86	63.3	52.4	78.6

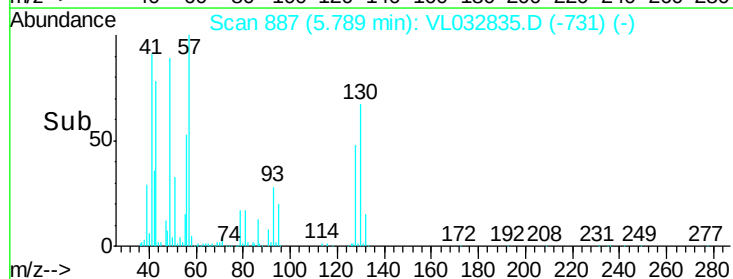
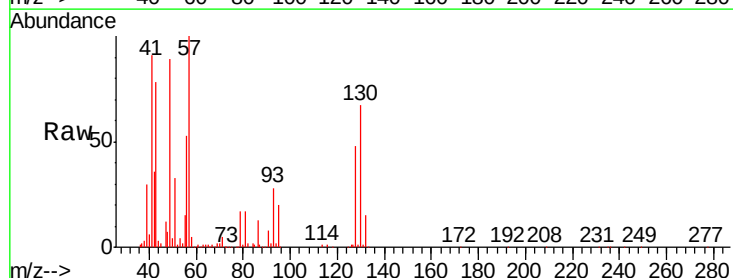
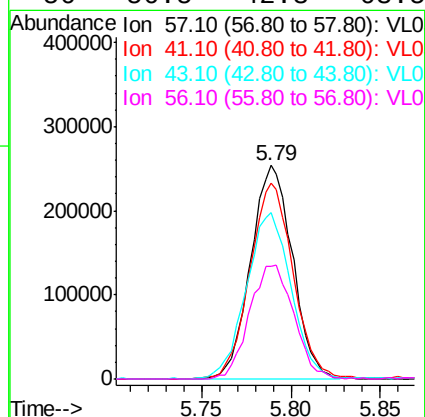
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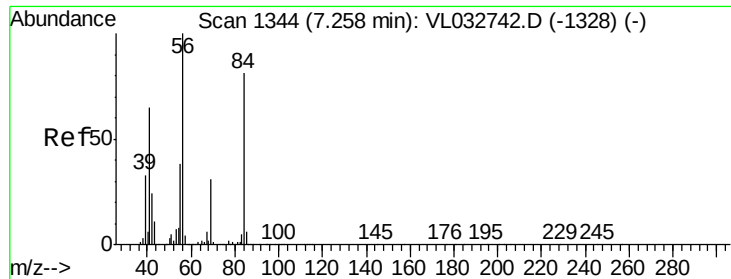
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#26
Hexane
Concen: 3.566 ppbv
RT: 5.79 min Scan# 887
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
57	100		
41	95.4	70.3	105.5
43	84.4	174.0	261.0#
56	56.5	42.3	63.5





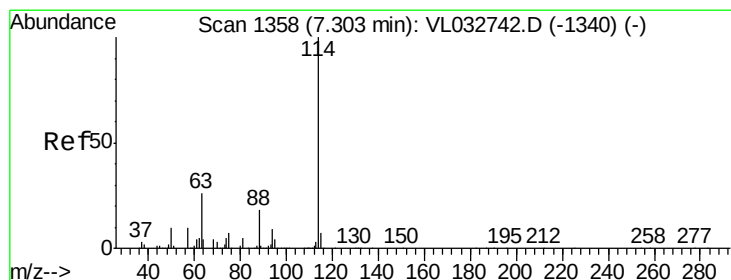
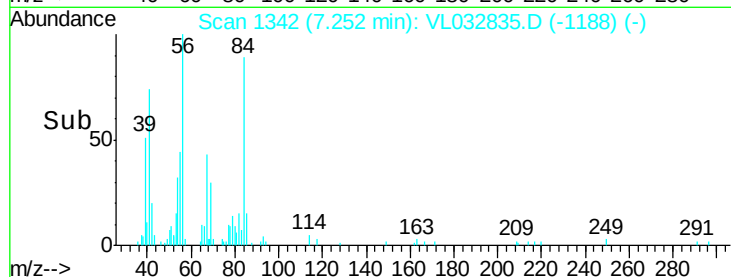
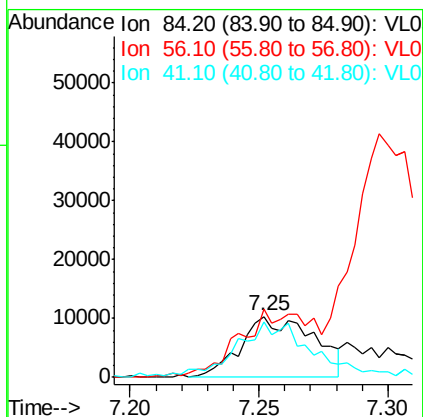
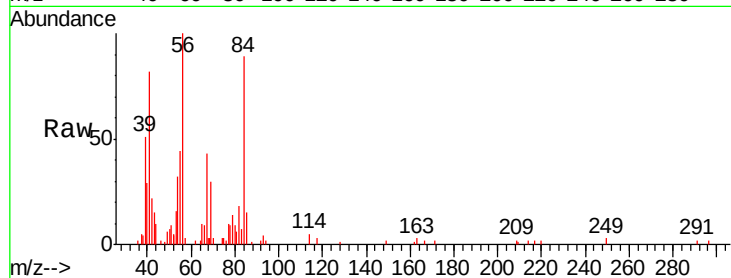
#30
Cyclohexane
Concen: 0.197 ppbv m
RT: 7.25 min Scan# 1342
Delta R.T. -0.01 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampled :
IAS-1

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	105.0	157.4#
41	0.0	65.3	97.9#

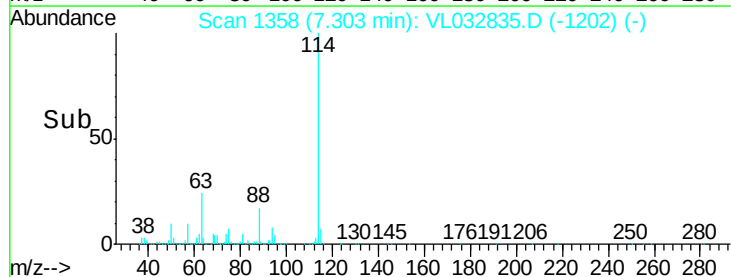
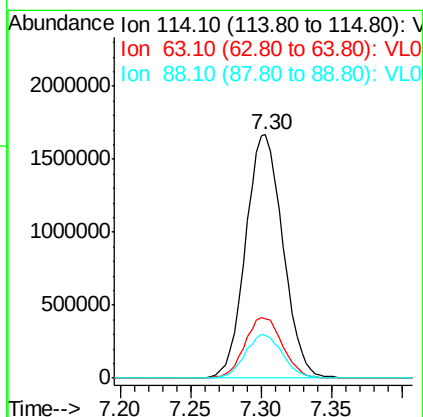
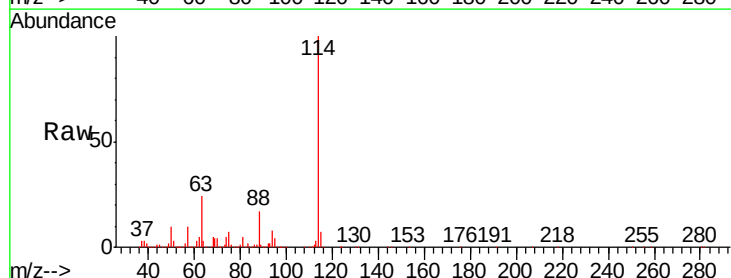
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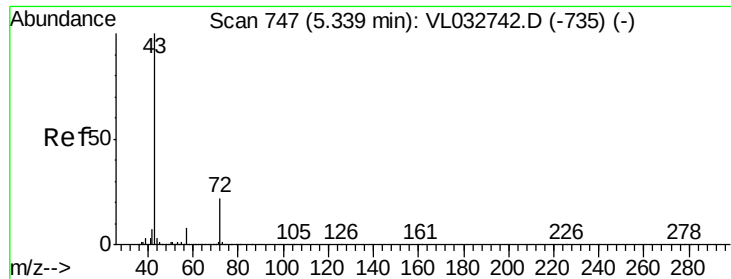
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.9	31.3
88	17.9	14.4	21.6





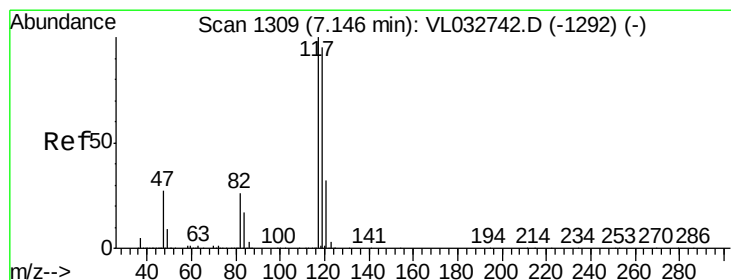
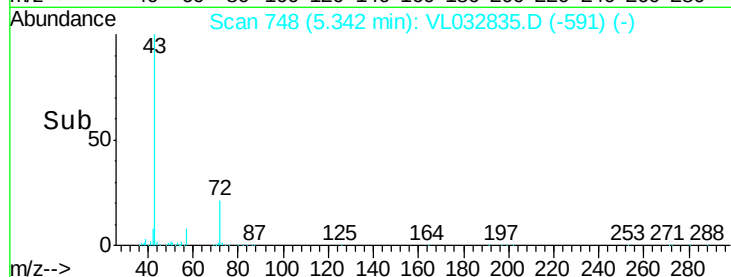
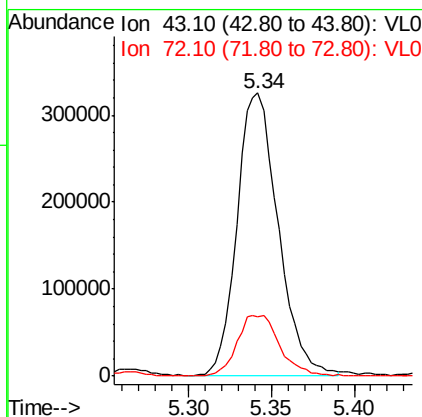
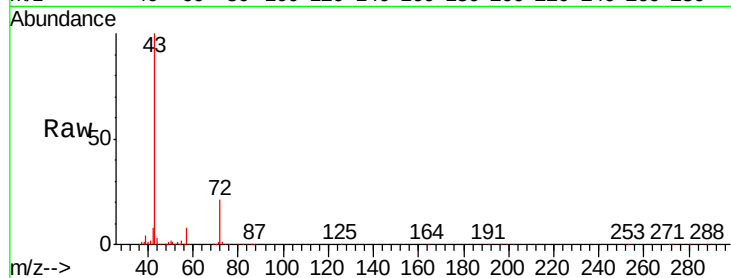
#34
2-Butanone
Concen: 3.502 ppbv
RT: 5.34 min Scan# 748
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampled :
IAS-1

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.4	27.6

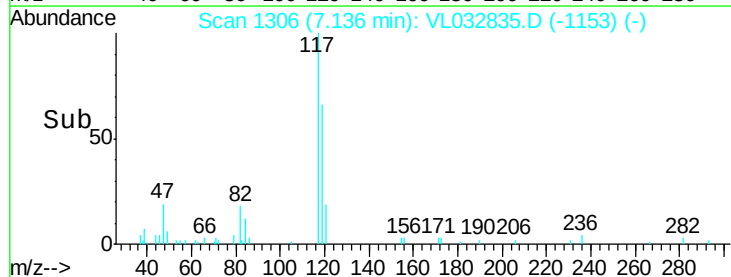
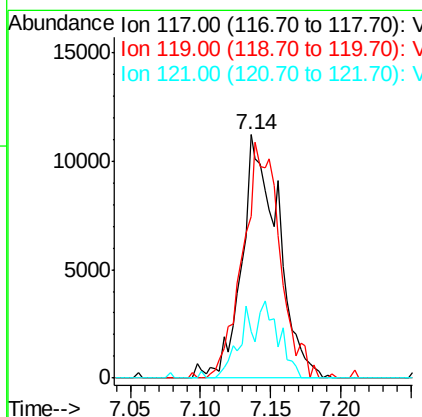
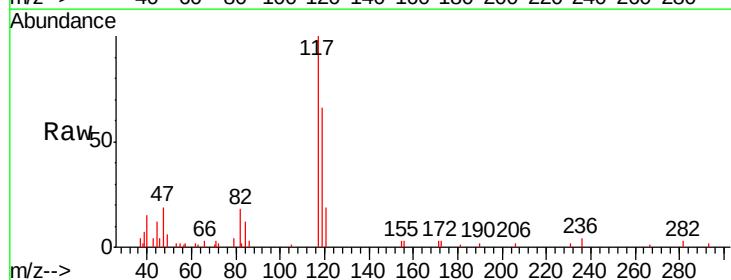
Manual Integrations
APPROVED

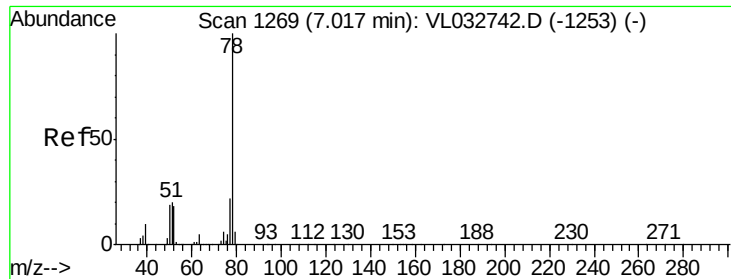
apatel
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#35
Carbon Tetrachloride
Concen: 0.081 ppbv m
RT: 7.14 min Scan# 1306
Delta R.T. -0.01 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
117	100		
119	66.4	76.1	114.1#
121	19.0	25.4	38.0#





#36

Benzene

Concen: 0.596 ppbv

RT: 7.01 min Scan# 1268

Delta R.T. -0.00 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Instrument :

MSVOA_L

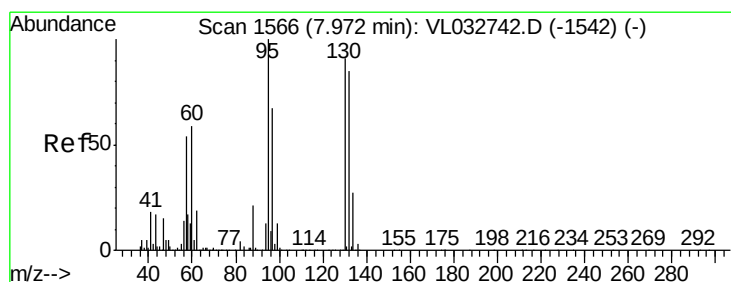
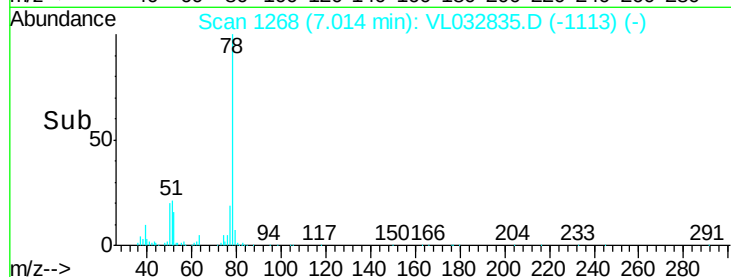
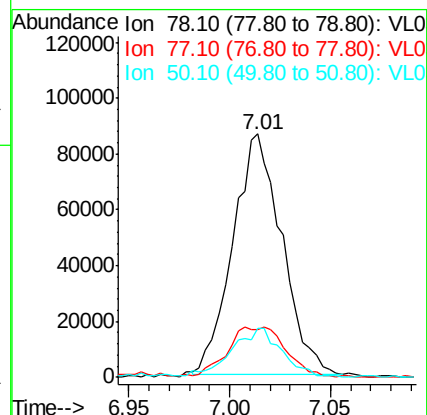
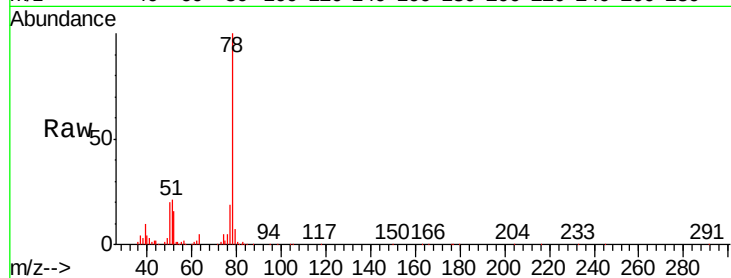
ClientSampled :

IAS-1

Tgt Ion:	78	Resp:	146515
Ion	Ratio	Lower	Upper
78	100		
77	18.9	17.8	26.8
50	20.2	15.4	23.0

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#38

Trichloroethene

Concen: 0.907 ppbv

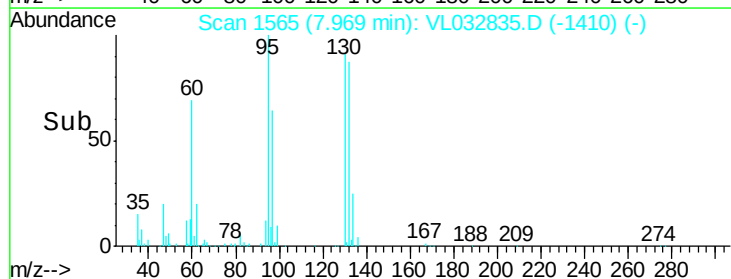
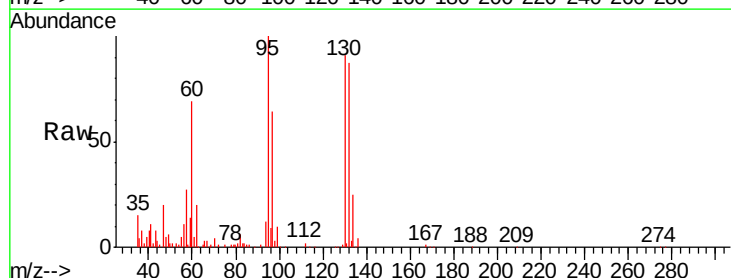
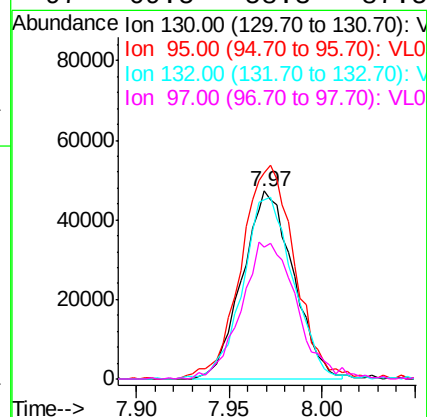
RT: 7.97 min Scan# 1565

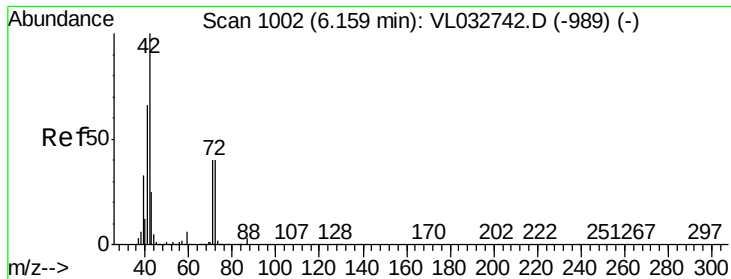
Delta R.T. -0.00 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Tgt Ion:	130	Resp:	90249
Ion	Ratio	Lower	Upper
130	100		
95	107.0	87.7	131.5
132	93.8	74.6	111.8
97	69.5	58.3	87.5





#41

Tetrahydrofuran

Concen: 0.584 ppbv

RT: 6.17 min Scan# 1005

Delta R.T. 0.01 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Instrument :

MSVOA_L

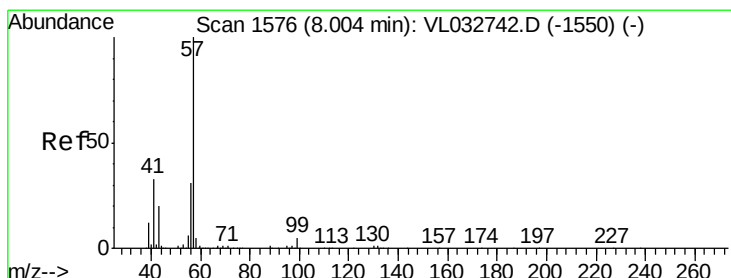
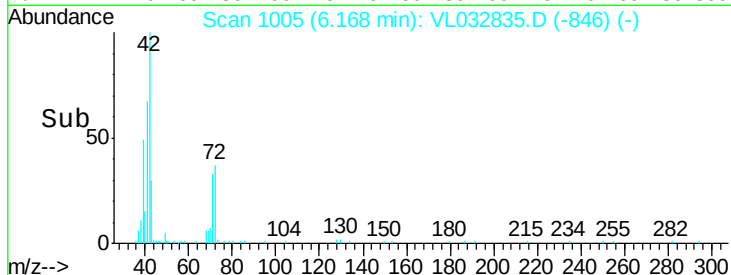
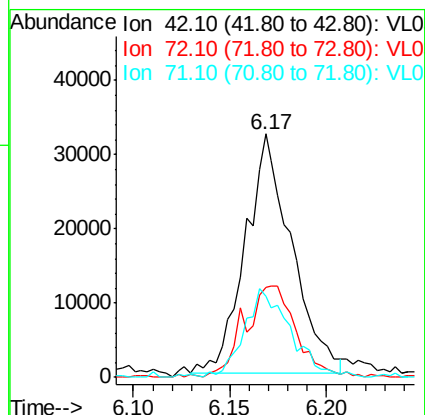
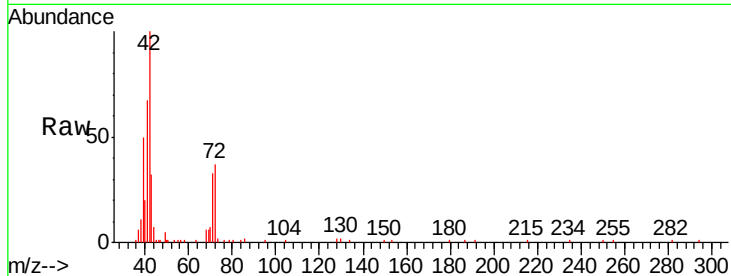
ClientSampleId :

IAS-1

Tgt Ion:	42	Resp:	53700
Ion Ratio		Lower	Upper
42	100		
72	43.2	32.4	48.6
71	37.5	31.6	47.4

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#44

2,2,4-Trimethylpentane

Concen: 0.757 ppbv

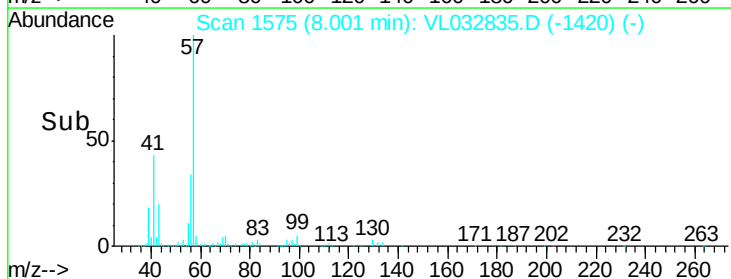
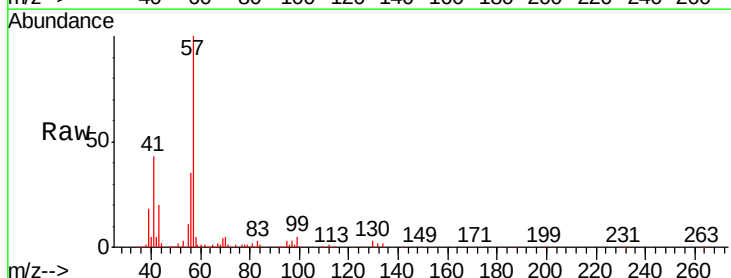
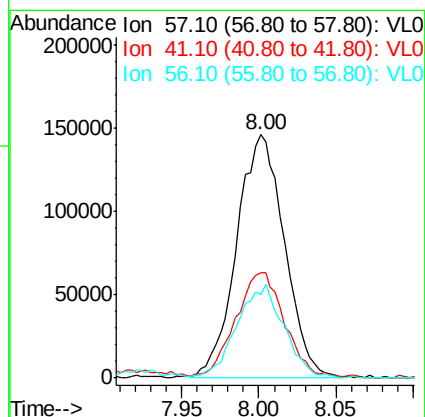
RT: 8.00 min Scan# 1575

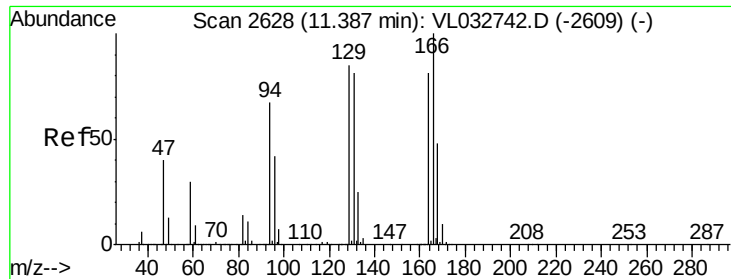
Delta R.T. -0.00 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Tgt Ion:	57	Resp:	311261
Ion Ratio		Lower	Upper
57	100		
41	45.0	26.6	39.8#
56	38.7	24.8	37.2#





#52

Tetrachloroethene

Concen: 0.876 ppbv m

RT: 11.38 min Scan# 2625

Delta R.T. -0.01 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Instrument :

MSVOA_L

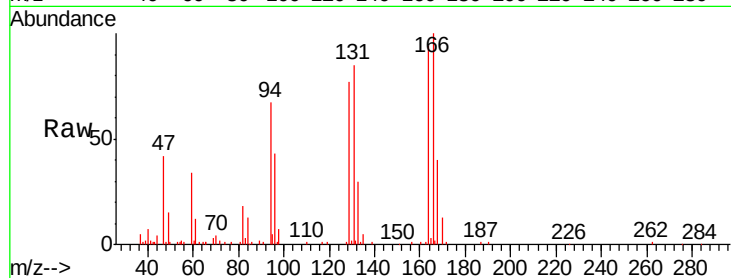
ClientSampleId :

IAS-1

Tgt Ion:	164	Resp:	74905
Ion Ratio	Lower	Upper	
164	100		
166	106.2	99.3	148.9
129	82.0	83.9	125.9#
131	90.2	80.8	121.2

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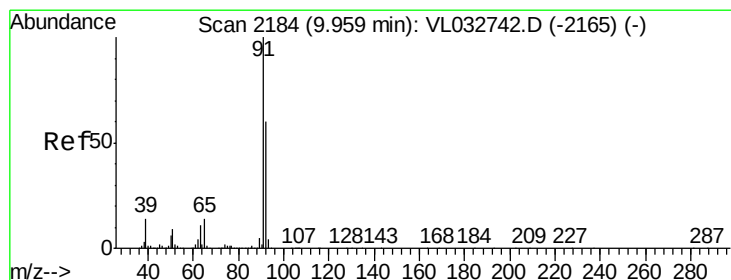
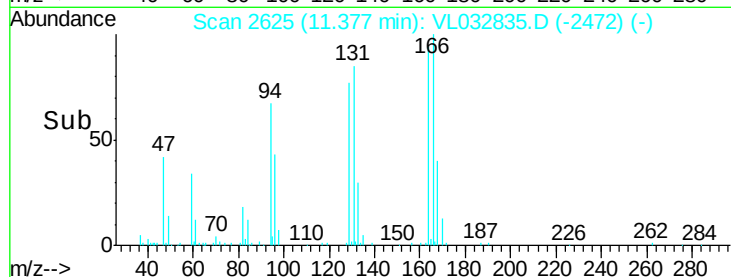
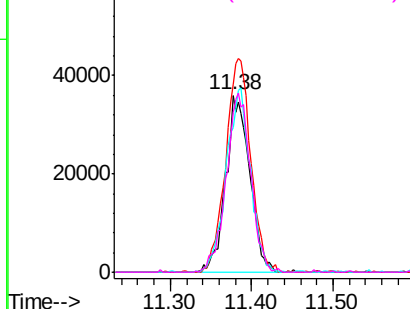


Abundance Ion 163.90 (163.60 to 164.60): V

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: 12.808 ppbv

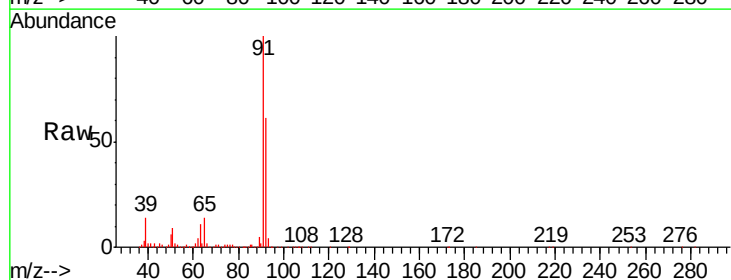
RT: 9.96 min Scan# 2183

Delta R.T. -0.00 min

Lab File: VL032835.D

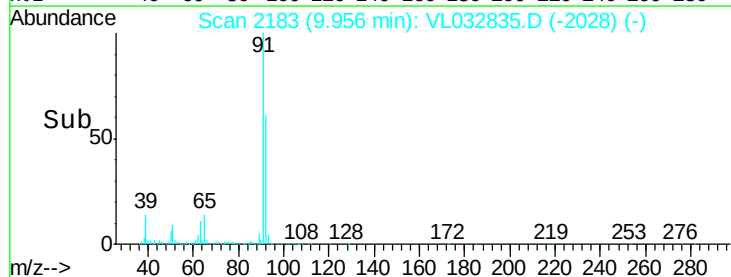
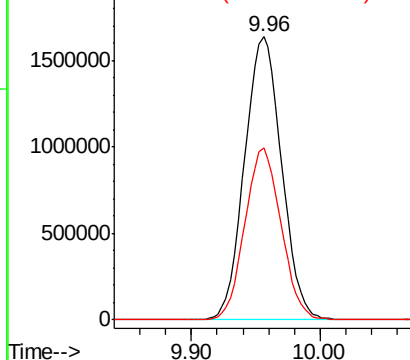
Acq: 29 Nov 2018 15:23

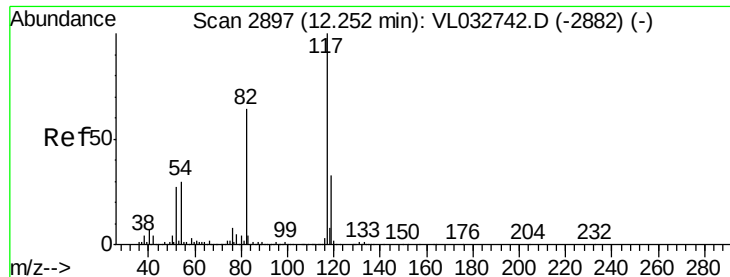
Tgt Ion:	91	Resp:	3286145
Ion Ratio	Lower	Upper	
91	100		
92	59.5	47.9	71.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





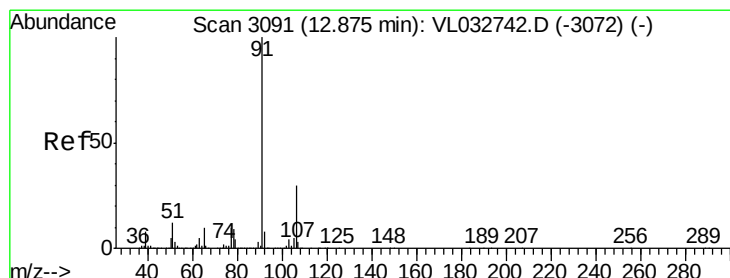
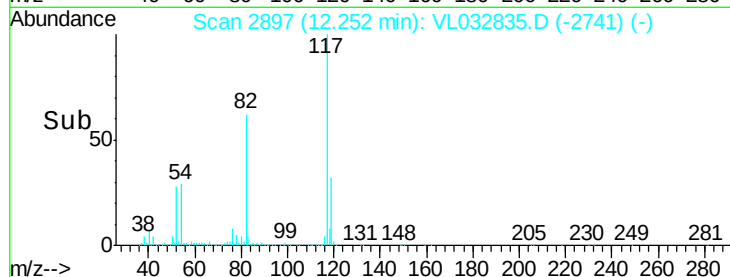
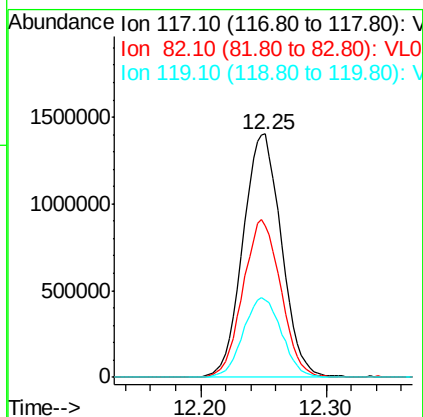
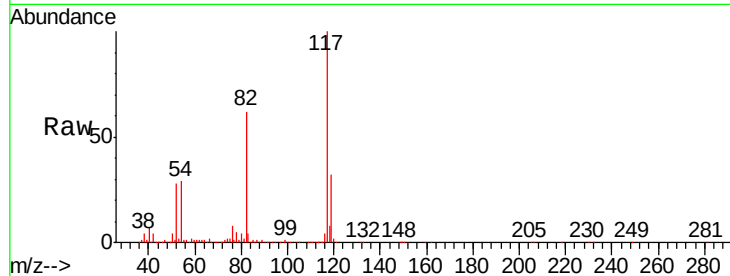
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampled :
IAS-1

Tgt Ion	Ratio	Lower	Upper
117	100		
82	64.1	51.0	76.6
119	32.7	28.0	42.0

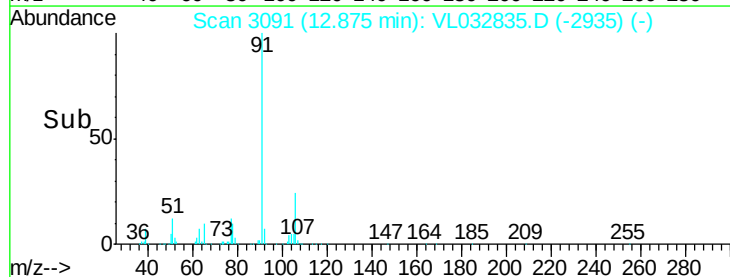
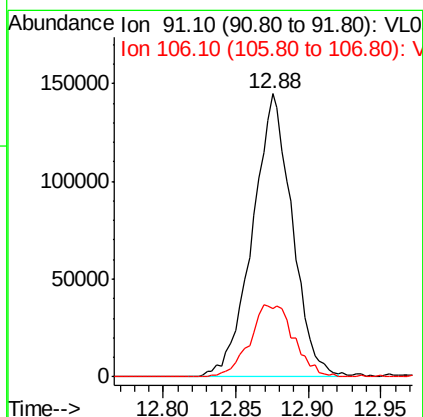
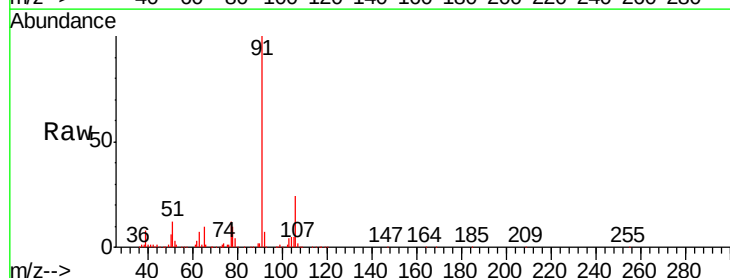
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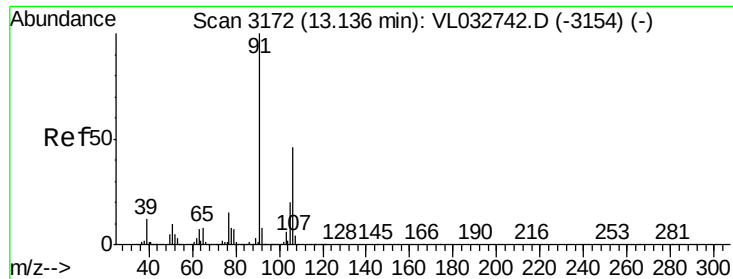
apatel
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#58
Ethyl Benzene
Concen: 0.766 ppbv
RT: 12.88 min Scan# 3091
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
91	100		
106	24.0	23.6	35.4





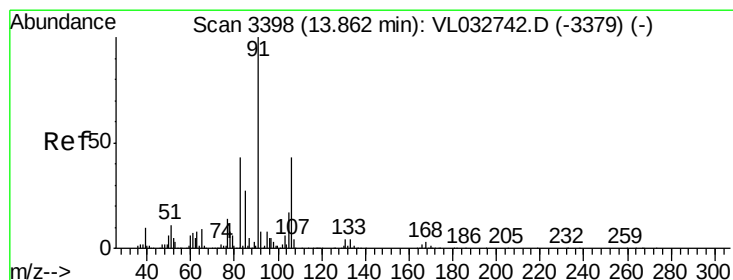
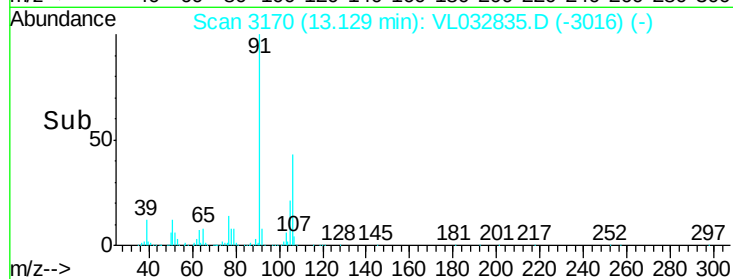
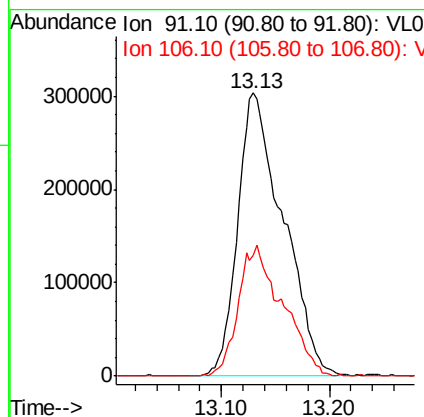
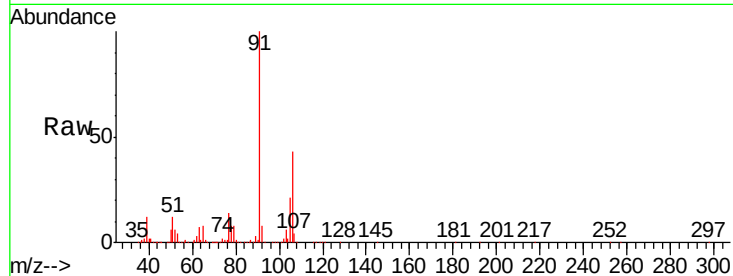
#59
m/p-Xylene
Concen: 2.771 ppbv
RT: 13.13 min Scan# 3170
Delta R.T. -0.01 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampled :
IAS-1

Tgt Ion: 91 Resp: 888149
Ion Ratio Lower Upper
91 100
106 45.2 36.1 54.1

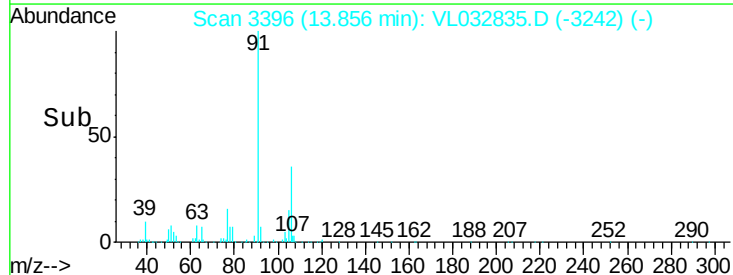
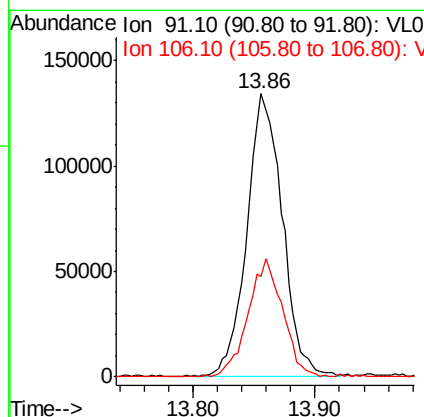
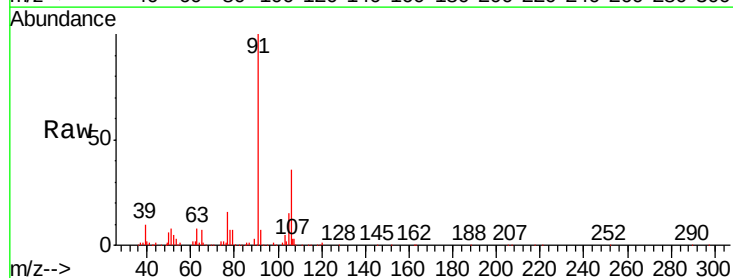
Manual Integrations
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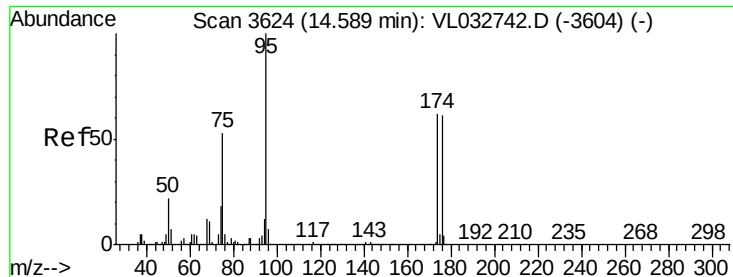
apatel
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#60
o-Xylene
Concen: 0.831 ppbv
RT: 13.86 min Scan# 3396
Delta R.T. -0.01 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion: 91 Resp: 267720
Ion Ratio Lower Upper
91 100
106 41.2 21.9 65.7





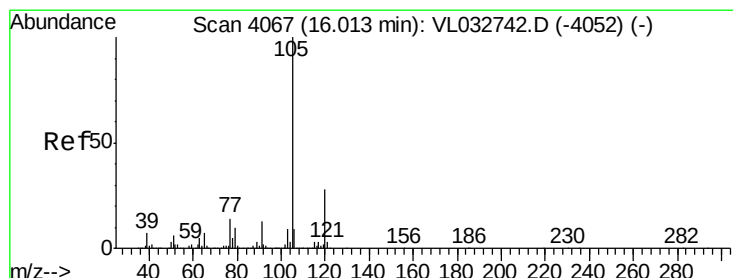
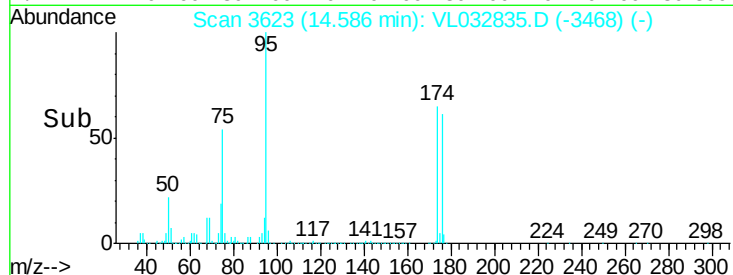
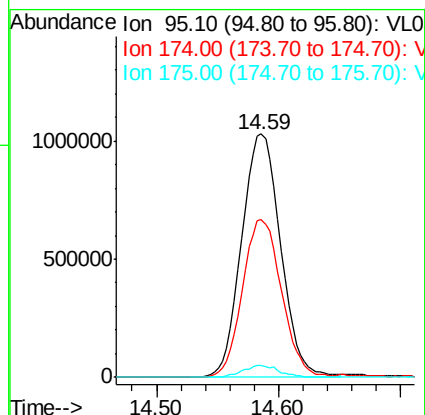
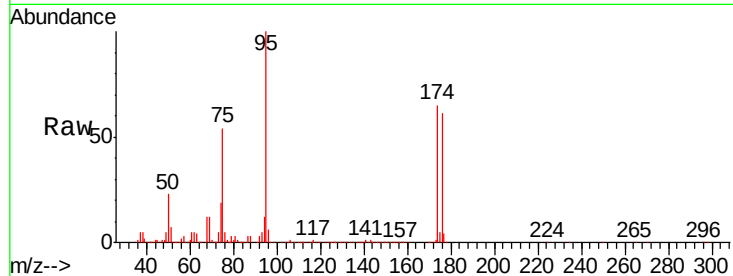
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.158 ppbv
 RT: 14.59 min Scan# 3623
 Delta R.T. -0.00 min
 Lab File: VL032835.D
 Acq: 29 Nov 2018 15:23

Instrument :
 MSVOA_L
 ClientSampled :
 IAS-1

Tgt Ion: 95 Resp: 2272679
 Ion Ratio Lower Upper
 95 100
 174 66.4 50.7 76.1
 175 4.7 3.8 5.6

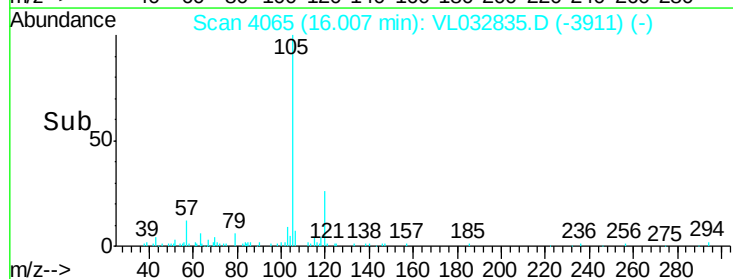
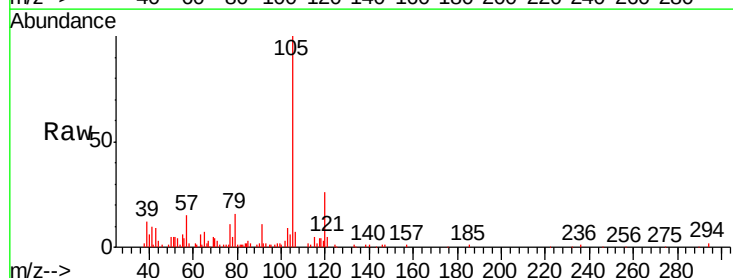
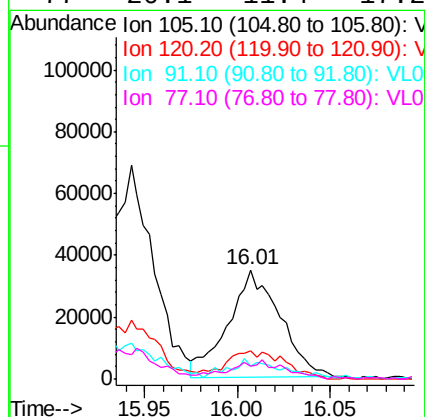
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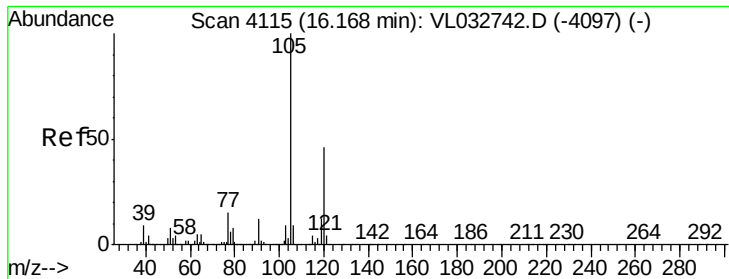
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#72
 4-Ethyltoluene
 Concen: 0.191 ppbv
 RT: 16.01 min Scan# 4065
 Delta R.T. -0.01 min
 Lab File: VL032835.D
 Acq: 29 Nov 2018 15:23

Tgt Ion: 105 Resp: 67476
 Ion Ratio Lower Upper
 105 100
 120 28.8 22.9 34.3
 91 20.7 10.6 15.8#
 77 20.1 11.4 17.2#





#73

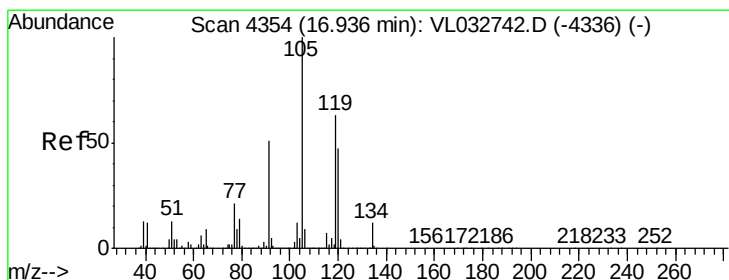
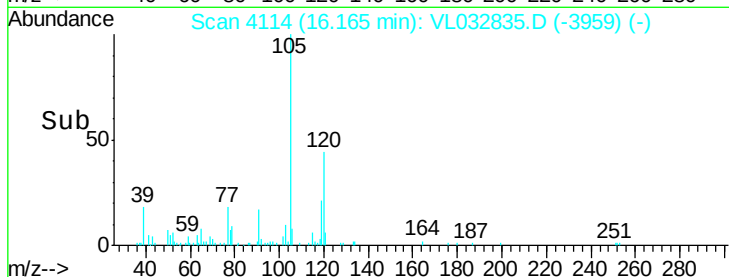
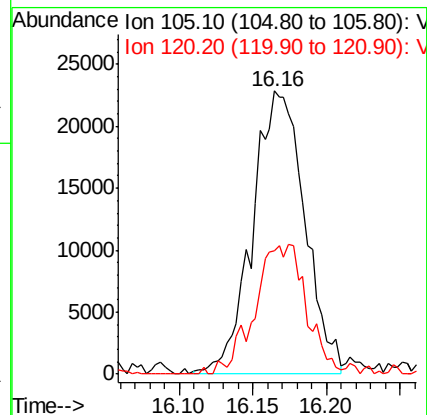
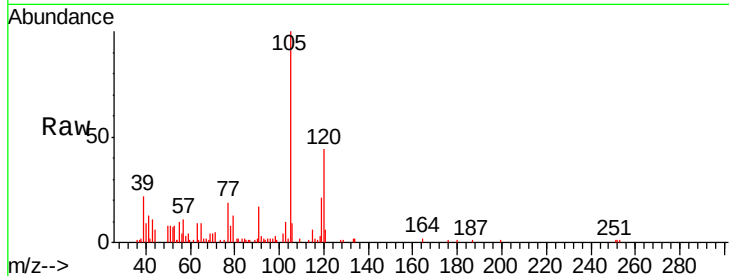
1,3,5-Trimethylbenzene
Concen: 0.163 ppbv m
RT: 16.16 min Scan# 4114
Delta R.T. -0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Instrument :
MSVOA_L
ClientSampled :
IAS-1

Tgt Ion	Ratio	Lower	Upper
105	100		
120	43.8	36.6	55.0

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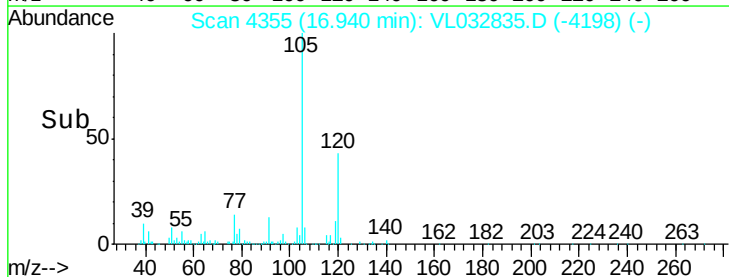
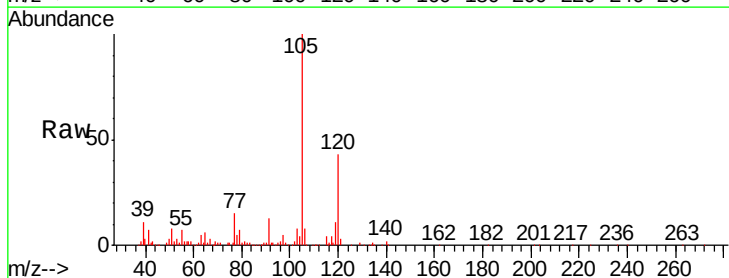
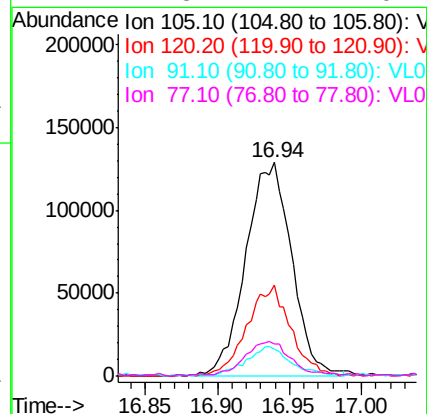
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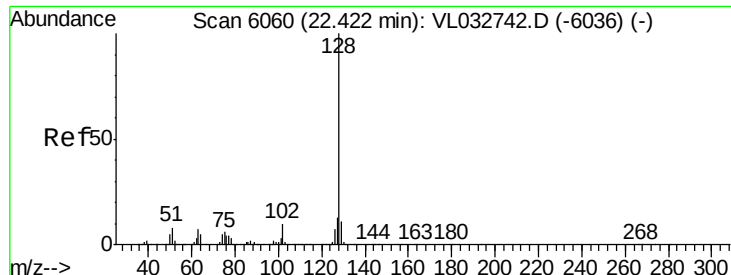


#74

1,2,4-Trimethylbenzene
Concen: 0.773 ppbv m
RT: 16.94 min Scan# 4355
Delta R.T. 0.00 min
Lab File: VL032835.D
Acq: 29 Nov 2018 15:23

Tgt Ion	Ratio	Lower	Upper
105	100		
120	42.8	37.6	56.4
91	12.7	42.5	63.7#
77	14.8	17.4	26.2#





#79

Naphthalene

Concen: 0.180 ppbv m

RT: 22.42 min Scan# 6061

Delta R.T. 0.00 min

Lab File: VL032835.D

Acq: 29 Nov 2018 15:23

Instrument :

MSVOA_L

ClientSampleId :

IAS-1

Tgt Ion	Ratio	Lower	Upper
128	100		
127	18.0	10.1	15.1#
129	12.4	8.9	13.3

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