

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL103018\
 Data File : VL032702.D
 Acq On : 30 Oct 2018 17:23
 Operator : SY/AP
 Sample : J5702-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 FIA-1D

Manual Integrations
 APPROVED

MMDadoda
 10/31/2018 10:40:00 AM

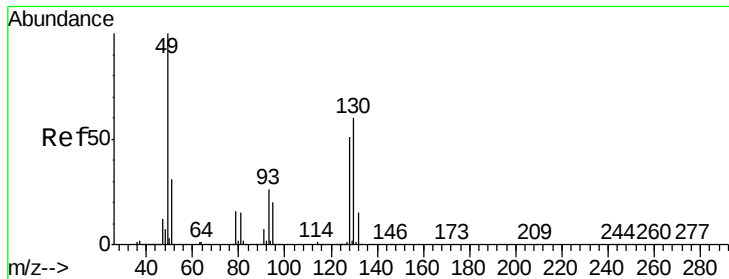
Quant Time: Oct 31 05:40:30 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct 25 05:15:43 2018
 QLast Update : Thu Oct 25 05:15:43 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.78	49	1384952	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.31	114	3377591	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.26	117	3194707	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.59	95	2359132	9.92	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	74430	0.527	ppbv	92
3) Chlorodifluoromethane	3.02	51	8517040	78.636	ppbv	96
4) Chloromethane	3.18	50	29260	0.483	ppbv	93
9) Propene	3.06	41	2269305m	50.912	ppbv	
10) Heptane	8.27	43	21304	0.124	ppbv	89
11) Trichlorofluoromethane	4.02	101	42794	0.232	ppbv	92
13) Ethanol	3.67	45	469907	36.886	ppbv	98
15) Acetone	3.91	43	19464775	152.200	ppbv #	73
19) Isopropyl Alcohol	4.04	45	4573165	50.212	ppbv #	93
20) Methylene Chloride	4.43	84	80001	1.232	ppbv	94
25) Ethyl Acetate	5.78	43	435088	1.478	ppbv #	93
29) Chloroform	5.87	83	25579	0.115	ppbv	99
30) Cyclohexane	7.26	84	19076m	0.173	ppbv	
34) 2-Butanone	5.35	43	90657	0.501	ppbv	98
35) Carbon Tetrachloride	7.16	117	18959m	0.079	ppbv	
36) Benzene	7.03	78	79566	0.290	ppbv #	91
37) 1,2-Dichloroethane	6.43	62	45095m	0.268	ppbv	
44) 2,2,4-Trimethylpentane	8.01	57	52540	0.112	ppbv #	61
52) Tetrachloroethene	11.39	164	9480m	0.099	ppbv	
53) Toluene	9.97	91	657094	2.090	ppbv	99
59) m/p-Xylene	13.14	91	59328m	0.180	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.78 min Scan# 885

Delta R.T. 0.00 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Instrument :

MSVOA_L

ClientSampled :

FIA-1D

Tot Ion: 49 Resp: 1384952

Ion Ratio Lower Upper

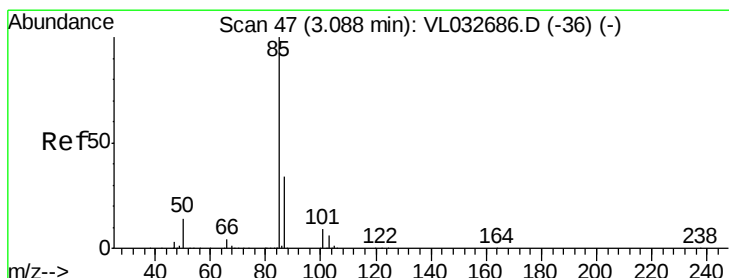
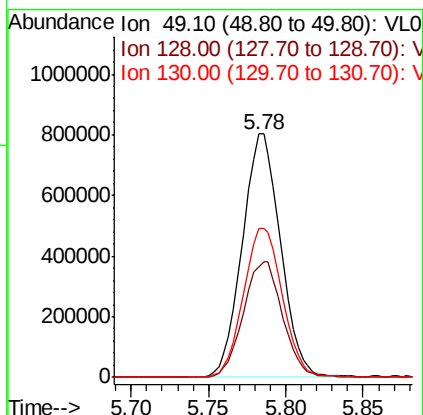
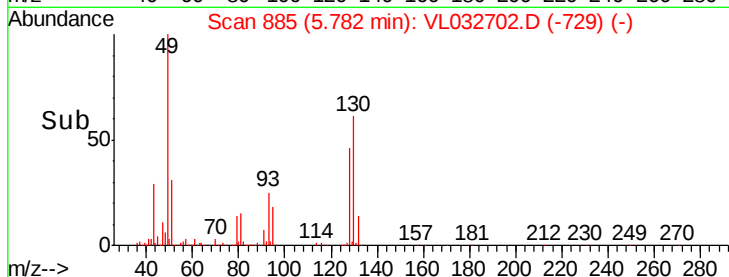
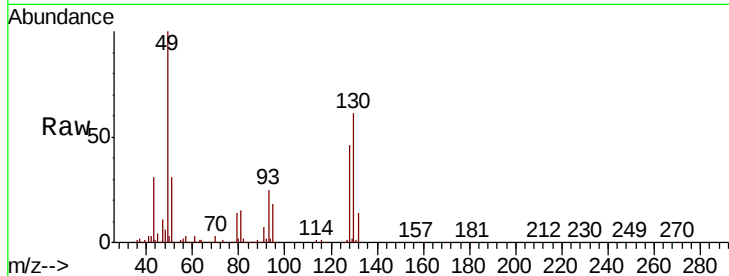
49 100

128 48.7 22.3 66.8

130 62.7 28.4 85.3

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#2

Dichlorodifluoromethane

Concen: 0.527 ppbv

RT: 3.08 min Scan# 46

Delta R.T. -0.00 min

Lab File: VL032702.D

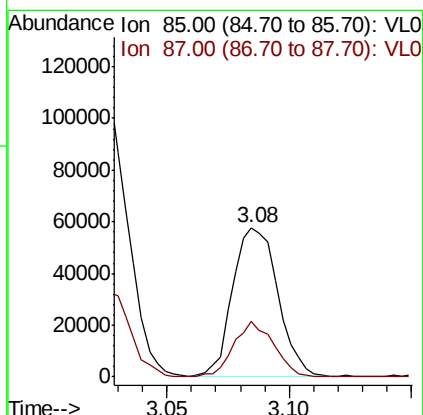
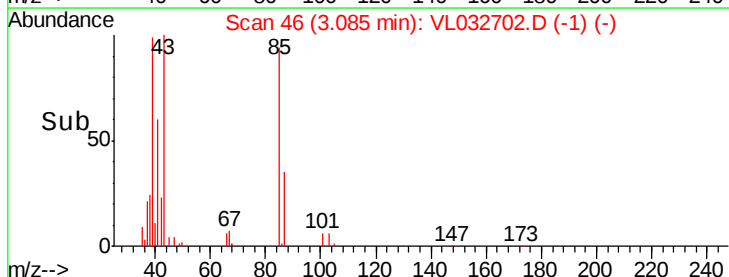
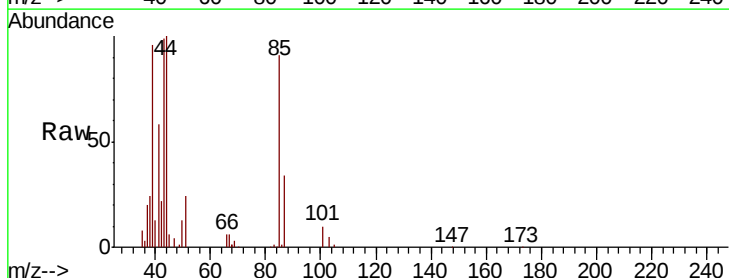
Acq: 30 Oct 2018 17:23

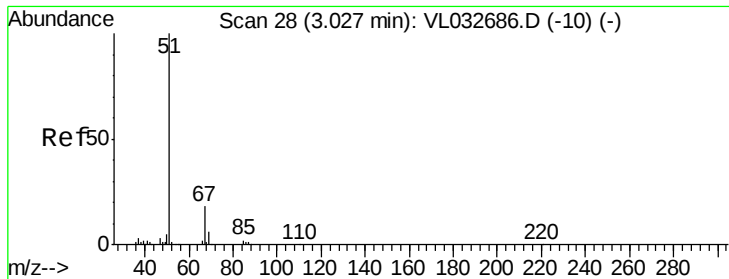
Tgt Ion: 85 Resp: 74430

Ion Ratio Lower Upper

85 100

87 37.2 26.2 39.2





#3

Chlorodifluoromethane

Concen: 78.636 ppbv

RT: 3.02 min Scan# 27

Delta R.T. -0.00 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Instrument :

MSVOA_L

ClientSampleId :

FIA-1D

Tot Ion: 51 Resp: 8517040

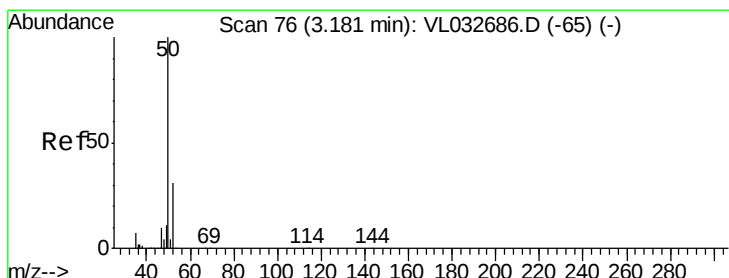
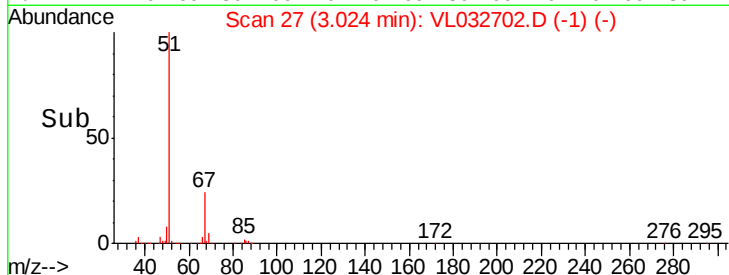
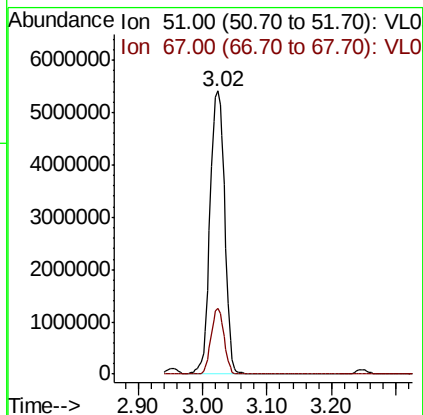
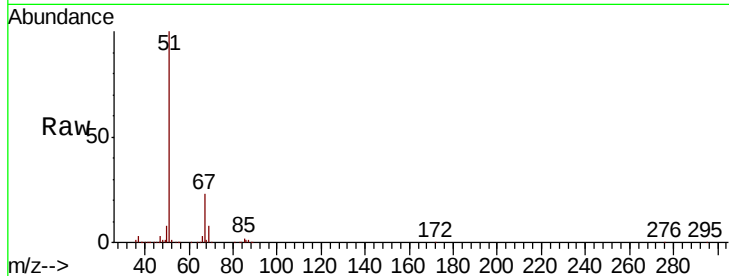
Ion Ratio Lower Upper

51 100

67 20.7 15.2 22.8

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#4

Chloromethane

Concen: 0.483 ppbv

RT: 3.18 min Scan# 75

Delta R.T. -0.00 min

Lab File: VL032702.D

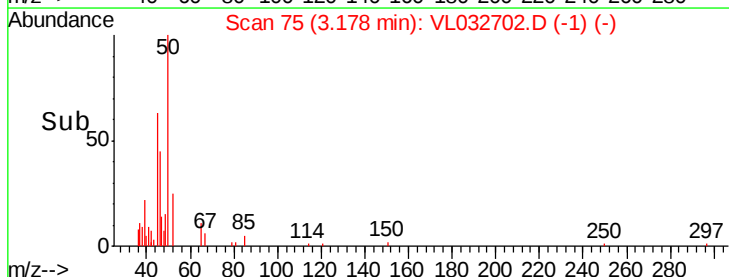
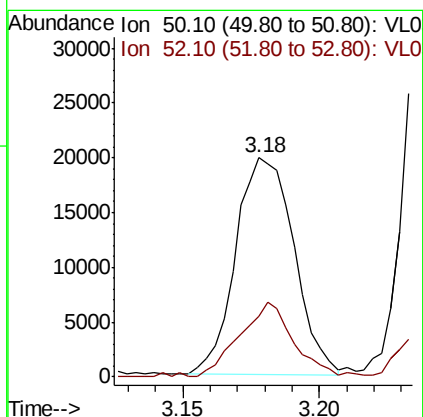
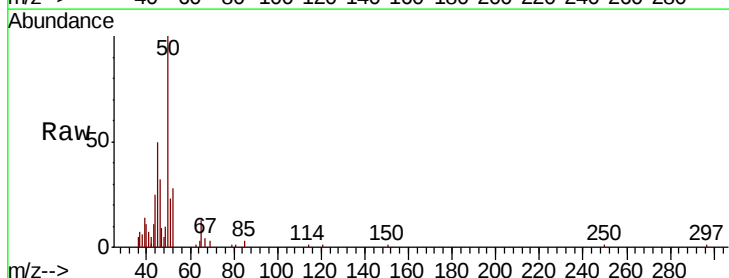
Acq: 30 Oct 2018 17:23

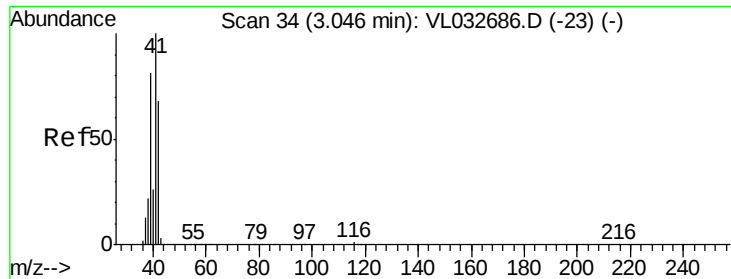
Tgt Ion: 50 Resp: 29260

Ion Ratio Lower Upper

50 100

52 28.4 25.9 38.9





#9

Propene

Concen: 50.912 ppbv m

RT: 3.06 min Scan# 38

Delta R.T. 0.02 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Instrument :

MSVOA_L

ClientSampled :

FIA-1D

Tot Ion: 41 Resp: 2269305

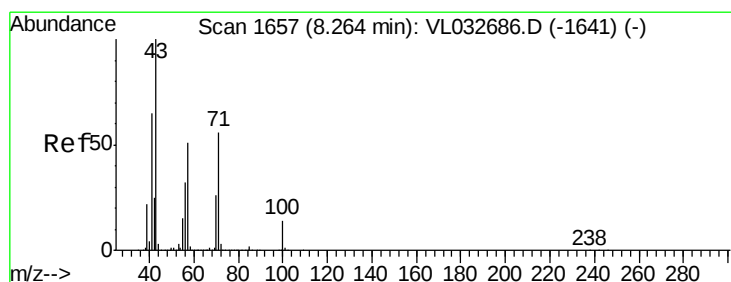
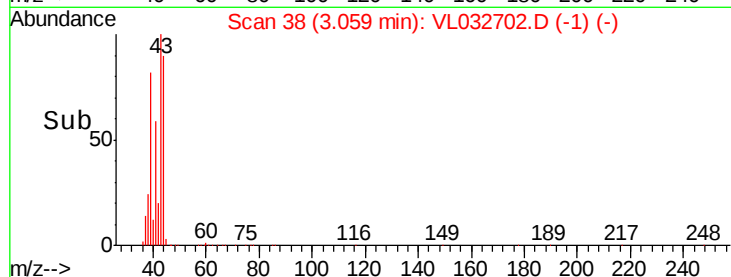
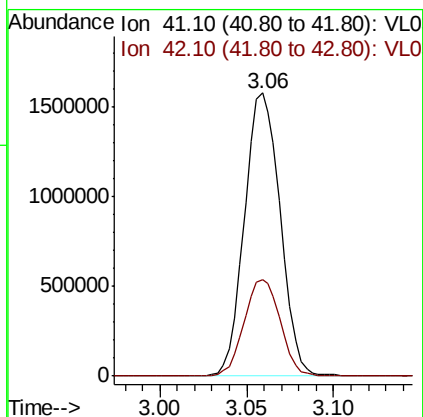
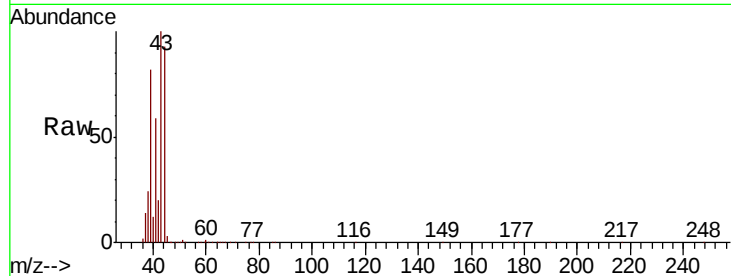
Ion Ratio Lower Upper

41 100

42 159.0 55.4 83.0#

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#10

Heptane

Concen: 0.124 ppbv

RT: 8.27 min Scan# 1658

Delta R.T. 0.01 min

Lab File: VL032702.D

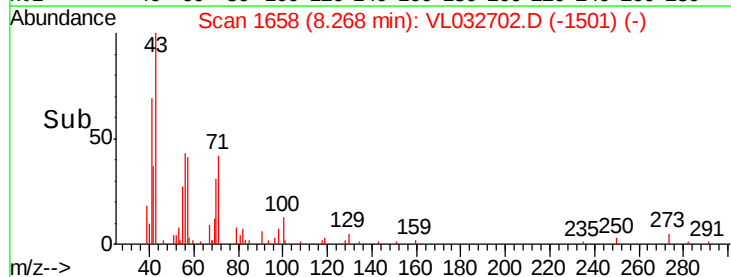
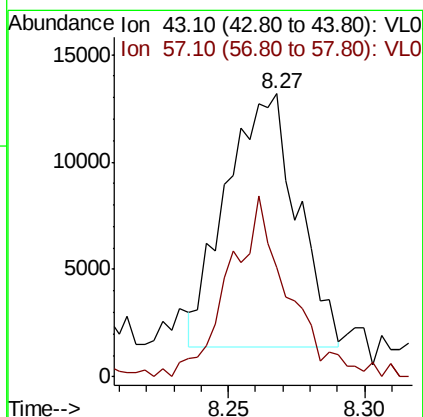
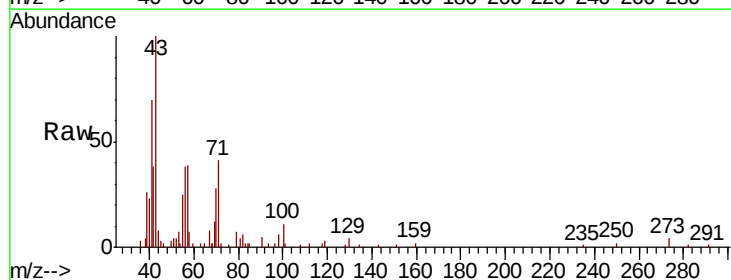
Acq: 30 Oct 2018 17:23

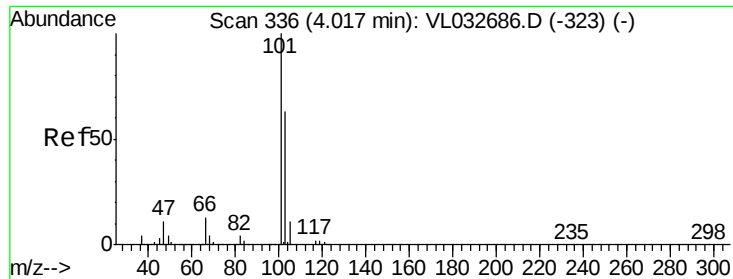
Tgt Ion: 43 Resp: 21304

Ion Ratio Lower Upper

43 100

57 59.7 41.5 62.3





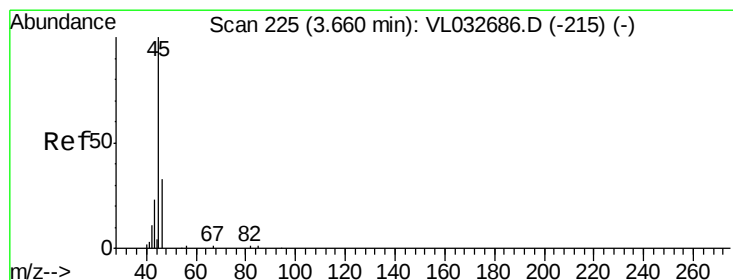
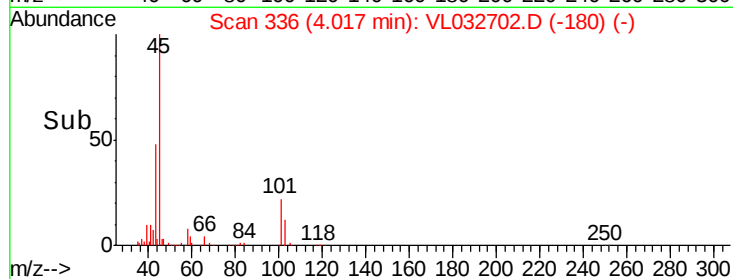
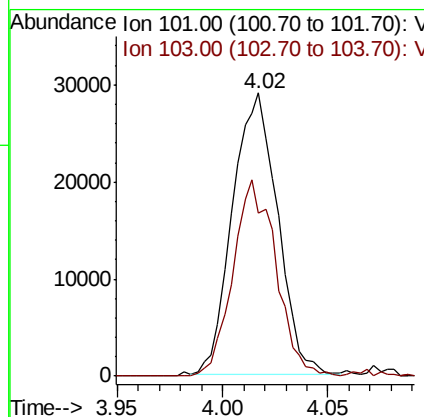
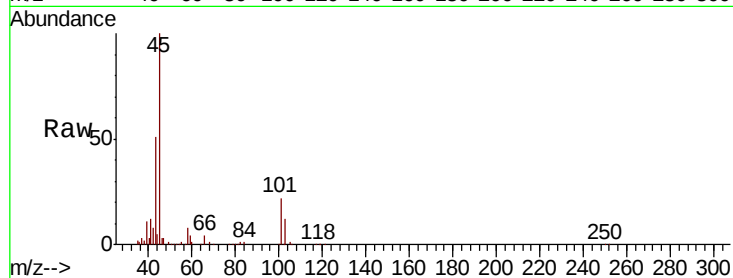
#11
 Trichlorofluoromethane
 Concen: 0.232 ppbv
 RT: 4.02 min Scan# 336
 Delta R.T. 0.00 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Instrument :
 MSVOA_L
 ClientSampleId :
 FIA-1D

Tot Ion:101 Resp: 42794
 Ion Ratio Lower Upper
 101 100
 103 57.9 51.4 77.2

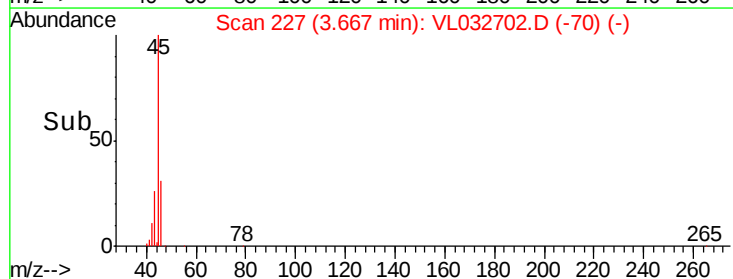
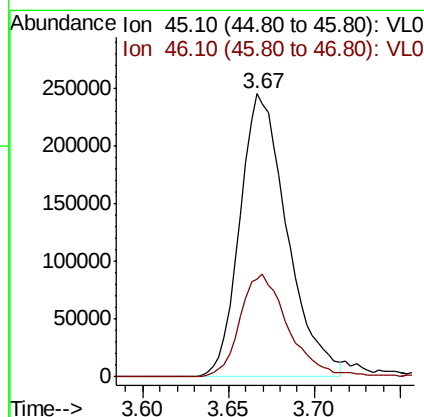
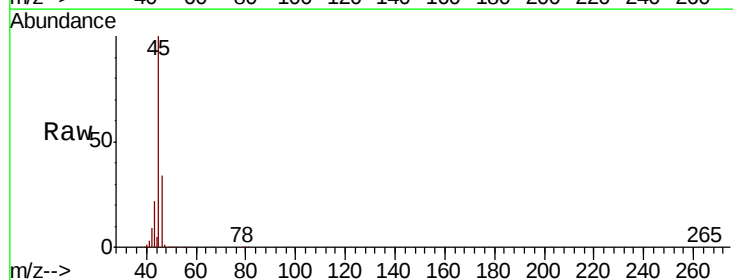
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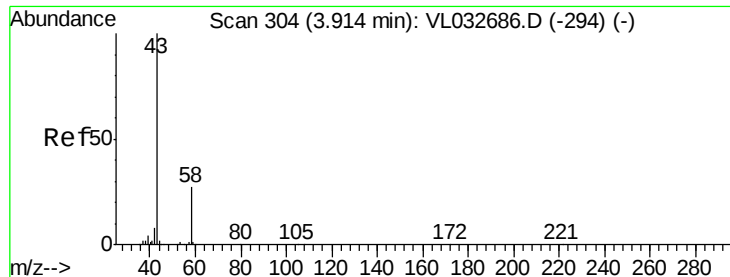
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#13
 Ethanol
 Concen: 36.886 ppbv
 RT: 3.67 min Scan# 227
 Delta R.T. 0.01 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Tgt Ion: 45 Resp: 469907
 Ion Ratio Lower Upper
 45 100
 46 37.3 15.4 61.8





#15

Acetone

Concen: 152.200 ppbv

RT: 3.91 min Scan# 303

Delta R.T. -0.00 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Instrument :

MSVOA_L

ClientSampled :

FIA-1D

Tot Ion: 43 Resp:19464775

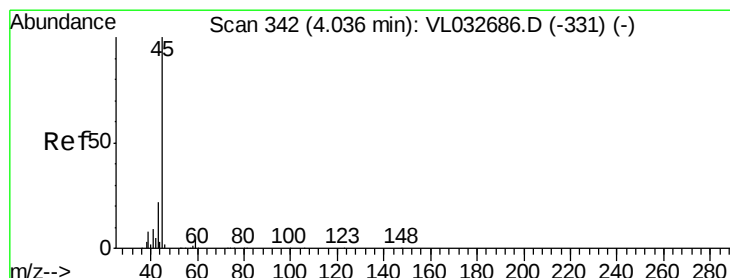
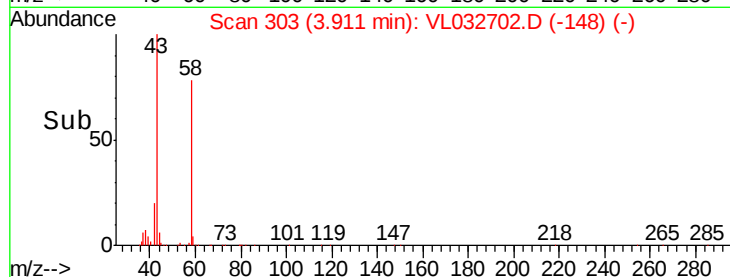
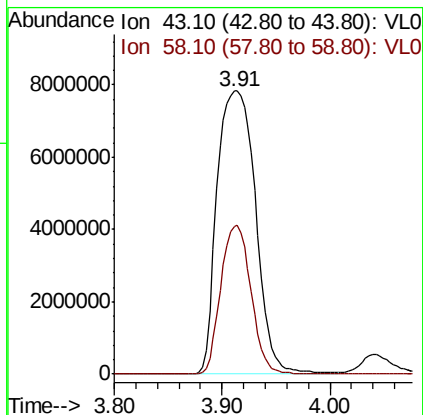
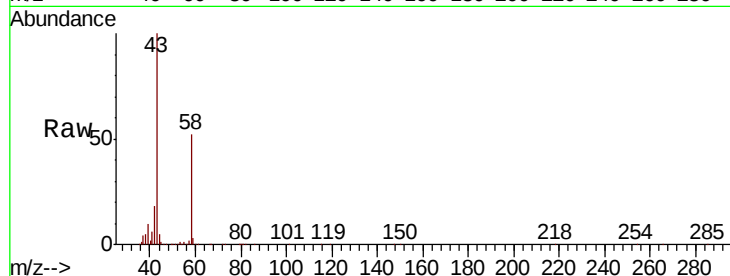
Ion Ratio Lower Upper

43 100

58 41.5 22.1 33.1#

Manual Integrations
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#19

Isopropyl Alcohol

Concen: 50.212 ppbv

RT: 4.04 min Scan# 343

Delta R.T. 0.01 min

Lab File: VL032702.D

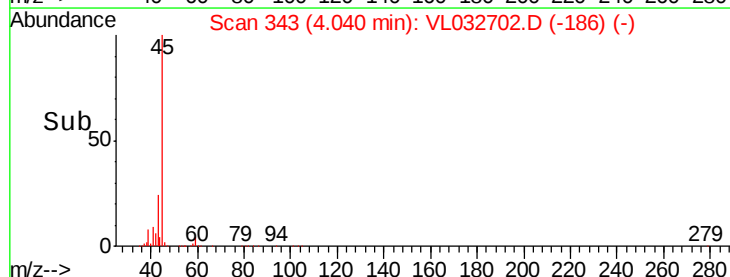
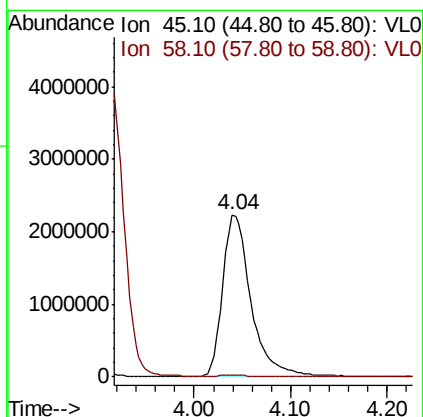
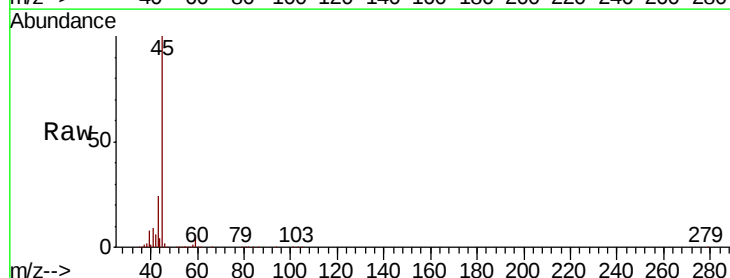
Acq: 30 Oct 2018 17:23

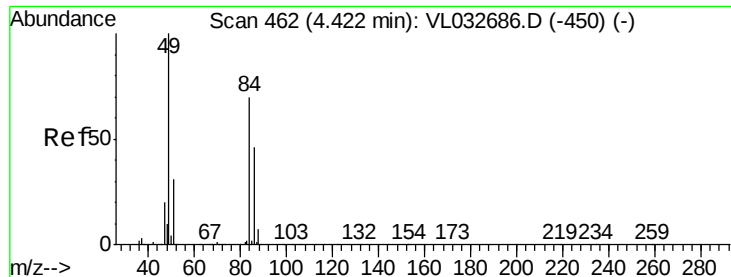
Tgt Ion: 45 Resp: 4573165

Ion Ratio Lower Upper

45 100

58 0.0 2.0 3.0#





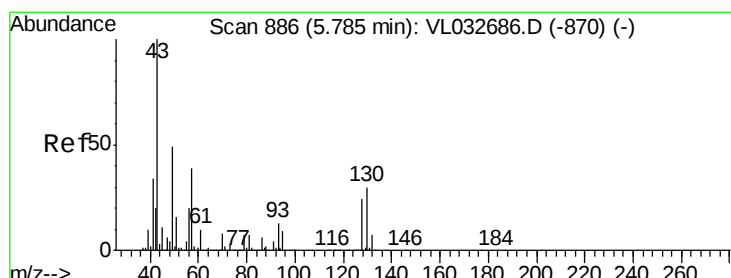
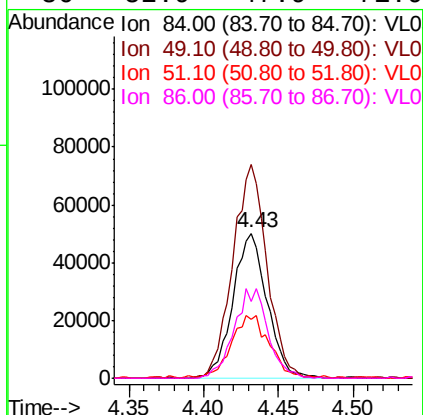
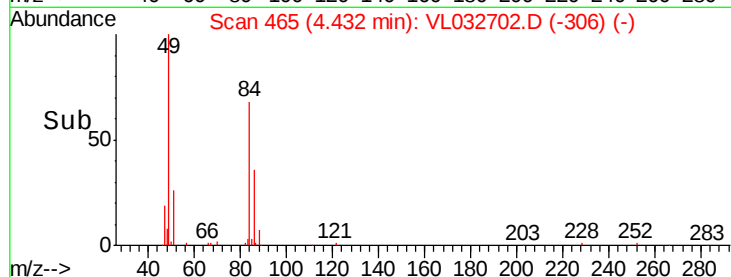
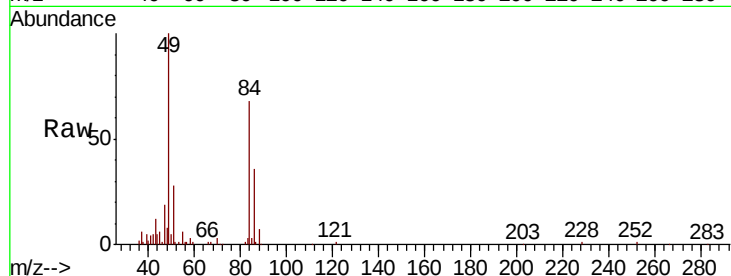
#20
Methvlene Chloride
Concen: 1.232 ppbv
RT: 4.43 min Scan# 465
Delta R.T. 0.01 min
Lab File: VL032702.D
Acq: 30 Oct 2018 17:23

Instrument :
MSVOA_L
ClientSampleId :
FIA-1D

Tot Ion:	84	Resp:	80001
Ion	Ratio	Lower	Upper
84	100		
49	147.6	113.5	170.3
51	41.2	34.8	52.2
86	52.9	47.9	71.9

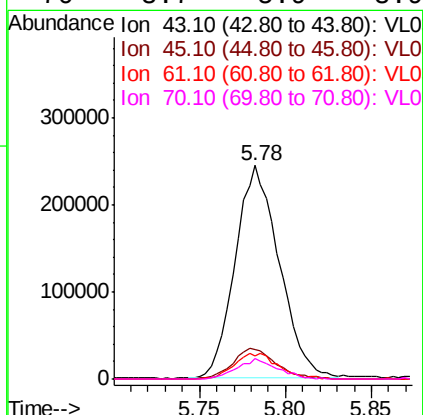
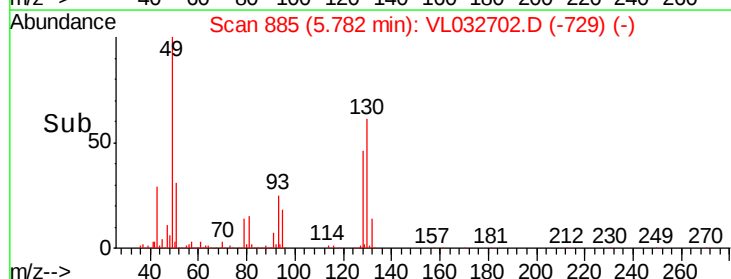
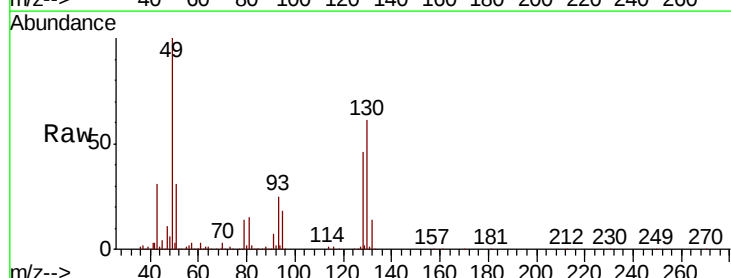
Manual Integrations
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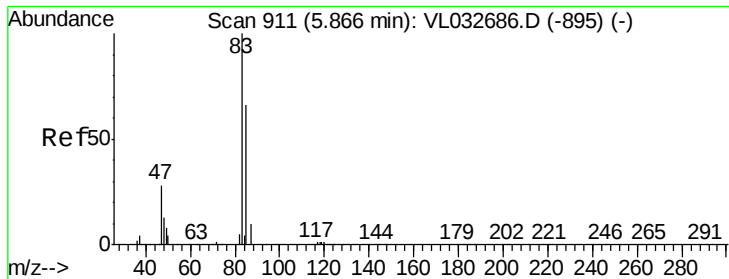
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10/31/2018 10:40:00 AM



#25
Ethyl Acetate
Concen: 1.478 ppbv
RT: 5.78 min Scan# 885
Delta R.T. 0.00 min
Lab File: VL032702.D
Acq: 30 Oct 2018 17:23

Tgt Ion:	43	Resp:	435088
Ion	Ratio	Lower	Upper
43	100		
45	14.3	8.0	12.0#
61	12.1	8.0	12.0#
70	8.7	5.9	8.9





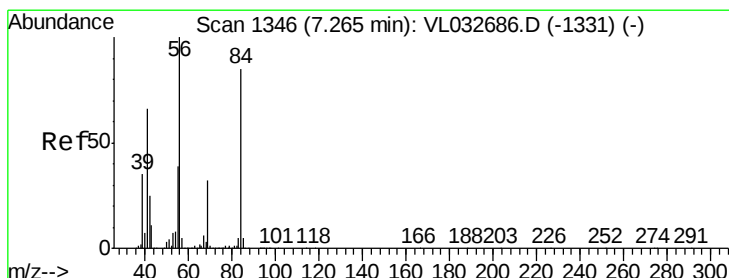
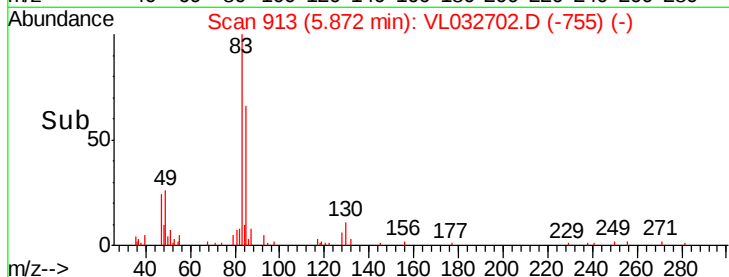
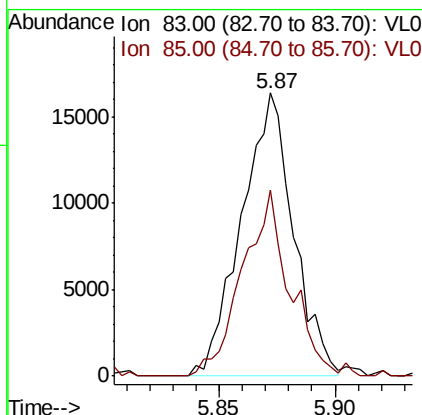
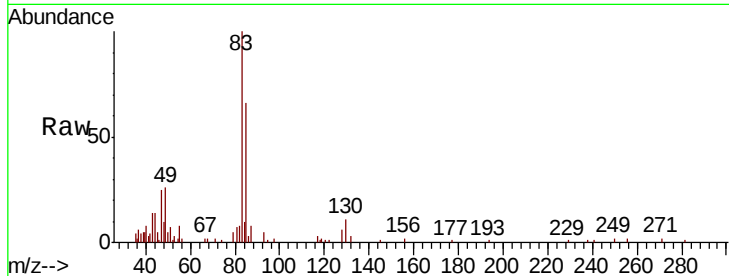
#29
Chloroform
Concen: 0.115 ppbv
RT: 5.87 min Scan# 913
Delta R.T. 0.01 min
Lab File: VL032702.D
Acq: 30 Oct 2018 17:23

Instrument :
MSVOA_L
ClientSampleId :
FIA-1D

Tot Ion	83	Resp	25579
Ion Ratio	100	Lower	Upper
83	100		
85	65.6	53.0	79.6

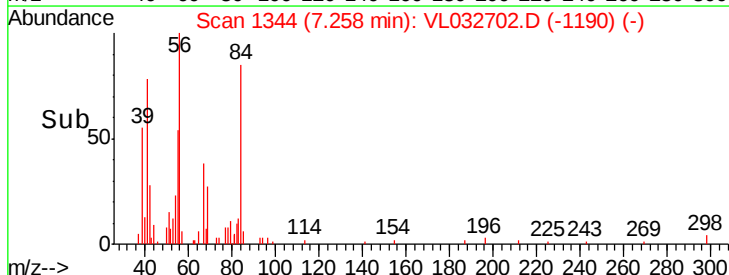
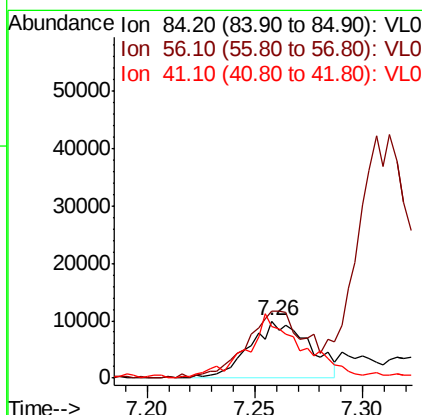
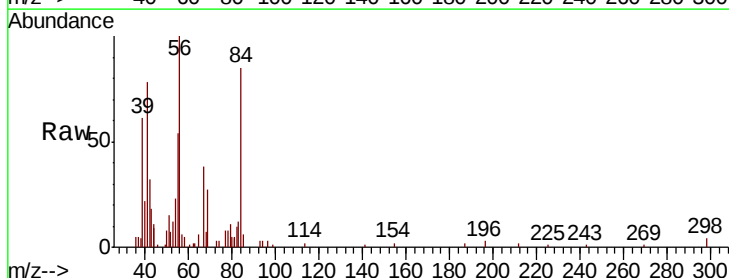
Manual Integrations
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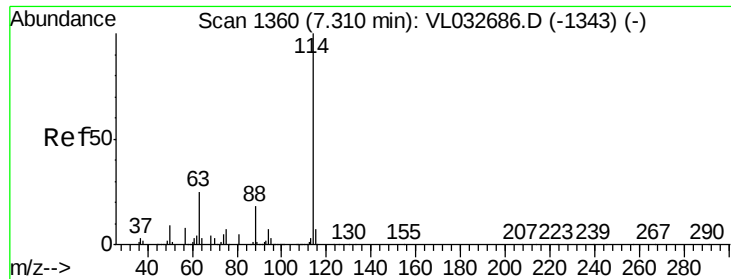
MMDadoda
10/31/2018 10:40:00 AM



#30
Cyclohexane
Concen: 0.173 ppbv m
RT: 7.26 min Scan# 1344
Delta R.T. -0.00 min
Lab File: VL032702.D
Acq: 30 Oct 2018 17:23

Tgt Ion	84	Resp	19076
Ion Ratio	100	Lower	Upper
84	100		
56	111.0	108.3	162.5
41	0.0	64.8	97.2#





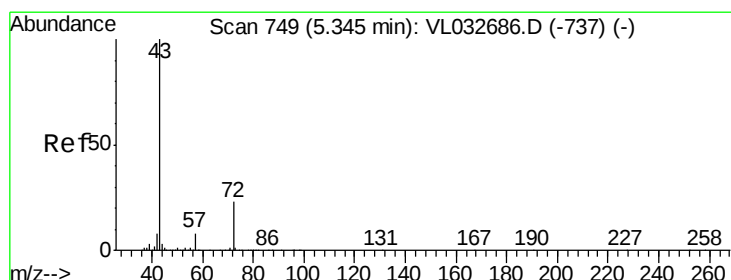
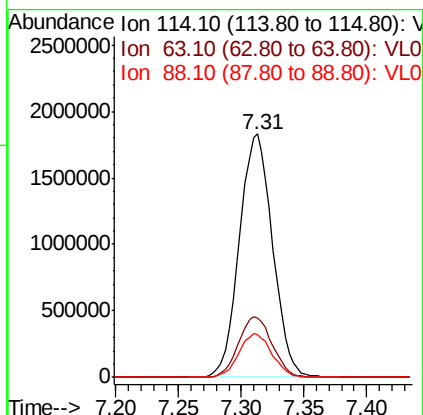
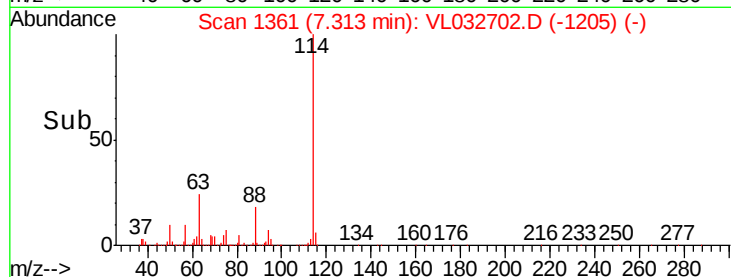
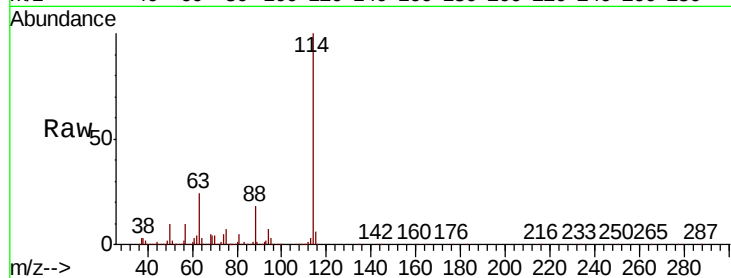
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.31 min Scan# 1361
 Delta R.T. 0.00 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Instrument :
 MSVOA_L
 ClientSampleId :
 FIA-1D

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.3	21.7	32.5
88	17.7	14.9	22.3

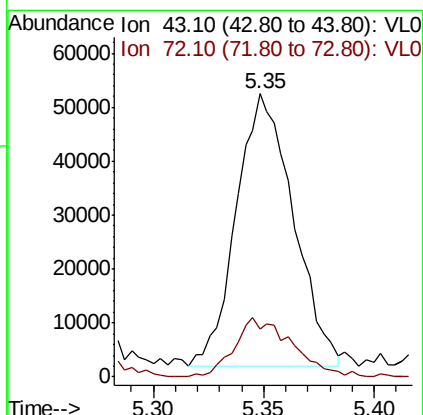
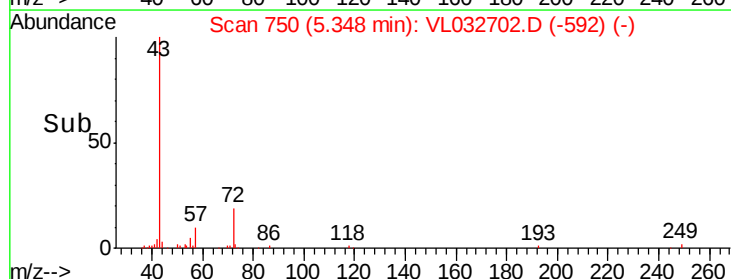
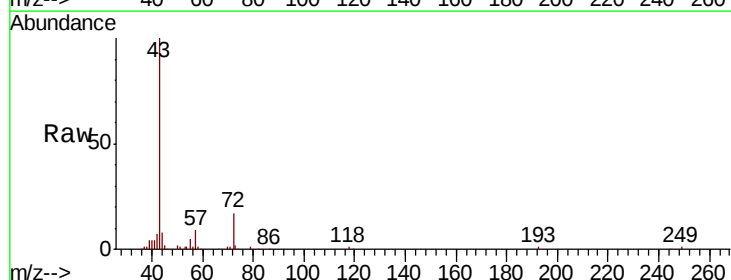
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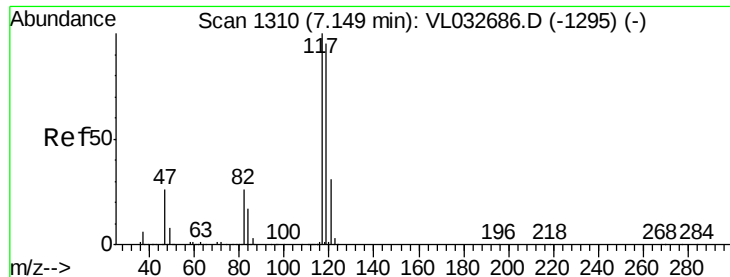
MMDadoda
 10/31/2018 10:40:00 AM



#34
 2-Butanone
 Concen: 0.501 ppbv
 RT: 5.35 min Scan# 750
 Delta R.T. 0.01 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.6	27.8





#35

Carbon Tetrachloride

Concen: 0.079 ppbv m

RT: 7.16 min Scan# 1313

Delta R.T. 0.01 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Instrument :

MSVOA_L

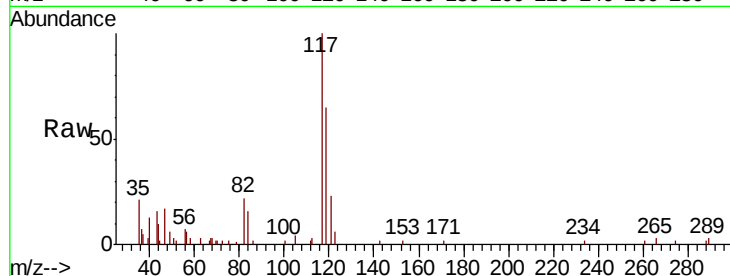
ClientSampled :

FIA-1D

Tot Ion	Ratio	Lower	Upper
117	100		
119	64.8	75.7	113.5#
121	23.1	24.7	37.1#

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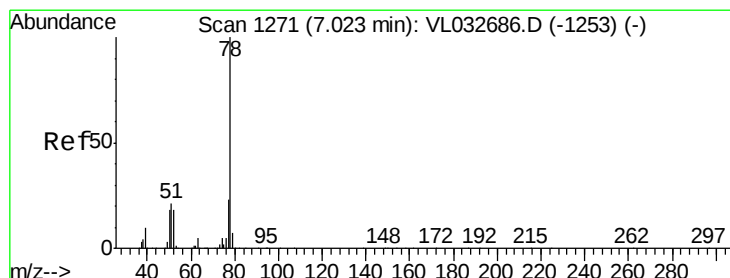
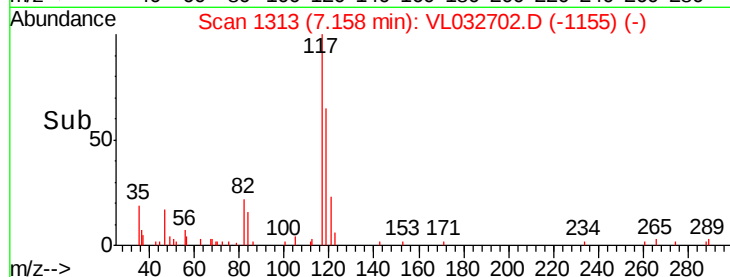
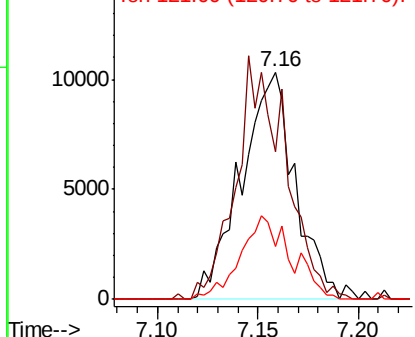


Abundance

Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.290 ppbv

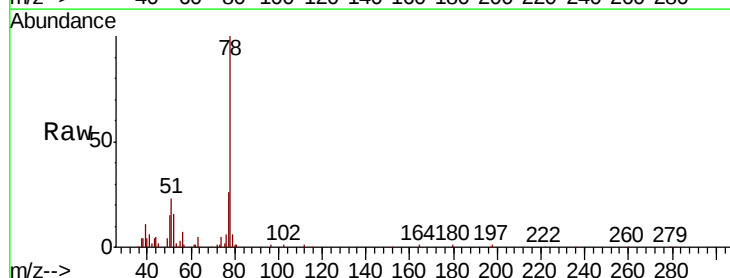
RT: 7.03 min Scan# 1272

Delta R.T. 0.01 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.5	18.1	27.1
50	13.7	15.1	22.7#

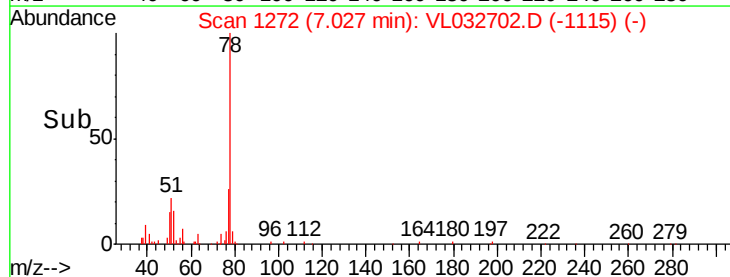
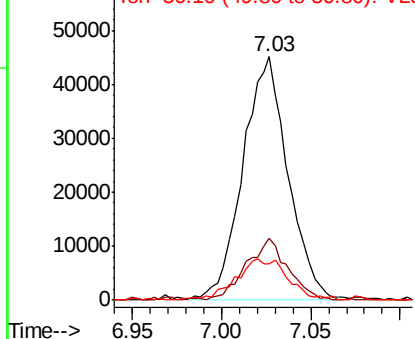


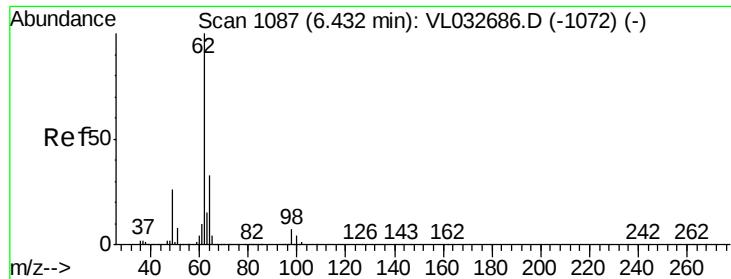
Abundance

Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





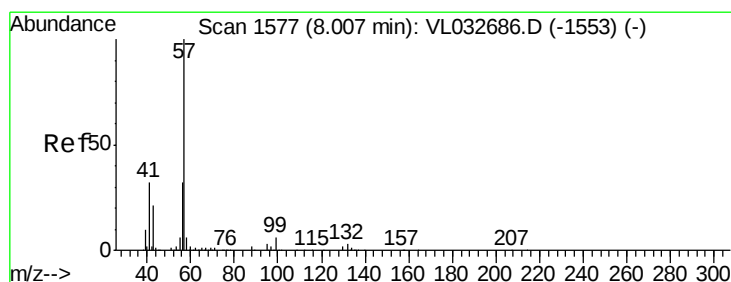
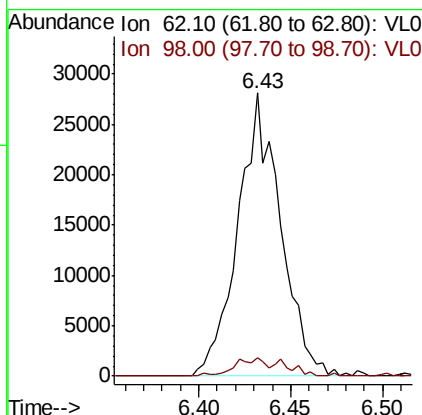
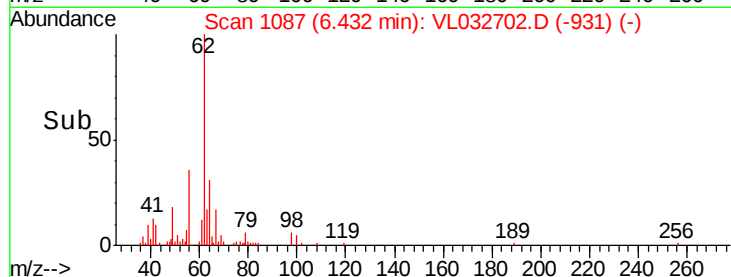
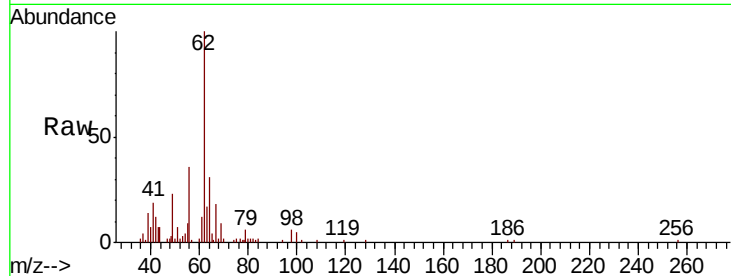
#37
 1,2-Dichloroethane
 Concen: 0.268 ppbv m
 RT: 6.43 min Scan# 1087
 Delta R.T. 0.00 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Instrument :
 MSVOA_L
 ClientSampled :
 FIA-1D

Tot Ion	Ratio	Lower	Upper
62	100		
98	7.4	4.4	6.6#

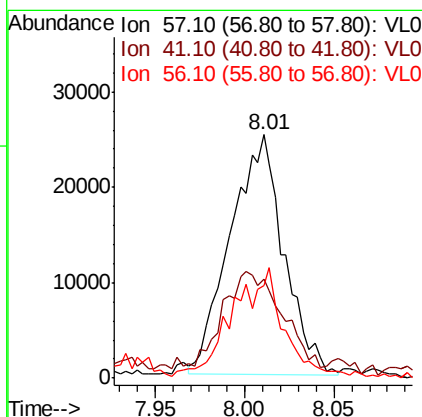
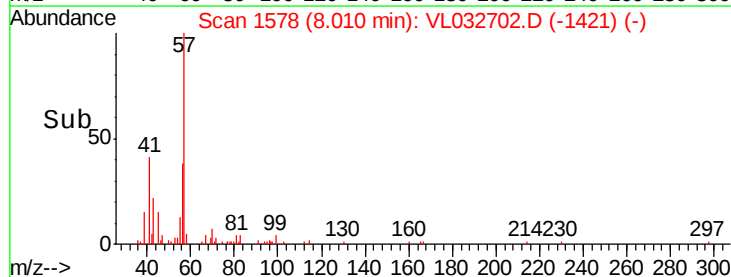
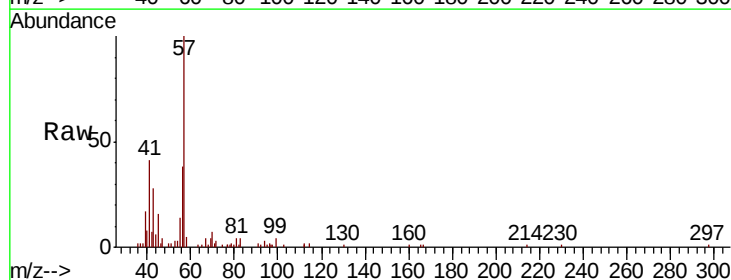
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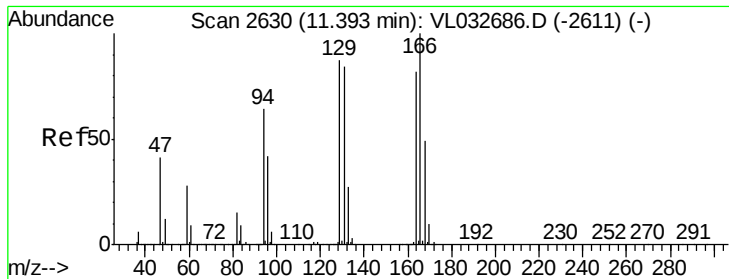
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 10/31/2018 10:40:00 AM



#44
 2,2,4-Trimethylpentane
 Concen: 0.112 ppbv
 RT: 8.01 min Scan# 1578
 Delta R.T. 0.01 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Tgt Ion	Ratio	Lower	Upper
57	100		
41	60.0	24.7	37.1#
56	45.5	25.0	37.4#





#52

Tetrachloroethene

Concen: 0.099 ppbv m

RT: 11.39 min Scan# 2630

Delta R.T. -0.00 min

Lab File: VL032702.D

Acq: 30 Oct 2018 17:23

Instrument :

MSVOA_L

ClientSampled :

FIA-1D

Tot Ion:164 Resp: 9480

Ion Ratio Lower Upper

164 100

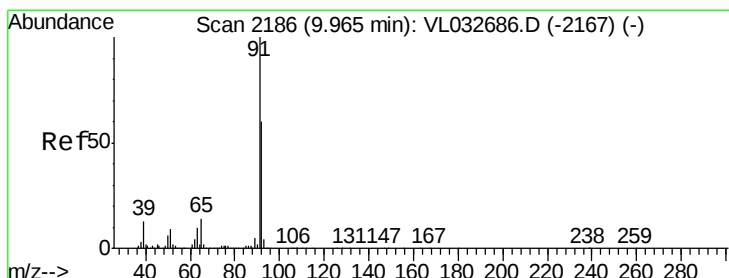
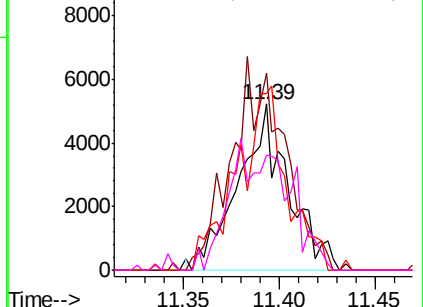
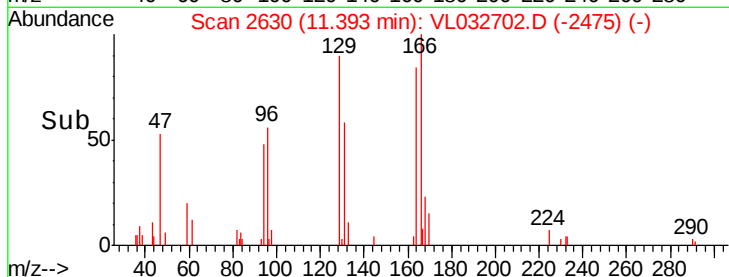
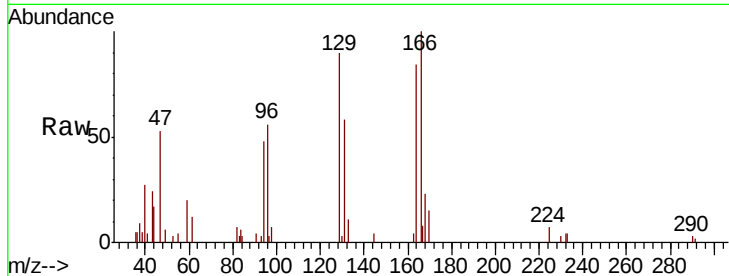
166 118.9 100.5 150.7

129 106.5 90.0 135.0

131 69.4 86.6 129.8#

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10/31/2018 10:40:00 AM



#53

Toluene

Concen: 2.090 ppbv

RT: 9.97 min Scan# 2186

Delta R.T. 0.00 min

Lab File: VL032702.D

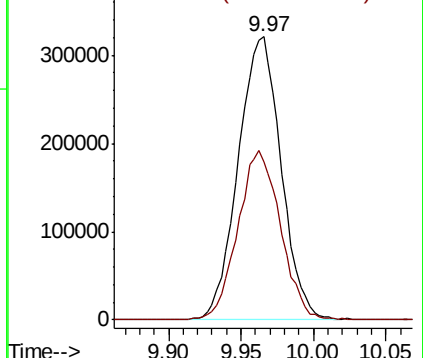
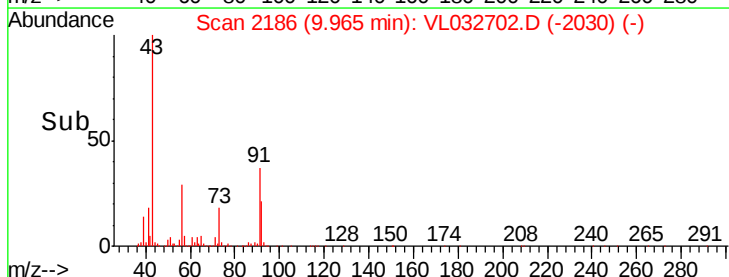
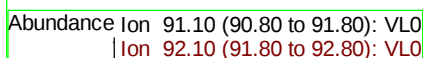
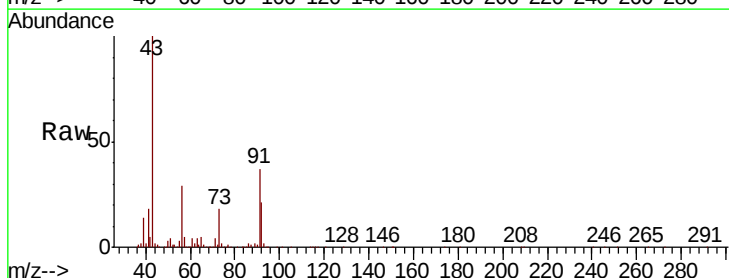
Acq: 30 Oct 2018 17:23

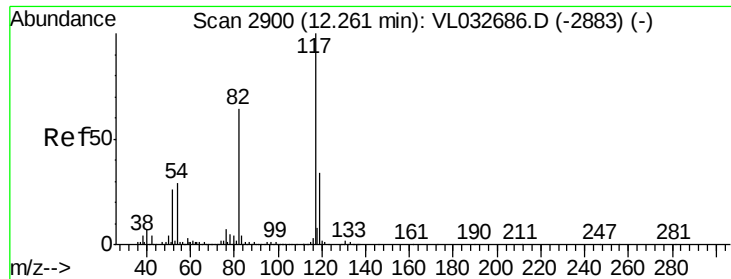
Tgt Ion: 91 Resp: 657094

Ion Ratio Lower Upper

91 100

92 60.0 48.4 72.6





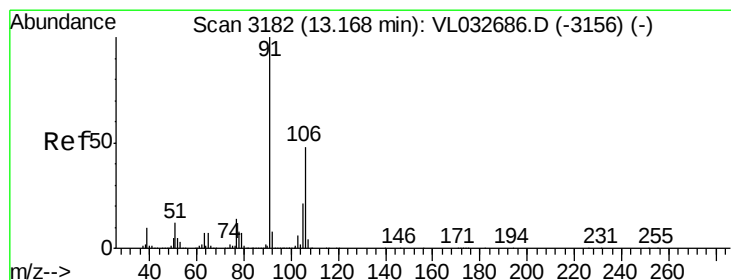
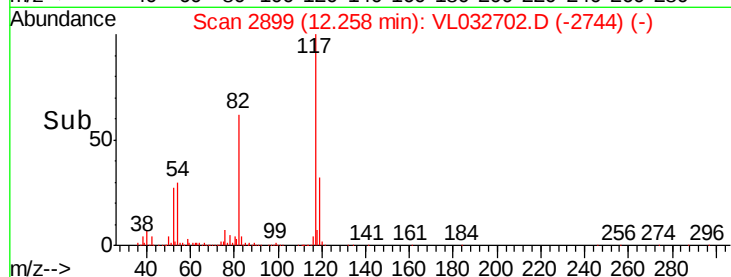
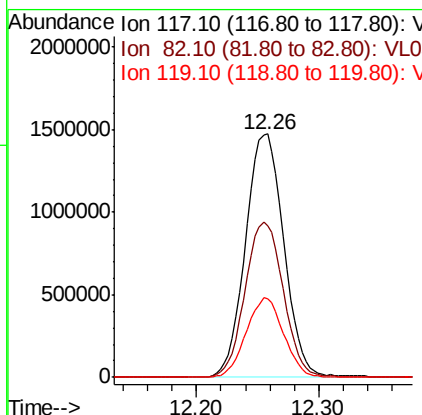
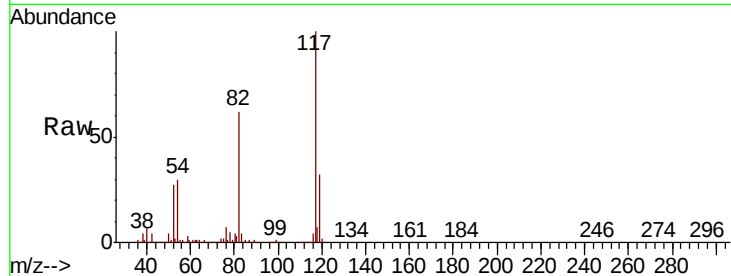
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.26 min Scan# 2899
Delta R.T. -0.00 min
Lab File: VL032702.D
Acq: 30 Oct 2018 17:23

Instrument :
MSVOA_L
ClientSampled :
FIA-1D

Tot Ion	Ratio	Lower	Upper
117	100		
82	64.5	52.7	79.1
119	32.2	26.7	40.1

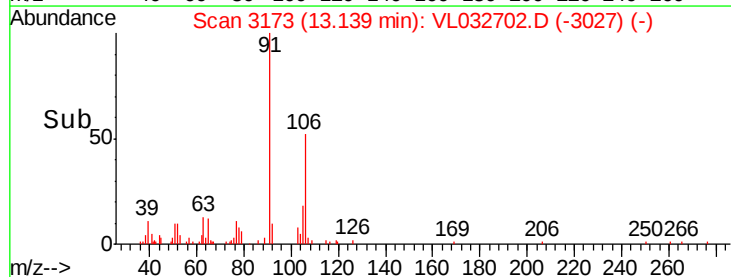
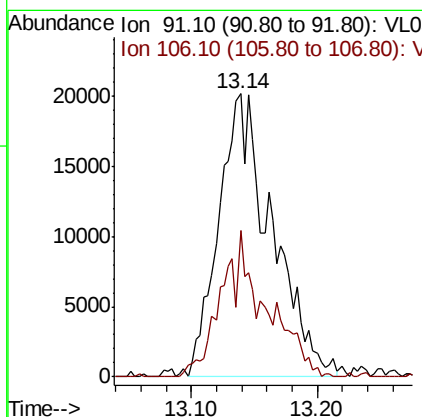
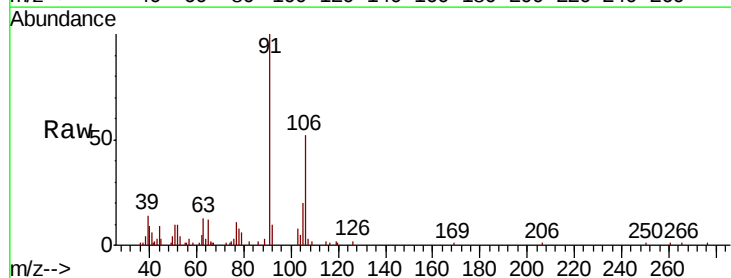
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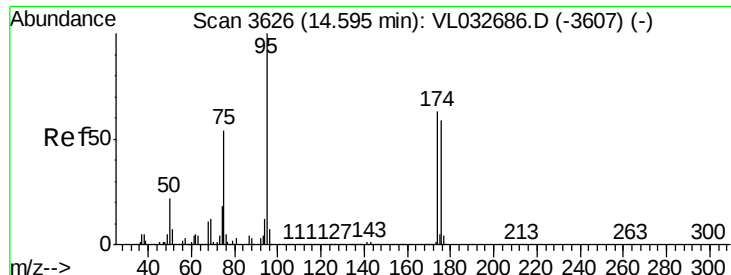
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#59
m/p-Xylene
Concen: 0.180 ppbv m
RT: 13.14 min Scan# 3173
Delta R.T. -0.03 min
Lab File: VL032702.D
Acq: 30 Oct 2018 17:23

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.9	53.9#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.918 ppbv
 RT: 14.59 min Scan# 3625
 Delta R.T. -0.00 min
 Lab File: VL032702.D
 Acq: 30 Oct 2018 17:23

Instrument :
 MSVOA_L
 ClientSampleId :
 FIA-1D

Tot Ion	Ratio	Lower	Upper
95	100		
174	64.7	46.0	69.0
175	4.8	3.4	5.0

Manual Integrations
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MMDadoda
 10/31/2018 10:40:00 AM

