

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL112718\
 Data File : VL032827.D
 Acq On : 28 Nov 2018 12:10
 Operator : SY/AP
 Sample : J6046-05DUP
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP2-OA-01DUP

Manual Integrations
 APPROVED

MMDadoda
 11/28/2018 4:21:42 PM

Quant Time: Nov 28 15:25:40 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 14 07:00:23 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1204952	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3072705	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2741344	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.59	95	2033333	9.92	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.09	85	104239	0.60	ppbv	95
3) Chlorodifluoromethane	3.02	51	65834m	0.69	ppbv	
4) Chloromethane	3.18	50	26114	0.49	ppbv #	87
9) Propene	3.06	41	76841m	2.01	ppbv	
11) Trichlorofluoromethane	4.01	101	62890	0.39	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.57	101	14268	0.11	ppbv	97
13) Ethanol	3.67	45	235131	18.78	ppbv	99
15) Acetone	3.91	43	484135	4.40	ppbv	93
19) Isopropyl Alcohol	4.05	45	126817	1.73	ppbv #	91
20) Methylene Chloride	4.42	84	254101	4.46	ppbv	92
26) Hexane	5.79	57	237275	2.08	ppbv #	51
34) 2-Butanone	5.35	43	57345	0.36	ppbv	97
35) Carbon Tetrachloride	7.14	117	21182m	0.09	ppbv	
36) Benzene	7.02	78	90520	0.37	ppbv	94
52) Tetrachloroethene	11.39	164	6304m	0.07	ppbv	
53) Toluene	9.96	91	204580	0.80	ppbv	96
59) m/p-Xylene	13.13	91	53948m	0.18	ppbv	

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

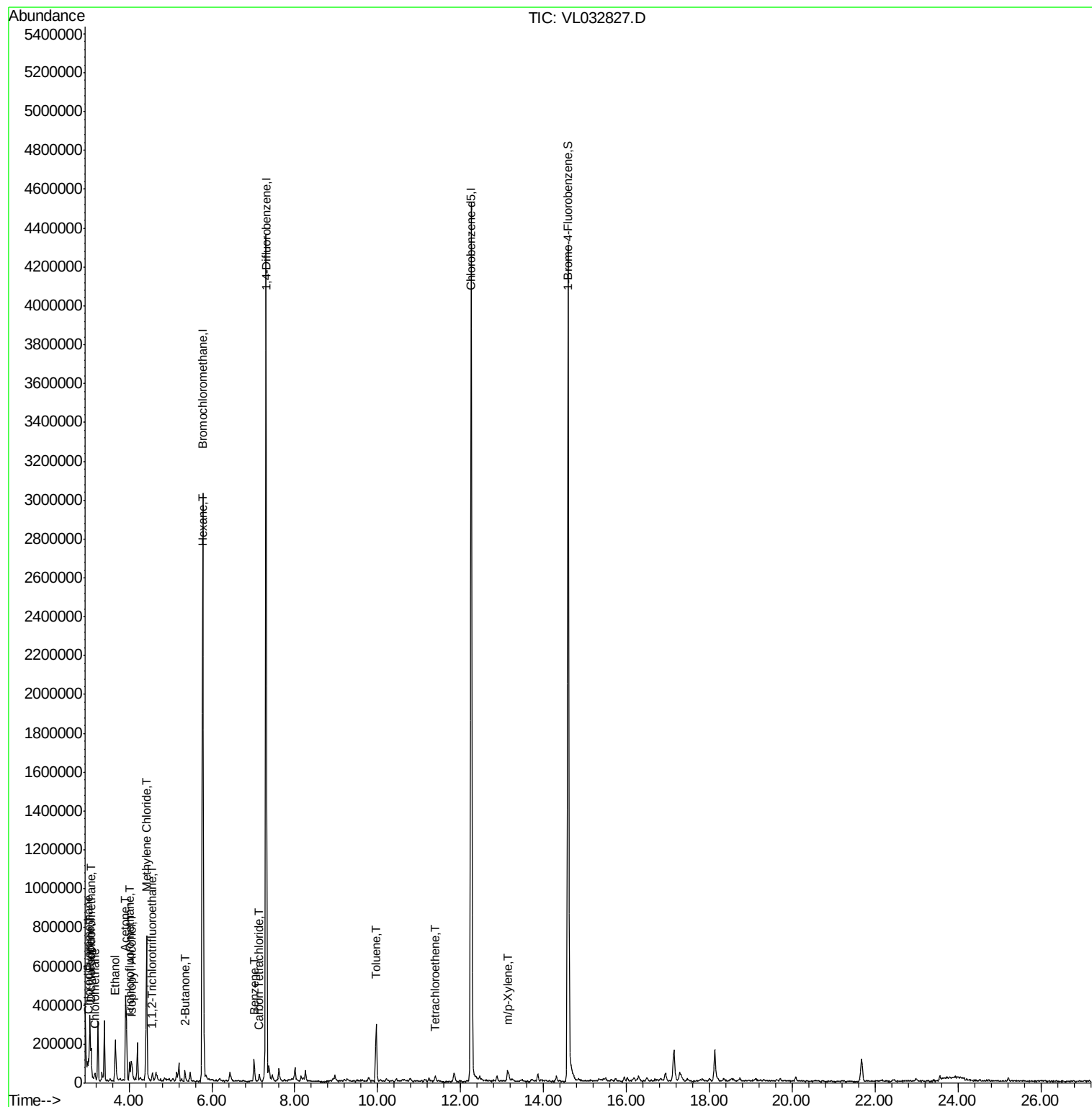
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL112718\
Data File : VL032827.D
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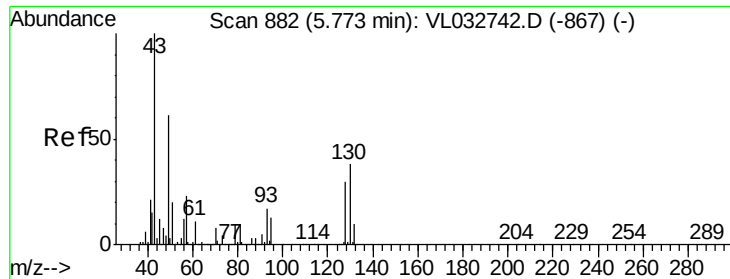
Instrument :
MSVOA_L
ClientSampleId :
EP2-OA-01DUP

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Quant Time: Nov 28 15:25:40 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.00 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

ClientSampleId :

EP2-OA-01DUP

Tgt Ion: 49 Resp: 1204952

Ion Ratio Lower Upper

49 100

128 52.6 24.9 74.6

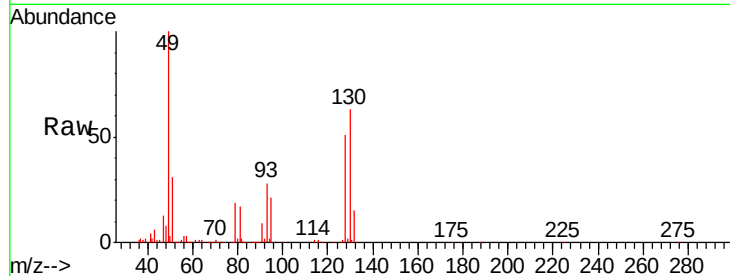
130 66.1 31.4 94.2

Manual Integrations

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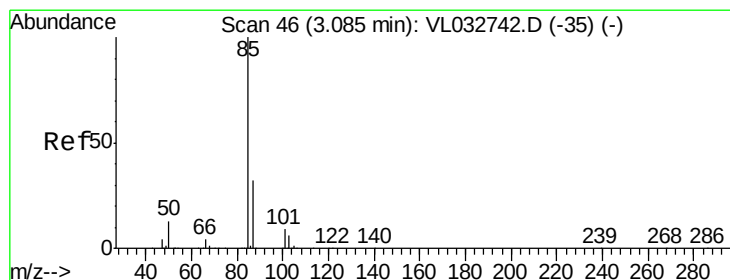
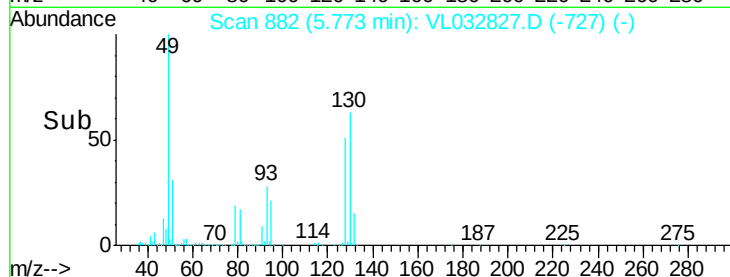
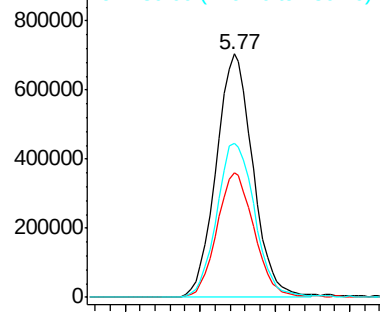
11/28/2018 4:21:42 PM



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: 0.60 ppbv

RT: 3.09 min Scan# 47

Delta R.T. 0.00 min

Lab File: VL032827.D

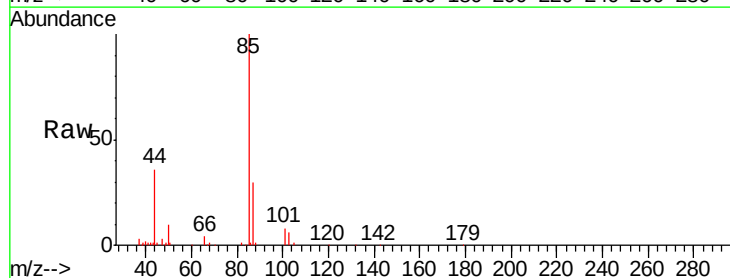
Acq: 28 Nov 2018 12:10

Tgt Ion: 85 Resp: 104239

Ion Ratio Lower Upper

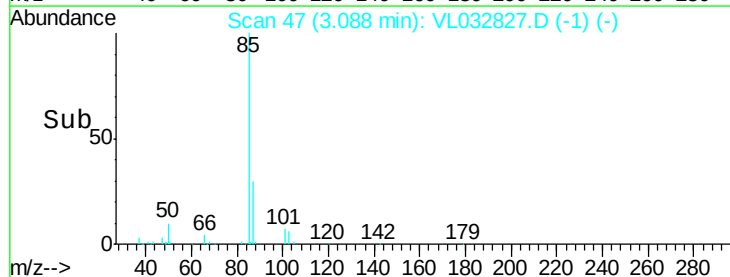
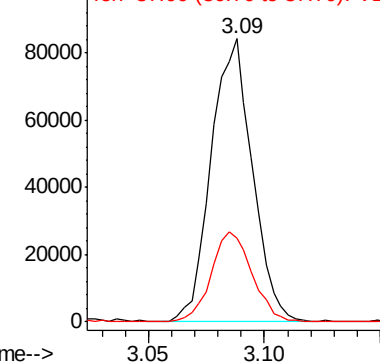
85 100

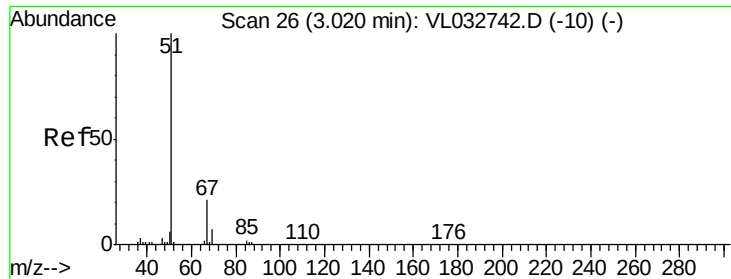
87 29.5 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.69 ppbv m

RT: 3.02 min Scan# 27

Delta R.T. 0.00 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

ClientSampleId :

EP2-OA-01DUP

Tgt Ion: 51 Resp: 65834

Ion Ratio Lower Upper

51 100

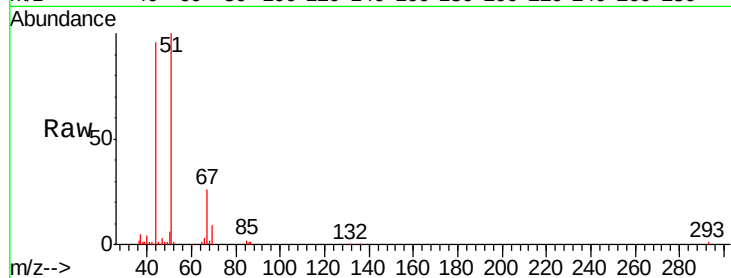
67 22.2 16.1 24.1

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.02

50000

40000

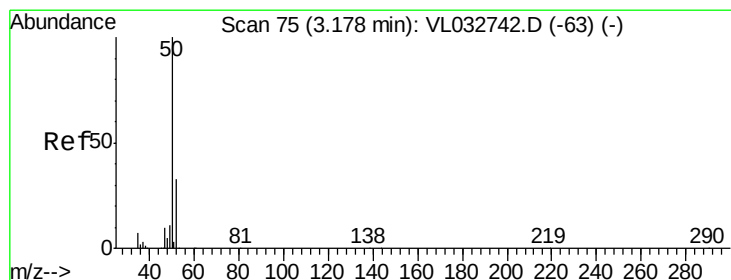
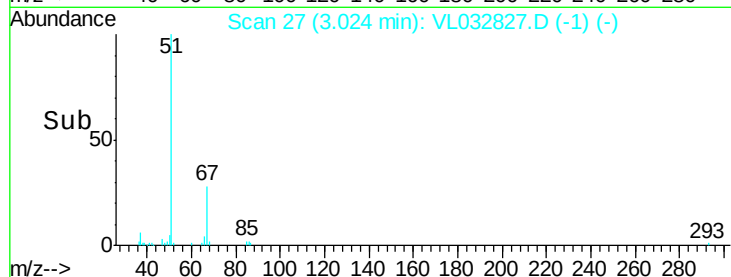
30000

20000

10000

0

Time-->



#4

Chloromethane

Concen: 0.49 ppbv

RT: 3.18 min Scan# 77

Delta R.T. 0.01 min

Lab File: VL032827.D

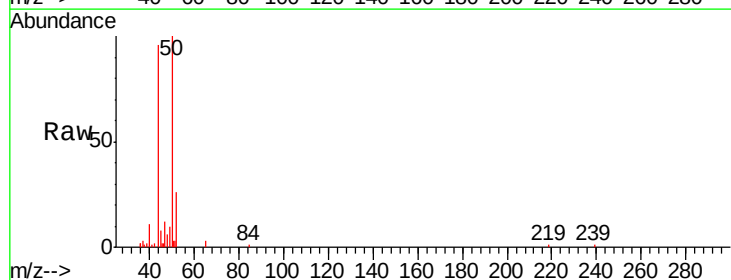
Acq: 28 Nov 2018 12:10

Tgt Ion: 50 Resp: 26114

Ion Ratio Lower Upper

50 100

52 26.0 26.6 40.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.18

20000

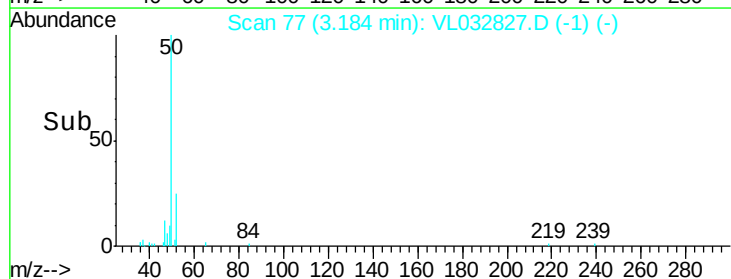
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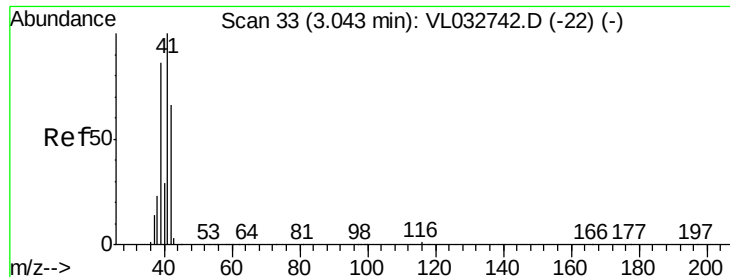
10000

5000

0

Time-->





#9

Propene

Concen: 2.01 ppbv m

RT: 3.06 min Scan# 37

Delta R.T. 0.01 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

ClientSampleId :

EP2-OA-01DUP

Tgt Ion: 41 Resp: 76841

Ion Ratio Lower Upper

41 100

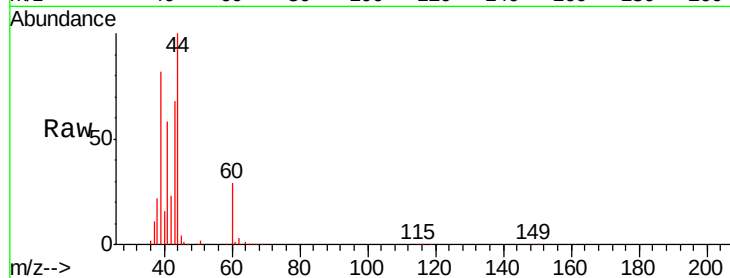
42 64.1 55.0 82.6

Manual Integrations

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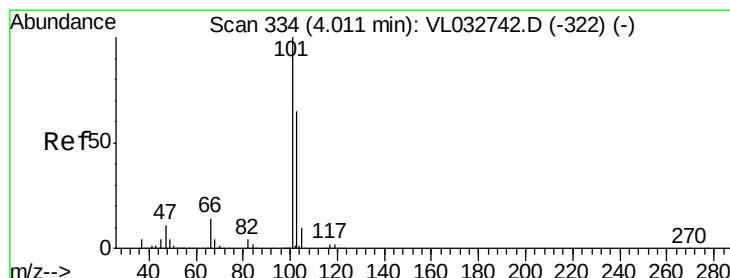
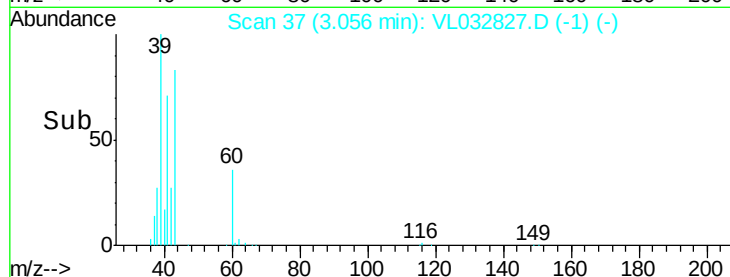
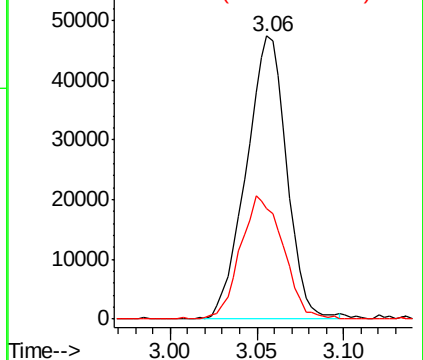
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.39 ppbv

RT: 4.01 min Scan# 335

Delta R.T. 0.00 min

Lab File: VL032827.D

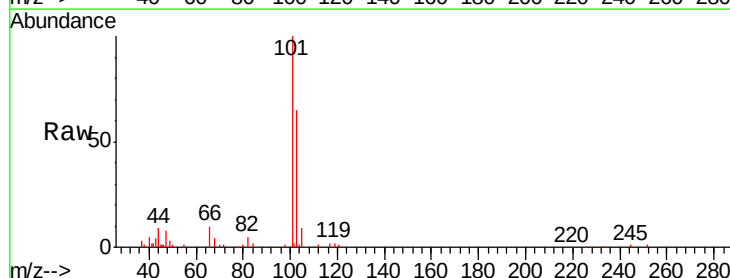
Acq: 28 Nov 2018 12:10

Tgt Ion: 101 Resp: 62890

Ion Ratio Lower Upper

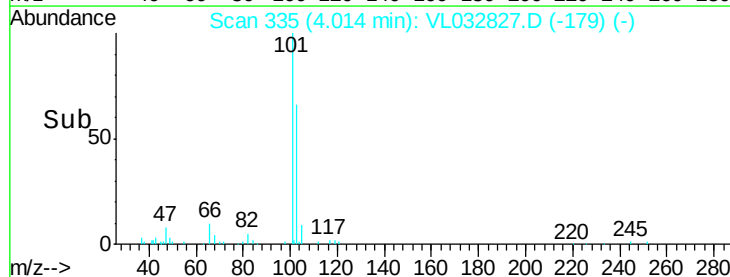
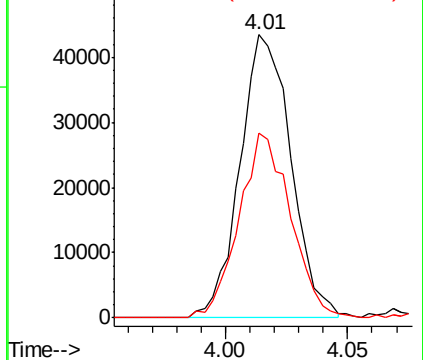
101 100

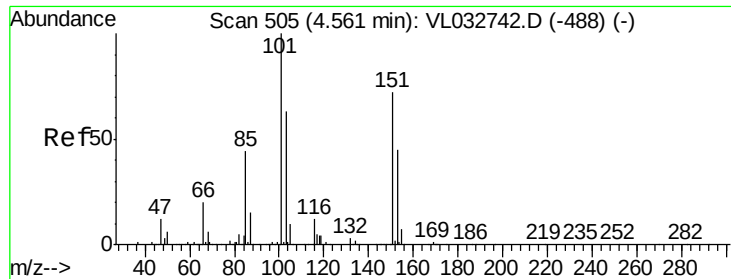
103 65.4 51.6 77.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.11 ppbv

RT: 4.57 min Scan# 507

Delta R.T. 0.01 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

ClientSampleId :

EP2-OA-01DUP

Tgt Ion: 101 Resp: 14268

Ion Ratio Lower Upper

101 100

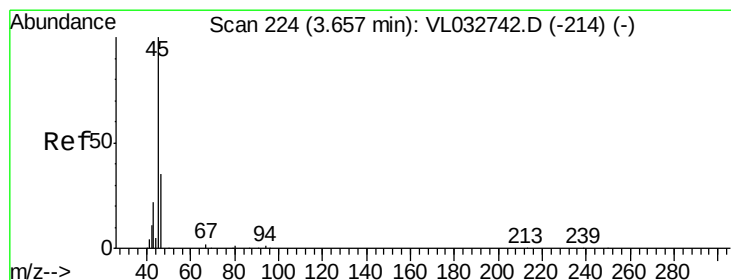
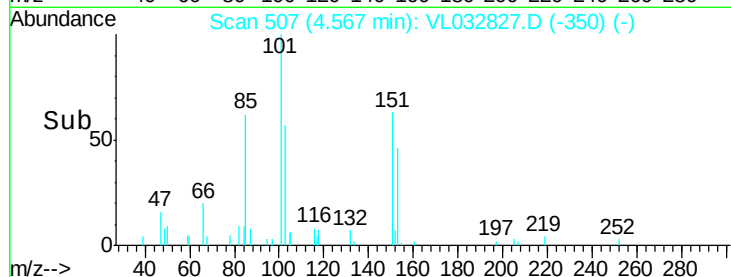
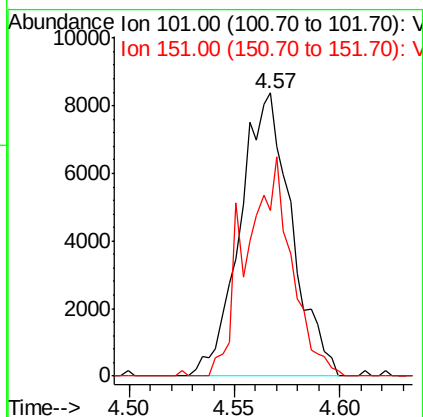
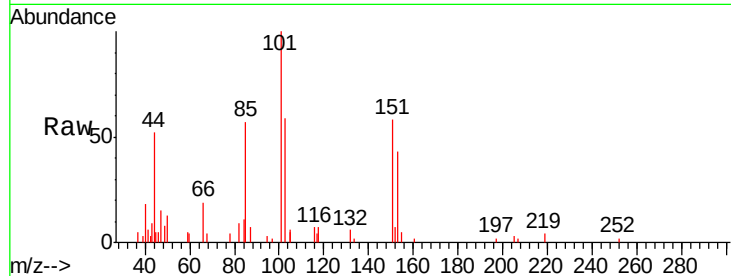
151 68.3 56.7 85.1

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#13

Ethanol

Concen: 18.78 ppbv

RT: 3.67 min Scan# 228

Delta R.T. 0.01 min

Lab File: VL032827.D

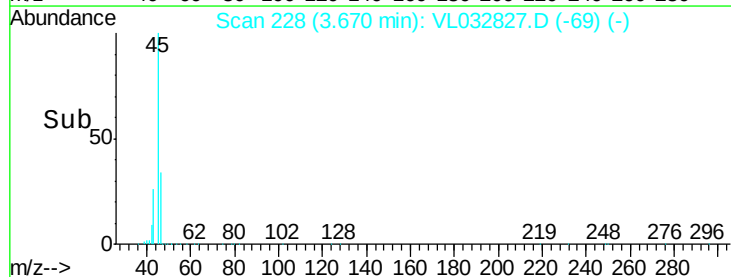
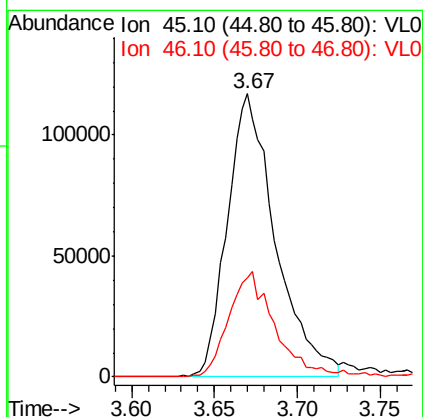
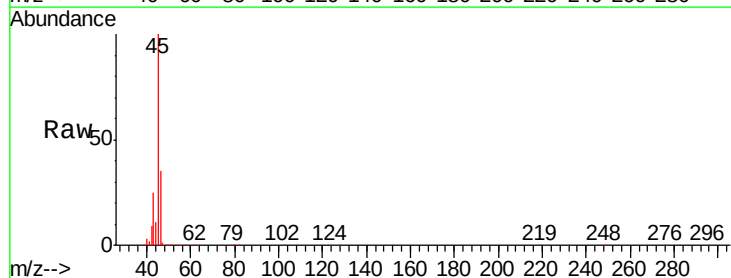
Acq: 28 Nov 2018 12:10

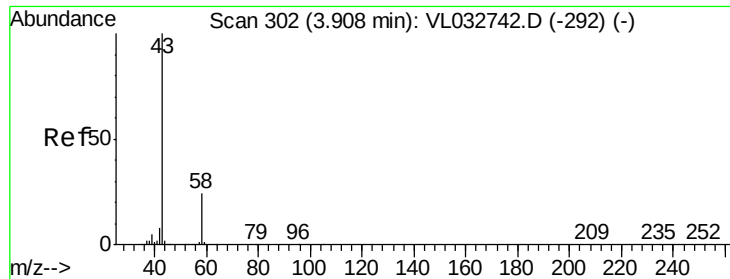
Tgt Ion: 45 Resp: 235131

Ion Ratio Lower Upper

45 100

46 36.9 14.5 57.9





#15

Acetone

Concen: 4.40 ppbv

RT: 3.91 min Scan# 304

Delta R.T. 0.01 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

ClientSampleId :

EP2-OA-01DUP

Tgt Ion: 43 Resp: 484135

Ion Ratio Lower Upper

43 100

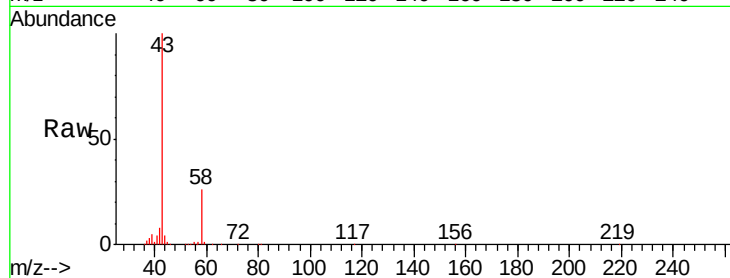
58 23.0 21.1 31.7

Manual Integrations

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

300000

250000

200000

150000

100000

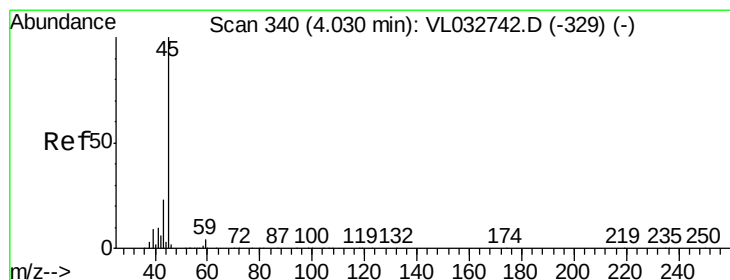
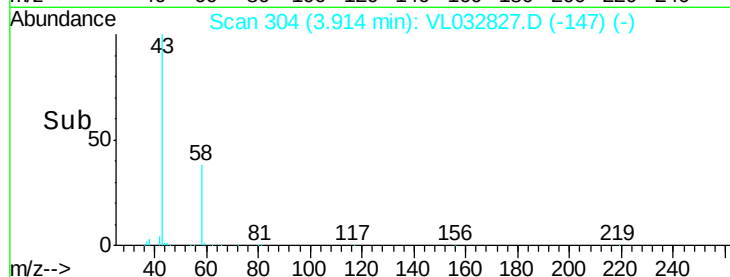
50000

0

Time-->

3.85 3.90 3.95 4.00

3.91



#19

Isopropyl Alcohol

Concen: 1.73 ppbv

RT: 4.05 min Scan# 347

Delta R.T. 0.02 min

Lab File: VL032827.D

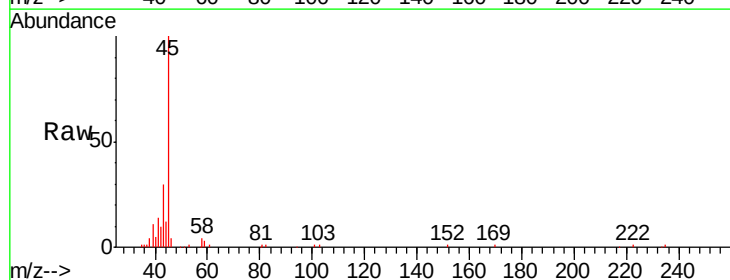
Acq: 28 Nov 2018 12:10

Tgt Ion: 45 Resp: 126817

Ion Ratio Lower Upper

45 100

58 5.0 1.4 2.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

60000

50000

40000

30000

20000

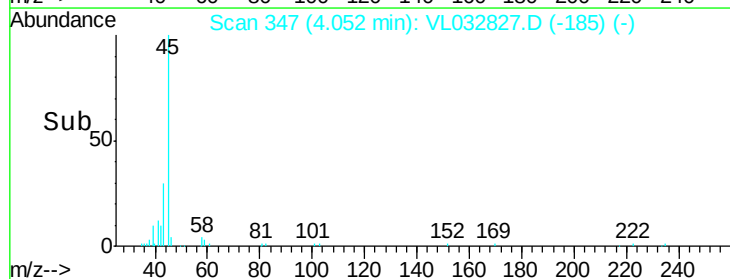
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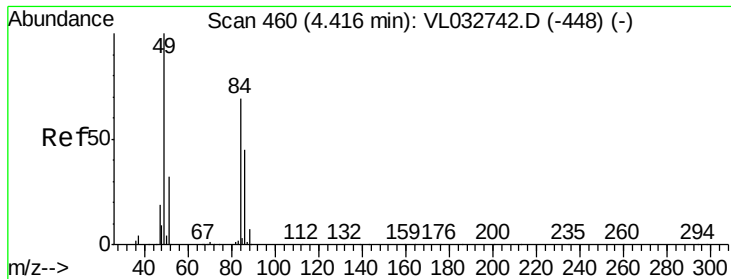
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Time-->

4.00 4.05 4.10

4.05





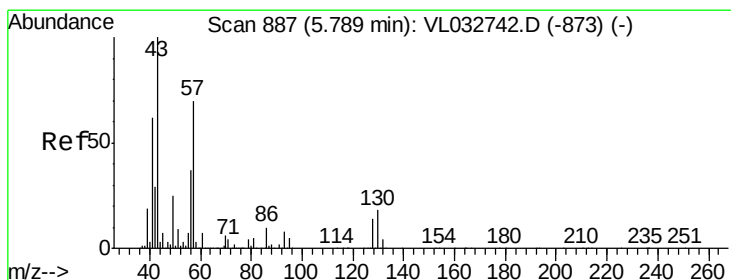
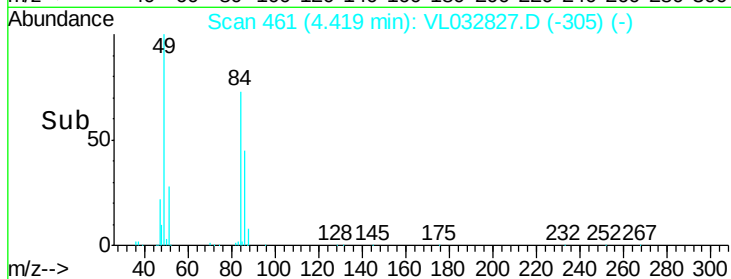
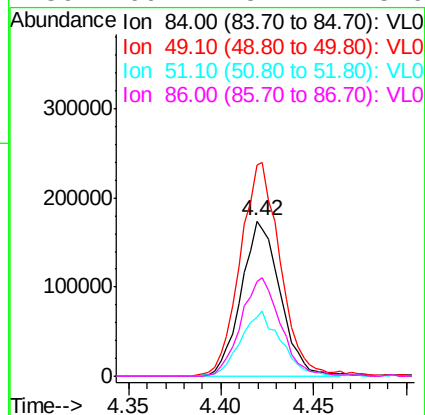
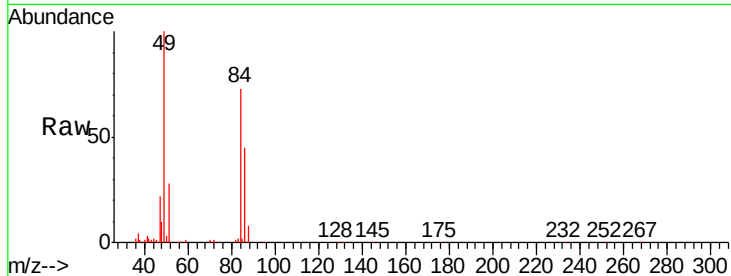
#20
Methylene Chloride
Concen: 4.46 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL032827.D
Acq: 28 Nov 2018 12:10

Instrument :
MSVOA_L
ClientSampleId :
EP2-OA-01DUP

Tgt Ion	Ratio	Lower	Upper
84	100		
49	136.0	115.8	173.6
51	38.0	36.9	55.3
86	60.4	52.4	78.6

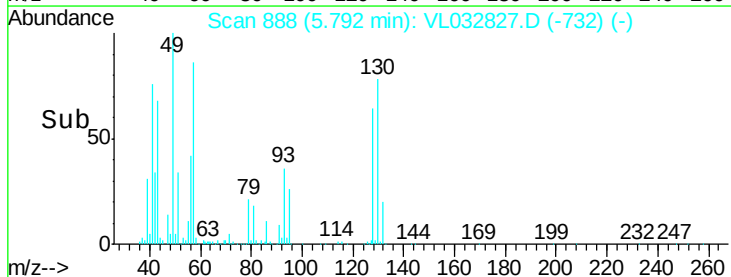
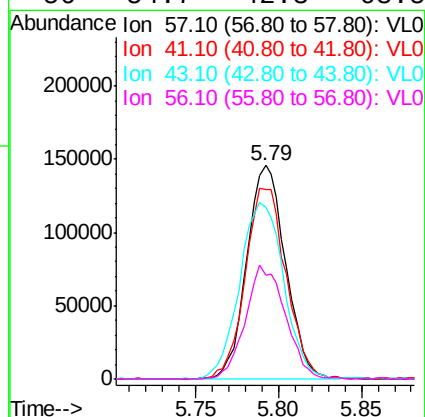
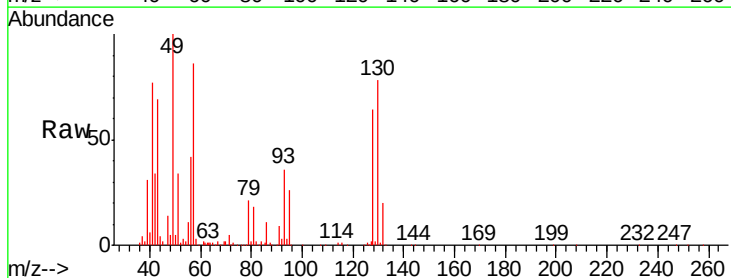
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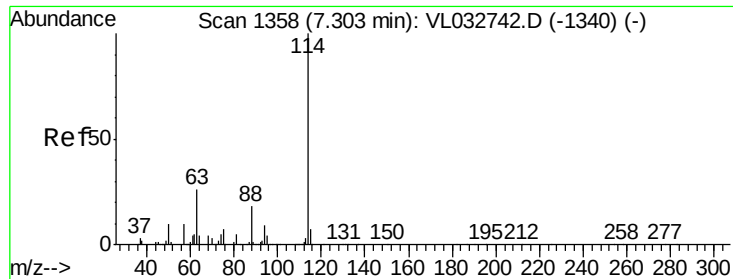
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#26
Hexane
Concen: 2.08 ppbv
RT: 5.79 min Scan# 888
Delta R.T. 0.00 min
Lab File: VL032827.D
Acq: 28 Nov 2018 12:10

Tgt Ion	Ratio	Lower	Upper
57	100		
41	94.6	70.3	105.5
43	94.7	174.0	261.0#
56	54.7	42.3	63.5





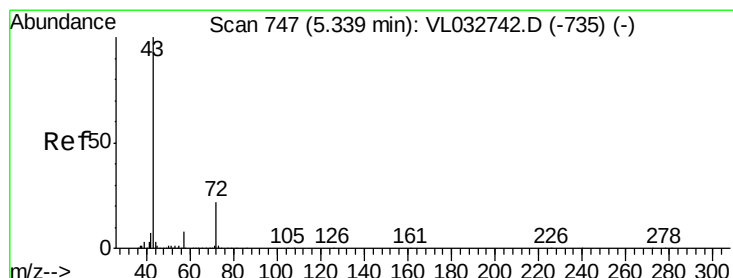
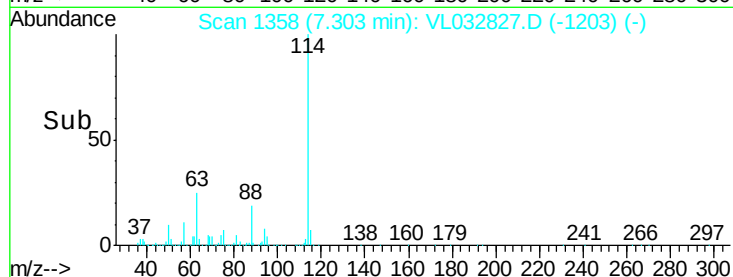
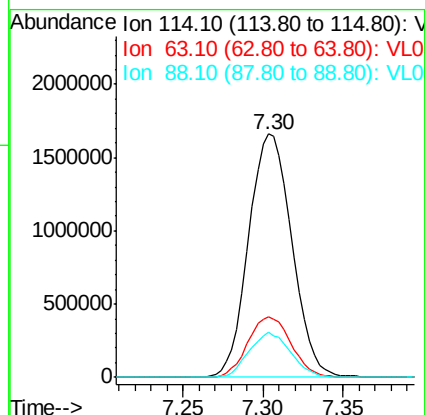
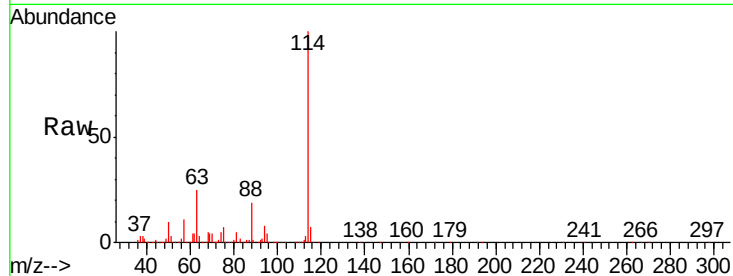
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.30 min Scan# 1358
 Delta R.T. -0.00 min
 Lab File: VL032827.D
 Acq: 28 Nov 2018 12:10

Instrument :
 MSVOA_L
 ClientSampleId :
 EP2-OA-01DUP

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.9	31.3
88	17.8	14.4	21.6

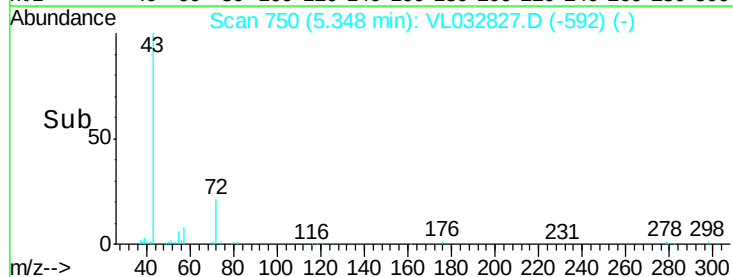
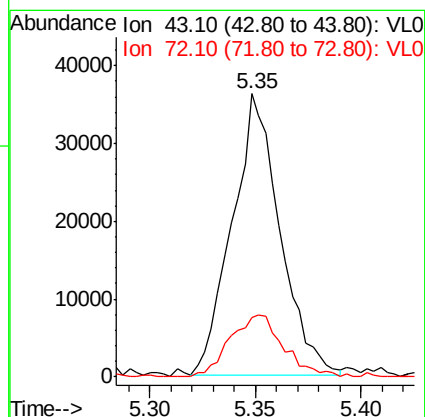
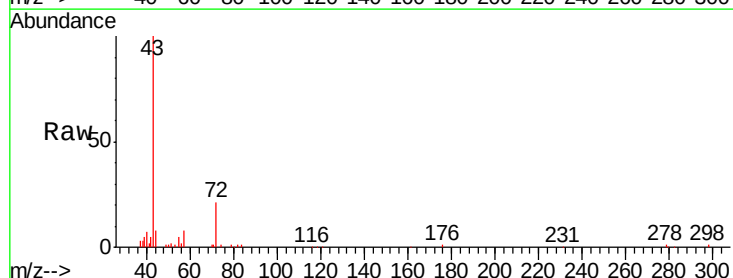
Manual Integrations
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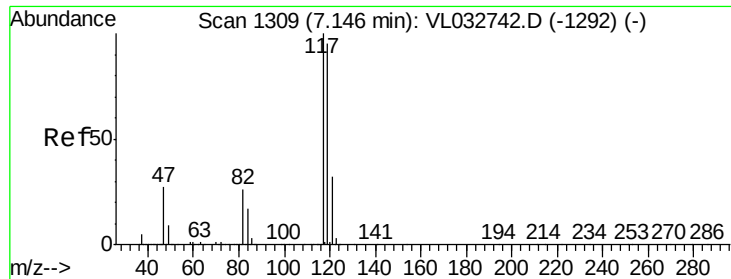
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#34
 2-Butanone
 Concen: 0.36 ppbv
 RT: 5.35 min Scan# 750
 Delta R.T. 0.01 min
 Lab File: VL032827.D
 Acq: 28 Nov 2018 12:10

Tgt Ion	Ratio	Lower	Upper
43	100		
72	24.6	18.4	27.6





#35

Carbon Tetrachloride

Concen: 0.09 ppbv m

RT: 7.14 min Scan# 1308

Delta R.T. -0.00 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

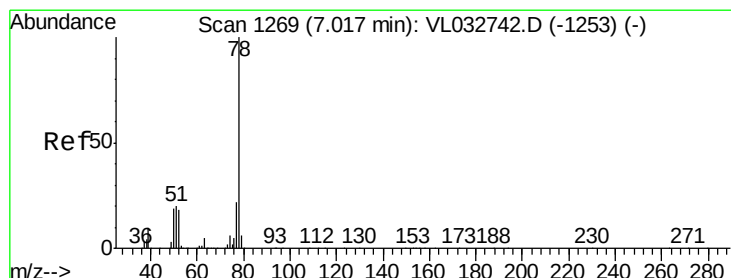
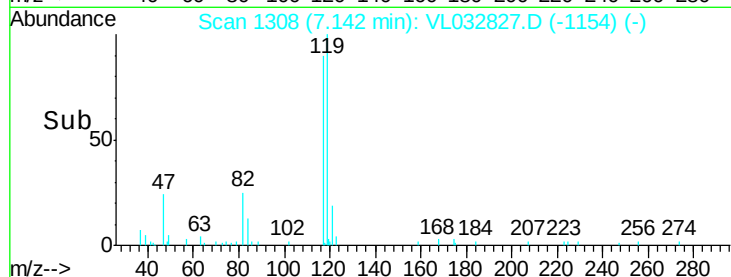
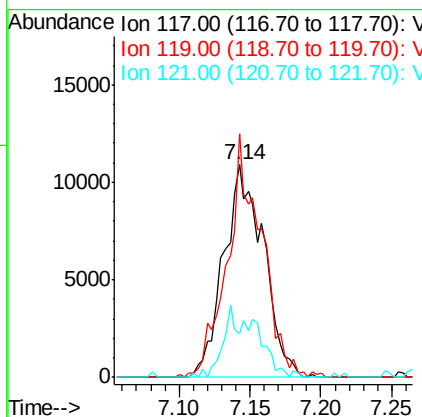
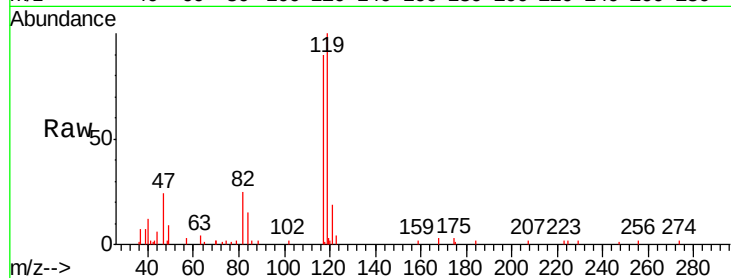
ClientSampleId :

EP2-OA-01DUP

Tgt Ion	Ratio	Lower	Upper
117	100		
119	111.2	76.1	114.1
121	20.7	25.4	38.0

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#36

Benzene

Concen: 0.37 ppbv

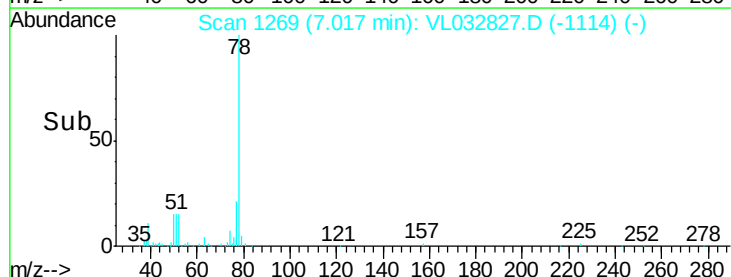
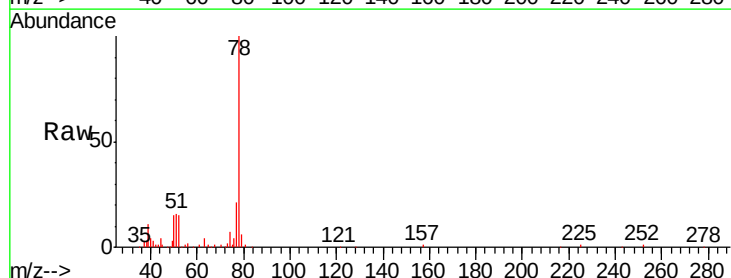
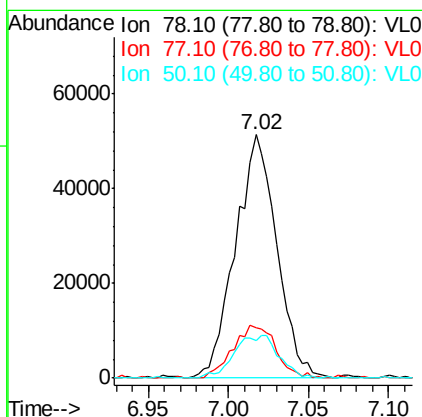
RT: 7.02 min Scan# 1269

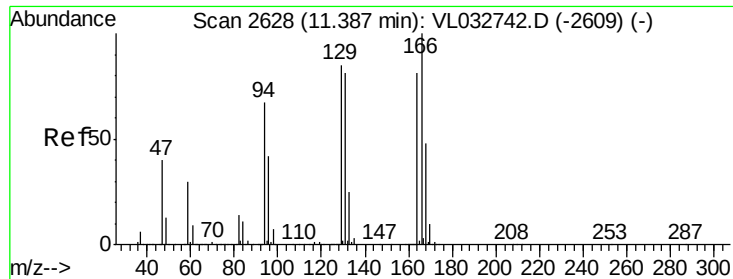
Delta R.T. -0.00 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.7	17.8	26.8
50	15.5	15.4	23.0





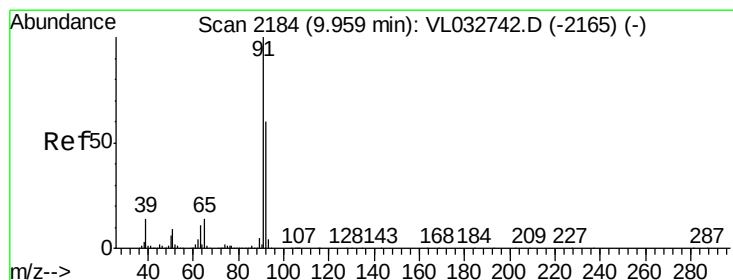
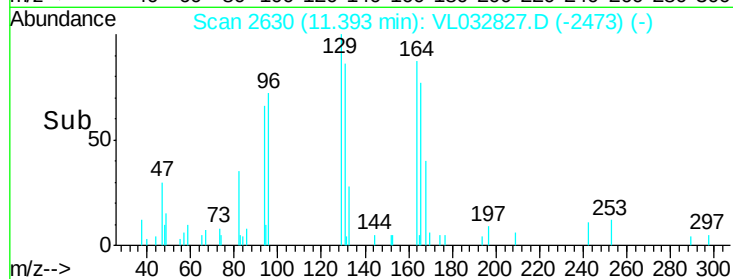
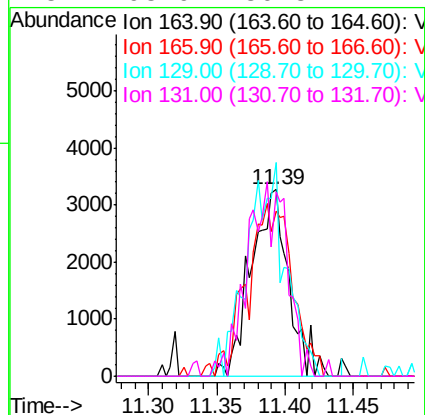
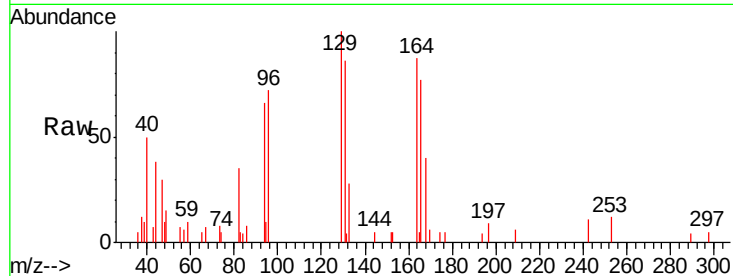
#52
Tetrachloroethene
Concen: 0.07 ppbv m
RT: 11.39 min Scan# 2630
Delta R.T. 0.01 min
Lab File: VL032827.D
Acq: 28 Nov 2018 12:10

Instrument :
MSVOA_L
ClientSampleId :
EP2-OA-01DUP

Tgt Ion	Ratio	Lower	Upper
164	100		
166	88.4	99.3	148.9#
129	114.6	83.9	125.9
131	98.9	80.8	121.2

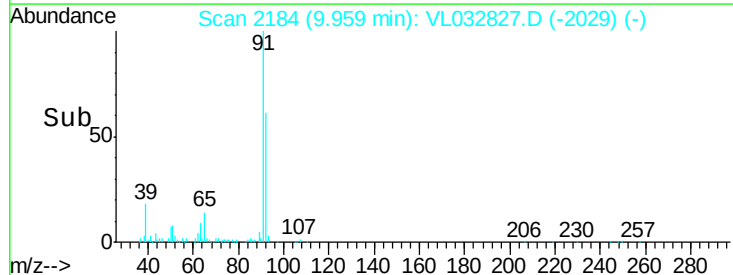
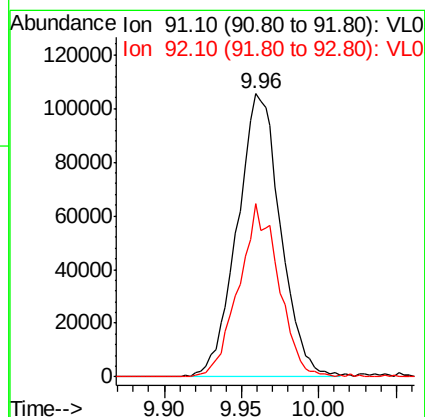
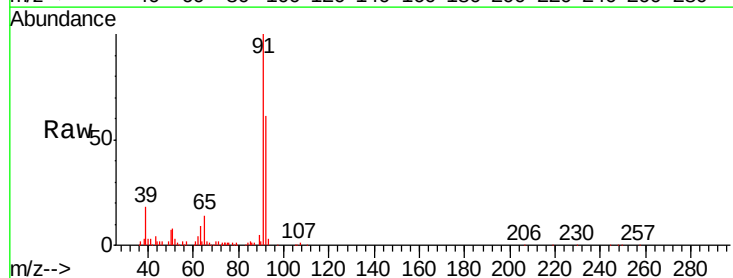
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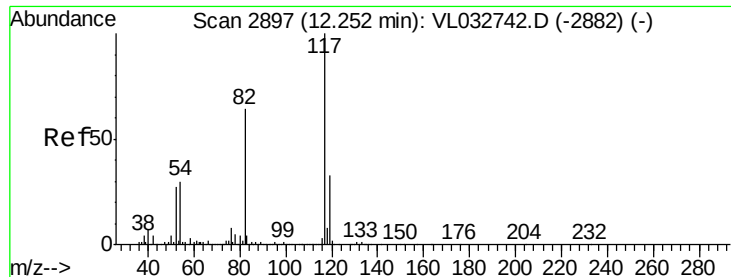
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#53
Toluene
Concen: 0.80 ppbv
RT: 9.96 min Scan# 2184
Delta R.T. -0.00 min
Lab File: VL032827.D
Acq: 28 Nov 2018 12:10

Tgt Ion	Ratio	Lower	Upper
91	100		
92	57.1	47.9	71.9





#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.25 min Scan# 2898

Delta R.T. 0.00 min

Lab File: VL032827.D

Acq: 28 Nov 2018 12:10

Instrument :

MSVOA_L

ClientSampleId :

EP2-OA-01DUP

Tgt Ion: 117 Resp: 2741344

Ion Ratio Lower Upper

117 100

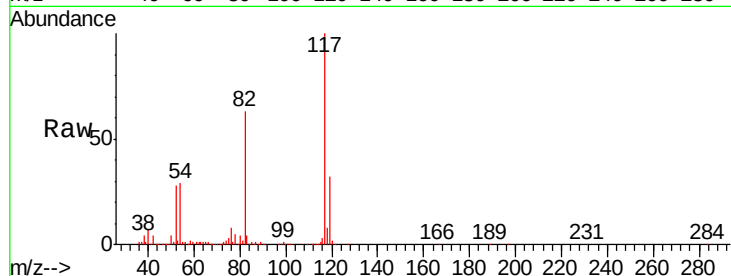
82 64.7 51.0 76.6

119 32.9 28.0 42.0

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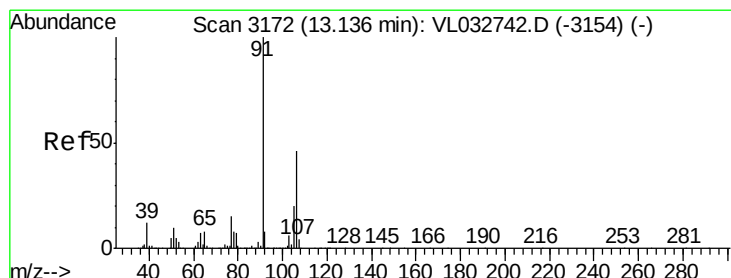
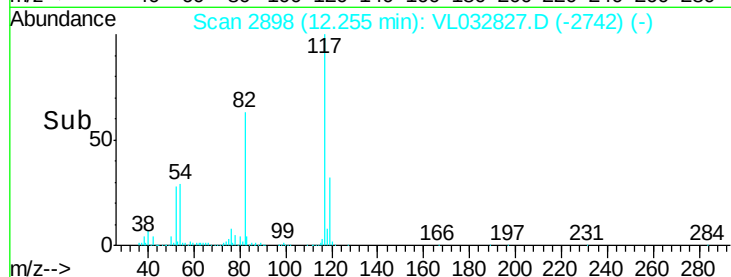
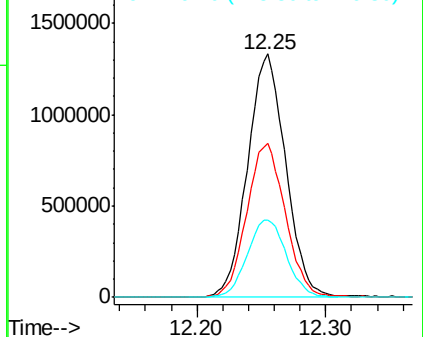
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#59

m/p-Xylene

Concen: 0.18 ppbv m

RT: 13.13 min Scan# 3171

Delta R.T. -0.00 min

Lab File: VL032827.D

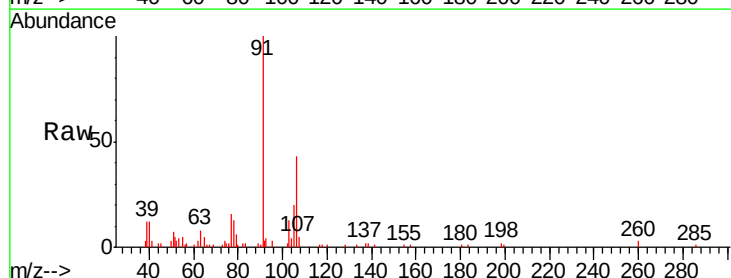
Acq: 28 Nov 2018 12:10

Tgt Ion: 91 Resp: 53948

Ion Ratio Lower Upper

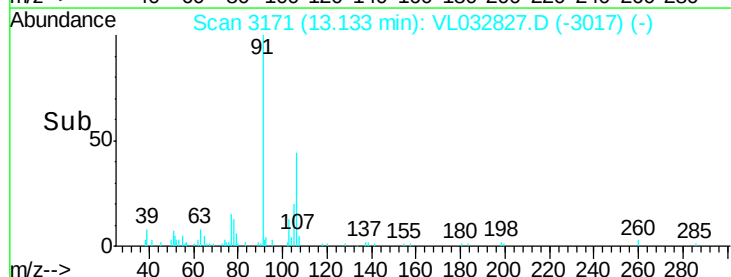
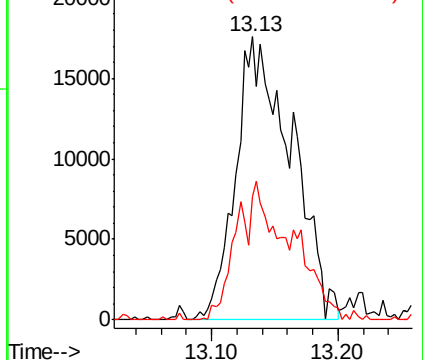
91 100

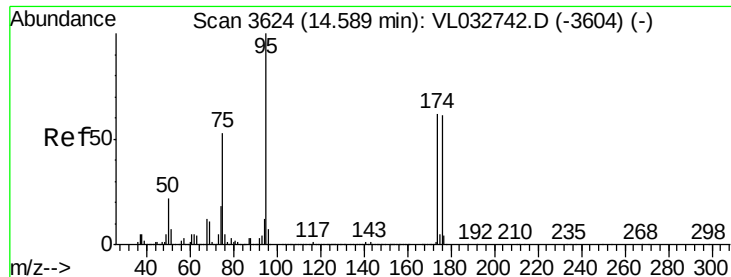
106 0.0 36.1 54.1#



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: 9.92 ppbv
 RT: 14.59 min Scan# 3625
 Delta R.T. 0.00 min
 Lab File: VL032827.D
 Acq: 28 Nov 2018 12:10

Instrument :
 MSVOA_L
 ClientSampleId :
 EP2-OA-01DUP

Tgt Ion: 95 Resp: 2033333
 Ion Ratio Lower Upper
 95 100
 174 66.1 50.7 76.1
 175 4.8 3.8 5.6

Manual Integrations
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