

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL061319\
 Data File : VL033914.D
 Acq On : 14 Jun 2019 2:09
 Operator : SY/AP
 Sample : K3367-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1-BSMNT

Manual Integrations
 APPROVED

MMDadoda
 6/17/2019 12:37:24 AM

Quant Time: Jun 16 18:13:03 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	804327	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	2057898	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.22	117	2067457	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.56	95	1576091	9.28	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	92.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	39622m	0.304	ppbv	
3) Chlorodifluoromethane	3.01	51	95764m	1.011	ppbv	
4) Chloromethane	3.17	50	30700	0.568	ppbv	91
9) Propene	3.04	41	105524m	2.978	ppbv	
10) Heptane	8.23	43	30649m	0.342	ppbv	
11) Trichlorofluoromethane	3.99	101	41316	0.245	ppbv	92
13) Ethanol	3.64	45	1748955	151.720	ppbv	96
15) Acetone	3.89	43	911278	7.768	ppbv	95
19) Isopropyl Alcohol	4.03	45	138771	2.071	ppbv #	1
20) Methylene Chloride	4.40	84	33172	0.725	ppbv #	91
26) Hexane	5.77	57	84336	1.037	ppbv #	61
29) Chloroform	5.83	83	156128	1.121	ppbv	90
30) Cyclohexane	7.23	84	13593m	0.237	ppbv	
34) 2-Butanone	5.32	43	45706	0.394	ppbv	97
35) Carbon Tetrachloride	7.12	117	11588m	0.073	ppbv	
36) Benzene	6.99	78	117814	0.749	ppbv	97
38) Trichloroethene	7.95	130	2371m	0.039	ppbv	
44) 2,2,4-Trimethylpentane	7.98	57	166993	0.597	ppbv #	80
52) Tetrachloroethene	11.36	164	1265714	22.883	ppbv	96
53) Toluene	9.93	91	458252	2.634	ppbv	98
58) Ethyl Benzene	12.85	91	48623	0.209	ppbv	99
59) m/p-Xylene	13.11	91	167422m	0.790	ppbv	
60) o-Xylene	13.83	91	60376m	0.276	ppbv	
72) 4-Ethyltoluene	15.98	105	48041m	0.193	ppbv	
73) 1,3,5-Trimethylbenzene	16.14	105	39906	0.163	ppbv	99
74) 1,2,4-Trimethylbenzene	16.91	105	141912	0.502	ppbv #	69

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

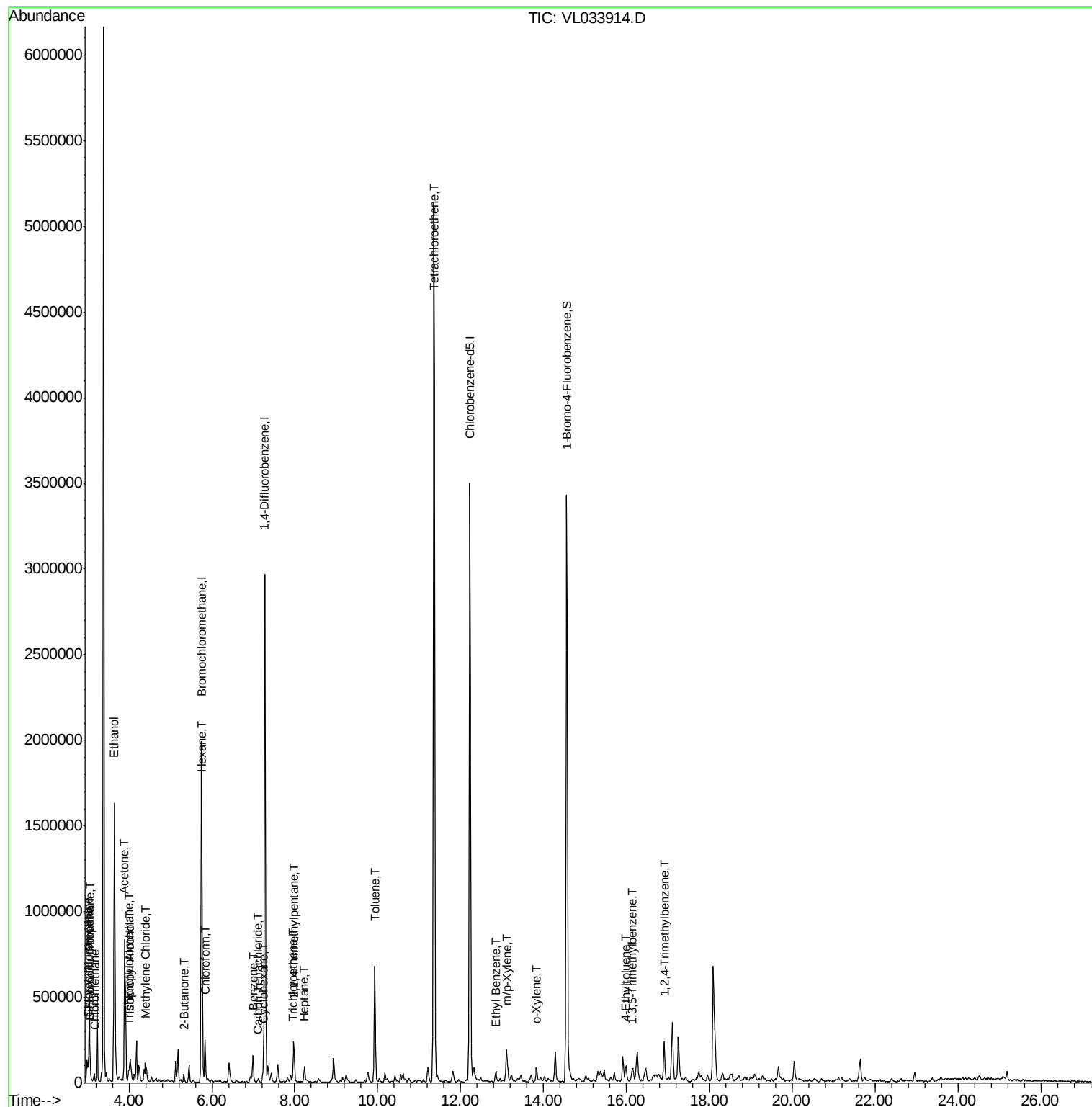
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL061319\
Data File : VL033914.D
Acq On : 14 Jun 2019 2:09
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

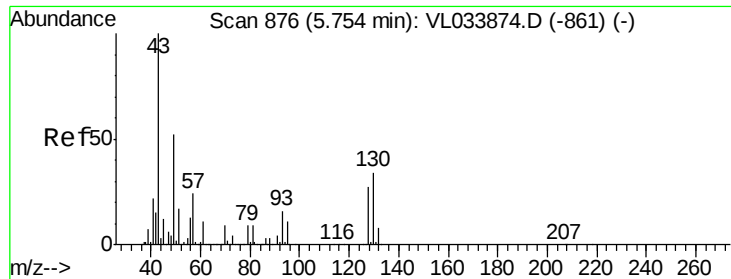
Instrument :
MSVOA_L
ClientSampleId :
IA1-BSMNT

Manual Integrations
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6/17/2019 12:37:24 AM

Quant Time: Jun 16 18:13:03 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: VL033914.D

Acq: 14 Jun 2019 2:09

Instrument :

MSVOA_L

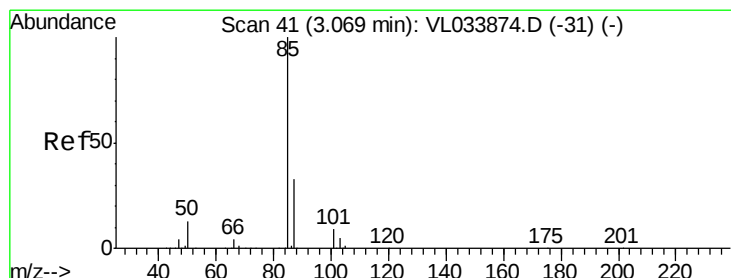
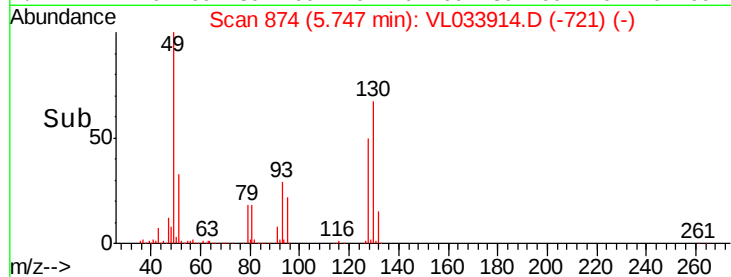
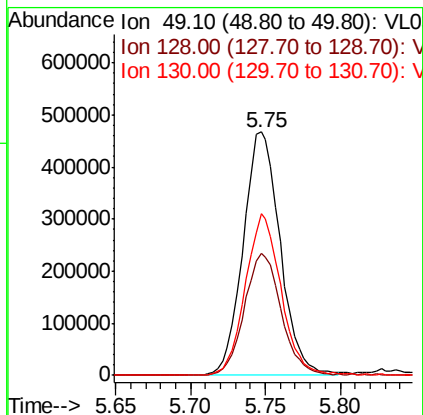
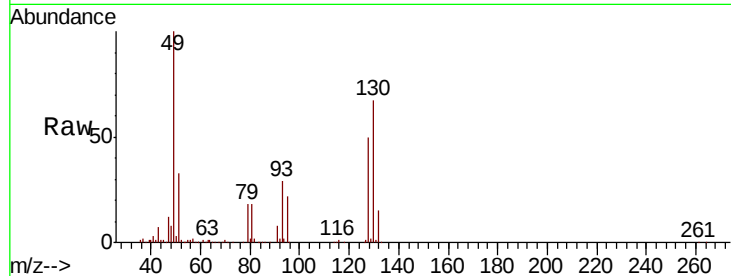
ClientSampleId :

IA1-BSMNT

Tot Ion:	49	Resp:	804327
Ion Ratio	Lower	Upper	
49	100		
128	49.9	25.5	76.5
130	64.4	32.5	97.4

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.304 ppbv m

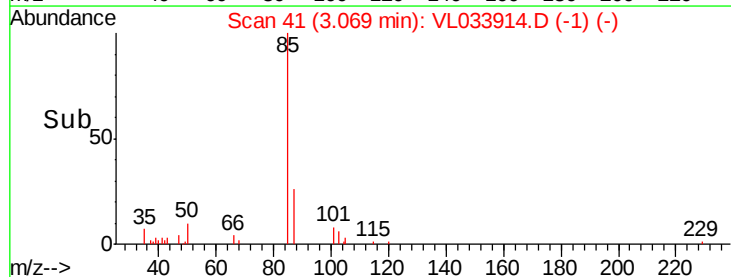
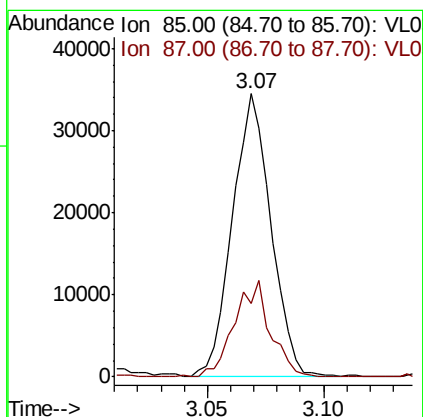
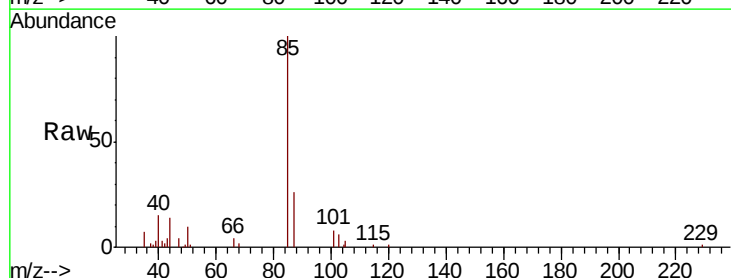
RT: 3.07 min Scan# 41

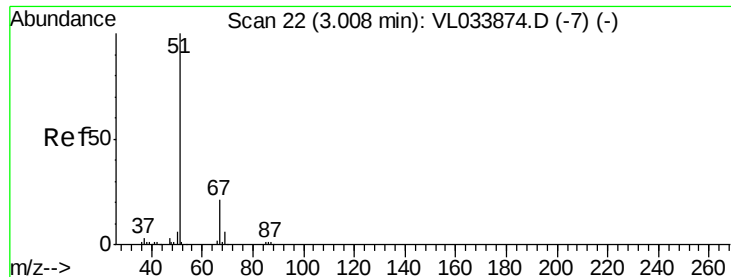
Delta R.T. -0.00 min

Lab File: VL033914.D

Acq: 14 Jun 2019 2:09

Tgt Ion:	85	Resp:	39622
Ion Ratio	Lower	Upper	
85	100		
87	25.7	26.6	40.0#





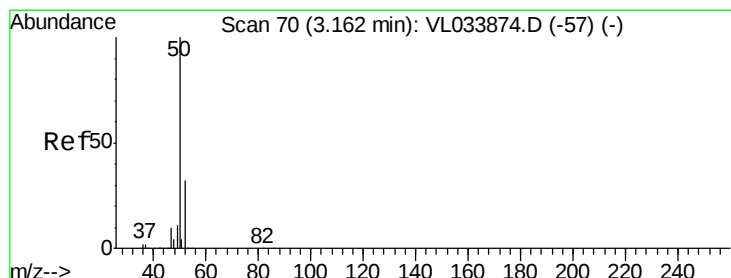
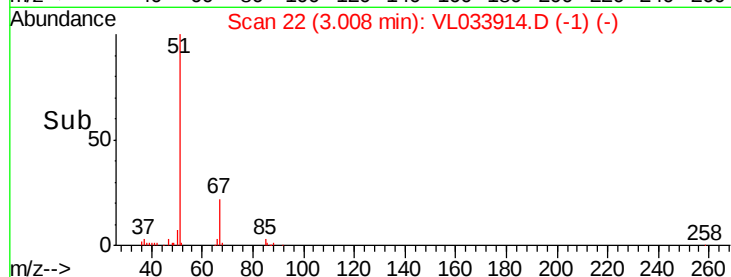
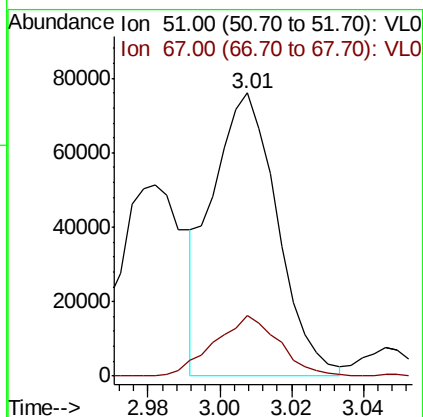
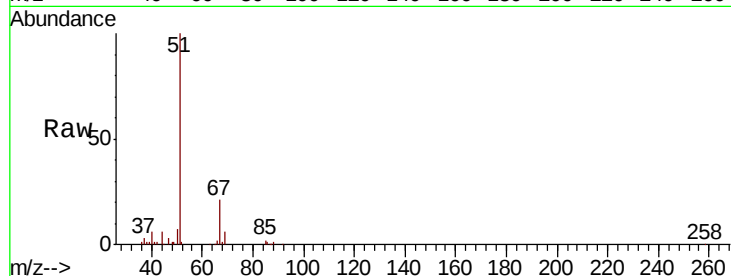
#3
Chlorodifluoromethane
Concen: 1.011 ppbv
RT: 3.01 min Scan# 22
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Instrument :
MSVOA_L
ClientSampleId :
IA1-BSMNT

Tot Ion: 51 Resp: 95764
Ion Ratio Lower Upper
51 100
67 21.6 16.4 24.6

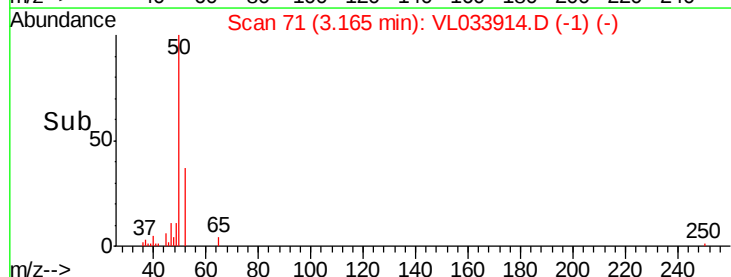
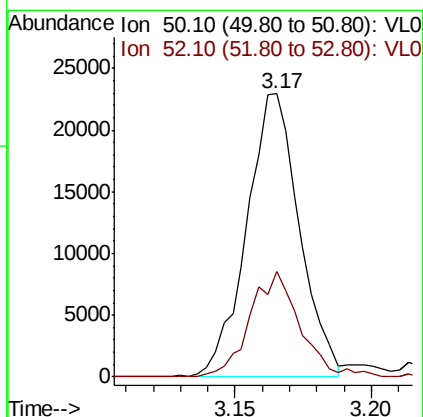
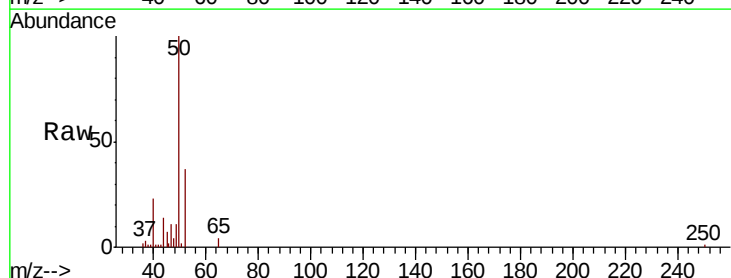
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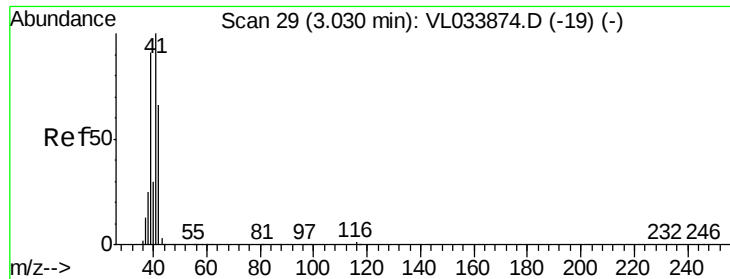
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#4
Chloromethane
Concen: 0.568 ppbv
RT: 3.17 min Scan# 71
Delta R.T. 0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tgt Ion: 50 Resp: 30700
Ion Ratio Lower Upper
50 100
52 36.5 25.4 38.0





#9

Propene

Concen: 2.978 ppbv m

RT: 3.04 min Scan# 32

Delta R.T. 0.01 min

Lab File: VL033914.D

Acq: 14 Jun 2019 2:09

Instrument :

MSVOA_L

ClientSampleId :

IA1-BSMNT

Tot Ion: 41 Resp: 105524

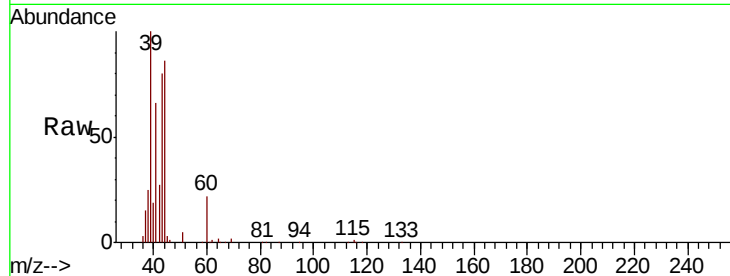
Ion Ratio Lower Upper

41 100

42 77.8 56.3 84.5

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.04

80000

60000

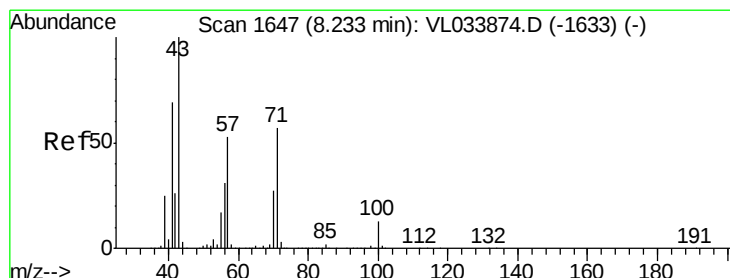
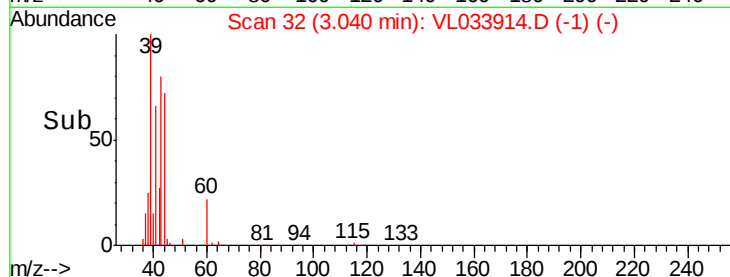
40000

20000

0

Time-->

3.00 3.05



#10

Heptane

Concen: 0.342 ppbv m

RT: 8.23 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VL033914.D

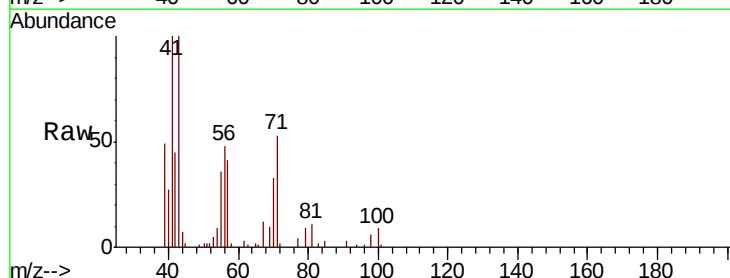
Acq: 14 Jun 2019 2:09

Tgt Ion: 43 Resp: 30649

Ion Ratio Lower Upper

43 100

57 0.0 41.7 62.5#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.23

15000

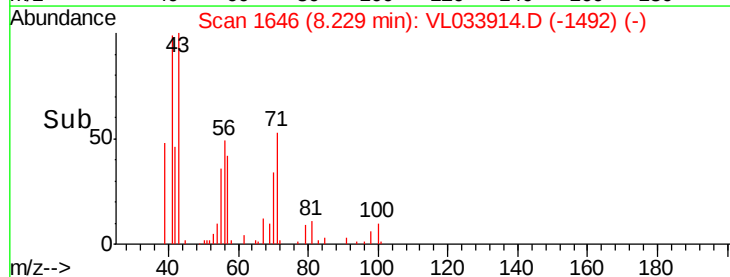
10000

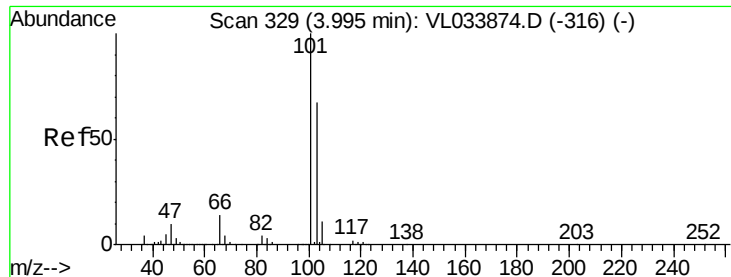
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0

Time-->

8.20 8.25 8.30





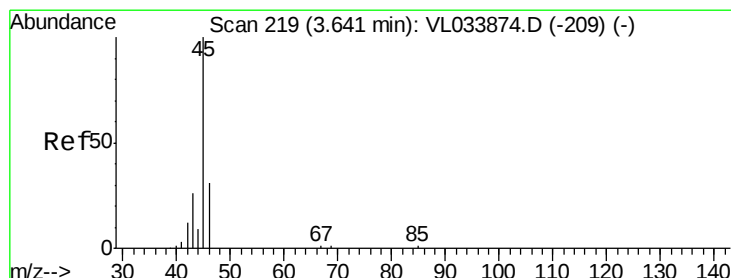
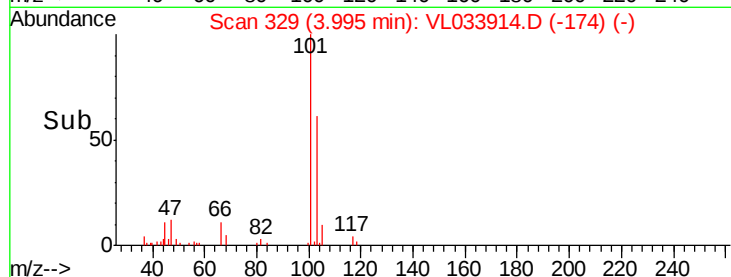
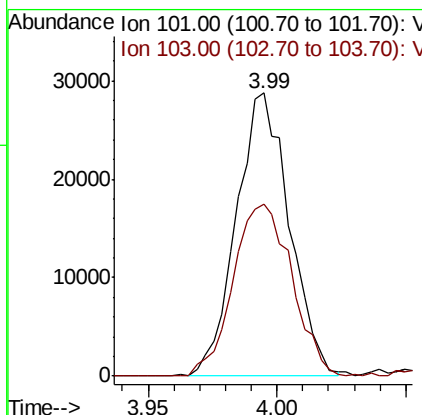
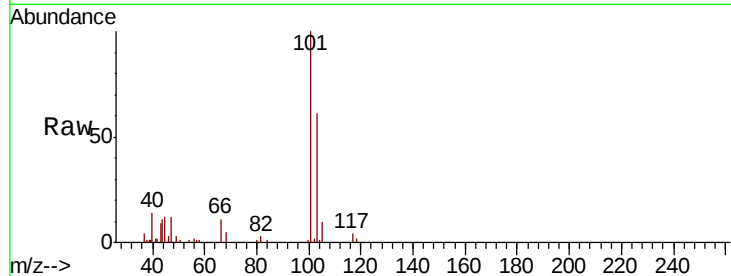
#11
 Trichlorofluoromethane
 Concen: 0.245 ppbv
 RT: 3.99 min Scan# 329
 Delta R.T. -0.00 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1-BSMNT

Tot Ion	Ratio	Lower	Upper
101	100		
103	60.8	53.6	80.4

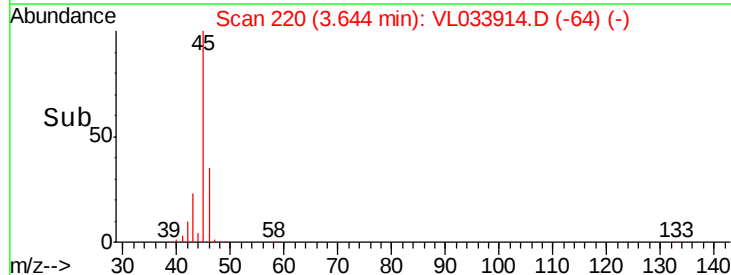
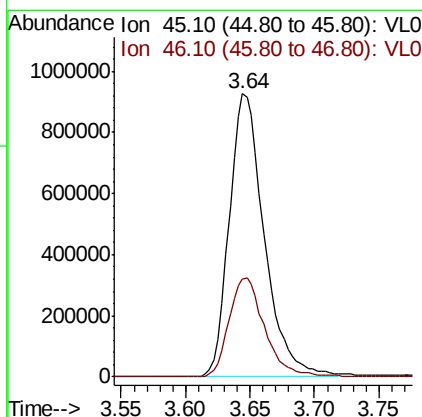
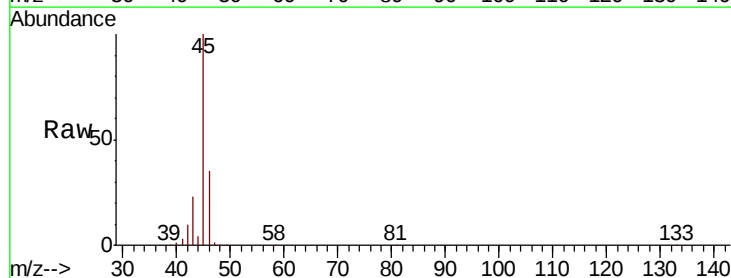
Manual Integrations
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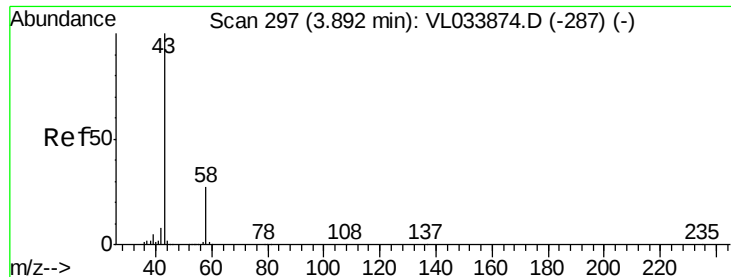
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#13
 Ethanol
 Concen: 151.720 ppbv
 RT: 3.64 min Scan# 220
 Delta R.T. 0.00 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Tgt Ion	Ratio	Lower	Upper
45	100		
46	35.9	15.3	61.1





#15

Acetone

Concen: 7.768 ppbv

RT: 3.89 min Scan# 297

Delta R.T. -0.00 min

Lab File: VL033914.D

Acq: 14 Jun 2019 2:09

Instrument :

MSVOA_L

ClientSampleId :

IA1-BSMNT

Tot Ion: 43 Resp: 911278

Ion Ratio Lower Upper

43 100

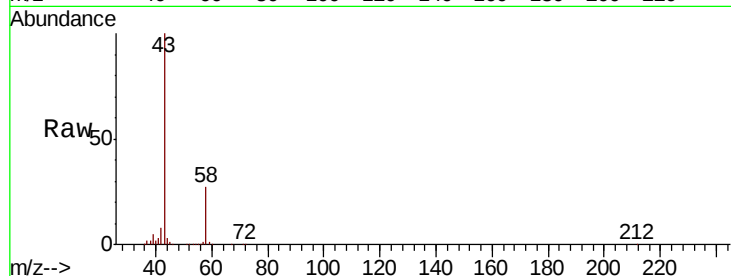
58 24.2 21.3 31.9

Manual Integrations

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.89

600000

500000

400000

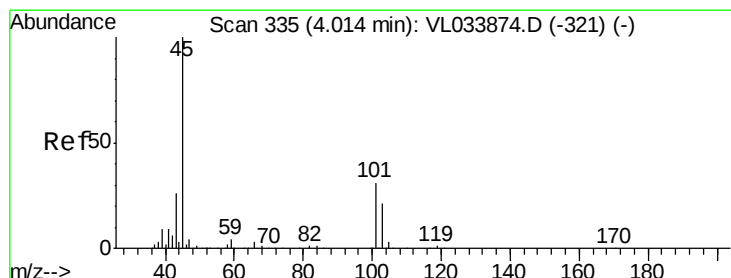
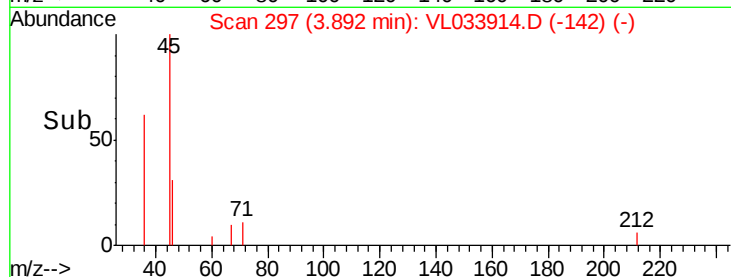
300000

200000

100000

0

Time-->



#19

Isopropyl Alcohol

Concen: 2.071 ppbv

RT: 4.03 min Scan# 339

Delta R.T. 0.01 min

Lab File: VL033914.D

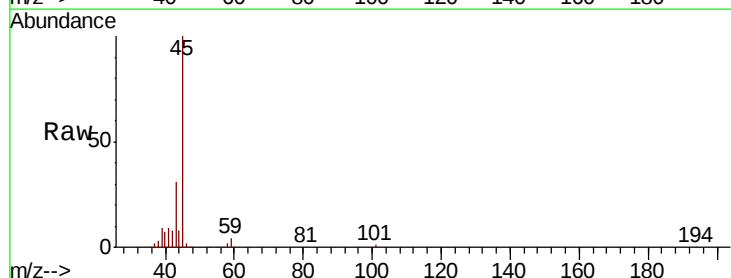
Acq: 14 Jun 2019 2:09

Tgt Ion: 45 Resp: 138771

Ion Ratio Lower Upper

45 100

58 157.9 1.8 2.6#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.03

80000

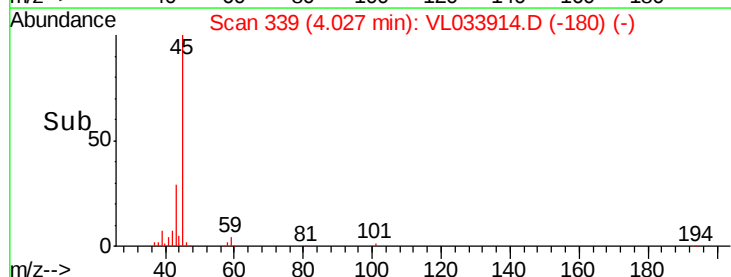
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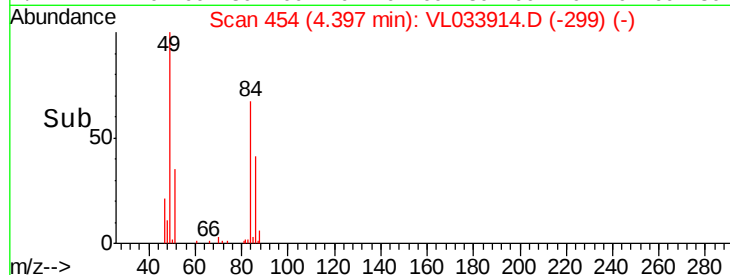
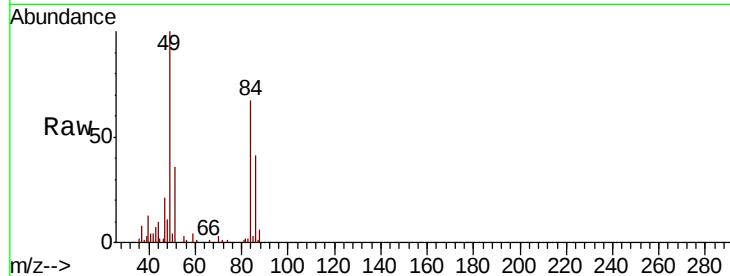
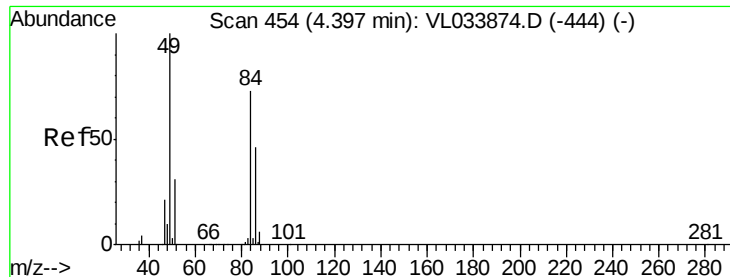
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Time-->





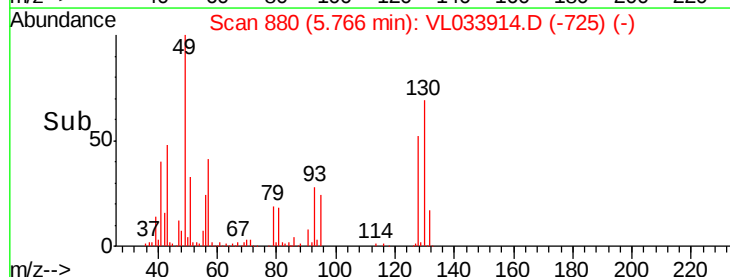
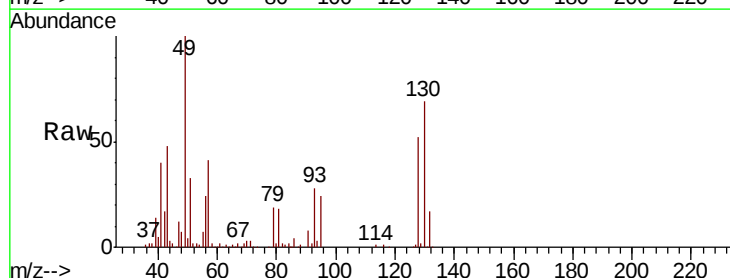
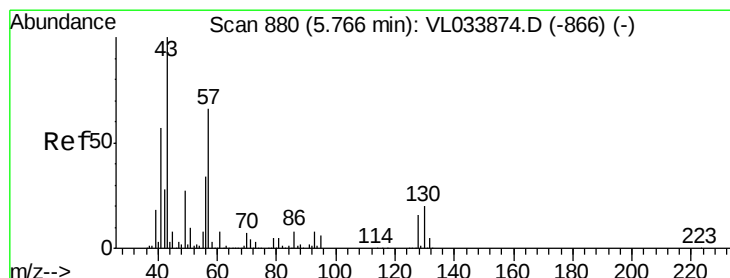
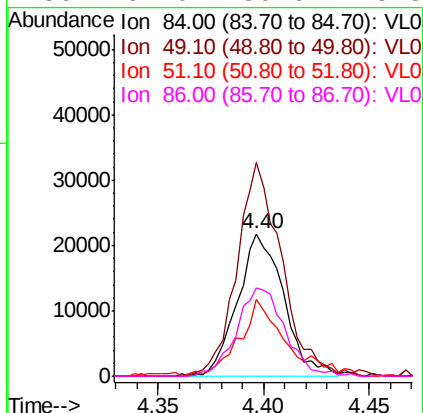
#20
Methvlene Chloride
Concen: 0.725 ppbv
RT: 4.40 min Scan# 454
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	149.1	110.0	165.0	
51	52.9	34.6	51.8	
86	62.0	50.6	75.8	

Instrument :
MSVOA_L
ClientSampled :
IA1-BSMNT

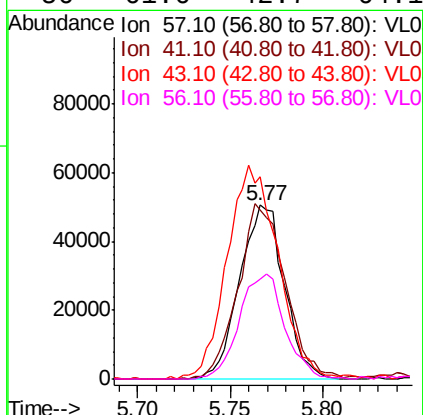
Manual Integrations
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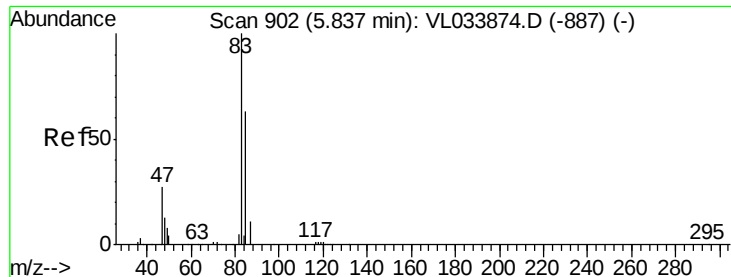
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#26
Hexane
Concen: 1.037 ppbv
RT: 5.77 min Scan# 880
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	106.6	71.4	107.2	
43	142.5	183.7	275.5	
56	61.6	42.7	64.1	





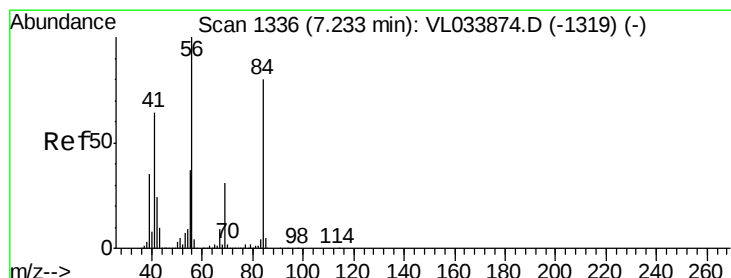
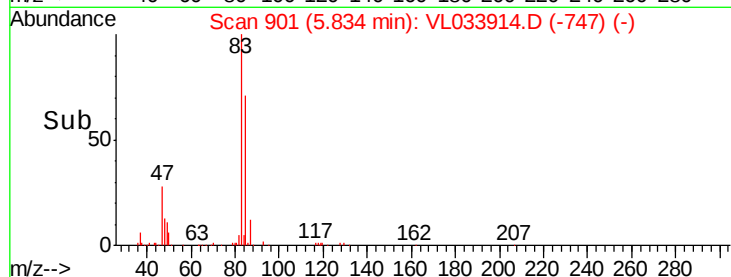
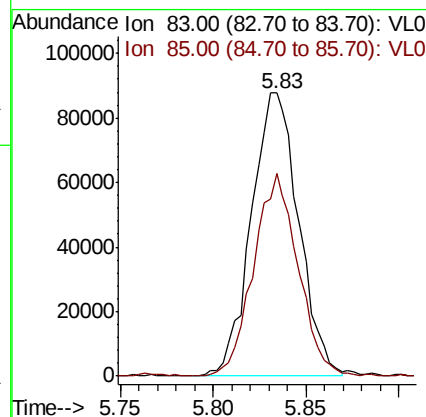
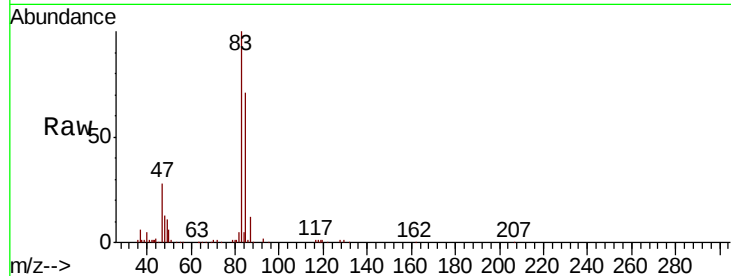
#29
Chloroform
Concen: 1.121 ppbv
RT: 5.83 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Instrument :
MSVOA_L
ClientSampled :
IA1-BSMNT

Tot Ion	83	Resp	156128
Ion Ratio	Lower	Upper	
83	100		
85	71.2	50.5	75.7

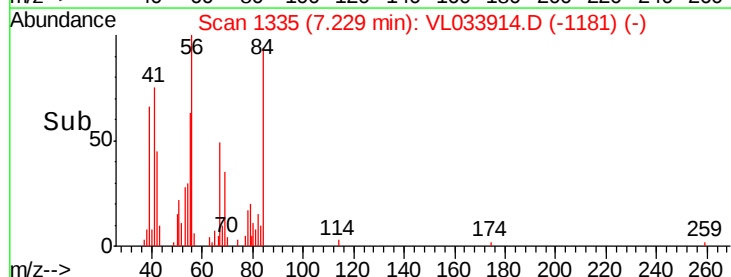
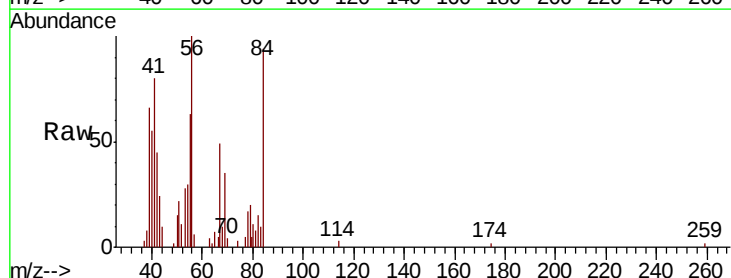
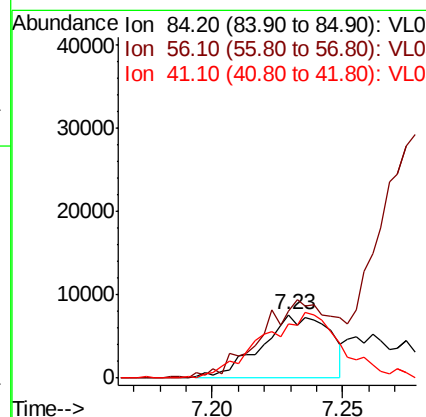
Manual Integrations
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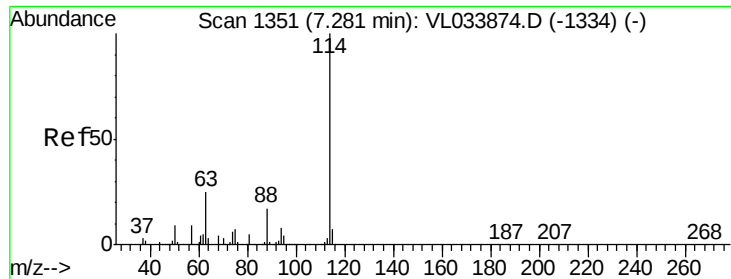
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#30
Cyclohexane
Concen: 0.237 ppbv m
RT: 7.23 min Scan# 1335
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tgt Ion	84	Resp	13593
Ion Ratio	Lower	Upper	
84	100		
56	0.0	105.8	158.8#
41	0.0	65.7	98.5#





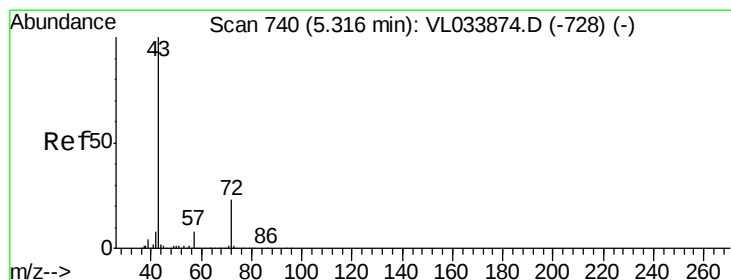
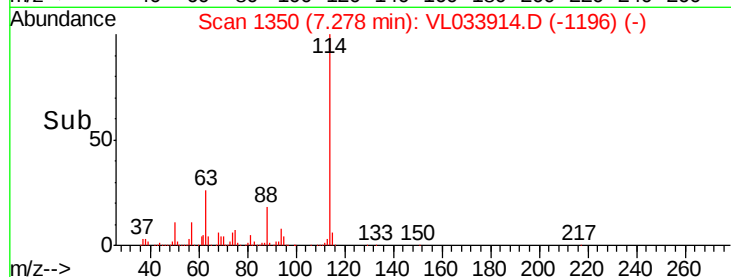
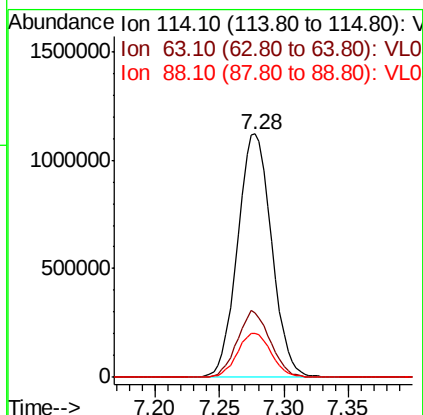
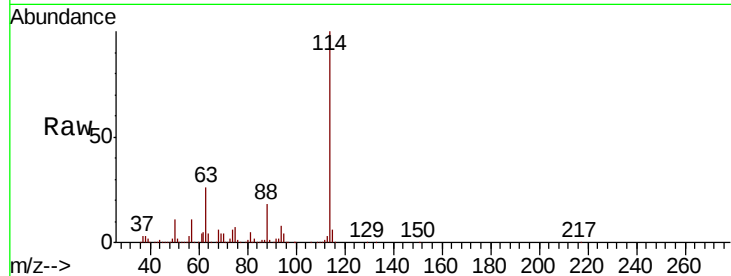
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.28 min Scan# 1350
 Delta R.T. -0.00 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1-BSMNT

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.4	21.1	31.7
88	18.0	14.2	21.4

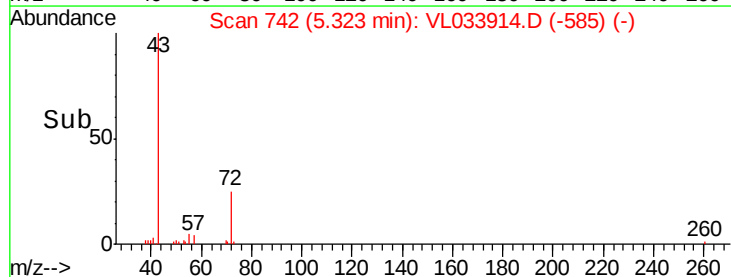
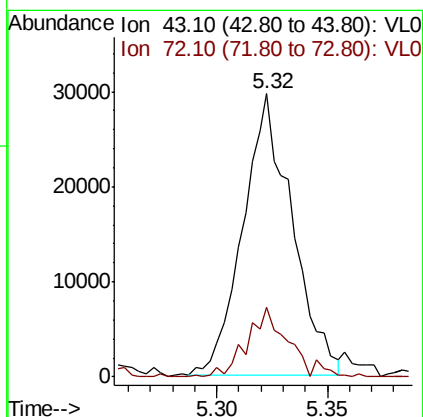
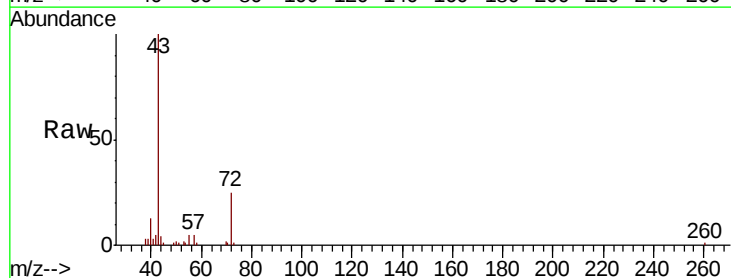
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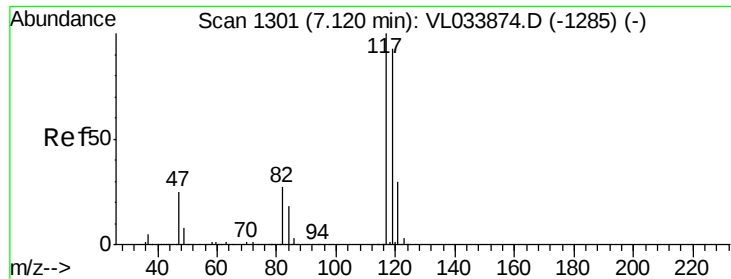
MMDadoda
 6/17/2019 12:37:24 AM



#34
 2-Butanone
 Concen: 0.394 ppbv
 RT: 5.32 min Scan# 742
 Delta R.T. 0.01 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.0	17.9	26.9





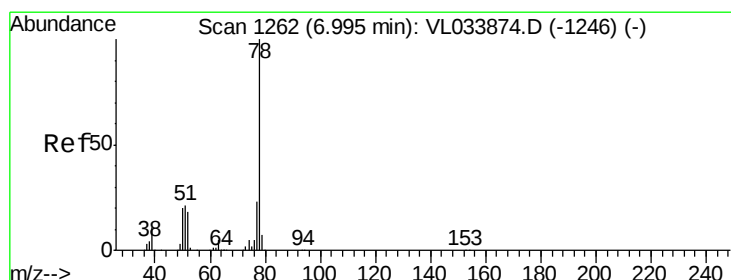
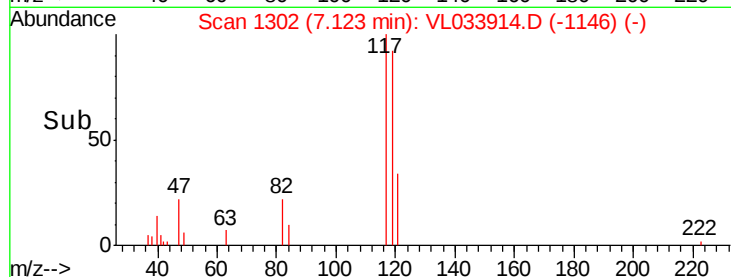
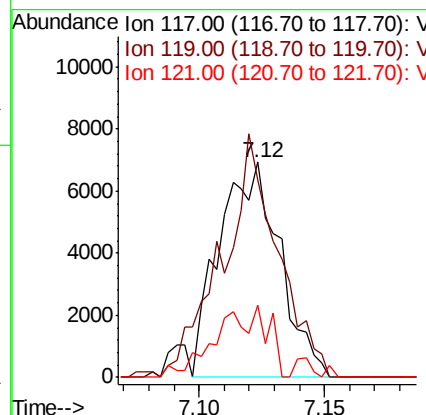
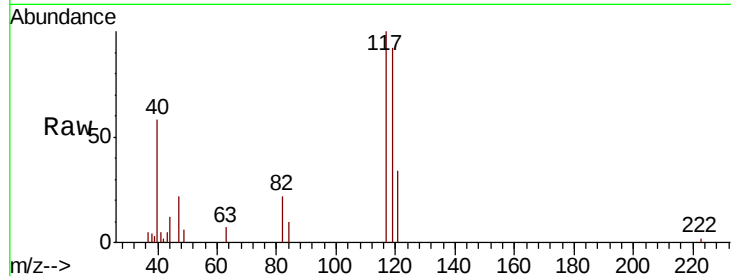
#35
Carbon Tetrachloride
Concen: 0.073 ppbv m
RT: 7.12 min Scan# 1302
Delta R.T. 0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Instrument :
MSVOA_L
ClientSampleId :
IA1-BSMNT

Tot Ion	Ratio	Lower	Upper
117	100		
119	91.7	74.6	111.8
121	33.6	24.0	36.0

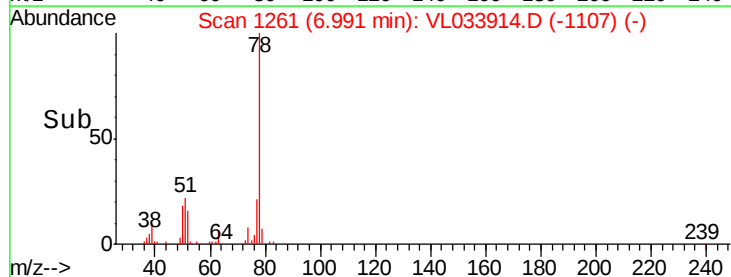
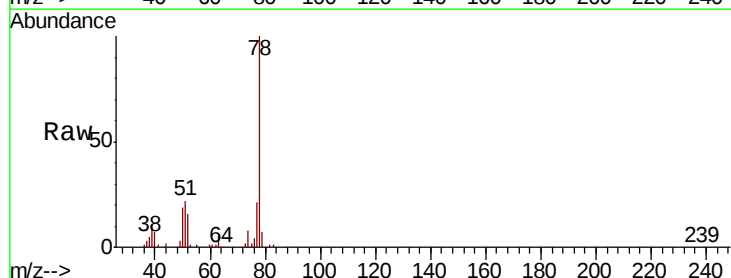
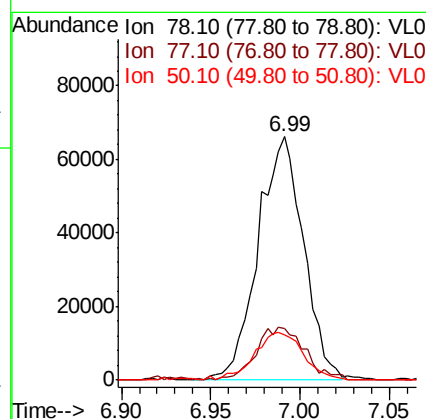
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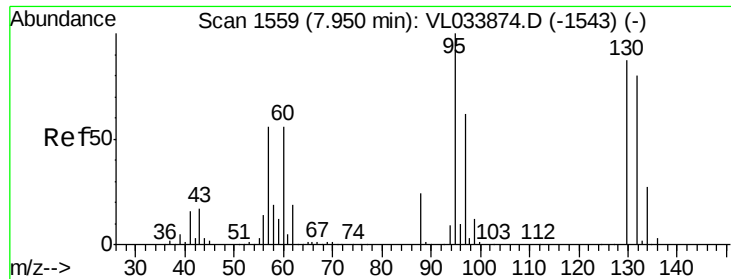
MMDadoda
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#36
Benzene
Concen: 0.749 ppbv
RT: 6.99 min Scan# 1261
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.3	18.2	27.2
50	18.0	15.9	23.9





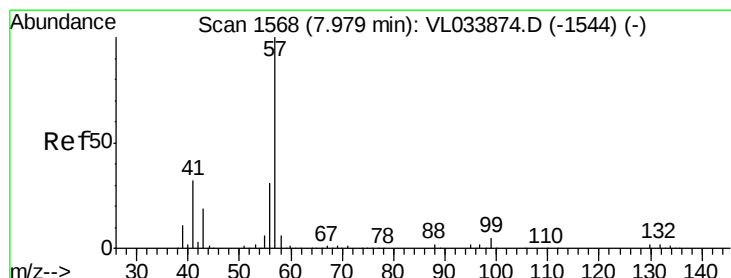
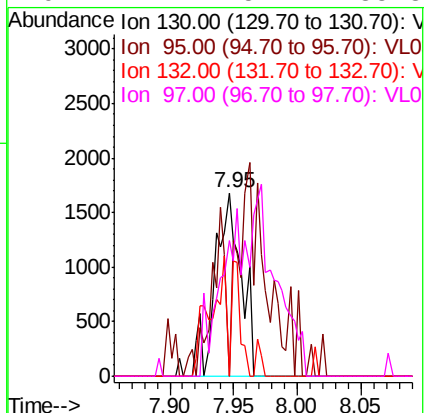
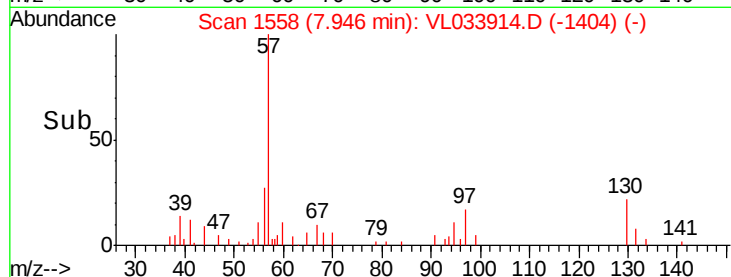
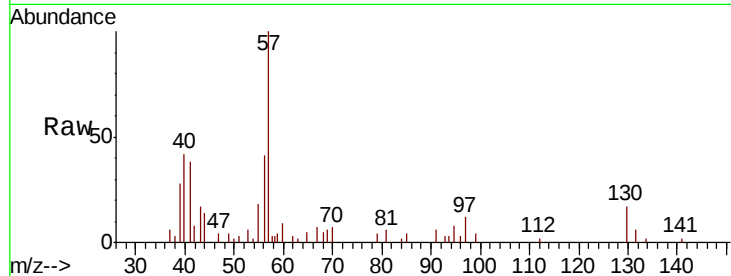
#38
 Trichloroethene
 Concen: 0.039 ppbv m
 RT: 7.95 min Scan# 1558
 Delta R.T. -0.00 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1-BSMNT

Tot Ion	Ratio	Lower	Upper
130	100		
95	0.0	92.0	138.0#
132	0.0	73.8	110.8#
97	74.2	57.2	85.8

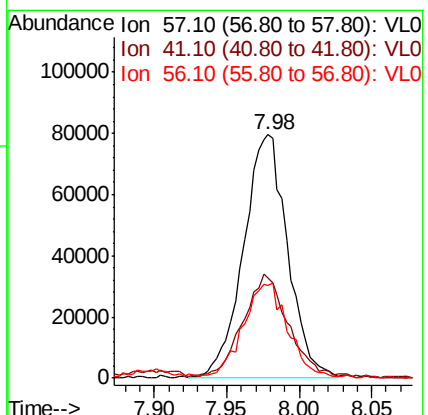
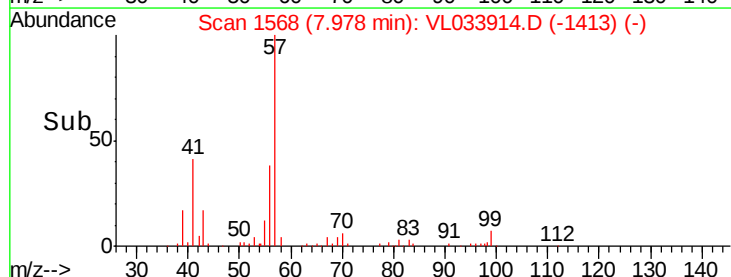
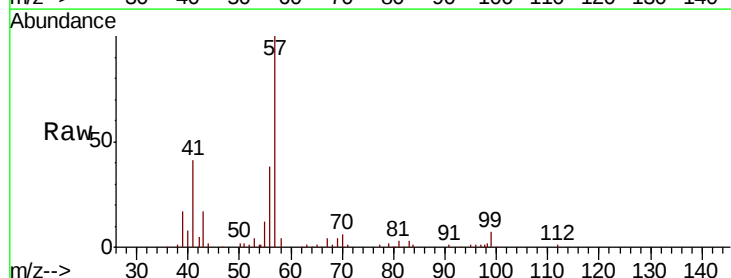
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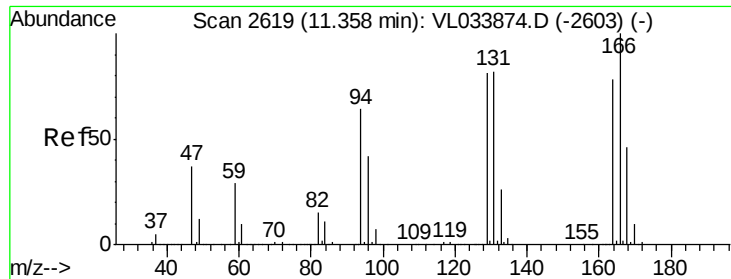
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#44
 2,2,4-Trimethylpentane
 Concen: 0.597 ppbv
 RT: 7.98 min Scan# 1568
 Delta R.T. -0.00 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Tgt Ion	Ratio	Lower	Upper
57	100		
41	44.6	26.1	39.1#
56	40.6	24.6	36.8#





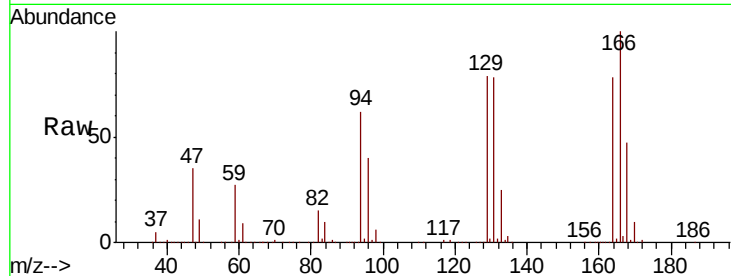
#52
Tetrachloroethene
Concen: 22.883 ppbv
RT: 11.36 min Scan# 2619
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Instrument :
MSVOA_L
ClientSampleId :
IA1-BSMNT

Tot Ion	Ratio	Lower	Upper
164	100		
166	127.7	103.1	154.7
129	100.3	83.9	125.9
131	100.2	85.1	127.7

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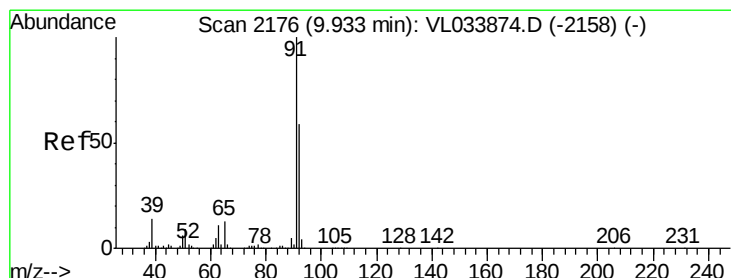
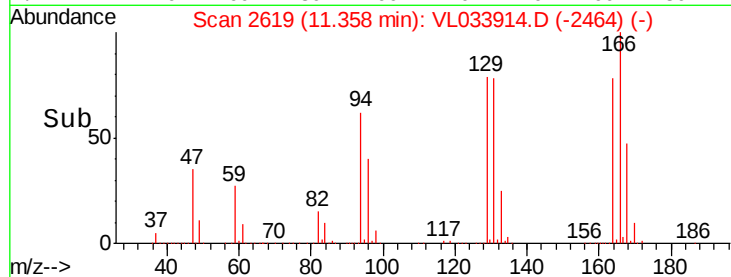
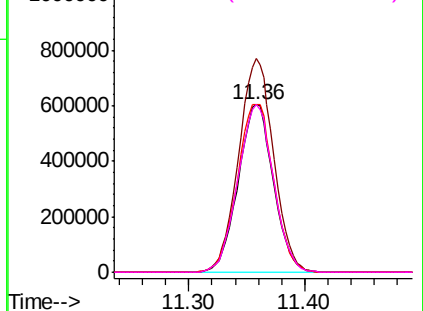
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

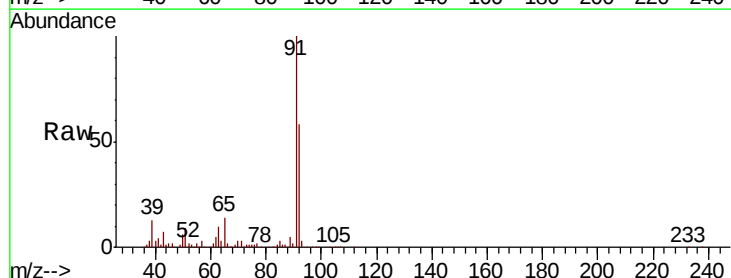
Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53
Toluene
Concen: 2.634 ppbv
RT: 9.93 min Scan# 2176
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

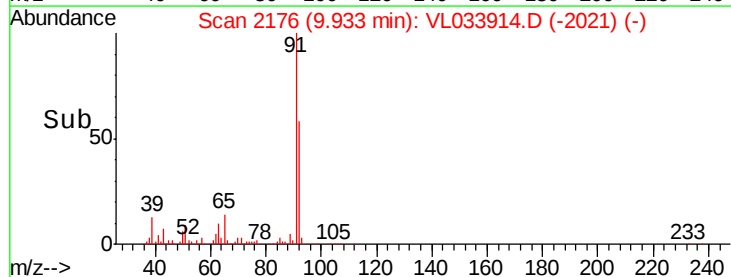
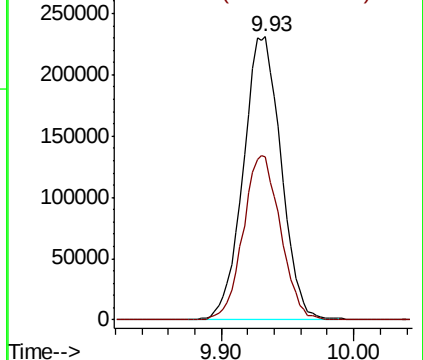
Tgt Ion	Ratio	Lower	Upper
91	100		
92	57.2	47.0	70.6

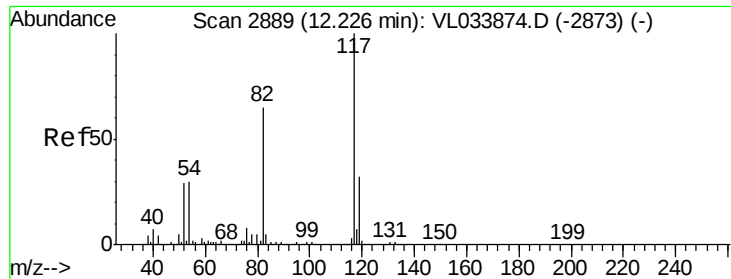


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





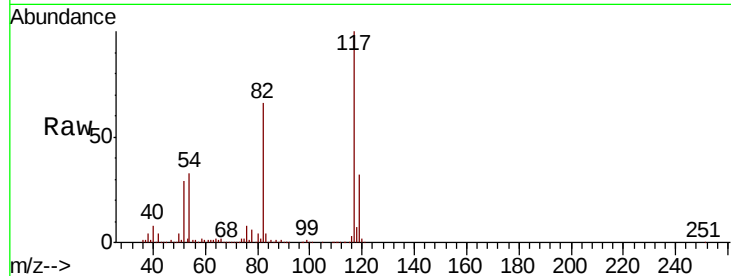
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.22 min Scan# 2888
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Instrument :
MSVOA_L
ClientSampleId :
IA1-BSMNT

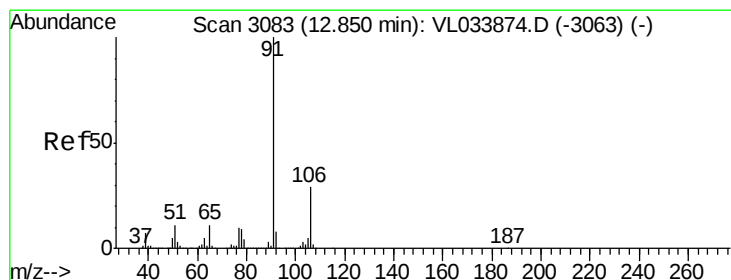
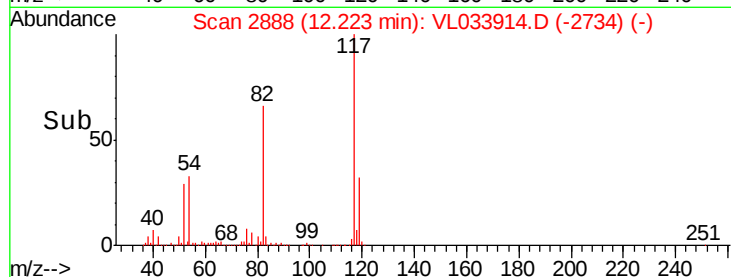
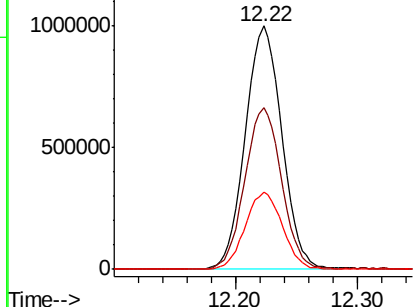
Tot Ion	Ratio	Lower	Upper
117	100		
82	66.9	50.2	75.2
119	32.4	24.8	37.2

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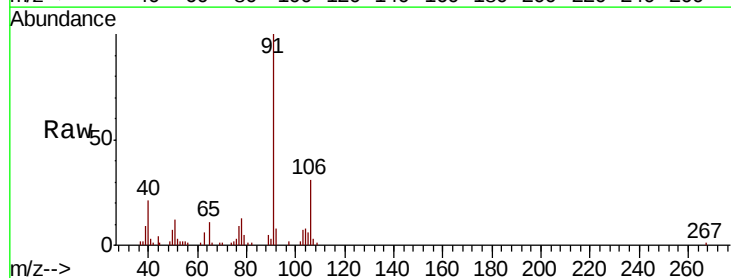


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

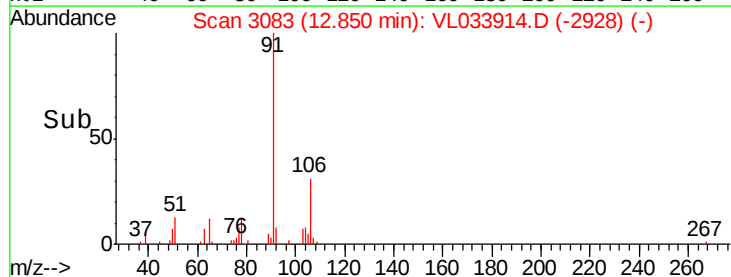
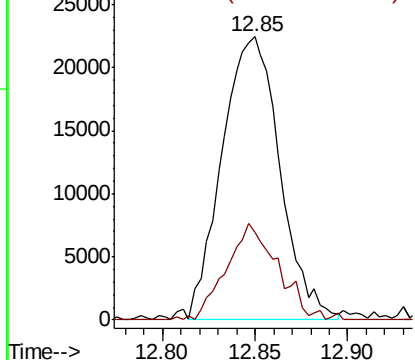


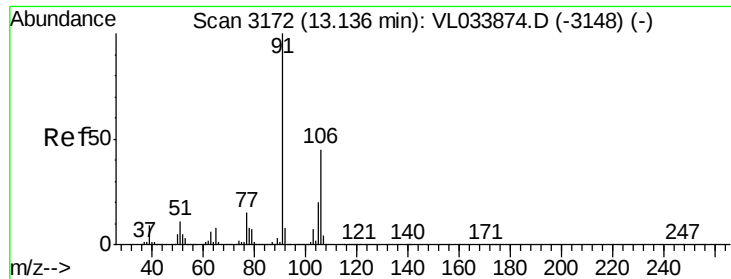
#58
Ethyl Benzene
Concen: 0.209 ppbv
RT: 12.85 min Scan# 3083
Delta R.T. -0.00 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tgt Ion	Ratio	Lower	Upper
91	100		
106	29.2	23.0	34.6



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





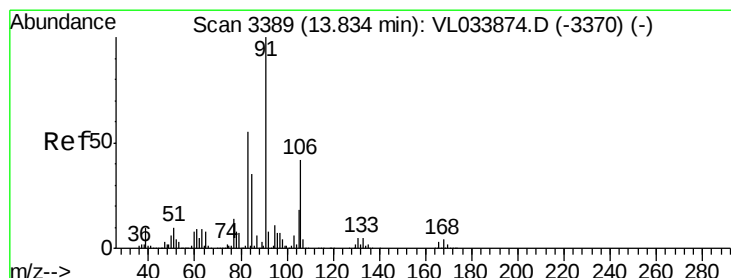
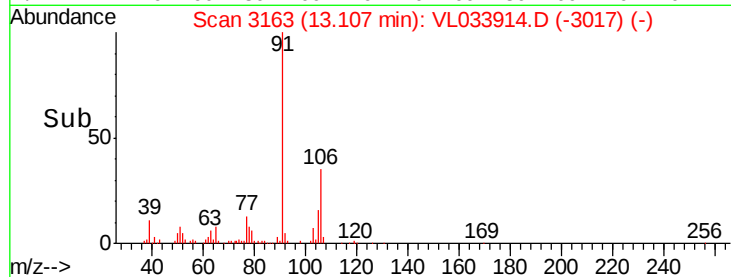
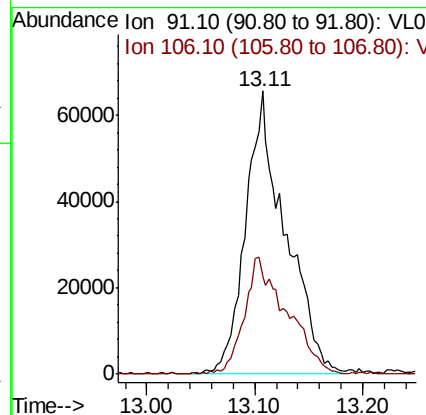
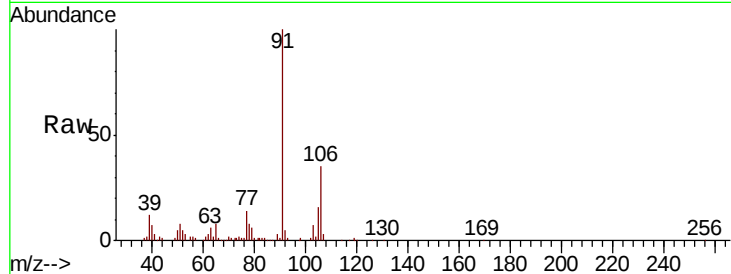
#59
m/p-Xylene
Concen: 0.790 ppbv m
RT: 13.11 min Scan# 3163
Delta R.T. -0.03 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Instrument :
MSVOA_L
ClientSampleId :
IA1-BSMNT

Tot Ion: 91 Resp: 167422
Ion Ratio Lower Upper
91 100
106 0.0 35.8 53.8#

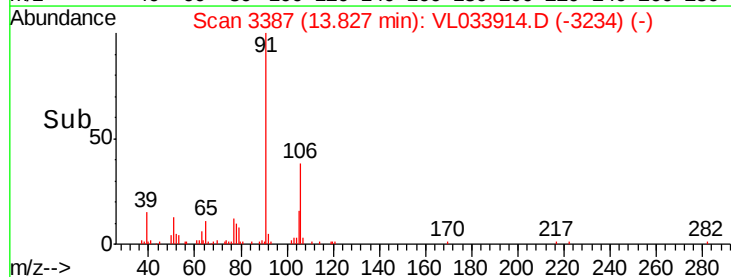
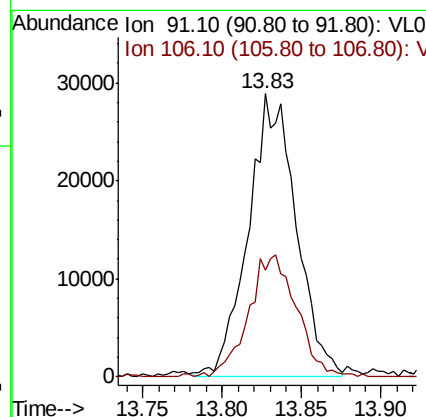
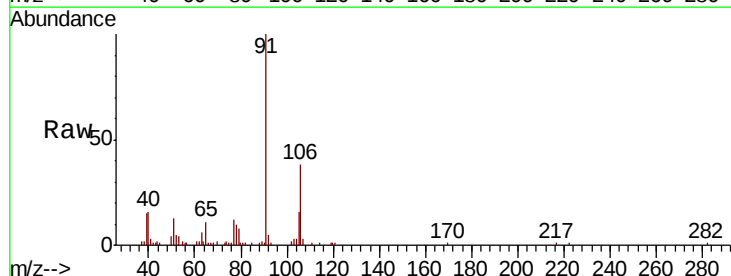
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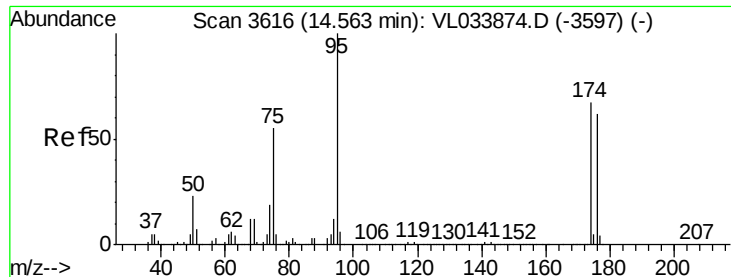
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#60
o-Xylene
Concen: 0.276 ppbv m
RT: 13.83 min Scan# 3387
Delta R.T. -0.01 min
Lab File: VL033914.D
Acq: 14 Jun 2019 2:09

Tgt Ion: 91 Resp: 60376
Ion Ratio Lower Upper
91 100
106 0.0 21.7 65.1#





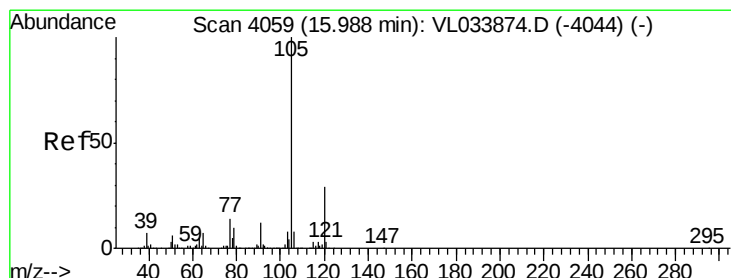
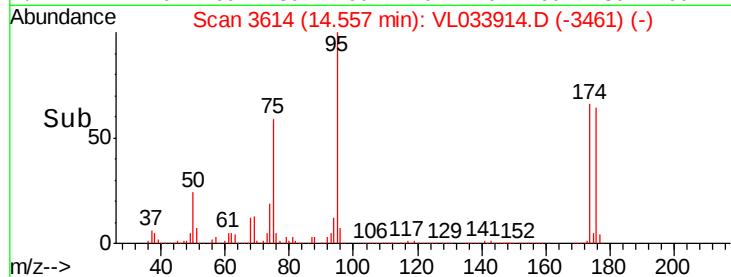
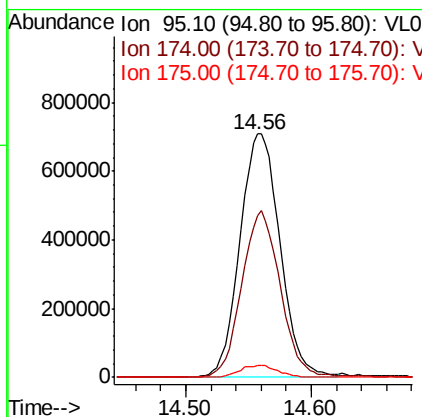
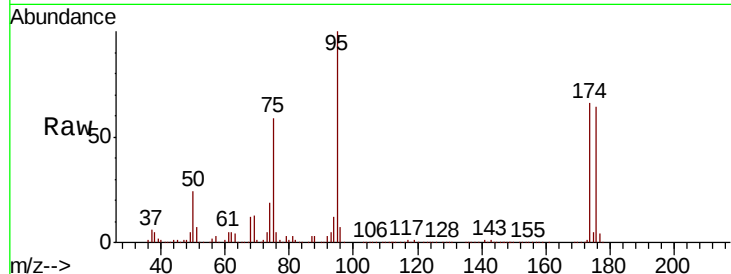
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.281 ppbv
 RT: 14.56 min Scan# 3614
 Delta R.T. -0.01 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1-BSMNT

Tot Ion: 95 Resp: 1576091
 Ion Ratio Lower Upper
 95 100
 174 66.5 54.0 81.0
 175 4.8 3.8 5.8

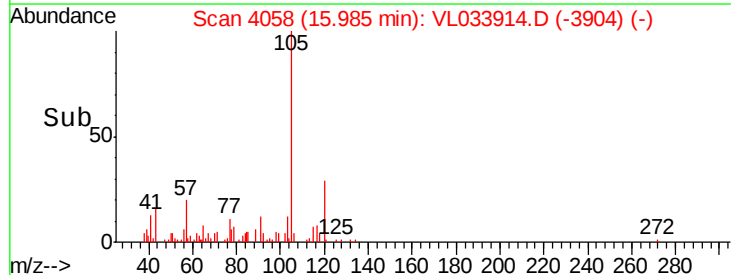
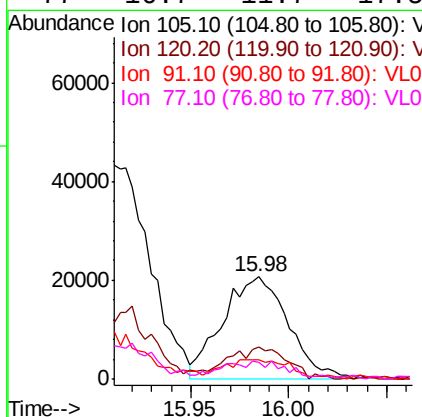
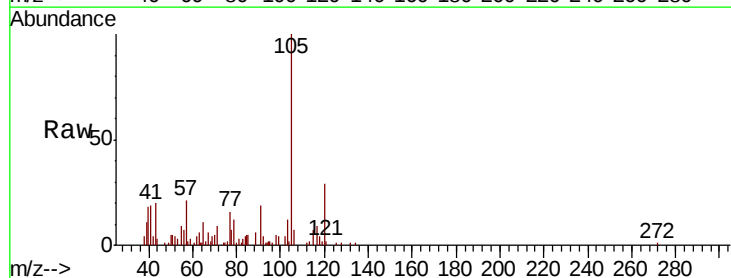
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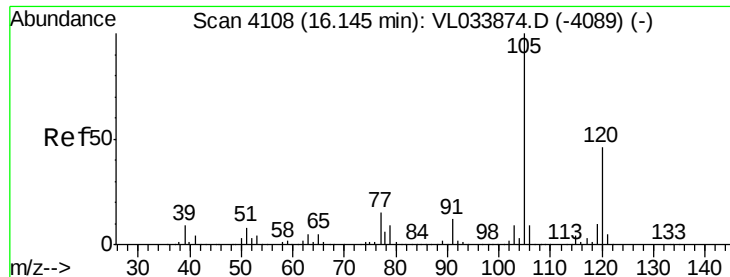
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 6/17/2019 12:37:24 AM



#72
 4-Ethyltoluene
 Concen: 0.193 ppbv m
 RT: 15.98 min Scan# 4058
 Delta R.T. -0.00 min
 Lab File: VL033914.D
 Acq: 14 Jun 2019 2:09

Tgt Ion: 105 Resp: 48041
 Ion Ratio Lower Upper
 105 100
 120 30.3 23.5 35.3
 91 20.9 10.4 15.6#
 77 16.7 11.7 17.5





#73

1,3,5-Trimethylbenzene

Concen: 0.163 ppbv

RT: 16.14 min Scan# 4107

Delta R.T. -0.00 min

Lab File: VL033914.D

Acq: 14 Jun 2019 2:09

Instrument :

MSVOA_L

ClientSampleId :

IA1-BSMNT

Tot Ion:105 Resp: 39906

Ion Ratio Lower Upper

105 100

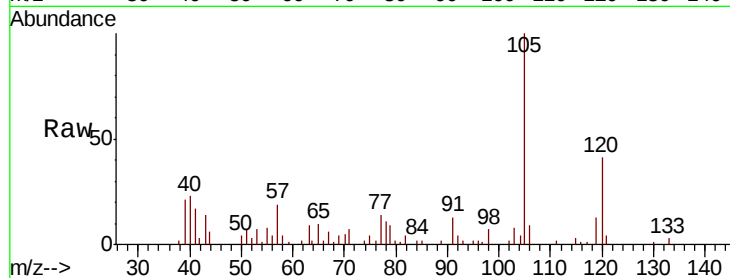
120 45.8 37.1 55.7

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.14

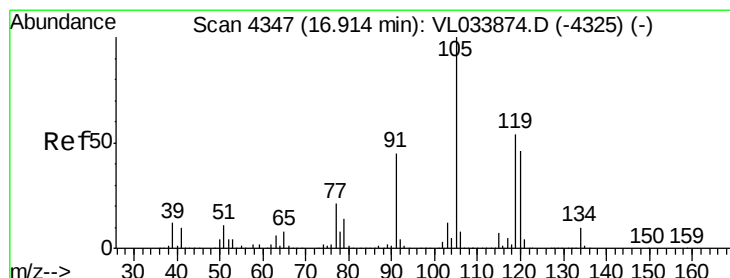
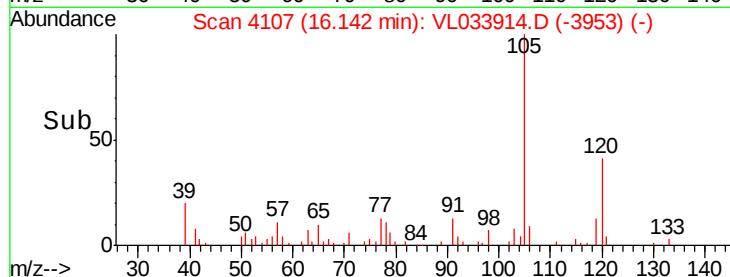
15000

10000

5000

0

Time--> 16.05 16.10 16.15 16.20



#74

1,2,4-Trimethylbenzene

Concen: 0.502 ppbv

RT: 16.91 min Scan# 4345

Delta R.T. -0.01 min

Lab File: VL033914.D

Acq: 14 Jun 2019 2:09

Tgt Ion:105 Resp: 141912

Ion Ratio Lower Upper

105 100

120 33.3 36.7 55.1#

91 12.0 35.8 53.8#

77 14.8 16.9 25.3#

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

16.91

100000

80000

60000

40000

20000

0

Time--> 16.85 16.90 16.95

