

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033153.D
 Acq On : 4 Feb 2019 11:57
 Operator : SY/AP
 Sample : VSTDIC0.5
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Manual Integrations
 APPROVED

MMDadoda
 2/5/2019 10:27:16 AM

Quant Time: Feb 04 12:43:05 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 04
 QLast Update : Fri Feb 01 22:01:04 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	1201371	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3421014	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	3414295	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2653395	10.29	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.90%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	3.08	85	113800	0.632 ppbv	97
3) Chlorodifluoromethane	3.01	51	74048	0.383 ppbv	99
4) Chloromethane	3.17	50	41309	0.371 ppbv	93
5) Vinyl Chloride	3.29	62	38124	0.313 ppbv	98
6) Bromomethane	3.51	94	23306m	0.435 ppbv	
7) Chloroethane	3.60	64	14152	0.431 ppbv	93
8) Dichlorotetrafluoroethane	3.22	85	95704	0.430 ppbv	97
9) Propene	3.03	41	38244	0.387 ppbv	98
10) Heptane	8.25	43	121964	0.663 ppbv	99
11) Trichlorofluoromethane	4.00	101	98301	0.518 ppbv	97
12) 1,1,2-Trichlorotrifluoroet	4.55	101	62520	0.518 ppbv	98
13) Ethanol	3.65	45	18224m	0.652 ppbv	
14) Bromoethene	3.79	108	27996	0.459 ppbv	97
15) Acetone	3.91	43	87658	0.576 ppbv	94
16) 1,3-Butadiene	3.36	39	31197	0.427 ppbv	90
17) tert-Butyl alcohol	4.37	59	19115m	0.521 ppbv	
18) 1,1-Dichloroethene	4.35	96	28777	0.494 ppbv	81
19) Isopropyl Alcohol	4.04	45	60921	0.523 ppbv #	47
20) Methylene Chloride	4.41	84	30519	0.518 ppbv	93
21) Allyl Chloride	4.48	41	47775m	0.488 ppbv	
22) trans-1,2-Dichloroethene	4.96	96	28904m	0.532 ppbv	
23) Vinyl Acetate	5.16	43	121806	0.461 ppbv #	93
24) 1,1-Dichloroethane	5.09	63	88430	0.501 ppbv	99
25) Ethyl Acetate	5.77	43	158806	0.487 ppbv	99
26) Hexane	5.78	57	75951	0.476 ppbv	98
27) Carbon Disulfide	4.62	76	59377	0.460 ppbv #	83
28) Methyl tert-Butyl Ether	5.12	73	107237	0.467 ppbv	99
29) Chloroform	5.84	83	104179	0.483 ppbv	94
30) Cyclohexane	7.24	84	74761	0.604 ppbv	93
31) cis-1,2-Dichloroethene	5.64	61	69319	0.475 ppbv	92
32) 1,1,1-Trichloroethane	6.62	97	97938	0.440 ppbv #	82
34) 2-Butanone	5.33	43	109917	0.420 ppbv	97
35) Carbon Tetrachloride	7.13	117	112337	0.438 ppbv	93
36) Benzene	7.00	78	186843	0.487 ppbv	98
37) 1,2-Dichloroethane	6.41	62	81421	0.417 ppbv	99
38) Trichloroethene	7.95	130	67499	0.437 ppbv	93
39) 1,2-Dichloropropane	7.73	63	69792m	0.496 ppbv	
40) 1,4-Dioxane	7.98	88	30305m	0.612 ppbv	
41) Tetrahydrofuran	6.17	42	62420	0.397 ppbv	98
42) Bromodichloromethane	7.91	83	129911	0.467 ppbv	95
43) Methyl Methacrylate	8.14	69	70394m	0.524 ppbv	

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Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Manual Integrations
 APPROVED

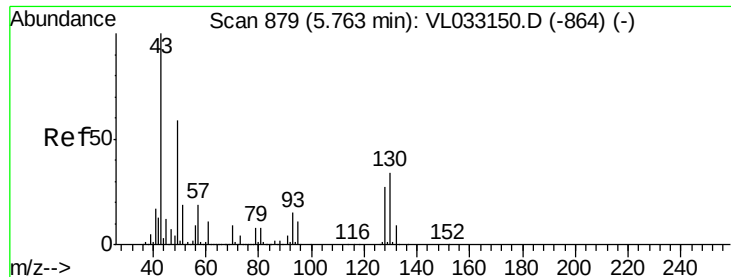
MMDadoda
 2/5/2019 10:27:16 AM

Quant Time: Feb 04 12:43:05 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 0
 QLast Update : Fri Feb 01 22:01:04 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

44) 2,2,4-Trimethylpentane	7.98	57	319298m	0.516	ppbv	
45) t-1,3-Dichloropropene	9.42	75	68041	0.419	ppbv	90
46) cis-1,3-Dichloropropene	8.83	75	90648	0.466	ppbv	91
47) 1,1,2-Trichloroethane	9.61	97	68201	0.532	ppbv #	91
48) Dibromochloromethane	10.45	129	90826	0.425	ppbv	100
49) Bromoform	13.20	173	73230m	0.413	ppbv	
50) 4-Methyl-2-Pentanone	8.88	43	201907	0.594	ppbv	98
51) 2-Hexanone	10.29	43	166693m	0.551	ppbv	
52) Tetrachloroethene	11.37	164	62648	0.430	ppbv	91
53) Toluene	9.95	91	198246	0.451	ppbv	100
54) 1,2-Dibromoethane	10.75	107	102931	0.427	ppbv	91
56) 1,1,1,2-Tetrachloroethane	12.28	131	78568	0.517	ppbv #	1
57) Chlorobenzene	12.30	112	157862	0.525	ppbv #	91
58) Ethyl Benzene	12.86	91	295033	0.527	ppbv	95
59) m/p-Xylene	13.14	91	489754m	1.072	ppbv	
60) o-Xylene	13.85	91	238428	0.540	ppbv	97
61) Styrene	13.69	104	170759	0.504	ppbv	97
62) Isopropylbenzene	14.82	105	344047	0.548	ppbv	97
63) 1,1,2,2-Tetrachloroethane	13.83	83	172799	0.518	ppbv	99
64) n-propylbenzene	15.72	120	86909	0.540	ppbv	84
65) tert-Butylbenzene	16.91	119	304972	0.577	ppbv	94
66) Benzyl Chloride	17.16	91	87575m	0.370	ppbv	
67) sec-Butylbenzene	17.46	105	429078	0.572	ppbv	100
69) p-Isopropyltoluene	17.82	119	357155	0.604	ppbv	97
70) n-Butylbenzene	18.72	91	403296	0.670	ppbv	96
71) 2-Chlorotoluene	15.61	91	266380	0.557	ppbv	98
72) 4-Ethyltoluene	16.00	105	273728	0.553	ppbv	99
73) 1,3,5-Trimethylbenzene	16.16	105	267977	0.600	ppbv	98
74) 1,2,4-Trimethylbenzene	16.92	105	280867	0.639	ppbv #	92
75) 1,3-Dichlorobenzene	17.17	146	154312	0.589	ppbv	99
76) 1,4-Dichlorobenzene	17.31	146	155011m	0.593	ppbv	
77) 1,2-Dichlorobenzene	17.98	146	153796	0.609	ppbv	99
78) Hexachloro-1,3-Butadiene	23.55	225	69492m	0.594	ppbv	
79) Naphthalene	22.42	128	334319m	1.159	ppbv	
80) Naphthalene, 2-methyl-	25.12	142	171986	2.022	ppbv	99
81) 1,2,4-Trichlorobenzene	22.14	180	150067	0.989	ppbv	100

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 49 Resp: 1201371

Ion Ratio Lower Upper

49 100

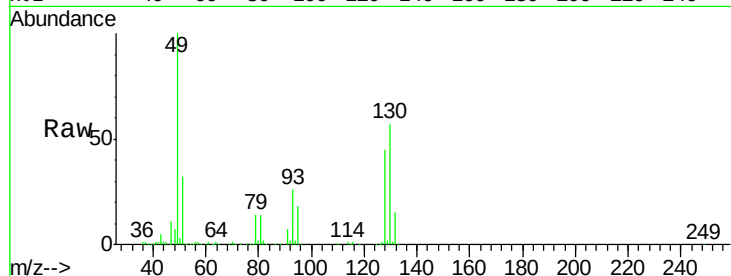
128 45.6 23.2 69.5

130 57.5 29.5 88.6

Manual Integrations
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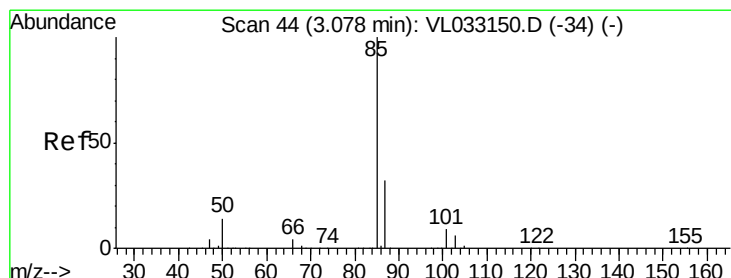
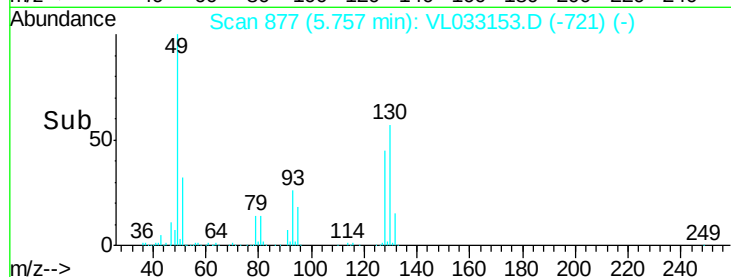
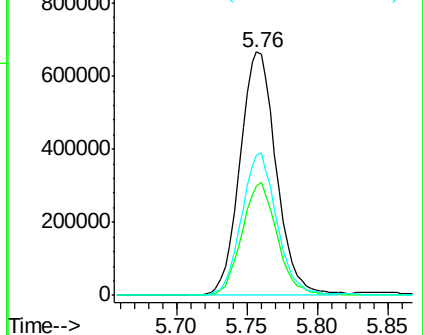
2/5/2019 10:27:16 AM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.632 ppbv

RT: 3.08 min Scan# 43

Delta R.T. 0.00 min

Lab File: VL033153.D

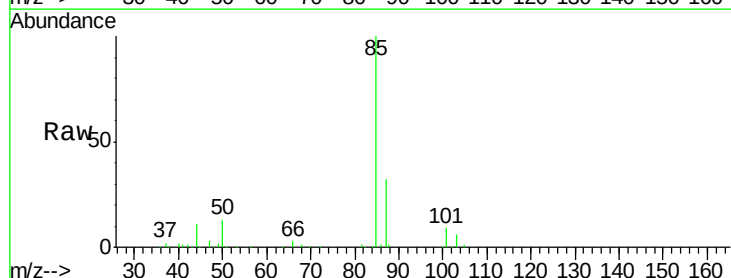
Acq: 4 Feb 2019 11:57

Tgt Ion: 85 Resp: 113800

Ion Ratio Lower Upper

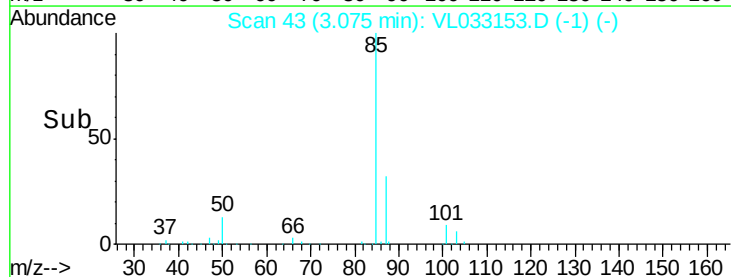
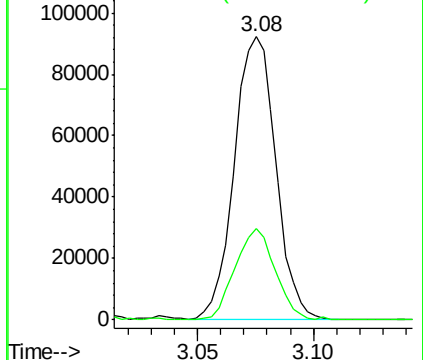
85 100

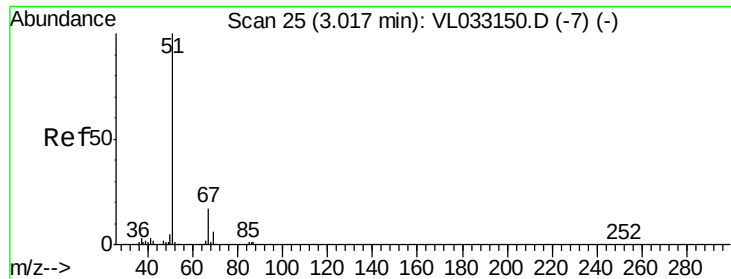
87 32.2 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

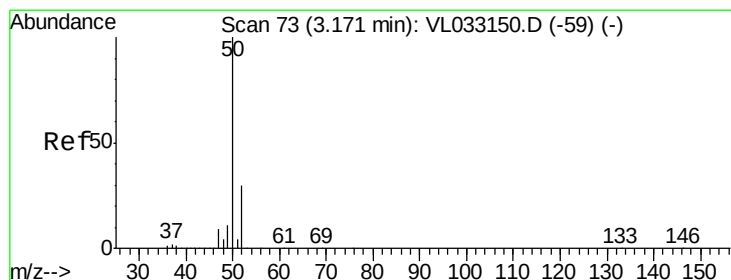
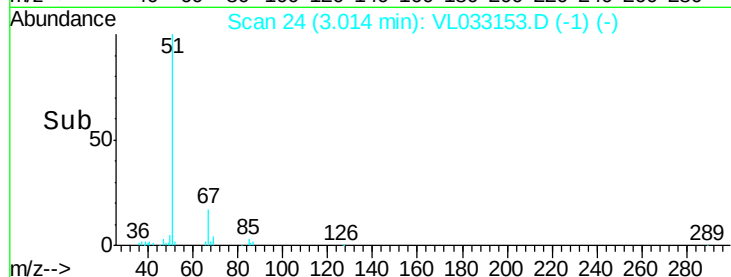
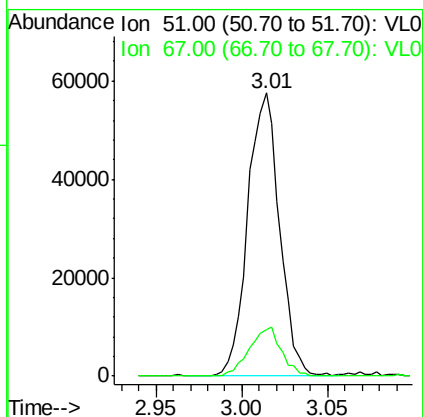
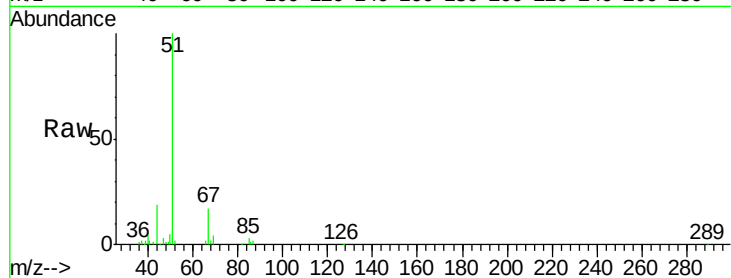
Chlorodifluoromethane
 Concen: 0.383 ppbv
 RT: 3.01 min Scan# 24
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
51	100		
67	17.3	13.4	20.2

Manual Integrations
 APPROVED

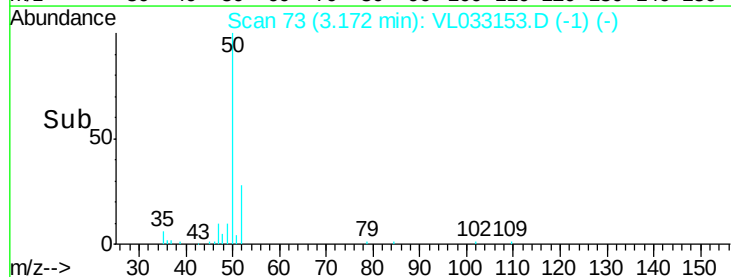
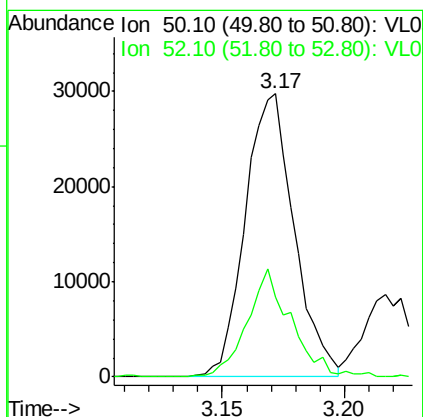
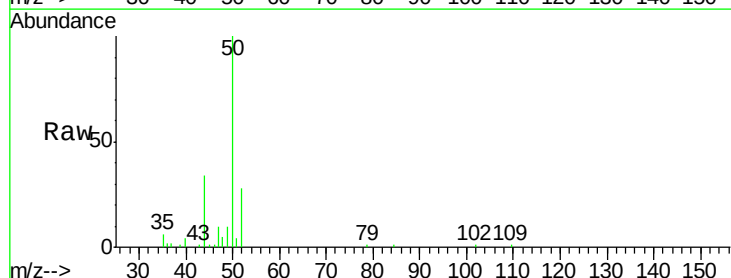
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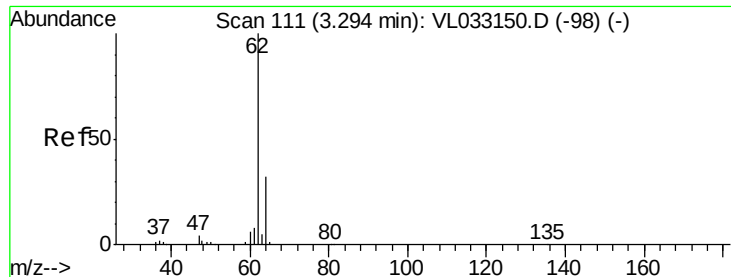


#4

Chloromethane
 Concen: 0.371 ppbv
 RT: 3.17 min Scan# 73
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
50	100		
52	28.3	25.7	38.5





#5

Vinyl Chloride

Concen: 0.313 ppbv

RT: 3.29 min Scan# 109

Delta R.T. -0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 62 Resp: 38124

Ion Ratio Lower Upper

62 100

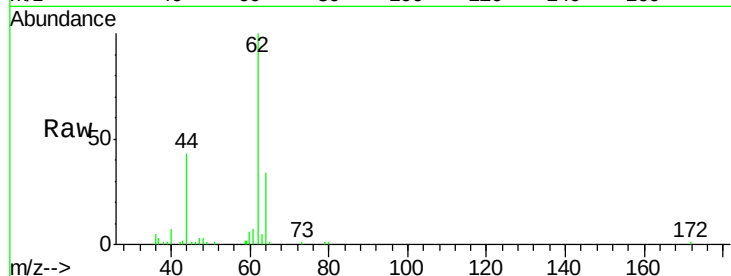
64 34.1 26.3 39.5

Manual Integrations

APPROVED

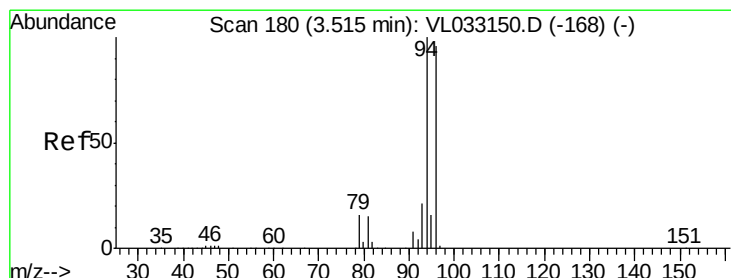
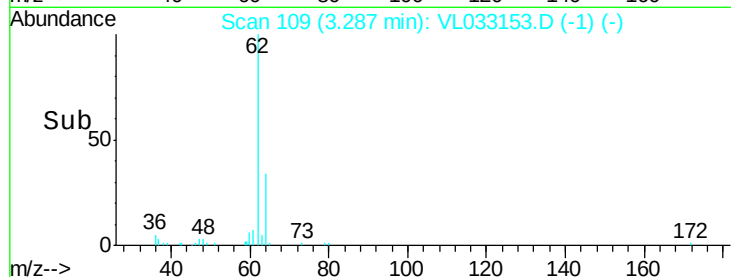
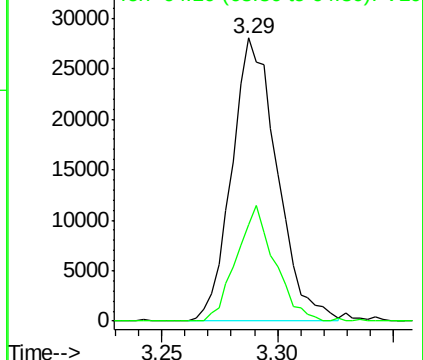
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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 0.435 ppbv m

RT: 3.51 min Scan# 178

Delta R.T. -0.00 min

Lab File: VL033153.D

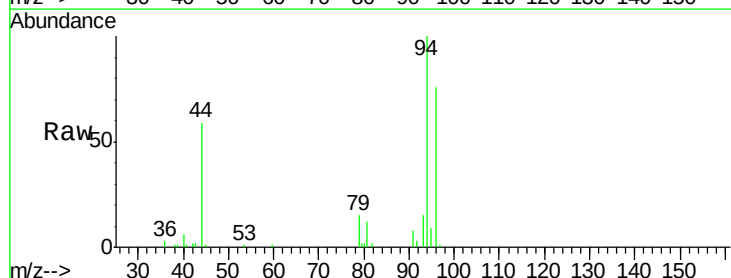
Acq: 4 Feb 2019 11:57

Tgt Ion: 94 Resp: 23306

Ion Ratio Lower Upper

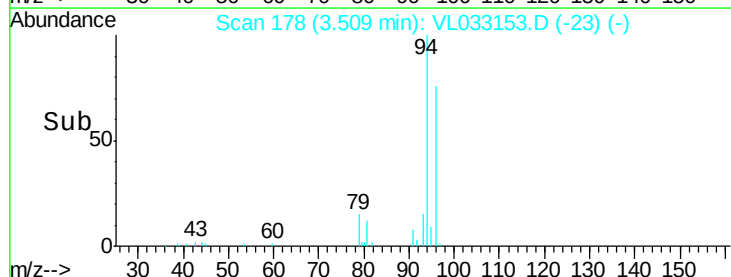
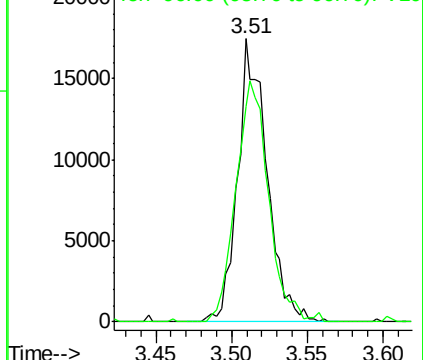
94 100

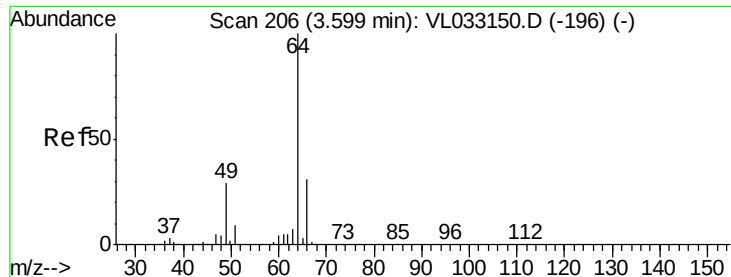
96 76.0 74.0 111.0



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 0.431 ppbv

RT: 3.60 min Scan# 206

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 64 Resp: 14152

Ion Ratio Lower Upper

64 100

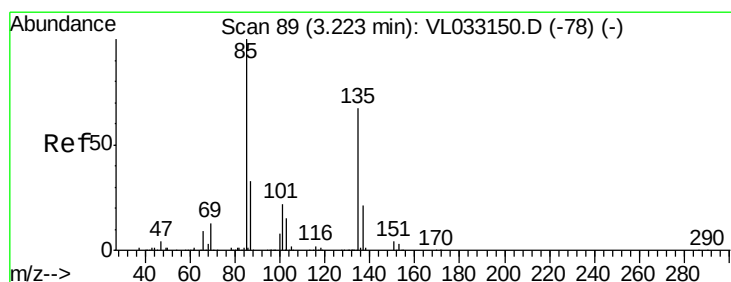
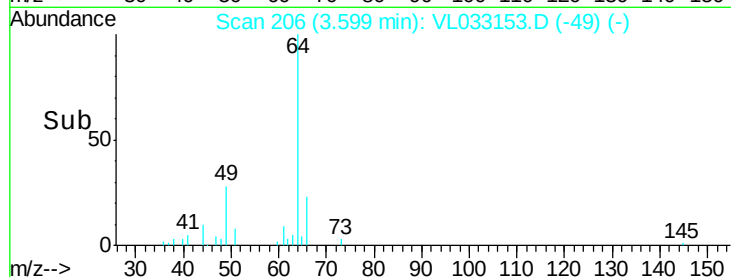
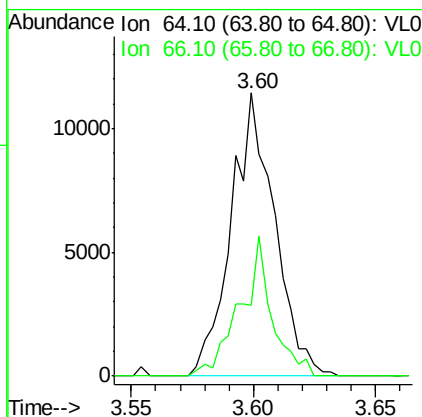
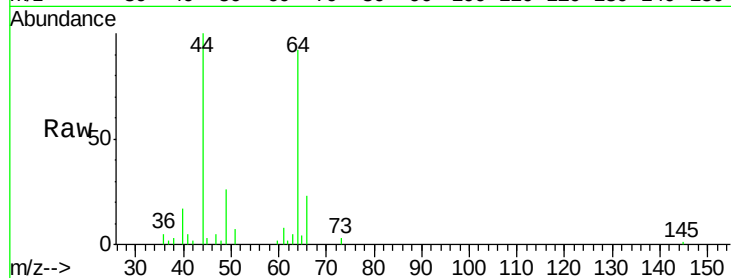
66 24.2 22.3 33.5

Manual Integrations

APPROVED

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#8

Dichlorotetrafluoroethane

Concen: 0.430 ppbv

RT: 3.22 min Scan# 87

Delta R.T. 0.00 min

Lab File: VL033153.D

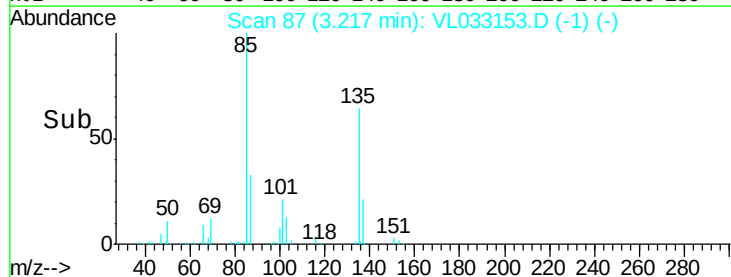
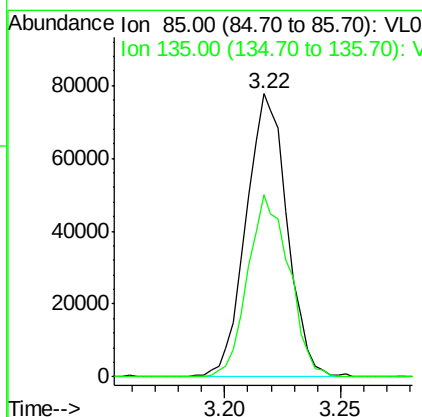
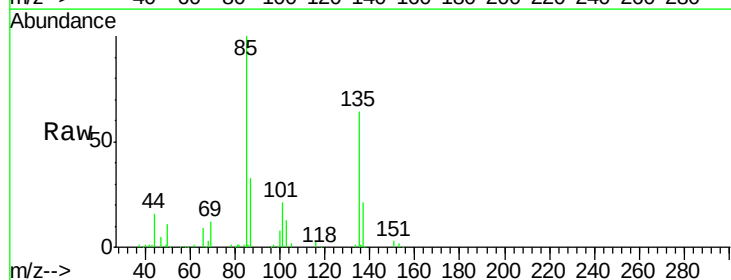
Acq: 4 Feb 2019 11:57

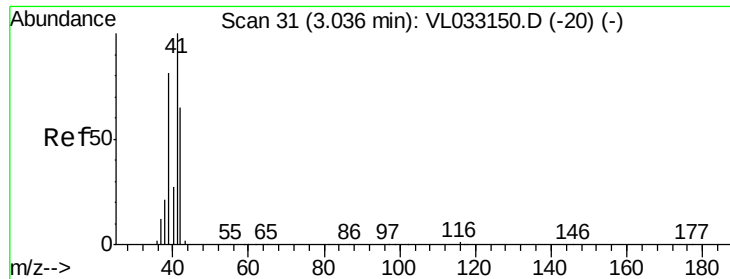
Tgt Ion: 85 Resp: 95704

Ion Ratio Lower Upper

85 100

135 65.0 54.0 81.0





#9

Propene

Concen: 0.387 ppbv

RT: 3.03 min Scan# 30

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 41 Resp: 38244

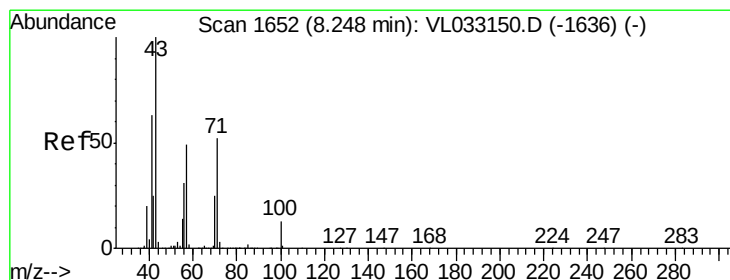
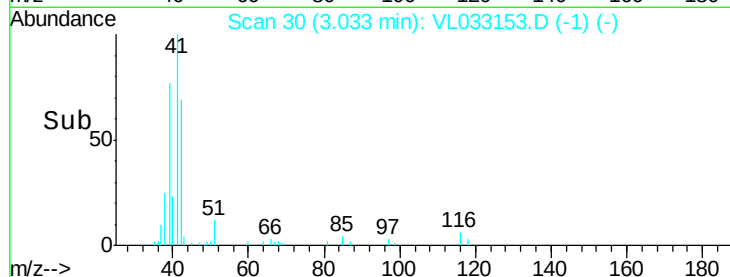
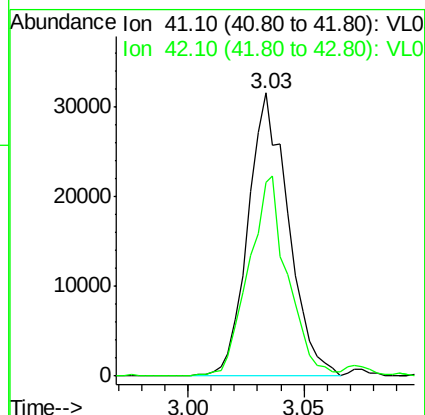
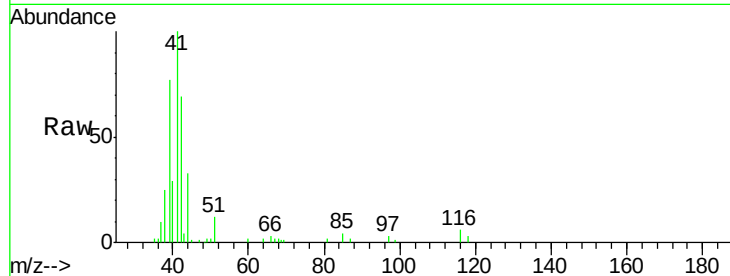
Ion Ratio Lower Upper

41 100

42 70.8 55.1 82.7

Manual Integrations
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#10

Heptane

Concen: 0.663 ppbv

RT: 8.25 min Scan# 1651

Delta R.T. 0.00 min

Lab File: VL033153.D

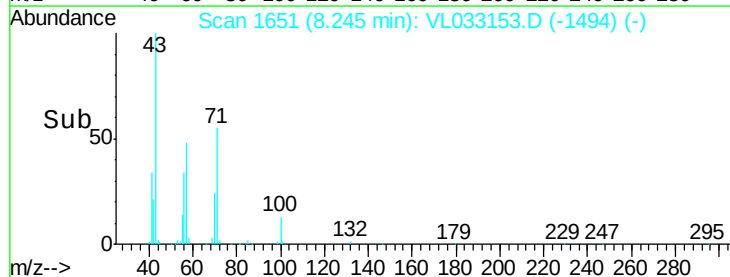
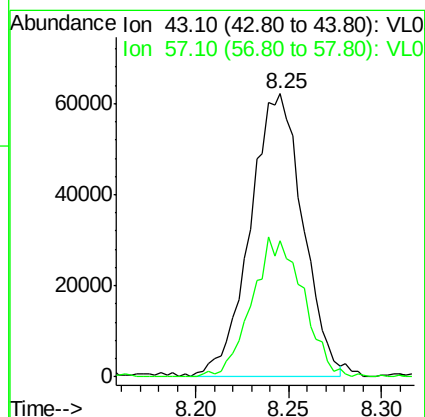
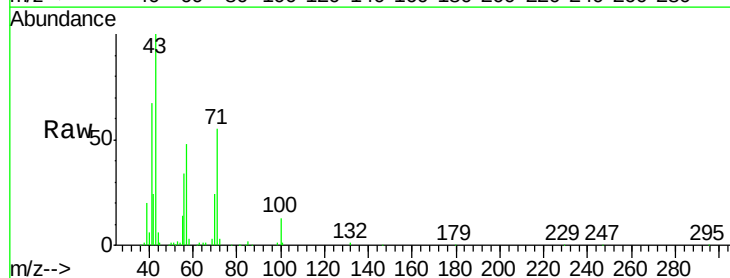
Acq: 4 Feb 2019 11:57

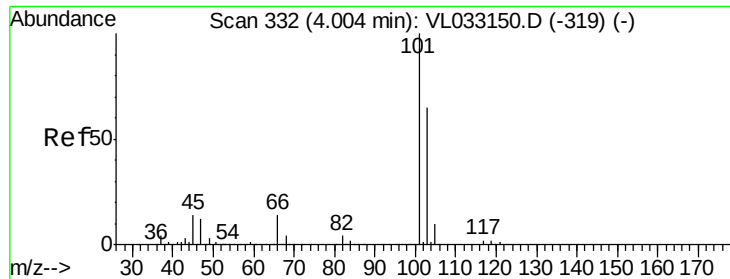
Tgt Ion: 43 Resp: 121964

Ion Ratio Lower Upper

43 100

57 48.4 39.3 58.9





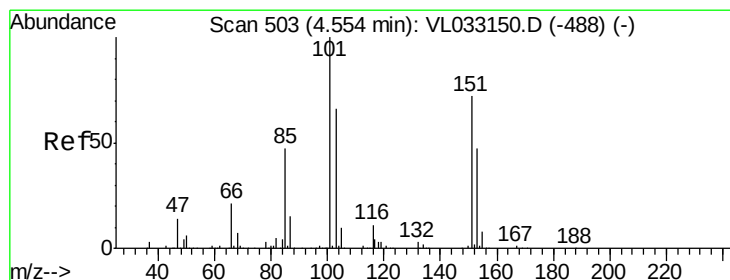
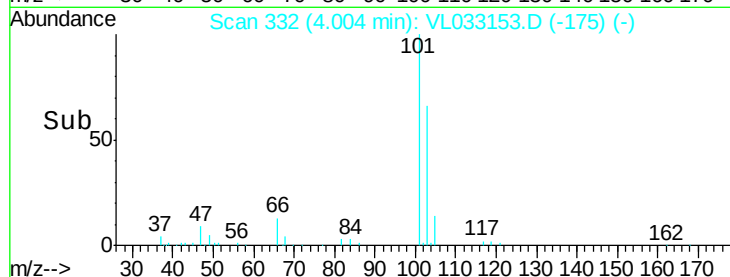
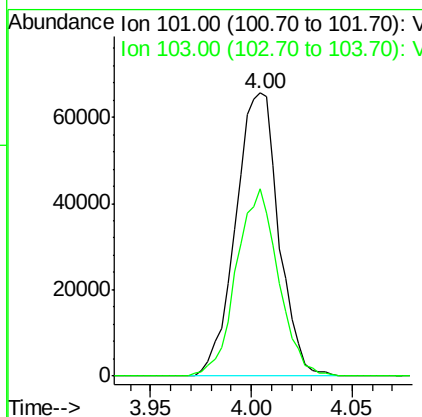
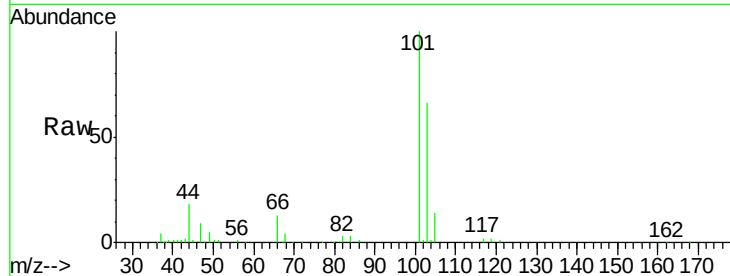
#11
 Trichlorofluoromethane
 Concen: 0.518 ppbv
 RT: 4.00 min Scan# 332
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
101	100		
103	66.1	51.3	76.9

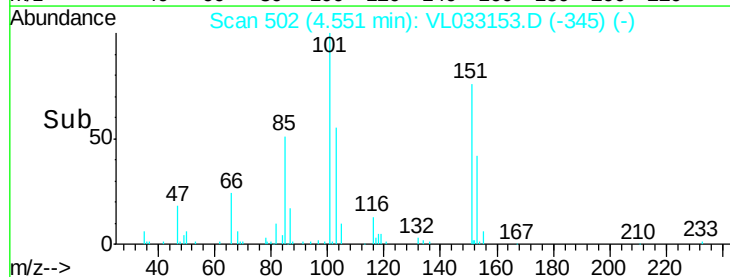
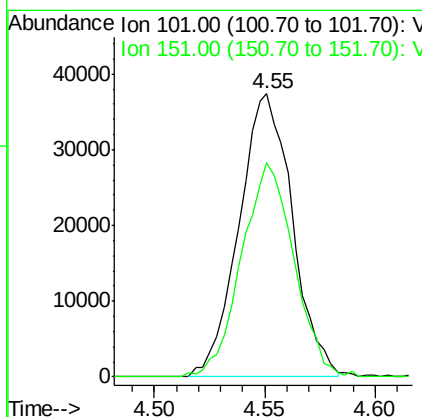
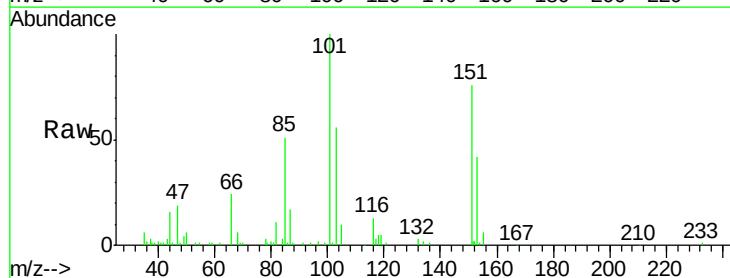
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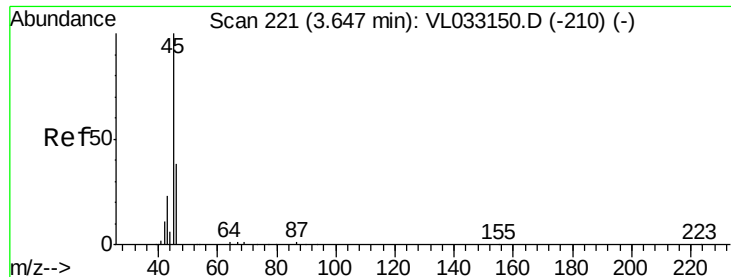
MMDadoda
 2/5/2019 10:27:16 AM



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.518 ppbv
 RT: 4.55 min Scan# 502
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
101	100		
151	74.5	57.9	86.9





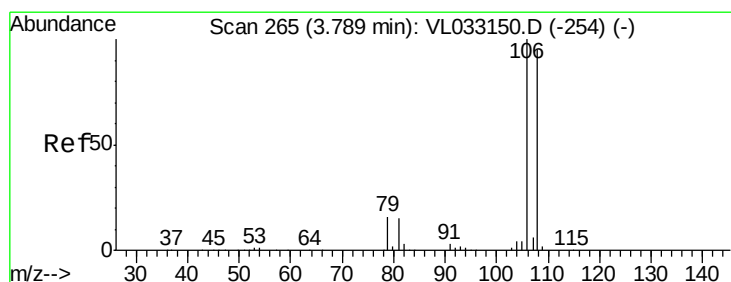
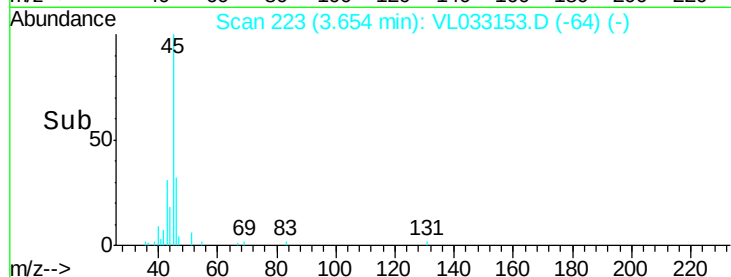
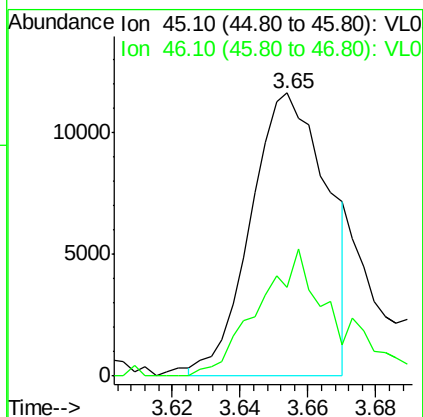
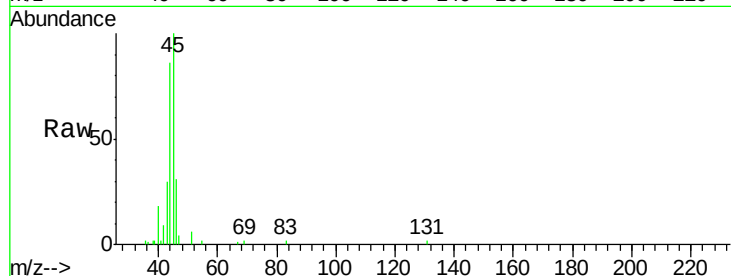
#13
Ethanol
Concen: 0.652 ppbv m
RT: 3.65 min Scan# 223
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion: 45 Resp: 18224
Ion Ratio Lower Upper
45 100
46 50.6 14.0 56.2

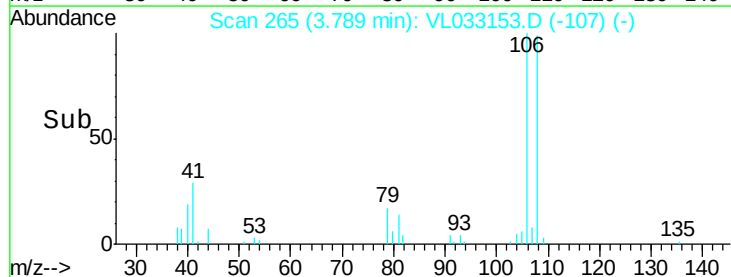
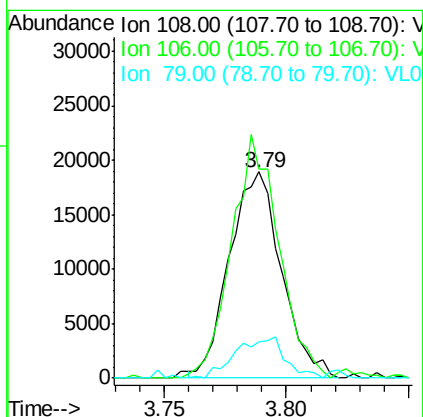
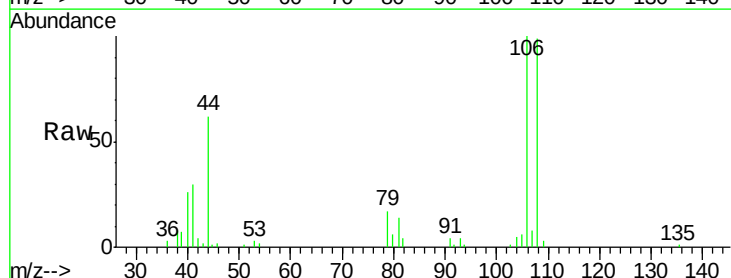
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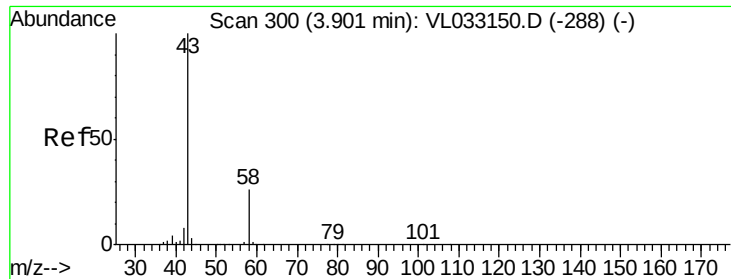
MMDadoda
2/5/2019 10:27:16 AM



#14
Bromoethene
Concen: 0.459 ppbv
RT: 3.79 min Scan# 265
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion: 108 Resp: 27996
Ion Ratio Lower Upper
108 100
106 109.3 85.6 128.4
79 20.4 14.2 21.4





#15

Acetone

Concen: 0.576 ppbv

RT: 3.91 min Scan# 302

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 43 Resp: 87658

Ion Ratio Lower Upper

43 100

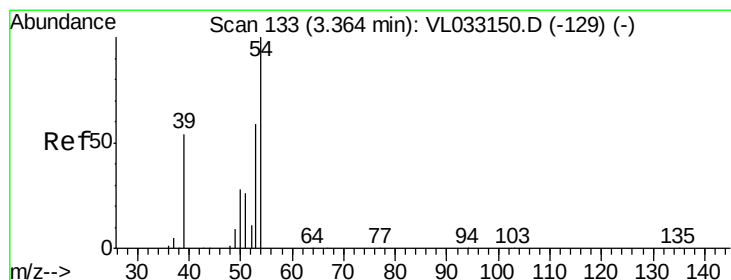
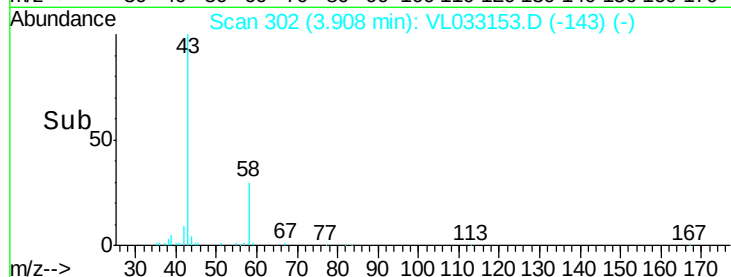
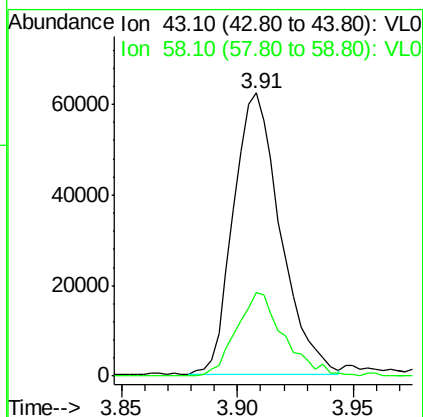
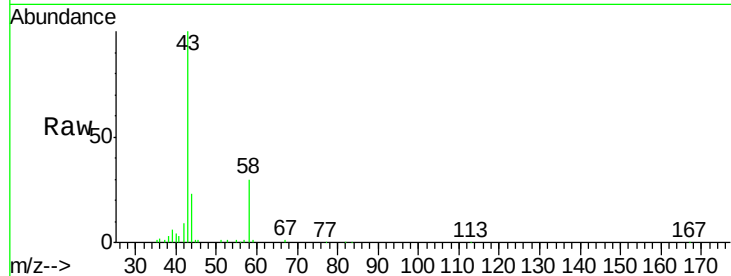
58 30.1 21.8 32.6

Manual Integrations

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MMDadoda

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#16

1,3-Butadiene

Concen: 0.427 ppbv

RT: 3.36 min Scan# 132

Delta R.T. 0.00 min

Lab File: VL033153.D

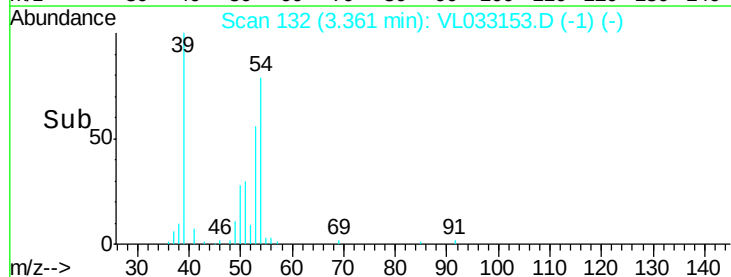
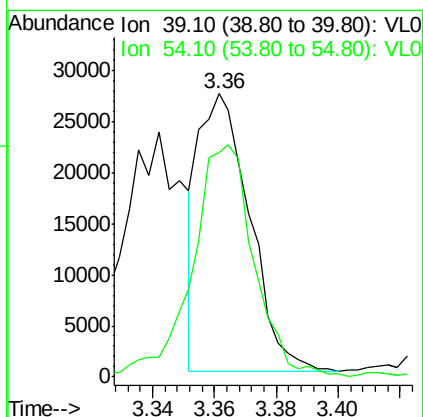
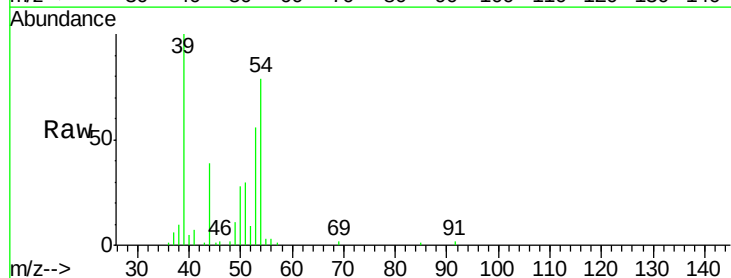
Acq: 4 Feb 2019 11:57

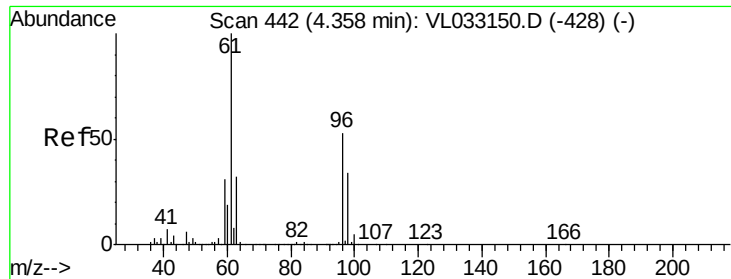
Tgt Ion: 39 Resp: 31197

Ion Ratio Lower Upper

39 100

54 103.8 75.0 112.6





#17

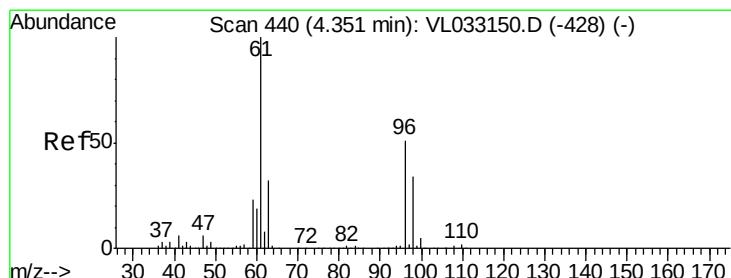
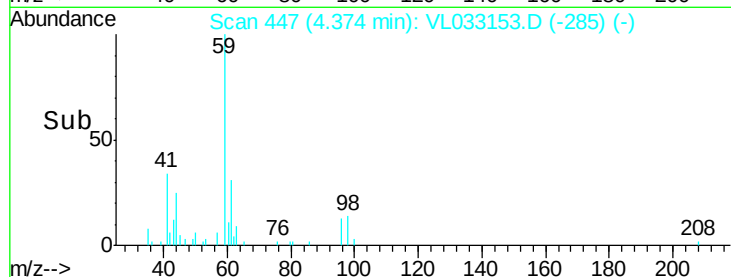
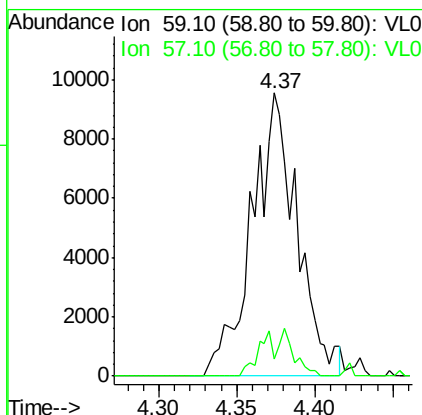
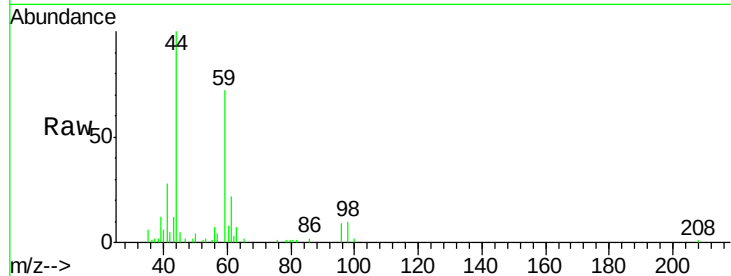
tert-Butyl alcohol
Concen: 0.521 ppbv
RT: 4.37 min Scan# 447
Delta R.T. 0.02 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.0	12.0#

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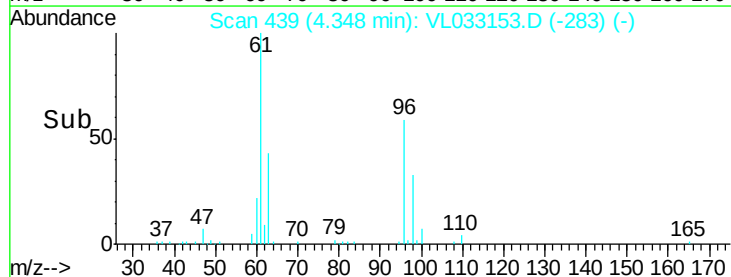
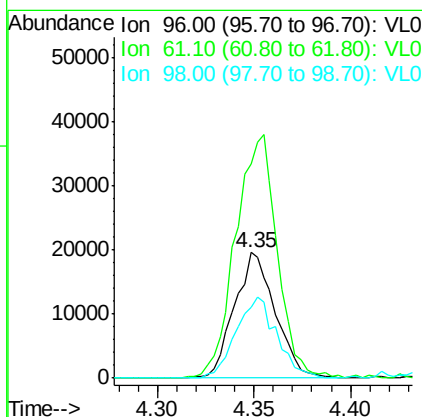
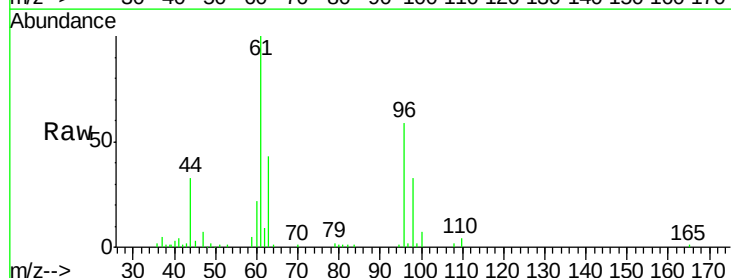
MMDadoda
2/5/2019 10:27:16 AM

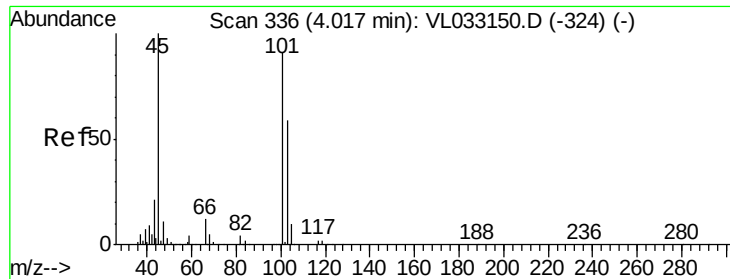


#18

1,1-Dichloroethene
Concen: 0.494 ppbv
RT: 4.35 min Scan# 439
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
96	100		
61	164.4	158.5	237.7
98	54.3	47.8	71.6





#19

Isopropyl Alcohol

Concen: 0.523 ppbv

RT: 4.04 min Scan# 342

Delta R.T. 0.02 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 45 Resp: 60921

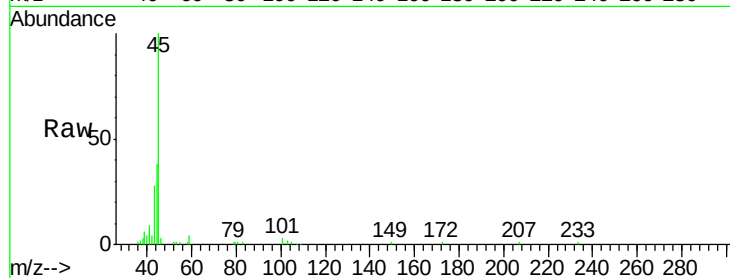
Ion Ratio Lower Upper

45 100

58 2.3 25.1 37.7#

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2/5/2019 10:27:16 AM



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.04

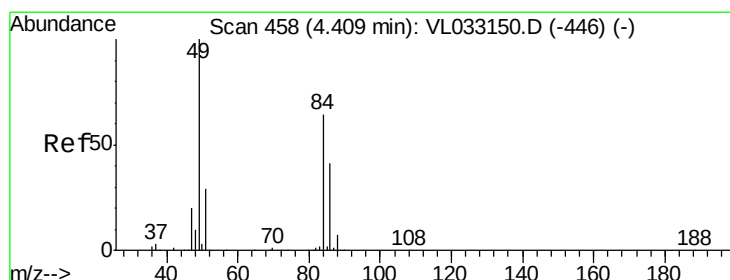
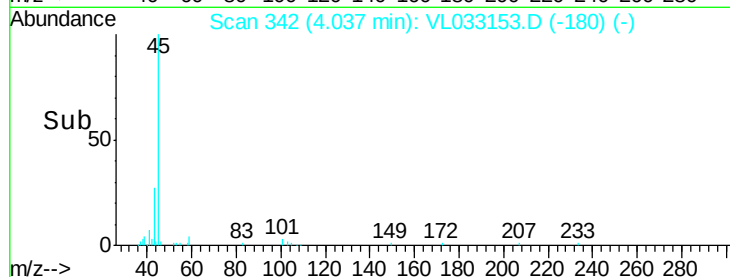
30000

20000

10000

0

Time-->



#20

Methylene Chloride

Concen: 0.518 ppbv

RT: 4.41 min Scan# 458

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion: 84 Resp: 30519

Ion Ratio Lower Upper

84 100

49 138.7 121.1 181.7

51 50.3 37.5 56.3

86 62.1 51.0 76.4

Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0

4.41

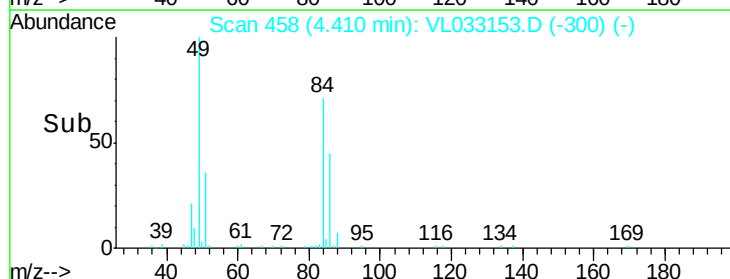
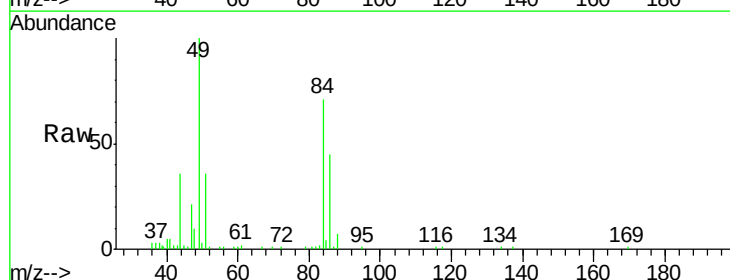
30000

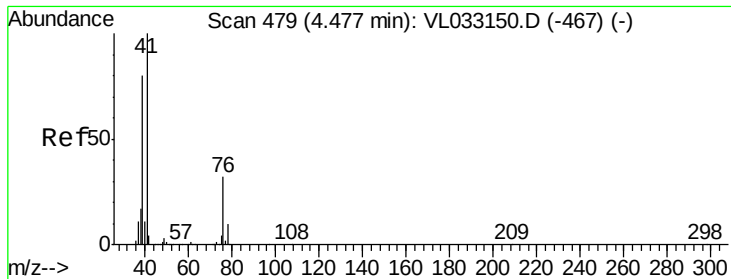
20000

10000

0

Time-->





#21

Allvl Chloride

Concen: 0.488 ppbv m

RT: 4.48 min Scan# 480

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

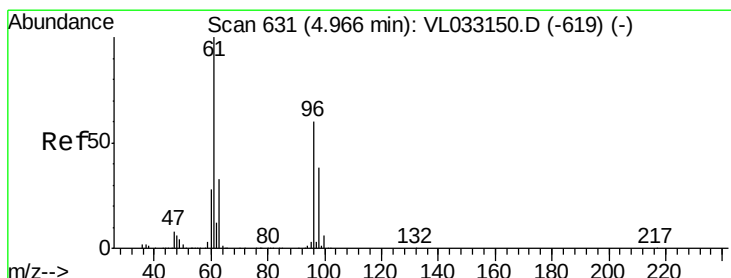
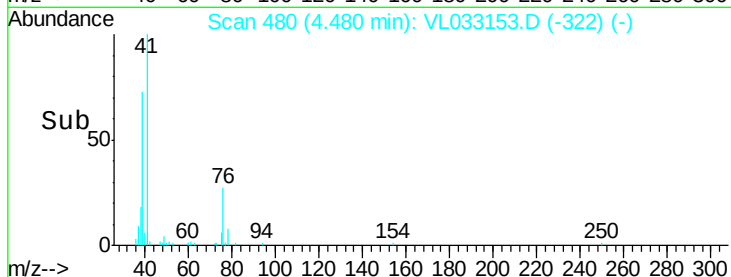
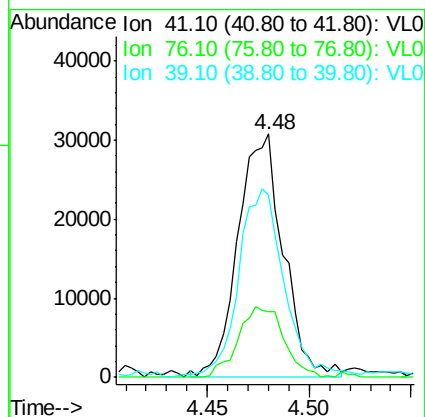
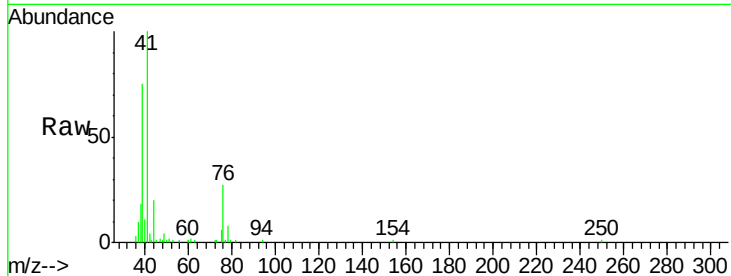
ClientSampleId :

VSTDIC0.5

Tot Ion:	41	Resp:	47775
Ion	Ratio	Lower	Upper
41	100		
76	29.7	23.2	34.8
39	77.1	61.8	92.6

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#22

trans-1,2-Dichloroethene

Concen: 0.532 ppbv m

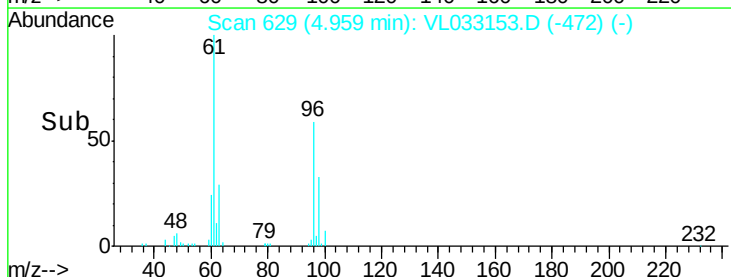
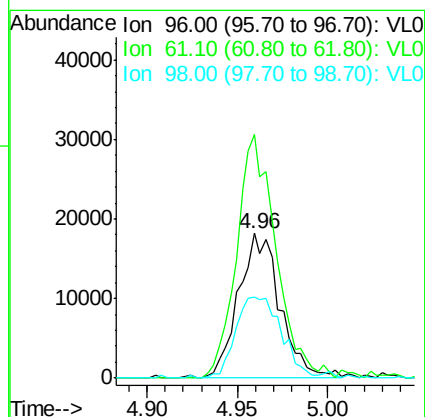
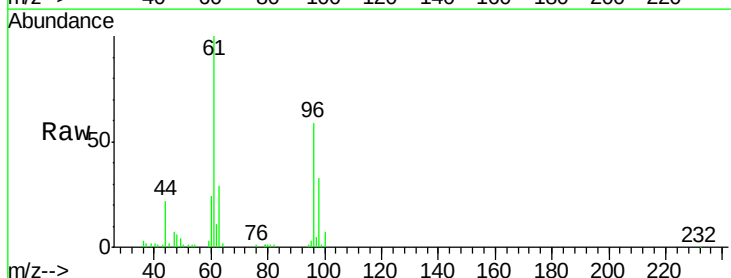
RT: 4.96 min Scan# 629

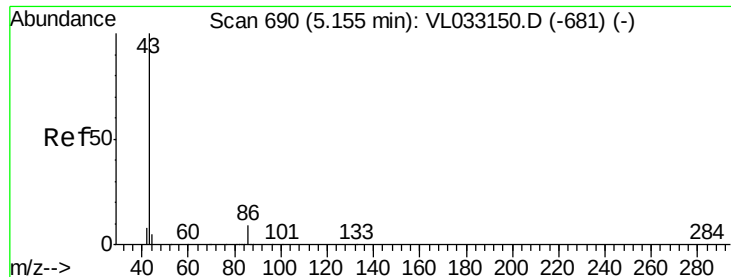
Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:	96	Resp:	28904
Ion	Ratio	Lower	Upper
96	100		
61	168.1	134.5	201.7
98	56.2	50.2	75.2





#23

Vinyl Acetate

Concen: 0.461 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

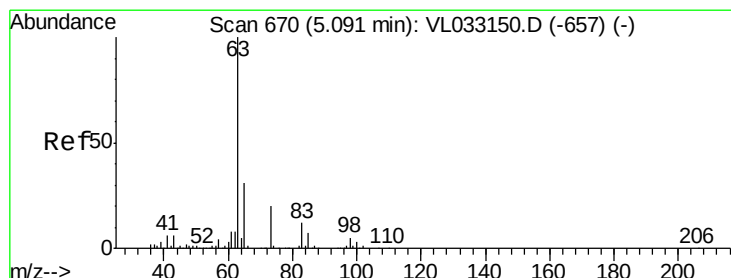
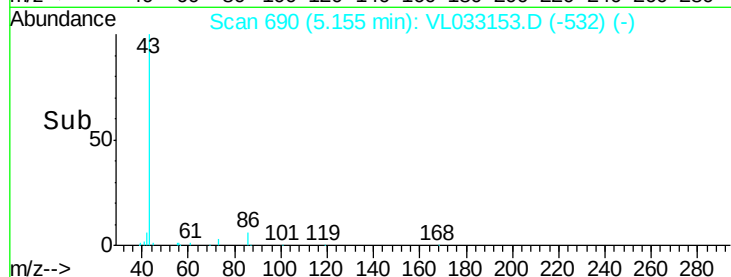
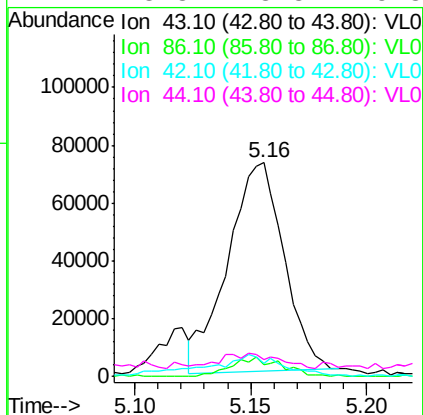
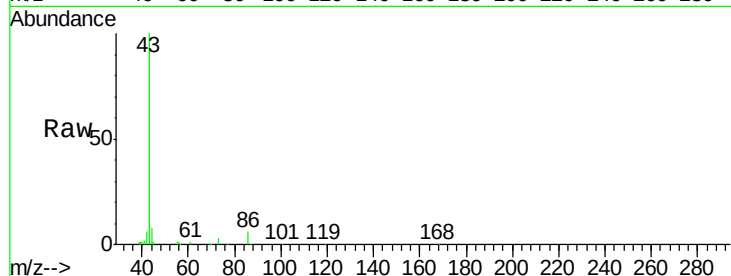
ClientSampleId :

VSTDIC0.5

Tot Ion	43	Resp	121806
Ion Ratio	Lower	Upper	
43	100		
86	5.8	6.2	9.4#
42	5.9	7.7	11.5#
44	3.8	3.8	5.8

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#24

1,1-Dichloroethane

Concen: 0.501 ppbv

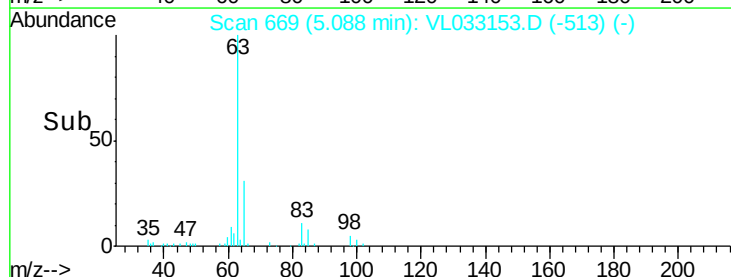
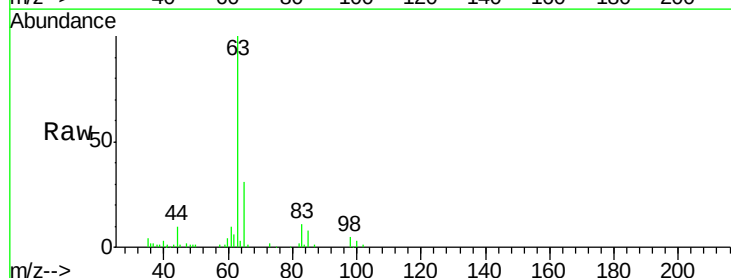
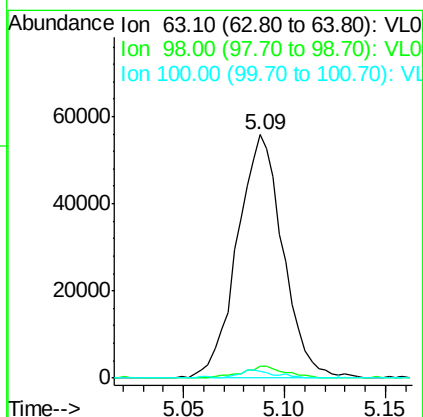
RT: 5.09 min Scan# 669

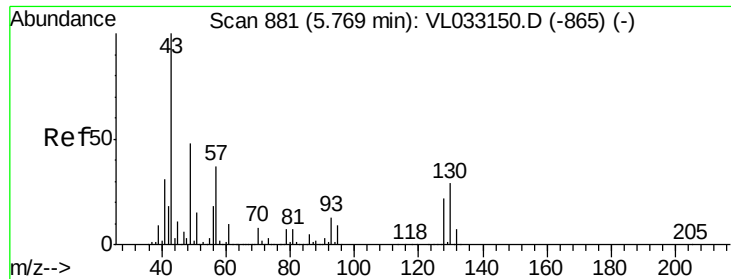
Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion	63	Resp	88430
Ion Ratio	Lower	Upper	
63	100		
98	5.1	2.3	6.9
100	2.7	1.3	3.9





#25

Ethyl Acetate

Concen: 0.487 ppbv

RT: 5.77 min Scan# 882

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

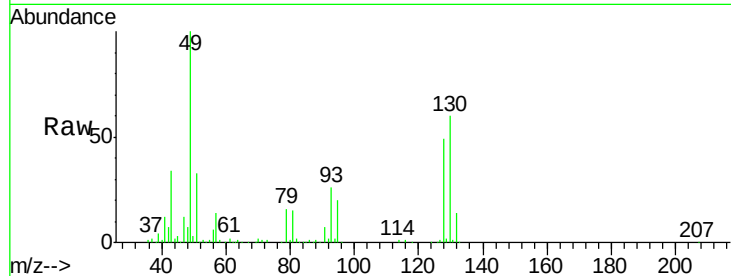
ClientSampled :

VSTDIC0.5

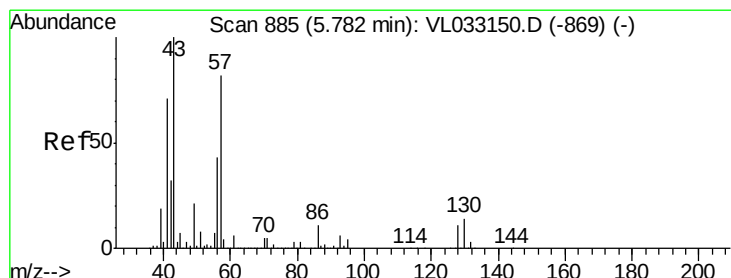
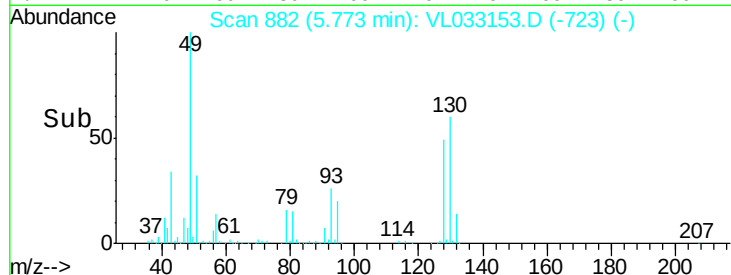
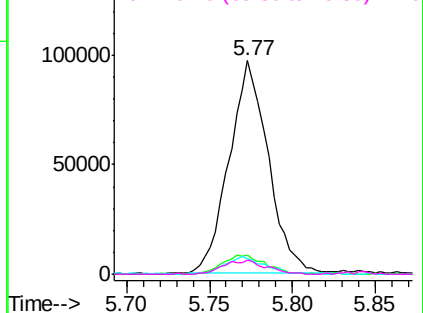
Tot Ion	Ion	Ratio	Resp	Lower	Upper
43	100				
45	10.5	8.0	12.0		
61	8.6	7.4	11.2		
70	7.2	5.9	8.9		

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Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 0.476 ppbv

RT: 5.78 min Scan# 884

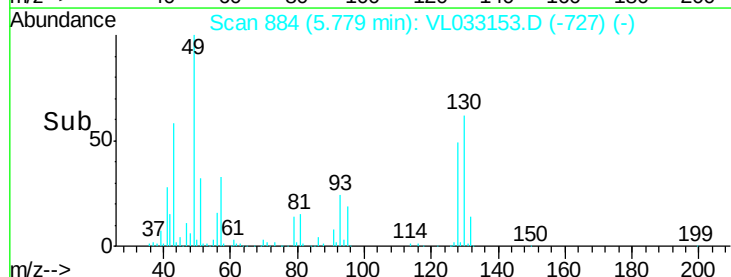
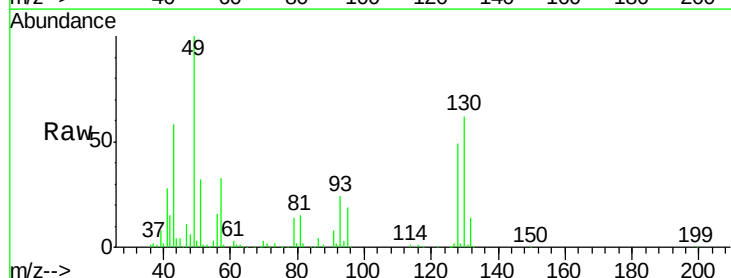
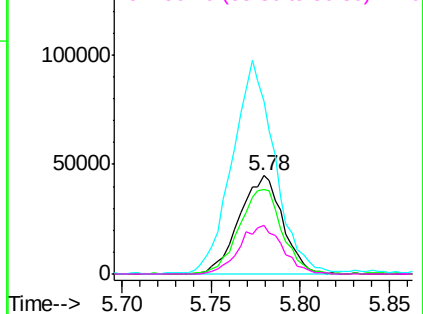
Delta R.T. 0.00 min

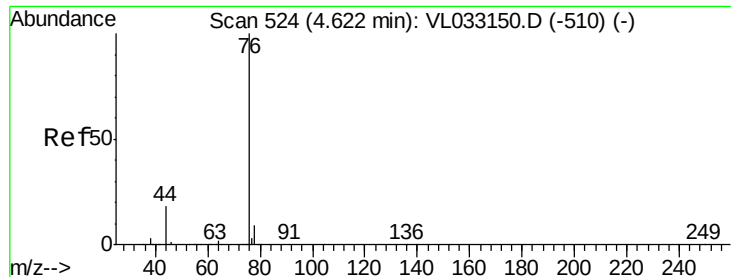
Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	86.0	69.5	104.3		
43	215.5	175.5	263.3		
56	48.9	41.6	62.4		

Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 0.460 ppbv

RT: 4.62 min Scan# 525

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

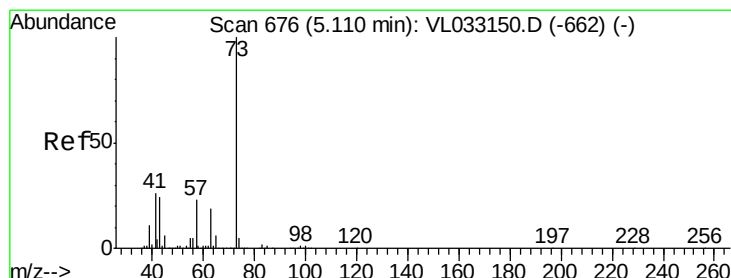
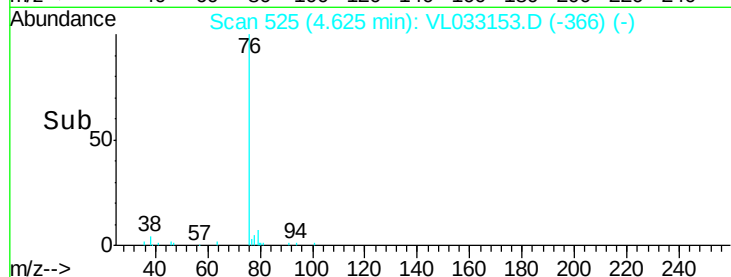
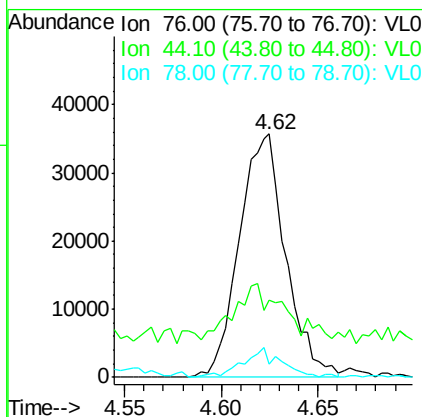
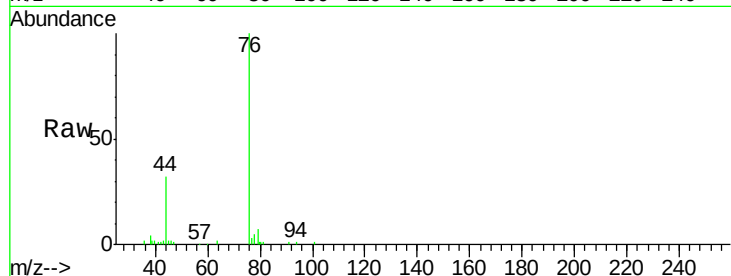
ClientSampleId :

VSTDIC0.5

Tot Ion:	76	Resp:	59377
Ion	Ratio	Lower	Upper
76	100		
44	32.0	17.1	25.7#
78	10.2	7.2	10.8

Manual Integrations
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MMDadoda
2/5/2019 10:27:16 AM



#28

Methyl tert-Butyl Ether

Concen: 0.467 ppbv

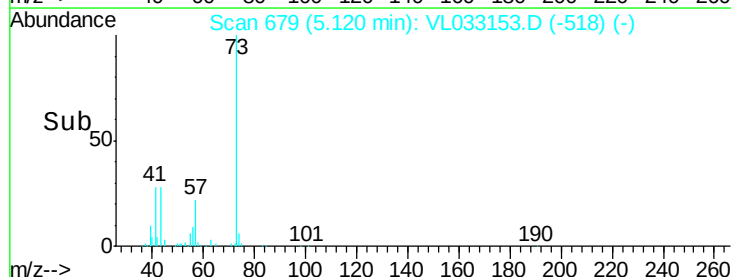
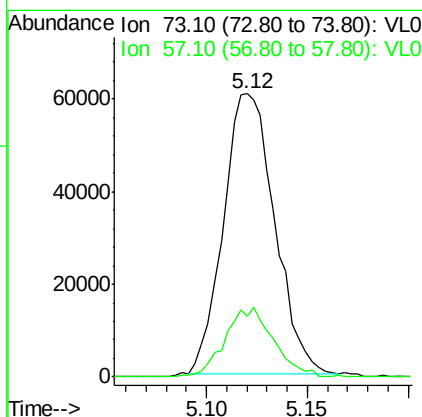
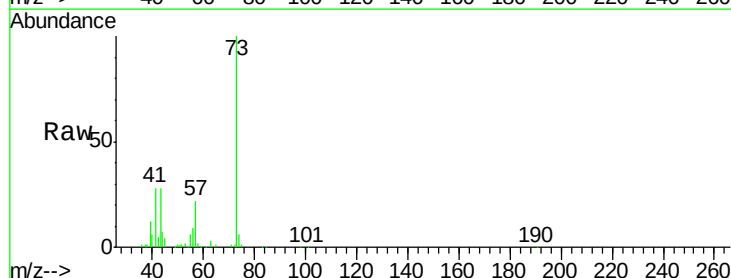
RT: 5.12 min Scan# 679

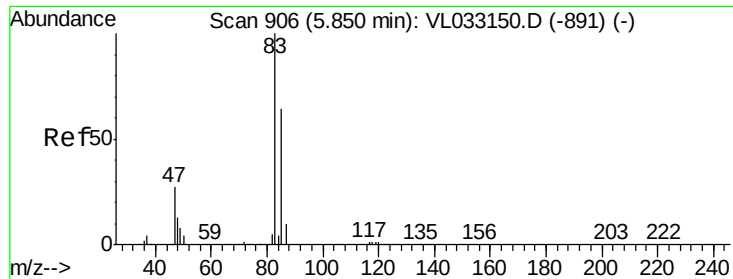
Delta R.T. 0.02 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:	73	Resp:	107237
Ion	Ratio	Lower	Upper
73	100		
57	23.6	18.3	27.5





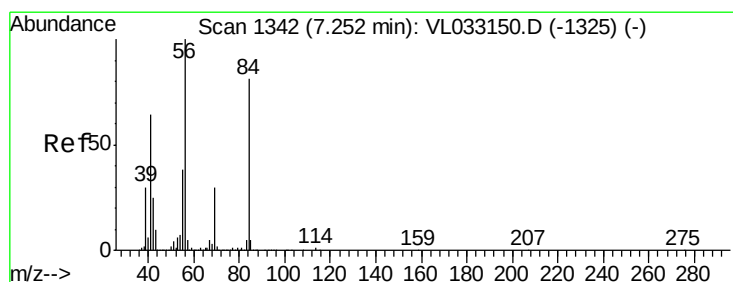
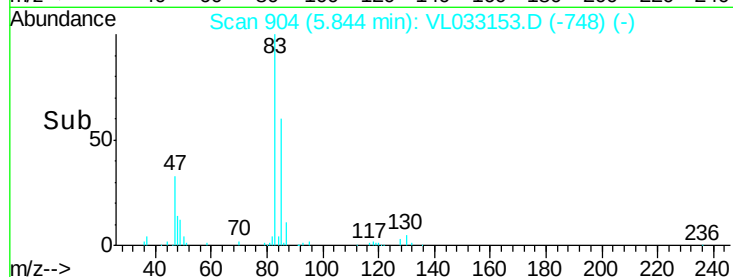
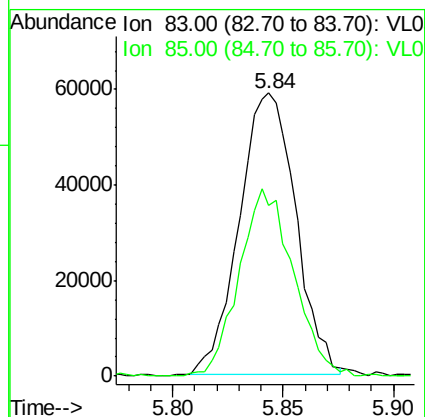
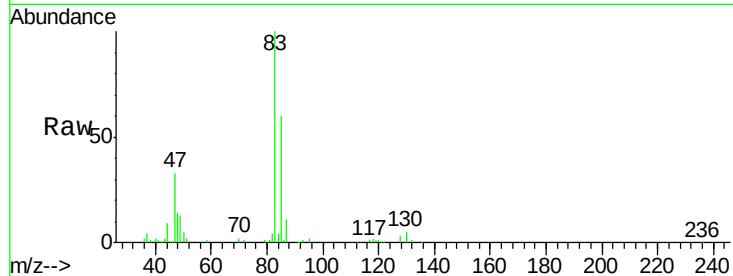
#29
Chloroform
Concen: 0.483 ppbv
RT: 5.84 min Scan# 904
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion: 83 Resp: 104179
Ion Ratio Lower Upper
83 100
85 59.5 51.6 77.4

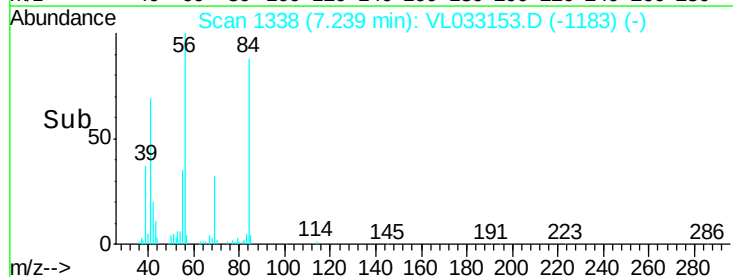
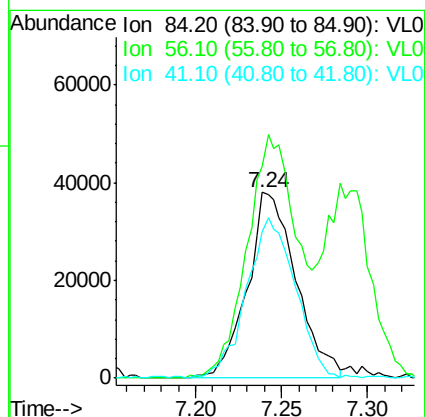
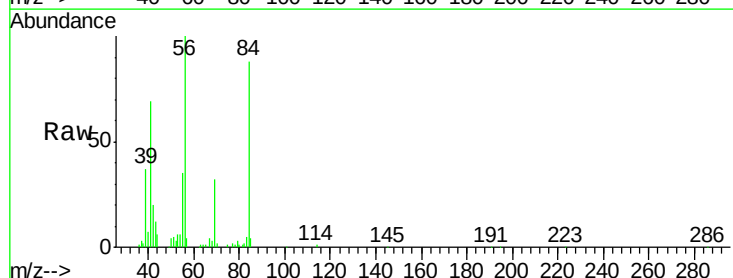
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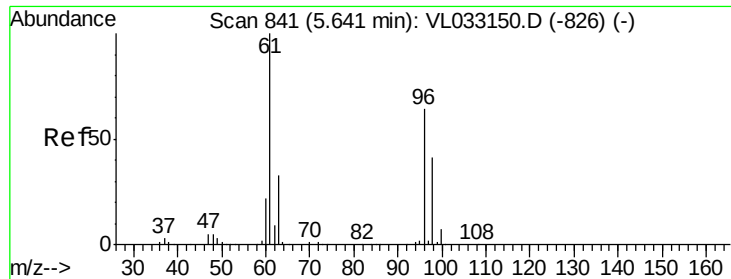
MMDadoda
2/5/2019 10:27:16 AM



#30
Cyclohexane
Concen: 0.604 ppbv
RT: 7.24 min Scan# 1338
Delta R.T. -0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion: 84 Resp: 74761
Ion Ratio Lower Upper
84 100
56 128.5 109.0 163.4
41 87.6 65.3 97.9





#31

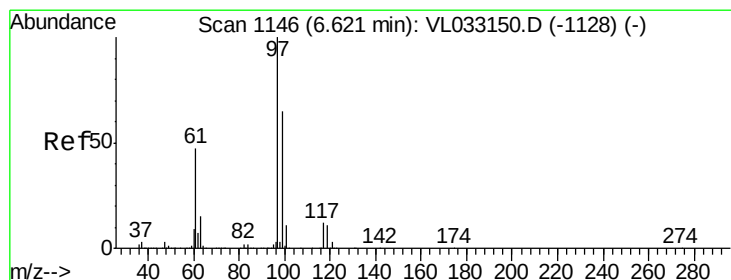
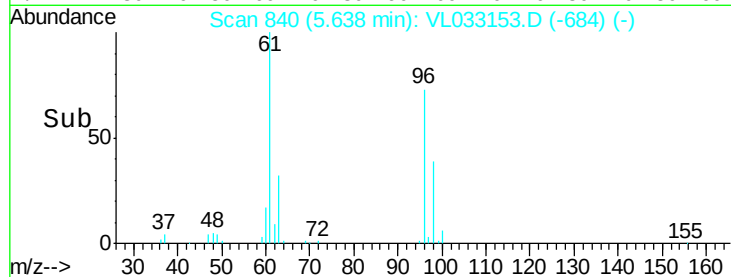
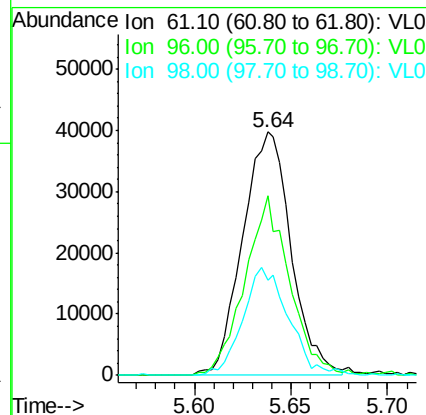
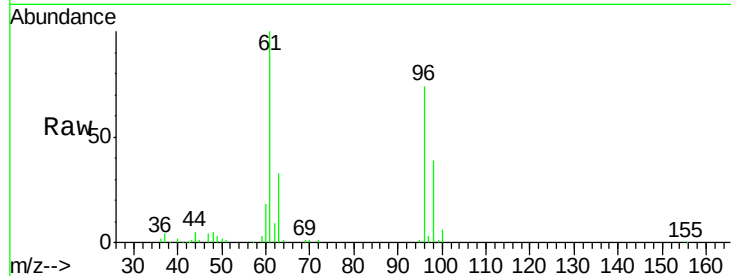
cis-1,2-Dichloroethene
 Concen: 0.475 ppbv
 RT: 5.64 min Scan# 840
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
61	100		
96	73.9	53.3	79.9
98	38.9	33.7	50.5

Manual Integrations
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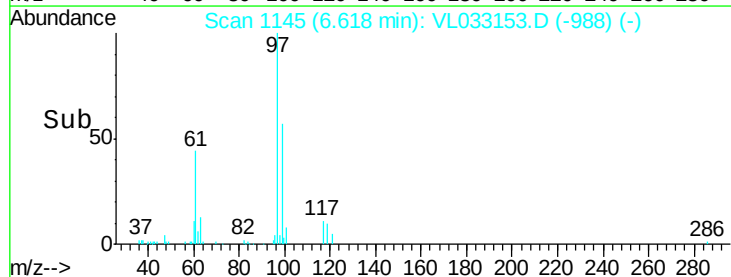
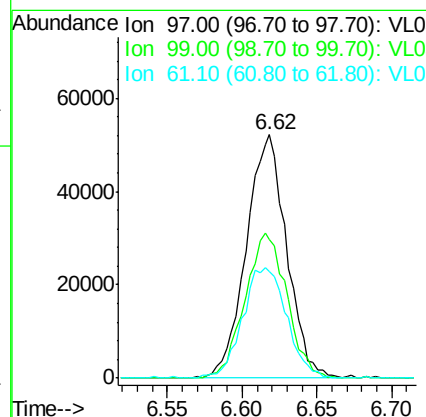
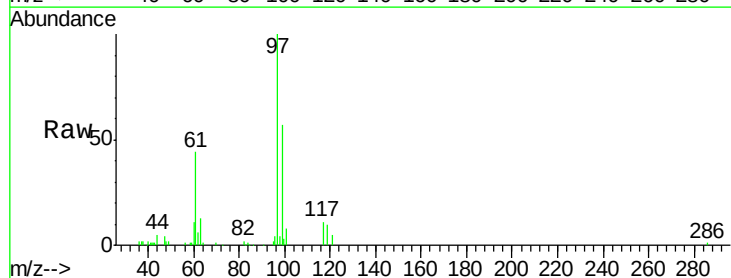
MMDadoda
 2/5/2019 10:27:16 AM

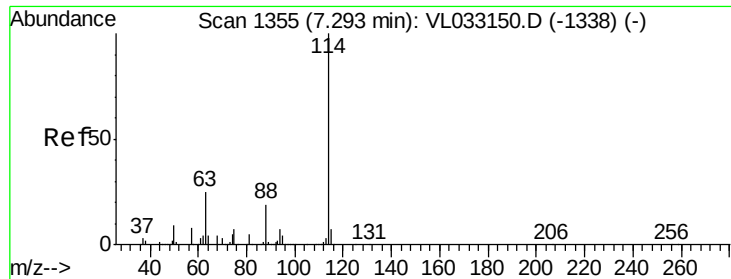


#32

1,1,1-Trichloroethane
 Concen: 0.440 ppbv
 RT: 6.62 min Scan# 1145
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
97	100		
99	61.7	65.1	97.7#
61	49.5	47.7	71.5





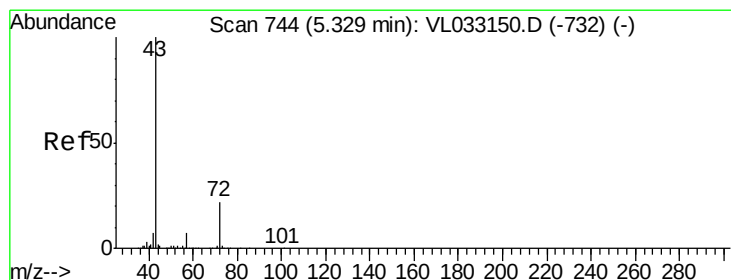
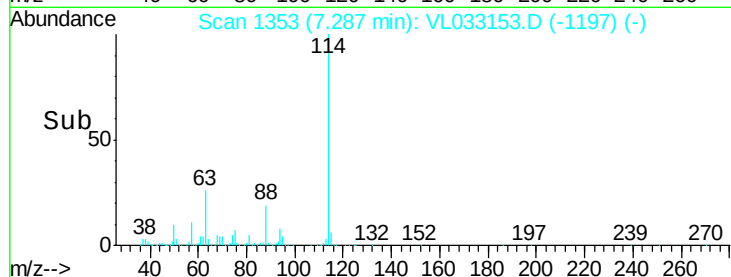
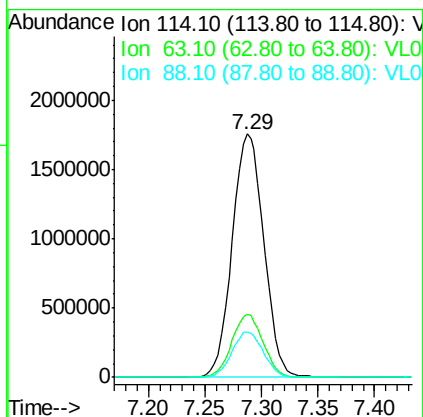
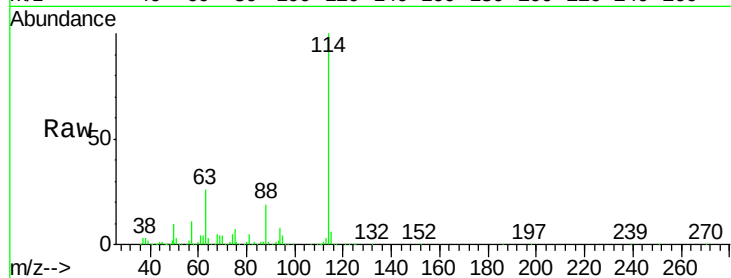
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1353
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.0	30.0
88	18.6	14.4	21.6

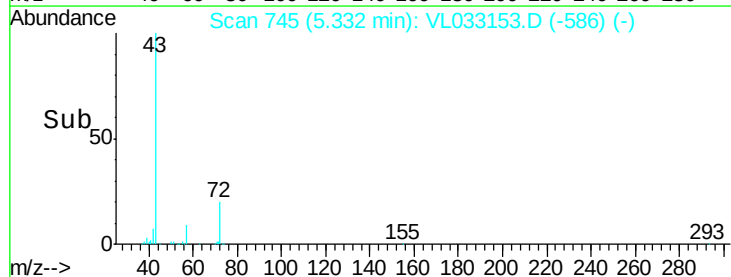
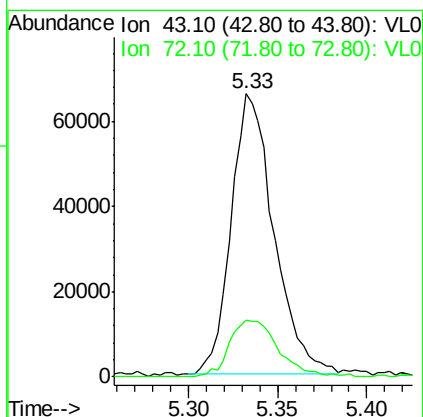
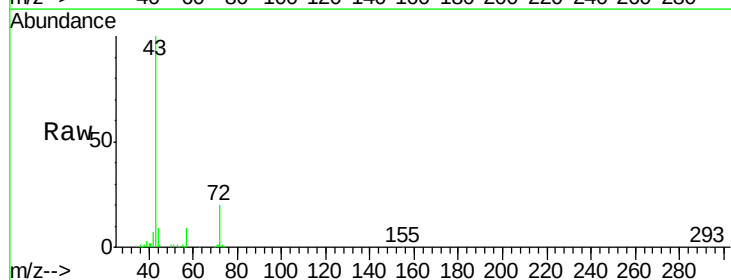
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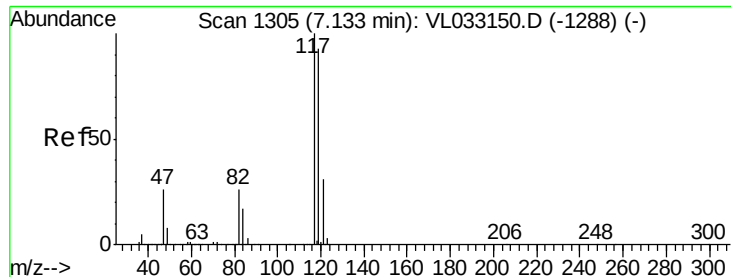
MMDadoda
 2/5/2019 10:27:16 AM



#34
 2-Butanone
 Concen: 0.420 ppbv
 RT: 5.33 min Scan# 745
 Delta R.T. 0.01 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.8	17.9	26.9





#35

Carbon Tetrachloride

Concen: 0.438 ppbv

RT: 7.13 min Scan# 1304

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

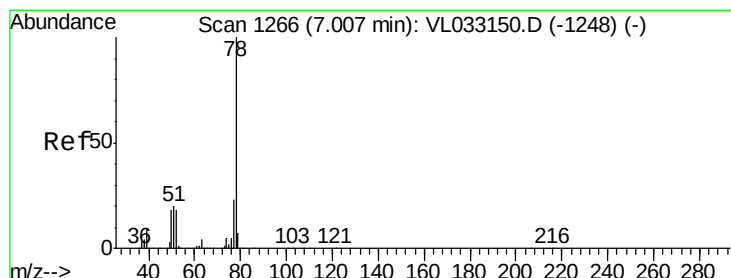
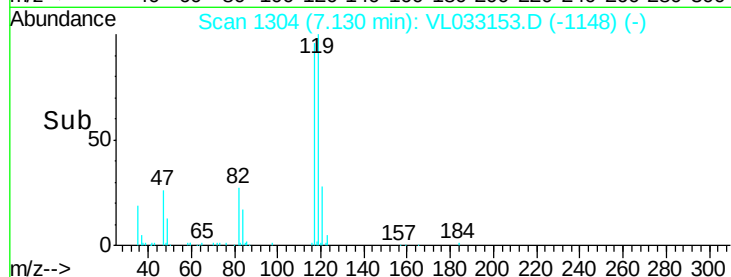
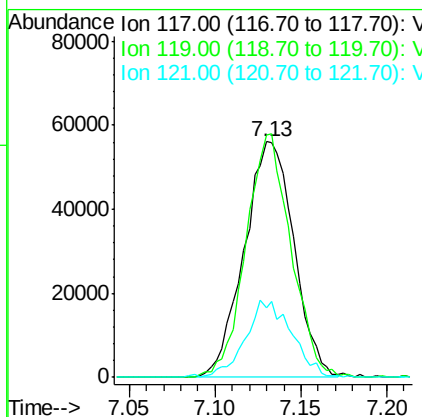
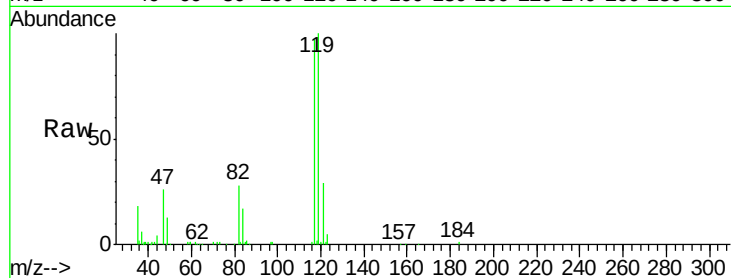
ClientSampleId :

VSTDIC0.5

Tot Ion:	117	Resp:	112337
Ion Ratio	Lower	Upper	
117	100		
119	103.0	76.6	114.8
121	29.2	25.0	37.4

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#36

Benzene

Concen: 0.487 ppbv

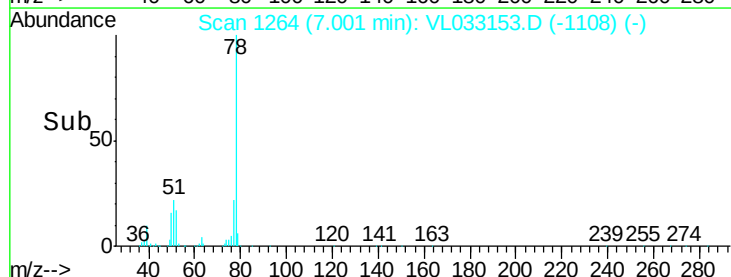
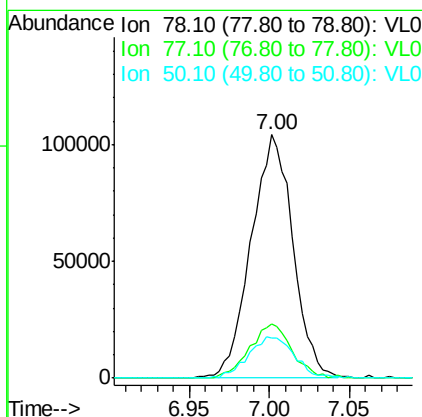
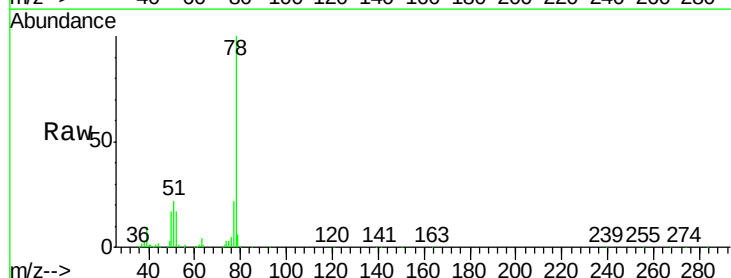
RT: 7.00 min Scan# 1264

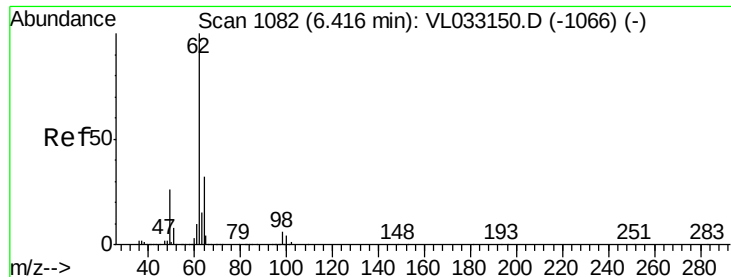
Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:	78	Resp:	186843
Ion Ratio	Lower	Upper	
78	100		
77	22.0	17.8	26.6
50	16.6	14.7	22.1





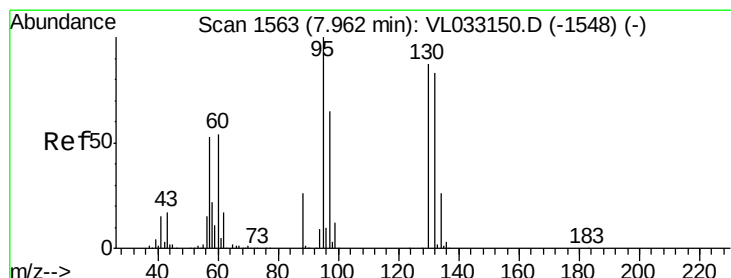
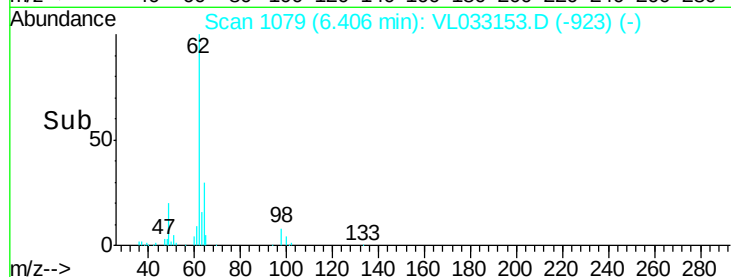
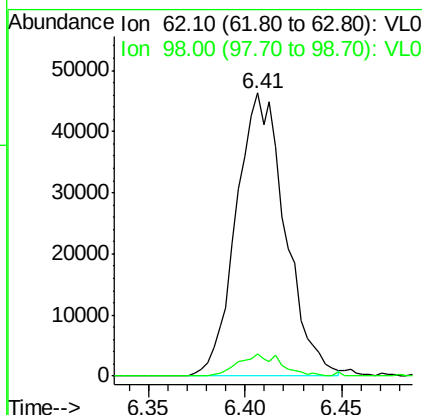
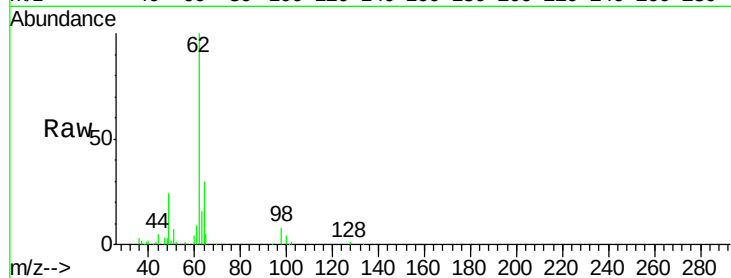
#37
 1,2-Dichloroethane
 Concen: 0.417 ppbv
 RT: 6.41 min Scan# 1079
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.3	7.9

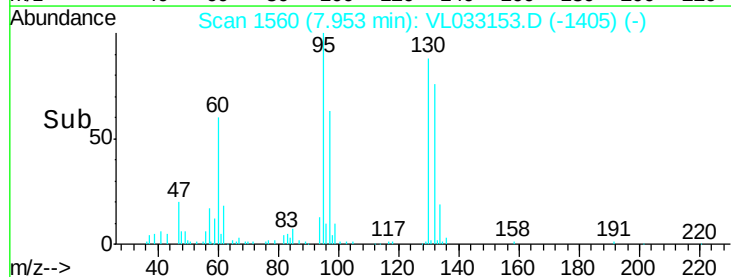
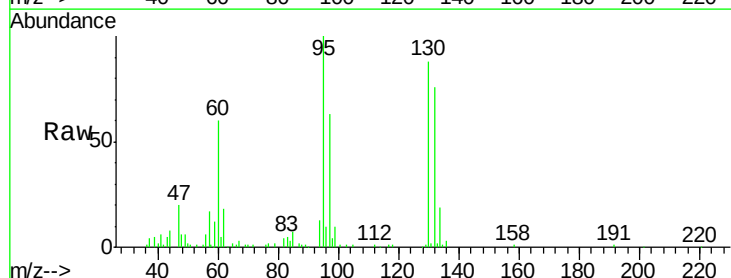
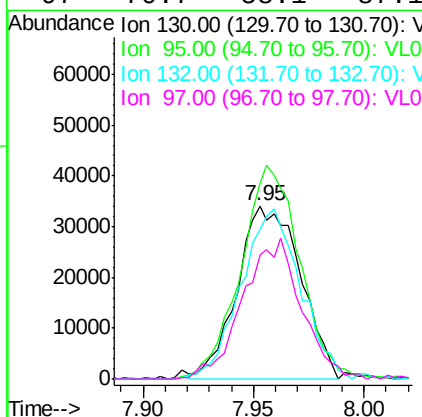
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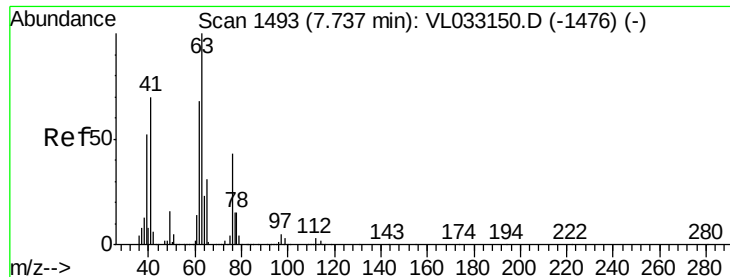
MMDadoda
 2/5/2019 10:27:16 AM



#38
 Trichloroethene
 Concen: 0.437 ppbv
 RT: 7.95 min Scan# 1560
 Delta R.T. -0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
130	100		
95	111.1	91.6	137.4
132	84.3	79.0	118.4
97	70.7	58.1	87.1





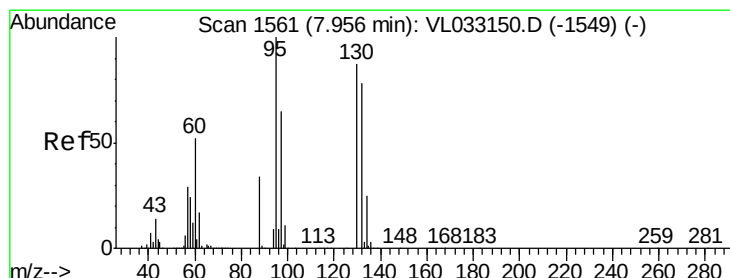
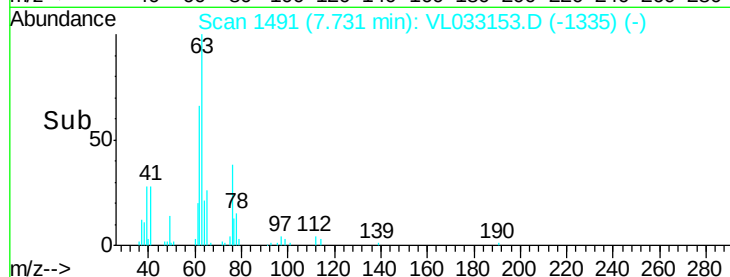
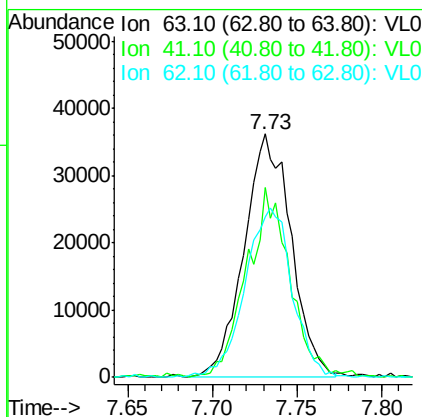
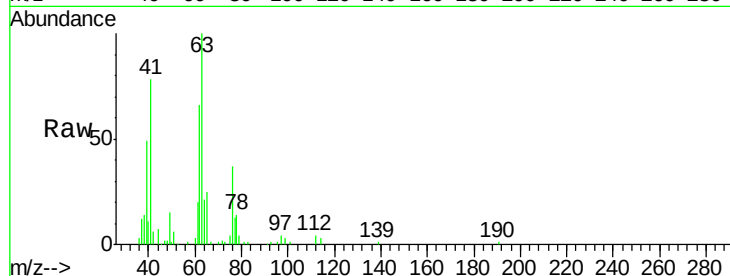
#39
 1,2-Dichloropropane
 Concen: 0.496 ppbv m
 RT: 7.73 min Scan# 1491
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
63	100		
41	78.1	53.2	79.8
62	65.7	54.4	81.6

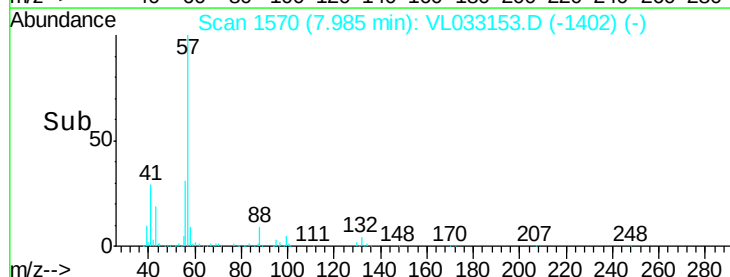
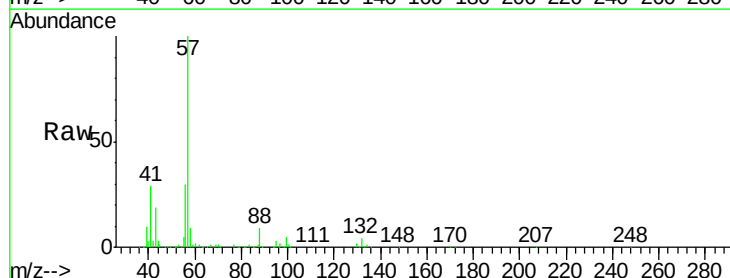
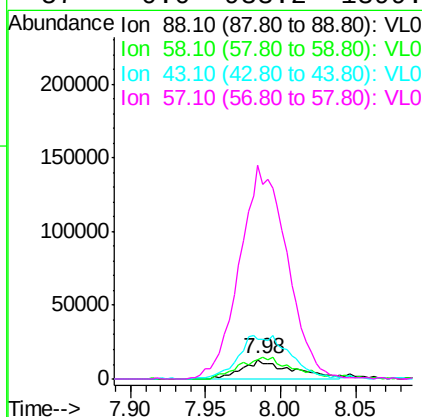
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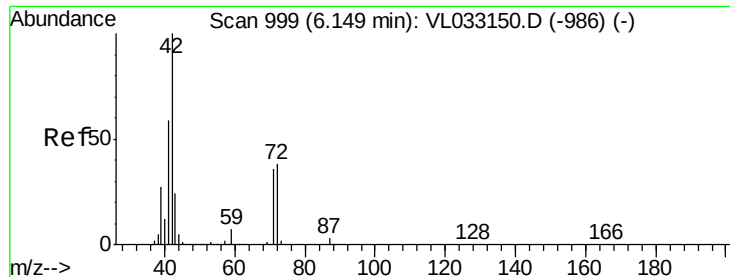
MMDadoda
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#40
 1,4-Dioxane
 Concen: 0.612 ppbv m
 RT: 7.98 min Scan# 1570
 Delta R.T. 0.04 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
88	100		
58	0.0	103.4	155.2#
43	0.0	210.8	316.2#
57	0.0	933.2	1399.8#





#41

Tetrahydrofuran

Concen: 0.397 ppbv

RT: 6.17 min Scan# 1004

Delta R.T. 0.02 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

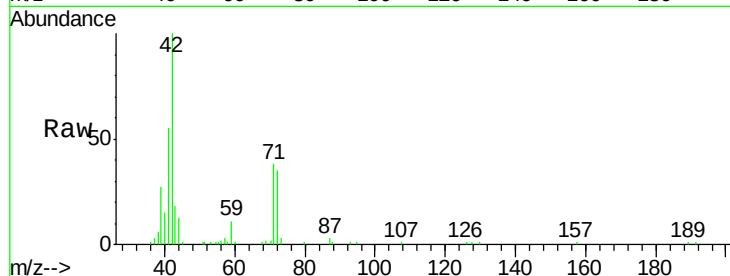
ClientSampleId :

VSTDIC0.5

Tot Ion:	42	Resp:	62420
Ion	Ratio	Lower	Upper
42	100		
72	37.0	30.2	45.4
71	34.8	28.8	43.2

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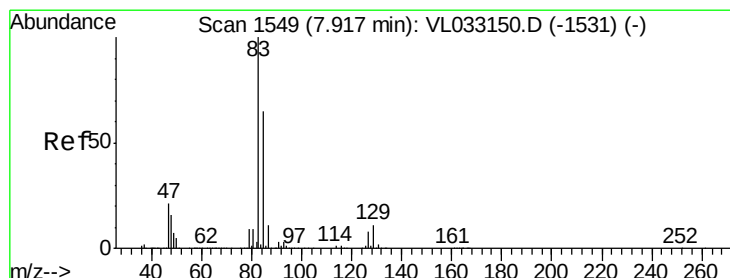
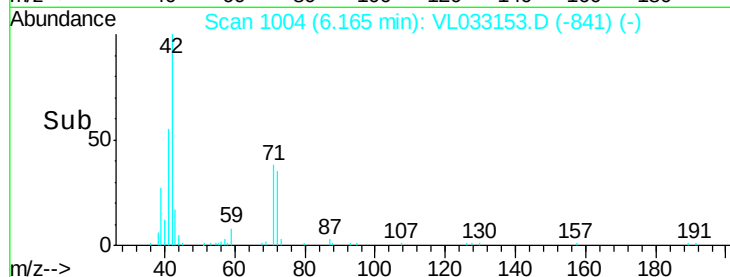
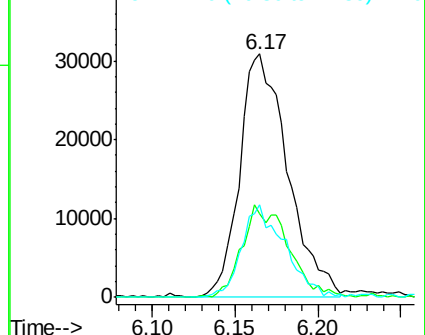


Abundance

Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



#42

Bromodichloromethane

Concen: 0.467 ppbv

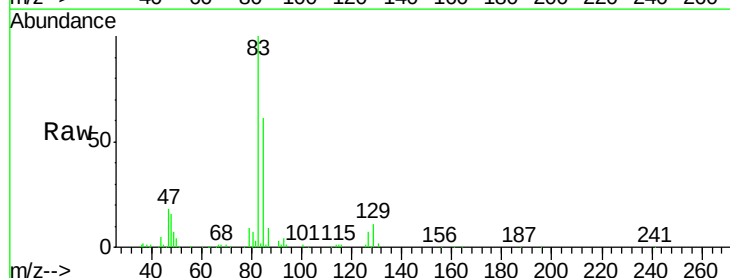
RT: 7.91 min Scan# 1547

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:	83	Resp:	129911
Ion	Ratio	Lower	Upper
83	100		
85	60.0	51.3	76.9
127	7.2	6.1	9.1

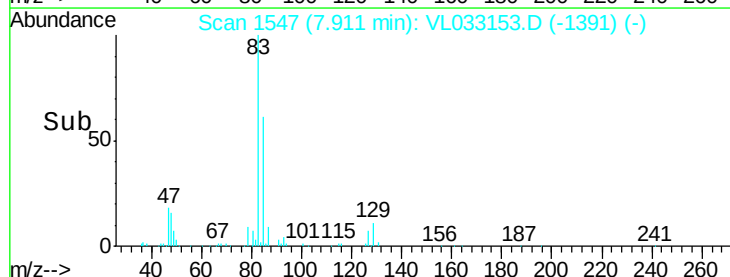
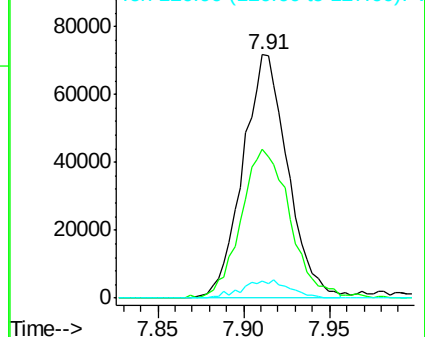


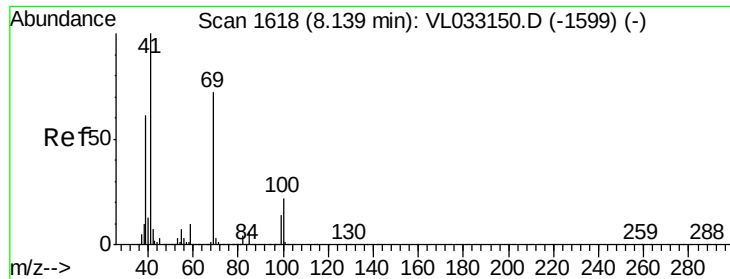
Abundance

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 126.90 (126.60 to 127.60): V





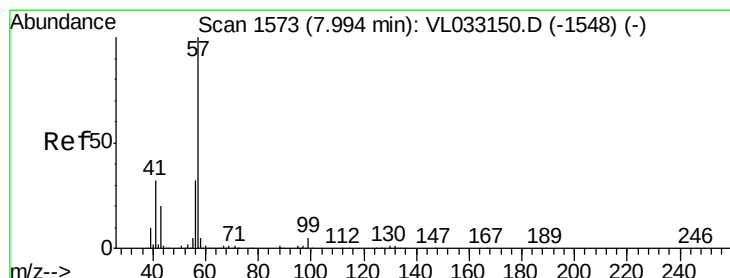
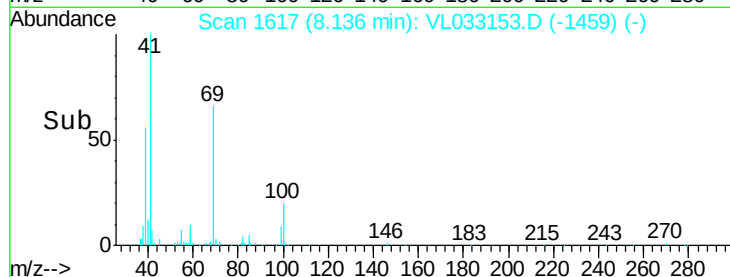
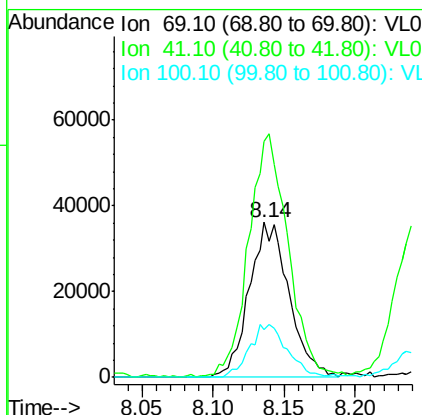
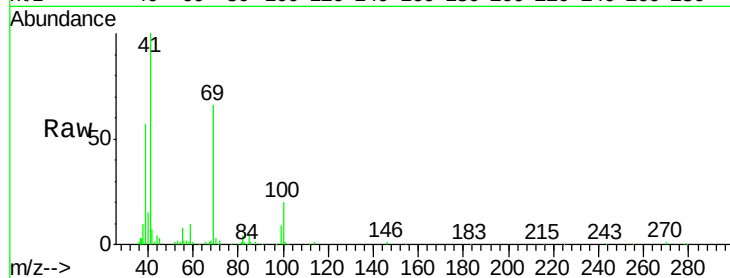
#43
Methyl Methacrylate
Concen: 0.524 ppbv m
RT: 8.14 min Scan# 1617
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
69	100		
41	0.0	118.4	177.6#
100	32.9	26.5	39.7

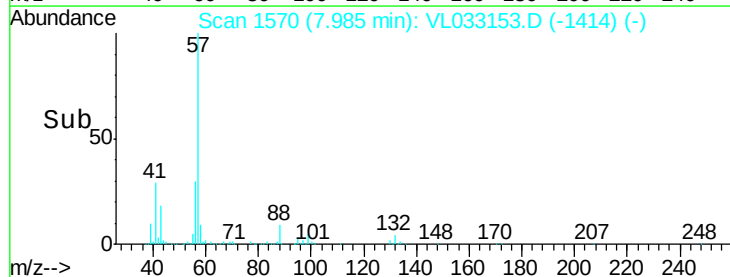
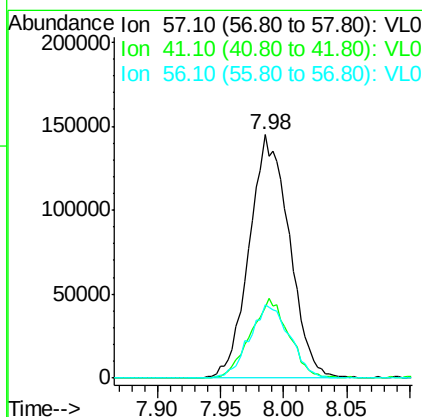
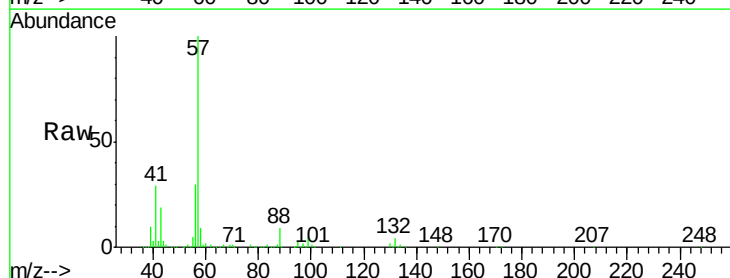
Manual Integrations
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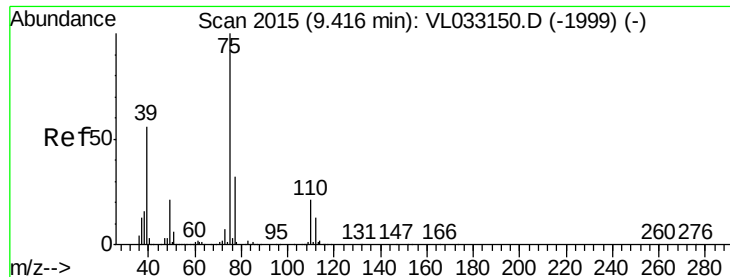
MMDadoda
2/5/2019 10:27:16 AM



#44
2,2,4-Trimethylpentane
Concen: 0.516 ppbv m
RT: 7.98 min Scan# 1570
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	24.6	36.8#
56	30.5	24.9	37.3





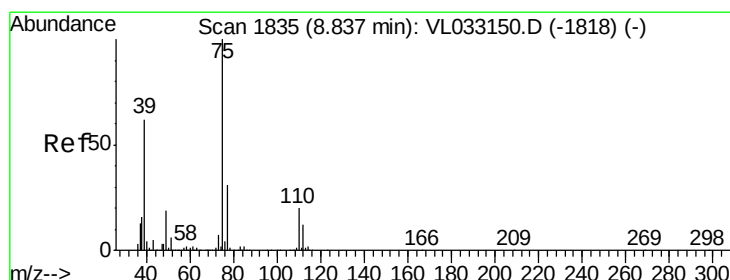
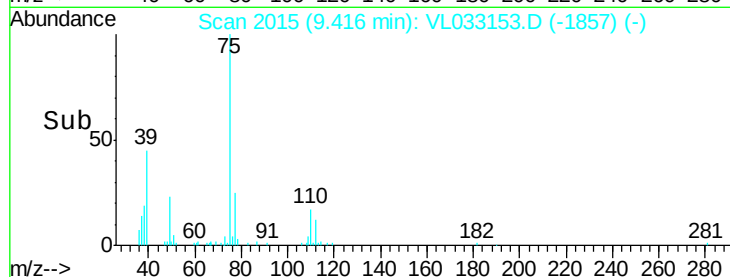
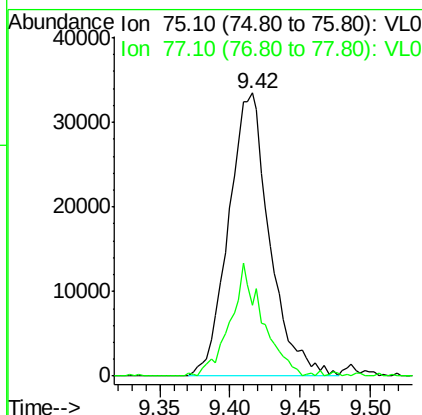
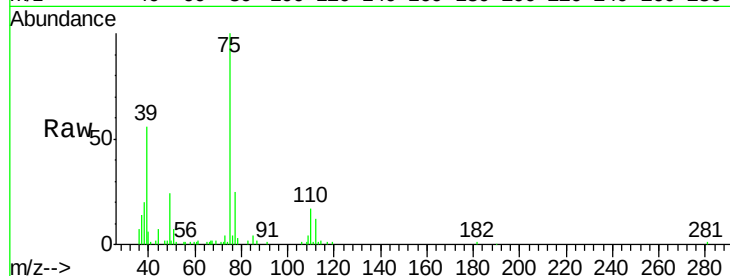
#45
t-1,3-Dichloropropene
Concen: 0.419 ppbv
RT: 9.42 min Scan# 2015
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
75	100		
77	25.3	24.4	36.6

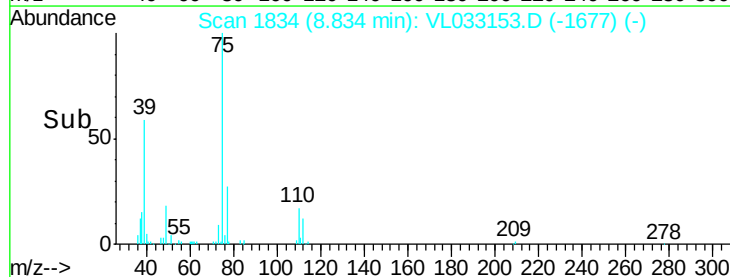
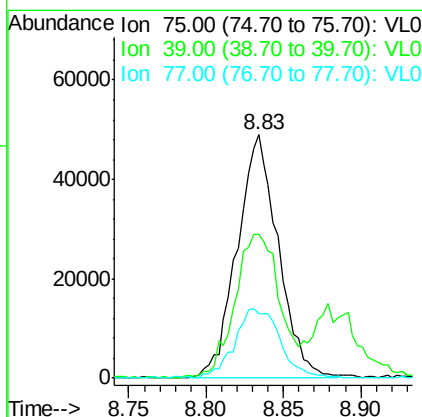
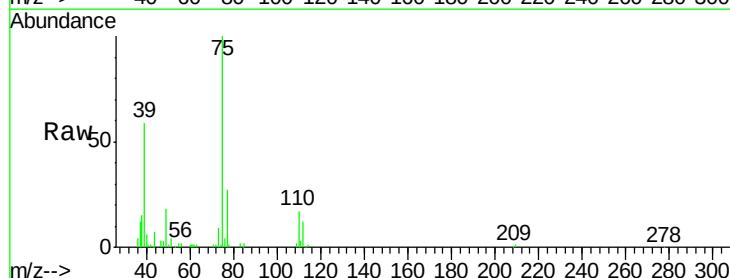
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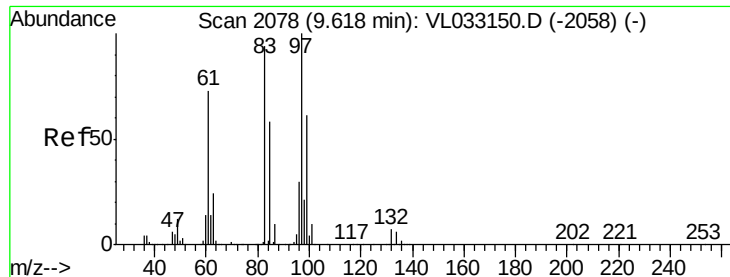
MMDadoda
2/5/2019 10:27:16 AM



#46
cis-1,3-Dichloropropene
Concen: 0.466 ppbv
RT: 8.83 min Scan# 1834
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
75	100		
39	57.7	51.4	77.2
77	26.1	25.4	38.0





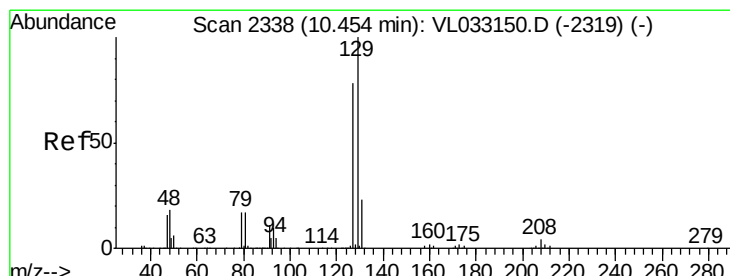
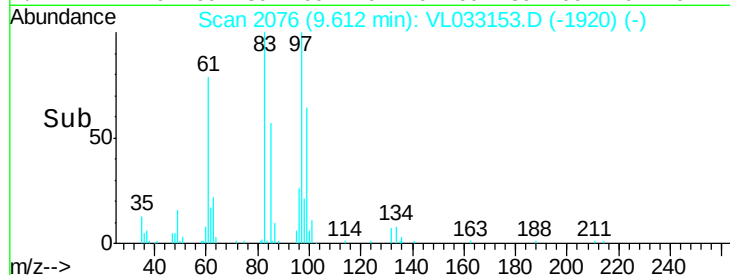
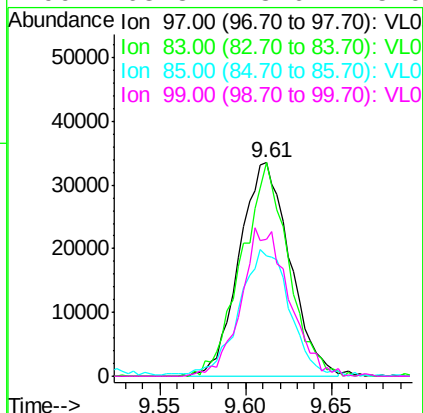
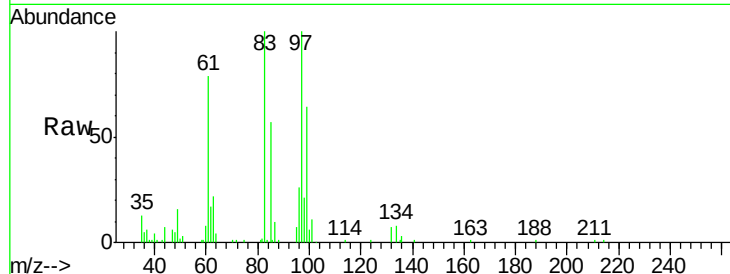
#47
 1,1,2-Trichloroethane
 Concen: 0.532 ppbv
 RT: 9.61 min Scan# 2076
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
97	100		
83	99.9	65.8	98.8#
85	55.5	44.7	67.1
99	63.8	48.6	73.0

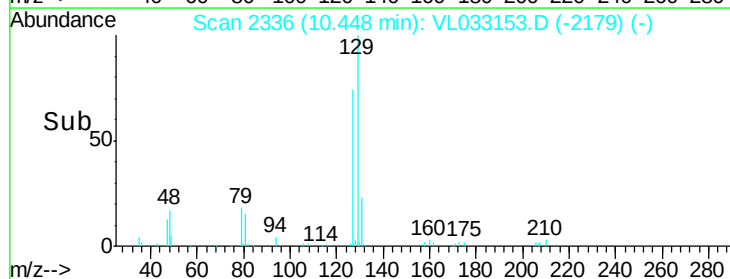
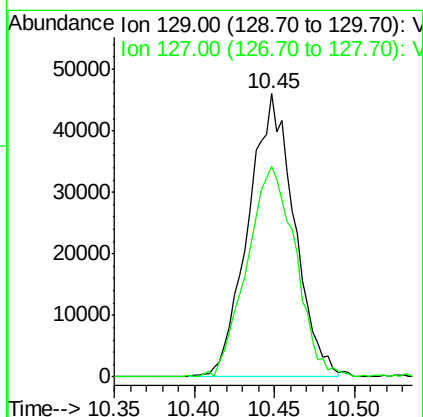
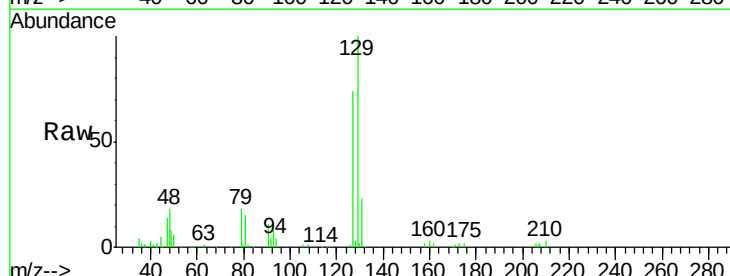
Manual Integrations
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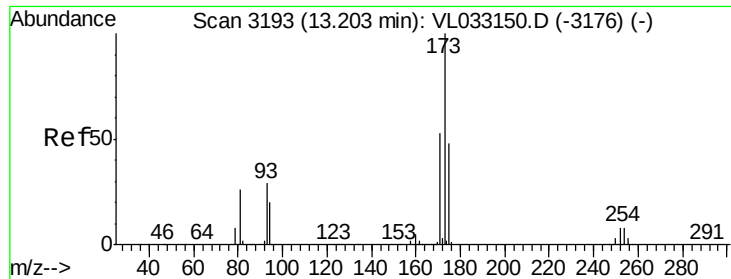
MMDadoda
 2/5/2019 10:27:16 AM



#48
 Dibromochloromethane
 Concen: 0.425 ppbv
 RT: 10.45 min Scan# 2336
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
129	100		
127	79.0	39.3	117.9





#49

Bromoform

Concen: 0.413 ppbv m

RT: 13.20 min Scan# 3193

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

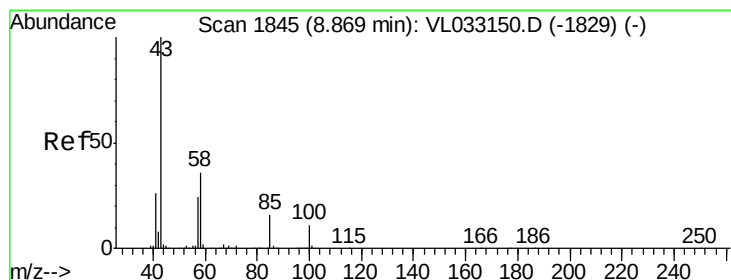
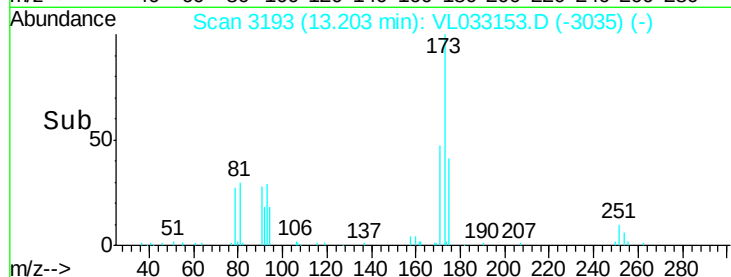
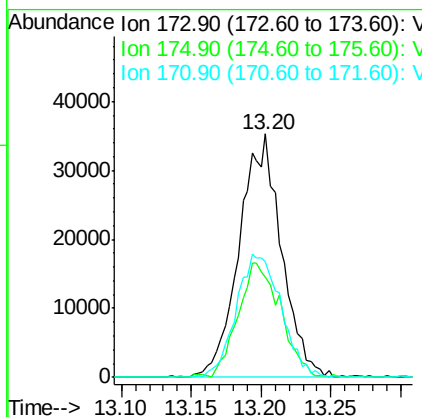
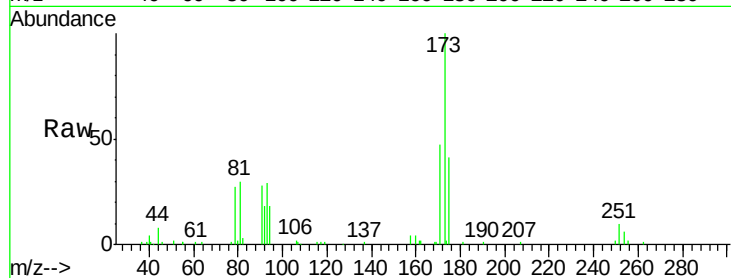
ClientSampleId :

VSTDIC0.5

Tot Ion:	173	Resp:	73230
Ion	Ratio	Lower	Upper
173	100		
175	47.9	39.3	58.9
171	54.0	41.8	62.6

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#50

4-Methyl-2-Pentanone

Concen: 0.594 ppbv

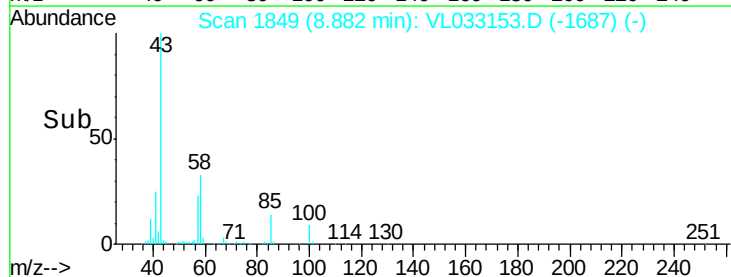
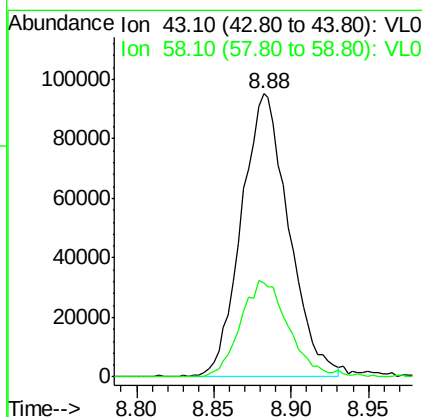
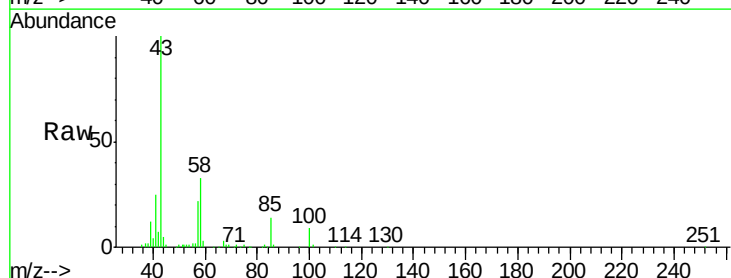
RT: 8.88 min Scan# 1849

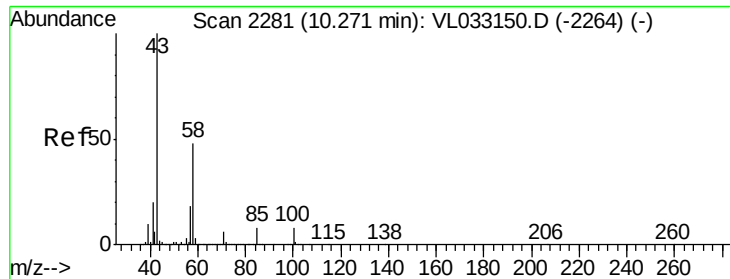
Delta R.T. 0.02 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:	43	Resp:	201907
Ion	Ratio	Lower	Upper
43	100		
58	34.9	28.7	43.1





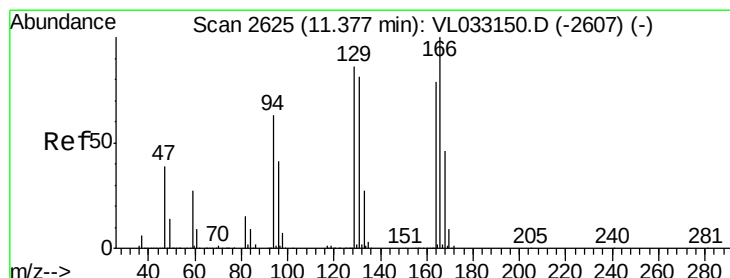
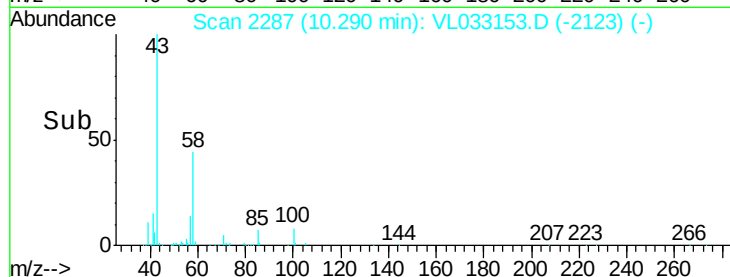
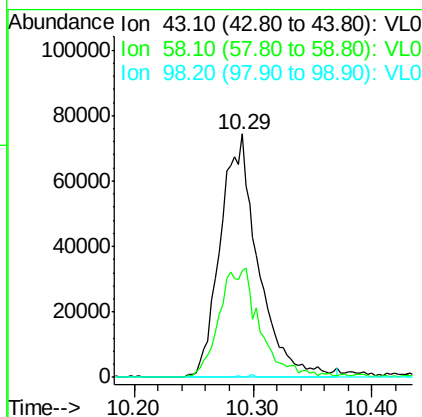
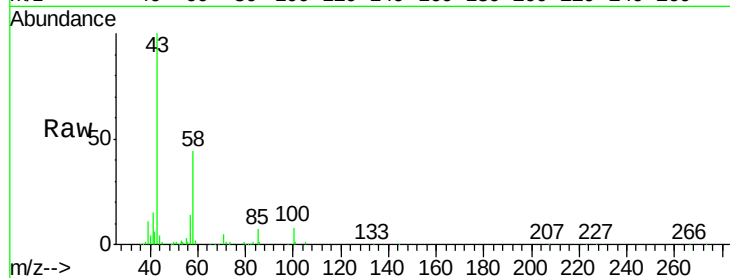
#51
2-Hexanone
Concen: 0.551 ppbv m
RT: 10.29 min Scan# 2287
Delta R.T. 0.03 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
43	100		
58	48.5	39.4	59.2
98	0.4	0.1	0.1#

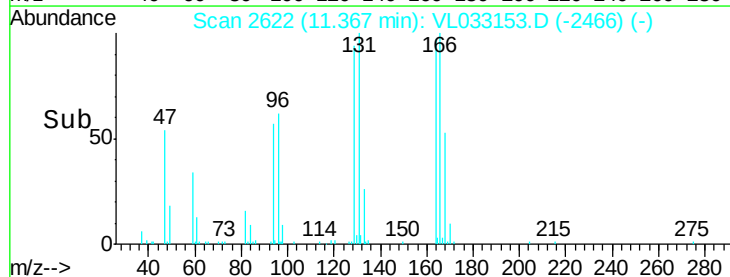
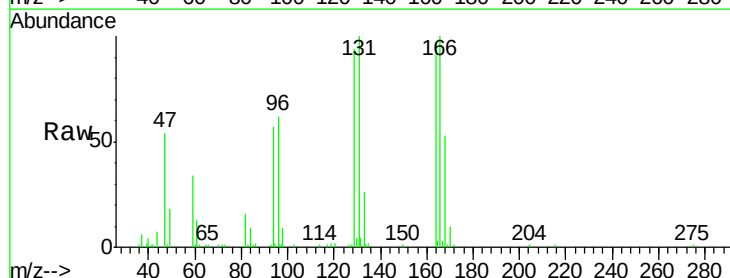
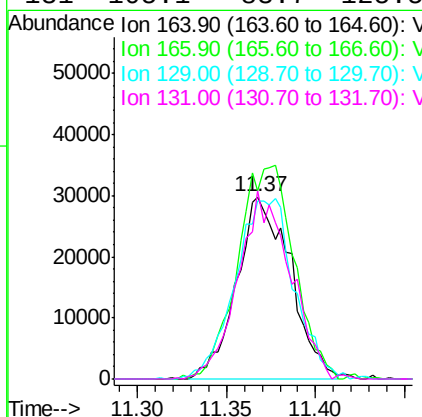
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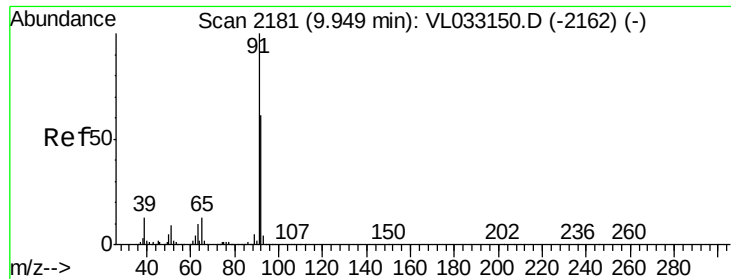
MMDadoda
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#52
Tetrachloroethene
Concen: 0.430 ppbv
RT: 11.37 min Scan# 2622
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
164	100		
166	103.4	98.6	148.0
129	99.7	86.3	129.5
131	105.1	83.7	125.5





#53

Toluene

Concen: 0.451 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 91 Resp: 198246

Ion Ratio Lower Upper

91 100

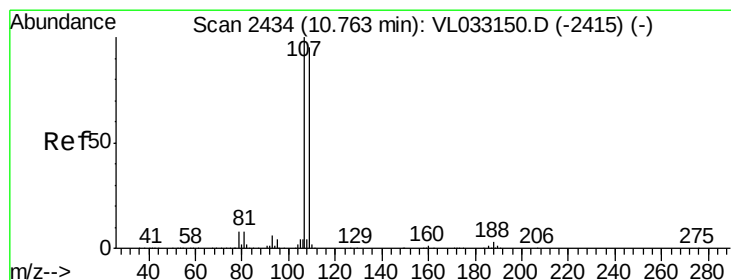
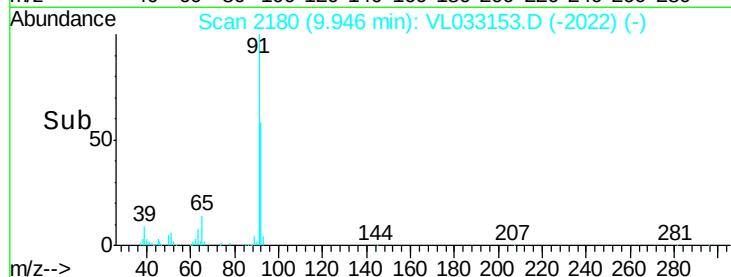
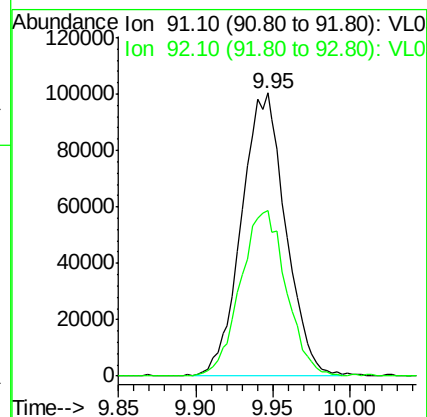
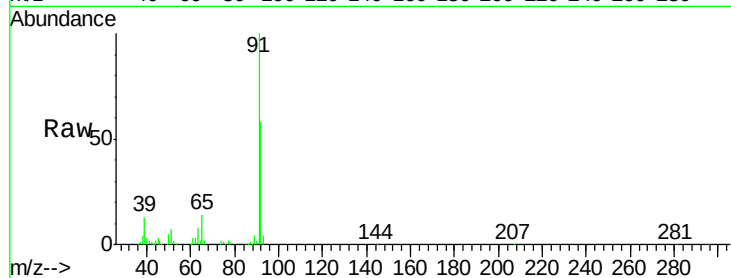
92 61.2 48.9 73.3

Manual Integrations

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#54

1,2-Dibromoethane

Concen: 0.427 ppbv

RT: 10.75 min Scan# 2431

Delta R.T. 0.00 min

Lab File: VL033153.D

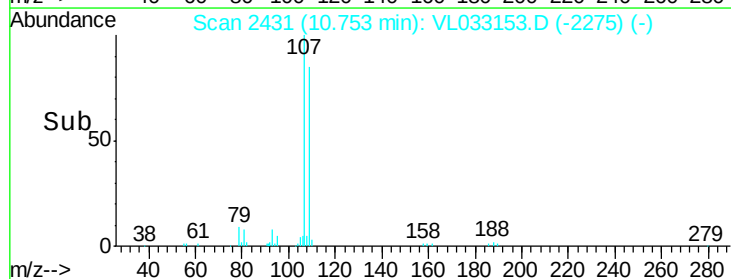
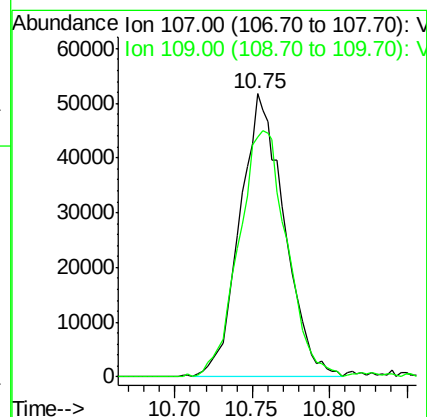
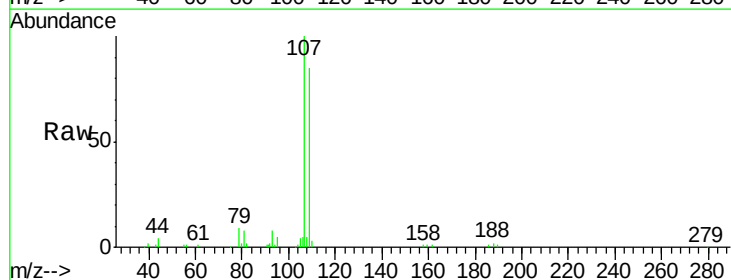
Acq: 4 Feb 2019 11:57

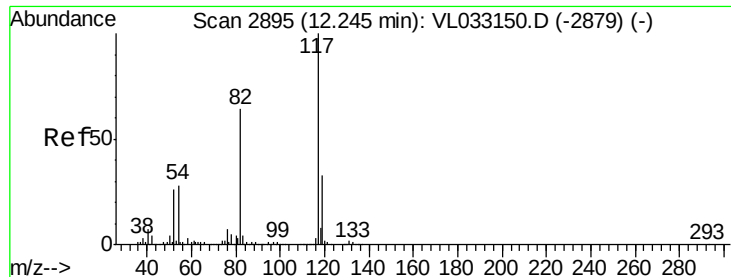
Tgt Ion: 107 Resp: 102931

Ion Ratio Lower Upper

107 100

109 84.8 74.7 112.1





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion:117 Resp: 3414295

Ion Ratio Lower Upper

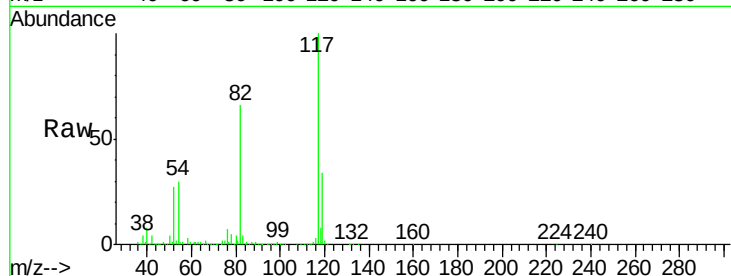
117 100

82 64.7 49.3 73.9

119 33.5 27.1 40.7

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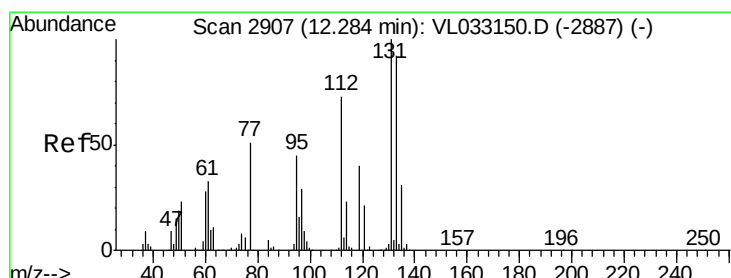
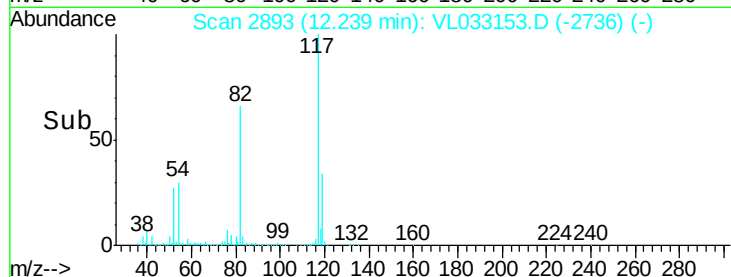
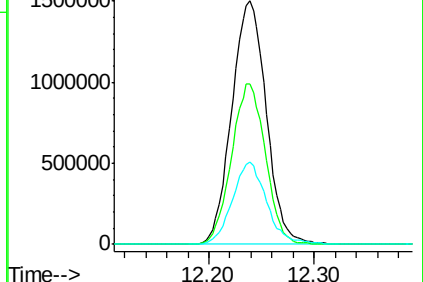
MMDadoda
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 0.517 ppbv

RT: 12.28 min Scan# 2905

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

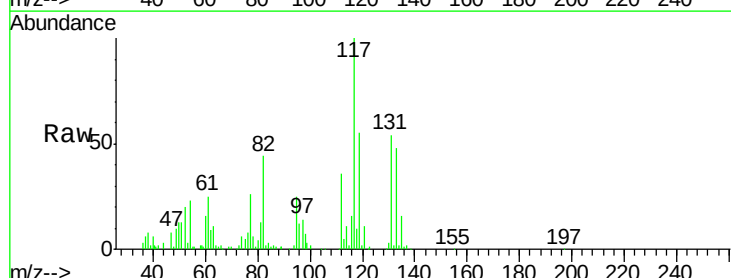
Tgt Ion:131 Resp: 78568

Ion Ratio Lower Upper

131 100

133 92.1 76.2 114.4

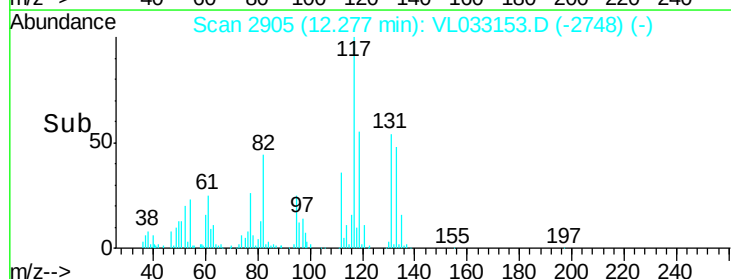
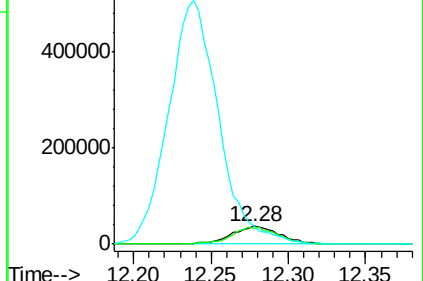
119 1456.9 46.9 70.3#

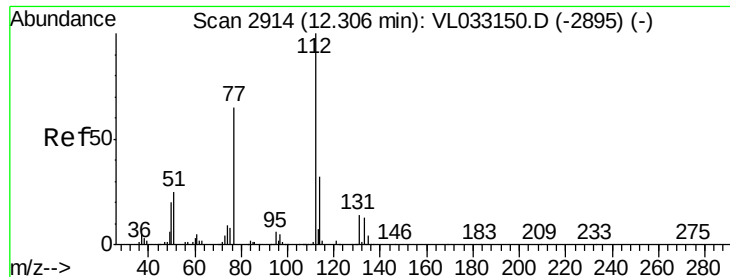


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V





#57

Chlorobenzene

Concen: 0.525 ppbv

RT: 12.30 min Scan# 2912

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

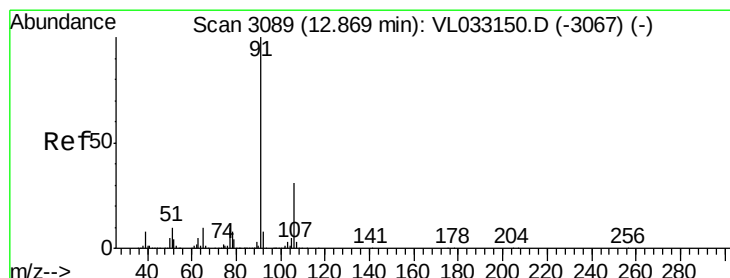
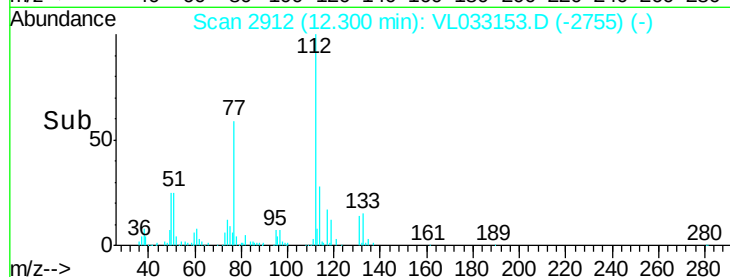
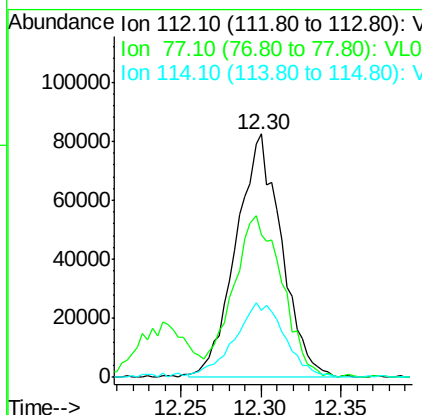
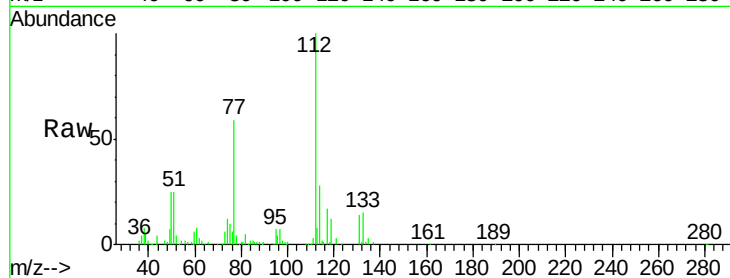
ClientSampleId :

VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
112	100		
77	58.6	52.8	79.2
114	27.8	29.7	36.3#

Manual Integrations
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#58

Ethyl Benzene

Concen: 0.527 ppbv

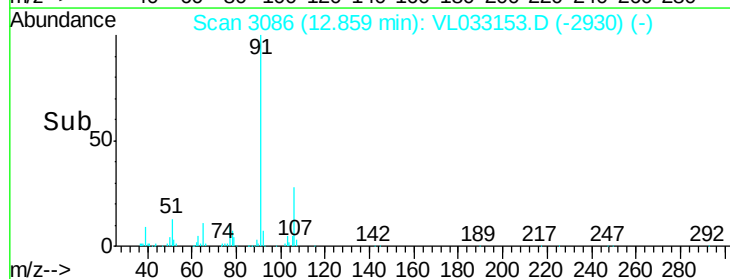
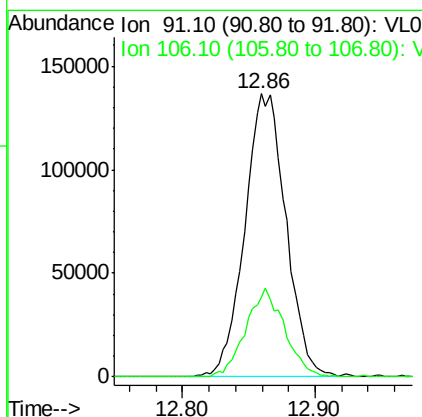
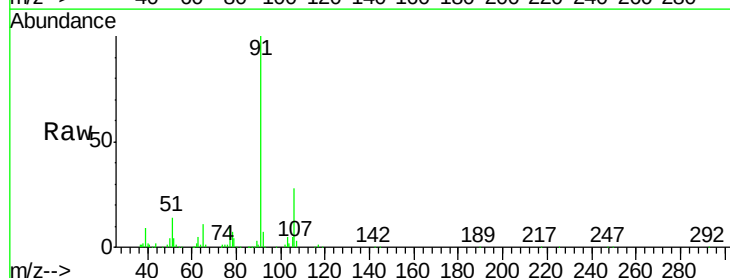
RT: 12.86 min Scan# 3086

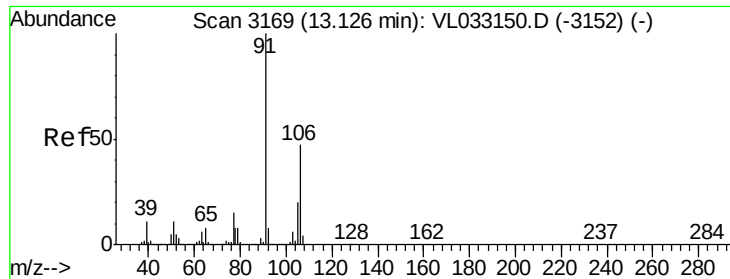
Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
91	100		
106	28.3	24.7	37.1





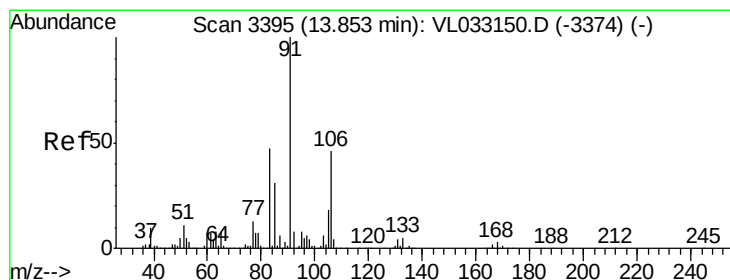
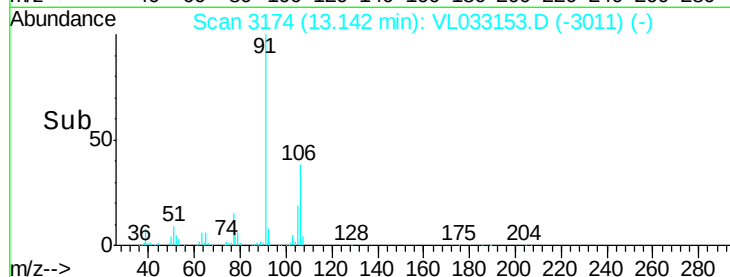
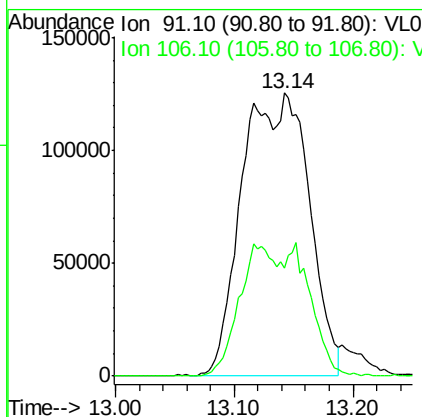
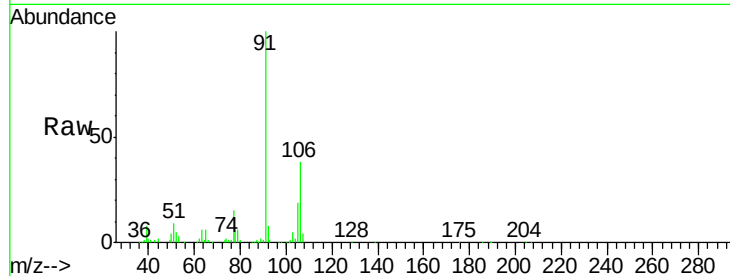
#59
m/p-Xylene
Concen: 1.072 ppbv m
RT: 13.14 min Scan# 3174
Delta R.T. 0.02 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion: 91 Resp: 489754
Ion Ratio Lower Upper
91 100
106 0.0 37.6 56.4#

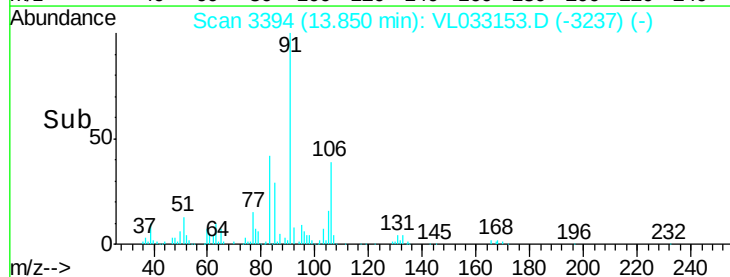
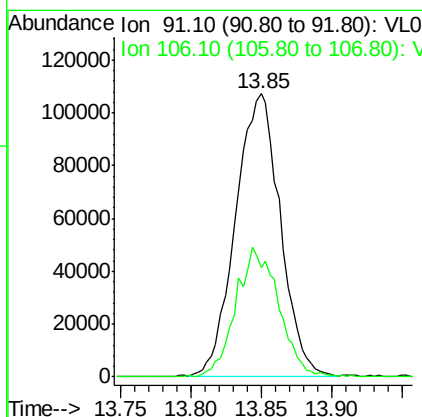
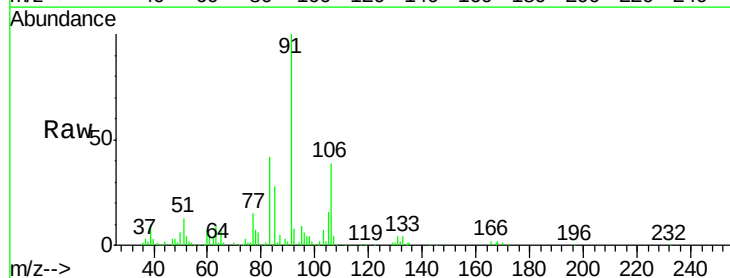
Manual Integrations
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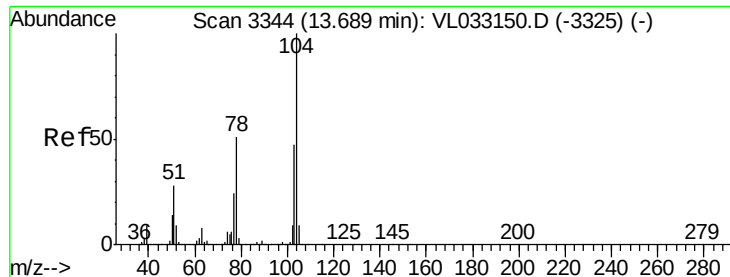
MMDadoda
2/5/2019 10:27:16 AM



#60
o-Xylene
Concen: 0.540 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion: 91 Resp: 238428
Ion Ratio Lower Upper
91 100
106 44.0 23.2 69.5





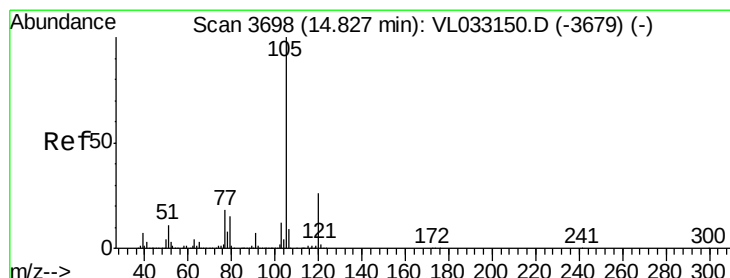
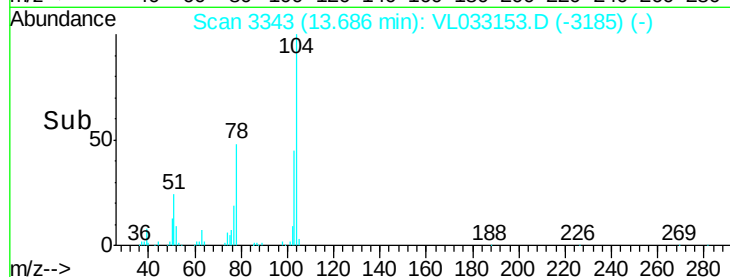
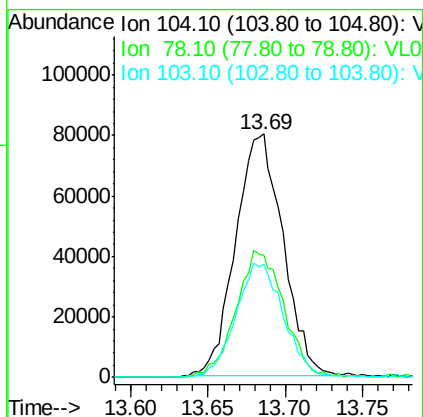
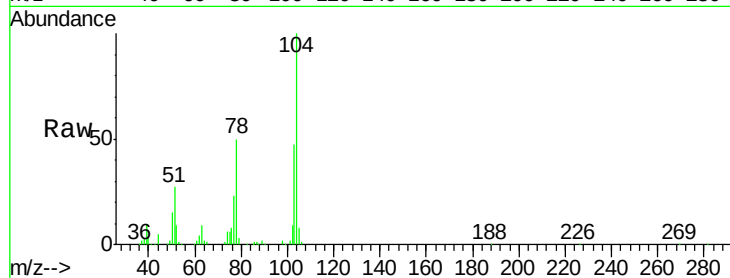
#61
Stvrene
Concen: 0.504 ppbv
RT: 13.69 min Scan# 3343
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
104	100		
78	53.0	39.7	59.5
103	47.7	37.7	56.5

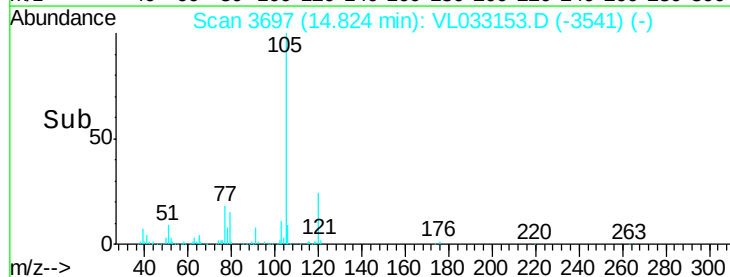
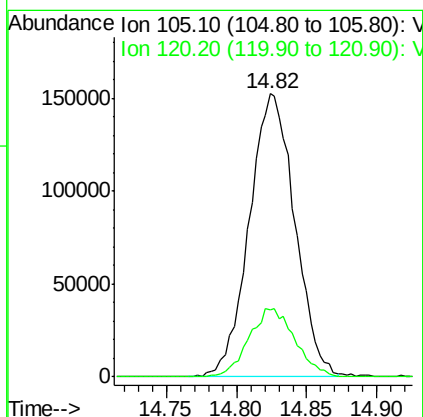
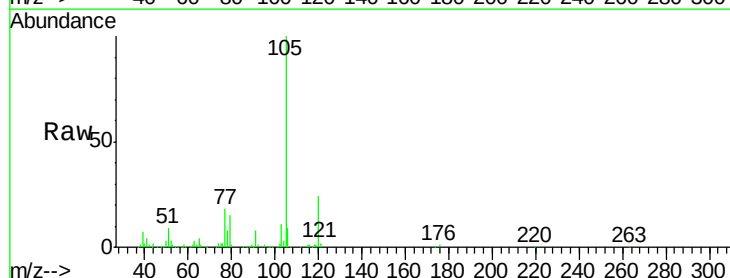
Manual Integrations
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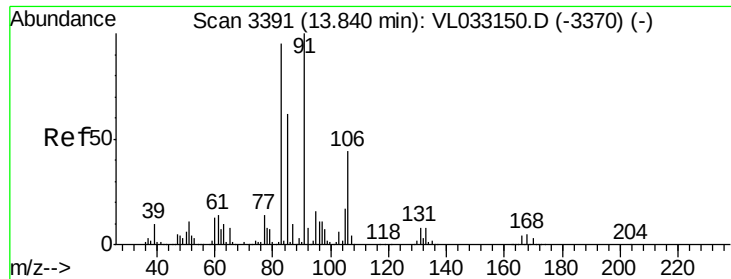
MMDadoda
2/5/2019 10:27:16 AM



#62
Isopropylbenzene
Concen: 0.548 ppbv
RT: 14.82 min Scan# 3697
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.5	20.8	31.2





#63

1,1,2,2-Tetrachloroethane

Concen: 0.518 ppbv

RT: 13.83 min Scan# 3389

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 83 Resp: 172799

Ion Ratio Lower Upper

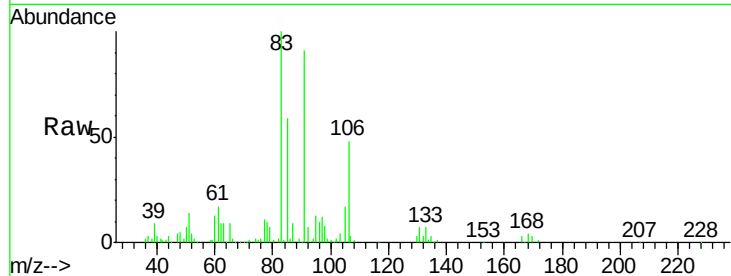
83 100

131 8.3 4.5 13.7

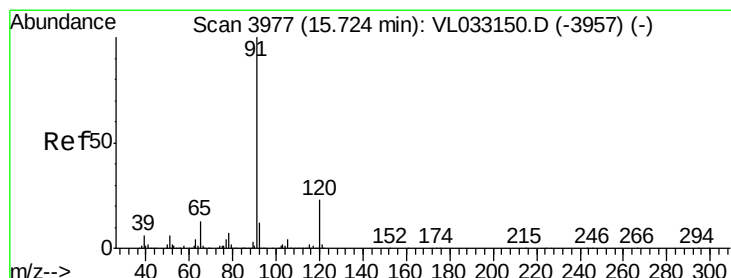
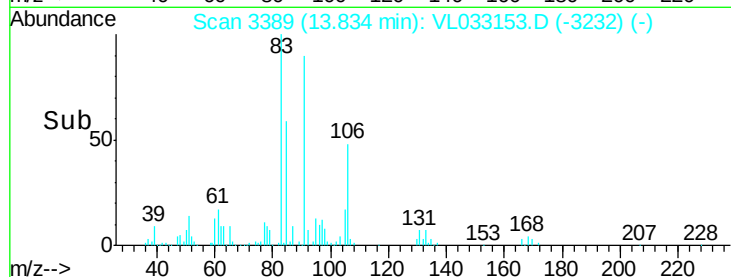
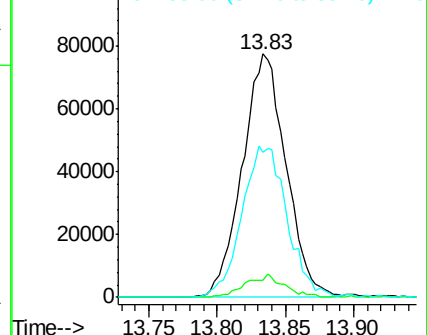
85 64.4 32.5 97.4

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2/5/2019 10:27:16 AM



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 131.00 (130.70 to 131.70): V
Ion 85.00 (84.70 to 85.70): VL0



#64

n-propylbenzene

Concen: 0.540 ppbv

RT: 15.72 min Scan# 3975

Delta R.T. -0.00 min

Lab File: VL033153.D

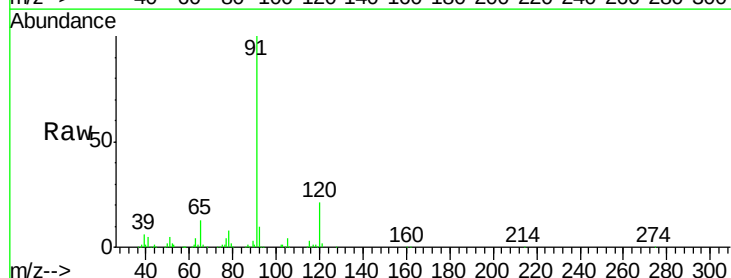
Acq: 4 Feb 2019 11:57

Tgt Ion: 120 Resp: 86909

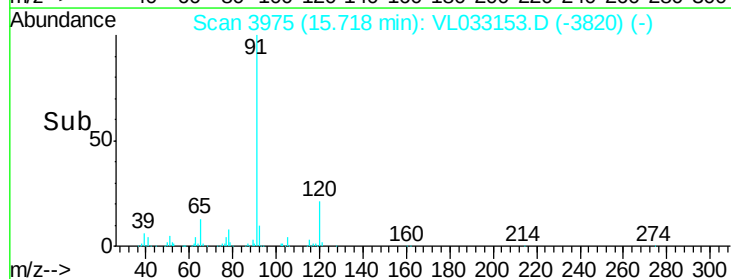
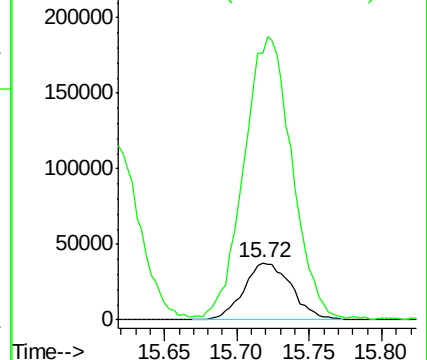
Ion Ratio Lower Upper

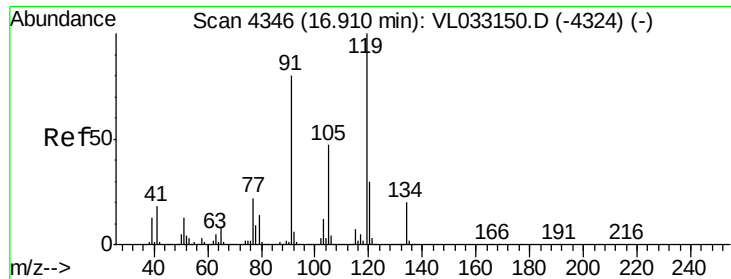
120 100

91 504.9 370.2 555.2



Abundance Ion 120.20 (119.90 to 120.90): V
Ion 91.10 (90.80 to 91.80): VL0





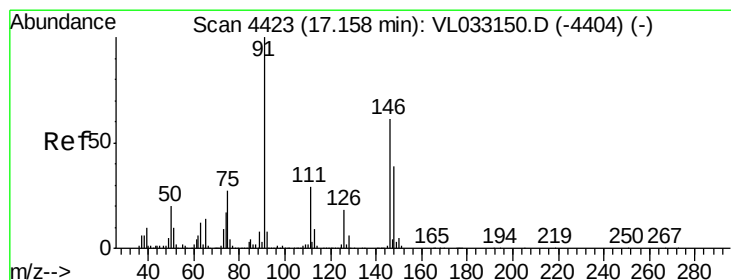
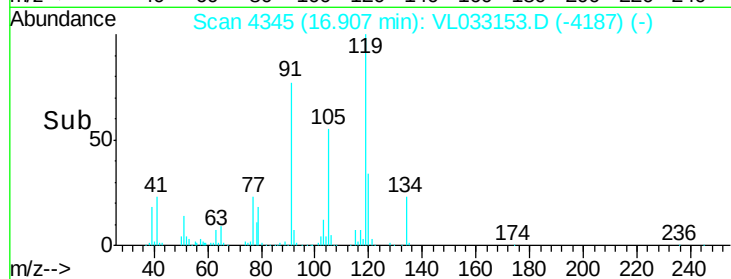
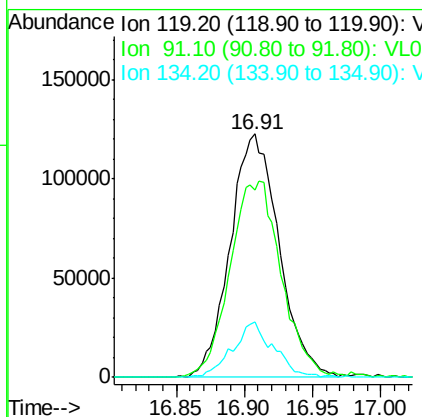
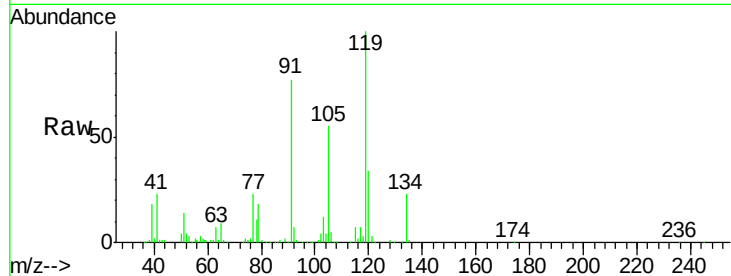
#65
tert-Butylbenzene
Concen: 0.577 ppbv
RT: 16.91 min Scan# 4345
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Resp	Lower	Upper
119	100	304972		
91	85.2	63.0	94.6	
134	19.2	15.5	23.3	

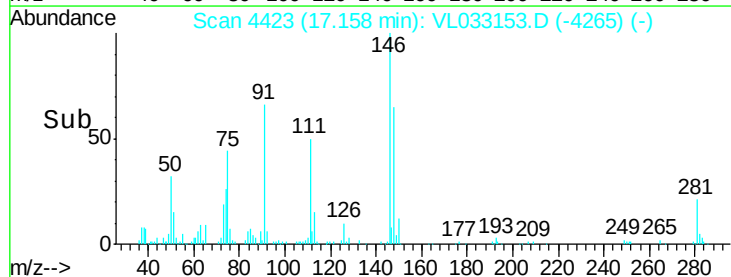
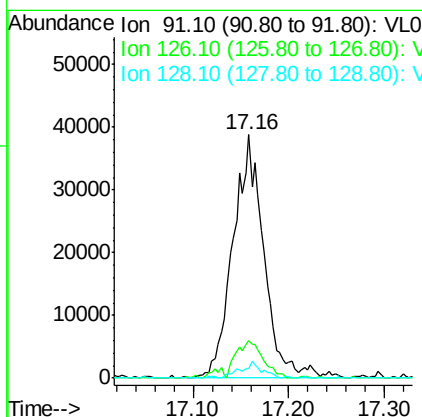
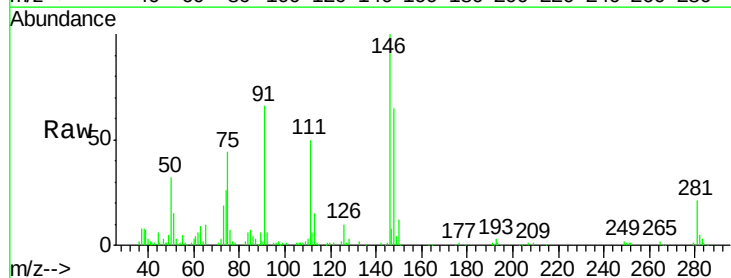
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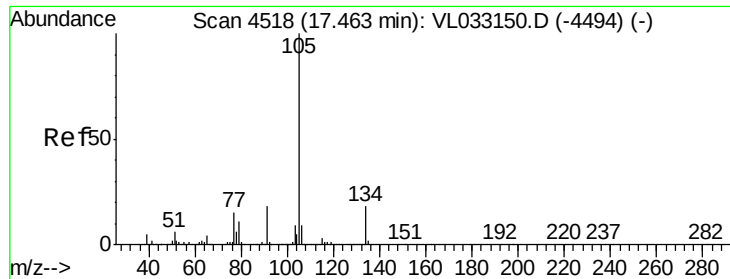
MMDadoda
2/5/2019 10:27:16 AM



#66
Benzyl Chloride
Concen: 0.370 ppbv m
RT: 17.16 min Scan# 4423
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	87575		
126	14.8	14.9	22.3#	
128	0.0	4.7	7.1#	





#67

sec-Butylbenzene

Concen: 0.572 ppbv

RT: 17.46 min Scan# 4517

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 105 Resp: 429078

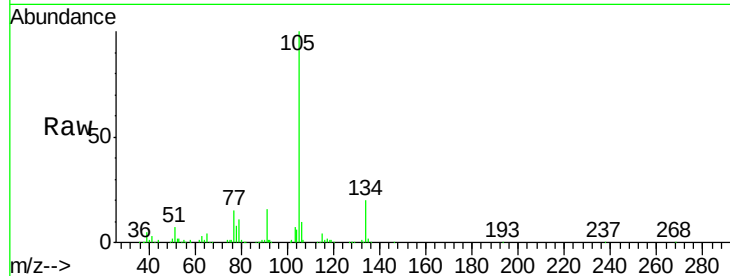
Ion Ratio Lower Upper

105 100

134 17.9 14.4 21.6

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MMDadoda
2/5/2019 10:27:16 AM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V

17.46

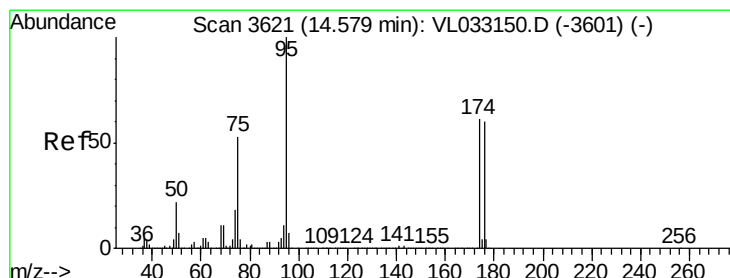
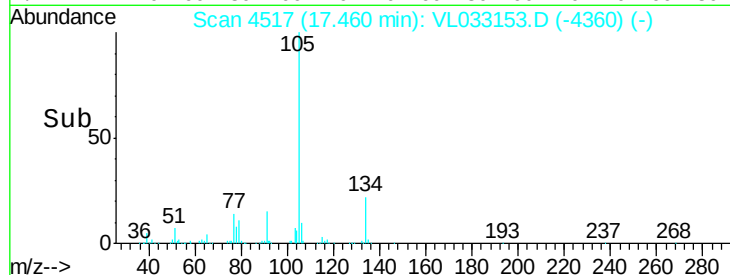
150000

100000

50000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.293 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

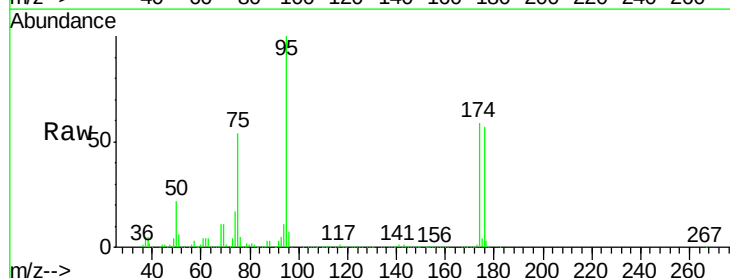
Tgt Ion: 95 Resp: 2653395

Ion Ratio Lower Upper

95 100

174 59.6 49.2 73.8

175 4.5 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

14.58

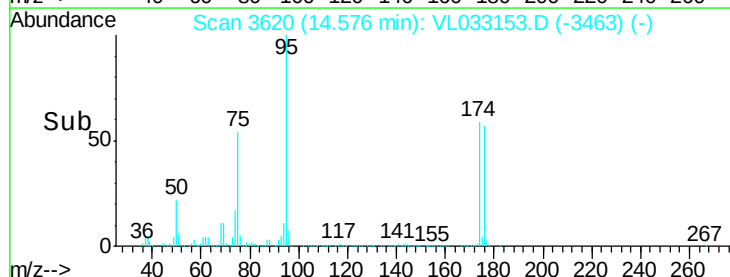
1500000

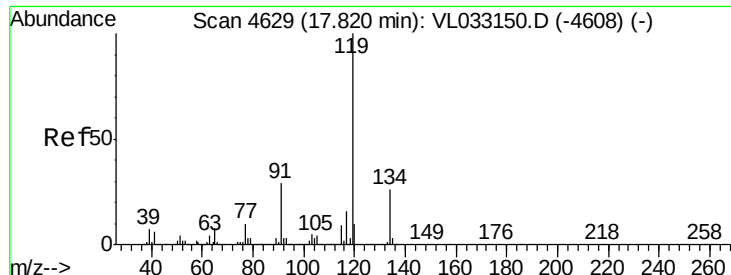
1000000

500000

0

Time-->





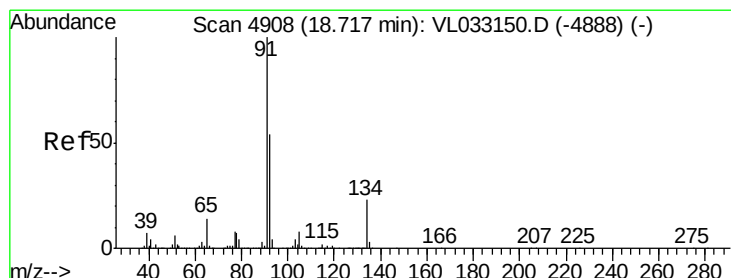
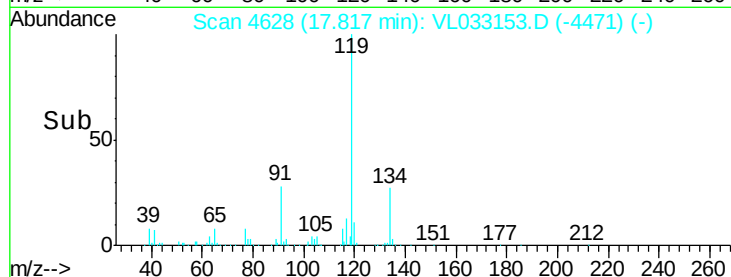
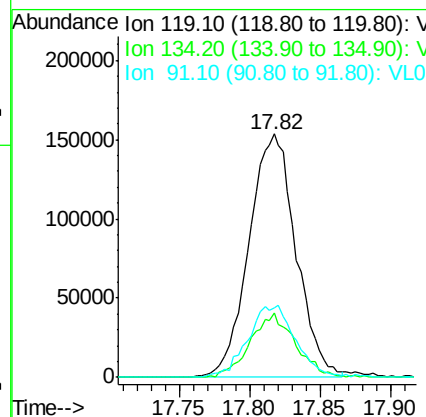
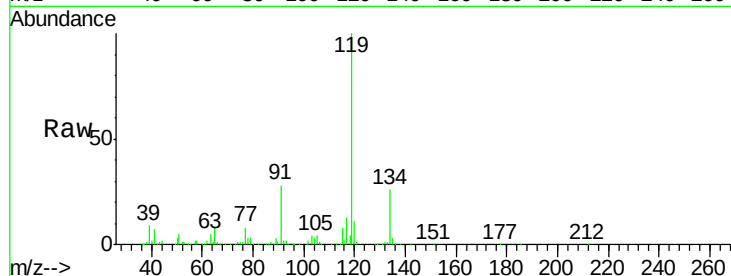
#69
p-Isopropyltoluene
Concen: 0.604 ppbv
RT: 17.82 min Scan# 4628
Delta R.T. 0.00 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC0.5

Tot Ion	Ratio	Resp	Lower	Upper
119	100	357155		
134	25.5	20.3	30.5	
91	30.7	22.6	33.8	

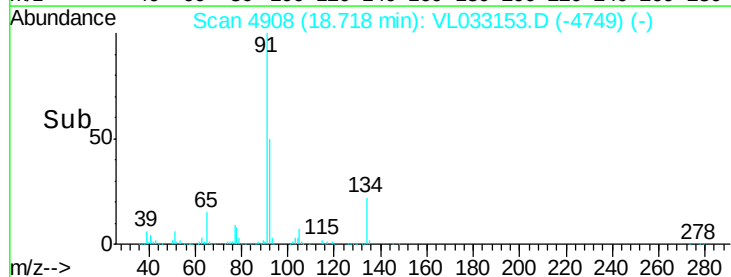
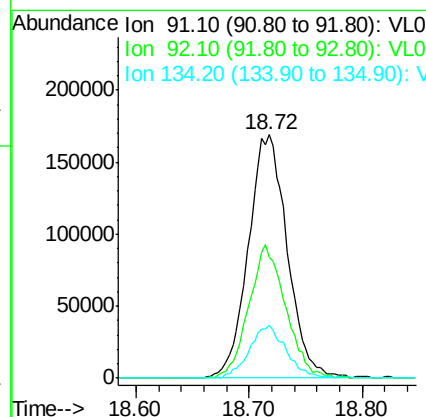
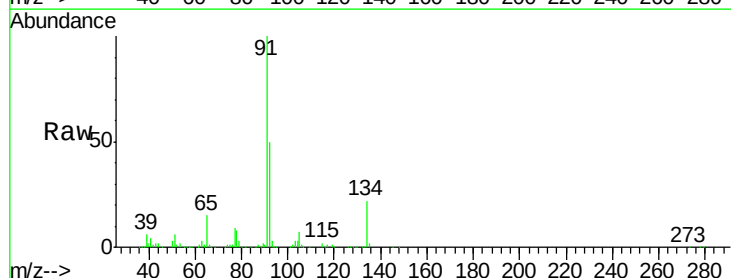
Manual Integrations
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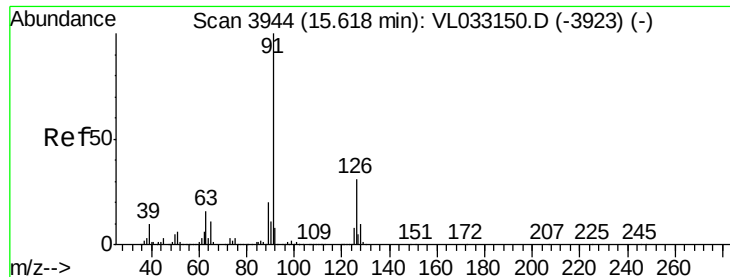
MMDadoda
2/5/2019 10:27:16 AM



#70
n-Butylbenzene
Concen: 0.670 ppbv
RT: 18.72 min Scan# 4908
Delta R.T. 0.01 min
Lab File: VL033153.D
Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Resp	Lower	Upper
91	100	403296		
92	52.1	43.7	65.5	
134	20.7	18.4	27.6	





#71

2-Chlorotoluene

Concen: 0.557 ppbv

RT: 15.61 min Scan# 3943

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion: 91 Resp: 266380

Ion Ratio Lower Upper

91 100

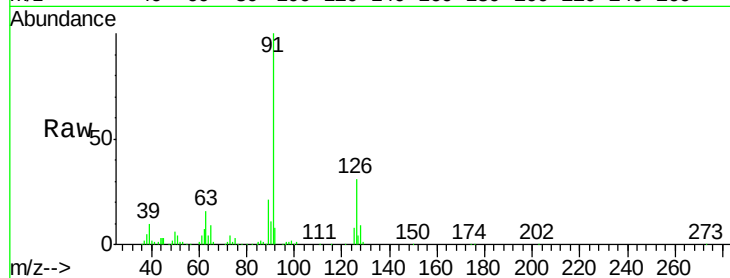
126 29.6 12.3 49.1

Manual Integrations

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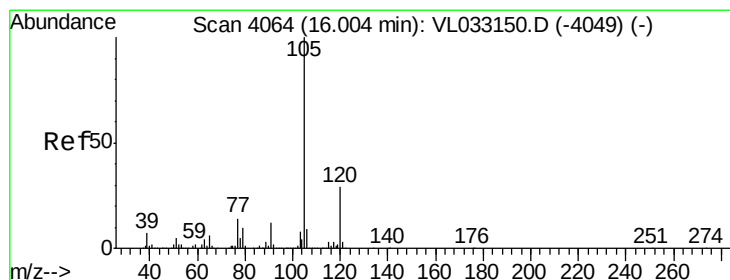
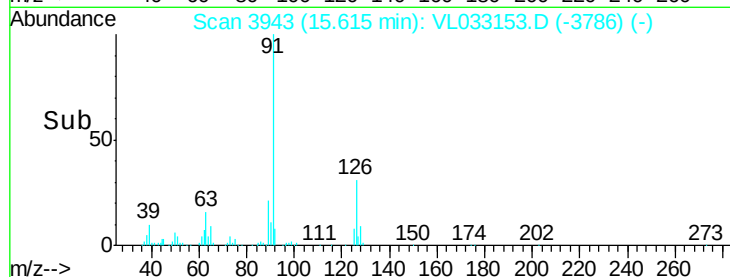
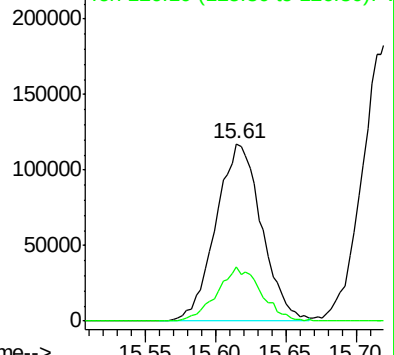
MMDadoda

2/5/2019 10:27:16 AM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 0.553 ppbv

RT: 16.00 min Scan# 4063

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion: 105 Resp: 273728

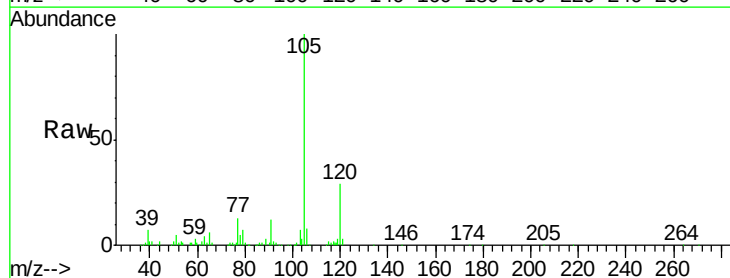
Ion Ratio Lower Upper

105 100

120 28.4 23.2 34.8

91 12.4 9.5 14.3

77 13.7 10.2 15.4

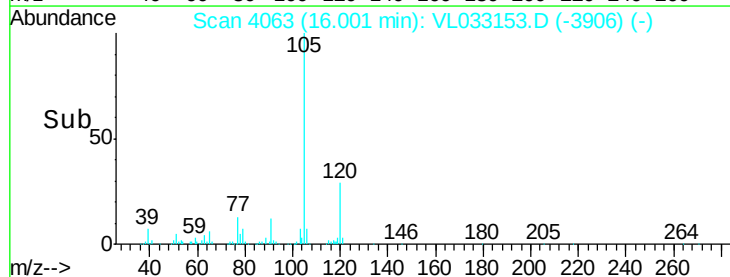
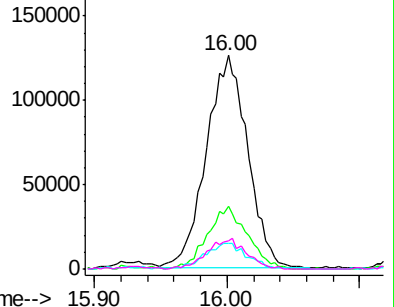


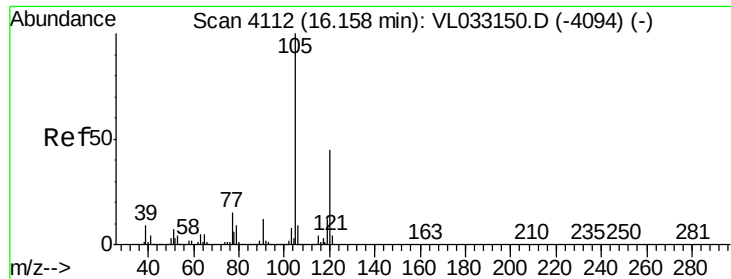
Abundance Ion 105.10 (104.80 to 105.80): V

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: 0.600 ppbv

RT: 16.16 min Scan# 4111

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC0.5

Tot Ion:105 Resp: 267977

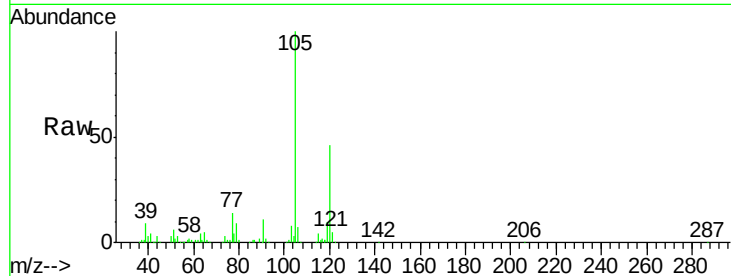
Ion Ratio Lower Upper

105 100

120 46.0 38.0 57.0

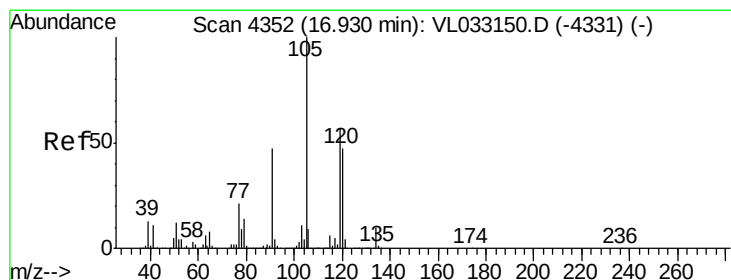
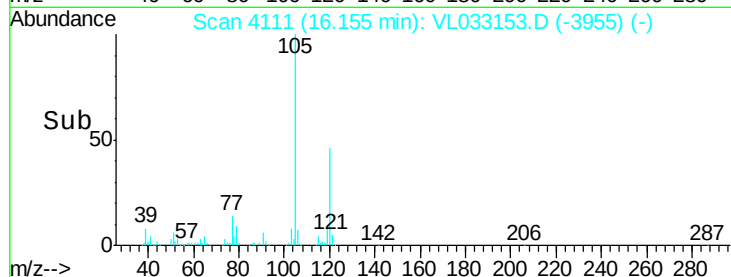
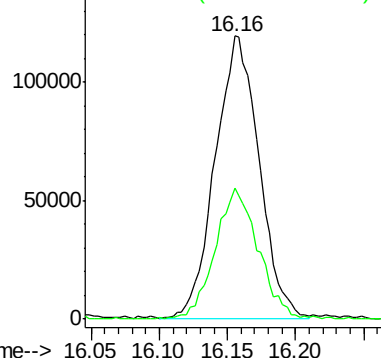
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.639 ppbv

RT: 16.92 min Scan# 4350

Delta R.T. 0.00 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:105 Resp: 280867

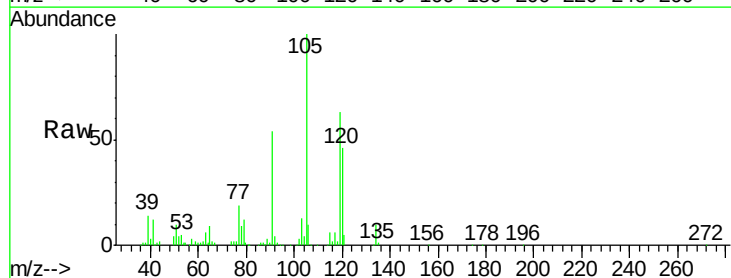
Ion Ratio Lower Upper

105 100

120 45.6 38.2 57.4

91 53.6 35.0 52.4#

77 18.6 15.8 23.6

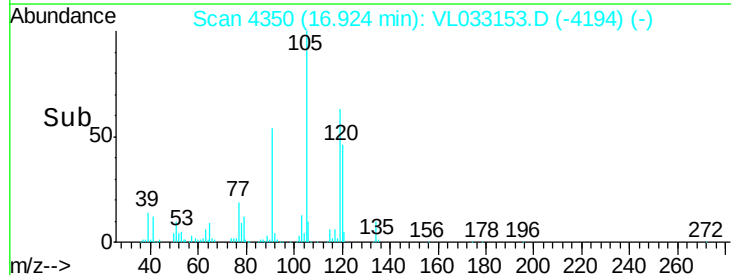
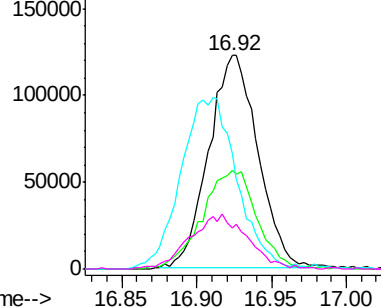


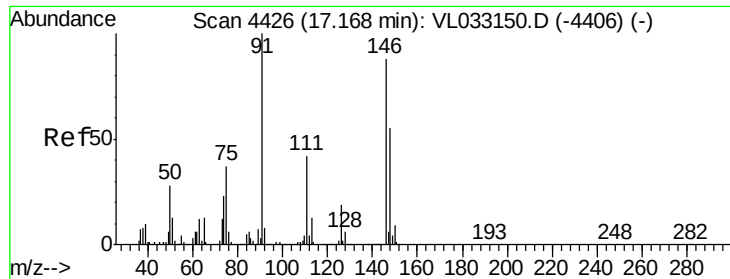
Abundance Ion 105.10 (104.80 to 105.80): V

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





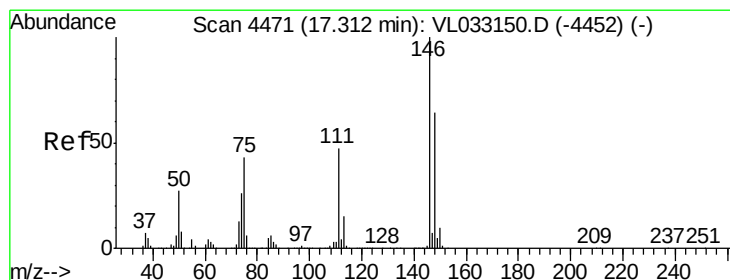
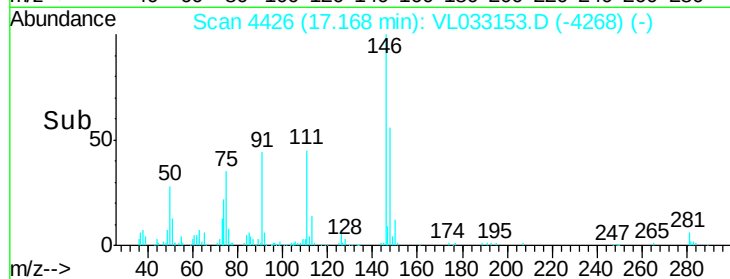
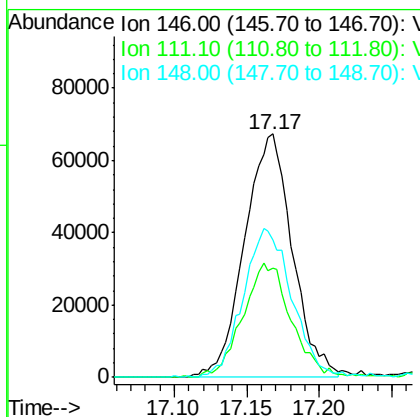
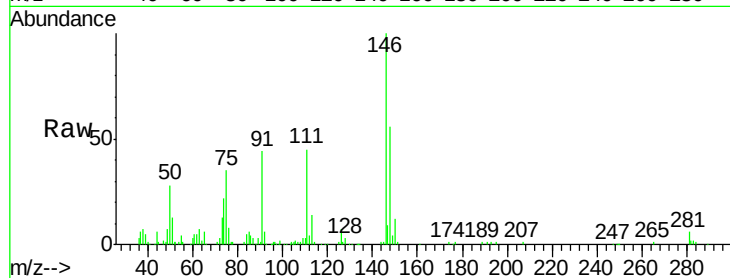
#75
 1,3-Dichlorobenzene
 Concen: 0.589 ppbv
 RT: 17.17 min Scan# 4426
 Delta R.T. 0.01 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
146	100		
111	47.6	24.0	72.0
148	63.3	31.9	95.7

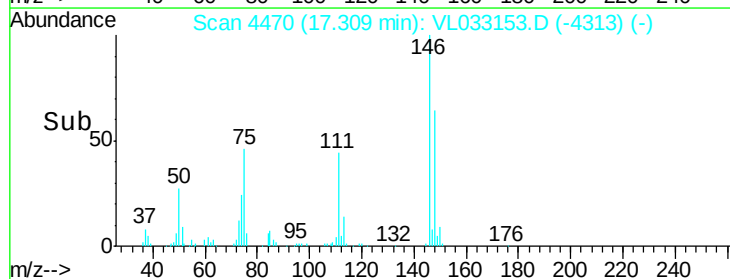
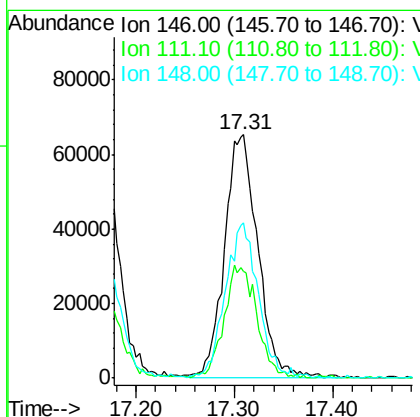
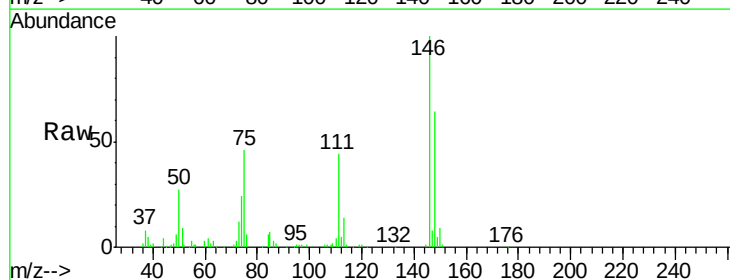
Manual Integrations
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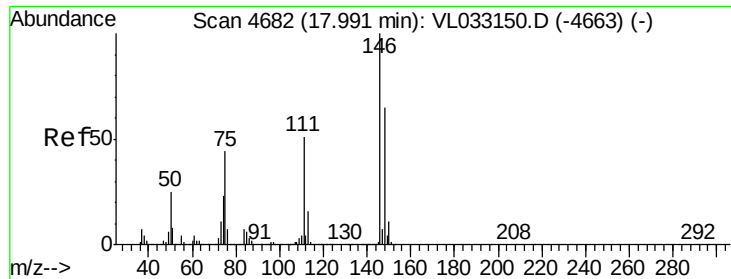
MMDadoda
 2/5/2019 10:27:16 AM



#76
 1,4-Dichlorobenzene
 Concen: 0.593 ppbv m
 RT: 17.31 min Scan# 4470
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
146	100		
111	0.0	23.4	70.0#
148	63.3	31.9	95.9





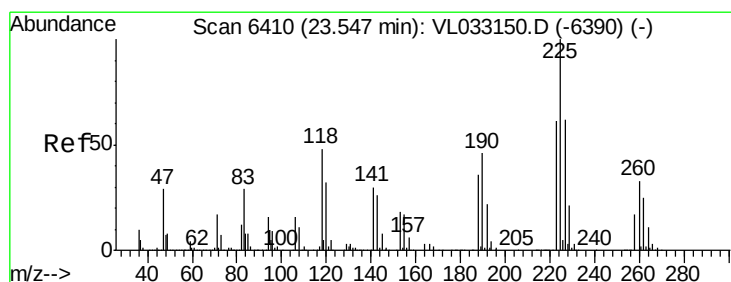
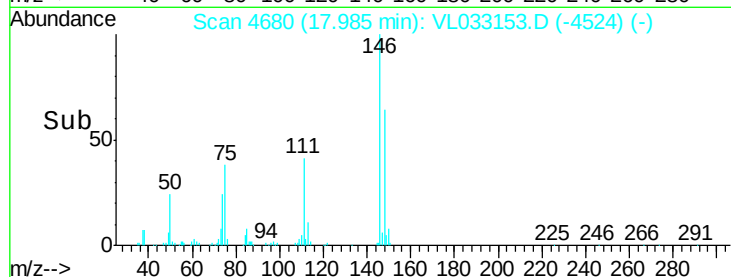
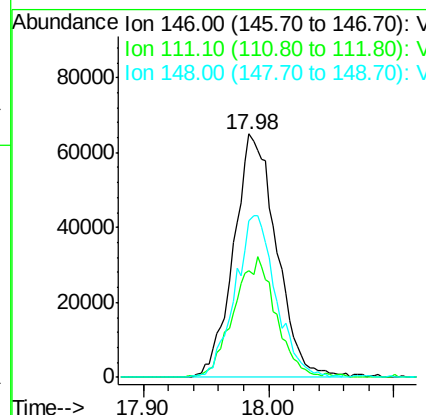
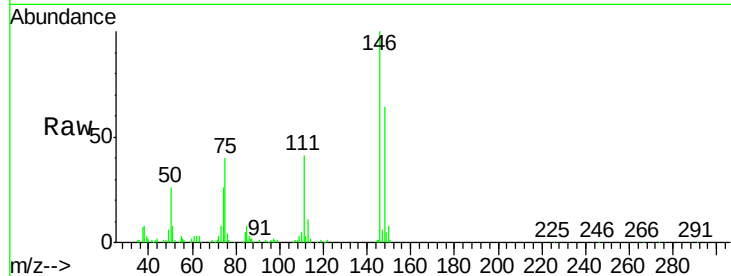
#77
 1,2-Dichlorobenzene
 Concen: 0.609 ppbv
 RT: 17.98 min Scan# 4680
 Delta R.T. 0.00 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Lower	Upper
146	100		
111	48.9	25.1	75.3
148	63.5	32.0	96.2

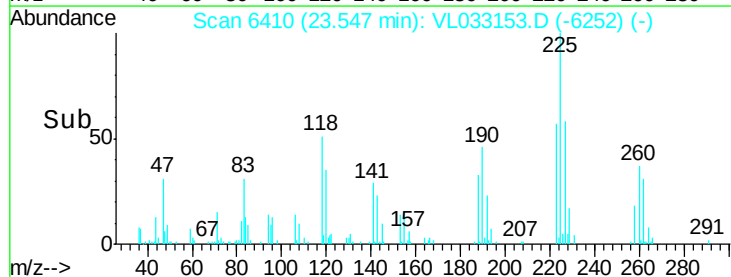
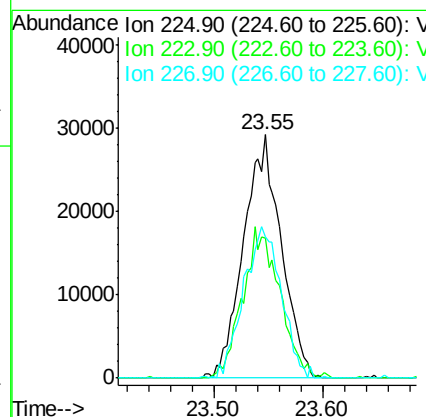
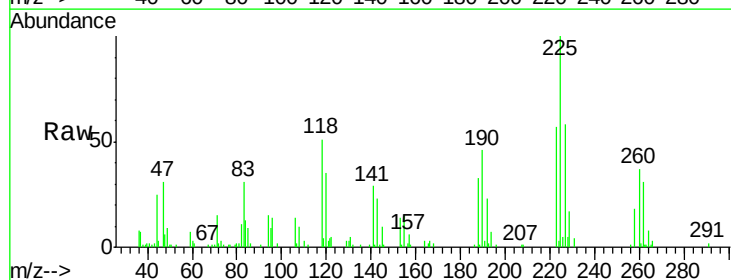
Manual Integrations
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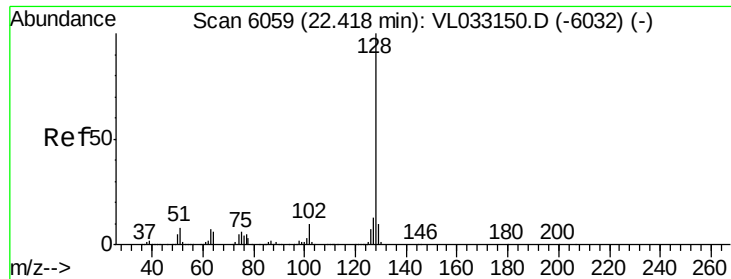
MMDadoda
 2/5/2019 10:27:16 AM



#78
 Hexachloro-1,3-Butadiene
 Concen: 0.594 ppbv m
 RT: 23.55 min Scan# 6410
 Delta R.T. 0.01 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Tgt Ion	Ratio	Lower	Upper
225	100		
223	0.0	50.2	75.4#
227	62.8	51.1	76.7





#79

Naphthalene

Concen: 1.159 ppbv m

RT: 22.42 min Scan# 6059

Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Instrument :

MSVOA_L

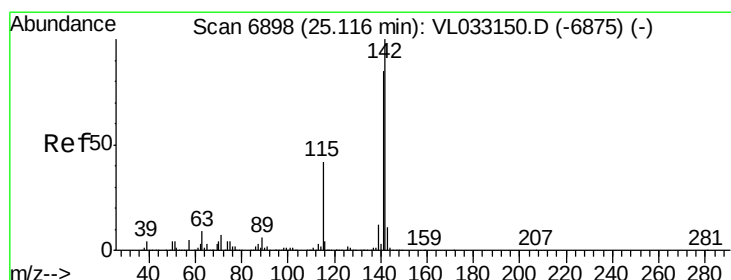
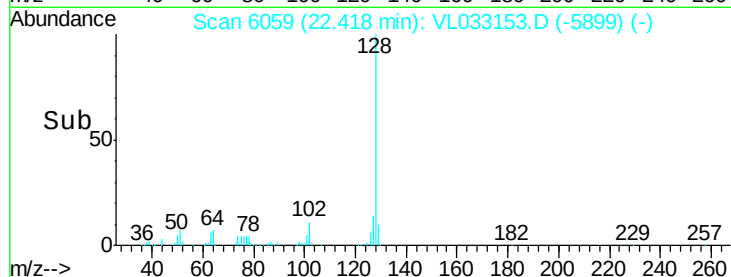
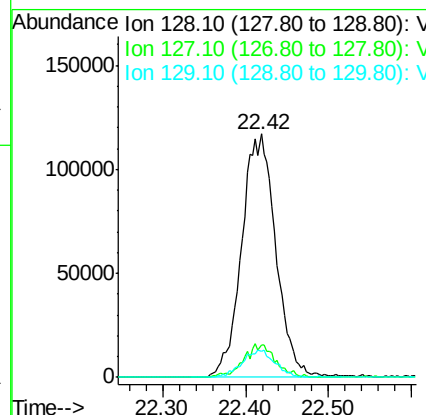
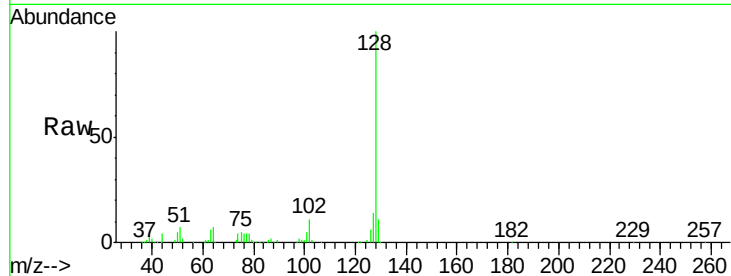
ClientSampleId :

VSTDIC0.5

Tot Ion:	128	Resp:	334319
Ion Ratio	Lower	Upper	
128	100		
127	13.6	10.6	16.0
129	10.6	9.0	13.4

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#80

Naphthalene, 2-methyl-

Concen: 2.022 ppbv

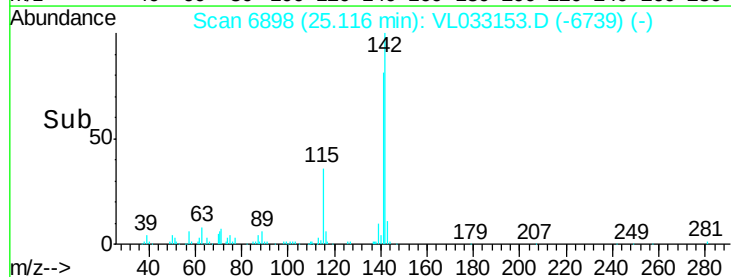
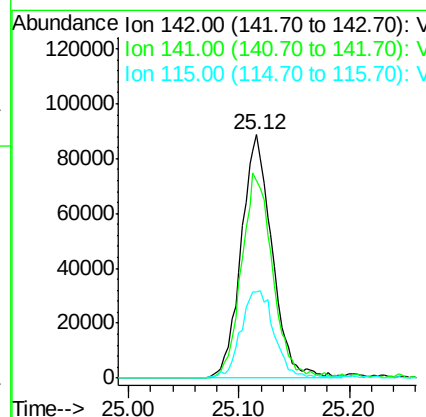
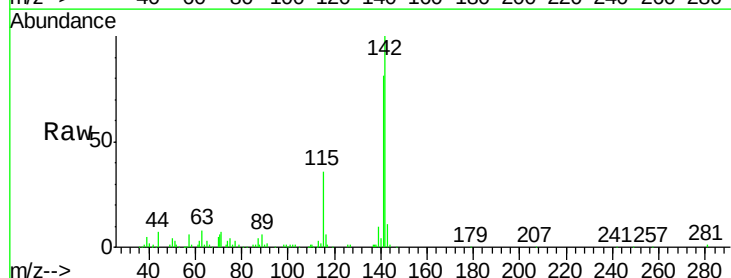
RT: 25.12 min Scan# 6898

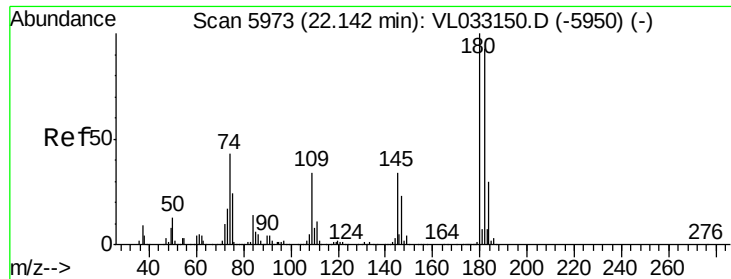
Delta R.T. 0.01 min

Lab File: VL033153.D

Acq: 4 Feb 2019 11:57

Tgt Ion:	142	Resp:	171986
Ion Ratio	Lower	Upper	
142	100		
141	84.6	66.5	99.7
115	38.9	31.3	46.9





#81
 1,2,4-Trichlorobenzene
 Concen: 0.989 ppbv
 RT: 22.14 min Scan# 5972
 Delta R.T. 0.01 min
 Lab File: VL033153.D
 Acq: 4 Feb 2019 11:57

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC0.5

Tot Ion	Ratio	Resp	Lower	Upper
180	100	150067		
182	95.6		76.2	114.4
184	30.8		24.6	36.8

Manual Integrations
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 2/5/2019 10:27:16 AM

