

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL113018\
 Data File : VL032866.D
 Acq On : 1 Dec 2018 2:12
 Operator : SY/AP
 Sample : J6132-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 DSV-05

Manual Integrations
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Quant Time: Dec 03 16:32:18 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1373640	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3603310	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3513236	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2686408	10.22	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	44713	0.226	ppbv	97
3) Chlorodifluoromethane	3.02	51	32546	0.299	ppbv #	89
4) Chloromethane	3.18	50	47165	0.781	ppbv	94
9) Propene	3.04	41	6514750	149.485	ppbv	99
10) Heptane	8.26	43	157967	0.949	ppbv	97
11) Trichlorofluoromethane	4.01	101	72137	0.388	ppbv	96
13) Ethanol	3.66	45	387020	27.113	ppbv	98
15) Acetone	3.91	43	2153200m	17.165	ppbv	
20) Methylene Chloride	4.42	84	153402	2.362	ppbv #	89
26) Hexane	5.79	57	801320	6.157	ppbv #	38
27) Carbon Disulfide	4.63	76	2690558	16.303	ppbv	99
29) Chloroform	5.86	83	40571	0.175	ppbv	92
34) 2-Butanone	5.33	43	4559445	24.396	ppbv	98
35) Carbon Tetrachloride	7.15	117	8998m	0.031	ppbv	
36) Benzene	7.01	78	1001955	3.492	ppbv	98
44) 2,2,4-Trimethylpentane	8.00	57	337872	0.705	ppbv	94
51) 2-Hexanone	10.28	43	556880	2.961	ppbv #	99
52) Tetrachloroethene	11.38	164	14000m	0.140	ppbv	
53) Toluene	9.96	91	773877	2.585	ppbv	99
58) Ethyl Benzene	12.87	91	206776	0.489	ppbv	97
59) m/p-Xylene	13.13	91	344920	0.916	ppbv	97
60) o-Xylene	13.86	91	167655	0.443	ppbv	99
61) Styrene	13.69	104	88226	0.358	ppbv	97
69) p-Isopropyltoluene	17.82	119	316227	0.602	ppbv	100
74) 1,2,4-Trimethylbenzene	16.93	105	173720	0.400	ppbv #	66
79) Naphthalene	22.43	128	62776m	0.220	ppbv	

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

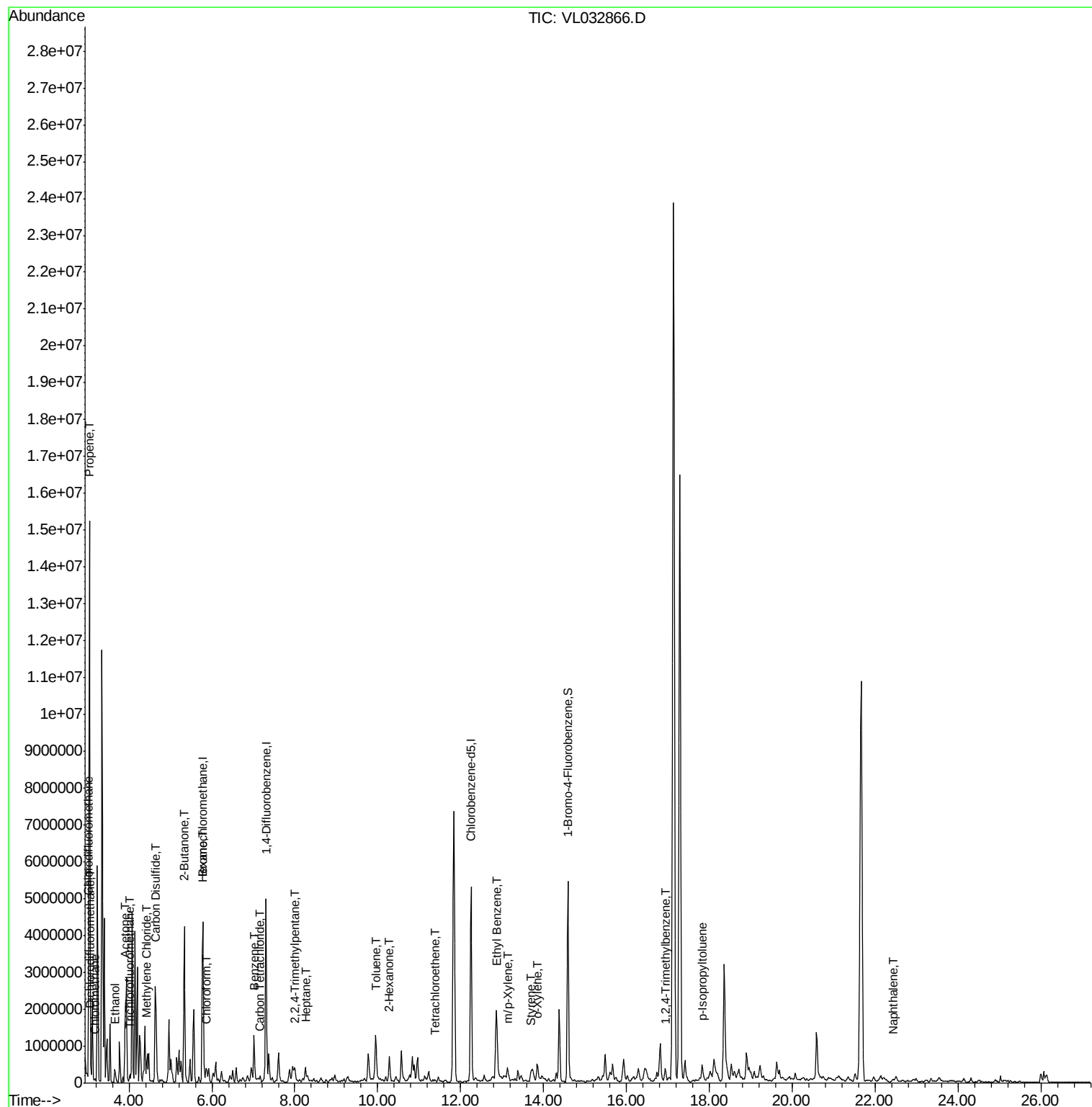
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL113018\
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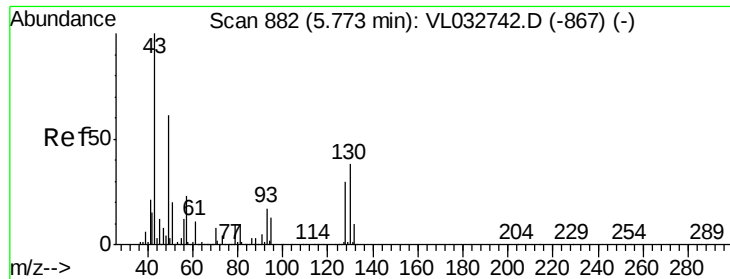
Instrument :
MSVOA_L
ClientSampleId :
DSV-05

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Quant Time: Dec 03 16:32:18 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Instrument :

MSVOA_L

ClientSampled :

DSV-05

Tot Ion: 49 Resp: 1373640

Ion Ratio Lower Upper

49 100

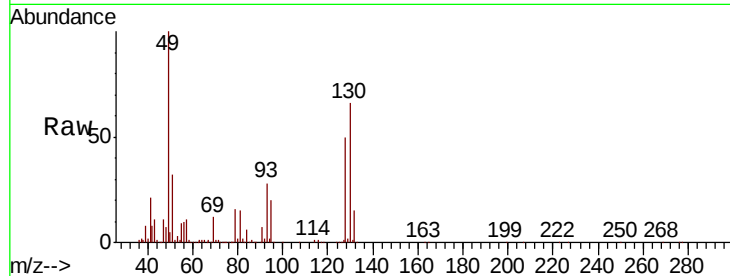
128 52.8 24.9 74.6

130 68.8 31.4 94.2

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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

1000000

800000

600000

400000

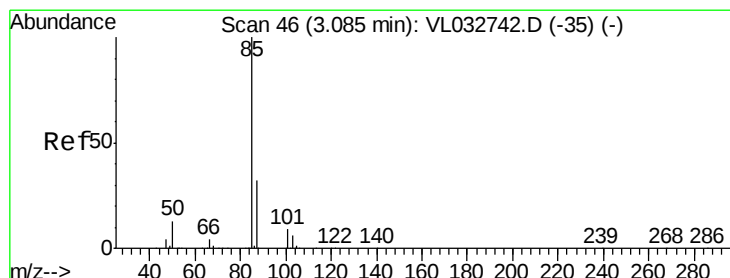
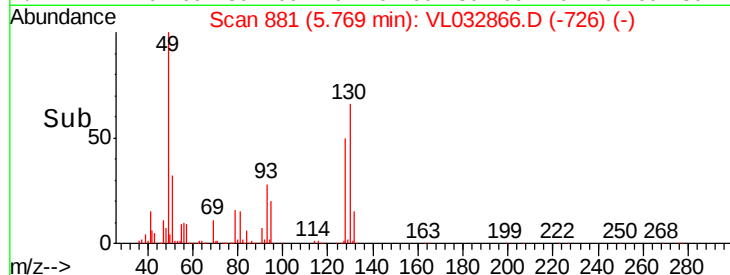
200000

0

5.77

5.70 5.75 5.80 5.85

Time-->



#2

Dichlorodifluoromethane

Concen: 0.226 ppbv

RT: 3.08 min Scan# 45

Delta R.T. -0.00 min

Lab File: VL032866.D

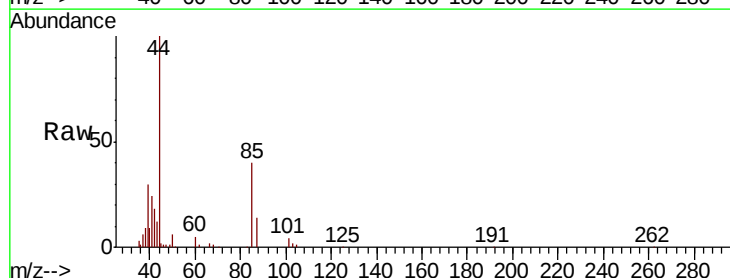
Acq: 1 Dec 2018 2:12

Tgt Ion: 85 Resp: 44713

Ion Ratio Lower Upper

85 100

87 34.4 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

40000

30000

20000

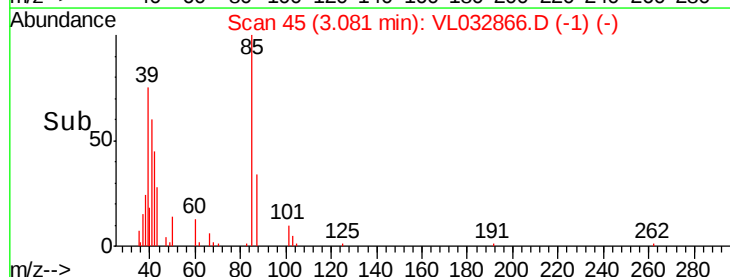
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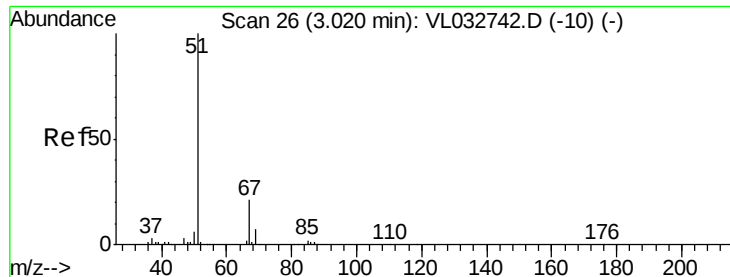
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3.08

3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 0.299 ppbv

RT: 3.02 min Scan# 25

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Instrument :

MSVOA_L

ClientSampled :

DSV-05

Tot Ion: 51 Resp: 32546

Ion Ratio Lower Upper

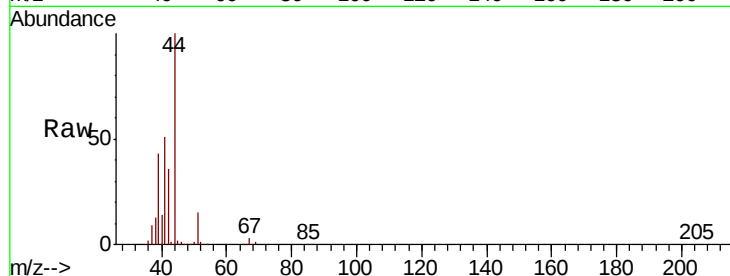
51 100

67 15.3 16.1 24.1#

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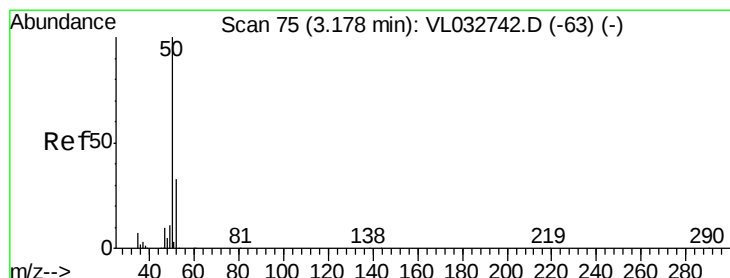
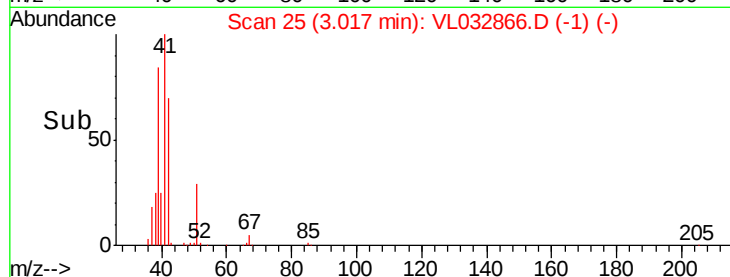
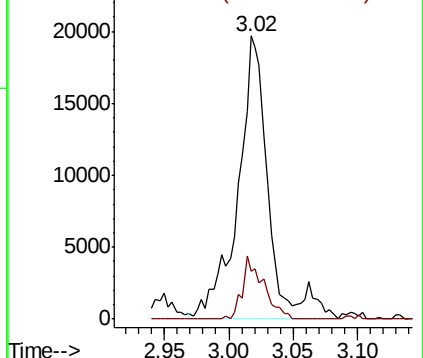
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.781 ppbv

RT: 3.18 min Scan# 75

Delta R.T. -0.00 min

Lab File: VL032866.D

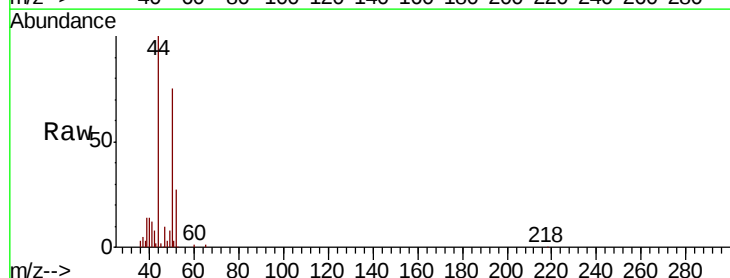
Acq: 1 Dec 2018 2:12

Tgt Ion: 50 Resp: 47165

Ion Ratio Lower Upper

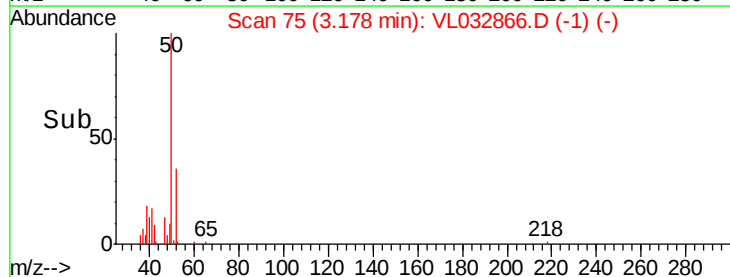
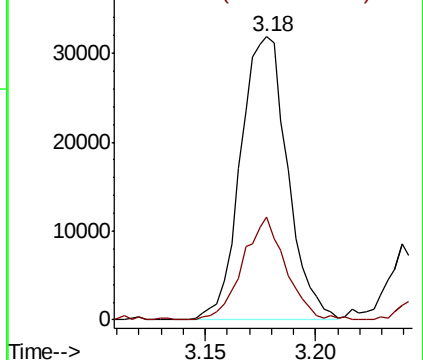
50 100

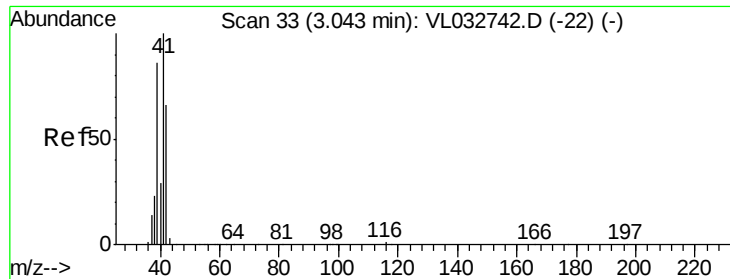
52 36.6 26.6 40.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 149.485 ppbv

RT: 3.04 min Scan# 33

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Instrument :

MSVOA_L

ClientSampled :

DSV-05

Tot Ion: 41 Resp: 6514750

Ion Ratio Lower Upper

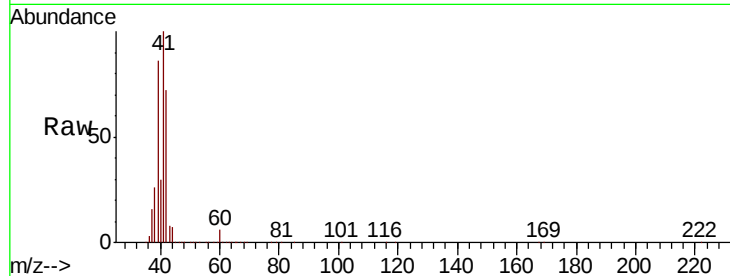
41 100

42 68.0 55.0 82.6

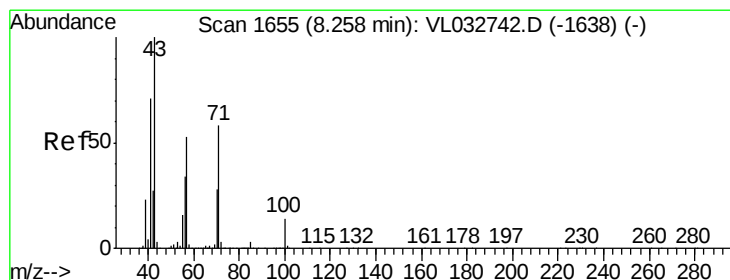
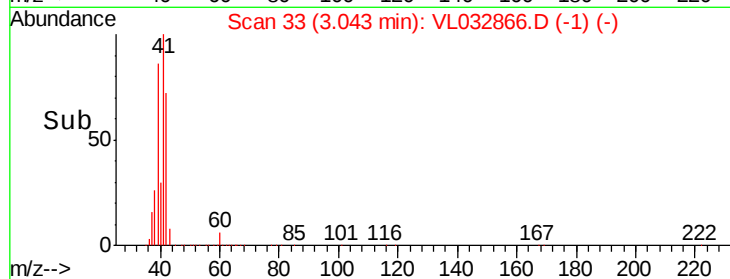
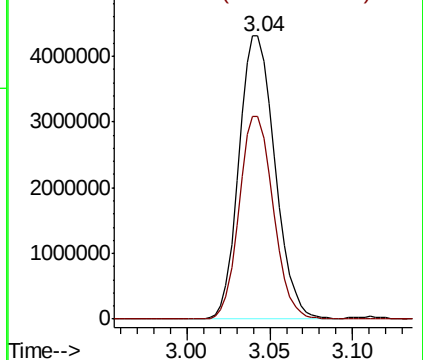
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Abundance Ion 41.10 (40.80 to 41.80): VL0
5000000 Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.949 ppbv

RT: 8.26 min Scan# 1655

Delta R.T. -0.00 min

Lab File: VL032866.D

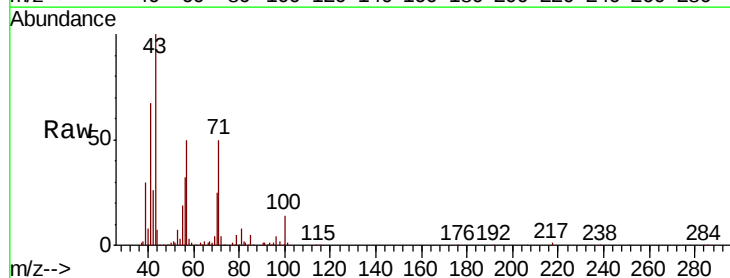
Acq: 1 Dec 2018 2:12

Tgt Ion: 43 Resp: 157967

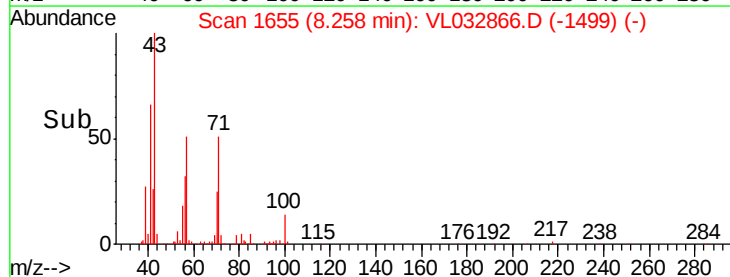
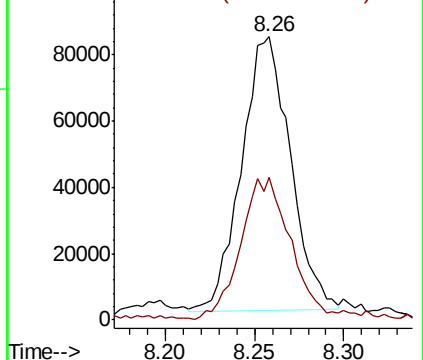
Ion Ratio Lower Upper

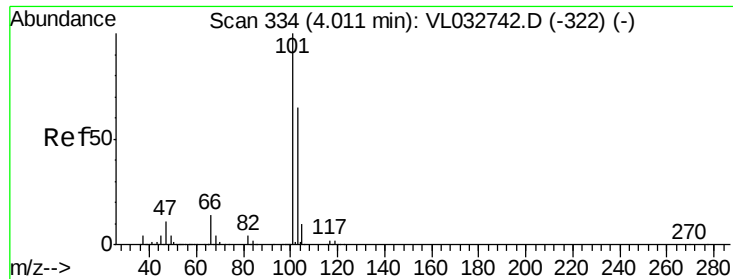
43 100

57 54.7 41.8 62.8



Abundance Ion 43.10 (42.80 to 43.80): VL0
100000 Ion 57.10 (56.80 to 57.80): VL0





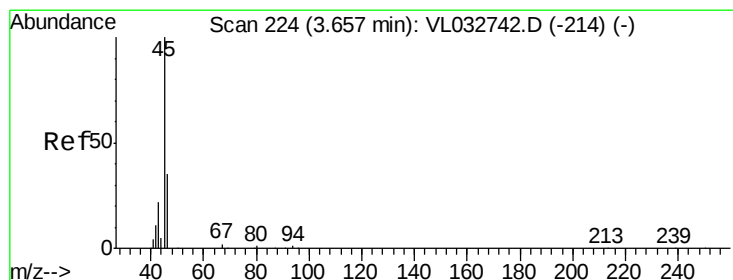
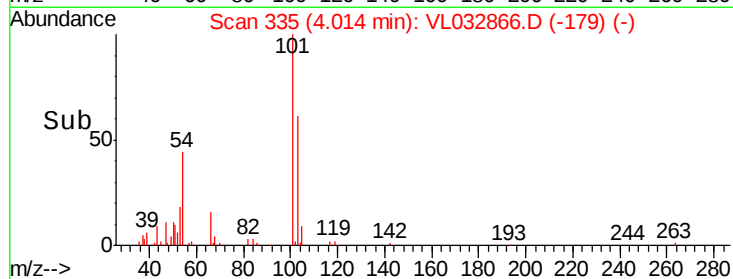
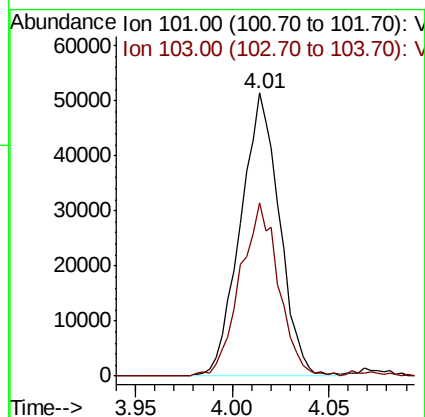
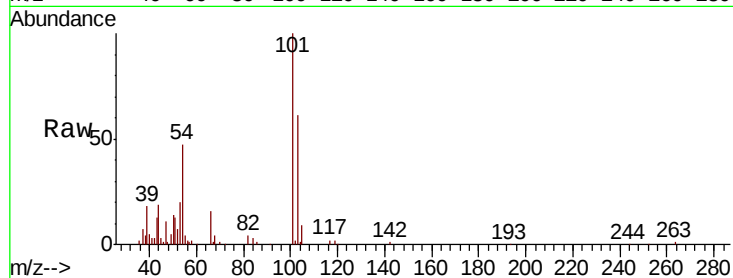
#11
Trichlorofluoromethane
Concen: 0.388 ppbv
RT: 4.01 min Scan# 335
Delta R.T. 0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion	Ratio	Lower	Upper
101	100		
103	61.1	51.6	77.4

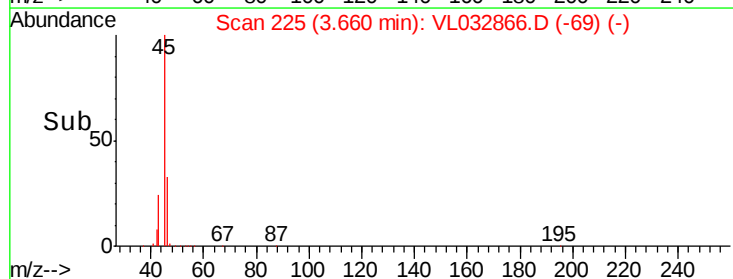
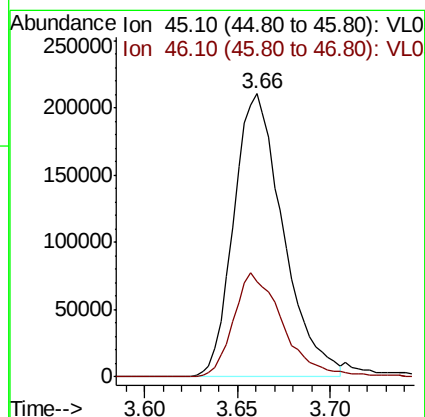
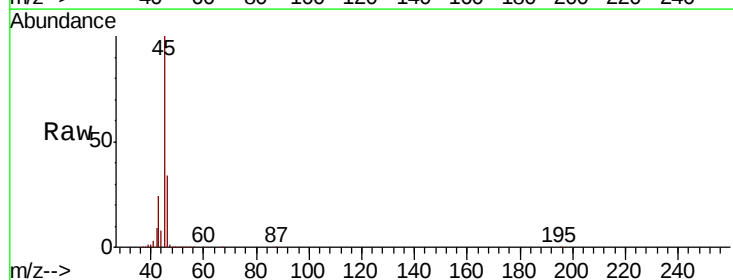
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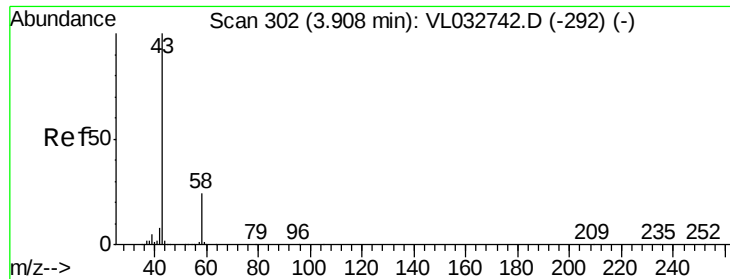
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#13
Ethanol
Concen: 27.113 ppbv
RT: 3.66 min Scan# 225
Delta R.T. 0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.6	14.5	57.9





#15

Acetone

Concen: 17.165 ppbv m

RT: 3.91 min Scan# 302

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Instrument :

MSVOA_L

ClientSampleId :

DSV-05

Tot Ion: 43 Resp: 2153200

Ion Ratio Lower Upper

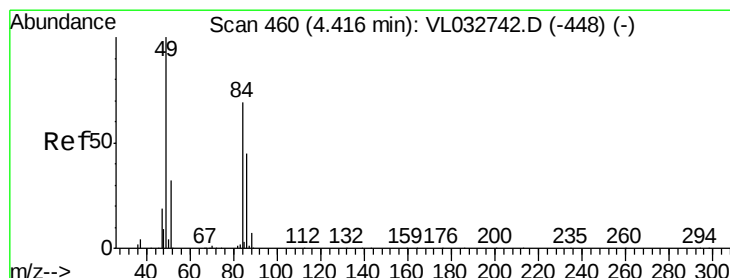
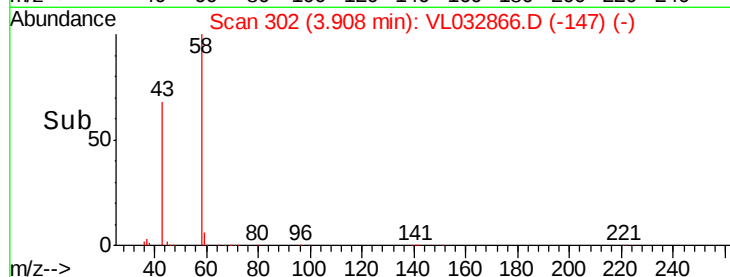
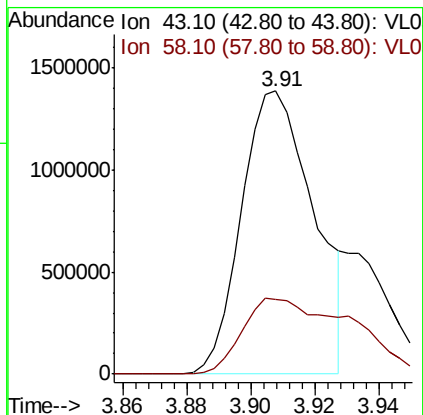
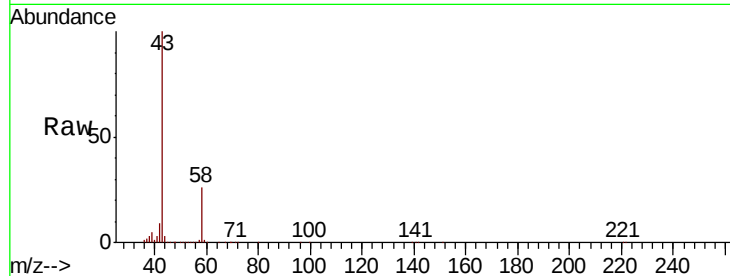
43 100

58 41.6 21.1 31.7#

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#20

Methylene Chloride

Concen: 2.362 ppbv

RT: 4.42 min Scan# 460

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Tgt Ion: 84 Resp: 153402

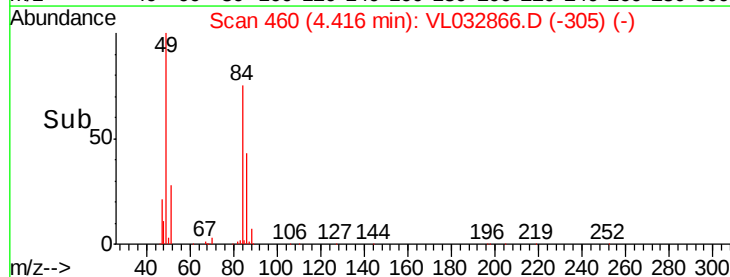
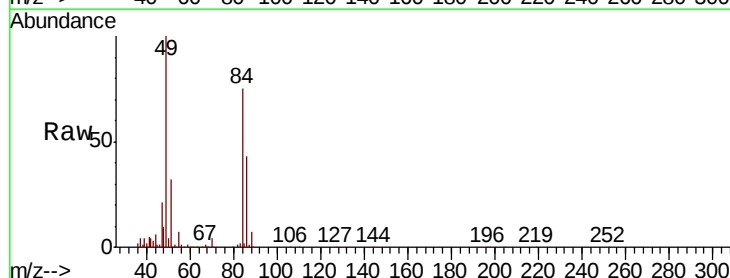
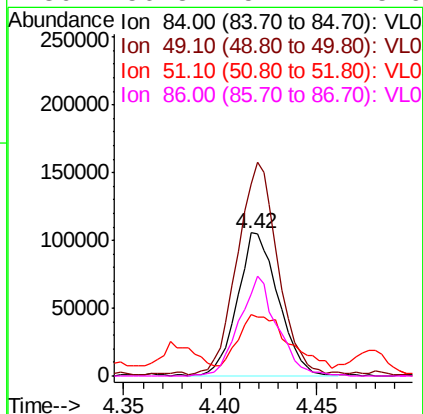
Ion Ratio Lower Upper

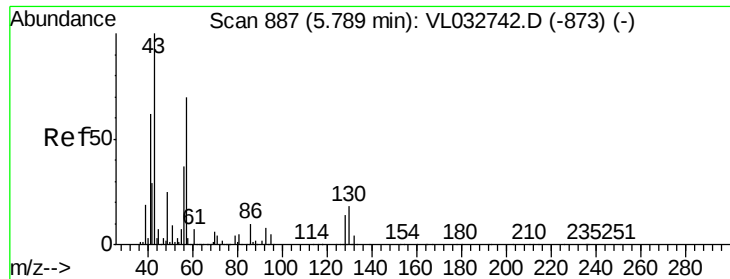
84 100

49 133.3 115.8 173.6

51 34.8 36.9 55.3#

86 56.8 52.4 78.6





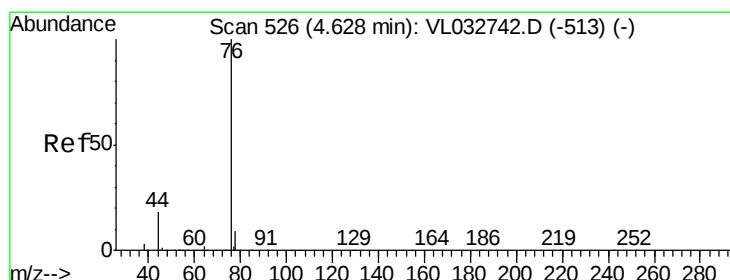
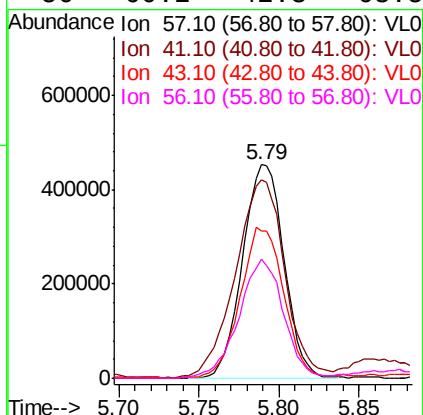
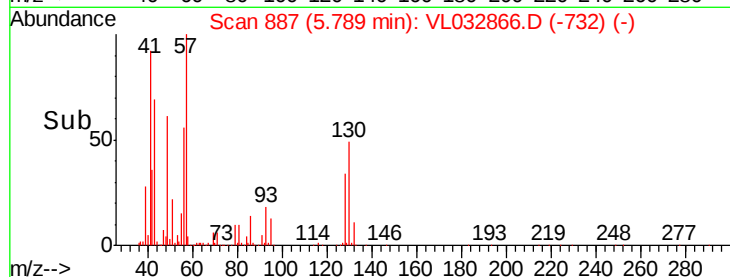
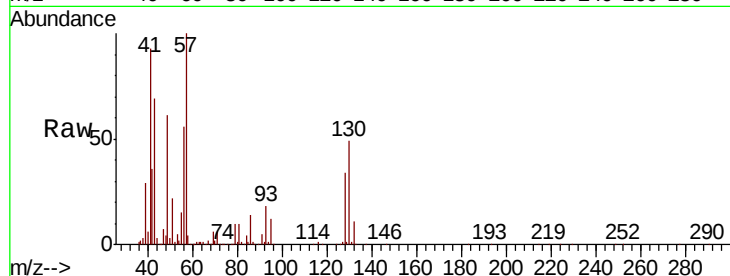
#26
Hexane
Concen: 6.157 ppbv
RT: 5.79 min Scan# 887
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion	Ratio	Lower	Upper
57	100		
41	110.2	70.3	105.5#
43	74.1	174.0	261.0#
56	60.2	42.3	63.5

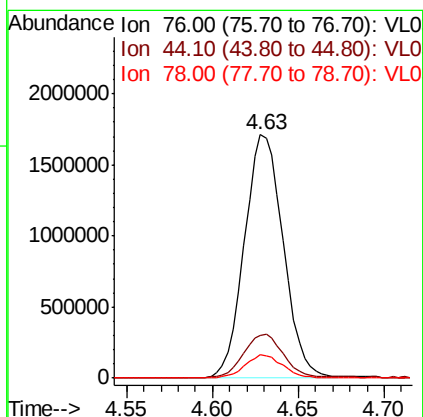
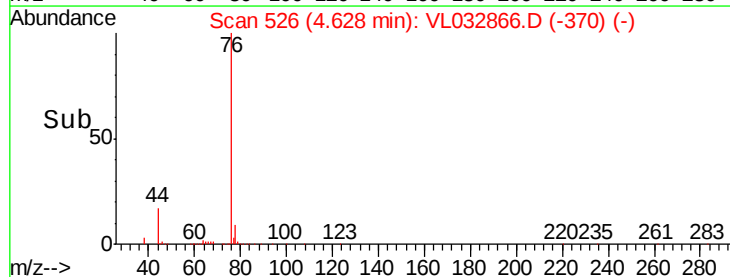
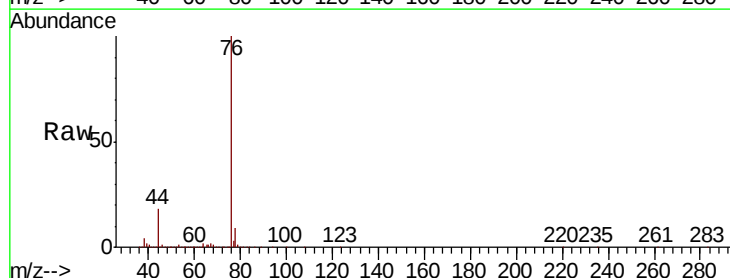
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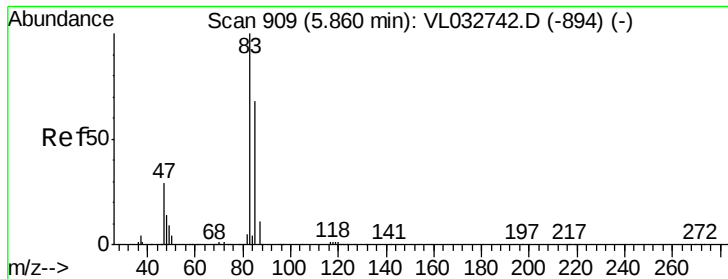
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#27
Carbon Disulfide
Concen: 16.303 ppbv
RT: 4.63 min Scan# 526
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion	Ratio	Lower	Upper
76	100		
44	18.2	14.4	21.6
78	9.3	7.7	11.5





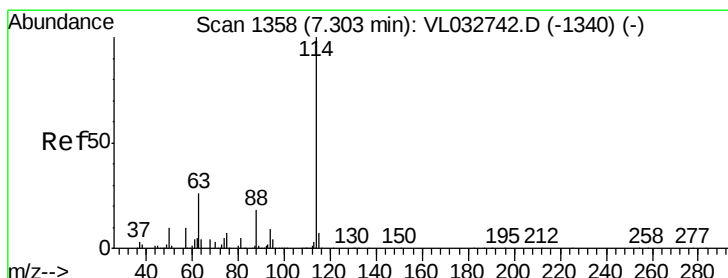
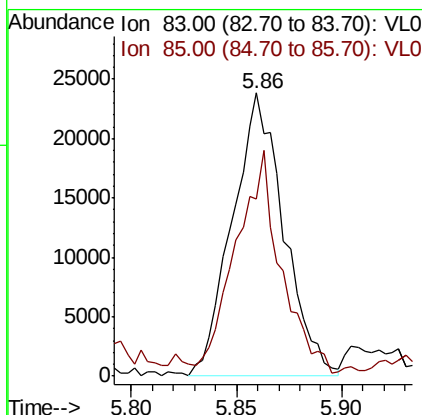
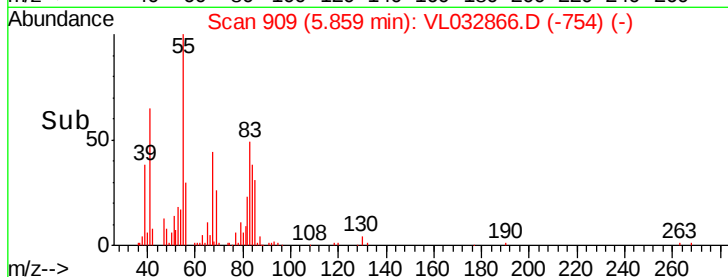
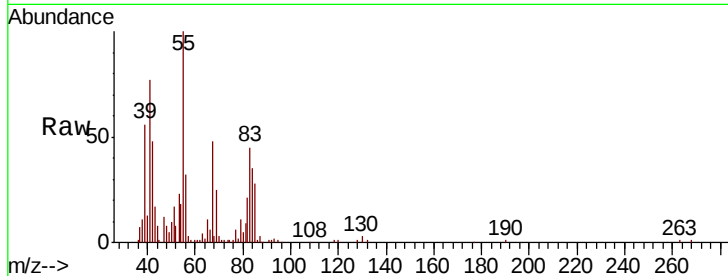
#29
Chloroform
Concen: 0.175 ppbv
RT: 5.86 min Scan# 909
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion: 83 Resp: 40571
Ion Ratio Lower Upper
83 100
85 61.3 54.2 81.4

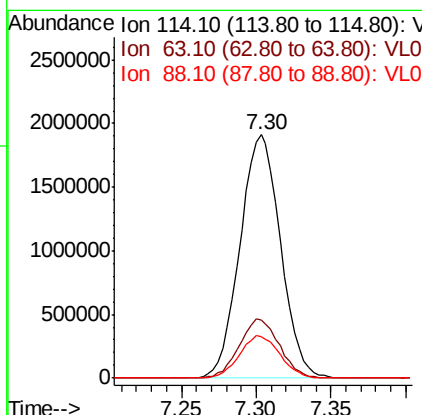
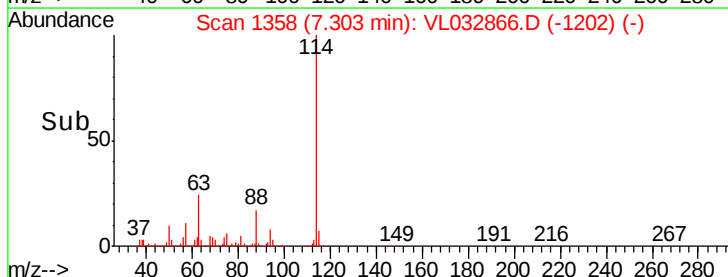
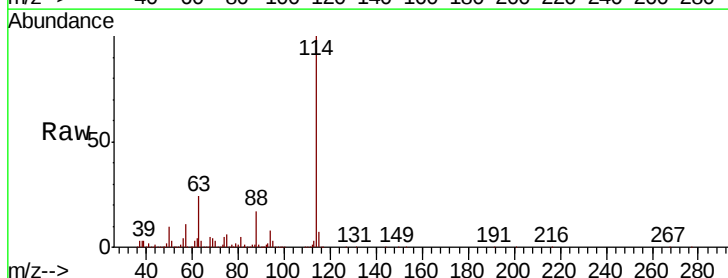
Manual Integrations
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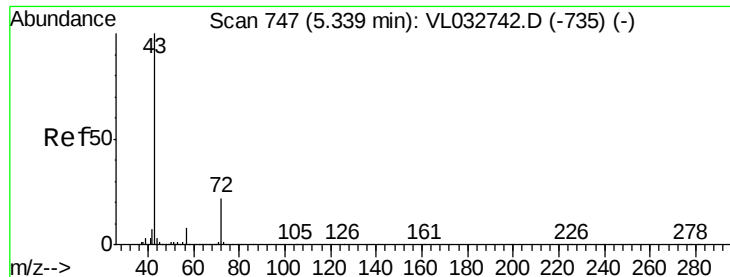
apatel
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion: 114 Resp: 3603310
Ion Ratio Lower Upper
114 100
63 24.2 20.9 31.3
88 17.5 14.4 21.6





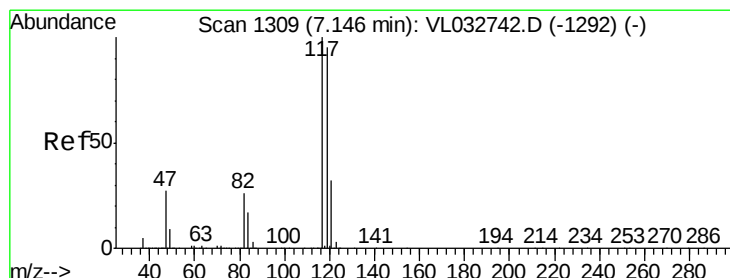
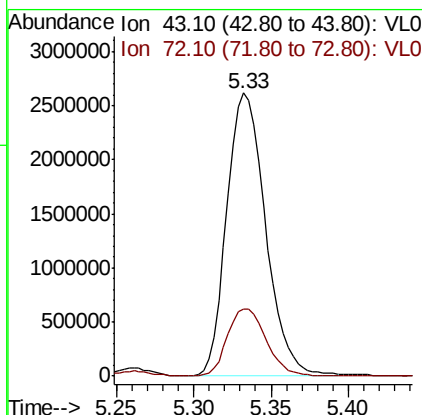
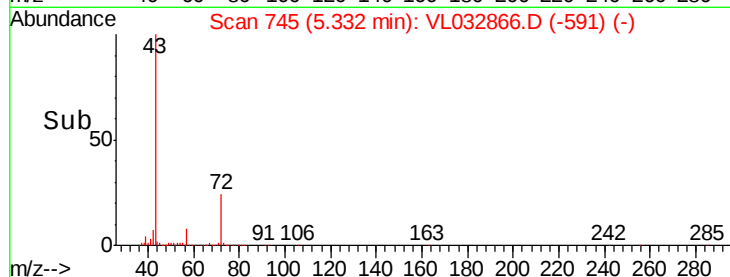
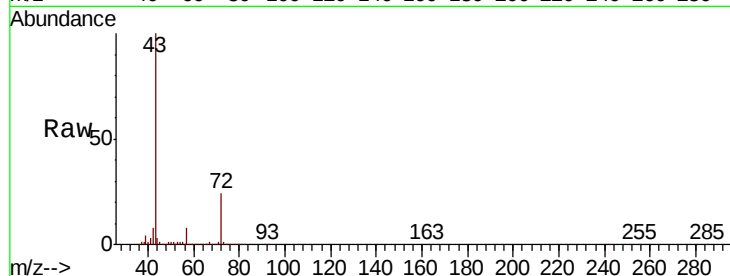
#34
2-Butanone
Concen: 24.396 ppbv
RT: 5.33 min Scan# 745
Delta R.T. -0.01 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion: 43 Resp: 4559445
Ion Ratio Lower Upper
43 100
72 24.0 18.4 27.6

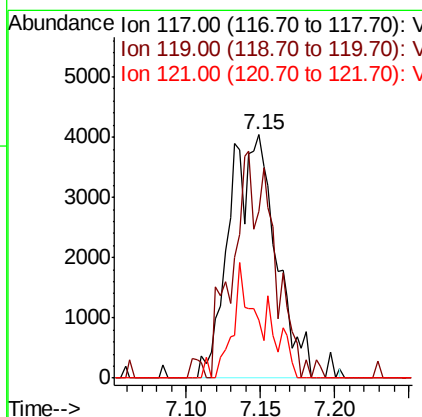
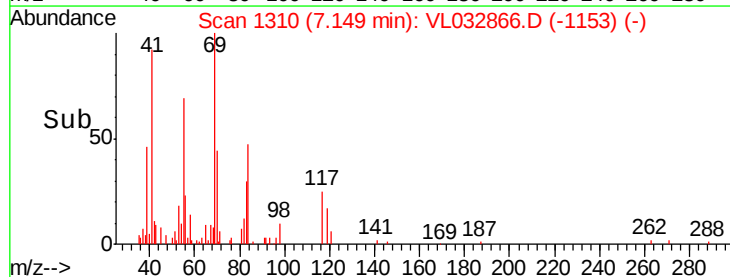
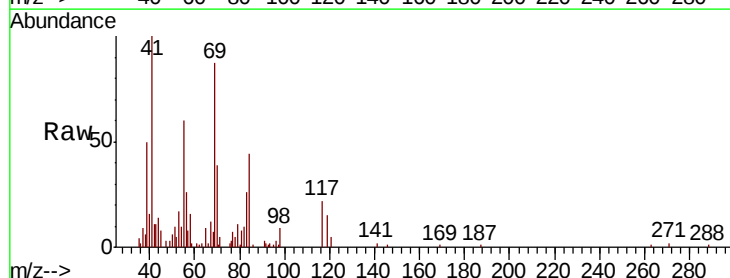
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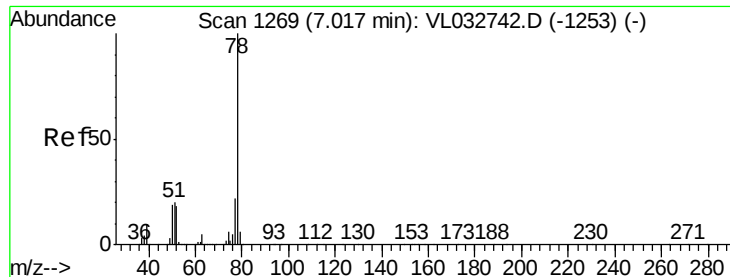
apatel
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#35
Carbon Tetrachloride
Concen: 0.031 ppbv m
RT: 7.15 min Scan# 1310
Delta R.T. 0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion: 117 Resp: 8998
Ion Ratio Lower Upper
117 100
119 68.4 76.1 114.1#
121 23.7 25.4 38.0#





#36

Benzene

Concen: 3.492 ppbv

RT: 7.01 min Scan# 1268

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Instrument :

MSVOA_L

ClientSampleId :

DSV-05

Tot Ion: 78 Resp: 1001955

Ion Ratio Lower Upper

78 100

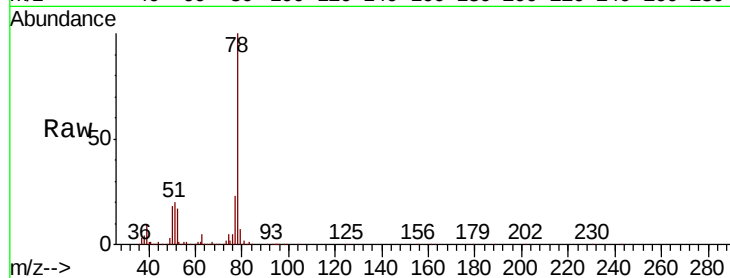
77 22.7 17.8 26.8

50 17.7 15.4 23.0

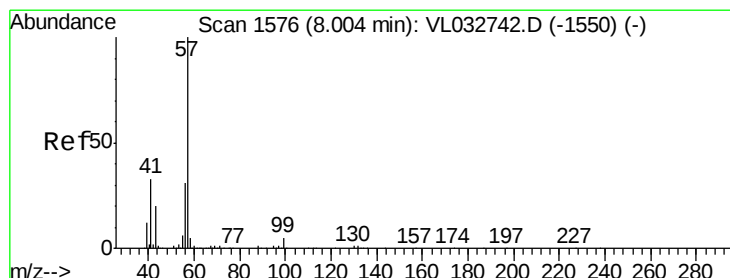
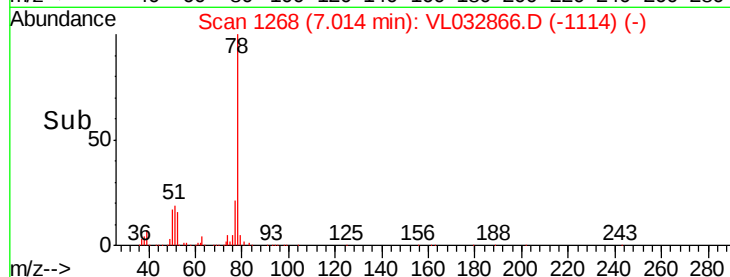
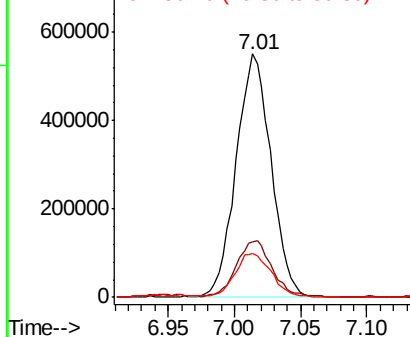
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Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.705 ppbv

RT: 8.00 min Scan# 1574

Delta R.T. -0.01 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

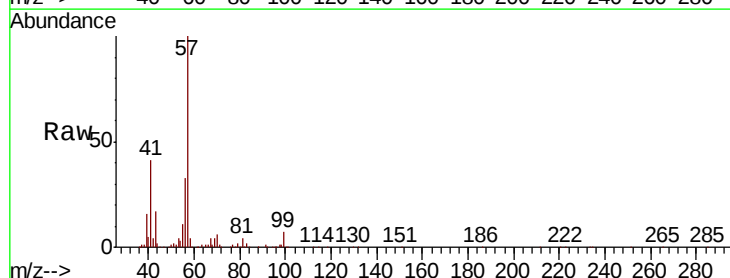
Tgt Ion: 57 Resp: 337872

Ion Ratio Lower Upper

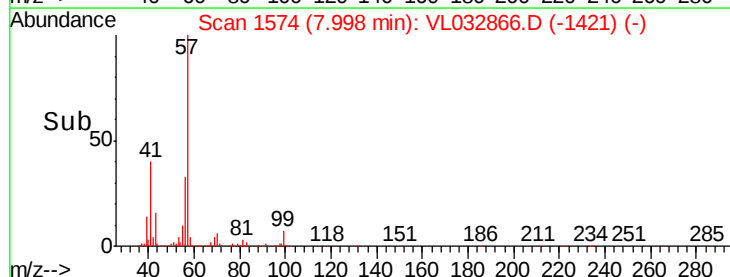
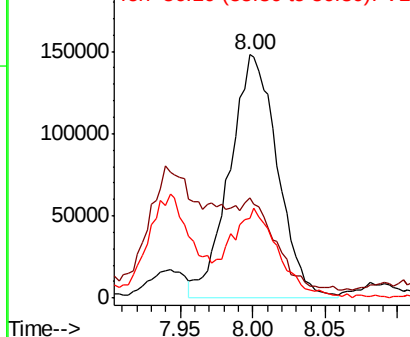
57 100

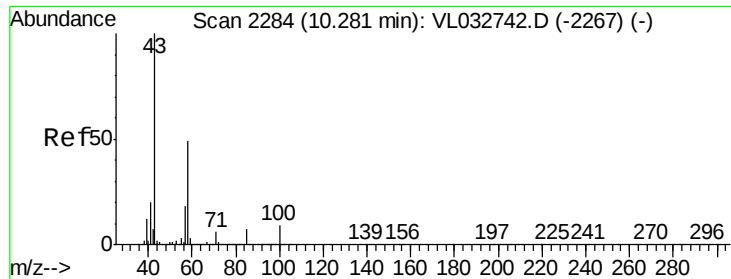
41 30.7 26.6 39.8

56 35.3 24.8 37.2



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





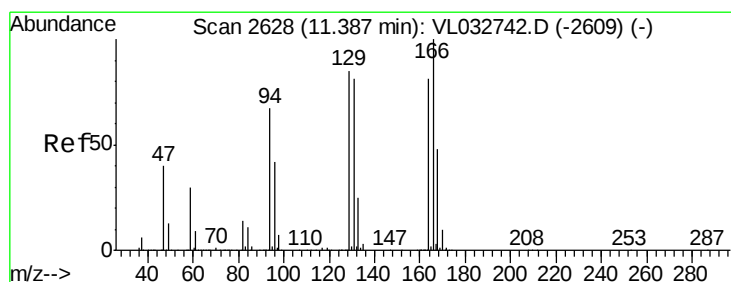
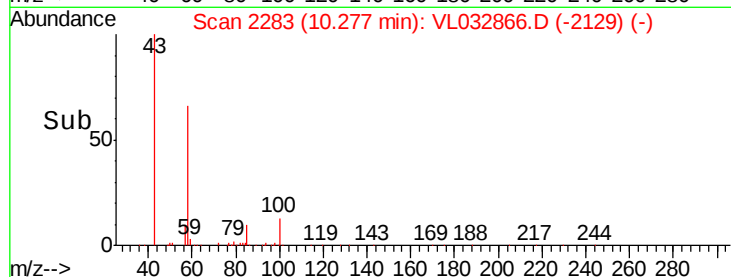
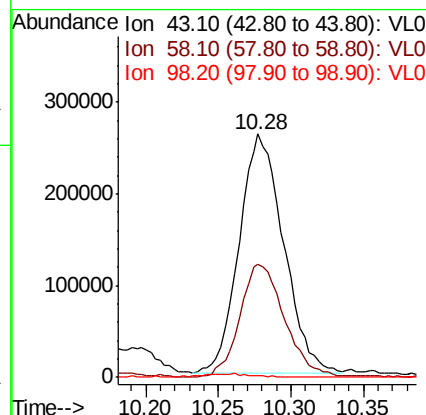
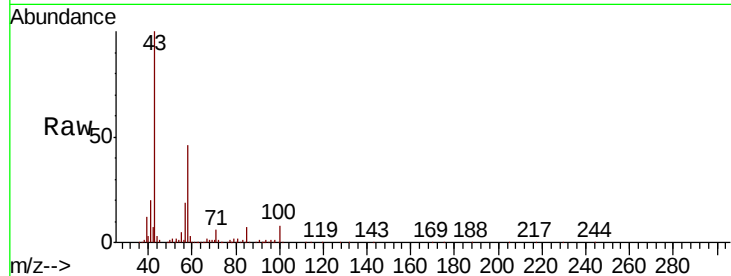
#51
2-Hexanone
Concen: 2.961 ppbv
RT: 10.28 min Scan# 2283
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion	Ratio	Lower	Upper
43	100		
58	48.2	38.9	58.3
98	2.2	0.2	0.4

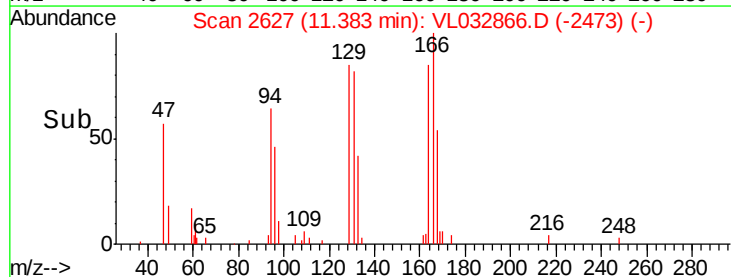
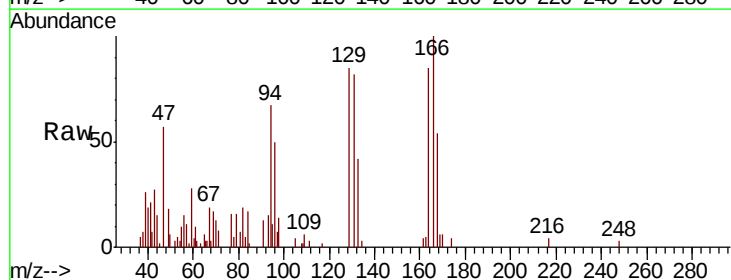
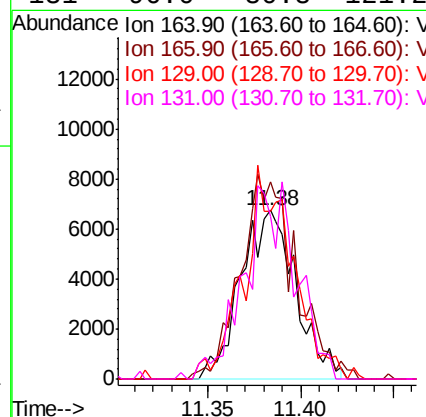
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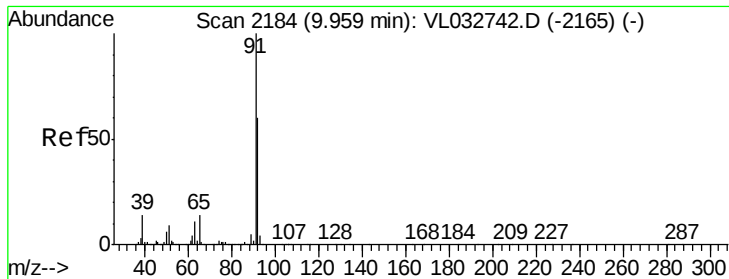
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#52
Tetrachloroethene
Concen: 0.140 ppbv m
RT: 11.38 min Scan# 2627
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion	Ratio	Lower	Upper
164	100		
166	117.0	99.3	148.9
129	99.4	83.9	125.9
131	96.0	80.8	121.2





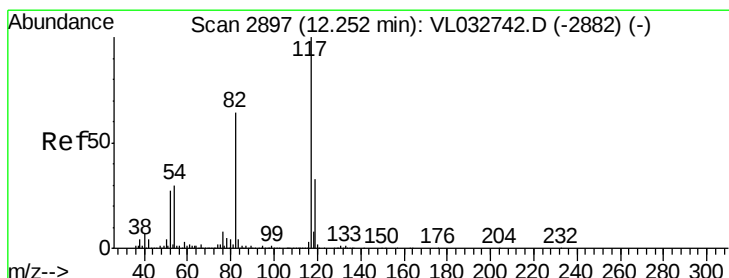
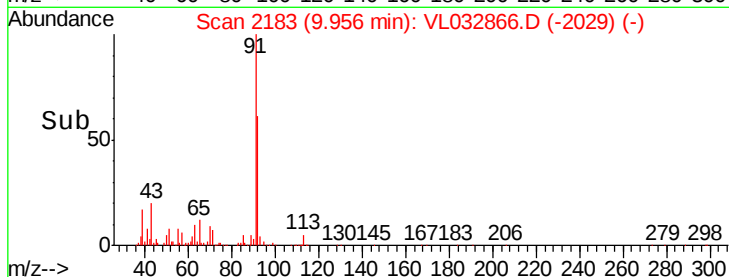
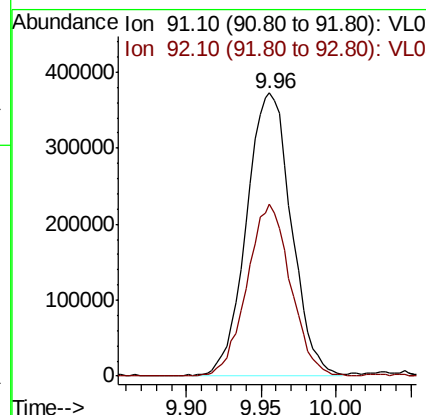
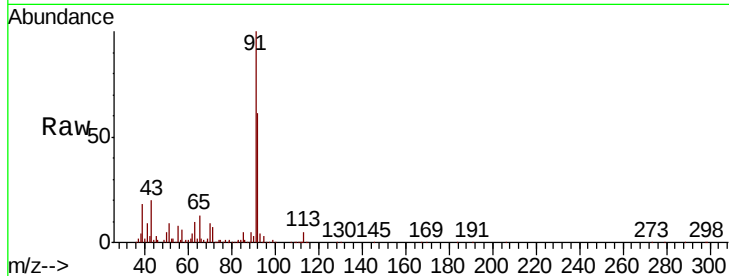
#53
Toluene
Concen: 2.585 ppbv
RT: 9.96 min Scan# 2183
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion: 91 Resp: 773877
Ion Ratio Lower Upper
91 100
92 59.3 47.9 71.9

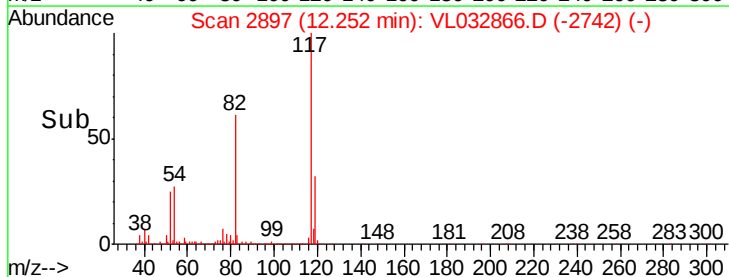
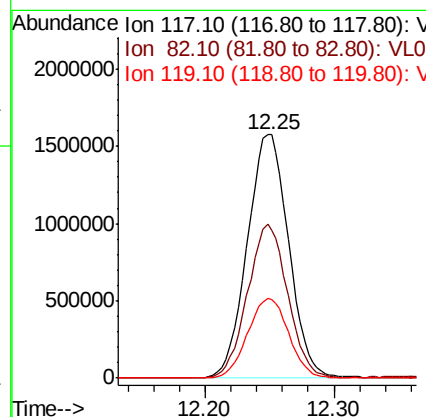
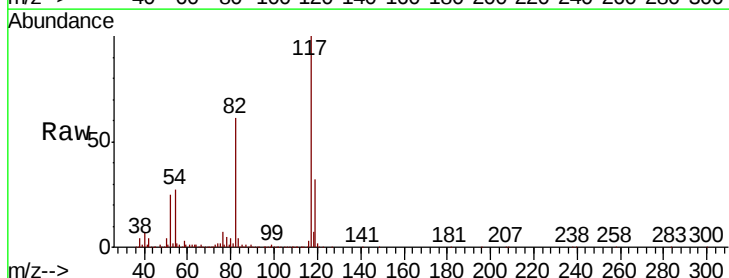
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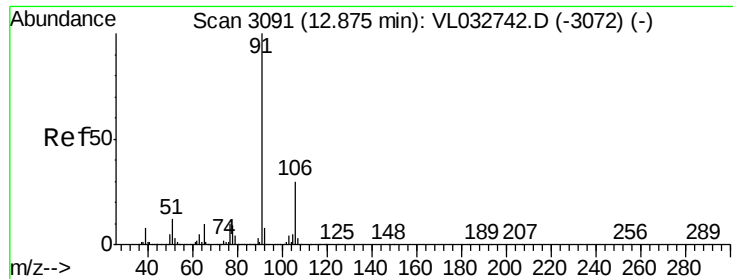
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion: 117 Resp: 3513236
Ion Ratio Lower Upper
117 100
82 61.5 51.0 76.6
119 32.6 28.0 42.0





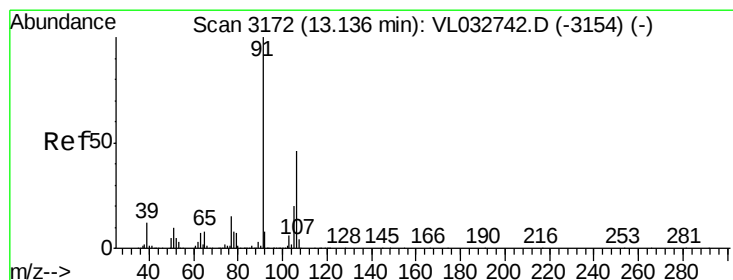
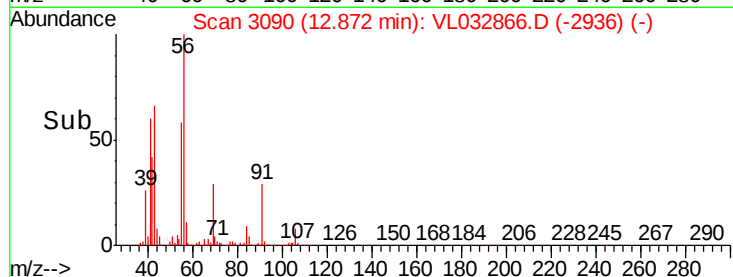
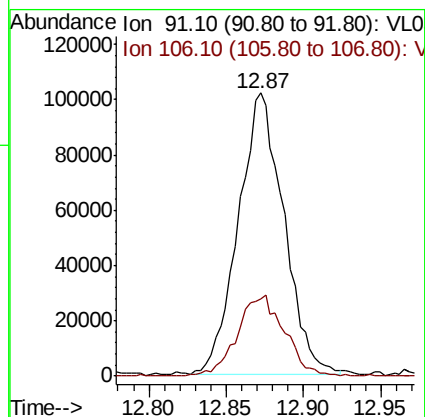
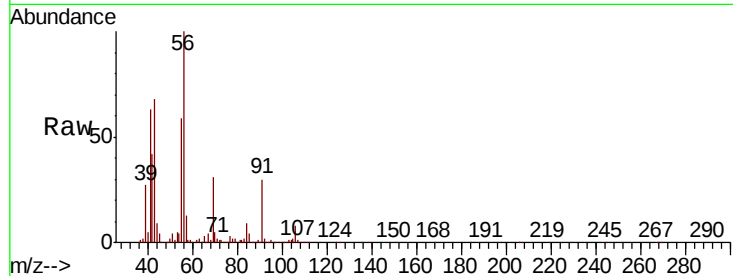
#58
Ethyl Benzene
Concen: 0.489 ppbv
RT: 12.87 min Scan# 3090
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion: 91 Resp: 206776
Ion Ratio Lower Upper
91 100
106 27.7 23.6 35.4

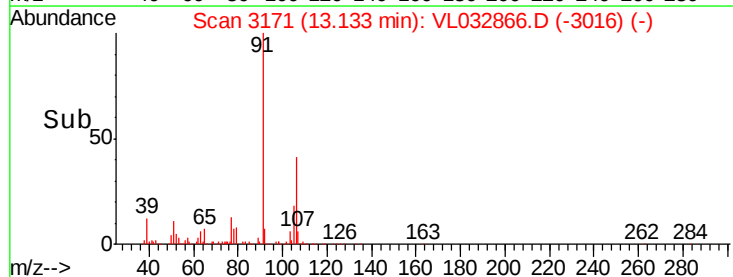
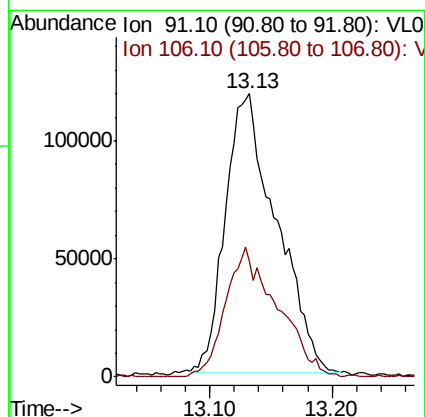
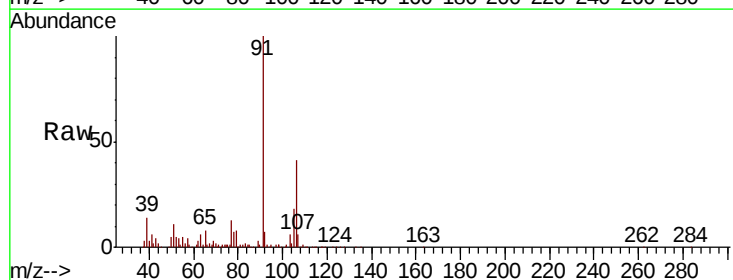
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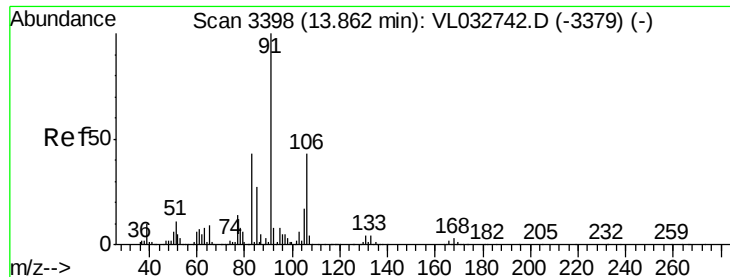
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#59
m/p-Xylene
Concen: 0.916 ppbv
RT: 13.13 min Scan# 3171
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion: 91 Resp: 344920
Ion Ratio Lower Upper
91 100
106 47.3 36.1 54.1





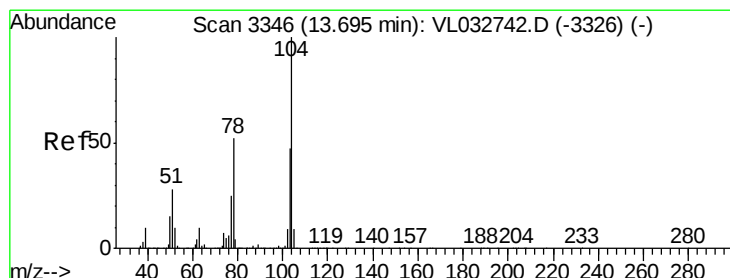
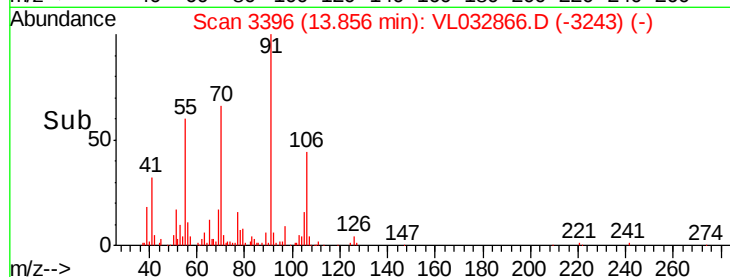
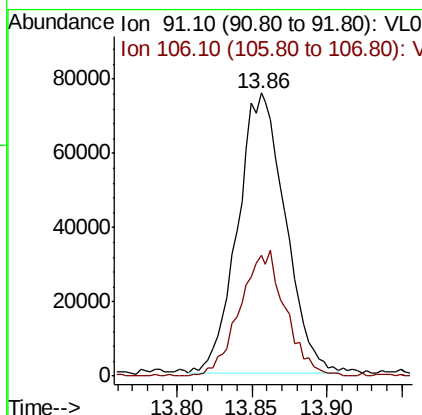
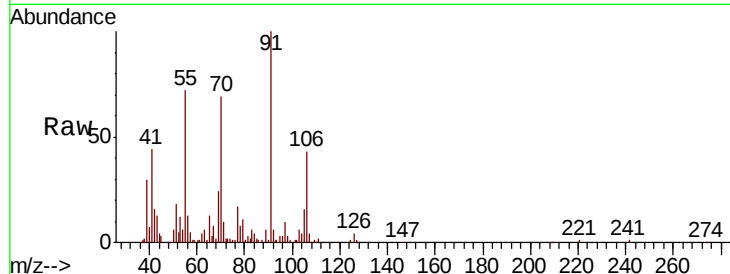
#60
o-Xylene
Concen: 0.443 ppbv
RT: 13.86 min Scan# 3396
Delta R.T. -0.01 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Instrument :
MSVOA_L
ClientSampled :
DSV-05

Tot Ion: 91 Resp: 167655
Ion Ratio Lower Upper
91 100
106 42.8 21.9 65.7

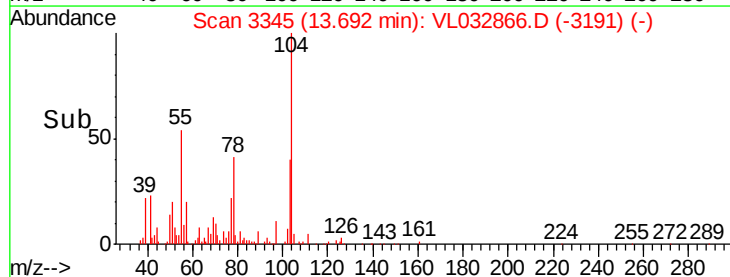
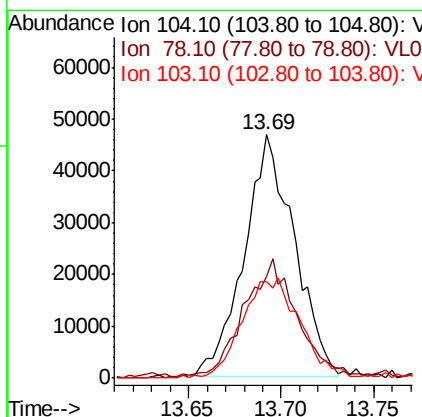
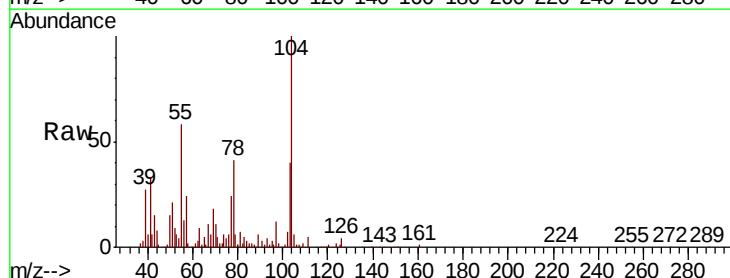
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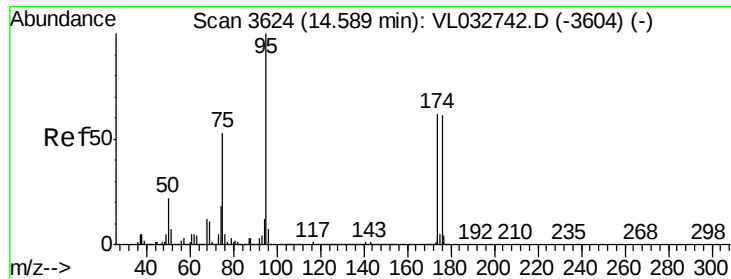
apatel
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#61
Styrene
Concen: 0.358 ppbv
RT: 13.69 min Scan# 3345
Delta R.T. -0.00 min
Lab File: VL032866.D
Acq: 1 Dec 2018 2:12

Tgt Ion: 104 Resp: 88226
Ion Ratio Lower Upper
104 100
78 56.4 42.2 63.4
103 47.9 38.2 57.2





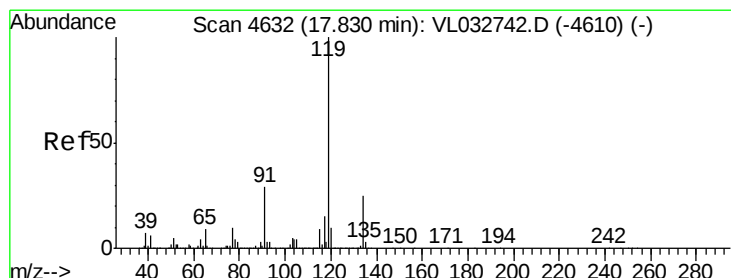
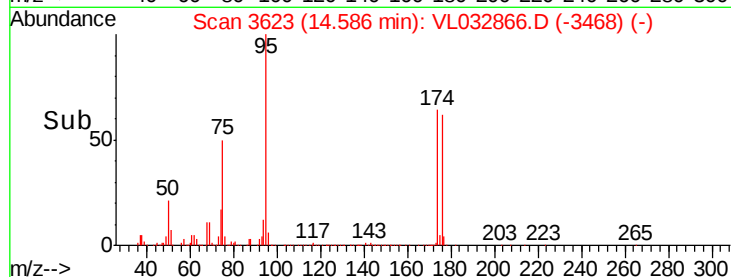
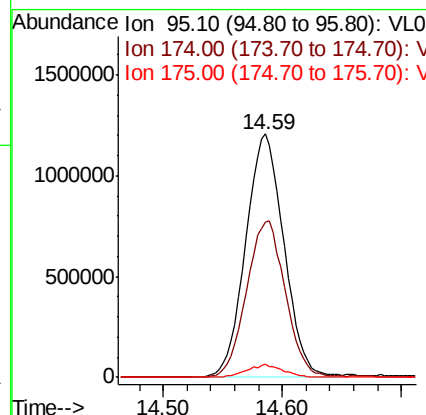
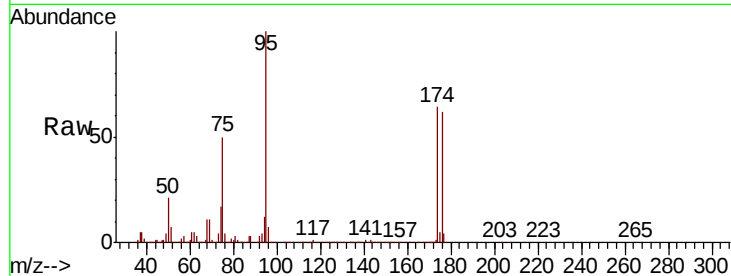
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.223 ppbv
 RT: 14.59 min Scan# 3623
 Delta R.T. -0.00 min
 Lab File: VL032866.D
 Acq: 1 Dec 2018 2:12

Instrument :
 MSVOA_L
 ClientSampled :
 DSV-05

Tot Ion: 95 Resp: 2686408
 Ion Ratio Lower Upper
 95 100
 174 66.3 50.7 76.1
 175 5.0 3.8 5.6

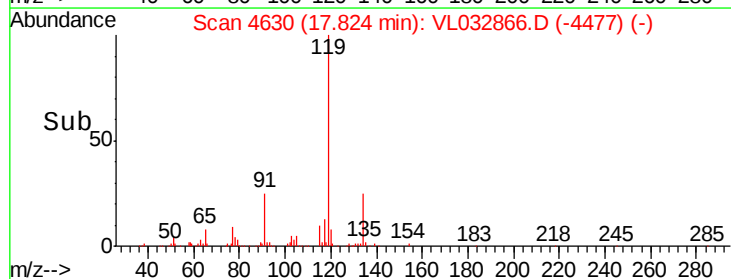
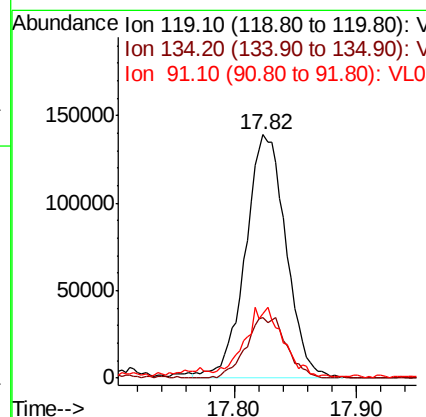
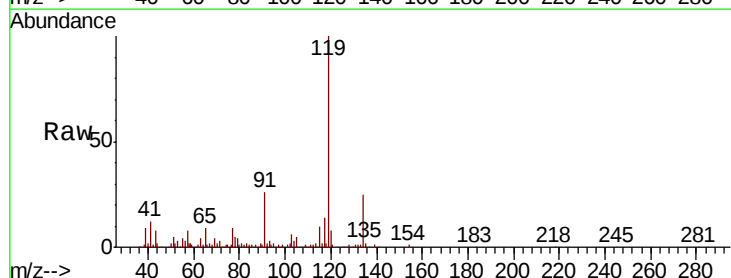
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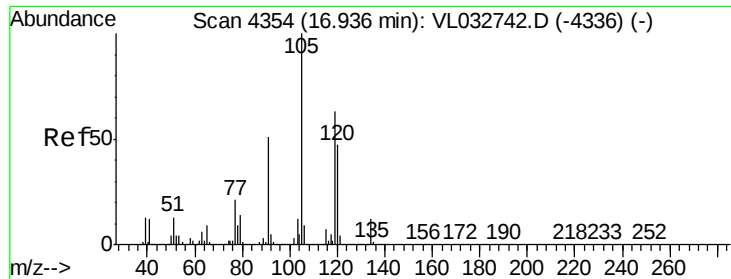
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#69
 p-Isopropyltoluene
 Concen: 0.602 ppbv
 RT: 17.82 min Scan# 4630
 Delta R.T. -0.01 min
 Lab File: VL032866.D
 Acq: 1 Dec 2018 2:12

Tgt Ion: 119 Resp: 316227
 Ion Ratio Lower Upper
 119 100
 134 25.3 20.2 30.4
 91 29.6 23.5 35.3





#74

1,2,4-Trimethylbenzene

Concen: 0.400 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. -0.00 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Instrument :

MSVOA_L

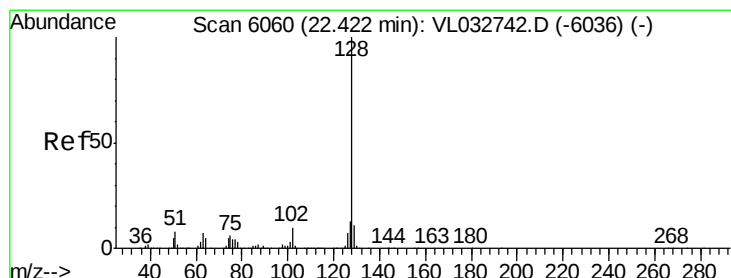
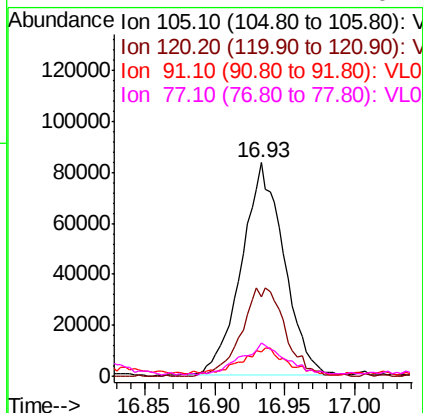
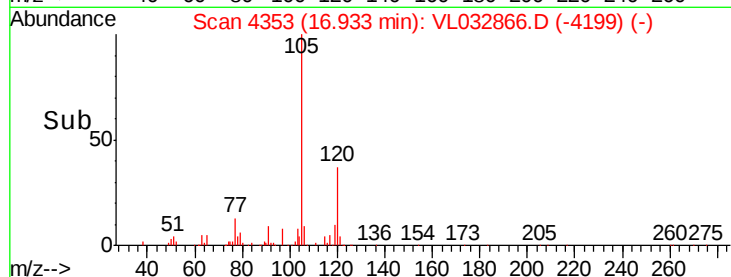
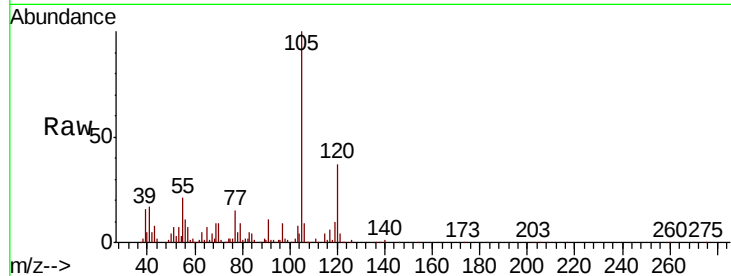
ClientSampleId :

DSV-05

Tot Ion	Ratio	Lower	Upper
105	100		
120	37.6	37.6	56.4#
91	10.5	42.5	63.7#
77	14.4	17.4	26.2#

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#79

Naphthalene

Concen: 0.220 ppbv m

RT: 22.43 min Scan# 6063

Delta R.T. 0.01 min

Lab File: VL032866.D

Acq: 1 Dec 2018 2:12

Tgt Ion	Ratio	Lower	Upper
128	100		
127	17.9	10.1	15.1#
129	13.9	8.9	13.3#

