

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
 Data File : VL031272.D
 Acq On : 20 Dec 2017 16:04
 Operator : SY/AP
 Sample : I6960-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 T5P3

Manual Integrations
 APPROVED

MMDadoda
 12/22/2017 4:54:48 PM

Quant Time: Dec 22 04:24:23 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	1687583	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.45	114	3904698	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.41	117	3792307	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.75	95	2982705	11.06	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.18	85	51290	0.36	ppbv	98
4) Chloromethane	3.28	50	40881	0.39	ppbv	97
9) Propene	3.14	41	1959199	20.81	ppbv	96
10) Heptane	8.41	43	88901	0.31	ppbv	99
11) Trichlorofluoromethane	4.13	101	58658	0.25	ppbv	98
13) Ethanol	3.77	45	255182	9.39	ppbv	98
15) Acetone	4.02	43	1980743	8.89	ppbv	94
17) tert-Butyl alcohol	4.50	59	90876m	0.73	ppbv	
20) Methylene Chloride	4.54	84	284294	3.86	ppbv	98
26) Hexane	5.93	57	317356	1.47	ppbv #	48
30) Cyclohexane	7.41	84	29466m	0.16	ppbv	
34) 2-Butanone	5.48	43	453017	1.64	ppbv	96
35) Carbon Tetrachloride	7.30	117	17220	0.06	ppbv	93
36) Benzene	7.16	78	70725m	0.17	ppbv	
37) 1,2-Dichloroethane	6.56	62	28464	0.12	ppbv	99
39) 1,2-Dichloropropane	7.90	63	22809m	0.16	ppbv	
44) 2,2,4-Trimethylpentane	8.15	57	188717	0.30	ppbv #	90
53) Toluene	10.12	91	2144681	4.78	ppbv	98
58) Ethyl Benzene	13.04	91	251007	0.40	ppbv	96
59) m/p-Xylene	13.30	91	503338	1.00	ppbv	97
60) o-Xylene	14.03	91	183883	0.36	ppbv	99
61) Styrene	13.86	104	398765	2.75	ppbv	96
62) Isopropylbenzene	15.00	105	5830666	8.80	ppbv	99
74) 1,2,4-Trimethylbenzene	17.09	105	68983m	0.13	ppbv	
76) 1,4-Dichlorobenzene	17.48	146	38745m	0.12	ppbv	

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

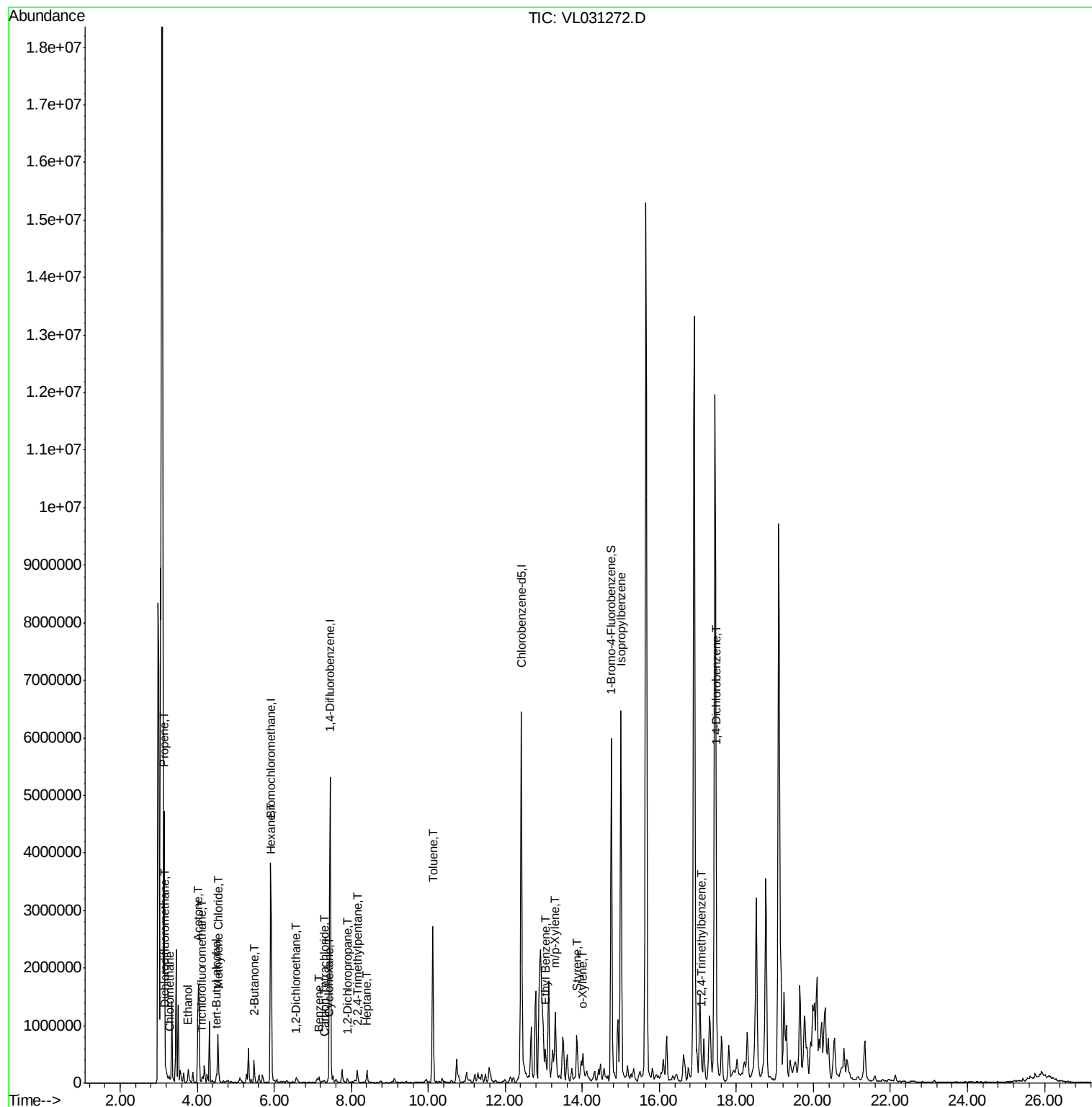
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
Data File : VL031272.D
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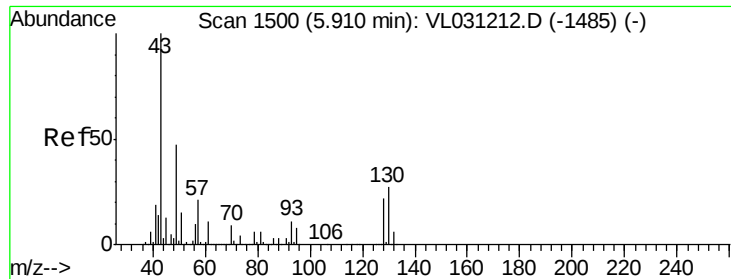
Instrument :
MSVOA_L
ClientSampleId :
T5P3

Manual Integrations
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Quant Time: Dec 22 04:24:23 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: VL031272.D

Acq: 20 Dec 2017 16:04

Instrument :

MSVOA_L

ClientSampled :

T5P3

Tot Ion: 49 Resp: 1687583

Ion Ratio Lower Upper

49 100

128 46.8 23.2 69.5

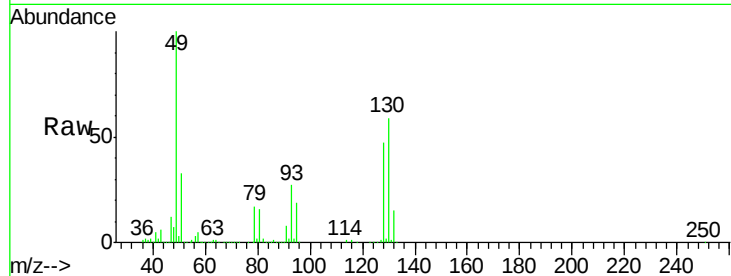
130 59.8 29.6 88.8

Manual Integrations

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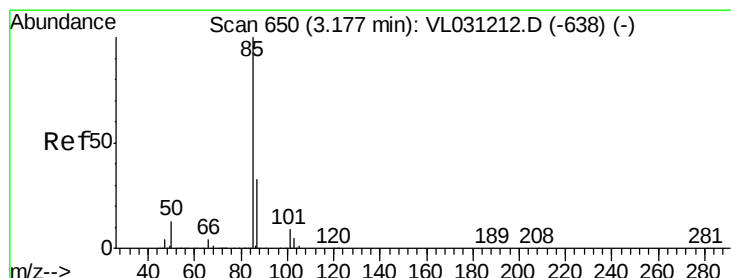
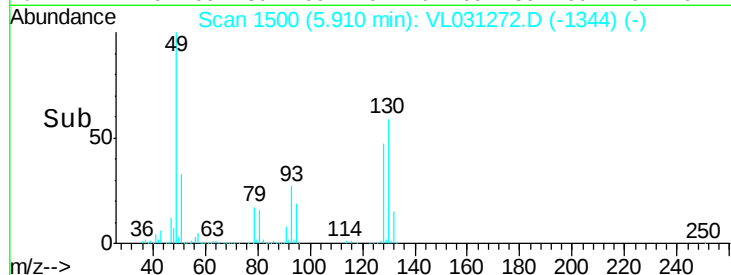
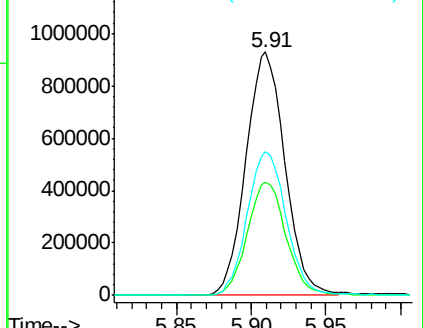
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.36 ppbv

RT: 3.18 min Scan# 650

Delta R.T. 0.00 min

Lab File: VL031272.D

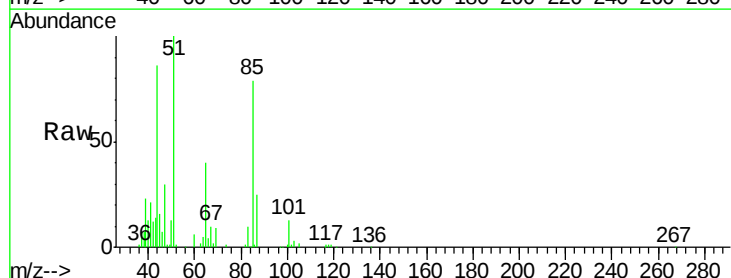
Acq: 20 Dec 2017 16:04

Tgt Ion: 85 Resp: 51290

Ion Ratio Lower Upper

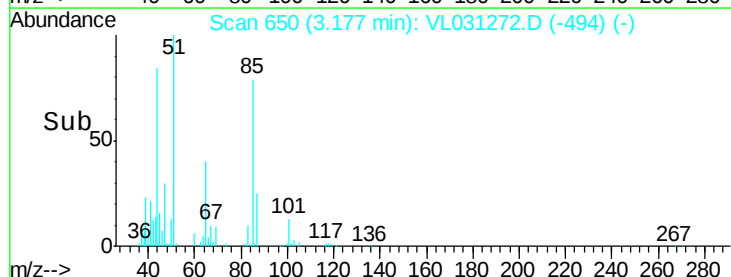
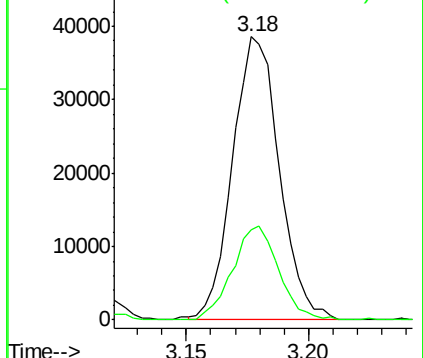
85 100

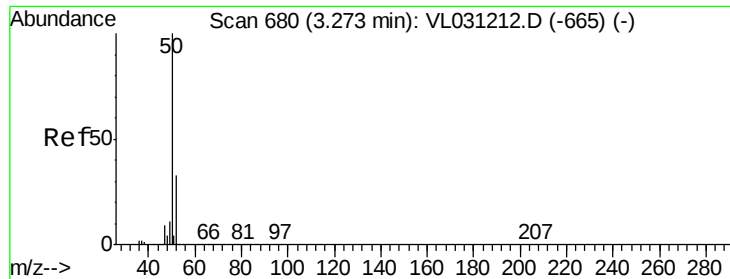
87 31.7 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.39 ppbv

RT: 3.28 min Scan# 681

Delta R.T. 0.00 min

Lab File: VL031272.D

Acq: 20 Dec 2017 16:04

Instrument :

MSVOA_L

ClientSampled :

T5P3

Tot Ion: 50 Resp: 40881

Ion Ratio Lower Upper

50 100

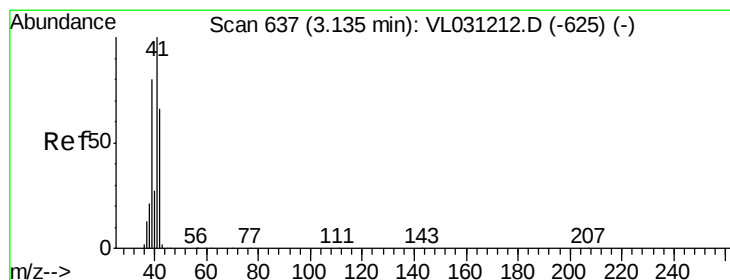
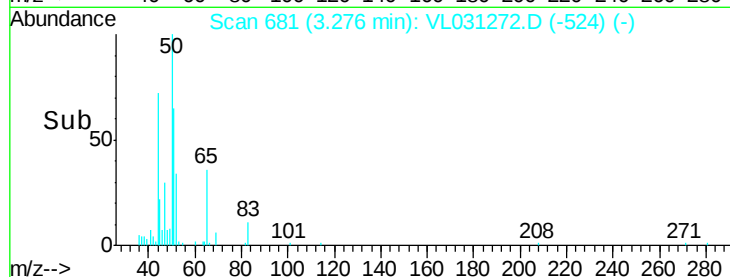
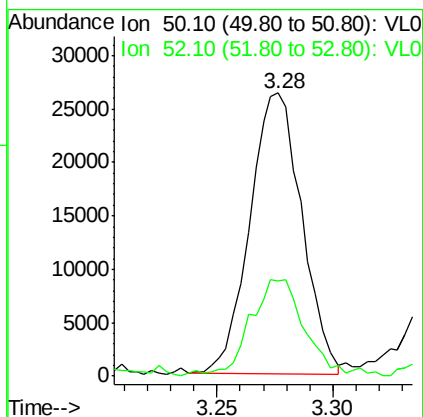
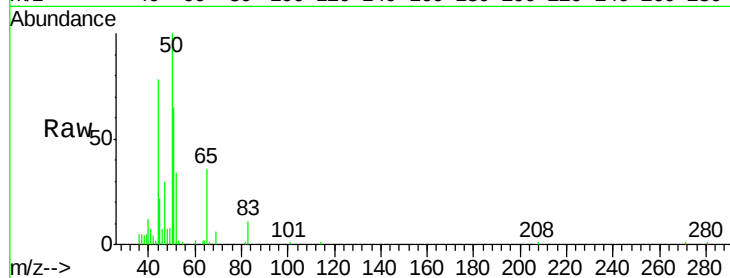
52 34.7 26.5 39.7

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#9

Propene

Concen: 20.81 ppbv

RT: 3.14 min Scan# 638

Delta R.T. 0.00 min

Lab File: VL031272.D

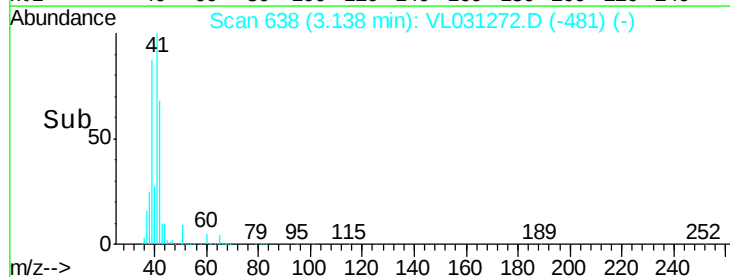
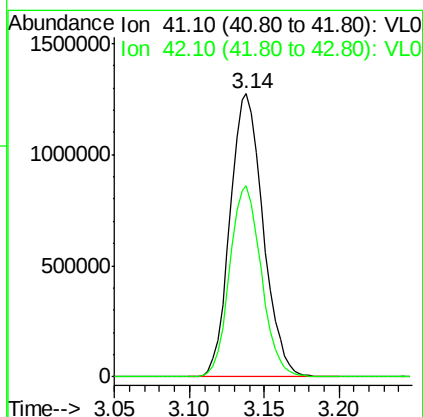
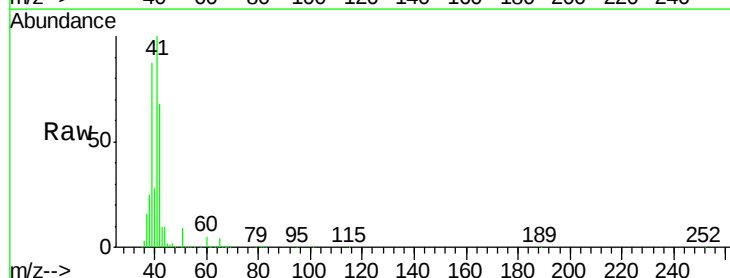
Acq: 20 Dec 2017 16:04

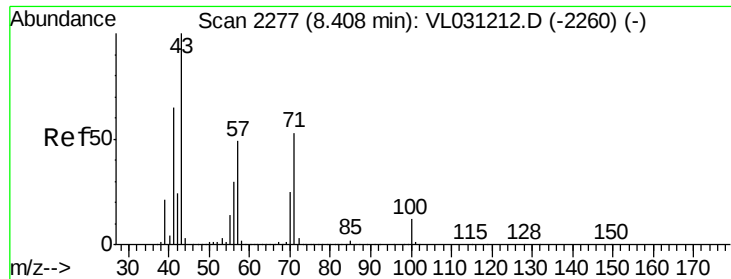
Tgt Ion: 41 Resp: 1959199

Ion Ratio Lower Upper

41 100

42 65.0 54.3 81.5





#10

Heptane

Concen: 0.31 ppbv

RT: 8.41 min Scan# 2278

Delta R.T. 0.00 min

Lab File: VL031272.D

Acq: 20 Dec 2017 16:04

Instrument :

MSVOA_L

ClientSampleId :

T5P3

Tot Ion: 43 Resp: 88901

Ion Ratio Lower Upper

43 100

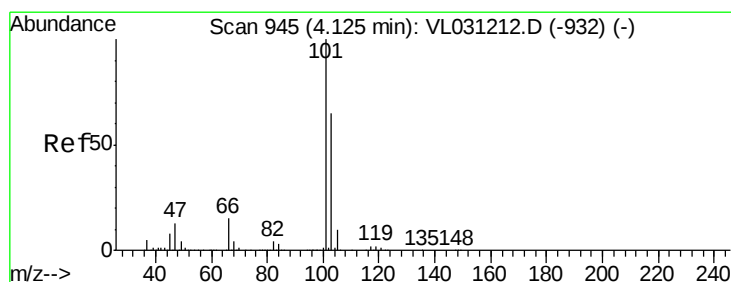
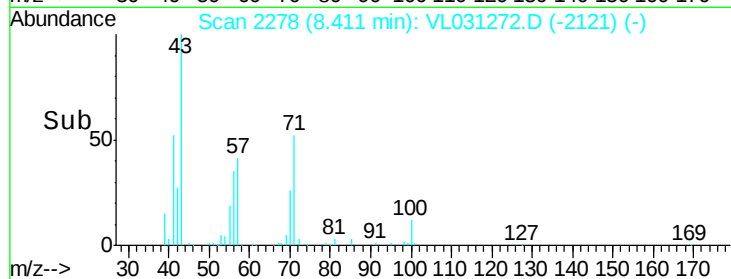
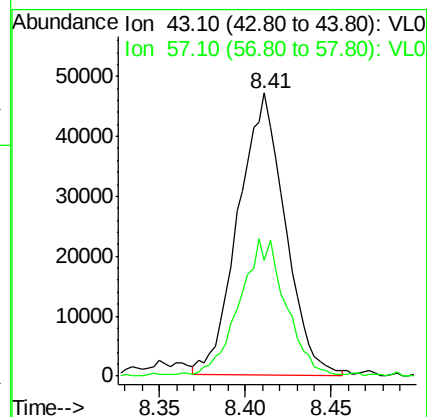
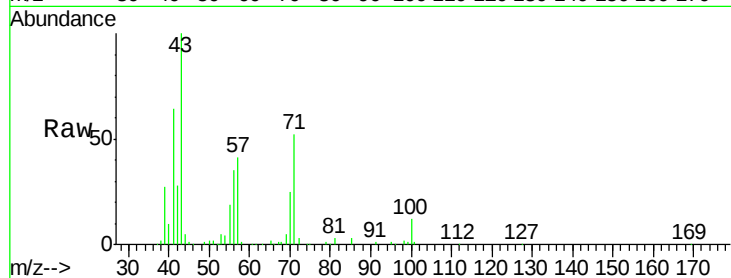
57 49.4 39.8 59.8

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#11

Trichlorofluoromethane

Concen: 0.25 ppbv

RT: 4.13 min Scan# 945

Delta R.T. 0.00 min

Lab File: VL031272.D

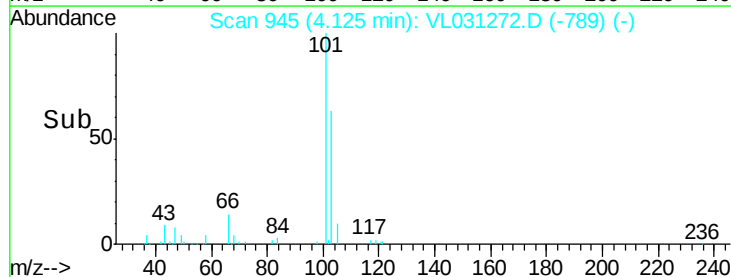
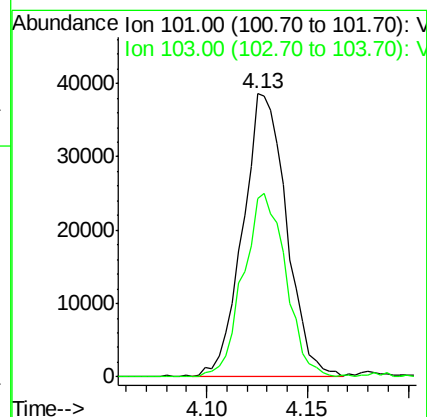
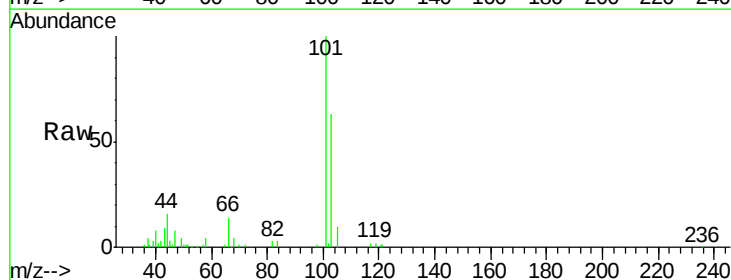
Acq: 20 Dec 2017 16:04

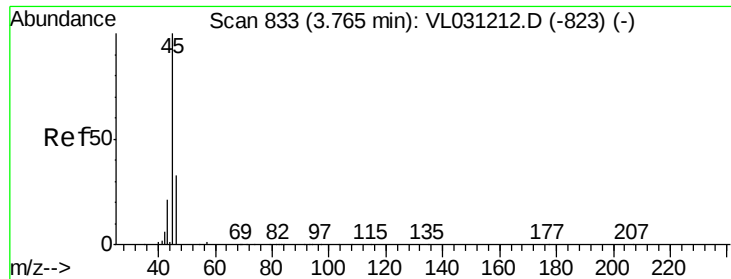
Tgt Ion: 101 Resp: 58658

Ion Ratio Lower Upper

101 100

103 63.0 51.8 77.8





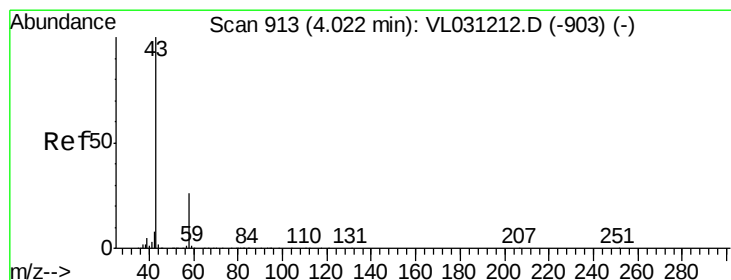
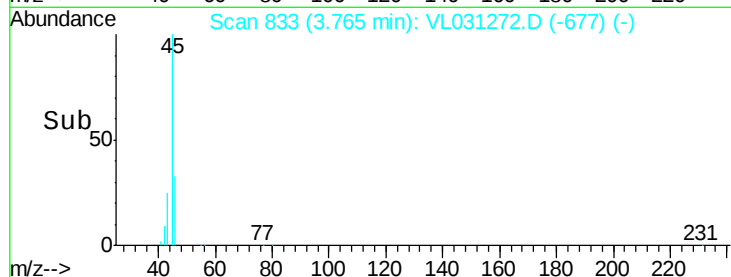
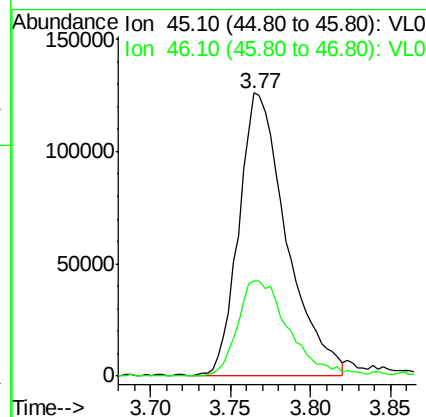
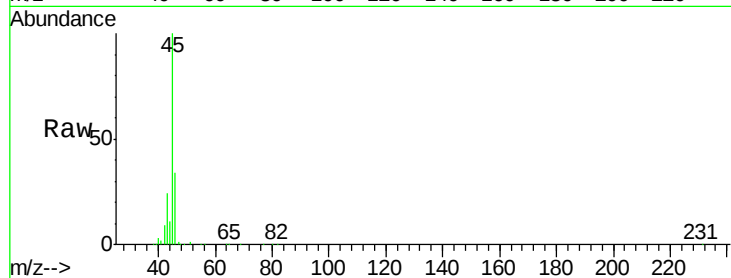
#13
Ethanol
Concen: 9.39 ppbv
RT: 3.77 min Scan# 833
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Instrument :
MSVOA_L
ClientSampled :
T5P3

Tot Ion	Ratio	Lower	Upper
45	100		
46	37.5	14.6	58.4

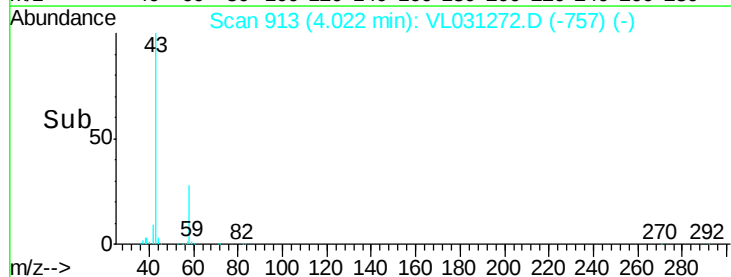
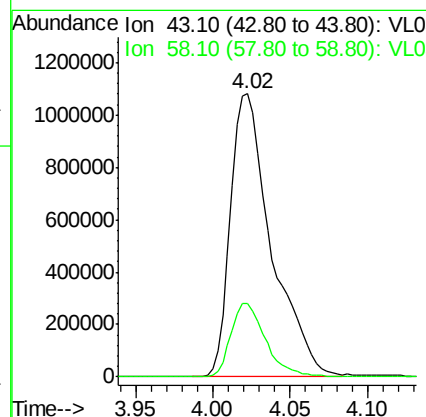
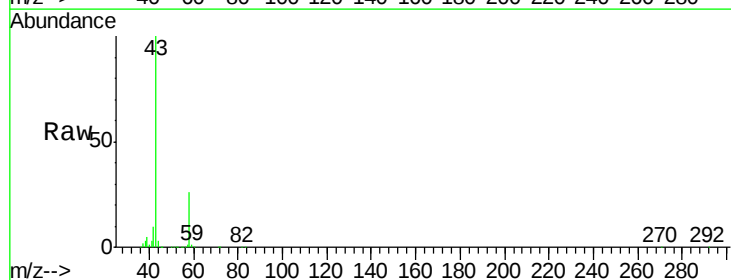
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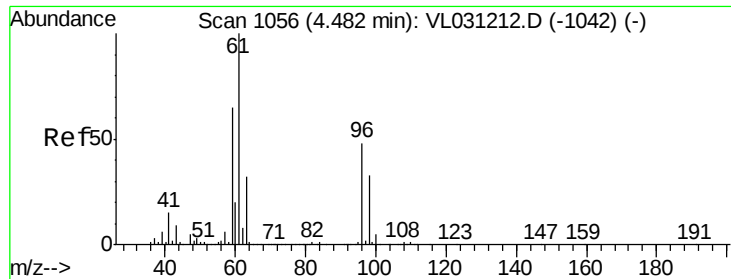
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#15
Acetone
Concen: 8.89 ppbv
RT: 4.02 min Scan# 913
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Tgt Ion	Ratio	Lower	Upper
43	100		
58	22.3	20.3	30.5





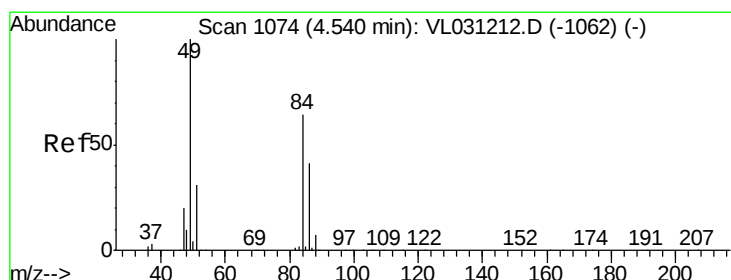
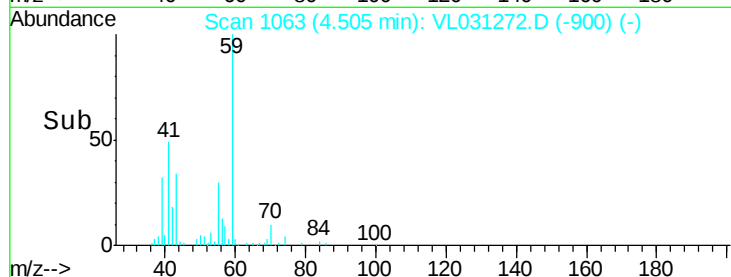
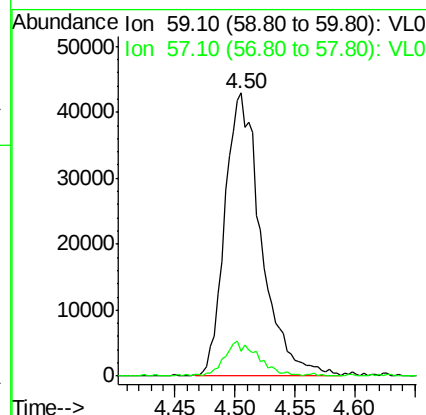
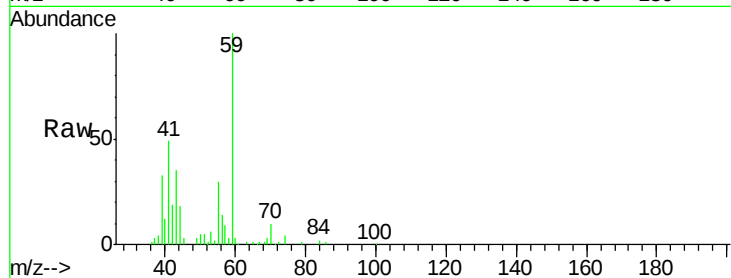
#17
tert-Butyl alcohol
Concen: 0.73 ppbv m
RT: 4.50 min Scan# 1063
Delta R.T. 0.02 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Instrument :
MSVOA_L
ClientSampled :
T5P3

Tot Ion: 59 Resp: 90876
Ion Ratio Lower Upper
59 100
57 11.9 8.2 12.2

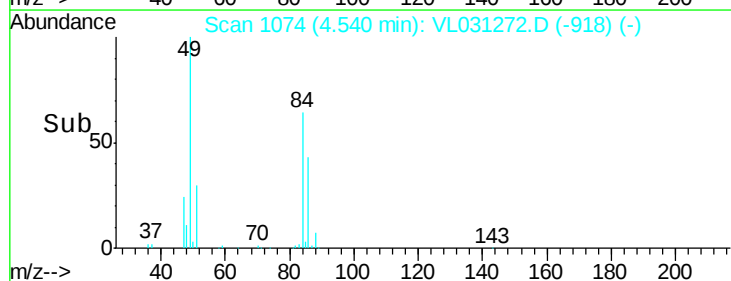
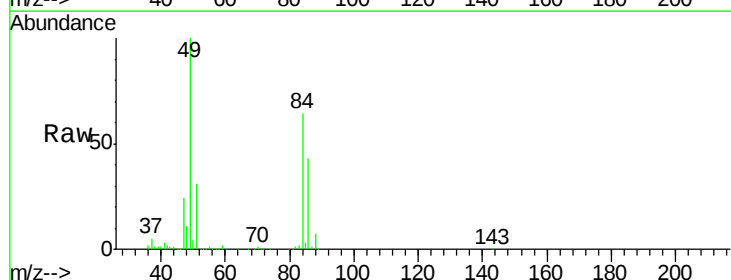
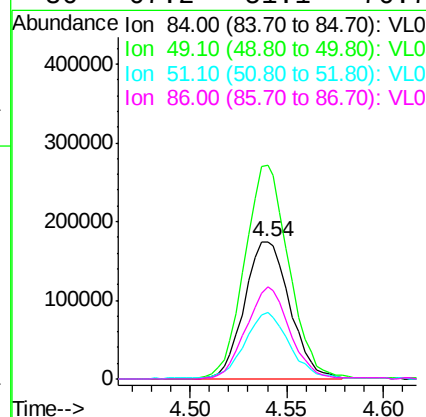
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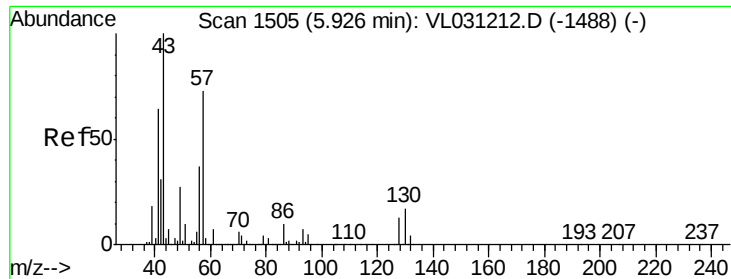
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#20
Methylene Chloride
Concen: 3.86 ppbv
RT: 4.54 min Scan# 1074
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Tgt Ion: 84 Resp: 284294
Ion Ratio Lower Upper
84 100
49 155.6 125.8 188.6
51 48.2 39.3 58.9
86 67.2 51.1 76.7





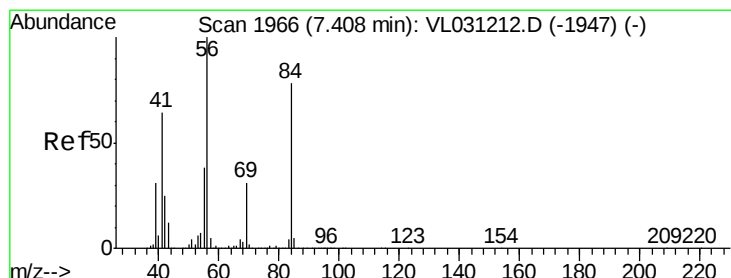
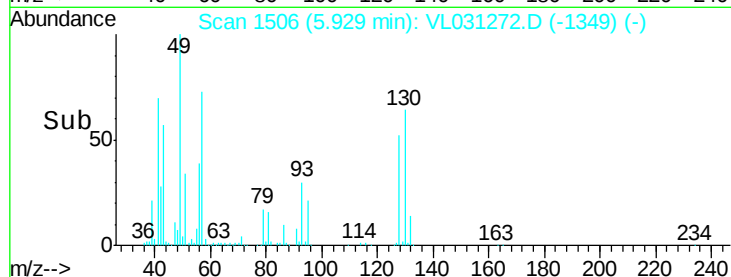
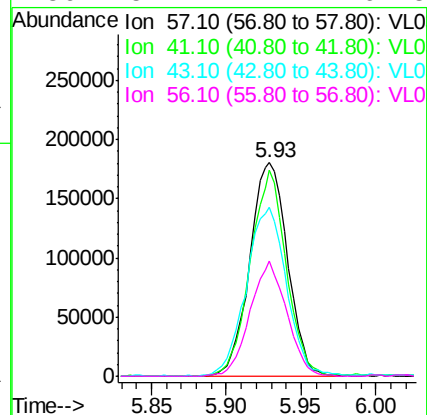
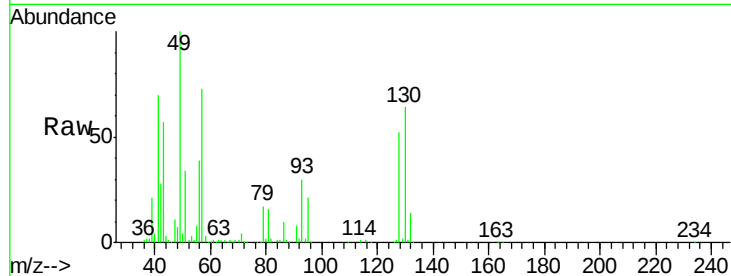
#26
Hexane
Concen: 1.47 ppbv
RT: 5.93 min Scan# 1506
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Instrument :
MSVOA_L
ClientSampled :
T5P3

Tot Ion	Ratio	Lower	Upper
57	100		
41	91.9	70.3	105.5
43	84.4	173.8	260.8#
56	52.4	41.7	62.5

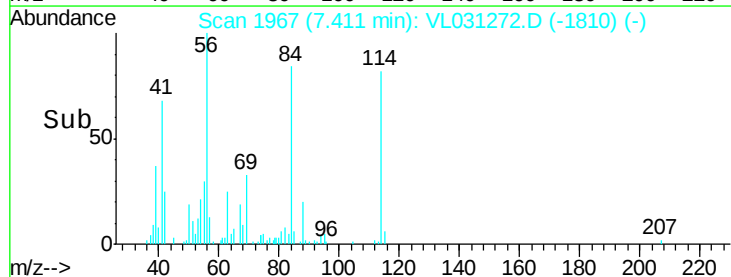
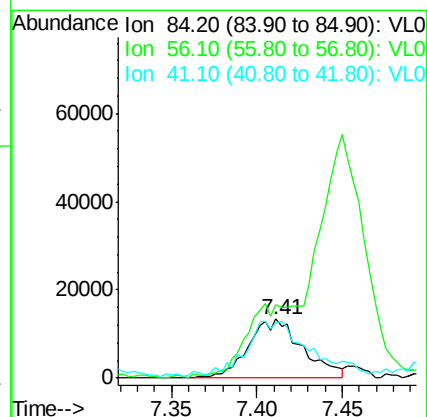
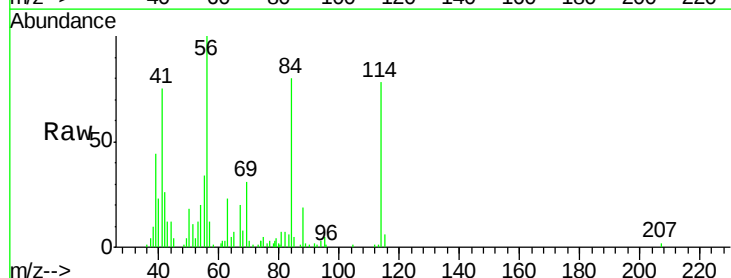
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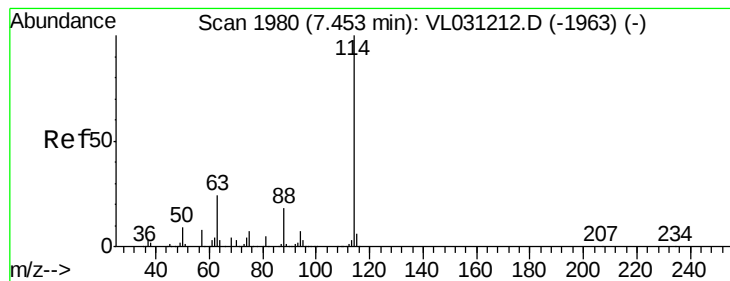
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#30
Cyclohexane
Concen: 0.16 ppbv m
RT: 7.41 min Scan# 1967
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.0	162.0#
41	0.0	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: VL031272.D

Acq: 20 Dec 2017 16:04

Instrument :

MSVOA_L

ClientSampled :

T5P3

Tot Ion:114 Resp: 3904698

Ion Ratio Lower Upper

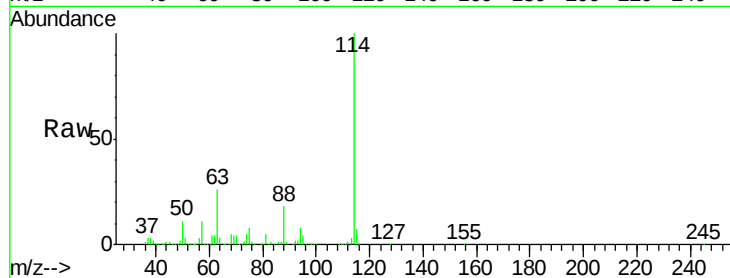
114 100

63 26.0 19.8 29.8

88 18.1 14.2 21.4

Manual Integrations
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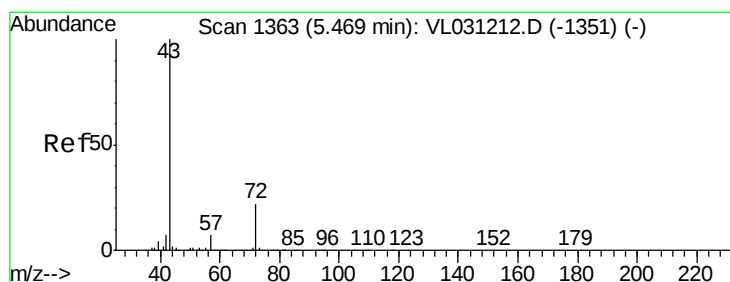
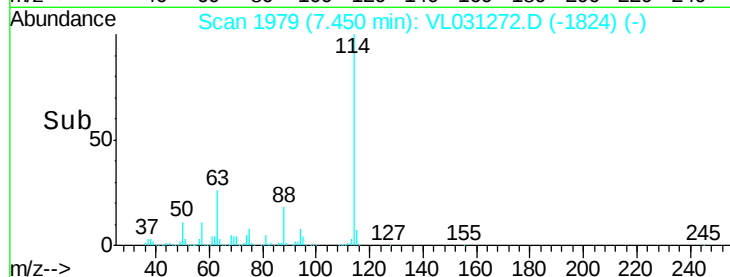
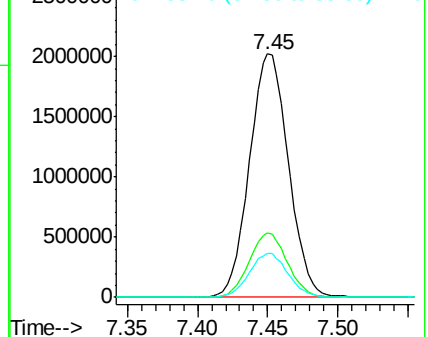
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Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 1.64 ppbv

RT: 5.48 min Scan# 1365

Delta R.T. 0.01 min

Lab File: VL031272.D

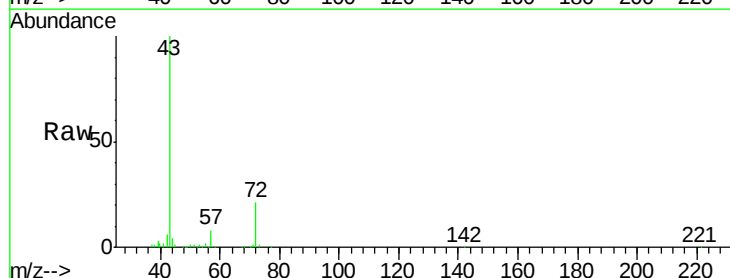
Acq: 20 Dec 2017 16:04

Tgt Ion: 43 Resp: 453017

Ion Ratio Lower Upper

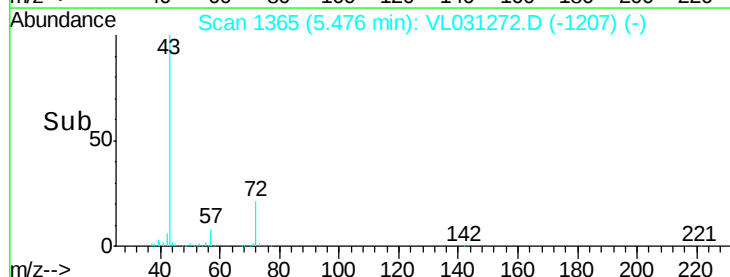
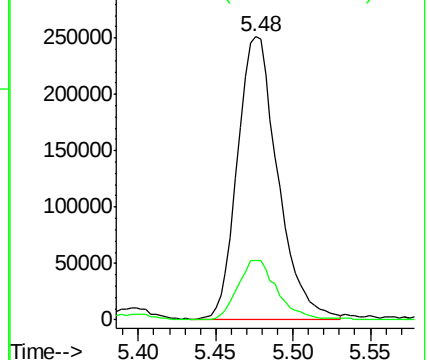
43 100

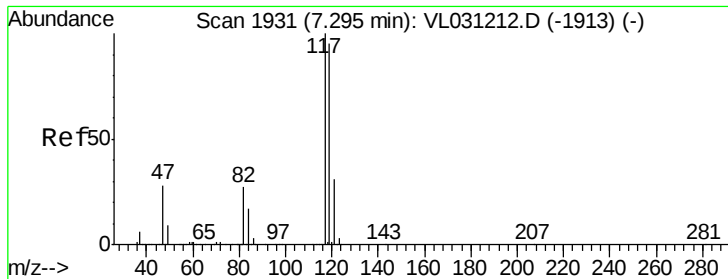
72 20.8 18.1 27.1



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.06 ppbv

RT: 7.30 min Scan# 1931

Delta R.T. 0.00 min

Lab File: VL031272.D

Acq: 20 Dec 2017 16:04

Instrument :

MSVOA_L

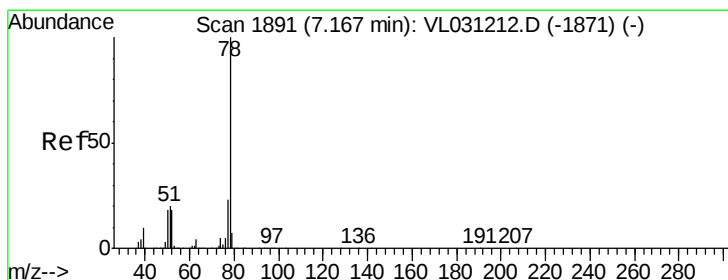
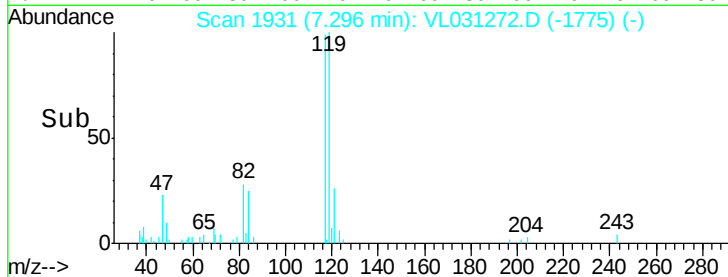
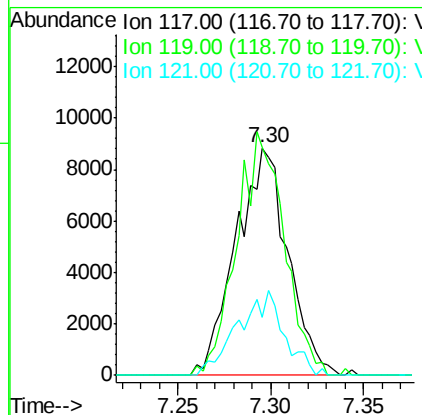
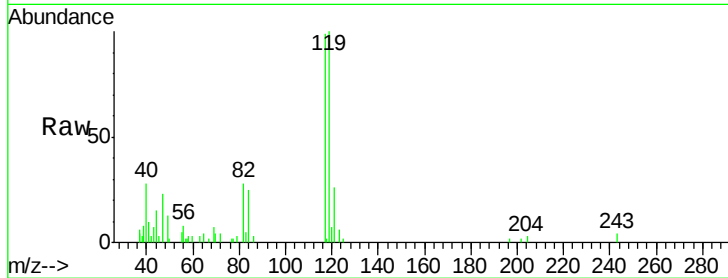
ClientSampleId :

T5P3

Tot Ion:	117	Resp:	17220
Ion	Ratio	Lower	Upper
117	100		
119	100.7	75.9	113.9
121	25.8	24.6	37.0

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#36

Benzene

Concen: 0.17 ppbv m

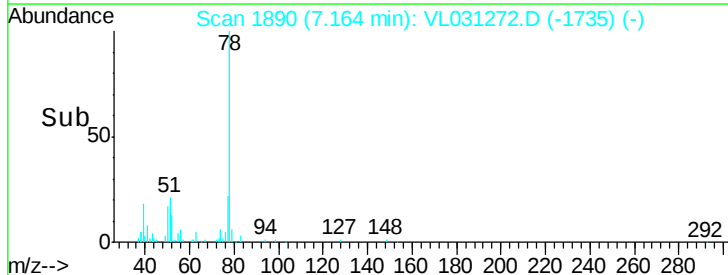
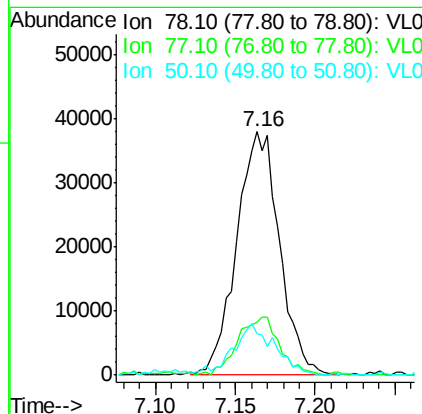
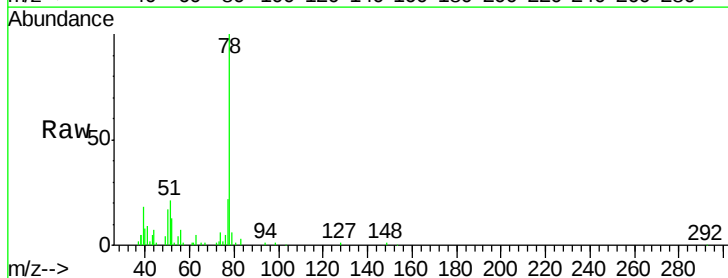
RT: 7.16 min Scan# 1890

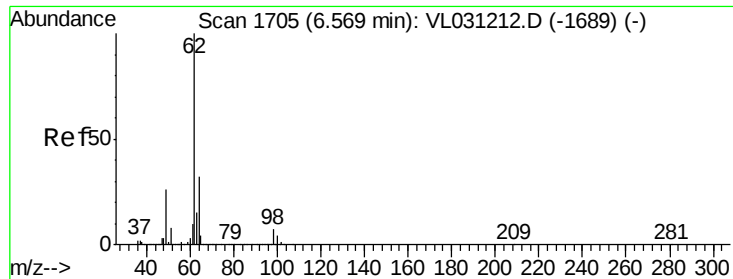
Delta R.T. -0.00 min

Lab File: VL031272.D

Acq: 20 Dec 2017 16:04

Tgt Ion:	78	Resp:	70725
Ion	Ratio	Lower	Upper
78	100		
77	21.6	18.1	27.1
50	16.8	14.6	21.8





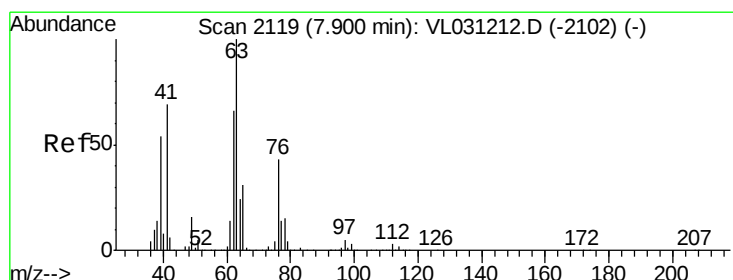
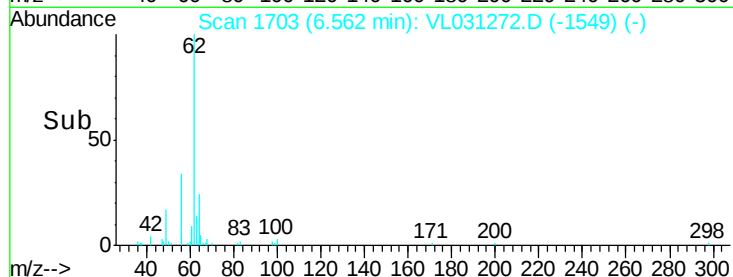
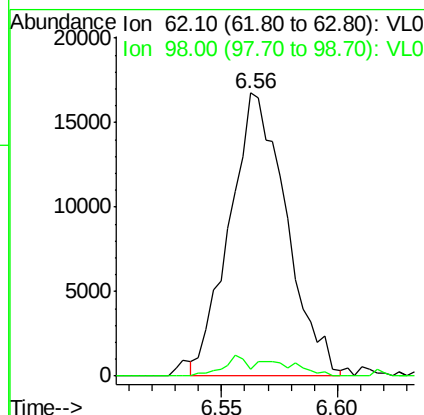
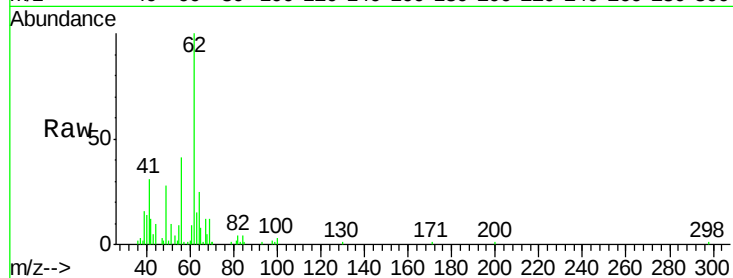
#37
 1,2-Dichloroethane
 Concen: 0.12 ppbv
 RT: 6.56 min Scan# 1703
 Delta R.T. -0.01 min
 Lab File: VL031272.D
 Acq: 20 Dec 2017 16:04

Instrument :
 MSVOA_L
 ClientSampleId :
 T5P3

Tot Ion	Ratio	Lower	Upper
62	100		
98	7.2	5.4	8.2

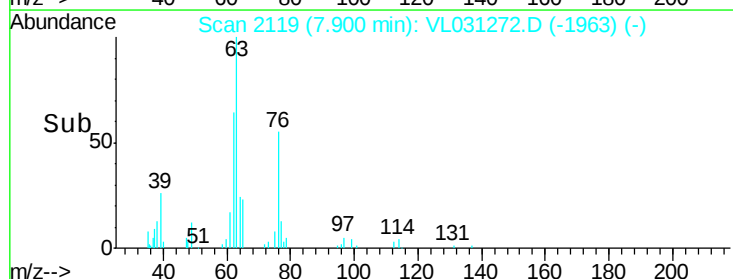
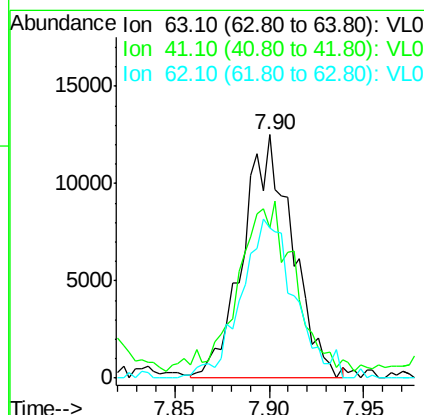
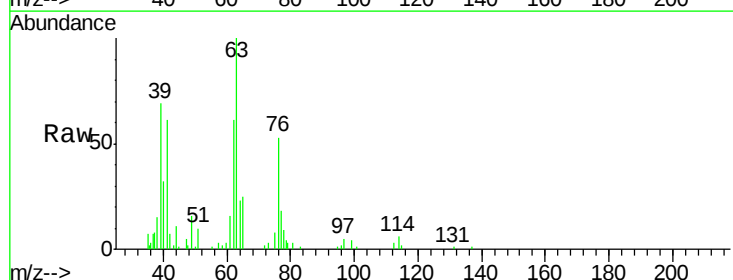
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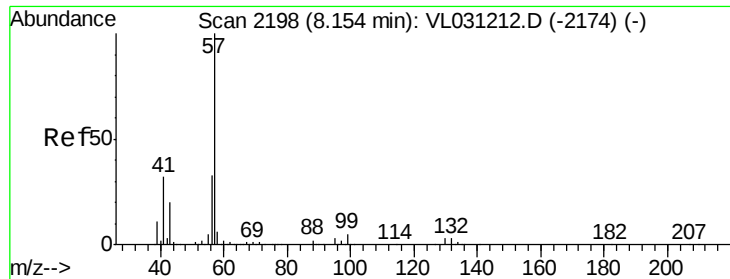
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#39
 1,2-Dichloropropane
 Concen: 0.16 ppbv m
 RT: 7.90 min Scan# 2119
 Delta R.T. 0.00 min
 Lab File: VL031272.D
 Acq: 20 Dec 2017 16:04

Tgt Ion	Ratio	Lower	Upper
63	100		
41	61.4	55.2	82.8
62	61.4	53.0	79.4





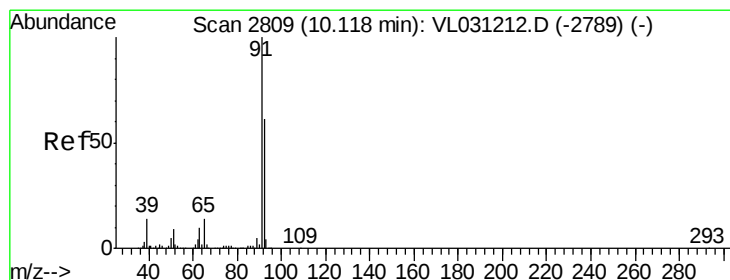
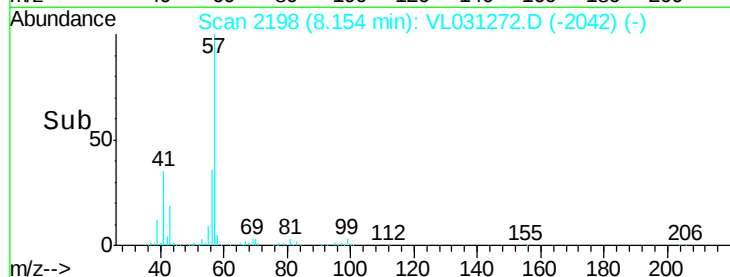
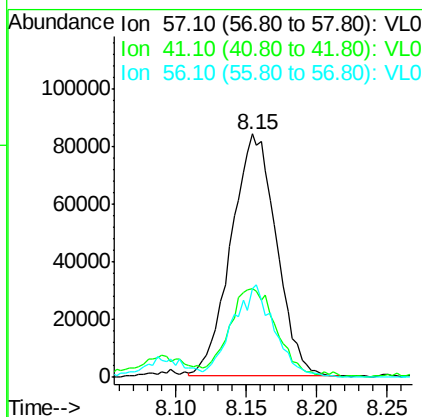
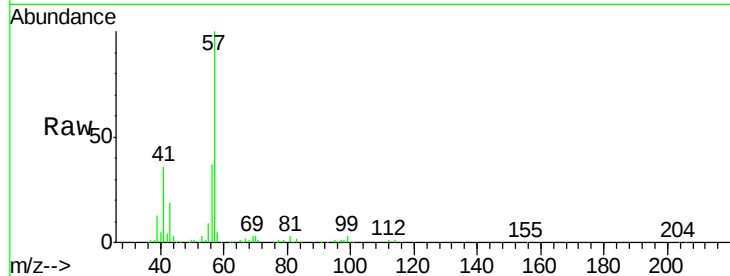
#44
 2,2,4-Trimethylpentane
 Concen: 0.30 ppbv
 RT: 8.15 min Scan# 2198
 Delta R.T. 0.00 min
 Lab File: VL031272.D
 Acq: 20 Dec 2017 16:04

Instrument :
 MSVOA_L
 ClientSampled :
 T5P3

Tot Ion	Ratio	Lower	Upper
57	100		
41	39.2	25.5	38.3#
56	35.4	25.0	37.6

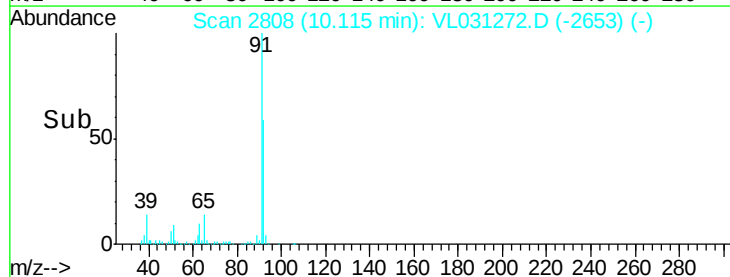
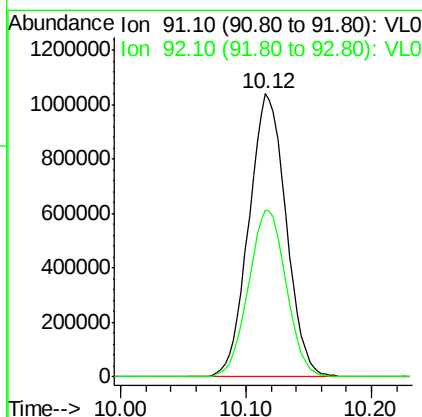
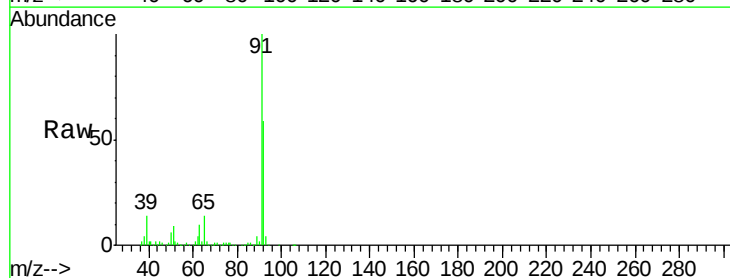
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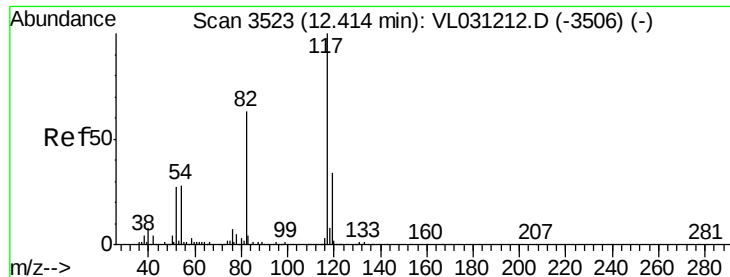
MMDadoda
 12/22/2017 4:54:48 PM



#53
 Toluene
 Concen: 4.78 ppbv
 RT: 10.12 min Scan# 2808
 Delta R.T. -0.00 min
 Lab File: VL031272.D
 Acq: 20 Dec 2017 16:04

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.9	49.1	73.7





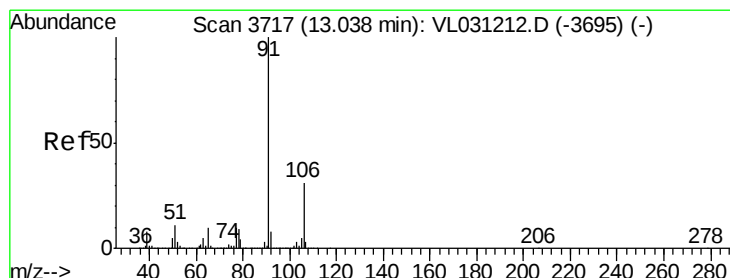
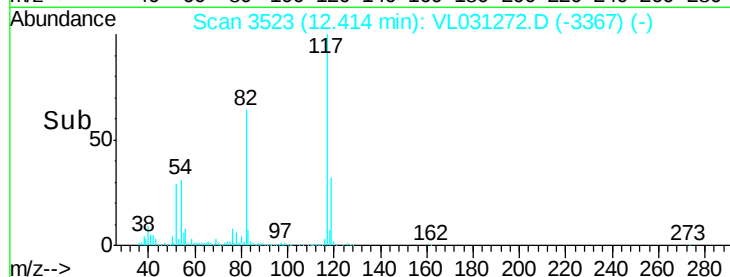
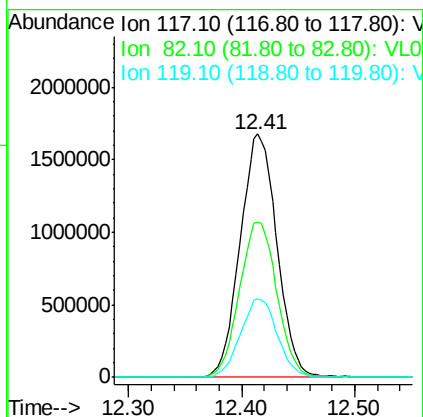
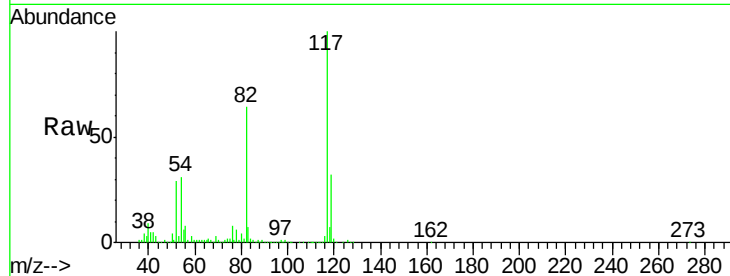
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.41 min Scan# 3523
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Instrument :
MSVOA_L
ClientSampleId :
T5P3

Tot Ion	Ratio	Lower	Upper
117	100		
82	65.7	48.1	72.1
119	32.6	23.1	34.7

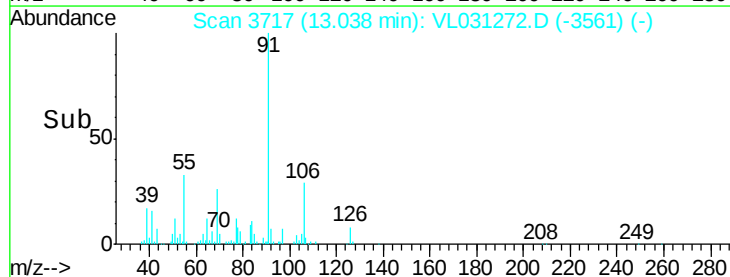
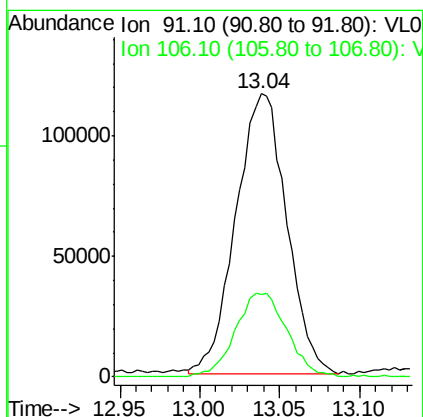
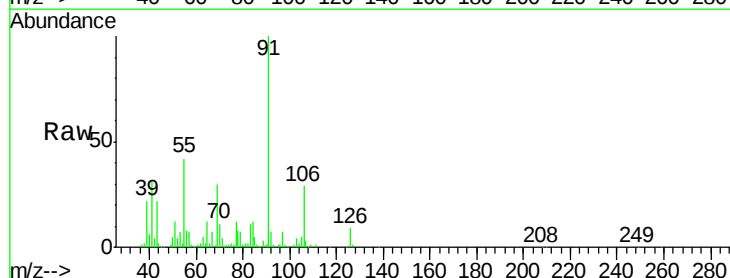
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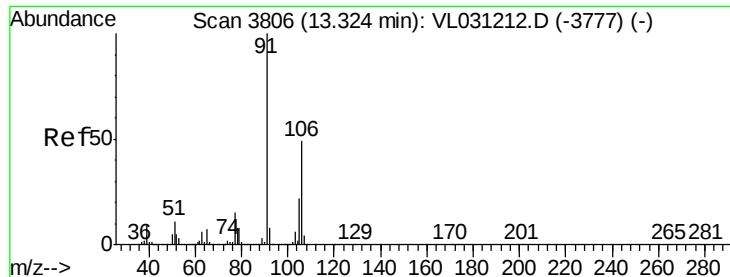
MMDadoda
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#58
Ethyl Benzene
Concen: 0.40 ppbv
RT: 13.04 min Scan# 3717
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Tgt Ion	Ratio	Lower	Upper
91	100		
106	29.3	25.1	37.7





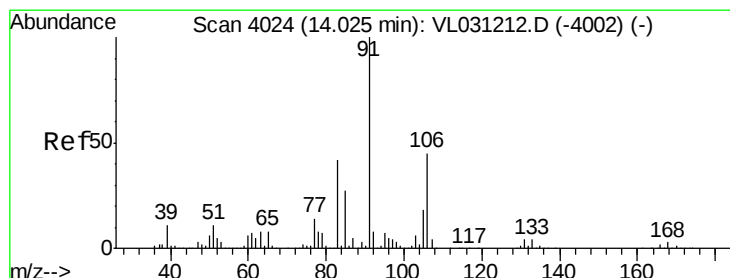
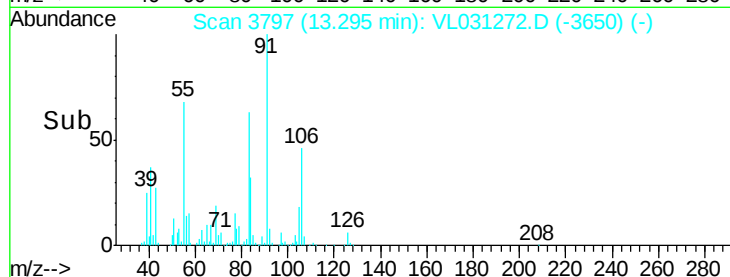
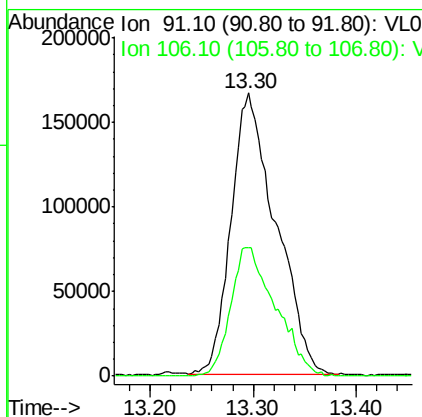
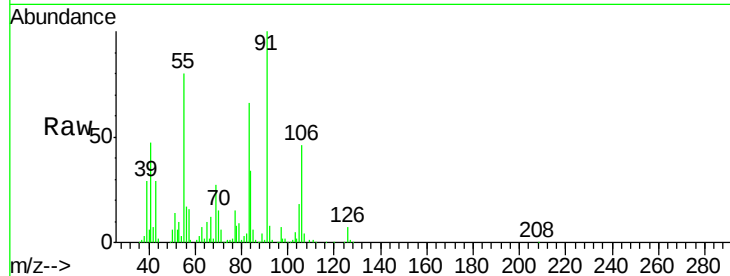
#59
m/p-Xylene
Concen: 1.00 ppbv
RT: 13.30 min Scan# 3797
Delta R.T. -0.03 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Instrument :
MSVOA_L
ClientSampled :
T5P3

Tot Ion: 91 Resp: 503338
Ion Ratio Lower Upper
91 100
106 46.0 38.5 57.7

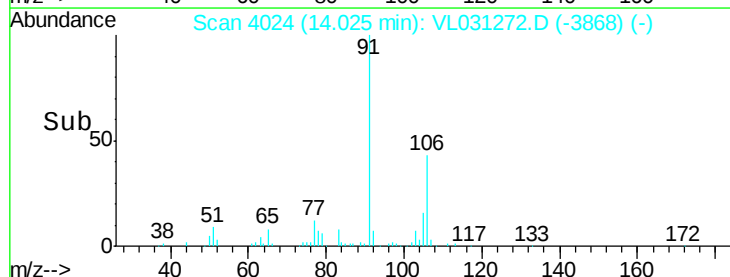
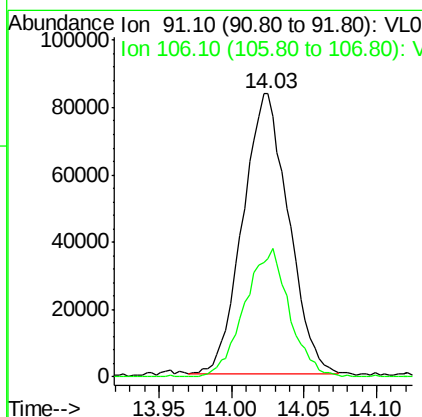
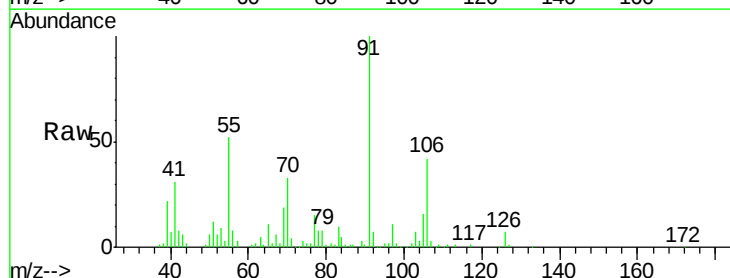
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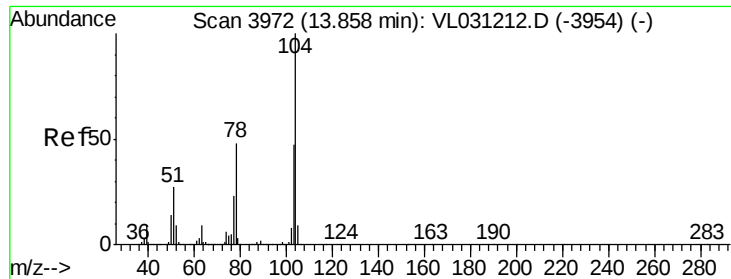
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#60
o-Xylene
Concen: 0.36 ppbv
RT: 14.03 min Scan# 4024
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Tgt Ion: 91 Resp: 183883
Ion Ratio Lower Upper
91 100
106 44.6 22.7 68.1





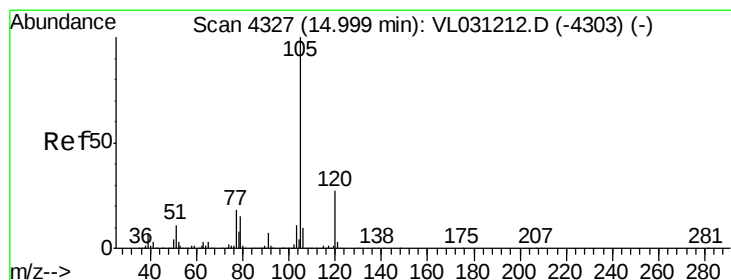
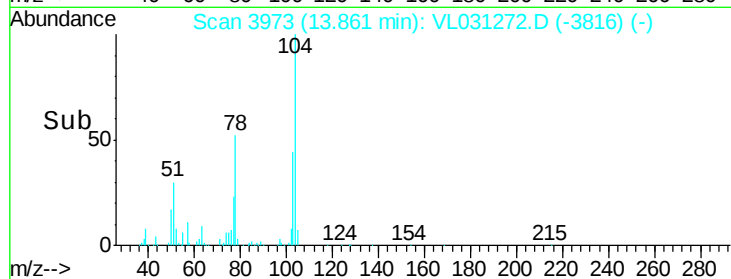
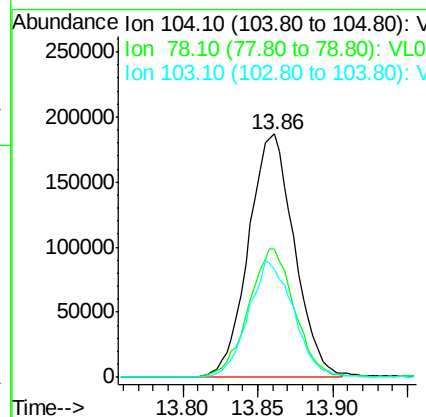
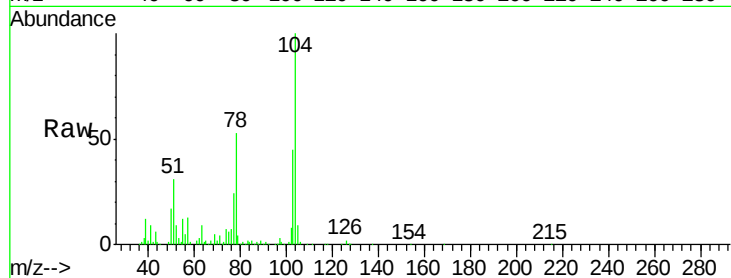
#61
Stvrene
Concen: 2.75 ppbv
RT: 13.86 min Scan# 3973
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Instrument :
MSVOA_L
ClientSampled :
T5P3

Tot Ion	Ratio	Lower	Upper
104	100		
78	53.4	39.1	58.7
103	47.3	37.3	55.9

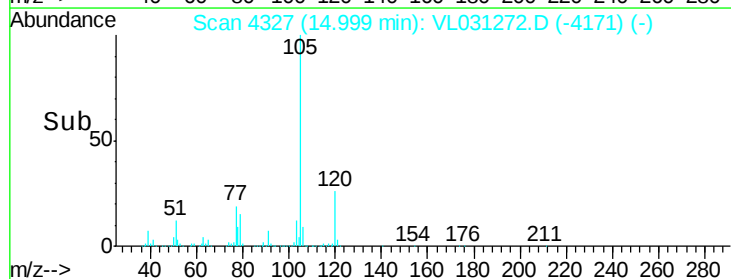
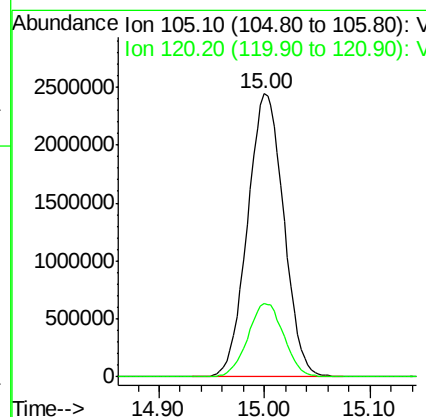
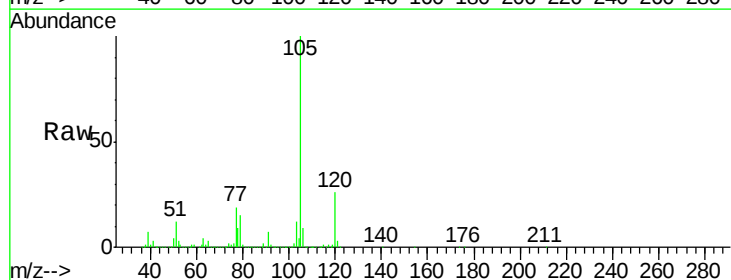
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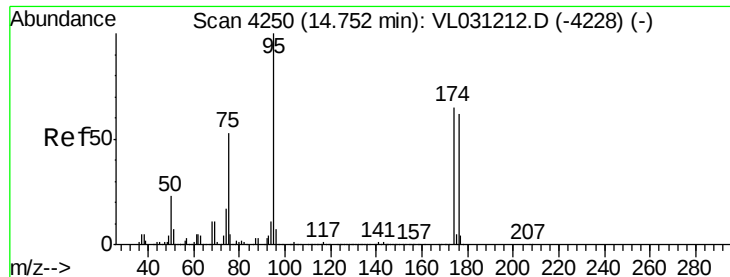
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#62
Isopropylbenzene
Concen: 8.80 ppbv
RT: 15.00 min Scan# 4327
Delta R.T. 0.00 min
Lab File: VL031272.D
Acq: 20 Dec 2017 16:04

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.9	21.0	31.6





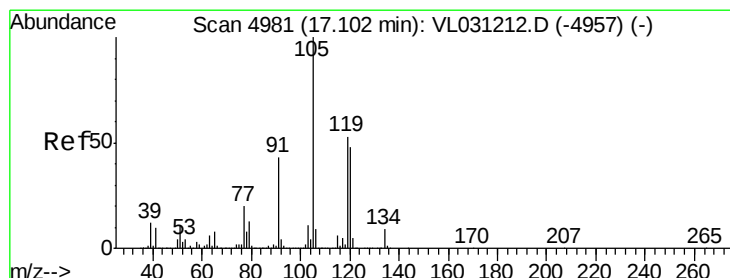
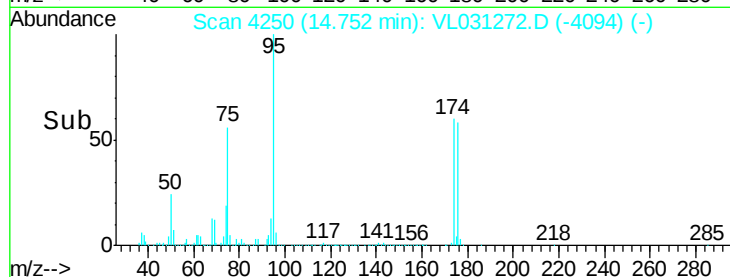
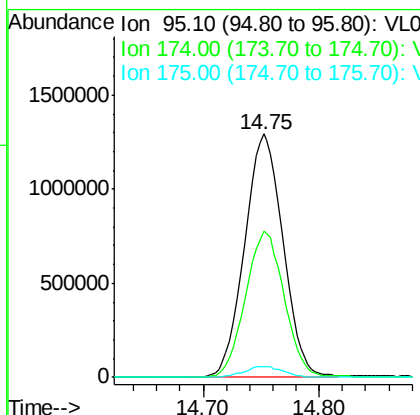
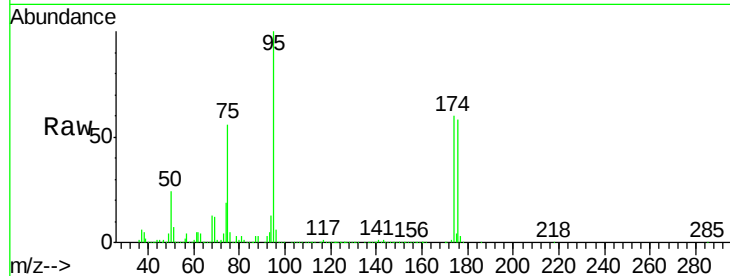
#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.06 ppbv
 RT: 14.75 min Scan# 4250
 Delta R.T. 0.00 min
 Lab File: VL031272.D
 Acq: 20 Dec 2017 16:04

Instrument :
 MSVOA_L
 ClientSampled :
 T5P3

Tot Ion: 95 Resp: 2982705
 Ion Ratio Lower Upper
 95 100
 174 61.2 52.5 78.7
 175 4.6 4.1 6.1

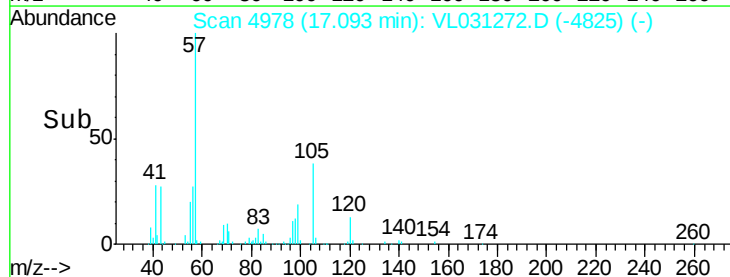
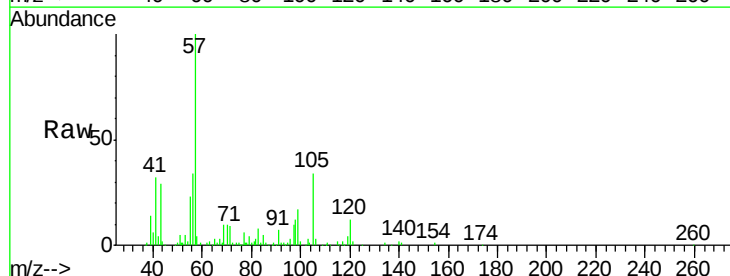
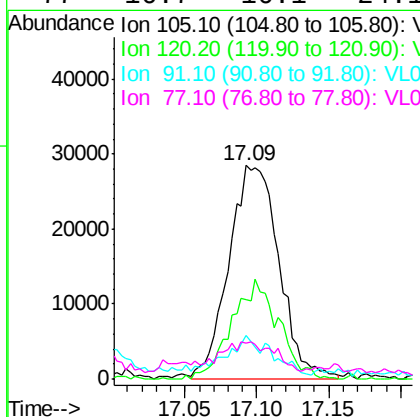
Manual Integrations
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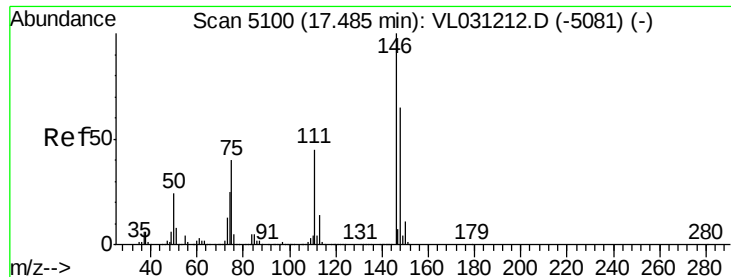
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.13 ppbv m
 RT: 17.09 min Scan# 4978
 Delta R.T. -0.01 min
 Lab File: VL031272.D
 Acq: 20 Dec 2017 16:04

Tgt Ion: 105 Resp: 68983
 Ion Ratio Lower Upper
 105 100
 120 37.0 38.6 58.0#
 91 20.1 34.2 51.4#
 77 16.7 16.1 24.1





#76

1,4-Dichlorobenzene

Concen: 0.12 ppbv m

RT: 17.48 min Scan# 5099

Delta R.T. -0.00 min

Lab File: VL031272.D

Acq: 20 Dec 2017 16:04

Instrument :

MSVOA_L

ClientSampleId :

T5P3

Tot Ion:	146	Resp:	38745
Ion Ratio	Lower	Upper	
146	100		
111	101.5	22.1	66.1#
148	0.0	32.0	96.0#

Manual Integrations
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