

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD051619\
 Data File : VD062419.D
 Acq On : 16 May 2019 16:00
 Operator : FY/SY
 Sample : K2823-05
 Misc : 6.09g/5mL/MSVOA D/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 12-B

Quant Time: May 17 02:29:32 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D050719S.M
 Quant Title : SW846 8260
 QLast Update : Tue May 07 14:26:29 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.04	168	566598	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	8.22	114	798966	50.00	ug/l	0.03
63) Chlorobenzene-d5	12.38	117	664885	50.00	ug/l	0.02
72) 1,4-Dichlorobenzene-d4	14.52	152	309125	50.00	ug/l	0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.46	65	247721	47.05	ug/l	0.03
Spiked Amount			Recovery	=	94.10%	
35) Dibromofluoromethane	6.93	113	292505	44.12	ug/l	0.03
Spiked Amount			Recovery	=	88.24%	
50) Toluene-d8	10.42	98	605176	37.86	ug/l	0.02
Spiked Amount			Recovery	=	75.72%	
62) 4-Bromofluorobenzene	13.56	95	250538	39.03	ug/l	0.01
Spiked Amount			Recovery	=	78.06%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.15	94	954	1.058	ug/l #	12
15) Acrylonitrile	4.23	53	18094	25.612	ug/l #	46
16) Acetone	3.22	43	143895	130.313	ug/l #	80
20) Methylene Chloride	3.81	84	17139	3.717	ug/l #	69
25) 2-Butanone	6.07	43	11193	9.293	ug/l	99
29) Tetrahydrofuran	6.64	42	804	1.449	ug/l #	1
31) Cyclohexane	6.98	56	108640	19.665	ug/l #	54
36) 1,1-Dichloropropene	7.04	75	45283	6.913	ug/l #	45
37) Ethyl Acetate	6.07	43	11193	4.029	ug/l #	64
38) Carbon Tetrachloride	7.04	117	58281	6.428	ug/l #	12
39) Methylcyclohexane	8.87	83	104392	16.632	ug/l	91
43) Isopropyl Acetate	9.29	43	14899	3.782	ug/l #	43
47) Bromodichloromethane	9.40	83	7952	1.093	ug/l #	26
48) Methyl methacrylate	9.15	41	30961	12.758	ug/l	98
51) 4-Methyl-2-Pentanone	10.36	43	24961	9.856	ug/l #	63
56) Ethyl methacrylate	11.10	69	15320	4.329	ug/l #	1
59) 2-Hexanone	11.49	43	37370	20.020	ug/l #	31
74) N-amyl acetate	13.22	43	18363	3.780	ug/l #	53
76) 1,2,3-Trichloropropane	13.56	75	106896	29.098	ug/l #	43
81) trans-1,4-Dichloro-2-buten	13.56	75	107941	104.079	ug/l #	18
89) n-Butylbenzene	14.81	91	19142	1.241	ug/l	77
90) Hexachloroethane	15.06	117	10437	2.234	ug/l #	20

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 571

Delta R.T. 0.02 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampled :

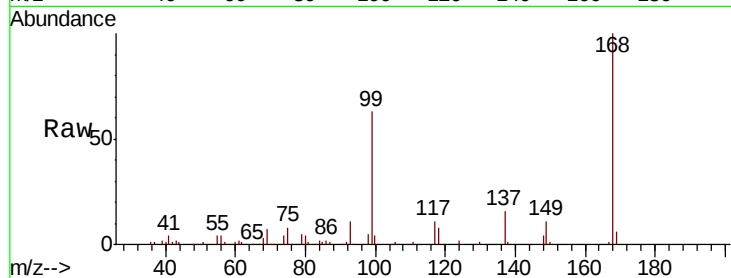
12-B

Tot Ion:168 Resp: 566598

Ion Ratio Lower Upper

168 100

99 63.3 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.04

200000

150000

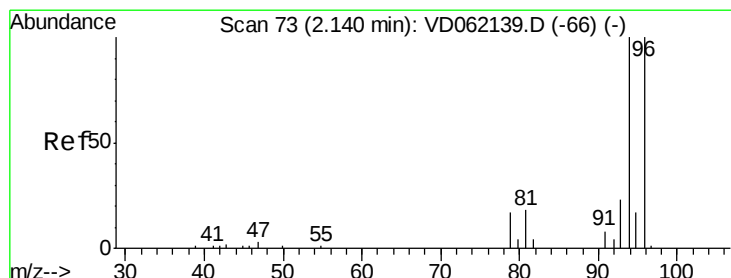
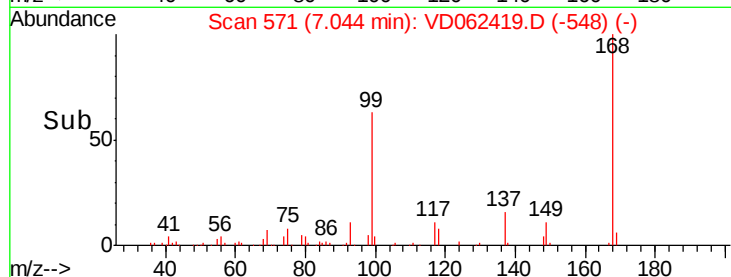
100000

50000

0

Time-->

6.90 7.00 7.10 7.20



#5

Bromomethane

Concen: 1.058 ug/l

RT: 2.15 min Scan# 74

Delta R.T. 0.01 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

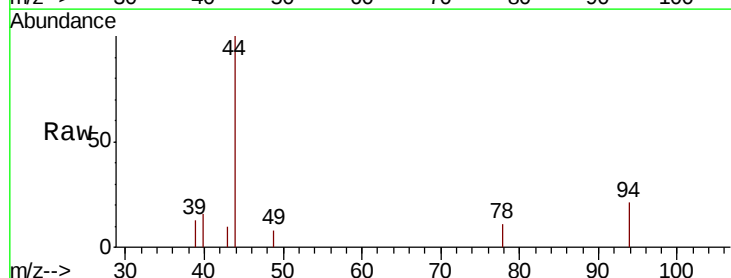
Tgt Ion: 94 Resp: 954

Ion Ratio Lower Upper

94 100

96 0.0 76.6 115.0#

93 0.0 18.5 27.7#



Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC

1200

1000

800

600

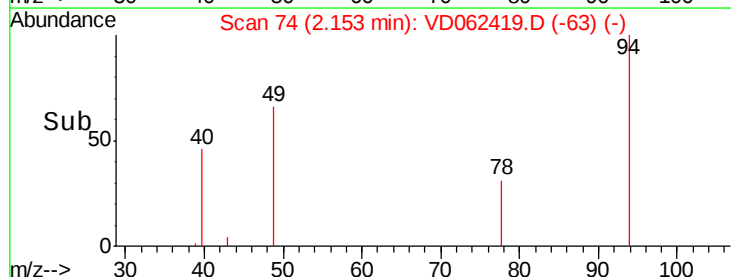
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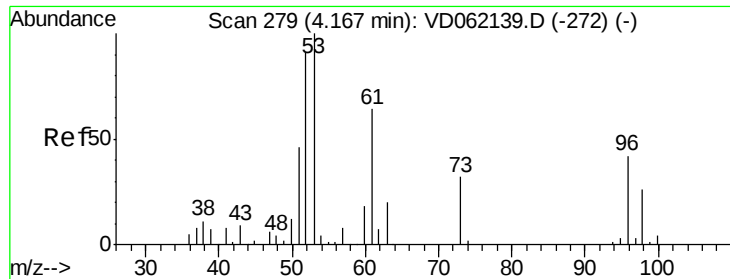
200

0

Time-->

2.15 2.20





#15

Acrylonitrile

Concen: 25.612 ug/l

RT: 4.23 min Scan# 285

Delta R.T. 0.06 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampleId :

12-B

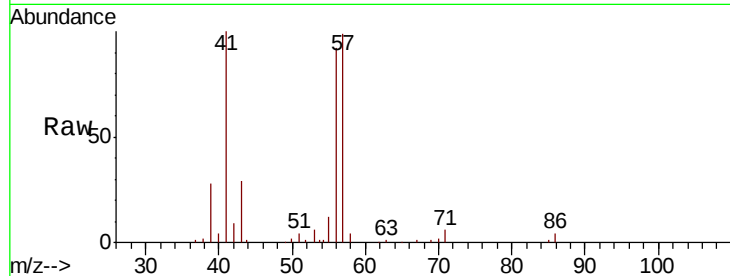
Tot Ion: 53 Resp: 18094

Ion Ratio Lower Upper

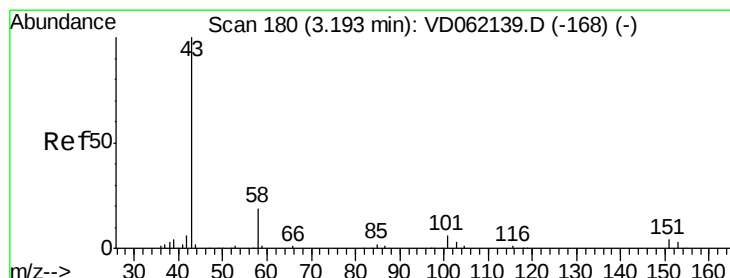
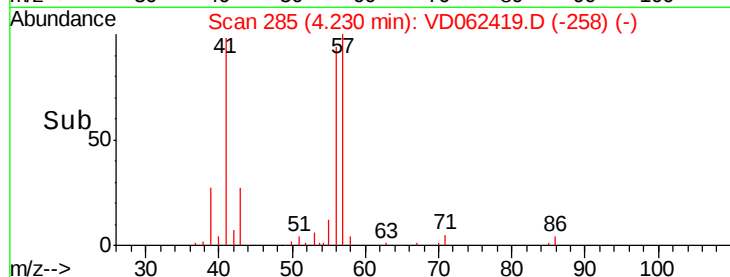
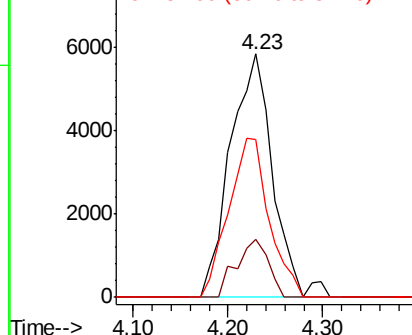
53 100

52 21.1 65.0 97.4#

51 58.0 32.6 48.8#



Abundance Ion 53.00 (52.70 to 53.70): VDC
Ion 52.00 (51.70 to 52.70): VDC
Ion 51.00 (50.70 to 51.70): VDC



#16

Acetone

Concen: 130.313 ug/l

RT: 3.22 min Scan# 182

Delta R.T. 0.02 min

Lab File: VD062419.D

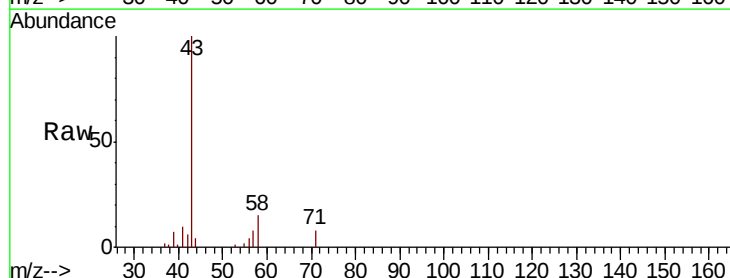
Acq: 16 May 2019 16:00

Tgt Ion: 43 Resp: 143895

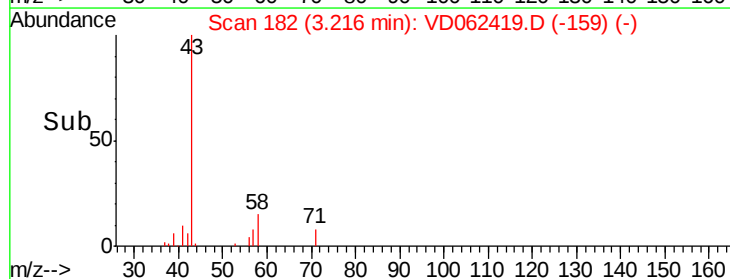
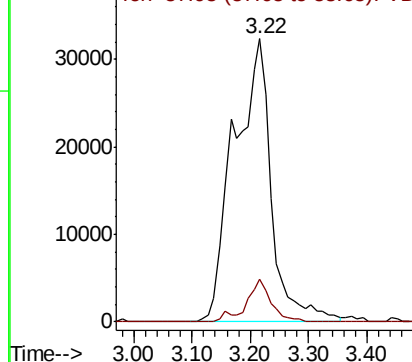
Ion Ratio Lower Upper

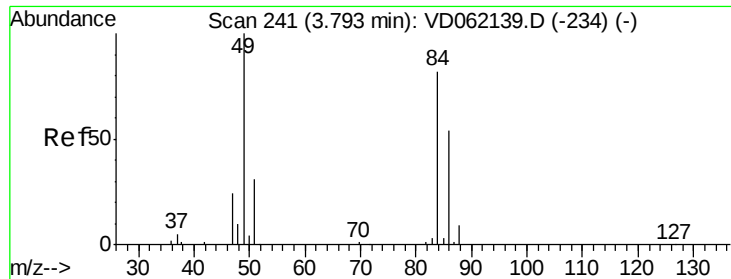
43 100

58 15.1 19.9 29.9#



Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 57.95 (57.65 to 58.65): VDC

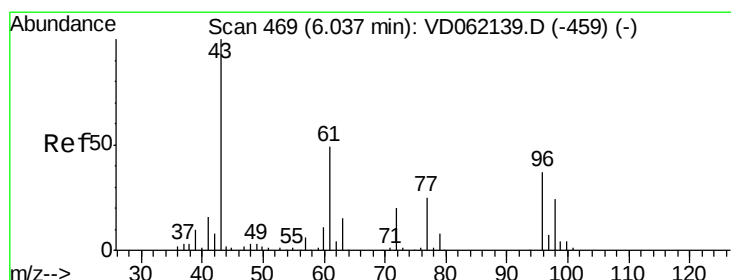
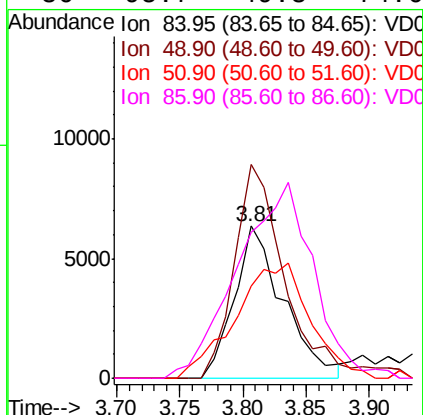
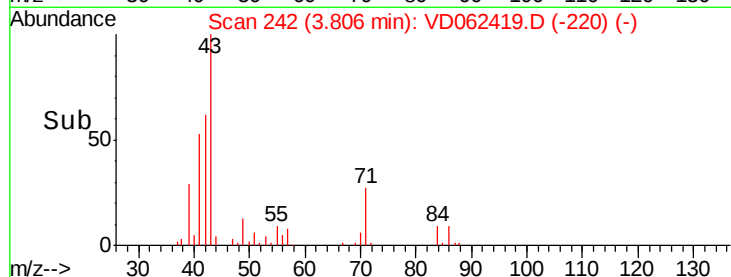
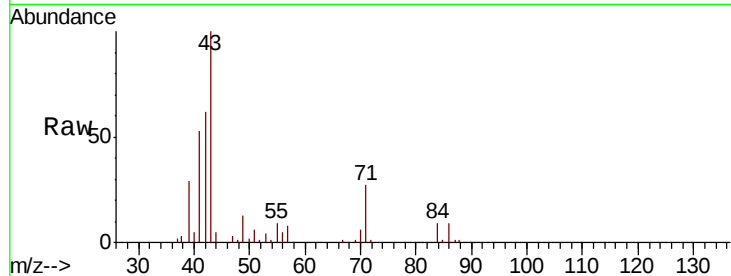




#20
Methvlene Chloride
Concen: 3.717 ug/l
RT: 3.81 min Scan# 242
Delta R.T. 0.01 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

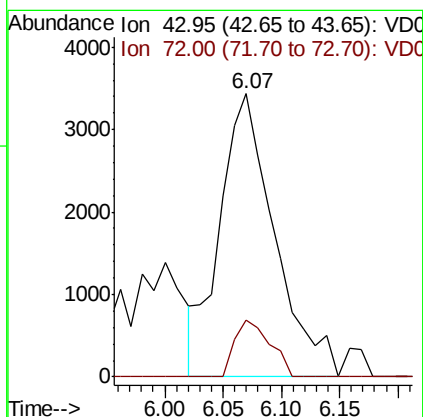
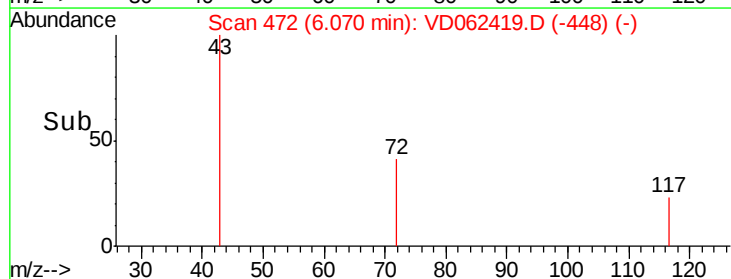
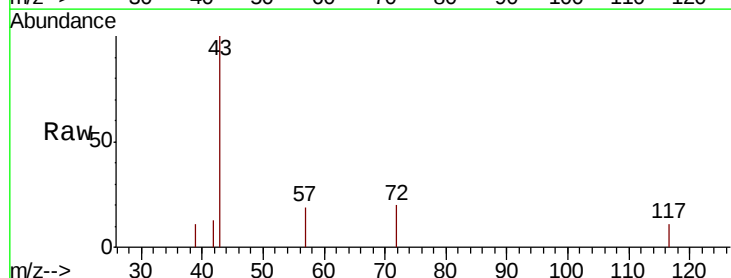
Instrument :
MSVOA_D
ClientSampled :
12-B

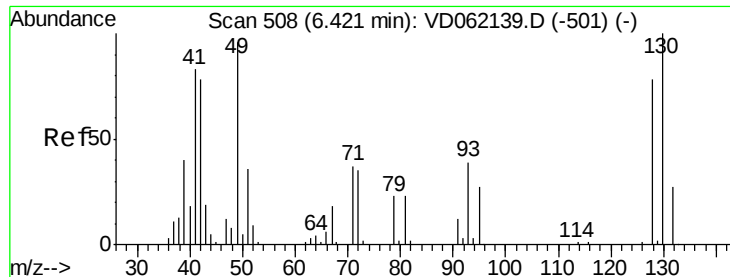
Tot Ion: 84 Resp: 17139
Ion Ratio Lower Upper
84 100
49 140.7 94.0 141.0
51 61.0 29.0 43.4#
86 95.7 49.8 74.6#



#25
2-Butanone
Concen: 9.293 ug/l
RT: 6.07 min Scan# 472
Delta R.T. 0.03 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

Tgt Ion: 43 Resp: 11193
Ion Ratio Lower Upper
43 100
72 19.9 16.2 24.4





#29

Tetrahydrofuran

Concen: 1.449 ug/l

RT: 6.64 min Scan# 530

Delta R.T. 0.22 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampled :

12-B

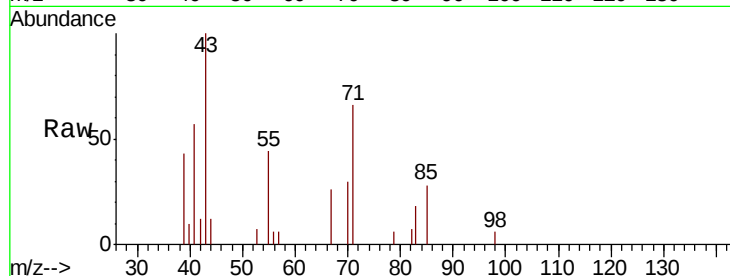
Tot Ion: 42 Resp: 804

Ion Ratio Lower Upper

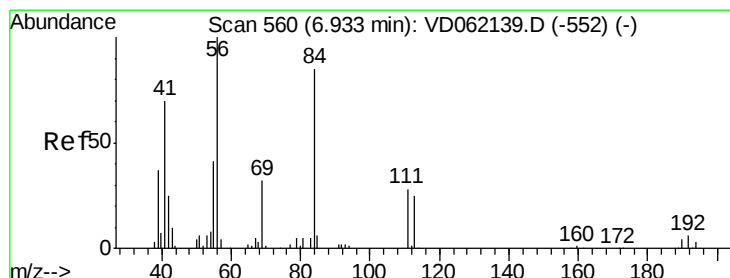
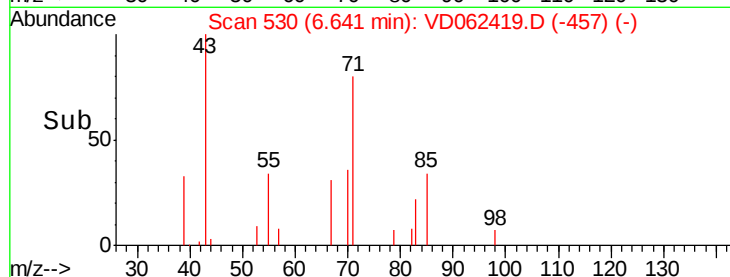
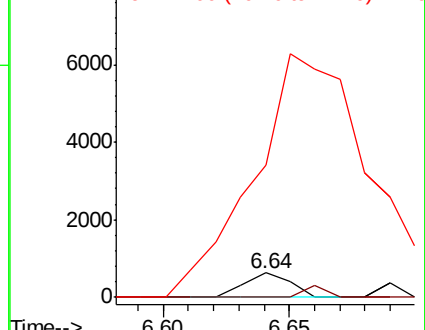
42 100

72 23.3 37.8 56.6#

71 2499.1 36.7 55.1#



Abundance Ion 42.00 (41.70 to 42.70): VDC
Ion 72.00 (71.70 to 72.70): VDC
Ion 71.00 (70.70 to 71.70): VDC



#31

Cyclohexane

Concen: 19.665 ug/l

RT: 6.98 min Scan# 564

Delta R.T. 0.04 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

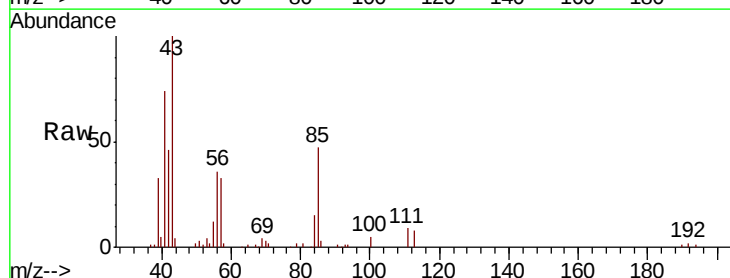
Tgt Ion: 56 Resp: 108640

Ion Ratio Lower Upper

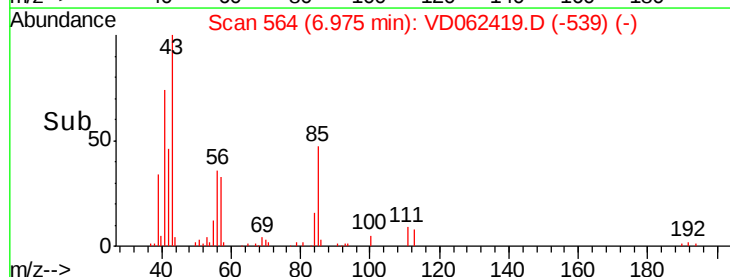
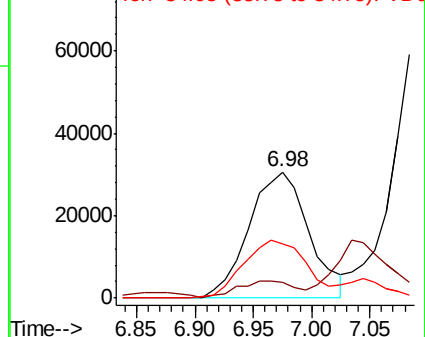
56 100

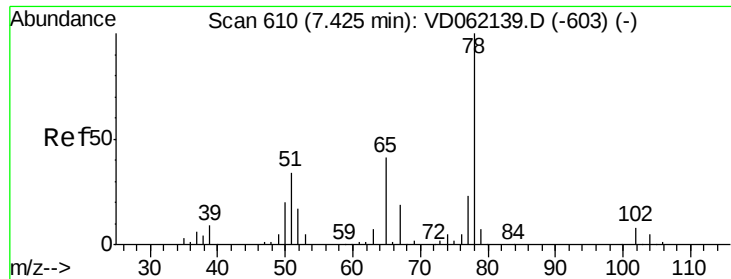
69 12.4 25.8 38.6#

84 43.3 72.2 108.4#



Abundance Ion 55.95 (55.65 to 56.65): VDC
Ion 69.00 (68.70 to 69.70): VDC
Ion 84.05 (83.75 to 84.75): VDC





#33

1,2-Dichloroethane-d4

Concen: 47.046 ug/l

RT: 7.46 min Scan# 613

Delta R.T. 0.03 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampleId :

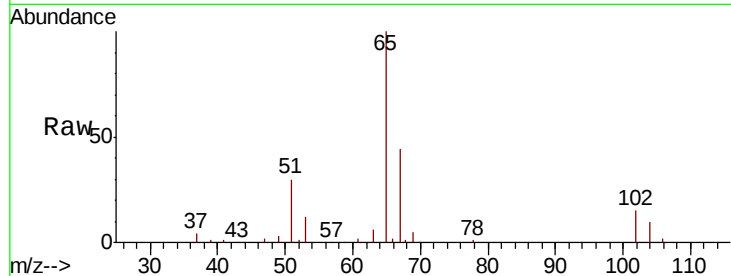
12-B

Tot Ion: 65 Resp: 247721

Ion Ratio Lower Upper

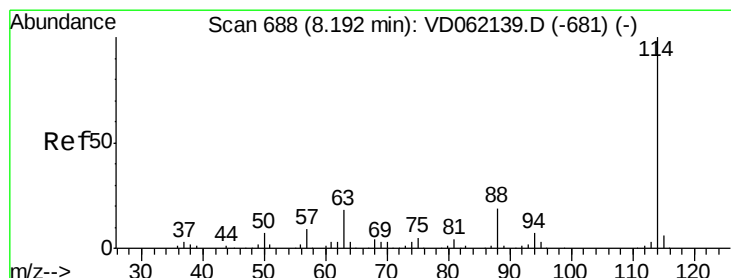
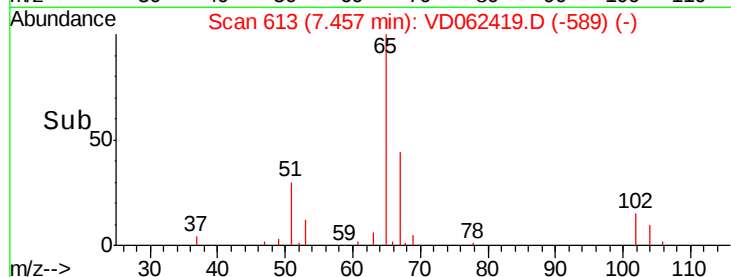
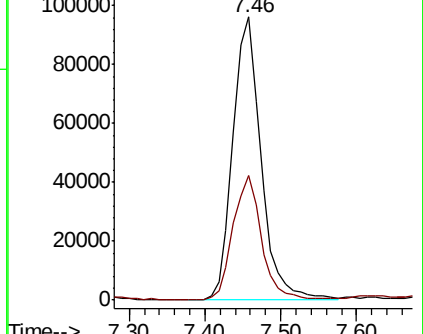
65 100

67 44.2 0.0 98.0



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.22 min Scan# 691

Delta R.T. 0.03 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

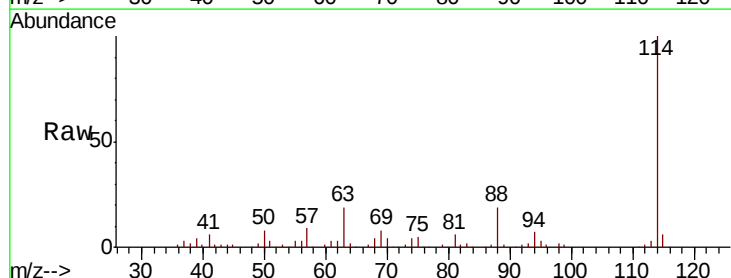
Tgt Ion: 114 Resp: 798966

Ion Ratio Lower Upper

114 100

63 18.6 0.0 32.4

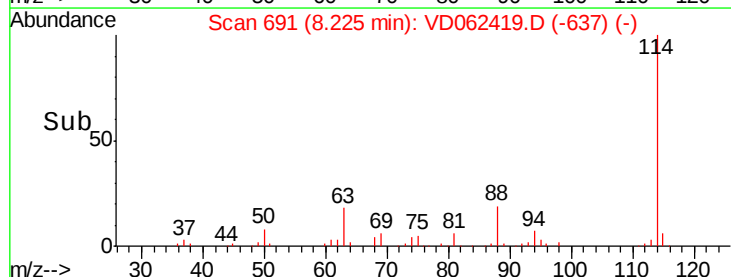
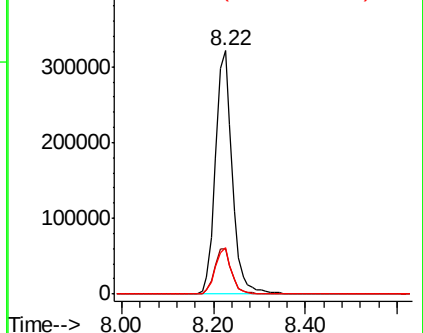
88 18.9 0.0 33.6

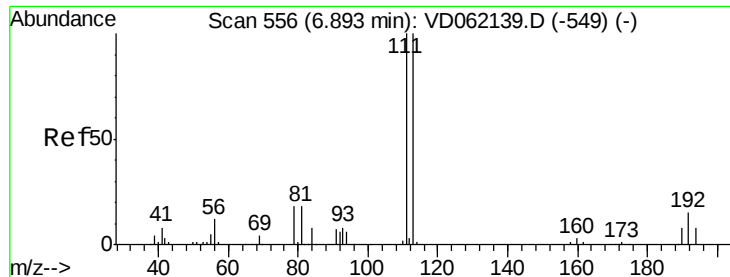


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

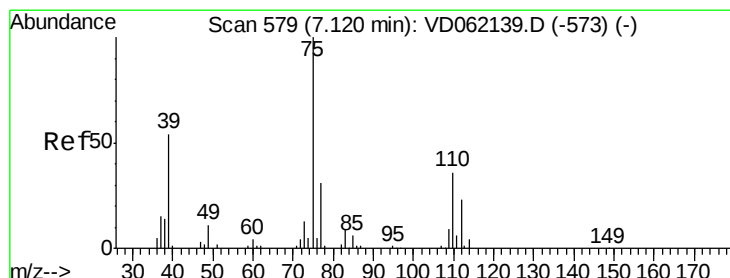
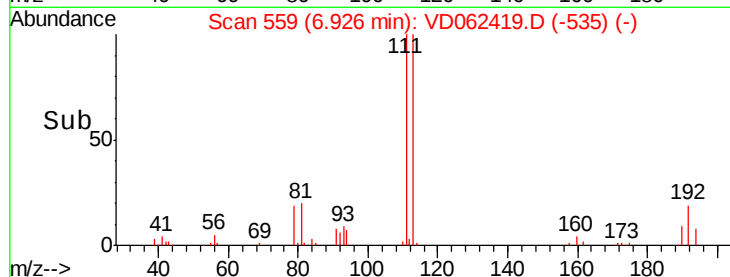
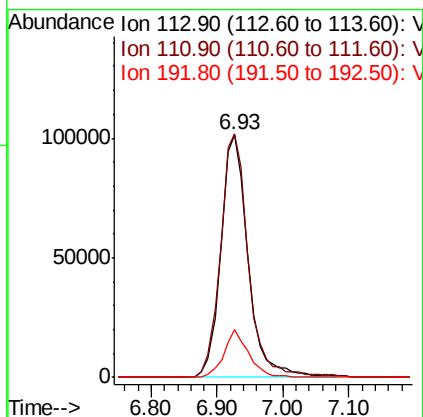
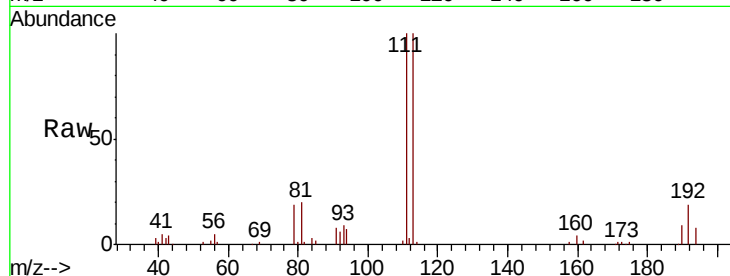




#35
 Dibromofluoromethane
 Concen: 44.124 ug/l
 RT: 6.93 min Scan# 559
 Delta R.T. 0.03 min
 Lab File: VD062419.D
 Acq: 16 May 2019 16:00

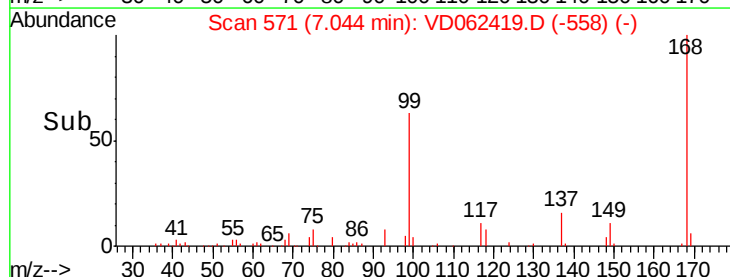
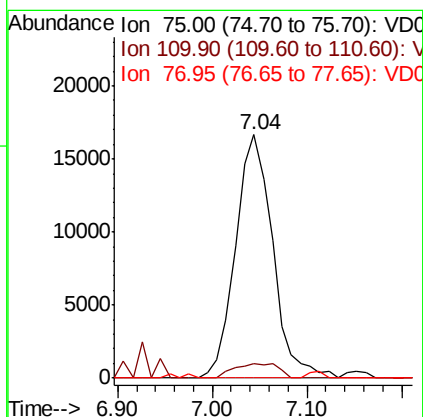
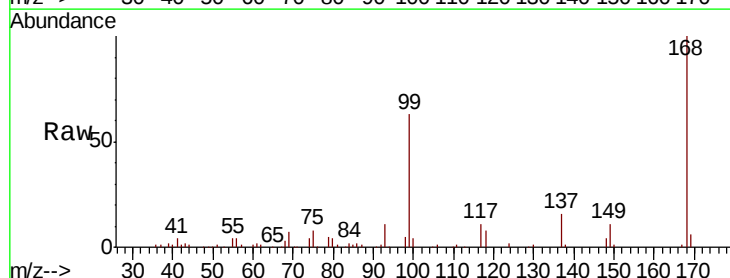
Instrument :
 MSVOA_D
 ClientSampled :
 12-B

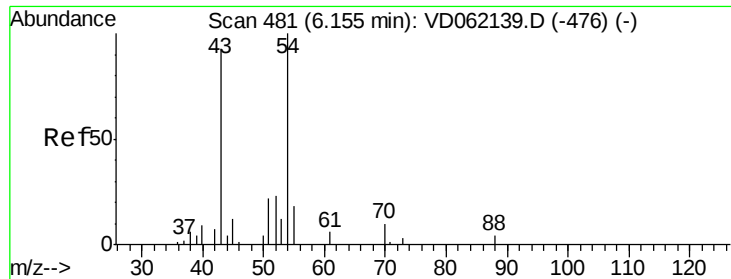
Tot Ion:113 Resp: 292505
 Ion Ratio Lower Upper
 113 100
 111 100.2 78.5 117.7
 192 19.5 13.0 19.4#



#36
 1,1-Dichloropropene
 Concen: 6.913 ug/l
 RT: 7.04 min Scan# 571
 Delta R.T. -0.08 min
 Lab File: VD062419.D
 Acq: 16 May 2019 16:00

Tgt Ion: 75 Resp: 45283
 Ion Ratio Lower Upper
 75 100
 110 5.7 19.1 57.1#
 77 0.0 25.6 38.4#

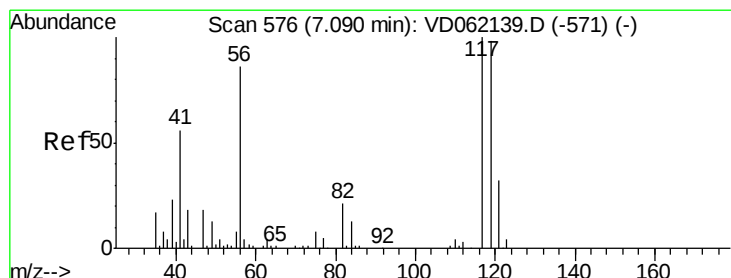
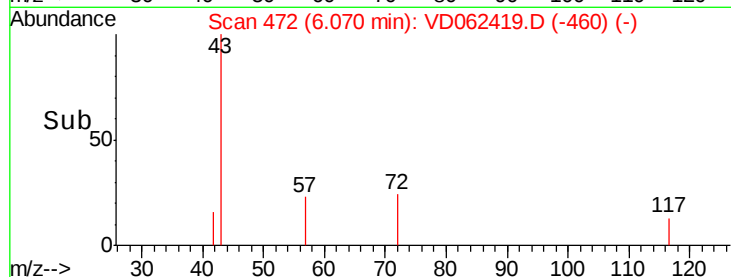
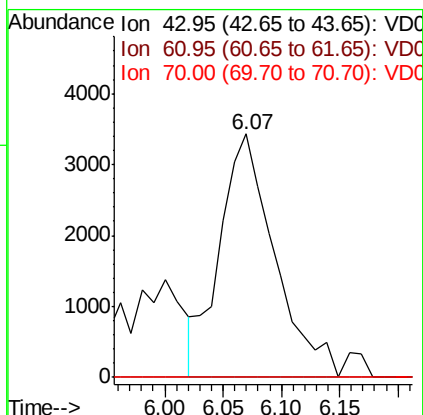
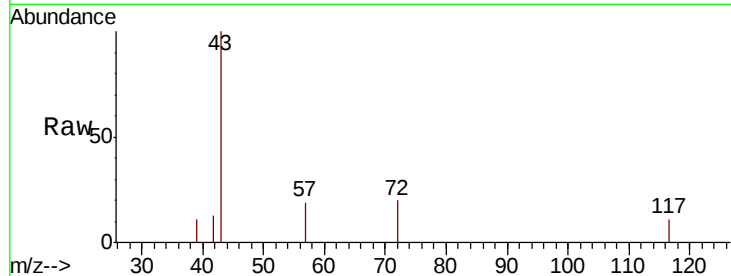




#37
Ethyl Acetate
Concen: 4.029 ug/l
RT: 6.07 min Scan# 472
Delta R.T. -0.09 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

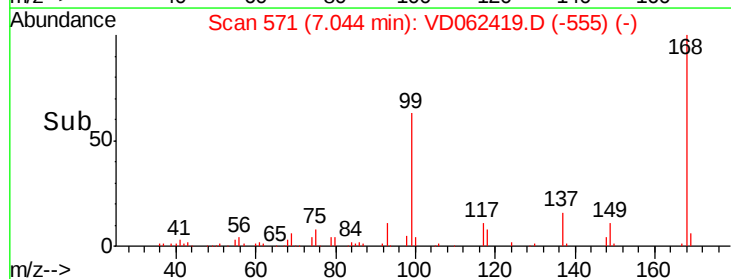
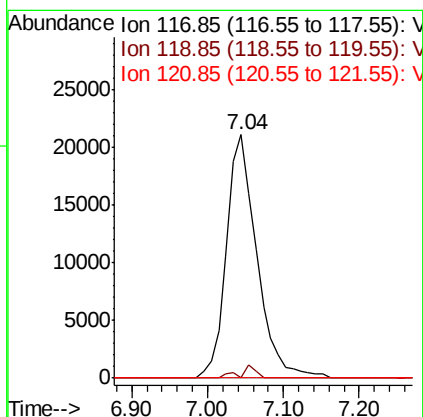
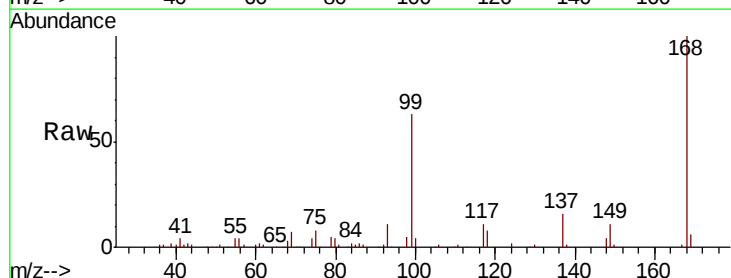
Instrument :
MSVOA_D
ClientSampled :
12-B

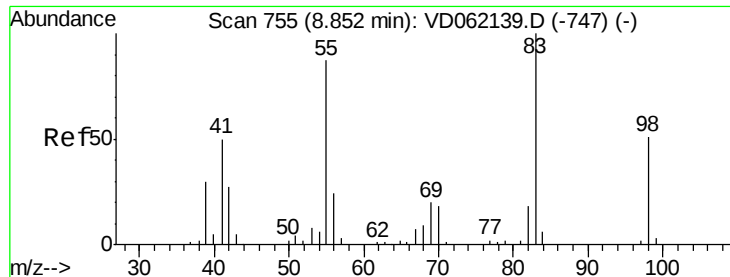
Tot Ion: 43 Resp: 11193
Ion Ratio Lower Upper
43 100
61 0.0 14.7 22.1#
70 0.0 7.8 11.6#



#38
Carbon Tetrachloride
Concen: 6.428 ug/l
RT: 7.04 min Scan# 571
Delta R.T. -0.05 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

Tgt Ion: 117 Resp: 58281
Ion Ratio Lower Upper
117 100
119 0.0 75.8 113.8#
121 0.0 25.9 38.9#

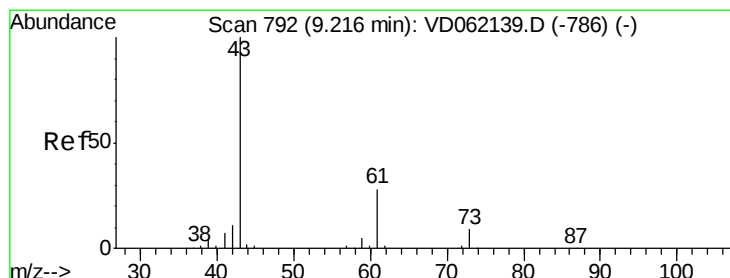
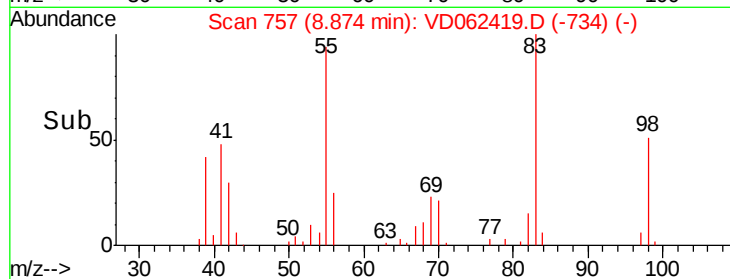
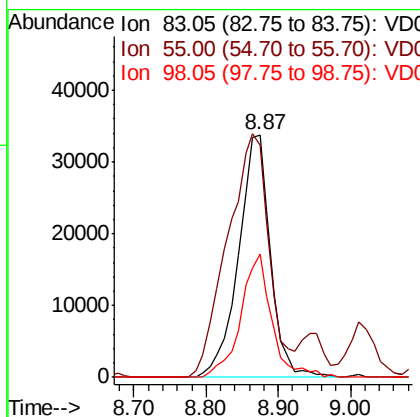
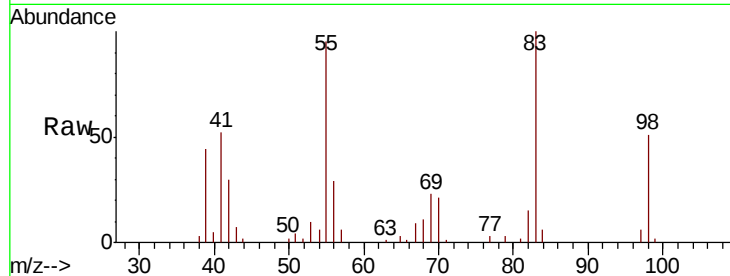




#39
Methvlcvclohexane
Concen: 16.632 ug/l
RT: 8.87 min Scan# 757
Delta R.T. 0.02 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

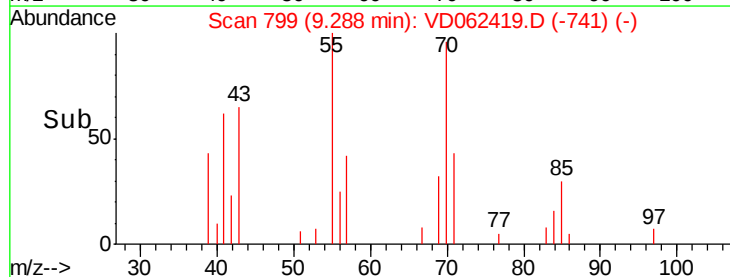
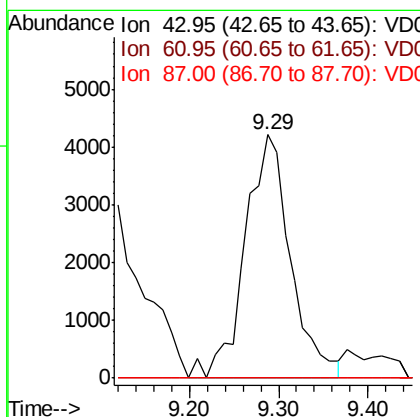
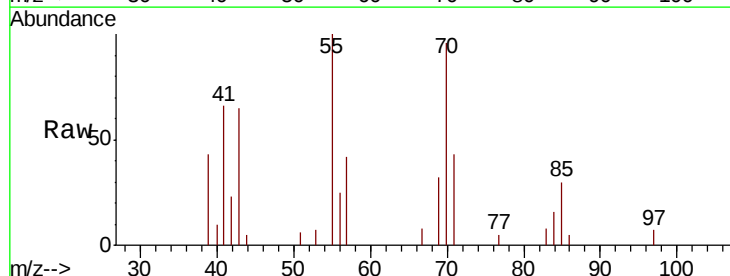
Instrument :
MSVOA_D
ClientSampleId :
12-B

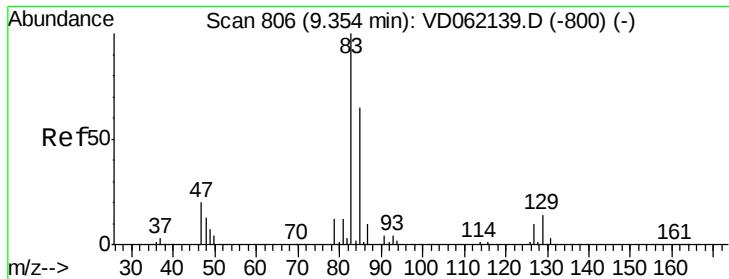
Tot Ion: 83 Resp: 104392
Ion Ratio Lower Upper
83 100
55 95.4 68.2 102.4
98 51.0 38.2 57.4



#43
Isopropyl Acetate
Concen: 3.782 ug/l
RT: 9.29 min Scan# 799
Delta R.T. 0.07 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

Tgt Ion: 43 Resp: 14899
Ion Ratio Lower Upper
43 100
61 0.0 25.1 37.7#
87 0.0 0.0 0.0





#47

Bromodichloromethane

Concen: 1.093 ug/l

RT: 9.40 min Scan# 810

Delta R.T. 0.04 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampleId :

12-B

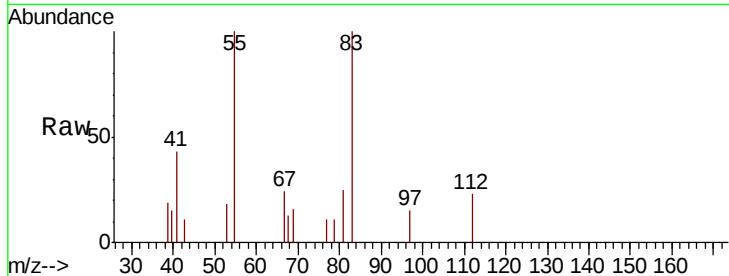
Tot Ion: 83 Resp: 7952

Ion Ratio Lower Upper

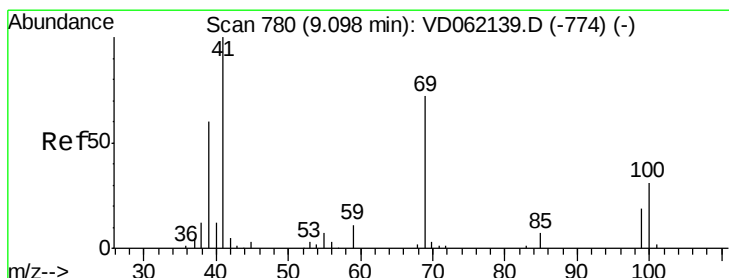
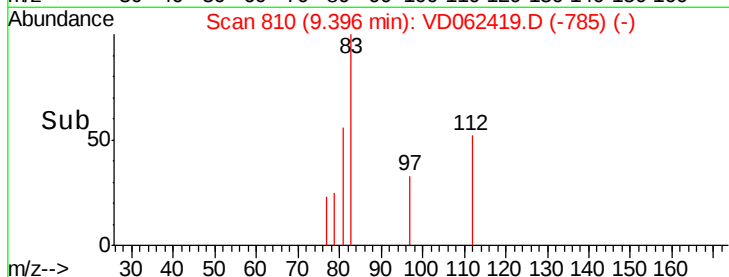
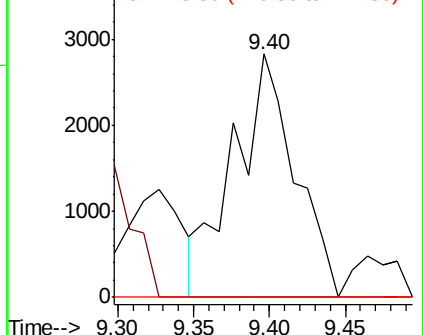
83 100

85 0.0 50.9 76.3#

127 0.0 8.1 12.1#



Abundance Ion 82.85 (82.55 to 83.55): VDC
Ion 84.95 (84.65 to 85.65): VDC
Ion 126.80 (126.50 to 127.50): VDC



#48

Methyl methacrylate

Concen: 12.758 ug/l

RT: 9.15 min Scan# 785

Delta R.T. 0.05 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

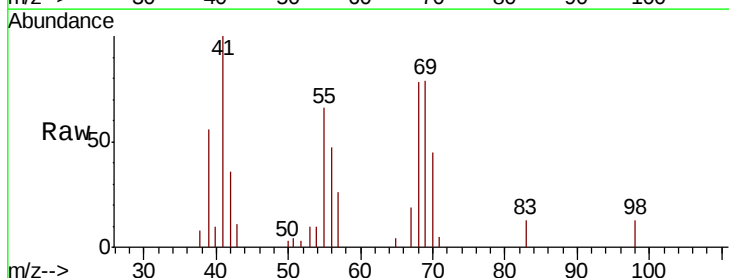
Tgt Ion: 41 Resp: 30961

Ion Ratio Lower Upper

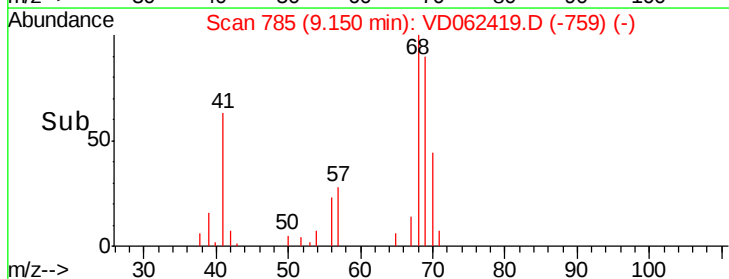
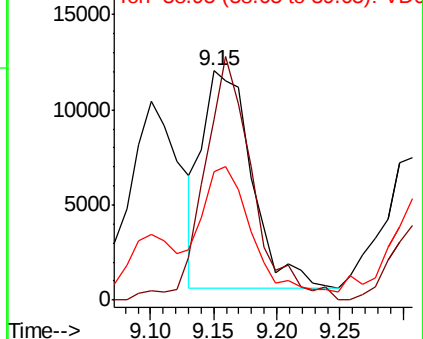
41 100

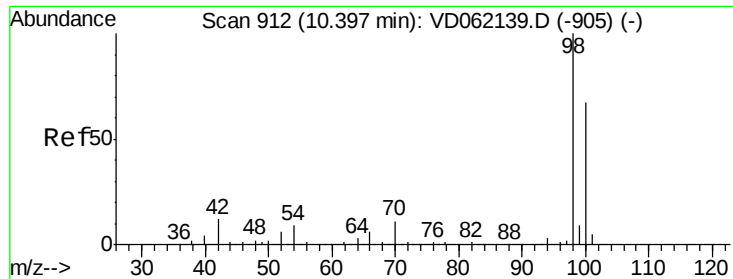
69 79.1 64.2 96.2

39 55.8 46.8 70.2



Abundance Ion 40.95 (40.65 to 41.65): VDC
Ion 69.00 (68.70 to 69.70): VDC
Ion 38.95 (38.65 to 39.65): VDC

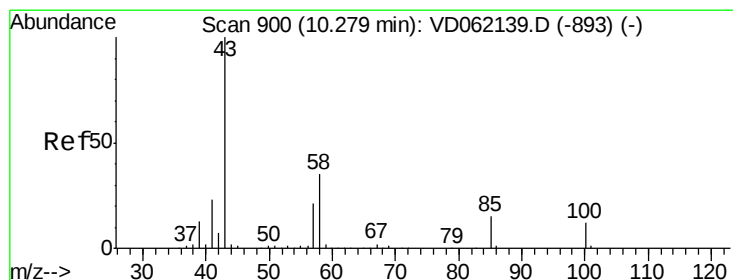
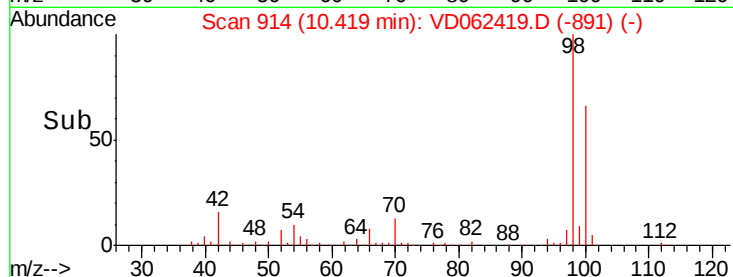
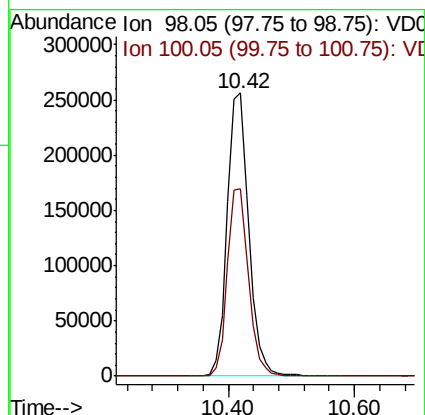
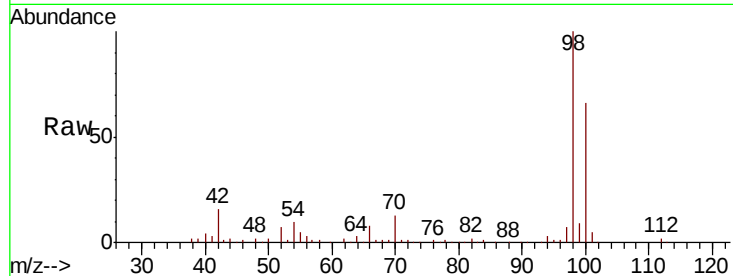




#50
Toluene-d8
Concen: 37.863 ug/l
RT: 10.42 min Scan# 914
Delta R.T. 0.02 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

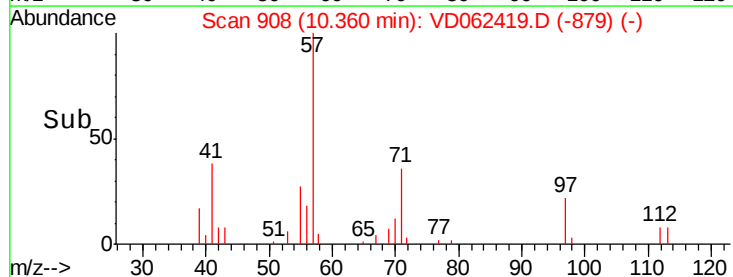
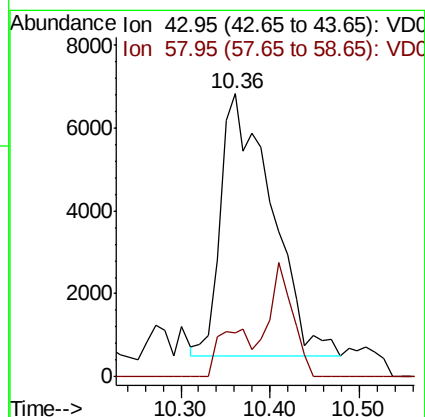
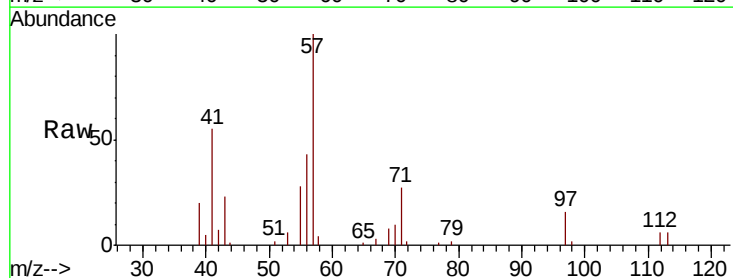
Instrument :
MSVOA_D
ClientSampled :
12-B

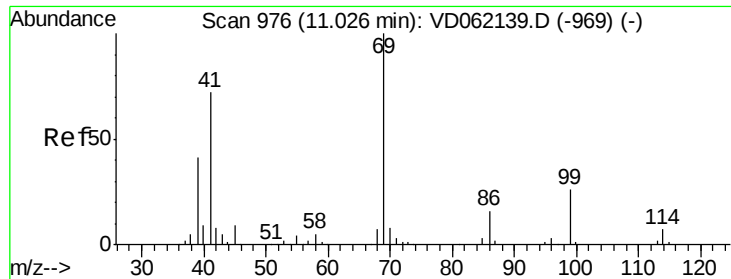
Tot Ion: 98 Resp: 605176
Ion Ratio Lower Upper
98 100
100 66.2 53.8 80.8



#51
4-Methyl-2-Pentanone
Concen: 9.856 ug/l
RT: 10.36 min Scan# 908
Delta R.T. 0.08 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

Tgt Ion: 43 Resp: 24961
Ion Ratio Lower Upper
43 100
58 15.5 30.4 45.6#





#56

Ethyl methacrylate

Concen: 4.329 ug/l

RT: 11.10 min Scan# 983

Delta R.T. 0.07 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :
MSVOA_D
ClientSampled :
12-B

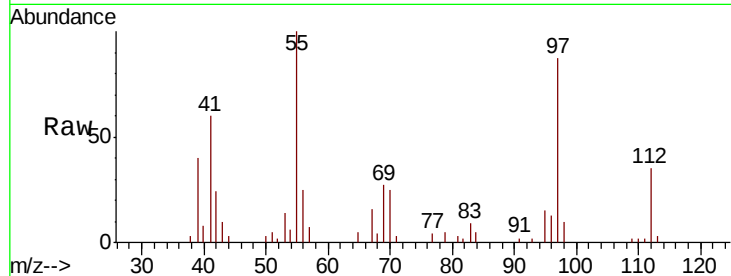
Tot Ion: 69 Resp: 15320

Ion Ratio Lower Upper

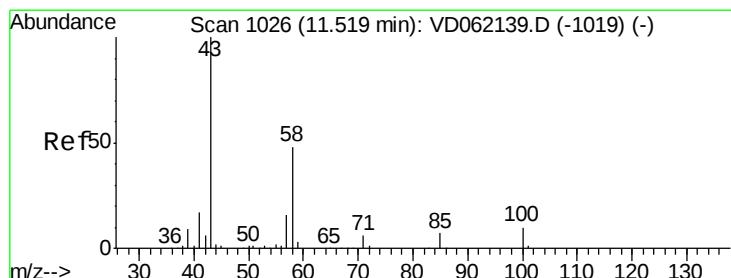
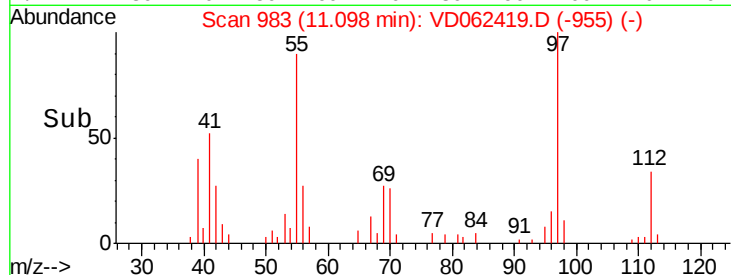
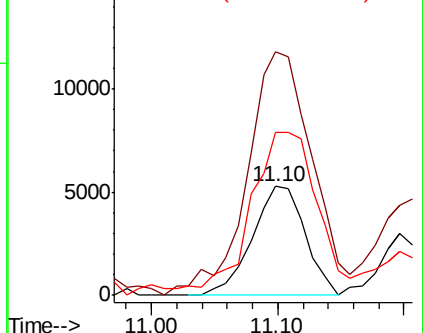
69 100

41 223.5 56.3 84.5#

39 149.3 29.4 44.2#



Abundance Ion 69.00 (68.70 to 69.70): VDC
Ion 41.05 (40.75 to 41.75): VDC
Ion 38.95 (38.65 to 39.65): VDC



#59

2-Hexanone

Concen: 20.020 ug/l

RT: 11.49 min Scan# 1023

Delta R.T. -0.03 min

Lab File: VD062419.D

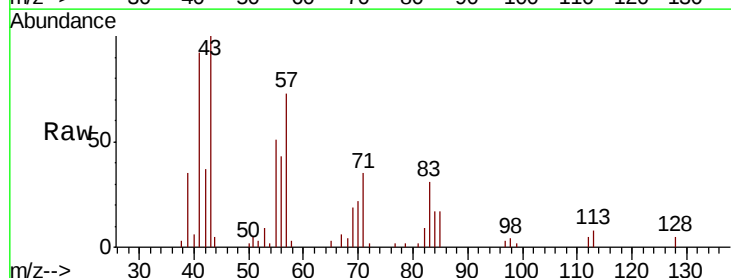
Acq: 16 May 2019 16:00

Tgt Ion: 43 Resp: 37370

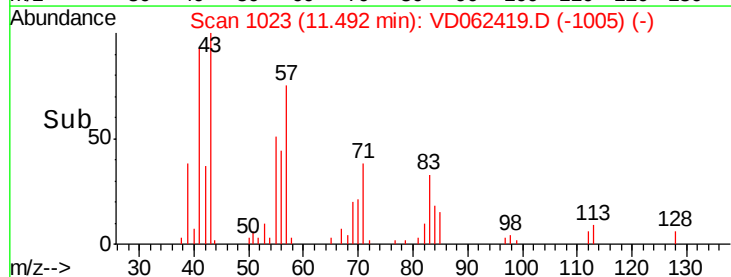
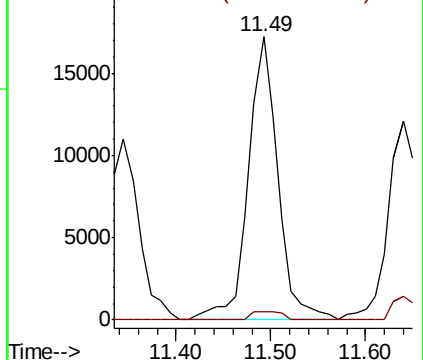
Ion Ratio Lower Upper

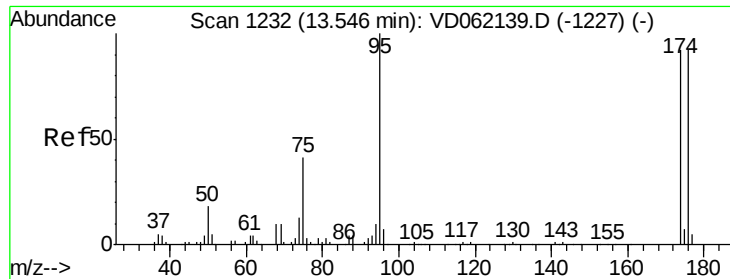
43 100

58 2.9 25.4 76.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 57.95 (57.65 to 58.65): VDC





#62

4-Bromofluorobenzene

Concen: 39.035 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.01 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampleId :

12-B

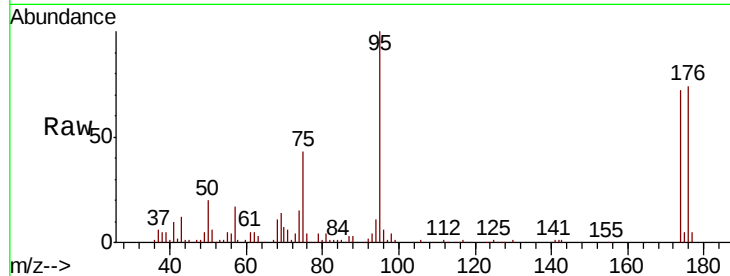
Tot Ion: 95 Resp: 250538

Ion Ratio Lower Upper

95 100

174 71.7 0.0 181.8

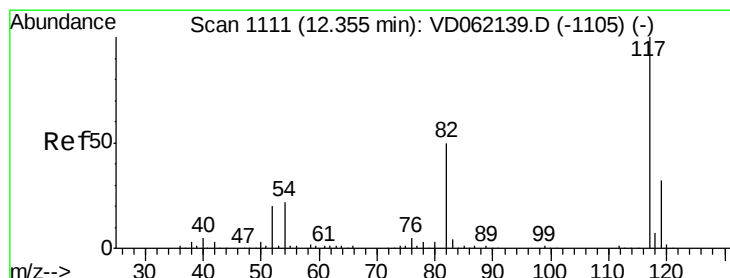
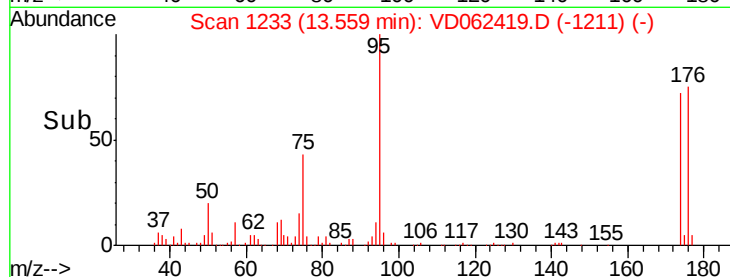
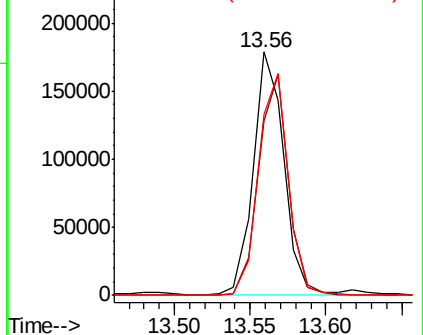
176 74.2 0.0 174.4



Abundance Ion 95.00 (94.70 to 95.70): V

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 12.38 min Scan# 1113

Delta R.T. 0.02 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

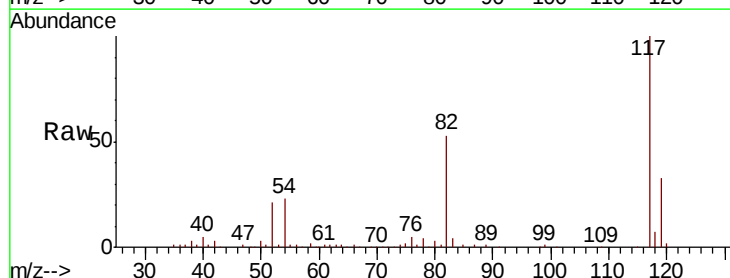
Tgt Ion: 117 Resp: 664885

Ion Ratio Lower Upper

117 100

82 52.8 36.2 54.2

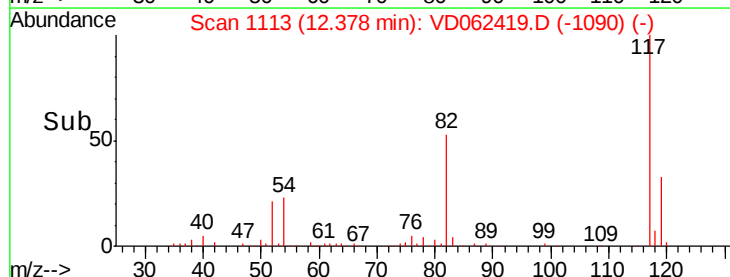
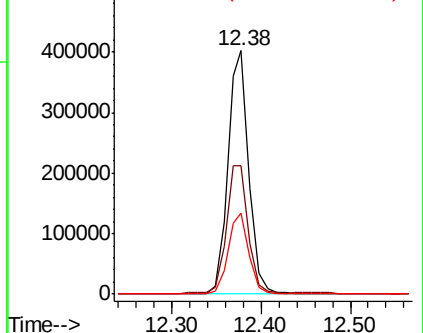
119 33.3 26.2 39.4

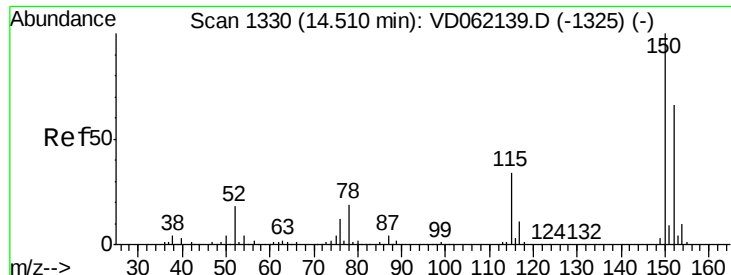


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.52 min Scan# 1331

Delta R.T. 0.01 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampled :

12-B

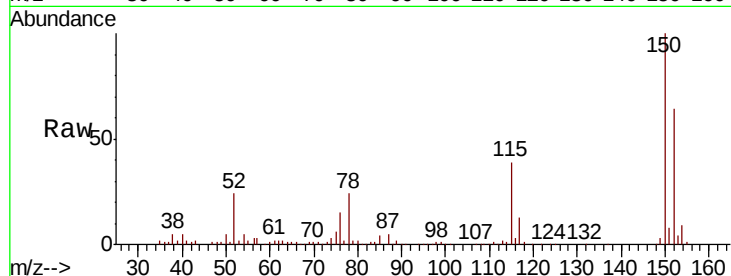
Tot Ion:152 Resp: 309125

Ion Ratio Lower Upper

152 100

115 60.9 30.9 92.7

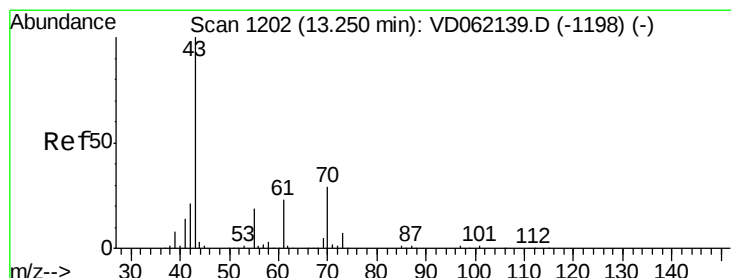
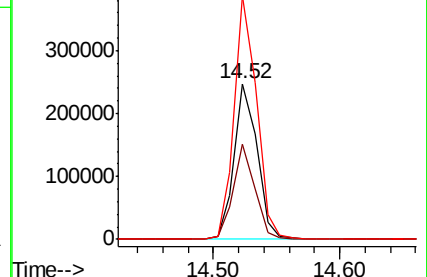
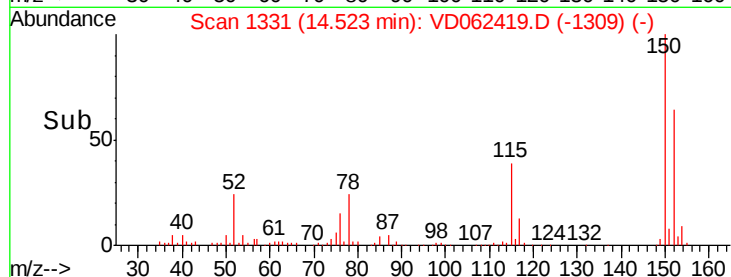
150 156.8 0.0 314.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 115.00 (114.70 to 115.70): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 3.780 ug/l

RT: 13.22 min Scan# 1199

Delta R.T. -0.03 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Tgt Ion: 43 Resp: 18363

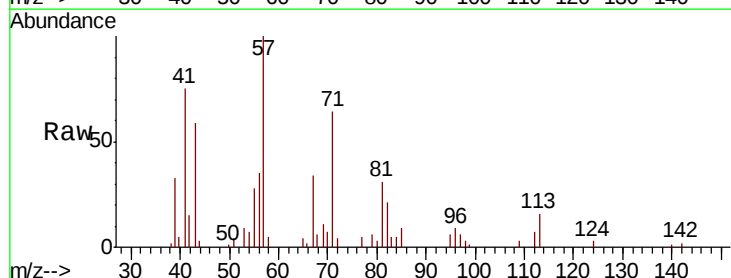
Ion Ratio Lower Upper

43 100

70 11.8 24.2 36.4#

55 47.9 16.0 24.0#

61 0.0 21.6 32.4#

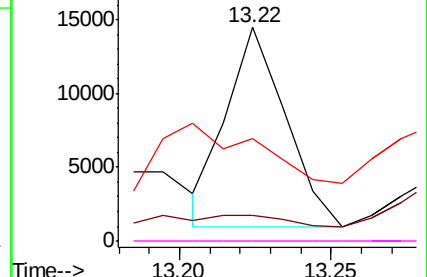
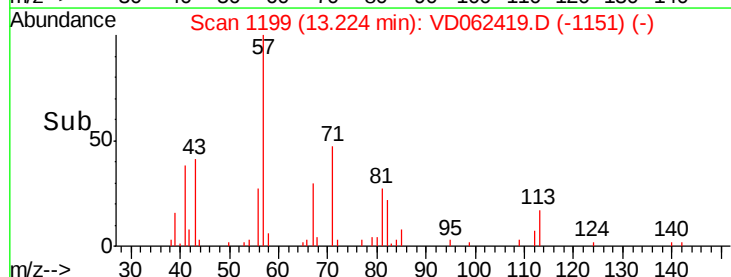


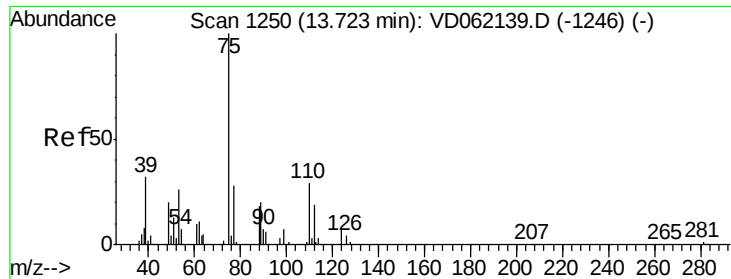
Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 60.95 (60.65 to 61.65): VDC





#76

1,2,3-Trichloropropane

Concen: 29.098 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. -0.16 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

Instrument :

MSVOA_D

ClientSampled :

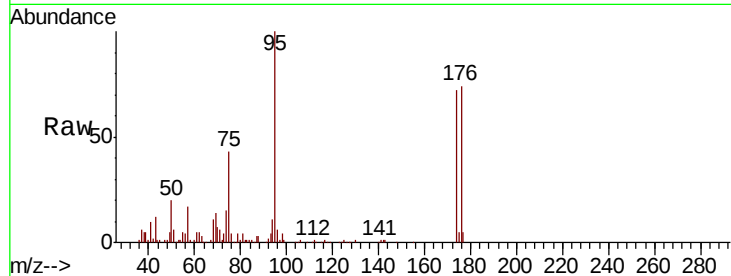
12-B

Tot Ion: 75 Resp: 106896

Ion Ratio Lower Upper

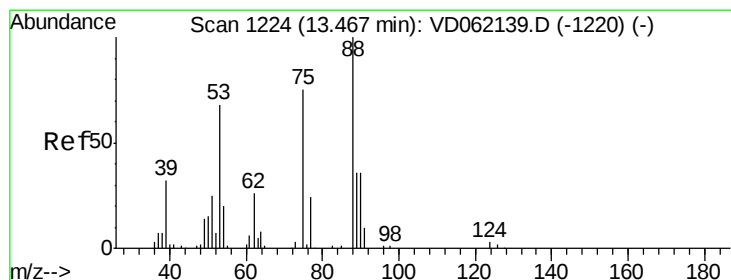
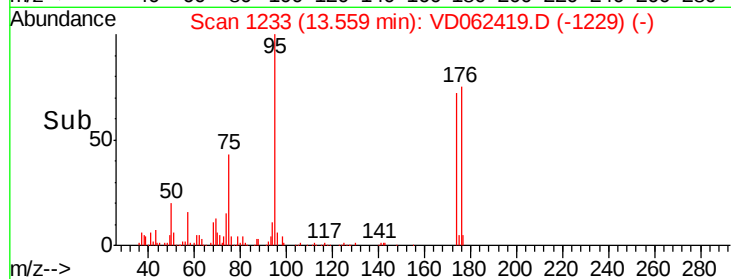
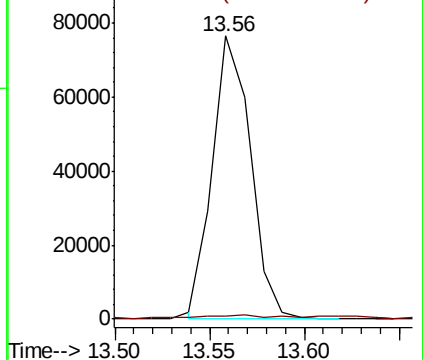
75 100

77 1.0 16.4 49.4#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 76.95 (76.65 to 77.65): VDC



#81

trans-1,4-Dichloro-2-butene

Concen: 104.079 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.09 min

Lab File: VD062419.D

Acq: 16 May 2019 16:00

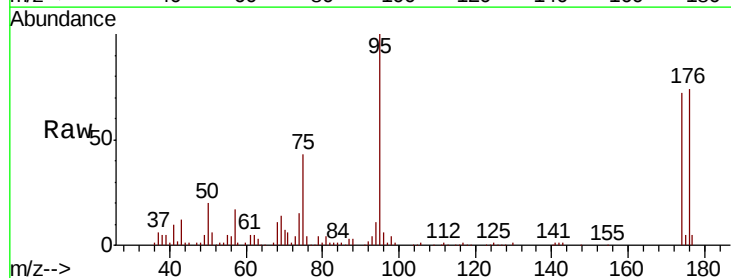
Tgt Ion: 75 Resp: 107941

Ion Ratio Lower Upper

75 100

53 2.0 65.8 98.8#

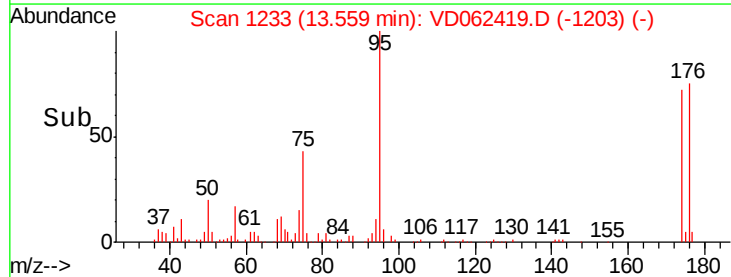
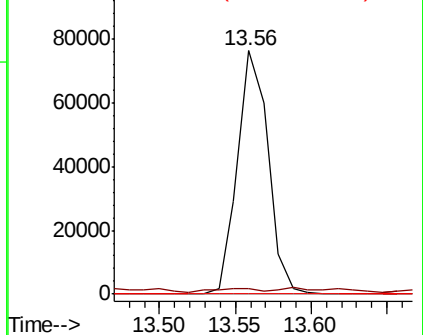
89 0.0 35.0 52.6#

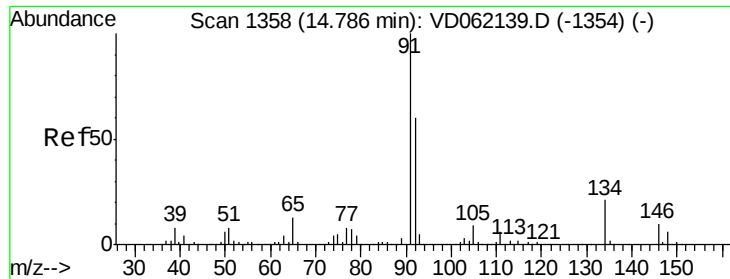


Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC

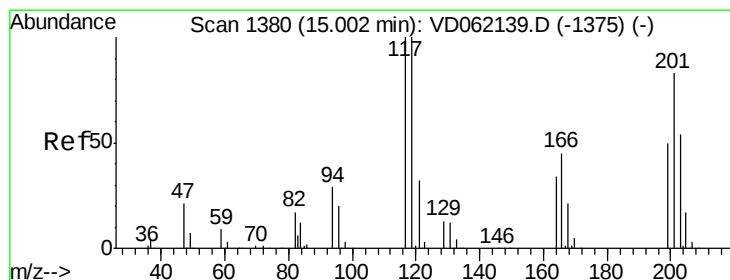
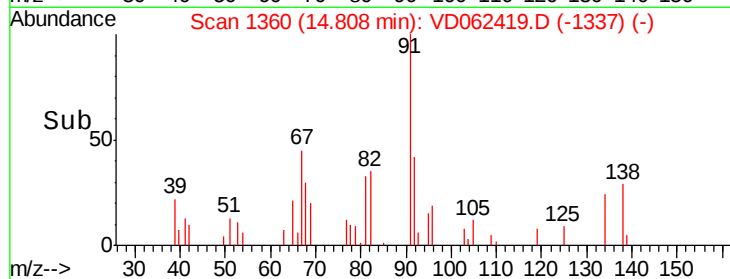
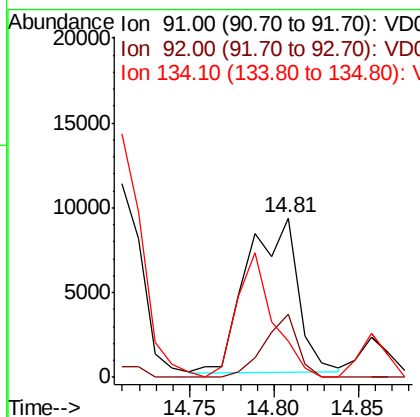
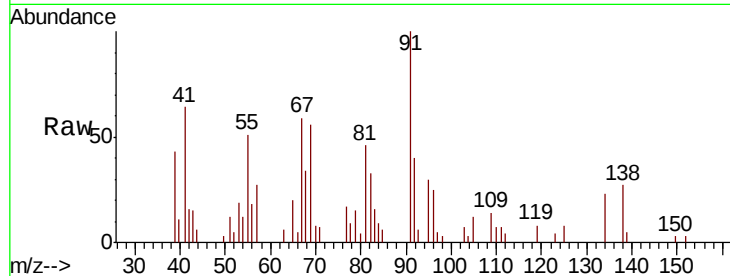




#89
n-Butylbenzene
Concen: 1.241 ug/l
RT: 14.81 min Scan# 1360
Delta R.T. 0.02 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

Instrument :
MSVOA_D
ClientSampled :
12-B

Tot Ion: 91 Resp: 19142
Ion Ratio Lower Upper
91 100
92 39.9 30.3 91.0
134 22.5 14.5 43.6



#90
Hexachloroethane
Concen: 2.234 ug/l
RT: 15.06 min Scan# 1386
Delta R.T. 0.06 min
Lab File: VD062419.D
Acq: 16 May 2019 16:00

Tgt Ion: 117 Resp: 10437
Ion Ratio Lower Upper
117 100
201 0.0 30.2 90.6#

