

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF011619\
 Data File : VF061416.D
 Acq On : 16 Jan 2019 17:17
 Operator : VA/AP
 Sample : VF0116SBS01
 Misc : 5.00µg/5mL/MSVOA-F/SOIL
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBS01

Manual Integrations
 APPROVED

MMDadoda
 1/17/2019 1:23:51 PM

Quant Time: Jan 17 03:11:58 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F011519S.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 16 04:51:59 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.86	168	211374	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.59	114	335877	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.77	117	308635	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.55	152	160310	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	4.84	65	127345	48.80	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.60%	
35) Dibromofluoromethane	4.11	113	142051	53.60	ug/l	0.00
Spiked Amount	50.000		Recovery	=	107.20%	
50) Toluene-d8	7.55	98	398685	54.90	ug/l	0.00
Spiked Amount	50.000		Recovery	=	109.80%	
62) 4-Bromofluorobenzene	11.40	95	177457	52.30	ug/l	0.00
Spiked Amount	50.000		Recovery	=	104.60%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.96	85	71895	17.311	ug/l	91
3) Chloromethane	1.09	50	58947	19.357	ug/l	96
4) Vinyl Chloride	1.14	62	53880	19.890	ug/l	91
5) Bromomethane	1.31	94	34659	19.620	ug/l #	79
6) Chloroethane	1.38	64	22905	19.082	ug/l	91
7) Trichlorofluoromethane	1.48	101	83699	15.893	ug/l	99
8) Diethyl Ether	1.63	74	13295	19.702	ug/l	87
9) 1,1,2-Trichlorotrifluoroet	1.84	101	45282	17.895	ug/l	93
10) Methyl Iodide	1.91	142	74831m	19.075	ug/l	
11) Tert butyl alcohol	2.57	59	11008	99.653	ug/l #	89
12) 1,1-Dichloroethene	1.79	96	36326	19.323	ug/l	95
13) Acrolein	1.99	56	6071	71.505	ug/l	90
14) Allyl chloride	2.08	41	53198	23.525	ug/l #	82
15) Acrylonitrile	2.93	53	26907	95.094	ug/l	95
16) Acetone	2.23	43	57702	110.217	ug/l	99
17) Carbon Disulfide	1.83	76	109929m	18.753	ug/l	
18) Methyl Acetate	2.34	43	22874	22.031	ug/l	94
19) Methyl tert-butyl Ether	2.43	73	75465	17.907	ug/l	96
20) Methylene Chloride	2.17	84	39043m	20.948	ug/l	
21) trans-1,2-Dichloroethene	2.30	96	40893	19.770	ug/l	93
22) Diisopropyl ether	2.79	45	130686	19.534	ug/l	99
23) Vinyl Acetate	3.18	43	326079	112.590	ug/l	98
24) 1,1-Dichloroethane	2.86	63	76121	18.129	ug/l	99
25) 2-Butanone	4.33	43	96493	110.833	ug/l	99
26) 2,2-Dichloropropane	3.59	77	45680	17.707	ug/l	99
27) cis-1,2-Dichloroethene	3.46	96	60249	19.733	ug/l	98
28) Bromochloromethane	3.71	49	38427	20.360	ug/l #	95
29) Tetrahydrofuran	4.06	42	37619	100.349	ug/l	99
30) Chloroform	3.85	83	105569	18.630	ug/l	99
31) Cyclohexane	3.68	56	81783m	19.499	ug/l	
32) 1,1,1-Trichloroethane	4.09	97	63162	15.201	ug/l	94
36) 1,1-Dichloropropene	4.26	75	82817	21.266	ug/l	100
37) Ethyl Acetate	4.10	43	34696	22.288	ug/l	94
38) Carbon Tetrachloride	3.98	117	62144	18.253	ug/l	96

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF011619\
 Data File : VF061416.D
 Acq On : 16 Jan 2019 17:17
 Operator : VA/AP
 Sample : VF0116SBS01
 Misc : 5.00µ/5mL/MSVOA-F/SOIL
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleID :
 VF0116SBS01

Manual Integrations
 APPROVED

MMDadoda
 1/17/2019 1:23:51 PM

Quant Time: Jan 17 03:11:58 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F011519S.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 16 04:51:59 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) Methylcyclohexane	5.45	83	86670	20.536	ug/l	98
40) Benzene	4.62	78	185263	21.379	ug/l	99
41) Methacrylonitrile	4.73	41	17846	21.545	ug/l	95
42) 1,2-Dichloroethane	4.93	62	58837	19.054	ug/l	96
43) Isopropyl Acetate	6.96	43	43981	22.511	ug/l #	82
44) Trichloroethene	5.50	130	59445	22.362	ug/l	93
45) 1,2-Dichloropropane	6.23	63	50893	22.377	ug/l	97
46) Dibromomethane	6.08	93	31101	20.566	ug/l	94
47) Bromodichloromethane	6.37	83	76081	20.334	ug/l #	93
48) Methyl methacrylate	6.71	41	24599	18.750	ug/l	92
49) 1,4-Dioxane	6.70	88	4524	456.256	ug/l	97
51) 4-Methyl-2-Pentanone	8.25	43	150385	104.702	ug/l	98
52) Toluene	7.62	92	117231	20.543	ug/l	99
53) t-1,3-Dichloropropene	8.27	75	61652	20.751	ug/l	98
54) cis-1,3-Dichloropropene	7.29	75	80960	21.800	ug/l	97
55) 1,1,2-Trichloroethane	8.49	97	34779	21.462	ug/l	97
56) Ethyl methacrylate	8.61	69	37645	19.967	ug/l	96
57) 1,3-Dichloropropane	8.85	76	61437	20.227	ug/l	99
58) 2-Chloroethyl Vinyl ether	7.29	63	23239	132.126	ug/l	91
59) 2-Hexanone	9.48	43	116321	116.138	ug/l	98
60) Dibromochloromethane	8.71	129	46403	19.587	ug/l	93
61) 1,2-Dibromoethane	8.98	107	35801	19.298	ug/l	96
64) Tetrachloroethene	8.15	164	47572	20.497	ug/l	98
65) Chlorobenzene	9.79	112	135722	21.625	ug/l	99
66) 1,1,1,2-Tetrachloroethane	9.93	131	53956	21.580	ug/l	99
67) Ethyl Benzene	9.90	91	248944	21.709	ug/l	99
68) m/p-Xylenes	10.12	106	175369	42.520	ug/l	95
69) o-Xylene	10.70	106	94413	21.121	ug/l	99
70) Styrene	10.78	104	130565	21.338	ug/l	97
71) Bromoform	10.76	173	24478	21.789	ug/l #	93
73) Isopropylbenzene	11.12	105	292995	22.472	ug/l	98
74) N-amyl acetate	11.37	43	71704	23.257	ug/l	97
75) 1,1,2,2-Tetrachloroethane	11.69	83	48745	20.986	ug/l	94
76) 1,2,3-Trichloropropane	11.79	75	35381	21.199	ug/l	98
77) Bromobenzene	11.49	156	59761	21.703	ug/l	97
78) n-propylbenzene	11.59	91	342510	20.166	ug/l	100
79) 2-Chlorotoluene	11.71	91	188744	20.864	ug/l	98
80) 1,3,5-Trimethylbenzene	11.82	105	233489	22.190	ug/l	98
81) trans-1,4-Dichloro-2-buten	11.86	75	15012m	20.691	ug/l	
82) 4-Chlorotoluene	11.89	91	196813	21.560	ug/l	97
83) tert-Butylbenzene	12.13	119	249290	22.890	ug/l	95
84) 1,2,4-Trimethylbenzene	12.20	105	229929	21.214	ug/l	97
85) sec-Butylbenzene	12.30	105	331290	22.400	ug/l	96
86) p-Isopropyltoluene	12.45	119	273016	22.487	ug/l	96
87) 1,3-Dichlorobenzene	12.47	146	117743	20.360	ug/l	99
88) 1,4-Dichlorobenzene	12.56	146	107775	20.713	ug/l	98
89) n-Butylbenzene	12.84	91	280550	22.407	ug/l	96
90) Hexachloroethane	12.91	117	60346	21.086	ug/l	97
91) 1,2-Dichlorobenzene	12.93	146	107393	20.849	ug/l	99
92) 1,2-Dibromo-3-Chloropropan	13.63	75	8297	20.139	ug/l	79

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF011619\
Data File : VF061416.D
Acq On : 16 Jan 2019 17:17
Operator : VA/AP
Sample : VF0116SBSD01
Misc : 5.00µ/5mL/MSVOA-F/SOIL
ALS Vial : 26 Sample Multiplier: 1

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBSD01

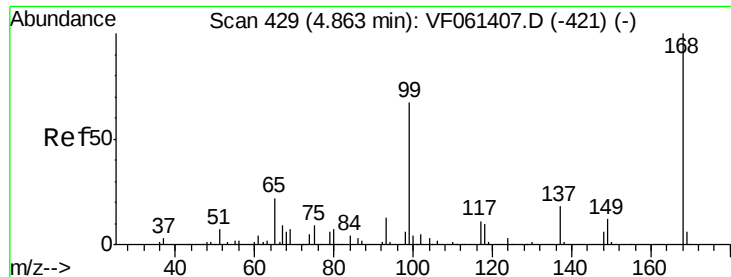
Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM

Quant Time: Jan 17 03:11:58 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_F\METHODS\82F011519S.M
Quant Title : SW846 8260
QLast Update : Wed Jan 16 04:51:59 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) 1,2,4-Trichlorobenzene	14.20	180	75897	21.033	ug/l	97
94) Hexachlorobutadiene	14.19	225	45644	20.385	ug/l	99
95) Naphthalene	14.45	128	136116	19.854	ug/l	98
96) 1,2,3-Trichlorobenzene	14.60	180	67724	20.275	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.86 min Scan# 428

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion:168 Resp: 211374

Ion Ratio Lower Upper

168 100

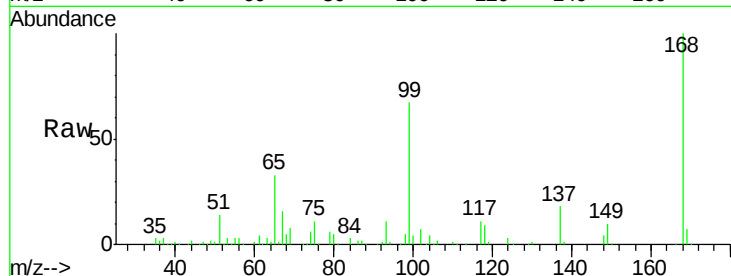
99 66.5 53.5 80.3

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.86

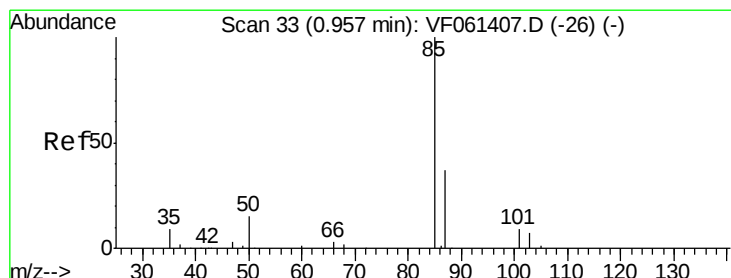
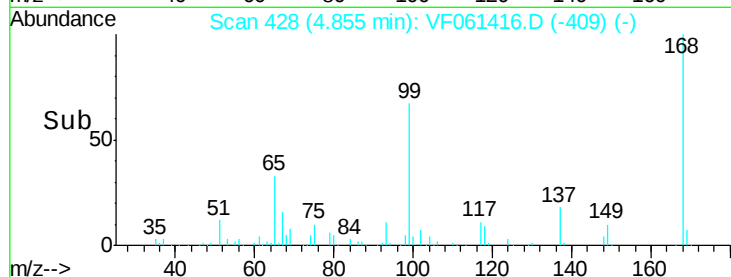
60000

40000

20000

0

Time--> 4.70 4.80 4.90 5.00



#2

Dichlorodifluoromethane

Concen: 17.311 ug/l

RT: 0.96 min Scan# 33

Delta R.T. 0.00 min

Lab File: VF061416.D

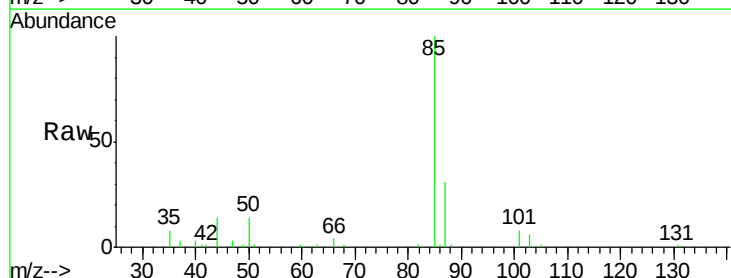
Acq: 16 Jan 2019 17:17

Tgt Ion: 85 Resp: 71895

Ion Ratio Lower Upper

85 100

87 31.3 18.4 55.0



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.96

20000

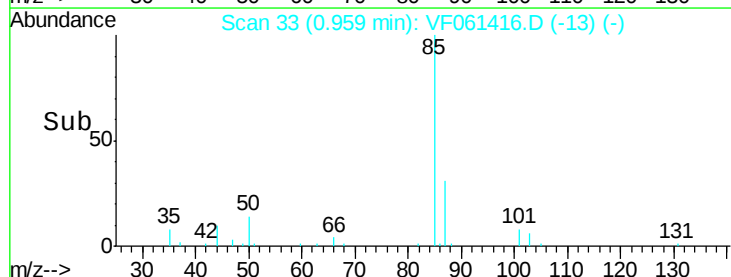
15000

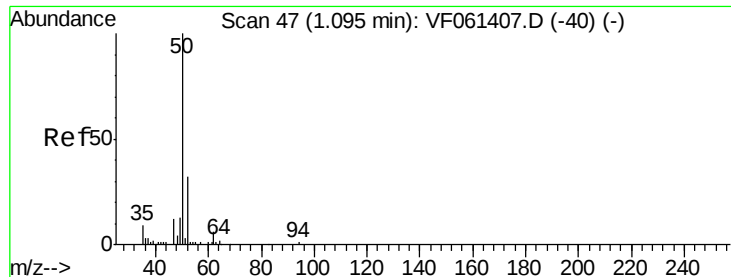
10000

5000

0

Time--> 0.80 0.90 1.00 1.10





#3

Chloromethane

Concen: 19.357 ug/l

RT: 1.09 min Scan# 46

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 50 Resp: 58947

Ion Ratio Lower Upper

50 100

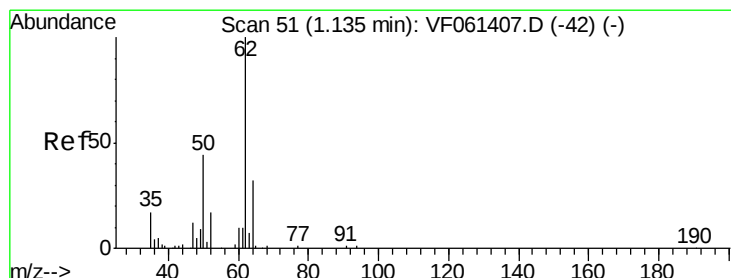
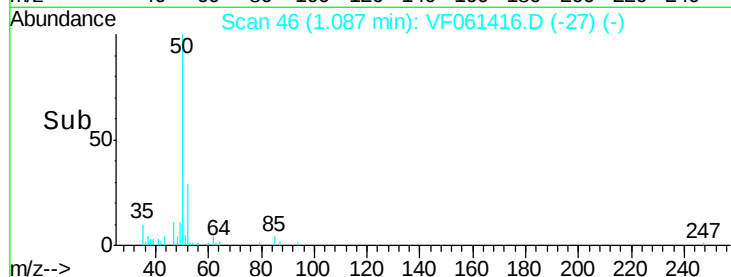
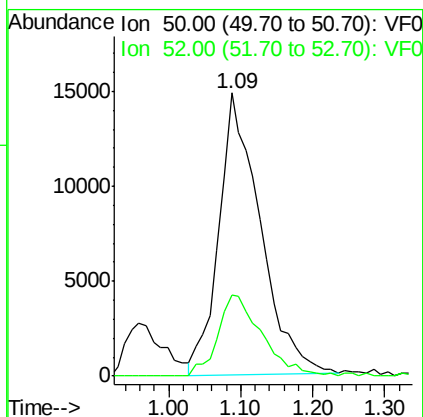
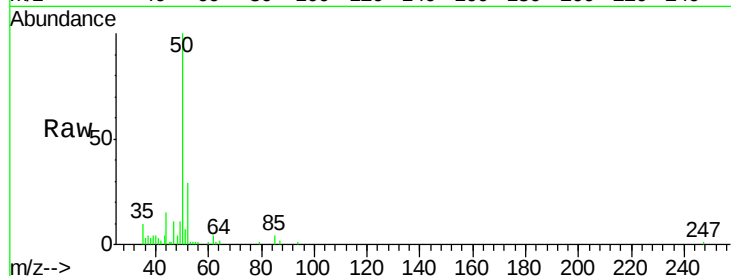
52 28.6 24.6 36.8

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#4

Vinyl Chloride

Concen: 19.890 ug/l

RT: 1.14 min Scan# 51

Delta R.T. 0.00 min

Lab File: VF061416.D

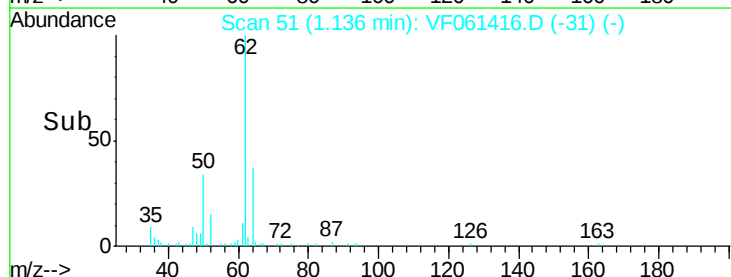
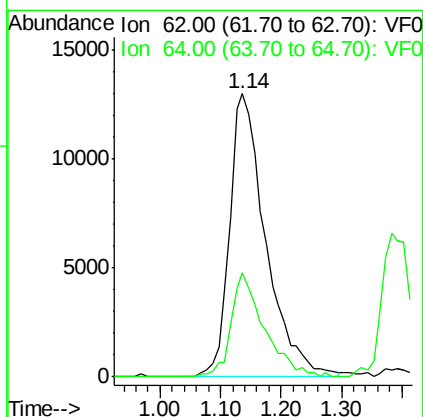
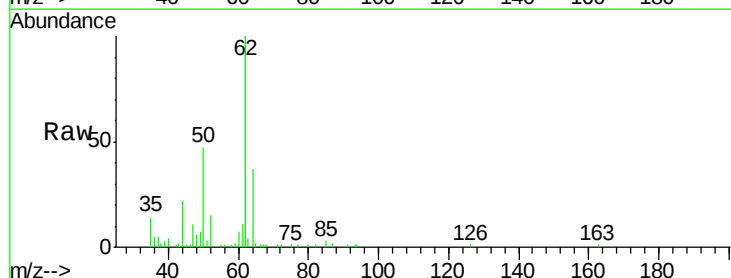
Acq: 16 Jan 2019 17:17

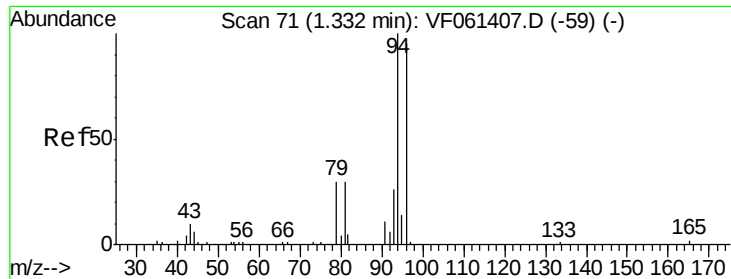
Tgt Ion: 62 Resp: 53880

Ion Ratio Lower Upper

62 100

64 36.8 25.6 38.4





#5

Bromomethane

Concen: 19.620 ug/l

RT: 1.31 min Scan# 69

Delta R.T. -0.02 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 94 Resp: 34659

Ion Ratio Lower Upper

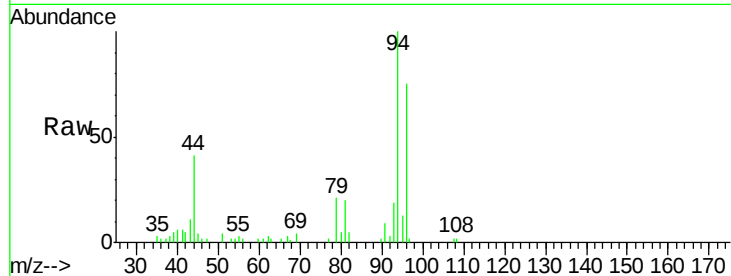
94 100

96 74.8 76.0 114.0#

Manual Integrations
APPROVED

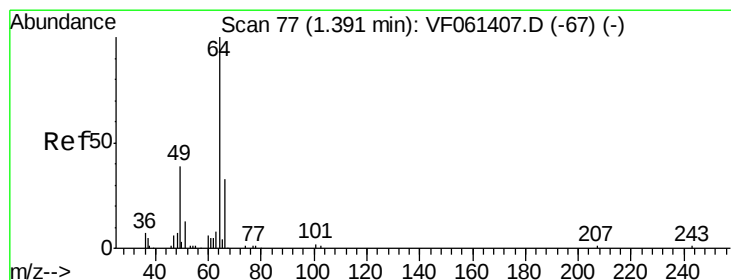
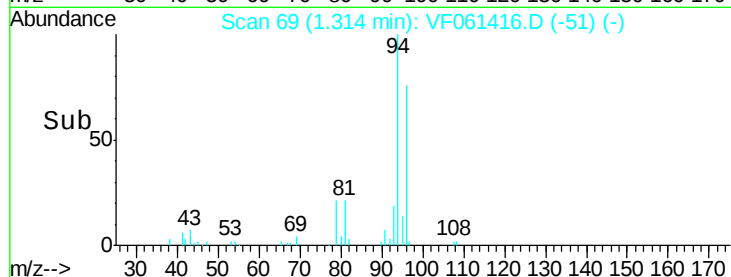
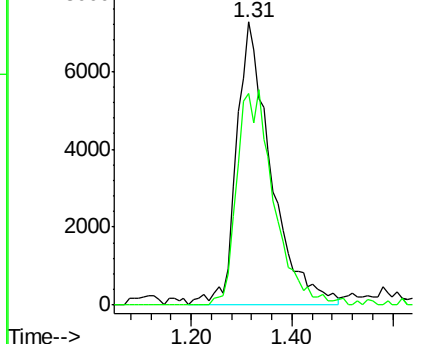
MMDadoda

1/17/2019 1:23:51 PM



Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0



#6

Chloroethane

Concen: 19.082 ug/l

RT: 1.38 min Scan# 76

Delta R.T. -0.01 min

Lab File: VF061416.D

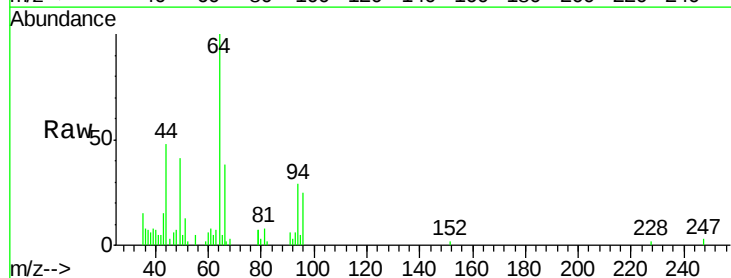
Acq: 16 Jan 2019 17:17

Tgt Ion: 64 Resp: 22905

Ion Ratio Lower Upper

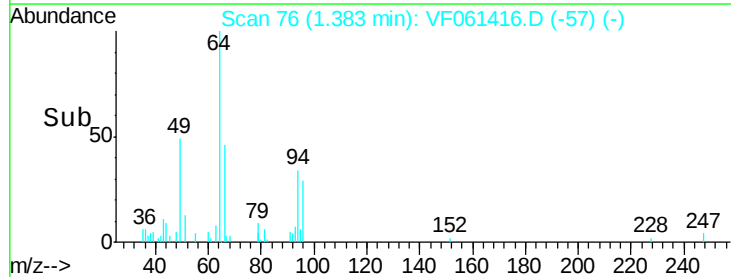
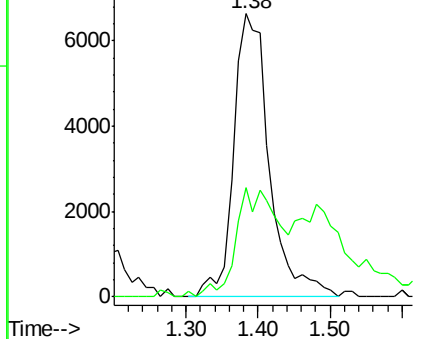
64 100

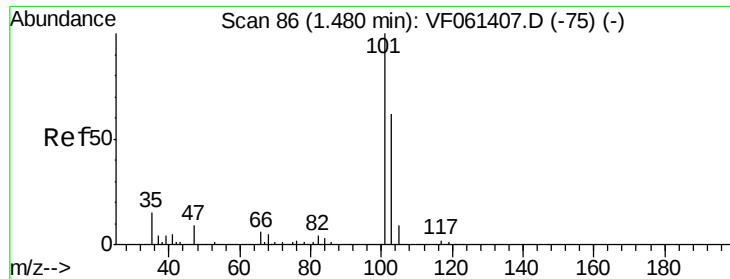
66 38.4 26.6 40.0



Abundance Ion 64.00 (63.70 to 64.70): VF0

Ion 66.00 (65.70 to 66.70): VF0





#7

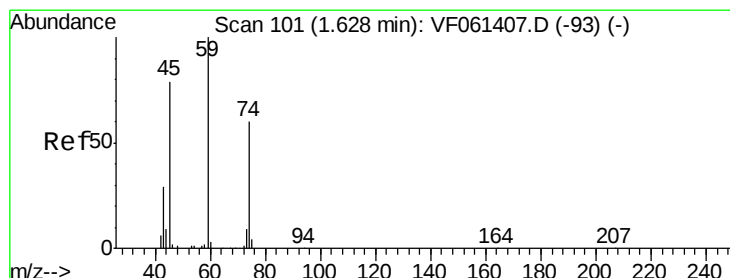
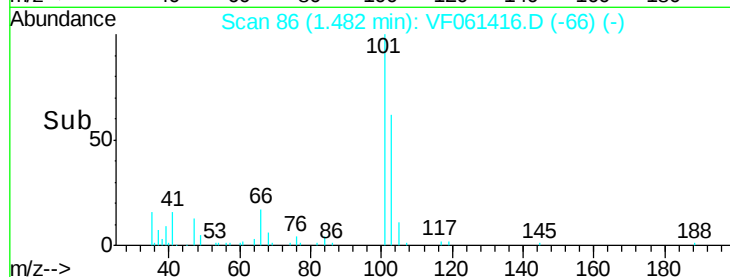
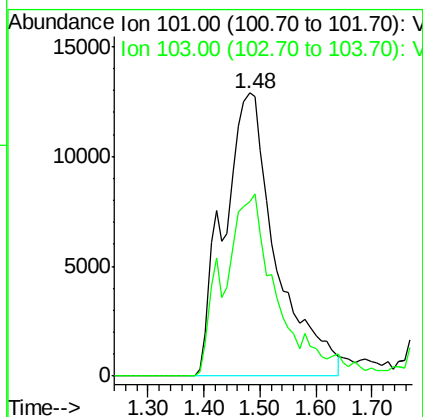
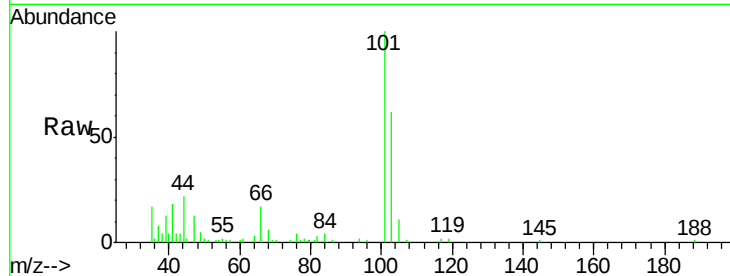
Trichlorofluoromethane
Concen: 15.893 ug/l
RT: 1.48 min Scan# 86
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Lower	Upper
101	100		
103	61.6	49.7	74.5

Manual Integrations
APPROVED

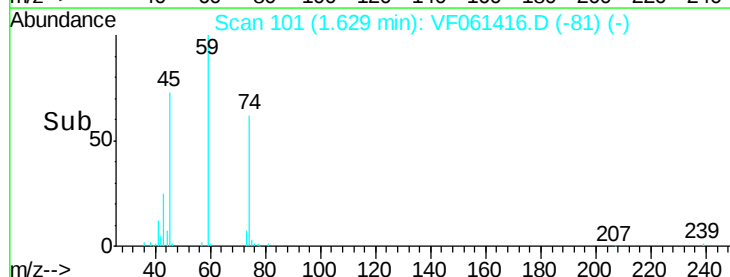
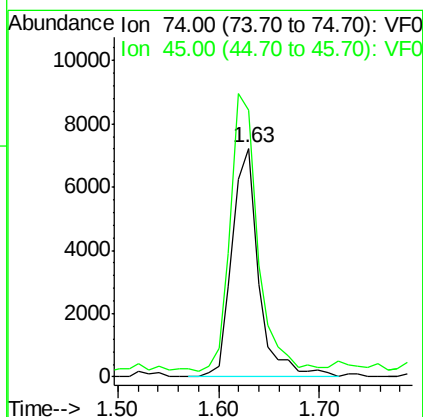
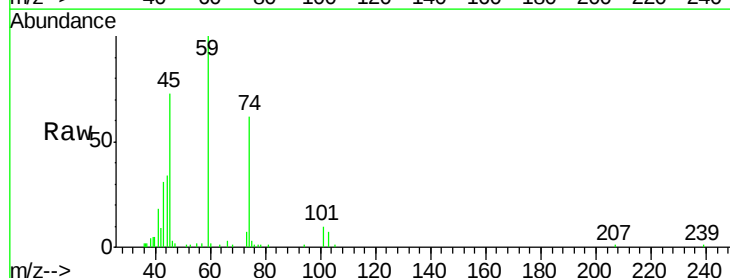
MMDadoda
1/17/2019 1:23:51 PM

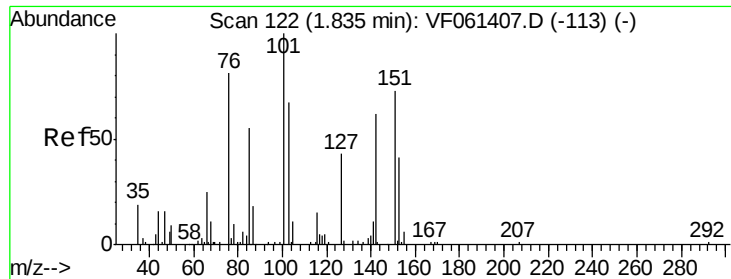


#8

Diethyl Ether
Concen: 19.702 ug/l
RT: 1.63 min Scan# 101
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
74	100		
45	117.0	65.8	197.5





#9

1,1,2-Trichlorotrifluoroethane

Concen: 17.895 ug/l

RT: 1.84 min Scan# 122

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

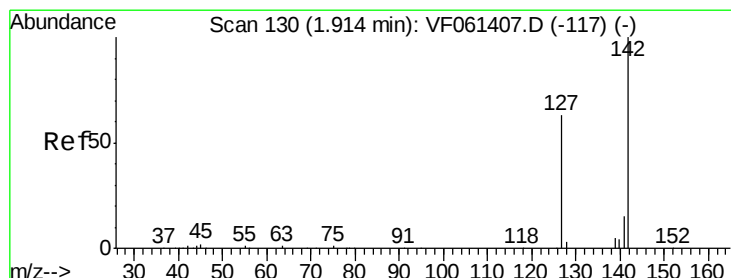
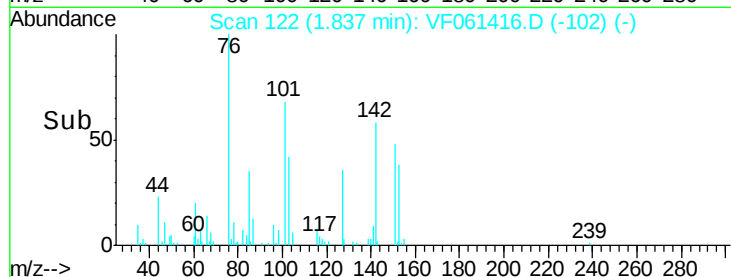
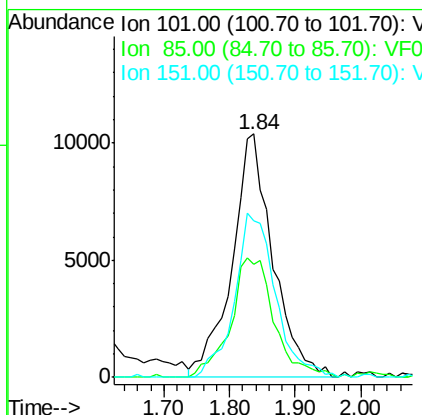
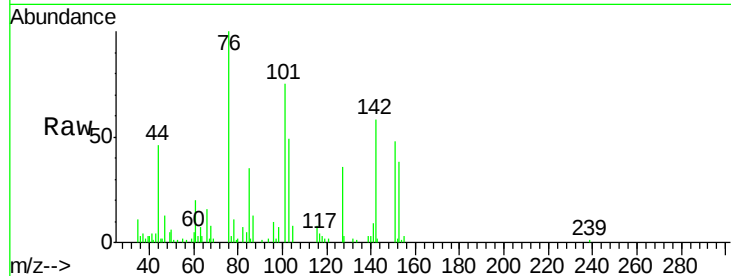
ClientSampleId :

VF0116SBS01

Tot Ion:	101	Resp:	45282
Ion Ratio	Lower	Upper	
101	100		
85	46.7	41.9	62.9
151	64.1	55.1	82.7

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#10

Methyl Iodide

Concen: 19.075 ug/l m

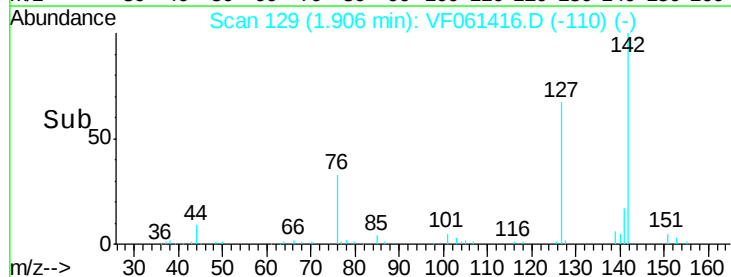
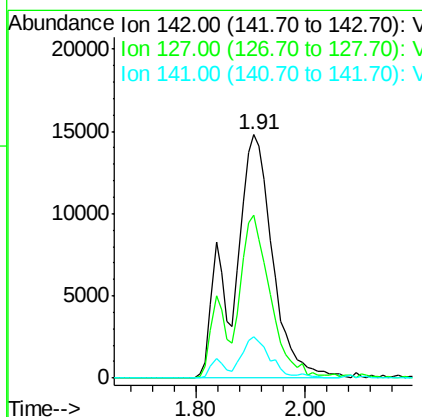
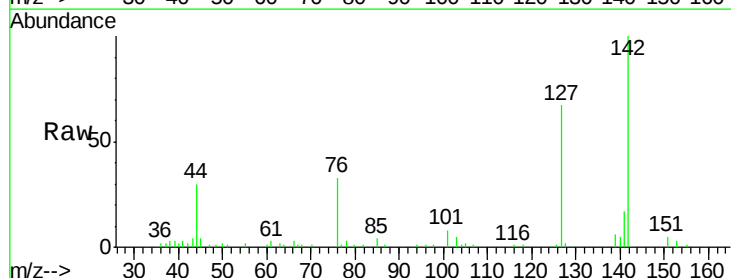
RT: 1.91 min Scan# 129

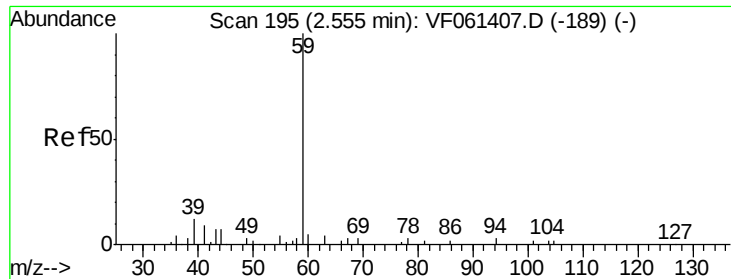
Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	142	Resp:	74831
Ion Ratio	Lower	Upper	
142	100		
127	66.9	50.7	76.1
141	17.2	11.8	17.6





#11

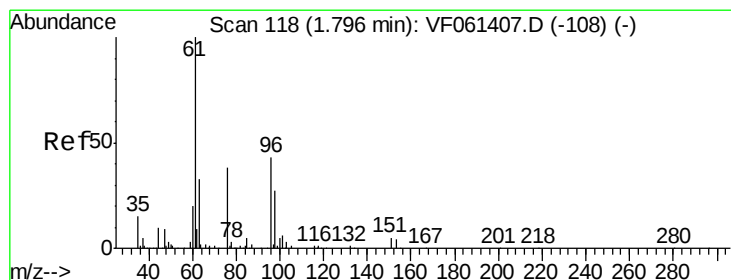
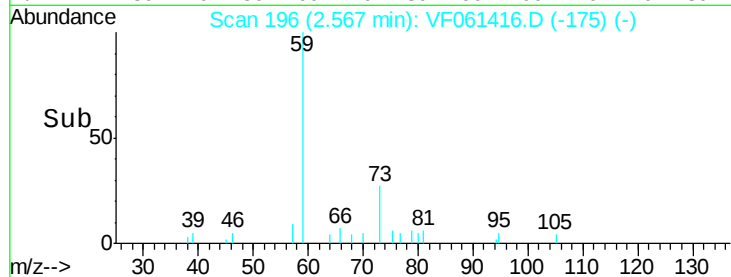
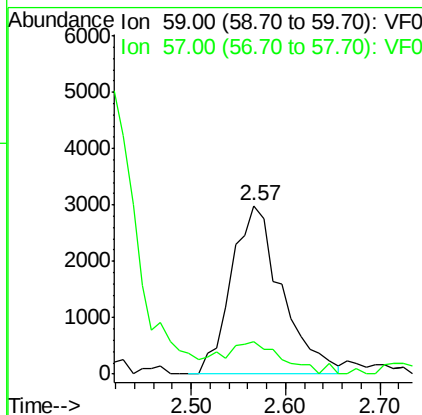
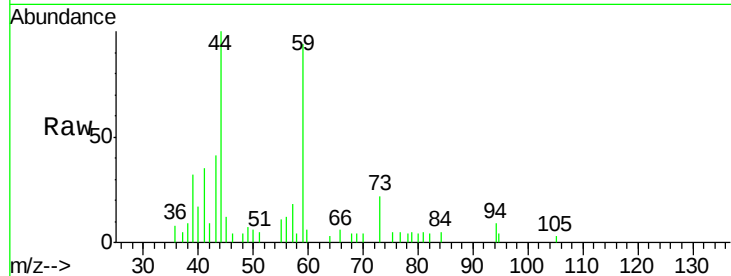
Tert butyl alcohol
Concen: 99.653 ug/l
RT: 2.57 min Scan# 196
Delta R.T. 0.01 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Lower	Upper
59	100		
57	19.4	11.9	17.9#

Manual Integrations
APPROVED

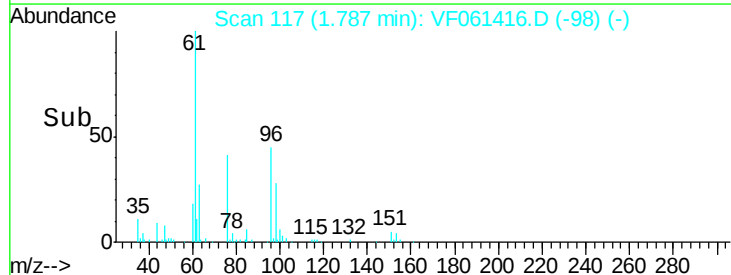
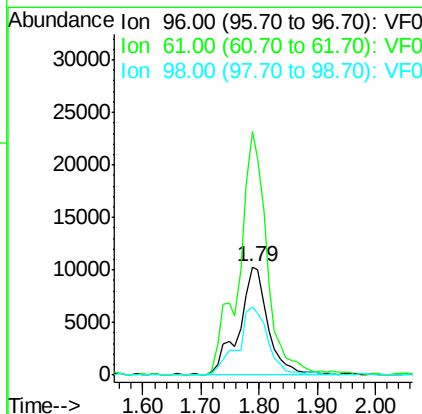
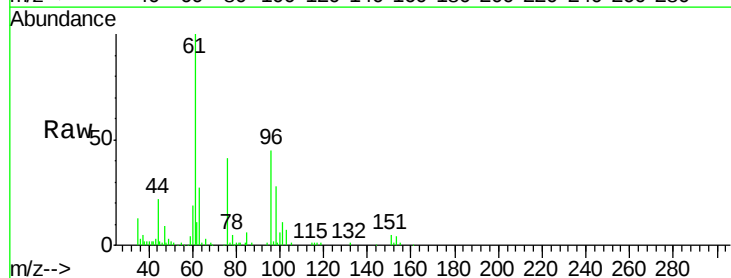
MMDadoda
1/17/2019 1:23:51 PM

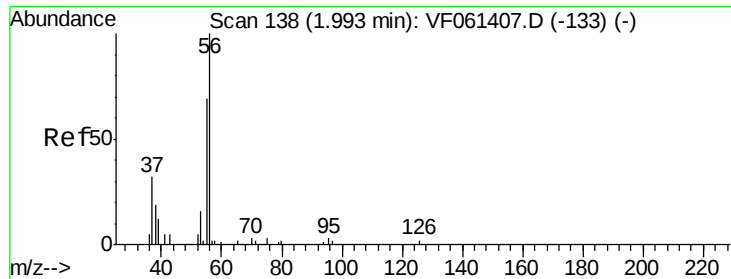


#12

1,1-Dichloroethene
Concen: 19.323 ug/l
RT: 1.79 min Scan# 117
Delta R.T. -0.01 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
96	100		
61	224.5	186.9	280.3
98	63.0	53.0	79.4





#13

Acrolein

Concen: 71.505 ug/l

RT: 1.99 min Scan# 138

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBSD01

Tot Ion: 56 Resp: 6071

Ion Ratio Lower Upper

56 100

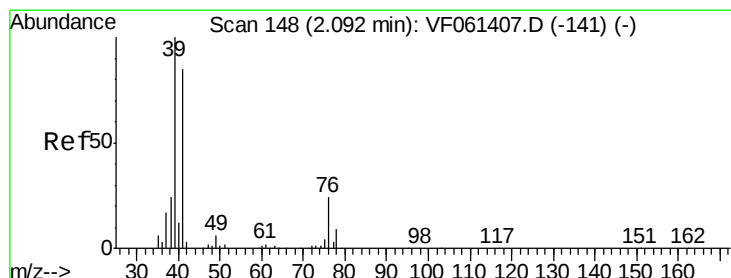
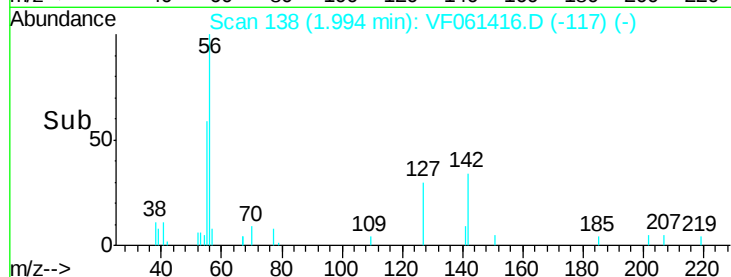
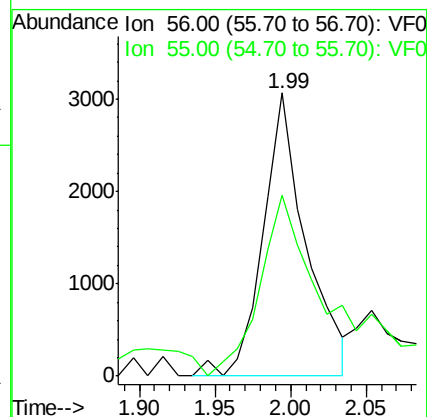
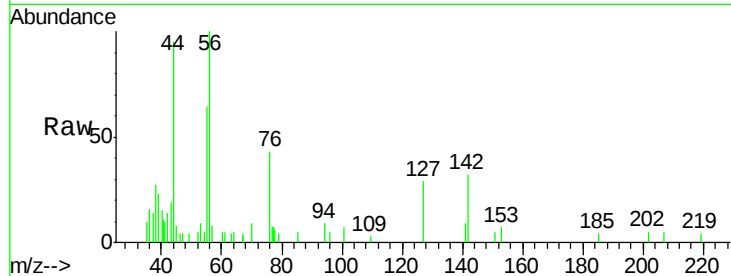
55 63.8 57.5 86.3

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#14

Allyl chloride

Concen: 23.525 ug/l

RT: 2.08 min Scan# 147

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

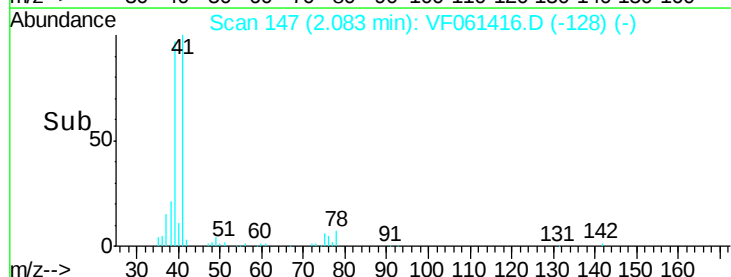
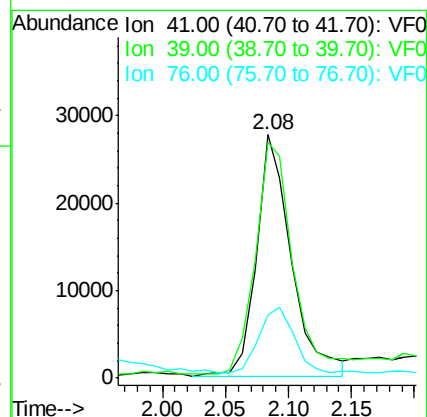
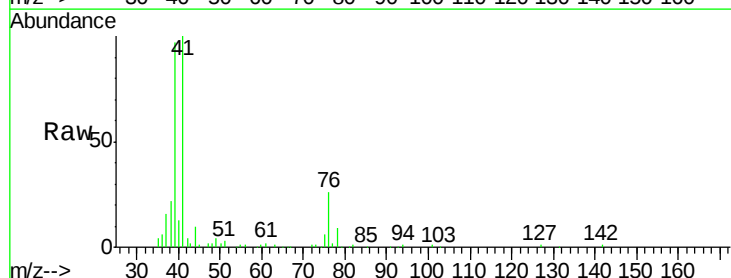
Tgt Ion: 41 Resp: 53198

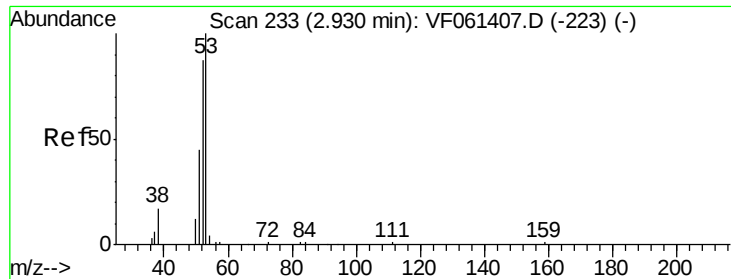
Ion Ratio Lower Upper

41 100

39 96.8 94.6 141.8

76 25.7 25.9 38.9#





#15

Acrylonitrile

Concen: 95.094 ug/l

RT: 2.93 min Scan# 233

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

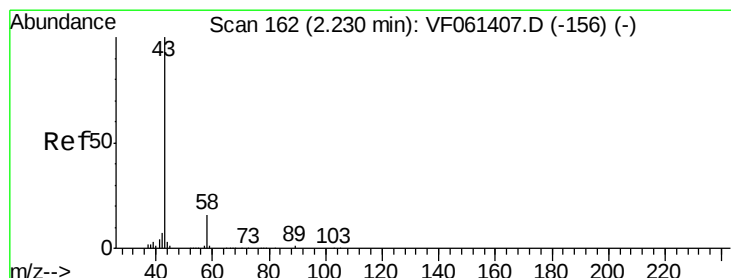
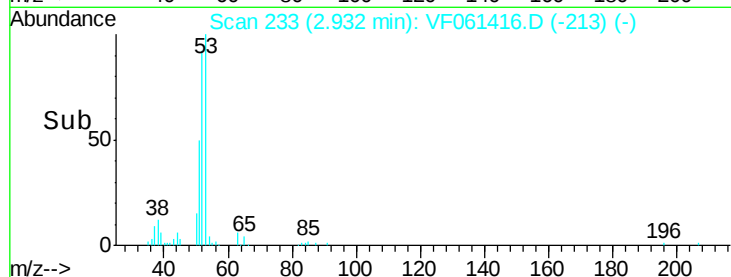
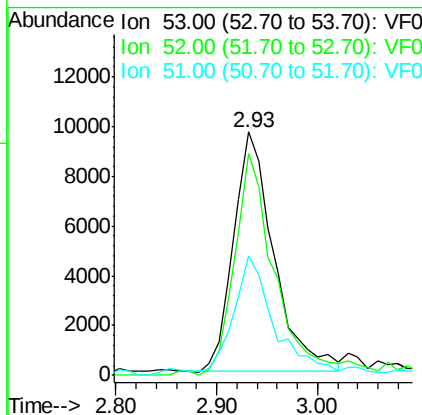
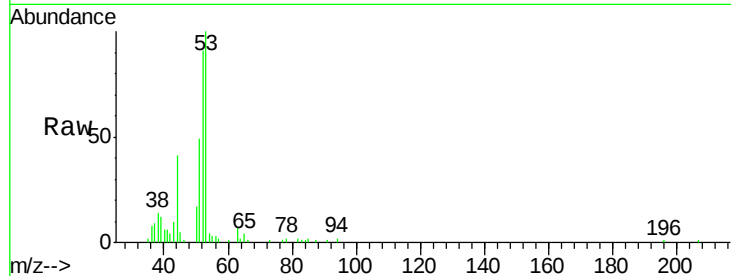
ClientSampleId :

VF0116SBS01

Tot Ion:	53	Resp:	26907
Ion	Ratio	Lower	Upper
53	100		
52	91.2	69.6	104.4
51	49.1	36.8	55.2

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#16

Acetone

Concen: 110.217 ug/l

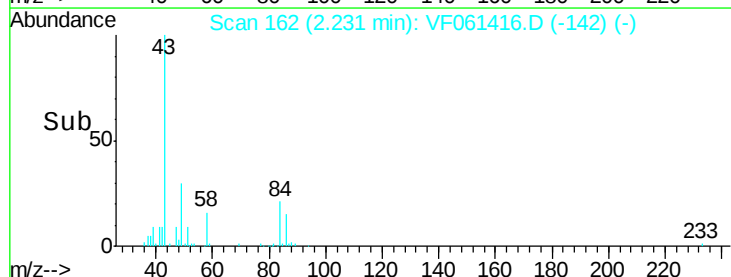
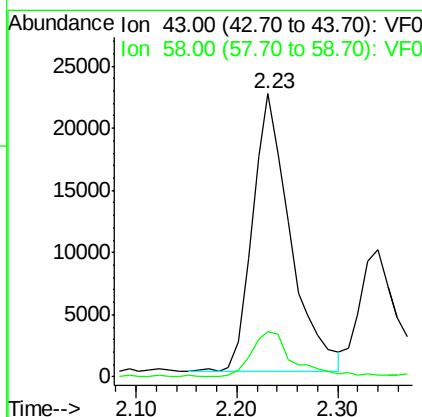
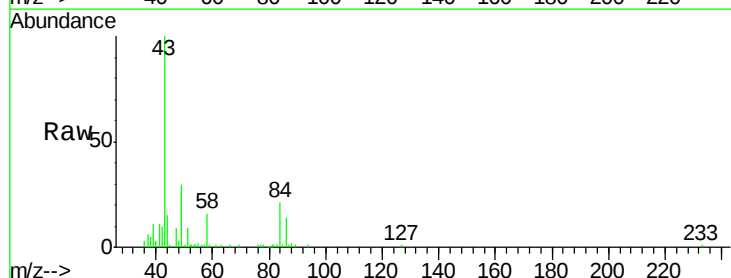
RT: 2.23 min Scan# 162

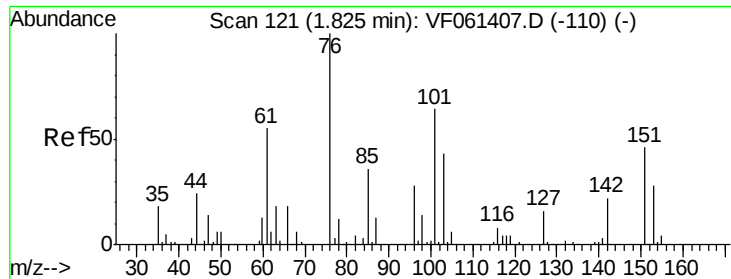
Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	43	Resp:	57702
Ion	Ratio	Lower	Upper
43	100		
58	16.0	13.3	19.9





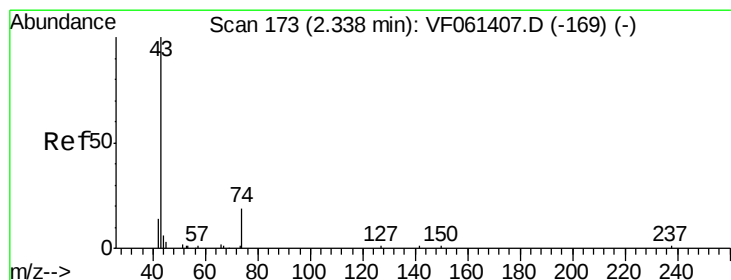
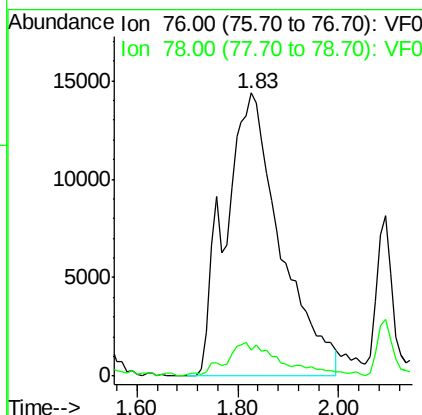
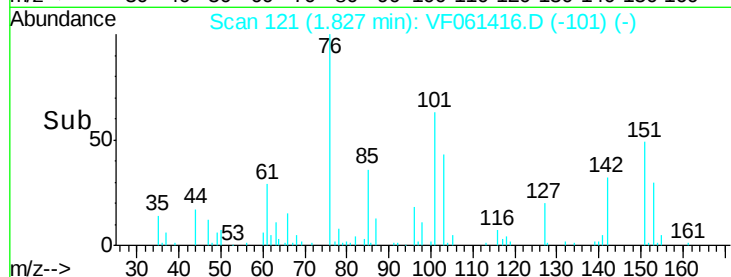
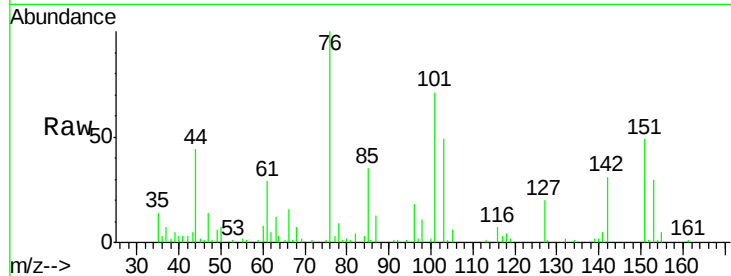
#17
Carbon Disulfide
Concen: 18.753 ug/l m
RT: 1.83 min Scan# 121
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBSD01

Tot Ion: 76 Resp: 109929
Ion Ratio Lower Upper
76 100
78 9.2 9.6 14.4#

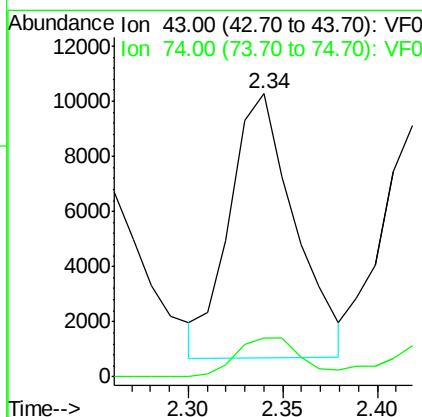
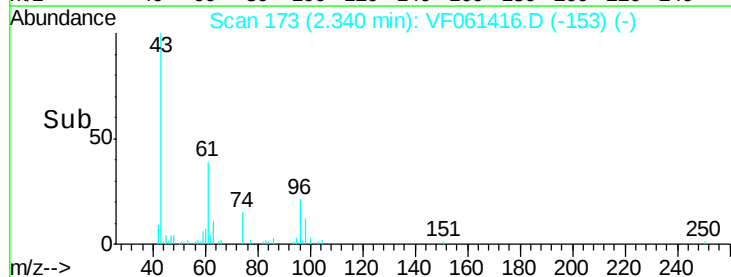
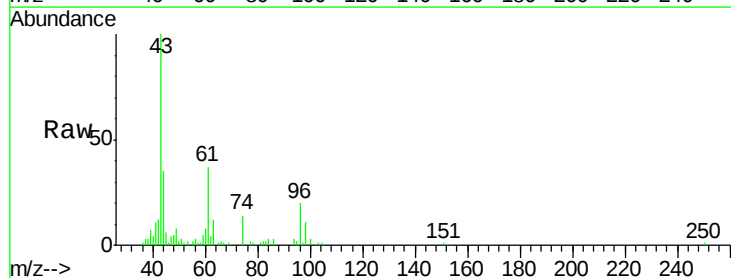
Manual Integrations
APPROVED

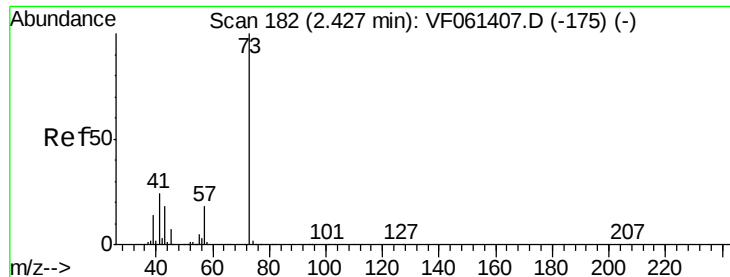
MMDadoda
1/17/2019 1:23:51 PM



#18
Methyl Acetate
Concen: 22.031 ug/l
RT: 2.34 min Scan# 173
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion: 43 Resp: 22874
Ion Ratio Lower Upper
43 100
74 13.9 13.4 20.0





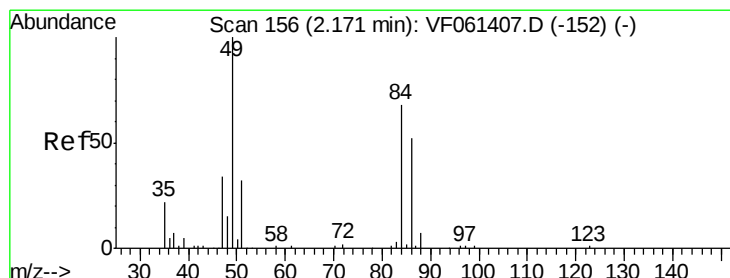
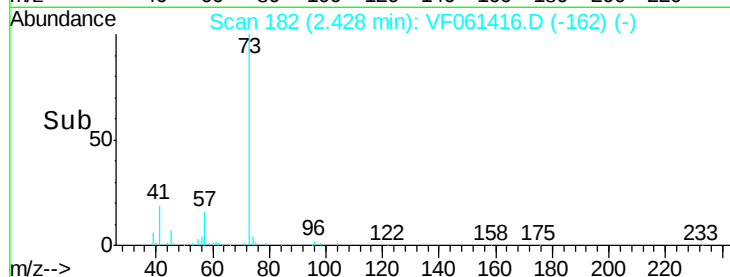
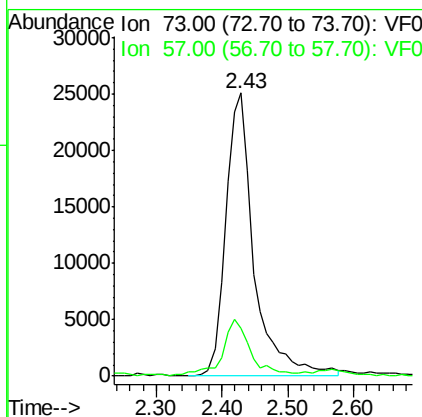
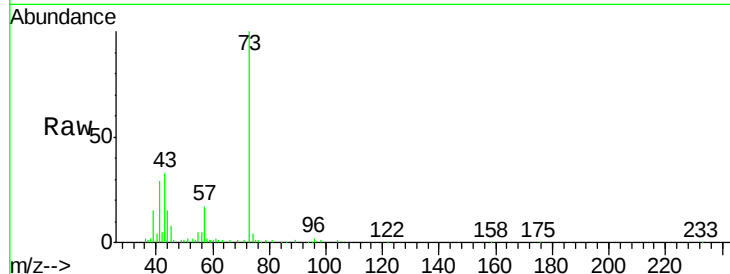
#19
Methvl tert-butvl Ether
Concen: 17.907 ug/l
RT: 2.43 min Scan# 182
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion: 73 Resp: 75465
Ion Ratio Lower Upper
73 100
57 16.9 14.8 22.2

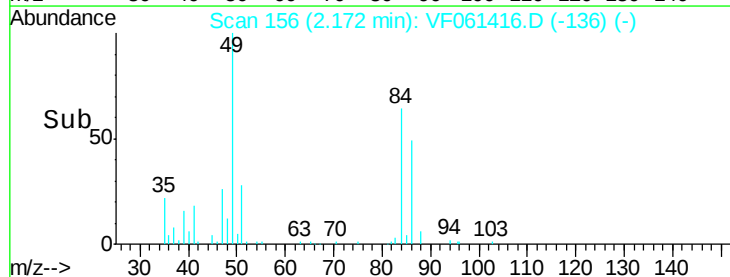
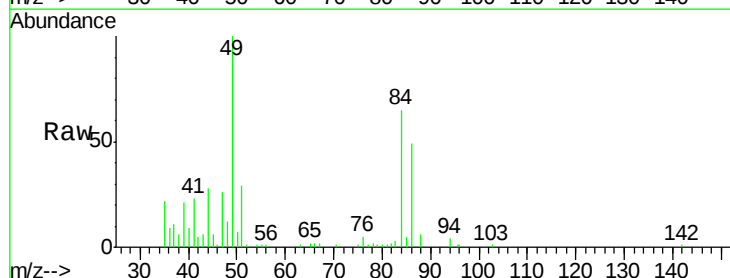
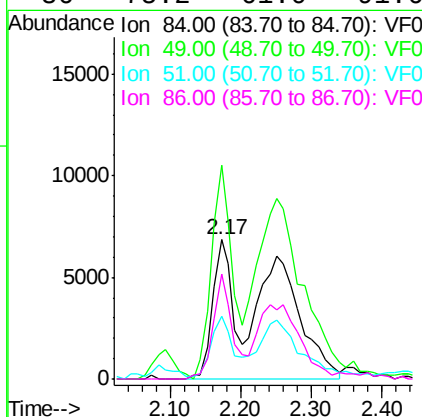
Manual Integrations
APPROVED

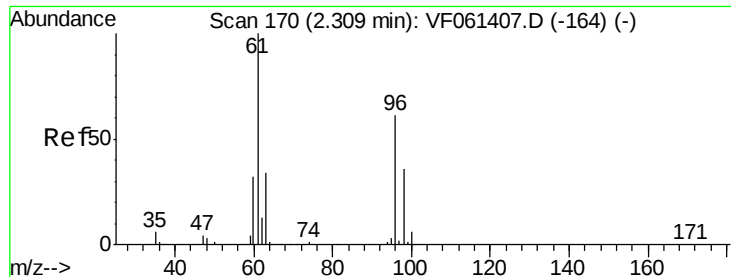
MMDadoda
1/17/2019 1:23:51 PM



#20
Methylene Chloride
Concen: 20.948 ug/l m
RT: 2.17 min Scan# 156
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion: 84 Resp: 39043
Ion Ratio Lower Upper
84 100
49 153.7 120.0 180.0
51 44.9 38.6 58.0
86 75.2 61.0 91.6





#21

trans-1,2-Dichloroethene

Concen: 19.770 ug/l

RT: 2.30 min Scan# 169

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

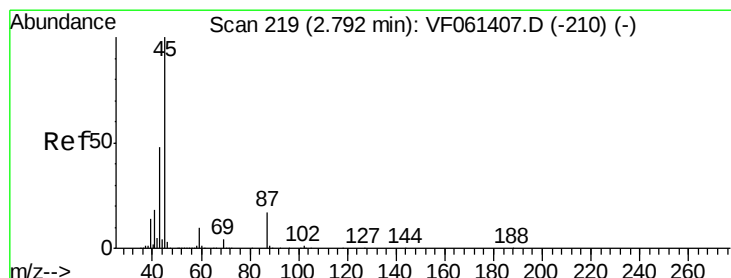
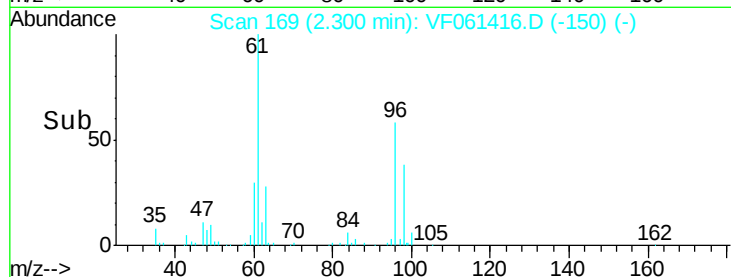
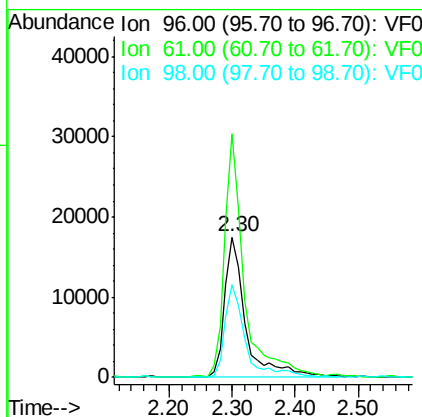
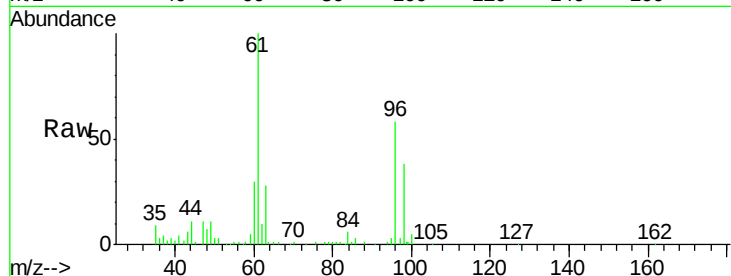
ClientSampleId :

VF0116SBS01

Tot Ion:	96	Resp:	40893
Ion	Ratio	Lower	Upper
96	100		
61	173.3	131.8	197.8
98	65.5	47.4	71.0

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#22

Diisopropyl ether

Concen: 19.534 ug/l

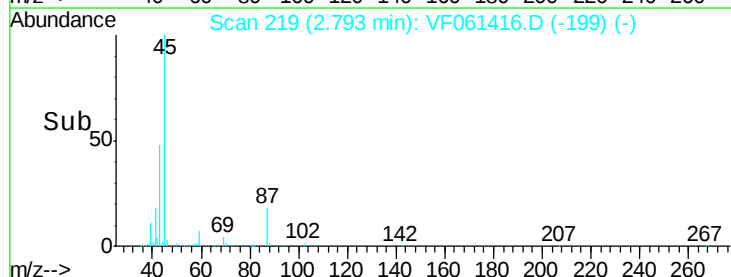
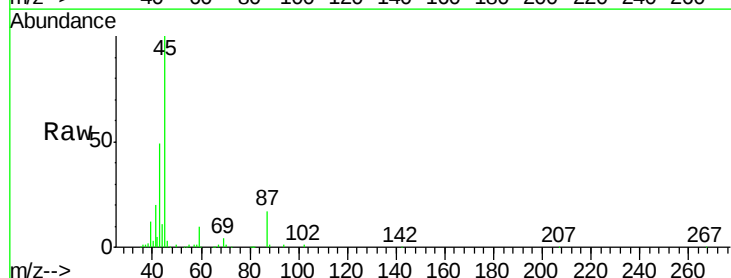
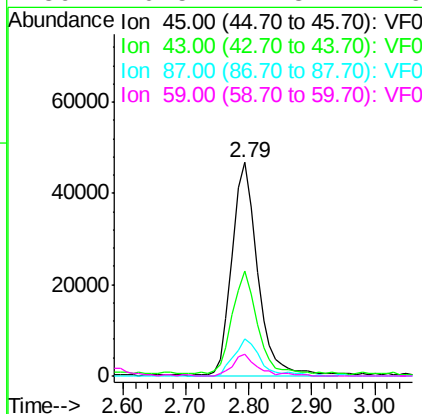
RT: 2.79 min Scan# 219

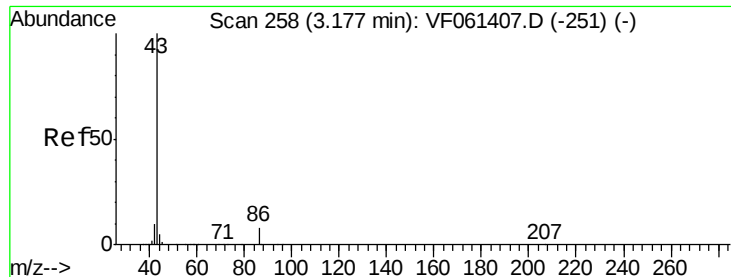
Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	45	Resp:	130686
Ion	Ratio	Lower	Upper
45	100		
43	49.3	39.0	58.6
87	17.4	13.9	20.9
59	10.5	7.8	11.6





#23

Vinyl Acetate

Concen: 112.590 ug/l

RT: 3.18 min Scan# 258

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 43 Resp: 326079

Ion Ratio Lower Upper

43 100

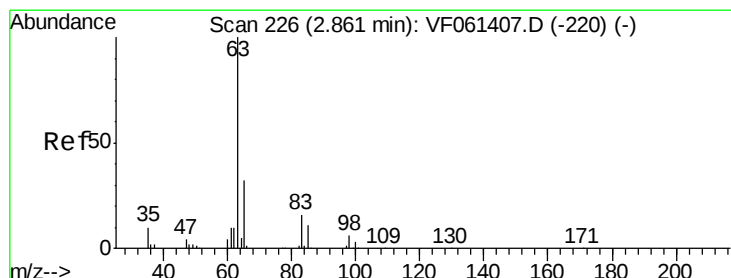
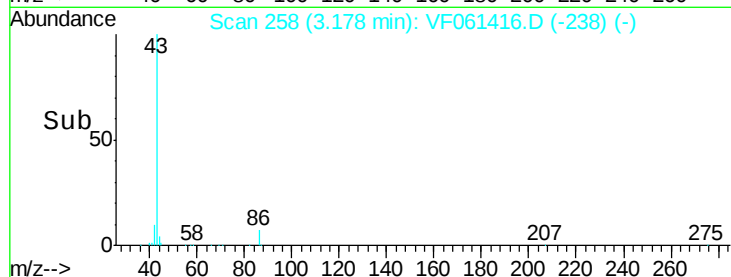
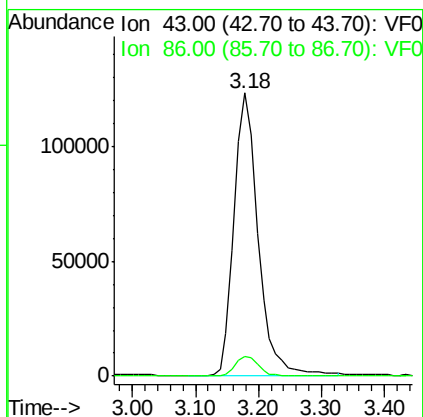
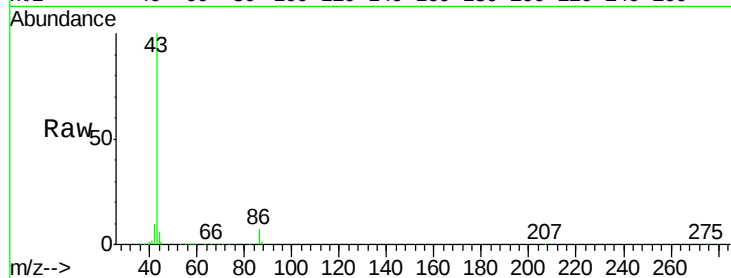
86 7.0 6.2 9.4

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#24

1,1-Dichloroethane

Concen: 18.129 ug/l

RT: 2.86 min Scan# 226

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

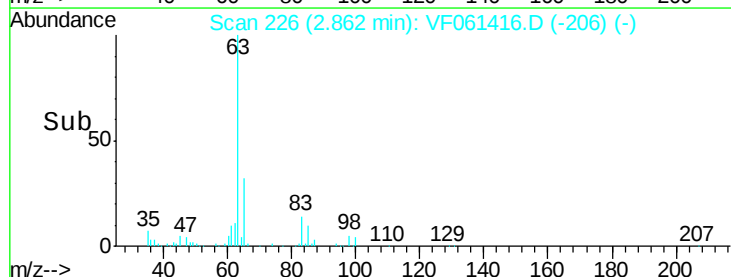
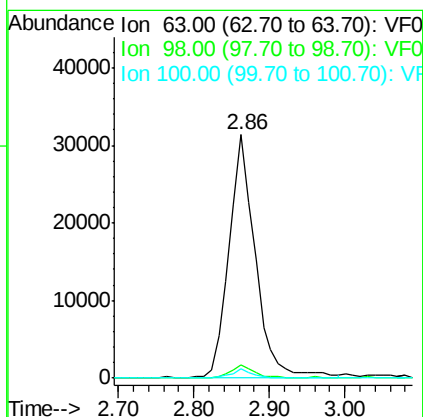
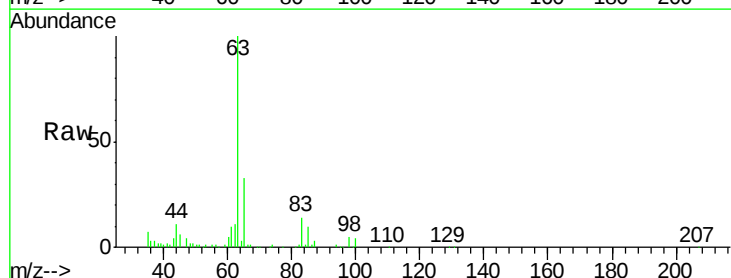
Tgt Ion: 63 Resp: 76121

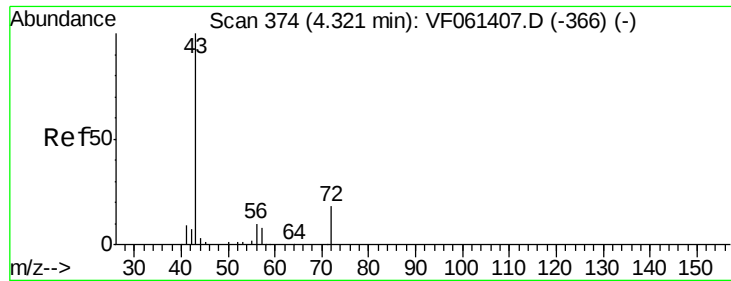
Ion Ratio Lower Upper

63 100

98 5.3 2.9 8.8

100 3.6 1.6 4.8





#25

2-Butanone

Concen: 110.833 ug/l

RT: 4.33 min Scan# 375

Delta R.T. 0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 43 Resp: 96493

Ion Ratio Lower Upper

43 100

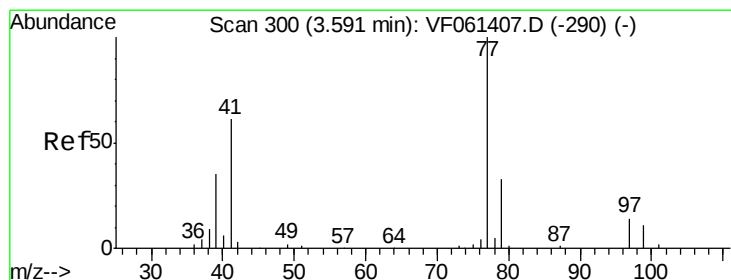
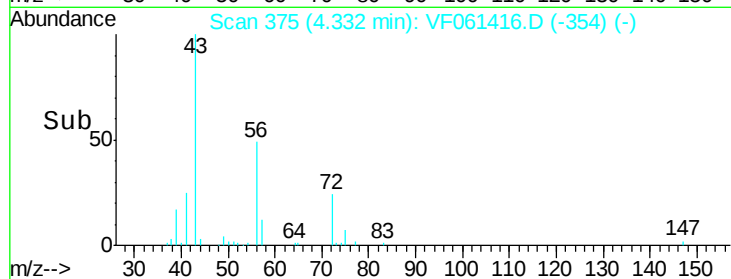
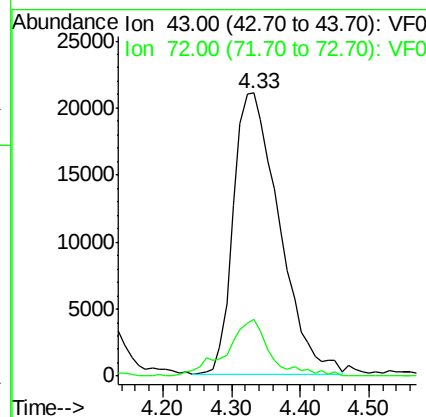
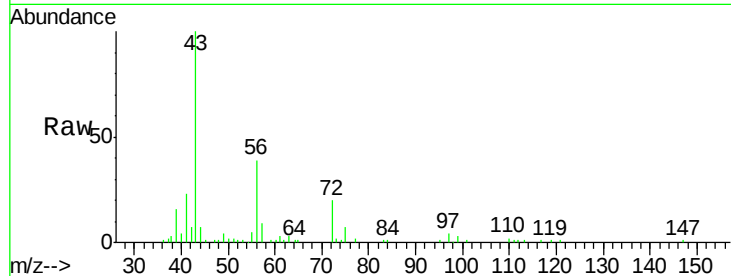
72 20.2 15.8 23.6

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#26

2,2-Dichloropropane

Concen: 17.707 ug/l

RT: 3.59 min Scan# 300

Delta R.T. 0.00 min

Lab File: VF061416.D

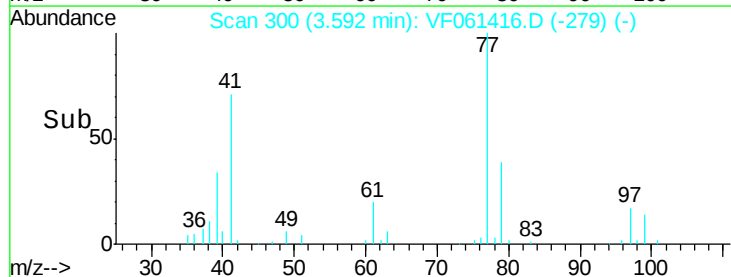
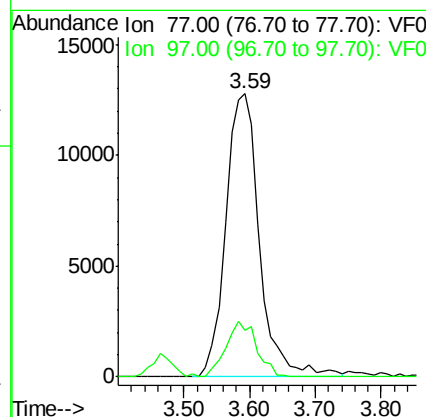
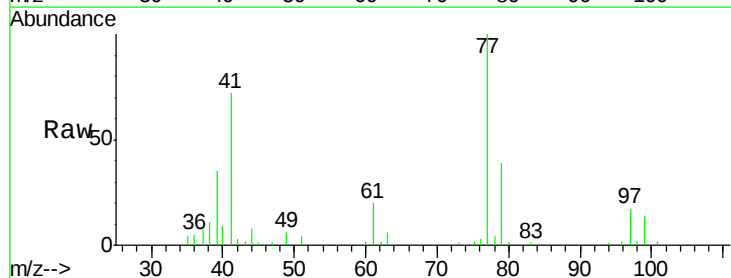
Acq: 16 Jan 2019 17:17

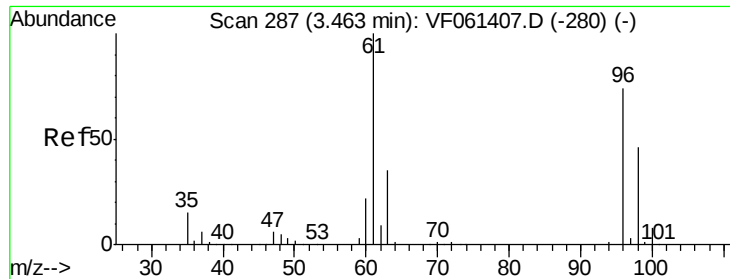
Tgt Ion: 77 Resp: 45680

Ion Ratio Lower Upper

77 100

97 16.6 8.5 25.5





#27

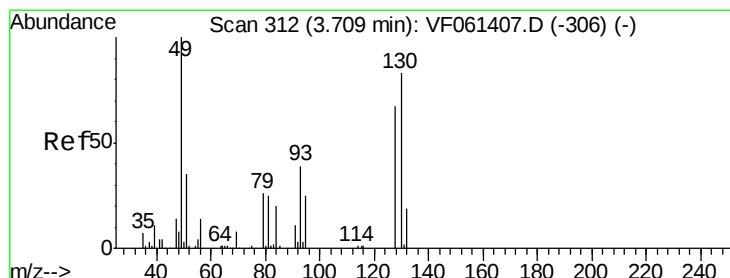
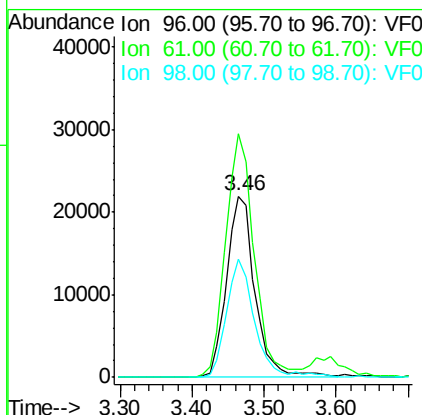
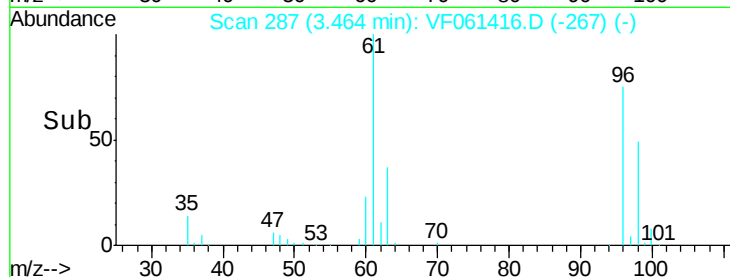
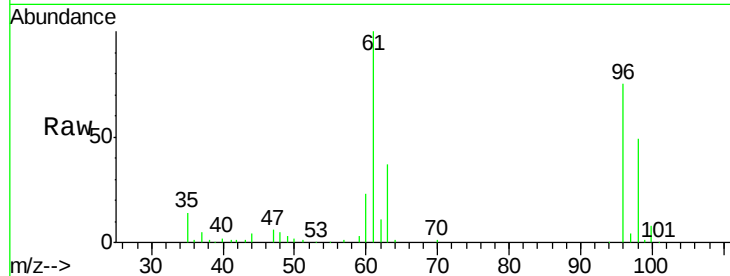
cis-1,2-Dichloroethene
Concen: 19.733 ug/l
RT: 3.46 min Scan# 287
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Resp	Lower	Upper
96	100	60249		
61	134.2	0.0	270.2	
98	65.4	0.0	124.0	

Manual Integrations
APPROVED

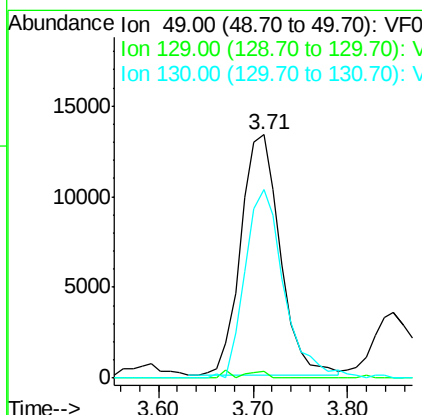
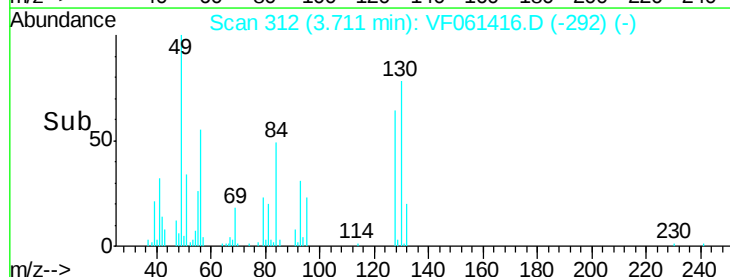
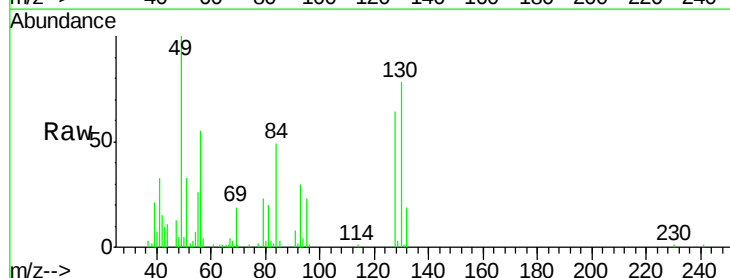
MMDadoda
1/17/2019 1:23:51 PM

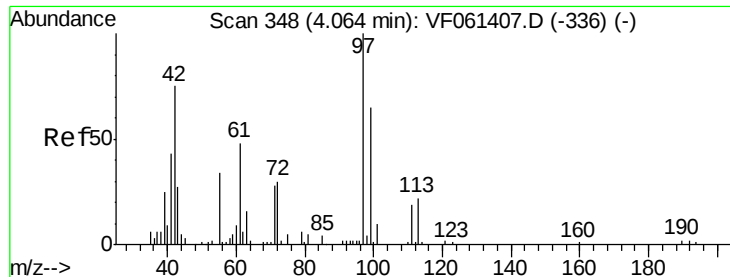


#28

Bromochloromethane
Concen: 20.360 ug/l
RT: 3.71 min Scan# 312
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
49	100	38427		
129	2.8	0.0	0.0#	
130	77.5	65.4	98.2	





#29

Tetrahydrofuran

Concen: 100.349 ug/l

RT: 4.06 min Scan# 347

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

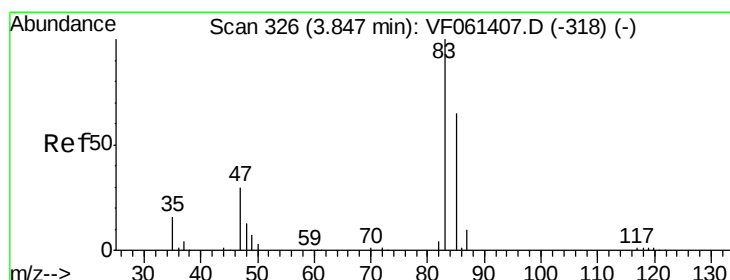
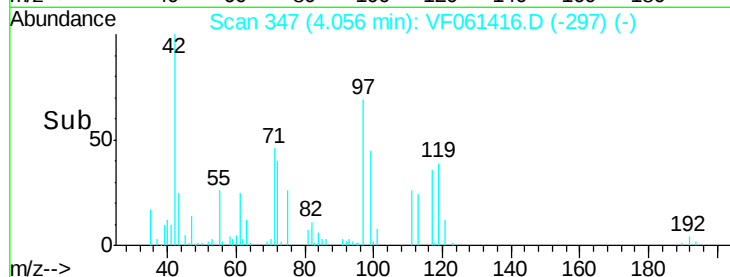
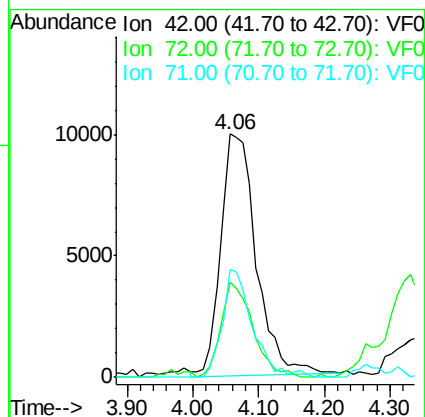
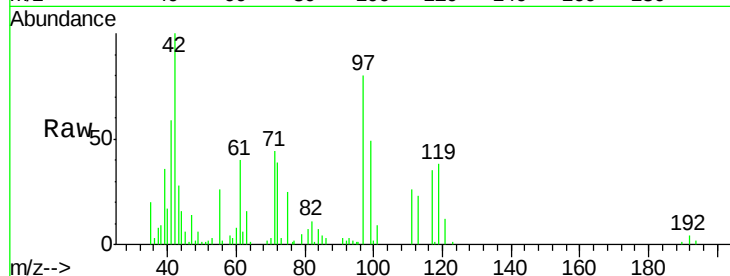
ClientSampleId :

VF0116SBS01

Tot Ion:	42	Resp:	37619
Ion	Ratio	Lower	Upper
42	100		
72	35.4	28.9	43.3
71	37.6	29.6	44.4

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#30

Chloroform

Concen: 18.630 ug/l

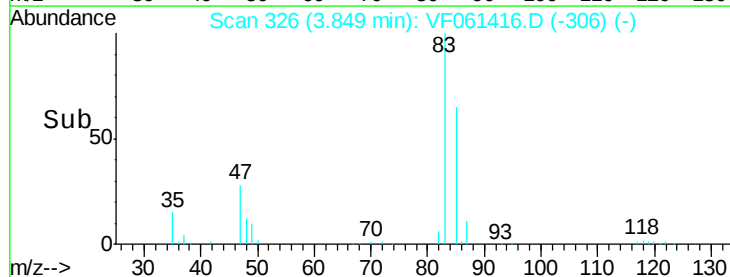
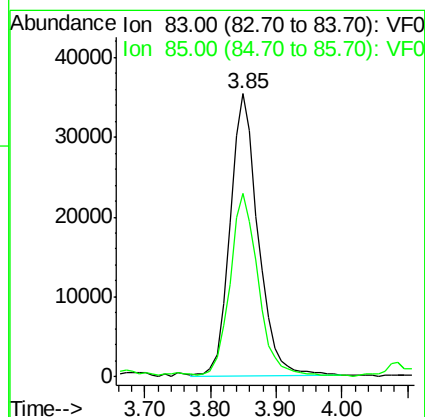
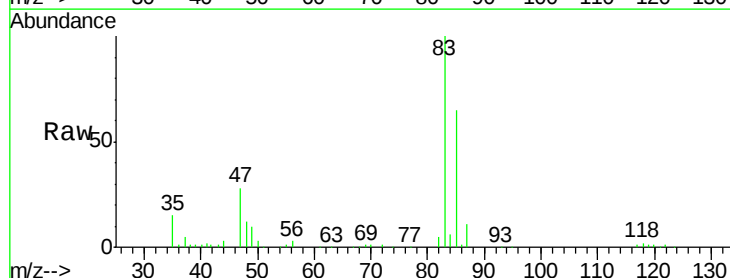
RT: 3.85 min Scan# 326

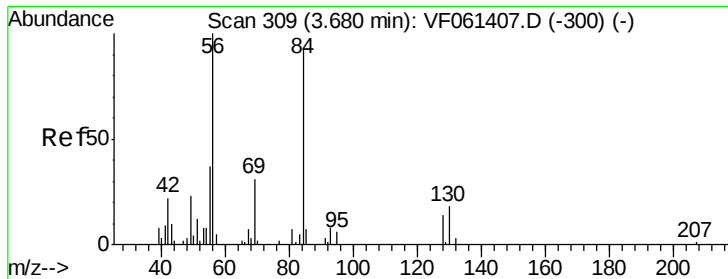
Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	83	Resp:	105569
Ion	Ratio	Lower	Upper
83	100		
85	64.9	52.7	79.1





#31

Cyclohexane

Concen: 19.499 ug/l m

RT: 3.68 min Scan# 309

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

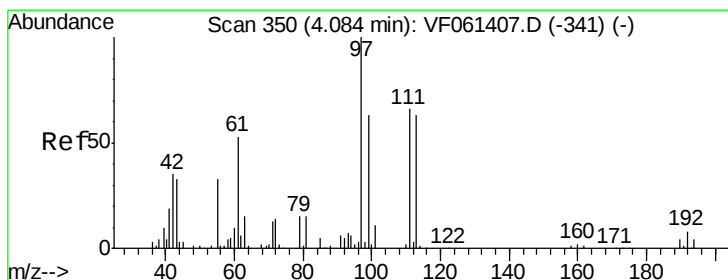
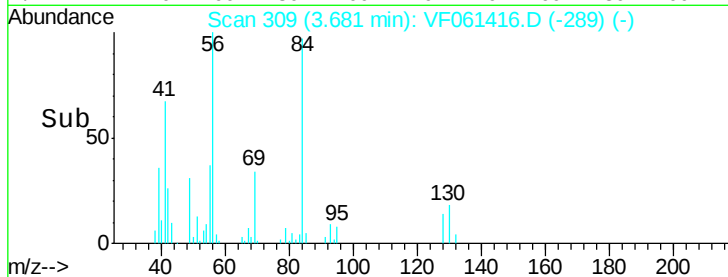
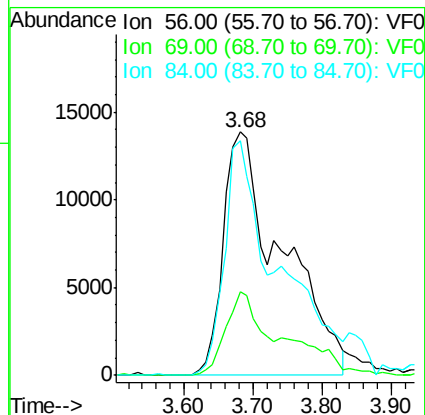
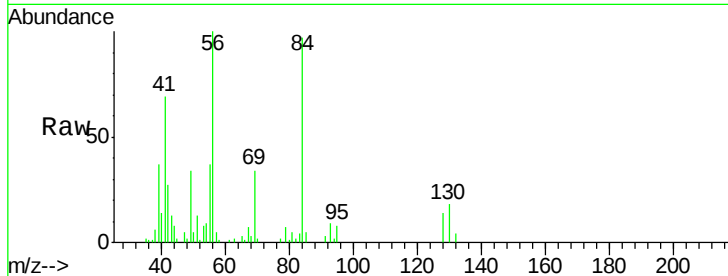
ClientSampleId :

VF0116SBS01

Tot Ion:	56	Resp:	81783
Ion	Ratio	Lower	Upper
56	100		
69	34.1	24.6	36.8
84	96.5	74.2	111.2

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#32

1,1,1-Trichloroethane

Concen: 15.201 ug/l

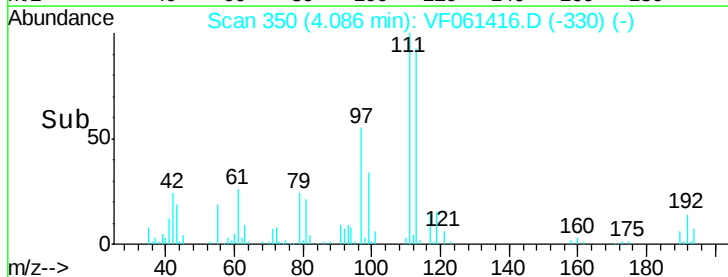
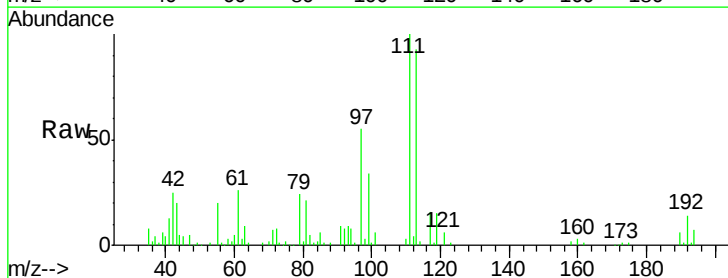
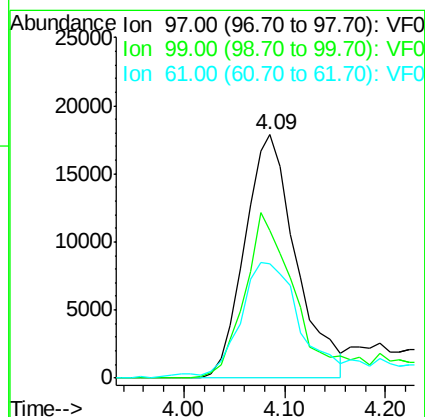
RT: 4.09 min Scan# 350

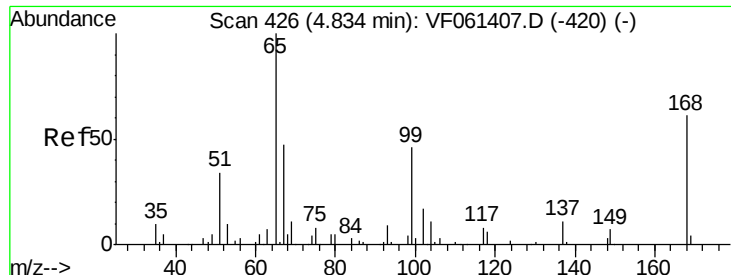
Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	97	Resp:	63162
Ion	Ratio	Lower	Upper
97	100		
99	60.8	50.1	75.1
61	47.1	43.1	64.7





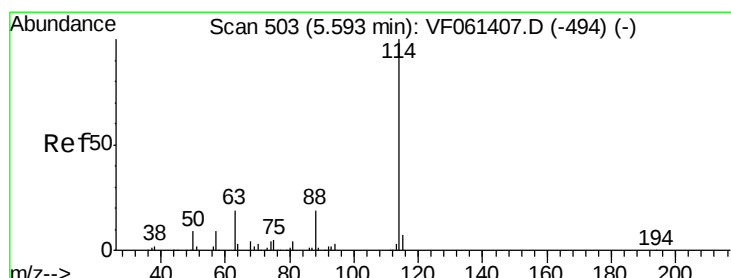
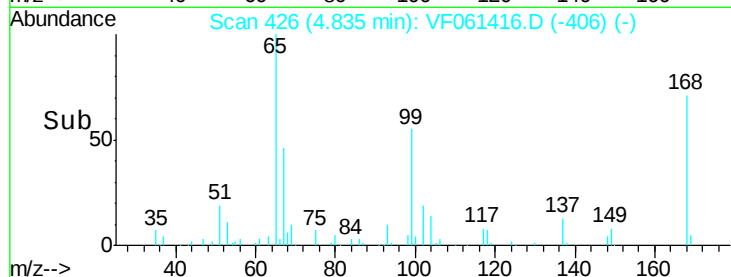
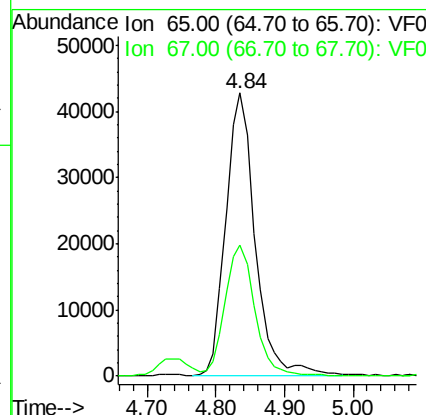
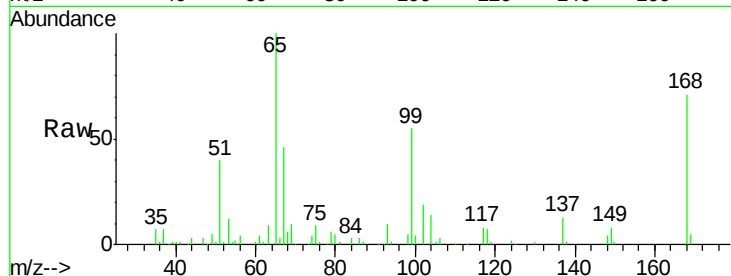
#33
 1,2-Dichloroethane-d4
 Concen: 48.797 ug/l
 RT: 4.84 min Scan# 426
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBS01

Tot Ion	Ratio	Resp	Lower	Upper
65	100	127345		
67	46.3	0.0	99.8	

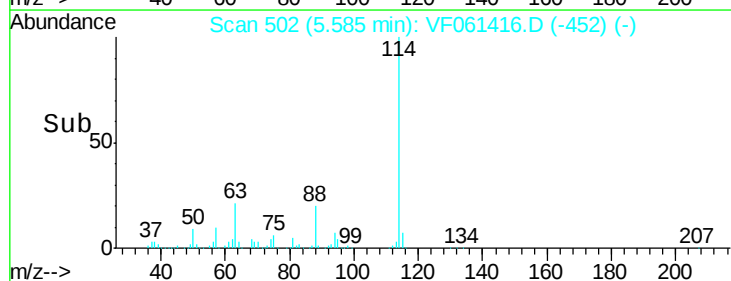
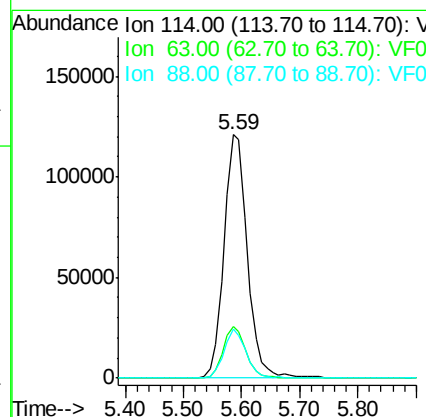
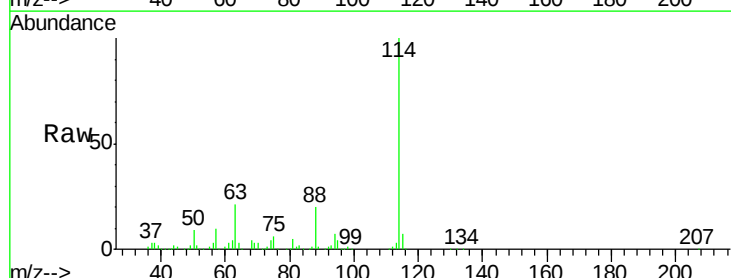
Manual Integrations
 APPROVED

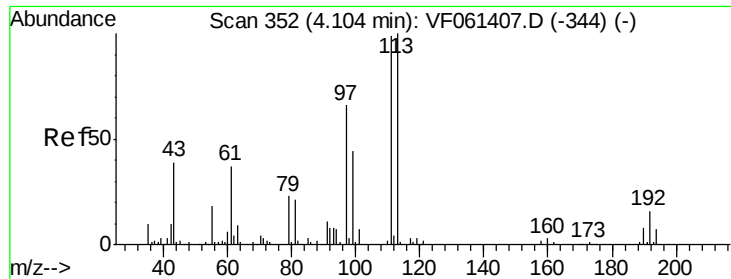
MMDadoda
 1/17/2019 1:23:51 PM



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.59 min Scan# 502
 Delta R.T. -0.01 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
114	100	335877		
63	21.1	0.0	39.0	
88	20.3	0.0	37.4	





#35

Dibromofluoromethane

Concen: 53.597 ug/l

RT: 4.11 min Scan# 352

Delta R.T. 0.00 min

Lab File: VF061416.D

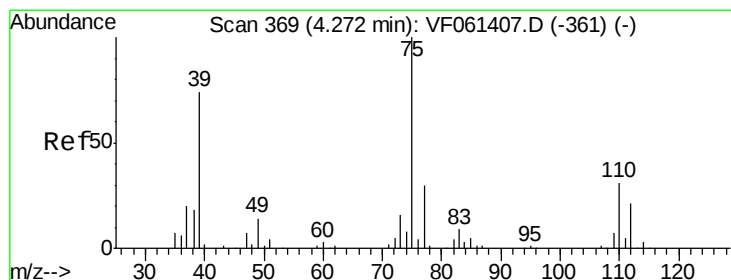
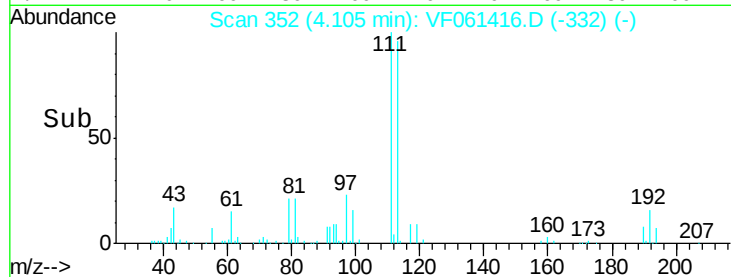
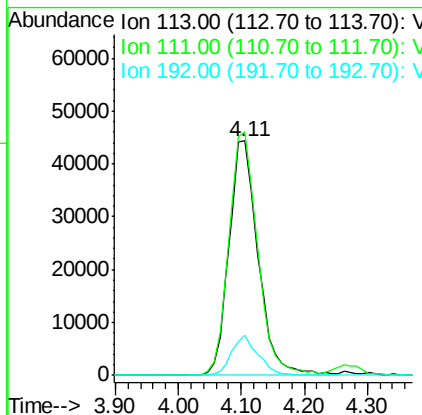
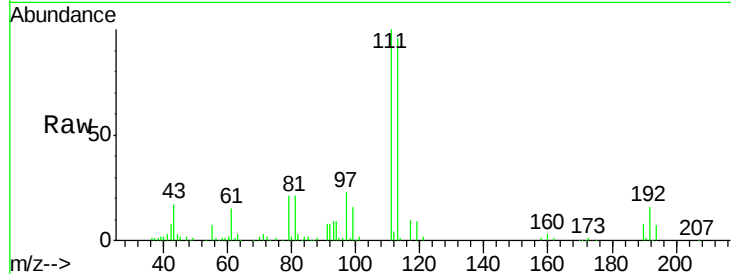
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Resp	Lower	Upper
113	100	142051		
111	103.8	79.4	119.0	
192	17.4	12.4	18.6	

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#36

1,1-Dichloropropene

Concen: 21.266 ug/l

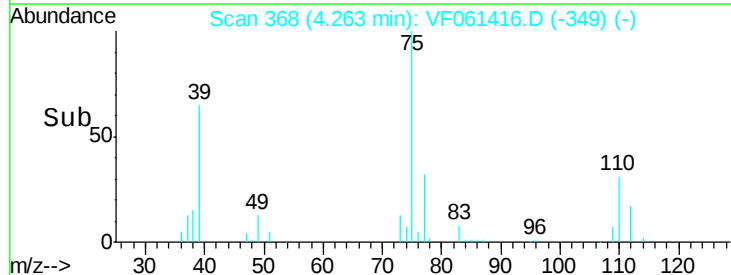
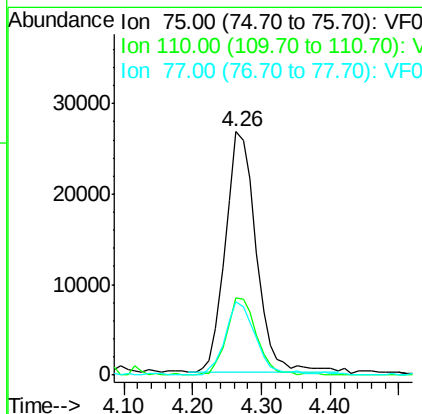
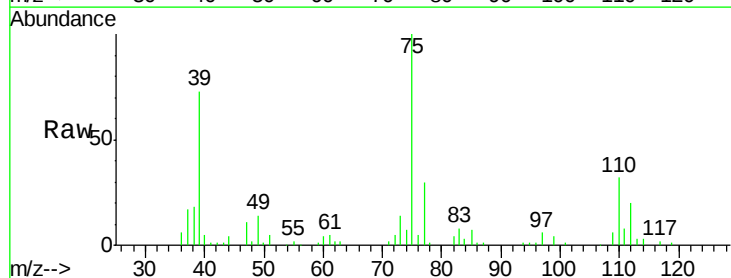
RT: 4.26 min Scan# 368

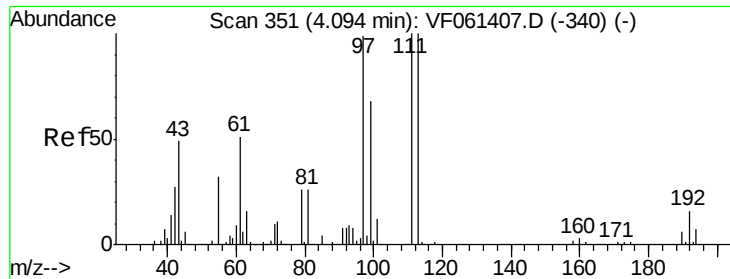
Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
75	100	82817		
110	31.6	15.8	47.3	
77	30.4	24.0	36.0	





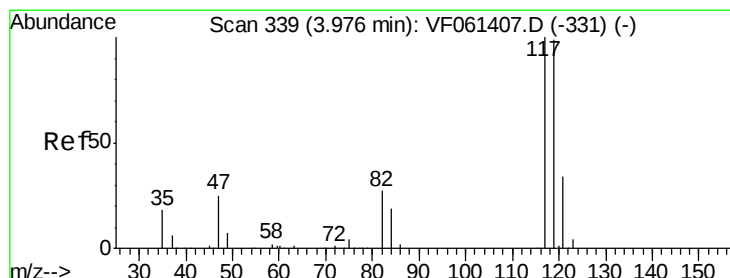
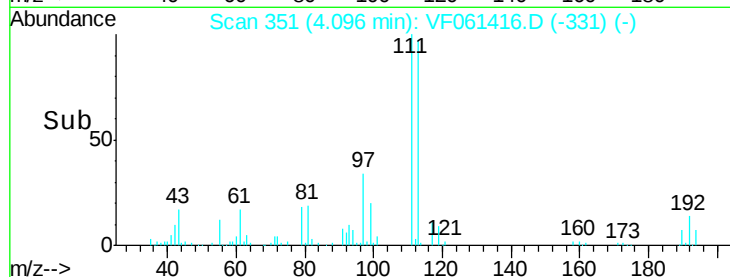
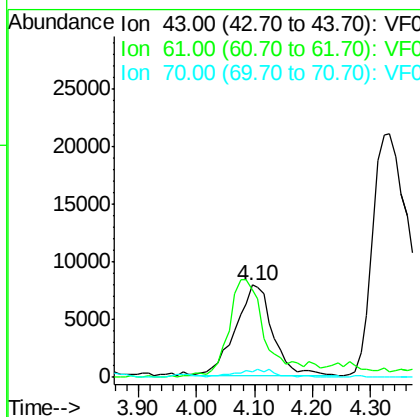
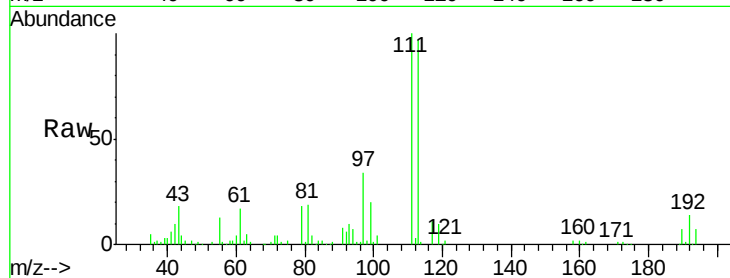
#37
Ethyl Acetate
Concen: 22.288 ug/l
RT: 4.10 min Scan# 351
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	43	61	70	Ratio	Lower	Upper	Resp
34696	100	95.3	6.4				
		81.7	6.2				
			9.2				

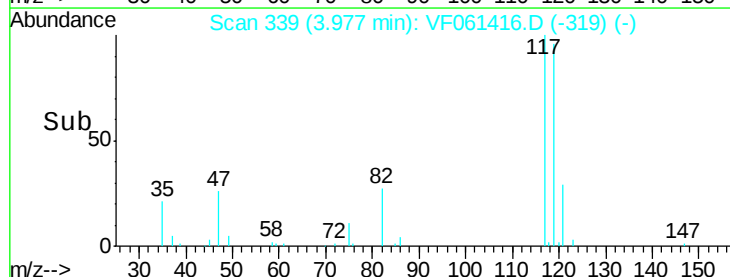
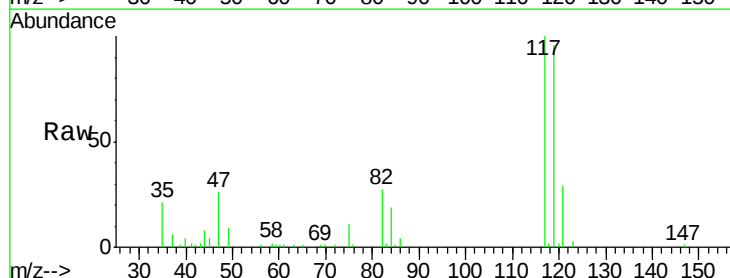
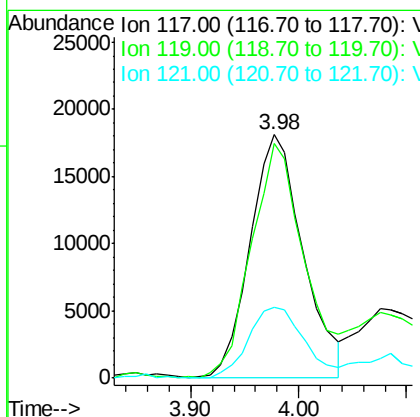
Manual Integrations
APPROVED

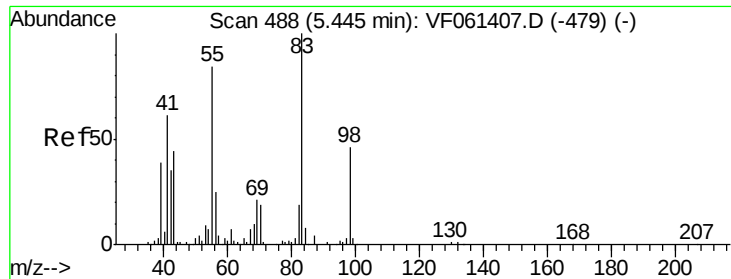
MMDadoda
1/17/2019 1:23:51 PM



#38
Carbon Tetrachloride
Concen: 18.253 ug/l
RT: 3.98 min Scan# 339
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	117	119	121	Ratio	Lower	Upper	Resp
62144	100	96.2	29.3				
		79.0	27.0				
			40.6				





#39

Methvlcvclohexane

Concen: 20.536 ug/l

RT: 5.45 min Scan# 488

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

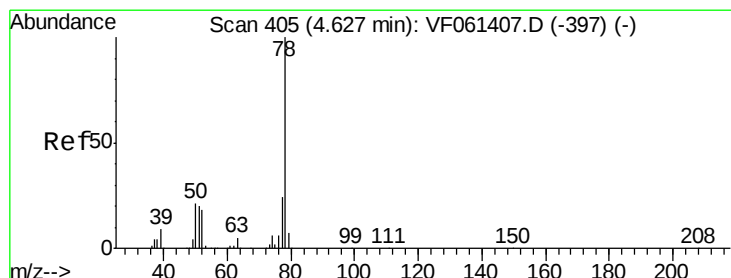
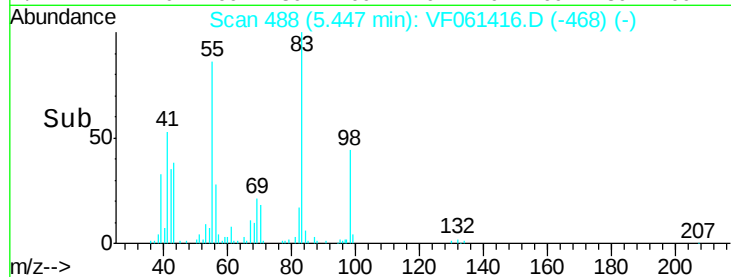
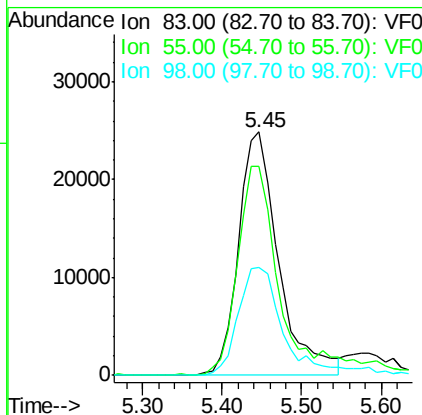
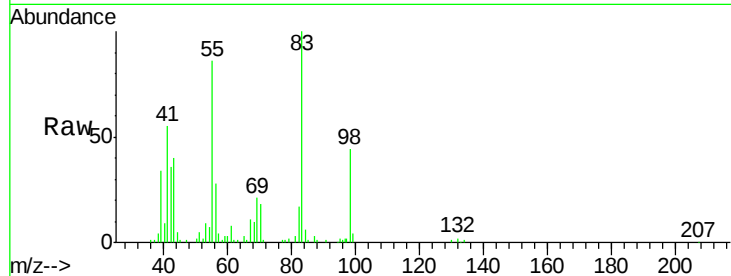
ClientSampleId :

VF0116SBSD01

Tot Ion:	83	Resp:	86670
Ion	Ratio	Lower	Upper
83	100		
55	86.1	67.4	101.2
98	44.2	36.7	55.1

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#40

Benzene

Concen: 21.379 ug/l

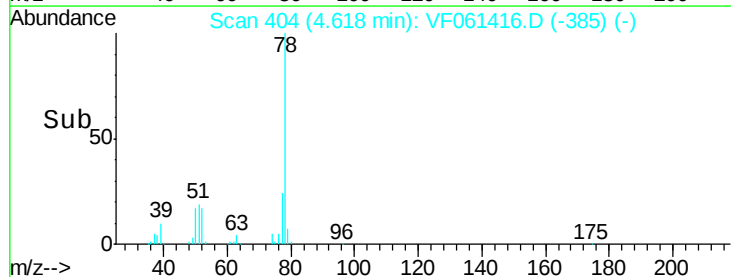
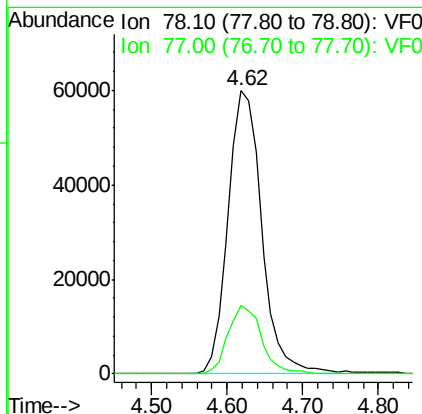
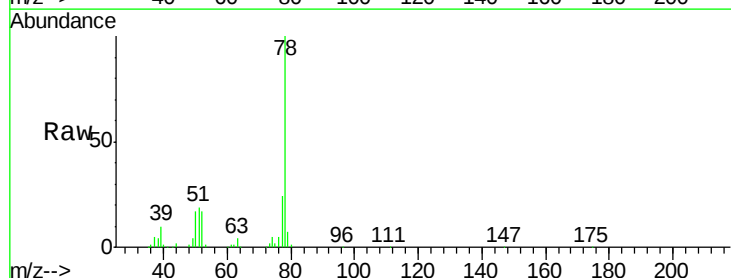
RT: 4.62 min Scan# 404

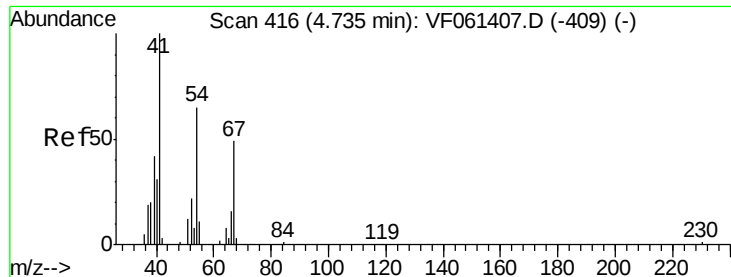
Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	78	Resp:	185263
Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.0	28.6





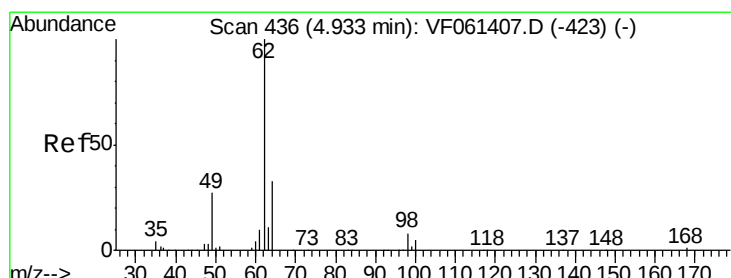
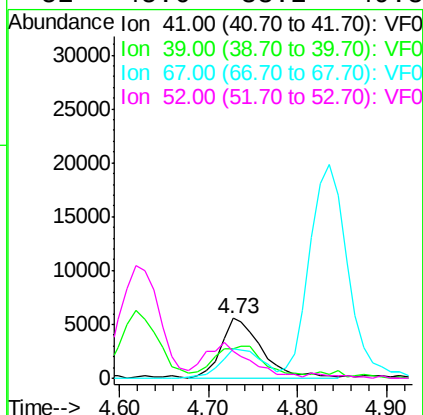
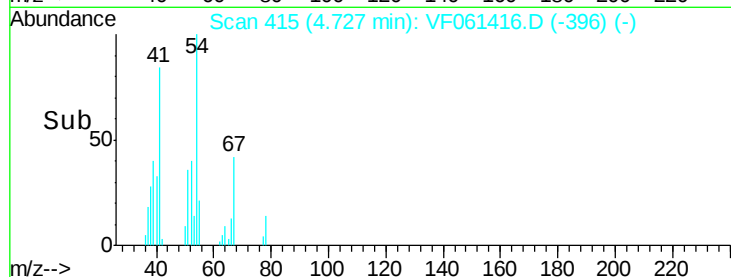
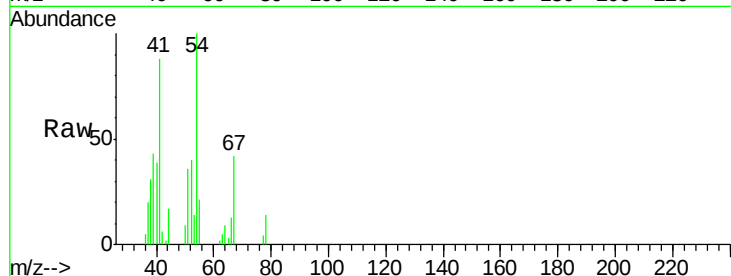
#41
Methacrylonitrile
Concen: 21.545 ug/l
RT: 4.73 min Scan# 415
Delta R.T. -0.01 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Lower	Upper
41	100		
39	48.6	43.1	64.7
67	48.4	38.8	58.2
52	45.6	33.2	49.8

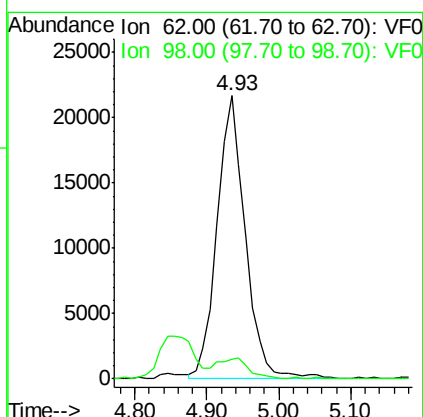
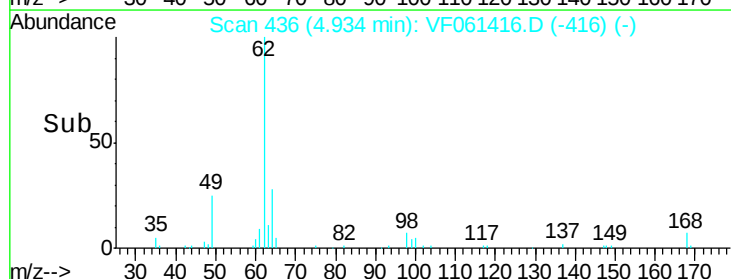
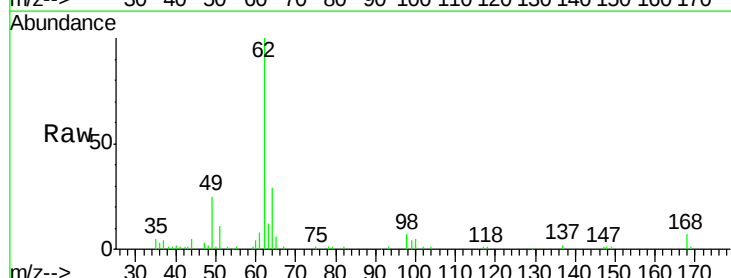
Manual Integrations
APPROVED

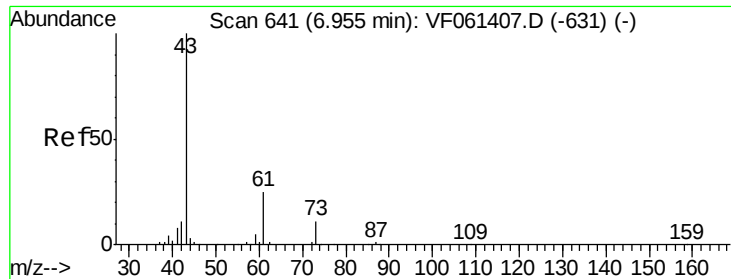
MMDadoda
1/17/2019 1:23:51 PM



#42
1,2-Dichloroethane
Concen: 19.054 ug/l
RT: 4.93 min Scan# 436
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
62	100		
98	7.0	0.0	17.0





#43

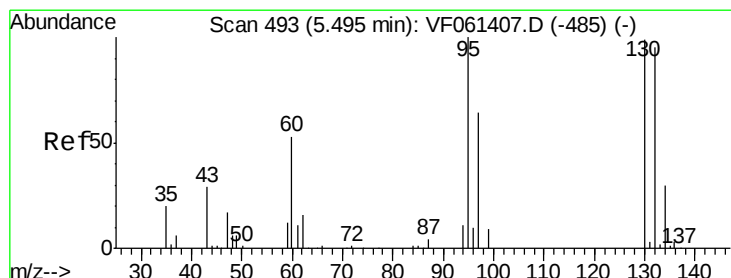
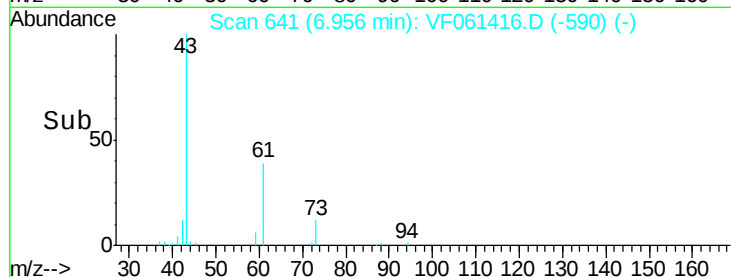
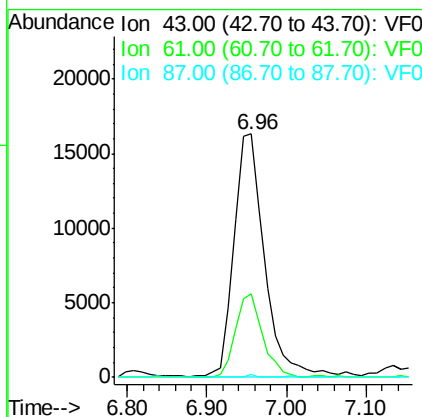
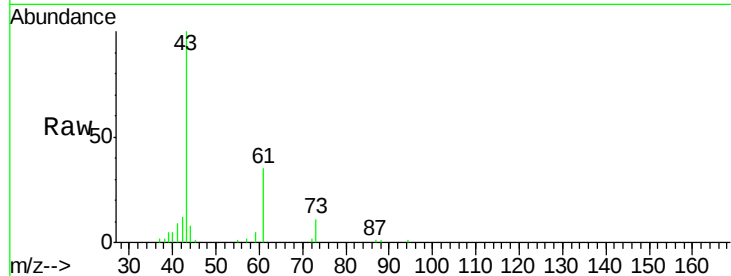
Isopropyl Acetate
 Concen: 22.511 ug/l
 RT: 6.96 min Scan# 641
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBS01

Tot Ion	Ratio	Lower	Upper
43	100		
61	34.5	20.3	30.5#
87	1.2	0.5	0.7#

Manual Integrations
 APPROVED

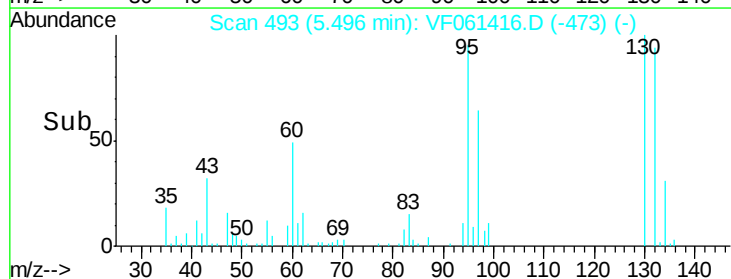
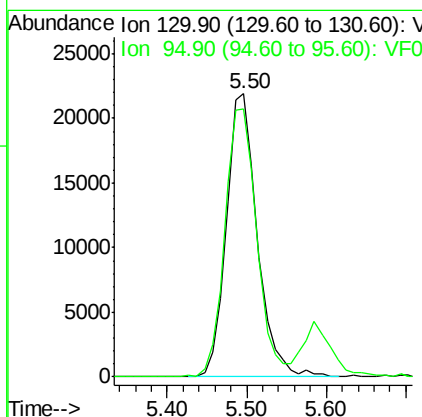
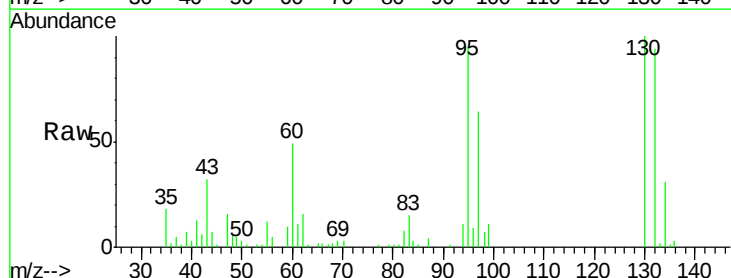
MMDadoda
 1/17/2019 1:23:51 PM

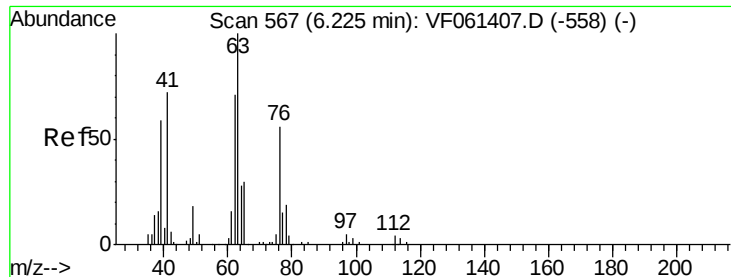


#44

Trichloroethene
 Concen: 22.362 ug/l
 RT: 5.50 min Scan# 493
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
130	100		
95	94.7	0.0	202.8





#45

1,2-Dichloropropane

Concen: 22.377 ug/l

RT: 6.23 min Scan# 567

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 63 Resp: 50893

Ion Ratio Lower Upper

63 100

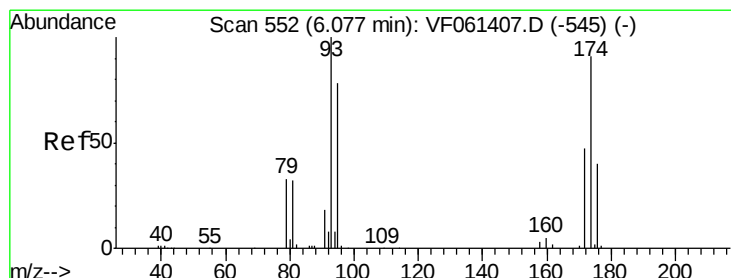
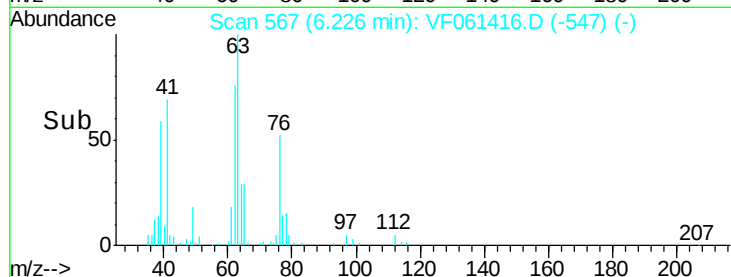
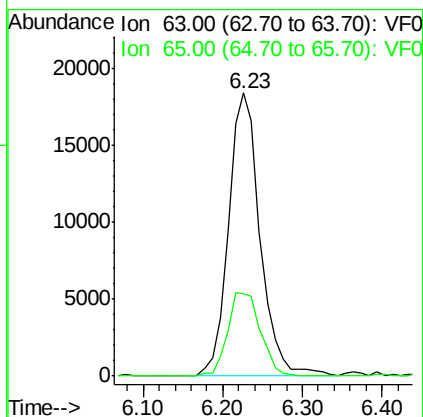
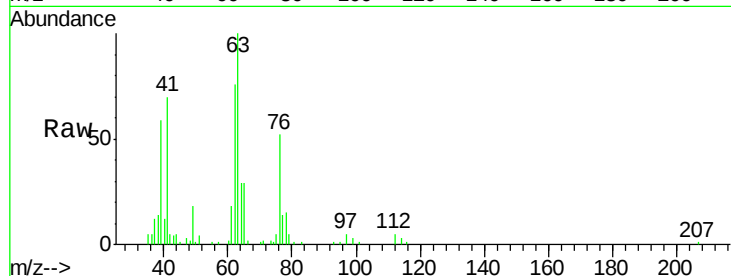
65 28.9 24.4 36.6

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#46

Dibromomethane

Concen: 20.566 ug/l

RT: 6.08 min Scan# 552

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

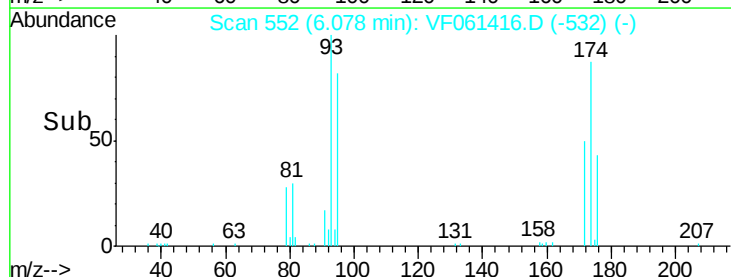
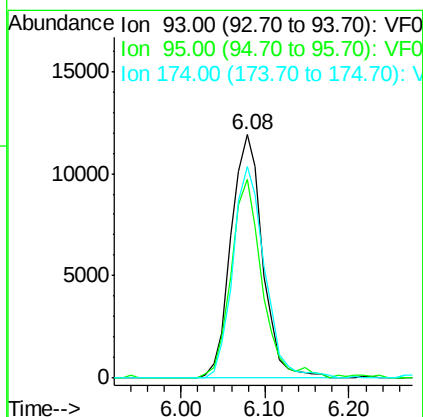
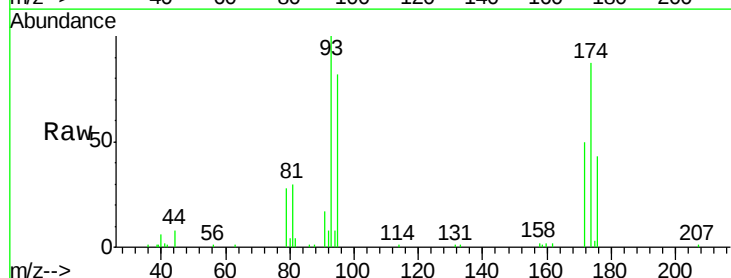
Tgt Ion: 93 Resp: 31101

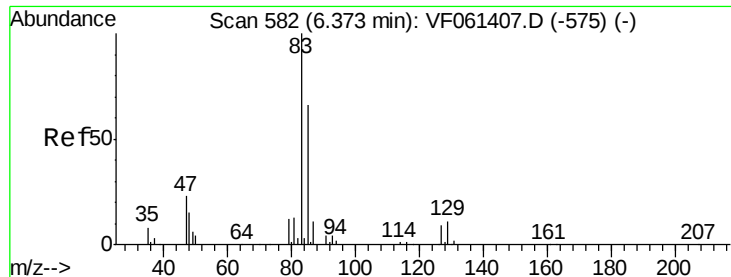
Ion Ratio Lower Upper

93 100

95 81.7 62.1 93.1

174 87.1 74.6 111.8





#47

Bromodichloromethane

Concen: 20.334 ug/l

RT: 6.37 min Scan# 582

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

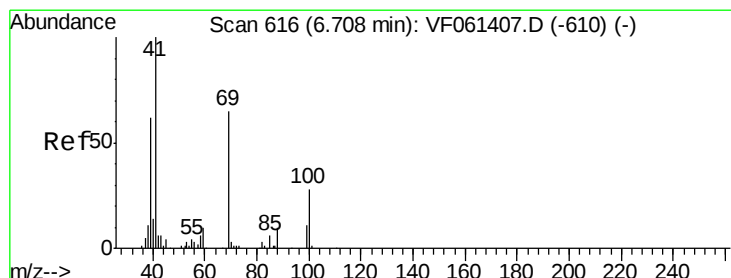
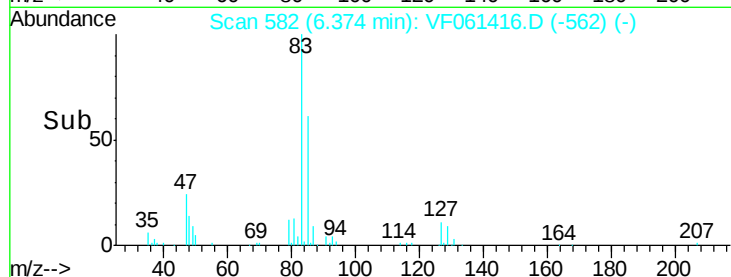
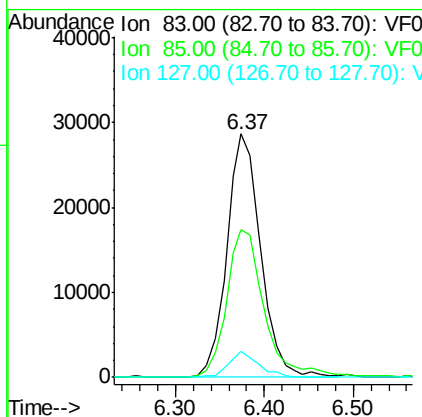
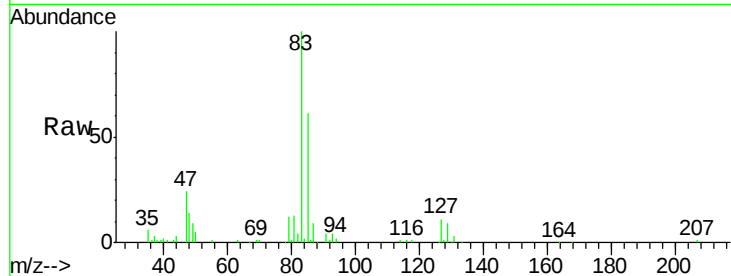
ClientSampleId :

VF0116SBS01

Tot Ion:	83	Resp:	76081
Ion Ratio	Lower	Upper	
83	100		
85	60.8	53.0	79.4
127	10.9	6.9	10.3#

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#48

Methyl methacrylate

Concen: 18.750 ug/l

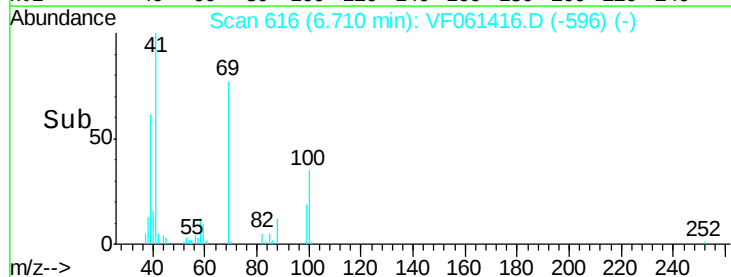
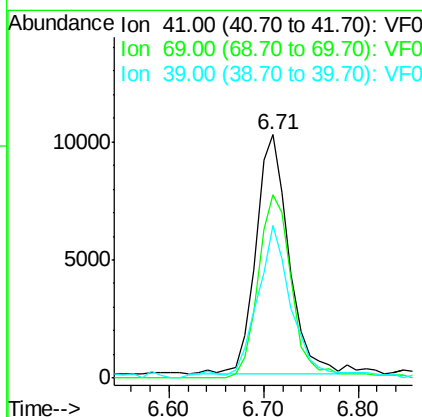
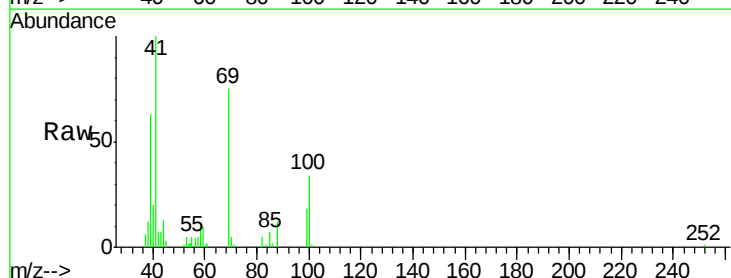
RT: 6.71 min Scan# 616

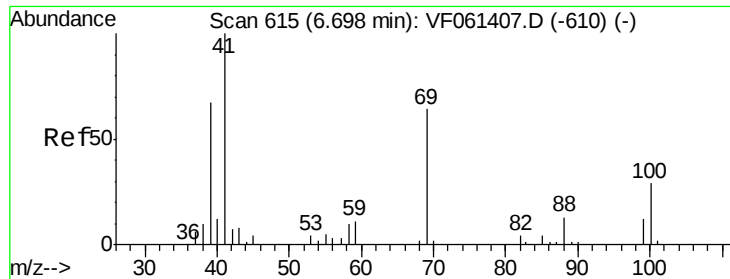
Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	41	Resp:	24599
Ion Ratio	Lower	Upper	
41	100		
69	75.5	51.7	77.5
39	62.6	49.2	73.8





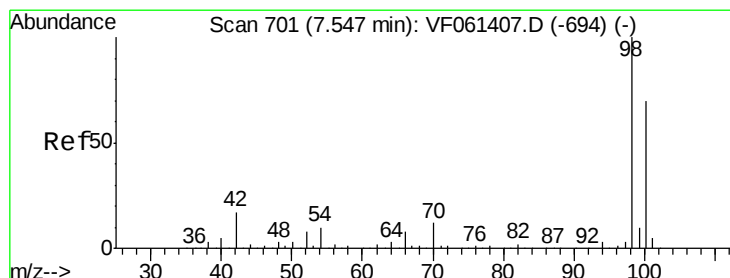
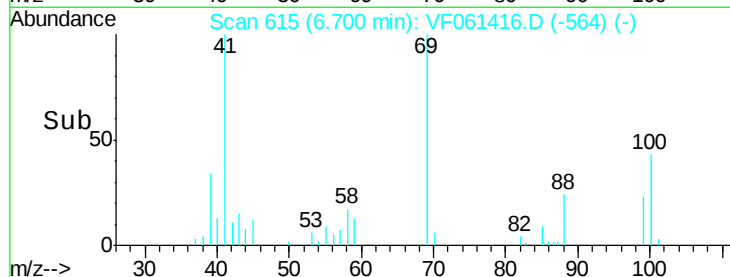
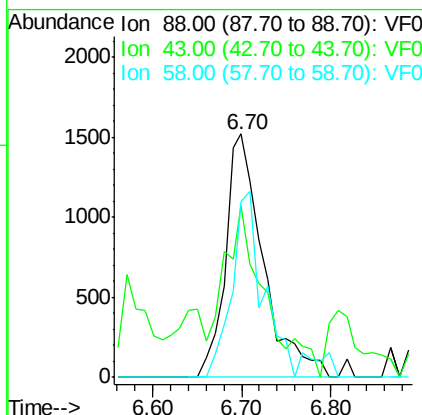
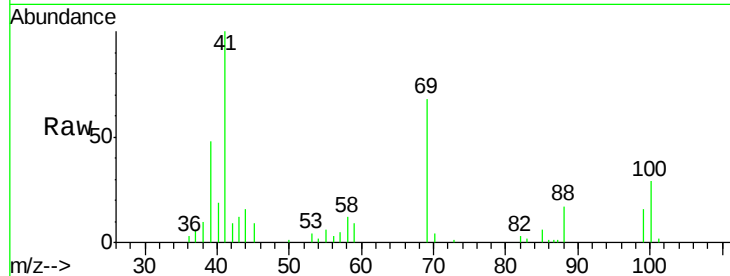
#49
1,4-Dioxane
Concen: 456.256 ug/l
RT: 6.70 min Scan# 615
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Lower	Upper
88	100		
43	70.7	55.5	83.3
58	71.9	59.9	89.9

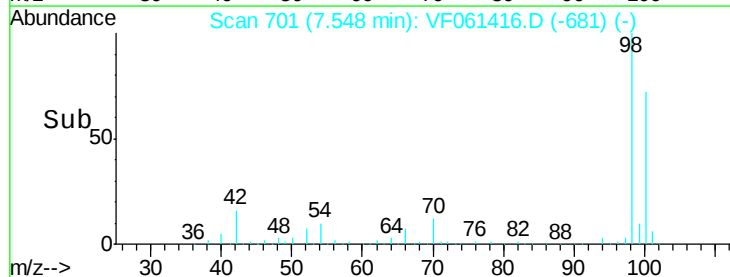
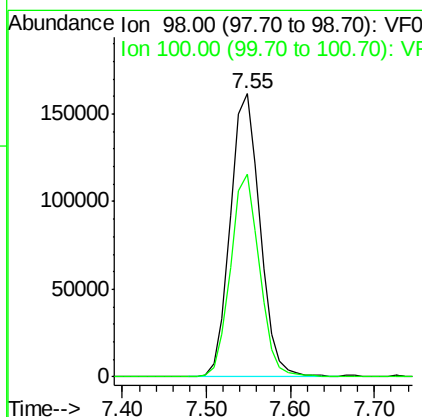
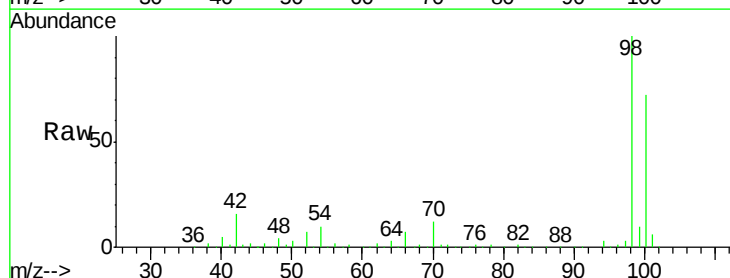
Manual Integrations
APPROVED

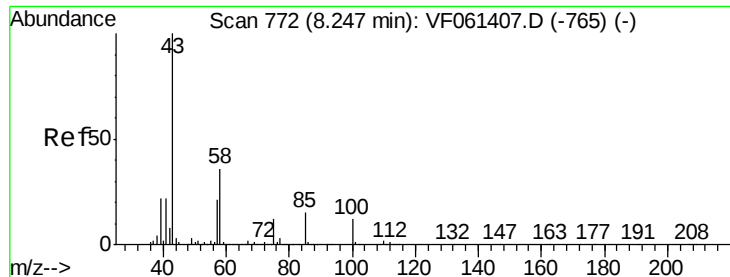
MMDadoda
1/17/2019 1:23:51 PM



#50
Toluene-d8
Concen: 54.904 ug/l
RT: 7.55 min Scan# 701
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
98	100		
100	71.8	55.6	83.4





#51

4-Methyl-2-Pentanone

Concen: 104.702 ug/l

RT: 8.25 min Scan# 772

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 43 Resp: 150385

Ion Ratio Lower Upper

43 100

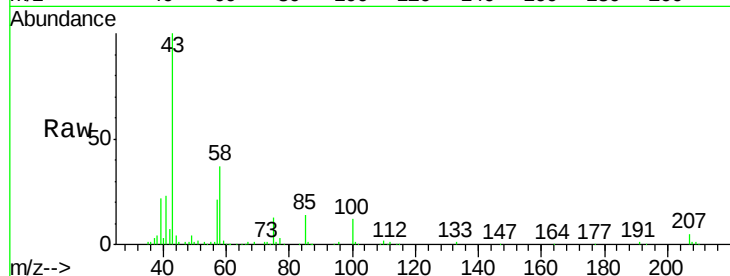
58 37.3 28.8 43.2

Manual Integrations

APPROVED

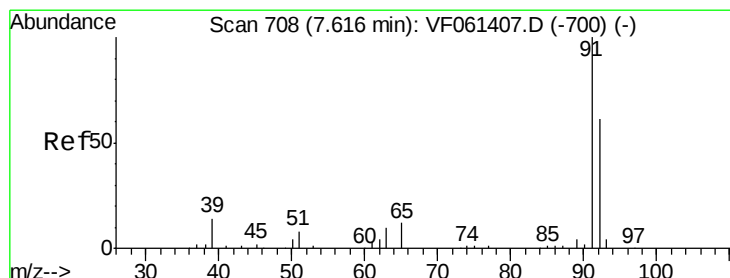
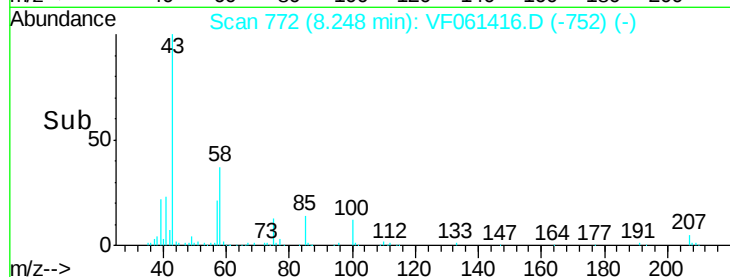
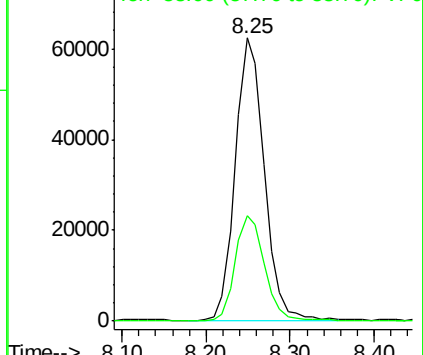
MMDadoda

1/17/2019 1:23:51 PM



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#52

Toluene

Concen: 20.543 ug/l

RT: 7.62 min Scan# 708

Delta R.T. 0.00 min

Lab File: VF061416.D

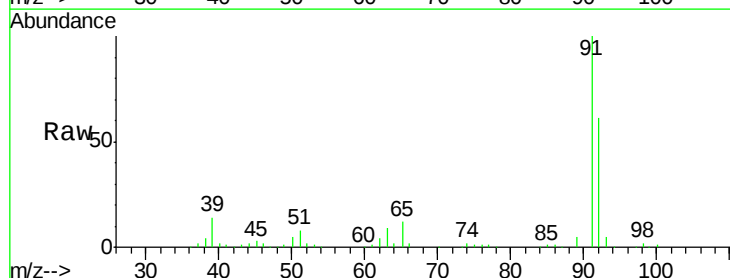
Acq: 16 Jan 2019 17:17

Tgt Ion: 92 Resp: 117231

Ion Ratio Lower Upper

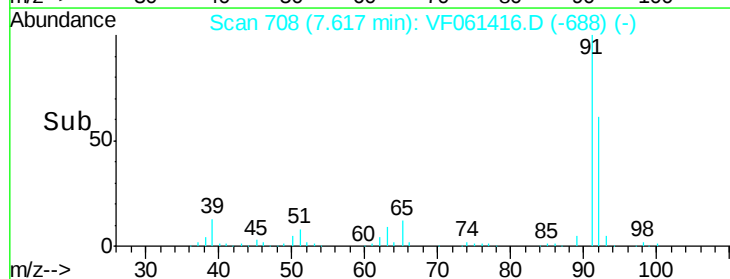
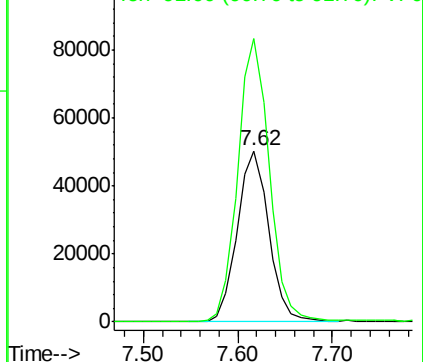
92 100

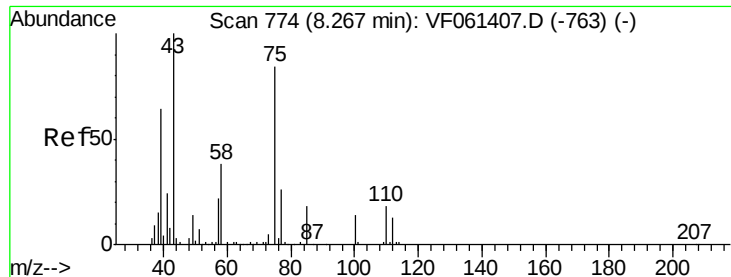
91 165.3 131.2 196.8



Abundance Ion 92.00 (91.70 to 92.70): VF0

Ion 91.00 (90.70 to 91.70): VF0





#53

t-1,3-Dichloropropene

Concen: 20.751 ug/l

RT: 8.27 min Scan# 774

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 75 Resp: 61652

Ion Ratio Lower Upper

75 100

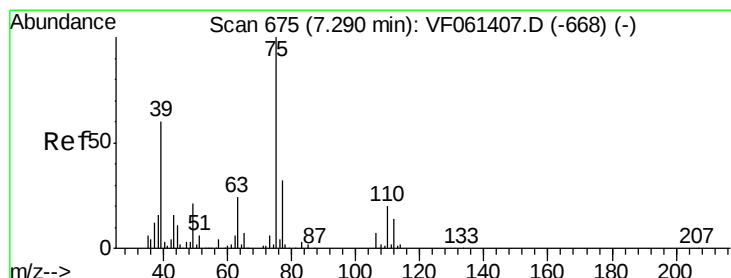
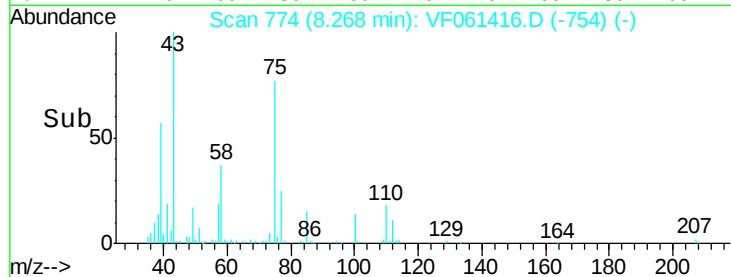
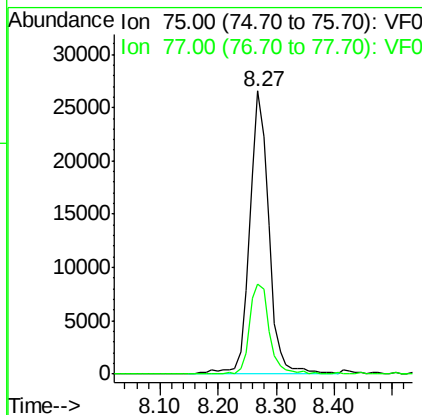
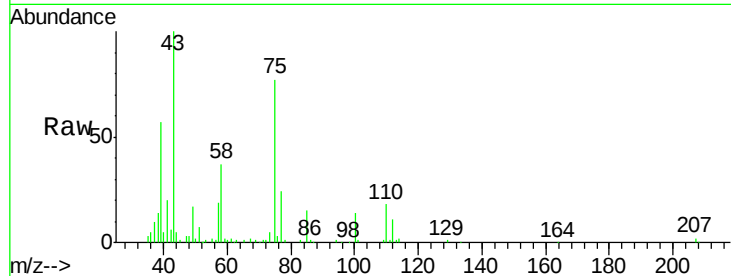
77 31.7 24.4 36.6

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#54

cis-1,3-Dichloropropene

Concen: 21.800 ug/l

RT: 7.29 min Scan# 675

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

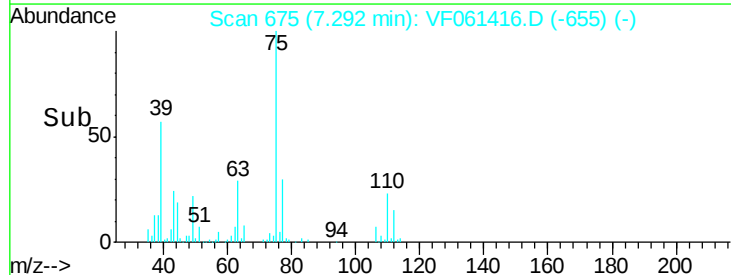
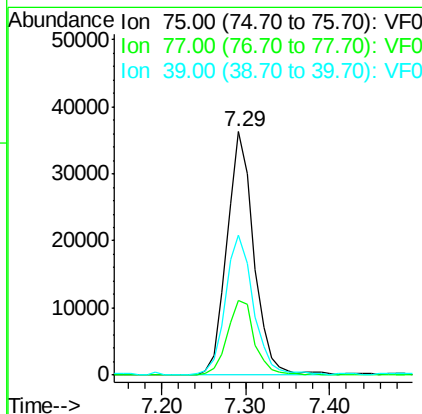
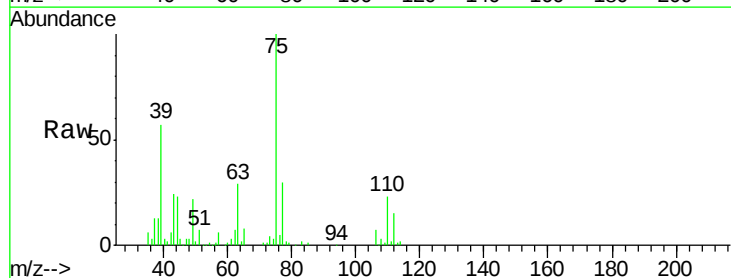
Tgt Ion: 75 Resp: 80960

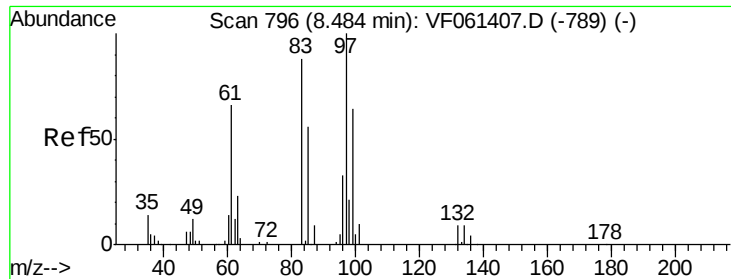
Ion Ratio Lower Upper

75 100

77 30.5 25.4 38.0

39 57.4 47.8 71.8





#55

1,1,2-Trichloroethane

Concen: 21.462 ug/l

RT: 8.49 min Scan# 796

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 97 Resp: 34779

Ion Ratio Lower Upper

97 100

83 89.3 70.4 105.6

85 54.3 44.7 67.1

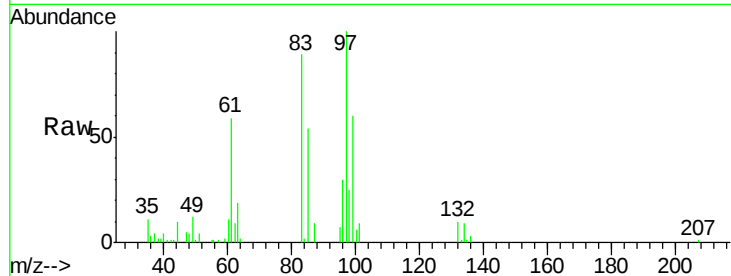
99 59.7 50.8 76.2

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM

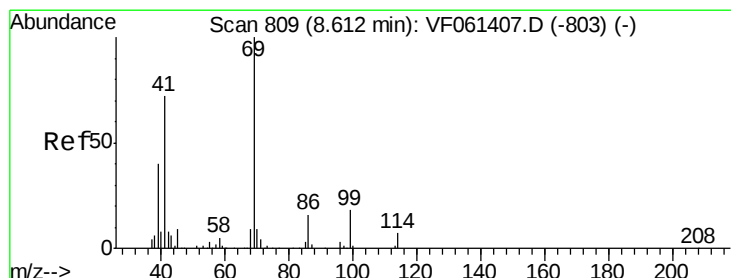
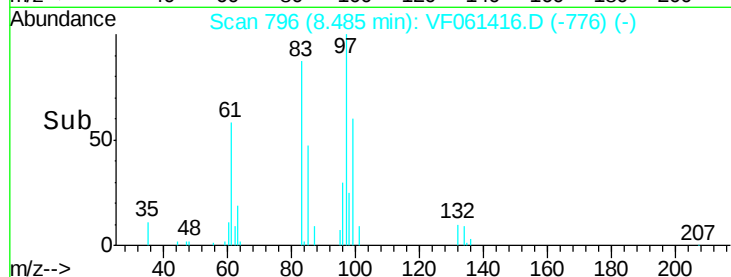
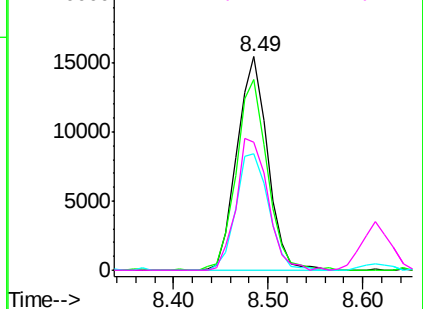


Abundance Ion 97.00 (96.70 to 97.70): VF0

Ion 82.95 (82.65 to 83.65): VF0

Ion 84.95 (84.65 to 85.65): VF0

Ion 98.95 (98.65 to 99.65): VF0



#56

Ethyl methacrylate

Concen: 19.967 ug/l

RT: 8.61 min Scan# 809

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

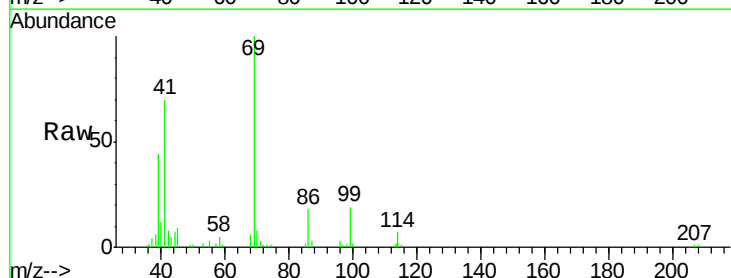
Tgt Ion: 69 Resp: 37645

Ion Ratio Lower Upper

69 100

41 70.2 57.5 86.3

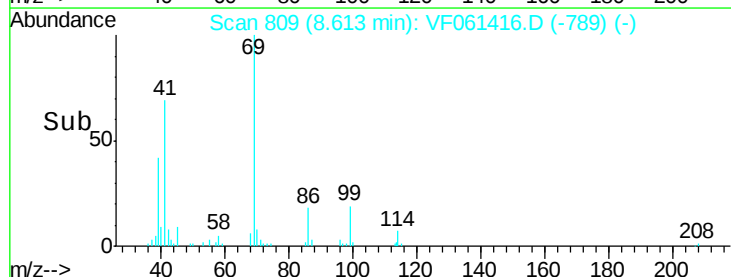
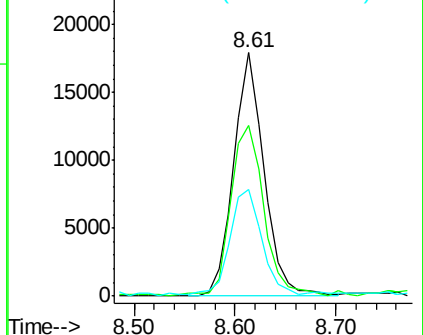
39 44.0 32.0 48.0

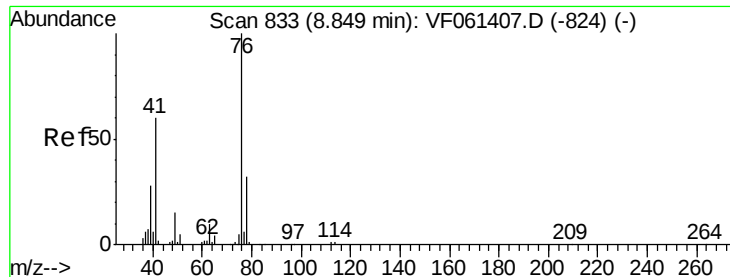


Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0





#57

1,3-Dichloropropane

Concen: 20.227 ug/l

RT: 8.85 min Scan# 833

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 76 Resp: 61437

Ion Ratio Lower Upper

76 100

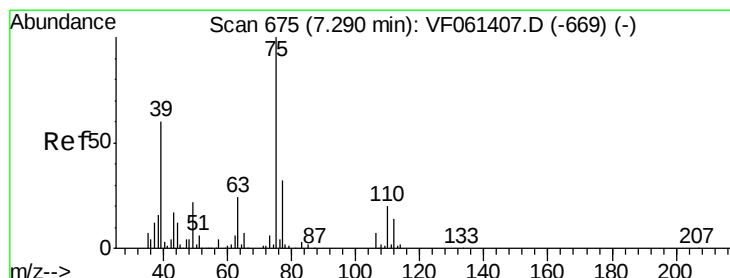
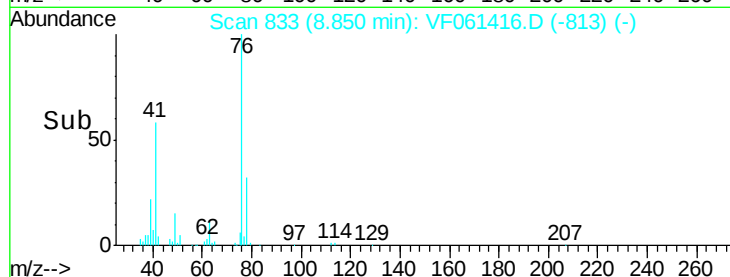
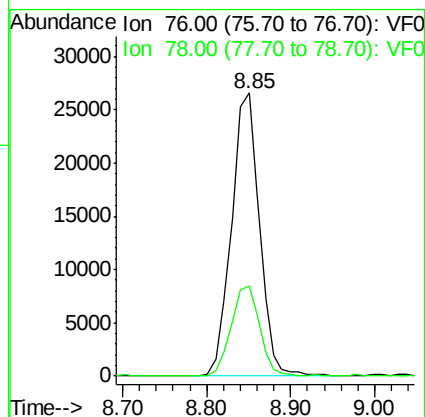
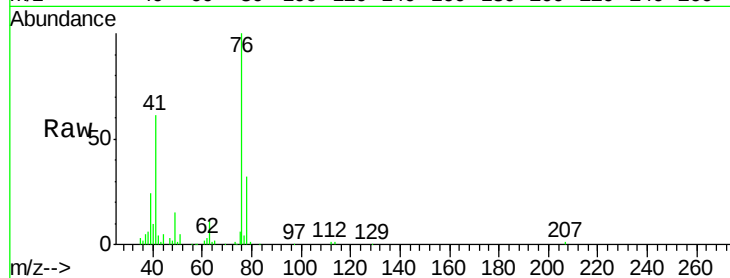
78 32.0 25.3 37.9

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#58

2-Chloroethyl Vinyl ether

Concen: 132.126 ug/l

RT: 7.29 min Scan# 675

Delta R.T. 0.00 min

Lab File: VF061416.D

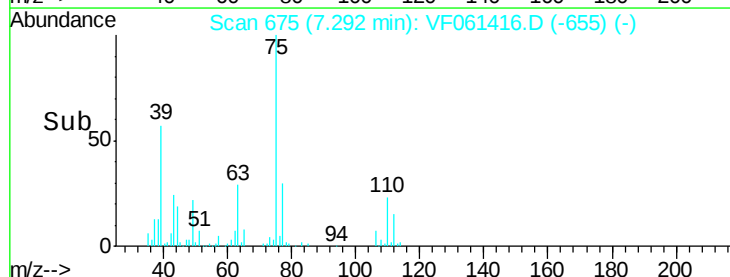
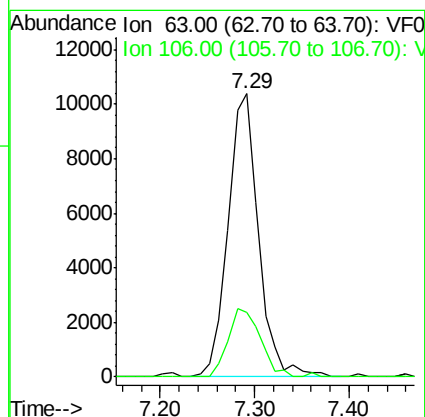
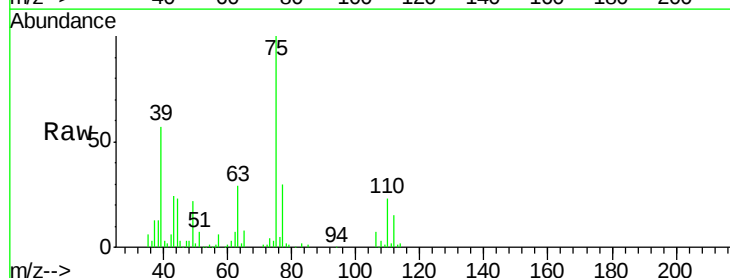
Acq: 16 Jan 2019 17:17

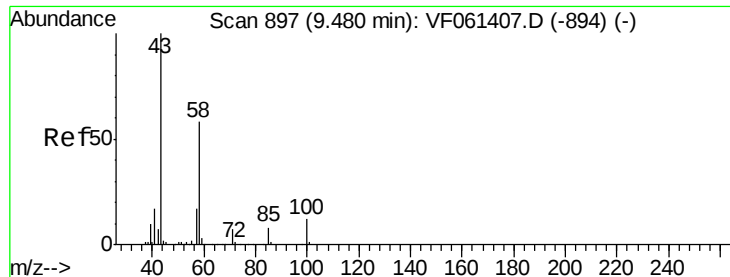
Tgt Ion: 63 Resp: 23239

Ion Ratio Lower Upper

63 100

106 22.9 21.9 32.9





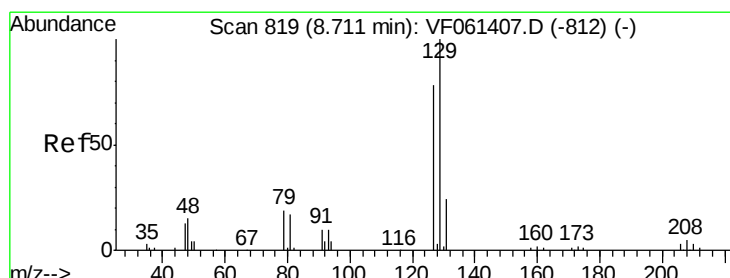
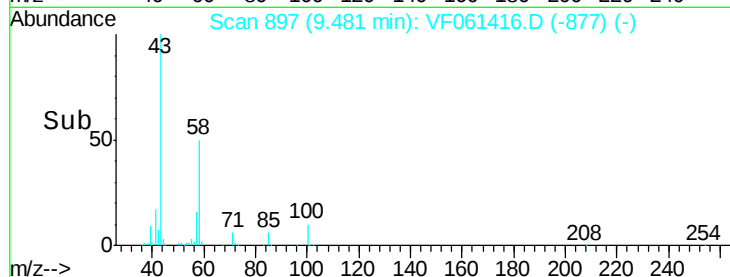
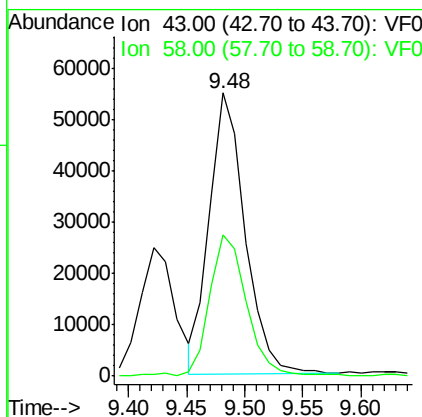
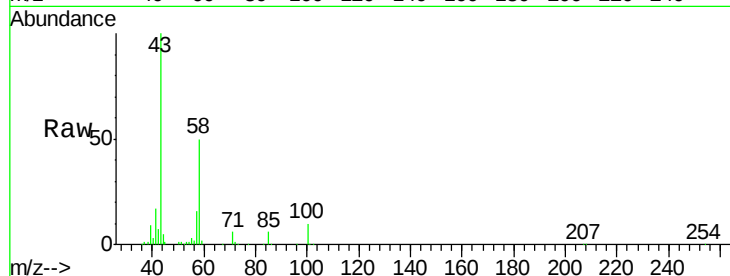
#59
2-Hexanone
Concen: 116.138 ug/l
RT: 9.48 min Scan# 897
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBSD01

Tot Ion: 43 Resp: 116321
Ion Ratio Lower Upper
43 100
58 50.0 25.9 77.6

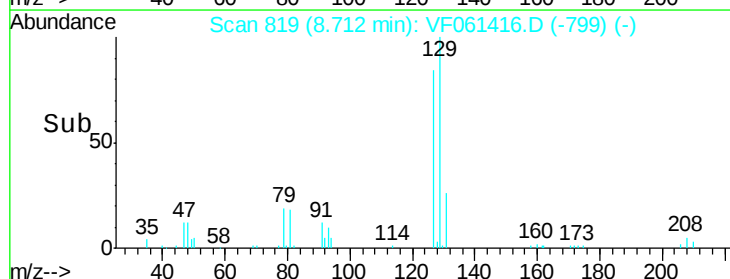
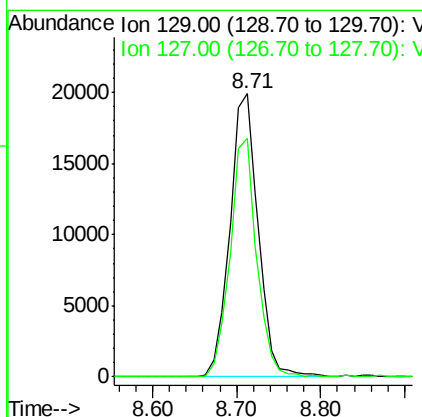
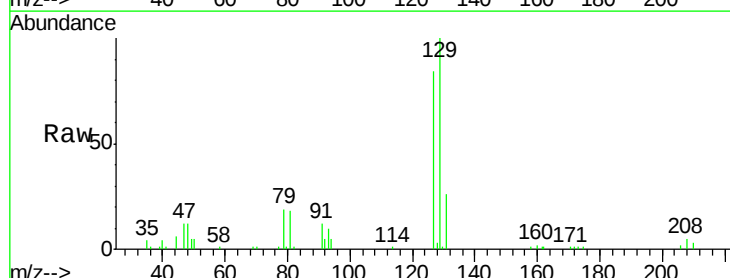
Manual Integrations
APPROVED

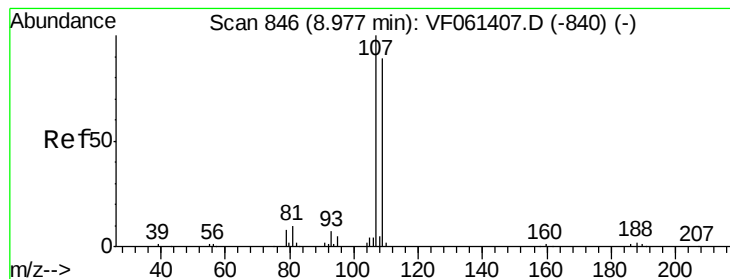
MMDadoda
1/17/2019 1:23:51 PM



#60
Dibromochloromethane
Concen: 19.587 ug/l
RT: 8.71 min Scan# 819
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion: 129 Resp: 46403
Ion Ratio Lower Upper
129 100
127 84.2 39.1 117.2





#61

1,2-Dibromoethane

Concen: 19.298 ug/l

RT: 8.98 min Scan# 846

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion:107 Resp: 35801

Ion Ratio Lower Upper

107 100

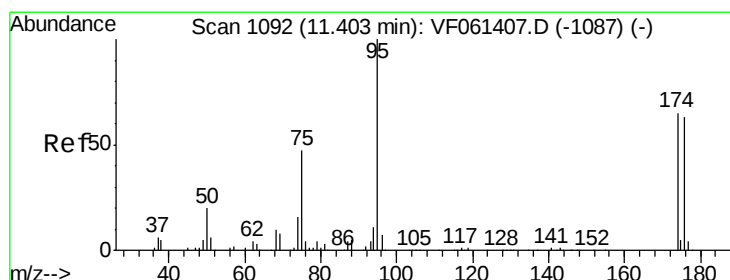
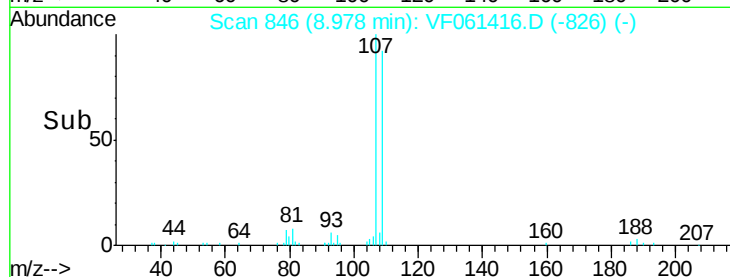
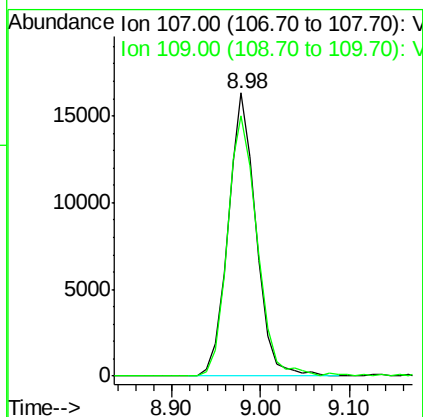
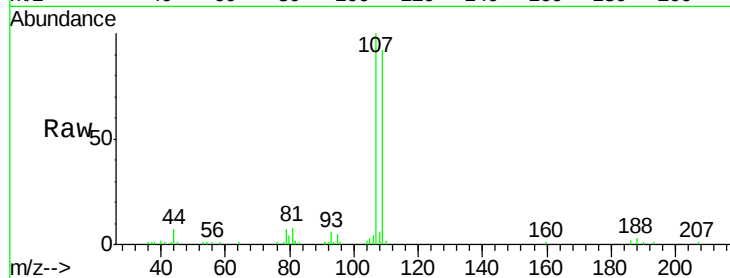
109 92.2 70.8 106.2

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#62

4-Bromofluorobenzene

Concen: 52.304 ug/l

RT: 11.40 min Scan# 1092

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

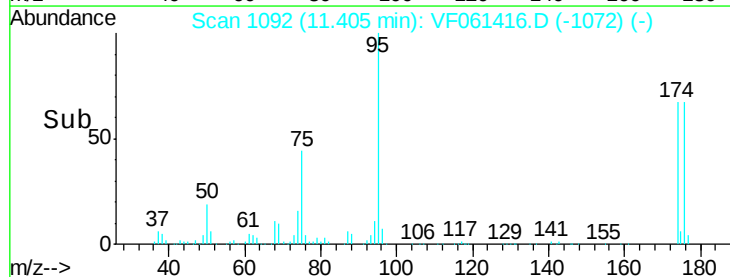
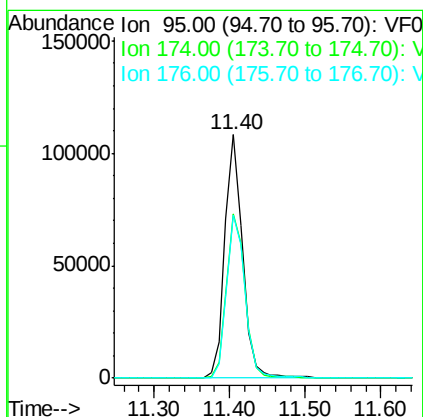
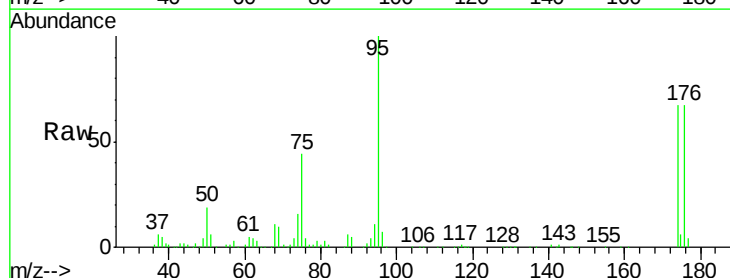
Tgt Ion: 95 Resp: 177457

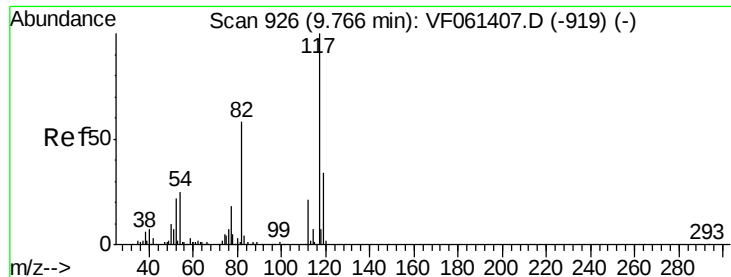
Ion Ratio Lower Upper

95 100

174 67.4 0.0 130.4

176 66.8 0.0 126.2





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.77 min Scan# 926

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

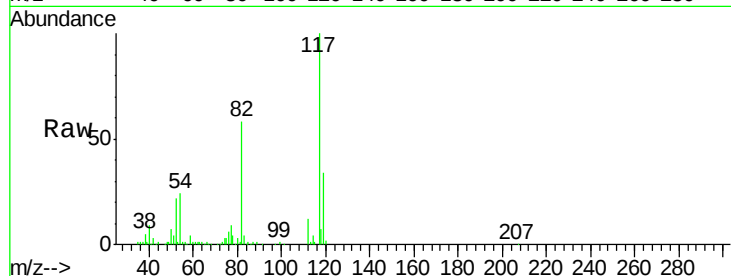
ClientSampleId :

VF0116SBS001

Tot Ion:	117	Resp:	308635
Ion Ratio	Lower	Upper	
117	100		
82	58.2	46.4	69.6
119	34.2	27.2	40.8

Manual Integrations
APPROVED

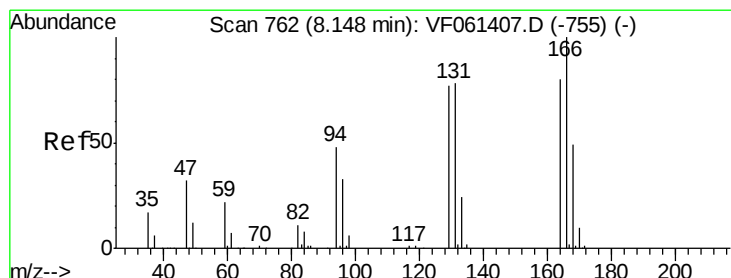
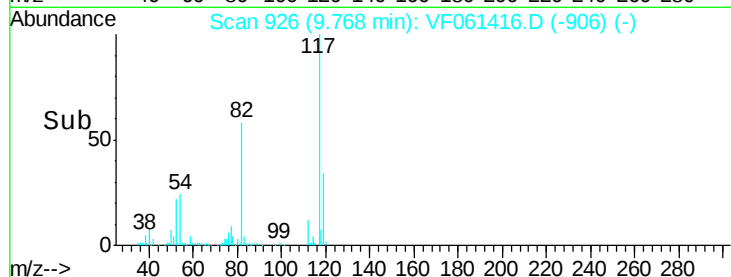
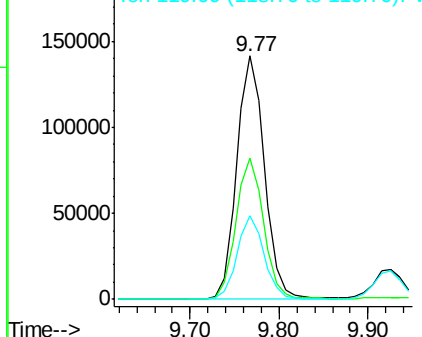
MMDadoda
1/17/2019 1:23:51 PM



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): V



#64

Tetrachloroethene

Concen: 20.497 ug/l

RT: 8.15 min Scan# 762

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

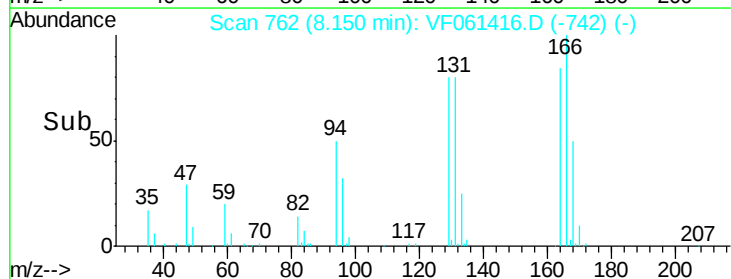
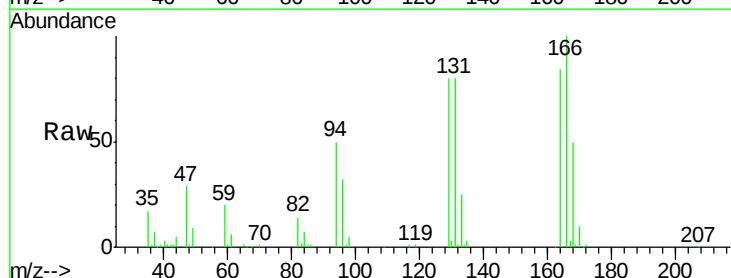
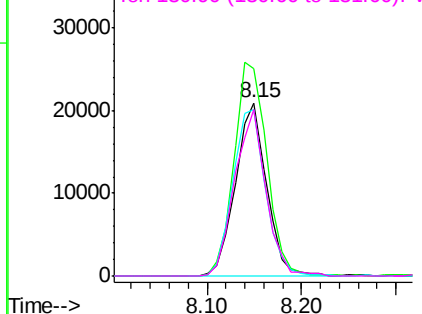
Tgt Ion:	164	Resp:	47572
Ion Ratio	Lower	Upper	
164	100		
166	119.5	99.6	149.4
129	95.8	76.4	114.6
131	96.0	77.9	116.9

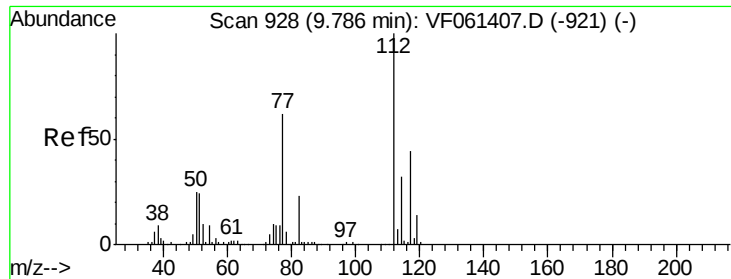
Abundance Ion 163.85 (163.55 to 164.55): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.90 (128.60 to 129.60): V

Ion 130.90 (130.60 to 131.60): V





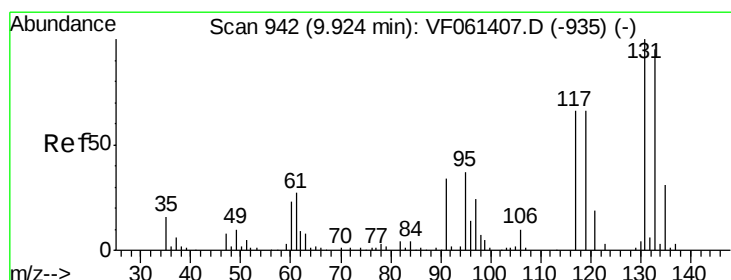
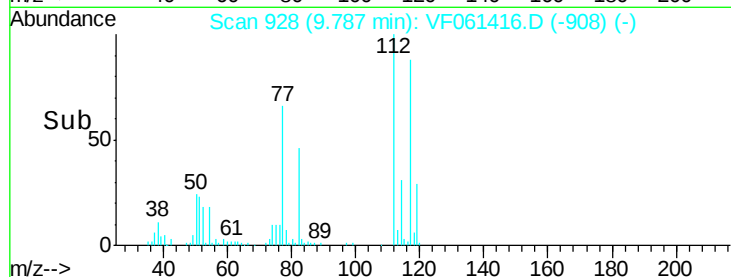
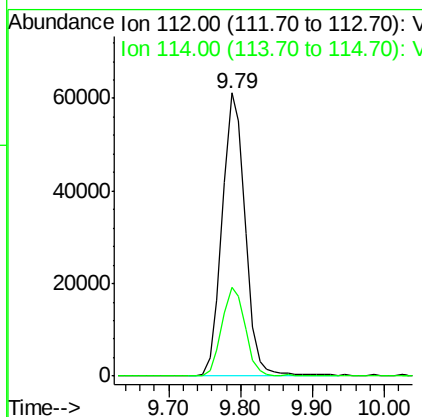
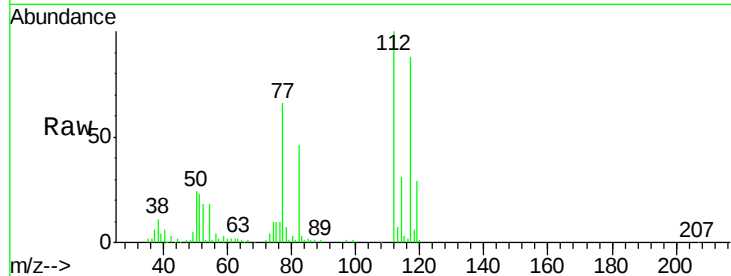
#65
Chlorobenzene
Concen: 21.625 ug/l
RT: 9.79 min Scan# 928
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ratio	Lower	Upper
112	100		
114	31.4	25.4	38.0

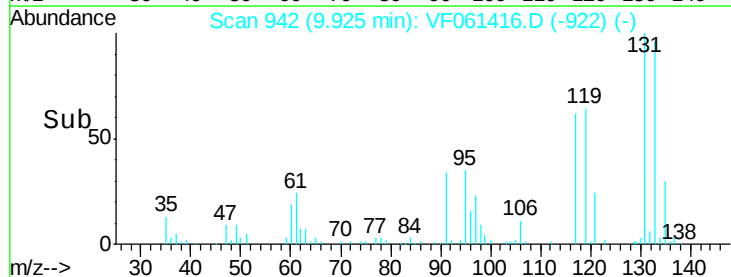
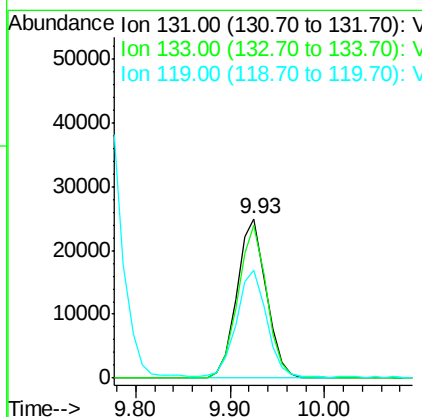
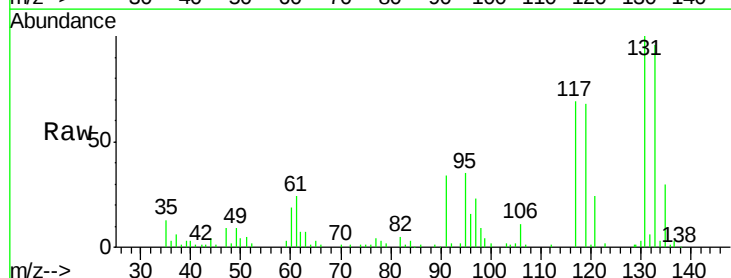
Manual Integrations
APPROVED

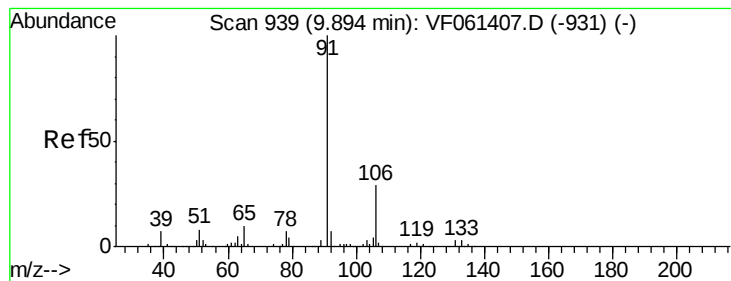
MMDadoda
1/17/2019 1:23:51 PM



#66
1,1,1,2-Tetrachloroethane
Concen: 21.580 ug/l
RT: 9.93 min Scan# 942
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
131	100		
133	95.9	47.4	142.2
119	67.6	33.1	99.3





#67

Ethyl Benzene

Concen: 21.709 ug/l

RT: 9.90 min Scan# 939

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBSD01

Tot Ion: 91 Resp: 248944

Ion Ratio Lower Upper

91 100

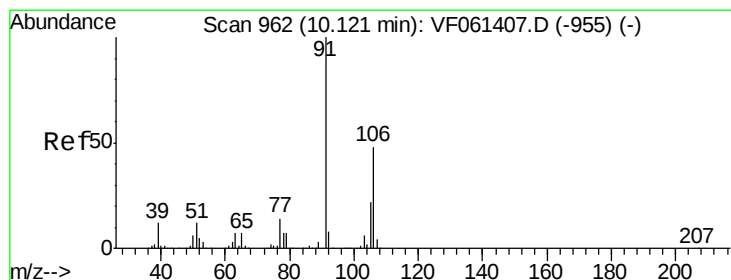
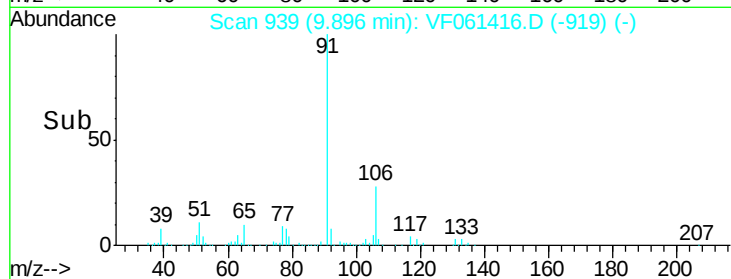
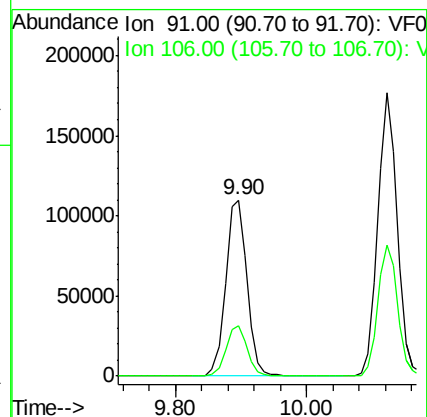
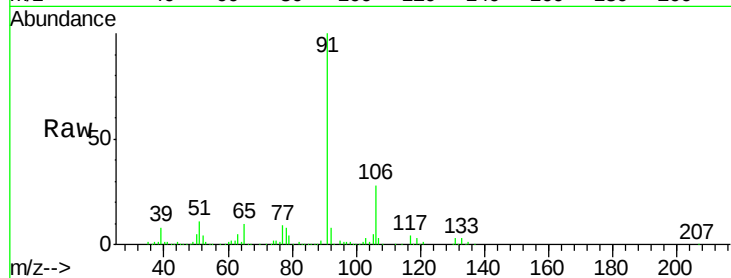
106 28.4 23.1 34.7

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#68

m/p-Xylenes

Concen: 42.520 ug/l

RT: 10.12 min Scan# 962

Delta R.T. 0.00 min

Lab File: VF061416.D

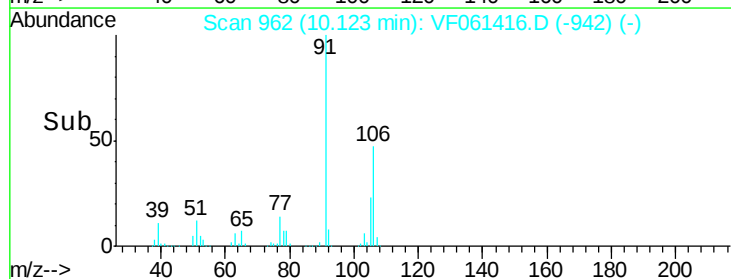
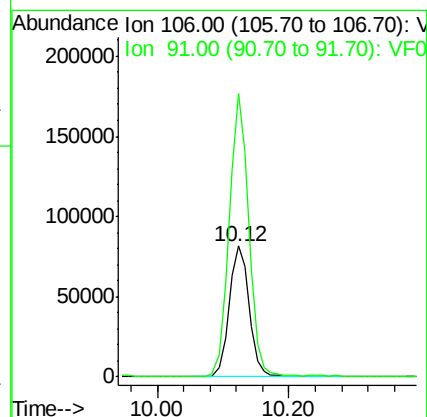
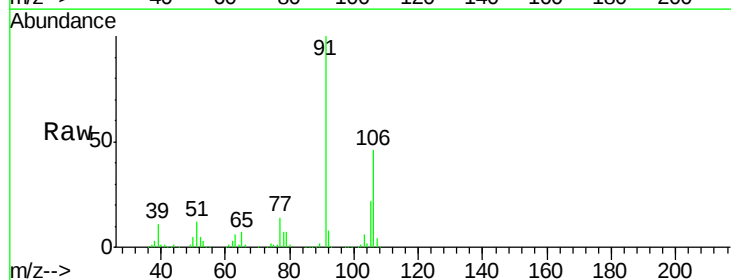
Acq: 16 Jan 2019 17:17

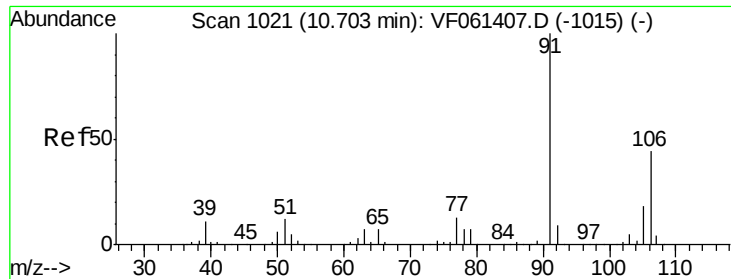
Tgt Ion: 106 Resp: 175369

Ion Ratio Lower Upper

106 100

91 216.0 166.2 249.4





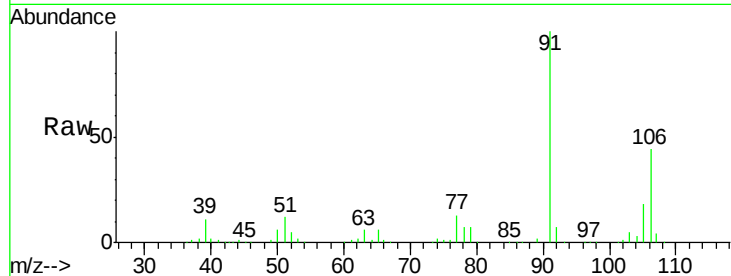
#69
o-Xylene
Concen: 21.121 ug/l
RT: 10.70 min Scan# 1021
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

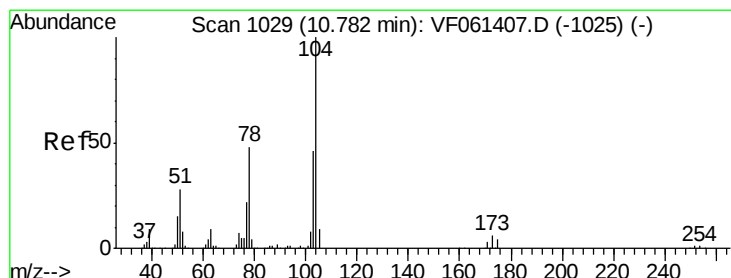
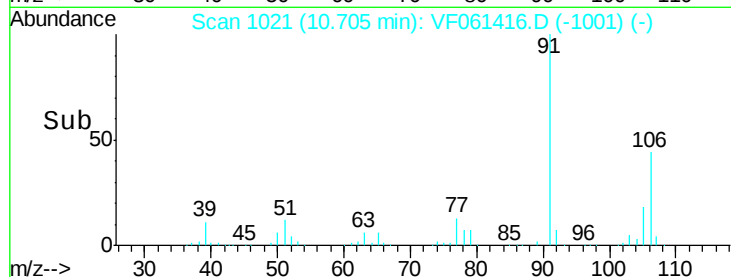
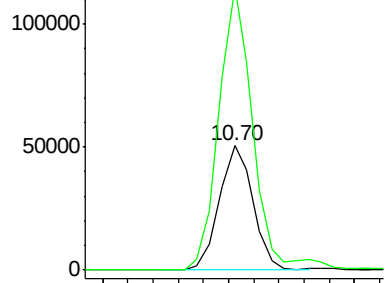
Tot Ion:106 Resp: 94413
Ion Ratio Lower Upper
106 100
91 227.5 113.3 339.8

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM

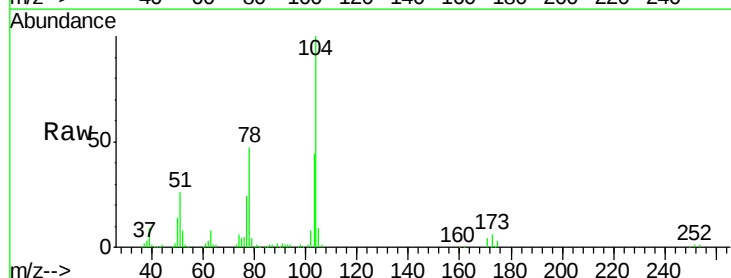


Abundance Ion 106.00 (105.70 to 106.70): V
Ion 91.00 (90.70 to 91.70): VF0

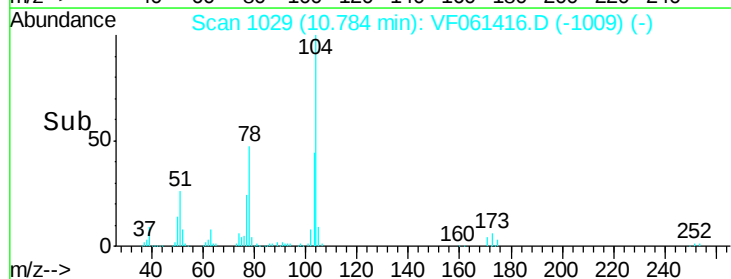
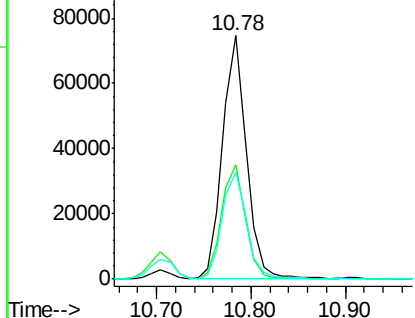


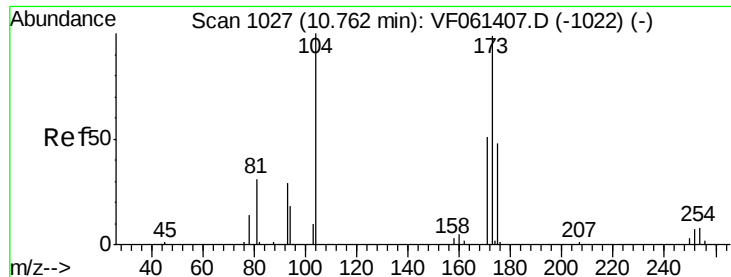
#70
Styrene
Concen: 21.338 ug/l
RT: 10.78 min Scan# 1029
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion:104 Resp: 130565
Ion Ratio Lower Upper
104 100
78 47.0 38.8 58.2
103 43.7 37.0 55.6



Abundance Ion 104.00 (103.70 to 104.70): V
Ion 78.00 (77.70 to 78.70): VF0
Ion 103.00 (102.70 to 103.70): V





#71

Bromoform

Concen: 21.789 ug/l

RT: 10.76 min Scan# 1027

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBSD01

Tot Ion:173 Resp: 24478

Ion Ratio Lower Upper

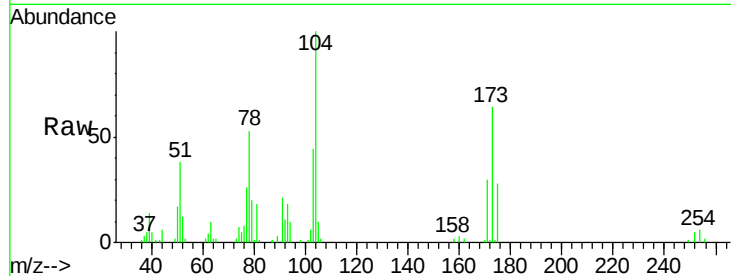
173 100

175 43.8 24.1 72.4

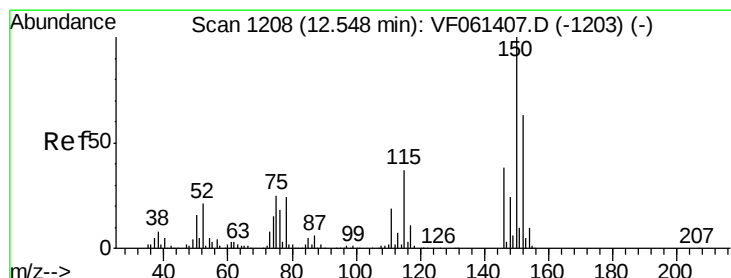
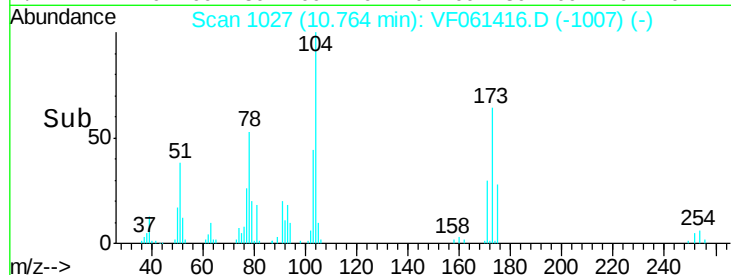
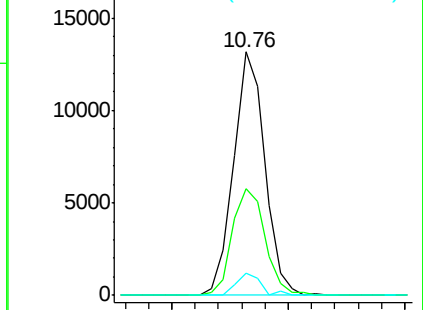
254 9.2 0.0 0.0#

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



Abundance Ion 173.00 (172.70 to 173.70): V
Ion 175.00 (174.70 to 175.70): V
Ion 254.00 (253.70 to 254.70): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.55 min Scan# 1208

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

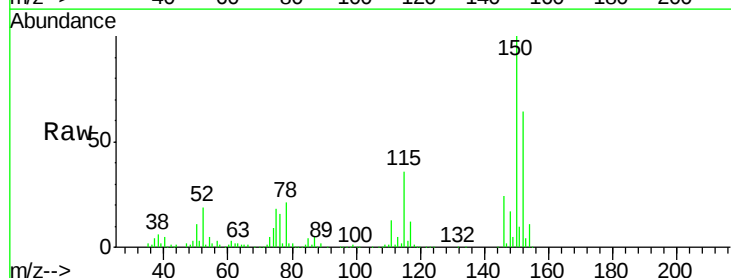
Tgt Ion:152 Resp: 160310

Ion Ratio Lower Upper

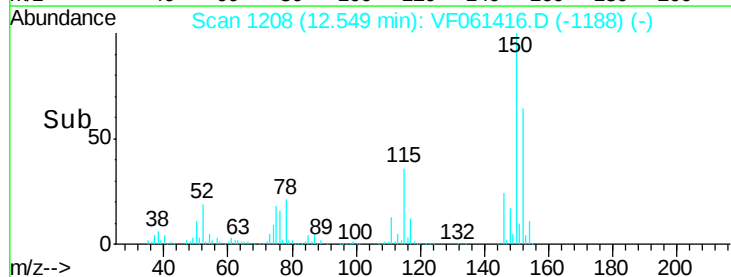
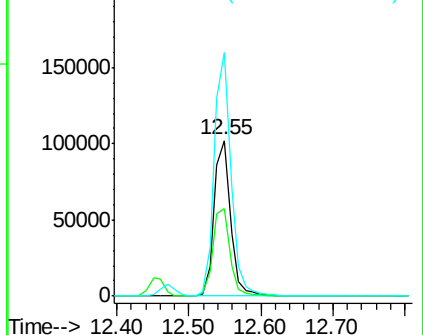
152 100

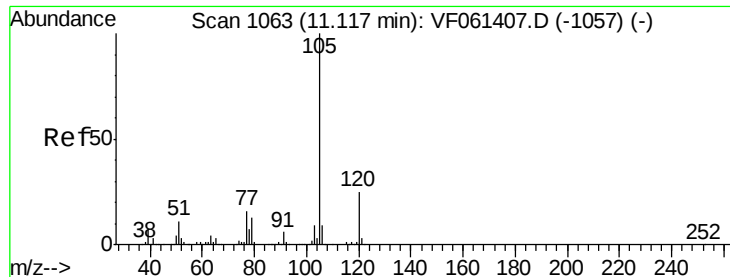
115 56.3 30.0 90.0

150 156.6 0.0 321.4



Abundance Ion 152.00 (151.70 to 152.70): V
Ion 115.00 (114.70 to 115.70): V
Ion 150.00 (149.70 to 150.70): V





#73

Isopropylbenzene

Concen: 22.472 ug/l

RT: 11.12 min Scan# 1063

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 105 Resp: 292995

Ion Ratio Lower Upper

105 100

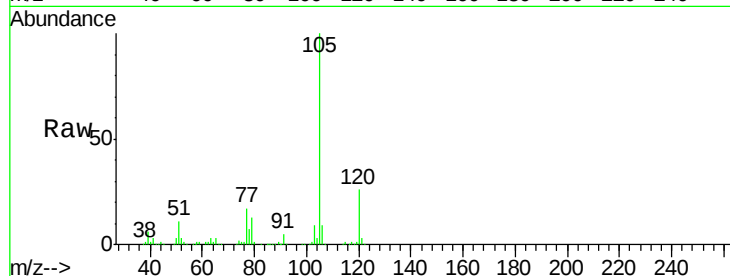
120 26.2 12.6 37.8

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

200000

150000

100000

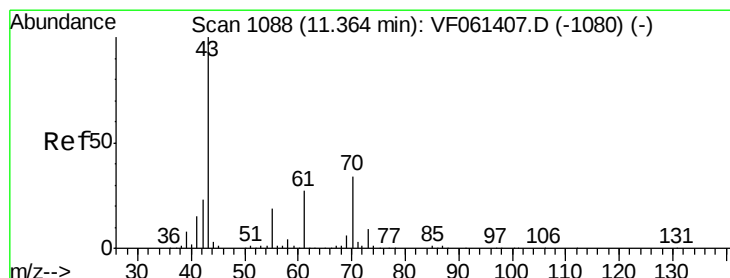
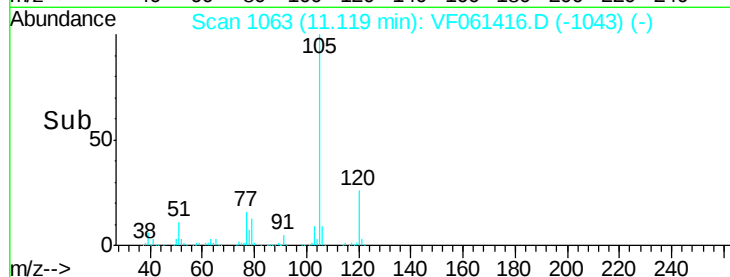
50000

0

11.00

11.20

Time-->



#74

N-ethyl acetate

Concen: 23.257 ug/l

RT: 11.37 min Scan# 1088

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion: 43 Resp: 71704

Ion Ratio Lower Upper

43 100

70 33.5 27.6 41.4

55 20.6 15.4 23.2

61 24.8 21.8 32.6

Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

60000

40000

20000

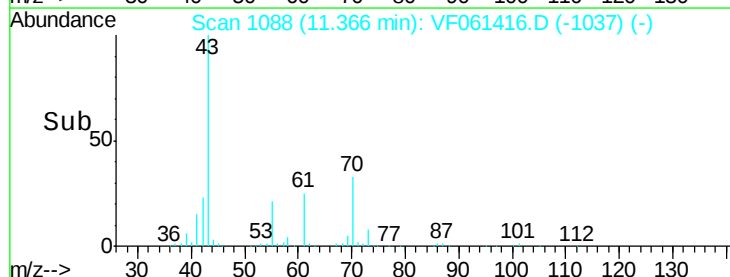
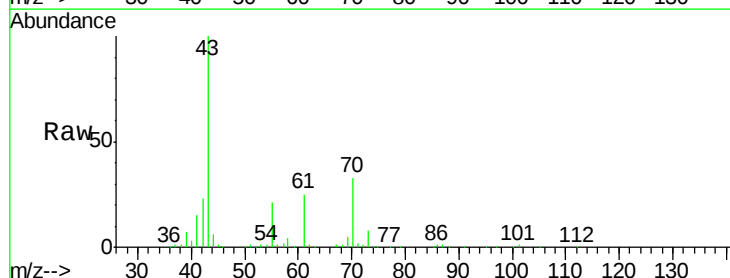
0

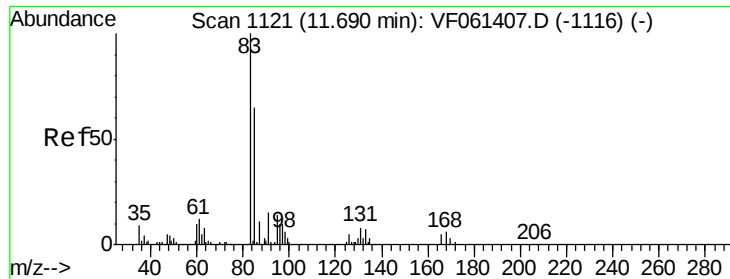
11.30

11.40

11.50

Time-->





#75

1,1,2,2-Tetrachloroethane

Concen: 20.986 ug/l

RT: 11.69 min Scan# 1121

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

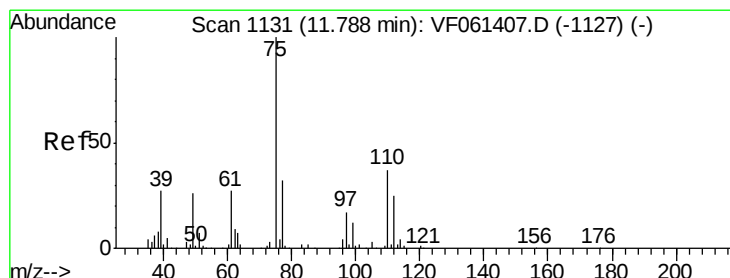
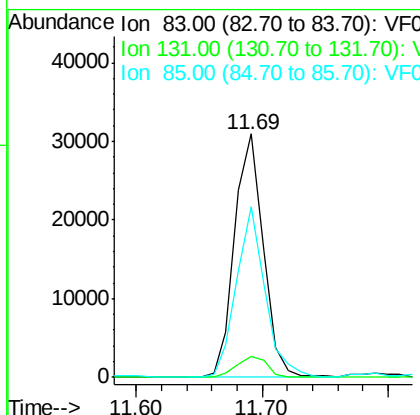
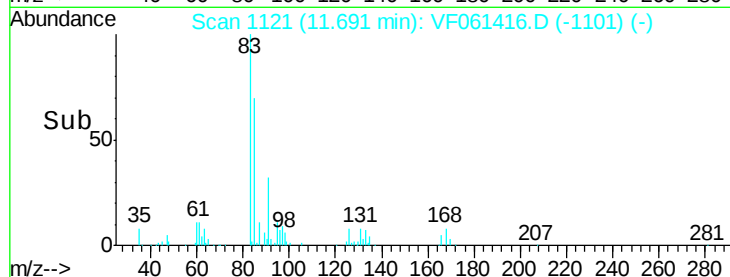
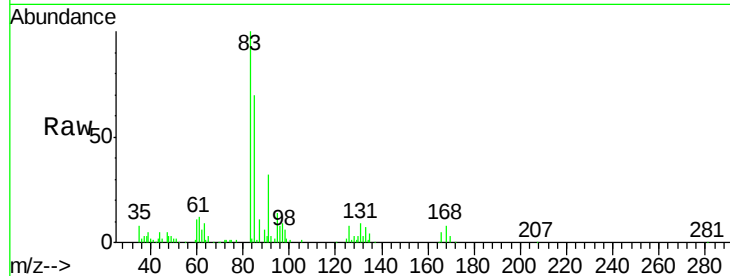
ClientSampleId :

VF0116SBS01

Tot Ion:	83	Resp:	48745
Ion Ratio	Lower	Upper	
83	100		
131	8.6	4.0	12.2
85	70.3	32.7	98.1

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#76

1,2,3-Trichloropropane

Concen: 21.199 ug/l

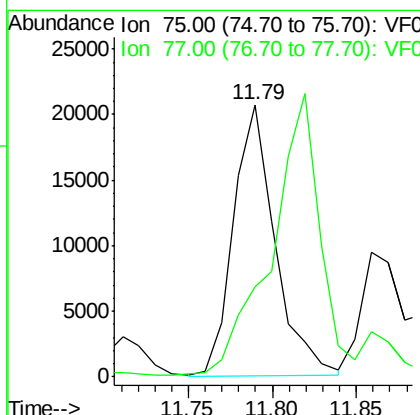
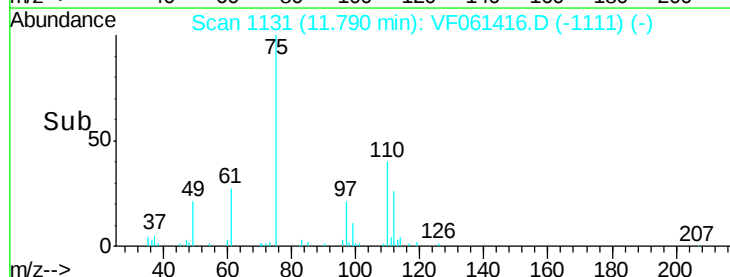
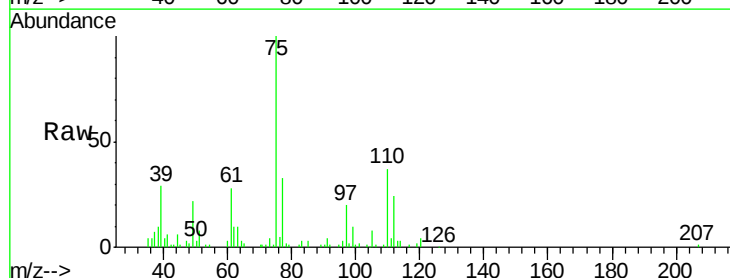
RT: 11.79 min Scan# 1131

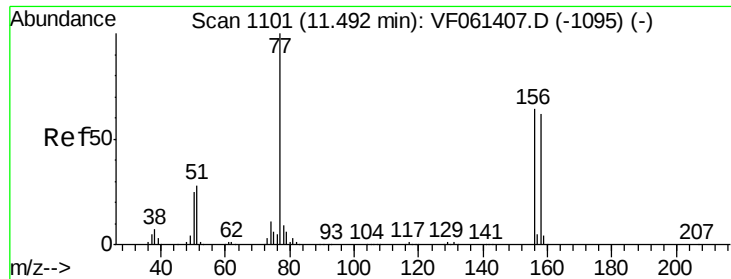
Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	75	Resp:	35381
Ion Ratio	Lower	Upper	
75	100		
77	33.2	16.1	48.3





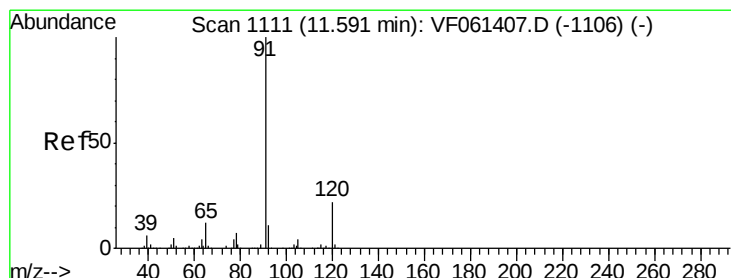
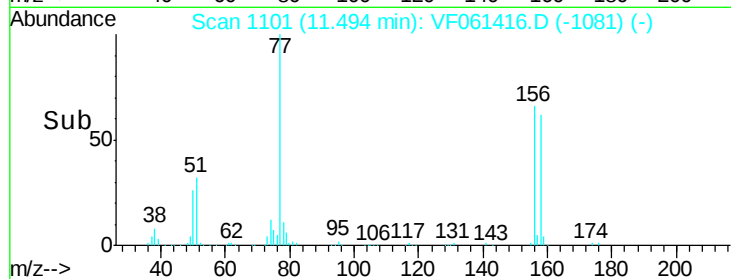
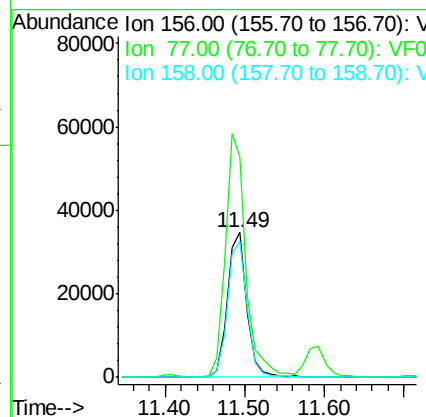
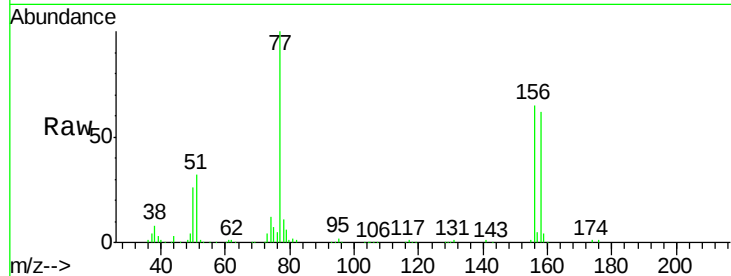
#77
Bromobenzene
Concen: 21.703 ug/l
RT: 11.49 min Scan# 1101
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBS01

Tot Ion	Ion	Ratio	Lower	Upper
156	100			
77	152.8	78.3	234.9	
158	94.1	48.9	146.7	

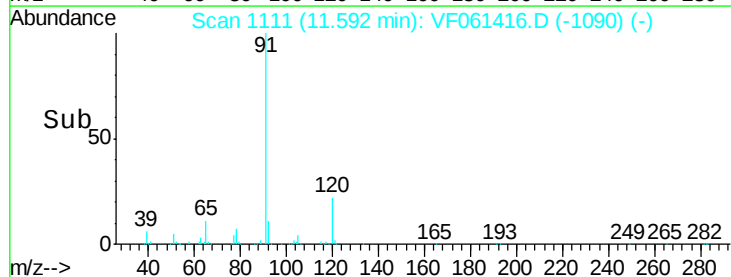
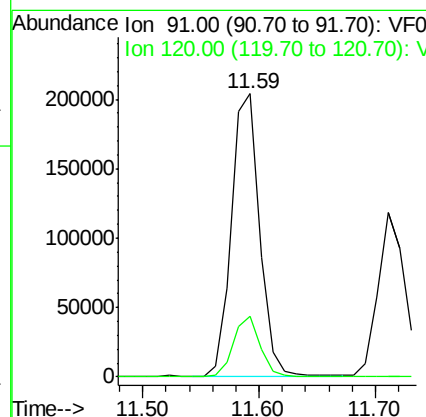
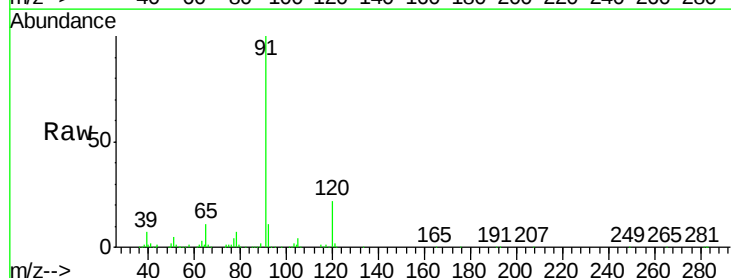
Manual Integrations
APPROVED

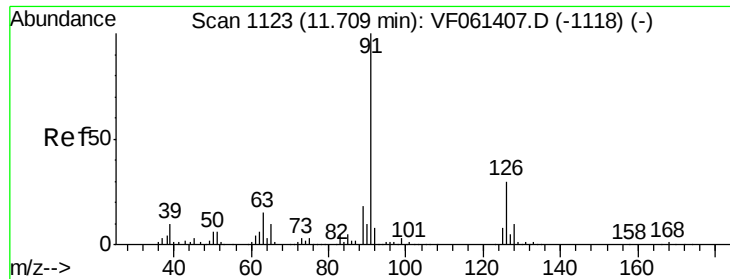
MMDadoda
1/17/2019 1:23:51 PM



#78
n-propylbenzene
Concen: 20.166 ug/l
RT: 11.59 min Scan# 1111
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ion	Ratio	Lower	Upper
91	100			
120	21.6	10.9	32.6	





#79

2-Chlorotoluene

Concen: 20.864 ug/l

RT: 11.71 min Scan# 1123

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion: 91 Resp: 188744

Ion Ratio Lower Upper

91 100

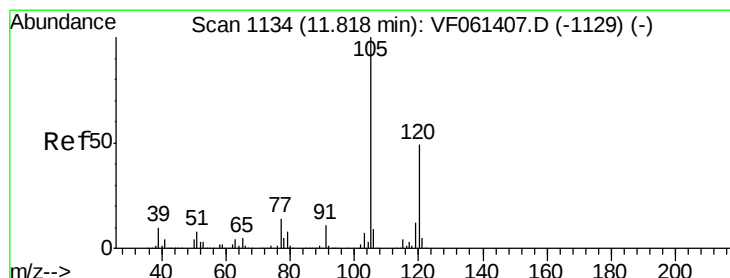
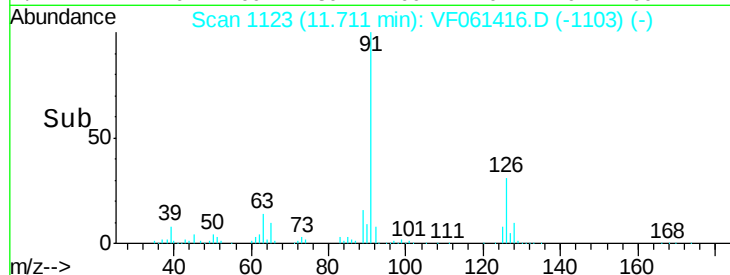
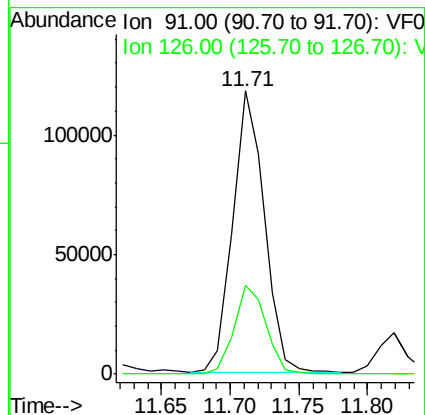
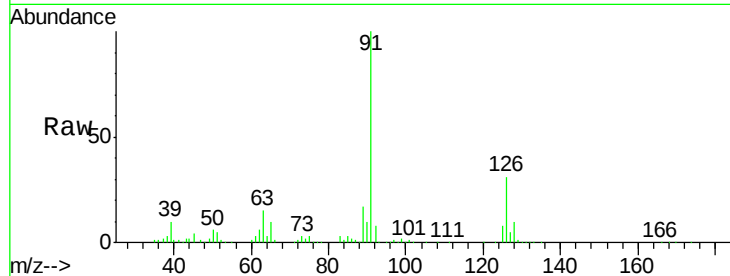
126 31.2 15.0 45.1

Manual Integrations

APPROVED

MMDadoda

1/17/2019 1:23:51 PM



#80

1,3,5-Trimethylbenzene

Concen: 22.190 ug/l

RT: 11.82 min Scan# 1134

Delta R.T. 0.00 min

Lab File: VF061416.D

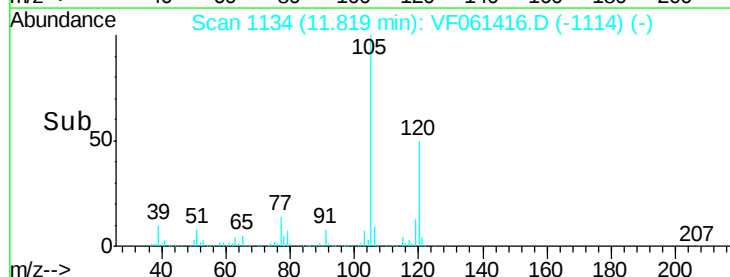
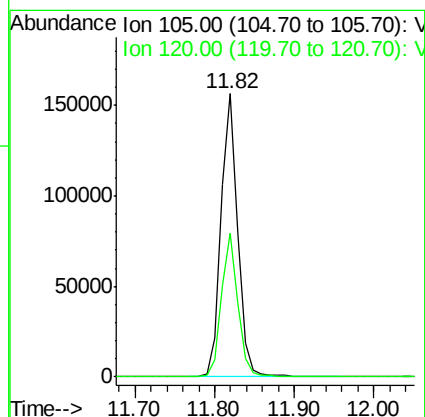
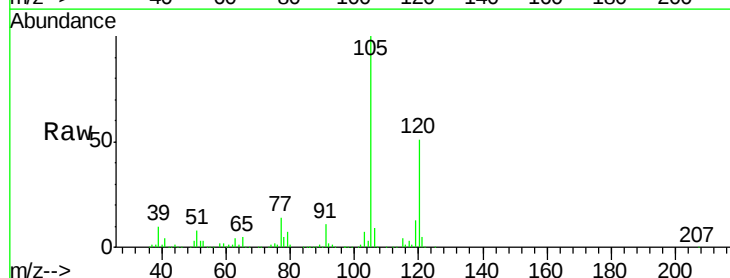
Acq: 16 Jan 2019 17:17

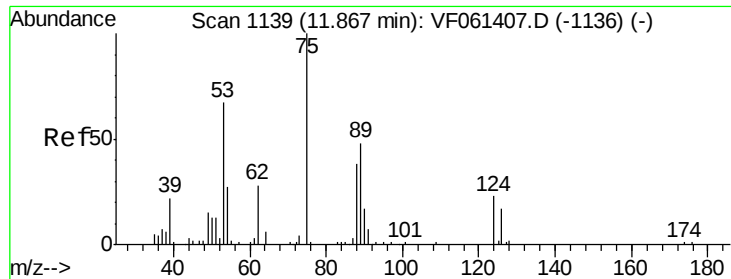
Tgt Ion: 105 Resp: 233489

Ion Ratio Lower Upper

105 100

120 50.8 24.7 74.1





#81

trans-1,4-Dichloro-2-butene

Concen: 20.691 ug/l m

RT: 11.86 min Scan# 1138

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

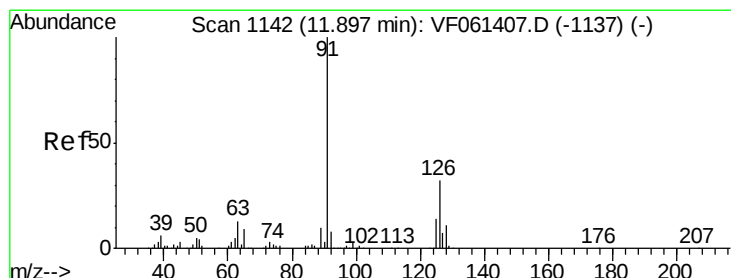
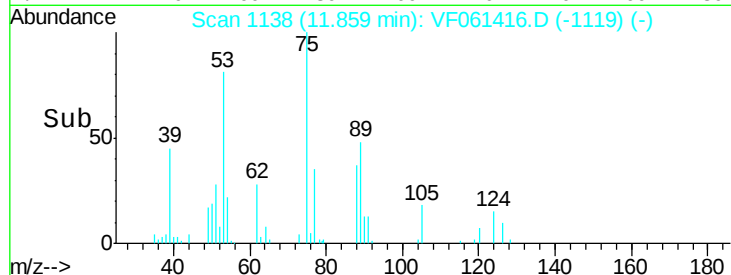
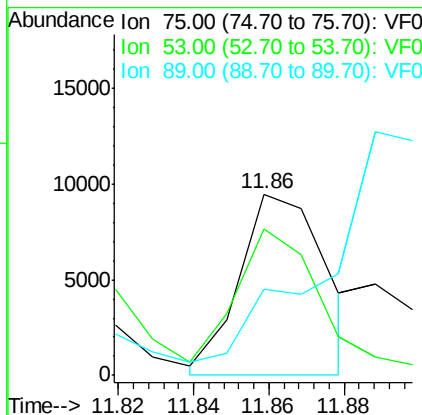
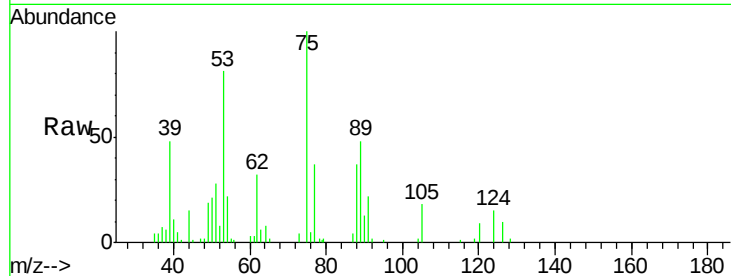
ClientSampleId :

VF0116SBS01

Tot Ion:	75	Resp:	15012
Ion	Ratio	Lower	Upper
75	100		
53	80.6	57.8	86.6
89	47.6	40.7	61.1

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#82

4-Chlorotoluene

Concen: 21.560 ug/l

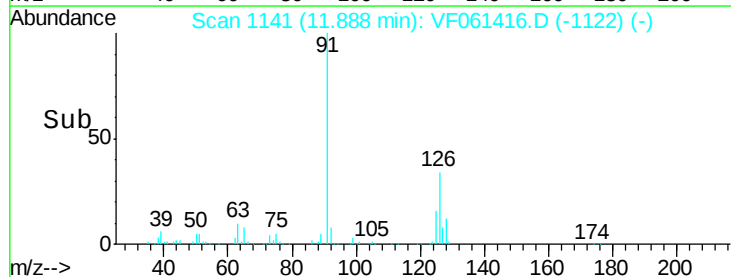
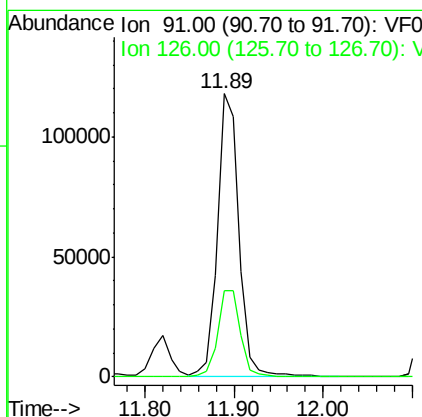
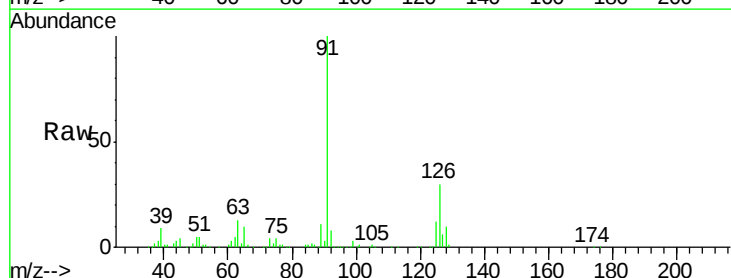
RT: 11.89 min Scan# 1141

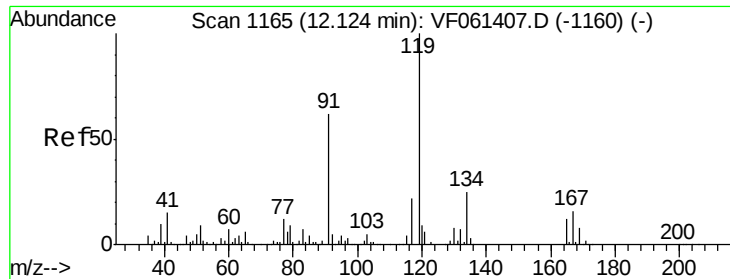
Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Tgt Ion:	91	Resp:	196813
Ion	Ratio	Lower	Upper
91	100		
126	30.5	16.0	47.9





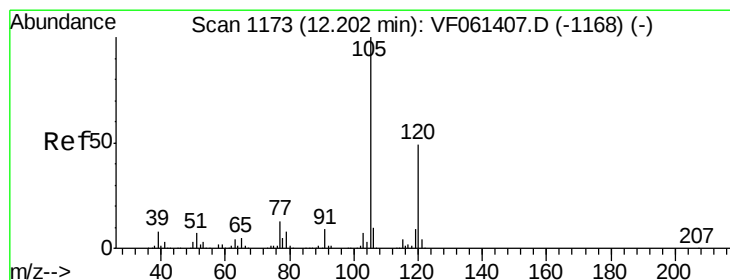
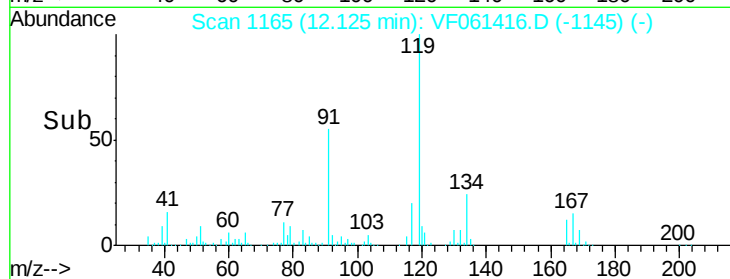
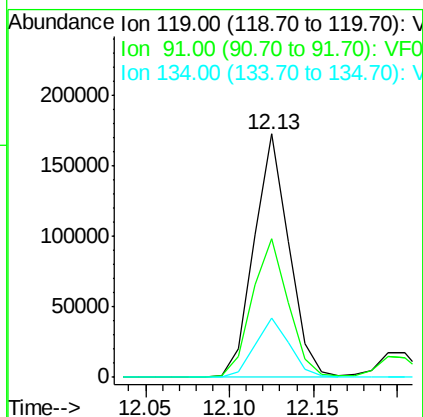
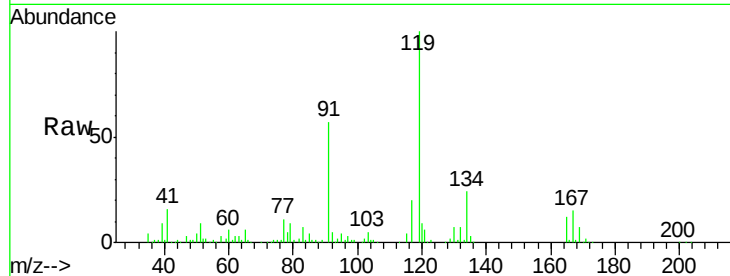
#83
 tert-Butylbenzene
 Concen: 22.890 ug/l
 RT: 12.13 min Scan# 1165
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBS01

Tot Ion	Ratio	Resp	Lower	Upper
119	100	249290		
91	57.1		31.3	93.8
134	24.4		12.4	37.0

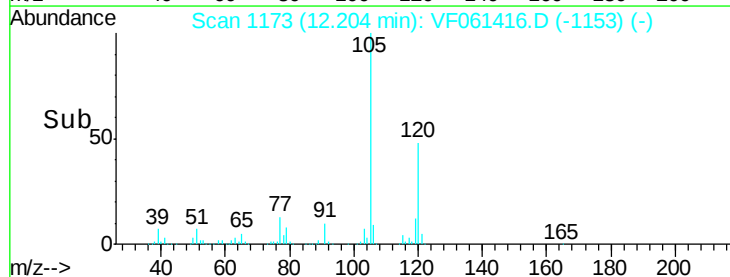
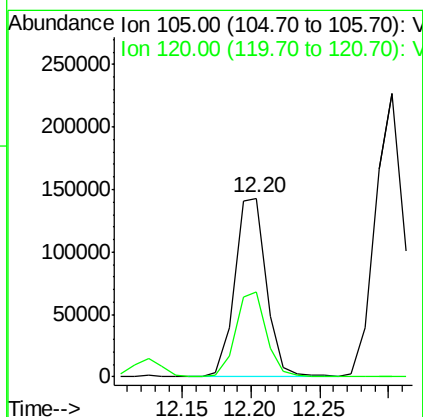
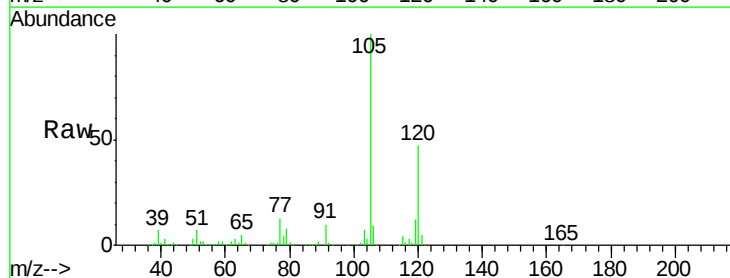
Manual Integrations
 APPROVED

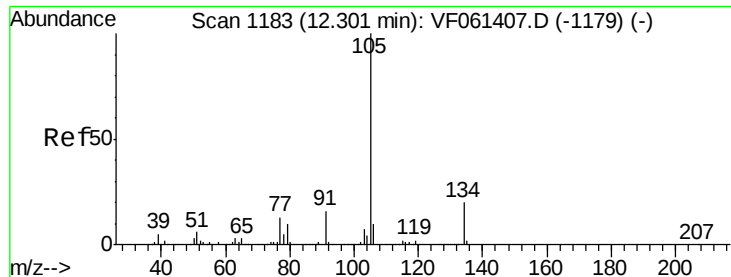
MMDadoda
 1/17/2019 1:23:51 PM



#84
 1,2,4-Trimethylbenzene
 Concen: 21.214 ug/l
 RT: 12.20 min Scan# 1173
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	229929		
120	47.5		24.9	74.6





#85

sec-Butylbenzene

Concen: 22.400 ug/l

RT: 12.30 min Scan# 1183

Delta R.T. 0.00 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

Instrument :

MSVOA_F

ClientSampleId :

VF0116SBS01

Tot Ion:105 Resp: 331290

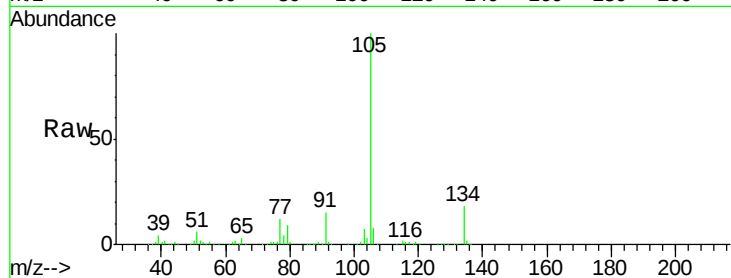
Ion Ratio Lower Upper

105 100

134 18.2 10.0 30.0

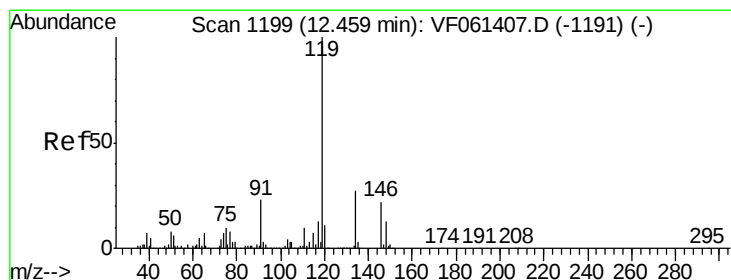
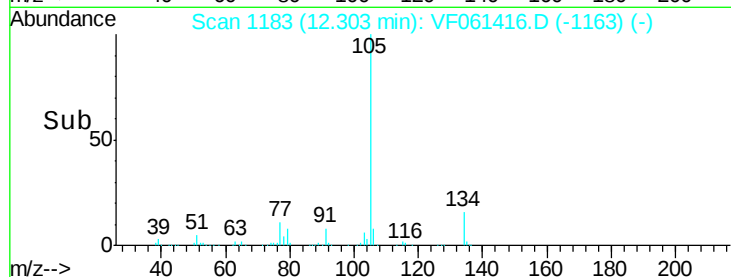
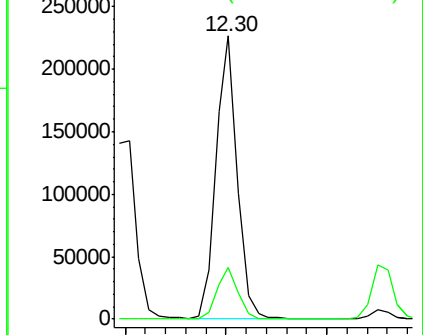
Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 22.487 ug/l

RT: 12.45 min Scan# 1198

Delta R.T. -0.01 min

Lab File: VF061416.D

Acq: 16 Jan 2019 17:17

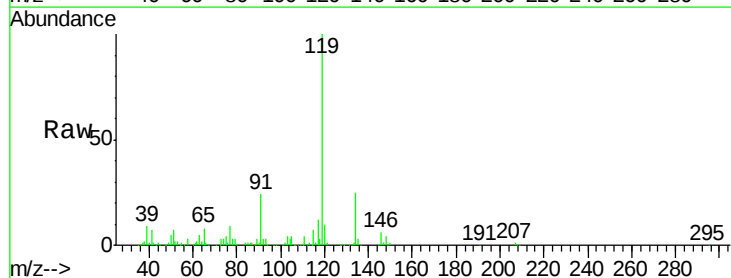
Tgt Ion:119 Resp: 273016

Ion Ratio Lower Upper

119 100

134 24.7 13.4 40.2

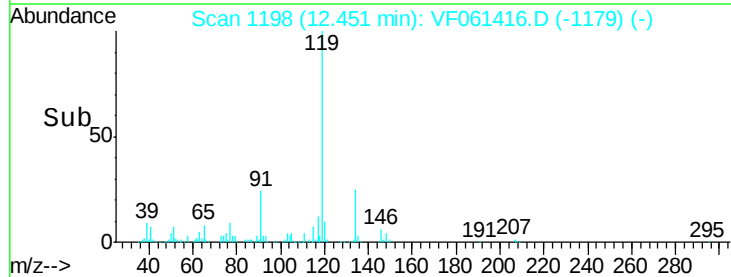
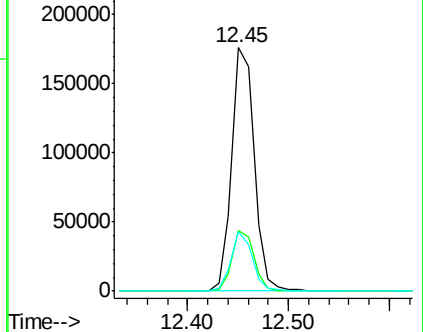
91 24.2 11.4 34.2

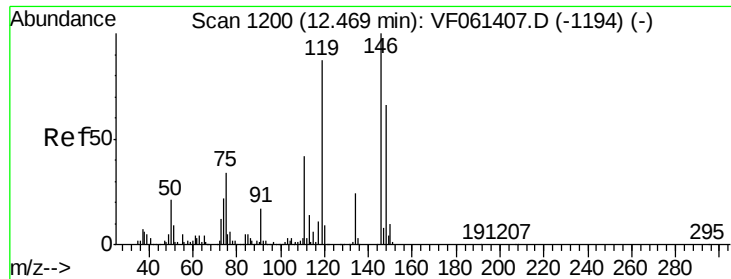


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): VF0





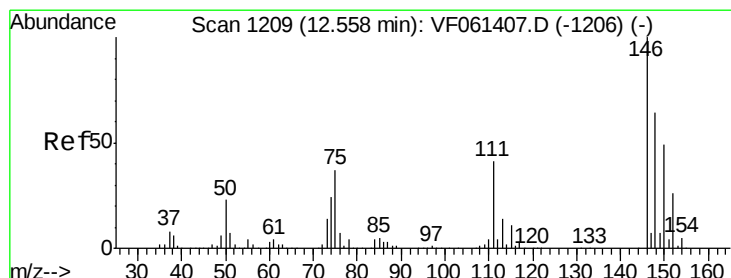
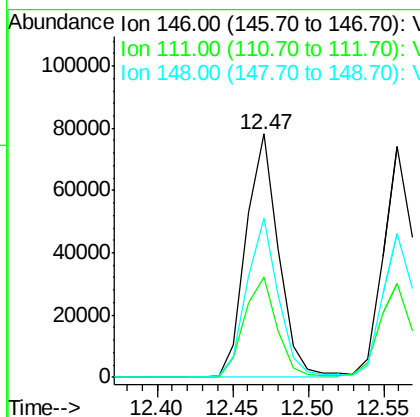
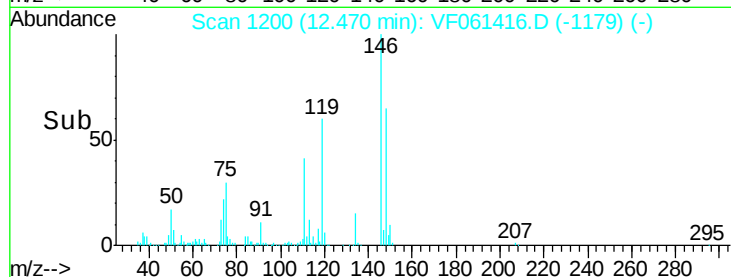
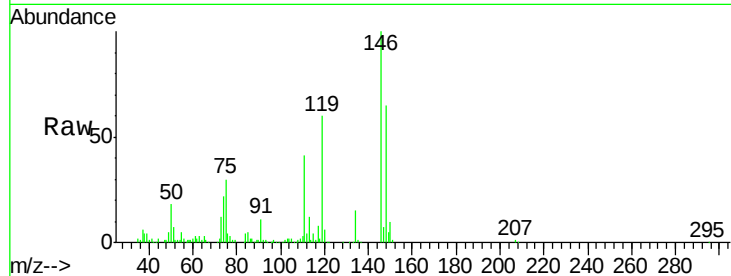
#87
 1,3-Dichlorobenzene
 Concen: 20.360 ug/l
 RT: 12.47 min Scan# 1200
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBS01

Tot Ion	Ratio	Lower	Upper
146	100		
111	41.4	21.1	63.4
148	65.4	32.9	98.6

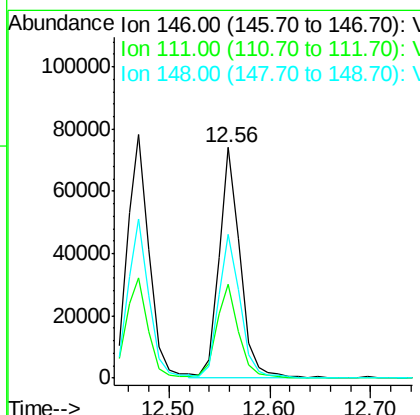
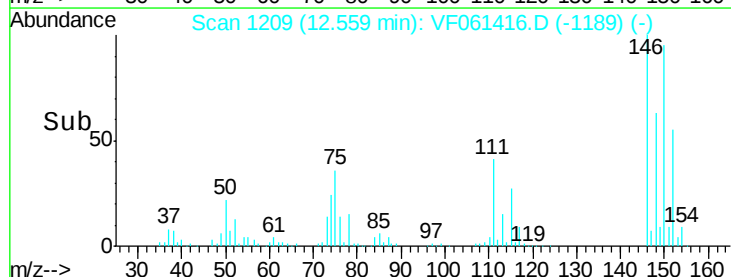
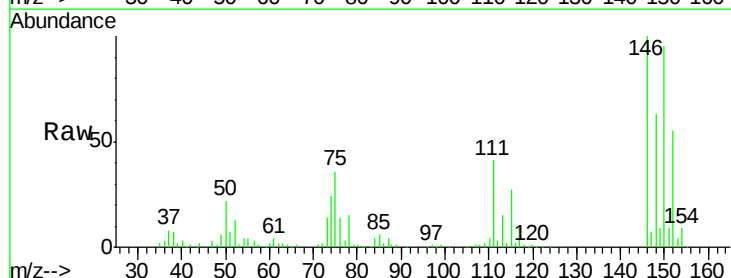
Manual Integrations
 APPROVED

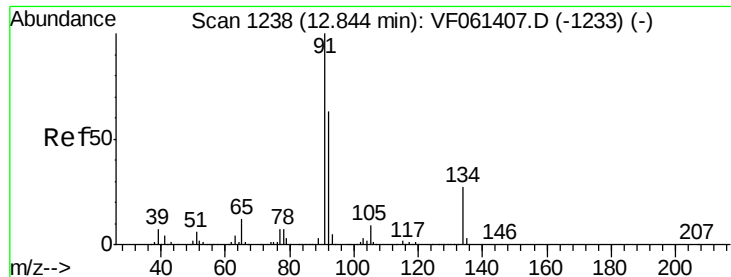
MMDadoda
 1/17/2019 1:23:51 PM



#88
 1,4-Dichlorobenzene
 Concen: 20.713 ug/l
 RT: 12.56 min Scan# 1209
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.8	20.8	62.2
148	62.6	32.1	96.5





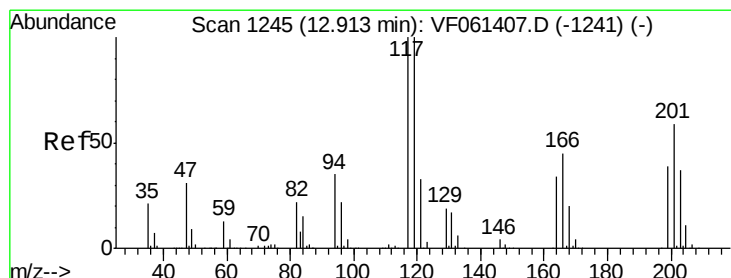
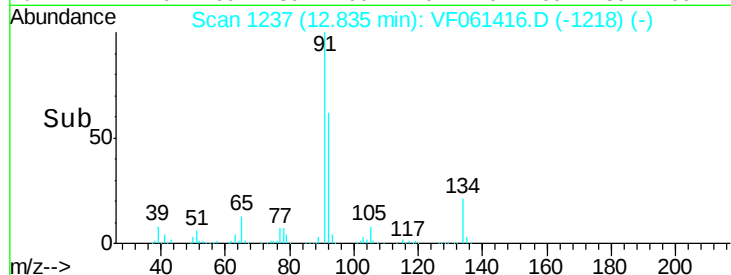
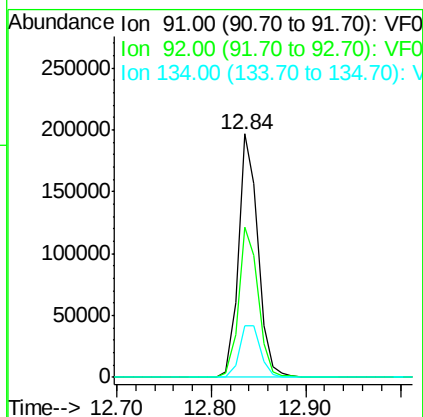
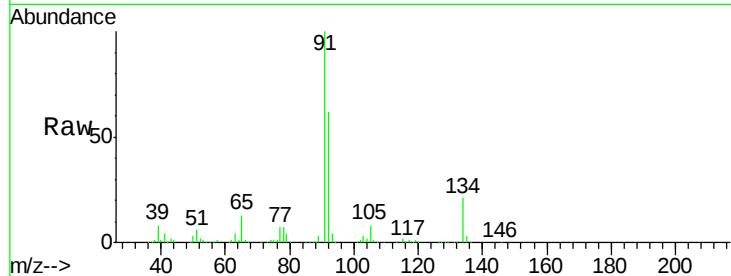
#89
n-Butylbenzene
Concen: 22.407 ug/l
RT: 12.84 min Scan# 1237
Delta R.T. -0.01 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleID :
VF0116SBS01

Tot Ion	Ratio	Resp	Lower	Upper
91	100	280550		
92	61.9		31.6	94.7
134	21.3		13.6	40.8

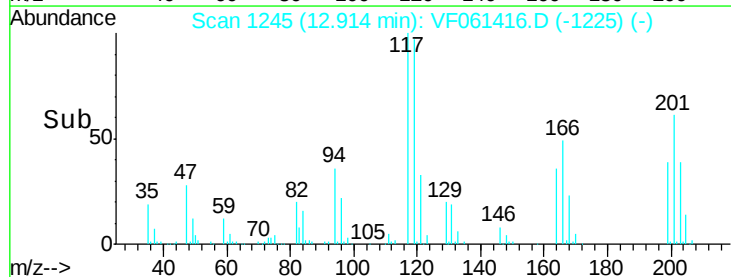
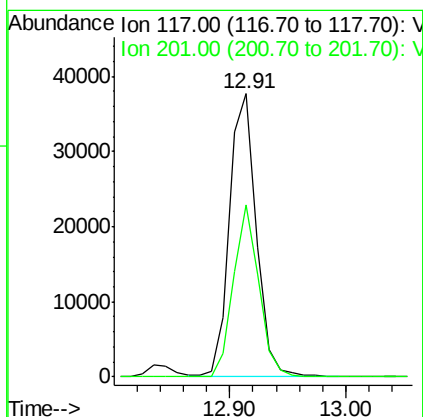
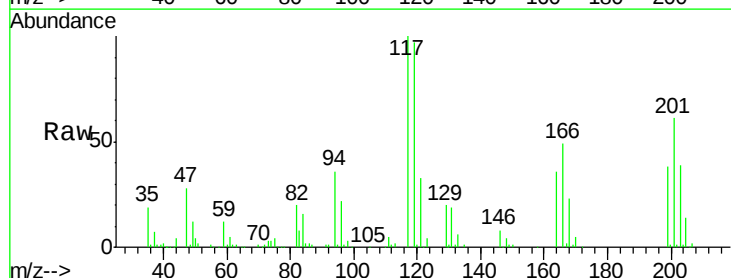
Manual Integrations
APPROVED

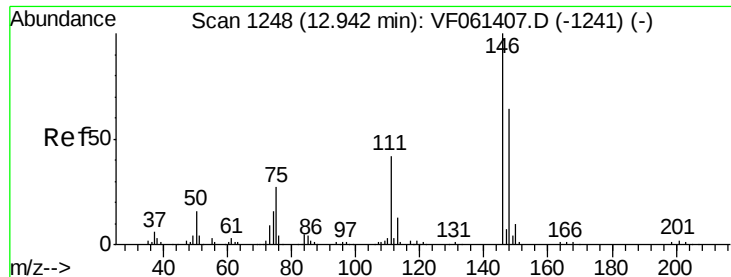
MMDadoda
1/17/2019 1:23:51 PM



#90
Hexachloroethane
Concen: 21.086 ug/l
RT: 12.91 min Scan# 1245
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
117	100	60346		
201	60.9		29.3	87.8





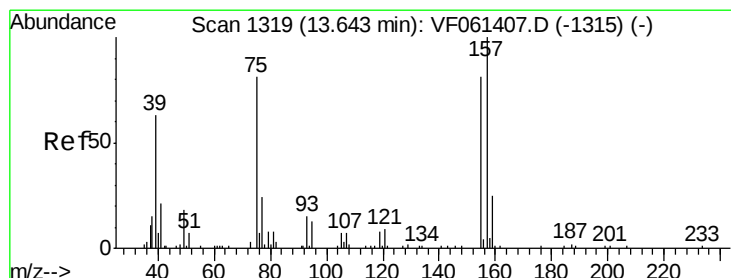
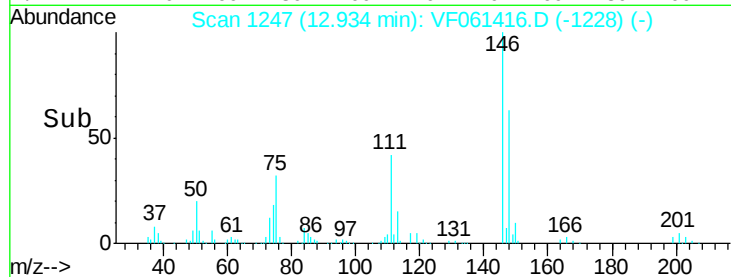
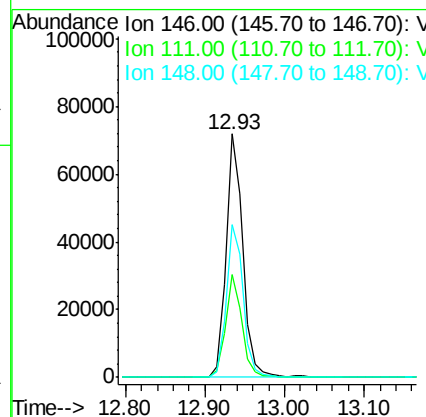
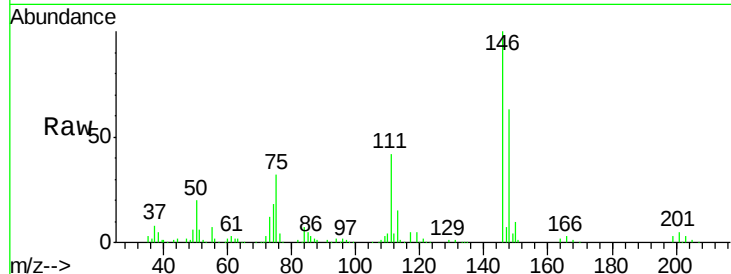
#91
 1,2-Dichlorobenzene
 Concen: 20.849 ug/l
 RT: 12.93 min Scan# 1247
 Delta R.T. -0.01 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBSD01

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.5	21.1	63.3
148	62.7	31.9	95.7

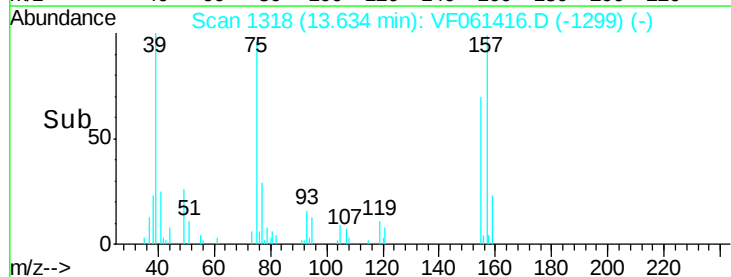
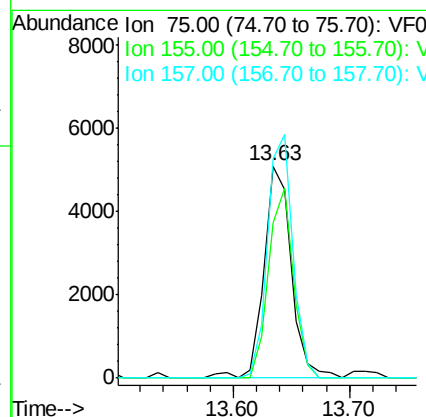
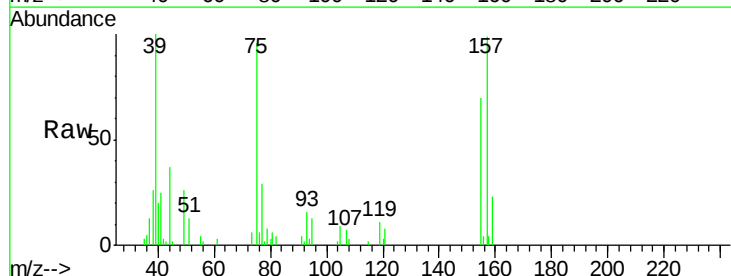
Manual Integrations
 APPROVED

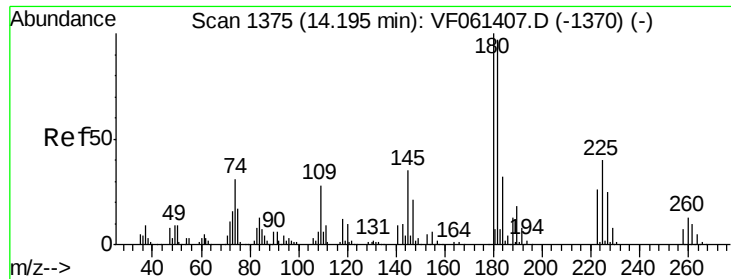
MMDadoda
 1/17/2019 1:23:51 PM



#92
 1,2-Dibromo-3-Chloropropane
 Concen: 20.139 ug/l
 RT: 13.63 min Scan# 1318
 Delta R.T. -0.01 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
75	100		
155	73.0	49.7	149.1
157	103.4	61.4	184.1





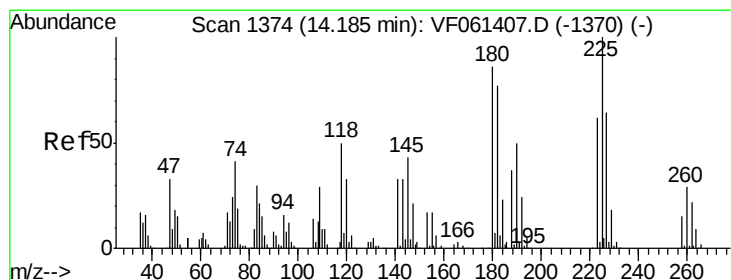
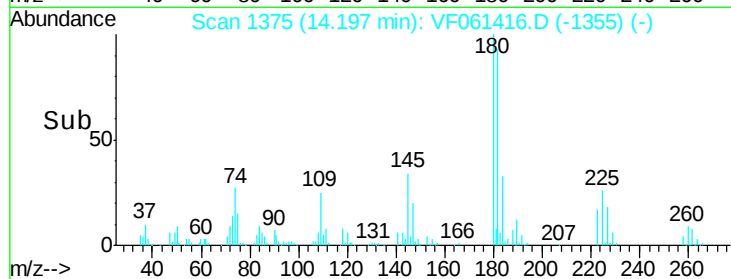
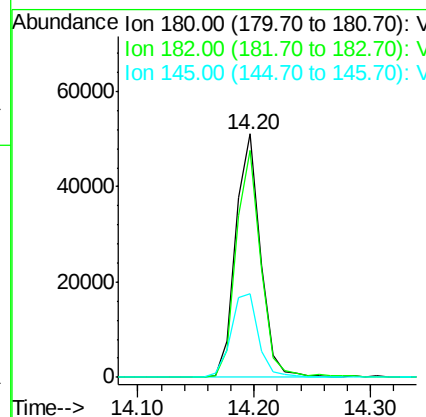
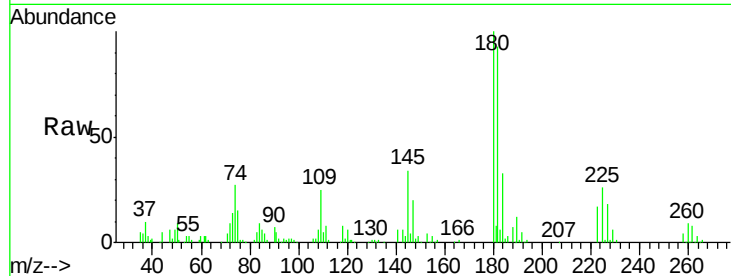
#93
 1,2,4-Trichlorobenzene
 Concen: 21.033 ug/l
 RT: 14.20 min Scan# 1375
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Instrument :
 MSVOA_F
 ClientSampleId :
 VF0116SBSD01

Tot Ion	Ratio	Resp	Lower	Upper
180	100	75897		
182	93.3		48.5	145.6
145	34.2		17.5	52.6

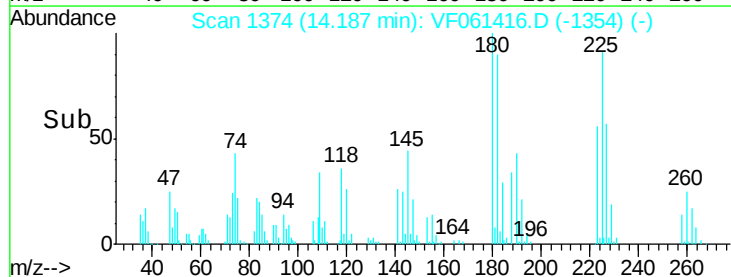
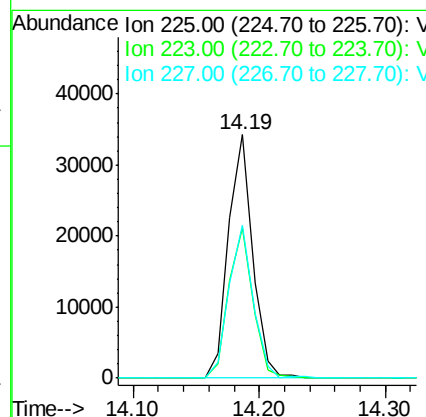
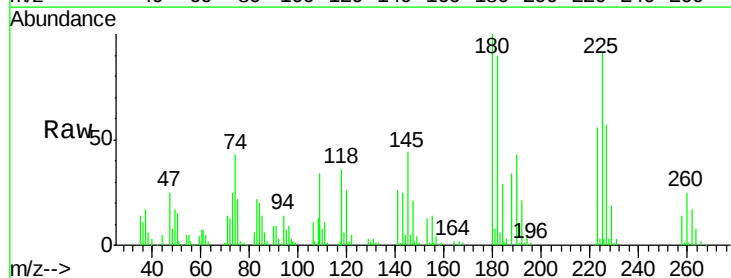
Manual Integrations
 APPROVED

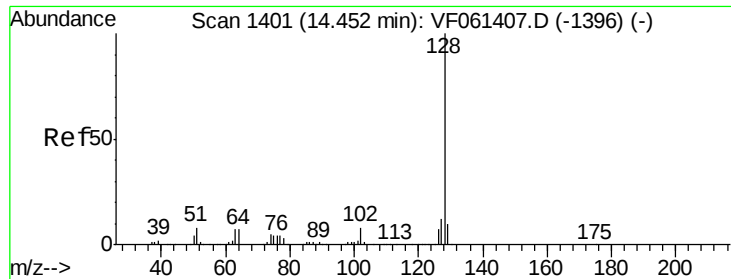
MMDadoda
 1/17/2019 1:23:51 PM



#94
 Hexachlorobutadiene
 Concen: 20.385 ug/l
 RT: 14.19 min Scan# 1374
 Delta R.T. 0.00 min
 Lab File: VF061416.D
 Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Resp	Lower	Upper
225	100	45644		
223	61.6		31.1	93.2
227	62.9		32.2	96.6





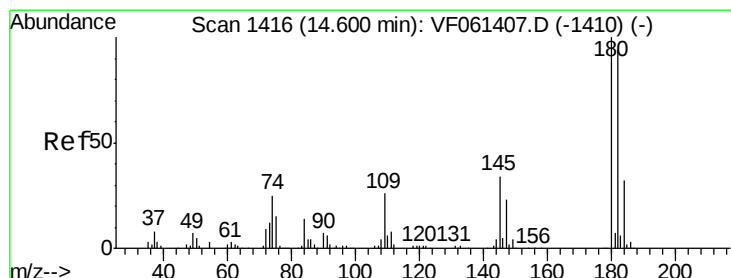
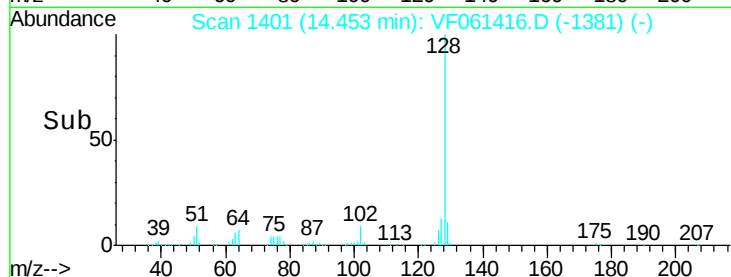
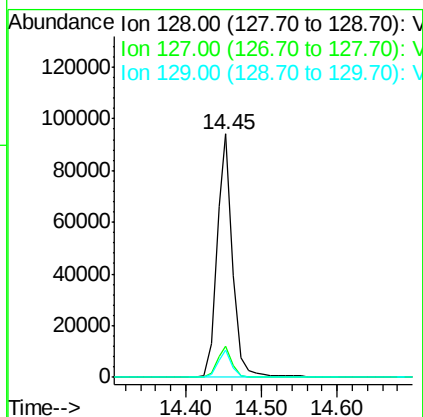
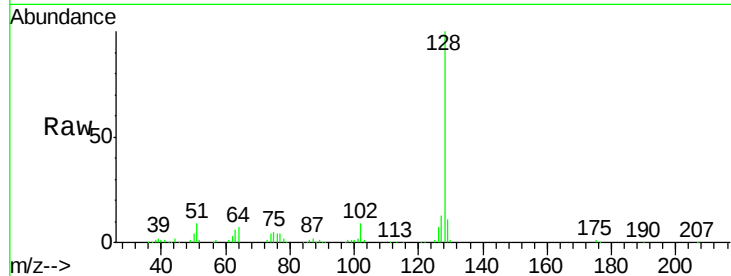
#95
Naphthalene
Concen: 19.854 ug/l
RT: 14.45 min Scan# 1401
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Instrument :
MSVOA_F
ClientSampleId :
VF0116SBSD01

Tot Ion	Ratio	Lower	Upper
128	100		
127	13.0	9.5	14.3
129	11.3	8.4	12.6

Manual Integrations
APPROVED

MMDadoda
1/17/2019 1:23:51 PM



#96
1,2,3-Trichlorobenzene
Concen: 20.275 ug/l
RT: 14.60 min Scan# 1416
Delta R.T. 0.00 min
Lab File: VF061416.D
Acq: 16 Jan 2019 17:17

Tgt Ion	Ratio	Lower	Upper
180	100		
182	92.1	47.0	141.2
145	31.2	17.1	51.2

