

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091420\
 Data File : VL035599.D
 Acq On : 14 Sep 2020 15:20
 Operator : SY/AP
 Sample : L3983-07 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-10

Manual Integrations
 APPROVED

MMDadoda
 9/17/2020 5:40:02 PM

Quant Time: Sep 15 16:06:40 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep 14 2020
 QLast Update : Mon Sep 14 15:19:50 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1099827	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	4434351	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	4532532	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	3500884	10.88	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	108.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
3) Chlorodifluoromethane	2.98	51	36175m	0.297	ppbv	
9) Propene	3.01	41	194330	4.144	ppbv #	77
10) Heptane	8.13	43	356605	2.831	ppbv	98
13) Ethanol	3.60	45	26185m	2.252	ppbv	
15) Acetone	3.84	43	5716441	47.126	ppbv	92
17) tert-Butyl alcohol	4.30	59	41451	0.281	ppbv #	72
19) Isopropyl Alcohol	3.97	45	24543	0.339	ppbv #	93
20) Methylene Chloride	4.34	84	402363	4.454	ppbv	95
22) trans-1,2-Dichloroethene	4.88	96	17989	0.183	ppbv	95
26) Hexane	5.69	57	672498	5.539	ppbv #	47
27) Carbon Disulfide	4.55	76	97491	0.560	ppbv	98
29) Chloroform	5.75	83	180807	0.731	ppbv	96
30) Cyclohexane	7.13	84	16412m	0.126	ppbv	
31) cis-1,2-Dichloroethene	5.55	61	2506318	20.120	ppbv	99
34) 2-Butanone	5.25	43	554981	4.217	ppbv	98
36) Benzene	6.90	78	79896	0.278	ppbv	94
38) Trichloroethene	7.84	130	6931437	41.572	ppbv #	92
51) 2-Hexanone	10.15	43	246117m	1.574	ppbv	
52) Tetrachloroethene	11.23	164	12957283m	77.270	ppbv	
53) Toluene	9.82	91	2138942	5.926	ppbv	99
58) Ethyl Benzene	12.73	91	190657	0.408	ppbv	90
59) m/p-Xylene	12.98	91	615110	1.575	ppbv	95
60) o-Xylene	13.71	91	228442	0.581	ppbv	94
64) n-propylbenzene	15.58	120	23036	0.119	ppbv #	1
72) 4-Ethyltoluene	15.86	105	121071	0.242	ppbv #	84
73) 1,3,5-Trimethylbenzene	16.02	105	72946	0.158	ppbv	91
74) 1,2,4-Trimethylbenzene	16.78	105	308126	0.607	ppbv #	70

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

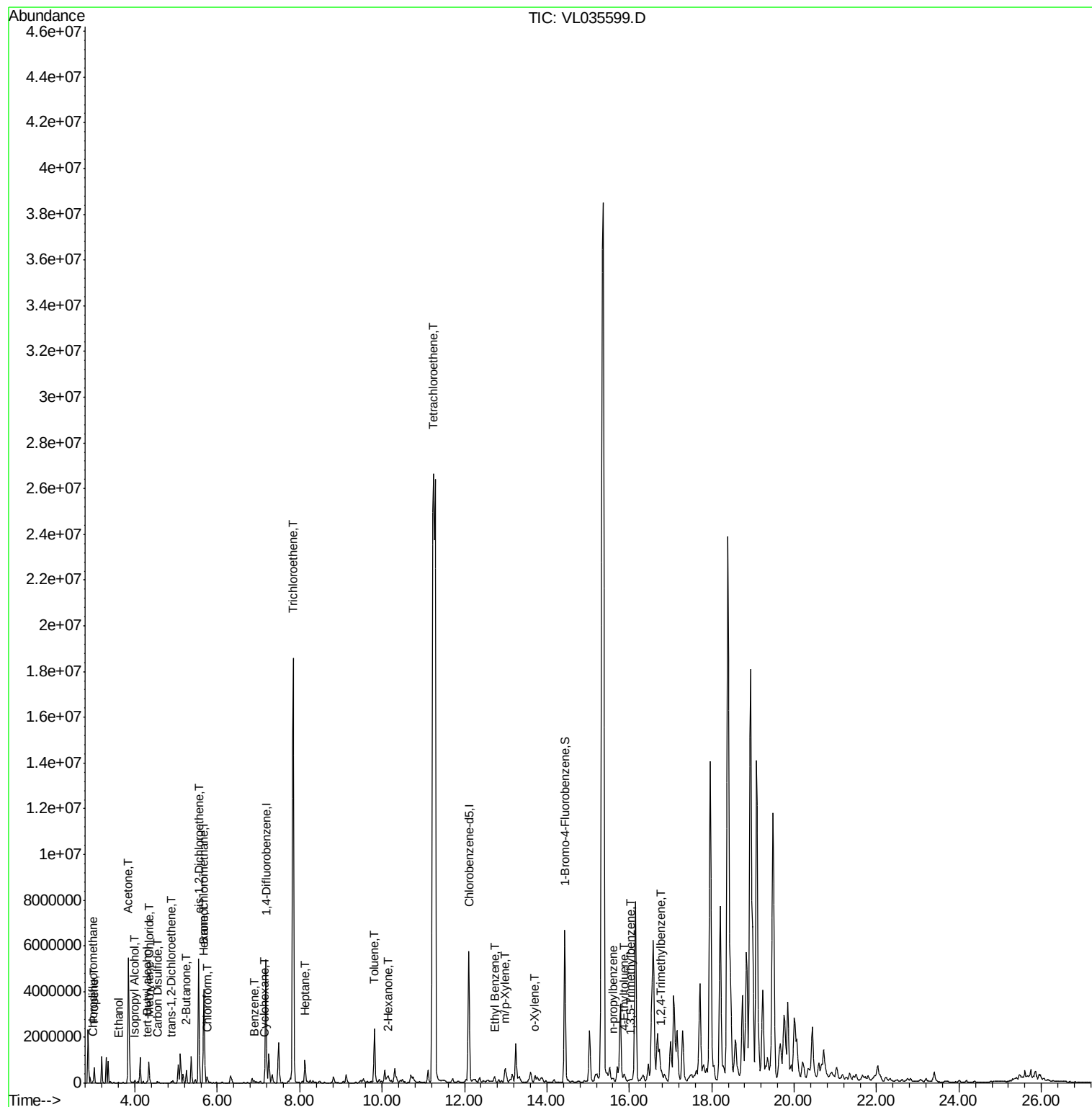
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL091420\
Data File : VL035599.D
Acq On : 14 Sep 2020 15:20
Operator : SY/AP
Sample : L3983-07 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

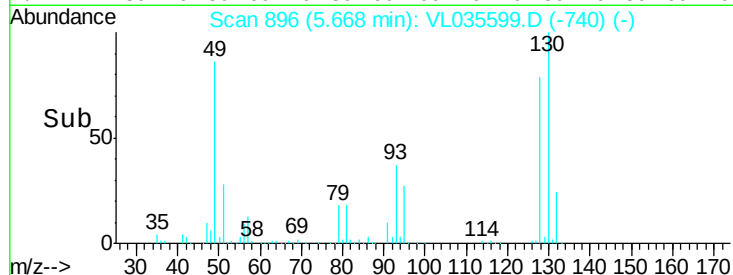
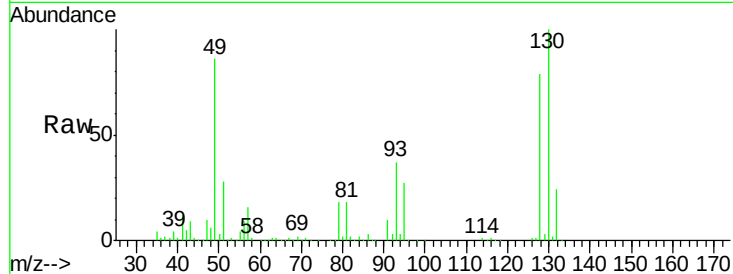
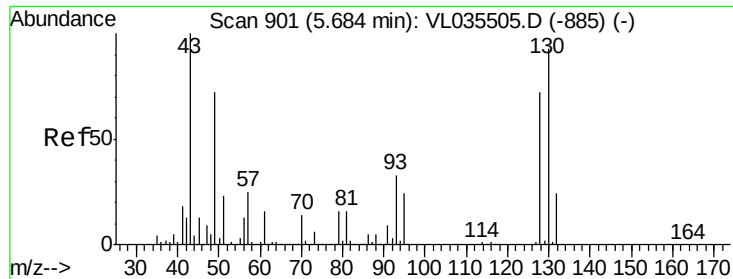
Instrument :
MSVOA_L
ClientSampleId :
SV-10

Manual Integrations
APPROVED

MMDadoda
9/17/2020 5:40:02 PM

Quant Time: Sep 15 16:06:40 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep
QLast Update : Mon Sep 14 15:19:50 2020
Response via : Initial Calibration





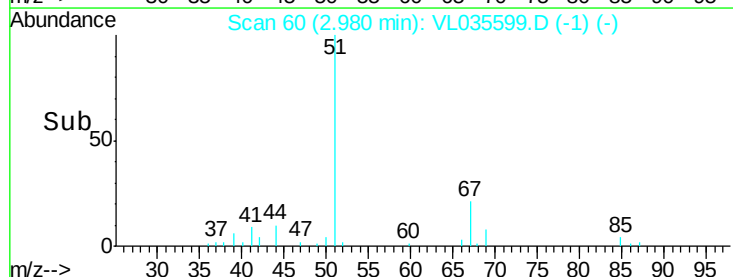
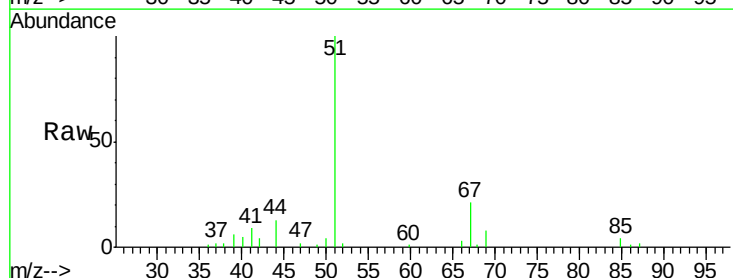
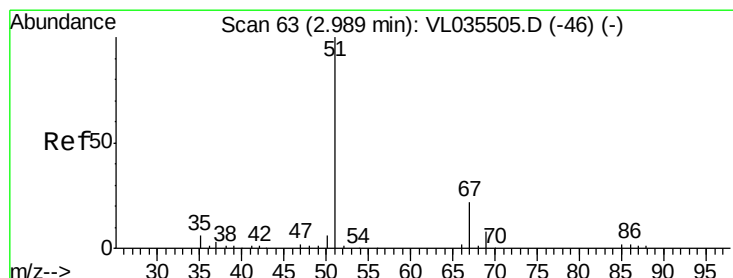
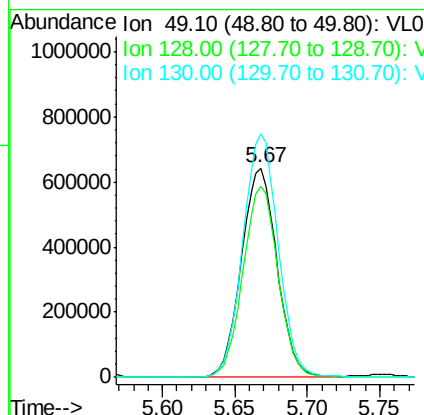
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.67 min Scan# 896
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tot Ion: 49 Resp: 1099827
Ion Ratio Lower Upper
49 100
128 90.6 50.0 150.1
130 116.1 64.4 193.2

Instrument :
MSVOA_L
ClientSampled :
SV-10

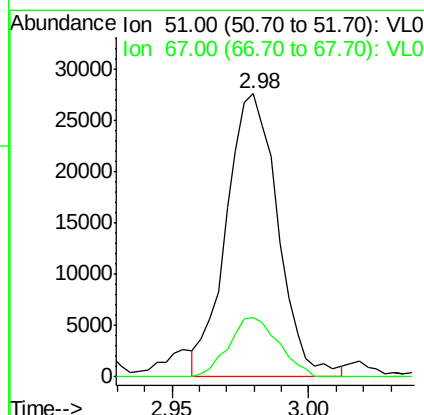
Manual Integrations
APPROVED

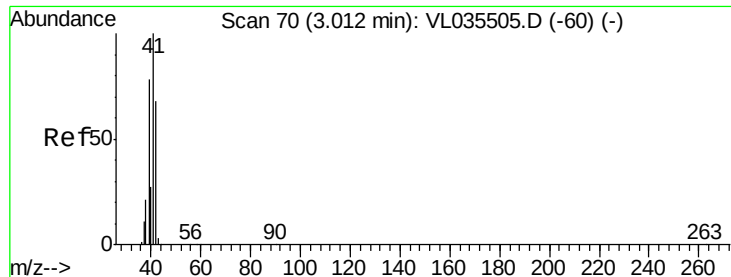
MMDadoda
9/17/2020 5:40:02 PM



#3
Chlorodifluoromethane
Concen: 0.297 ppbv m
RT: 2.98 min Scan# 60
Delta R.T. 0.01 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion: 51 Resp: 36175
Ion Ratio Lower Upper
51 100
67 20.2 17.8 26.8





#9

Propene

Concen: 4.144 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.01 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Instrument :

MSVOA_L

ClientSampled :

SV-10

Tot Ion: 41 Resp: 194330

Ion Ratio Lower Upper

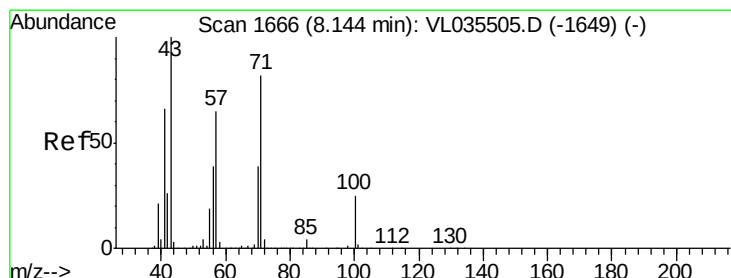
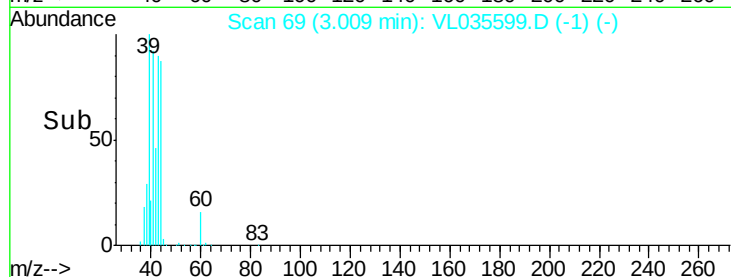
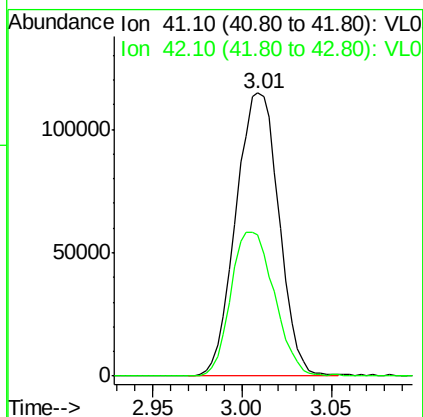
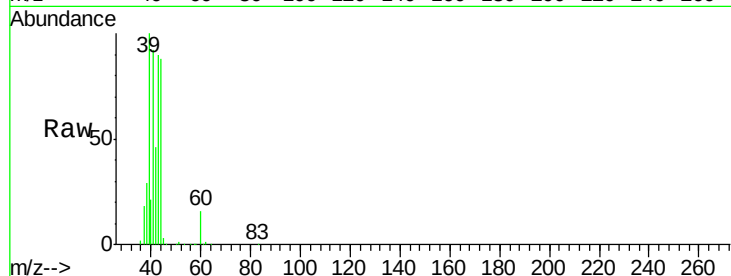
41 100

42 51.5 56.3 84.5#

Manual Integrations
APPROVED

MMDadoda

9/17/2020 5:40:02 PM



#10

Heptane

Concen: 2.831 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. -0.00 min

Lab File: VL035599.D

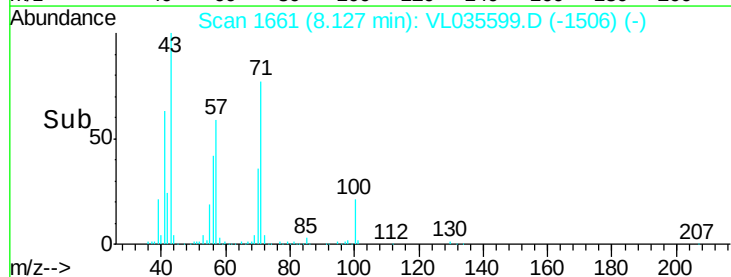
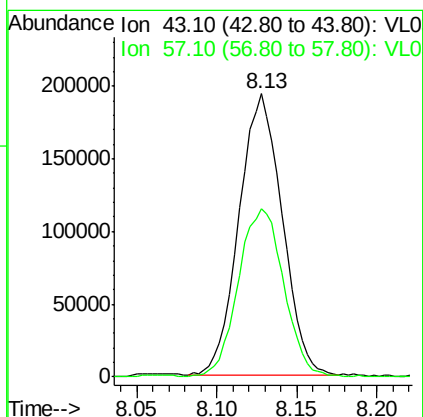
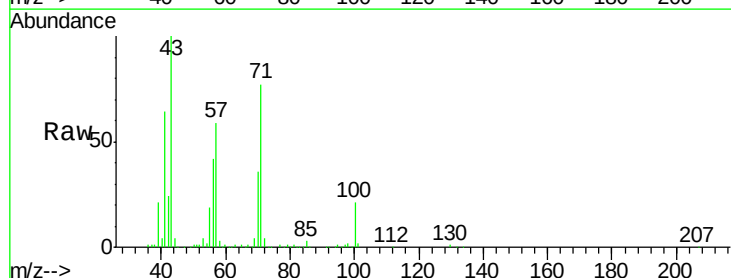
Acq: 14 Sep 2020 15:20

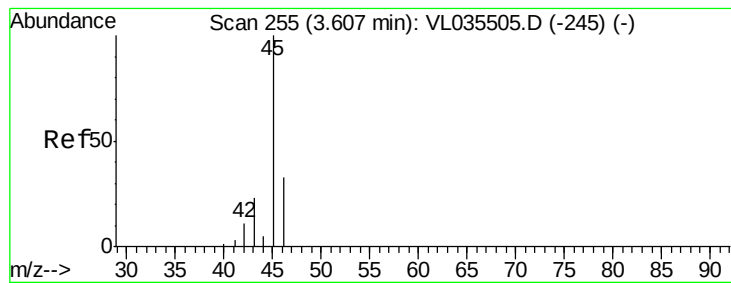
Tgt Ion: 43 Resp: 356605

Ion Ratio Lower Upper

43 100

57 62.7 51.4 77.0





#13

Ethanol

Concen: 2.252 ppbv m

RT: 3.60 min Scan# 252

Delta R.T. -0.00 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Instrument :

MSVOA_L

ClientSampled :

SV-10

Tot Ion: 45 Resp: 26185

Ion Ratio Lower Upper

45 100

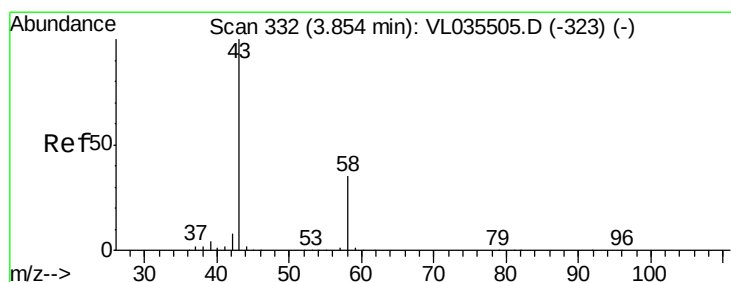
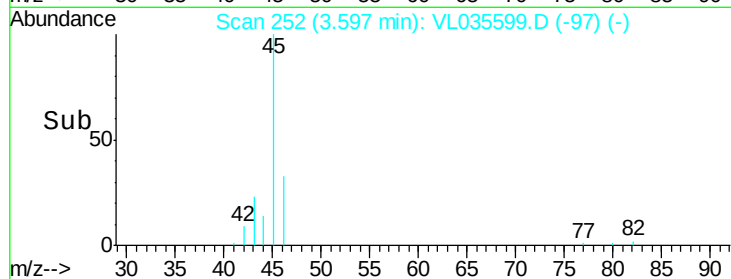
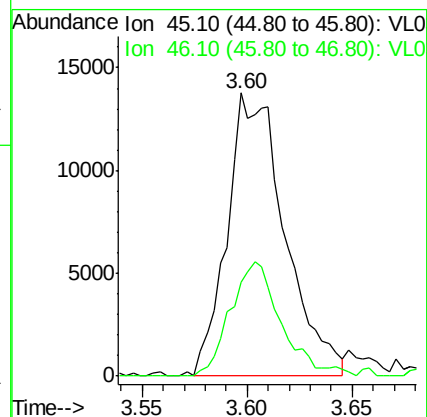
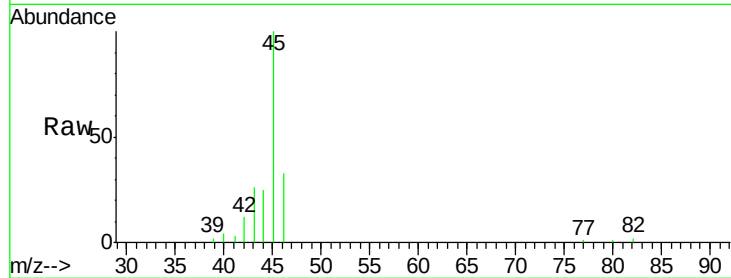
46 0.0 15.2 60.6#

Manual Integrations

APPROVED

MMDadoda

9/17/2020 5:40:02 PM



#15

Acetone

Concen: 47.126 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.00 min

Lab File: VL035599.D

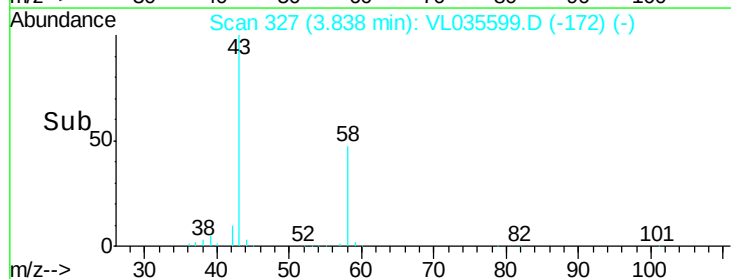
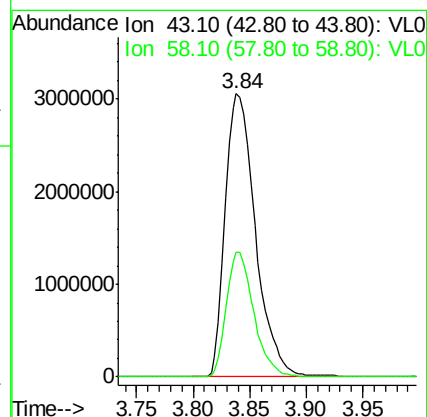
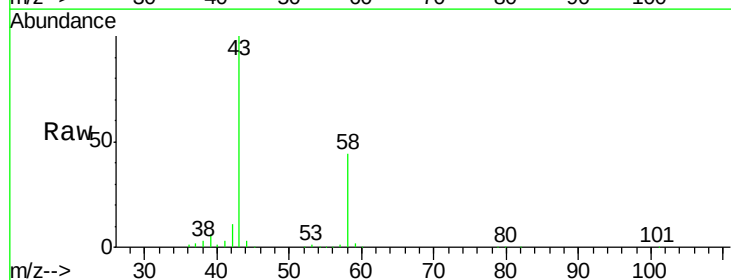
Acq: 14 Sep 2020 15:20

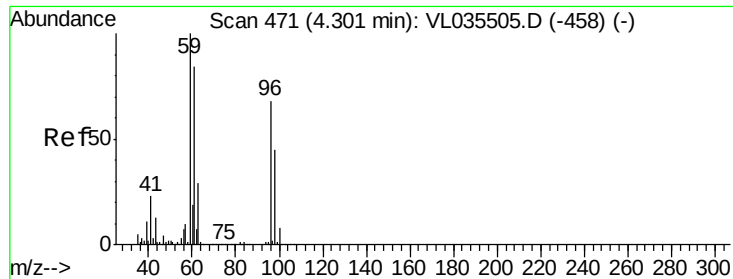
Tgt Ion: 43 Resp: 5716441

Ion Ratio Lower Upper

43 100

58 40.2 28.4 42.6





#17

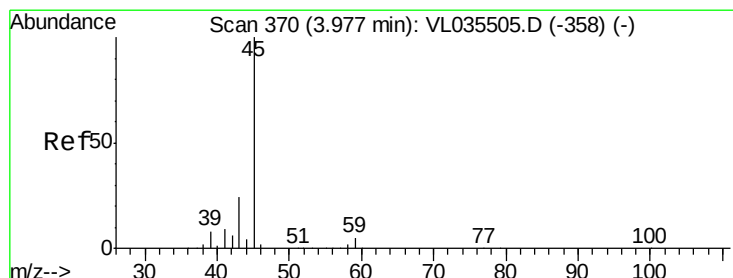
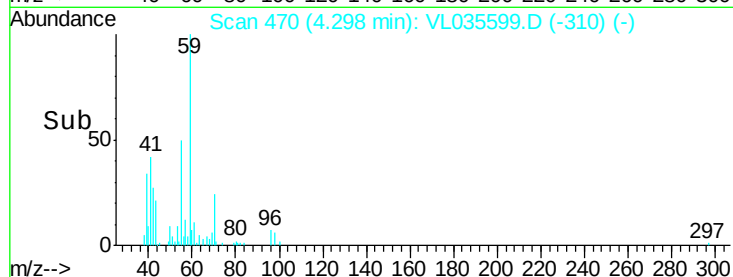
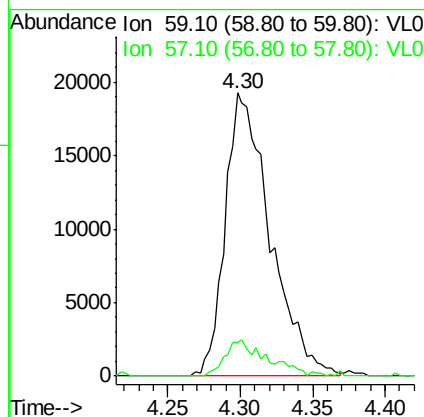
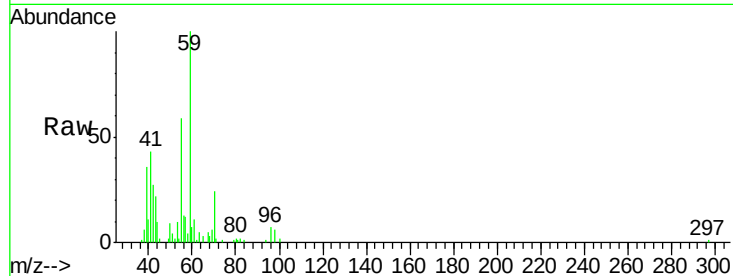
tert-Butyl alcohol
Concen: 0.281 ppbv
RT: 4.30 min Scan# 470
Delta R.T. 0.02 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampled :
SV-10

Tot Ion	59	Resp	41451
Ion Ratio	100	Lower	Upper
57	0.0	8.4	12.6#

Manual Integrations
APPROVED

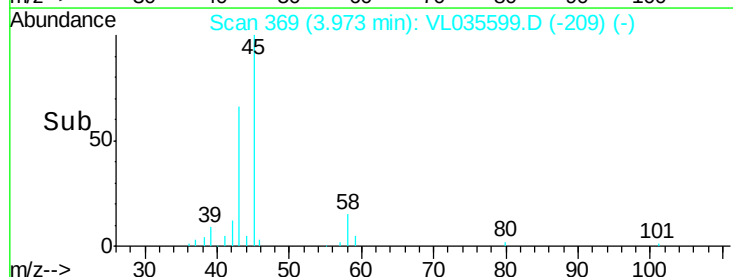
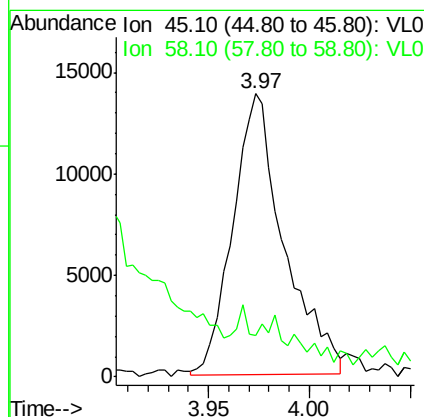
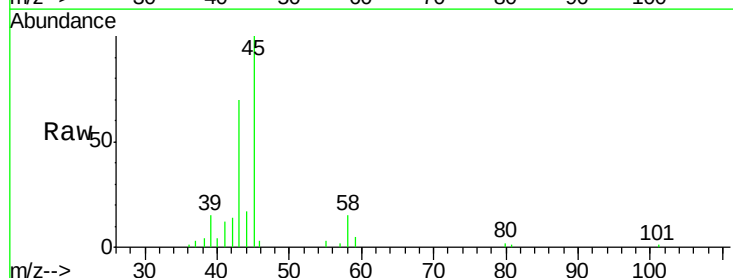
MMDadoda
9/17/2020 5:40:02 PM

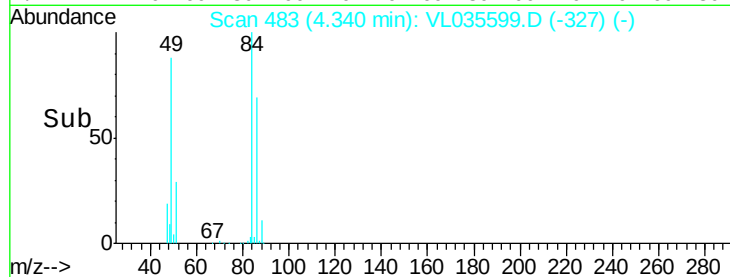
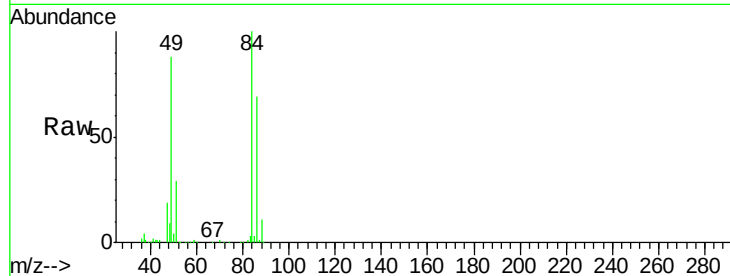
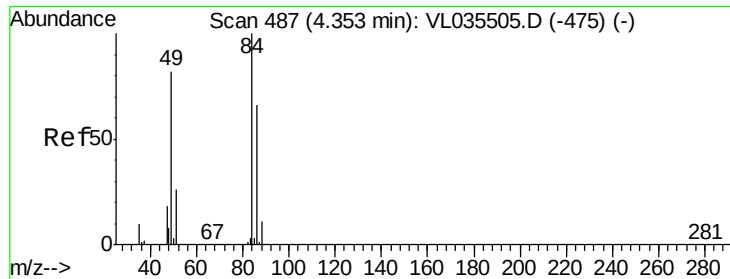


#19

Isopropyl Alcohol
Concen: 0.339 ppbv
RT: 3.97 min Scan# 369
Delta R.T. 0.02 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion	45	Resp	24543
Ion Ratio	100	Lower	Upper
58	0.0	2.0	3.0#





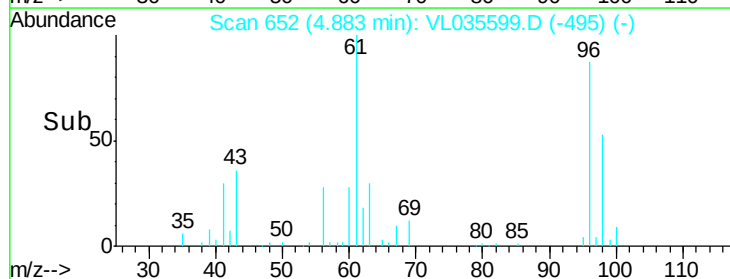
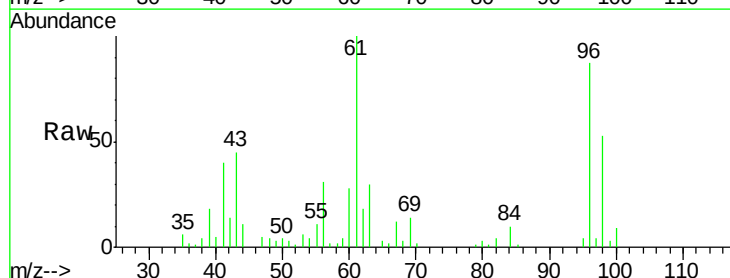
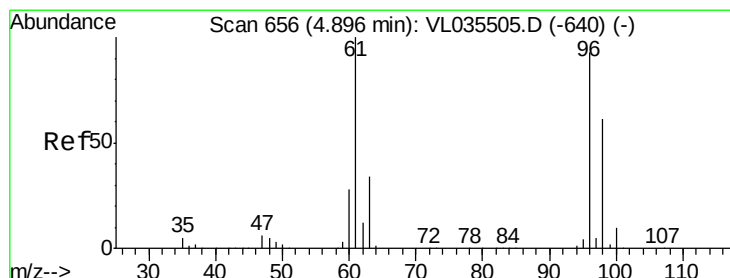
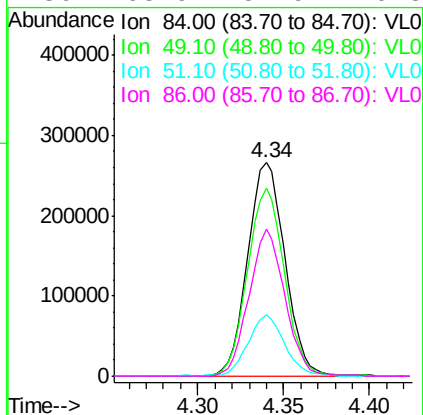
#20
Methylene Chloride
Concen: 4.454 ppbv
RT: 4.34 min Scan# 483
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tot Ion	84	Resp	402363
Ion Ratio	Lower	Upper	
84	100		
49	87.9	65.4	98.0
51	28.4	21.5	32.3
86	68.9	52.9	79.3

Instrument :
MSVOA_L
ClientSampled :
SV-10

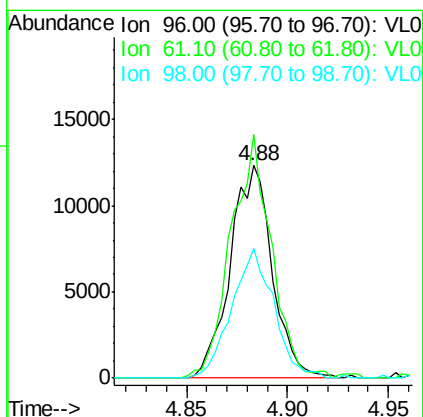
Manual Integrations
APPROVED

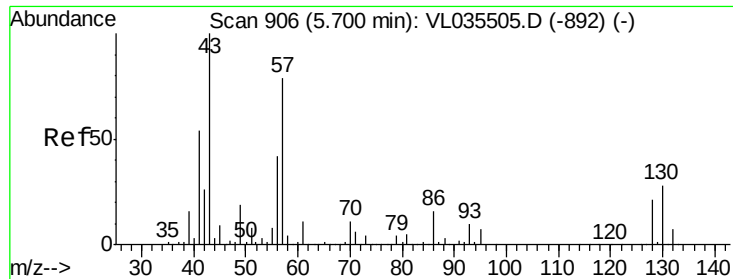
MMDadoda
9/17/2020 5:40:02 PM



#22
trans-1,2-Dichloroethene
Concen: 0.183 ppbv
RT: 4.88 min Scan# 652
Delta R.T. 0.01 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion	96	Resp	17989
Ion Ratio	Lower	Upper	
96	100		
61	113.2	86.0	129.0
98	61.1	52.3	78.5





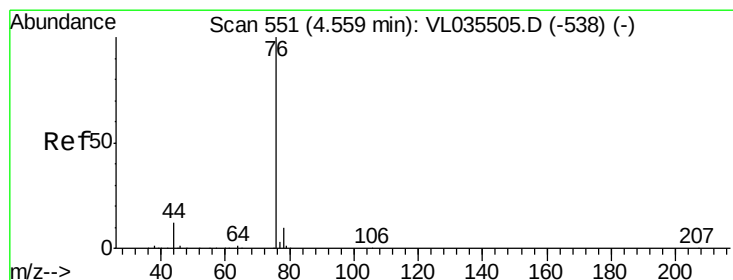
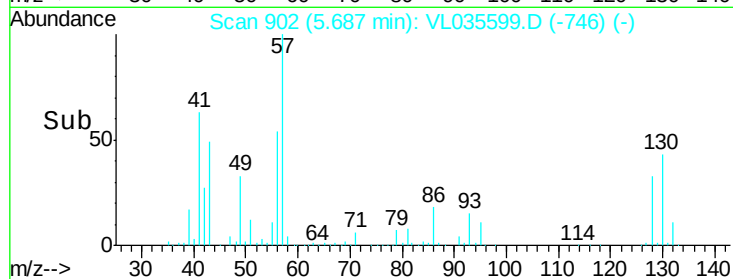
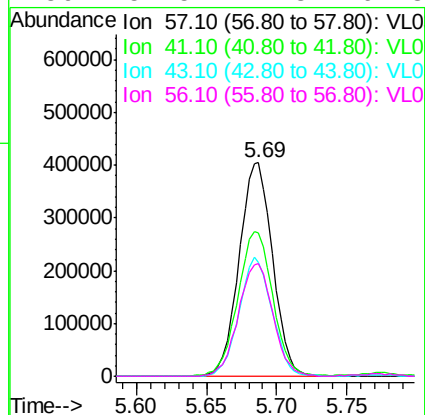
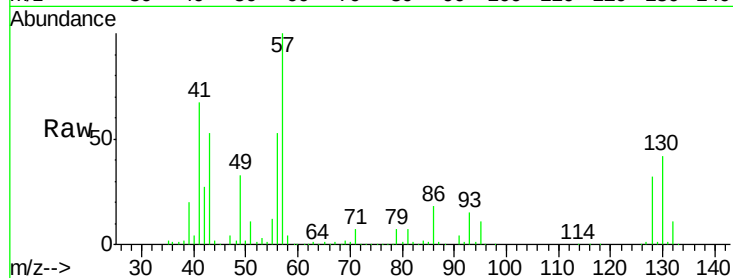
#26
Hexane
Concen: 5.539 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampleId :
SV-10

Tot Ion	Ratio	Lower	Upper
57	100		
41	71.4	55.9	83.9
43	54.7	141.8	212.8#
56	54.5	41.8	62.8

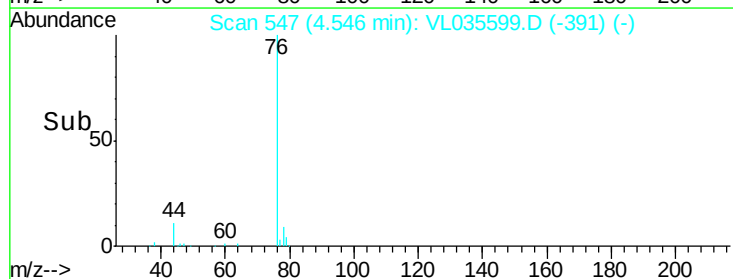
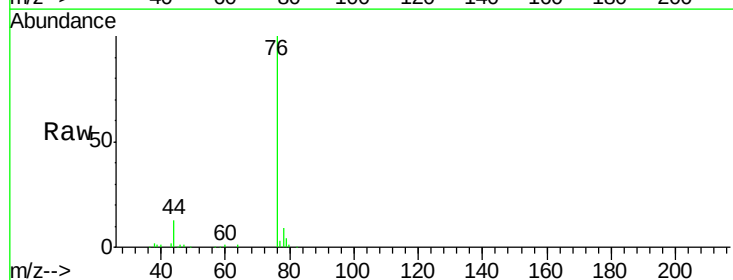
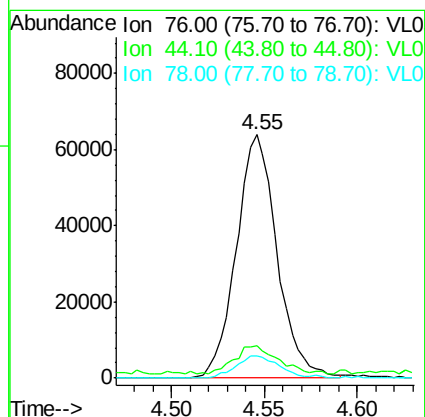
Manual Integrations
APPROVED

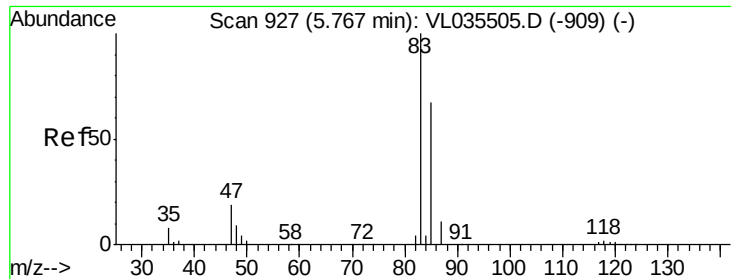
MMDadoda
9/17/2020 5:40:02 PM



#27
Carbon Disulfide
Concen: 0.560 ppbv
RT: 4.55 min Scan# 547
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion	Ratio	Lower	Upper
76	100		
44	12.5	9.3	13.9
78	10.2	7.8	11.6





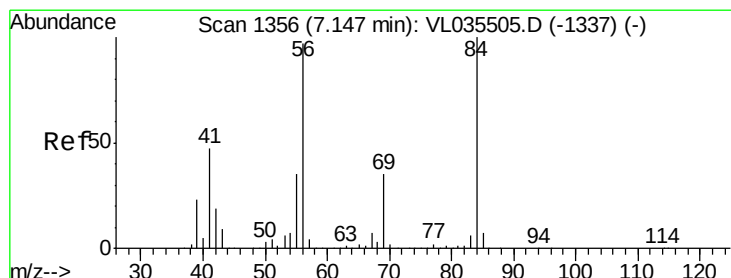
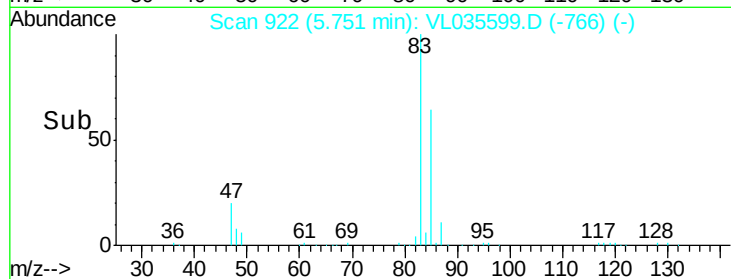
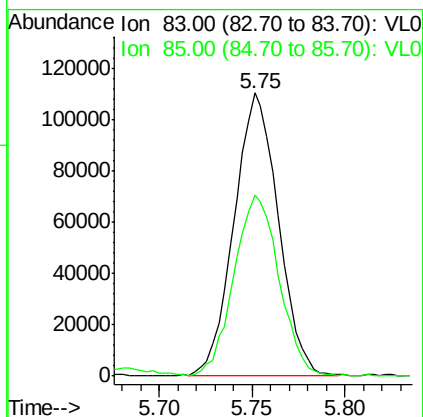
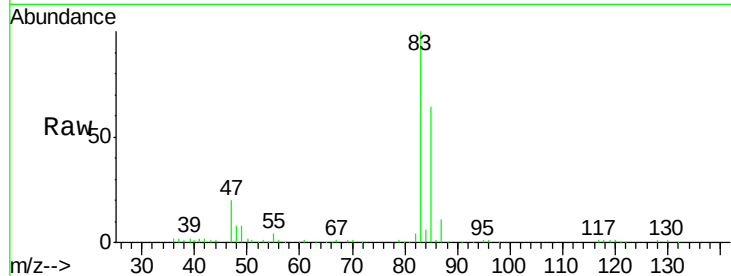
#29
Chloroform
Concen: 0.731 ppbv
RT: 5.75 min Scan# 922
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampled :
SV-10

Tot Ion: 83 Resp: 180807
Ion Ratio Lower Upper
83 100
85 64.0 53.9 80.9

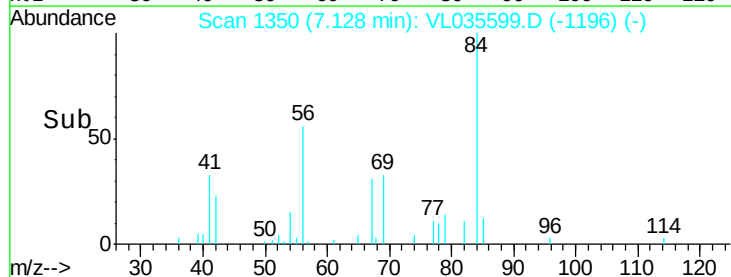
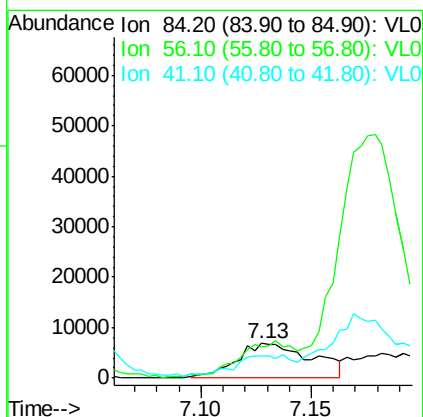
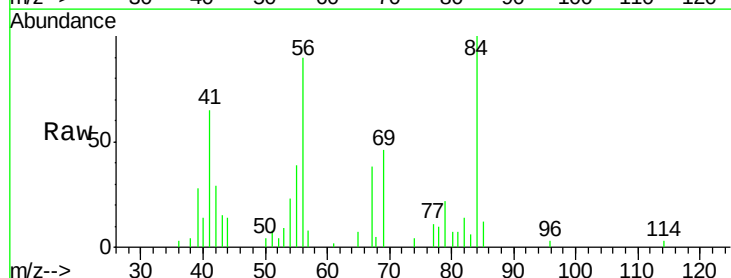
Manual Integrations
APPROVED

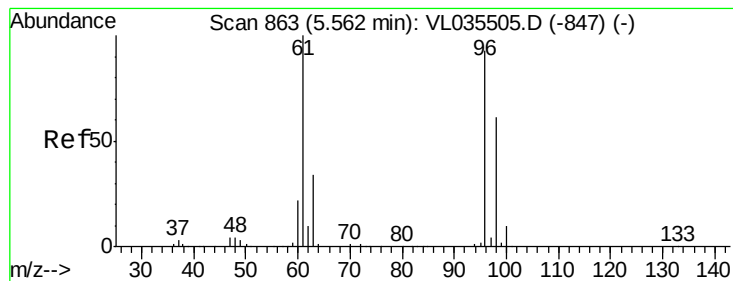
MMDadoda
9/17/2020 5:40:02 PM



#30
Cyclohexane
Concen: 0.126 ppbv m
RT: 7.13 min Scan# 1350
Delta R.T. -0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion: 84 Resp: 16412
Ion Ratio Lower Upper
84 100
56 0.0 80.1 120.1#
41 0.0 38.1 57.1#





#31

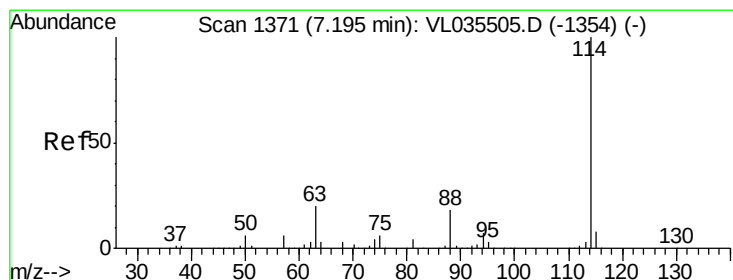
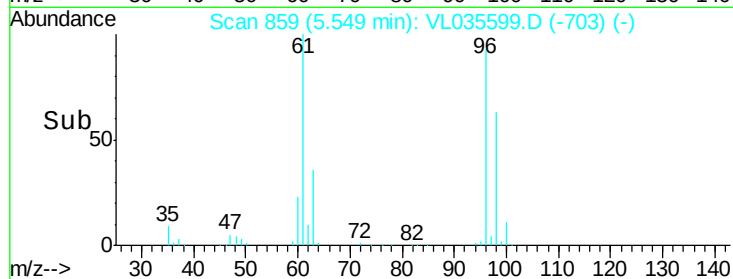
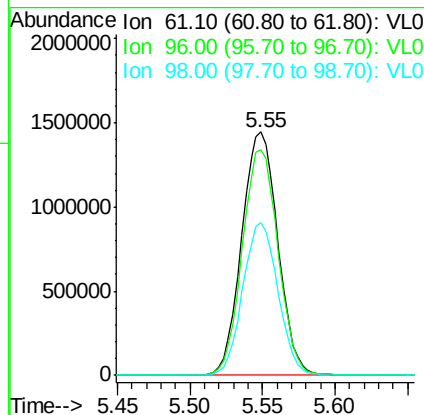
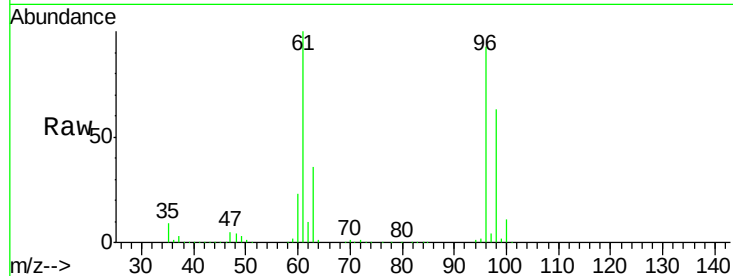
cis-1,2-Dichloroethene
Concen: 20.120 ppbv
RT: 5.55 min Scan# 859
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampleId :
SV-10

Tot Ion	Ratio	Lower	Upper
61	100		
96	92.6	74.4	111.6
98	62.8	49.2	73.8

Manual Integrations
APPROVED

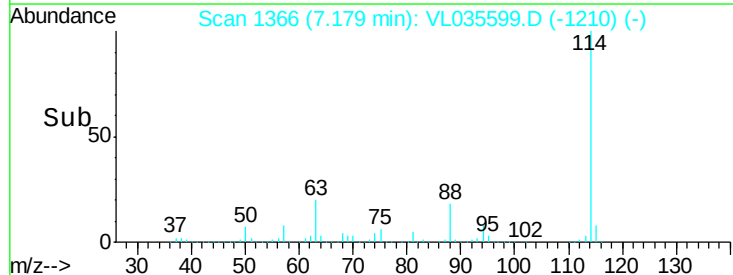
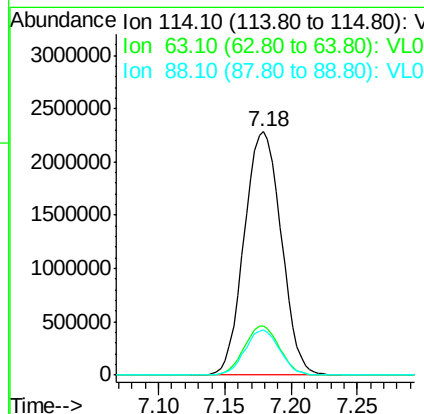
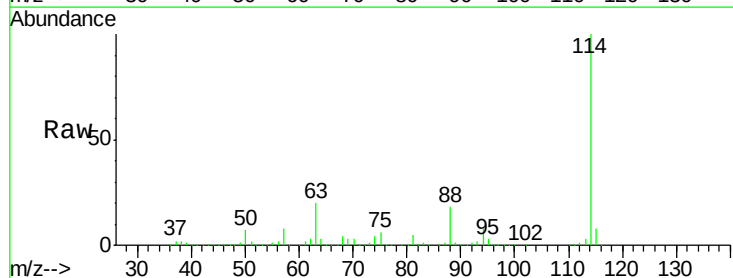
MMDadoda
9/17/2020 5:40:02 PM

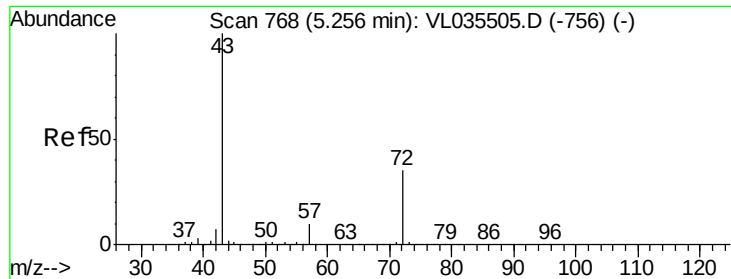


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion	Ratio	Lower	Upper
114	100		
63	19.4	14.7	22.1
88	17.3	13.4	20.2





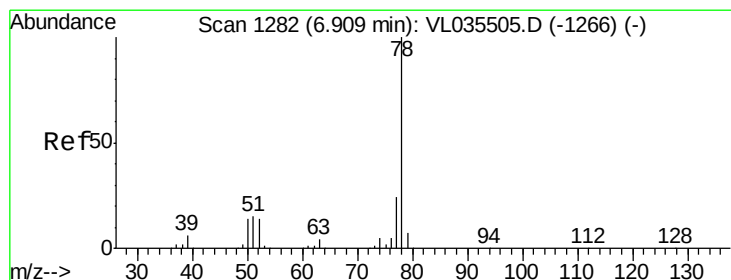
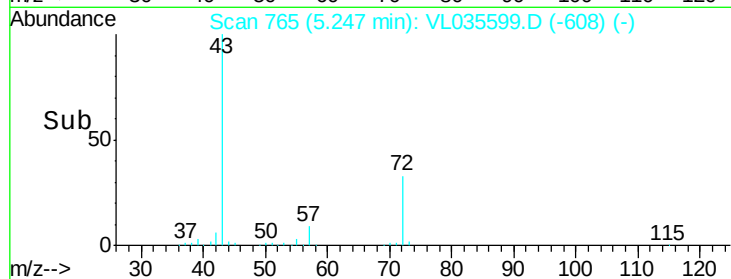
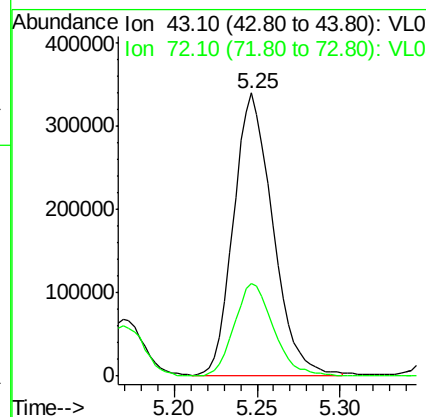
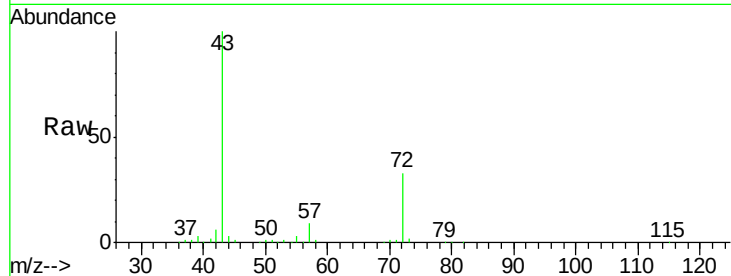
#34
2-Butanone
Concen: 4.217 ppbv
RT: 5.25 min Scan# 765
Delta R.T. 0.01 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampleId :
SV-10

Tot Ion	Ratio	Lower	Upper
43	100		
72	33.2	27.7	41.5

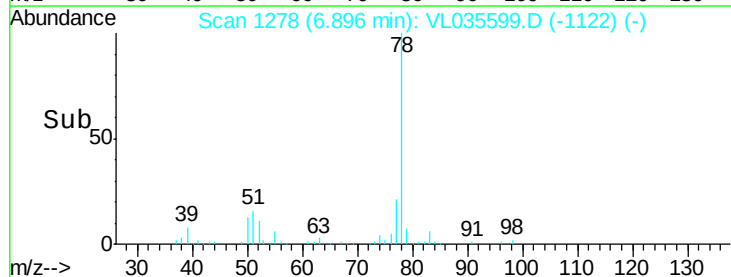
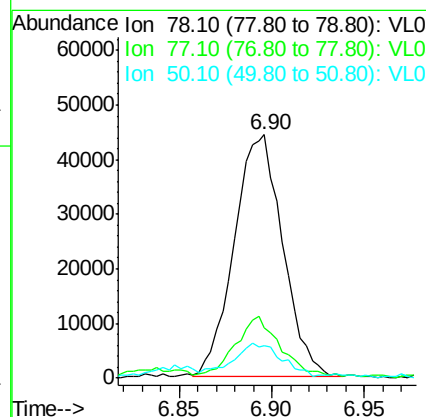
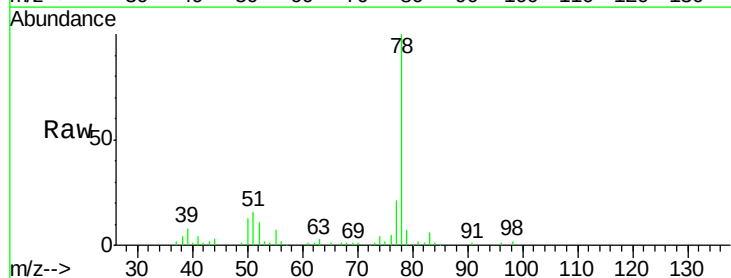
Manual Integrations
APPROVED

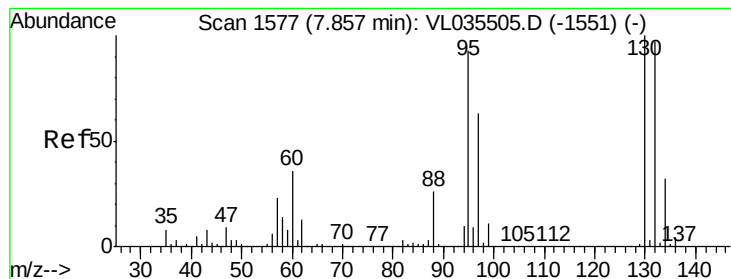
MMDadoda
9/17/2020 5:40:02 PM



#36
Benzene
Concen: 0.278 ppbv
RT: 6.90 min Scan# 1278
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.2	19.3	28.9
50	12.2	11.0	16.6





#38

Trichloroethene

Concen: 41.572 ppbv

RT: 7.84 min Scan# 1571

Delta R.T. -0.00 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Instrument :

MSVOA_L

ClientSampled :

SV-10

Tot Ion:130 Resp: 6931437

Ion Ratio Lower Upper

130 100

95 101.9 74.6 112.0

132 96.6 77.6 116.4

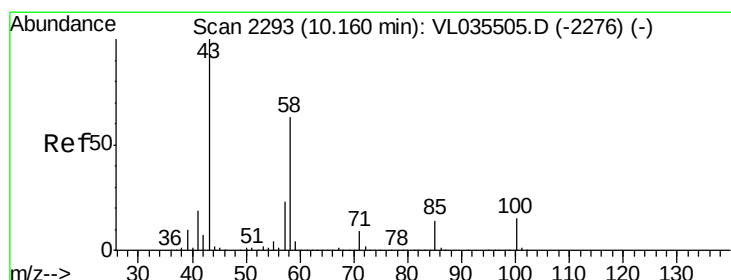
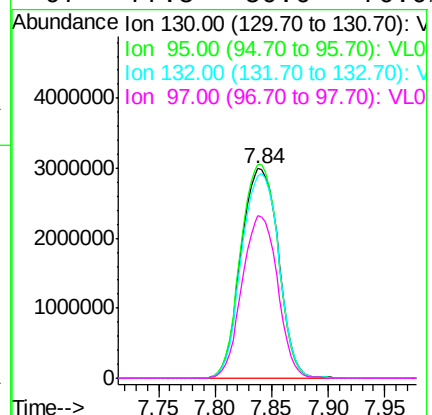
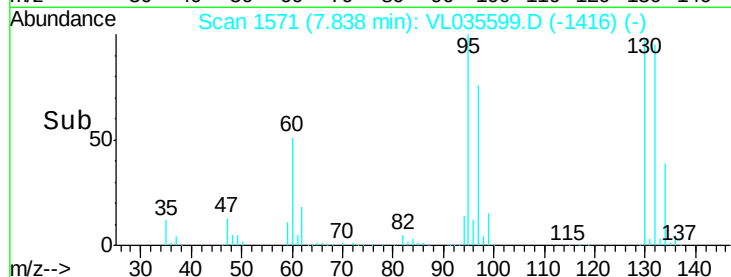
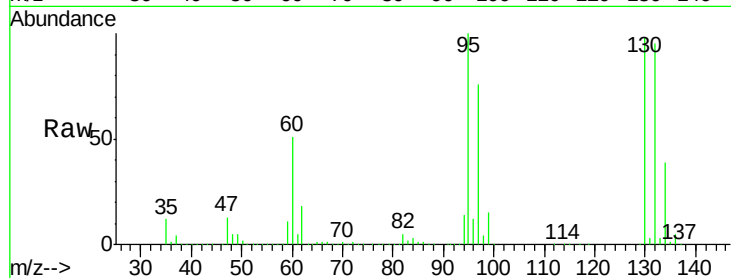
97 77.5 50.6 76.0#

Manual Integrations

APPROVED

MMDadoda

9/17/2020 5:40:02 PM



#51

2-Hexanone

Concen: 1.574 ppbv m

RT: 10.15 min Scan# 2290

Delta R.T. 0.01 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

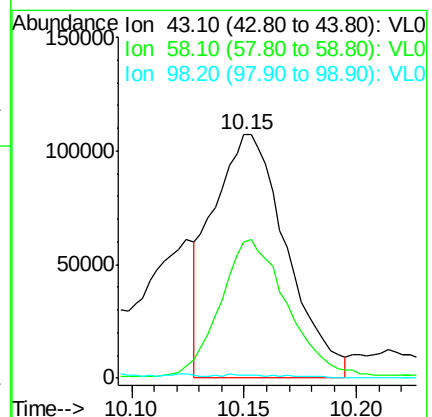
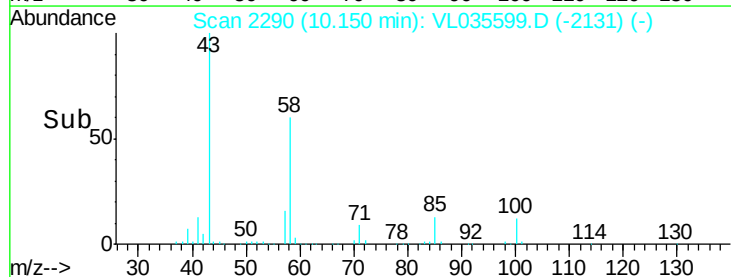
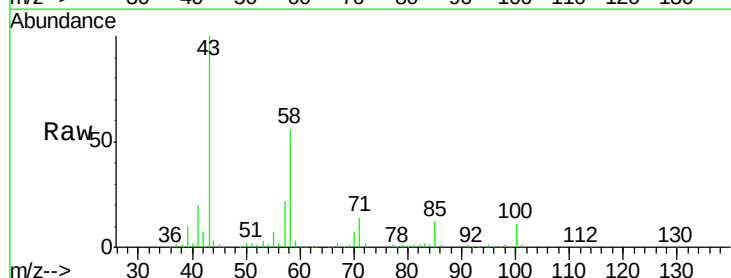
Tgt Ion: 43 Resp: 246117

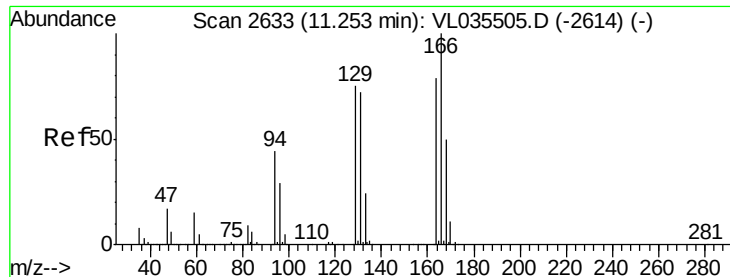
Ion Ratio Lower Upper

43 100

58 53.2 50.2 75.4

98 1.5 0.4 0.6#





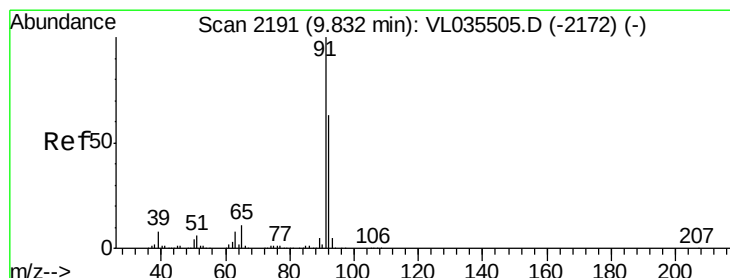
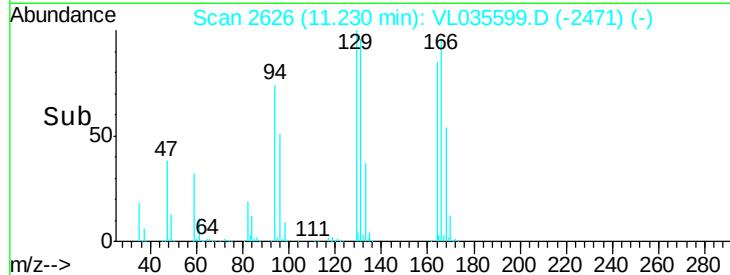
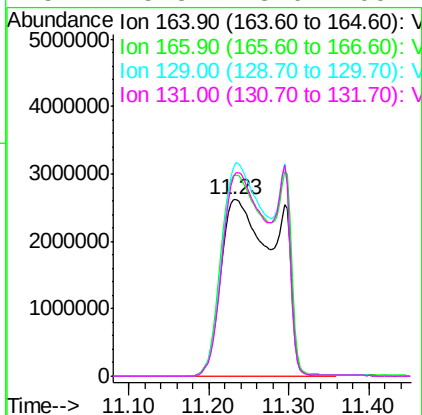
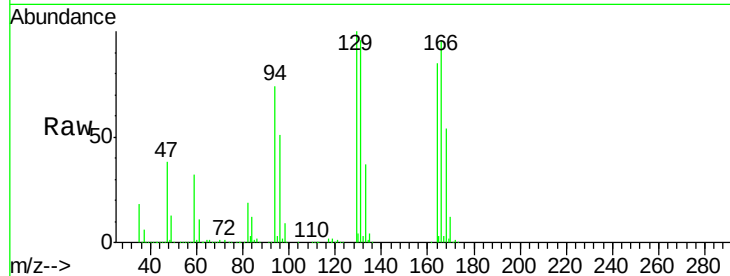
#52
Tetrachloroethene
Concen: 77.270 ppbv m
RT: 11.23 min Scan# 2626
Delta R.T. -0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampled :
SV-10

Tot Ion:164 Resp:12957283
Ion Ratio Lower Upper
164 100
166 113.6 100.9 151.3
129 118.2 75.3 112.9#
131 113.3 73.0 109.4#

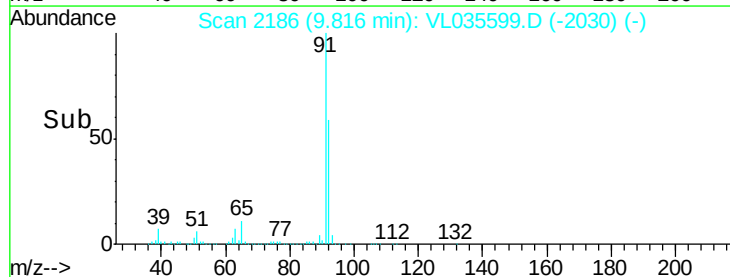
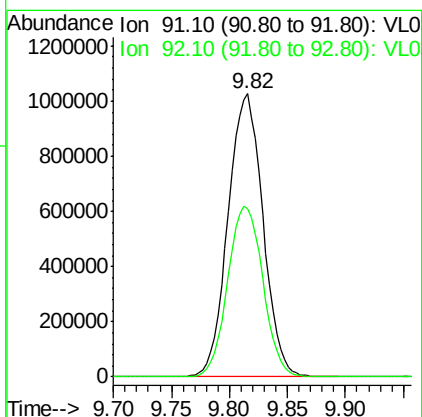
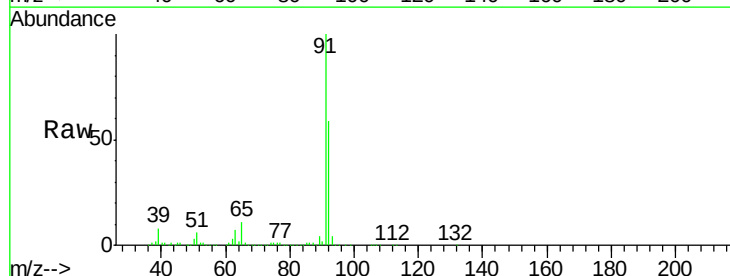
Manual Integrations
APPROVED

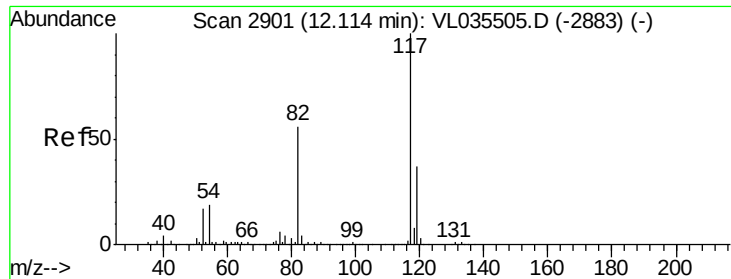
MMDadoda
9/17/2020 5:40:02 PM



#53
Toluene
Concen: 5.926 ppbv
RT: 9.82 min Scan# 2186
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion: 91 Resp: 2138942
Ion Ratio Lower Upper
91 100
92 61.2 49.8 74.8





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2898

Delta R.T. 0.01 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Instrument :

MSVOA_L

ClientSampled :

SV-10

Tot Ion:117 Resp: 4532532

Ion Ratio Lower Upper

117 100

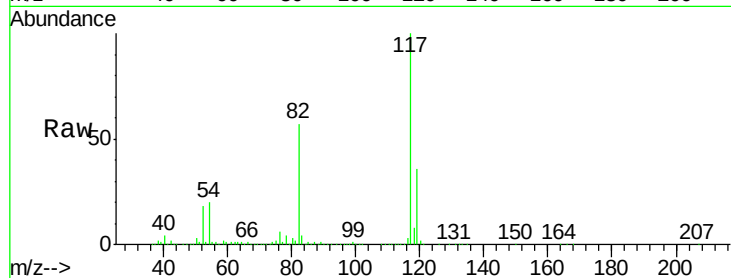
82 57.0 41.6 62.4

119 34.7 29.3 43.9

Manual Integrations
APPROVED

MMDadoda

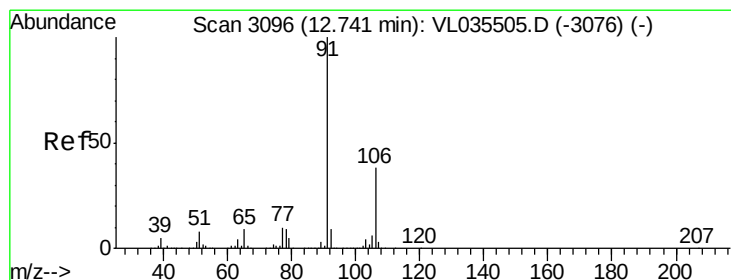
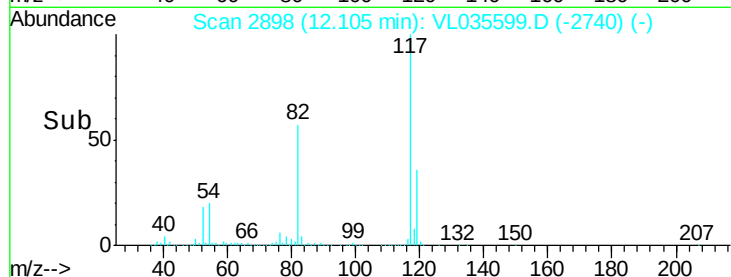
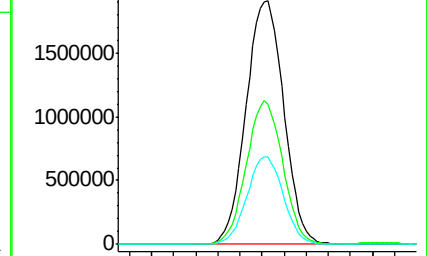
9/17/2020 5:40:02 PM



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



#58

Ethyl Benzene

Concen: 0.408 ppbv

RT: 12.73 min Scan# 3092

Delta R.T. 0.01 min

Lab File: VL035599.D

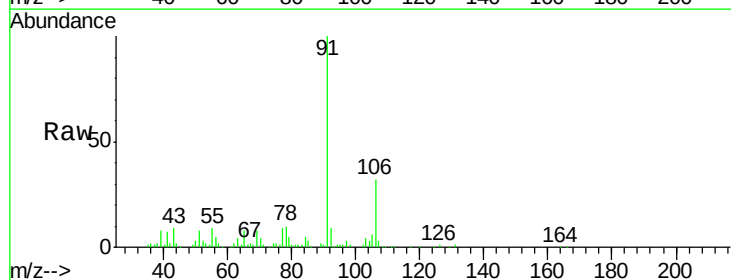
Acq: 14 Sep 2020 15:20

Tgt Ion: 91 Resp: 190657

Ion Ratio Lower Upper

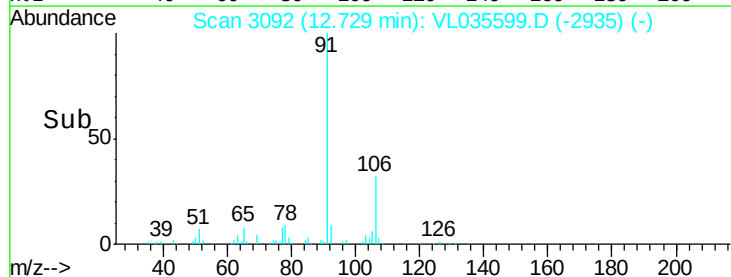
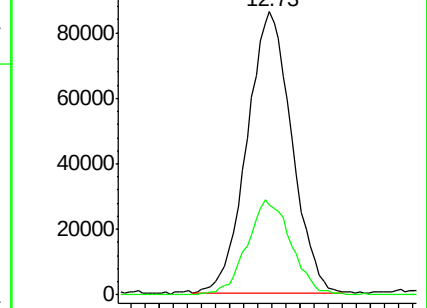
91 100

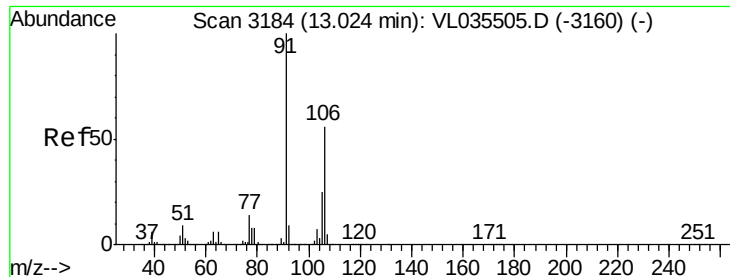
106 32.0 30.3 45.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





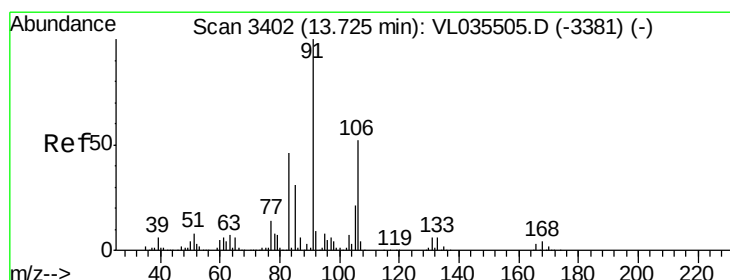
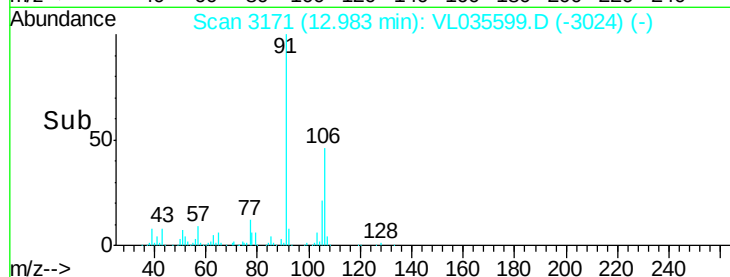
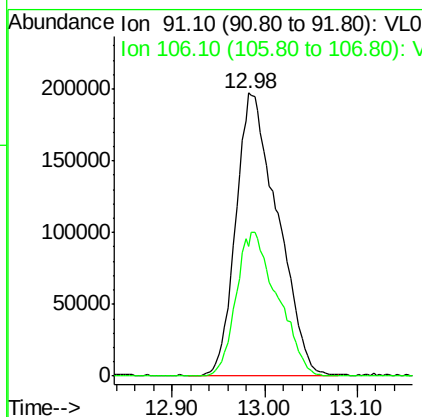
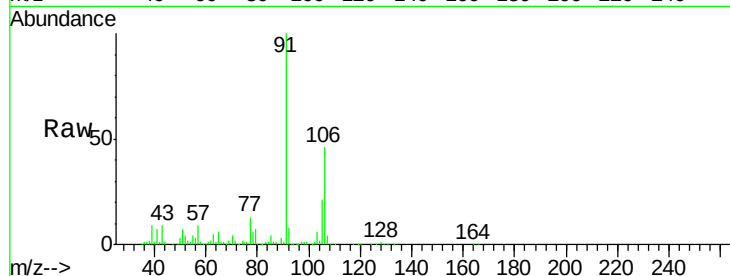
#59
m/p-Xylene
Concen: 1.575 ppbv
RT: 12.98 min Scan# 3171
Delta R.T. -0.03 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Instrument :
MSVOA_L
ClientSampled :
SV-10

Tot Ion: 91 Resp: 615110
Ion Ratio Lower Upper
91 100
106 50.5 43.4 65.2

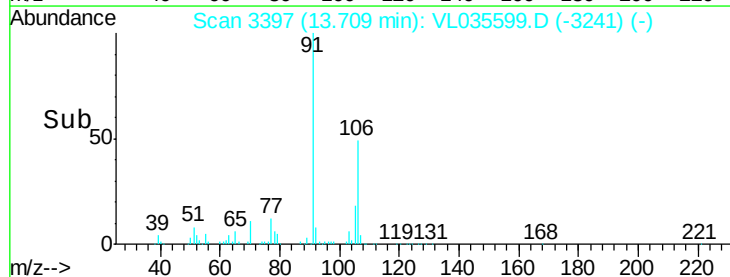
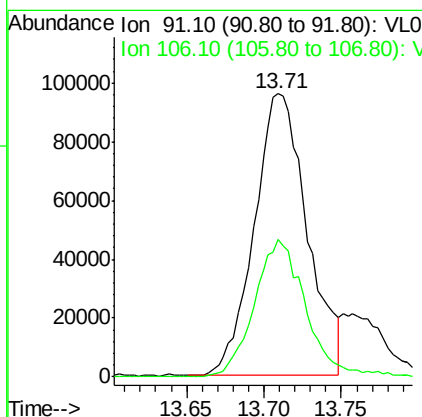
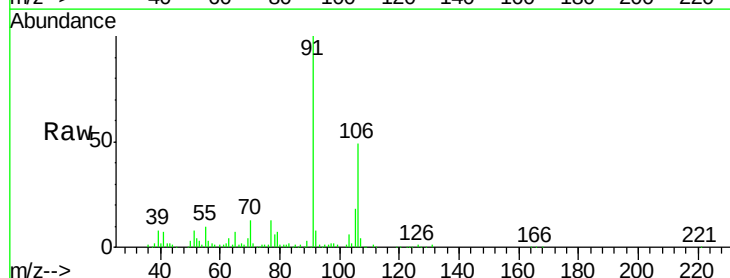
Manual Integrations
APPROVED

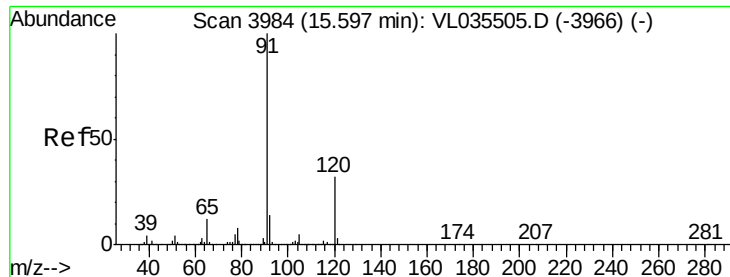
MMDadoda
9/17/2020 5:40:02 PM



#60
o-Xylene
Concen: 0.581 ppbv
RT: 13.71 min Scan# 3397
Delta R.T. 0.00 min
Lab File: VL035599.D
Acq: 14 Sep 2020 15:20

Tgt Ion: 91 Resp: 228442
Ion Ratio Lower Upper
91 100
106 47.5 25.8 77.4





#64

n-propylbenzene

Concen: 0.119 ppbv

RT: 15.58 min Scan# 3980

Delta R.T. 0.01 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Instrument :

MSVOA_L

ClientSampled :

SV-10

Tot Ion:120 Resp: 23036

Ion Ratio Lower Upper

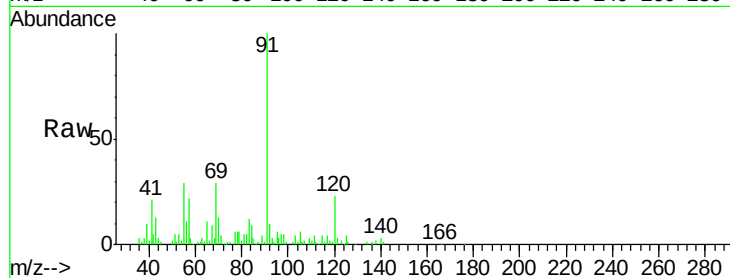
120 100

91 0.0 279.4 419.0#

Manual Integrations
APPROVED

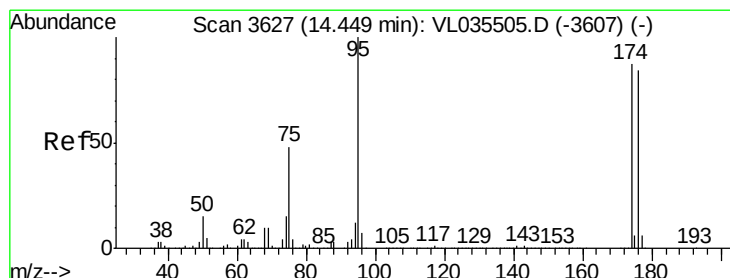
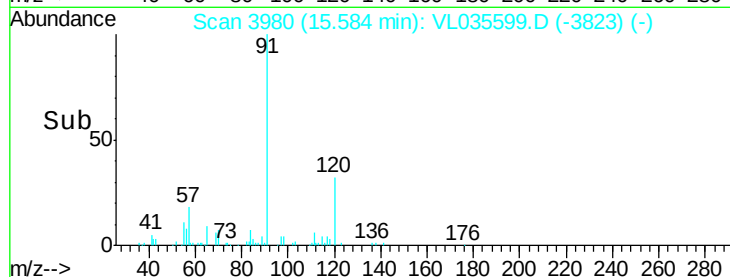
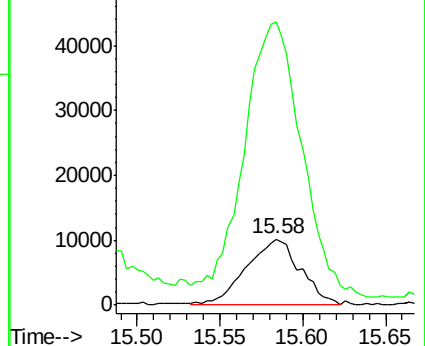
MMDadoda

9/17/2020 5:40:02 PM



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.876 ppbv

RT: 14.43 min Scan# 3622

Delta R.T. 0.00 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

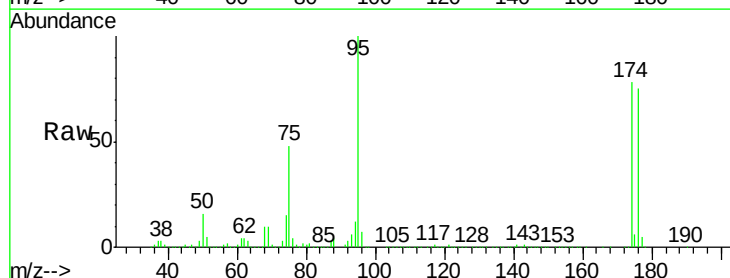
Tgt Ion: 95 Resp: 3500884

Ion Ratio Lower Upper

95 100

174 76.5 69.6 104.4

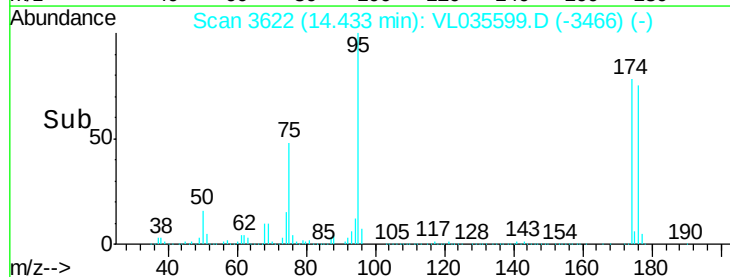
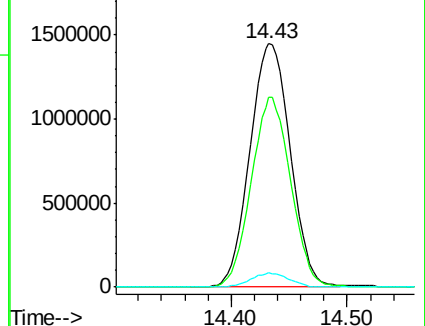
175 5.6 5.1 7.7

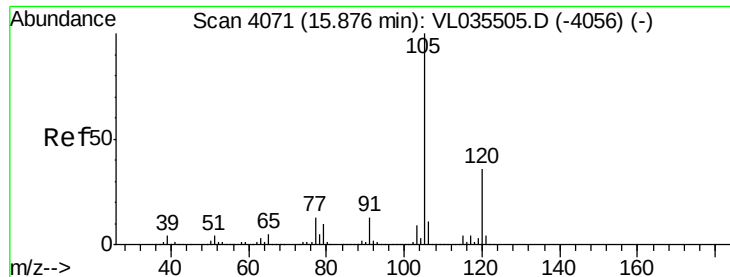


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#72

4-Ethyltoluene

Concen: 0.242 ppbv

RT: 15.86 min Scan# 4065

Delta R.T. 0.00 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Instrument :

MSVOA_L

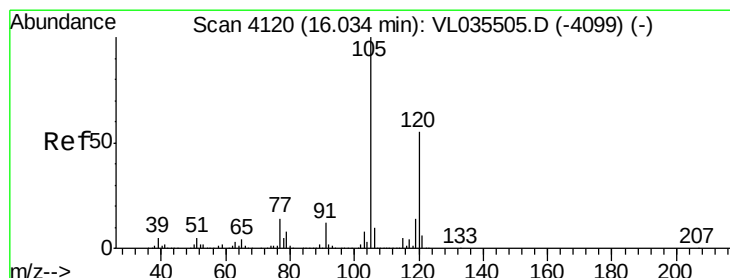
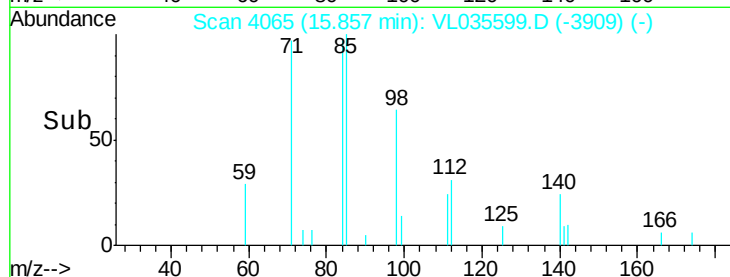
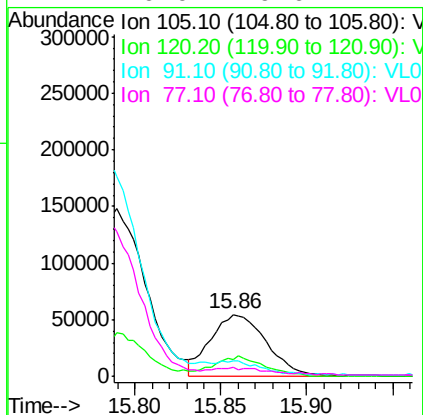
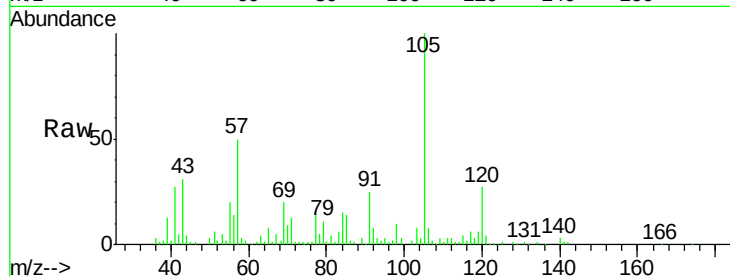
ClientSampled :

SV-10

Tot Ion	Ratio	Resp	Lower	Upper
105	100	121071		
120	30.8	27.4	41.2	
91	0.0	9.7	14.5	
77	0.0	9.6	14.4	

Manual Integrations
APPROVED

MMDadoda
9/17/2020 5:40:02 PM



#73

1,3,5-Trimethylbenzene

Concen: 0.158 ppbv

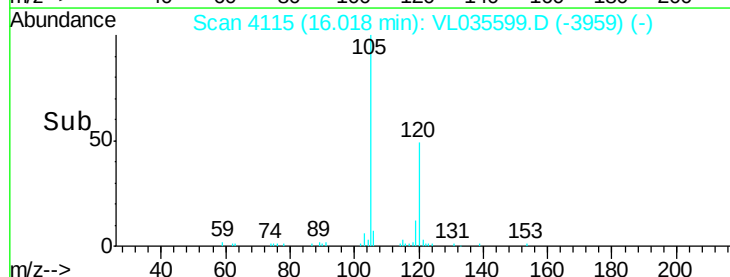
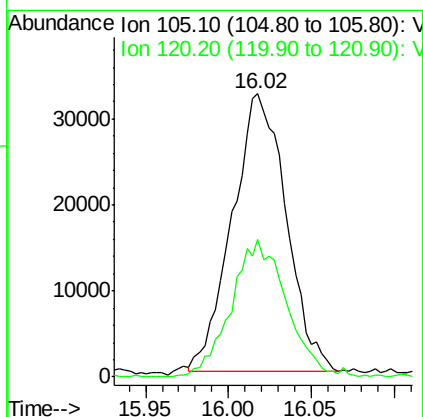
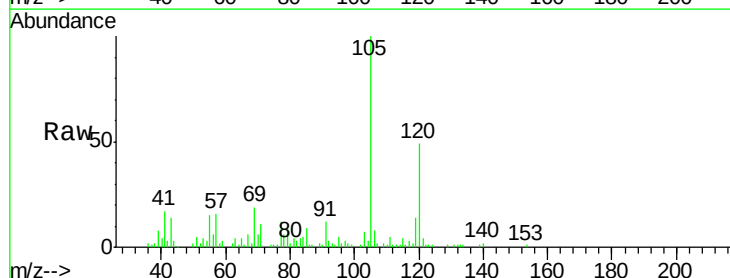
RT: 16.02 min Scan# 4115

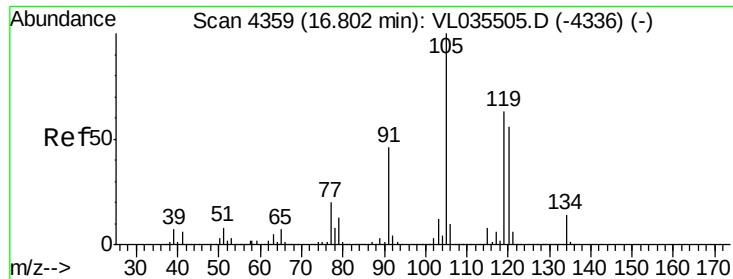
Delta R.T. 0.00 min

Lab File: VL035599.D

Acq: 14 Sep 2020 15:20

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	72946		
120	48.3	44.2	66.2	





#74
 1,2,4-Trimethylbenzene
 Concen: 0.607 ppbv
 RT: 16.78 min Scan# 4352
 Delta R.T. -0.00 min
 Lab File: VL035599.D
 Acq: 14 Sep 2020 15:20

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-10

Tot Ion	Ion	Ratio	Resp Lower	Resp Upper
105	105	100		
120	120	45.0	44.4	66.6
91	91	11.5	37.1	55.7
77	77	11.8	16.0	24.0

Manual Integrations
 APPROVED

MMDadoda
 9/17/2020 5:40:02 PM

