

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100819\
 Data File : VL034268.D
 Acq On : 9 Oct 2019 3:51
 Operator : SY/AP
 Sample : K5243-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Manual Integrations
 APPROVED

MMDadoda
 10/11/2019 5:08:10 PM

Quant Time: Oct 09 06:45:09 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 18 2019
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.70	49	968770	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.22	114	1845388	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.17	117	1860239	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.50	95	1719251	10.64	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	957578	6.692	ppbv	98
4) Chloromethane	3.12	50	25666	0.385	ppbv	95
9) Propene	2.99	41	667537	11.911	ppbv	84
10) Heptane	8.17	43	1987556	13.608	ppbv	97
11) Trichlorofluoromethane	3.94	101	123124	0.945	ppbv	92
13) Ethanol	3.61	45	314494	23.175	ppbv	97
15) Acetone	3.85	43	12441732	95.822	ppbv #	27
17) tert-Butyl alcohol	4.33	59	539613	6.559	ppbv	99
19) Isopropyl Alcohol	4.00	45	15298088	191.600	ppbv	100
20) Methylene Chloride	4.36	84	52448	1.401	ppbv	89
26) Hexane	5.71	57	3141756	30.761	ppbv #	41
27) Carbon Disulfide	4.56	76	151046	1.604	ppbv	98
29) Chloroform	5.79	83	328139	2.248	ppbv	100
30) Cyclohexane	7.17	84	130980	1.776	ppbv	97
34) 2-Butanone	5.27	43	4124374	21.889	ppbv	92
36) Benzene	6.93	78	390810	1.918	ppbv	95
38) Trichloroethene	7.89	130	6538461	89.786	ppbv	90
50) 4-Methyl-2-Pentanone	8.80	43	641351	2.339	ppbv	97
51) 2-Hexanone	10.20	43	1747190	7.592	ppbv	100
52) Tetrachloroethene	11.38	164	24013995m	356.626	ppbv	
53) Toluene	9.87	91	2835968	12.732	ppbv	100
58) Ethyl Benzene	12.80	91	1150978	3.835	ppbv	93
59) m/p-Xylene	13.05	91	4291218	17.261	ppbv	99
60) o-Xylene	13.78	91	1743766	7.015	ppbv	98
61) Styrene	13.62	104	140130m	0.787	ppbv	
62) Isopropylbenzene	14.76	105	90658m	0.282	ppbv	
72) 4-Ethyltoluene	15.92	105	237897m	0.847	ppbv	
73) 1,3,5-Trimethylbenzene	16.09	105	217394	0.801	ppbv #	84
74) 1,2,4-Trimethylbenzene	16.86	105	520280	1.806	ppbv #	69

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

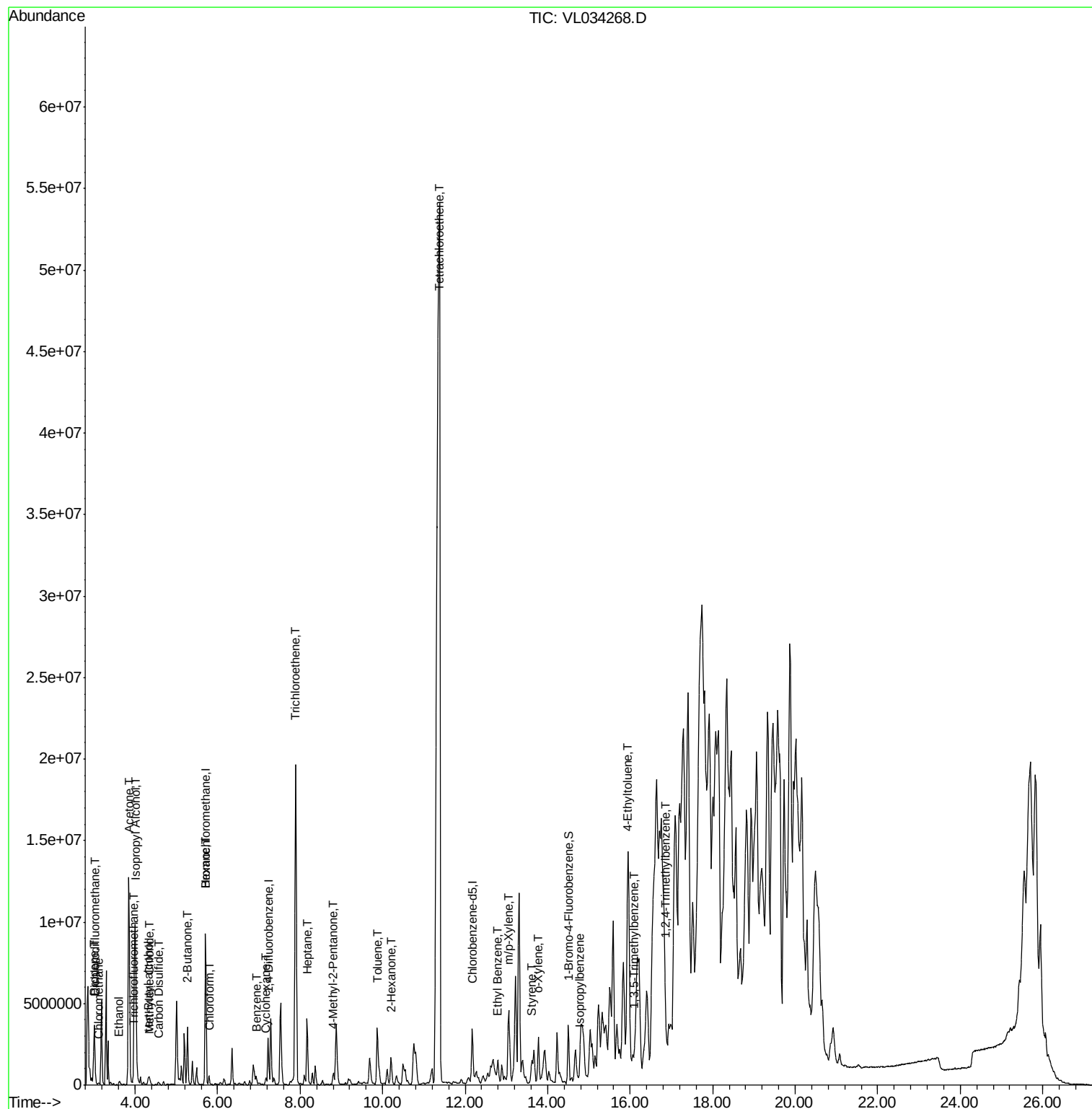
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100819\
Data File : VL034268.D
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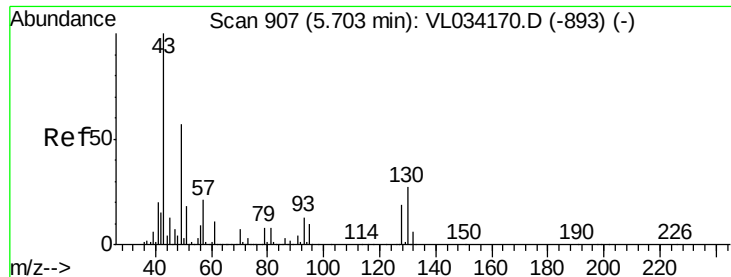
Instrument :
MSVOA_L
ClientSampleId :
SV1

Manual Integrations
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Quant Time: Oct 09 06:45:09 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 18 12:53:31 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 907

Delta R.T. 0.00 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

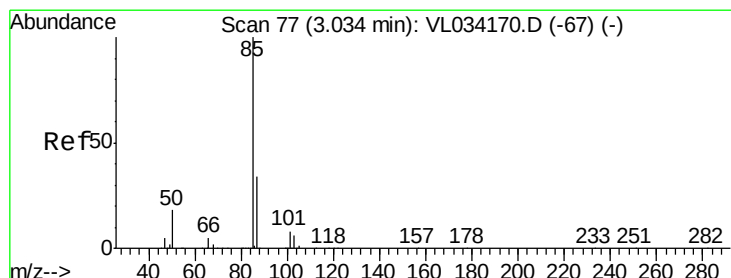
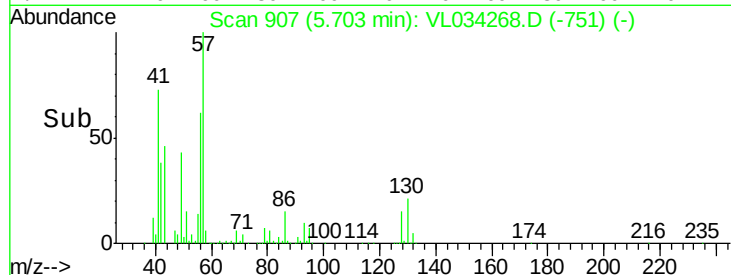
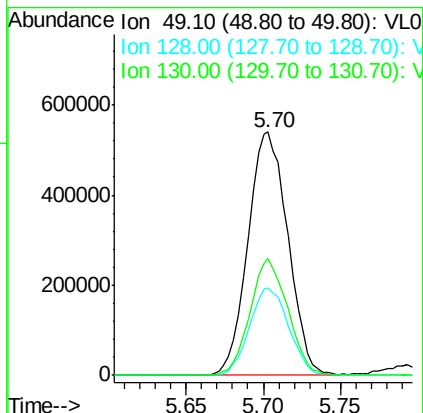
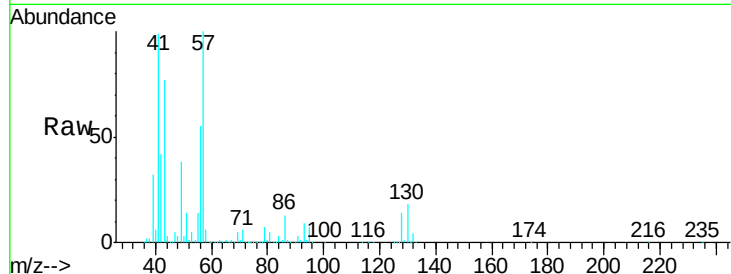
ClientSampled :

SV1

Tgt Ion	Ratio	Lower	Upper
49	100		
128	35.6	17.6	52.9
130	45.6	22.3	66.9

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 6.692 ppbv

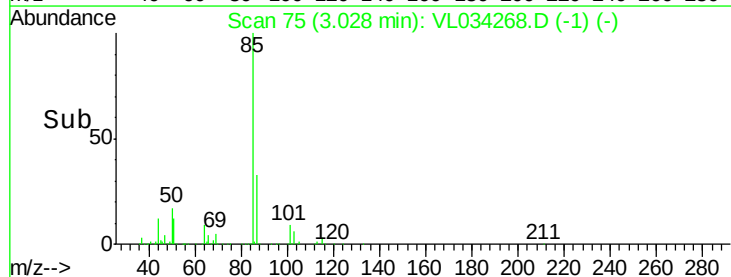
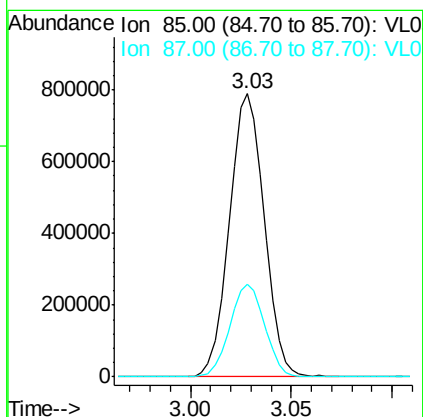
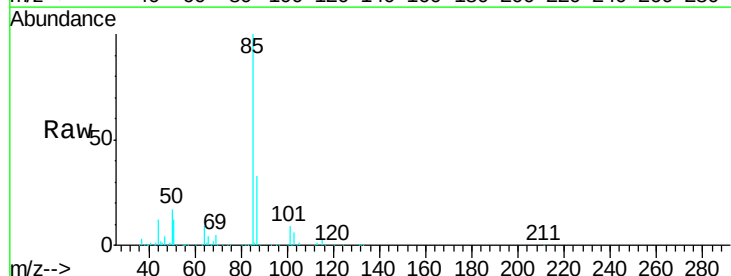
RT: 3.03 min Scan# 75

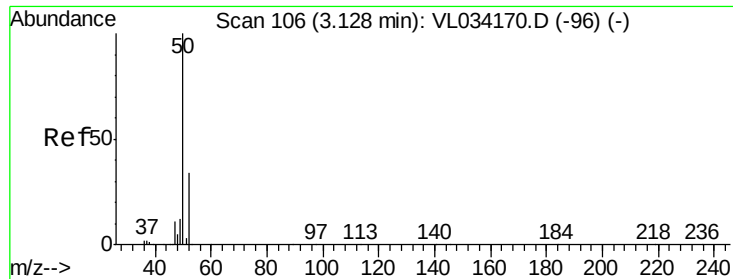
Delta R.T. -0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.8	27.2	40.8





#4

Chloromethane

Concen: 0.385 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

ClientSampled :

SV1

Tgt Ion: 50 Resp: 25666

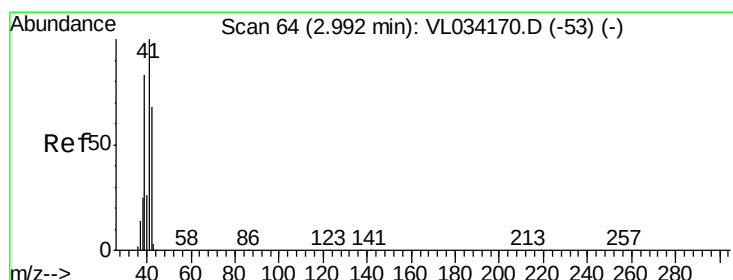
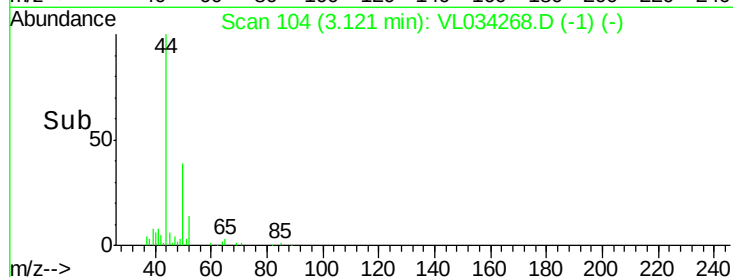
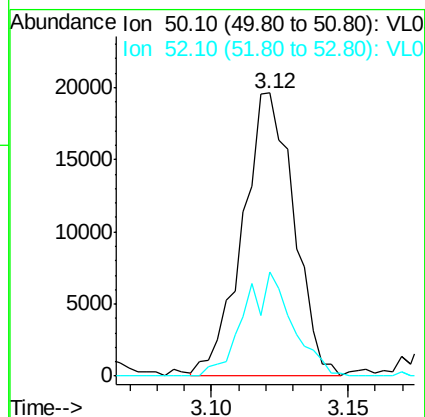
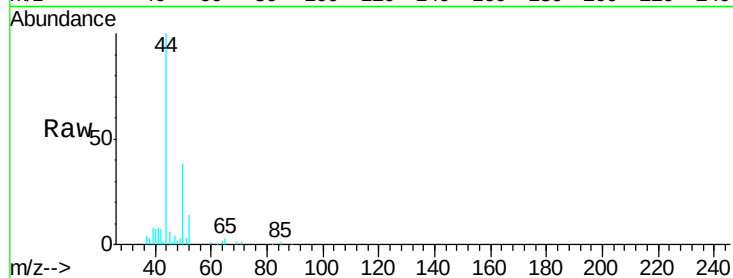
Ion Ratio Lower Upper

50 100

52 36.6 27.1 40.7

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#9

Propene

Concen: 11.911 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.00 min

Lab File: VL034268.D

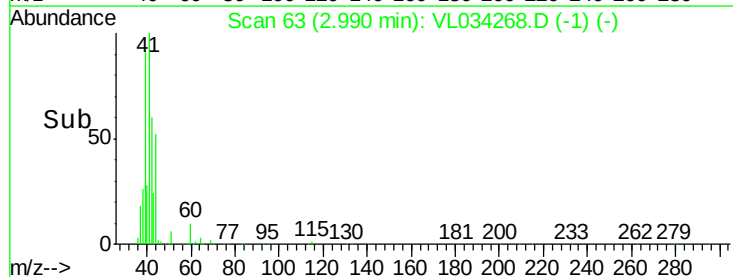
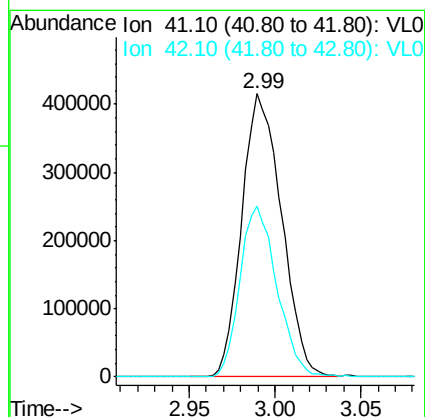
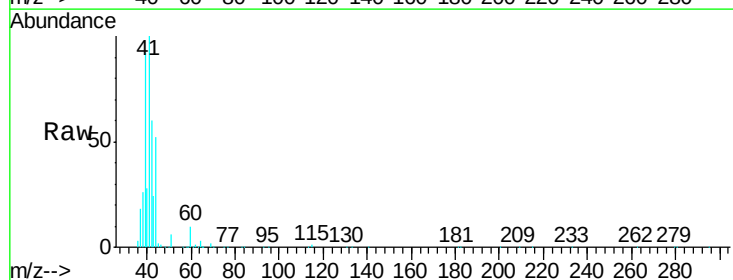
Acq: 9 Oct 2019 3:51

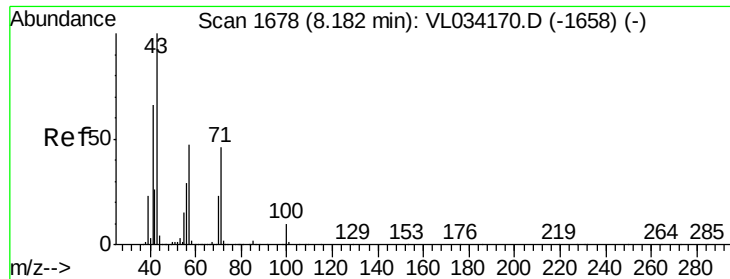
Tgt Ion: 41 Resp: 667537

Ion Ratio Lower Upper

41 100

42 56.4 55.8 83.6





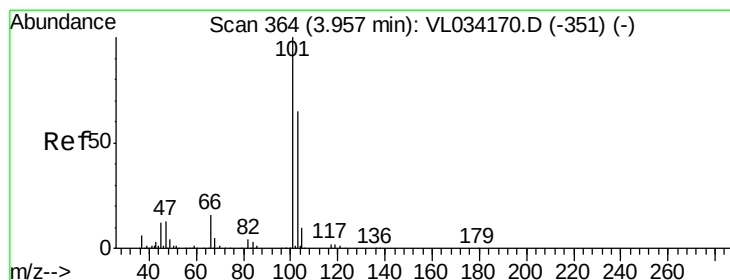
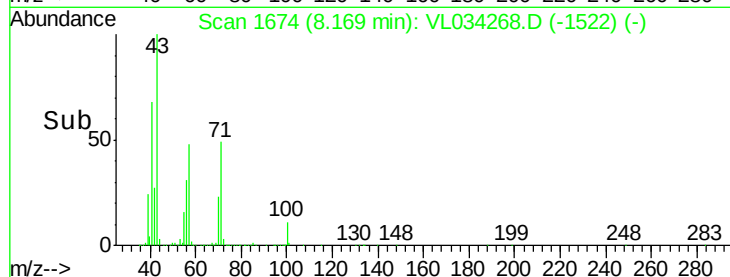
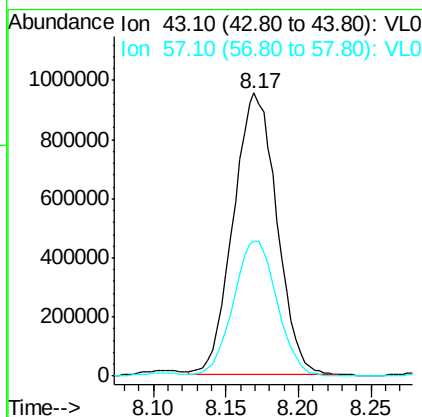
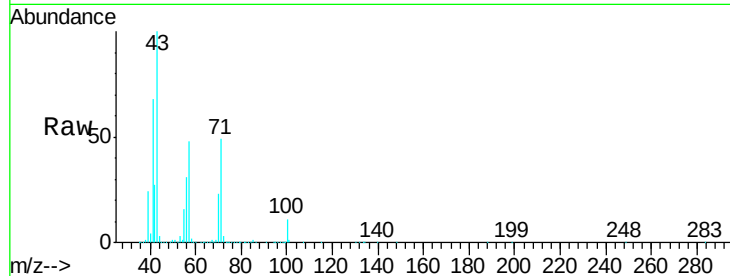
#10
 Heptane
 Concen: 13.608 ppbv
 RT: 8.17 min Scan# 1674
 Delta R.T. -0.01 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Tgt Ion: 43 Resp: 1987556
 Ion Ratio Lower Upper
 43 100
 57 49.2 37.5 56.3

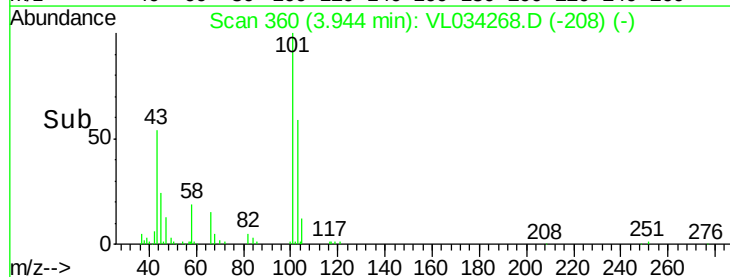
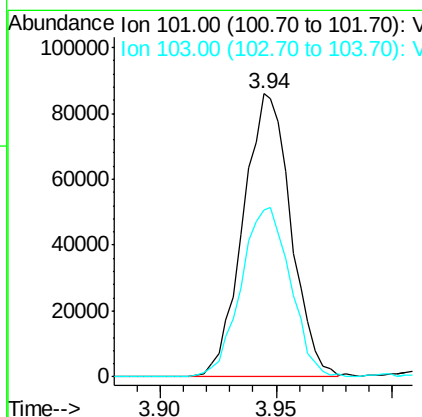
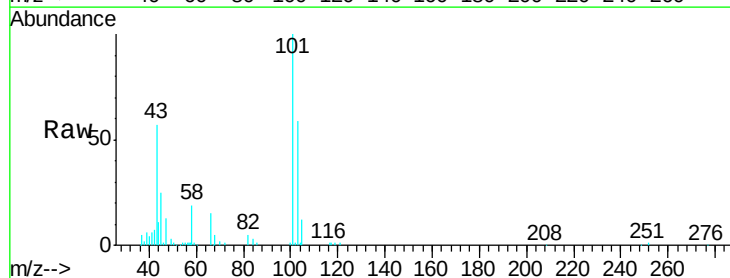
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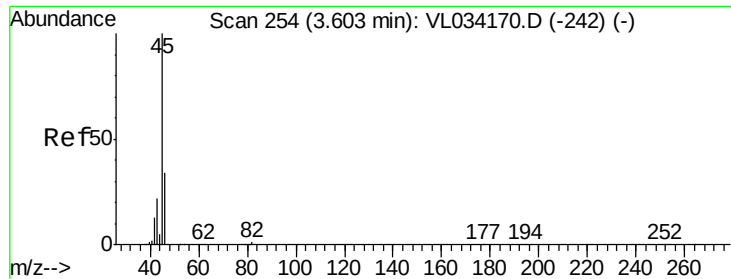
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#11
 Trichlorofluoromethane
 Concen: 0.945 ppbv
 RT: 3.94 min Scan# 360
 Delta R.T. -0.01 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Tgt Ion: 101 Resp: 123124
 Ion Ratio Lower Upper
 101 100
 103 58.5 52.1 78.1





#13

Ethanol

Concen: 23.175 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

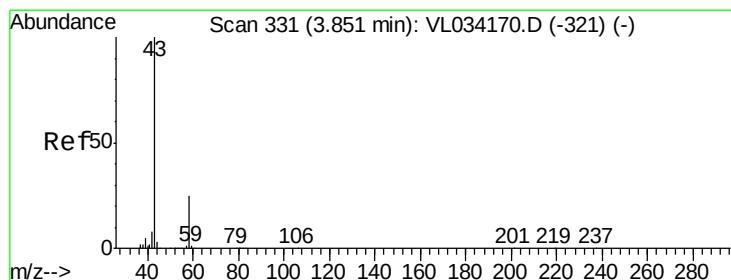
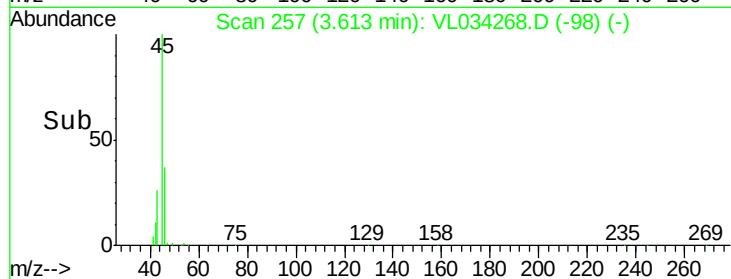
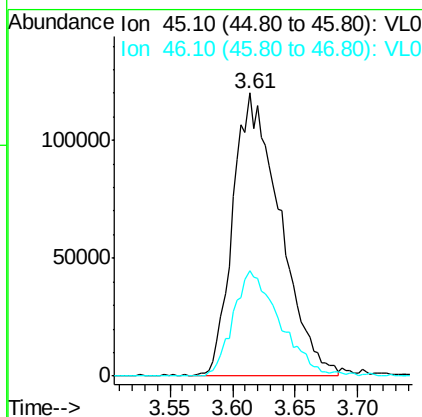
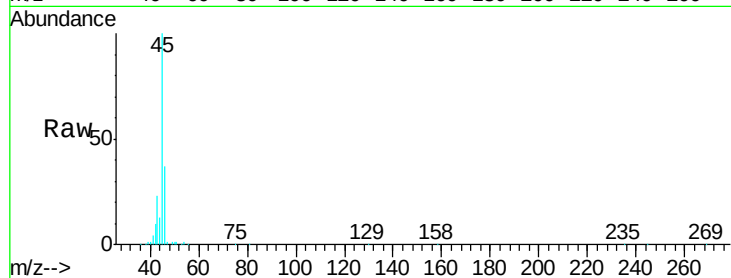
ClientSampled :

SV1

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Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.1	15.5	61.9



#15

Acetone

Concen: 95.822 ppbv

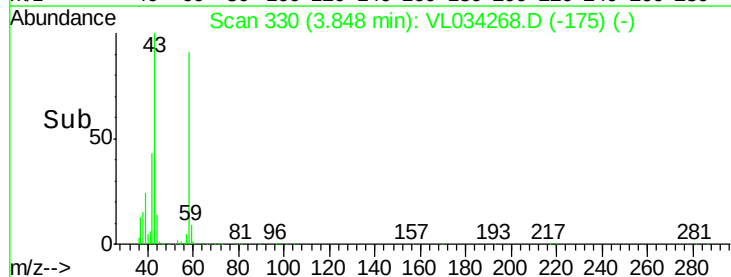
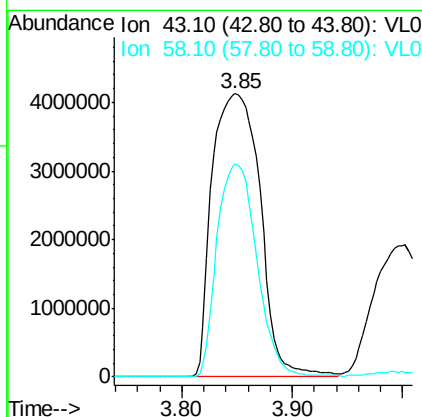
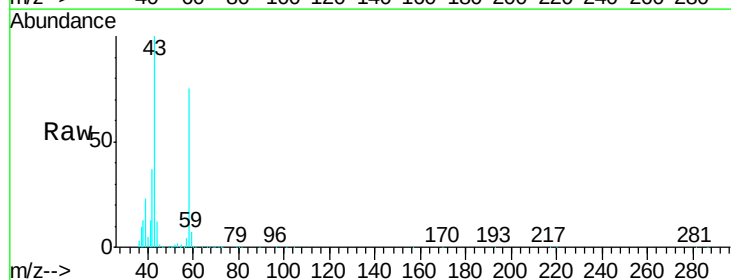
RT: 3.85 min Scan# 330

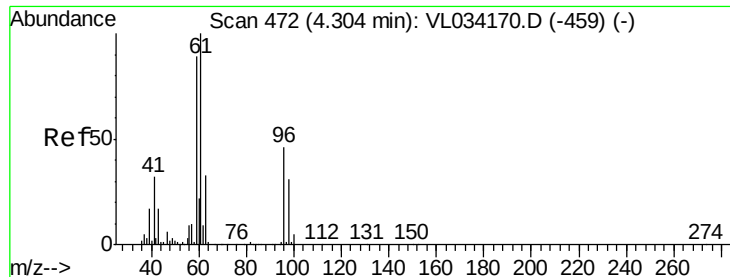
Delta R.T. -0.00 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Tgt Ion	Ratio	Lower	Upper
43	100		
58	62.6	20.5	30.7#





#17

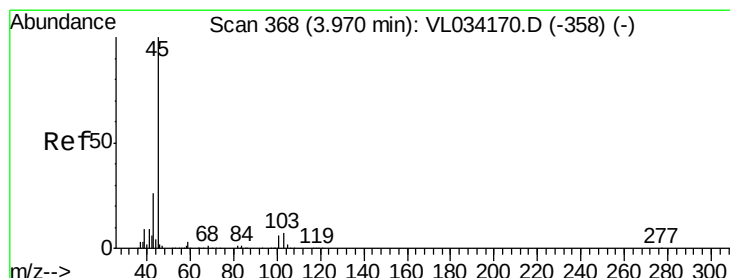
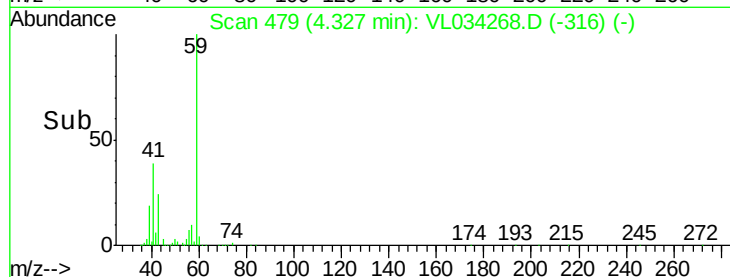
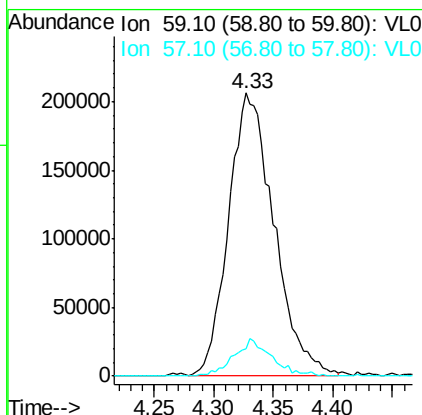
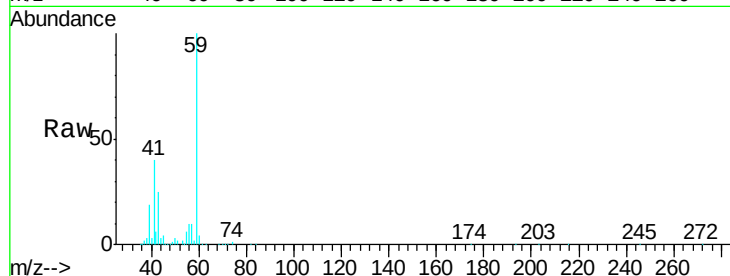
tert-Butyl alcohol
 Concen: 6.559 ppbv
 RT: 4.33 min Scan# 479
 Delta R.T. 0.02 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Instrument :
 MSVOA_L
 ClientSampled :
 SV1

Tgt Ion	Ratio	Lower	Upper
59	100		
57	11.3	8.7	13.1

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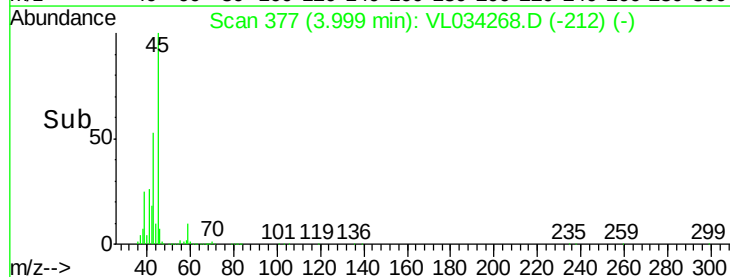
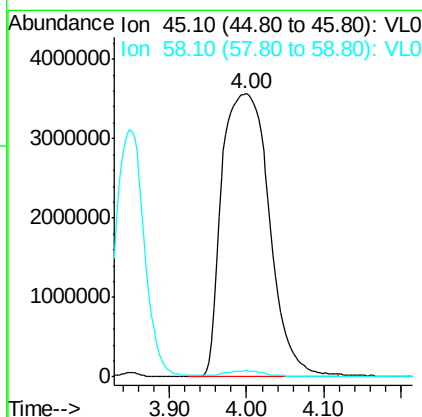
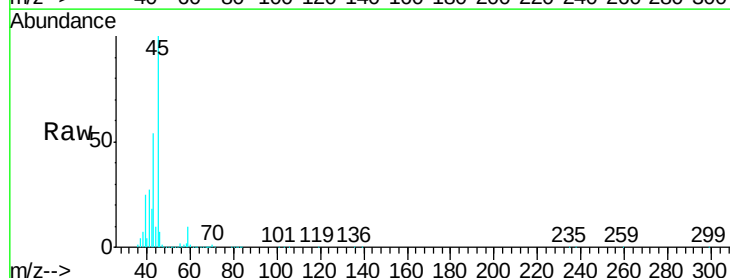
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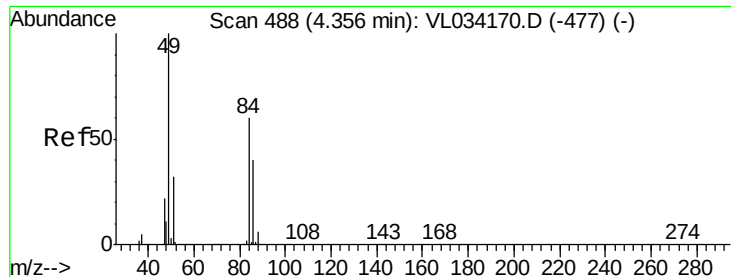


#19

Isopropyl Alcohol
 Concen: 191.600 ppbv
 RT: 4.00 min Scan# 377
 Delta R.T. 0.03 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Tgt Ion	Ratio	Lower	Upper
45	100		
58	1.8	1.4	2.0





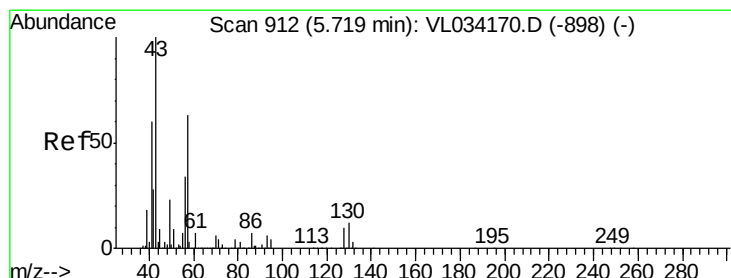
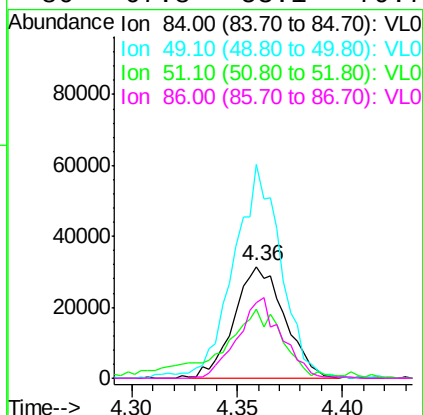
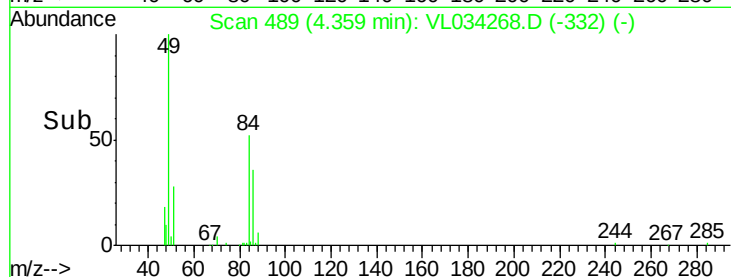
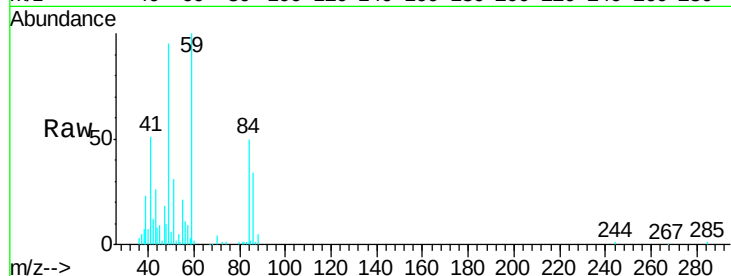
#20
Methylene Chloride
Concen: 1.401 ppbv
RT: 4.36 min Scan# 489
Delta R.T. 0.00 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Instrument :
MSVOA_L
ClientSampled :
SV1

Tgt Ion:	84	Resp:	52448
Ion	Ratio	Lower	Upper
84	100		
49	189.2	133.8	200.8
51	59.6	43.6	65.4
86	67.8	53.1	79.7

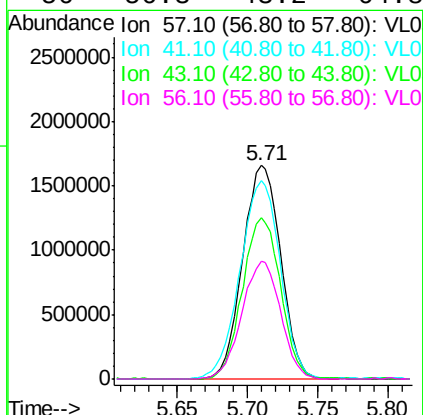
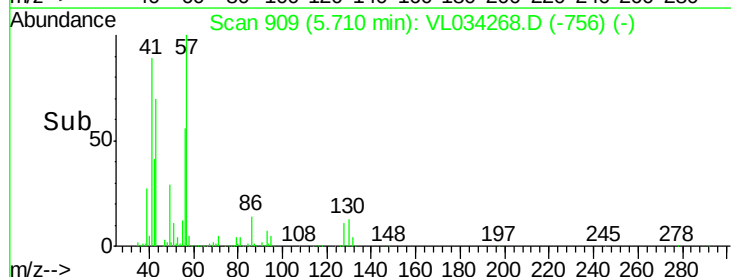
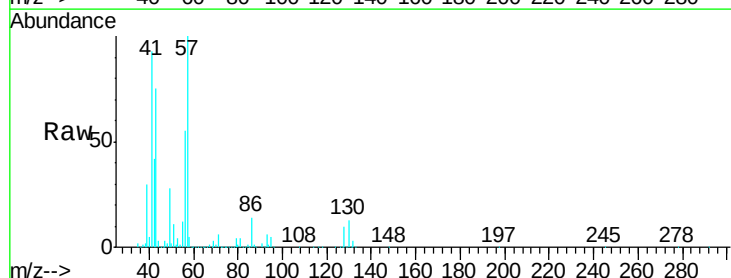
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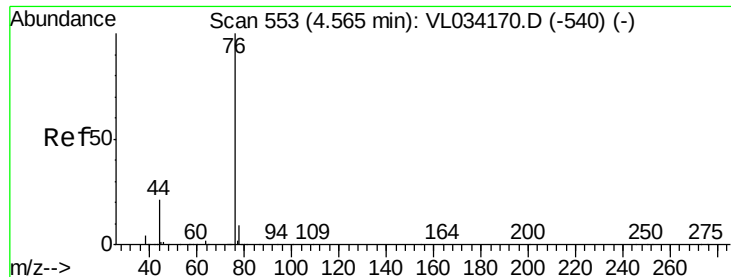
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#26
Hexane
Concen: 30.761 ppbv
RT: 5.71 min Scan# 909
Delta R.T. -0.01 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Tgt Ion:	57	Resp:	3141756
Ion	Ratio	Lower	Upper
57	100		
41	98.7	78.5	117.7
43	75.2	189.5	284.3#
56	56.3	43.2	64.8





#27

Carbon Disulfide

Concen: 1.604 ppbv

RT: 4.56 min Scan# 550

Delta R.T. -0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

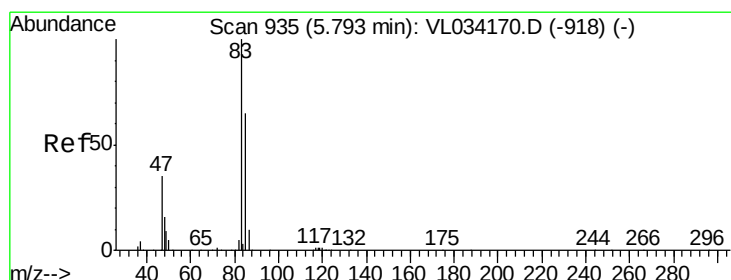
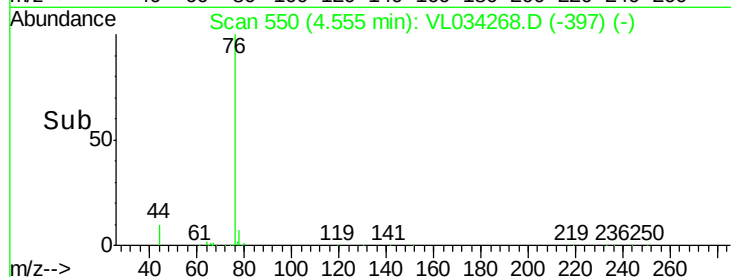
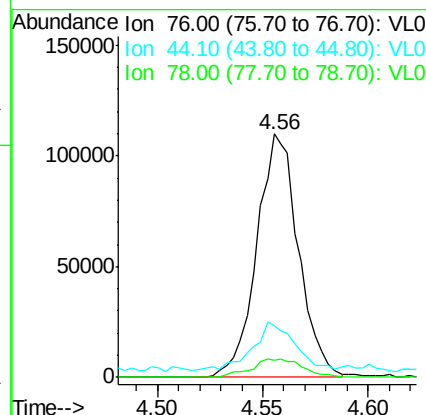
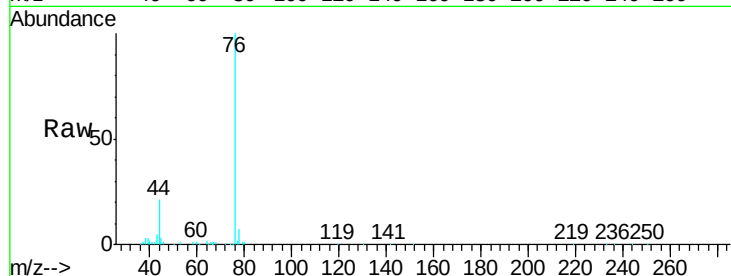
ClientSampled :

SV1

Tgt Ion:	76	Resp:	151046
Ion Ratio		Lower	Upper
76	100		
44	23.0	17.6	26.4
78	9.2	7.6	11.4

Manual Integrations
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#29

Chloroform

Concen: 2.248 ppbv

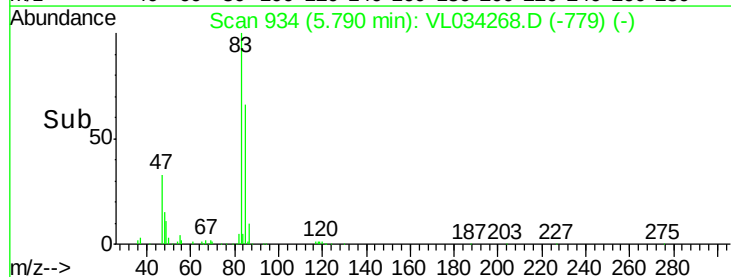
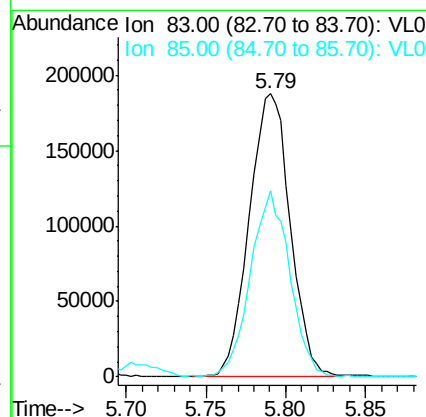
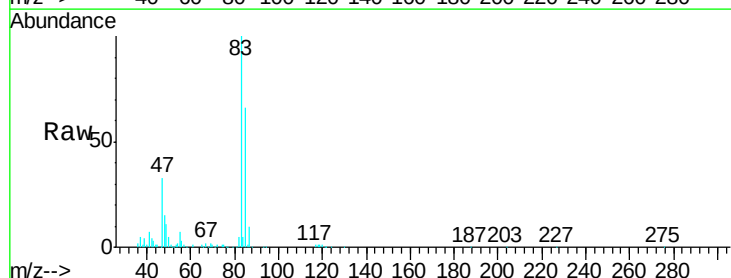
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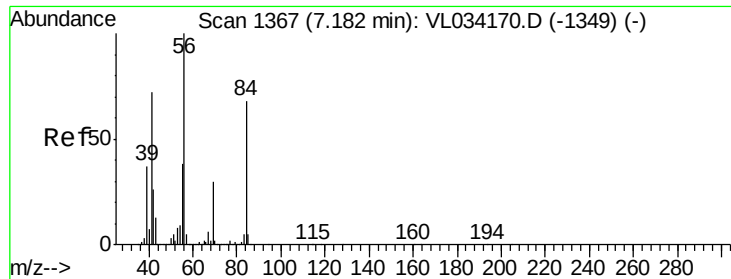
Delta R.T. -0.00 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Tgt Ion:	83	Resp:	328139
Ion Ratio		Lower	Upper
83	100		
85	65.4	52.3	78.5





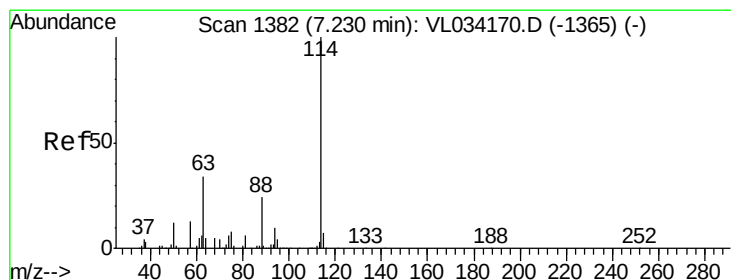
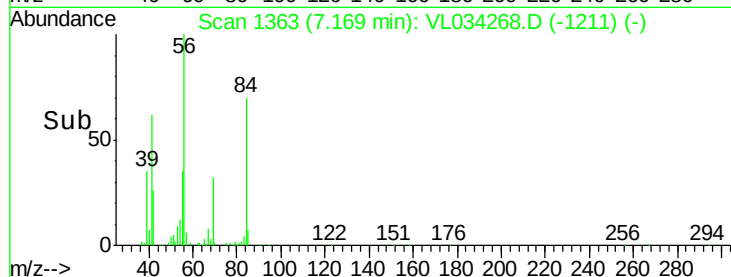
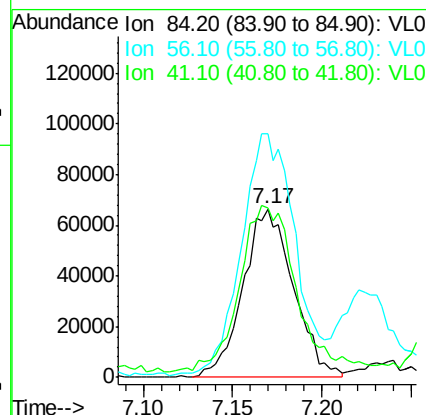
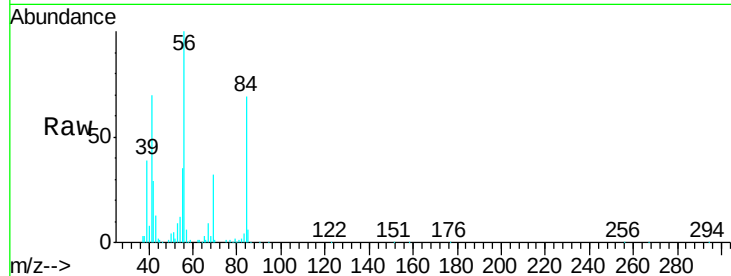
#30
Cyclohexane
Concen: 1.776 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Instrument :
MSVOA_L
ClientSampled :
SV1

Tgt Ion	Ratio	Lower	Upper
84	100		
56	152.8	126.2	189.2
41	108.7	85.8	128.8

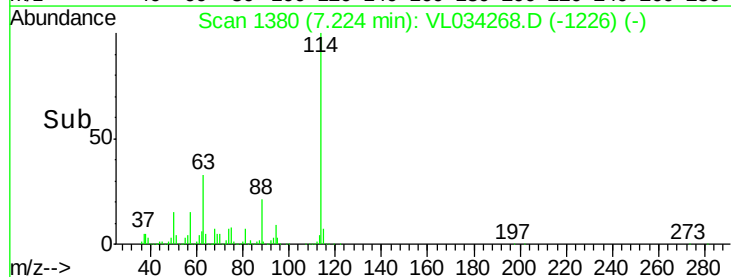
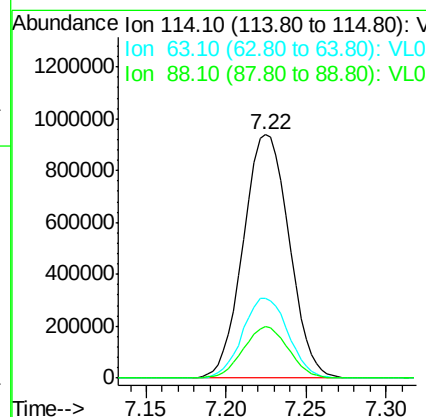
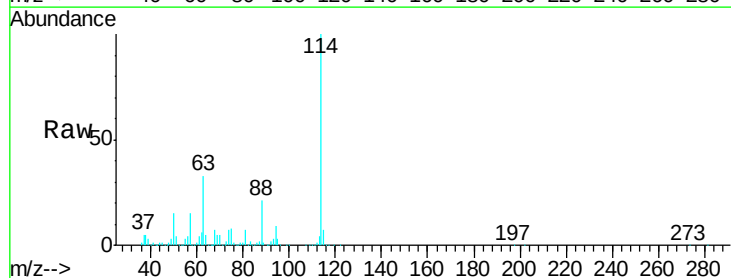
Manual Integrations
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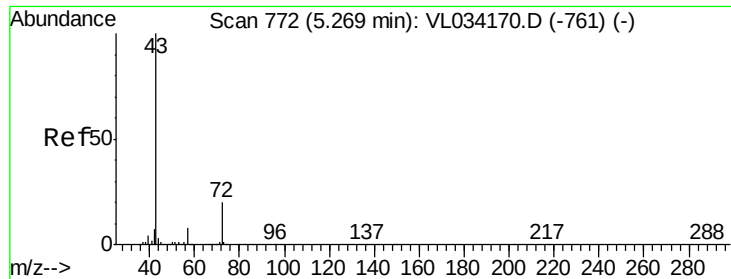
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.22 min Scan# 1380
Delta R.T. -0.01 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Tgt Ion	Ratio	Lower	Upper
114	100		
63	33.2	27.8	41.6
88	20.7	17.1	25.7





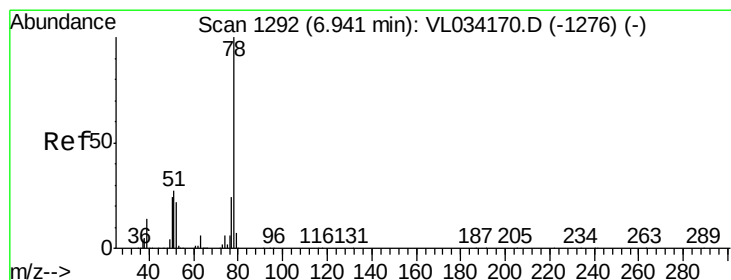
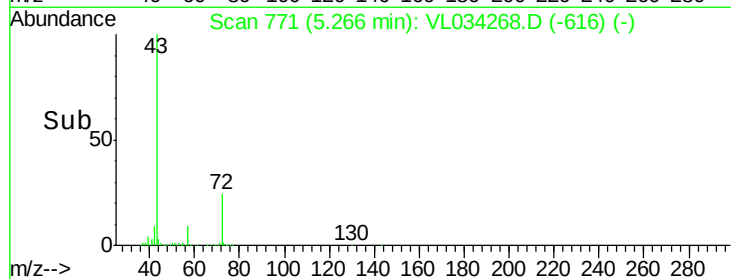
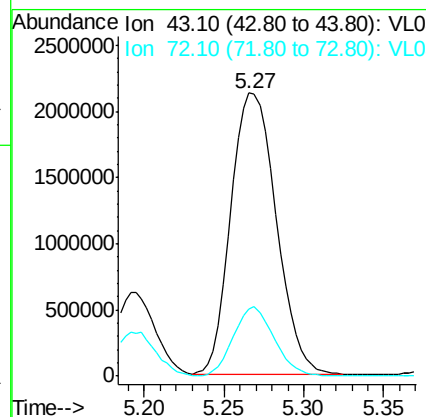
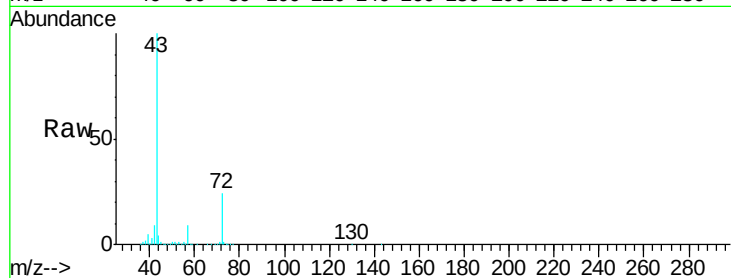
#34
2-Butanone
Concen: 21.889 ppbv
RT: 5.27 min Scan# 771
Delta R.T. -0.00 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Instrument :
MSVOA_L
ClientSampled :
SV1

Tgt Ion: 43 Resp: 4124374
Ion Ratio Lower Upper
43 100
72 22.2 15.0 22.6

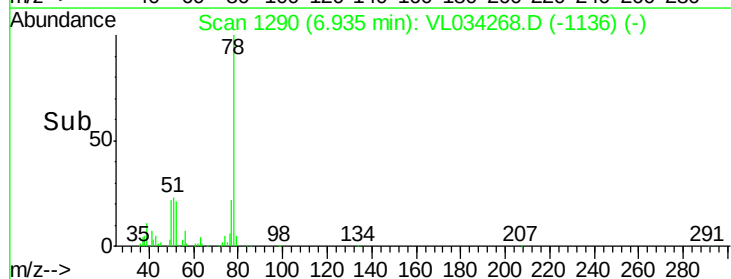
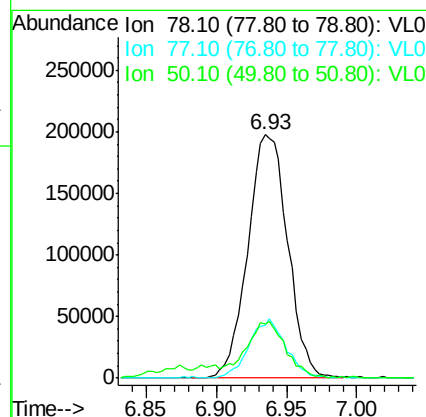
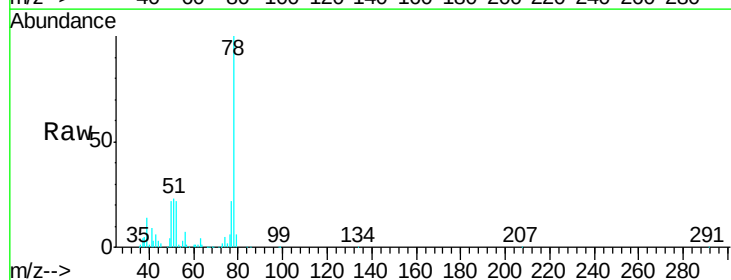
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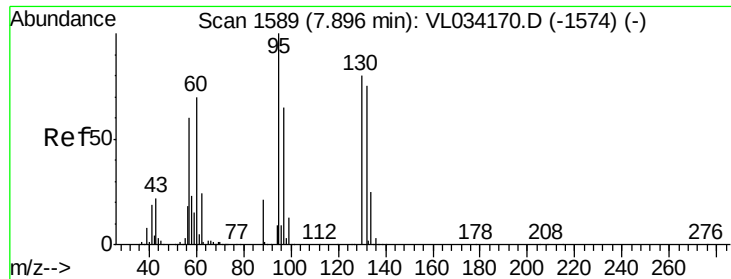
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#36
Benzene
Concen: 1.918 ppbv
RT: 6.93 min Scan# 1290
Delta R.T. -0.01 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Tgt Ion: 78 Resp: 390810
Ion Ratio Lower Upper
78 100
77 21.5 19.0 28.4
50 21.2 18.9 28.3





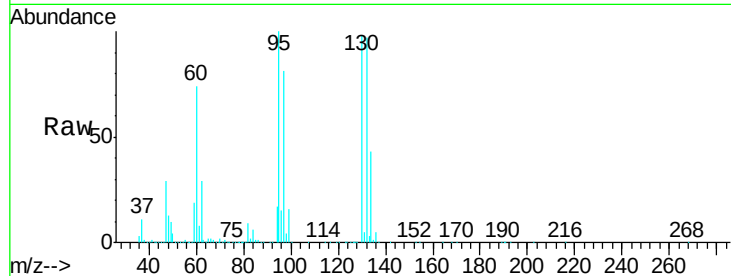
#38
 Trichloroethene
 Concen: 89.786 ppbv
 RT: 7.89 min Scan# 1588
 Delta R.T. -0.00 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

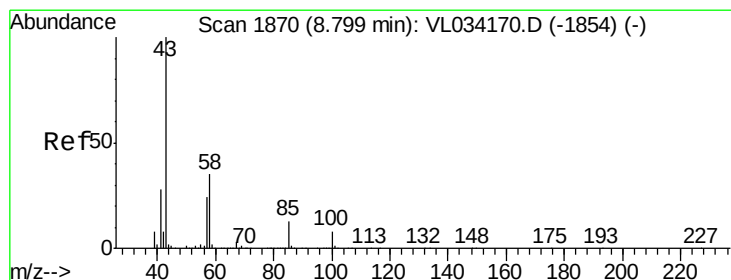
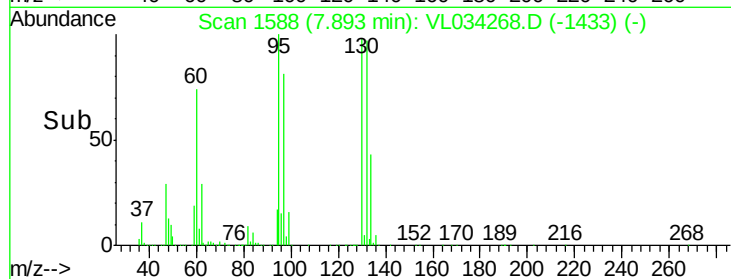
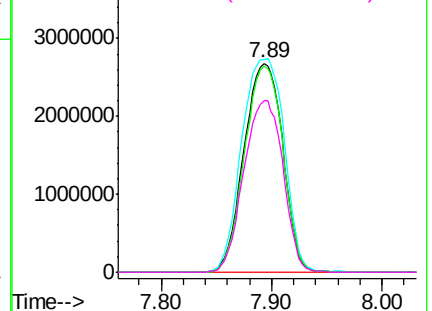
Tgt Ion: 130 Resp: 6538461
 Ion Ratio Lower Upper
 130 100
 95 102.1 99.8 149.6
 132 98.8 75.2 112.8
 97 82.5 65.0 97.4

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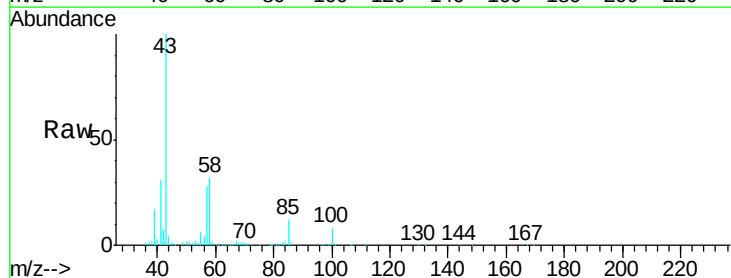


Abundance Ion 130.00 (129.70 to 130.70): V
 Ion 95.00 (94.70 to 95.70): VL0
 Ion 132.00 (131.70 to 132.70): V
 Ion 97.00 (96.70 to 97.70): VL0

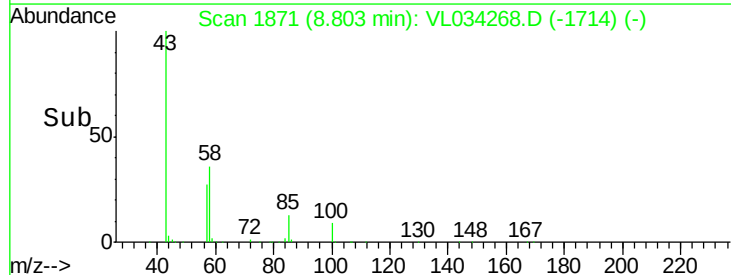
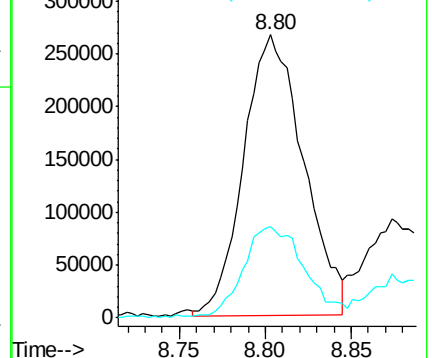


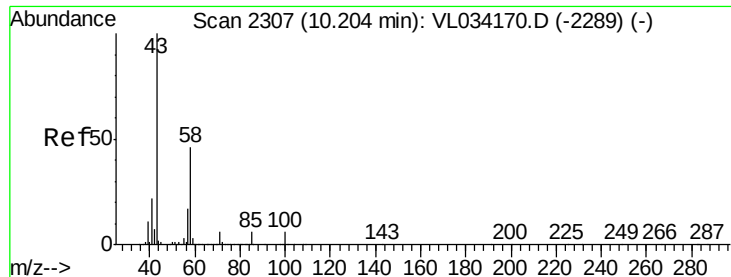
#50
 4-Methyl-2-Pentanone
 Concen: 2.339 ppbv
 RT: 8.80 min Scan# 1871
 Delta R.T. 0.00 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Tgt Ion: 43 Resp: 641351
 Ion Ratio Lower Upper
 43 100
 58 33.0 27.6 41.4



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 58.10 (57.80 to 58.80): VL0





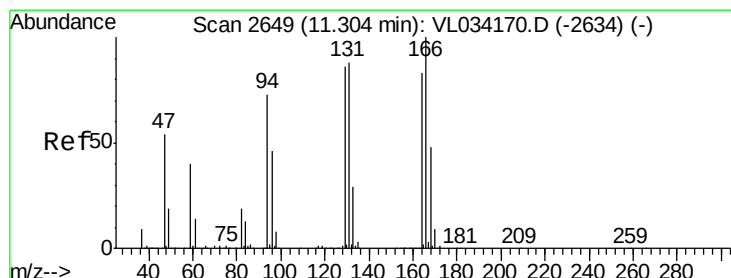
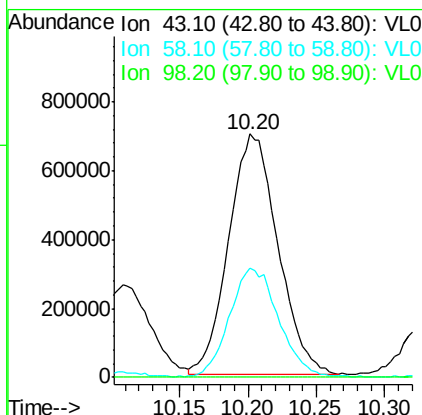
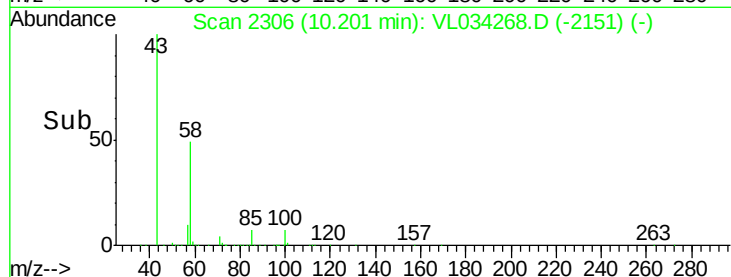
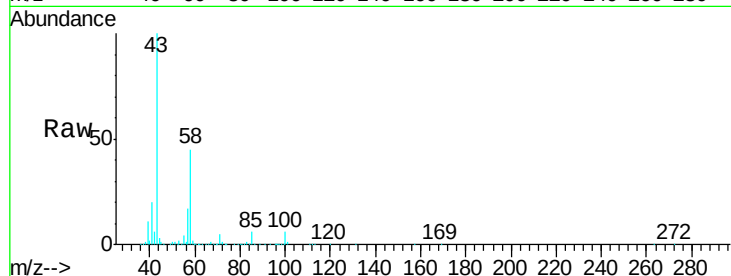
#51
2-Hexanone
Concen: 7.592 ppbv
RT: 10.20 min Scan# 2306
Delta R.T. -0.00 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 43 Resp: 1747190
Ion Ratio Lower Upper
43 100
58 45.1 36.2 54.4
98 0.2 0.2 0.2

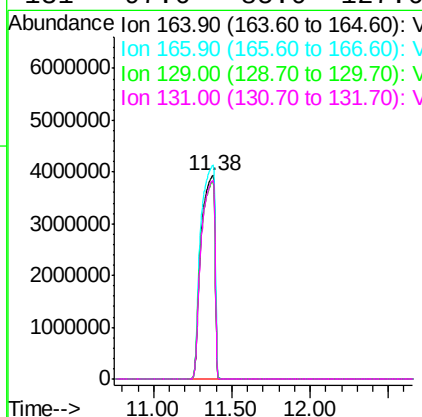
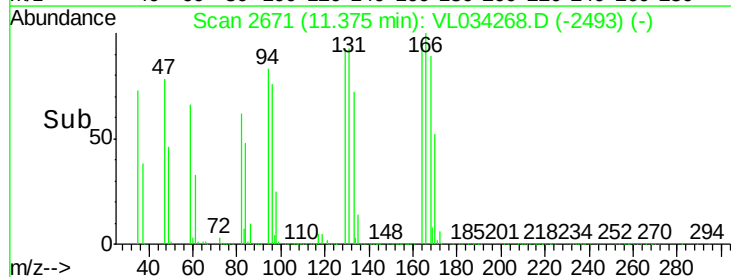
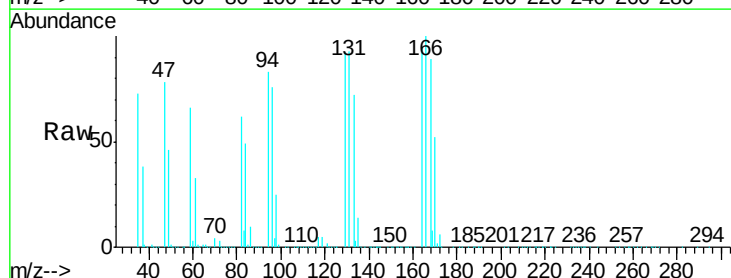
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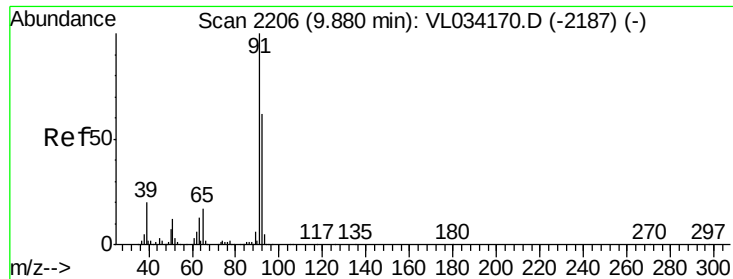
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#52
Tetrachloroethene
Concen: 356.626 ppbv m
RT: 11.38 min Scan# 2671
Delta R.T. 0.07 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Tgt Ion: 164 Resp: 24013995
Ion Ratio Lower Upper
164 100
166 105.1 96.7 145.1
129 97.2 82.8 124.2
131 97.6 85.0 127.6





#53

Toluene

Concen: 12.732 ppbv

RT: 9.87 min Scan# 2203

Delta R.T. -0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion: 91 Resp: 2835968

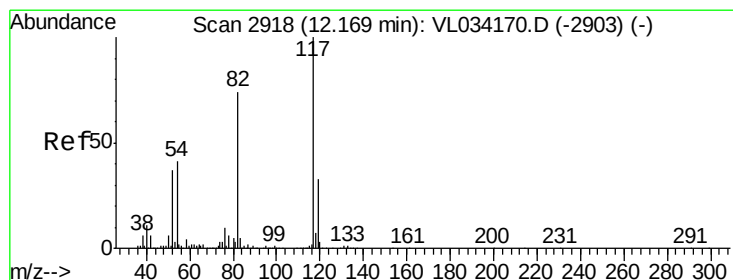
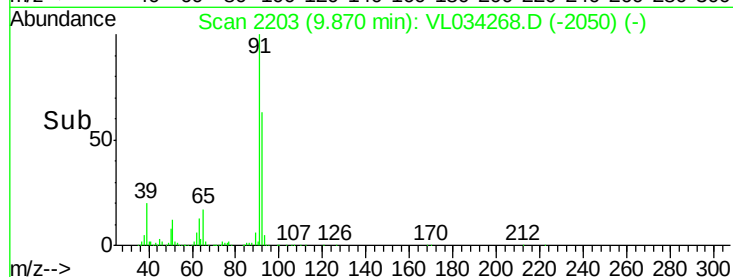
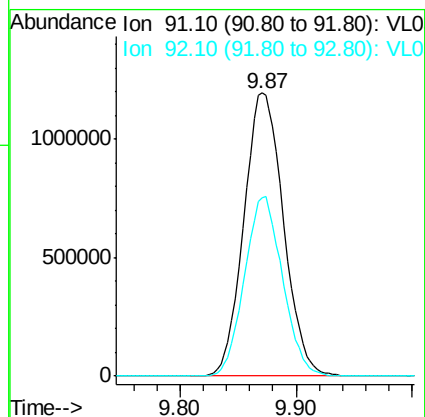
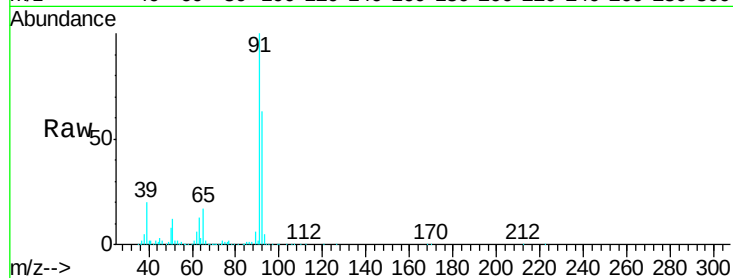
Ion Ratio Lower Upper

91 100

92 61.0 49.0 73.6

Manual Integrations
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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.17 min Scan# 2919

Delta R.T. 0.00 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

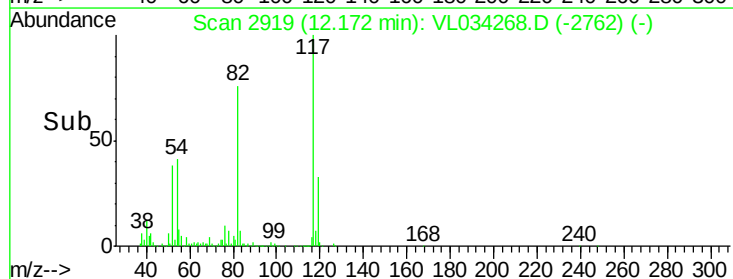
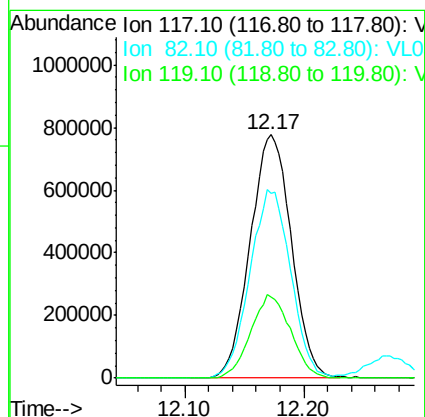
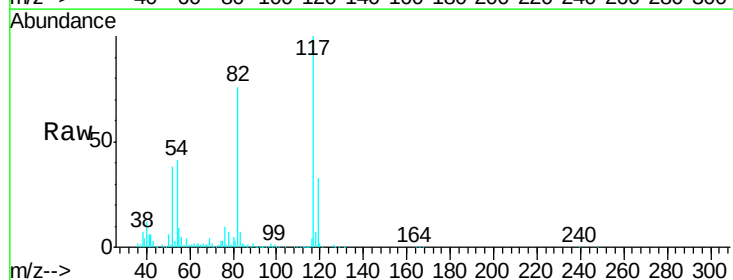
Tgt Ion: 117 Resp: 1860239

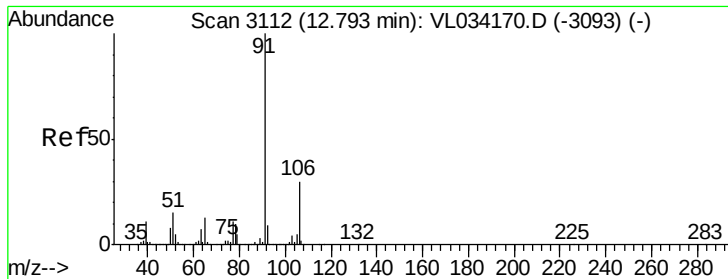
Ion Ratio Lower Upper

117 100

82 76.9 58.2 87.4

119 33.3 23.7 35.5





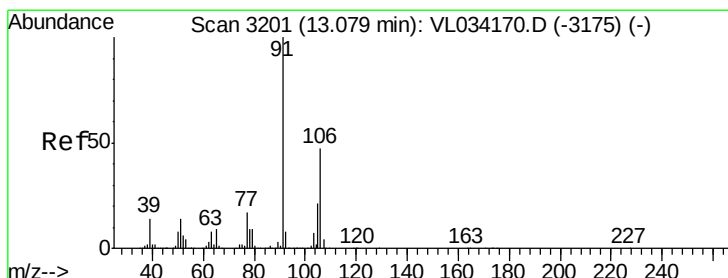
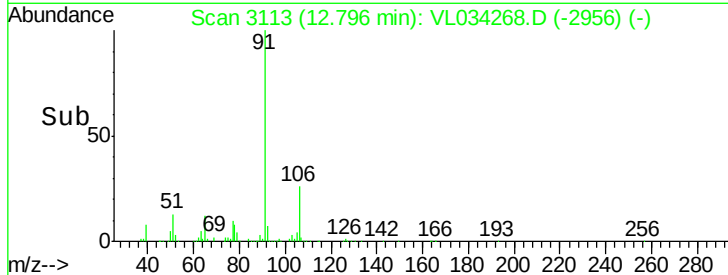
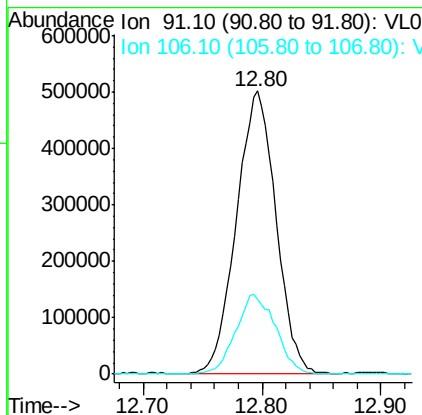
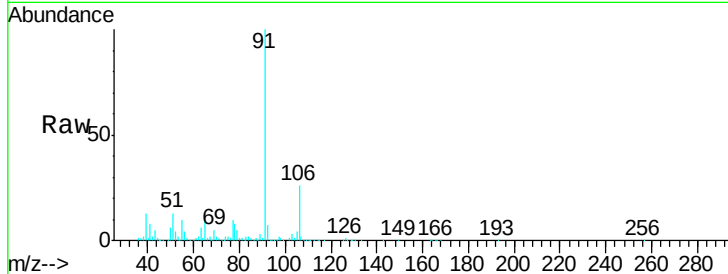
#58
Ethyl Benzene
Concen: 3.835 ppbv
RT: 12.80 min Scan# 3113
Delta R.T. 0.00 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Instrument :
MSVOA_L
ClientSampled :
SV1

Tgt Ion: 91 Resp: 1150978
Ion Ratio Lower Upper
91 100
106 26.4 24.2 36.4

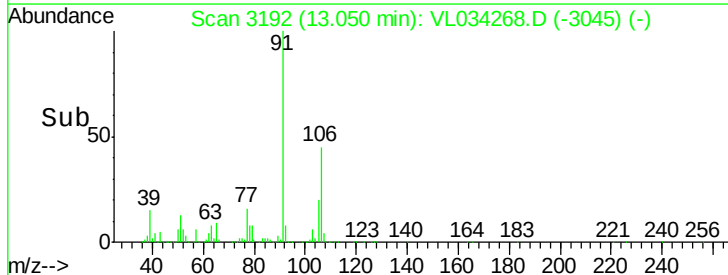
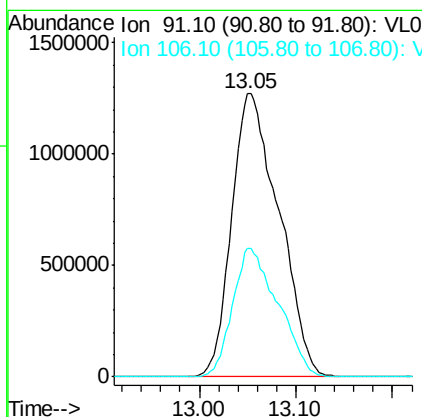
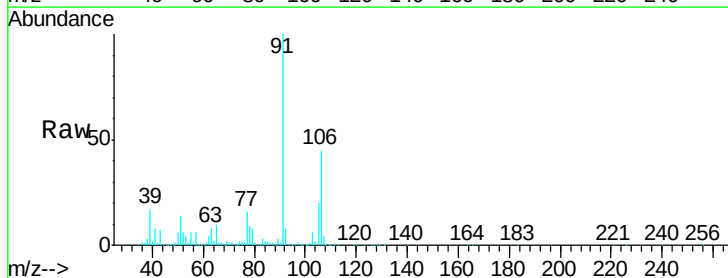
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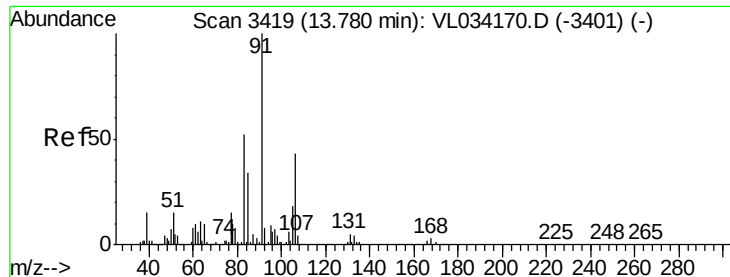
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#59
m/p-Xylene
Concen: 17.261 ppbv
RT: 13.05 min Scan# 3192
Delta R.T. -0.03 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Tgt Ion: 91 Resp: 4291218
Ion Ratio Lower Upper
91 100
106 44.0 35.5 53.3





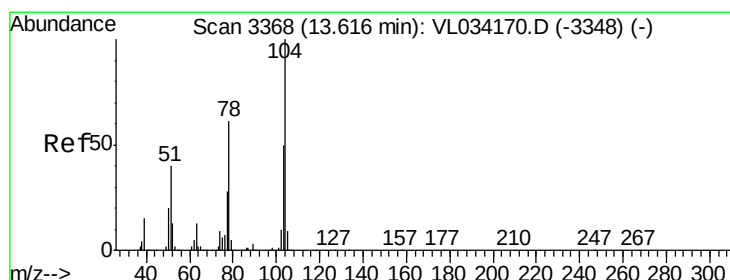
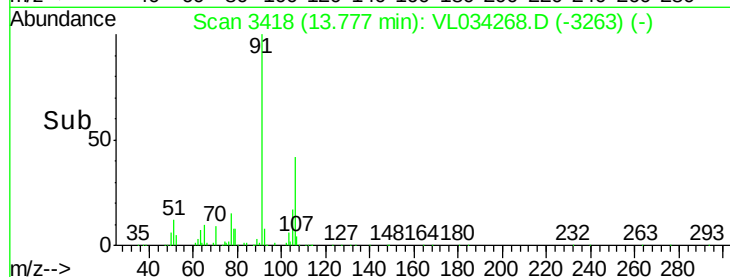
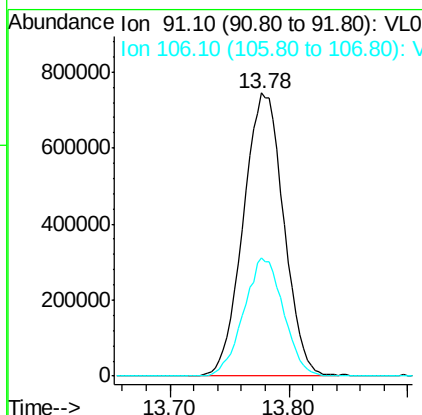
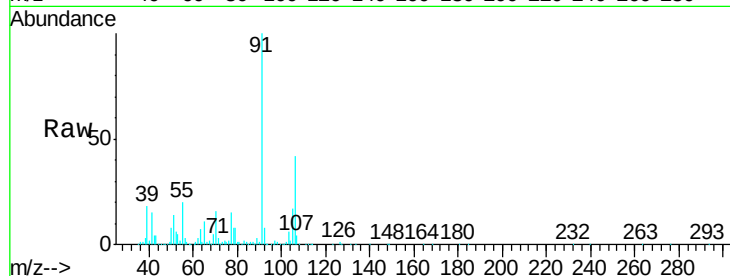
#60
o-Xylene
Concen: 7.015 ppbv
RT: 13.78 min Scan# 3418
Delta R.T. -0.00 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 91 Resp: 1743766
Ion Ratio Lower Upper
91 100
106 41.1 21.2 63.6

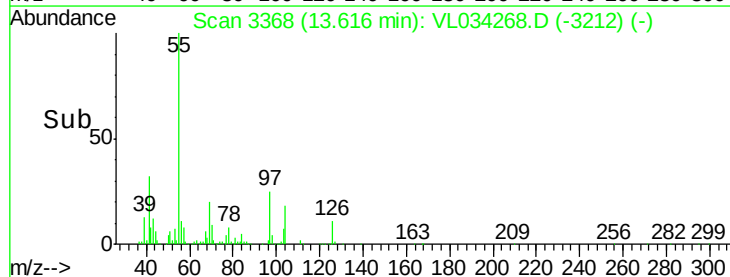
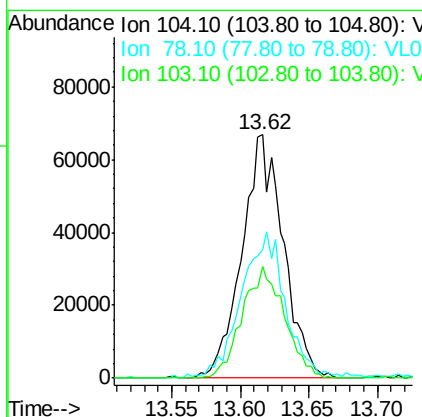
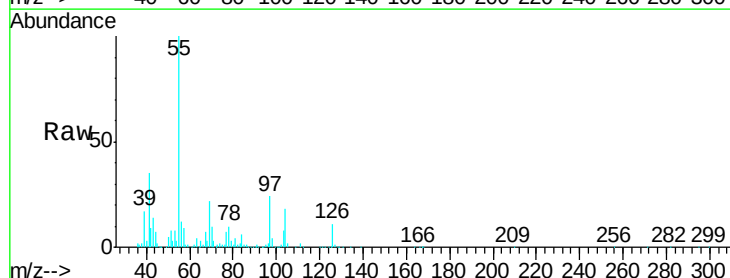
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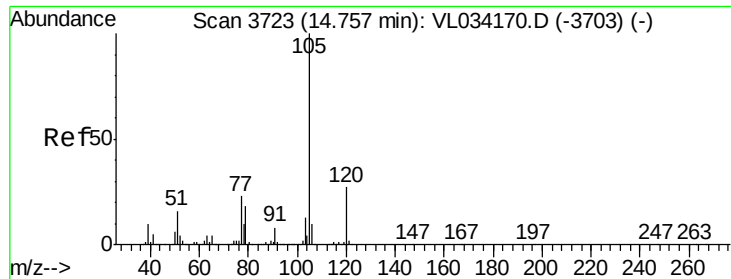
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#61
Styrene
Concen: 0.787 ppbv m
RT: 13.62 min Scan# 3368
Delta R.T. 0.00 min
Lab File: VL034268.D
Acq: 9 Oct 2019 3:51

Tgt Ion: 104 Resp: 140130
Ion Ratio Lower Upper
104 100
78 65.8 49.7 74.5
103 0.0 38.4 57.6#





#62

Isopropylbenzene

Concen: 0.282 ppbv m

RT: 14.76 min Scan# 3723

Delta R.T. 0.00 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

ClientSampled :

SV1

Tgt Ion: 105 Resp: 90658

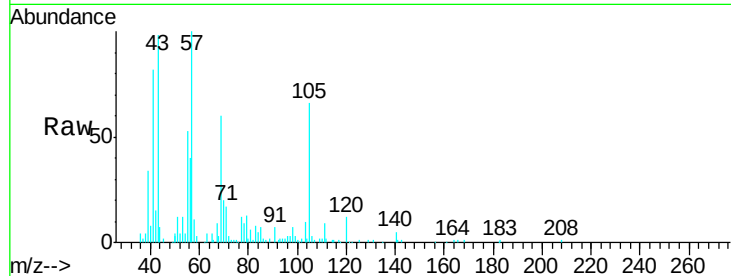
Ion Ratio Lower Upper

105 100

120 24.6 20.7 31.1

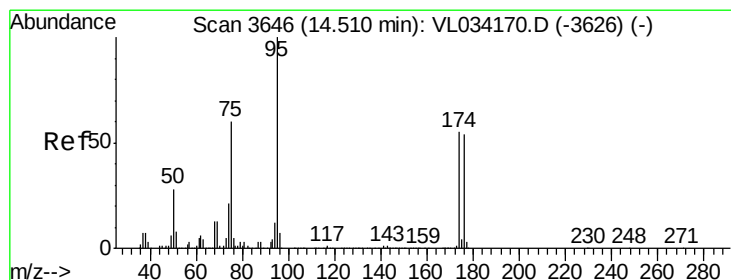
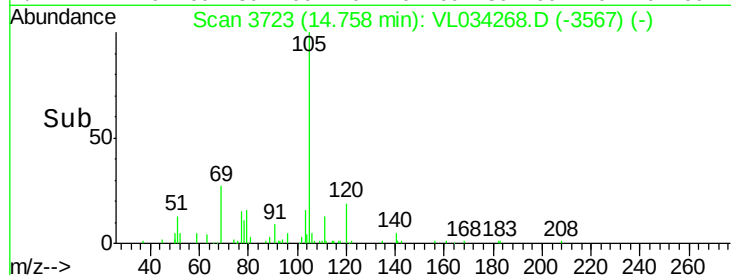
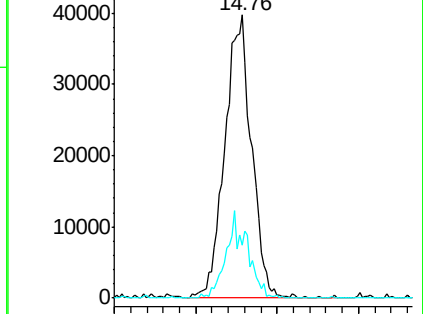
Manual Integrations
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.636 ppbv

RT: 14.50 min Scan# 3644

Delta R.T. -0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

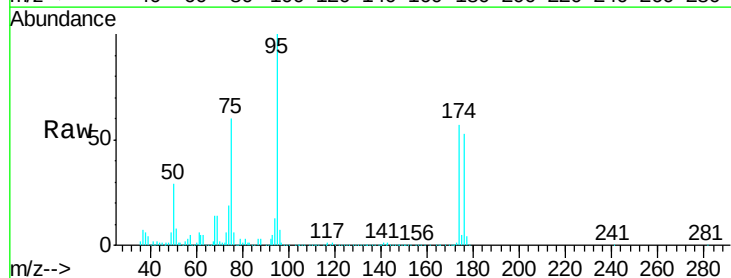
Tgt Ion: 95 Resp: 1719251

Ion Ratio Lower Upper

95 100

174 57.3 45.1 67.7

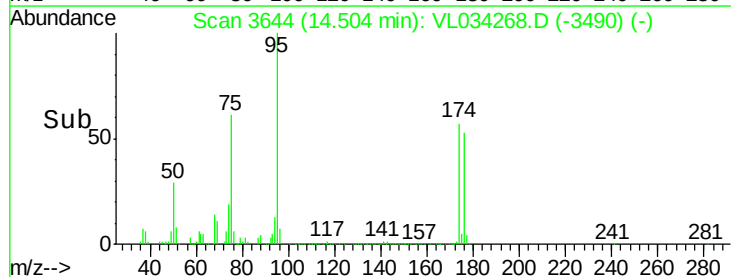
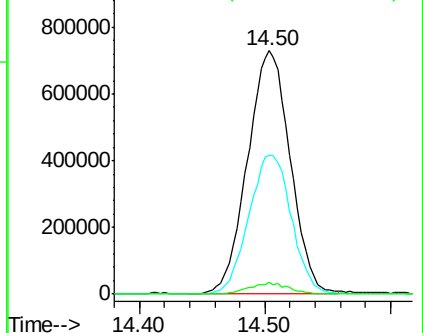
175 4.3 3.3 4.9

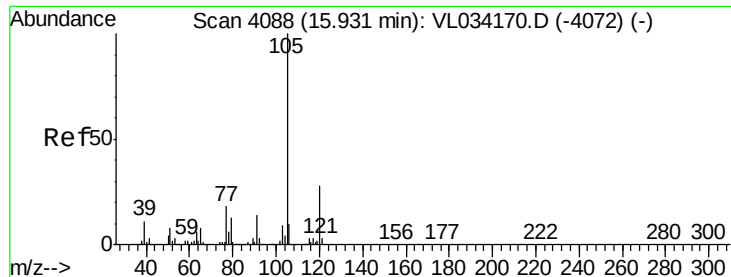


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#72

4-Ethyltoluene

Concen: 0.847 ppbv m

RT: 15.92 min Scan# 4086

Delta R.T. -0.01 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Instrument :

MSVOA_L

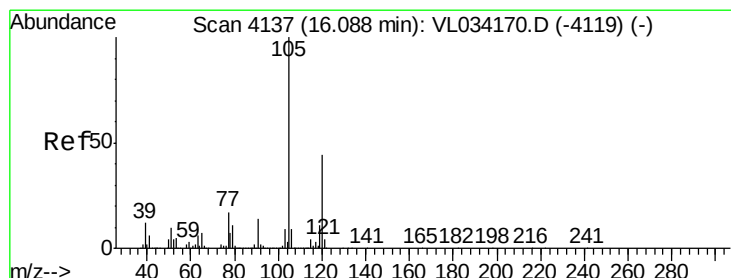
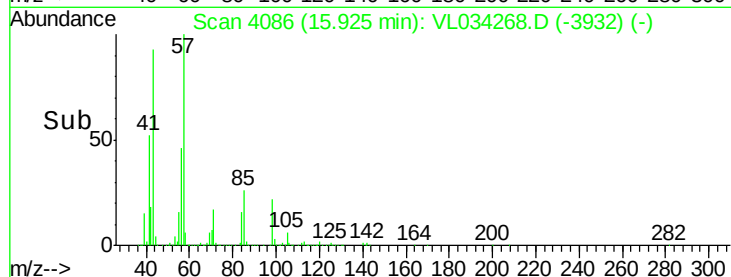
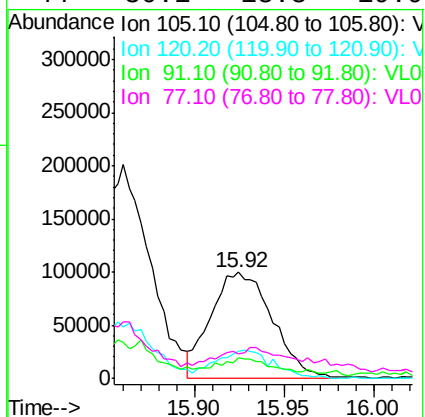
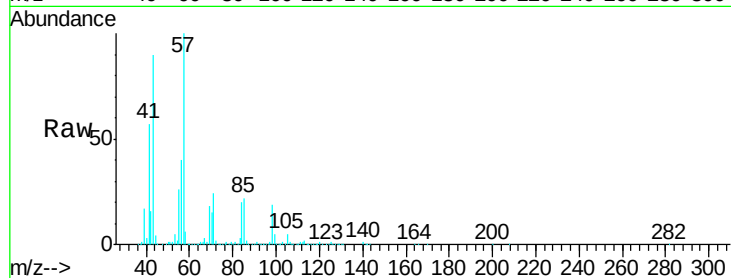
ClientSampleId :

SV1

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	237897		
120	25.0	23.3	34.9	
91	0.0	11.4	17.2#	
77	30.1	13.3	19.9#	

Manual Integrations
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10/11/2019 5:08:10 PM



#73

1,3,5-Trimethylbenzene

Concen: 0.801 ppbv

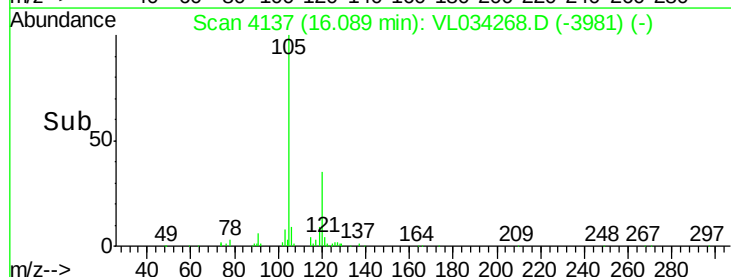
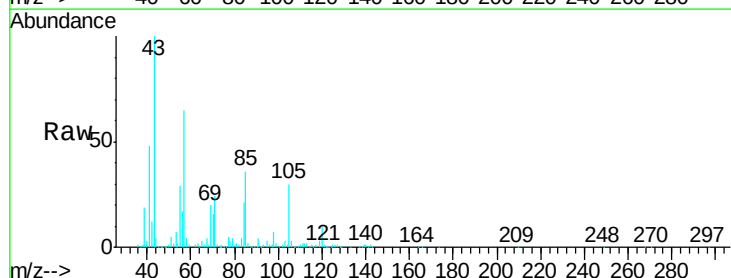
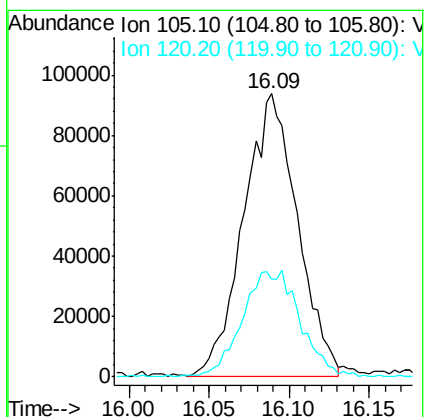
RT: 16.09 min Scan# 4137

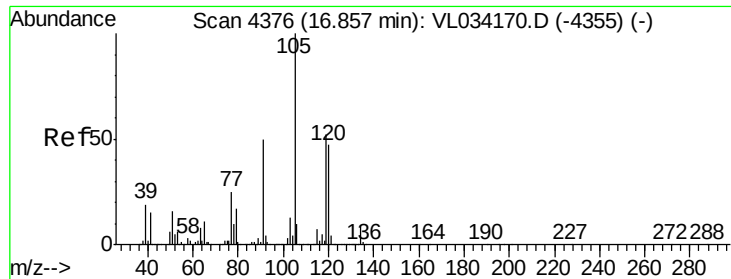
Delta R.T. 0.00 min

Lab File: VL034268.D

Acq: 9 Oct 2019 3:51

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	217394		
120	33.9	35.6	53.4#	





#74
 1,2,4-Trimethylbenzene
 Concen: 1.806 ppbv
 RT: 16.86 min Scan# 4376
 Delta R.T. 0.00 min
 Lab File: VL034268.D
 Acq: 9 Oct 2019 3:51

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Tgt Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	36.3	37.5	56.3#
91	14.4	41.1	61.7#
77	16.9	19.9	29.9#

Manual Integrations
 APPROVED

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 10/11/2019 5:08:10 PM

