

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121718\
 Data File : VL033004.D
 Acq On : 17 Dec 2018 20:33
 Operator : SY/AP
 Sample : J6382-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 P0131-IA001-181212-01

Manual Integrations
 APPROVED

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 12/19/2018 5:36:24 PM

Quant Time: Dec 19 15:28:55 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1081966	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2510938	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2548306	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	2124873	11.29	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	112.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	83541	0.578	ppbv	99
3) Chlorodifluoromethane	3.02	51	14257m	0.174	ppbv	
4) Chloromethane	3.18	50	27559	0.578	ppbv	90
9) Propene	3.05	41	44190m	1.364	ppbv	
11) Trichlorofluoromethane	4.01	101	38804	0.285	ppbv	84
13) Ethanol	3.65	45	145409	13.034	ppbv	93
15) Acetone	3.91	43	315453	3.397	ppbv	99
19) Isopropyl Alcohol	4.05	45	56887m	0.975	ppbv	
20) Methylene Chloride	4.41	84	26475	0.583	ppbv #	88
26) Hexane	5.78	57	99114	0.979	ppbv #	62
34) 2-Butanone	5.34	43	102103	0.934	ppbv	99
35) Carbon Tetrachloride	7.13	117	13692m	0.069	ppbv	
36) Benzene	7.01	78	71460	0.387	ppbv	98
38) Trichloroethene	7.97	130	8723m	0.113	ppbv	
44) 2,2,4-Trimethylpentane	7.99	57	27091m	0.086	ppbv	
52) Tetrachloroethene	11.38	164	2085m	0.031	ppbv	
53) Toluene	9.95	91	2341140	11.952	ppbv	99
59) m/p-Xylene	13.13	91	56217m	0.228	ppbv	
60) o-Xylene	13.87	91	28370m	0.114	ppbv	
74) 1,2,4-Trimethylbenzene	16.94	105	101888m	0.333	ppbv	

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

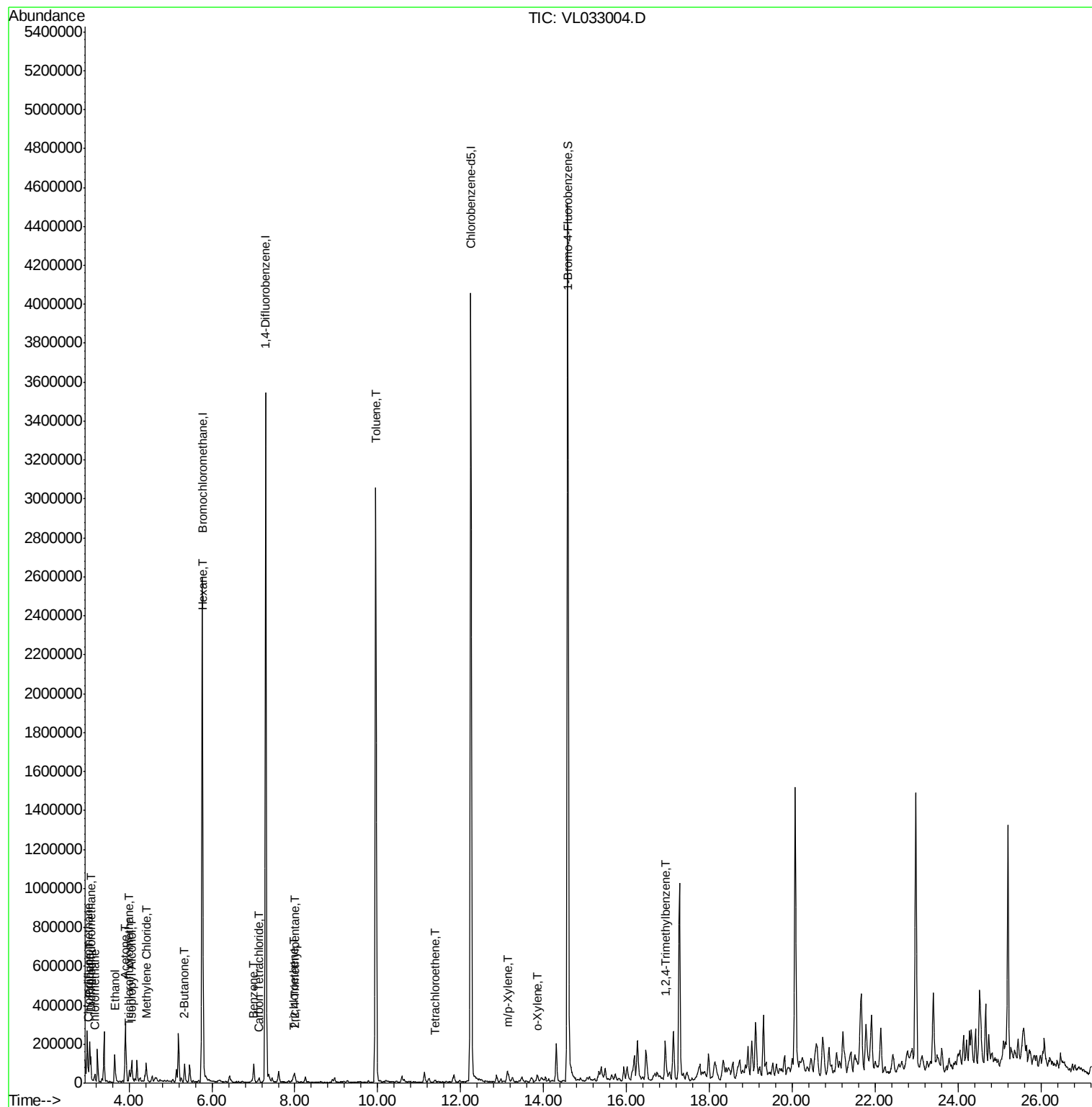
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121718\
Data File : VL033004.D
Acq On : 17 Dec 2018 20:33
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P0131-IA001-181212-01

Manual Integrations
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Quant Time: Dec 19 15:28:55 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec
QLast Update : Fri Dec 07 09:35:17 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. -0.01 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Instrument :

MSVOA_L

ClientSampleId :

P0131-IA001-181212-01

Tot Ion: 49 Resp: 1081966

Ion Ratio Lower Upper

49 100

128 52.7 26.3 78.8

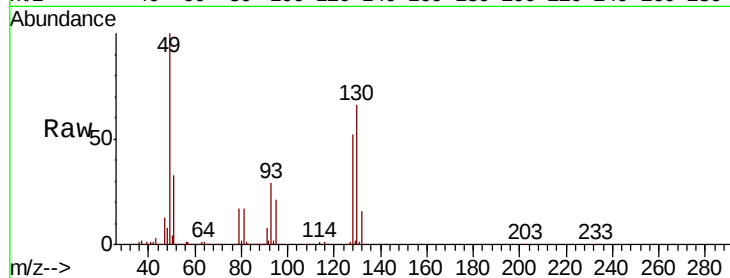
130 67.4 33.9 101.7

Manual Integrations

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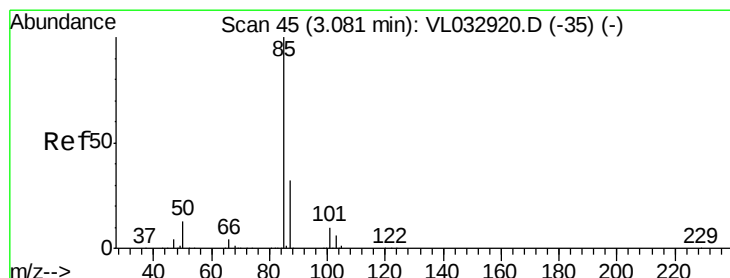
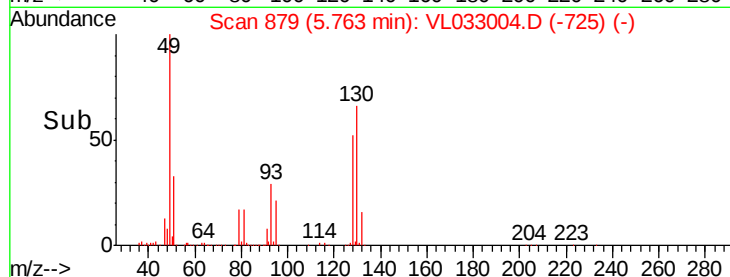
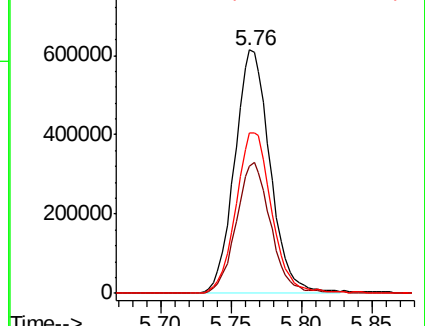
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.578 ppbv

RT: 3.08 min Scan# 44

Delta R.T. -0.00 min

Lab File: VL033004.D

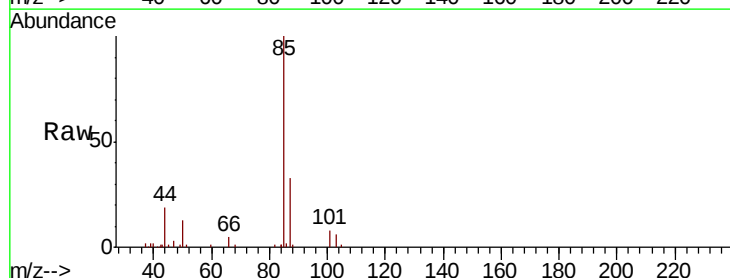
Acq: 17 Dec 2018 20:33

Tgt Ion: 85 Resp: 83541

Ion Ratio Lower Upper

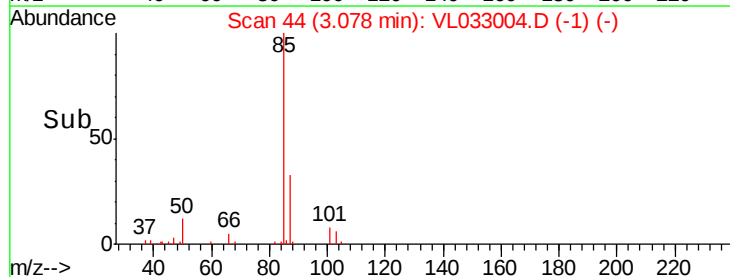
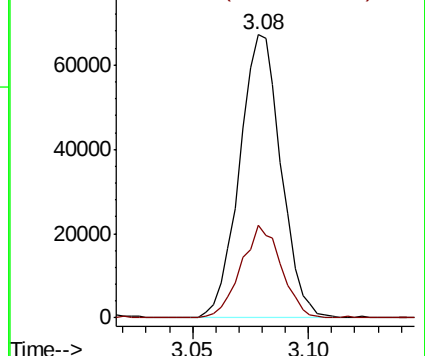
85 100

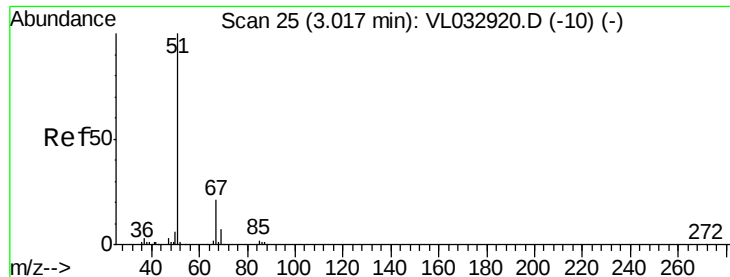
87 32.4 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

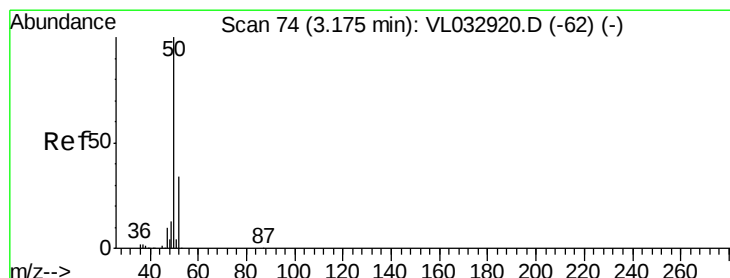
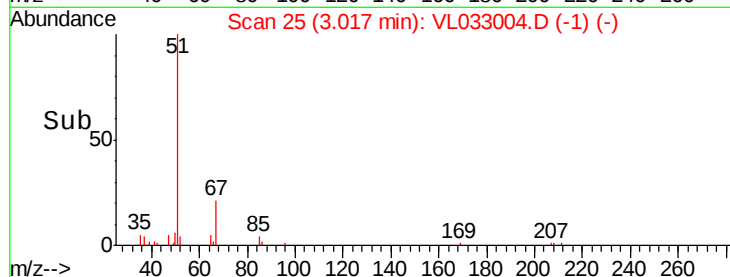
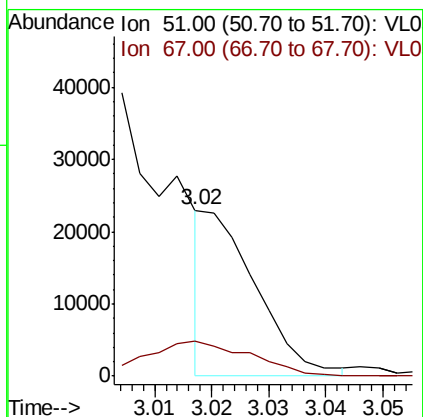
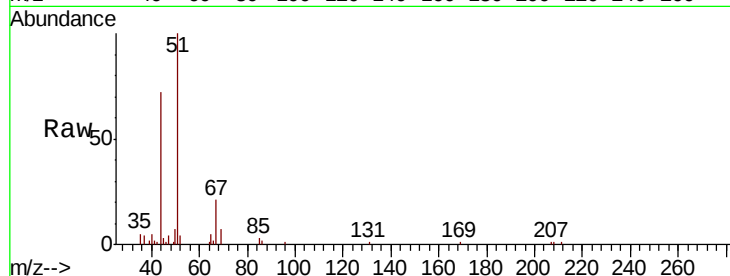
Chlorodifluoromethane
Concen: 0.174 ppbv
RT: 3.02 min Scan# 25
Delta R.T. 0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Instrument :
MSVOA_L
ClientSampleId :
P0131-IA001-181212-01

Tot Ion	Ratio	Lower	Upper
51	100		
67	44.7	16.8	25.2

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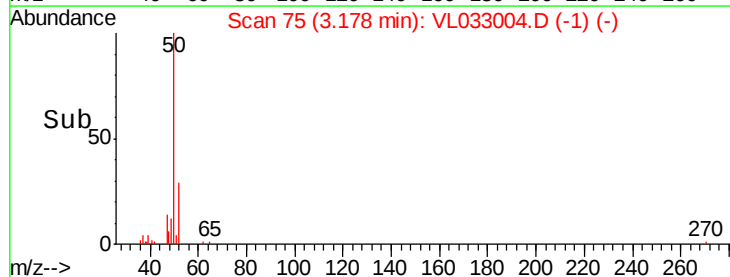
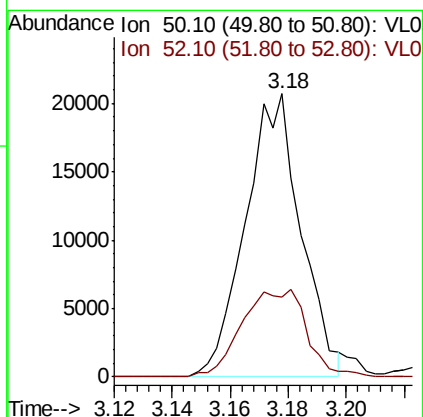
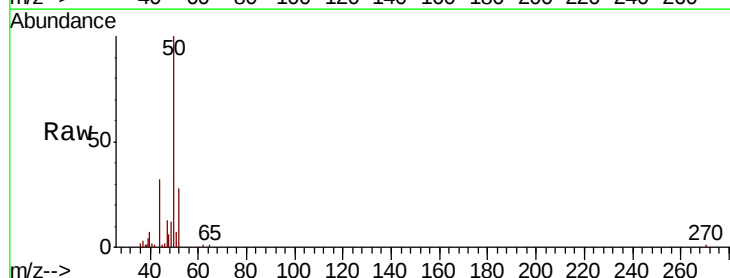
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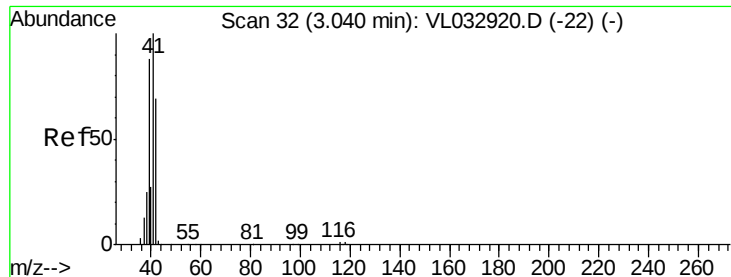


#4

Chloromethane
Concen: 0.578 ppbv
RT: 3.18 min Scan# 75
Delta R.T. 0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Tgt Ion	Ratio	Lower	Upper
50	100		
52	28.4	27.3	40.9





#9

Propene

Concen: 1.364 ppbv m

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Instrument :

MSVOA_L

ClientSampleId :

P0131-IA001-181212-01

Tot Ion: 41 Resp: 44190

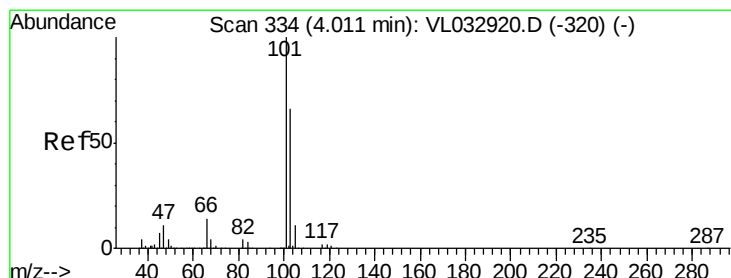
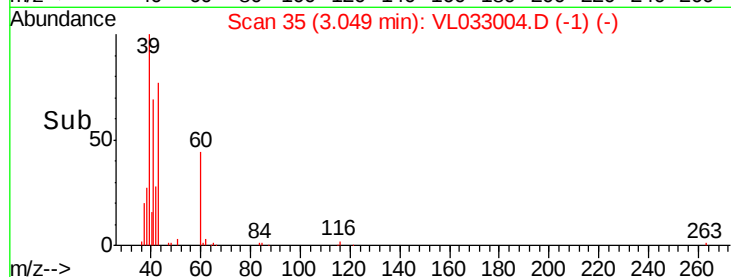
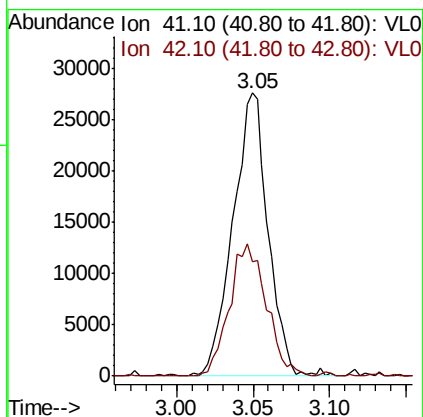
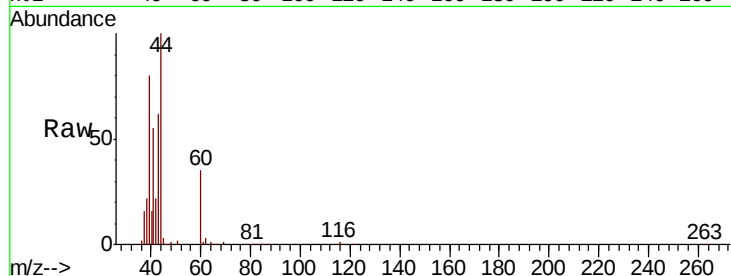
Ion Ratio Lower Upper

41 100

42 63.1 56.2 84.2

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#11

Trichlorofluoromethane

Concen: 0.285 ppbv

RT: 4.01 min Scan# 334

Delta R.T. 0.00 min

Lab File: VL033004.D

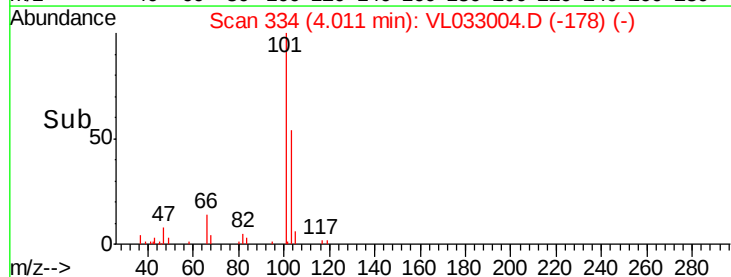
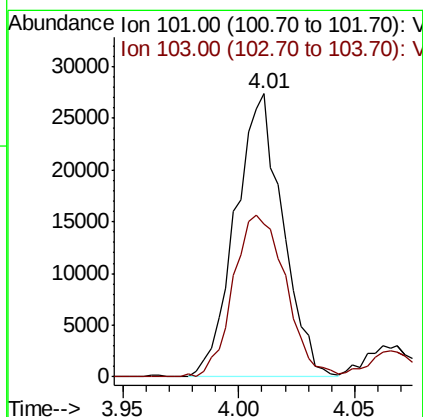
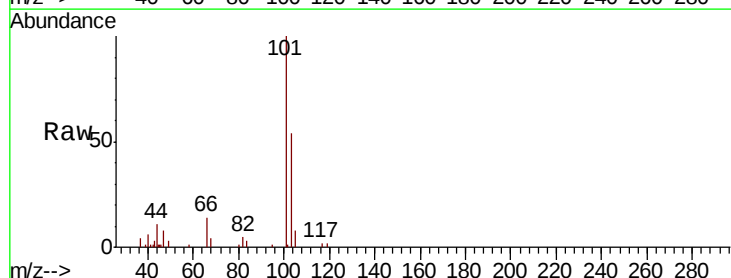
Acq: 17 Dec 2018 20:33

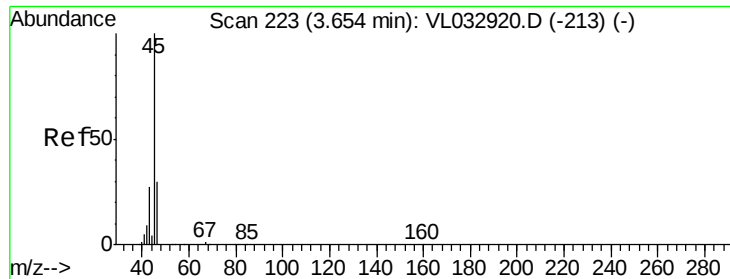
Tgt Ion: 101 Resp: 38804

Ion Ratio Lower Upper

101 100

103 53.1 52.7 79.1





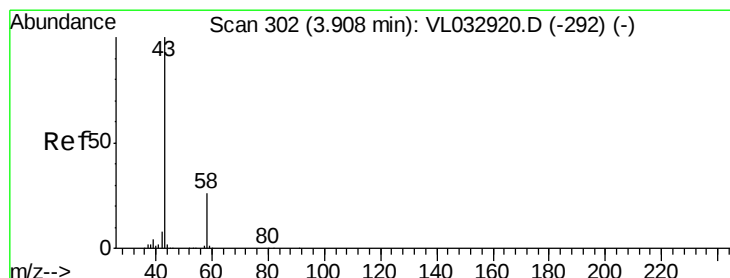
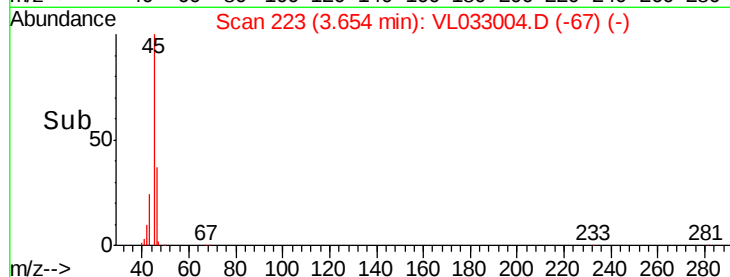
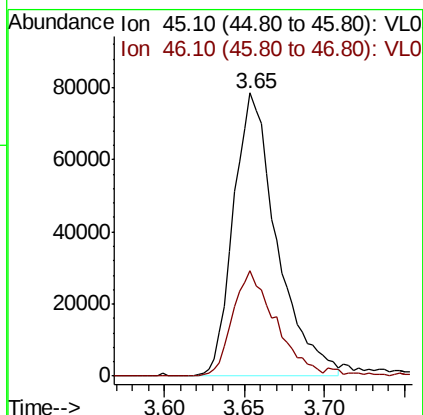
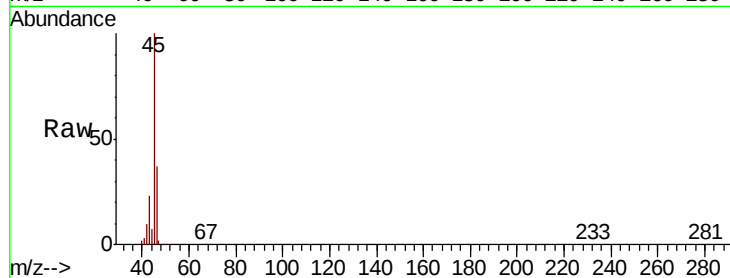
#13
Ethanol
Concen: 13.034 ppbv
RT: 3.65 min Scan# 223
Delta R.T. 0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Instrument :
MSVOA_L
ClientSampleId :
P0131-IA001-181212-01

Tot Ion: 45 Resp: 145409
Ion Ratio Lower Upper
45 100
46 38.5 13.8 55.4

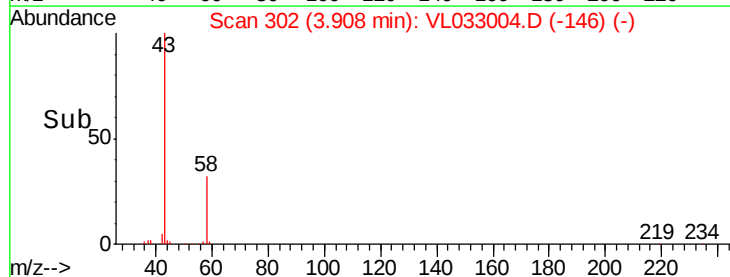
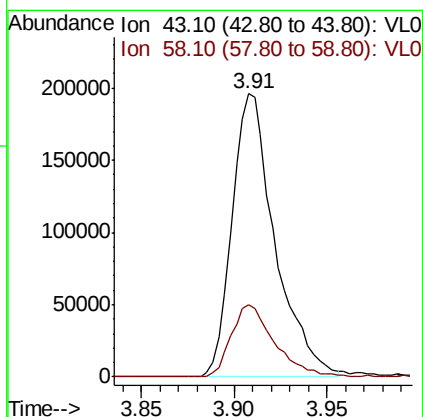
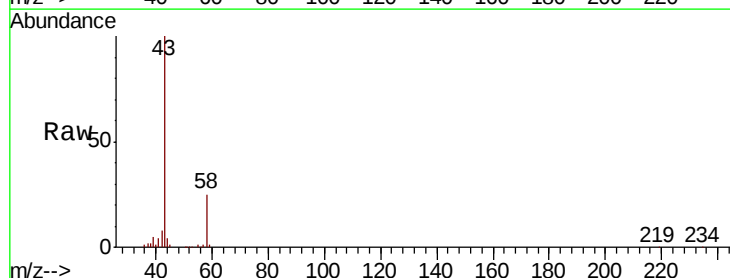
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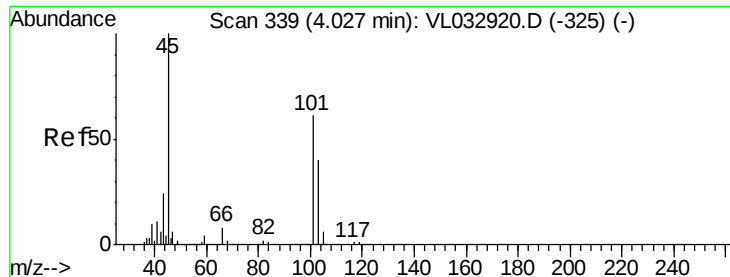
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#15
Acetone
Concen: 3.397 ppbv
RT: 3.91 min Scan# 302
Delta R.T. 0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Tgt Ion: 43 Resp: 315453
Ion Ratio Lower Upper
43 100
58 26.1 20.6 30.8





#19

Isopropyl Alcohol

Concen: 0.975 ppbv m

RT: 4.05 min Scan# 345

Delta R.T. 0.02 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Instrument :

MSVOA_L

ClientSampleId :

P0131-IA001-181212-01

Tot Ion: 45 Resp: 56887

Ion Ratio Lower Upper

45 100

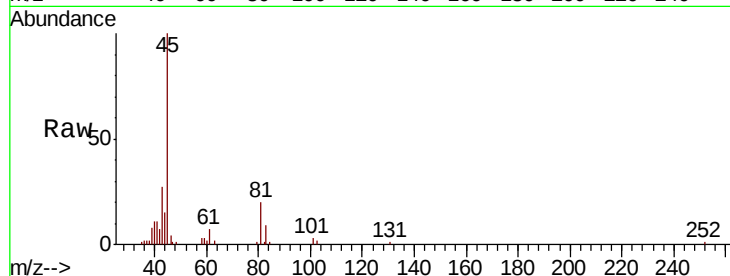
58 0.0 1.4 2.2#

Manual Integrations

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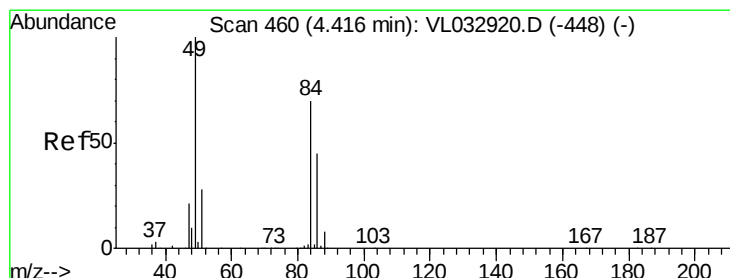
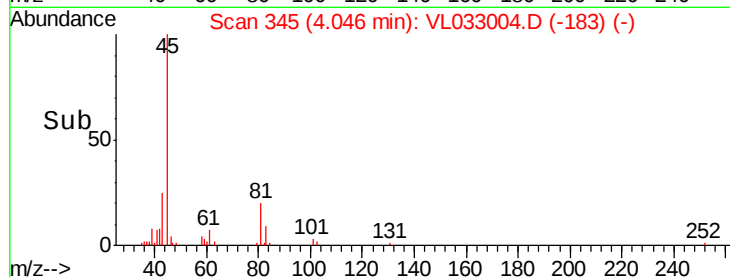
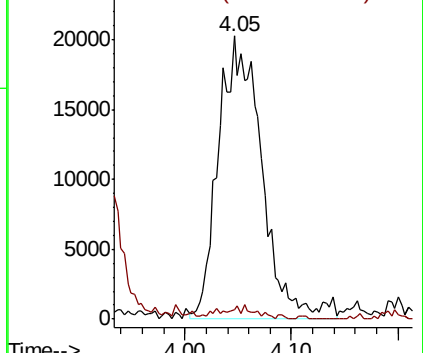
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 0.583 ppbv

RT: 4.41 min Scan# 459

Delta R.T. -0.00 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Tgt Ion: 84 Resp: 26475

Ion Ratio Lower Upper

84 100

49 124.0 113.8 170.8

51 31.7 31.8 47.8#

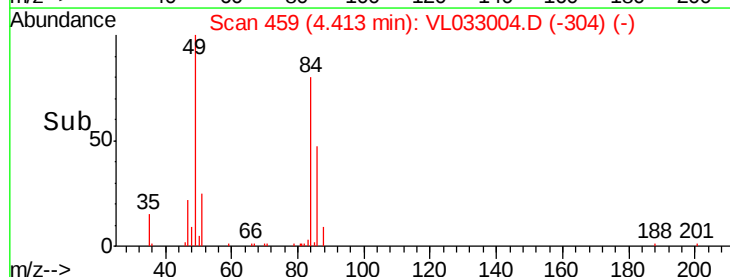
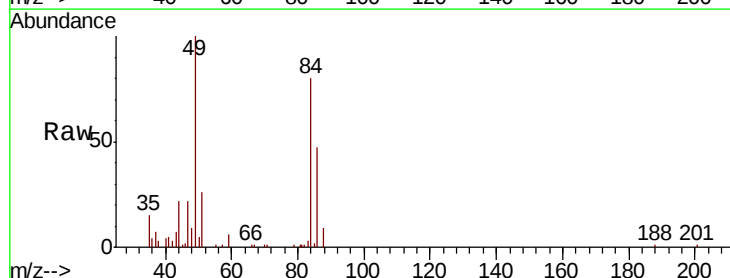
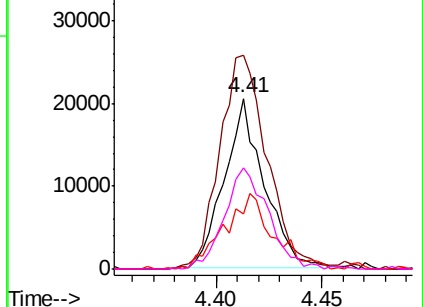
86 58.6 50.8 76.2

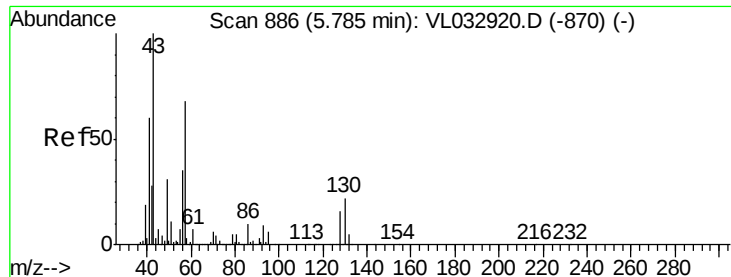
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





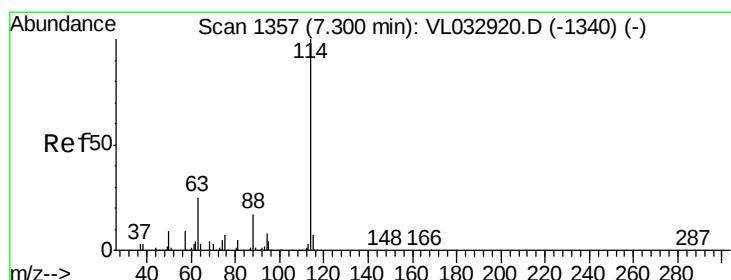
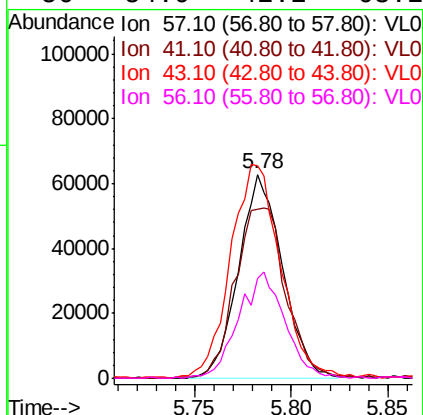
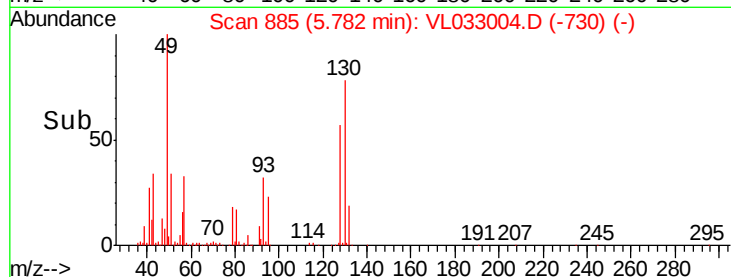
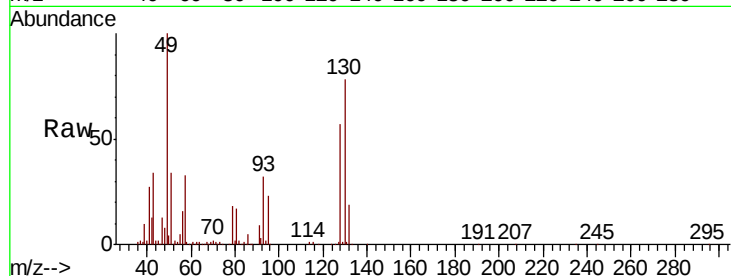
#26
Hexane
Concen: 0.979 ppbv
RT: 5.78 min Scan# 885
Delta R.T. -0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Instrument :
MSVOA_L
ClientSampleId :
P0131-IA001-181212-01

Tot Ion	Ratio	Lower	Upper
57	100		
41	96.4	72.2	108.2
43	120.0	171.9	257.9
56	54.9	42.2	63.2

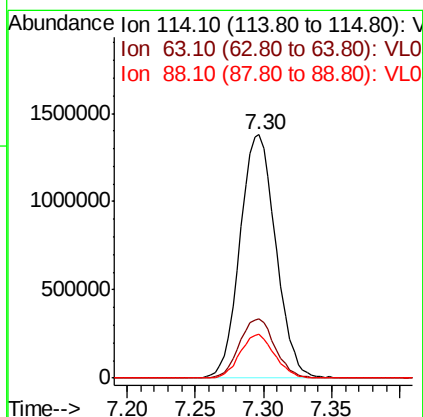
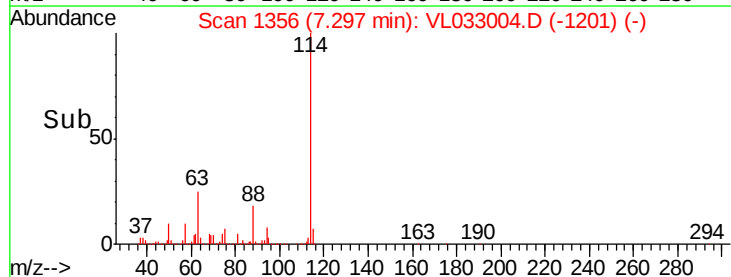
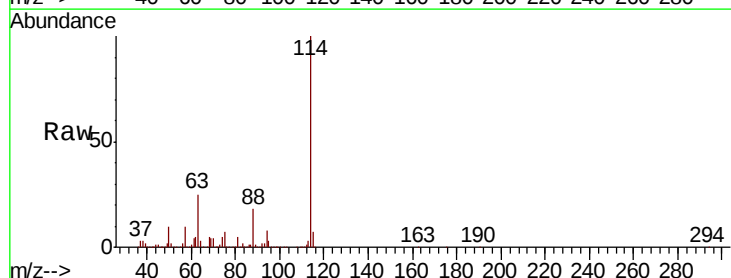
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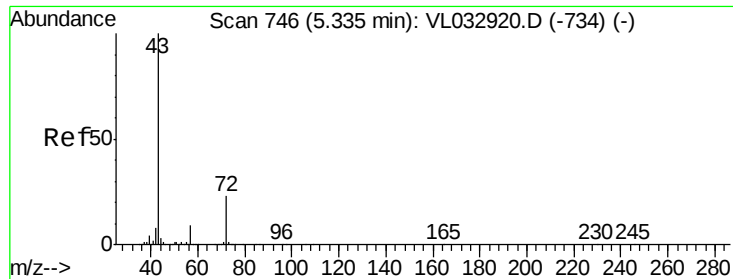
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1356
Delta R.T. -0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.4	20.1	30.1
88	17.4	14.2	21.4





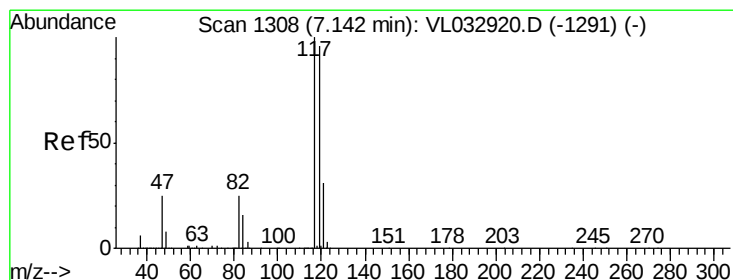
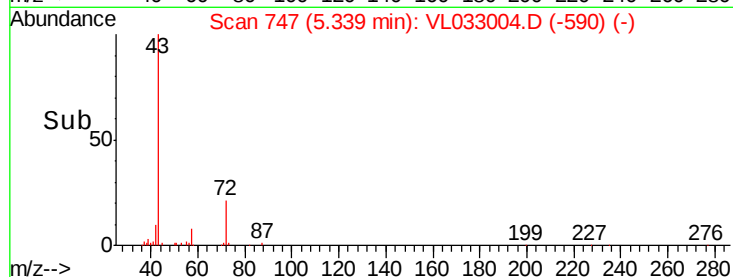
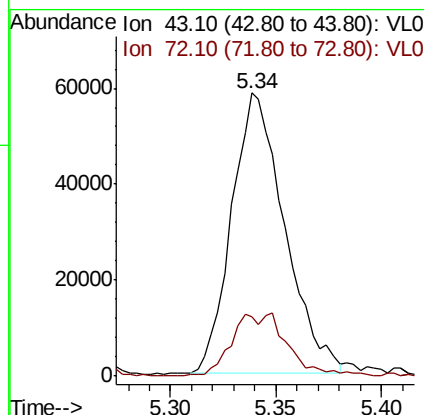
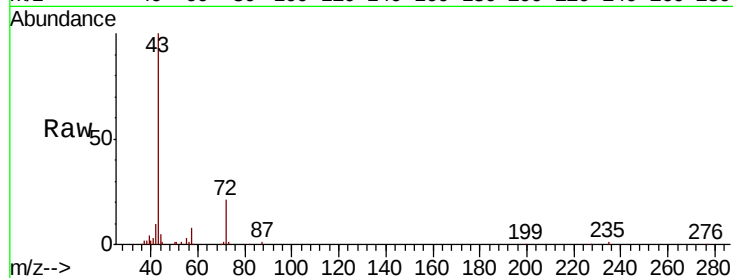
#34
2-Butanone
Concen: 0.934 ppbv
RT: 5.34 min Scan# 747
Delta R.T. 0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Instrument :
MSVOA_L
ClientSampleId :
P0131-IA001-181212-01

Tot Ion: 43 Resp: 102103
Ion Ratio Lower Upper
43 100
72 24.1 18.8 28.2

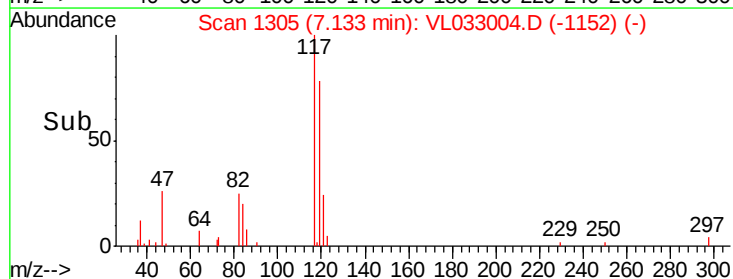
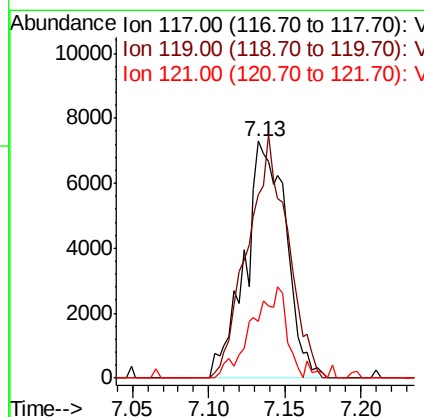
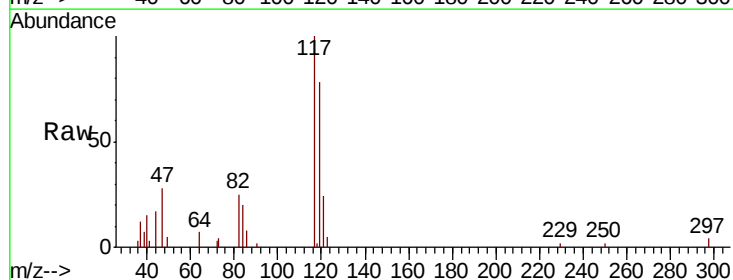
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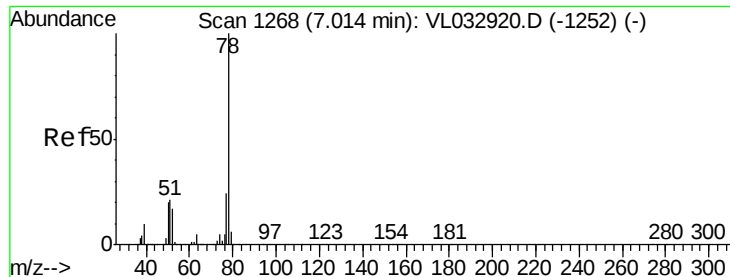
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#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 7.13 min Scan# 1305
Delta R.T. -0.01 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Tgt Ion: 117 Resp: 13692
Ion Ratio Lower Upper
117 100
119 77.5 76.5 114.7
121 24.2 24.5 36.7#





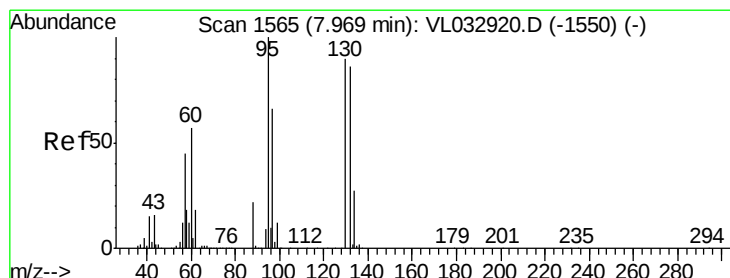
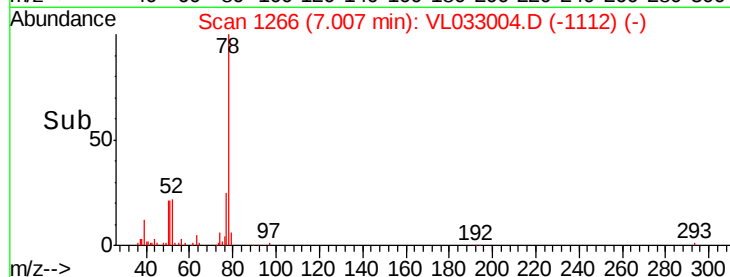
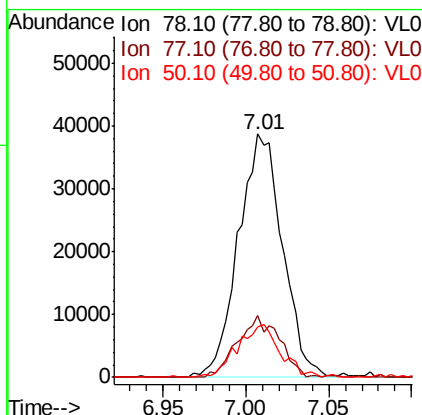
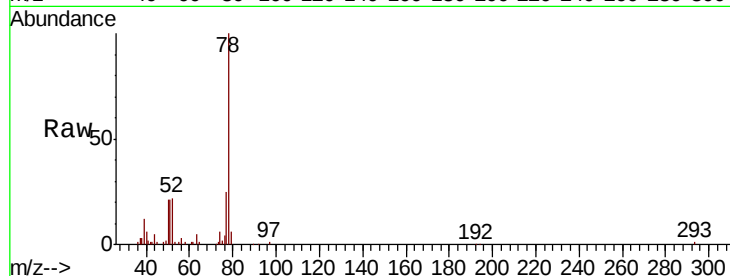
#36
Benzene
Concen: 0.387 ppbv
RT: 7.01 min Scan# 1266
Delta R.T. -0.01 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Instrument :
MSVOA_L
ClientSampleId :
P0131-IA001-181212-01

Tot Ion	Ratio	Lower	Upper
78	100		
77	25.2	18.9	28.3
50	20.7	16.1	24.1

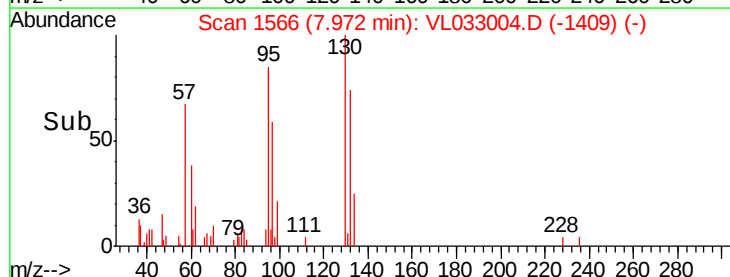
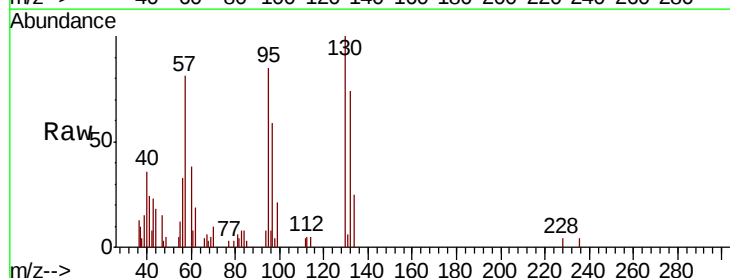
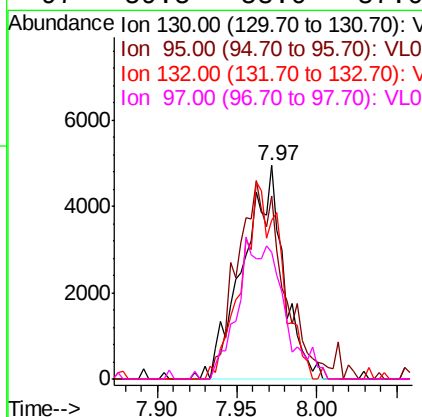
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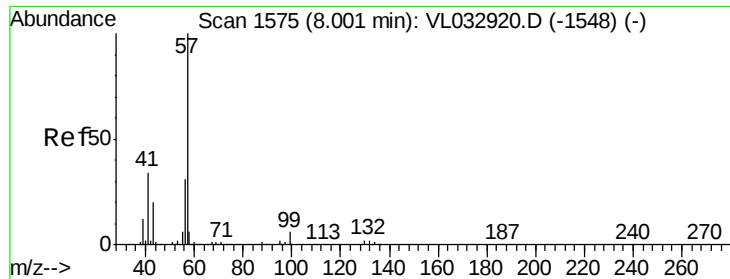
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#38
Trichloroethene
Concen: 0.113 ppbv m
RT: 7.97 min Scan# 1566
Delta R.T. 0.00 min
Lab File: VL033004.D
Acq: 17 Dec 2018 20:33

Tgt Ion	Ratio	Lower	Upper
130	100		
95	85.4	88.6	132.8#
132	74.3	76.1	114.1#
97	59.5	58.0	87.0





#44

2,2,4-Trimethylpentane

Concen: 0.086 ppbv m

RT: 7.99 min Scan# 1572

Delta R.T. -0.01 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Instrument :

MSVOA_L

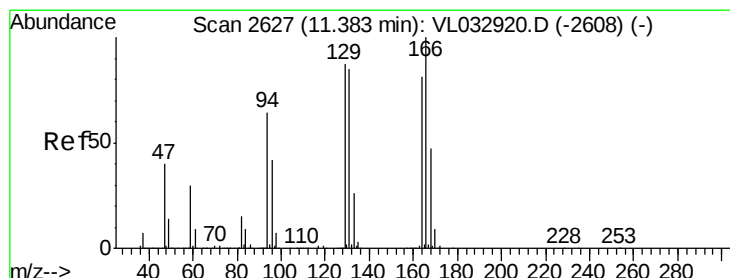
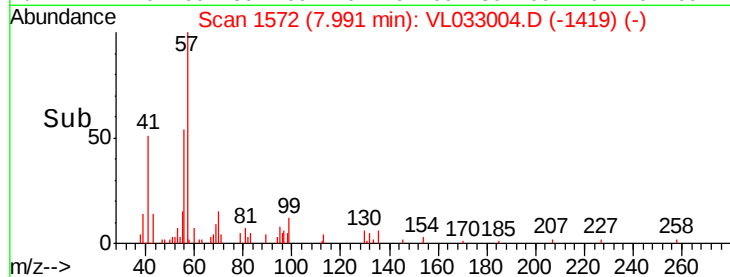
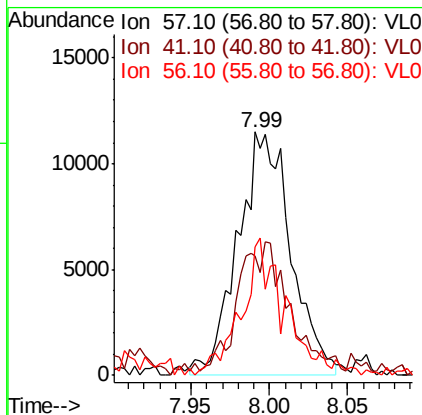
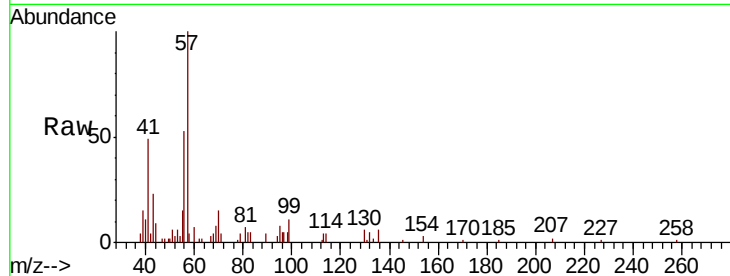
ClientSampleId :

P0131-IA001-181212-01

Tot Ion:	57	Resp:	27091
Ion Ratio	Lower	Upper	
57	100		
41	58.0	27.0	40.4#
56	48.5	24.6	37.0#

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#52

Tetrachloroethene

Concen: 0.031 ppbv m

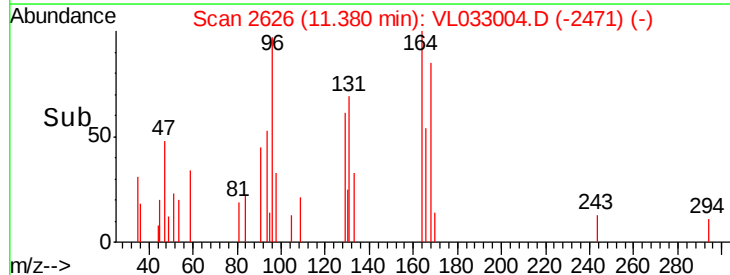
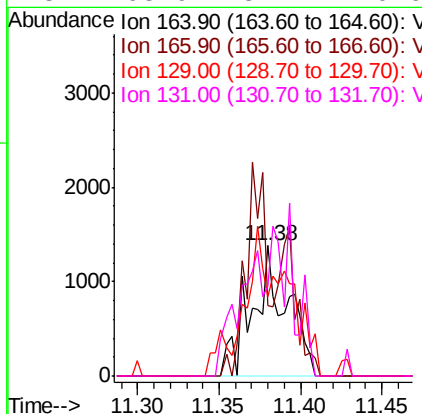
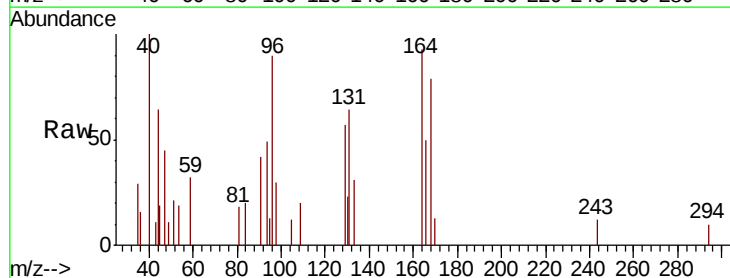
RT: 11.38 min Scan# 2626

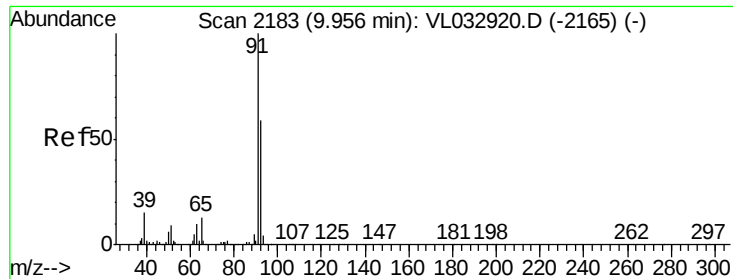
Delta R.T. -0.00 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Tgt Ion:	164	Resp:	2085
Ion Ratio	Lower	Upper	
164	100		
166	53.6	98.8	148.2#
129	61.0	85.5	128.3#
131	68.9	84.4	126.6#





#53

Toluene

Concen: 11.952 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. -0.01 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Instrument :

MSVOA_L

ClientSampleId :

P0131-IA001-181212-01

Tot Ion: 91 Resp: 2341140

Ion Ratio Lower Upper

91 100

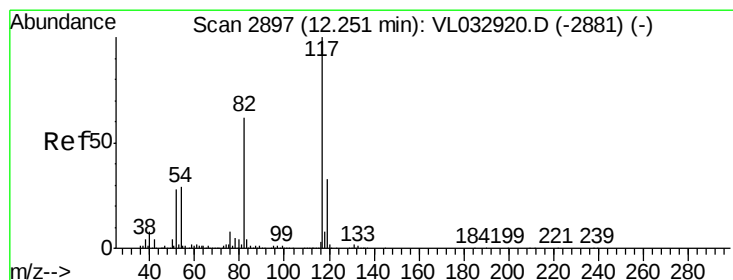
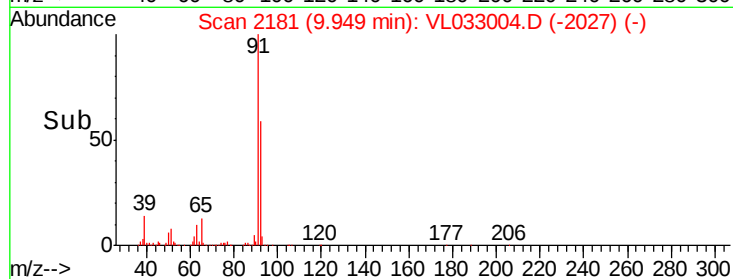
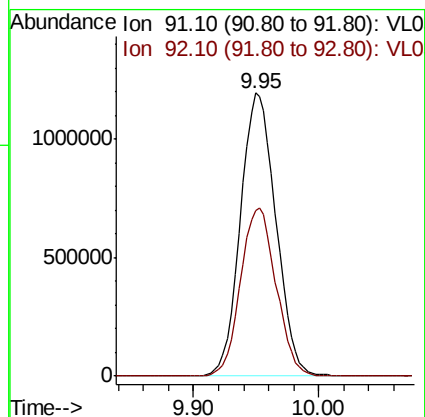
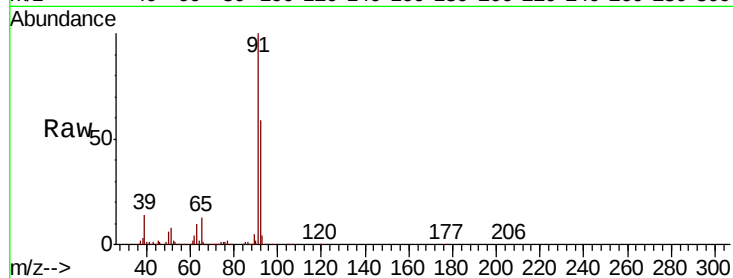
92 59.7 47.4 71.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

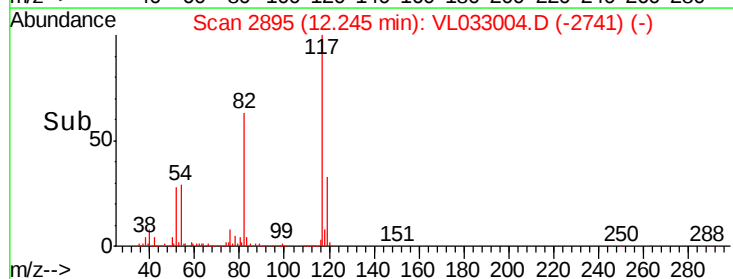
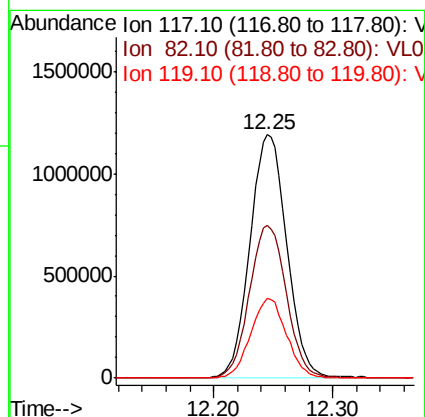
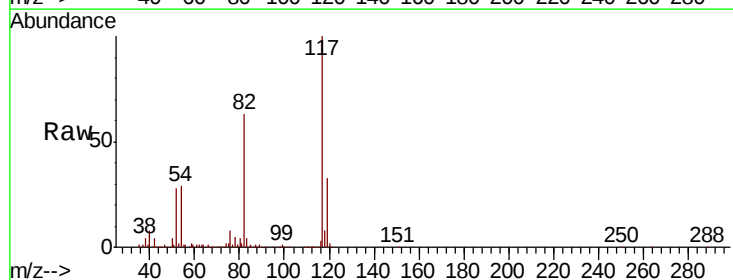
Tgt Ion: 117 Resp: 2548306

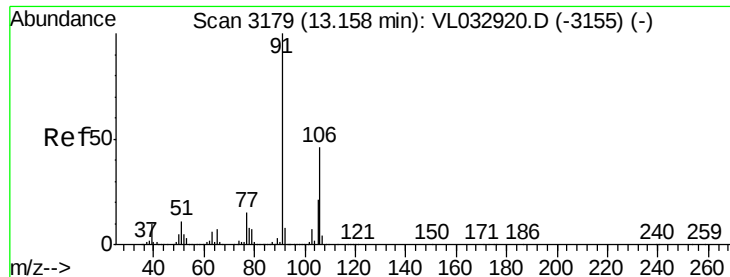
Ion Ratio Lower Upper

117 100

82 63.2 47.8 71.8

119 32.0 43.1 64.7#





#59

m/p-Xylene

Concen: 0.228 ppbv m

RT: 13.13 min Scan# 3171

Delta R.T. -0.03 min

Lab File: VL033004.D

Acq: 17 Dec 2018 20:33

Instrument :

MSVOA_L

ClientSampleId :

P0131-IA001-181212-01

Tot Ion: 91 Resp: 56217

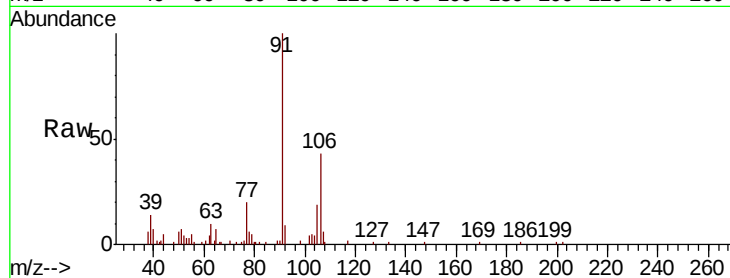
Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0

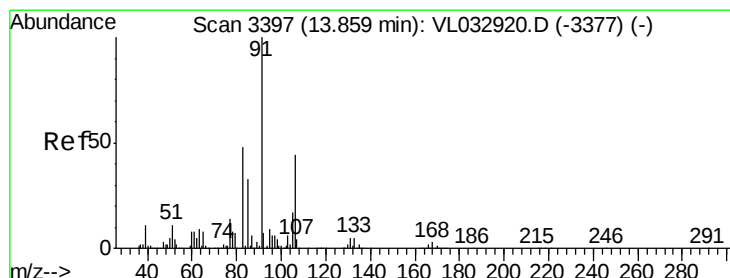
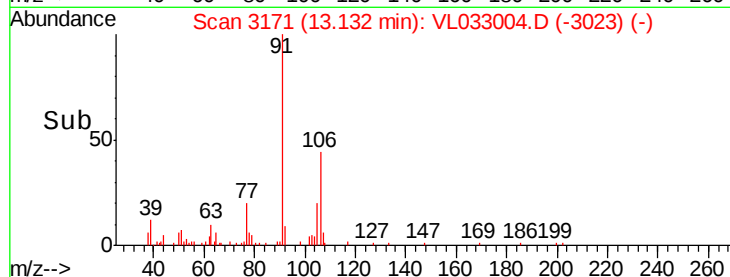
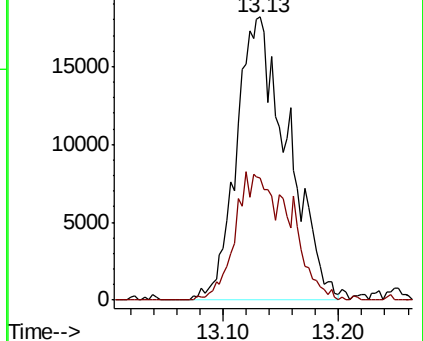
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 0.114 ppbv m

RT: 13.87 min Scan# 3399

Delta R.T. 0.01 min

Lab File: VL033004.D

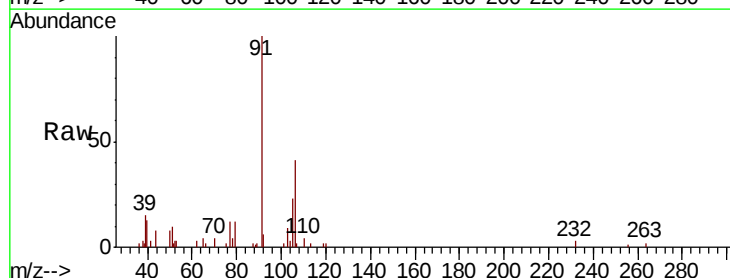
Acq: 17 Dec 2018 20:33

Tgt Ion: 91 Resp: 28370

Ion Ratio Lower Upper

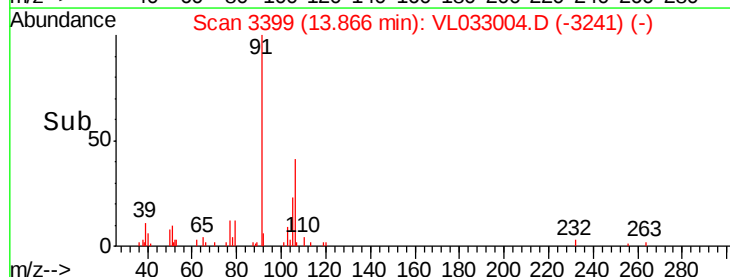
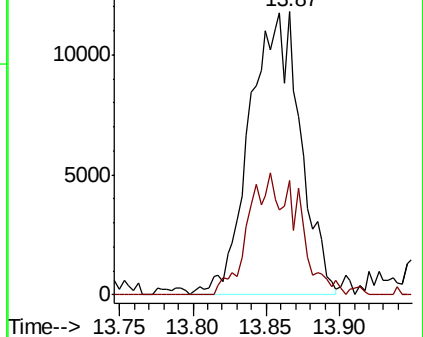
91 100

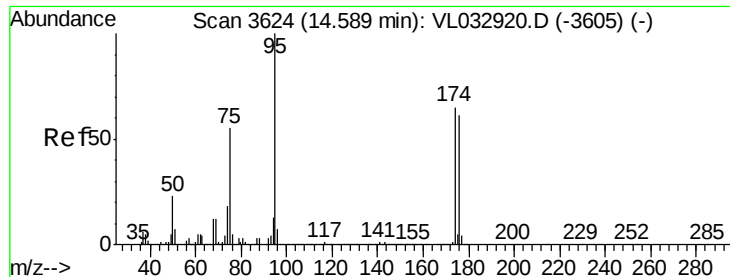
106 42.3 21.9 65.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





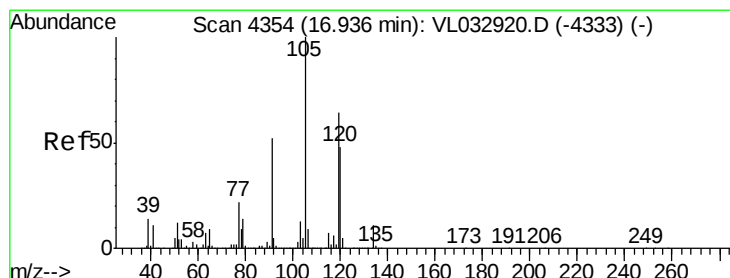
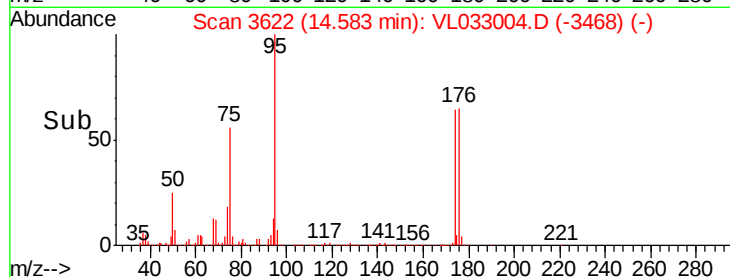
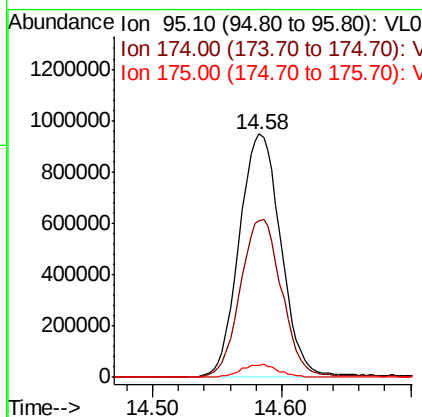
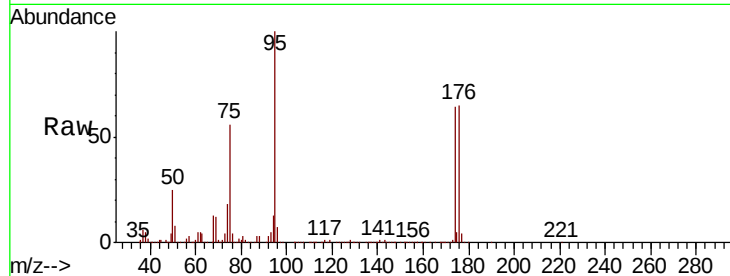
#68
 1-Bromo-4-Fluorobenzene
 Concen: 11.287 ppbv
 RT: 14.58 min Scan# 3622
 Delta R.T. -0.01 min
 Lab File: VL033004.D
 Acq: 17 Dec 2018 20:33

Instrument :
 MSVOA_L
 ClientSampleId :
 P0131-IA001-181212-01

Tot Ion: 95 Resp: 2124873
 Ion Ratio Lower Upper
 95 100
 174 66.0 51.4 77.0
 175 4.9 3.8 5.6

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.333 ppbv m
 RT: 16.94 min Scan# 4355
 Delta R.T. 0.00 min
 Lab File: VL033004.D
 Acq: 17 Dec 2018 20:33

Tgt Ion: 105 Resp: 101888
 Ion Ratio Lower Upper
 105 100
 120 45.1 38.6 58.0
 91 16.3 41.7 62.5#
 77 15.9 17.4 26.2#

