

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112420\
 Data File : VL036019.D
 Acq On : 25 Nov 2020 7:24
 Operator : SY/AP
 Sample : L4843-02 2X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-02

Manual Integrations
 APPROVED

MMDadoda
 11/27/2020 1:17:37 PM

Quant Time: Nov 26 14:29:20 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 02:40:06 2020
 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	5.64	49	1222444	10.00	ppbv	-0.03
33) 1,4-Difluorobenzene	7.15	114	4774819	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.06	117	4567137	10.00	ppbv	-0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	3390987	10.45	ppbv	-0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	30418	0.132	ppbv	100
3) Chlorodifluoromethane	2.96	51	29709	0.203	ppbv	97
4) Chloromethane	3.11	50	14577	0.205	ppbv	96
9) Propene	2.99	41	6545429m	122.159	ppbv	
10) Heptane	8.10	43	1763820	11.918	ppbv	99
11) Trichlorofluoromethane	3.92	101	61871	0.214	ppbv	91
13) Ethanol	3.59	45	40407	3.476	ppbv	99
20) Methylene Chloride	4.32	84	220565	2.397	ppbv	97
26) Hexane	5.67	57	5214851	36.727	ppbv #	46
27) Carbon Disulfide	4.53	76	639597	3.006	ppbv	99
30) Cyclohexane	7.11	84	227083	1.468	ppbv #	1
32) 1,1,1-Trichloroethane	6.49	97	5094117	17.492	ppbv	97
34) 2-Butanone	5.23	43	177120	1.143	ppbv	92
36) Benzene	6.87	78	525386	1.480	ppbv	97
52) Tetrachloroethene	11.20	164	21289m	0.127	ppbv	
53) Toluene	9.78	91	304462	0.711	ppbv	99
59) m/p-Xylene	12.94	91	60724m	0.129	ppbv	

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

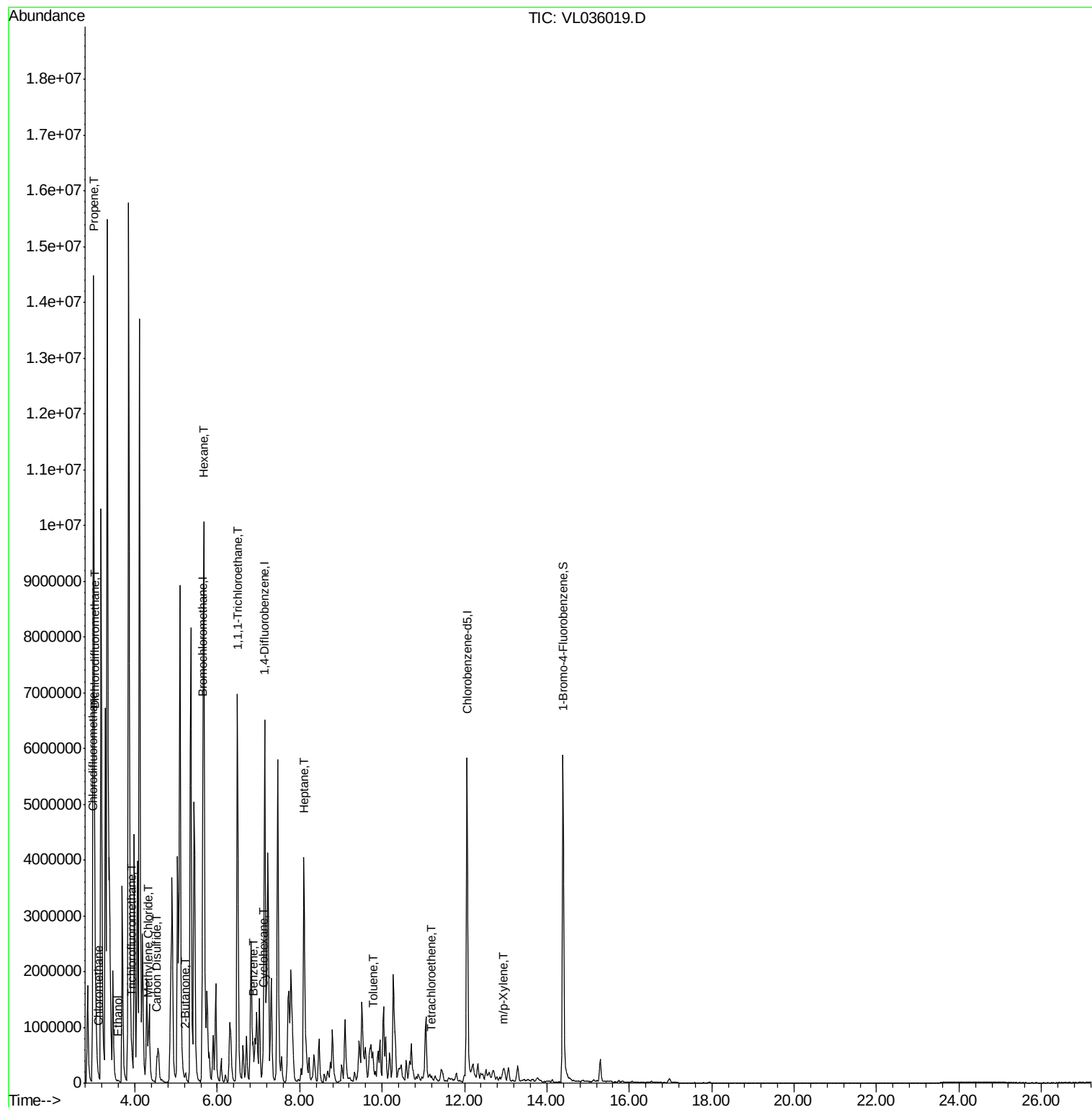
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112420\
Data File : VL036019.D
Acq On : 25 Nov 2020 7:24
Operator : SY/AP
Sample : L4843-02 2X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

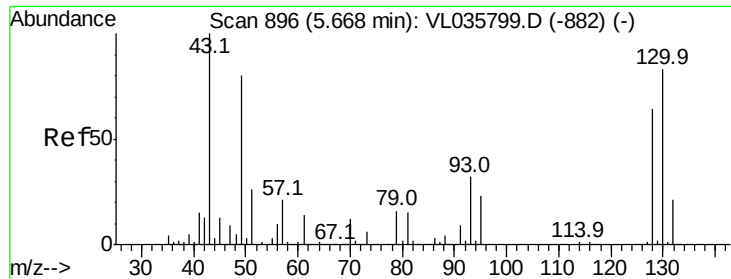
Instrument :
MSVOA_L
ClientSampleId :
SVP-02

Manual Integrations
APPROVED

MMDadoda
11/27/2020 1:17:37 PM

Quant Time: Nov 26 14:29:20 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 887

Delta R.T. -0.03 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

ClientSampled :

SVP-02

Tot Ion: 49 Resp: 1222444

Ion Ratio Lower Upper

49 100

128 79.3 41.5 124.6

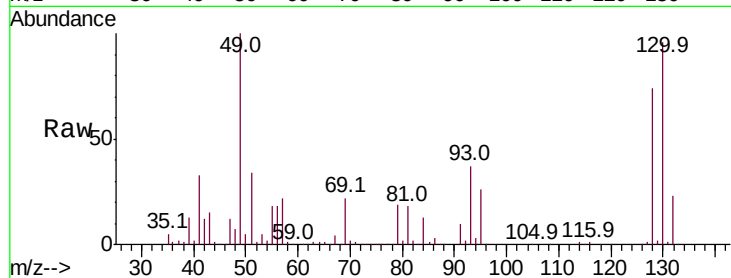
130 101.4 53.7 161.1

Manual Integrations

APPROVED

MMDadoda

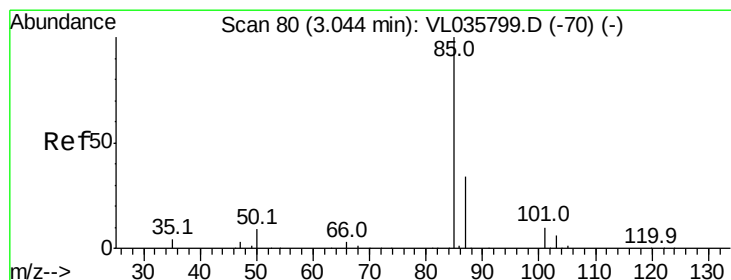
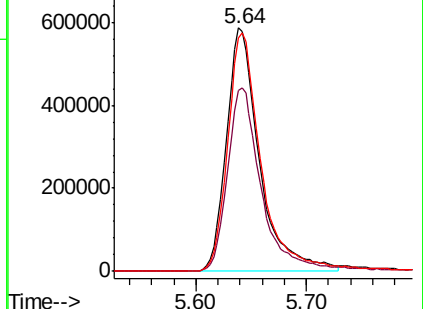
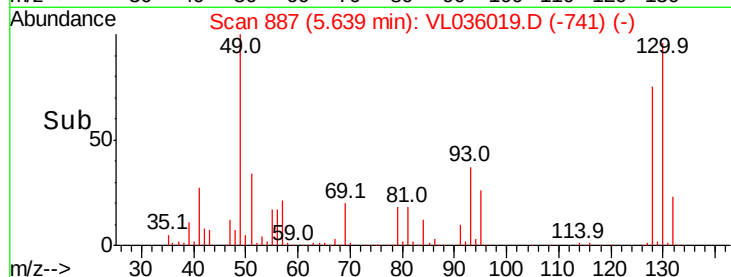
11/27/2020 1:17:37 PM



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: 0.132 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.02 min

Lab File: VL036019.D

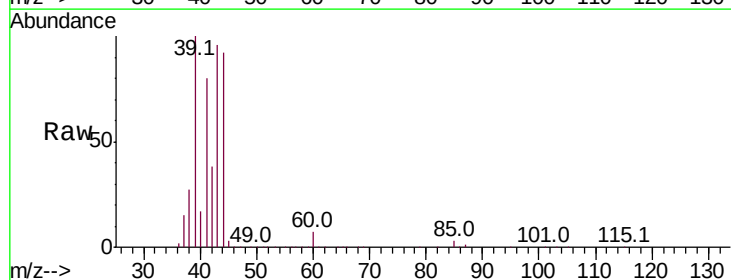
Acq: 25 Nov 2020 7:24

Tgt Ion: 85 Resp: 30418

Ion Ratio Lower Upper

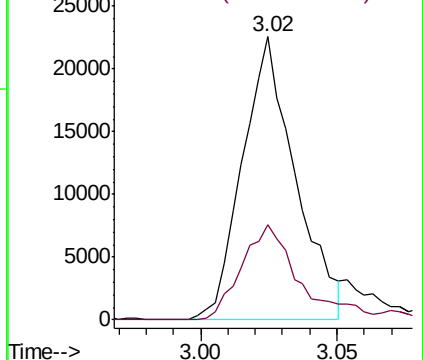
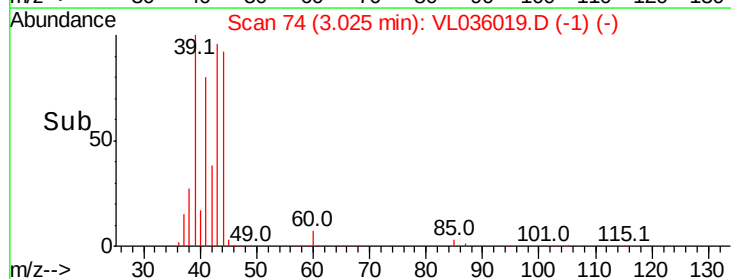
85 100

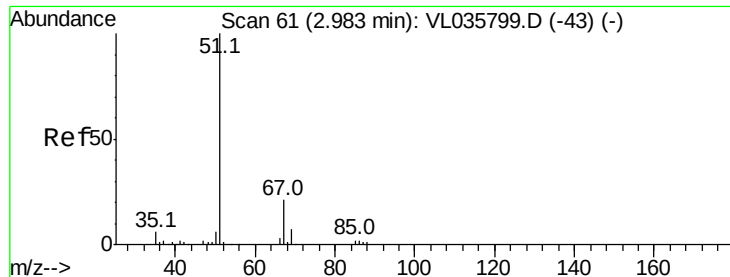
87 33.7 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.203 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.02 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

ClientSampleId :

SVP-02

Tot Ion: 51 Resp: 29709

Ion Ratio Lower Upper

51 100

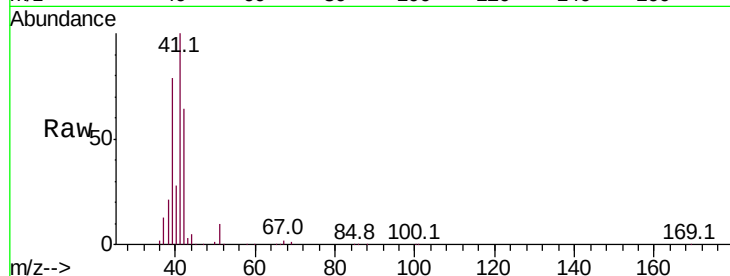
67 19.8 17.0 25.4

Manual Integrations

APPROVED

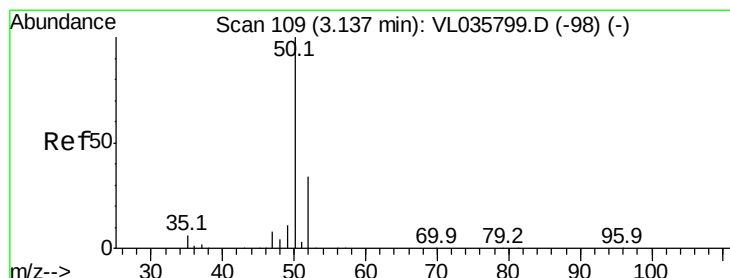
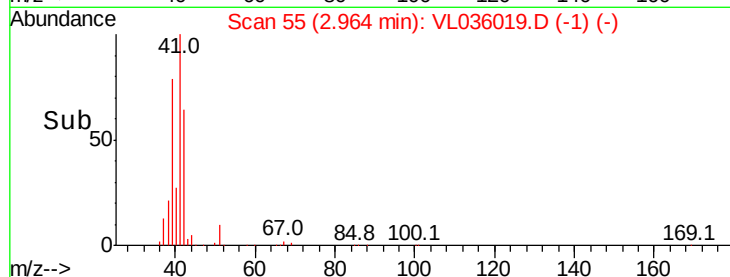
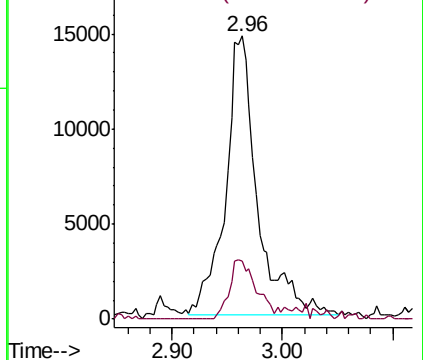
MMDadoda

11/27/2020 1:17:37 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.205 ppbv

RT: 3.11 min Scan# 102

Delta R.T. -0.02 min

Lab File: VL036019.D

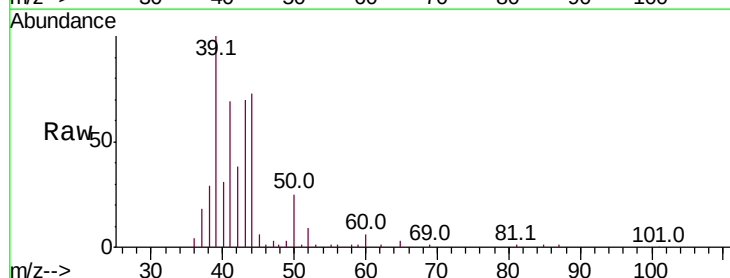
Acq: 25 Nov 2020 7:24

Tgt Ion: 50 Resp: 14577

Ion Ratio Lower Upper

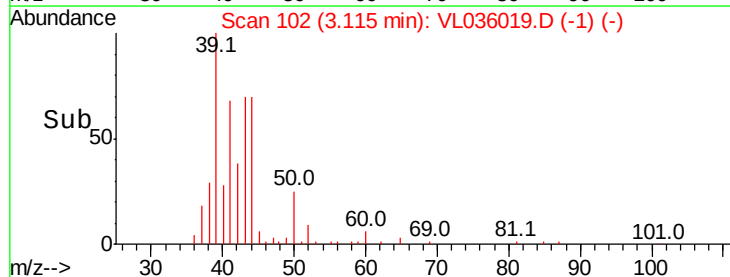
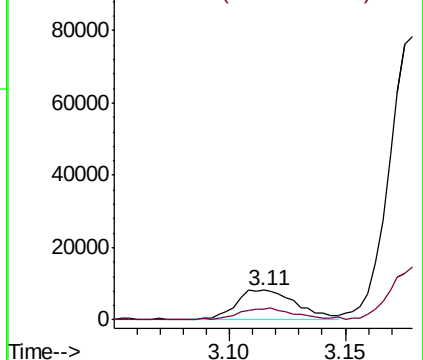
50 100

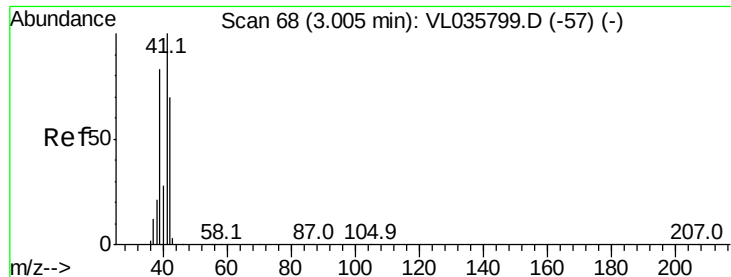
52 36.4 27.1 40.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 122.159 ppbv m

RT: 2.99 min Scan# 63

Delta R.T. -0.02 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

ClientSampleId :

SVP-02

Tot Ion: 41 Resp: 6545429

Ion Ratio Lower Upper

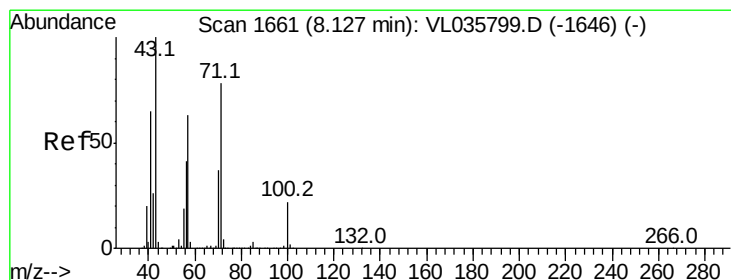
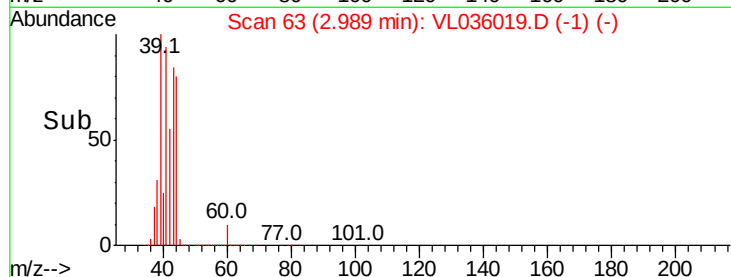
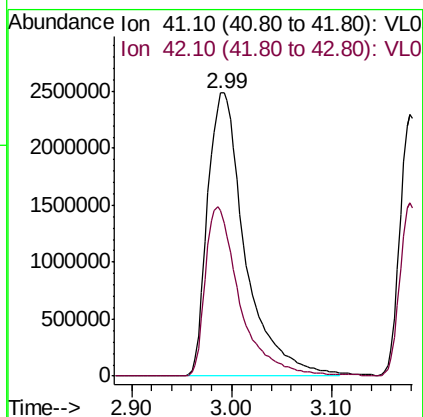
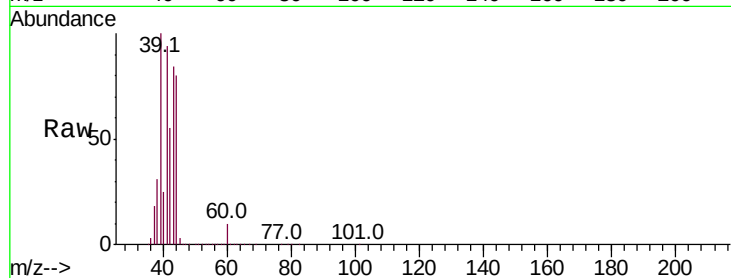
41 100

42 44.8 56.2 84.4#

Manual Integrations
APPROVED

MMDadoda

11/27/2020 1:17:37 PM



#10

Heptane

Concen: 11.918 ppbv

RT: 8.10 min Scan# 1653

Delta R.T. -0.03 min

Lab File: VL036019.D

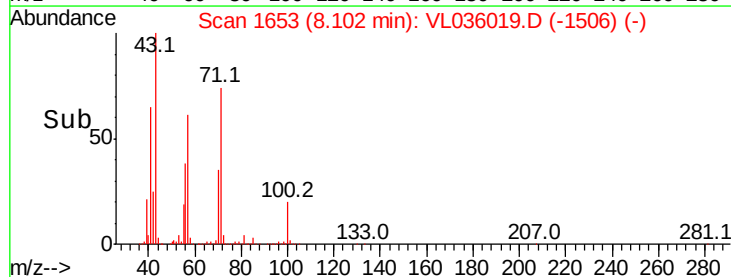
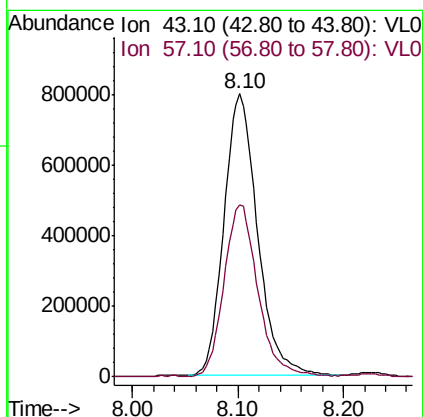
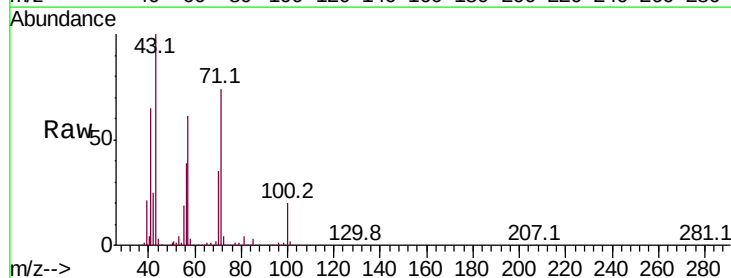
Acq: 25 Nov 2020 7:24

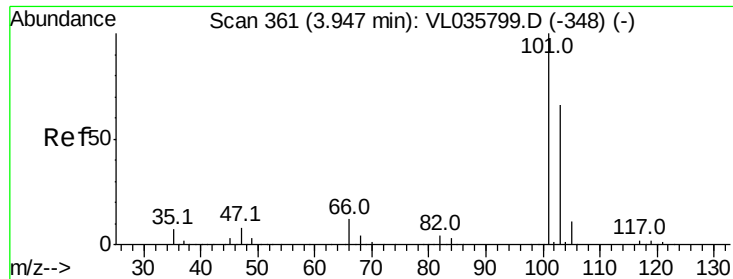
Tgt Ion: 43 Resp: 1763820

Ion Ratio Lower Upper

43 100

57 62.0 50.0 75.0





#11

Trichlorofluoromethane

Concen: 0.214 ppbv

RT: 3.92 min Scan# 354

Delta R.T. -0.02 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

ClientSampled :

SVP-02

Tot Ion:101 Resp: 61871

Ion Ratio Lower Upper

101 100

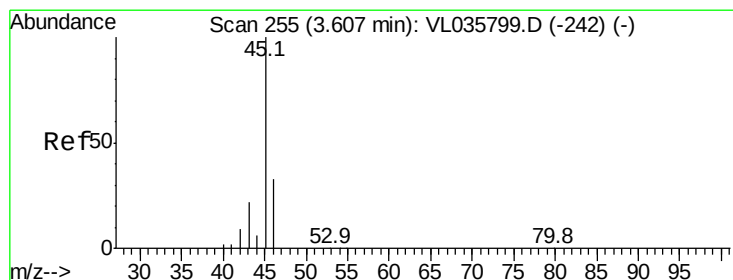
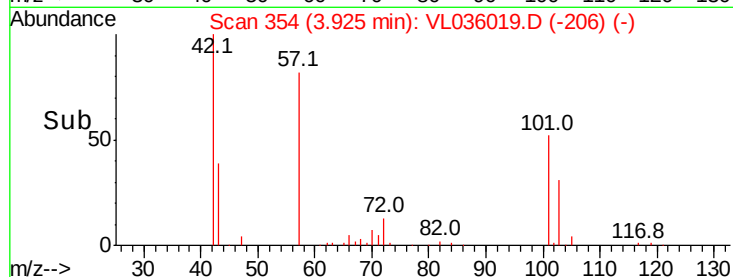
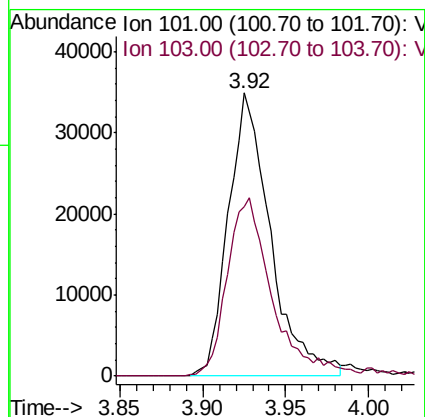
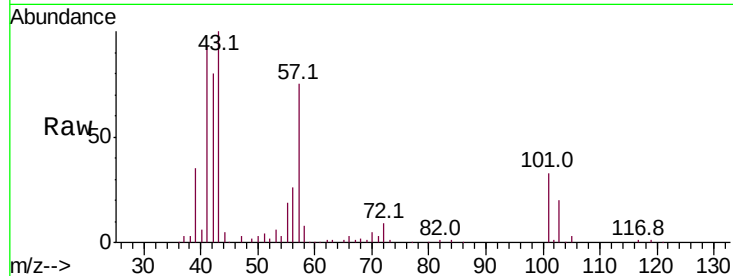
103 59.0 53.0 79.4

Manual Integrations

APPROVED

MMDadoda

11/27/2020 1:17:37 PM



#13

Ethanol

Concen: 3.476 ppbv

RT: 3.59 min Scan# 250

Delta R.T. -0.02 min

Lab File: VL036019.D

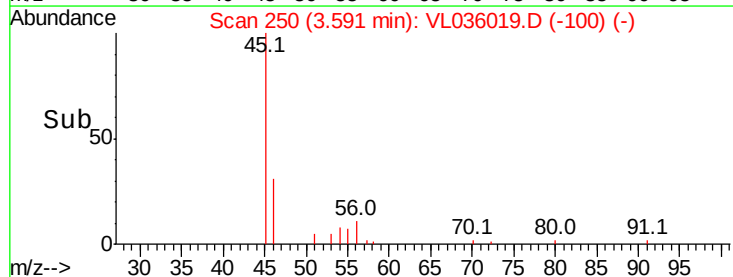
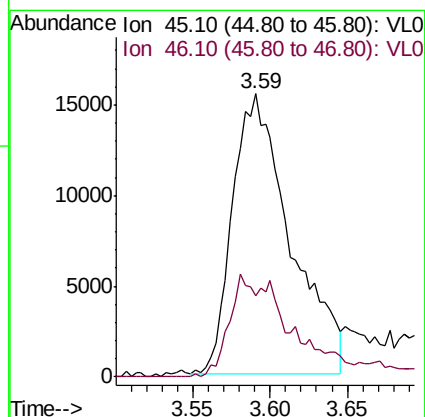
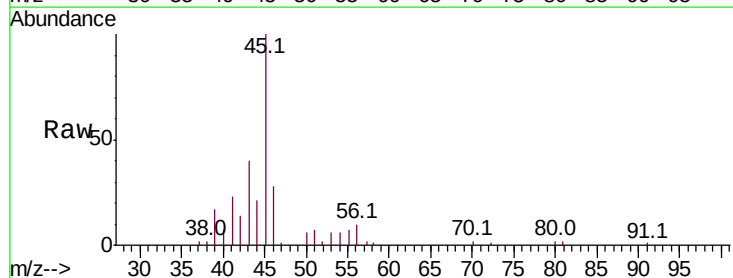
Acq: 25 Nov 2020 7:24

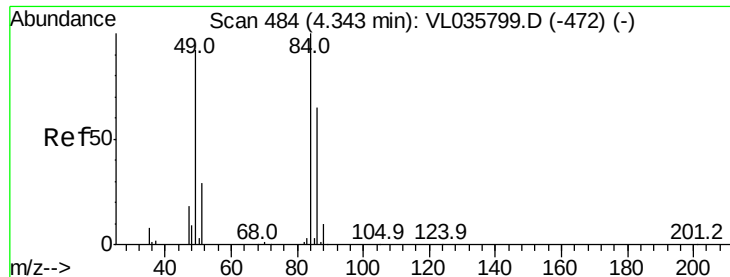
Tgt Ion: 45 Resp: 40407

Ion Ratio Lower Upper

45 100

46 41.2 16.1 64.5





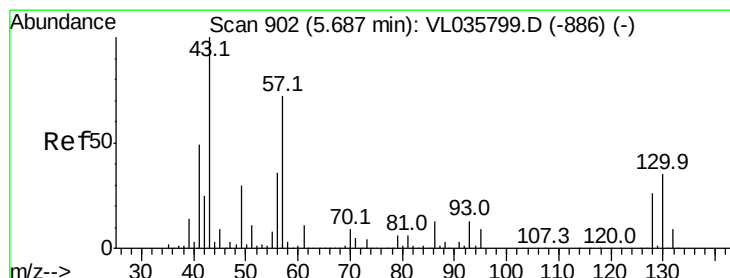
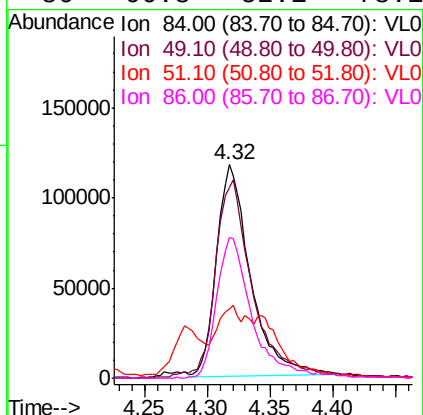
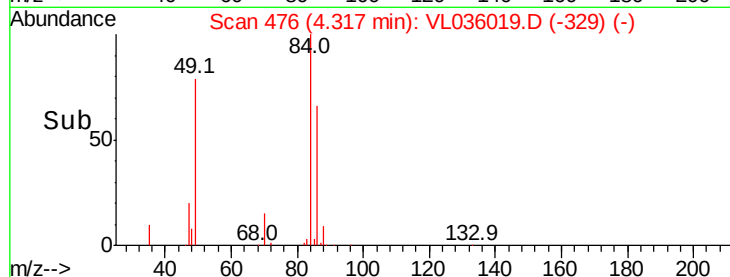
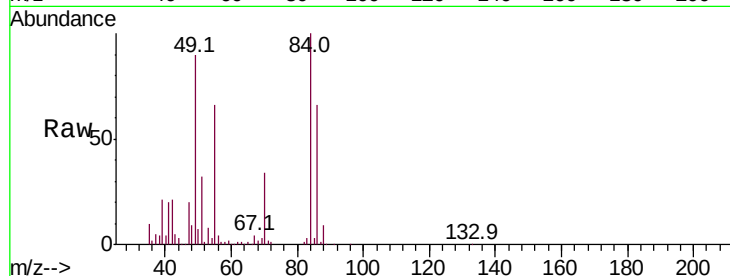
#20
Methvlene Chloride
Concen: 2.397 ppbv
RT: 4.32 min Scan# 476
Delta R.T. -0.03 min
Lab File: VL036019.D
Acq: 25 Nov 2020 7:24

Instrument :
MSVOA_L
ClientSampleId :
SVP-02

Tot Ion	Ratio	Lower	Upper
84	100		
49	89.1	73.8	110.8
51	31.5	23.0	34.4
86	66.8	52.1	78.1

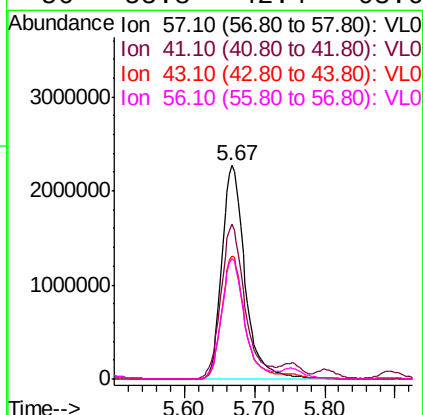
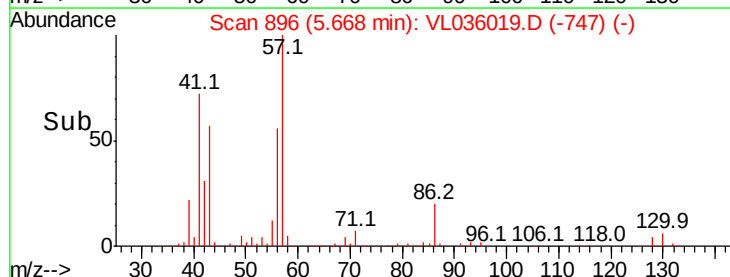
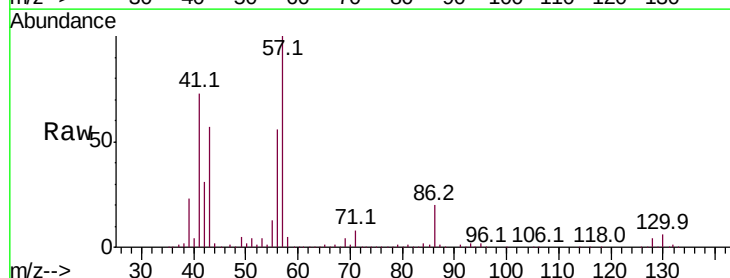
Manual Integrations
APPROVED

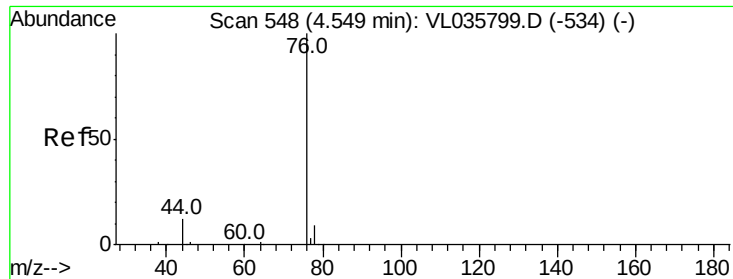
MMDadoda
11/27/2020 1:17:37 PM



#26
Hexane
Concen: 36.727 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.02 min
Lab File: VL036019.D
Acq: 25 Nov 2020 7:24

Tgt Ion	Ratio	Lower	Upper
57	100		
41	75.0	58.9	88.3
43	59.2	150.2	225.2#
56	55.8	42.4	63.6





#27

Carbon Disulfide

Concen: 3.006 ppbv

RT: 4.53 min Scan# 541

Delta R.T. -0.02 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

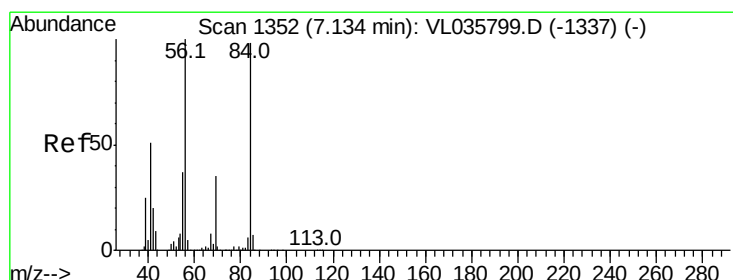
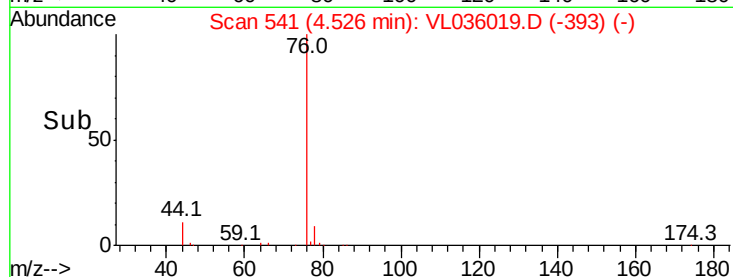
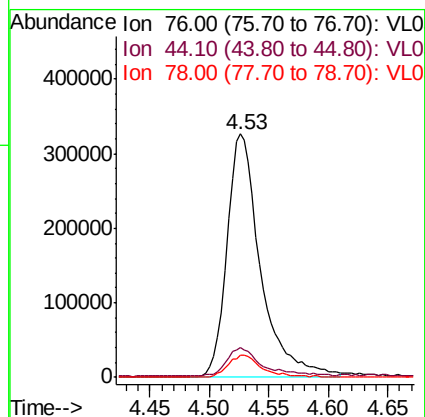
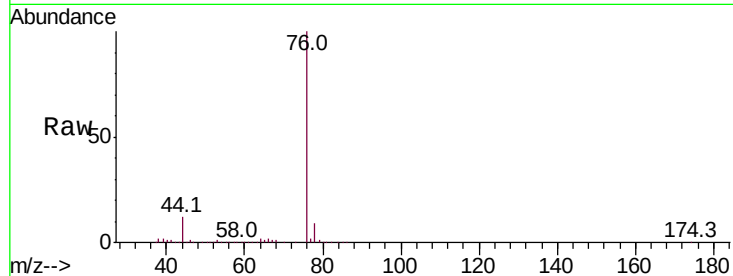
ClientSampled :

SVP-02

Tot Ion:	76	Resp:	639597
Ion Ratio	Lower	Upper	
76	100		
44	12.6	9.9	14.9
78	9.5	8.1	12.1

Manual Integrations
APPROVED

MMDadoda
11/27/2020 1:17:37 PM



#30

Cyclohexane

Concen: 1.468 ppbv

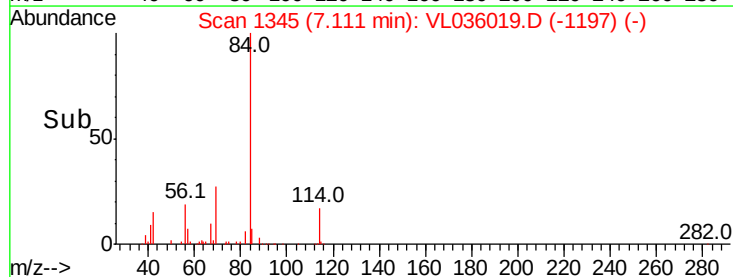
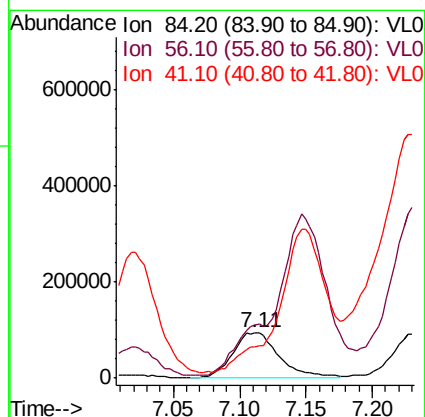
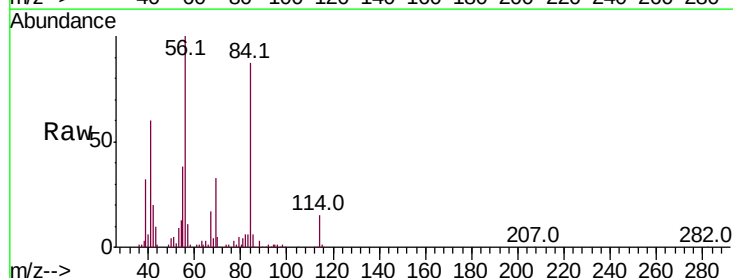
RT: 7.11 min Scan# 1345

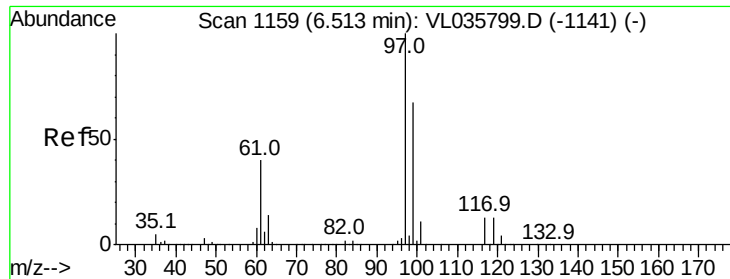
Delta R.T. -0.02 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Tgt Ion:	84	Resp:	227083
Ion Ratio	Lower	Upper	
84	100		
56	416.0	86.4	129.6#
41	332.4	42.1	63.1#





#32

1,1,1-Trichloroethane

Concen: 17.492 ppbv

RT: 6.49 min Scan# 1151

Delta R.T. -0.03 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

ClientSampleId :

SVP-02

Tot Ion: 97 Resp: 5094117

Ion Ratio Lower Upper

97 100

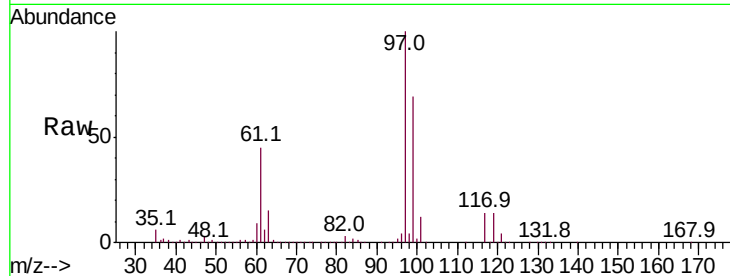
99 66.6 52.3 78.5

61 43.2 32.0 48.0

Manual Integrations
APPROVED

MMDadoda

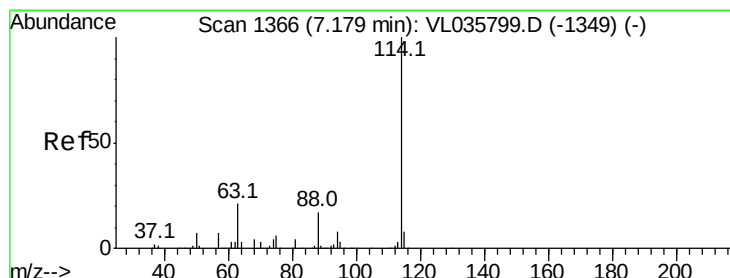
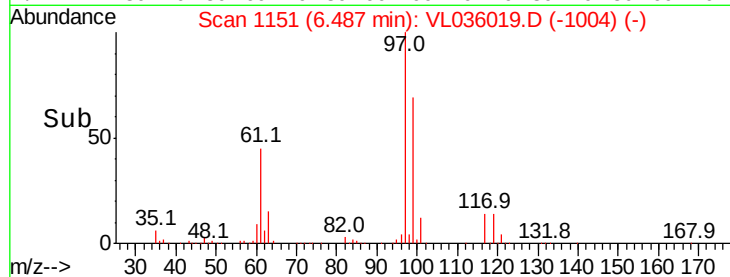
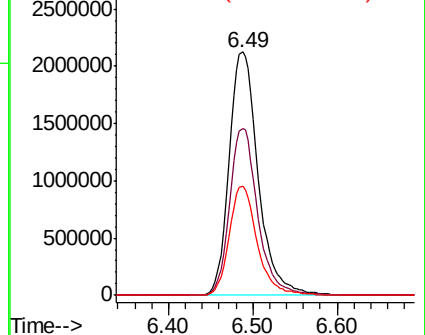
11/27/2020 1:17:37 PM



Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 99.00 (98.70 to 99.70): VL0

Ion 61.10 (60.80 to 61.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.15 min Scan# 1357

Delta R.T. -0.03 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

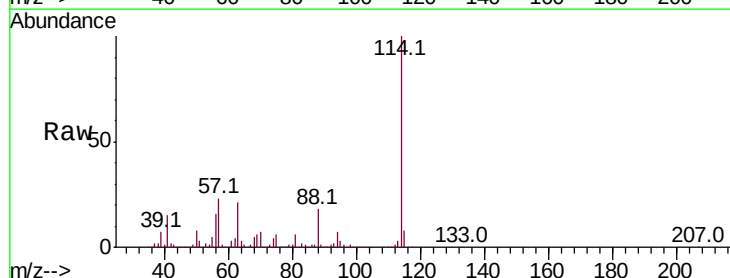
Tgt Ion: 114 Resp: 4774819

Ion Ratio Lower Upper

114 100

63 21.0 16.1 24.1

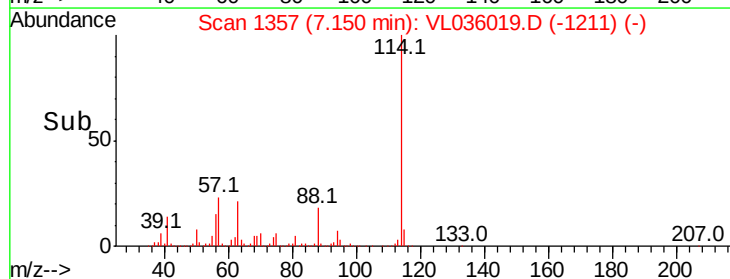
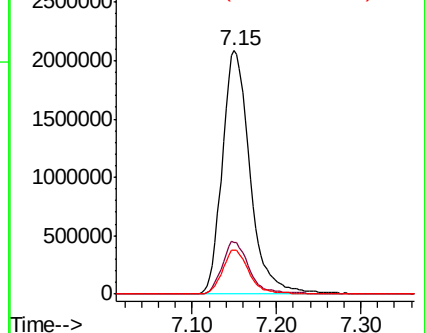
88 17.4 13.7 20.5

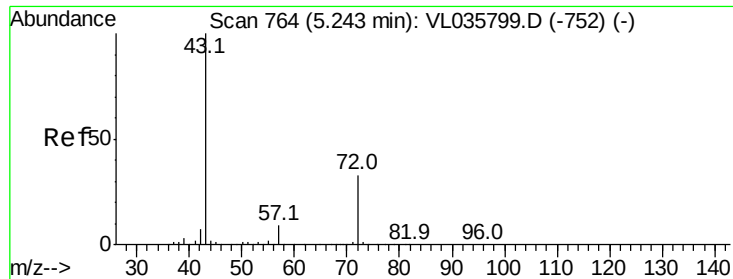


Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





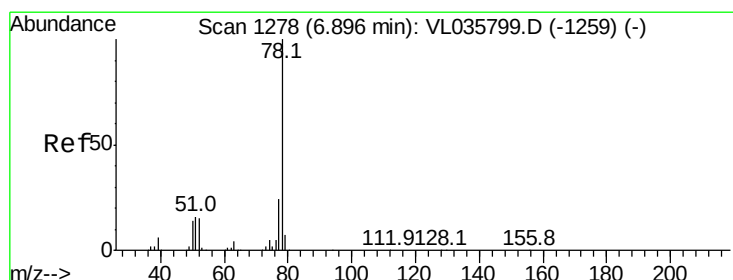
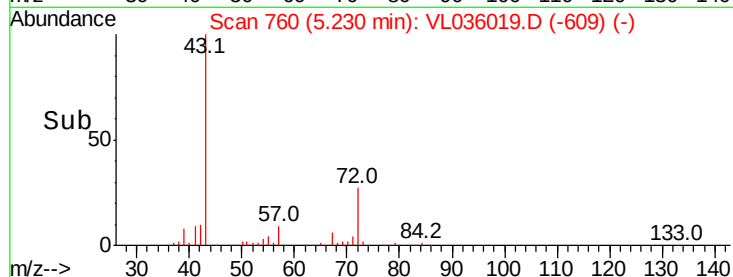
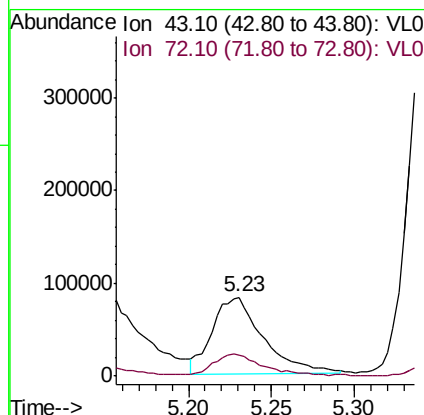
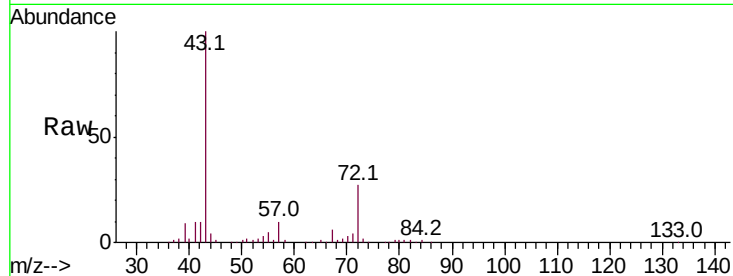
#34
2-Butanone
Concen: 1.143 ppbv
RT: 5.23 min Scan# 760
Delta R.T. -0.01 min
Lab File: VL036019.D
Acq: 25 Nov 2020 7:24

Instrument :
MSVOA_L
ClientSampled :
SVP-02

Tot Ion: 43 Resp: 177120
Ion Ratio Lower Upper
43 100
72 28.8 26.5 39.7

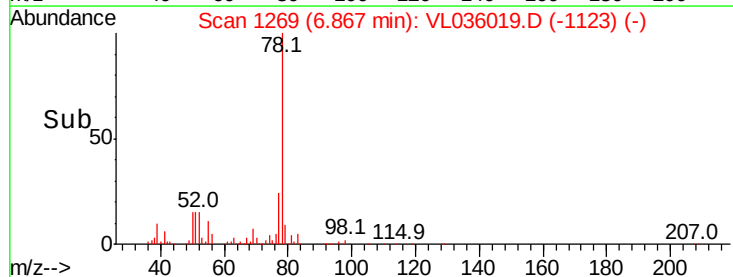
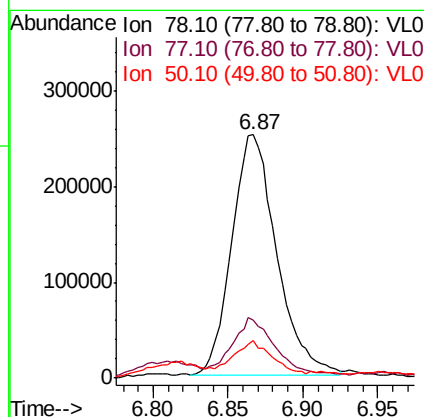
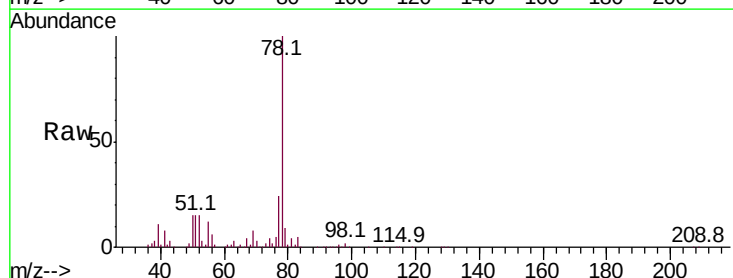
Manual Integrations
APPROVED

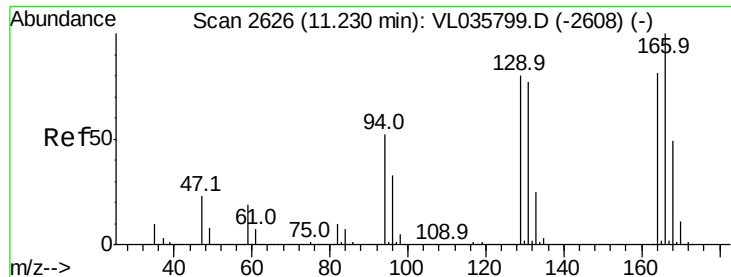
MMDadoda
11/27/2020 1:17:37 PM



#36
Benzene
Concen: 1.480 ppbv
RT: 6.87 min Scan# 1269
Delta R.T. -0.03 min
Lab File: VL036019.D
Acq: 25 Nov 2020 7:24

Tgt Ion: 78 Resp: 525386
Ion Ratio Lower Upper
78 100
77 22.4 19.3 28.9
50 13.6 11.4 17.2





#52

Tetrachloroethene

Concen: 0.127 ppbv m

RT: 11.20 min Scan# 2617

Delta R.T. -0.03 min

Lab File: VL036019.D

Acq: 25 Nov 2020 7:24

Instrument :

MSVOA_L

ClientSampled :

SVP-02

Tot Ion:164 Resp: 21289

Ion Ratio Lower Upper

164 100

166 122.5 99.3 148.9

129 86.4 79.3 118.9

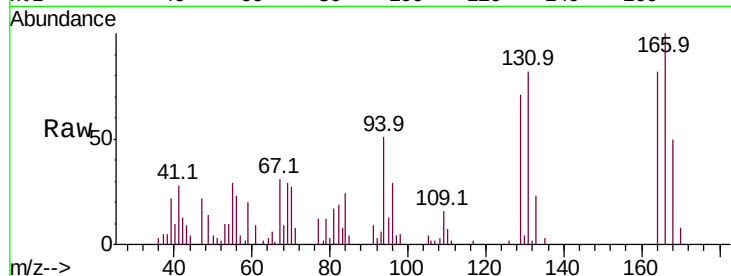
131 100.1 76.5 114.7

Manual Integrations

APPROVED

MMDadoda

11/27/2020 1:17:37 PM



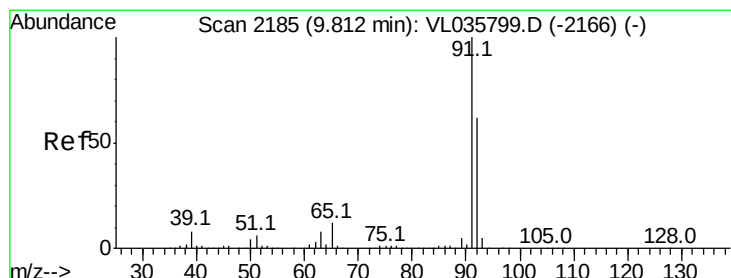
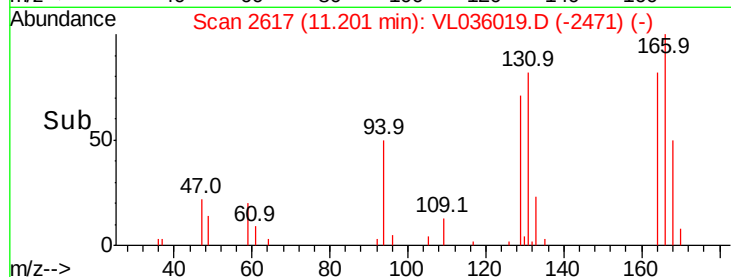
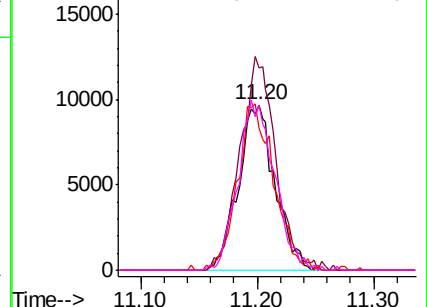
Abundance

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: 0.711 ppbv

RT: 9.78 min Scan# 2175

Delta R.T. -0.03 min

Lab File: VL036019.D

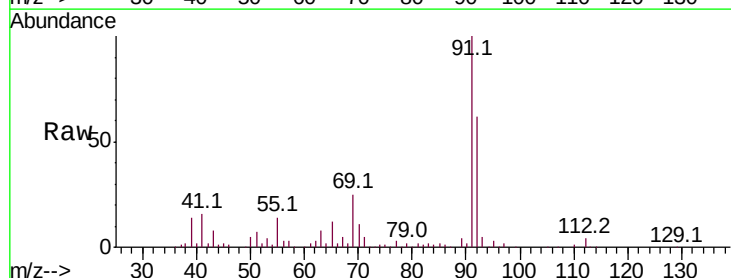
Acq: 25 Nov 2020 7:24

Tgt Ion: 91 Resp: 304462

Ion Ratio Lower Upper

91 100

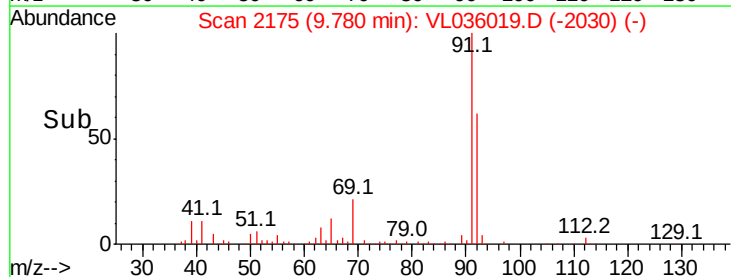
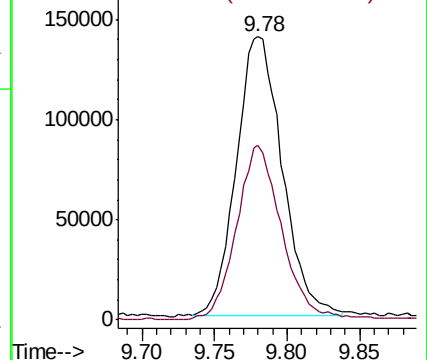
92 62.7 49.8 74.6

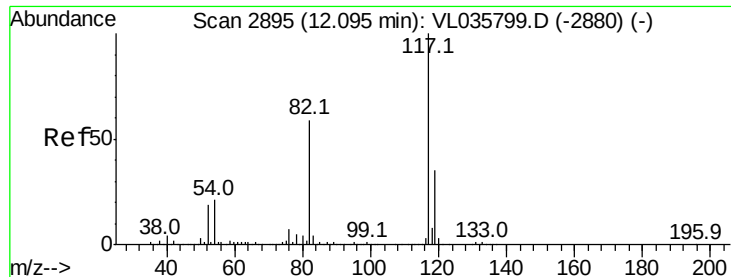


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





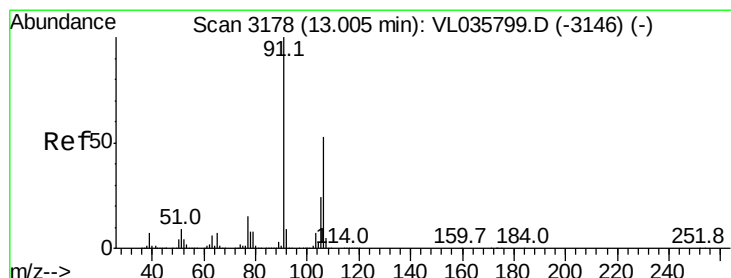
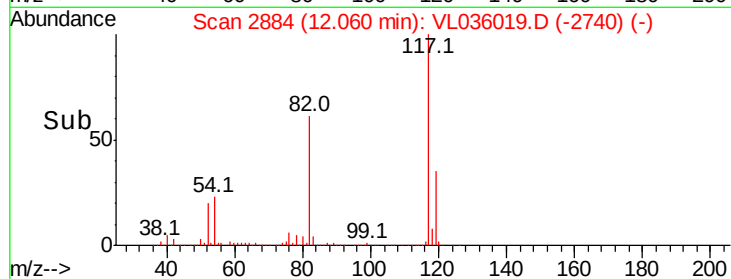
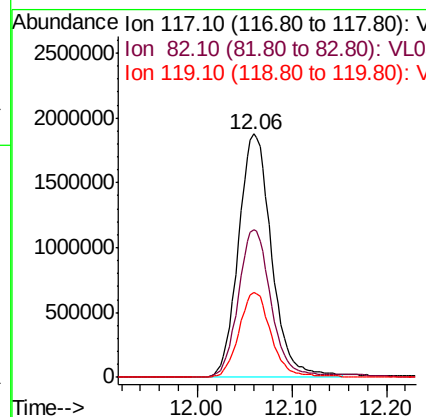
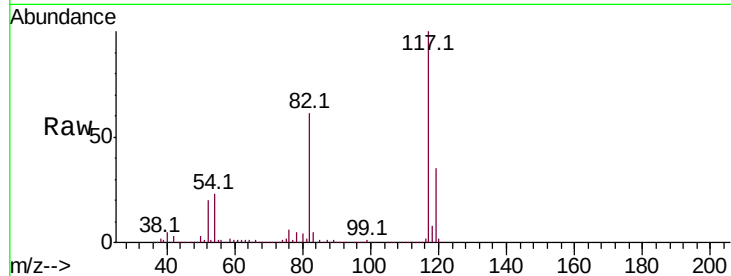
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.06 min Scan# 2884
Delta R.T. -0.04 min
Lab File: VL036019.D
Acq: 25 Nov 2020 7:24

Instrument :
MSVOA_L
ClientSampled :
SVP-02

Tot Ion:117 Resp: 4567137
Ion Ratio Lower Upper
117 100
82 61.7 50.6 76.0
119 34.8 52.6 78.8#

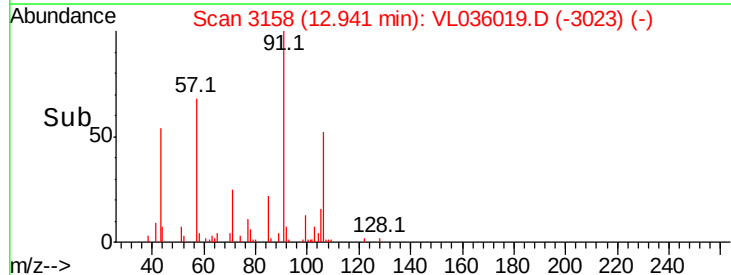
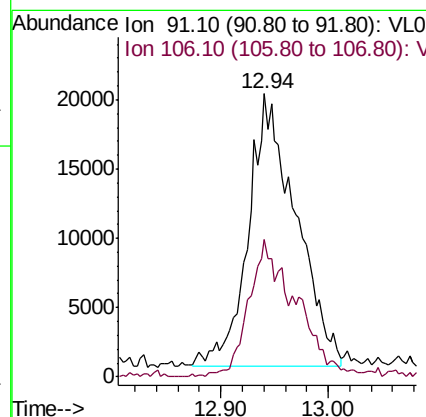
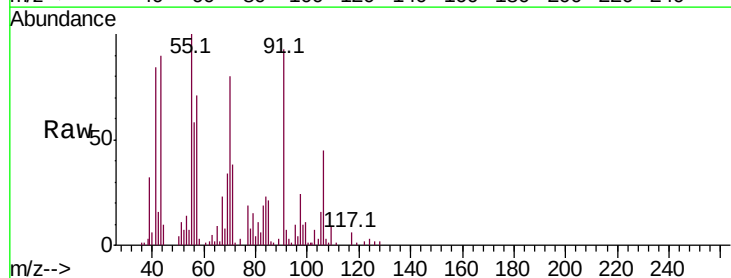
Manual Integrations
APPROVED

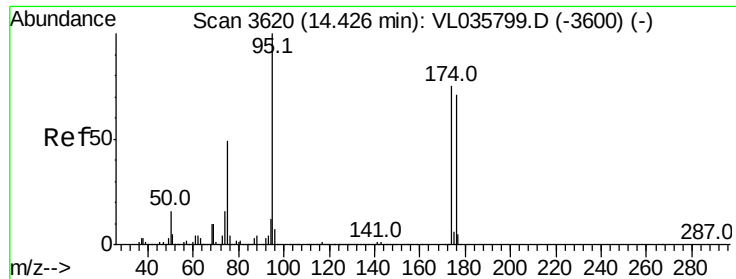
MMDadoda
11/27/2020 1:17:37 PM



#59
m/p-Xylene
Concen: 0.129 ppbv m
RT: 12.94 min Scan# 3158
Delta R.T. -0.06 min
Lab File: VL036019.D
Acq: 25 Nov 2020 7:24

Tgt Ion: 91 Resp: 60724
Ion Ratio Lower Upper
91 100
106 0.0 39.5 59.3#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.450 ppbv
 RT: 14.39 min Scan# 3609
 Delta R.T. -0.04 min
 Lab File: VL036019.D
 Acq: 25 Nov 2020 7:24

Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-02

Tot Ion	Ratio	Lower	Upper
95	100		
174	70.0	59.8	89.6
175	5.0	4.3	6.5

Manual Integrations
 APPROVED

MMDadoda
 11/27/2020 1:17:37 PM

