

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120820\
 Data File : VL036114.D
 Acq On : 9 Dec 2020 3:34
 Operator : SY/AP
 Sample : L4948-11 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SS-5B

Manual Integrations
 APPROVED

MMDadoda
 12/11/2020 12:24:02 PM

Quant Time: Dec 14 21:57:04 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 0
 QLast Update : Mon Dec 07 16:56:49 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1150959	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.18	114	2457575	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	2197528	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	1838429	10.54	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	2321363	17.307	ppbv	100
3) Chlorodifluoromethane	2.99	51	17229	0.131	ppbv	92
9) Propene	3.02	41	29727m	0.452	ppbv	
13) Ethanol	3.61	45	549365	60.579	ppbv	97
15) Acetone	3.85	43	551373	3.986	ppbv	97
18) 1,1-Dichloroethene	4.29	96	45615m	0.959	ppbv	
19) Isopropyl Alcohol	3.98	45	40643m	0.481	ppbv	
20) Methylene Chloride	4.35	84	28566	0.504	ppbv	85
22) trans-1,2-Dichloroethene	4.89	96	22055	0.463	ppbv	96
24) 1,1-Dichloroethane	5.01	63	175258	1.353	ppbv	98
29) Chloroform	5.75	83	49563	0.303	ppbv #	77
30) Cyclohexane	7.14	84	16218m	0.178	ppbv	
31) cis-1,2-Dichloroethene	5.55	61	1024533	9.062	ppbv	97
32) 1,1,1-Trichloroethane	6.52	97	232176	1.378	ppbv	96
36) Benzene	6.90	78	64173	0.308	ppbv #	94
38) Trichloroethene	7.84	130	1035421	13.299	ppbv	93
52) Tetrachloroethene	11.24	164	5294855	70.228	ppbv	92
53) Toluene	9.82	91	46880m	0.200	ppbv	
59) m/p-Xylene	12.98	91	82538m	0.325	ppbv	
60) o-Xylene	13.70	91	36929m	0.155	ppbv	

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

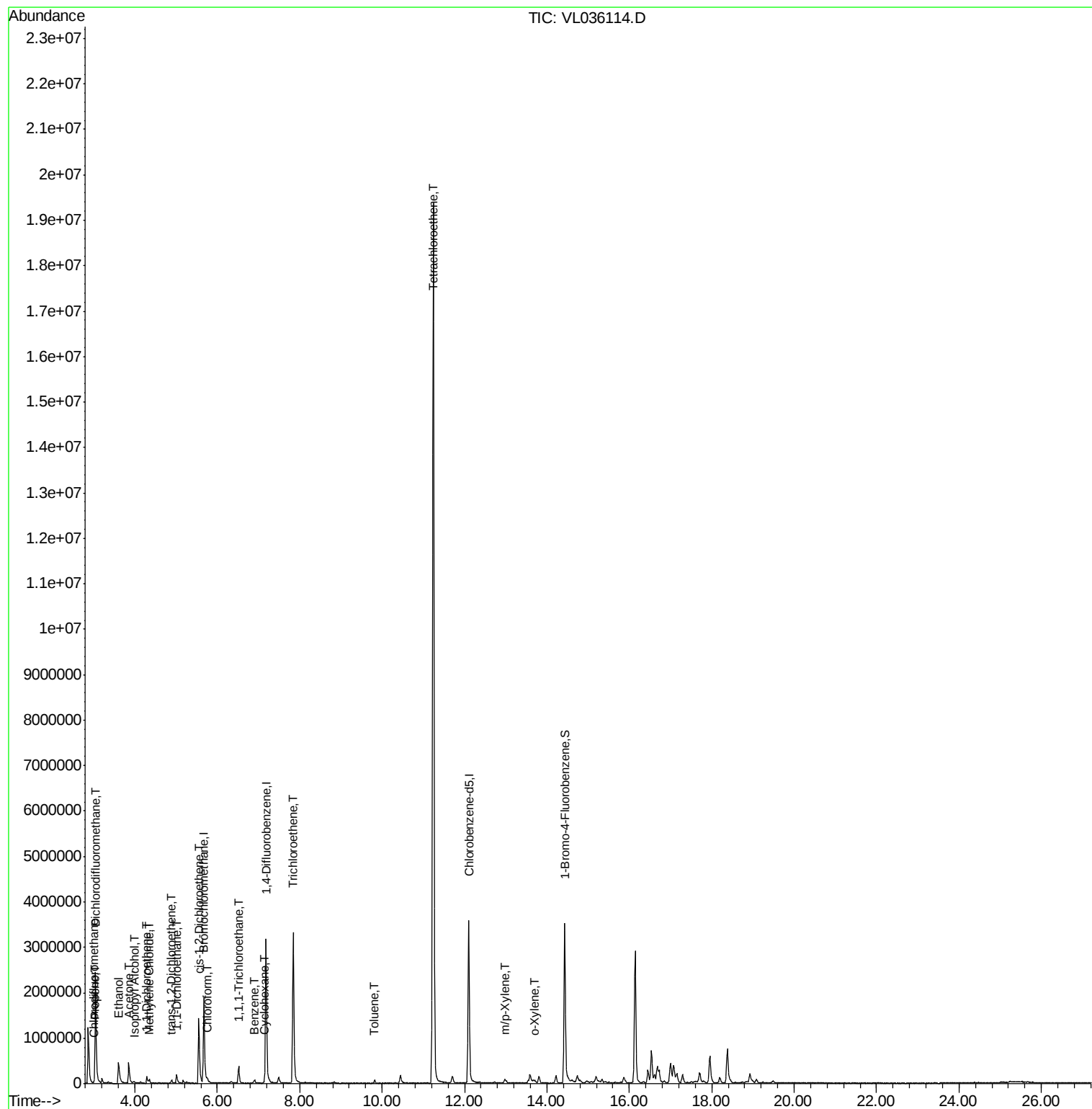
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120820\
Data File : VL036114.D
Acq On : 9 Dec 2020 3:34
Operator : SY/AP
Sample : L4948-11 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

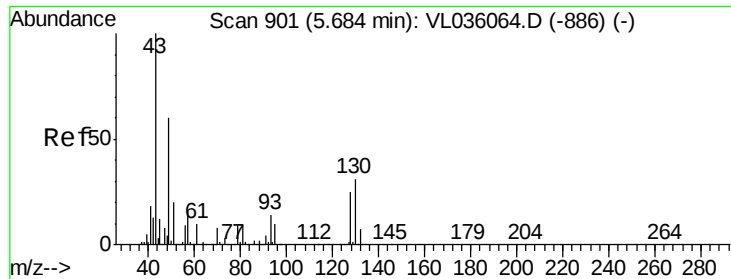
Instrument :
MSVOA_L
ClientSampleId :
SS-5B

Manual Integrations
APPROVED

MMDadoda
12/11/2020 12:24:02 PM

Quant Time: Dec 14 21:57:04 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec
QLast Update : Mon Dec 07 16:56:49 2020
Response via : Initial Calibration





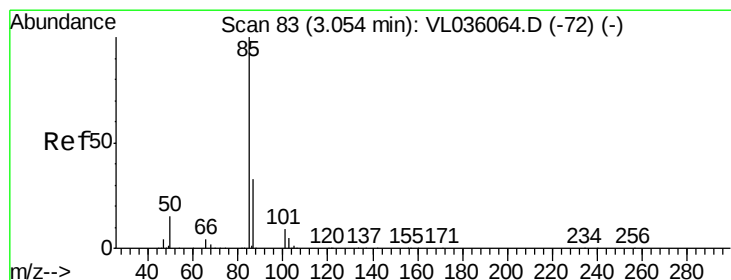
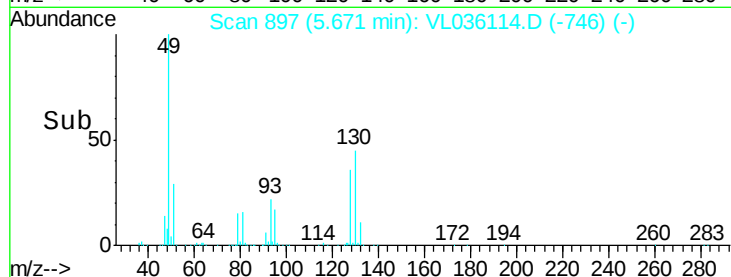
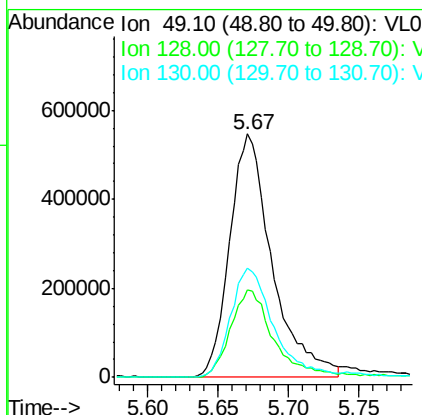
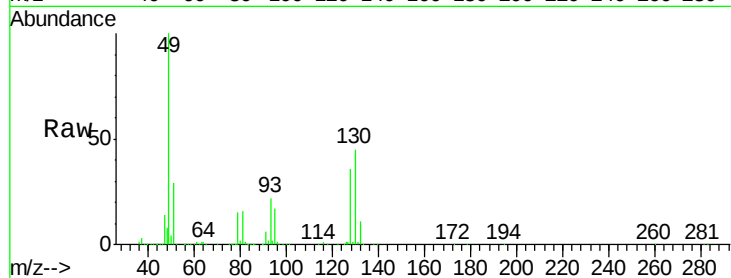
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampleId :
SS-5B

Tot Ion: 49 Resp: 1150959
Ion Ratio Lower Upper
49 100
128 38.1 21.1 63.1
130 47.8 27.1 81.3

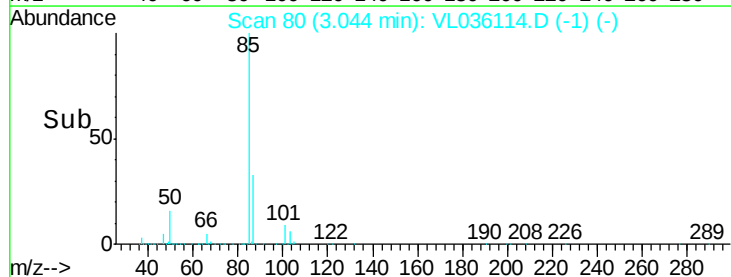
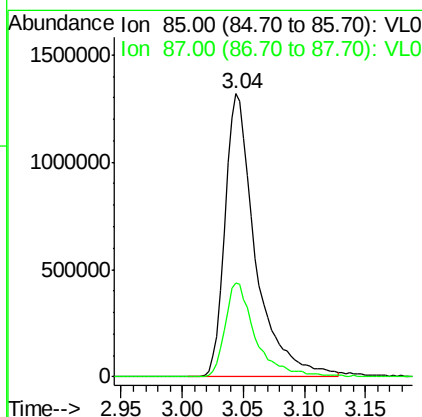
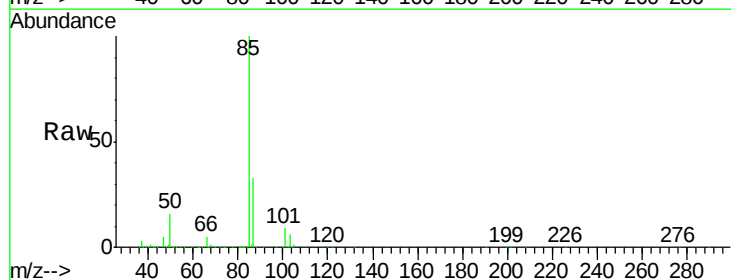
Manual Integrations
APPROVED

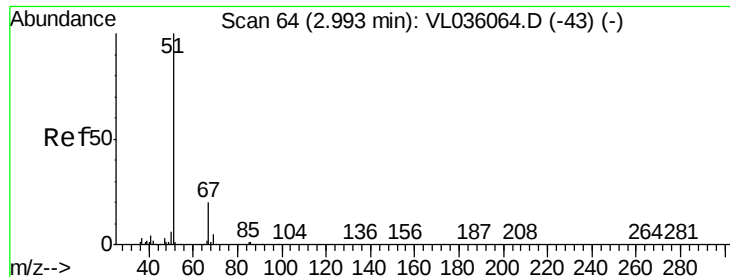
MMDadoda
12/11/2020 12:24:02 PM



#2
Dichlorodifluoromethane
Concen: 17.307 ppbv
RT: 3.04 min Scan# 80
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion: 85 Resp: 2321363
Ion Ratio Lower Upper
85 100
87 33.4 26.5 39.7





#3

Chlorodifluoromethane

Concen: 0.131 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.00 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Instrument :

MSVOA_L

ClientSampleId :

SS-5B

Tot Ion: 51 Resp: 17229

Ion Ratio Lower Upper

51 100

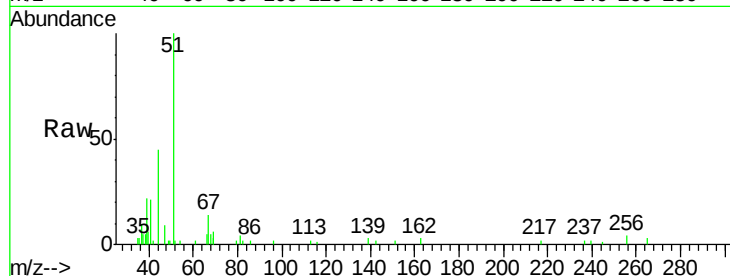
67 14.3 14.3 21.5

Manual Integrations

APPROVED

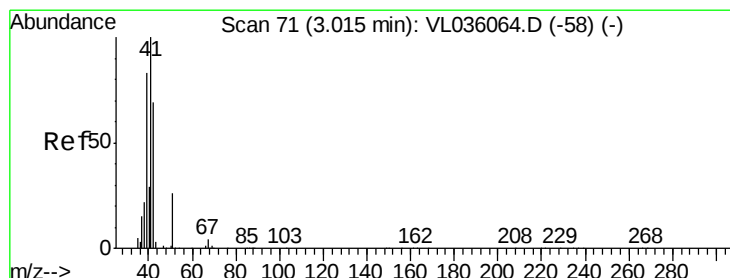
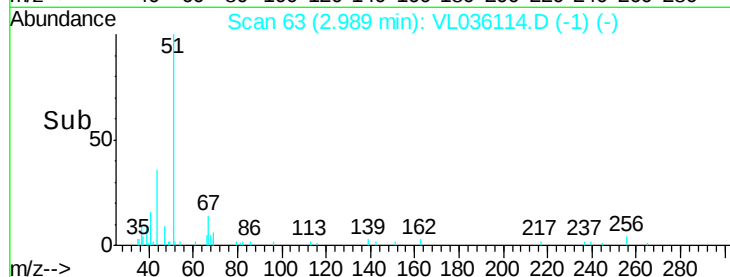
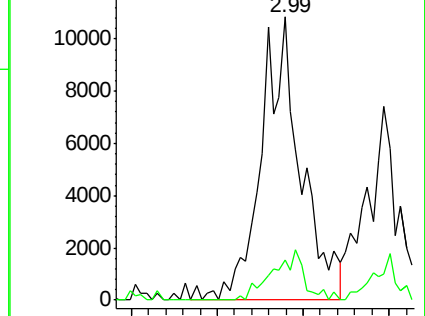
MMDadoda

12/11/2020 12:24:02 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 0.452 ppbv m

RT: 3.02 min Scan# 72

Delta R.T. 0.00 min

Lab File: VL036114.D

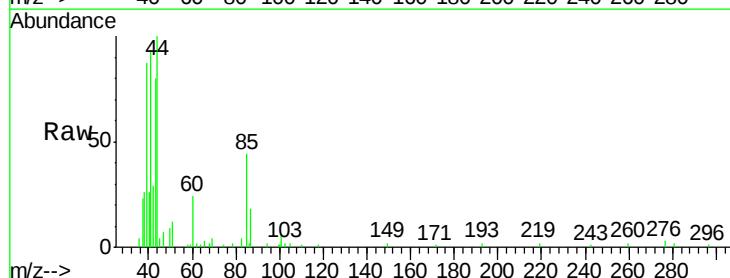
Acq: 9 Dec 2020 3:34

Tgt Ion: 41 Resp: 29727

Ion Ratio Lower Upper

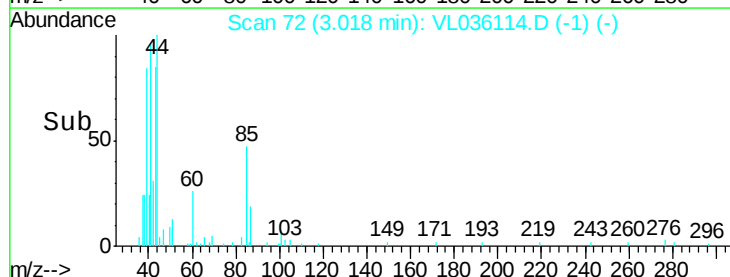
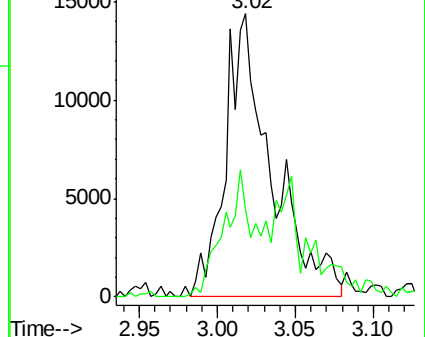
41 100

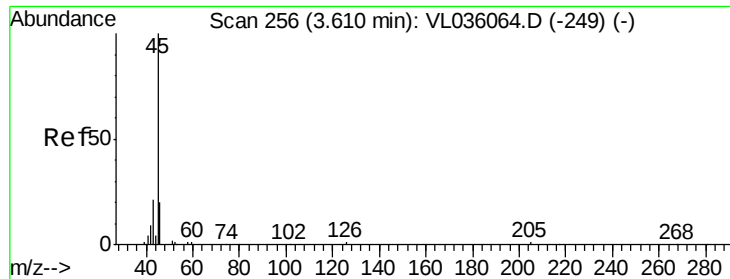
42 0.0 57.0 85.6#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





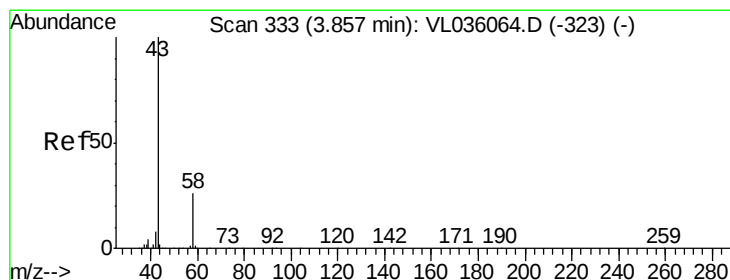
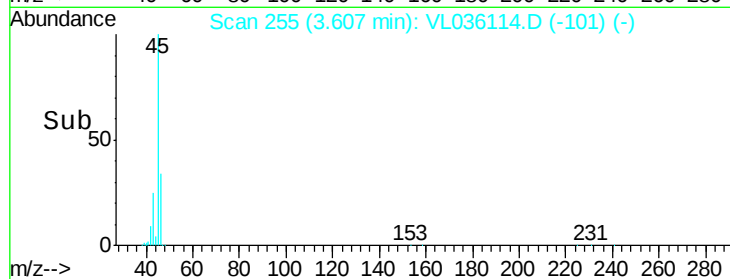
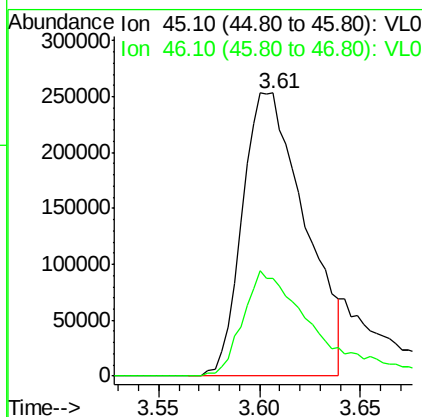
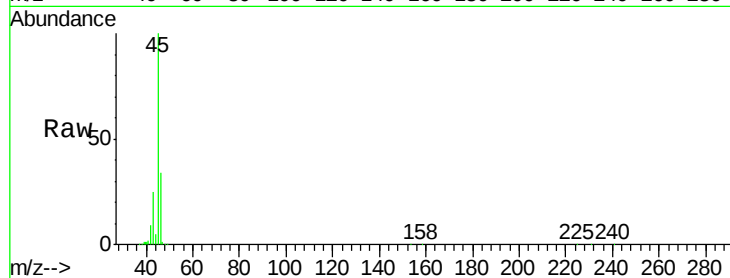
#13
Ethanol
Concen: 60.579 ppbv
RT: 3.61 min Scan# 255
Delta R.T. -0.00 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampled :
SS-5B

Tot Ion: 45 Resp: 549365
Ion Ratio Lower Upper
45 100
46 45.1 19.0 75.8

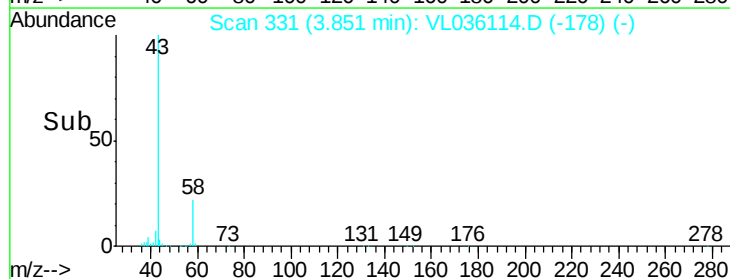
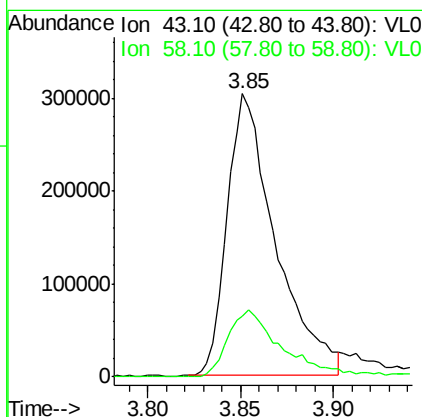
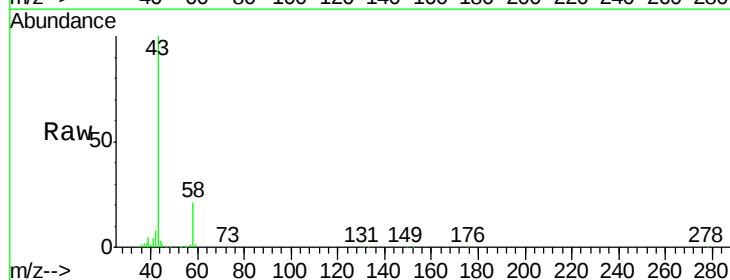
Manual Integrations
APPROVED

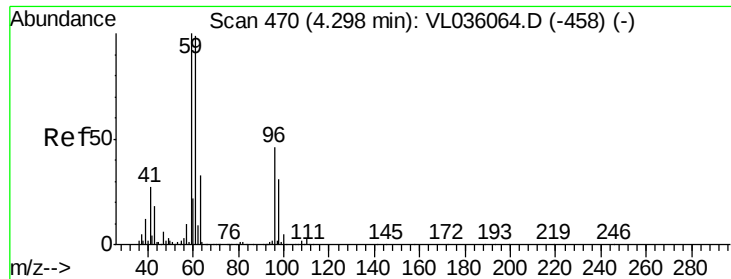
MMDadoda
12/11/2020 12:24:02 PM



#15
Acetone
Concen: 3.986 ppbv
RT: 3.85 min Scan# 331
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion: 43 Resp: 551373
Ion Ratio Lower Upper
43 100
58 27.8 20.9 31.3





#18

1,1-Dichloroethene

Concen: 0.959 ppbv m

RT: 4.29 min Scan# 469

Delta R.T. -0.00 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Instrument :

MSVOA_L

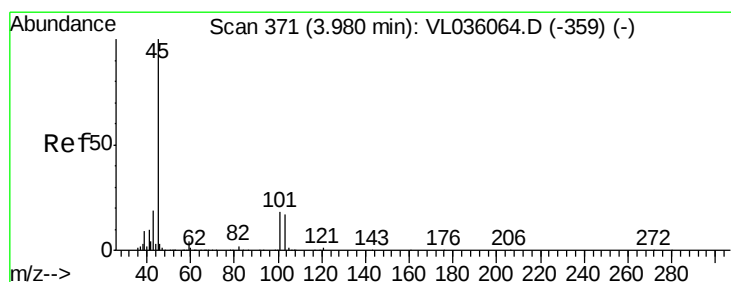
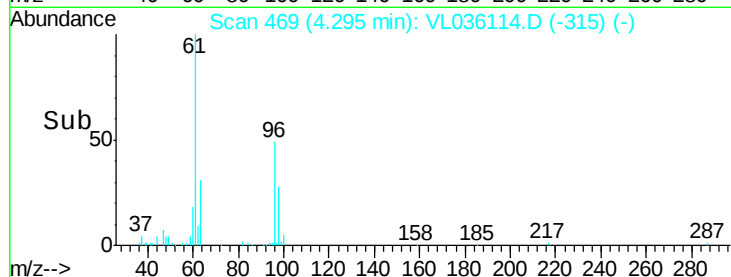
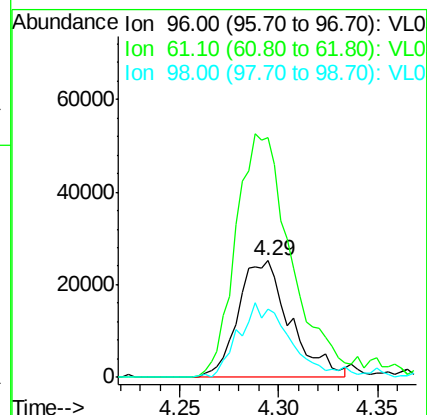
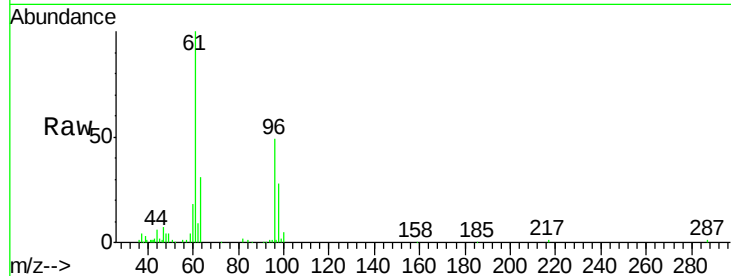
ClientSampled :

SS-5B

Tot Ion:	96	Resp:	45615
Ion Ratio	Lower	Upper	
96	100		
61	206.1	171.4	257.2
98	58.1	54.2	81.2

Manual Integrations
APPROVED

MMDadoda
12/11/2020 12:24:02 PM



#19

Isopropyl Alcohol

Concen: 0.481 ppbv m

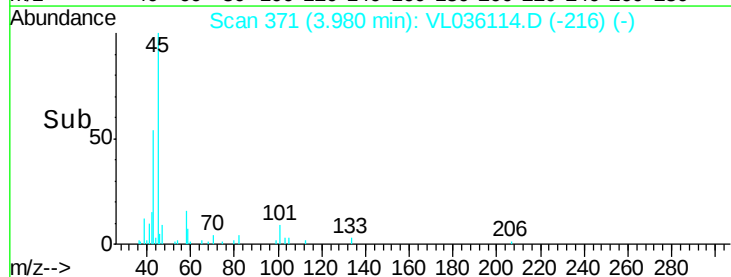
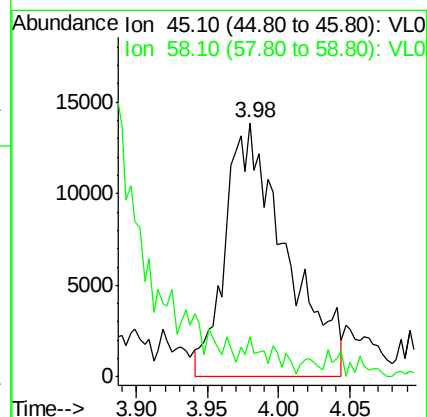
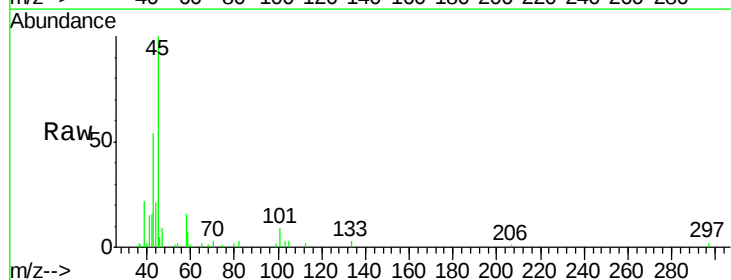
RT: 3.98 min Scan# 371

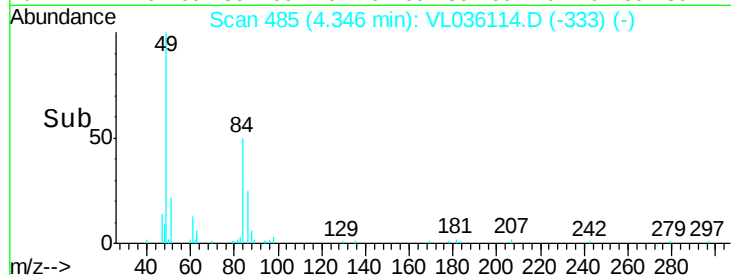
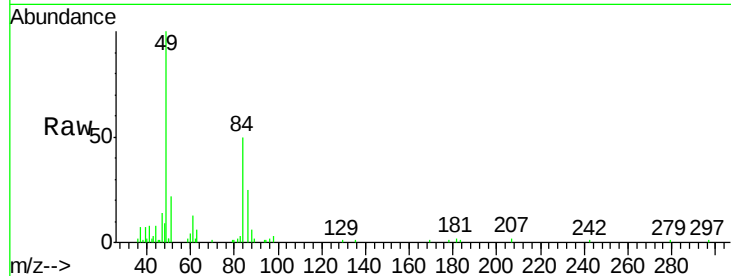
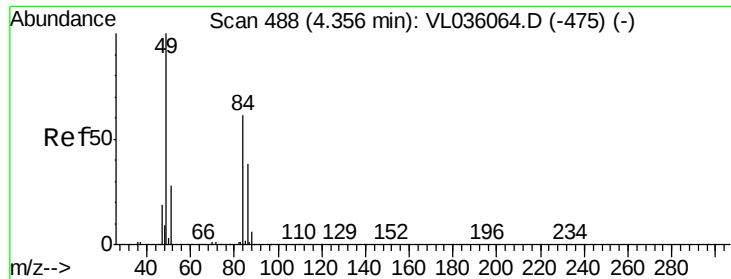
Delta R.T. -0.00 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Tgt Ion:	45	Resp:	40643
Ion Ratio	Lower	Upper	
45	100		
58	383.4	0.0	0.0#





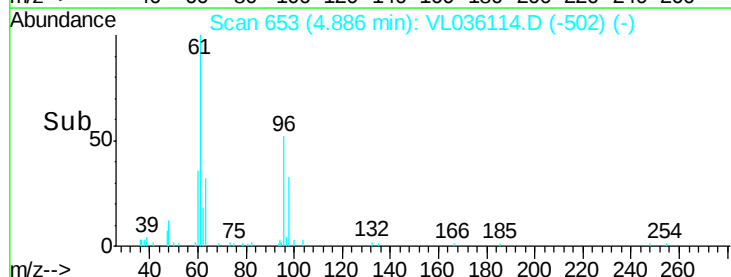
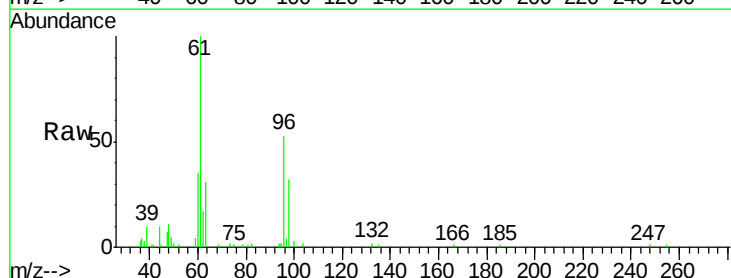
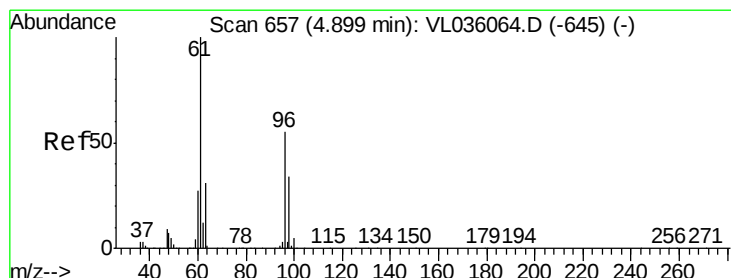
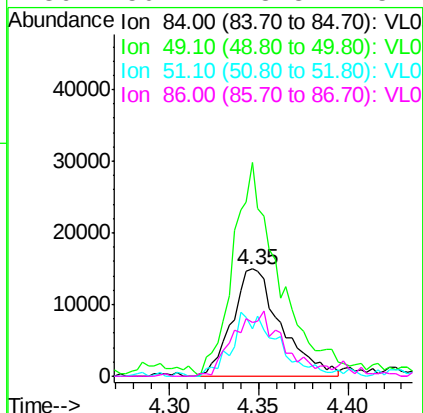
#20
Methvlene Chloride
Concen: 0.504 ppbv
RT: 4.35 min Scan# 485
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tot Ion:	84	Resp:	28566
Ion	Ratio	Lower	Upper
84	100		
49	190.3	133.0	199.4
51	44.7	38.9	58.3
86	50.7	48.8	73.2

Instrument :
MSVOA_L
ClientSampleId :
SS-5B

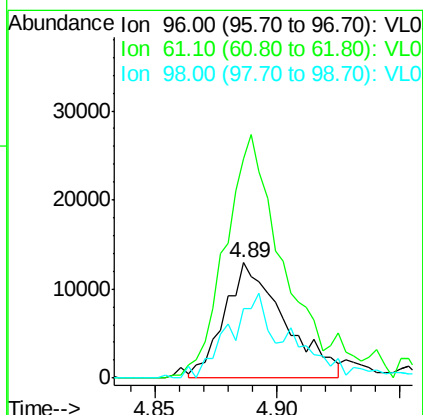
Manual Integrations
APPROVED

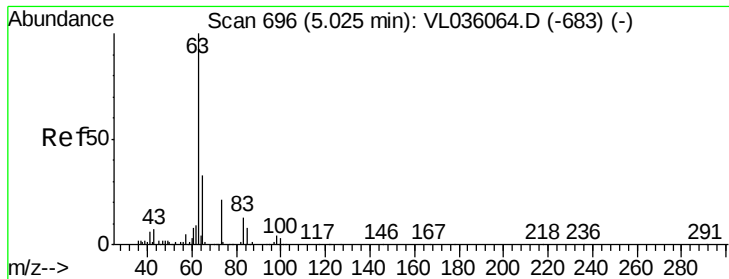
MMDadoda
12/11/2020 12:24:02 PM



#22
trans-1,2-Dichloroethene
Concen: 0.463 ppbv
RT: 4.89 min Scan# 653
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion:	96	Resp:	22055
Ion	Ratio	Lower	Upper
96	100		
61	184.5	145.7	218.5
98	52.6	49.2	73.8





#24

1,1-Dichloroethane

Concen: 1.353 ppbv

RT: 5.01 min Scan# 692

Delta R.T. -0.01 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Instrument :

MSVOA_L

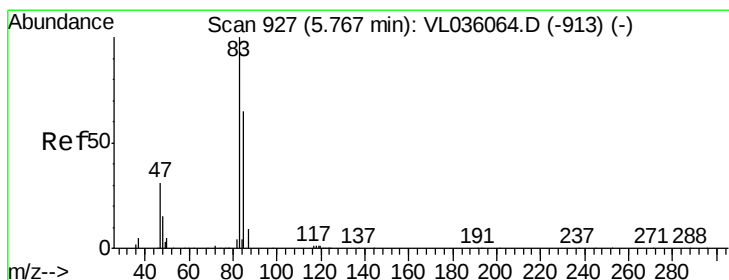
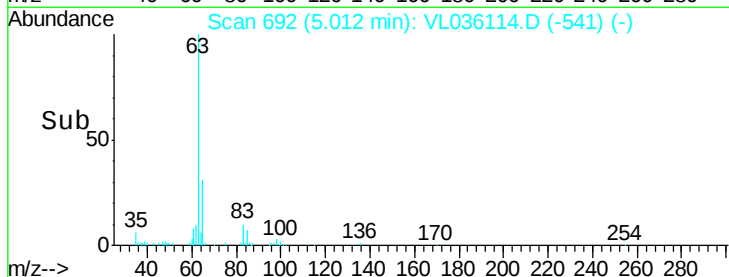
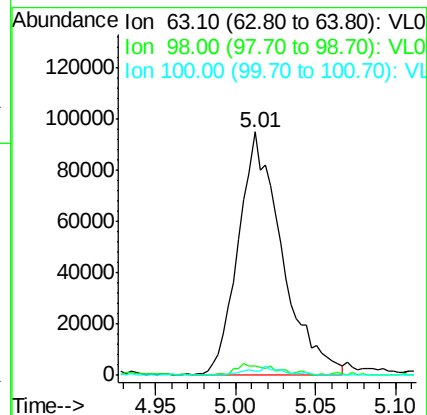
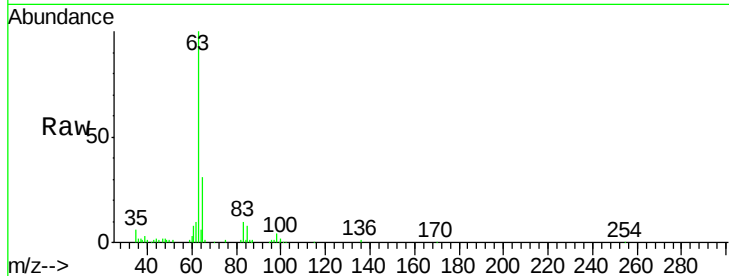
ClientSampleId :

SS-5B

Tot Ion:	63	Resp:	175258
Ion Ratio	Lower	Upper	
63	100		
98	3.8	2.2	6.6
100	2.0	1.5	4.4

Manual Integrations
APPROVED

MMDadoda
12/11/2020 12:24:02 PM



#29

Chloroform

Concen: 0.303 ppbv

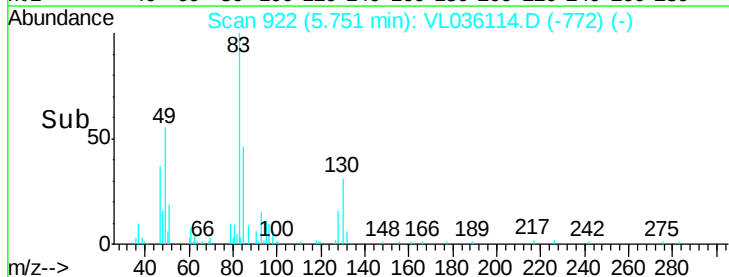
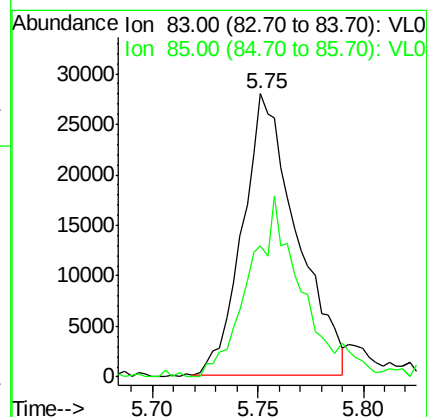
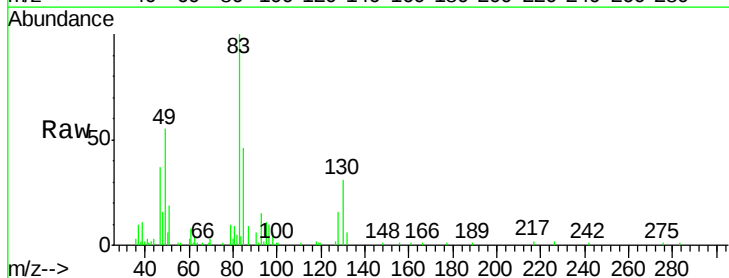
RT: 5.75 min Scan# 922

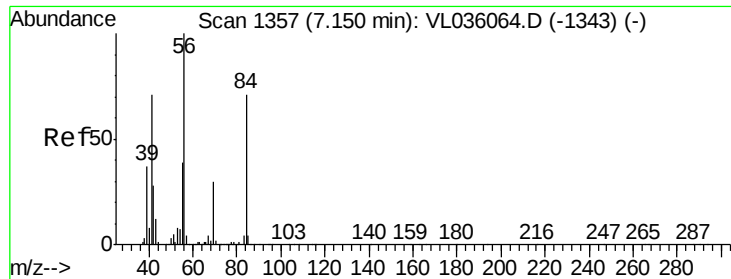
Delta R.T. -0.02 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Tgt Ion:	83	Resp:	49563
Ion Ratio	Lower	Upper	
83	100		
85	46.7	51.8	77.6#





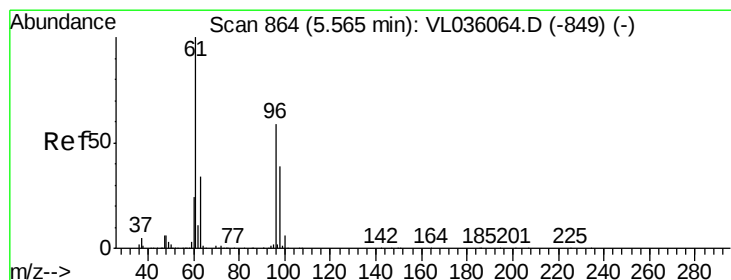
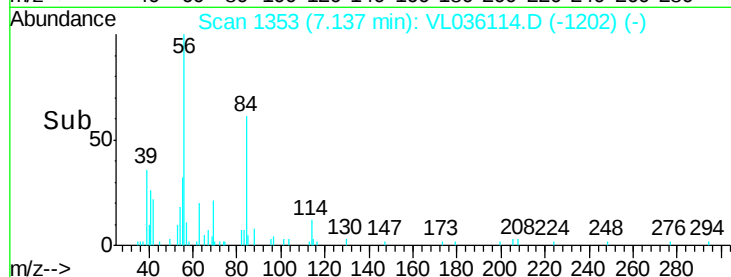
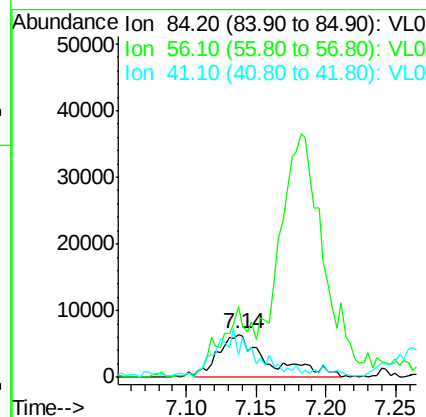
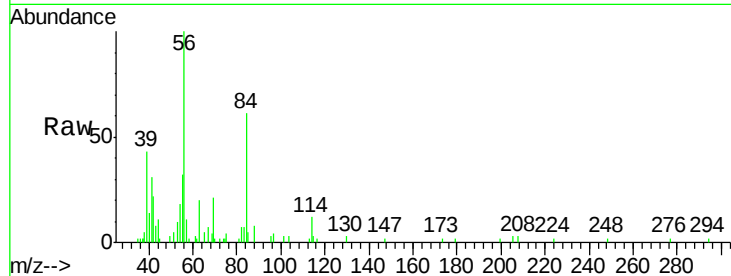
#30
Cvclohexane
Concen: 0.178 ppbv m
RT: 7.14 min Scan# 1353
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampleId :
SS-5B

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	128.0	192.0#
41	89.6	81.3	121.9

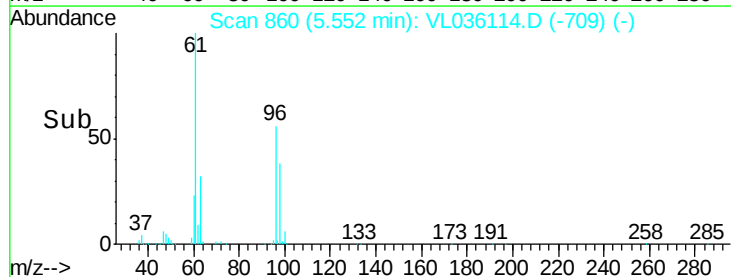
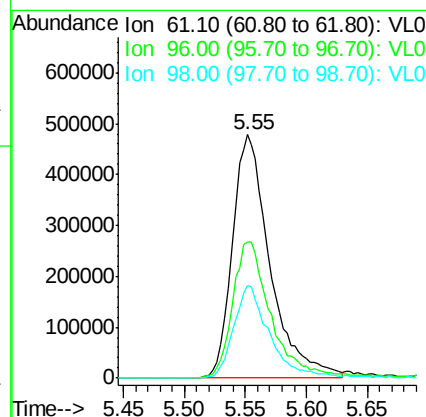
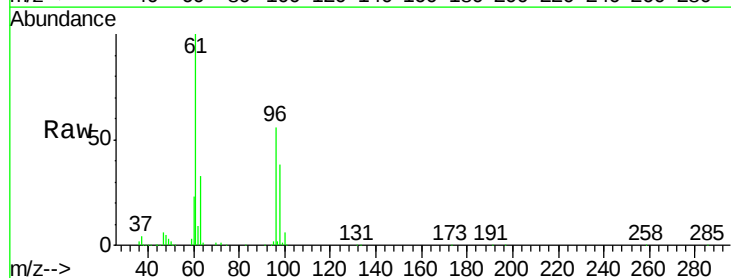
Manual Integrations
APPROVED

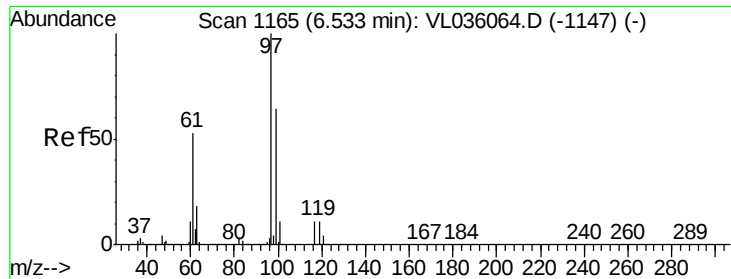
MMDadoda
12/11/2020 12:24:02 PM



#31
cis-1,2-Dichloroethene
Concen: 9.062 ppbv
RT: 5.55 min Scan# 860
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion	Ratio	Lower	Upper
61	100		
96	56.2	47.3	70.9
98	37.9	31.4	47.0





#32

1,1,1-Trichloroethane

Concen: 1.378 ppbv

RT: 6.52 min Scan# 1160

Delta R.T. -0.02 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Instrument :

MSVOA_L

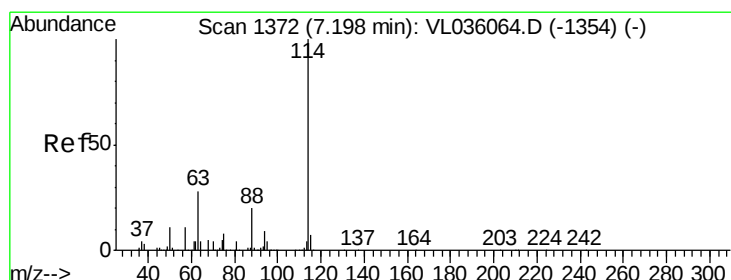
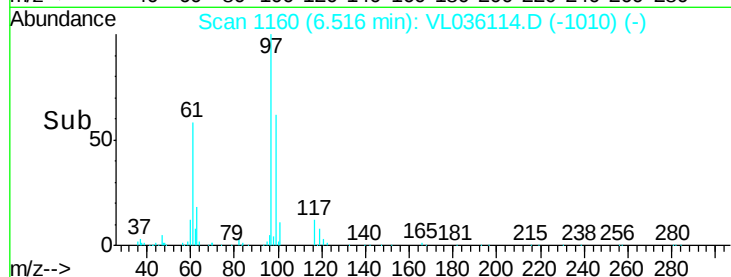
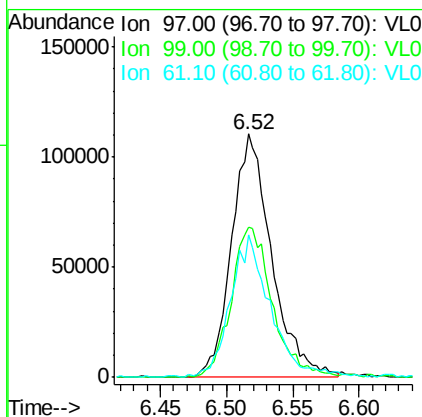
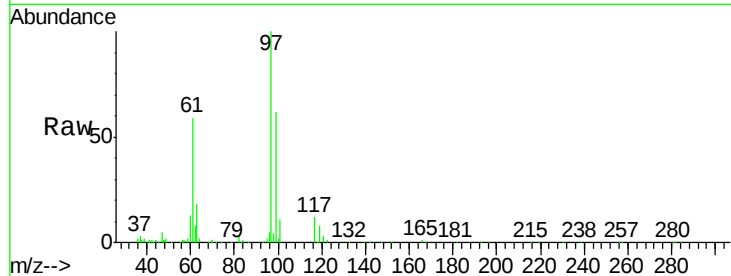
ClientSampled :

SS-5B

Tot Ion:	97	Resp:	232176
Ion	Ratio	Lower	Upper
97	100		
99	64.5	52.4	78.6
61	58.7	43.4	65.0

Manual Integrations
APPROVED

MMDadoda
12/11/2020 12:24:02 PM



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

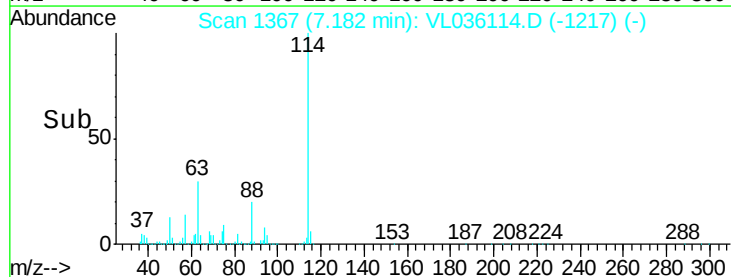
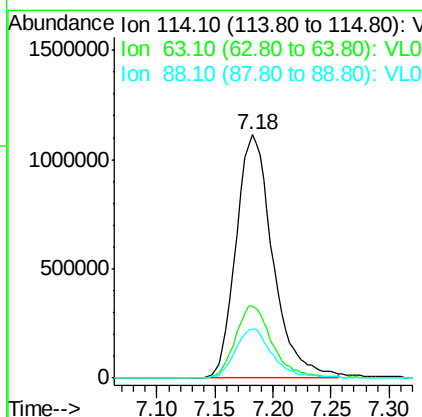
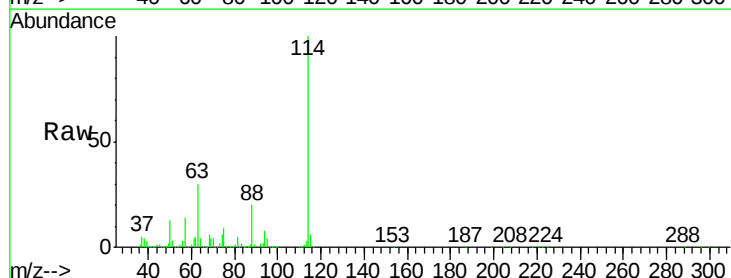
RT: 7.18 min Scan# 1367

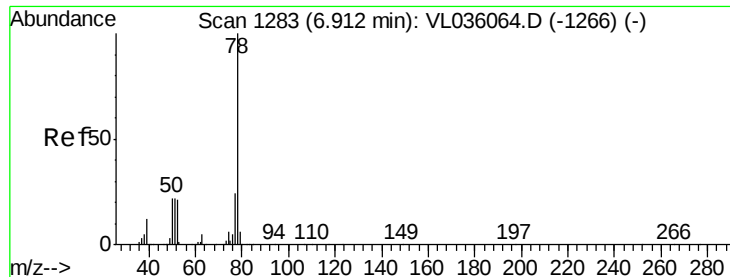
Delta R.T. -0.02 min

Lab File: VL036114.D

Acq: 9 Dec 2020 3:34

Tgt Ion:	114	Resp:	2457575
Ion	Ratio	Lower	Upper
114	100		
63	30.3	23.6	35.4
88	20.5	15.8	23.6





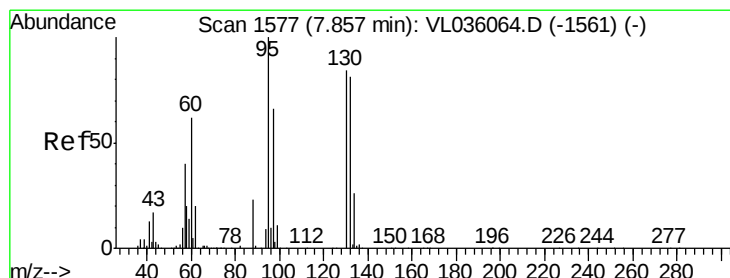
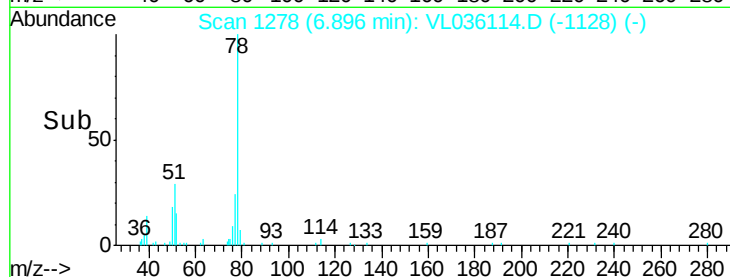
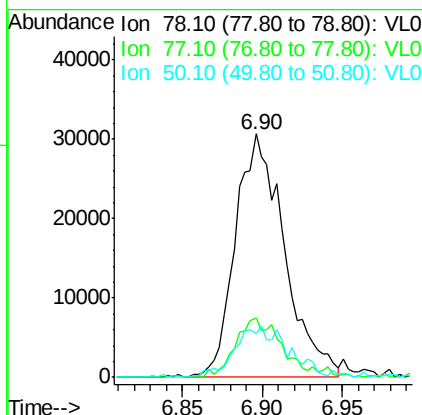
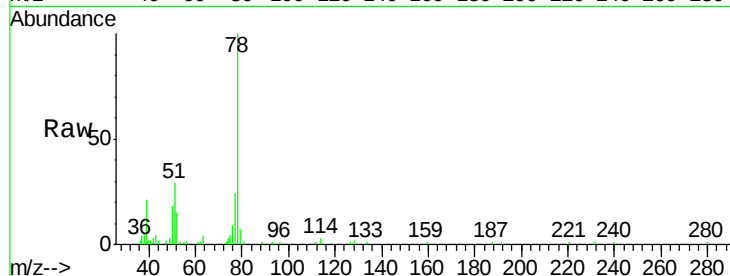
#36
Benzene
Concen: 0.308 ppbv
RT: 6.90 min Scan# 1278
Delta R.T. -0.02 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampleId :
SS-5B

Tot Ion	Ratio	Lower	Upper
78	100		
77	24.4	19.4	29.2
50	16.6	17.8	26.8#

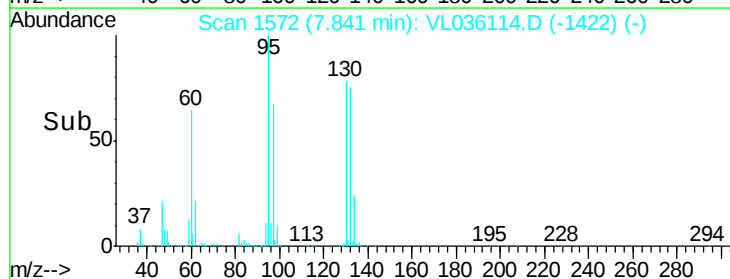
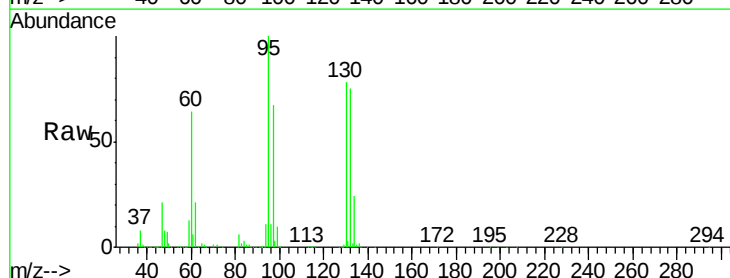
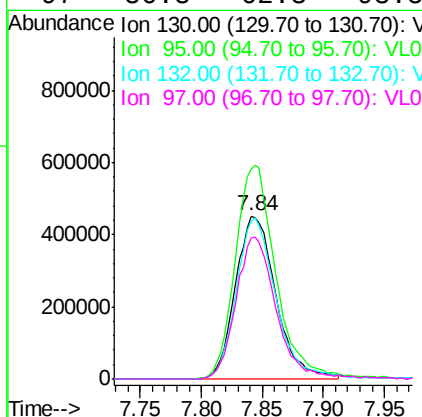
Manual Integrations
APPROVED

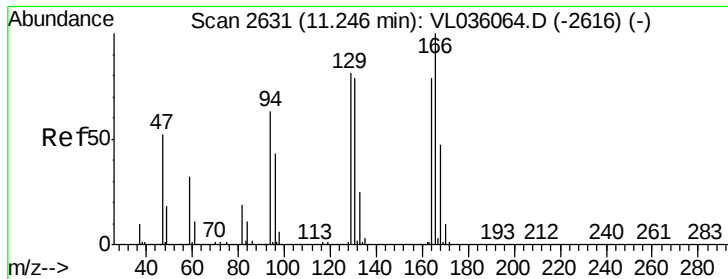
MMDadoda
12/11/2020 12:24:02 PM



#38
Trichloroethene
Concen: 13.299 ppbv
RT: 7.84 min Scan# 1572
Delta R.T. -0.02 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion	Ratio	Lower	Upper
130	100		
95	128.8	95.2	142.8
132	96.9	76.9	115.3
97	86.8	62.3	93.5





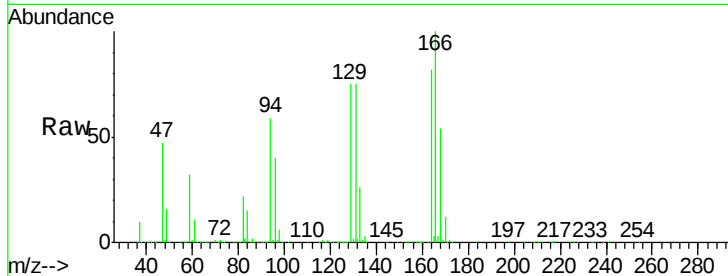
#52
Tetrachloroethene
Concen: 70.228 ppbv
RT: 11.24 min Scan# 2630
Delta R.T. -0.00 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampleId :
SS-5B

Tot Ion	Ratio	Lower	Upper
164	100		
166	121.6	101.9	152.9
129	91.2	82.1	123.1
131	91.4	80.8	121.2

Manual Integrations
APPROVED

MMDadoda
12/11/2020 12:24:02 PM



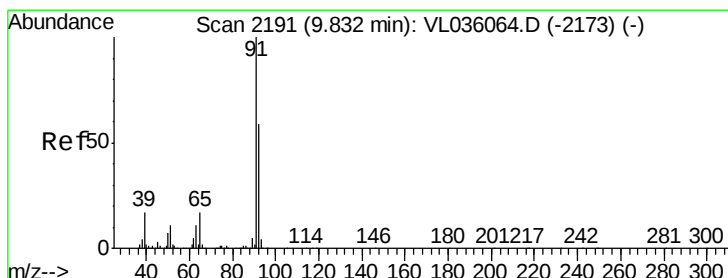
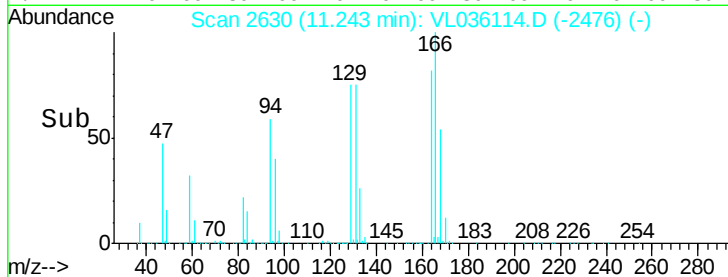
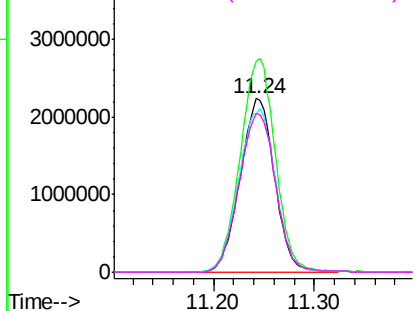
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

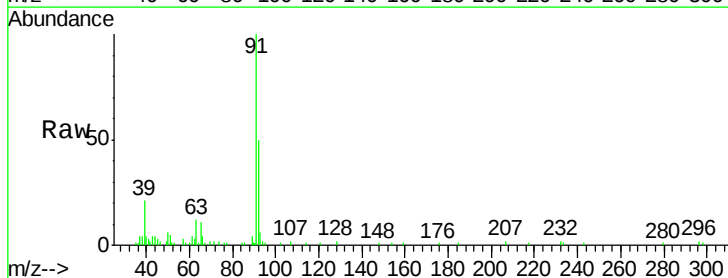
Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53
Toluene
Concen: 0.200 ppbv m
RT: 9.82 min Scan# 2186
Delta R.T. -0.02 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

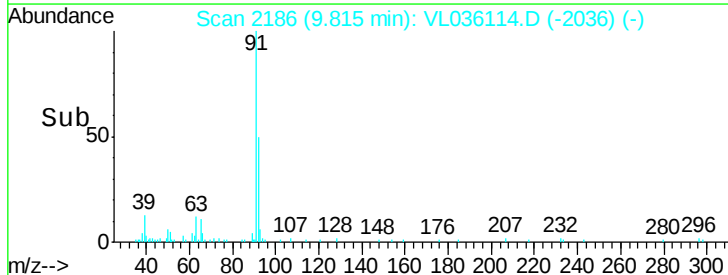
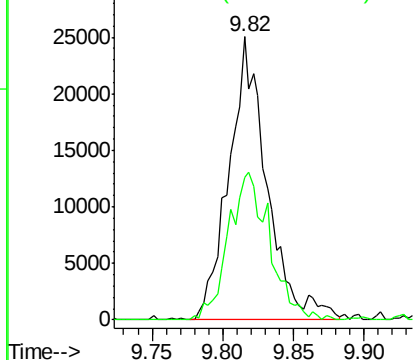
Tgt Ion	Ratio	Lower	Upper
91	100		
92	0.0	48.2	72.2#

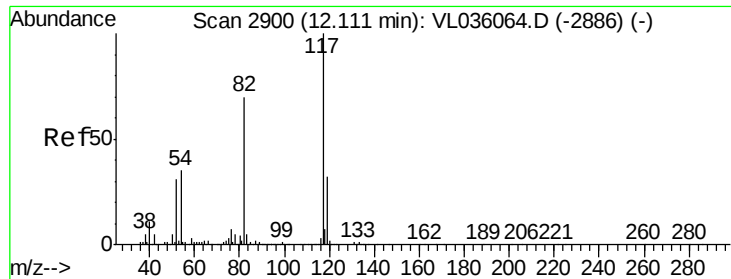


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





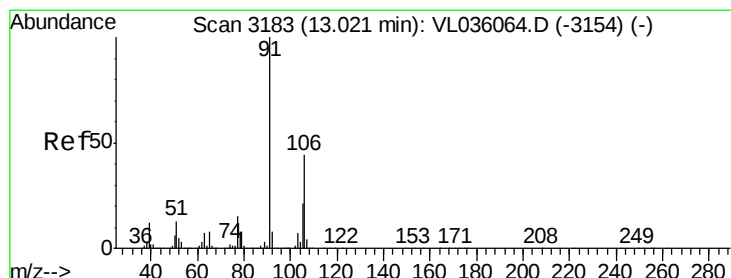
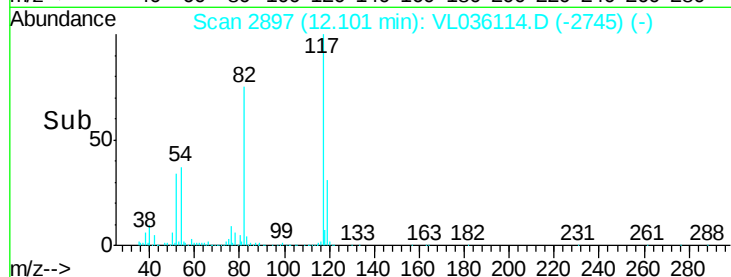
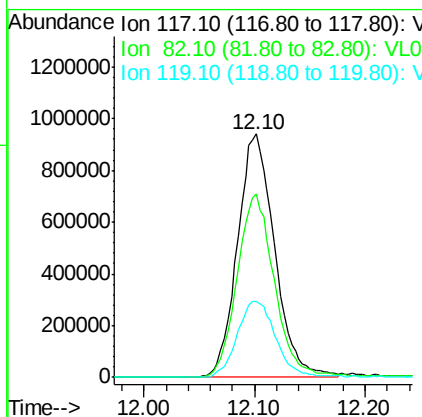
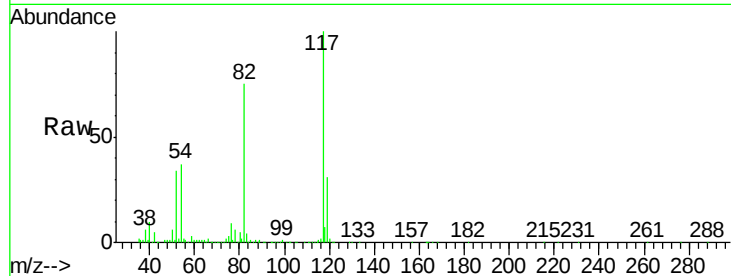
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2897
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampleId :
SS-5B

Tot Ion	Ratio	Lower	Upper
117	100		
82	76.1	0.0	0.0#
119	33.0	0.0	0.0#

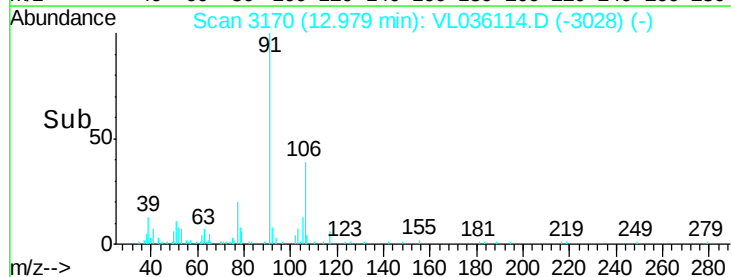
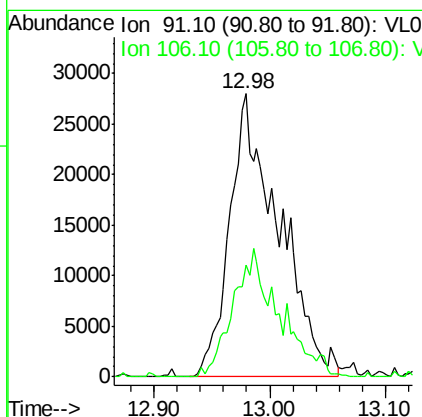
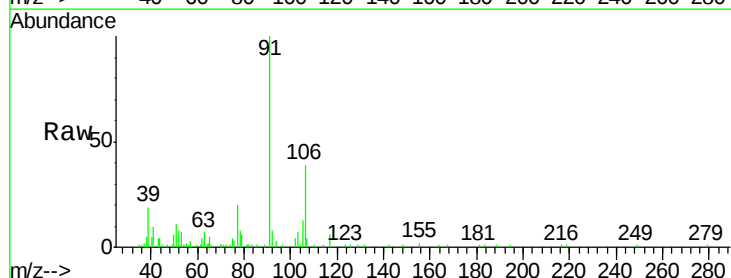
Manual Integrations
APPROVED

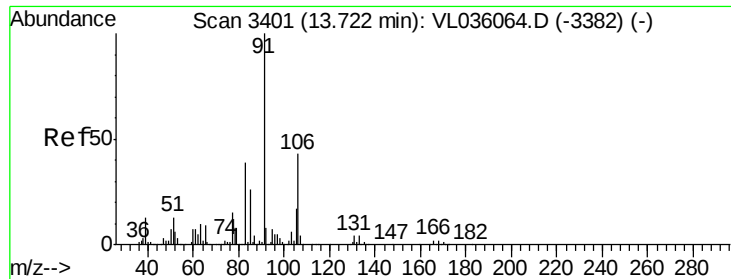
MMDadoda
12/11/2020 12:24:02 PM



#59
m/p-Xylene
Concen: 0.325 ppbv m
RT: 12.98 min Scan# 3170
Delta R.T. -0.04 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	33.6	50.4#





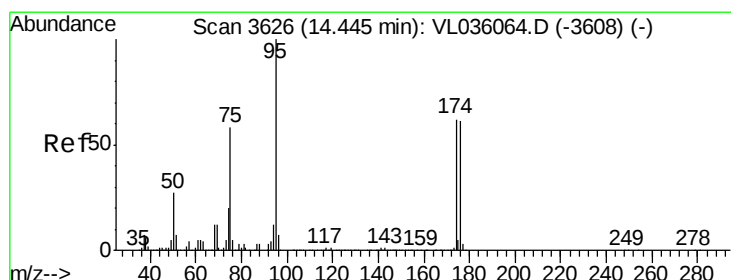
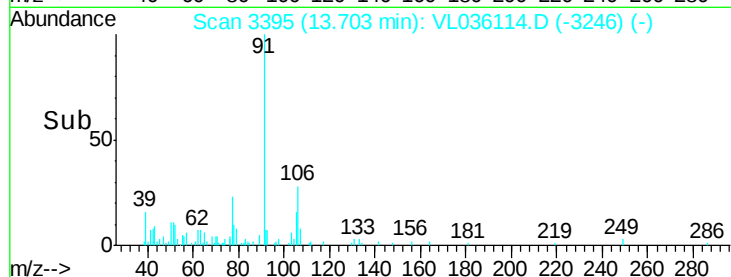
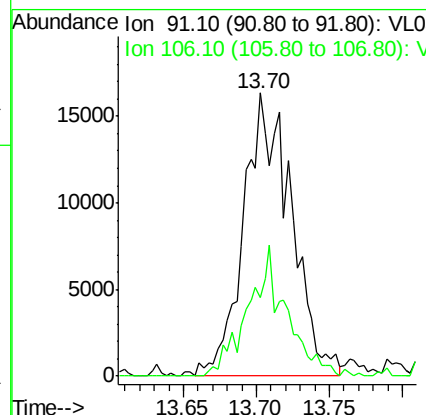
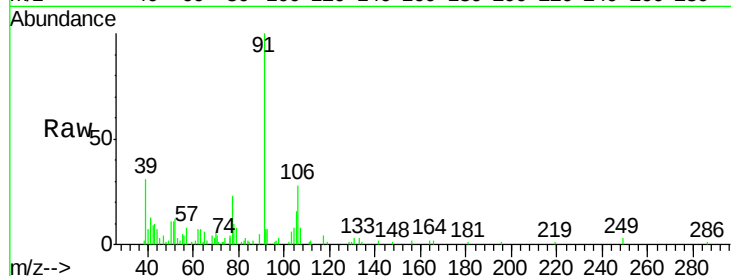
#60
o-Xylene
Concen: 0.155 ppbv m
RT: 13.70 min Scan# 3395
Delta R.T. -0.02 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Instrument :
MSVOA_L
ClientSampled :
SS-5B

Tot Ion: 91 Resp: 36929
Ion Ratio Lower Upper
91 100
106 37.4 21.6 64.6

Manual Integrations
APPROVED

MMDadoda
12/11/2020 12:24:02 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.536 ppbv
RT: 14.43 min Scan# 3622
Delta R.T. -0.01 min
Lab File: VL036114.D
Acq: 9 Dec 2020 3:34

Tgt Ion: 95 Resp: 1838429
Ion Ratio Lower Upper
95 100
174 58.5 50.7 76.1
175 4.2 4.0 6.0

