

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033152.D
 Acq On : 4 Feb 2019 11:20
 Operator : SY/AP
 Sample : VSTDIC001
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Manual Integrations
 APPROVED

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

Quant Time: Feb 04 12:05:32 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 2019
 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	1497053	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	3442749	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	4270034	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	2641756	8.19	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	81.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	238523	1.062	ppbv	99
3) Chlorodifluoromethane	3.01	51	156078	0.648	ppbv	98
4) Chloromethane	3.17	50	85256	0.615	ppbv	95
5) Vinyl Chloride	3.29	62	79401	0.524	ppbv	89
6) Bromomethane	3.51	94	47545	0.712	ppbv	85
7) Chloroethane	3.60	64	27415	0.670	ppbv #	76
8) Dichlorotetrafluoroethane	3.22	85	190350	0.686	ppbv	98
9) Propene	3.04	41	76992	0.626	ppbv	100
10) Heptane	8.24	43	247994m	1.082	ppbv	
11) Trichlorofluoromethane	4.00	101	196429	0.831	ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.55	101	131545	0.875	ppbv	97
13) Ethanol	3.65	45	41379m	1.189	ppbv	
14) Bromoethene	3.79	108	57387	0.754	ppbv	97
15) Acetone	3.90	43	177404	0.935	ppbv	100
16) 1,3-Butadiene	3.36	39	63474	0.698	ppbv	94
17) tert-Butyl alcohol	4.37	59	37768	0.825	ppbv	100
18) 1,1-Dichloroethene	4.35	96	58008	0.799	ppbv	93
19) Isopropyl Alcohol	4.03	45	124912	0.861	ppbv #	47
20) Methylene Chloride	4.41	84	60965	0.830	ppbv	98
21) Allyl Chloride	4.48	41	95635	0.784	ppbv	98
22) trans-1,2-Dichloroethene	4.96	96	56376	0.833	ppbv	96
23) Vinyl Acetate	5.15	43	271761	0.825	ppbv #	97
24) 1,1-Dichloroethane	5.09	63	184095	0.837	ppbv	99
25) Ethyl Acetate	5.77	43	399575	0.983	ppbv	99
26) Hexane	5.78	57	188151	0.945	ppbv	99
27) Carbon Disulfide	4.62	76	131410	0.818	ppbv #	88
28) Methyl tert-Butyl Ether	5.12	73	236751	0.828	ppbv	99
29) Chloroform	5.84	83	262733	0.977	ppbv	99
30) Cyclohexane	7.25	84	157558	1.021	ppbv #	79
31) cis-1,2-Dichloroethene	5.64	61	179952	0.990	ppbv	95
32) 1,1,1-Trichloroethane	6.62	97	244407	0.881	ppbv #	83
34) 2-Butanone	5.33	43	273150	1.038	ppbv	98
35) Carbon Tetrachloride	7.13	117	238669	0.924	ppbv	94
36) Benzene	7.00	78	378768	0.981	ppbv	96
37) 1,2-Dichloroethane	6.41	62	196144	0.998	ppbv	100
38) Trichloroethene	7.96	130	134195	0.863	ppbv	96
39) 1,2-Dichloropropane	7.73	63	142663	1.008	ppbv	95
40) 1,4-Dioxane	7.97	88	63879m	1.282	ppbv	
41) Tetrahydrofuran	6.16	42	152212	0.963	ppbv	98
42) Bromodichloromethane	7.91	83	276368	0.986	ppbv	92
43) Methyl Methacrylate	8.14	69	147330	1.089	ppbv	98

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Manual Integrations
 APPROVED

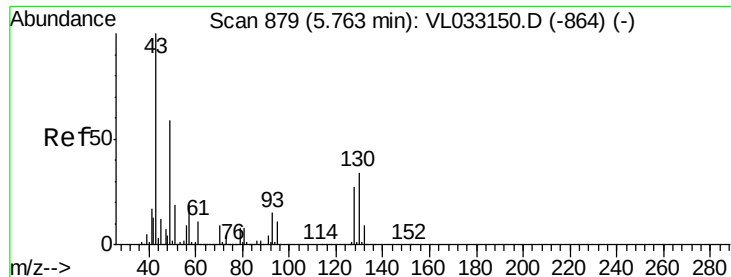
MMDadoda
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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 0
 QLast Update : Fri Feb 01 22:01:04 2019
 Response via : Initial Calibration

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

44) 2,2,4-Trimethylpentane	7.99	57	647734	1.040	ppbv	99
45) t-1,3-Dichloropropene	9.41	75	204923	1.254	ppbv	98
46) cis-1,3-Dichloropropene	8.83	75	244397	1.247	ppbv	91
47) 1,1,2-Trichloroethane	9.61	97	190218	1.474	ppbv	97
48) Dibromochloromethane	10.44	129	262835	1.222	ppbv	99
49) Bromoform	13.20	173	210818	1.181	ppbv	98
50) 4-Methyl-2-Pentanone	8.88	43	524422	1.534	ppbv	98
51) 2-Hexanone	10.28	43	449585	1.476	ppbv #	99
52) Tetrachloroethene	11.37	164	149503	1.021	ppbv	95
53) Toluene	9.94	91	541468	1.225	ppbv	98
54) 1,2-Dibromoethane	10.76	107	277723	1.144	ppbv	95
56) 1,1,1,2-Tetrachloroethane	12.28	131	201406	1.060	ppbv #	1
57) Chlorobenzene	12.30	112	402897	1.072	ppbv	96
58) Ethyl Benzene	12.86	91	723765	1.033	ppbv	97
59) m/p-Xylene	13.12	91	1224624m	2.144	ppbv	
60) o-Xylene	13.85	91	488162	0.884	ppbv	95
61) Styrene	13.68	104	438092	1.034	ppbv	98
62) Isopropylbenzene	14.83	105	675475	0.860	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.84	83	344845	0.827	ppbv	98
64) n-propylbenzene	15.72	120	174011m	0.865	ppbv	
65) tert-Butylbenzene	16.91	119	632236	0.956	ppbv	96
66) Benzyl Chloride	17.15	91	227425	0.768	ppbv	97
67) sec-Butylbenzene	17.46	105	897884	0.956	ppbv	99
69) p-Isopropyltoluene	17.82	119	734001	0.992	ppbv	98
70) n-Butylbenzene	18.72	91	802035	1.065	ppbv	98
71) 2-Chlorotoluene	15.62	91	534702	0.894	ppbv	98
72) 4-Ethyltoluene	16.00	105	566019	0.914	ppbv	99
73) 1,3,5-Trimethylbenzene	16.15	105	559669	1.002	ppbv	97
74) 1,2,4-Trimethylbenzene	16.92	105	574098	1.044	ppbv	95
75) 1,3-Dichlorobenzene	17.16	146	314280	0.959	ppbv	99
76) 1,4-Dichlorobenzene	17.30	146	309549	0.946	ppbv	98
77) 1,2-Dichlorobenzene	17.99	146	307892	0.974	ppbv	99
78) Hexachloro-1,3-Butadiene	23.54	225	150640m	1.029	ppbv	
79) Naphthalene	22.42	128	678320	1.881	ppbv	98
80) Naphthalene, 2-methyl-	25.12	142	355142	3.339	ppbv	99
81) 1,2,4-Trichlorobenzene	22.13	180	309912m	1.633	ppbv	

(#) = 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

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MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 49 Resp: 1497053

Ion Ratio Lower Upper

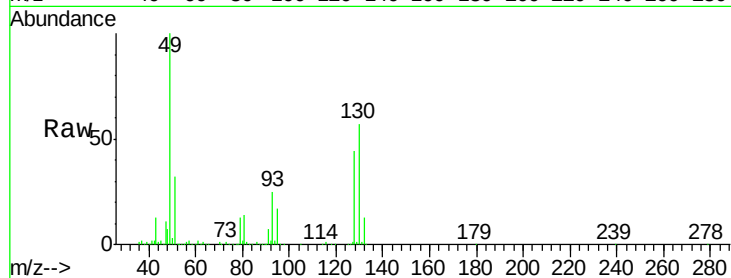
49 100

128 46.2 23.2 69.5

130 58.7 29.5 88.6

Manual Integrations
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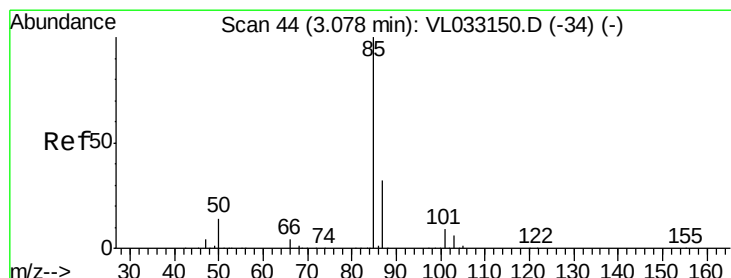
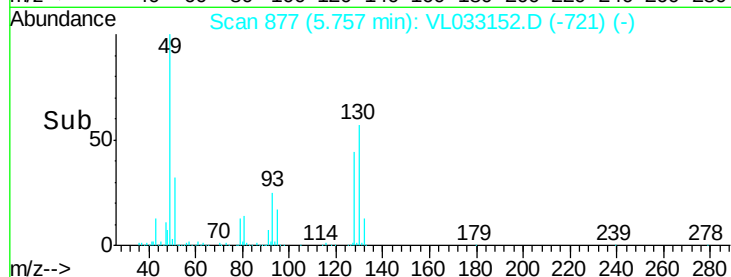
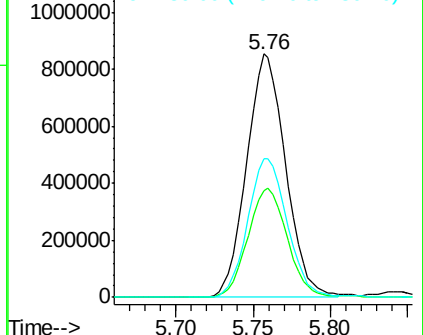
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 1.062 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033152.D

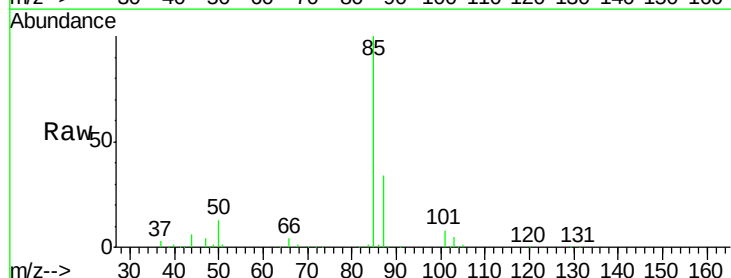
Acq: 4 Feb 2019 11:20

Tgt Ion: 85 Resp: 238523

Ion Ratio Lower Upper

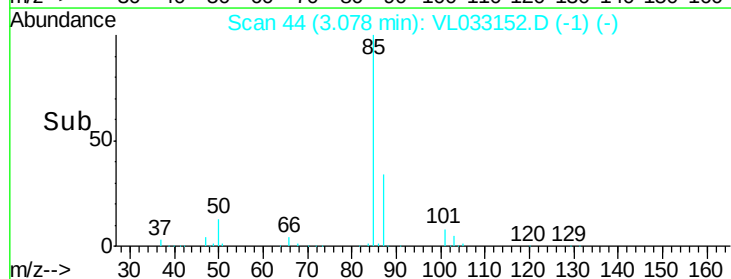
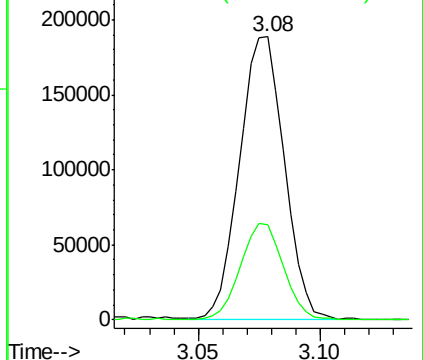
85 100

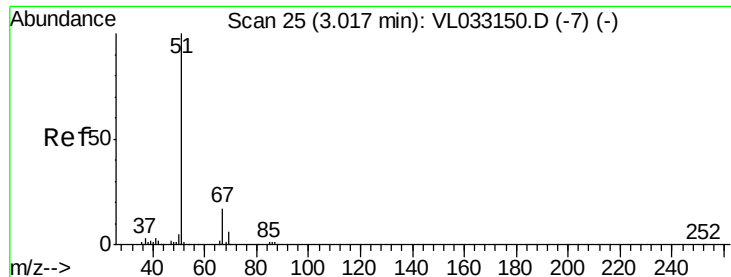
87 33.5 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.648 ppbv

RT: 3.01 min Scan# 24

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 51 Resp: 156078

Ion Ratio Lower Upper

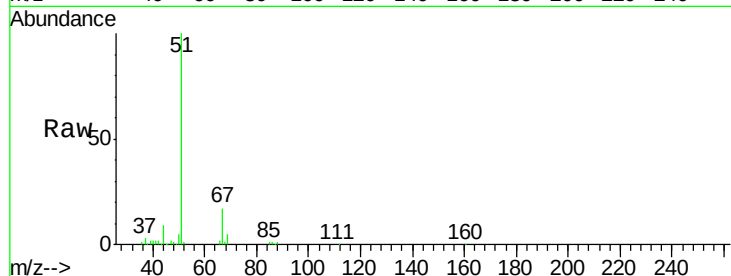
51 100

67 17.5 13.4 20.2

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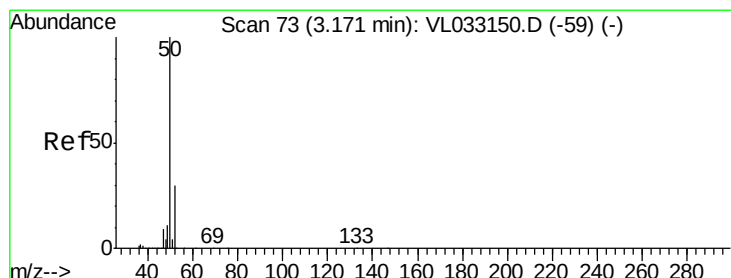
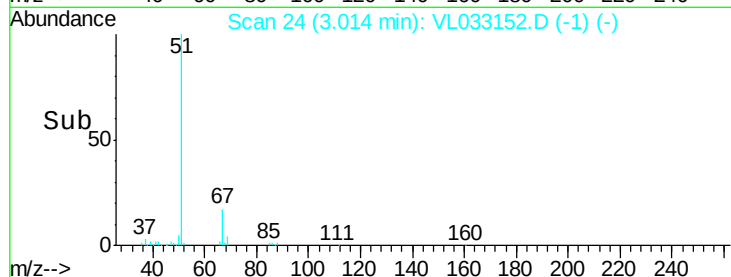
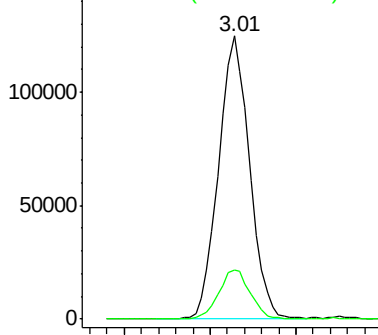
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.615 ppbv

RT: 3.17 min Scan# 72

Delta R.T. 0.00 min

Lab File: VL033152.D

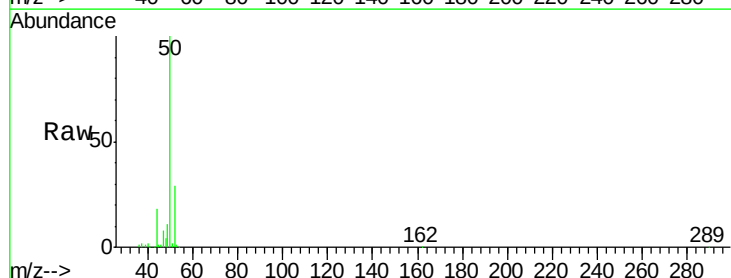
Acq: 4 Feb 2019 11:20

Tgt Ion: 50 Resp: 85256

Ion Ratio Lower Upper

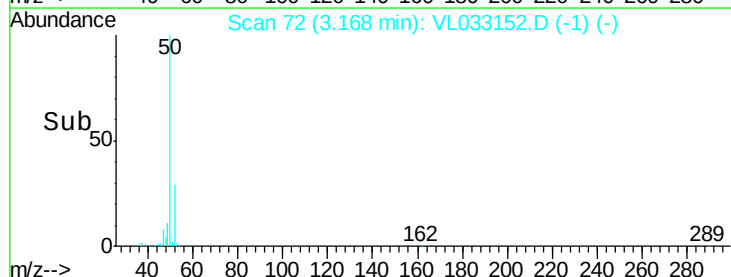
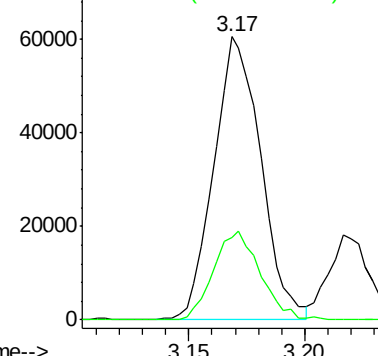
50 100

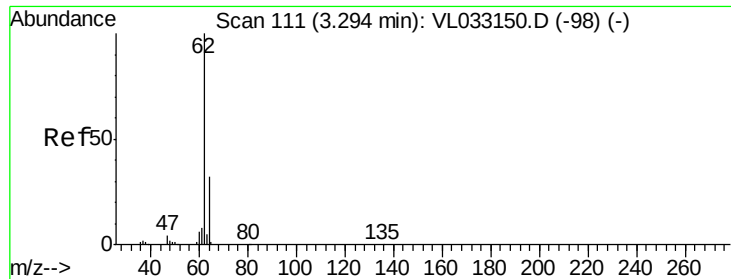
52 29.4 25.7 38.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.524 ppbv

RT: 3.29 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 62 Resp: 79401

Ion Ratio Lower Upper

62 100

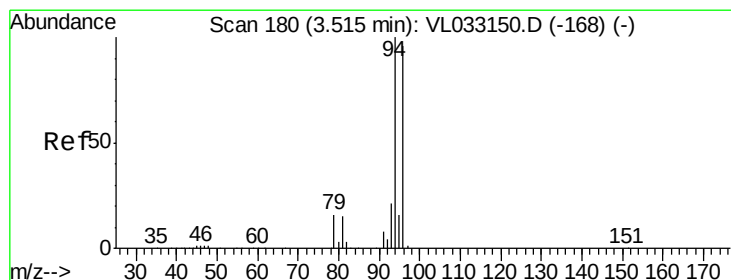
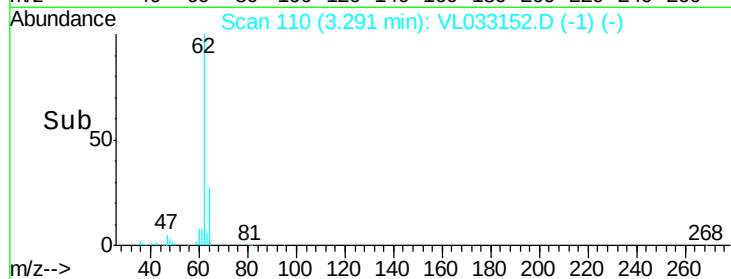
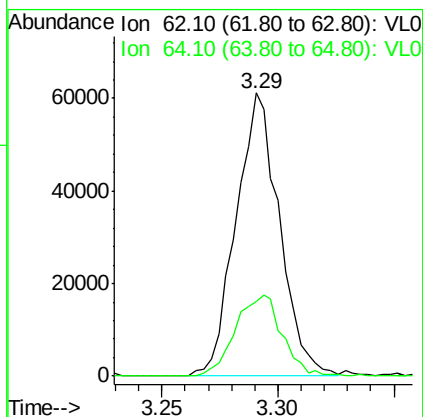
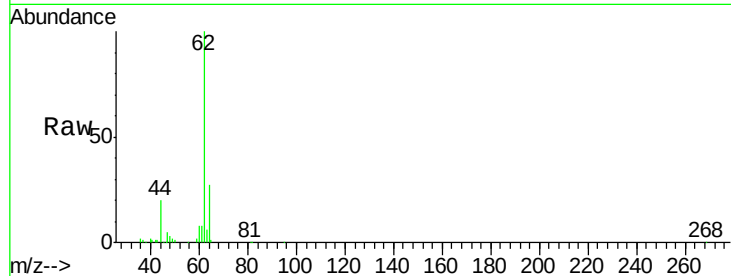
64 26.5 26.3 39.5

Manual Integrations

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#6

Bromomethane

Concen: 0.712 ppbv

RT: 3.51 min Scan# 179

Delta R.T. 0.00 min

Lab File: VL033152.D

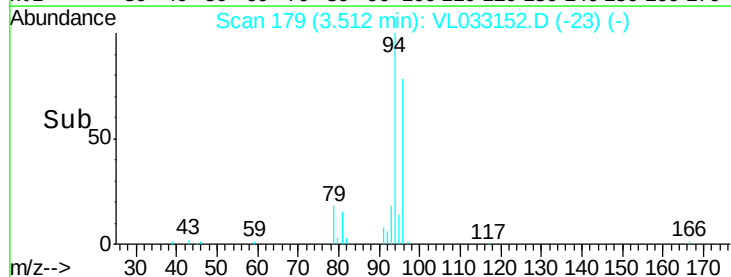
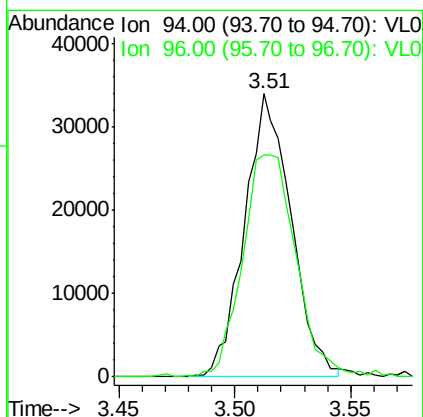
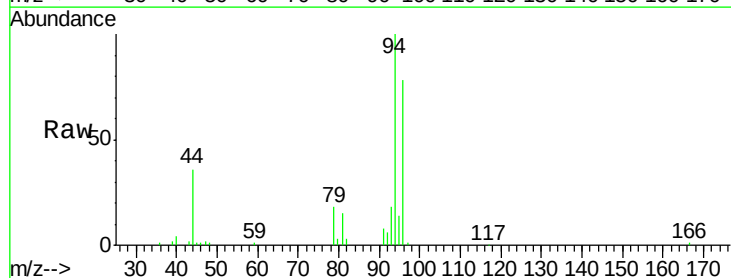
Acq: 4 Feb 2019 11:20

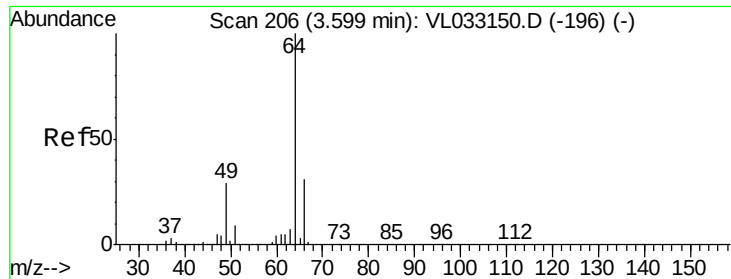
Tgt Ion: 94 Resp: 47545

Ion Ratio Lower Upper

94 100

96 77.8 74.0 111.0





#7

Chloroethane

Concen: 0.670 ppbv

RT: 3.60 min Scan# 206

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 64 Resp: 27415

Ion Ratio Lower Upper

64 100

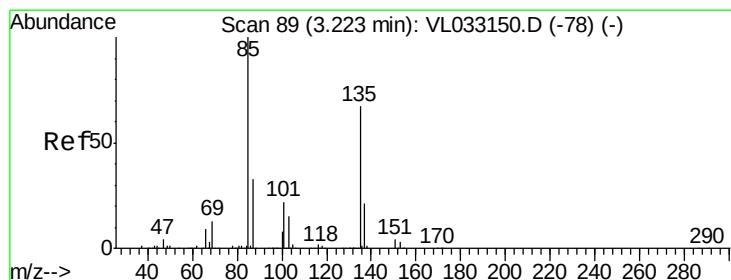
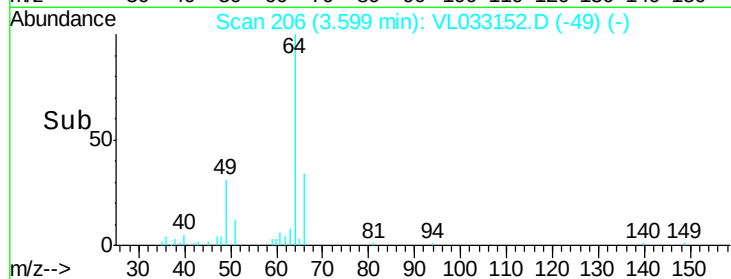
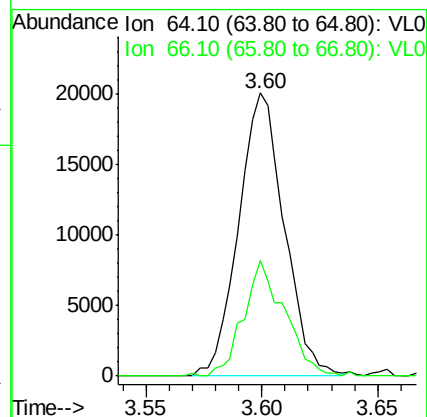
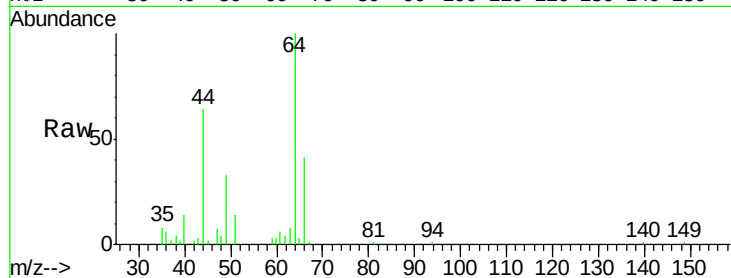
66 40.8 22.3 33.5#

Manual Integrations

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#8

Dichlorotetrafluoroethane

Concen: 0.686 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033152.D

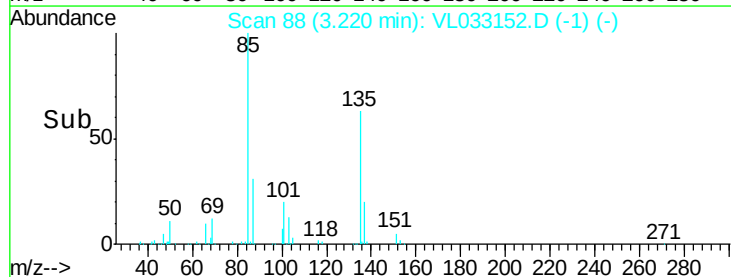
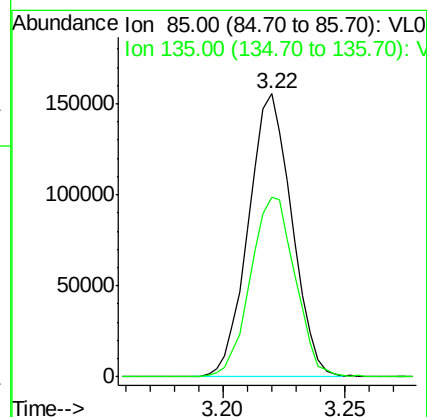
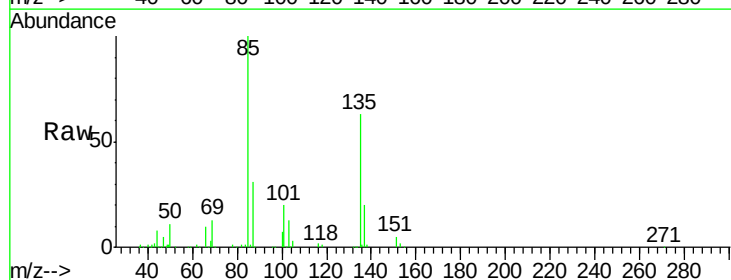
Acq: 4 Feb 2019 11:20

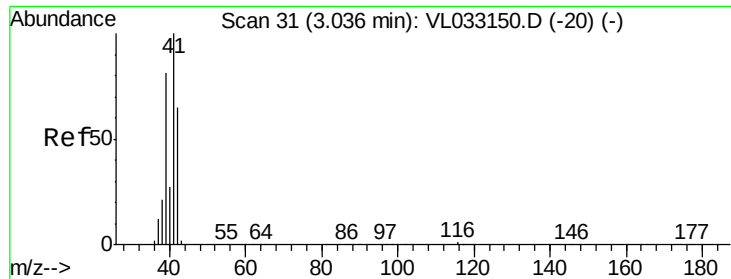
Tgt Ion: 85 Resp: 190350

Ion Ratio Lower Upper

85 100

135 66.0 54.0 81.0





#9

Propene

Concen: 0.626 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 41 Resp: 76992

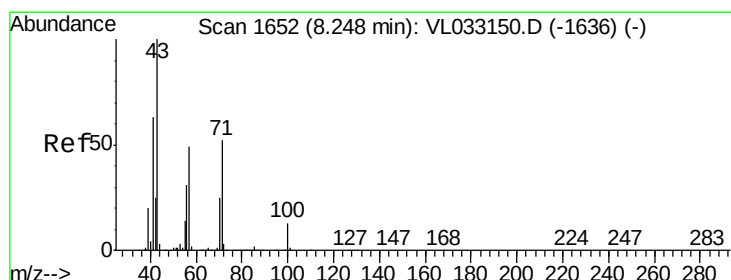
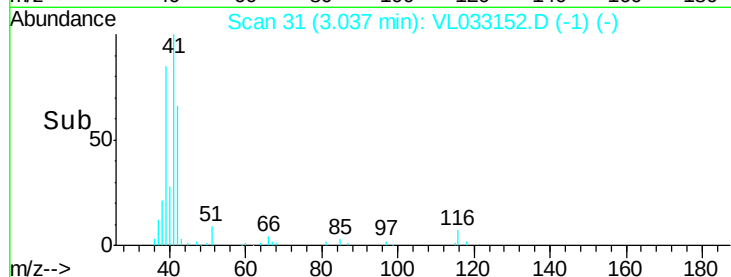
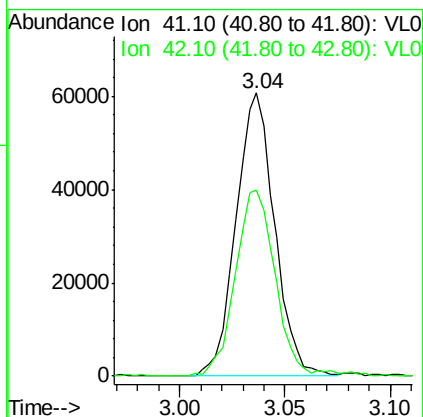
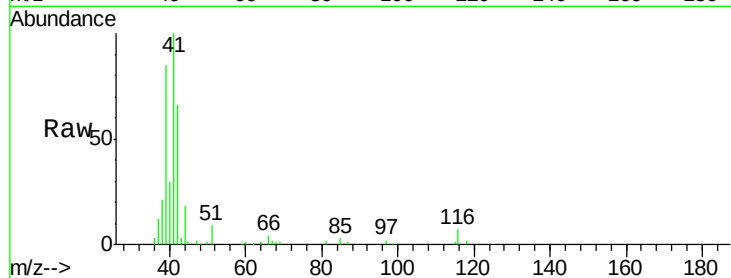
Ion Ratio Lower Upper

41 100

42 69.2 55.1 82.7

Manual Integrations
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#10

Heptane

Concen: 1.082 ppbv m

RT: 8.24 min Scan# 1650

Delta R.T. 0.00 min

Lab File: VL033152.D

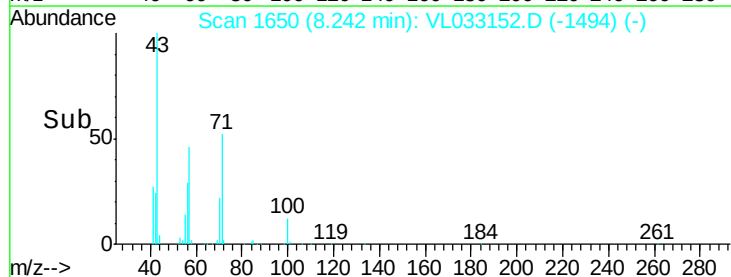
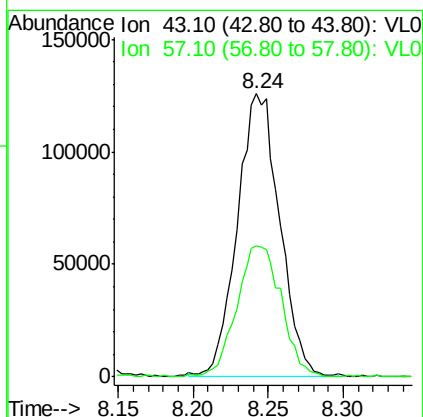
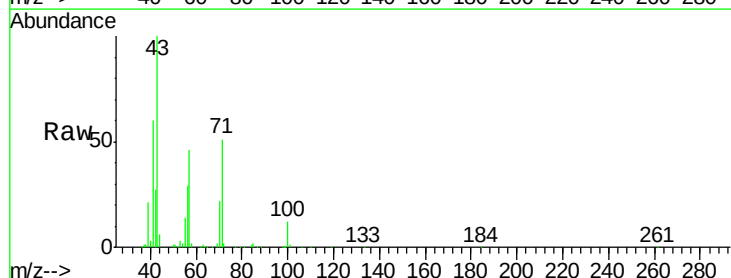
Acq: 4 Feb 2019 11:20

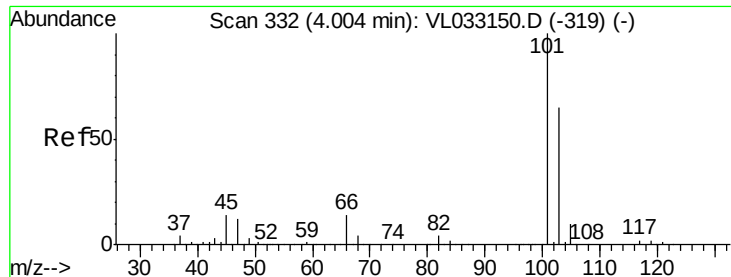
Tgt Ion: 43 Resp: 247994

Ion Ratio Lower Upper

43 100

57 49.0 39.3 58.9





#11

Trichlorofluoromethane

Concen: 0.831 ppbv

RT: 4.00 min Scan# 332

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion:101 Resp: 196429

Ion Ratio Lower Upper

101 100

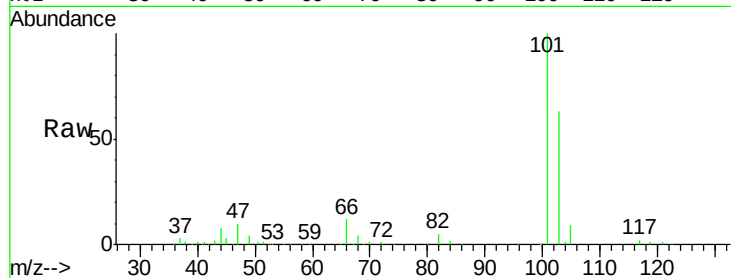
103 63.2 51.3 76.9

Manual Integrations

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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

150000

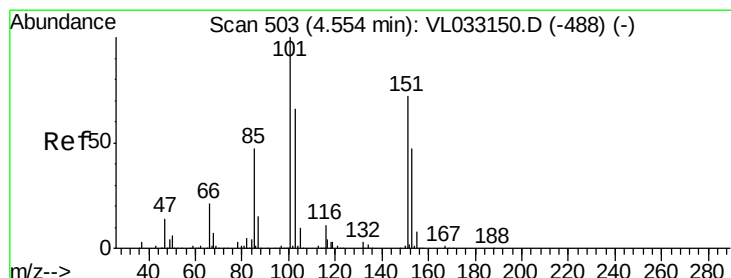
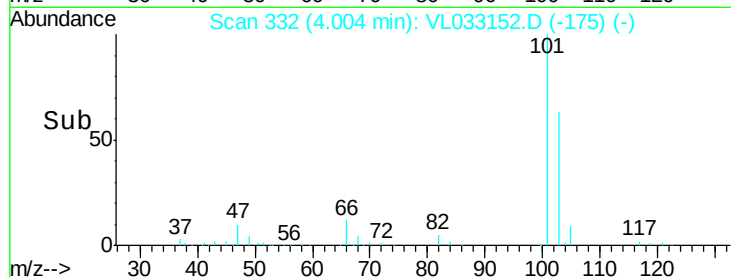
100000

50000

0

3.95 4.00 4.05

Time-->



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.875 ppbv

RT: 4.55 min Scan# 502

Delta R.T. 0.00 min

Lab File: VL033152.D

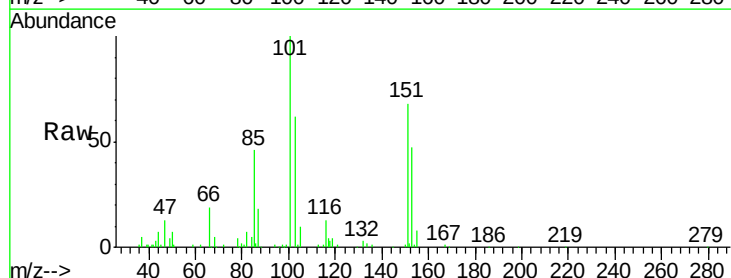
Acq: 4 Feb 2019 11:20

Tgt Ion:101 Resp: 131545

Ion Ratio Lower Upper

101 100

151 70.1 57.9 86.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

80000

60000

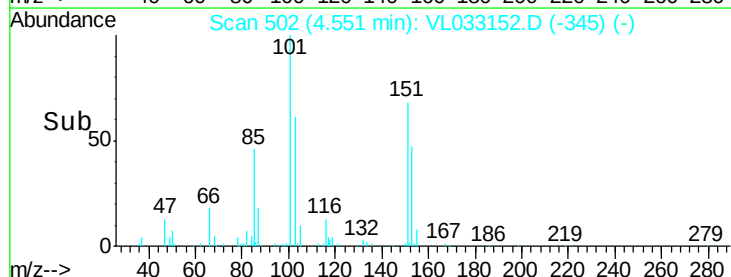
40000

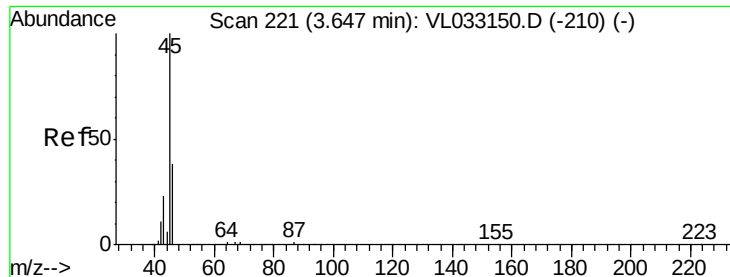
20000

0

4.50 4.55 4.60

Time-->





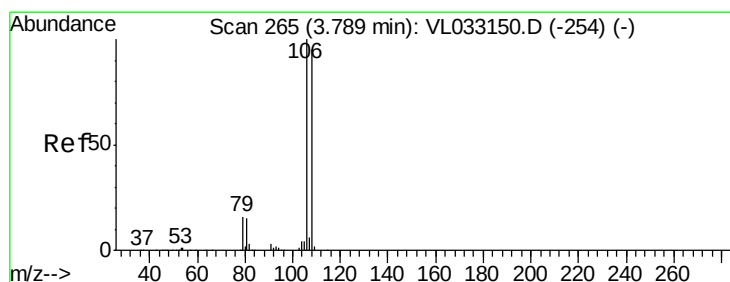
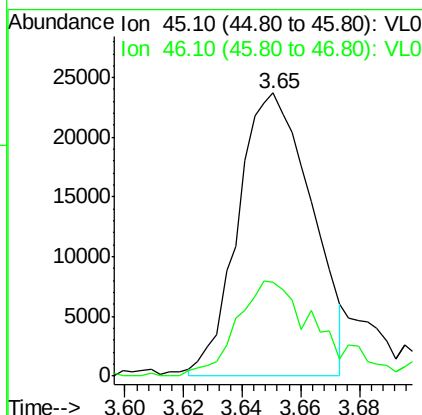
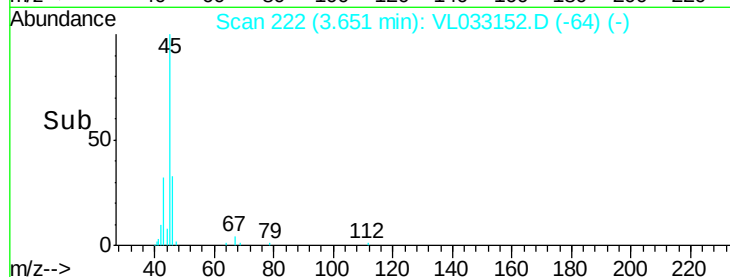
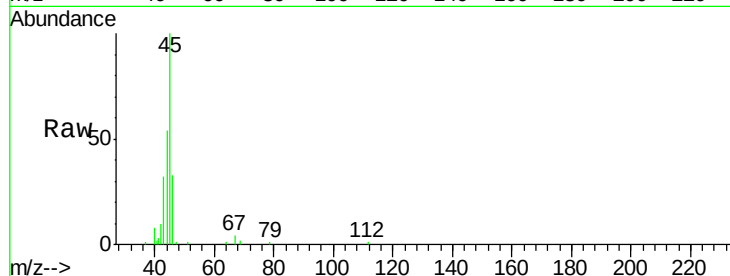
#13
Ethanol
Concen: 1.189 ppbv m
RT: 3.65 min Scan# 222
Delta R.T. 0.01 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
45	100		
46	40.3	14.0	56.2

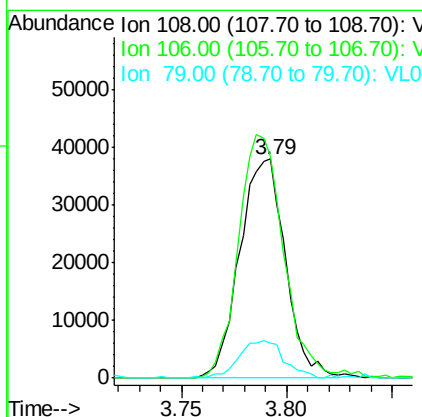
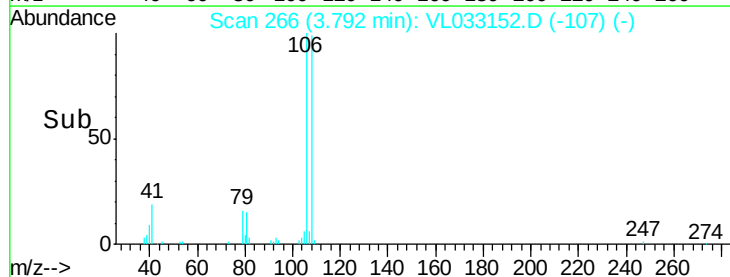
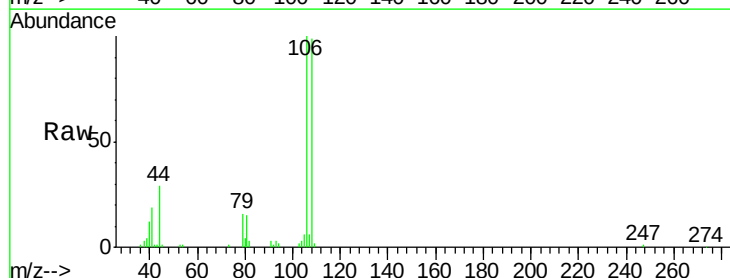
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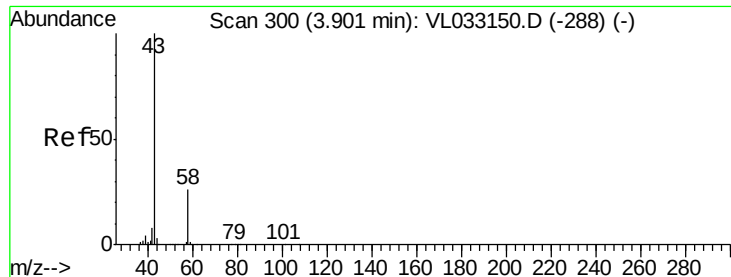
MMDadoda
2/5/2019 10:27:10 AM



#14
Bromoethene
Concen: 0.754 ppbv
RT: 3.79 min Scan# 266
Delta R.T. 0.01 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
108	100		
106	110.4	85.6	128.4
79	17.8	14.2	21.4





#15

Acetone

Concen: 0.935 ppbv

RT: 3.90 min Scan# 300

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 43 Resp: 177404

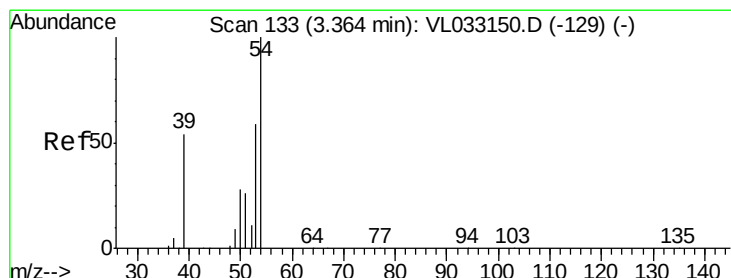
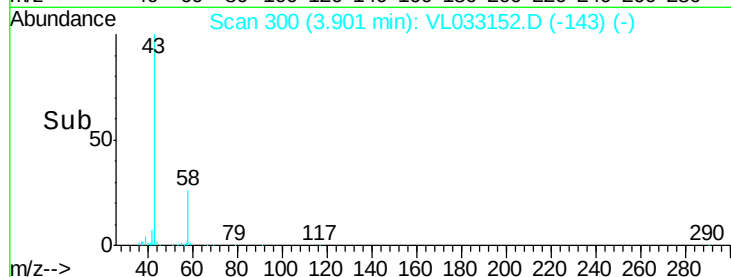
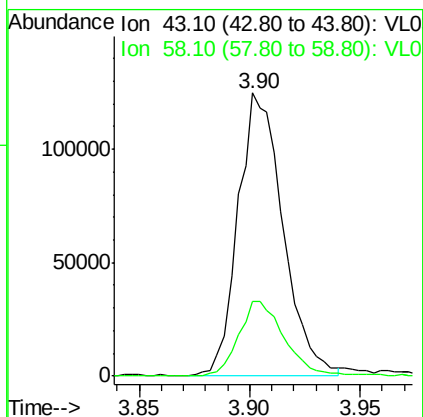
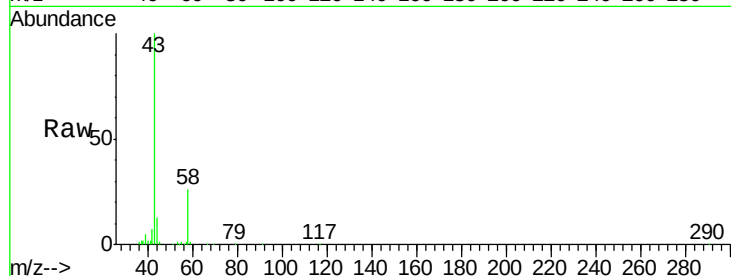
Ion Ratio Lower Upper

43 100

58 27.4 21.8 32.6

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2/5/2019 10:27:10 AM



#16

1,3-Butadiene

Concen: 0.698 ppbv

RT: 3.36 min Scan# 132

Delta R.T. 0.00 min

Lab File: VL033152.D

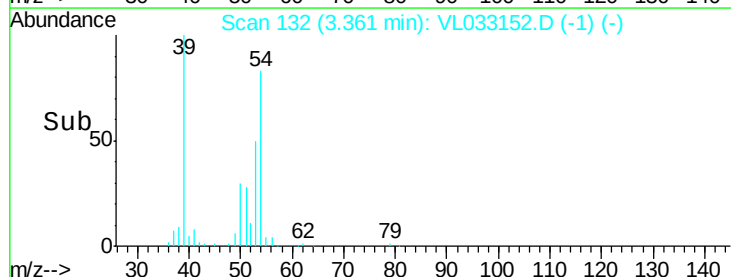
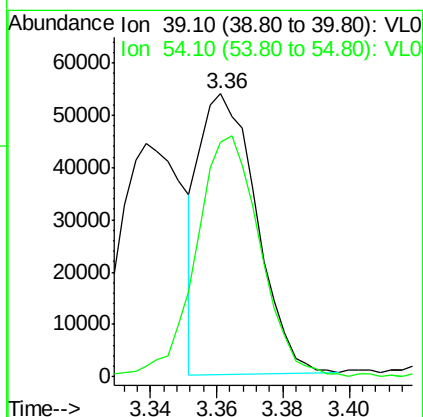
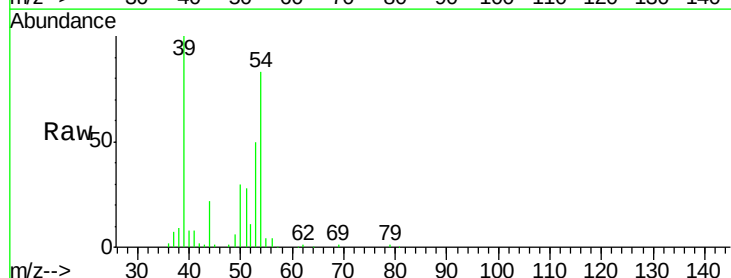
Acq: 4 Feb 2019 11:20

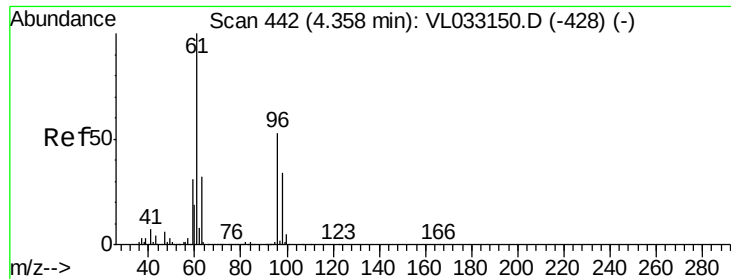
Tgt Ion: 39 Resp: 63474

Ion Ratio Lower Upper

39 100

54 99.3 75.0 112.6





#17

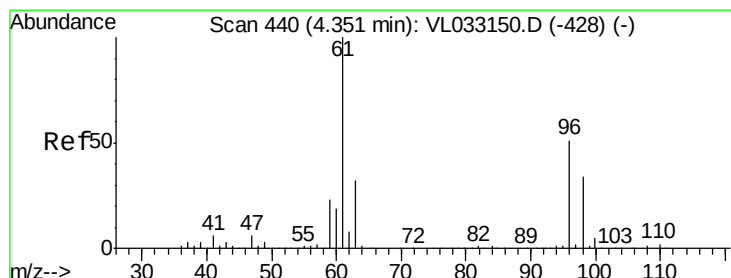
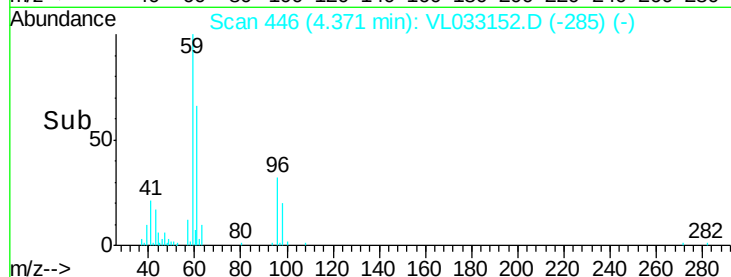
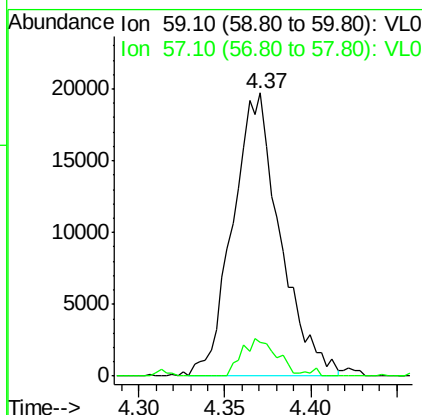
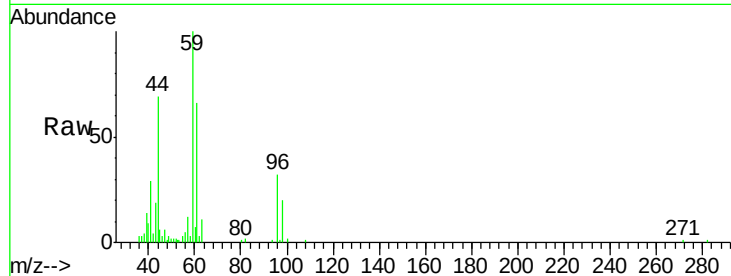
tert-Butyl alcohol
Concen: 0.825 ppbv
RT: 4.37 min Scan# 446
Delta R.T. 0.02 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion: 59 Resp: 37768
Ion Ratio Lower Upper
59 100
57 10.2 8.0 12.0

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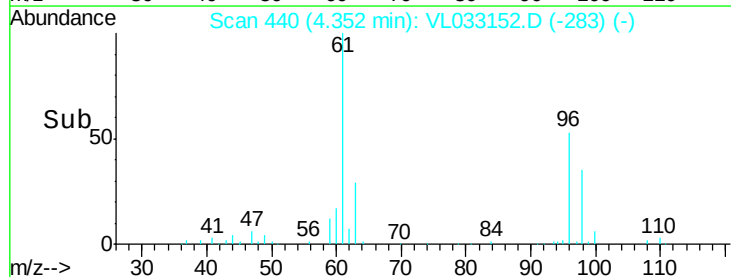
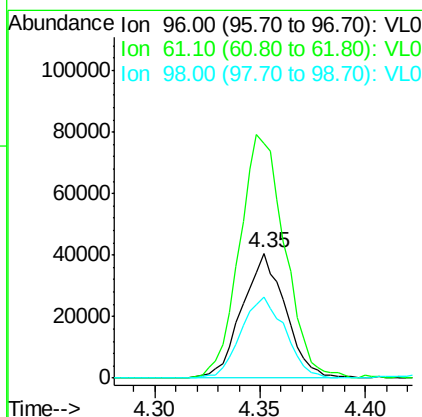
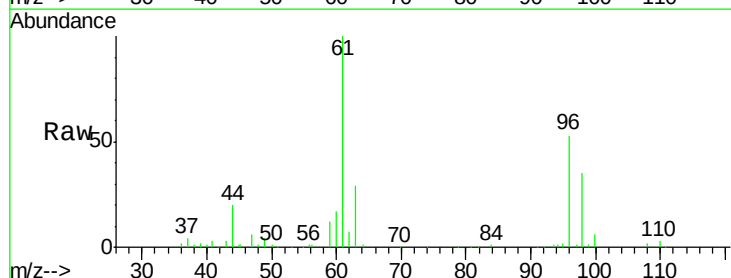
MMDadoda
2/5/2019 10:27:10 AM

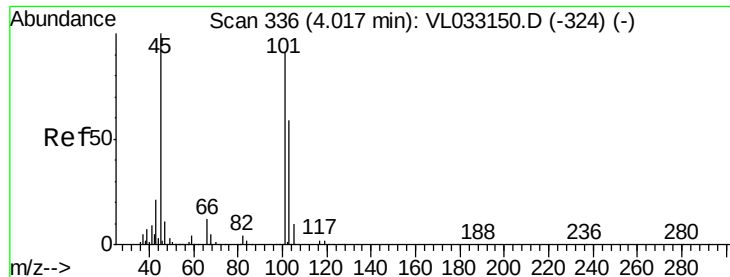


#18

1,1-Dichloroethene
Concen: 0.799 ppbv
RT: 4.35 min Scan# 440
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion: 96 Resp: 58008
Ion Ratio Lower Upper
96 100
61 187.8 158.5 237.7
98 65.0 47.8 71.6





#19

Isopropyl Alcohol

Concen: 0.861 ppbv

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 45 Resp: 124912

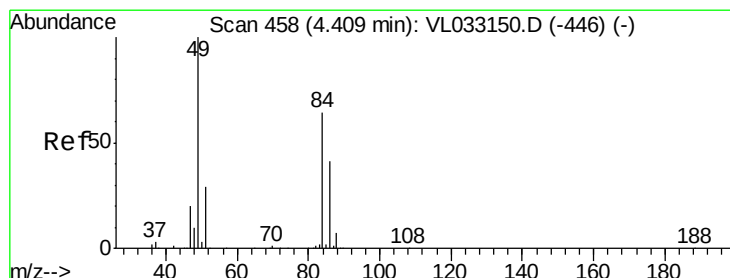
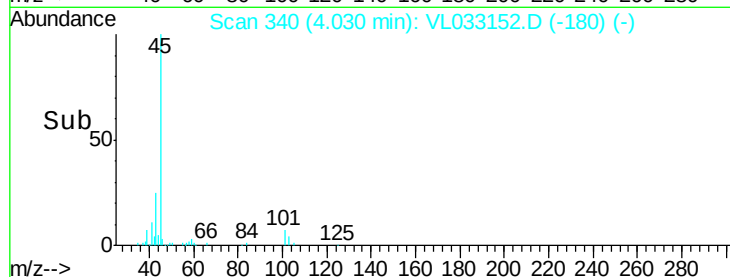
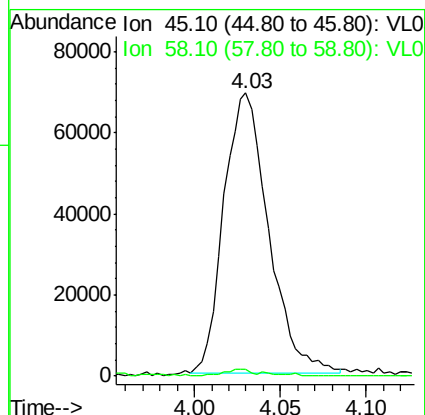
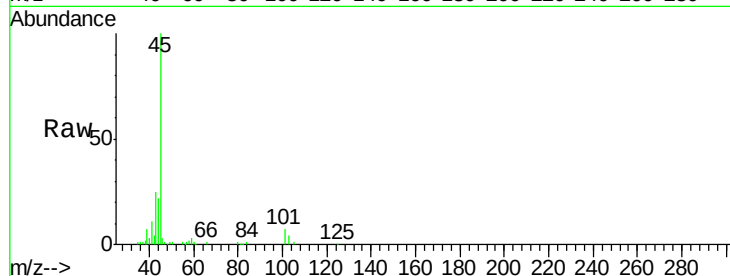
Ion Ratio Lower Upper

45 100

58 2.3 25.1 37.7#

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#20

Methylene Chloride

Concen: 0.830 ppbv

RT: 4.41 min Scan# 457

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion: 84 Resp: 60965

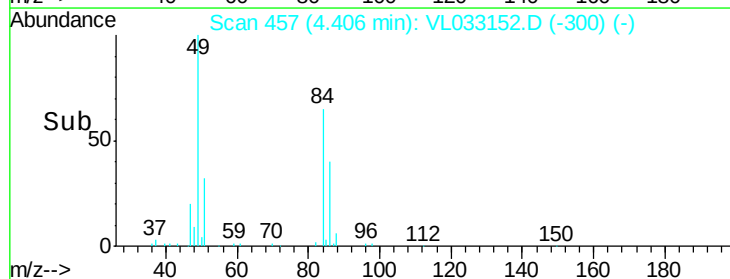
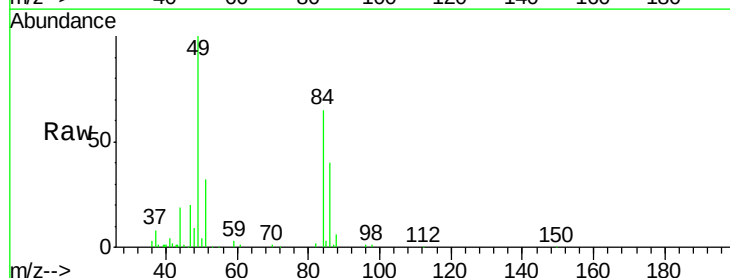
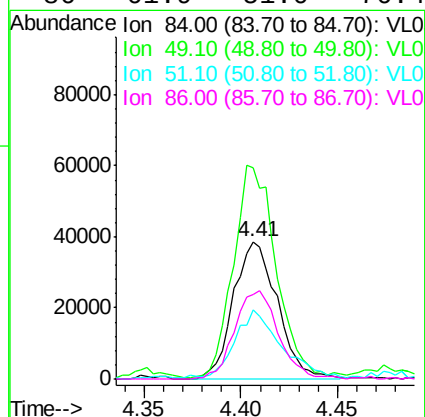
Ion Ratio Lower Upper

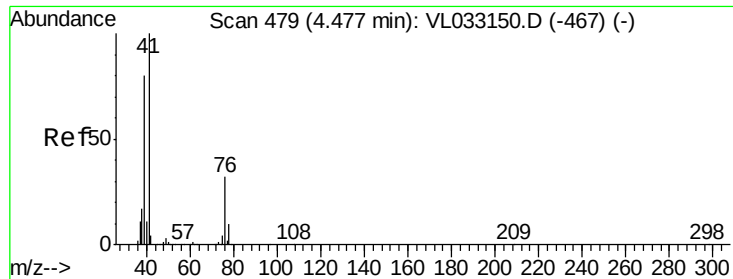
84 100

49 153.5 121.1 181.7

51 47.7 37.5 56.3

86 61.9 51.0 76.4





#21

Allvl Chloride

Concen: 0.784 ppbv

RT: 4.48 min Scan# 479

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

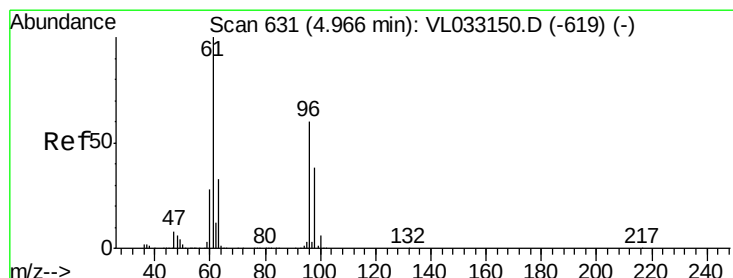
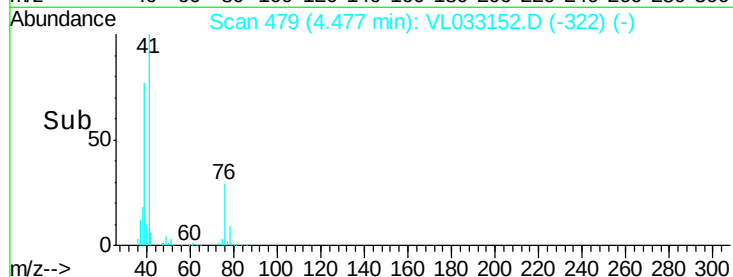
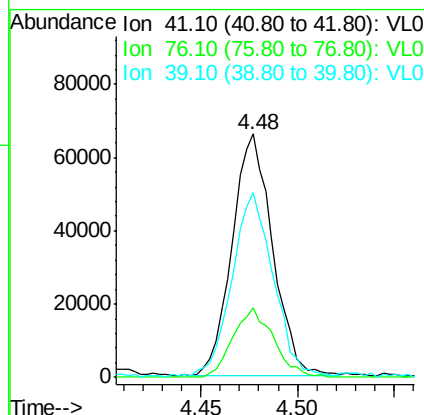
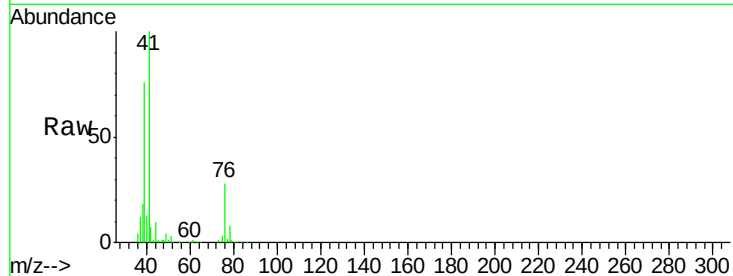
ClientSampleId :

VSTDIC001

Tot Ion:	41	Resp:	95635
Ion Ratio	Lower	Upper	
41	100		
76	29.0	23.2	34.8
39	79.6	61.8	92.6

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#22

trans-1,2-Dichloroethene

Concen: 0.833 ppbv

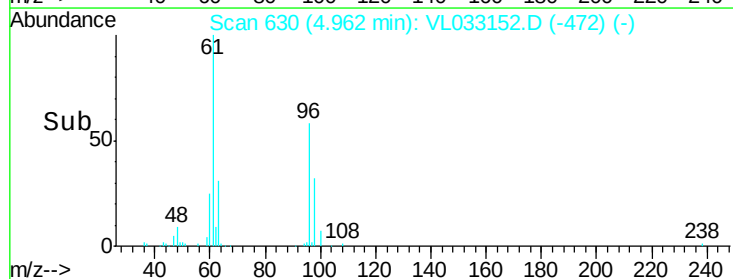
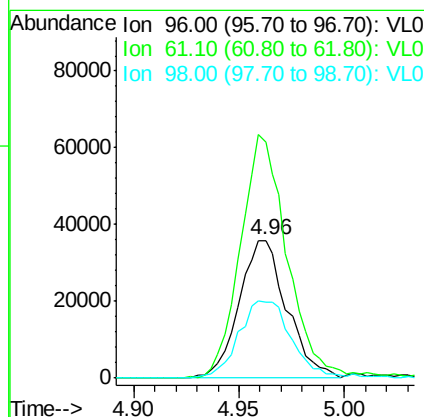
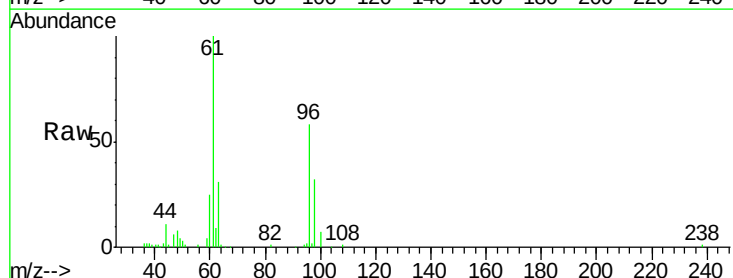
RT: 4.96 min Scan# 630

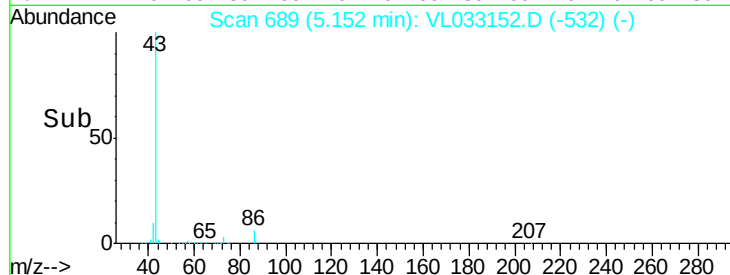
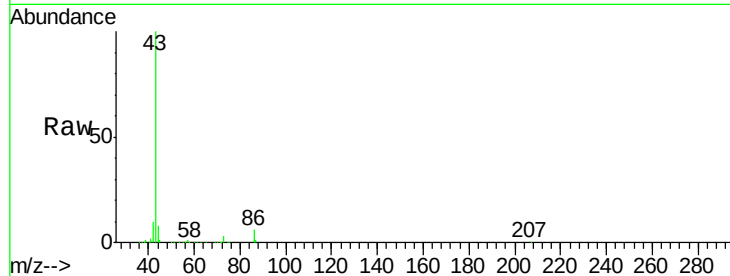
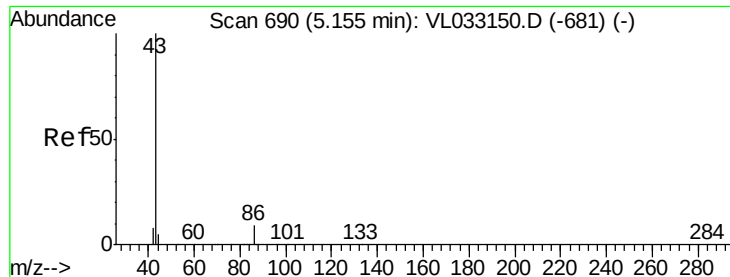
Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	96	Resp:	56376
Ion Ratio	Lower	Upper	
96	100		
61	170.5	134.5	201.7
98	55.1	50.2	75.2





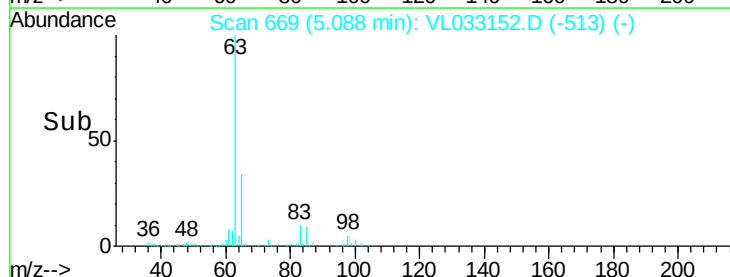
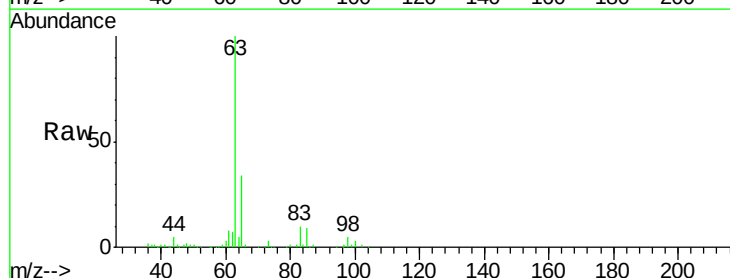
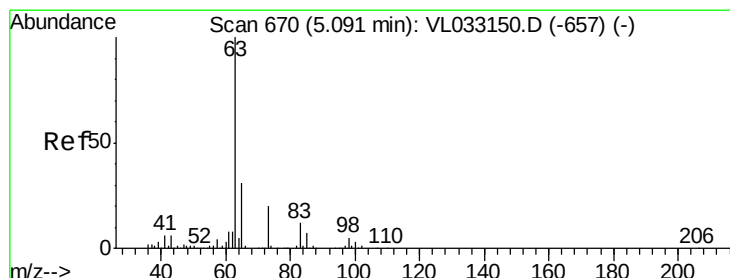
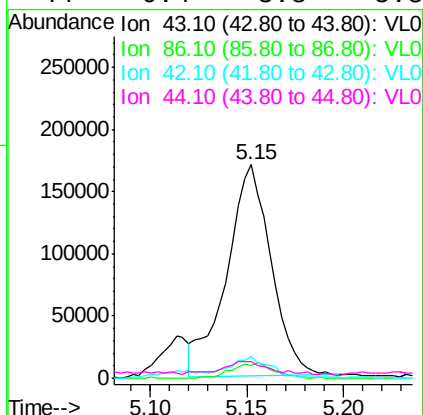
#23
 Vinyl Acetate
 Concen: 0.825 ppbv
 RT: 5.15 min Scan# 689
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tot Ion	43	Resp	271761
Ion Ratio	Lower	Upper	
43	100		
86	5.9	6.2	9.4#
42	10.0	7.7	11.5
44	6.4	3.8	5.8#

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

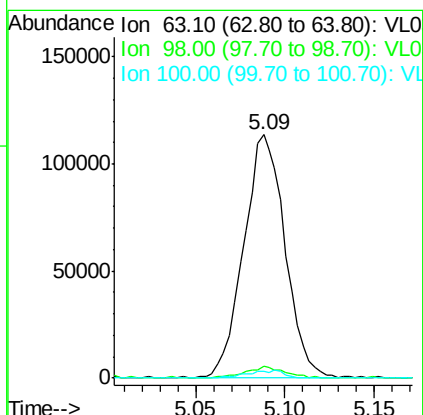
Manual Integrations
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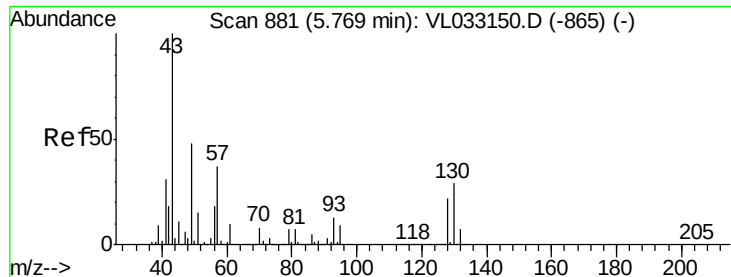
MMDadoda
 2/5/2019 10:27:10 AM



#24
 1,1-Dichloroethane
 Concen: 0.837 ppbv
 RT: 5.09 min Scan# 669
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	63	Resp	184095
Ion Ratio	Lower	Upper	
63	100		
98	5.1	2.3	6.9
100	2.8	1.3	3.9





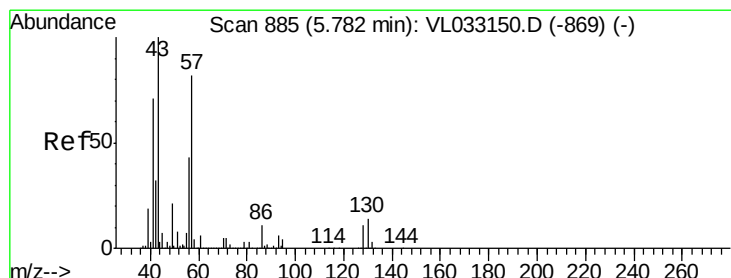
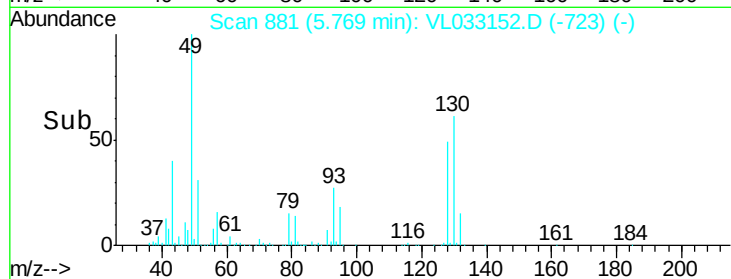
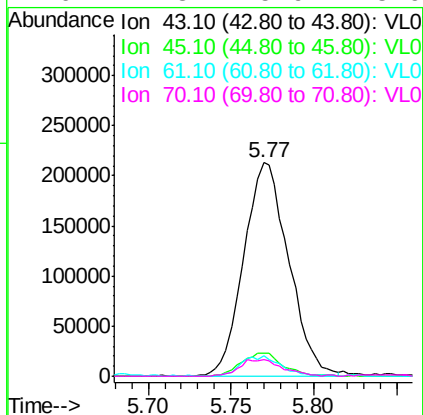
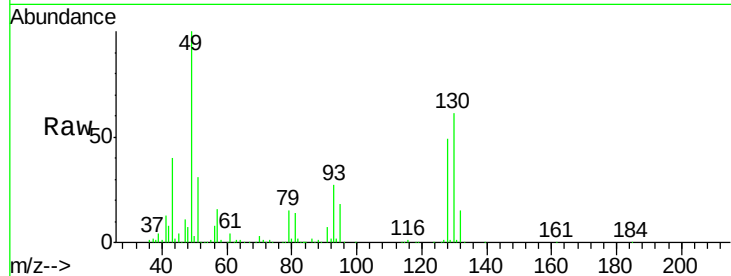
#25
Ethyl Acetate
Concen: 0.983 ppbv
RT: 5.77 min Scan# 881
Delta R.T. 0.01 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ion	Ratio	Resp	Lower	Upper
43	100				
45	10.4	8.0	12.0		
61	8.8	7.4	11.2		
70	7.3	5.9	8.9		

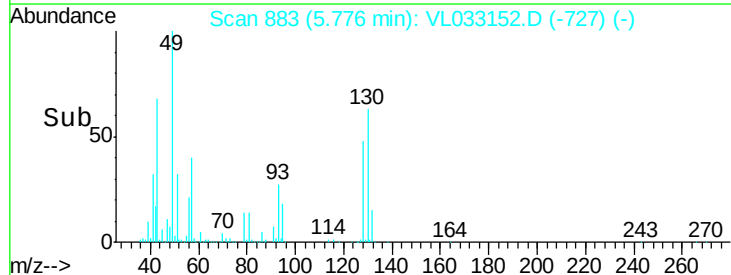
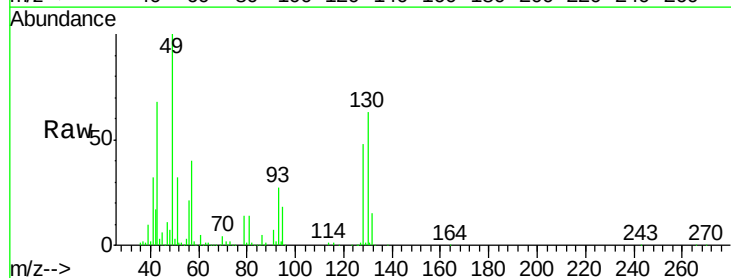
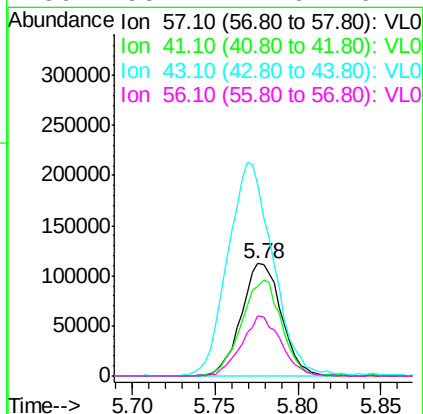
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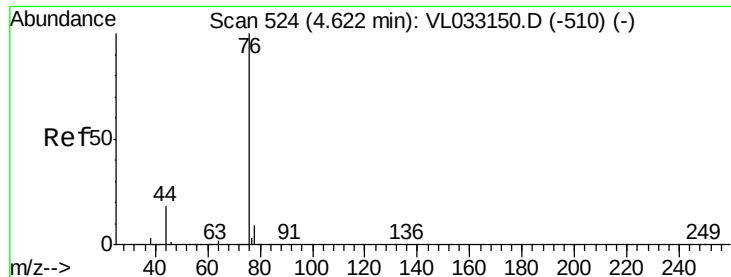
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#26
Hexane
Concen: 0.945 ppbv
RT: 5.78 min Scan# 883
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	86.5	69.5	104.3		
43	217.1	175.5	263.3		
56	53.1	41.6	62.4		





#27

Carbon Disulfide

Concen: 0.818 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

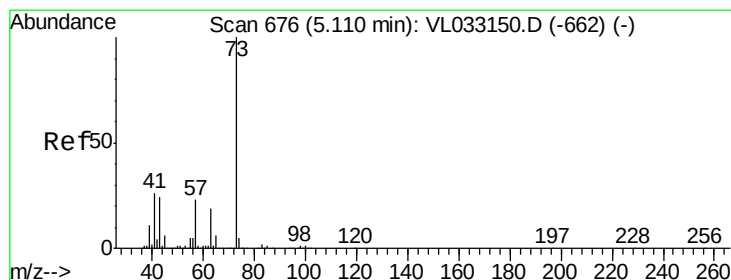
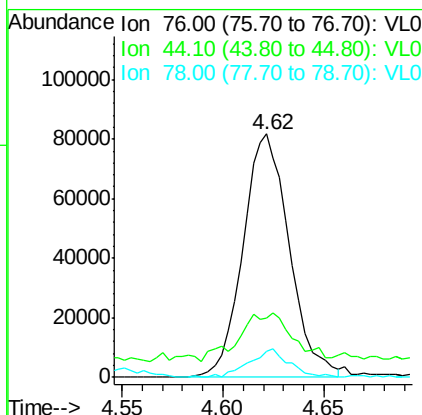
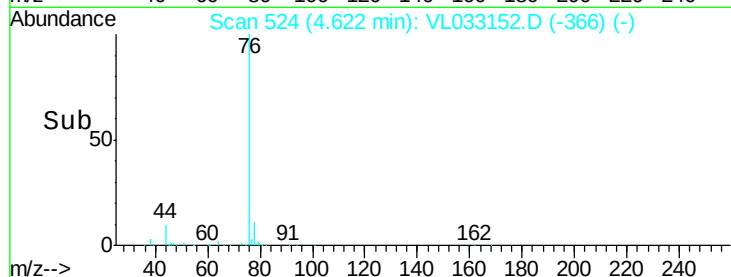
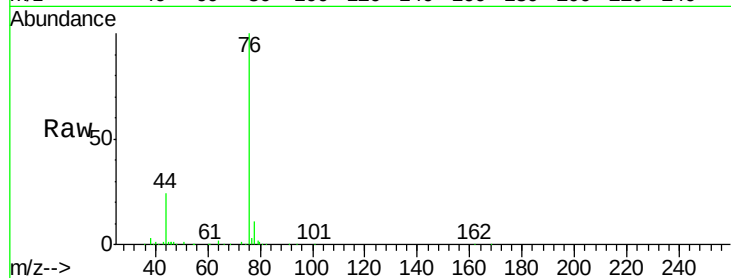
ClientSampleId :

VSTDIC001

Tot Ion:	76	Resp:	131410
Ion	Ratio	Lower	Upper
76	100		
44	28.6	17.1	25.7#
78	10.8	7.2	10.8#

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



#28

Methyl tert-Butyl Ether

Concen: 0.828 ppbv

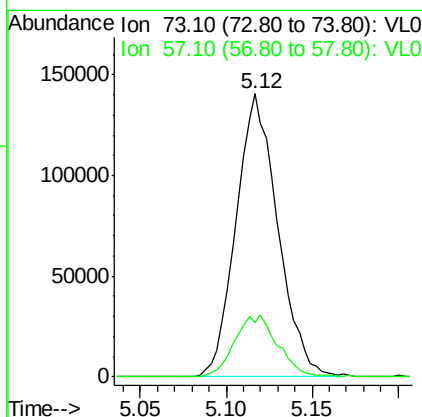
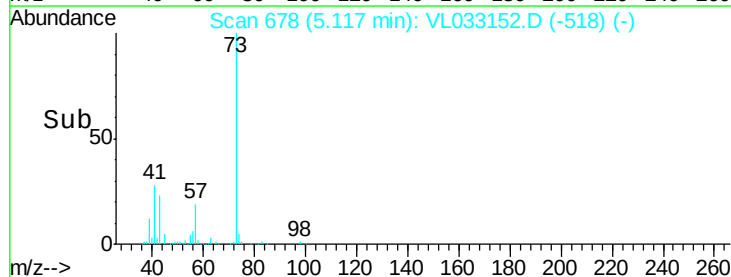
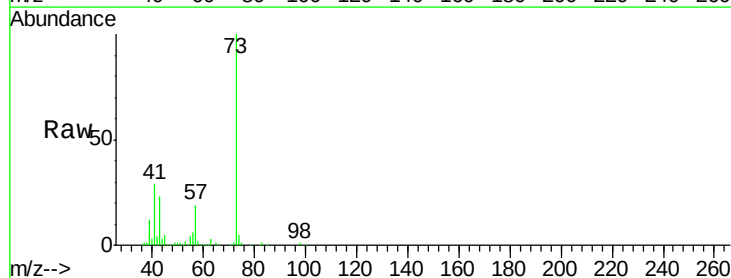
RT: 5.12 min Scan# 678

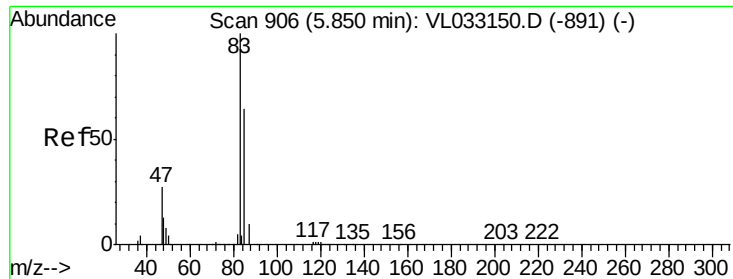
Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	73	Resp:	236751
Ion	Ratio	Lower	Upper
73	100		
57	22.6	18.3	27.5





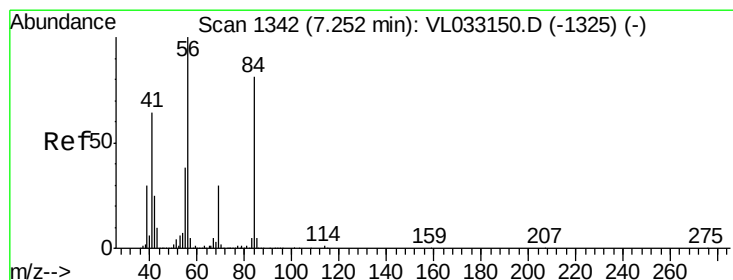
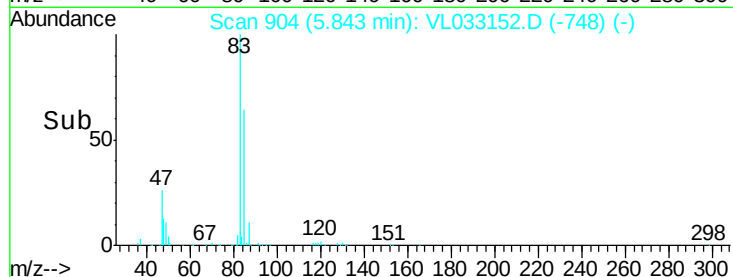
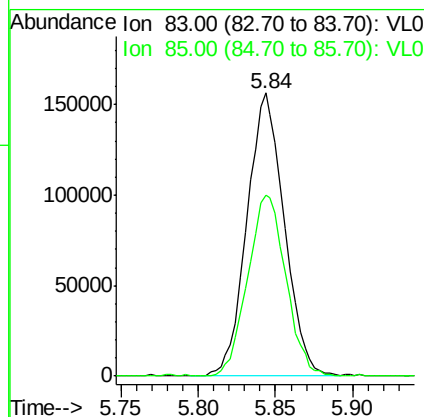
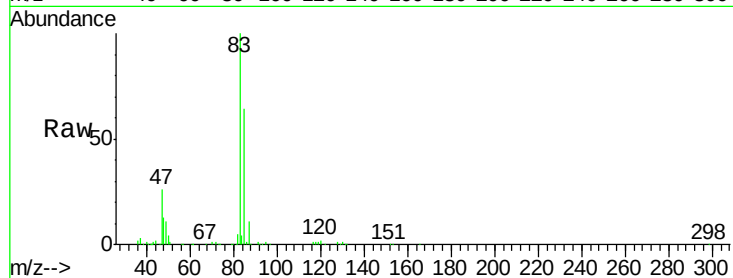
#29
Chloroform
Concen: 0.977 ppbv
RT: 5.84 min Scan# 904
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	83	Resp	262733
Ion Ratio	100	Lower	Upper
85	63.5	51.6	77.4

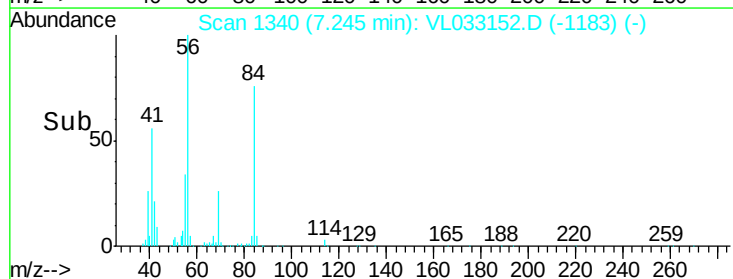
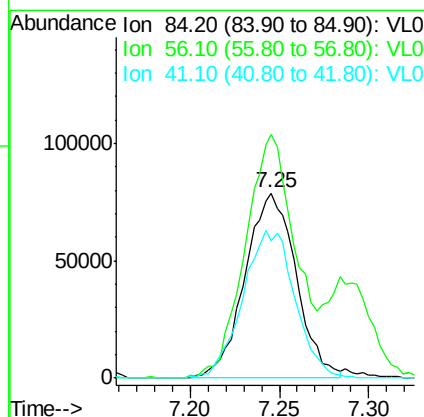
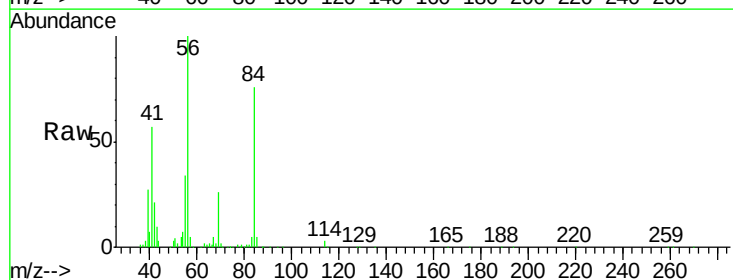
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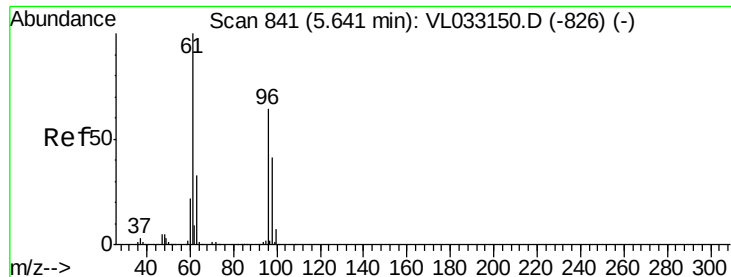
MMDadoda
2/5/2019 10:27:10 AM



#30
Cyclohexane
Concen: 1.021 ppbv
RT: 7.25 min Scan# 1340
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion	84	Resp	157558
Ion Ratio	100	Lower	Upper
56	176.9	109.0	163.4#
41	81.4	65.3	97.9





#31

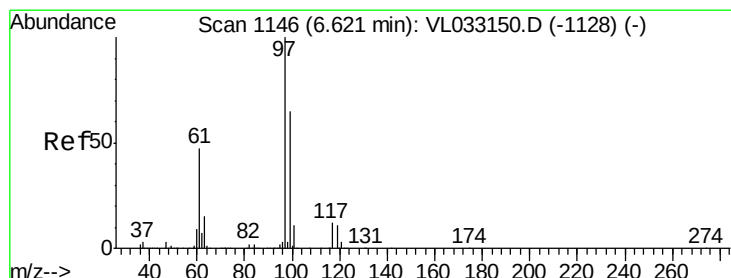
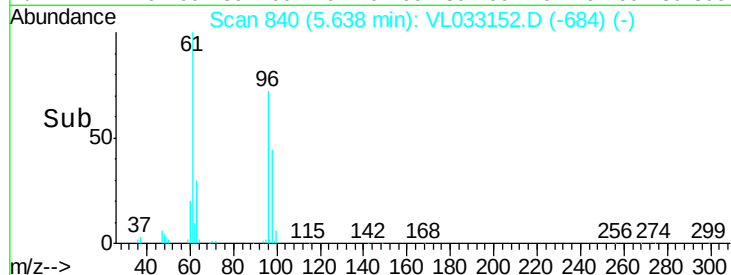
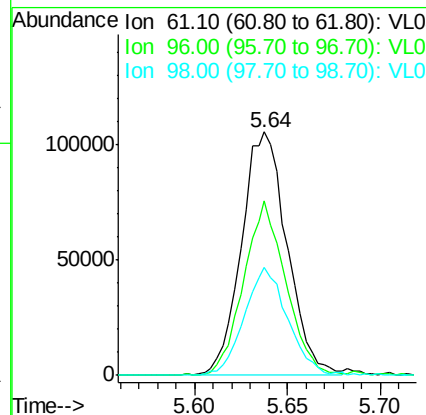
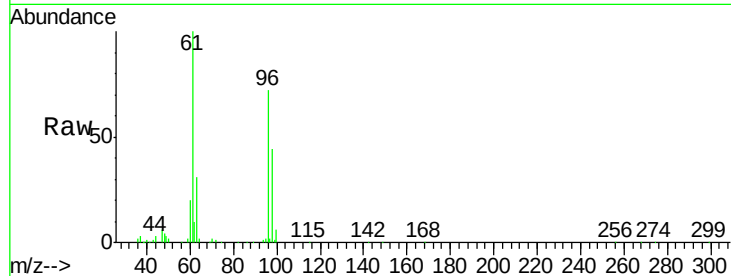
cis-1,2-Dichloroethene
Concen: 0.990 ppbv
RT: 5.64 min Scan# 840
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
61	100		
96	71.5	53.3	79.9
98	43.7	33.7	50.5

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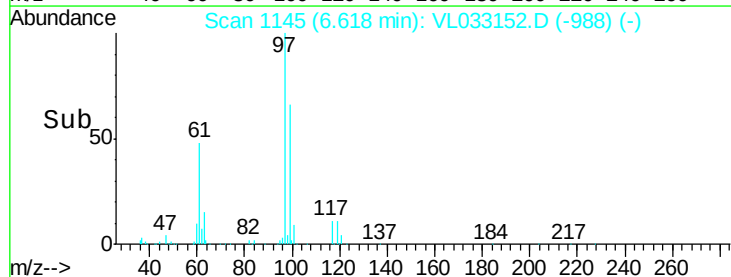
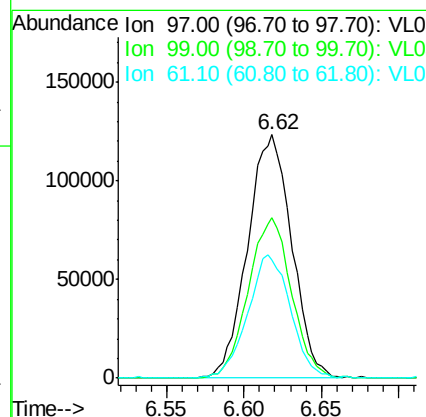
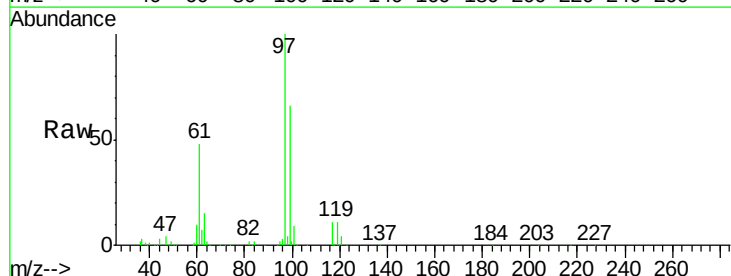
MMDadoda
2/5/2019 10:27:10 AM

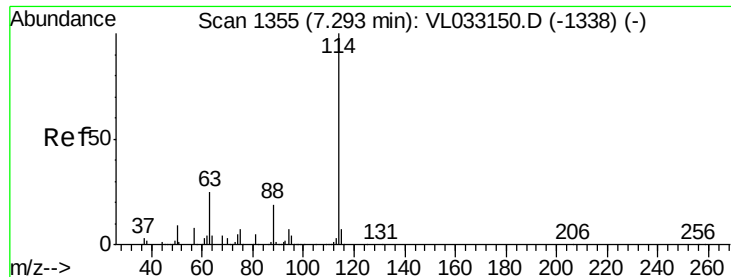


#32

1,1,1-Trichloroethane
Concen: 0.881 ppbv
RT: 6.62 min Scan# 1145
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
97	100		
99	64.6	65.1	97.7#
61	49.2	47.7	71.5





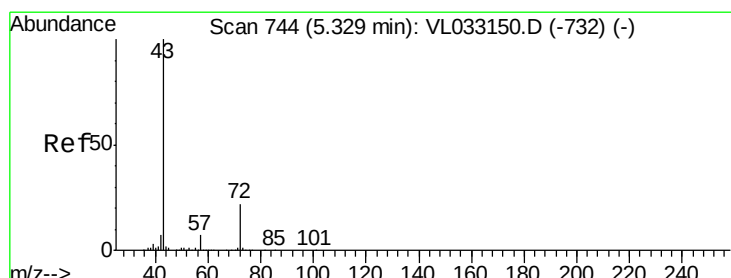
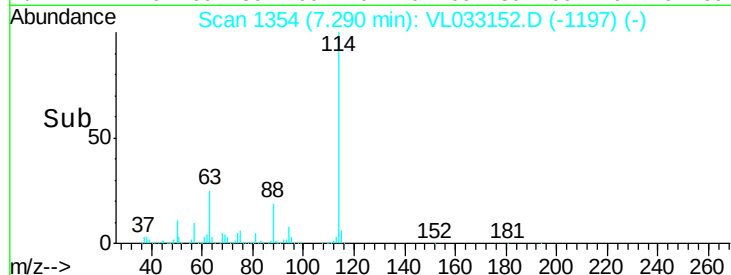
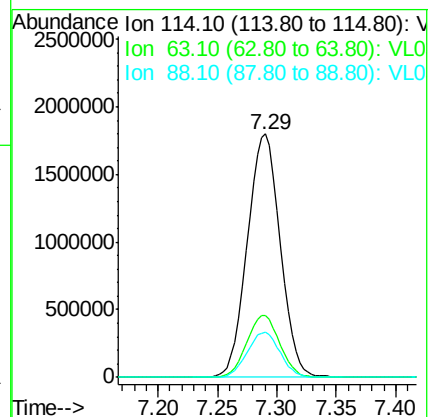
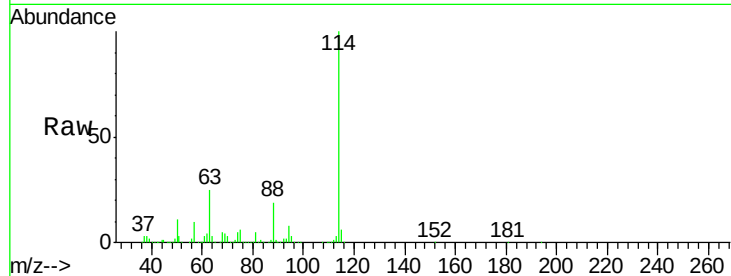
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.29 min Scan# 1354
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

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

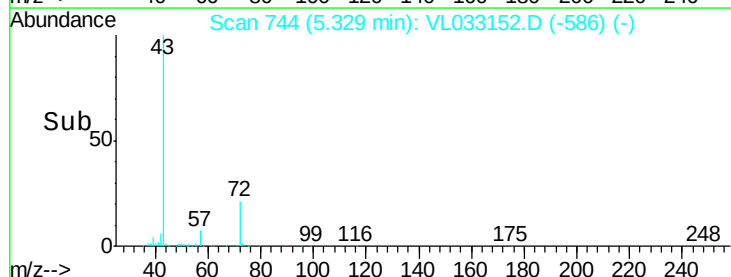
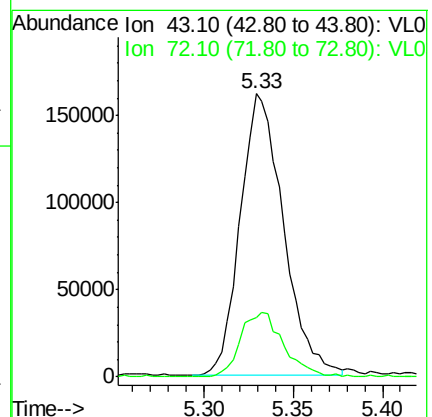
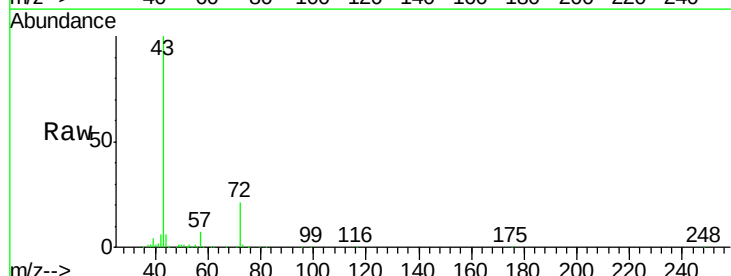
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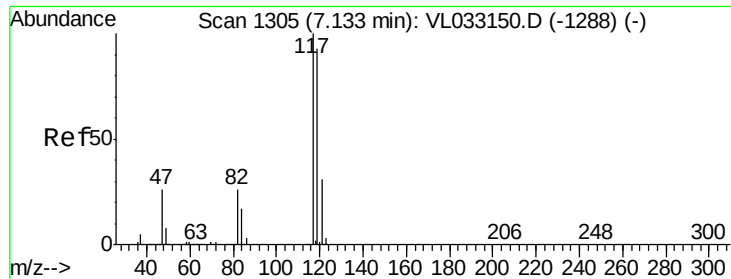
MMDadoda
 2/5/2019 10:27:10 AM



#34
 2-Butanone
 Concen: 1.038 ppbv
 RT: 5.33 min Scan# 744
 Delta R.T. 0.01 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.3	17.9	26.9





#35

Carbon Tetrachloride

Concen: 0.924 ppbv

RT: 7.13 min Scan# 1304

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

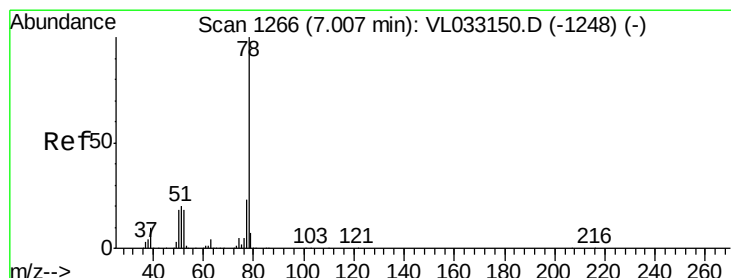
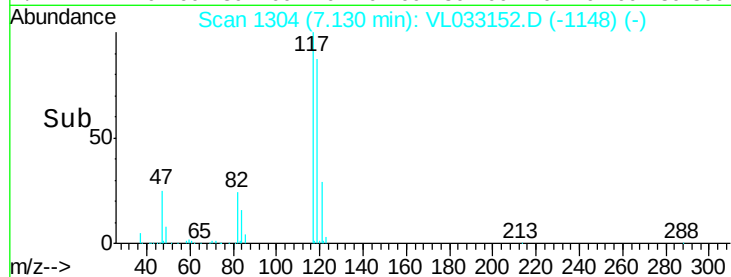
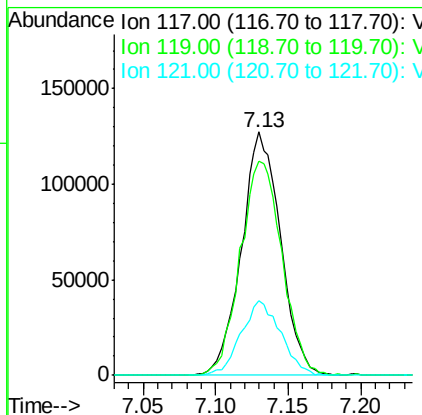
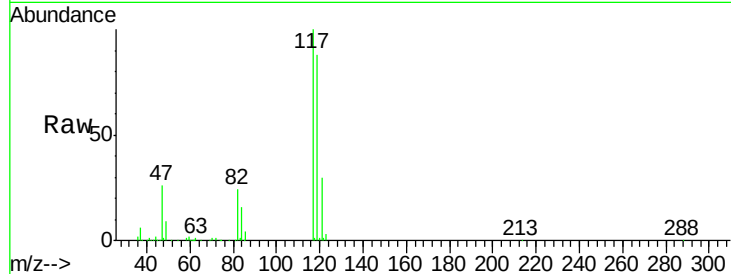
ClientSampleId :

VSTDIC001

Tot Ion	Ratio	Lower	Upper
117	100		
119	87.9	76.6	114.8
121	30.5	25.0	37.4

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



#36

Benzene

Concen: 0.981 ppbv

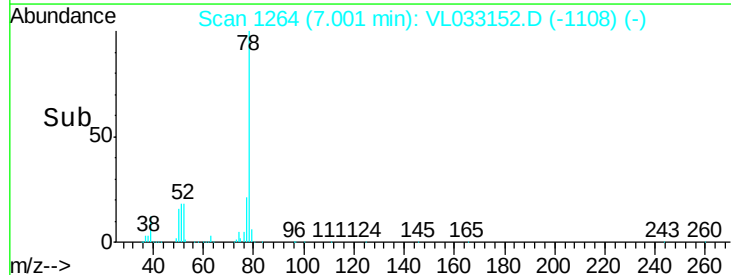
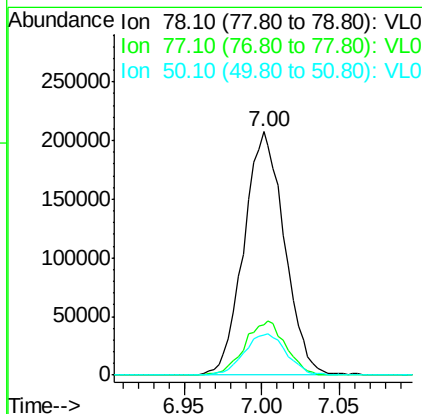
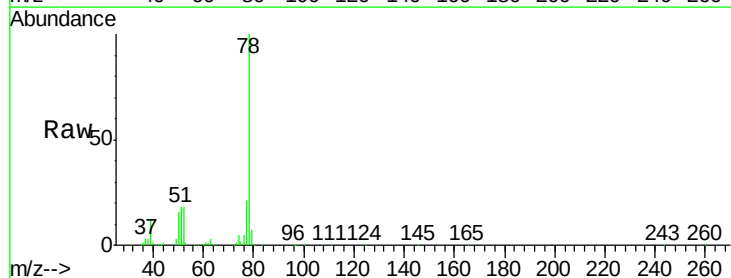
RT: 7.00 min Scan# 1264

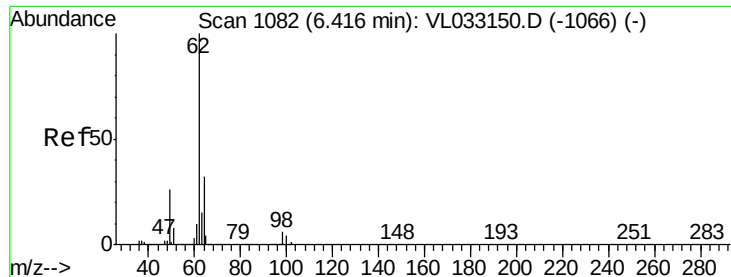
Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.7	17.8	26.6
50	16.4	14.7	22.1





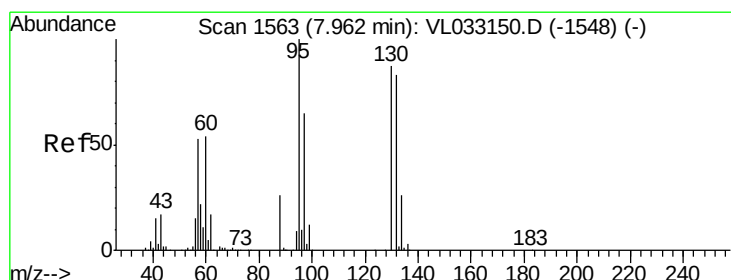
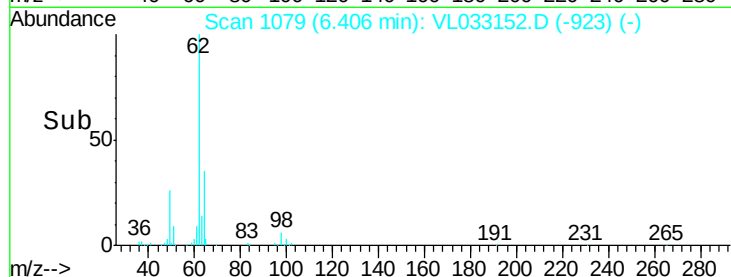
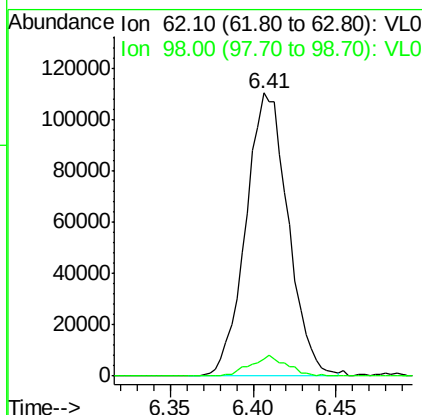
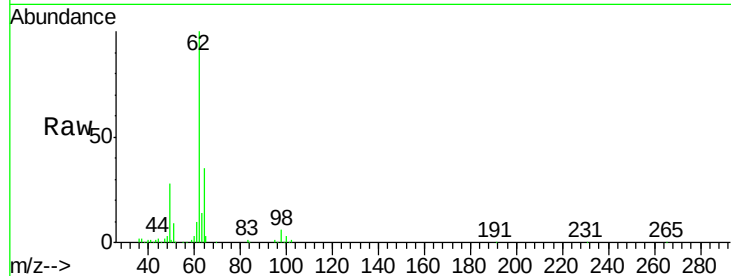
#37
 1,2-Dichloroethane
 Concen: 0.998 ppbv
 RT: 6.41 min Scan# 1079
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
62	100	196144		
98	6.5	5.3	7.9	

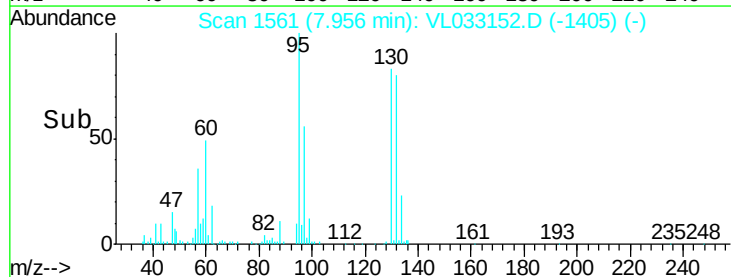
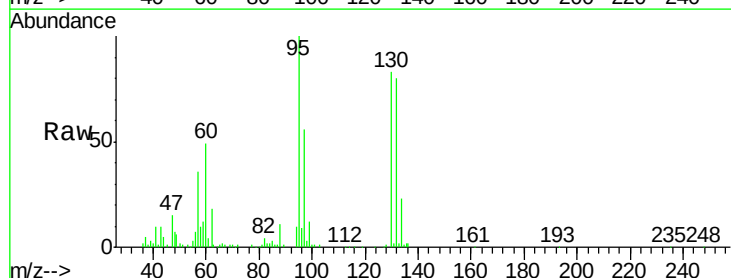
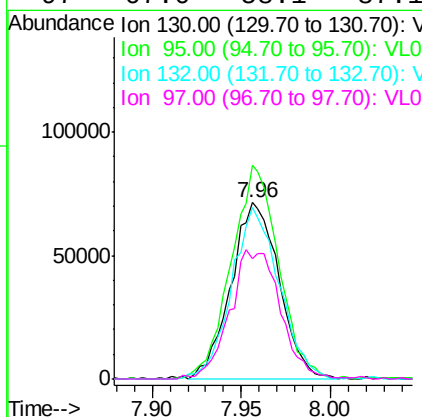
Manual Integrations
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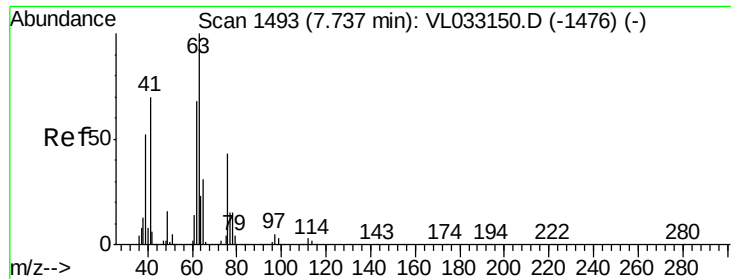
MMDadoda
 2/5/2019 10:27:10 AM



#38
 Trichloroethene
 Concen: 0.863 ppbv
 RT: 7.96 min Scan# 1561
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Resp	Lower	Upper
130	100	134195		
95	119.5	91.6	137.4	
132	98.5	79.0	118.4	
97	67.0	58.1	87.1	





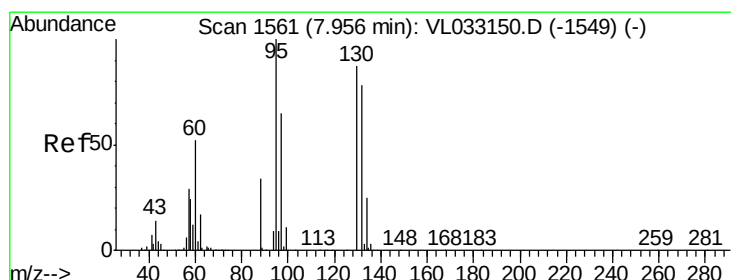
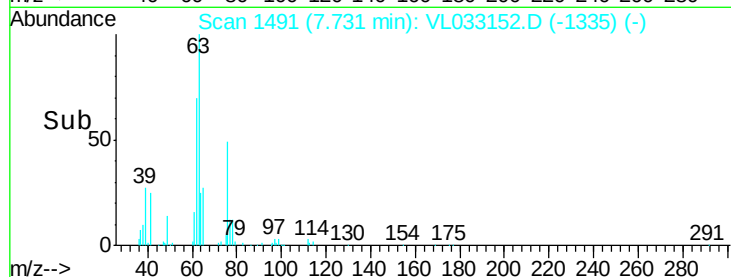
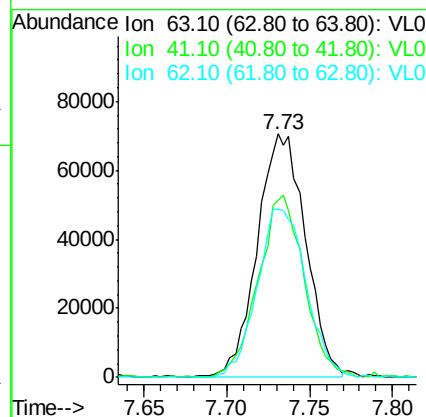
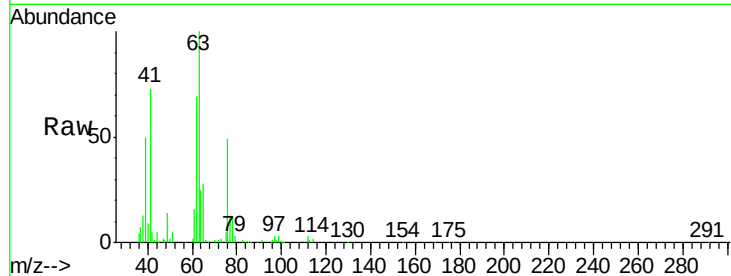
#39
 1,2-Dichloropropane
 Concen: 1.008 ppbv
 RT: 7.73 min Scan# 1491
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
63	100		
41	73.0	53.2	79.8
62	69.1	54.4	81.6

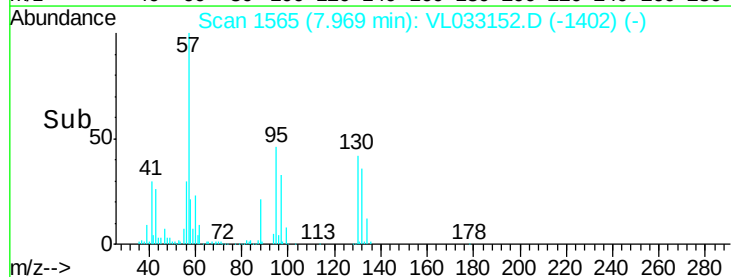
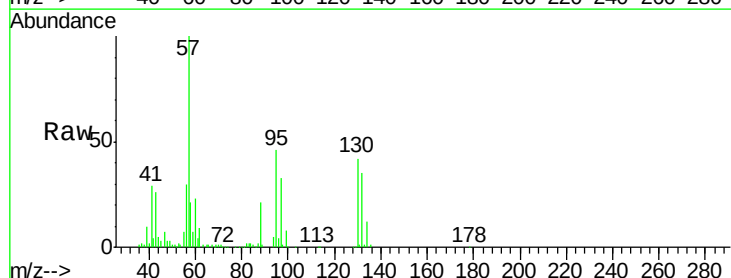
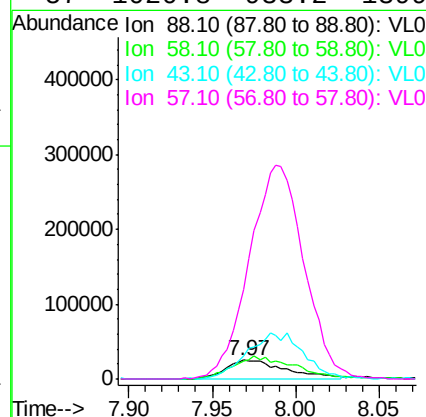
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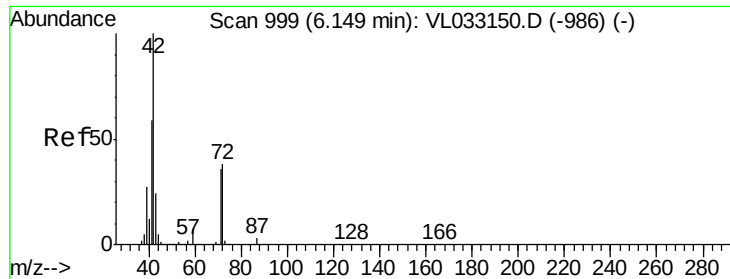
MMDadoda
 2/5/2019 10:27:10 AM



#40
 1,4-Dioxane
 Concen: 1.282 ppbv m
 RT: 7.97 min Scan# 1565
 Delta R.T. 0.02 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
88	100		
58	127.1	103.4	155.2
43	232.2	210.8	316.2
57	1020.8	933.2	1399.8





#41

Tetrahydrofuran

Concen: 0.963 ppbv

RT: 6.16 min Scan# 1003

Delta R.T. 0.02 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

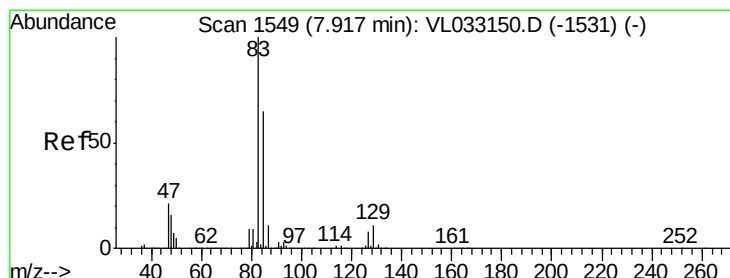
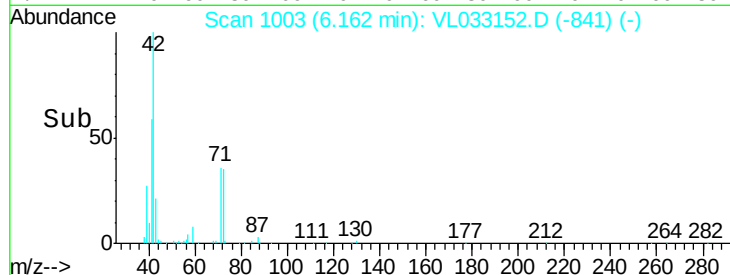
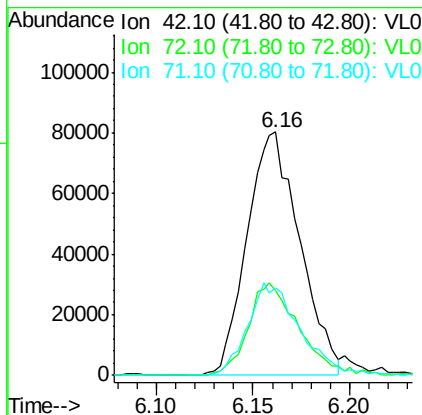
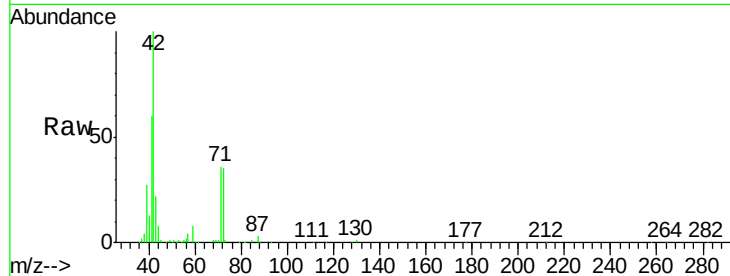
ClientSampleId :

VSTDIC001

Tot Ion:	42	Resp:	152212
Ion	Ratio	Lower	Upper
42	100		
72	37.0	30.2	45.4
71	37.9	28.8	43.2

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



#42

Bromodichloromethane

Concen: 0.986 ppbv

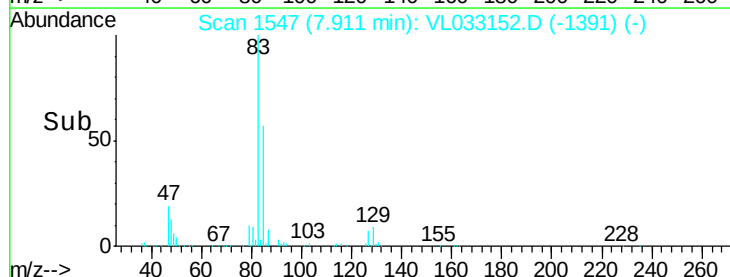
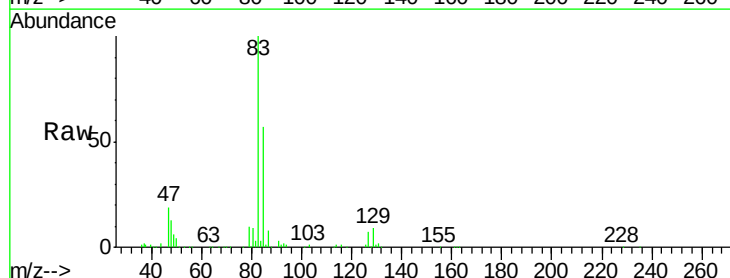
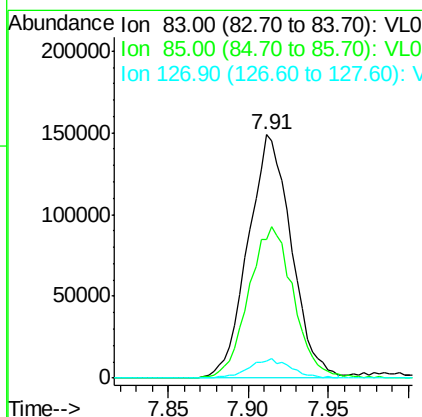
RT: 7.91 min Scan# 1547

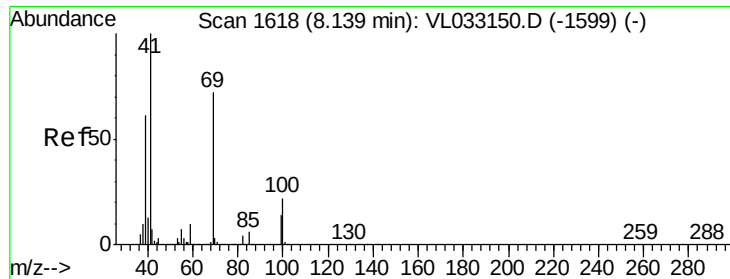
Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	83	Resp:	276368
Ion	Ratio	Lower	Upper
83	100		
85	57.1	51.3	76.9
127	6.9	6.1	9.1





#43

Methyl Methacrylate

Concen: 1.089 ppbv

RT: 8.14 min Scan# 1618

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

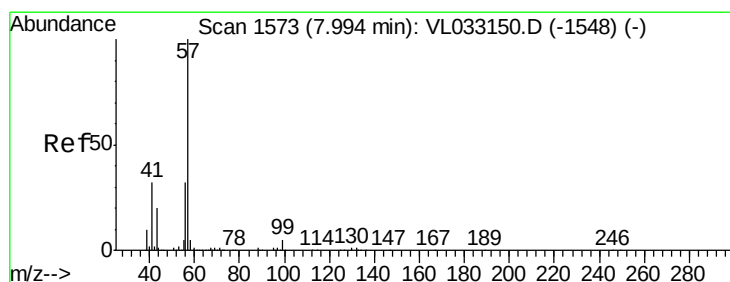
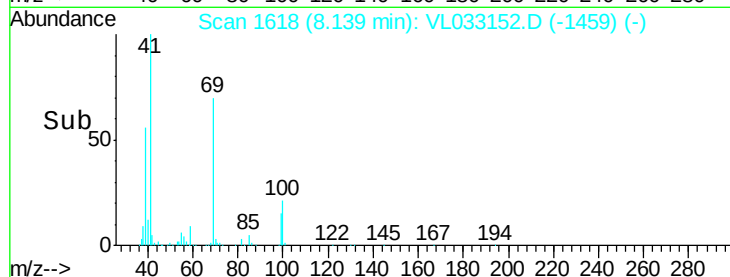
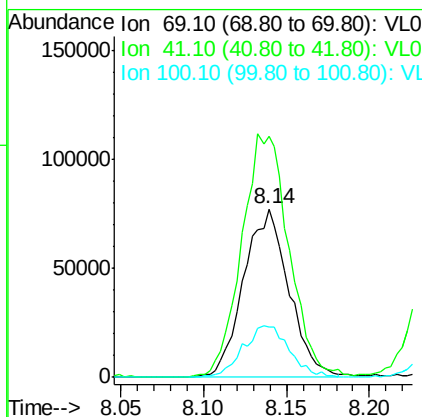
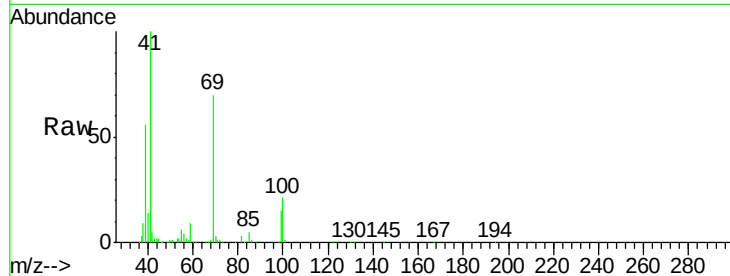
ClientSampleID :

VSTDIC001

Tot Ion:	69	Resp:	147330
Ion	Ratio	Lower	Upper
69	100		
41	150.6	118.4	177.6
100	31.2	26.5	39.7

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



#44

2,2,4-Trimethylpentane

Concen: 1.040 ppbv

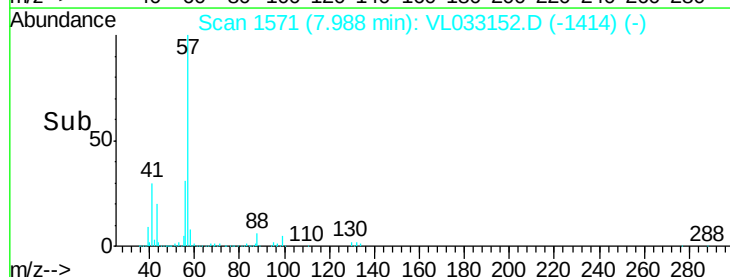
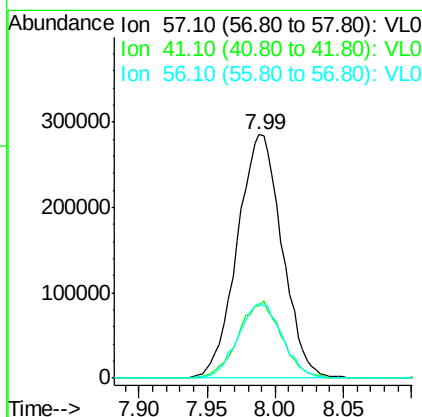
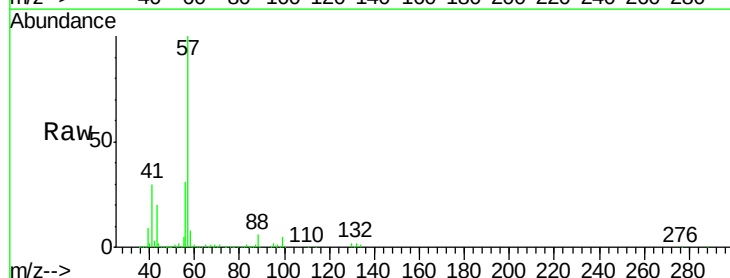
RT: 7.99 min Scan# 1571

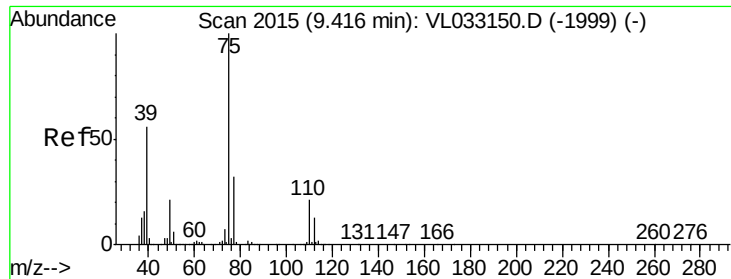
Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	57	Resp:	647734
Ion	Ratio	Lower	Upper
57	100		
41	30.8	24.6	36.8
56	30.6	24.9	37.3





#45

t-1,3-Dichloropropene

Concen: 1.254 ppbv

RT: 9.41 min Scan# 2014

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 75 Resp: 204923

Ion Ratio Lower Upper

75 100

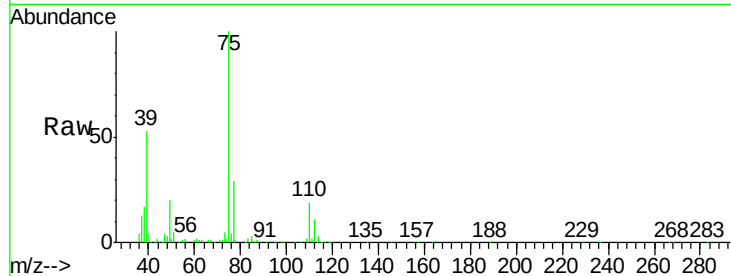
77 29.7 24.4 36.6

Manual Integrations

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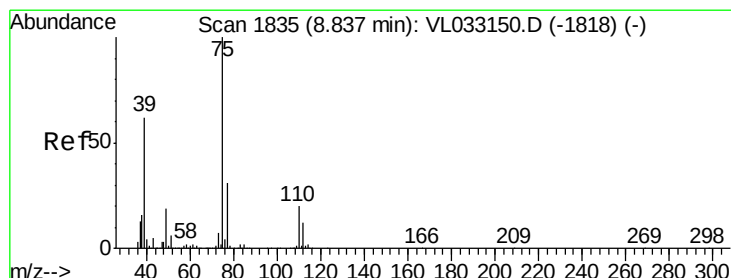
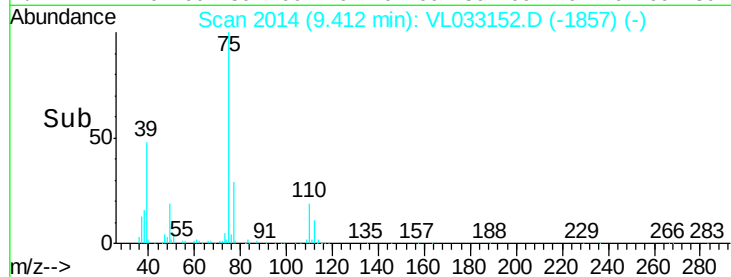
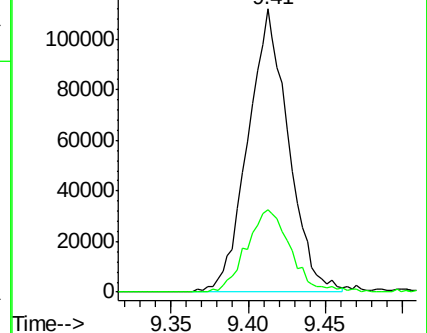
MMDadoda

2/5/2019 10:27:10 AM



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#46

cis-1,3-Dichloropropene

Concen: 1.247 ppbv

RT: 8.83 min Scan# 1834

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

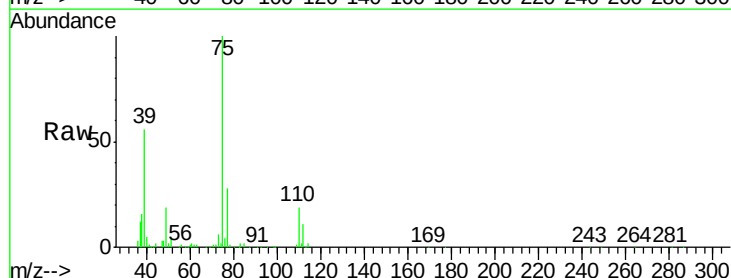
Tgt Ion: 75 Resp: 244397

Ion Ratio Lower Upper

75 100

39 55.5 51.4 77.2

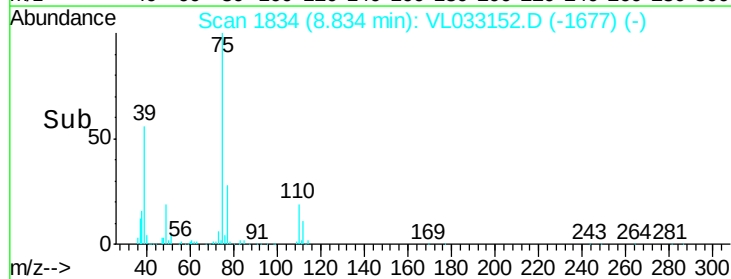
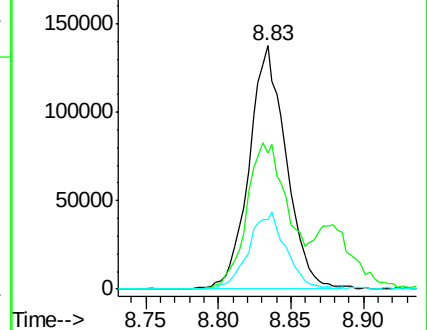
77 28.4 25.4 38.0

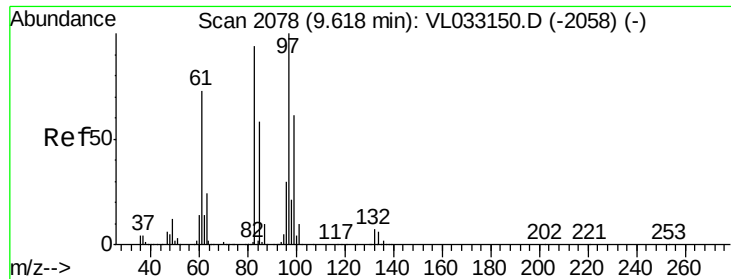


Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0





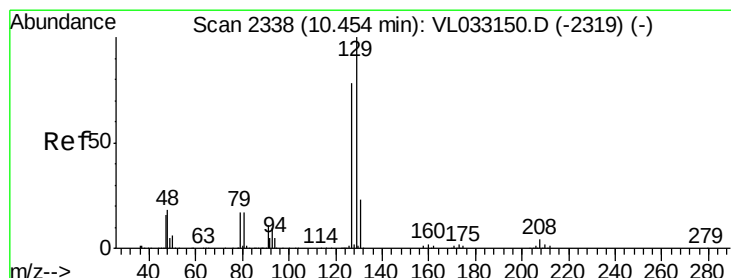
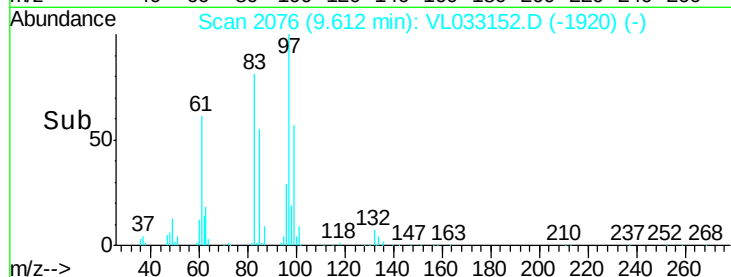
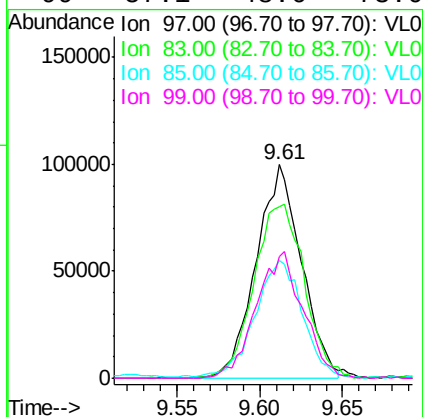
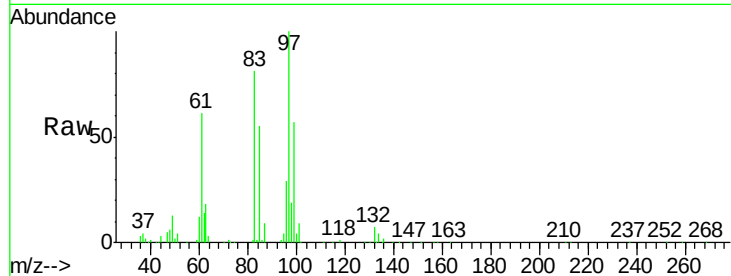
#47
 1,1,2-Trichloroethane
 Concen: 1.474 ppbv
 RT: 9.61 min Scan# 2076
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ion	Ratio	Resp	Lower	Upper
97	100		190218		
83	80.6	65.8	98.8		
85	54.1	44.7	67.1		
99	57.1	48.6	73.0		

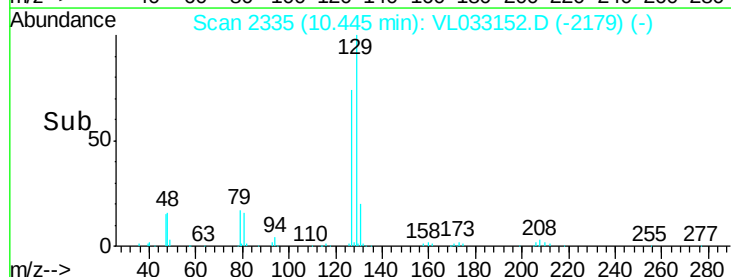
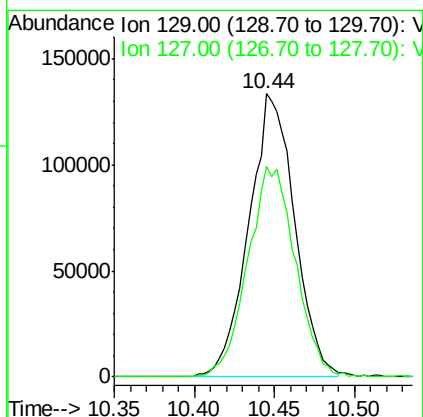
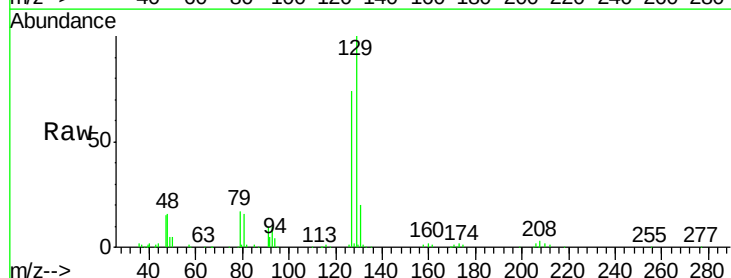
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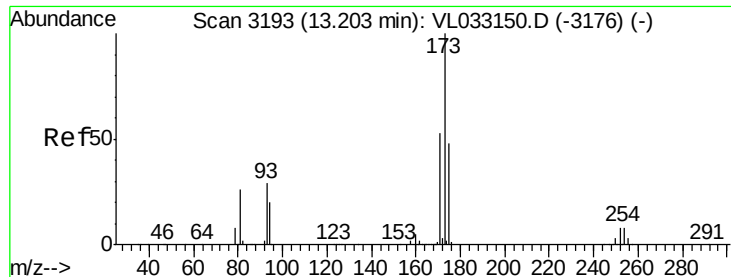
MMDadoda
 2/5/2019 10:27:10 AM



#48
 Dibromochloromethane
 Concen: 1.222 ppbv
 RT: 10.44 min Scan# 2335
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
129	100		262835		
127	77.3	39.3	117.9		





#49

Bromoform

Concen: 1.181 ppbv

RT: 13.20 min Scan# 3191

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

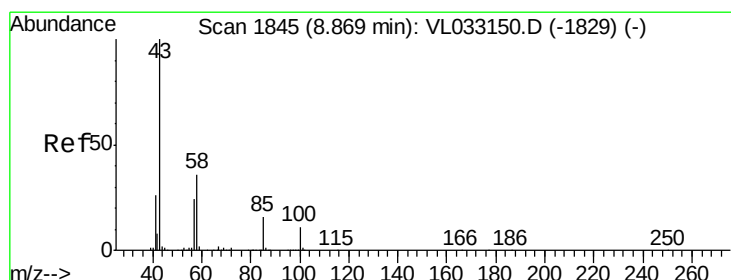
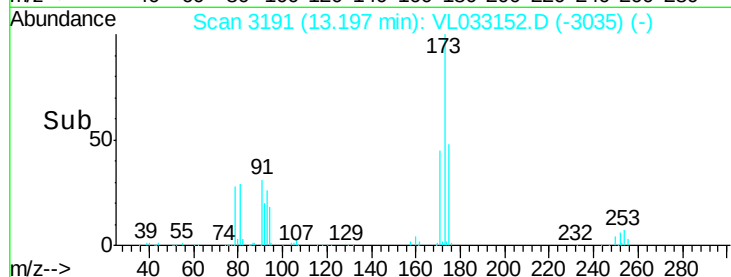
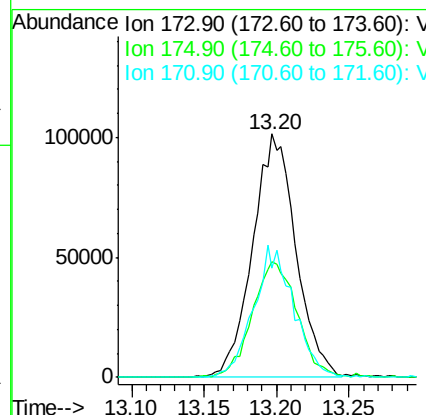
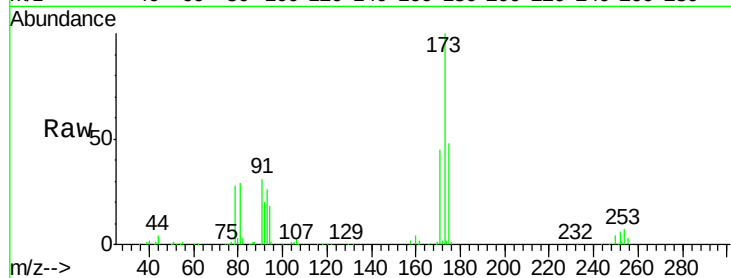
ClientSampleId :

VSTDIC001

Tot Ion:	173	Resp:	210818
Ion Ratio	Lower	Upper	
173	100		
175	49.5	39.3	58.9
171	50.2	41.8	62.6

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#50

4-Methyl-2-Pentanone

Concen: 1.534 ppbv

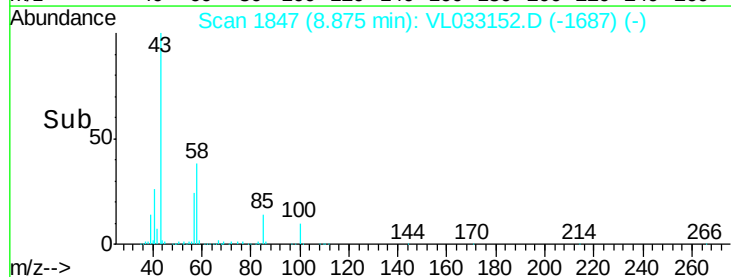
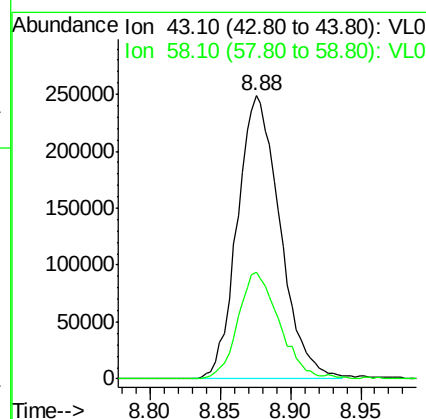
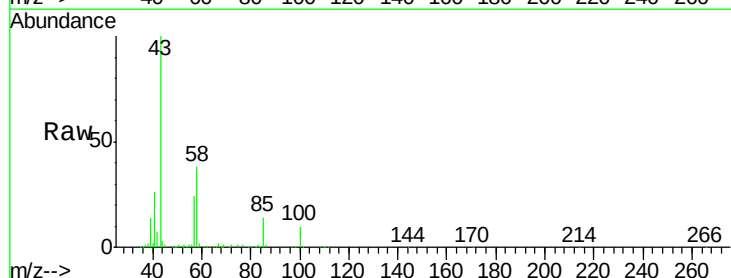
RT: 8.88 min Scan# 1847

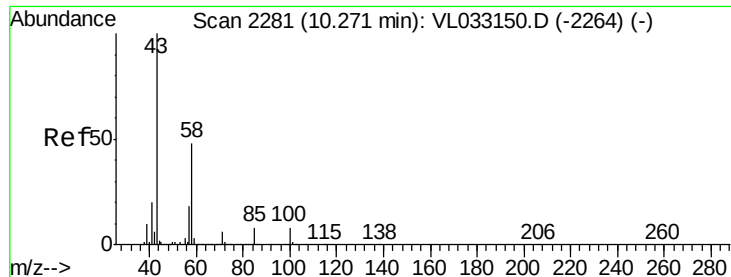
Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	43	Resp:	524422
Ion Ratio	Lower	Upper	
43	100		
58	37.3	28.7	43.1





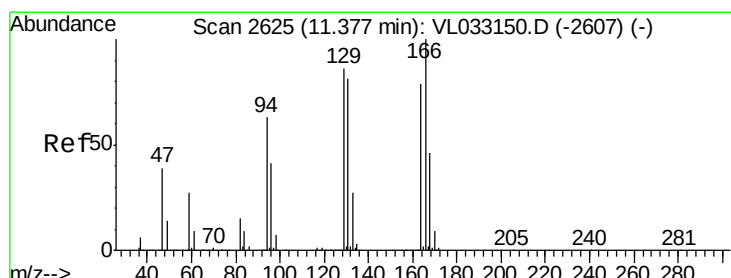
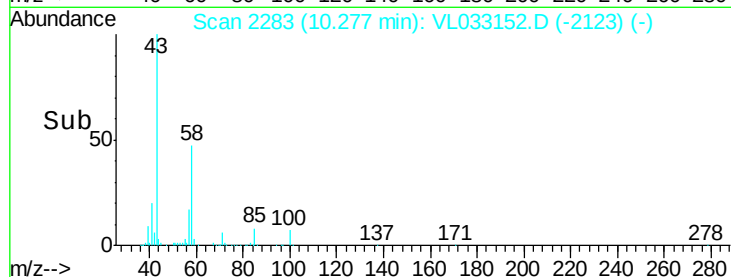
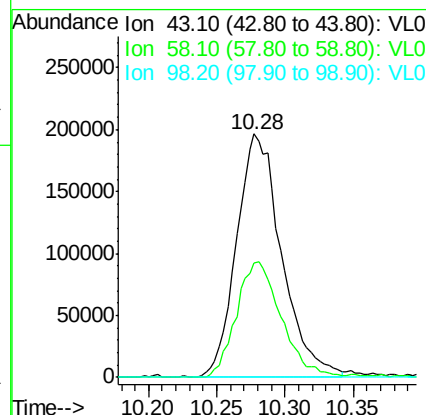
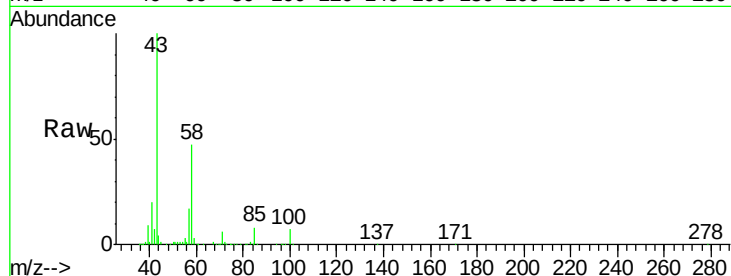
#51
2-Hexanone
Concen: 1.476 ppbv
RT: 10.28 min Scan# 2283
Delta R.T. 0.01 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
43	100		
58	48.7	39.4	59.2
98	0.2	0.1	0.1#

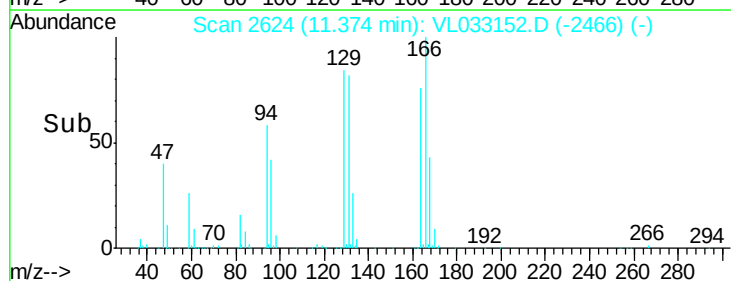
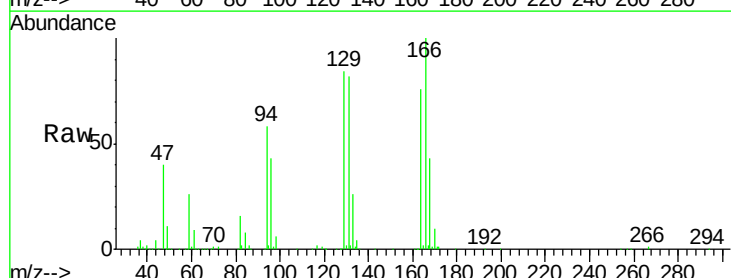
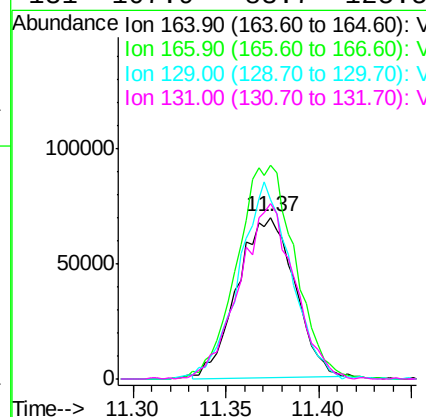
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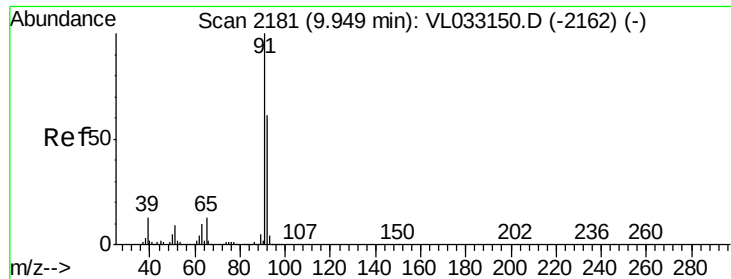
MMDadoda
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#52
Tetrachloroethene
Concen: 1.021 ppbv
RT: 11.37 min Scan# 2624
Delta R.T. 0.01 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
164	100		
166	131.2	98.6	148.0
129	112.4	86.3	129.5
131	107.9	83.7	125.5





#53

Toluene

Concen: 1.225 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 91 Resp: 541468

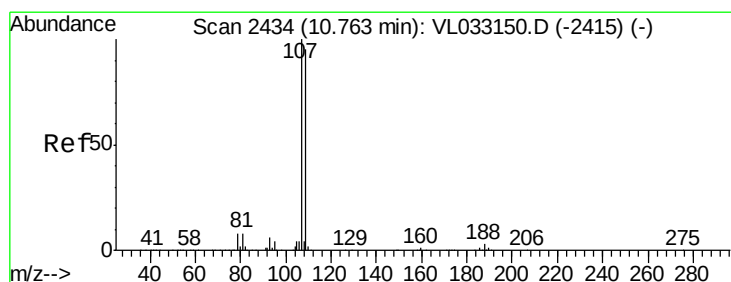
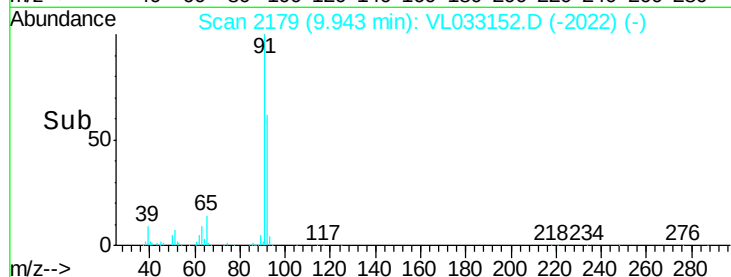
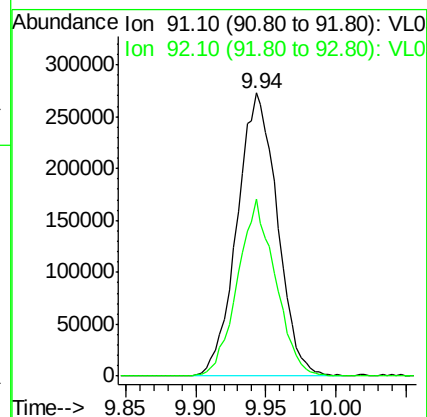
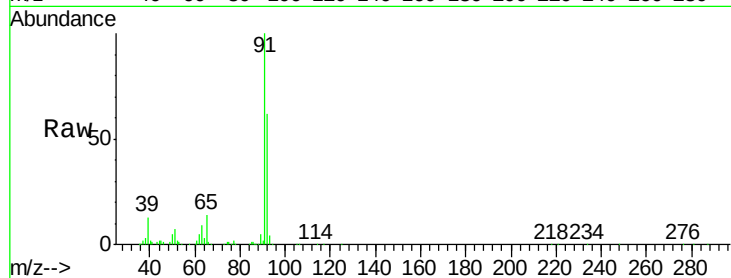
Ion Ratio Lower Upper

91 100

92 59.3 48.9 73.3

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#54

1,2-Dibromoethane

Concen: 1.144 ppbv

RT: 10.76 min Scan# 2433

Delta R.T. 0.01 min

Lab File: VL033152.D

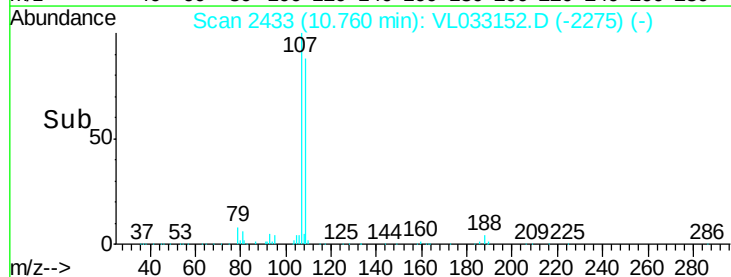
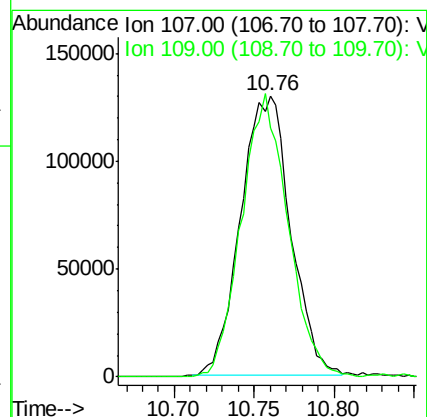
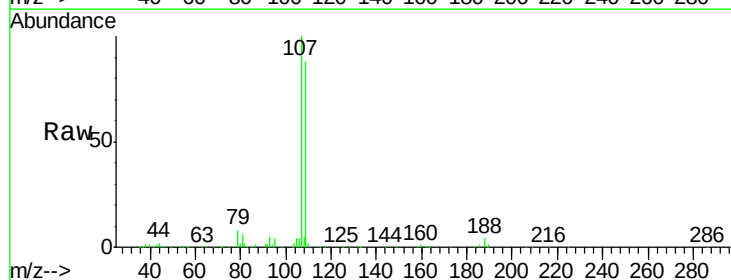
Acq: 4 Feb 2019 11:20

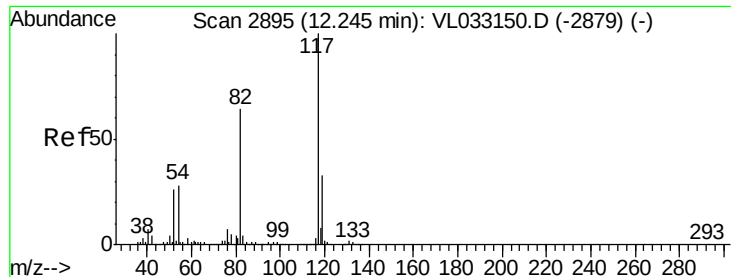
Tgt Ion: 107 Resp: 277723

Ion Ratio Lower Upper

107 100

109 88.4 74.7 112.1





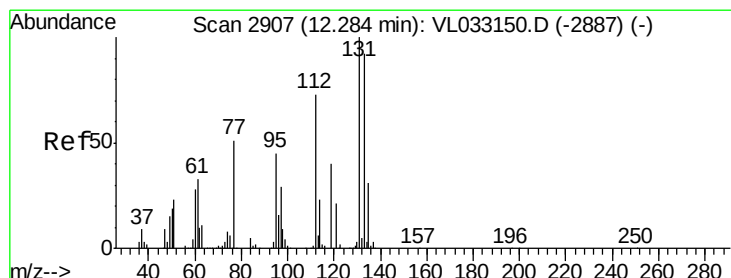
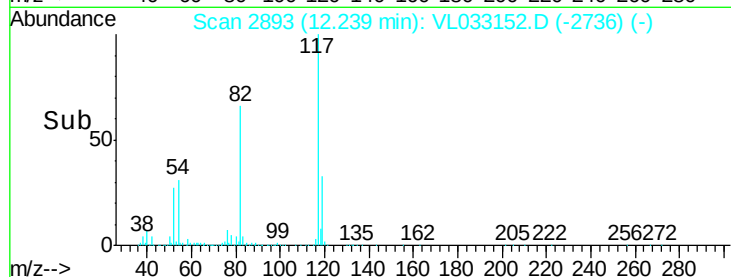
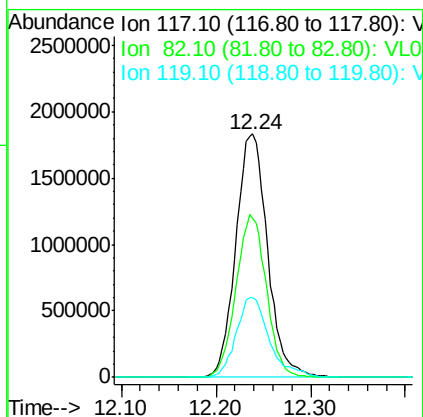
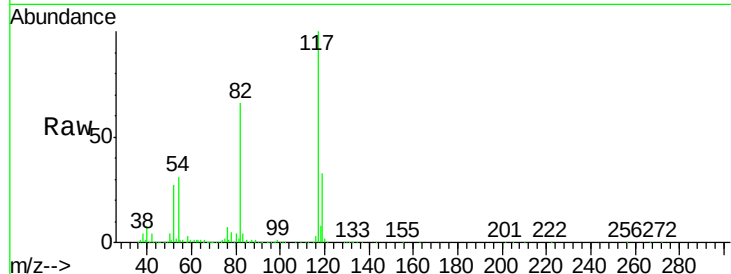
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion:117 Resp: 4270034
Ion Ratio Lower Upper
117 100
82 64.1 49.3 73.9
119 34.5 27.1 40.7

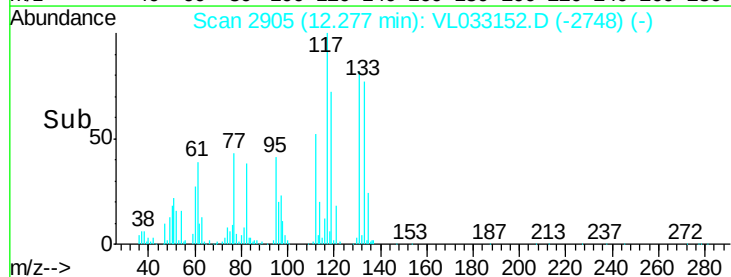
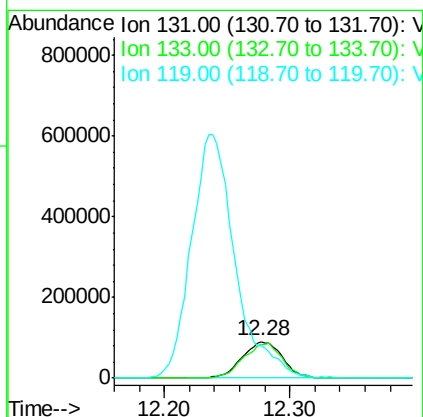
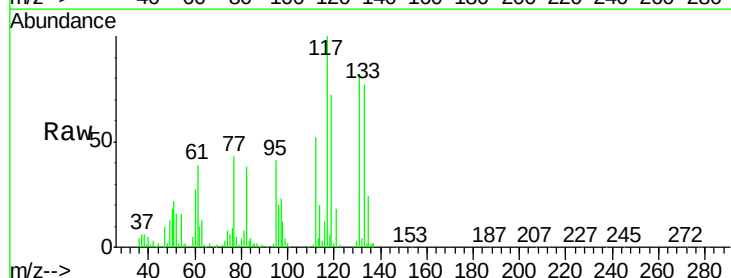
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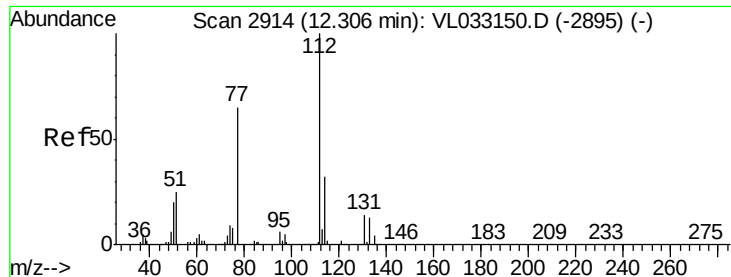
MMDadoda
2/5/2019 10:27:10 AM



#56
1,1,1,2-Tetrachloroethane
Concen: 1.060 ppbv
RT: 12.28 min Scan# 2905
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion:131 Resp: 201406
Ion Ratio Lower Upper
131 100
133 93.7 76.2 114.4
119 732.9 46.9 70.3#





#57

Chlorobenzene

Concen: 1.072 ppbv

RT: 12.30 min Scan# 2913

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

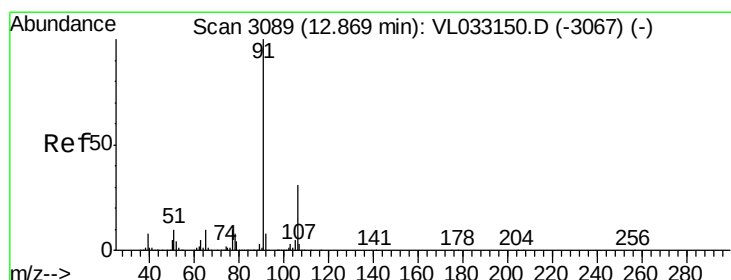
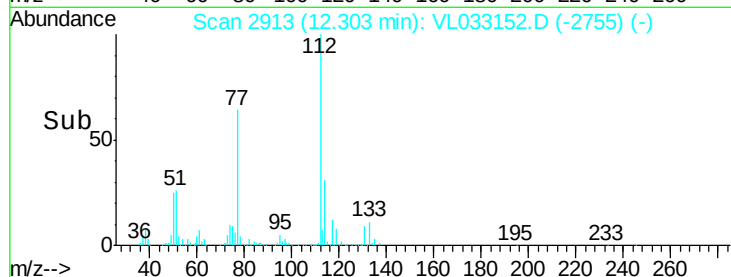
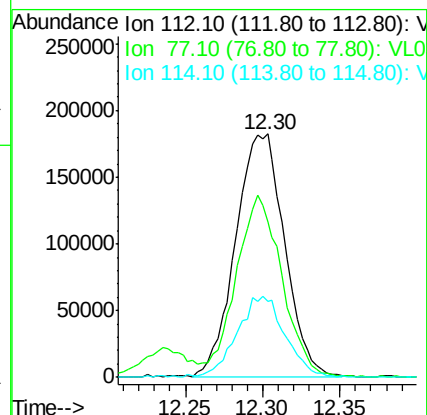
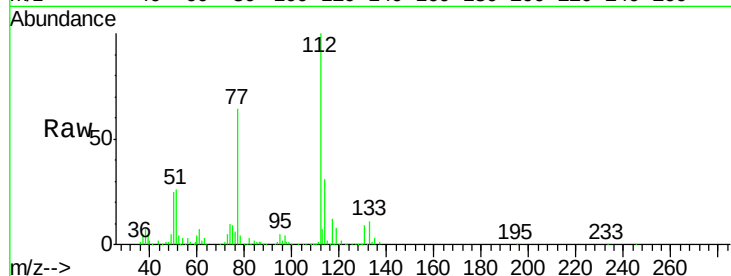
ClientSampleId :

VSTDIC001

Tot Ion:	112	Resp:	402897
Ion Ratio	Lower	Upper	
112	100		
77	63.2	52.8	79.2
114	30.7	29.7	36.3

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#58

Ethyl Benzene

Concen: 1.033 ppbv

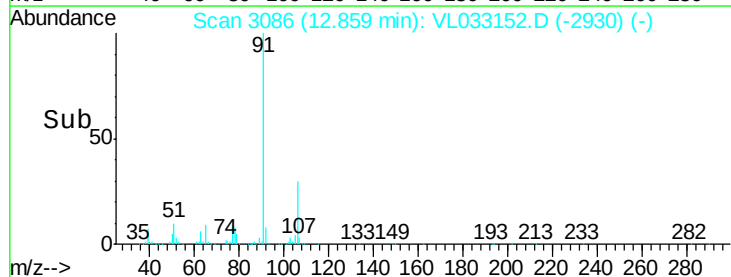
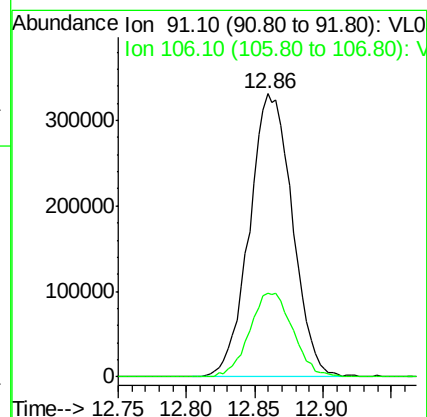
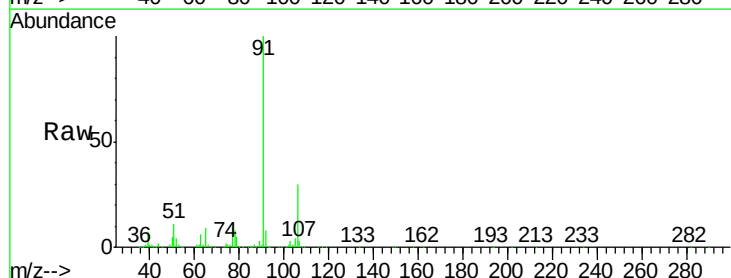
RT: 12.86 min Scan# 3086

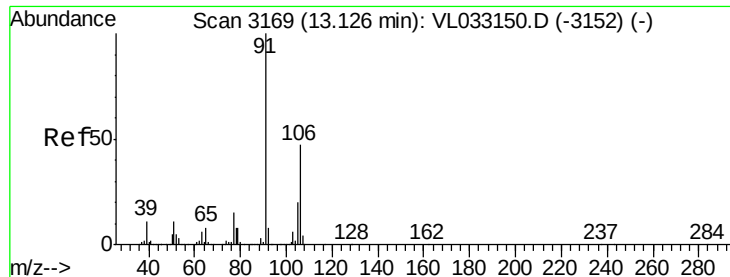
Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	91	Resp:	723765
Ion Ratio	Lower	Upper	
91	100		
106	29.5	24.7	37.1





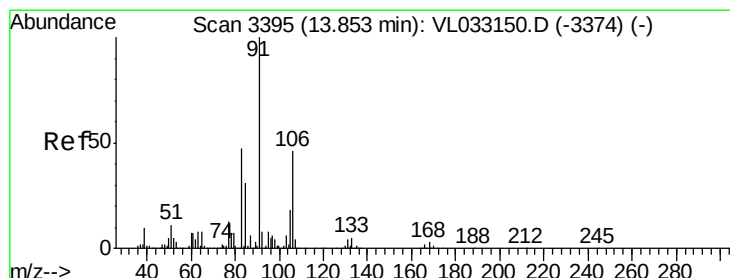
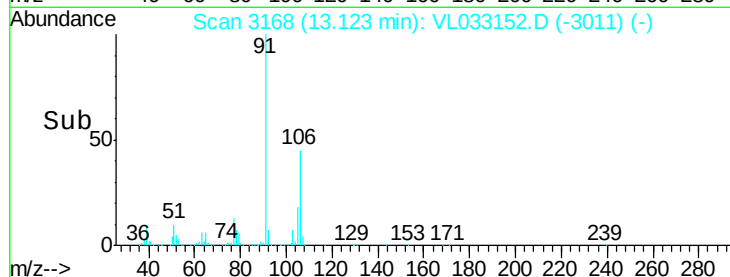
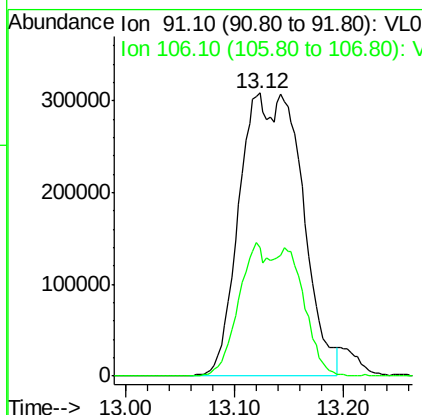
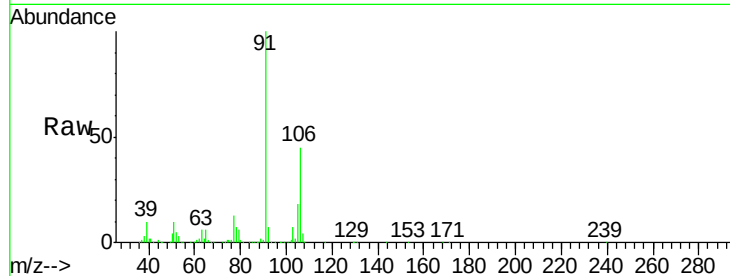
#59
m/p-Xylene
Concen: 2.144 ppbv m
RT: 13.12 min Scan# 3168
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion: 91 Resp: 1224624
Ion Ratio Lower Upper
91 100
106 44.9 37.6 56.4

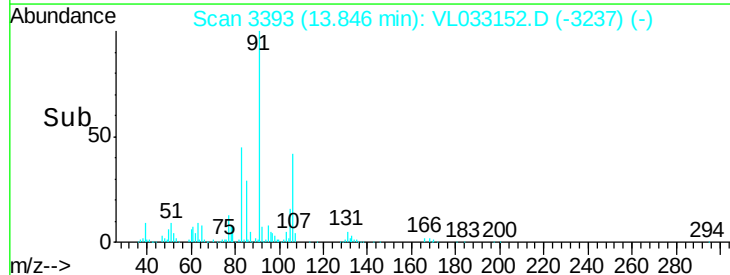
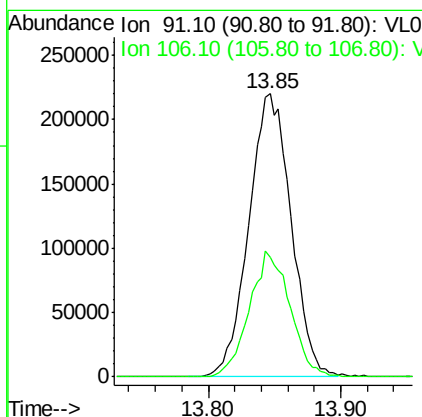
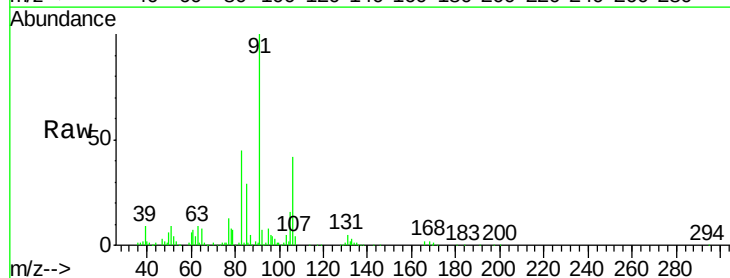
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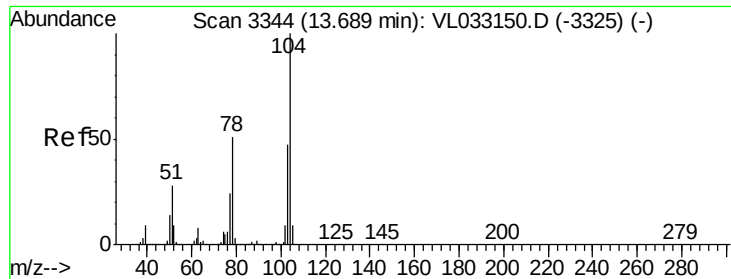
MMDadoda
2/5/2019 10:27:10 AM



#60
o-Xylene
Concen: 0.884 ppbv
RT: 13.85 min Scan# 3393
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion: 91 Resp: 488162
Ion Ratio Lower Upper
91 100
106 42.8 23.2 69.5





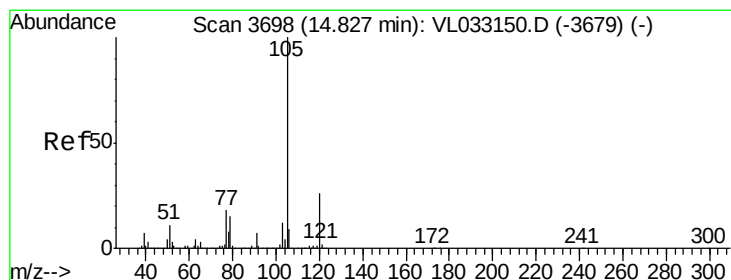
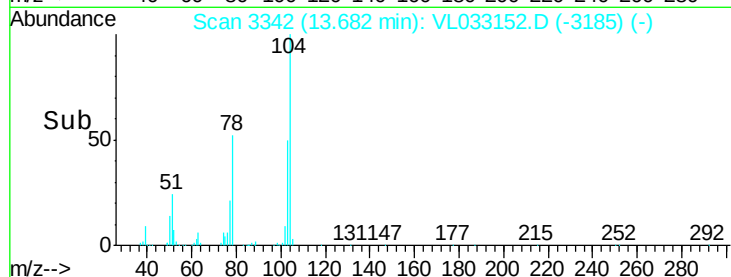
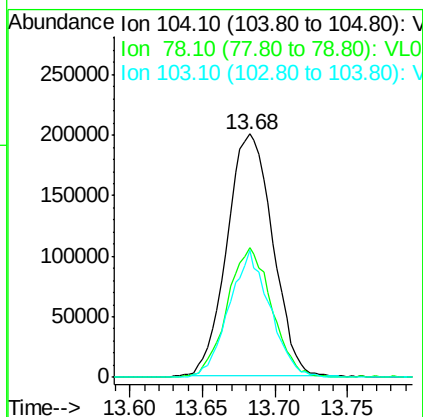
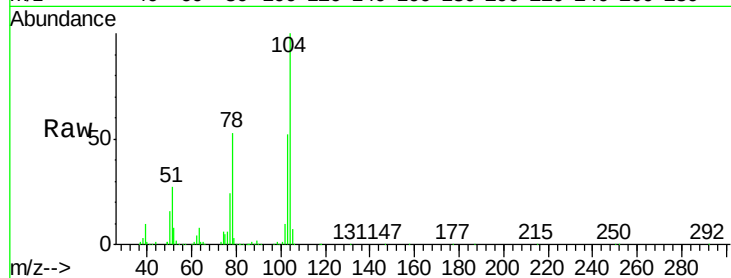
#61
Stvrene
Concen: 1.034 ppbv
RT: 13.68 min Scan# 3342
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDIC001

Tot Ion	Ratio	Lower	Upper
104	100		
78	52.7	39.7	59.5
103	47.2	37.7	56.5

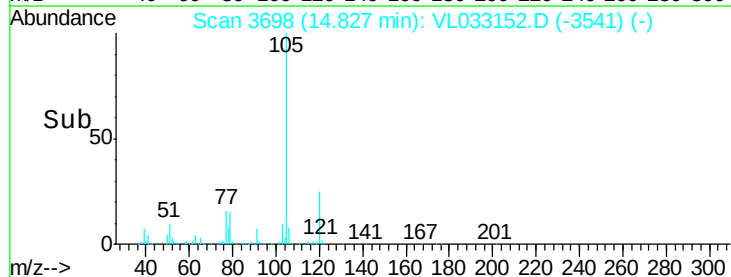
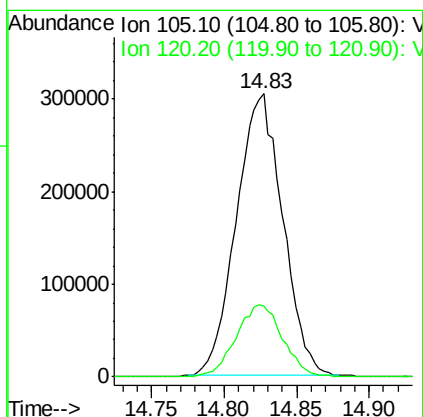
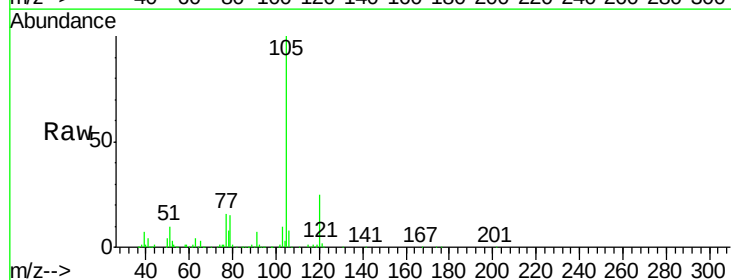
Manual Integrations
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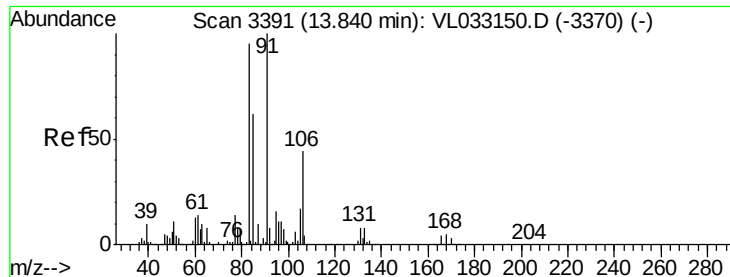
MMDadoda
2/5/2019 10:27:10 AM



#62
Isopropylbenzene
Concen: 0.860 ppbv
RT: 14.83 min Scan# 3698
Delta R.T. 0.00 min
Lab File: VL033152.D
Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.9	20.8	31.2





#63

1,1,2,2-Tetrachloroethane

Concen: 0.827 ppbv

RT: 13.84 min Scan# 3390

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 83 Resp: 344845

Ion Ratio Lower Upper

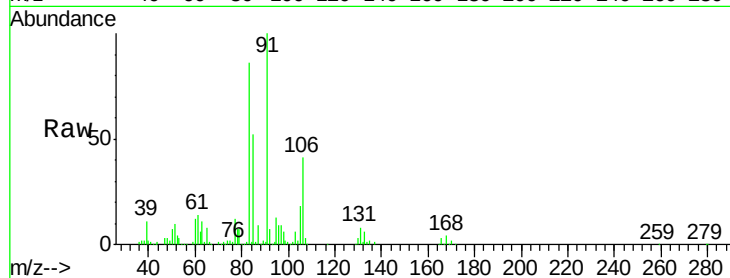
83 100

131 8.8 4.5 13.7

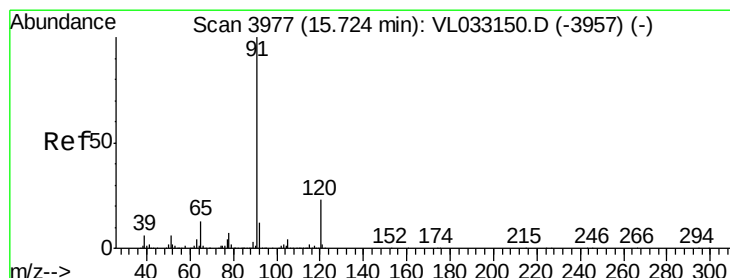
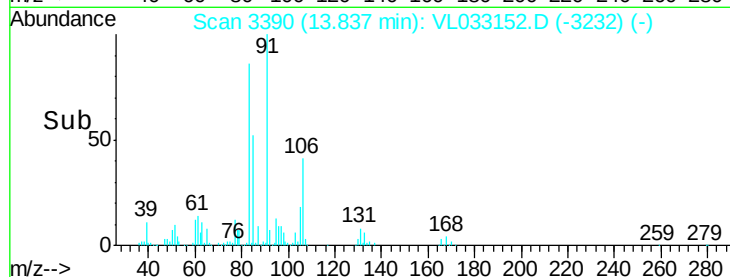
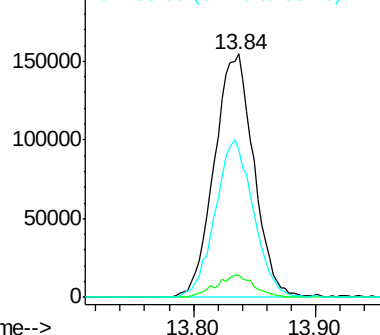
85 63.0 32.5 97.4

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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: 0.865 ppbv m

RT: 15.72 min Scan# 3975

Delta R.T. -0.00 min

Lab File: VL033152.D

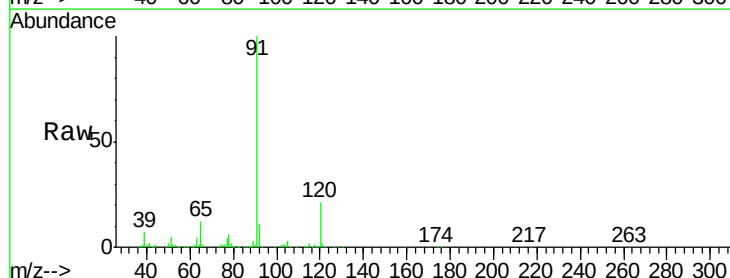
Acq: 4 Feb 2019 11:20

Tgt Ion: 120 Resp: 174011

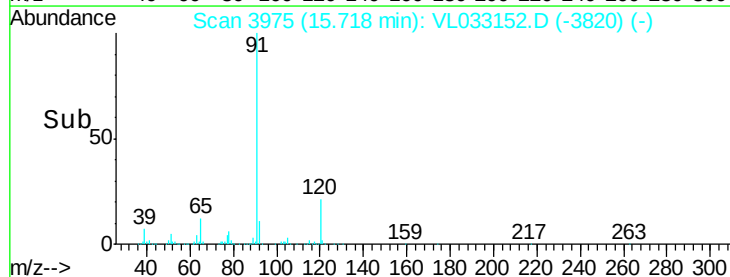
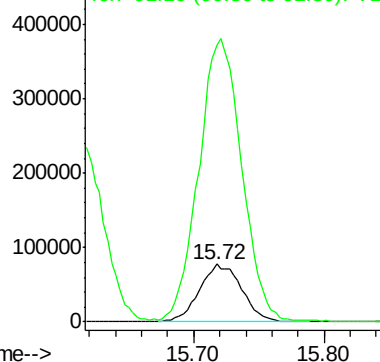
Ion Ratio Lower Upper

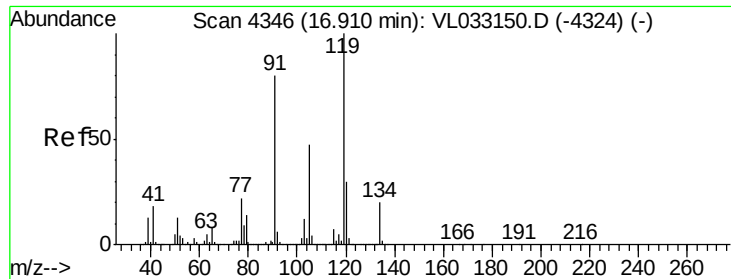
120 100

91 0.0 370.2 555.2#



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





#65

tert-Butylbenzene

Concen: 0.956 ppbv

RT: 16.91 min Scan# 4345

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

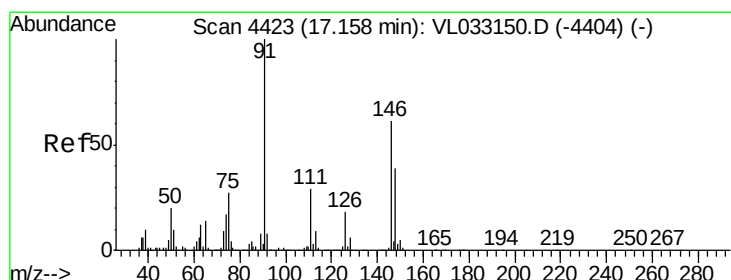
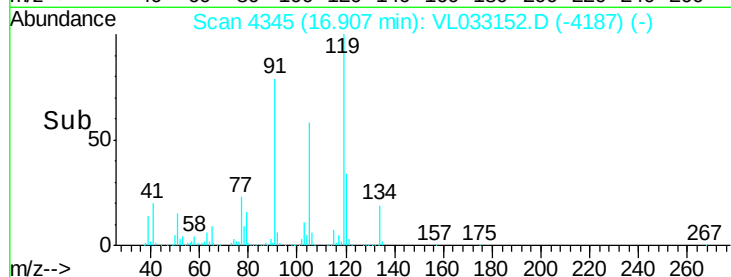
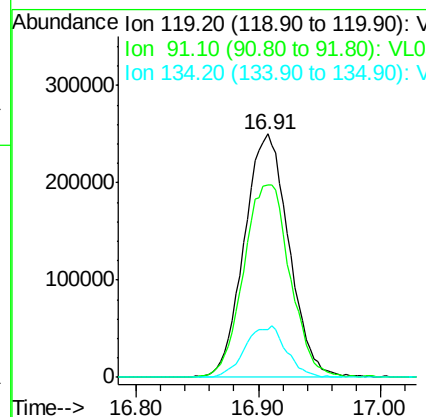
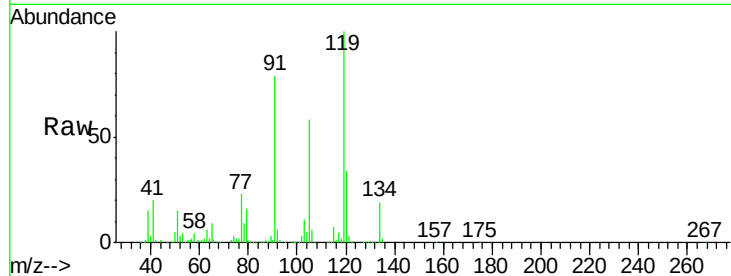
ClientSampleId :

VSTDIC001

Tot Ion:	119	Resp:	632236
Ion Ratio	Lower	Upper	
119	100		
91	82.8	63.0	94.6
134	19.7	15.5	23.3

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#66

Benzyl Chloride

Concen: 0.768 ppbv

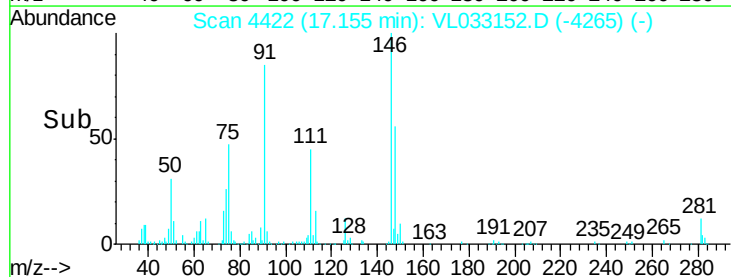
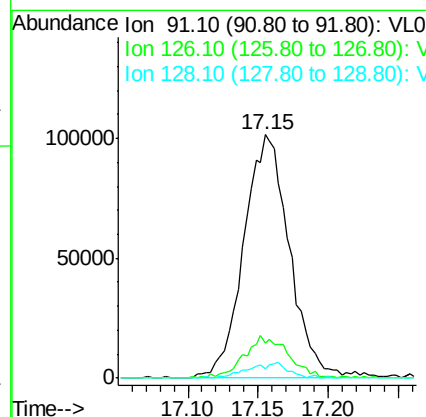
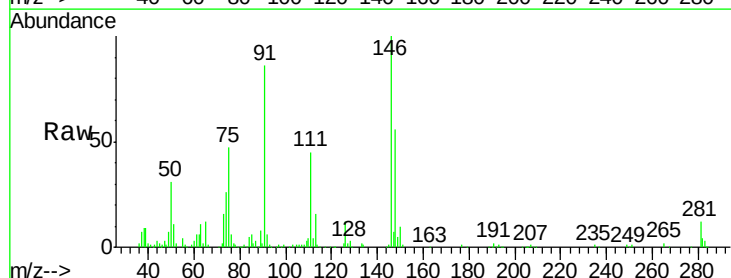
RT: 17.15 min Scan# 4422

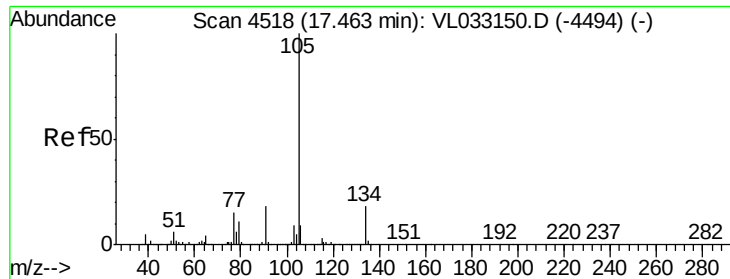
Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	91	Resp:	227425
Ion Ratio	Lower	Upper	
91	100		
126	17.1	14.9	22.3
128	5.9	4.7	7.1





#67

sec-Butylbenzene

Concen: 0.956 ppbv

RT: 17.46 min Scan# 4518

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 105 Resp: 897884

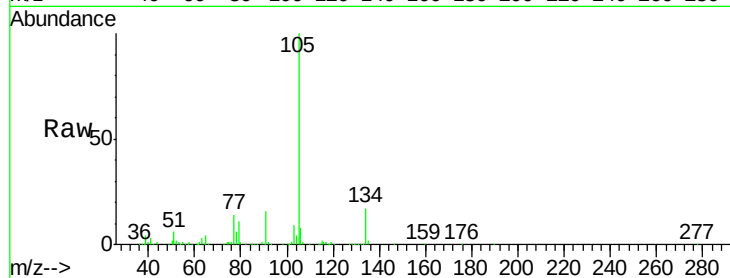
Ion Ratio Lower Upper

105 100

134 17.3 14.4 21.6

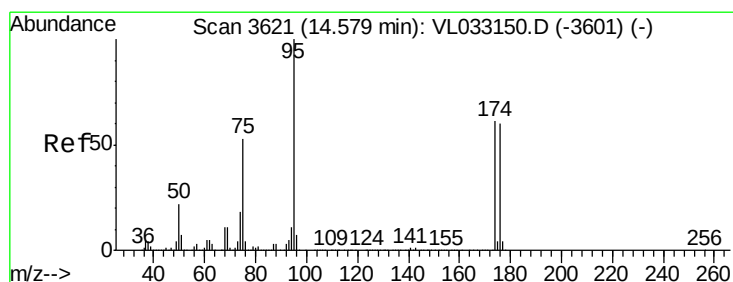
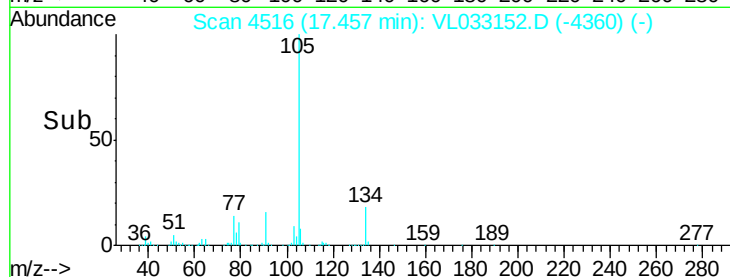
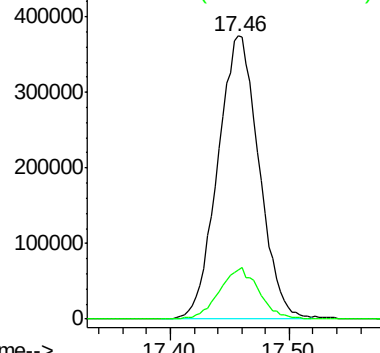
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 8.194 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

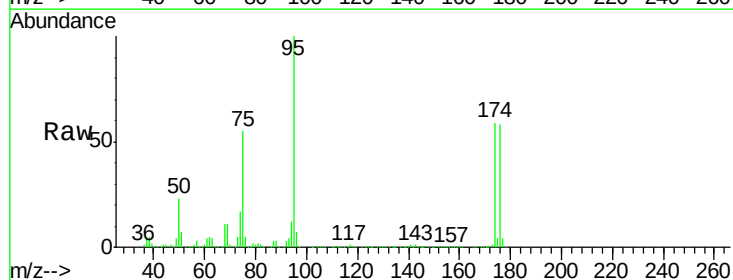
Tgt Ion: 95 Resp: 2641756

Ion Ratio Lower Upper

95 100

174 59.9 49.2 73.8

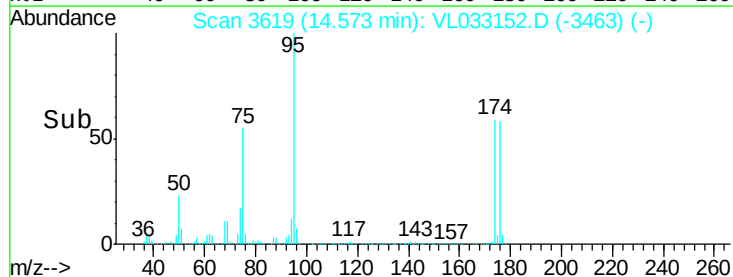
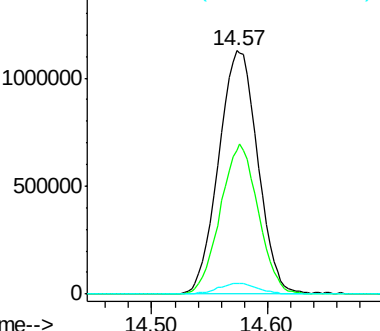
175 4.5 3.7 5.5

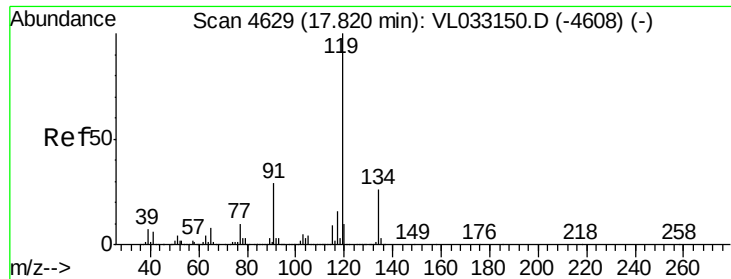


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





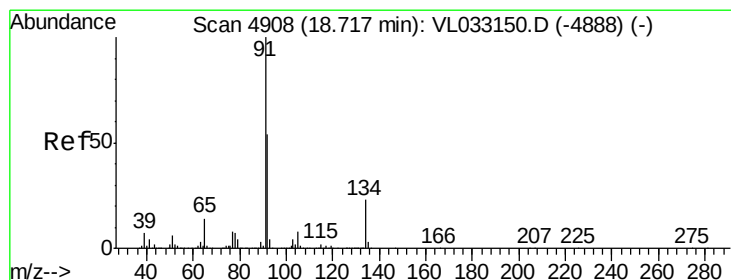
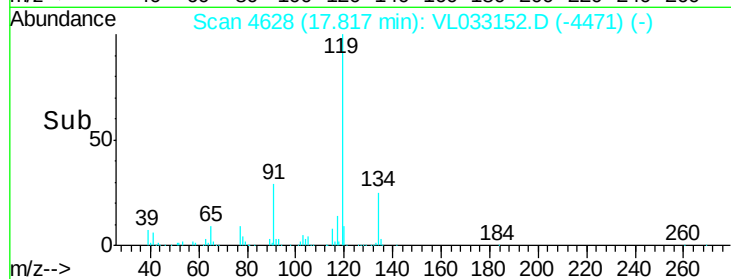
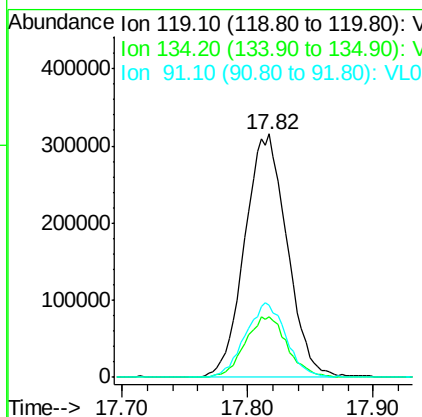
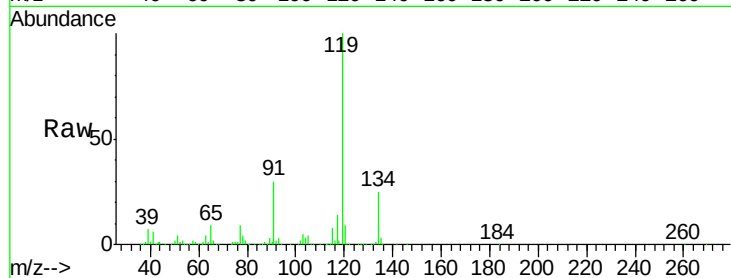
#69
 p-Isopropyltoluene
 Concen: 0.992 ppbv
 RT: 17.82 min Scan# 4628
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
119	100		
134	24.9	20.3	30.5
91	30.0	22.6	33.8

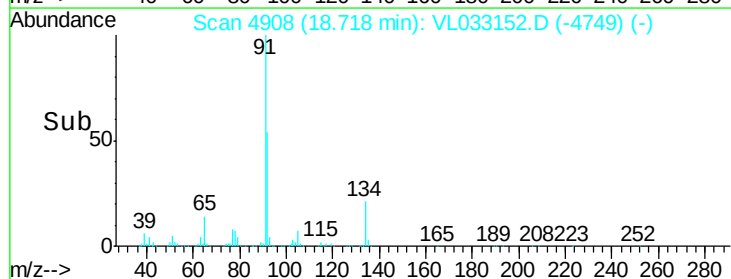
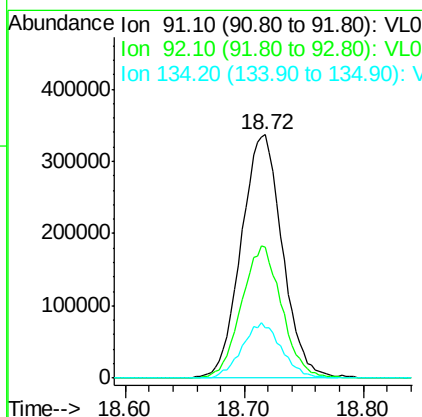
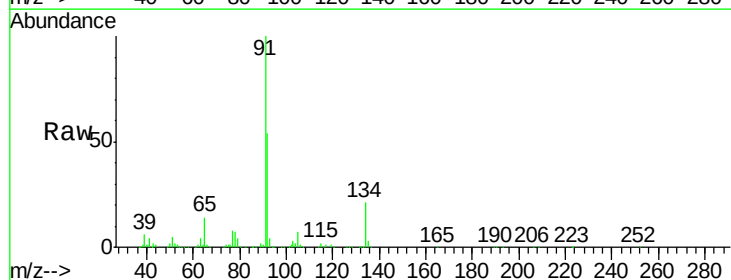
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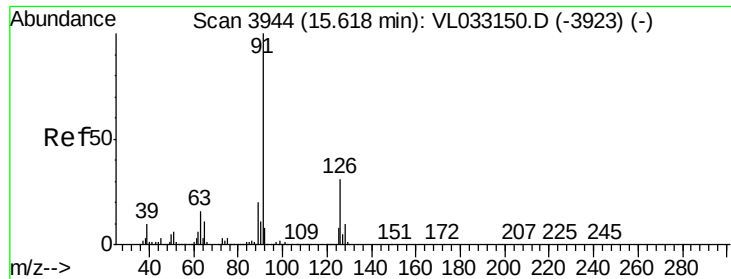
MMDadoda
 2/5/2019 10:27:10 AM



#70
 n-Butylbenzene
 Concen: 1.065 ppbv
 RT: 18.72 min Scan# 4908
 Delta R.T. 0.01 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
91	100		
92	53.5	43.7	65.5
134	22.1	18.4	27.6





#71

2-Chlorotoluene

Concen: 0.894 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion: 91 Resp: 534702

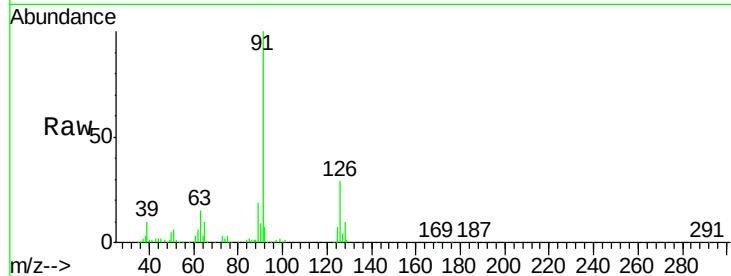
Ion Ratio Lower Upper

91 100

126 29.6 12.3 49.1

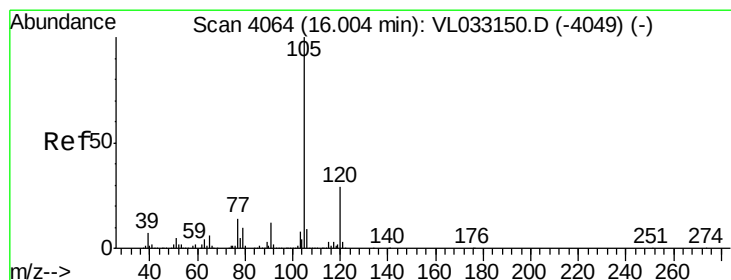
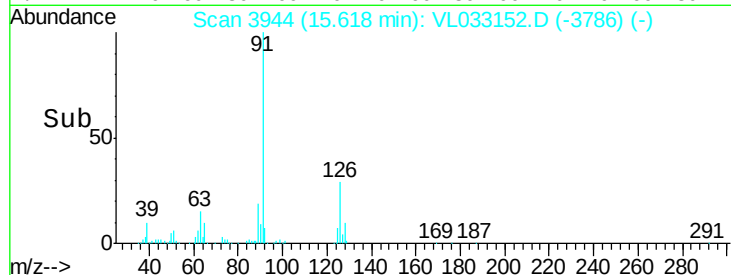
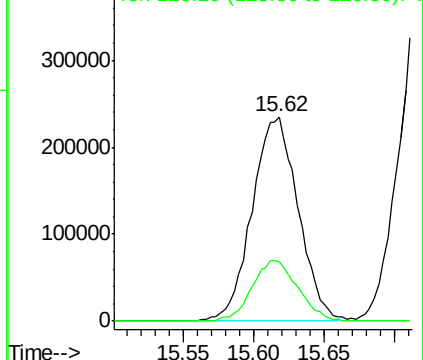
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 0.914 ppbv

RT: 16.00 min Scan# 4064

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion: 105 Resp: 566019

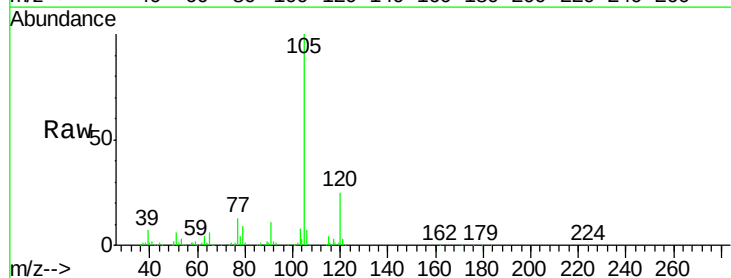
Ion Ratio Lower Upper

105 100

120 29.2 23.2 34.8

91 12.8 9.5 14.3

77 13.5 10.2 15.4

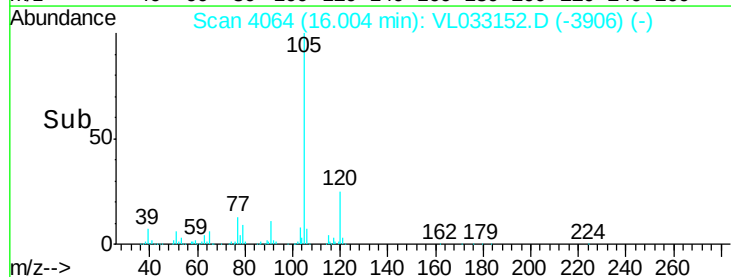
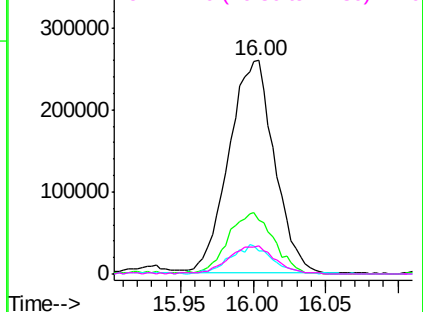


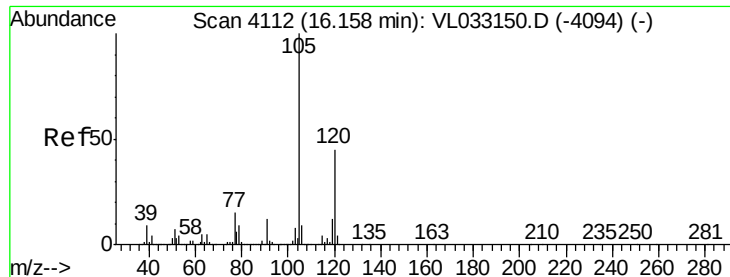
Abundance Ion 105.10 (104.80 to 105.80): V

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: 1.002 ppbv

RT: 16.15 min Scan# 4110

Delta R.T. -0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

ClientSampleId :

VSTDIC001

Tot Ion:105 Resp: 559669

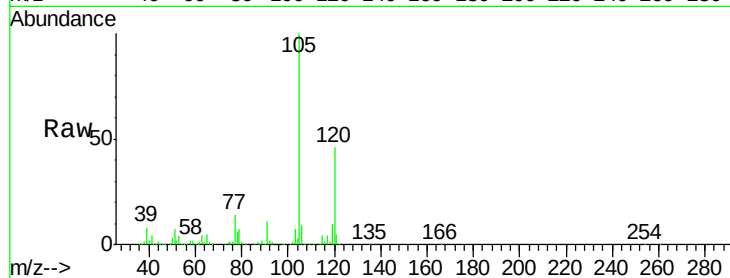
Ion Ratio Lower Upper

105 100

120 45.8 38.0 57.0

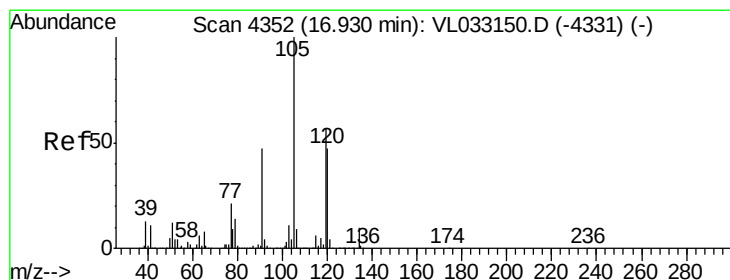
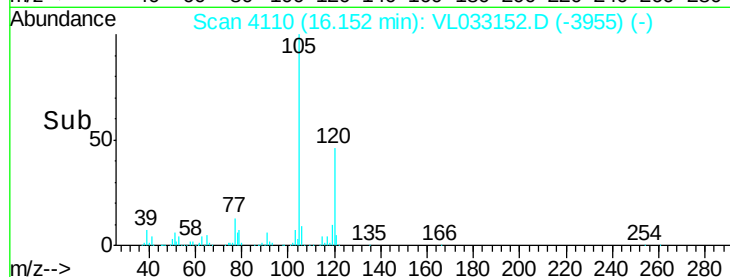
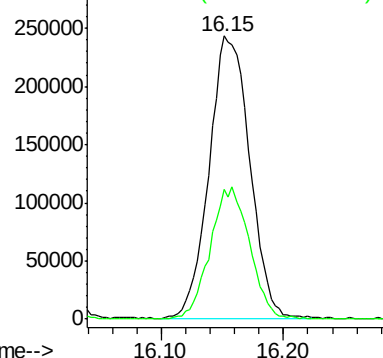
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 1.044 ppbv

RT: 16.92 min Scan# 4350

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:105 Resp: 574098

Ion Ratio Lower Upper

105 100

120 43.4 38.2 57.4

91 46.2 35.0 52.4

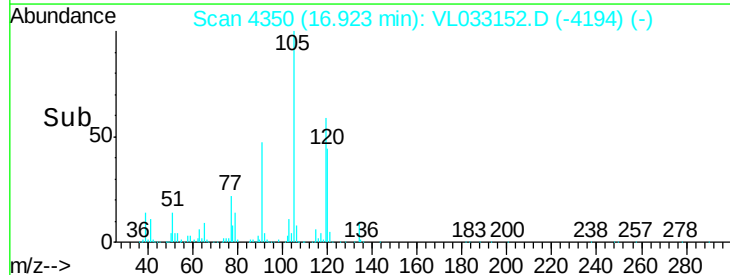
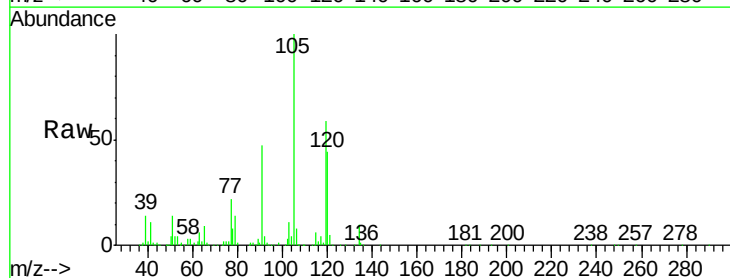
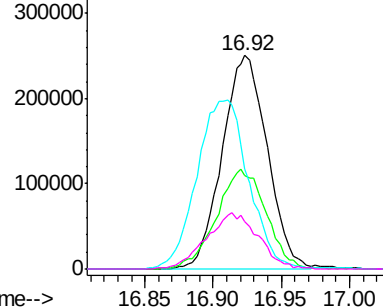
77 21.6 15.8 23.6

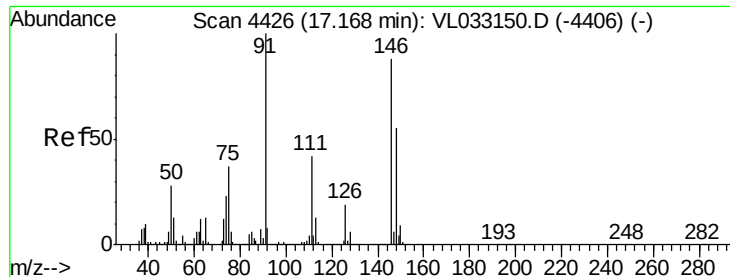
Abundance Ion 105.10 (104.80 to 105.80): V

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





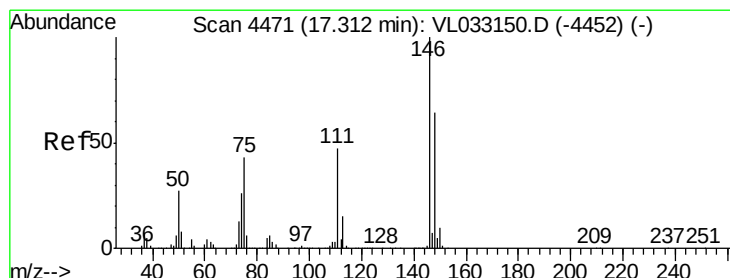
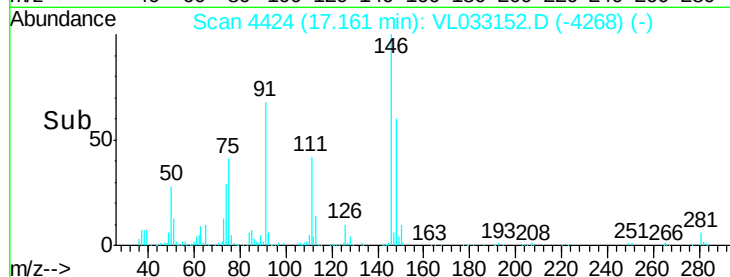
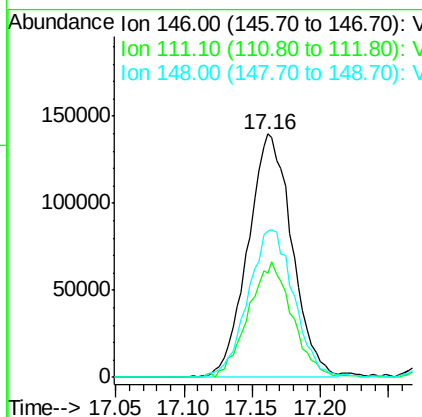
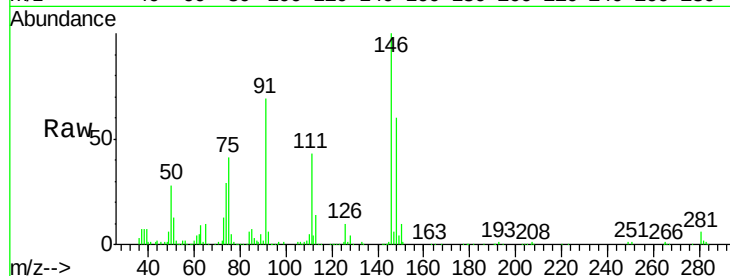
#75
 1,3-Dichlorobenzene
 Concen: 0.959 ppbv
 RT: 17.16 min Scan# 4424
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Lower	Upper
146	100		
111	47.4	24.0	72.0
148	63.2	31.9	95.7

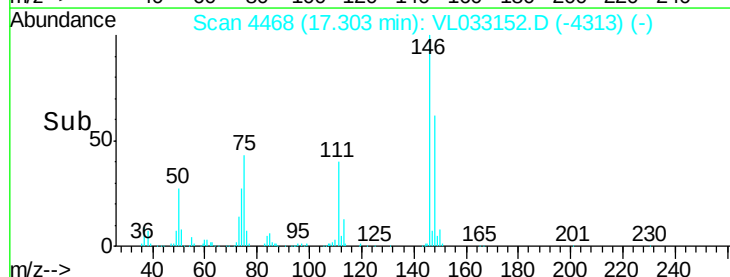
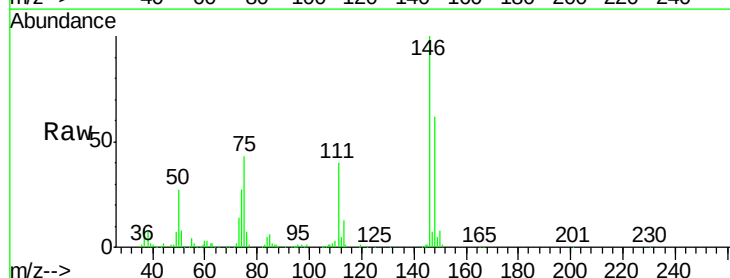
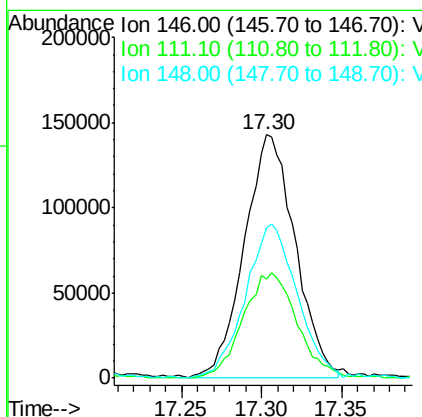
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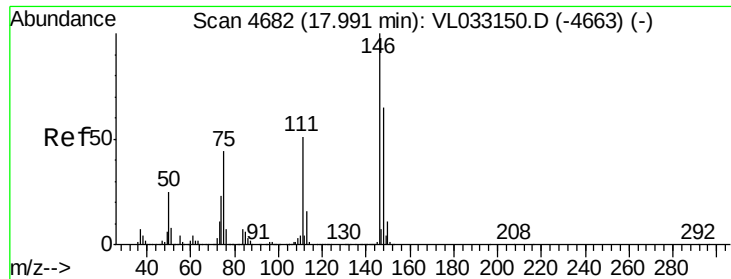
MMDadoda
 2/5/2019 10:27:10 AM



#76
 1,4-Dichlorobenzene
 Concen: 0.946 ppbv
 RT: 17.30 min Scan# 4468
 Delta R.T. -0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Tgt Ion	Ratio	Lower	Upper
146	100		
111	46.8	23.4	70.0
148	65.9	31.9	95.9





#77

1,2-Dichlorobenzene

Concen: 0.974 ppbv

RT: 17.99 min Scan# 4681

Delta R.T. 0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

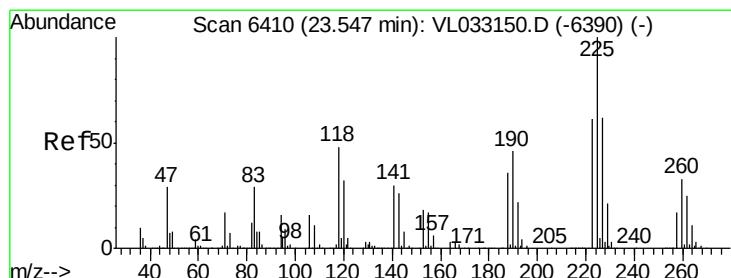
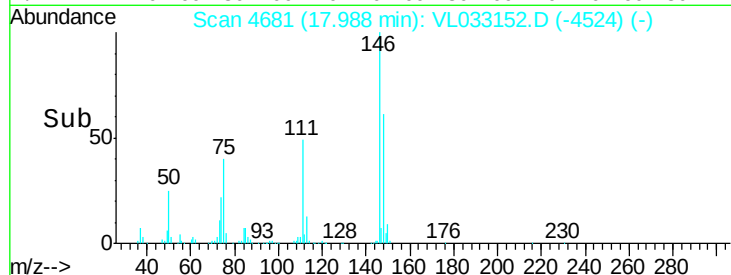
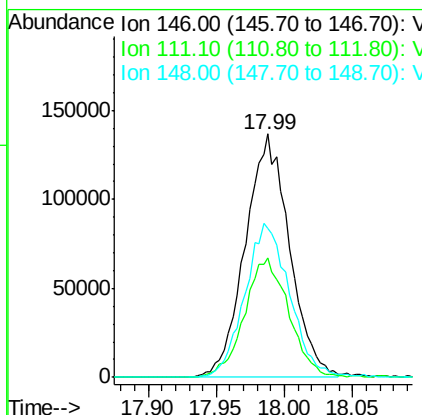
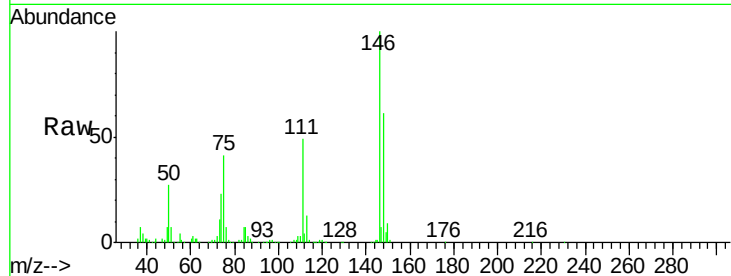
ClientSampleId :

VSTDIC001

Tot Ion:	146	Resp:	307892
Ion Ratio	Lower	Upper	
146	100		
111	49.6	25.1	75.3
148	64.5	32.0	96.2

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



#78

Hexachloro-1,3-Butadiene

Concen: 1.029 ppbv m

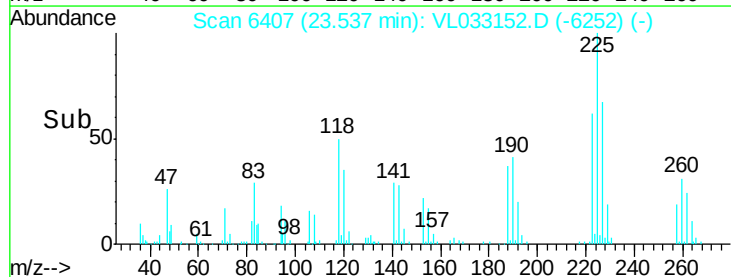
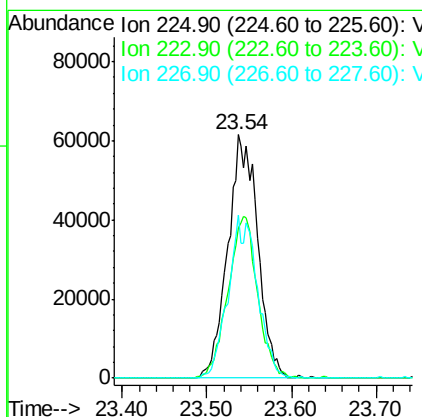
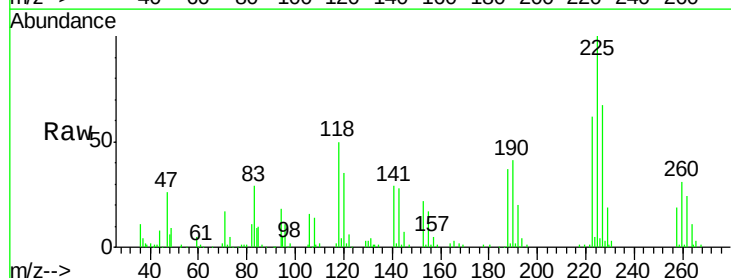
RT: 23.54 min Scan# 6407

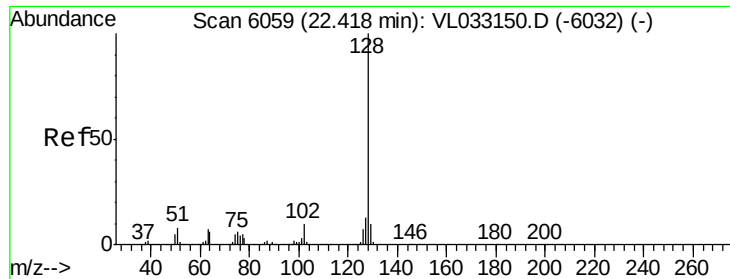
Delta R.T. -0.00 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Tgt Ion:	225	Resp:	150640
Ion Ratio	Lower	Upper	
225	100		
223	65.5	50.2	75.4
227	0.0	51.1	76.7#





#79

Naphthalene

Concen: 1.881 ppbv

RT: 22.42 min Scan# 6059

Delta R.T. 0.01 min

Lab File: VL033152.D

Acq: 4 Feb 2019 11:20

Instrument :

MSVOA_L

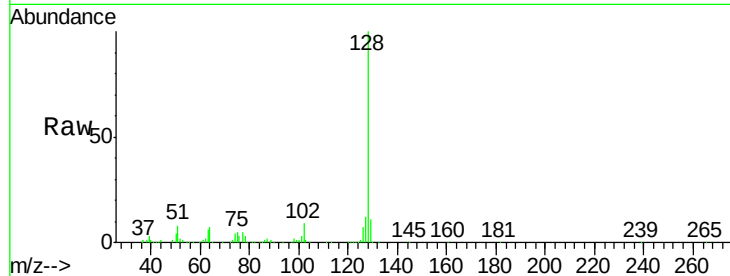
ClientSampleId :

VSTDIC001

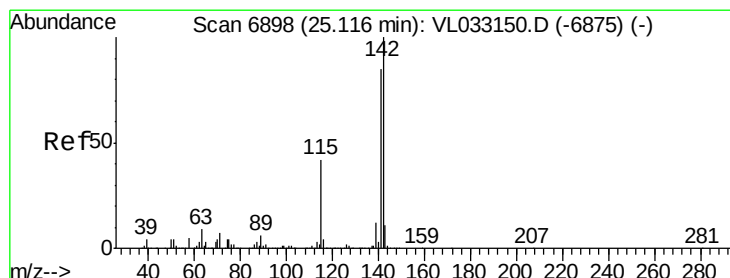
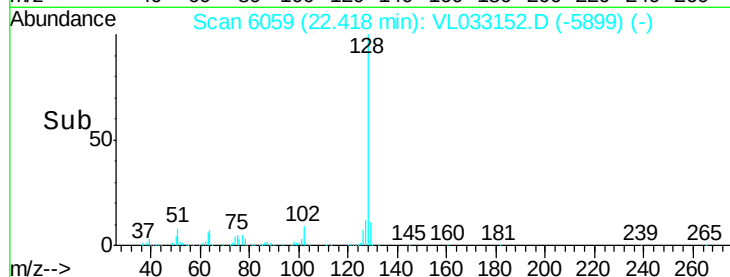
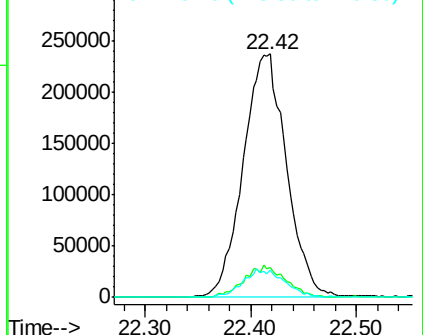
Tot Ion:	128	Resp:	678320
Ion Ratio	Lower	Upper	
128	100		
127	12.1	10.6	16.0
129	11.1	9.0	13.4

Manual Integrations
APPROVED

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



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: 3.339 ppbv

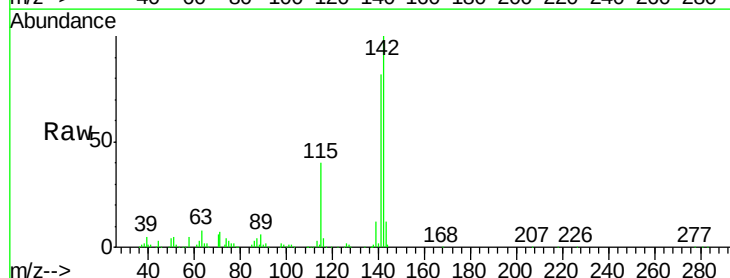
RT: 25.12 min Scan# 6898

Delta R.T. 0.01 min

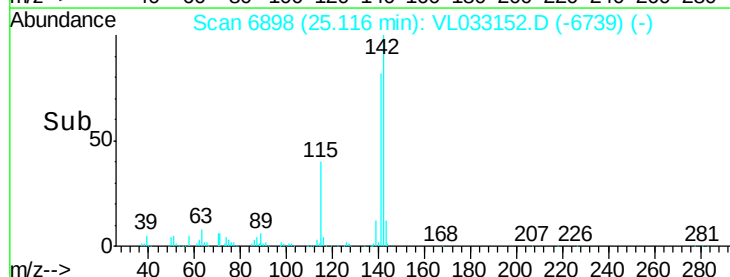
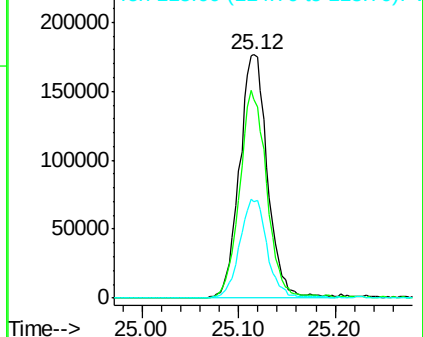
Lab File: VL033152.D

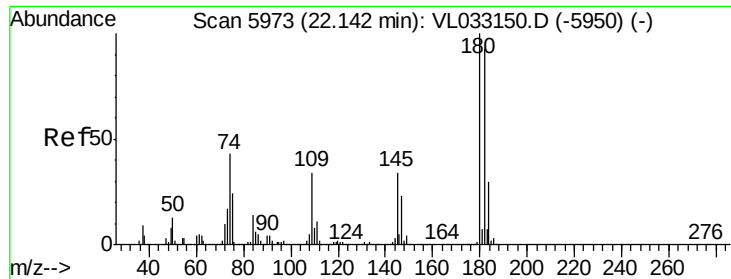
Acq: 4 Feb 2019 11:20

Tgt Ion:	142	Resp:	355142
Ion Ratio	Lower	Upper	
142	100		
141	83.1	66.5	99.7
115	40.5	31.3	46.9



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: 1.633 ppbv m
 RT: 22.13 min Scan# 5970
 Delta R.T. 0.00 min
 Lab File: VL033152.D
 Acq: 4 Feb 2019 11:20

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC001

Tot Ion	Ratio	Resp	Lower	Upper
180	100	309912		
182	93.7		76.2	114.4
184	29.4		24.6	36.8

Manual Integrations
 APPROVED

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

