

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL053118\
 Data File : VL032022.D
 Acq On : 31 May 2018 20:04
 Operator : SY/AP
 Sample : VSTDIC015
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleID :
 VSTDIC015

Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 10:55:09 AM

Quant Time: Jun 01 02:29:20 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01 02:29:20 2018
 QLast Update : Fri Jun 01 01:58:27 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.87	49	1401293	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.41	114	2704213	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.37	117	2761104	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.71	95	2141961	9.99	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.15	85	1822586	10.20	ppbv	96
3) Chlorodifluoromethane	3.08	51	1439674	10.93	ppbv	100
4) Chloromethane	3.24	50	840089	12.32	ppbv	96
5) Vinyl Chloride	3.37	62	922327	11.87	ppbv	98
6) Bromomethane	3.59	94	668285	13.17	ppbv	96
7) Chloroethane	3.68	64	407091	13.69	ppbv	99
8) Dichlorotetrafluoroethane	3.29	85	2213884	12.11	ppbv	99
9) Propene	3.11	41	628776	13.17	ppbv	96
10) Heptane	8.37	43	2280256	13.73	ppbv	99
11) Trichlorofluoromethane	4.09	101	2798813	12.32	ppbv	100
12) 1,1,2-Trichlorotrifluoroet	4.65	101	2293821	14.20	ppbv	100
13) Ethanol	3.73	45	186063	10.41	ppbv	100
14) Bromoethene	3.87	108	746707	12.84	ppbv	98
15) Acetone	3.99	43	1864086	9.53	ppbv	100
16) 1,3-Butadiene	3.44	39	800695	12.64	ppbv	95
17) tert-Butyl alcohol	4.45	59	968123	11.84	ppbv	99
18) 1,1-Dichloroethene	4.44	96	1057017	15.01	ppbv	93
19) Isopropyl Alcohol	4.11	45	1250767	11.47	ppbv	100
20) Methylene Chloride	4.50	84	1007952	14.89	ppbv	97
21) Allyl Chloride	4.57	41	1651604	14.49	ppbv	99
22) trans-1,2-Dichloroethene	5.06	96	1104549	14.10	ppbv	98
23) Vinyl Acetate	5.26	43	3142584	13.81	ppbv	99
24) 1,1-Dichloroethane	5.19	63	2915977	13.59	ppbv	99
25) Ethyl Acetate	5.87	43	4494243	13.19	ppbv	100
26) Hexane	5.89	57	2152372	13.39	ppbv	99
27) Carbon Disulfide	4.72	76	2901881	15.70	ppbv	100
28) Methyl tert-Butyl Ether	5.22	73	2757091	13.96	ppbv	99
29) Chloroform	5.96	83	3380923	13.18	ppbv	96
30) Cyclohexane	7.36	84	1420669	13.39	ppbv	98
31) cis-1,2-Dichloroethene	5.75	61	2130535	14.45	ppbv	98
32) 1,1,1-Trichloroethane	6.74	97	2788634	11.97	ppbv	100
34) 2-Butanone	5.43	43	2971063	13.29	ppbv	100
35) Carbon Tetrachloride	7.25	117	2944849	13.59	ppbv	98
36) Benzene	7.13	78	3478186	13.69	ppbv	100
37) 1,2-Dichloroethane	6.53	62	2232767	12.43	ppbv	99
38) Trichloroethene	8.08	130	1388199	14.29	ppbv	97
39) 1,2-Dichloropropane	7.86	63	1249530	14.06	ppbv	97
40) 1,4-Dioxane	8.07	88	541645	13.59	ppbv	99
41) Tetrahydrofuran	6.26	42	1519545	15.75	ppbv	99
42) Bromodichloromethane	8.04	83	2975085	14.44	ppbv	100
43) Methyl Methacrylate	8.26	69	1281253	14.78	ppbv	98

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 6/4/2018 10:55:09 AM

Quant Time: Jun 01 02:29:20 2018
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 01 02:29:20 2018
 QLast Update : Fri Jun 01 01:58:27 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	8.12	57	5740258	13.89	ppbv	100
45) t-1,3-Dichloropropene	9.54	75	1934766	16.80	ppbv	99
46) cis-1,3-Dichloropropene	8.96	75	2284464	16.09	ppbv	100
47) 1,1,2-Trichloroethane	9.75	97	1518160	14.41	ppbv	98
48) Dibromochloromethane	10.58	129	2597431	15.27	ppbv	99
49) Bromoform	13.34	173	2123573	15.92	ppbv	99
50) 4-Methyl-2-Pentanone	8.99	43	3106253	14.72	ppbv	100
51) 2-Hexanone	10.39	43	2892385	15.04	ppbv #	100
52) Tetrachloroethene	11.50	164	1376619	14.55	ppbv	98
53) Toluene	10.08	91	4218374	15.31	ppbv	100
54) 1,2-Dibromoethane	10.89	107	2329347	14.85	ppbv	99
56) 1,1,1,2-Tetrachloroethane	12.41	131	1811478	14.24	ppbv #	75
57) Chlorobenzene	12.44	112	3356618	13.89	ppbv	98
58) Ethyl Benzene	13.00	91	6013554	15.03	ppbv	99
59) m/p-Xylene	13.28	91	9894679m	28.93	ppbv	
60) o-Xylene	13.98	91	5061783	14.75	ppbv	100
61) Styrene	13.82	104	1206364	17.39	ppbv	99
62) Isopropylbenzene	14.96	105	6424283	14.71	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.97	83	3427066	14.12	ppbv	99
64) n-propylbenzene	15.85	120	1649477	15.02	ppbv	96
65) tert-Butylbenzene	17.04	119	5589554	14.38	ppbv	99
66) Benzyl Chloride	17.29	91	730059	20.14	ppbv	99
67) sec-Butylbenzene	17.59	105	8057212	14.89	ppbv	100
69) p-Isopropyltoluene	17.95	119	6602719	15.23	ppbv	99
70) n-Butylbenzene	18.84	91	6892533	15.39	ppbv	99
71) 2-Chlorotoluene	15.75	91	4931045	15.37	ppbv	100
72) 4-Ethyltoluene	16.13	105	5395178	15.48	ppbv	100
73) 1,3,5-Trimethylbenzene	16.29	105	4920901	15.37	ppbv	98
74) 1,2,4-Trimethylbenzene	17.06	105	5158391	14.50	ppbv	96
75) 1,3-Dichlorobenzene	17.30	146	3295229	14.90	ppbv	100
76) 1,4-Dichlorobenzene	17.44	146	3353261	15.34	ppbv	100
77) 1,2-Dichlorobenzene	18.12	146	3281938	14.89	ppbv	100
78) Hexachloro-1,3-Butadiene	23.67	225	1167586	12.95	ppbv	99
79) Naphthalene	22.56	128	4288772	17.56	ppbv	98
80) Naphthalene, 2-methyl-	25.21	142	1272281	19.76	ppbv	99
81) 1,2,4-Trichlorobenzene	22.29	180	2182646	16.13	ppbv	98

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

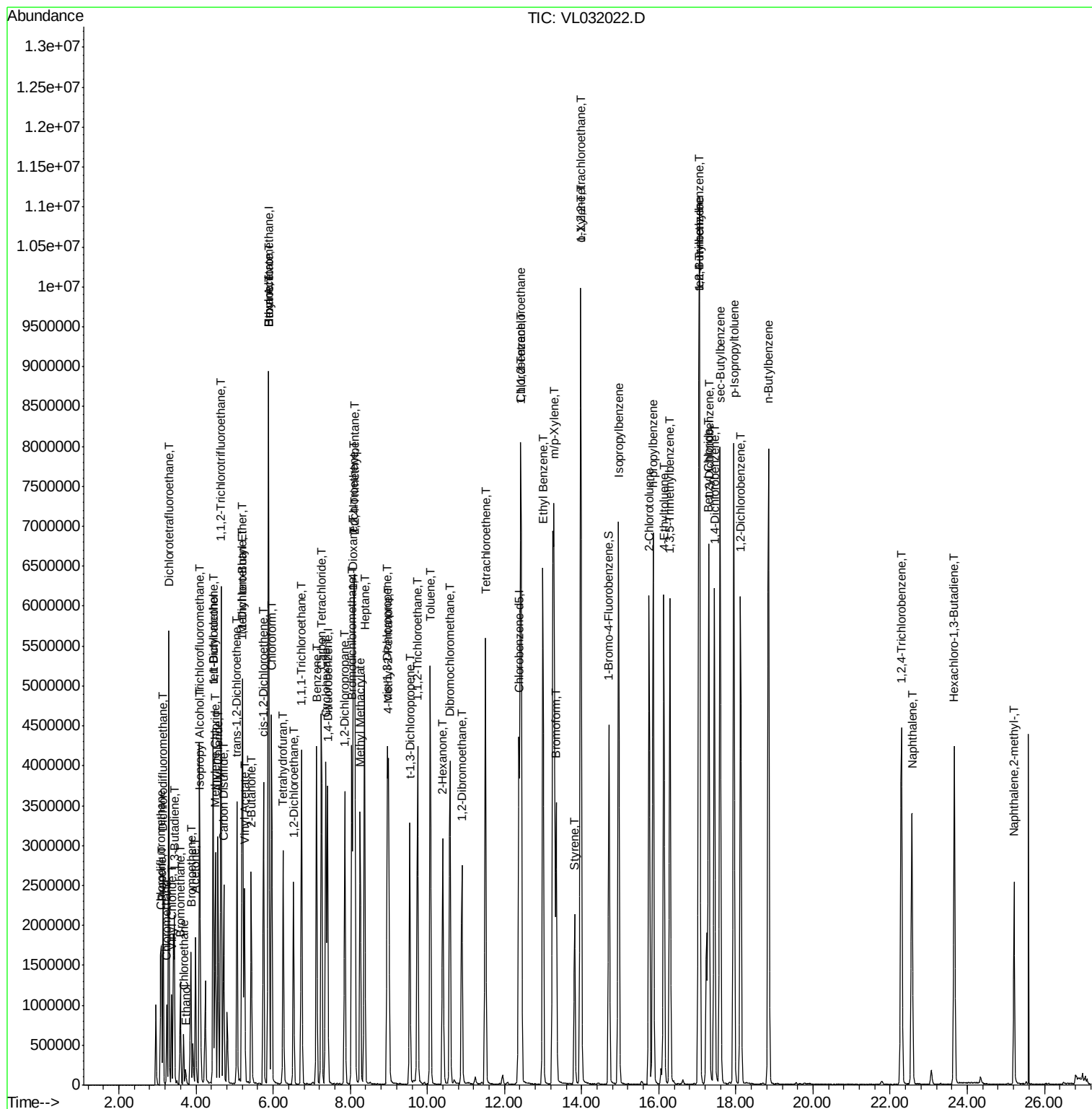
Data Path : W:\HPCHEM1\MSVOA L\DATA\VL053118\
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ALS Vial : 1 Sample Multiplier: 1

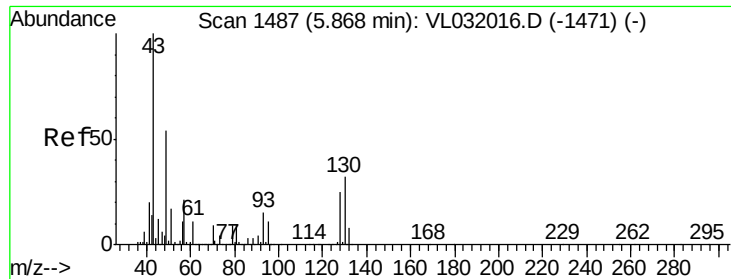
Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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Quant Time: Jun 01 02:29:20 2018
Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL053118AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Jun
QLast Update : Fri Jun 01 01:58:27 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.87 min Scan# 1488

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 49 Resp: 1401293

Ion Ratio Lower Upper

49 100

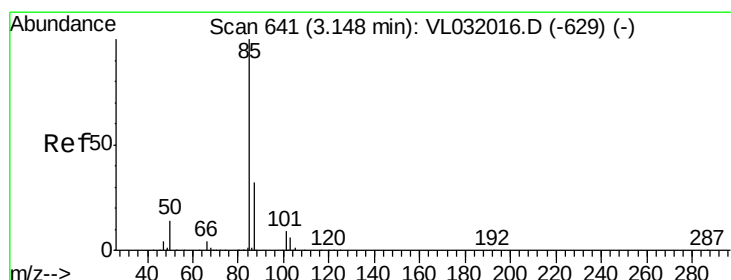
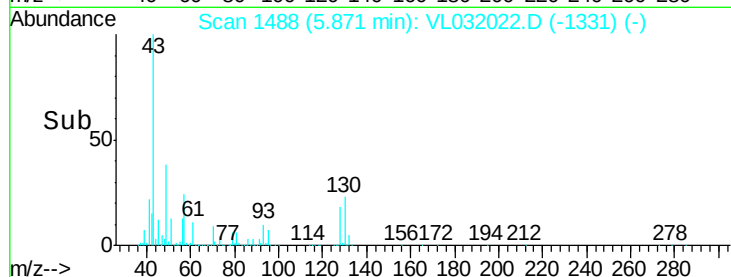
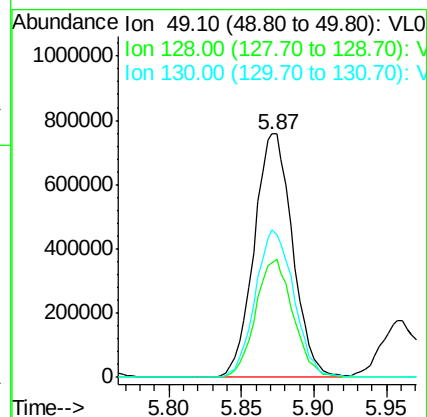
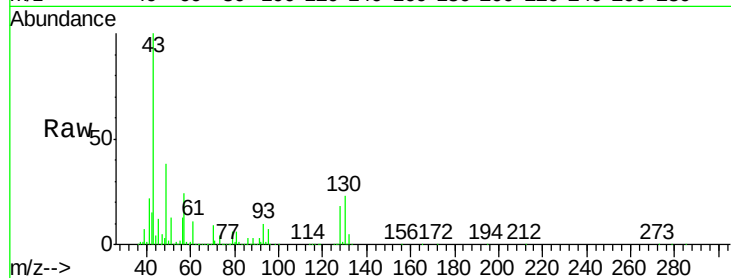
128 47.5 24.1 72.3

130 61.0 30.9 92.8

Manual Integrations
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6/4/2018 10:55:09 AM



#2

Dichlorodifluoromethane

Concen: 10.20 ppbv

RT: 3.15 min Scan# 641

Delta R.T. 0.00 min

Lab File: VL032022.D

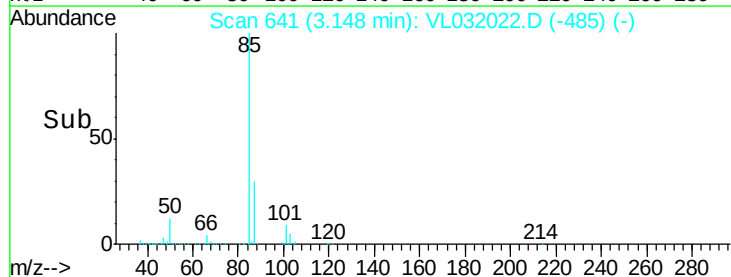
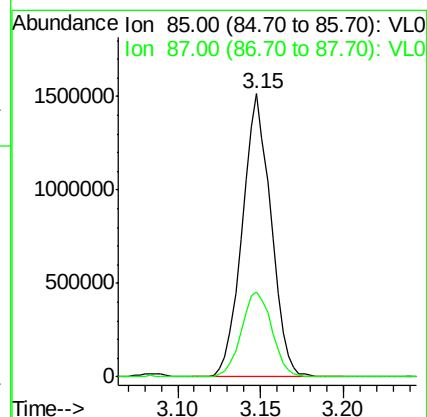
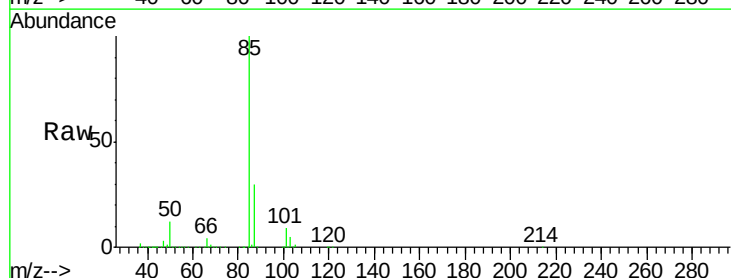
Acq: 31 May 2018 20:04

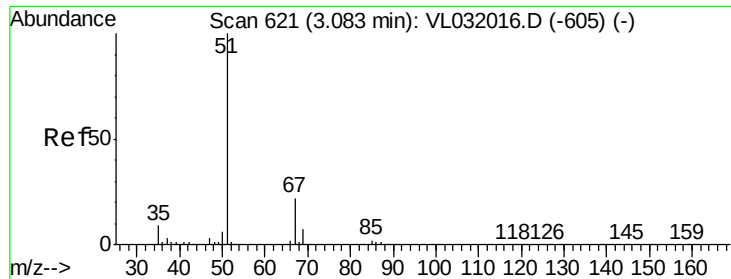
Tgt Ion: 85 Resp: 1822586

Ion Ratio Lower Upper

85 100

87 29.8 25.5 38.3





#3

Chlorodifluoromethane

Concen: 10.93 ppbv

RT: 3.08 min Scan# 621

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 51 Resp: 1439674

Ion Ratio Lower Upper

51 100

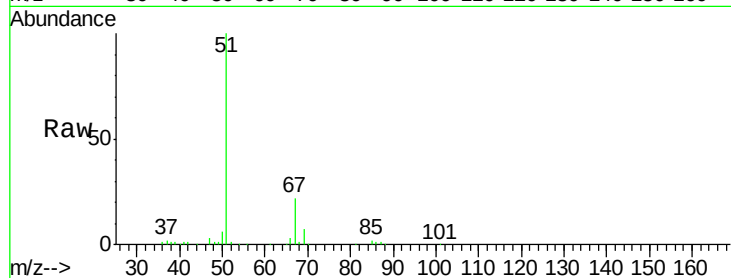
67 21.6 17.2 25.8

Manual Integrations

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.08

1200000

1000000

800000

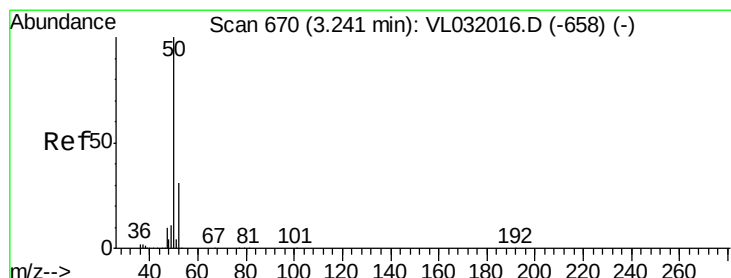
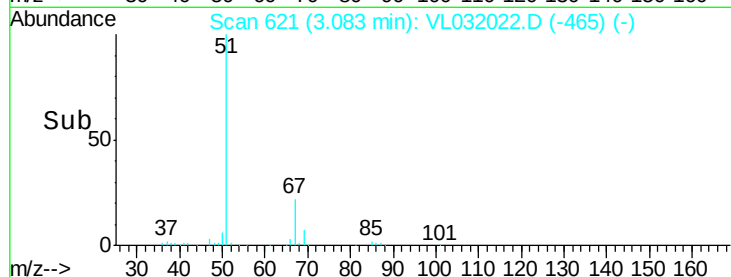
600000

400000

200000

0

Time-->



#4

Chloromethane

Concen: 12.32 ppbv

RT: 3.24 min Scan# 671

Delta R.T. 0.00 min

Lab File: VL032022.D

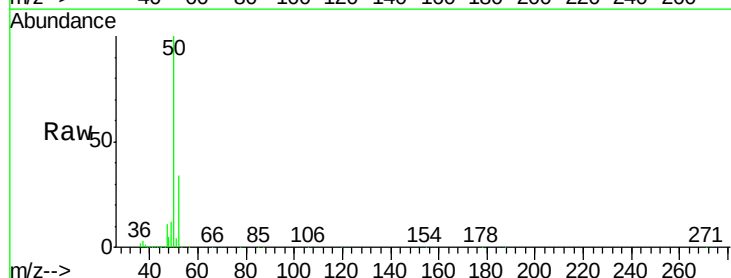
Acq: 31 May 2018 20:04

Tgt Ion: 50 Resp: 840089

Ion Ratio Lower Upper

50 100

52 33.5 25.0 37.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.24

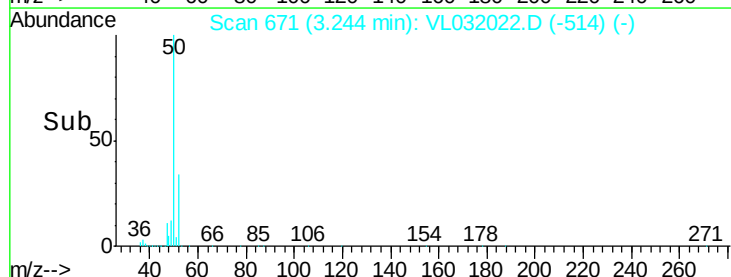
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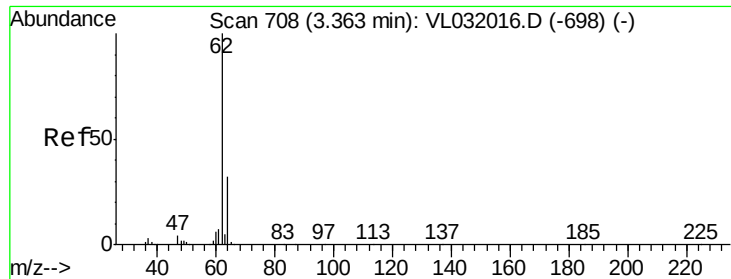
400000

200000

0

Time-->





#5

Vinyl Chloride

Concen: 11.87 ppbv

RT: 3.37 min Scan# 709

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 62 Resp: 922327

Ion Ratio Lower Upper

62 100

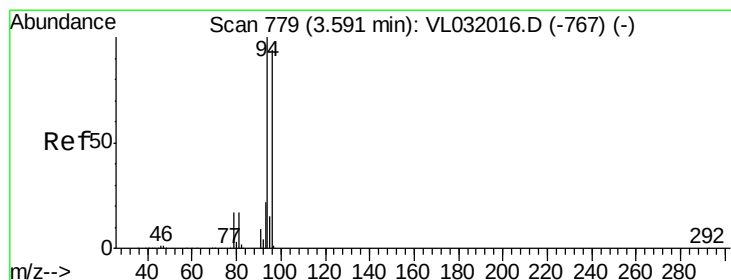
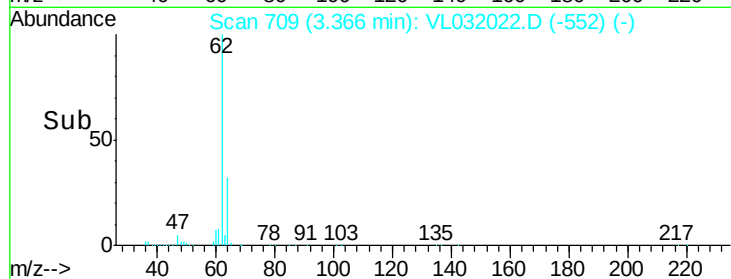
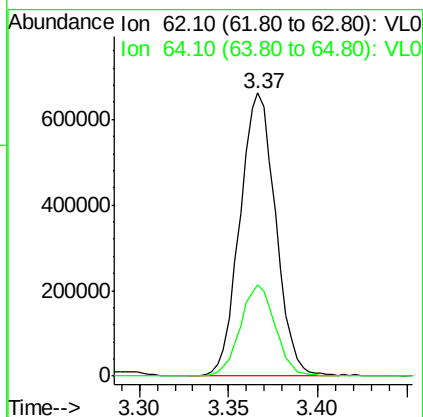
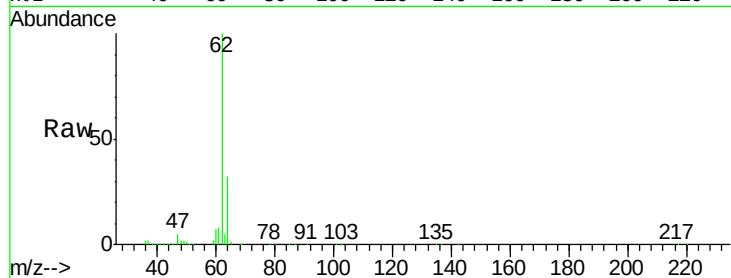
64 32.4 25.2 37.8

Manual Integrations

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#6

Bromomethane

Concen: 13.17 ppbv

RT: 3.59 min Scan# 779

Delta R.T. 0.00 min

Lab File: VL032022.D

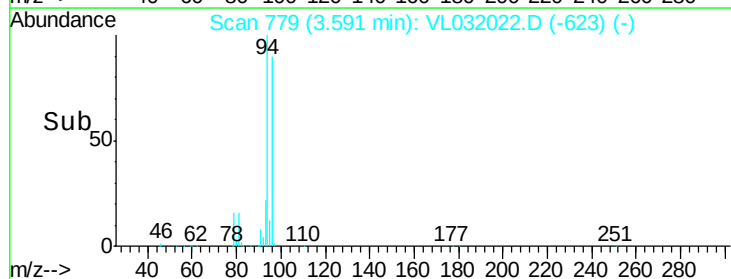
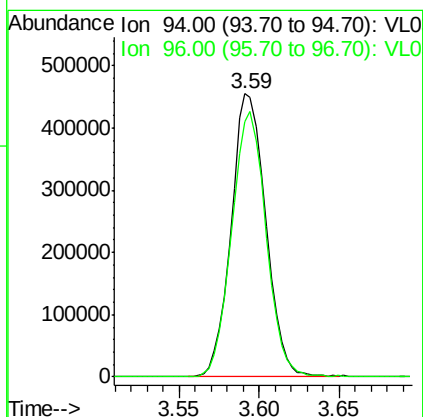
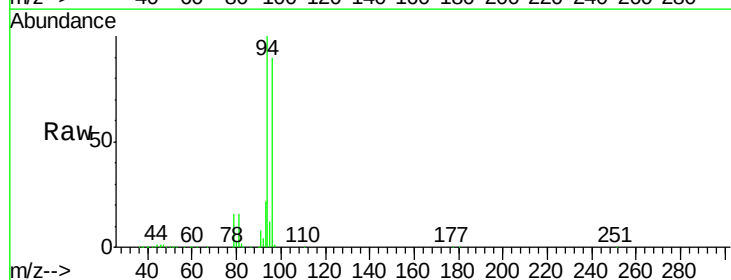
Acq: 31 May 2018 20:04

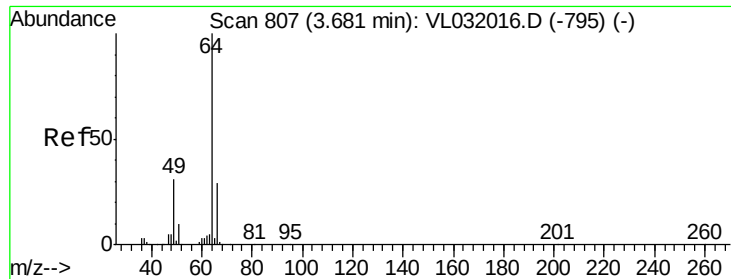
Tgt Ion: 94 Resp: 668285

Ion Ratio Lower Upper

94 100

96 90.0 75.1 112.7





#7

Chloroethane

Concen: 13.69 ppbv

RT: 3.68 min Scan# 807

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 64 Resp: 407091

Ion Ratio Lower Upper

64 100

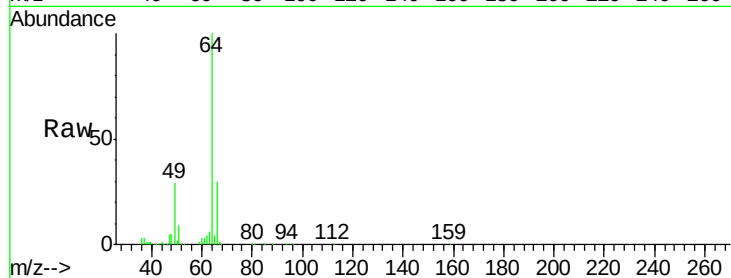
66 29.6 23.4 35.2

Manual Integrations

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6/4/2018 10:55:09 AM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0

3.68

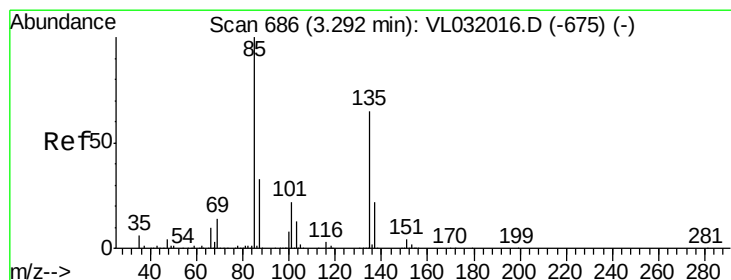
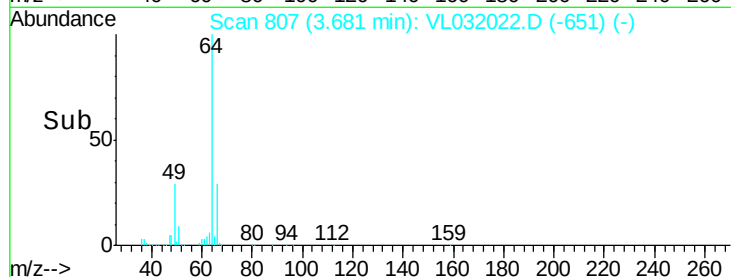
300000

200000

100000

0

Time-->



#8

Dichlorotetrafluoroethane

Concen: 12.11 ppbv

RT: 3.29 min Scan# 686

Delta R.T. 0.00 min

Lab File: VL032022.D

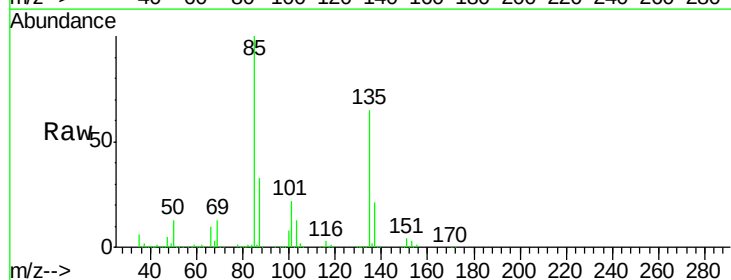
Acq: 31 May 2018 20:04

Tgt Ion: 85 Resp: 2213884

Ion Ratio Lower Upper

85 100

135 66.7 52.6 79.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V

3.29

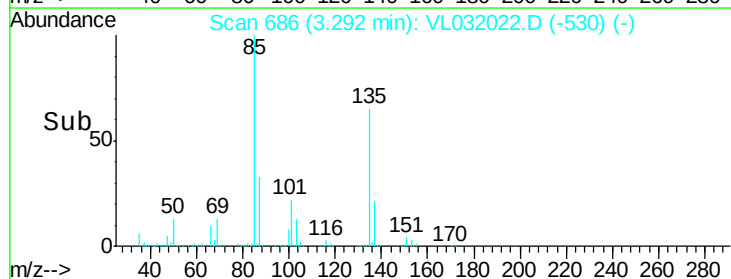
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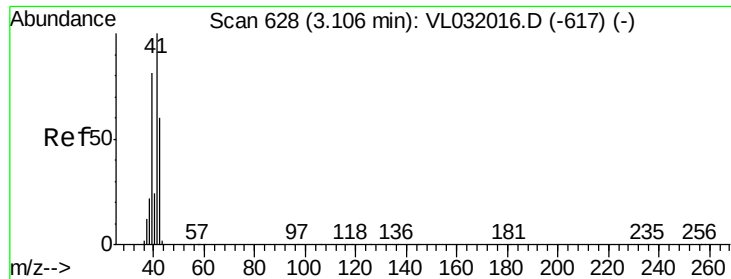
1000000

500000

0

Time-->





#9

Propene

Concen: 13.17 ppbv

RT: 3.11 min Scan# 628

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 41 Resp: 628776

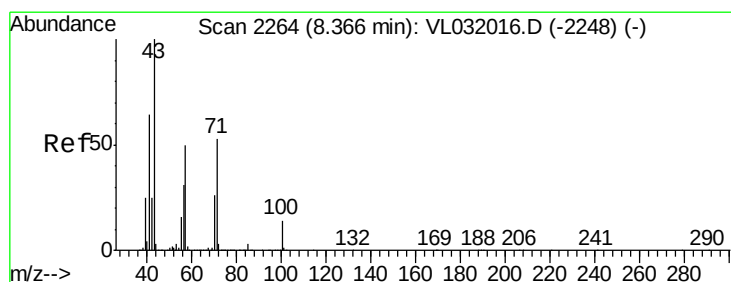
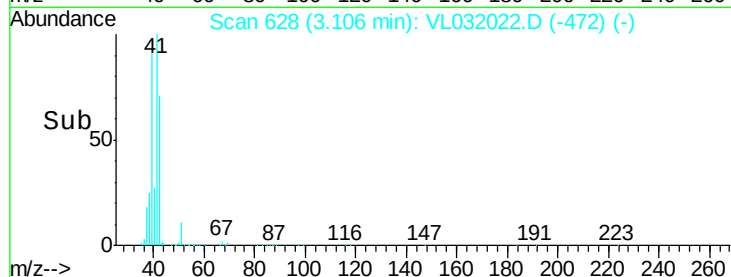
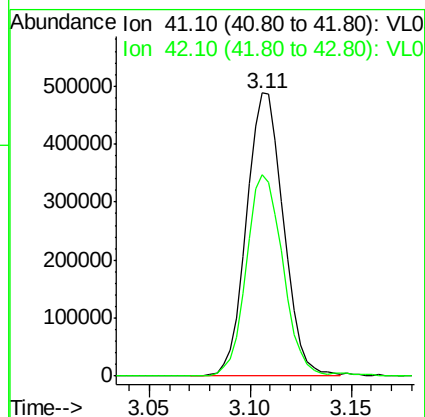
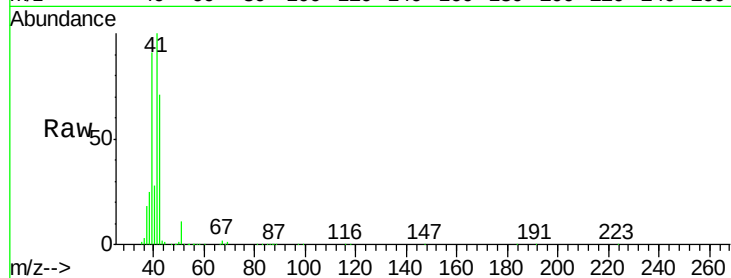
Ion Ratio Lower Upper

41 100

42 71.0 54.4 81.6

Manual Integrations
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6/4/2018 10:55:09 AM



#10

Heptane

Concen: 13.73 ppbv

RT: 8.37 min Scan# 2264

Delta R.T. 0.00 min

Lab File: VL032022.D

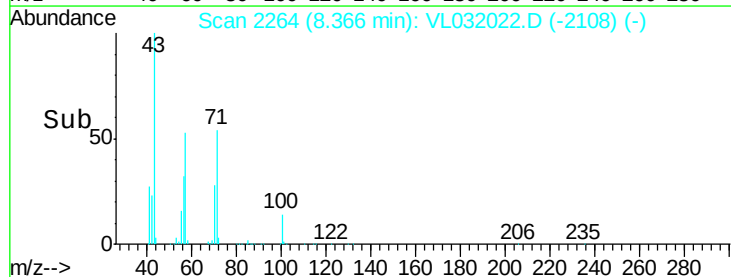
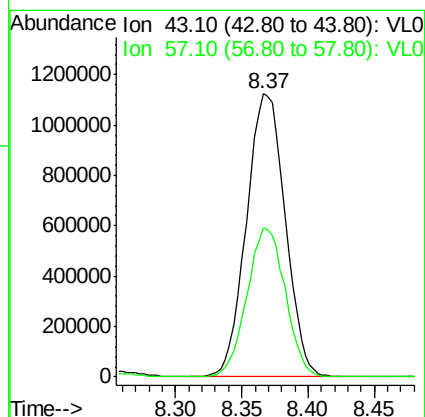
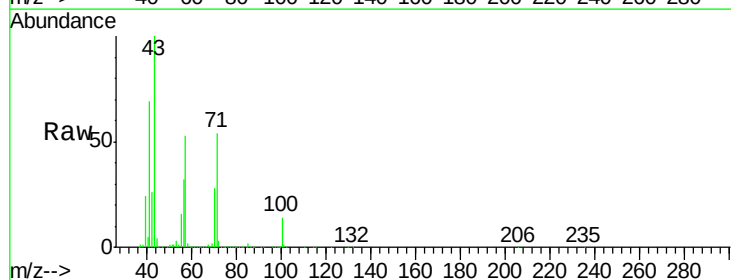
Acq: 31 May 2018 20:04

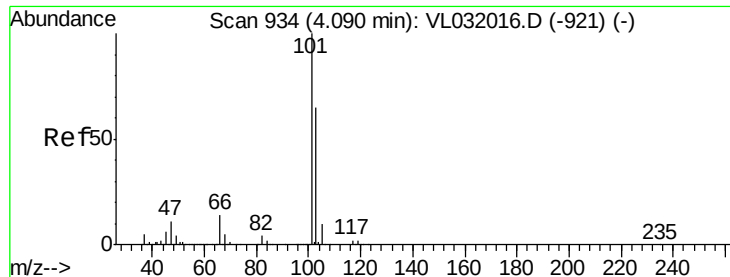
Tgt Ion: 43 Resp: 2280256

Ion Ratio Lower Upper

43 100

57 52.5 41.7 62.5





#11

Trichlorofluoromethane

Concen: 12.32 ppbv

RT: 4.09 min Scan# 934

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

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ClientSampleId :

VSTDIC015

Tot Ion:101 Resp: 2798813

Ion Ratio Lower Upper

101 100

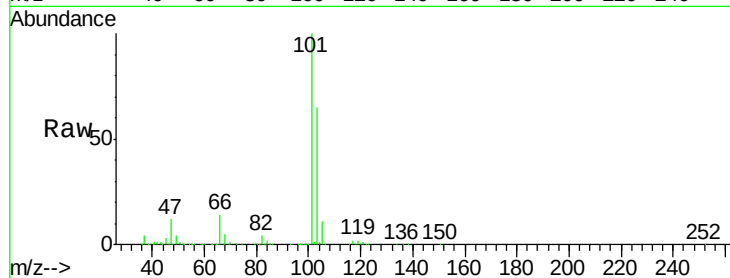
103 65.2 52.0 78.0

Manual Integrations

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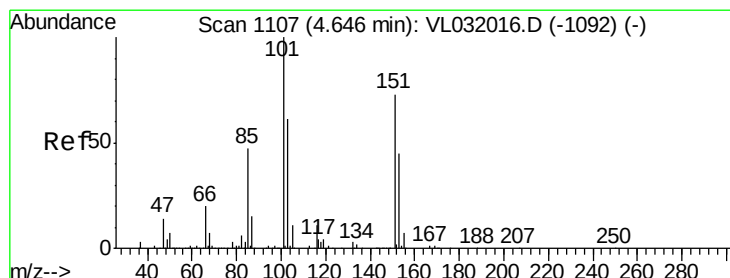
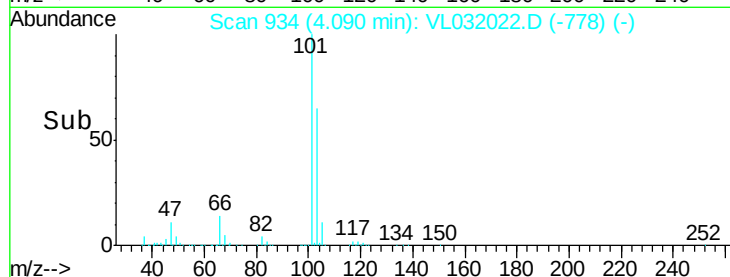
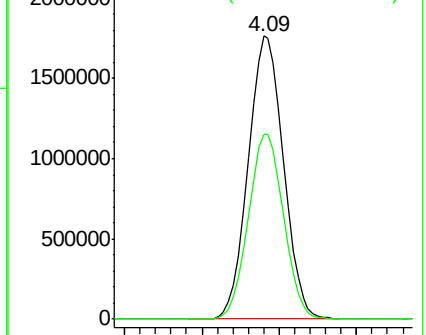
MMDadoda

6/4/2018 10:55:09 AM



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 14.20 ppbv

RT: 4.65 min Scan# 1107

Delta R.T. 0.00 min

Lab File: VL032022.D

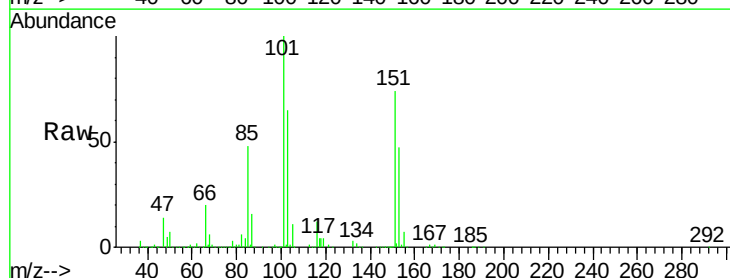
Acq: 31 May 2018 20:04

Tgt Ion:101 Resp: 2293821

Ion Ratio Lower Upper

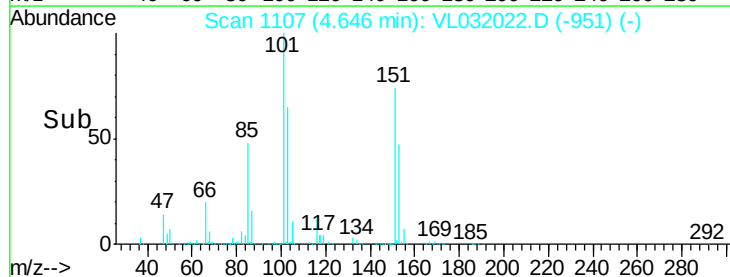
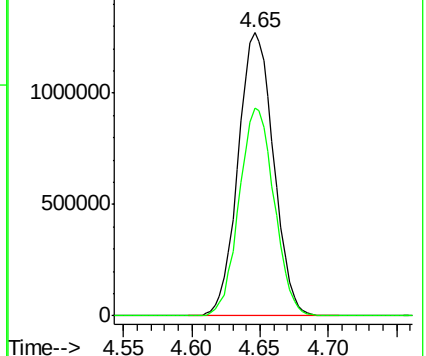
101 100

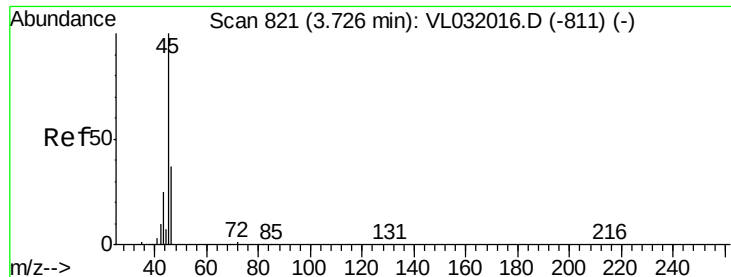
151 72.7 58.2 87.4



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 10.41 ppbv

RT: 3.73 min Scan# 823

Delta R.T. 0.01 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 45 Resp: 186063

Ion Ratio Lower Upper

45 100

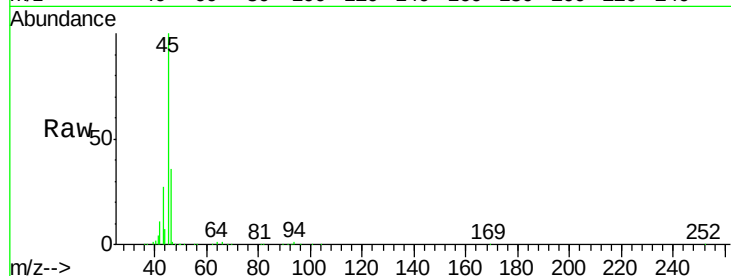
46 37.3 14.9 59.5

Manual Integrations

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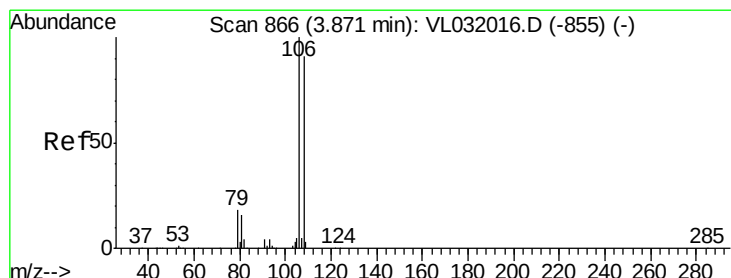
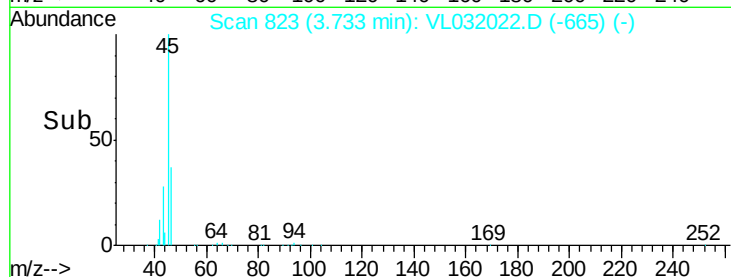
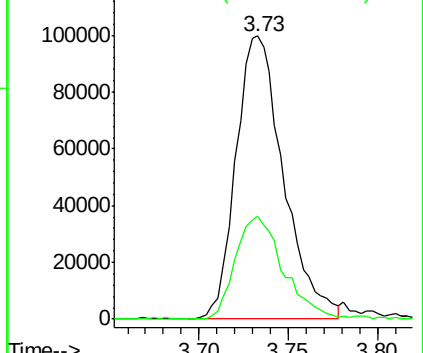
MMDadoda

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0



#14

Bromoethene

Concen: 12.84 ppbv

RT: 3.87 min Scan# 866

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

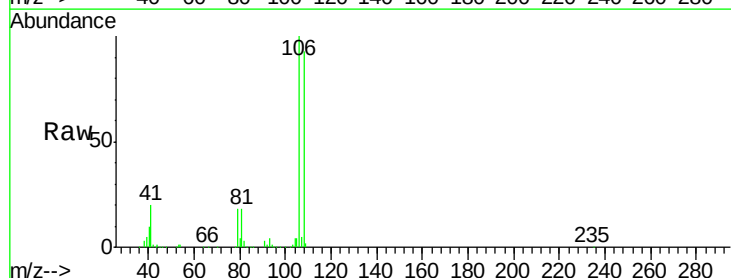
Tgt Ion: 108 Resp: 746707

Ion Ratio Lower Upper

108 100

106 108.1 85.1 127.7

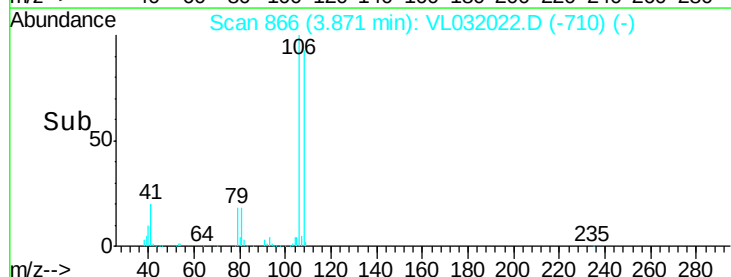
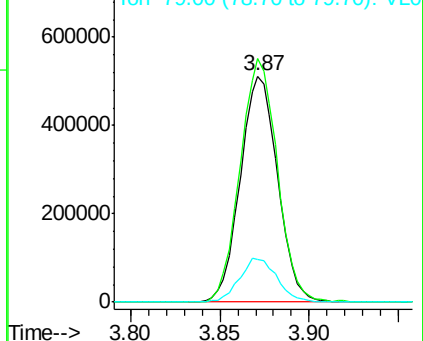
79 19.8 15.2 22.8

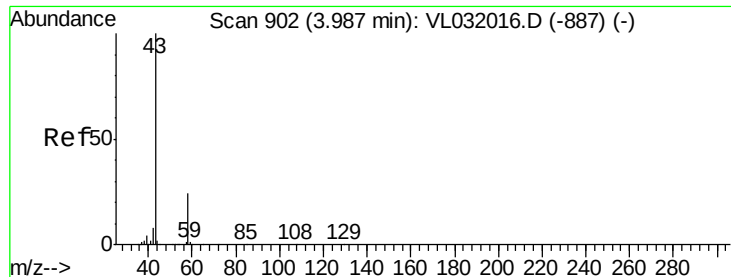


Abundance Ion 108.00 (107.70 to 108.70): V

Ion 106.00 (105.70 to 106.70): V

Ion 79.00 (78.70 to 79.70): VL0





#15

Acetone

Concen: 9.53 ppbv

RT: 3.99 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Tot Ion: 43 Resp: 1864086

Ion Ratio Lower Upper

43 100

58 25.8 20.7 31.1

Instrument :

MSVOA_L

ClientSampled :

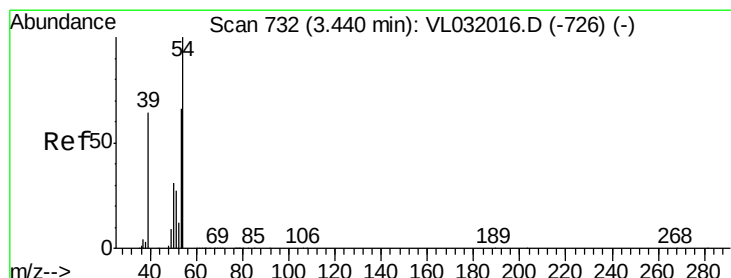
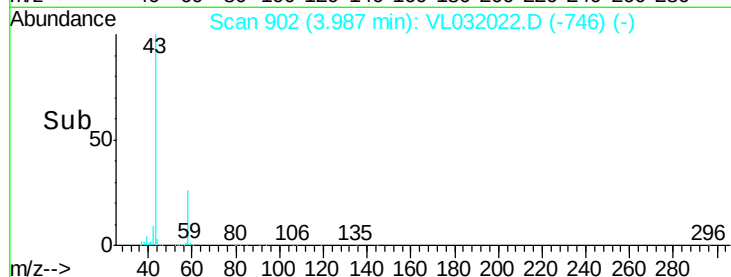
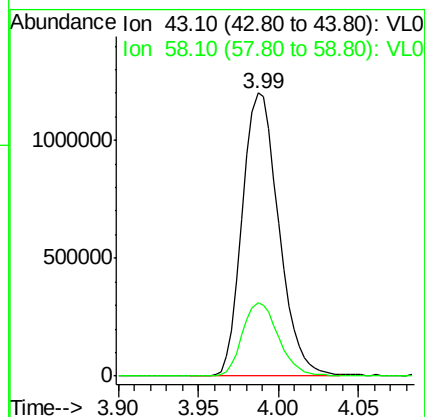
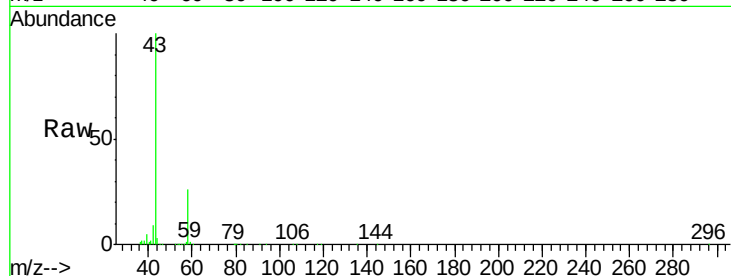
VSTDIC015

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#16

1,3-Butadiene

Concen: 12.64 ppbv

RT: 3.44 min Scan# 732

Delta R.T. 0.00 min

Lab File: VL032022.D

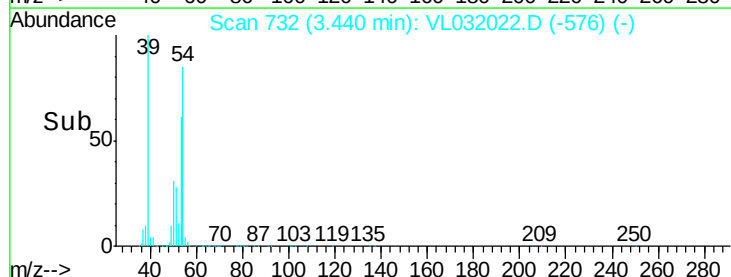
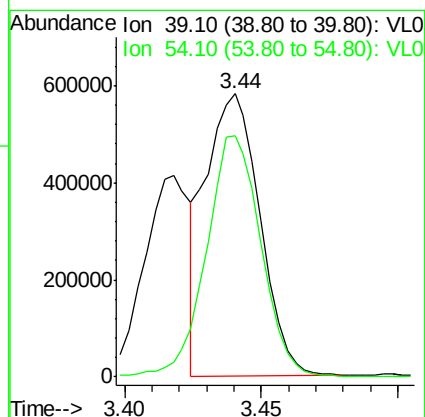
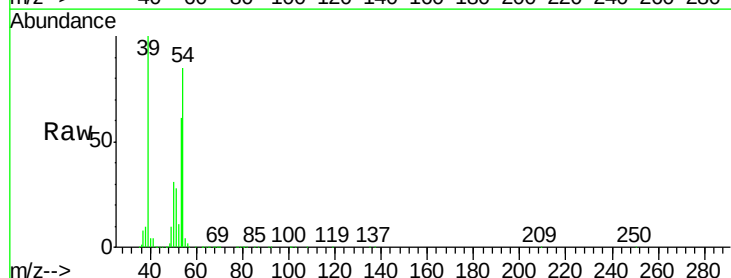
Acq: 31 May 2018 20:04

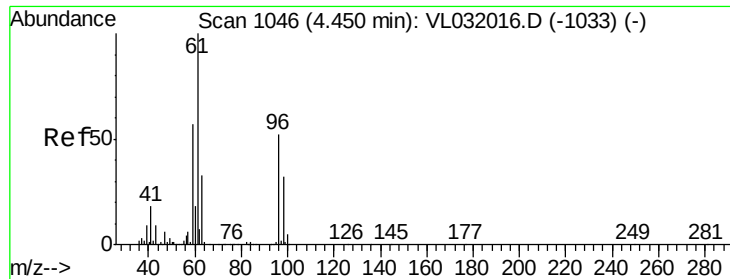
Tgt Ion: 39 Resp: 800695

Ion Ratio Lower Upper

39 100

54 86.6 65.7 98.5





#17

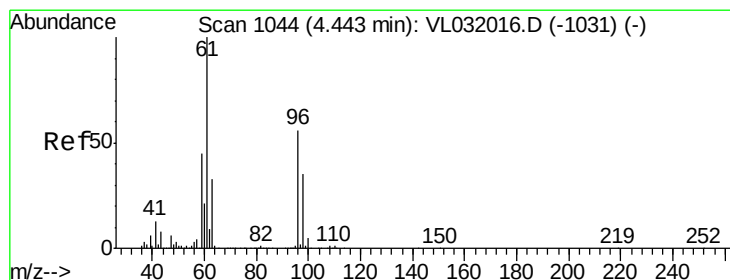
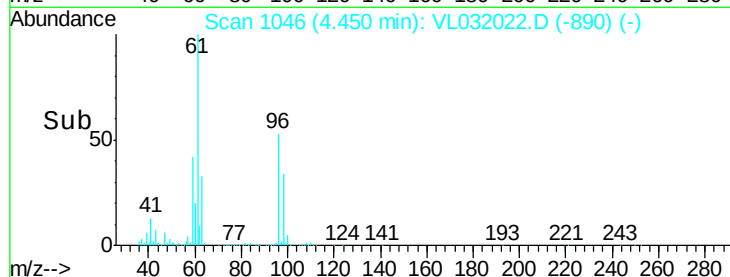
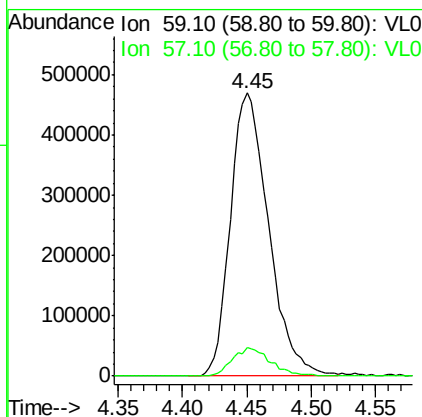
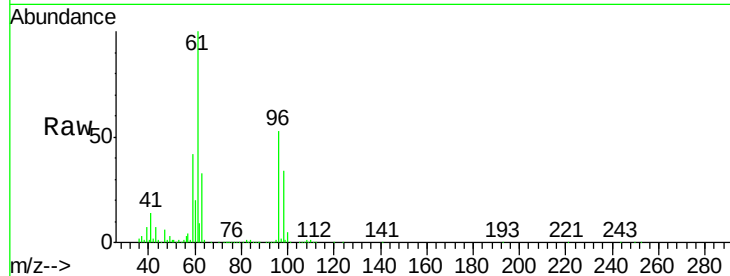
tert-Butyl alcohol
Concen: 11.84 ppbv
RT: 4.45 min Scan# 1046
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
59	100		
57	10.2	8.3	12.5

Manual Integrations
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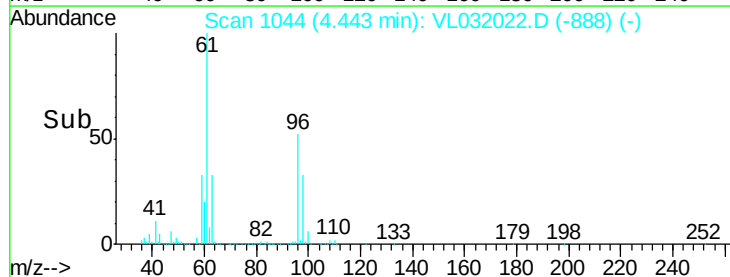
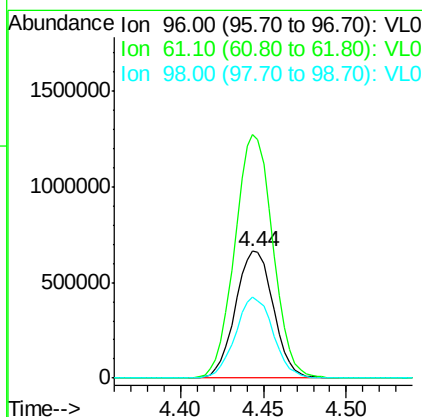
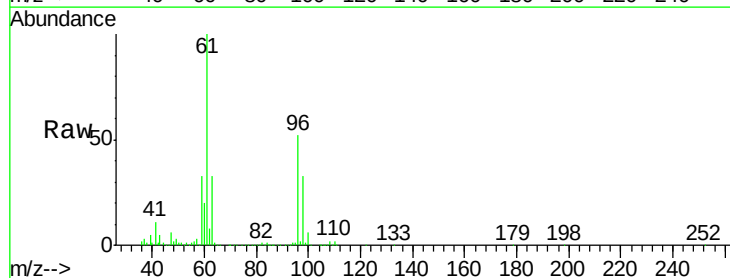
MMDadoda
6/4/2018 10:55:09 AM

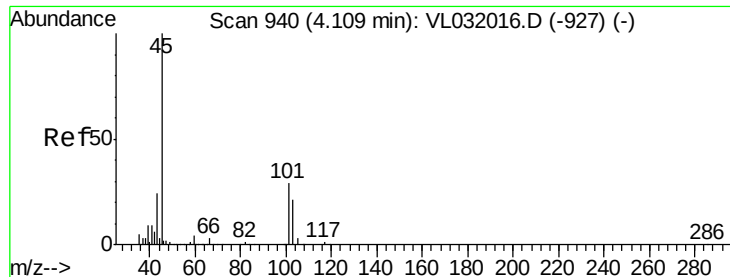


#18

1,1-Dichloroethene
Concen: 15.01 ppbv
RT: 4.44 min Scan# 1044
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
96	100		
61	192.3	143.5	215.3
98	64.2	50.0	75.0





#19

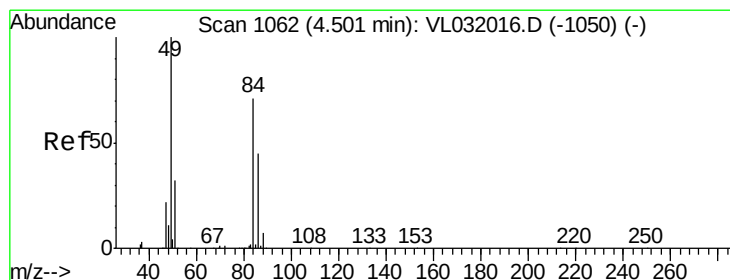
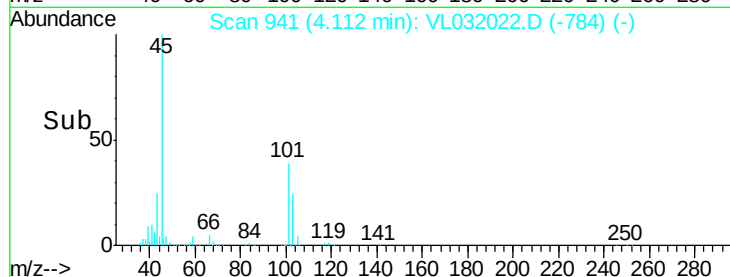
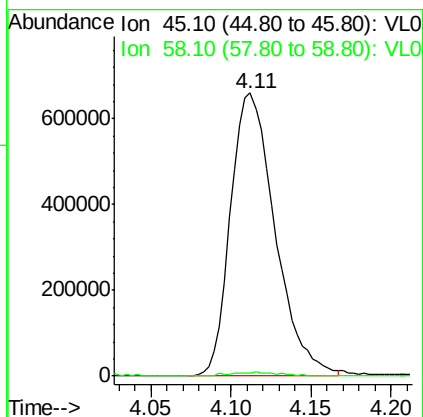
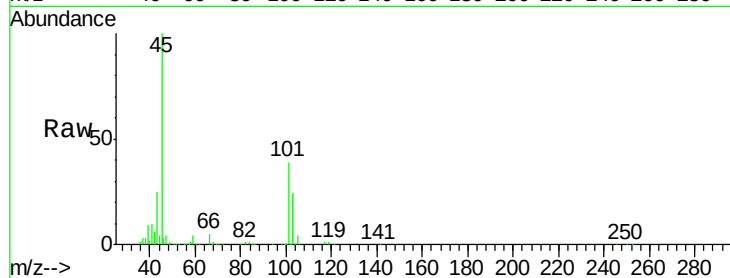
Isopropyl Alcohol
 Concen: 11.47 ppbv
 RT: 4.11 min Scan# 941
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion: 45 Resp: 1250767
 Ion Ratio Lower Upper
 45 100
 58 1.8 1.5 2.3

Manual Integrations
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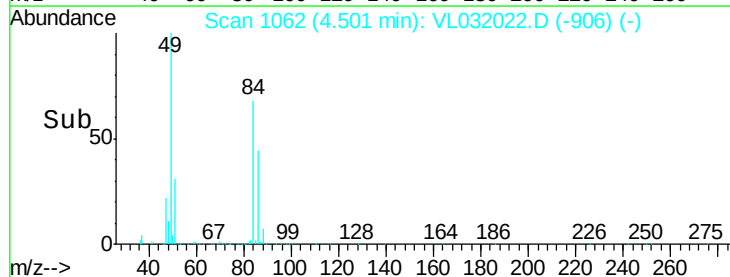
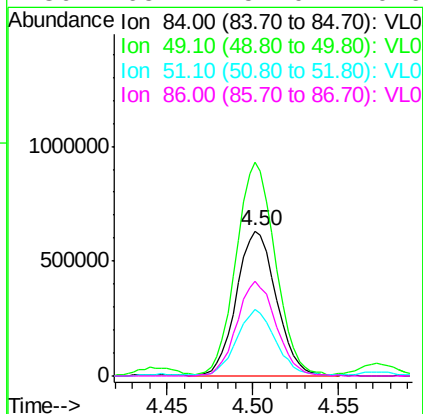
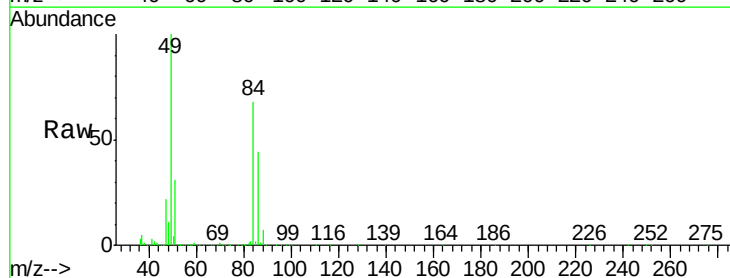
MMDadoda
 6/4/2018 10:55:09 AM

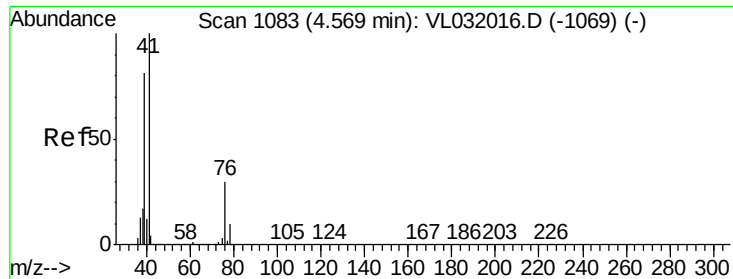


#20

Methylene Chloride
 Concen: 14.89 ppbv
 RT: 4.50 min Scan# 1062
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion: 84 Resp: 1007952
 Ion Ratio Lower Upper
 84 100
 49 146.6 113.0 169.4
 51 44.9 36.4 54.6
 86 65.1 51.0 76.6





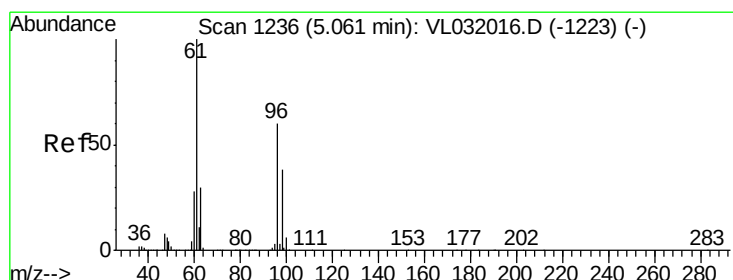
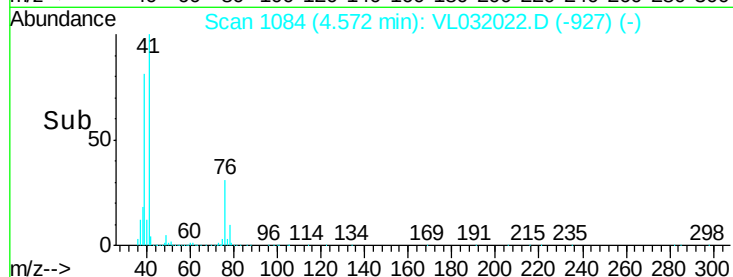
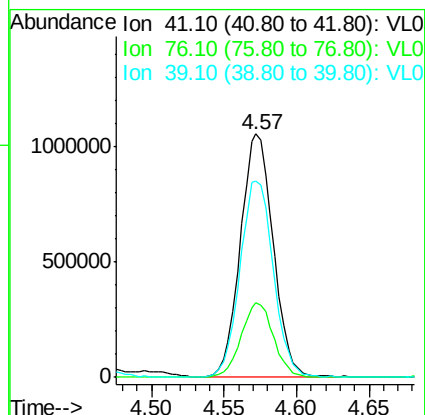
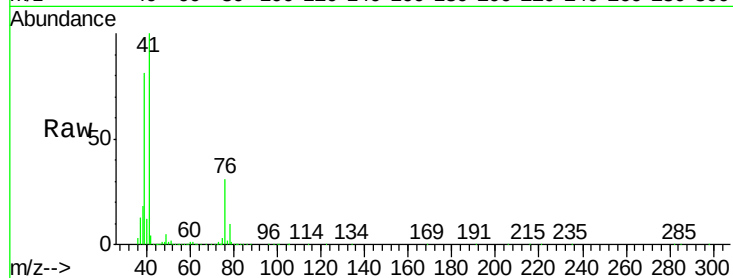
#21
Allvl Chloride
Concen: 14.49 ppbv
RT: 4.57 min Scan# 1084
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
41	100		
76	30.4	23.9	35.9
39	83.2	65.9	98.9

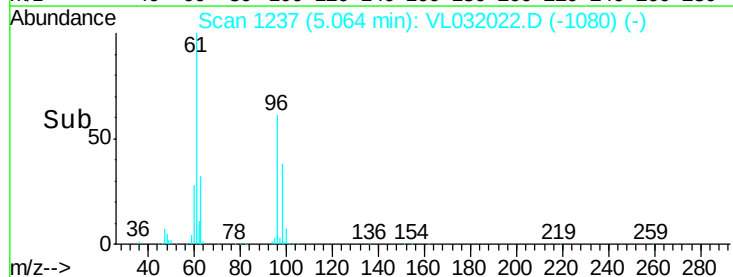
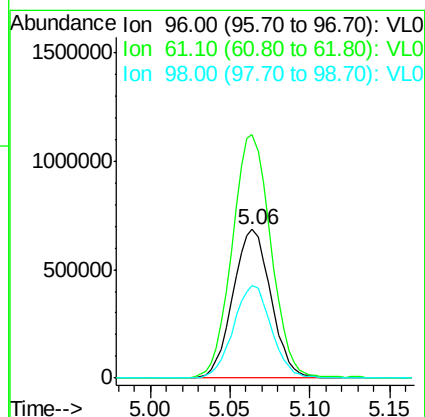
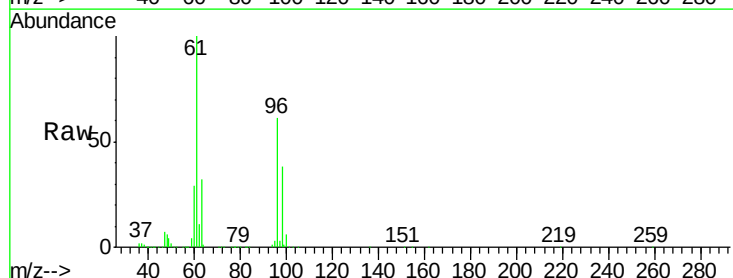
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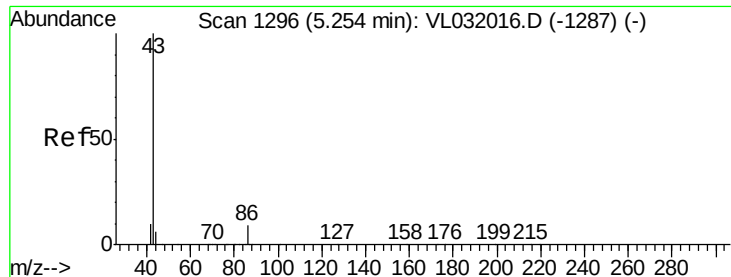
MMDadoda
6/4/2018 10:55:09 AM



#22
trans-1,2-Dichloroethene
Concen: 14.10 ppbv
RT: 5.06 min Scan# 1237
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
96	100		
61	163.9	133.3	199.9
98	62.5	51.0	76.4





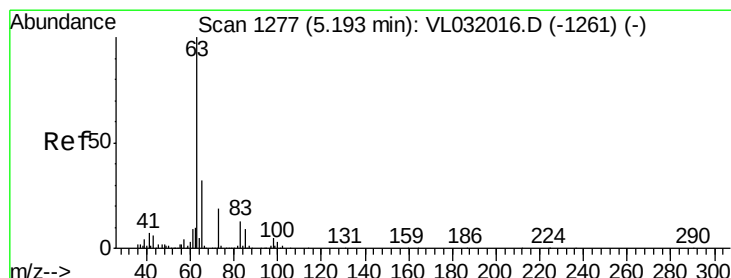
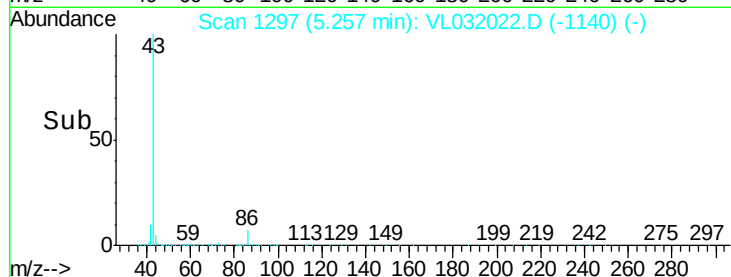
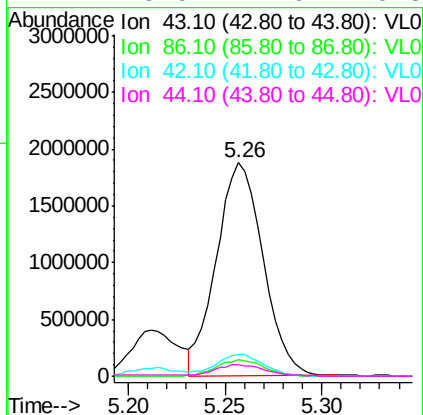
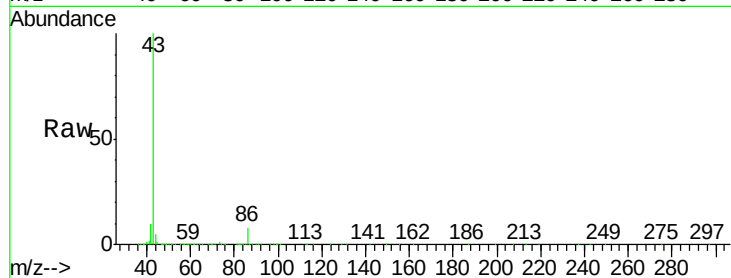
#23
 Vinyl Acetate
 Concen: 13.81 ppbv
 RT: 5.26 min Scan# 1297
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	43	Resp	3142584
Ion	Ratio	Lower	Upper
43	100		
86	7.5	6.2	9.4
42	10.4	8.7	13.1
44	5.0	4.6	6.8

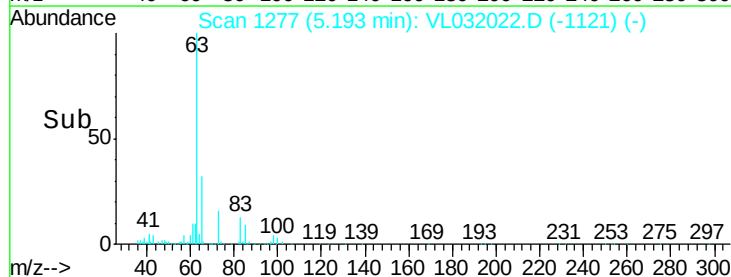
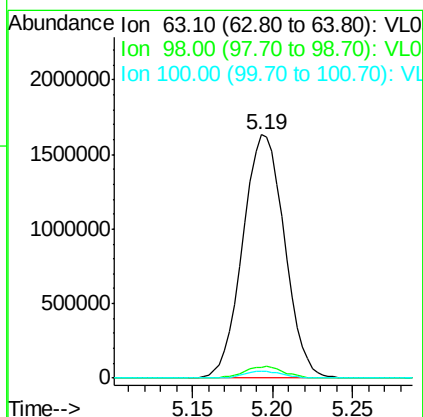
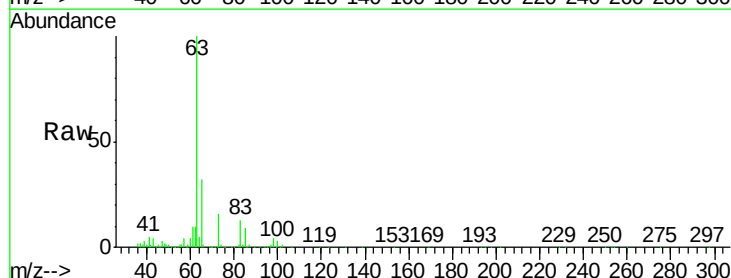
Manual Integrations
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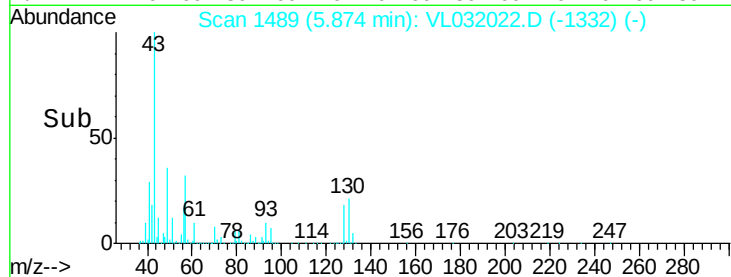
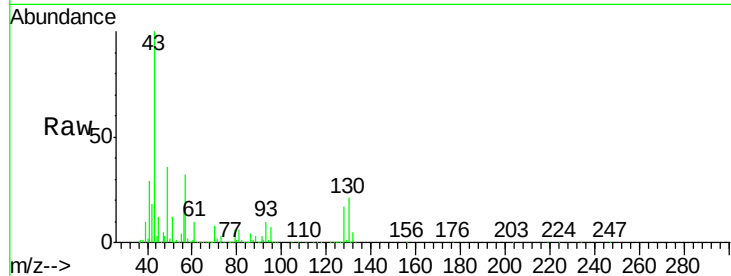
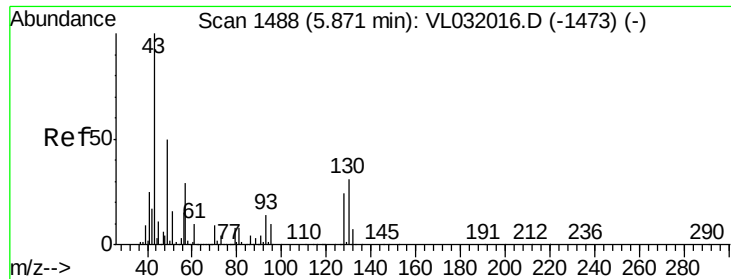
MMDadoda
 6/4/2018 10:55:09 AM



#24
 1,1-Dichloroethane
 Concen: 13.59 ppbv
 RT: 5.19 min Scan# 1277
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion	63	Resp	2915977
Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.4	7.1
100	2.6	1.5	4.5





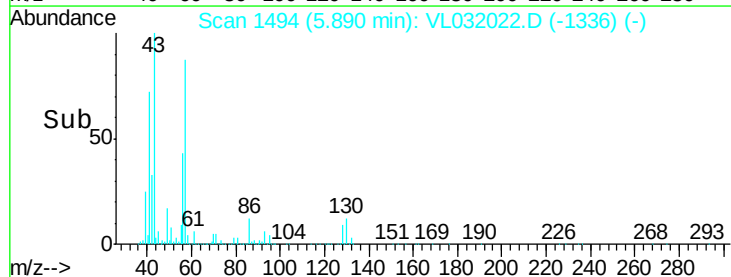
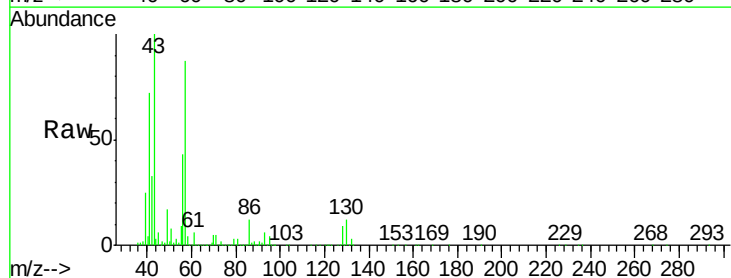
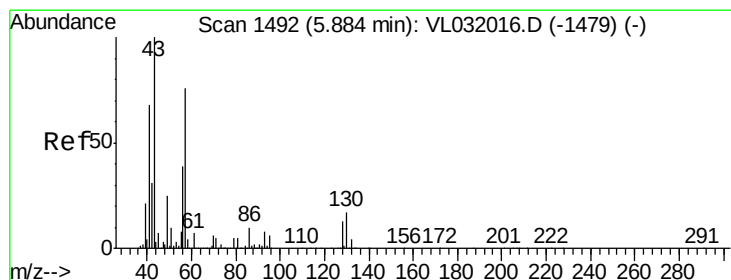
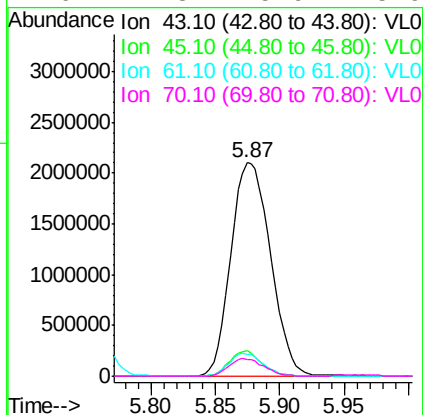
#25
Ethyl Acetate
Concen: 13.19 ppbv
RT: 5.87 min Scan# 1489
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tot Ion	43	Resp	4494243
Ion	Ratio	Lower	Upper
43	100		
45	9.8	7.8	11.6
61	9.3	7.4	11.2
70	7.3	5.9	8.9

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

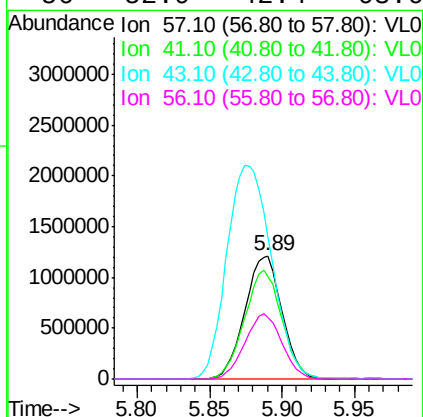
Manual Integrations
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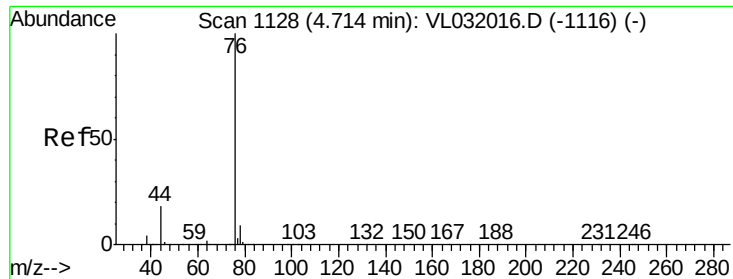
MMDadoda
6/4/2018 10:55:09 AM



#26
Hexane
Concen: 13.39 ppbv
RT: 5.89 min Scan# 1494
Delta R.T. 0.01 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	57	Resp	2152372
Ion	Ratio	Lower	Upper
57	100		
41	89.9	71.4	107.2
43	209.4	168.6	252.8
56	52.9	42.4	63.6





#27

Carbon Disulfide

Concen: 15.70 ppbv

RT: 4.72 min Scan# 1129

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

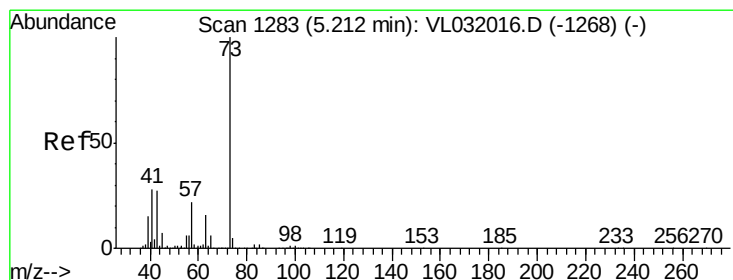
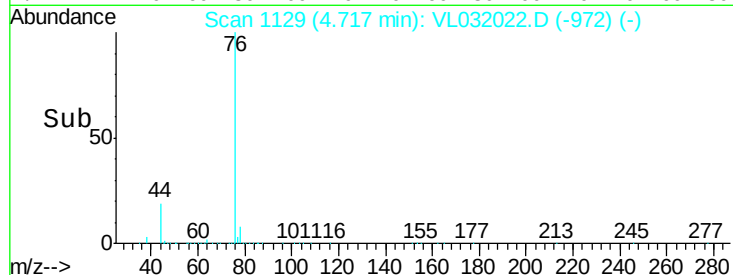
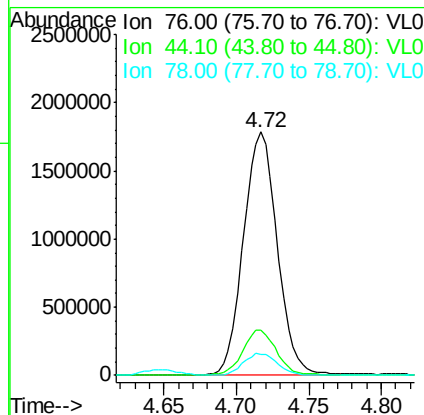
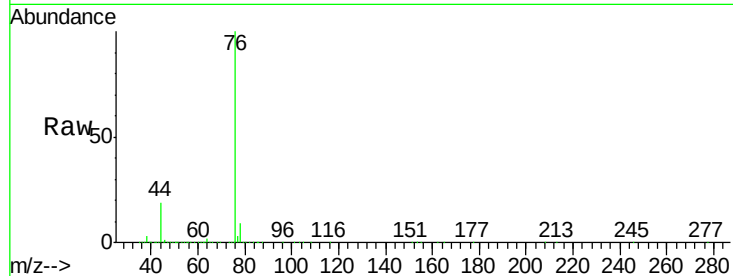
ClientSampleId :

VSTDIC015

Tot Ion:	76	Resp:	2901881
Ion	Ratio	Lower	Upper
76	100		
44	18.6	14.9	22.3
78	9.1	7.6	11.4

Manual Integrations
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MMDadoda
6/4/2018 10:55:09 AM



#28

Methyl tert-Butyl Ether

Concen: 13.96 ppbv

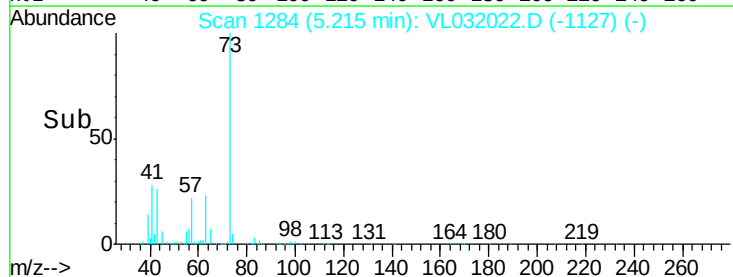
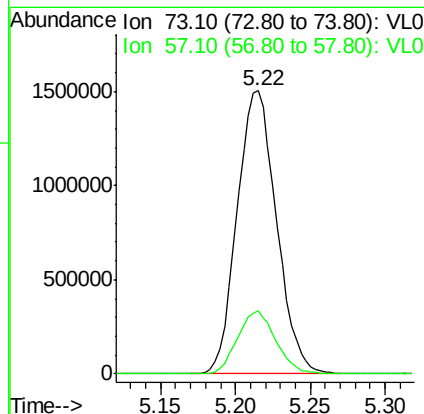
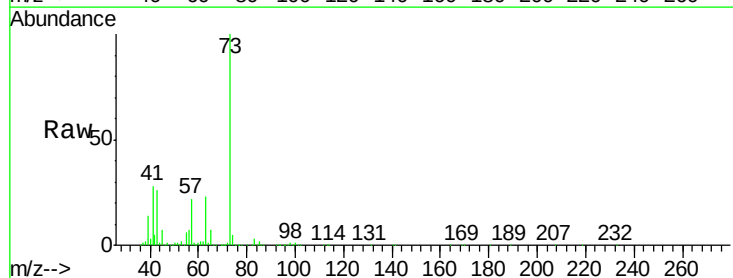
RT: 5.22 min Scan# 1284

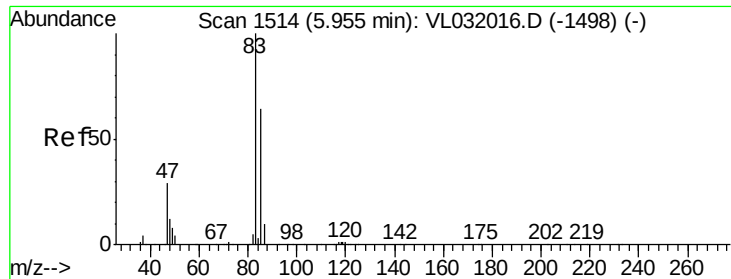
Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Tgt Ion:	73	Resp:	2757091
Ion	Ratio	Lower	Upper
73	100		
57	21.8	17.8	26.8





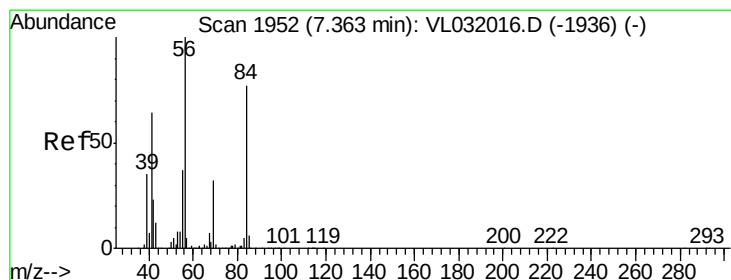
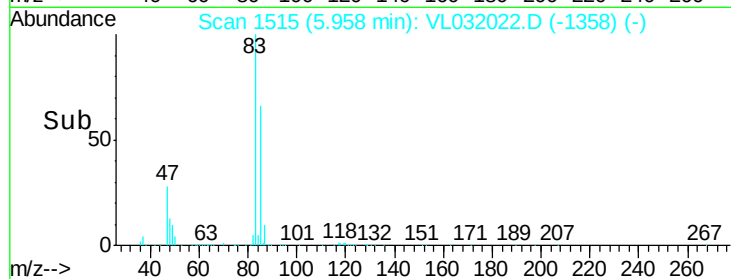
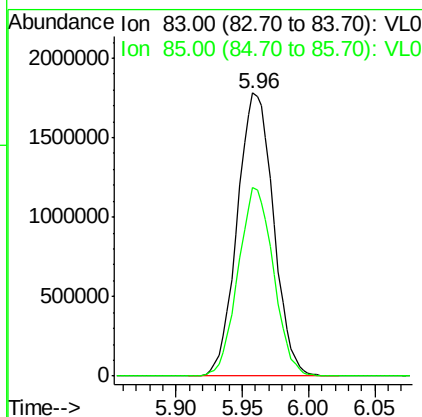
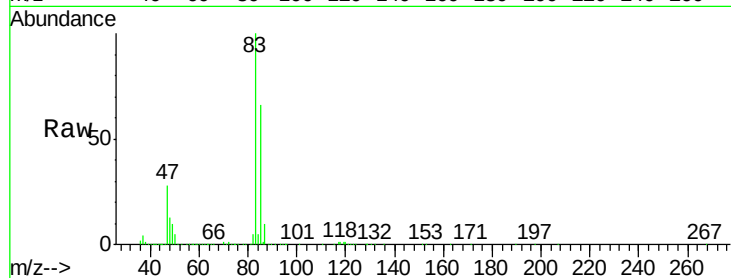
#29
Chloroform
Concen: 13.18 ppbv
RT: 5.96 min Scan# 1515
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 83 Resp: 3380923
Ion Ratio Lower Upper
83 100
85 66.4 50.9 76.3

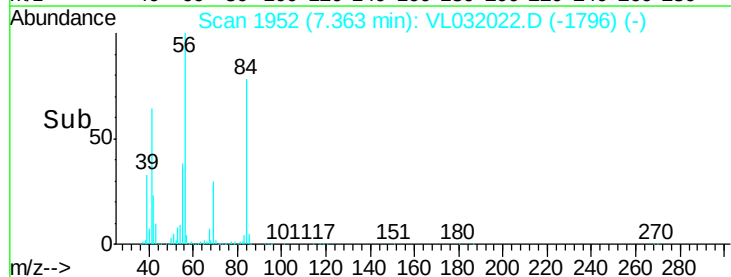
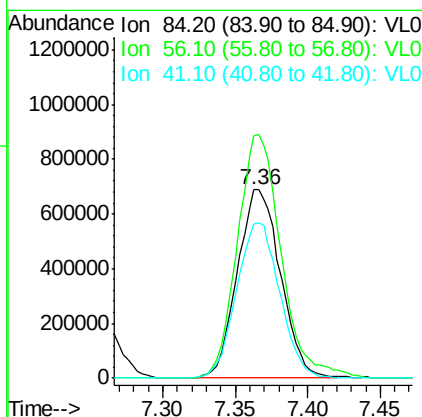
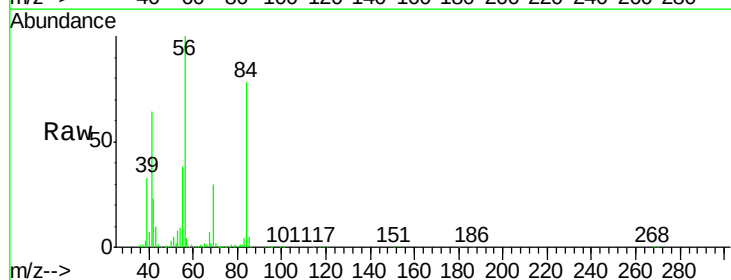
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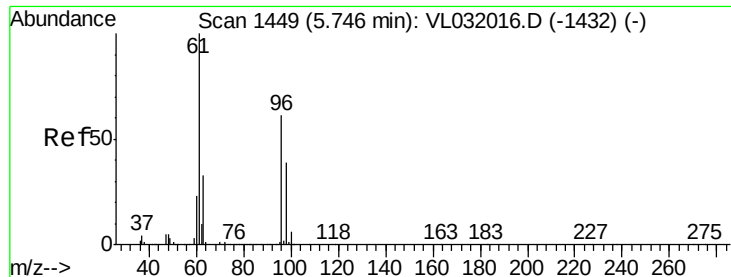
MMDadoda
6/4/2018 10:55:09 AM



#30
Cyclohexane
Concen: 13.39 ppbv
RT: 7.36 min Scan# 1952
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion: 84 Resp: 1420669
Ion Ratio Lower Upper
84 100
56 131.8 108.6 162.8
41 82.7 66.8 100.2





#31

cis-1,2-Dichloroethene

Concen: 14.45 ppbv

RT: 5.75 min Scan# 1450

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 61 Resp: 2130535

Ion Ratio Lower Upper

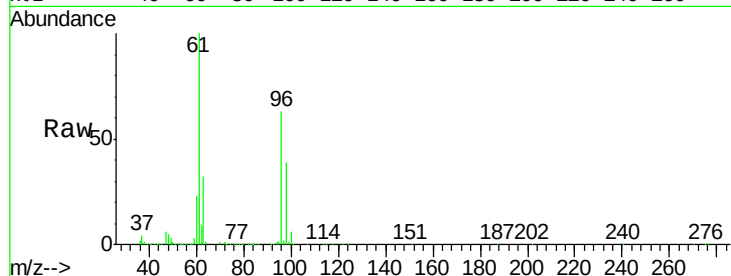
61 100

96 63.3 49.0 73.6

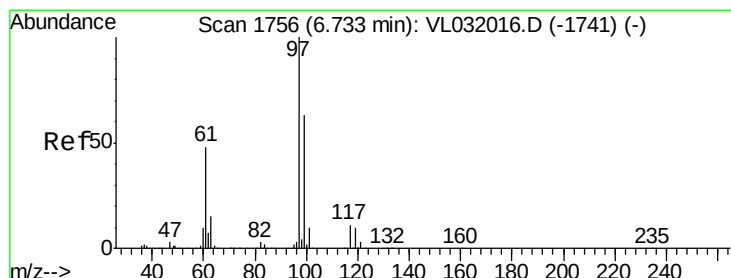
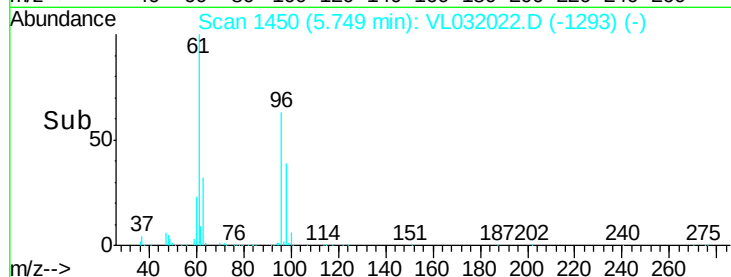
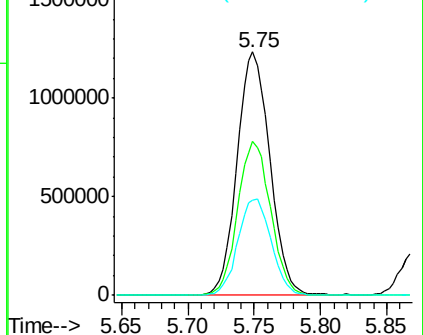
98 39.0 31.2 46.8

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Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#32

1,1,1-Trichloroethane

Concen: 11.97 ppbv

RT: 6.74 min Scan# 1757

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

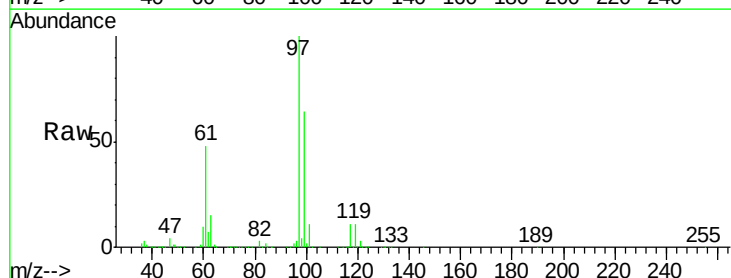
Tgt Ion: 97 Resp: 2788634

Ion Ratio Lower Upper

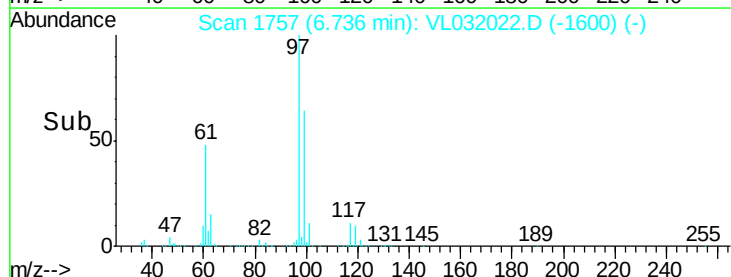
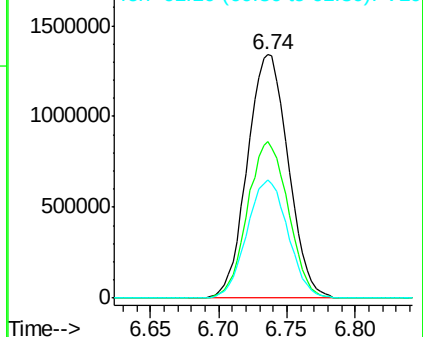
97 100

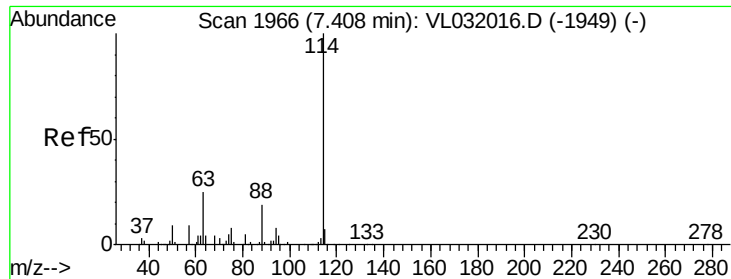
99 64.3 51.5 77.3

61 48.8 39.4 59.2



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





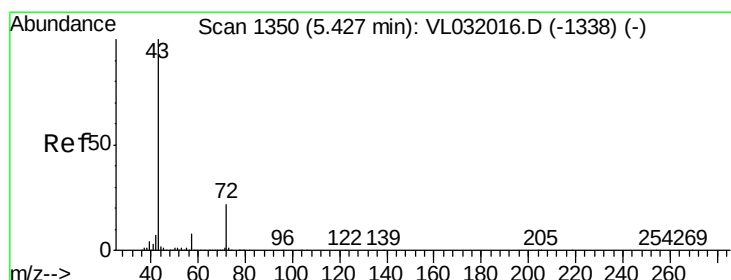
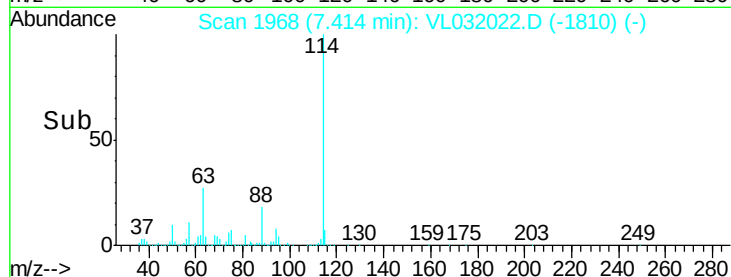
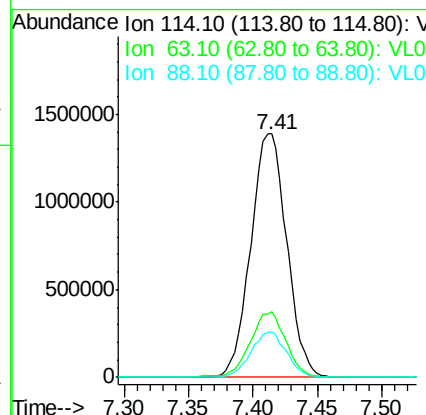
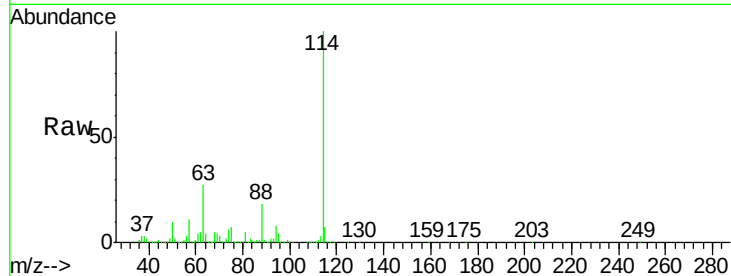
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.41 min Scan# 1968
 Delta R.T. 0.01 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.7	21.1	31.7
88	18.3	14.8	22.2

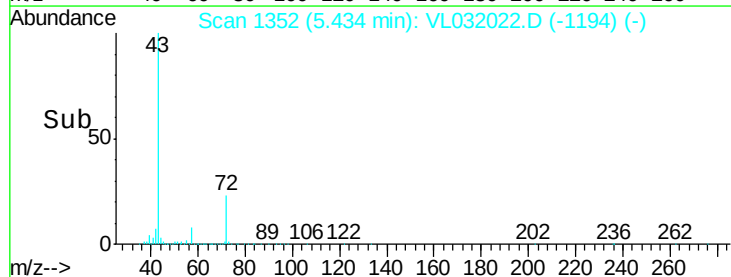
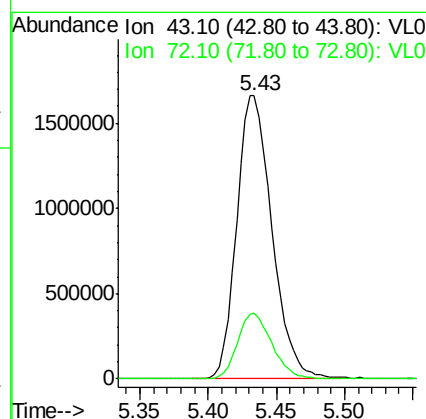
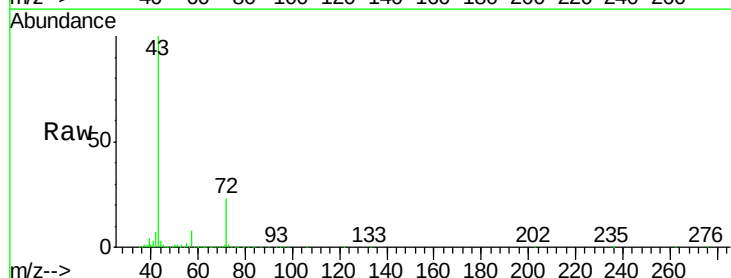
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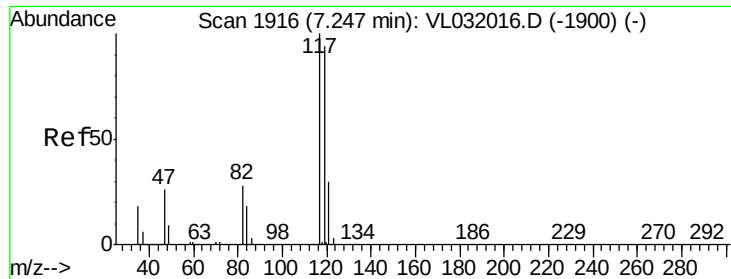
MMDadoda
 6/4/2018 10:55:09 AM



#34
 2-Butanone
 Concen: 13.29 ppbv
 RT: 5.43 min Scan# 1352
 Delta R.T. 0.01 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.0	18.6	27.8





#35

Carbon Tetrachloride

Concen: 13.59 ppbv

RT: 7.25 min Scan# 1918

Delta R.T. 0.01 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:117 Resp: 2944849

Ion Ratio Lower Upper

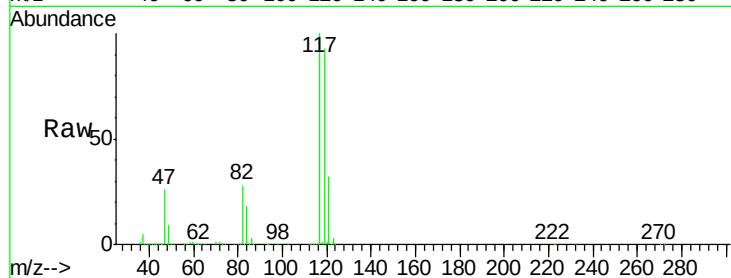
117 100

119 93.3 75.3 112.9

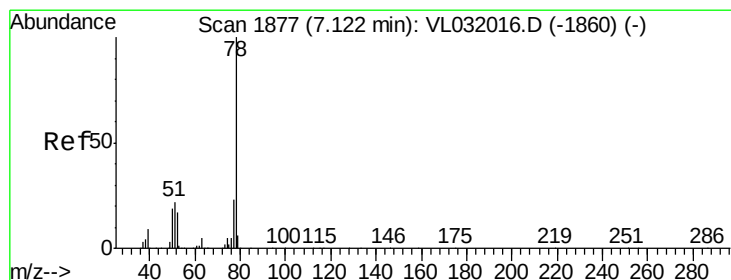
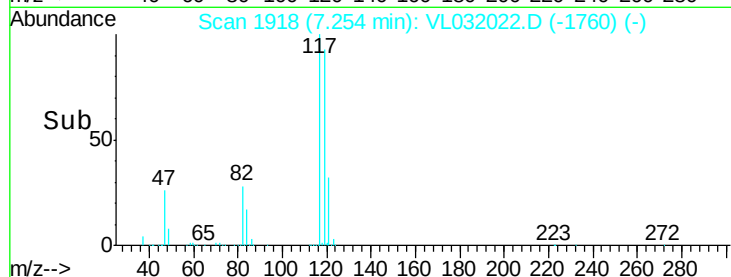
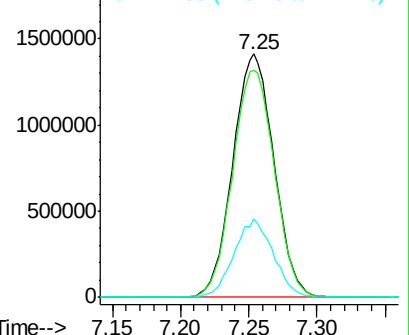
121 32.2 24.1 36.1

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Abundance Ion 117.00 (116.70 to 117.70): V
Ion 119.00 (118.70 to 119.70): V
Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 13.69 ppbv

RT: 7.13 min Scan# 1878

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

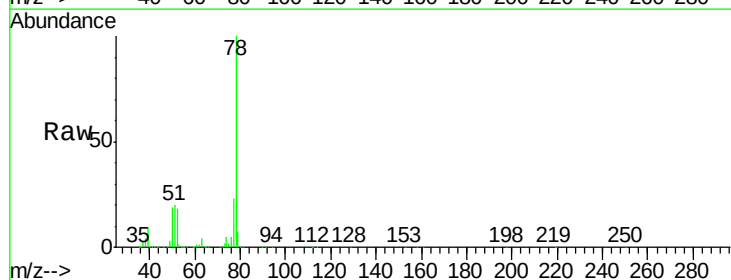
Tgt Ion: 78 Resp: 3478186

Ion Ratio Lower Upper

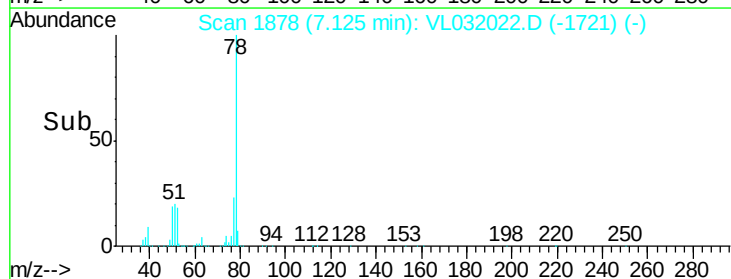
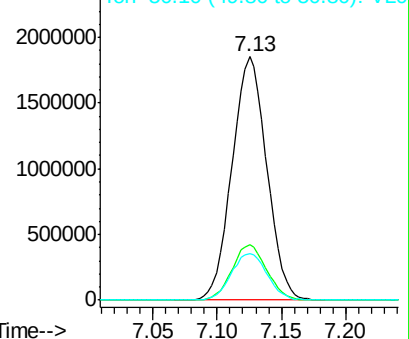
78 100

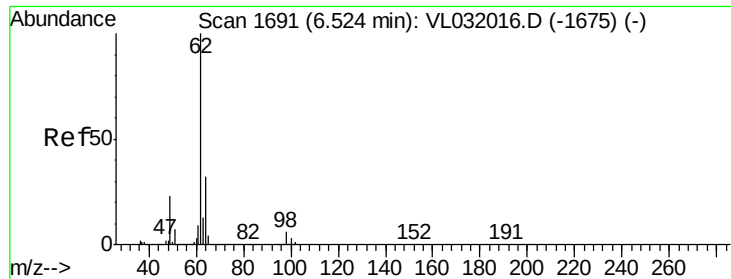
77 22.5 18.1 27.1

50 18.8 14.9 22.3



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0





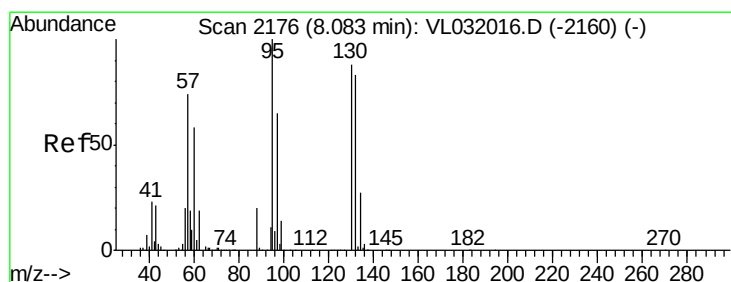
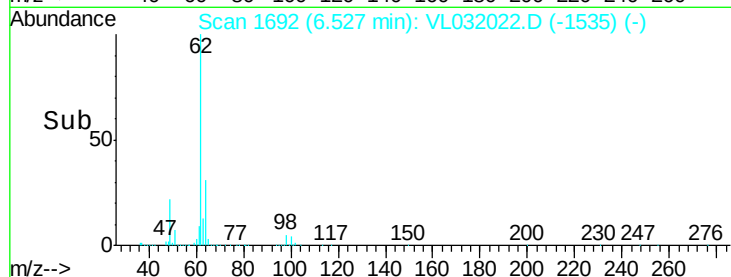
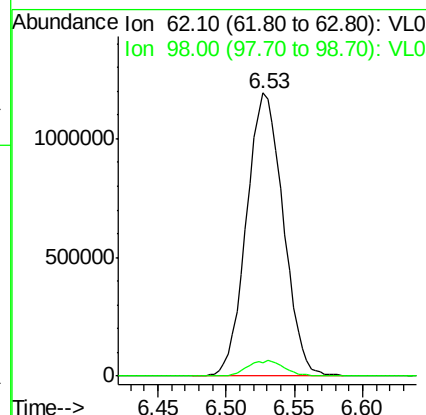
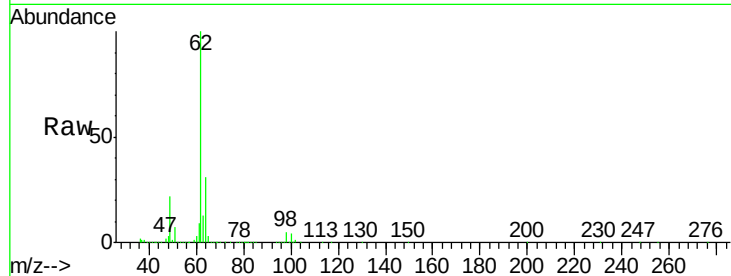
#37
1,2-Dichloroethane
Concen: 12.43 ppbv
RT: 6.53 min Scan# 1692
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
62	100		
98	5.6	4.2	6.4

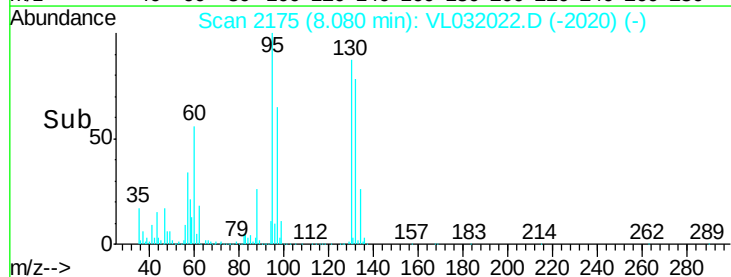
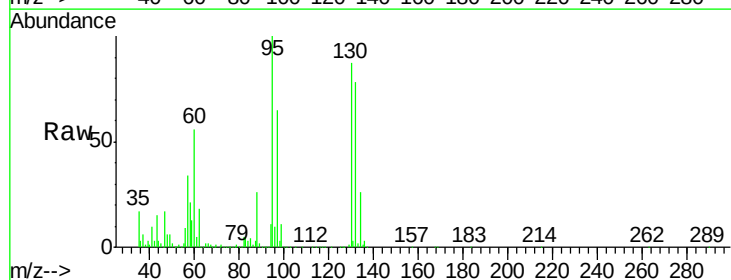
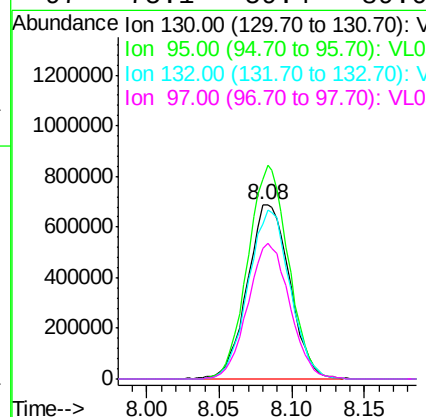
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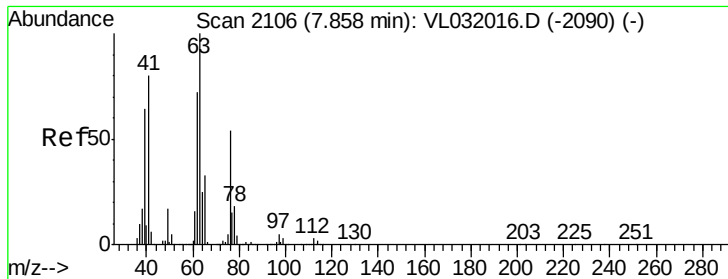
MMDadoda
6/4/2018 10:55:09 AM



#38
Trichloroethene
Concen: 14.29 ppbv
RT: 8.08 min Scan# 2175
Delta R.T. -0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
130	100		
95	115.2	90.7	136.1
132	89.2	75.6	113.4
97	75.1	59.4	89.0





#39

1,2-Dichloropropane

Concen: 14.06 ppbv

RT: 7.86 min Scan# 2106

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

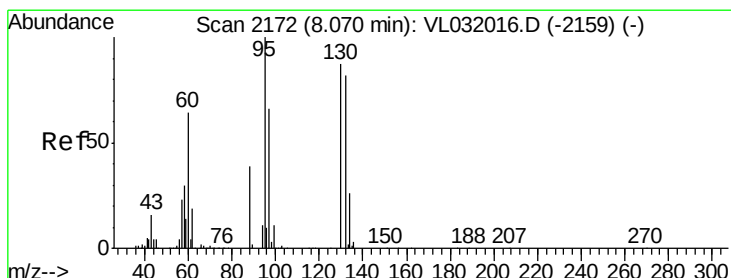
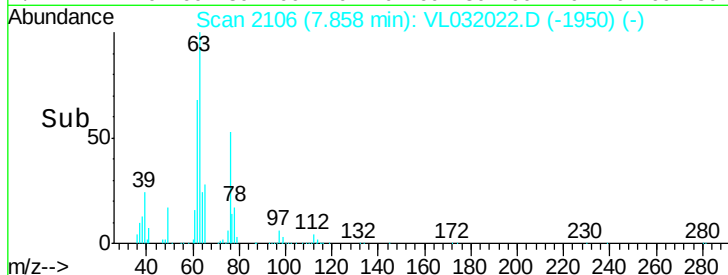
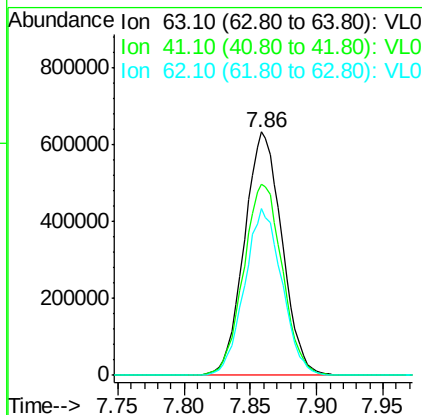
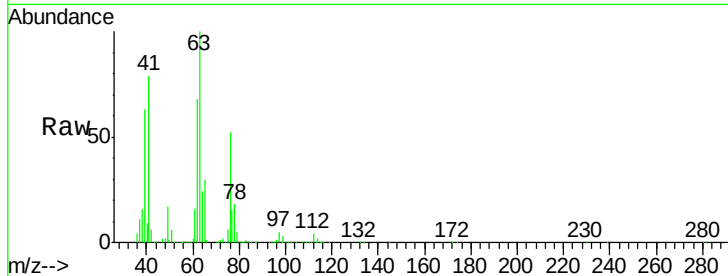
ClientSampleId :

VSTDIC015

Tot Ion:	63	Resp:	1249530
Ion	Ratio	Lower	Upper
63	100		
41	78.6	64.0	96.0
62	68.3	57.6	86.4

Manual Integrations
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#40

1,4-Dioxane

Concen: 13.59 ppbv

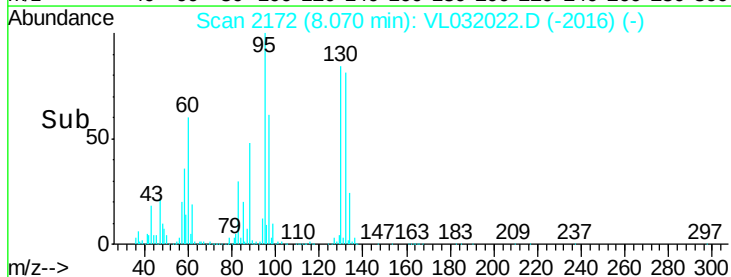
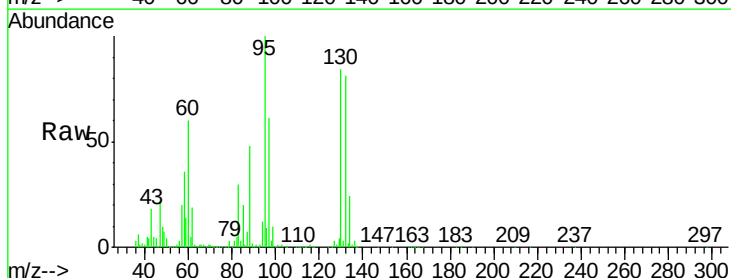
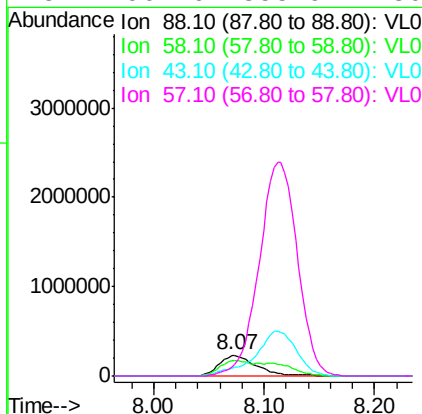
RT: 8.07 min Scan# 2172

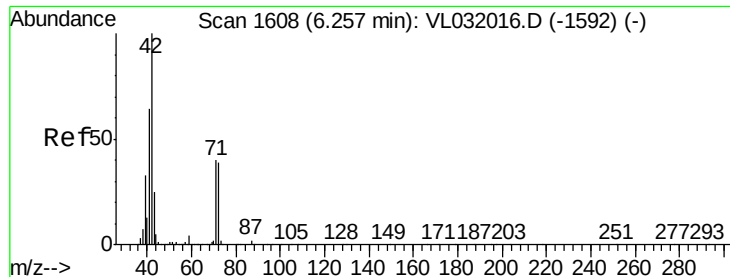
Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Tgt Ion:	88	Resp:	541645
Ion	Ratio	Lower	Upper
88	100		
58	123.1	100.5	150.7
43	241.9	193.8	290.6
57	1061.0	853.9	1280.9





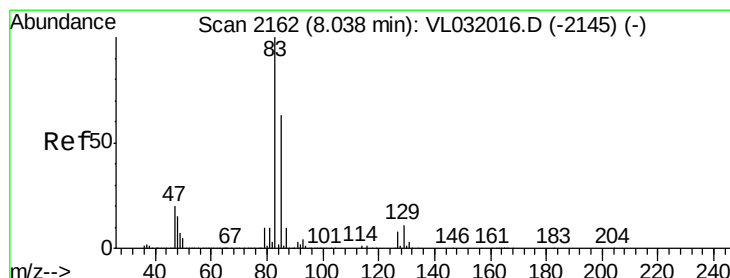
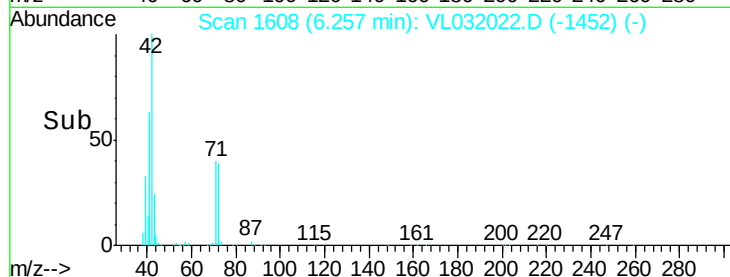
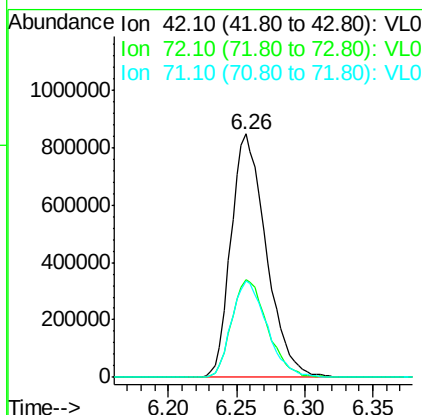
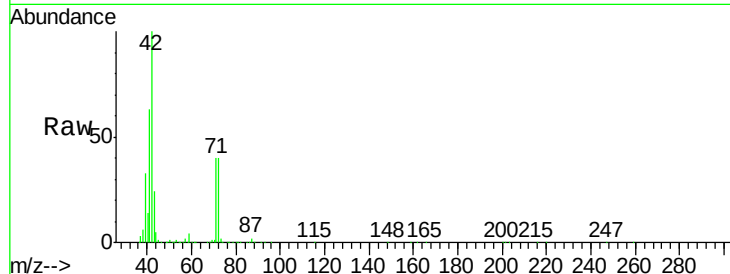
#41
Tetrahydrofuran
Concen: 15.75 ppbv
RT: 6.26 min Scan# 1608
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
42	100		
72	40.8	32.3	48.5
71	39.9	32.3	48.5

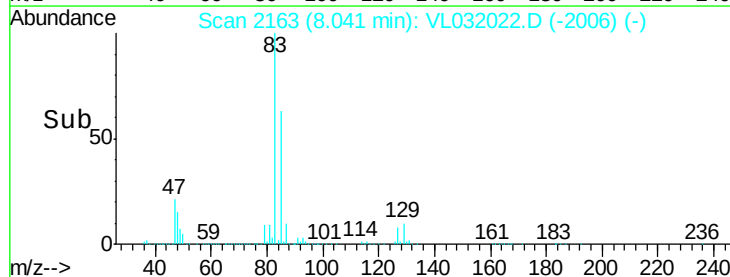
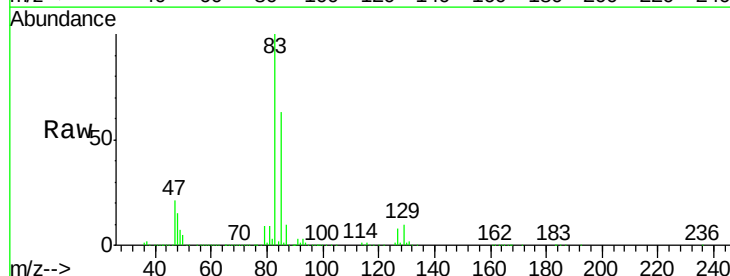
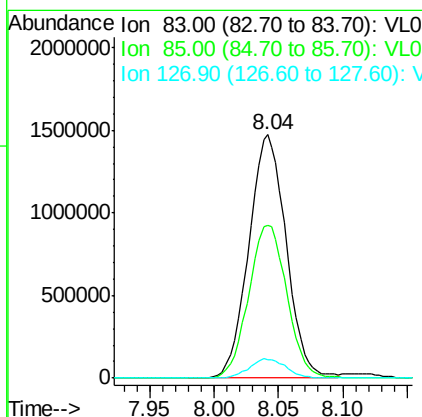
Manual Integrations
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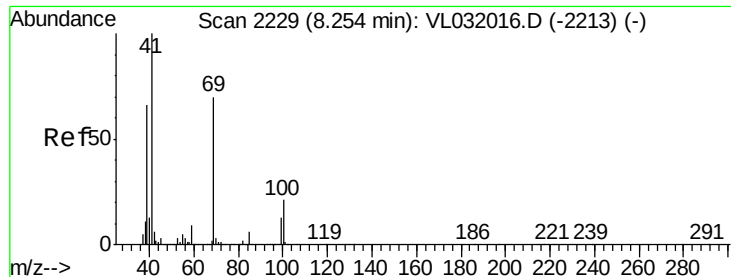
MMDadoda
6/4/2018 10:55:09 AM



#42
Bromodichloromethane
Concen: 14.44 ppbv
RT: 8.04 min Scan# 2163
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
83	100		
85	62.7	50.3	75.5
127	7.6	6.6	9.8





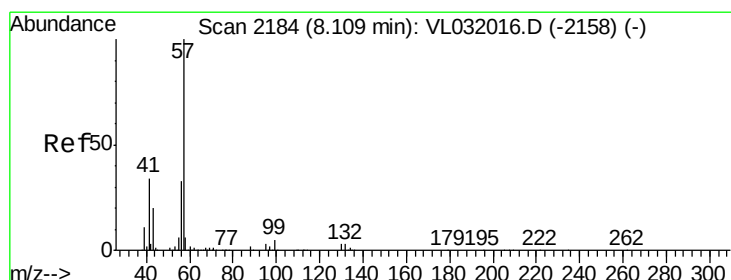
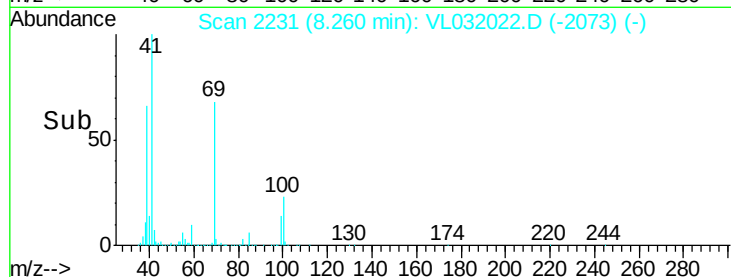
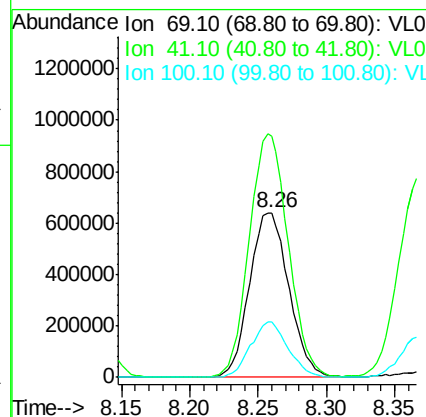
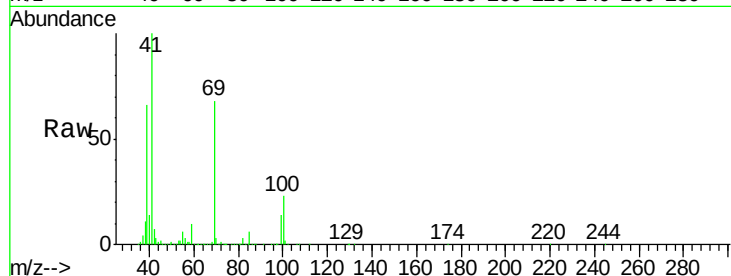
#43
Methyl Methacrylate
Concen: 14.78 ppbv
RT: 8.26 min Scan# 2231
Delta R.T. 0.01 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 69 Resp: 1281253
Ion Ratio Lower Upper
69 100
41 146.5 115.5 173.3
100 32.2 25.4 38.0

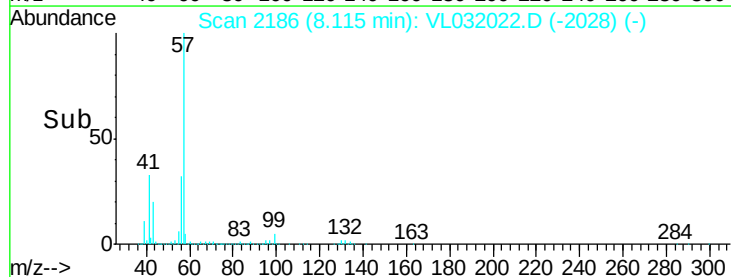
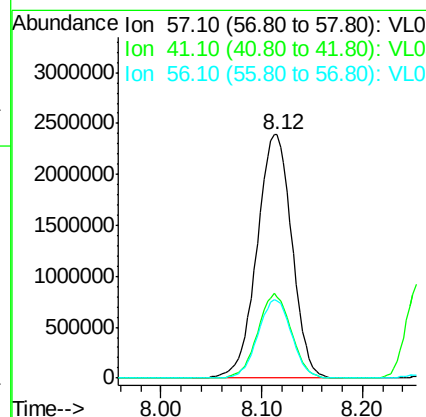
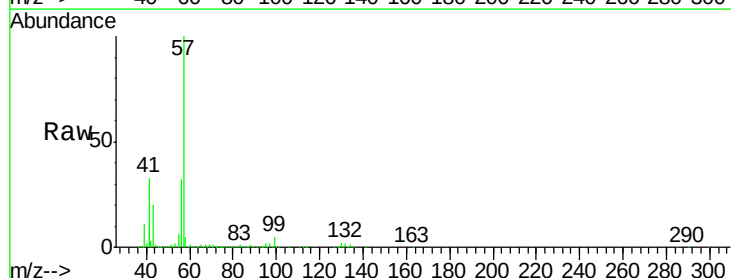
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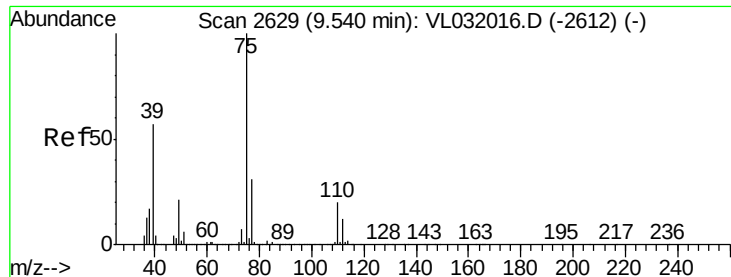
MMDadoda
6/4/2018 10:55:09 AM



#44
2,2,4-Trimethylpentane
Concen: 13.89 ppbv
RT: 8.12 min Scan# 2186
Delta R.T. 0.01 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion: 57 Resp: 5740258
Ion Ratio Lower Upper
57 100
41 33.1 26.6 40.0
56 31.1 24.9 37.3





#45

t-1,3-Dichloropropene

Concen: 16.80 ppbv

RT: 9.54 min Scan# 2630

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Tot Ion: 75 Resp: 1934766

Ion Ratio Lower Upper

75 100

77 31.8 25.0 37.4

Instrument :

MSVOA_L

ClientSampled :

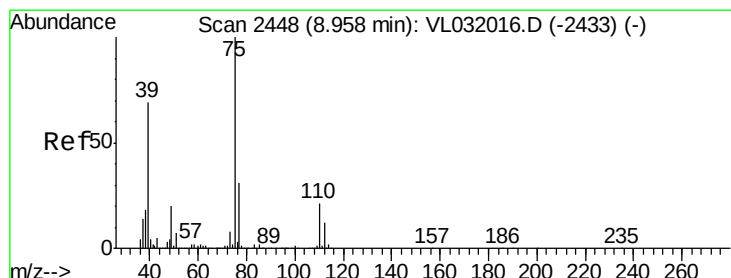
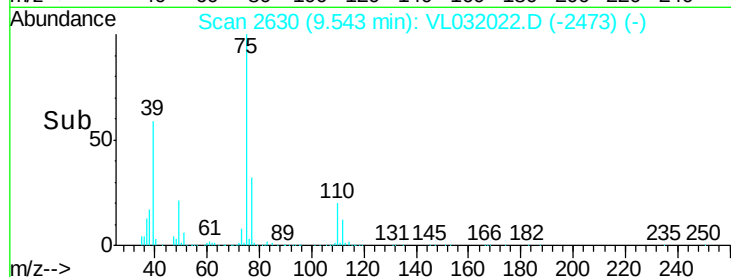
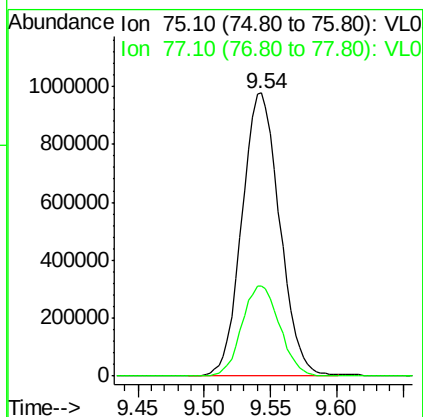
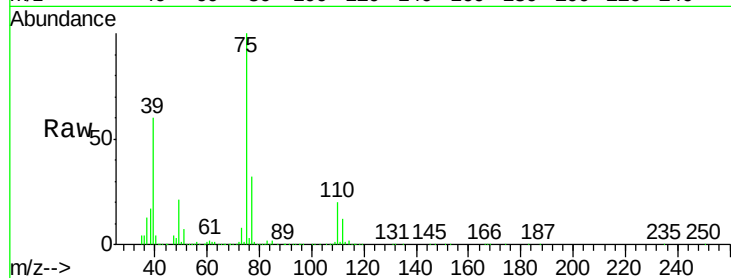
VSTDIC015

Manual Integrations

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#46

cis-1,3-Dichloropropene

Concen: 16.09 ppbv

RT: 8.96 min Scan# 2449

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

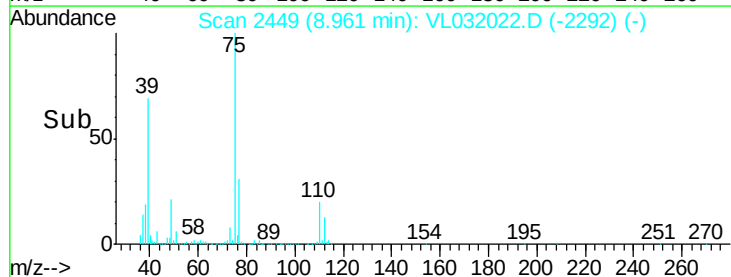
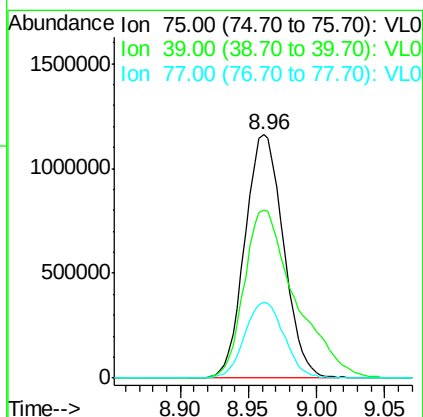
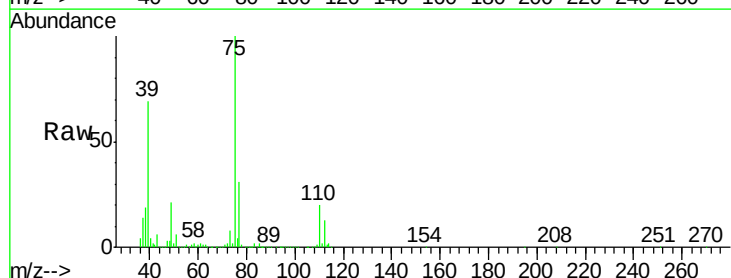
Tgt Ion: 75 Resp: 2284464

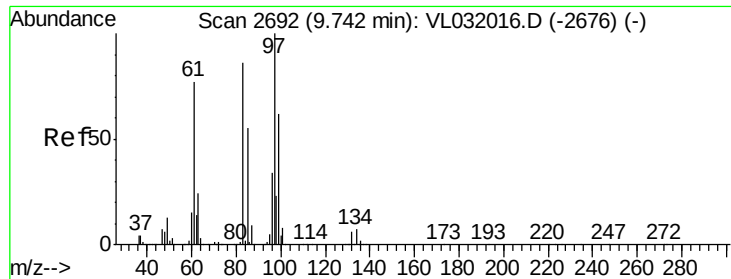
Ion Ratio Lower Upper

75 100

39 69.2 55.0 82.6

77 31.2 25.0 37.6





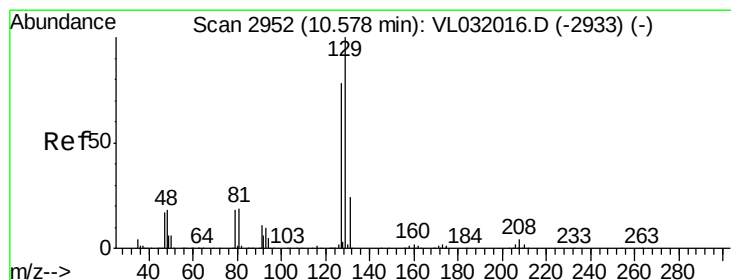
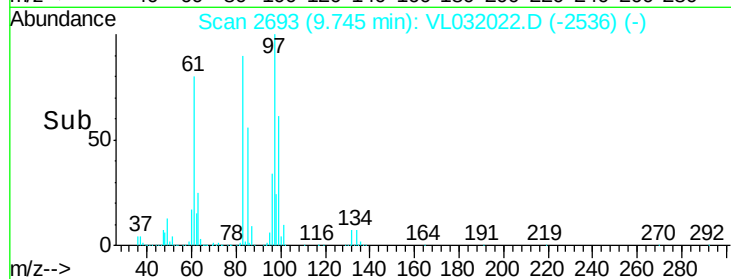
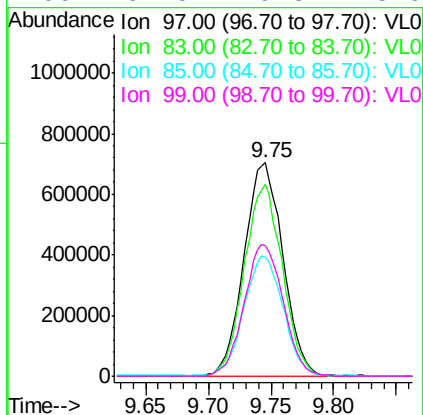
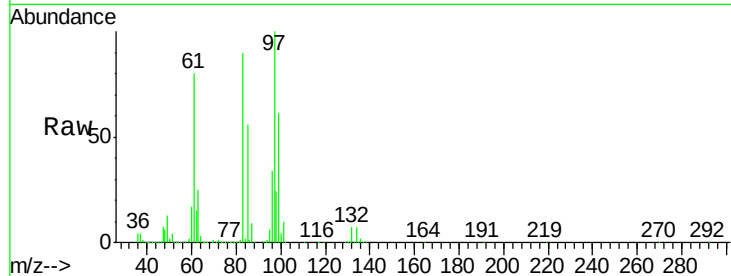
#47
 1,1,2-Trichloroethane
 Concen: 14.41 ppbv
 RT: 9.75 min Scan# 2693
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ion	Ratio	Lower	Upper
97	100			
83	89.9	69.1	103.7	
85	55.9	44.5	66.7	
99	61.0	49.3	73.9	

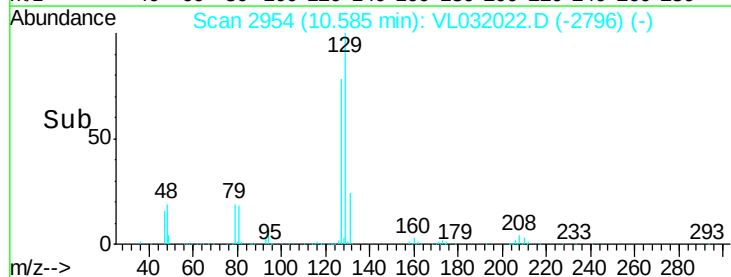
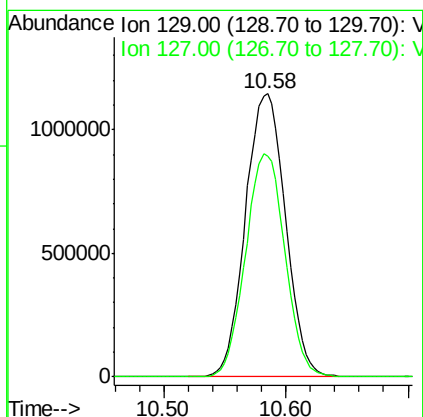
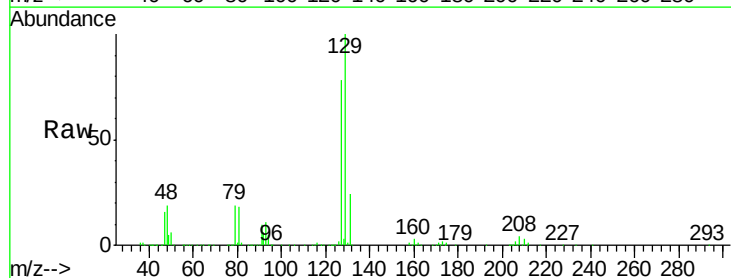
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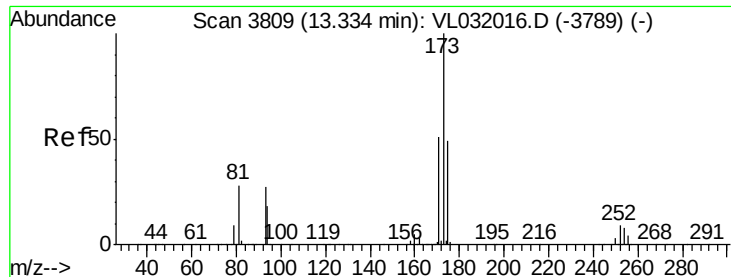
MMDadoda
 6/4/2018 10:55:09 AM



#48
 Dibromochloromethane
 Concen: 15.27 ppbv
 RT: 10.58 min Scan# 2954
 Delta R.T. 0.01 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion	Ion	Ratio	Lower	Upper
129	100			
127	77.6	39.3	117.9	





#49

Bromoform

Concen: 15.92 ppbv

RT: 13.34 min Scan# 3810

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:173 Resp: 2123573

Ion Ratio Lower Upper

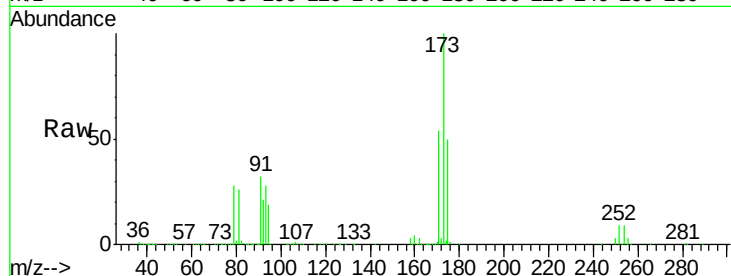
173 100

175 49.1 39.8 59.8

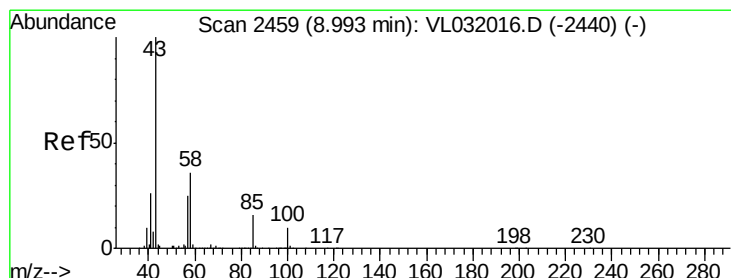
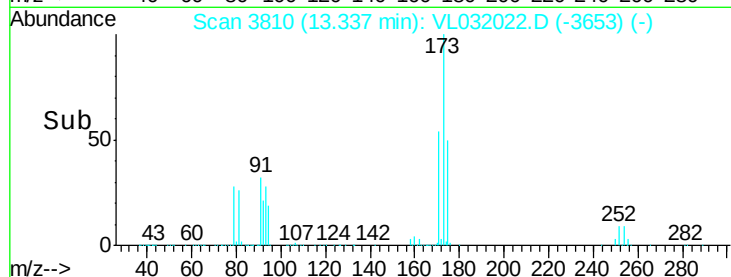
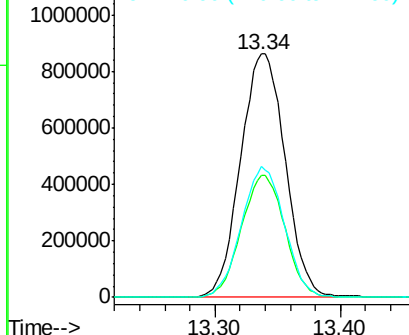
171 52.1 41.7 62.5

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Abundance Ion 172.90 (172.60 to 173.60): V
Ion 174.90 (174.60 to 175.60): V
Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 14.72 ppbv

RT: 8.99 min Scan# 2459

Delta R.T. 0.00 min

Lab File: VL032022.D

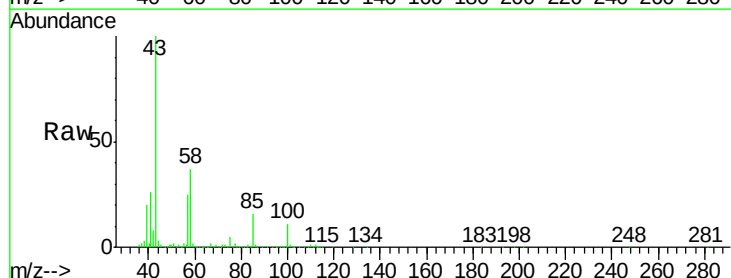
Acq: 31 May 2018 20:04

Tgt Ion: 43 Resp: 3106253

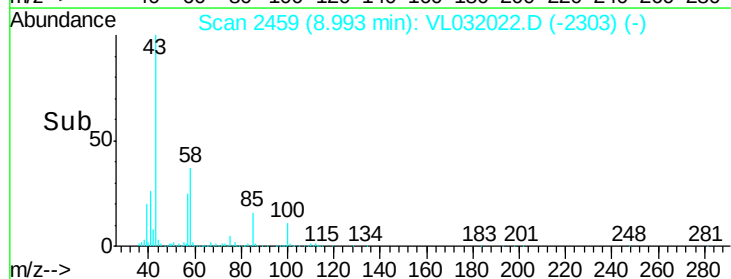
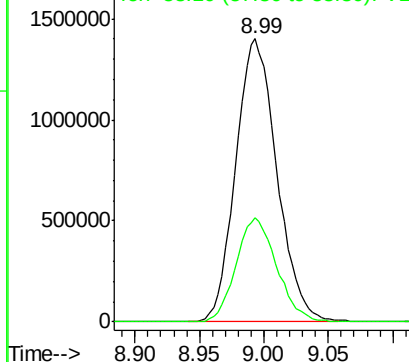
Ion Ratio Lower Upper

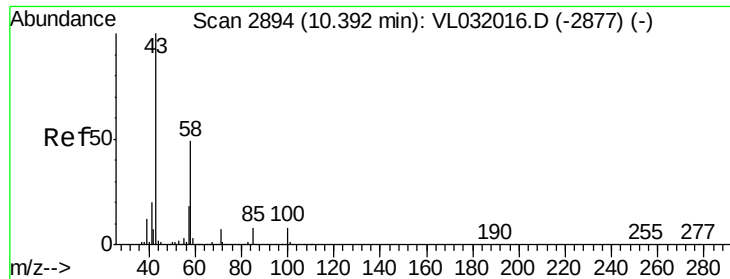
43 100

58 36.4 29.1 43.7



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





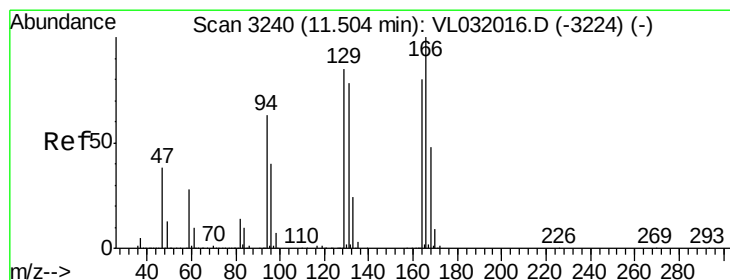
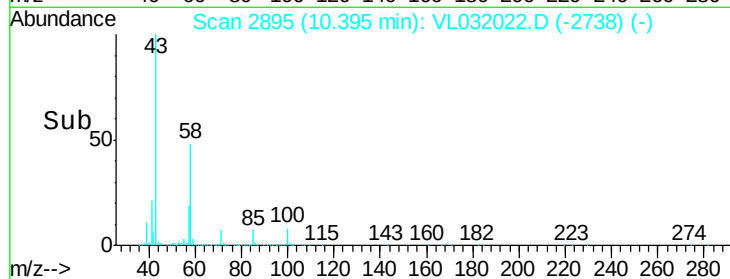
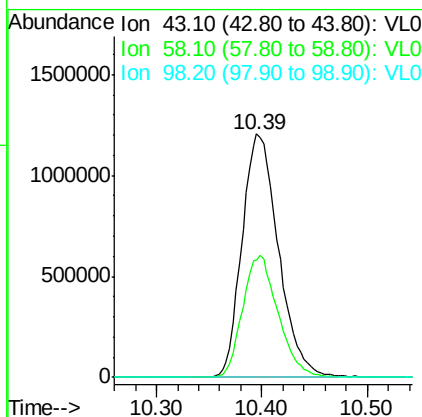
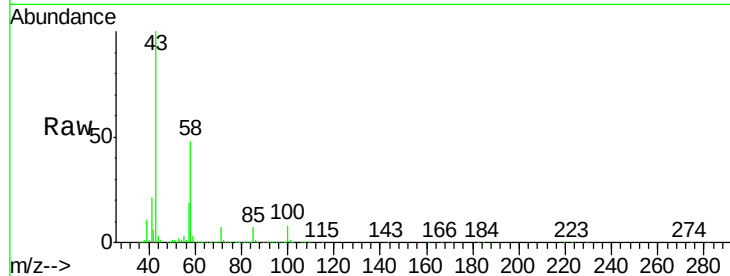
#51
2-Hexanone
Concen: 15.04 ppbv
RT: 10.39 min Scan# 2895
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 43 Resp: 2892385
Ion Ratio Lower Upper
43 100
58 49.0 39.0 58.6
98 0.2 0.4 0.6#

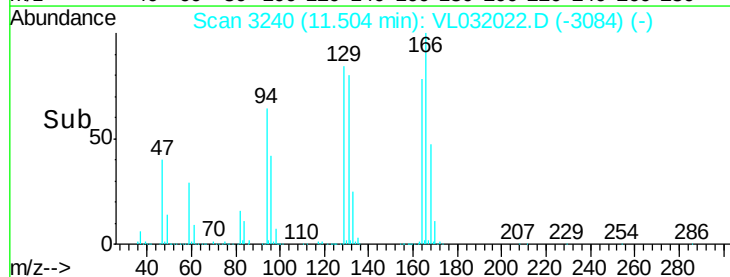
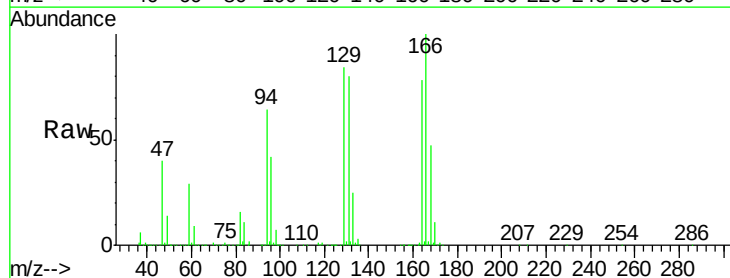
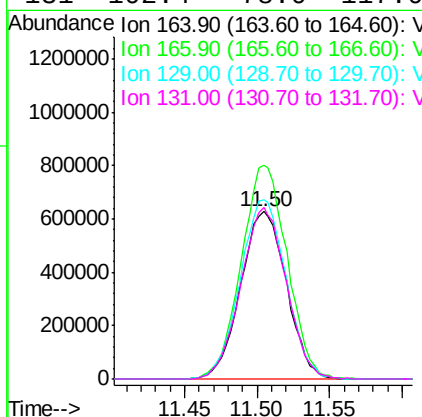
Manual Integrations
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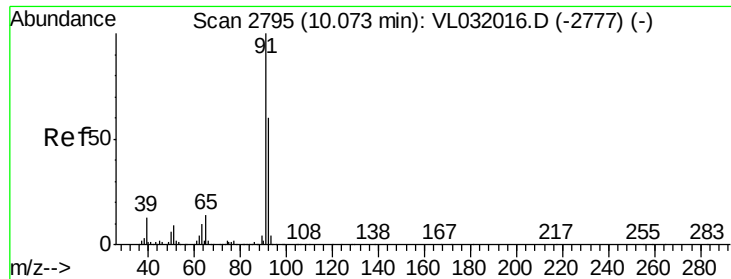
MMDadoda
6/4/2018 10:55:09 AM



#52
Tetrachloroethene
Concen: 14.55 ppbv
RT: 11.50 min Scan# 3240
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion: 164 Resp: 1376619
Ion Ratio Lower Upper
164 100
166 127.6 100.2 150.2
129 107.2 85.4 128.0
131 102.4 78.0 117.0





#53

Toluene

Concen: 15.31 ppbv

RT: 10.08 min Scan# 2796

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 91 Resp: 4218374

Ion Ratio Lower Upper

91 100

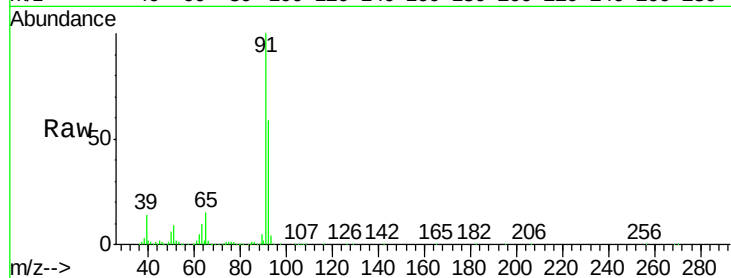
92 59.9 48.2 72.2

Manual Integrations

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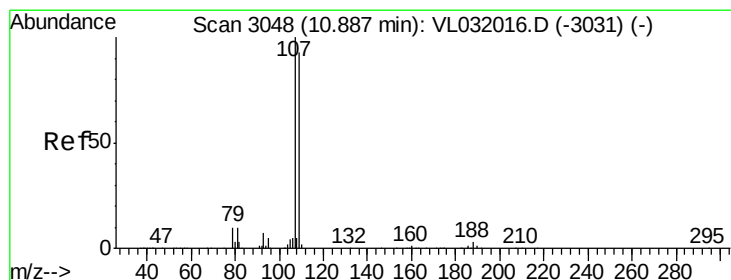
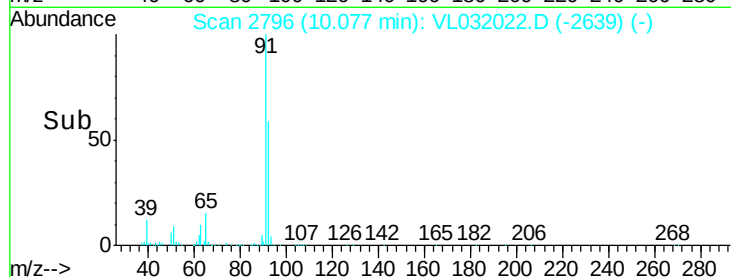
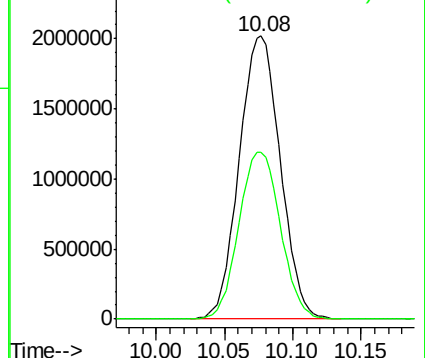
MMDadoda

6/4/2018 10:55:09 AM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0



#54

1,2-Dibromoethane

Concen: 14.85 ppbv

RT: 10.89 min Scan# 3050

Delta R.T. 0.01 min

Lab File: VL032022.D

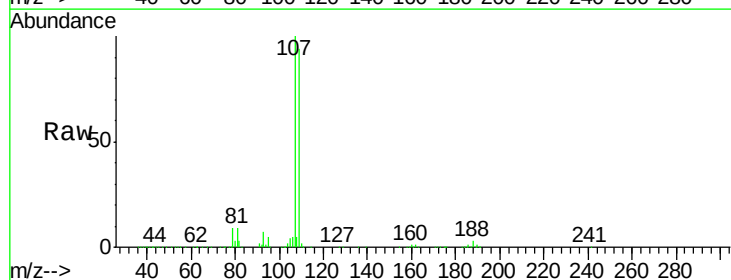
Acq: 31 May 2018 20:04

Tgt Ion:107 Resp: 2329347

Ion Ratio Lower Upper

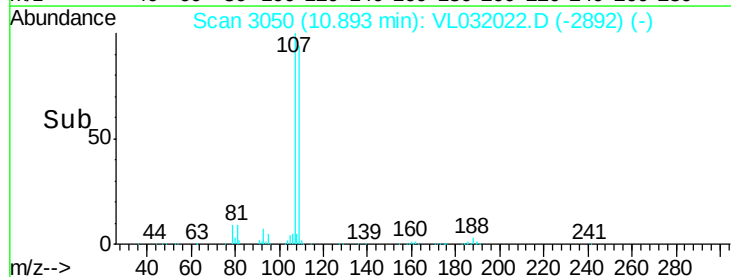
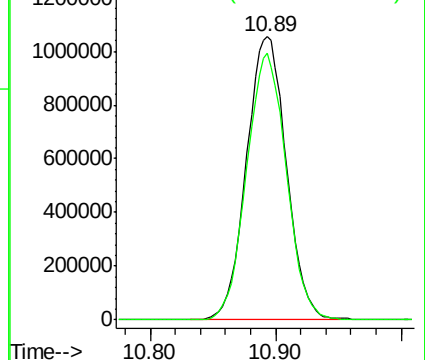
107 100

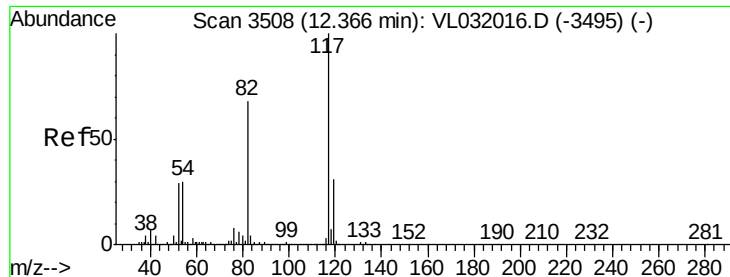
109 94.3 74.6 111.8



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V





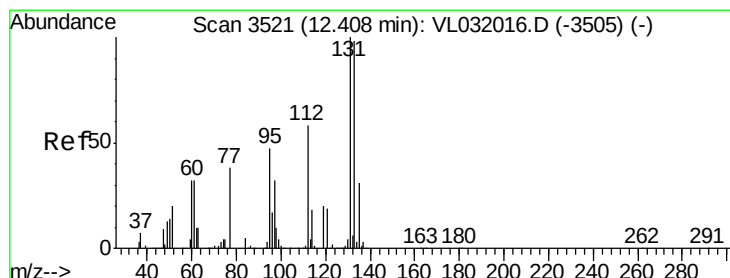
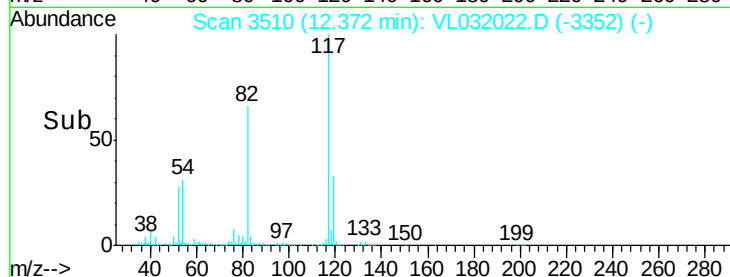
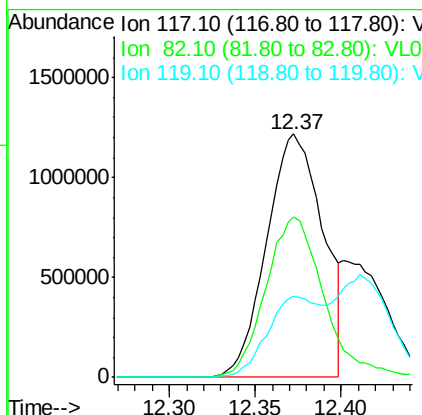
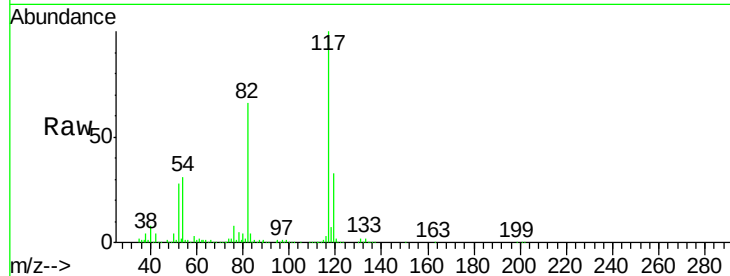
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.37 min Scan# 3510
Delta R.T. 0.01 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
117	100		
82	68.2	52.7	79.1
119	0.0	25.5	38.3#

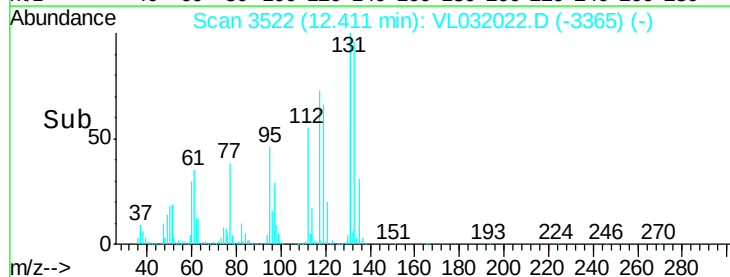
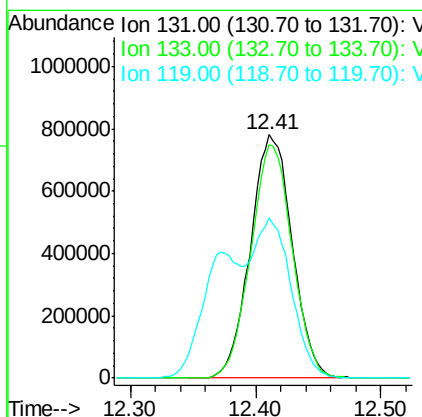
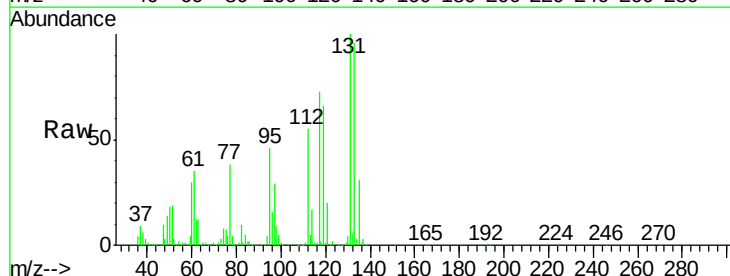
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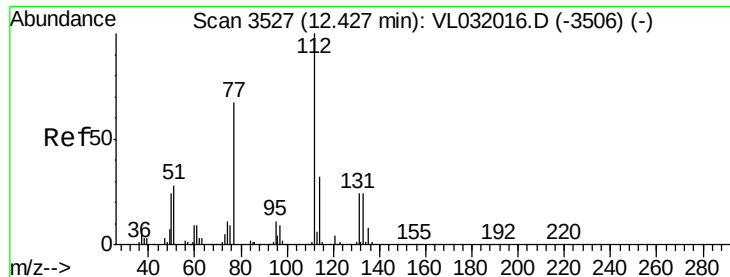
MMDadoda
6/4/2018 10:55:09 AM



#56
1,1,1,2-Tetrachloroethane
Concen: 14.24 ppbv
RT: 12.41 min Scan# 3522
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
131	100		
133	95.3	76.7	115.1
119	110.6	49.2	73.8#





#57

Chlorobenzene

Concen: 13.89 ppbv

RT: 12.44 min Scan# 3530

Delta R.T. 0.01 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:112 Resp: 3356618

Ion Ratio Lower Upper

112 100

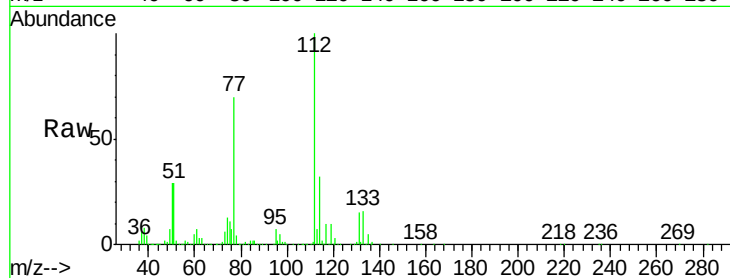
77 70.3 54.3 81.5

114 31.9 28.6 35.0

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Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V

12.44

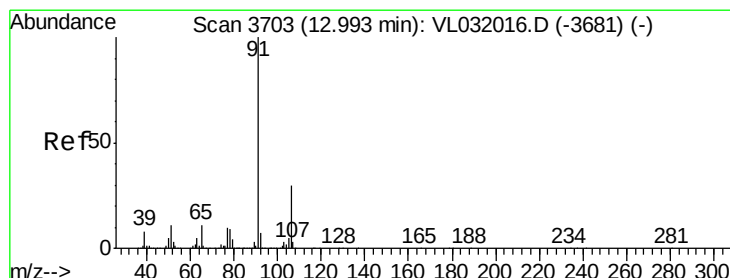
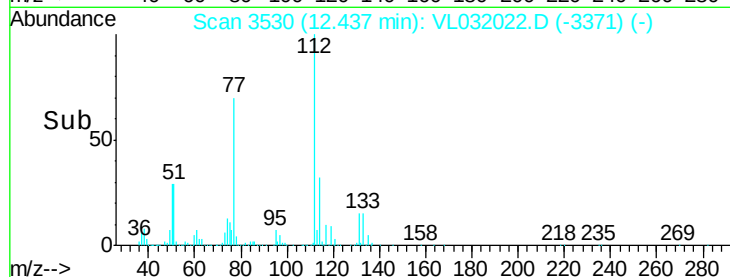
1500000

1000000

500000

0

Time--> 12.30 12.40 12.50



#58

Ethyl Benzene

Concen: 15.03 ppbv

RT: 13.00 min Scan# 3704

Delta R.T. 0.00 min

Lab File: VL032022.D

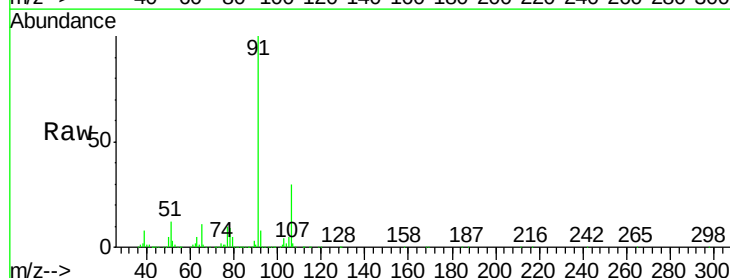
Acq: 31 May 2018 20:04

Tgt Ion: 91 Resp: 6013554

Ion Ratio Lower Upper

91 100

106 29.9 24.2 36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.00

3000000

2500000

2000000

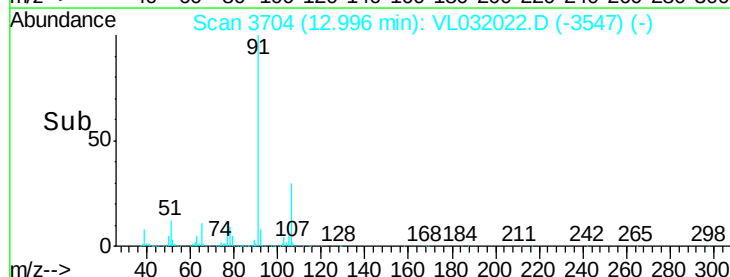
1500000

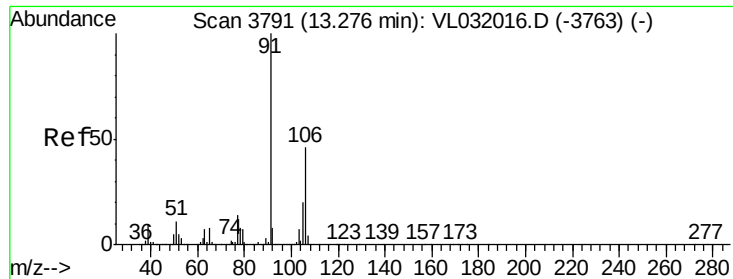
1000000

500000

0

Time--> 12.90 13.00 13.10





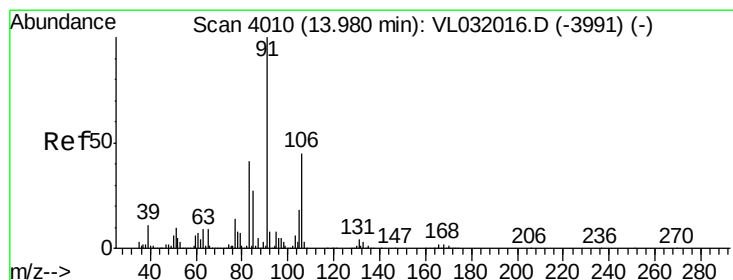
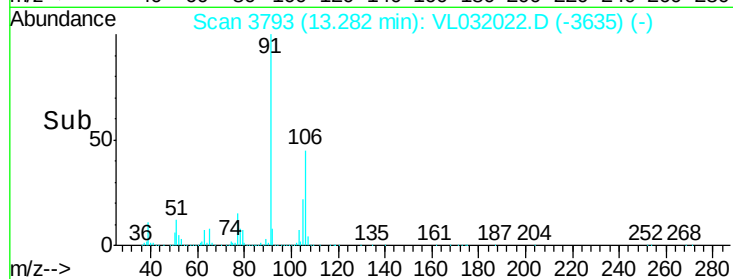
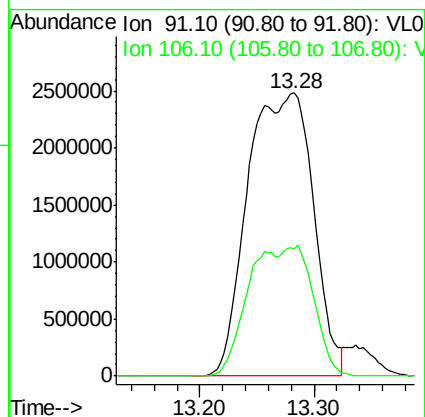
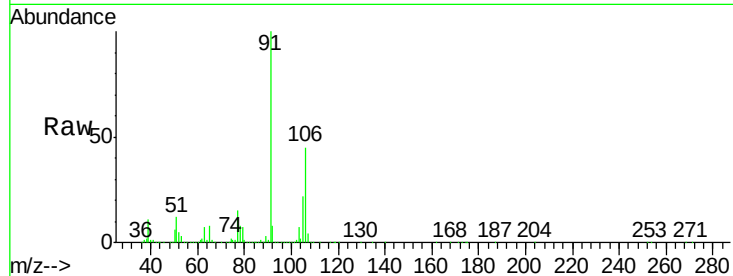
#59
m/p-Xylene
Concen: 28.93 ppbv m
RT: 13.28 min Scan# 3793
Delta R.T. 0.01 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion: 91 Resp: 9894679
Ion Ratio Lower Upper
91 100
106 45.3 35.7 53.5

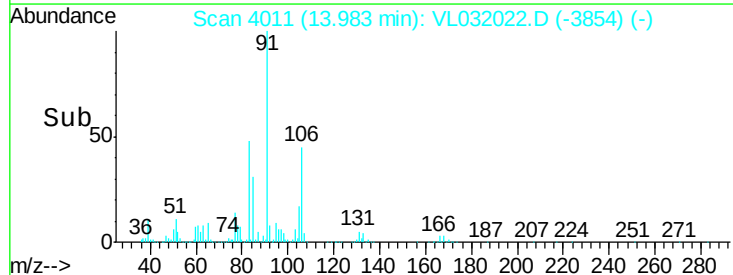
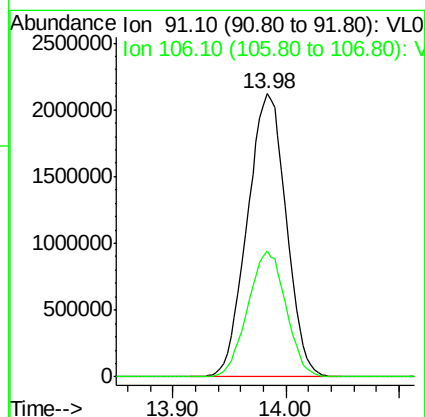
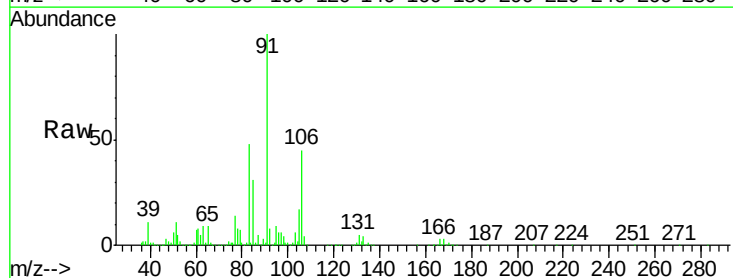
Manual Integrations
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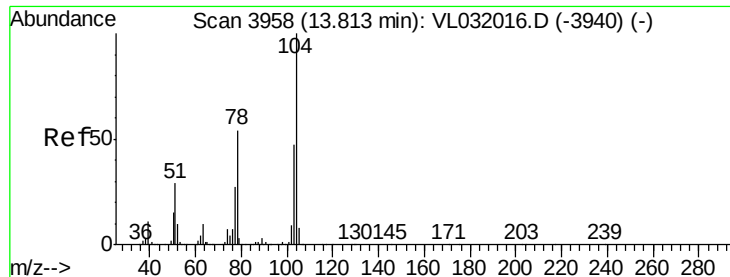
MMDadoda
6/4/2018 10:55:09 AM



#60
o-Xylene
Concen: 14.75 ppbv
RT: 13.98 min Scan# 4011
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion: 91 Resp: 5061783
Ion Ratio Lower Upper
91 100
106 43.7 21.9 65.5





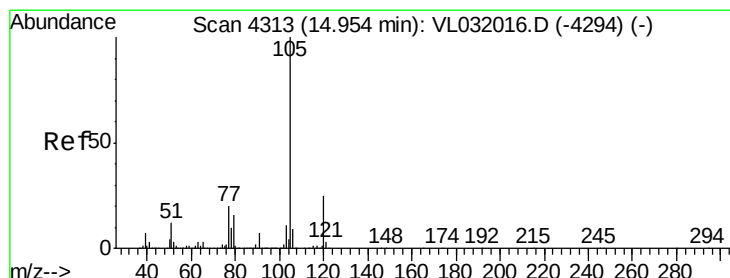
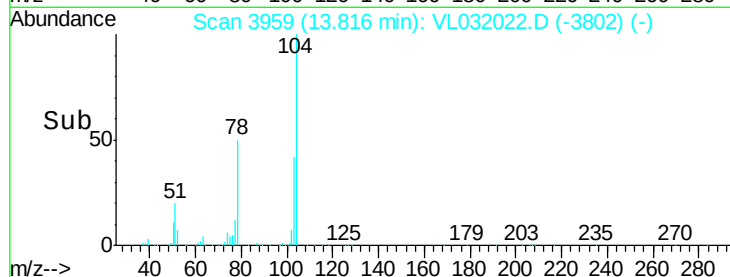
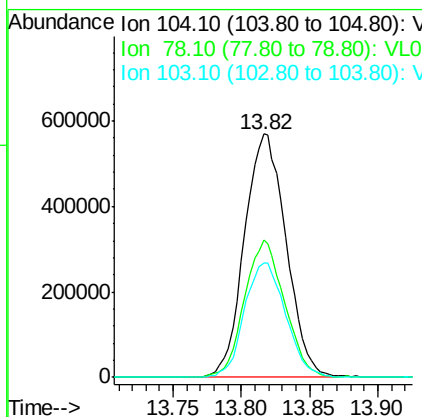
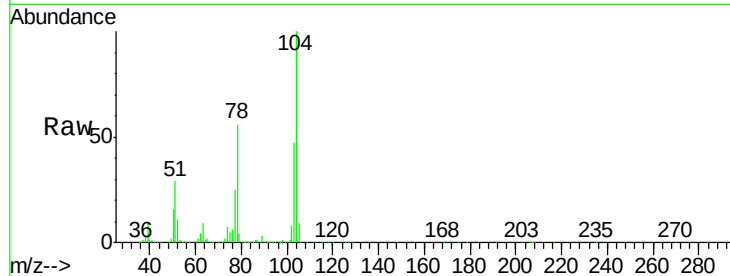
#61
Stvrene
Concen: 17.39 ppbv
RT: 13.82 min Scan# 3959
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC015

Tot Ion	Ratio	Lower	Upper
104	100		
78	54.6	43.0	64.4
103	46.8	37.4	56.2

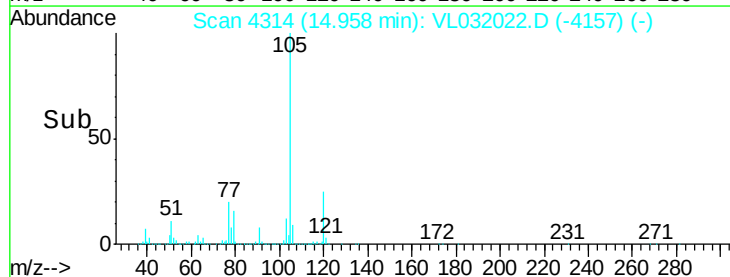
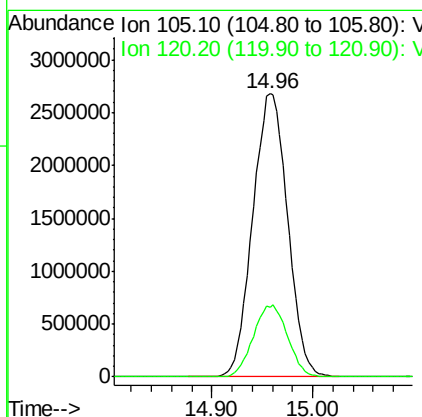
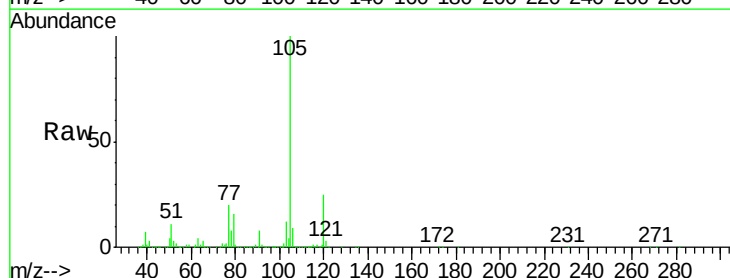
Manual Integrations
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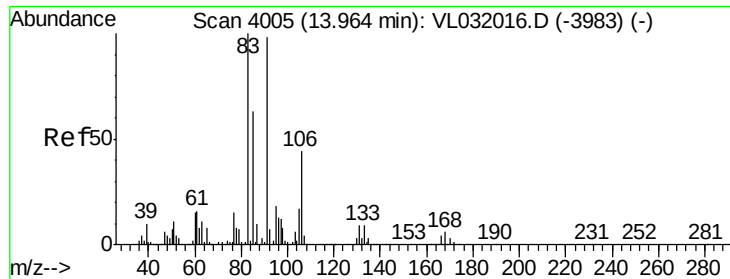
MMDadoda
6/4/2018 10:55:09 AM



#62
Isopropylbenzene
Concen: 14.71 ppbv
RT: 14.96 min Scan# 4314
Delta R.T. 0.00 min
Lab File: VL032022.D
Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.8	29.8





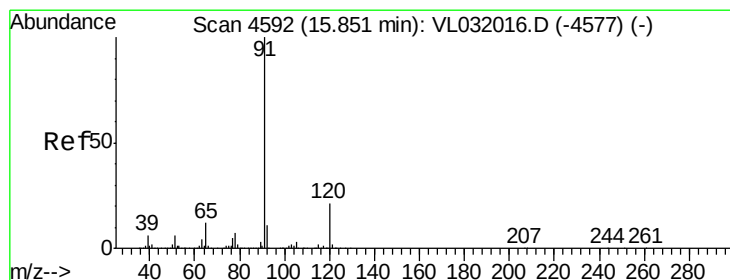
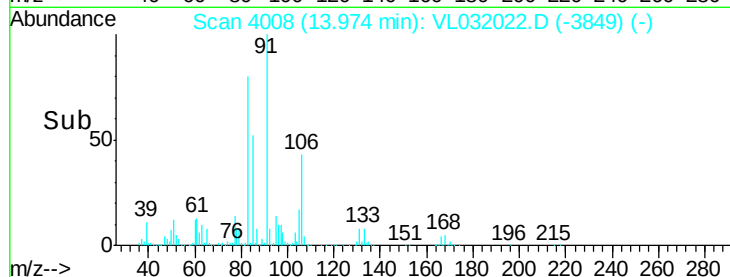
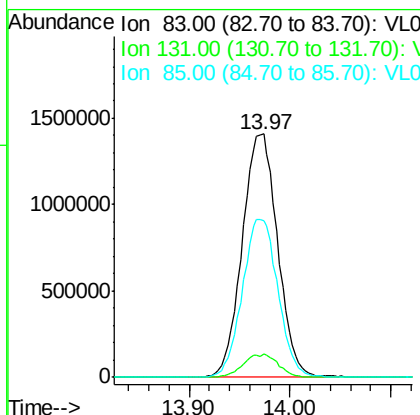
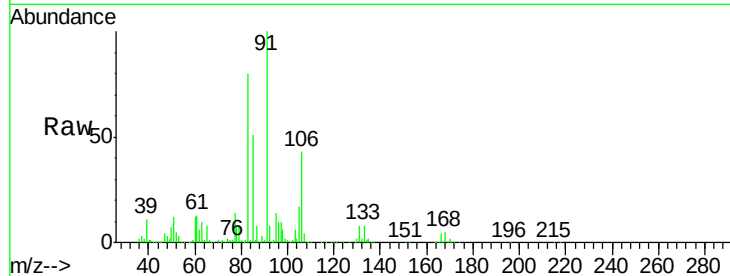
#63
 1,1,2,2-Tetrachloroethane
 Concen: 14.12 ppbv
 RT: 13.97 min Scan# 4008
 Delta R.T. 0.01 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion: 83 Resp: 3427066
 Ion Ratio Lower Upper
 83 100
 131 9.6 4.7 14.0
 85 65.6 32.2 96.6

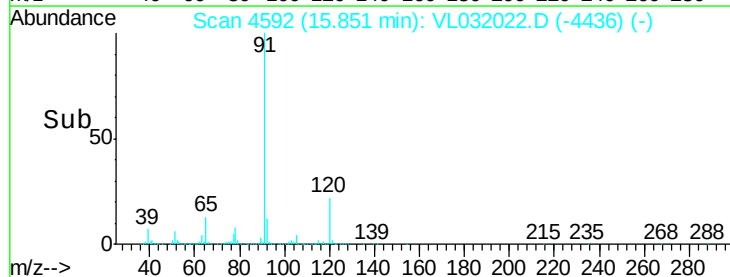
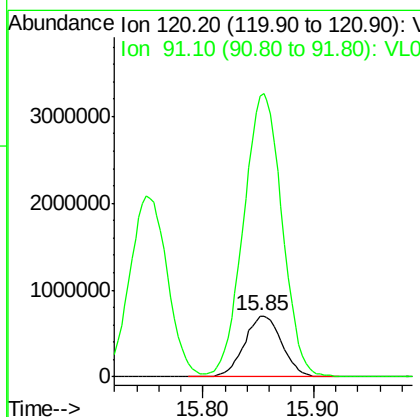
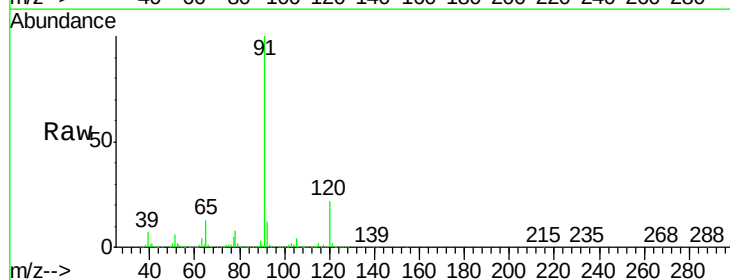
Manual Integrations
 APPROVED

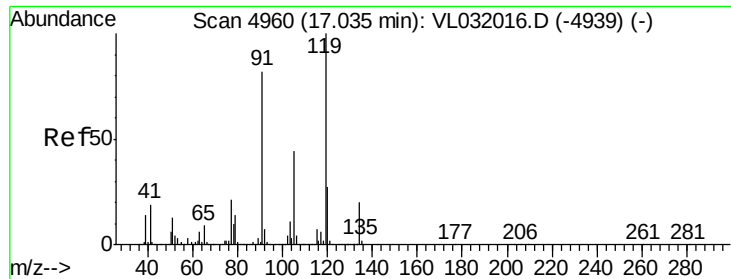
MMDadoda
 6/4/2018 10:55:09 AM



#64
 n-propylbenzene
 Concen: 15.02 ppbv
 RT: 15.85 min Scan# 4592
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion: 120 Resp: 1649477
 Ion Ratio Lower Upper
 120 100
 91 479.1 391.1 586.7





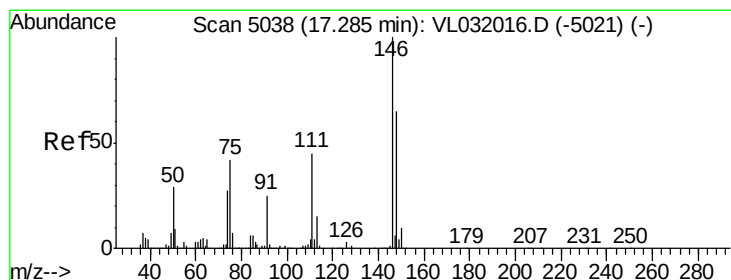
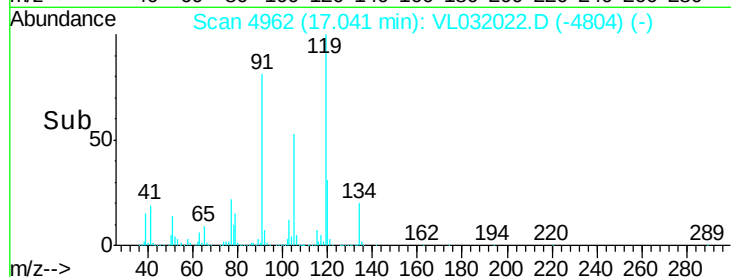
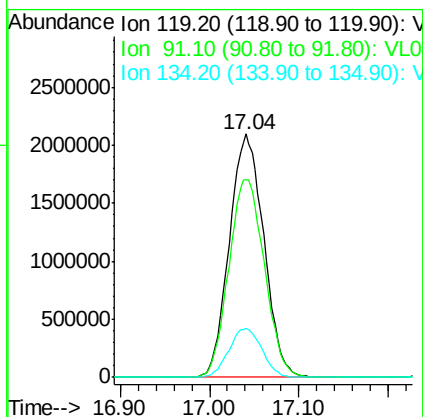
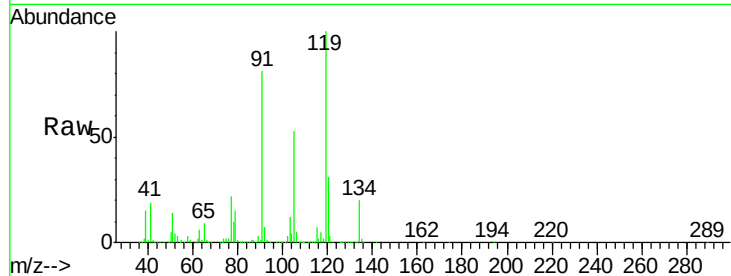
#65
 tert-Butylbenzene
 Concen: 14.38 ppbv
 RT: 17.04 min Scan# 4962
 Delta R.T. 0.01 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion:119 Resp: 5589554
 Ion Ratio Lower Upper
 119 100
 91 84.3 68.2 102.4
 134 19.5 15.6 23.4

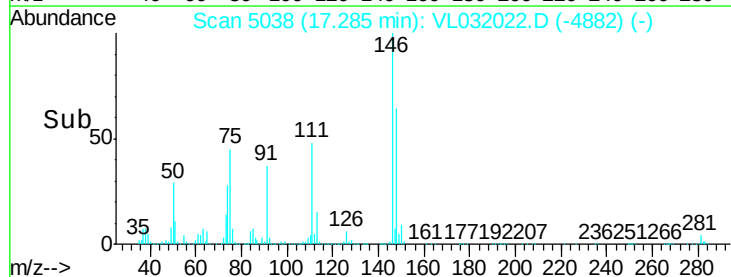
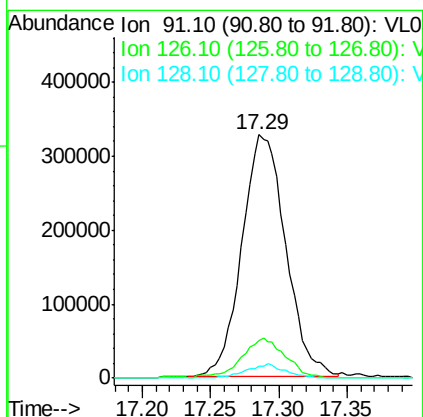
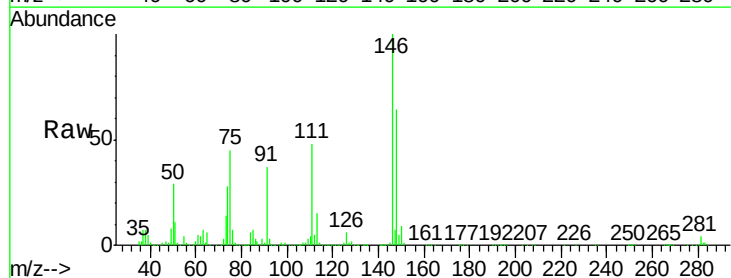
Manual Integrations
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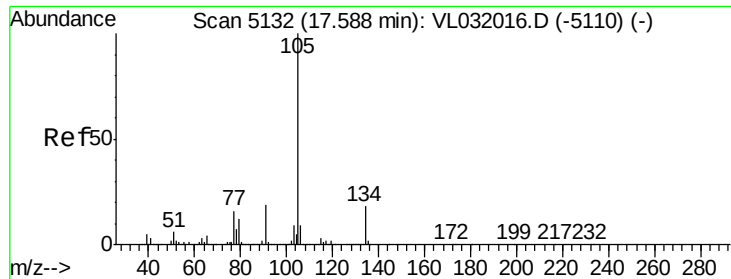
MMDadoda
 6/4/2018 10:55:09 AM



#66
 Benzyl Chloride
 Concen: 20.14 ppbv
 RT: 17.29 min Scan# 5038
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion: 91 Resp: 730059
 Ion Ratio Lower Upper
 91 100
 126 17.1 14.2 21.2
 128 5.2 4.5 6.7





#67

sec-Butylbenzene

Concen: 14.89 ppbv

RT: 17.59 min Scan# 5133

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:105 Resp: 8057212

Ion Ratio Lower Upper

105 100

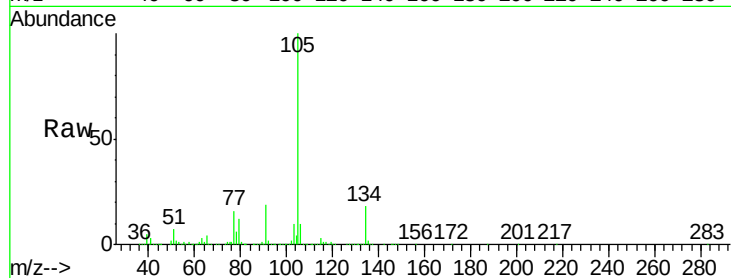
134 18.1 14.4 21.6

Manual Integrations

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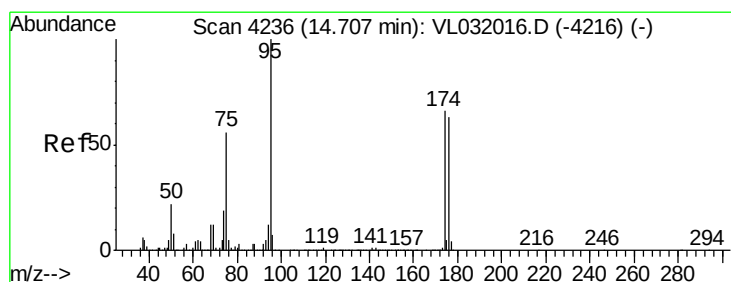
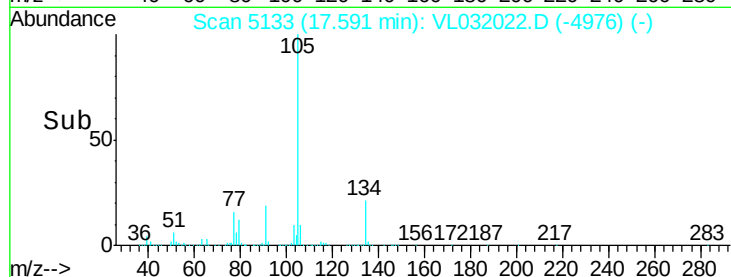
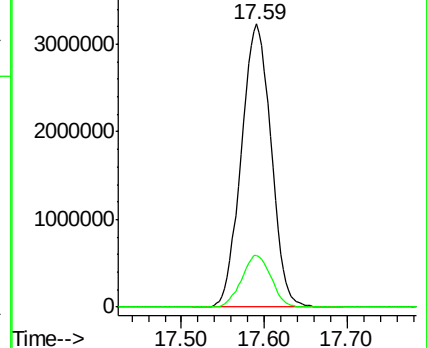
MMDadoda

6/4/2018 10:55:09 AM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.99 ppbv

RT: 14.71 min Scan# 4237

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

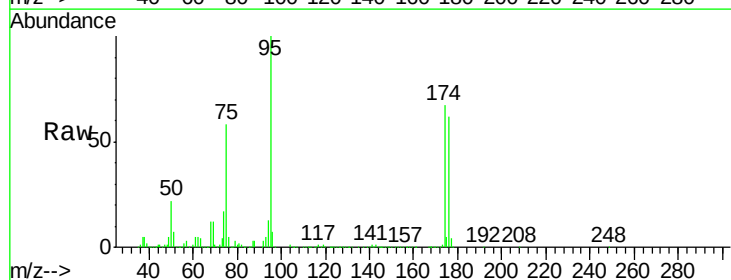
Tgt Ion: 95 Resp: 2141961

Ion Ratio Lower Upper

95 100

174 66.1 53.2 79.8

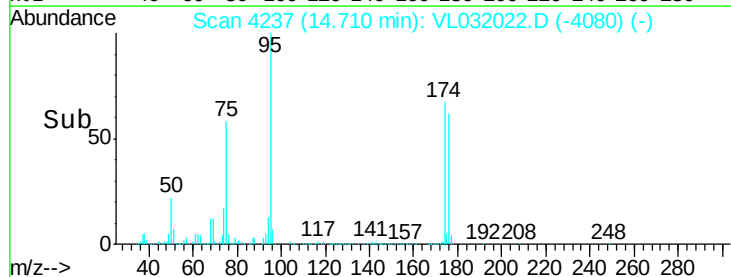
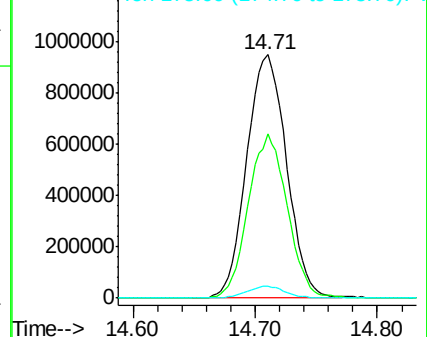
175 4.7 3.7 5.5

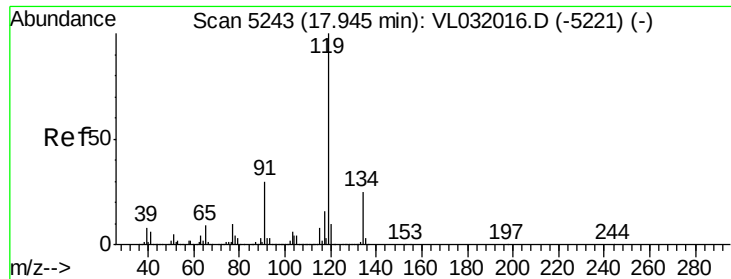


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





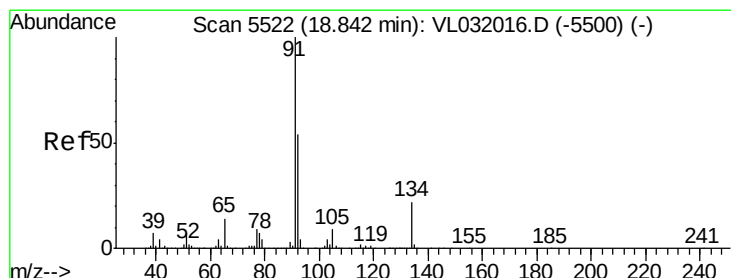
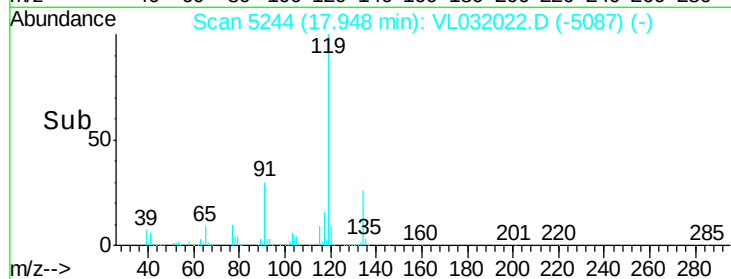
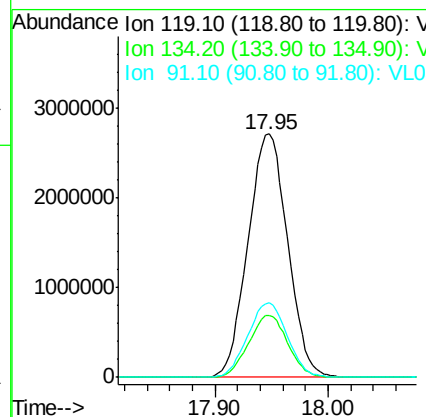
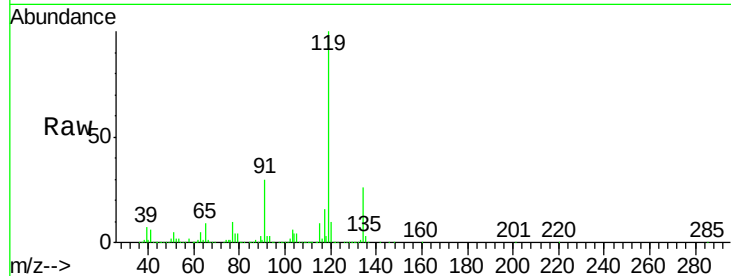
#69
 p-Isopropyltoluene
 Concen: 15.23 ppbv
 RT: 17.95 min Scan# 5244
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion: 119 Resp: 6602719
 Ion Ratio Lower Upper
 119 100
 134 25.2 19.9 29.9
 91 30.5 24.1 36.1

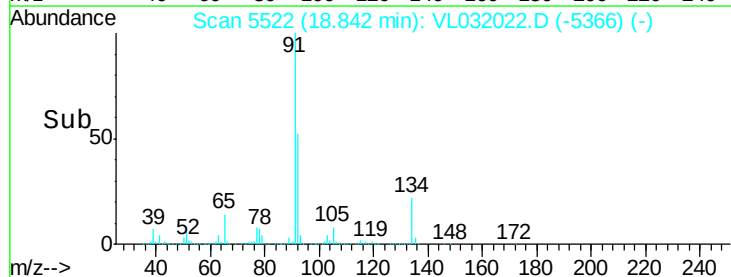
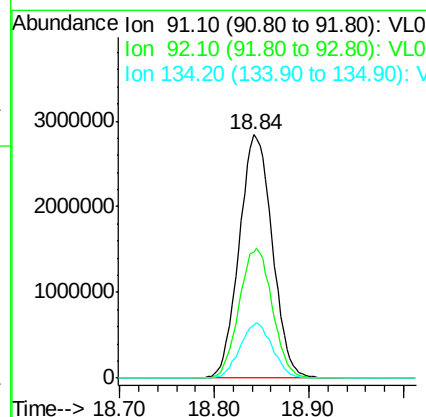
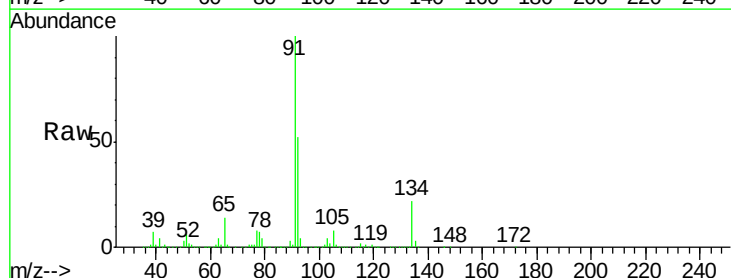
Manual Integrations
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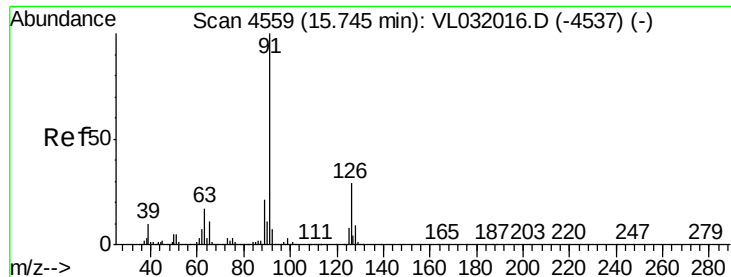
MMDadoda
 6/4/2018 10:55:09 AM



#70
 n-Butylbenzene
 Concen: 15.39 ppbv
 RT: 18.84 min Scan# 5522
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion: 91 Resp: 6892533
 Ion Ratio Lower Upper
 91 100
 92 53.4 42.5 63.7
 134 22.1 17.4 26.2





#71

2-Chlorotoluene

Concen: 15.37 ppbv

RT: 15.75 min Scan# 4560

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion: 91 Resp: 4931045

Ion Ratio Lower Upper

91 100

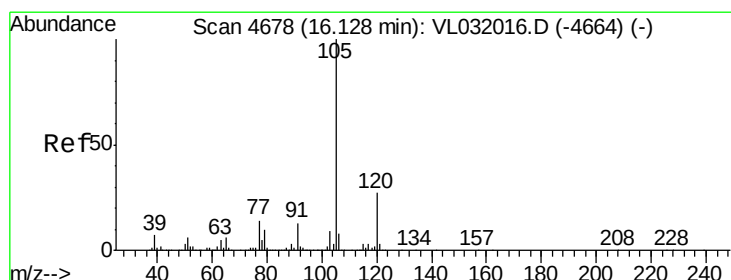
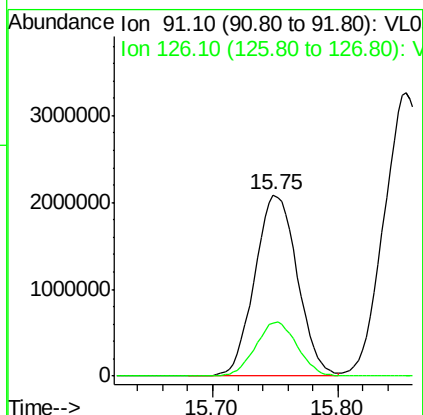
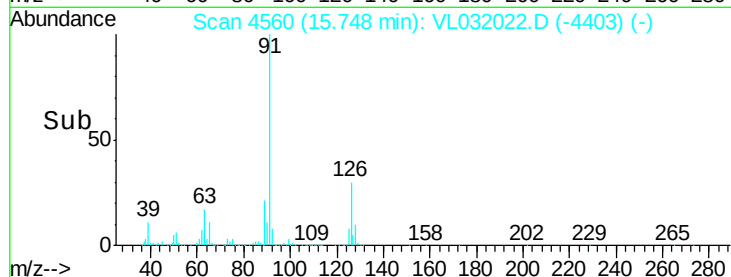
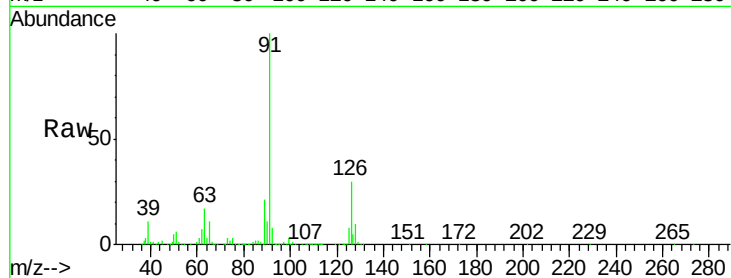
126 29.3 11.7 46.7

Manual Integrations

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#72

4-Ethyltoluene

Concen: 15.48 ppbv

RT: 16.13 min Scan# 4679

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Tgt Ion:105 Resp: 5395178

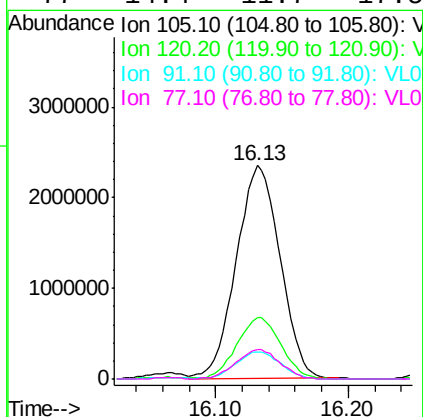
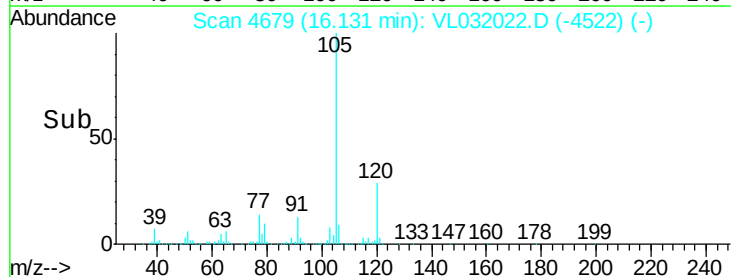
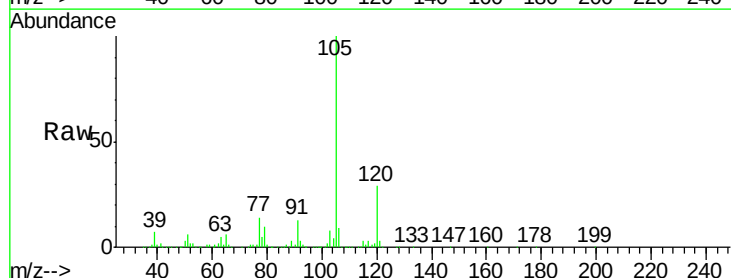
Ion Ratio Lower Upper

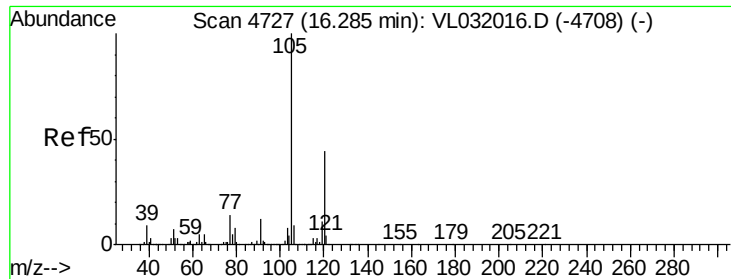
105 100

120 29.0 23.4 35.0

91 13.2 10.7 16.1

77 14.4 11.7 17.5





#73

1,3,5-Trimethylbenzene

Concen: 15.37 ppbv

RT: 16.29 min Scan# 4728

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:105 Resp: 4920901

Ion Ratio Lower Upper

105 100

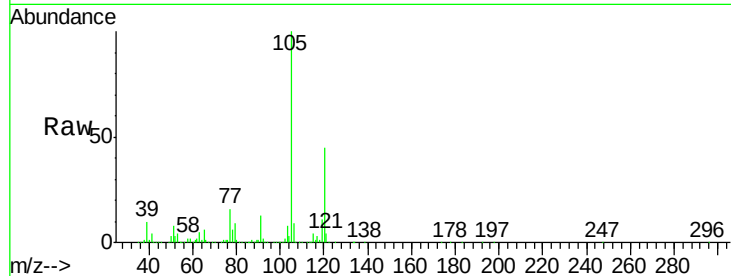
120 45.2 35.0 52.4

Manual Integrations

APPROVED

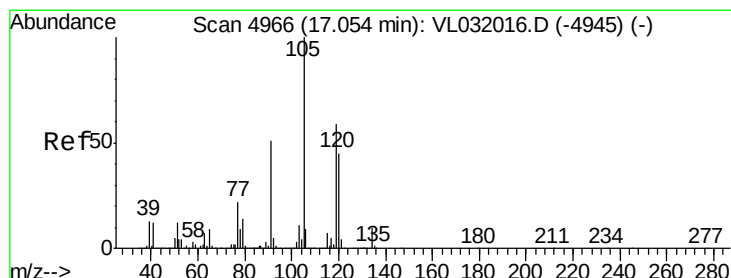
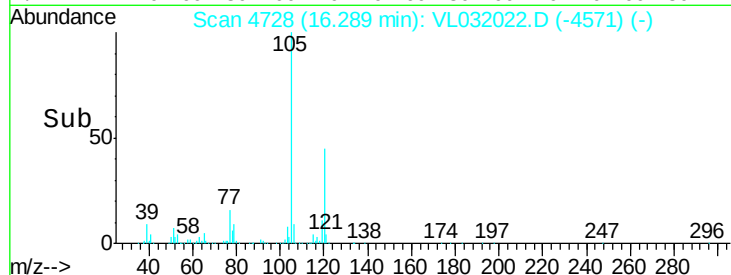
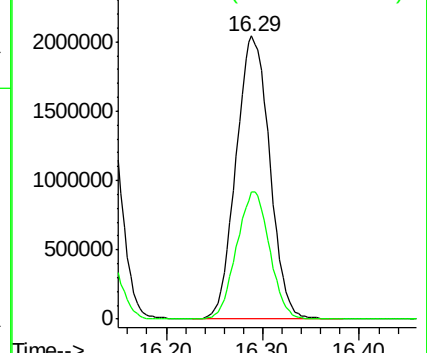
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 14.50 ppbv

RT: 17.06 min Scan# 4968

Delta R.T. 0.01 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Tgt Ion:105 Resp: 5158391

Ion Ratio Lower Upper

105 100

120 45.1 36.0 54.0

91 46.1 41.4 62.0

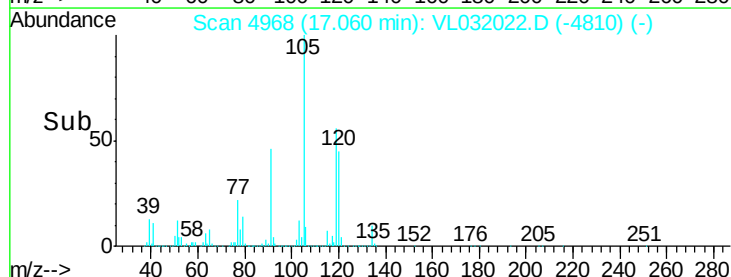
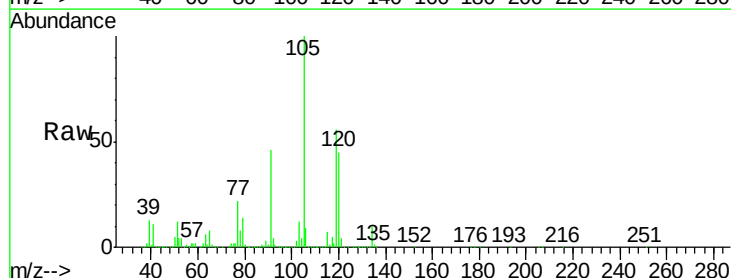
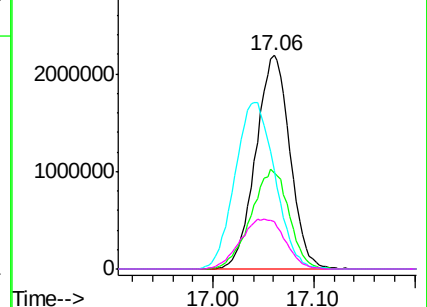
77 22.0 17.3 25.9

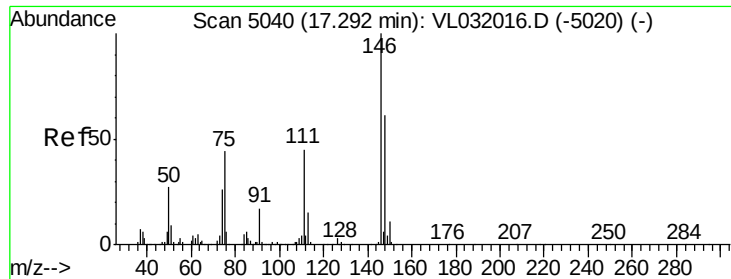
Abundance Ion 105.10 (104.80 to 105.80): V

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





#75

1,3-Dichlorobenzene

Concen: 14.90 ppbv

RT: 17.30 min Scan# 5043

Delta R.T. 0.01 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:146 Resp: 3295229

Ion Ratio Lower Upper

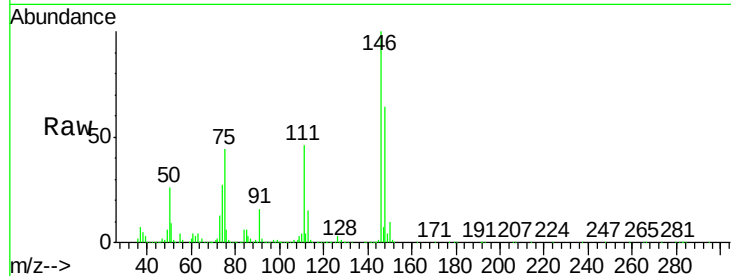
146 100

111 47.3 23.7 71.1

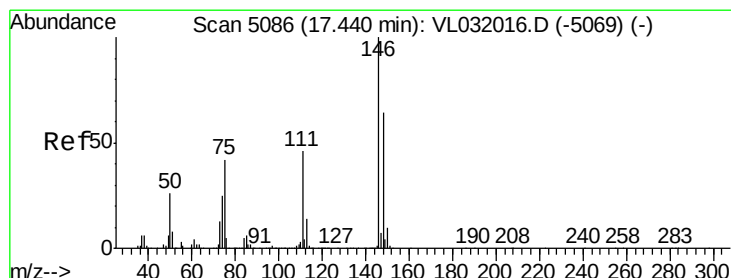
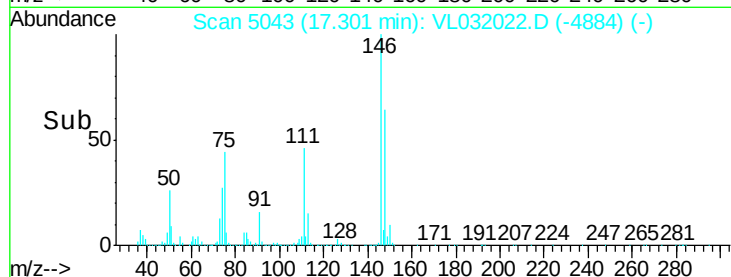
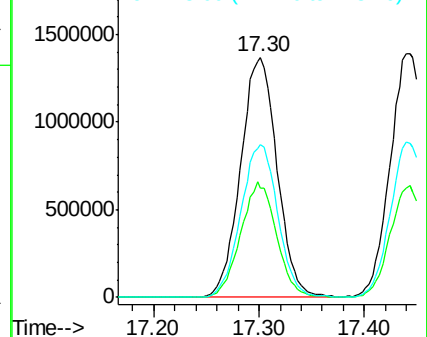
148 64.6 32.1 96.5

Manual Integrations
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6/4/2018 10:55:09 AM



Abundance Ion 146.00 (145.70 to 146.70): V
Ion 111.10 (110.80 to 111.80): V
Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 15.34 ppbv

RT: 17.44 min Scan# 5086

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

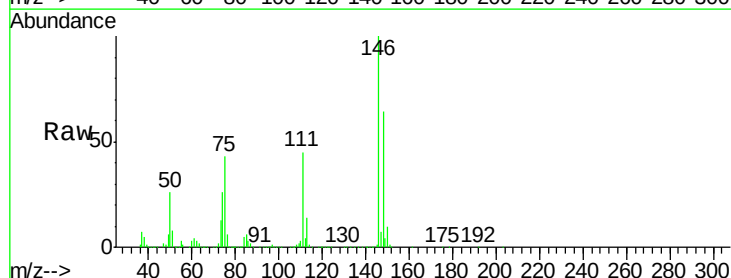
Tgt Ion:146 Resp: 3353261

Ion Ratio Lower Upper

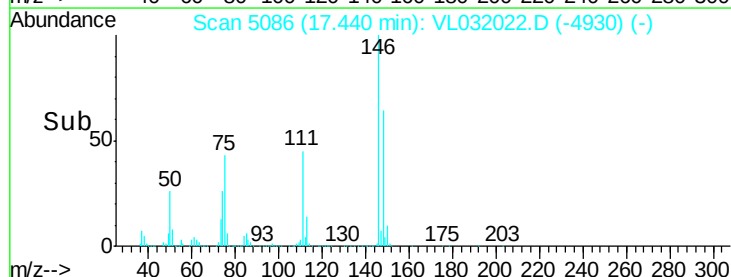
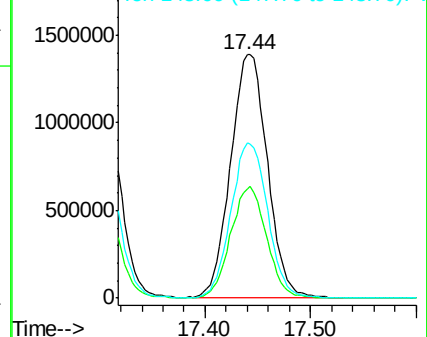
146 100

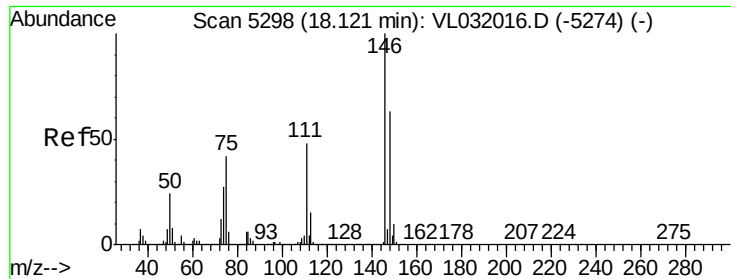
111 45.1 22.4 67.0

148 63.9 32.1 96.3



Abundance Ion 146.00 (145.70 to 146.70): V
Ion 111.10 (110.80 to 111.80): V
Ion 148.00 (147.70 to 148.70): V





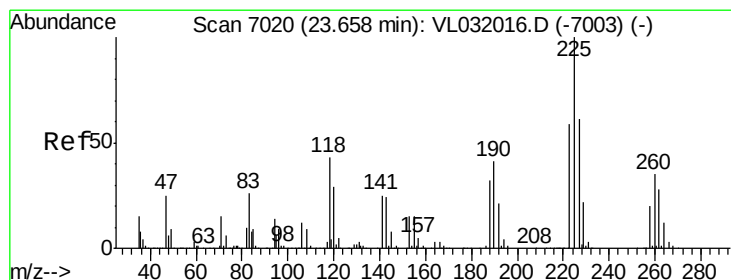
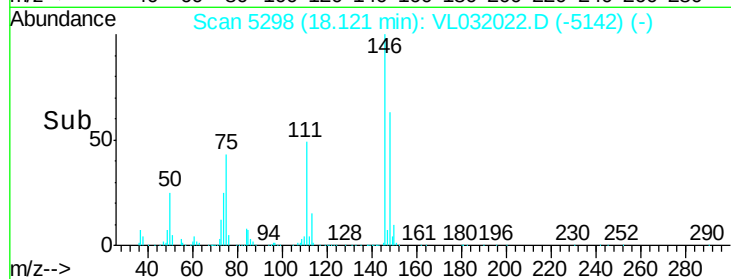
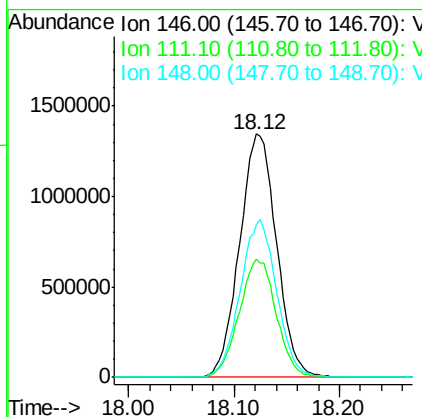
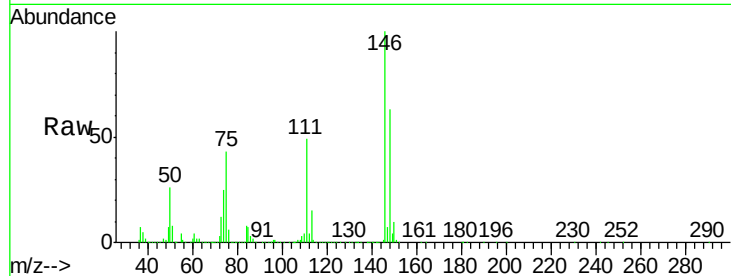
#77
 1,2-Dichlorobenzene
 Concen: 14.89 ppbv
 RT: 18.12 min Scan# 5298
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
146	100		
111	48.7	24.2	72.6
148	64.3	32.0	96.2

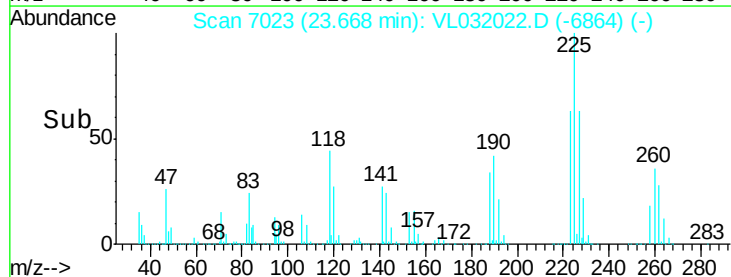
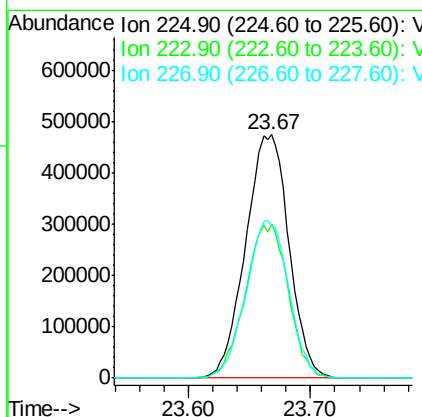
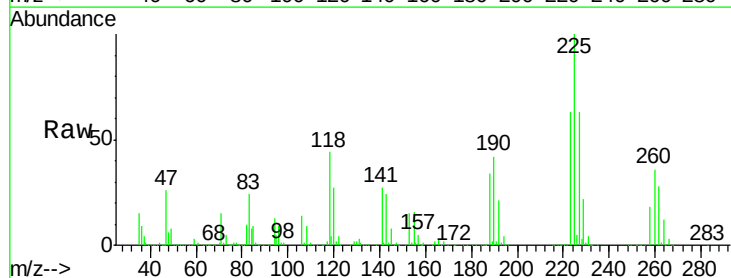
Manual Integrations
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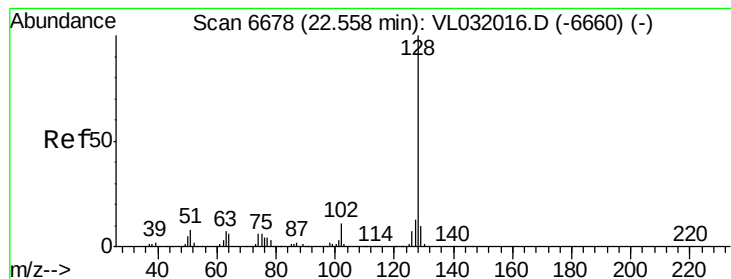
MMDadoda
 6/4/2018 10:55:09 AM



#78
 Hexachloro-1,3-Butadiene
 Concen: 12.95 ppbv
 RT: 23.67 min Scan# 7023
 Delta R.T. 0.01 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Tgt Ion	Ratio	Lower	Upper
225	100		
223	62.8	49.4	74.2
227	63.9	51.2	76.8





#79

Naphthalene

Concen: 17.56 ppbv

RT: 22.56 min Scan# 6680

Delta R.T. 0.01 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC015

Tot Ion:128 Resp: 4288772

Ion Ratio Lower Upper

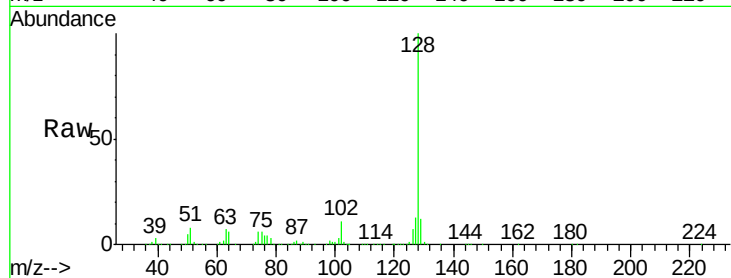
128 100

127 12.9 10.2 15.2

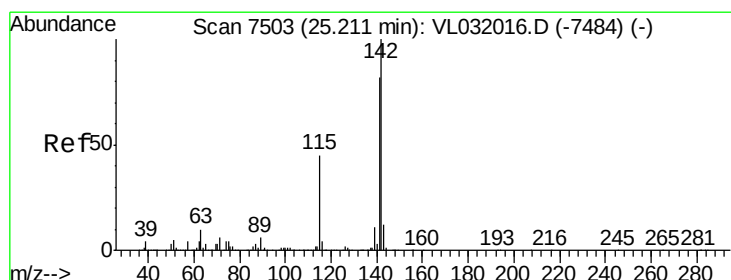
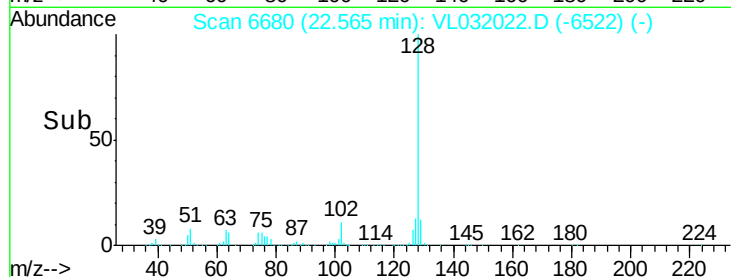
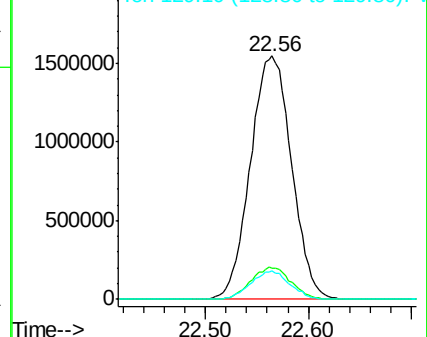
129 11.7 8.2 12.2

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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: 19.76 ppbv

RT: 25.21 min Scan# 7504

Delta R.T. 0.00 min

Lab File: VL032022.D

Acq: 31 May 2018 20:04

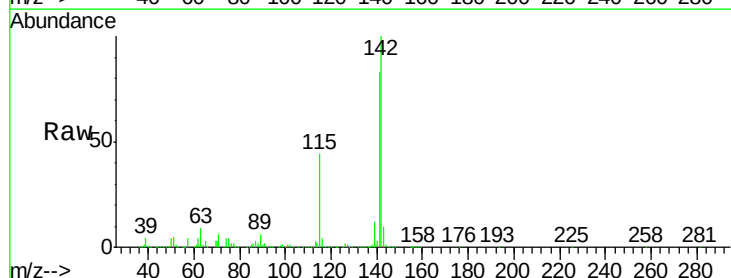
Tgt Ion:142 Resp: 1272281

Ion Ratio Lower Upper

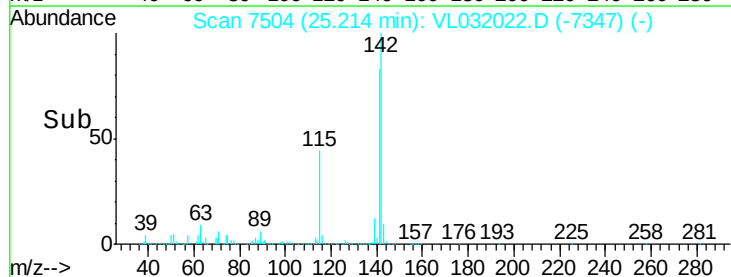
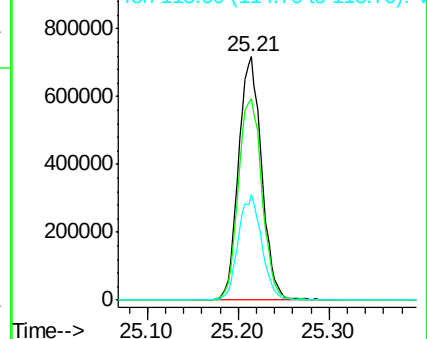
142 100

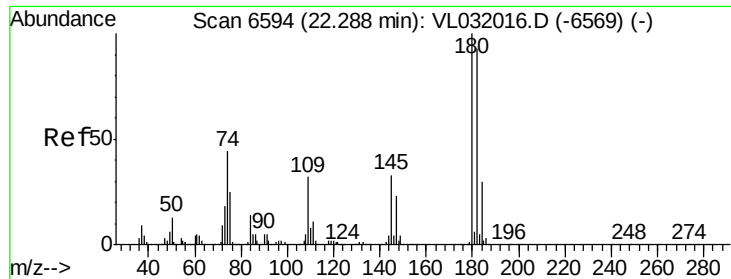
141 85.1 67.4 101.2

115 43.8 35.3 52.9



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: 16.13 ppbv
 RT: 22.29 min Scan# 6595
 Delta R.T. 0.00 min
 Lab File: VL032022.D
 Acq: 31 May 2018 20:04

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.2	77.8	116.6
184	30.4	24.9	37.3

Manual Integrations
 APPROVED

MMDadoda
 6/4/2018 10:55:09 AM

