

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL121317\
 Data File : VL031233.D
 Acq On : 14 Dec 2017 15:51
 Operator : SY/AP
 Sample : I6907-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Manual Integrations
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 12/15/2017 4:07:13 PM

Quant Time: Dec 15 06:41:30 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	1479691	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.45	114	3559372	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.41	117	2844431	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.74	95	2401479	11.87	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	118.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.18	85	87848	0.70	ppbv	100
7) Chloroethane	3.71	64	132263	3.80	ppbv	98
9) Propene	3.15	41	626151m	7.58	ppbv	
11) Trichlorofluoromethane	4.13	101	227844	1.11	ppbv	96
12) 1,1,2-Trichlorotrifluoroet	4.69	101	202983	1.41	ppbv	96
13) Ethanol	3.77	45	228723	9.60	ppbv	97
15) Acetone	4.03	43	380327	1.95	ppbv #	85
18) 1,1-Dichloroethene	4.48	96	213788	3.32	ppbv	96
20) Methylene Chloride	4.54	84	148289	2.29	ppbv	94
22) trans-1,2-Dichloroethene	5.10	96	107583	1.36	ppbv	98
24) 1,1-Dichloroethane	5.23	63	2801866	12.26	ppbv	99
26) Hexane	5.93	57	81169	0.43	ppbv #	47
31) cis-1,2-Dichloroethene	5.79	61	29404	0.17	ppbv	93
32) 1,1,1-Trichloroethane	6.77	97	12742744	46.65	ppbv	93
34) 2-Butanone	5.49	43	35423	0.14	ppbv	99
36) Benzene	7.16	78	40450	0.11	ppbv	94
44) 2,2,4-Trimethylpentane	8.16	57	42975m	0.08	ppbv	
53) Toluene	10.12	91	214186	0.52	ppbv	98
58) Ethyl Benzene	13.03	91	49109m	0.10	ppbv	
59) m/p-Xylene	13.29	91	140354	0.37	ppbv	99
60) o-Xylene	14.02	91	53179	0.14	ppbv	96
74) 1,2,4-Trimethylbenzene	17.09	105	52773	0.14	ppbv #	71

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

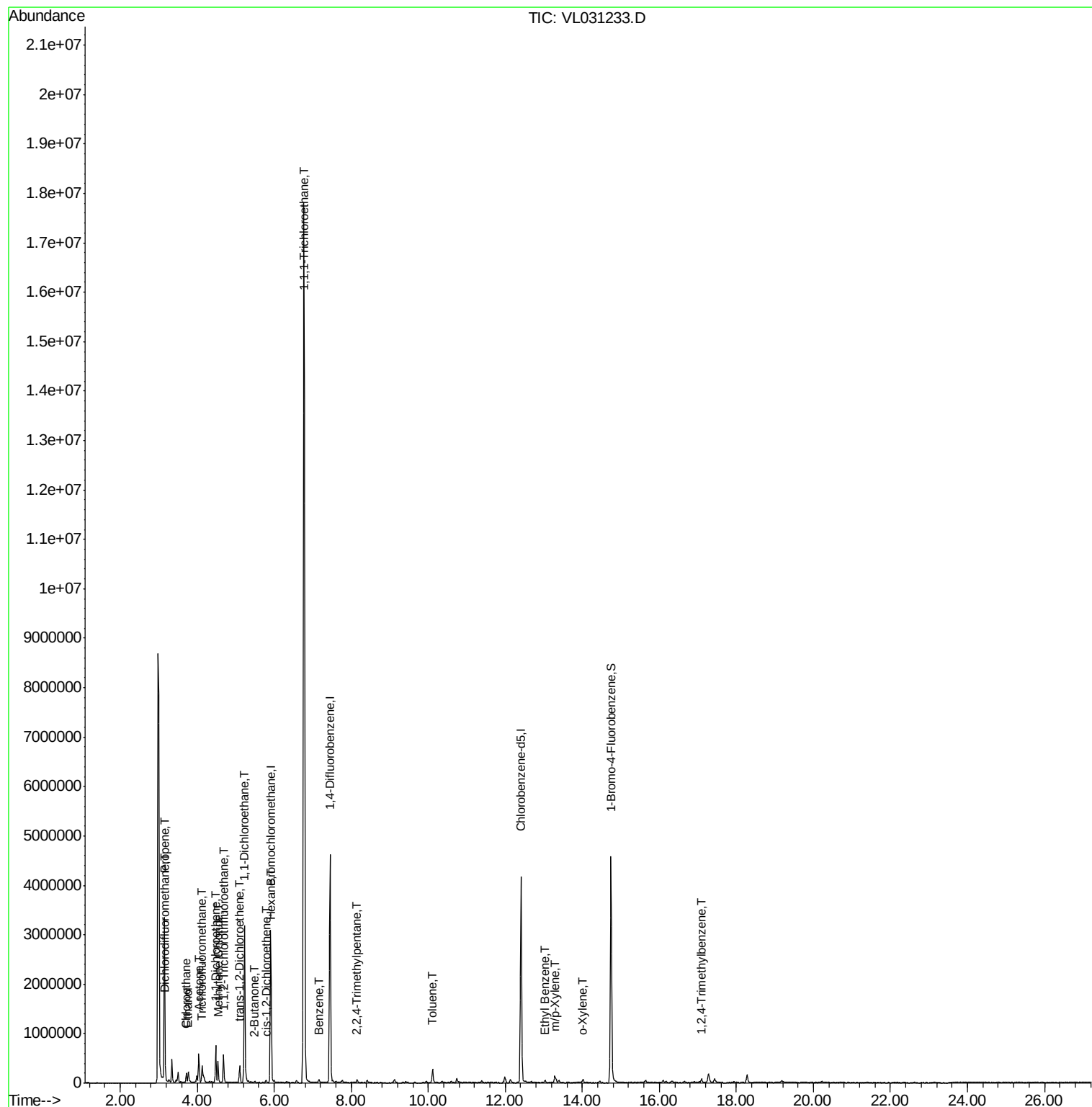
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL121317\
Data File : VL031233.D
Acq On : 14 Dec 2017 15:51
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Sample : I6907-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

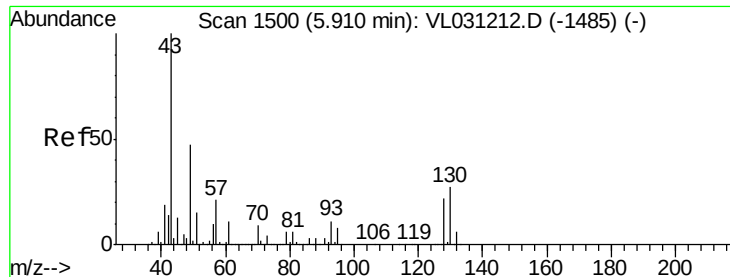
Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Manual Integrations
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Quant Time: Dec 15 06:41:30 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: VL031233.D

Acq: 14 Dec 2017 15:51

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 49 Resp: 1479691

Ion Ratio Lower Upper

49 100

128 47.8 23.2 69.5

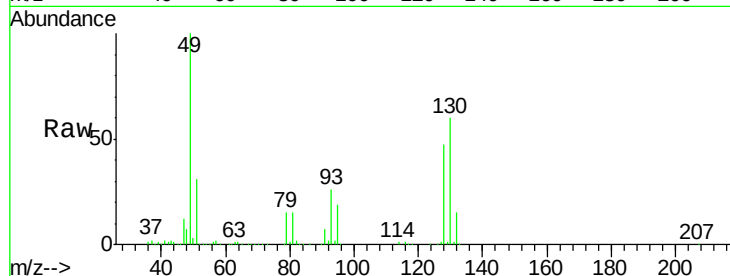
130 62.3 29.6 88.8

Manual Integrations

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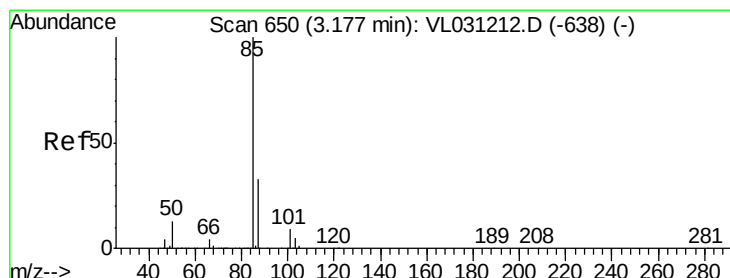
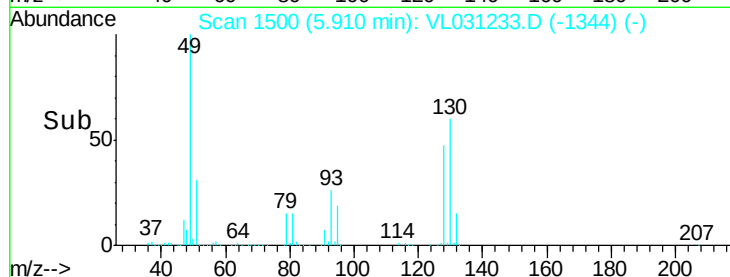
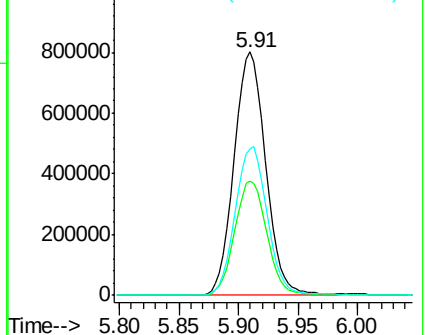
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.70 ppbv

RT: 3.18 min Scan# 650

Delta R.T. 0.00 min

Lab File: VL031233.D

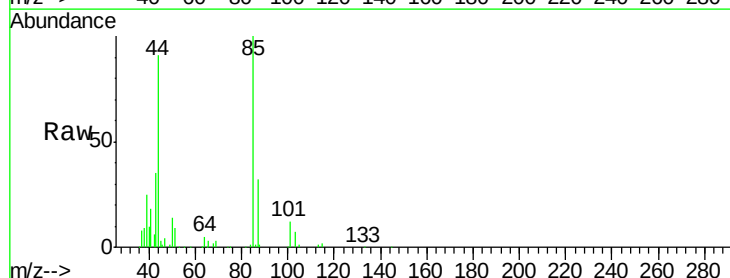
Acq: 14 Dec 2017 15:51

Tgt Ion: 85 Resp: 87848

Ion Ratio Lower Upper

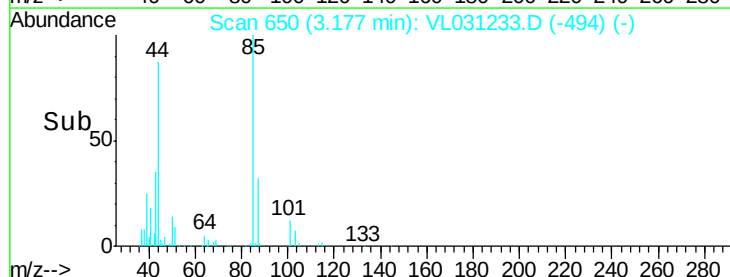
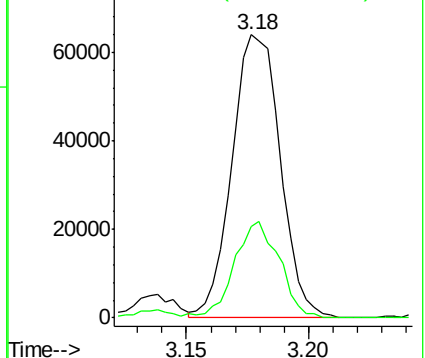
85 100

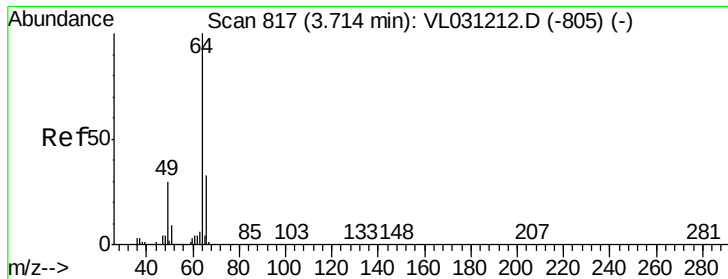
87 32.5 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#7

Chloroethane

Concen: 3.80 ppbv

RT: 3.71 min Scan# 817

Delta R.T. 0.00 min

Lab File: VL031233.D

Acq: 14 Dec 2017 15:51

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 64 Resp: 132263

Ion Ratio Lower Upper

64 100

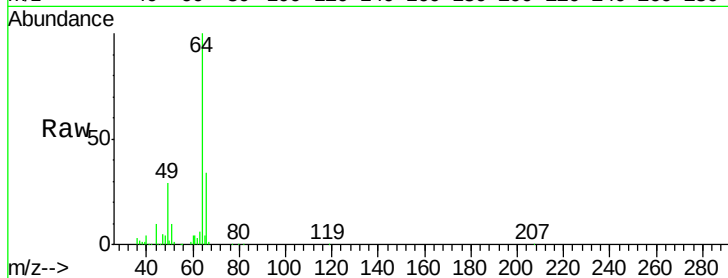
66 33.8 26.2 39.2

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Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.71

80000

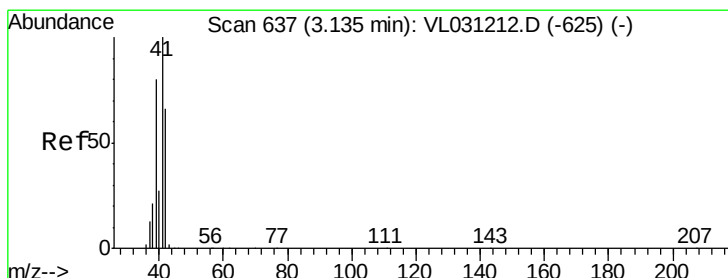
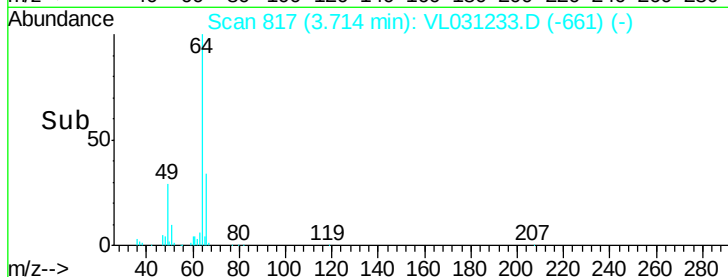
60000

40000

20000

0

Time--> 3.65 3.70 3.75



#9

Propene

Concen: 7.58 ppbv m

RT: 3.15 min Scan# 642

Delta R.T. 0.02 min

Lab File: VL031233.D

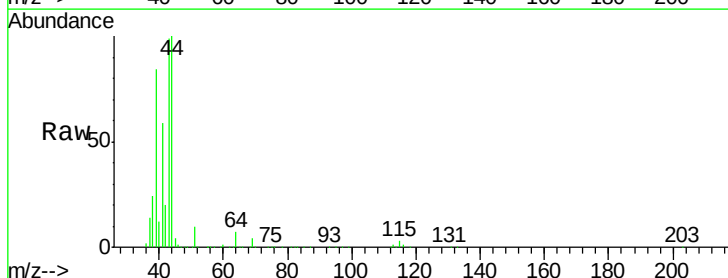
Acq: 14 Dec 2017 15:51

Tgt Ion: 41 Resp: 626151

Ion Ratio Lower Upper

41 100

42 13.5 54.3 81.5#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.15

500000

400000

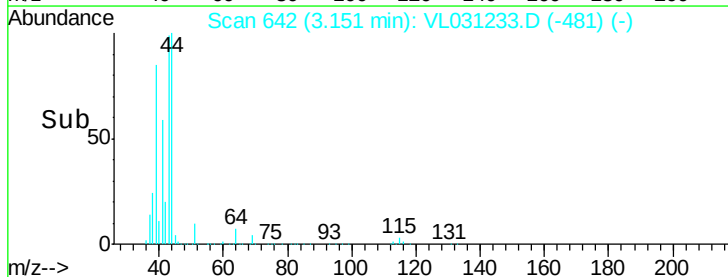
300000

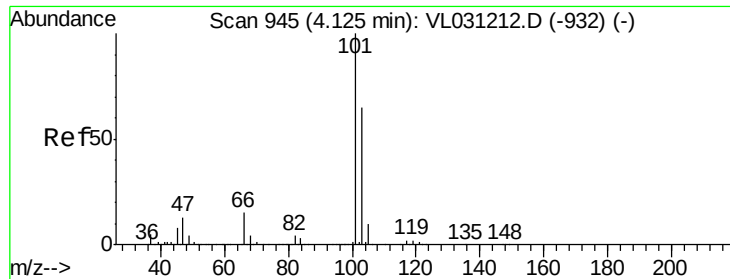
200000

100000

0

Time--> 3.00 3.10 3.20 3.30





#11

Trichlorofluoromethane

Concen: 1.11 ppbv

RT: 4.13 min Scan# 946

Delta R.T. 0.00 min

Lab File: VL031233.D

Acq: 14 Dec 2017 15:51

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion:101 Resp: 227844

Ion Ratio Lower Upper

101 100

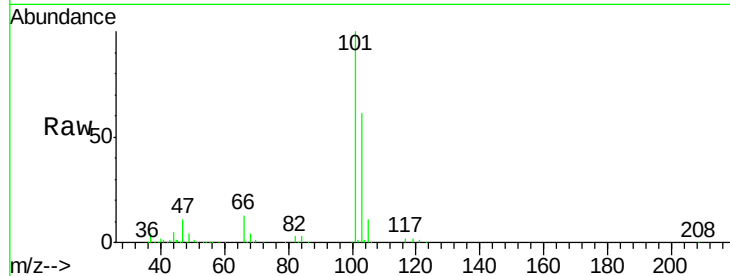
103 61.3 51.8 77.8

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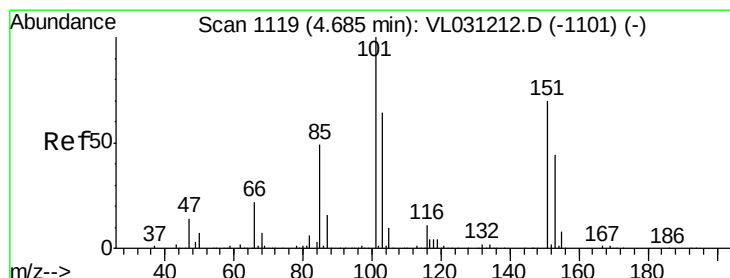
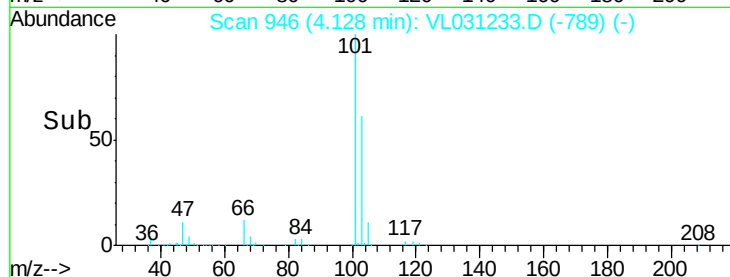
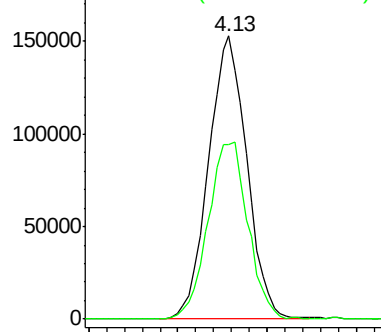
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 1.41 ppbv

RT: 4.69 min Scan# 1120

Delta R.T. 0.00 min

Lab File: VL031233.D

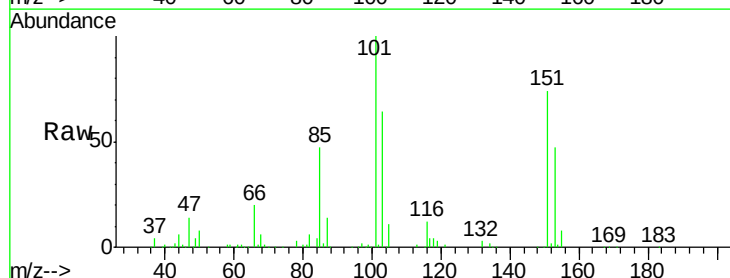
Acq: 14 Dec 2017 15:51

Tgt Ion:101 Resp: 202983

Ion Ratio Lower Upper

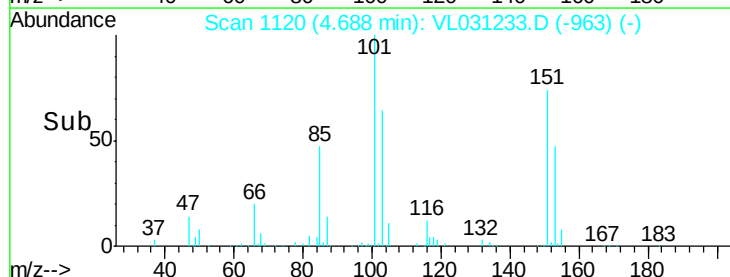
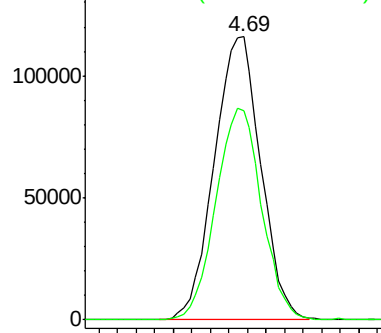
101 100

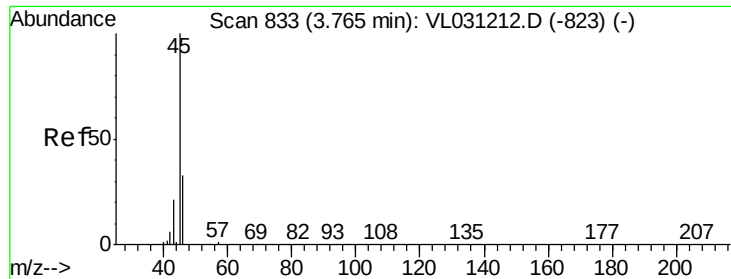
151 73.6 56.5 84.7



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





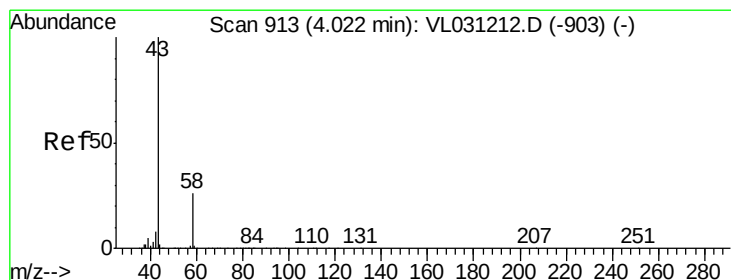
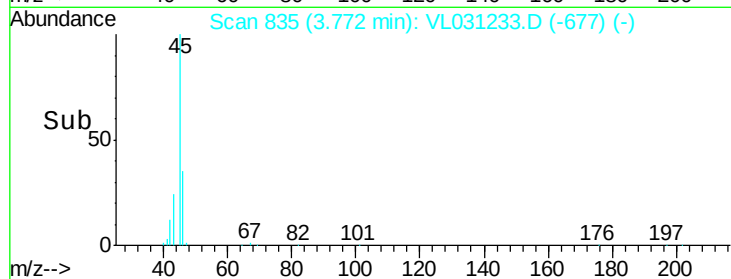
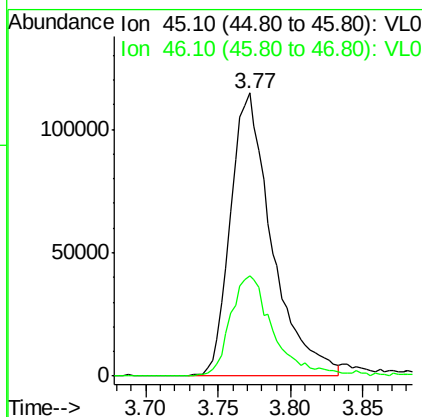
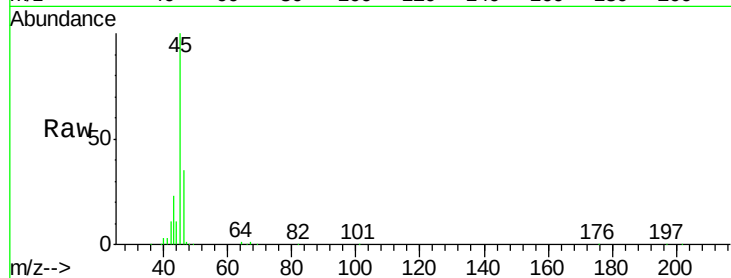
#13
Ethanol
Concen: 9.60 ppbv
RT: 3.77 min Scan# 835
Delta R.T. 0.01 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion	Ratio	Lower	Upper
45	100		
46	38.2	14.6	58.4

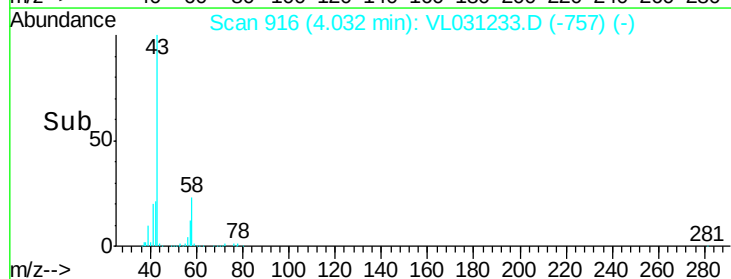
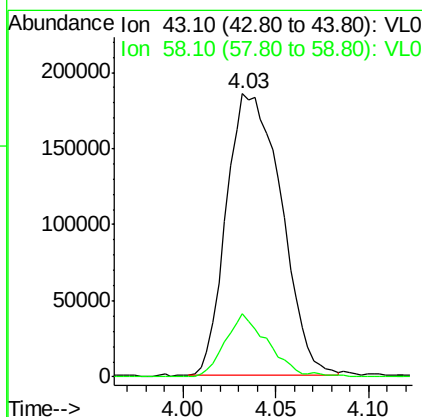
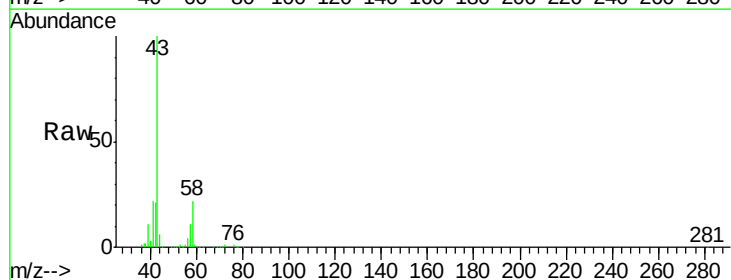
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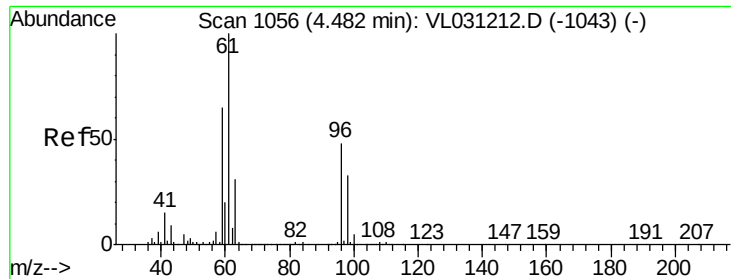
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#15
Acetone
Concen: 1.95 ppbv
RT: 4.03 min Scan# 916
Delta R.T. 0.01 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Tgt Ion	Ratio	Lower	Upper
43	100		
58	17.8	20.3	30.5#





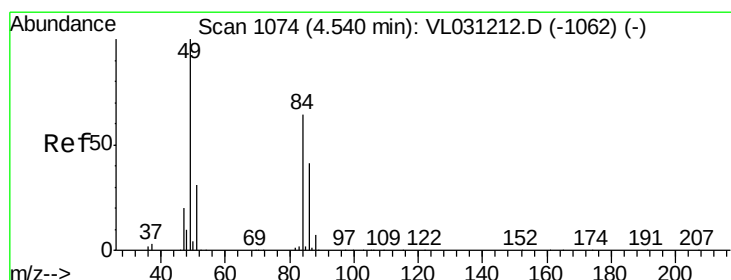
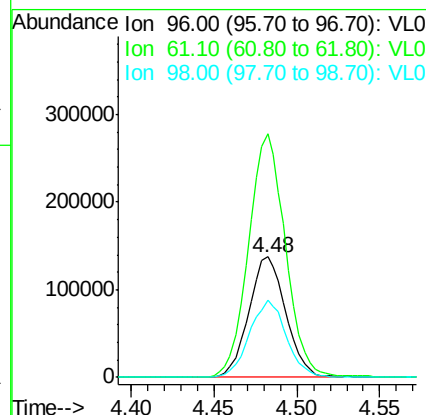
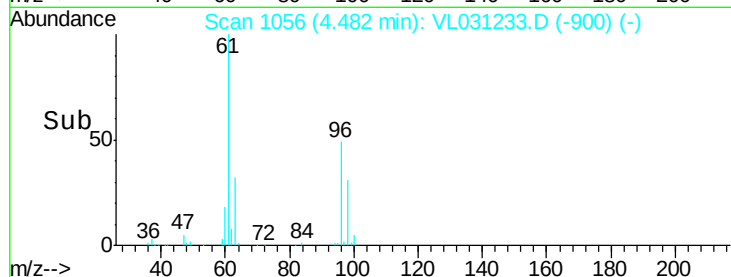
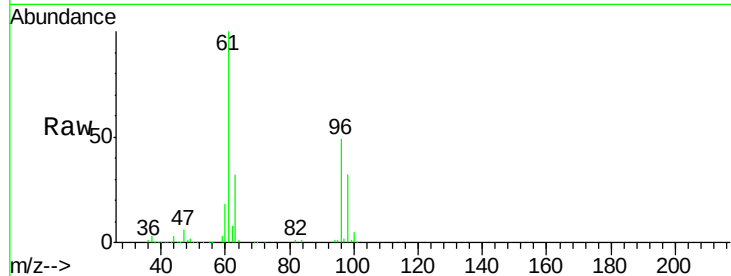
#18
 1,1-Dichloroethene
 Concen: 3.32 ppbv
 RT: 4.48 min Scan# 1056
 Delta R.T. 0.00 min
 Lab File: VL031233.D
 Acq: 14 Dec 2017 15:51

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Tot Ion	Ratio	Lower	Upper
96	100		
61	202.7	166.8	250.2
98	64.0	55.0	82.6

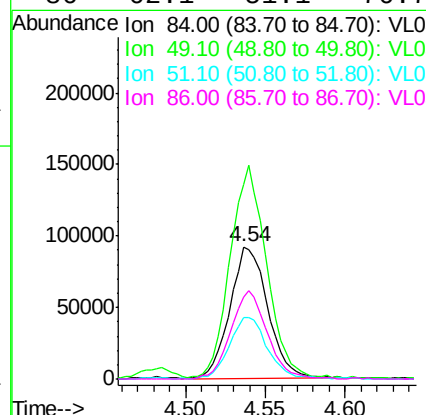
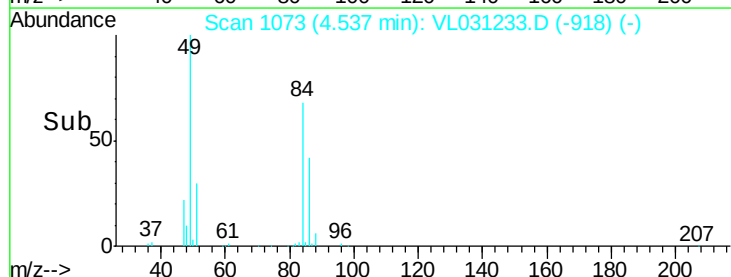
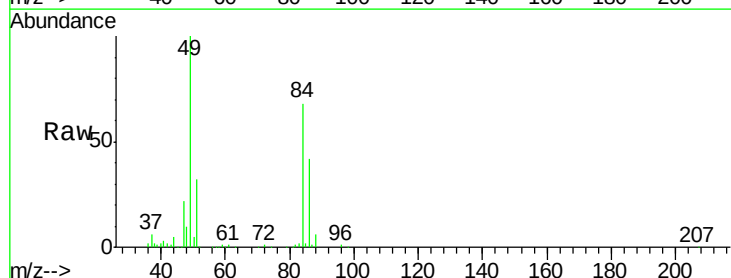
Manual Integrations
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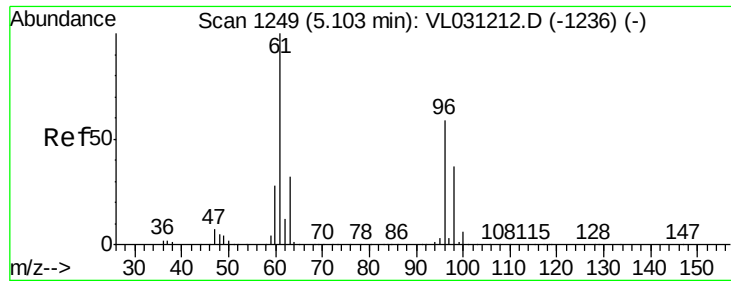
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#20
 Methylene Chloride
 Concen: 2.29 ppbv
 RT: 4.54 min Scan# 1073
 Delta R.T. -0.00 min
 Lab File: VL031233.D
 Acq: 14 Dec 2017 15:51

Tgt Ion	Ratio	Lower	Upper
84	100		
49	147.2	125.8	188.6
51	46.7	39.3	58.9
86	62.1	51.1	76.7





#22

trans-1,2-Dichloroethene

Concen: 1.36 ppbv

RT: 5.10 min Scan# 1249

Delta R.T. 0.00 min

Lab File: VL031233.D

Acq: 14 Dec 2017 15:51

Instrument :

MSVOA_L

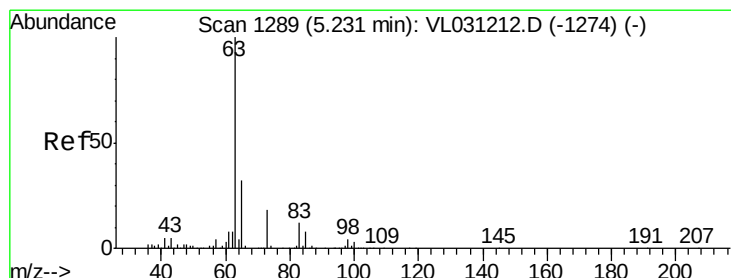
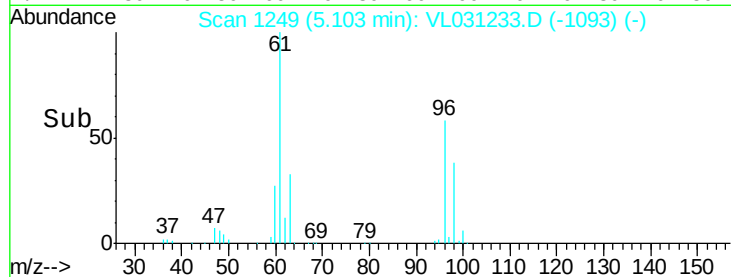
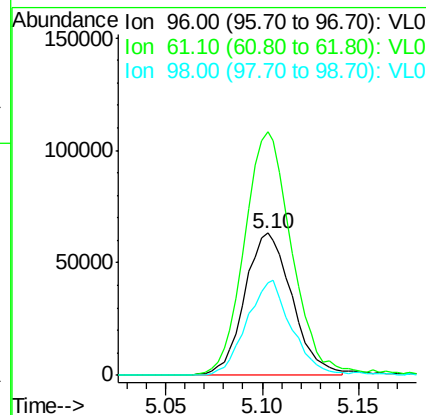
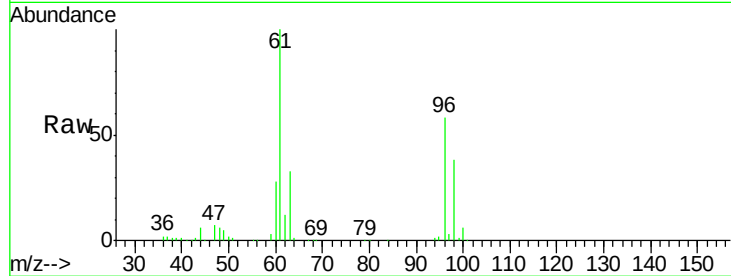
ClientSampleId :

EFFLUENT

Tot Ion:	96	Resp:	107583
Ion Ratio	Lower	Upper	
96	100		
61	171.5	135.0	202.4
98	64.8	50.5	75.7

Manual Integrations
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#24

1,1-Dichloroethane

Concen: 12.26 ppbv

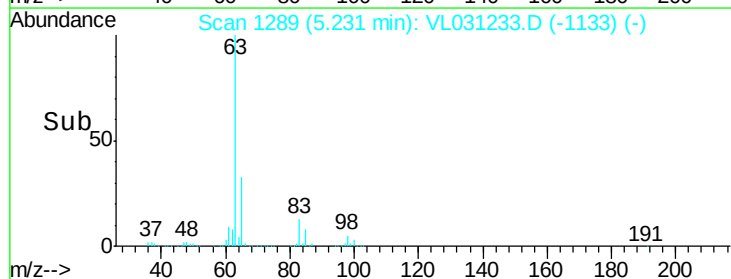
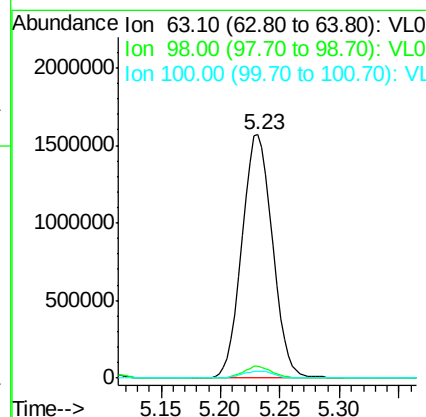
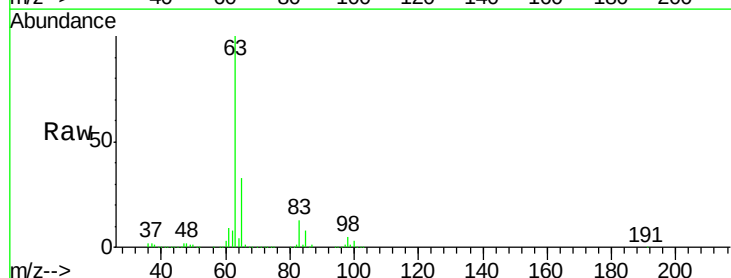
RT: 5.23 min Scan# 1289

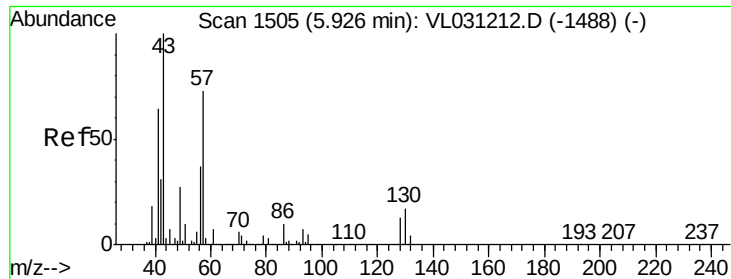
Delta R.T. 0.00 min

Lab File: VL031233.D

Acq: 14 Dec 2017 15:51

Tgt Ion:	63	Resp:	2801866
Ion Ratio	Lower	Upper	
63	100		
98	4.8	2.3	6.8
100	2.8	1.4	4.2





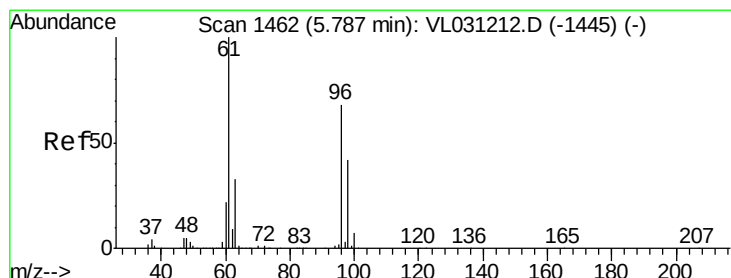
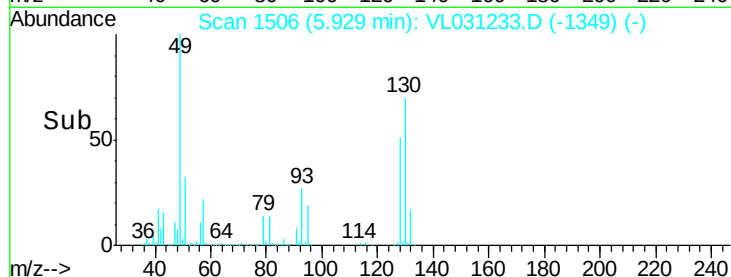
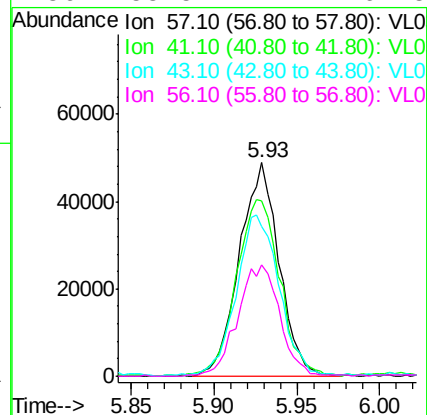
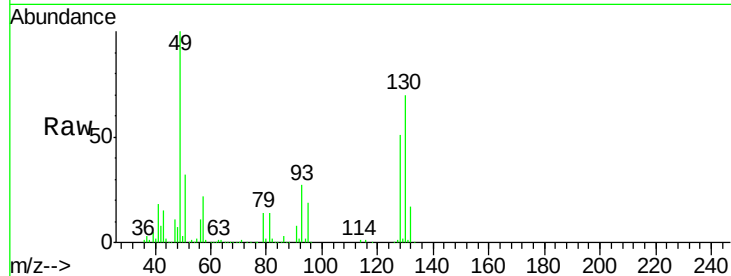
#26
Hexane
Concen: 0.43 ppbv
RT: 5.93 min Scan# 1506
Delta R.T. 0.00 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion	Ratio	Lower	Upper
57	100		
41	91.0	70.3	105.5
43	82.5	173.8	260.8#
56	55.5	41.7	62.5

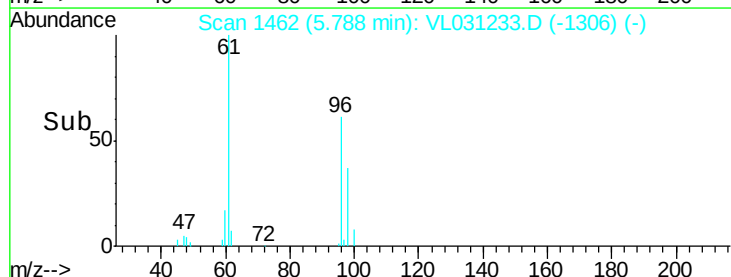
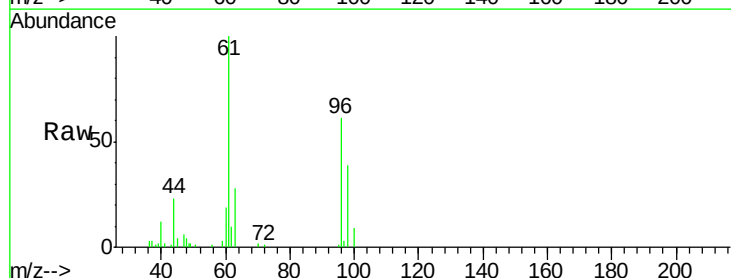
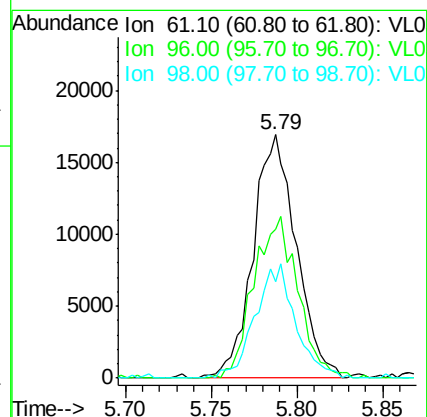
Manual Integrations
APPROVED

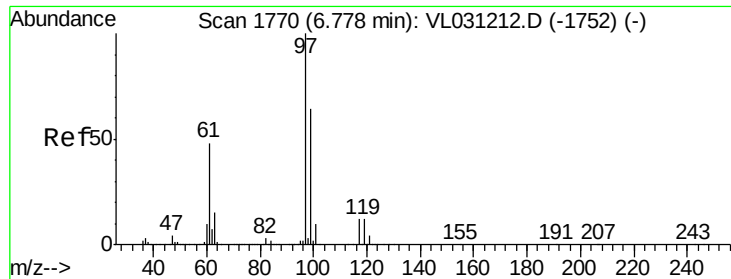
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#31
cis-1,2-Dichloroethene
Concen: 0.17 ppbv
RT: 5.79 min Scan# 1462
Delta R.T. 0.00 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Tgt Ion	Ratio	Lower	Upper
61	100		
96	61.4	54.4	81.6
98	39.4	33.6	50.4





#32
 1,1,1-Trichloroethane
 Concen: 46.65 ppbv
 RT: 6.77 min Scan# 1769
 Delta R.T. -0.00 min
 Lab File: VL031233.D
 Acq: 14 Dec 2017 15:51

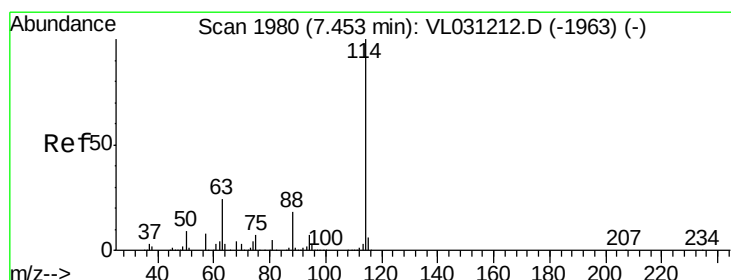
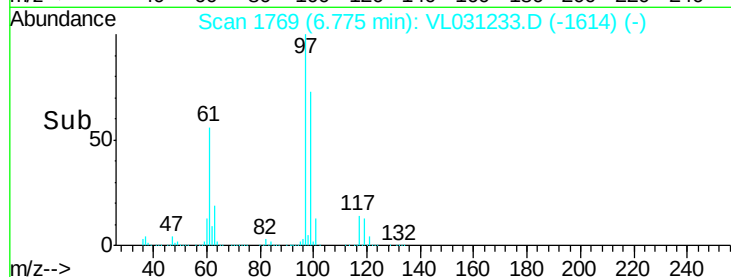
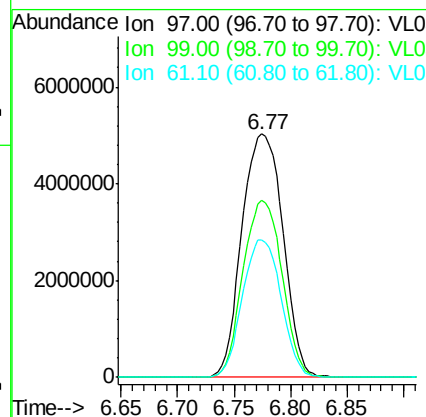
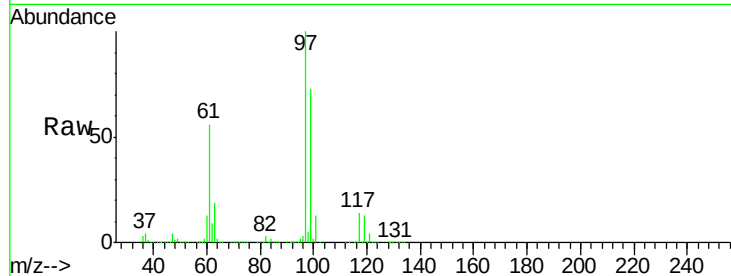
Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Tot Ion: 97 Resp: 12742744

Ion	Ratio	Lower	Upper
97	100		
99	69.3	51.4	77.0
61	53.3	38.4	57.6

Manual Integrations
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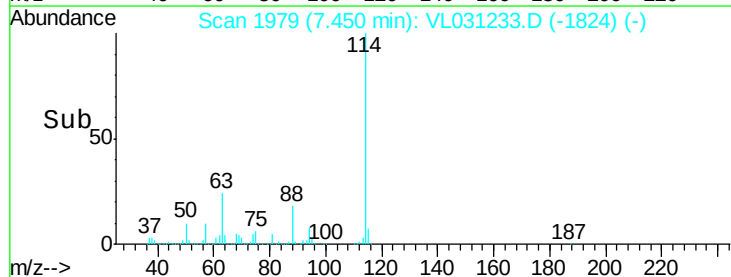
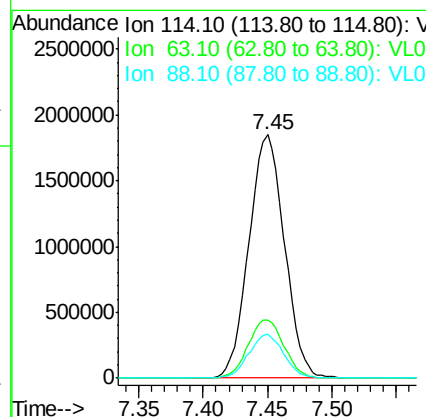
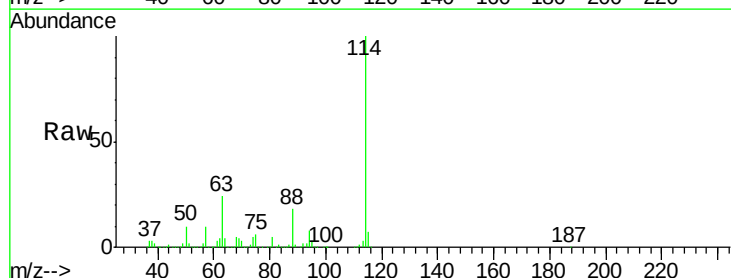
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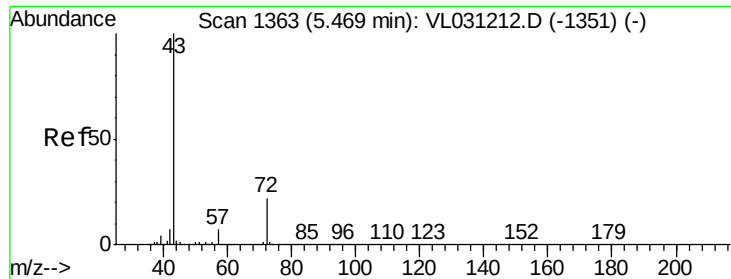


#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.45 min Scan# 1979
 Delta R.T. -0.00 min
 Lab File: VL031233.D
 Acq: 14 Dec 2017 15:51

Tgt Ion: 114 Resp: 3559372

Ion	Ratio	Lower	Upper
114	100		
63	24.5	19.8	29.8
88	17.7	14.2	21.4





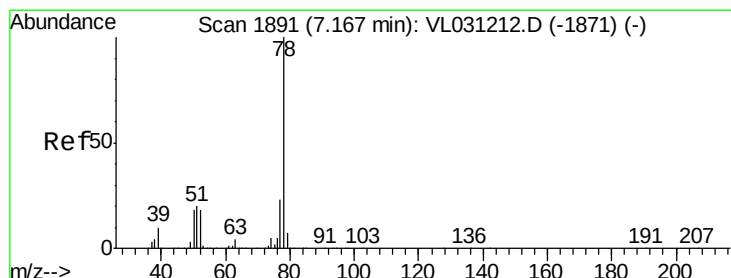
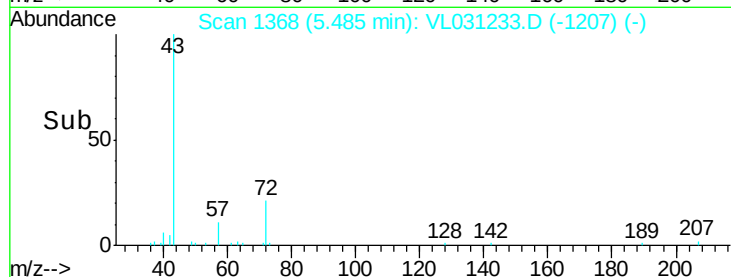
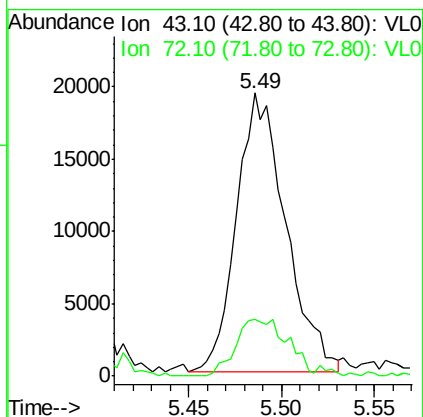
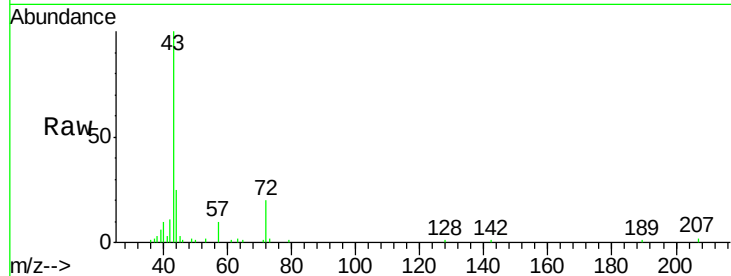
#34
2-Butanone
Concen: 0.14 ppbv
RT: 5.49 min Scan# 1368
Delta R.T. 0.02 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Instrument :
MSVOA_L
ClientSampled :
EFFLUENT

Tot Ion	43	Resp	35423
Ion Ratio	100	Lower	Upper
72	23.3	18.1	27.1

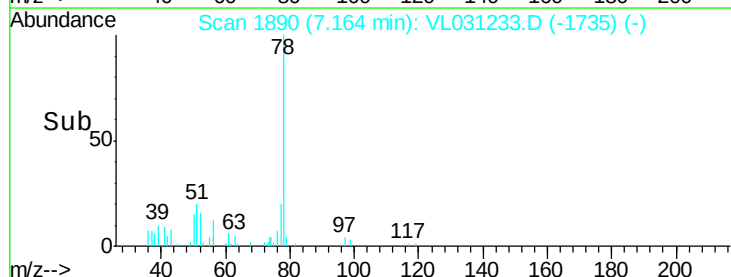
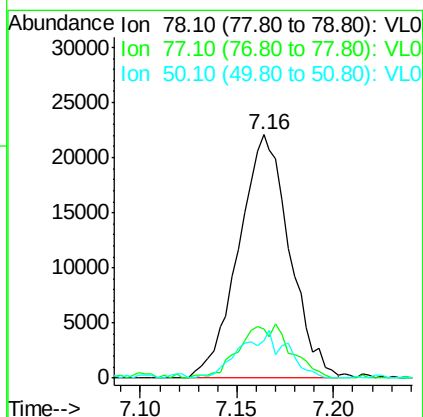
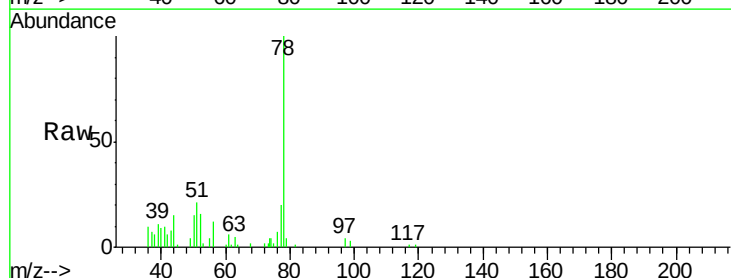
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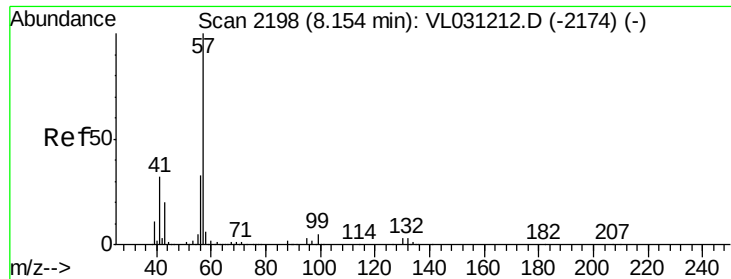
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#36
Benzene
Concen: 0.11 ppbv
RT: 7.16 min Scan# 1890
Delta R.T. -0.00 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Tgt Ion	78	Resp	40450
Ion Ratio	100	Lower	Upper
77	20.3	18.1	27.1
50	15.2	14.6	21.8





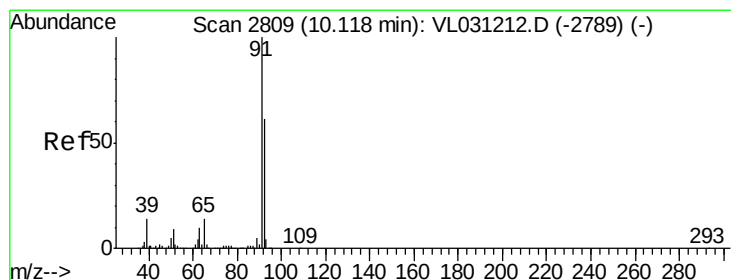
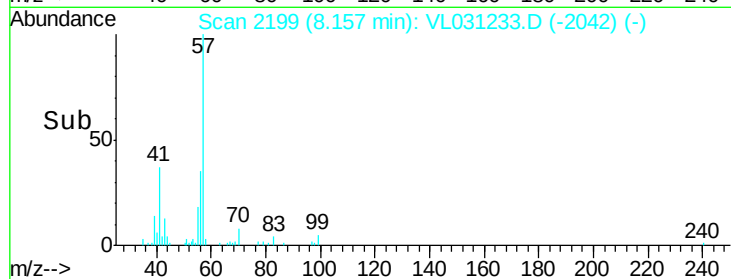
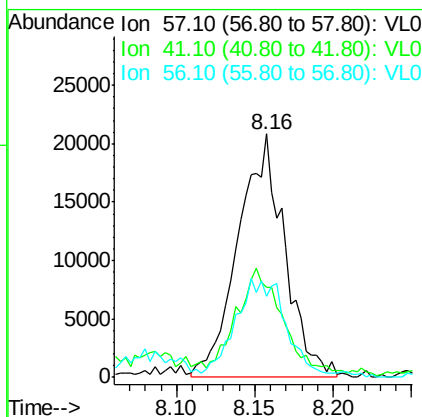
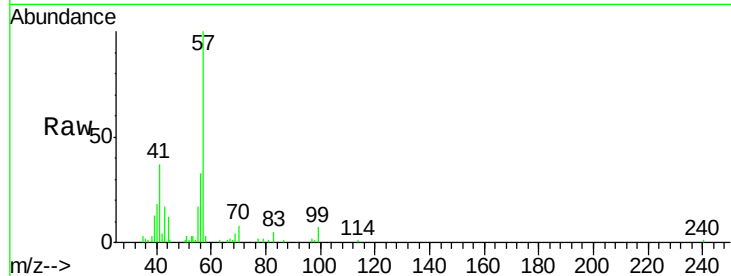
#44
 2,2,4-Trimethylpentane
 Concen: 0.08 ppbv m
 RT: 8.16 min Scan# 2199
 Delta R.T. 0.00 min
 Lab File: VL031233.D
 Acq: 14 Dec 2017 15:51

Instrument :
 MSVOA_L
 ClientSampleId :
 EFFLUENT

Tot Ion	Ratio	Lower	Upper
57	100		
41	45.9	25.5	38.3#
56	45.1	25.0	37.6#

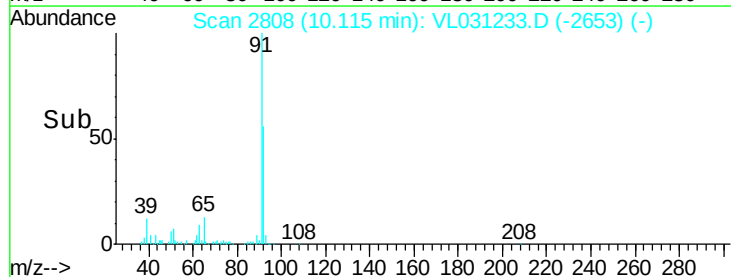
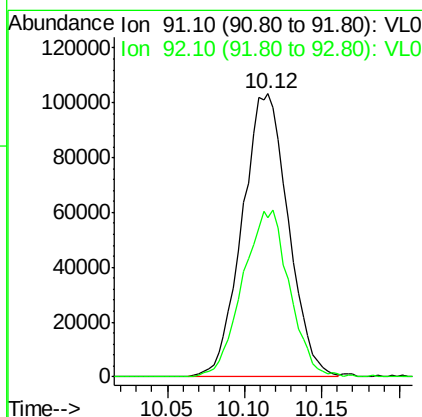
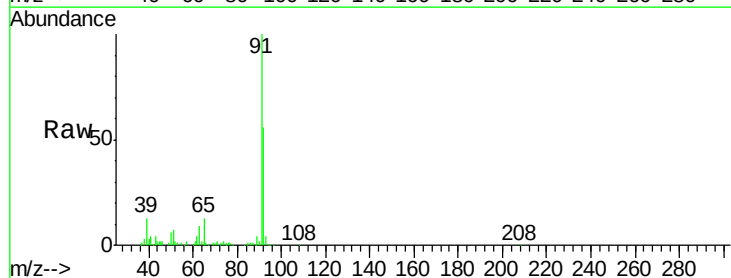
Manual Integrations
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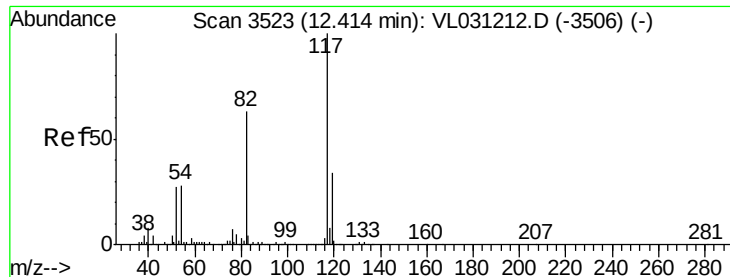
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#53
 Toluene
 Concen: 0.52 ppbv
 RT: 10.12 min Scan# 2808
 Delta R.T. -0.00 min
 Lab File: VL031233.D
 Acq: 14 Dec 2017 15:51

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.6	49.1	73.7





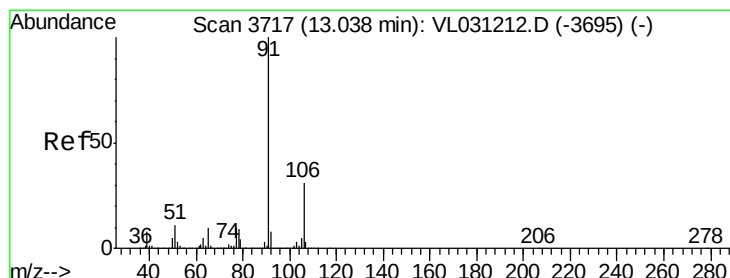
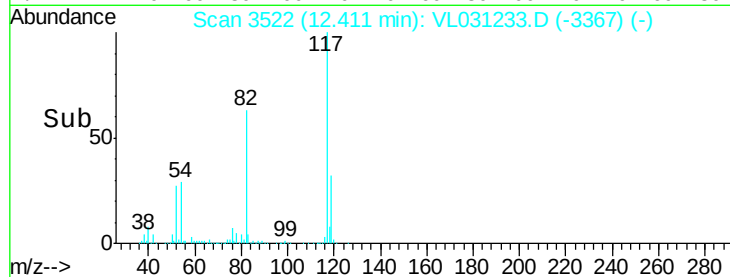
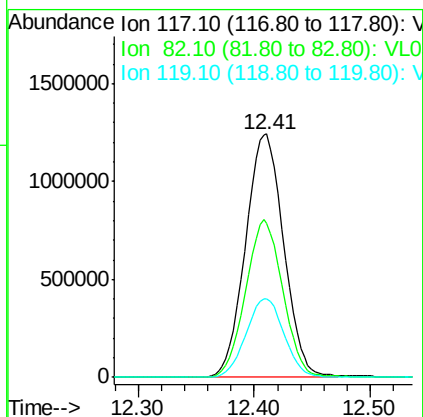
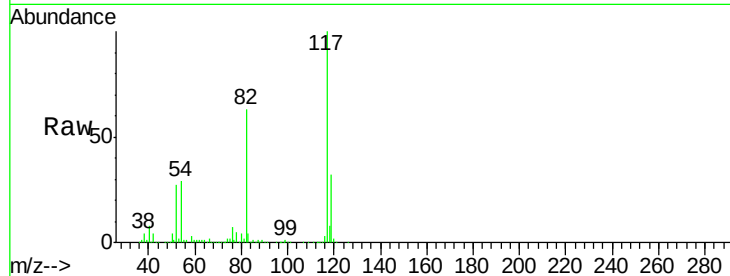
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.41 min Scan# 3522
Delta R.T. -0.00 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.1	48.1	72.1
119	32.5	23.1	34.7

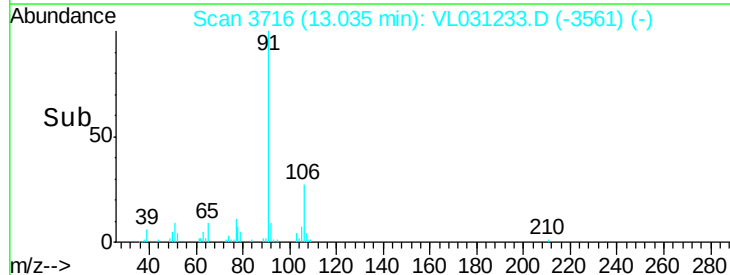
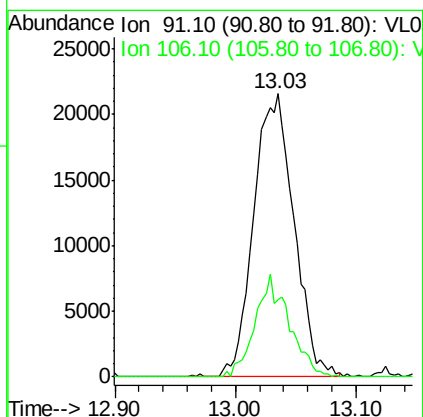
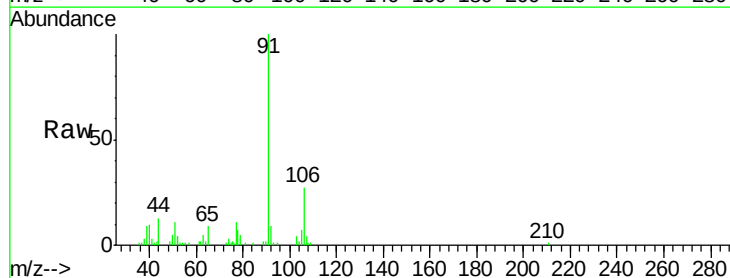
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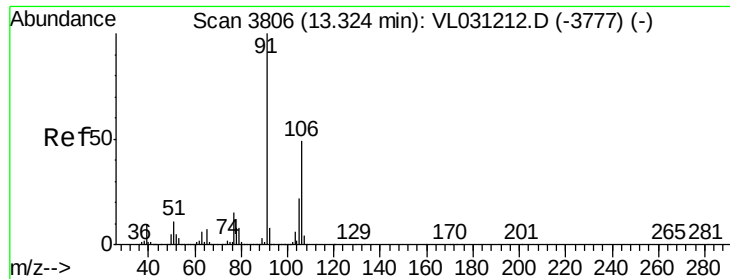
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#58
Ethyl Benzene
Concen: 0.10 ppbv m
RT: 13.03 min Scan# 3716
Delta R.T. -0.00 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Tgt Ion	Ratio	Lower	Upper
91	100		
106	27.5	25.1	37.7





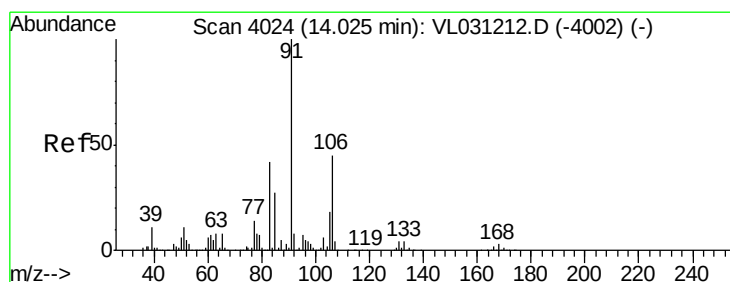
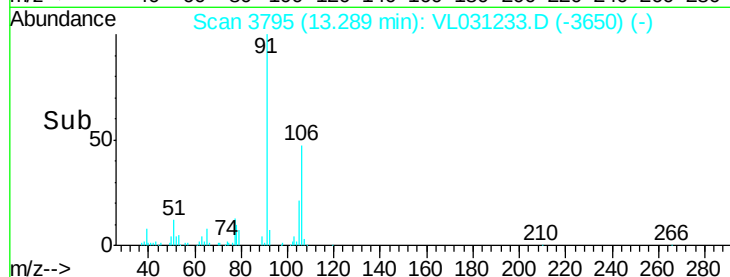
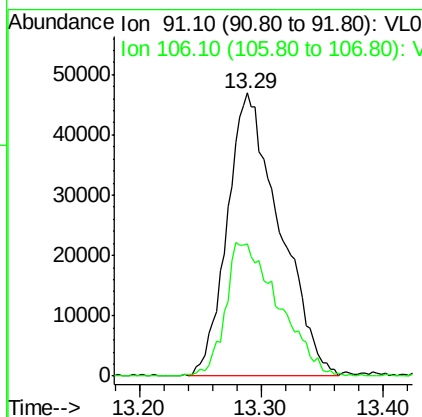
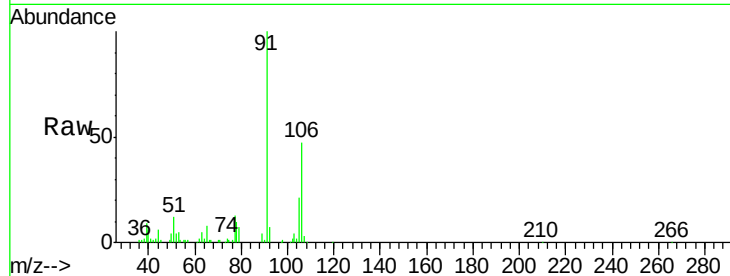
#59
m/p-Xylene
Concen: 0.37 ppbv
RT: 13.29 min Scan# 3795
Delta R.T. -0.04 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Instrument :
MSVOA_L
ClientSampleId :
EFFLUENT

Tot Ion: 91 Resp: 140354
Ion Ratio Lower Upper
91 100
106 47.7 38.5 57.7

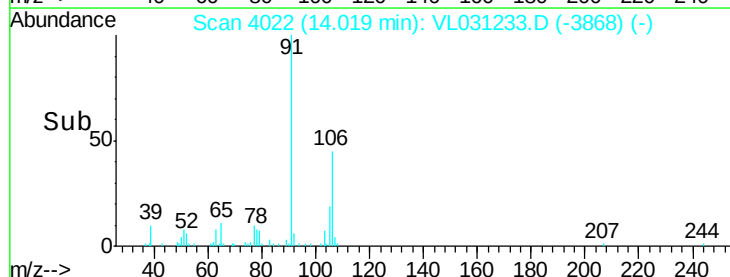
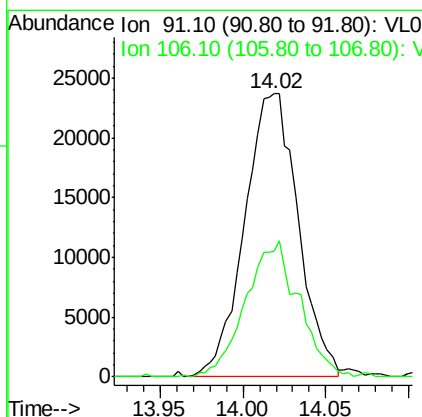
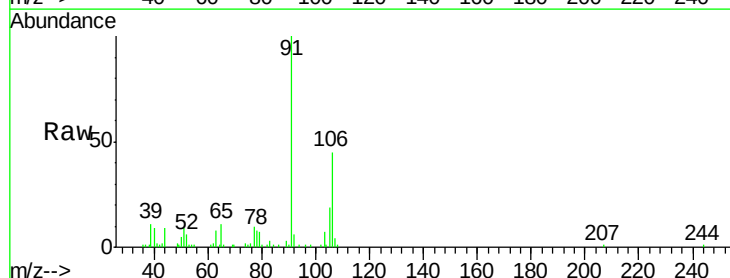
Manual Integrations
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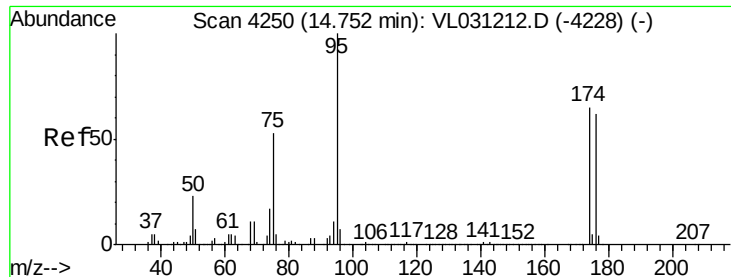
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#60
o-Xylene
Concen: 0.14 ppbv
RT: 14.02 min Scan# 4022
Delta R.T. -0.01 min
Lab File: VL031233.D
Acq: 14 Dec 2017 15:51

Tgt Ion: 91 Resp: 53179
Ion Ratio Lower Upper
91 100
106 48.0 22.7 68.1





#68

1-Bromo-4-Fluorobenzene

Concen: 11.87 ppbv

RT: 14.74 min Scan# 4247

Delta R.T. -0.01 min

Lab File: VL031233.D

Acq: 14 Dec 2017 15:51

Instrument :

MSVOA_L

ClientSampleId :

EFFLUENT

Tot Ion: 95 Resp: 2401479

Ion Ratio Lower Upper

95 100

174 62.6 52.5 78.7

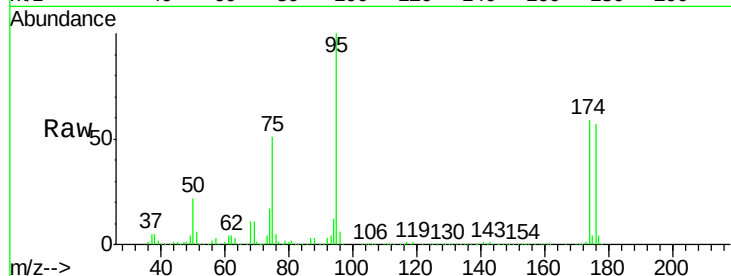
175 4.8 4.1 6.1

Manual Integrations

APPROVED

MMDadoda

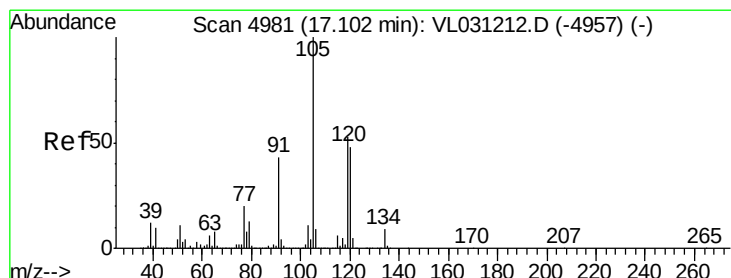
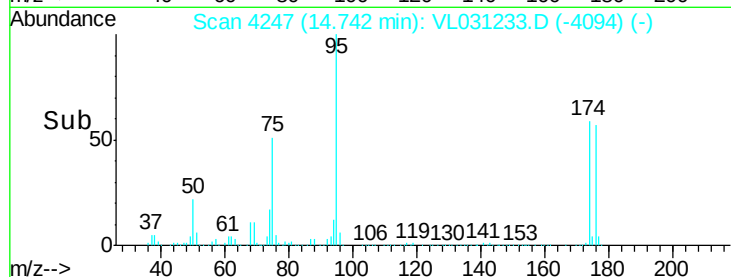
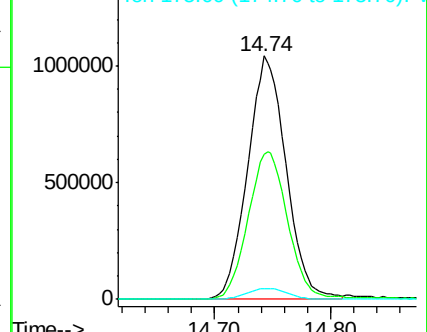
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Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V



#74

1,2,4-Trimethylbenzene

Concen: 0.14 ppbv

RT: 17.09 min Scan# 4978

Delta R.T. -0.01 min

Lab File: VL031233.D

Acq: 14 Dec 2017 15:51

Tgt Ion: 105 Resp: 52773

Ion Ratio Lower Upper

105 100

120 38.4 38.6 58.0#

91 12.2 34.2 51.4#

77 8.3 16.1 24.1#

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

