

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
 Data File : VL031294.D
 Acq On : 21 Dec 2017 7:10
 Operator : SY/AP
 Sample : I7005-11DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP1-SV-10DL

Manual Integrations
 APPROVED

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 12/22/2017 4:55:13 PM

Quant Time: Dec 22 07:24:29 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	1322608	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.45	114	3245188	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.41	117	3175472	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.75	95	2744409	12.15	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	121.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	3.11	51	621851	4.14	ppbv	98
9) Propene	3.15	41	317751m	4.31	ppbv	
13) Ethanol	3.78	45	17935m	0.84	ppbv	
15) Acetone	4.03	43	391940	2.25	ppbv #	87
29) Chloroform	6.00	83	25994	0.11	ppbv	90
30) Cyclohexane	7.40	84	31617m	0.21	ppbv	
34) 2-Butanone	5.47	43	879184	3.84	ppbv	100
41) Tetrahydrofuran	6.33	42	42008	0.33	ppbv	97
51) 2-Hexanone	10.47	43	49876m	0.19	ppbv	
52) Tetrachloroethene	11.55	164	415579	3.28	ppbv	96
53) Toluene	10.12	91	92020	0.25	ppbv	98
58) Ethyl Benzene	13.04	91	63151	0.12	ppbv	97
59) m/p-Xylene	13.30	91	98676m	0.24	ppbv	
62) Isopropylbenzene	15.00	105	210332	0.38	ppbv	98
64) n-propylbenzene	15.89	120	57401m	0.39	ppbv	
67) sec-Butylbenzene	17.63	105	118817	0.18	ppbv	99

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

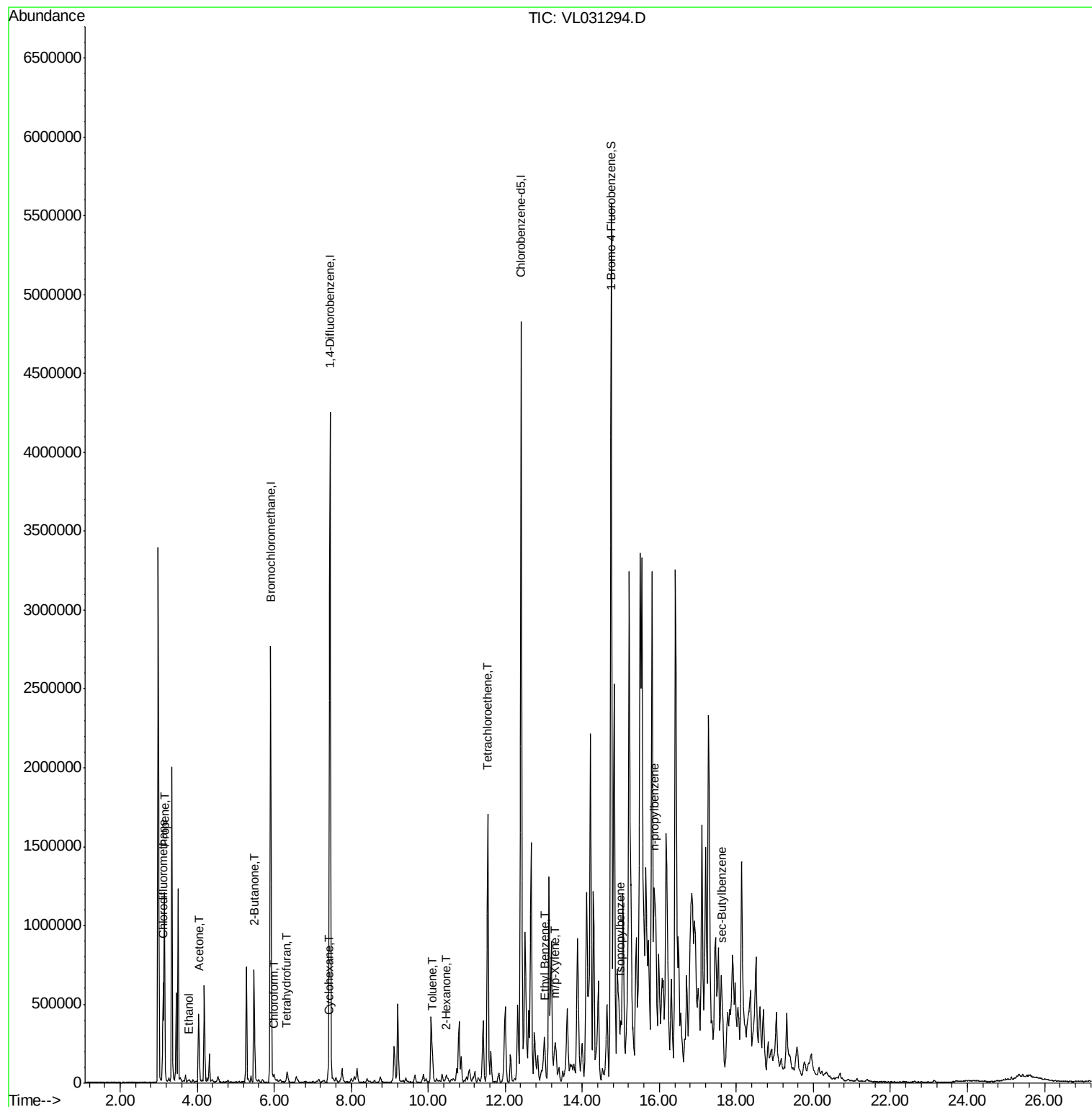
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL122017\
Data File : VL031294.D
Acq On : 21 Dec 2017 7:10
Operator : SY/AP
Sample : I7005-11DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

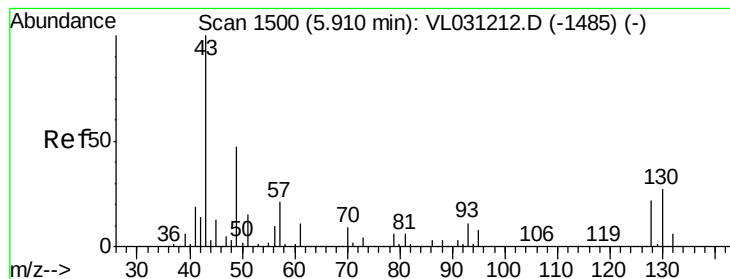
Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-10DL

Manual Integrations
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12/22/2017 4:55:13 PM

Quant Time: Dec 22 07:24:29 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# 1499

Delta R.T. -0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-10DL

Tot Ion: 49 Resp: 1322608

Ion Ratio Lower Upper

49 100

128 48.6 23.2 69.5

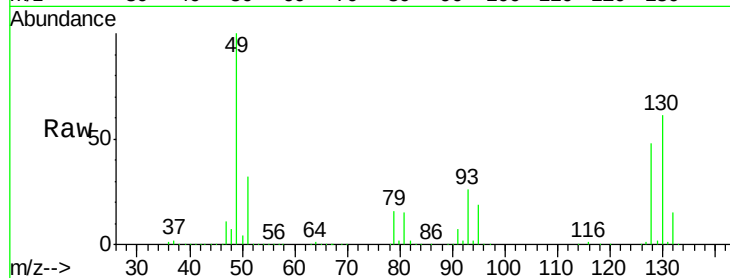
130 62.1 29.6 88.8

Manual Integrations

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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

5.91

800000

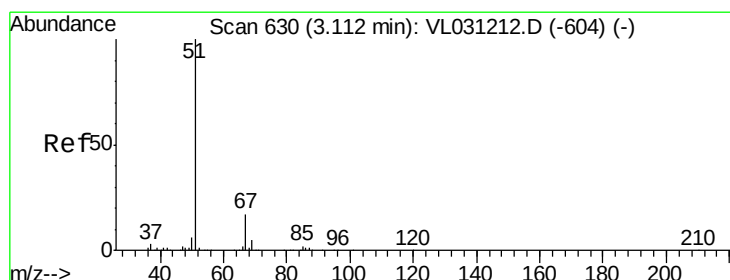
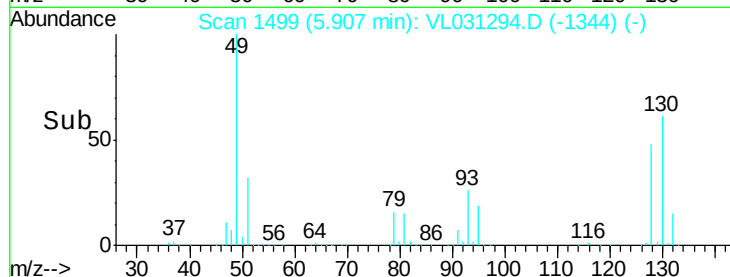
600000

400000

200000

0

Time--> 5.80 5.85 5.90 5.95 6.00



#3

Chlorodifluoromethane

Concen: 4.14 ppbv

RT: 3.11 min Scan# 630

Delta R.T. 0.00 min

Lab File: VL031294.D

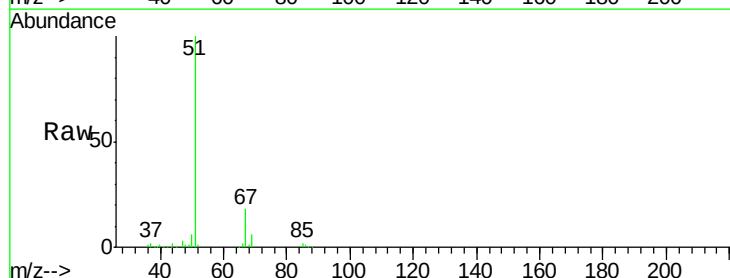
Acq: 21 Dec 2017 7:10

Tgt Ion: 51 Resp: 621851

Ion Ratio Lower Upper

51 100

67 18.1 13.8 20.6



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.11

500000

400000

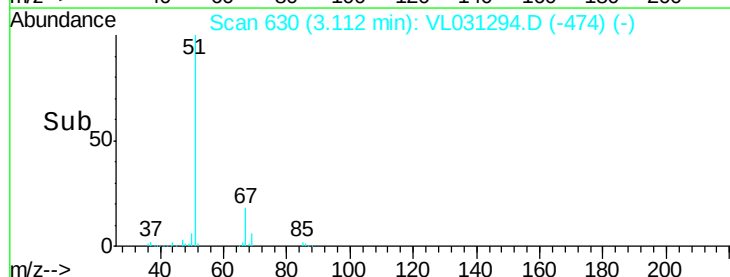
300000

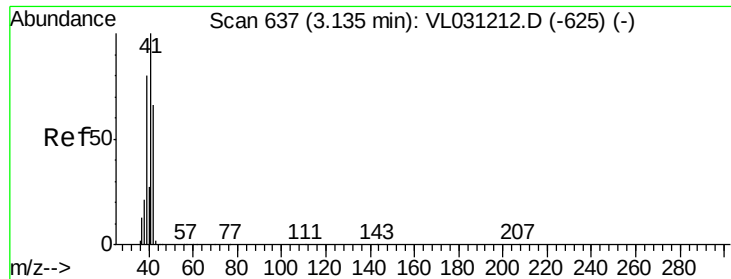
200000

100000

0

Time--> 3.00 3.10 3.20





#9

Propene

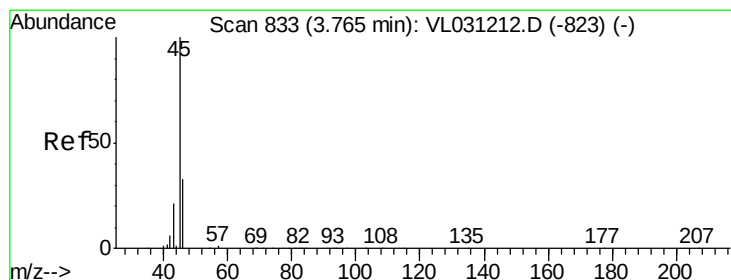
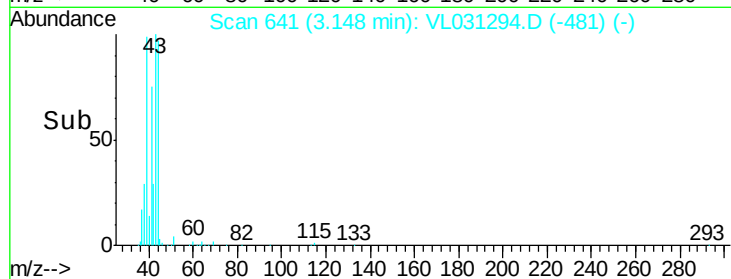
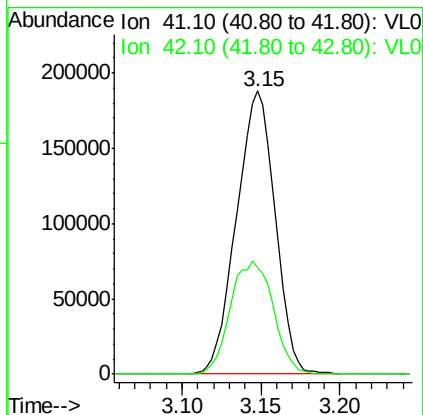
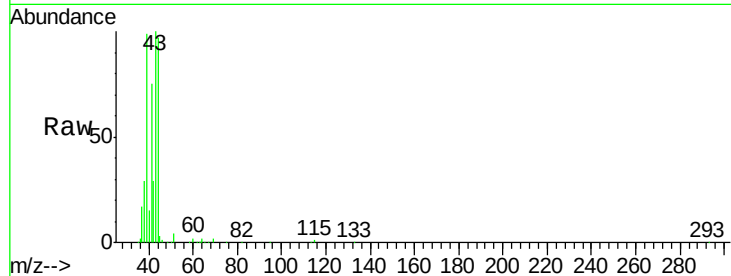
Concen: 4.31 ppbv m
RT: 3.15 min Scan# 641
Delta R.T. 0.01 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-10DL

Tot Ion	Ratio	Lower	Upper
41	100		
42	114.4	54.3	81.5#

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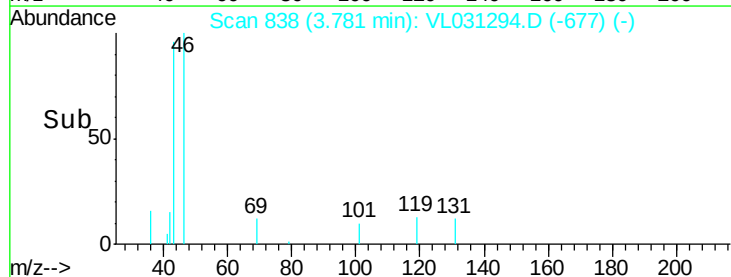
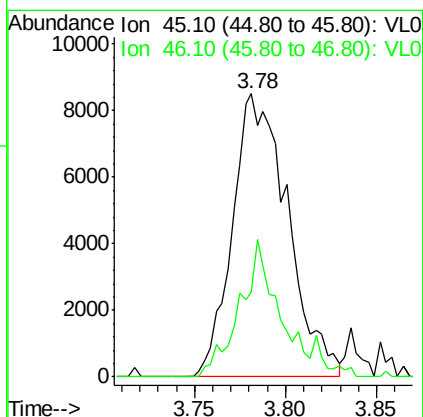
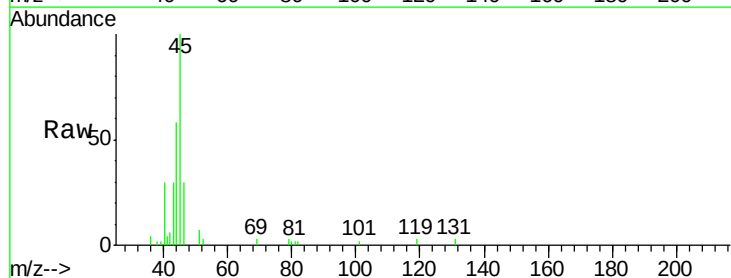


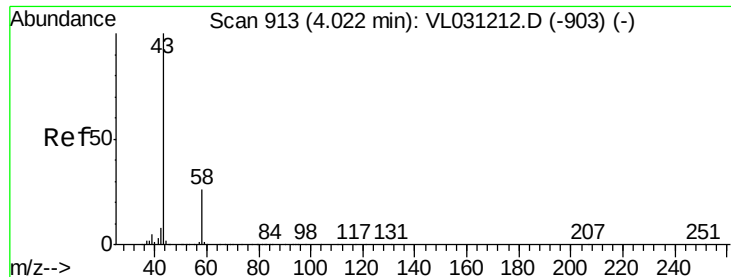
#13

Ethanol

Concen: 0.84 ppbv m
RT: 3.78 min Scan# 838
Delta R.T. 0.02 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.2	14.6	58.4





#15

Acetone

Concen: 2.25 ppbv

RT: 4.03 min Scan# 915

Delta R.T. 0.01 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-10DL

Tot Ion: 43 Resp: 391940

Ion Ratio Lower Upper

43 100

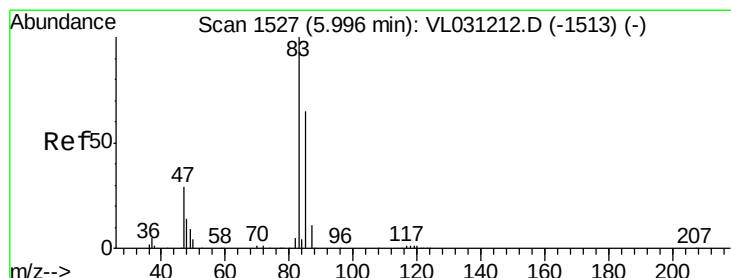
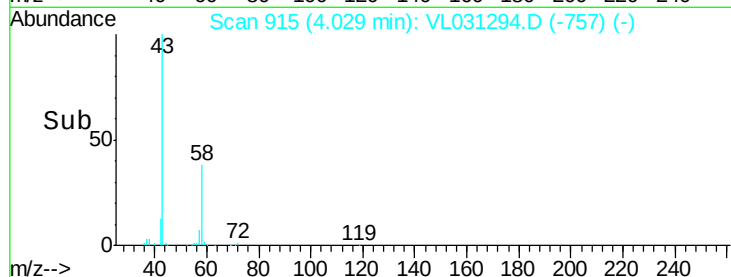
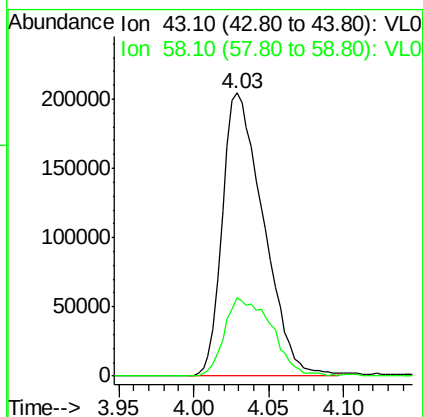
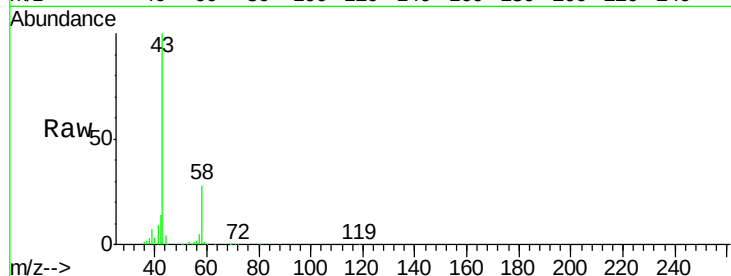
58 32.1 20.3 30.5#

Manual Integrations

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#29

Chloroform

Concen: 0.11 ppbv

RT: 6.00 min Scan# 1527

Delta R.T. 0.00 min

Lab File: VL031294.D

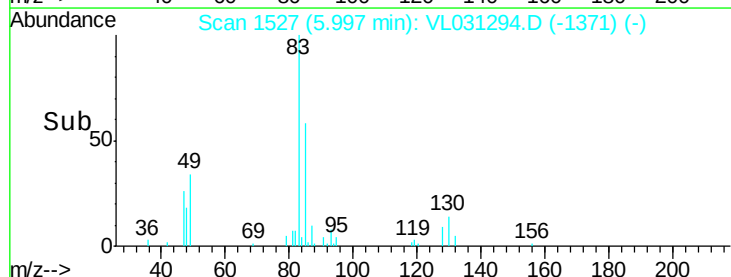
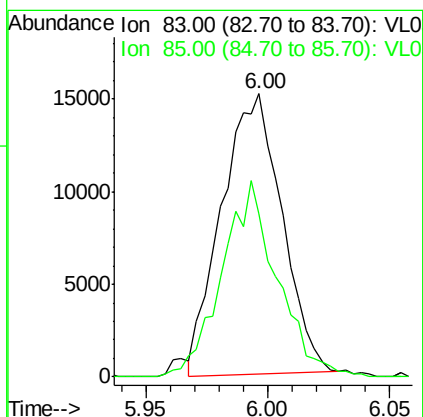
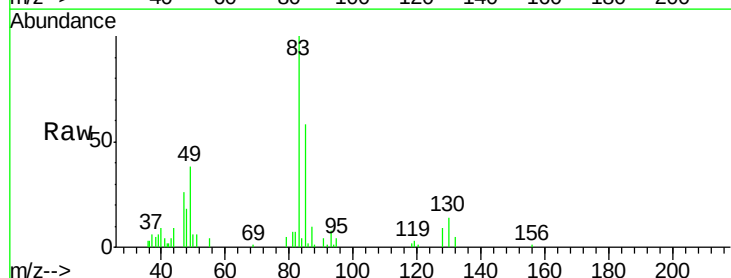
Acq: 21 Dec 2017 7:10

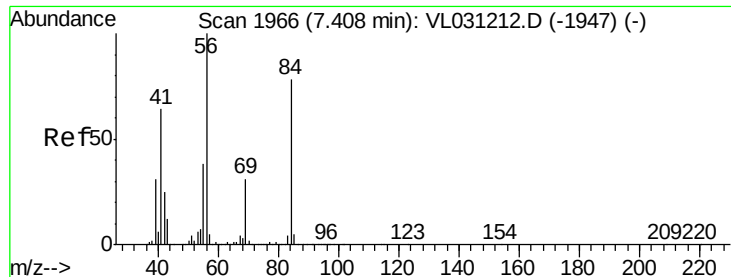
Tgt Ion: 83 Resp: 25994

Ion Ratio Lower Upper

83 100

85 57.1 51.8 77.6





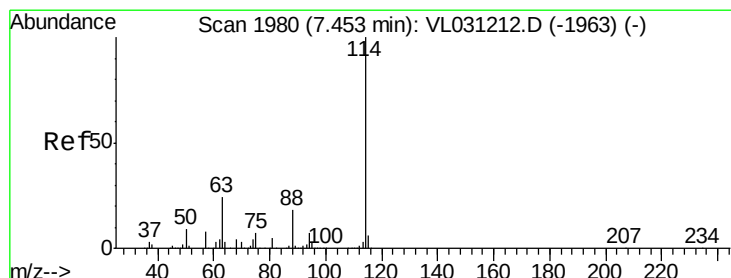
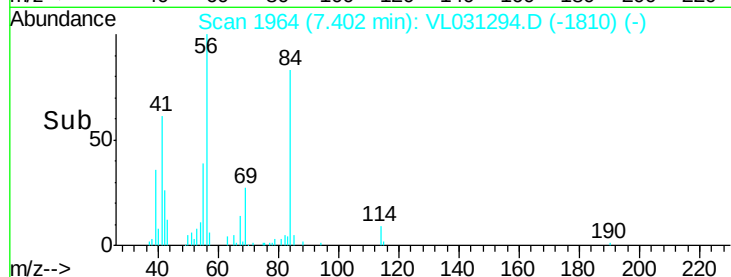
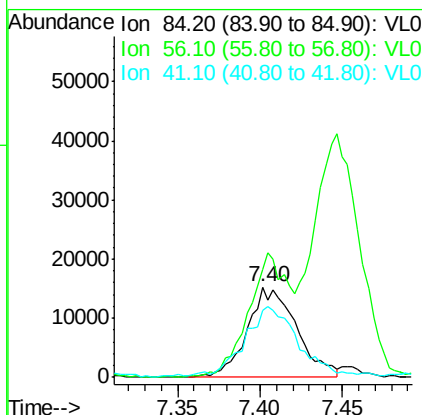
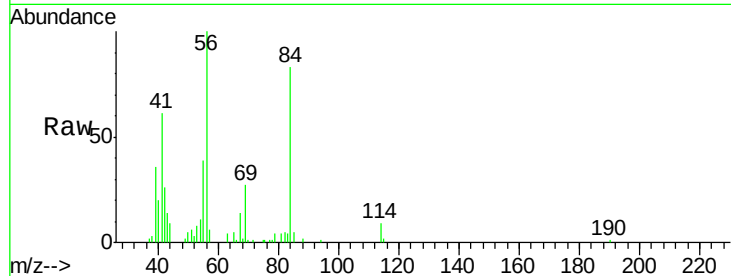
#30
Cyclohexane
Concen: 0.21 ppbv m
RT: 7.40 min Scan# 1964
Delta R.T. -0.01 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-10DL

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.0	162.0#
41	88.9	66.2	99.4

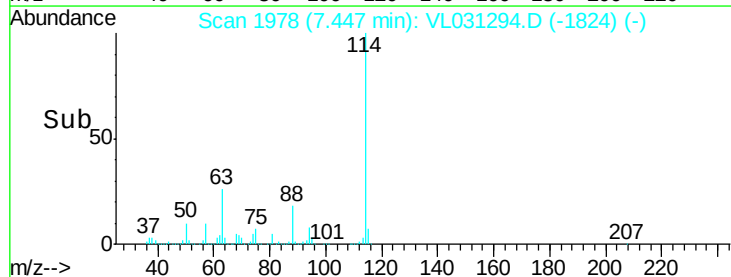
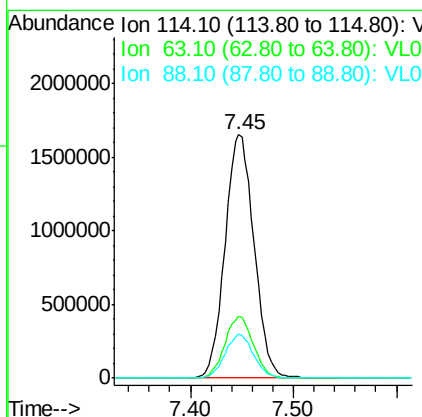
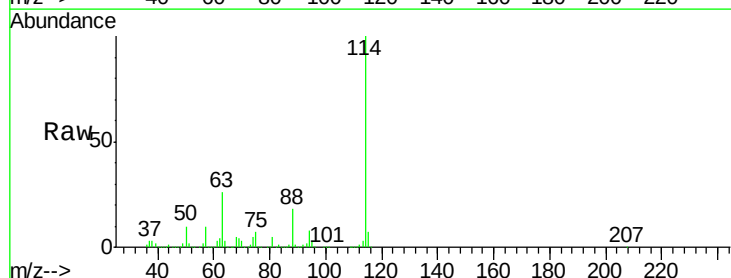
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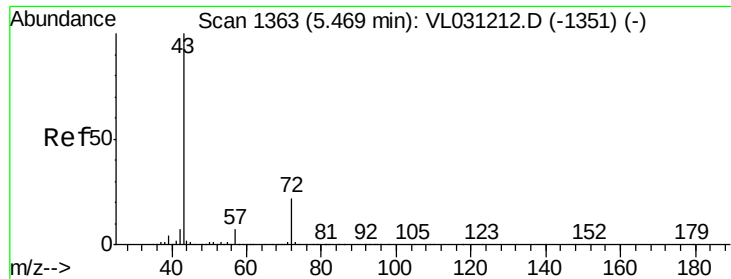
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#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.45 min Scan# 1978
Delta R.T. -0.01 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.9	19.8	29.8
88	17.5	14.2	21.4





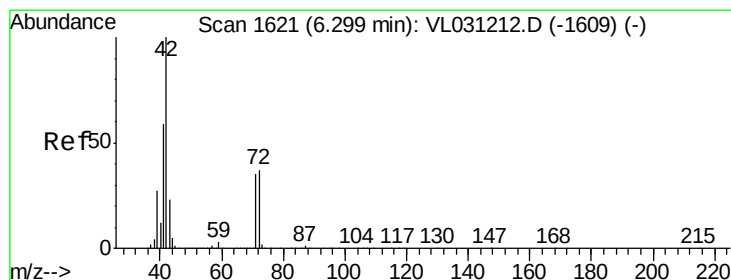
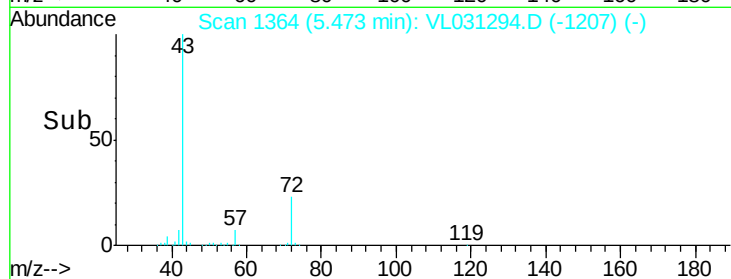
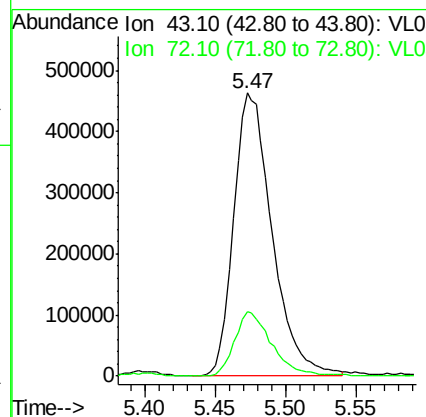
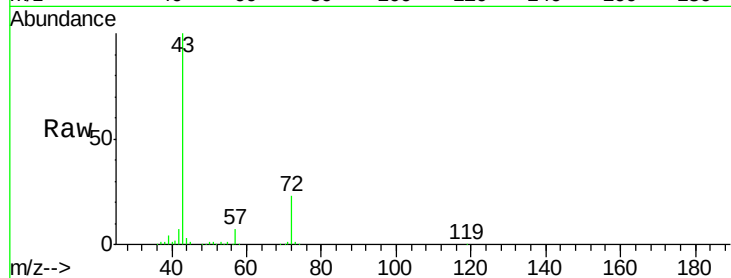
#34
2-Butanone
Concen: 3.84 ppbv
RT: 5.47 min Scan# 1364
Delta R.T. 0.00 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-10DL

Tot Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.1	27.1

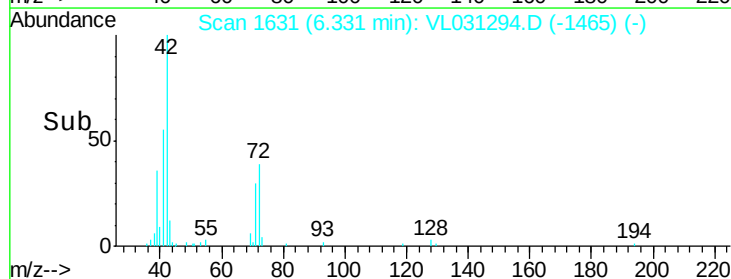
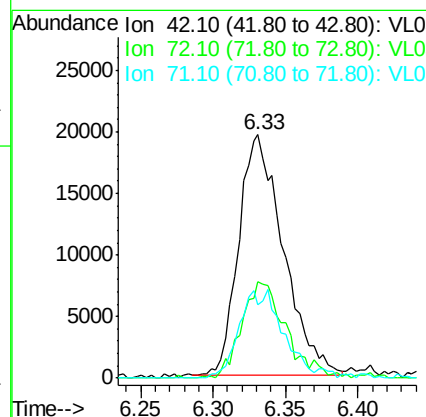
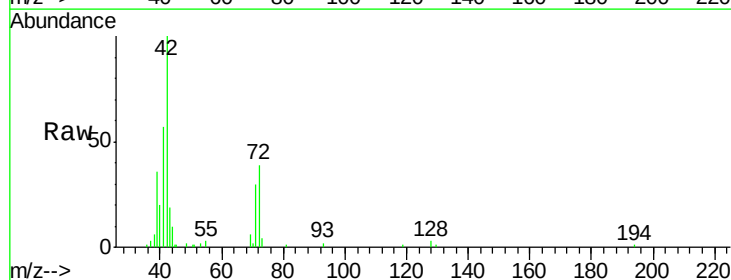
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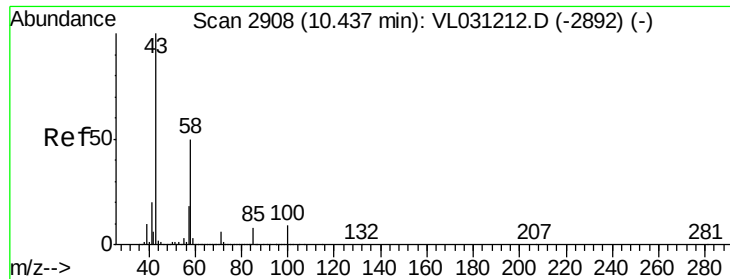
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#41
Tetrahydrofuran
Concen: 0.33 ppbv
RT: 6.33 min Scan# 1631
Delta R.T. 0.03 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Tgt Ion	Ratio	Lower	Upper
42	100		
72	40.4	30.2	45.4
71	37.1	29.0	43.6





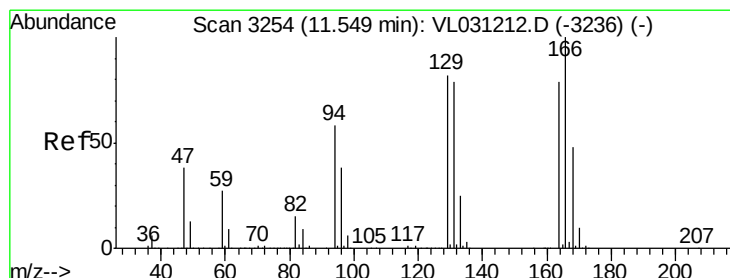
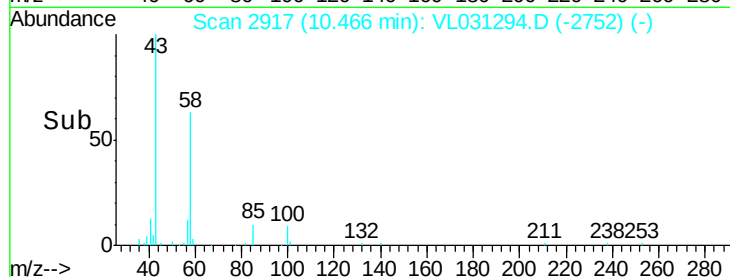
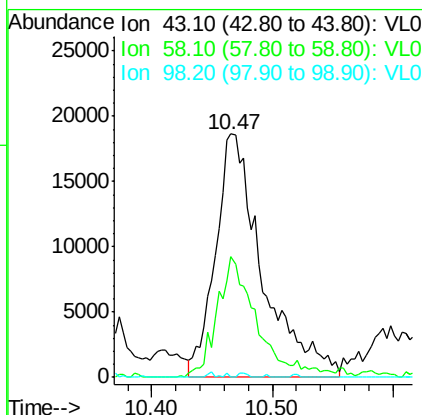
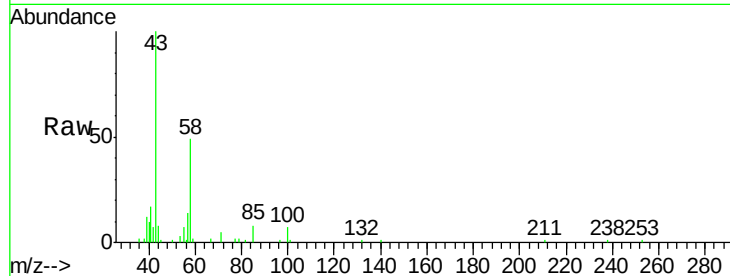
#51
2-Hexanone
Concen: 0.19 ppbv m
RT: 10.47 min Scan# 2917
Delta R.T. 0.03 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Instrument :
MSVOA_L
ClientSampleId :
EP1-SV-10DL

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.8	59.6#
98	0.0	0.0	0.0

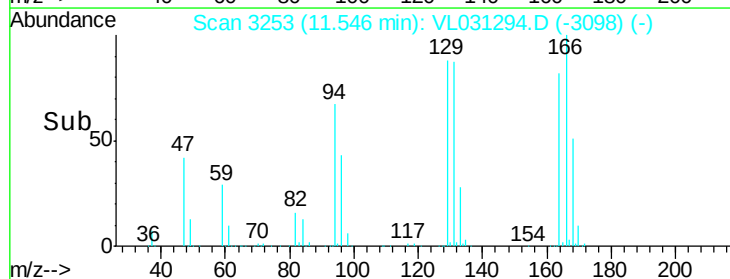
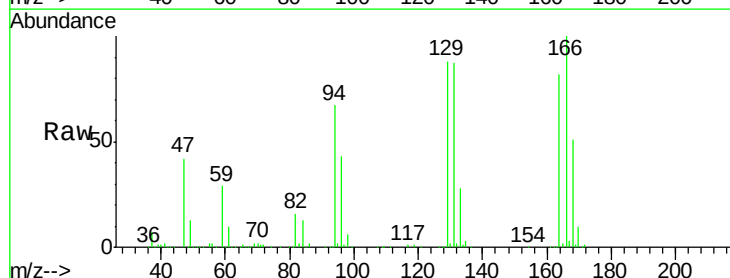
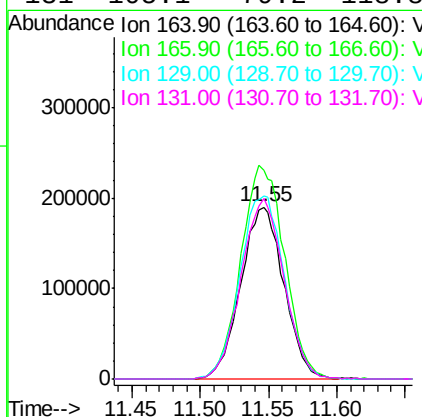
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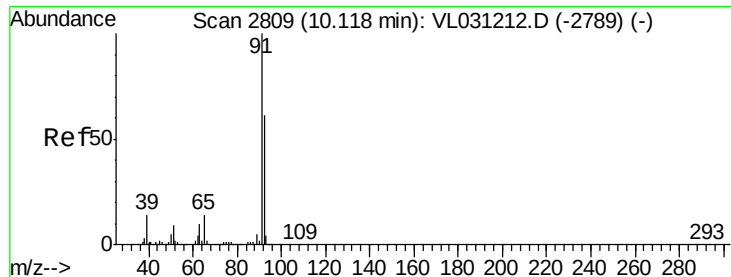
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#52
Tetrachloroethene
Concen: 3.28 ppbv
RT: 11.55 min Scan# 3253
Delta R.T. -0.00 min
Lab File: VL031294.D
Acq: 21 Dec 2017 7:10

Tgt Ion	Ratio	Lower	Upper
164	100		
166	121.2	100.6	151.0
129	106.5	82.9	124.3
131	105.1	79.2	118.8





#53

Toluene

Concen: 0.25 ppbv

RT: 10.12 min Scan# 2808

Delta R.T. -0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-10DL

Tot Ion: 91 Resp: 92020

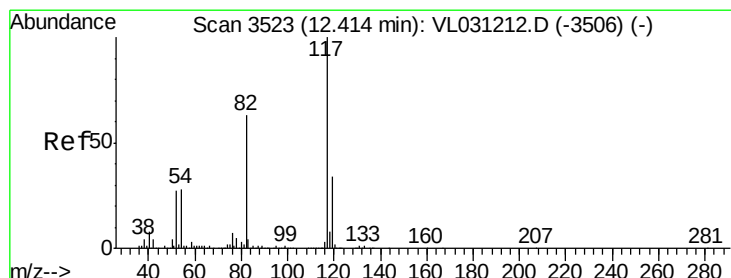
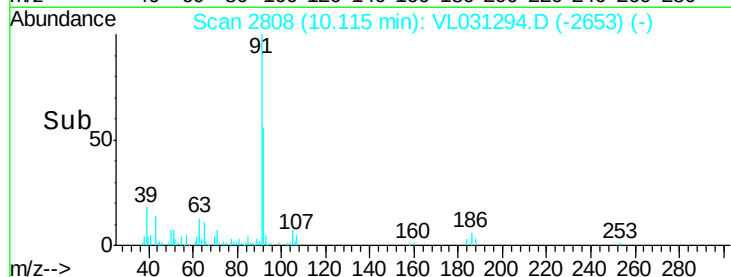
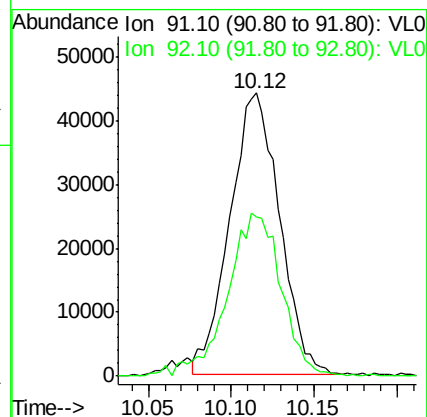
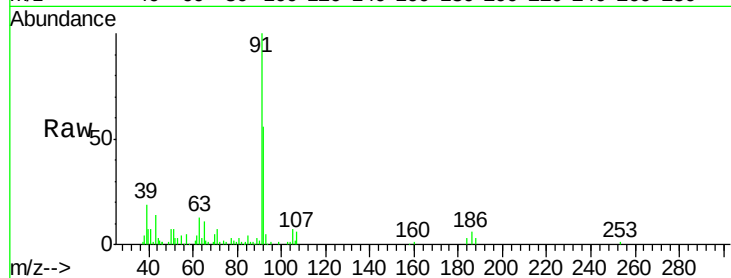
Ion Ratio Lower Upper

91 100

92 63.2 49.1 73.7

Manual Integrations
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12/22/2017 4:55:13 PM



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.41 min Scan# 3522

Delta R.T. -0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

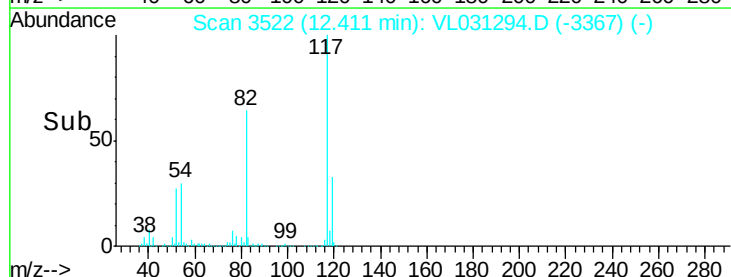
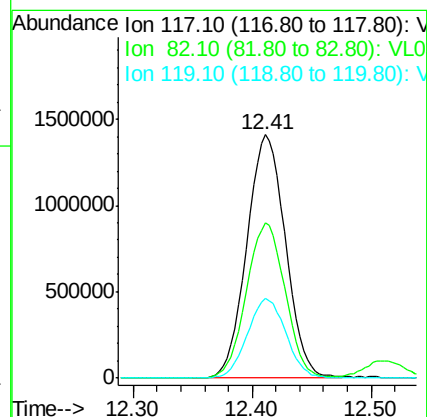
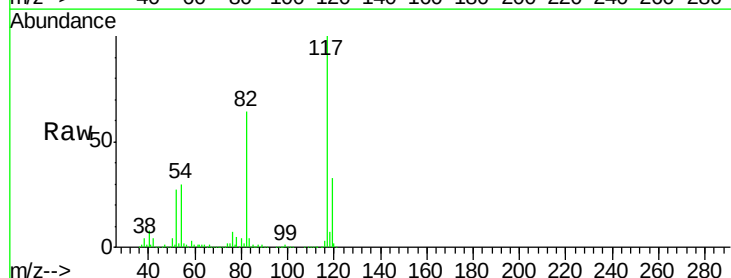
Tgt Ion: 117 Resp: 3175472

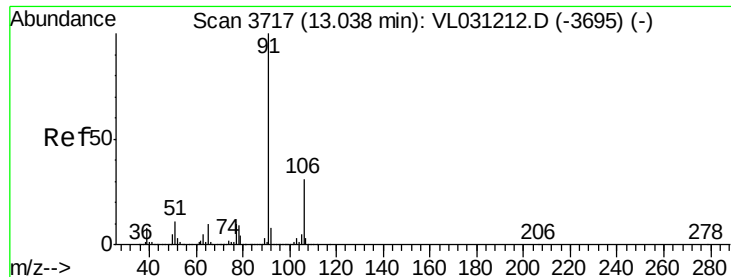
Ion Ratio Lower Upper

117 100

82 63.7 48.1 72.1

119 32.8 23.1 34.7





#58

Ethyl Benzene

Concen: 0.12 ppbv

RT: 13.04 min Scan# 3717

Delta R.T. 0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-10DL

Tot Ion: 91 Resp: 63151

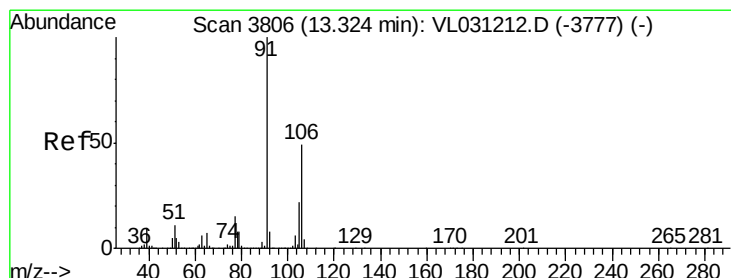
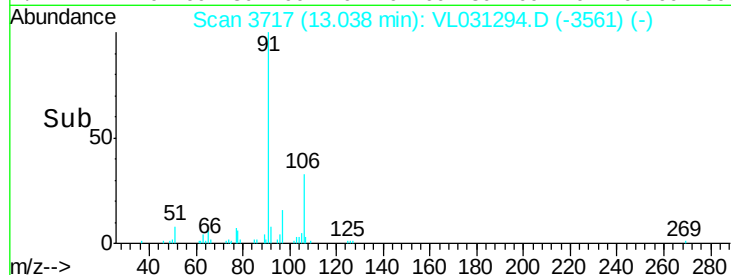
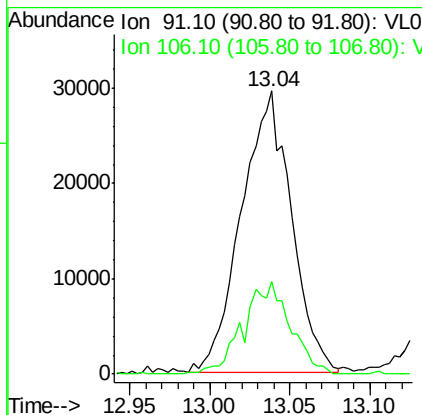
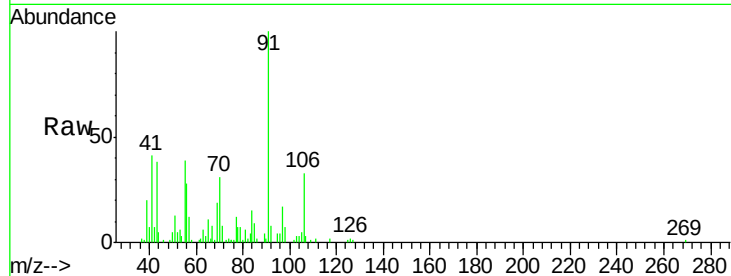
Ion Ratio Lower Upper

91 100

106 32.9 25.1 37.7

Manual Integrations
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#59

m/p-Xylene

Concen: 0.24 ppbv m

RT: 13.30 min Scan# 3797

Delta R.T. -0.03 min

Lab File: VL031294.D

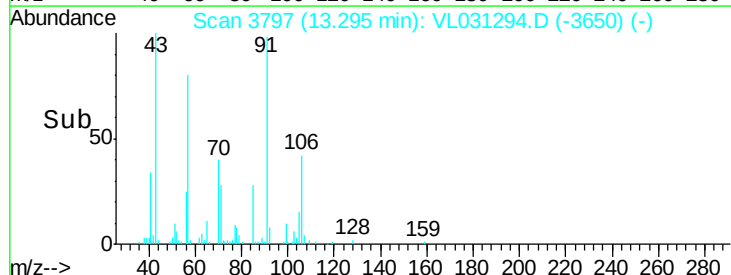
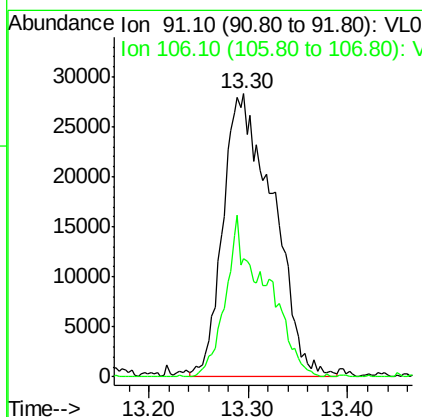
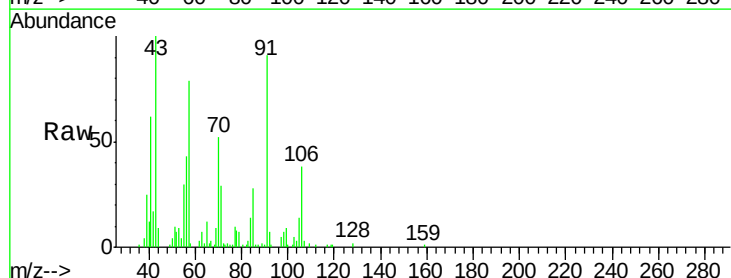
Acq: 21 Dec 2017 7:10

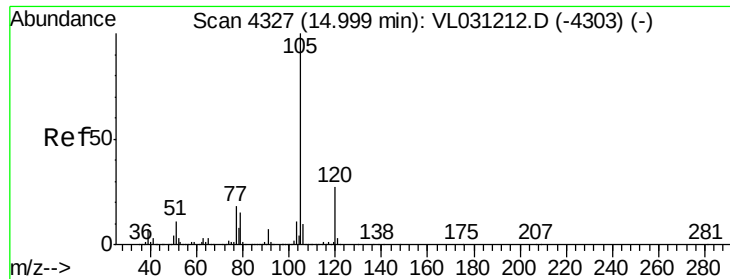
Tgt Ion: 91 Resp: 98676

Ion Ratio Lower Upper

91 100

106 0.0 38.5 57.7#





#62

Isopropylbenzene

Concen: 0.38 ppbv

RT: 15.00 min Scan# 4326

Delta R.T. -0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Instrument :

MSVOA_L

ClientSampled :

EP1-SV-10DL

Tot Ion:105 Resp: 210332

Ion Ratio Lower Upper

105 100

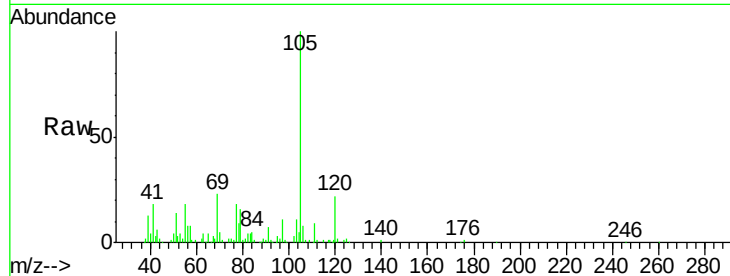
120 25.5 21.0 31.6

Manual Integrations

APPROVED

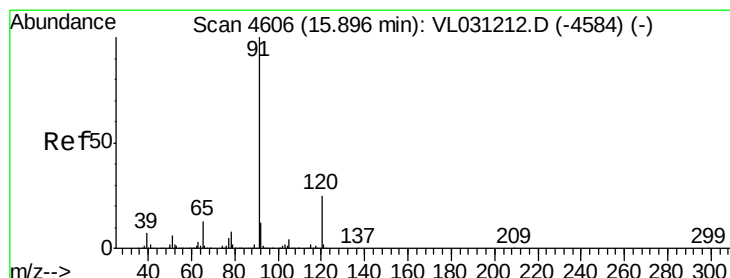
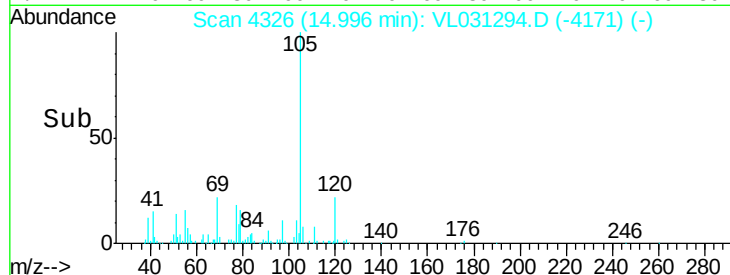
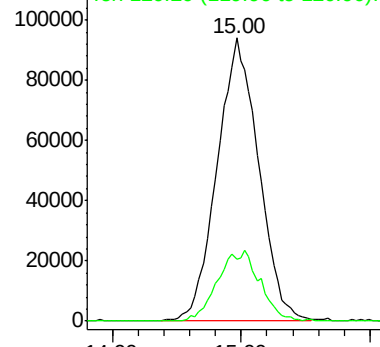
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.39 ppbv m

RT: 15.89 min Scan# 4604

Delta R.T. -0.01 min

Lab File: VL031294.D

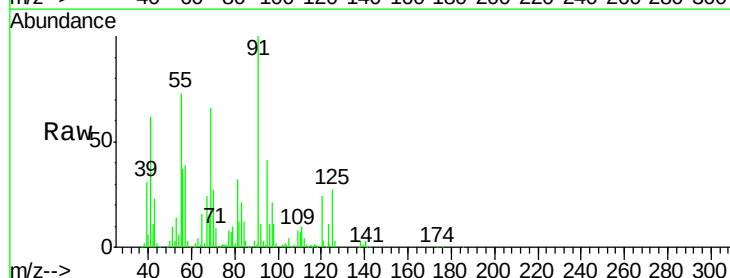
Acq: 21 Dec 2017 7:10

Tgt Ion:120 Resp: 57401

Ion Ratio Lower Upper

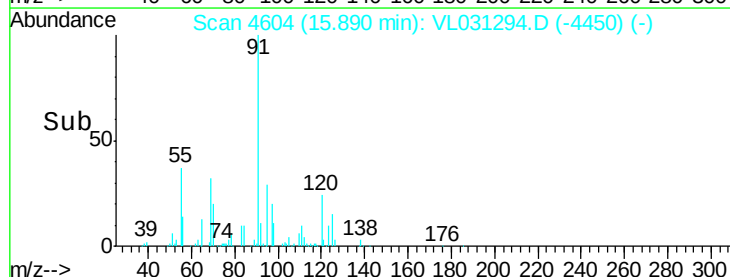
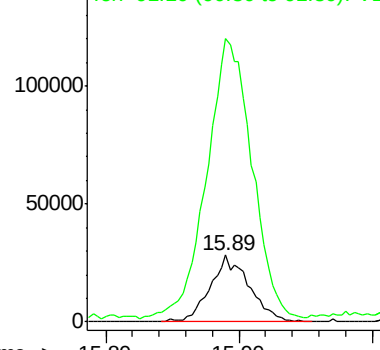
120 100

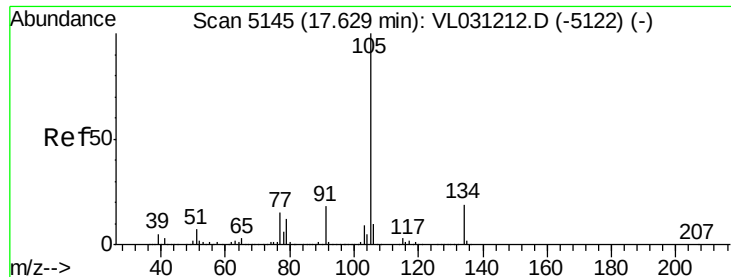
91 489.2 352.1 528.1



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





#67

sec-Butylbenzene

Concen: 0.18 ppbv

RT: 17.63 min Scan# 5145

Delta R.T. 0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Instrument :

MSVOA_L

ClientSampleId :

EP1-SV-10DL

Tot Ion: 105 Resp: 118817

Ion Ratio Lower Upper

105 100

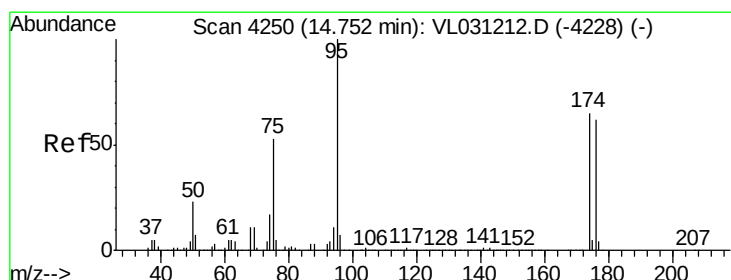
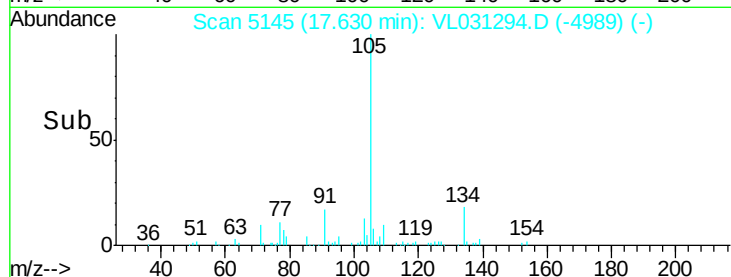
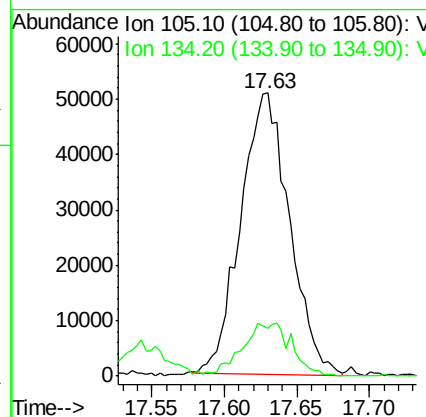
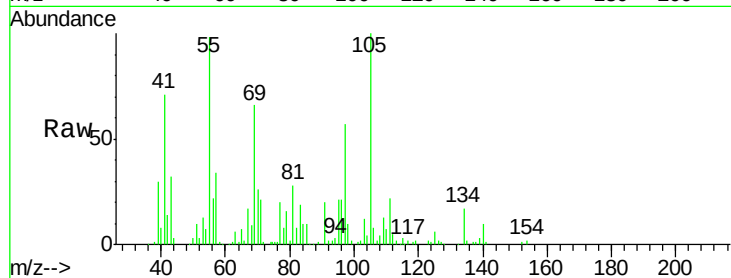
134 19.4 15.3 22.9

Manual Integrations

APPROVED

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#68

1-Bromo-4-Fluorobenzene

Concen: 12.15 ppbv

RT: 14.75 min Scan# 4249

Delta R.T. -0.00 min

Lab File: VL031294.D

Acq: 21 Dec 2017 7:10

Tgt Ion: 95 Resp: 2744409

Ion Ratio Lower Upper

95 100

174 57.9 52.5 78.7

175 4.2 4.1 6.1

