

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL112918\
 Data File : VL032836.D
 Acq On : 29 Nov 2018 16:03
 Operator : SY/AP
 Sample : J6088-01DUP
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1DUP

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 12/4/2018 8:38:31 AM

Quant Time: Nov 30 07:10:10 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 14 07:10:10 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	1334257	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3389010	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3116417	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2274884	9.76	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	101339	0.528	ppbv	99
3) Chlorodifluoromethane	3.02	51	796464m	7.529	ppbv	
4) Chloromethane	3.18	50	28924	0.493	ppbv	97
9) Propene	3.06	41	78567m	1.856	ppbv	
10) Heptane	8.26	43	102235	0.633	ppbv	97
11) Trichlorofluoromethane	4.01	101	162937	0.901	ppbv	91
13) Ethanol	3.66	45	678153	48.910	ppbv	98
15) Acetone	3.90	43	2840958	23.316	ppbv	98
19) Isopropyl Alcohol	4.04	45	627559	7.731	ppbv #	1
20) Methylene Chloride	4.42	84	226342	3.588	ppbv	96
26) Hexane	5.79	57	462801	3.661	ppbv #	47
30) Cyclohexane	7.25	84	22178m	0.201	ppbv	
34) 2-Butanone	5.34	43	612276	3.483	ppbv	99
35) Carbon Tetrachloride	7.14	117	20216m	0.074	ppbv	
36) Benzene	7.01	78	167411	0.620	ppbv	95
38) Trichloroethene	7.97	130	101195	0.927	ppbv	92
41) Tetrahydrofuran	6.16	42	63752	0.632	ppbv	99
44) 2,2,4-Trimethylpentane	8.00	57	344276	0.763	ppbv #	86
50) 4-Methyl-2-Pentanone	8.91	43	45325m	0.165	ppbv	
52) Tetrachloroethene	11.38	164	82569m	0.880	ppbv	
53) Toluene	9.95	91	3494934	12.414	ppbv	100
58) Ethyl Benzene	12.87	91	305419	0.814	ppbv	97
59) m/p-Xylene	13.13	91	951865	2.851	ppbv	100
60) o-Xylene	13.86	91	286602	0.854	ppbv	98
72) 4-Ethyltoluene	16.01	105	71253	0.194	ppbv #	94
73) 1,3,5-Trimethylbenzene	16.17	105	60696	0.169	ppbv	97
74) 1,2,4-Trimethylbenzene	16.93	105	288658	0.750	ppbv #	70
79) Naphthalene	22.43	128	46984m	0.186	ppbv	

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

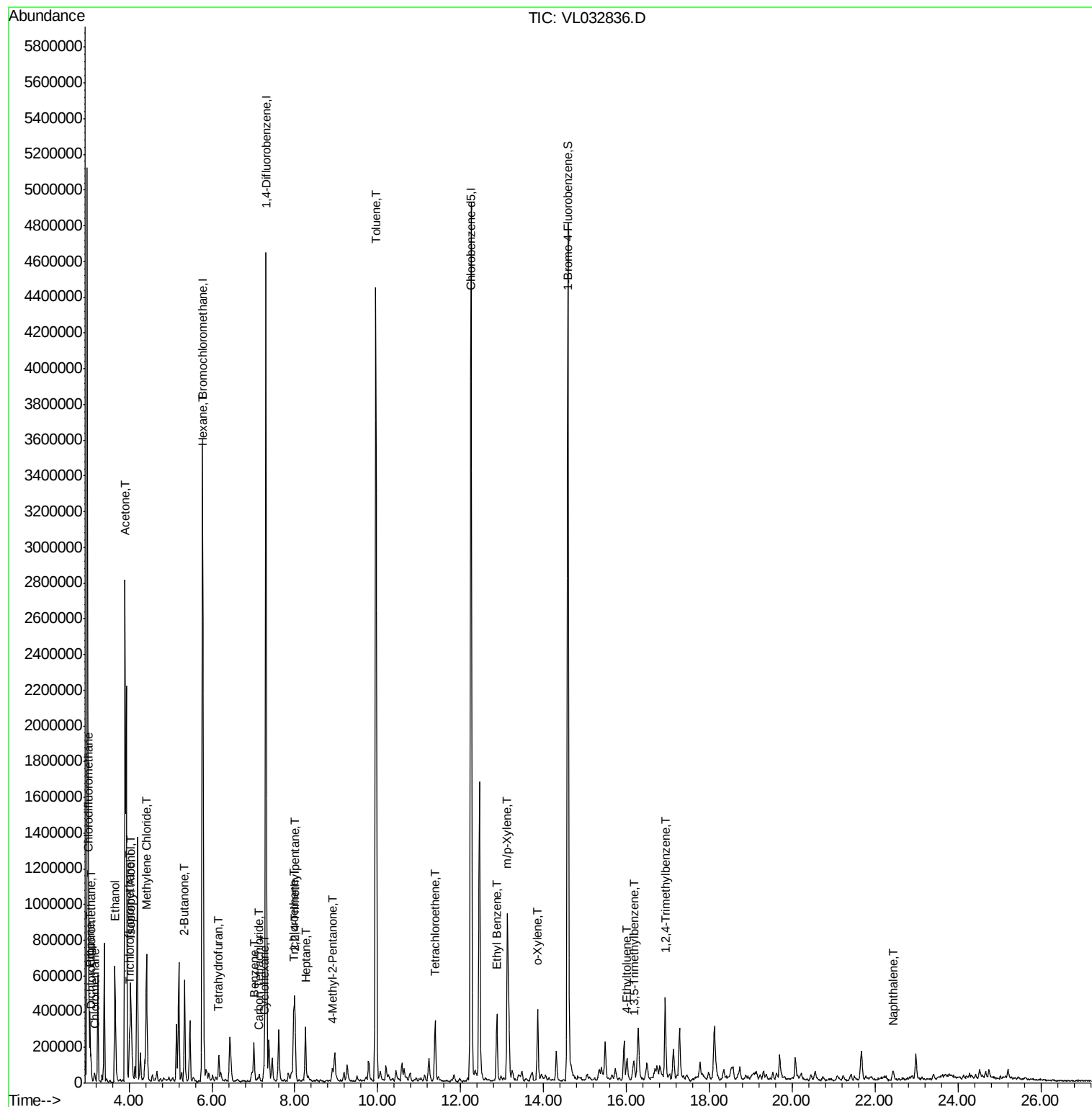
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL112918\
Data File : VL032836.D
Acq On : 29 Nov 2018 16:03
Operator : SY/AP
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Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

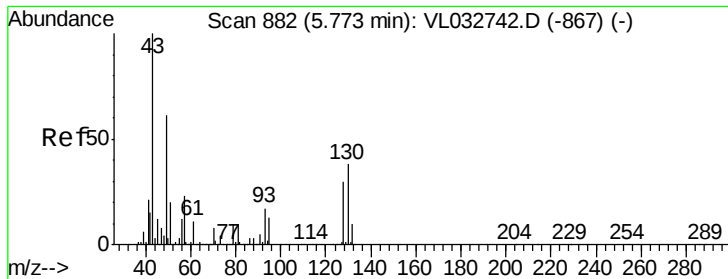
Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

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Quant Time: Nov 30 07:10:10 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# 881

Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

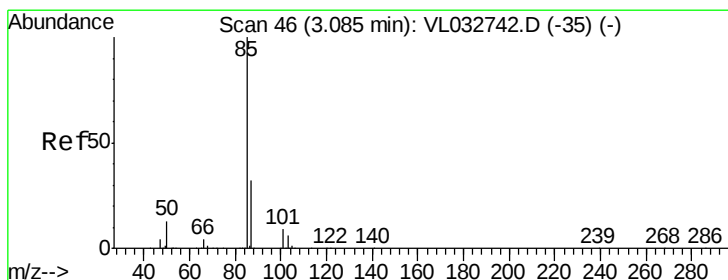
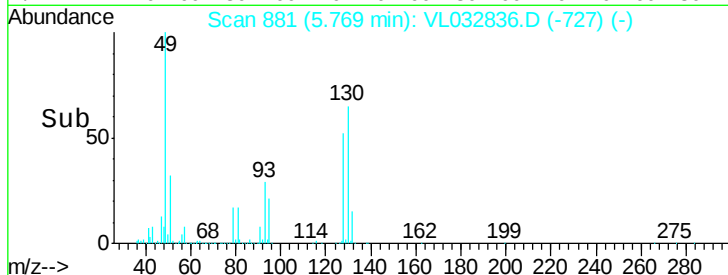
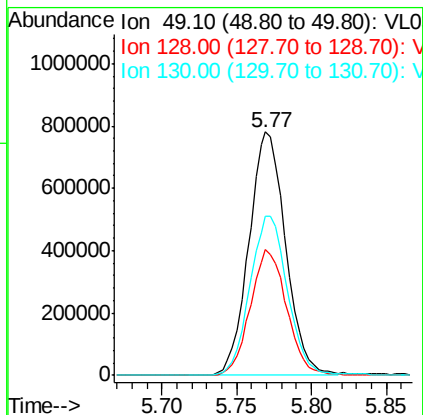
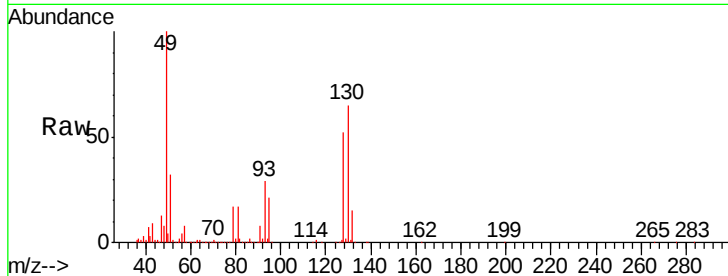
ClientSampled :

IAS-1DUP

Tgt Ion: 49 Resp: 1334257
 Ion Ratio Lower Upper
 49 100
 128 51.7 24.9 74.6
 130 67.6 31.4 94.2

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#2

Dichlorodifluoromethane

Concen: 0.528 ppbv

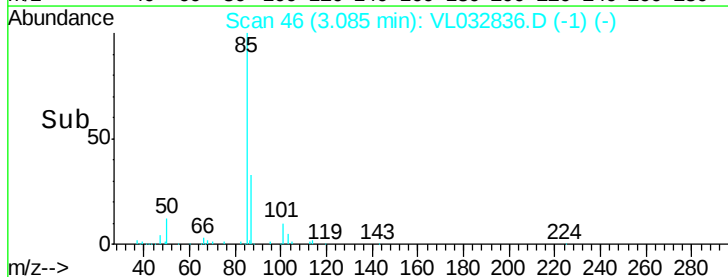
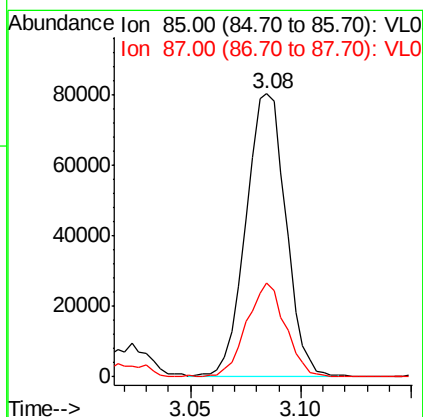
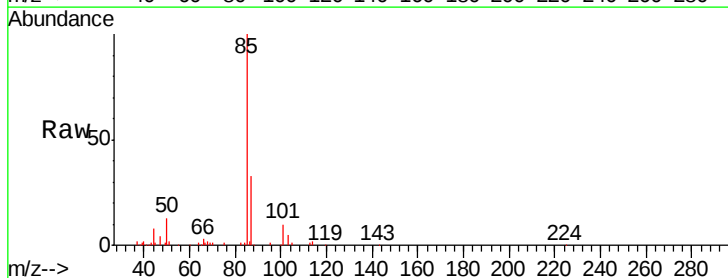
RT: 3.08 min Scan# 46

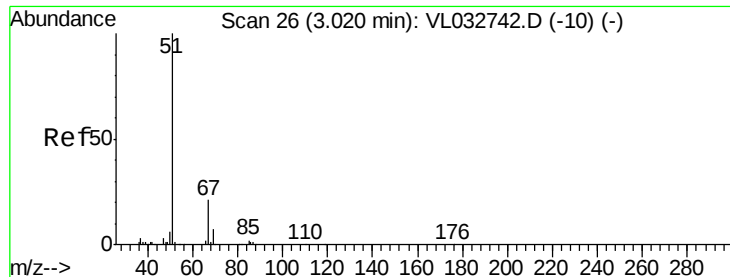
Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Tgt Ion: 85 Resp: 101339
 Ion Ratio Lower Upper
 85 100
 87 33.3 26.0 39.0





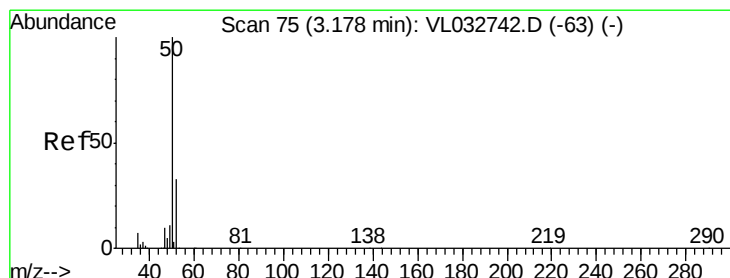
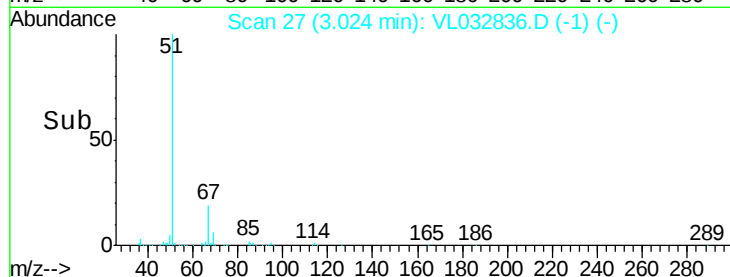
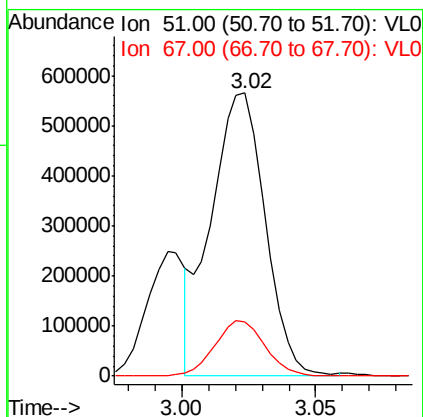
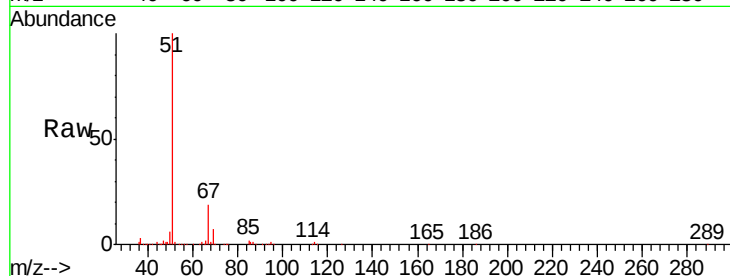
#3
Chlorodifluoromethane
Concen: 7.529 ppbv
RT: 3.02 min Scan# 27
Delta R.T. 0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

Tgt Ion	Ratio	Lower	Upper
51	100		
67	18.3	16.1	24.1

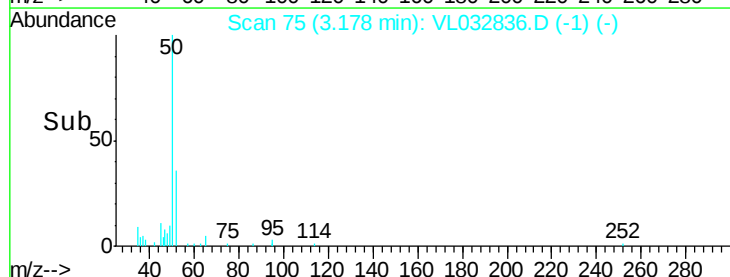
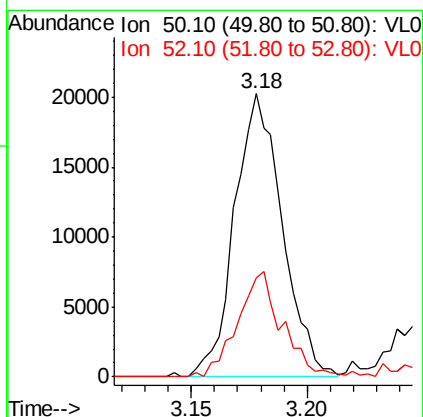
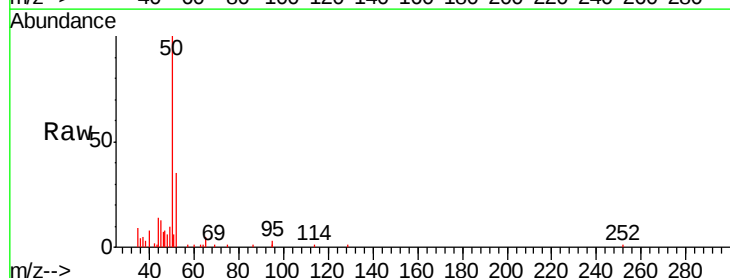
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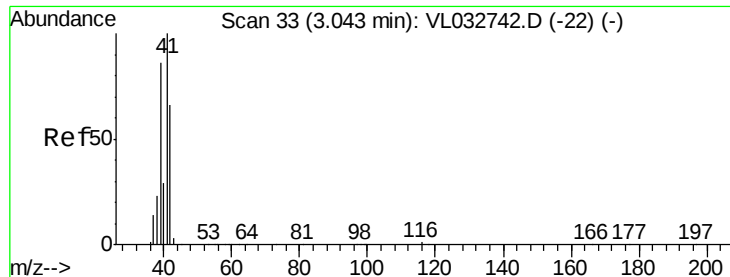
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#4
Chloromethane
Concen: 0.493 ppbv
RT: 3.18 min Scan# 75
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion	Ratio	Lower	Upper
50	100		
52	35.0	26.6	40.0





#9

Propene

Concen: 1.856 ppbv m

RT: 3.06 min Scan# 38

Delta R.T. 0.02 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

ClientSampleId :

IAS-1DUP

Tgt Ion: 41 Resp: 78567

Ion Ratio Lower Upper

41 100

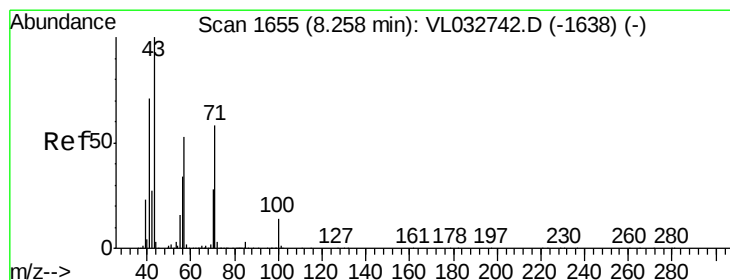
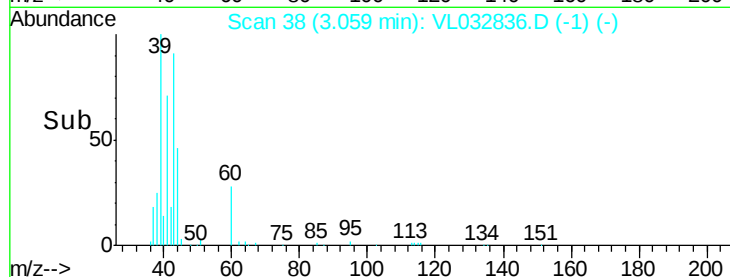
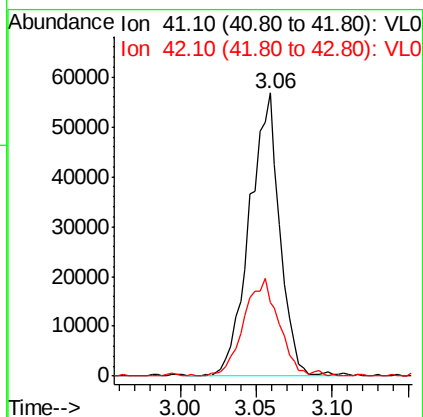
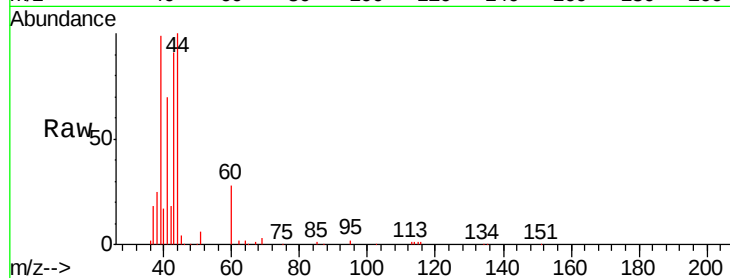
42 129.6 55.0 82.6#

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#10

Heptane

Concen: 0.633 ppbv

RT: 8.26 min Scan# 1655

Delta R.T. -0.00 min

Lab File: VL032836.D

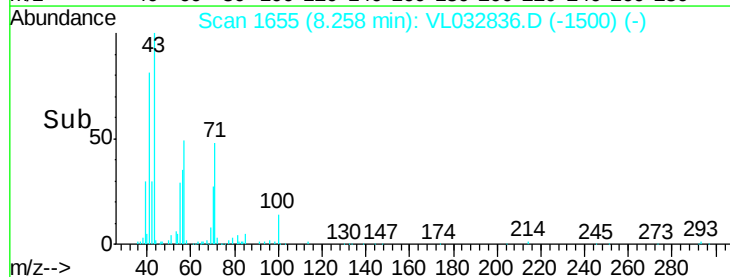
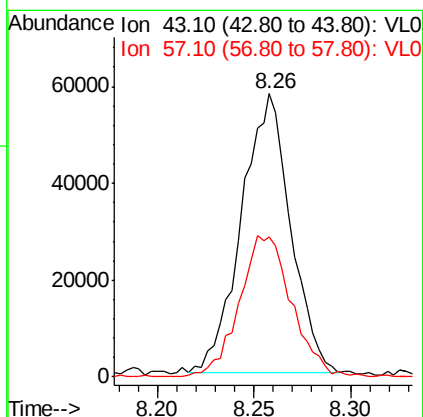
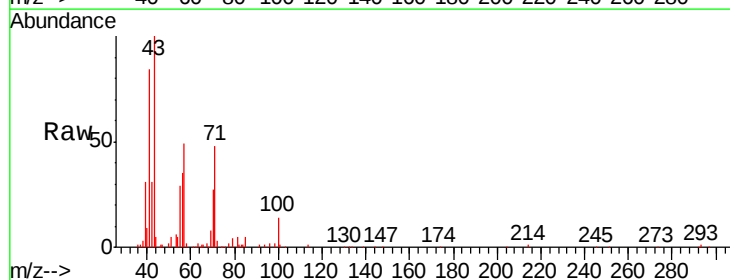
Acq: 29 Nov 2018 16:03

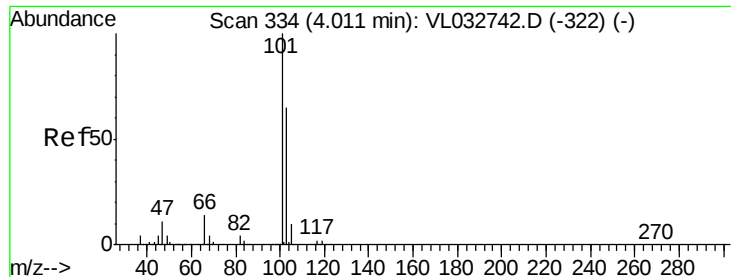
Tgt Ion: 43 Resp: 102235

Ion Ratio Lower Upper

43 100

57 54.3 41.8 62.8





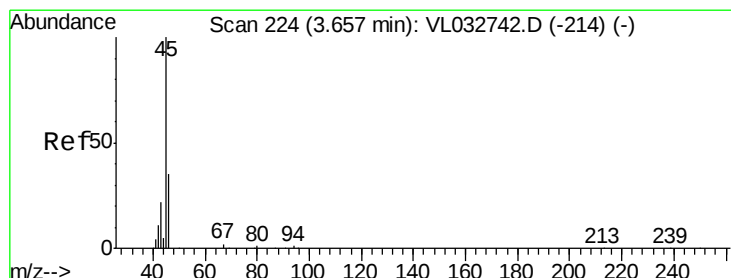
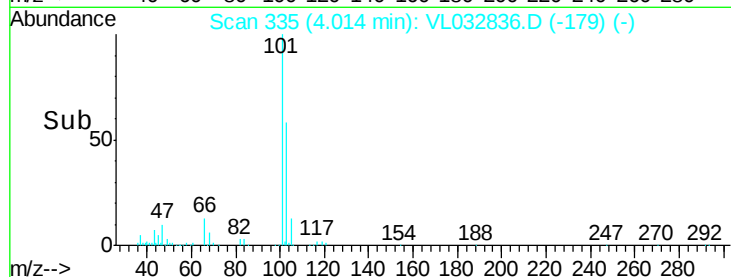
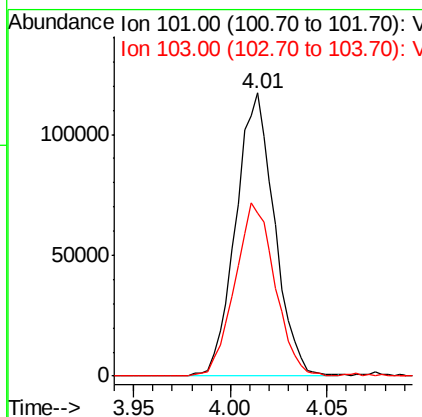
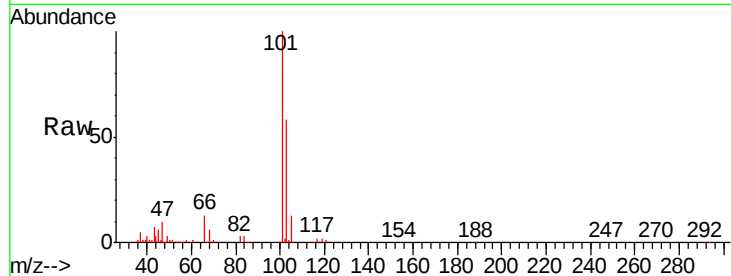
#11
 Trichlorofluoromethane
 Concen: 0.901 ppbv
 RT: 4.01 min Scan# 335
 Delta R.T. 0.00 min
 Lab File: VL032836.D
 Acq: 29 Nov 2018 16:03

Instrument :
 MSVOA_L
 ClientSampled :
 IAS-1DUP

Tgt Ion: 101 Resp: 162937
 Ion Ratio Lower Upper
 101 100
 103 57.5 51.6 77.4

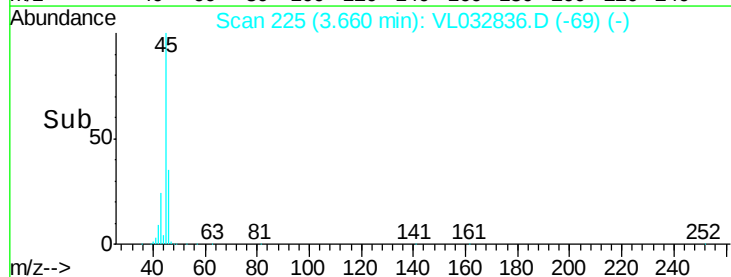
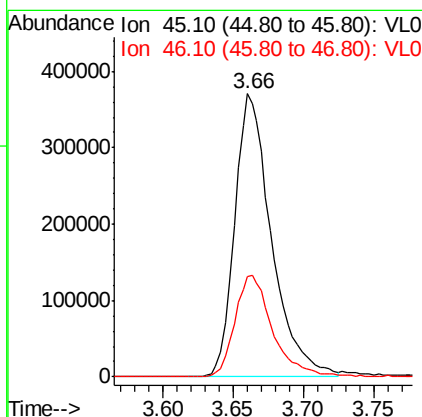
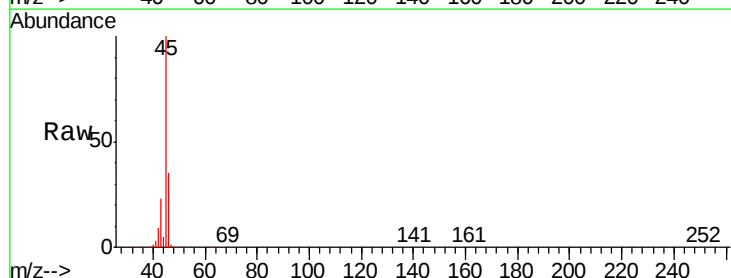
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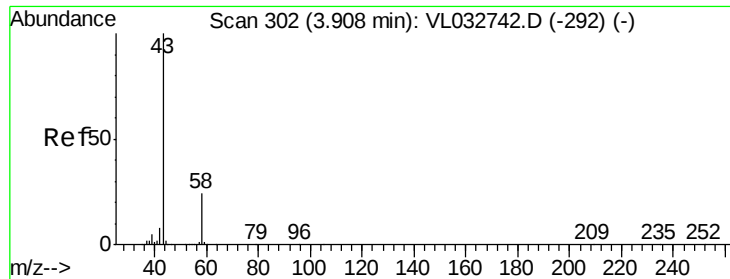
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#13
 Ethanol
 Concen: 48.910 ppbv
 RT: 3.66 min Scan# 225
 Delta R.T. 0.00 min
 Lab File: VL032836.D
 Acq: 29 Nov 2018 16:03

Tgt Ion: 45 Resp: 678153
 Ion Ratio Lower Upper
 45 100
 46 37.1 14.5 57.9





#15

Acetone

Concen: 23.316 ppbv

RT: 3.90 min Scan# 301

Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

ClientSampleId :

IAS-1DUP

Tgt Ion: 43 Resp: 2840958

Ion Ratio Lower Upper

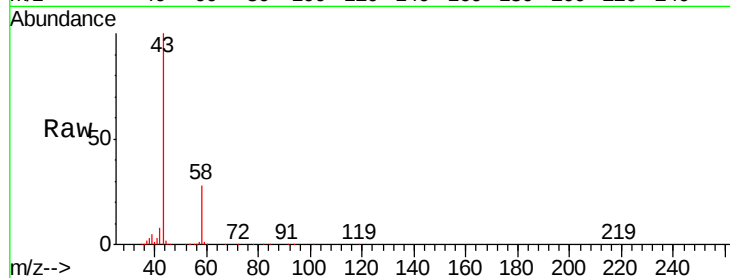
43 100

58 27.3 21.1 31.7

Manual Integrations
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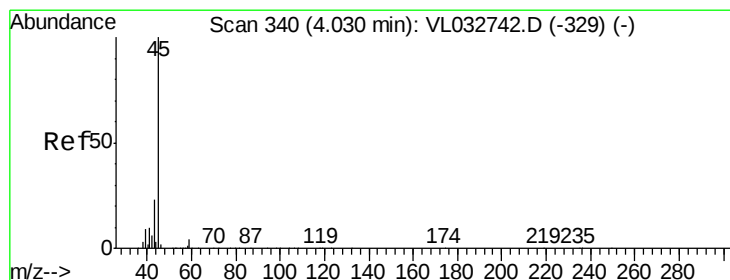
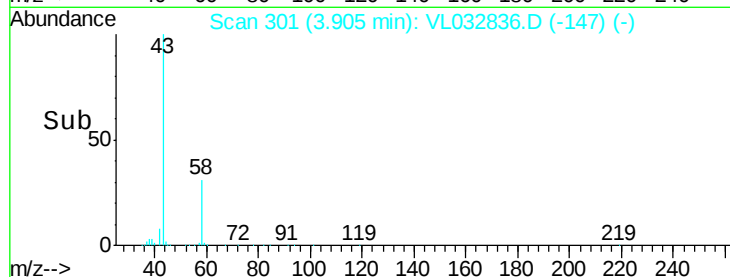
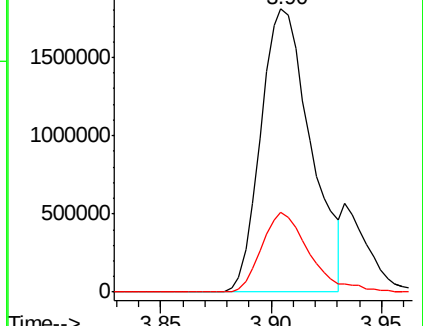
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 7.731 ppbv

RT: 4.04 min Scan# 343

Delta R.T. 0.01 min

Lab File: VL032836.D

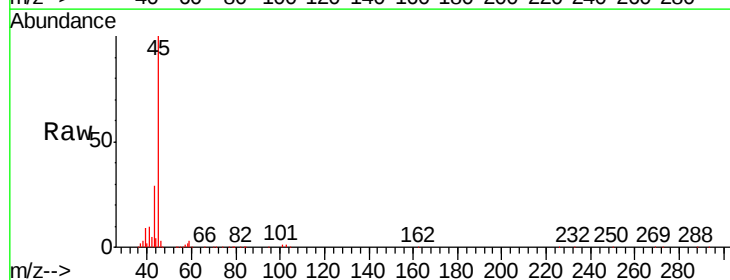
Acq: 29 Nov 2018 16:03

Tgt Ion: 45 Resp: 627559

Ion Ratio Lower Upper

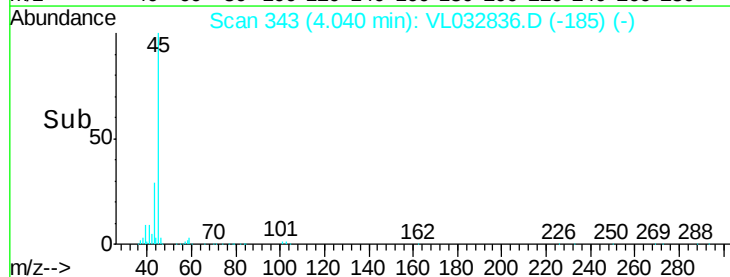
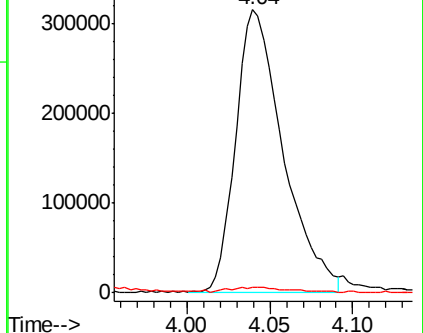
45 100

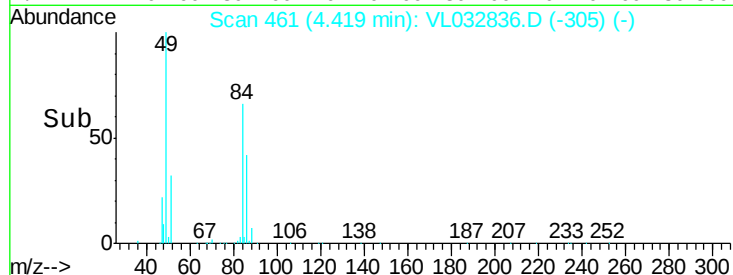
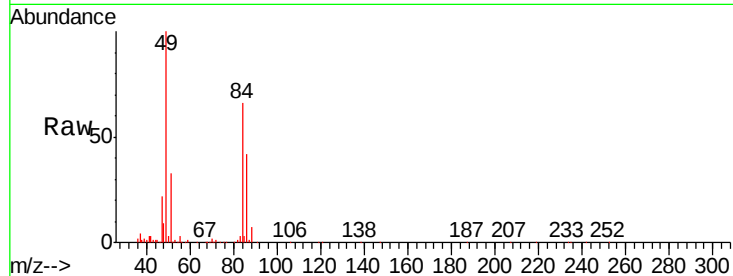
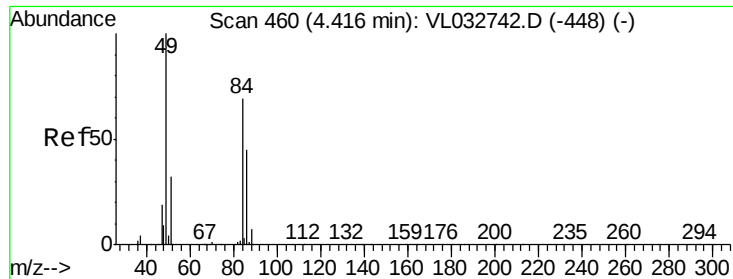
58 123.5 1.4 2.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





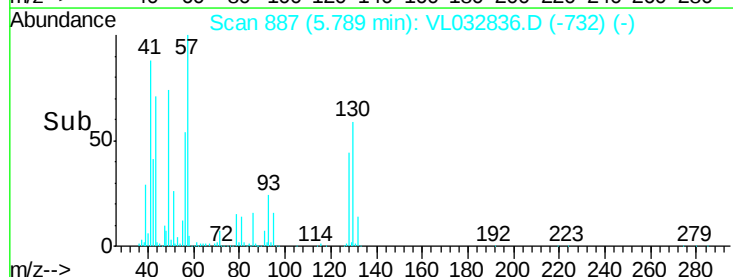
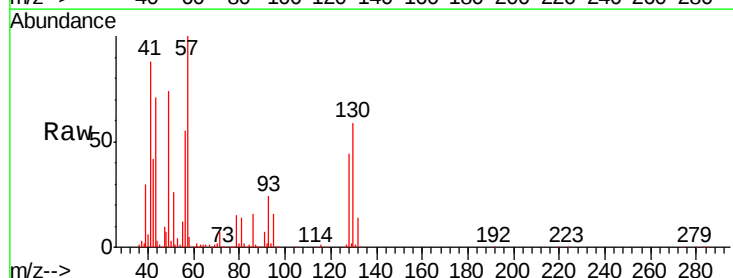
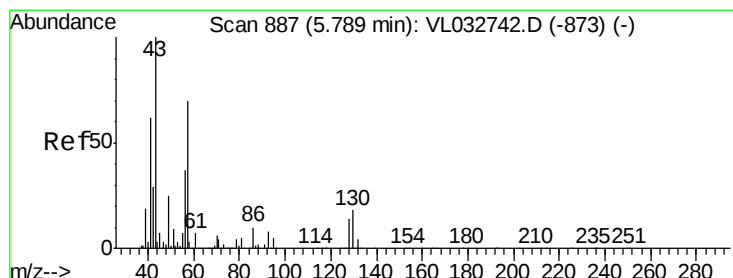
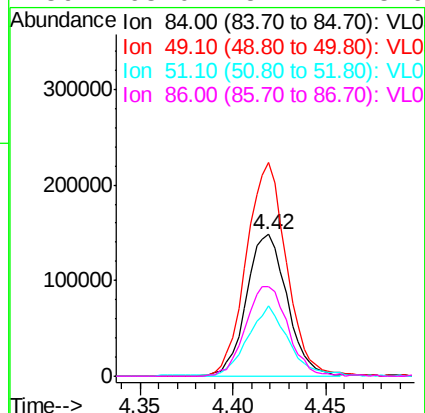
#20
Methylene Chloride
Concen: 3.588 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion	Ratio	Lower	Upper
84	100		
49	150.4	115.8	173.6
51	48.9	36.9	55.3
86	63.0	52.4	78.6

Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

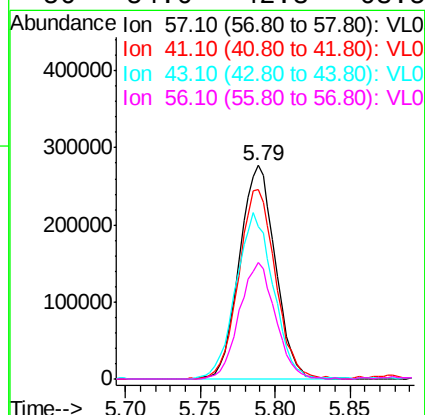
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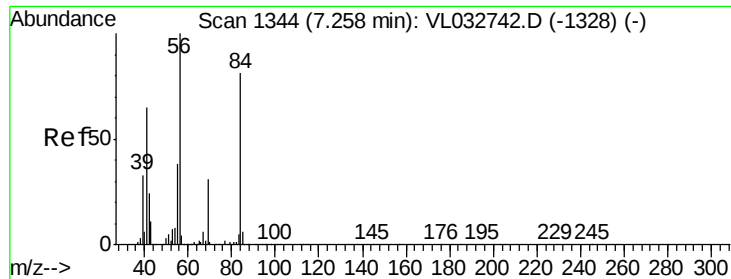
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#26
Hexane
Concen: 3.661 ppbv
RT: 5.79 min Scan# 887
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion	Ratio	Lower	Upper
57	100		
41	91.1	70.3	105.5
43	80.8	174.0	261.0#
56	54.6	42.3	63.5





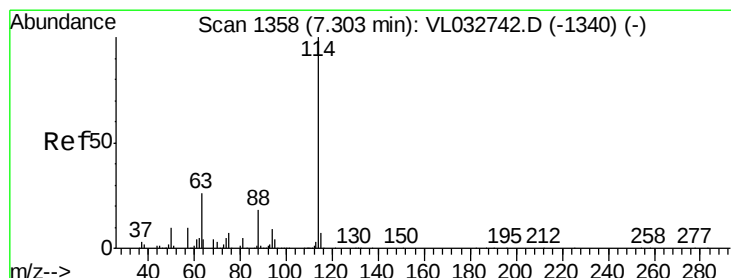
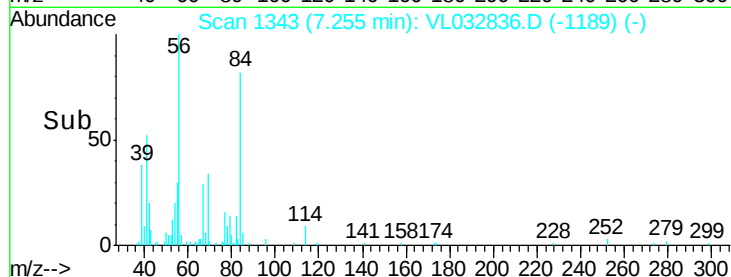
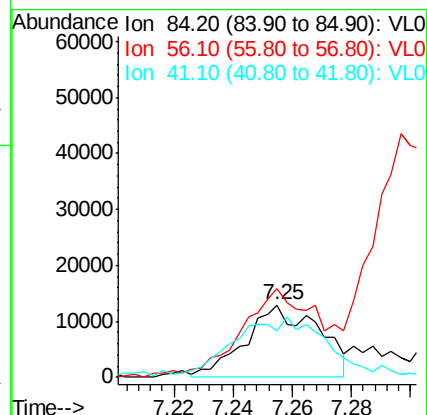
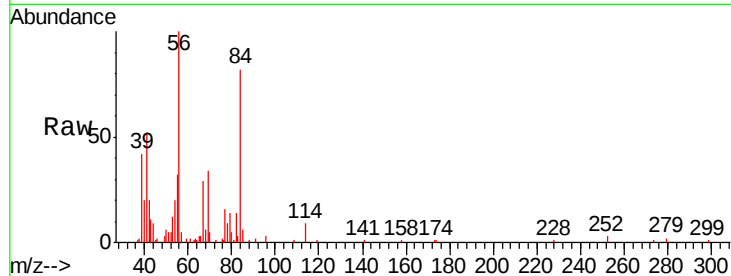
#30
Cyclohexane
Concen: 0.201 ppbv m
RT: 7.25 min Scan# 1343
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

Tgt Ion	Ratio	Lower	Upper
84	100		
56	130.5	105.0	157.4
41	111.9	65.3	97.9#

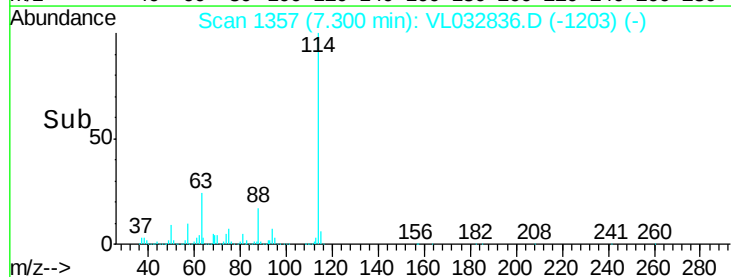
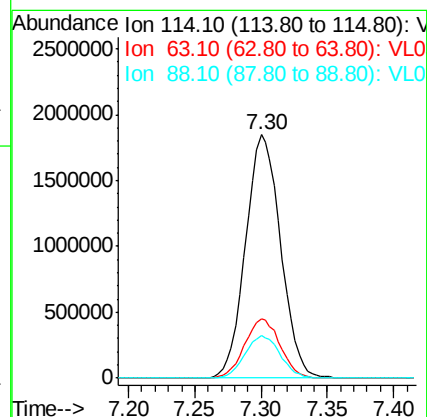
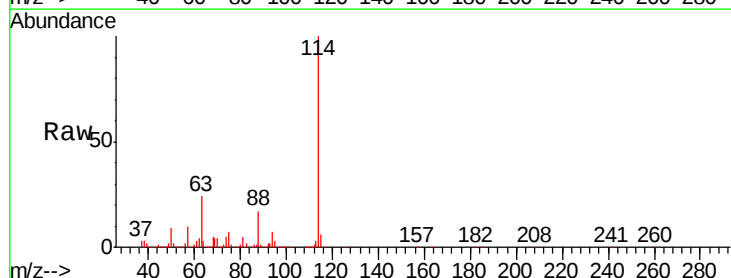
Manual Integrations
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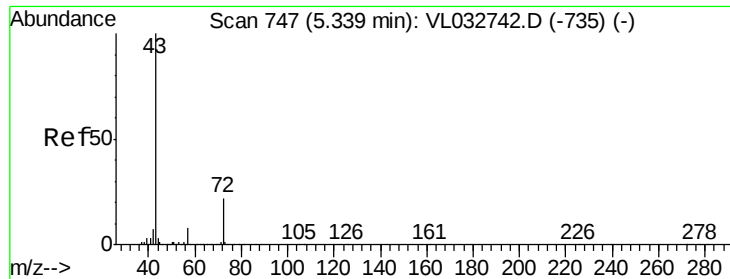
apatel
12/4/2018 8:38:31 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1357
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.7	20.9	31.3
88	17.5	14.4	21.6





#34

2-Butanone

Concen: 3.483 ppbv

RT: 5.34 min Scan# 747

Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

ClientSampleId :

IAS-1DUP

Tgt Ion: 43 Resp: 612276

Ion Ratio Lower Upper

43 100

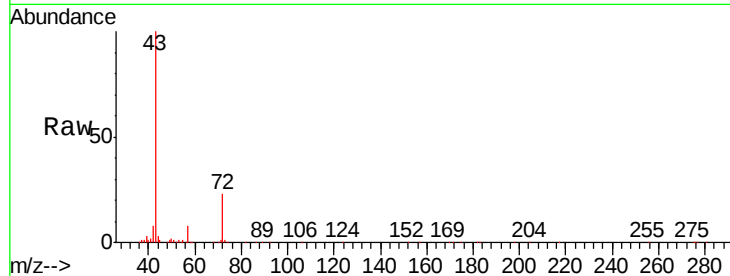
72 23.6 18.4 27.6

Manual Integrations

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

5.34

400000

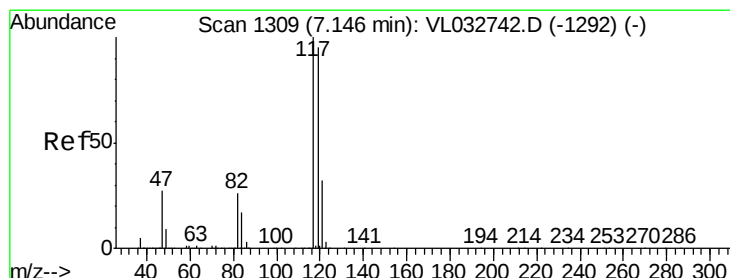
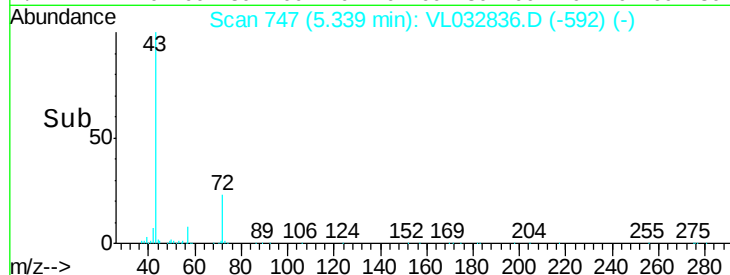
300000

200000

100000

0

Time-->



#35

Carbon Tetrachloride

Concen: 0.074 ppbv m

RT: 7.14 min Scan# 1306

Delta R.T. -0.01 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

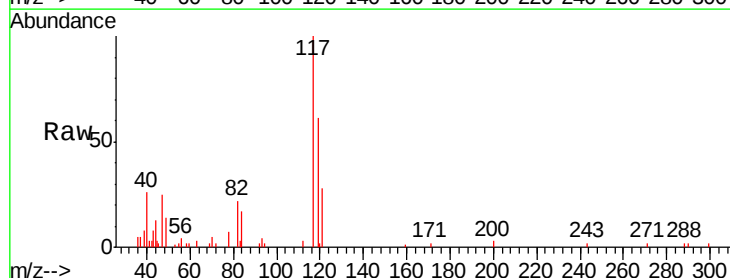
Tgt Ion: 117 Resp: 20216

Ion Ratio Lower Upper

117 100

119 60.7 76.1 114.1#

121 27.6 25.4 38.0



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V

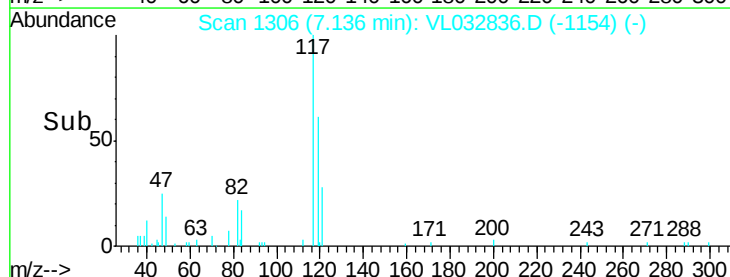
15000

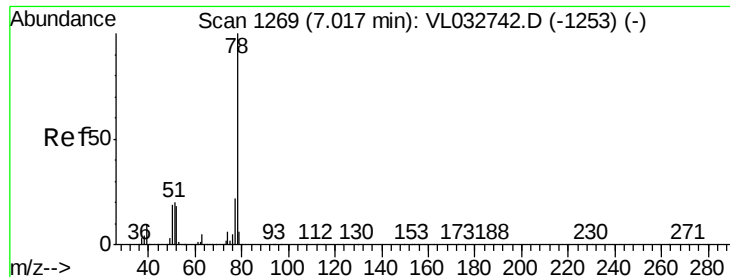
10000

5000

0

Time-->





#36

Benzene

Concen: 0.620 ppbv

RT: 7.01 min Scan# 1267

Delta R.T. -0.01 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

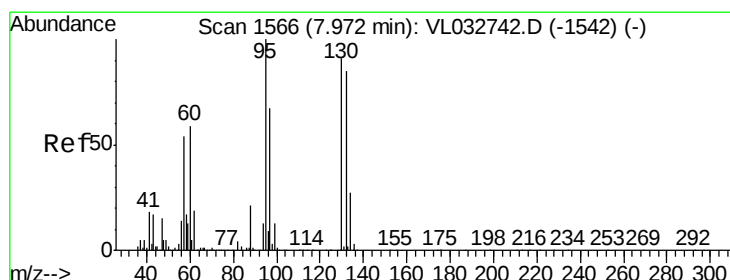
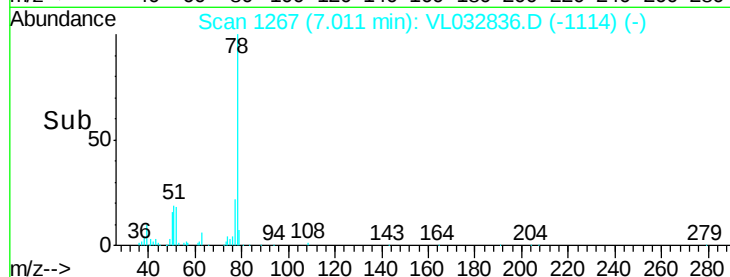
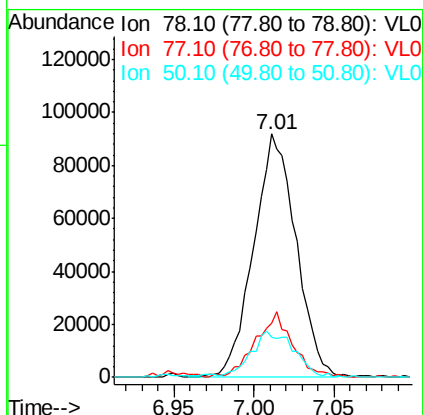
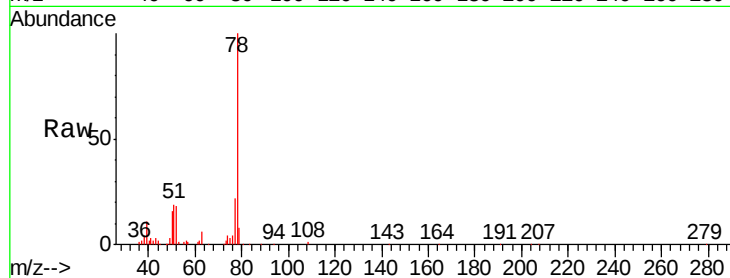
ClientSampleId :

IAS-1DUP

Tgt Ion:	78	Resp:	167411
Ion Ratio	Lower	Upper	
78	100		
77	21.1	17.8	26.8
50	15.9	15.4	23.0

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#38

Trichloroethene

Concen: 0.927 ppbv

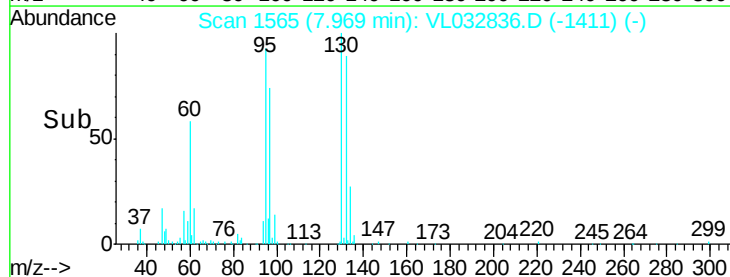
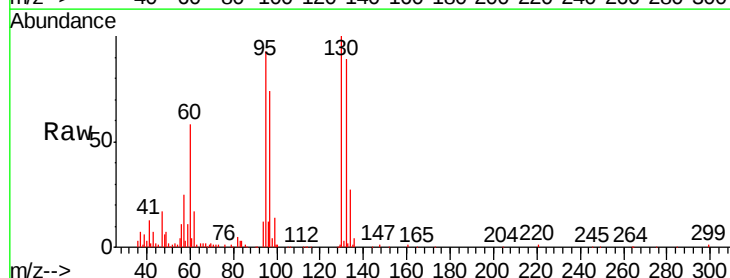
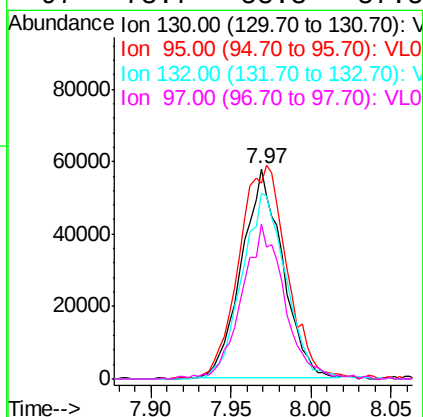
RT: 7.97 min Scan# 1565

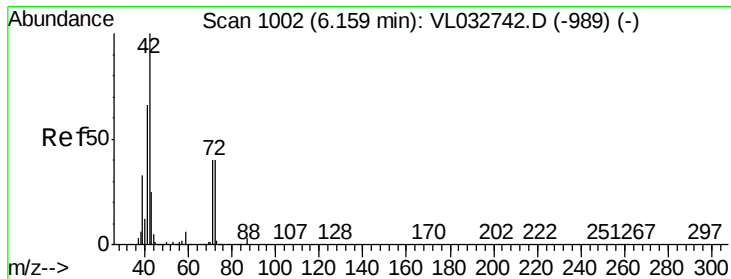
Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Tgt Ion:	130	Resp:	101195
Ion Ratio	Lower	Upper	
130	100		
95	93.2	87.7	131.5
132	89.0	74.6	111.8
97	73.7	58.3	87.5





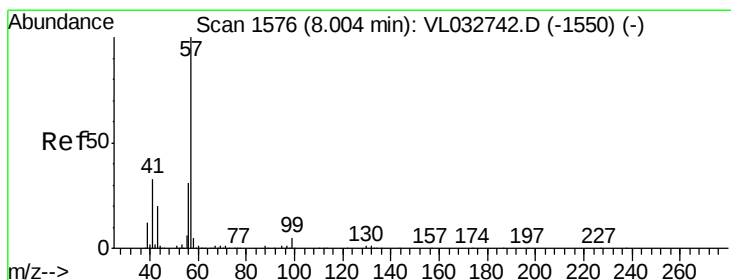
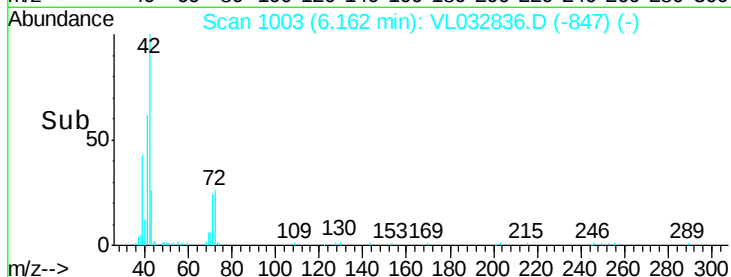
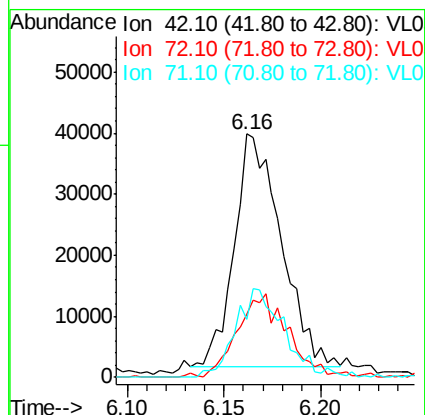
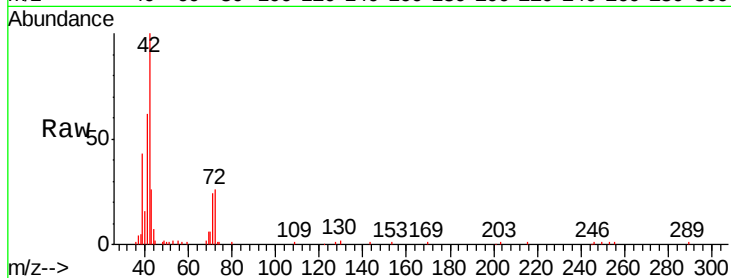
#41
Tetrahydrofuran
Concen: 0.632 ppbv
RT: 6.16 min Scan# 1003
Delta R.T. 0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Instrument :
MSVOA_L
ClientSampled :
IAS-1DUP

Tgt Ion	Ratio	Lower	Upper
42	100		
72	40.5	32.4	48.6
71	40.1	31.6	47.4

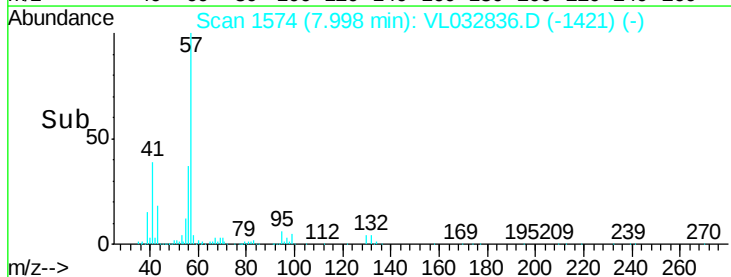
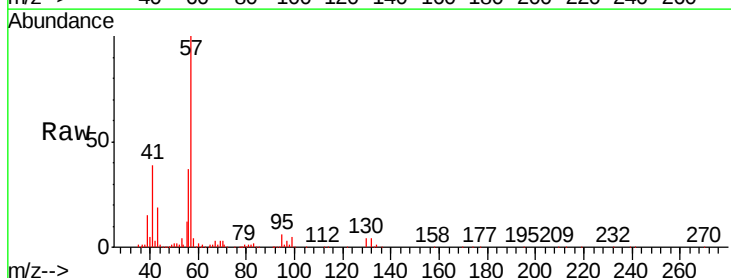
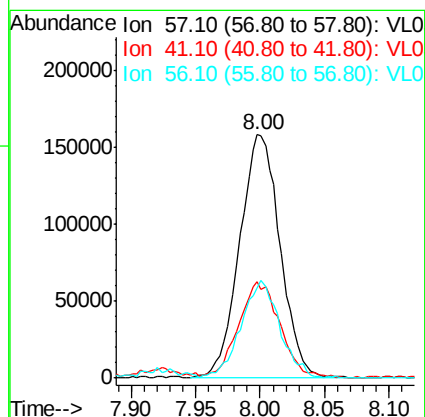
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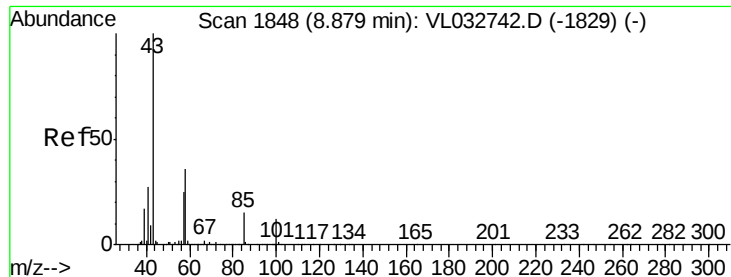
apatel
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#44
2,2,4-Trimethylpentane
Concen: 0.763 ppbv
RT: 8.00 min Scan# 1574
Delta R.T. -0.01 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion	Ratio	Lower	Upper
57	100		
41	40.4	26.6	39.8#
56	39.0	24.8	37.2#





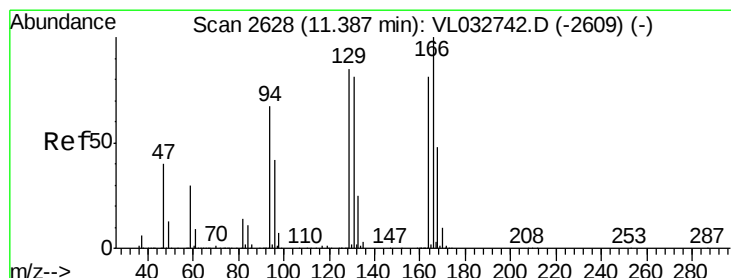
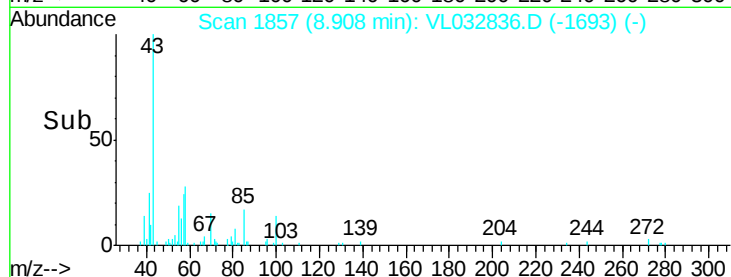
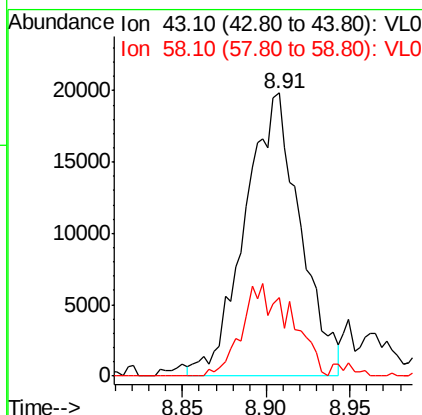
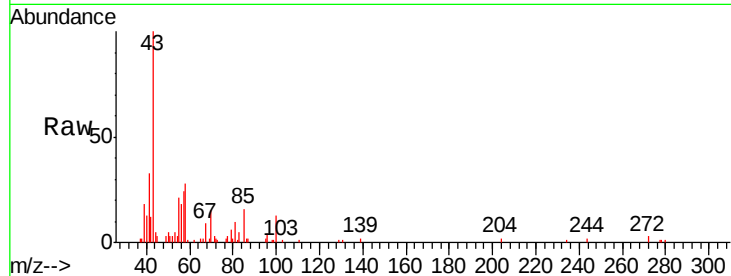
#50
4-Methyl-2-Pentanone
Concen: 0.165 ppbv m
RT: 8.91 min Scan# 1857
Delta R.T. 0.03 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

Tgt Ion: 43 Resp: 45325
Ion Ratio Lower Upper
43 100
58 0.0 28.8 43.2#

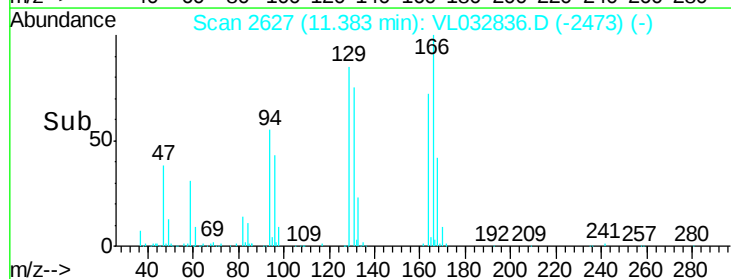
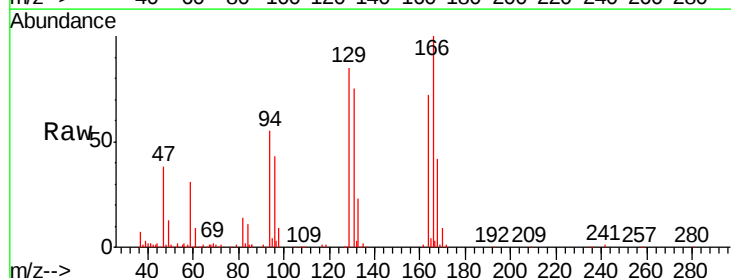
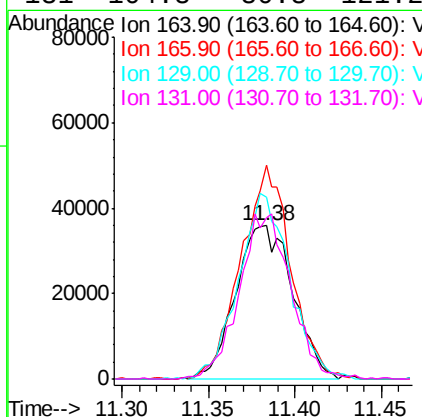
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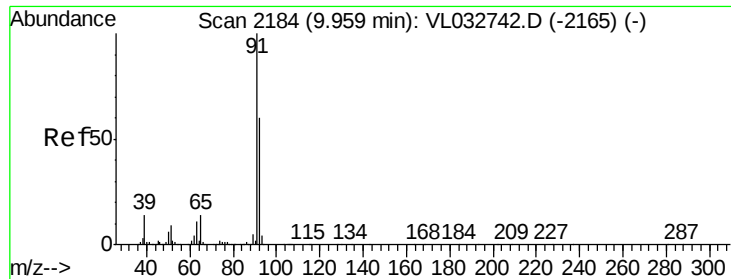
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#52
Tetrachloroethene
Concen: 0.880 ppbv m
RT: 11.38 min Scan# 2627
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion: 164 Resp: 82569
Ion Ratio Lower Upper
164 100
166 139.2 99.3 148.9
129 118.1 83.9 125.9
131 104.8 80.8 121.2





#53

Toluene

Concen: 12.414 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

ClientSampleId :

IAS-1DUP

Tgt Ion: 91 Resp: 3494934

Ion Ratio Lower Upper

91 100

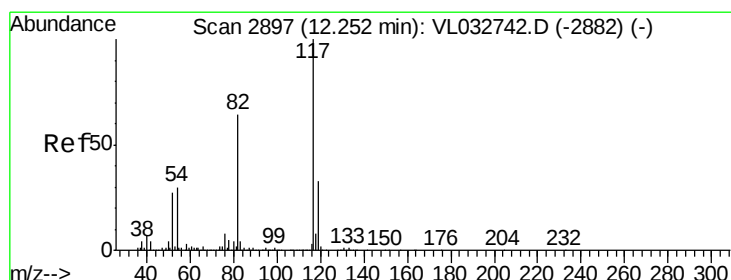
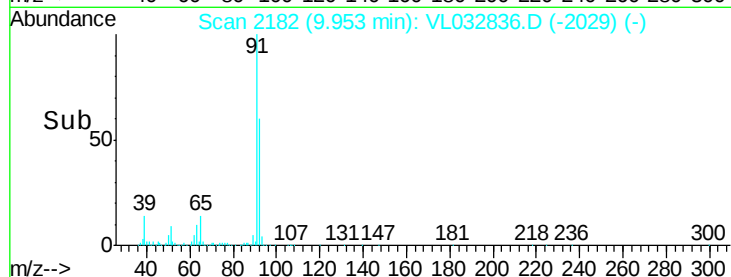
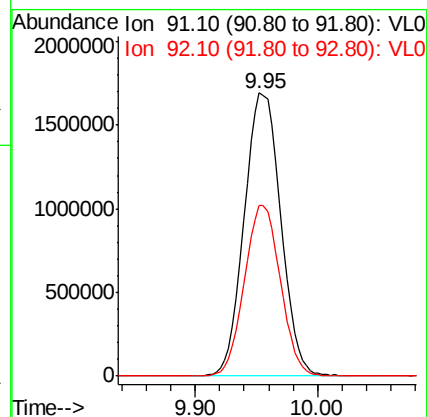
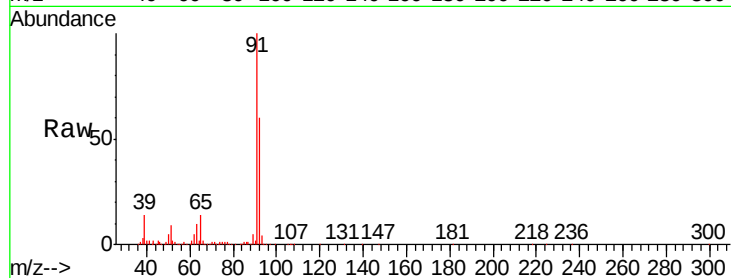
92 59.5 47.9 71.9

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2896

Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

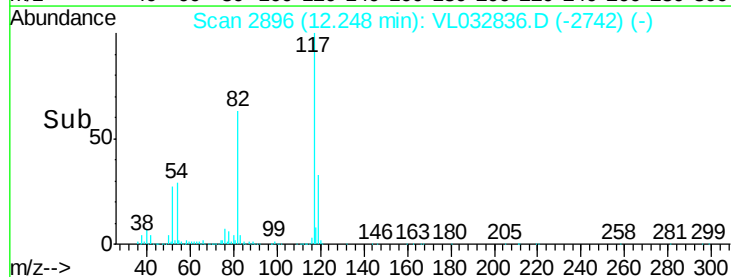
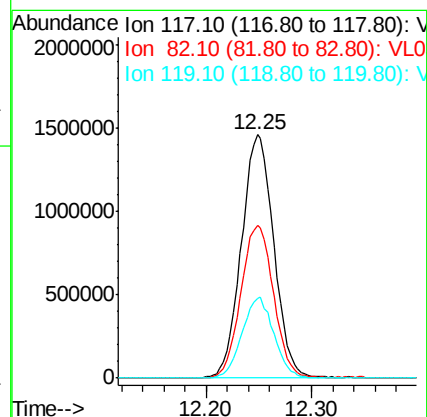
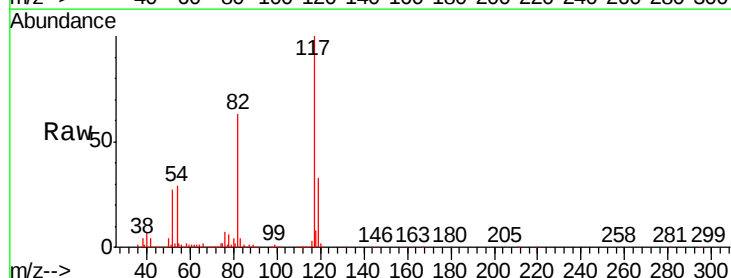
Tgt Ion: 117 Resp: 3116417

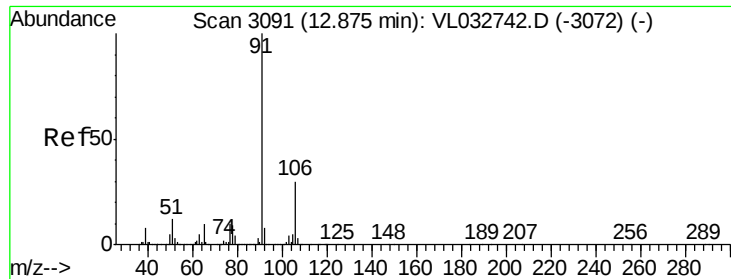
Ion Ratio Lower Upper

117 100

82 63.5 51.0 76.6

119 32.7 28.0 42.0





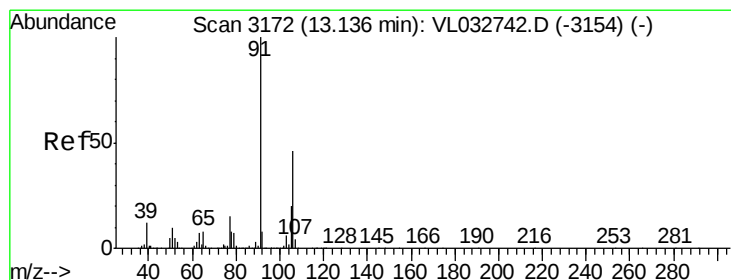
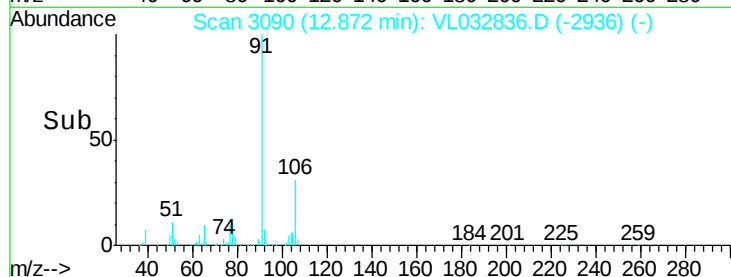
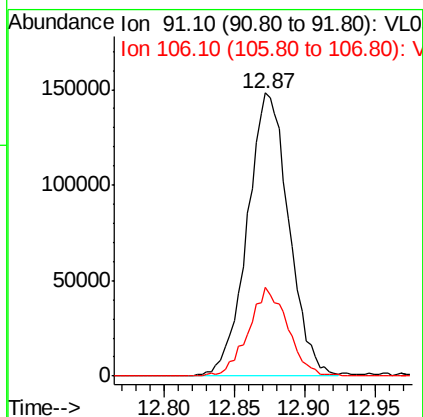
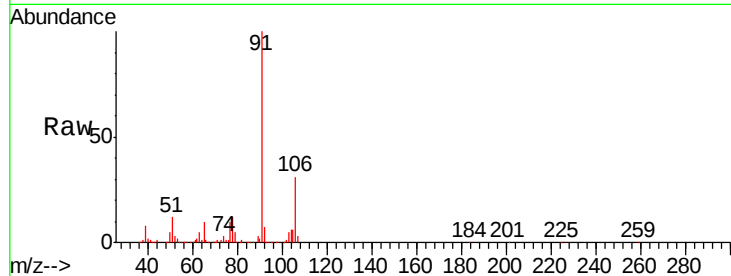
#58
Ethyl Benzene
Concen: 0.814 ppbv
RT: 12.87 min Scan# 3090
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

Tgt Ion: 91 Resp: 305419
Ion Ratio Lower Upper
91 100
106 31.2 23.6 35.4

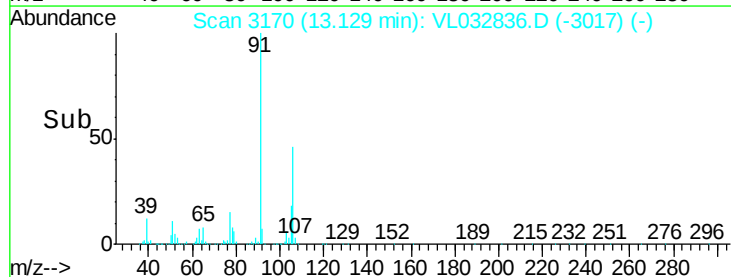
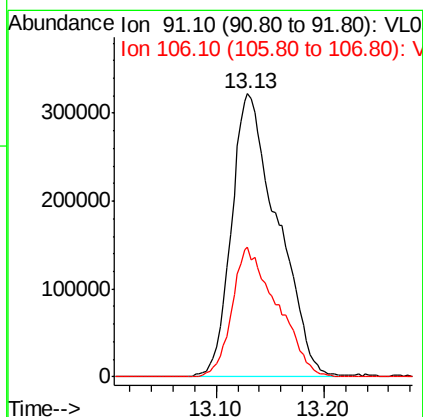
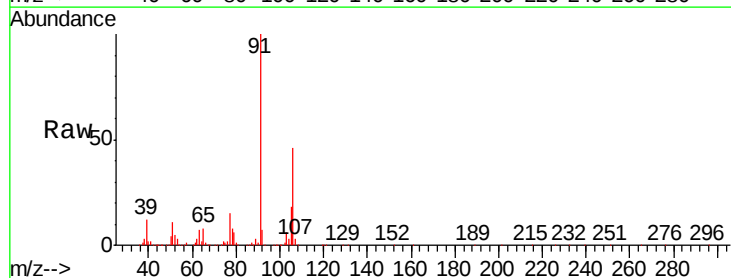
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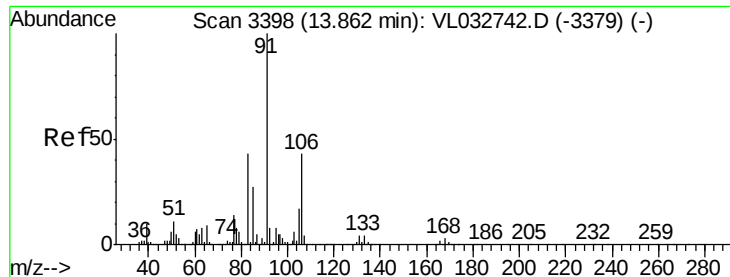
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#59
m/p-Xylene
Concen: 2.851 ppbv
RT: 13.13 min Scan# 3170
Delta R.T. -0.01 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion: 91 Resp: 951865
Ion Ratio Lower Upper
91 100
106 45.1 36.1 54.1





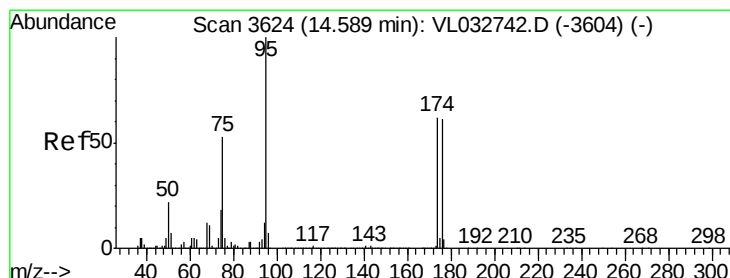
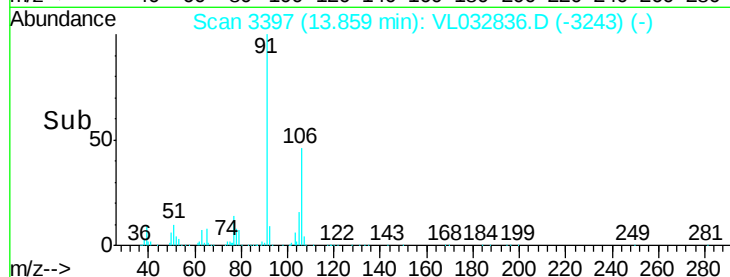
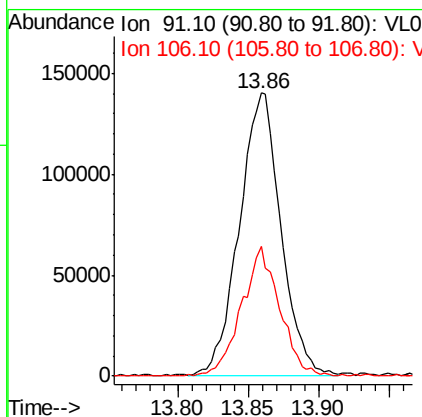
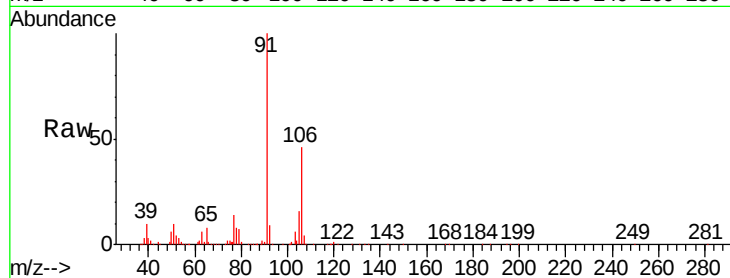
#60
o-Xylene
Concen: 0.854 ppbv
RT: 13.86 min Scan# 3397
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Instrument :
MSVOA_L
ClientSampleId :
IAS-1DUP

Tgt Ion: 91 Resp: 286602
Ion Ratio Lower Upper
91 100
106 42.7 21.9 65.7

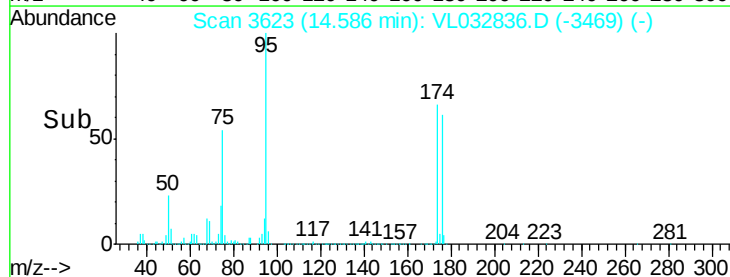
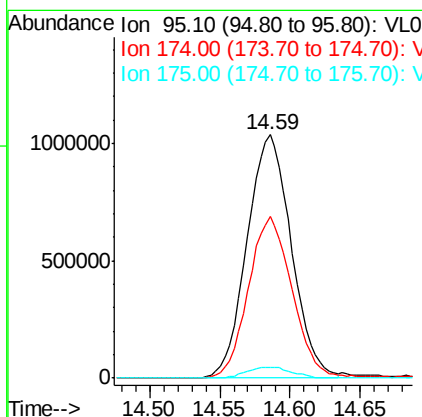
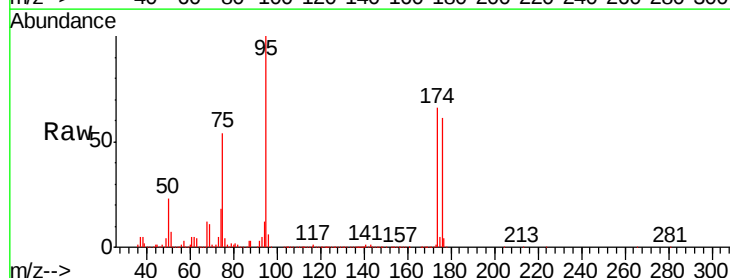
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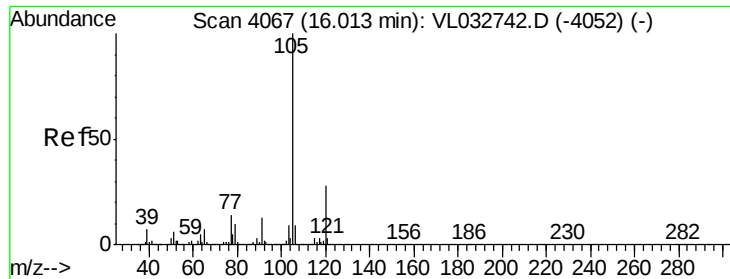
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.760 ppbv
RT: 14.59 min Scan# 3623
Delta R.T. -0.00 min
Lab File: VL032836.D
Acq: 29 Nov 2018 16:03

Tgt Ion: 95 Resp: 2274884
Ion Ratio Lower Upper
95 100
174 66.1 50.7 76.1
175 4.7 3.8 5.6





#72

4-Ethyltoluene

Concen: 0.194 ppbv

RT: 16.01 min Scan# 4066

Delta R.T. -0.00 min

Lab File: VL032836.D

Acq: 29 Nov 2018 16:03

Instrument :

MSVOA_L

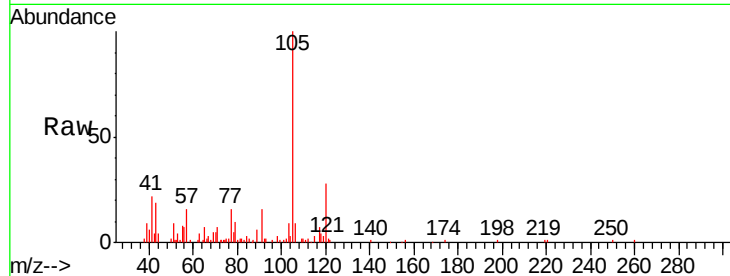
ClientSampleId :

IAS-1DUP

Tgt Ion	Ratio	Lower	Upper
105	100		
120	30.6	22.9	34.3
91	17.9	10.6	15.8
77	16.7	11.4	17.2

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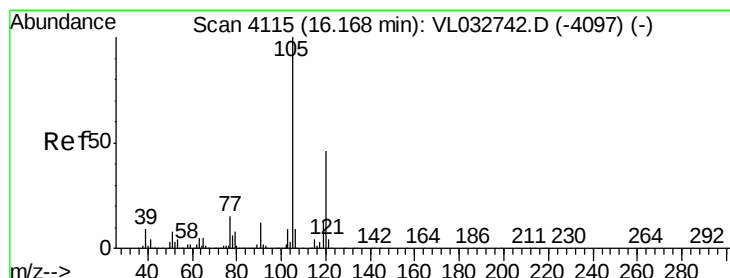
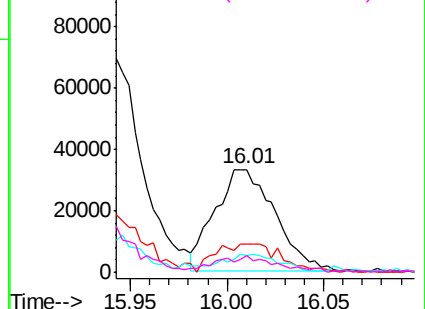
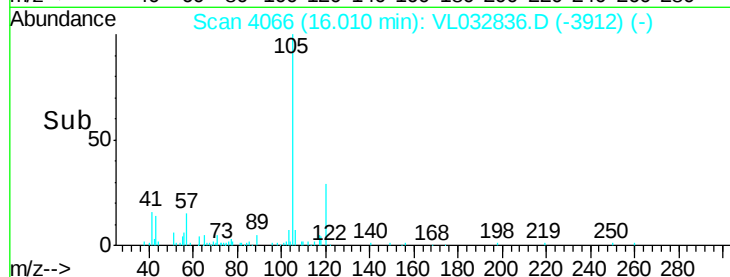


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.169 ppbv

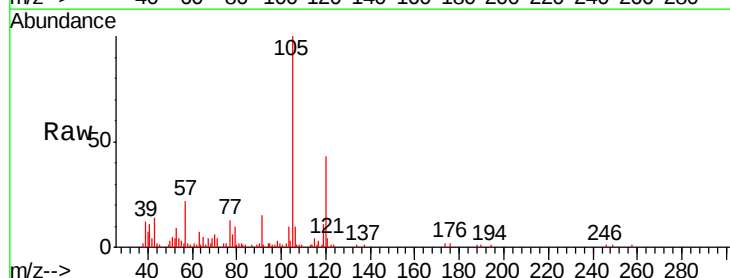
RT: 16.17 min Scan# 4115

Delta R.T. -0.00 min

Lab File: VL032836.D

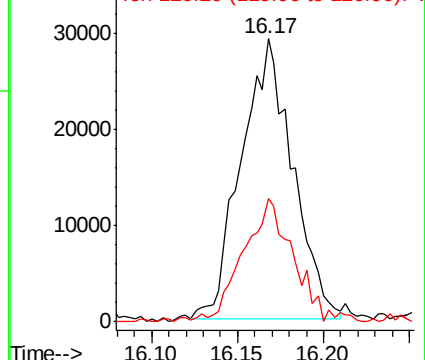
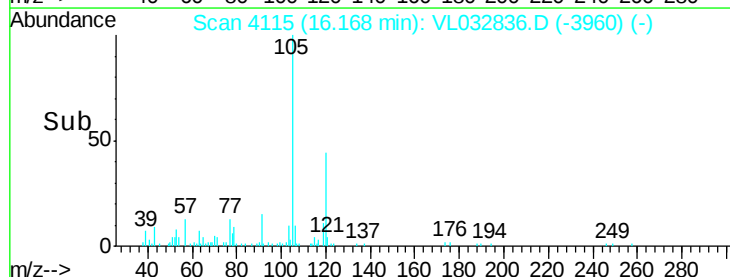
Acq: 29 Nov 2018 16:03

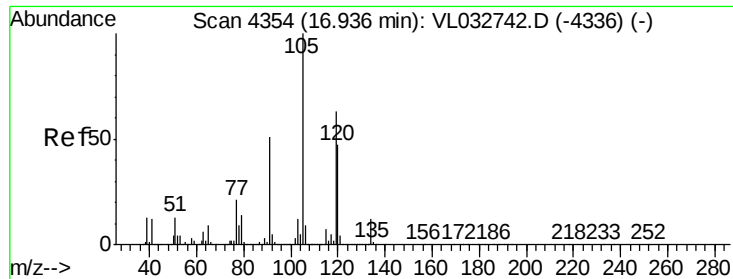
Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.6	36.6	55.0



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





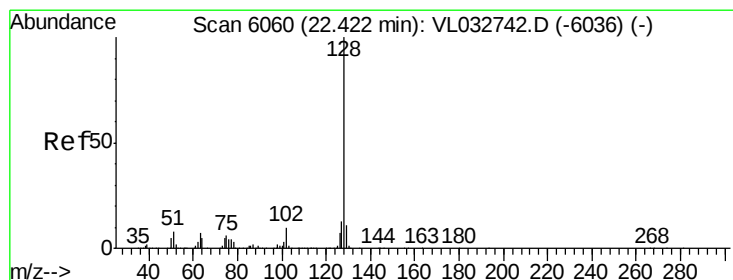
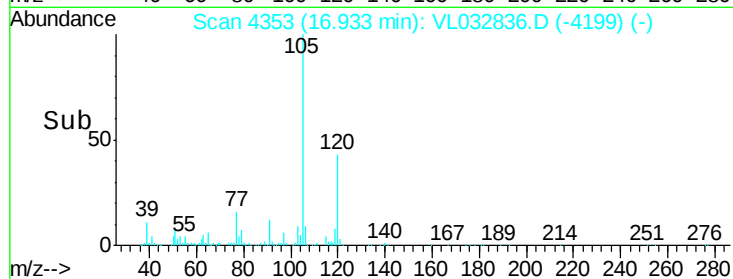
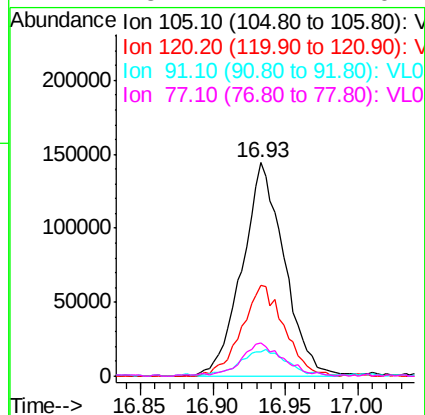
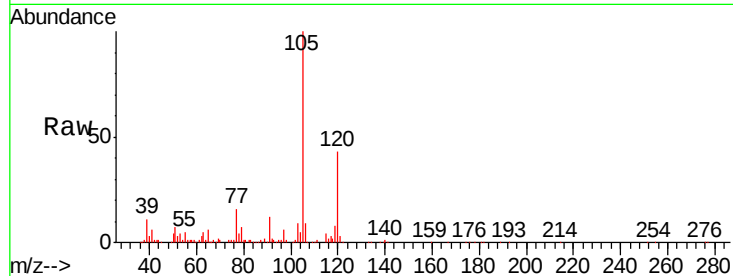
#74
 1,2,4-Trimethylbenzene
 Concen: 0.750 ppbv
 RT: 16.93 min Scan# 4353
 Delta R.T. -0.00 min
 Lab File: VL032836.D
 Acq: 29 Nov 2018 16:03

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1DUP

Tgt Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	42.9	37.6	56.4
91	11.2	42.5	63.7#
77	15.4	17.4	26.2#

Manual Integrations
 APPROVED

apatel
 12/4/2018 8:38:31 AM



#79
 Naphthalene
 Concen: 0.186 ppbv m
 RT: 22.43 min Scan# 6062
 Delta R.T. 0.01 min
 Lab File: VL032836.D
 Acq: 29 Nov 2018 16:03

Tgt Ion	Ratio	Resp Lower	Resp Upper
128	100		
127	16.3	10.1	15.1#
129	11.5	8.9	13.3

