

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL012819\
 Data File : VL033126.D
 Acq On : 29 Jan 2019 3:47
 Operator : SY/AP
 Sample : K1245-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 S-01

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 1/29/2019 2:38:33 PM

Quant Time: Jan 29 12:13:38 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL012819AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jan 29 2019
 QLast Update : Tue Jan 29 06:21:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1060514	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3128688	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2178935	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	1666526	10.11	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	126978	0.506	ppbv	97
3) Chlorodifluoromethane	3.01	51	45485m	0.323	ppbv	
4) Chloromethane	3.17	50	46198	0.604	ppbv	89
11) Trichlorofluoromethane	4.01	101	49901	0.233	ppbv	93
13) Ethanol	3.65	45	2599412	132.204	ppbv	98
15) Acetone	3.91	43	508047m	3.548	ppbv	
20) Methylene Chloride	4.41	84	52993	0.815	ppbv #	90
26) Hexane	5.78	57	85481	0.700	ppbv	84
29) Chloroform	5.85	83	420042	2.086	ppbv	97
34) 2-Butanone	5.33	43	62546	0.352	ppbv	97
35) Carbon Tetrachloride	7.13	117	21741m	0.076	ppbv	
36) Benzene	7.00	78	87161	0.316	ppbv	95
38) Trichloroethene	7.95	130	59257	0.528	ppbv	89
44) 2,2,4-Trimethylpentane	7.99	57	49111m	0.113	ppbv	
52) Tetrachloroethene	11.37	164	229939	2.504	ppbv	94
53) Toluene	9.95	91	233698	0.847	ppbv	100
59) m/p-Xylene	13.12	91	55746m	0.234	ppbv	
60) o-Xylene	13.85	91	25768m	0.104	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	48389m	0.180	ppbv	

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

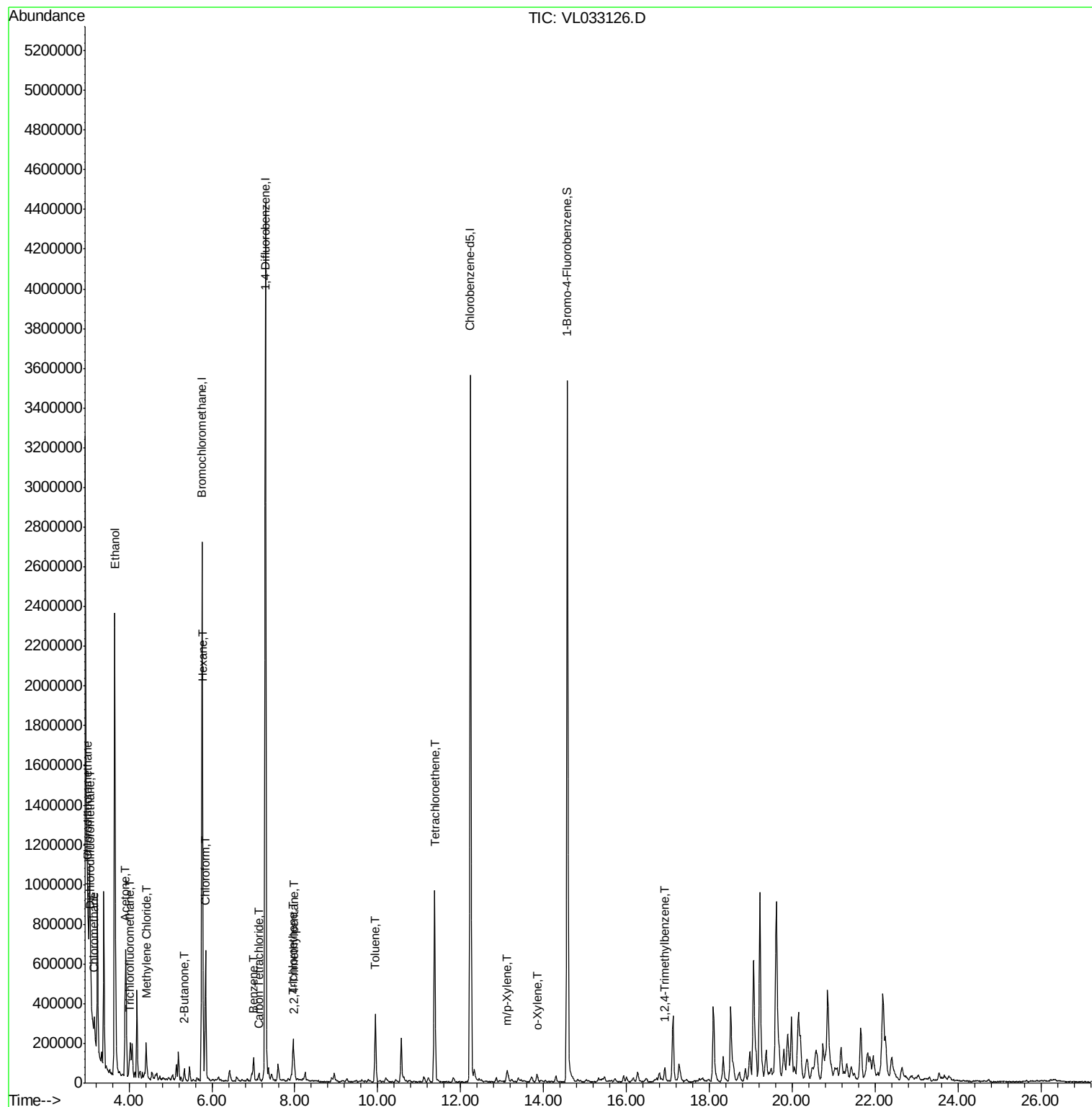
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL012819\
Data File : VL033126.D
Acq On : 29 Jan 2019 3:47
Operator : SY/AP
Sample : K1245-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

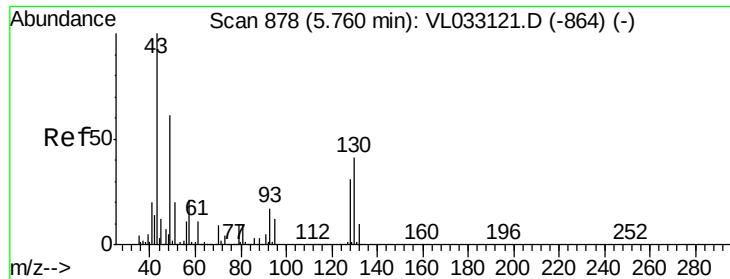
Instrument :
MSVOA_L
ClientSampled :
S-01

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Quant Time: Jan 29 12:13:38 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL012819AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Jan
QLast Update : Tue Jan 29 06:21:00 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

Instrument :

MSVOA_L

ClientSampled :

S-01

Tot Ion: 49 Resp: 1060514

Ion Ratio Lower Upper

49 100

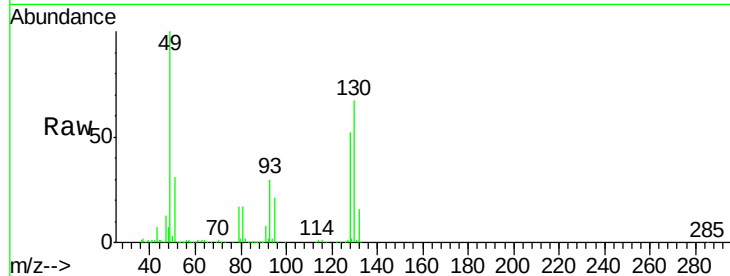
128 53.7 25.9 77.7

130 68.6 32.9 98.7

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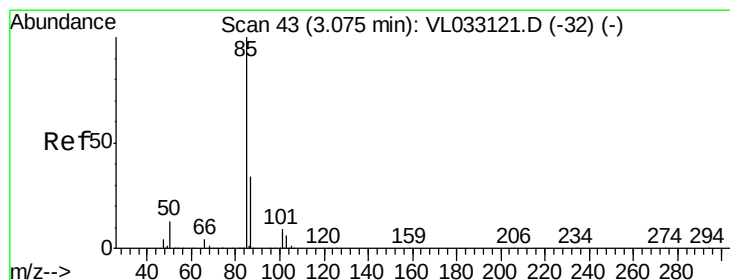
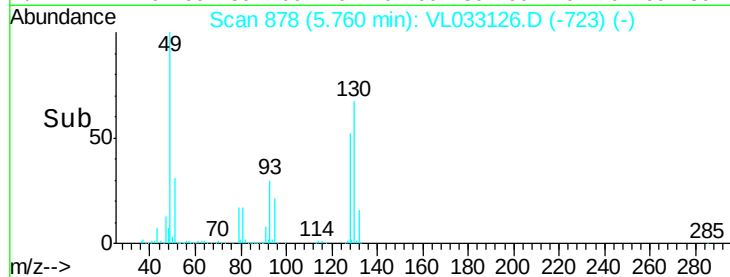
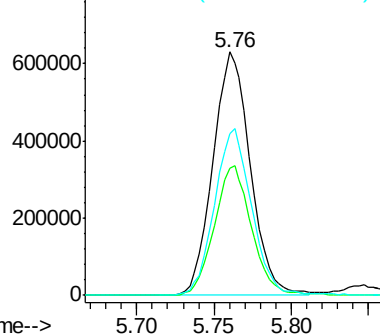
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.506 ppbv

RT: 3.08 min Scan# 43

Delta R.T. -0.00 min

Lab File: VL033126.D

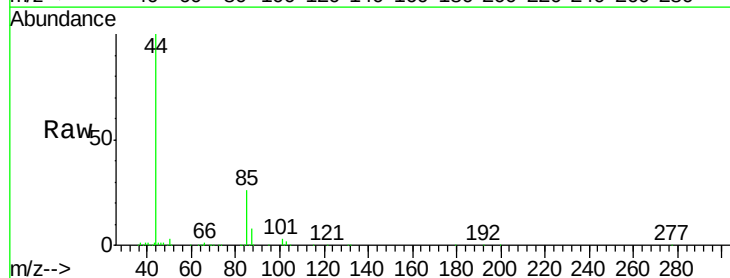
Acq: 29 Jan 2019 3:47

Tgt Ion: 85 Resp: 126978

Ion Ratio Lower Upper

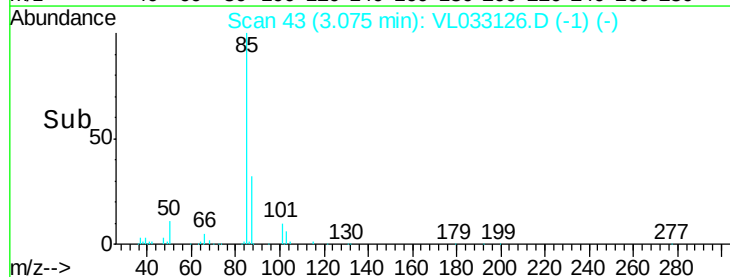
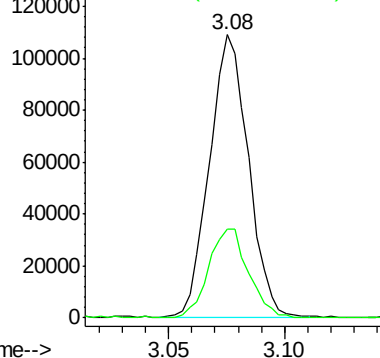
85 100

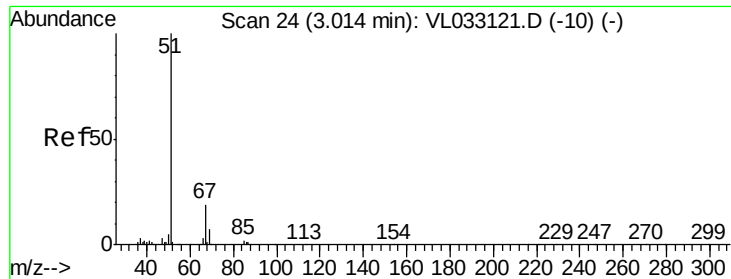
87 31.6 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.323 ppbv

RT: 3.01 min Scan# 23

Delta R.T. -0.00 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

Instrument :

MSVOA_L

ClientSampled :

S-01

Tot Ion: 51 Resp: 45485

Ion Ratio Lower Upper

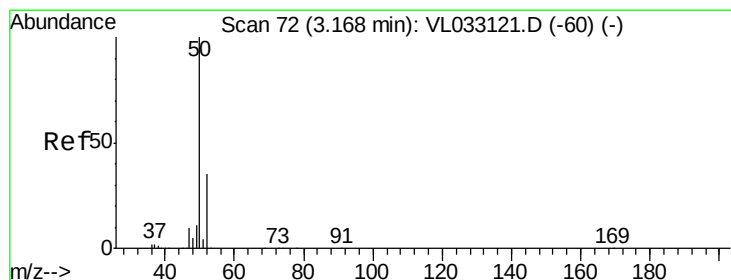
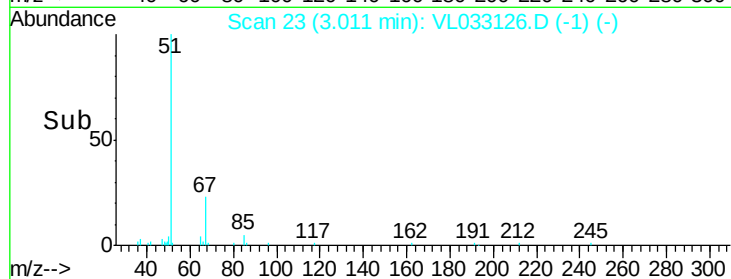
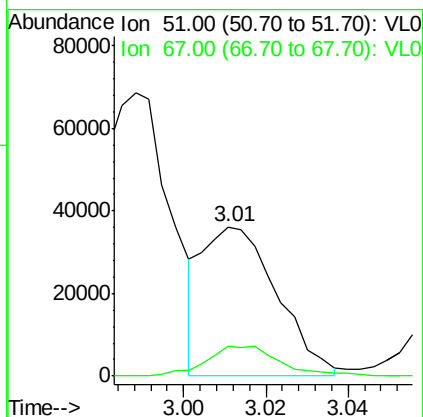
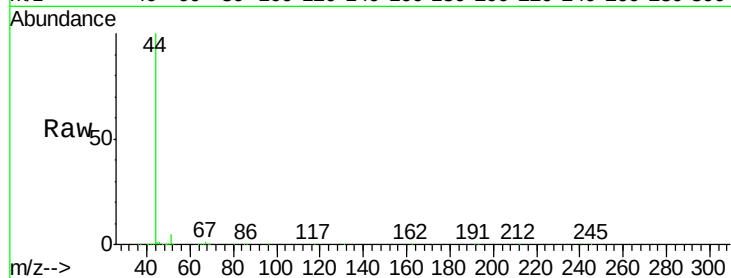
51 100

67 20.4 16.2 24.2

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#4

Chloromethane

Concen: 0.604 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033126.D

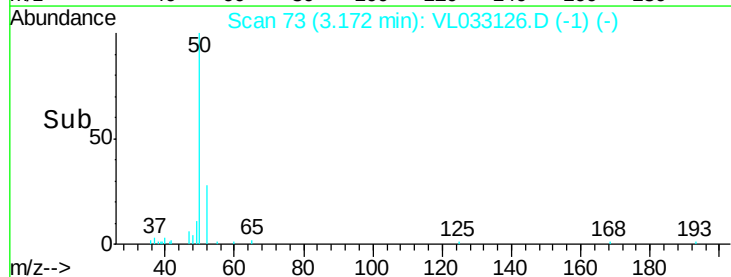
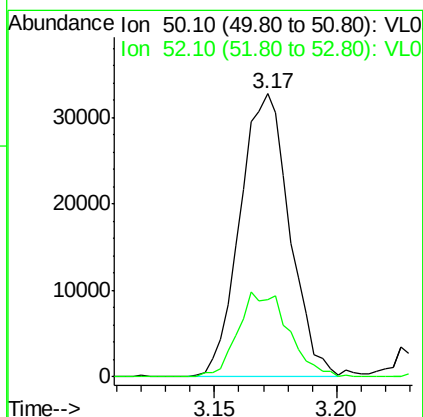
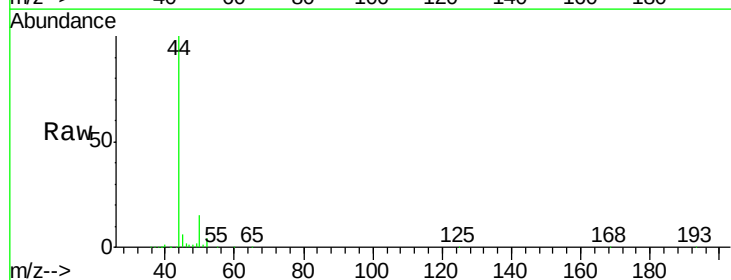
Acq: 29 Jan 2019 3:47

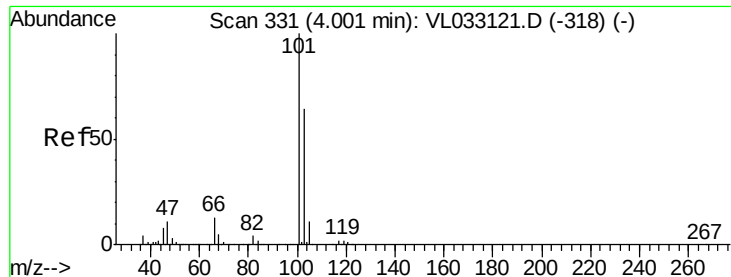
Tgt Ion: 50 Resp: 46198

Ion Ratio Lower Upper

50 100

52 27.2 27.0 40.4





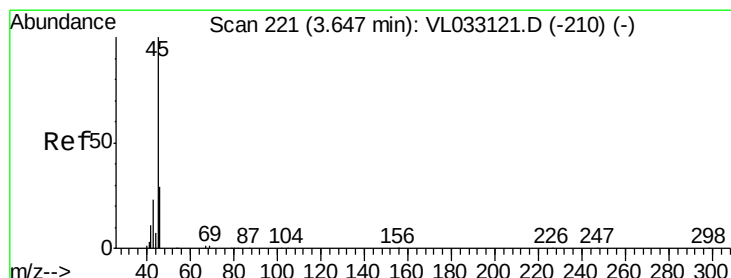
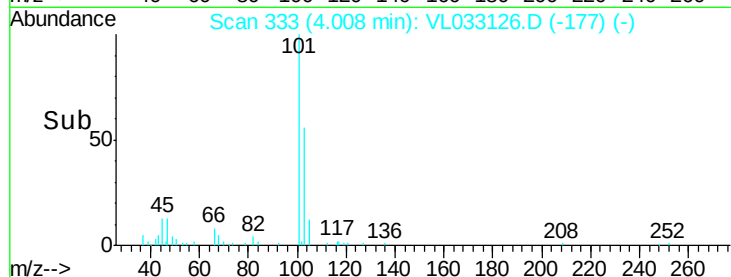
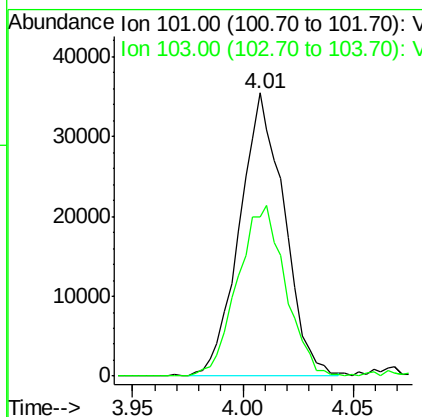
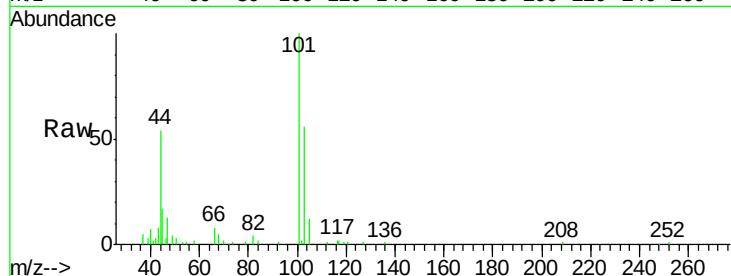
#11
Trichlorofluoromethane
Concen: 0.233 ppbv
RT: 4.01 min Scan# 333
Delta R.T. 0.00 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Instrument :
MSVOA_L
ClientSampleId :
S-01

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		49901		
103	56.3	49.4	74.0		

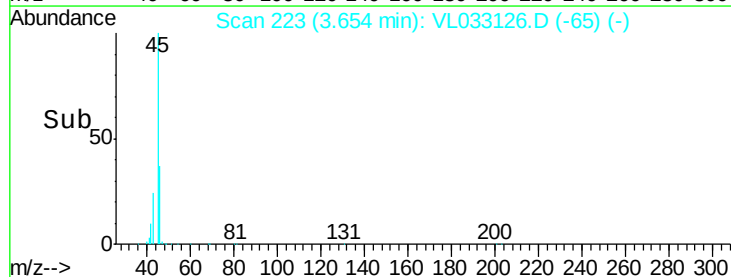
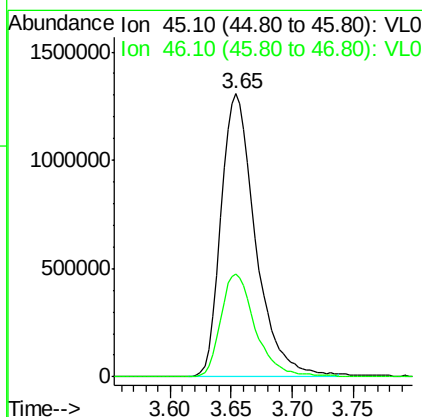
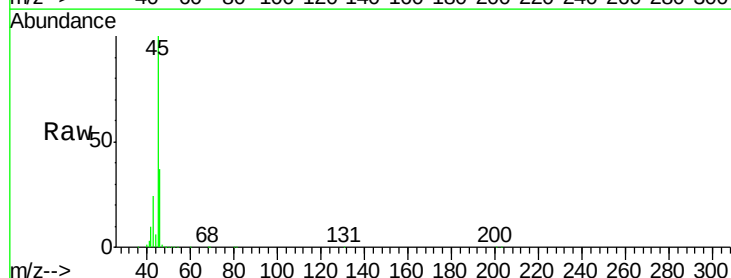
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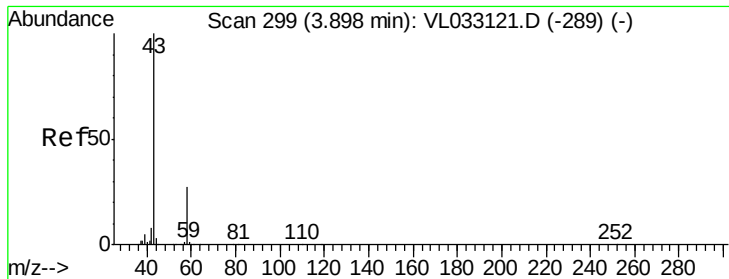
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#13
Ethanol
Concen: 132.204 ppbv
RT: 3.65 min Scan# 223
Delta R.T. 0.01 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
45	100		2599412		
46	36.6	15.0	60.2		





#15

Acetone

Concen: 3.548 ppbv m

RT: 3.91 min Scan# 302

Delta R.T. 0.01 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

Instrument :

MSVOA_L

ClientSampleId :

S-01

Tot Ion: 43 Resp: 508047

Ion Ratio Lower Upper

43 100

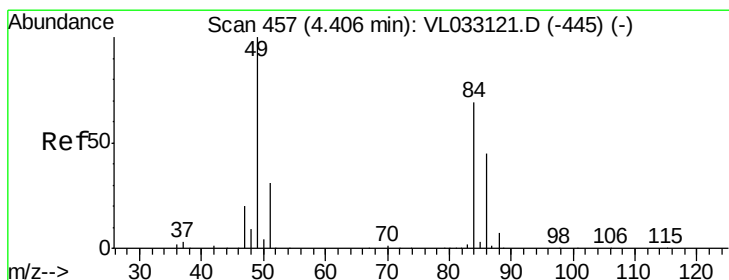
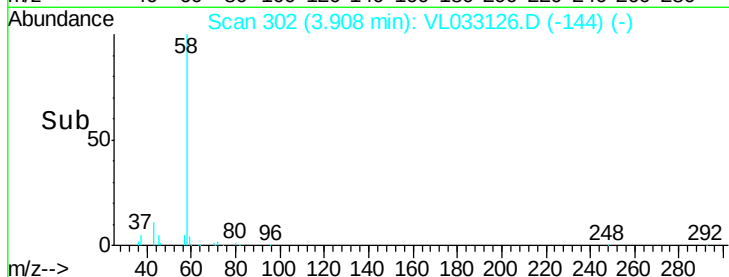
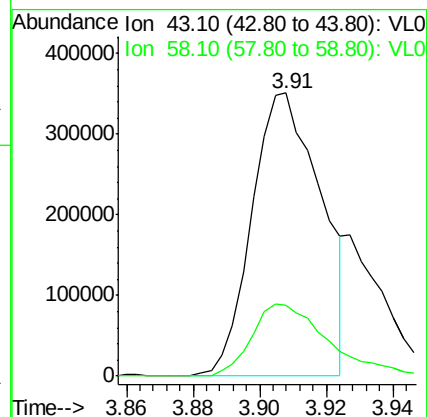
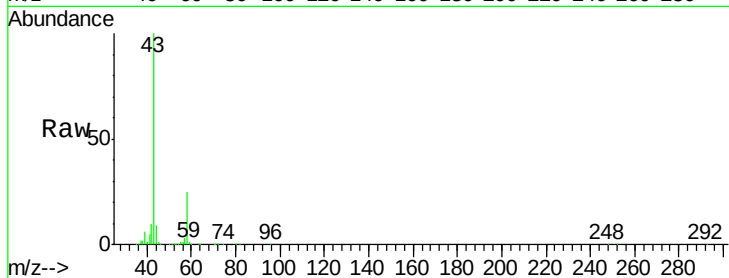
58 28.4 21.1 31.7

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#20

Methylene Chloride

Concen: 0.815 ppbv

RT: 4.41 min Scan# 458

Delta R.T. -0.00 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

Tgt Ion: 84 Resp: 52993

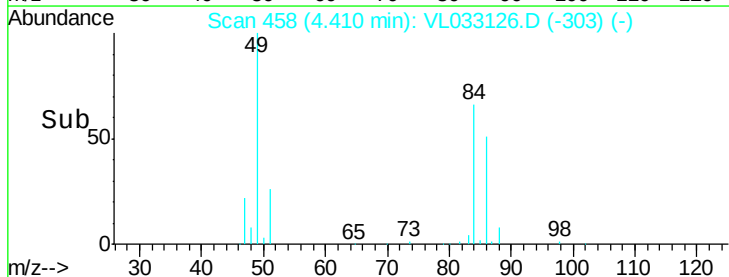
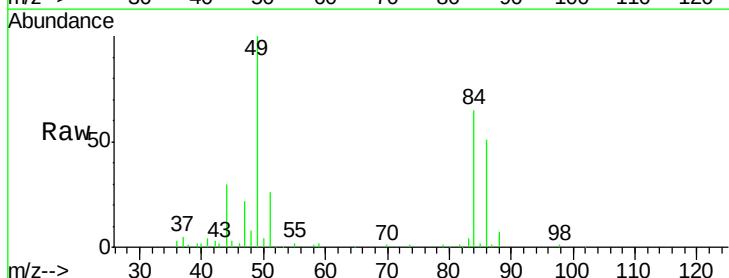
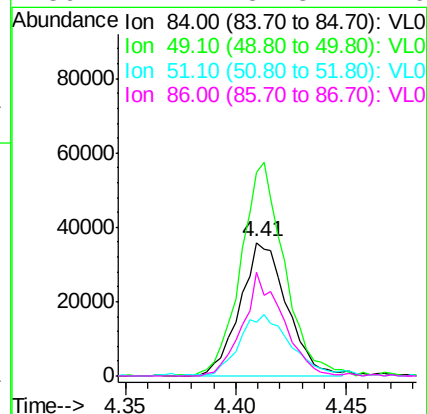
Ion Ratio Lower Upper

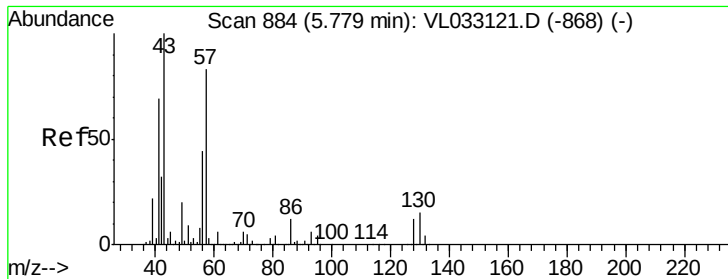
84 100

49 152.8 113.8 170.6

51 38.6 34.5 51.7

86 77.7 51.8 77.6#





#26

Hexane

Concen: 0.700 ppbv

RT: 5.78 min Scan# 885

Delta R.T. 0.00 min

Lab File: VL033126.D

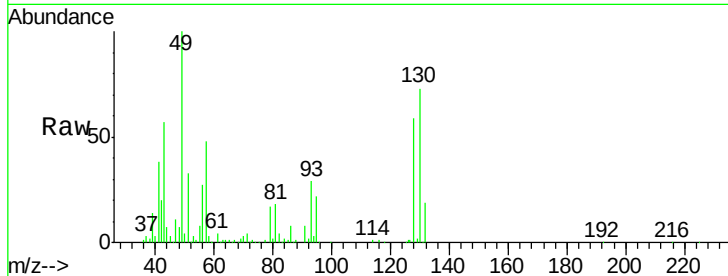
Acq: 29 Jan 2019 3:47

Instrument :

MSVOA_L

ClientSampled :

S-01



Tot Ion: 57 Resp: 85481

Ion Ratio Lower Upper

57 100

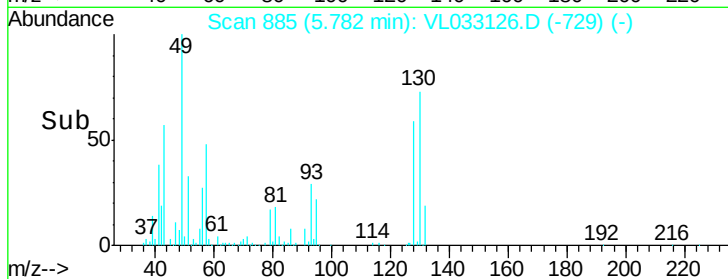
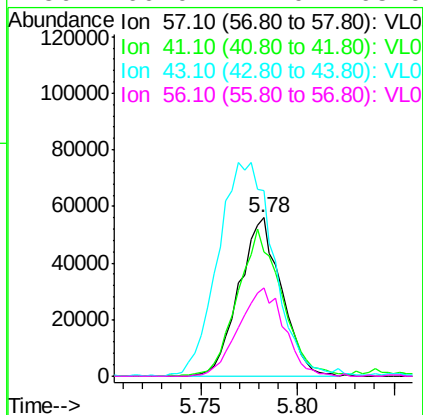
41 97.1 69.9 104.9

43 180.1 169.0 253.4

56 60.0 42.0 63.0

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#29

Chloroform

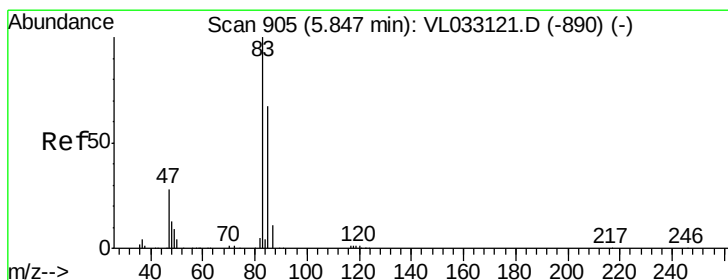
Concen: 2.086 ppbv

RT: 5.85 min Scan# 905

Delta R.T. -0.00 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

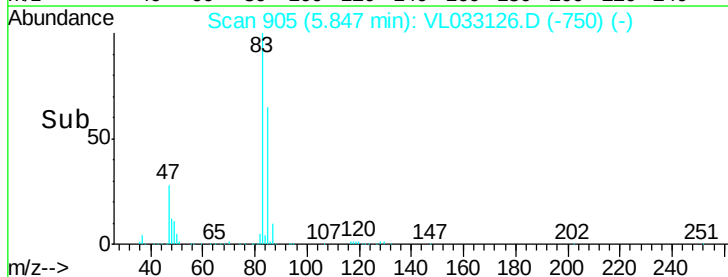
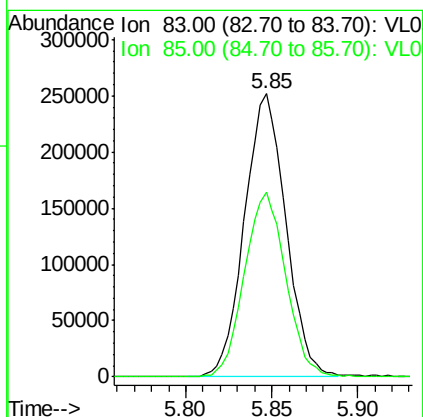
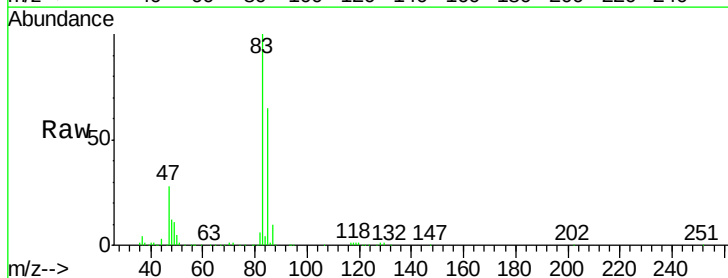


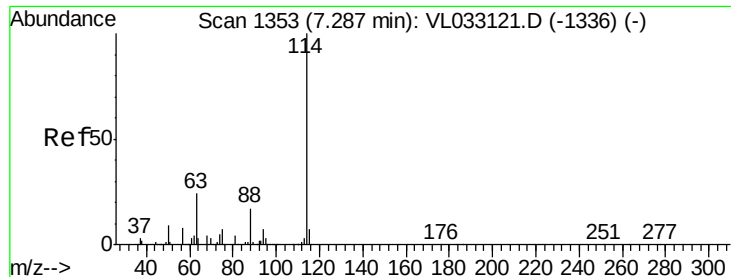
Tgt Ion: 83 Resp: 420042

Ion Ratio Lower Upper

83 100

85 65.0 50.4 75.6





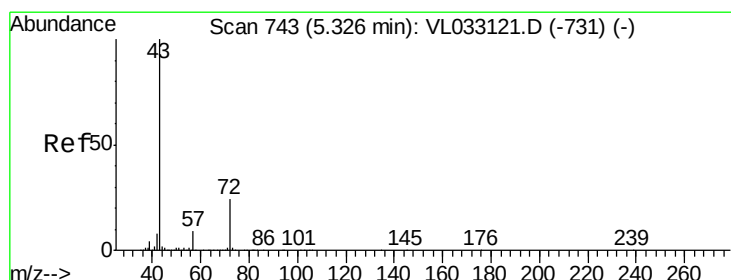
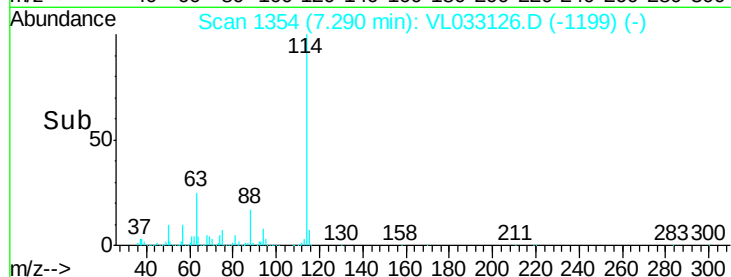
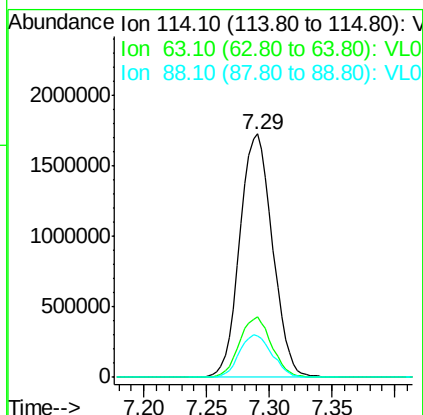
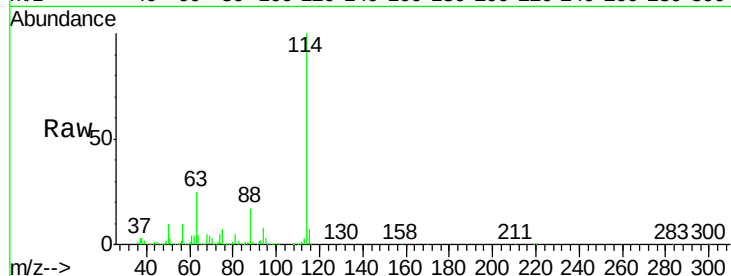
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1354
 Delta R.T. -0.00 min
 Lab File: VL033126.D
 Acq: 29 Jan 2019 3:47

Instrument :
 MSVOA_L
 ClientSampleId :
 S-01

Tot Ion	Ratio	Lower	Upper
114	100		
63	24.6	19.8	29.8
88	17.4	14.2	21.2

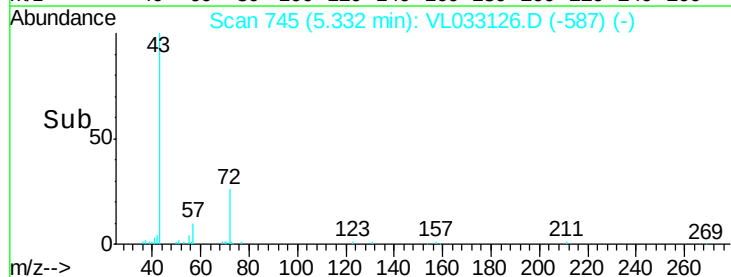
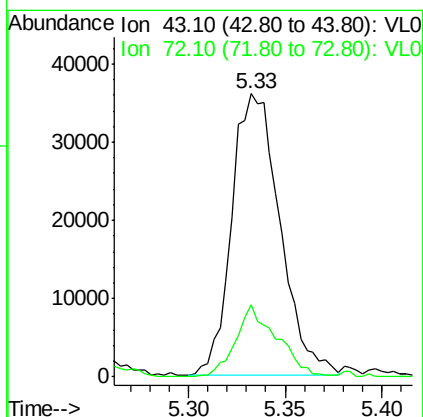
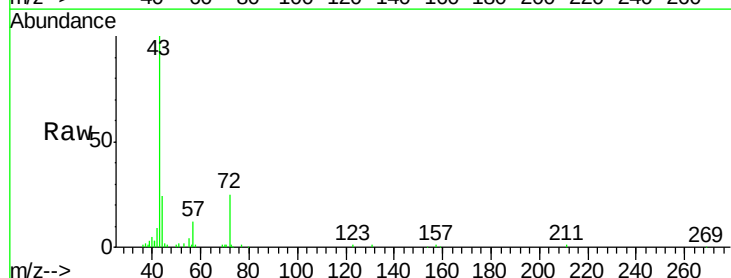
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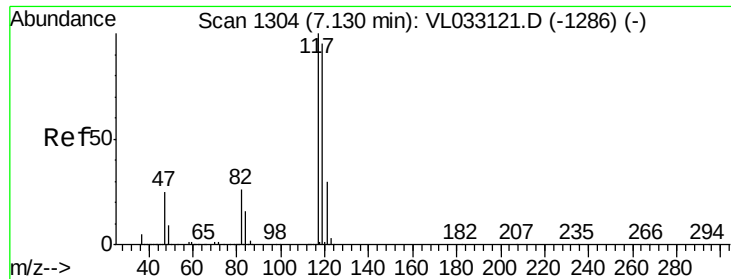
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#34
 2-Butanone
 Concen: 0.352 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. 0.01 min
 Lab File: VL033126.D
 Acq: 29 Jan 2019 3:47

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.8	18.7	28.1





#35

Carbon Tetrachloride

Concen: 0.076 ppbv m

RT: 7.13 min Scan# 1303

Delta R.T. -0.01 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

Instrument :

MSVOA_L

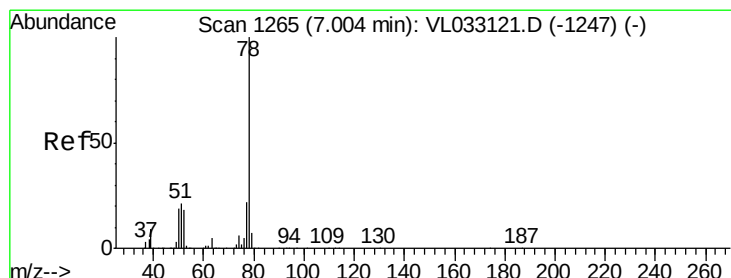
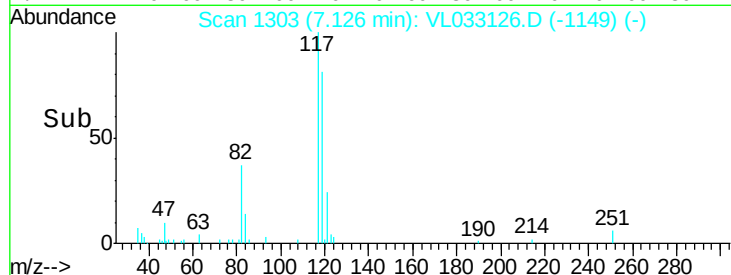
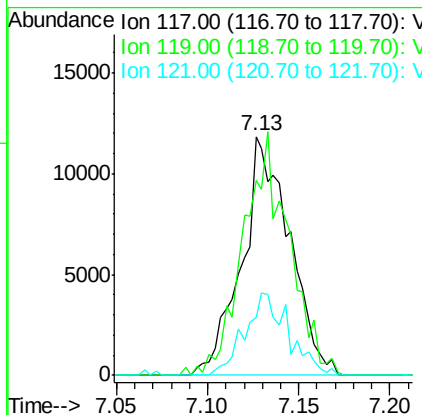
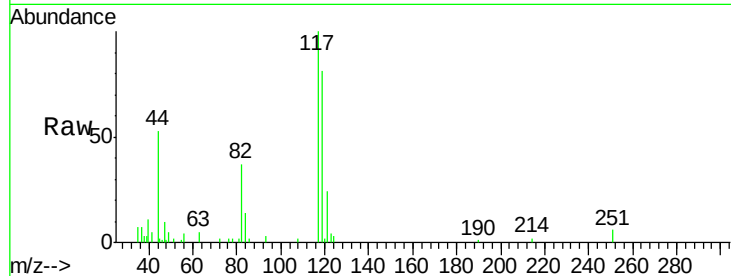
ClientSampled :

S-01

Tot Ion	Ratio	Lower	Upper
117	100		
119	81.4	75.8	113.6
121	24.1	24.6	36.8#

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#36

Benzene

Concen: 0.316 ppbv

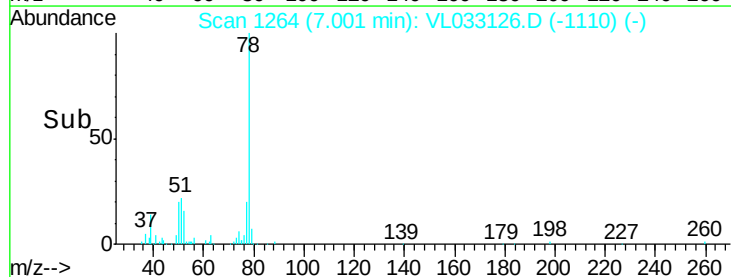
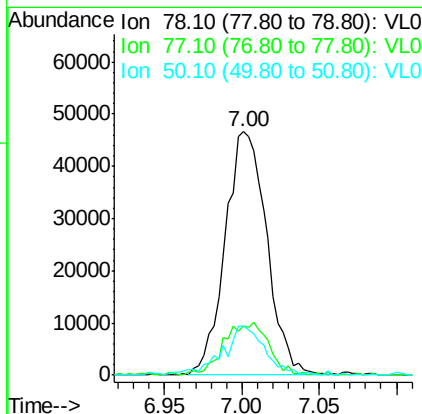
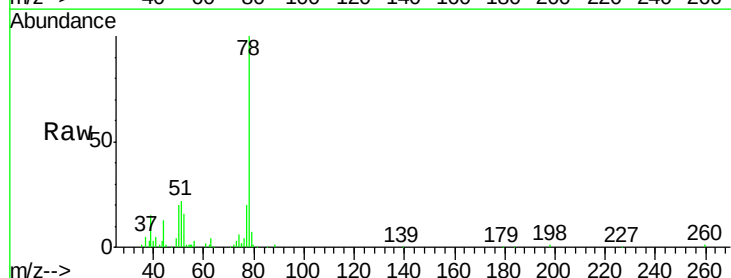
RT: 7.00 min Scan# 1264

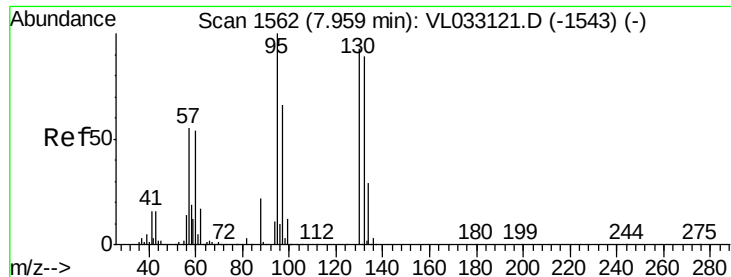
Delta R.T. -0.00 min

Lab File: VL033126.D

Acq: 29 Jan 2019 3:47

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.6	18.5	27.7
50	20.0	15.4	23.2





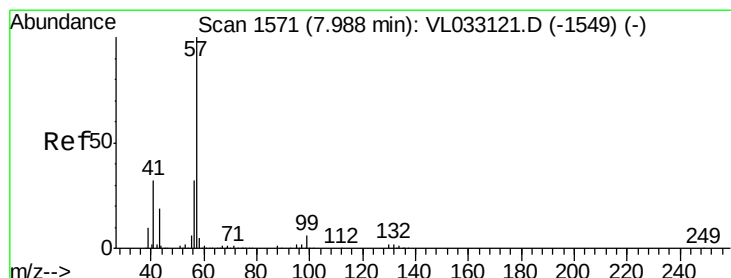
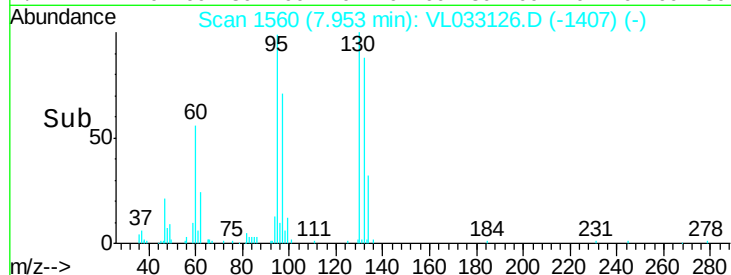
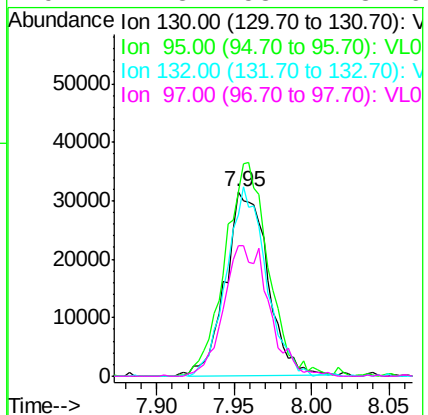
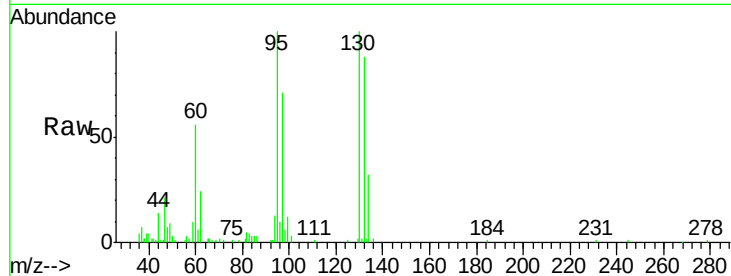
#38
 Trichloroethene
 Concen: 0.528 ppbv
 RT: 7.95 min Scan# 1560
 Delta R.T. -0.01 min
 Lab File: VL033126.D
 Acq: 29 Jan 2019 3:47

Instrument :
 MSVOA_L
 ClientSampled :
 S-01

Tot Ion	Ratio	Lower	Upper
130	100		
95	99.0	94.0	141.0
132	88.1	79.7	119.5
97	71.3	58.4	87.6

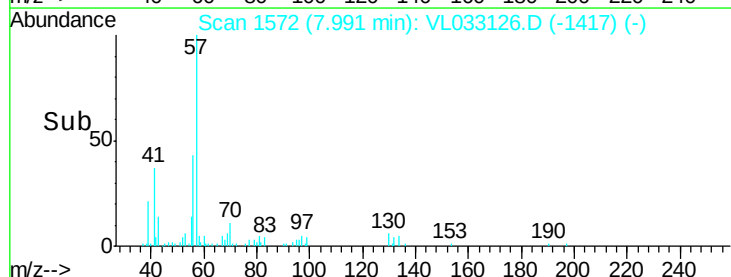
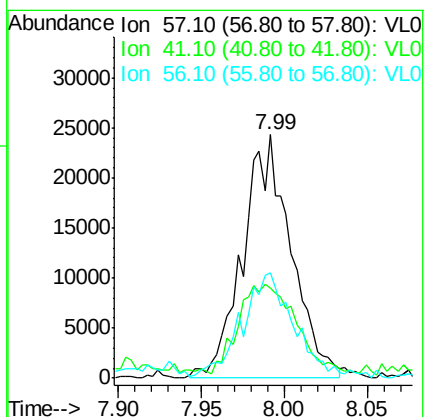
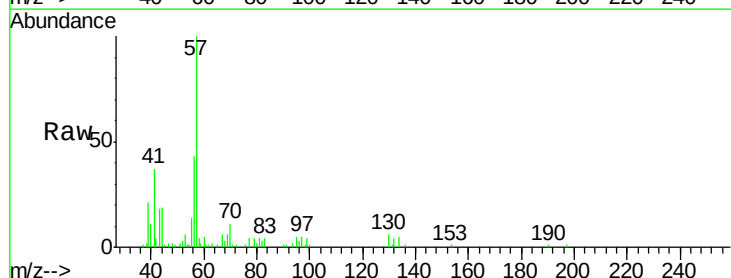
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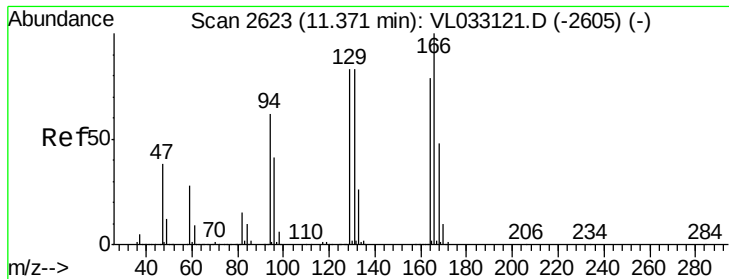
apatel
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#44
 2,2,4-Trimethylpentane
 Concen: 0.113 ppbv m
 RT: 7.99 min Scan# 1572
 Delta R.T. -0.00 min
 Lab File: VL033126.D
 Acq: 29 Jan 2019 3:47

Tgt Ion	Ratio	Lower	Upper
57	100		
41	49.7	26.1	39.1#
56	48.1	25.0	37.4#





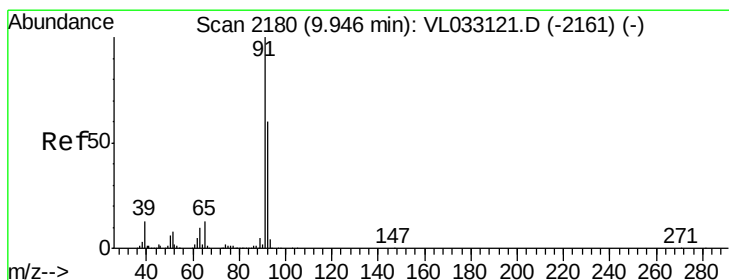
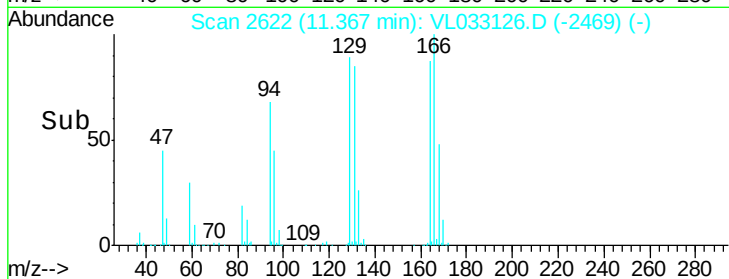
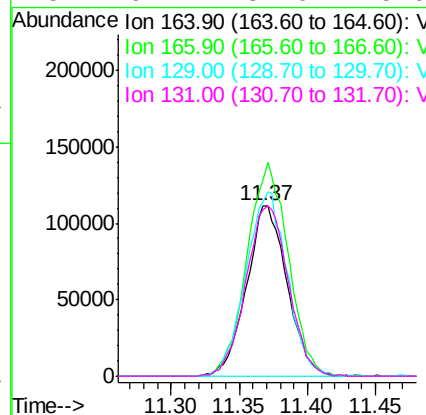
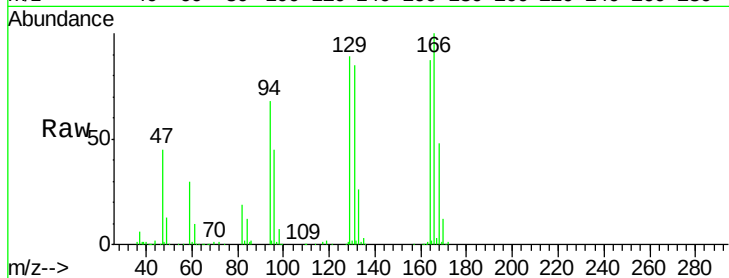
#52
Tetrachloroethene
Concen: 2.504 ppbv
RT: 11.37 min Scan# 2622
Delta R.T. -0.01 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion	Ratio	Lower	Upper
164	100		
166	114.9	101.3	151.9
129	102.2	83.3	124.9
131	97.4	82.0	123.0

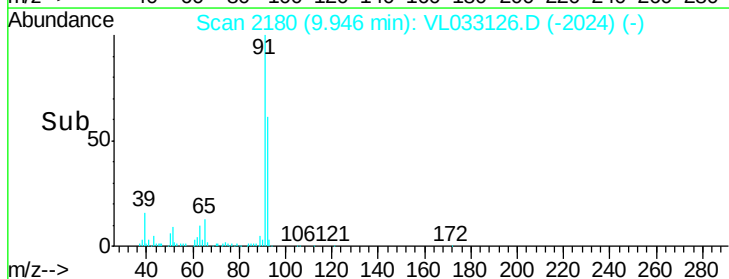
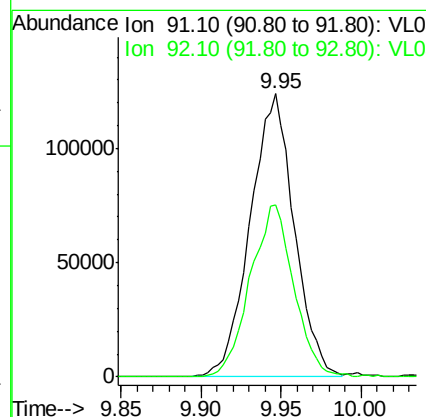
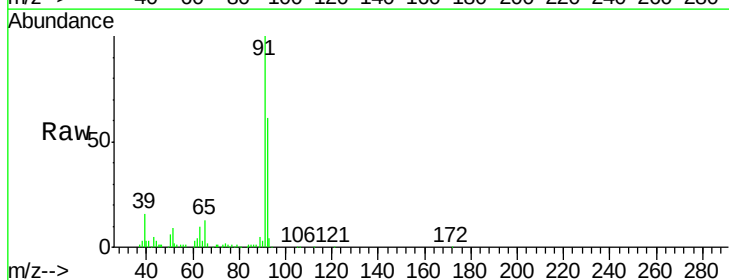
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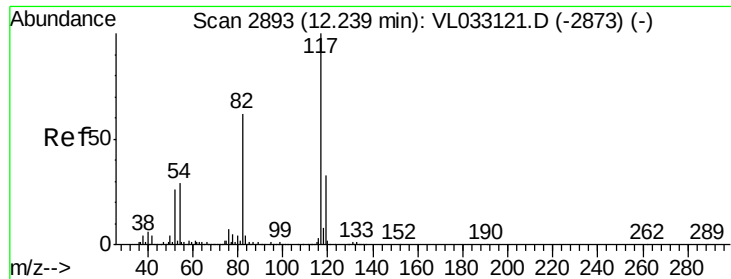
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1/29/2019 2:38:33 PM



#53
Toluene
Concen: 0.847 ppbv
RT: 9.95 min Scan# 2180
Delta R.T. -0.00 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.3	47.9	71.9





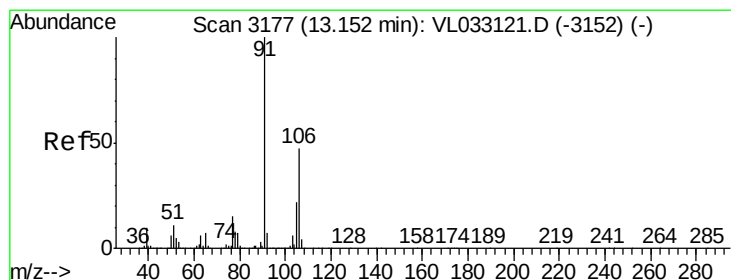
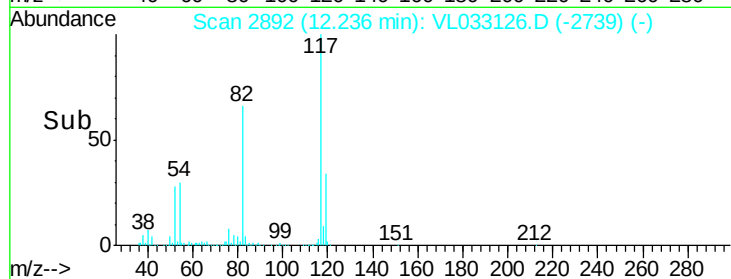
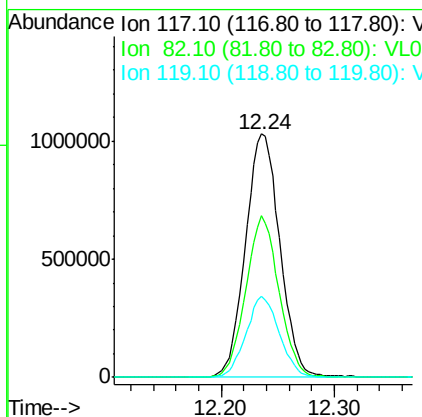
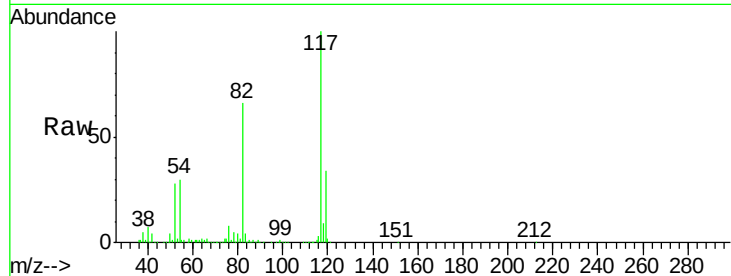
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.0	48.3	72.5
119	32.6	25.9	38.9

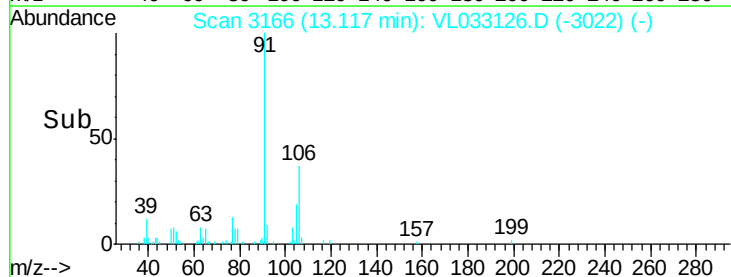
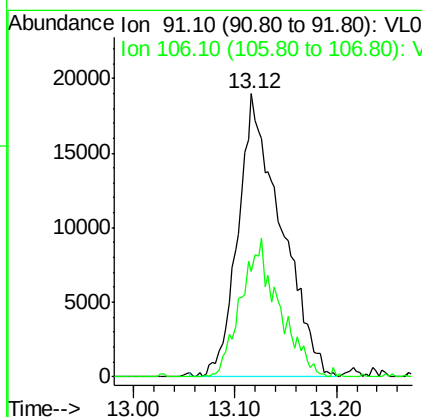
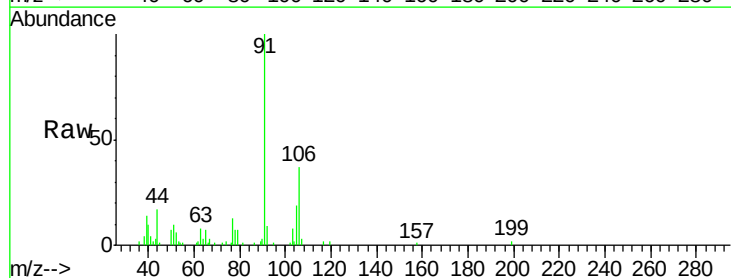
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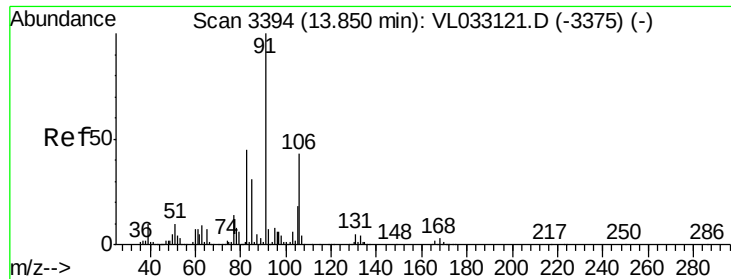
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1/29/2019 2:38:33 PM



#59
m/p-Xylene
Concen: 0.234 ppbv m
RT: 13.12 min Scan# 3166
Delta R.T. -0.04 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Tgt Ion	Ratio	Lower	Upper
91	100		
106	43.5	0.0	0.0#





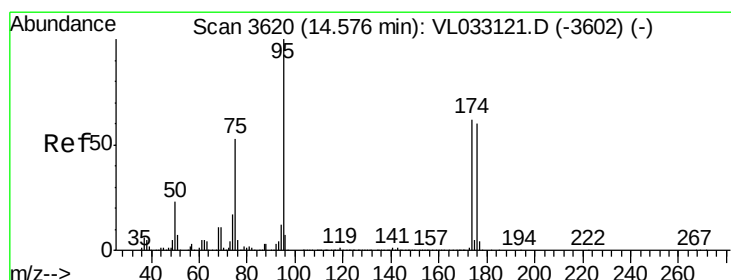
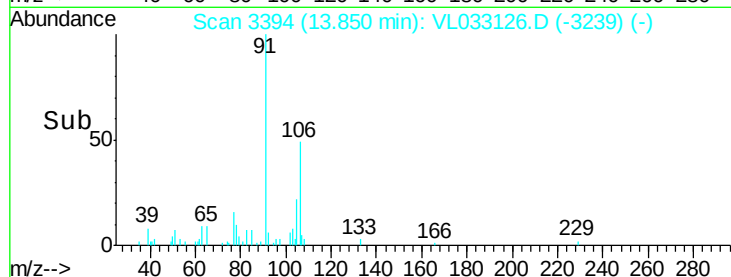
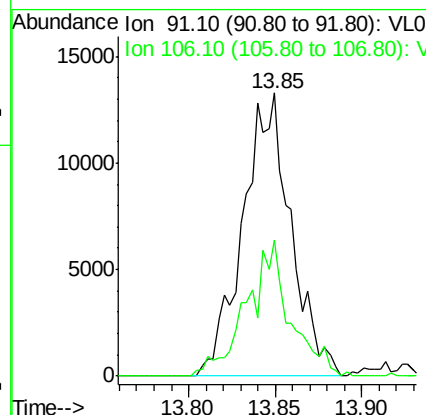
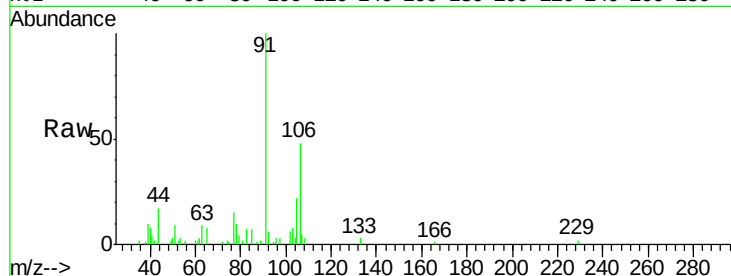
#60
o-Xylene
Concen: 0.104 ppbv m
RT: 13.85 min Scan# 3394
Delta R.T. -0.00 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

Instrument :
MSVOA_L
ClientSampled :
S-01

Tot Ion: 91 Resp: 25768
Ion Ratio Lower Upper
91 100
106 0.0 22.6 67.8#

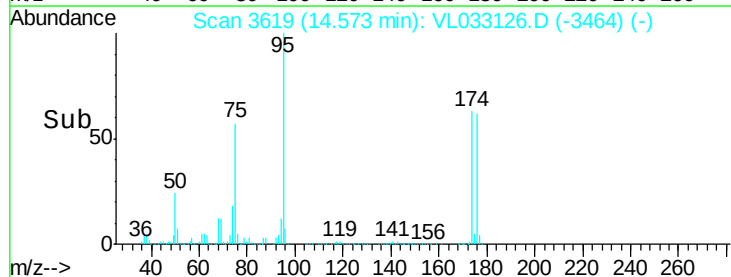
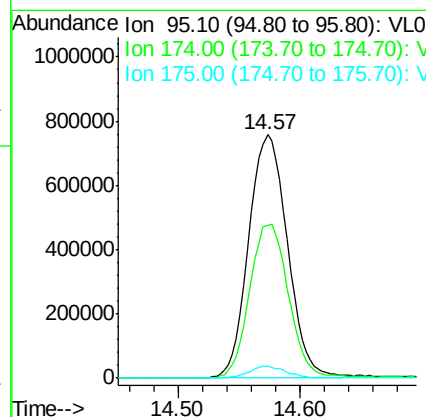
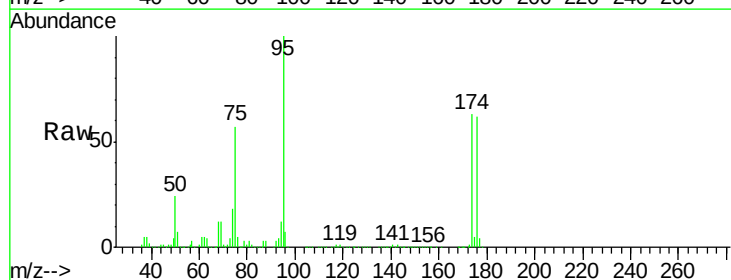
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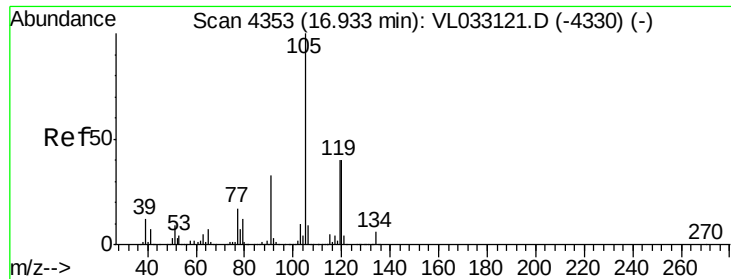
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.111 ppbv
RT: 14.57 min Scan# 3619
Delta R.T. -0.00 min
Lab File: VL033126.D
Acq: 29 Jan 2019 3:47

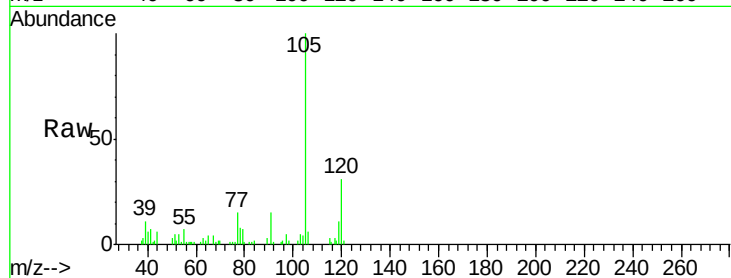
Tgt Ion: 95 Resp: 1666526
Ion Ratio Lower Upper
95 100
174 63.6 51.4 77.2
175 4.7 4.0 6.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.180 ppbv m
 RT: 16.93 min Scan# 4351
 Delta R.T. -0.00 min
 Lab File: VL033126.D
 Acq: 29 Jan 2019 3:47

Instrument :
 MSVOA_L
 ClientSampleId :
 S-01



Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	31.5	37.9	56.9#
91	14.7	39.8	59.8#
77	15.3	17.8	26.8#

Manual Integrations
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