

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
 Data File : VL031273.D
 Acq On : 20 Dec 2017 16:45
 Operator : SY/AP
 Sample : I7005-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-OUT-01

Manual Integrations
 APPROVED

MMDadoda
 12/22/2017 4:54:49 PM

Quant Time: Dec 22 04:27:46 2017
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL121317AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Dec 14 2017
 QLast Update : Thu Dec 14 04:29:58 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.91	49	1527288	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.45	114	3664471	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.41	117	3550043	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.75	95	2711949	10.74	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.18	85	51193	0.40	ppbv	97
3) Chlorodifluoromethane	3.11	51	187698	1.08	ppbv	95
4) Chloromethane	3.27	50	46061	0.49	ppbv	90
9) Propene	3.14	41	74662	0.88	ppbv	88
10) Heptane	8.41	43	29217	0.11	ppbv	94
11) Trichlorofluoromethane	4.13	101	63035	0.30	ppbv	93
13) Ethanol	3.77	45	223238	9.08	ppbv	98
15) Acetone	4.03	43	678879	3.37	ppbv	91
20) Methylene Chloride	4.54	84	558922	8.38	ppbv	94
26) Hexane	5.93	57	1667320	8.54	ppbv #	44
30) Cyclohexane	7.41	84	22595m	0.13	ppbv	
34) 2-Butanone	5.49	43	52463	0.20	ppbv	99
35) Carbon Tetrachloride	7.30	117	18676m	0.07	ppbv	
36) Benzene	7.16	78	115560	0.30	ppbv	95
44) 2,2,4-Trimethylpentane	8.16	57	103489	0.18	ppbv #	85
52) Tetrachloroethene	11.54	164	8029m	0.06	ppbv	
53) Toluene	10.12	91	221685	0.53	ppbv	97
59) m/p-Xylene	13.29	91	110994m	0.24	ppbv	

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

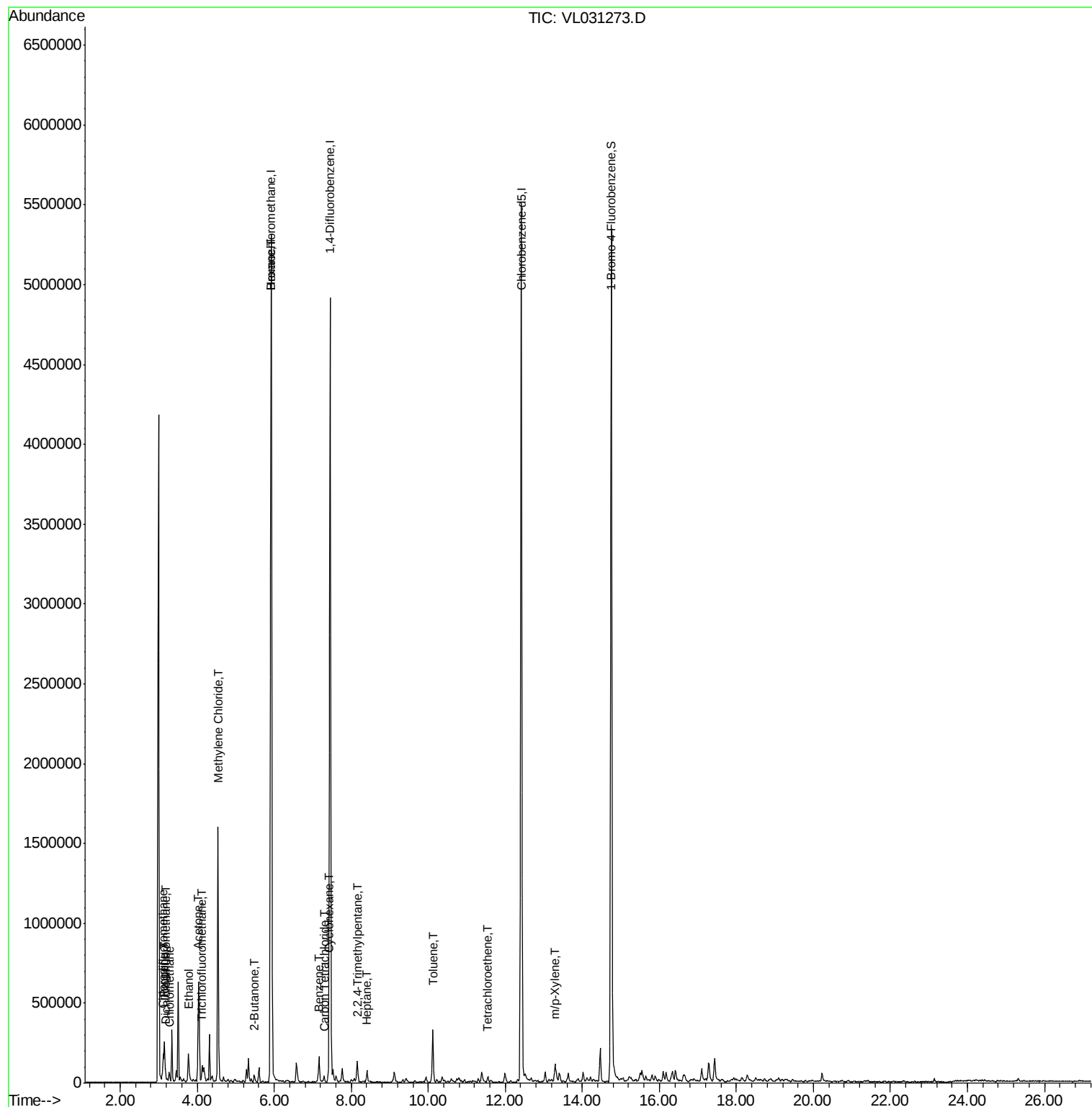
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
Data File : VL031273.D
Acq On : 20 Dec 2017 16:45
Operator : SY/AP
Sample : I7005-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

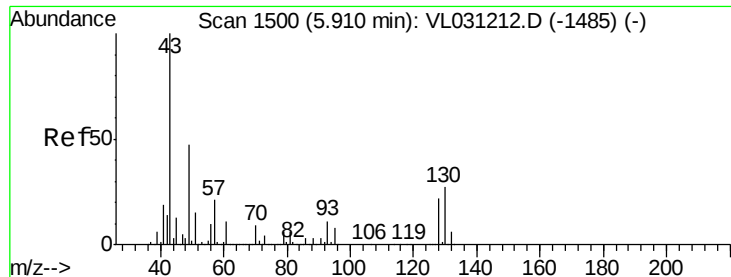
Instrument :
MSVOA_L
ClientSampleId :
EP1-OUT-01

Manual Integrations
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12/22/2017 4:54:49 PM

Quant Time: Dec 22 04:27:46 2017
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL121317AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Dec
QLast Update : Thu Dec 14 04:29:58 2017
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.91 min Scan# 1500

Delta R.T. 0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Instrument :

MSVOA_L

ClientSampleId :

EP1-OUT-01

Tot Ion: 49 Resp: 1527288

Ion Ratio Lower Upper

49 100

128 47.2 23.2 69.5

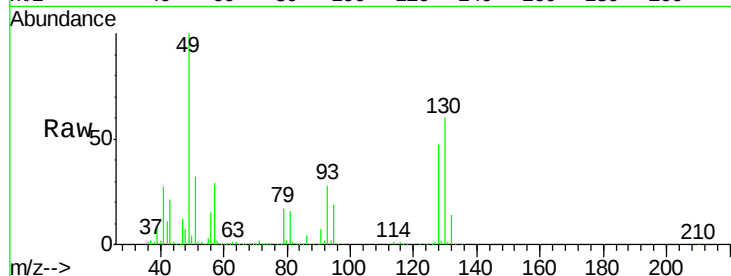
130 60.6 29.6 88.8

Manual Integrations

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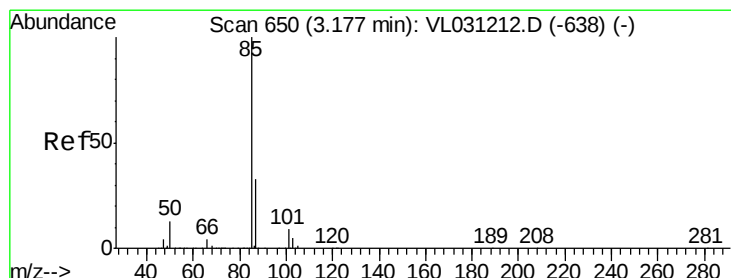
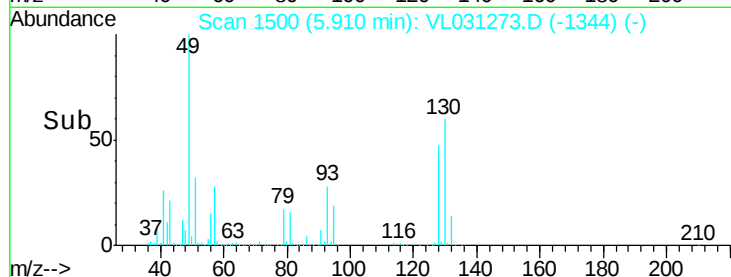
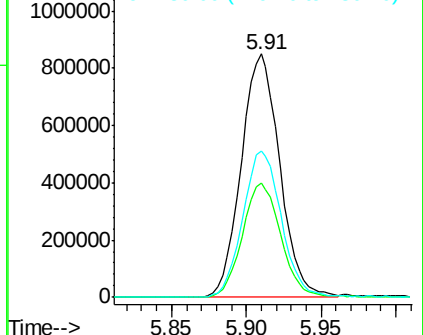
12/22/2017 4:54:49 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.40 ppbv

RT: 3.18 min Scan# 650

Delta R.T. 0.00 min

Lab File: VL031273.D

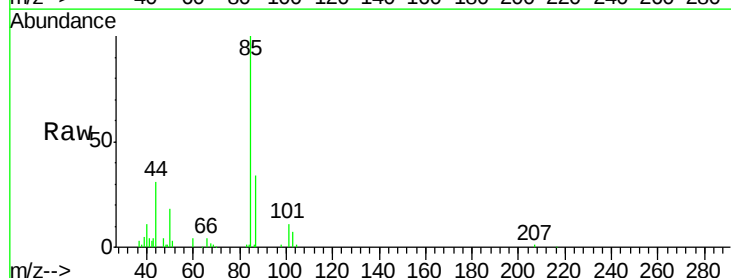
Acq: 20 Dec 2017 16:45

Tgt Ion: 85 Resp: 51193

Ion Ratio Lower Upper

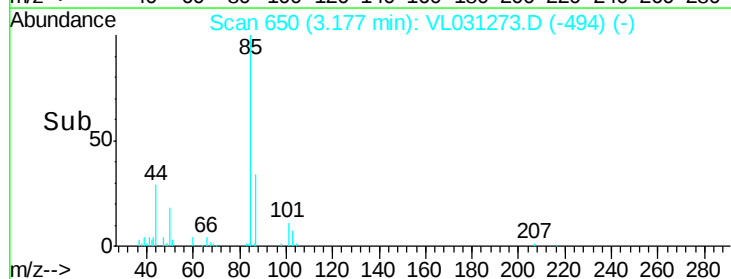
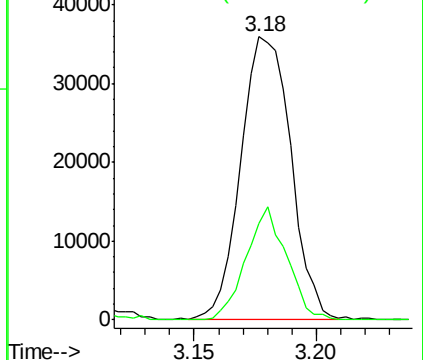
85 100

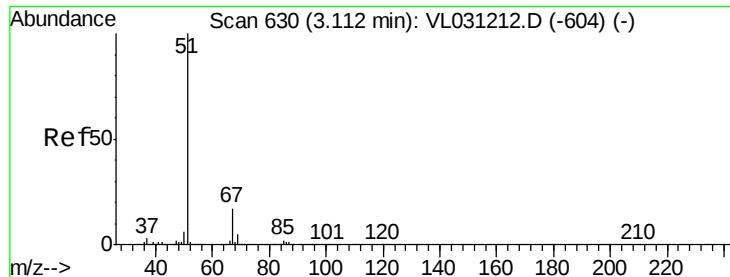
87 34.3 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.08 ppbv

RT: 3.11 min Scan# 630

Delta R.T. 0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Instrument :

MSVOA_L

ClientSampleId :

EP1-OUT-01

Tot Ion: 51 Resp: 187698

Ion Ratio Lower Upper

51 100

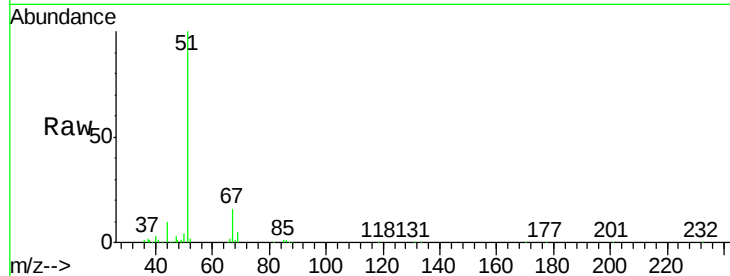
67 15.1 13.8 20.6

Manual Integrations

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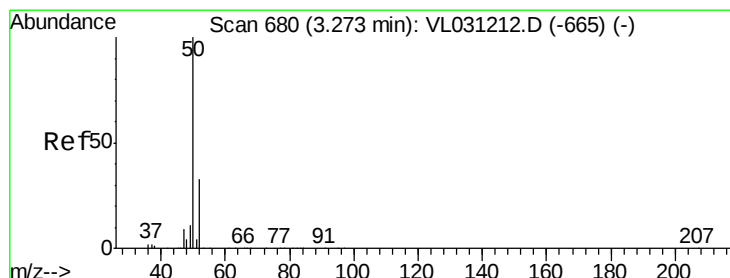
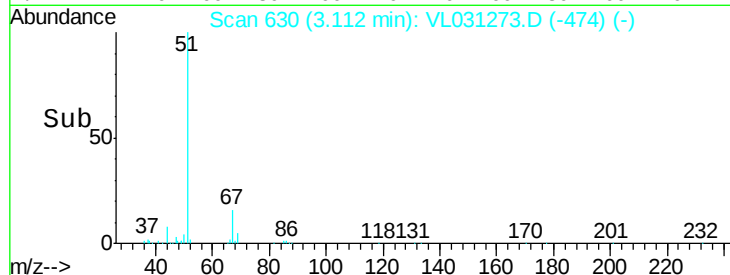
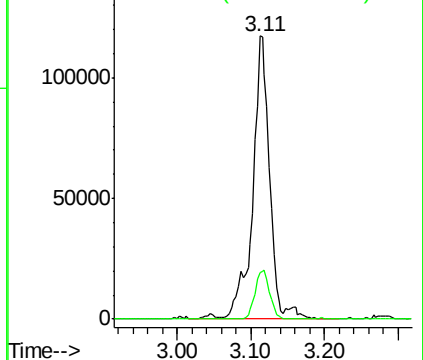
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.49 ppbv

RT: 3.27 min Scan# 680

Delta R.T. 0.00 min

Lab File: VL031273.D

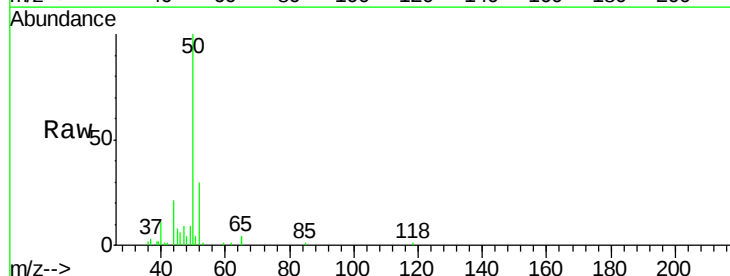
Acq: 20 Dec 2017 16:45

Tgt Ion: 50 Resp: 46061

Ion Ratio Lower Upper

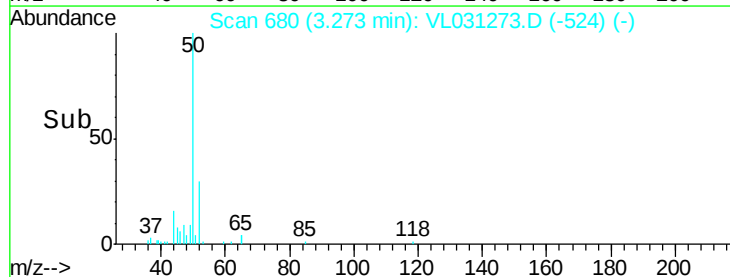
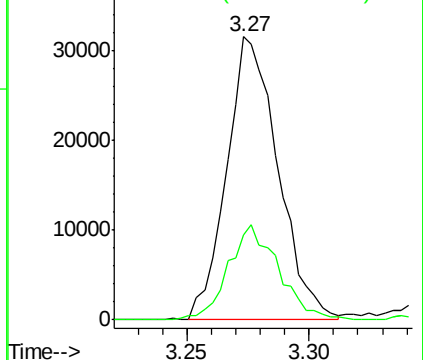
50 100

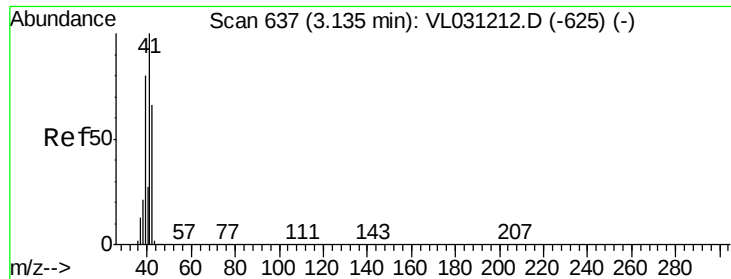
52 27.6 26.5 39.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.88 ppbv

RT: 3.14 min Scan# 640

Delta R.T. 0.01 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Instrument :

MSVOA_L

ClientSampleId :

EP1-OUT-01

Tot Ion: 41 Resp: 74662

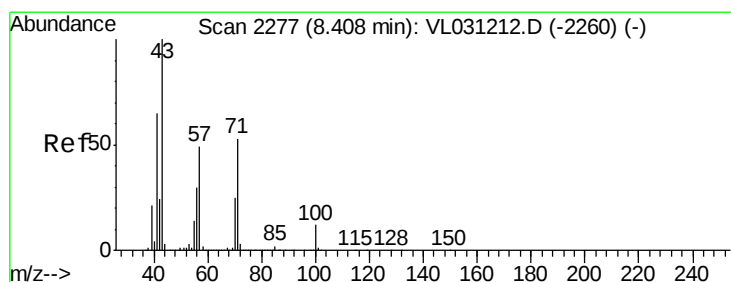
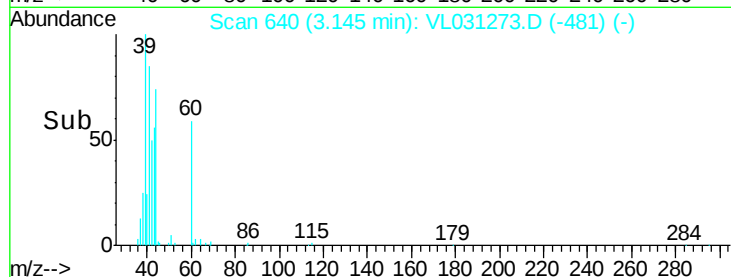
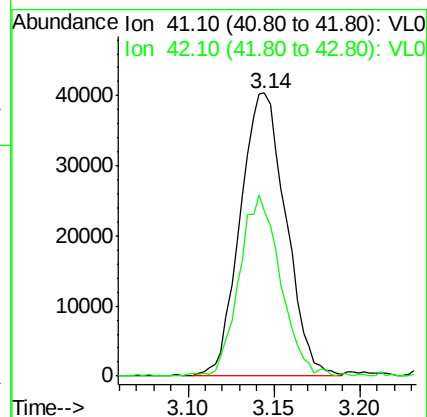
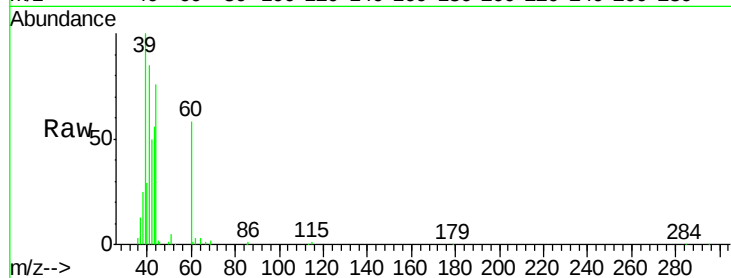
Ion Ratio Lower Upper

41 100

42 58.1 54.3 81.5

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#10

Heptane

Concen: 0.11 ppbv

RT: 8.41 min Scan# 2277

Delta R.T. 0.00 min

Lab File: VL031273.D

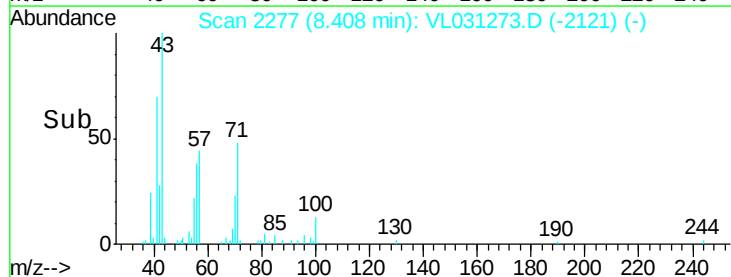
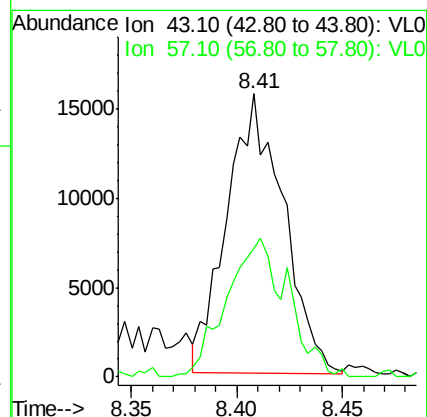
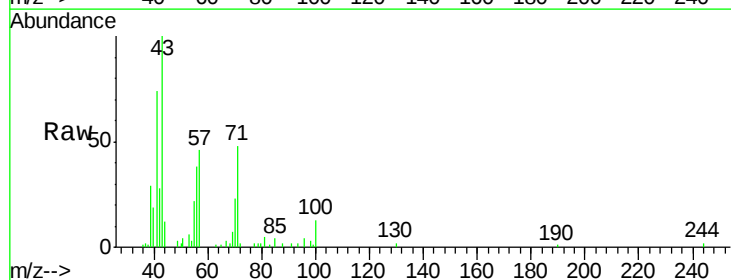
Acq: 20 Dec 2017 16:45

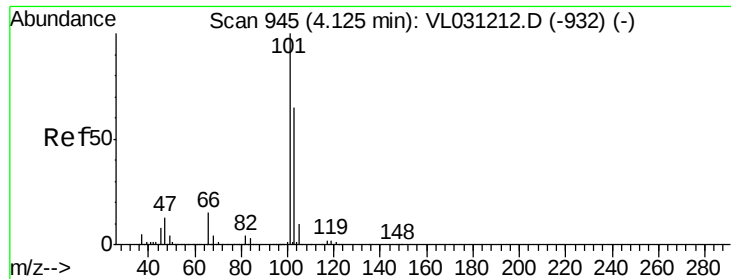
Tgt Ion: 43 Resp: 29217

Ion Ratio Lower Upper

43 100

57 54.1 39.8 59.8





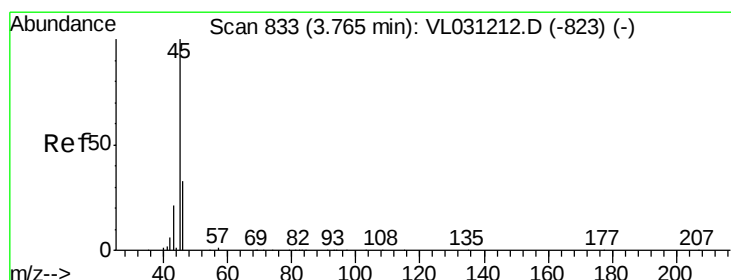
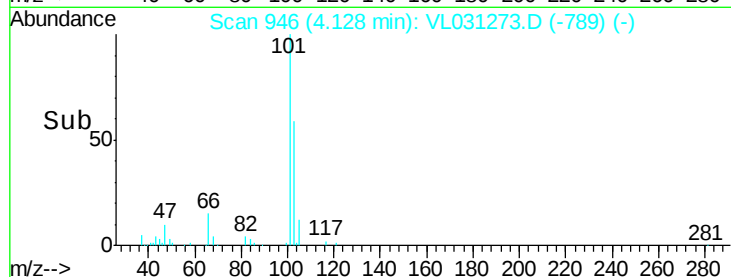
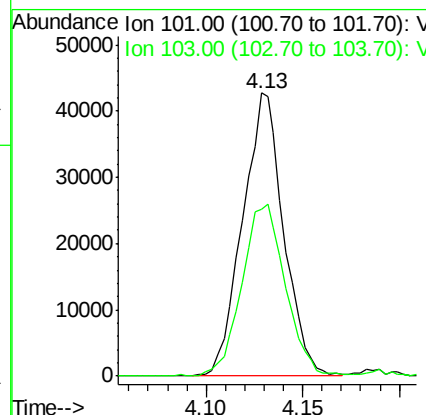
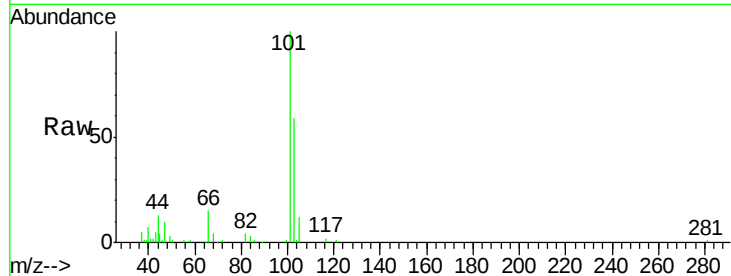
#11
 Trichlorofluoromethane
 Concen: 0.30 ppbv
 RT: 4.13 min Scan# 946
 Delta R.T. 0.00 min
 Lab File: VL031273.D
 Acq: 20 Dec 2017 16:45

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-OUT-01

Tot Ion	Ratio	Lower	Upper
101	100		
103	58.9	51.8	77.8

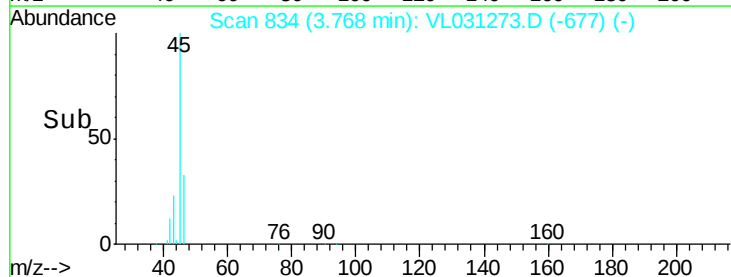
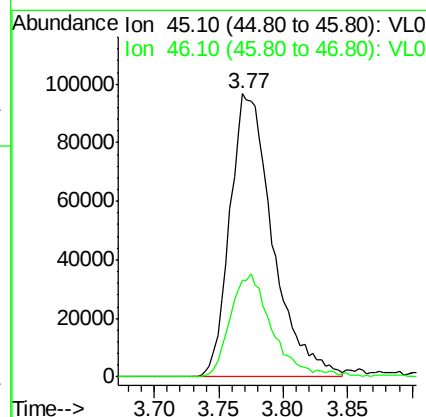
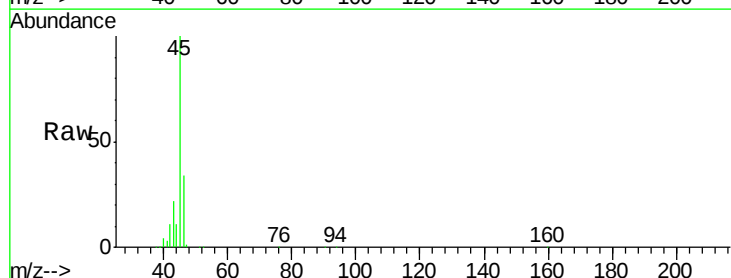
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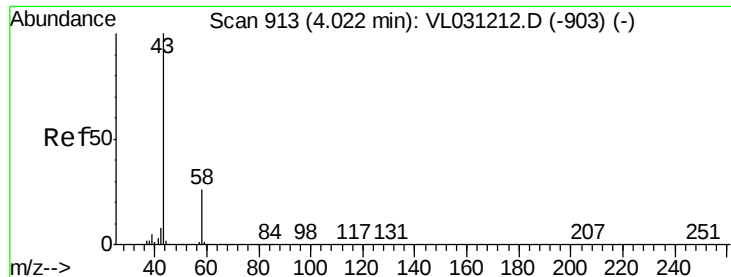
MMDadoda
 12/22/2017 4:54:49 PM



#13
 Ethanol
 Concen: 9.08 ppbv
 RT: 3.77 min Scan# 834
 Delta R.T. 0.00 min
 Lab File: VL031273.D
 Acq: 20 Dec 2017 16:45

Tgt Ion	Ratio	Lower	Upper
45	100		
46	35.5	14.6	58.4





#15

Acetone

Concen: 3.37 ppbv

RT: 4.03 min Scan# 914

Delta R.T. 0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Instrument :

MSVOA_L

ClientSampleId :

EP1-OUT-01

Tot Ion: 43 Resp: 678879

Ion Ratio Lower Upper

43 100

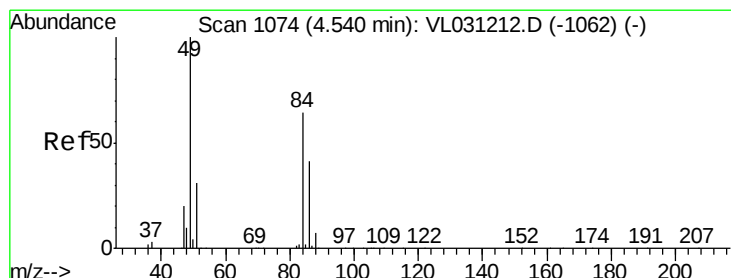
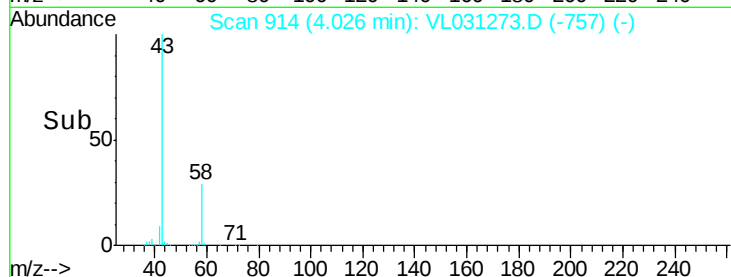
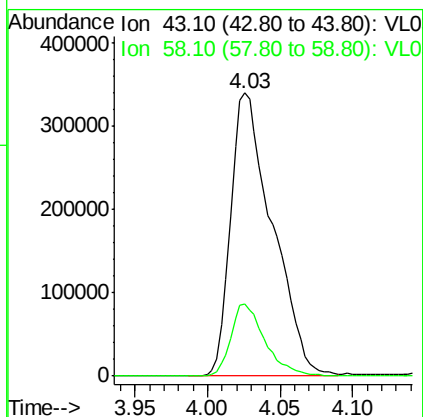
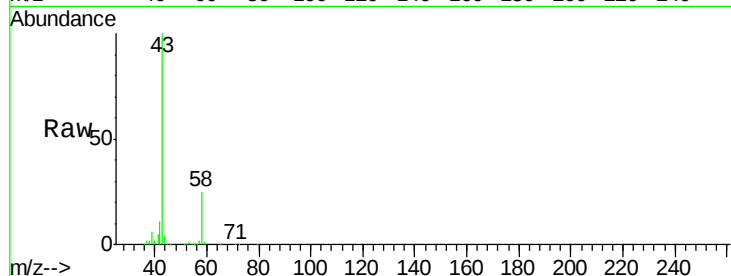
58 20.9 20.3 30.5

Manual Integrations

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#20

Methylene Chloride

Concen: 8.38 ppbv

RT: 4.54 min Scan# 1074

Delta R.T. 0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Tgt Ion: 84 Resp: 558922

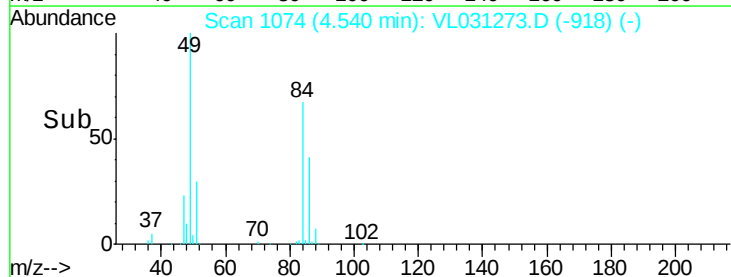
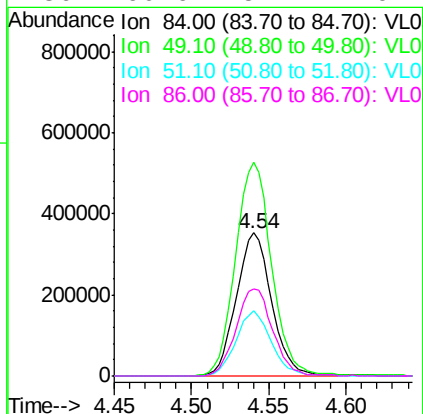
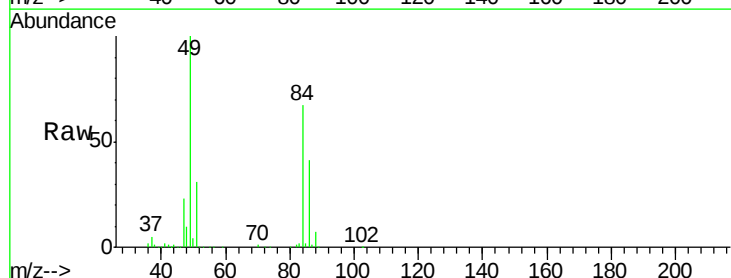
Ion Ratio Lower Upper

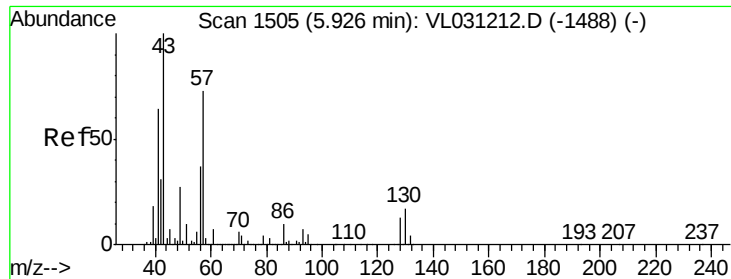
84 100

49 148.9 125.8 188.6

51 45.6 39.3 58.9

86 60.6 51.1 76.7





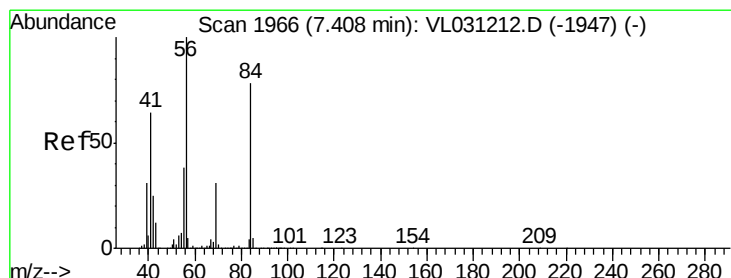
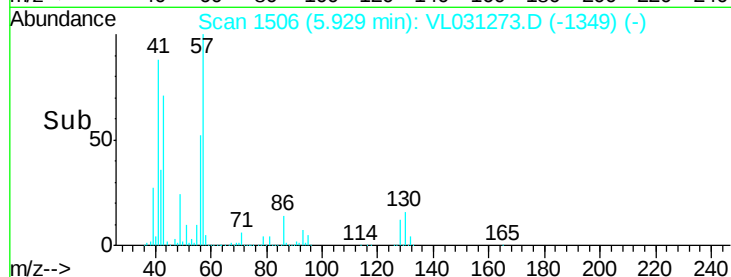
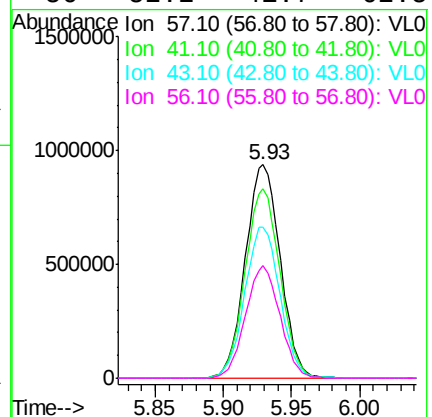
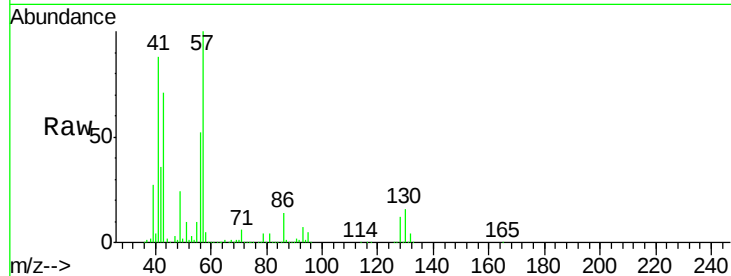
#26
Hexane
Concen: 8.54 ppbv
RT: 5.93 min Scan# 1506
Delta R.T. 0.00 min
Lab File: VL031273.D
Acq: 20 Dec 2017 16:45

Instrument :
MSVOA_L
ClientSampleId :
EP1-OUT-01

Tot Ion	Ratio	Lower	Upper
57	100		
41	89.2	70.3	105.5
43	71.8	173.8	260.8#
56	52.2	41.7	62.5

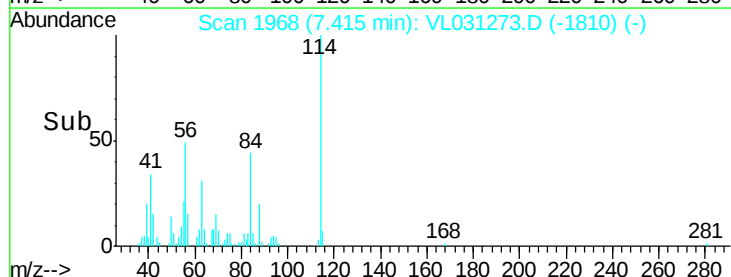
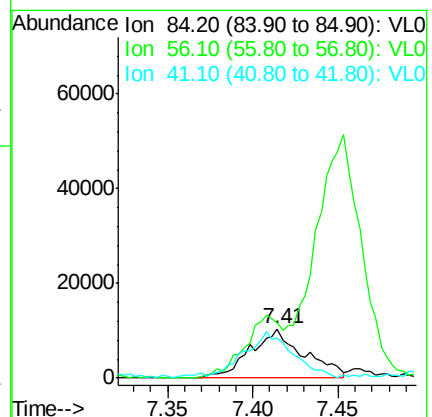
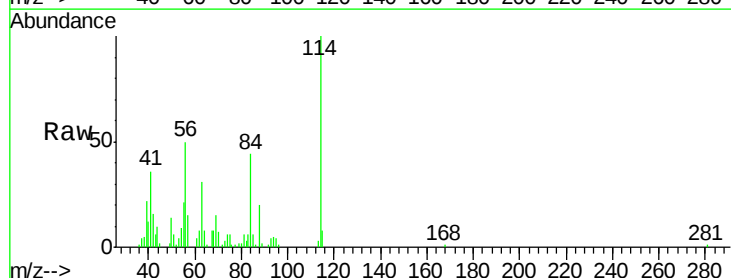
Manual Integrations
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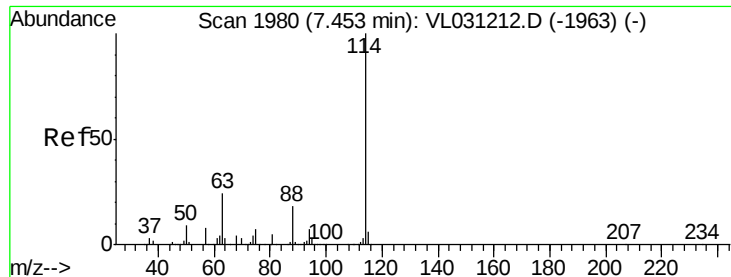
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#30
Cyclohexane
Concen: 0.13 ppbv m
RT: 7.41 min Scan# 1968
Delta R.T. 0.01 min
Lab File: VL031273.D
Acq: 20 Dec 2017 16:45

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.0	162.0#
41	91.5	66.2	99.4





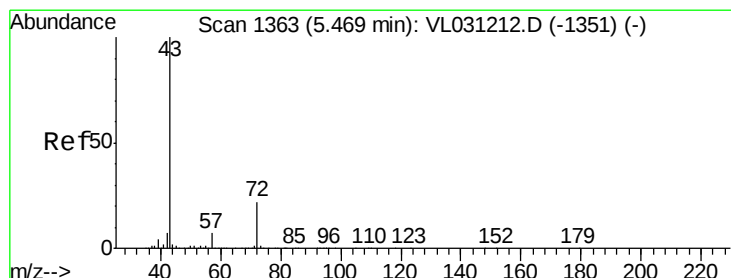
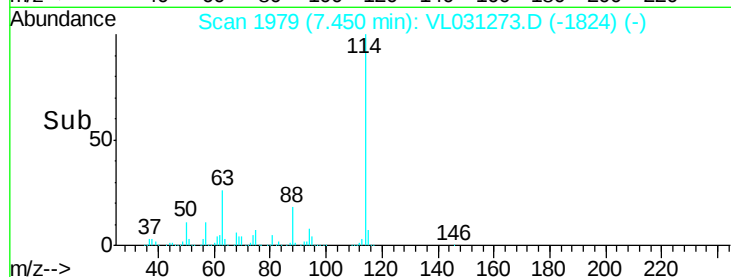
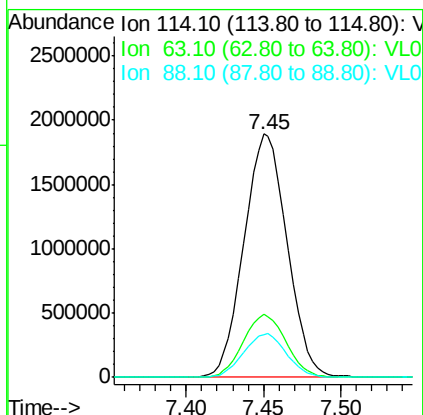
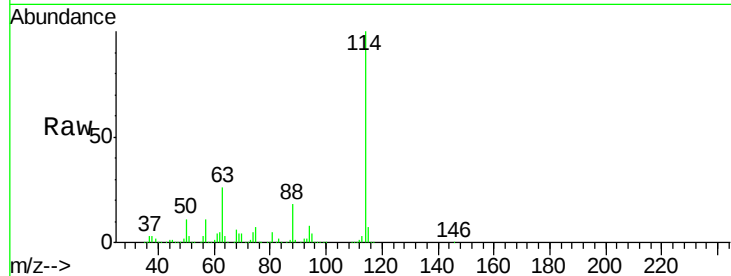
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.45 min Scan# 1979
 Delta R.T. -0.00 min
 Lab File: VL031273.D
 Acq: 20 Dec 2017 16:45

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-OUT-01

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.9	19.8	29.8
88	17.9	14.2	21.4

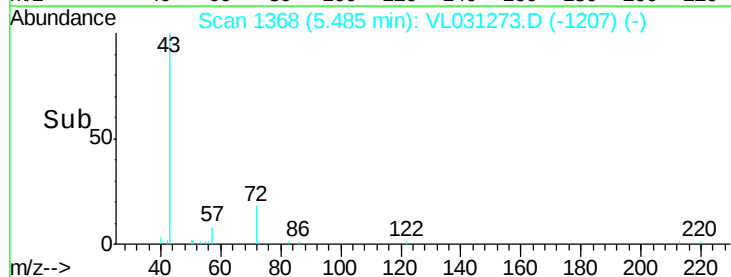
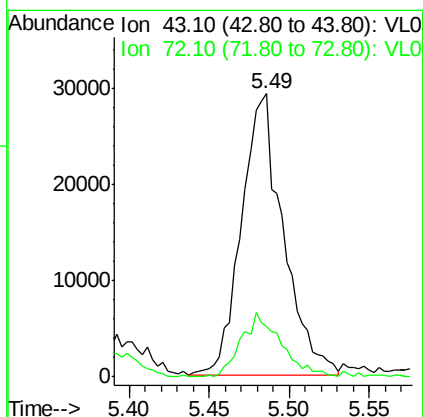
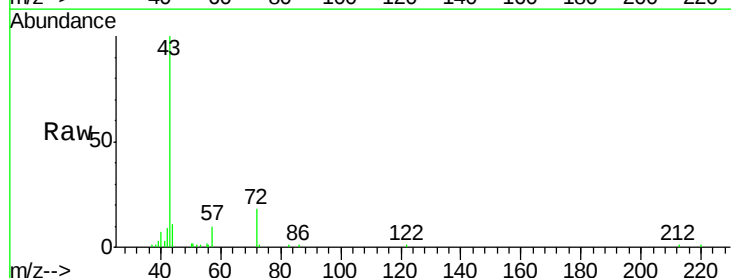
Manual Integrations
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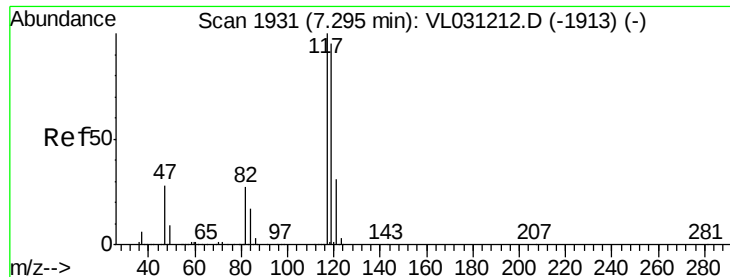
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#34
 2-Butanone
 Concen: 0.20 ppbv
 RT: 5.49 min Scan# 1368
 Delta R.T. 0.02 min
 Lab File: VL031273.D
 Acq: 20 Dec 2017 16:45

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.1	18.1	27.1





#35

Carbon Tetrachloride

Concen: 0.07 ppbv m

RT: 7.30 min Scan# 1931

Delta R.T. 0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Instrument :

MSVOA_L

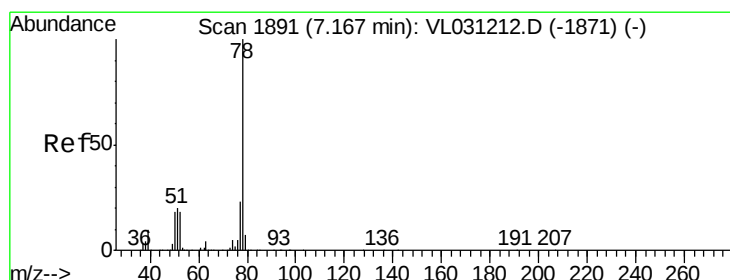
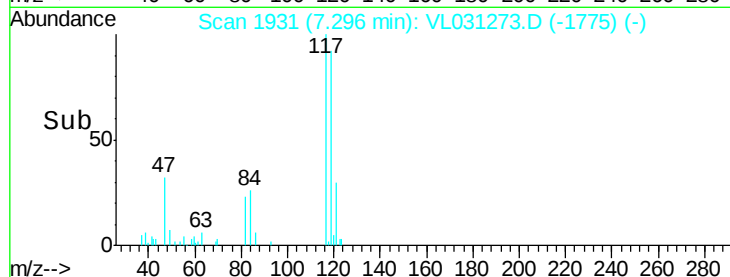
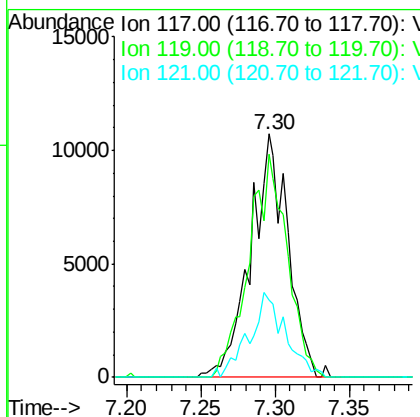
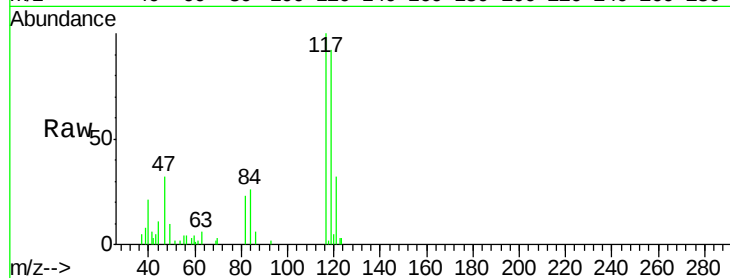
ClientSampleId :

EP1-OUT-01

Tot Ion:	117	Resp:	18676
Ion	Ratio	Lower	Upper
117	100		
119	91.6	75.9	113.9
121	31.9	24.6	37.0

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#36

Benzene

Concen: 0.30 ppbv

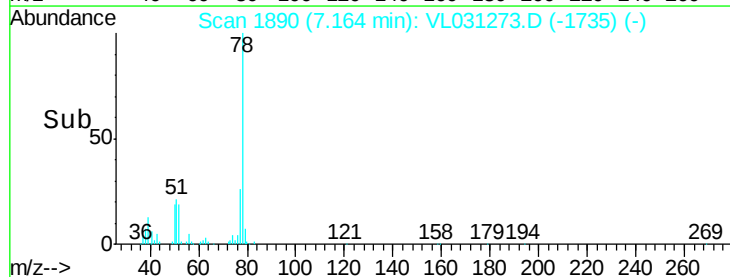
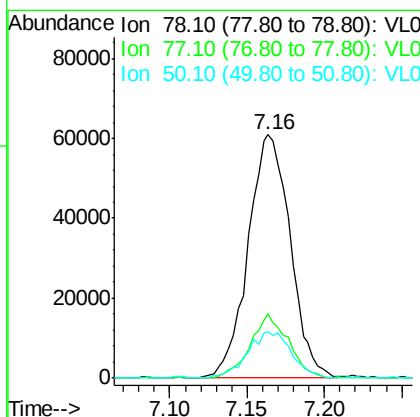
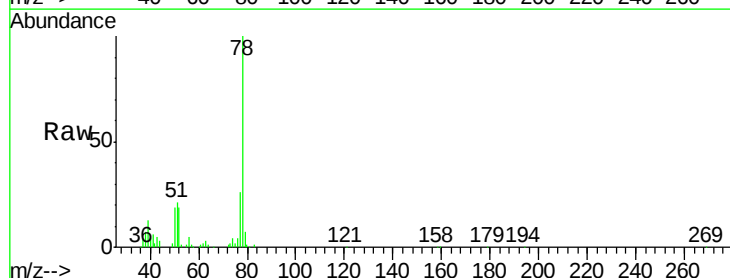
RT: 7.16 min Scan# 1890

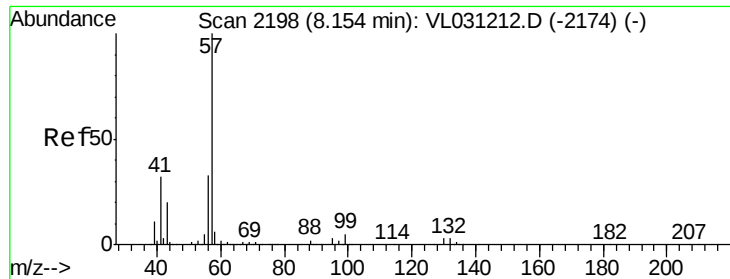
Delta R.T. -0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Tgt Ion:	78	Resp:	115560
Ion	Ratio	Lower	Upper
78	100		
77	26.1	18.1	27.1
50	19.1	14.6	21.8





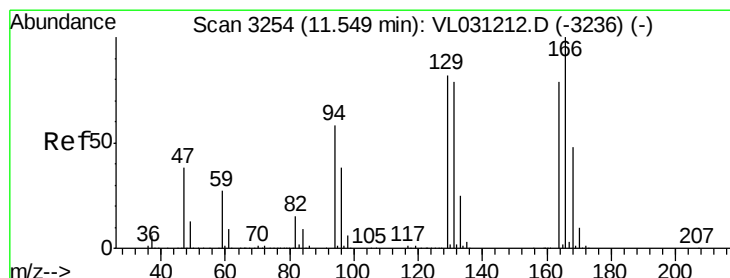
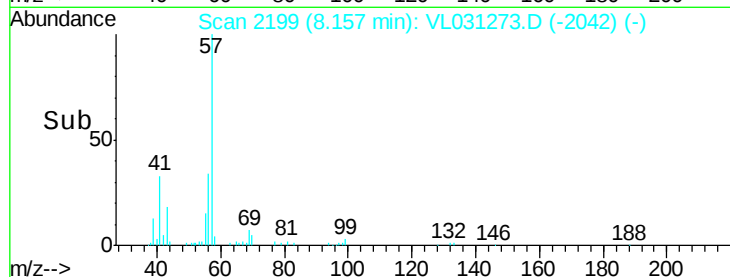
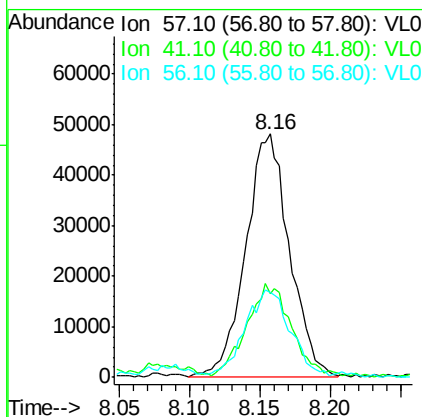
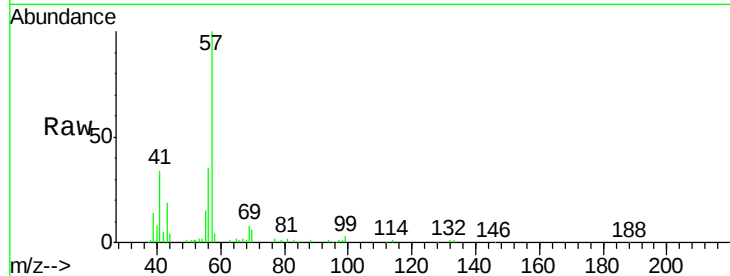
#44
2,2,4-Trimethylpentane
Concen: 0.18 ppbv
RT: 8.16 min Scan# 2199
Delta R.T. 0.00 min
Lab File: VL031273.D
Acq: 20 Dec 2017 16:45

Instrument :
MSVOA_L
ClientSampleId :
EP1-OUT-01

Tot Ion	Ratio	Lower	Upper
57	100		
41	41.0	25.5	38.3#
56	39.0	25.0	37.6#

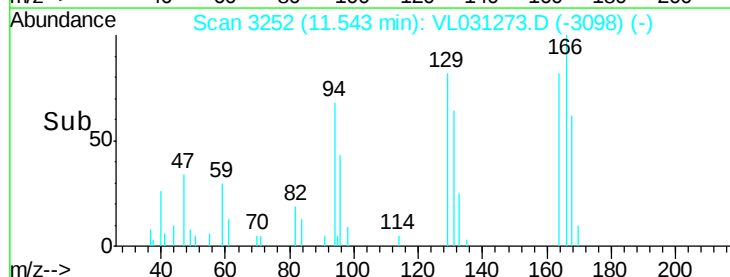
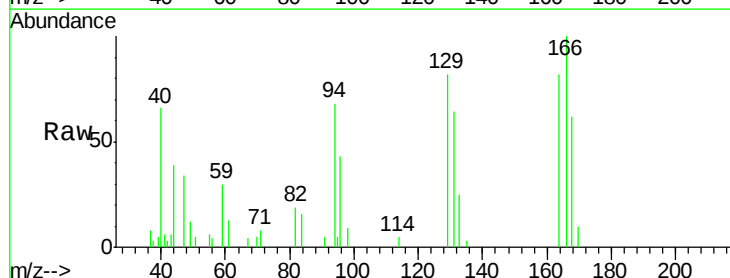
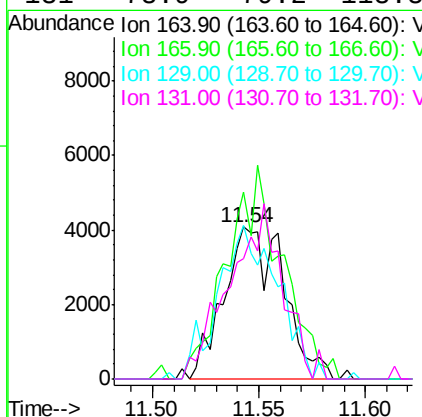
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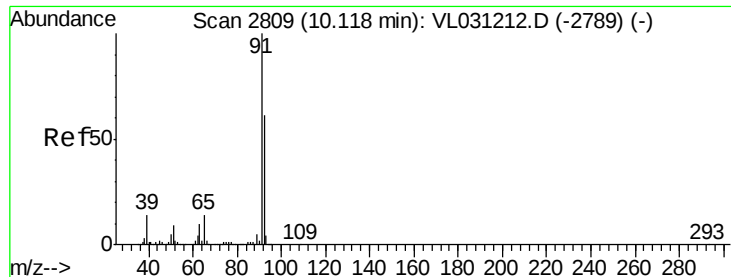
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#52
Tetrachloroethene
Concen: 0.06 ppbv m
RT: 11.54 min Scan# 3252
Delta R.T. -0.01 min
Lab File: VL031273.D
Acq: 20 Dec 2017 16:45

Tgt Ion	Ratio	Lower	Upper
164	100		
166	122.7	100.6	151.0
129	100.8	82.9	124.3
131	78.9	79.2	118.8#





#53

Toluene

Concen: 0.53 ppbv

RT: 10.12 min Scan# 2808

Delta R.T. -0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

Instrument :

MSVOA_L

ClientSampleId :

EP1-OUT-01

Tot Ion: 91 Resp: 221685

Ion Ratio Lower Upper

91 100

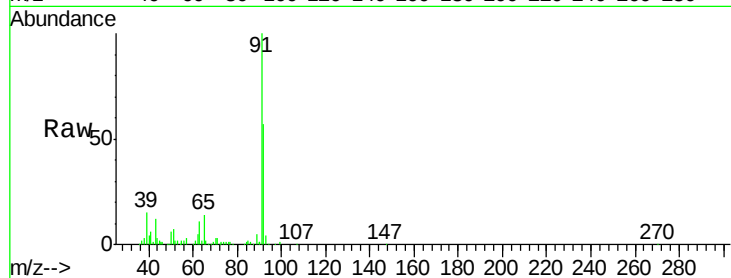
92 59.1 49.1 73.7

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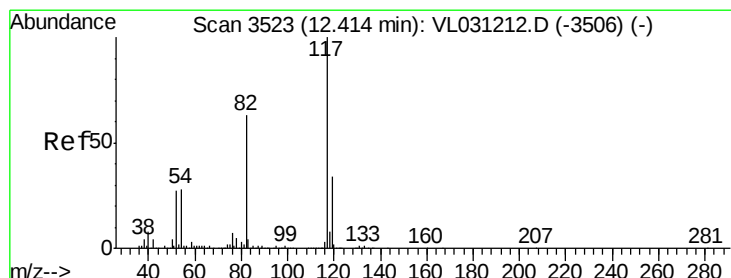
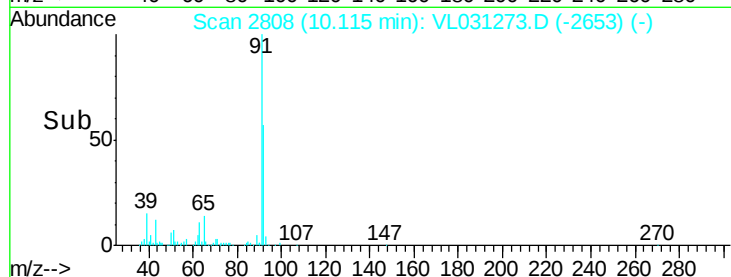
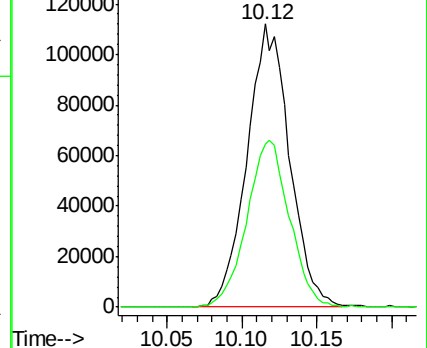
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.41 min Scan# 3523

Delta R.T. 0.00 min

Lab File: VL031273.D

Acq: 20 Dec 2017 16:45

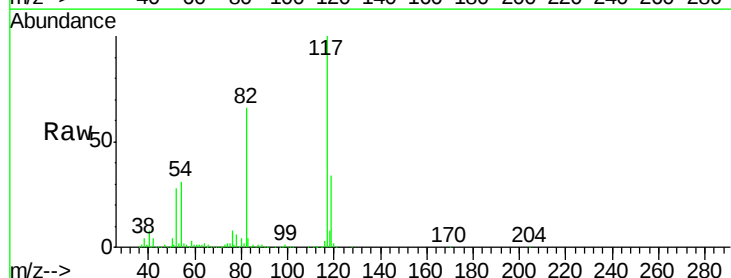
Tgt Ion: 117 Resp: 3550043

Ion Ratio Lower Upper

117 100

82 64.6 48.1 72.1

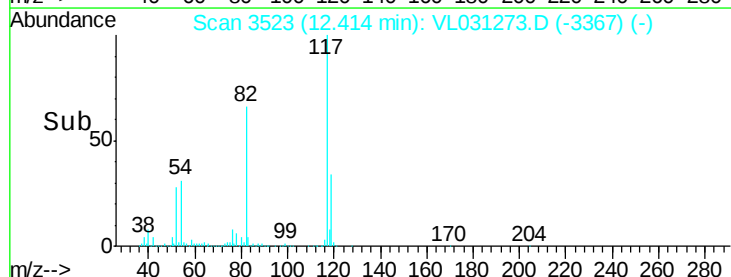
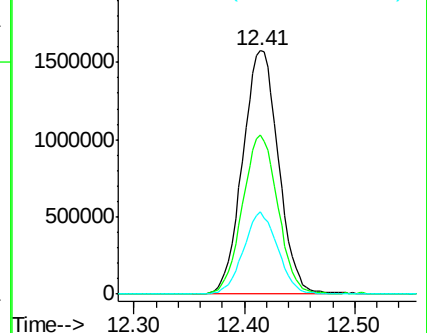
119 32.5 23.1 34.7

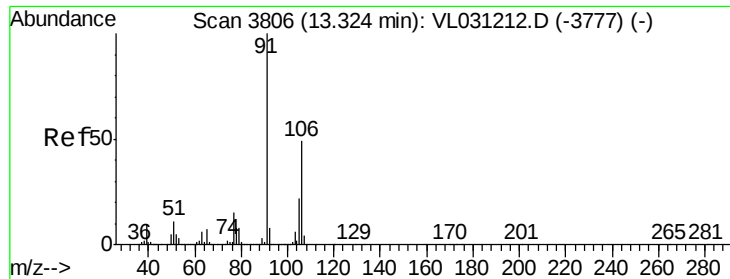


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V





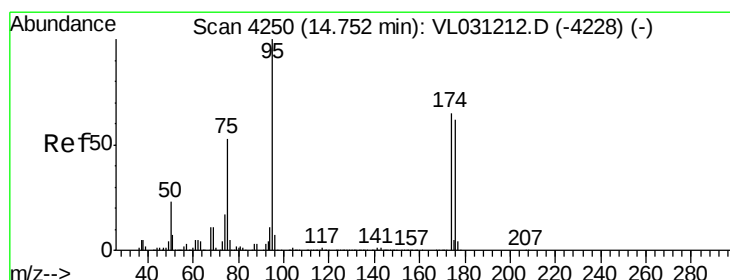
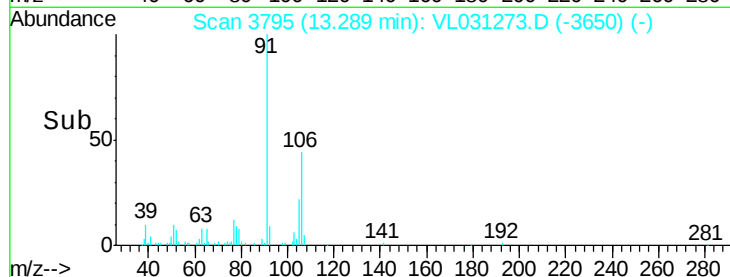
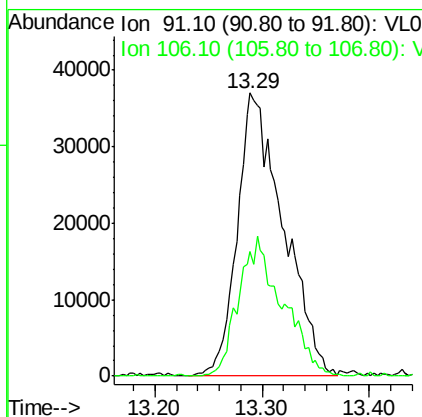
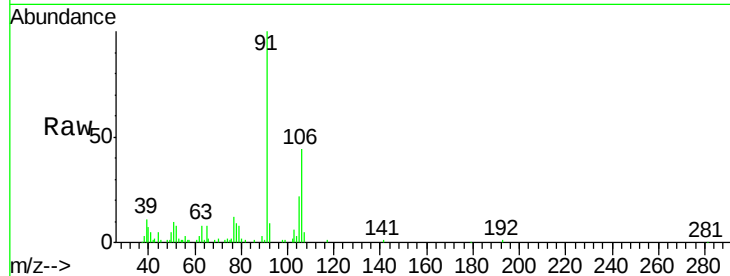
#59
m/p-Xylene
Concen: 0.24 ppbv m
RT: 13.29 min Scan# 3795
Delta R.T. -0.04 min
Lab File: VL031273.D
Acq: 20 Dec 2017 16:45

Instrument :
MSVOA_L
ClientSampleId :
EP1-OUT-01

Tot Ion: 91 Resp: 110994
Ion Ratio Lower Upper
91 100
106 0.0 38.5 57.7#

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#68
1-Bromo-4-Fluorobenzene
Concen: 10.74 ppbv
RT: 14.75 min Scan# 4249
Delta R.T. -0.00 min
Lab File: VL031273.D
Acq: 20 Dec 2017 16:45

Tgt Ion: 95 Resp: 2711949
Ion Ratio Lower Upper
95 100
174 61.9 52.5 78.7
175 4.6 4.1 6.1

