

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111620\
 Data File : VL035945.D
 Acq On : 16 Nov 2020 15:59
 Operator : SY/AP
 Sample : L4721-06
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-6

Manual Integrations
 APPROVED

MMDadoda
 11/18/2020 2:11:19 PM

Quant Time: Nov 17 21:46:34 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

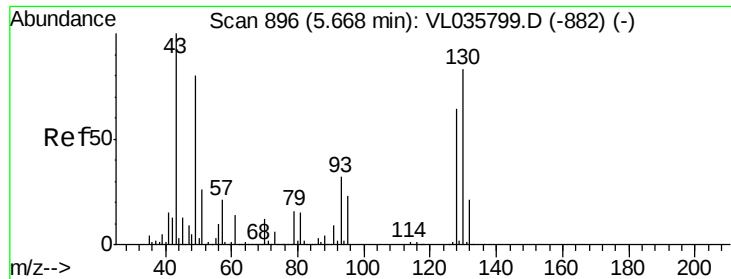
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1076938	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3814694	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3599359	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2780212	10.87	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	108.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	46442	0.229	ppbv	94
3) Chlorodifluoromethane	2.98	51	73382	0.569	ppbv #	86
4) Chloromethane	3.14	50	38616	0.616	ppbv #	85
9) Propene	3.02	41	64111	1.358	ppbv	85
10) Heptane	8.12	43	28404	0.218	ppbv	98
11) Trichlorofluoromethane	3.95	101	66903	0.263	ppbv	99
13) Ethanol	3.60	45	276653m	27.016	ppbv	
15) Acetone	3.85	43	388464m	3.374	ppbv	
19) Isopropyl Alcohol	3.98	45	114133	1.613	ppbv #	91
20) Methylene Chloride	4.34	84	440751	5.438	ppbv	99
26) Hexane	5.69	57	728745	5.826	ppbv #	47
30) Cyclohexane	7.13	84	47168m	0.346	ppbv	
34) 2-Butanone	5.25	43	48880	0.395	ppbv	98
35) Carbon Tetrachloride	7.02	117	14525	0.071	ppbv	86
36) Benzene	6.89	78	105494	0.372	ppbv	97
38) Trichloroethene	7.84	130	8056m	0.058	ppbv	
44) 2,2,4-Trimethylpentane	7.88	57	193907	0.517	ppbv #	81
52) Tetrachloroethene	11.23	164	14370m	0.107	ppbv	
53) Toluene	9.81	91	1760194	5.144	ppbv	98
58) Ethyl Benzene	12.72	91	53238	0.121	ppbv	93
59) m/p-Xylene	12.98	91	168778m	0.455	ppbv	
60) o-Xylene	13.70	91	59259	0.164	ppbv	97
74) 1,2,4-Trimethylbenzene	16.78	105	67185	0.157	ppbv #	76

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.00 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

Instrument :

MSVOA_L

ClientSampled :

LA-6

Tot Ion: 49 Resp: 1076938

Ion Ratio Lower Upper

49 100

128 75.4 41.5 124.6

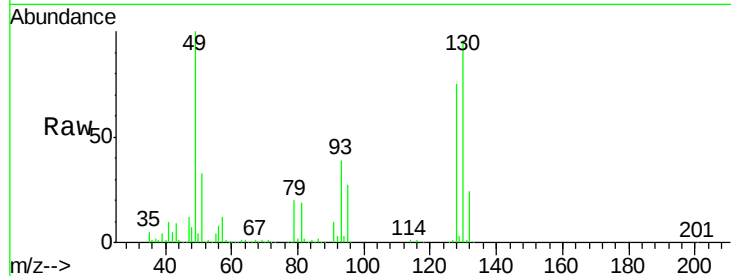
130 97.8 53.7 161.1

Manual Integrations

APPROVED

MMDadoda

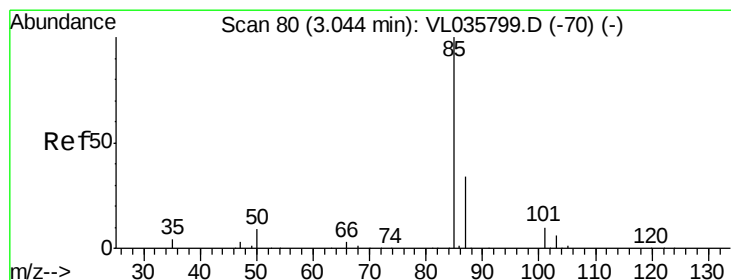
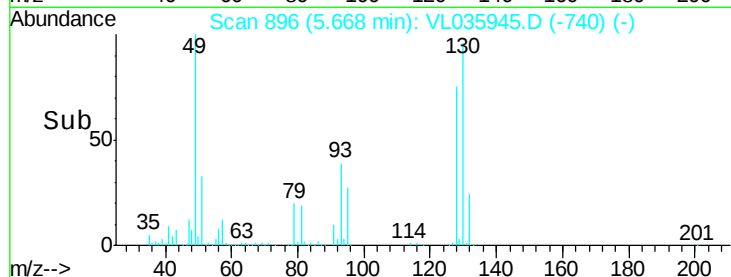
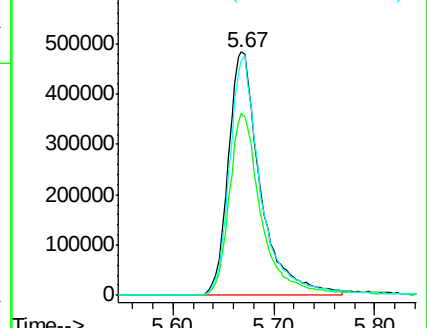
11/18/2020 2:11:19 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.229 ppbv

RT: 3.04 min Scan# 80

Delta R.T. 0.00 min

Lab File: VL035945.D

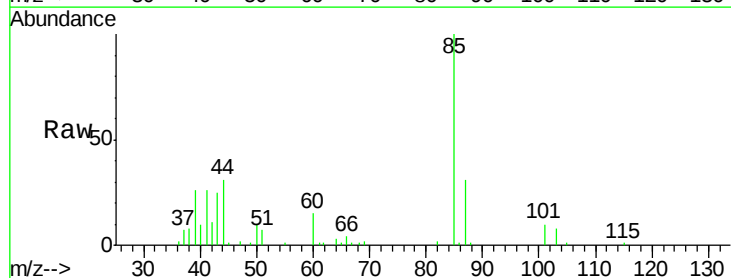
Acq: 16 Nov 2020 15:59

Tgt Ion: 85 Resp: 46442

Ion Ratio Lower Upper

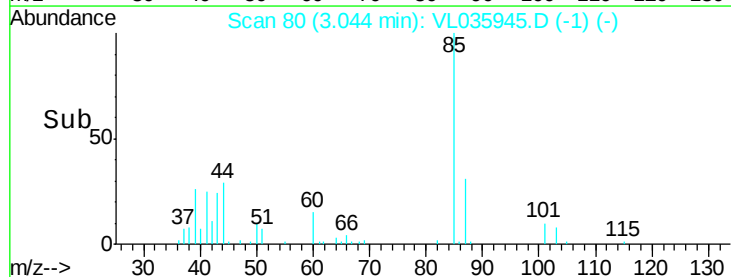
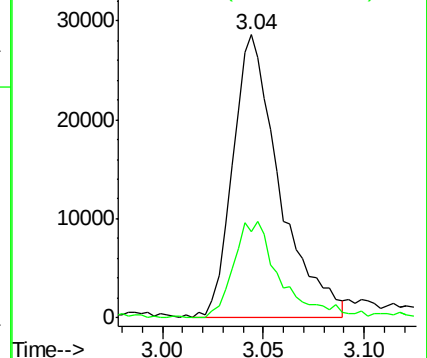
85 100

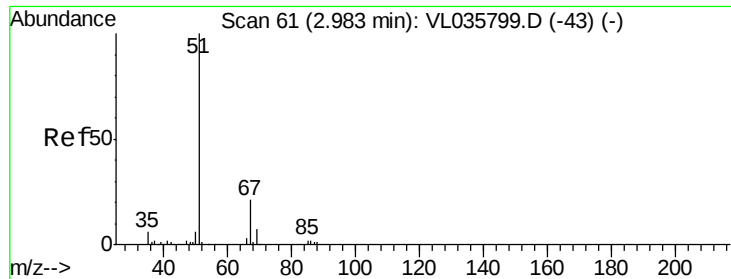
87 30.6 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.569 ppbv

RT: 2.98 min Scan# 61

Delta R.T. 0.00 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

Instrument :

MSVOA_L

ClientSampled :

LA-6

Tot Ion: 51 Resp: 73382

Ion Ratio Lower Upper

51 100

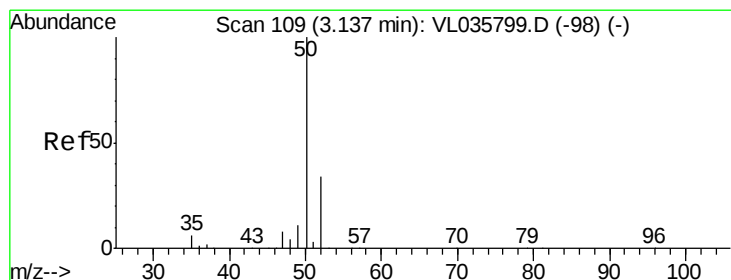
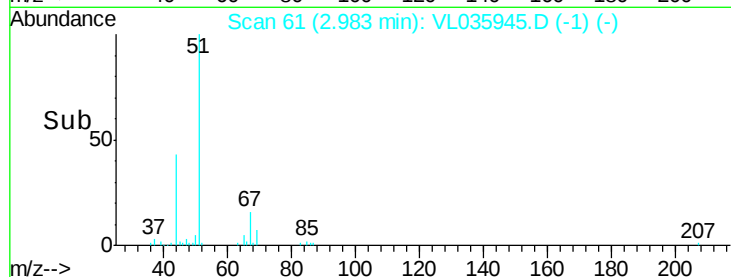
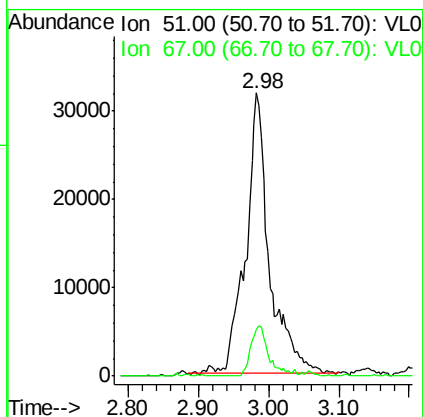
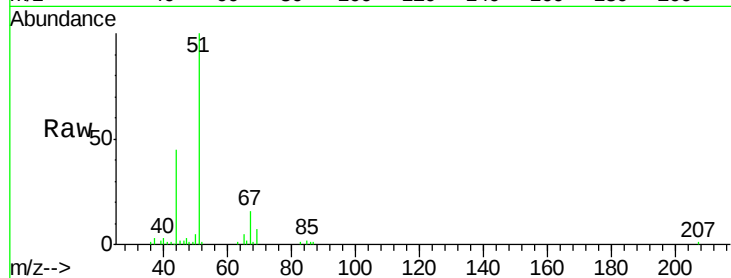
67 14.5 17.0 25.4#

Manual Integrations

APPROVED

MMDadoda

11/18/2020 2:11:19 PM



#4

Chloromethane

Concen: 0.616 ppbv

RT: 3.14 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL035945.D

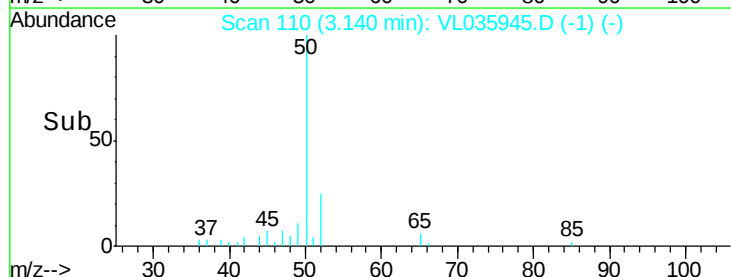
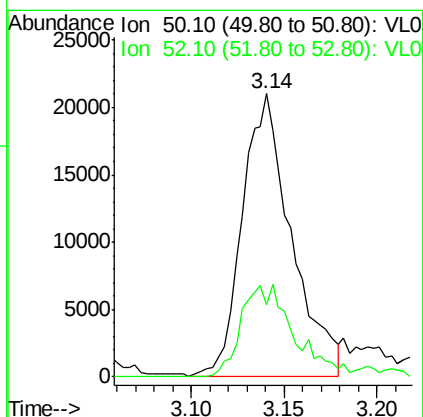
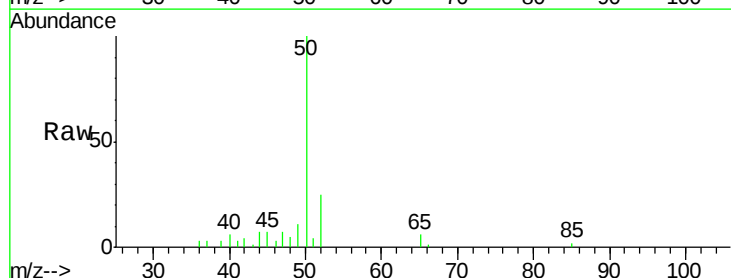
Acq: 16 Nov 2020 15:59

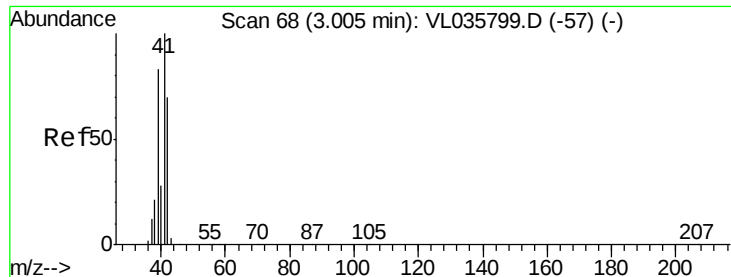
Tgt Ion: 50 Resp: 38616

Ion Ratio Lower Upper

50 100

52 25.3 27.1 40.7#





#9

Propene

Concen: 1.358 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

Instrument :

MSVOA_L

ClientSampled :

LA-6

Tot Ion: 41 Resp: 64111

Ion Ratio Lower Upper

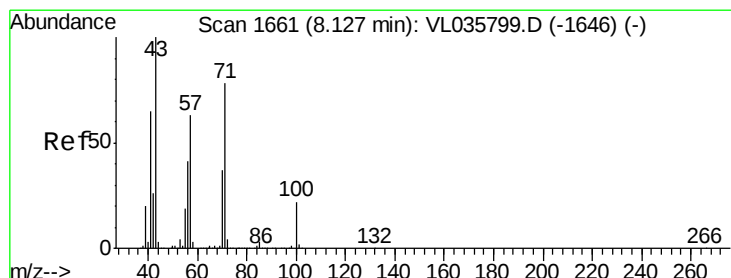
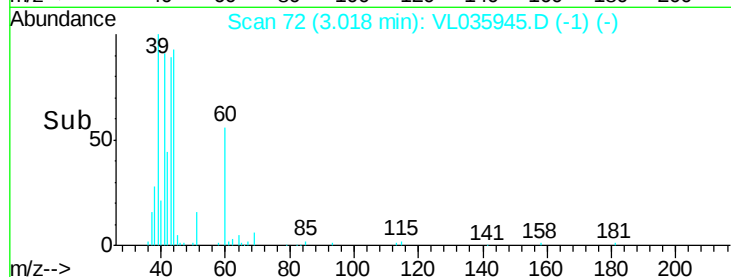
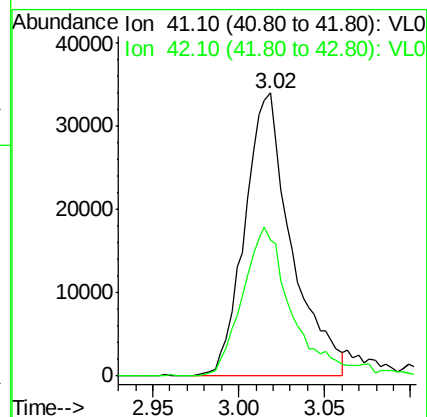
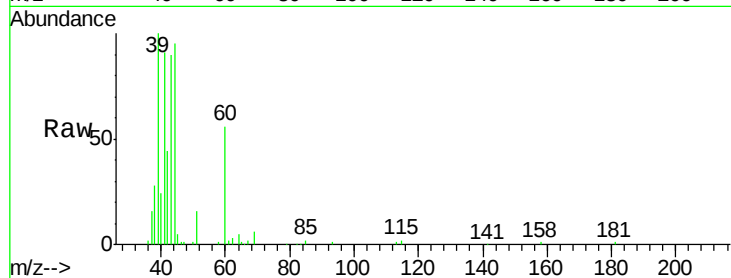
41 100

42 57.6 56.2 84.4

Manual Integrations
APPROVED

MMDadoda

11/18/2020 2:11:19 PM



#10

Heptane

Concen: 0.218 ppbv

RT: 8.12 min Scan# 1660

Delta R.T. -0.00 min

Lab File: VL035945.D

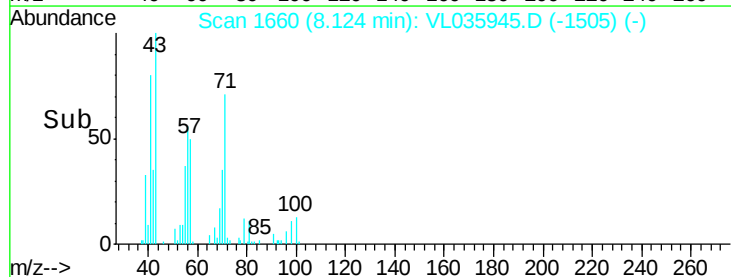
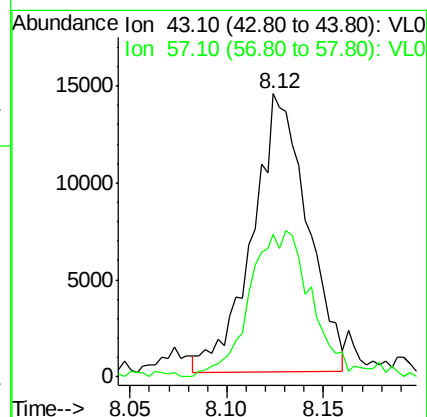
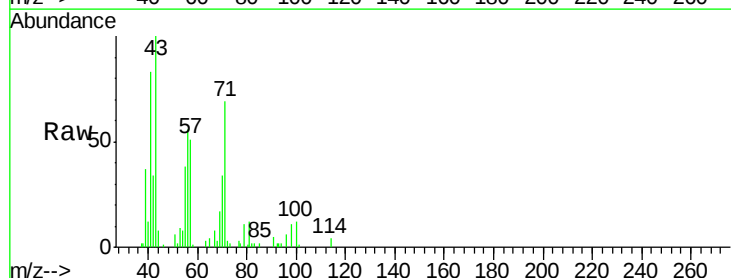
Acq: 16 Nov 2020 15:59

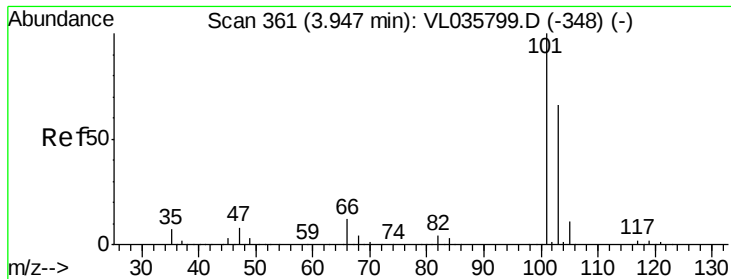
Tgt Ion: 43 Resp: 28404

Ion Ratio Lower Upper

43 100

57 61.3 50.0 75.0





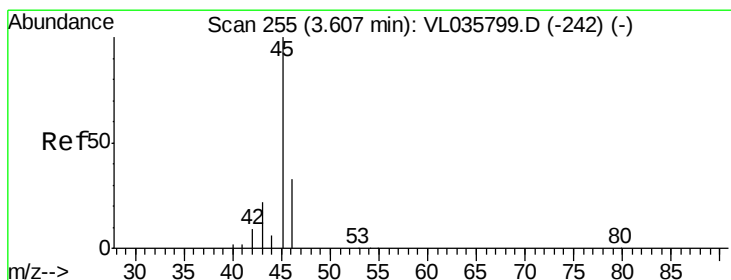
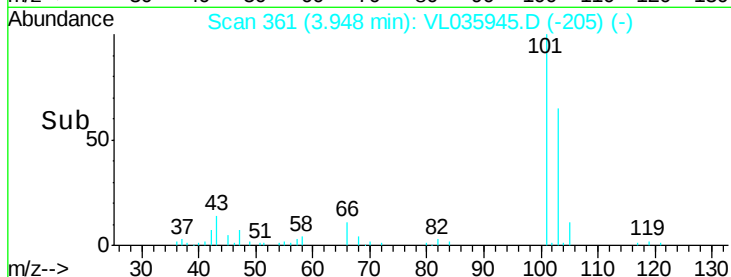
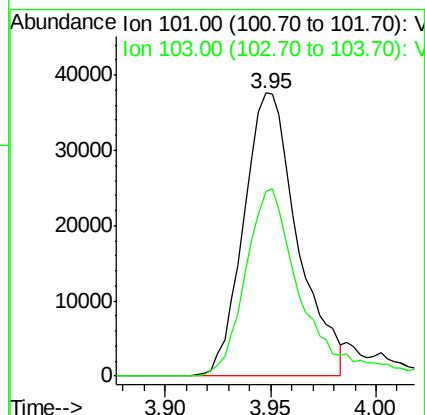
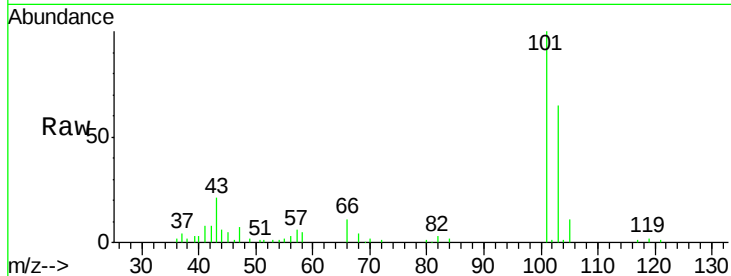
#11
Trichlorofluoromethane
Concen: 0.263 ppbv
RT: 3.95 min Scan# 361
Delta R.T. 0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Instrument :
MSVOA_L
ClientSampleId :
LA-6

Tot Ion:101 Resp: 66903
Ion Ratio Lower Upper
101 100
103 65.3 53.0 79.4

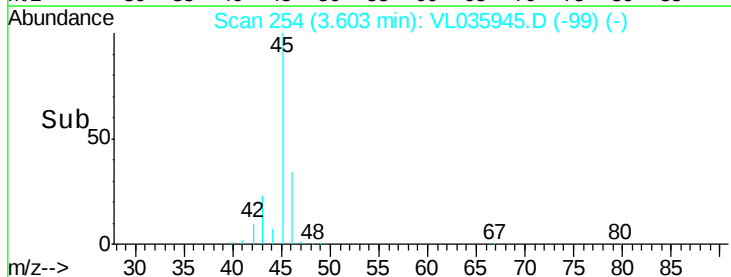
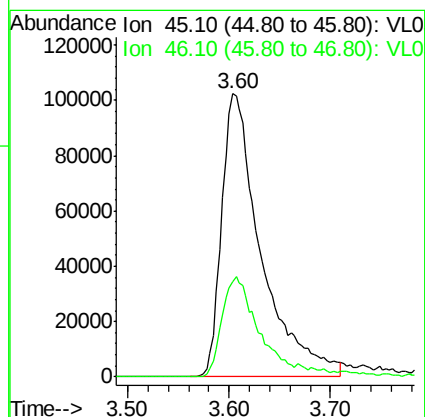
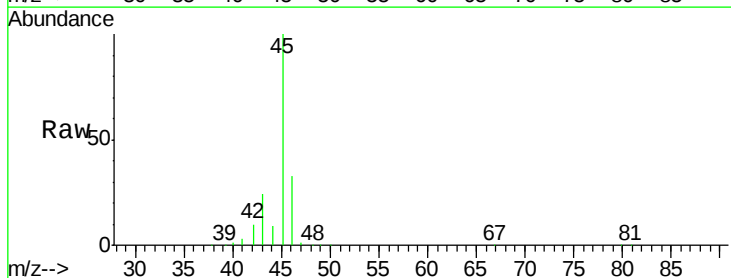
Manual Integrations
APPROVED

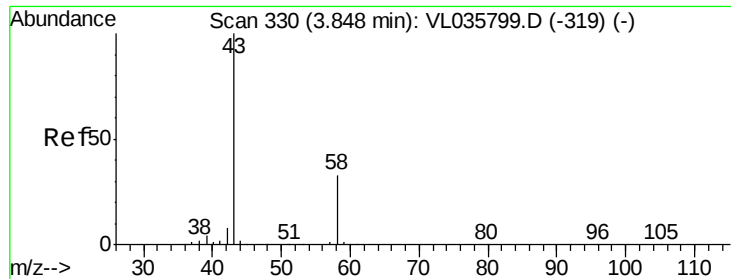
MMDadoda
11/18/2020 2:11:19 PM



#13
Ethanol
Concen: 27.016 ppbv m
RT: 3.60 min Scan# 254
Delta R.T. -0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tgt Ion: 45 Resp: 276653
Ion Ratio Lower Upper
45 100
46 36.4 16.1 64.5





#15

Acetone

Concen: 3.374 ppbv m

RT: 3.85 min Scan# 331

Delta R.T. 0.00 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

Instrument :

MSVOA_L

ClientSampled :

LA-6

Tot Ion: 43 Resp: 388464

Ion Ratio Lower Upper

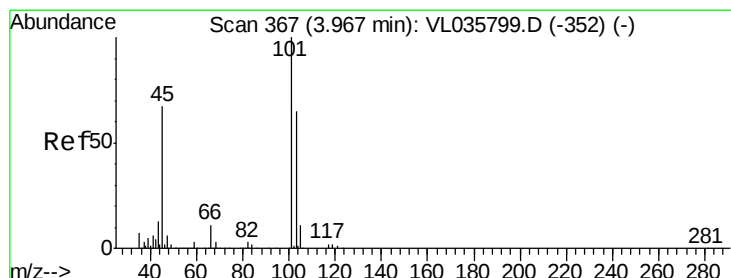
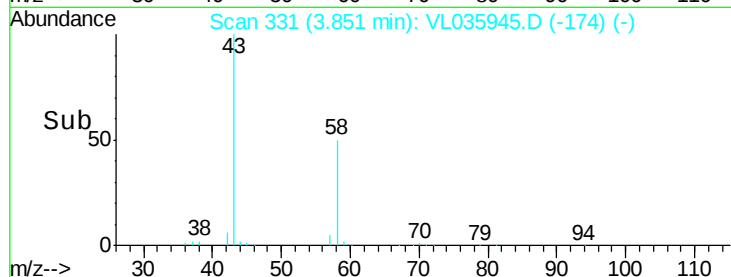
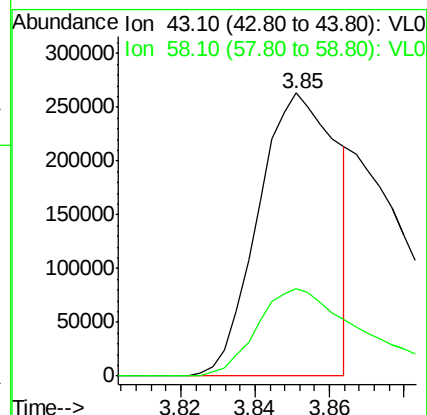
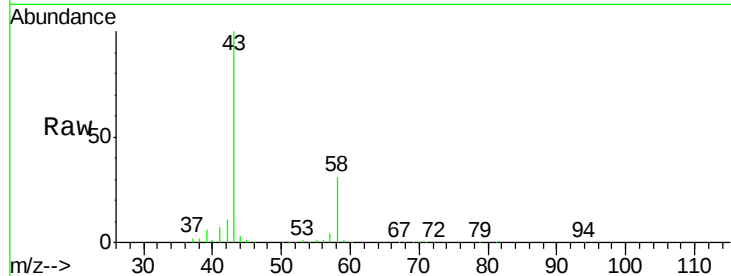
43 100

58 46.3 27.5 41.3#

Manual Integrations
APPROVED

MMDadoda

11/18/2020 2:11:19 PM



#19

Isopropyl Alcohol

Concen: 1.613 ppbv

RT: 3.98 min Scan# 370

Delta R.T. 0.01 min

Lab File: VL035945.D

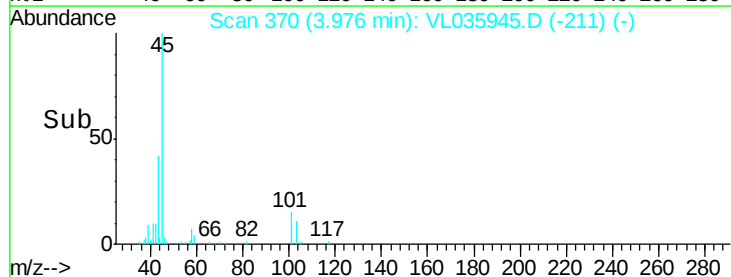
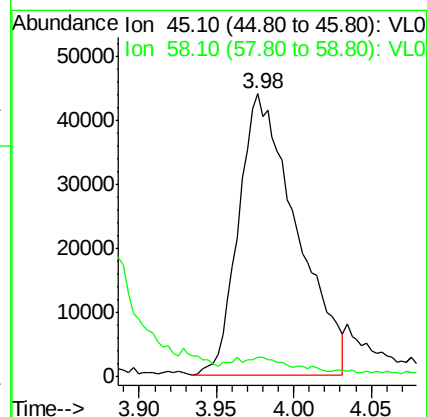
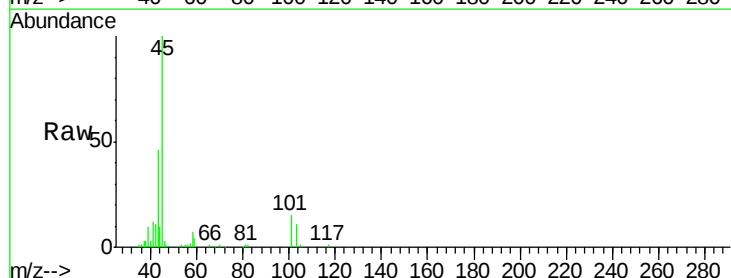
Acq: 16 Nov 2020 15:59

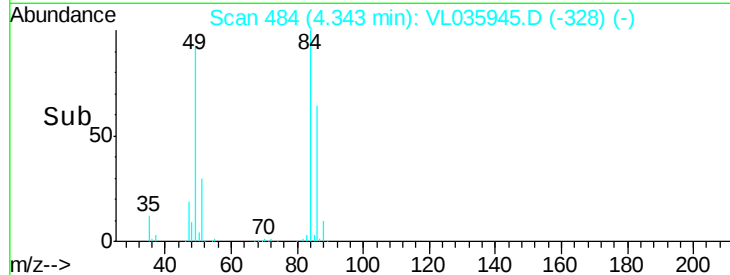
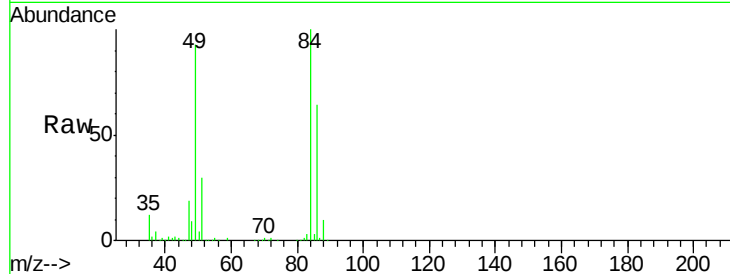
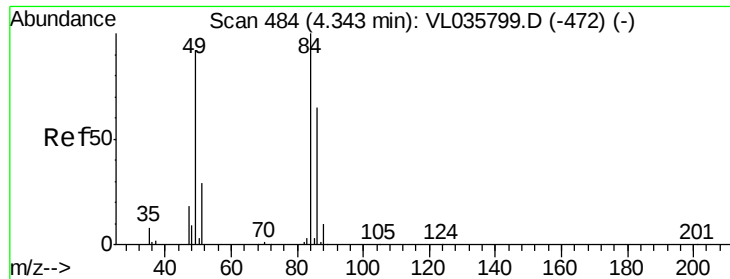
Tgt Ion: 45 Resp: 114133

Ion Ratio Lower Upper

45 100

58 6.3 2.6 3.8#





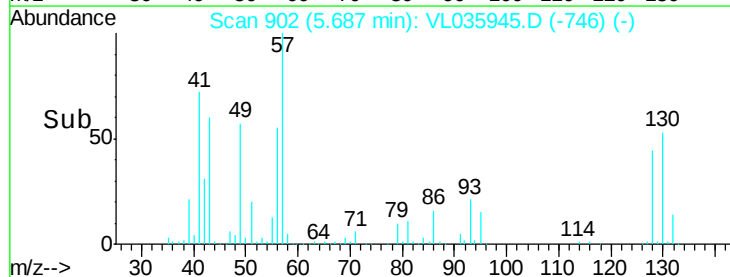
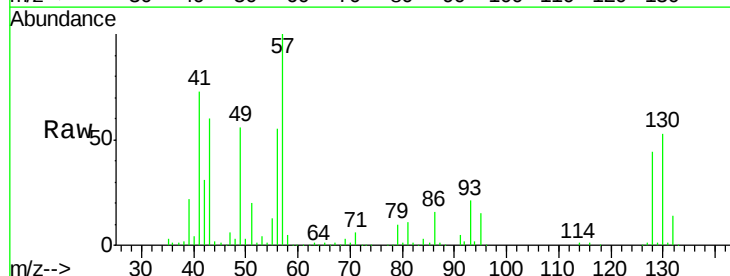
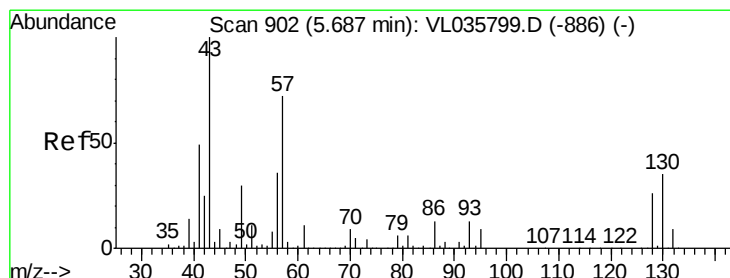
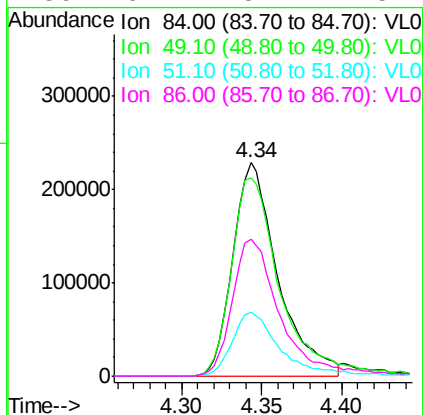
#20
Methvlene Chloride
Concen: 5.438 ppbv
RT: 4.34 min Scan# 484
Delta R.T. 0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tot Ion	84	Resp	440751
Ion Ratio	Lower	Upper	
84	100		
49	92.7	73.8	110.8
51	29.9	23.0	34.4
86	64.1	52.1	78.1

Instrument :
MSVOA_L
ClientSampled :
LA-6

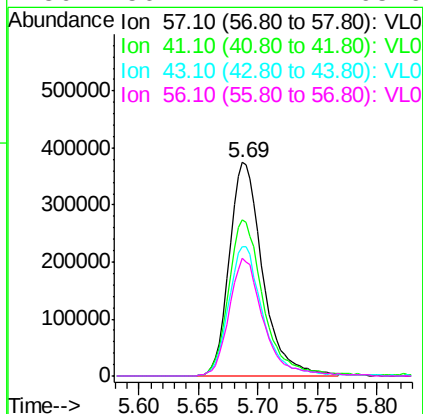
Manual Integrations
APPROVED

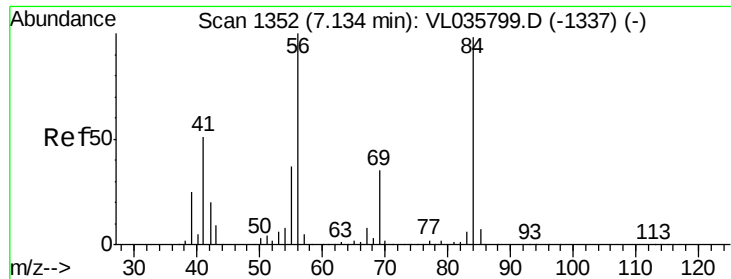
MMDadoda
11/18/2020 2:11:19 PM



#26
Hexane
Concen: 5.826 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tgt Ion	57	Resp	728745
Ion Ratio	Lower	Upper	
57	100		
41	76.6	58.9	88.3
43	62.4	150.2	225.2
56	56.7	42.4	63.6





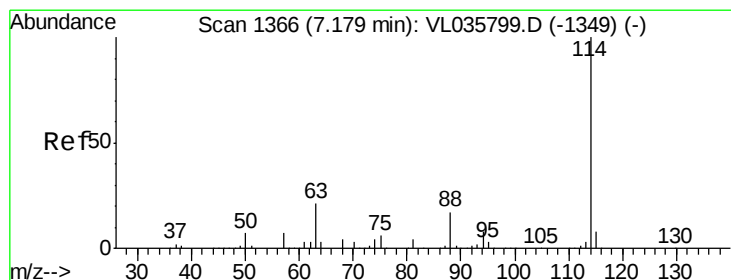
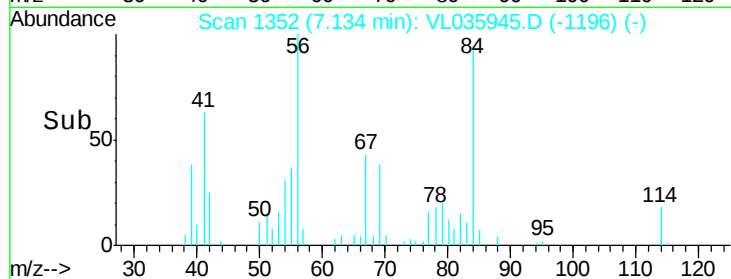
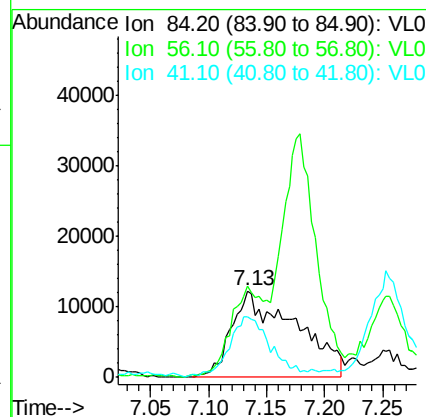
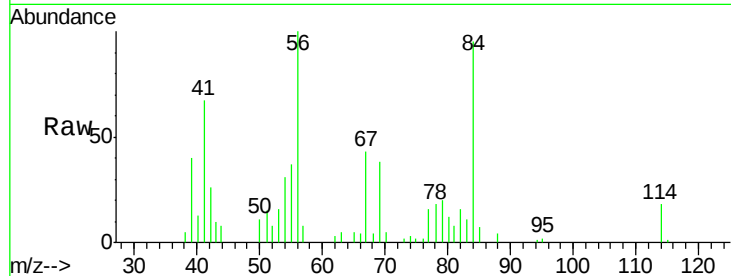
#30
Cyclohexane
Concen: 0.346 ppbv m
RT: 7.13 min Scan# 1352
Delta R.T. 0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Instrument :
MSVOA_L
ClientSampled :
LA-6

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	46.2	42.1	63.1

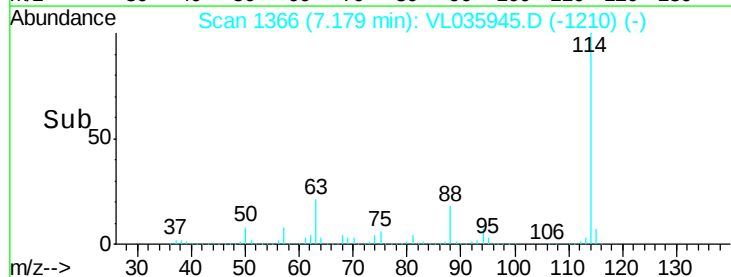
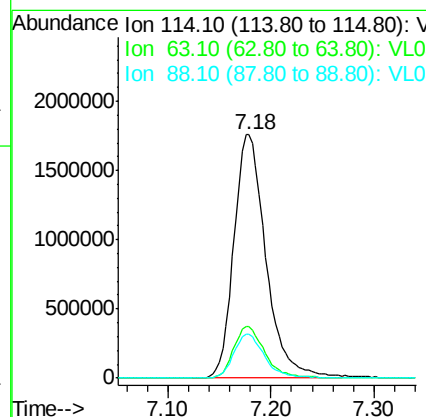
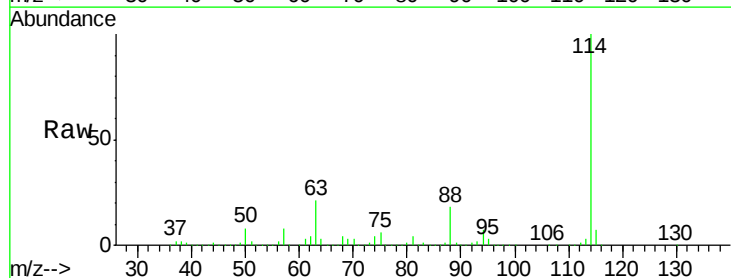
Manual Integrations
APPROVED

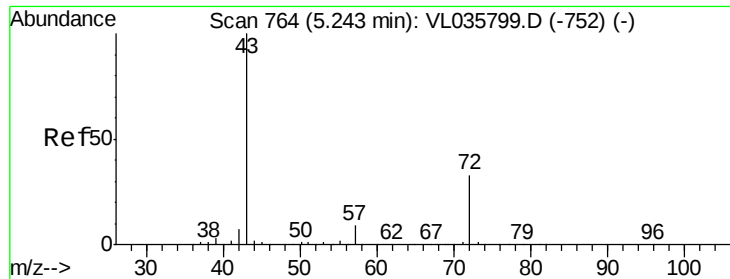
MMDadoda
11/18/2020 2:11:19 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1366
Delta R.T. 0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tgt Ion	Ratio	Lower	Upper
114	100		
63	21.0	16.1	24.1
88	17.5	13.7	20.5





#34

2-Butanone

Concen: 0.395 ppbv

RT: 5.25 min Scan# 767

Delta R.T. 0.01 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

Instrument :

MSVOA_L

ClientSampled :

LA-6

Tot Ion: 43 Resp: 48880

Ion Ratio Lower Upper

43 100

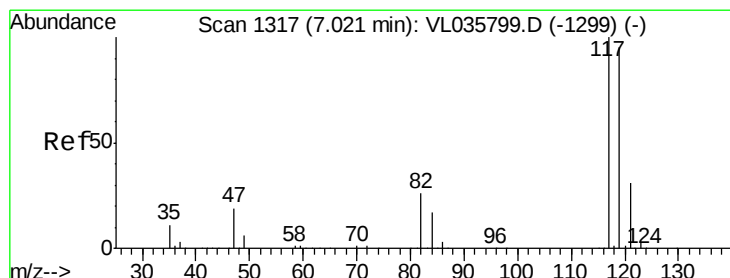
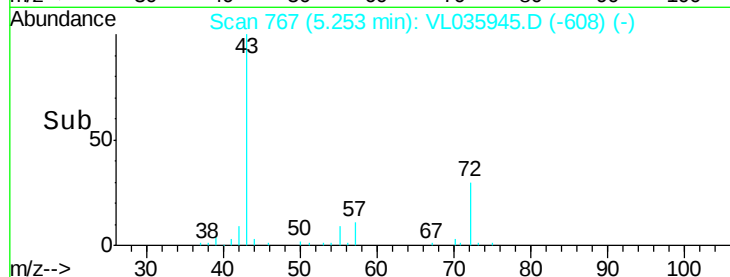
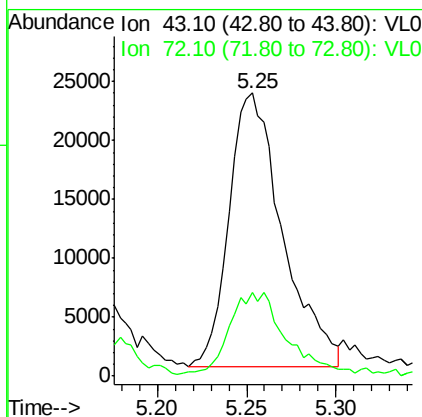
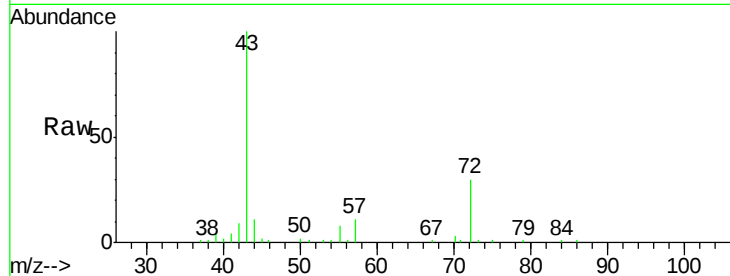
72 34.4 26.5 39.7

Manual Integrations

APPROVED

MMDadoda

11/18/2020 2:11:19 PM



#35

Carbon Tetrachloride

Concen: 0.071 ppbv

RT: 7.02 min Scan# 1317

Delta R.T. 0.00 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

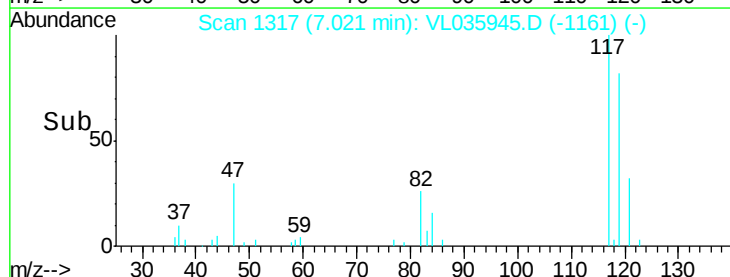
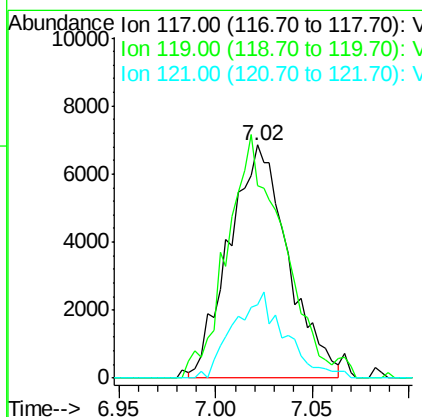
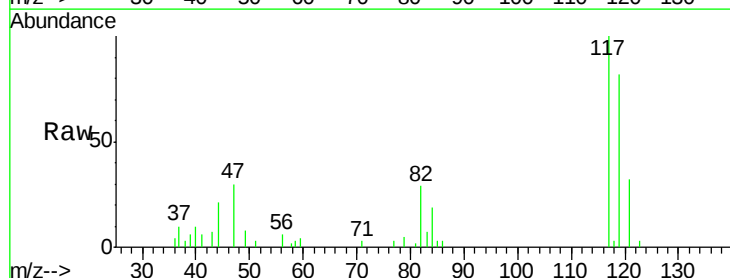
Tgt Ion: 117 Resp: 14525

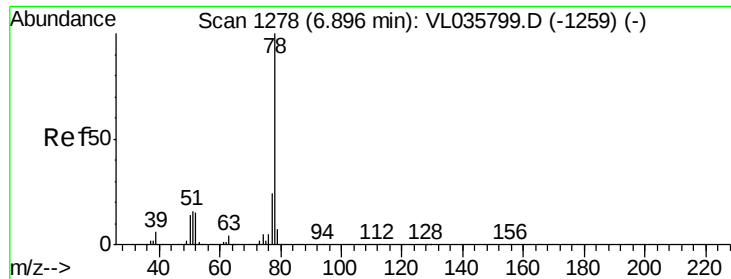
Ion Ratio Lower Upper

117 100

119 77.1 75.6 113.4

121 32.4 25.1 37.7





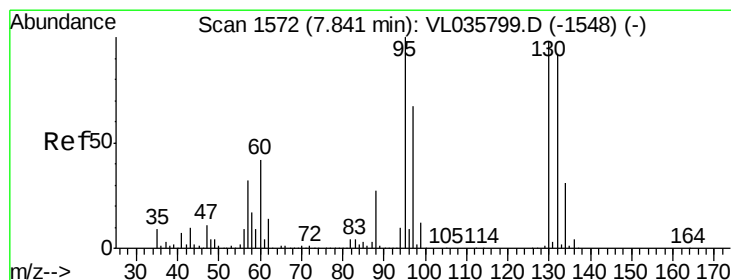
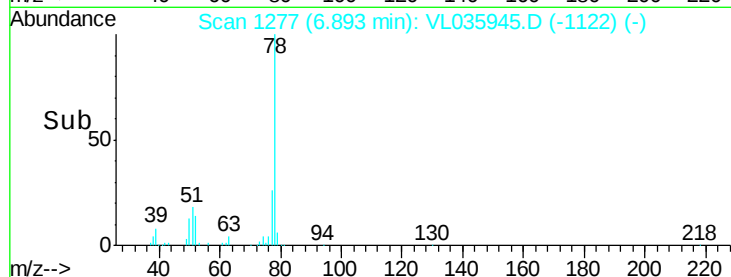
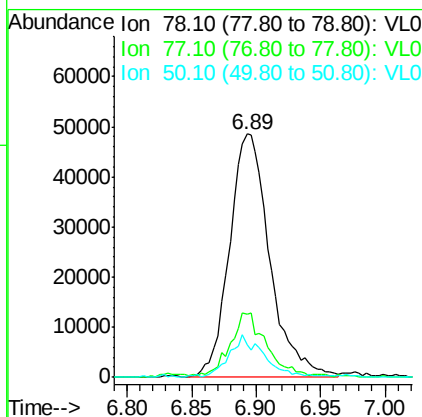
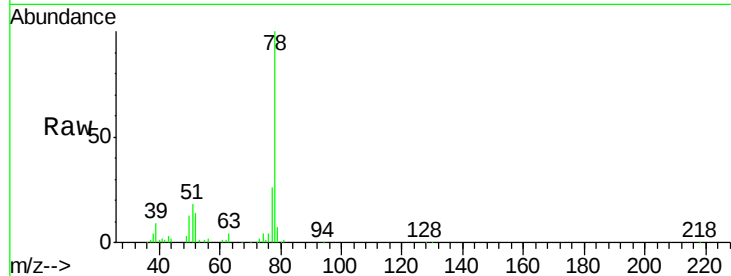
#36
Benzene
Concen: 0.372 ppbv
RT: 6.89 min Scan# 1277
Delta R.T. -0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Instrument :
MSVOA_L
ClientSampled :
LA-6

Tot Ion	Ratio	Lower	Upper
78	100		
77	25.1	19.3	28.9
50	12.8	11.4	17.2

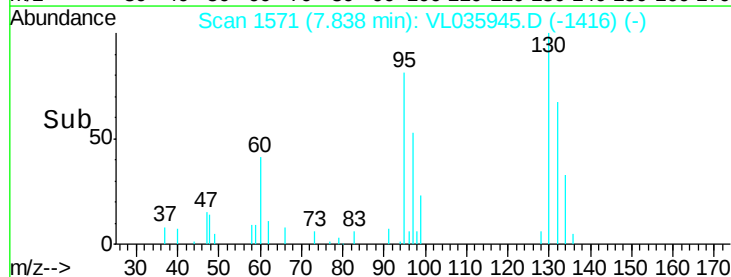
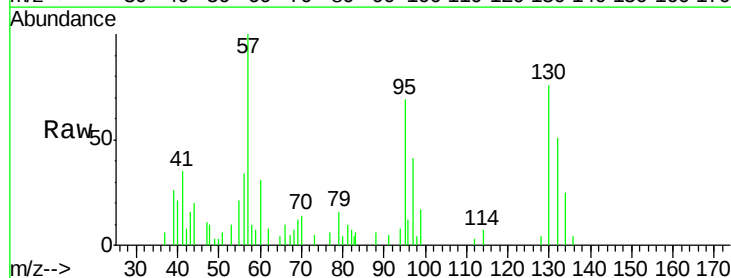
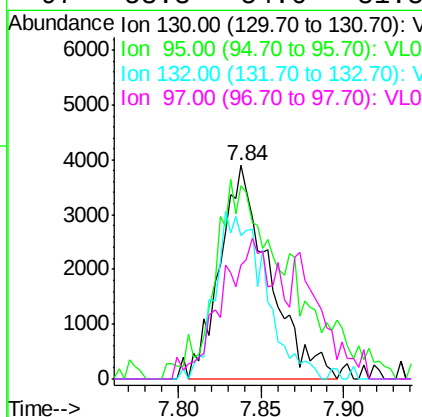
Manual Integrations
APPROVED

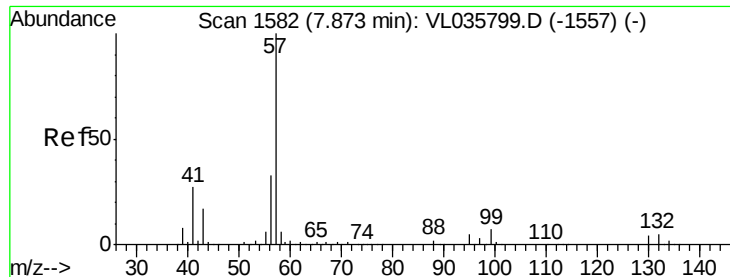
MMDadoda
11/18/2020 2:11:19 PM



#38
Trichloroethene
Concen: 0.058 ppbv m
RT: 7.84 min Scan# 1571
Delta R.T. -0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tgt Ion	Ratio	Lower	Upper
130	100		
95	90.4	81.6	122.4
132	67.4	75.1	112.7#
97	53.3	54.6	81.8#





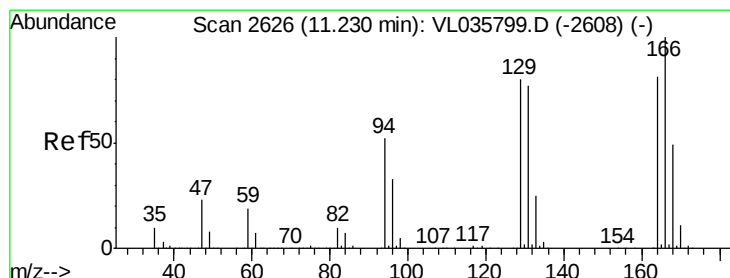
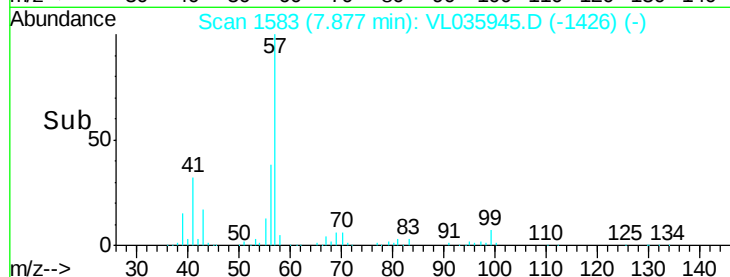
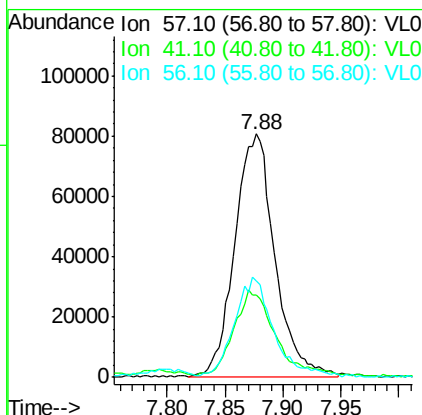
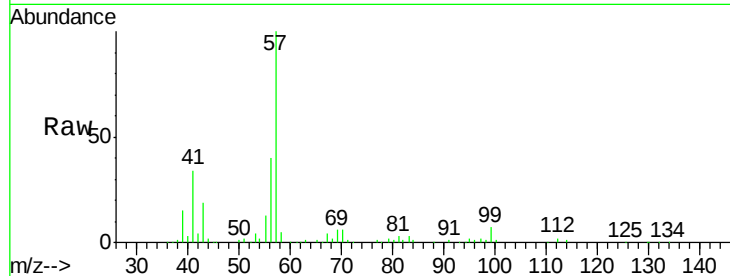
#44
 2,2,4-Trimethylpentane
 Concen: 0.517 ppbv
 RT: 7.88 min Scan# 1583
 Delta R.T. 0.00 min
 Lab File: VL035945.D
 Acq: 16 Nov 2020 15:59

Instrument :
 MSVOA_L
 ClientSampled :
 LA-6

Tot Ion	Ratio	Lower	Upper
57	100		
41	37.2	21.0	31.4#
56	40.8	25.4	38.0#

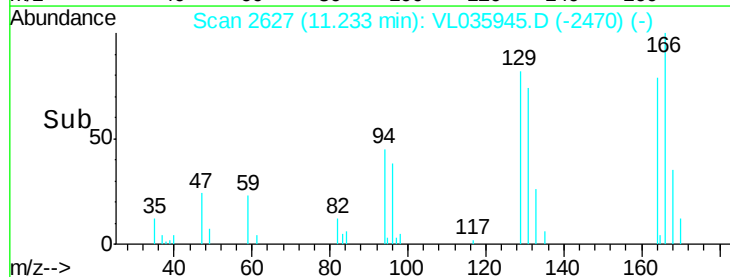
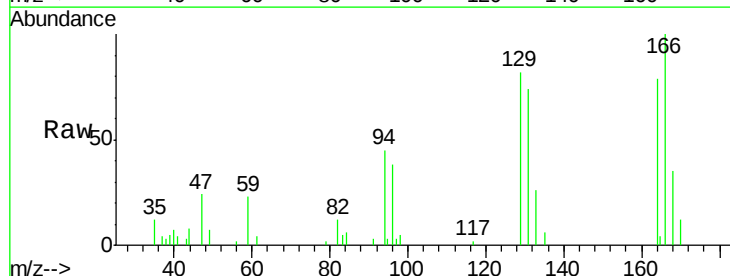
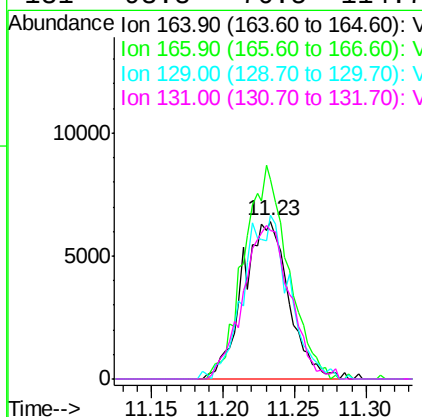
Manual Integrations
 APPROVED

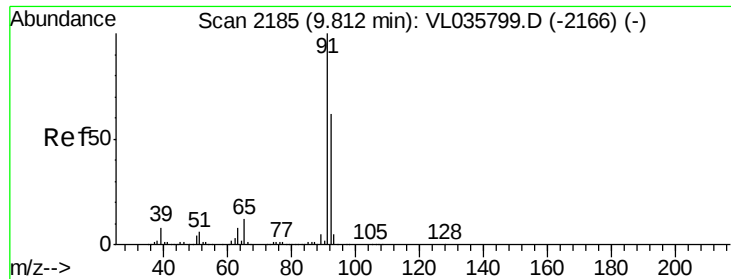
MMDadoda
 11/18/2020 2:11:19 PM



#52
 Tetrachloroethene
 Concen: 0.107 ppbv m
 RT: 11.23 min Scan# 2627
 Delta R.T. 0.00 min
 Lab File: VL035945.D
 Acq: 16 Nov 2020 15:59

Tgt Ion	Ratio	Lower	Upper
164	100		
166	126.6	99.3	148.9
129	104.0	79.3	118.9
131	93.8	76.5	114.7





#53

Toluene

Concen: 5.144 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

Instrument :

MSVOA_L

ClientSampled :

LA-6

Tot Ion: 91 Resp: 1760194

Ion Ratio Lower Upper

91 100

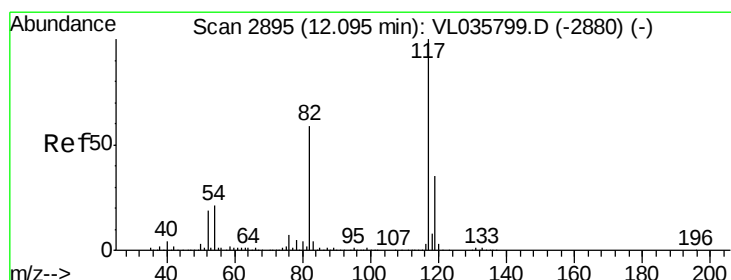
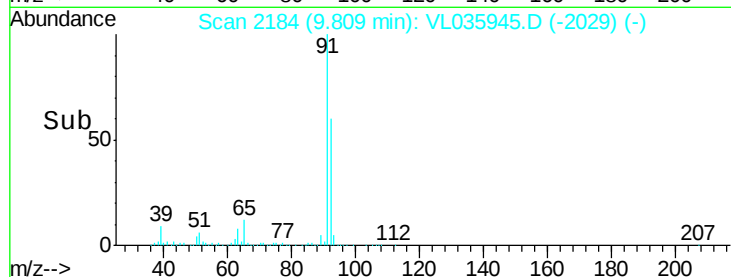
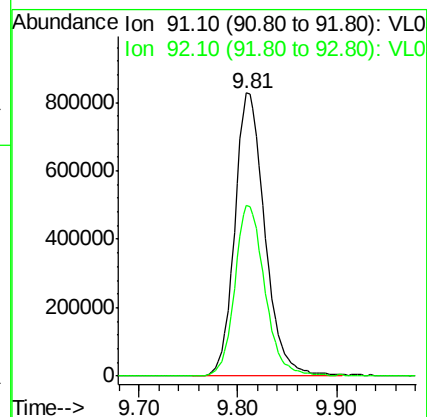
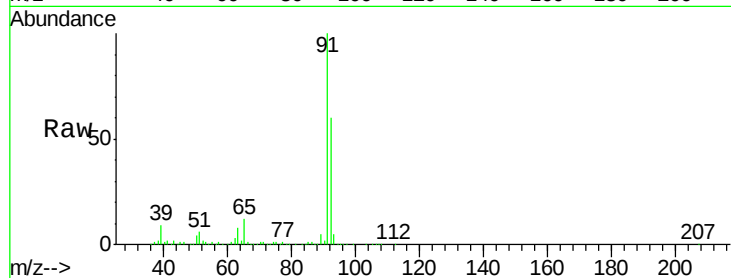
92 60.7 49.8 74.6

Manual Integrations

APPROVED

MMDadoda

11/18/2020 2:11:19 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. -0.00 min

Lab File: VL035945.D

Acq: 16 Nov 2020 15:59

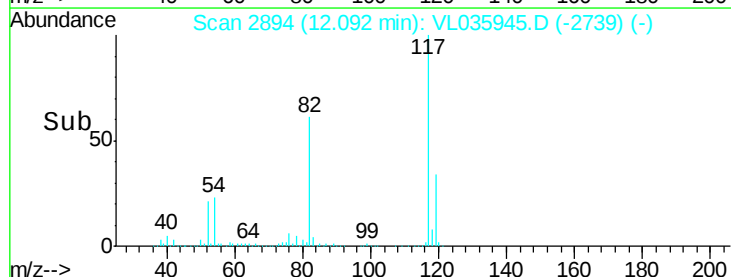
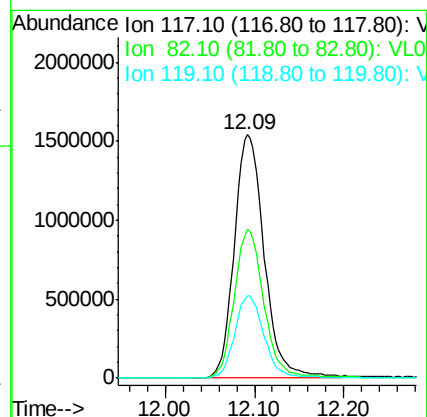
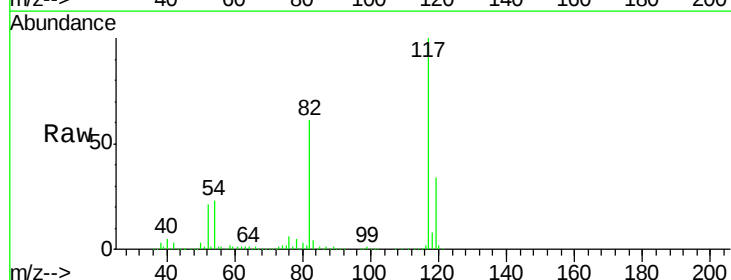
Tgt Ion: 117 Resp: 3599359

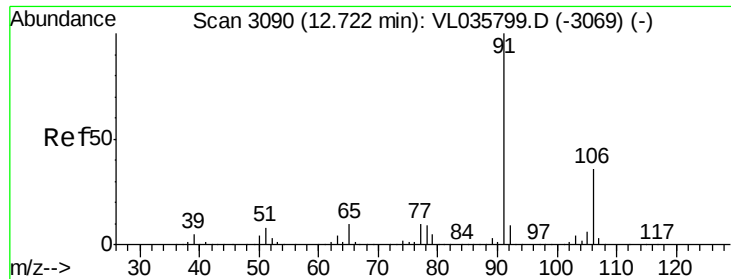
Ion Ratio Lower Upper

117 100

82 61.1 50.6 76.0

119 33.6 52.6 78.8#





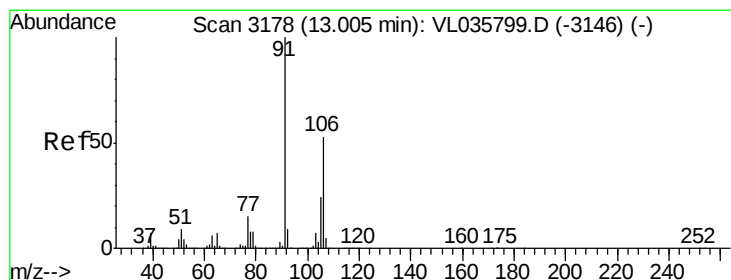
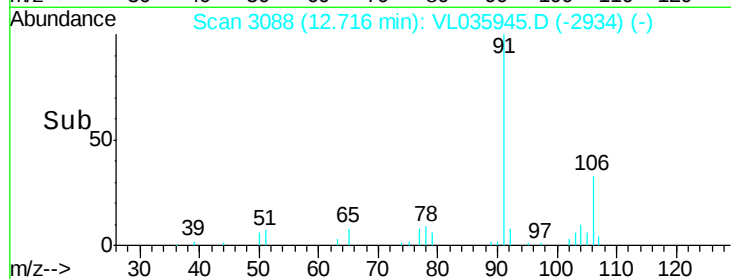
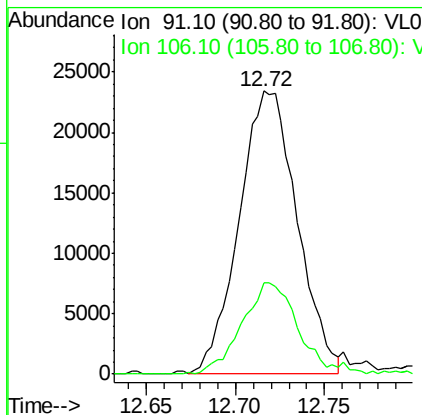
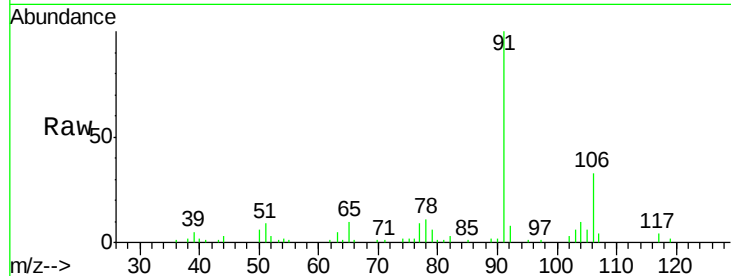
#58
Ethyl Benzene
Concen: 0.121 ppbv
RT: 12.72 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Instrument :
MSVOA_L
ClientSampled :
LA-6

Tot Ion: 91 Resp: 53238
Ion Ratio Lower Upper
91 100
106 31.8 28.6 43.0

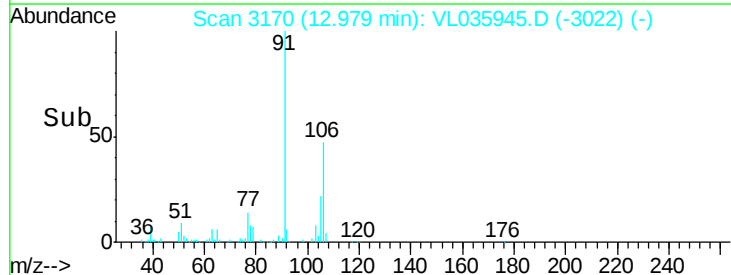
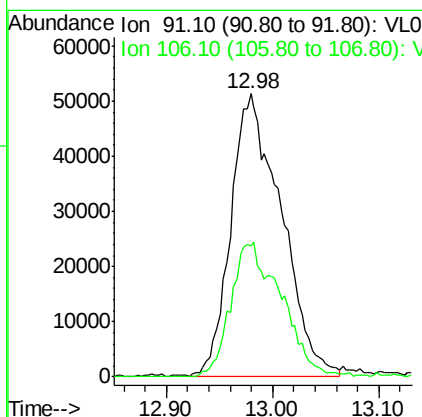
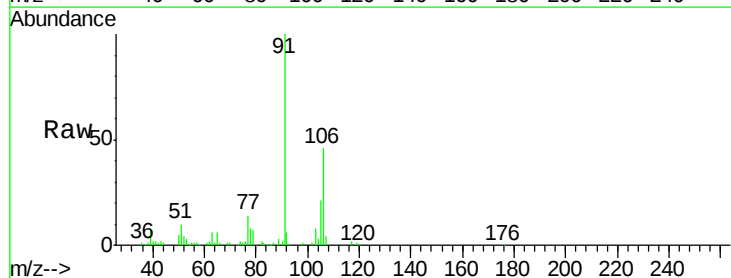
Manual Integrations
APPROVED

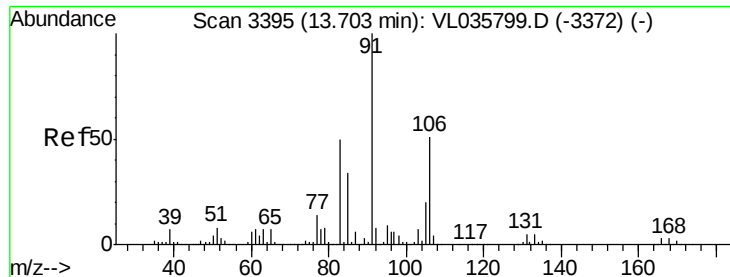
MMDadoda
11/18/2020 2:11:19 PM



#59
m/p-Xylene
Concen: 0.455 ppbv m
RT: 12.98 min Scan# 3170
Delta R.T. -0.03 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tgt Ion: 91 Resp: 168778
Ion Ratio Lower Upper
91 100
106 0.0 39.5 59.3#





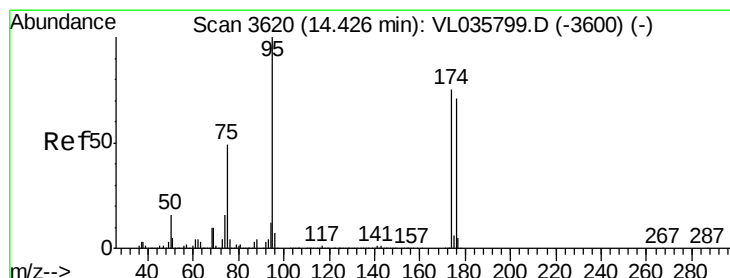
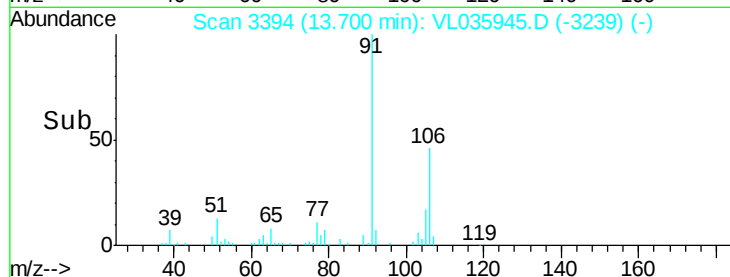
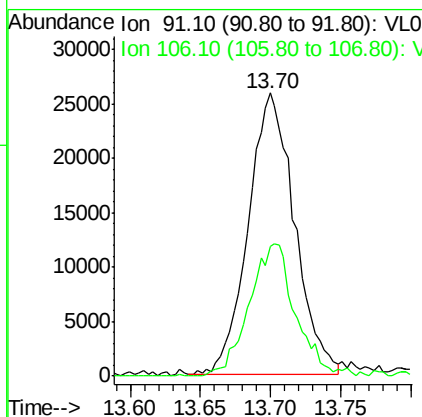
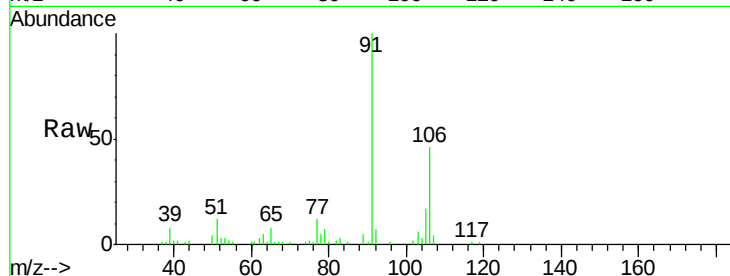
#60
o-Xylene
Concen: 0.164 ppbv
RT: 13.70 min Scan# 3394
Delta R.T. -0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Instrument :
MSVOA_L
ClientSampled :
LA-6

Tot Ion: 91 Resp: 59259
Ion Ratio Lower Upper
91 100
106 47.7 24.8 74.4

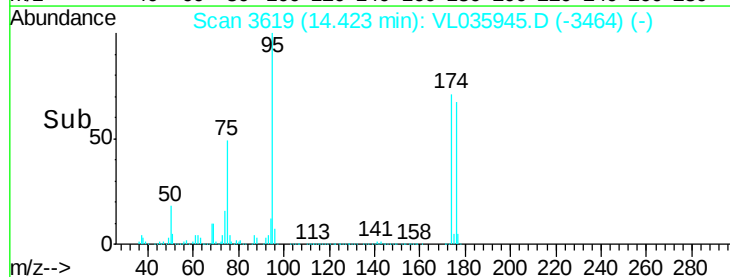
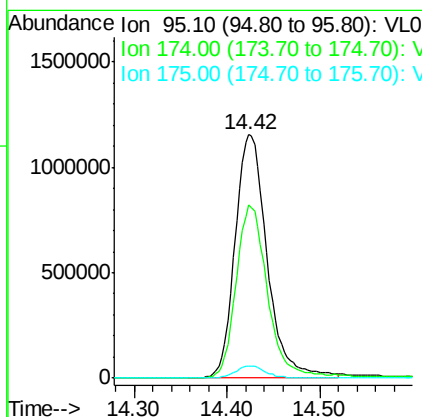
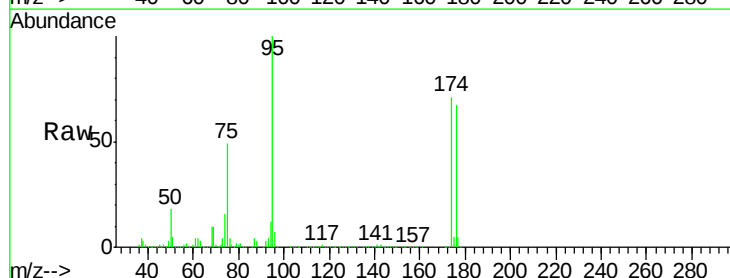
Manual Integrations
APPROVED

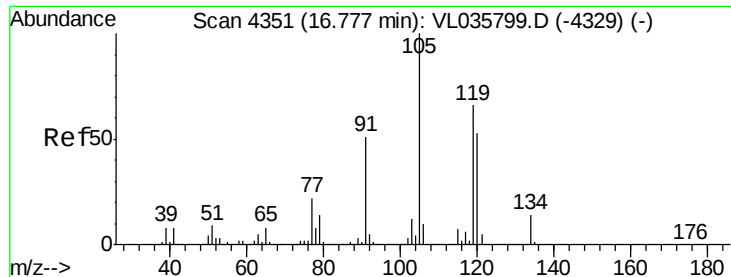
MMDadoda
11/18/2020 2:11:19 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.872 ppbv
RT: 14.42 min Scan# 3619
Delta R.T. -0.00 min
Lab File: VL035945.D
Acq: 16 Nov 2020 15:59

Tgt Ion: 95 Resp: 2780212
Ion Ratio Lower Upper
95 100
174 70.6 59.8 89.6
175 5.0 4.3 6.5





#74
 1,2,4-Trimethylbenzene
 Concen: 0.157 ppbv
 RT: 16.78 min Scan# 4351
 Delta R.T. 0.00 min
 Lab File: VL035945.D
 Acq: 16 Nov 2020 15:59

Instrument :
 MSVOA_L
 ClientSampled :
 LA-6

Tot Ion:	105	Resp:	67185
Ion Ratio	Lower	Upper	
105	100		
120	52.5	42.0	63.0
91	15.2	41.0	61.6#
77	12.6	17.3	25.9#

Manual Integrations
 APPROVED

MMDadoda
 11/18/2020 2:11:19 PM

