

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL120718\
 Data File : VL032934.D
 Acq On : 7 Dec 2018 14:33
 Operator : SY/AP
 Sample : J6262-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 12/11/2018 10:08:45 AM

Quant Time: Dec 10 20:04:45 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

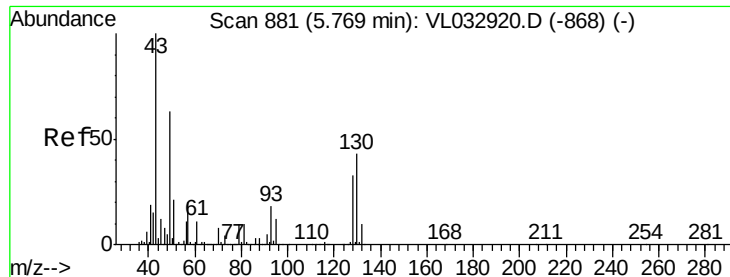
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1069239	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2766249	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2631785	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2011457	10.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.08	85	30486	0.214	ppbv	97
3) Chlorodifluoromethane	3.02	51	40953m	0.506	ppbv	
4) Chloromethane	3.17	50	35951	0.763	ppbv	98
9) Propene	3.05	41	65438m	2.044	ppbv	
10) Heptane	8.25	43	49519	0.412	ppbv	98
11) Trichlorofluoromethane	4.01	101	35046	0.261	ppbv	93
13) Ethanol	3.66	45	1339827	121.531	ppbv	97
15) Acetone	3.90	43	1998521	21.776	ppbv	98
19) Isopropyl Alcohol	4.03	45	735289	12.758	ppbv #	1
20) Methylene Chloride	4.41	84	106714	2.379	ppbv	96
26) Hexane	5.78	57	588095	5.875	ppbv #	58
29) Chloroform	5.85	83	19450	0.109	ppbv	100
30) Cyclohexane	7.25	84	20301m	0.245	ppbv	
31) cis-1,2-Dichloroethene	5.64	61	16221	0.177	ppbv	90
34) 2-Butanone	5.34	43	240350	1.995	ppbv	99
35) Carbon Tetrachloride	7.14	117	17065m	0.078	ppbv	
36) Benzene	7.01	78	63955m	0.314	ppbv	
38) Trichloroethene	7.96	130	38026m	0.449	ppbv	
43) Methyl Methacrylate	8.14	69	236660m	3.139	ppbv	
44) 2,2,4-Trimethylpentane	8.00	57	124185	0.360	ppbv #	78
52) Tetrachloroethene	11.38	164	238344	3.220	ppbv	99
53) Toluene	9.95	91	2151804	9.972	ppbv	100
58) Ethyl Benzene	12.87	91	53137m	0.189	ppbv	
59) m/p-Xylene	13.13	91	175529	0.690	ppbv #	100
60) o-Xylene	13.86	91	63498m	0.247	ppbv	
72) 4-Ethyltoluene	16.01	105	48466m	0.169	ppbv	
73) 1,3,5-Trimethylbenzene	16.16	105	38682m	0.138	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	144715	0.457	ppbv #	68
79) Naphthalene	22.42	128	36316m	0.178	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

Delta R.T. -0.00 min

Lab File: VL032934.D

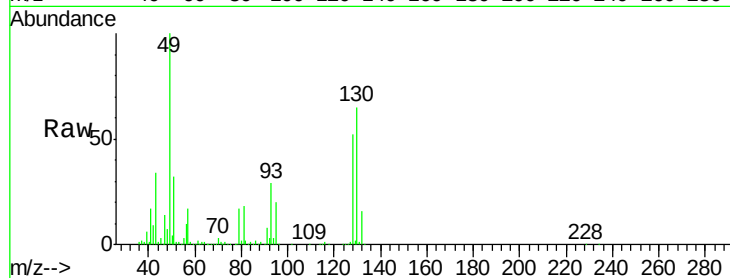
Acq: 7 Dec 2018 14:33

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MSVOA_L

ClientSampleId :

IA1



Tgt Ion: 49 Resp: 1069239

Ion Ratio Lower Upper

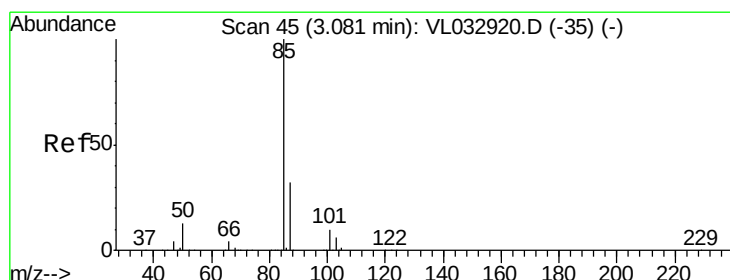
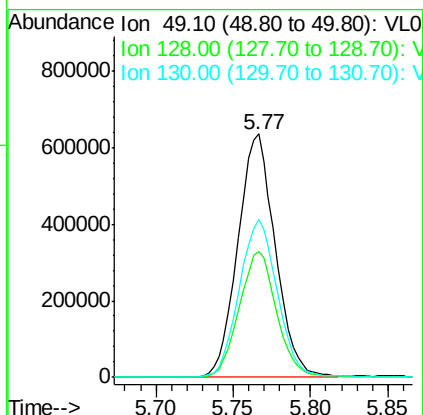
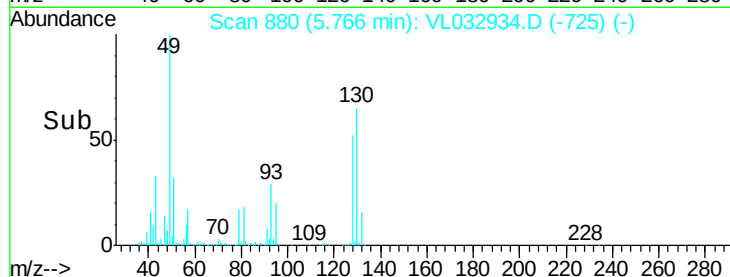
49 100

128 52.2 26.3 78.8

130 66.7 33.9 101.7

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#2

Dichlorodifluoromethane

Concen: 0.214 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.01 min

Lab File: VL032934.D

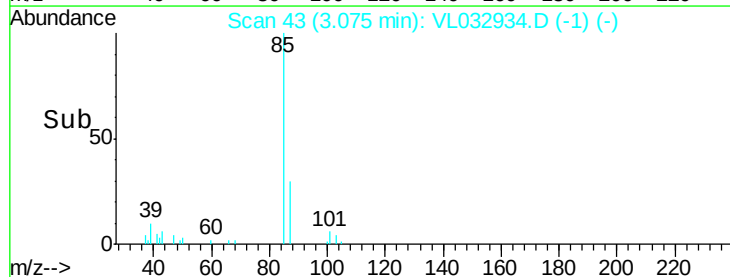
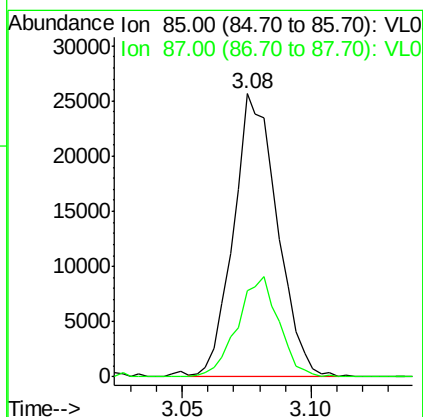
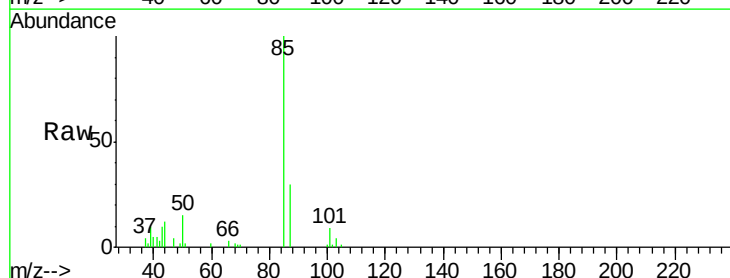
Acq: 7 Dec 2018 14:33

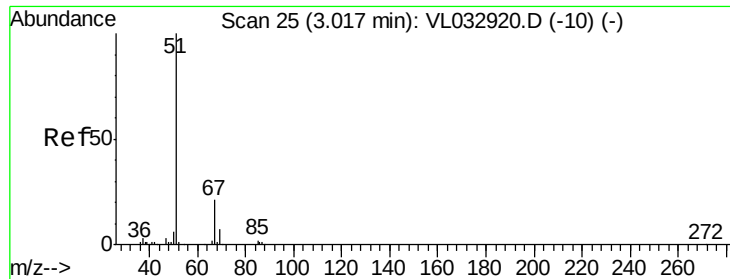
Tgt Ion: 85 Resp: 30486

Ion Ratio Lower Upper

85 100

87 30.3 25.7 38.5





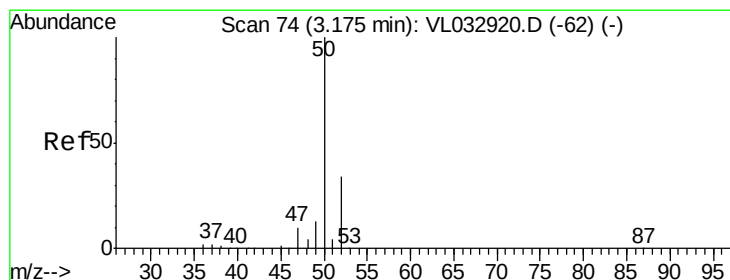
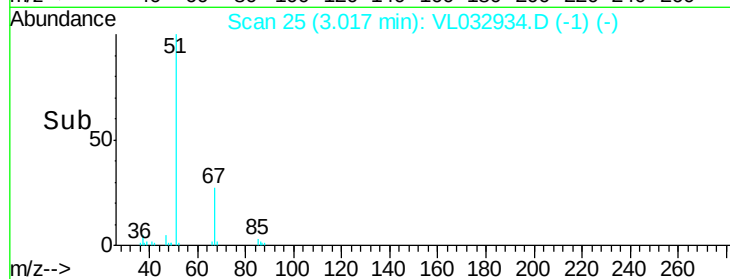
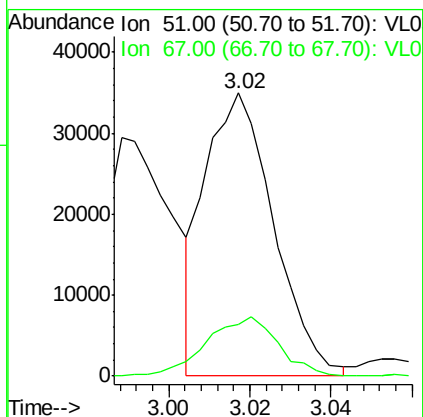
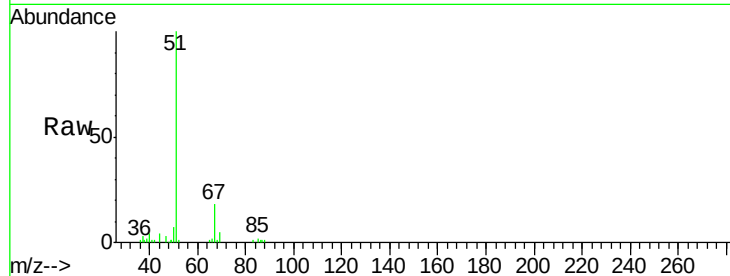
#3
Chlorodifluoromethane
Concen: 0.506 ppbv
RT: 3.02 min Scan# 25
Delta R.T. 0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 51 Resp: 40953
Ion Ratio Lower Upper
51 100
67 22.2 16.8 25.2

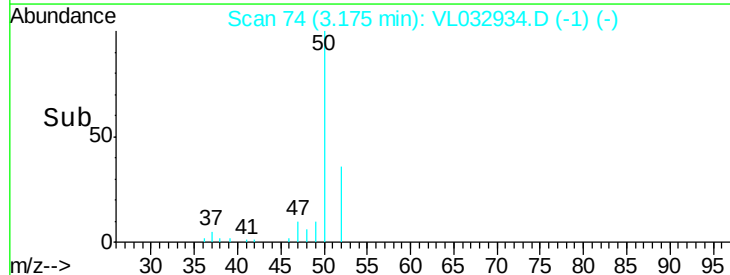
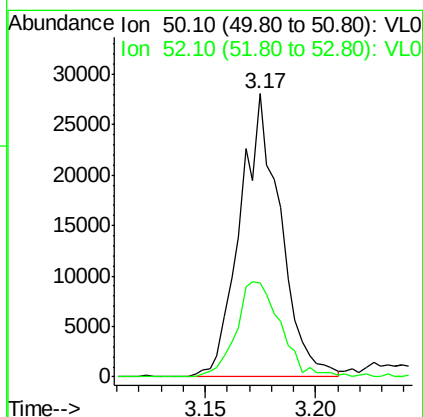
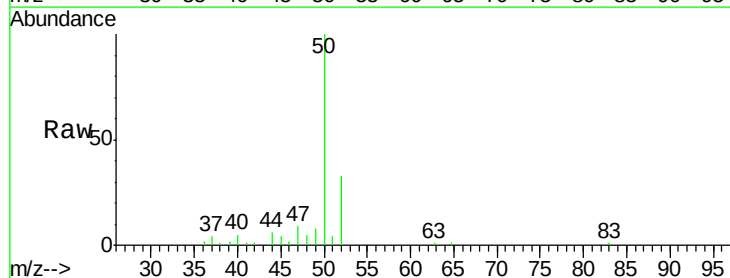
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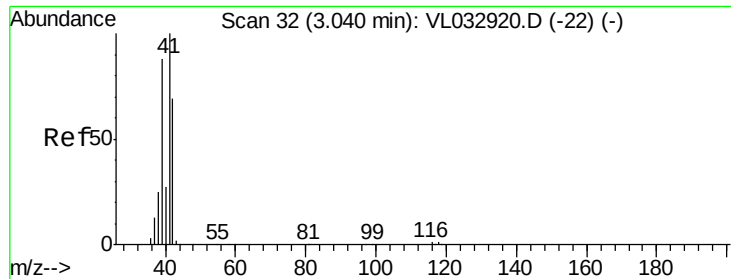
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#4
Chloromethane
Concen: 0.763 ppbv
RT: 3.17 min Scan# 74
Delta R.T. 0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion: 50 Resp: 35951
Ion Ratio Lower Upper
50 100
52 33.2 27.3 40.9





#9

Propene

Concen: 2.044 ppbv m

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL032934.D

Acq: 7 Dec 2018 14:33

Instrument :

MSVOA_L

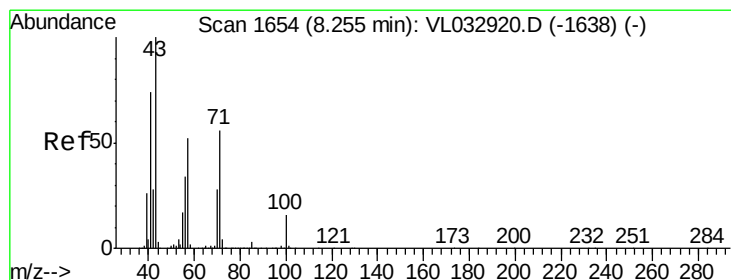
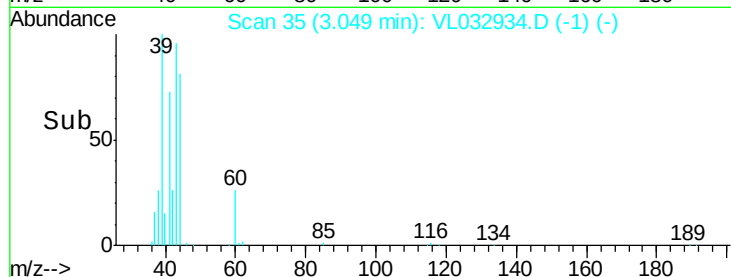
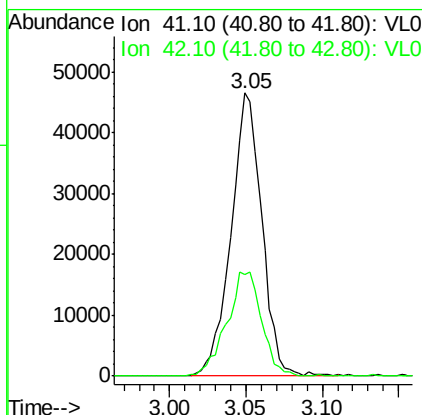
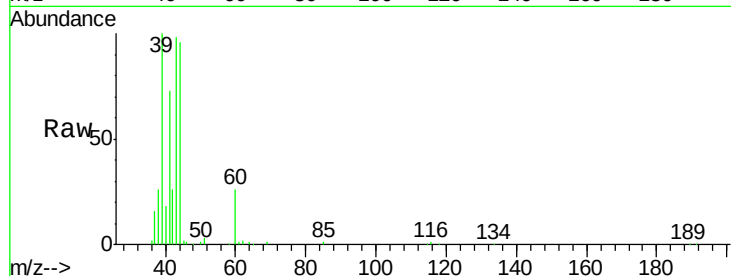
ClientSampled :

IA1

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Tgt Ion: 41 Resp: 65438
Ion Ratio Lower Upper
41 100
42 78.1 56.2 84.2



#10

Heptane

Concen: 0.412 ppbv

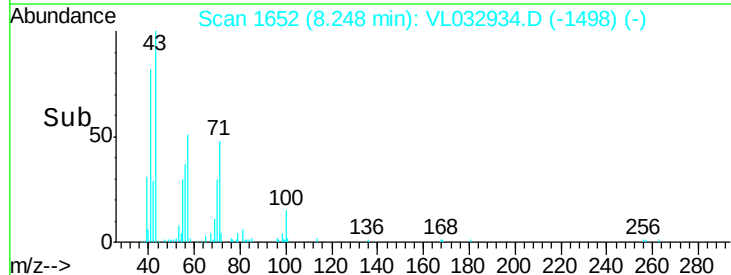
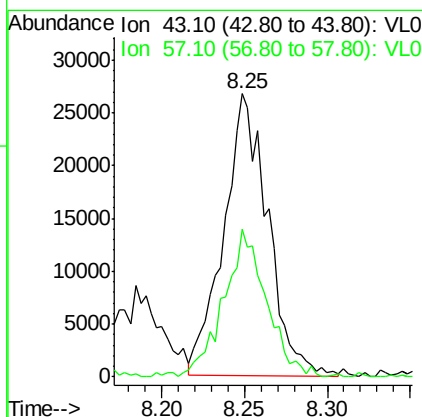
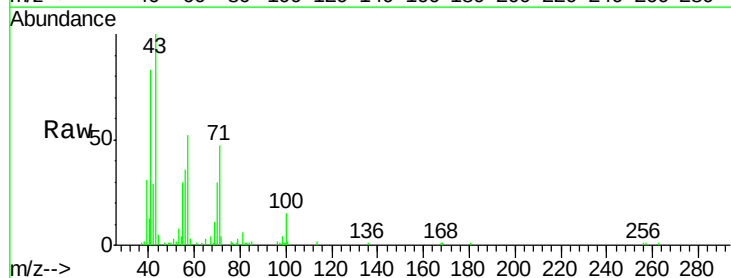
RT: 8.25 min Scan# 1652

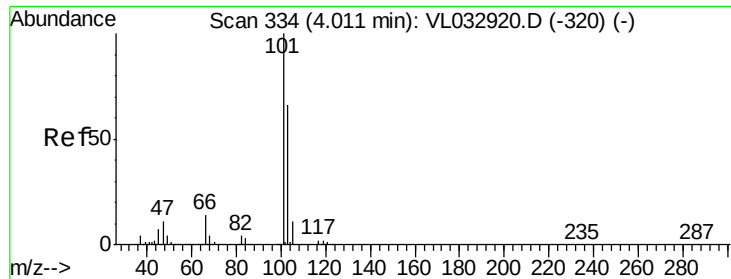
Delta R.T. -0.01 min

Lab File: VL032934.D

Acq: 7 Dec 2018 14:33

Tgt Ion: 43 Resp: 49519
Ion Ratio Lower Upper
43 100
57 51.0 41.8 62.6





#11

Trichlorofluoromethane

Concen: 0.261 ppbv

RT: 4.01 min Scan# 333

Delta R.T. -0.00 min

Lab File: VL032934.D

Acq: 7 Dec 2018 14:33

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion:101 Resp: 35046

Ion Ratio Lower Upper

101 100

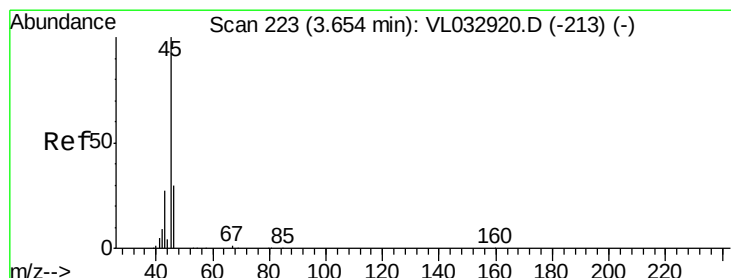
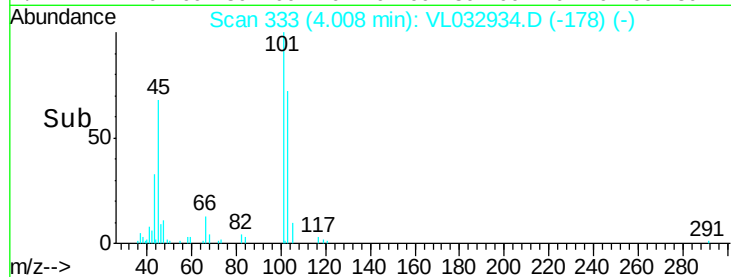
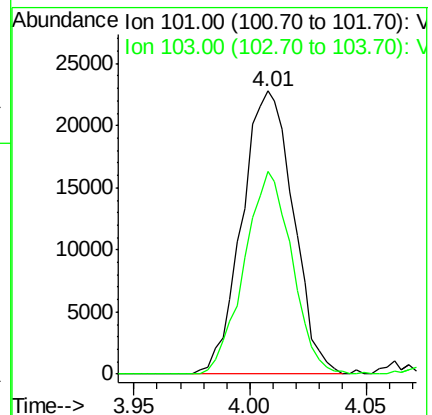
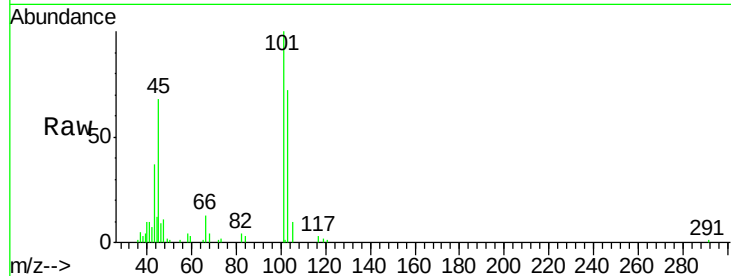
103 71.5 52.7 79.1

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#13

Ethanol

Concen: 121.531 ppbv

RT: 3.66 min Scan# 224

Delta R.T. 0.00 min

Lab File: VL032934.D

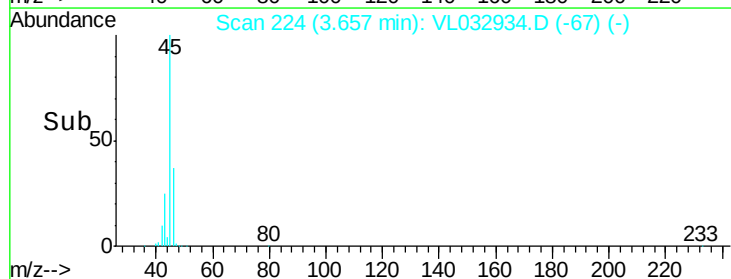
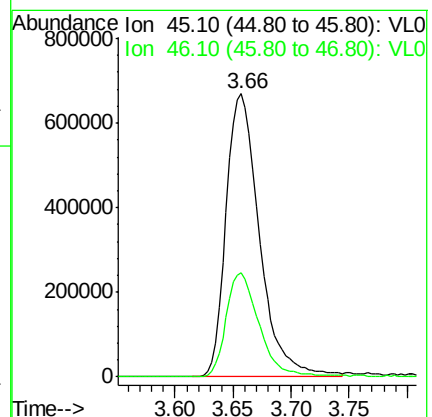
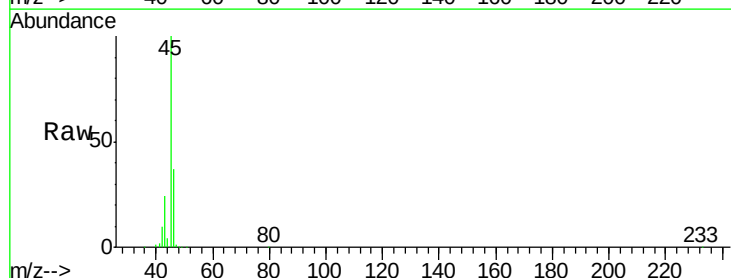
Acq: 7 Dec 2018 14:33

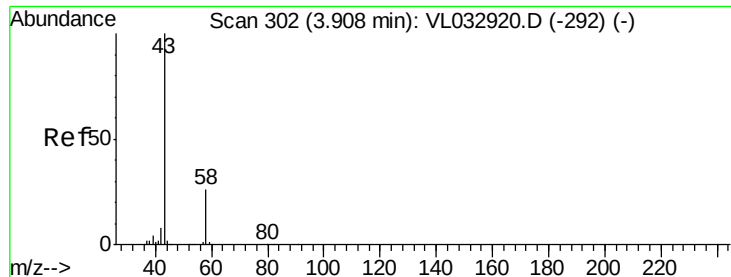
Tgt Ion: 45 Resp: 1339827

Ion Ratio Lower Upper

45 100

46 36.4 13.8 55.4





#15

Acetone

Concen: 21.776 ppbv

RT: 3.90 min Scan# 300

Delta R.T. -0.01 min

Lab File: VL032934.D

Acq: 7 Dec 2018 14:33

Instrument :

MSVOA_L

ClientSampled :

IA1

Tgt Ion: 43 Resp: 1998521

Ion Ratio Lower Upper

43 100

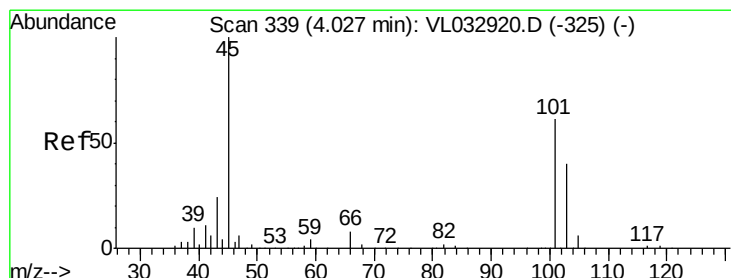
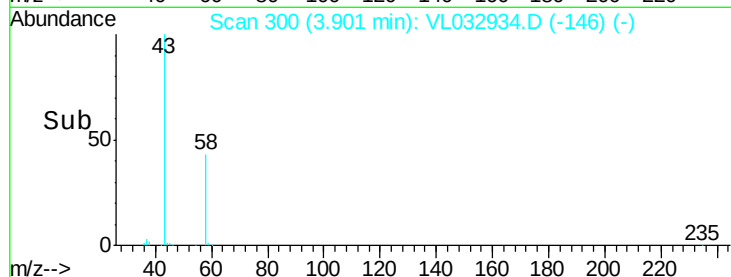
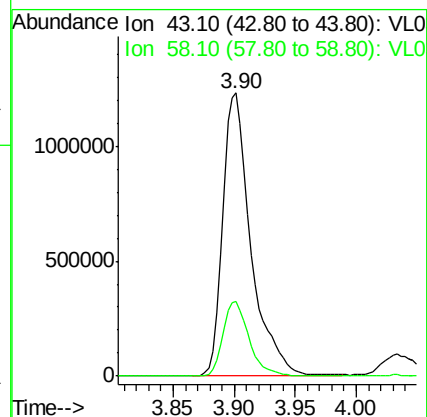
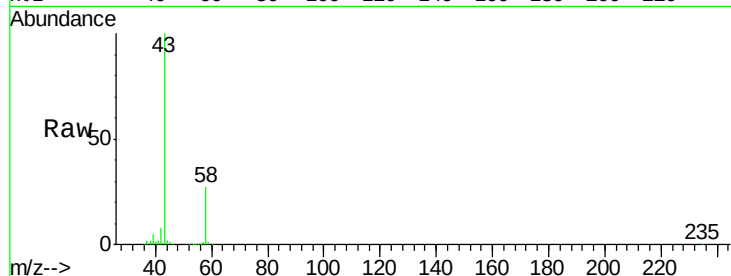
58 24.6 20.6 30.8

Manual Integrations

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#19

Isopropyl Alcohol

Concen: 12.758 ppbv

RT: 4.03 min Scan# 341

Delta R.T. 0.01 min

Lab File: VL032934.D

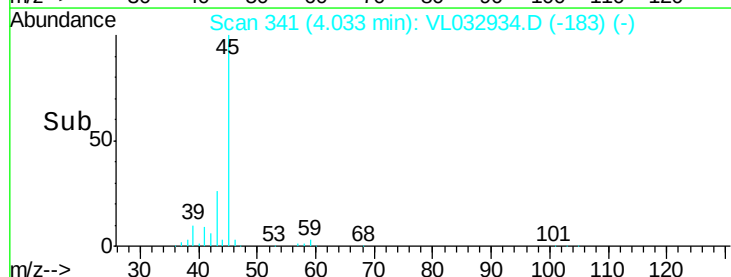
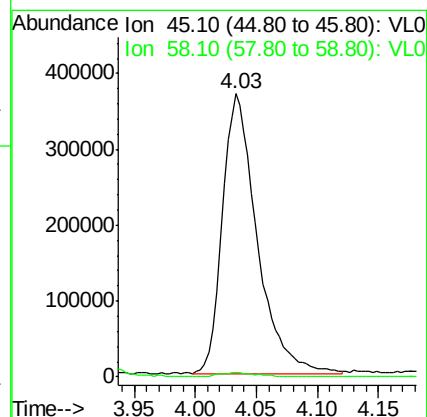
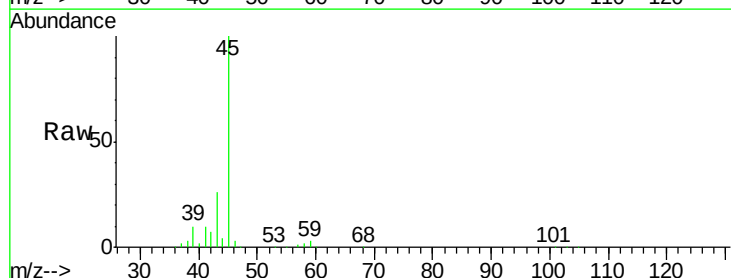
Acq: 7 Dec 2018 14:33

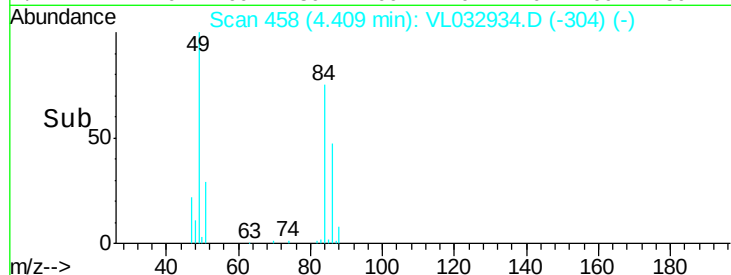
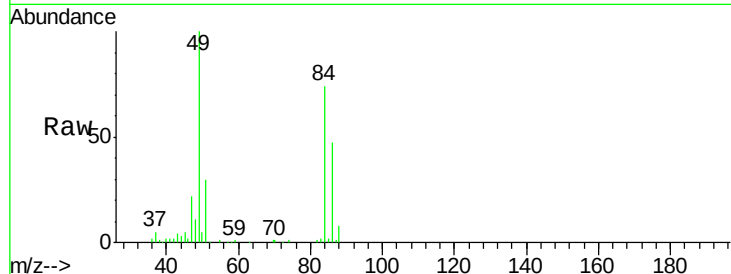
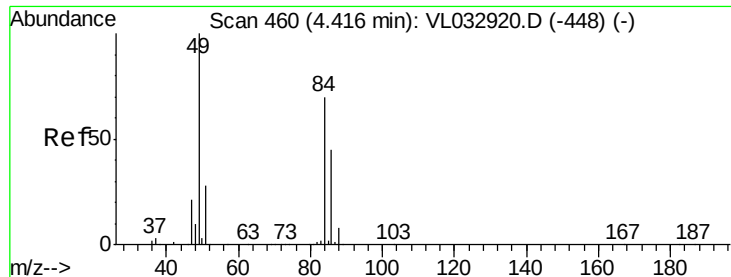
Tgt Ion: 45 Resp: 735289

Ion Ratio Lower Upper

45 100

58 67.2 1.4 2.2#





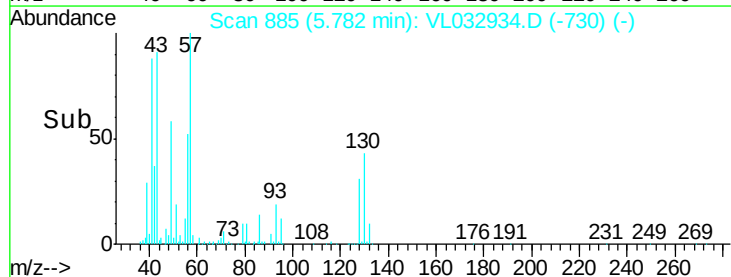
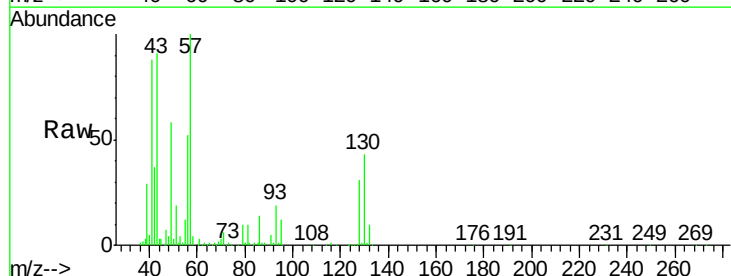
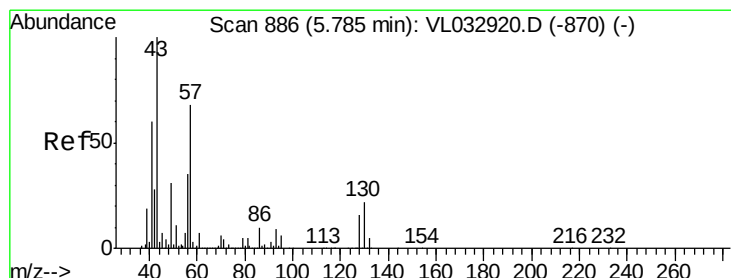
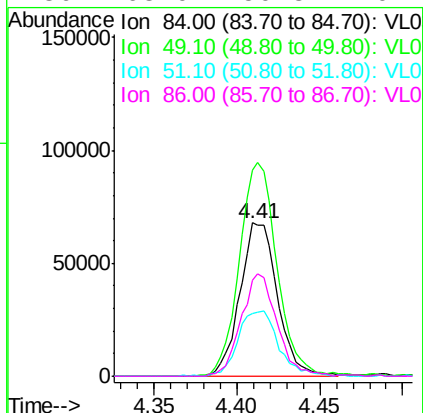
#20
Methylene Chloride
Concen: 2.379 ppbv
RT: 4.41 min Scan# 458
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Lower	Upper
84	100		
49	134.4	113.8	170.8
51	40.4	31.8	47.8
86	63.0	50.8	76.2

Instrument :
MSVOA_L
ClientSampled :
IA1

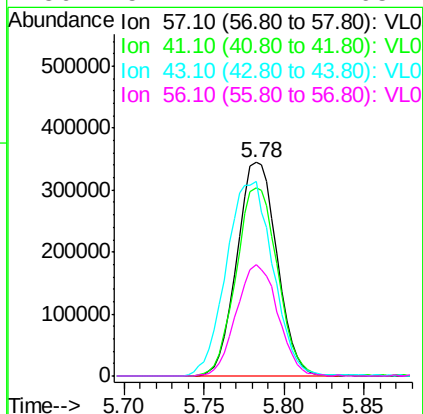
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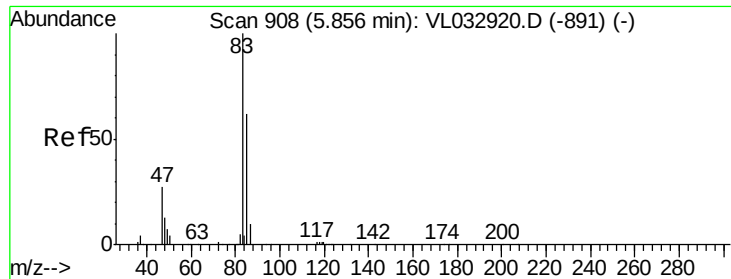
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#26
Hexane
Concen: 5.875 ppbv
RT: 5.78 min Scan# 885
Delta R.T. -0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Lower	Upper
57	100		
41	91.3	72.2	108.2
43	106.9	171.9	257.9#
56	54.2	42.2	63.2





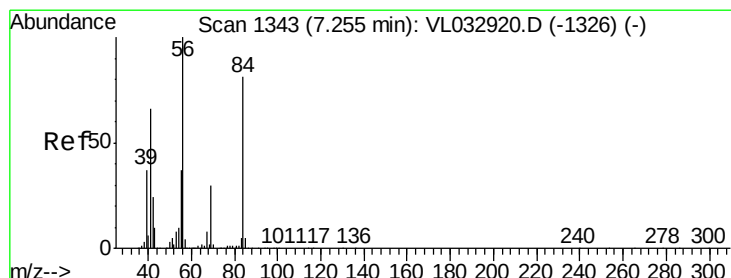
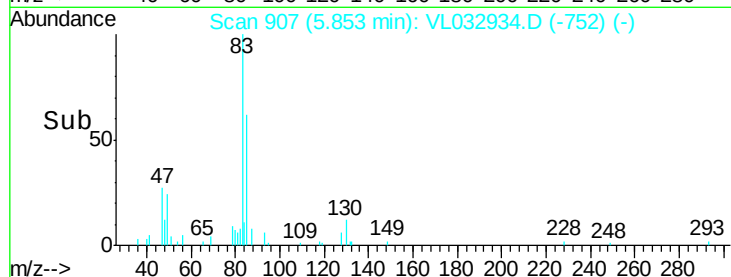
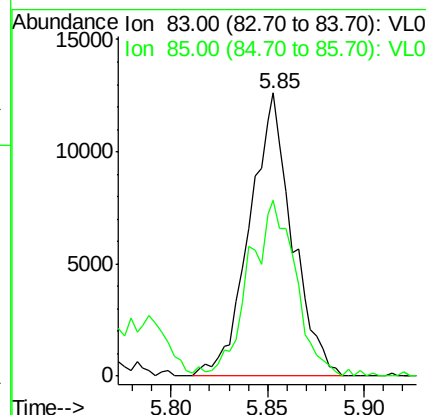
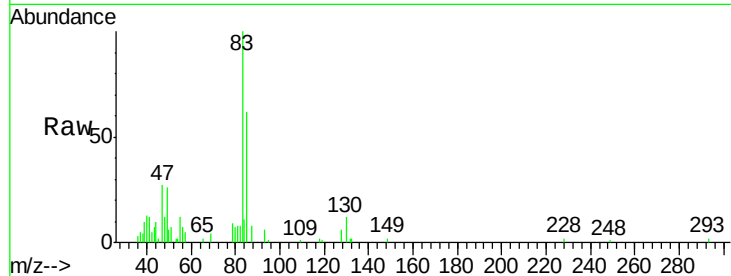
#29
Chloroform
Concen: 0.109 ppbv
RT: 5.85 min Scan# 907
Delta R.T. -0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.2	49.8	74.8

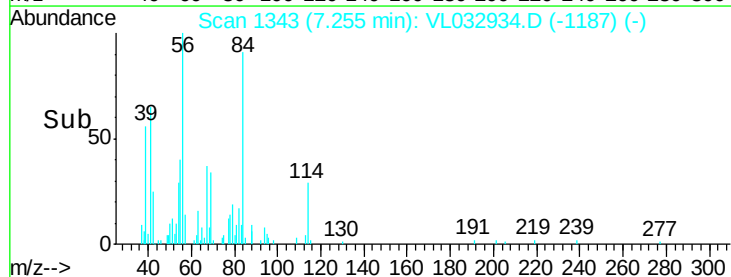
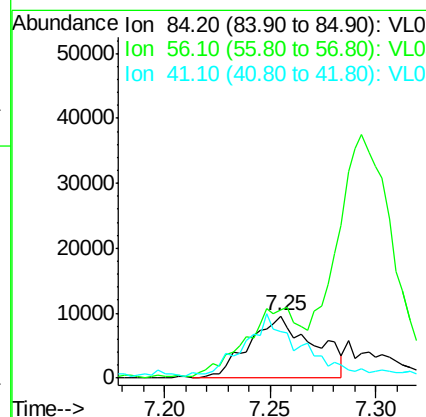
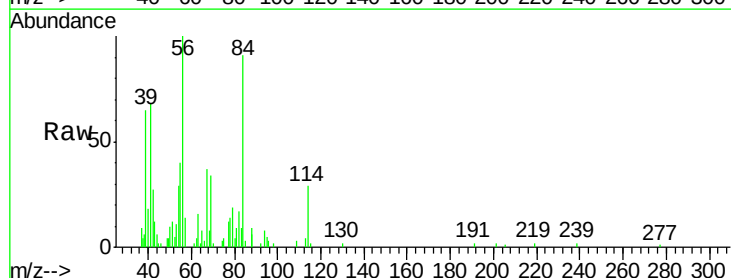
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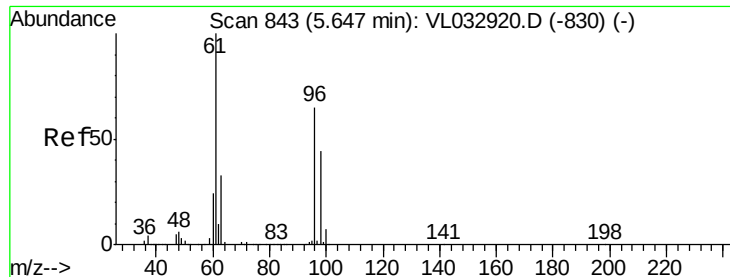
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#30
Cyclohexane
Concen: 0.245 ppbv m
RT: 7.25 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.5	153.7#
41	99.2	64.1	96.1#





#31

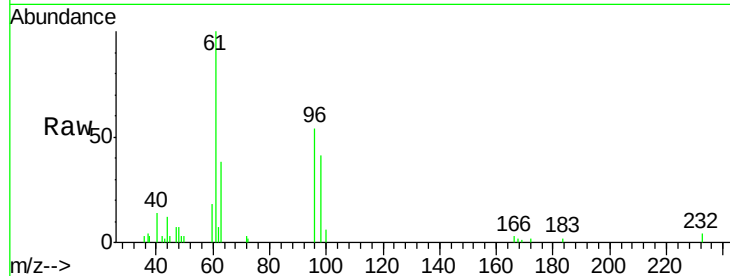
cis-1,2-Dichloroethene
 Concen: 0.177 ppbv
 RT: 5.64 min Scan# 841
 Delta R.T. -0.01 min
 Lab File: VL032934.D
 Acq: 7 Dec 2018 14:33

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

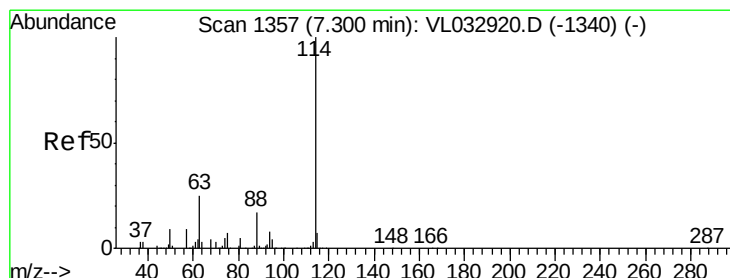
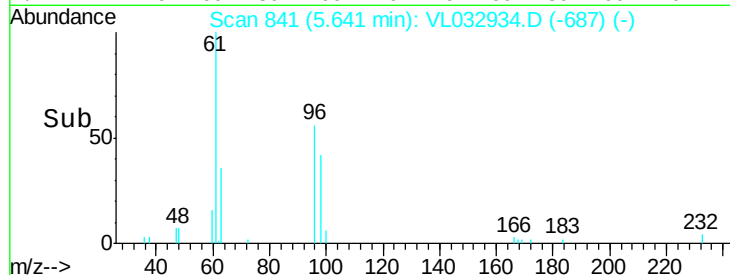
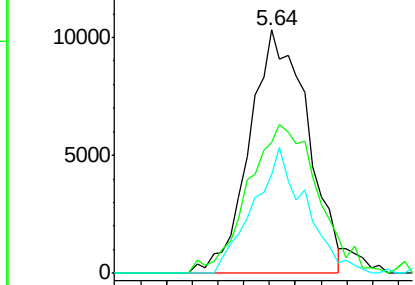
Tgt Ion	Ratio	Lower	Upper
61	100		
96	53.9	51.9	77.9
98	40.7	35.0	52.4

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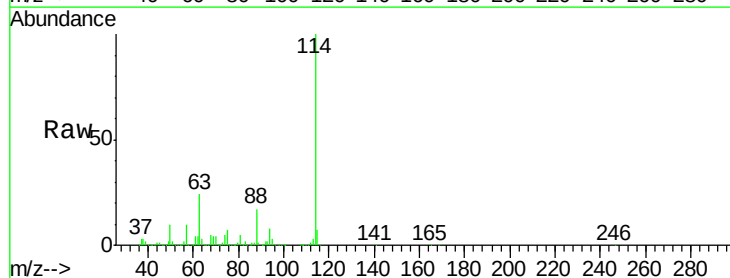
Abundance Ion 61.10 (60.80 to 61.80): VL0
 Ion 96.00 (95.70 to 96.70): VL0
 Ion 98.00 (97.70 to 98.70): VL0



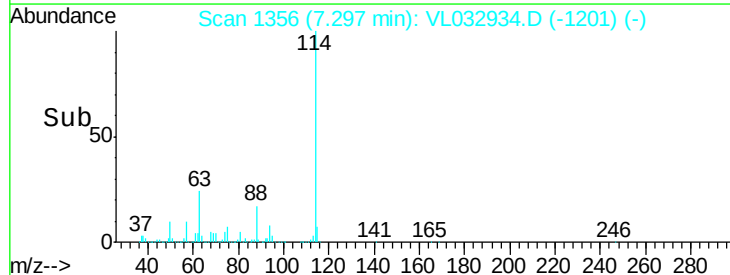
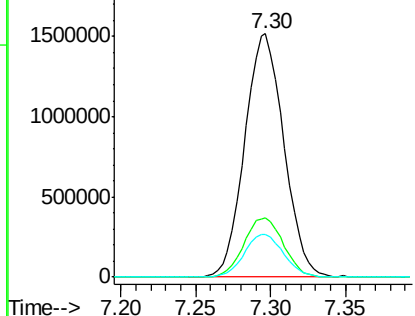
#33

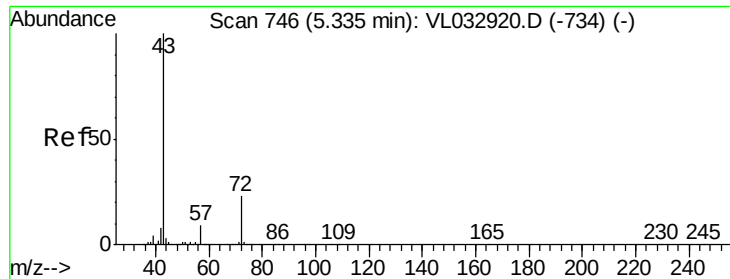
1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1356
 Delta R.T. -0.00 min
 Lab File: VL032934.D
 Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.8	20.1	30.1
88	17.8	14.2	21.4



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





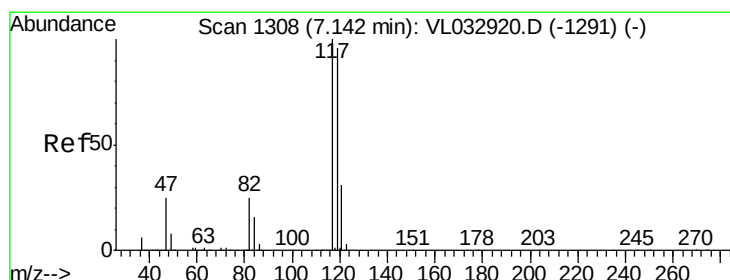
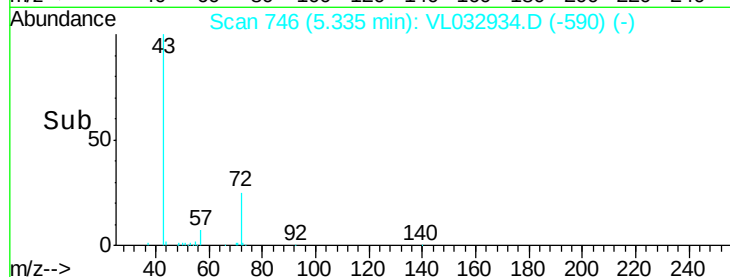
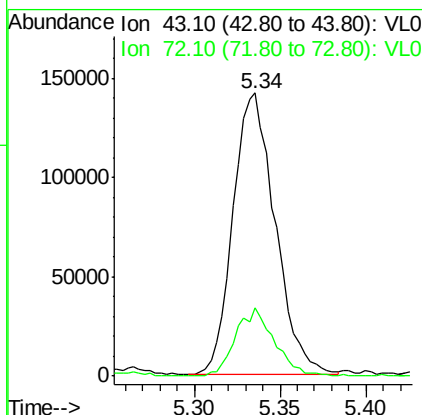
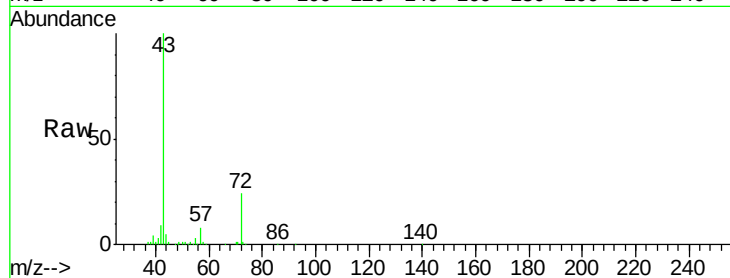
#34
2-Butanone
Concen: 1.995 ppbv
RT: 5.34 min Scan# 746
Delta R.T. 0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion: 43 Resp: 240350
Ion Ratio Lower Upper
43 100
72 22.8 18.8 28.2

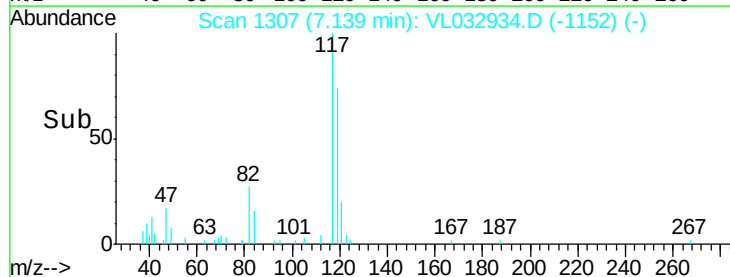
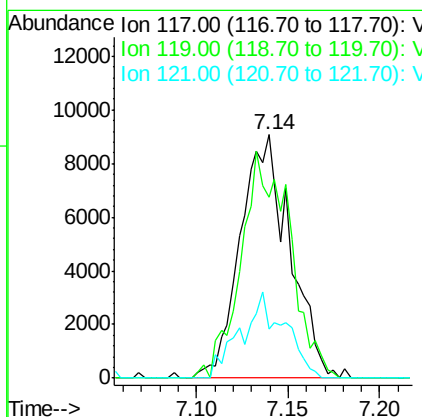
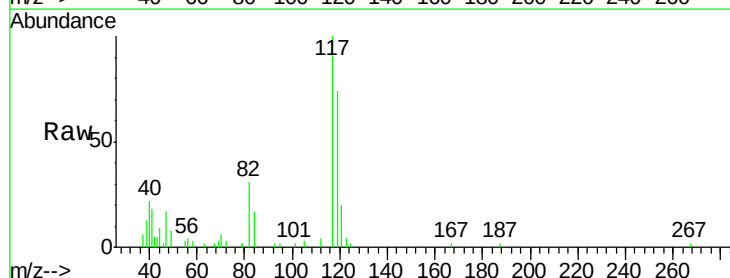
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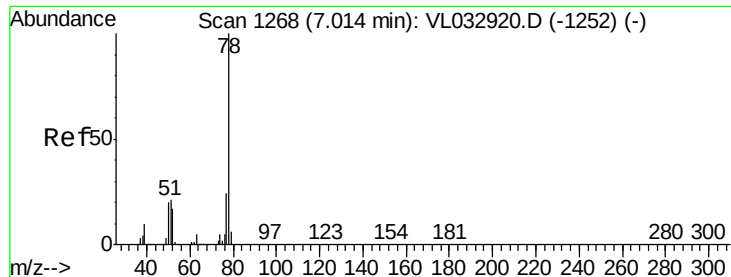
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#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 7.14 min Scan# 1307
Delta R.T. -0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion: 117 Resp: 17065
Ion Ratio Lower Upper
117 100
119 74.4 76.5 114.7#
121 20.0 24.5 36.7#





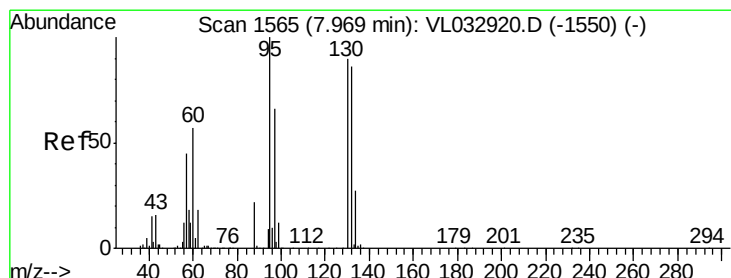
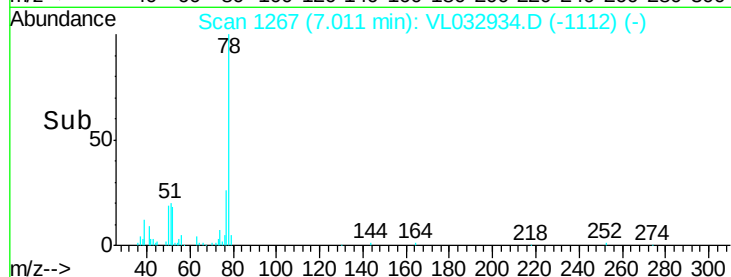
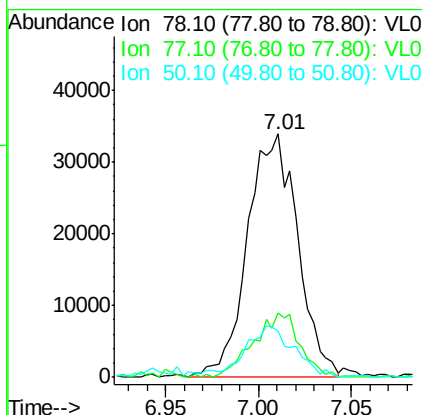
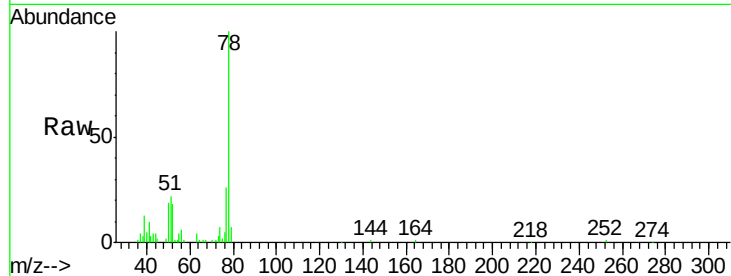
#36
Benzene
Concen: 0.314 ppbv m
RT: 7.01 min Scan# 1267
Delta R.T. -0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion	Ratio	Lower	Upper
78	100		
77	26.3	18.9	28.3
50	19.1	16.1	24.1

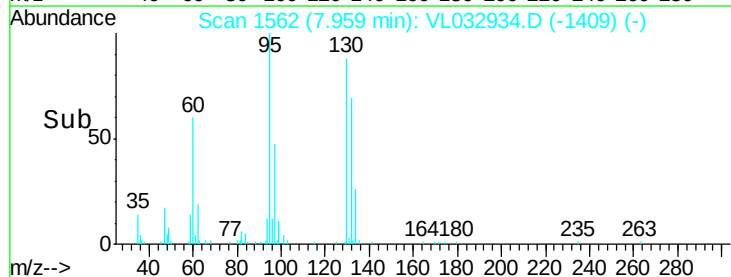
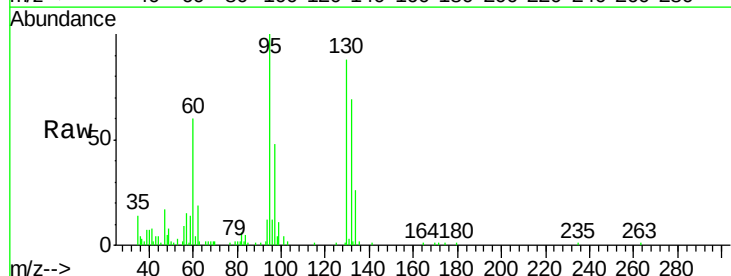
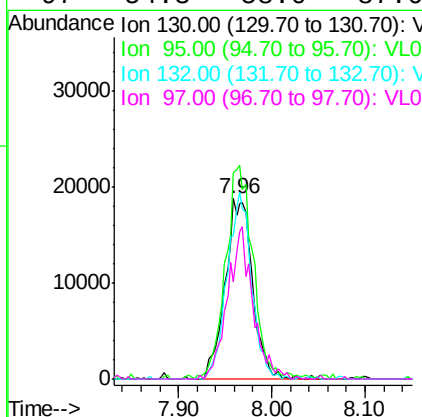
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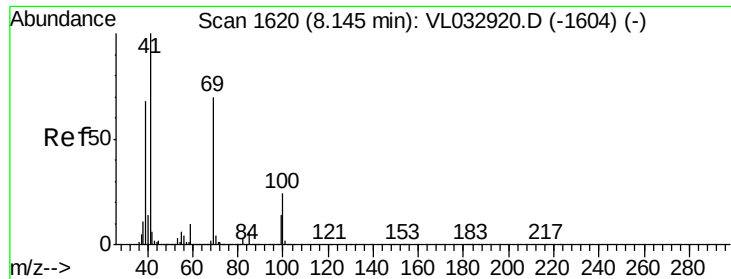
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#38
Trichloroethene
Concen: 0.449 ppbv m
RT: 7.96 min Scan# 1562
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Lower	Upper
130	100		
95	114.2	88.6	132.8
132	79.3	76.1	114.1
97	54.3	58.0	87.0#





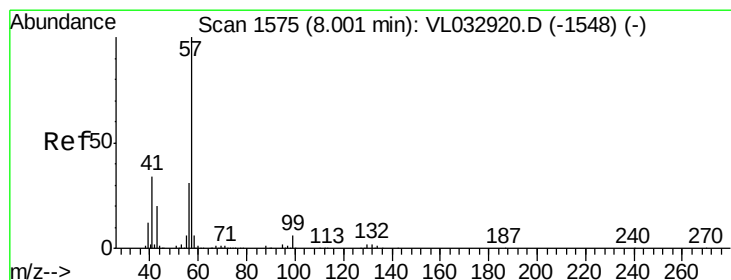
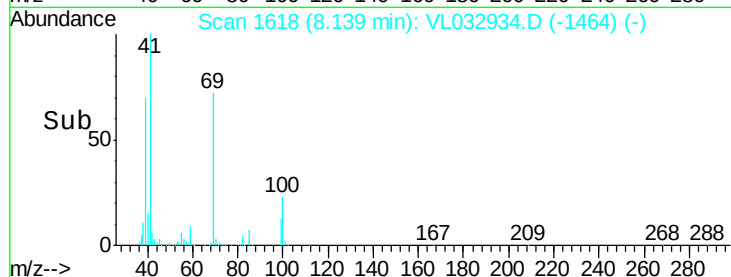
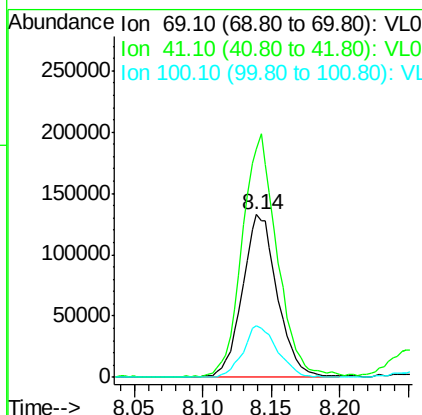
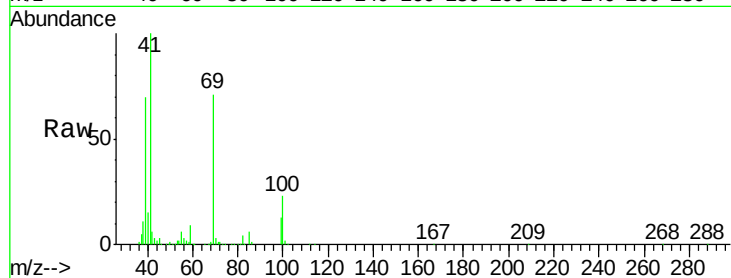
#43
Methyl Methacrylate
Concen: 3.139 ppbv m
RT: 8.14 min Scan# 1618
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion	Ratio	Lower	Upper
69	100		
41	0.0	116.6	175.0#
100	0.0	26.5	39.7#

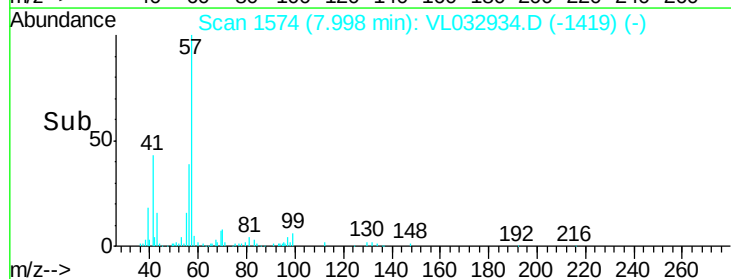
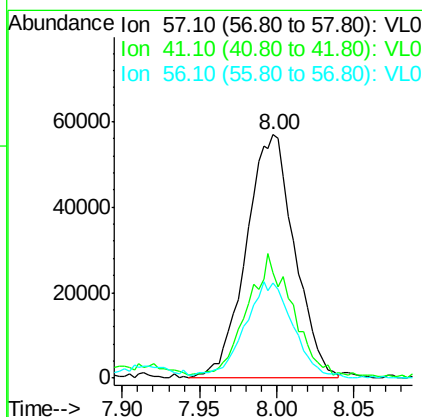
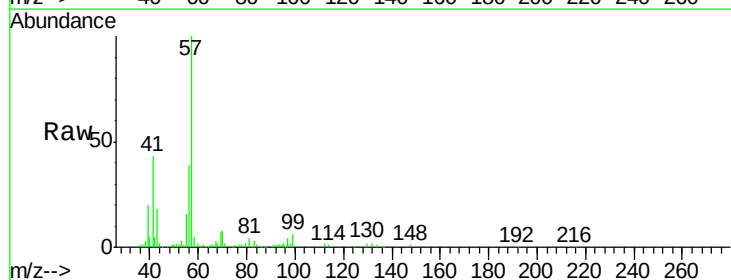
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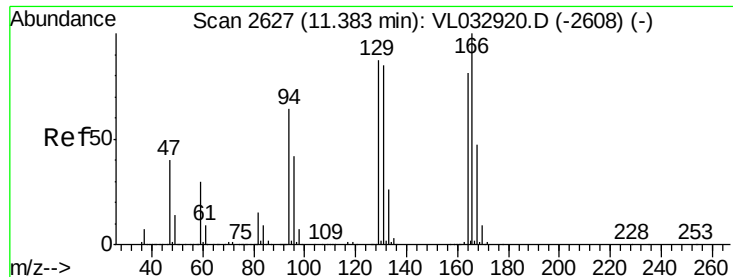
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#44
2,2,4-Trimethylpentane
Concen: 0.360 ppbv
RT: 8.00 min Scan# 1574
Delta R.T. -0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Lower	Upper
57	100		
41	49.8	27.0	40.4#
56	39.5	24.6	37.0#





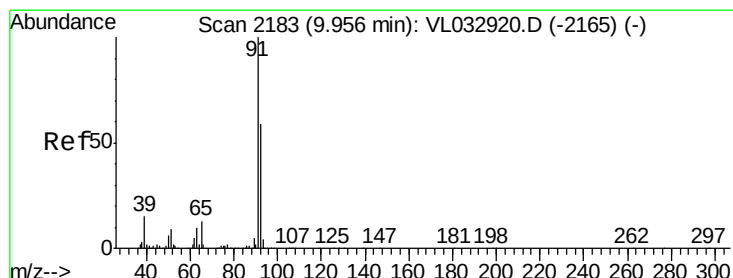
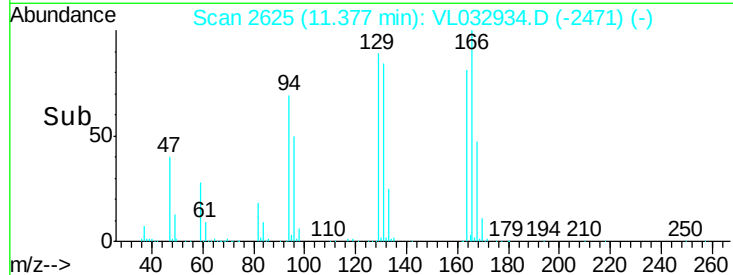
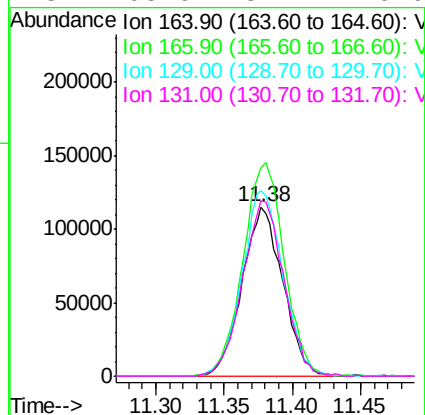
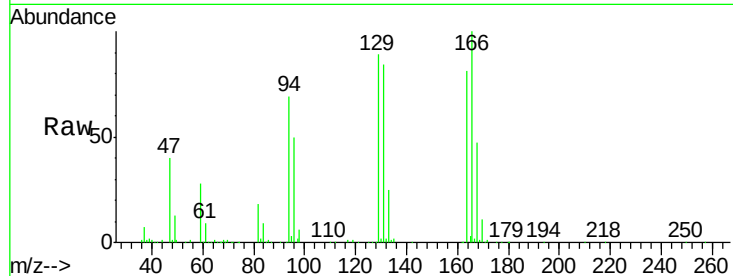
#52
Tetrachloroethene
Concen: 3.220 ppbv
RT: 11.38 min Scan# 2625
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	238344		
166	123.2	98.8	148.2	
129	109.5	85.5	128.3	
131	103.6	84.4	126.6	

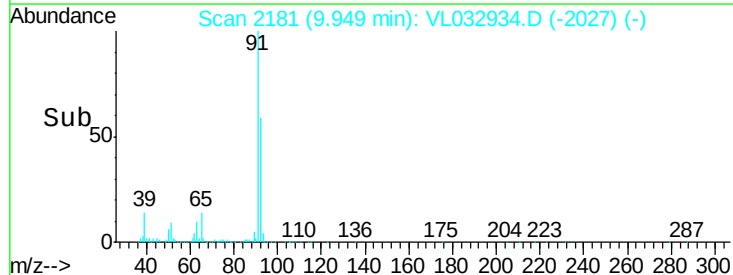
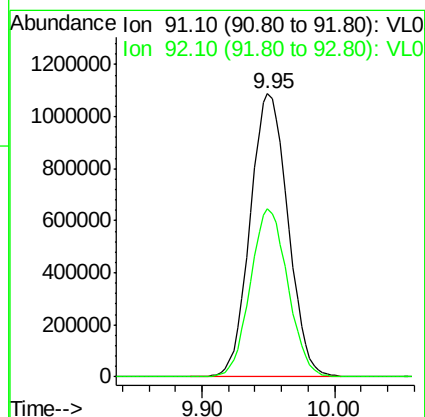
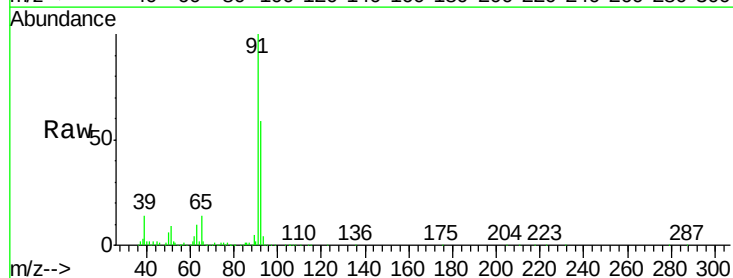
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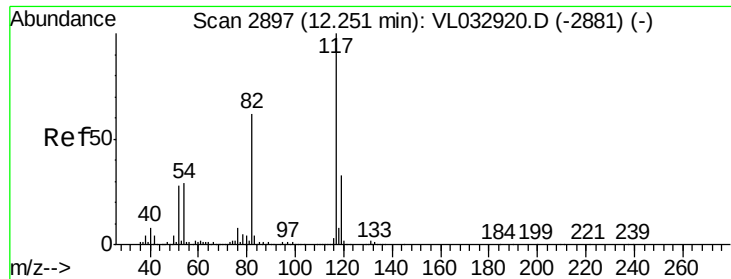
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#53
Toluene
Concen: 9.972 ppbv
RT: 9.95 min Scan# 2181
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	2151804		
92	59.1	47.4	71.0	





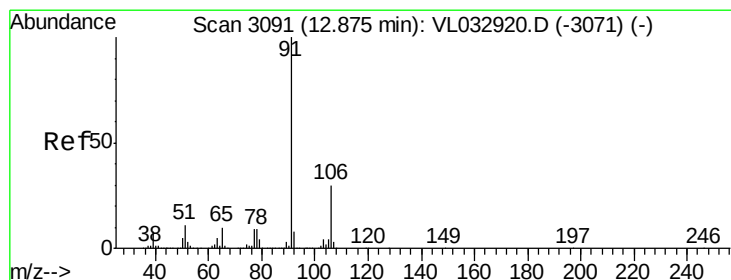
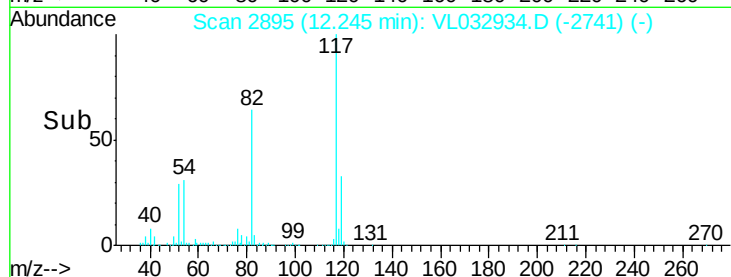
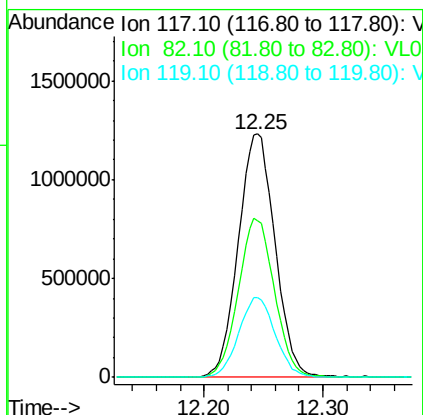
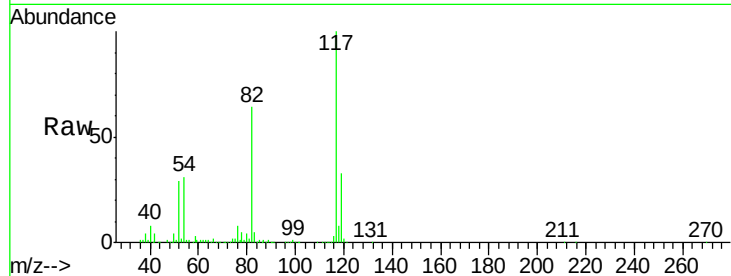
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2895
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 117 Resp: 2631785
Ion Ratio Lower Upper
117 100
82 64.2 47.8 71.8
119 32.7 43.1 64.7#

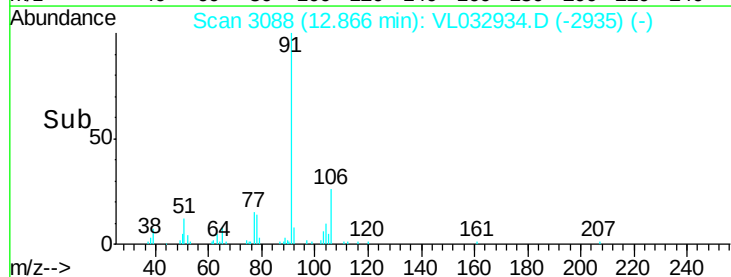
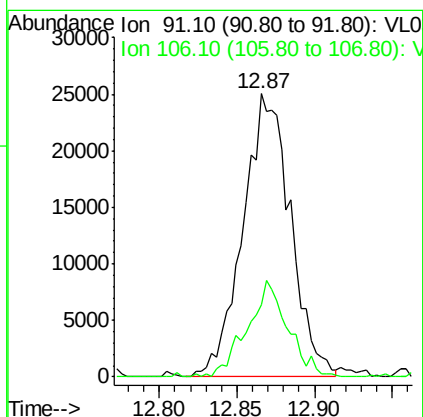
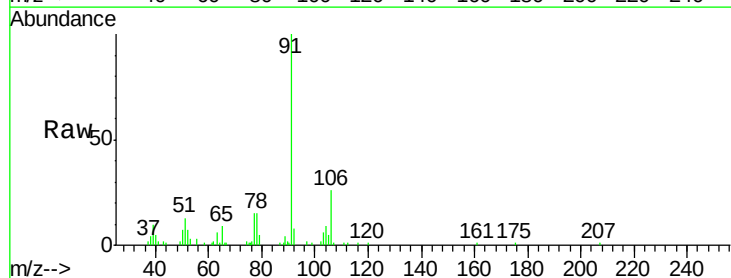
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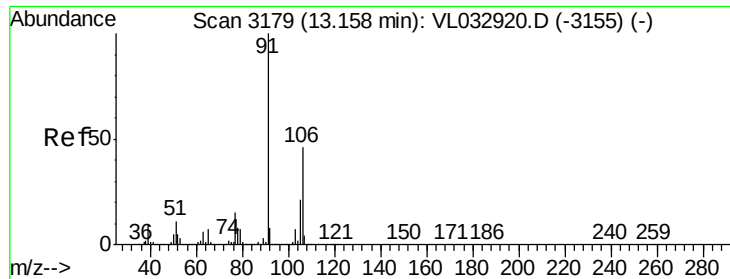
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#58
Ethyl Benzene
Concen: 0.189 ppbv m
RT: 12.87 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion: 91 Resp: 53137
Ion Ratio Lower Upper
91 100
106 25.6 23.9 35.9





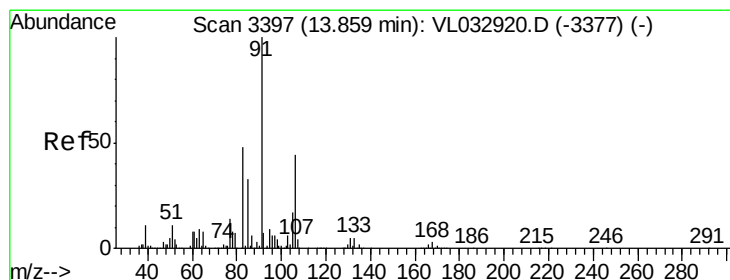
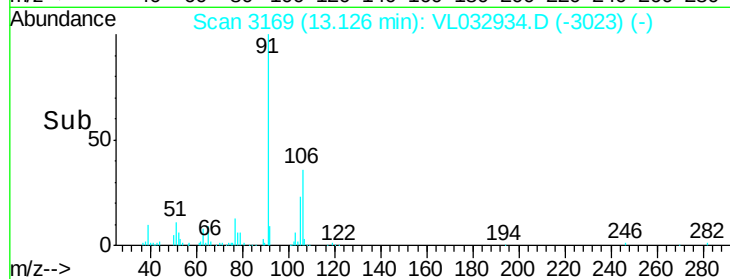
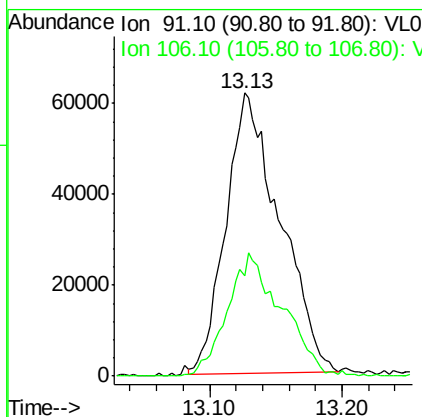
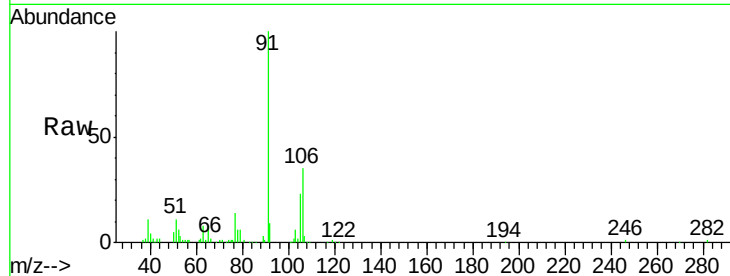
#59
m/p-Xylene
Concen: 0.690 ppbv
RT: 13.13 min Scan# 3169
Delta R.T. -0.03 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Instrument :
MSVOA_L
ClientSampled :
IA1

Tgt Ion: 91 Resp: 175529
Ion Ratio Lower Upper
91 100
106 44.2 0.0 0.0#

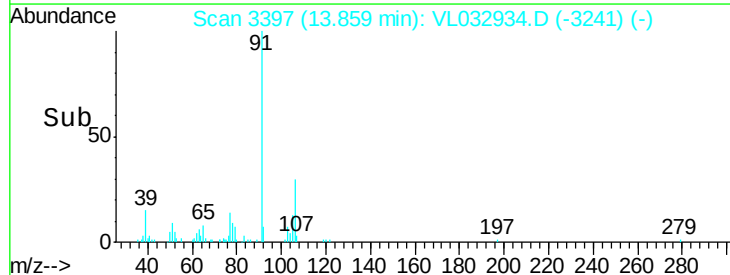
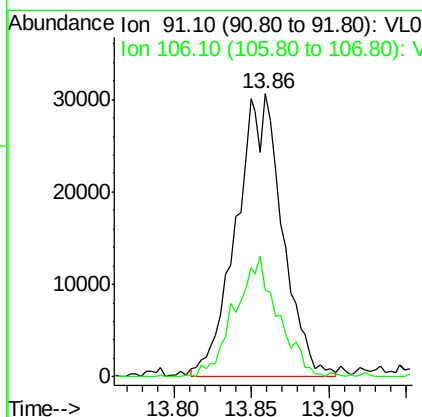
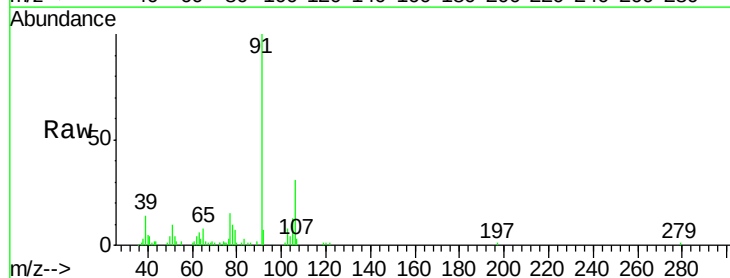
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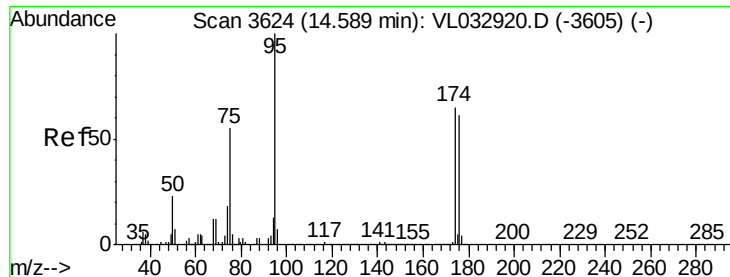
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#60
o-Xylene
Concen: 0.247 ppbv m
RT: 13.86 min Scan# 3397
Delta R.T. 0.00 min
Lab File: VL032934.D
Acq: 7 Dec 2018 14:33

Tgt Ion: 91 Resp: 63498
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.8#





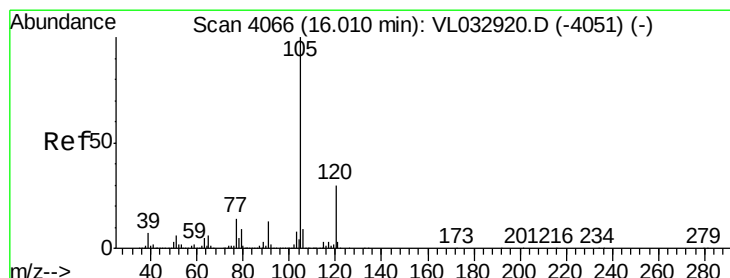
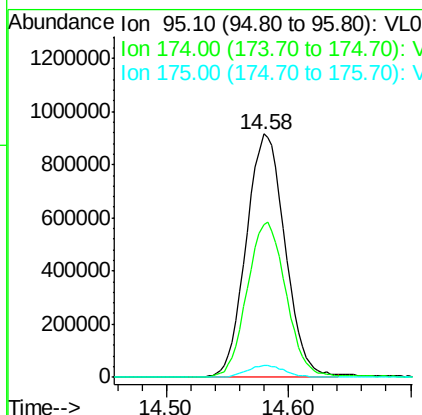
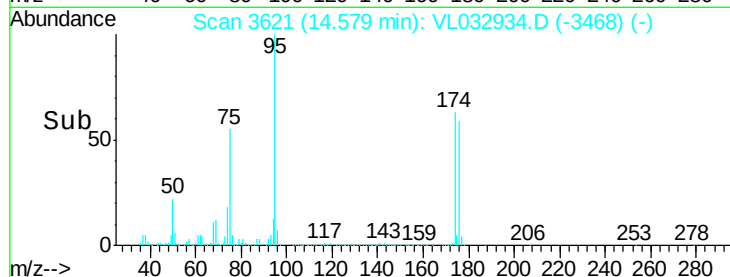
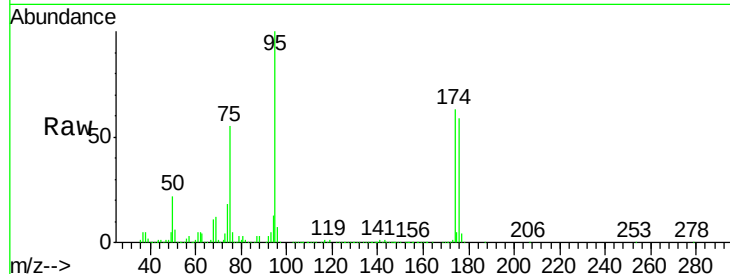
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.345 ppbv
 RT: 14.58 min Scan# 3621
 Delta R.T. -0.01 min
 Lab File: VL032934.D
 Acq: 7 Dec 2018 14:33

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tgt Ion: 95 Resp: 2011457
 Ion Ratio Lower Upper
 95 100
 174 64.9 51.4 77.0
 175 4.9 3.8 5.6

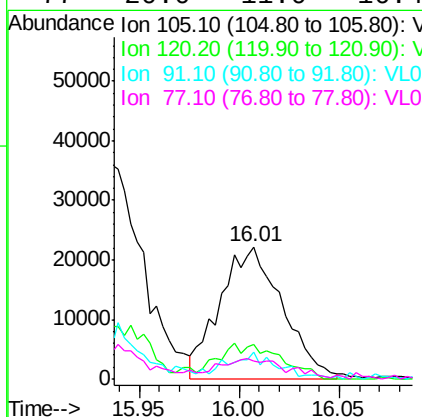
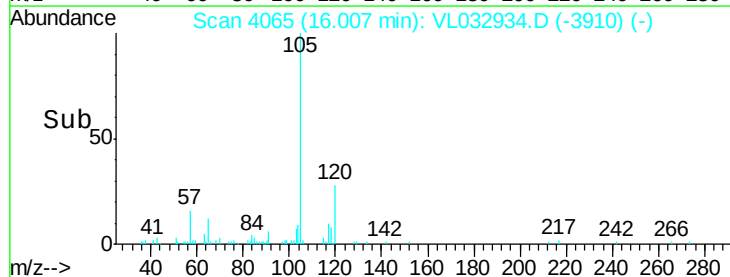
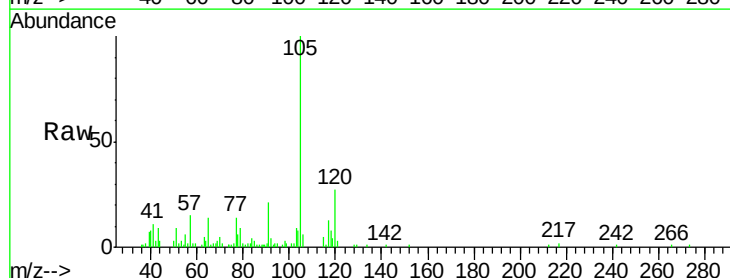
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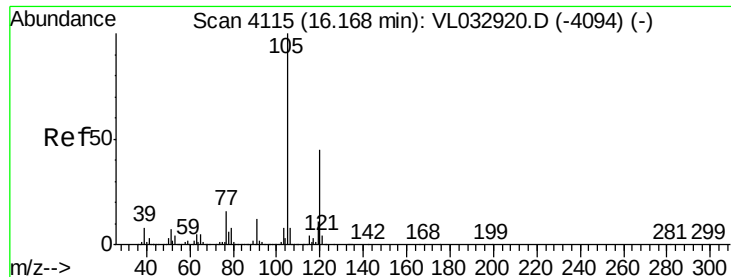
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#72
 4-Ethyltoluene
 Concen: 0.169 ppbv m
 RT: 16.01 min Scan# 4065
 Delta R.T. -0.00 min
 Lab File: VL032934.D
 Acq: 7 Dec 2018 14:33

Tgt Ion: 105 Resp: 48466
 Ion Ratio Lower Upper
 105 100
 120 0.0 23.0 34.4#
 91 15.4 10.4 15.6
 77 20.0 11.0 16.4#





#73

1,3,5-Trimethylbenzene

Concen: 0.138 ppbv m

RT: 16.16 min Scan# 4114

Delta R.T. -0.00 min

Lab File: VL032934.D

Acq: 7 Dec 2018 14:33

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion:105 Resp: 38682

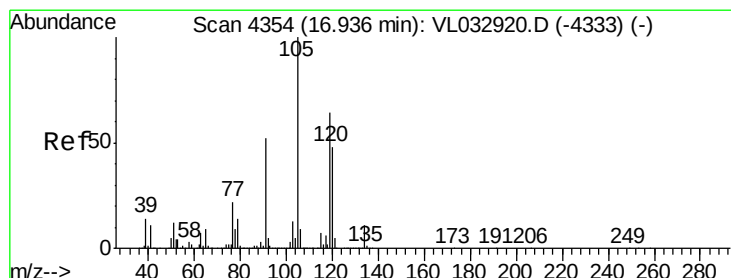
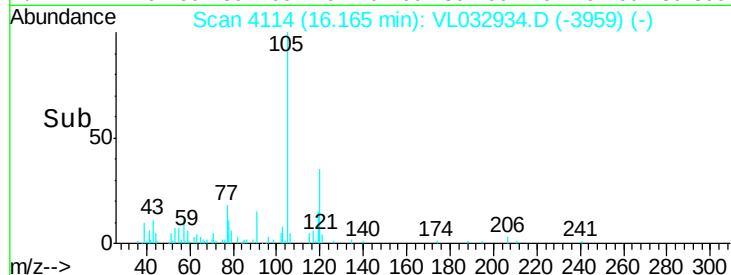
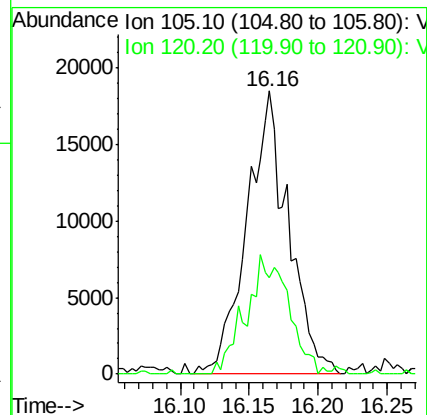
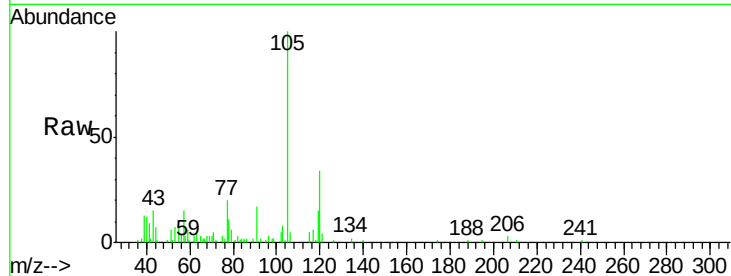
Ion Ratio Lower Upper

105 100

120 34.1 36.0 54.0#

Manual Integrations
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#74

1,2,4-Trimethylbenzene

Concen: 0.457 ppbv

RT: 16.93 min Scan# 4352

Delta R.T. -0.01 min

Lab File: VL032934.D

Acq: 7 Dec 2018 14:33

Tgt Ion:105 Resp: 144715

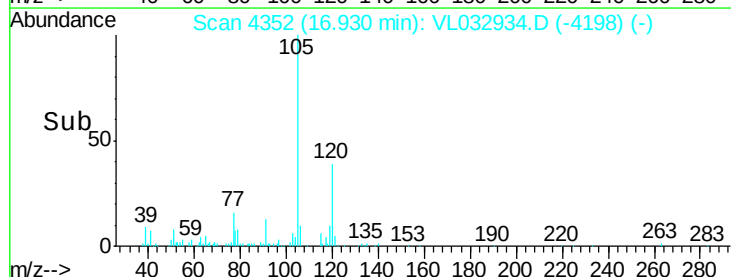
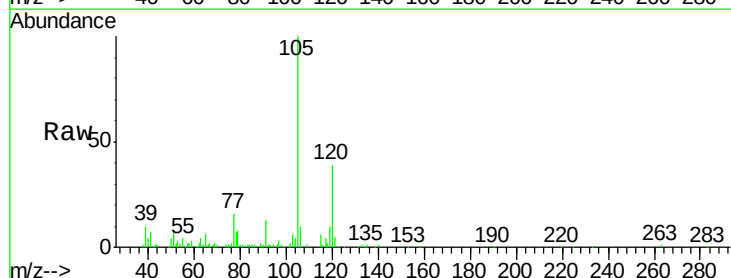
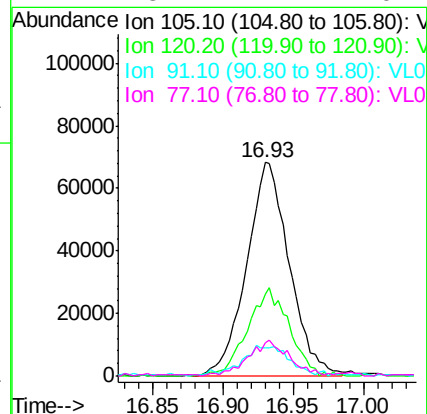
Ion Ratio Lower Upper

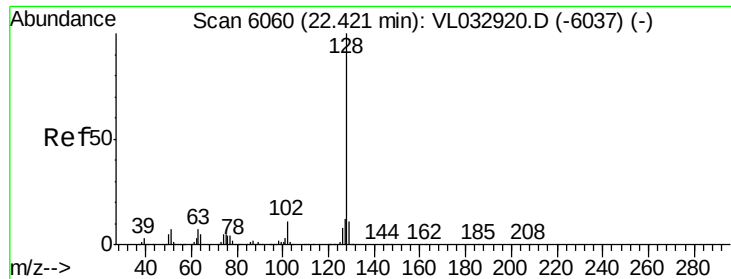
105 100

120 38.7 38.6 58.0

91 12.6 41.7 62.5#

77 15.1 17.4 26.2#





#79

Naphthalene

Concen: 0.178 ppbv m

RT: 22.42 min Scan# 6061

Delta R.T. 0.00 min

Lab File: VL032934.D

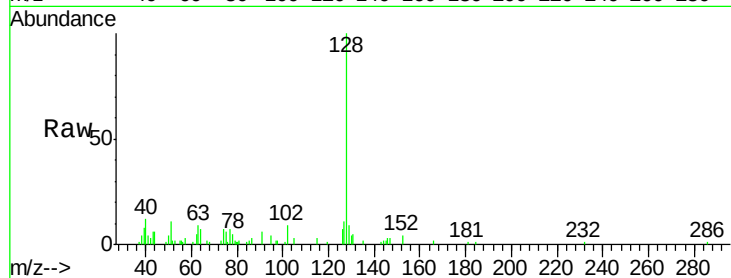
Acq: 7 Dec 2018 14:33

Instrument :

MSVOA_L

ClientSampleId :

IA1



Tgt Ion:	128	Resp:	36316
Ion Ratio	Lower	Upper	
128	100		
127	11.0	9.9	14.9
129	9.1	8.6	13.0

Manual Integrations
APPROVED

MMDadoda
12/11/2018 10:08:45 AM

