

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW052019\
 Data File : VW010448.D
 Acq On : 20 May 2019 15:10
 Operator : SY/VA
 Sample : VSTDIC005
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Manual Integrations
 APPROVED

MMDadoda
 5/21/2019 11:28:29 AM

Quant Time: May 21 06:33:01 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W052019S.M
 Quant Title : SW846 8260
 QLast Update : Tue May 21 06:23:24 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.95	168	139212	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.84	114	239732	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.63	117	208717	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.56	152	98328	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.31	65	6777	4.52	ug/l	0.00
Spiked Amount	50.000		Recovery	=	9.04%	
35) Dibromofluoromethane	7.88	113	6778	4.61	ug/l	0.00
Spiked Amount	50.000		Recovery	=	9.22%	
50) Toluene-d8	10.32	98	25007	4.55	ug/l	0.00
Spiked Amount	50.000		Recovery	=	9.10%	
62) 4-Bromofluorobenzene	12.62	95	11590	5.37	ug/l	0.00
Spiked Amount	50.000		Recovery	=	10.74%	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	2.00	85	9059	7.598	ug/l 95
3) Chloromethane	2.21	50	8466	5.262	ug/l 93
4) Vinyl Chloride	2.36	62	9615	5.669	ug/l 100
5) Bromomethane	2.75	94	6693	6.749	ug/l 97
6) Chloroethane	2.91	64	5943	5.599	ug/l 96
7) Trichlorofluoromethane	3.26	101	13433	5.693	ug/l 94
8) Diethyl Ether	3.68	74	4061	4.928	ug/l 92
9) 1,1,2-Trichlorotrifluoroet	4.06	101	8091	5.421	ug/l 98
10) Methyl Iodide	4.27	142	8527	5.044	ug/l 100
11) Tert butyl alcohol	5.17	59	3504	25.869	ug/l # 94
12) 1,1-Dichloroethene	4.03	96	7737	5.468	ug/l 91
13) Acrolein	3.89	56	3002	29.606	ug/l 90
14) Allyl chloride	4.67	41	10920	5.040	ug/l 95
15) Acrylonitrile	5.37	53	8720	25.046	ug/l 99
16) Acetone	4.12	43	8274	29.936	ug/l 95
17) Carbon Disulfide	4.37	76	22860	5.571	ug/l 99
18) Methyl Acetate	4.67	43	4013	4.867	ug/l 97
19) Methyl tert-butyl Ether	5.43	73	18801	4.746	ug/l 94
20) Methylene Chloride	4.92	84	15988	9.573	ug/l 98
21) trans-1,2-Dichloroethene	5.42	96	8874	5.394	ug/l 91
22) Diisopropyl ether	6.31	45	21478	4.685	ug/l 96
23) Vinyl Acetate	6.26	43	62115	21.915	ug/l 96
24) 1,1-Dichloroethane	6.22	63	12791	4.776	ug/l 98
25) 2-Butanone	7.17	43	10764	23.900	ug/l 95
26) 2,2-Dichloropropane	7.17	77	13223	5.421	ug/l 99
27) cis-1,2-Dichloroethene	7.17	96	9219	5.030	ug/l 99
28) Bromochloromethane	7.51	49	3689	3.745	ug/l # 99
29) Tetrahydrofuran	7.53	42	7855	25.775	ug/l 94
30) Chloroform	7.68	83	13885	4.925	ug/l 95
31) Cyclohexane	7.95	56	16059	5.937	ug/l # 71
32) 1,1,1-Trichloroethane	7.87	97	13776	5.172	ug/l 99
36) 1,1-Dichloropropene	8.09	75	11693	5.416	ug/l 99
37) Ethyl Acetate	7.26	43	5104	5.057	ug/l 96
38) Carbon Tetrachloride	8.07	117	12330	5.291	ug/l 98

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW052019\
 Data File : VW010448.D
 Acq On : 20 May 2019 15:10
 Operator : SY/VA
 Sample : VSTDIC005
 Misc : 5.00G/5ML/MSVOA W/SOIL
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleID :
 VSTDIC005

Manual Integrations
 APPROVED

MMDadoda
 5/21/2019 11:28:29 AM

Quant Time: May 21 06:33:01 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W052019S.M
 Quant Title : SW846 8260
 QLast Update : Tue May 21 06:23:24 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	9.34	83	15273	5.281	ug/l	94
40) Benzene	8.32	78	30985	5.044	ug/l	99
41) Methacrylonitrile	7.48	41	3038	5.167	ug/l	99
42) 1,2-Dichloroethane	8.40	62	8960	4.948	ug/l	100
43) Isopropyl Acetate	8.43	43	9806	4.799	ug/l	98
44) Trichloroethene	9.09	130	9256	5.240	ug/l	96
45) 1,2-Dichloropropane	9.37	63	7342	4.924	ug/l	98
46) Dibromomethane	9.46	93	4267	4.863	ug/l	96
47) Bromodichloromethane	9.65	83	10537	4.811	ug/l #	94
48) Methyl methacrylate	9.44	41	4243	4.493	ug/l	93
49) 1,4-Dioxane	9.45	88	1545	118.966	ug/l #	84
51) 4-Methyl-2-Pentanone	10.21	43	24862	23.755	ug/l	99
52) Toluene	10.39	92	20979	5.142	ug/l	100
53) t-1,3-Dichloropropene	10.60	75	10955	4.868	ug/l	98
54) cis-1,3-Dichloropropene	10.07	75	11940	4.666	ug/l	93
55) 1,1,2-Trichloroethane	10.79	97	6272	4.956	ug/l	98
56) Ethyl methacrylate	10.65	69	8616	4.875	ug/l	95
57) 1,3-Dichloropropane	10.93	76	10381	4.887	ug/l	98
58) 2-Chloroethyl Vinyl ether	9.93	63	17357	21.089	ug/l	100
59) 2-Hexanone	10.97	43	17600	24.075	ug/l	98
60) Dibromochloromethane	11.13	129	7703	4.892	ug/l	96
61) 1,2-Dibromoethane	11.24	107	6313	4.912	ug/l	98
64) Tetrachloroethene	10.86	164	7427	5.322	ug/l	91
65) Chlorobenzene	11.66	112	22989	5.358	ug/l	98
66) 1,1,1,2-Tetrachloroethane	11.73	131	7852	4.964	ug/l	100
67) Ethyl Benzene	11.73	91	40636	5.362	ug/l	99
68) m/p-Xylenes	11.84	106	31446	10.595	ug/l	96
69) o-Xylene	12.16	106	14816	5.247	ug/l	99
70) Styrene	12.18	104	24441	5.035	ug/l	98
71) Bromoform	12.35	173	4137	4.706	ug/l #	97
73) Isopropylbenzene	12.46	105	40699	5.272	ug/l	100
74) N-amyl acetate	12.27	43	8947	4.629	ug/l	97
75) 1,1,2,2-Tetrachloroethane	12.71	83	7568	5.056	ug/l	99
76) 1,2,3-Trichloropropane	12.77	75	5324m	5.102	ug/l	
77) Bromobenzene	12.75	156	8800	5.059	ug/l	95
78) n-propylbenzene	12.80	91	48136	5.389	ug/l	98
79) 2-Chlorotoluene	12.90	91	27974	5.368	ug/l	97
80) 1,3,5-Trimethylbenzene	12.94	105	34276	5.229	ug/l	98
81) trans-1,4-Dichloro-2-buten	12.52	75	2399	4.537	ug/l	91
82) 4-Chlorotoluene	12.99	91	28604	5.265	ug/l	98
83) tert-Butylbenzene	13.21	119	30464	5.480	ug/l	98
84) 1,2,4-Trimethylbenzene	13.26	105	33961	5.256	ug/l	99
85) sec-Butylbenzene	13.39	105	43217	5.527	ug/l	96
86) p-Isopropyltoluene	13.50	119	38419	5.426	ug/l	99
87) 1,3-Dichlorobenzene	13.50	146	17564	5.239	ug/l	98
88) 1,4-Dichlorobenzene	13.58	146	17398	5.200	ug/l	90
89) n-Butylbenzene	13.83	91	36596	5.425	ug/l	99
90) Hexachloroethane	14.10	117	6959	4.907	ug/l	95
91) 1,2-Dichlorobenzene	13.87	146	15828	5.213	ug/l	98
92) 1,2-Dibromo-3-Chloropropan	14.49	75	1352	4.843	ug/l	97

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW052019\
Data File : VW010448.D
Acq On : 20 May 2019 15:10
Operator : SY/VA
Sample : VSTDICC005
Misc : 5.00G/5ML/MSVOA W/SOIL
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTDICC005

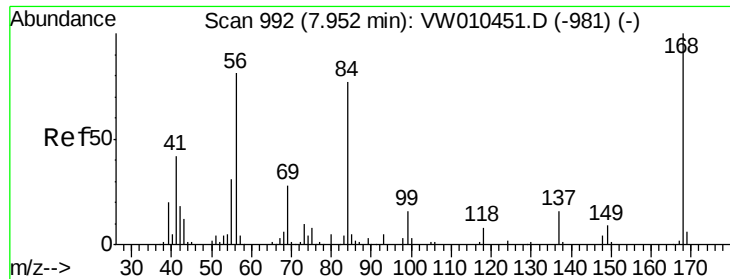
Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM

Quant Time: May 21 06:33:01 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\82W052019S.M
Quant Title : SW846 8260
QLast Update : Tue May 21 06:23:24 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	15.14	180	10523	5.247	ug/l	98
94) Hexachlorobutadiene	15.24	225	5652	5.253	ug/l	96
95) Naphthalene	15.37	128	22050	4.935	ug/l	99
96) 1,2,3-Trichlorobenzene	15.56	180	8879	5.037	ug/l	98

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.95 min Scan# 991

Delta R.T. -0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion:168 Resp: 139212

Ion Ratio Lower Upper

168 100

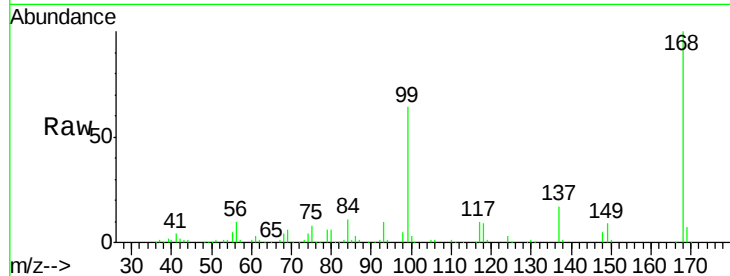
99 63.8 46.1 69.1

Manual Integrations

APPROVED

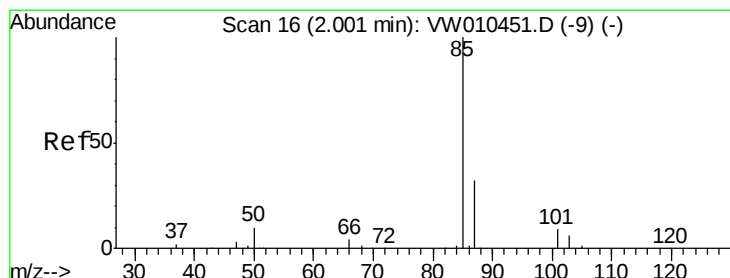
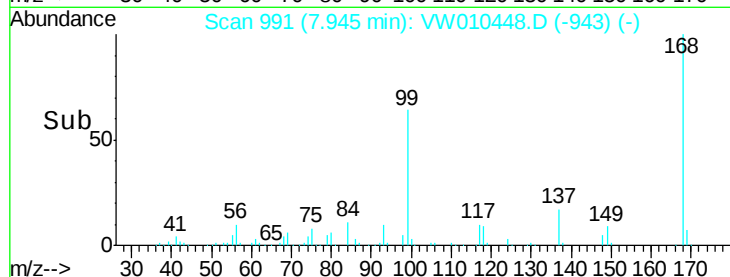
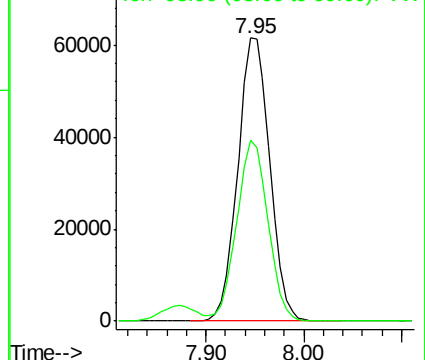
MMDadoda

5/21/2019 11:28:29 AM



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VW



#2

Dichlorodifluoromethane

Concen: 7.598 ug/l

RT: 2.00 min Scan# 15

Delta R.T. -0.01 min

Lab File: VW010448.D

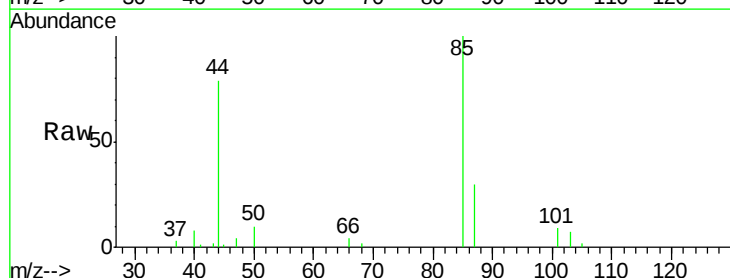
Acq: 20 May 2019 15:10

Tgt Ion: 85 Resp: 9059

Ion Ratio Lower Upper

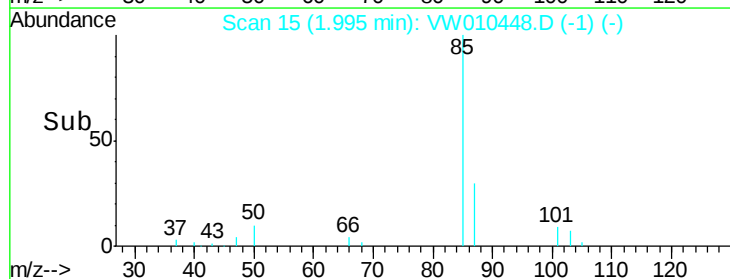
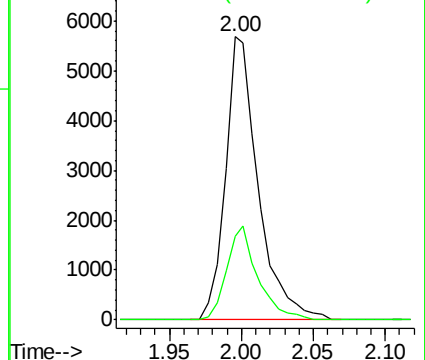
85 100

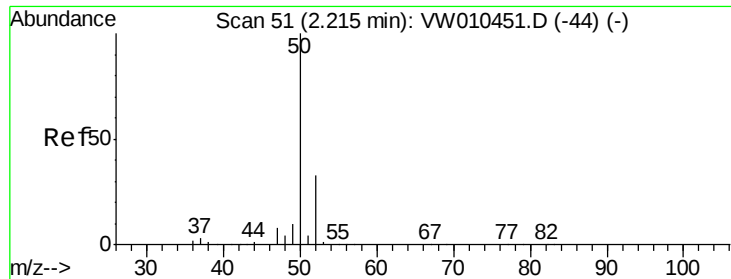
87 29.7 16.3 48.8



Abundance Ion 84.90 (84.60 to 85.60): VW

Ion 86.90 (86.60 to 87.60): VW





#3

Chloromethane

Concen: 5.262 ug/l

RT: 2.21 min Scan# 51

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 50 Resp: 8466

Ion Ratio Lower Upper

50 100

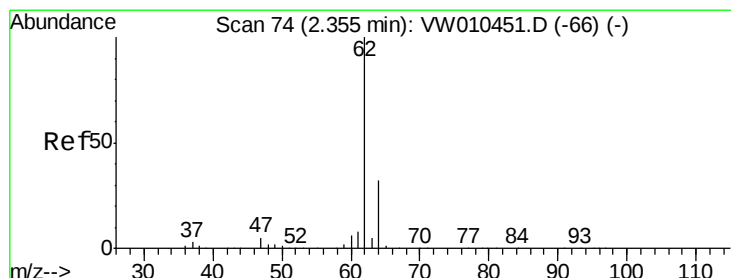
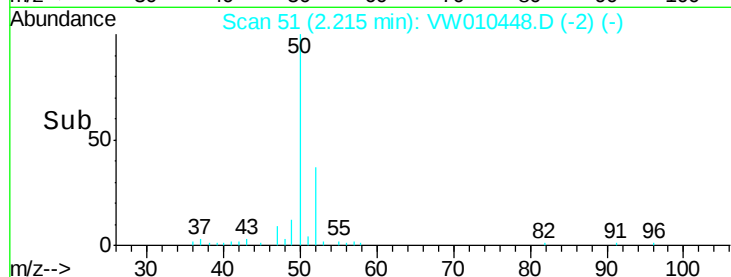
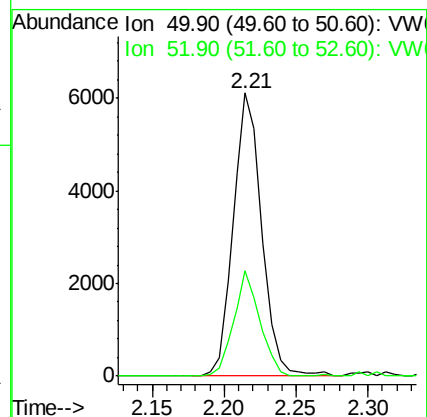
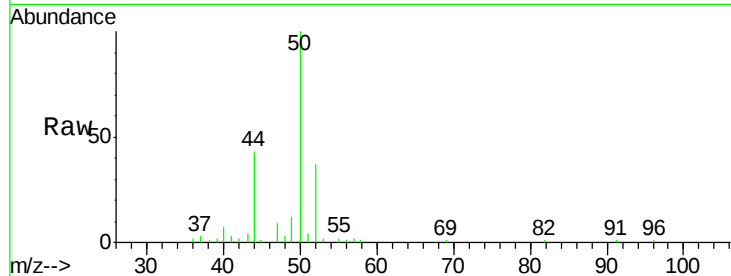
52 37.1 26.3 39.5

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



#4

Vinyl Chloride

Concen: 5.669 ug/l

RT: 2.36 min Scan# 74

Delta R.T. -0.00 min

Lab File: VW010448.D

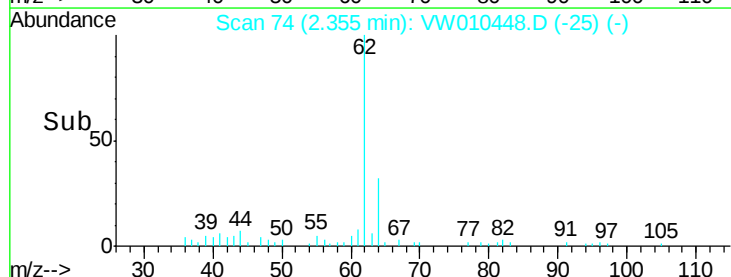
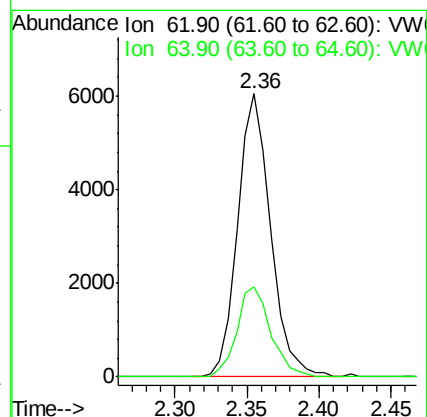
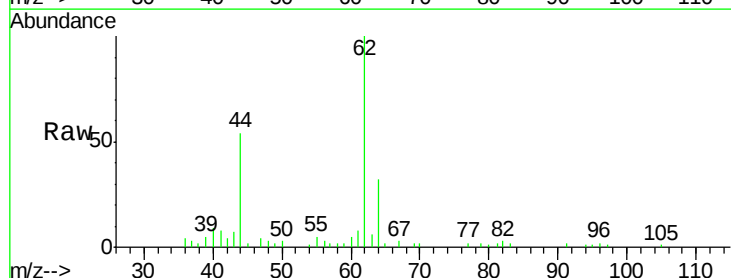
Acq: 20 May 2019 15:10

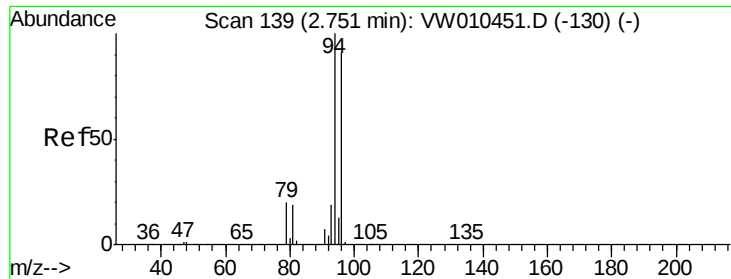
Tgt Ion: 62 Resp: 9615

Ion Ratio Lower Upper

62 100

64 32.0 25.8 38.8





#5

Bromomethane

Concen: 6.749 ug/l

RT: 2.75 min Scan# 139

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 94 Resp: 6693

Ion Ratio Lower Upper

94 100

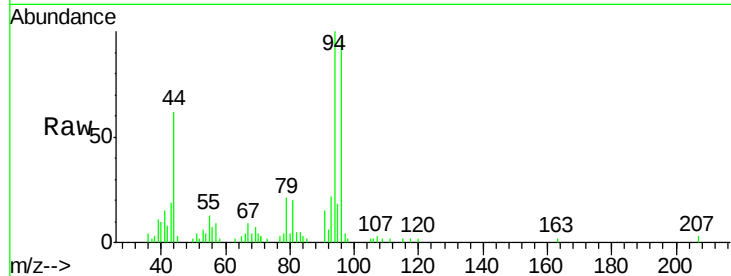
96 94.2 72.9 109.3

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



Abundance Ion 93.90 (93.60 to 94.60): VW

Ion 95.90 (95.60 to 96.60): VW

2.75

3000

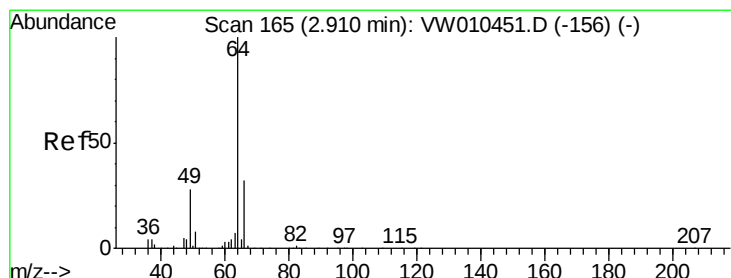
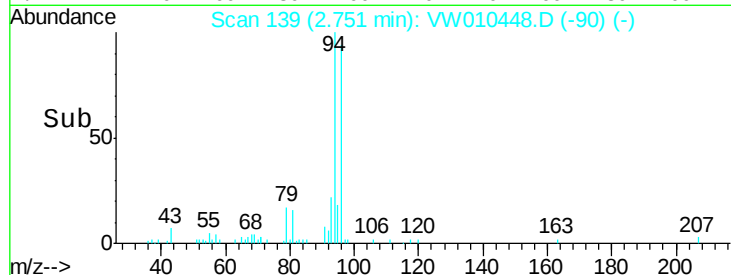
2000

1000

0

2.70 2.75 2.80 2.85

Time-->



#6

Chloroethane

Concen: 5.599 ug/l

RT: 2.91 min Scan# 165

Delta R.T. -0.00 min

Lab File: VW010448.D

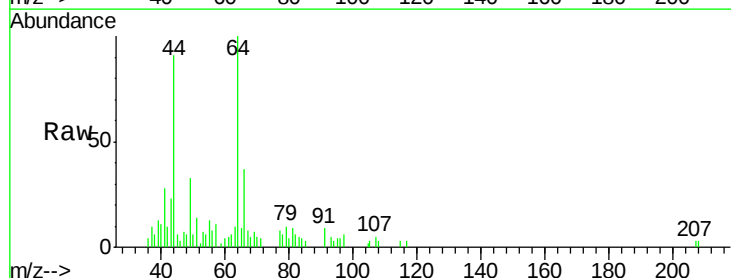
Acq: 20 May 2019 15:10

Tgt Ion: 64 Resp: 5943

Ion Ratio Lower Upper

64 100

66 34.2 25.5 38.3



Abundance Ion 63.90 (63.60 to 64.60): VW

Ion 65.90 (65.60 to 66.60): VW

2.91

3000

2500

2000

1500

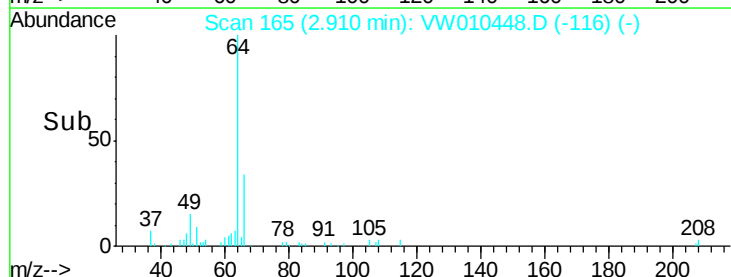
1000

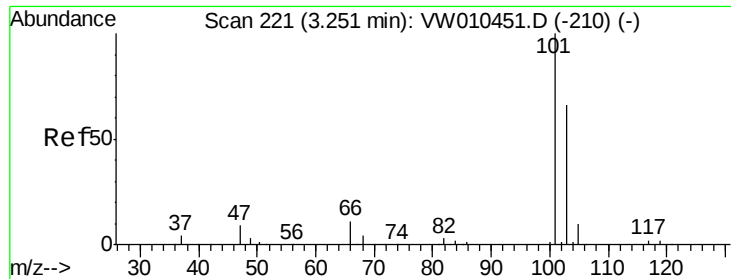
500

0

2.80 2.85 2.90 2.95 3.00

Time-->





#7

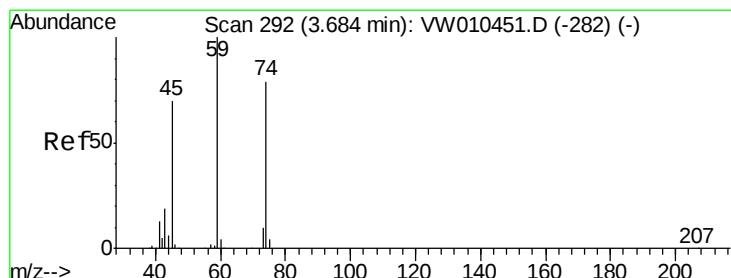
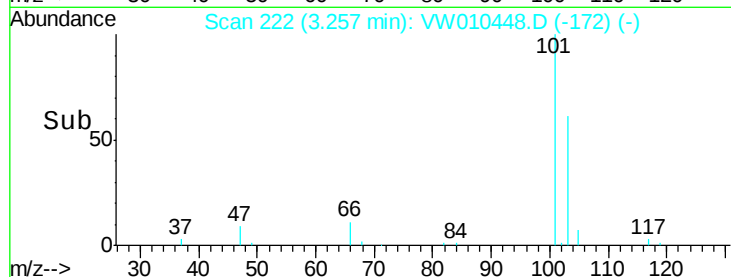
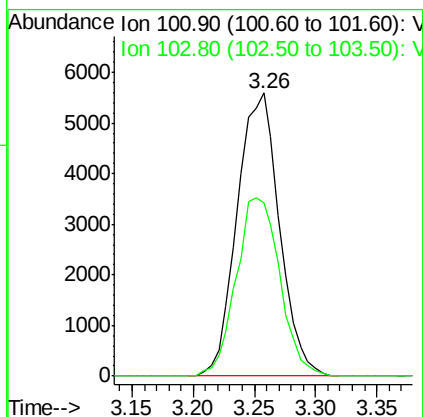
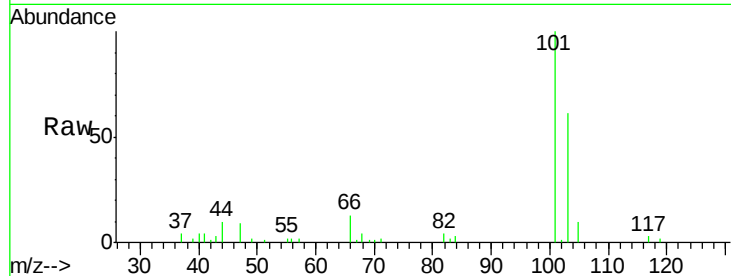
Trichlorofluoromethane
 Concen: 5.693 ug/l
 RT: 3.26 min Scan# 222
 Delta R.T. 0.01 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion	Ratio	Lower	Upper
101	100		
103	61.1	53.0	79.4

Manual Integrations
 APPROVED

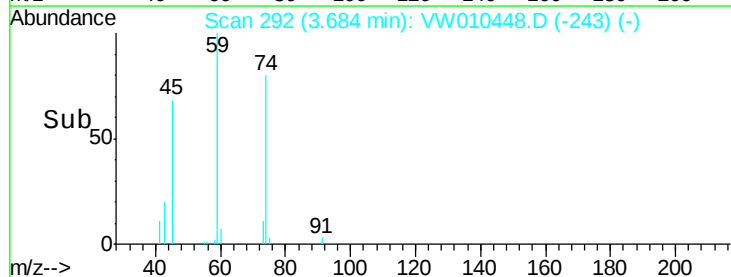
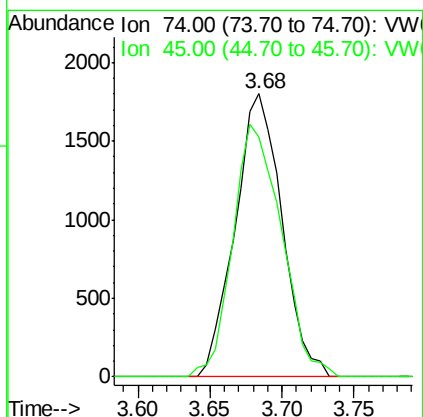
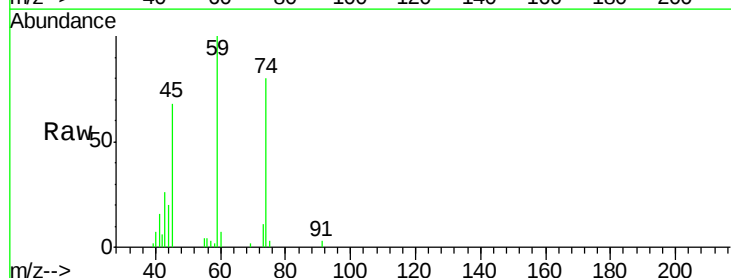
MMDadoda
 5/21/2019 11:28:29 AM

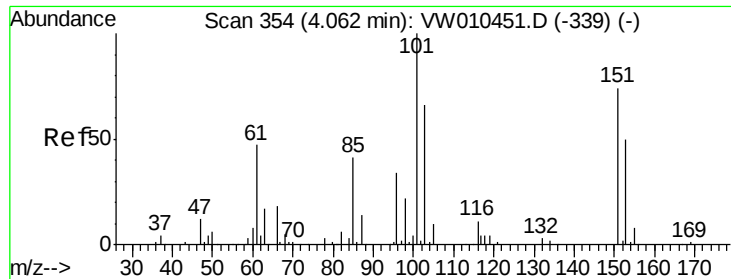


#8

Diethyl Ether
 Concen: 4.928 ug/l
 RT: 3.68 min Scan# 292
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
74	100		
45	93.1	42.9	128.5





#9

1,1,2-Trichlorotrifluoroethane

Concen: 5.421 ug/l

RT: 4.06 min Scan# 353

Delta R.T. -0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

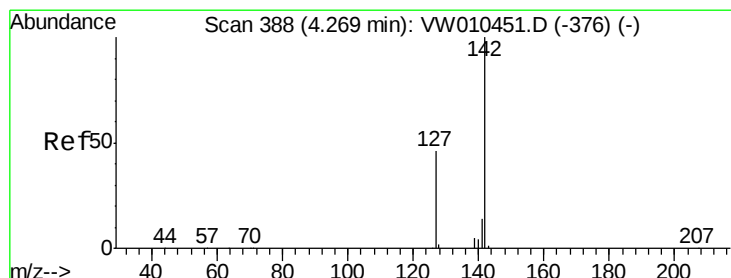
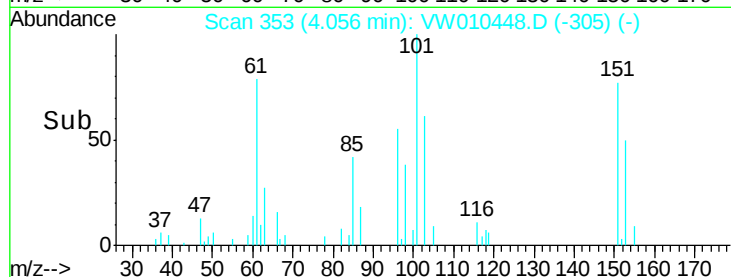
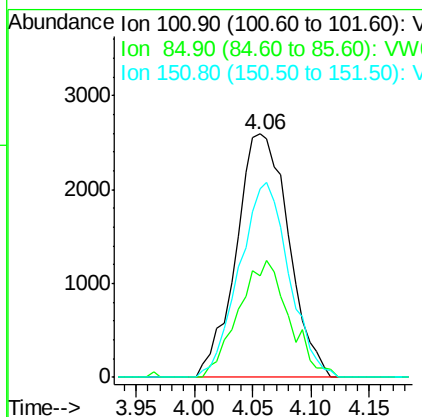
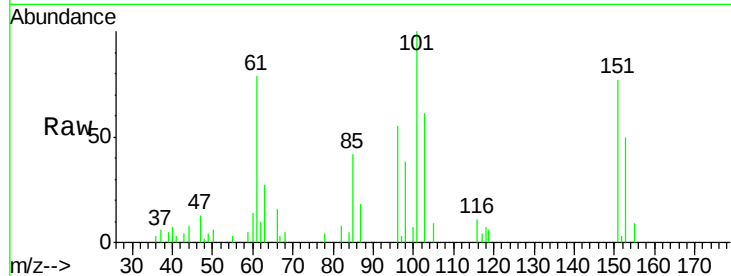
ClientSampleId :

VSTDIC005

Tot Ion:	101	Resp:	8091
Ion Ratio	Lower	Upper	
101	100		
85	46.2	34.3	51.5
151	76.1	60.3	90.5

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#10

Methyl Iodide

Concen: 5.044 ug/l

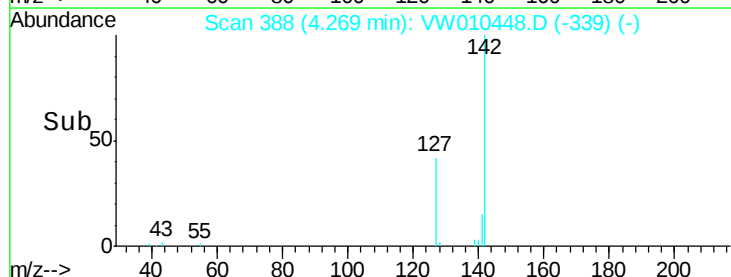
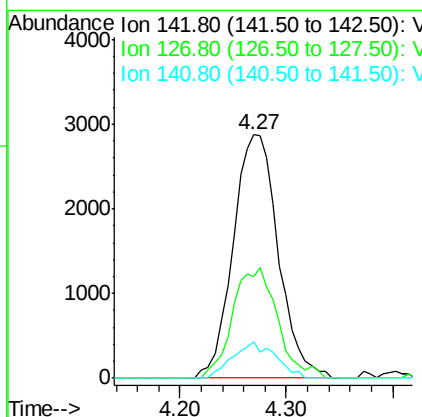
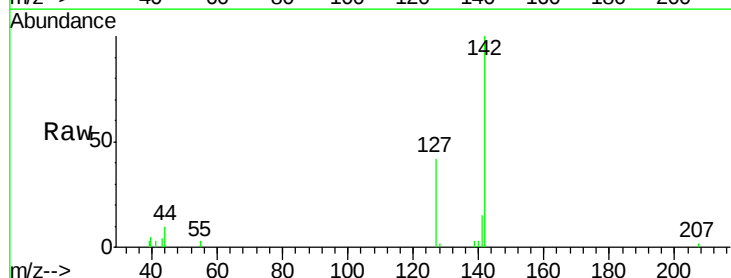
RT: 4.27 min Scan# 388

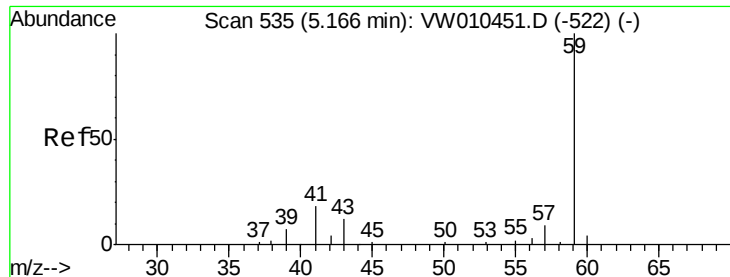
Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Tgt Ion:	142	Resp:	8527
Ion Ratio	Lower	Upper	
142	100		
127	45.0	36.1	54.1
141	14.0	11.3	16.9





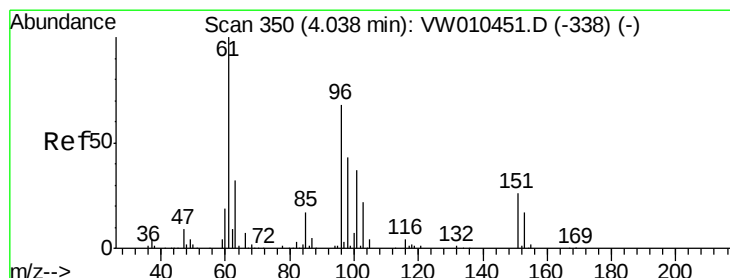
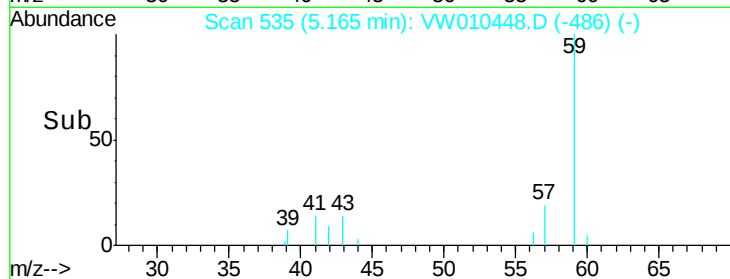
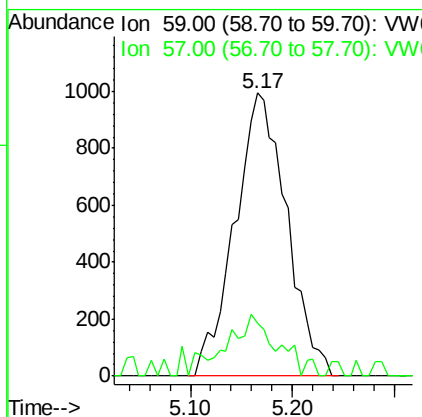
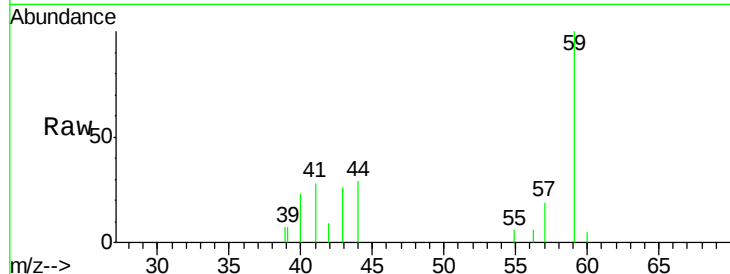
#11
Tert butyl alcohol
Concen: 25.869 ug/l
RT: 5.17 min Scan# 535
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampled :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
59	100		
57	8.6	8.8	13.2#

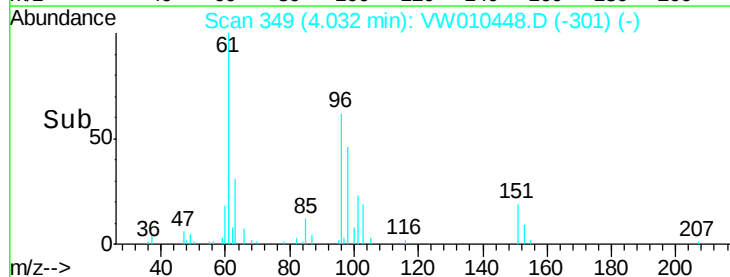
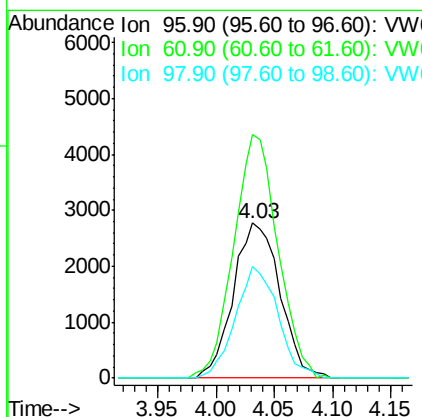
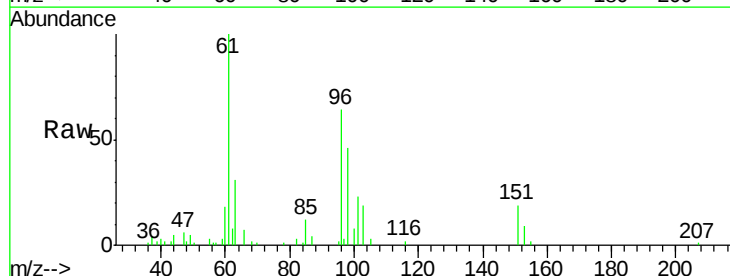
Manual Integrations
APPROVED

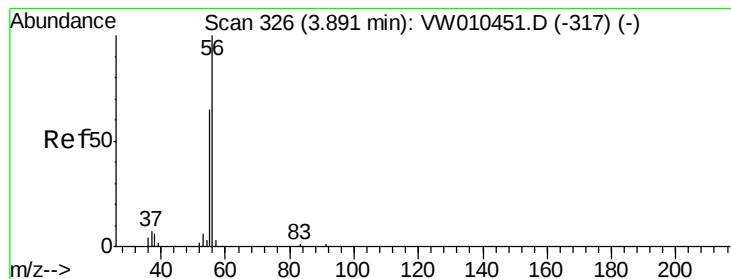
MMDadoda
5/21/2019 11:28:29 AM



#12
1,1-Dichloroethene
Concen: 5.468 ug/l
RT: 4.03 min Scan# 349
Delta R.T. -0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
96	100		
61	157.2	118.3	177.5
98	72.5	51.0	76.6





#13

Acrolein

Concen: 29.606 ug/l

RT: 3.89 min Scan# 326

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 56 Resp: 3002

Ion Ratio Lower Upper

56 100

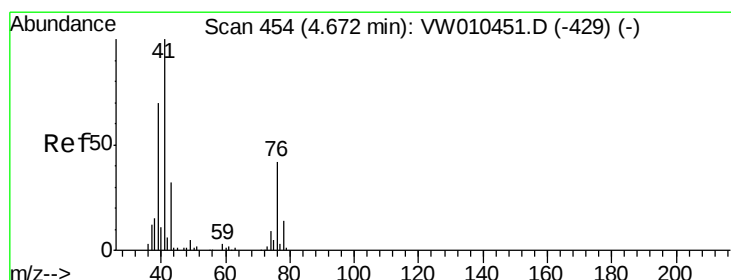
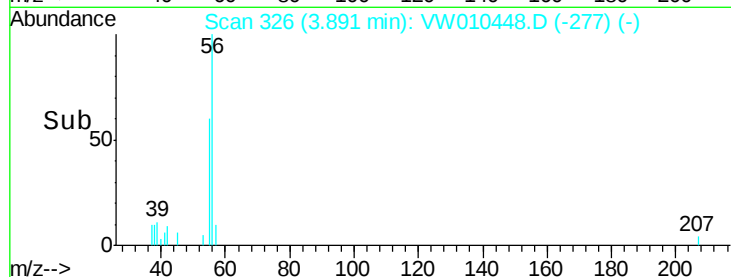
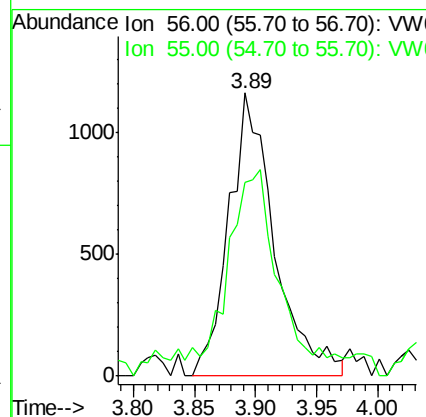
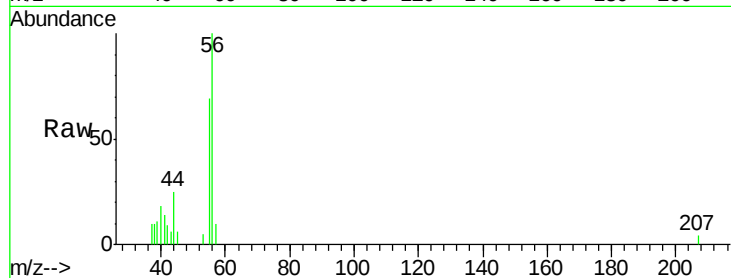
55 64.3 57.9 86.9

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



#14

Allyl chloride

Concen: 5.040 ug/l

RT: 4.67 min Scan# 454

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

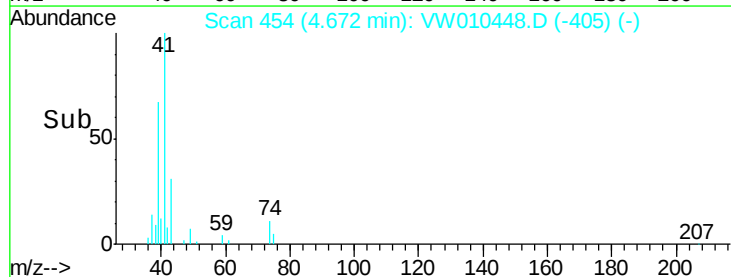
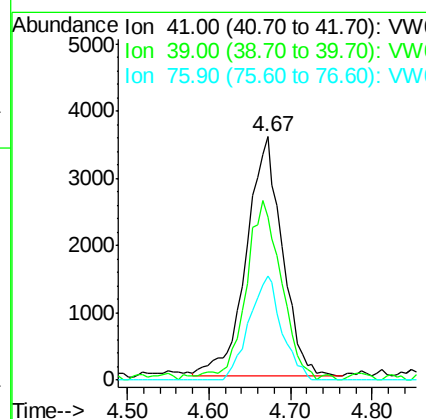
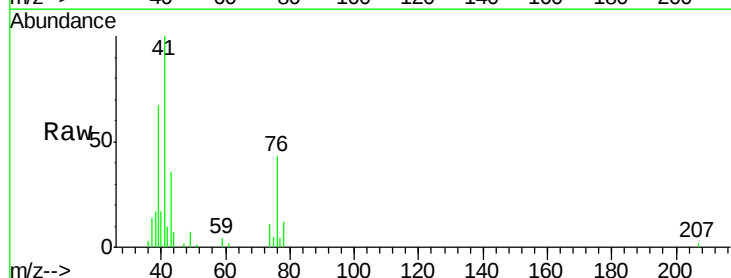
Tgt Ion: 41 Resp: 10920

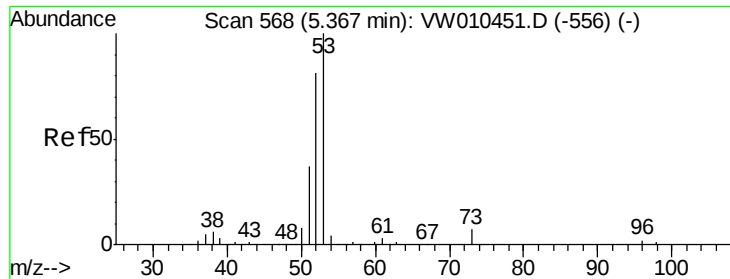
Ion Ratio Lower Upper

41 100

39 73.8 55.0 82.4

76 39.3 32.8 49.2





#15

Acrylonitrile

Concen: 25.046 ug/l

RT: 5.37 min Scan# 568

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

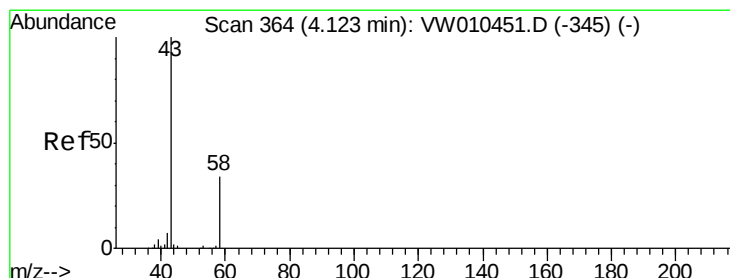
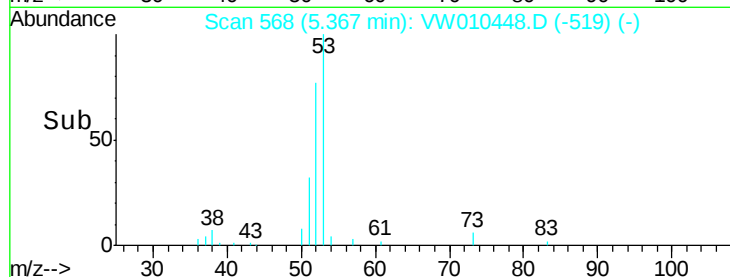
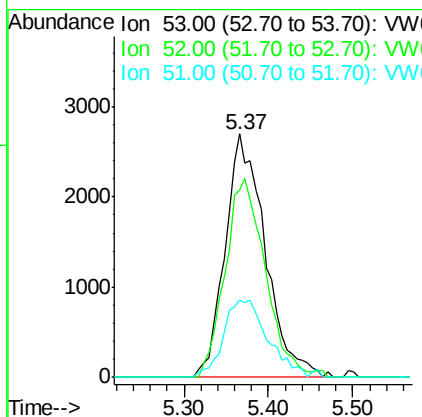
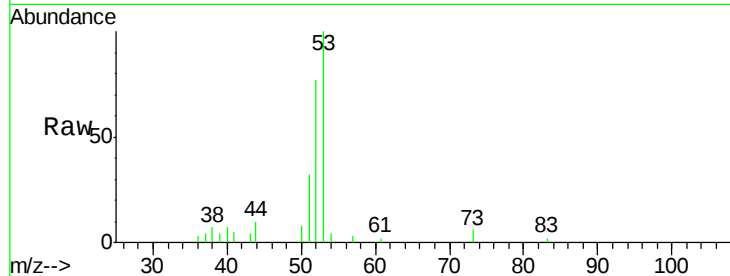
ClientSampleId :

VSTDIC005

Tot Ion:	53	Resp:	8720
Ion	Ratio	Lower	Upper
53	100		
52	82.4	65.6	98.4
51	35.0	29.5	44.3

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#16

Acetone

Concen: 29.936 ug/l

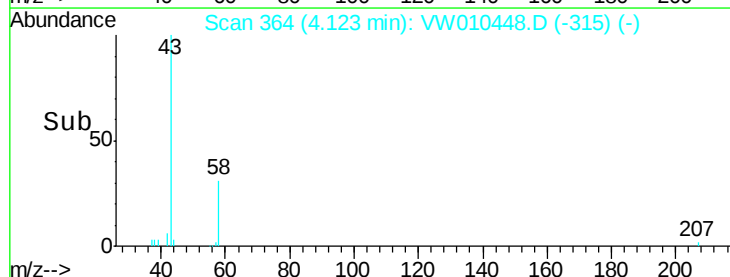
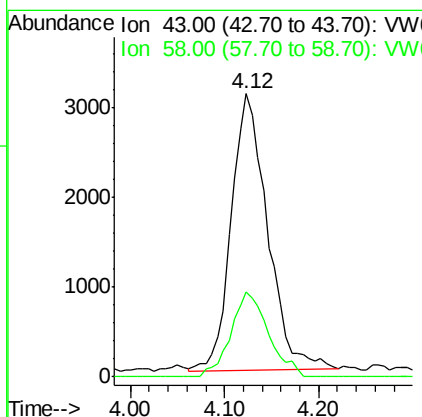
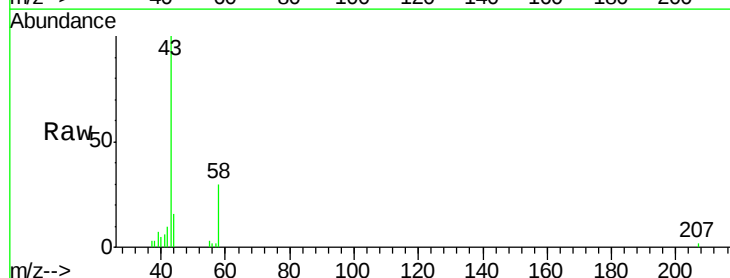
RT: 4.12 min Scan# 364

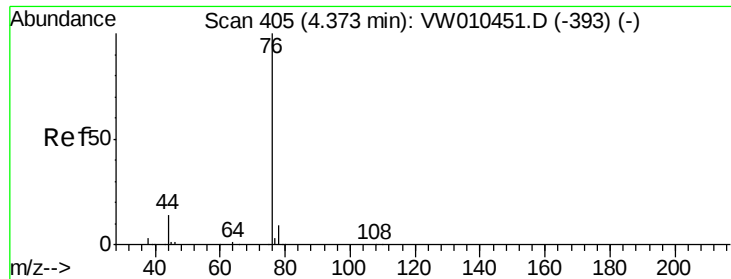
Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Tgt Ion:	43	Resp:	8274
Ion	Ratio	Lower	Upper
43	100		
58	30.7	27.0	40.4





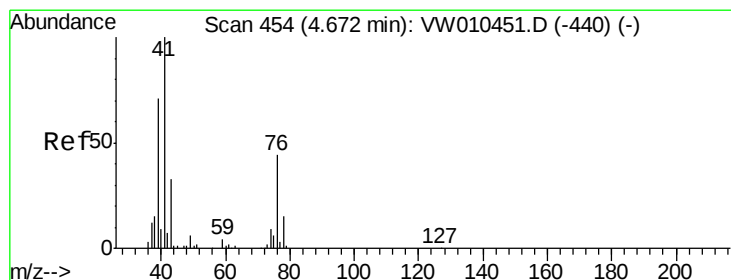
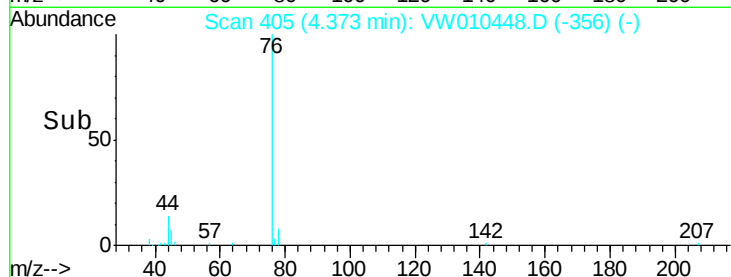
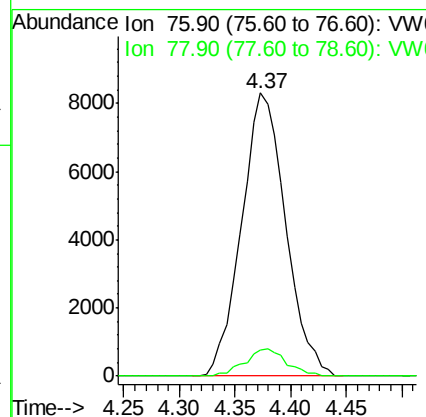
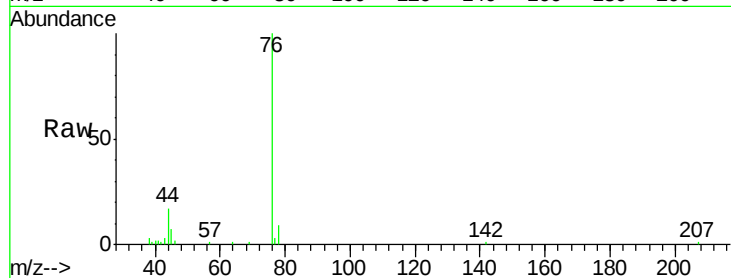
#17
Carbon Disulfide
Concen: 5.571 ug/l
RT: 4.37 min Scan# 405
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
76	100		
78	9.2	7.1	10.7

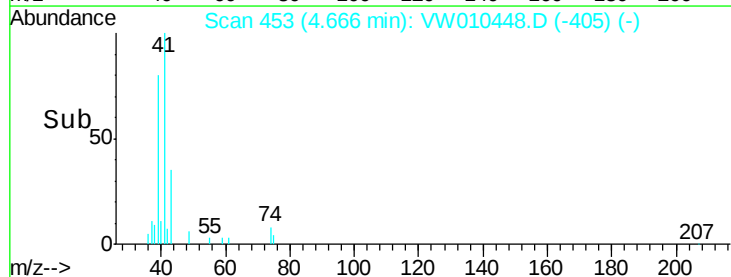
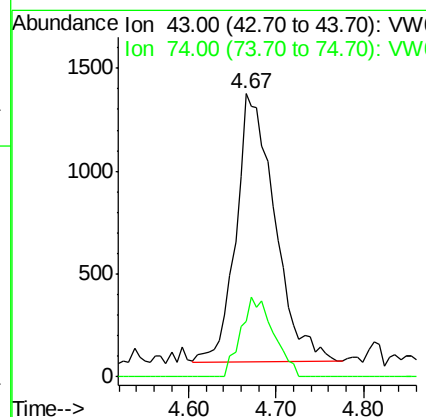
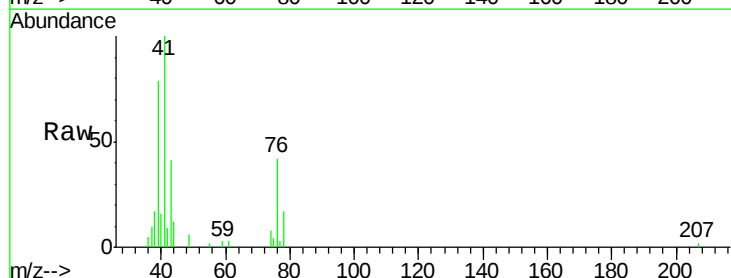
Manual Integrations
APPROVED

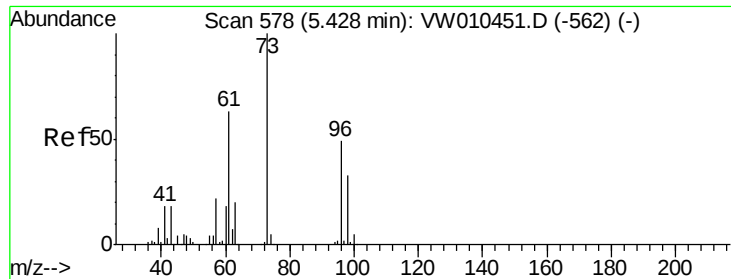
MMDadoda
5/21/2019 11:28:29 AM



#18
Methyl Acetate
Concen: 4.867 ug/l
RT: 4.67 min Scan# 453
Delta R.T. -0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
43	100		
74	25.2	21.6	32.4





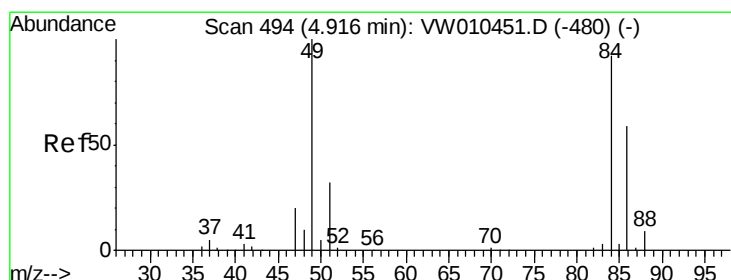
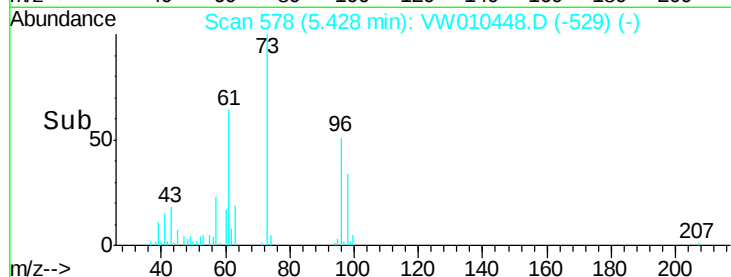
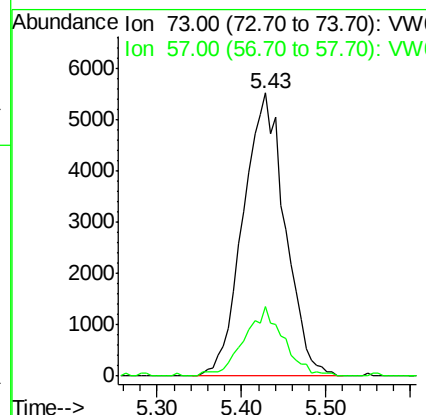
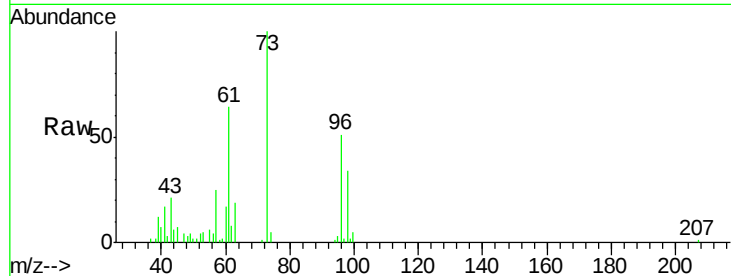
#19
Methvl tert-butvl Ether
Concen: 4.746 ug/l
RT: 5.43 min Scan# 578
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion: 73 Resp: 18801
Ion Ratio Lower Upper
73 100
57 24.5 17.4 26.0

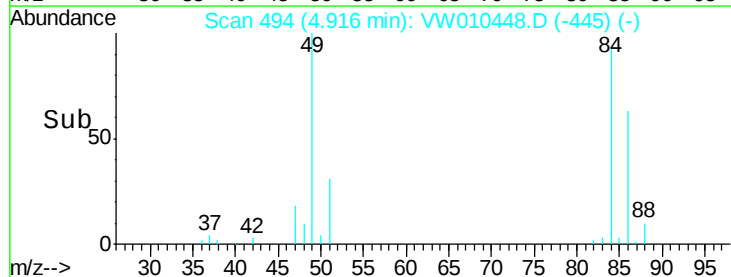
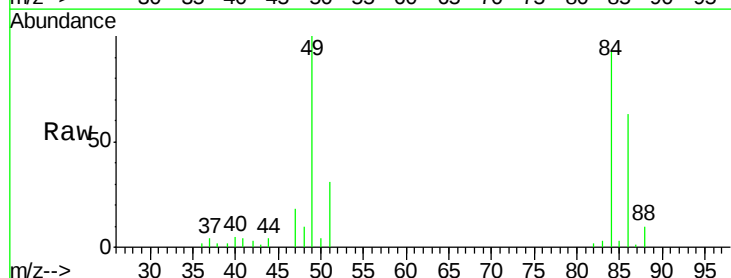
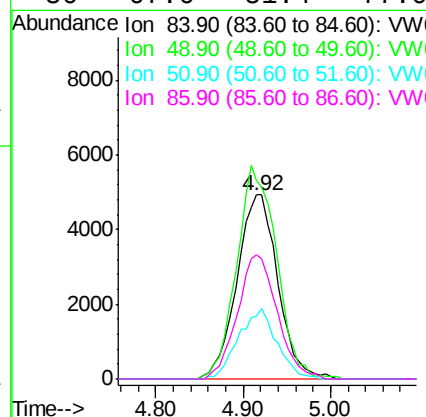
Manual Integrations
APPROVED

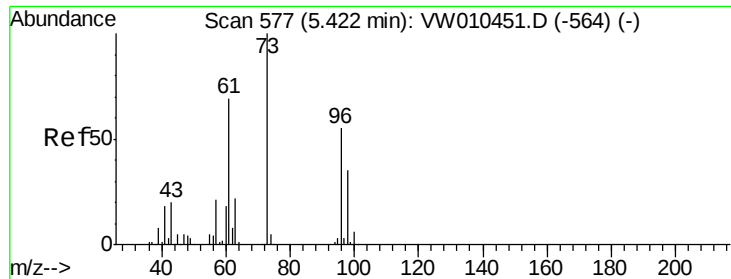
MMDadoda
5/21/2019 11:28:29 AM



#20
Methylene Chloride
Concen: 9.573 ug/l
RT: 4.92 min Scan# 494
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion: 84 Resp: 15988
Ion Ratio Lower Upper
84 100
49 107.7 87.2 130.8
51 33.8 27.7 41.5
86 67.6 51.4 77.0





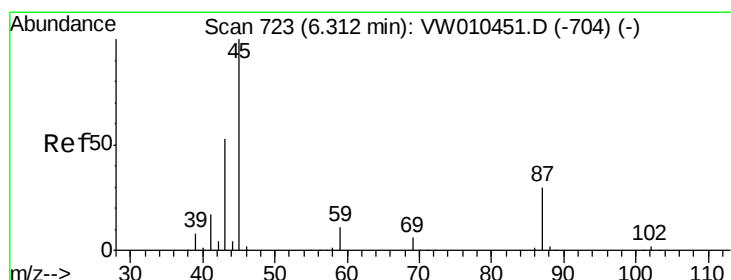
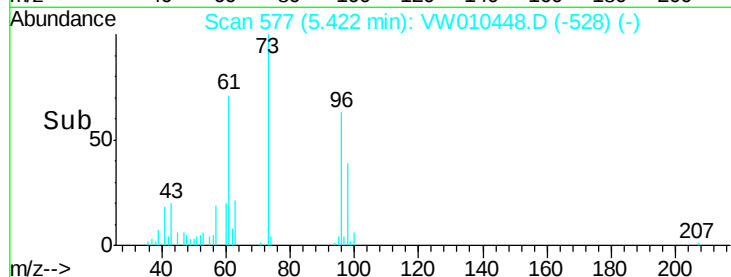
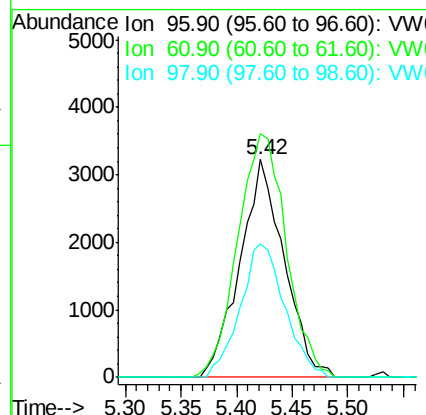
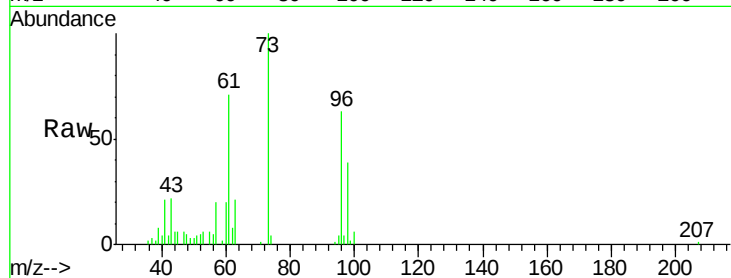
#21
trans-1,2-Dichloroethene
Concen: 5.394 ug/l
RT: 5.42 min Scan# 577
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
96	100		
61	111.9	101.4	152.0
98	61.6	50.6	76.0

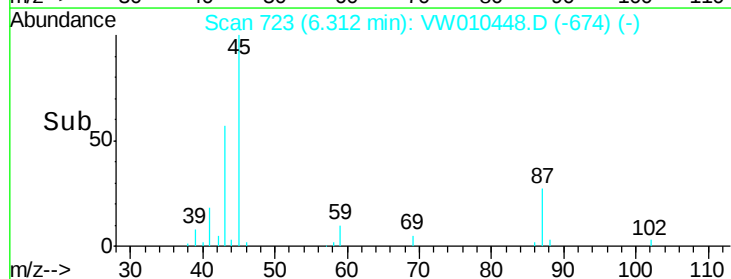
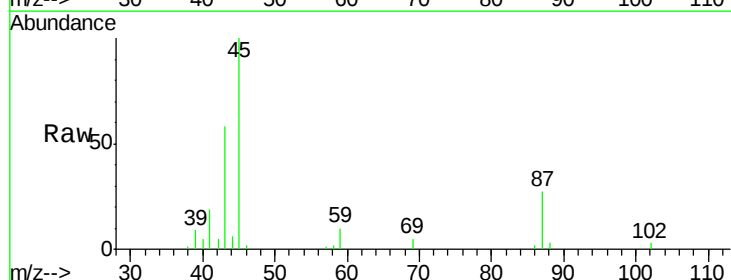
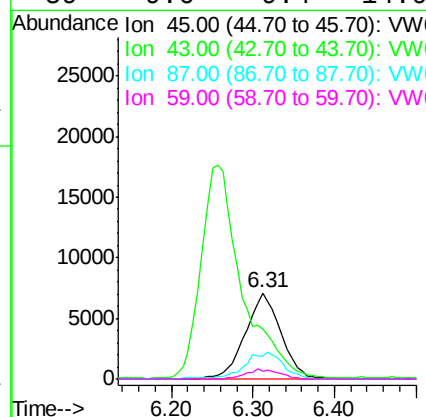
Manual Integrations
APPROVED

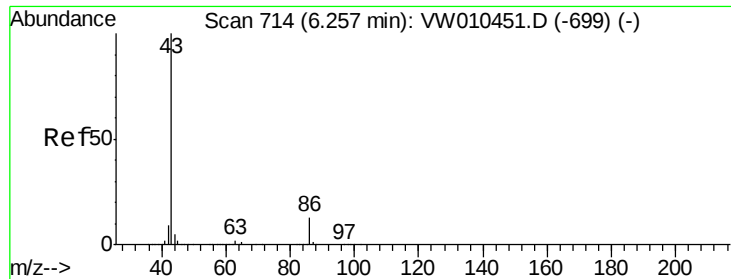
MMDadoda
5/21/2019 11:28:29 AM



#22
Diisopropyl ether
Concen: 4.685 ug/l
RT: 6.31 min Scan# 723
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
45	100		
43	55.6	42.9	64.3
87	27.1	24.6	36.8
59	9.6	9.4	14.0





#23

Vinyl Acetate

Concen: 21.915 ug/l

RT: 6.26 min Scan# 714

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 43 Resp: 62115

Ion Ratio Lower Upper

43 100

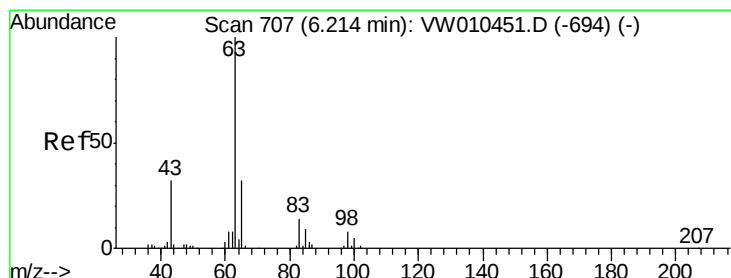
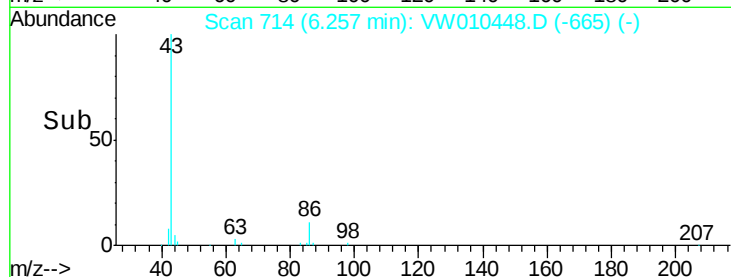
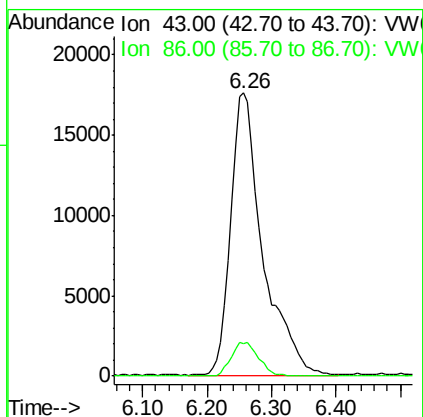
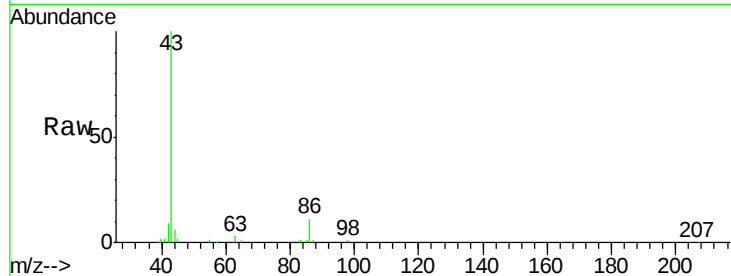
86 11.3 10.3 15.5

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



#24

1,1-Dichloroethane

Concen: 4.776 ug/l

RT: 6.22 min Scan# 708

Delta R.T. 0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

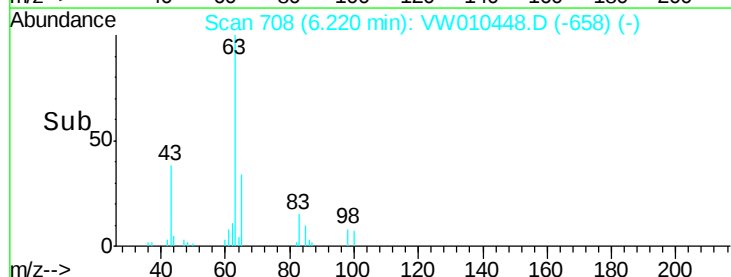
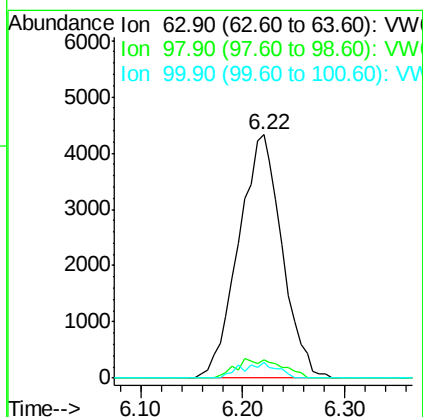
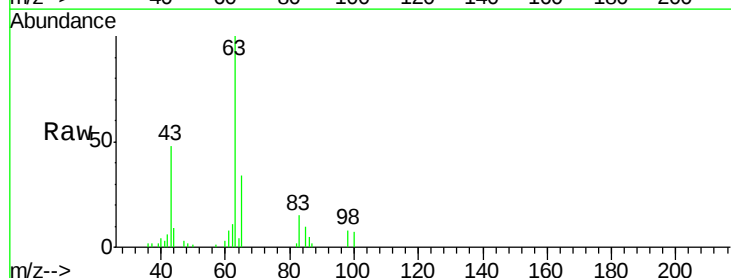
Tgt Ion: 63 Resp: 12791

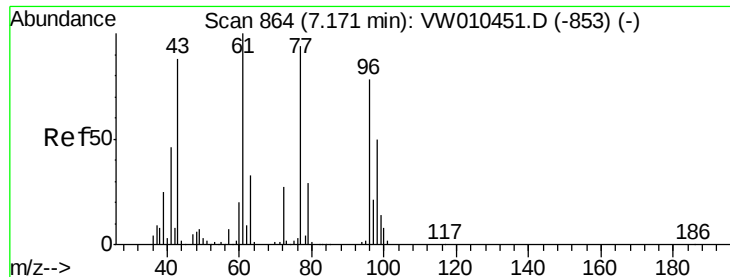
Ion Ratio Lower Upper

63 100

98 7.8 3.8 11.2

100 6.6 2.5 7.4





#25

2-Butanone

Concen: 23.900 ug/l

RT: 7.17 min Scan# 864

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 43 Resp: 10764

Ion Ratio Lower Upper

43 100

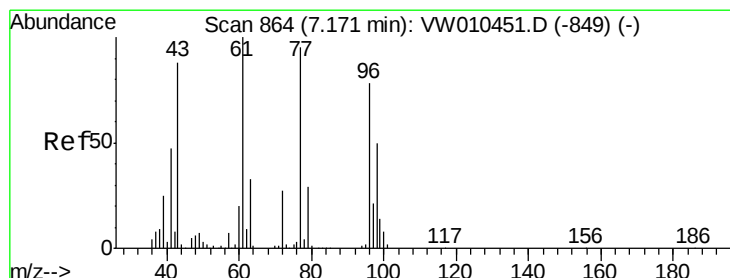
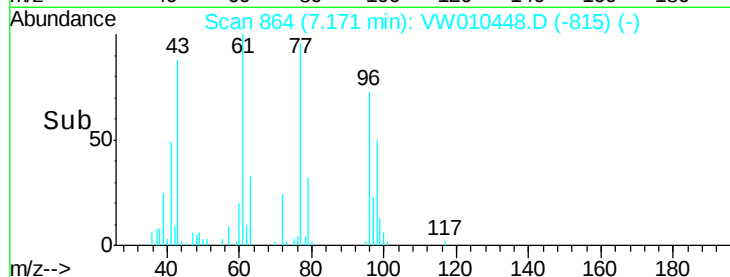
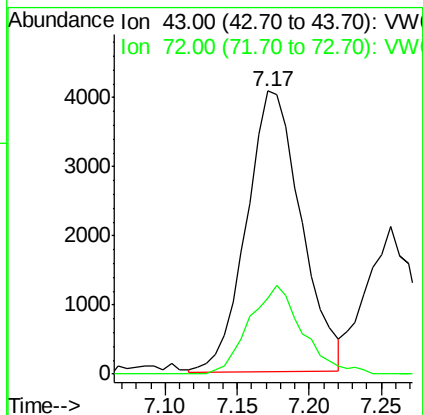
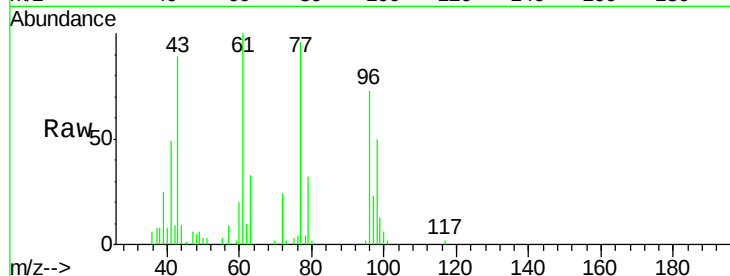
72 27.5 24.1 36.1

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



#26

2,2-Dichloropropane

Concen: 5.421 ug/l

RT: 7.17 min Scan# 863

Delta R.T. -0.01 min

Lab File: VW010448.D

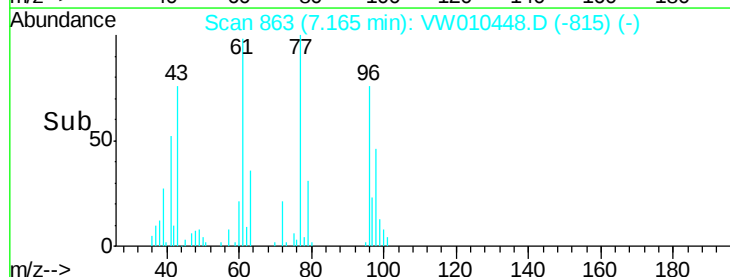
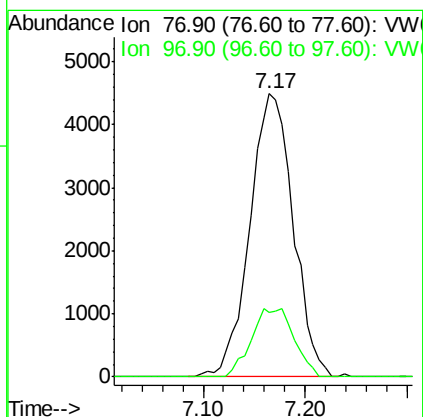
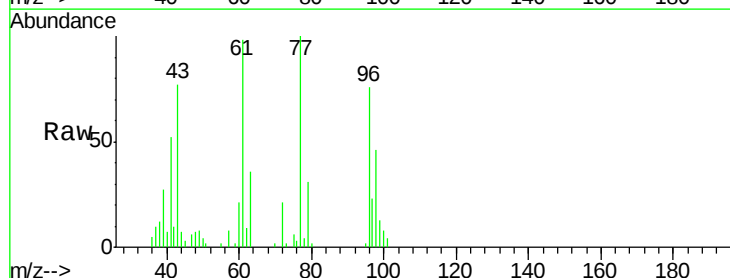
Acq: 20 May 2019 15:10

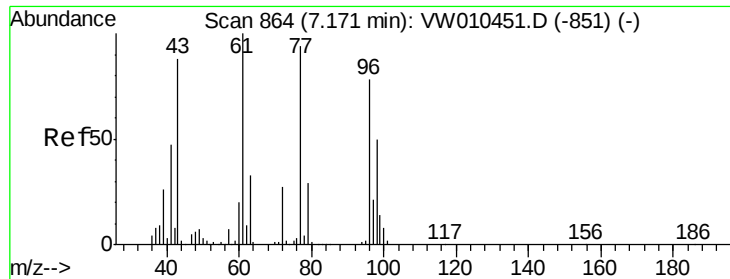
Tgt Ion: 77 Resp: 13223

Ion Ratio Lower Upper

77 100

97 23.7 11.7 35.0





#27

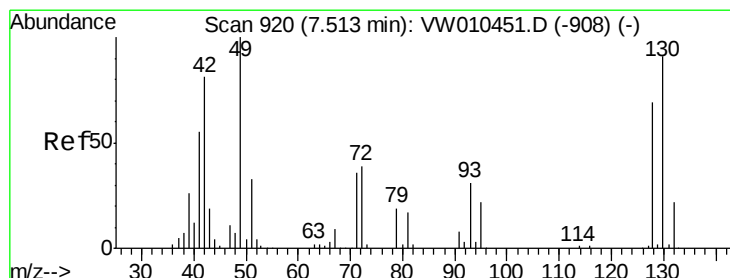
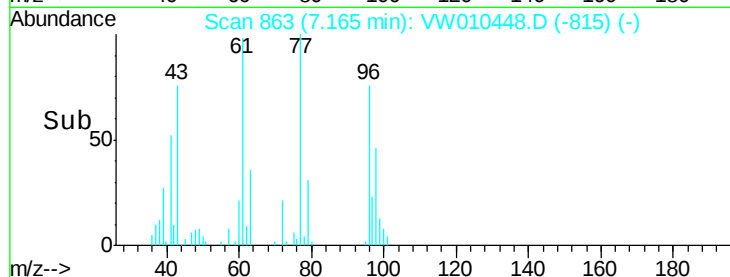
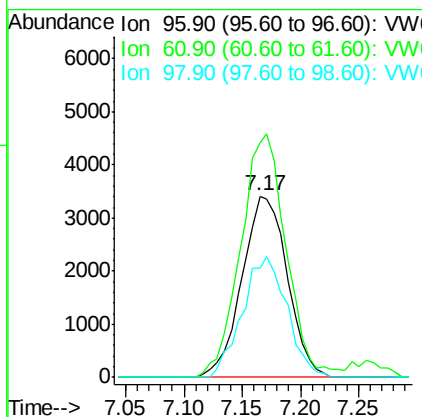
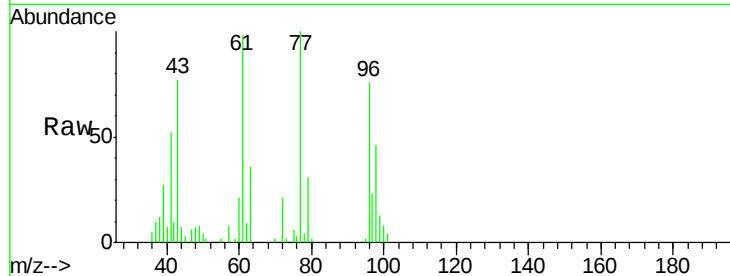
cis-1,2-Dichloroethene
Concen: 5.030 ug/l
RT: 7.17 min Scan# 863
Delta R.T. -0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
96	100		
61	134.5	0.0	265.4
98	65.2	0.0	129.4

Manual Integrations
APPROVED

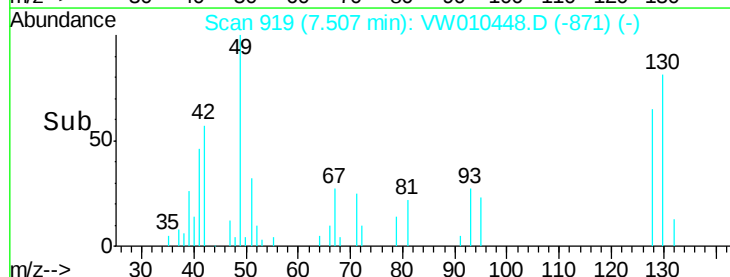
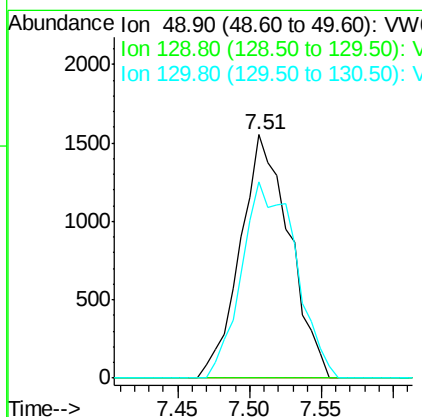
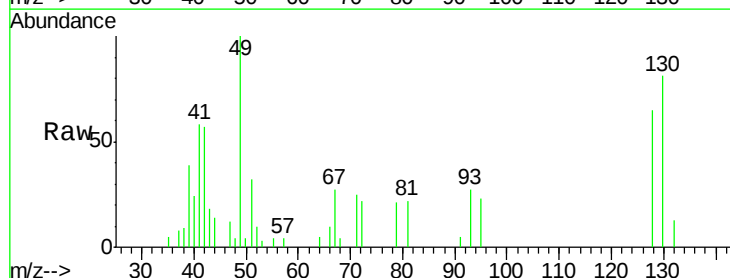
MMDadoda
5/21/2019 11:28:29 AM

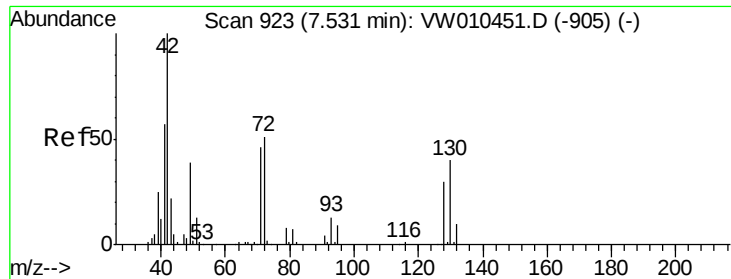


#28

Bromochloromethane
Concen: 3.745 ug/l
RT: 7.51 min Scan# 919
Delta R.T. -0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
49	100		
129	0.0	0.0	4.8
130	88.3	71.2	106.8





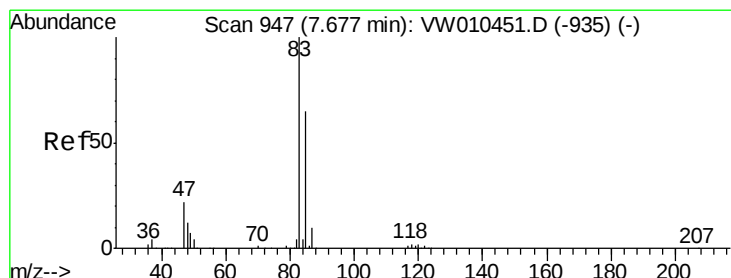
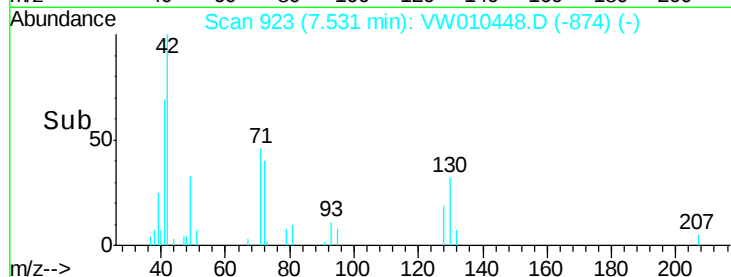
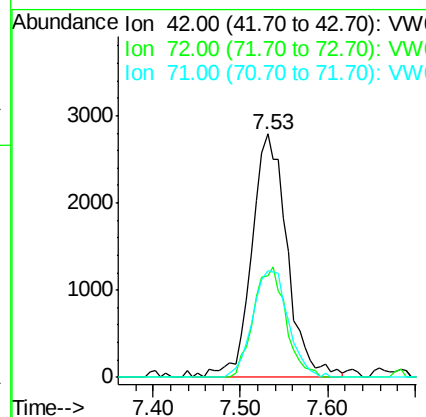
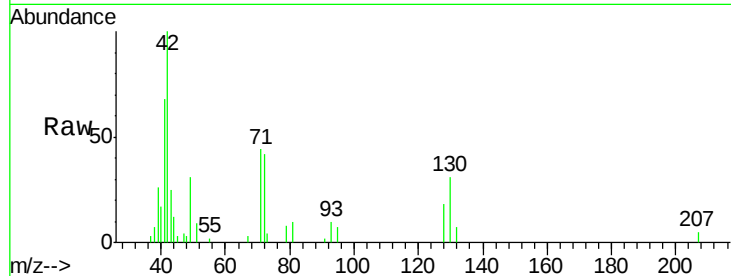
#29
Tetrahydrofuran
Concen: 25.775 ug/l
RT: 7.53 min Scan# 923
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion:	42	Resp:	7855
Ion	Ratio	Lower	Upper
42	100		
72	41.3	38.5	57.7
71	44.2	36.5	54.7

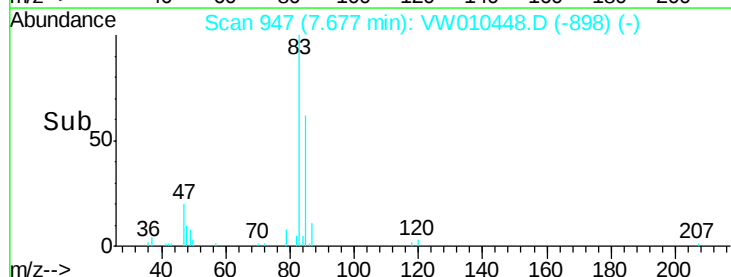
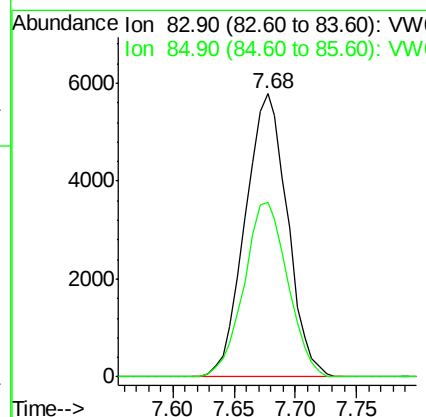
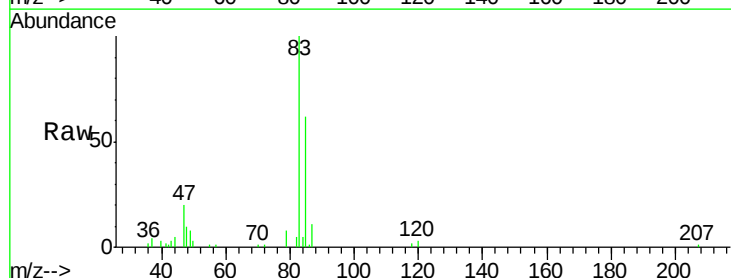
Manual Integrations
APPROVED

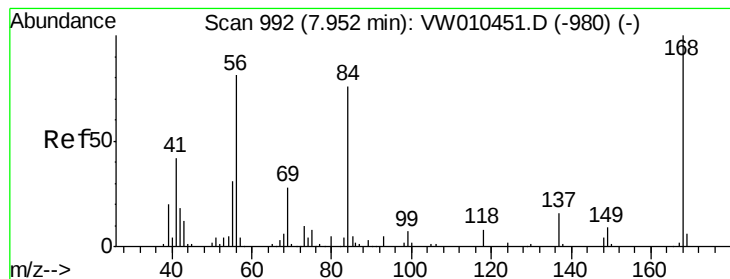
MMDadoda
5/21/2019 11:28:29 AM



#30
Chloroform
Concen: 4.925 ug/l
RT: 7.68 min Scan# 947
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion:	83	Resp:	13885
Ion	Ratio	Lower	Upper
83	100		
85	61.7	52.2	78.4





#31

Cyclohexane

Concen: 5.937 ug/l

RT: 7.95 min Scan# 992

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 56 Resp: 16059

Ion Ratio Lower Upper

56 100

69 67.9 28.2 42.2#

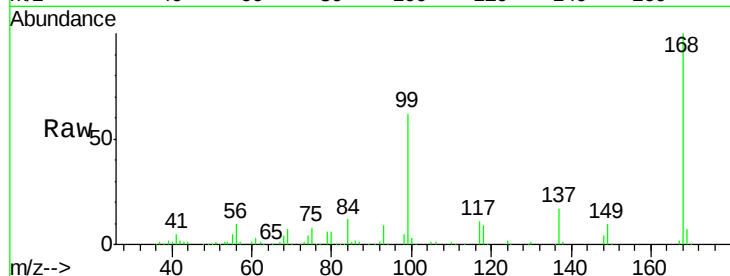
84 113.4 75.8 113.8

Manual Integrations

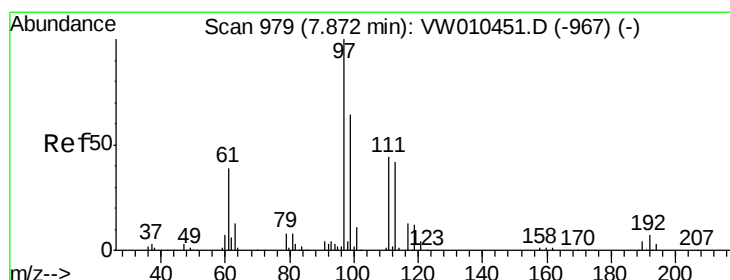
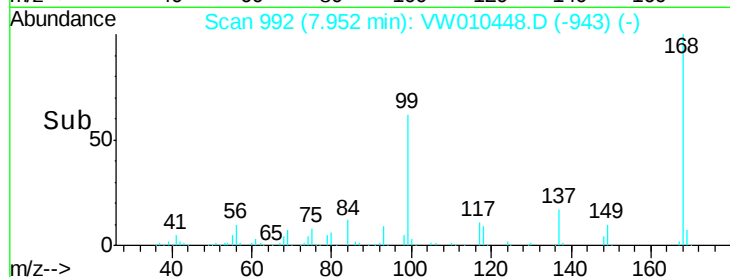
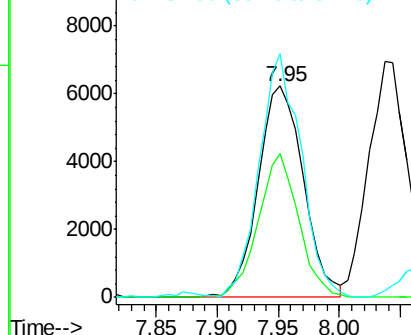
APPROVED

MMDadoda

5/21/2019 11:28:29 AM



Abundance Ion 56.00 (55.70 to 56.70): VW
Ion 69.00 (68.70 to 69.70): VW
Ion 84.00 (83.70 to 84.70): VW



#32

1,1,1-Trichloroethane

Concen: 5.172 ug/l

RT: 7.87 min Scan# 979

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

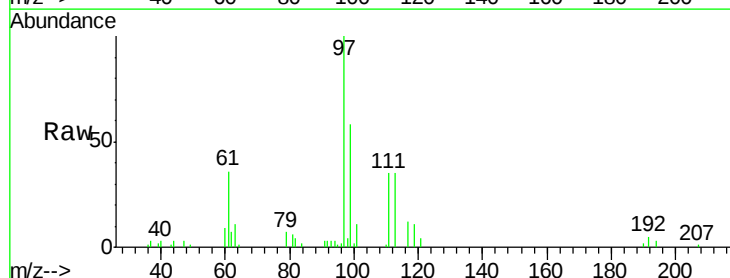
Tgt Ion: 97 Resp: 13776

Ion Ratio Lower Upper

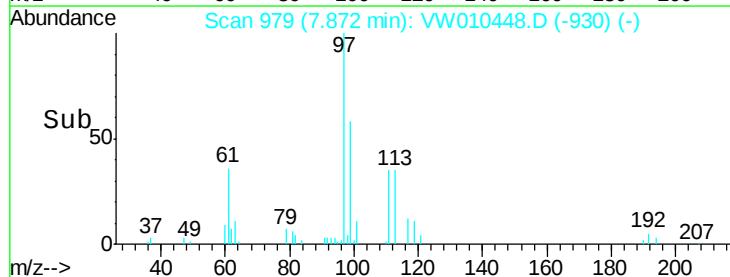
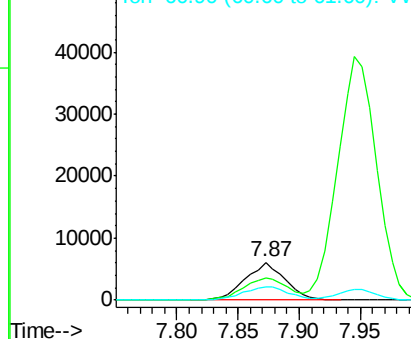
97 100

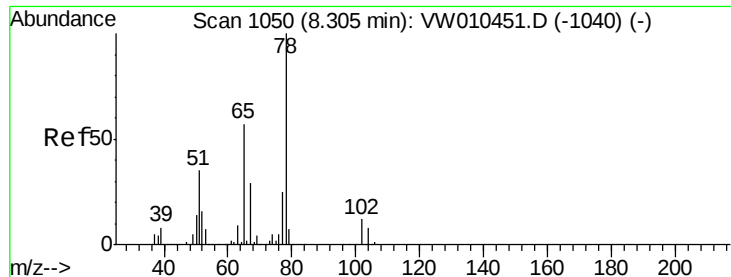
99 64.4 50.8 76.2

61 40.0 32.1 48.1



Abundance Ion 96.90 (96.60 to 97.60): VW
Ion 98.90 (98.60 to 99.60): VW
Ion 60.90 (60.60 to 61.60): VW





#33

1,2-Dichloroethane-d4

Concen: 4.518 ug/l

RT: 8.31 min Scan# 1050

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 65 Resp: 6777

Ion Ratio Lower Upper

65 100

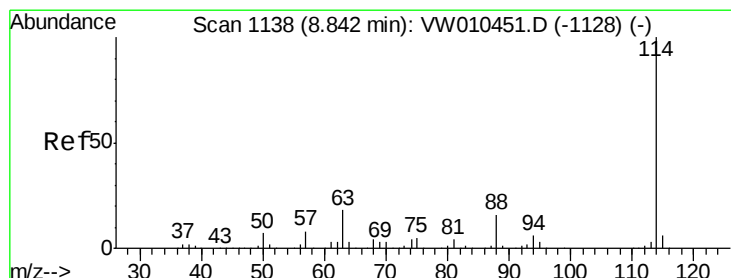
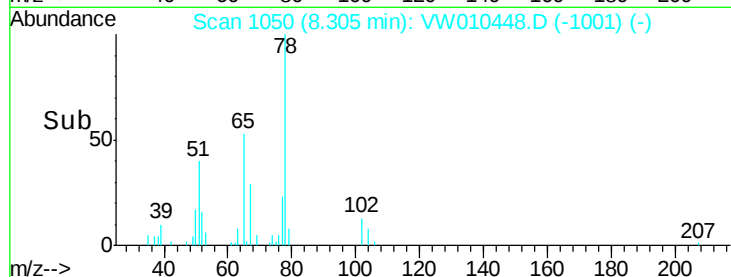
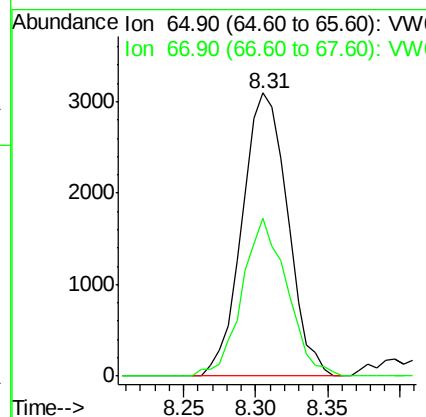
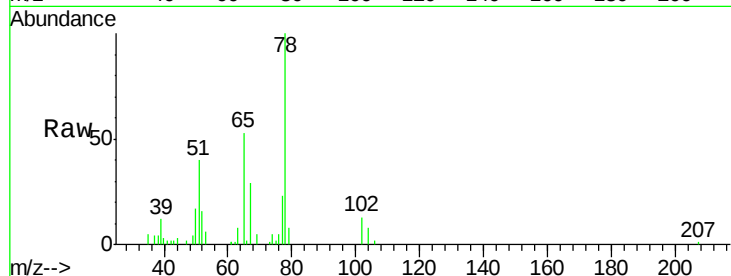
67 55.1 0.0 103.6

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.84 min Scan# 1138

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

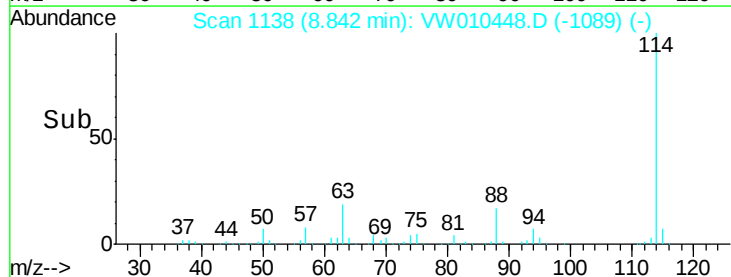
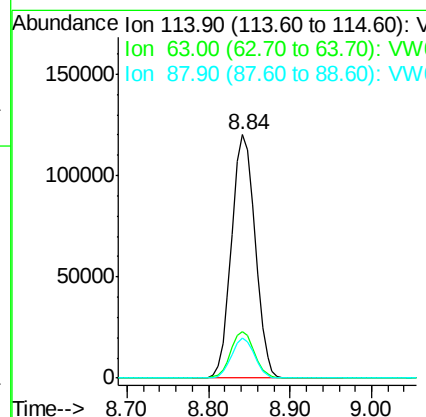
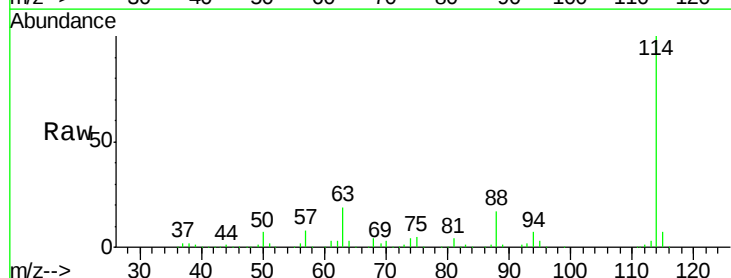
Tgt Ion: 114 Resp: 239732

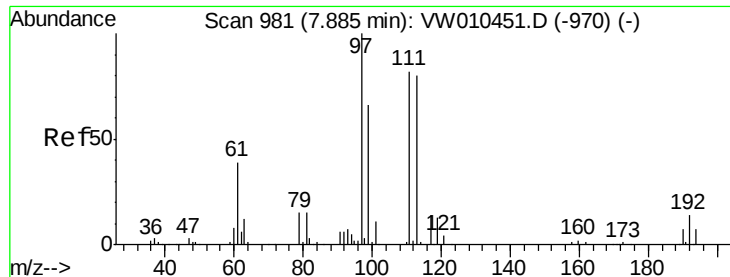
Ion Ratio Lower Upper

114 100

63 19.3 0.0 36.0

88 16.5 0.0 32.0





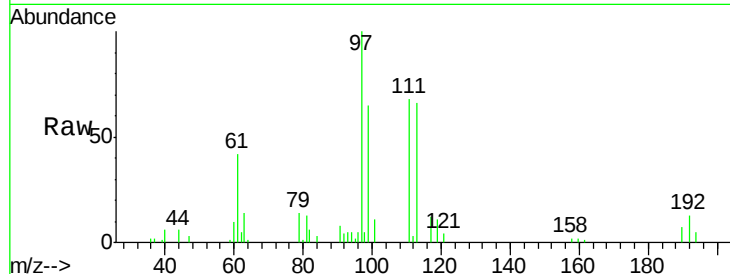
#35
 Dibromofluoromethane
 Concen: 4.612 ug/l
 RT: 7.88 min Scan# 981
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion	Ratio	Lower	Upper
113	100		
111	103.5	82.2	123.4
192	17.2	14.3	21.5

Manual Integrations
 APPROVED

MMDadoda
 5/21/2019 11:28:29 AM

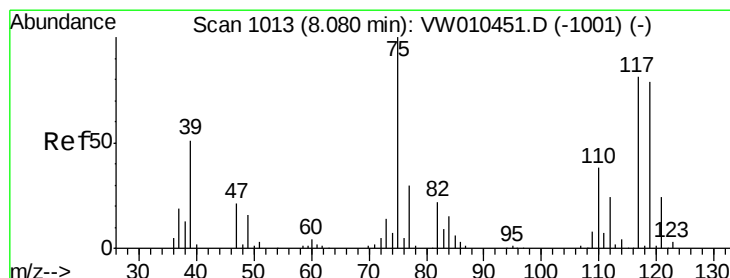
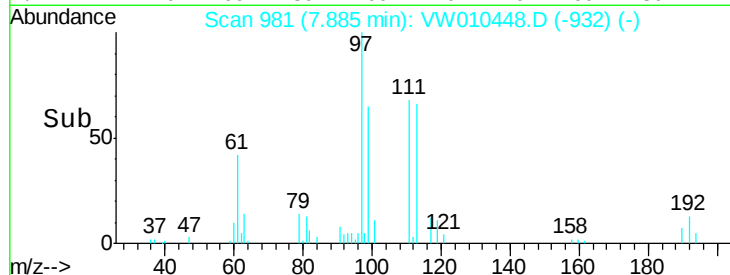
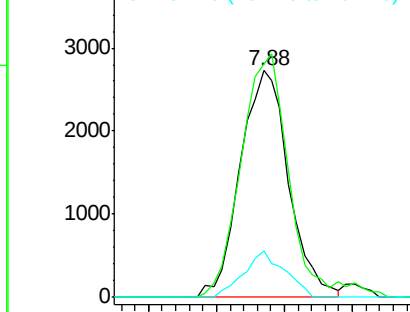


Abundance

Ion 112.80 (112.50 to 113.50): V

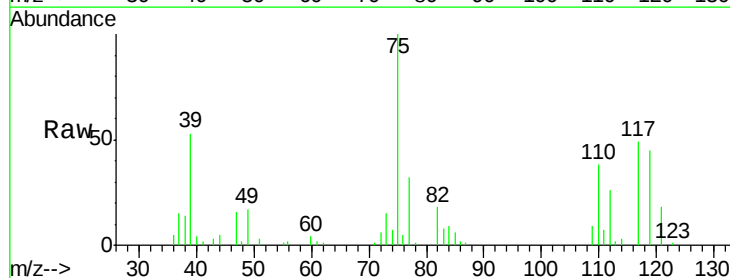
Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36
 1,1-Dichloropropene
 Concen: 5.416 ug/l
 RT: 8.09 min Scan# 1014
 Delta R.T. 0.01 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
75	100		
110	37.5	19.2	57.6
77	32.2	25.2	37.8

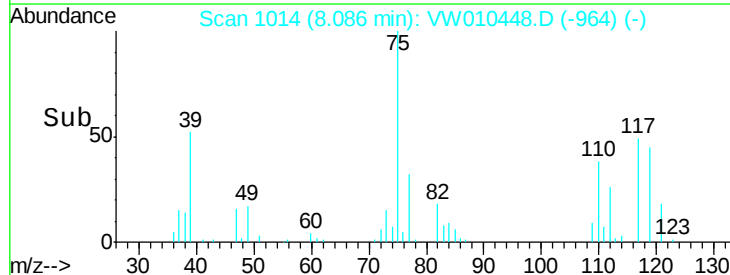
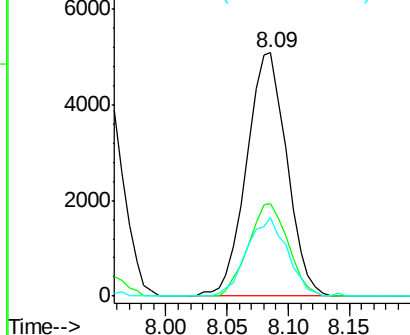


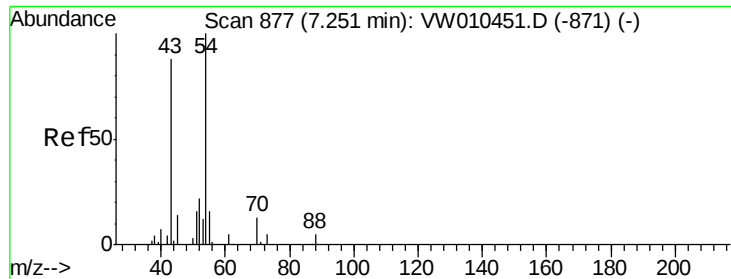
Abundance

Ion 74.90 (74.60 to 75.60): VW

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VW





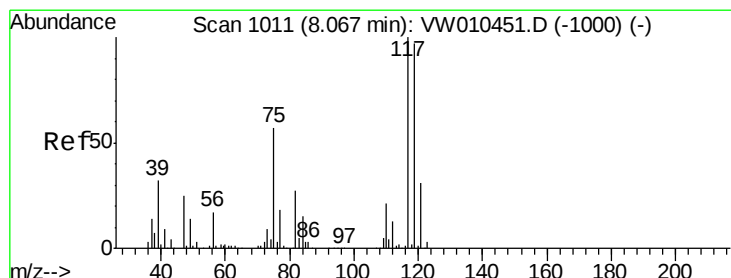
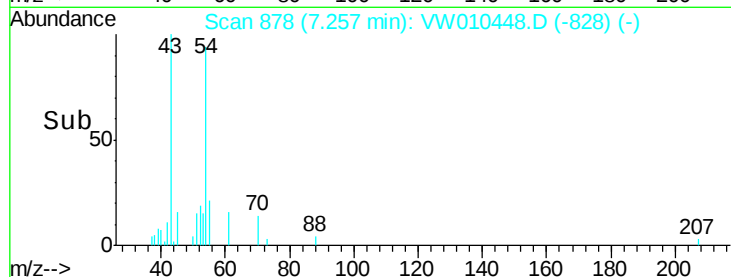
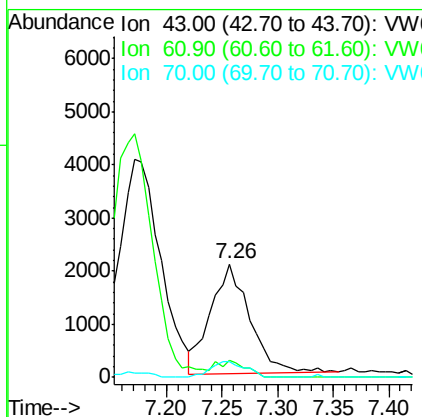
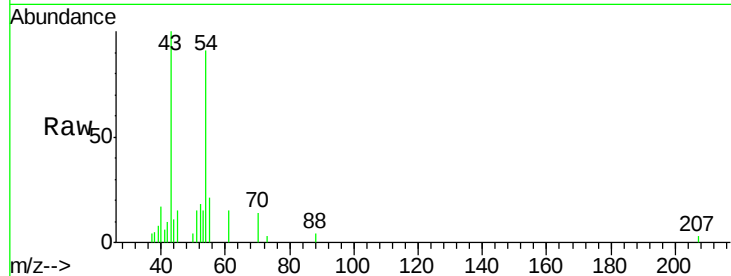
#37
Ethyl Acetate
Concen: 5.057 ug/l
RT: 7.26 min Scan# 878
Delta R.T. 0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
43	100		
61	11.3	11.2	16.8
70	12.7	9.9	14.9

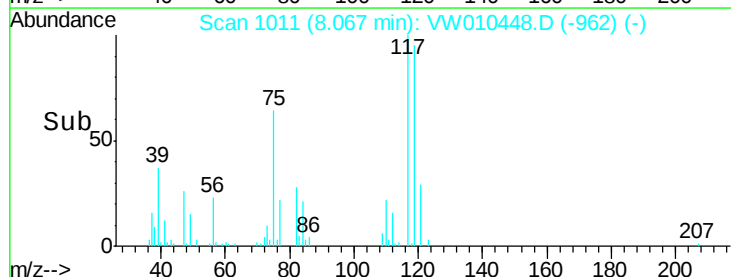
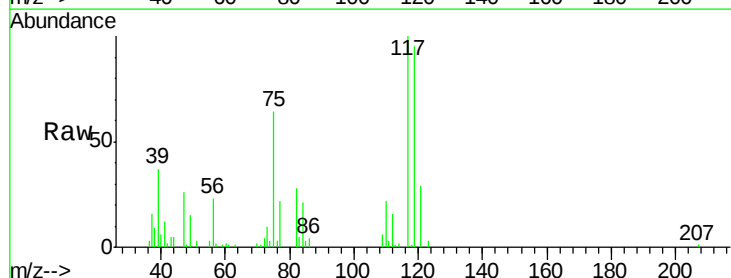
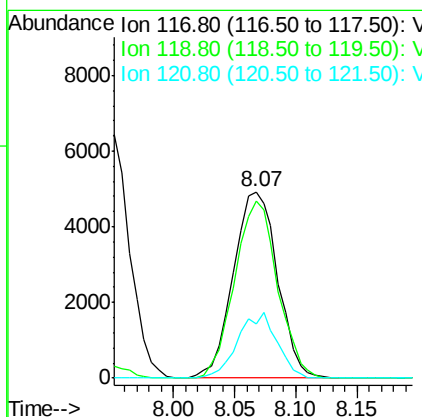
Manual Integrations
APPROVED

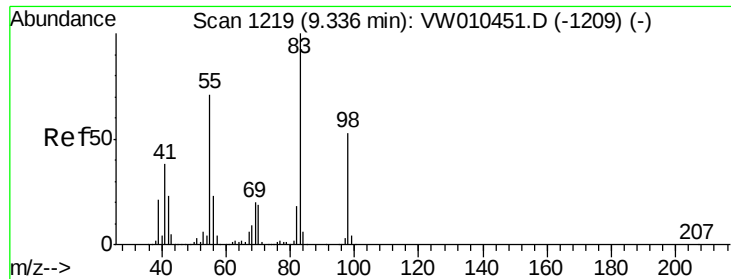
MMDadoda
5/21/2019 11:28:29 AM



#38
Carbon Tetrachloride
Concen: 5.291 ug/l
RT: 8.07 min Scan# 1011
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
117	100		
119	95.4	77.4	116.0
121	28.9	25.0	37.6





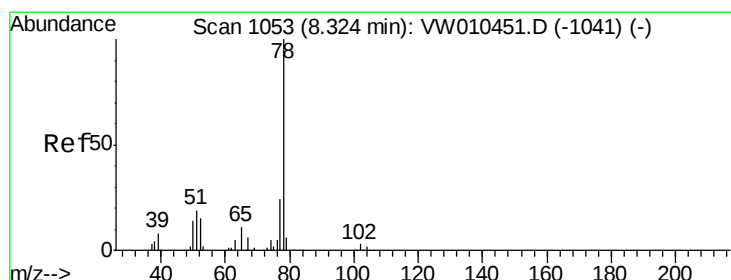
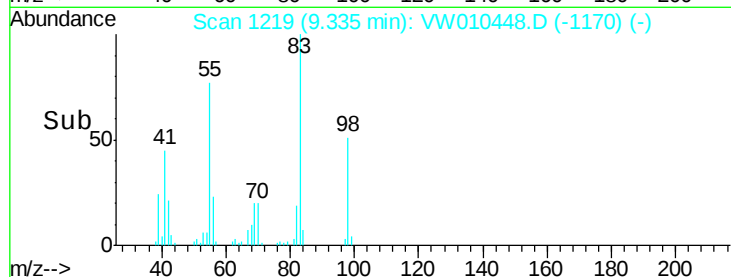
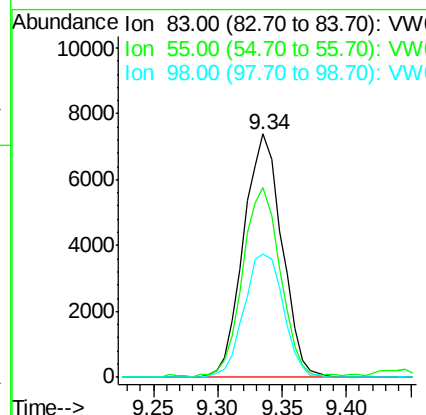
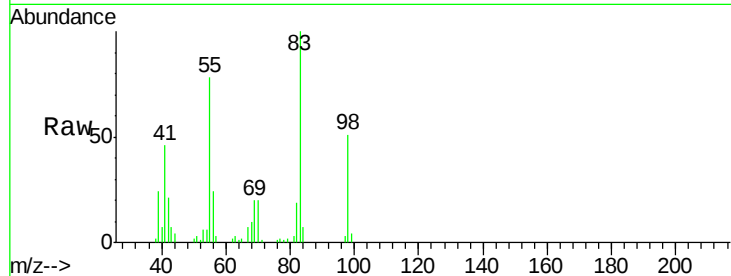
#39
Methvlcvclohexane
Concen: 5.281 ug/l
RT: 9.34 min Scan# 1219
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampled :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
83	100		
55	78.0	57.0	85.6
98	50.5	42.0	63.0

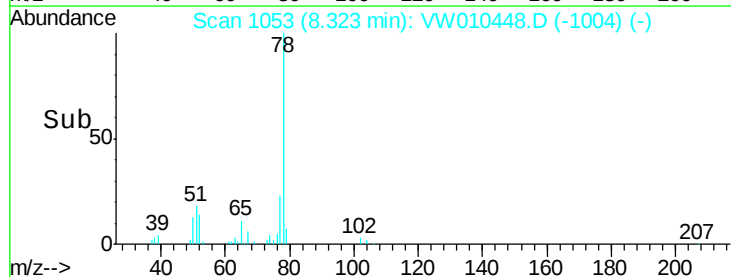
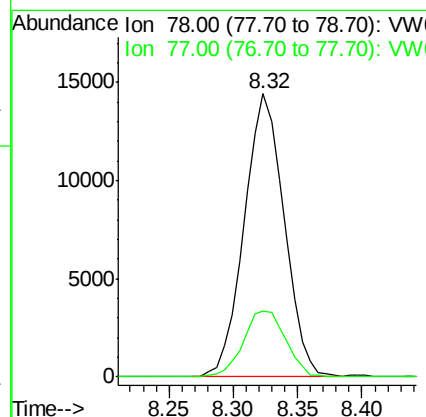
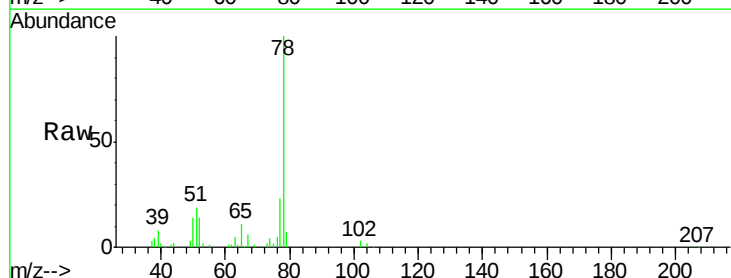
Manual Integrations
APPROVED

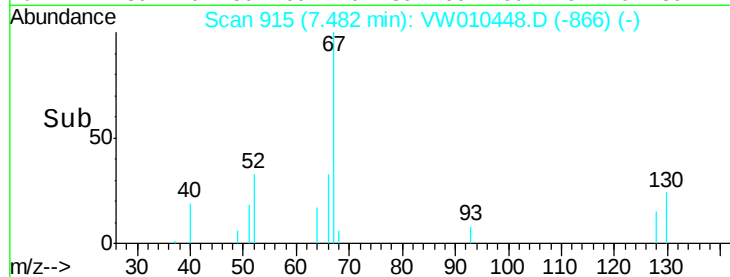
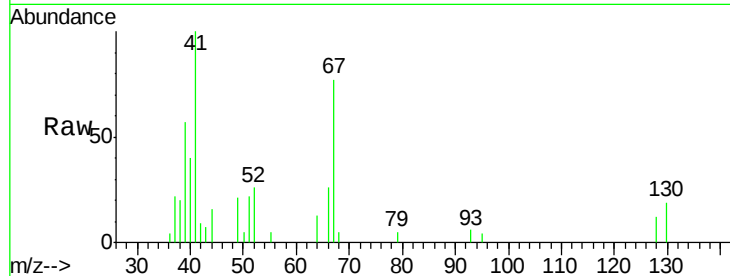
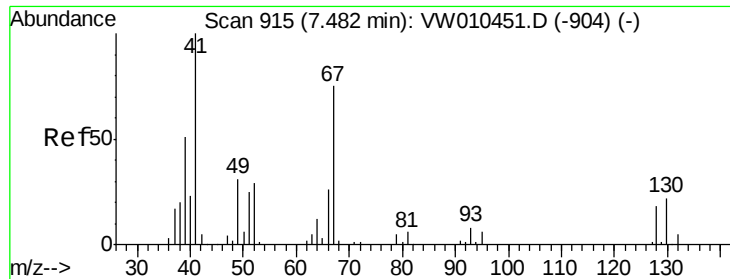
MMDadoda
5/21/2019 11:28:29 AM



#40
Benzene
Concen: 5.044 ug/l
RT: 8.32 min Scan# 1053
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.2	18.9	28.3





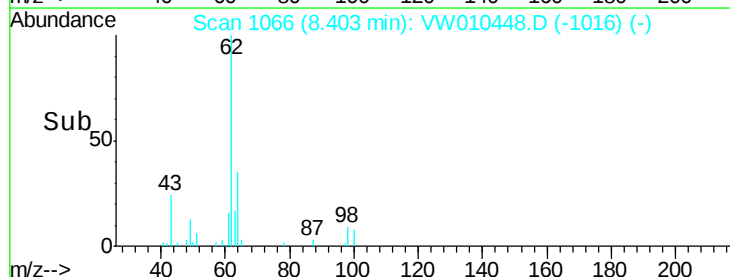
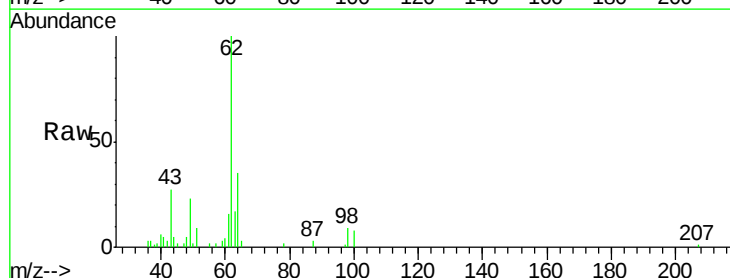
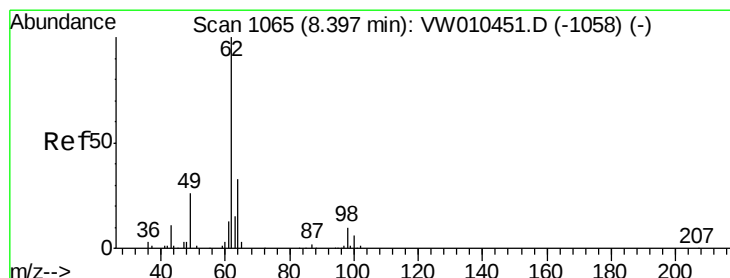
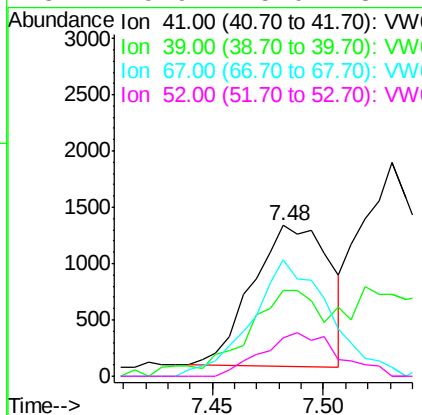
#41
Methacrylonitrile
Concen: 5.167 ug/l
RT: 7.48 min Scan# 915
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tot Ion	41	Resp	3038
Ion	Ratio	Lower	Upper
41	100		
39	59.1	47.4	71.2
67	82.7	65.5	98.3
52	29.9	25.0	37.4

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

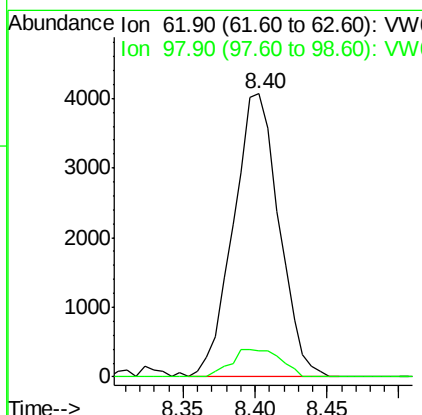
Manual Integrations
APPROVED

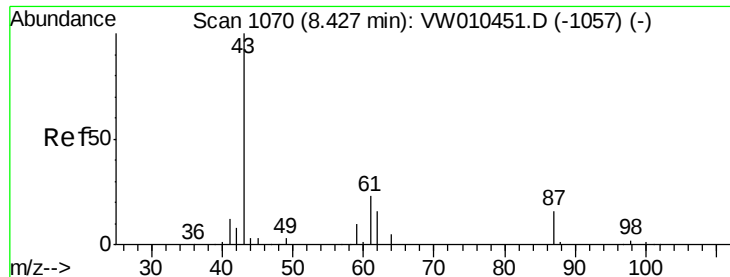
MMDadoda
5/21/2019 11:28:29 AM



#42
1,2-Dichloroethane
Concen: 4.948 ug/l
RT: 8.40 min Scan# 1066
Delta R.T. 0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	62	Resp	8960
Ion	Ratio	Lower	Upper
62	100		
98	10.5	0.0	21.0





#43

Isopropyl Acetate

Concen: 4.799 ug/l

RT: 8.43 min Scan# 1070

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

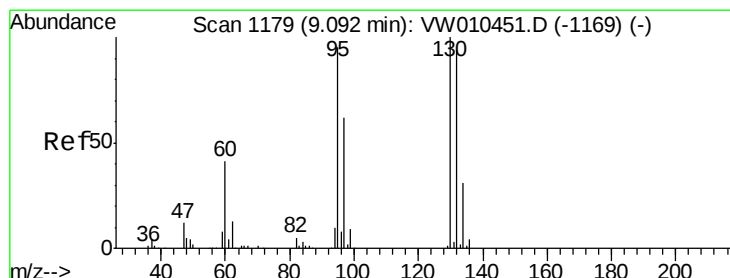
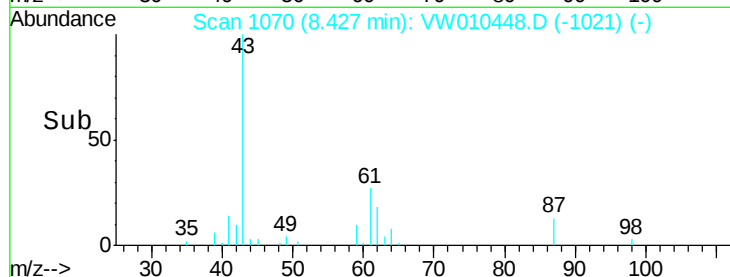
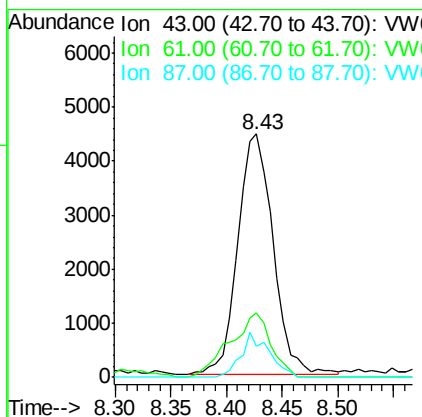
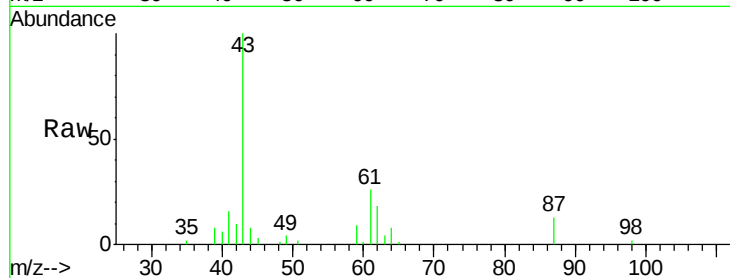
ClientSampleId :

VSTDIC005

Tot Ion:	43	Resp:	9806
Ion	Ratio	Lower	Upper
43	100		
61	30.9	25.4	38.2
87	14.8	12.7	19.1

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#44

Trichloroethene

Concen: 5.240 ug/l

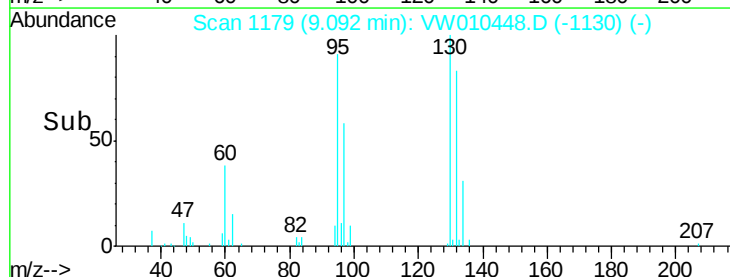
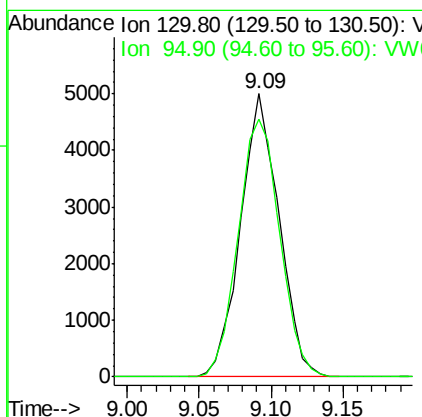
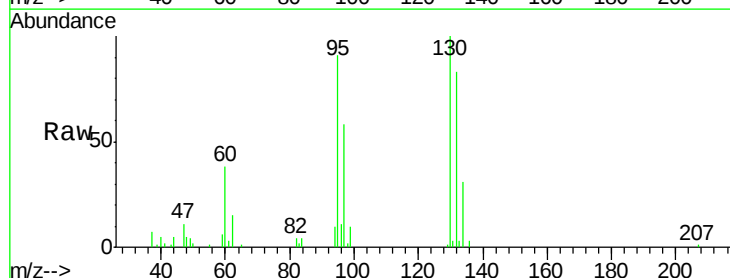
RT: 9.09 min Scan# 1179

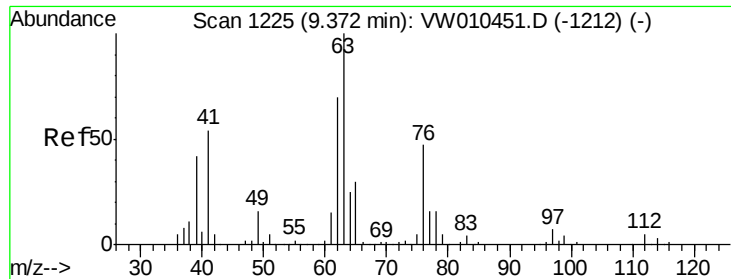
Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Tgt Ion:	130	Resp:	9256
Ion	Ratio	Lower	Upper
130	100		
95	90.9	0.0	189.6





#45

1,2-Dichloropropane

Concen: 4.924 ug/l

RT: 9.37 min Scan# 1224

Delta R.T. -0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampled :

VSTDIC005

Tot Ion: 63 Resp: 7342

Ion Ratio Lower Upper

63 100

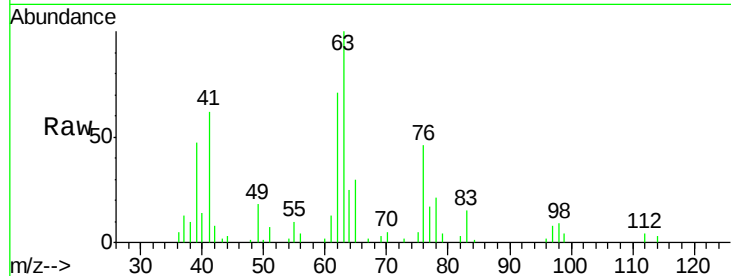
65 29.6 24.3 36.5

Manual Integrations

APPROVED

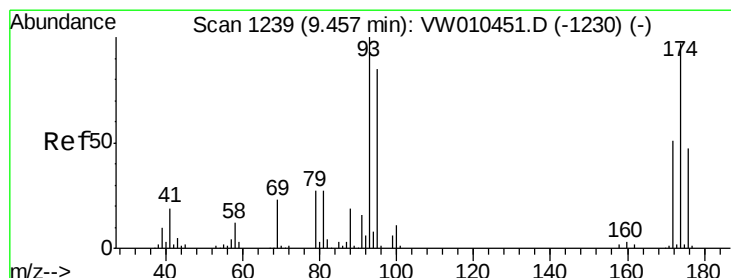
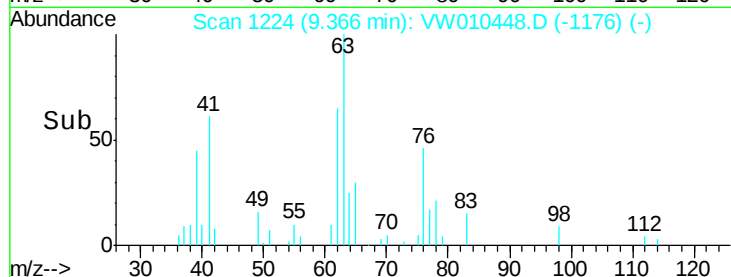
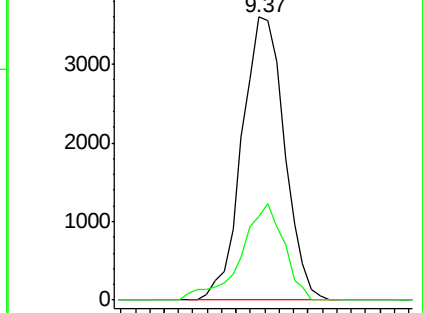
MMDadoda

5/21/2019 11:28:29 AM



Abundance Ion 62.90 (62.60 to 63.60): VW

Ion 64.90 (64.60 to 65.60): VW



#46

Dibromomethane

Concen: 4.863 ug/l

RT: 9.46 min Scan# 1239

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

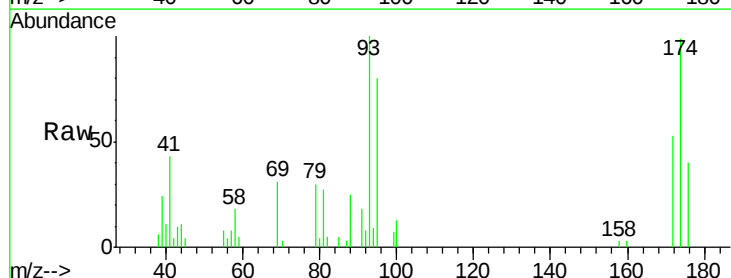
Tgt Ion: 93 Resp: 4267

Ion Ratio Lower Upper

93 100

95 84.8 66.1 99.1

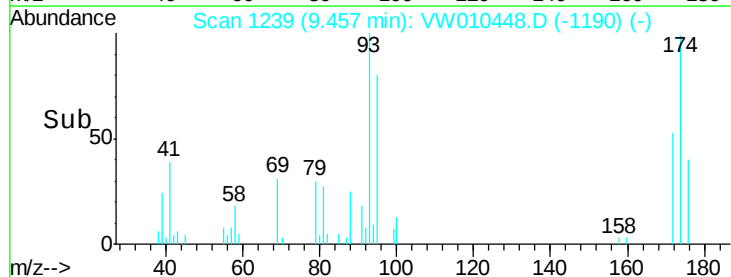
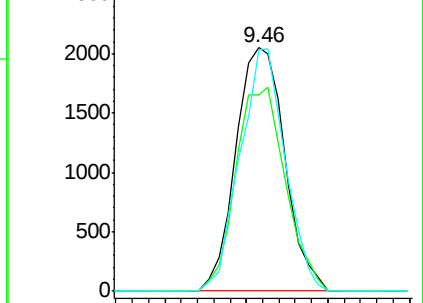
174 91.9 77.1 115.7

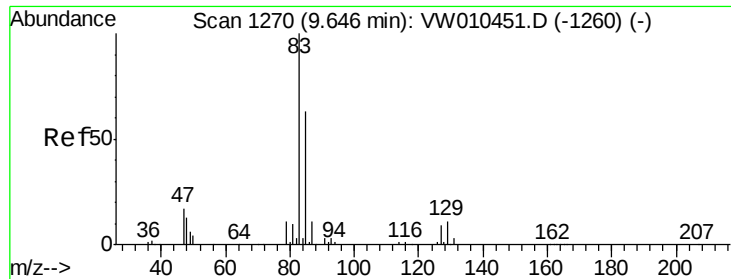


Abundance Ion 92.80 (92.50 to 93.50): VW

Ion 94.80 (94.50 to 95.50): VW

Ion 173.70 (173.40 to 174.40): V





#47

Bromodichloromethane

Concen: 4.811 ug/l

RT: 9.65 min Scan# 1270

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

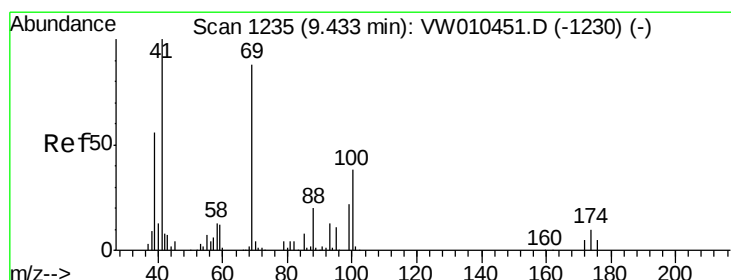
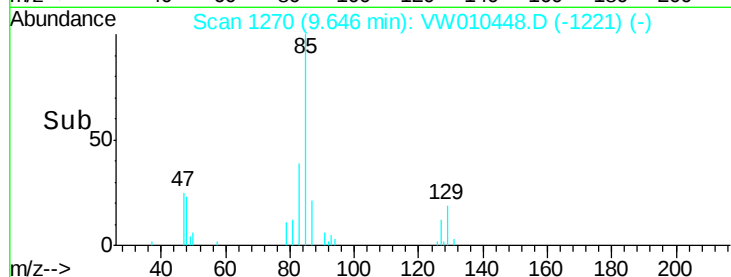
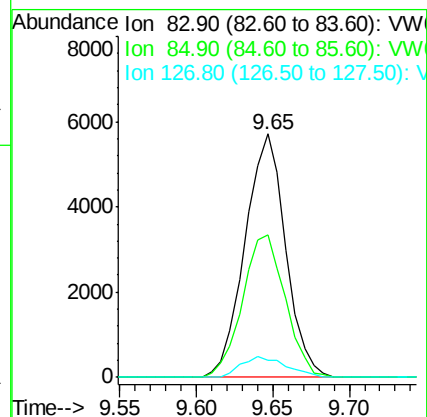
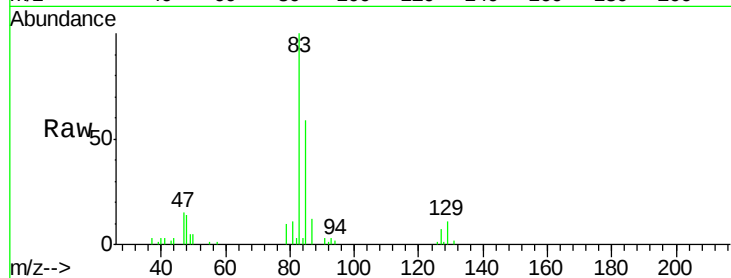
ClientSampleId :

VSTDIC005

Tot Ion:	83	Resp:	10537
Ion Ratio	Lower	Upper	
83	100		
85	58.7	50.4	75.6
127	6.9	7.4	11.0#

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#48

Methyl methacrylate

Concen: 4.493 ug/l

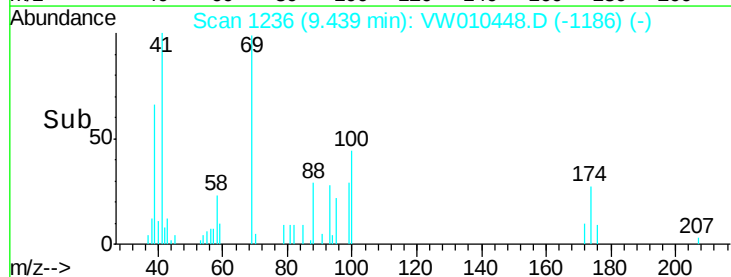
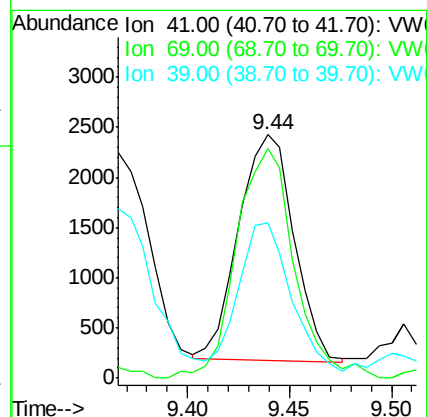
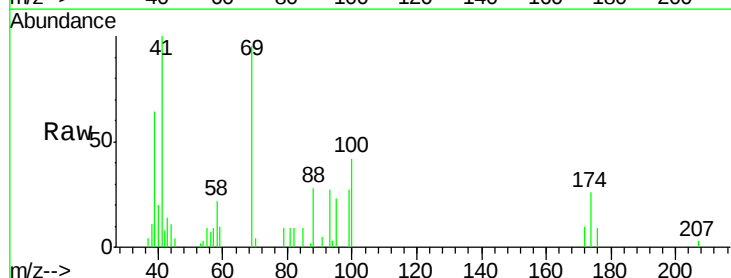
RT: 9.44 min Scan# 1236

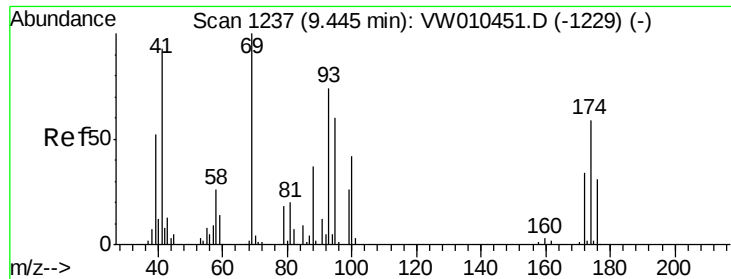
Delta R.T. 0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Tgt Ion:	41	Resp:	4243
Ion Ratio	Lower	Upper	
41	100		
69	106.4	77.6	116.4
39	64.9	49.8	74.8





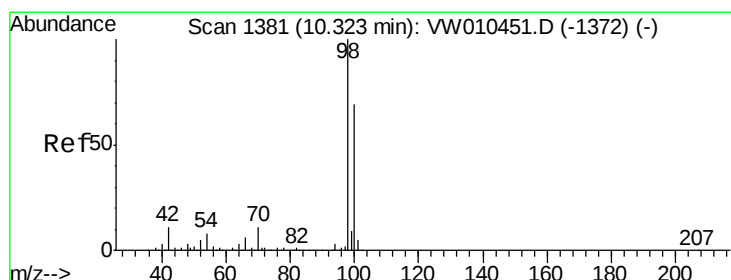
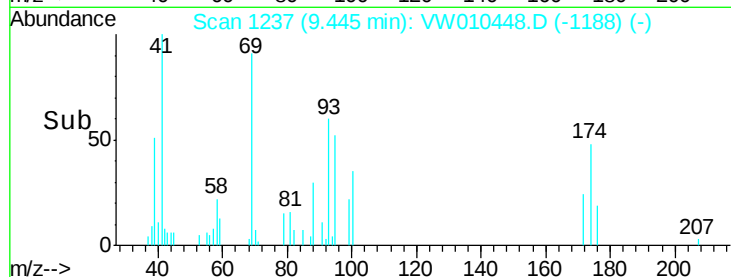
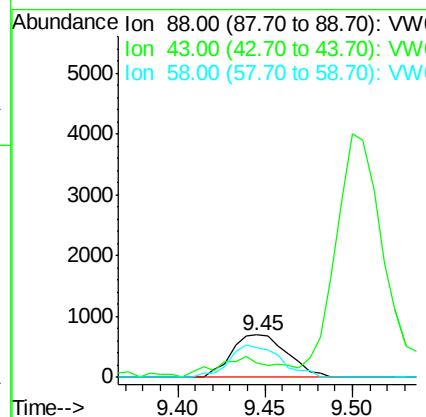
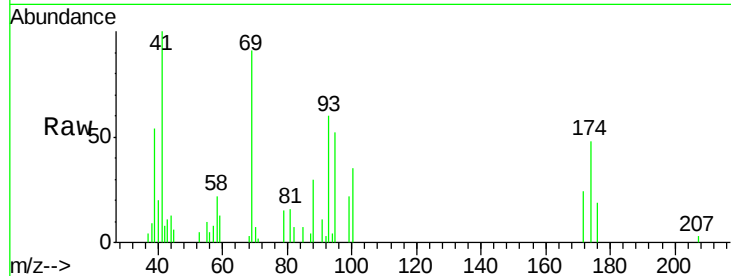
#49
1,4-Dioxane
Concen: 118.966 ug/l
RT: 9.45 min Scan# 1237
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
88	100		
43	53.2	25.9	38.9#
58	70.2	52.7	79.1

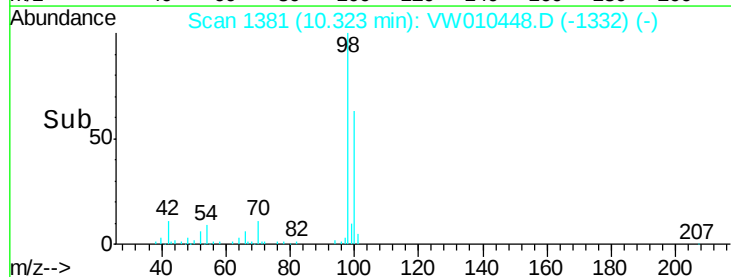
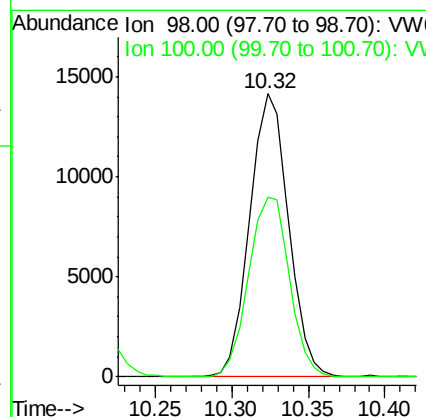
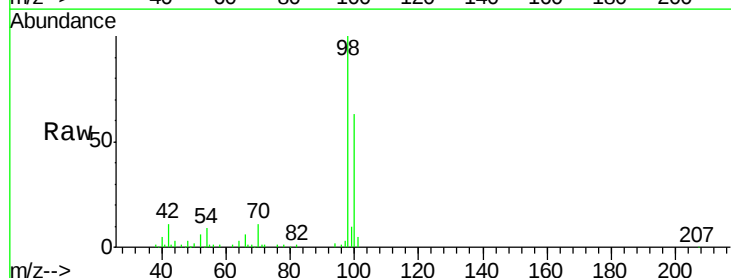
Manual Integrations
APPROVED

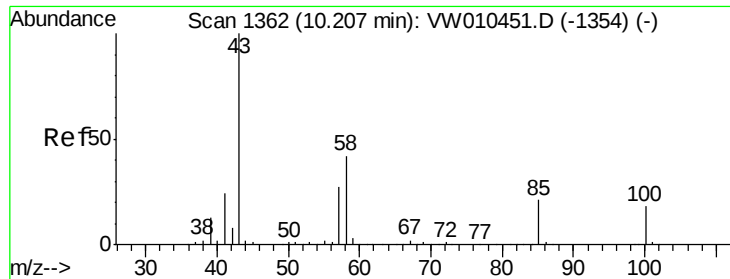
MMDadoda
5/21/2019 11:28:29 AM



#50
Toluene-d8
Concen: 4.549 ug/l
RT: 10.32 min Scan# 1381
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
98	100		
100	66.7	53.7	80.5





#51

4-Methyl-2-Pentanone

Concen: 23.755 ug/l

RT: 10.21 min Scan# 1363

Delta R.T. 0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion: 43 Resp: 24862

Ion Ratio Lower Upper

43 100

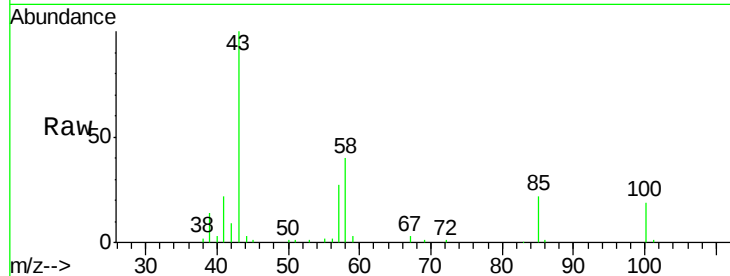
58 41.0 33.2 49.8

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

15000

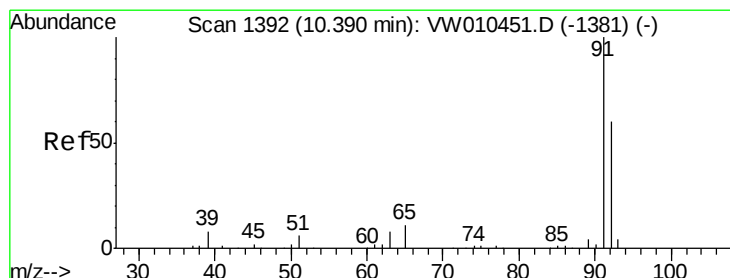
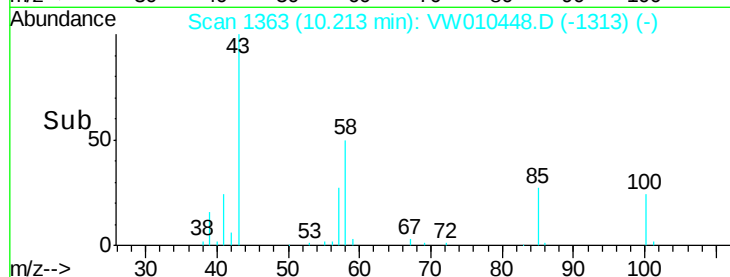
10000

5000

0

10.10 10.20 10.30

Time-->



#52

Toluene

Concen: 5.142 ug/l

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW010448.D

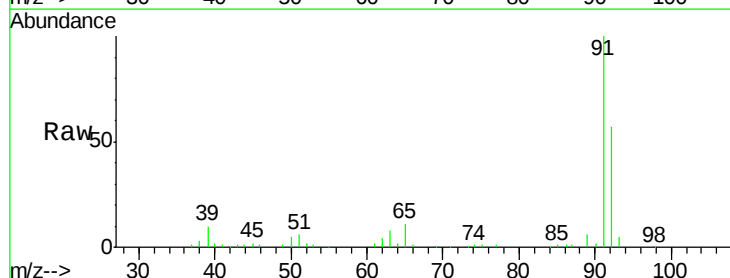
Acq: 20 May 2019 15:10

Tgt Ion: 92 Resp: 20979

Ion Ratio Lower Upper

92 100

91 168.9 135.4 203.0



Abundance Ion 92.00 (91.70 to 92.70): VW

Ion 91.00 (90.70 to 91.70): VW

20000

15000

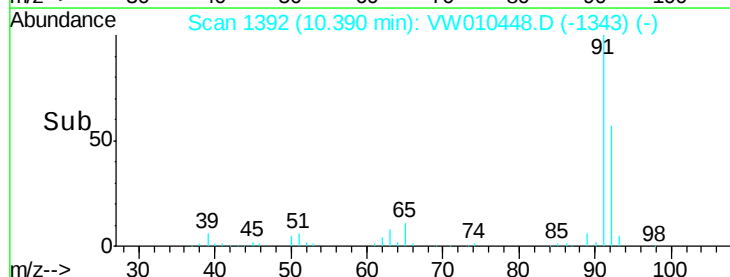
10000

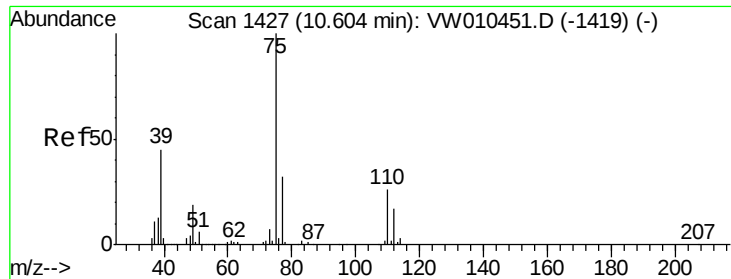
5000

0

10.30 10.35 10.40 10.45

Time-->





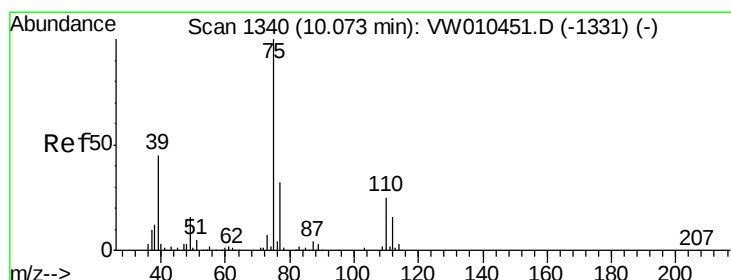
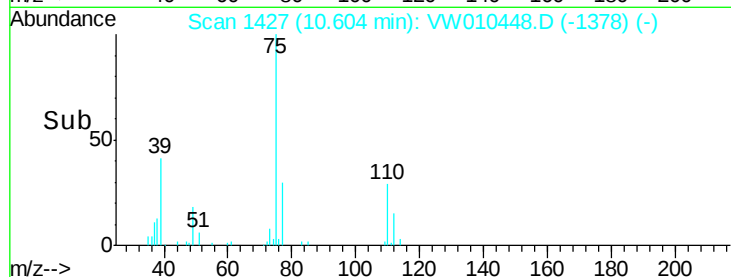
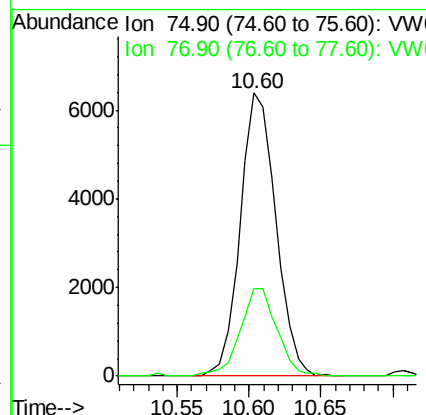
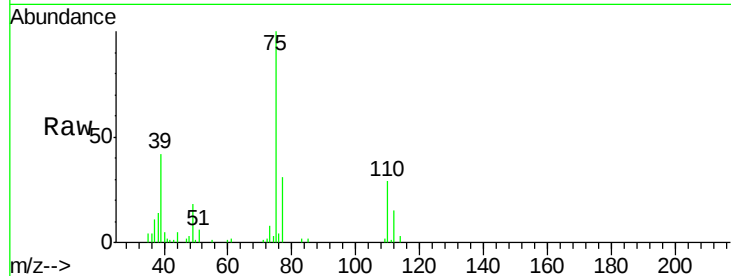
#53
t-1,3-Dichloropropene
Concen: 4.868 ug/l
RT: 10.60 min Scan# 1427
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
75	100		
77	30.7	25.4	38.0

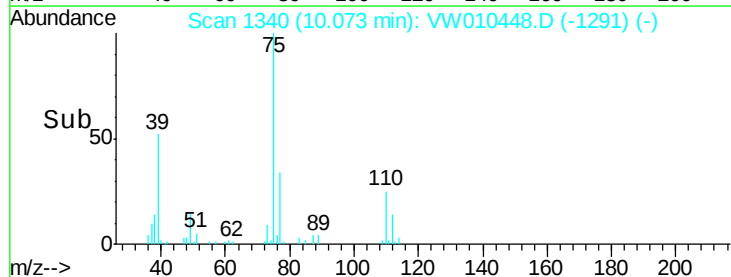
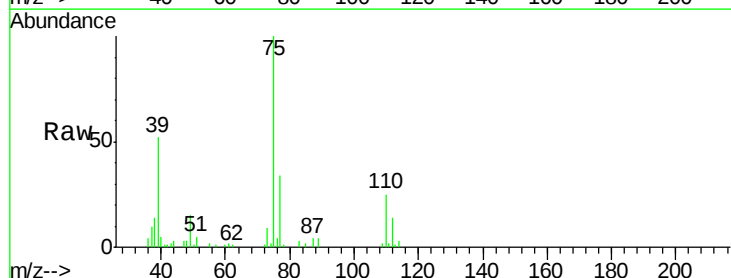
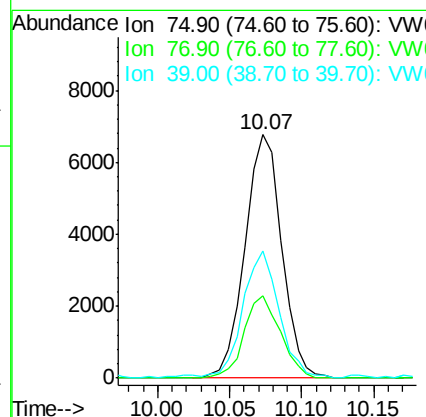
Manual Integrations
APPROVED

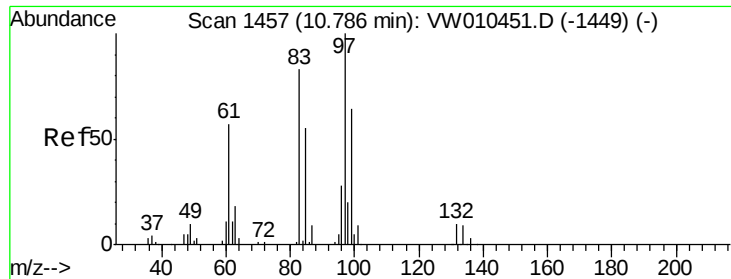
MMDadoda
5/21/2019 11:28:29 AM



#54
cis-1,3-Dichloropropene
Concen: 4.666 ug/l
RT: 10.07 min Scan# 1340
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
75	100		
77	33.9	25.7	38.5
39	52.0	36.2	54.4





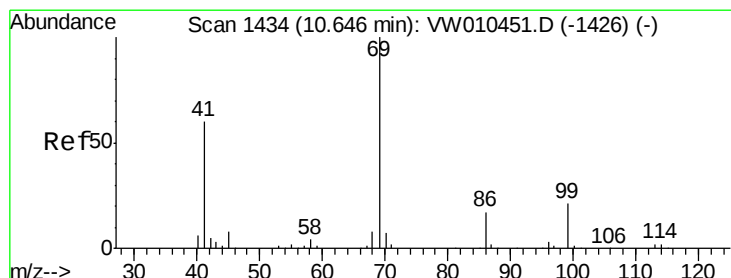
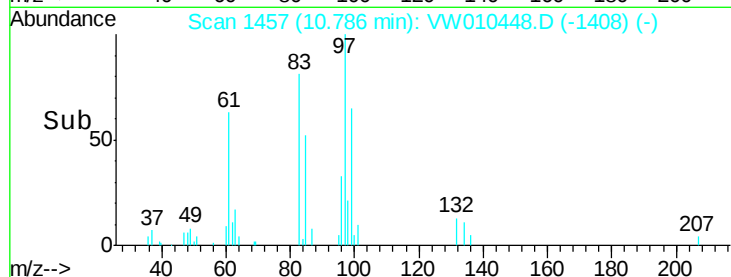
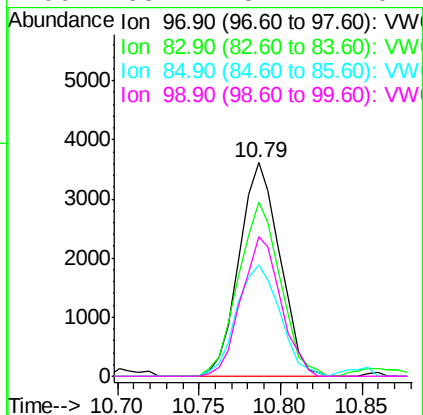
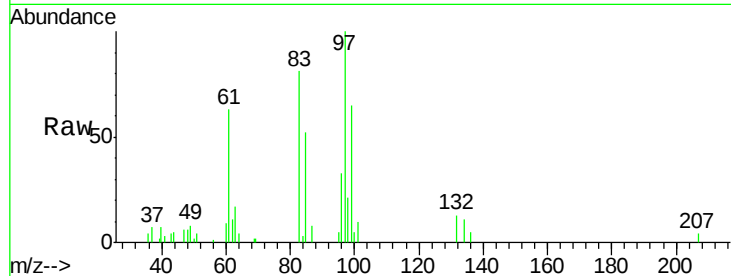
#55
 1,1,2-Trichloroethane
 Concen: 4.956 ug/l
 RT: 10.79 min Scan# 1457
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion:	97	Resp:	6272
Ion	Ratio	Lower	Upper
97	100		
83	81.3	66.1	99.1
85	52.0	44.2	66.4
99	65.1	51.1	76.7

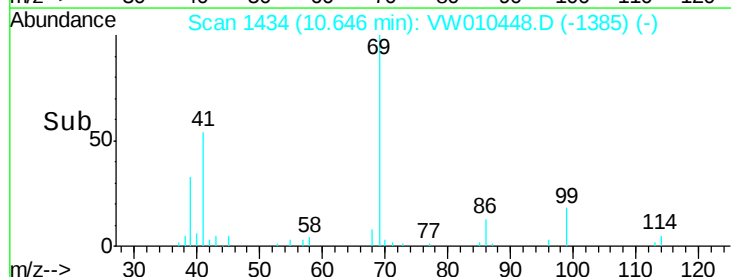
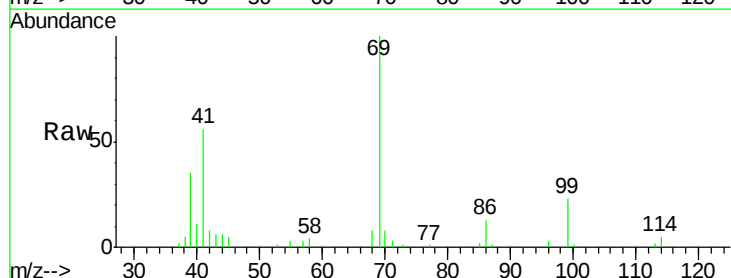
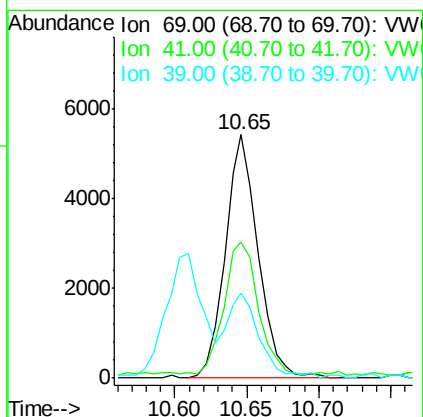
Manual Integrations
 APPROVED

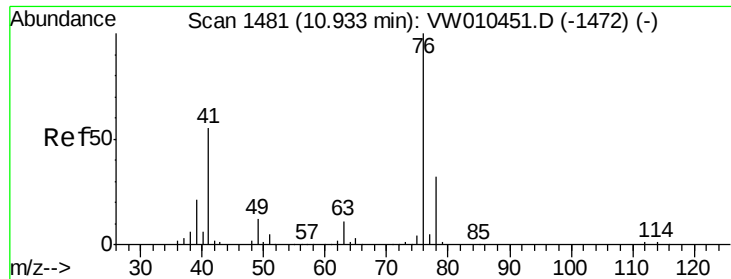
MMDadoda
 5/21/2019 11:28:29 AM



#56
 Ethyl methacrylate
 Concen: 4.875 ug/l
 RT: 10.65 min Scan# 1434
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion:	69	Resp:	8616
Ion	Ratio	Lower	Upper
69	100		
41	57.3	47.7	71.5
39	35.7	25.3	37.9





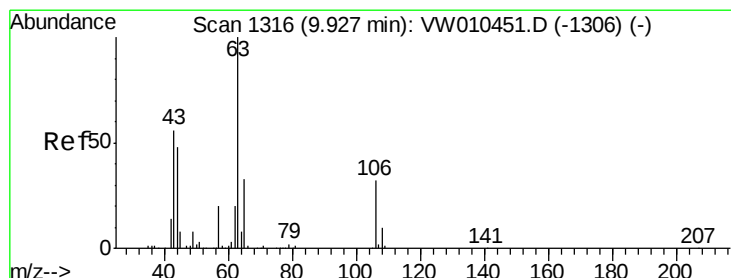
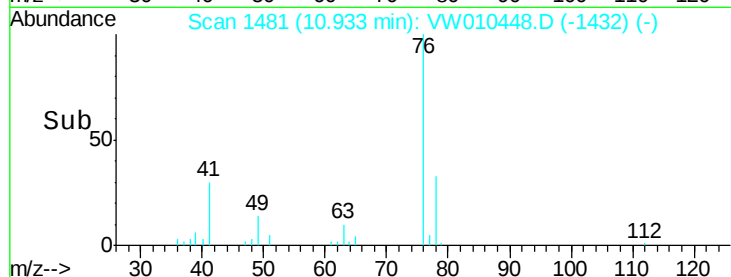
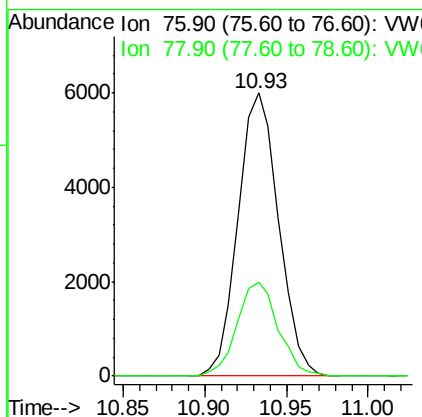
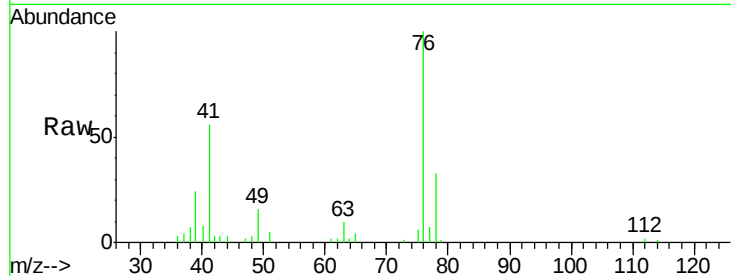
#57
 1,3-Dichloropropane
 Concen: 4.887 ug/l
 RT: 10.93 min Scan# 1481
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion	Ratio	Lower	Upper
76	100		
78	33.6	26.2	39.2

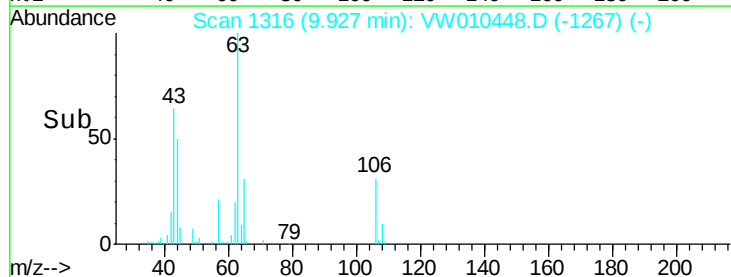
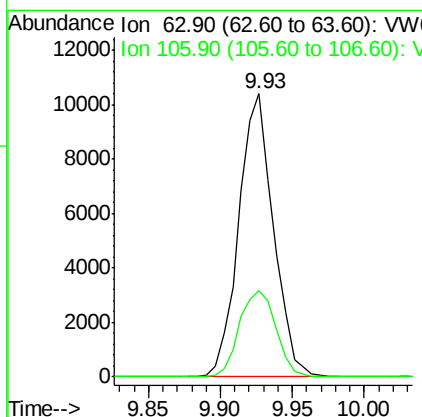
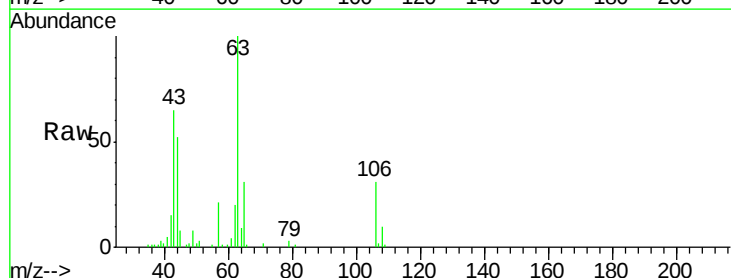
Manual Integrations
 APPROVED

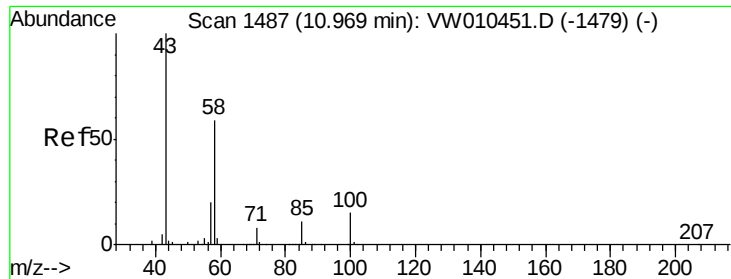
MMDadoda
 5/21/2019 11:28:29 AM



#58
 2-Chloroethyl Vinyl ether
 Concen: 21.089 ug/l
 RT: 9.93 min Scan# 1316
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
63	100		
106	32.0	25.8	38.6





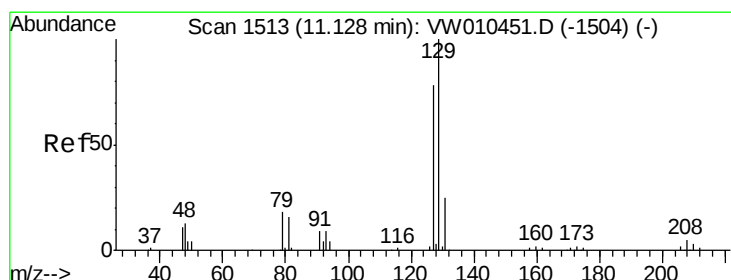
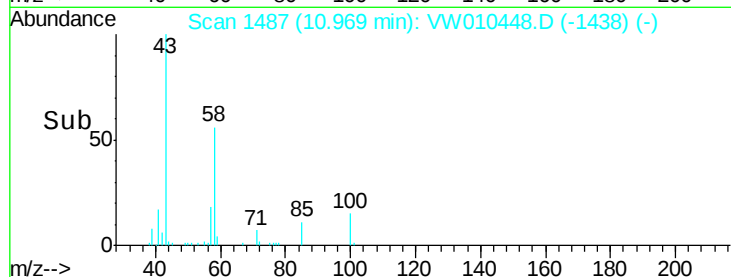
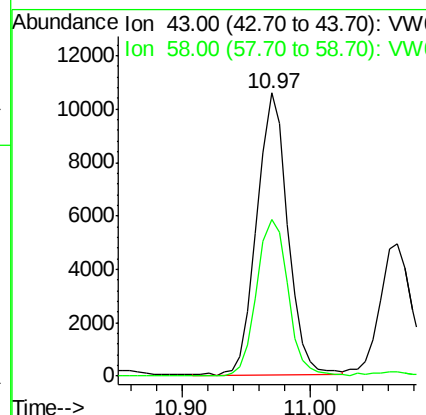
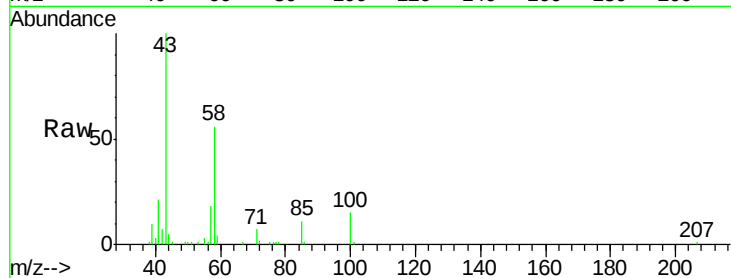
#59
2-Hexanone
Concen: 24.075 ug/l
RT: 10.97 min Scan# 1487
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion: 43 Resp: 17600
Ion Ratio Lower Upper
43 100
58 56.4 28.9 86.8

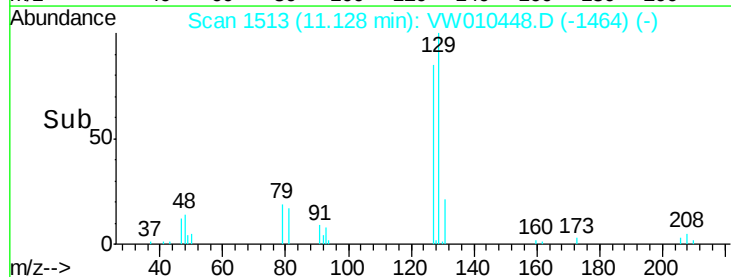
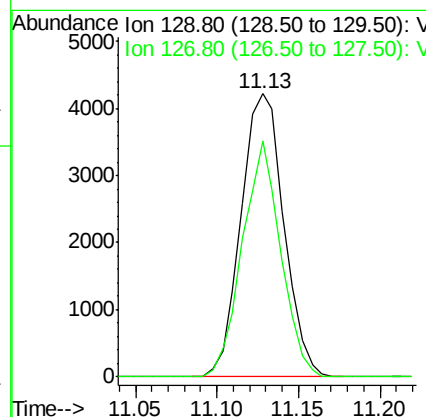
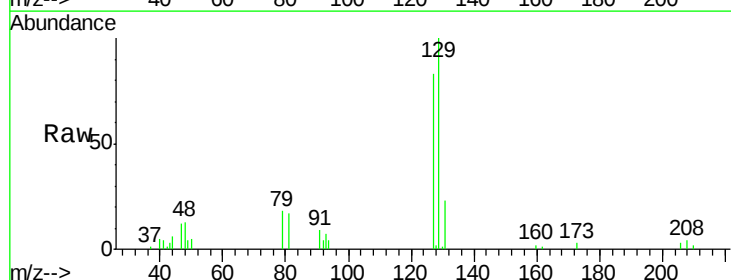
Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#60
Dibromochloromethane
Concen: 4.892 ug/l
RT: 11.13 min Scan# 1513
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion: 129 Resp: 7703
Ion Ratio Lower Upper
129 100
127 74.5 38.9 116.7





#61

1,2-Dibromoethane

Concen: 4.912 ug/l

RT: 11.24 min Scan# 1531

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion:107 Resp: 6313

Ion Ratio Lower Upper

107 100

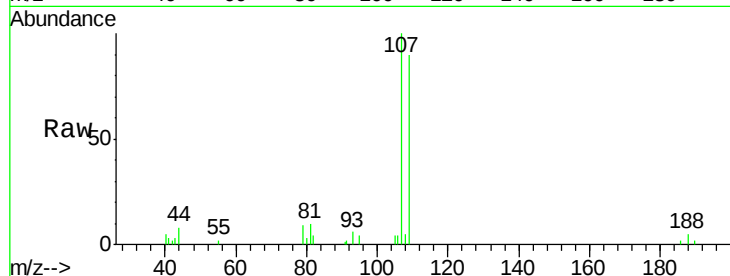
109 91.6 75.0 112.4

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



Abundance Ion 106.90 (106.60 to 107.60): V

Ion 108.80 (108.50 to 109.50): V

11.24

4000

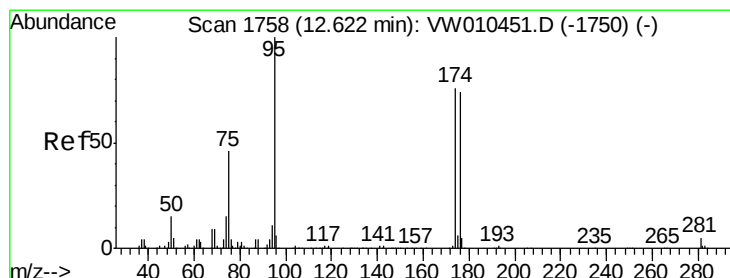
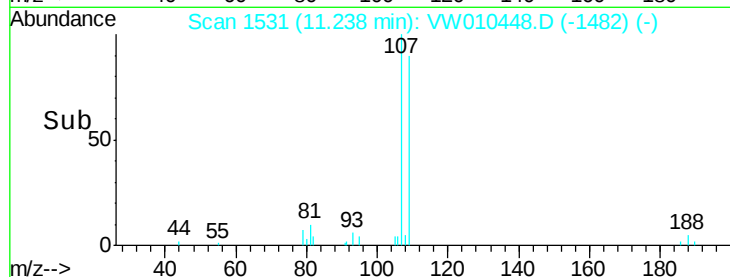
3000

2000

1000

0

Time--> 11.15 11.20 11.25 11.30



#62

4-Bromofluorobenzene

Concen: 5.367 ug/l

RT: 12.62 min Scan# 1758

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

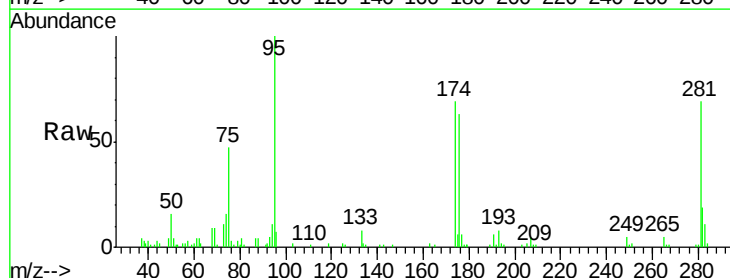
Tgt Ion: 95 Resp: 11590

Ion Ratio Lower Upper

95 100

174 64.4 0.0 148.6

176 64.1 0.0 144.2



Abundance Ion 94.90 (94.60 to 95.60): VW

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

12.62

10000

8000

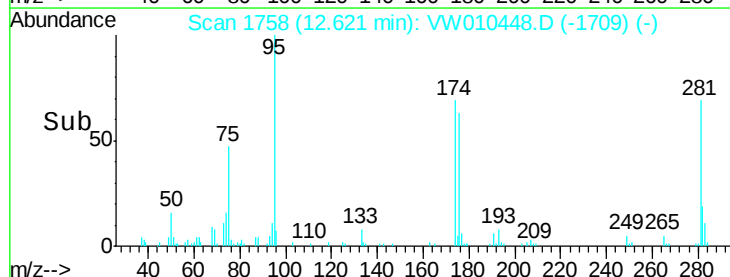
6000

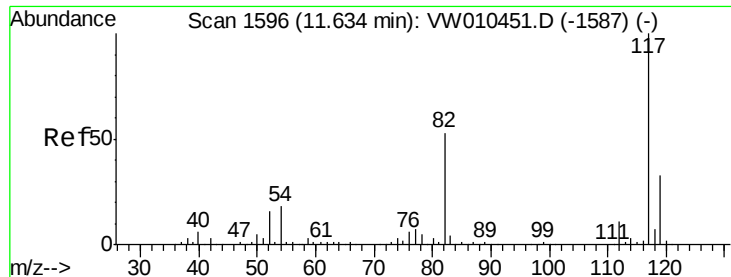
4000

2000

0

Time--> 12.55 12.60 12.65 12.70





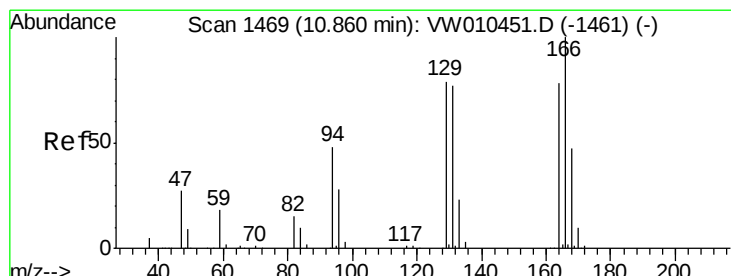
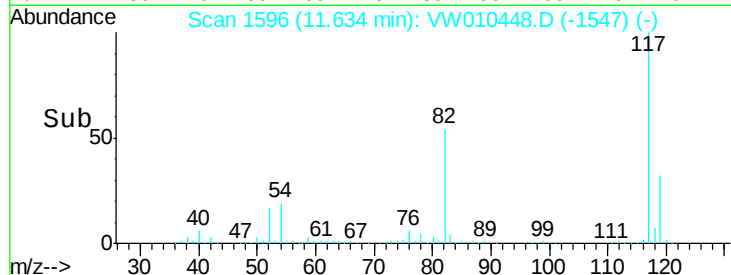
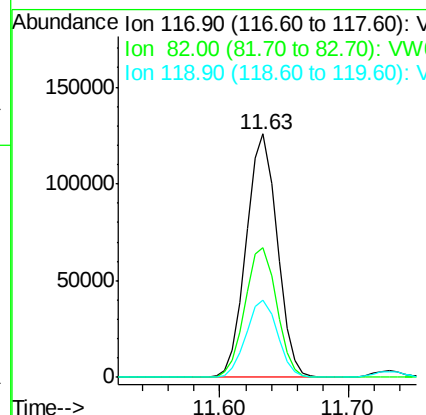
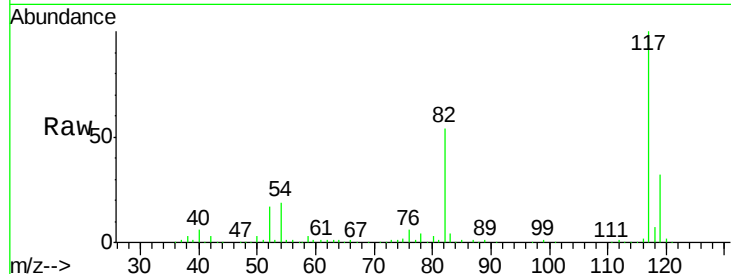
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.63 min Scan# 1596
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
117	100		
82	53.5	42.8	64.2
119	31.9	26.3	39.5

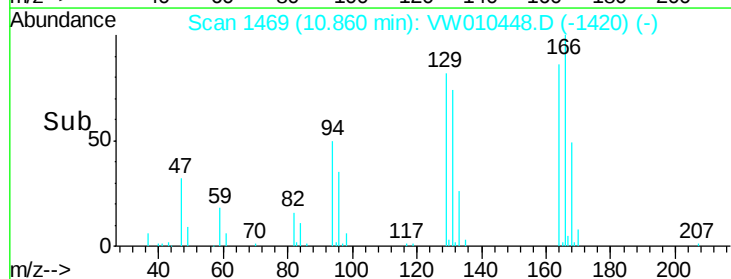
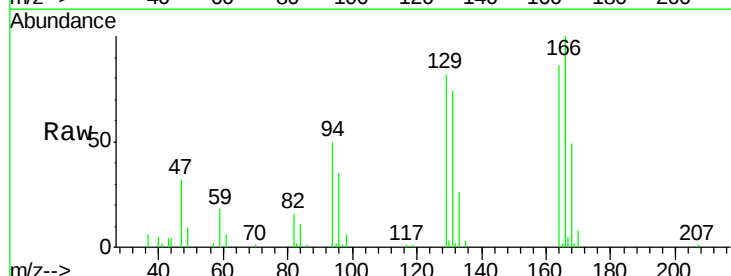
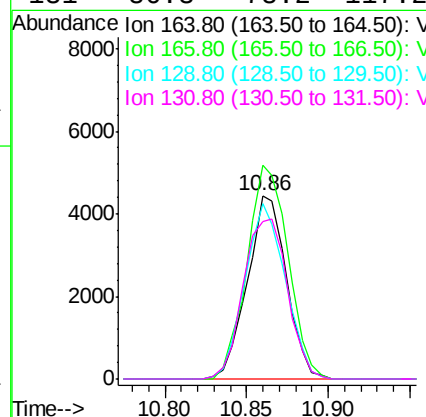
Manual Integrations
APPROVED

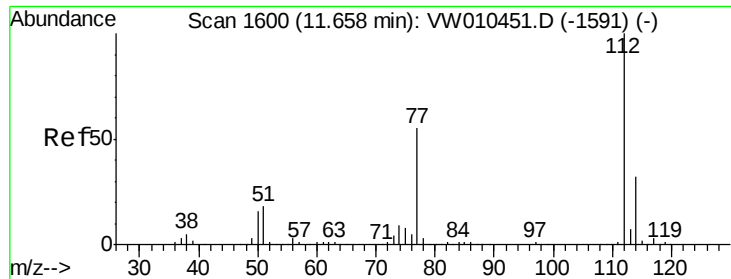
MMDadoda
5/21/2019 11:28:29 AM



#64
Tetrachloroethene
Concen: 5.322 ug/l
RT: 10.86 min Scan# 1469
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
164	100		
166	116.6	101.9	152.9
129	95.7	80.6	121.0
131	86.3	78.2	117.2





#65

Chlorobenzene

Concen: 5.358 ug/l

RT: 11.66 min Scan# 1600

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

ClientSampleId :

VSTDIC005

Tot Ion:112 Resp: 22989

Ion Ratio Lower Upper

112 100

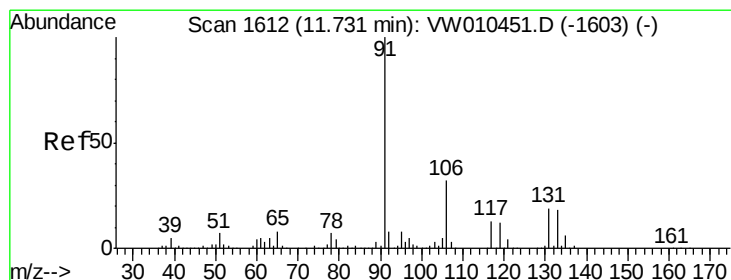
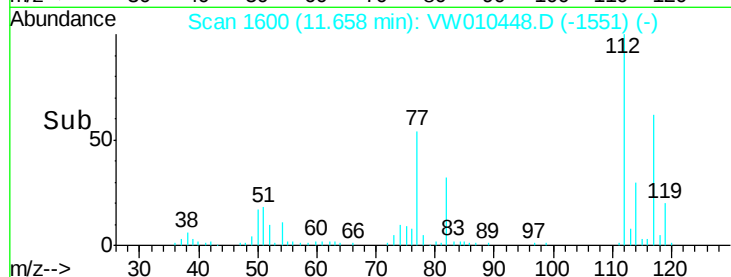
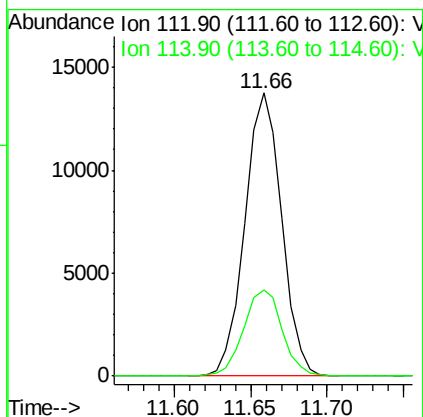
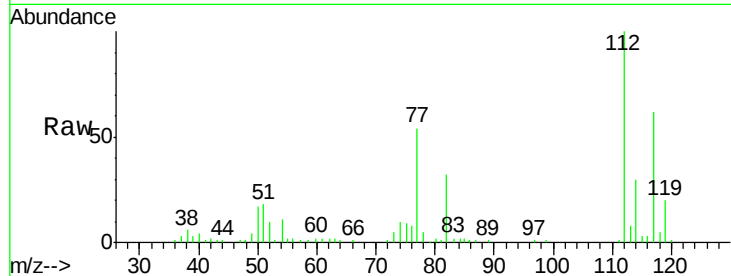
114 30.3 25.3 37.9

Manual Integrations

APPROVED

MMDadoda

5/21/2019 11:28:29 AM



#66

1,1,1,2-Tetrachloroethane

Concen: 4.964 ug/l

RT: 11.73 min Scan# 1612

Delta R.T. -0.00 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

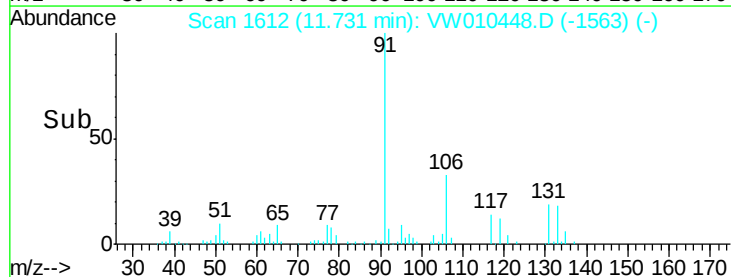
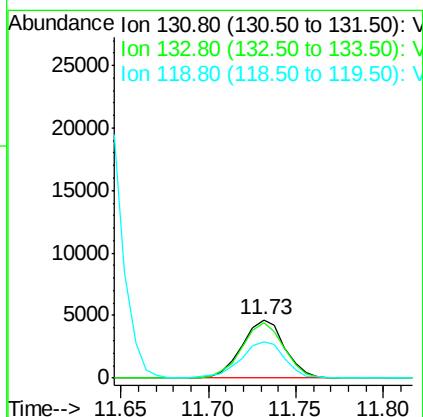
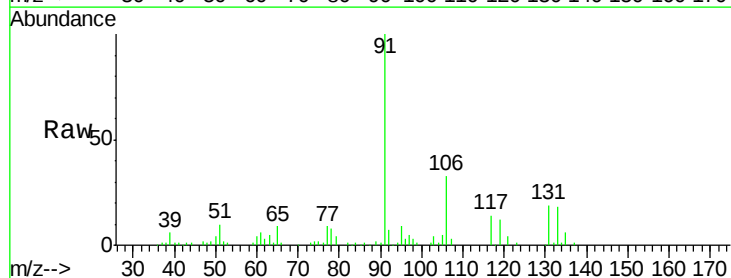
Tgt Ion:131 Resp: 7852

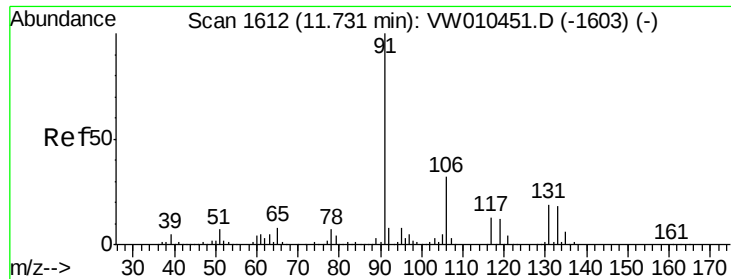
Ion Ratio Lower Upper

131 100

133 94.6 47.3 141.9

119 64.2 32.1 96.5





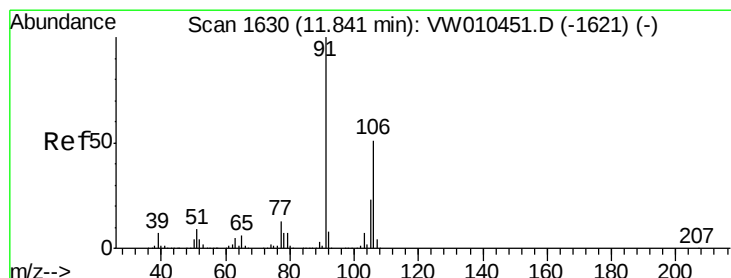
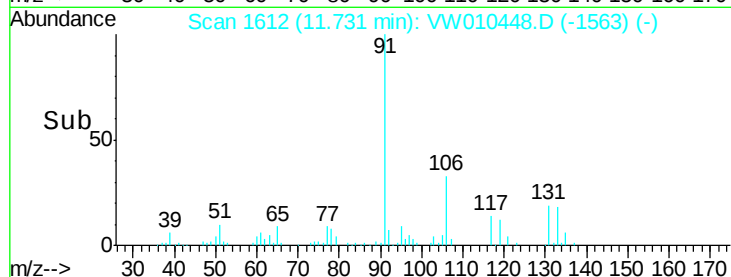
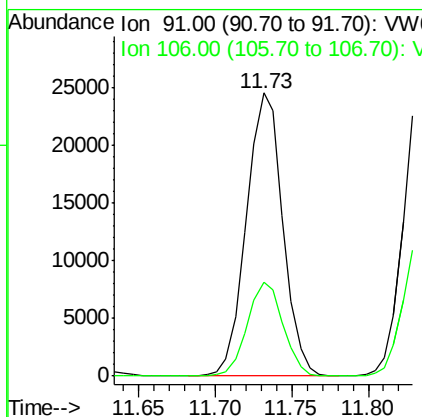
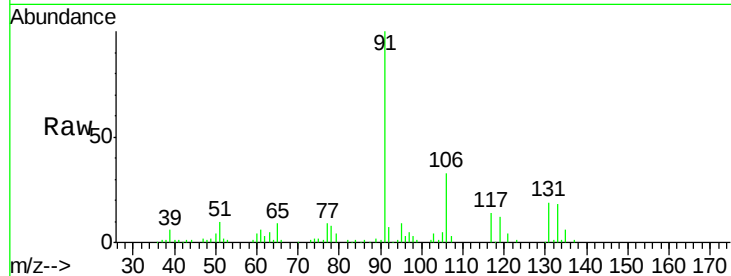
#67
Ethyl Benzene
Concen: 5.362 ug/l
RT: 11.73 min Scan# 1612
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampled :
VSTDIC005

Tot Ion: 91 Resp: 40636
Ion Ratio Lower Upper
91 100
106 33.2 25.9 38.9

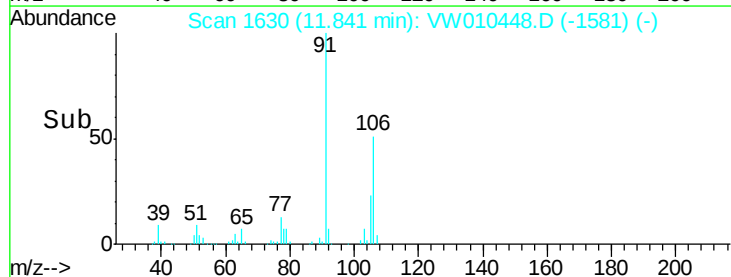
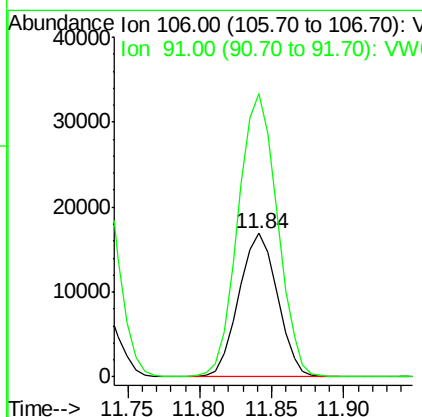
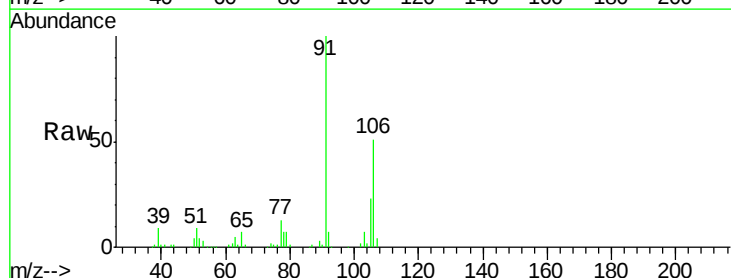
Manual Integrations
APPROVED

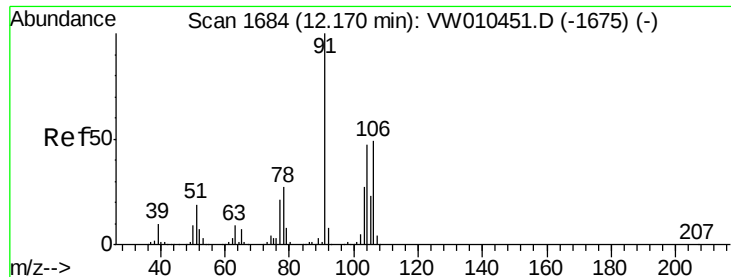
MMDadoda
5/21/2019 11:28:29 AM



#68
m/p-Xylenes
Concen: 10.595 ug/l
RT: 11.84 min Scan# 1630
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion: 106 Resp: 31446
Ion Ratio Lower Upper
106 100
91 200.8 156.0 234.0





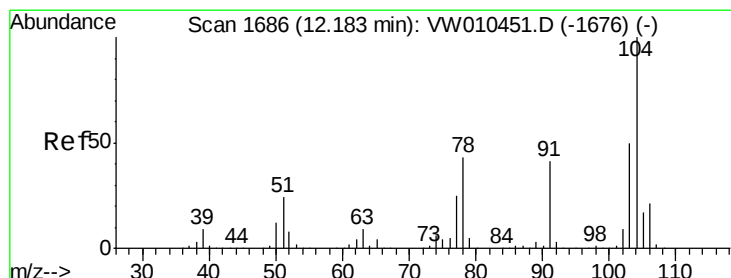
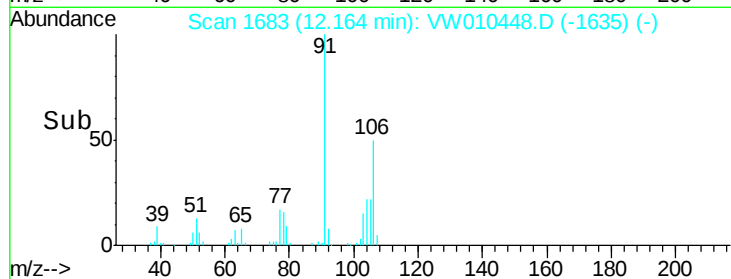
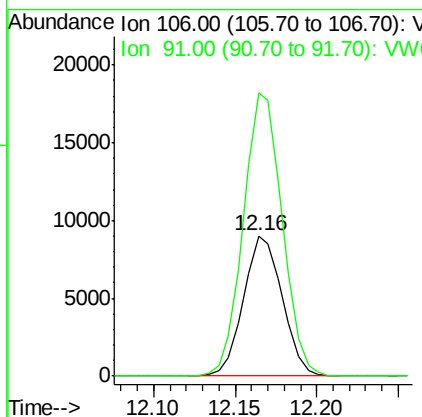
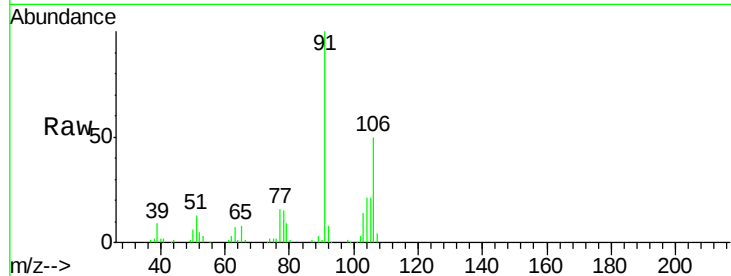
#69
o-Xylene
Concen: 5.247 ug/l
RT: 12.16 min Scan# 1683
Delta R.T. -0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion:106 Resp: 14816
Ion Ratio Lower Upper
106 100
91 204.3 103.2 309.4

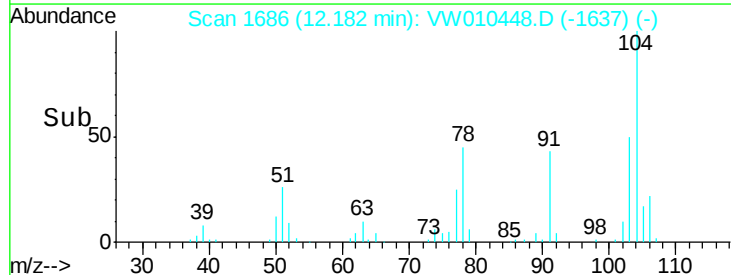
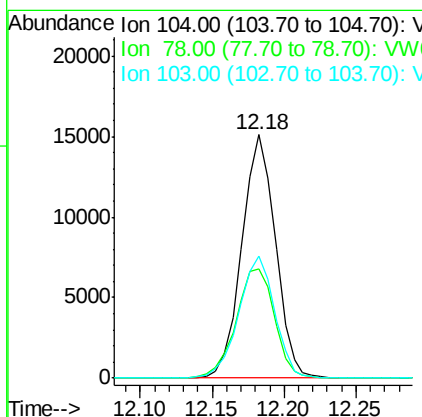
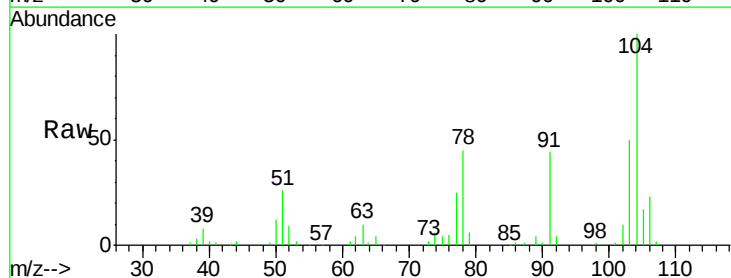
Manual Integrations
APPROVED

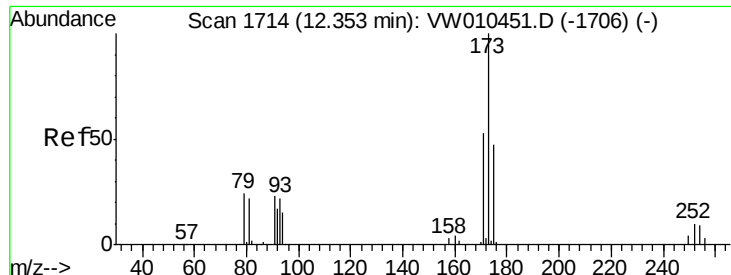
MMDadoda
5/21/2019 11:28:29 AM



#70
Styrene
Concen: 5.035 ug/l
RT: 12.18 min Scan# 1686
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion:104 Resp: 24441
Ion Ratio Lower Upper
104 100
78 51.5 39.0 58.4
103 53.4 43.0 64.6





#71

Bromoform

Concen: 4.706 ug/l

RT: 12.35 min Scan# 1713

Delta R.T. -0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

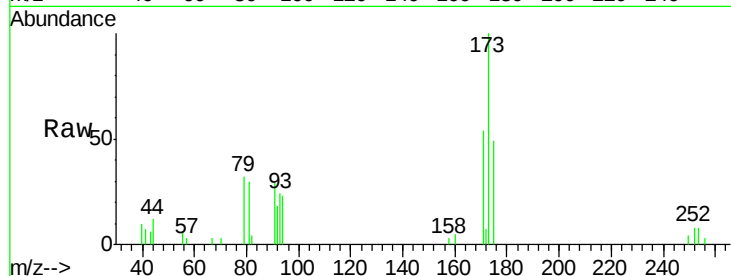
ClientSampleId :

VSTDIC005

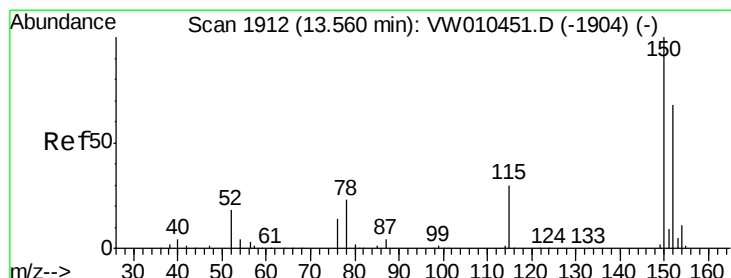
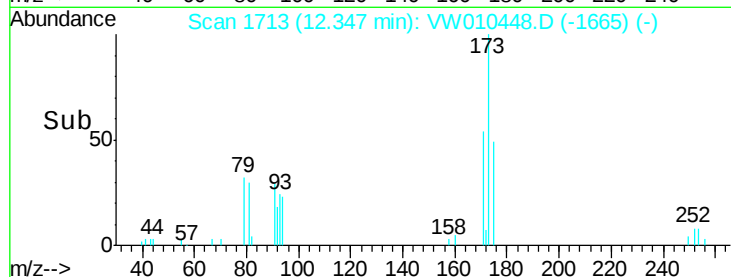
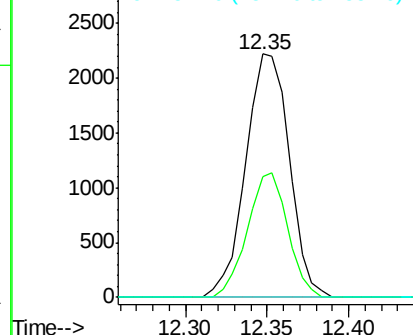
Tot Ion:	173	Resp:	4137
Ion	Ratio	Lower	Upper
173	100		
175	47.1	24.4	73.4
254	0.0	0.0	0.0

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



Abundance Ion 172.70 (172.40 to 173.40): V
Ion 174.70 (174.40 to 175.40): V
Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

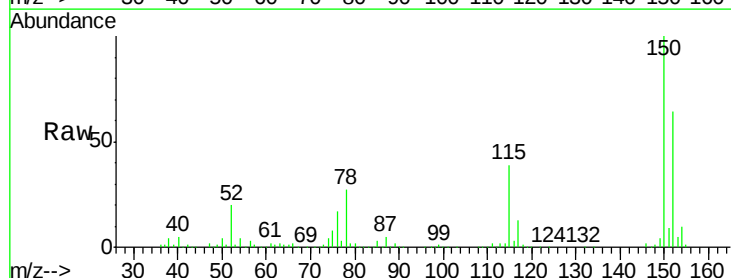
RT: 13.56 min Scan# 1912

Delta R.T. -0.00 min

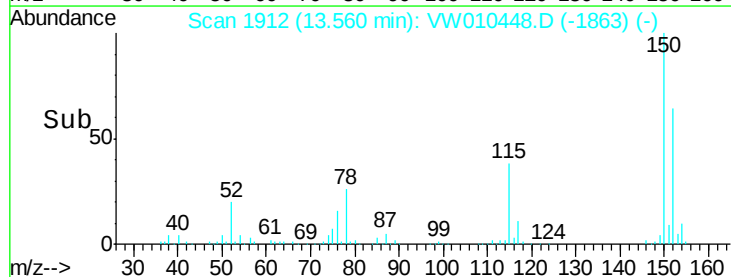
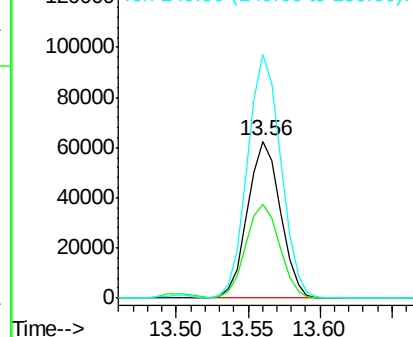
Lab File: VW010448.D

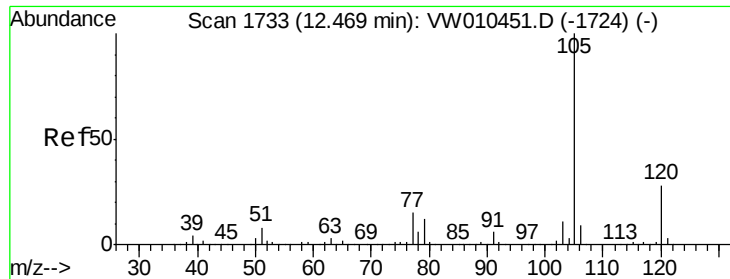
Acq: 20 May 2019 15:10

Tgt Ion:	152	Resp:	98328
Ion	Ratio	Lower	Upper
152	100		
115	61.9	30.3	91.0
150	158.4	0.0	349.8



Abundance Ion 151.90 (151.60 to 152.60): V
Ion 114.90 (114.60 to 115.60): V
Ion 149.90 (149.60 to 150.60): V





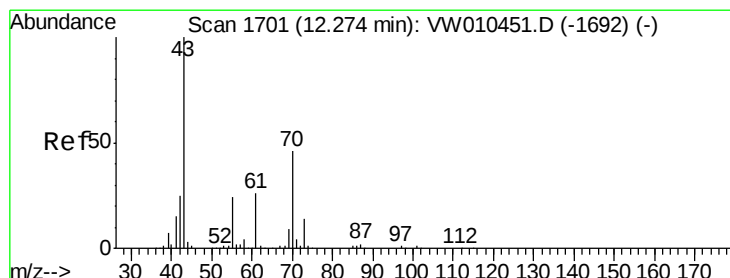
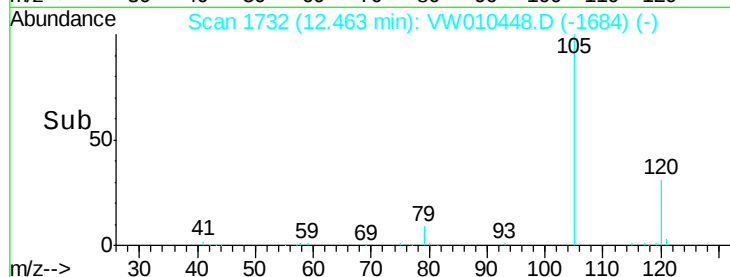
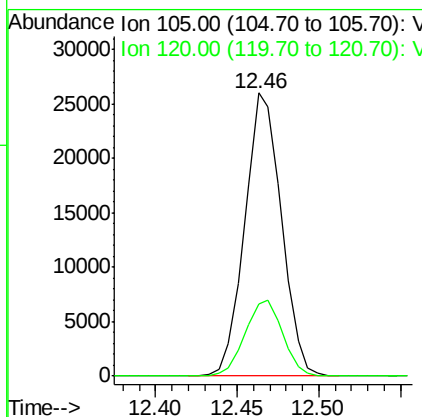
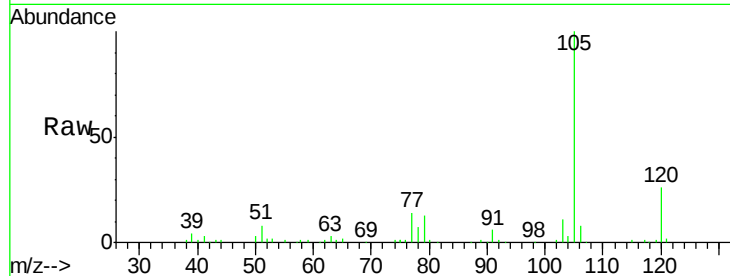
#73
Isopropylbenzene
Concen: 5.272 ug/l
RT: 12.46 min Scan# 1732
Delta R.T. -0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion: 105 Resp: 40699
Ion Ratio Lower Upper
105 100
120 27.5 13.9 41.7

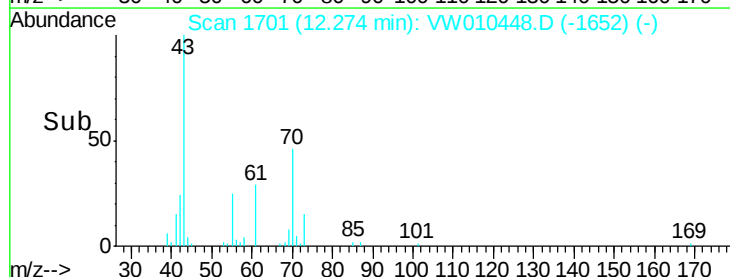
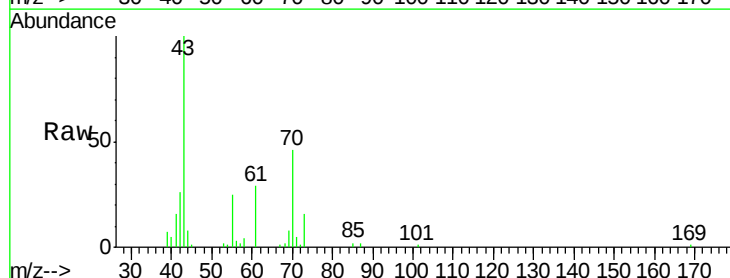
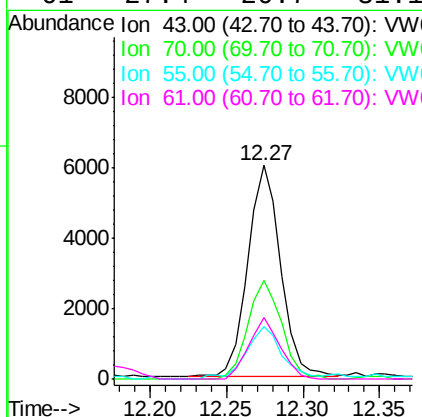
Manual Integrations
APPROVED

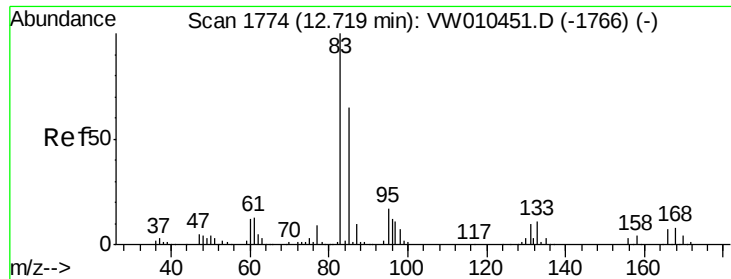
MMDadoda
5/21/2019 11:28:29 AM



#74
N-ethyl acetate
Concen: 4.629 ug/l
RT: 12.27 min Scan# 1701
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion: 43 Resp: 8947
Ion Ratio Lower Upper
43 100
70 47.7 37.1 55.7
55 27.1 19.6 29.4
61 27.4 20.7 31.1





#75

1,1,2,2-Tetrachloroethane

Concen: 5.056 ug/l

RT: 12.71 min Scan# 1773

Delta R.T. -0.01 min

Lab File: VW010448.D

Acq: 20 May 2019 15:10

Instrument :

MSVOA_W

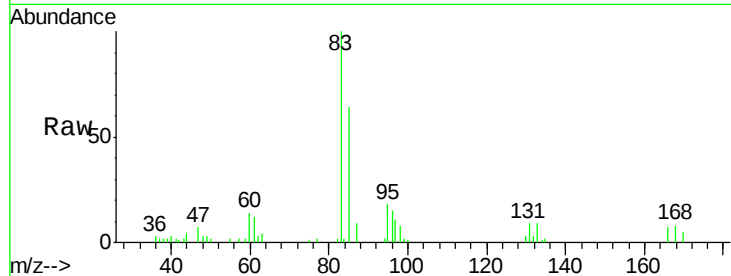
ClientSampleId :

VSTDIC005

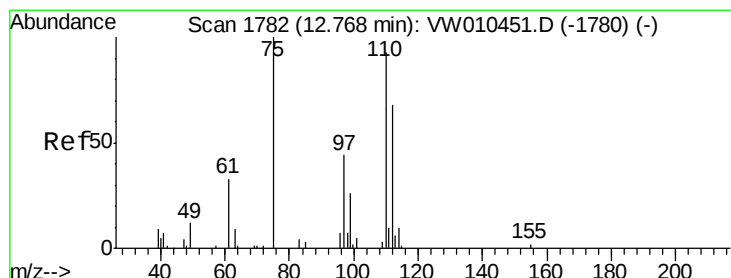
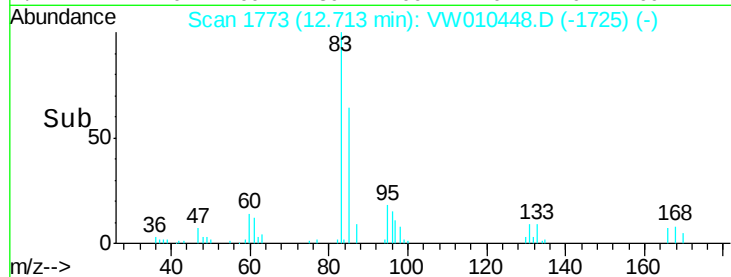
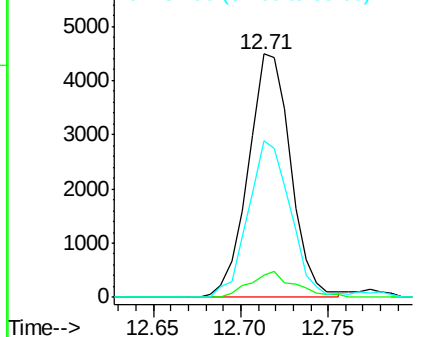
Tot Ion:	83	Resp:	7568
Ion Ratio	Lower	Upper	
83	100		
131	11.4	5.6	16.8
85	64.0	32.4	97.0

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



Abundance Ion 82.90 (82.60 to 83.60): VW
Ion 130.80 (130.50 to 131.50): VW
Ion 84.90 (84.60 to 85.60): VW



#76

1,2,3-Trichloropropane

Concen: 5.102 ug/l m

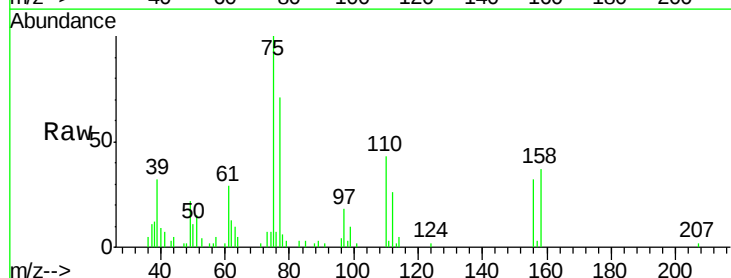
RT: 12.77 min Scan# 1782

Delta R.T. -0.00 min

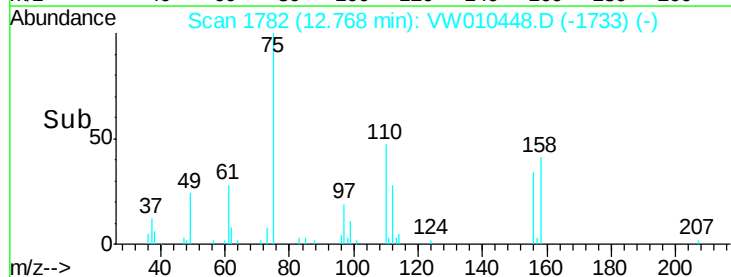
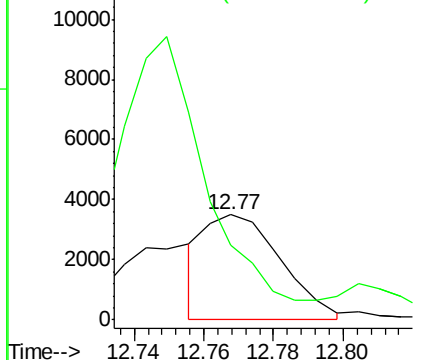
Lab File: VW010448.D

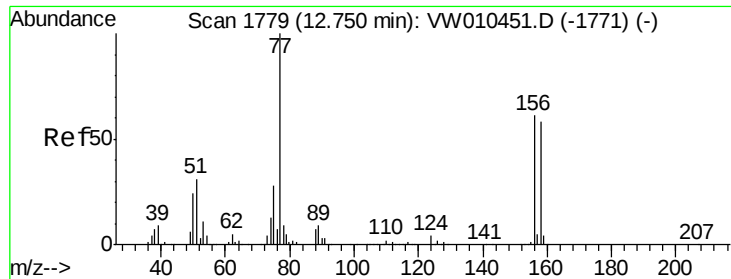
Acq: 20 May 2019 15:10

Tgt Ion:	75	Resp:	5324
Ion Ratio	Lower	Upper	
75	100		
77	321.3	170.0	510.1



Abundance Ion 74.90 (74.60 to 75.60): VW
Ion 77.00 (76.70 to 77.70): VW





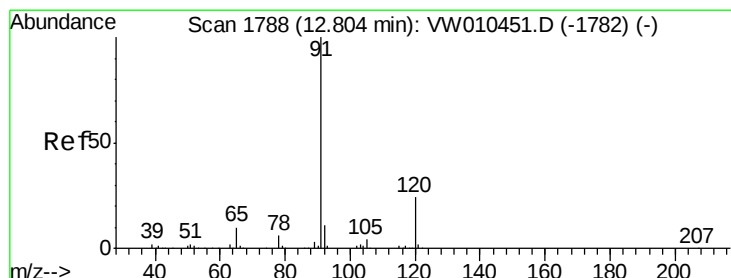
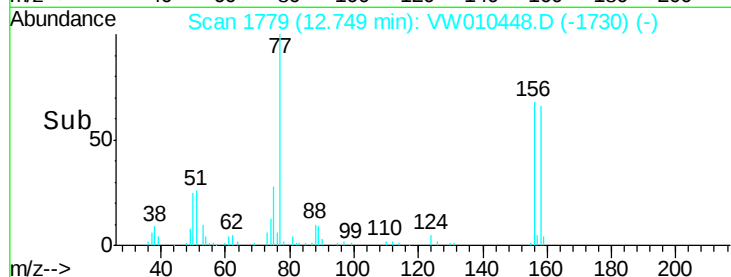
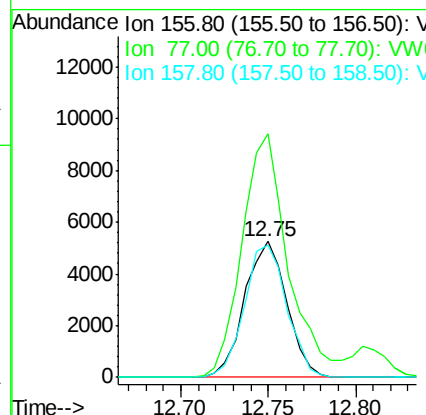
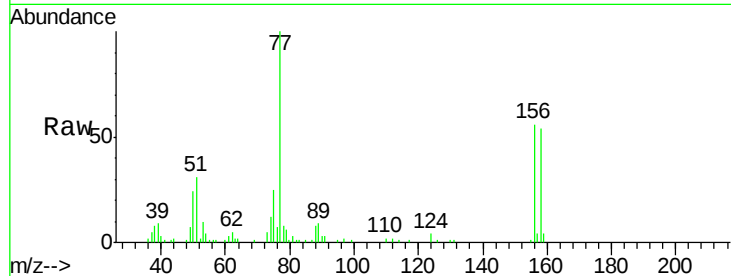
#77
Bromobenzene
Concen: 5.059 ug/l
RT: 12.75 min Scan# 1779
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampled :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
156	100		
77	194.4	92.4	277.2
158	98.0	48.3	144.8

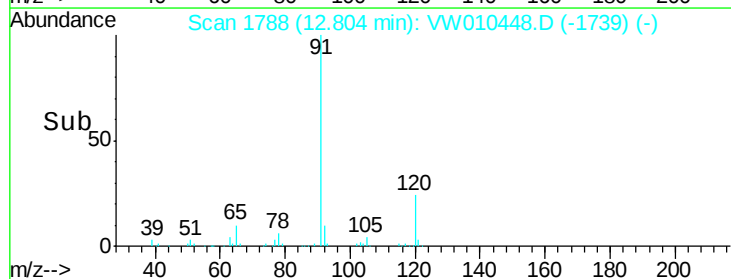
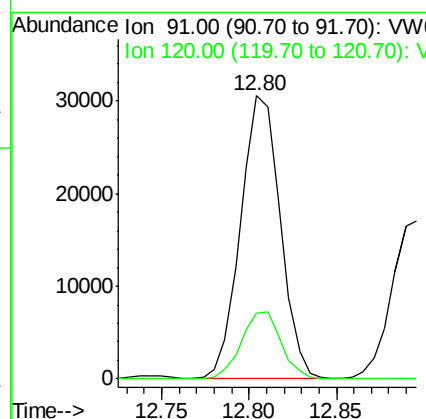
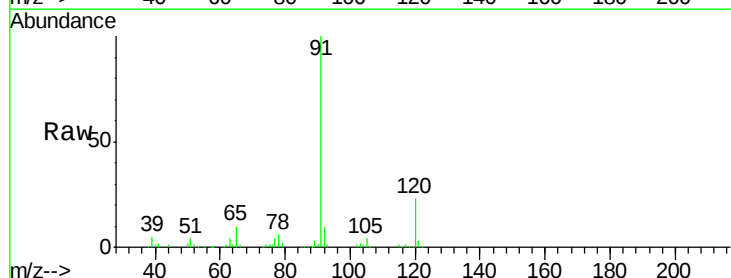
Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#78
n-propylbenzene
Concen: 5.389 ug/l
RT: 12.80 min Scan# 1788
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
91	100		
120	23.7	12.3	36.8





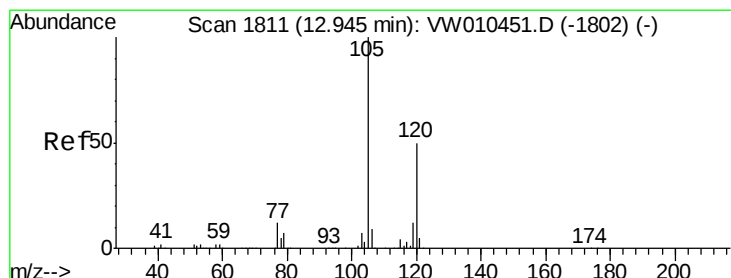
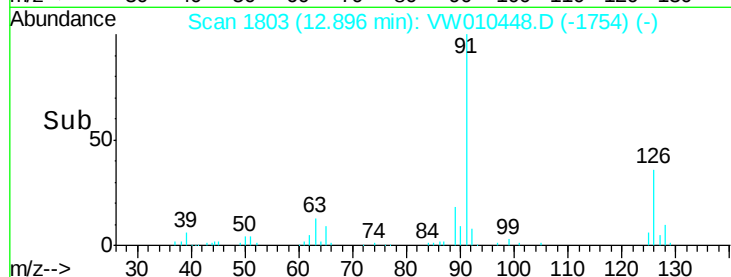
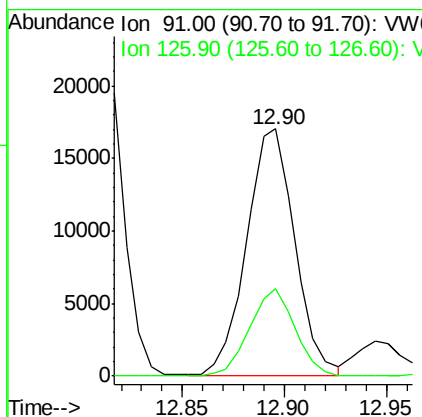
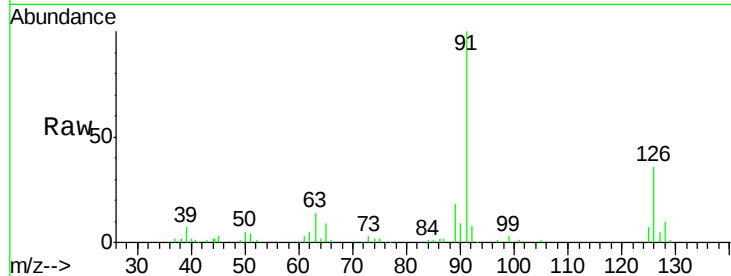
#79
 2-Chlorotoluene
 Concen: 5.368 ug/l
 RT: 12.90 min Scan# 1803
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion: 91 Resp: 27974
 Ion Ratio Lower Upper
 91 100
 126 33.3 17.4 52.3

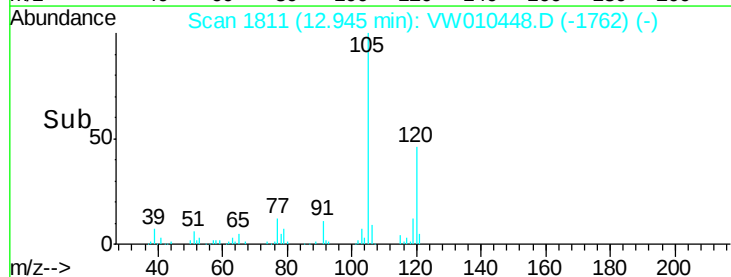
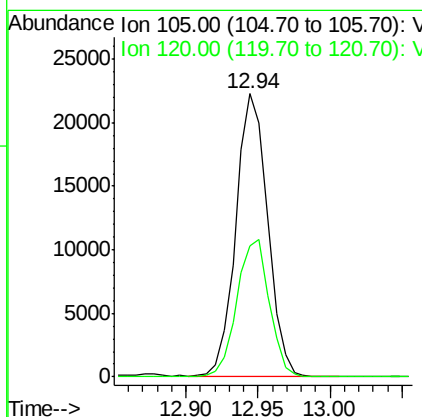
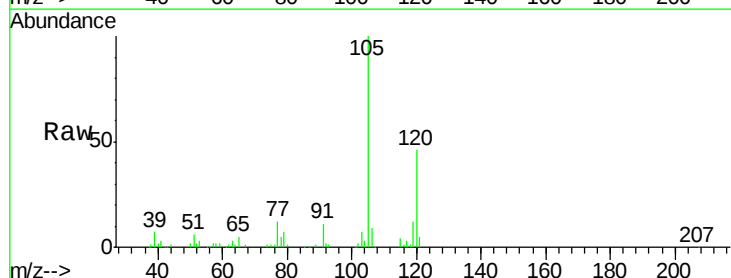
Manual Integrations
 APPROVED

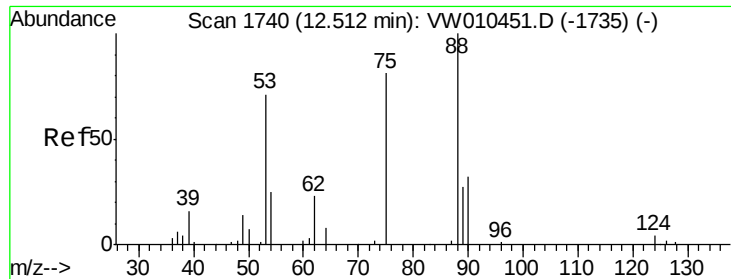
MMDadoda
 5/21/2019 11:28:29 AM



#80
 1,3,5-Trimethylbenzene
 Concen: 5.229 ug/l
 RT: 12.94 min Scan# 1811
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion: 105 Resp: 34276
 Ion Ratio Lower Upper
 105 100
 120 49.3 25.2 75.6





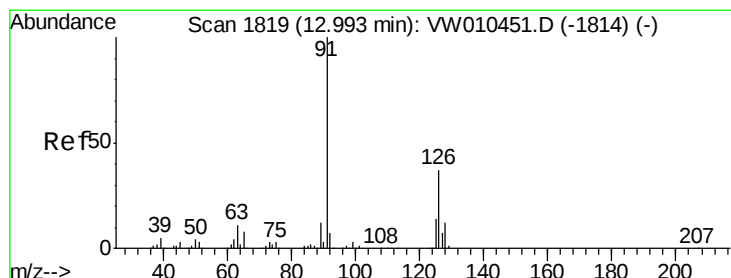
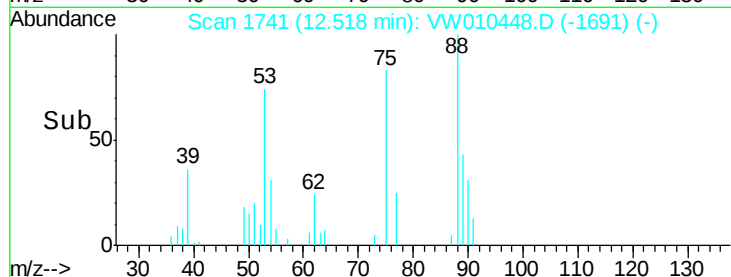
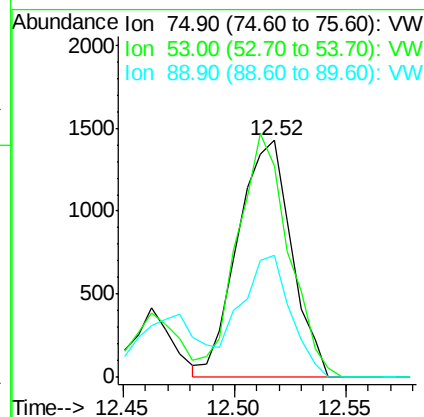
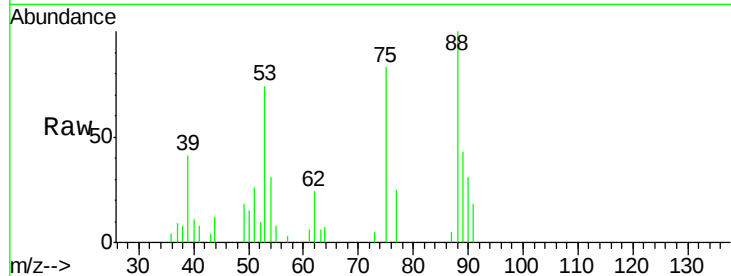
#81
trans-1,4-Dichloro-2-butene
Concen: 4.537 ug/l
RT: 12.52 min Scan# 1741
Delta R.T. 0.01 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
75	100		
53	98.4	69.8	104.8
89	46.6	39.5	59.3

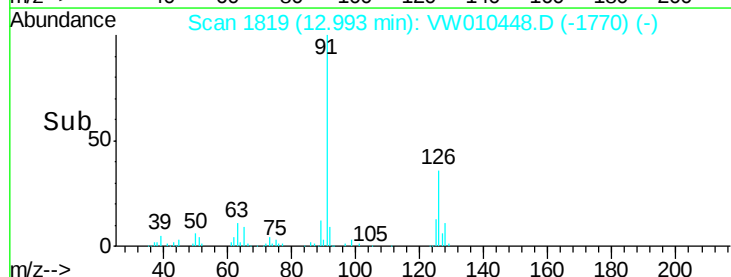
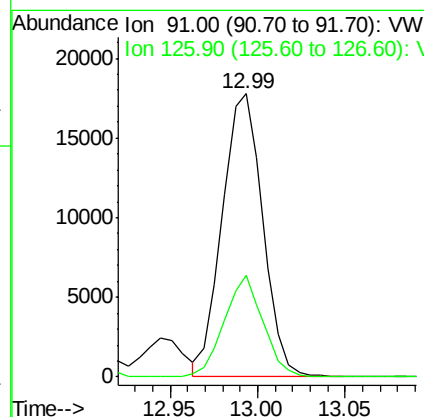
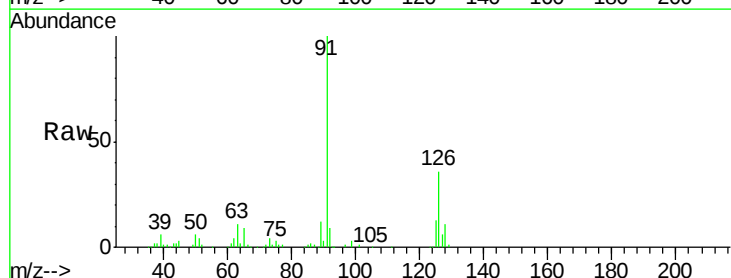
Manual Integrations
APPROVED

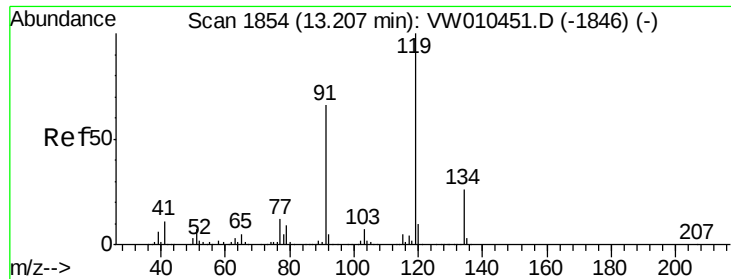
MMDadoda
5/21/2019 11:28:29 AM



#82
4-Chlorotoluene
Concen: 5.265 ug/l
RT: 12.99 min Scan# 1819
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
91	100		
126	34.1	17.5	52.6





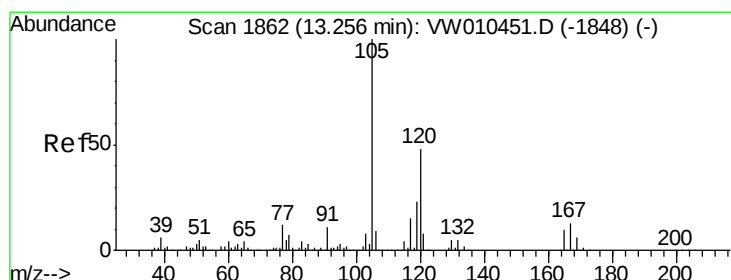
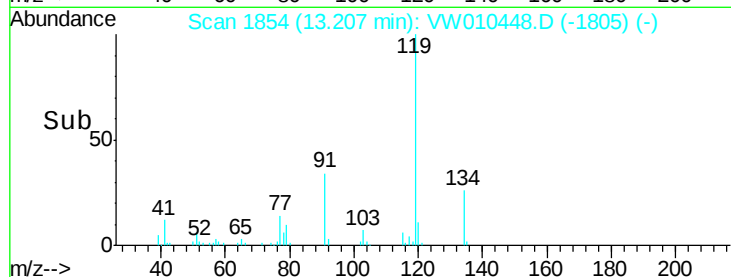
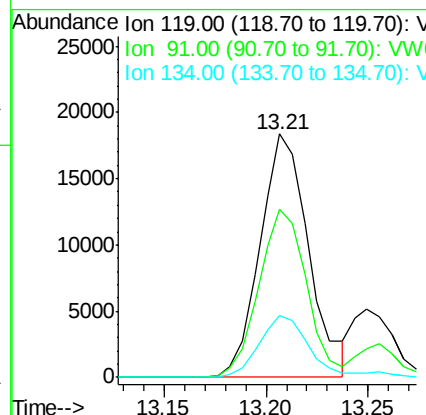
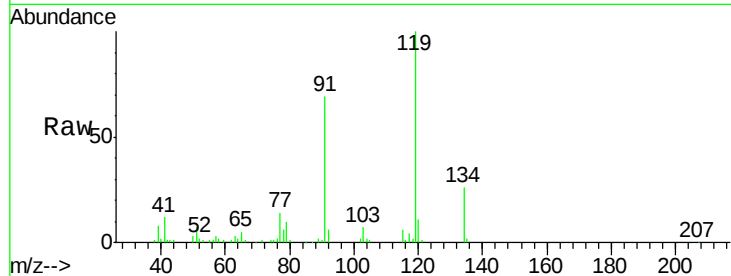
#83
tert-Butylbenzene
Concen: 5.480 ug/l
RT: 13.21 min Scan# 1854
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
119	100		
91	67.7	33.1	99.5
134	26.7	13.9	41.6

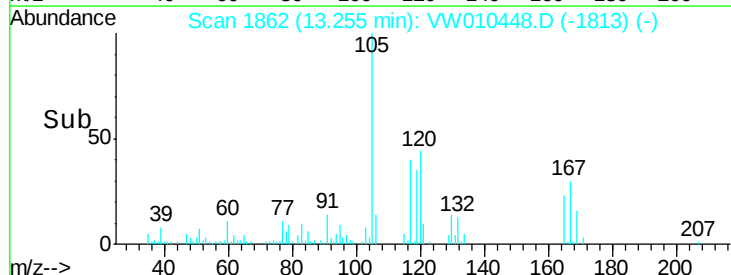
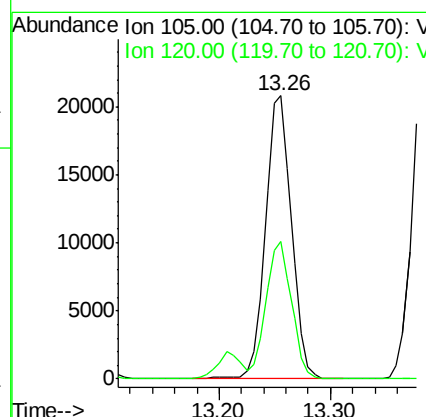
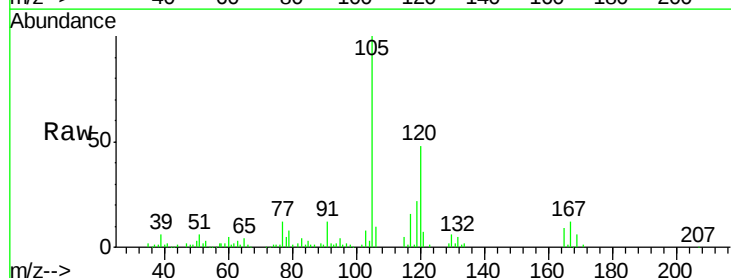
Manual Integrations
APPROVED

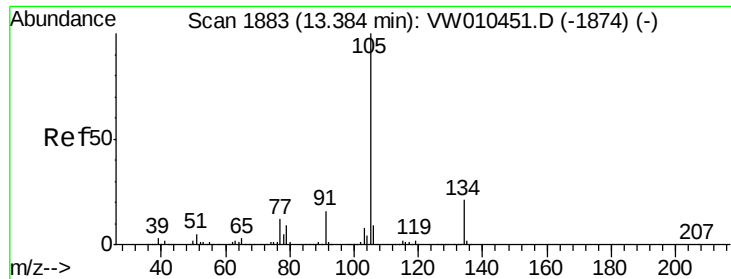
MMDadoda
5/21/2019 11:28:29 AM



#84
1,2,4-Trimethylbenzene
Concen: 5.256 ug/l
RT: 13.26 min Scan# 1862
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
105	100		
120	47.5	23.4	70.2





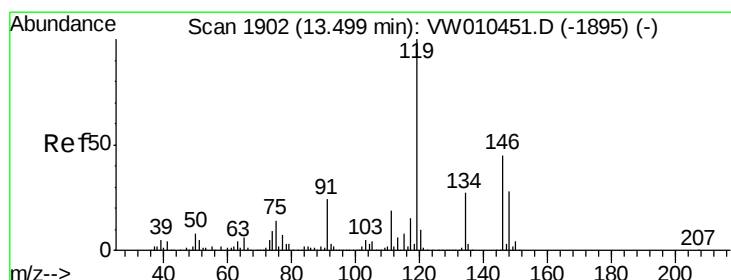
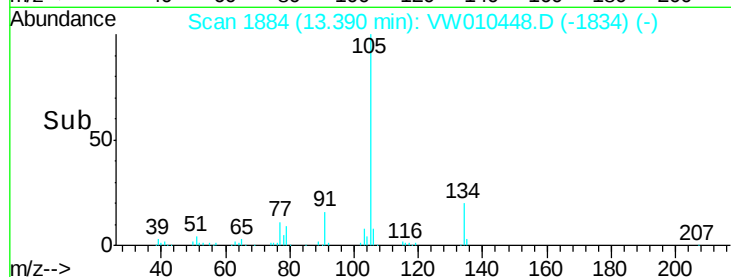
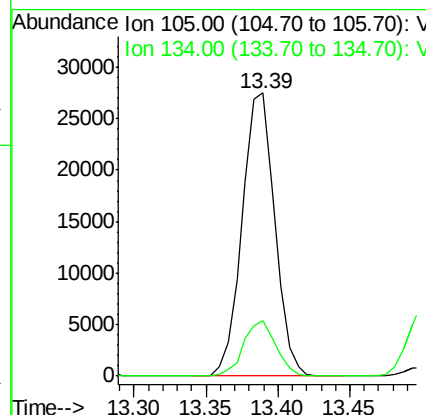
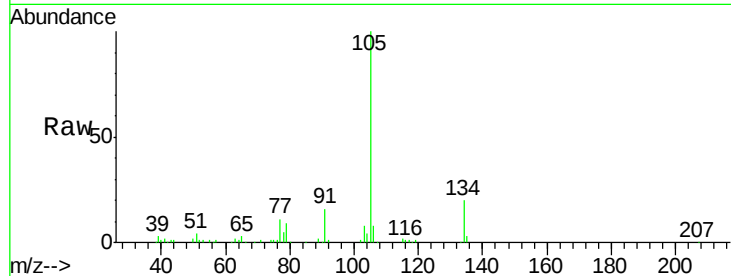
#85
 sec-Butylbenzene
 Concen: 5.527 ug/l
 RT: 13.39 min Scan# 1884
 Delta R.T. 0.01 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion	Ratio	Lower	Upper
105	100		
134	19.4	10.5	31.6

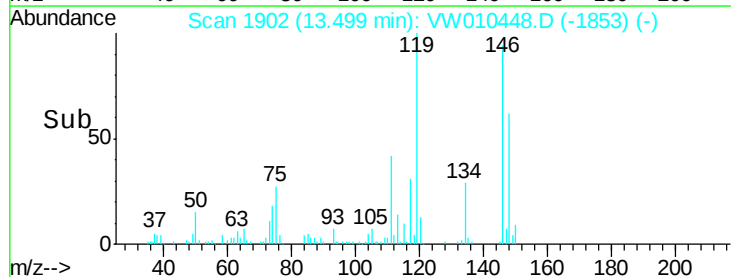
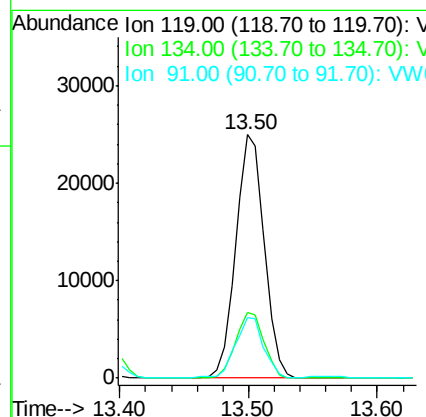
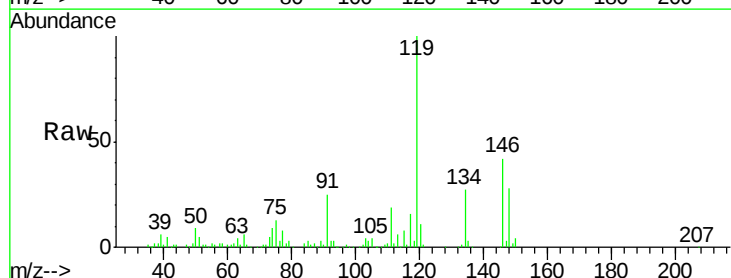
Manual Integrations
 APPROVED

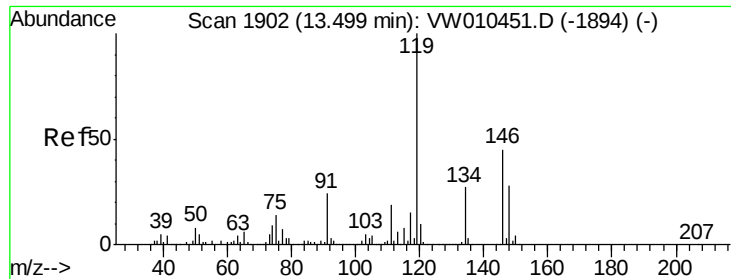
MMDadoda
 5/21/2019 11:28:29 AM



#86
 p-Isopropyltoluene
 Concen: 5.426 ug/l
 RT: 13.50 min Scan# 1902
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
119	100		
134	26.9	13.6	40.7
91	25.0	11.9	35.7





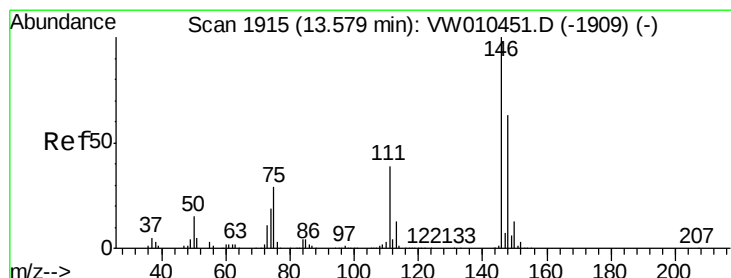
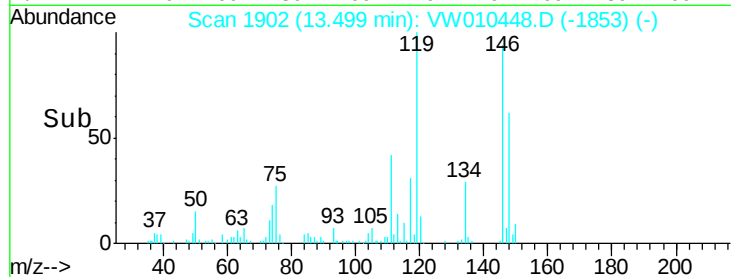
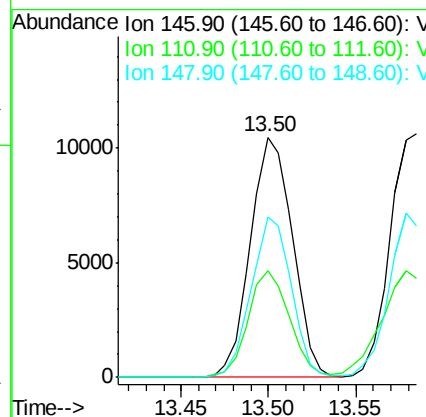
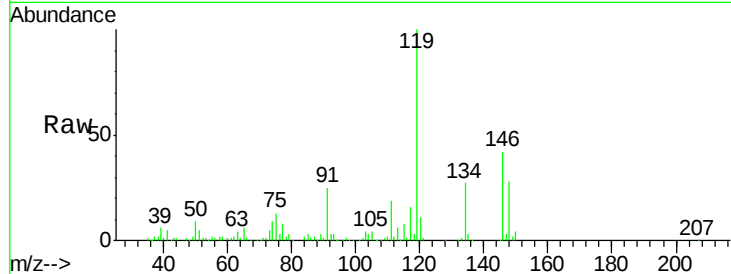
#87
 1,3-Dichlorobenzene
 Concen: 5.239 ug/l
 RT: 13.50 min Scan# 1902
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampled :
 VSTDIC005

Tot Ion	Ratio	Lower	Upper
146	100		
111	43.4	20.3	60.9
148	63.5	31.6	94.8

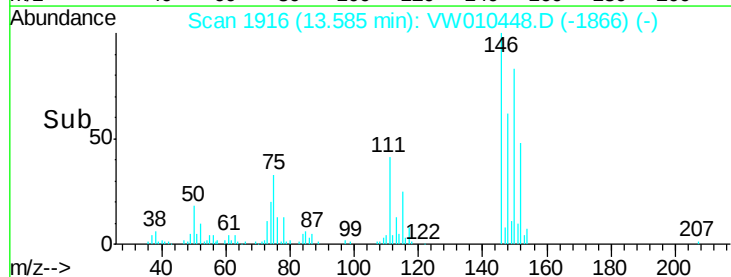
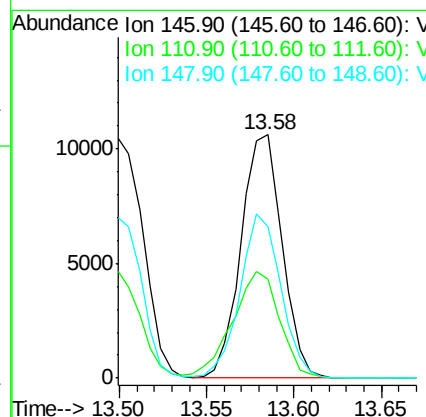
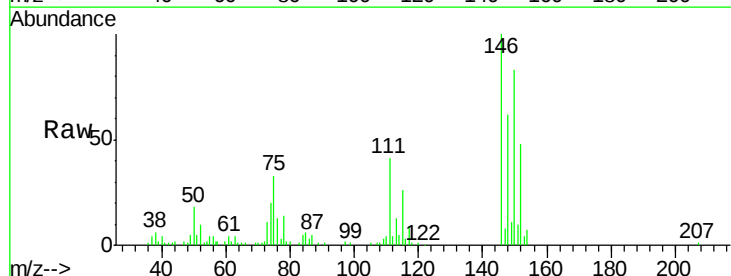
Manual Integrations
 APPROVED

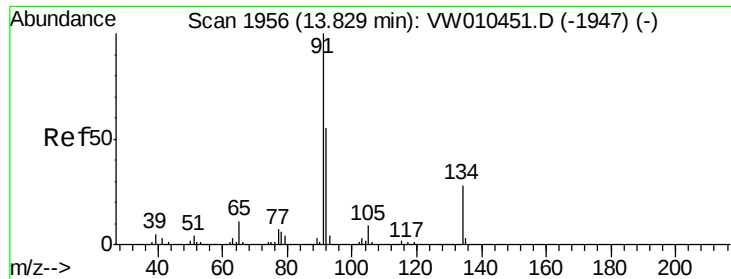
MMDadoda
 5/21/2019 11:28:29 AM



#88
 1,4-Dichlorobenzene
 Concen: 5.200 ug/l
 RT: 13.58 min Scan# 1916
 Delta R.T. 0.01 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
146	100		
111	50.3	19.9	59.6
148	67.0	31.6	94.8





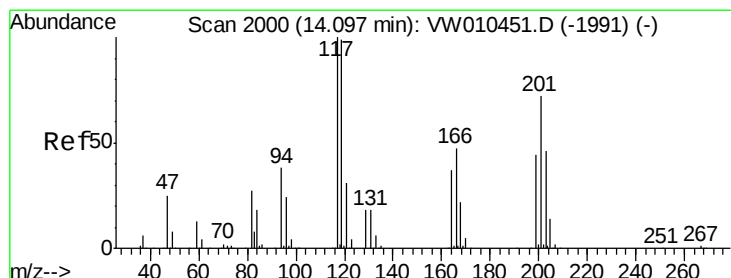
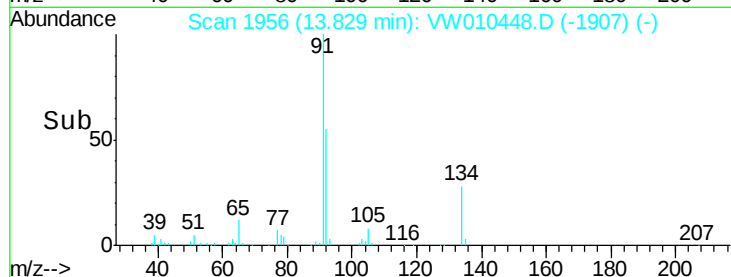
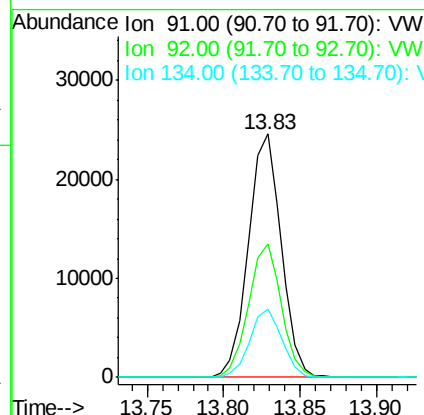
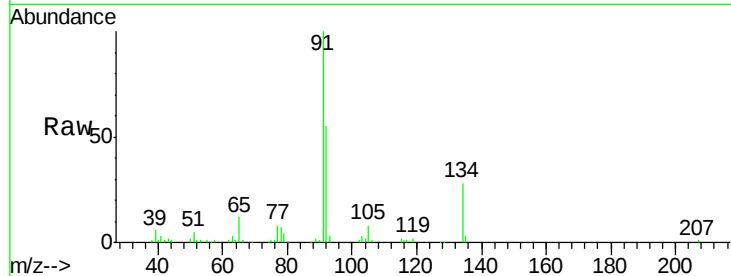
#89
n-Butylbenzene
Concen: 5.425 ug/l
RT: 13.83 min Scan# 1956
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
91	100		
92	54.7	27.7	83.1
134	27.6	13.9	41.6

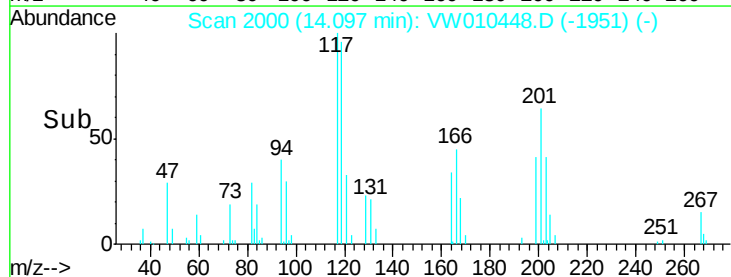
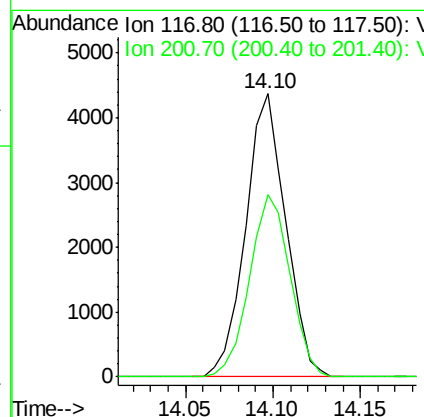
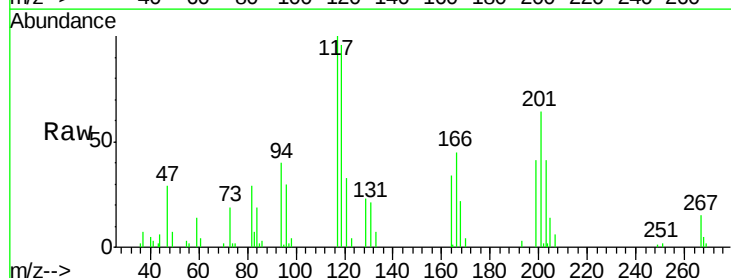
Manual Integrations
APPROVED

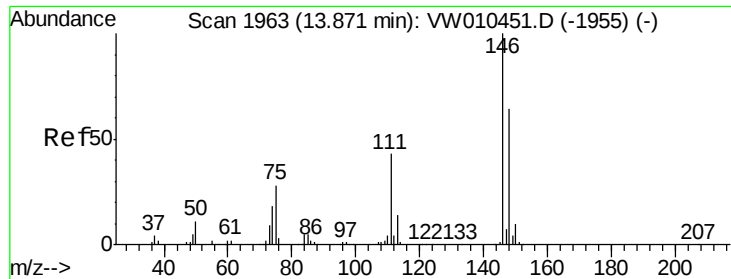
MMDadoda
5/21/2019 11:28:29 AM



#90
Hexachloroethane
Concen: 4.907 ug/l
RT: 14.10 min Scan# 2000
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
117	100		
201	65.3	34.6	103.8





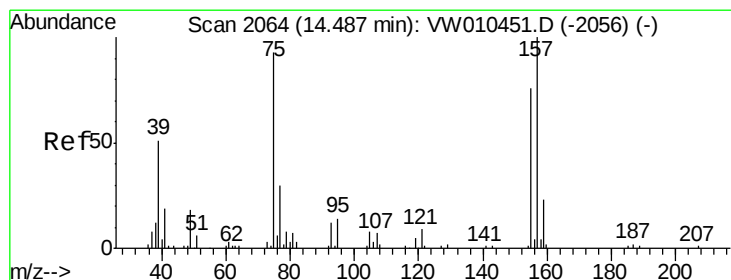
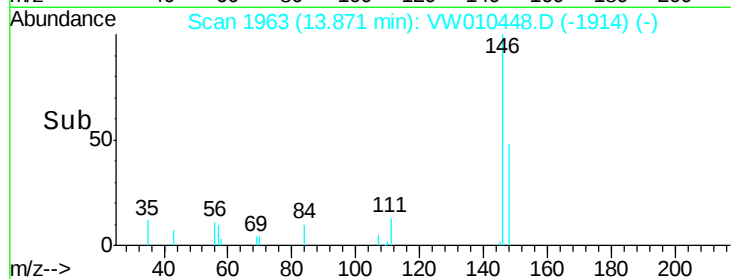
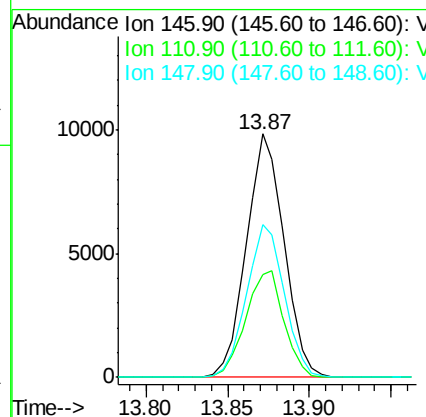
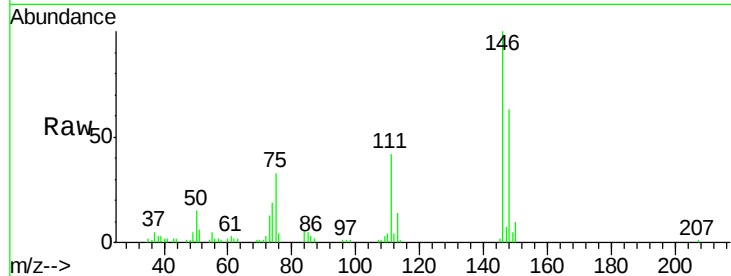
#91
 1,2-Dichlorobenzene
 Concen: 5.213 ug/l
 RT: 13.87 min Scan# 1963
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

Tot Ion	Ratio	Lower	Upper
146	100		
111	44.2	21.3	64.0
148	62.9	32.0	96.0

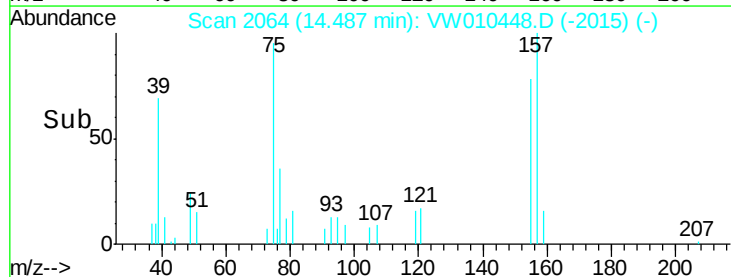
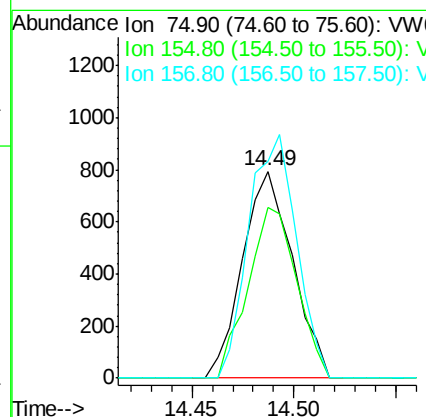
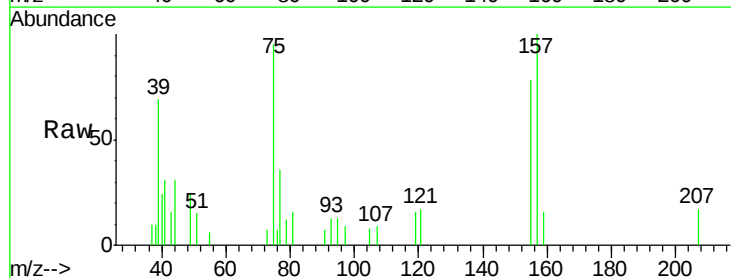
Manual Integrations
 APPROVED

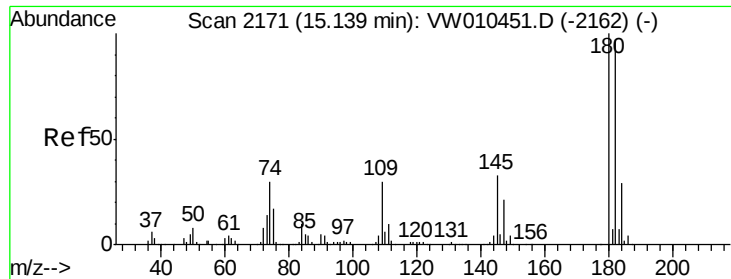
MMDadoda
 5/21/2019 11:28:29 AM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 4.843 ug/l
 RT: 14.49 min Scan# 2064
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
75	100		
155	80.4	43.0	129.0
157	112.4	55.7	167.1





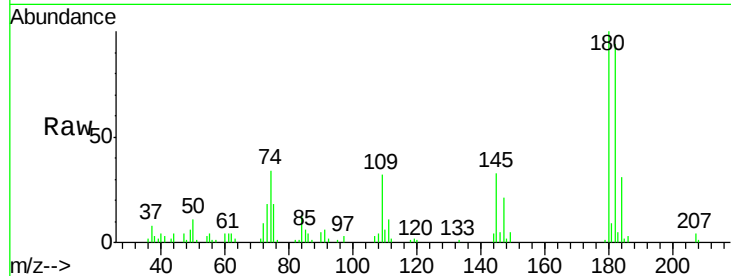
#93
 1,2,4-Trichlorobenzene
 Concen: 5.247 ug/l
 RT: 15.14 min Scan# 2171
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTDIC005

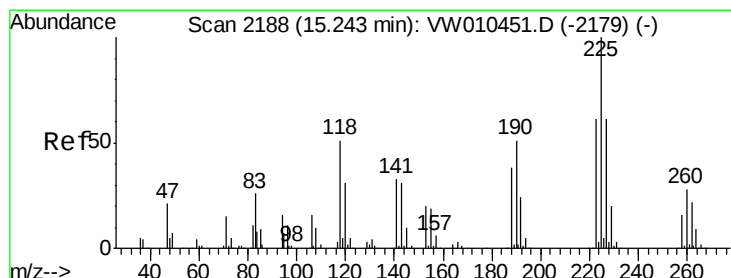
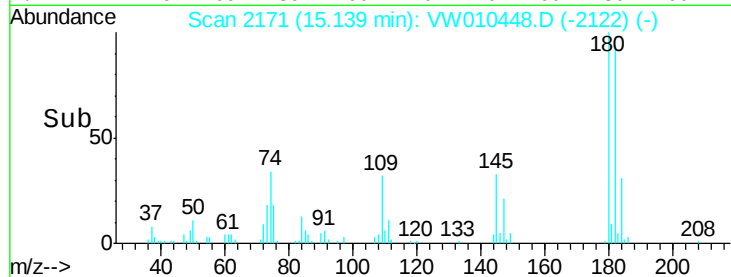
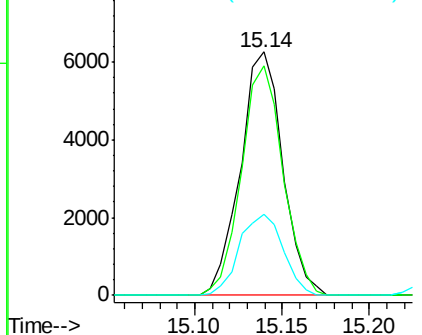
Tot Ion	Ratio	Lower	Upper
180	100		
182	92.6	47.0	141.2
145	34.4	16.7	50.0

Manual Integrations
 APPROVED

MMDadoda
 5/21/2019 11:28:29 AM

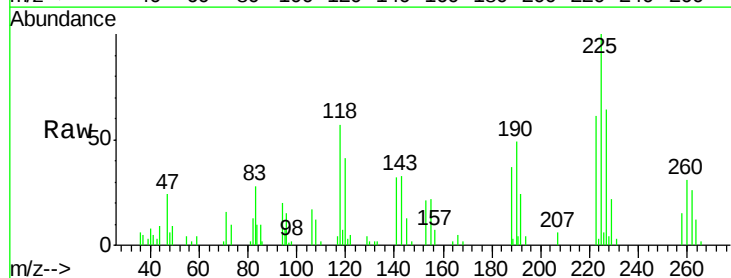


Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.80 (144.50 to 145.50): V

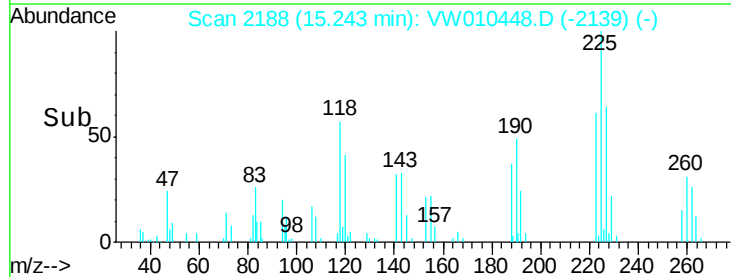
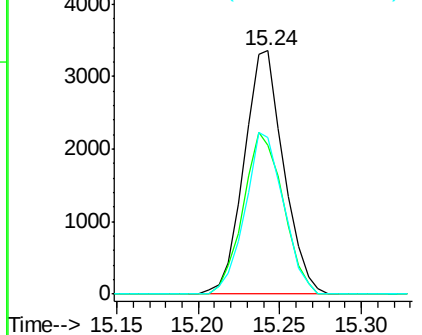


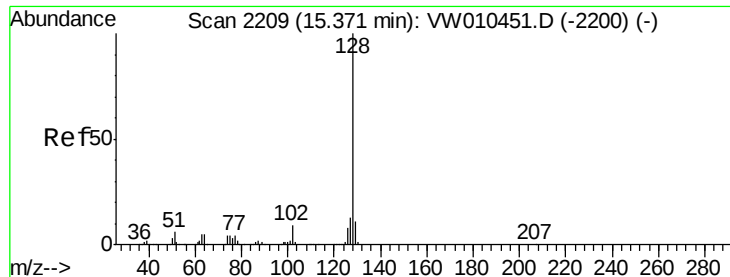
#94
 Hexachlorobutadiene
 Concen: 5.253 ug/l
 RT: 15.24 min Scan# 2188
 Delta R.T. -0.00 min
 Lab File: VW010448.D
 Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
225	100		
223	66.8	31.1	93.2
227	64.5	31.1	93.5



Abundance Ion 224.70 (224.40 to 225.40): V
 Ion 222.70 (222.40 to 223.40): V
 Ion 226.70 (226.40 to 227.40): V





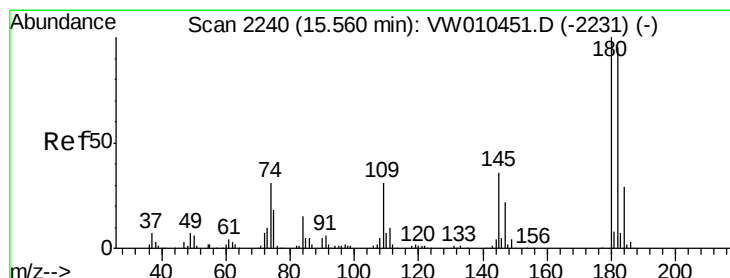
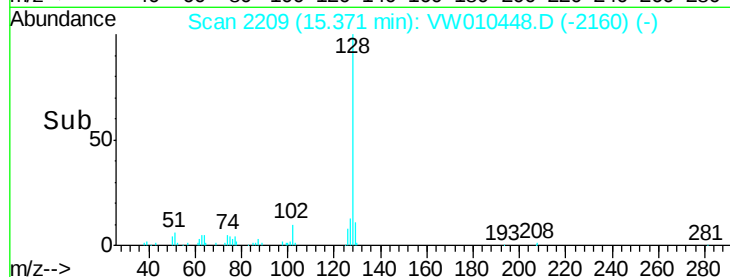
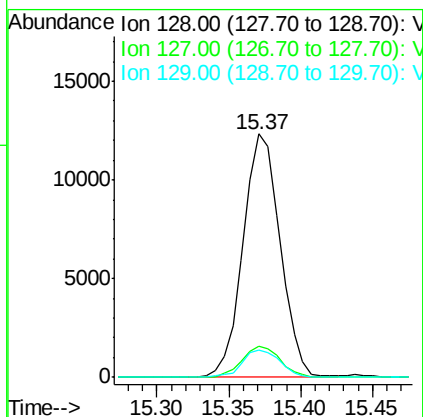
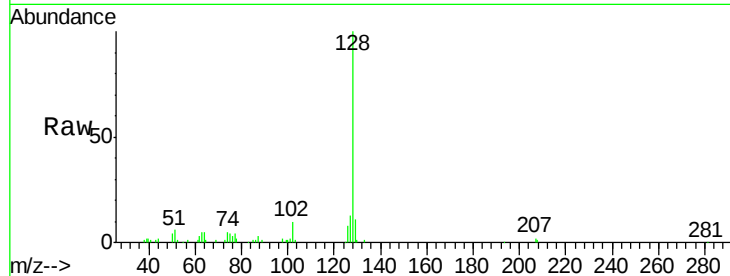
#95
Naphthalene
Concen: 4.935 ug/l
RT: 15.37 min Scan# 2209
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Instrument :
MSVOA_W
ClientSampleId :
VSTDIC005

Tot Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.6	15.8
129	11.4	8.9	13.3

Manual Integrations
APPROVED

MMDadoda
5/21/2019 11:28:29 AM



#96
1,2,3-Trichlorobenzene
Concen: 5.037 ug/l
RT: 15.56 min Scan# 2240
Delta R.T. -0.00 min
Lab File: VW010448.D
Acq: 20 May 2019 15:10

Tgt Ion	Ratio	Lower	Upper
180	100		
182	93.5	47.1	141.3
145	37.5	17.4	52.3

