

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071719\
 Data File : VL034039.D
 Acq On : 17 Jul 2019 19:54
 Operator : SY/AP
 Sample : K3804-01DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1DUP

Manual Integrations
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MMDadoda
 7/19/2019 1:37:17 AM

Quant Time: Jul 18 12:48:09 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070219AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 0
 QLast Update : Tue Jul 02 19:31:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.73	49	1055658	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.25	114	2787948	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.19	117	2692995	10.00	ppbv	-0.01

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.53	95	2116645	9.22	ppbv	-0.01	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	92.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	39479m	0.181	ppbv	
3) Chlorodifluoromethane	2.99	51	110101m	0.845	ppbv	
9) Propene	3.01	41	2812909	58.657	ppbv	92
10) Heptane	8.20	43	102760	0.856	ppbv	97
11) Trichlorofluoromethane	3.98	101	634953	2.592	ppbv	94
13) Ethanol	3.67	45	22248340	1493.408	ppbv	96
15) Acetone	3.87	43	12147519	68.441	ppbv #	88
20) Methylene Chloride	4.39	84	62848	0.812	ppbv	91
26) Hexane	5.74	57	206020	1.855	ppbv #	76
27) Carbon Disulfide	4.59	76	10760178	56.976	ppbv	95
29) Chloroform	5.82	83	163307	0.782	ppbv	89
30) Cyclohexane	7.20	84	68315	0.796	ppbv #	79
34) 2-Butanone	5.29	43	1323404	8.969	ppbv	98
35) Carbon Tetrachloride	7.09	117	17345m	0.079	ppbv	
36) Benzene	6.97	78	545434	2.500	ppbv	94
38) Trichloroethene	7.92	130	32476	0.335	ppbv #	86
41) Tetrahydrofuran	6.12	42	94233	1.302	ppbv #	72
44) 2,2,4-Trimethylpentane	7.94	57	106835m	0.284	ppbv	
50) 4-Methyl-2-Pentanone	8.85	43	61661m	0.282	ppbv	
52) Tetrachloroethene	11.33	164	48924	0.521	ppbv #	82
53) Toluene	9.90	91	1174687	4.704	ppbv	99
58) Ethyl Benzene	12.82	91	213618	0.660	ppbv	96
59) m/p-Xylene	13.08	91	655451m	2.235	ppbv	
60) o-Xylene	13.80	91	274188m	0.935	ppbv	
61) Styrene	13.63	104	66398m	0.342	ppbv	
62) Isopropylbenzene	14.78	105	121200	0.269	ppbv	98
74) 1,2,4-Trimethylbenzene	16.87	105	100449m	0.259	ppbv	

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

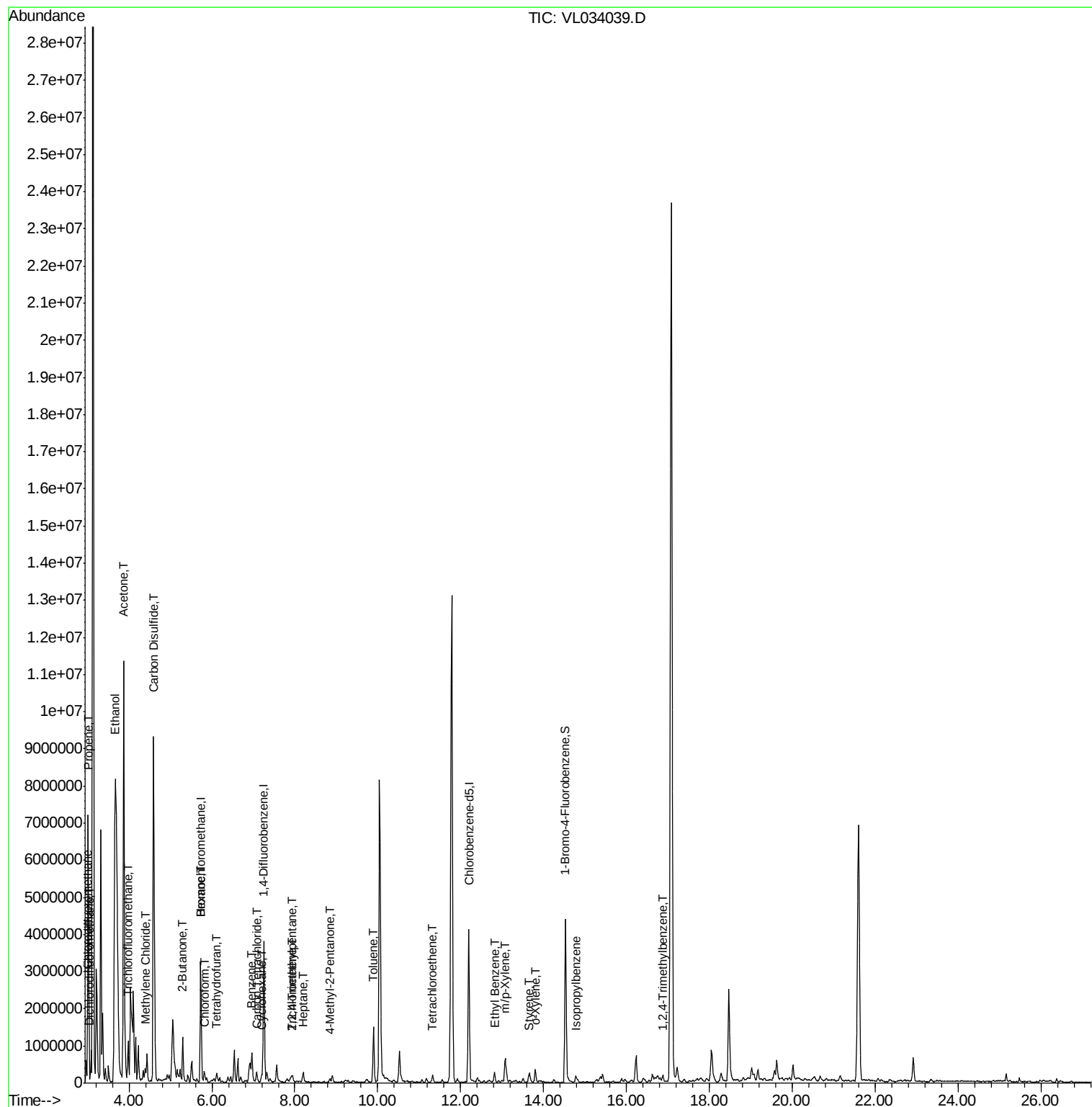
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL071719\
Data File : VL034039.D
Acq On : 17 Jul 2019 19:54
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

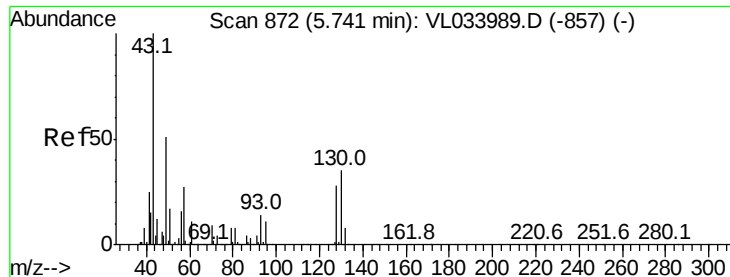
Instrument :
MSVOA_L
ClientSampleId :
SG-1DUP

Manual Integrations
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Quant Time: Jul 18 12:48:09 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL070219AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul
QLast Update : Tue Jul 02 19:31:31 2019
Response via : Initial Calibration





#1

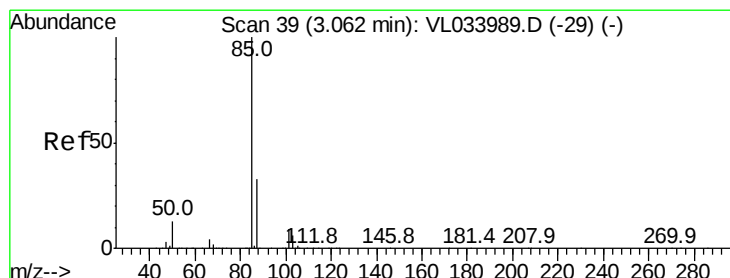
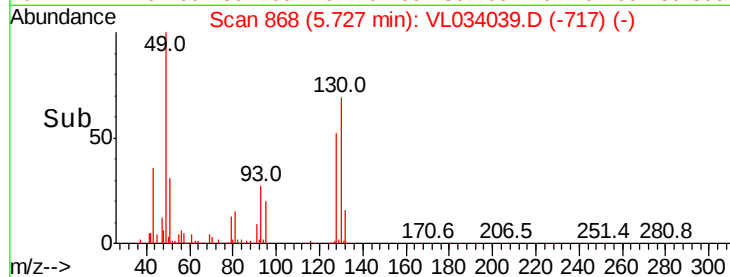
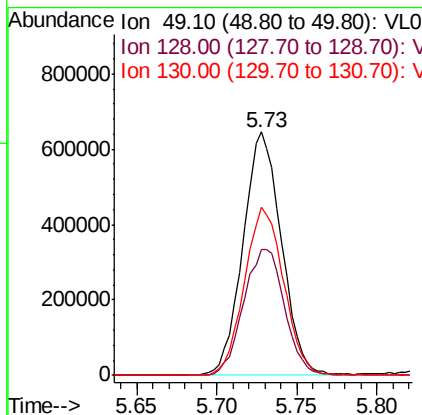
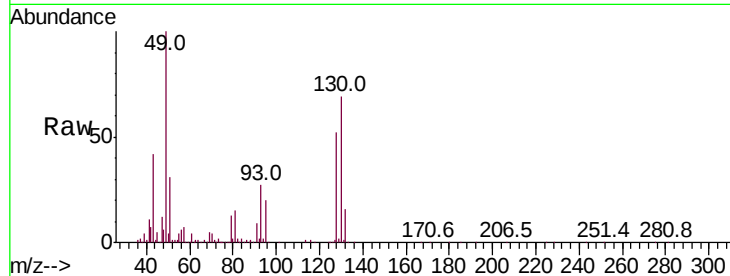
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.73 min Scan# 868
 Delta R.T. -0.01 min
 Lab File: VL034039.D
 Acq: 17 Jul 2019 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1DUP

Tot Ion: 49 Resp: 1055658
 Ion Ratio Lower Upper
 49 100
 128 55.4 27.9 83.6
 130 71.1 35.8 107.4

Manual Integrations
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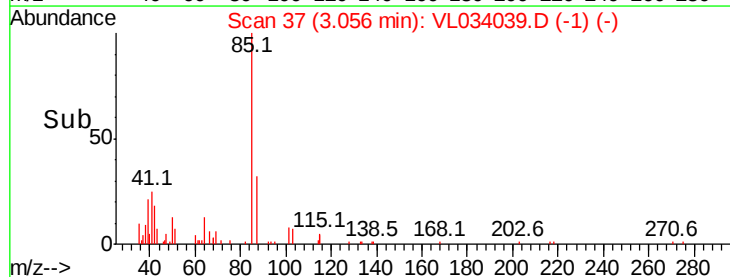
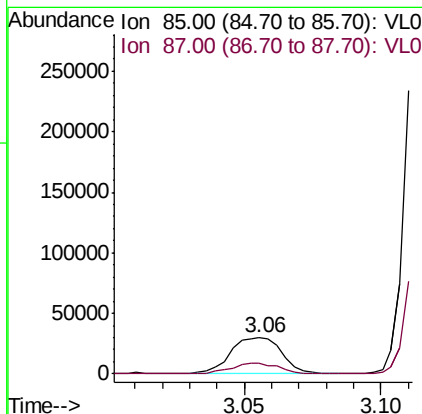
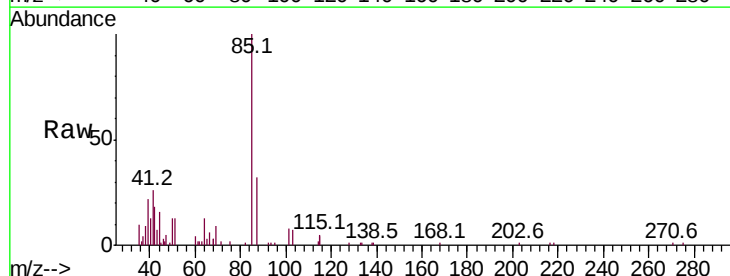
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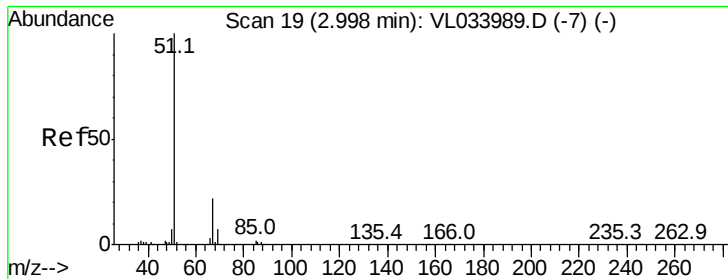


#2

Dichlorodifluoromethane
 Concen: 0.181 ppbv m
 RT: 3.06 min Scan# 37
 Delta R.T. -0.01 min
 Lab File: VL034039.D
 Acq: 17 Jul 2019 19:54

Tgt Ion: 85 Resp: 39479
 Ion Ratio Lower Upper
 85 100
 87 31.6 26.0 39.0





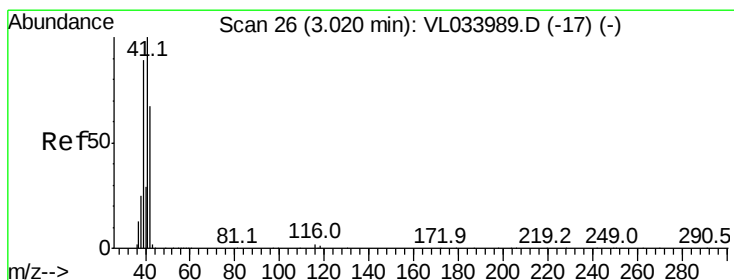
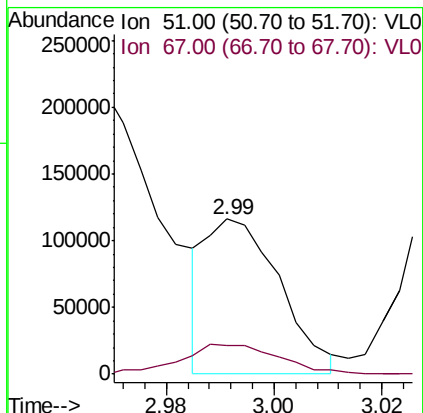
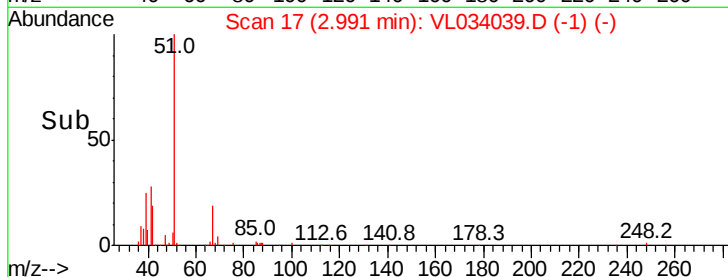
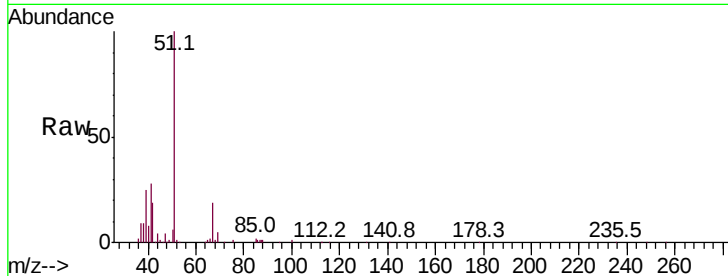
#3
 Chlorodifluoromethane
 Concen: 0.845 ppbv
 RT: 2.99 min Scan# 17
 Delta R.T. -0.01 min
 Lab File: VL034039.D
 Acq: 17 Jul 2019 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1DUP

Tot Ion	Ratio	Lower	Upper
51	100		
67	26.2	17.3	25.9#

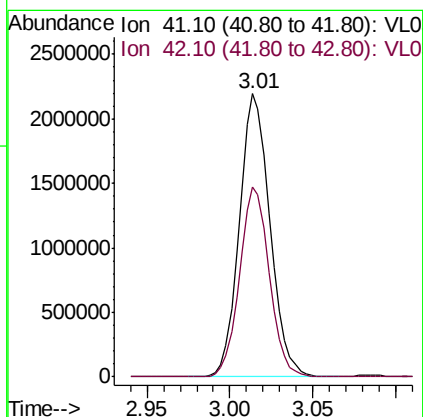
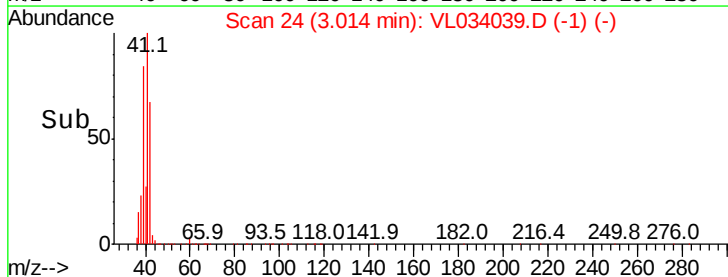
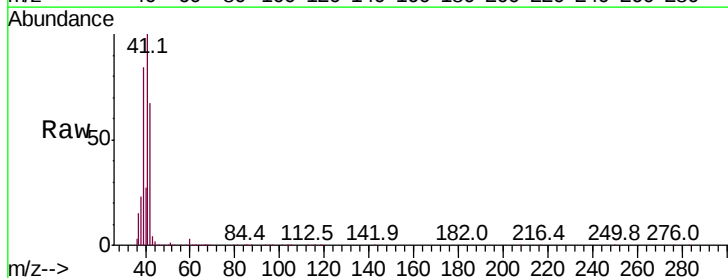
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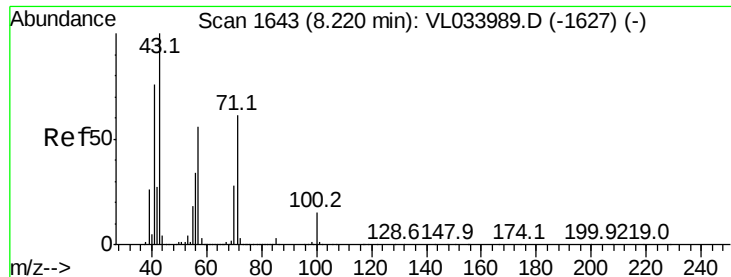
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#9
 Propene
 Concen: 58.657 ppbv
 RT: 3.01 min Scan# 24
 Delta R.T. -0.01 min
 Lab File: VL034039.D
 Acq: 17 Jul 2019 19:54

Tgt Ion	Ratio	Lower	Upper
41	100		
42	65.1	57.1	85.7





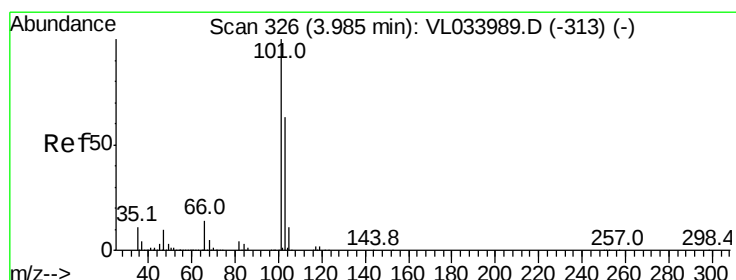
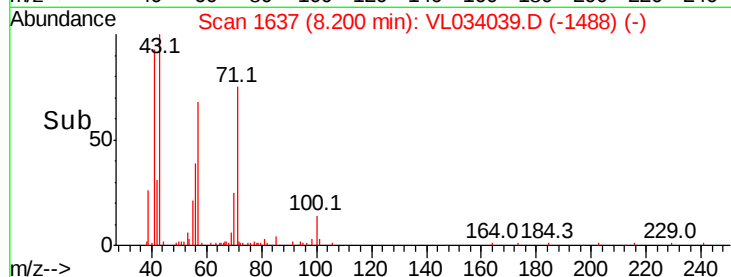
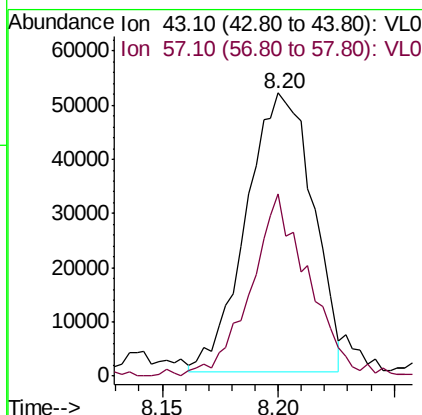
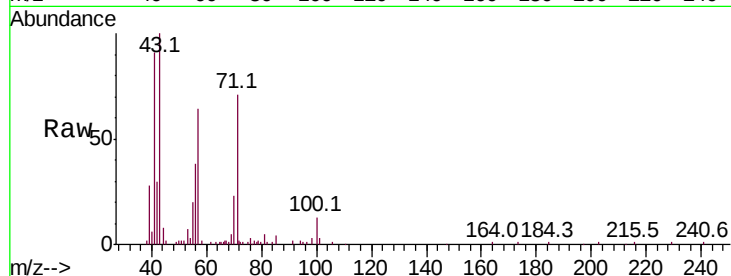
#10
Heptane
Concen: 0.856 ppbv
RT: 8.20 min Scan# 1637
Delta R.T. -0.02 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampleId :
SG-1DUP

Tot Ion: 43 Resp: 102760
Ion Ratio Lower Upper
43 100
57 57.7 44.6 66.8

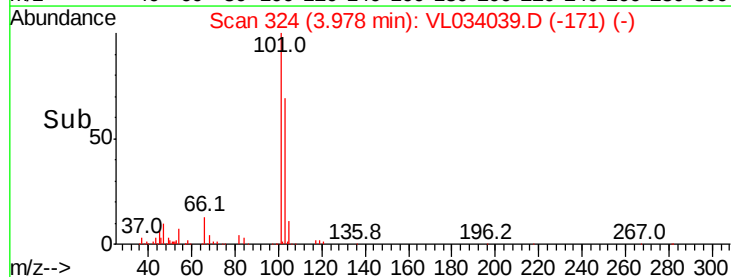
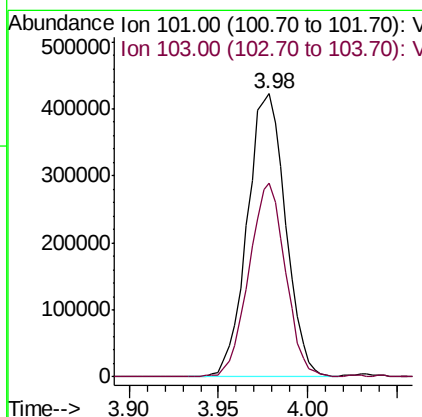
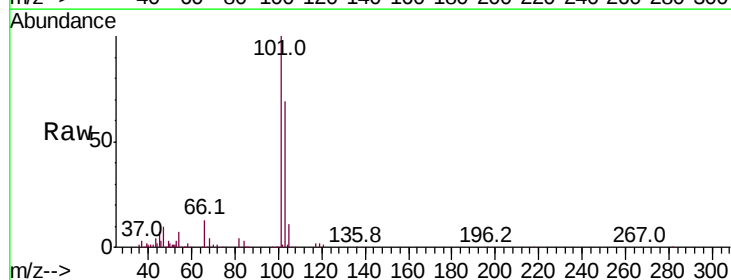
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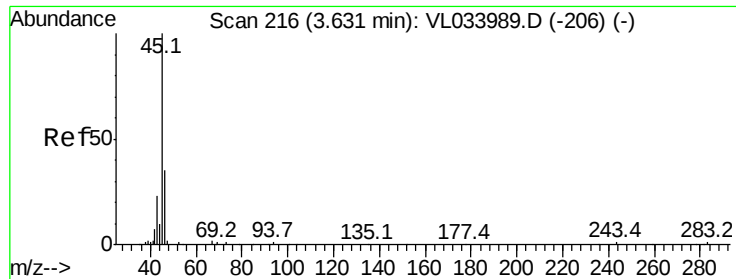
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#11
Trichlorofluoromethane
Concen: 2.592 ppbv
RT: 3.98 min Scan# 324
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion: 101 Resp: 634953
Ion Ratio Lower Upper
101 100
103 68.5 50.8 76.2





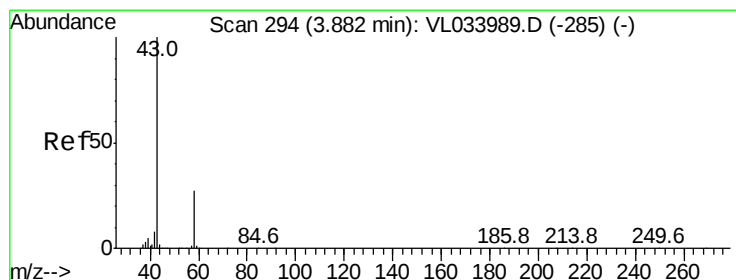
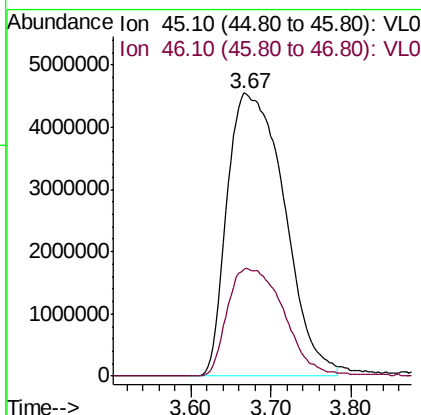
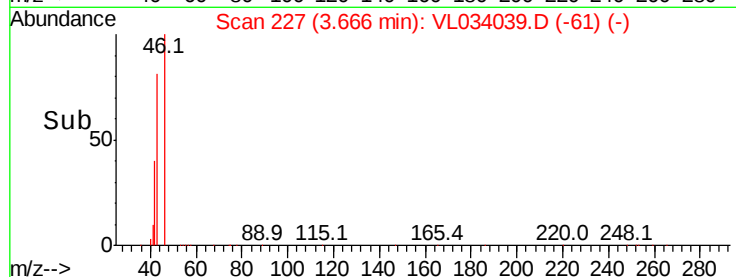
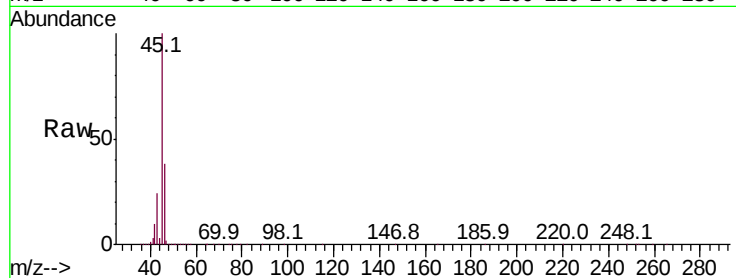
#13
Ethanol
Concen: 1493.408 ppbv
RT: 3.67 min Scan# 227
Delta R.T. 0.04 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampled :
SG-1DUP

Tot Ion: 45 Resp:22248340
Ion Ratio Lower Upper
45 100
46 38.1 16.2 64.6

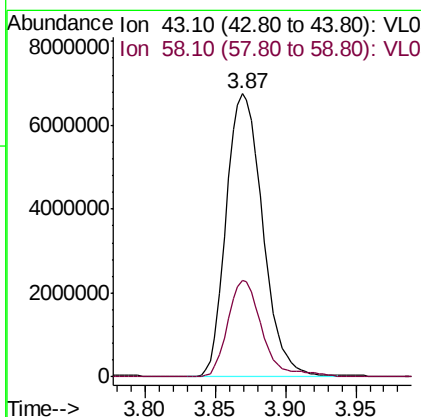
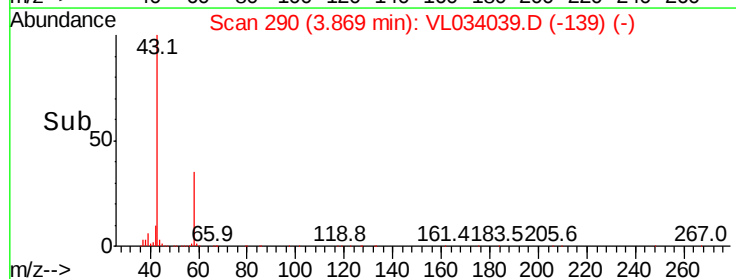
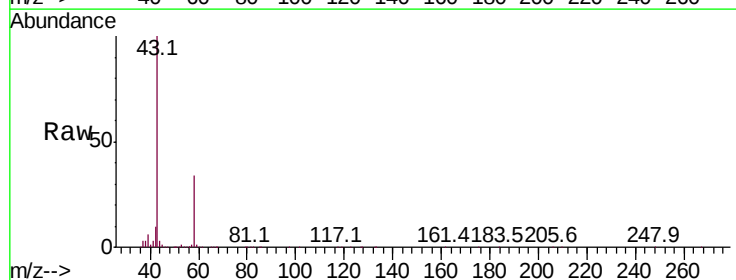
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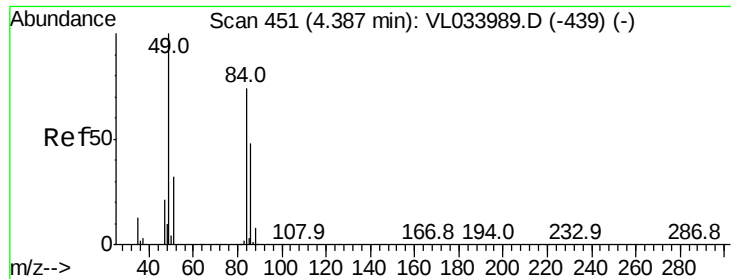
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#15
Acetone
Concen: 68.441 ppbv
RT: 3.87 min Scan# 290
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion: 43 Resp:12147519
Ion Ratio Lower Upper
43 100
58 32.7 21.4 32.0#





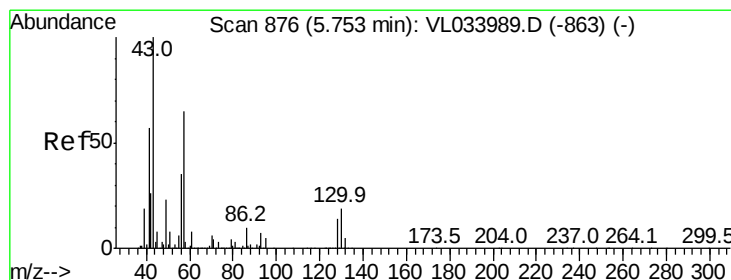
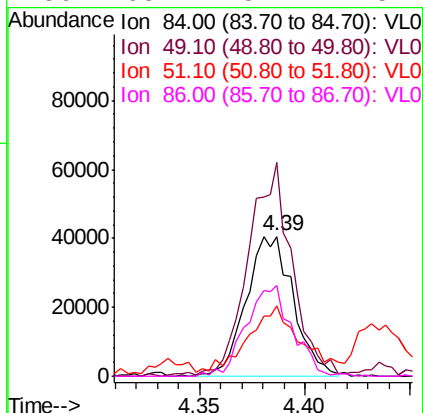
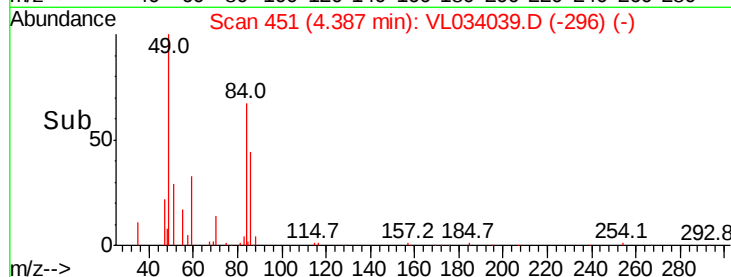
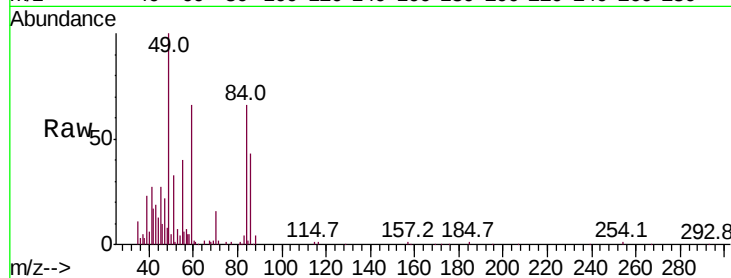
#20
Methvlene Chloride
Concen: 0.812 ppbv
RT: 4.39 min Scan# 451
Delta R.T. -0.00 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampleId :
SG-1DUP

Tot Ion	Ratio	Lower	Upper
84	100		
49	151.1	107.6	161.4
51	40.2	35.0	52.6
86	65.2	52.1	78.1

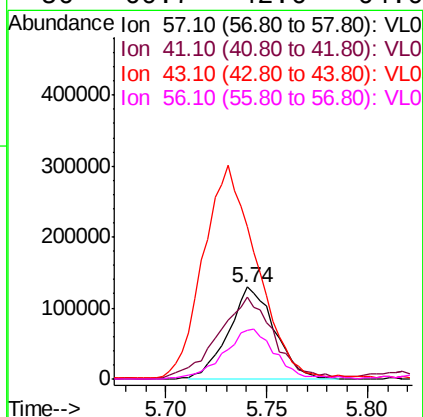
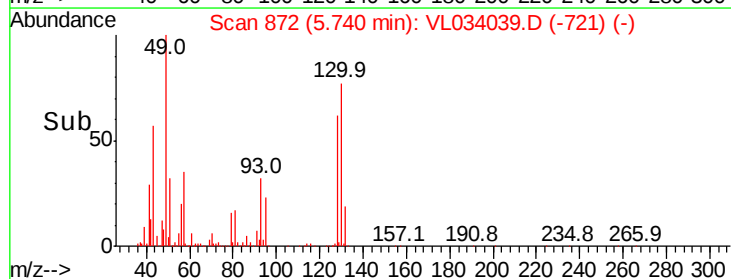
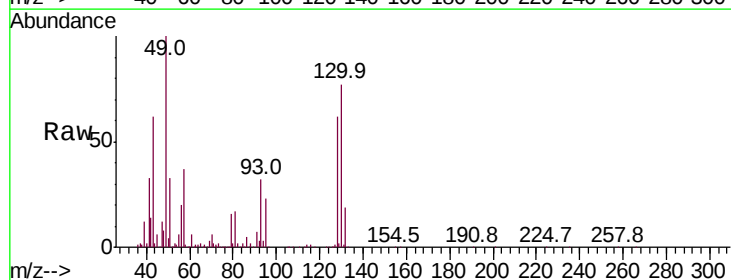
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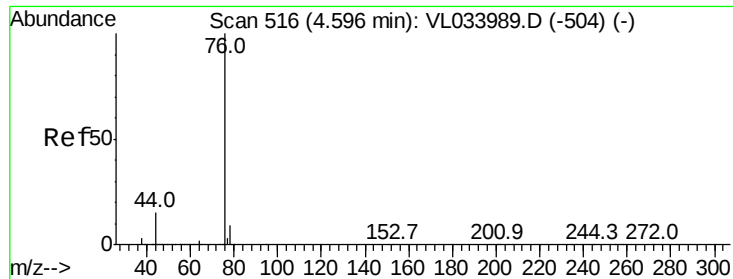
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#26
Hexane
Concen: 1.855 ppbv
RT: 5.74 min Scan# 872
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion	Ratio	Lower	Upper
57	100		
41	106.9	70.6	105.8#
43	267.8	177.6	266.4#
56	60.7	42.6	64.0





#27

Carbon Disulfide

Concen: 56.976 ppbv

RT: 4.59 min Scan# 514

Delta R.T. -0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Instrument :

MSVOA_L

ClientSampleId :

SG-1DUP

Tot Ion: 76 Resp:10760178

Ion Ratio Lower Upper

76 100

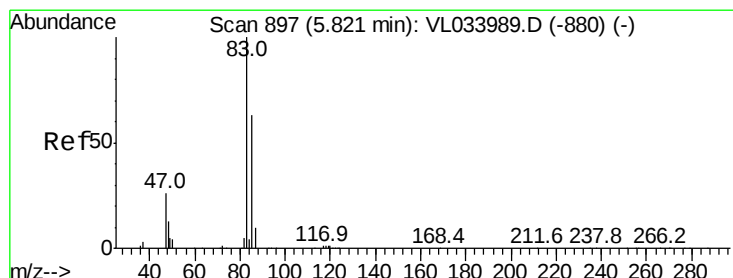
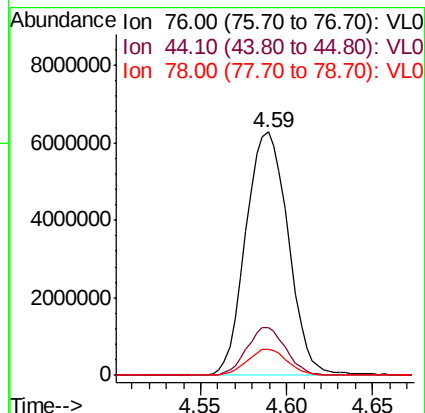
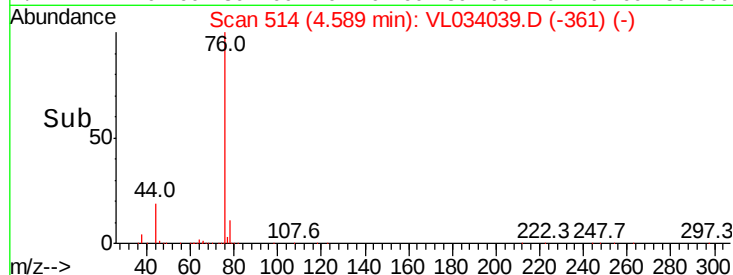
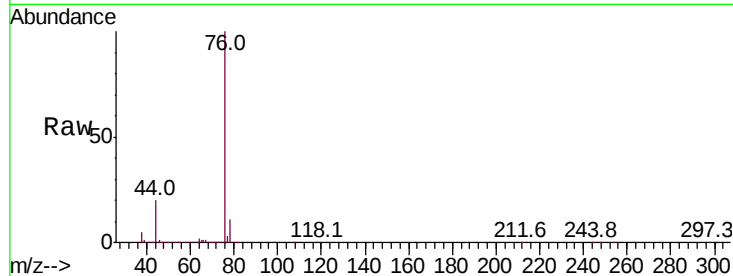
44 18.1 12.6 18.8

78 10.2 7.2 10.8

Manual Integrations
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7/19/2019 1:37:17 AM



#29

Chloroform

Concen: 0.782 ppbv

RT: 5.82 min Scan# 896

Delta R.T. -0.00 min

Lab File: VL034039.D

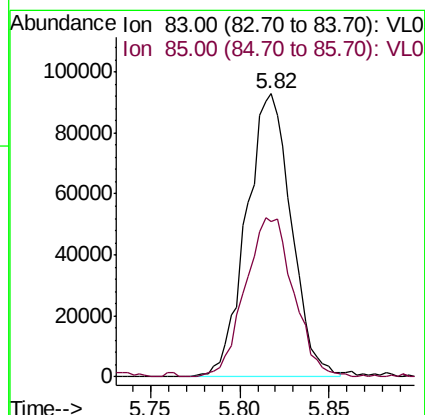
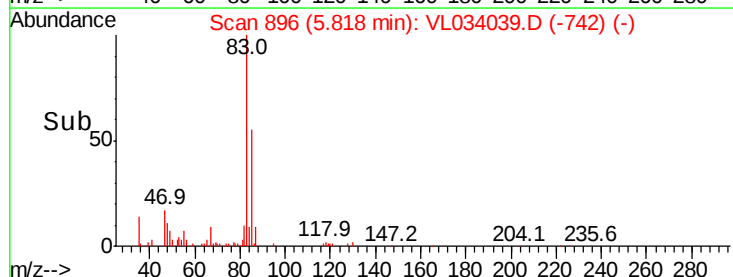
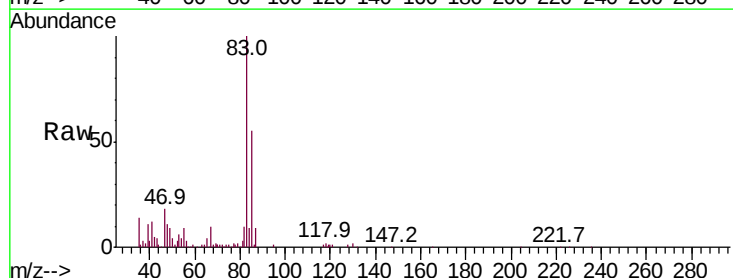
Acq: 17 Jul 2019 19:54

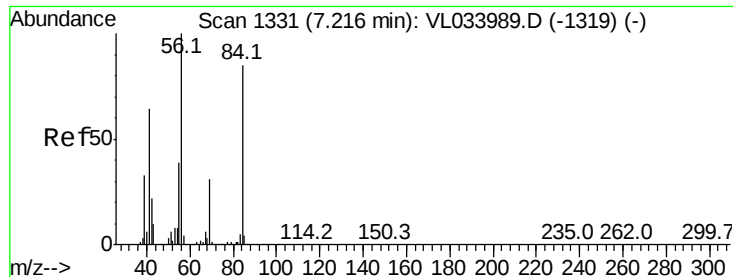
Tgt Ion: 83 Resp: 163307

Ion Ratio Lower Upper

83 100

85 54.9 50.6 75.8





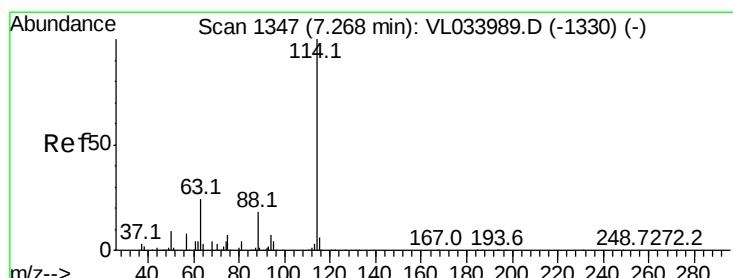
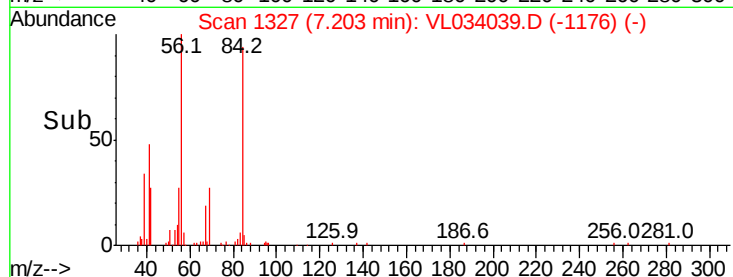
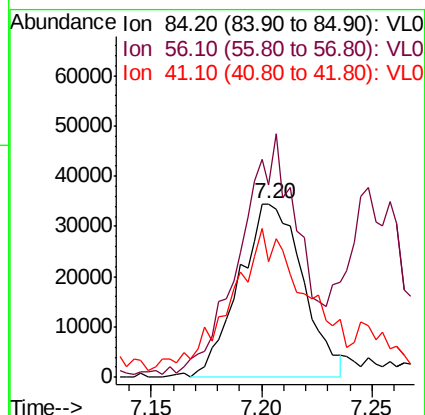
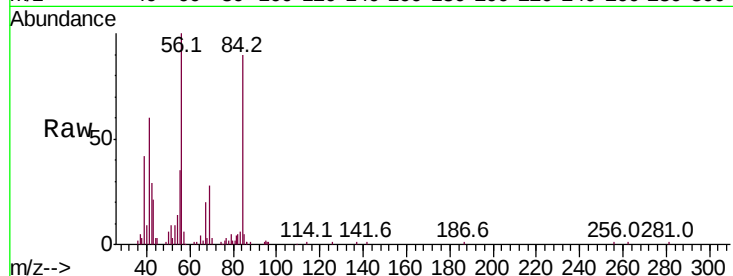
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Cvclohexane
Concen: 0.796 ppbv
RT: 7.20 min Scan# 1327
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampleId :
SG-1DUP

Tot Ion	Ratio	Lower	Upper
84	100		
56	137.3	103.7	155.5
41	117.0	62.6	94.0#

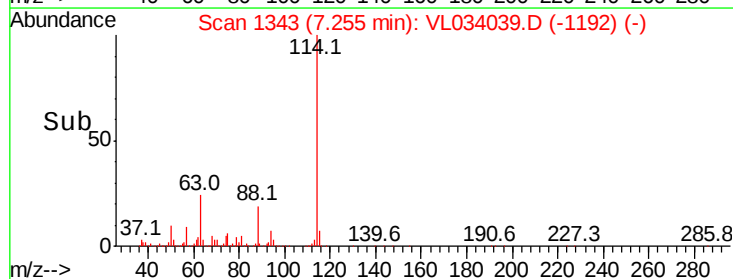
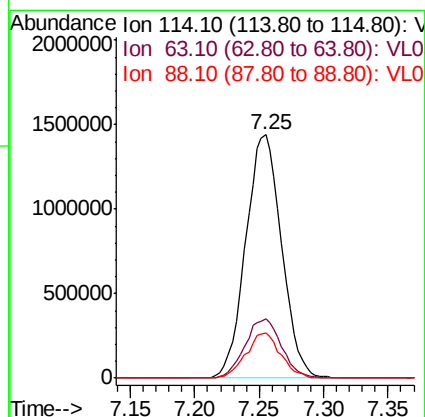
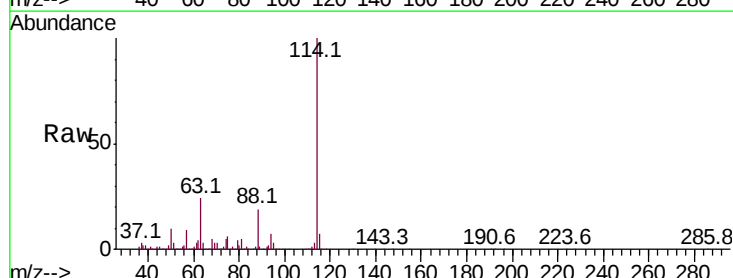
Manual Integrations
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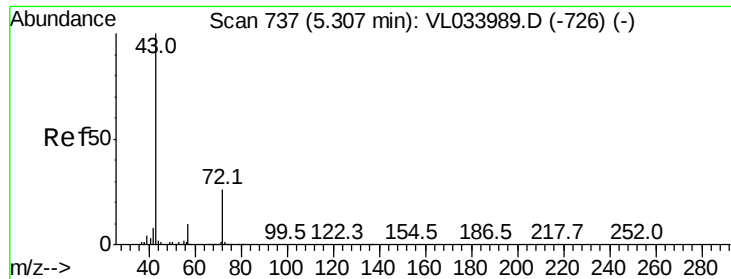
MMDadoda
7/19/2019 1:37:17 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.25 min Scan# 1343
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.9	20.2	30.2
88	17.9	14.1	21.1





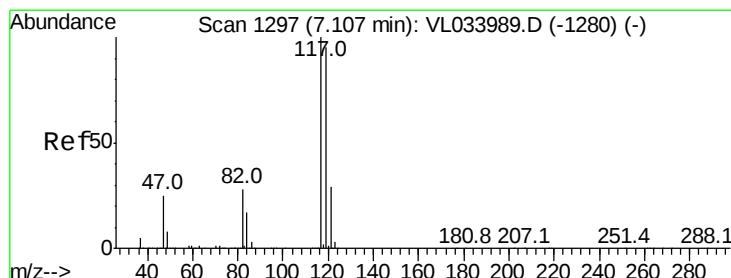
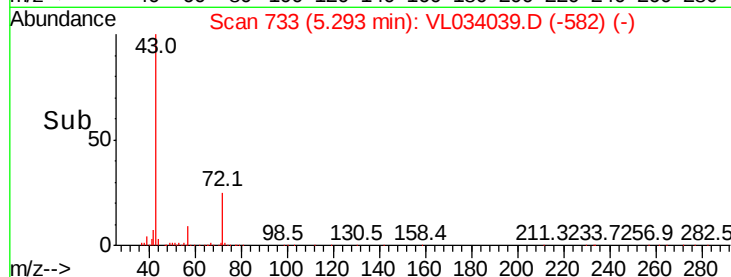
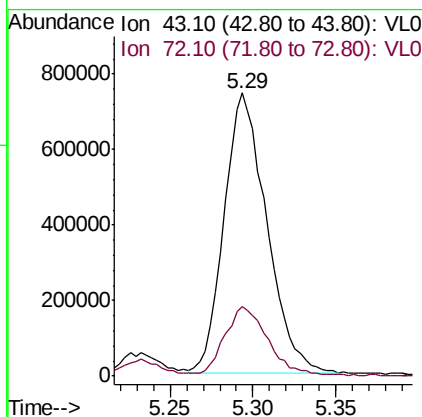
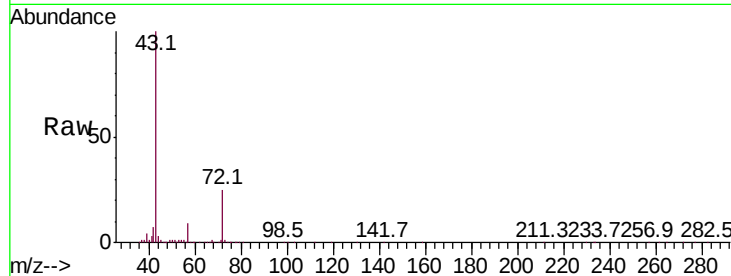
#34
2-Butanone
Concen: 8.969 ppbv
RT: 5.29 min Scan# 733
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampleId :
SG-1DUP

Tot Ion: 43 Resp: 1323404
Ion Ratio Lower Upper
43 100
72 26.1 19.9 29.9

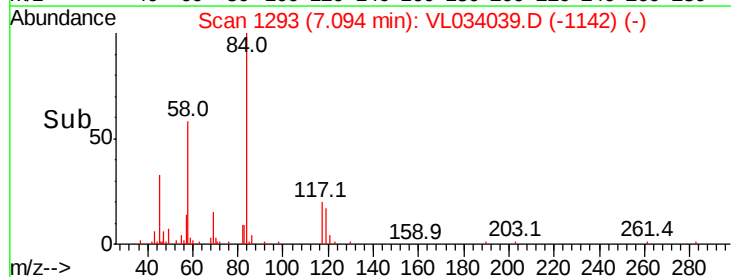
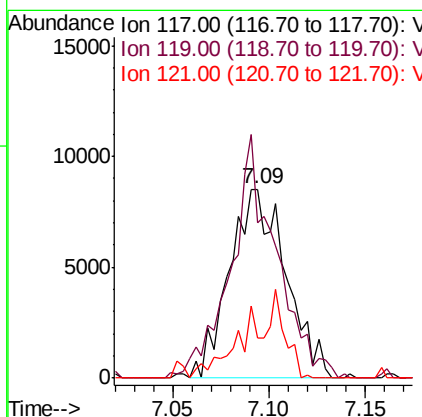
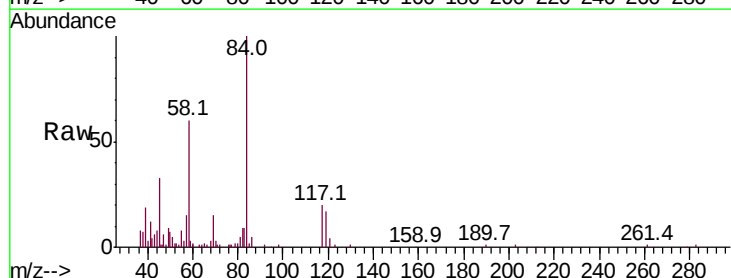
Manual Integrations
APPROVED

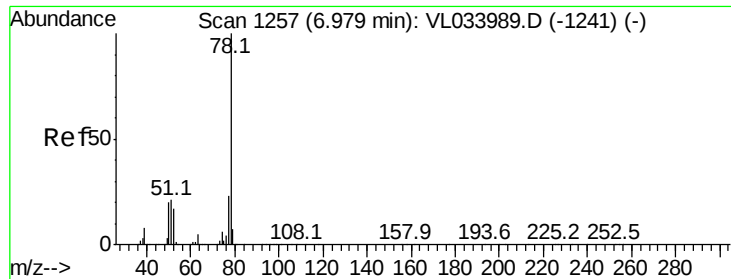
MMDadoda
7/19/2019 1:37:17 AM



#35
Carbon Tetrachloride
Concen: 0.079 ppbv m
RT: 7.09 min Scan# 1293
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion: 117 Resp: 17345
Ion Ratio Lower Upper
117 100
119 82.2 75.8 113.6
121 21.5 23.4 35.2#





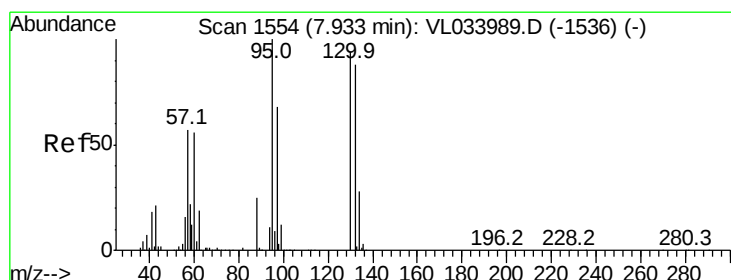
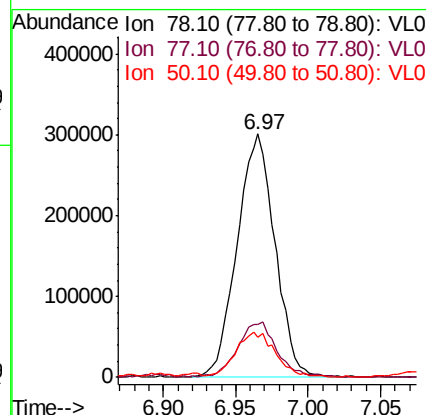
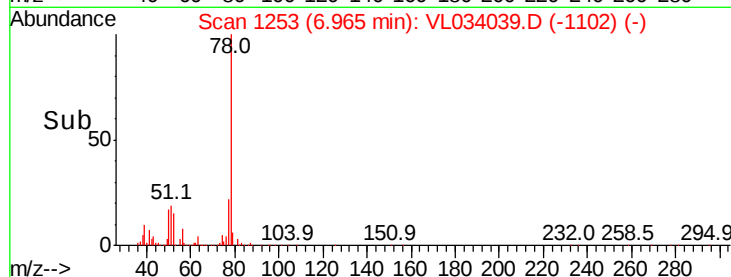
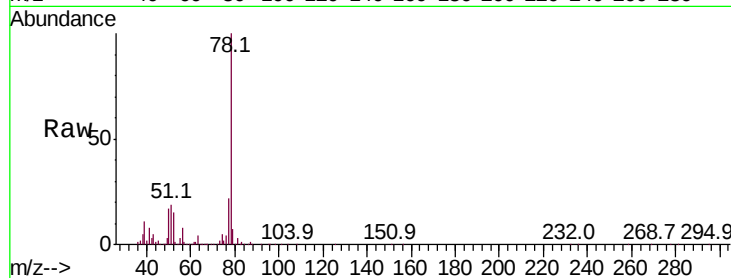
#36
Benzene
Concen: 2.500 ppbv
RT: 6.97 min Scan# 1253
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampleId :
SG-1DUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	21.5	18.7	28.1
50	16.4	16.2	24.2

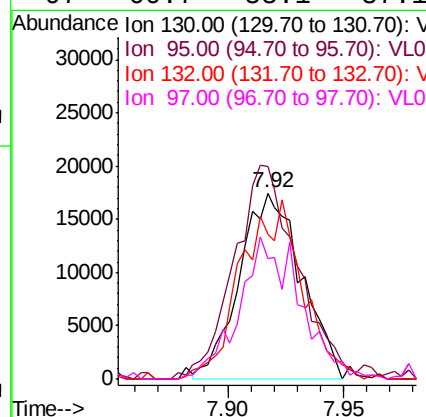
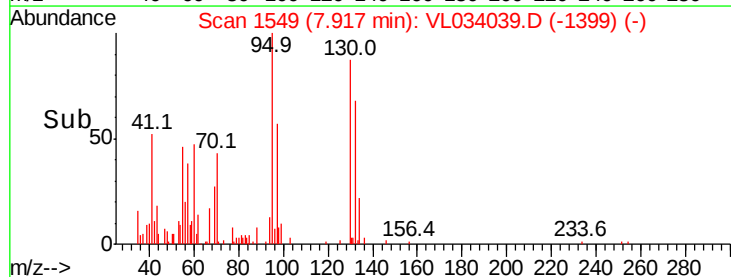
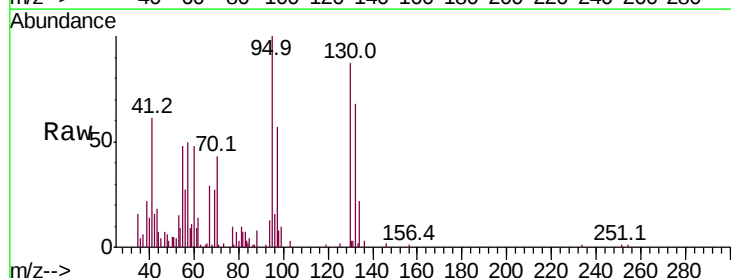
Manual Integrations
APPROVED

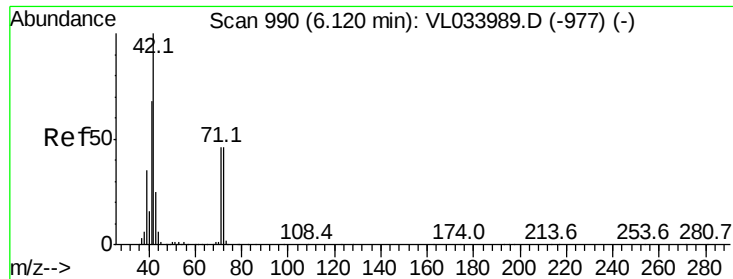
MMDadoda
7/19/2019 1:37:17 AM



#38
Trichloroethene
Concen: 0.335 ppbv
RT: 7.92 min Scan# 1549
Delta R.T. -0.02 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion	Ratio	Lower	Upper
130	100		
95	102.5	85.5	128.3
132	70.5	75.1	112.7
97	60.7	58.1	87.1





#41

Tetrahydrofuran

Concen: 1.302 ppbv

RT: 6.12 min Scan# 989

Delta R.T. -0.00 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Instrument :

MSVOA_L

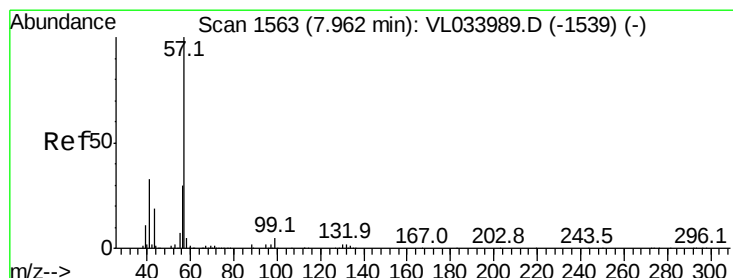
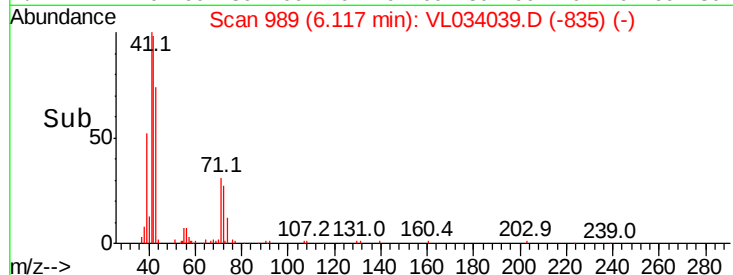
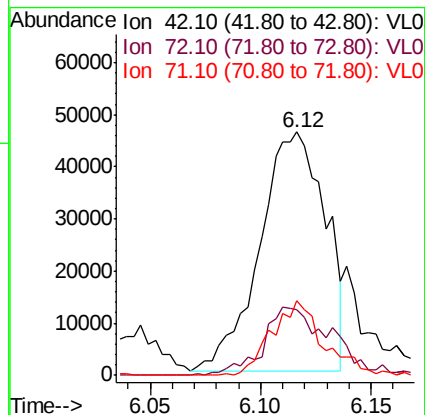
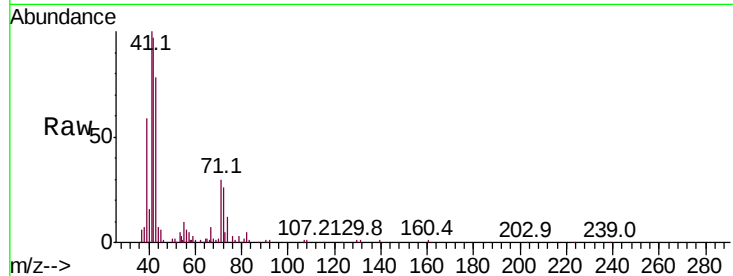
ClientSampleId :

SG-1DUP

Tot Ion:	42	Resp:	94233
Ion Ratio	Lower	Upper	
42	100		
72	29.6	37.3	55.9#
71	25.0	36.2	54.2#

Manual Integrations
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#44

2,2,4-Trimethylpentane

Concen: 0.284 ppbv m

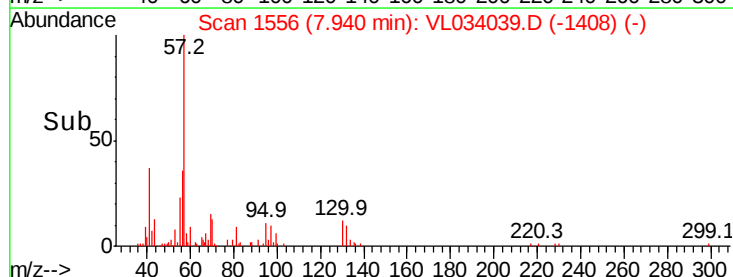
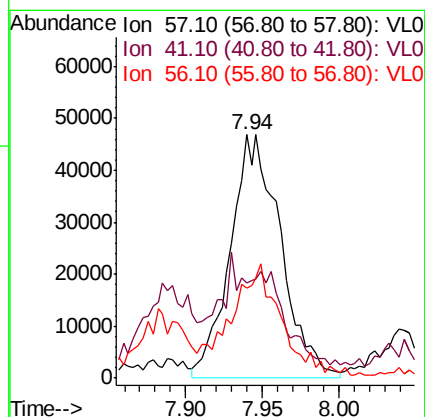
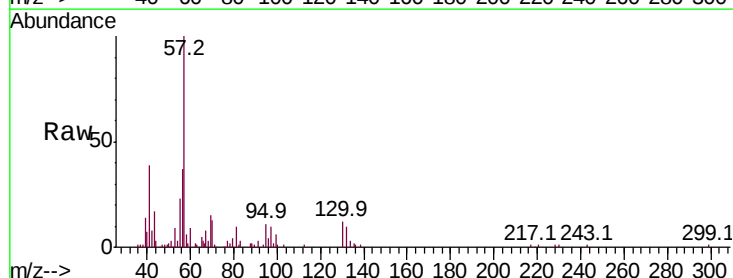
RT: 7.94 min Scan# 1556

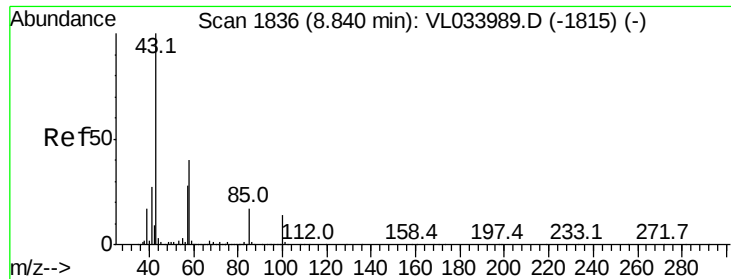
Delta R.T. -0.02 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Tgt Ion:	57	Resp:	106835
Ion Ratio	Lower	Upper	
57	100		
41	0.0	26.1	39.1#
56	46.6	24.4	36.6#





#50

4-Methyl-2-Pentanone

Concen: 0.282 ppbv

RT: 8.85 min Scan# 1838

Delta R.T. 0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Instrument :

MSVOA_L

ClientSampleId :

SG-1DUP

Tot Ion: 43 Resp: 61661

Ion Ratio Lower Upper

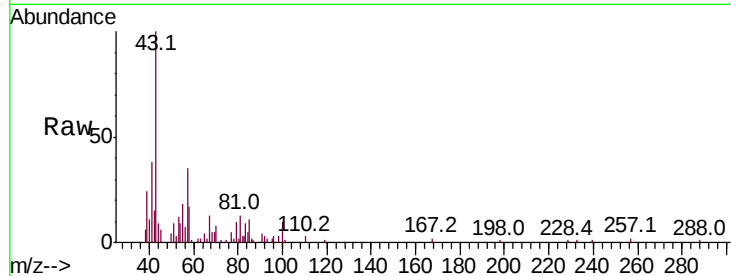
43 100

58 0.0 30.3 45.5#

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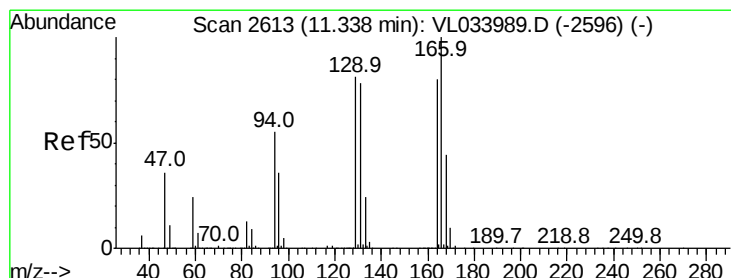
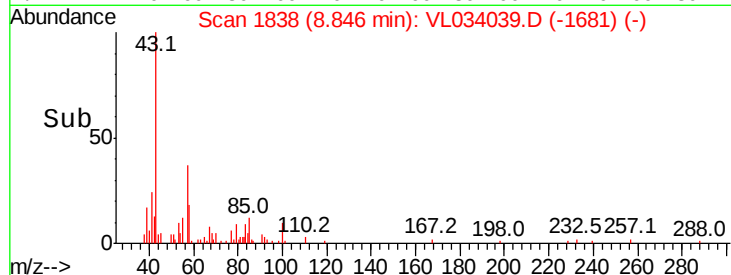
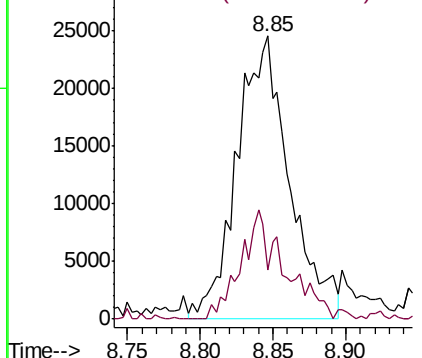
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#52

Tetrachloroethene

Concen: 0.521 ppbv

RT: 11.33 min Scan# 2610

Delta R.T. -0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Tgt Ion: 164 Resp: 48924

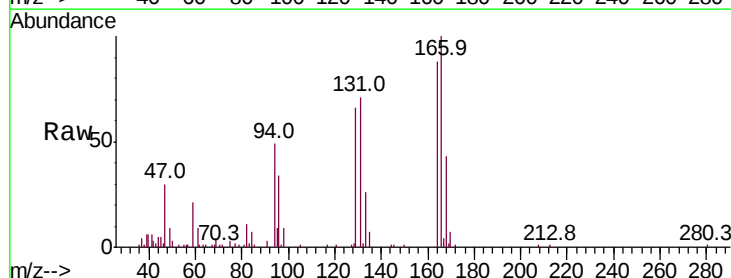
Ion Ratio Lower Upper

164 100

166 113.0 100.2 150.2

129 72.0 81.0 121.6#

131 80.7 78.3 117.5

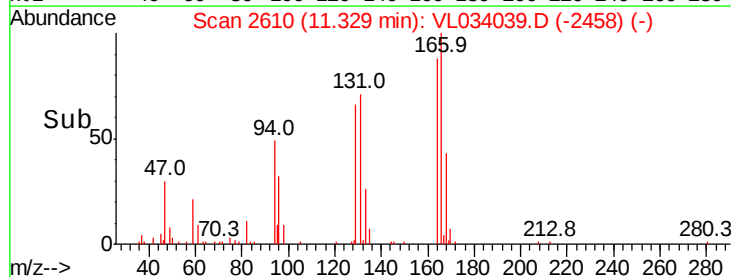
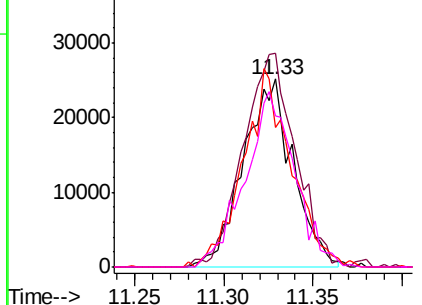


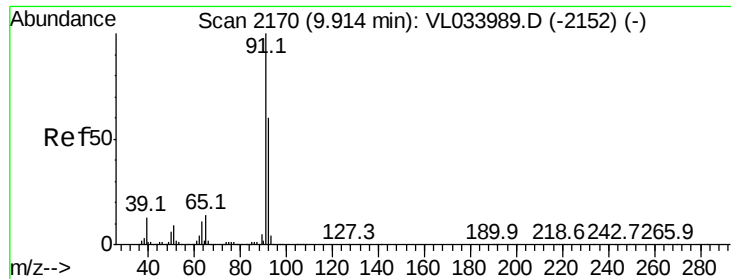
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 4.704 ppbv

RT: 9.90 min Scan# 2165

Delta R.T. -0.02 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Instrument :

MSVOA_L

ClientSampleId :

SG-1DUP

Tot Ion: 91 Resp: 1174687

Ion Ratio Lower Upper

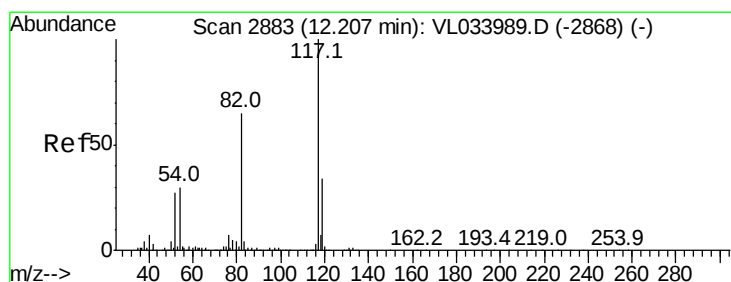
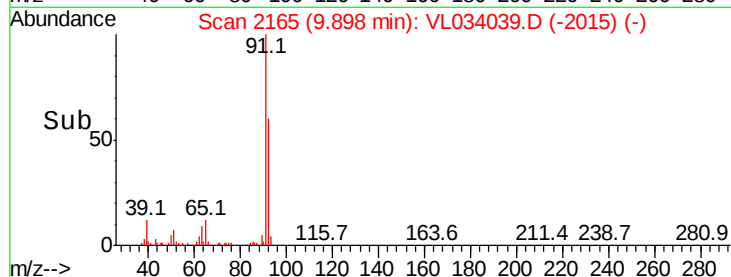
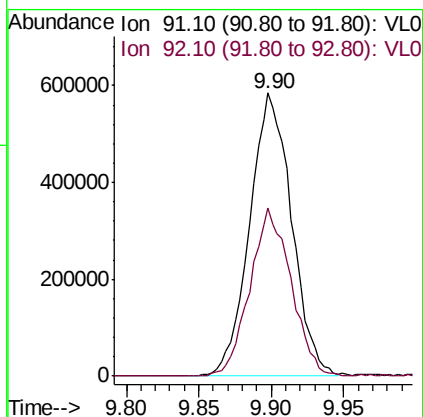
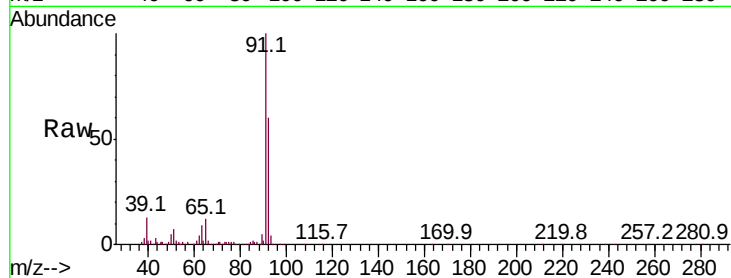
91 100

92 58.5 47.7 71.5

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.19 min Scan# 2879

Delta R.T. -0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

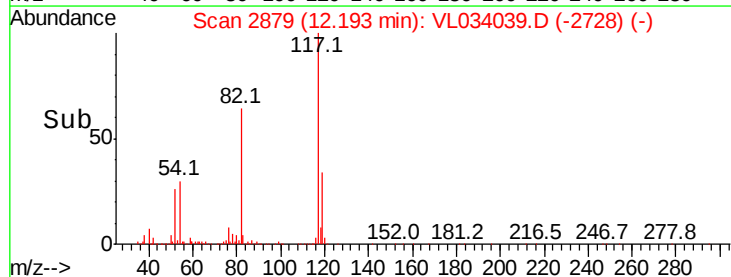
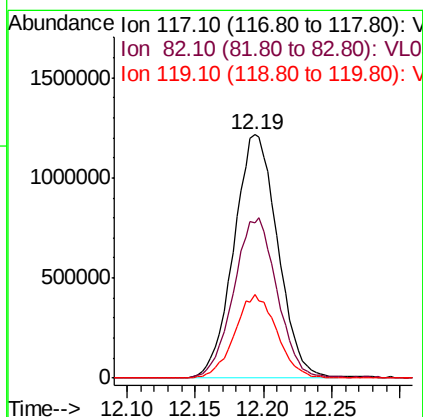
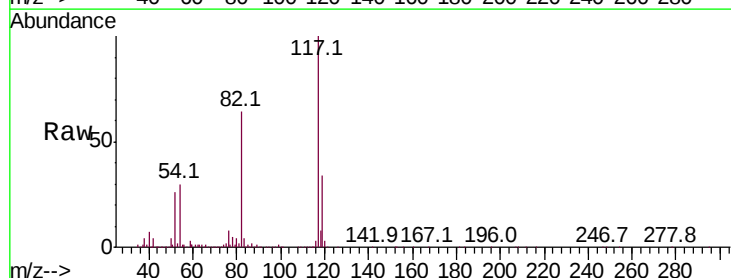
Tgt Ion: 117 Resp: 2692995

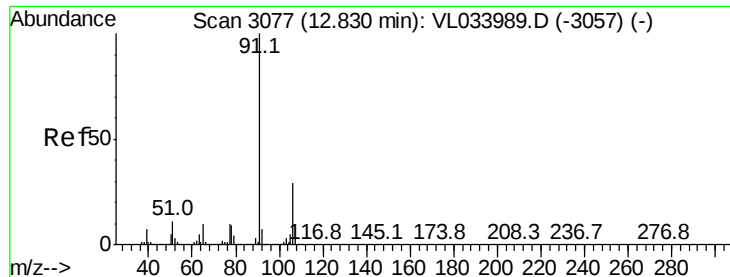
Ion Ratio Lower Upper

117 100

82 65.5 50.8 76.2

119 33.2 24.0 36.0





#58

Ethyl Benzene

Concen: 0.660 ppbv

RT: 12.82 min Scan# 3073

Delta R.T. -0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Instrument :

MSVOA_L

ClientSampleId :

SG-1DUP

Tot Ion: 91 Resp: 213618

Ion Ratio Lower Upper

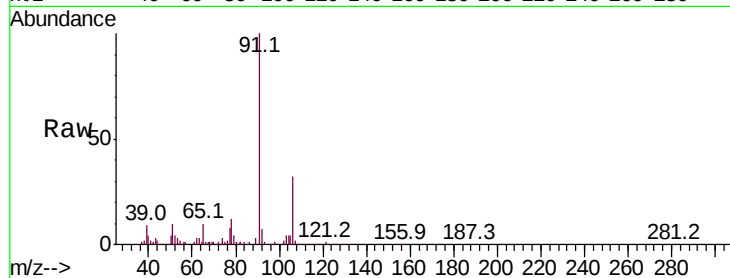
91 100

106 31.3 23.3 34.9

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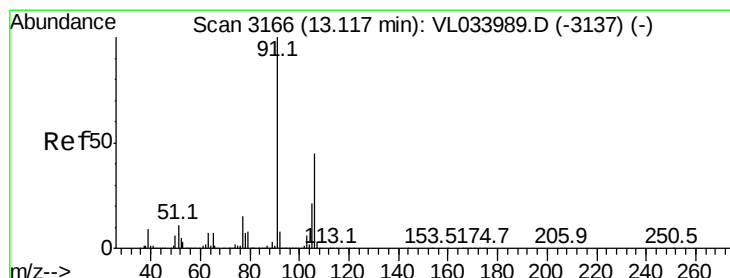
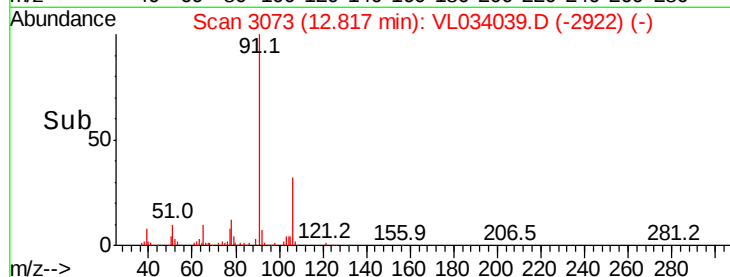
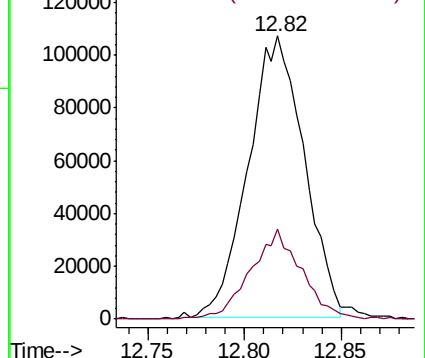
MMDadoda

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 2.235 ppbv m

RT: 13.08 min Scan# 3154

Delta R.T. -0.04 min

Lab File: VL034039.D

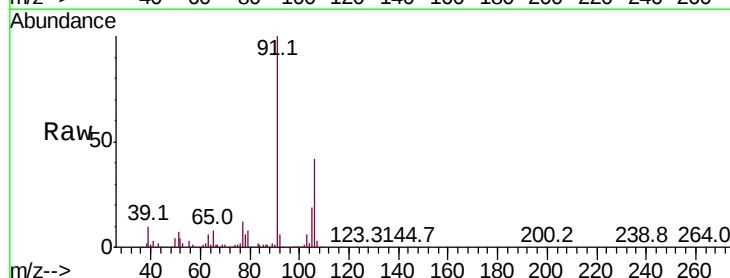
Acq: 17 Jul 2019 19:54

Tgt Ion: 91 Resp: 655451

Ion Ratio Lower Upper

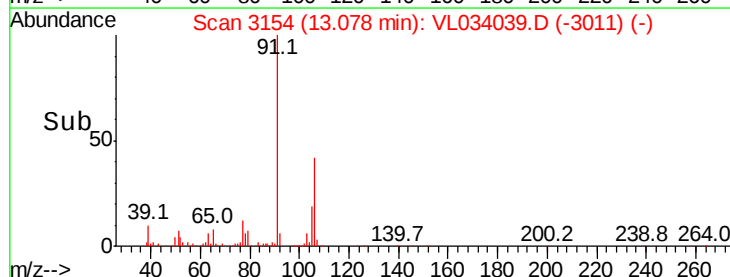
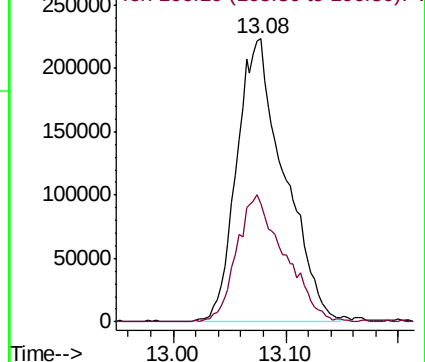
91 100

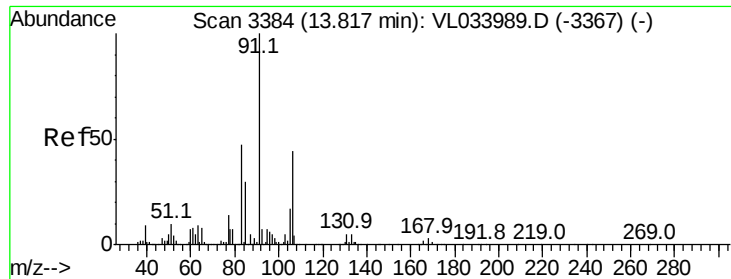
106 45.0 35.7 53.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





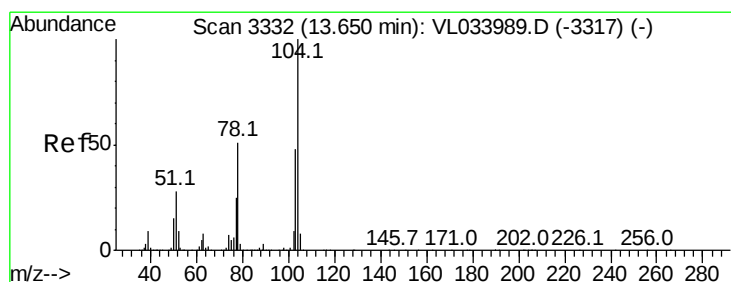
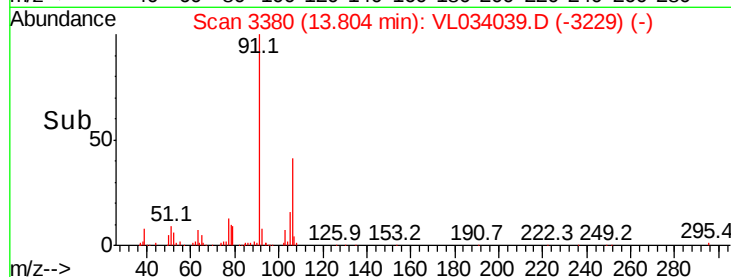
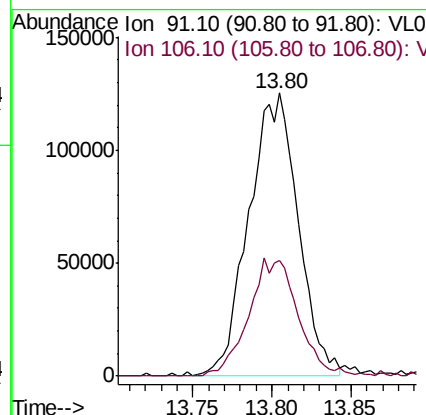
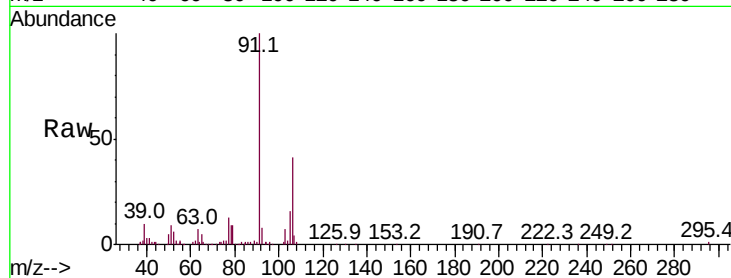
#60
o-Xylene
Concen: 0.935 ppbv m
RT: 13.80 min Scan# 3380
Delta R.T. -0.01 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Instrument :
MSVOA_L
ClientSampled :
SG-1DUP

Tot Ion: 91 Resp: 274188
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.7#

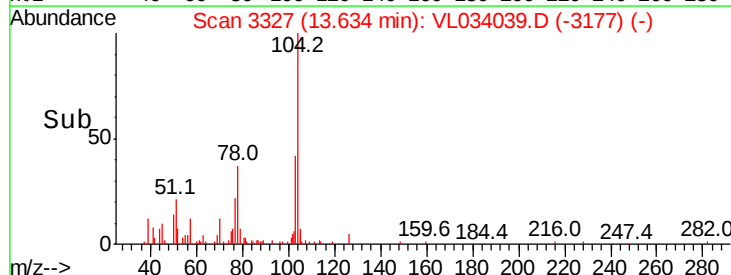
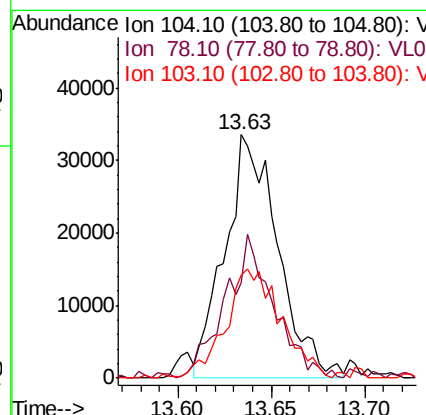
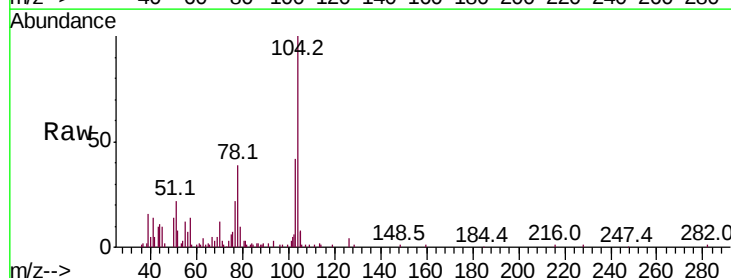
Manual Integrations
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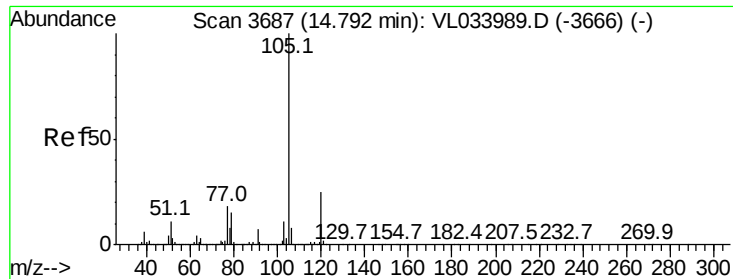
MMDadoda
7/19/2019 1:37:17 AM



#61
Styrene
Concen: 0.342 ppbv m
RT: 13.63 min Scan# 3327
Delta R.T. -0.02 min
Lab File: VL034039.D
Acq: 17 Jul 2019 19:54

Tgt Ion: 104 Resp: 66398
Ion Ratio Lower Upper
104 100
78 55.0 43.9 65.9
103 48.6 38.1 57.1





#62

Isopropylbenzene

Concen: 0.269 ppbv

RT: 14.78 min Scan# 3684

Delta R.T. -0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

Instrument :

MSVOA_L

ClientSampleId :

SG-1DUP

Tot Ion: 105 Resp: 121200

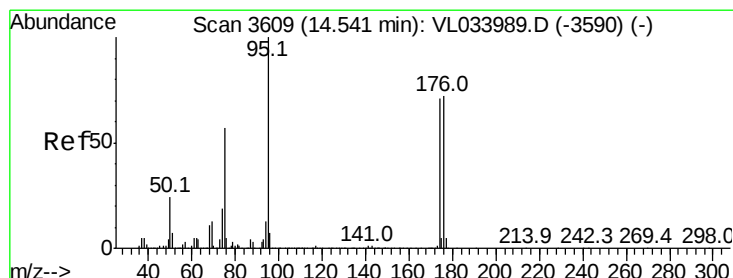
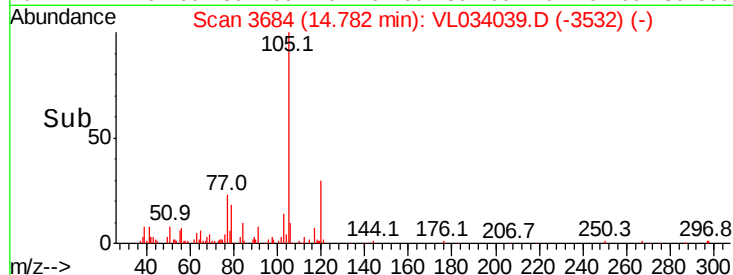
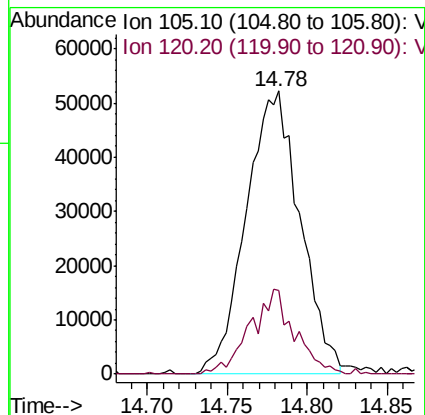
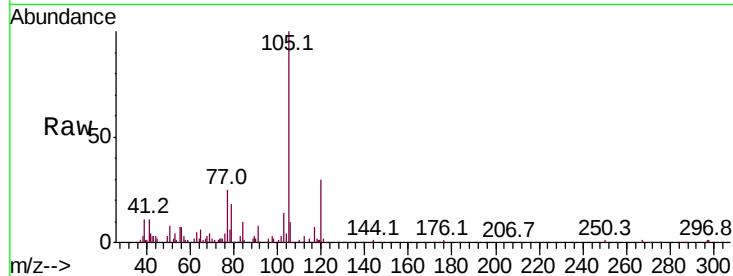
Ion Ratio Lower Upper

105 100

120 24.6 20.4 30.6

Manual Integrations
APPROVED

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.215 ppbv

RT: 14.53 min Scan# 3605

Delta R.T. -0.01 min

Lab File: VL034039.D

Acq: 17 Jul 2019 19:54

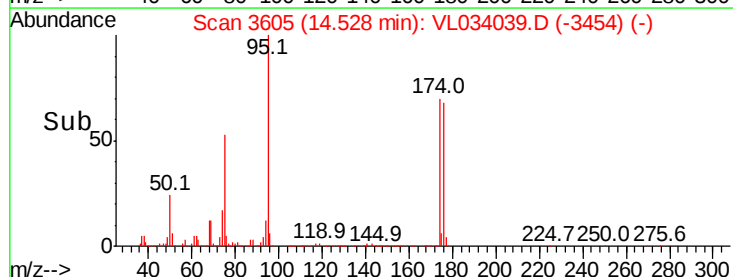
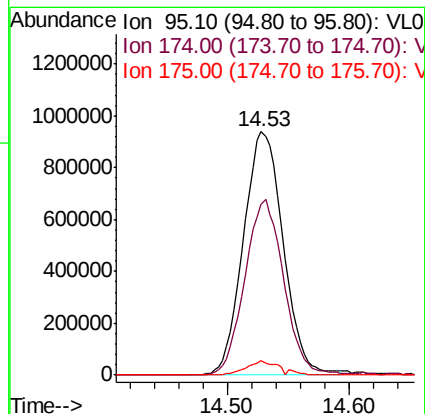
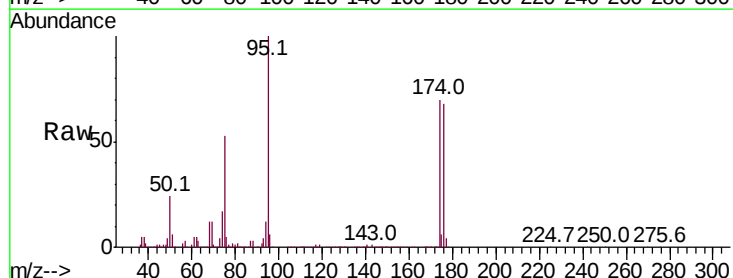
Tgt Ion: 95 Resp: 2116645

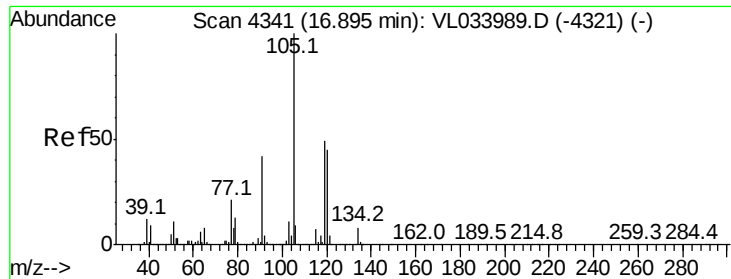
Ion Ratio Lower Upper

95 100

174 71.5 60.5 90.7

175 5.0 4.0 6.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.259 ppbv m
 RT: 16.87 min Scan# 4335
 Delta R.T. -0.02 min
 Lab File: VL034039.D
 Acq: 17 Jul 2019 19:54

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1DUP

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	39.7	36.2	54.2
91	10.2	34.3	51.5#
77	15.8	17.1	25.7#

Manual Integrations
 APPROVED

MMDadoda
 7/19/2019 1:37:17 AM

