

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
 Data File : VL032720.D
 Acq On : 7 Nov 2018 16:59
 Operator : SY/AP
 Sample : J5823-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-01

Manual Integrations
 APPROVED

MMDadoda
 11/12/2018 12:30:07 PM

Quant Time: Nov 12 00:52:28 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 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	5.77	49	1421321	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3502743	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3460549	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2578572	10.01	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	36526	0.252	ppbv	95
3) Chlorodifluoromethane	3.02	51	50686m	0.456	ppbv	
4) Chloromethane	3.18	50	28178	0.454	ppbv	99
9) Propene	3.05	41	211427	4.622	ppbv	86
10) Heptane	8.26	43	74877	0.425	ppbv	97
11) Trichlorofluoromethane	4.02	101	45157	0.239	ppbv	94
13) Ethanol	3.67	45	106273	8.129	ppbv	97
15) Acetone	3.91	43	560631	4.272	ppbv	94
19) Isopropyl Alcohol	4.05	45	76140m	0.815	ppbv	
20) Methylene Chloride	4.42	84	124680	1.871	ppbv	99
26) Hexane	5.79	57	360945	2.525	ppbv #	48
30) Cyclohexane	7.26	84	34227m	0.303	ppbv	
34) 2-Butanone	5.35	43	83755	0.446	ppbv	99
35) Carbon Tetrachloride	7.15	117	21440m	0.086	ppbv	
36) Benzene	7.02	78	599496	2.108	ppbv	97
44) 2,2,4-Trimethylpentane	8.00	57	805895	1.660	ppbv #	91
52) Tetrachloroethene	11.38	164	23010m	0.232	ppbv	
53) Toluene	9.96	91	4907106	15.050	ppbv	100
58) Ethyl Benzene	12.88	91	448639	1.116	ppbv	97
59) m/p-Xylene	13.13	91	1592838	4.449	ppbv	100
60) o-Xylene	13.86	91	600481	1.739	ppbv	98
61) Styrene	13.70	104	37147	0.160	ppbv	90
64) n-propylbenzene	15.73	120	15362	0.126	ppbv	87
72) 4-Ethyltoluene	16.01	105	160646	0.437	ppbv #	96
73) 1,3,5-Trimethylbenzene	16.17	105	124807	0.348	ppbv	95
74) 1,2,4-Trimethylbenzene	16.93	105	547765	1.432	ppbv #	75
79) Naphthalene	22.43	128	31068m	0.131	ppbv	

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

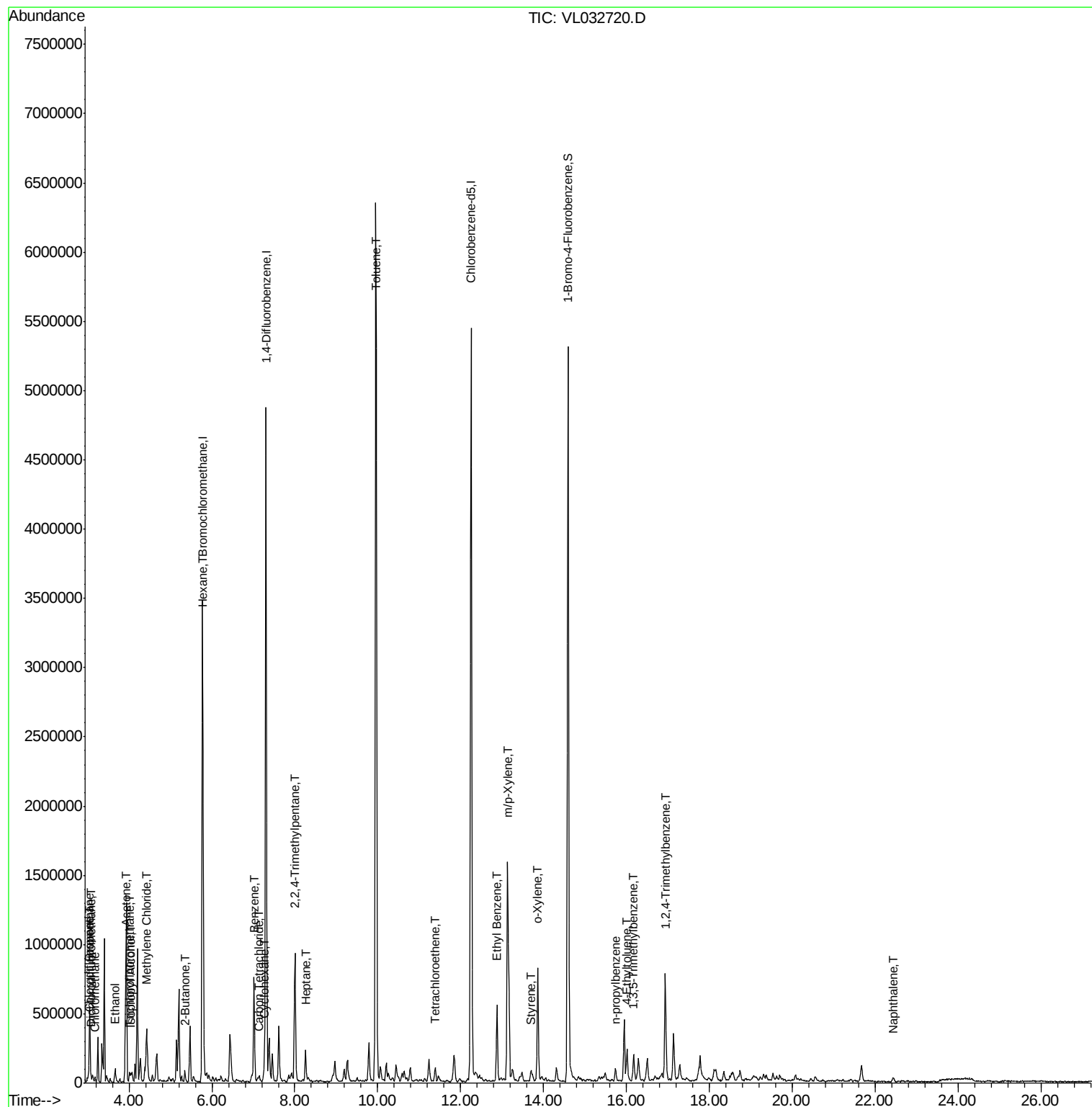
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110718\
Data File : VL032720.D
Acq On : 7 Nov 2018 16:59
Operator : SY/AP
Sample : J5823-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

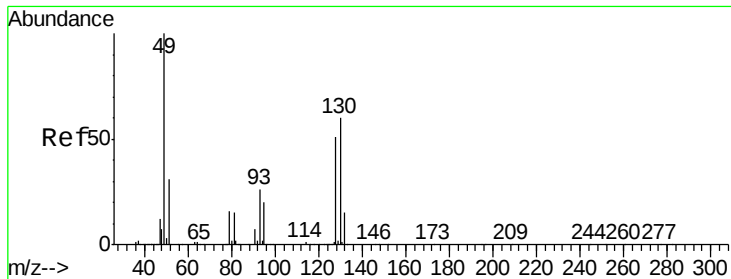
Instrument :
MSVOA_L
ClientSampleId :
SV-01

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM

Quant Time: Nov 12 00:52:28 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Oct
QLast Update : Thu Oct 25 05:15:43 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 882

Delta R.T. -0.01 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

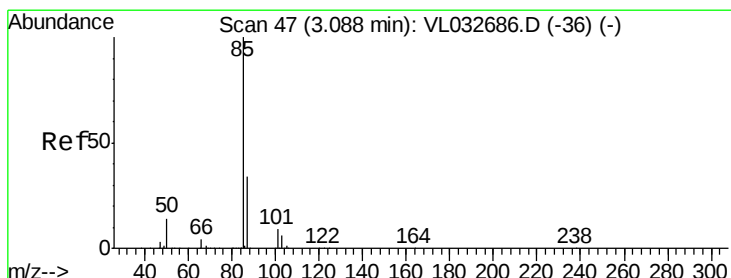
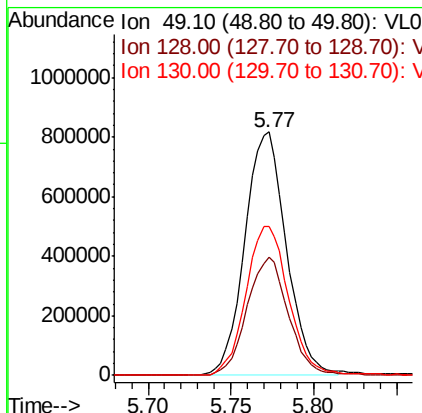
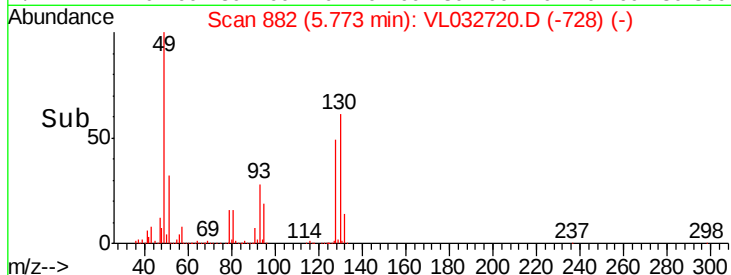
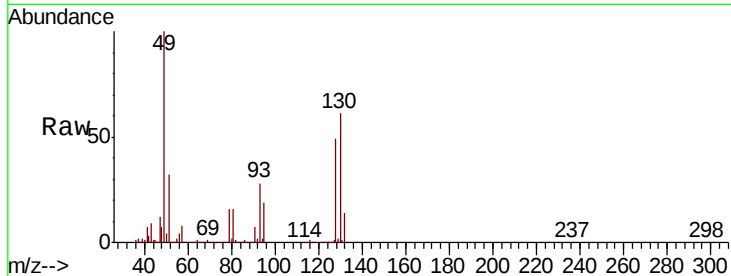
ClientSampleId :

SV-01

Tot Ion:	49	Resp:	1421321
Ion	Ratio	Lower	Upper
49	100		
128	49.1	22.3	66.8
130	63.6	28.4	85.3

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM



#2

Dichlorodifluoromethane

Concen: 0.252 ppbv

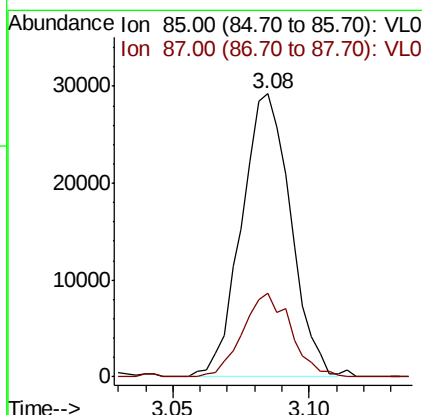
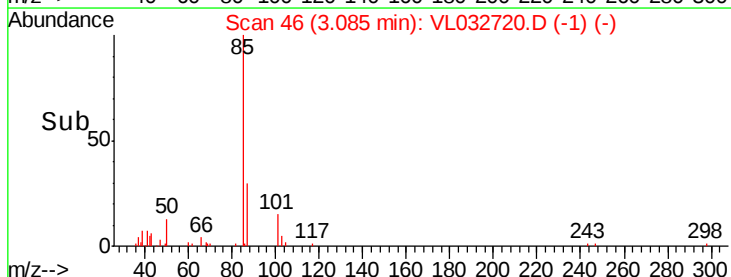
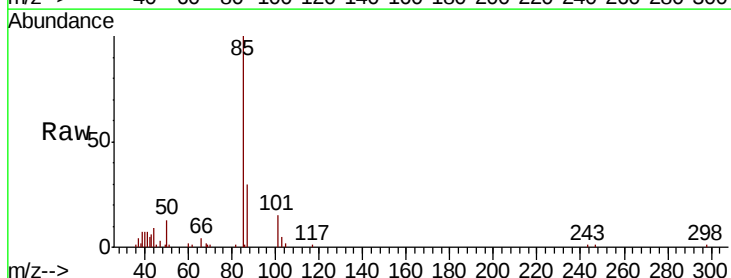
RT: 3.08 min Scan# 46

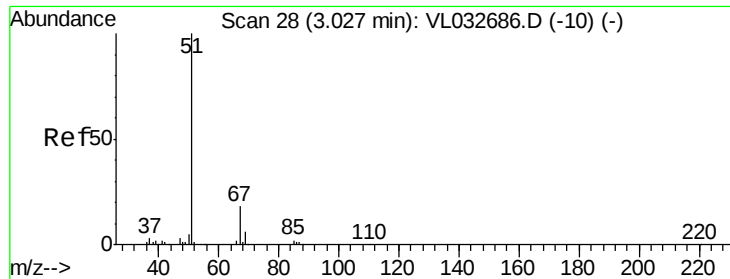
Delta R.T. 0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Tgt Ion:	85	Resp:	36526
Ion	Ratio	Lower	Upper
85	100		
87	29.7	26.2	39.2





#3

Chlorodifluoromethane

Concen: 0.456 ppbv

RT: 3.02 min Scan# 27

Delta R.T. -0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

ClientSampleId :

SV-01

Tot Ion: 51 Resp: 50686

Ion Ratio Lower Upper

51 100

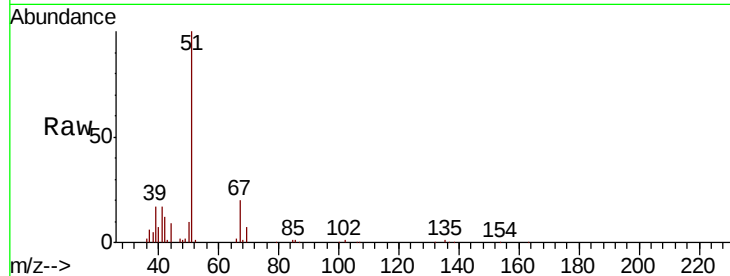
67 20.6 15.2 22.8

Manual Integrations

APPROVED

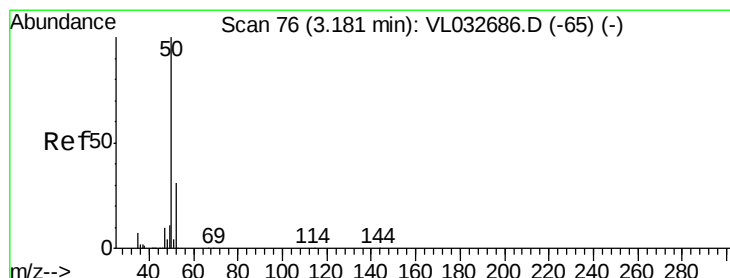
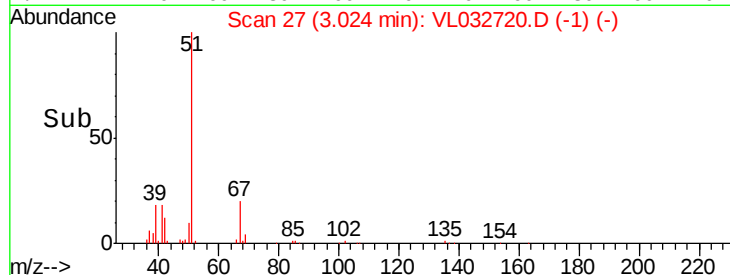
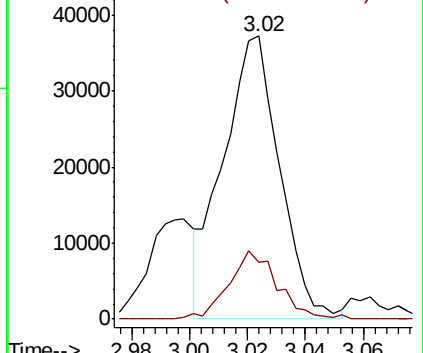
MMDadoda

11/12/2018 12:30:07 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.454 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL032720.D

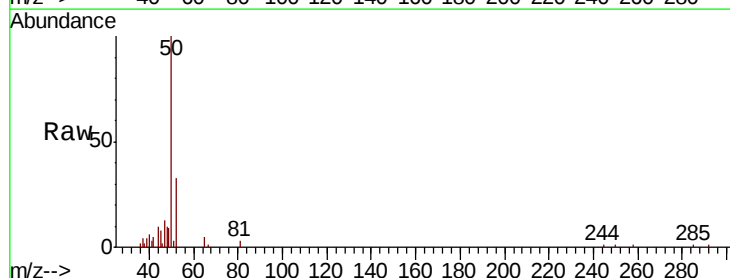
Acq: 7 Nov 2018 16:59

Tgt Ion: 50 Resp: 28178

Ion Ratio Lower Upper

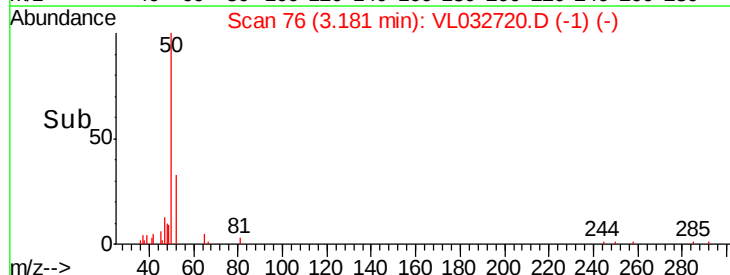
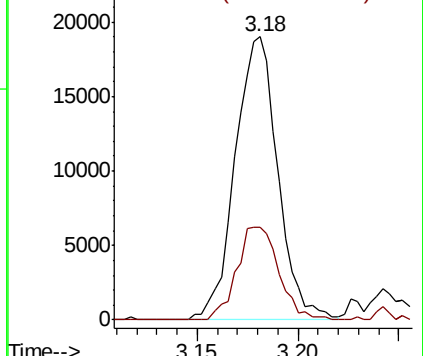
50 100

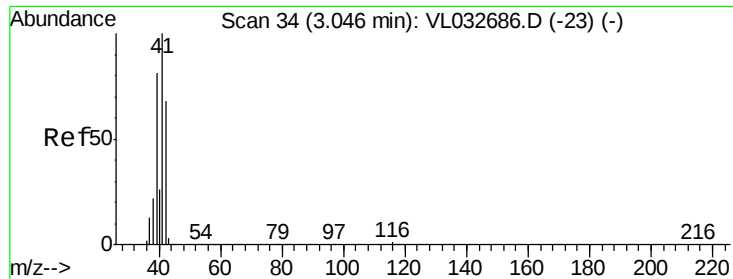
52 32.9 25.9 38.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 4.622 ppbv

RT: 3.05 min Scan# 34

Delta R.T. 0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

ClientSampleId :

SV-01

Tot Ion: 41 Resp: 211427

Ion Ratio Lower Upper

41 100

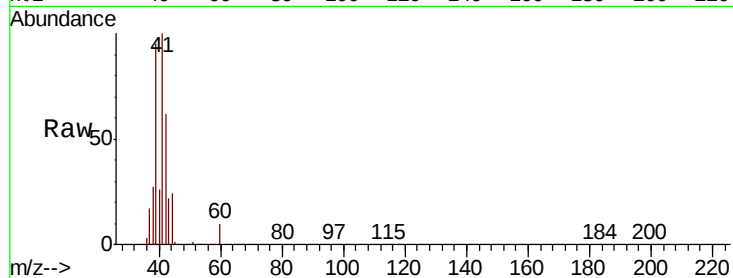
42 58.2 55.4 83.0

Manual Integrations

APPROVED

MMDadoda

11/12/2018 12:30:07 PM



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

3.05

150000

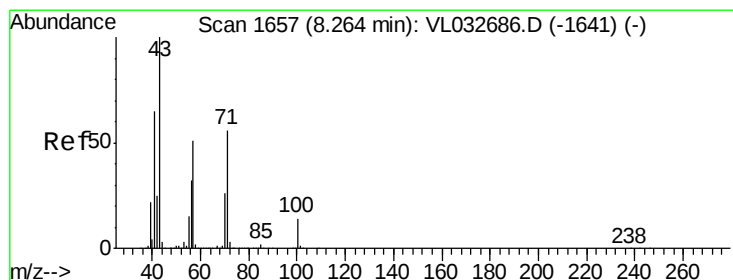
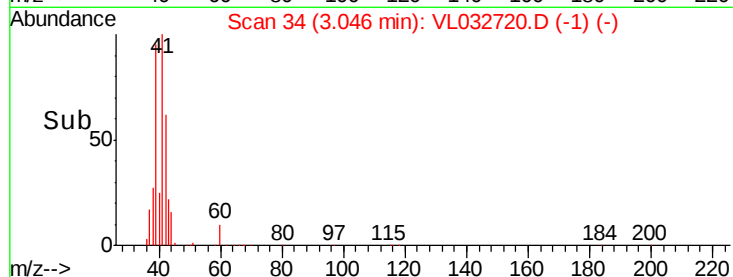
100000

50000

0

Time-->

3.00 3.05 3.10



#10

Heptane

Concen: 0.425 ppbv

RT: 8.26 min Scan# 1656

Delta R.T. -0.00 min

Lab File: VL032720.D

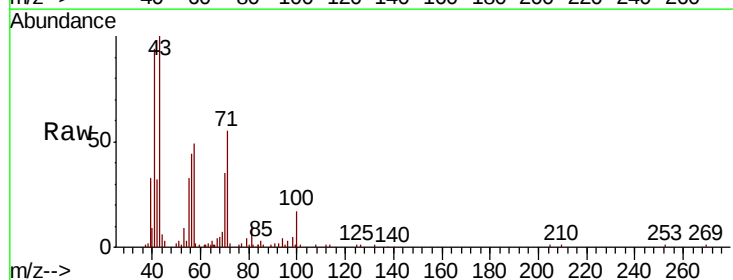
Acq: 7 Nov 2018 16:59

Tgt Ion: 43 Resp: 74877

Ion Ratio Lower Upper

43 100

57 53.8 41.5 62.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.26

40000

30000

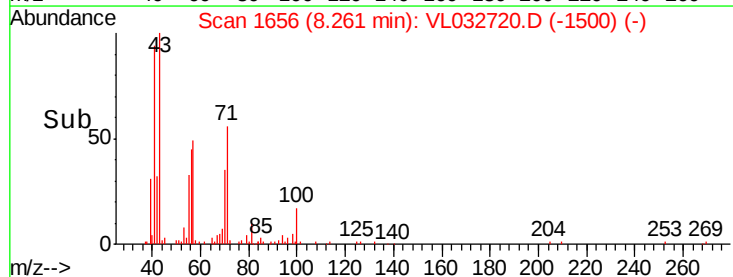
20000

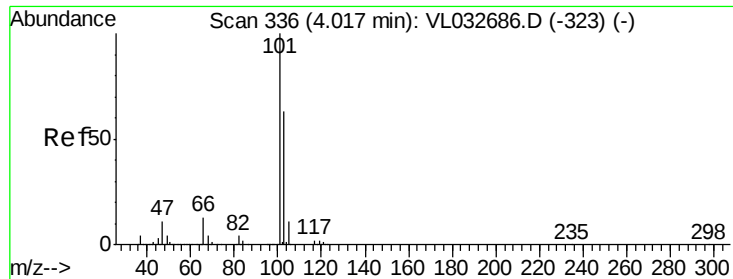
10000

0

Time-->

8.20 8.25 8.30





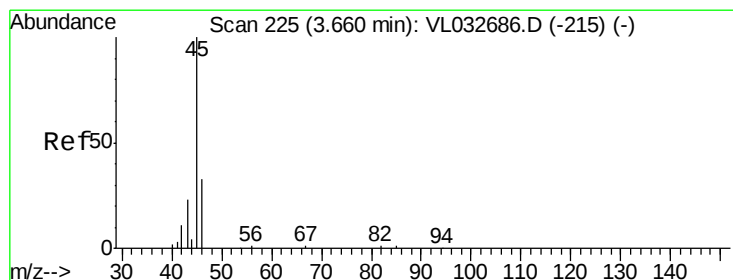
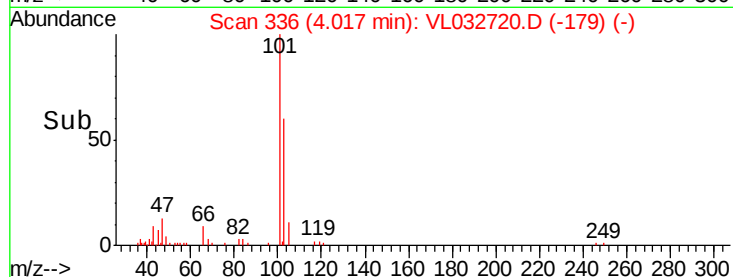
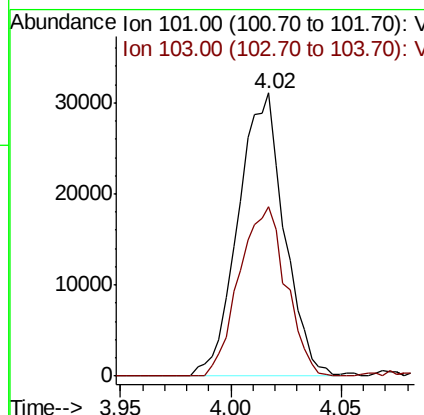
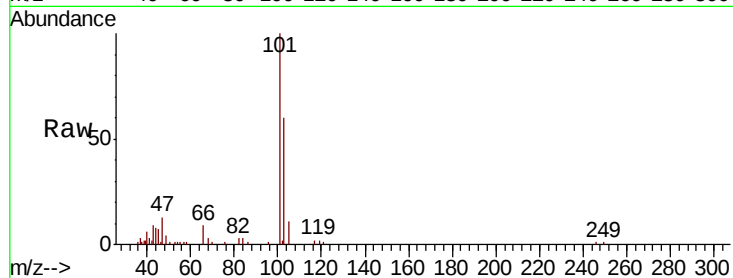
#11
 Trichlorofluoromethane
 Concen: 0.239 ppbv
 RT: 4.02 min Scan# 336
 Delta R.T. 0.00 min
 Lab File: VL032720.D
 Acq: 7 Nov 2018 16:59

Instrument :
 MSVOA_L
 ClientSampled :
 SV-01

Tot Ion	Ratio	Lower	Upper
101	100		
103	59.9	51.4	77.2

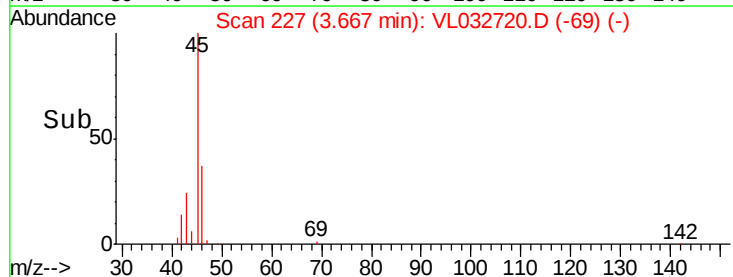
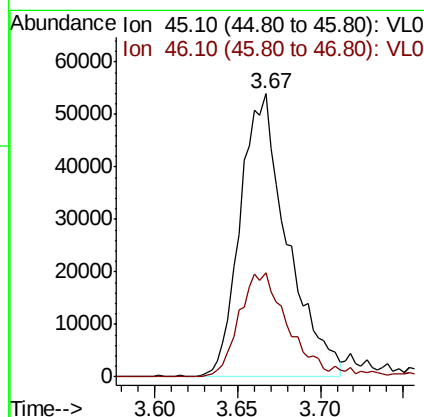
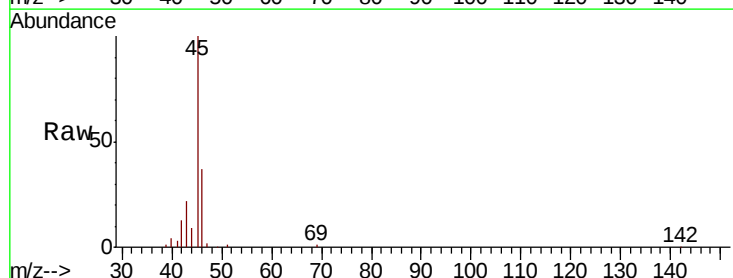
Manual Integrations
 APPROVED

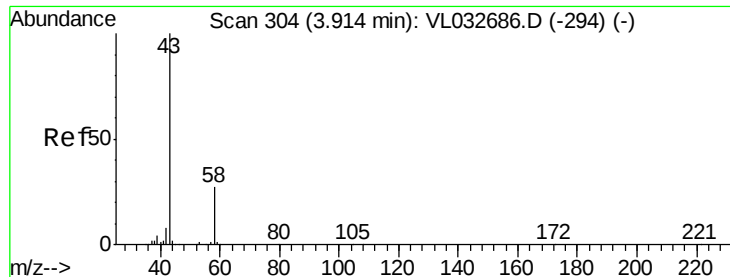
MMDadoda
 11/12/2018 12:30:07 PM



#13
 Ethanol
 Concen: 8.129 ppbv
 RT: 3.67 min Scan# 227
 Delta R.T. 0.01 min
 Lab File: VL032720.D
 Acq: 7 Nov 2018 16:59

Tgt Ion	Ratio	Lower	Upper
45	100		
46	40.3	15.4	61.8





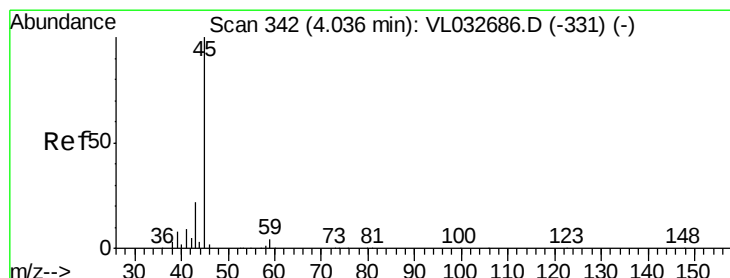
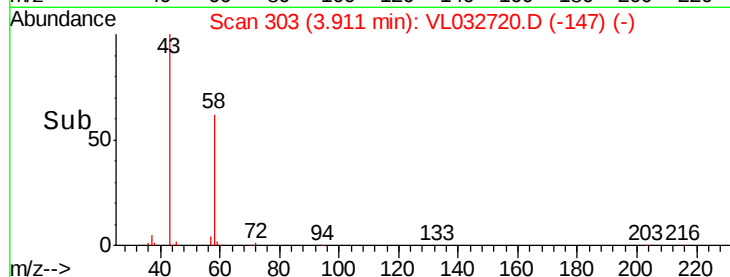
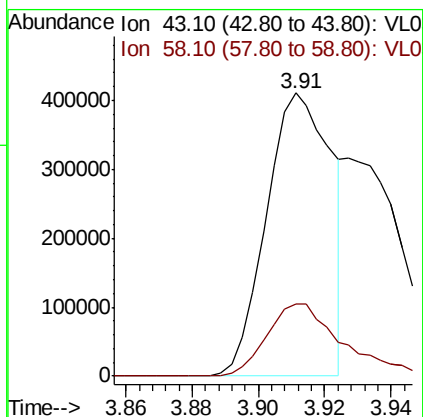
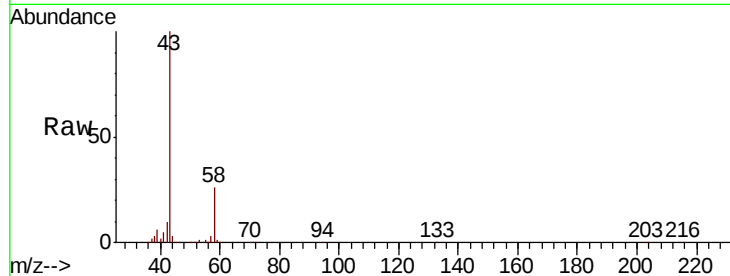
#15
Acetone
Concen: 4.272 ppbv
RT: 3.91 min Scan# 303
Delta R.T. 0.00 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Instrument :
MSVOA_L
ClientSampleId :
SV-01

Tot Ion: 43 Resp: 560631
Ion Ratio Lower Upper
43 100
58 30.6 22.1 33.1

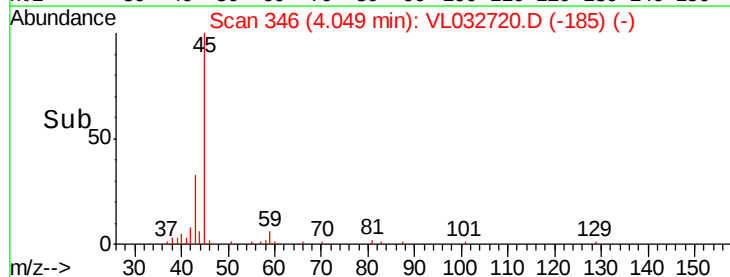
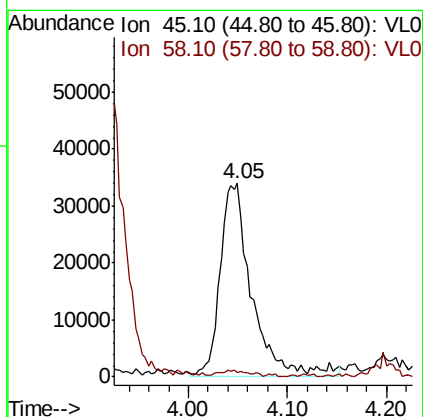
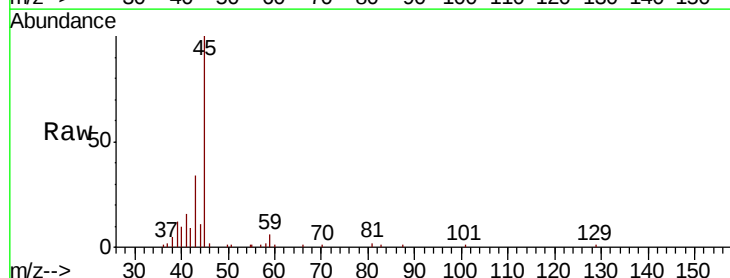
Manual Integrations
APPROVED

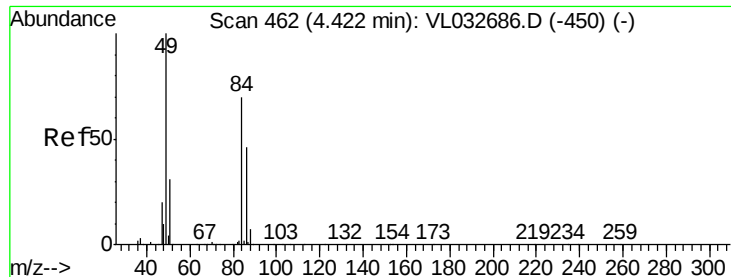
MMDadoda
11/12/2018 12:30:07 PM



#19
Isopropyl Alcohol
Concen: 0.815 ppbv m
RT: 4.05 min Scan# 346
Delta R.T. 0.02 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Tgt Ion: 45 Resp: 76140
Ion Ratio Lower Upper
45 100
58 0.0 2.0 3.0#





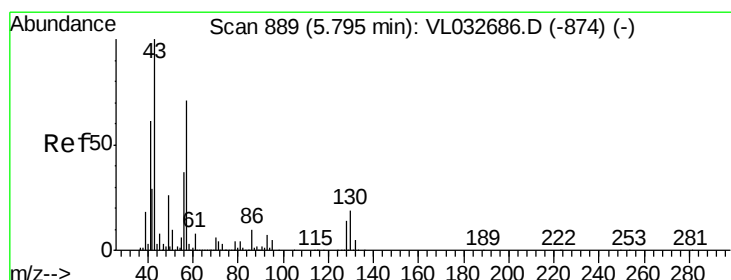
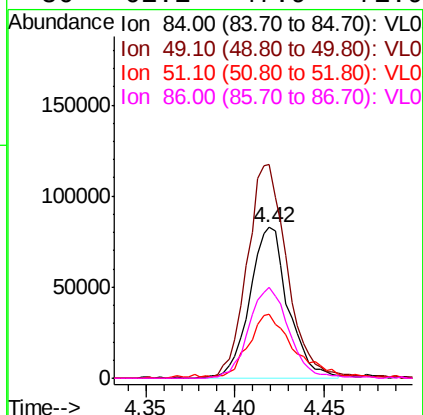
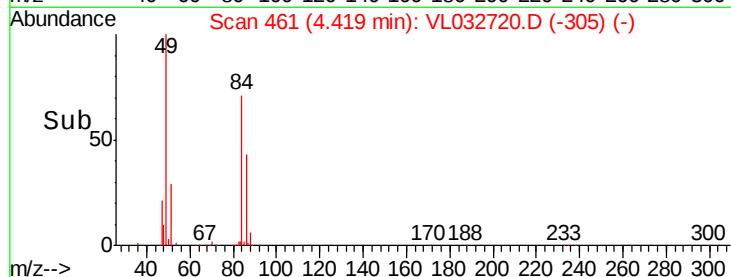
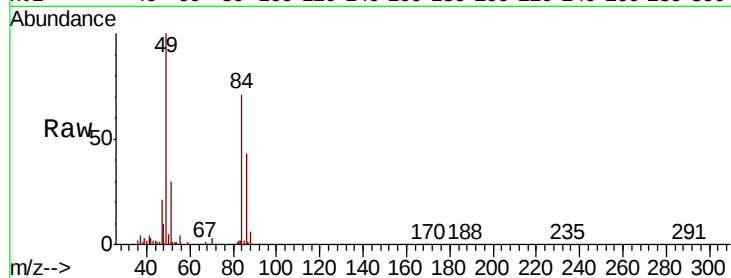
#20
Methvlene Chloride
Concen: 1.871 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion:	84	Resp:	124680
Ion	Ratio	Lower	Upper
84	100		
49	141.2	113.5	170.3
51	41.5	34.8	52.2
86	61.1	47.9	71.9

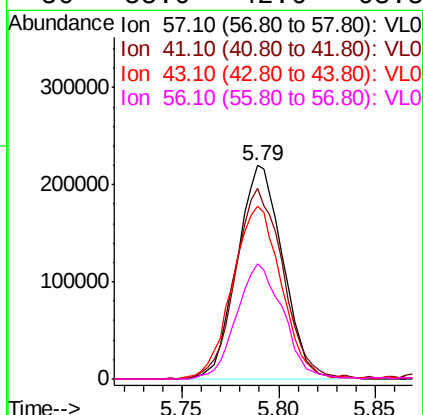
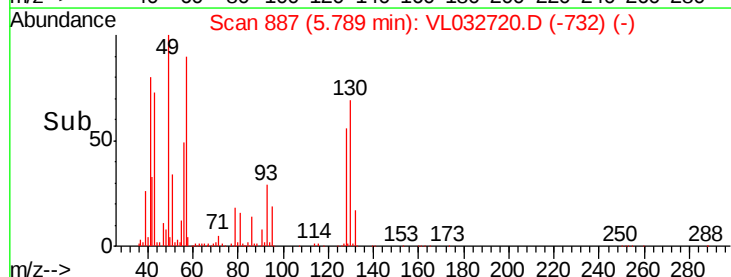
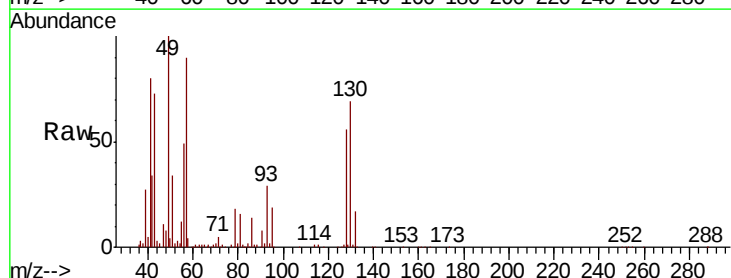
Manual Integrations
APPROVED

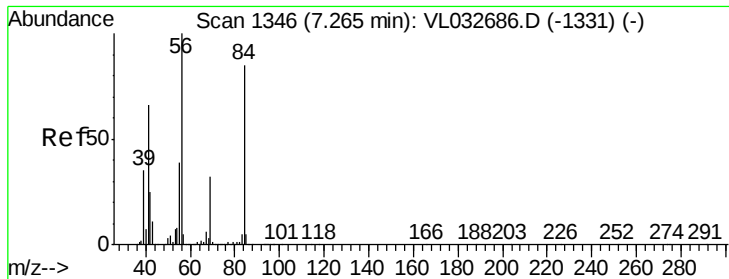
MMDadoda
11/12/2018 12:30:07 PM



#26
Hexane
Concen: 2.525 ppbv
RT: 5.79 min Scan# 887
Delta R.T. -0.00 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Tgt Ion:	57	Resp:	360945
Ion	Ratio	Lower	Upper
57	100		
41	93.7	67.4	101.0
43	87.2	171.9	257.9#
56	55.0	42.6	63.8





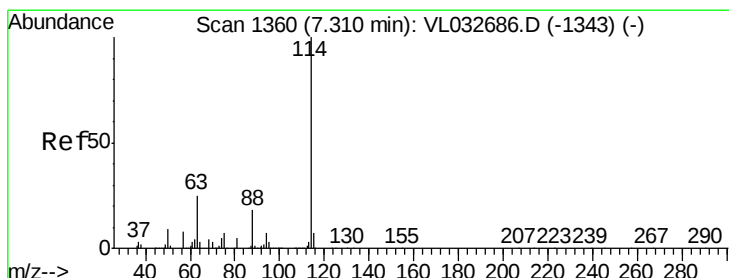
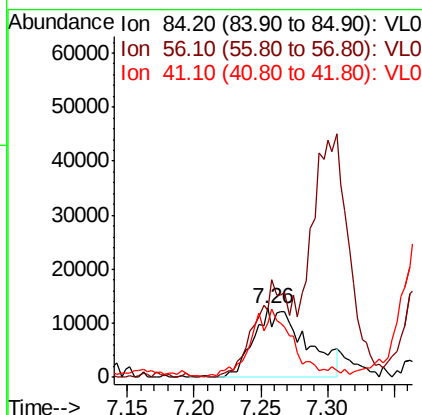
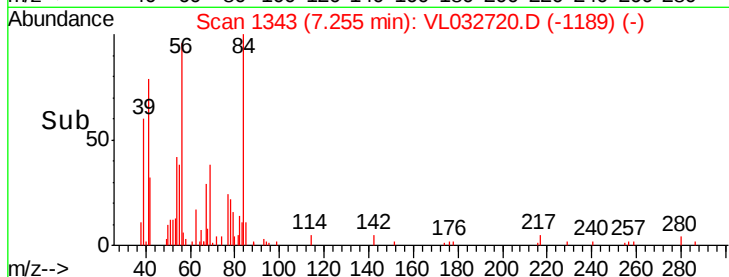
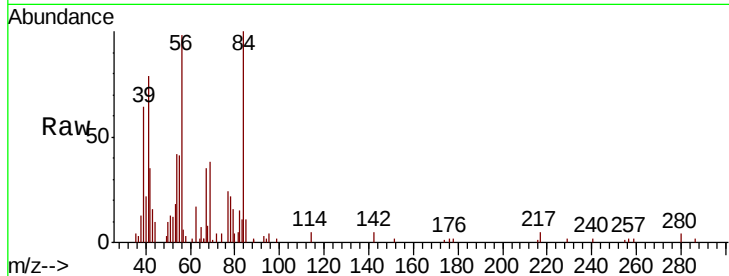
#30
Cvclohexane
Concen: 0.303 ppbv m
RT: 7.26 min Scan# 1343
Delta R.T. -0.01 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Instrument :
MSVOA_L
ClientSampleId :
SV-01

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	108.3	162.5#
41	79.9	64.8	97.2

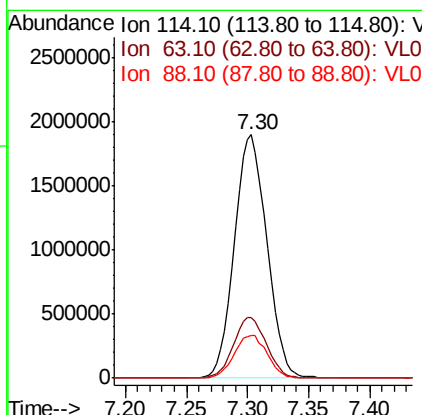
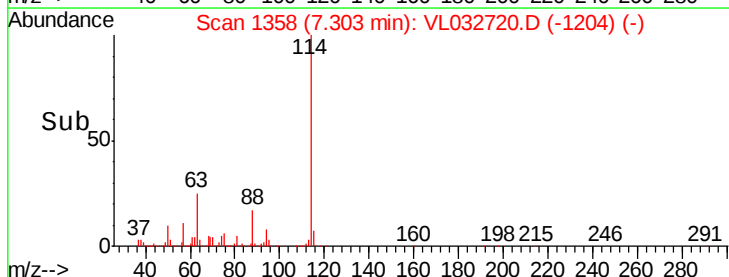
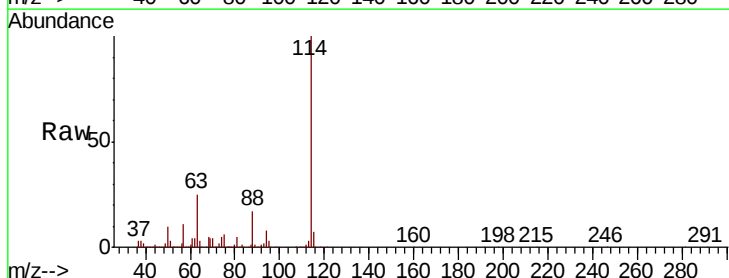
Manual Integrations
APPROVED

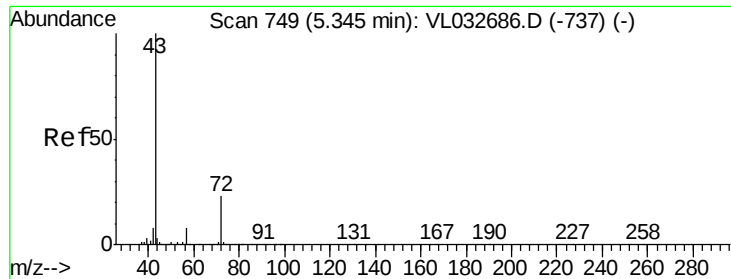
MMDadoda
11/12/2018 12:30:07 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. -0.01 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.3	21.7	32.5
88	18.0	14.9	22.3





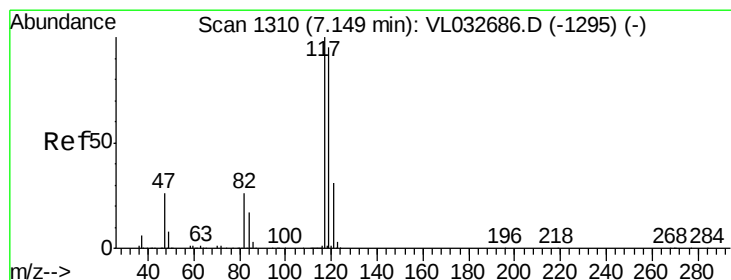
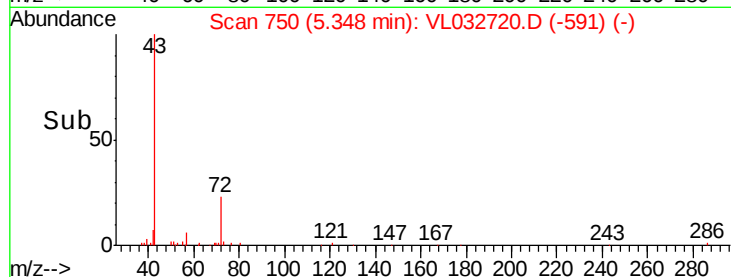
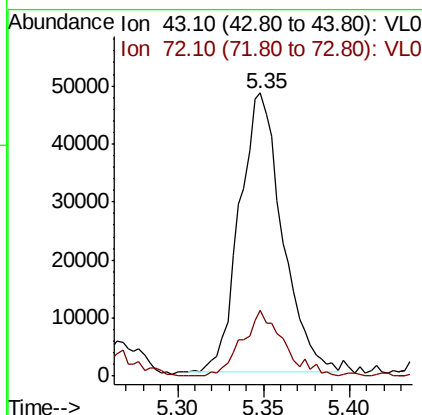
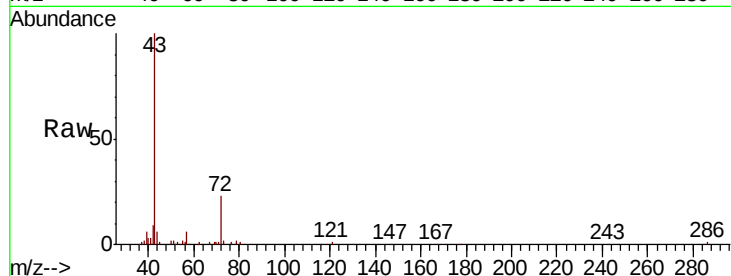
#34
2-Butanone
Concen: 0.446 ppbv
RT: 5.35 min Scan# 750
Delta R.T. 0.01 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion: 43 Resp: 83755
Ion Ratio Lower Upper
43 100
72 22.6 18.6 27.8

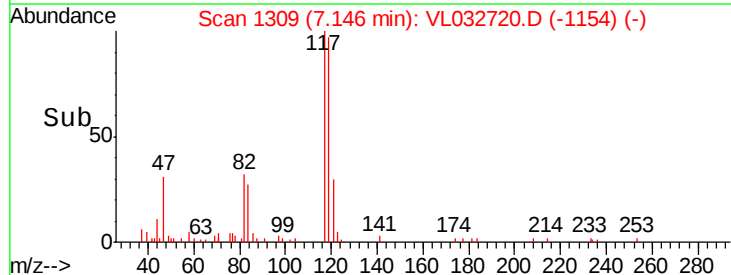
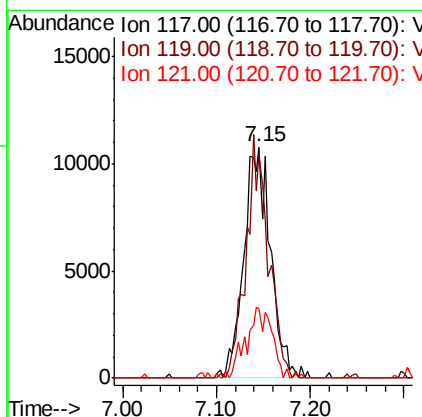
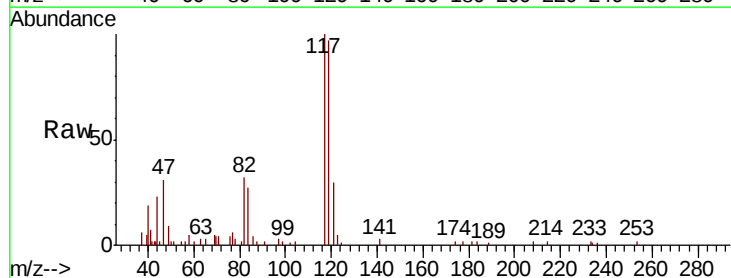
Manual Integrations
APPROVED

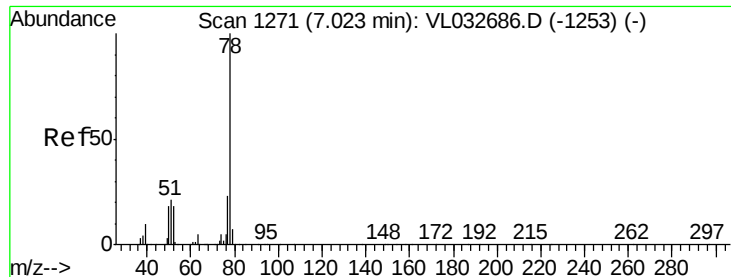
MMDadoda
11/12/2018 12:30:07 PM



#35
Carbon Tetrachloride
Concen: 0.086 ppbv m
RT: 7.15 min Scan# 1309
Delta R.T. -0.00 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Tgt Ion: 117 Resp: 21440
Ion Ratio Lower Upper
117 100
119 96.7 75.7 113.5
121 30.3 24.7 37.1





#36

Benzene

Concen: 2.108 ppbv

RT: 7.02 min Scan# 1269

Delta R.T. -0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

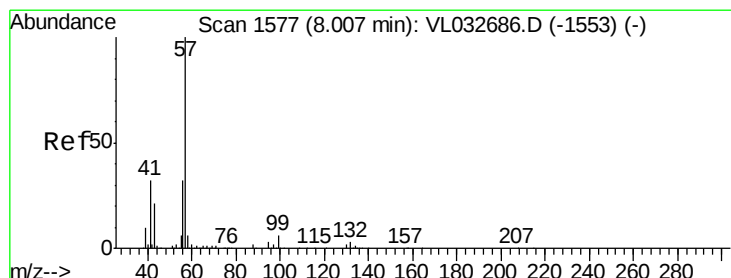
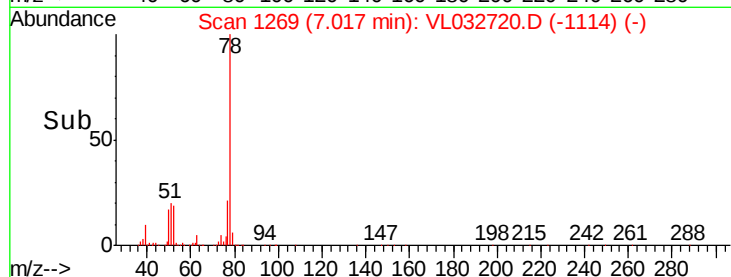
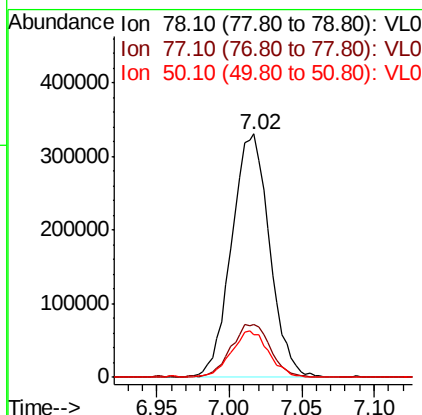
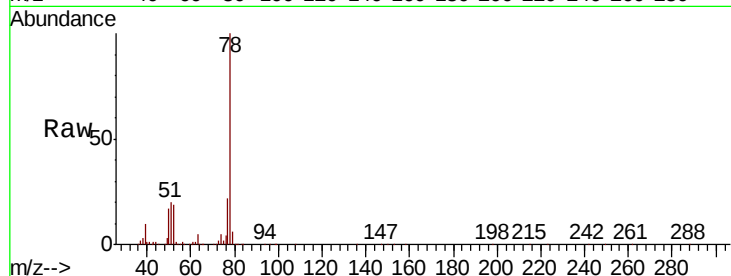
ClientSampled :

SV-01

Tot Ion:	78	Resp:	599496
Ion	Ratio	Lower	Upper
78	100		
77	21.5	18.1	27.1
50	17.2	15.1	22.7

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM



#44

2,2,4-Trimethylpentane

Concen: 1.660 ppbv

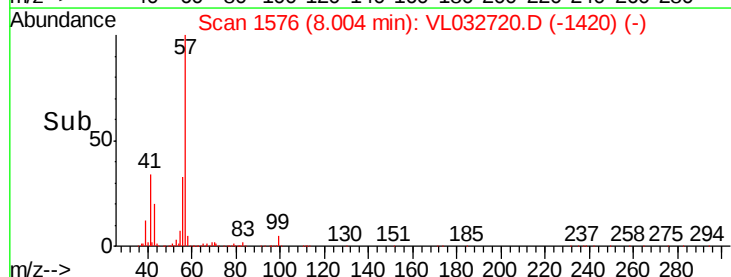
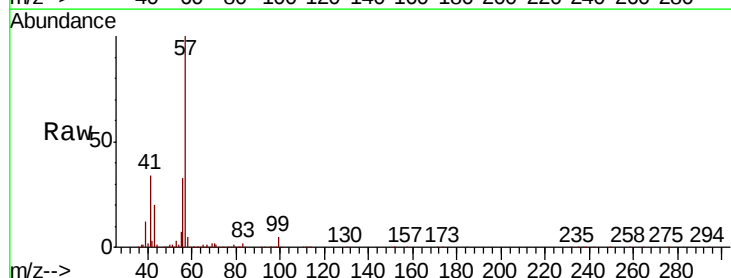
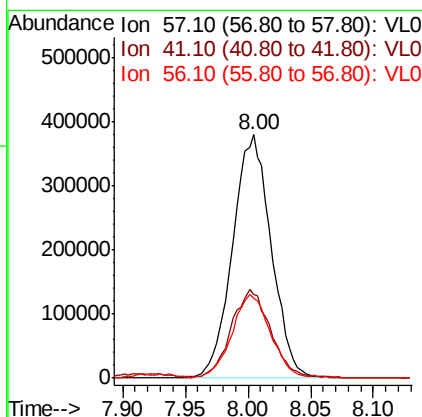
RT: 8.00 min Scan# 1576

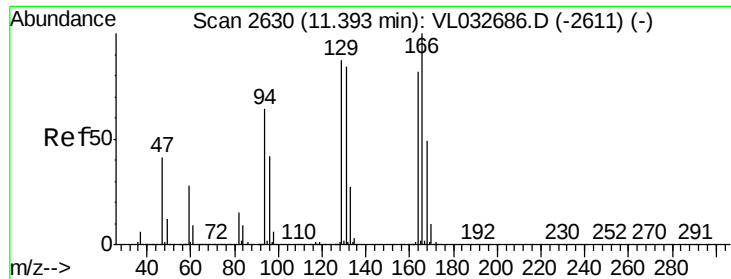
Delta R.T. 0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Tgt Ion:	57	Resp:	805895
Ion	Ratio	Lower	Upper
57	100		
41	37.1	24.7	37.1#
56	34.9	25.0	37.4





#52

Tetrachloroethene

Concen: 0.232 ppbv m

RT: 11.38 min Scan# 2626

Delta R.T. -0.01 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

ClientSampleId :

SV-01

Tot Ion:164 Resp: 23010

Ion Ratio Lower Upper

164 100

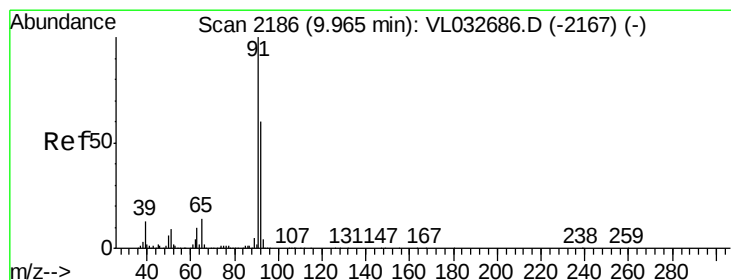
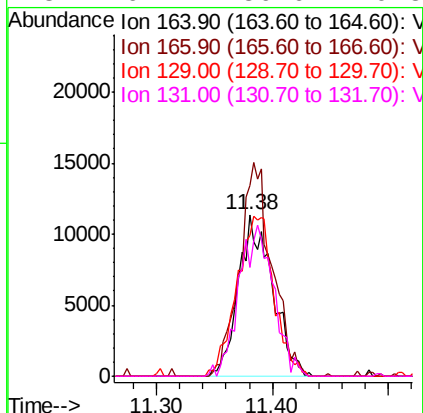
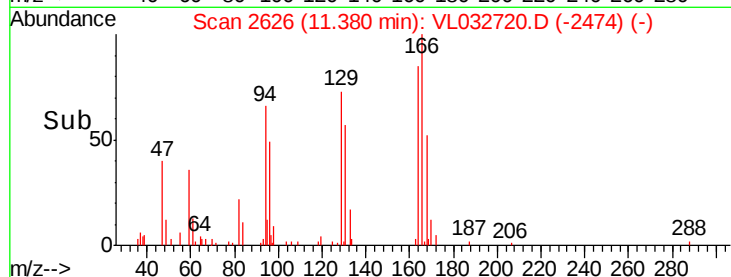
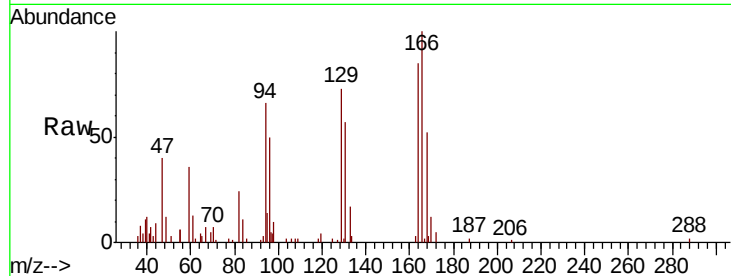
166 118.2 100.5 150.7

129 86.9 90.0 135.0#

131 67.1 86.6 129.8#

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM



#53

Toluene

Concen: 15.050 ppbv

RT: 9.96 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL032720.D

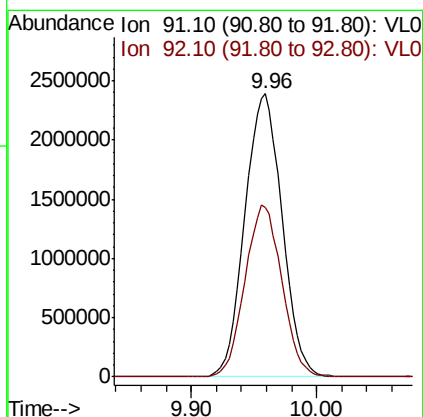
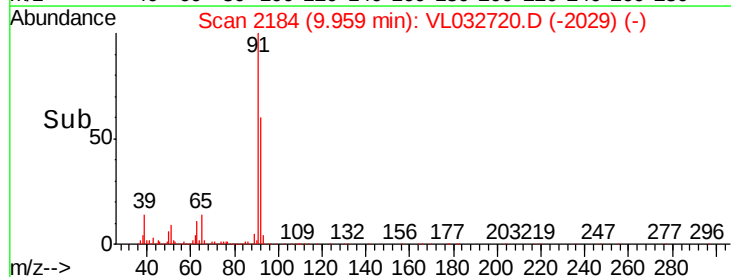
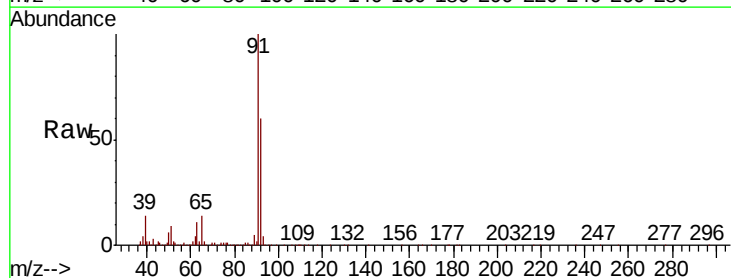
Acq: 7 Nov 2018 16:59

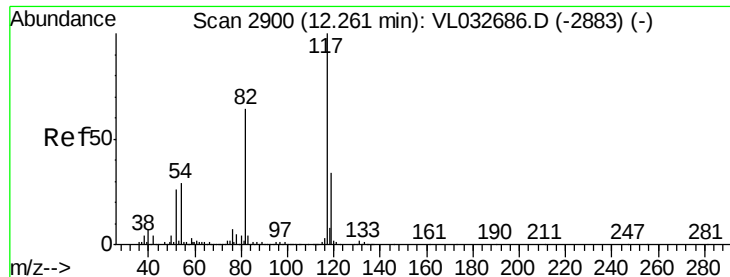
Tgt Ion: 91 Resp: 4907106

Ion Ratio Lower Upper

91 100

92 60.3 48.4 72.6





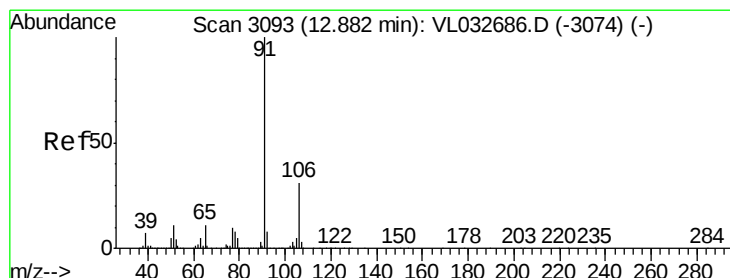
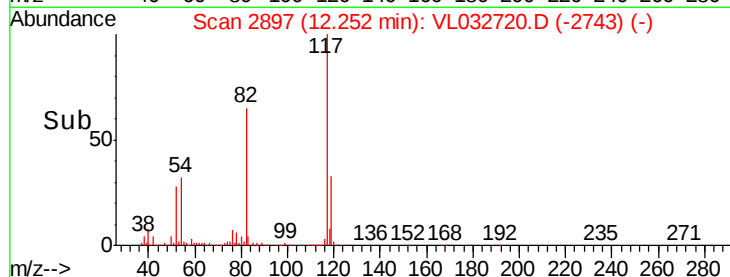
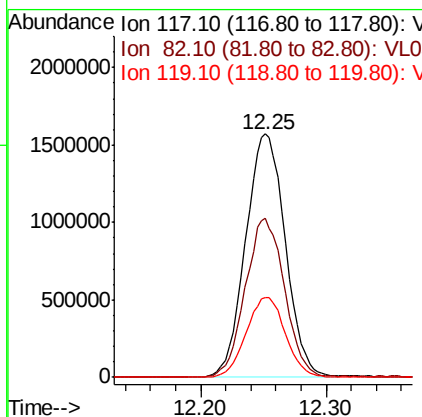
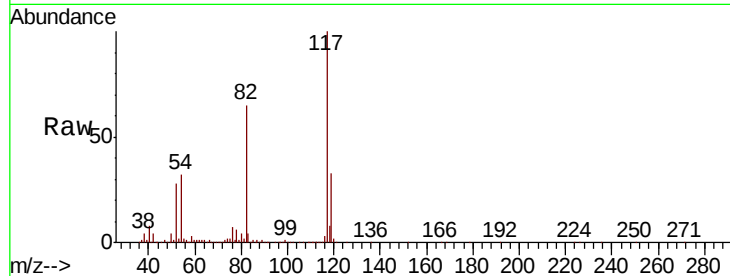
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2897
Delta R.T. -0.01 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Instrument :
MSVOA_L
ClientSampled :
SV-01

Tot Ion:117 Resp: 3460549
Ion Ratio Lower Upper
117 100
82 65.4 52.7 79.1
119 32.5 26.7 40.1

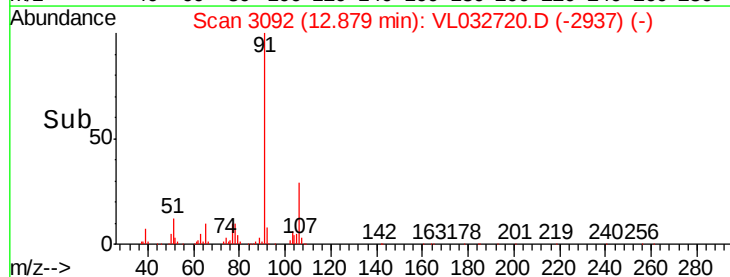
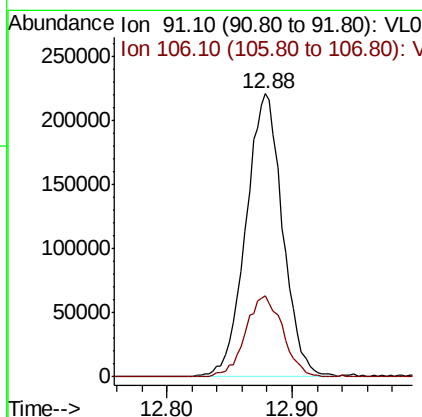
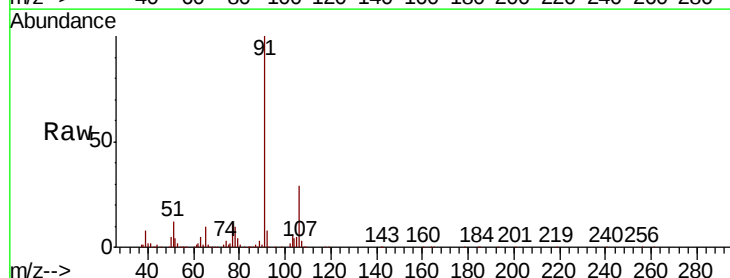
Manual Integrations
APPROVED

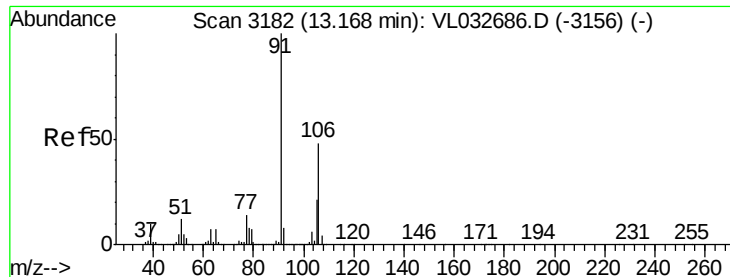
MMDadoda
11/12/2018 12:30:07 PM



#58
Ethyl Benzene
Concen: 1.116 ppbv
RT: 12.88 min Scan# 3092
Delta R.T. -0.00 min
Lab File: VL032720.D
Acq: 7 Nov 2018 16:59

Tgt Ion: 91 Resp: 448639
Ion Ratio Lower Upper
91 100
106 28.7 24.2 36.2





#59

m/p-Xylene

Concen: 4.449 ppbv

RT: 13.13 min Scan# 3170

Delta R.T. -0.04 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

ClientSampled :

SV-01

Tot Ion: 91 Resp: 1592838

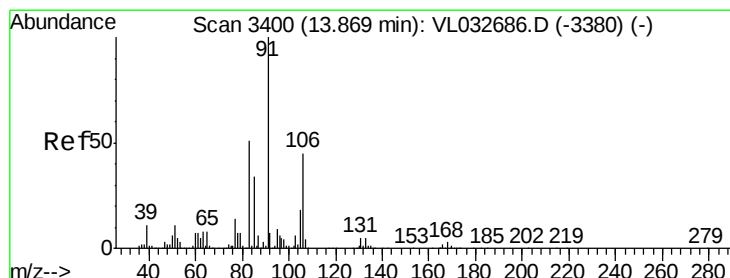
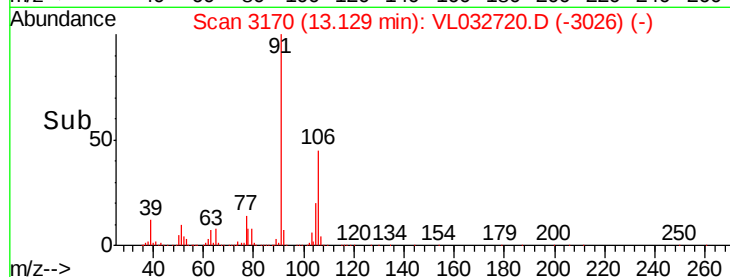
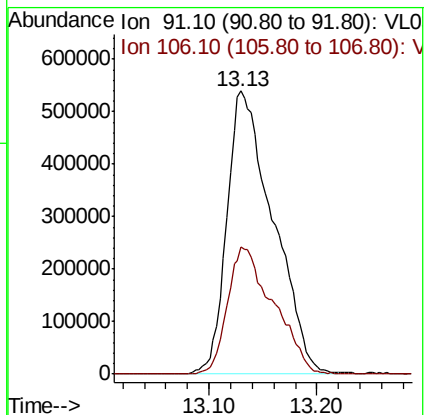
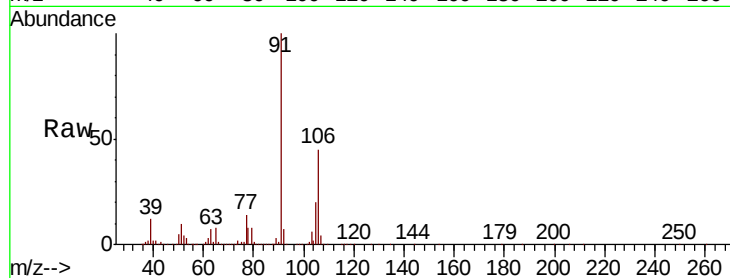
Ion Ratio Lower Upper

91 100

106 45.2 35.9 53.9

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM



#60

o-Xylene

Concen: 1.739 ppbv

RT: 13.86 min Scan# 3397

Delta R.T. -0.01 min

Lab File: VL032720.D

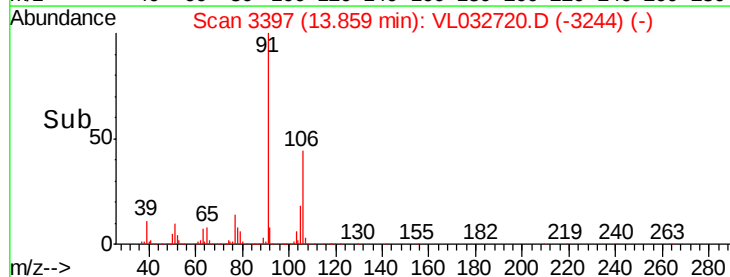
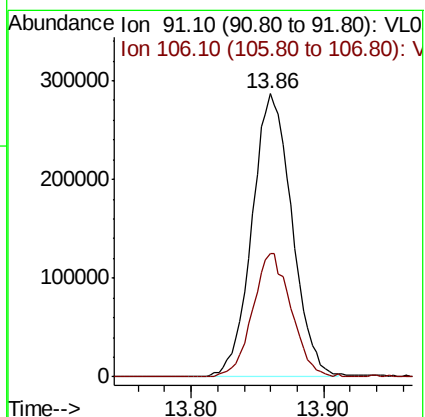
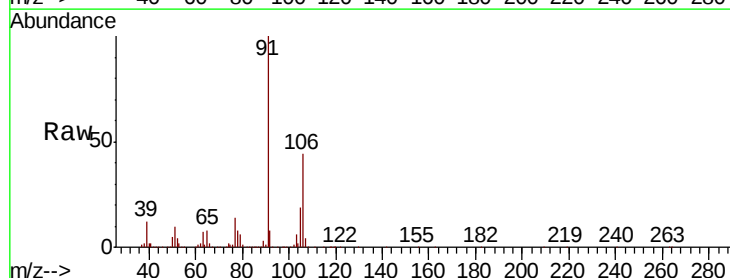
Acq: 7 Nov 2018 16:59

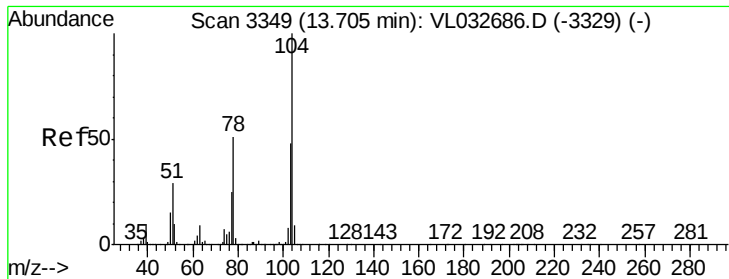
Tgt Ion: 91 Resp: 600481

Ion Ratio Lower Upper

91 100

106 42.5 22.1 66.1





#61

Stvrene

Concen: 0.160 ppbv

RT: 13.70 min Scan# 3348

Delta R.T. 0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

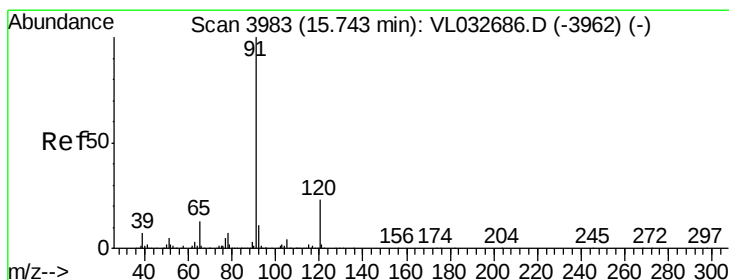
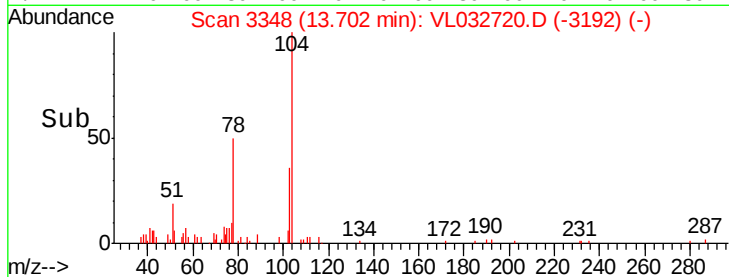
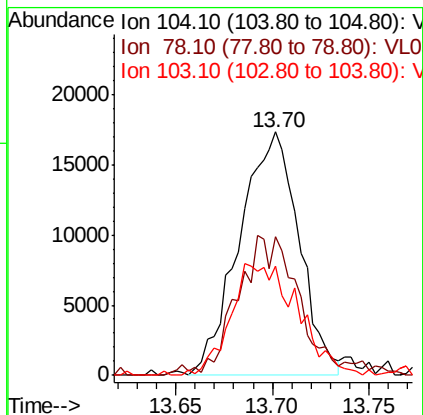
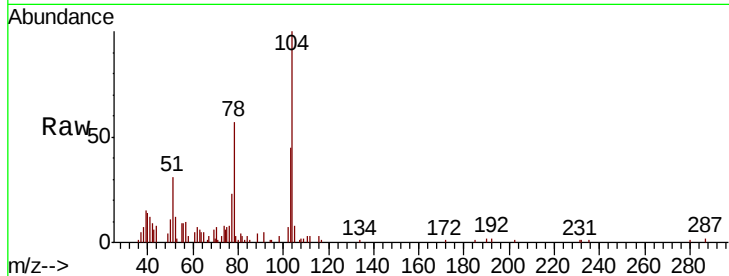
ClientSampled :

SV-01

Tot Ion:	104	Resp:	37147
Ion Ratio	Lower	Upper	
104	100		
78	61.0	42.8	64.2
103	52.3	37.4	56.0

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM



#64

n-propylbenzene

Concen: 0.126 ppbv

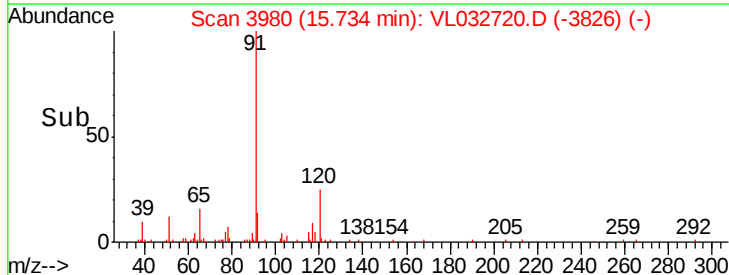
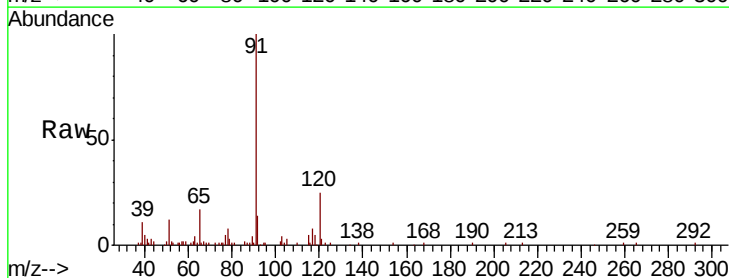
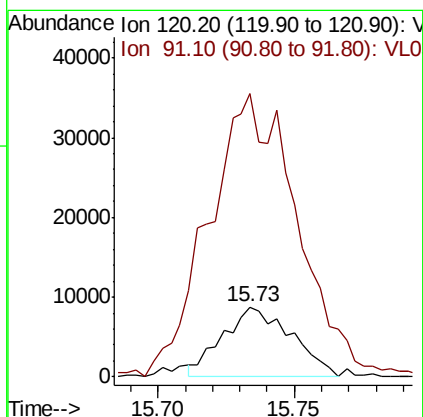
RT: 15.73 min Scan# 3980

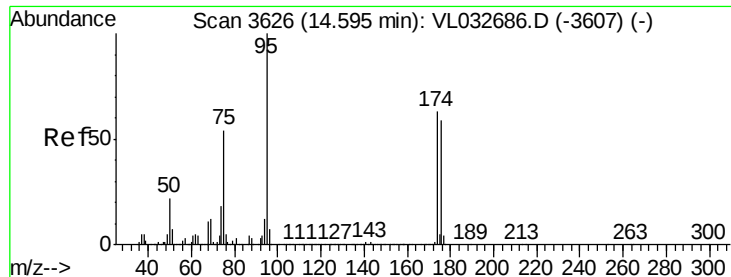
Delta R.T. -0.01 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Tgt Ion:	120	Resp:	15362
Ion Ratio	Lower	Upper	
120	100		
91	523.4	390.2	585.2





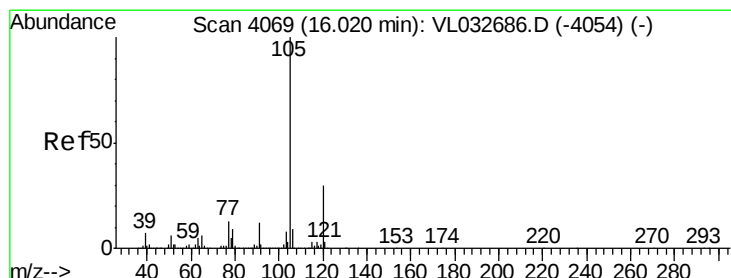
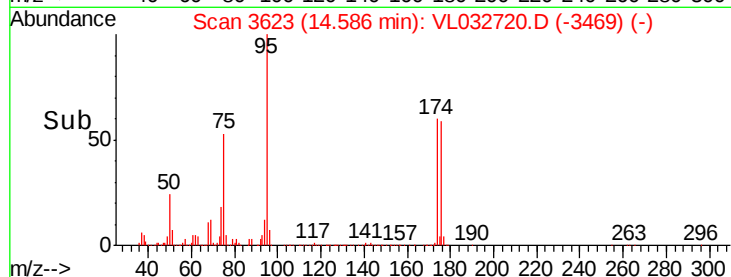
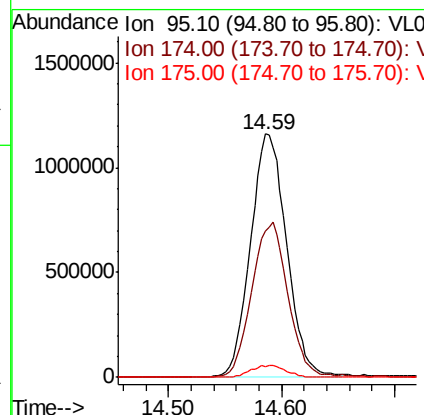
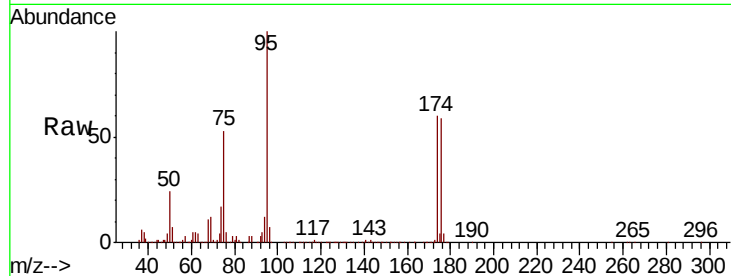
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.007 ppbv
 RT: 14.59 min Scan# 3623
 Delta R.T. -0.01 min
 Lab File: VL032720.D
 Acq: 7 Nov 2018 16:59

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-01

Tot Ion	Ratio	Lower	Upper
95	100		
174	64.9	46.0	69.0
175	4.8	3.4	5.0

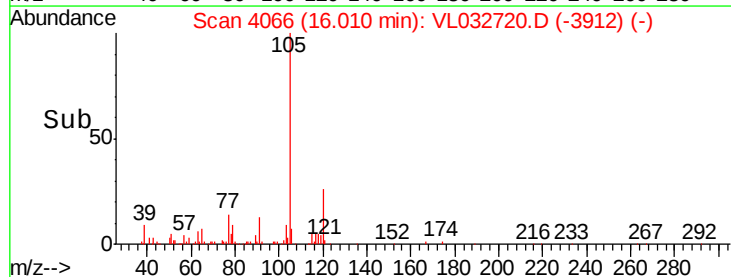
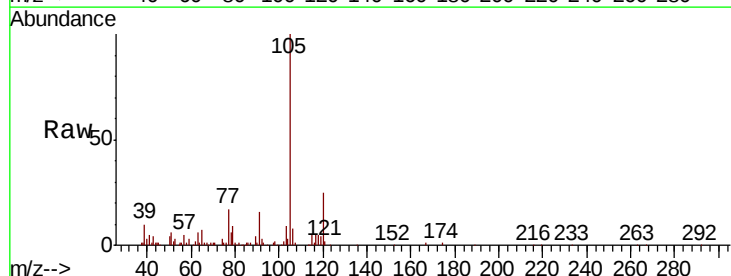
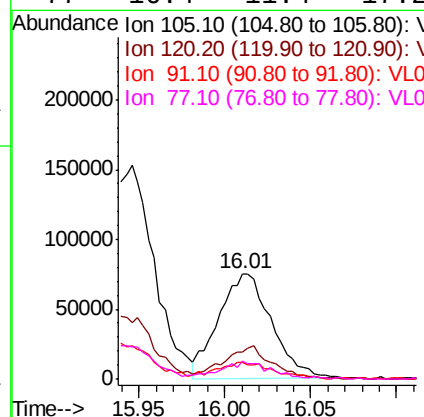
Manual Integrations
 APPROVED

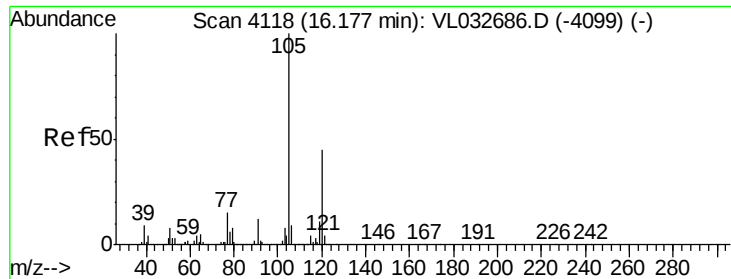
MMDadoda
 11/12/2018 12:30:07 PM



#72
 4-Ethyltoluene
 Concen: 0.437 ppbv
 RT: 16.01 min Scan# 4066
 Delta R.T. -0.01 min
 Lab File: VL032720.D
 Acq: 7 Nov 2018 16:59

Tgt Ion	Ratio	Lower	Upper
105	100		
120	29.0	23.7	35.5
91	16.4	10.4	15.6
77	16.4	11.4	17.2





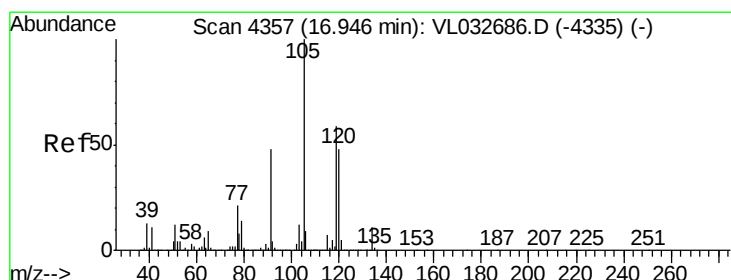
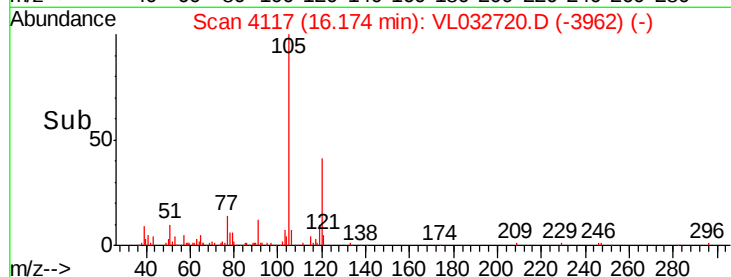
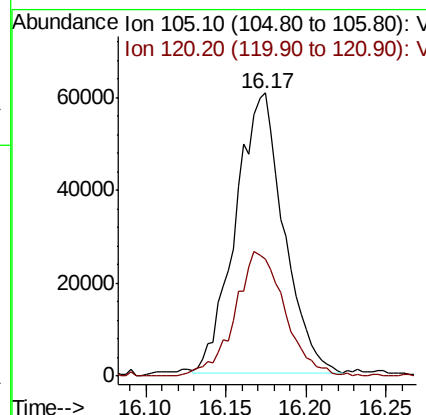
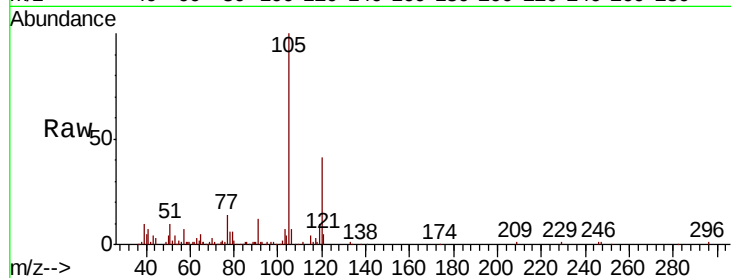
#73
 1,3,5-Trimethylbenzene
 Concen: 0.348 ppbv
 RT: 16.17 min Scan# 4117
 Delta R.T. -0.00 min
 Lab File: VL032720.D
 Acq: 7 Nov 2018 16:59

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-01

Tot Ion	Ratio	Lower	Upper
105	100		
120	41.0	35.4	53.2

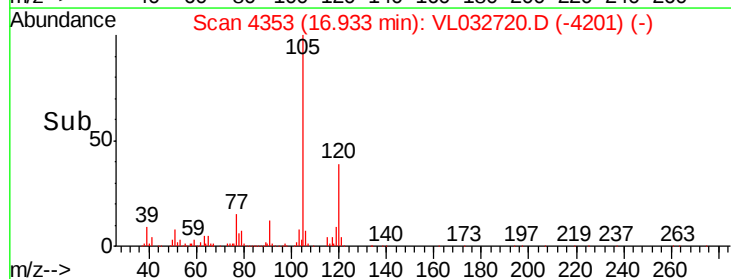
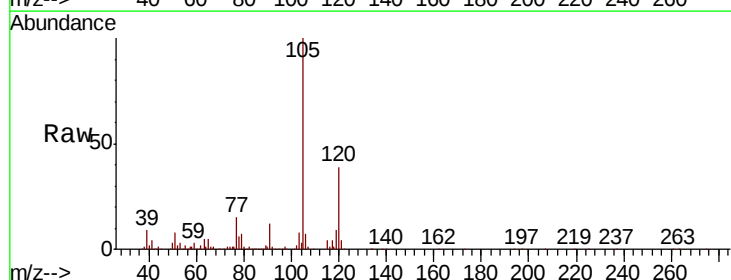
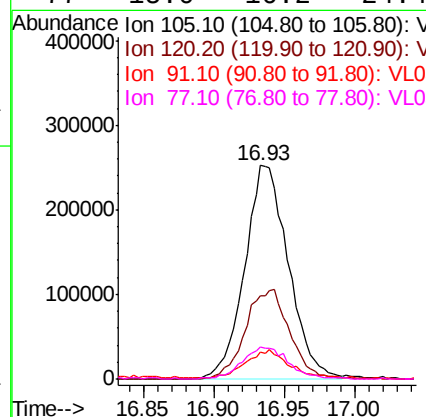
Manual Integrations
 APPROVED

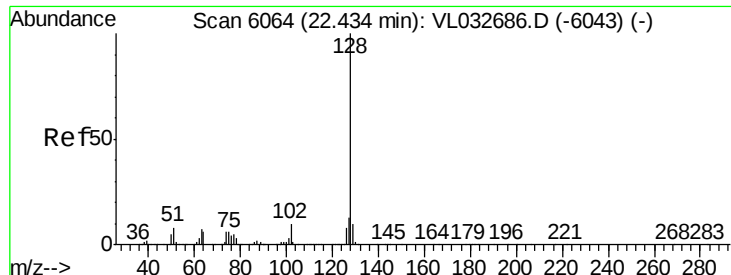
MMDadoda
 11/12/2018 12:30:07 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 1.432 ppbv
 RT: 16.93 min Scan# 4353
 Delta R.T. -0.01 min
 Lab File: VL032720.D
 Acq: 7 Nov 2018 16:59

Tgt Ion	Ratio	Lower	Upper
105	100		
120	38.6	35.8	53.8
91	11.9	33.2	49.8#
77	15.0	16.2	24.4#





#79

Naphthalene

Concen: 0.131 ppbv m

RT: 22.43 min Scan# 6064

Delta R.T. -0.00 min

Lab File: VL032720.D

Acq: 7 Nov 2018 16:59

Instrument :

MSVOA_L

ClientSampleId :

SV-01

Tot Ion:	128	Resp:	31068
Ion Ratio	Lower	Upper	
128	100		
127	11.0	10.3	15.5
129	9.0	8.6	13.0

Manual Integrations
APPROVED

MMDadoda
11/12/2018 12:30:07 PM

