

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101619\
 Data File : VL034304.D
 Acq On : 16 Oct 2019 16:48
 Operator : SY/AP
 Sample : VSTDIC015
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Manual Integrations
 APPROVED

MMDadoda
 10/18/2019 3:04:13 PM

Quant Time: Oct 16 17:18:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Oct 16 16:52:05 2019
 QLast Update : Wed Oct 16 16:52:05 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.70	49	1168216	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.22	114	2314424	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.16	117	2601648	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	2126414	9.41	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.10%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	2862269	16.587	ppbv 91
3) Chlorodifluoromethane	2.97	51	1863105	13.602	ppbv 98
4) Chloromethane	3.12	50	1155656	14.357	ppbv 94
5) Vinyl Chloride	3.24	62	1065471	14.484	ppbv 97
6) Bromomethane	3.46	94	558154	16.263	ppbv 96
7) Chloroethane	3.55	64	395845	15.396	ppbv 100
8) Dichlorotetrafluoroethane	3.17	85	2266542	14.882	ppbv 96
9) Propene	2.99	41	876014	12.963	ppbv 96
10) Heptane	8.17	43	2375696	13.489	ppbv 98
11) Trichlorofluoromethane	3.95	101	2546866	16.215	ppbv 100
12) 1,1,2-Trichlorotrifluoroet	4.49	101	1752671	17.050	ppbv 100
13) Ethanol	3.60	45	128950	7.880	ppbv 98
14) Bromoethene	3.73	108	726542	17.287	ppbv 97
15) Acetone	3.84	43	2007530	12.822	ppbv 100
16) 1,3-Butadiene	3.31	39	1014680	14.850	ppbv 100
17) tert-Butyl alcohol	4.30	59	1130384	11.394	ppbv 100
18) 1,1-Dichloroethene	4.29	96	799103	17.823	ppbv 93
19) Isopropyl Alcohol	3.97	45	960089	9.972	ppbv 99
20) Methylene Chloride	4.35	84	714039	15.817	ppbv 99
21) Allyl Chloride	4.42	41	1411265	15.958	ppbv 99
22) trans-1,2-Dichloroethene	4.90	96	815805	18.186	ppbv 98
23) Vinyl Acetate	5.09	43	3124965	13.544	ppbv 99
24) 1,1-Dichloroethane	5.03	63	2181543	14.042	ppbv 100
25) Ethyl Acetate	5.70	43	3859012	13.034	ppbv 99
26) Hexane	5.71	57	1701268	13.813	ppbv 97
27) Carbon Disulfide	4.56	76	2084287	18.349	ppbv 99
28) Methyl tert-Butyl Ether	5.05	73	2645604	14.463	ppbv 99
29) Chloroform	5.78	83	2638168	14.990	ppbv 94
30) Cyclohexane	7.18	84	1358457	15.277	ppbv 97
31) cis-1,2-Dichloroethene	5.57	61	1839422	14.651	ppbv 99
32) 1,1,1-Trichloroethane	6.55	97	2623751	15.458	ppbv 99
34) 2-Butanone	5.27	43	2680501	11.343	ppbv 100
35) Carbon Tetrachloride	7.06	117	2759622	14.352	ppbv 99
36) Benzene	6.93	78	3126870	12.233	ppbv 97
37) 1,2-Dichloroethane	6.34	62	2348621	12.918	ppbv 100
38) Trichloroethene	7.89	130	1232976	13.500	ppbv 95
39) 1,2-Dichloropropane	7.66	63	1387366	12.080	ppbv 98
40) 1,4-Dioxane	7.88	88	372245	10.016	ppbv # 1
41) Tetrahydrofuran	6.07	42	1579576	11.868	ppbv 99
42) Bromodichloromethane	7.84	83	2912846	13.350	ppbv 95
43) Methyl Methacrylate	8.07	69	1438744	13.625	ppbv 96

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101619\
 Data File : VL034304.D
 Acq On : 16 Oct 2019 16:48
 Operator : SY/AP
 Sample : VSTDIC015
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

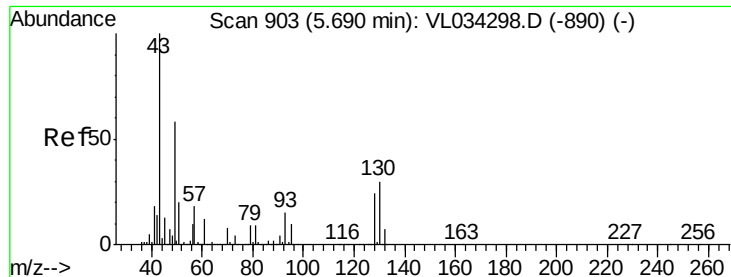
Manual Integrations
 APPROVED

MMDadoda
 10/18/2019 3:04:13 PM

Quant Time: Oct 16 17:18:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL101619AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Oct 16 16:52:05 2019
 QLast Update : Wed Oct 16 16:52:05 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.92	57	5477307	11.131	ppbv	97
45) t-1,3-Dichloropropene	9.34	75	1988069	15.923	ppbv	96
46) cis-1,3-Dichloropropene	8.76	75	2146234	14.291	ppbv	98
47) 1,1,2-Trichloroethane	9.54	97	1384241	13.422	ppbv	98
48) Dibromochloromethane	10.37	129	2482989	15.190	ppbv	99
49) Bromoform	13.12	173	2294501	17.346	ppbv	99
50) 4-Methyl-2-Pentanone	8.79	43	3946591	11.475	ppbv	97
51) 2-Hexanone	10.19	43	3430853	11.887	ppbv #	99
52) Tetrachloroethene	11.29	164	1219355	14.439	ppbv	98
53) Toluene	9.87	91	3651267	13.070	ppbv	98
54) 1,2-Dibromoethane	10.68	107	2092441	13.643	ppbv	98
56) 1,1,1,2-Tetrachloroethane	12.20	131	1633831	14.082	ppbv	97
57) Chlorobenzene	12.22	112	2801002	12.365	ppbv	98
58) Ethyl Benzene	12.78	91	4953587	11.800	ppbv	95
59) m/p-Xylene	13.07	91	8127918m	23.377	ppbv	
60) o-Xylene	13.77	91	4144129	11.920	ppbv	99
61) Styrene	13.60	104	3248062	13.043	ppbv	100
62) Isopropylbenzene	14.75	105	5358043	11.905	ppbv	98
63) 1,1,2,2-Tetrachloroethane	13.76	83	3019190	10.590	ppbv	99
64) n-propylbenzene	15.64	120	1490283	13.088	ppbv	87
65) tert-Butylbenzene	16.83	119	4809154m	12.229	ppbv	
66) Benzyl Chloride	17.08	91	2669890	19.190	ppbv	98
67) sec-Butylbenzene	17.38	105	6514306	11.584	ppbv	97
69) p-Isopropyltoluene	17.74	119	5508403	12.097	ppbv	98
70) n-Butylbenzene	18.64	91	5930909	11.186	ppbv	97
71) 2-Chlorotoluene	15.54	91	4403809	11.976	ppbv	98
72) 4-Ethyltoluene	15.92	105	4807406	12.239	ppbv	98
73) 1,3,5-Trimethylbenzene	16.08	105	4663034	12.288	ppbv	95
74) 1,2,4-Trimethylbenzene	16.85	105	4695861	11.654	ppbv	97
75) 1,3-Dichlorobenzene	17.09	146	2841041	13.142	ppbv	99
76) 1,4-Dichlorobenzene	17.23	146	2876515	12.993	ppbv	100
77) 1,2-Dichlorobenzene	17.91	146	2805776	12.823	ppbv	99
78) Hexachloro-1,3-Butadiene	23.46	225	2406923	16.608	ppbv	100
79) Naphthalene	22.31	128	4179080	11.781	ppbv	98
80) Naphthalene, 2-methyl-	25.05	142	2148932	13.027	ppbv	94
81) 1,2,4-Trichlorobenzene	22.04	180	2544260	12.948	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 49 Resp: 1168216

Ion Ratio Lower Upper

49 100

128 41.4 20.6 61.8

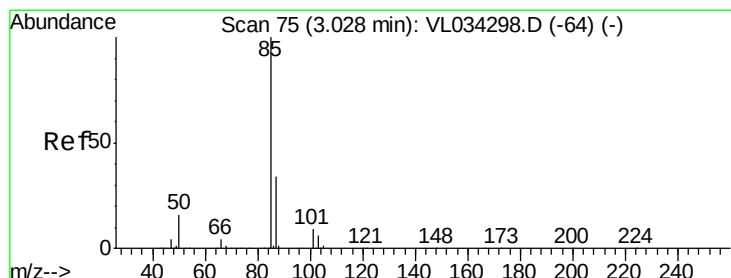
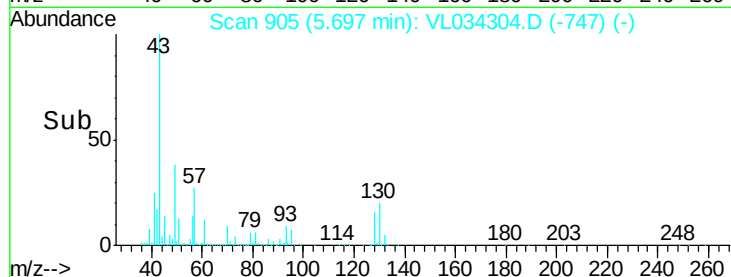
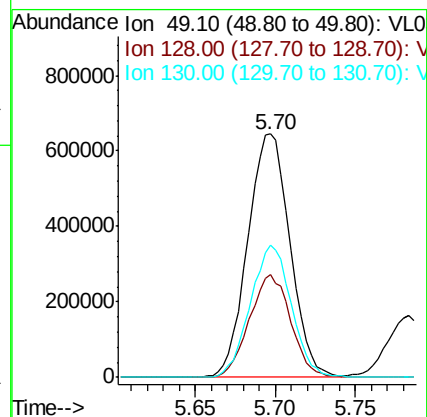
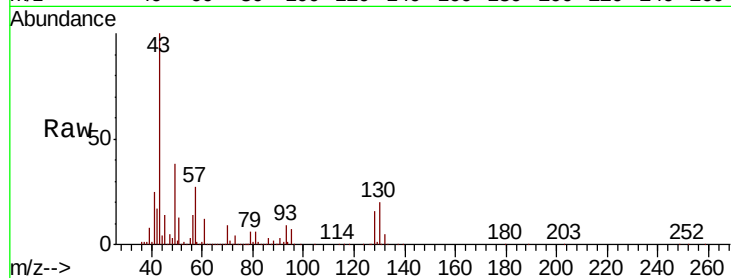
130 53.0 26.2 78.5

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#2

Dichlorodifluoromethane

Concen: 16.587 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.00 min

Lab File: VL034304.D

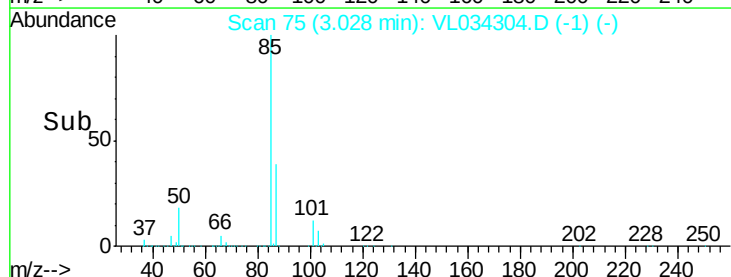
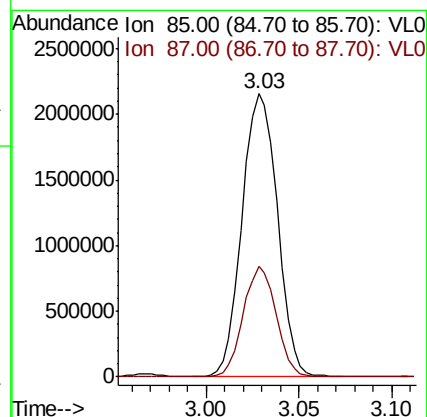
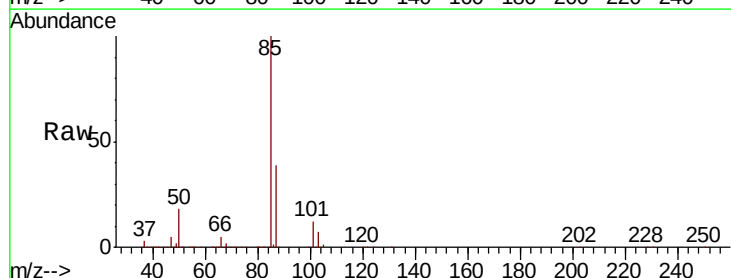
Acq: 16 Oct 2019 16:48

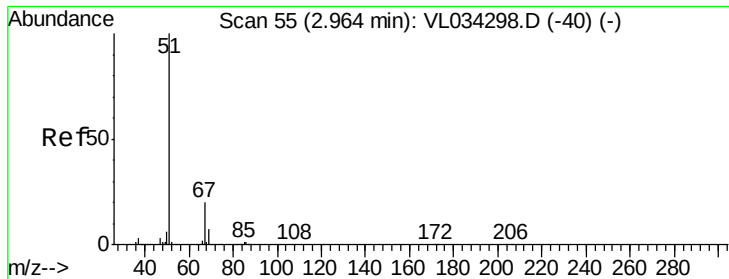
Tgt Ion: 85 Resp: 2862269

Ion Ratio Lower Upper

85 100

87 38.9 27.0 40.6





#3

Chlorodifluoromethane

Concen: 13.602 ppbv

RT: 2.97 min Scan# 56

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Tot Ion: 51 Resp: 1863105

Ion Ratio Lower Upper

51 100

67 20.9 15.8 23.8

Instrument :

MSVOA_L

ClientSampleId :

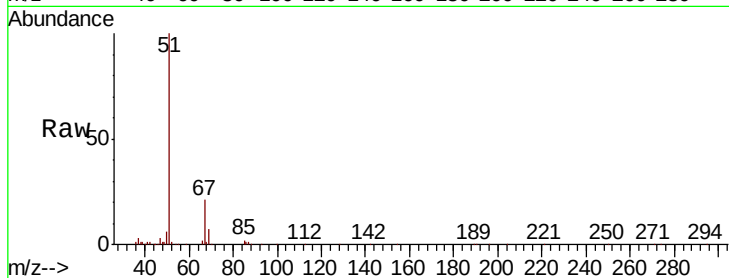
VSTDIC015

Manual Integrations

APPROVED

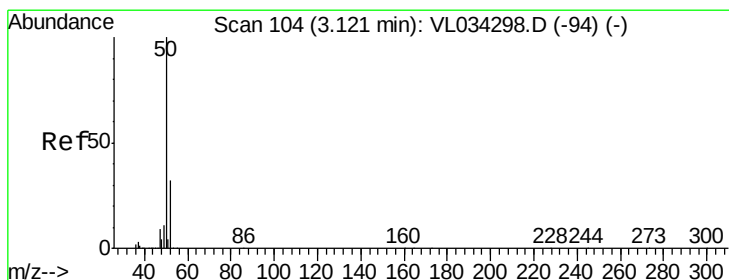
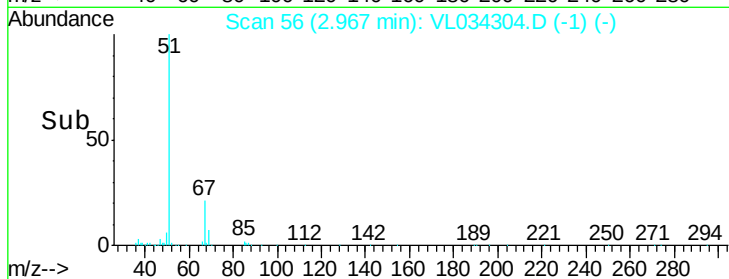
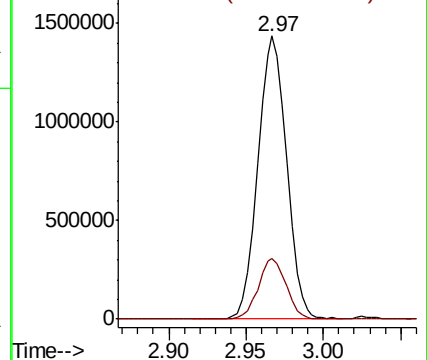
MMDadoda

10/18/2019 3:04:13 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 14.357 ppbv

RT: 3.12 min Scan# 104

Delta R.T. 0.00 min

Lab File: VL034304.D

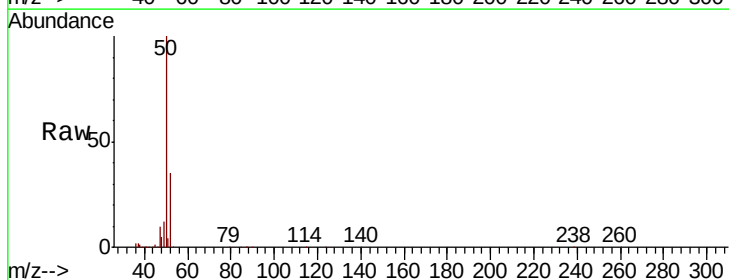
Acq: 16 Oct 2019 16:48

Tgt Ion: 50 Resp: 1155656

Ion Ratio Lower Upper

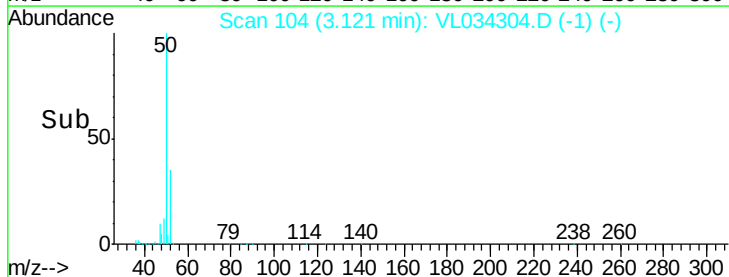
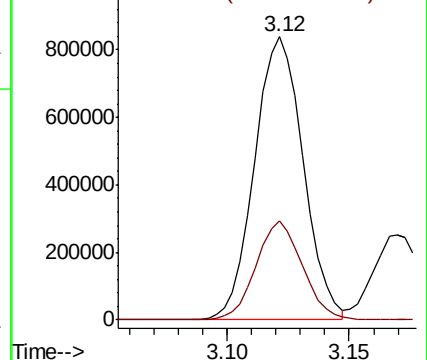
50 100

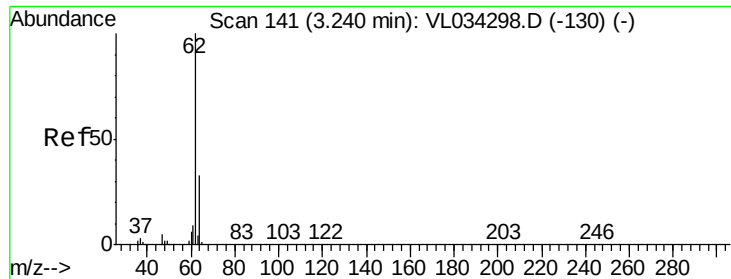
52 35.0 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 14.484 ppbv

RT: 3.24 min Scan# 141

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 62 Resp: 1065471

Ion Ratio Lower Upper

62 100

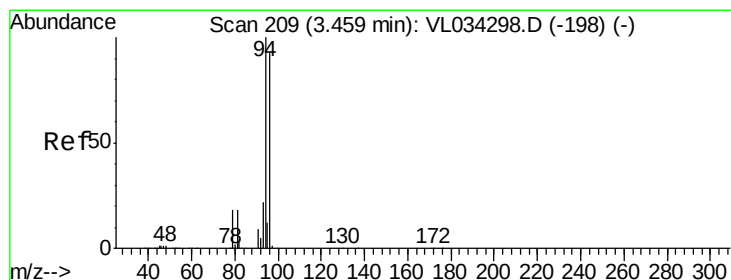
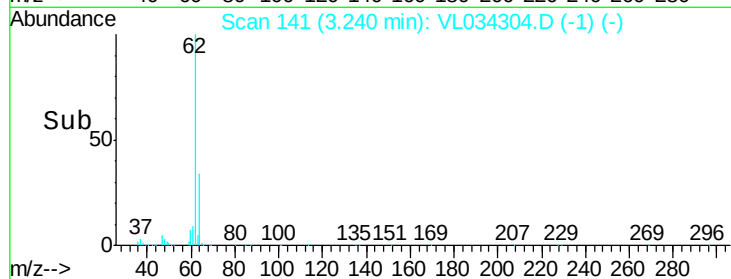
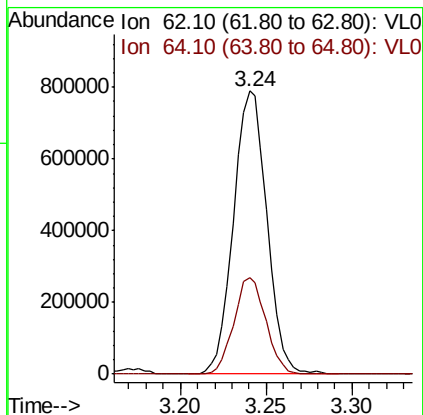
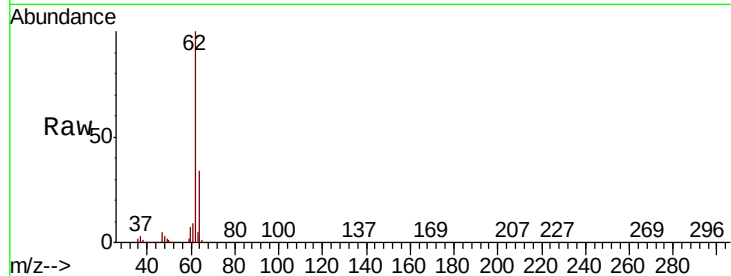
64 34.3 26.0 39.0

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#6

Bromomethane

Concen: 16.263 ppbv

RT: 3.46 min Scan# 210

Delta R.T. 0.00 min

Lab File: VL034304.D

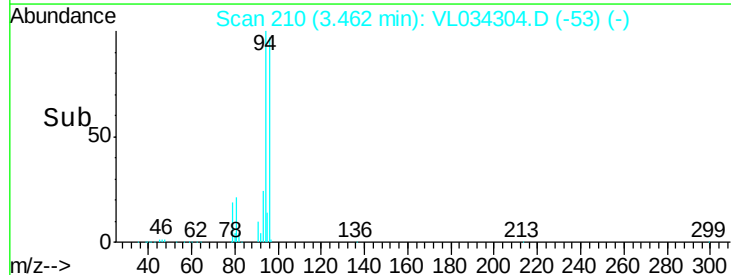
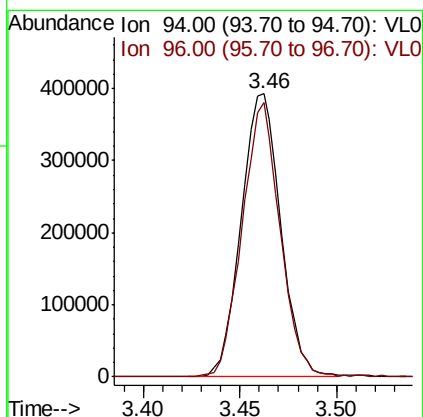
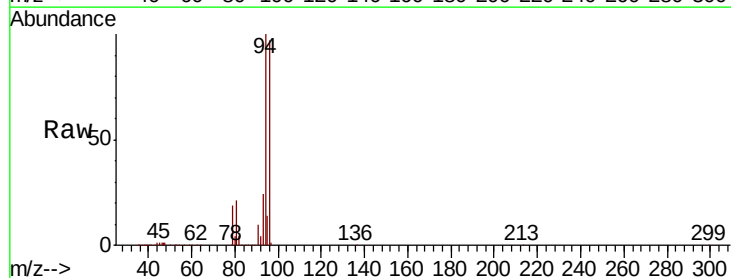
Acq: 16 Oct 2019 16:48

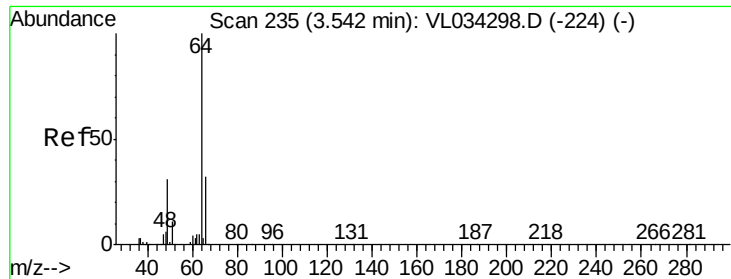
Tgt Ion: 94 Resp: 558154

Ion Ratio Lower Upper

94 100

96 96.8 74.6 112.0





#7

Chloroethane

Concen: 15.396 ppbv

RT: 3.55 min Scan# 236

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 64 Resp: 395845

Ion Ratio Lower Upper

64 100

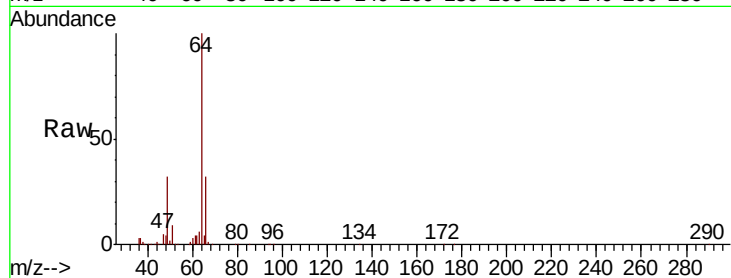
66 31.5 25.4 38.0

Manual Integrations

APPROVED

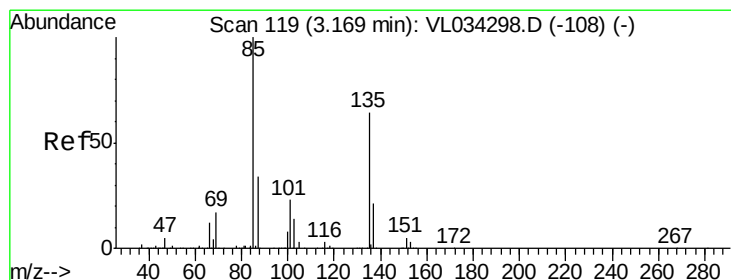
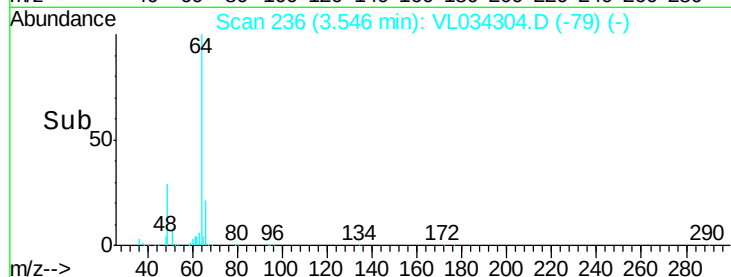
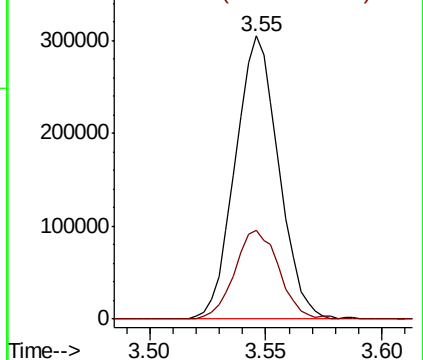
MMDadoda

10/18/2019 3:04:13 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 14.882 ppbv

RT: 3.17 min Scan# 119

Delta R.T. 0.00 min

Lab File: VL034304.D

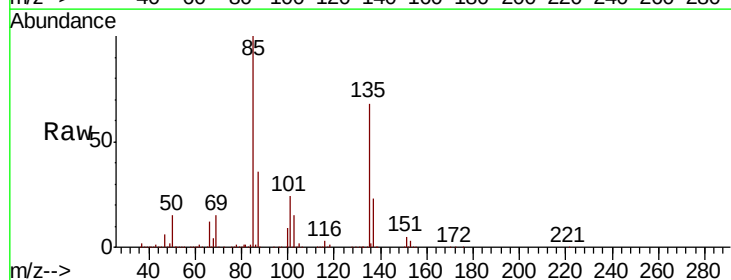
Acq: 16 Oct 2019 16:48

Tgt Ion: 85 Resp: 2266542

Ion Ratio Lower Upper

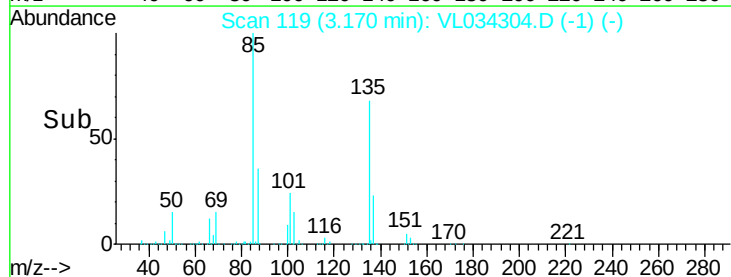
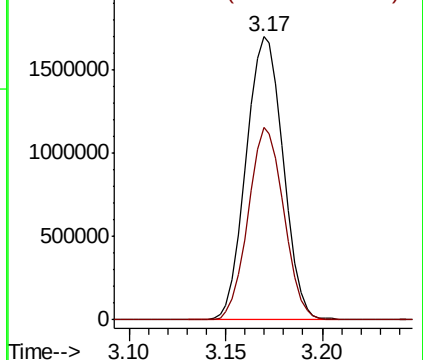
85 100

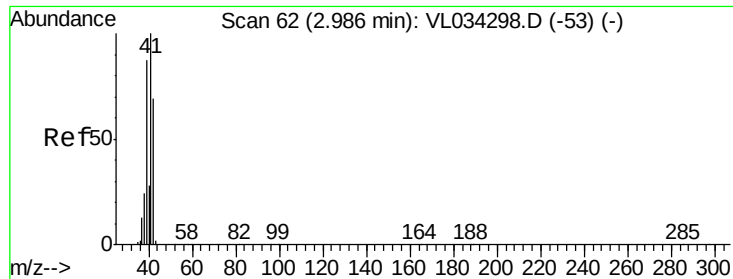
135 65.6 50.2 75.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 12.963 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 41 Resp: 876014

Ion Ratio Lower Upper

41 100

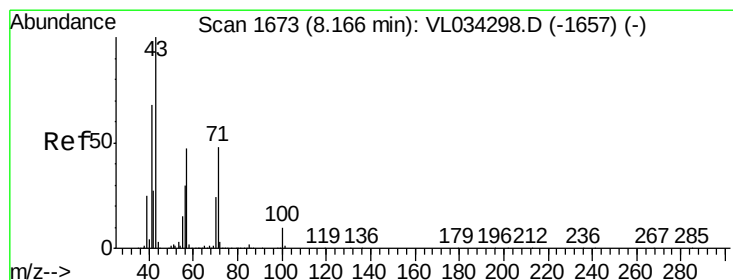
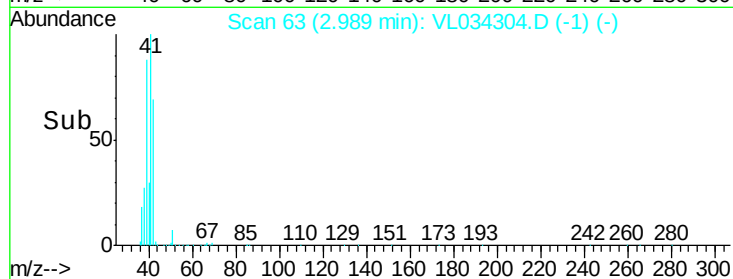
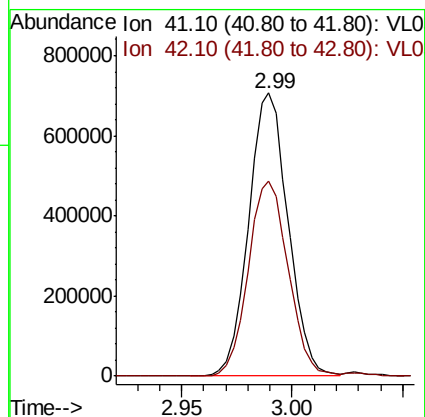
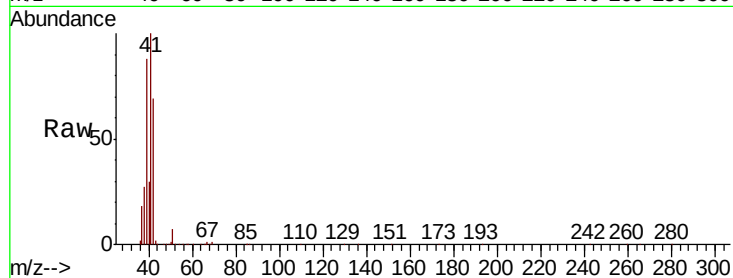
42 70.9 53.9 80.9

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#10

Heptane

Concen: 13.489 ppbv

RT: 8.17 min Scan# 1675

Delta R.T. 0.01 min

Lab File: VL034304.D

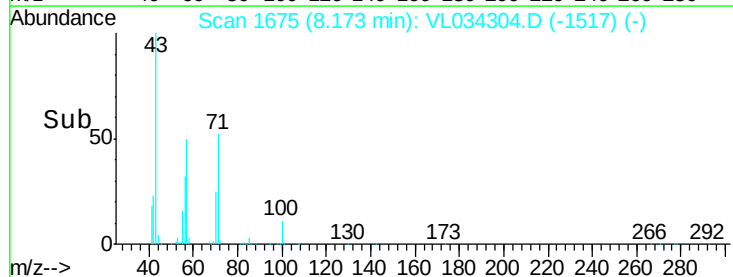
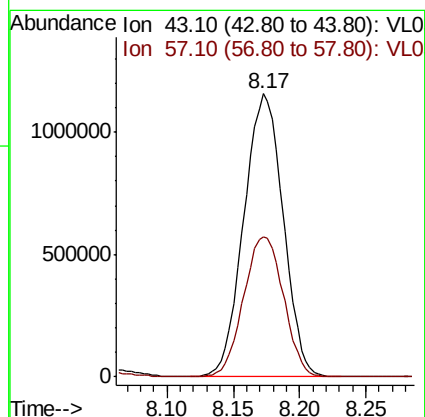
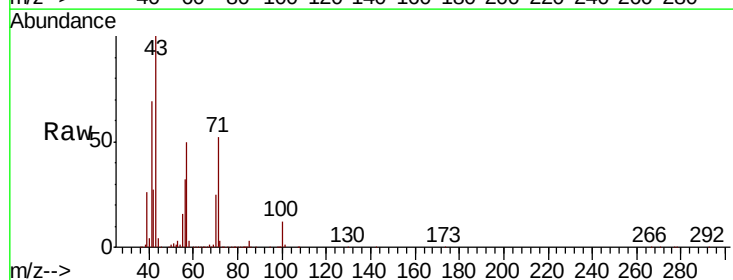
Acq: 16 Oct 2019 16:48

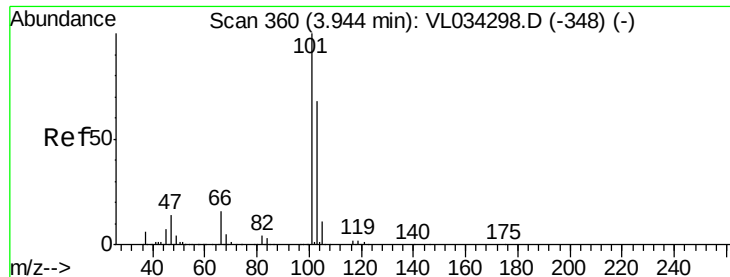
Tgt Ion: 43 Resp: 2375696

Ion Ratio Lower Upper

43 100

57 50.4 39.5 59.3





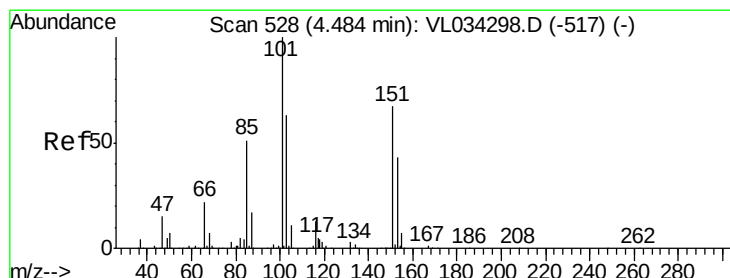
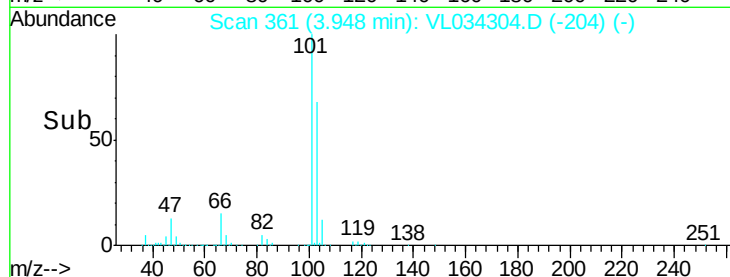
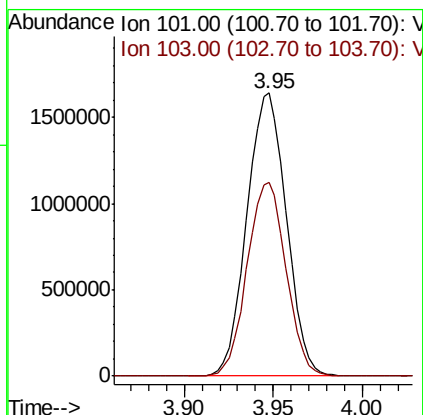
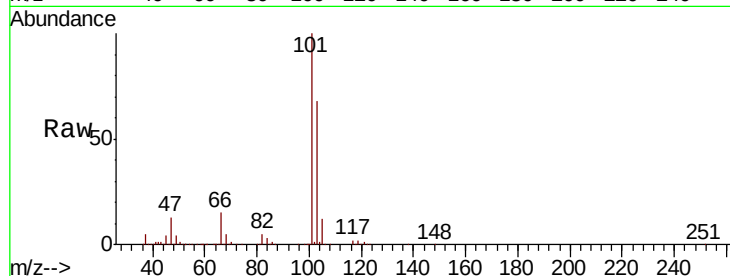
#11
 Trichlorofluoromethane
 Concen: 16.215 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion:101 Resp: 2546866
 Ion Ratio Lower Upper
 101 100
 103 68.4 54.5 81.7

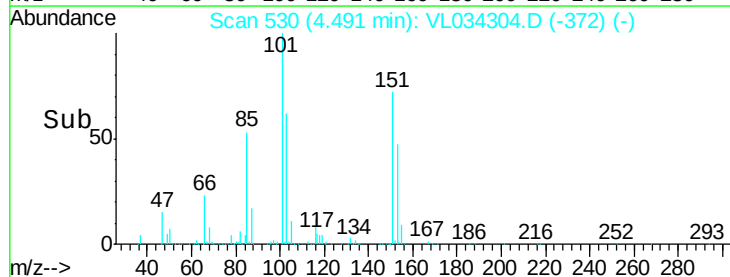
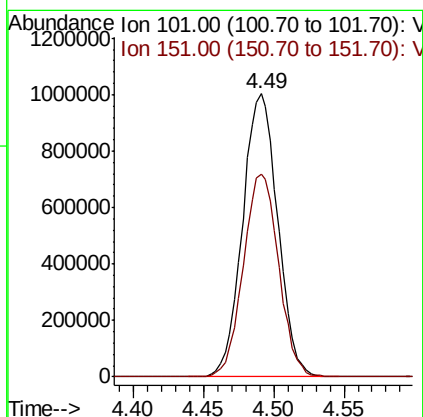
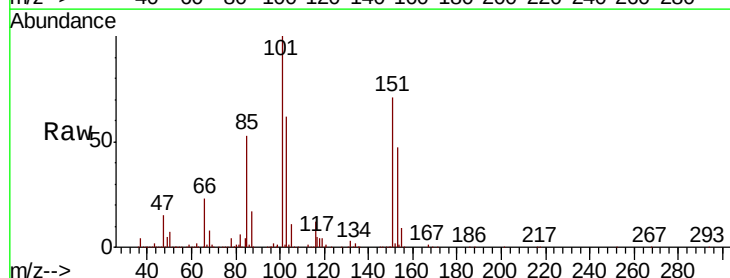
Manual Integrations
 APPROVED

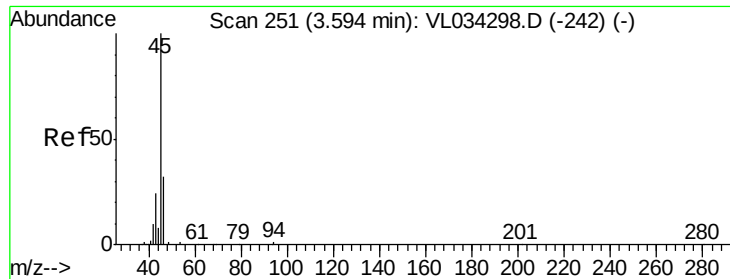
MMDadoda
 10/18/2019 3:04:13 PM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 17.050 ppbv
 RT: 4.49 min Scan# 530
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion:101 Resp: 1752671
 Ion Ratio Lower Upper
 101 100
 151 72.1 57.4 86.2





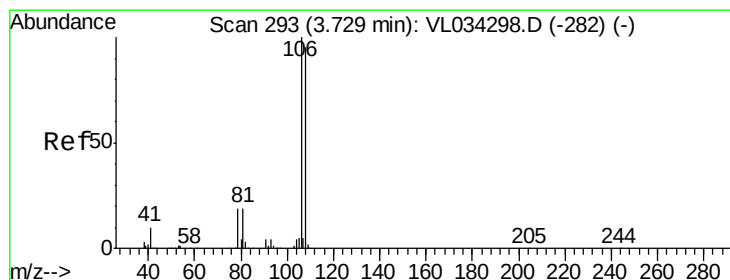
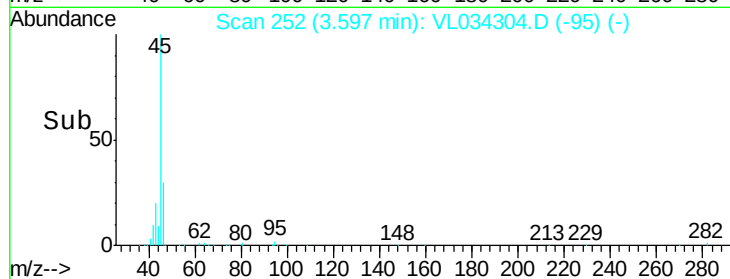
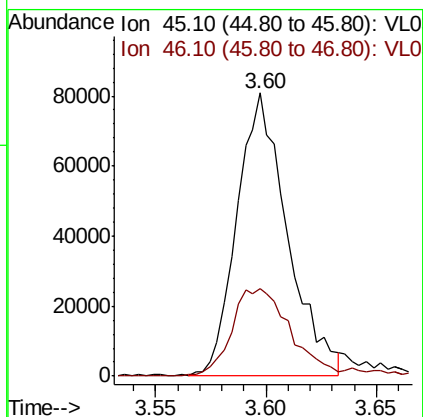
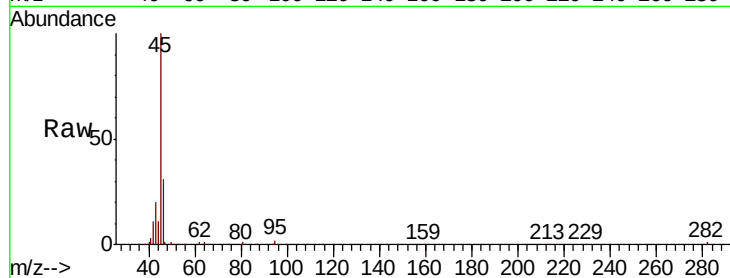
#13
Ethanol
Concen: 7.880 ppbv
RT: 3.60 min Scan# 252
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
45	100		
46	38.4	15.8	63.2

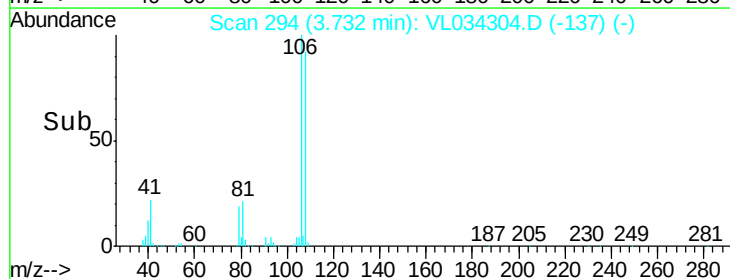
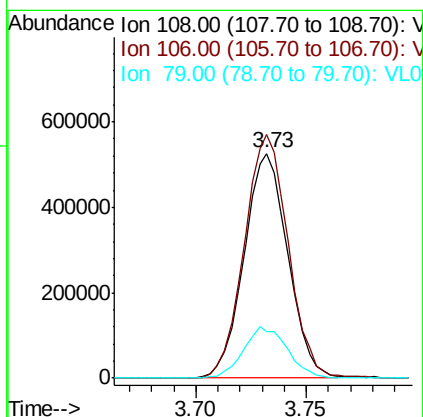
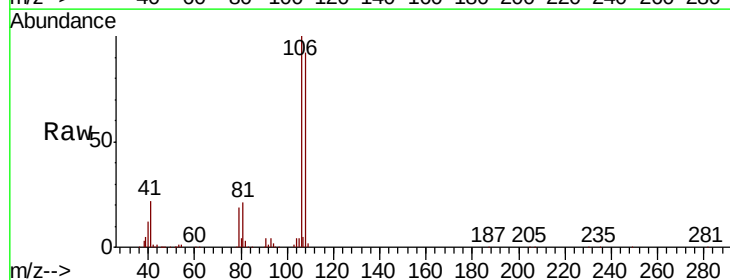
Manual Integrations
APPROVED

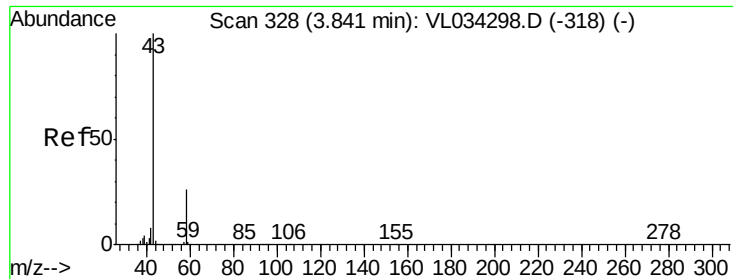
MMDadoda
10/18/2019 3:04:13 PM



#14
Bromoethene
Concen: 17.287 ppbv
RT: 3.73 min Scan# 294
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion	Ratio	Lower	Upper
108	100		
106	109.1	84.8	127.2
79	23.2	17.0	25.4





#15

Acetone

Concen: 12.822 ppbv

RT: 3.84 min Scan# 329

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 43 Resp: 2007530

Ion Ratio Lower Upper

43 100

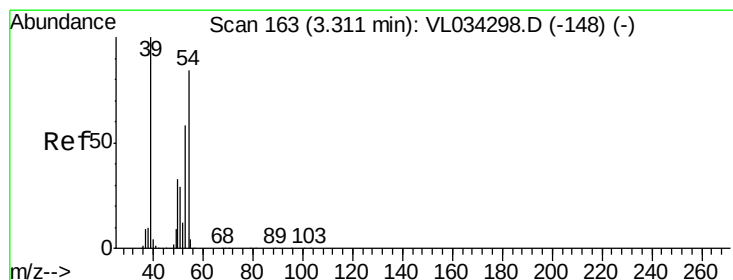
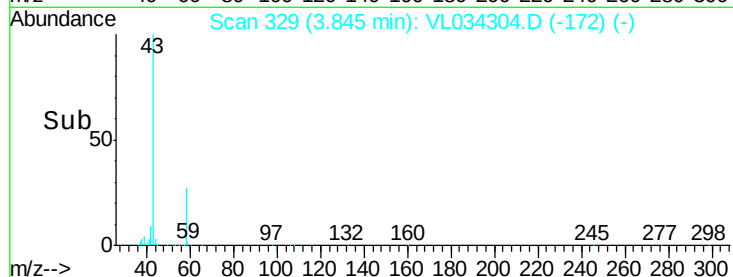
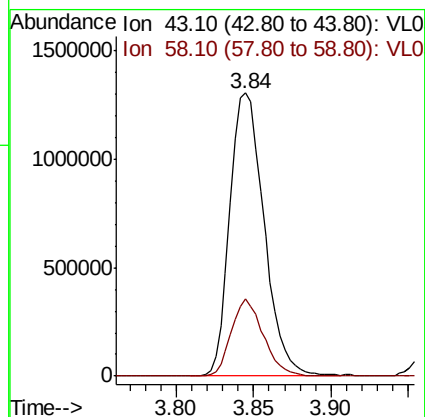
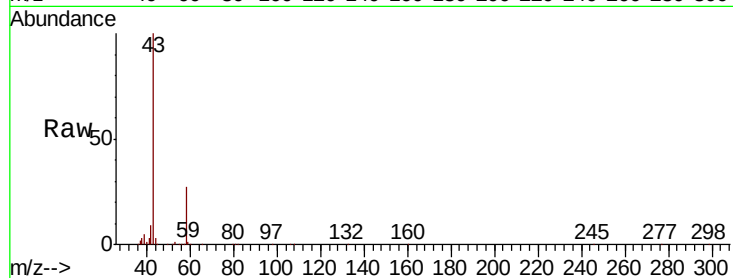
58 25.6 20.4 30.6

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#16

1,3-Butadiene

Concen: 14.850 ppbv

RT: 3.31 min Scan# 163

Delta R.T. 0.00 min

Lab File: VL034304.D

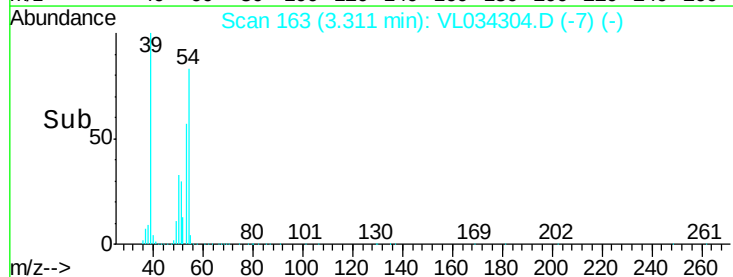
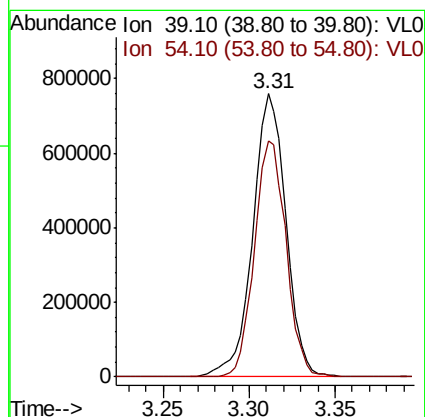
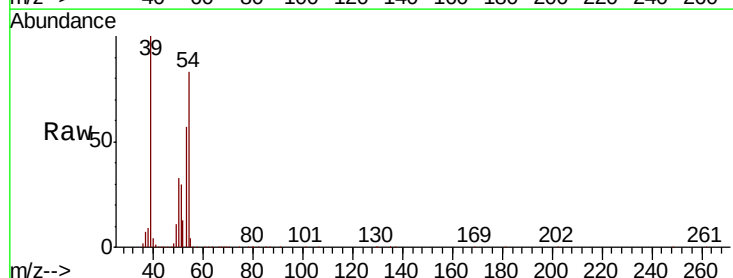
Acq: 16 Oct 2019 16:48

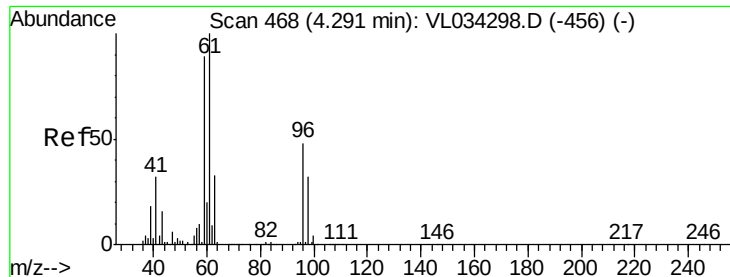
Tgt Ion: 39 Resp: 1014680

Ion Ratio Lower Upper

39 100

54 80.1 63.9 95.9





#17

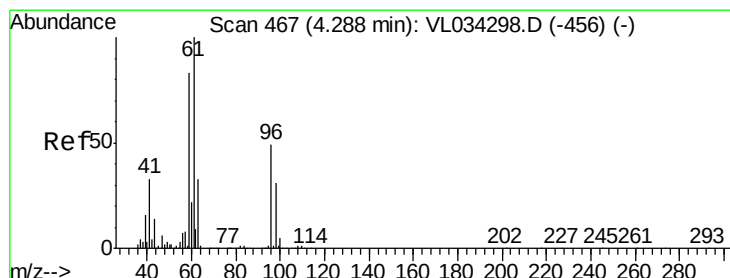
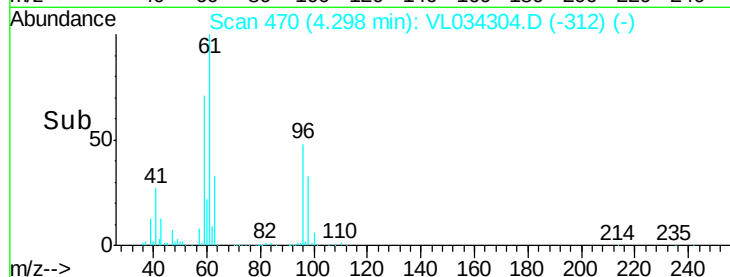
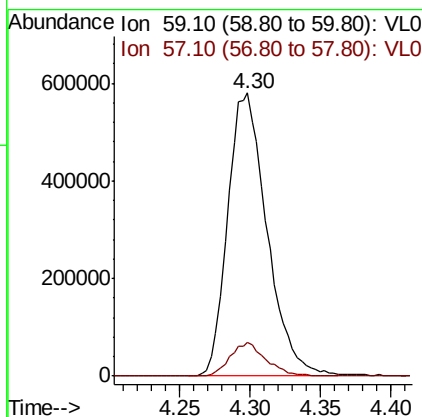
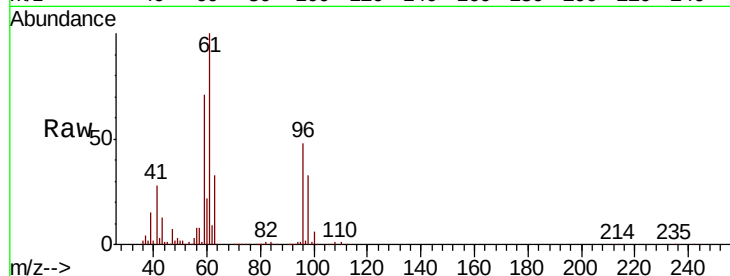
tert-Butyl alcohol
Concen: 11.394 ppbv
RT: 4.30 min Scan# 470
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 59 Resp: 1130384
Ion Ratio Lower Upper
59 100
57 11.0 8.8 13.2

Manual Integrations
APPROVED

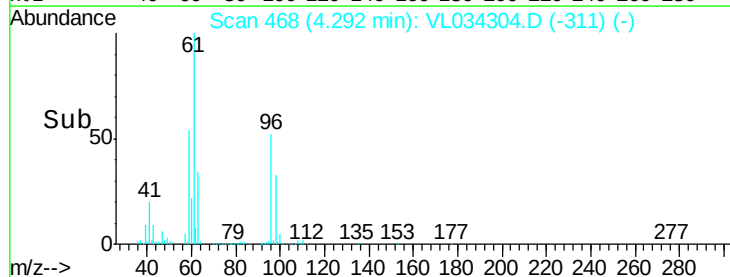
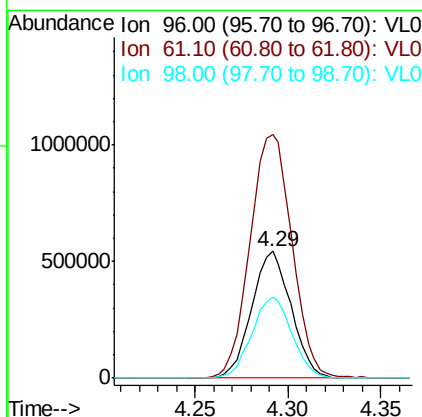
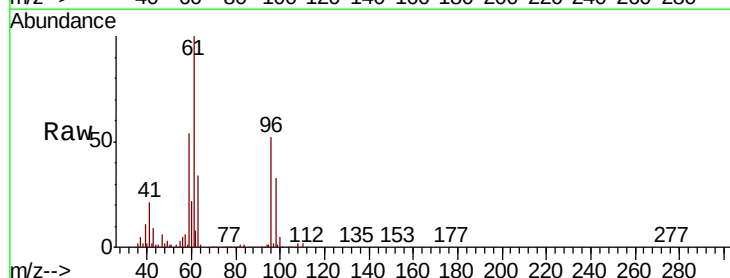
MMDadoda
10/18/2019 3:04:13 PM

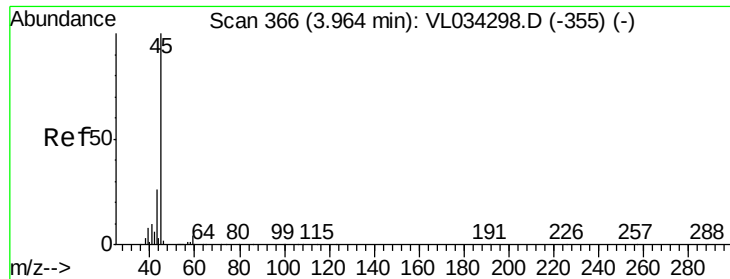


#18

1,1-Dichloroethene
Concen: 17.823 ppbv
RT: 4.29 min Scan# 468
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion: 96 Resp: 799103
Ion Ratio Lower Upper
96 100
61 192.0 164.5 246.7
98 63.9 51.7 77.5





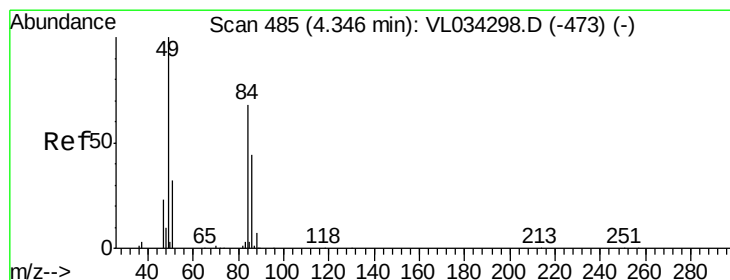
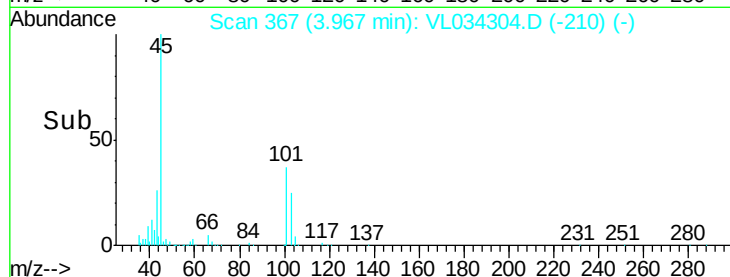
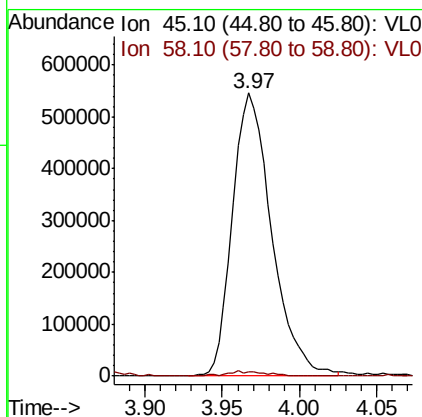
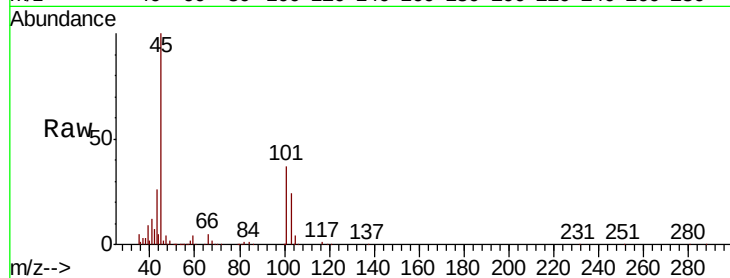
#19
Isopropyl Alcohol
Concen: 9.972 ppbv
RT: 3.97 min Scan# 367
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
45	100		
58	2.1	1.4	2.2

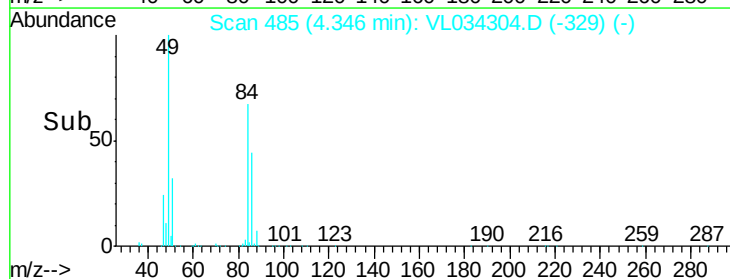
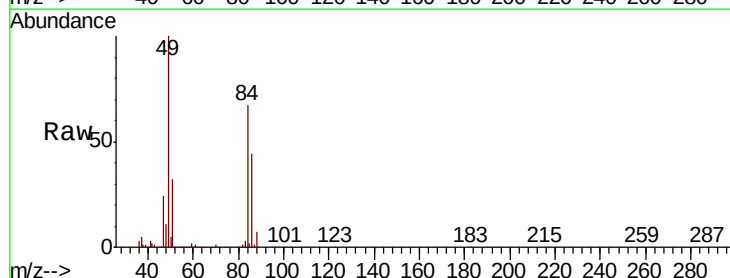
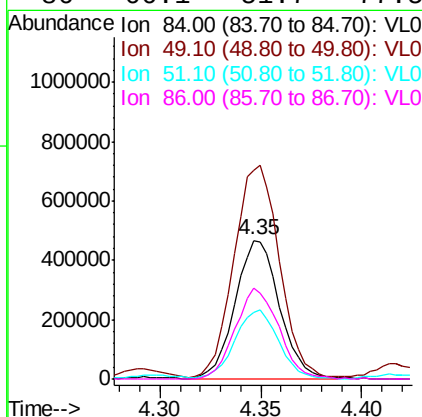
Manual Integrations
APPROVED

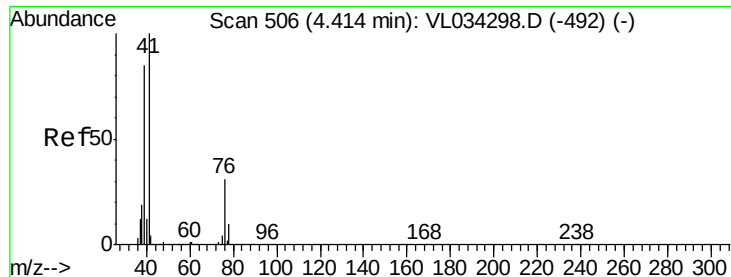
MMDadoda
10/18/2019 3:04:13 PM



#20
Methylene Chloride
Concen: 15.817 ppbv
RT: 4.35 min Scan# 485
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion	Ratio	Lower	Upper
84	100		
49	149.4	118.5	177.7
51	47.3	38.8	58.2
86	66.1	51.7	77.5





#21

Allvl Chloride

Concen: 15.958 ppbv

RT: 4.42 min Scan# 507

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 41 Resp: 1411265

Ion Ratio Lower Upper

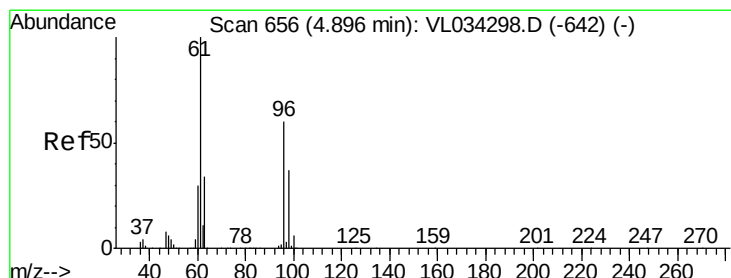
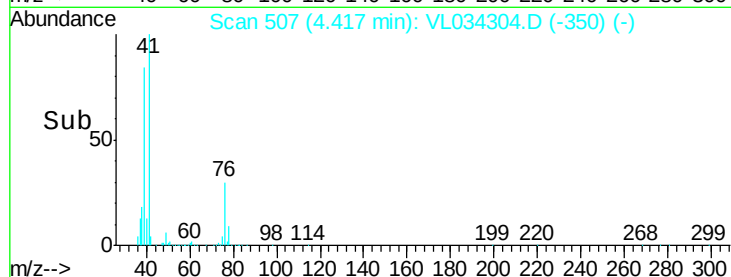
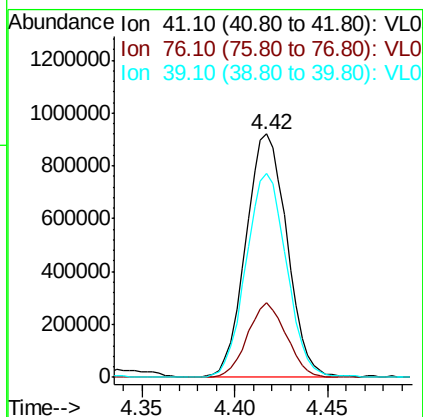
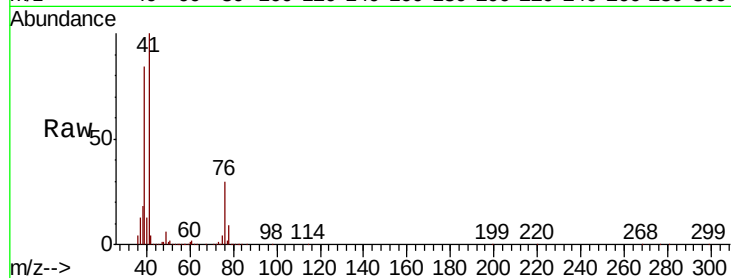
41 100

76 29.2 22.8 34.2

39 82.8 66.0 99.0

Manual Integrations
APPROVED

MMDadoda
10/18/2019 3:04:13 PM



#22

trans-1,2-Dichloroethene

Concen: 18.186 ppbv

RT: 4.90 min Scan# 657

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

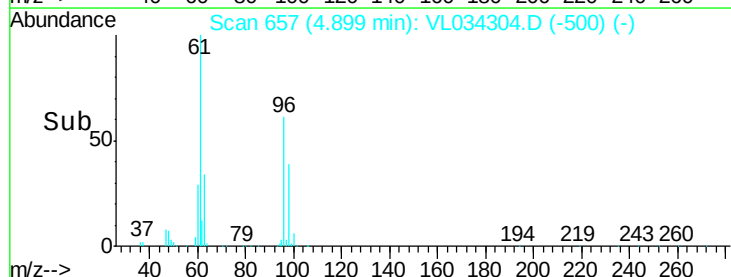
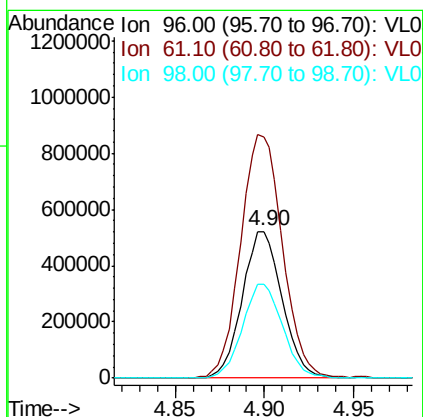
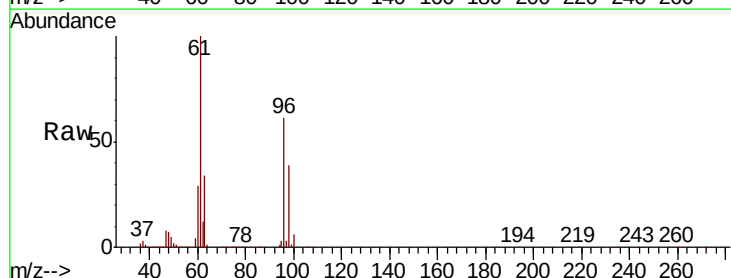
Tgt Ion: 96 Resp: 815805

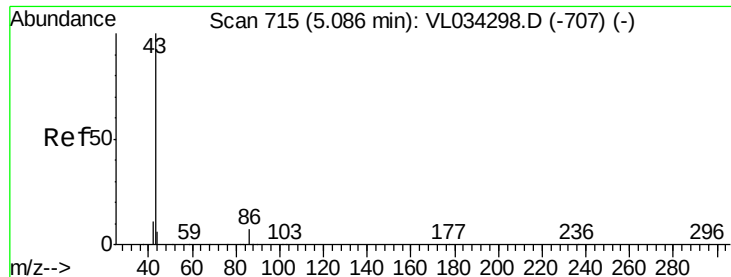
Ion Ratio Lower Upper

96 100

61 164.8 133.8 200.6

98 63.7 49.4 74.0





#23

Vinyl Acetate

Concen: 13.544 ppbv

RT: 5.09 min Scan# 716

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 43 Resp: 3124965

Ion Ratio Lower Upper

43 100

86 7.1 5.0 7.4

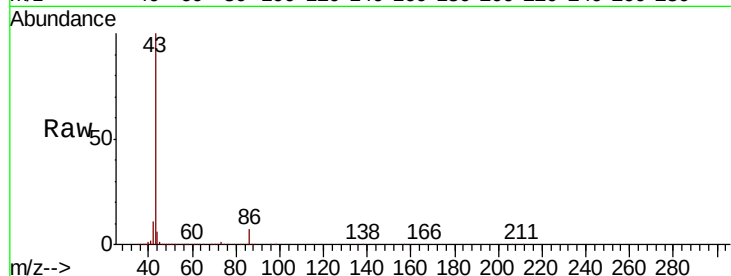
42 11.3 8.6 13.0

44 5.9 4.8 7.2

Manual Integrations
APPROVED

MMDadoda

10/18/2019 3:04:13 PM

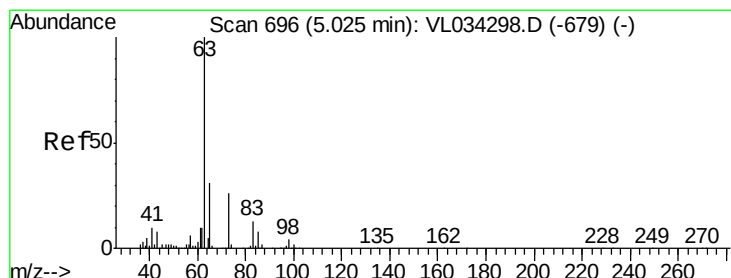
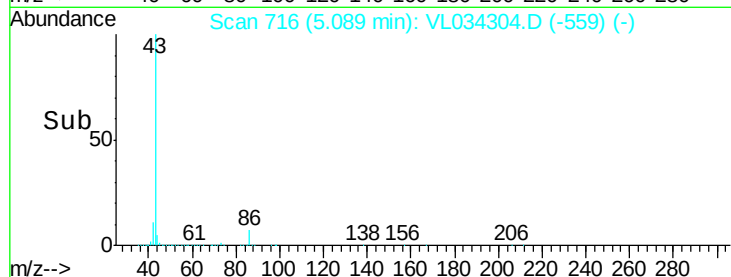
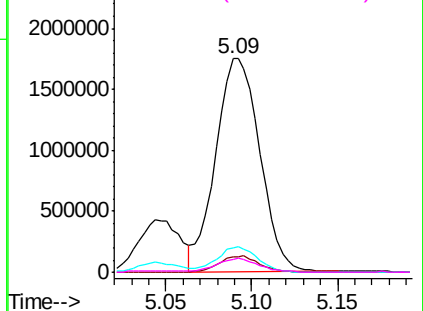


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 14.042 ppbv

RT: 5.03 min Scan# 697

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

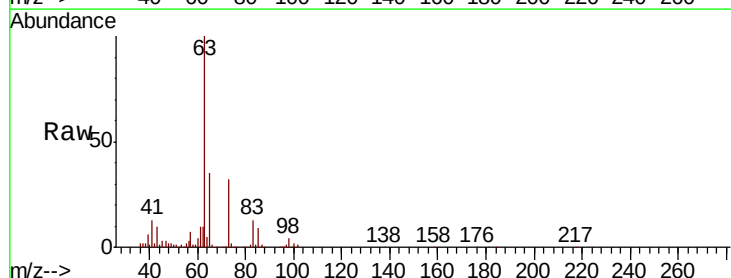
Tgt Ion: 63 Resp: 2181543

Ion Ratio Lower Upper

63 100

98 4.1 2.0 6.0

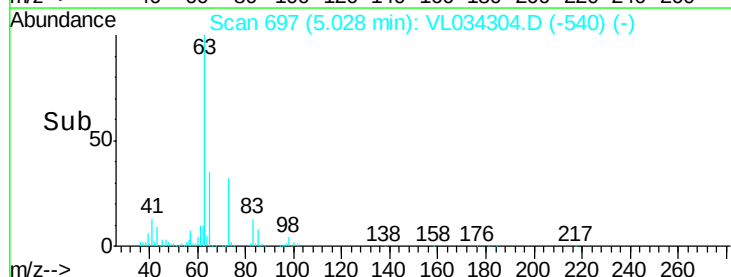
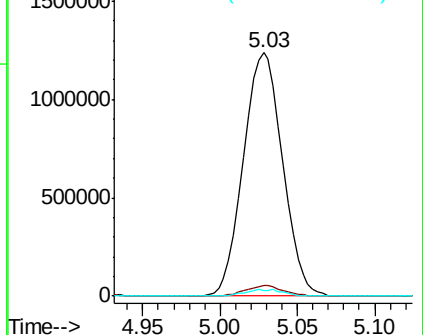
100 2.4 1.1 3.5

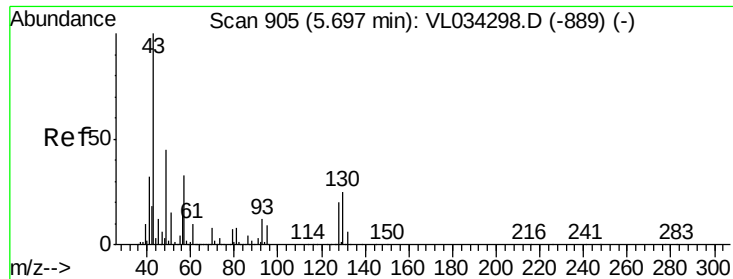


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0





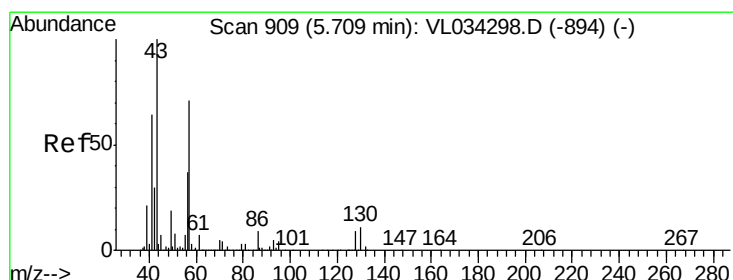
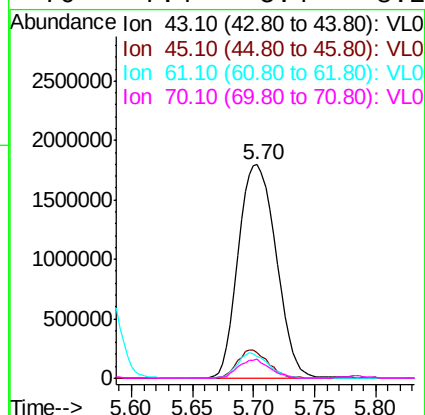
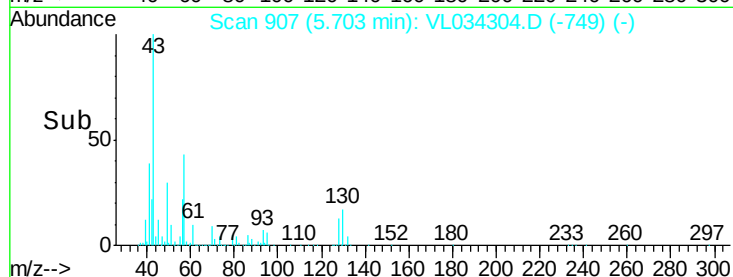
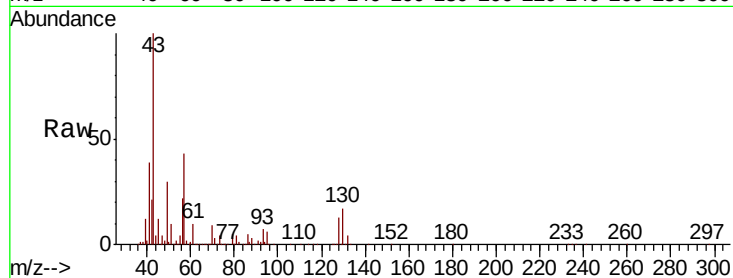
#25
Ethyl Acetate
Concen: 13.034 ppbv
RT: 5.70 min Scan# 907
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ion	Ratio	Lower	Upper
43	100			
45	10.9	8.3	12.5	
61	9.8	7.7	11.5	
70	7.4	5.4	8.2	

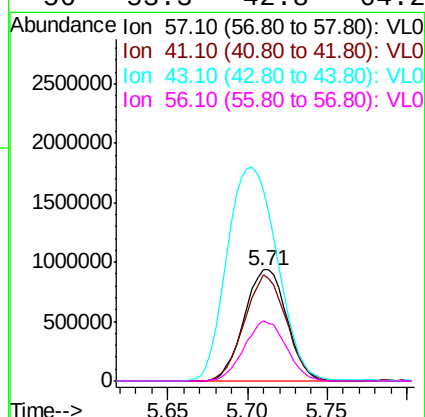
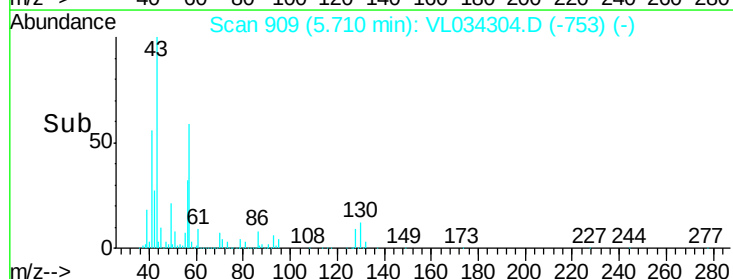
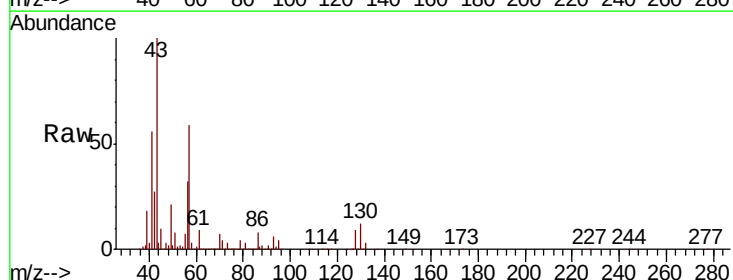
Manual Integrations
APPROVED

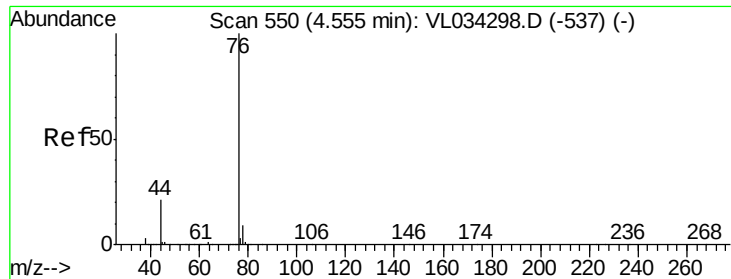
MMDadoda
10/18/2019 3:04:13 PM



#26
Hexane
Concen: 13.813 ppbv
RT: 5.71 min Scan# 909
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	93.8	76.5	114.7	
43	228.2	188.5	282.7	
56	53.3	42.8	64.2	





#27

Carbon Disulfide

Concen: 18.349 ppbv

RT: 4.56 min Scan# 550

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 76 Resp: 2084287

Ion Ratio Lower Upper

76 100

44 21.2 17.3 25.9

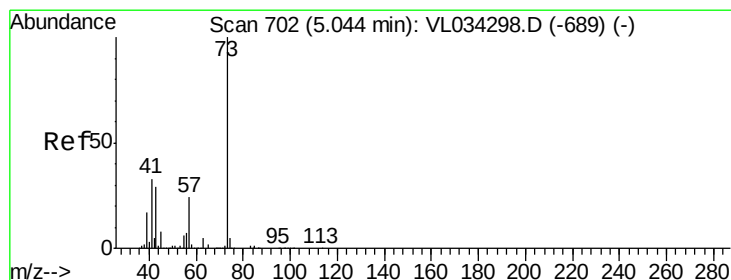
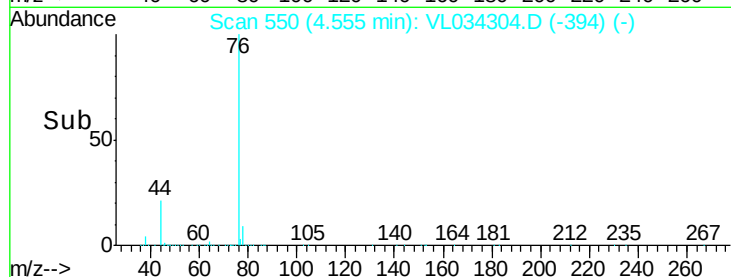
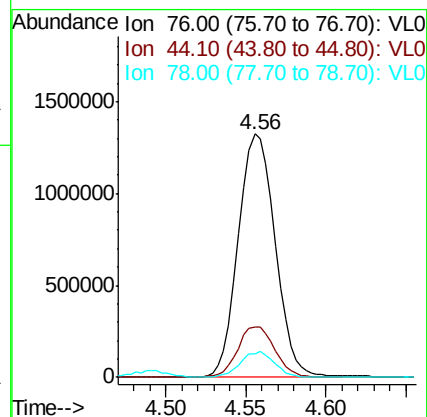
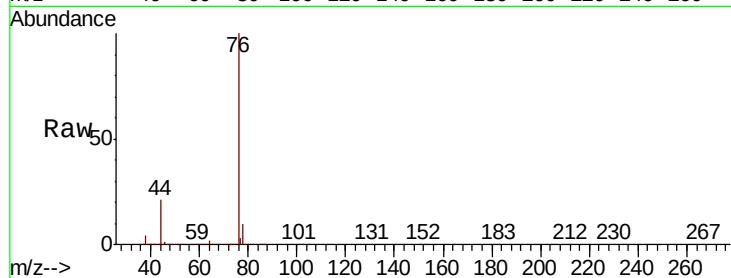
78 9.8 7.8 11.6

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#28

Methyl tert-Butyl Ether

Concen: 14.463 ppbv

RT: 5.05 min Scan# 703

Delta R.T. 0.00 min

Lab File: VL034304.D

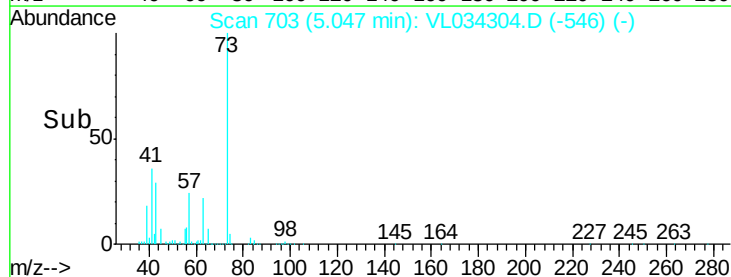
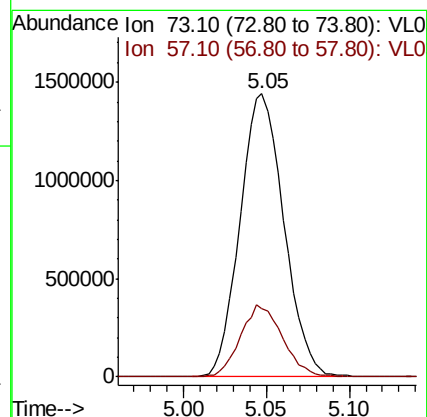
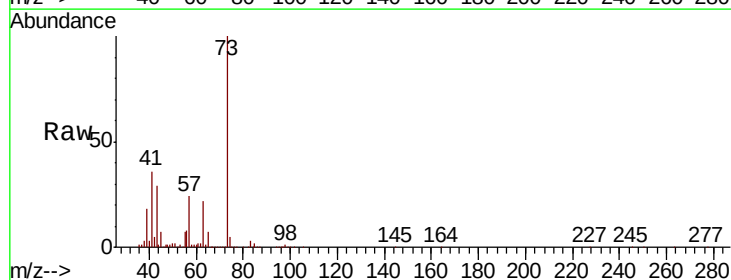
Acq: 16 Oct 2019 16:48

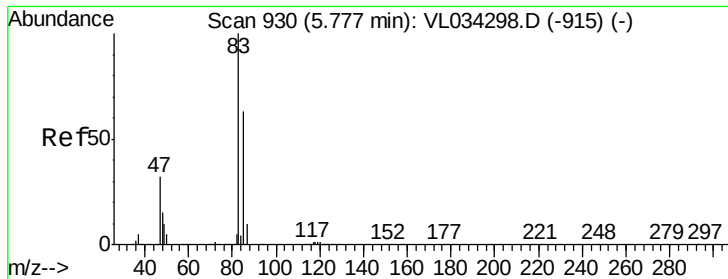
Tgt Ion: 73 Resp: 2645604

Ion Ratio Lower Upper

73 100

57 24.6 19.2 28.8





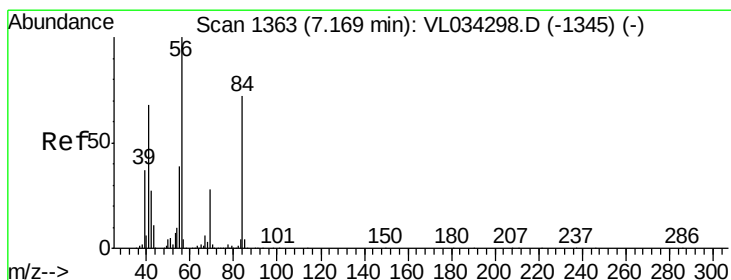
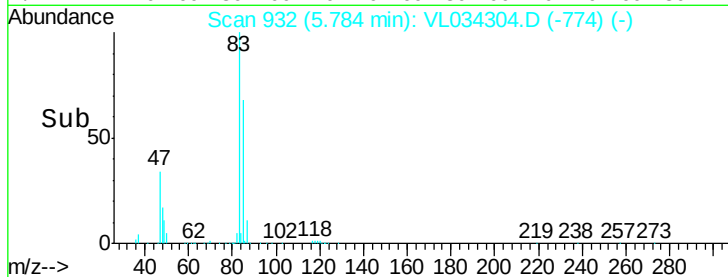
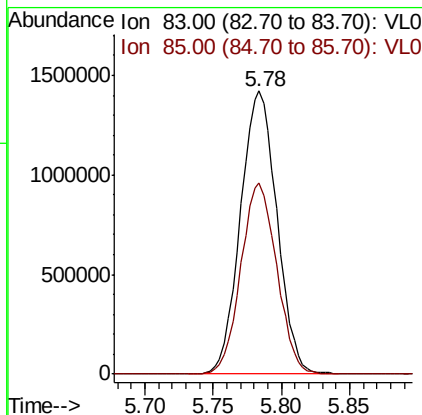
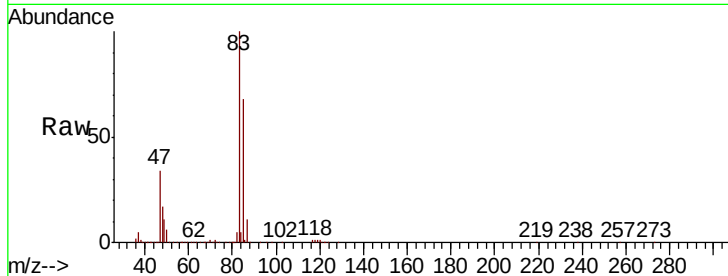
#29
Chloroform
Concen: 14.990 ppbv
RT: 5.78 min Scan# 932
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 83 Resp: 2638168
Ion Ratio Lower Upper
83 100
85 67.5 50.5 75.7

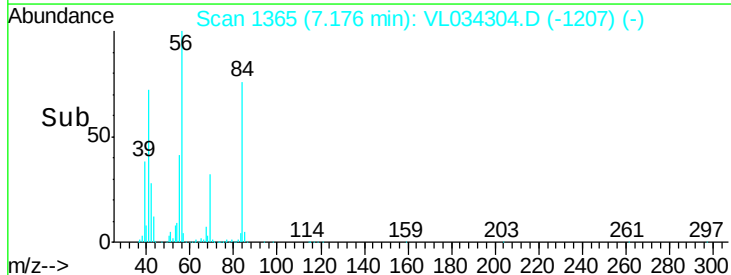
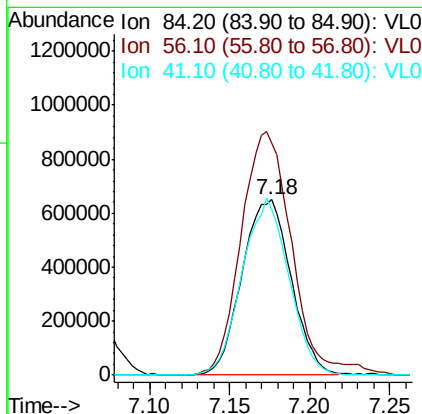
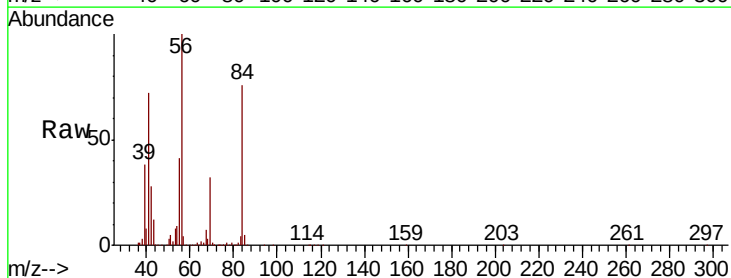
Manual Integrations
APPROVED

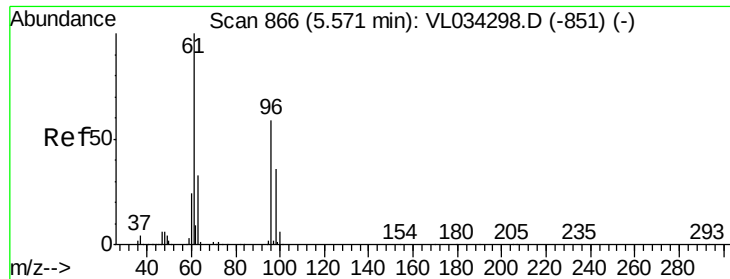
MMDadoda
10/18/2019 3:04:13 PM



#30
Cyclohexane
Concen: 15.277 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion: 84 Resp: 1358457
Ion Ratio Lower Upper
84 100
56 144.5 119.4 179.0
41 96.8 78.7 118.1





#31

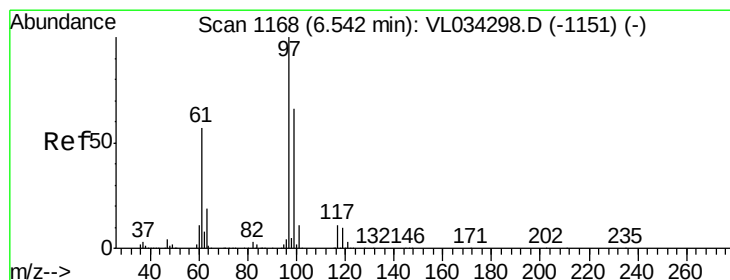
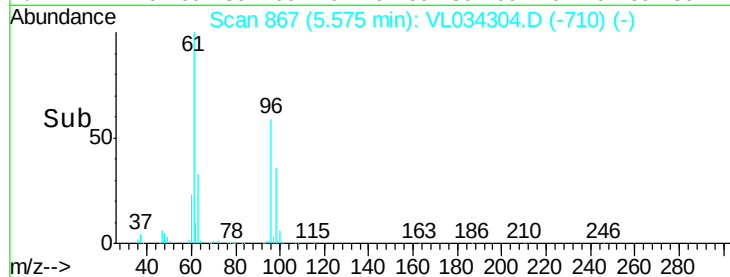
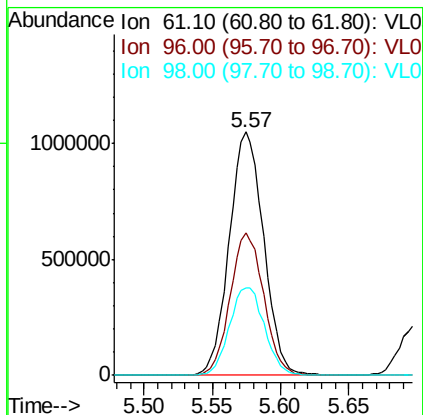
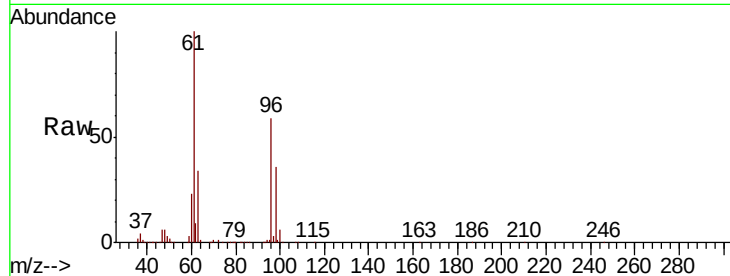
cis-1,2-Dichloroethene
 Concen: 14.651 ppbv
 RT: 5.57 min Scan# 867
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
61	100		
96	58.5	47.5	71.3
98	35.9	28.8	43.2

Manual Integrations
 APPROVED

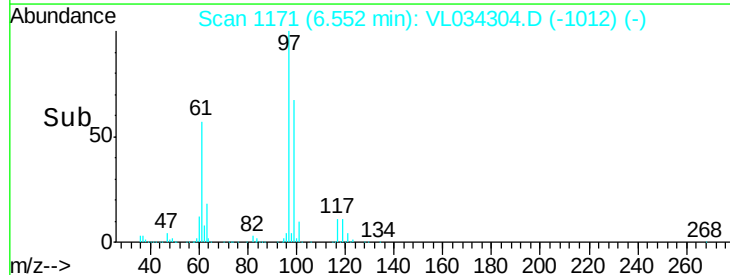
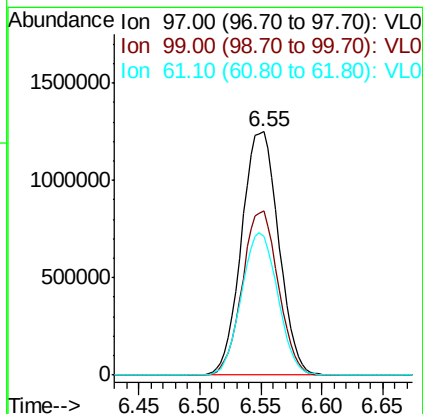
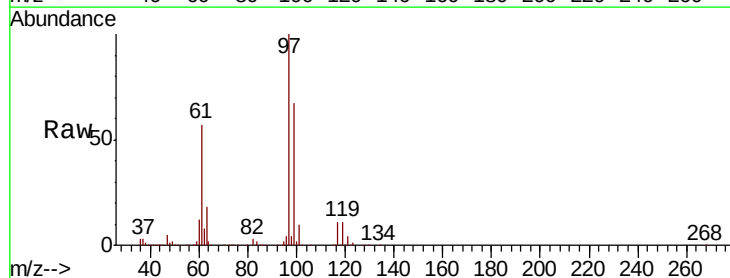
MMDadoda
 10/18/2019 3:04:13 PM

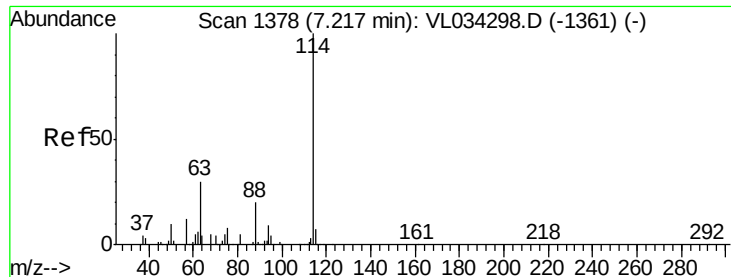


#32

1,1,1-Trichloroethane
 Concen: 15.458 ppbv
 RT: 6.55 min Scan# 1171
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion	Ratio	Lower	Upper
97	100		
99	65.7	52.6	78.8
61	57.3	44.5	66.7





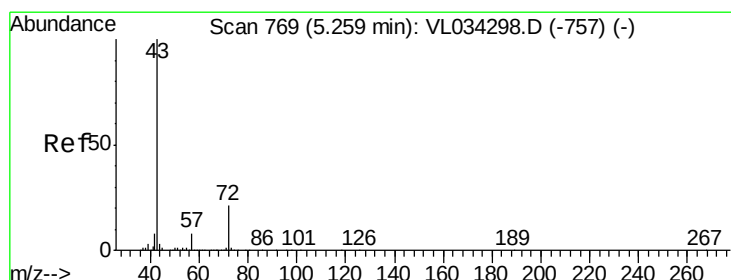
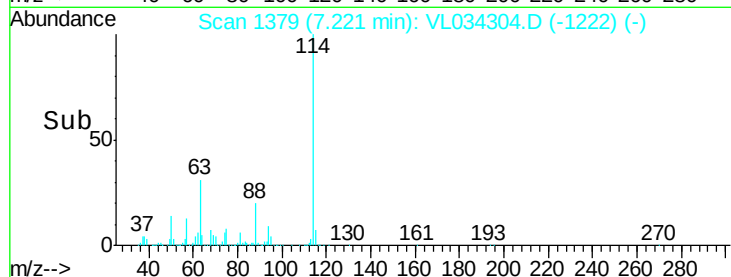
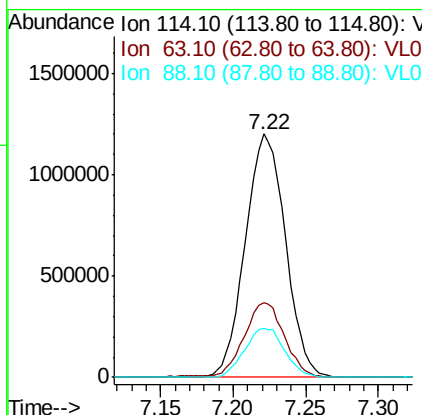
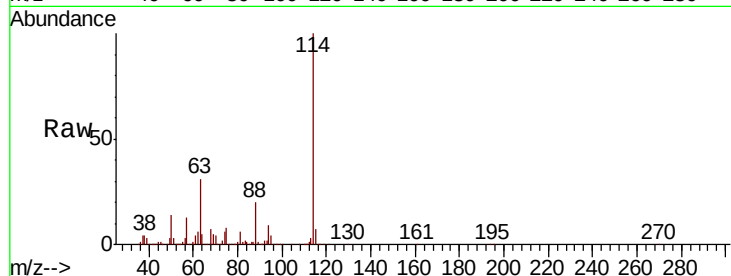
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.22 min Scan# 1379
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
114	100		
63	31.5	25.2	37.8
88	20.2	16.0	24.0

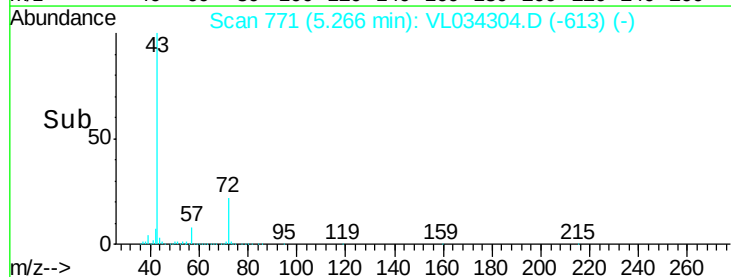
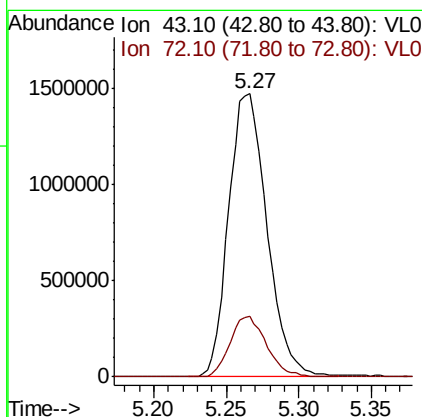
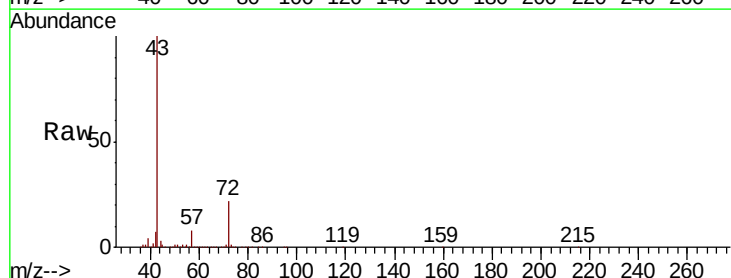
Manual Integrations
 APPROVED

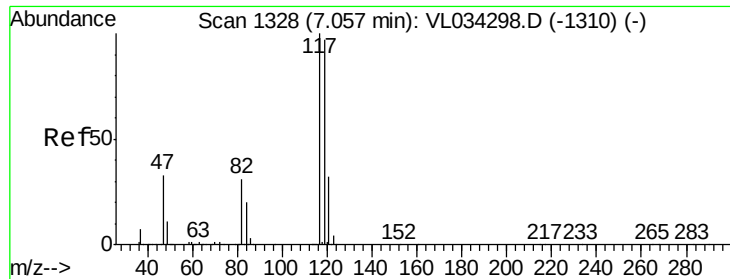
MMDadoda
 10/18/2019 3:04:13 PM



#34
 2-Butanone
 Concen: 11.343 ppbv
 RT: 5.27 min Scan# 771
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.6	16.3	24.5





#35

Carbon Tetrachloride

Concen: 14.352 ppbv

RT: 7.06 min Scan# 1329

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:117 Resp: 2759622

Ion Ratio Lower Upper

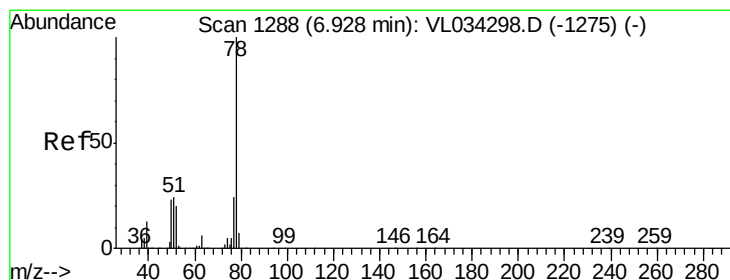
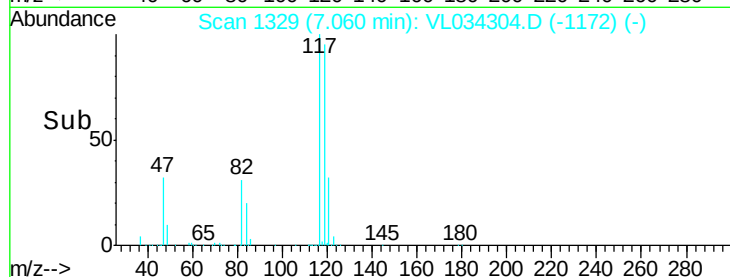
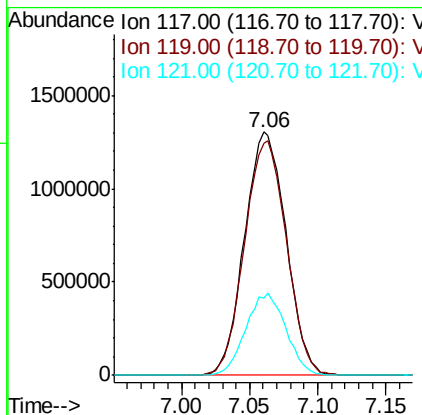
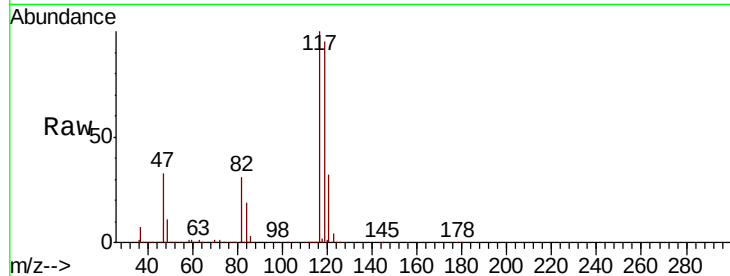
117 100

119 95.4 77.3 115.9

121 32.0 25.5 38.3

Manual Integrations
APPROVED

MMDadoda
10/18/2019 3:04:13 PM



#36

Benzene

Concen: 12.233 ppbv

RT: 6.93 min Scan# 1290

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

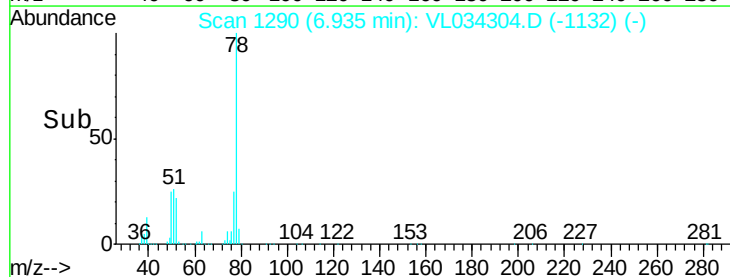
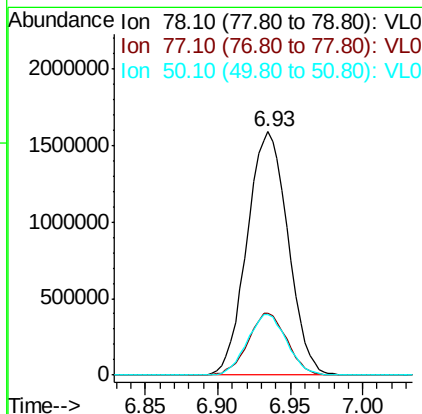
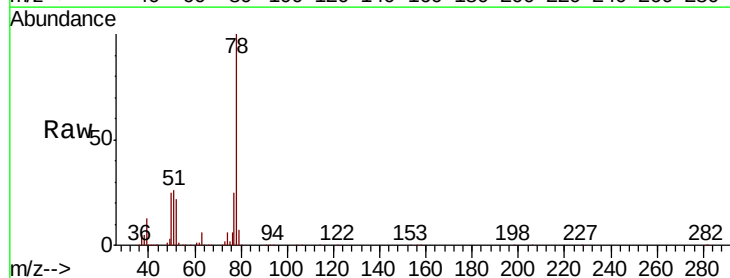
Tgt Ion: 78 Resp: 3126870

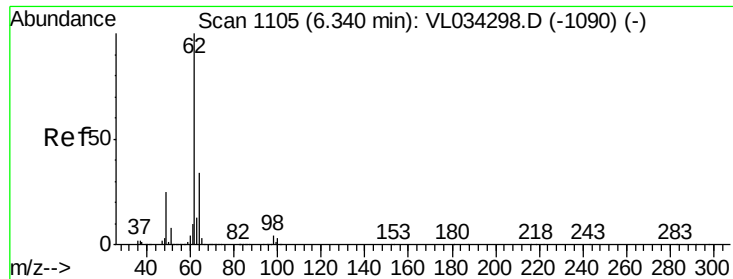
Ion Ratio Lower Upper

78 100

77 25.2 19.0 28.4

50 24.7 18.6 27.8





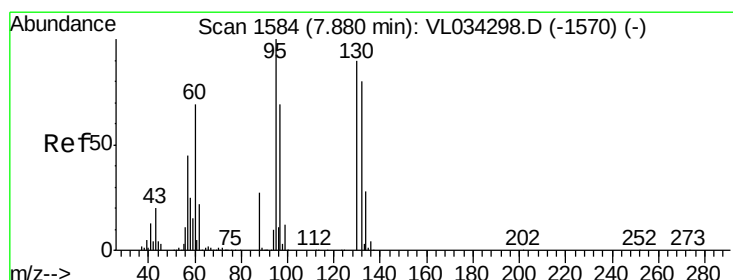
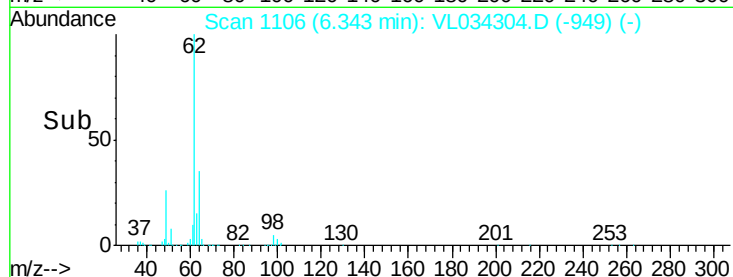
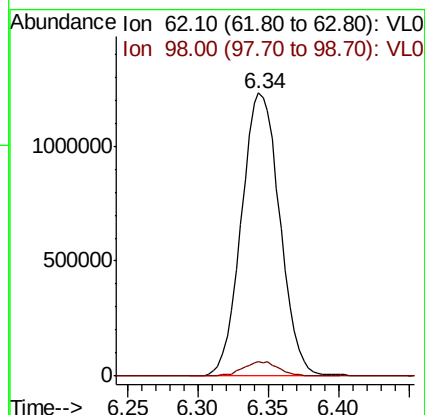
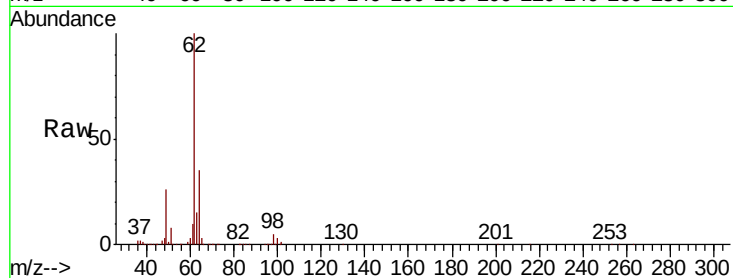
#37
 1,2-Dichloroethane
 Concen: 12.918 ppbv
 RT: 6.34 min Scan# 1106
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion: 62 Resp: 2348621
 Ion Ratio Lower Upper
 62 100
 98 4.8 3.8 5.6

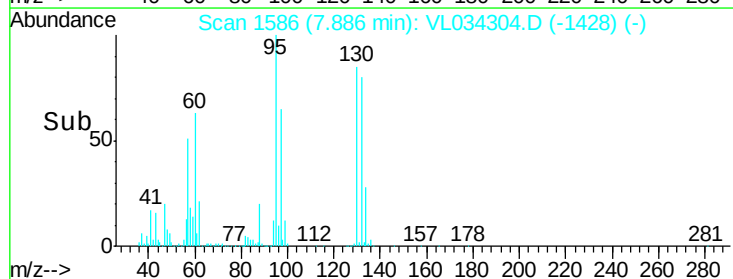
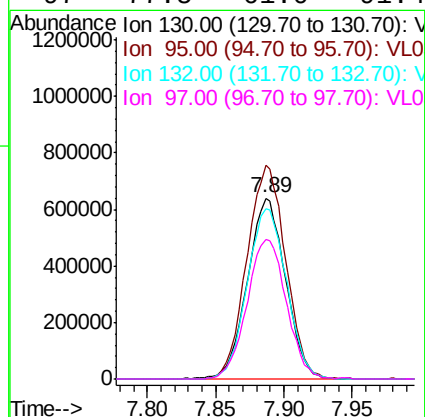
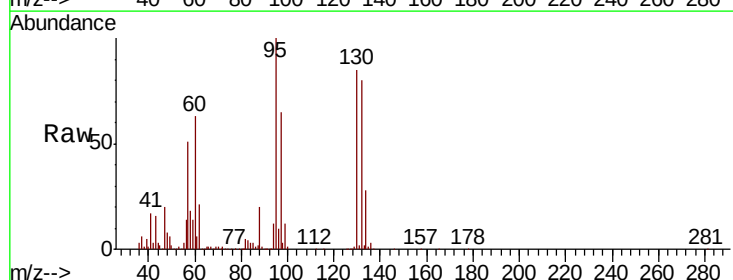
Manual Integrations
 APPROVED

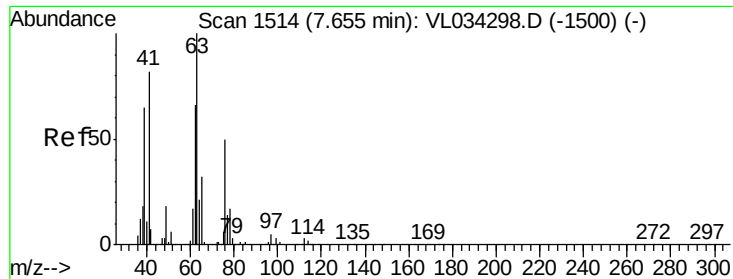
MMDadoda
 10/18/2019 3:04:13 PM



#38
 Trichloroethene
 Concen: 13.500 ppbv
 RT: 7.89 min Scan# 1586
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion: 130 Resp: 1232976
 Ion Ratio Lower Upper
 130 100
 95 118.5 88.6 132.8
 132 94.3 71.2 106.8
 97 77.5 61.0 91.4





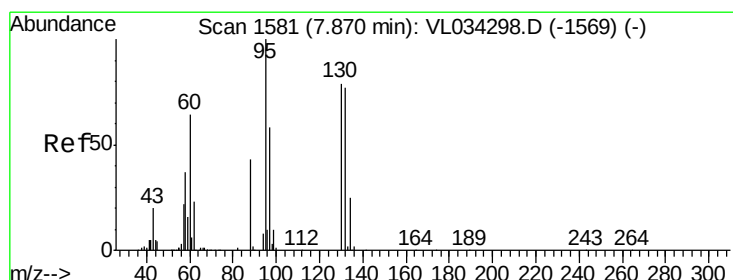
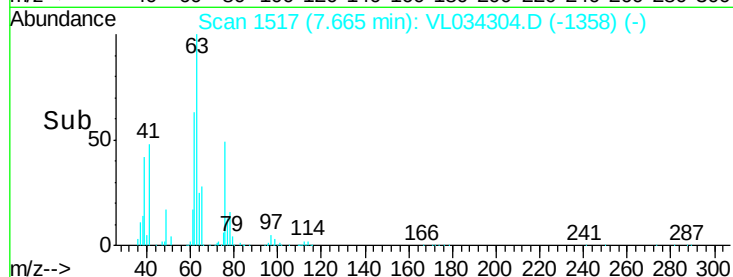
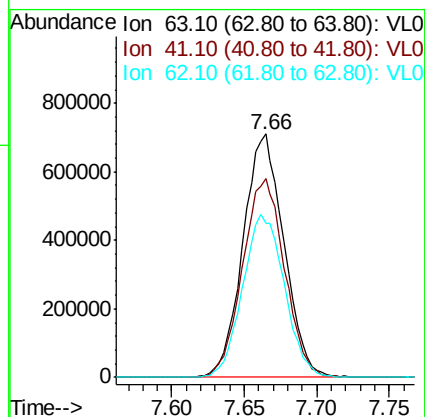
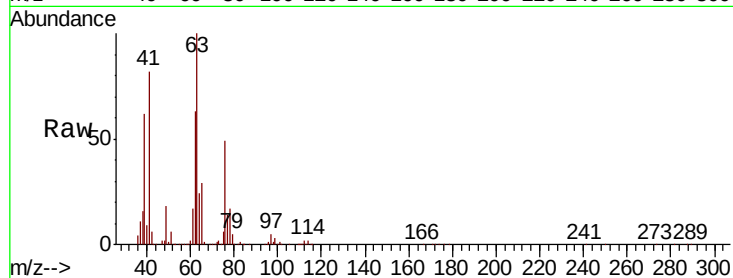
#39
 1,2-Dichloropropane
 Concen: 12.080 ppbv
 RT: 7.66 min Scan# 1517
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
63	100		
41	81.9	65.6	98.4
62	63.2	53.0	79.6

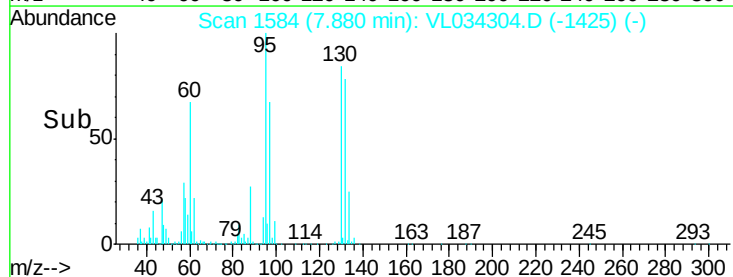
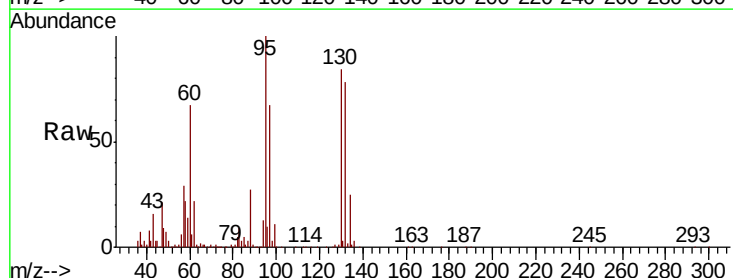
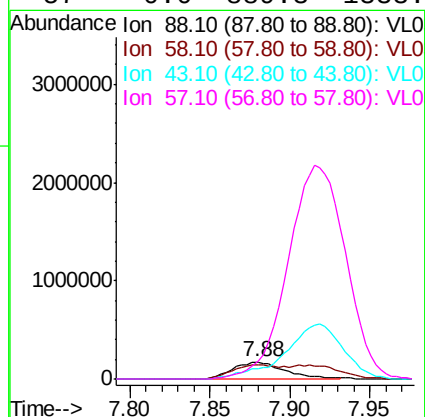
Manual Integrations
 APPROVED

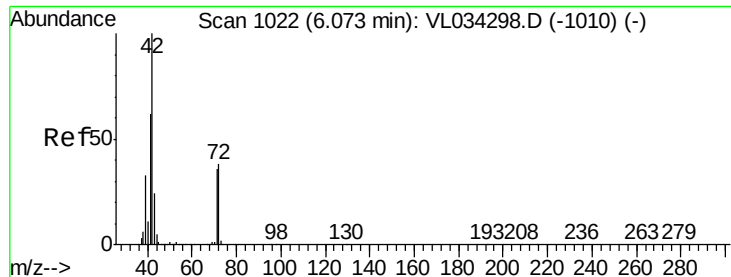
MMDadoda
 10/18/2019 3:04:13 PM



#40
 1,4-Dioxane
 Concen: 10.016 ppbv
 RT: 7.88 min Scan# 1584
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion	Ratio	Lower	Upper
88	100		
58	79.7	110.3	165.5#
43	0.0	228.1	342.1#
57	0.0	889.3	1333.9#





#41

Tetrahydrofuran

Concen: 11.868 ppbv

RT: 6.07 min Scan# 1022

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 42 Resp: 1579576

Ion Ratio Lower Upper

42 100

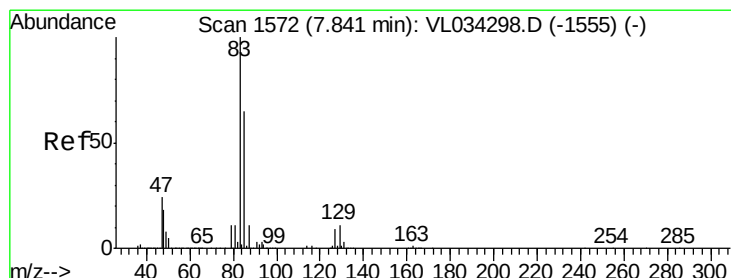
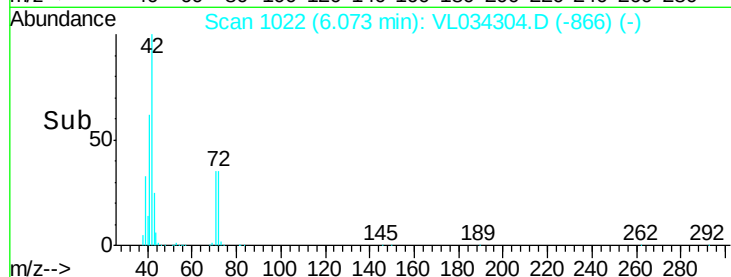
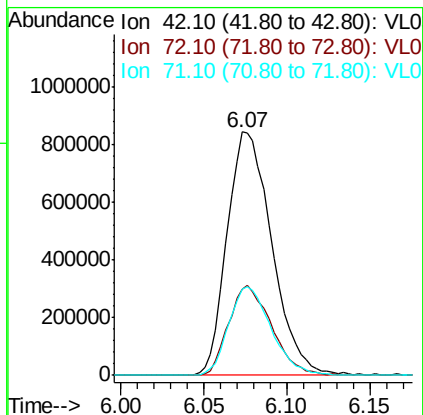
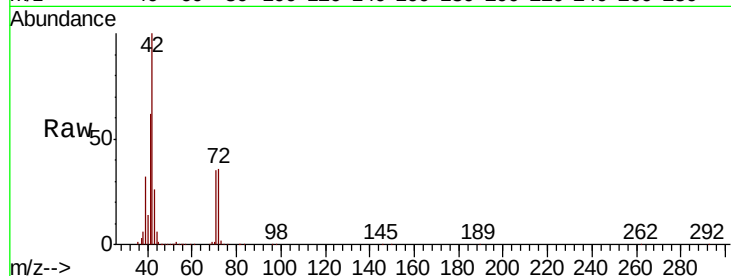
72 35.8 28.0 42.0

71 34.8 27.3 40.9

Manual Integrations
APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#42

Bromodichloromethane

Concen: 13.350 ppbv

RT: 7.84 min Scan# 1573

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

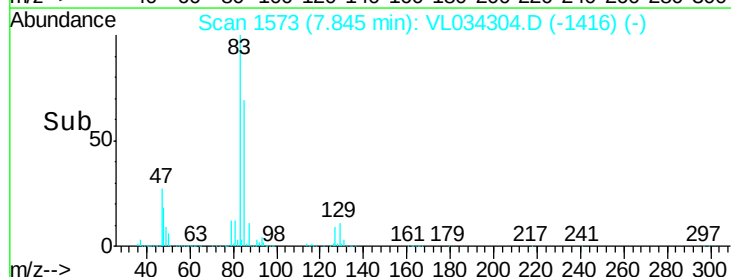
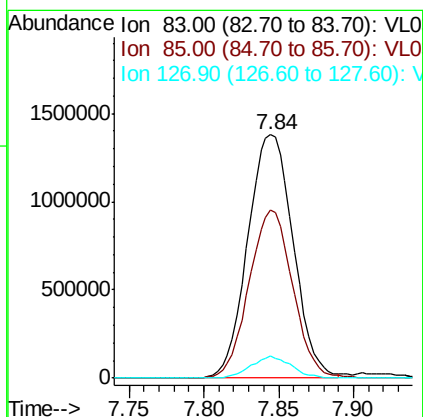
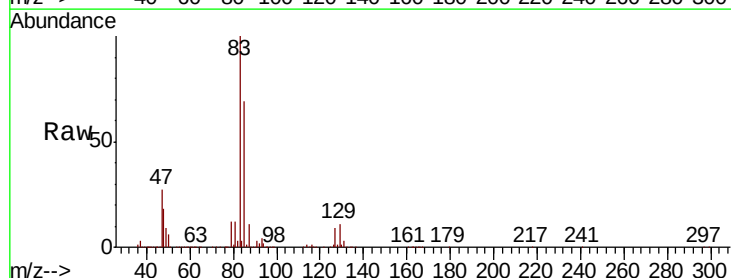
Tgt Ion: 83 Resp: 2912846

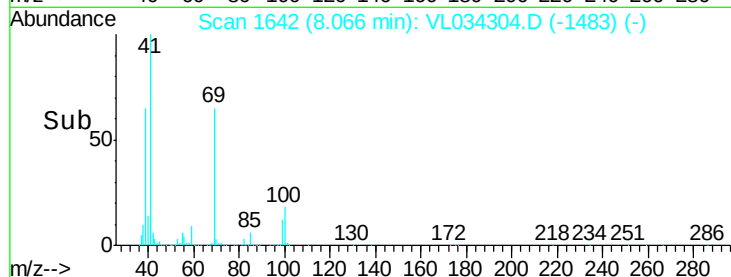
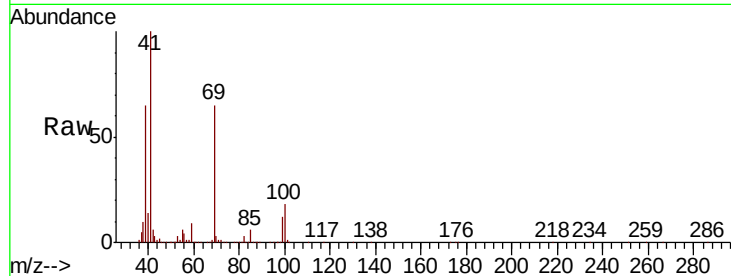
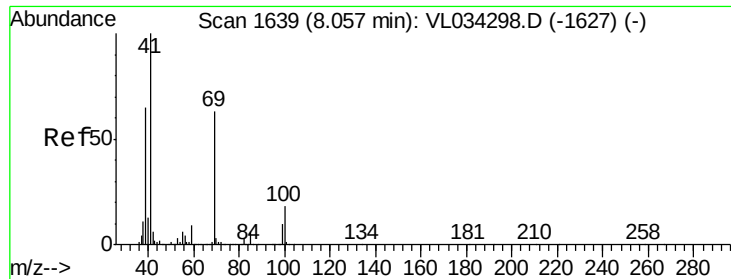
Ion Ratio Lower Upper

83 100

85 69.2 51.8 77.6

127 9.1 7.0 10.6





#43

Methyl Methacrylate

Concen: 13.625 ppbv

RT: 8.07 min Scan# 1642

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Tot Ion:	69	Resp:	1438744
Ion	Ratio	Lower	Upper
69	100		
41	159.3	132.1	198.1
100	28.6	23.2	34.8

Instrument :

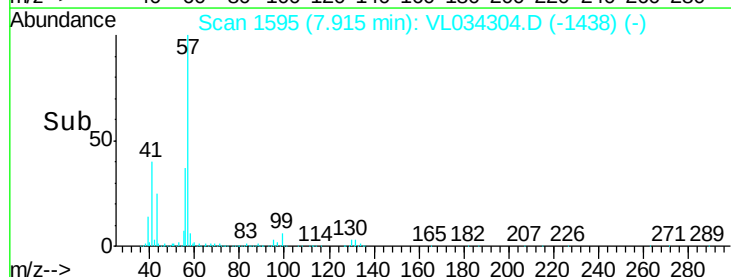
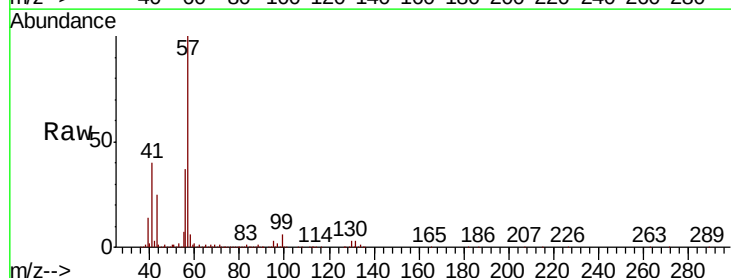
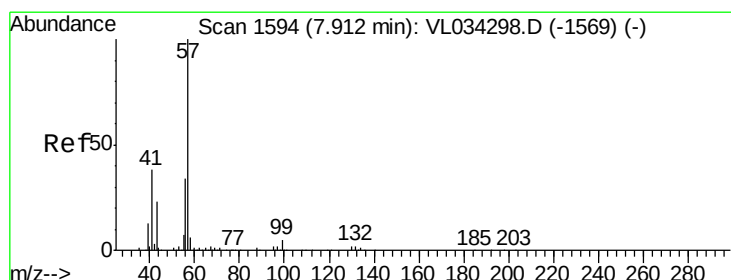
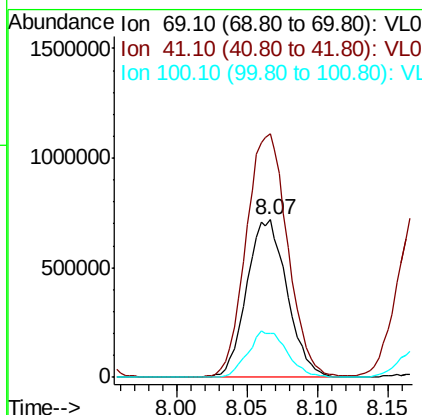
MSVOA_L

ClientSampled :

VSTDIC015

Manual Integrations
APPROVED

MMDadoda
10/18/2019 3:04:13 PM



#44

2,2,4-Trimethylpentane

Concen: 11.131 ppbv

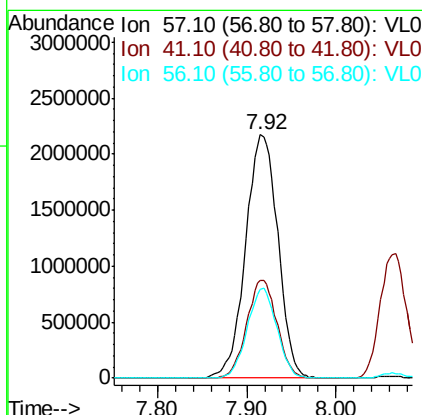
RT: 7.92 min Scan# 1595

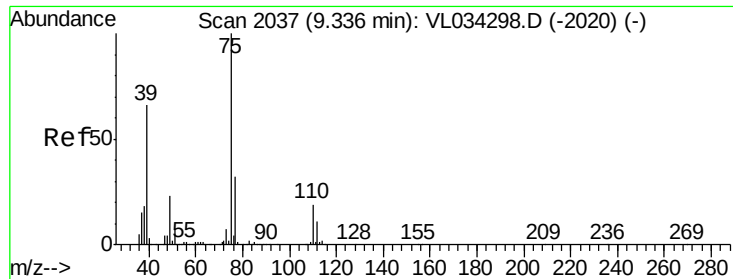
Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Tgt Ion:	57	Resp:	5477307
Ion	Ratio	Lower	Upper
57	100		
41	37.8	29.3	43.9
56	33.8	25.3	37.9





#45

t-1,3-Dichloropropene

Concen: 15.923 ppbv

RT: 9.34 min Scan# 2038

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 75 Resp: 1988069

Ion Ratio Lower Upper

75 100

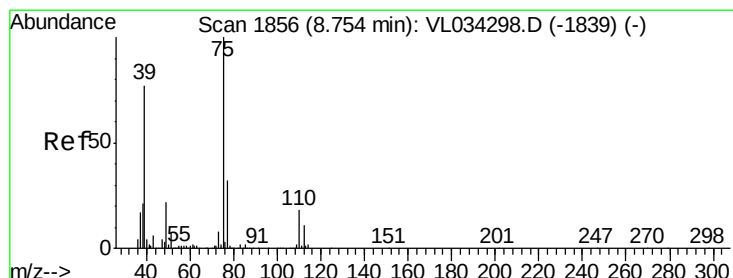
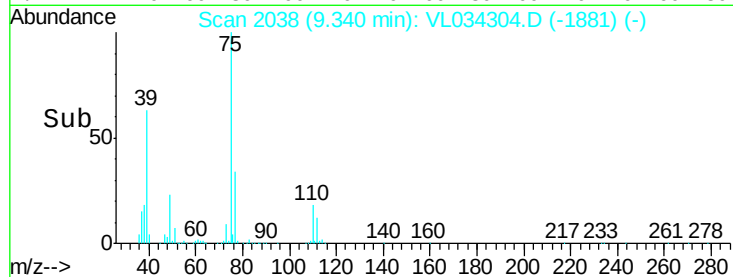
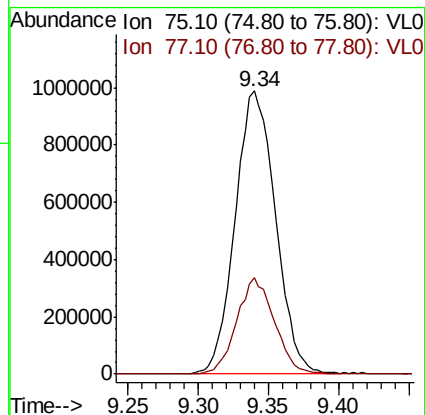
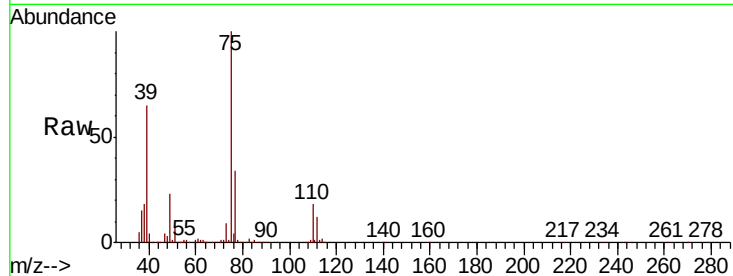
77 34.2 25.6 38.4

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#46

cis-1,3-Dichloropropene

Concen: 14.291 ppbv

RT: 8.76 min Scan# 1858

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

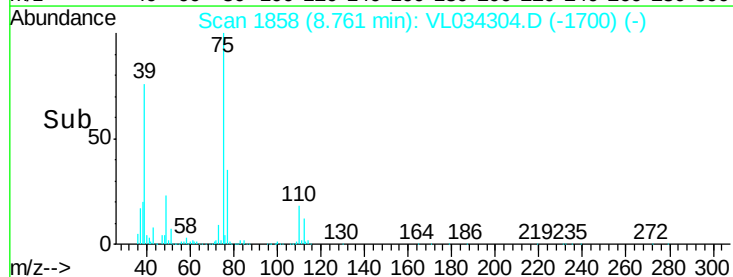
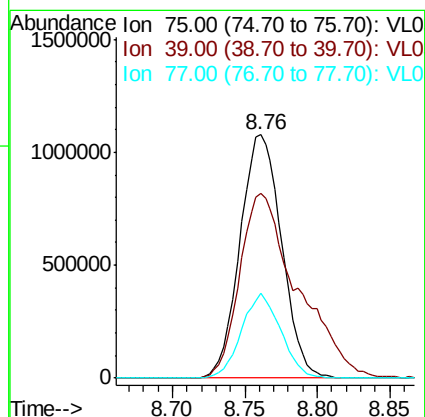
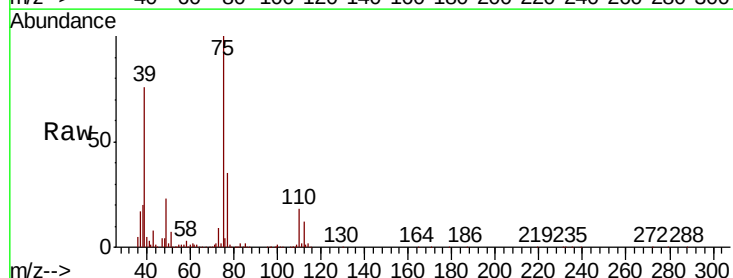
Tgt Ion: 75 Resp: 2146234

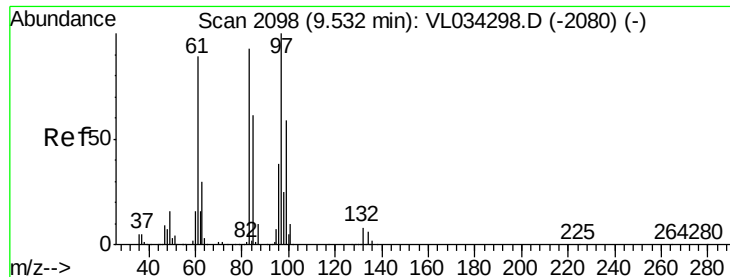
Ion Ratio Lower Upper

75 100

39 75.6 61.2 91.8

77 35.0 25.9 38.9





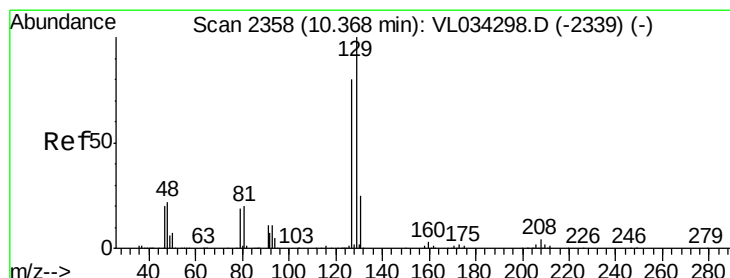
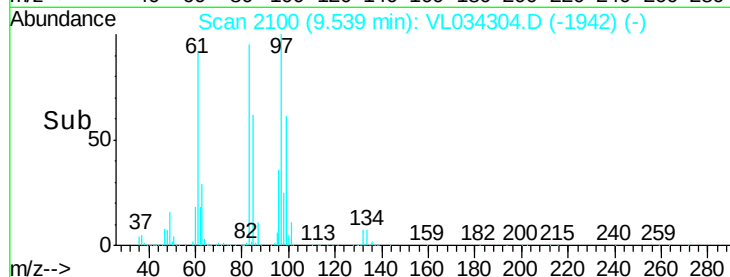
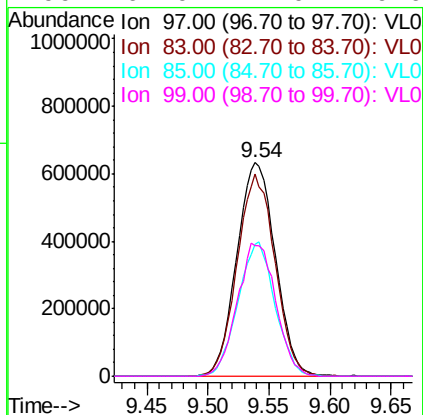
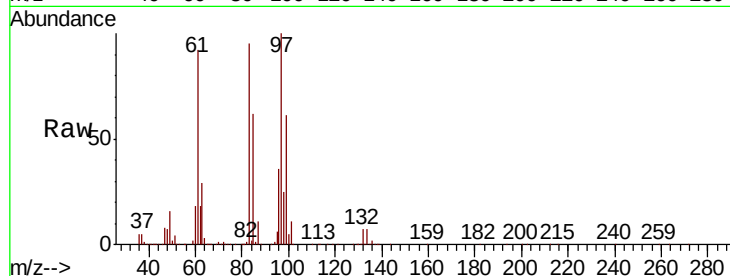
#47
 1,1,2-Trichloroethane
 Concen: 13.422 ppbv
 RT: 9.54 min Scan# 2100
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleID :
 VSTDIC015

Tot Ion	Ion	Ratio	Lower	Upper
97	100			
83	94.8	74.2	111.2	
85	61.8	48.6	73.0	
99	61.0	47.0	70.6	

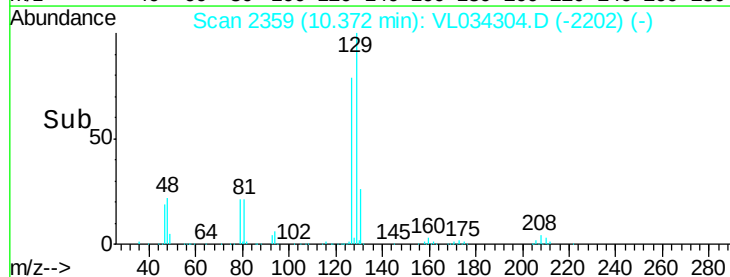
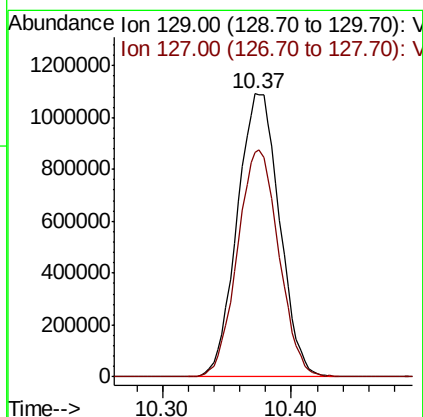
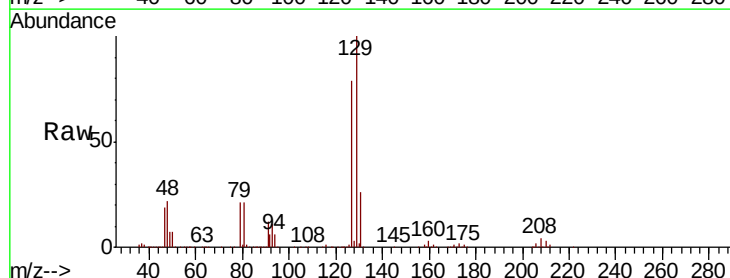
Manual Integrations
 APPROVED

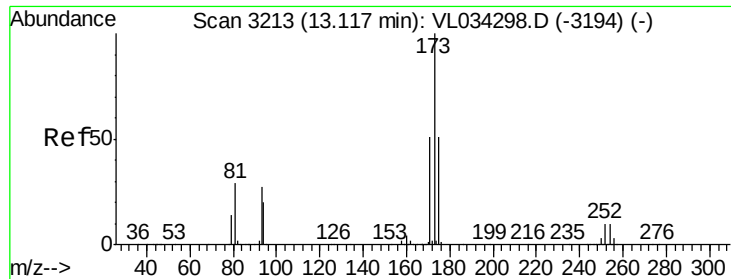
MMDadoda
 10/18/2019 3:04:13 PM



#48
 Dibromochloromethane
 Concen: 15.190 ppbv
 RT: 10.37 min Scan# 2359
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion	Ion	Ratio	Lower	Upper
129	100			
127	78.9	39.7	119.1	





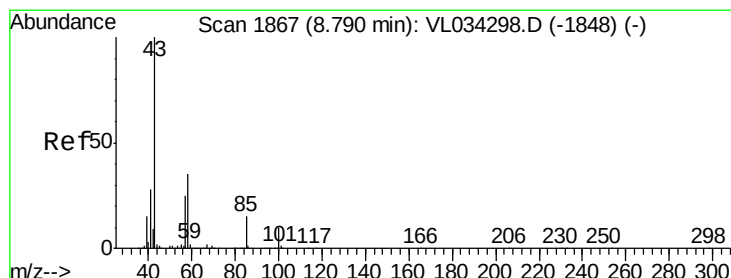
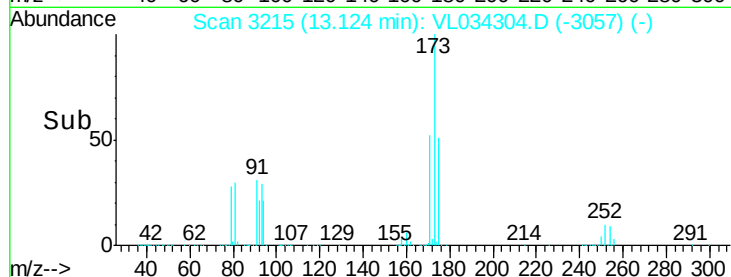
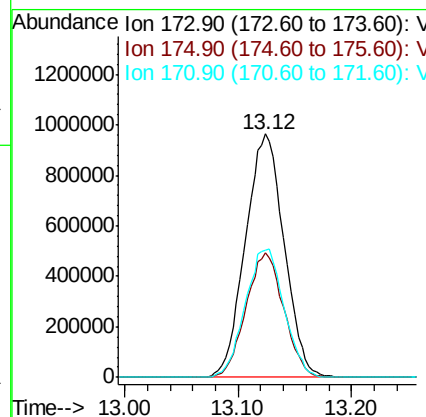
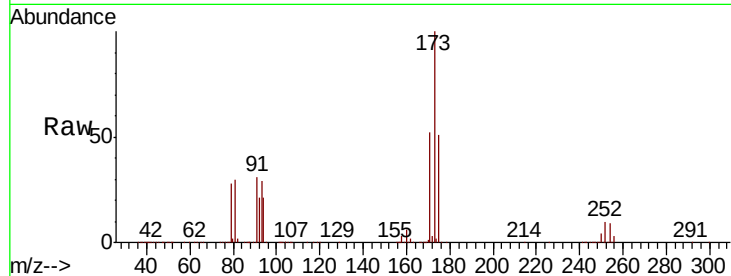
#49
Bromoform
Concen: 17.346 ppbv
RT: 13.12 min Scan# 3215
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion:173 Resp: 2294501
Ion Ratio Lower Upper
173 100
175 49.9 39.8 59.6
171 52.9 41.8 62.6

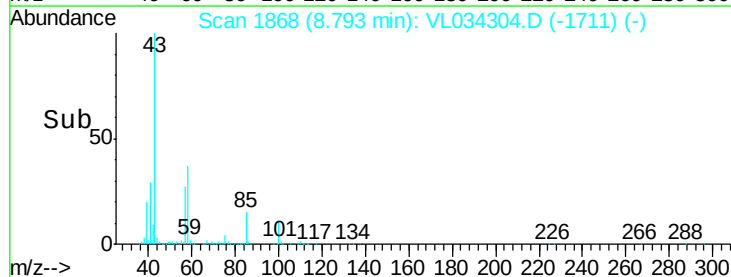
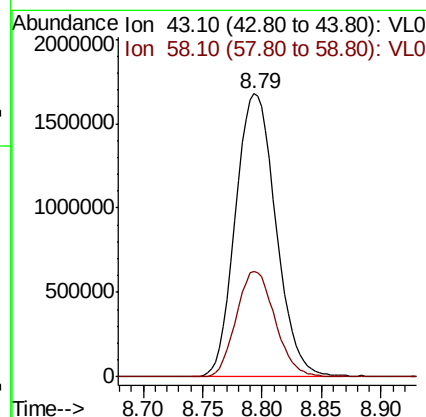
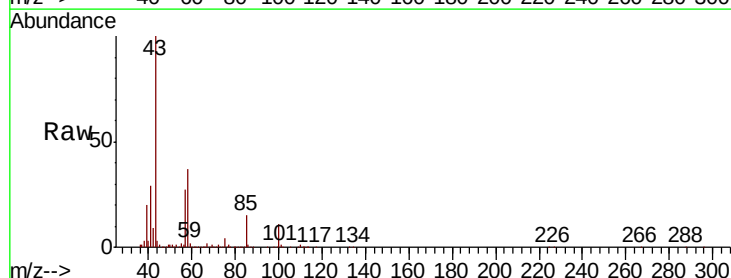
Manual Integrations
APPROVED

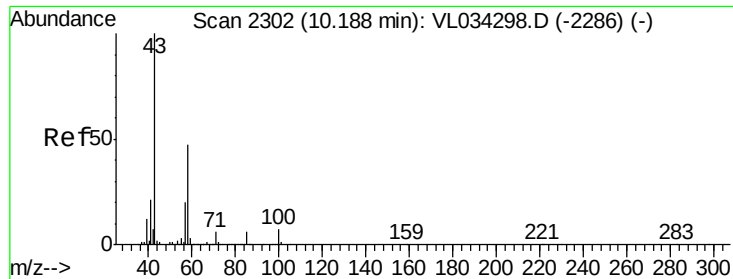
MMDadoda
10/18/2019 3:04:13 PM



#50
4-Methyl-2-Pentanone
Concen: 11.475 ppbv
RT: 8.79 min Scan# 1868
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion: 43 Resp: 3946591
Ion Ratio Lower Upper
43 100
58 36.0 27.6 41.4





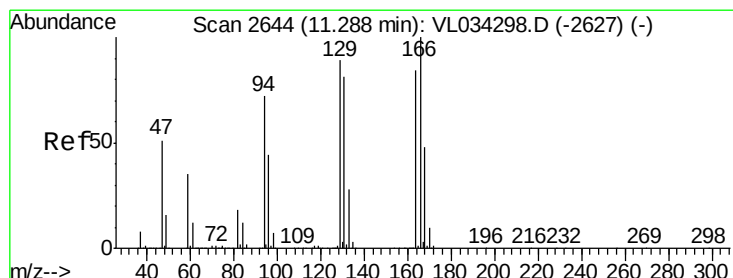
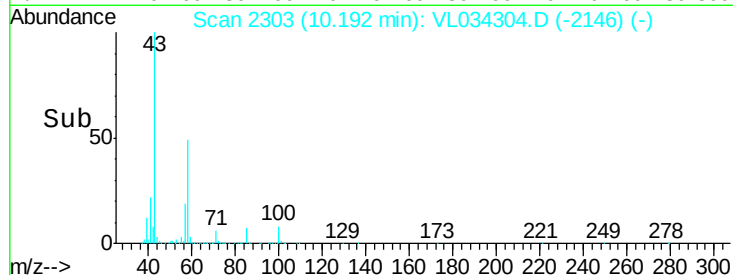
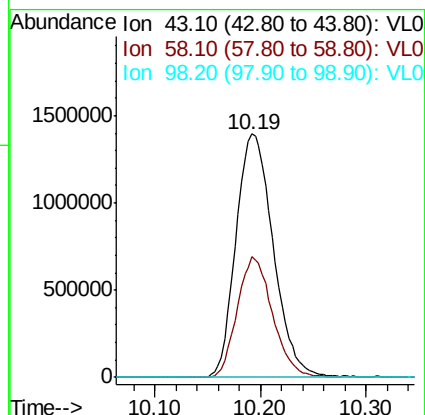
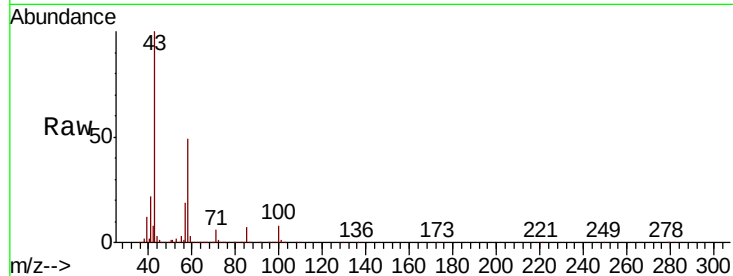
#51
2-Hexanone
Concen: 11.887 ppbv
RT: 10.19 min Scan# 2303
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 43 Resp: 3430853
Ion Ratio Lower Upper
43 100
58 46.9 37.0 55.6
98 0.1 0.2 0.2#

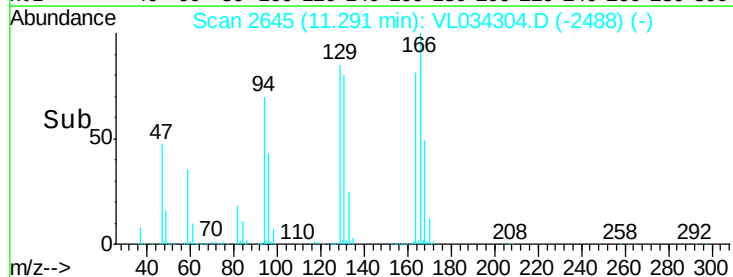
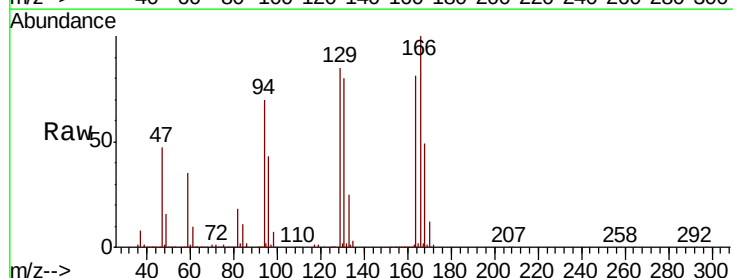
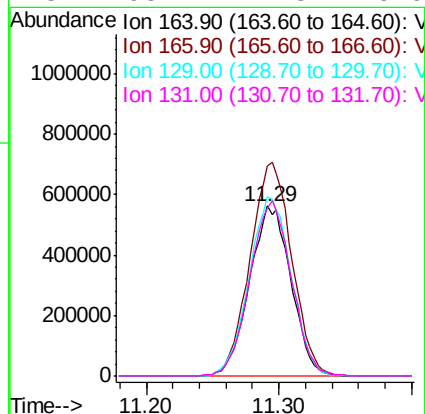
Manual Integrations
APPROVED

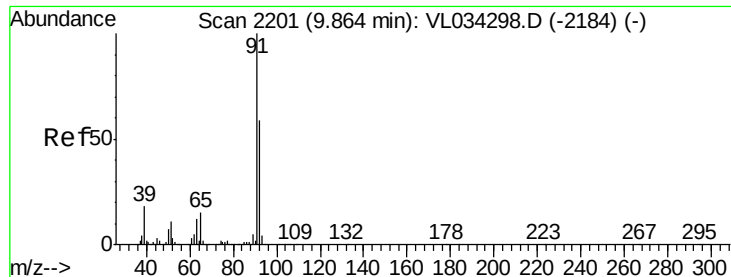
MMDadoda
10/18/2019 3:04:13 PM



#52
Tetrachloroethene
Concen: 14.439 ppbv
RT: 11.29 min Scan# 2645
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion: 164 Resp: 1219355
Ion Ratio Lower Upper
164 100
166 123.6 95.3 142.9
129 105.2 84.5 126.7
131 98.4 77.3 115.9





#53

Toluene

Concen: 13.070 ppbv

RT: 9.87 min Scan# 2203

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 91 Resp: 3651267

Ion Ratio Lower Upper

91 100

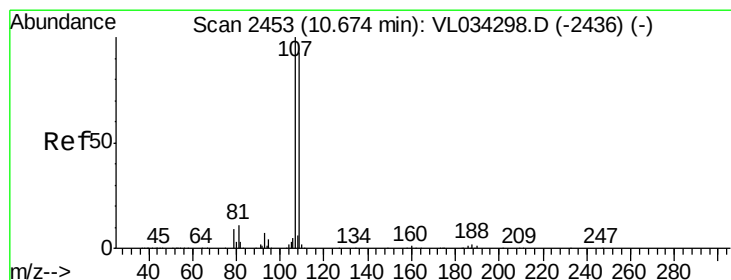
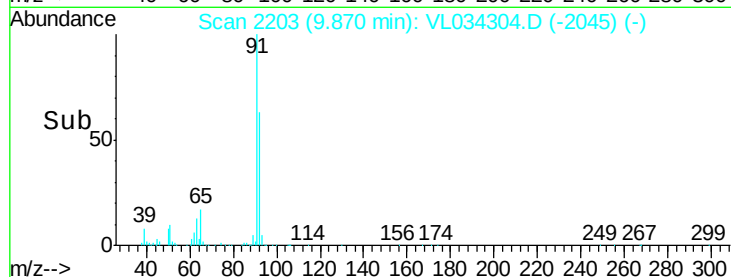
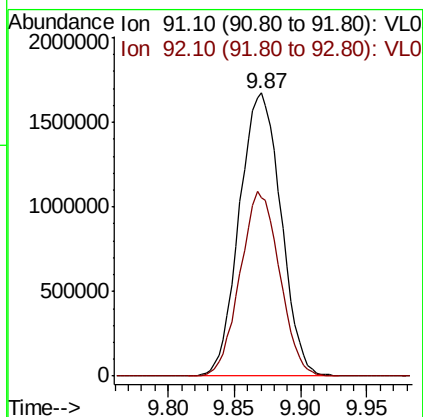
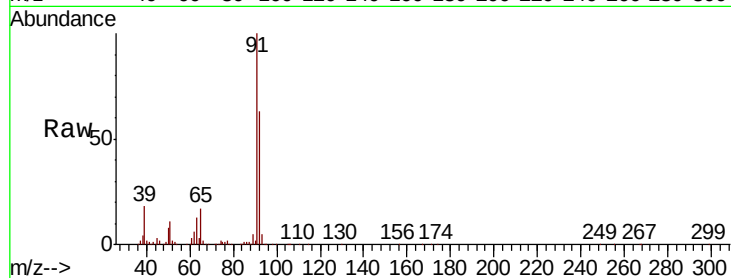
92 62.1 48.4 72.6

Manual Integrations

APPROVED

MMDadoda

10/18/2019 3:04:13 PM



#54

1,2-Dibromoethane

Concen: 13.643 ppbv

RT: 10.68 min Scan# 2455

Delta R.T. 0.01 min

Lab File: VL034304.D

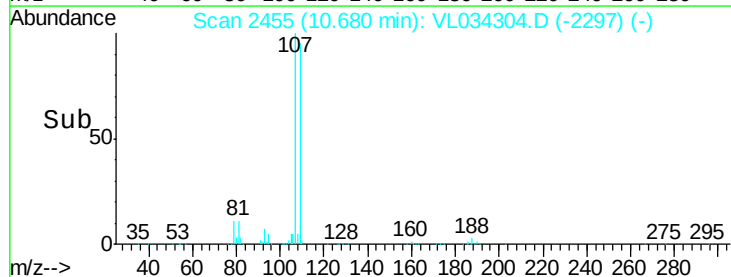
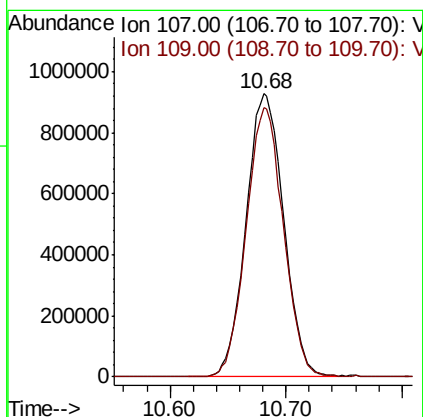
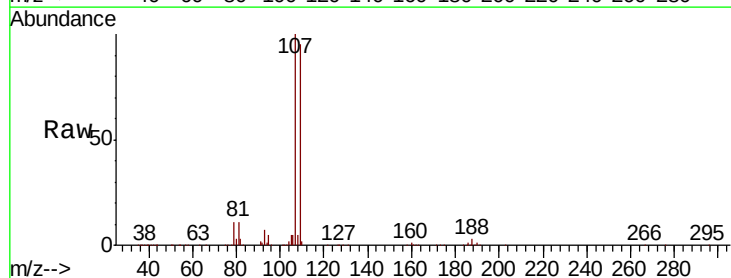
Acq: 16 Oct 2019 16:48

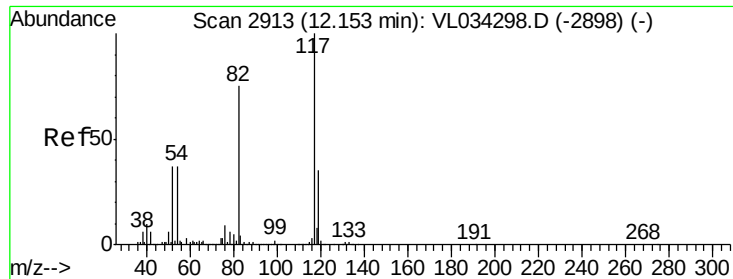
Tgt Ion: 107 Resp: 2092441

Ion Ratio Lower Upper

107 100

109 95.0 74.6 112.0





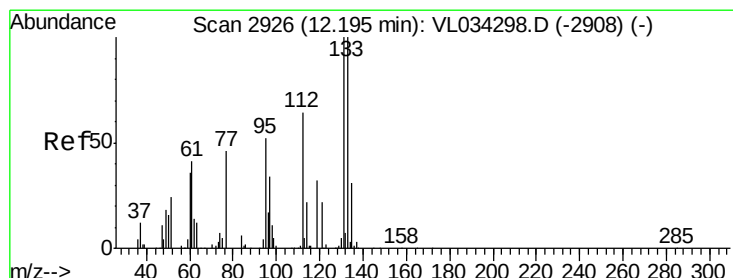
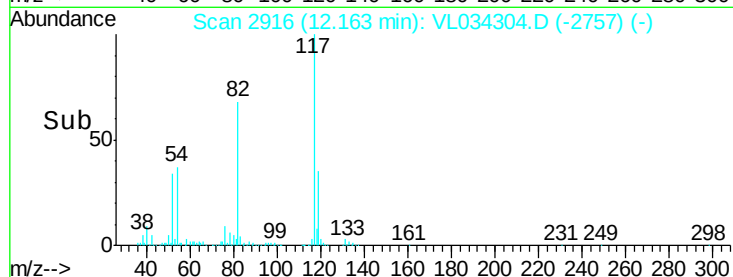
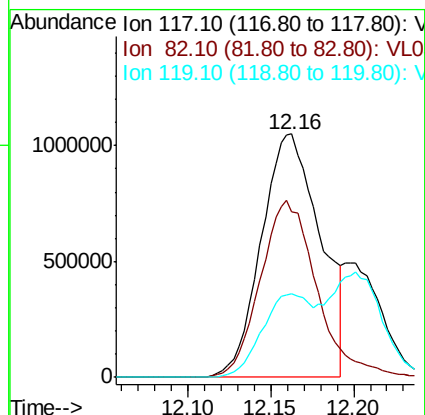
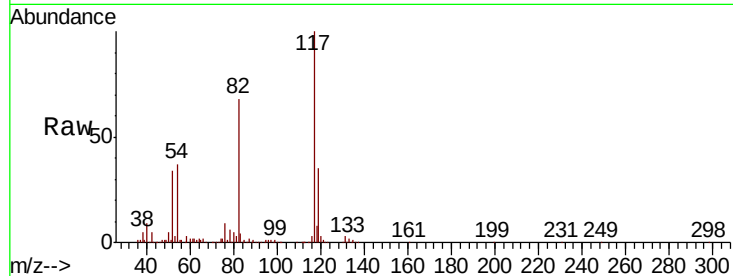
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.16 min Scan# 2916
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion:117 Resp: 2601648
Ion Ratio Lower Upper
117 100
82 70.0 55.5 83.3
119 0.0 26.5 39.7#

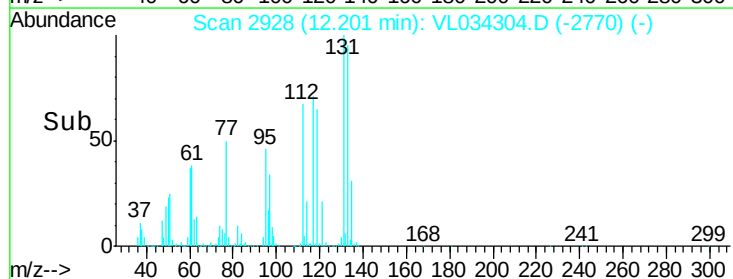
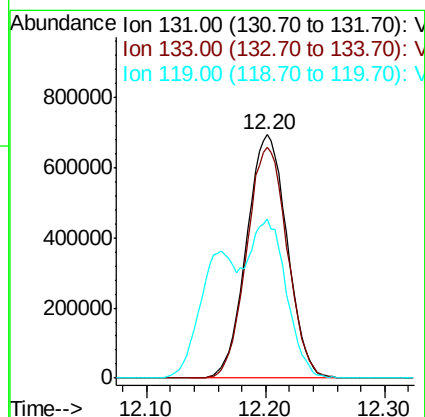
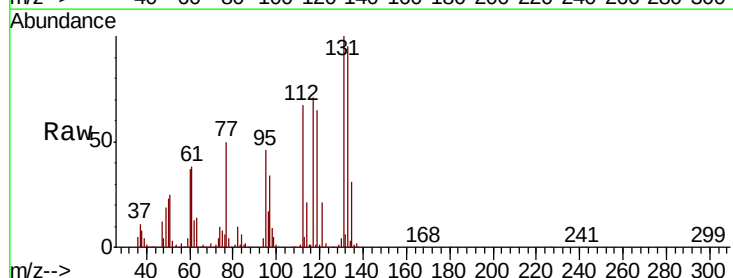
Manual Integrations
APPROVED

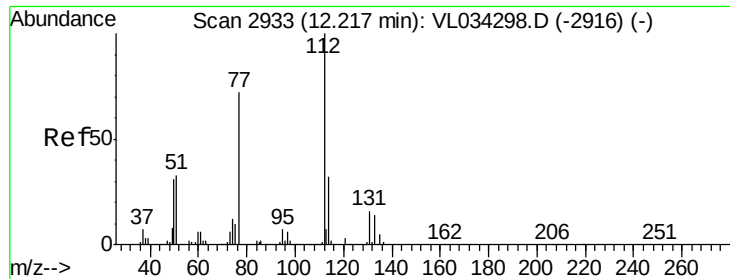
MMDadoda
10/18/2019 3:04:13 PM



#56
1,1,1,2-Tetrachloroethane
Concen: 14.082 ppbv
RT: 12.20 min Scan# 2928
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion:131 Resp: 1633831
Ion Ratio Lower Upper
131 100
133 94.9 77.1 115.7
119 65.1 49.0 73.4





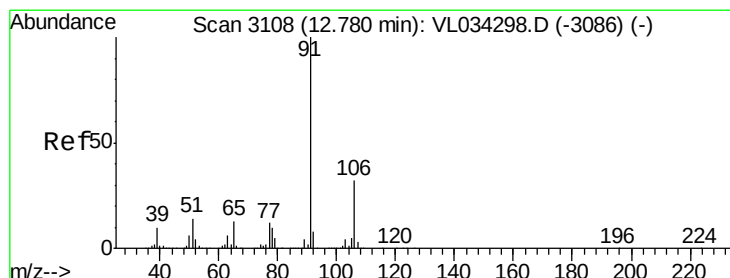
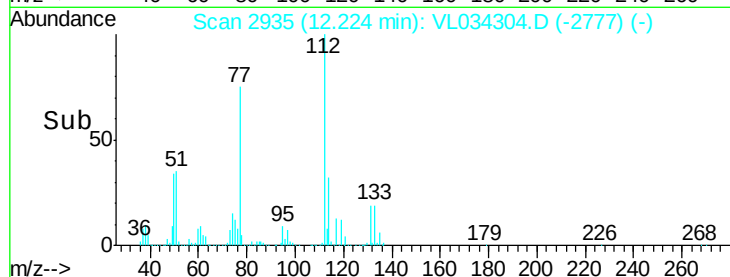
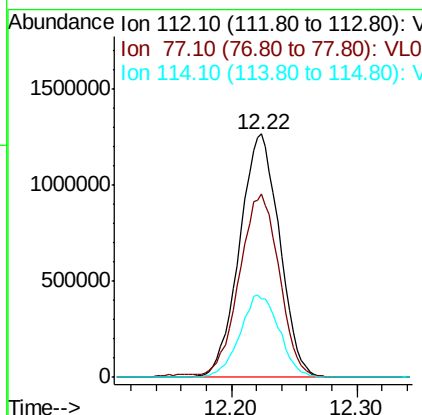
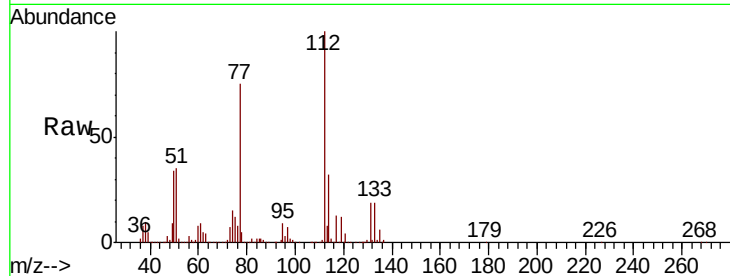
#57
Chlorobenzene
Concen: 12.365 ppbv
RT: 12.22 min Scan# 2935
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion:112 Resp: 2801002
Ion Ratio Lower Upper
112 100
77 75.0 58.6 88.0
114 32.3 28.6 35.0

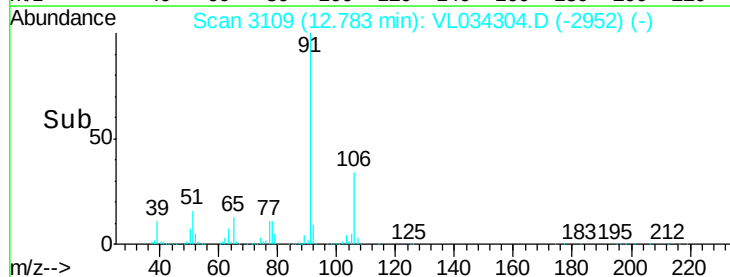
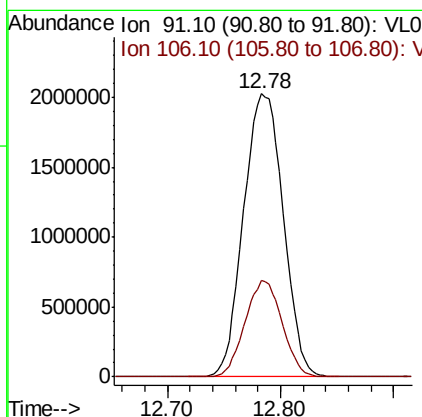
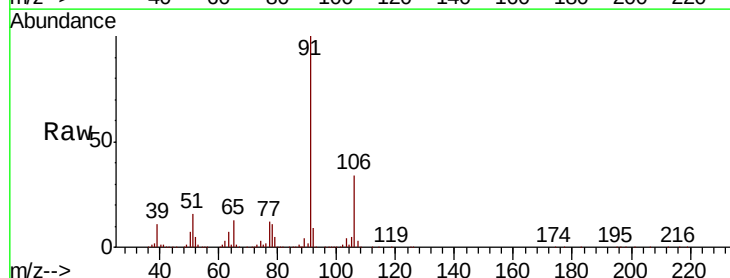
Manual Integrations
APPROVED

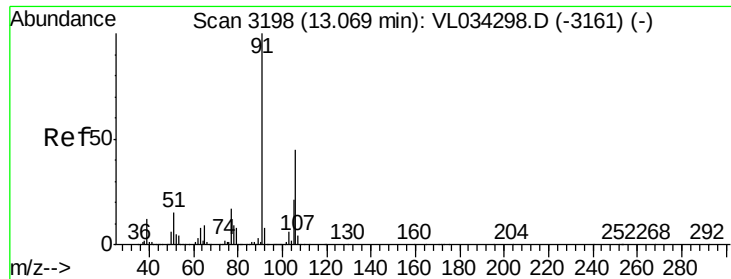
MMDadoda
10/18/2019 3:04:13 PM



#58
Ethyl Benzene
Concen: 11.800 ppbv
RT: 12.78 min Scan# 3109
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion: 91 Resp: 4953587
Ion Ratio Lower Upper
91 100
106 34.1 25.3 37.9





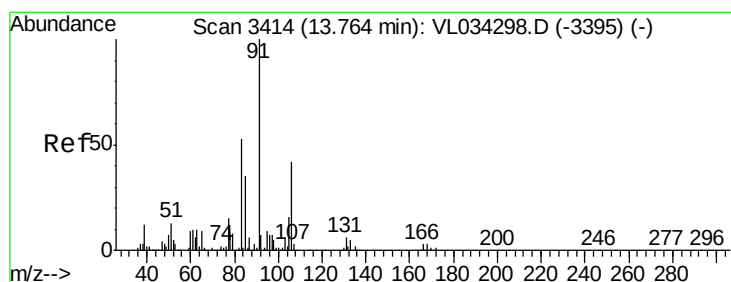
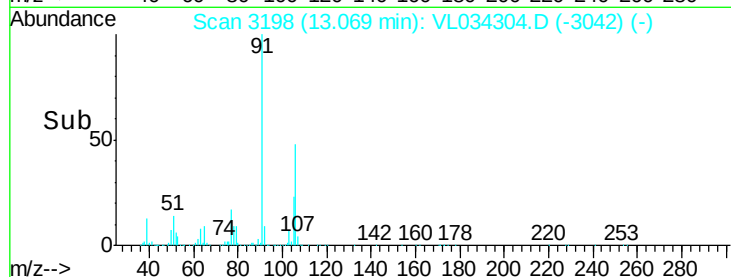
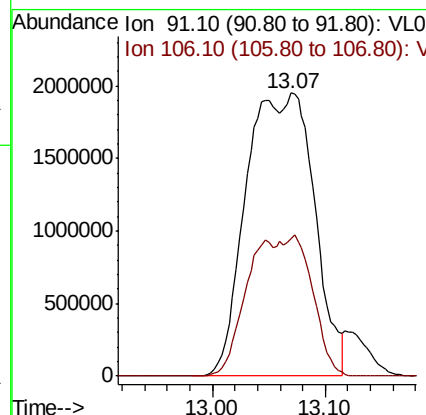
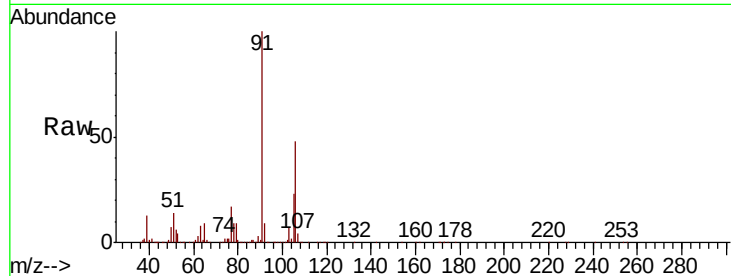
#59
m/p-Xylene
Concen: 23.377 ppbv m
RT: 13.07 min Scan# 3198
Delta R.T. 0.00 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 91 Resp: 8127918
Ion Ratio Lower Upper
91 100
106 46.7 35.4 53.2

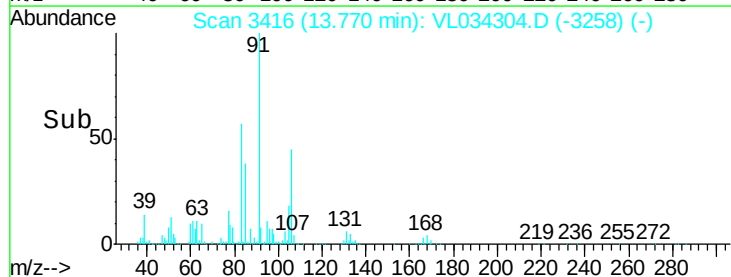
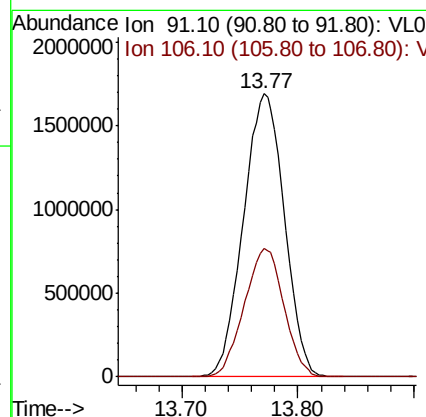
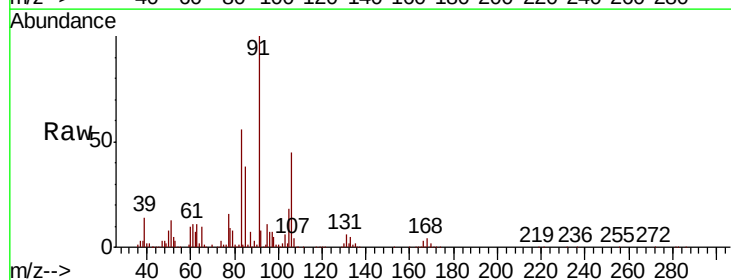
Manual Integrations
APPROVED

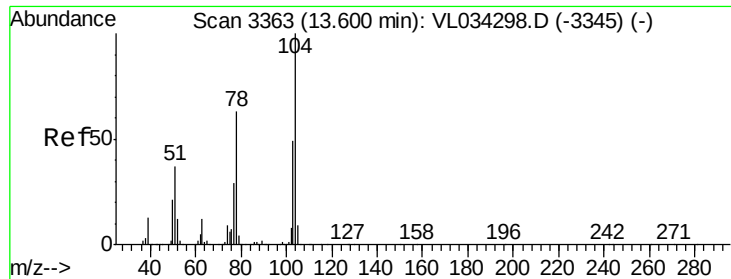
MMDadoda
10/18/2019 3:04:13 PM



#60
o-Xylene
Concen: 11.920 ppbv
RT: 13.77 min Scan# 3416
Delta R.T. 0.01 min
Lab File: VL034304.D
Acq: 16 Oct 2019 16:48

Tgt Ion: 91 Resp: 4144129
Ion Ratio Lower Upper
91 100
106 44.0 21.6 64.6





#61

Stvrene

Concen: 13.043 ppbv

RT: 13.60 min Scan# 3364

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:104 Resp: 3248062

Ion Ratio Lower Upper

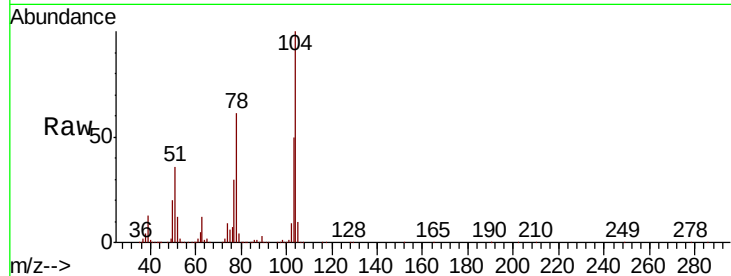
104 100

78 60.0 47.8 71.8

103 48.9 39.0 58.6

Manual Integrations
APPROVED

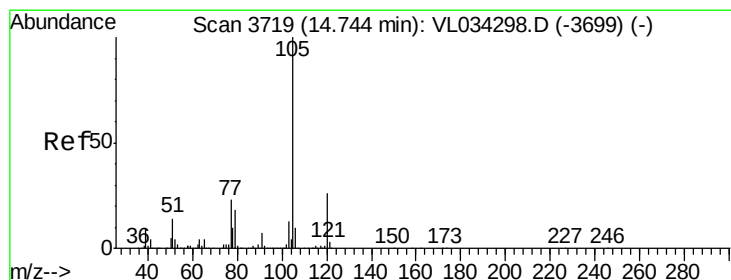
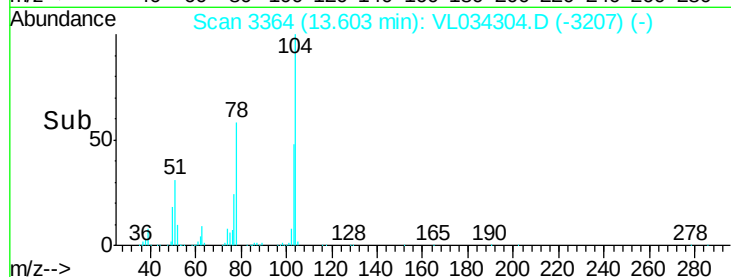
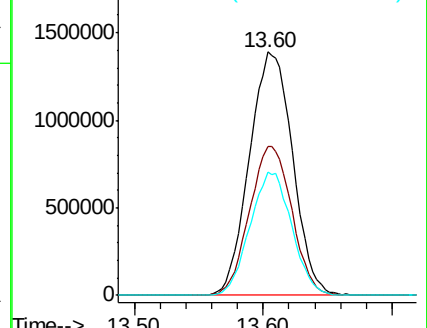
MMDadoda
10/18/2019 3:04:13 PM



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 11.905 ppbv

RT: 14.75 min Scan# 3720

Delta R.T. 0.00 min

Lab File: VL034304.D

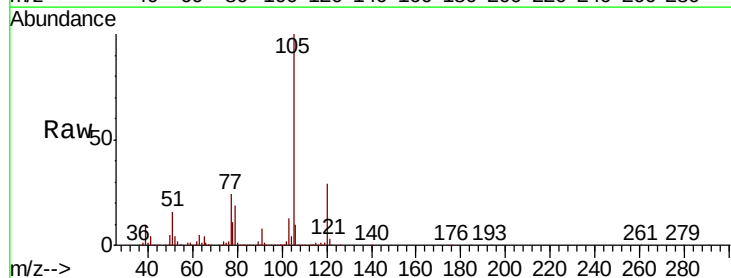
Acq: 16 Oct 2019 16:48

Tgt Ion:105 Resp: 5358043

Ion Ratio Lower Upper

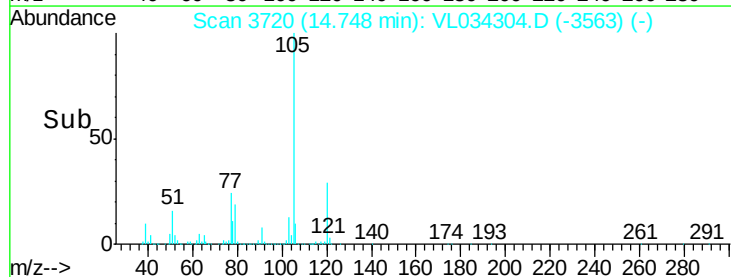
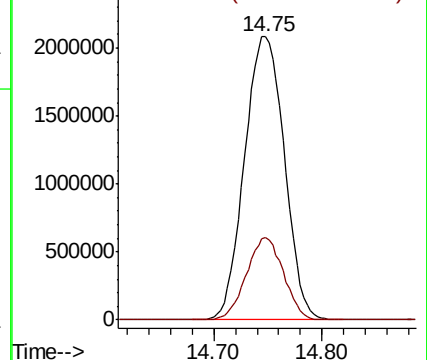
105 100

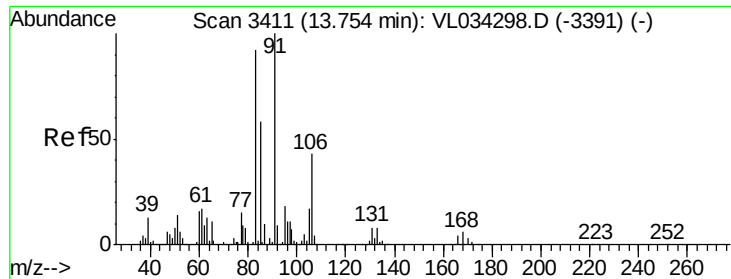
120 27.1 20.8 31.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#63

1,1,2,2-Tetrachloroethane

Concen: 10.590 ppbv

RT: 13.76 min Scan# 3413

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 83 Resp: 3019190

Ion Ratio Lower Upper

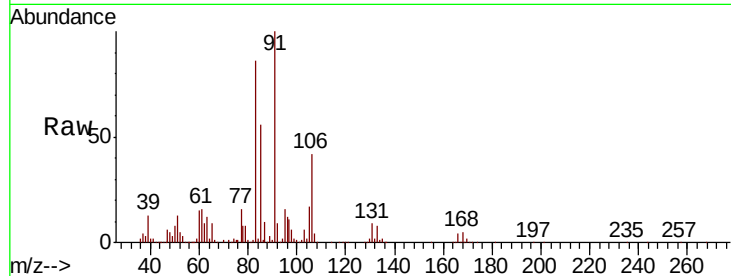
83 100

131 9.9 4.8 14.4

85 65.9 32.5 97.4

Manual Integrations
APPROVED

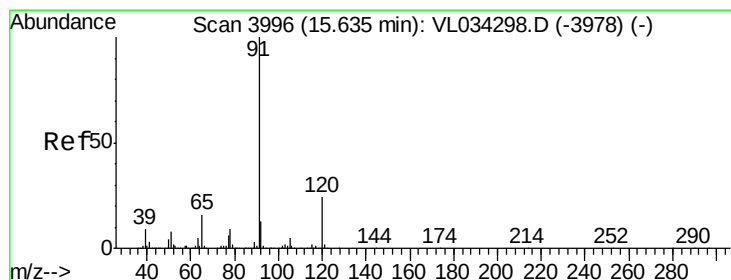
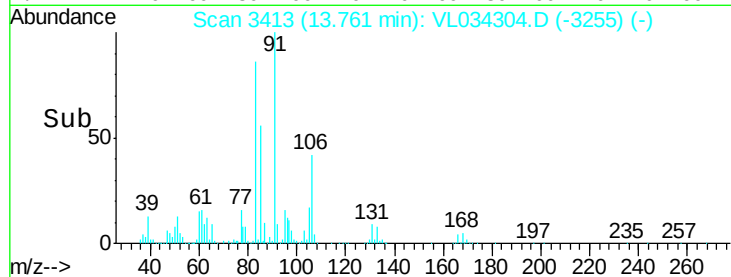
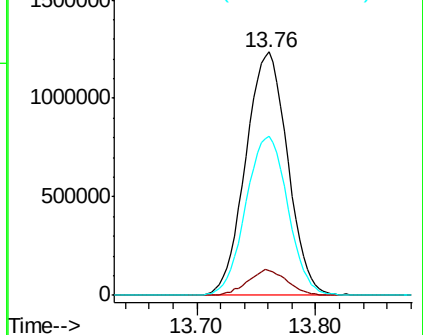
MMDadoda
10/18/2019 3:04:13 PM



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 131.00 (130.70 to 131.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 13.088 ppbv

RT: 15.64 min Scan# 3999

Delta R.T. 0.01 min

Lab File: VL034304.D

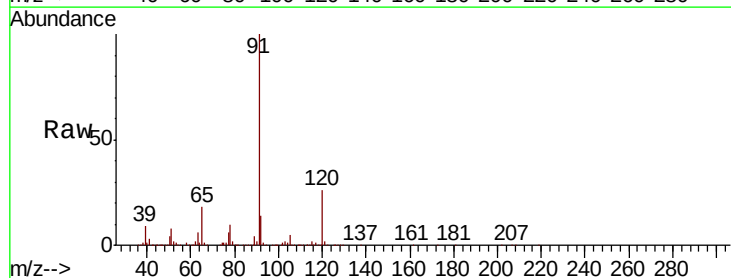
Acq: 16 Oct 2019 16:48

Tgt Ion:120 Resp: 1490283

Ion Ratio Lower Upper

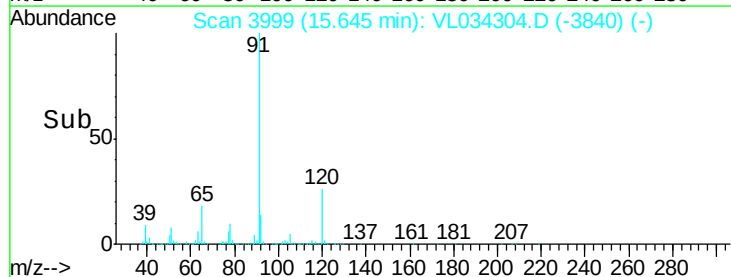
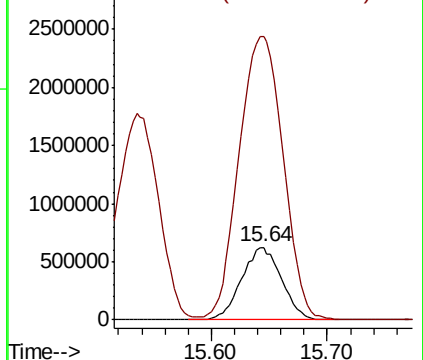
120 100

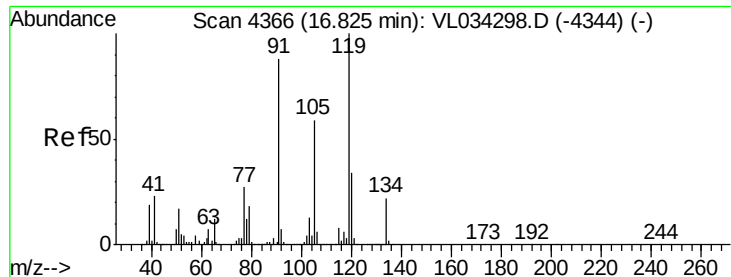
91 434.1 374.9 562.3



Abundance Ion 120.20 (119.90 to 120.90): VL0

Ion 91.10 (90.80 to 91.80): VL0





#65

tert-Butylbenzene

Concen: 12.229 ppbv m

RT: 16.83 min Scan# 4368

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:119 Resp: 4809154

Ion Ratio Lower Upper

119 100

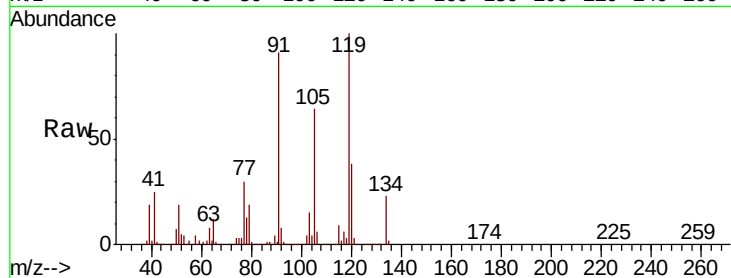
91 89.7 71.4 107.0

134 20.7 15.9 23.9

Manual Integrations
APPROVED

MMDadoda

10/18/2019 3:04:13 PM



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

16.83

2000000

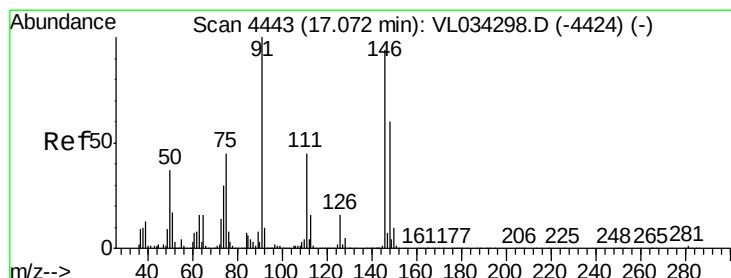
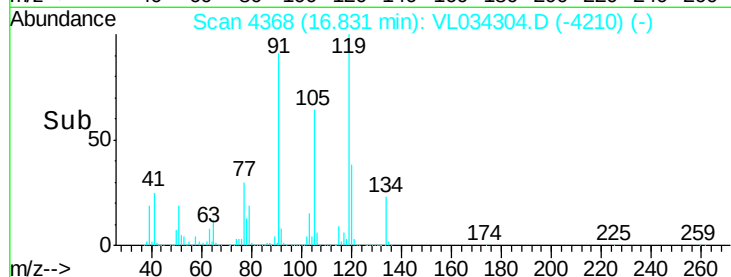
1500000

1000000

500000

0

Time--> 16.70 16.80 16.90



#66

Benzyl Chloride

Concen: 19.190 ppbv

RT: 17.08 min Scan# 4445

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

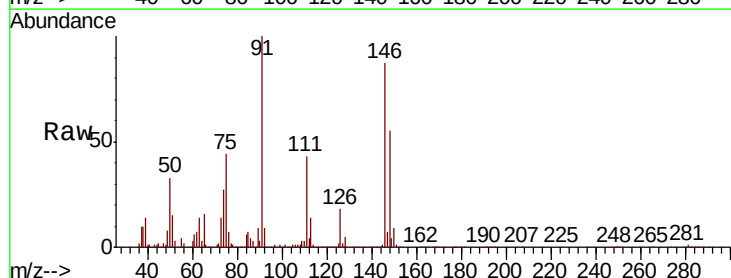
Tgt Ion: 91 Resp: 2669890

Ion Ratio Lower Upper

91 100

126 16.9 12.9 19.3

128 5.3 4.3 6.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V

17.08

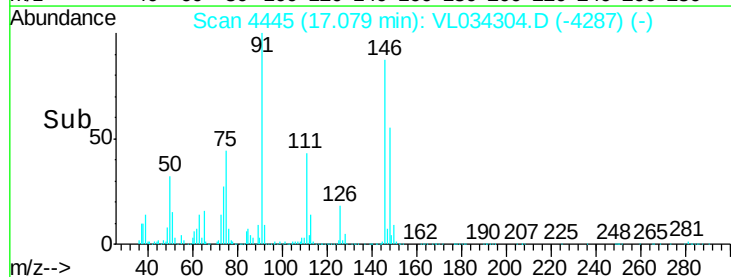
1500000

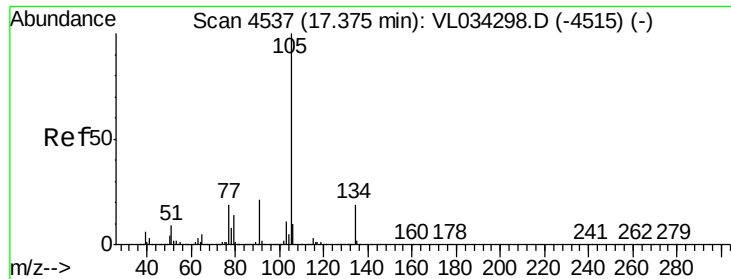
1000000

500000

0

Time--> 17.00 17.10





#67

sec-Butylbenzene

Concen: 11.584 ppbv

RT: 17.38 min Scan# 4539

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 105 Resp: 6514306

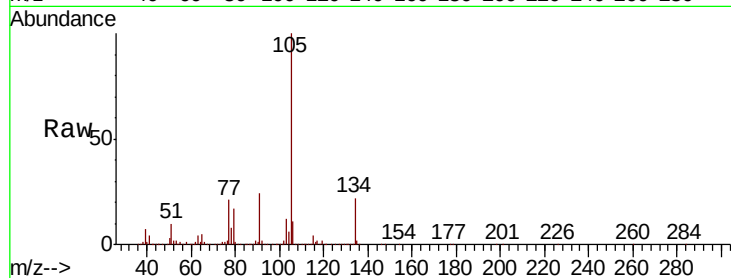
Ion Ratio Lower Upper

105 100

134 20.5 15.4 23.0

Manual Integrations
APPROVED

MMDadoda
10/18/2019 3:04:13 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

2500000

2000000

1500000

1000000

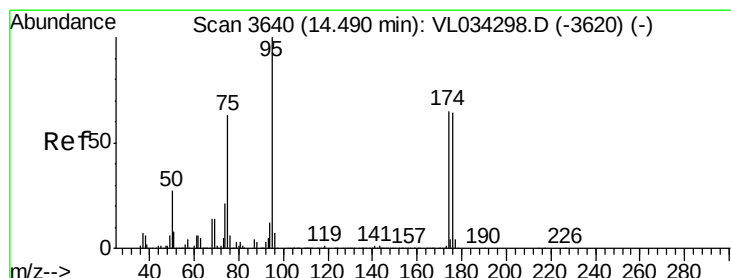
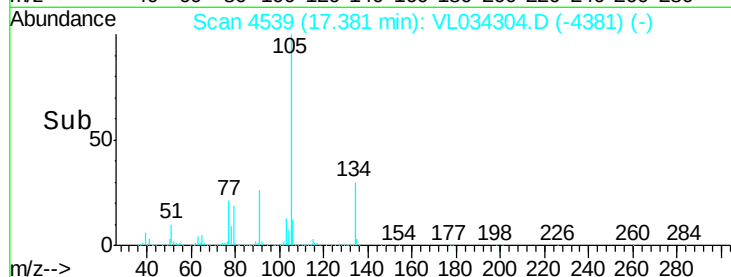
500000

0

17.38

17.30 17.40 17.50

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 9.406 ppbv

RT: 14.49 min Scan# 3641

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

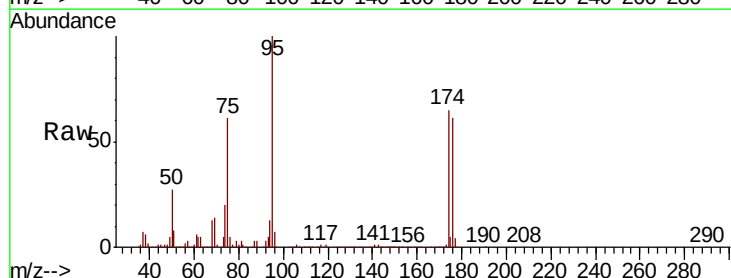
Tgt Ion: 95 Resp: 2126414

Ion Ratio Lower Upper

95 100

174 65.6 52.6 78.8

175 4.7 3.8 5.6



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

1200000

1000000

800000

600000

400000

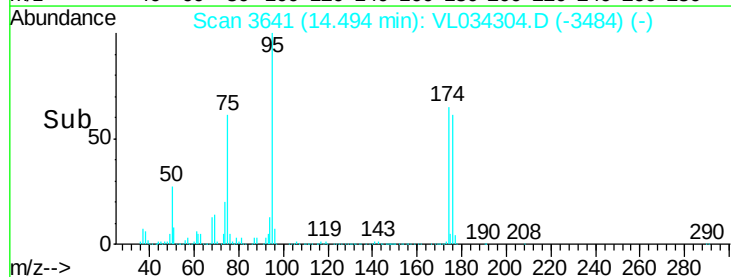
200000

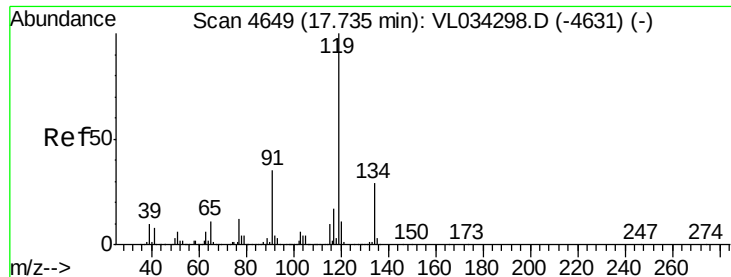
0

14.49

14.40 14.50

Time-->





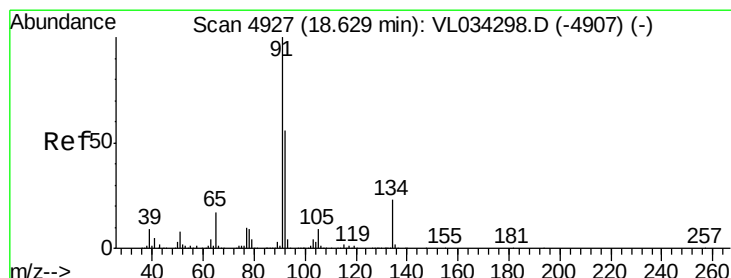
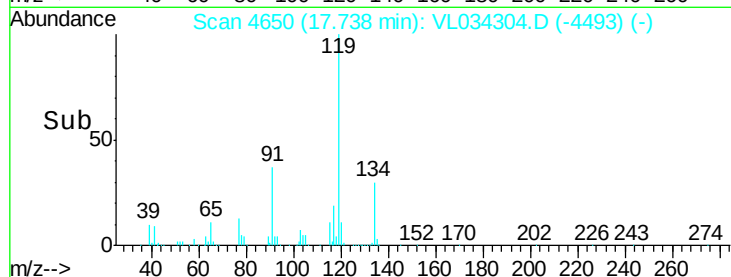
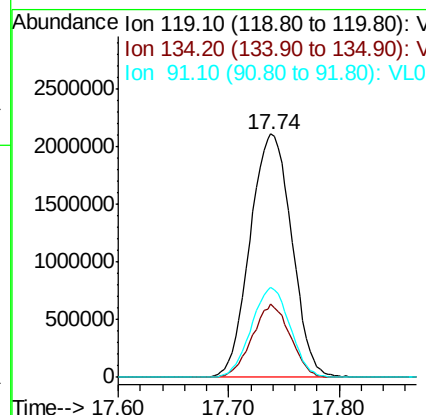
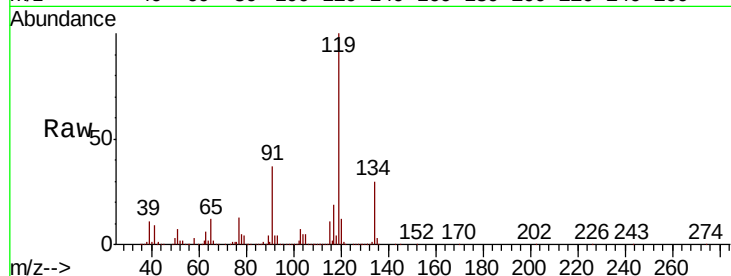
#69
 p-Isopropyltoluene
 Concen: 12.097 ppbv
 RT: 17.74 min Scan# 4650
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
119	100		
134	27.5	21.3	31.9
91	34.6	26.6	39.8

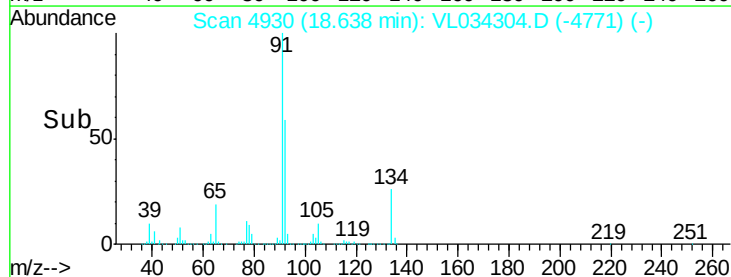
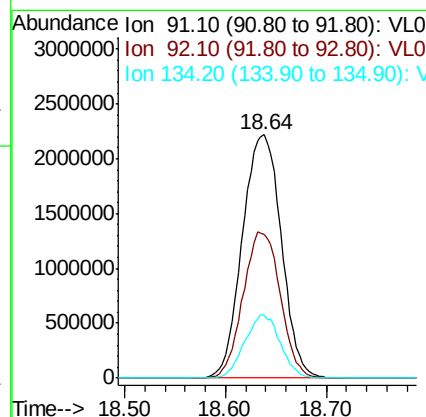
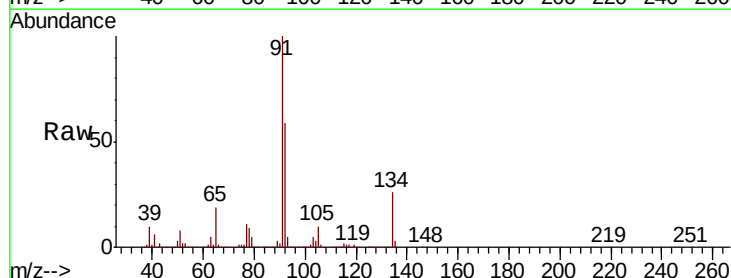
Manual Integrations
 APPROVED

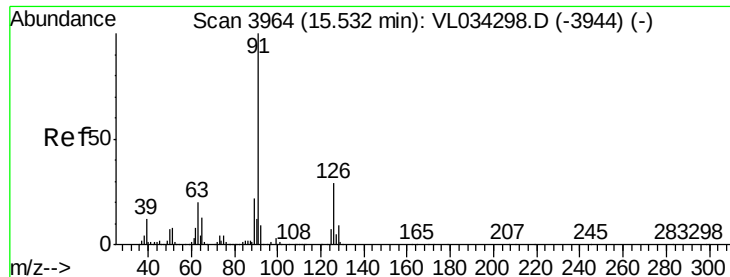
MMDadoda
 10/18/2019 3:04:13 PM



#70
 n-Butylbenzene
 Concen: 11.186 ppbv
 RT: 18.64 min Scan# 4930
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion	Ratio	Lower	Upper
91	100		
92	57.5	44.5	66.7
134	23.8	18.2	27.2





#71

2-Chlorotoluene

Concen: 11.976 ppbv

RT: 15.54 min Scan# 3965

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 91 Resp: 4403809

Ion Ratio Lower Upper

91 100

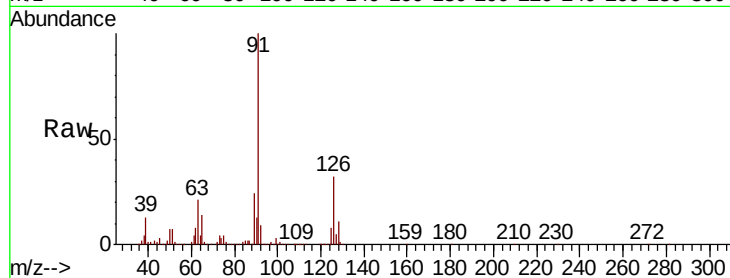
126 30.6 11.9 47.5

Manual Integrations

APPROVED

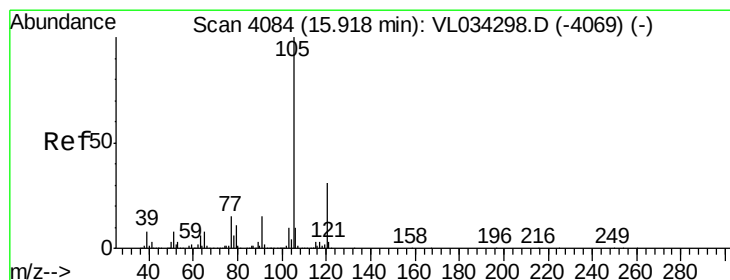
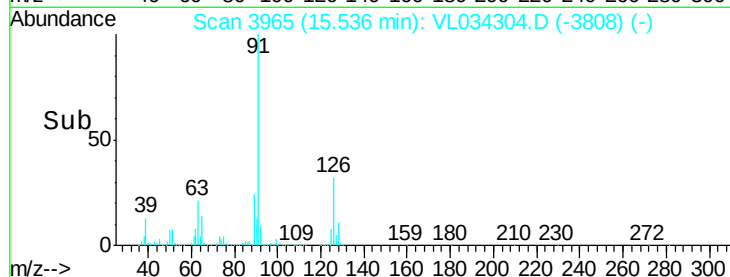
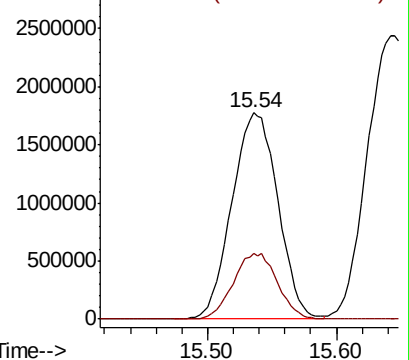
MMDadoda

10/18/2019 3:04:13 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 12.239 ppbv

RT: 15.92 min Scan# 4085

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Tgt Ion:105 Resp: 4807406

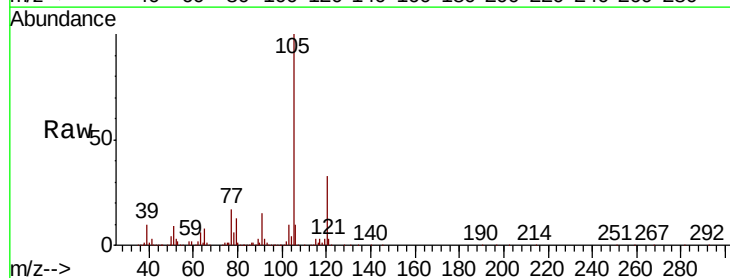
Ion Ratio Lower Upper

105 100

120 31.0 23.8 35.8

91 15.0 11.2 16.8

77 16.6 12.8 19.2

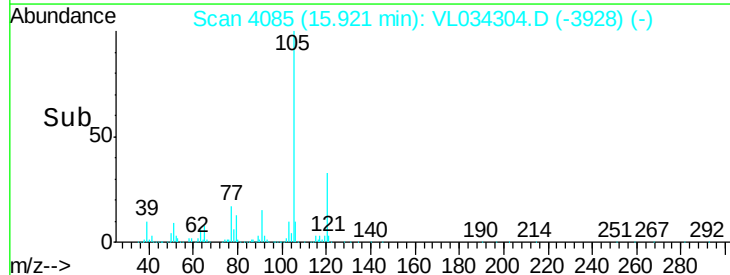
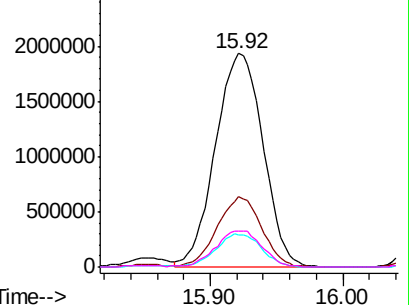


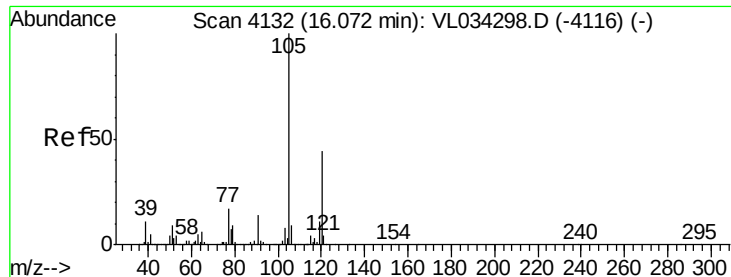
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0





#73

1,3,5-Trimethylbenzene

Concen: 12.288 ppbv

RT: 16.08 min Scan# 4134

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:105 Resp: 4663034

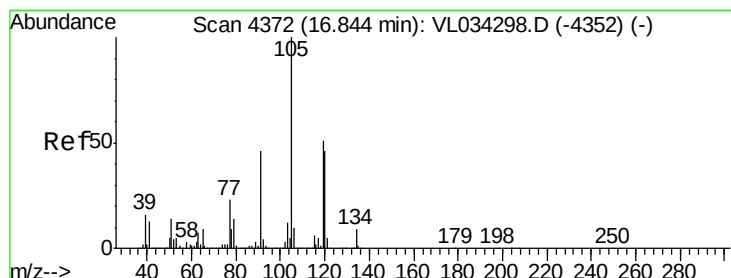
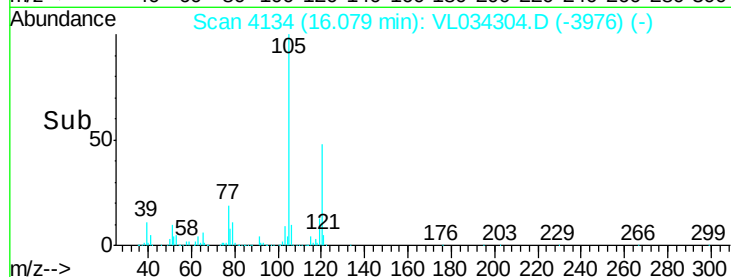
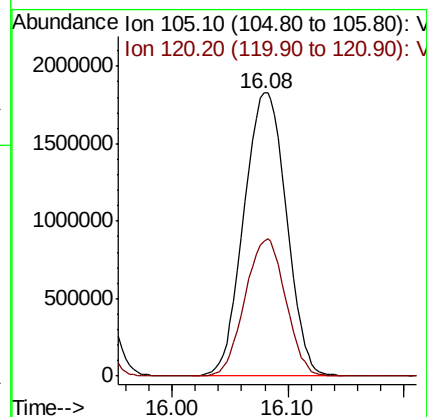
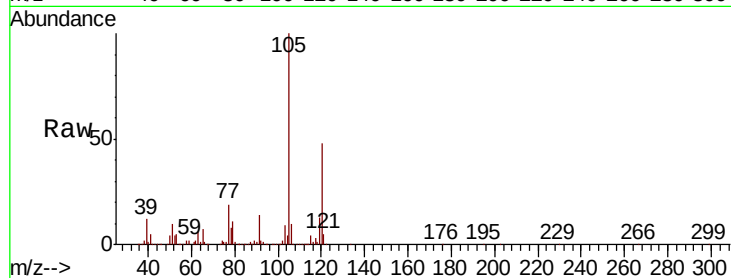
Ion Ratio Lower Upper

105 100

120 47.5 35.2 52.8

Manual Integrations
APPROVED

MMDadoda
10/18/2019 3:04:13 PM



#74

1,2,4-Trimethylbenzene

Concen: 11.654 ppbv

RT: 16.85 min Scan# 4374

Delta R.T. 0.01 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Tgt Ion:105 Resp: 4695861

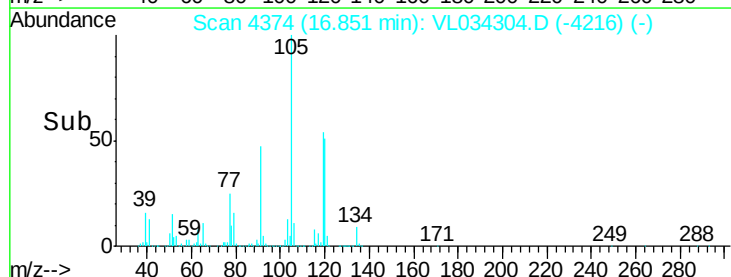
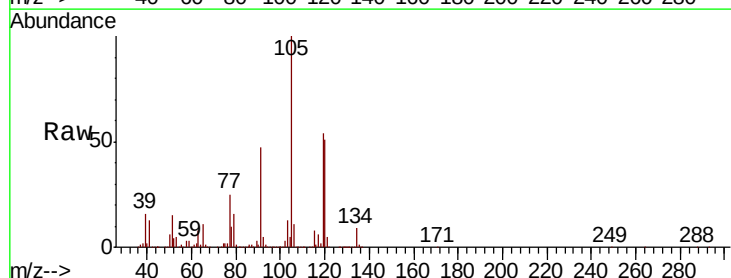
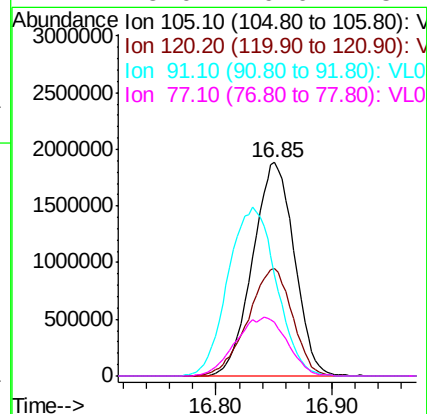
Ion Ratio Lower Upper

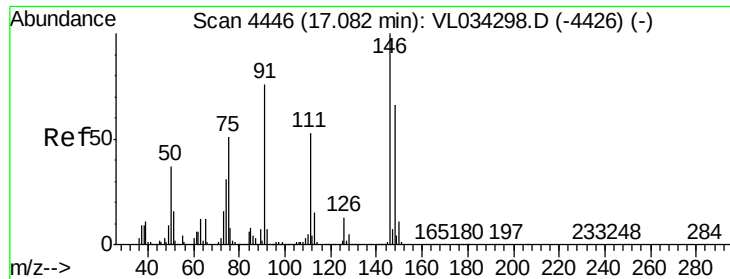
105 100

120 50.5 37.0 55.6

91 47.3 38.2 57.2

77 25.0 19.0 28.4





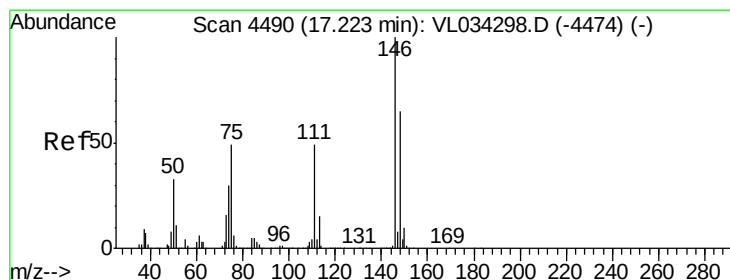
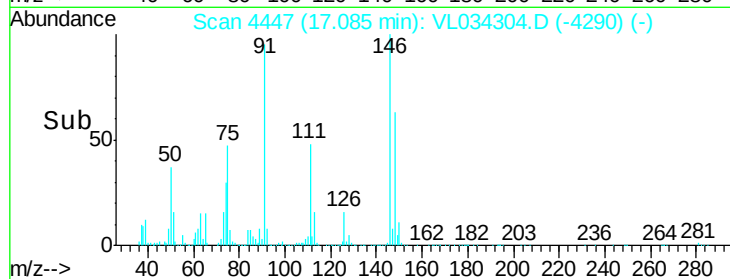
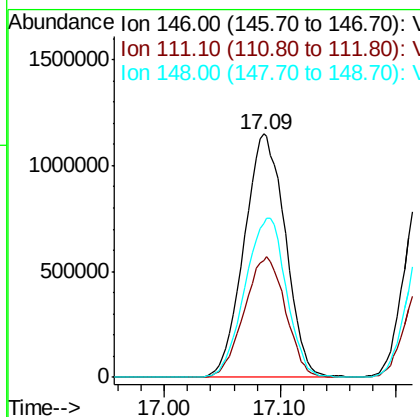
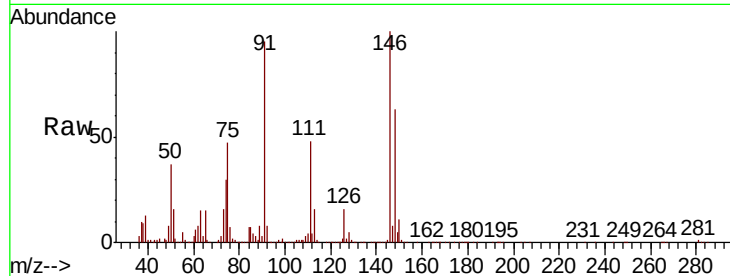
#75
 1,3-Dichlorobenzene
 Concen: 13.142 ppbv
 RT: 17.09 min Scan# 4447
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion:146 Resp: 2841041
 Ion Ratio Lower Upper
 146 100
 111 49.3 24.5 73.5
 148 65.7 32.3 96.8

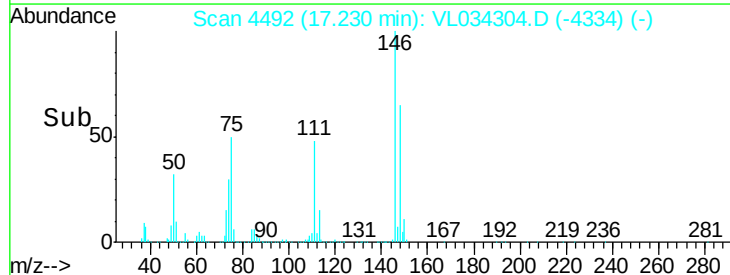
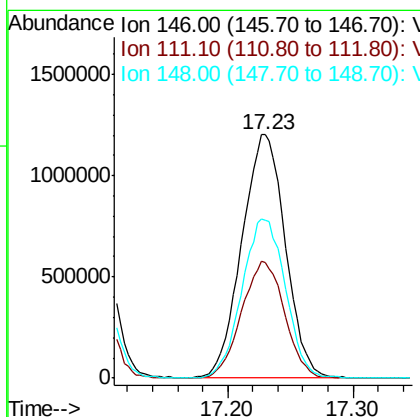
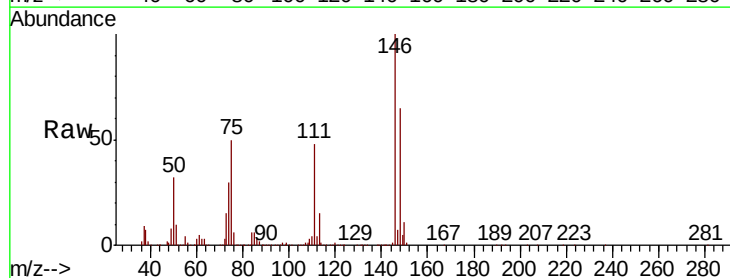
Manual Integrations
 APPROVED

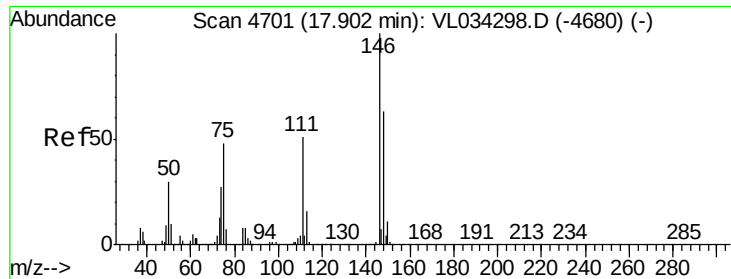
MMDadoda
 10/18/2019 3:04:13 PM



#76
 1,4-Dichlorobenzene
 Concen: 12.993 ppbv
 RT: 17.23 min Scan# 4492
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion:146 Resp: 2876515
 Ion Ratio Lower Upper
 146 100
 111 47.8 23.9 71.7
 148 65.8 33.1 99.2





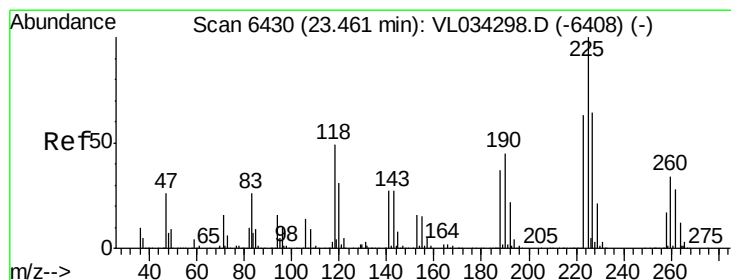
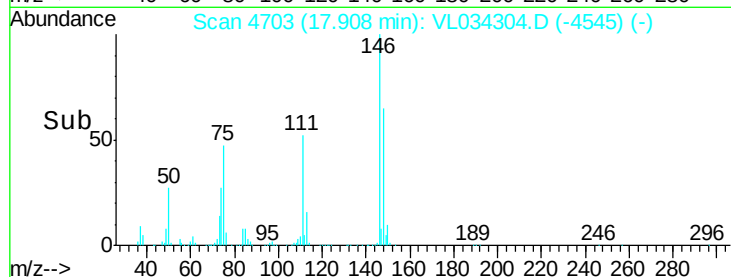
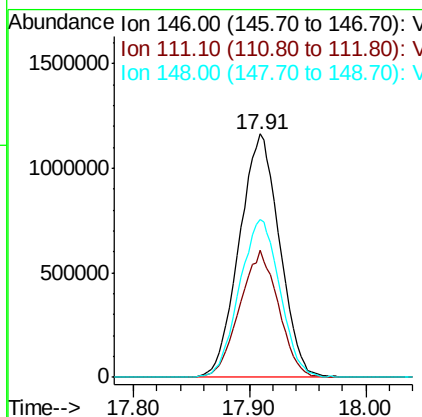
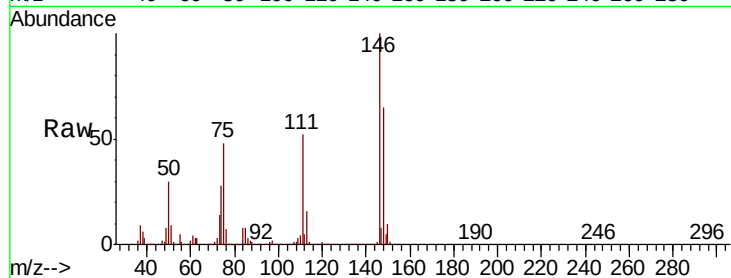
#77
 1,2-Dichlorobenzene
 Concen: 12.823 ppbv
 RT: 17.91 min Scan# 4703
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion:146 Resp: 2805776
 Ion Ratio Lower Upper
 146 100
 111 50.3 25.1 75.3
 148 65.5 32.3 96.8

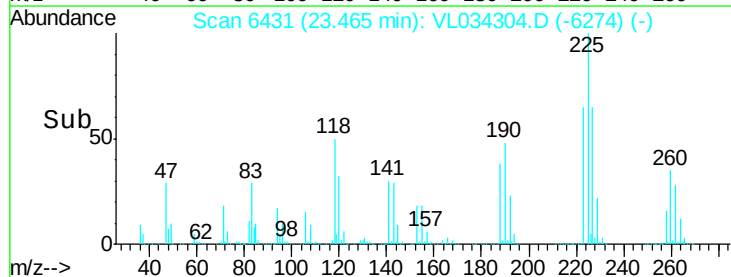
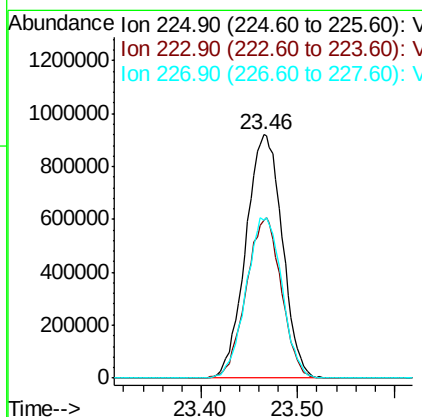
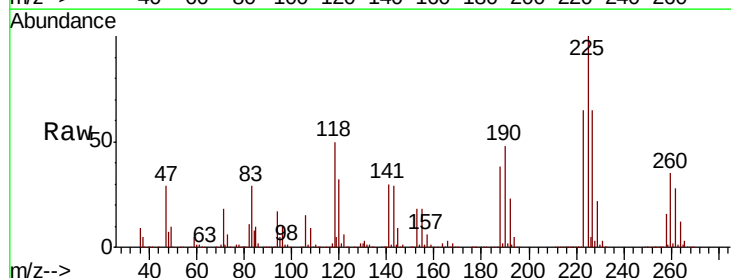
Manual Integrations
 APPROVED

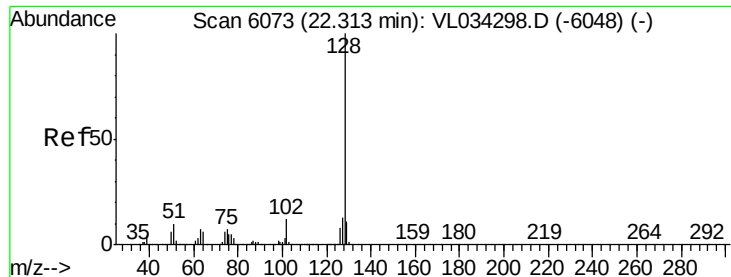
MMDadoda
 10/18/2019 3:04:13 PM



#78
 Hexachloro-1,3-Butadiene
 Concen: 16.608 ppbv
 RT: 23.46 min Scan# 6431
 Delta R.T. 0.00 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Tgt Ion:225 Resp: 2406923
 Ion Ratio Lower Upper
 225 100
 223 63.5 50.8 76.2
 227 64.9 51.5 77.3





#79

Naphthalene

Concen: 11.781 ppbv

RT: 22.31 min Scan# 6073

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:128 Resp: 4179080

Ion Ratio Lower Upper

128 100

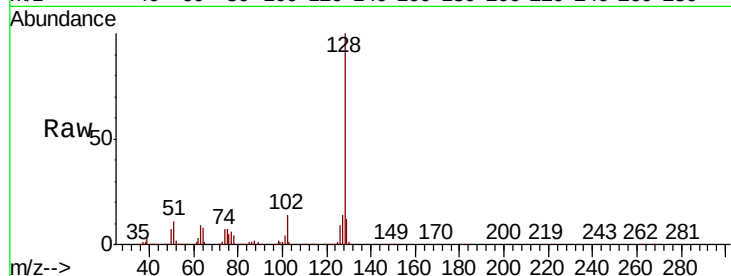
127 13.6 10.2 15.4

129 11.9 8.9 13.3

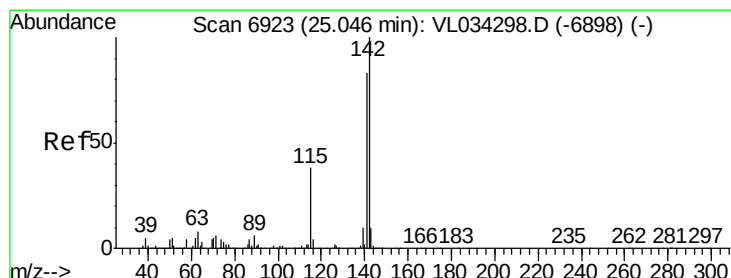
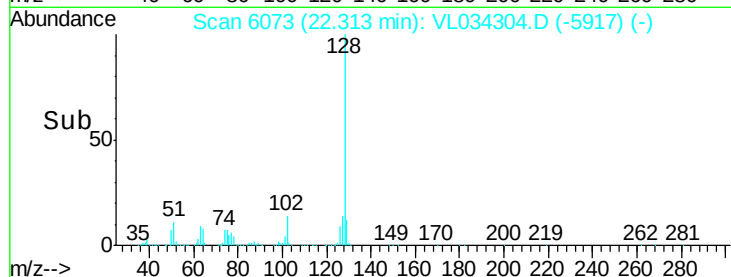
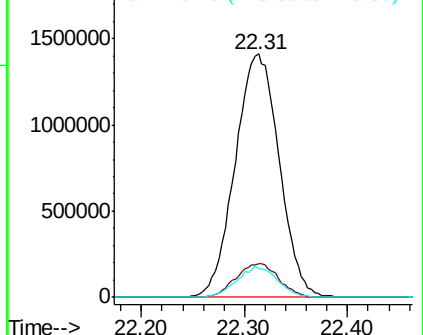
Manual Integrations
APPROVED

MMDadoda

10/18/2019 3:04:13 PM



Abundance Ion 128.10 (127.80 to 128.80): V
Ion 127.10 (126.80 to 127.80): V
Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 13.027 ppbv

RT: 25.05 min Scan# 6924

Delta R.T. 0.00 min

Lab File: VL034304.D

Acq: 16 Oct 2019 16:48

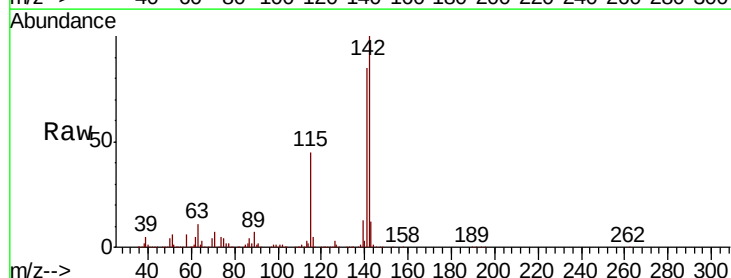
Tgt Ion:142 Resp: 2148932

Ion Ratio Lower Upper

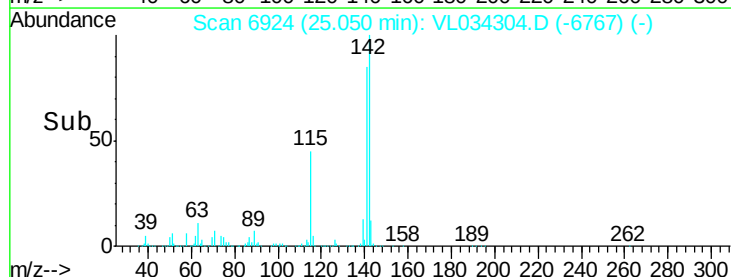
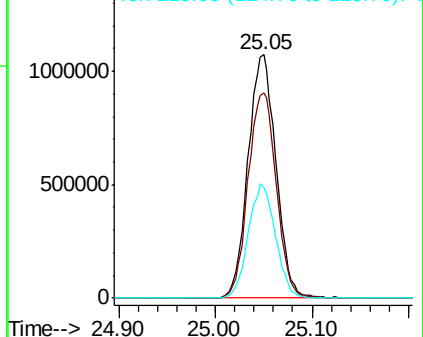
142 100

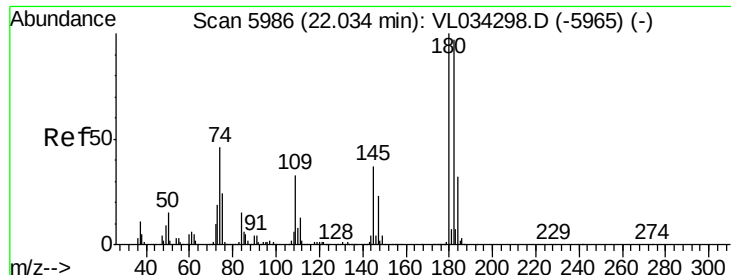
141 85.7 65.7 98.5

115 45.6 30.9 46.3



Abundance Ion 142.00 (141.70 to 142.70): V
Ion 141.00 (140.70 to 141.70): V
Ion 115.00 (114.70 to 115.70): V





#81
 1,2,4-Trichlorobenzene
 Concen: 12.948 ppbv
 RT: 22.04 min Scan# 5988
 Delta R.T. 0.01 min
 Lab File: VL034304.D
 Acq: 16 Oct 2019 16:48

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
180	100		
182	96.6	77.8	116.8
184	32.0	25.4	38.2

Manual Integrations
 APPROVED

MMDadoda
 10/18/2019 3:04:13 PM

