

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080118\
 Data File : VL032341.D
 Acq On : 2 Aug 2018 3:20
 Operator : SY/AP
 Sample : J4258-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

Manual Integrations
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Quant Time: Aug 02 07:16:33 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jul 27 2018
 QLast Update : Fri Jul 27 07:05:37 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.85	49	1802523	10.00	ppbv	0.01
33) 1,4-Difluorobenzene	7.38	114	4527956	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.32	117	4478031	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.66	95	3547381	10.21	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.12	85	29926	0.14	ppbv	92
3) Chlorodifluoromethane	3.05	51	59696m	0.33	ppbv	
4) Chloromethane	3.21	50	211780	1.94	ppbv	98
7) Chloroethane	3.65	64	6000	0.17	ppbv	92
9) Propene	3.08	41	4654883	57.44	ppbv	96
11) Trichlorofluoromethane	4.06	101	53911	0.26	ppbv	90
13) Ethanol	3.73	45	1420378	60.99	ppbv	99
15) Acetone	3.95	43	28591929m	168.30	ppbv	
26) Hexane	5.85	57	677483	3.93	ppbv #	22
27) Carbon Disulfide	4.68	76	862533	5.50	ppbv	97
30) Cyclohexane	7.32	84	546211	4.06	ppbv #	78
34) 2-Butanone	5.41	43	25937466	88.50	ppbv #	74
35) Carbon Tetrachloride	7.22	117	16113m	0.06	ppbv	
36) Benzene	7.09	78	1381242	3.46	ppbv	99
44) 2,2,4-Trimethylpentane	8.07	57	1555712	1.80	ppbv #	50
51) 2-Hexanone	10.35	43	6593011	16.73	ppbv #	96
52) Tetrachloroethene	11.46	164	9619m	0.07	ppbv	
53) Toluene	10.03	91	580016	1.22	ppbv	99
58) Ethyl Benzene	12.94	91	419768m	0.75	ppbv	
59) m/p-Xylene	13.20	91	385027m	0.81	ppbv	
60) o-Xylene	13.93	91	229704	0.49	ppbv	100
61) Styrene	13.77	104	98036	0.28	ppbv	92
62) Isopropylbenzene	14.91	105	188845	0.28	ppbv	100
72) 4-Ethyltoluene	16.09	105	110041m	0.21	ppbv	
73) 1,3,5-Trimethylbenzene	16.23	105	149987m	0.29	ppbv	
74) 1,2,4-Trimethylbenzene	17.00	105	273470	0.50	ppbv #	76
79) Naphthalene	22.50	128	157115	0.33	ppbv #	93

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

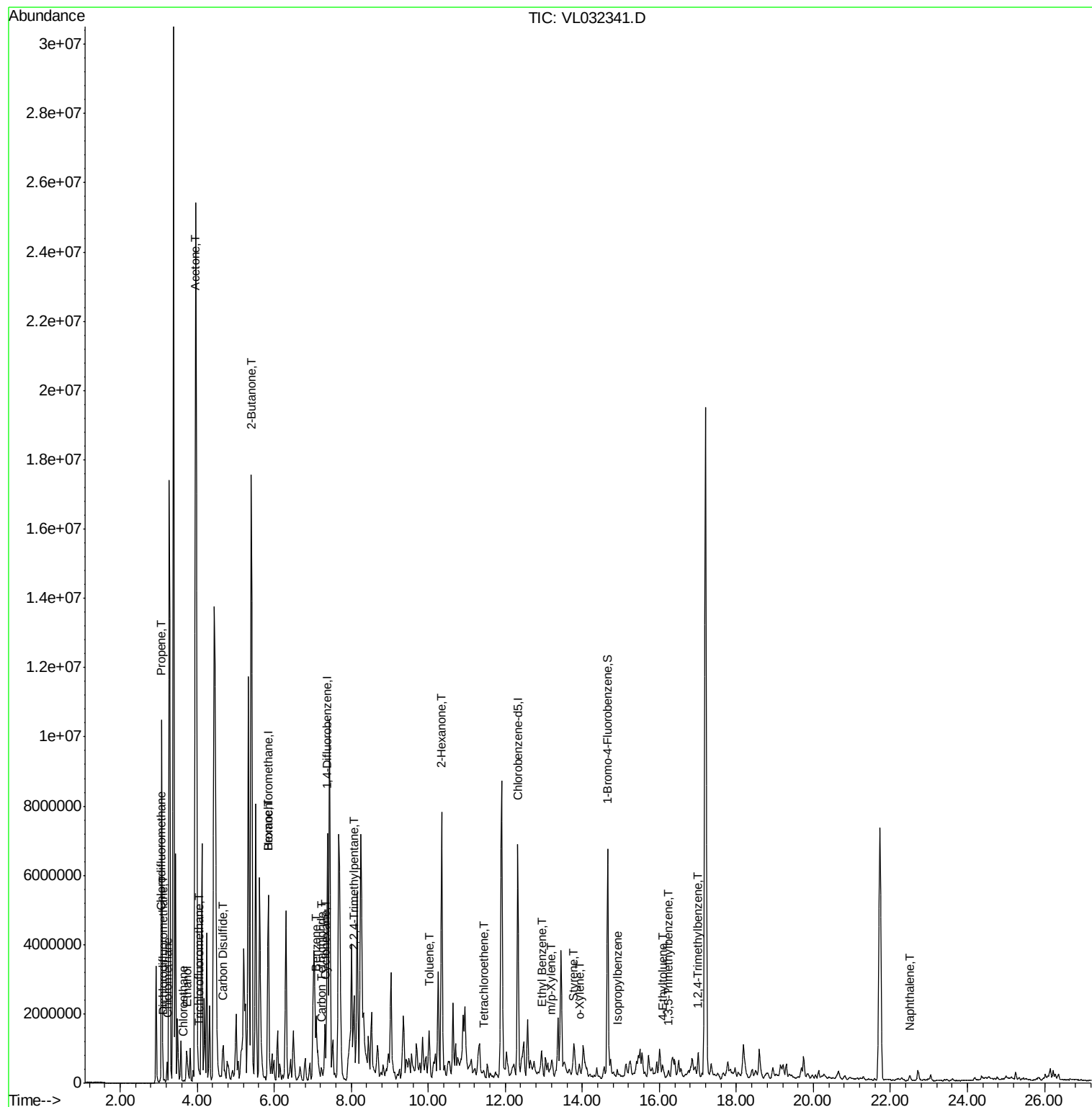
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080118\
Data File : VL032341.D
Acq On : 2 Aug 2018 3:20
Operator : SY/AP
Sample : J4258-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

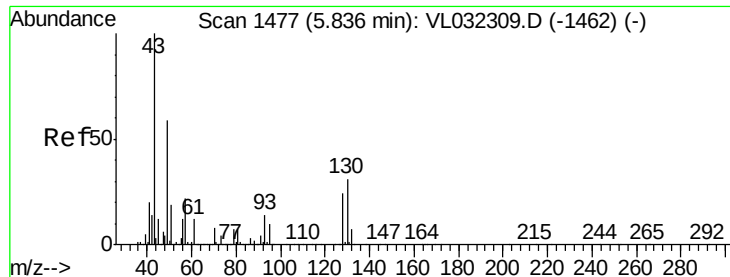
Instrument :
MSVOA_L
ClientSampleId :
SV-2

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Quant Time: Aug 02 07:16:33 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL072718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jul
QLast Update : Fri Jul 27 07:05:37 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.85 min Scan# 1481

Delta R.T. 0.01 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

ClientSampled :

SV-2

Tot Ion: 49 Resp: 1802523

Ion Ratio Lower Upper

49 100

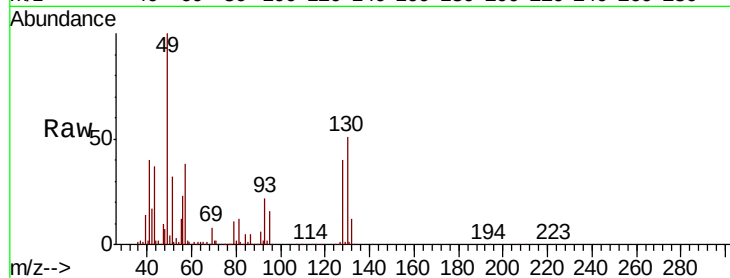
128 40.2 20.2 60.6

130 51.9 25.8 77.3

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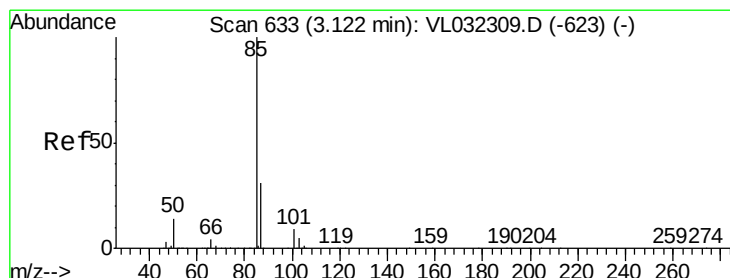
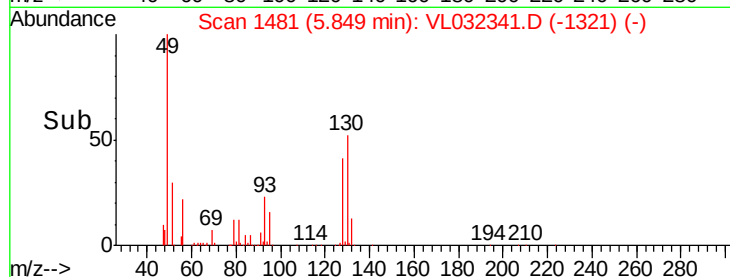
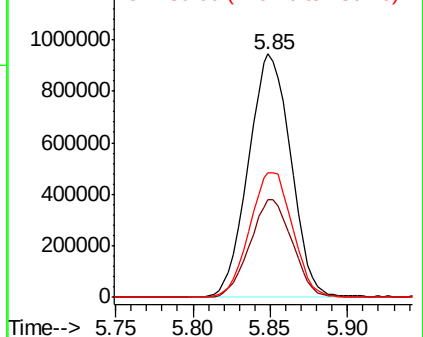
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.14 ppbv

RT: 3.12 min Scan# 631

Delta R.T. -0.01 min

Lab File: VL032341.D

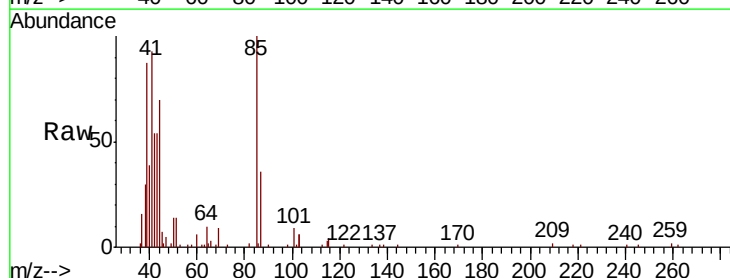
Acq: 2 Aug 2018 3:20

Tgt Ion: 85 Resp: 29926

Ion Ratio Lower Upper

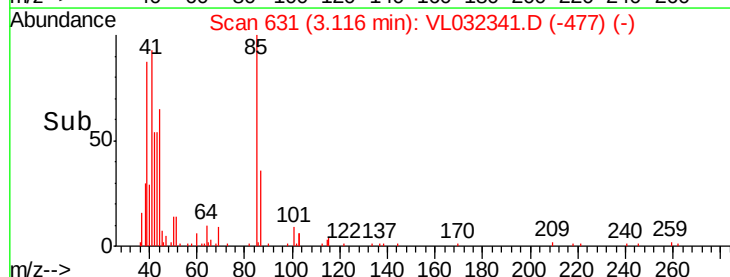
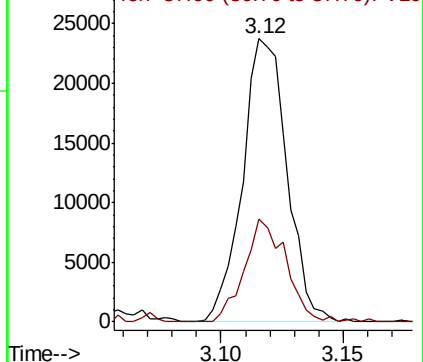
85 100

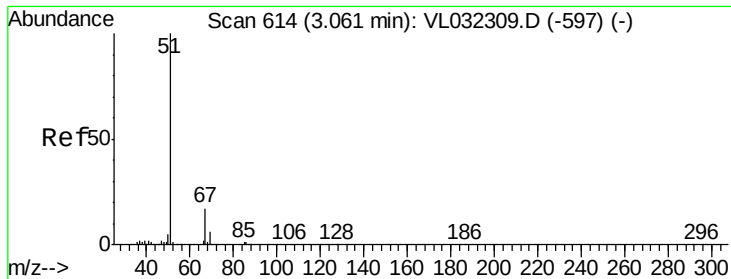
87 36.2 25.2 37.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.33 ppbv m

RT: 3.05 min Scan# 612

Delta R.T. -0.01 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

ClientSampled :

SV-2

Tot Ion: 51 Resp: 59696

Ion Ratio Lower Upper

51 100

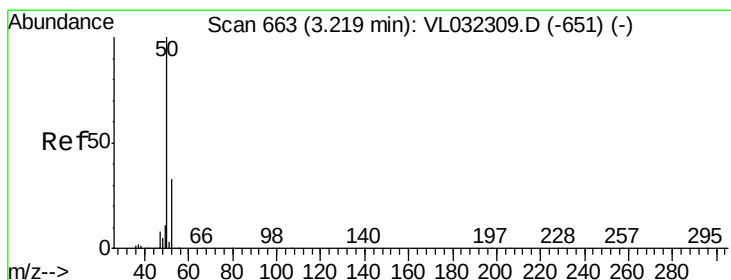
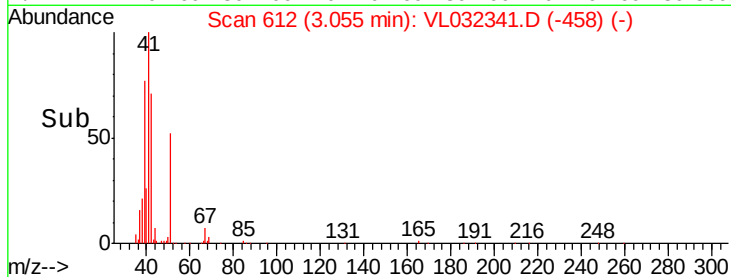
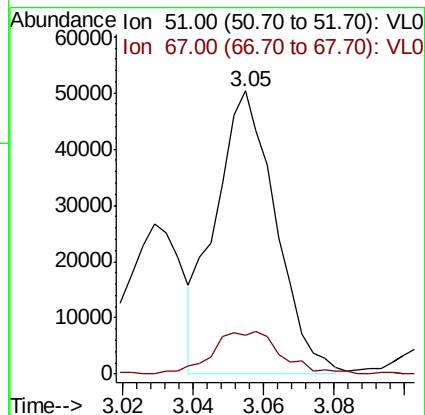
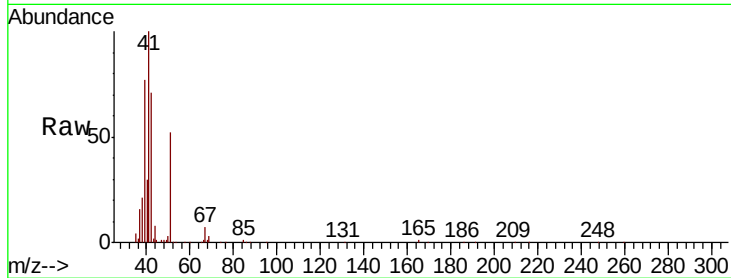
67 17.5 13.5 20.3

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#4

Chloromethane

Concen: 1.94 ppbv

RT: 3.21 min Scan# 661

Delta R.T. -0.01 min

Lab File: VL032341.D

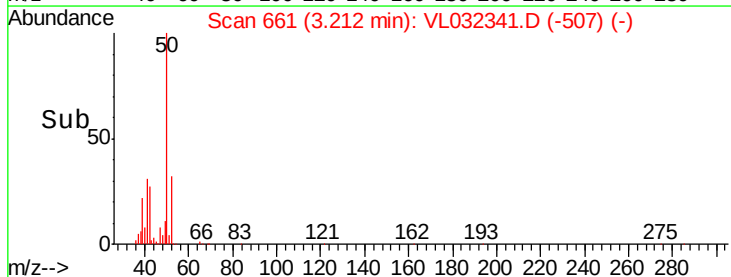
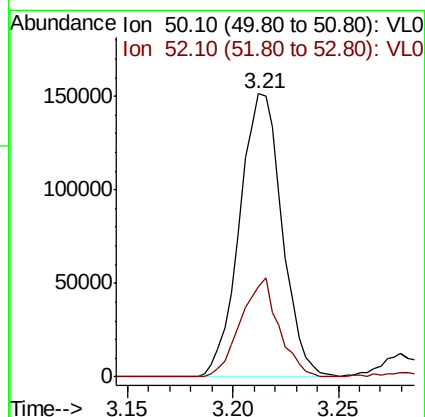
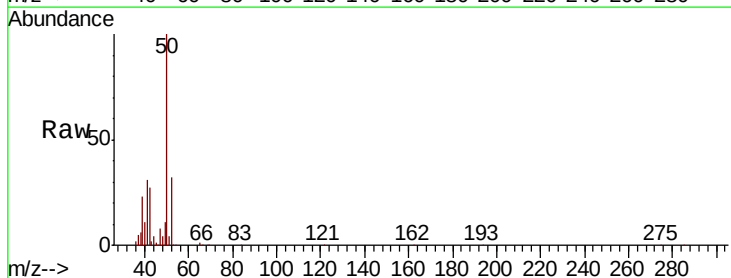
Acq: 2 Aug 2018 3:20

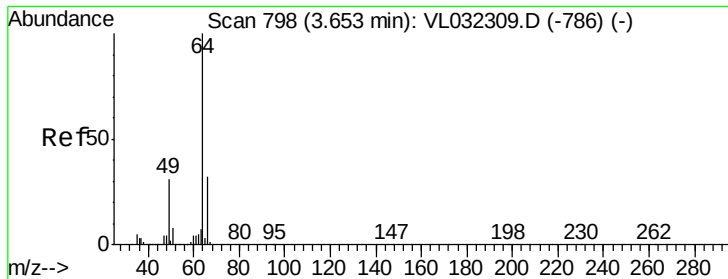
Tgt Ion: 50 Resp: 211780

Ion Ratio Lower Upper

50 100

52 31.9 26.2 39.4





#7

Chloroethane

Concen: 0.17 ppbv

RT: 3.65 min Scan# 796

Delta R.T. -0.01 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

ClientSampleId :

SV-2

Tot Ion: 64 Resp: 6000

Ion Ratio Lower Upper

64 100

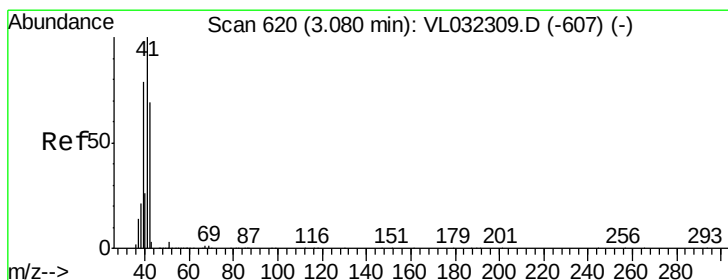
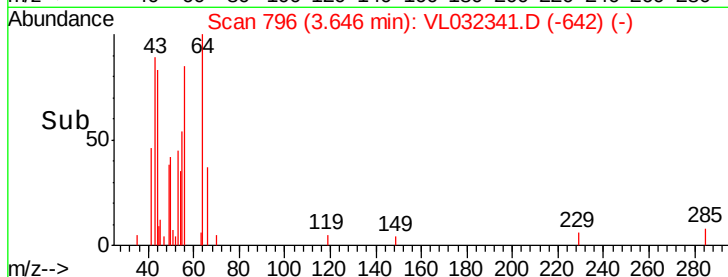
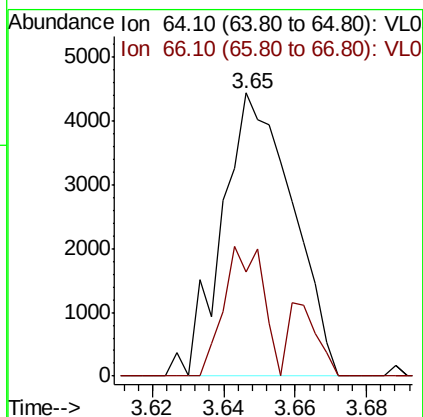
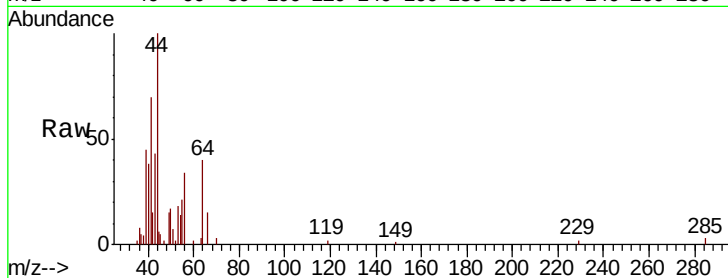
66 36.8 25.7 38.5

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#9

Propene

Concen: 57.44 ppbv

RT: 3.08 min Scan# 619

Delta R.T. -0.00 min

Lab File: VL032341.D

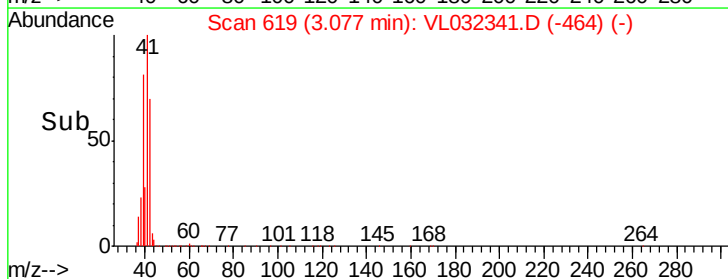
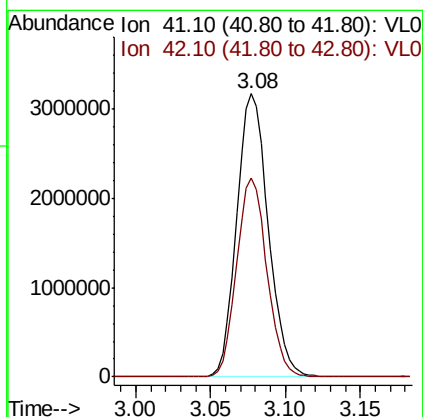
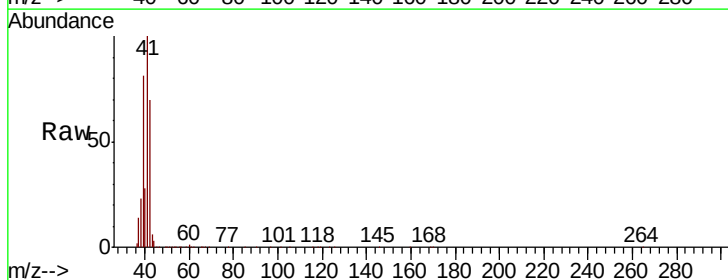
Acq: 2 Aug 2018 3:20

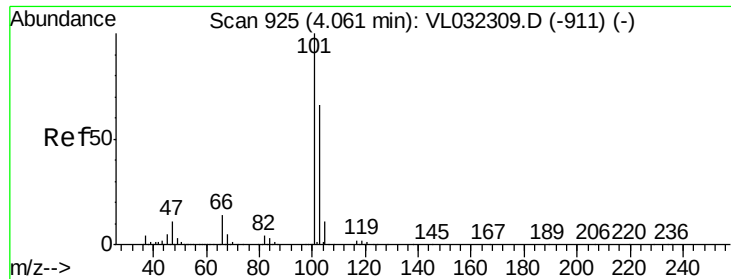
Tgt Ion: 41 Resp: 4654883

Ion Ratio Lower Upper

41 100

42 67.9 56.8 85.2





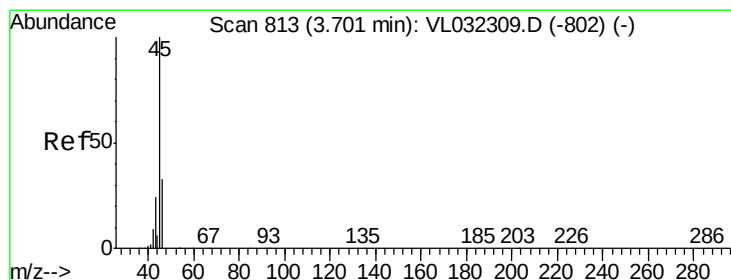
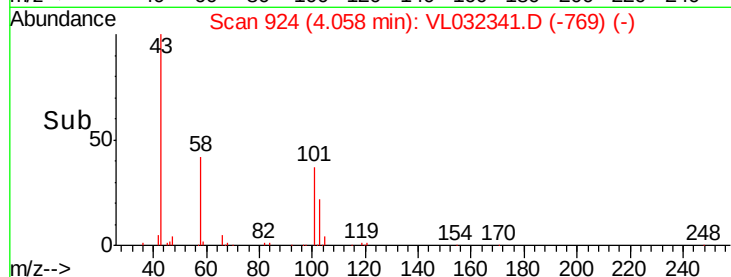
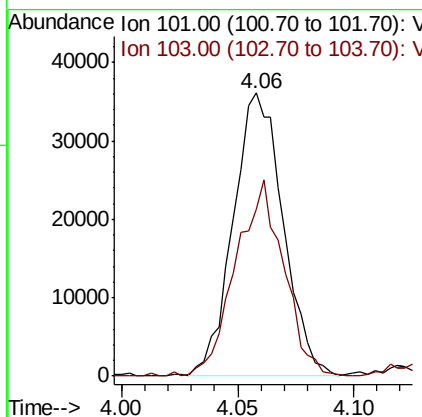
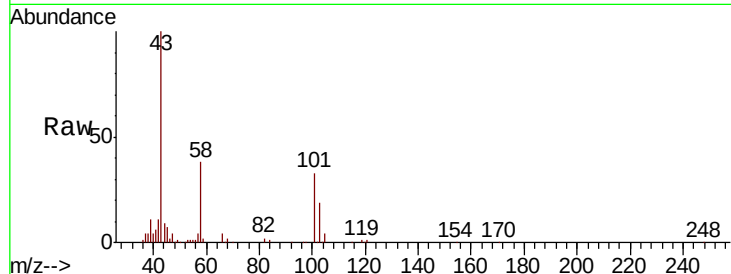
#11
 Trichlorofluoromethane
 Concen: 0.26 ppbv
 RT: 4.06 min Scan# 924
 Delta R.T. -0.00 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

Tot Ion	Ratio	Lower	Upper
101	100		
103	58.1	52.6	78.8

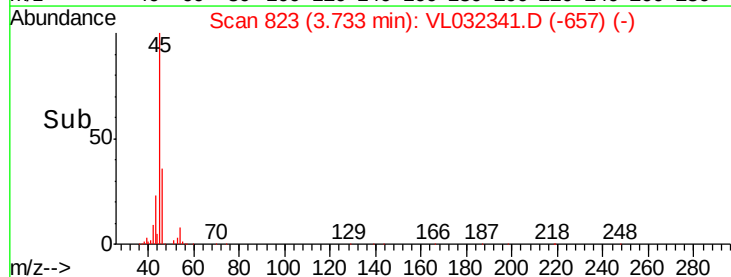
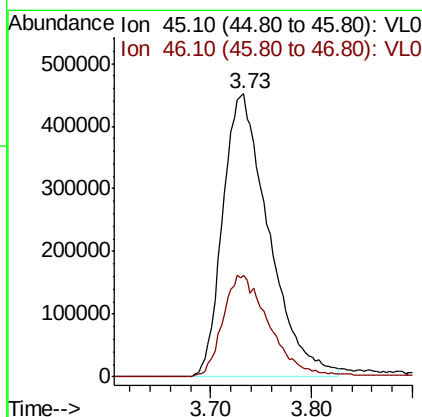
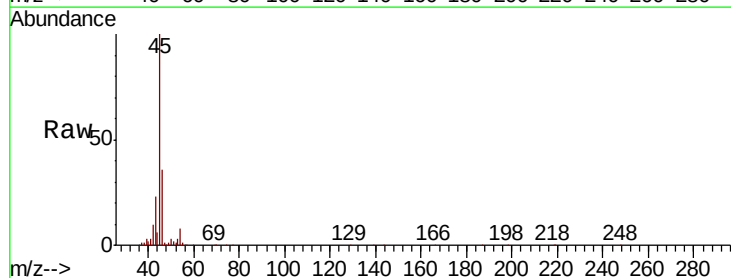
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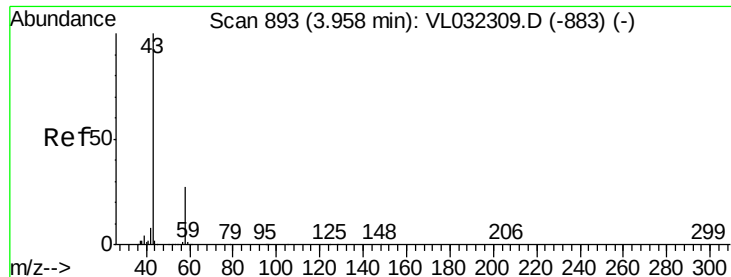
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#13
 Ethanol
 Concen: 60.99 ppbv
 RT: 3.73 min Scan# 823
 Delta R.T. 0.03 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.4	15.2	60.6





#15

Acetone

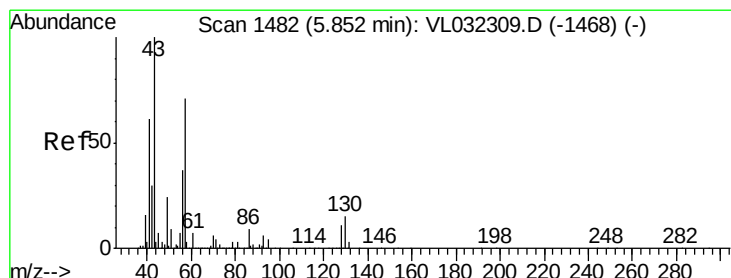
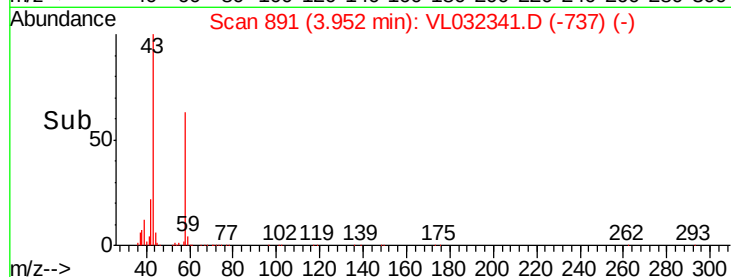
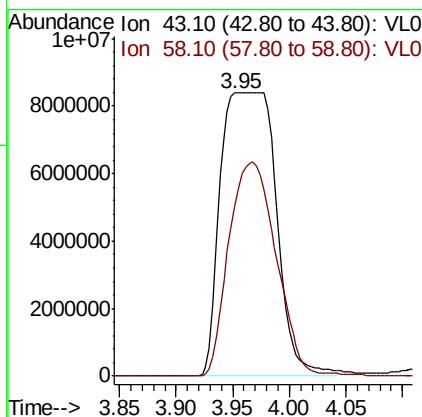
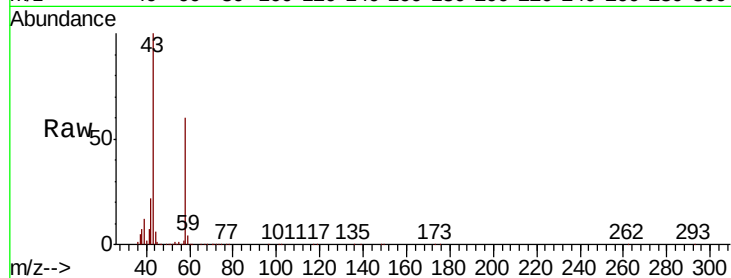
Concen: 168.30 ppbv m
RT: 3.95 min Scan# 891
Delta R.T. -0.01 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Instrument :
MSVOA_L
ClientSampleId :
SV-2

Tot Ion: 43 Resp: 28591929
Ion Ratio Lower Upper
43 100
58 65.0 22.5 33.7#

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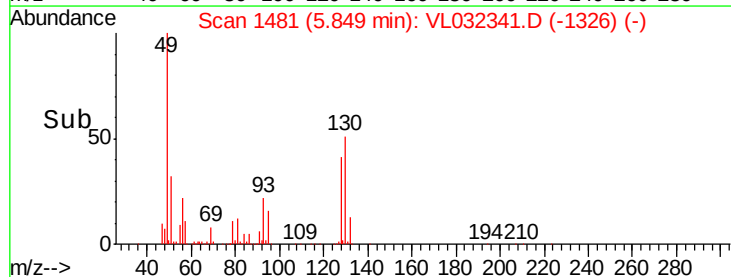
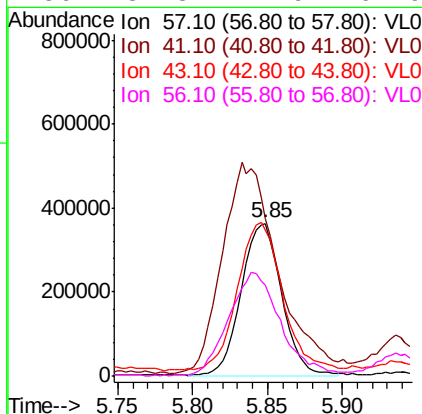
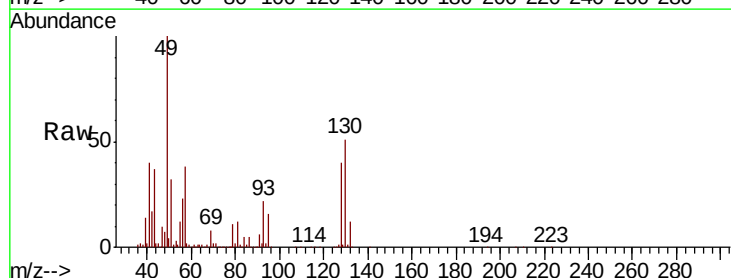


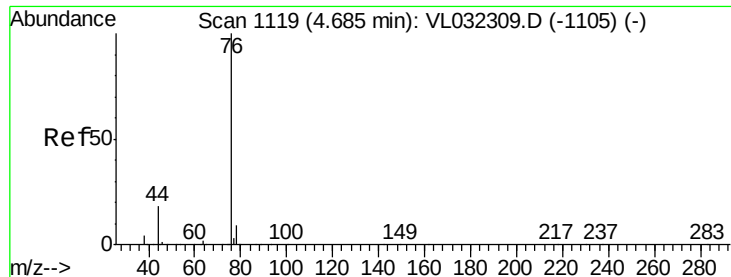
#26

Hexane

Concen: 3.93 ppbv
RT: 5.85 min Scan# 1481
Delta R.T. -0.00 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Tgt Ion: 57 Resp: 677483
Ion Ratio Lower Upper
57 100
41 191.6 68.1 102.1#
43 107.6 177.4 266.2#
56 87.3 41.9 62.9#





#27

Carbon Disulfide

Concen: 5.50 ppbv

RT: 4.68 min Scan# 1118

Delta R.T. -0.00 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

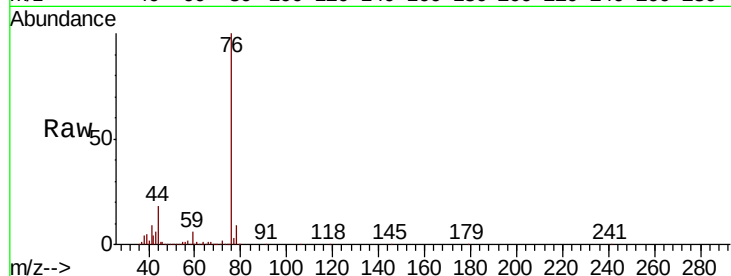
ClientSampled :

SV-2

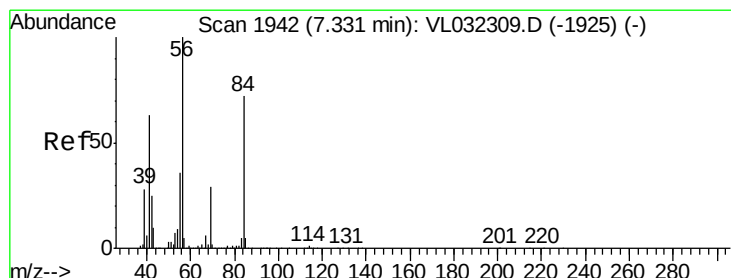
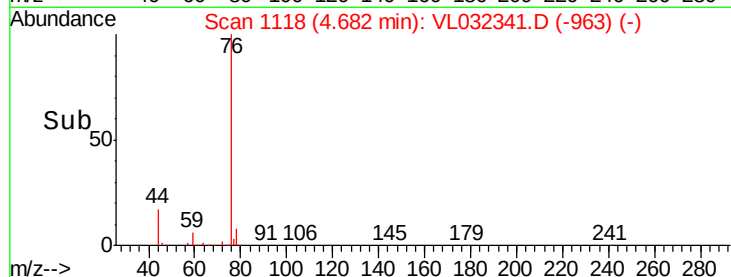
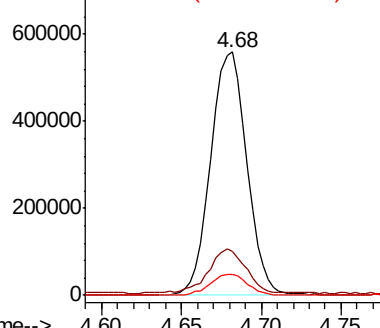
Tot Ion:	76	Resp:	862533
Ion Ratio	Lower	Upper	
76	100		
44	19.5	14.0	21.0
78	9.0	7.5	11.3

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Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0



#30

Cyclohexane

Concen: 4.06 ppbv

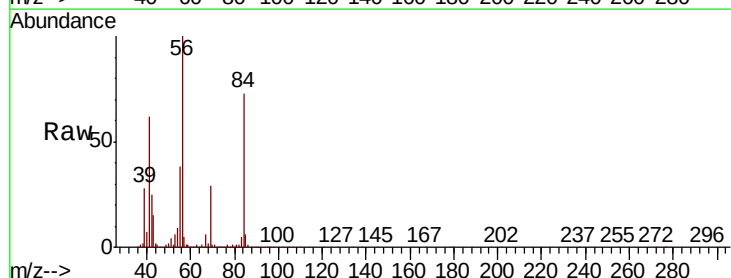
RT: 7.32 min Scan# 1940

Delta R.T. -0.01 min

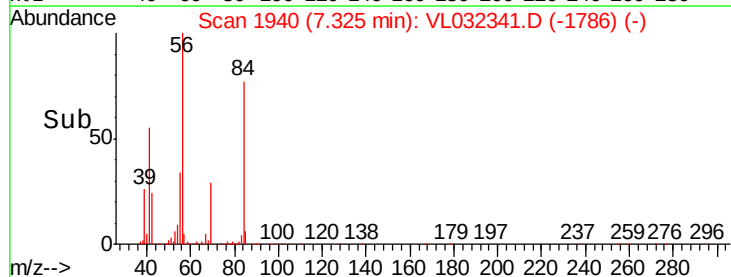
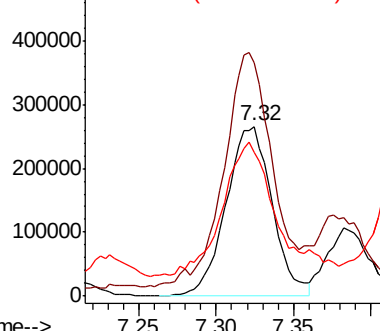
Lab File: VL032341.D

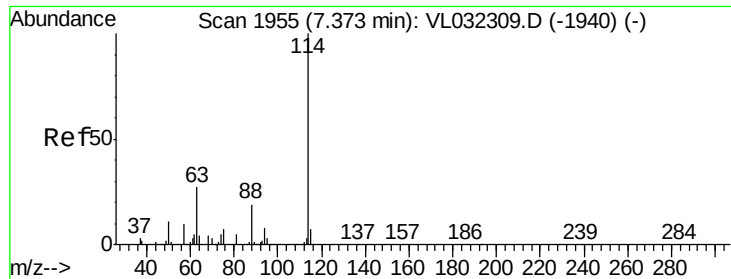
Acq: 2 Aug 2018 3:20

Tgt Ion:	84	Resp:	546211
Ion Ratio	Lower	Upper	
84	100		
56	161.3	116.8	175.2
41	123.5	70.0	105.0#



Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0





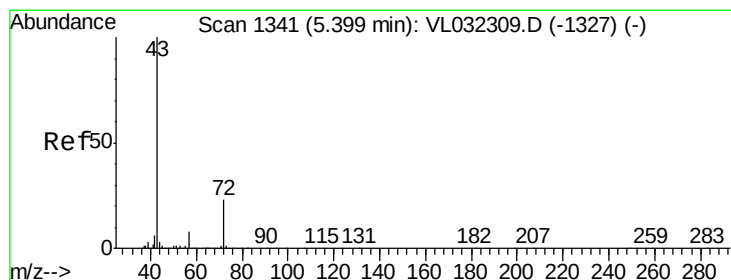
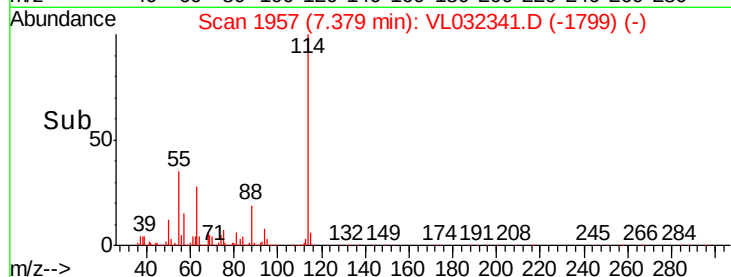
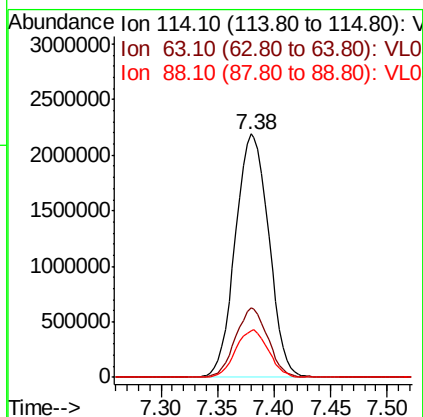
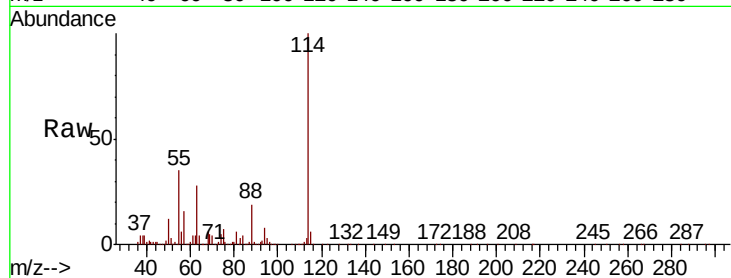
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.38 min Scan# 1957
 Delta R.T. 0.01 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Instrument :
 MSVOA_L
 ClientSampled :
 SV-2

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.9	22.4	33.6
88	19.2	15.3	22.9

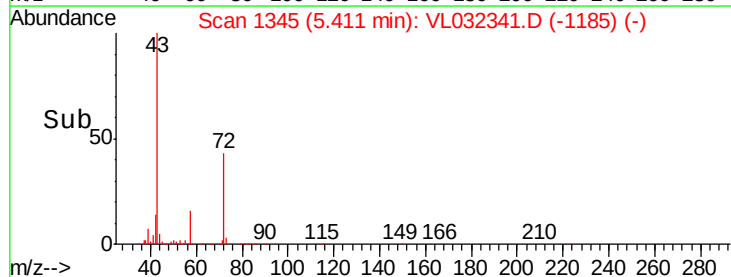
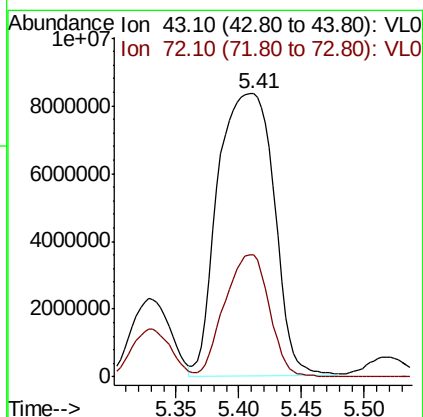
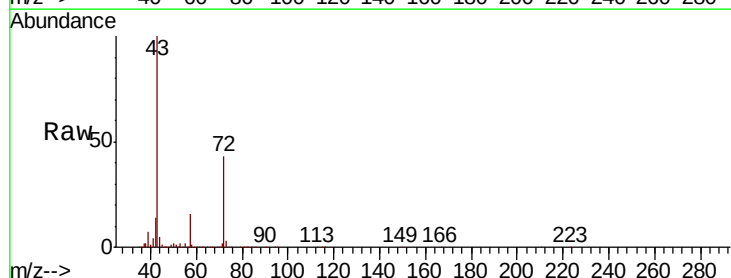
Manual Integrations
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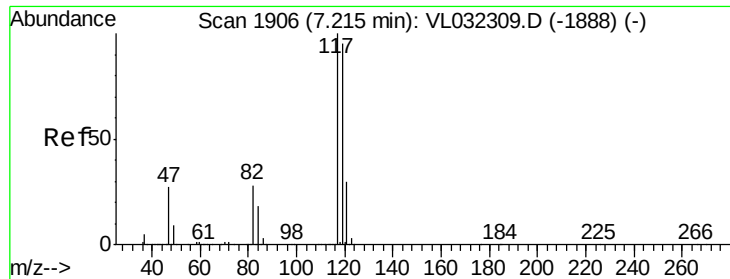
apatel
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#34
 2-Butanone
 Concen: 88.50 ppbv
 RT: 5.41 min Scan# 1345
 Delta R.T. 0.01 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Tgt Ion	Ratio	Lower	Upper
43	100		
72	34.4	17.4	26.2





#35

Carbon Tetrachloride

Concen: 0.06 ppbv m

RT: 7.22 min Scan# 1907

Delta R.T. 0.00 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

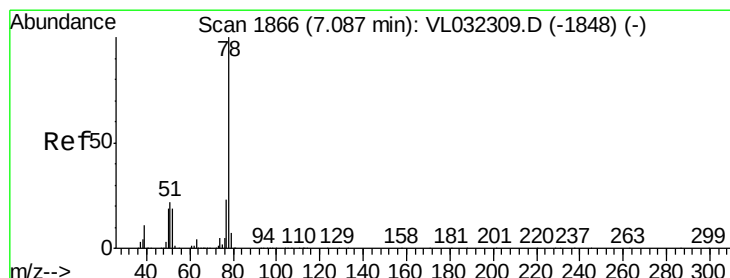
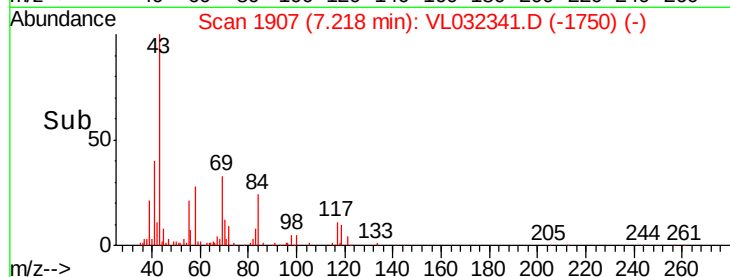
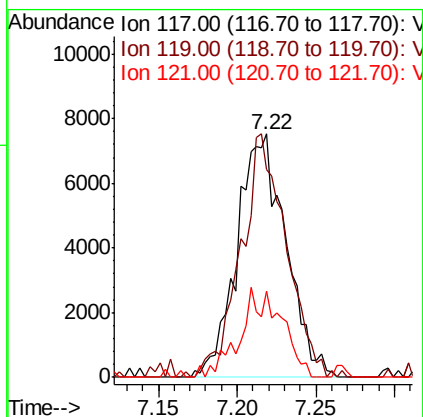
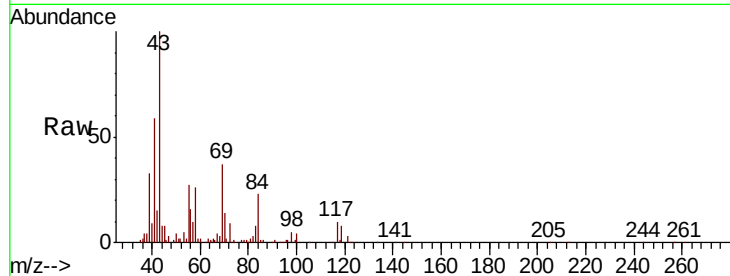
ClientSampled :

SV-2

Tot Ion:	117	Resp:	16113
Ion Ratio	Lower	Upper	
117	100		
119	85.3	76.1	114.1
121	35.6	24.4	36.6

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#36

Benzene

Concen: 3.46 ppbv

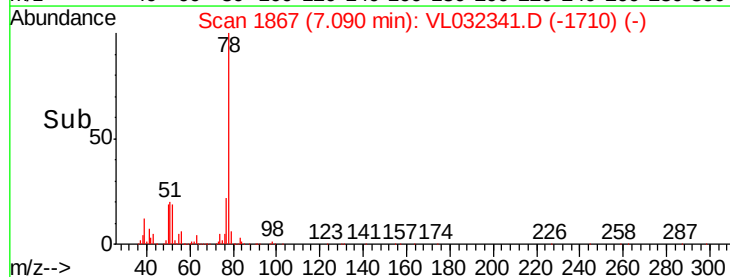
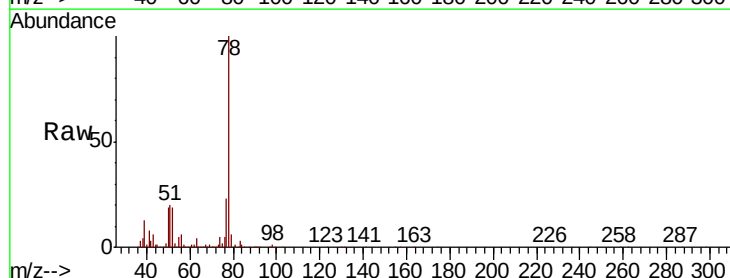
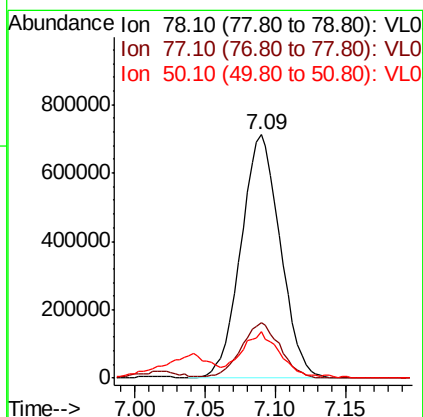
RT: 7.09 min Scan# 1867

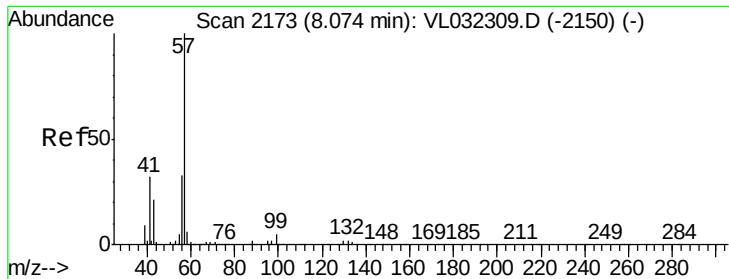
Delta R.T. 0.00 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Tgt Ion:	78	Resp:	1381242
Ion Ratio	Lower	Upper	
78	100		
77	22.5	18.4	27.6
50	18.7	15.3	22.9





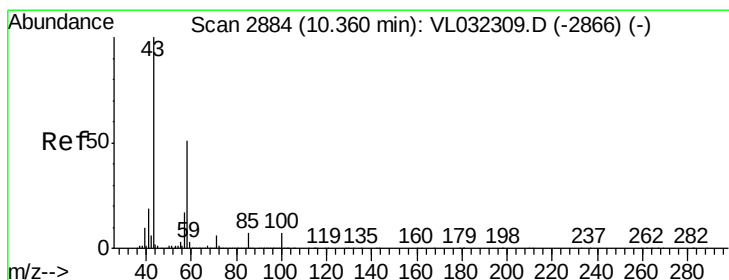
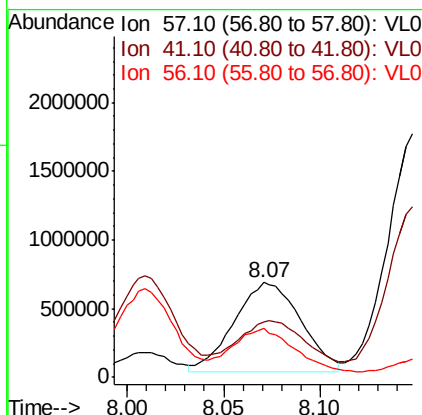
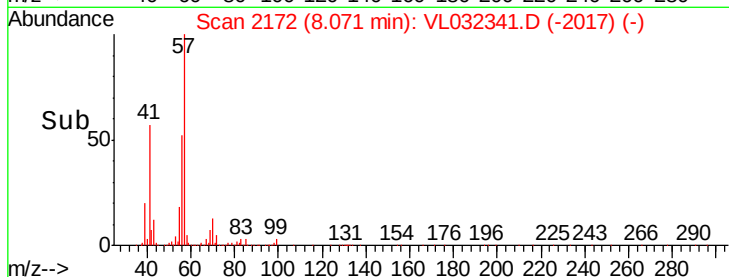
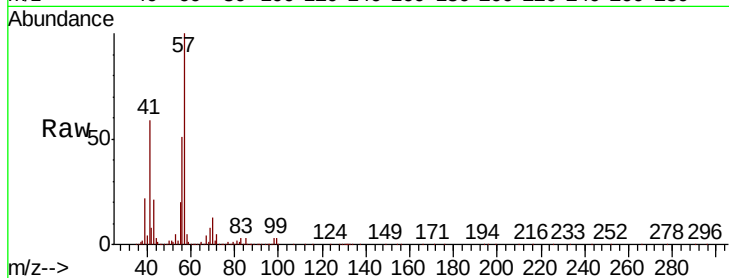
#44
 2,2,4-Trimethylpentane
 Concen: 1.80 ppbv
 RT: 8.07 min Scan# 2172
 Delta R.T. -0.00 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

Tot Ion	Ratio	Lower	Upper
57	100		
41	65.1	24.3	36.5#
56	52.5	25.4	38.2#

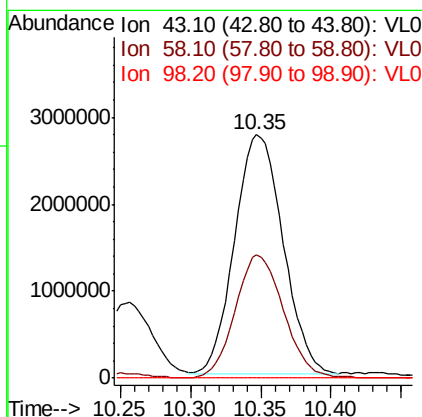
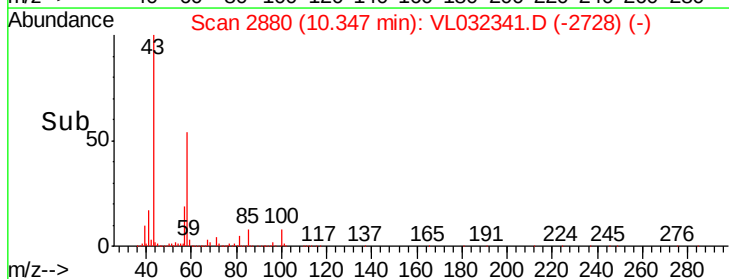
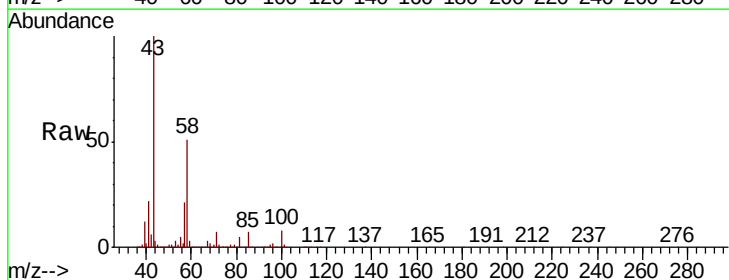
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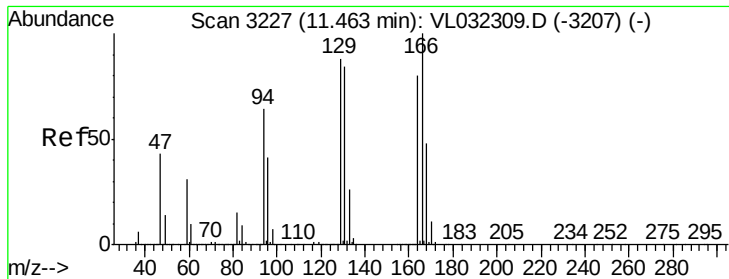
apatel
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#51
 2-Hexanone
 Concen: 16.73 ppbv
 RT: 10.35 min Scan# 2880
 Delta R.T. -0.01 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Tgt Ion	Ratio	Lower	Upper
43	100		
58	51.4	39.1	58.7
98	0.3	0.3	0.5#





#52

Tetrachloroethene

Concen: 0.07 ppbv m

RT: 11.46 min Scan# 3226

Delta R.T. -0.00 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

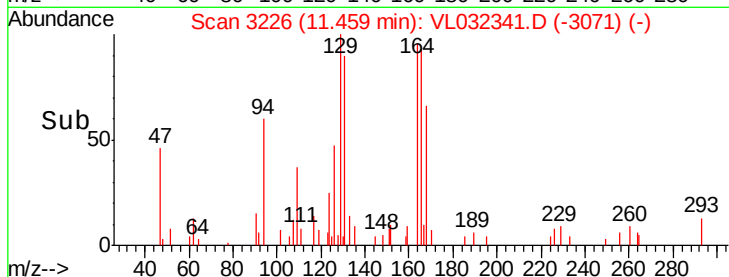
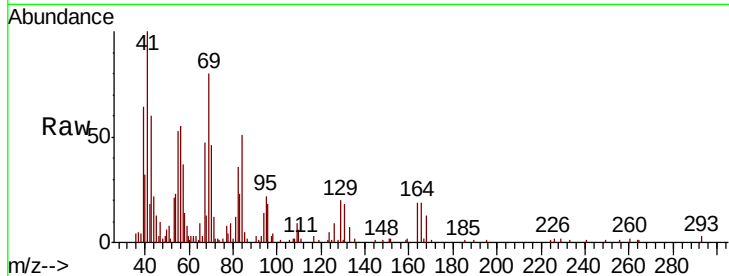
ClientSampled :

SV-2

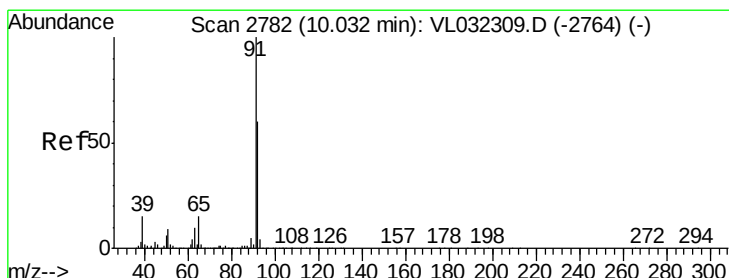
Tot Ion:	164	Resp:	9619
Ion	Ratio	Lower	Upper
164	100		
166	100.4	100.0	150.0
129	104.0	87.9	131.9
131	93.9	83.8	125.8

Manual Integrations
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Time-->



#53

Toluene

Concen: 1.22 ppbv

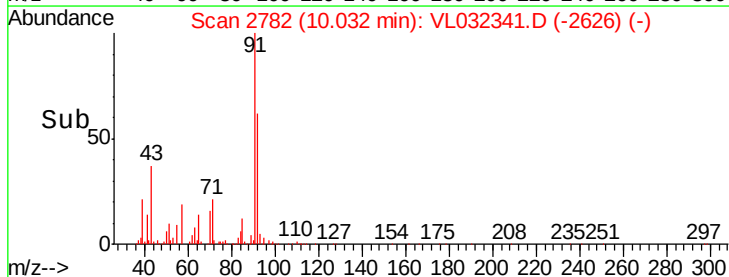
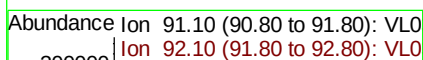
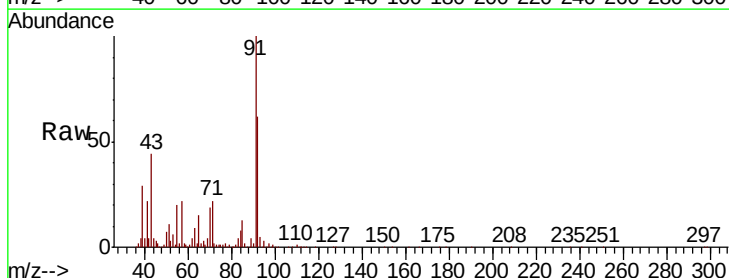
RT: 10.03 min Scan# 2782

Delta R.T. 0.00 min

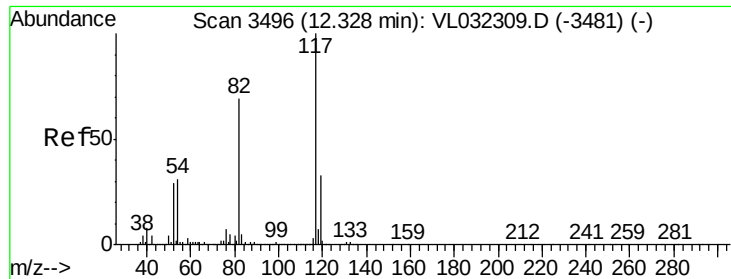
Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Tgt Ion:	91	Resp:	580016
Ion	Ratio	Lower	Upper
91	100		
92	61.4	48.6	72.8



Time-->



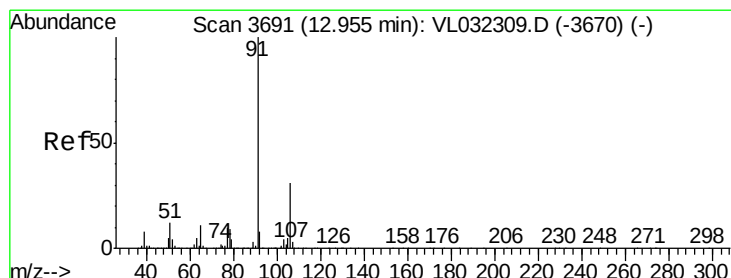
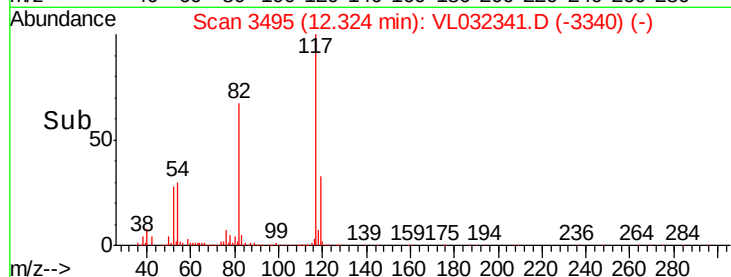
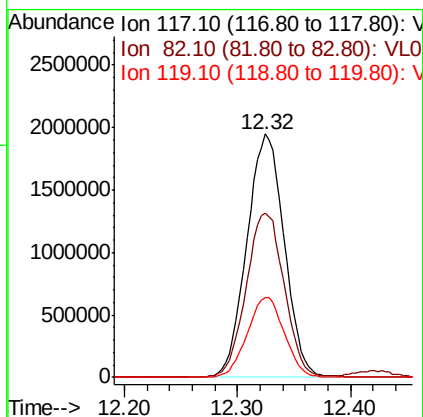
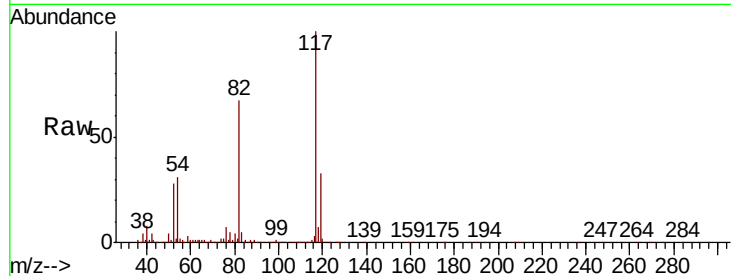
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.32 min Scan# 3495
Delta R.T. -0.00 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Instrument :
MSVOA_L
ClientSampled :
SV-2

Tot Ion	Ratio	Lower	Upper
117	100		
82	68.3	52.6	78.8
119	32.6	25.7	38.5

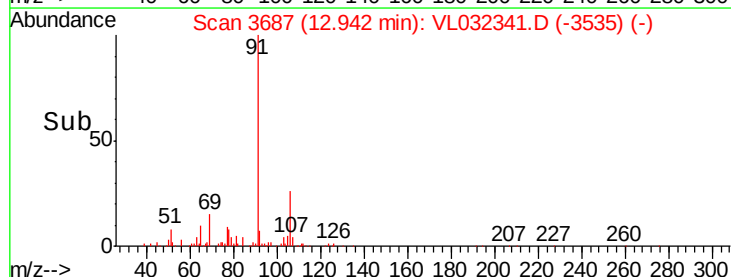
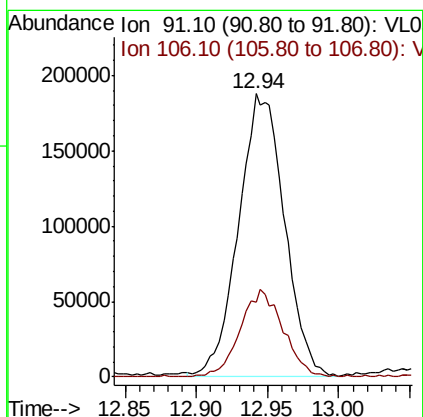
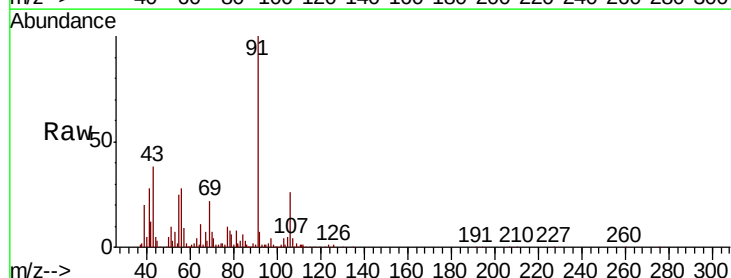
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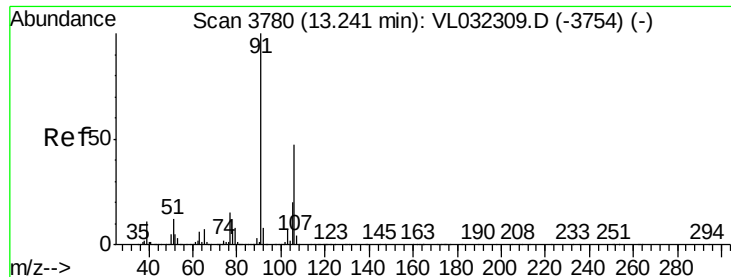
apatel
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#58
Ethyl Benzene
Concen: 0.75 ppbv m
RT: 12.94 min Scan# 3687
Delta R.T. -0.01 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Tgt Ion	Ratio	Lower	Upper
91	100		
106	26.2	25.0	37.4





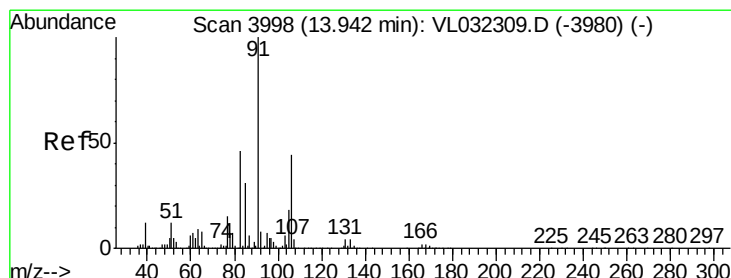
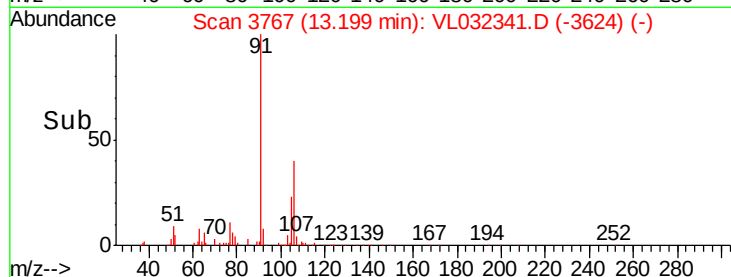
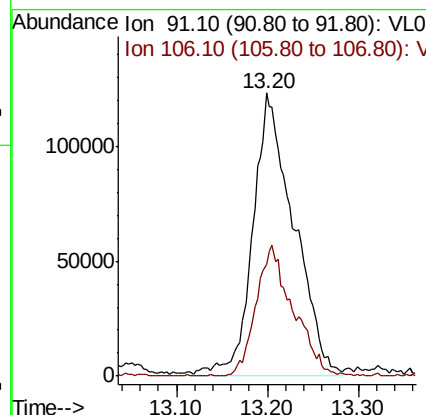
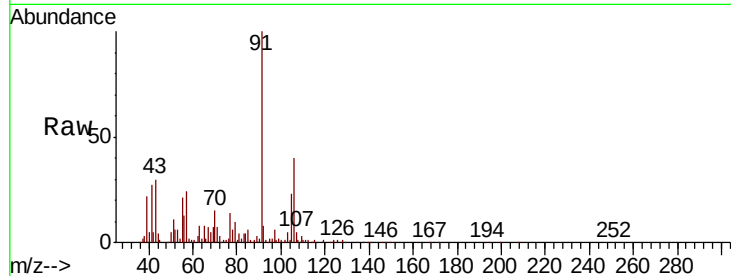
#59
m/p-Xylene
Concen: 0.81 ppbv m
RT: 13.20 min Scan# 3767
Delta R.T. -0.04 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Instrument :
MSVOA_L
ClientSampled :
SV-2

Tot Ion: 91 Resp: 385027
Ion Ratio Lower Upper
91 100
106 0.0 36.4 54.6#

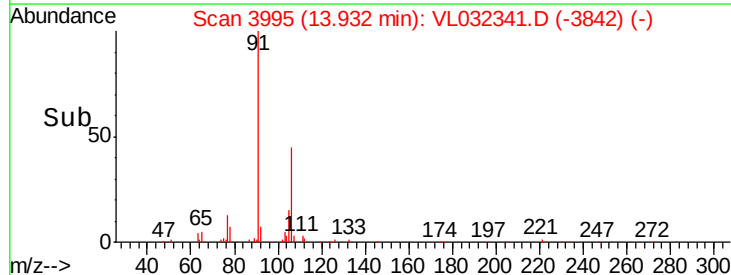
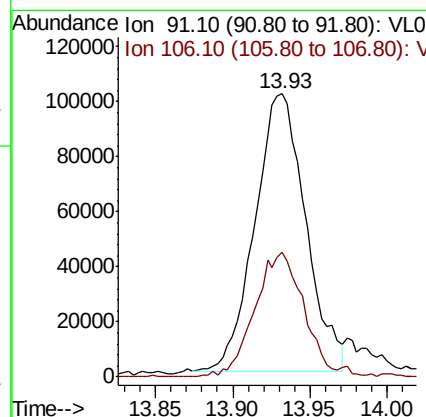
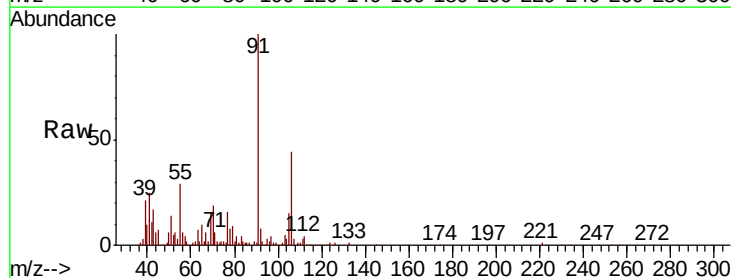
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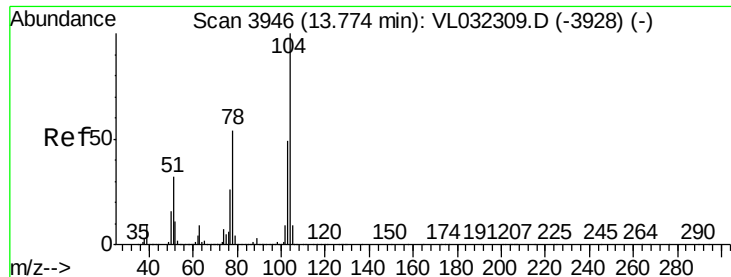
apatel
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#60
o-Xylene
Concen: 0.49 ppbv
RT: 13.93 min Scan# 3995
Delta R.T. -0.01 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Tgt Ion: 91 Resp: 229704
Ion Ratio Lower Upper
91 100
106 44.7 22.4 67.0





#61

Stvrene

Concen: 0.28 ppbv

RT: 13.77 min Scan# 3944

Delta R.T. -0.01 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Instrument :

MSVOA_L

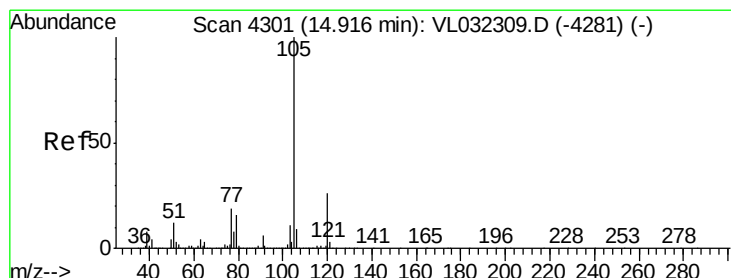
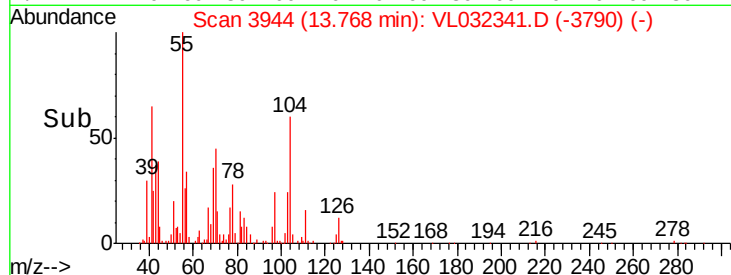
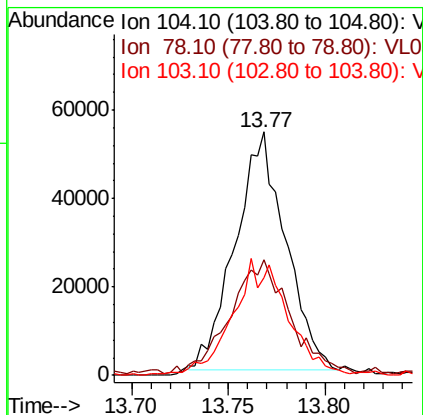
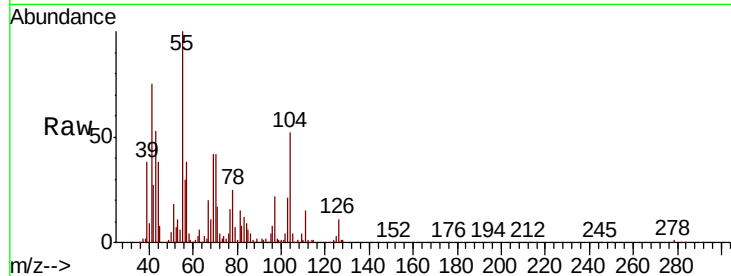
ClientSampled :

SV-2

Tot Ion:	104	Resp:	98036
Ion Ratio	Lower	Upper	
104	100		
78	58.2	42.6	63.8
103	53.8	38.0	57.0

Manual Integrations
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#62

Isopropylbenzene

Concen: 0.28 ppbv

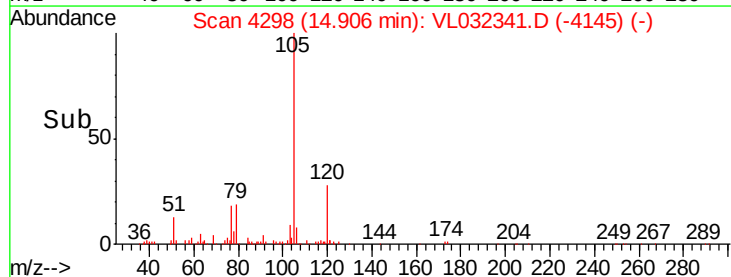
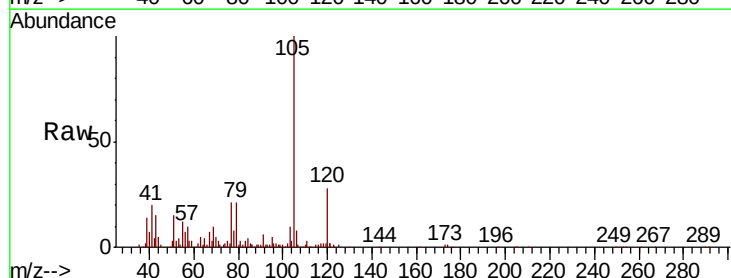
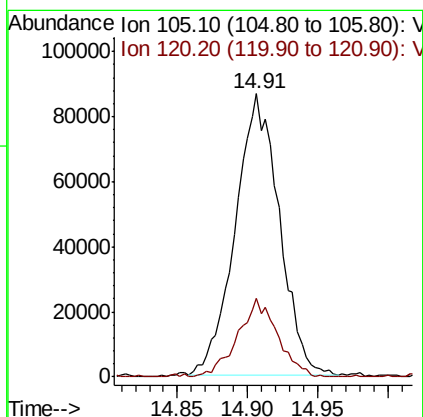
RT: 14.91 min Scan# 4298

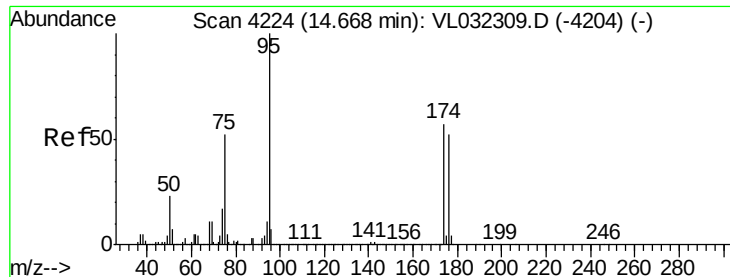
Delta R.T. -0.01 min

Lab File: VL032341.D

Acq: 2 Aug 2018 3:20

Tgt Ion:	105	Resp:	188845
Ion Ratio	Lower	Upper	
105	100		
120	25.6	20.4	30.6





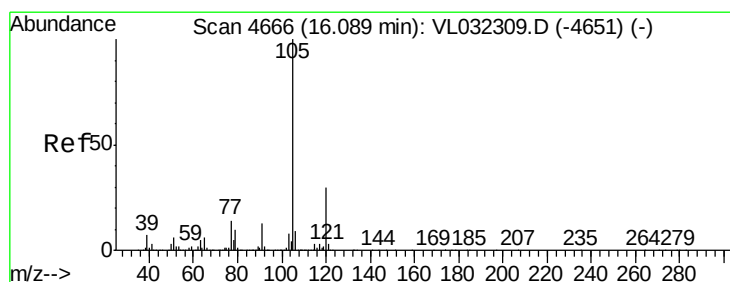
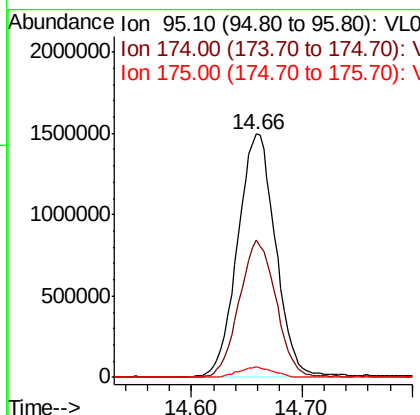
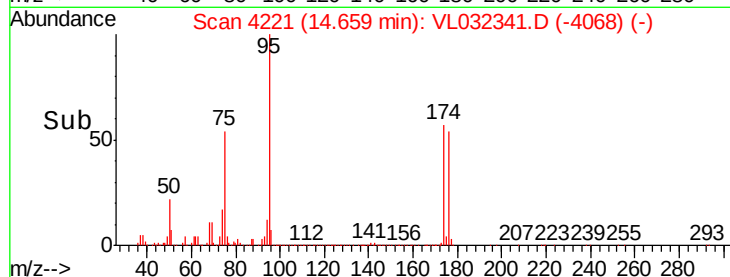
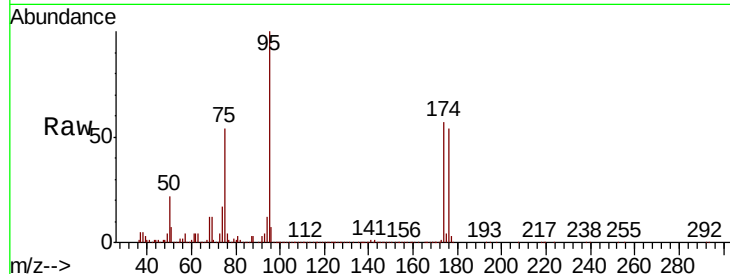
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.21 ppbv
 RT: 14.66 min Scan# 4221
 Delta R.T. -0.01 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

Tot Ion	Ratio	Lower	Upper
95	100		
174	55.5	45.5	68.3
175	4.1	3.3	4.9

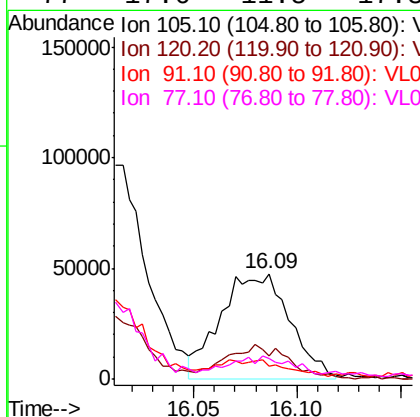
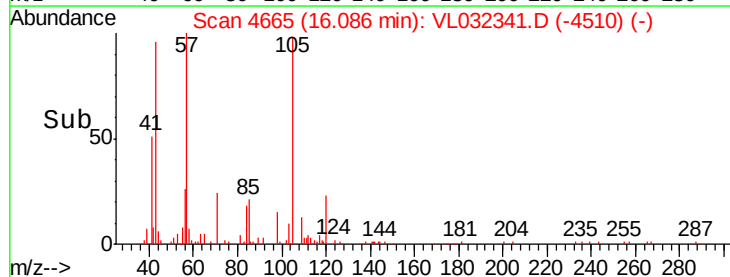
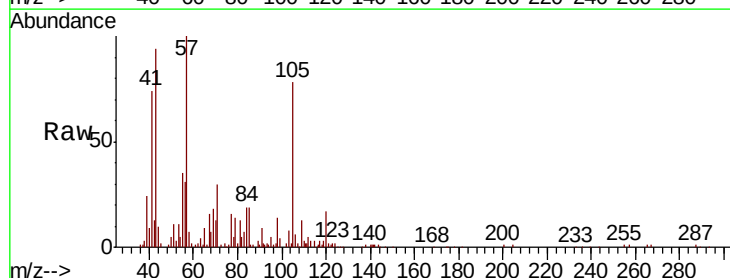
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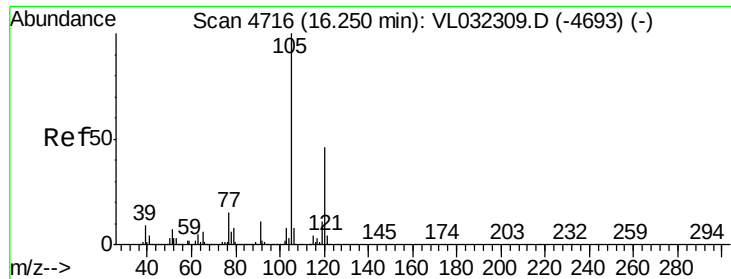
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#72
 4-Ethyltoluene
 Concen: 0.21 ppbv m
 RT: 16.09 min Scan# 4665
 Delta R.T. -0.00 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Tgt Ion	Ratio	Lower	Upper
105	100		
120	30.5	23.1	34.7
91	0.0	10.0	15.0#
77	17.6	11.5	17.3#





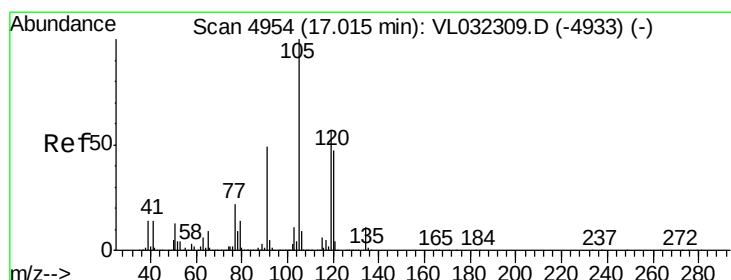
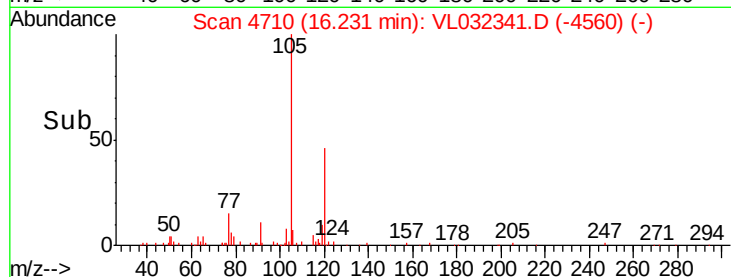
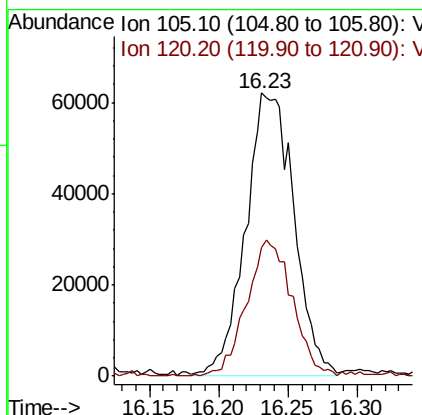
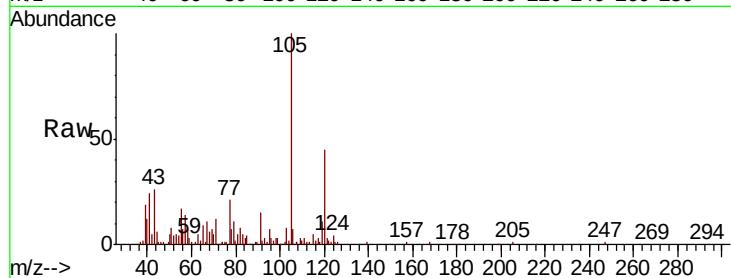
#73
 1,3,5-Trimethylbenzene
 Concen: 0.29 ppbv m
 RT: 16.23 min Scan# 4710
 Delta R.T. -0.02 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Instrument :
 MSVOA_L
 ClientSampled :
 SV-2

Tot Ion	Ratio	Lower	Upper
105	100		
120	45.4	36.5	54.7

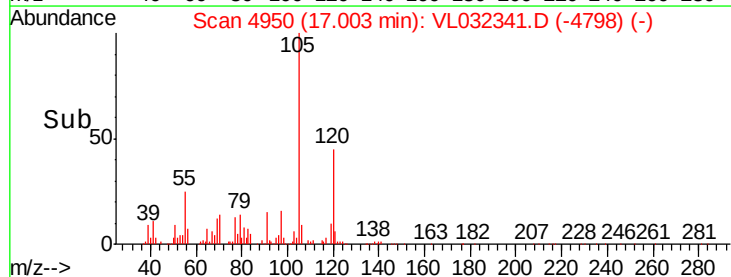
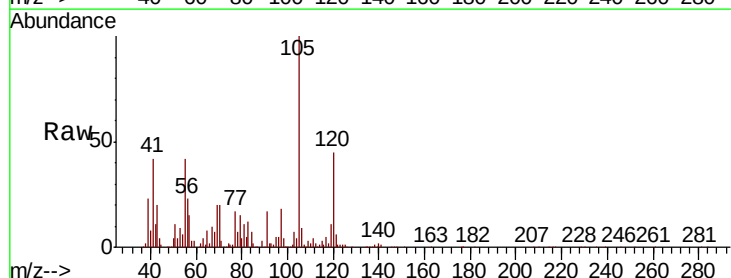
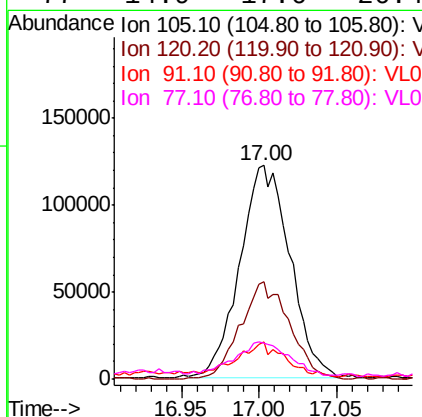
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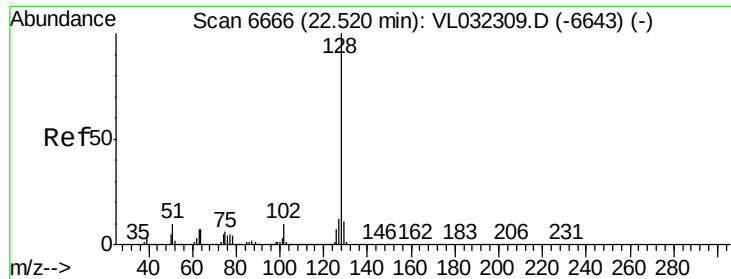
apatel
 8/14/2018 2:01:24 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.50 ppbv
 RT: 17.00 min Scan# 4950
 Delta R.T. -0.01 min
 Lab File: VL032341.D
 Acq: 2 Aug 2018 3:20

Tgt Ion	Ratio	Lower	Upper
105	100		
120	45.2	37.8	56.6
91	16.2	39.4	59.0#
77	14.9	17.6	26.4#





#79
Naphthalene
Concen: 0.33 ppbv
RT: 22.50 min Scan# 6661
Delta R.T. -0.02 min
Lab File: VL032341.D
Acq: 2 Aug 2018 3:20

Instrument :
MSVOA_L
ClientSampleId :
SV-2

Tot Ion	Ratio	Resp Lower	Upper
128	100		
127	9.8	9.9	14.9#
129	7.9	8.8	13.2#

Manual Integrations
APPROVED

apatel
8/14/2018 2:01:24 PM

