

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071719\
 Data File : VL034042.D
 Acq On : 17 Jul 2019 21:53
 Operator : SY/AP
 Sample : K3804-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Manual Integrations
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MMDadoda
 7/19/2019 1:37:23 AM

Quant Time: Jul 18 07:48:29 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	868866	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.25	114	2513394	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.19	117	2534079	10.00	ppbv	-0.01

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.53	95	2092389	9.68	ppbv	-0.01	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.80%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	23505m	0.131	ppbv	
3) Chlorodifluoromethane	2.99	51	467458m	4.357	ppbv	
9) Propene	3.02	41	194252	4.922	ppbv #	73
10) Heptane	8.20	43	566755	5.735	ppbv	100
11) Trichlorofluoromethane	3.99	101	573311	2.844	ppbv	99
13) Ethanol	3.67	45	19033584	1552.286	ppbv	96
15) Acetone	3.88	43	10072778	68.953	ppbv	93
20) Methylene Chloride	4.38	84	63321m	0.994	ppbv	
26) Hexane	5.75	57	866473	9.477	ppbv #	49
27) Carbon Disulfide	4.60	76	244378	1.572	ppbv #	94
29) Chloroform	5.82	83	398995	2.322	ppbv	99
30) Cyclohexane	7.21	84	157571	2.232	ppbv	94
32) 1,1,1-Trichloroethane	6.59	97	9305m	0.053	ppbv	
34) 2-Butanone	5.30	43	370849	2.788	ppbv	98
35) Carbon Tetrachloride	7.10	117	11815m	0.059	ppbv	
36) Benzene	6.97	78	780493	3.969	ppbv	97
38) Trichloroethene	7.91	130	12437m	0.142	ppbv	
41) Tetrahydrofuran	6.11	42	129723m	1.989	ppbv	
44) 2,2,4-Trimethylpentane	7.95	57	209634	0.618	ppbv #	11
50) 4-Methyl-2-Pentanone	8.84	43	38330m	0.194	ppbv	
52) Tetrachloroethene	11.32	164	175547	2.074	ppbv	92
53) Toluene	9.90	91	1395988	6.201	ppbv	100
58) Ethyl Benzene	12.82	91	222175	0.729	ppbv	96
59) m/p-Xylene	13.07	91	665336	2.411	ppbv	99
60) o-Xylene	13.80	91	257409m	0.933	ppbv	
61) Styrene	13.64	104	59446m	0.325	ppbv	
62) Isopropylbenzene	14.78	105	138723	0.327	ppbv	97
74) 1,2,4-Trimethylbenzene	16.87	105	100682m	0.276	ppbv	

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

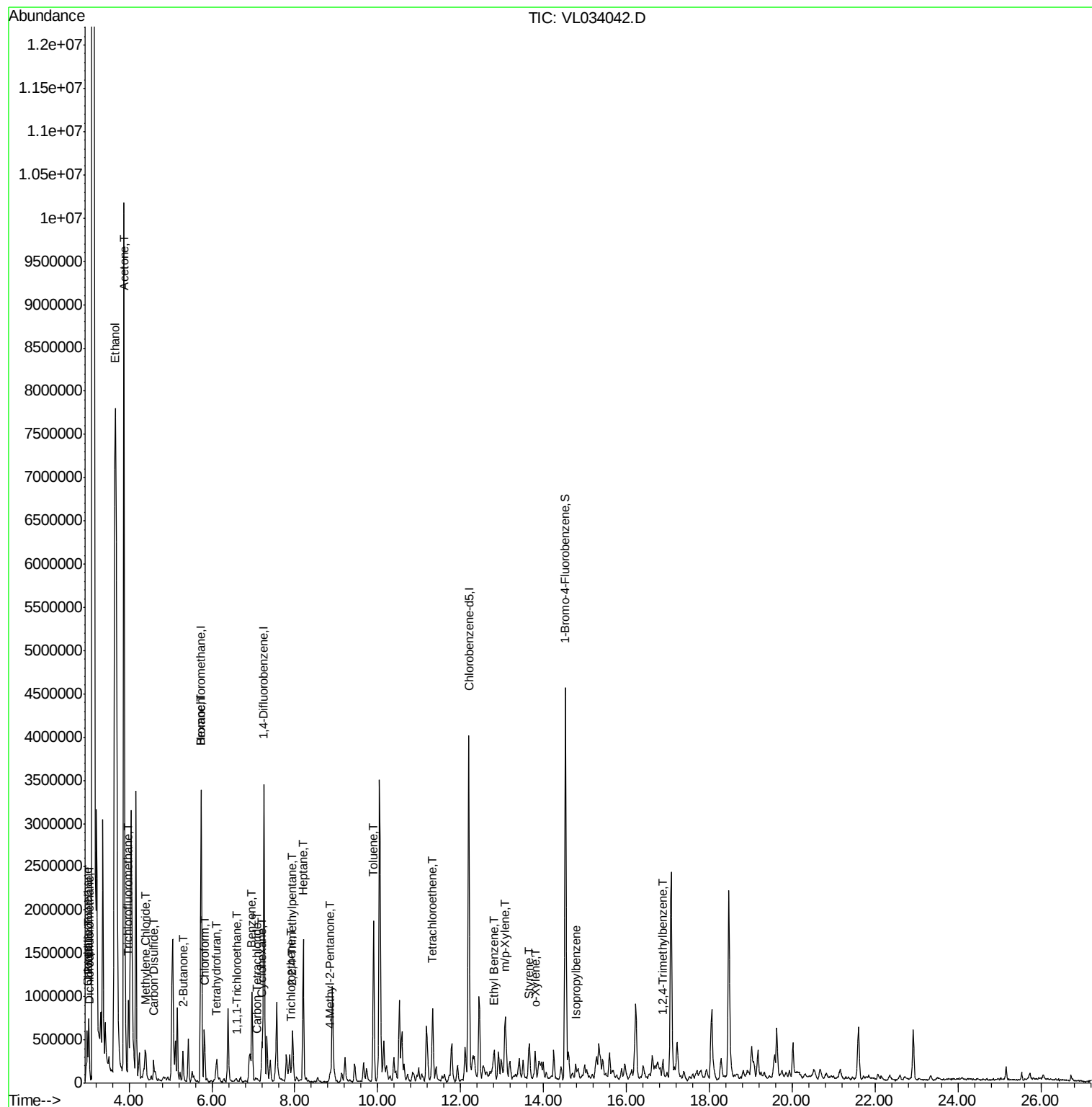
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071719\
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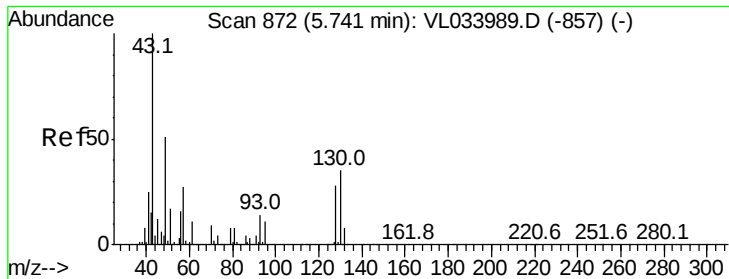
Instrument :
MSVOA_L
ClientSampleId :
SG-2

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Quant Time: Jul 18 07:48:29 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL070219AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue 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# 869

Delta R.T. -0.01 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Instrument :

MSVOA_L

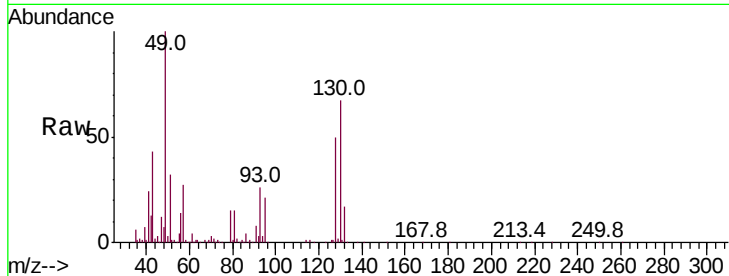
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SG-2

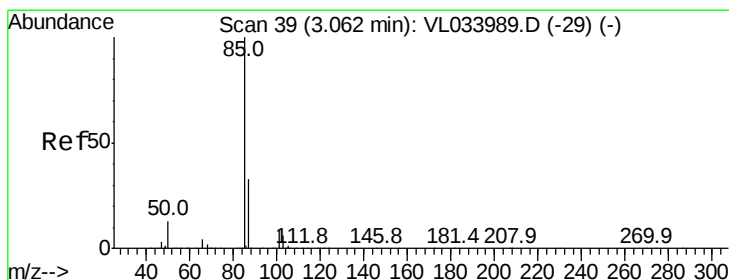
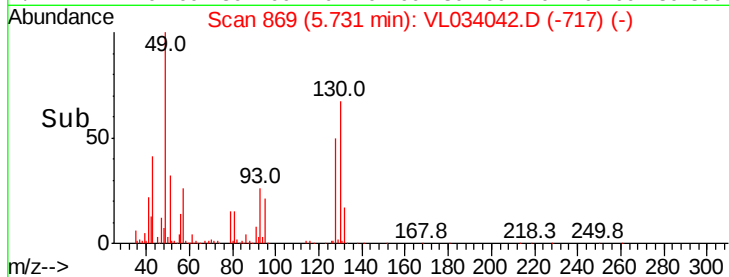
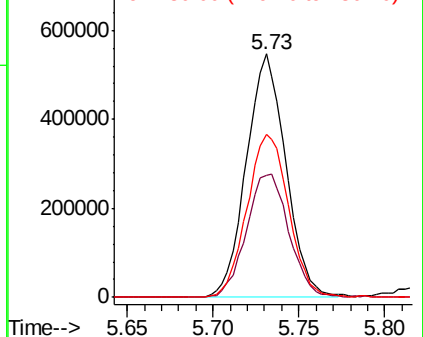
Tot Ion	Ratio	Lower	Upper
49	100		
128	54.8	27.9	83.6
130	71.1	35.8	107.4

Manual Integrations
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Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.131 ppbv m

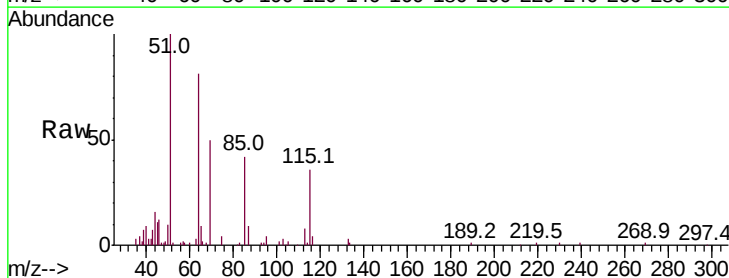
RT: 3.05 min Scan# 35

Delta R.T. -0.01 min

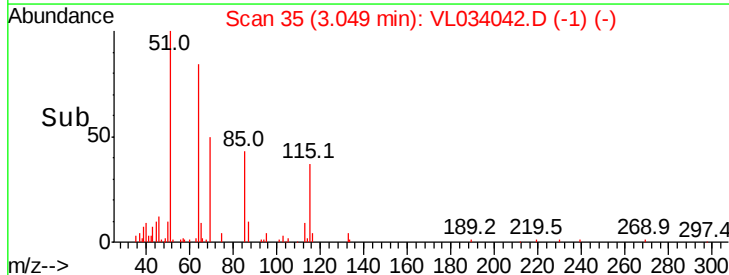
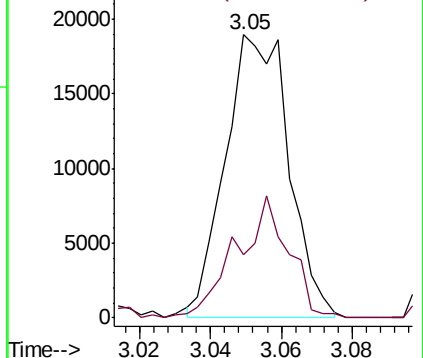
Lab File: VL034042.D

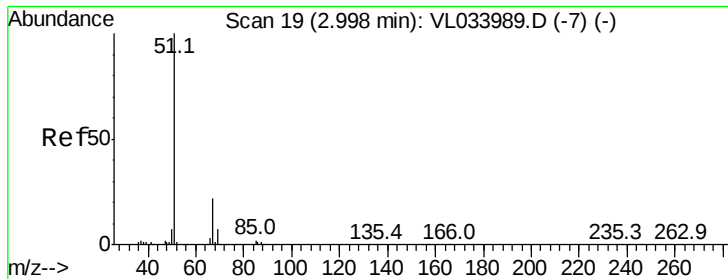
Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
85	100		
87	22.3	26.0	39.0#



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





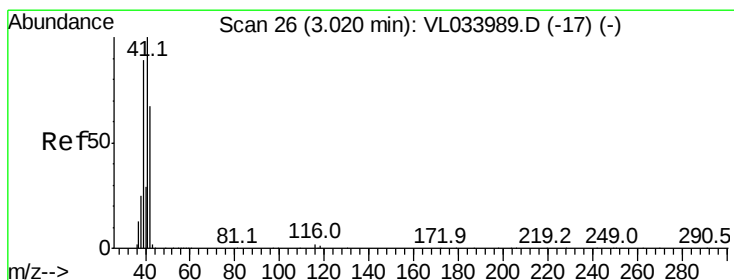
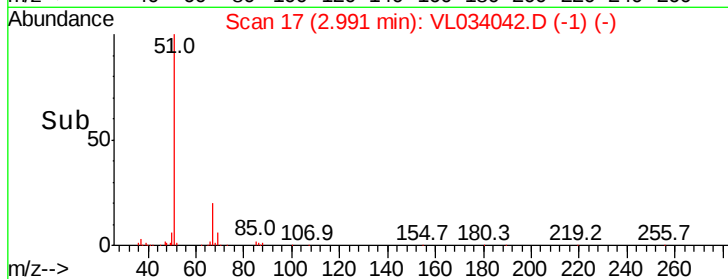
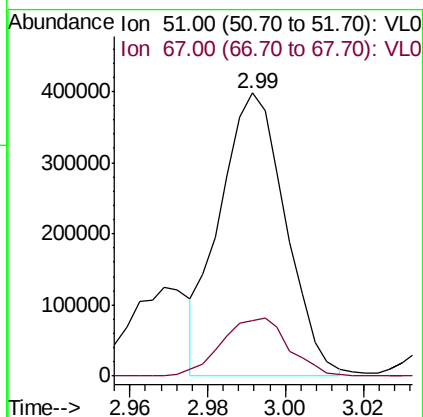
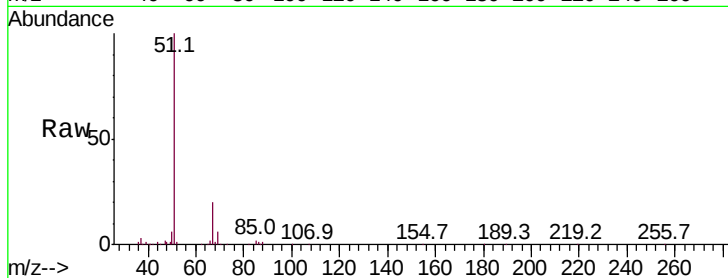
#3
Chlorodifluoromethane
Concen: 4.357 ppbv
RT: 2.99 min Scan# 17
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion	Ratio	Lower	Upper
51	100		
67	21.0	17.3	25.9

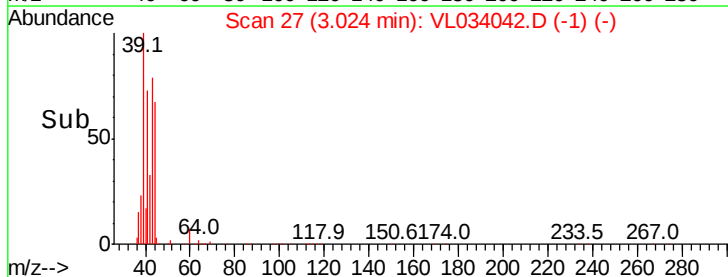
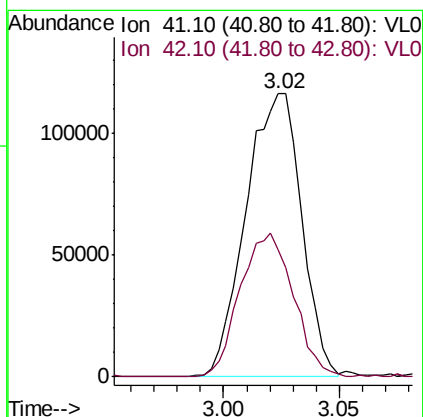
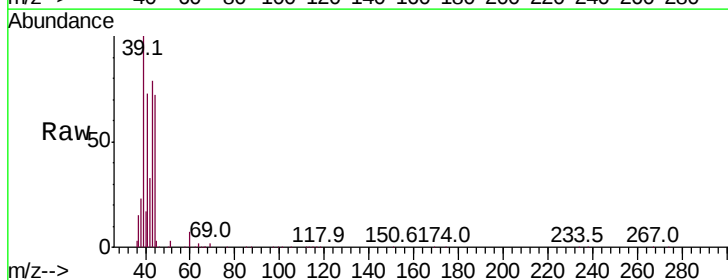
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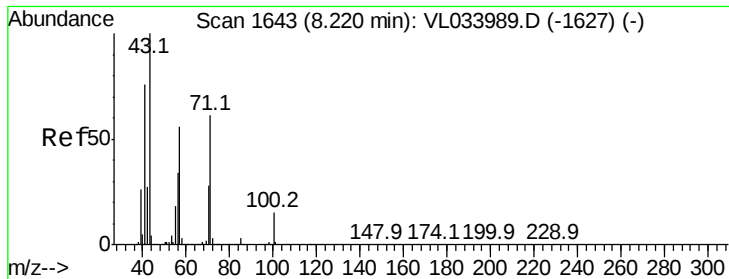
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#9
Propene
Concen: 4.922 ppbv
RT: 3.02 min Scan# 27
Delta R.T. 0.00 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
41	100		
42	48.8	57.1	85.7#





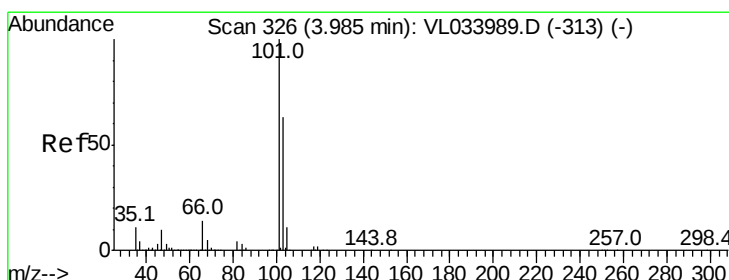
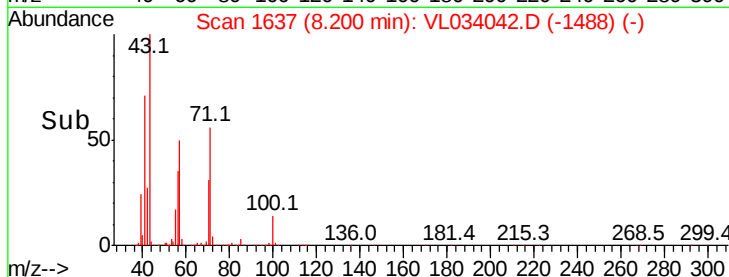
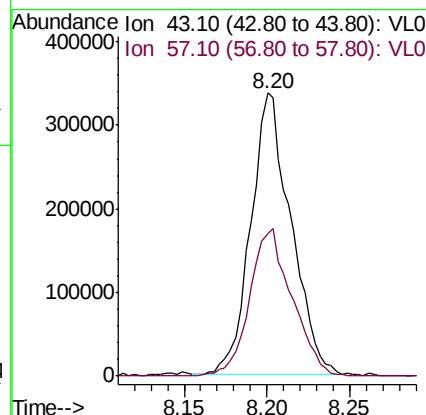
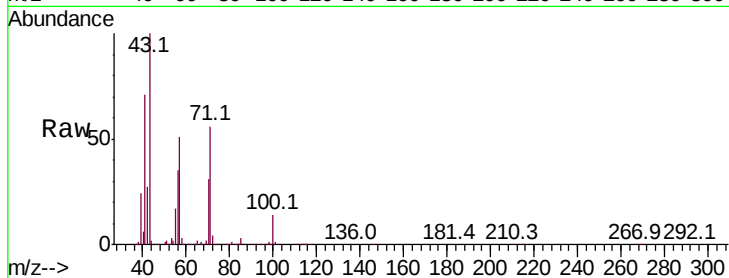
#10
Heptane
Concen: 5.735 ppbv
RT: 8.20 min Scan# 1637
Delta R.T. -0.02 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion: 43 Resp: 566755
Ion Ratio Lower Upper
43 100
57 55.7 44.6 66.8

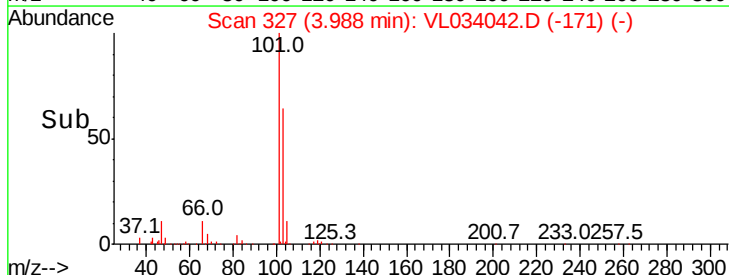
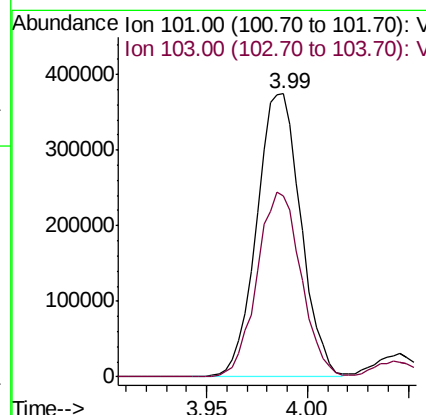
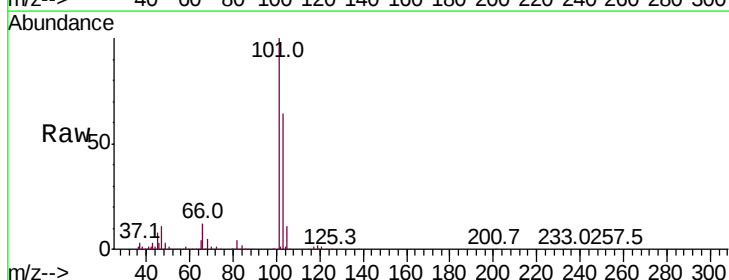
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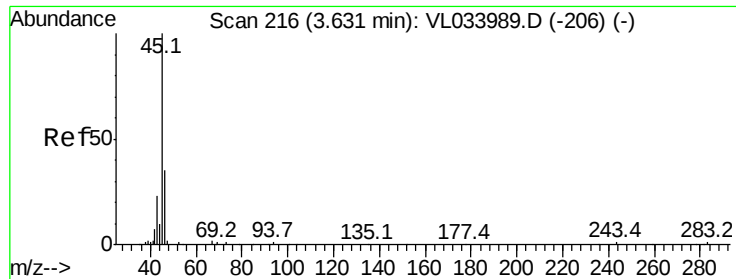
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#11
Trichlorofluoromethane
Concen: 2.844 ppbv
RT: 3.99 min Scan# 327
Delta R.T. 0.00 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion: 101 Resp: 573311
Ion Ratio Lower Upper
101 100
103 64.1 50.8 76.2





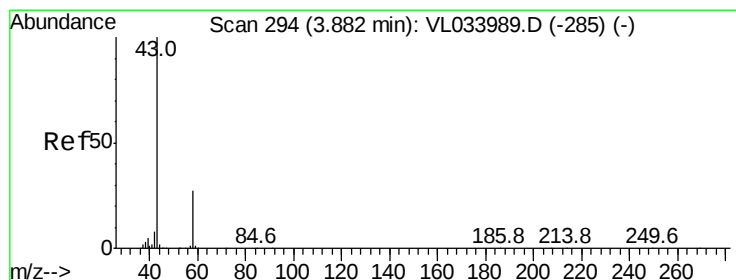
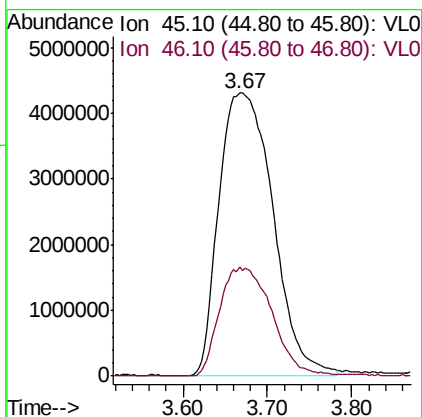
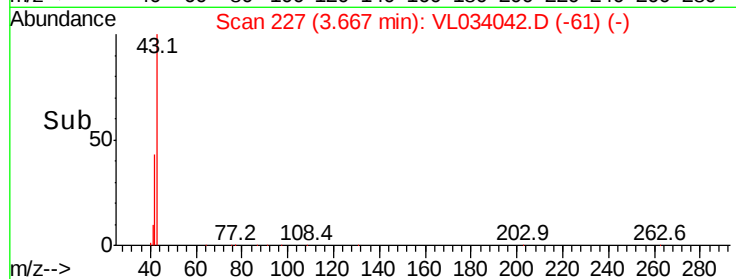
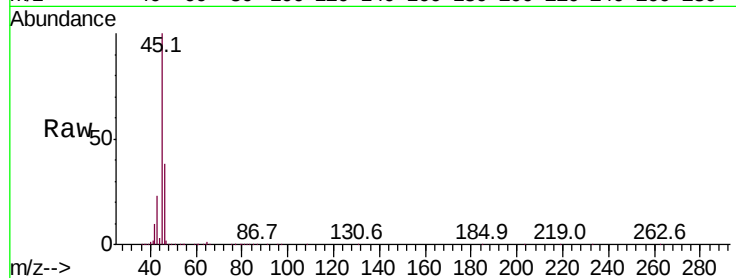
#13
Ethanol
Concen: 1552.286 ppbv
RT: 3.67 min Scan# 227
Delta R.T. 0.04 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion: 45 Resp:19033584
Ion Ratio Lower Upper
45 100
46 37.7 16.2 64.6

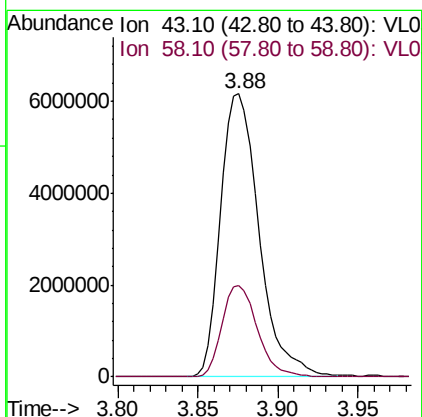
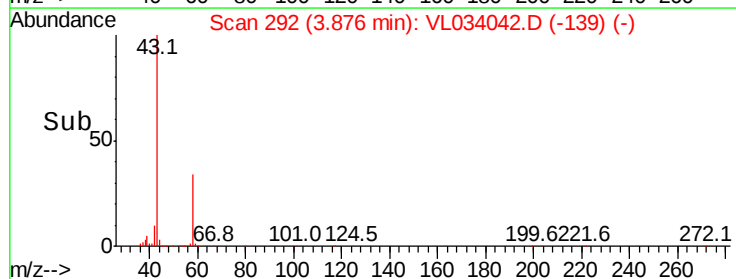
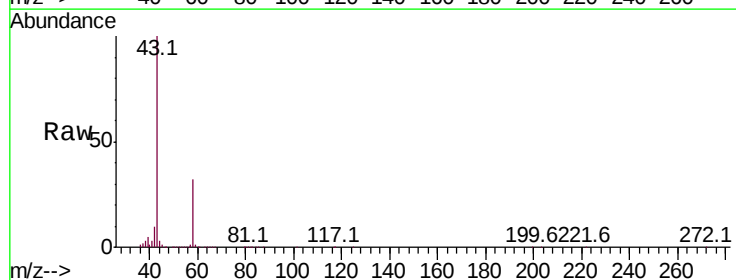
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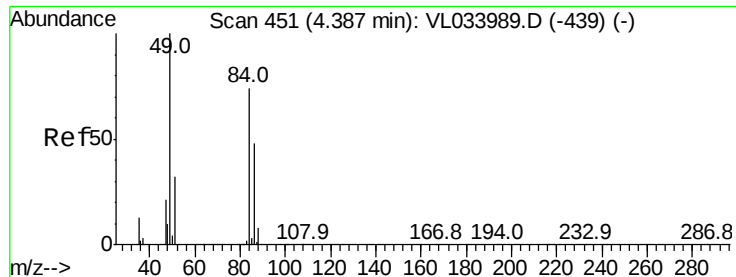
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#15
Acetone
Concen: 68.953 ppbv
RT: 3.88 min Scan# 292
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion: 43 Resp:10072778
Ion Ratio Lower Upper
43 100
58 30.2 21.4 32.0





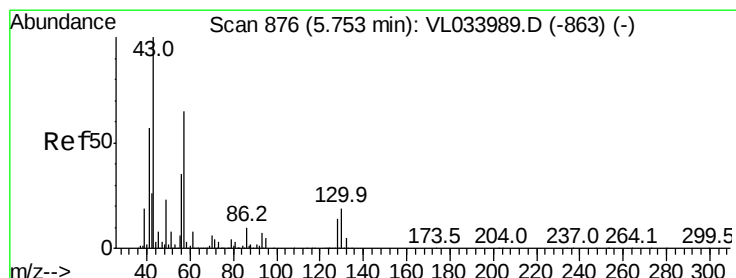
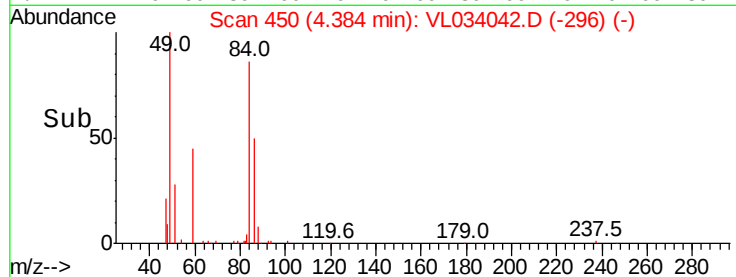
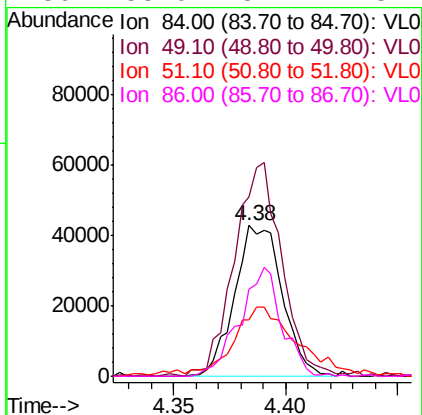
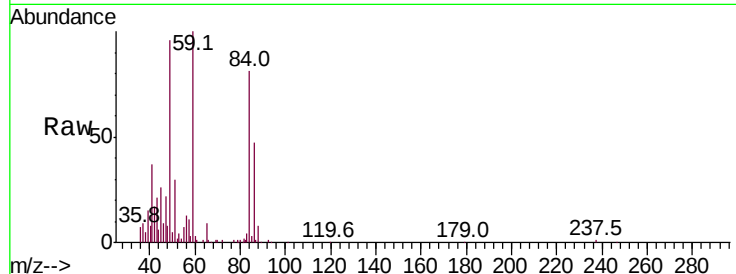
#20
Methvlene Chloride
Concen: 0.994 ppbv
RT: 4.38 min Scan# 450
Delta R.T. -0.00 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	118.7	107.6	161.4	
51	37.5	35.0	52.6	
86	58.0	52.1	78.1	

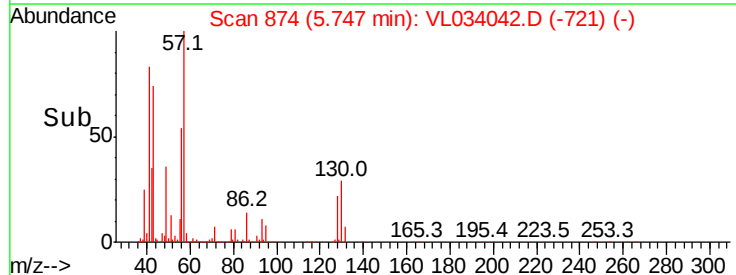
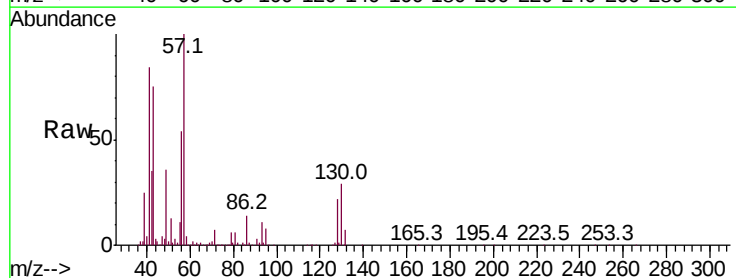
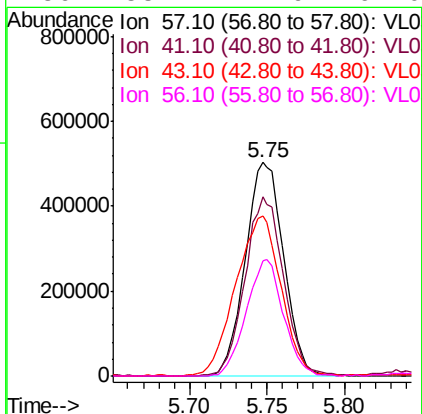
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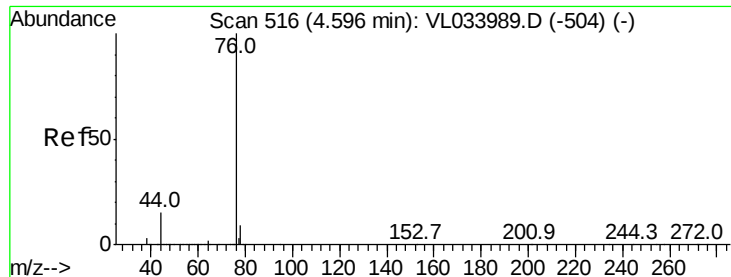
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#26
Hexane
Concen: 9.477 ppbv
RT: 5.75 min Scan# 874
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	84.5	70.6	105.8	
43	88.3	177.6	266.4#	
56	53.1	42.6	64.0	





#27

Carbon Disulfide

Concen: 1.572 ppbv

RT: 4.60 min Scan# 516

Delta R.T. -0.00 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Instrument :

MSVOA_L

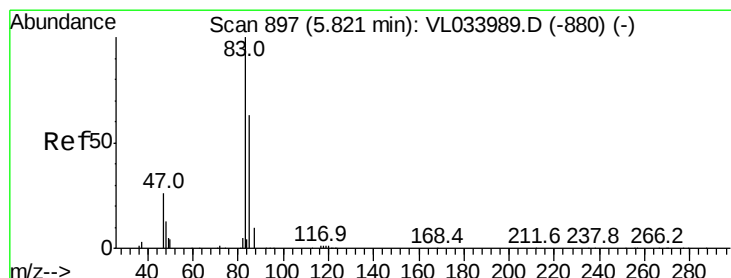
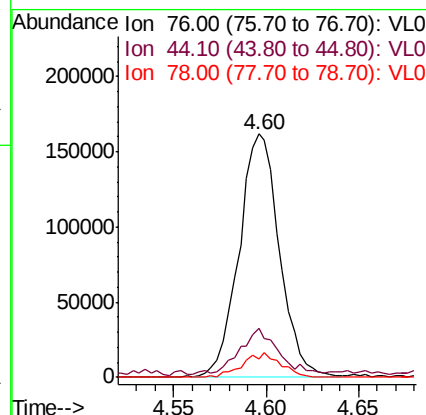
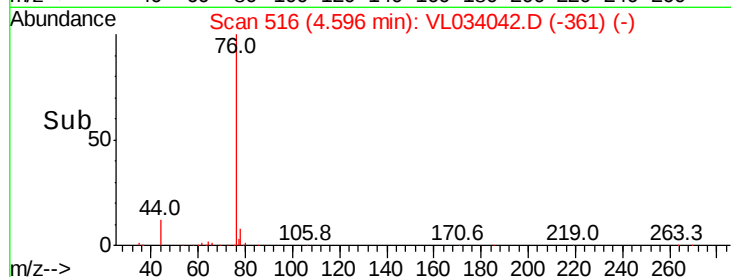
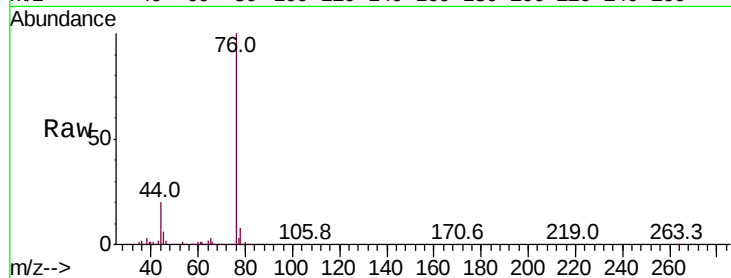
ClientSampleId :

SG-2

Tot Ion:	76	Resp:	244378
Ion Ratio	Lower	Upper	
76	100		
44	19.0	12.6	18.8#
78	9.7	7.2	10.8

Manual Integrations
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#29

Chloroform

Concen: 2.322 ppbv

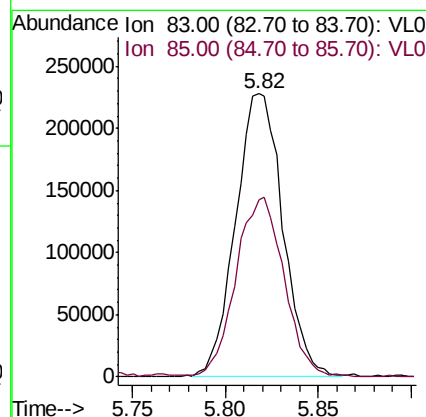
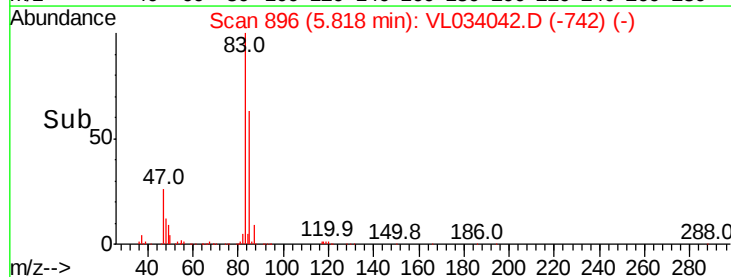
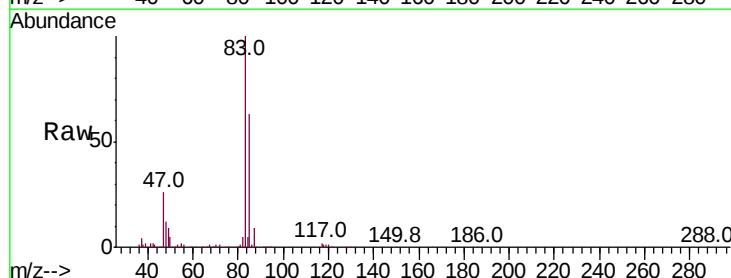
RT: 5.82 min Scan# 896

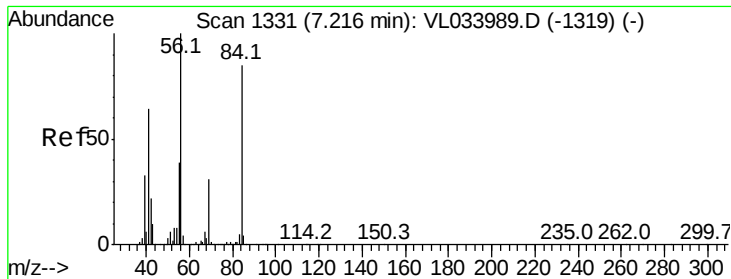
Delta R.T. -0.00 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Tgt Ion:	83	Resp:	398995
Ion Ratio	Lower	Upper	
83	100		
85	62.5	50.6	75.8





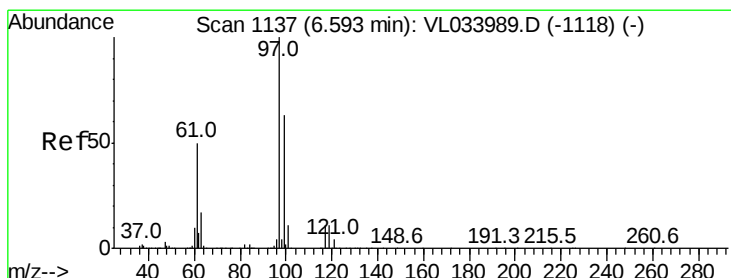
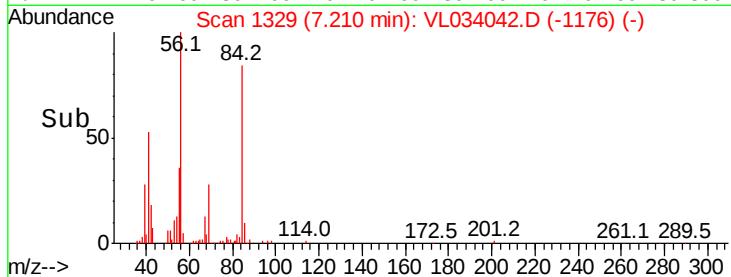
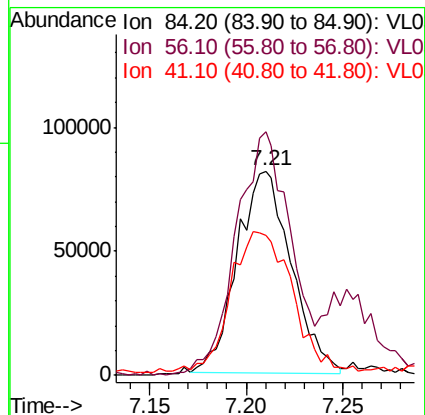
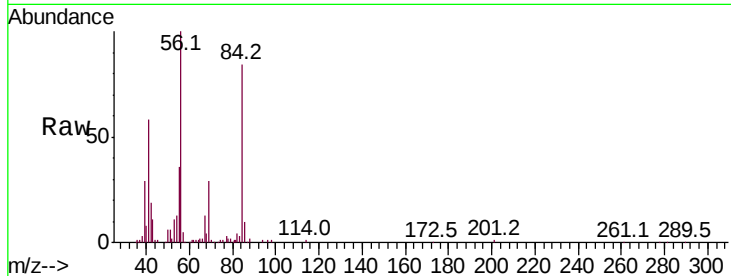
#30
Cvclohexane
Concen: 2.232 ppbv
RT: 7.21 min Scan# 1329
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampled :
SG-2

Tot Ion	Ratio	Lower	Upper
84	100		
56	120.7	103.7	155.5
41	81.1	62.6	94.0

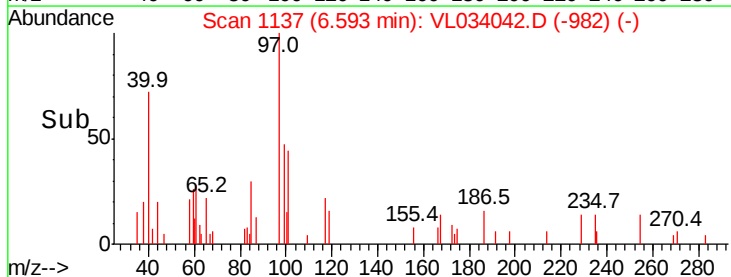
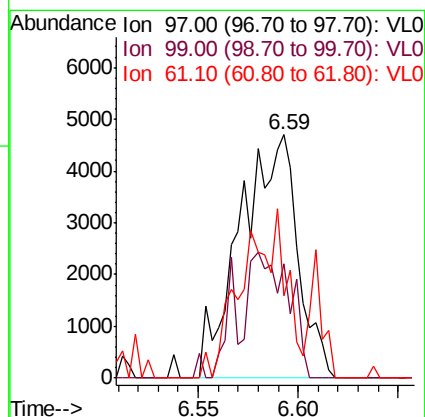
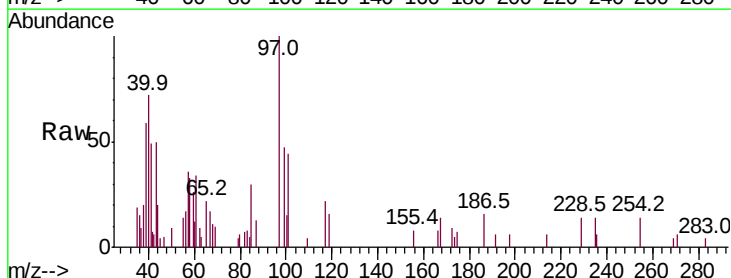
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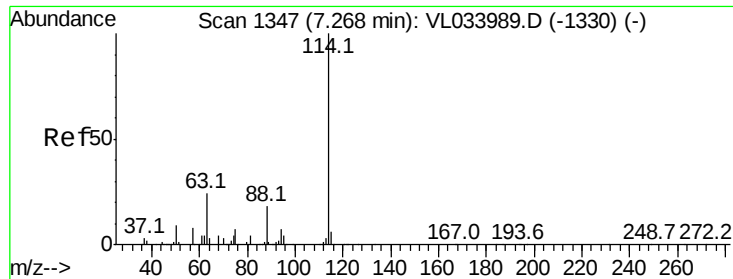
MMDadoda
7/19/2019 1:37:23 AM



#32
1,1,1-Trichloroethane
Concen: 0.053 ppbv m
RT: 6.59 min Scan# 1137
Delta R.T. -0.00 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
97	100		
99	45.5	51.9	77.9#
61	0.0	39.8	59.8#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.25 min Scan# 1343

Delta R.T. -0.01 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion:114 Resp: 2513394

Ion Ratio Lower Upper

114 100

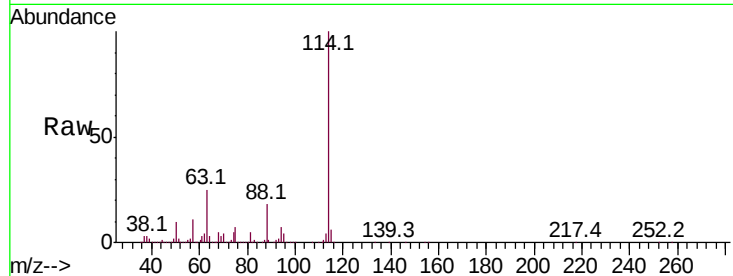
63 25.2 20.2 30.2

88 17.9 14.1 21.1

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MMDadoda

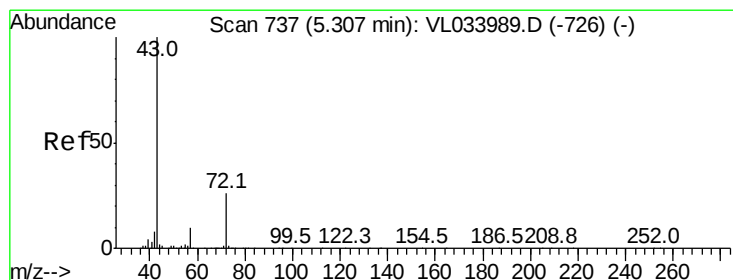
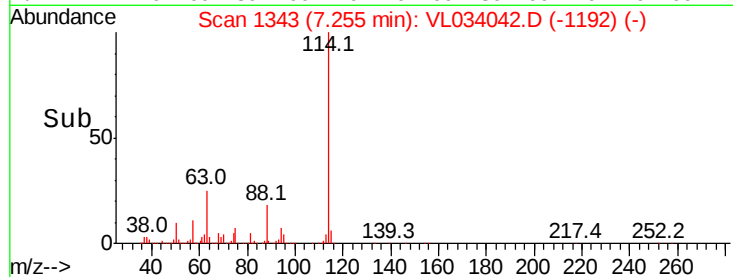
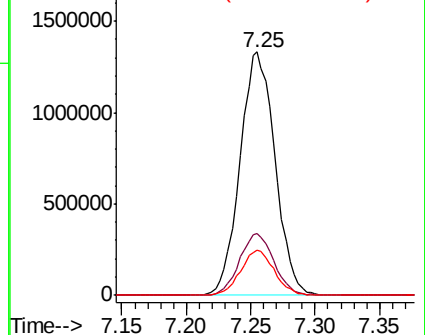
7/19/2019 1:37:23 AM



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 2.788 ppbv

RT: 5.30 min Scan# 735

Delta R.T. -0.01 min

Lab File: VL034042.D

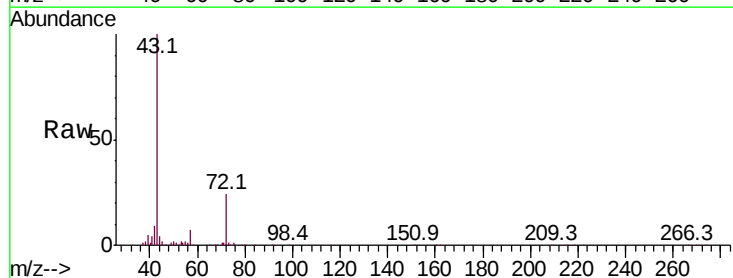
Acq: 17 Jul 2019 21:53

Tgt Ion: 43 Resp: 370849

Ion Ratio Lower Upper

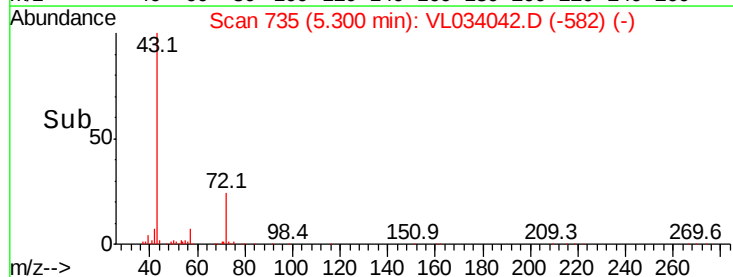
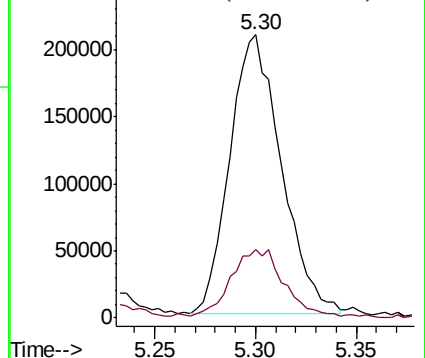
43 100

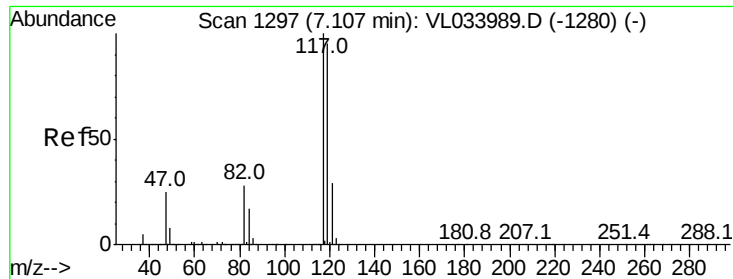
72 25.7 19.9 29.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.059 ppbv m

RT: 7.10 min Scan# 1294

Delta R.T. -0.01 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Instrument :

MSVOA_L

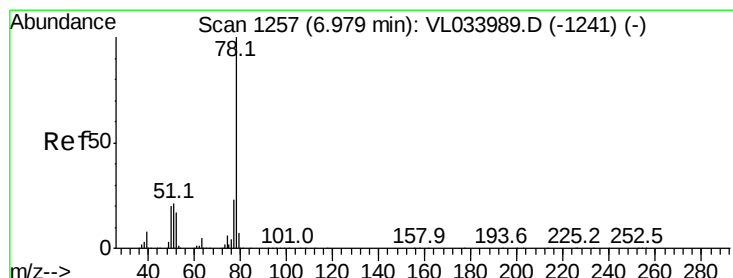
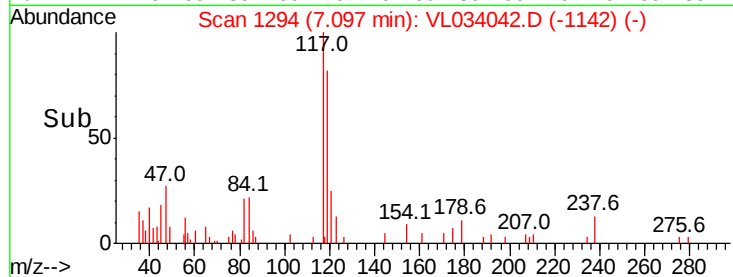
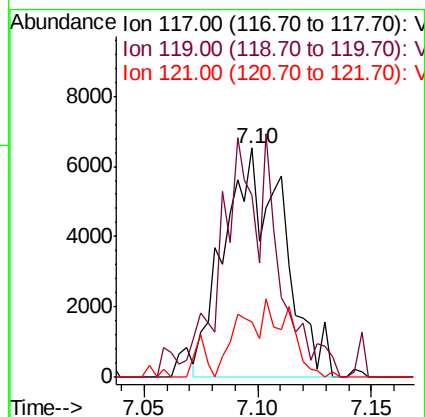
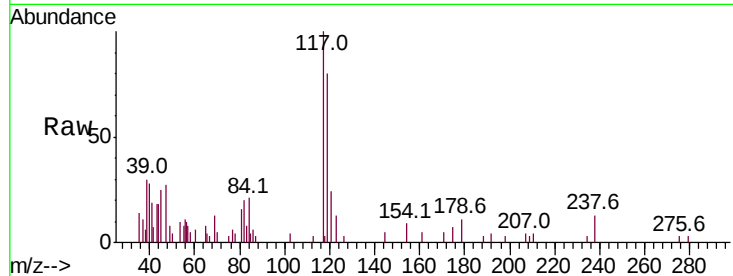
ClientSampleId :

SG-2

Tot Ion:	117	Resp:	11815
Ion Ratio	Lower	Upper	
117	100		
119	79.7	75.8	113.6
121	23.9	23.4	35.2

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#36

Benzene

Concen: 3.969 ppbv

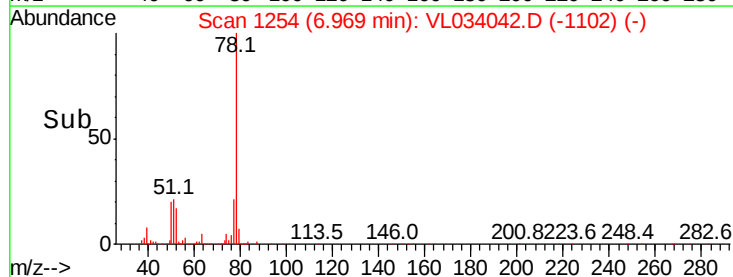
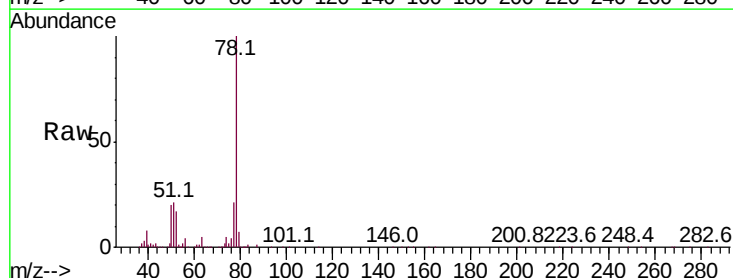
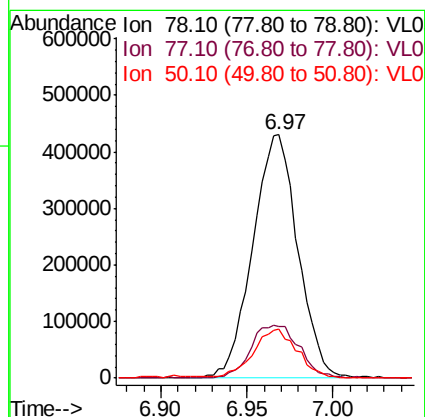
RT: 6.97 min Scan# 1254

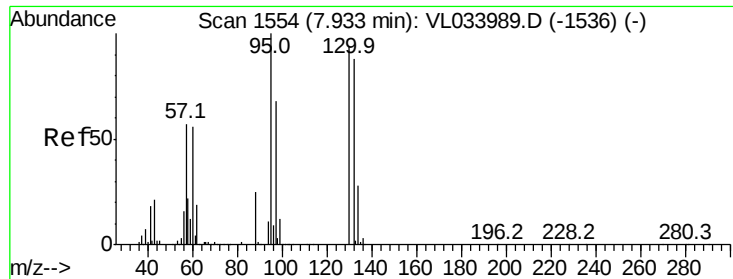
Delta R.T. -0.01 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Tgt Ion:	78	Resp:	780493
Ion Ratio	Lower	Upper	
78	100		
77	21.1	18.7	28.1
50	19.9	16.2	24.2





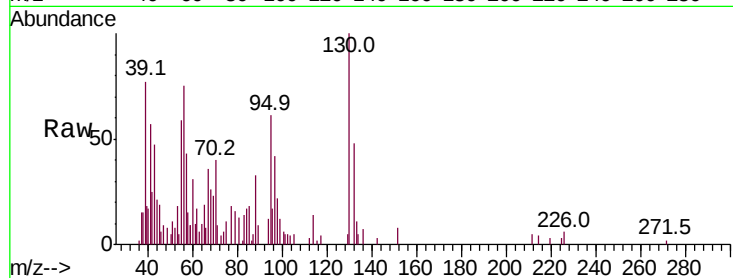
#38
 Trichloroethene
 Concen: 0.142 ppbv m
 RT: 7.91 min Scan# 1547
 Delta R.T. -0.02 min
 Lab File: VL034042.D
 Acq: 17 Jul 2019 21:53

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Lower	Upper
130	100		
95	61.4	85.5	128.3#
132	47.5	75.1	112.7#
97	41.6	58.1	87.1#

Manual Integrations
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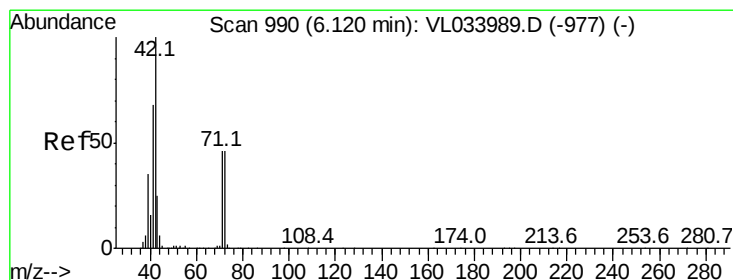
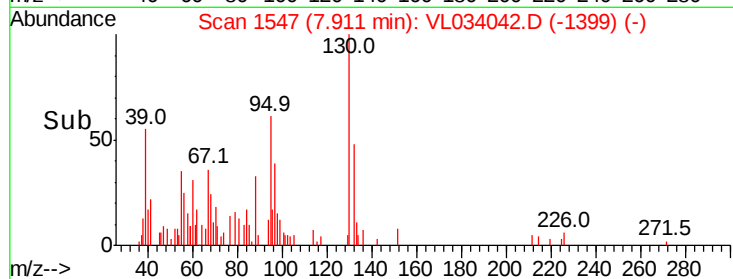
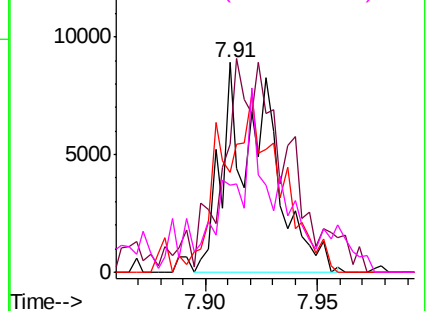


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

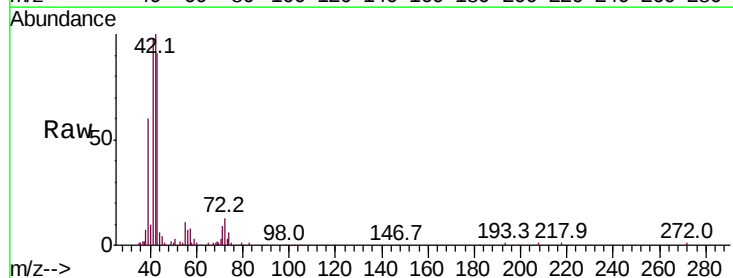
Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#41
 Tetrahydrofuran
 Concen: 1.989 ppbv m
 RT: 6.11 min Scan# 986
 Delta R.T. -0.01 min
 Lab File: VL034042.D
 Acq: 17 Jul 2019 21:53

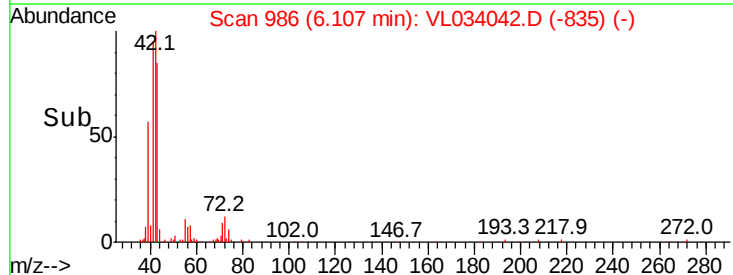
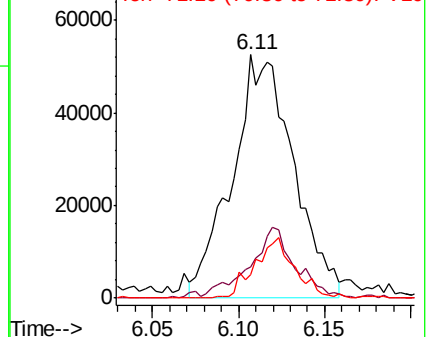
Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.0	37.3	55.9#
71	0.0	36.2	54.2#

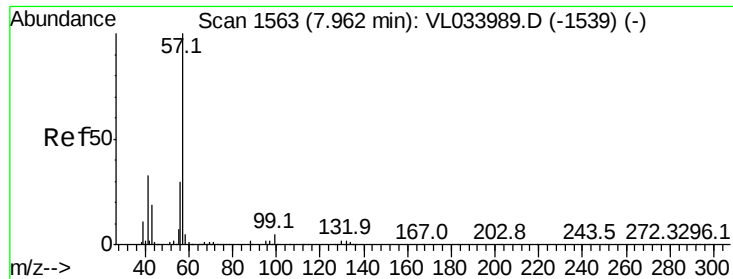


Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0





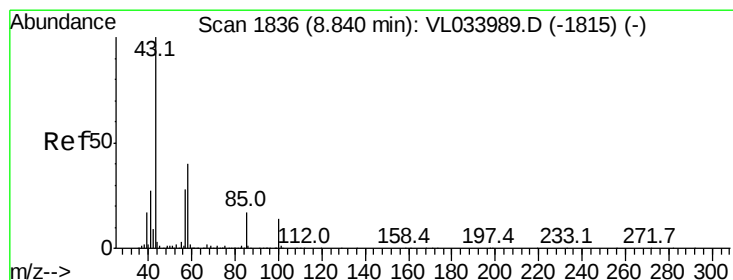
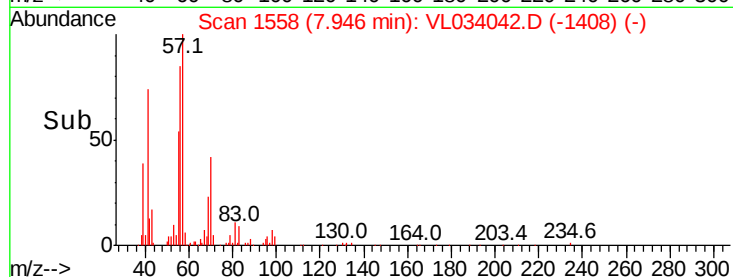
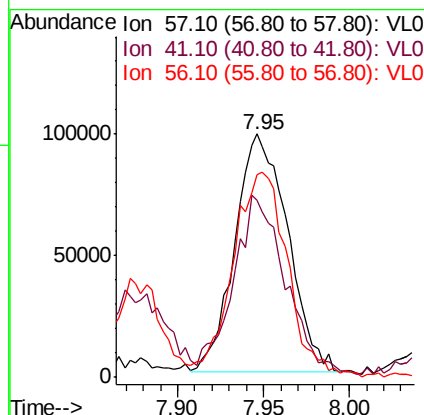
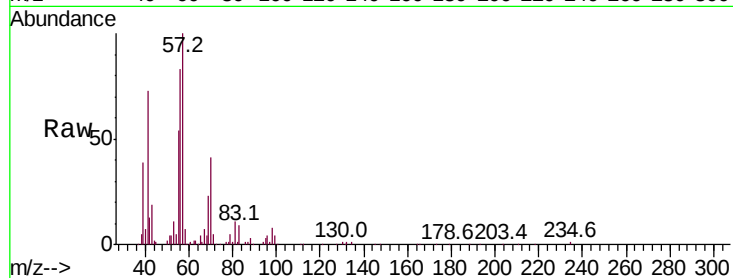
#44
 2,2,4-Trimethylpentane
 Concen: 0.618 ppbv
 RT: 7.95 min Scan# 1558
 Delta R.T. -0.02 min
 Lab File: VL034042.D
 Acq: 17 Jul 2019 21:53

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Tot Ion	Ratio	Lower	Upper
57	100		
41	73.8	26.1	39.1#
56	88.4	24.4	36.6#

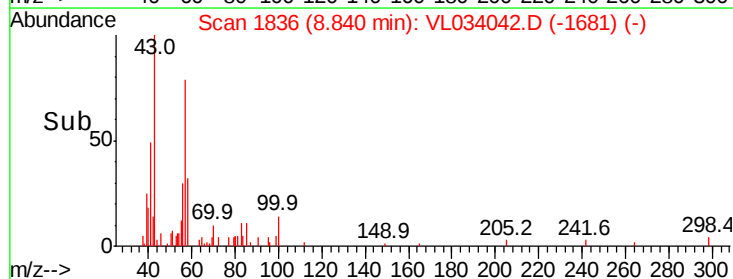
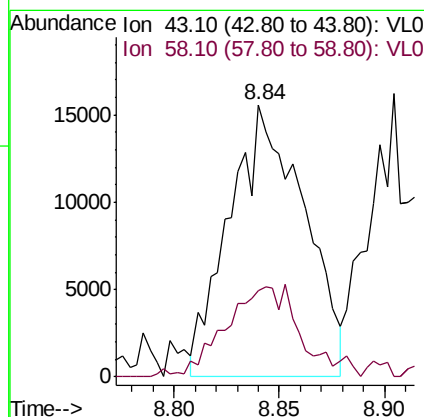
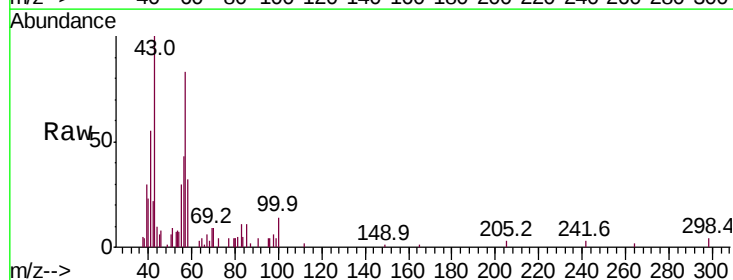
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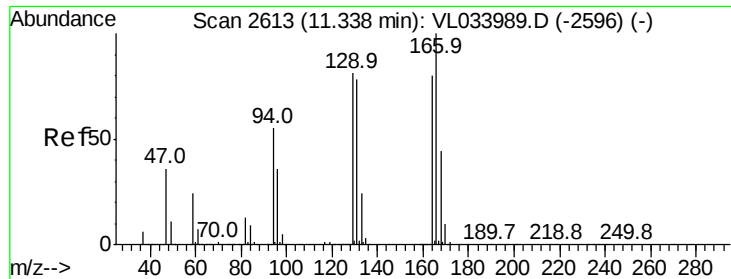
MMDadoda
 7/19/2019 1:37:23 AM



#50
 4-Methyl-2-Pentanone
 Concen: 0.194 ppbv m
 RT: 8.84 min Scan# 1836
 Delta R.T. -0.00 min
 Lab File: VL034042.D
 Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	30.3	45.5#





#52

Tetrachloroethene

Concen: 2.074 ppbv

RT: 11.32 min Scan# 2608

Delta R.T. -0.02 min

Lab File: VL034042.D

Acq: 17 Jul 2019 21:53

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion:164 Resp: 175547

Ion Ratio Lower Upper

164 100

166 111.9 100.2 150.2

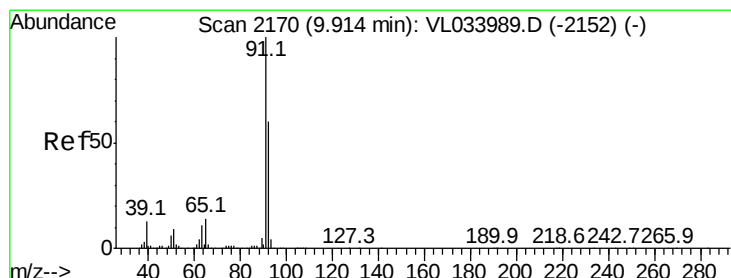
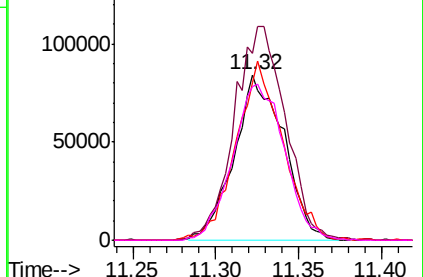
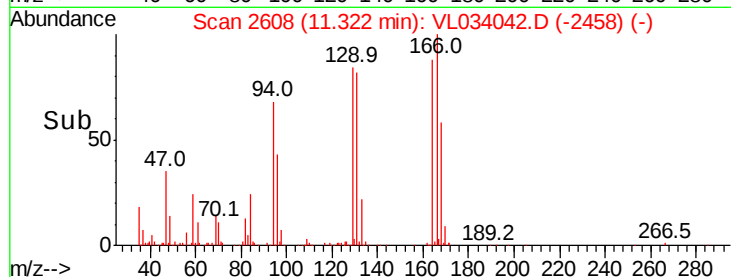
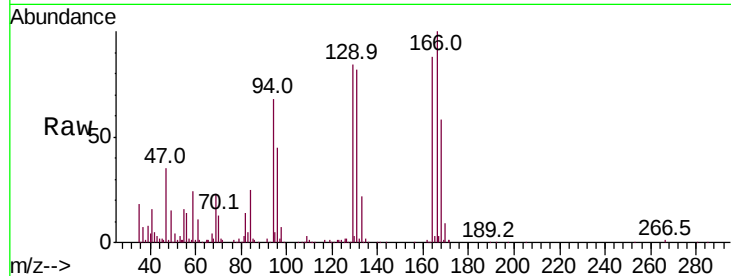
129 94.6 81.0 121.6

131 91.9 78.3 117.5

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7/19/2019 1:37:23 AM



#53

Toluene

Concen: 6.201 ppbv

RT: 9.90 min Scan# 2166

Delta R.T. -0.01 min

Lab File: VL034042.D

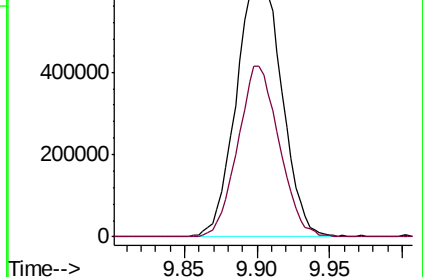
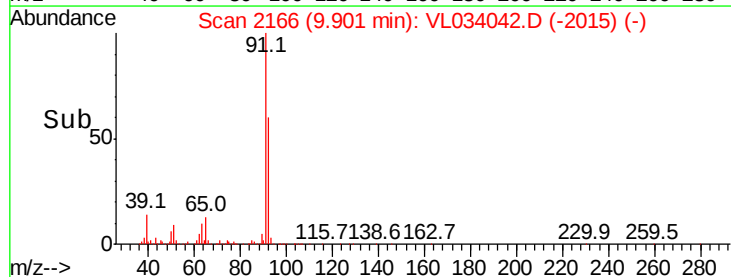
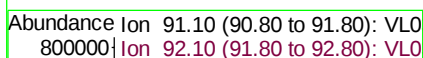
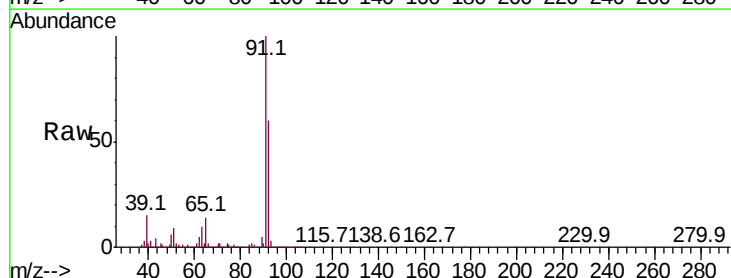
Acq: 17 Jul 2019 21:53

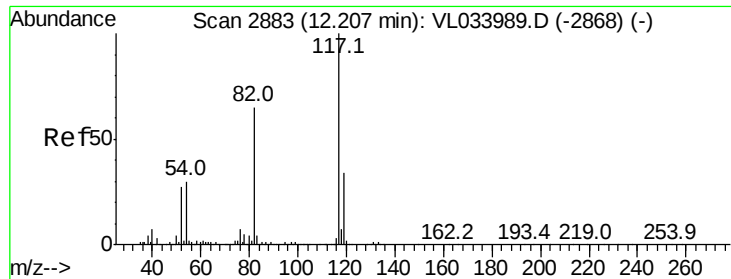
Tgt Ion: 91 Resp: 1395988

Ion Ratio Lower Upper

91 100

92 59.4 47.7 71.5





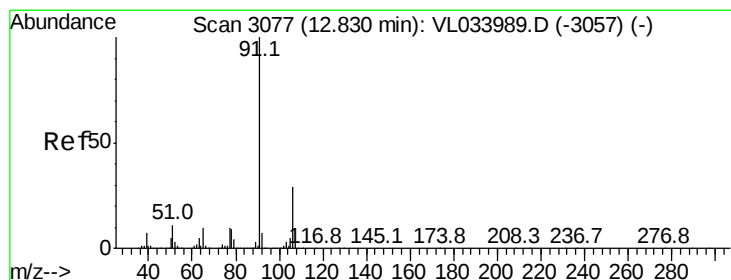
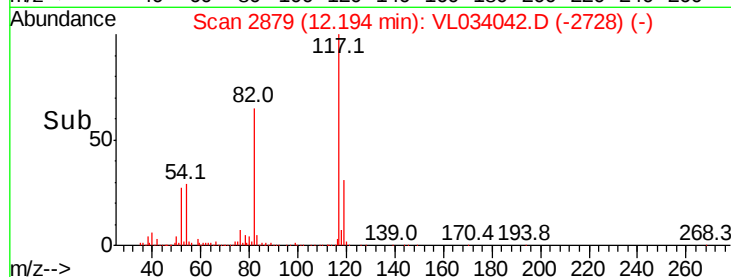
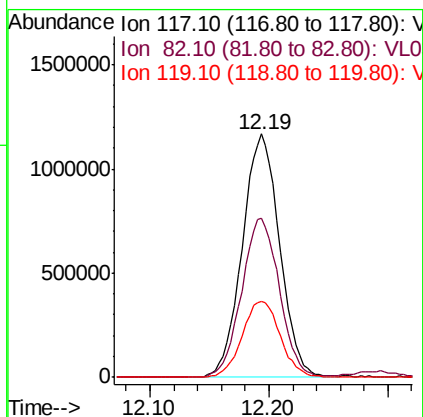
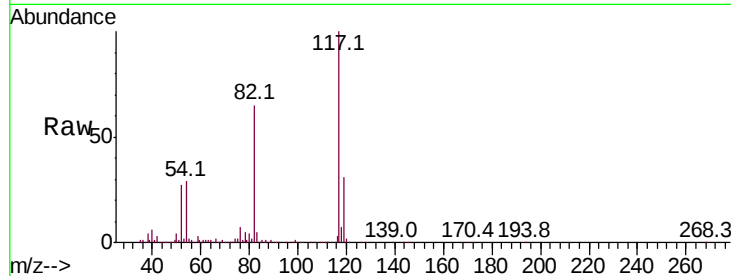
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.19 min Scan# 2879
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion	Ratio	Lower	Upper
117	100		
82	66.1	50.8	76.2
119	32.1	24.0	36.0

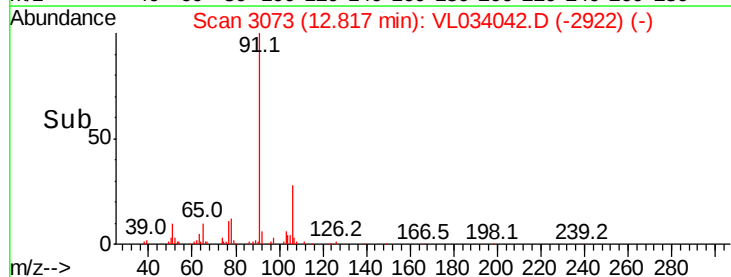
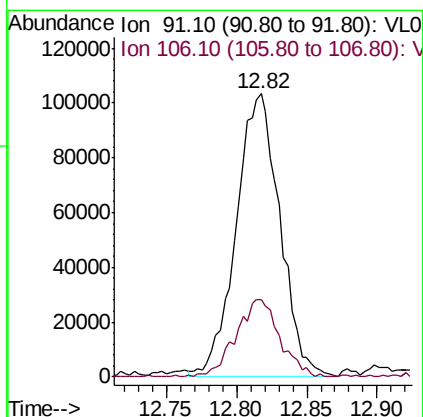
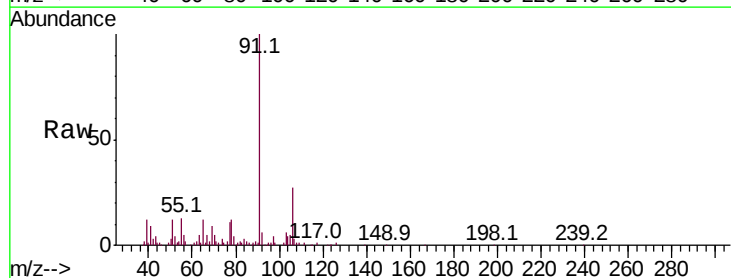
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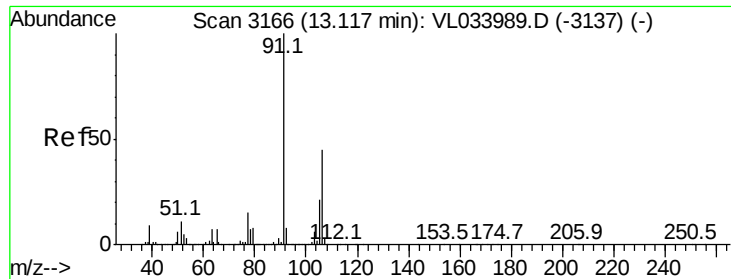
MMDadoda
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#58
Ethyl Benzene
Concen: 0.729 ppbv
RT: 12.82 min Scan# 3073
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
91	100		
106	27.2	23.3	34.9





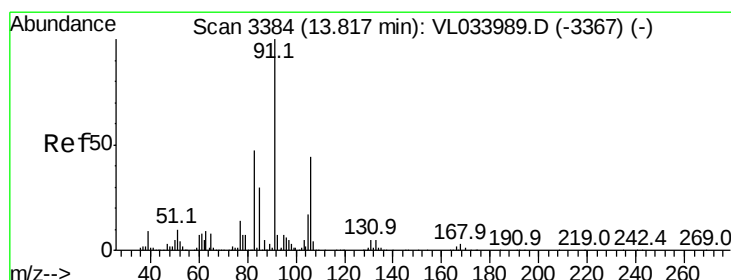
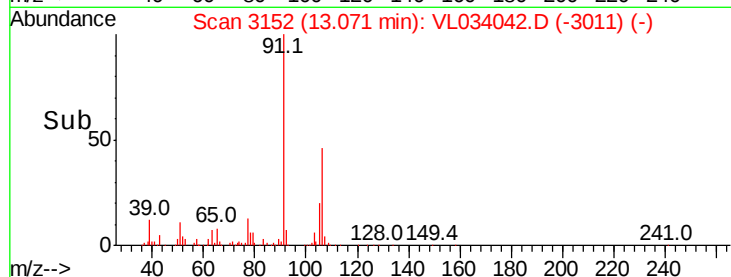
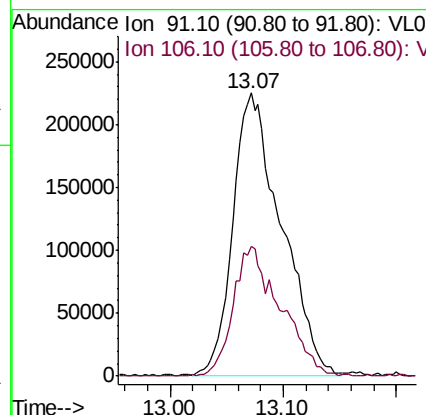
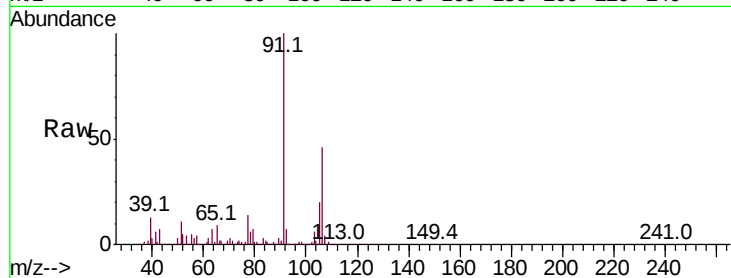
#59
m/p-Xylene
Concen: 2.411 ppbv
RT: 13.07 min Scan# 3152
Delta R.T. -0.05 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampled :
SG-2

Tot Ion	Ratio	Lower	Upper
91	100		
106	45.1	35.7	53.5

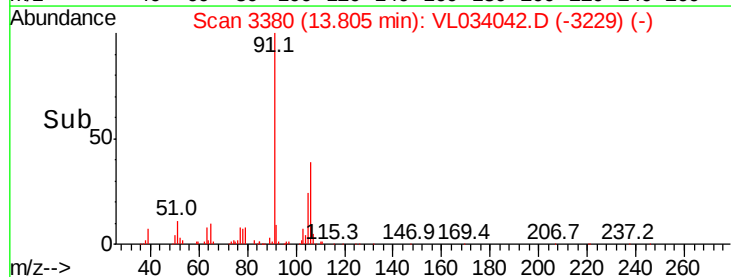
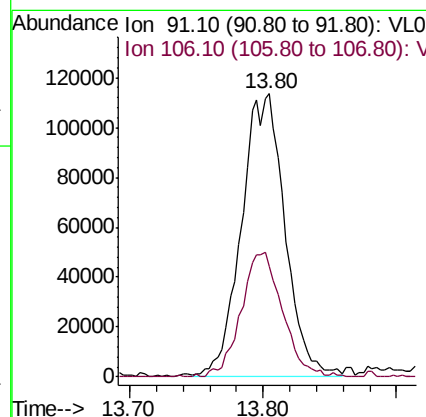
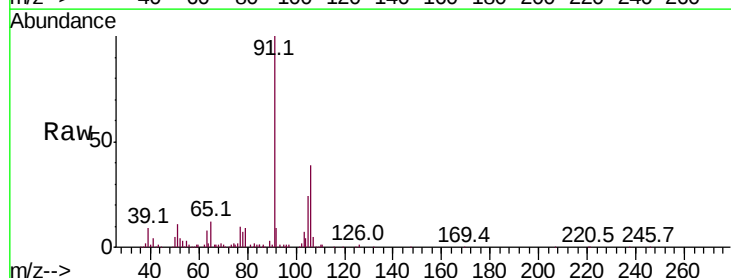
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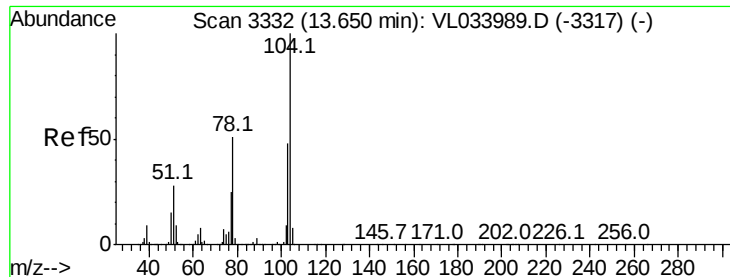
MMDadoda
7/19/2019 1:37:23 AM



#60
o-Xylene
Concen: 0.933 ppbv m
RT: 13.80 min Scan# 3380
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
91	100		
106	42.0	21.9	65.7





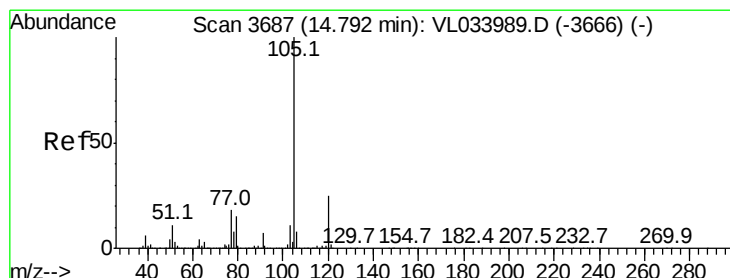
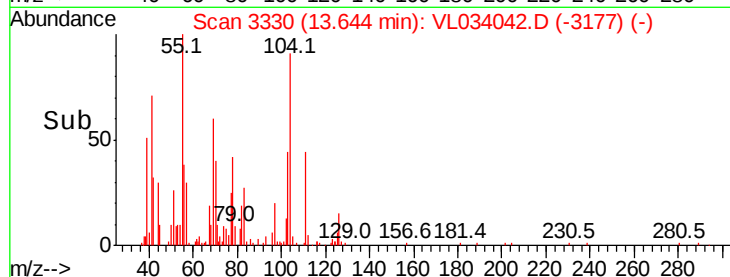
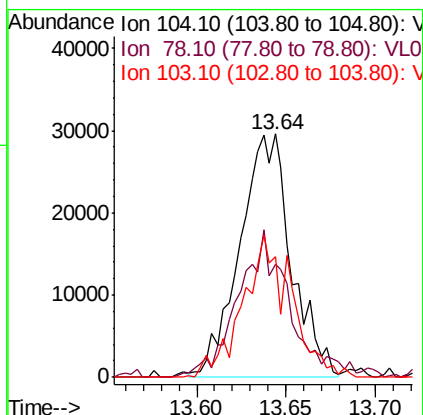
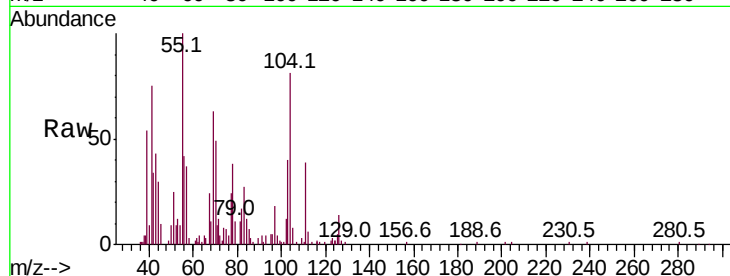
#61
Stvrene
Concen: 0.325 ppbv m
RT: 13.64 min Scan# 3330
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion	Ratio	Lower	Upper
104	100		
78	61.1	43.9	65.9
103	55.0	38.1	57.1

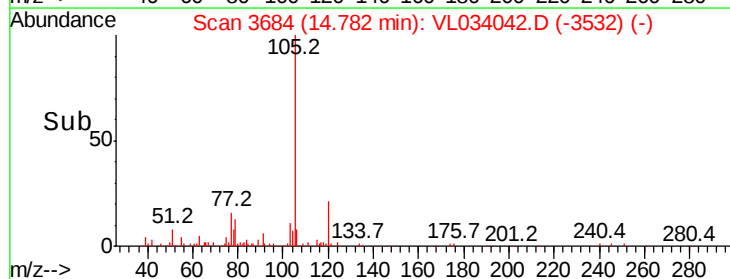
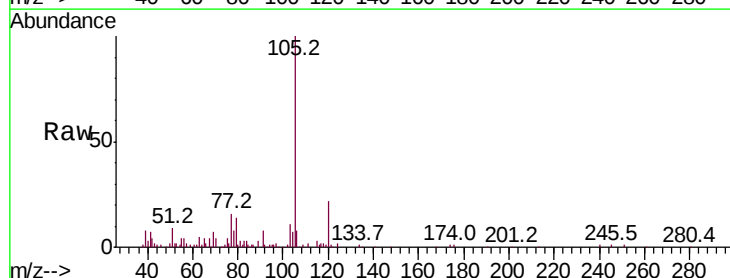
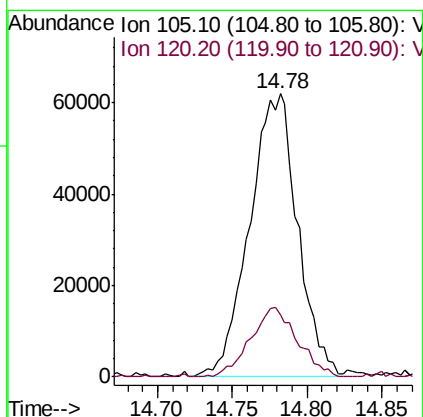
Manual Integrations
APPROVED

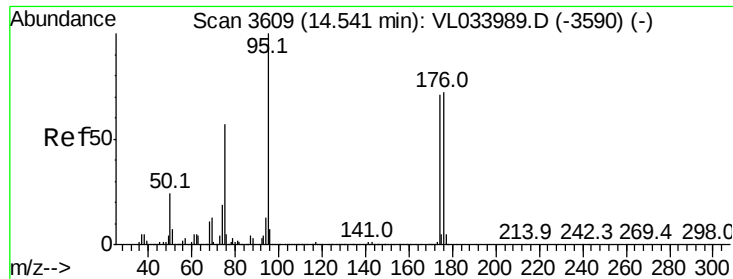
MMDadoda
7/19/2019 1:37:23 AM



#62
Isopropylbenzene
Concen: 0.327 ppbv
RT: 14.78 min Scan# 3684
Delta R.T. -0.01 min
Lab File: VL034042.D
Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.1	20.4	30.6





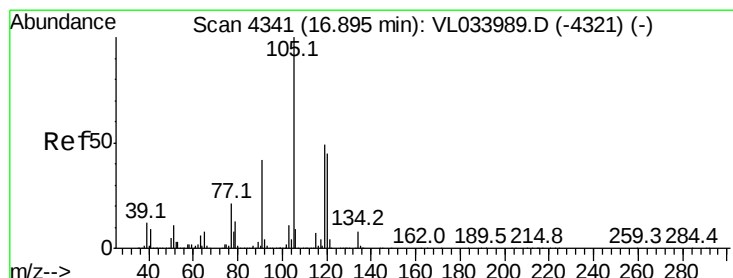
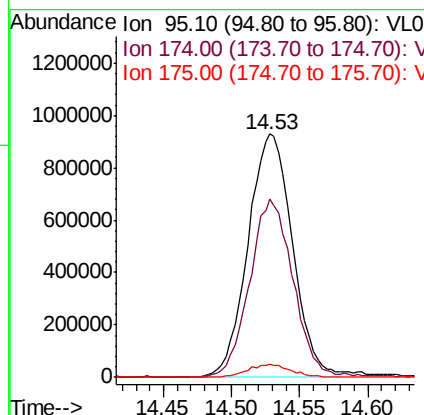
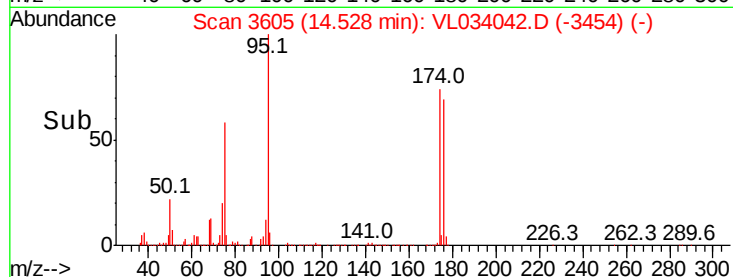
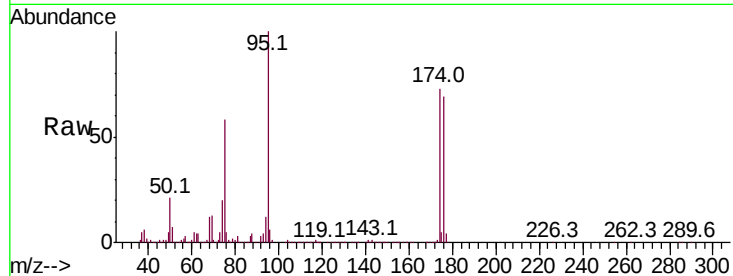
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.681 ppbv
 RT: 14.53 min Scan# 3605
 Delta R.T. -0.01 min
 Lab File: VL034042.D
 Acq: 17 Jul 2019 21:53

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Tot Ion	Ratio	Lower	Upper
95	100		
174	72.8	60.5	90.7
175	5.3	4.0	6.0

Manual Integrations
 APPROVED

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 7/19/2019 1:37:23 AM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.276 ppbv m
 RT: 16.87 min Scan# 4333
 Delta R.T. -0.03 min
 Lab File: VL034042.D
 Acq: 17 Jul 2019 21:53

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.8	36.2	54.2#
91	15.0	34.3	51.5#
77	26.5	17.1	25.7#

