

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061319\
 Data File : VL033922.D
 Acq On : 14 Jun 2019 7:27
 Operator : SY/AP
 Sample : K3295-01DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 V1DL

Manual Integrations
 APPROVED

MMDadoda
 6/17/2019 12:37:39 AM

Quant Time: Jun 16 18:23:22 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 0
 QLast Update : Fri Jun 07 08:53:27 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.75	49	1075477	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	2740706	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.22	117	2871090	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.56	95	2100407	8.91	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	89.10%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	19839	0.114	ppbv	94
9) Propene	3.03	41	218227	4.606	ppbv	94
10) Heptane	8.23	43	71161	0.594	ppbv #	73
13) Ethanol	3.64	45	120323	7.806	ppbv	95
15) Acetone	3.89	43	3854180	24.572	ppbv	93
17) tert-Butyl alcohol	4.35	59	131796	1.075	ppbv	98
19) Isopropyl Alcohol	4.02	45	76845	0.858	ppbv #	94
26) Hexane	5.77	57	49520	0.455	ppbv #	37
27) Carbon Disulfide	4.61	76	75366	0.499	ppbv #	91
30) Cyclohexane	7.23	84	9323m	0.121	ppbv	
34) 2-Butanone	5.31	43	829153	5.363	ppbv	98
36) Benzene	6.99	78	70873	0.339	ppbv #	94
38) Trichloroethene	7.94	130	9525m	0.117	ppbv	
44) 2,2,4-Trimethylpentane	7.98	57	108363m	0.291	ppbv	
50) 4-Methyl-2-Pentanone	8.87	43	43562m	0.189	ppbv	
51) 2-Hexanone	10.26	43	226574	1.258	ppbv #	99
52) Tetrachloroethene	11.35	164	96304	1.307	ppbv	86
53) Toluene	9.93	91	254680	1.099	ppbv	97
58) Ethyl Benzene	12.84	91	70717	0.218	ppbv	91
59) m/p-Xylene	13.10	91	228445m	0.776	ppbv	
60) o-Xylene	13.83	91	94526	0.311	ppbv	97
74) 1,2,4-Trimethylbenzene	16.91	105	156370	0.398	ppbv #	72

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

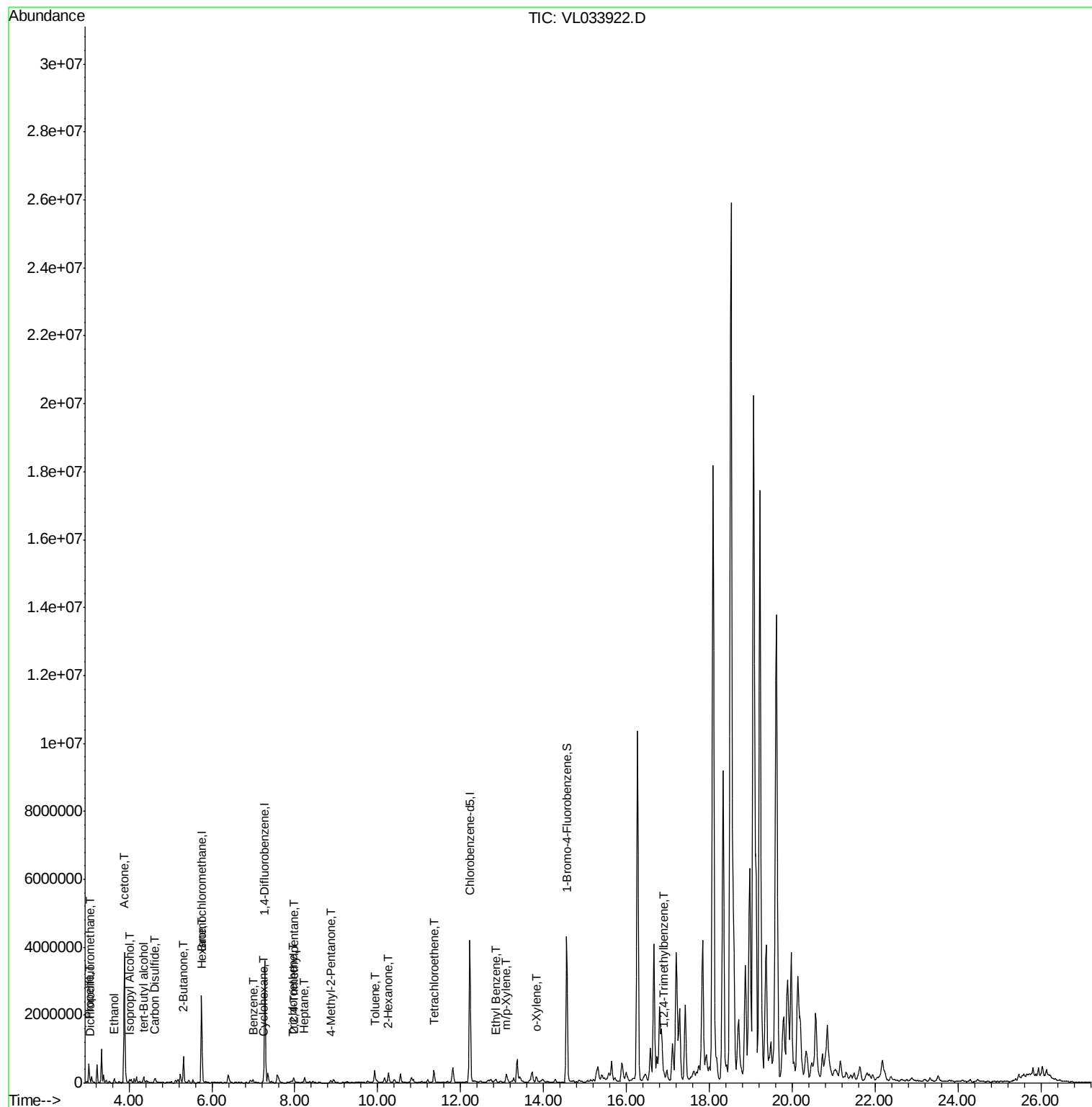
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL061319\
Data File : VL033922.D
Acq On : 14 Jun 2019 7:27
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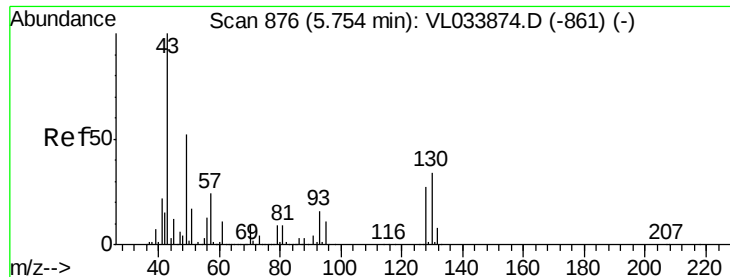
Instrument :
MSVOA_L
ClientSampleId :
V1DL

Manual Integrations
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6/17/2019 12:37:39 AM

Quant Time: Jun 16 18:23:22 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL060719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun
QLast Update : Fri Jun 07 08:53:27 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.75 min Scan# 874

Delta R.T. -0.01 min

Lab File: VL033922.D

Acq: 14 Jun 2019 7:27

Instrument :

MSVOA_L

ClientSampled :

V1DL

Tot Ion: 49 Resp: 1075477

Ion Ratio Lower Upper

49 100

128 53.5 25.5 76.5

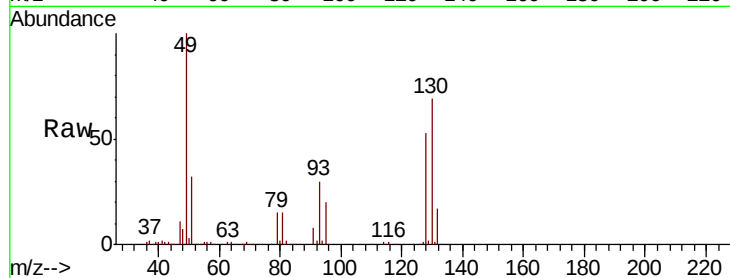
130 69.1 32.5 97.4

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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

800000

600000

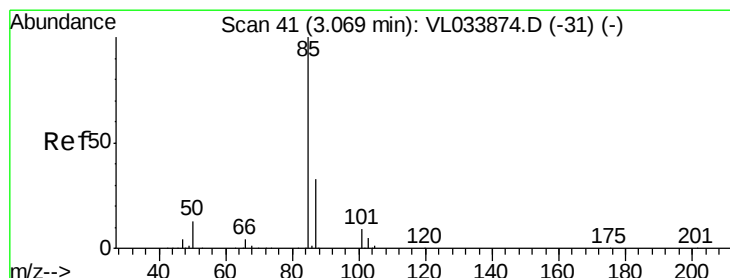
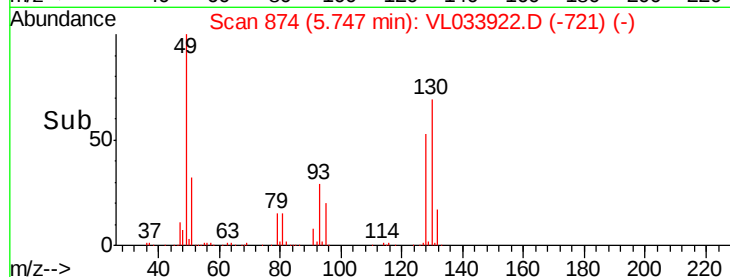
400000

200000

0

5.65 5.70 5.75 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.114 ppbv

RT: 3.07 min Scan# 40

Delta R.T. -0.00 min

Lab File: VL033922.D

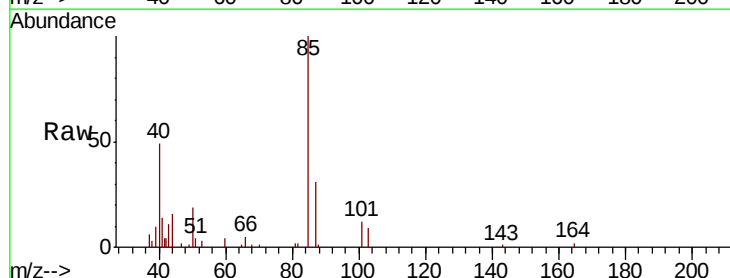
Acq: 14 Jun 2019 7:27

Tgt Ion: 85 Resp: 19839

Ion Ratio Lower Upper

85 100

87 29.7 26.6 40.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

15000

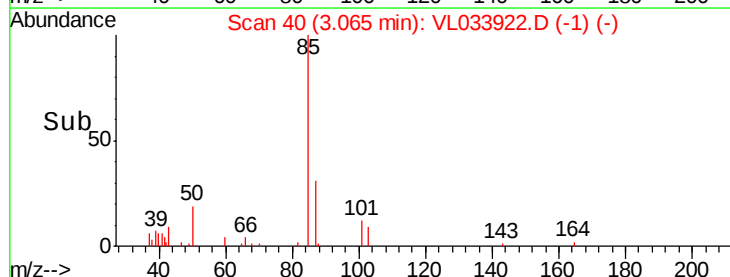
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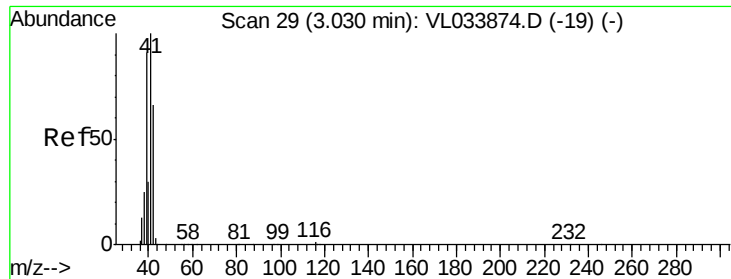
5000

0

3.04 3.06 3.08 3.10

Time-->





#9

Propene

Concen: 4.606 ppbv

RT: 3.03 min Scan# 29

Delta R.T. -0.00 min

Lab File: VL033922.D

Acq: 14 Jun 2019 7:27

Instrument :

MSVOA_L

ClientSampleId :

V1DL

Tot Ion: 41 Resp: 218227

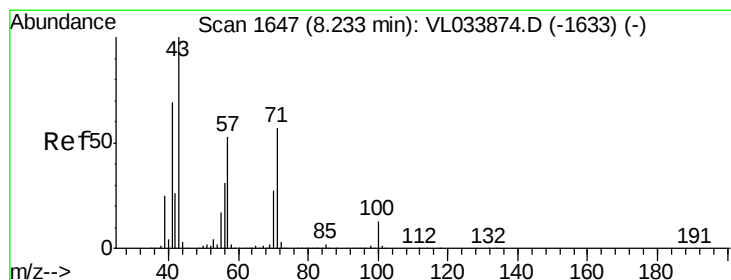
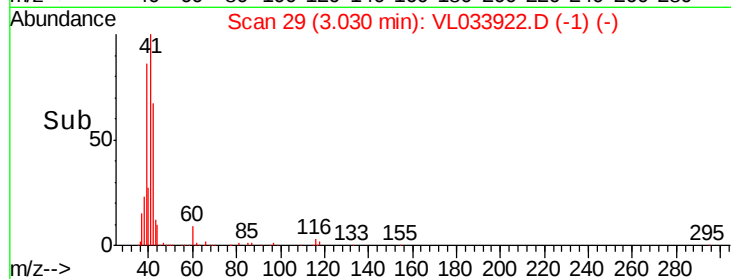
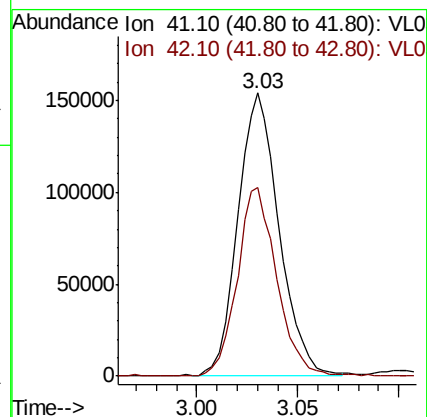
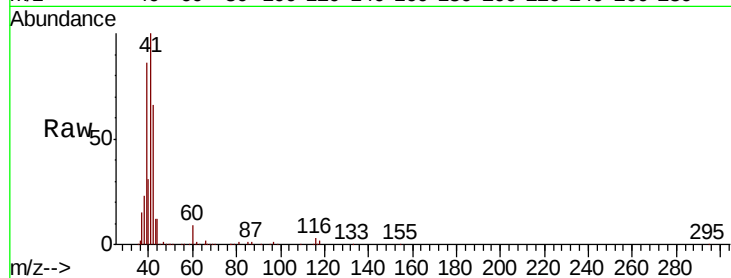
Ion Ratio Lower Upper

41 100

42 65.2 56.3 84.5

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#10

Heptane

Concen: 0.594 ppbv

RT: 8.23 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VL033922.D

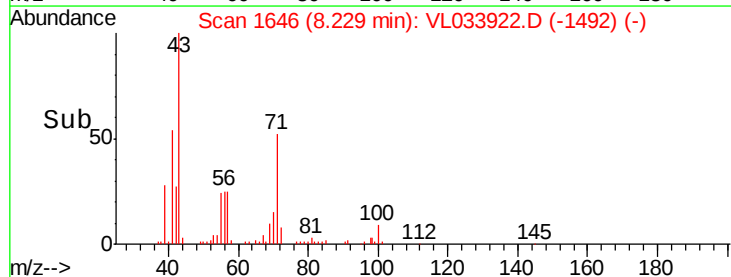
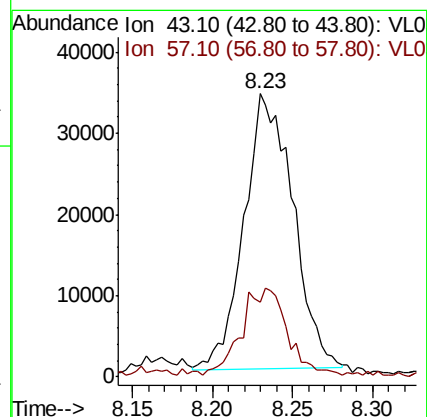
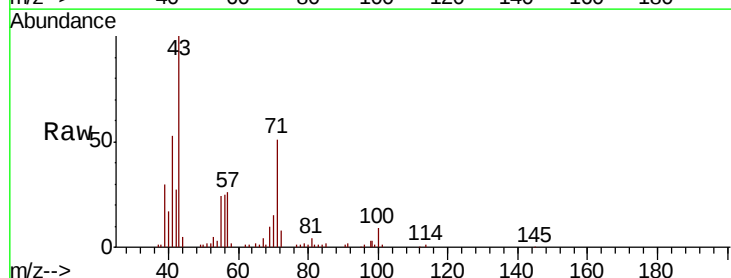
Acq: 14 Jun 2019 7:27

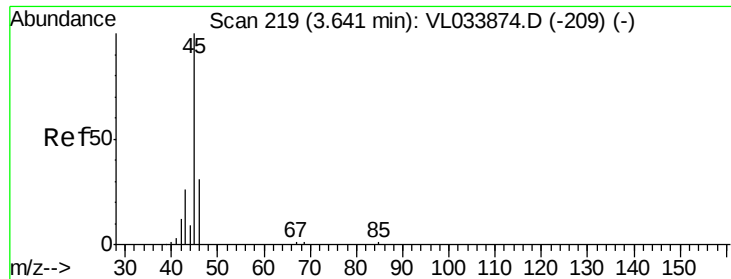
Tgt Ion: 43 Resp: 71161

Ion Ratio Lower Upper

43 100

57 33.0 41.7 62.5#





#13

Ethanol

Concen: 7.806 ppbv

RT: 3.64 min Scan# 219

Delta R.T. -0.00 min

Lab File: VL033922.D

Acq: 14 Jun 2019 7:27

Instrument :

MSVOA_L

ClientSampleId :

V1DL

Tot Ion: 45 Resp: 120323

Ion Ratio Lower Upper

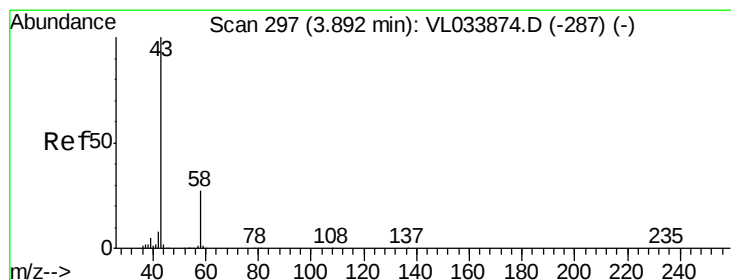
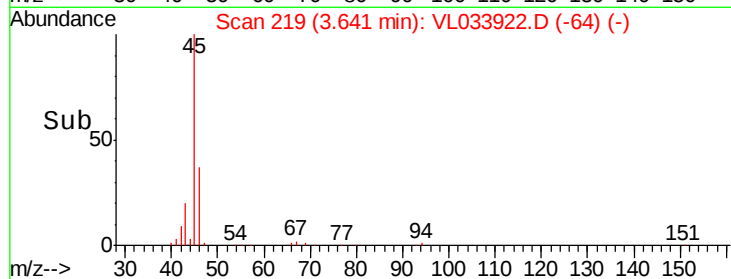
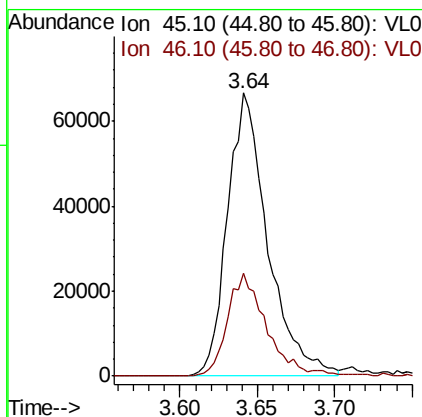
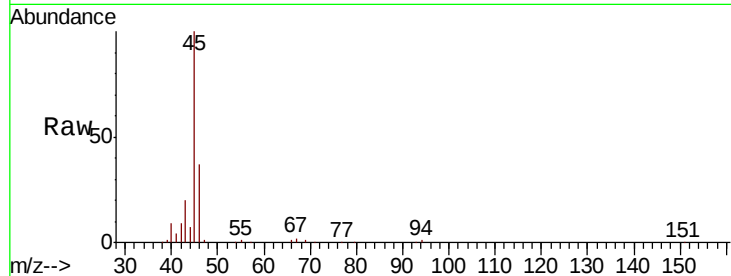
45 100

46 35.4 15.3 61.1

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#15

Acetone

Concen: 24.572 ppbv

RT: 3.89 min Scan# 295

Delta R.T. -0.01 min

Lab File: VL033922.D

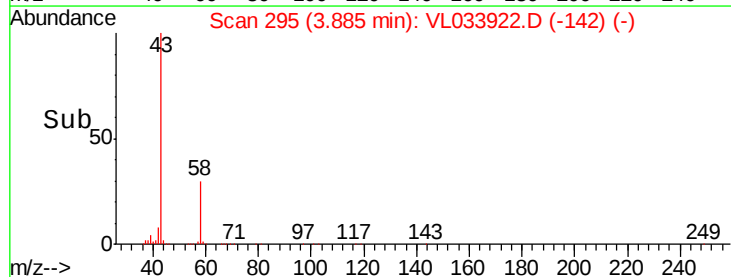
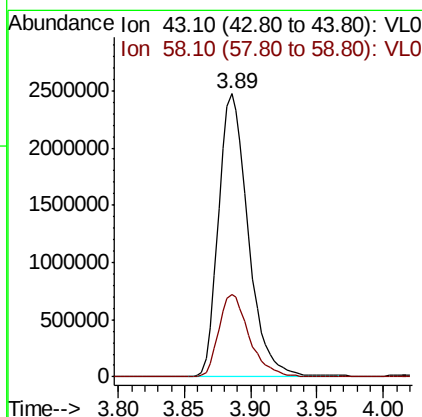
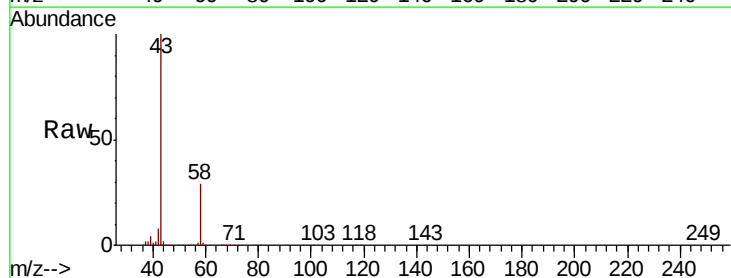
Acq: 14 Jun 2019 7:27

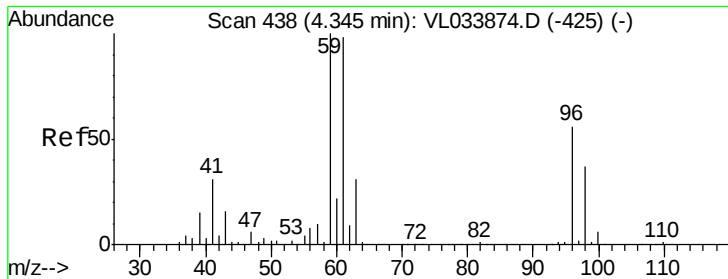
Tgt Ion: 43 Resp: 3854180

Ion Ratio Lower Upper

43 100

58 30.2 21.3 31.9





#17

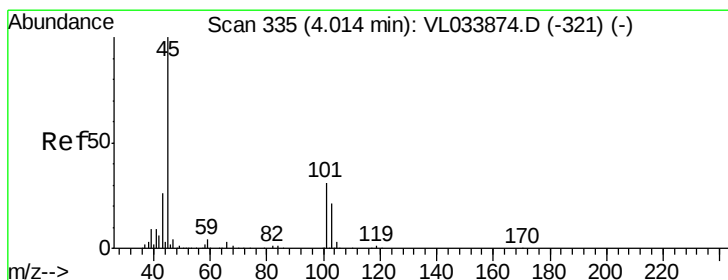
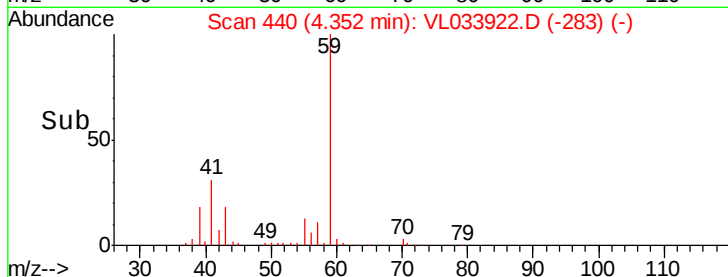
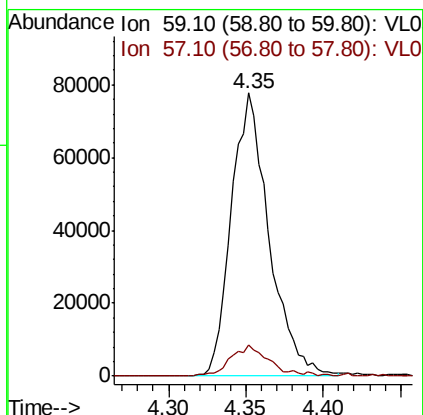
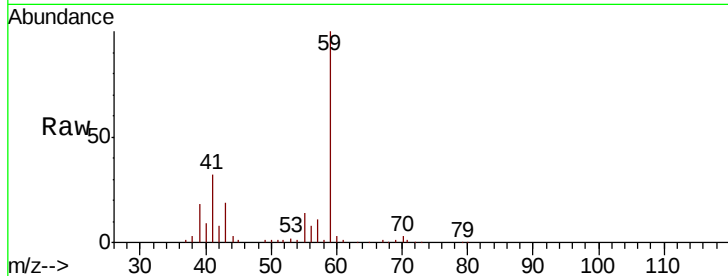
tert-Butyl alcohol
Concen: 1.075 ppbv
RT: 4.35 min Scan# 440
Delta R.T. 0.01 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampled :
V1DL

Tot Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.4	12.6

Manual Integrations
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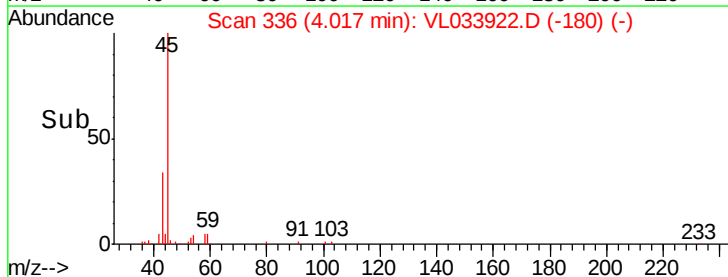
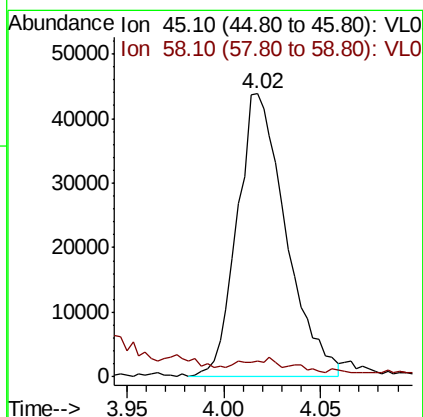
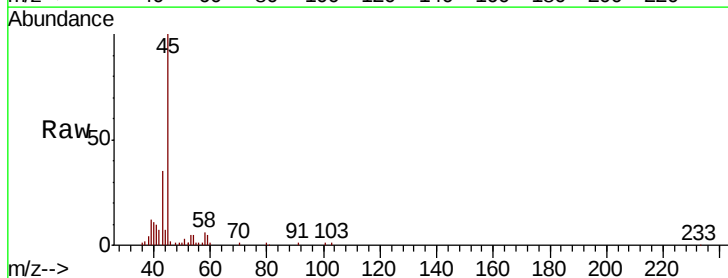
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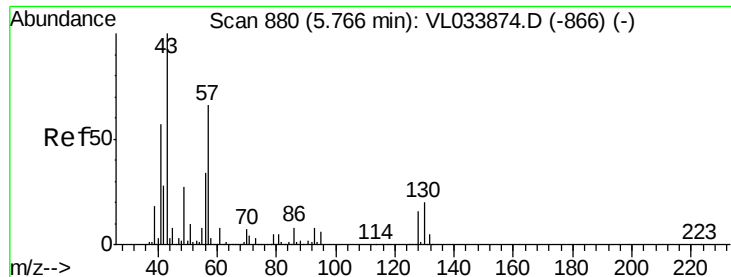


#19

Isopropyl Alcohol
Concen: 0.858 ppbv
RT: 4.02 min Scan# 336
Delta R.T. 0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion	Ratio	Lower	Upper
45	100		
58	0.0	1.8	2.6#





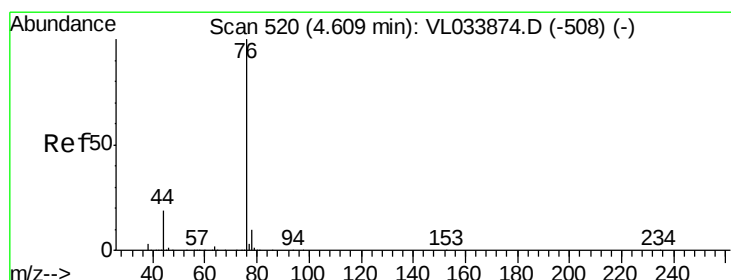
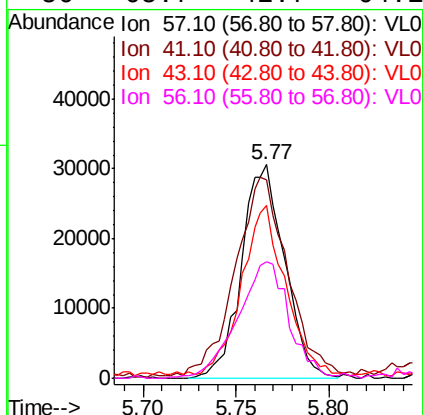
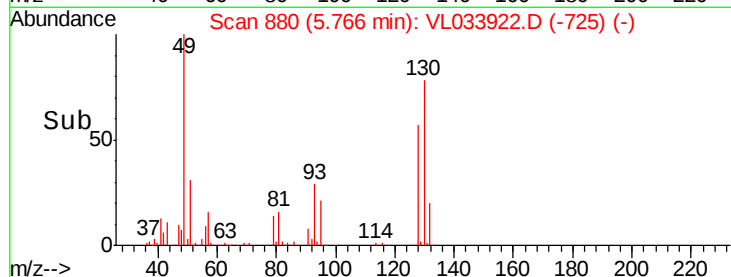
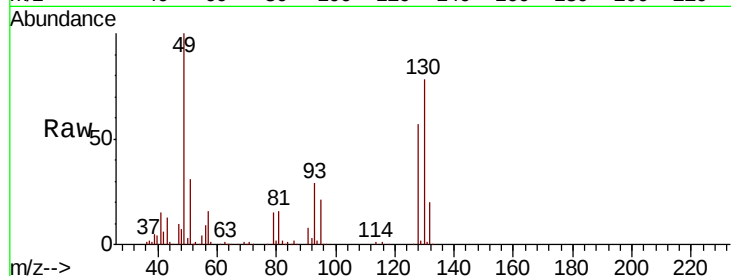
#26
Hexane
Concen: 0.455 ppbv
RT: 5.77 min Scan# 880
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampleId :
V1DL

Tot Ion	Ratio	Lower	Upper
57	100		
41	114.5	71.4	107.2#
43	84.7	183.7	275.5#
56	65.7	42.7	64.1#

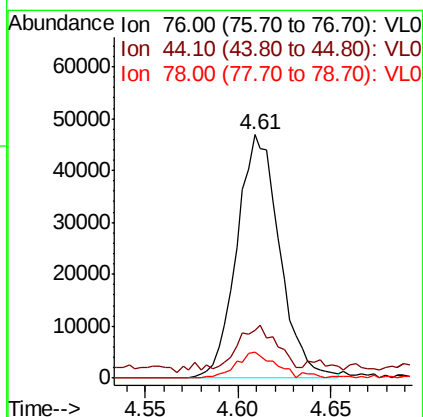
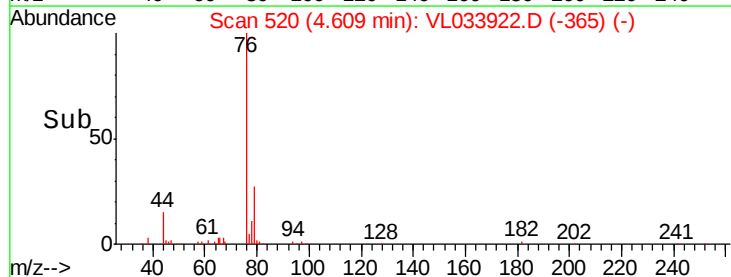
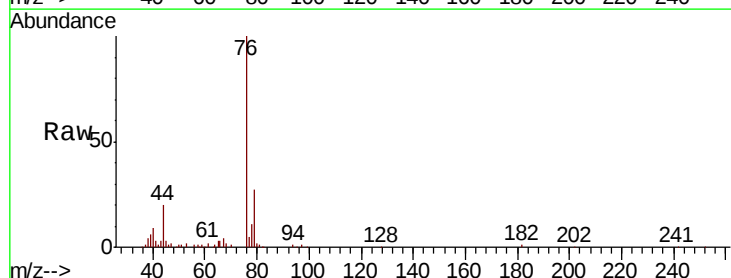
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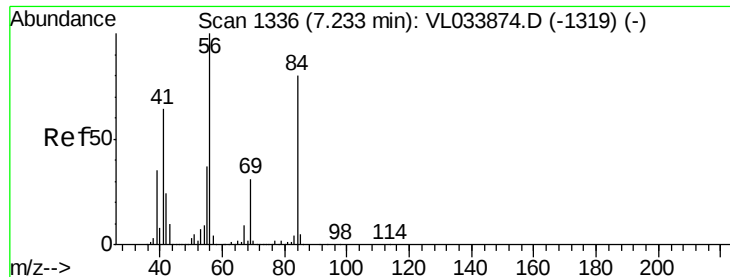
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#27
Carbon Disulfide
Concen: 0.499 ppbv
RT: 4.61 min Scan# 520
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion	Ratio	Lower	Upper
76	100		
44	23.5	14.4	21.6#
78	10.7	7.5	11.3





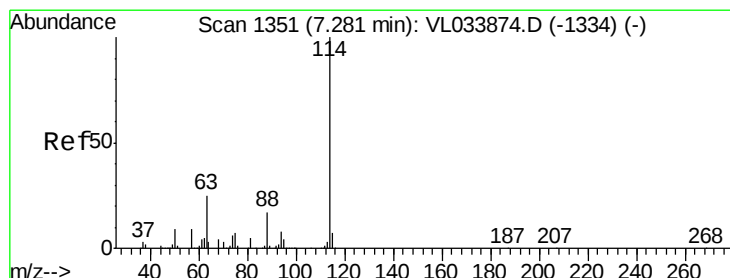
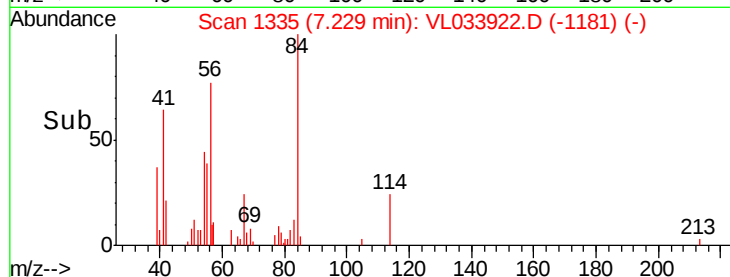
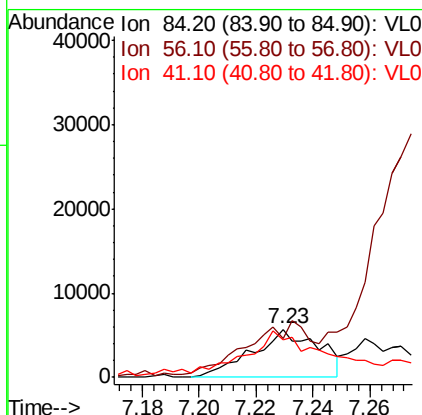
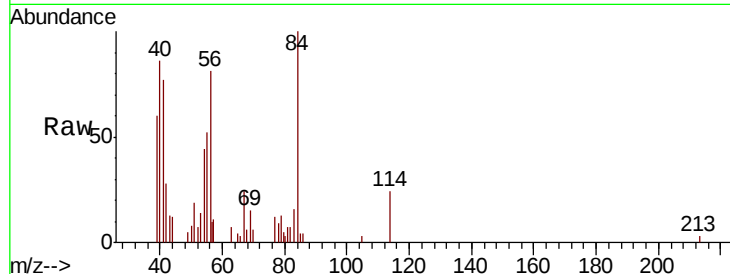
#30
Cvclohexane
Concen: 0.121 ppbv m
RT: 7.23 min Scan# 1335
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampled :
V1DL

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	105.8	158.8#
41	133.9	65.7	98.5#

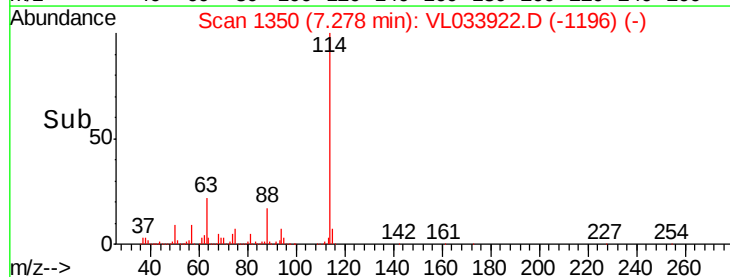
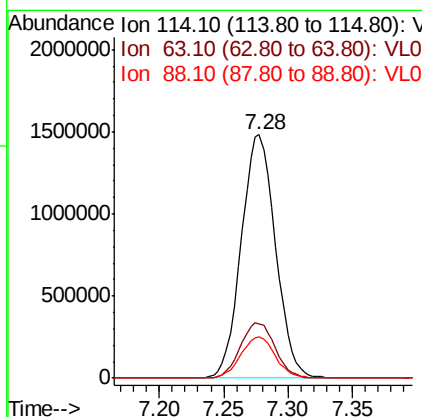
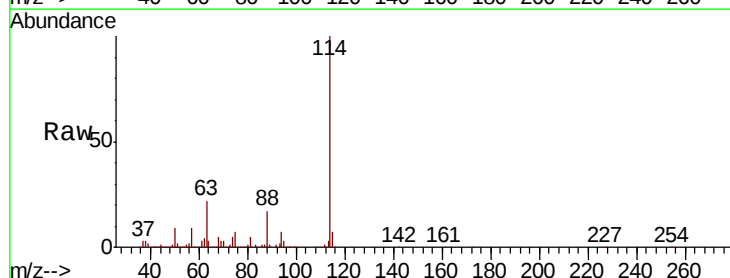
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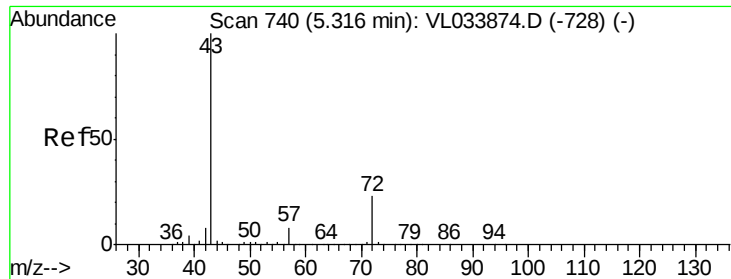
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.28 min Scan# 1350
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.2	21.1	31.7
88	17.1	14.2	21.4





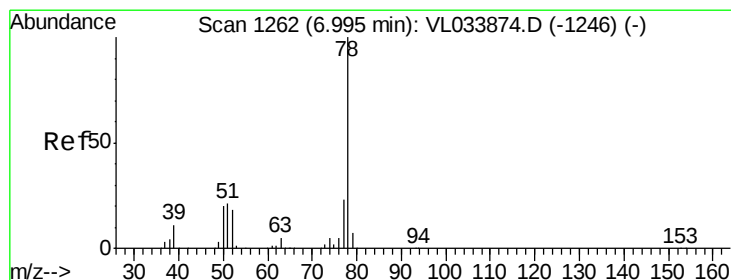
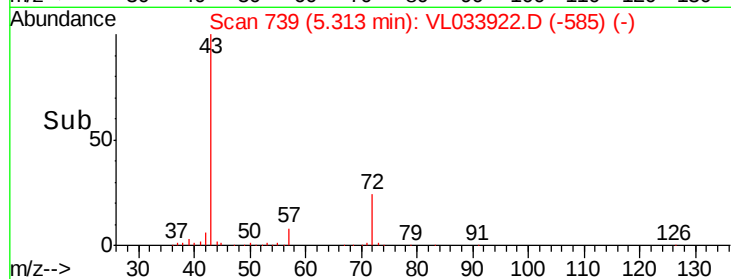
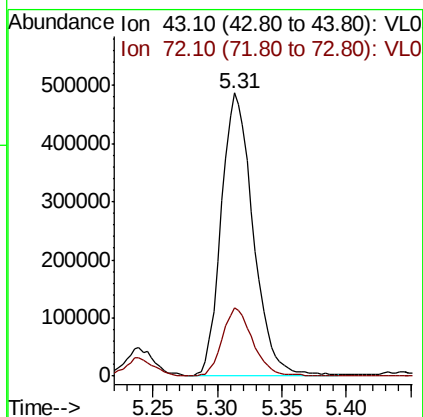
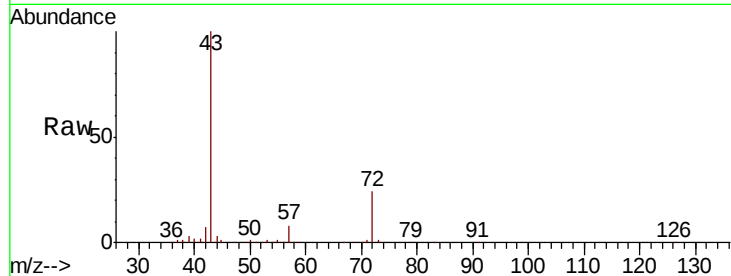
#34
2-Butanone
Concen: 5.363 ppbv
RT: 5.31 min Scan# 739
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampled :
V1DL

Tot Ion	43	Resp	829153
Ion Ratio	100	Lower	Upper
72	23.2	17.9	26.9

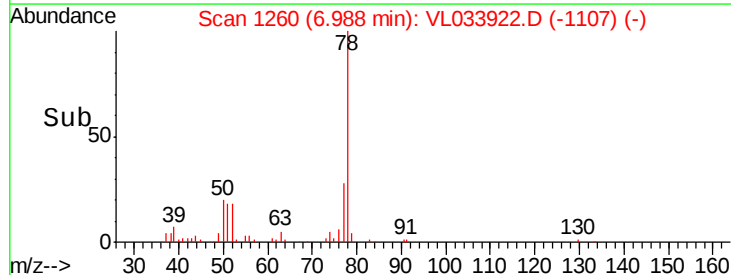
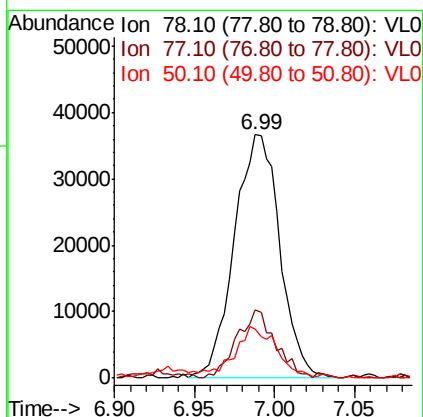
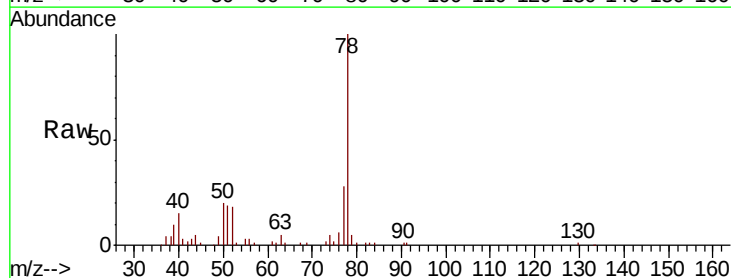
Manual Integrations
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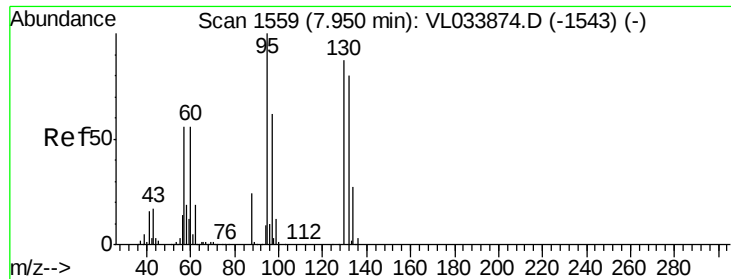
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#36
Benzene
Concen: 0.339 ppbv
RT: 6.99 min Scan# 1260
Delta R.T. -0.01 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion	78	Resp	70873
Ion Ratio	100	Lower	Upper
77	28.2	18.2	27.2#
50	20.1	15.9	23.9





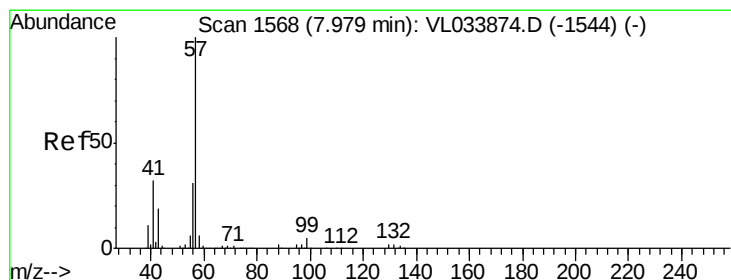
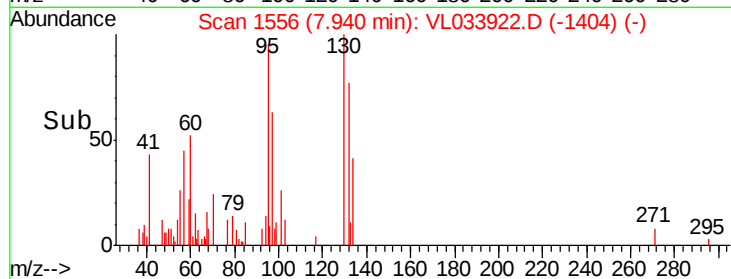
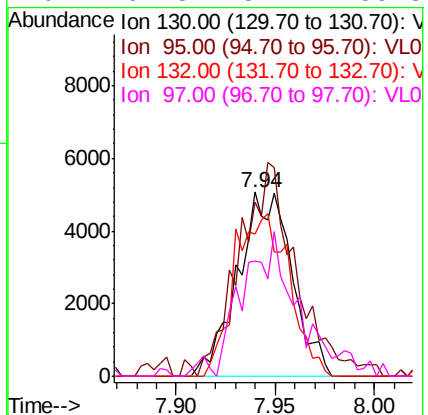
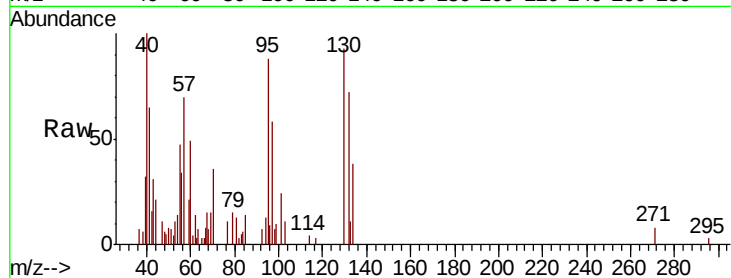
#38
 Trichloroethene
 Concen: 0.117 ppbv m
 RT: 7.94 min Scan# 1556
 Delta R.T. -0.01 min
 Lab File: VL033922.D
 Acq: 14 Jun 2019 7:27

Instrument :
 MSVOA_L
 ClientSampled :
 V1DL

Tot Ion	Ratio	Lower	Upper
130	100		
95	95.0	92.0	138.0
132	77.2	73.8	110.8
97	62.8	57.2	85.8

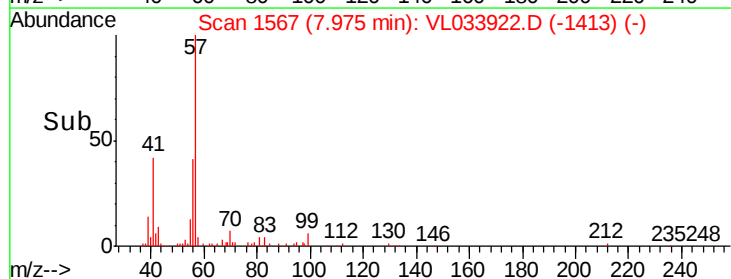
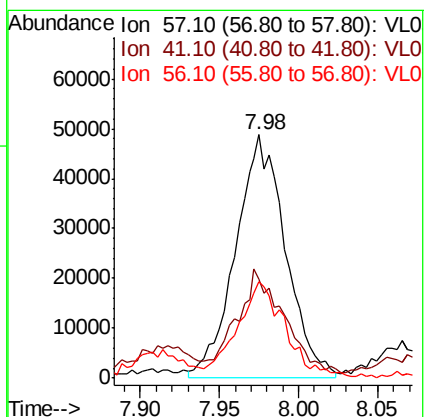
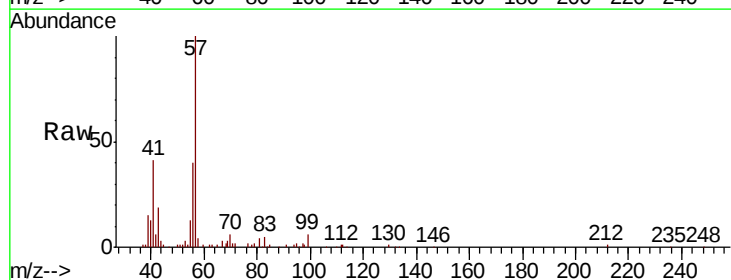
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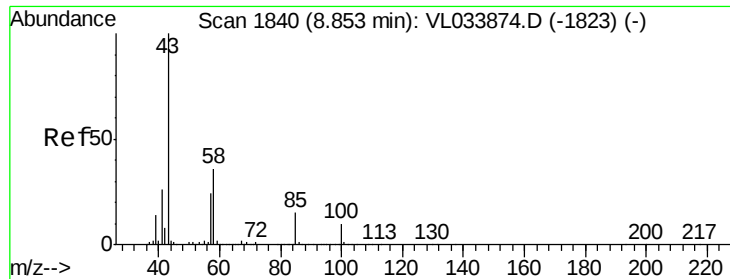
MMDadoda
 6/17/2019 12:37:39 AM



#44
 2,2,4-Trimethylpentane
 Concen: 0.291 ppbv m
 RT: 7.98 min Scan# 1567
 Delta R.T. -0.00 min
 Lab File: VL033922.D
 Acq: 14 Jun 2019 7:27

Tgt Ion	Ratio	Lower	Upper
57	100		
41	42.1	26.1	39.1#
56	37.7	24.6	36.8#





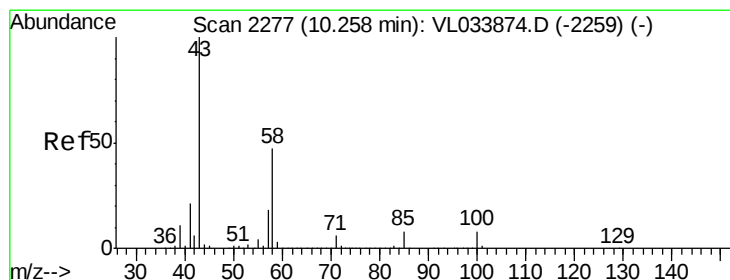
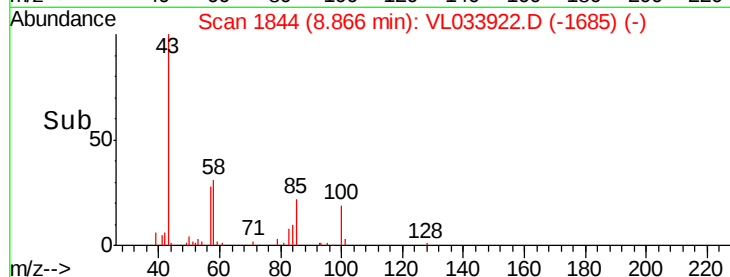
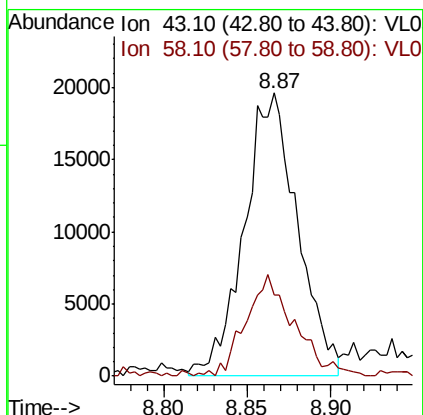
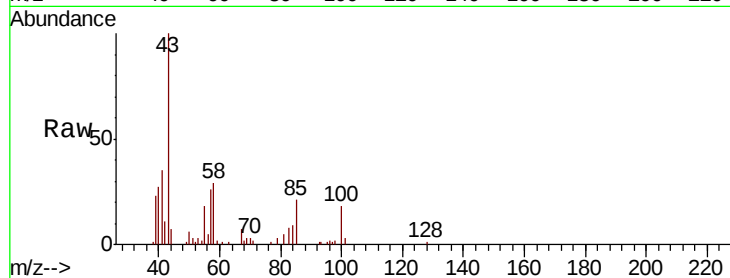
#50
4-Methyl-2-Pentanone
Concen: 0.189 ppbv m
RT: 8.87 min Scan# 1844
Delta R.T. 0.01 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampleId :
V1DL

Tot Ion	43	Resp	43562
Ion Ratio	Lower	Upper	
43	100		
58	0.0	28.6	42.8#

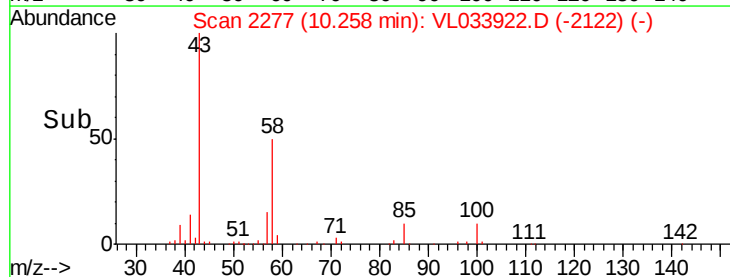
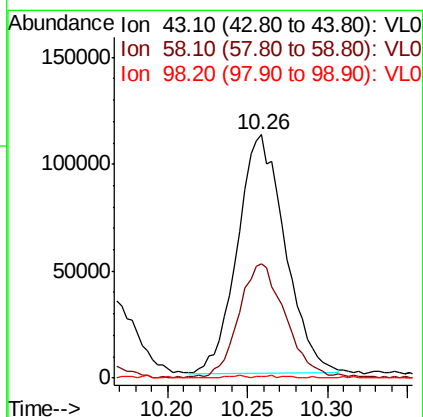
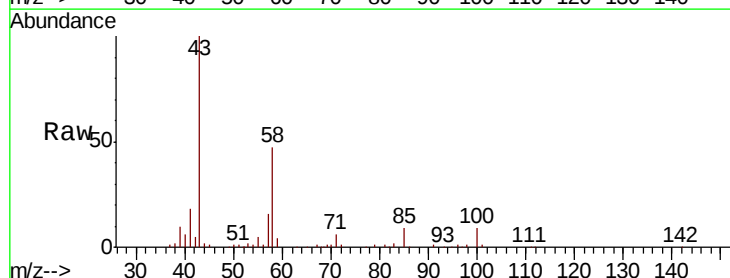
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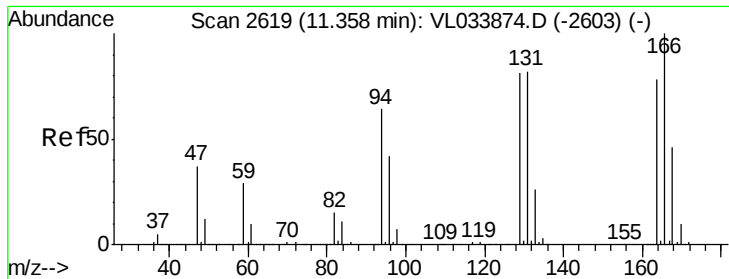
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#51
2-Hexanone
Concen: 1.258 ppbv
RT: 10.26 min Scan# 2277
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion	43	Resp	226574
Ion Ratio	Lower	Upper	
43	100		
58	47.0	38.2	57.4
98	1.2	0.2	0.2#





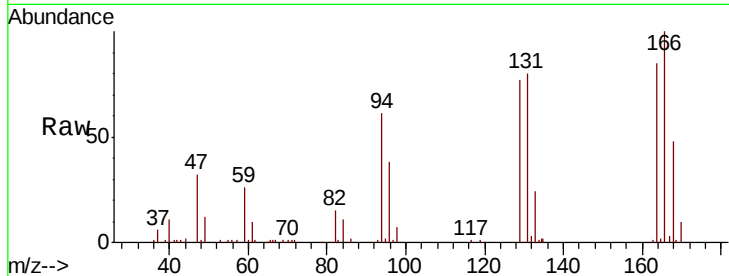
#52
Tetrachloroethene
Concen: 1.307 ppbv
RT: 11.35 min Scan# 2618
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampleId :
V1DL

Tot Ion	Ratio	Lower	Upper
164	100		
166	115.0	103.1	154.7
129	88.8	83.9	125.9
131	91.7	85.1	127.7

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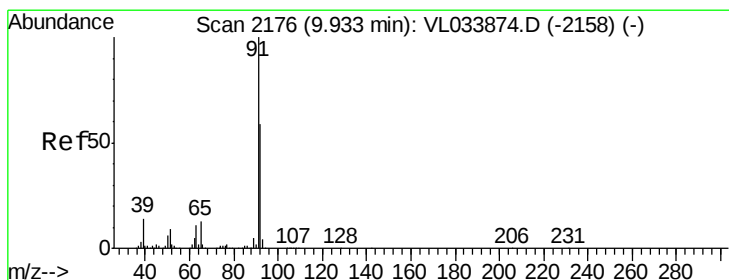
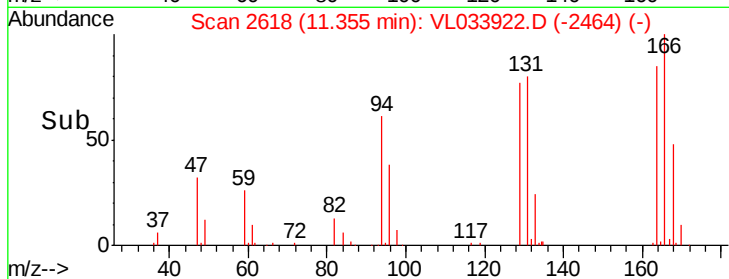
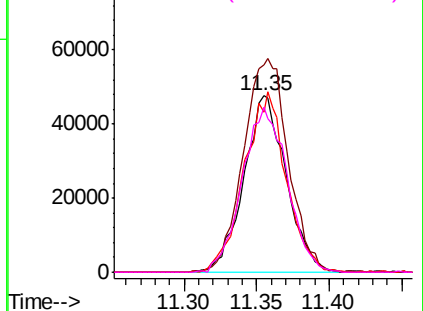
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

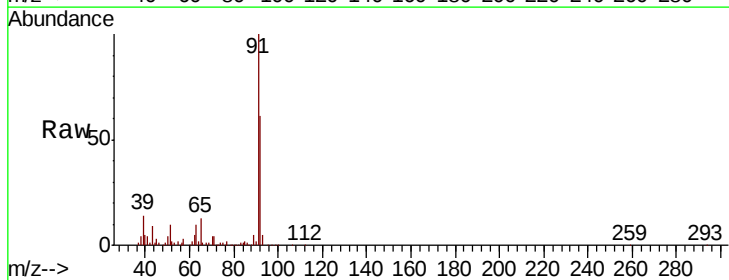
Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53
Toluene
Concen: 1.099 ppbv
RT: 9.93 min Scan# 2174
Delta R.T. -0.01 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

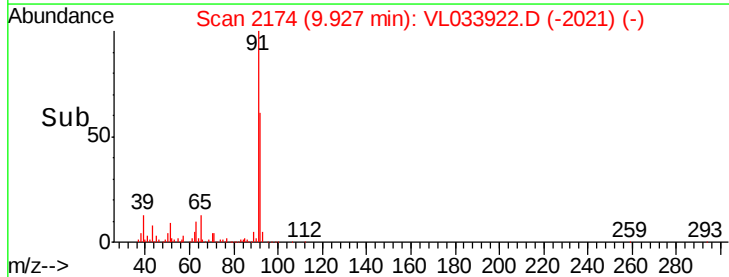
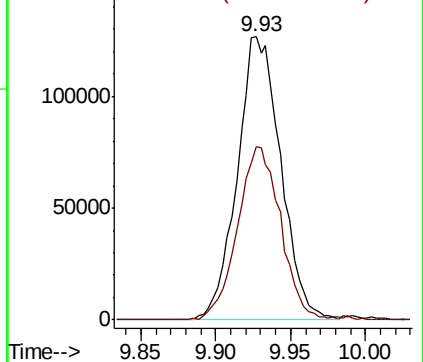
Tgt Ion	Ratio	Lower	Upper
91	100		
92	61.4	47.0	70.6

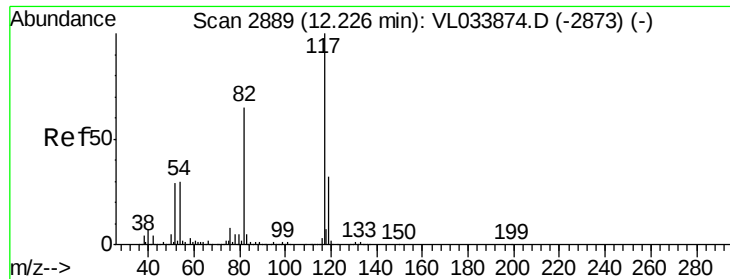


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





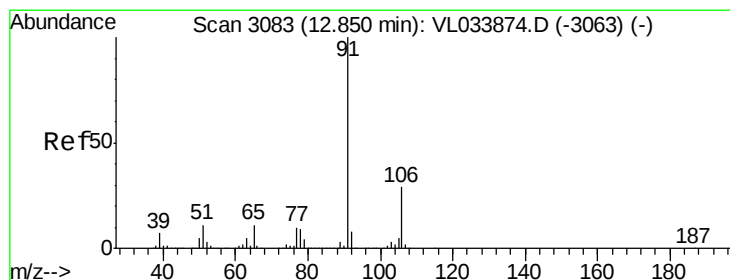
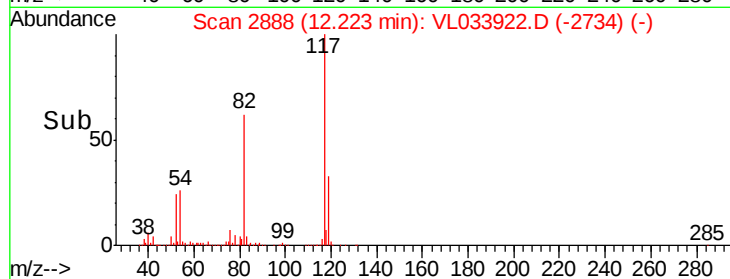
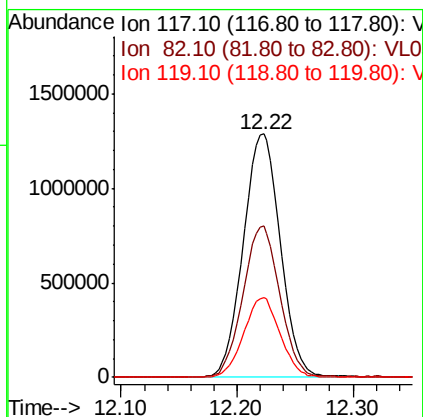
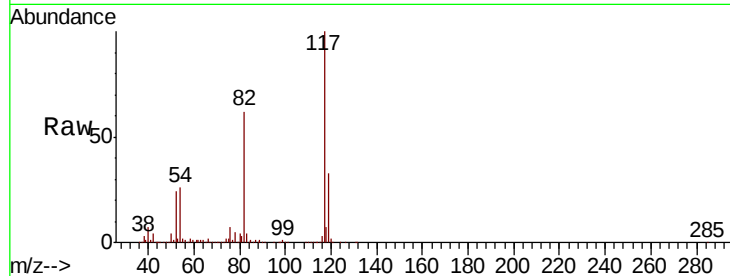
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.22 min Scan# 2888
Delta R.T. -0.00 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampleId :
V1DL

Tot Ion:117 Resp: 2871090
Ion Ratio Lower Upper
117 100
82 61.8 50.2 75.2
119 32.3 24.8 37.2

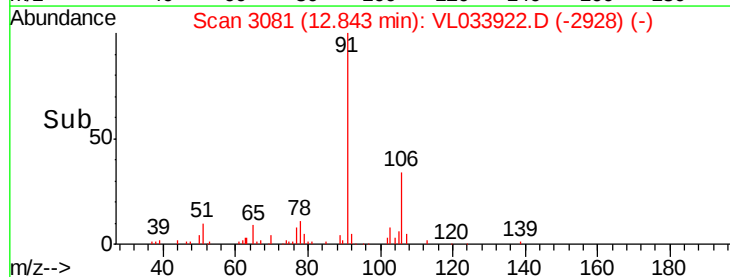
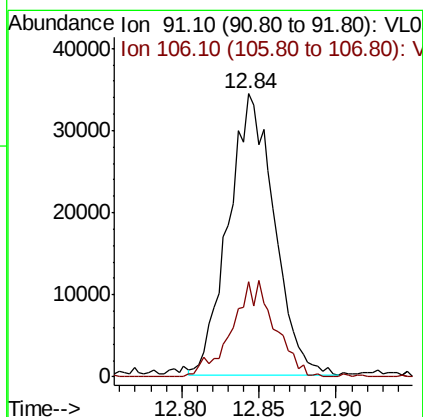
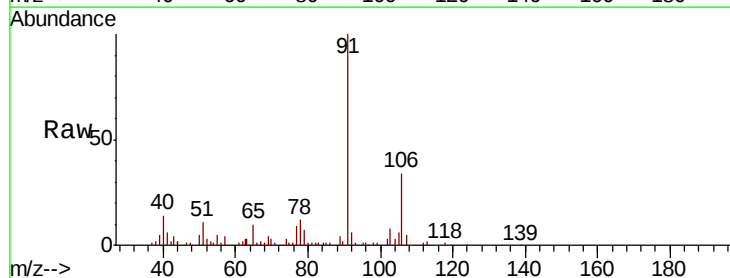
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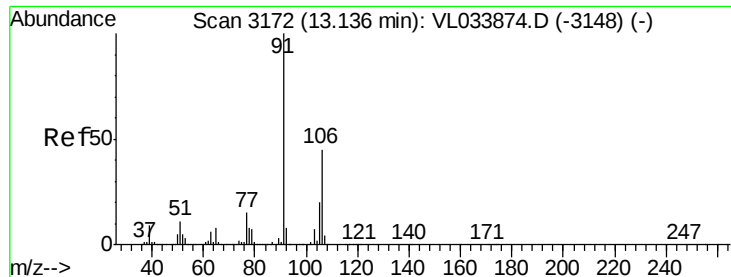
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#58
Ethyl Benzene
Concen: 0.218 ppbv
RT: 12.84 min Scan# 3081
Delta R.T. -0.01 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion: 91 Resp: 70717
Ion Ratio Lower Upper
91 100
106 33.7 23.0 34.6





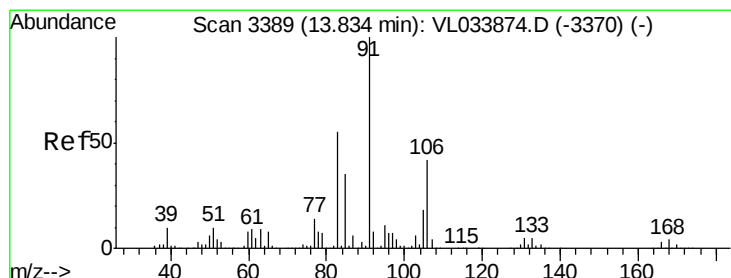
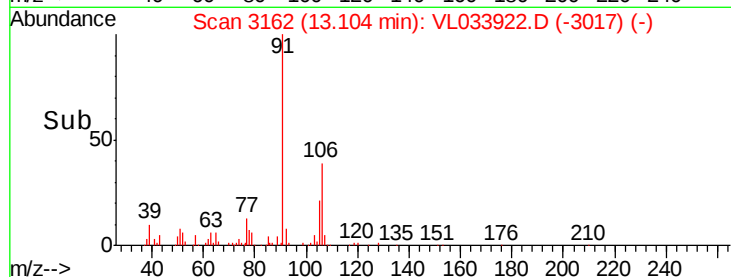
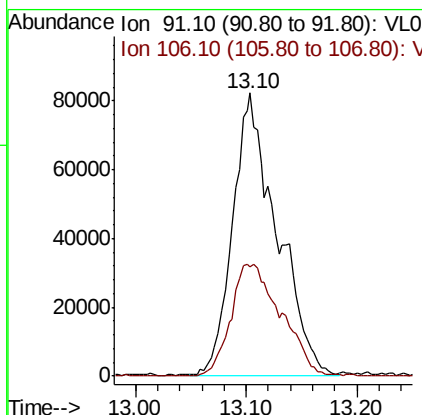
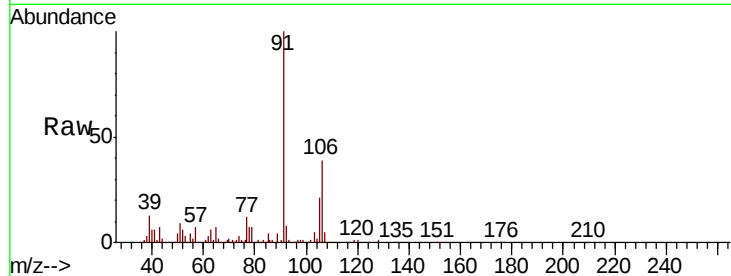
#59
m/p-Xylene
Concen: 0.776 ppbv m
RT: 13.10 min Scan# 3162
Delta R.T. -0.03 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Instrument :
MSVOA_L
ClientSampleId :
V1DL

Tot Ion: 91 Resp: 228445
Ion Ratio Lower Upper
91 100
106 0.0 35.8 53.8#

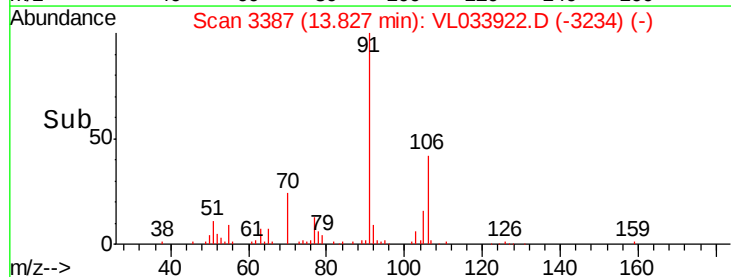
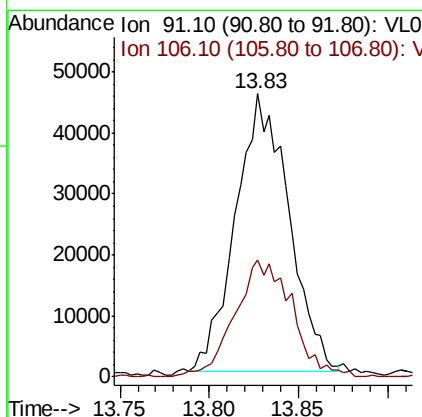
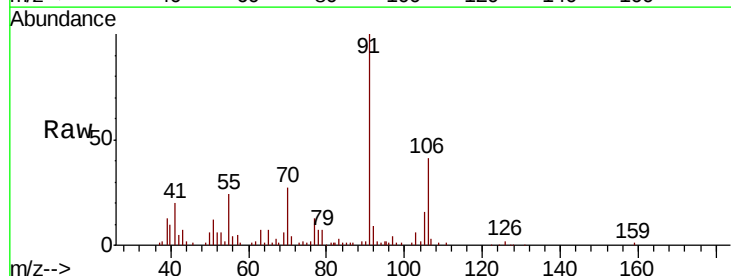
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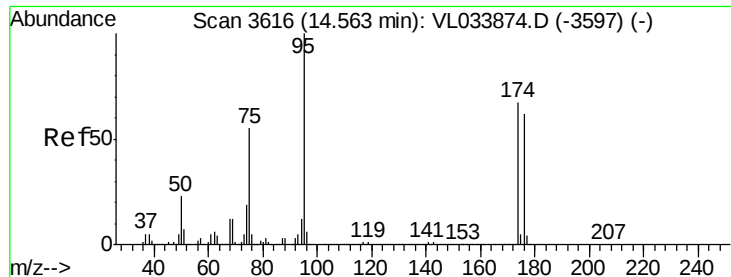
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#60
o-Xylene
Concen: 0.311 ppbv
RT: 13.83 min Scan# 3387
Delta R.T. -0.01 min
Lab File: VL033922.D
Acq: 14 Jun 2019 7:27

Tgt Ion: 91 Resp: 94526
Ion Ratio Lower Upper
91 100
106 45.2 21.7 65.1





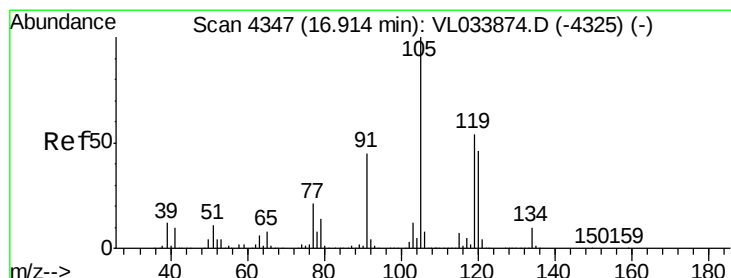
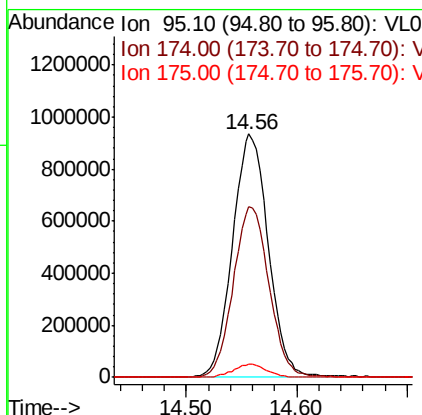
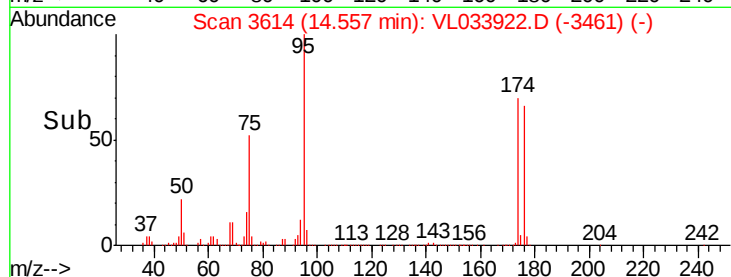
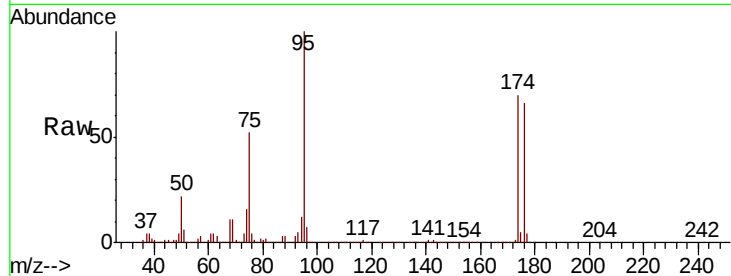
#68
 1-Bromo-4-Fluorobenzene
 Concen: 8.907 ppbv
 RT: 14.56 min Scan# 3614
 Delta R.T. -0.01 min
 Lab File: VL033922.D
 Acq: 14 Jun 2019 7:27

Instrument :
 MSVOA_L
 ClientSampled :
 V1DL

Tot Ion: 95 Resp: 2100407
 Ion Ratio Lower Upper
 95 100
 174 70.4 54.0 81.0
 175 5.2 3.8 5.8

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.398 ppbv
 RT: 16.91 min Scan# 4345
 Delta R.T. -0.01 min
 Lab File: VL033922.D
 Acq: 14 Jun 2019 7:27

Tgt Ion: 105 Resp: 156370
 Ion Ratio Lower Upper
 105 100
 120 38.6 36.7 55.1
 91 11.8 35.8 53.8#
 77 13.9 16.9 25.3#

