

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071119\
 Data File : VL034031.D
 Acq On : 12 Jul 2019 00:09
 Operator : SY/AP
 Sample : K3747-02RE 3.2X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SVS-2RE

Manual Integrations
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 7/12/2019 10:47:21 PM

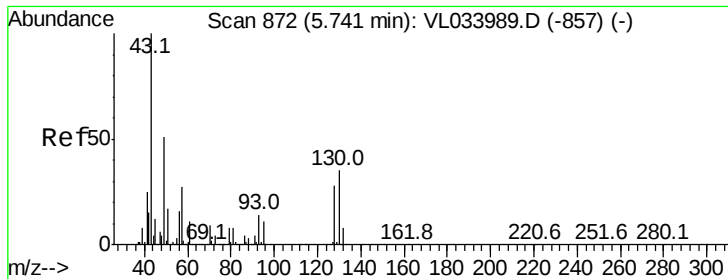
Quant Time: Jul 12 08:16:45 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070219AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 0
 QLast Update : Tue Jul 02 19:31:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.72	49	820977	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.25	114	2205897	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.19	117	2259723	10.00	ppbv	-0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.53	95	1815623	9.42	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	17971	0.106	ppbv	91
3) Chlorodifluoromethane	2.99	51	15593m	0.154	ppbv	
4) Chloromethane	3.16	50	8833m	0.152	ppbv	
10) Heptane	8.21	43	19462m	0.208	ppbv	
13) Ethanol	3.64	45	70119m	6.052	ppbv	
15) Acetone	3.88	43	322472	2.336	ppbv	92
17) tert-Butyl alcohol	4.35	59	35625m	0.324	ppbv	
20) Methylene Chloride	4.38	84	20413m	0.339	ppbv	
26) Hexane	5.74	57	39364m	0.456	ppbv	
27) Carbon Disulfide	4.59	76	22910m	0.156	ppbv	
29) Chloroform	5.81	83	41665	0.257	ppbv #	80
31) cis-1,2-Dichloroethene	5.61	61	66627	0.798	ppbv	87
34) 2-Butanone	5.31	43	33756	0.289	ppbv #	90
36) Benzene	6.96	78	40547m	0.235	ppbv	
38) Trichloroethene	7.92	130	56775	0.739	ppbv	91
52) Tetrachloroethene	11.33	164	17112m	0.230	ppbv	
53) Toluene	9.90	91	660329	3.342	ppbv	99
58) Ethyl Benzene	12.82	91	123887m	0.456	ppbv	
59) m/p-Xylene	13.08	91	610844	2.483	ppbv	99
60) o-Xylene	13.80	91	200416	0.814	ppbv	96
65) tert-Butylbenzene	16.88	119	43669m	0.136	ppbv	
72) 4-Ethyltoluene	15.95	105	109596m	0.347	ppbv	
73) 1,3,5-Trimethylbenzene	16.12	105	71904	0.244	ppbv	91
74) 1,2,4-Trimethylbenzene	16.88	105	378283	1.161	ppbv #	73
79) Naphthalene	22.36	128	68407m	0.250	ppbv	
80) Naphthalene, 2-methyl-	25.08	142	12721m	0.128	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.72 min Scan# 866

Delta R.T. -0.02 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

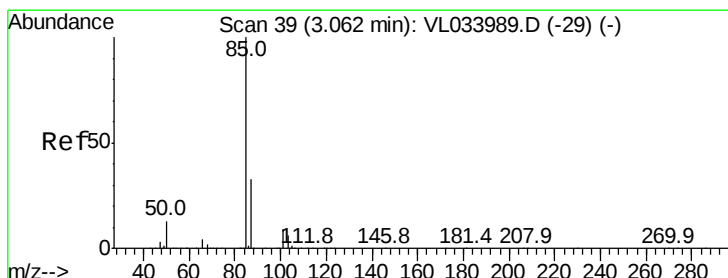
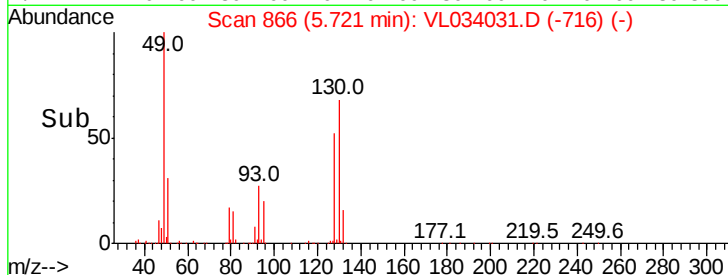
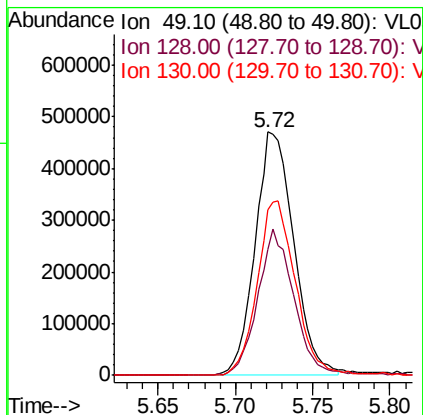
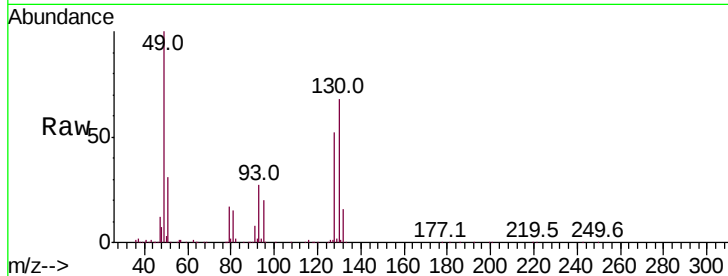
ClientSampleId :

SVS-2RE

Tot Ion	Ratio	Lower	Upper
49	100		
128	56.3	27.9	83.6
130	71.5	35.8	107.4

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.106 ppbv

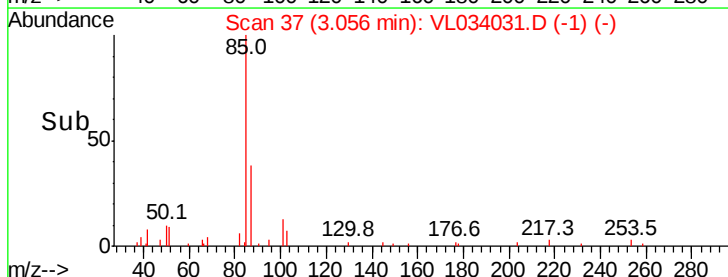
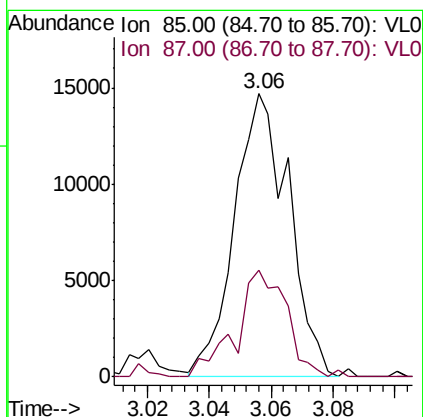
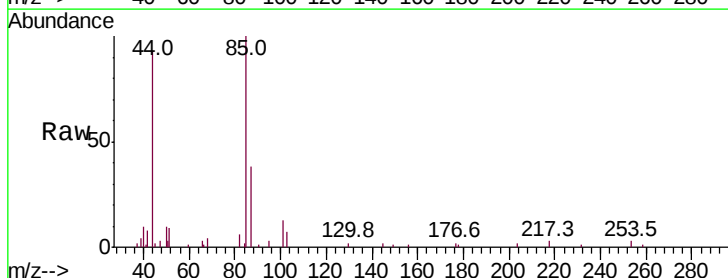
RT: 3.06 min Scan# 37

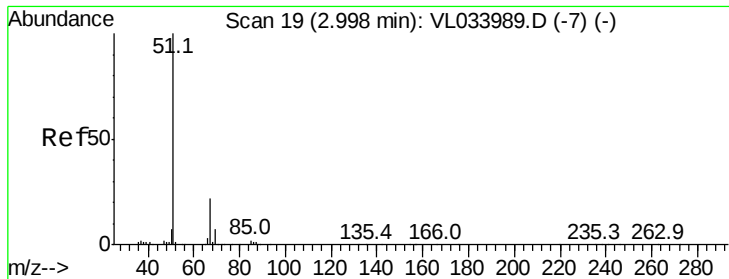
Delta R.T. -0.01 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Tgt Ion	Ratio	Lower	Upper
85	100		
87	37.8	26.0	39.0





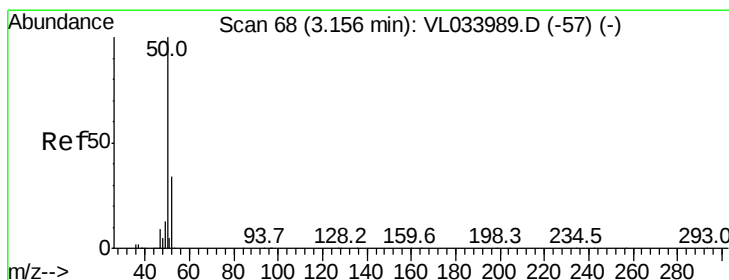
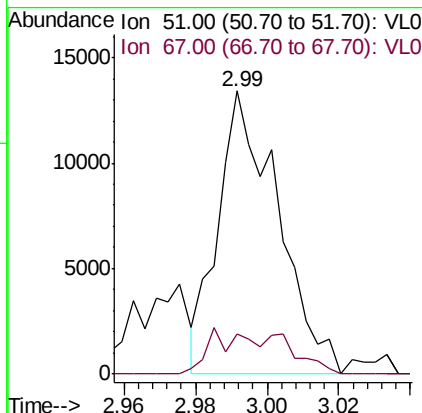
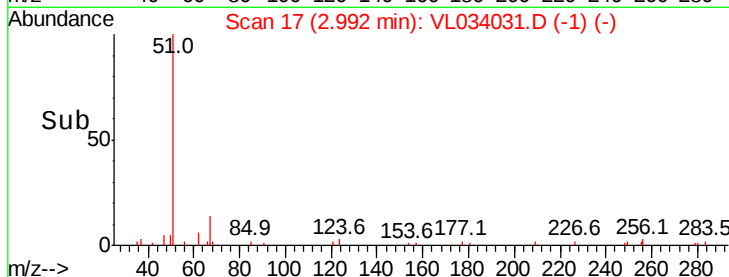
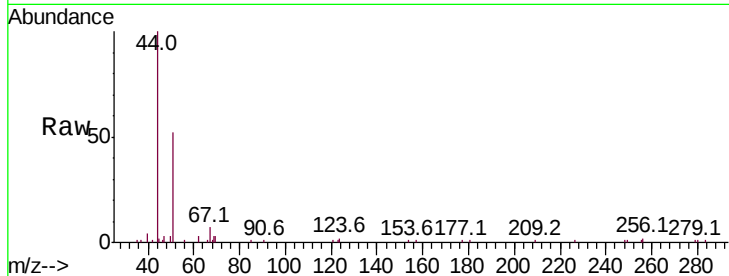
#3
Chlorodifluoromethane
Concen: 0.154 ppbv m
RT: 2.99 min Scan# 17
Delta R.T. -0.01 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Instrument :
MSVOA_L
ClientSampleId :
SVS-2RE

Tot Ion	51	Resp	15593
Ion Ratio	100	Lower	Upper
51	100		
67	18.8	17.3	25.9

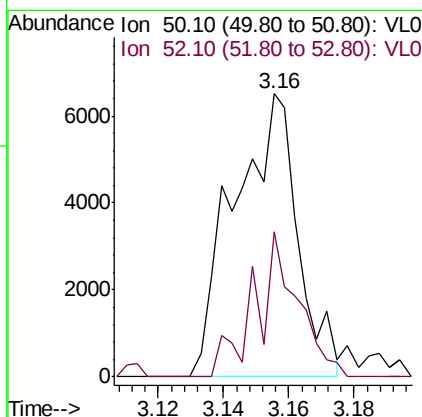
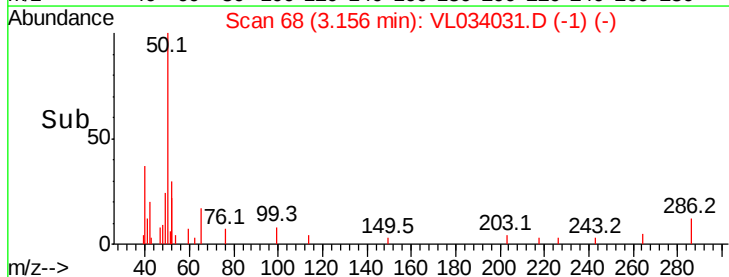
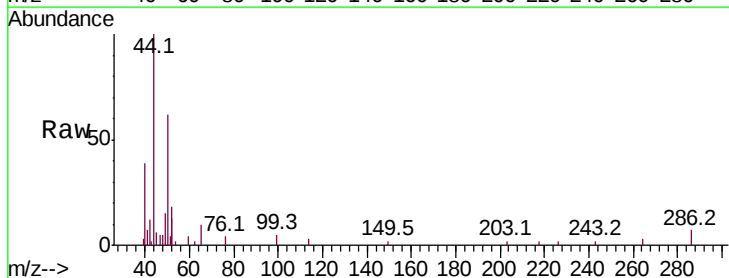
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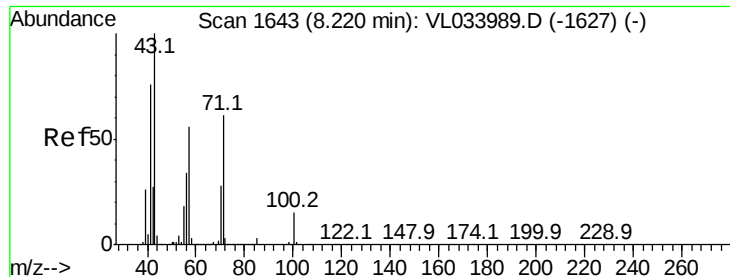
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#4
Chloromethane
Concen: 0.152 ppbv m
RT: 3.16 min Scan# 68
Delta R.T. 0.00 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Tgt Ion	50	Resp	8833
Ion Ratio	100	Lower	Upper
50	100		
52	29.8	27.4	41.0





#10

Heptane

Concen: 0.208 ppbv m

RT: 8.21 min Scan# 1639

Delta R.T. -0.01 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

ClientSampleId :

SVS-2RE

Tot Ion: 43 Resp: 19462

Ion Ratio Lower Upper

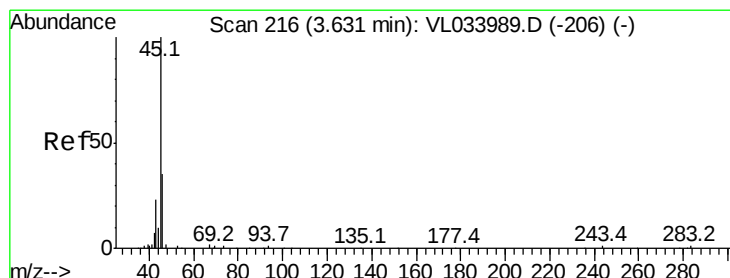
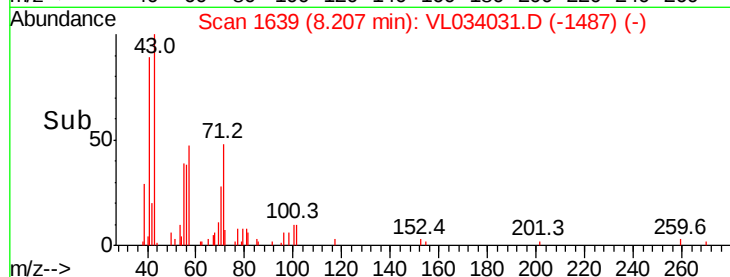
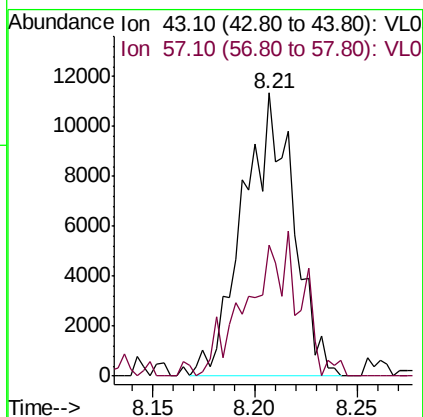
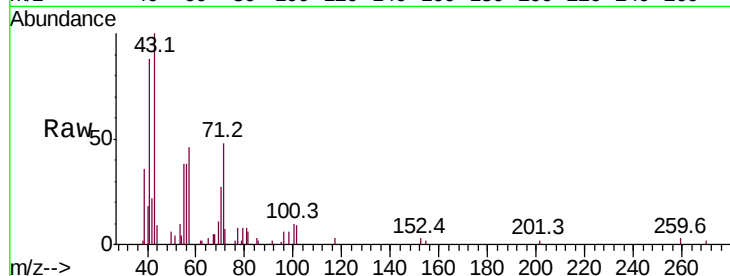
43 100

57 0.0 44.6 66.8#

Manual Integrations
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#13

Ethanol

Concen: 6.052 ppbv m

RT: 3.64 min Scan# 218

Delta R.T. 0.01 min

Lab File: VL034031.D

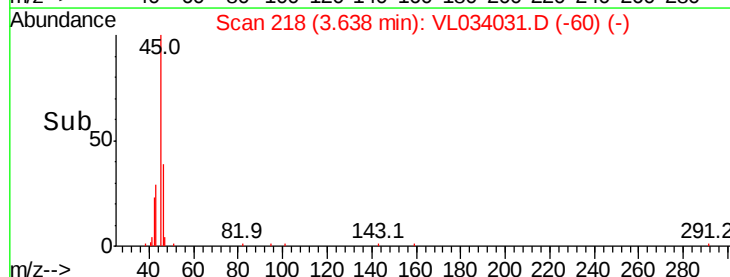
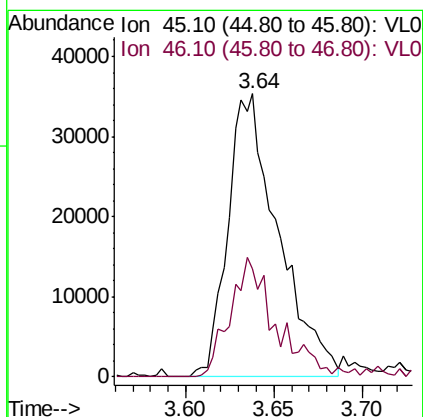
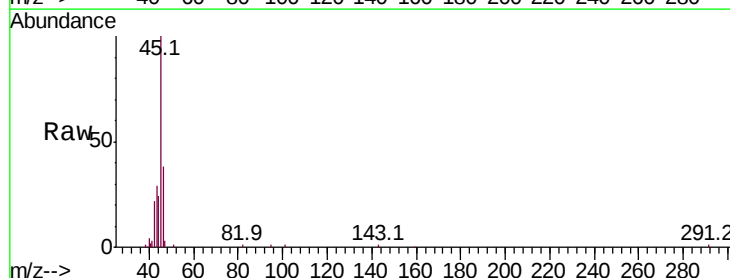
Acq: 12 Jul 2019 00:09

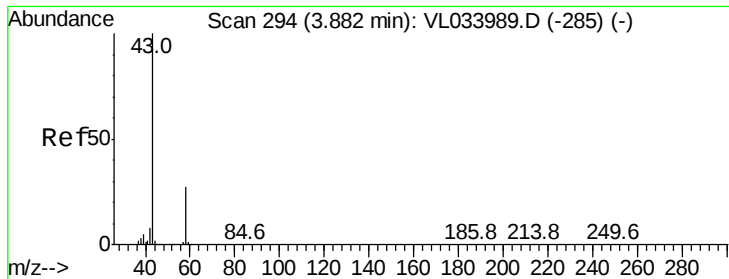
Tgt Ion: 45 Resp: 70119

Ion Ratio Lower Upper

45 100

46 0.0 16.2 64.6#





#15

Acetone

Concen: 2.336 ppbv

RT: 3.88 min Scan# 293

Delta R.T. -0.00 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

ClientSampleId :

SVS-2RE

Tot Ion: 43 Resp: 322472

Ion Ratio Lower Upper

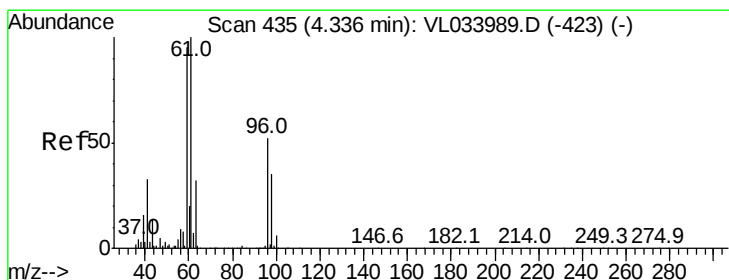
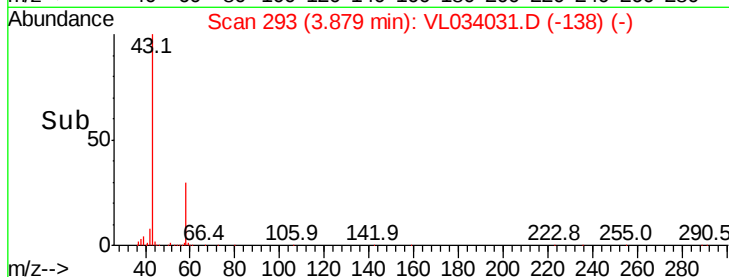
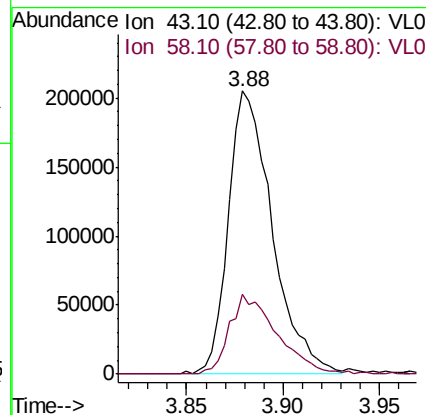
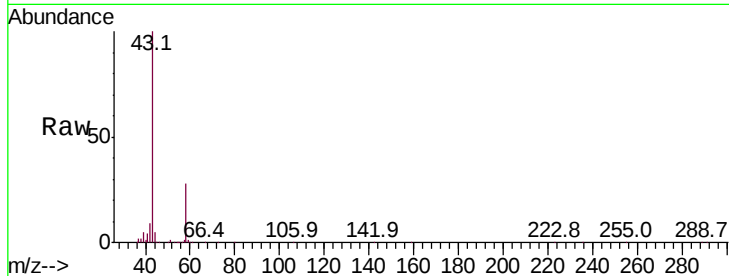
43 100

58 30.9 21.4 32.0

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#17

tert-Butyl alcohol

Concen: 0.324 ppbv m

RT: 4.35 min Scan# 438

Delta R.T. 0.01 min

Lab File: VL034031.D

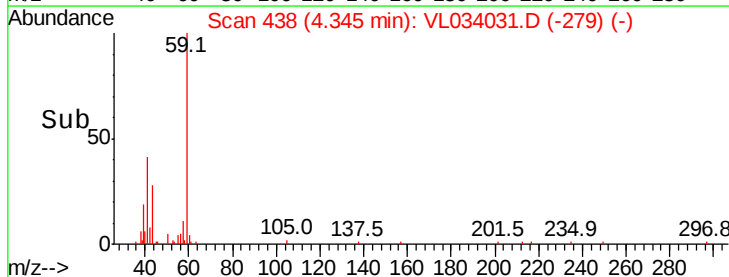
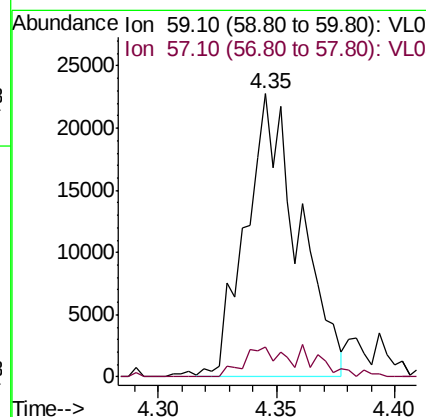
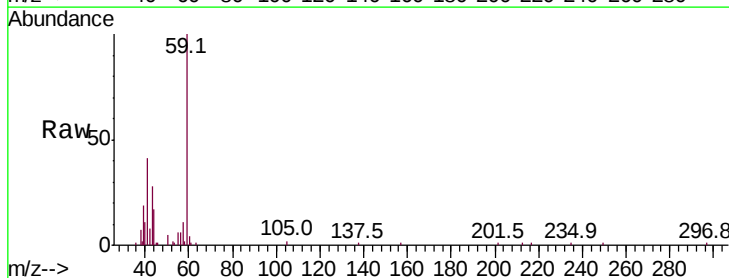
Acq: 12 Jul 2019 00:09

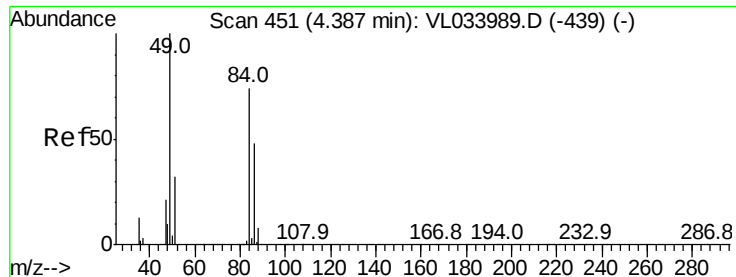
Tgt Ion: 59 Resp: 35625

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.2#





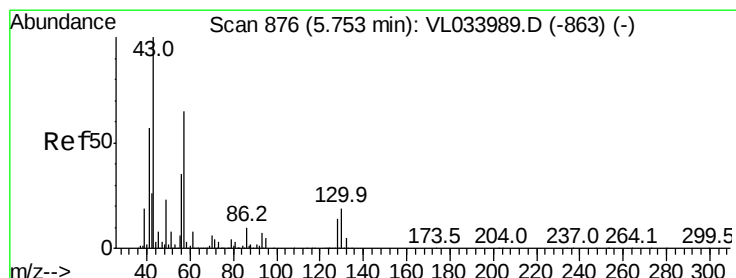
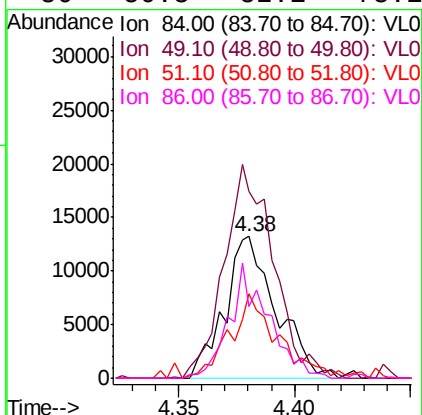
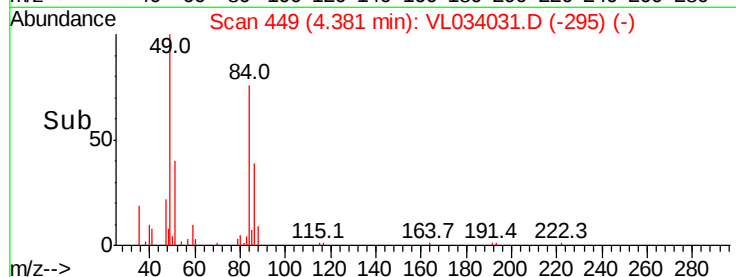
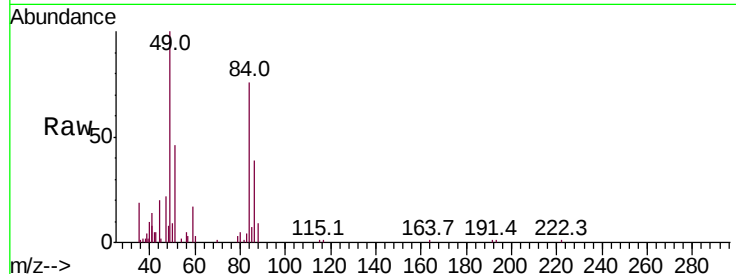
#20
Methvlene Chloride
Concen: 0.339 ppbv m
RT: 4.38 min Scan# 449
Delta R.T. -0.01 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Instrument :
MSVOA_L
ClientSampleId :
SVS-2RE

Tot Ion	Ratio	Lower	Upper
84	100		
49	132.0	107.6	161.4
51	60.1	35.0	52.6#
86	50.8	52.1	78.1#

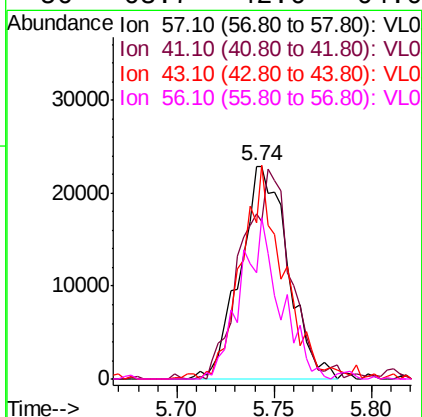
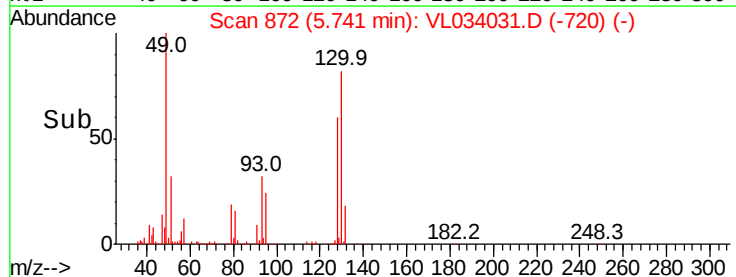
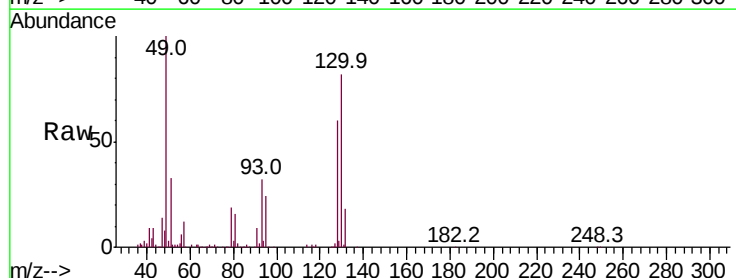
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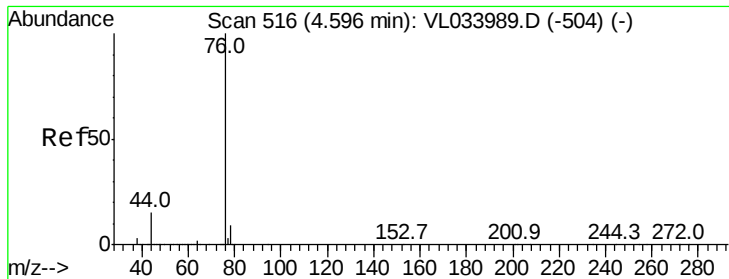
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#26
Hexane
Concen: 0.456 ppbv m
RT: 5.74 min Scan# 872
Delta R.T. -0.01 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Tgt Ion	Ratio	Lower	Upper
57	100		
41	101.0	70.6	105.8
43	89.3	177.6	266.4#
56	63.7	42.6	64.0





#27

Carbon Disulfide

Concen: 0.156 ppbv m

RT: 4.59 min Scan# 515

Delta R.T. -0.00 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

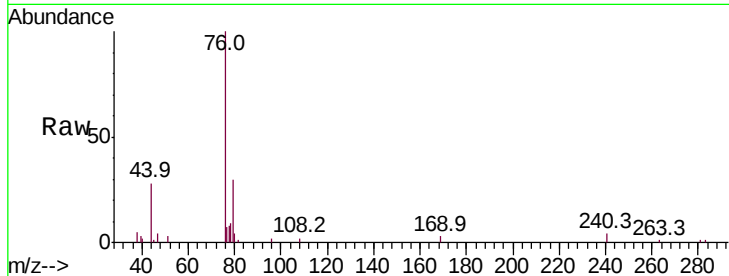
ClientSampleId :

SVS-2RE

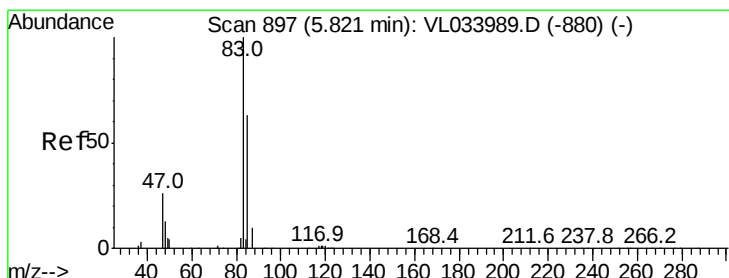
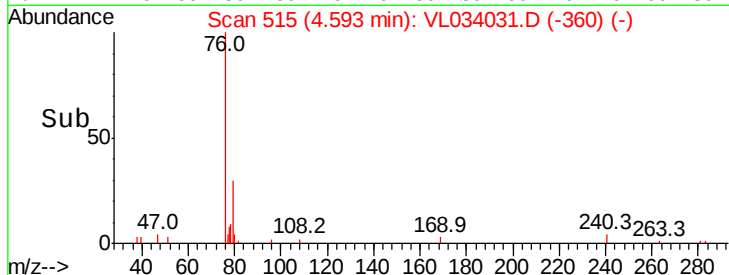
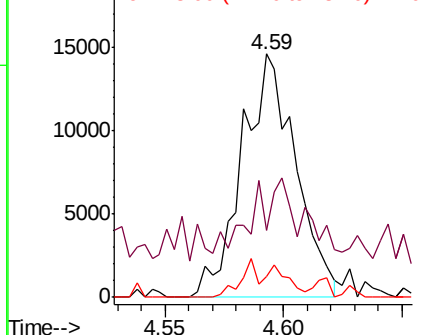
Tot Ion:	76	Resp:	22910
Ion Ratio	Lower	Upper	
76	100		
44	0.0	12.6	18.8#
78	13.5	7.2	10.8#

Manual Integrations
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Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#29

Chloroform

Concen: 0.257 ppbv

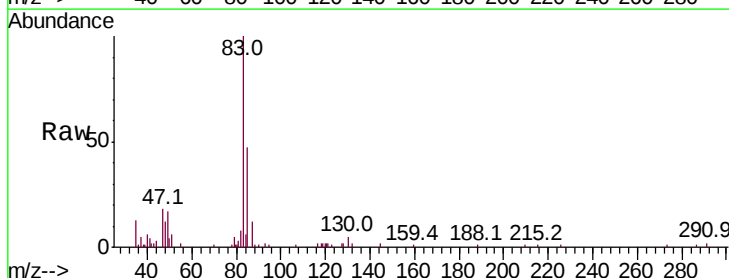
RT: 5.81 min Scan# 894

Delta R.T. -0.01 min

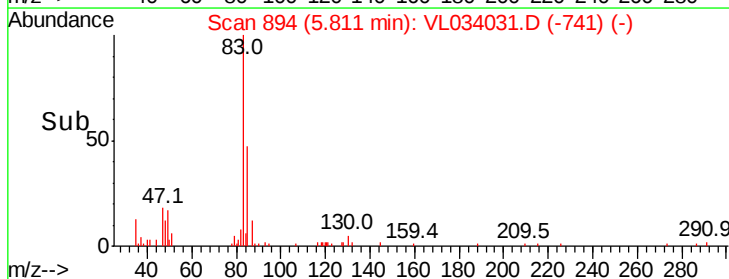
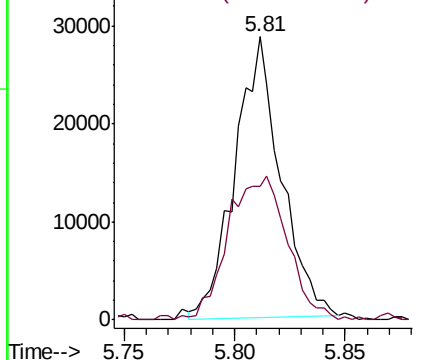
Lab File: VL034031.D

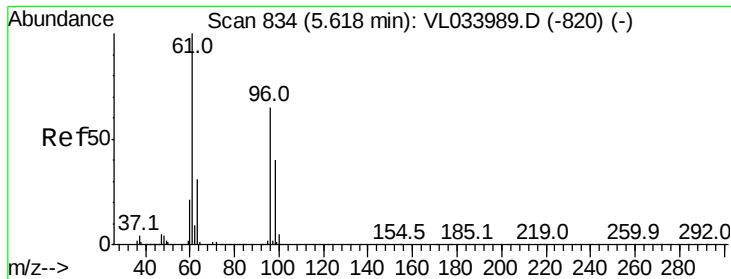
Acq: 12 Jul 2019 00:09

Tgt Ion:	83	Resp:	41665
Ion Ratio	Lower	Upper	
83	100		
85	47.8	50.6	75.8#



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





#31

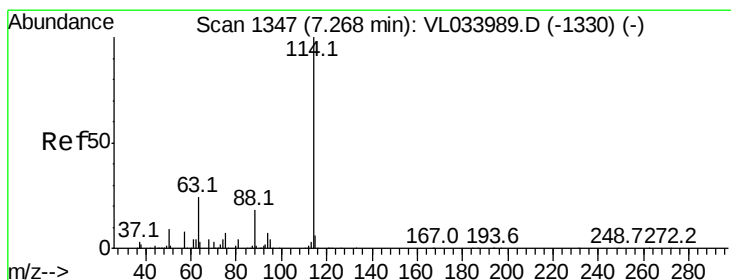
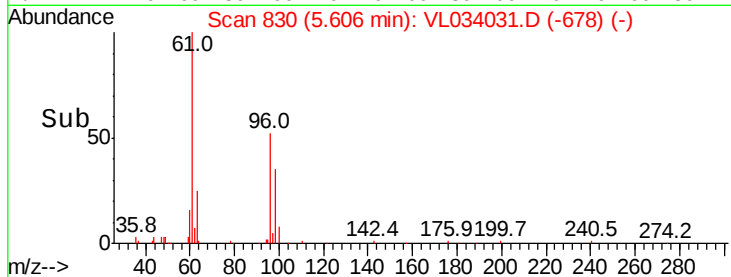
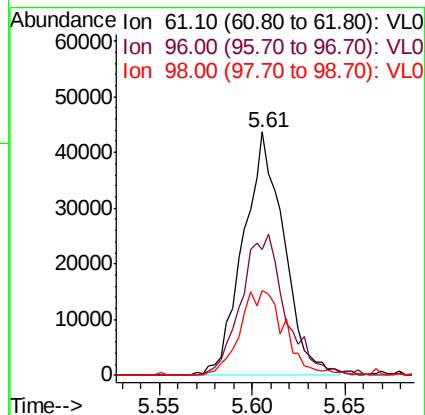
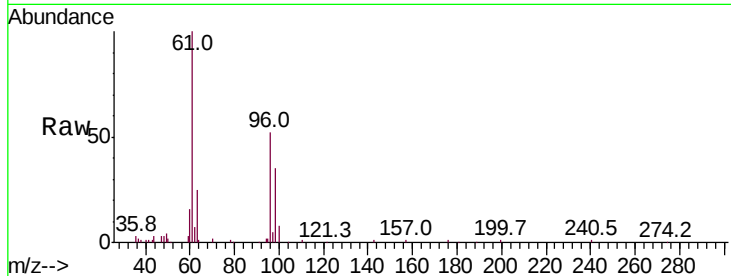
cis-1,2-Dichloroethene
 Concen: 0.798 ppbv
 RT: 5.61 min Scan# 830
 Delta R.T. -0.01 min
 Lab File: VL034031.D
 Acq: 12 Jul 2019 00:09

Instrument :
 MSVOA_L
 ClientSampled :
 SVS-2RE

Tot Ion	Ratio	Lower	Upper
61	100		
96	51.8	51.8	77.6
98	34.9	32.1	48.1

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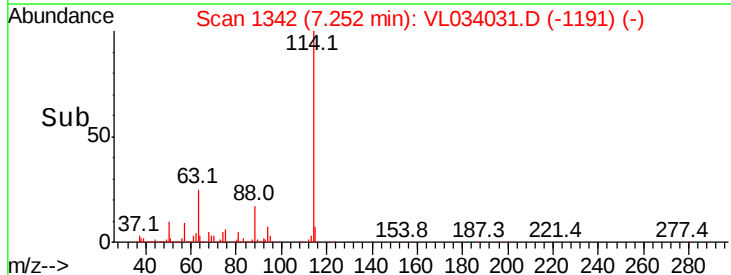
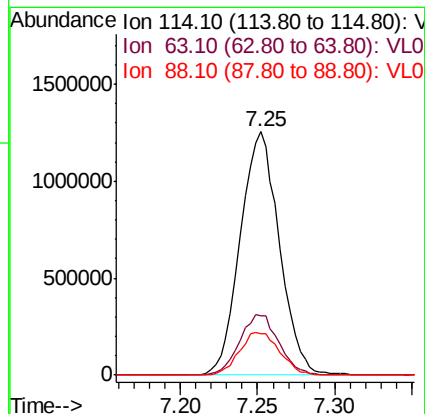
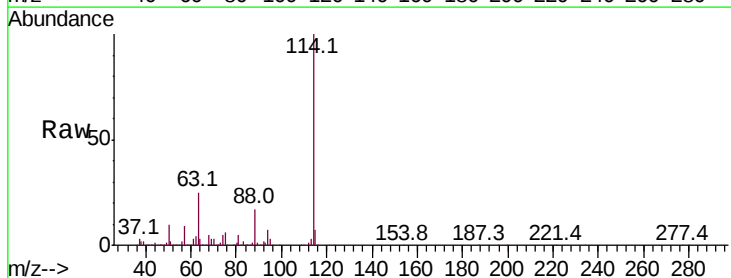
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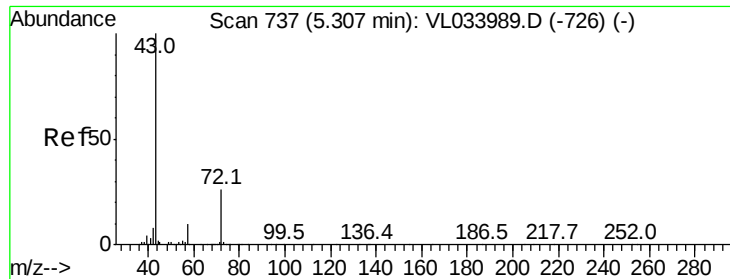


#33

1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.25 min Scan# 1342
 Delta R.T. -0.02 min
 Lab File: VL034031.D
 Acq: 12 Jul 2019 00:09

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.0	20.2	30.2
88	18.1	14.1	21.1





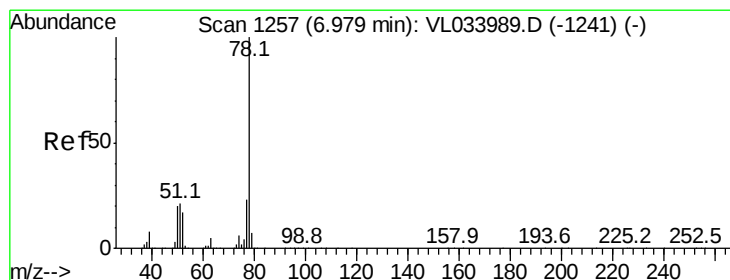
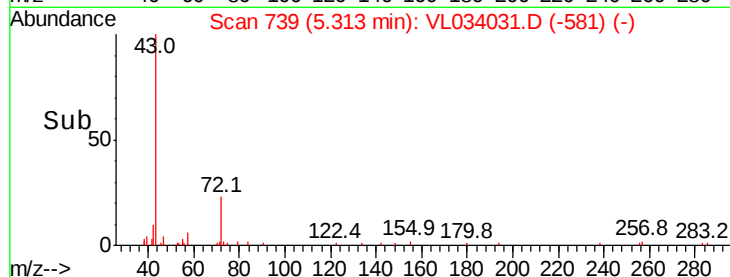
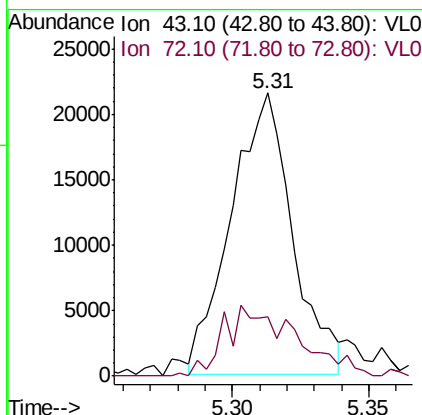
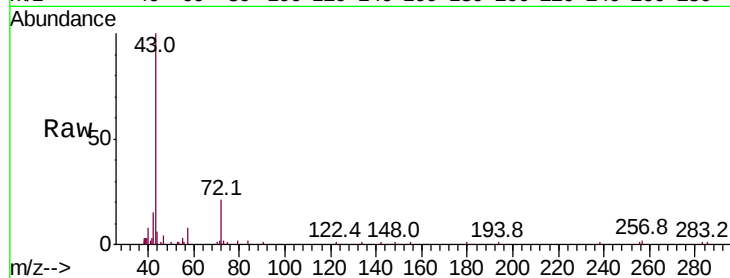
#34
2-Butanone
Concen: 0.289 ppbv
RT: 5.31 min Scan# 739
Delta R.T. 0.01 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Instrument :
MSVOA_L
ClientSampled :
SVS-2RE

Tot Ion: 43 Resp: 33756
Ion Ratio Lower Upper
43 100
72 29.9 19.9 29.9#

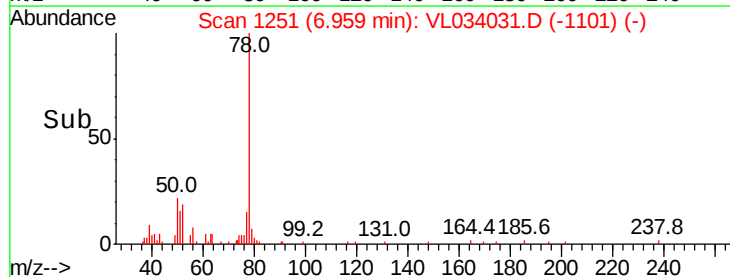
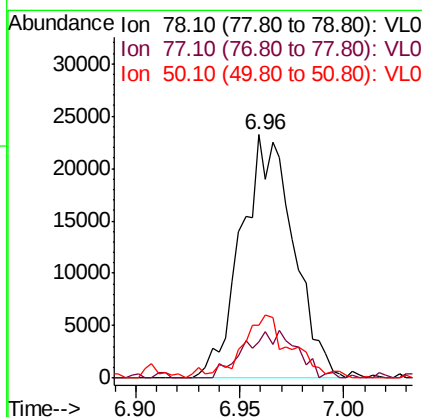
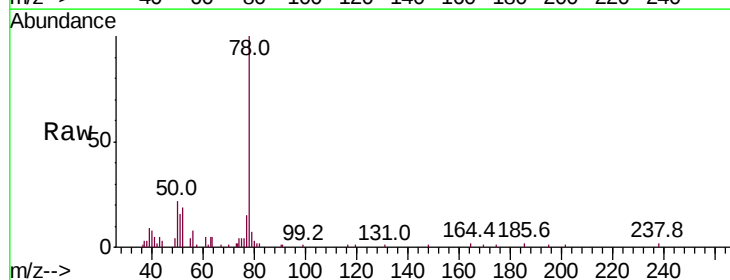
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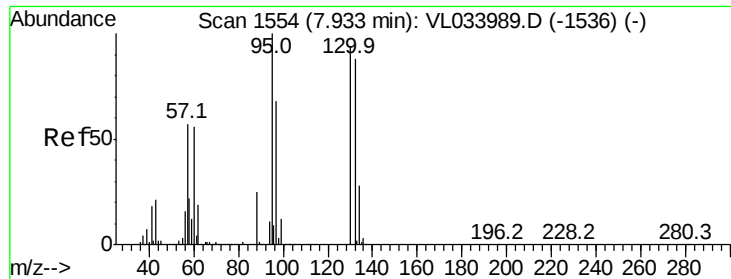
MMDadoda
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#36
Benzene
Concen: 0.235 ppbv m
RT: 6.96 min Scan# 1251
Delta R.T. -0.02 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Tgt Ion: 78 Resp: 40547
Ion Ratio Lower Upper
78 100
77 14.7 18.7 28.1#
50 21.9 16.2 24.2





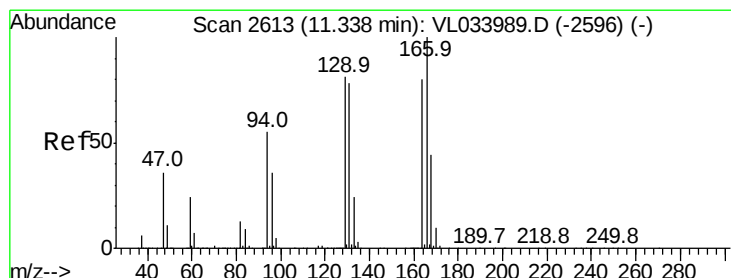
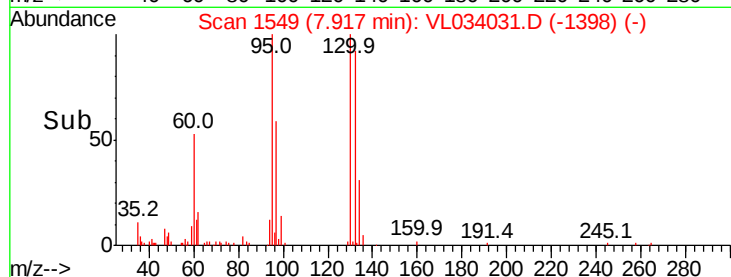
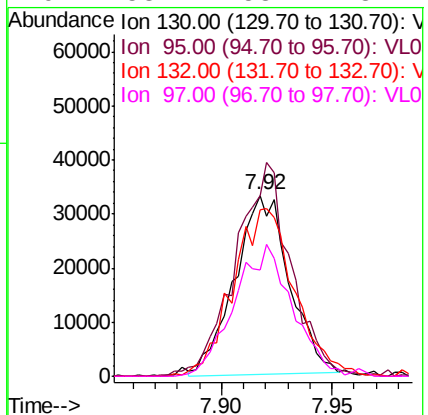
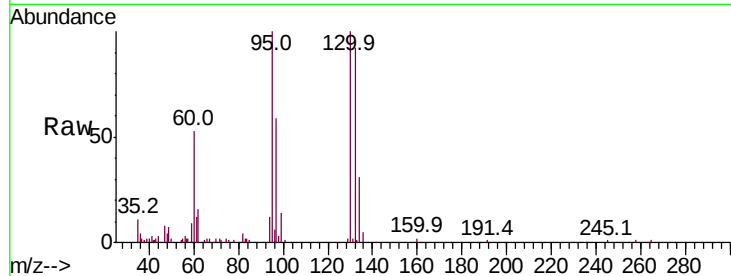
#38
 Trichloroethene
 Concen: 0.739 ppbv
 RT: 7.92 min Scan# 1549
 Delta R.T. -0.02 min
 Lab File: VL034031.D
 Acq: 12 Jul 2019 00:09

Instrument :
 MSVOA_L
 ClientSampleId :
 SVS-2RE

Tot Ion	Ratio	Lower	Upper
130	100		
95	98.5	85.5	128.3
132	91.0	75.1	112.7
97	58.4	58.1	87.1

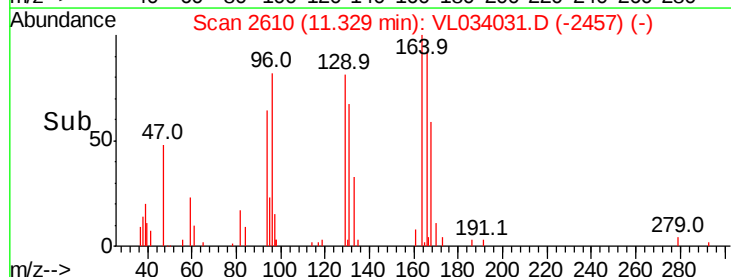
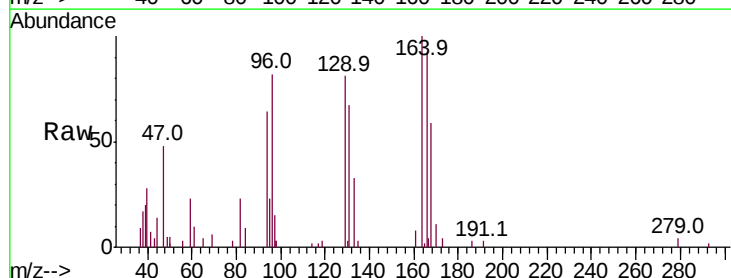
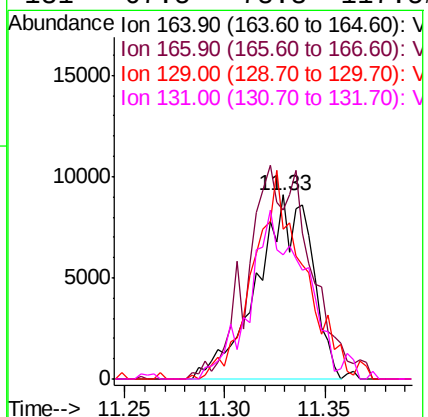
Manual Integrations
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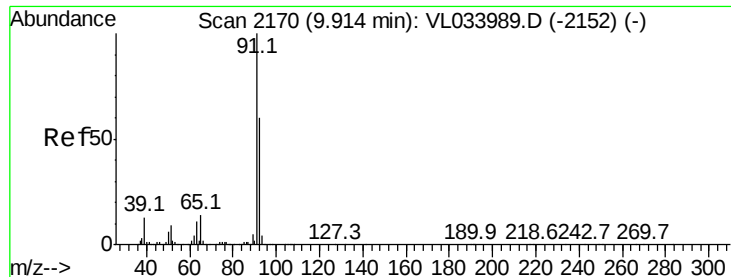
MMDadoda
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#52
 Tetrachloroethene
 Concen: 0.230 ppbv m
 RT: 11.33 min Scan# 2610
 Delta R.T. -0.01 min
 Lab File: VL034031.D
 Acq: 12 Jul 2019 00:09

Tgt Ion	Ratio	Lower	Upper
164	100		
166	91.8	100.2	150.2#
129	81.2	81.0	121.6
131	67.5	78.3	117.5#





#53

Toluene

Concen: 3.342 ppbv

RT: 9.90 min Scan# 2166

Delta R.T. -0.01 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

ClientSampleId :

SVS-2RE

Tot Ion: 91 Resp: 660329

Ion Ratio Lower Upper

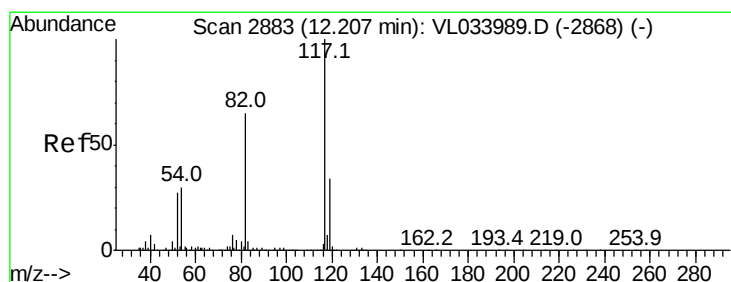
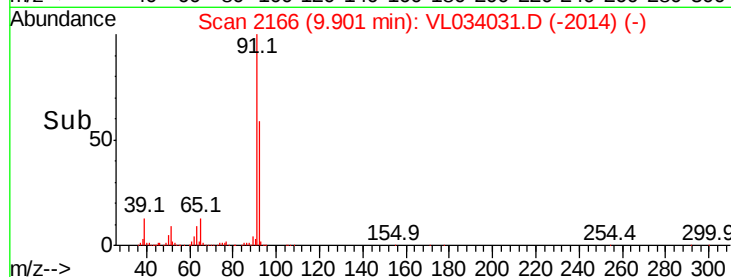
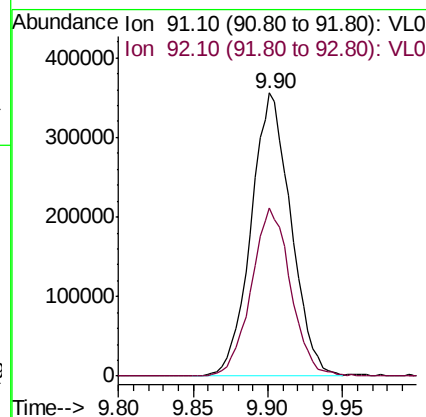
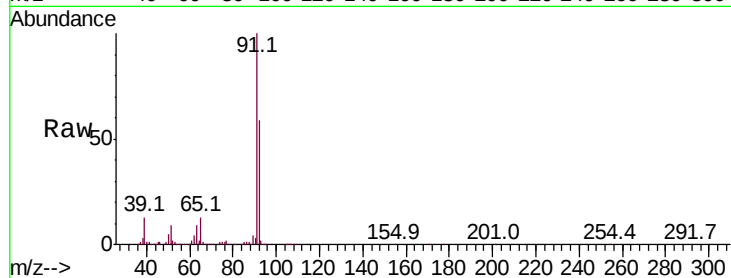
91 100

92 59.1 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: VL034031.D

Acq: 12 Jul 2019 00:09

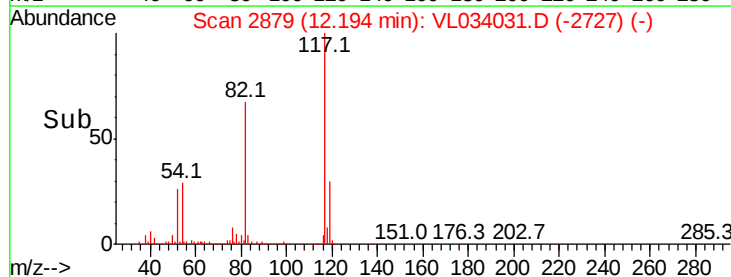
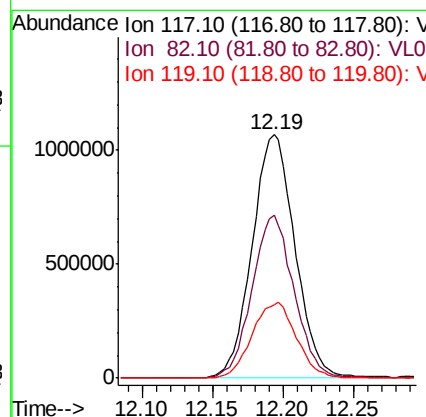
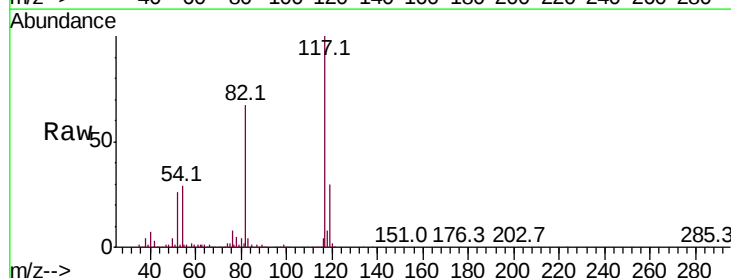
Tgt Ion: 117 Resp: 2259723

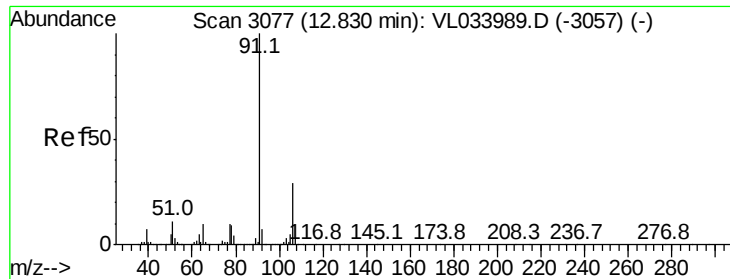
Ion Ratio Lower Upper

117 100

82 66.4 50.8 76.2

119 32.5 24.0 36.0





#58

Ethyl Benzene

Concen: 0.456 ppbv m

RT: 12.82 min Scan# 3075

Delta R.T. -0.01 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

ClientSampleId :

SVS-2RE

Tot Ion: 91 Resp: 123887

Ion Ratio Lower Upper

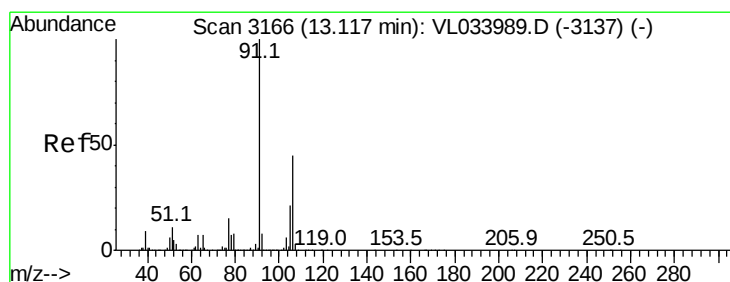
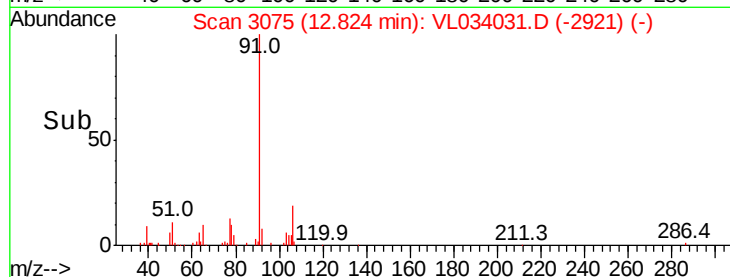
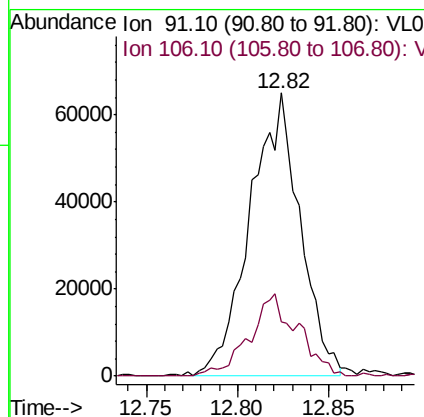
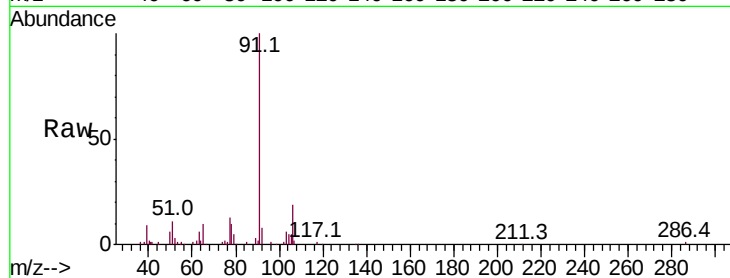
91 100

106 19.2 23.3 34.9#

Manual Integrations
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#59

m/p-Xylene

Concen: 2.483 ppbv

RT: 13.08 min Scan# 3154

Delta R.T. -0.04 min

Lab File: VL034031.D

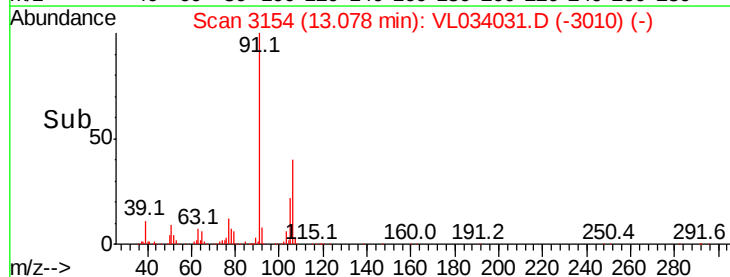
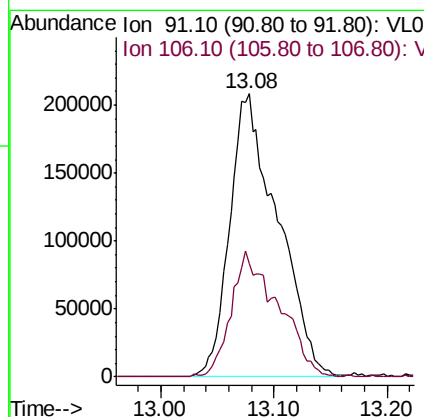
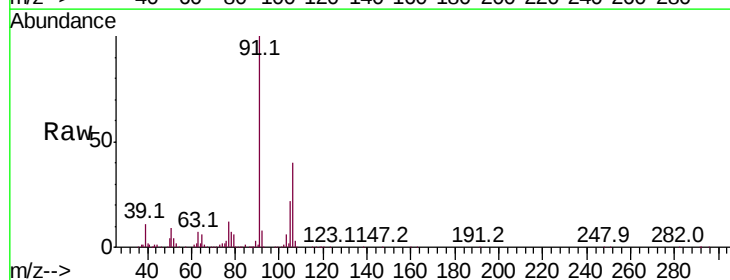
Acq: 12 Jul 2019 00:09

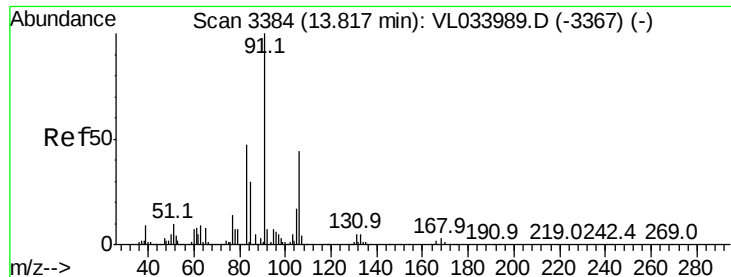
Tgt Ion: 91 Resp: 610844

Ion Ratio Lower Upper

91 100

106 44.1 35.7 53.5





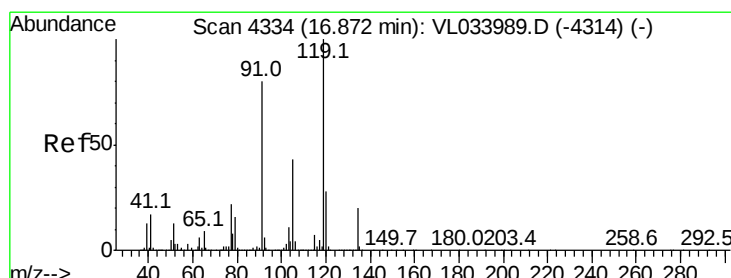
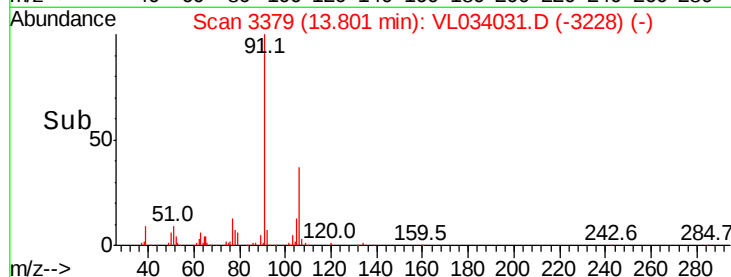
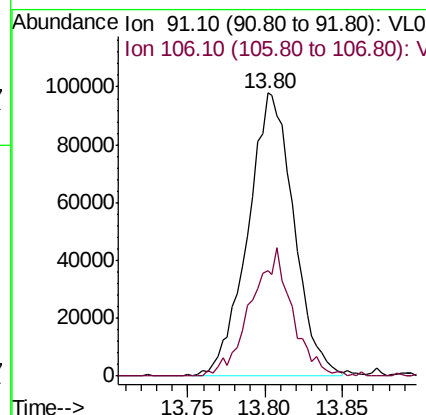
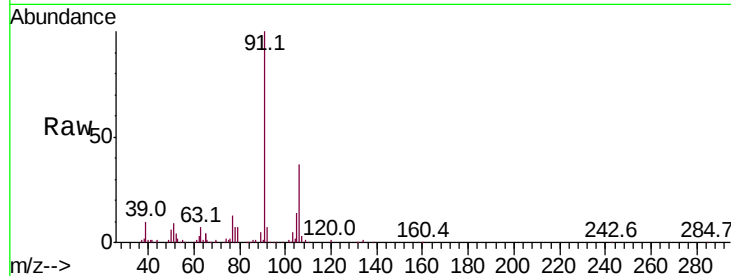
#60
o-Xylene
Concen: 0.814 ppbv
RT: 13.80 min Scan# 3379
Delta R.T. -0.02 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Instrument :
MSVOA_L
ClientSampled :
SVS-2RE

Tot Ion	Ratio	Lower	Upper
91	100		
106	40.9	21.9	65.7

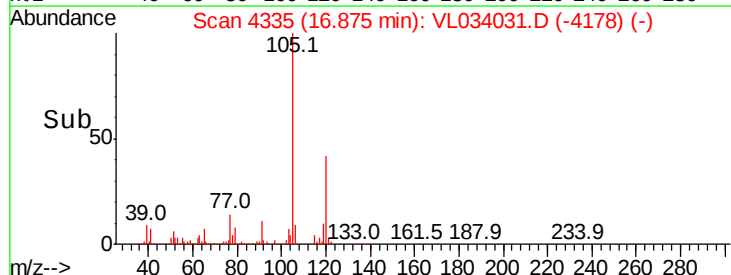
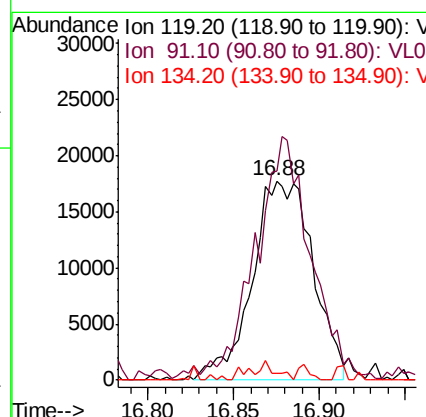
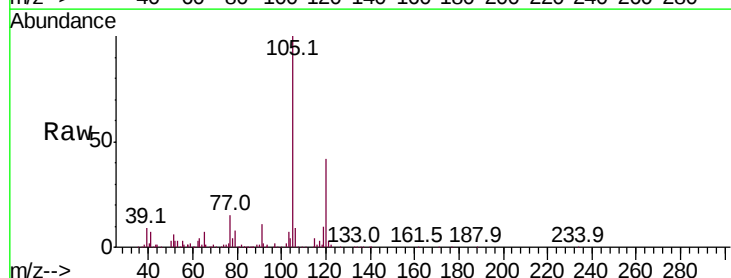
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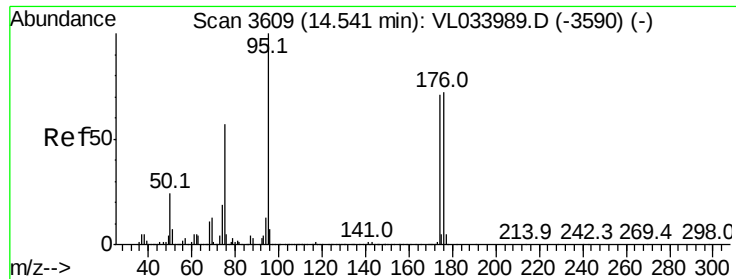
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#65
tert-Butylbenzene
Concen: 0.136 ppbv m
RT: 16.88 min Scan# 4335
Delta R.T. 0.00 min
Lab File: VL034031.D
Acq: 12 Jul 2019 00:09

Tgt Ion	Ratio	Lower	Upper
119	100		
91	0.0	67.0	100.6#
134	3.7	15.8	23.6#





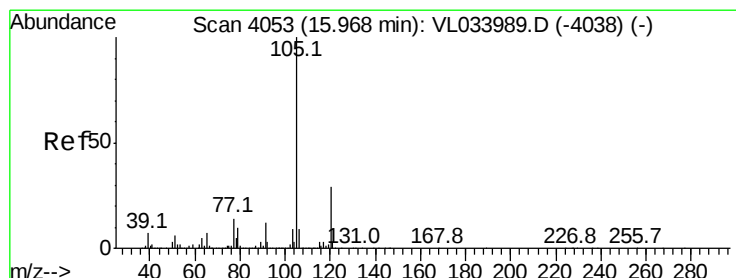
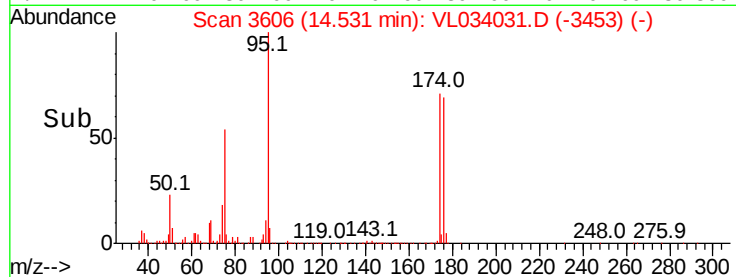
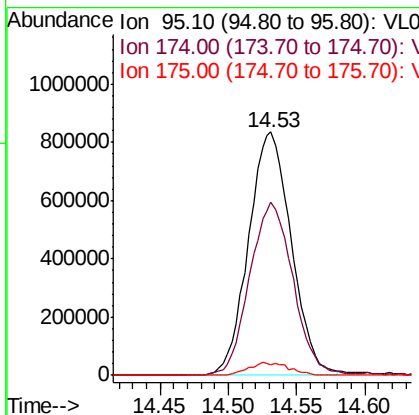
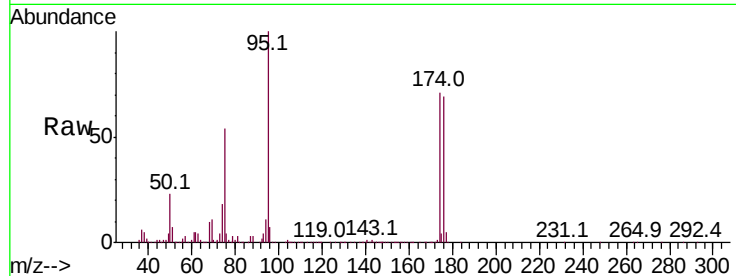
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.421 ppbv
 RT: 14.53 min Scan# 3606
 Delta R.T. -0.01 min
 Lab File: VL034031.D
 Acq: 12 Jul 2019 00:09

Instrument :
 MSVOA_L
 ClientSampled :
 SVS-2RE

Tot Ion: 95 Resp: 1815623
 Ion Ratio Lower Upper
 95 100
 174 73.2 60.5 90.7
 175 5.2 4.0 6.0

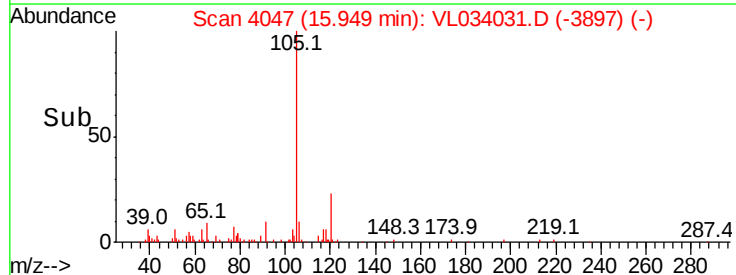
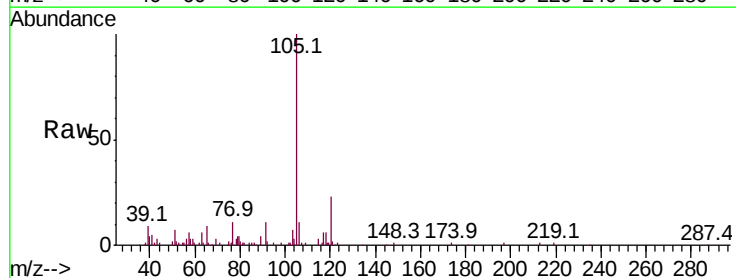
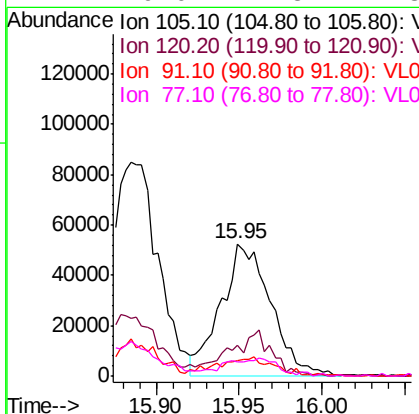
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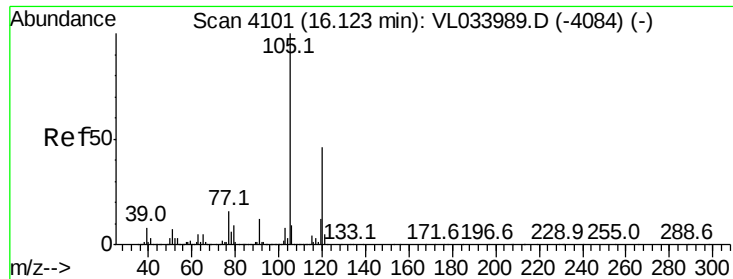
MMDadoda
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#72
 4-Ethyltoluene
 Concen: 0.347 ppbv m
 RT: 15.95 min Scan# 4047
 Delta R.T. -0.02 min
 Lab File: VL034031.D
 Acq: 12 Jul 2019 00:09

Tgt Ion: 105 Resp: 109596
 Ion Ratio Lower Upper
 105 100
 120 0.0 24.1 36.1#
 91 0.0 10.6 16.0#
 77 0.0 11.5 17.3#





#73

1,3,5-Trimethylbenzene

Concen: 0.244 ppbv

RT: 16.12 min Scan# 4099

Delta R.T. -0.01 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

ClientSampleId :

SVS-2RE

Tot Ion:105 Resp: 71904

Ion Ratio Lower Upper

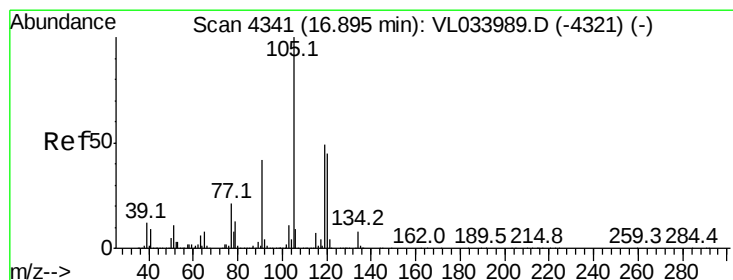
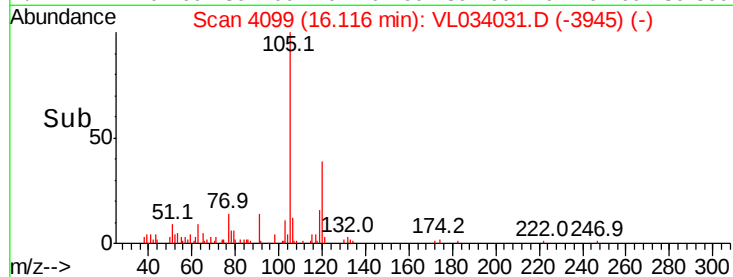
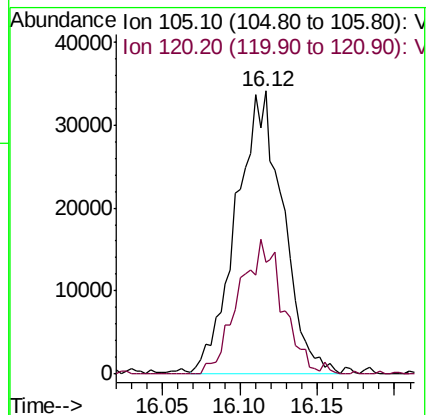
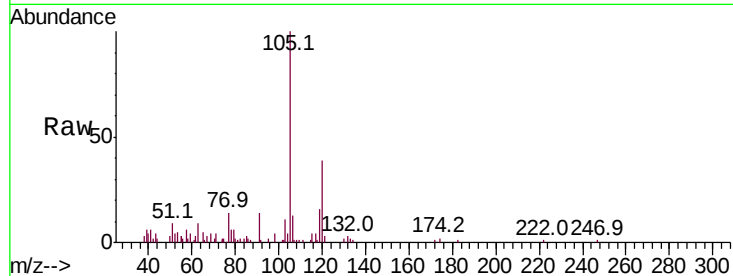
105 100

120 39.5 36.4 54.6

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#74

1,2,4-Trimethylbenzene

Concen: 1.161 ppbv

RT: 16.88 min Scan# 4336

Delta R.T. -0.02 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Tgt Ion:105 Resp: 378283

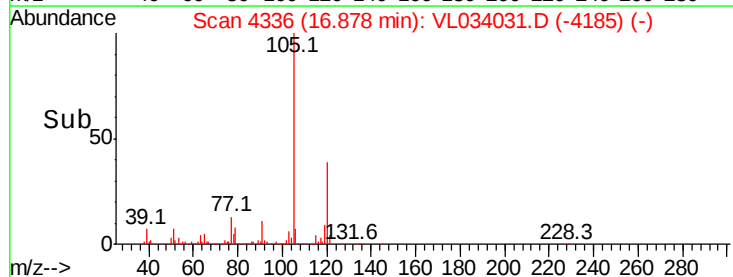
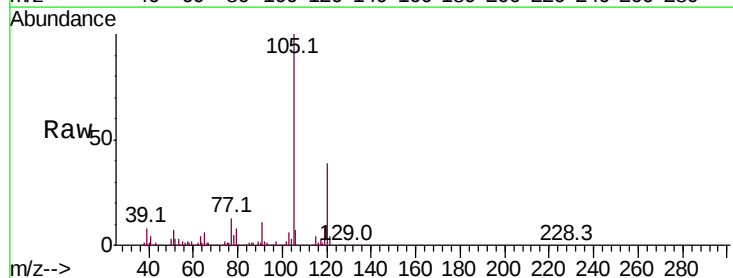
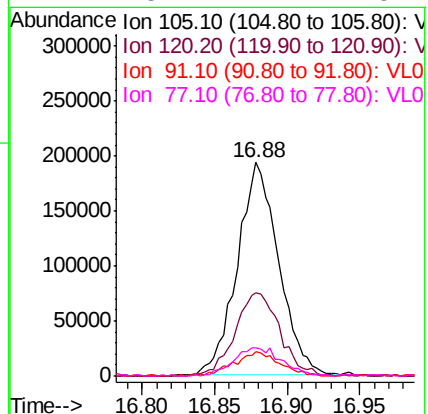
Ion Ratio Lower Upper

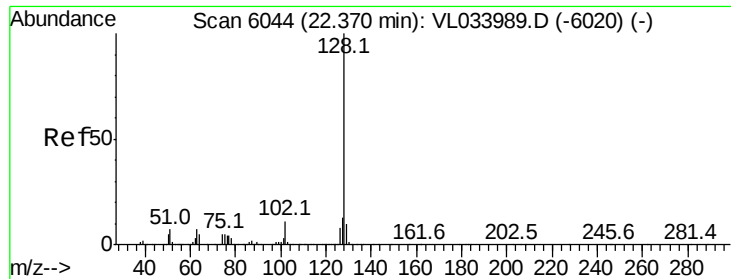
105 100

120 38.7 36.2 54.2

91 11.2 34.3 51.5#

77 13.1 17.1 25.7#





#79

Naphthalene

Concen: 0.250 ppbv m

RT: 22.36 min Scan# 6042

Delta R.T. -0.01 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Instrument :

MSVOA_L

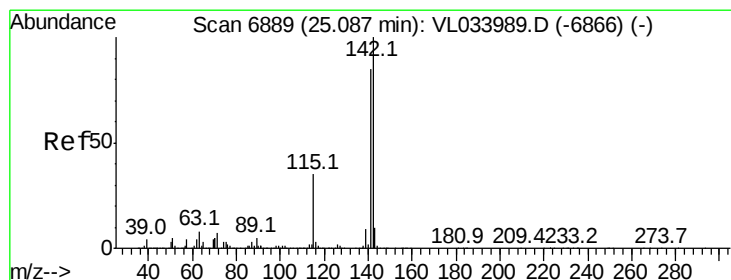
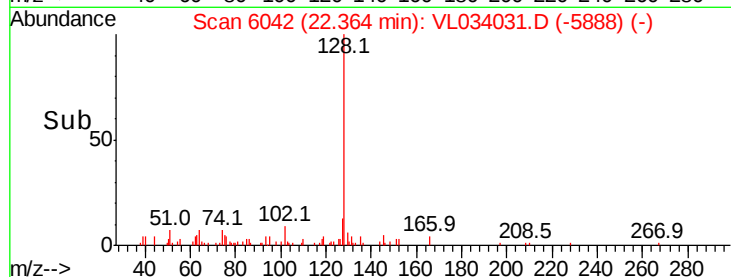
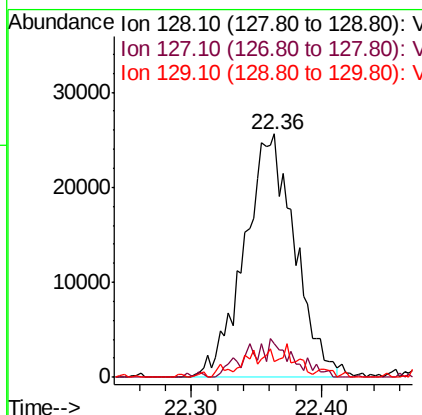
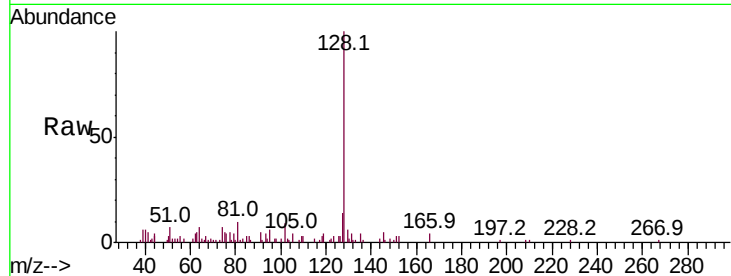
ClientSampleId :

SVS-2RE

Tot Ion:	128	Resp:	68407
Ion Ratio	Lower	Upper	
128	100		
127	13.6	10.6	15.8
129	6.4	8.3	12.5#

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#80

Naphthalene, 2-methyl-

Concen: 0.128 ppbv m

RT: 25.08 min Scan# 6888

Delta R.T. -0.00 min

Lab File: VL034031.D

Acq: 12 Jul 2019 00:09

Tgt Ion:	142	Resp:	12721
Ion Ratio	Lower	Upper	
142	100		
141	0.0	68.2	102.2#
115	0.0	29.9	44.9#

