

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032119\
 Data File : VN054535.D
 Acq On : 22 Mar 2019 3:11
 Operator : JC/SP
 Sample : K1694-06
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 34 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 EO-02-032019-C

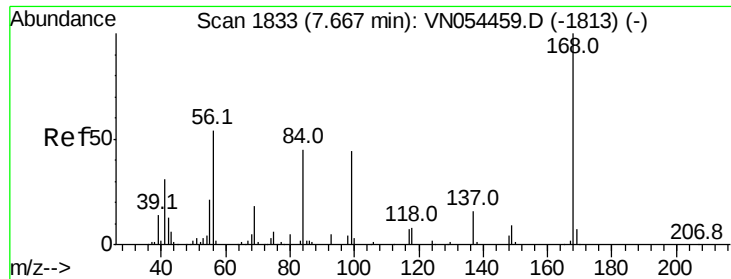
Quant Time: Mar 22 10:20:44 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N032019W.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 22 02:09:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	640199	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	1015067	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	838390	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	310834	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.03	65	407079	51.12	ug/l	0.00
Spiked Amount			Recovery	=	102.24%	
35) Dibromofluoromethane	7.59	113	316653	48.42	ug/l	0.00
Spiked Amount			Recovery	=	96.84%	
50) Toluene-d8	10.09	98	1194327	48.58	ug/l	0.00
Spiked Amount			Recovery	=	97.16%	
62) 4-Bromofluorobenzene	12.40	95	369186	44.13	ug/l	0.00
Spiked Amount			Recovery	=	88.26%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Diethyl Ether	3.42	74	918	0.235	ug/l	93
11) Tert butyl alcohol	4.82	59	144	0.299	ug/l #	70
13) Acrolein	3.60	56	299	0.449	ug/l #	4
16) Acetone	3.82	43	18712	7.816	ug/l	91
20) Methylene Chloride	4.55	84	18649	2.643	ug/l #	81
25) 2-Butanone	6.86	43	5612	1.830	ug/l #	80
29) Tetrahydrofuran	7.23	42	1680	0.844	ug/l #	64
30) Chloroform	7.38	83	7802	0.647	ug/l #	81
31) Cyclohexane	7.66	56	13403	Below Cal	#	29
36) 1,1-Dichloropropene	7.67	75	47734	5.029	ug/l #	47
38) Carbon Tetrachloride	7.67	117	58835	6.379	ug/l #	15
43) Isopropyl Acetate	8.17	43	19209	1.685	ug/l	94
48) Methyl methacrylate	9.19	41	8334	1.347	ug/l #	11
49) 1,4-Dioxane	9.27	88	63	0.911	ug/l #	1
51) 4-Methyl-2-Pentanone	10.03	43	8573	1.357	ug/l #	36
53) t-1,3-Dichloropropene	10.30	75	34	2.235	ug/l #	9
54) cis-1,3-Dichloropropene	9.91	75	53878	5.208	ug/l #	69
57) 1,3-Dichloropropane	10.77	76	11642	1.116	ug/l #	43
59) 2-Hexanone	10.77	43	182475	44.216	ug/l #	47
71) Bromoform	12.39	173	1140	2.479	ug/l #	1
76) 1,2,3-Trichloropropane	12.40	75	185808	37.670	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	185808	124.797	ug/l #	11
95) Naphthalene	15.14	128	7429	0.670	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.00 min

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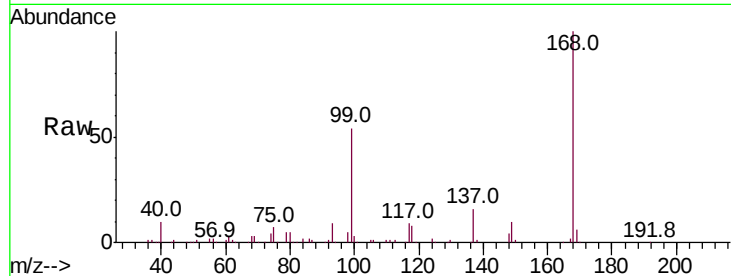
EO-02-032019-C

Tot Ion:168 Resp: 640199

Ion Ratio Lower Upper

168 100

99 54.1 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): VN054459.D (-1813) (-)

Ion 98.90 (98.60 to 99.60): VN054459.D (-1813) (-)

7.67

250000

200000

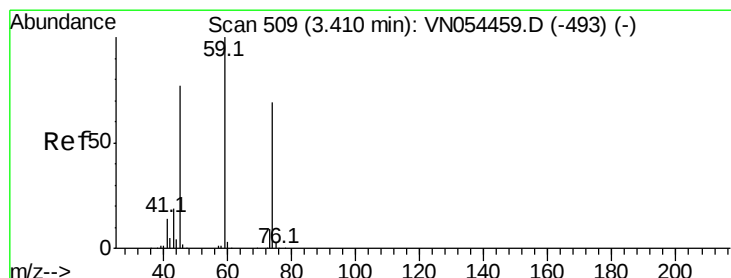
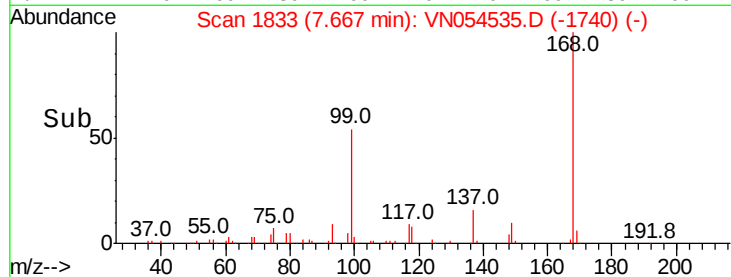
150000

100000

50000

0

Time-->



#8

Diethyl Ether

Concen: 0.235 ug/l

RT: 3.42 min Scan# 513

Delta R.T. 0.01 min

Lab File: VN054535.D

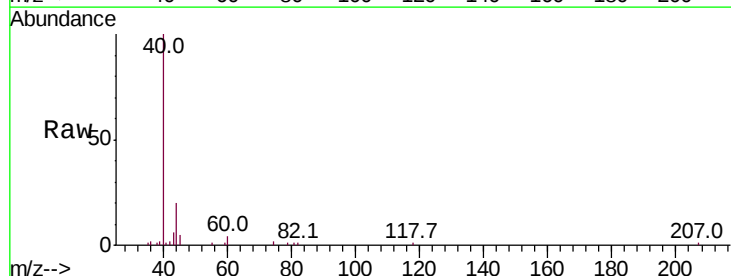
Acq: 22 Mar 2019 3:11

Tgt Ion: 74 Resp: 918

Ion Ratio Lower Upper

74 100

45 79.7 43.1 129.4



Abundance Ion 74.00 (73.70 to 74.70): VN054459.D (-493) (-)

Ion 45.00 (44.70 to 45.70): VN054459.D (-493) (-)

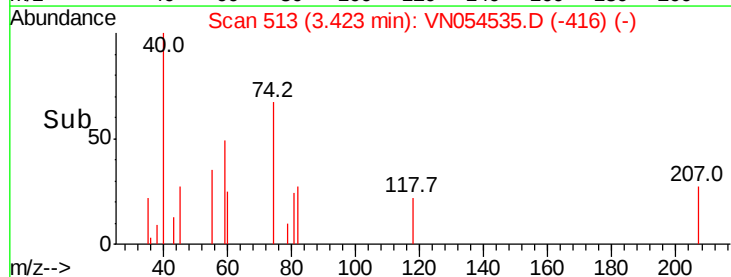
1500

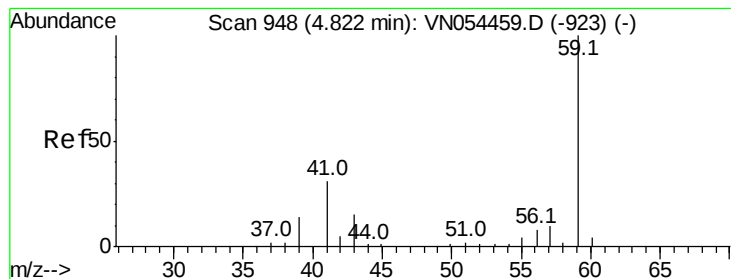
1000

500

0

Time-->



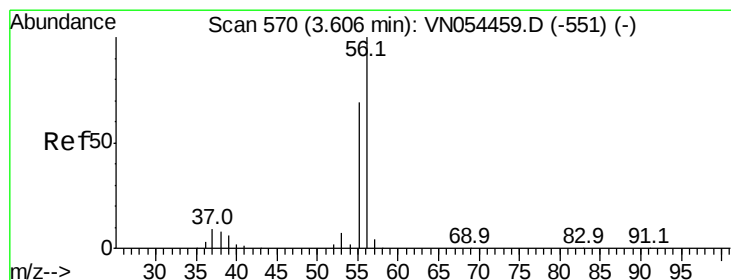
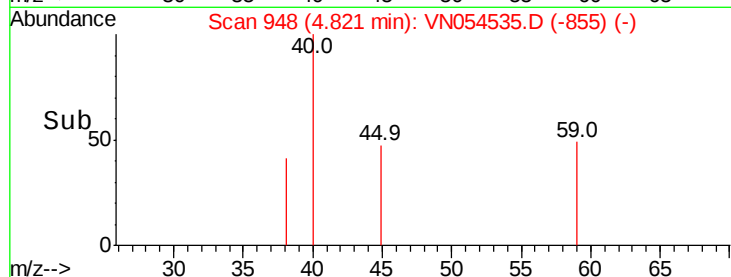
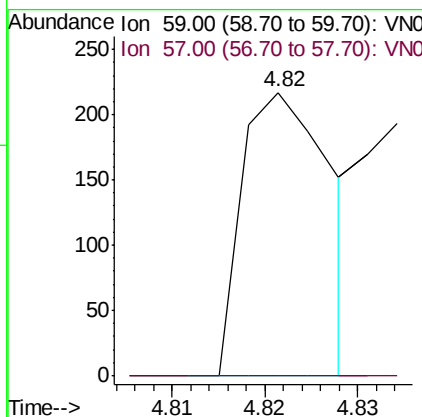
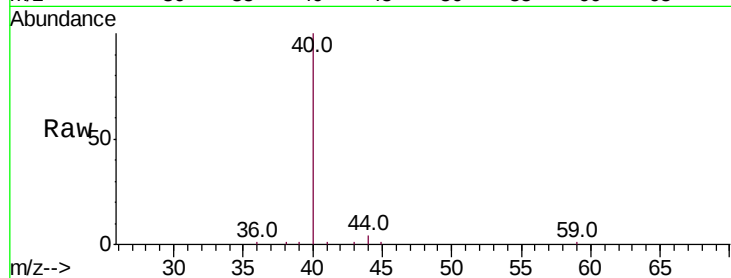


#11

Tert butyl alcohol
 Concen: 0.299 ug/l
 RT: 4.82 min Scan# 948
 Delta R.T. 0.00 min
 Lab File: VN054535.D
 Acq: 22 Mar 2019 3:11

Instrument :
 MSVOA_N
 ClientSampleId :
 EO-02-032019-C

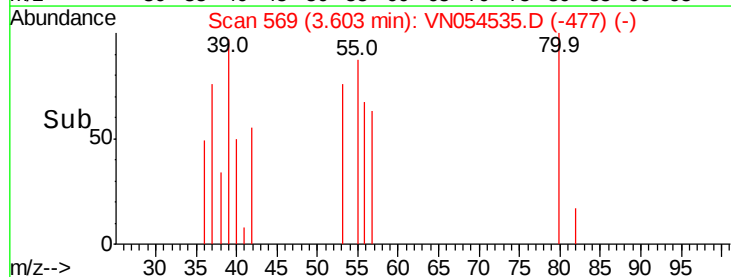
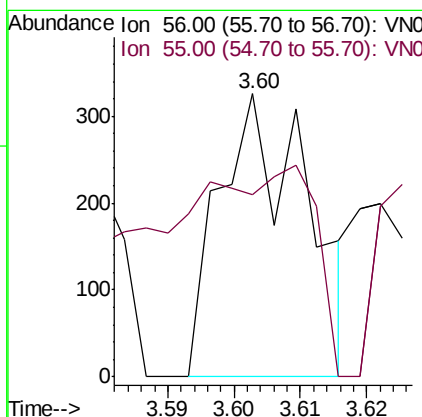
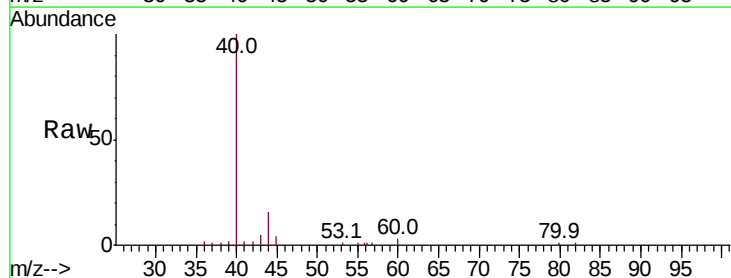
Tot Ion: 59 Resp: 144
 Ion Ratio Lower Upper
 59 100
 57 0.0 9.0 13.6#

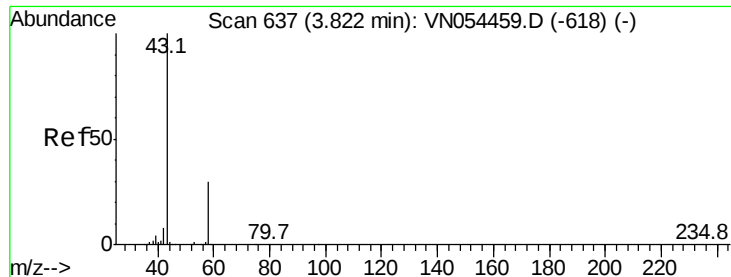


#13

Acrolein
 Concen: 0.449 ug/l
 RT: 3.60 min Scan# 569
 Delta R.T. -0.00 min
 Lab File: VN054535.D
 Acq: 22 Mar 2019 3:11

Tgt Ion: 56 Resp: 299
 Ion Ratio Lower Upper
 56 100
 55 149.8 56.7 85.1#

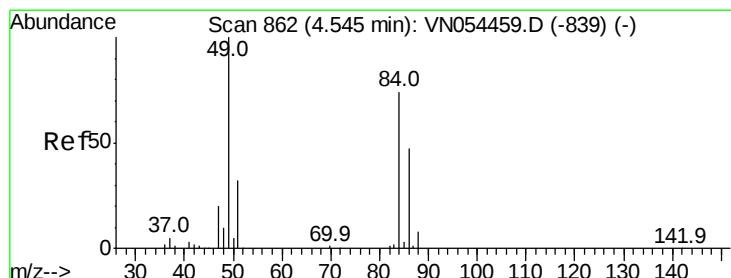
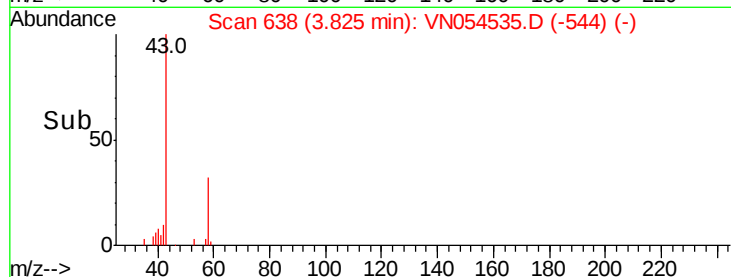
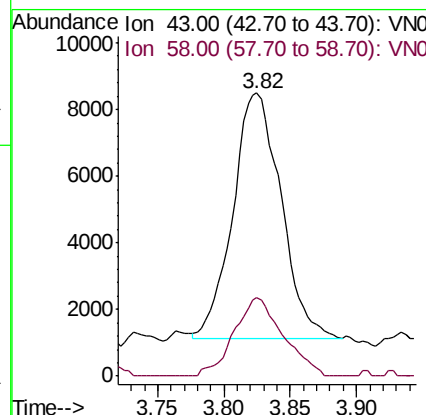
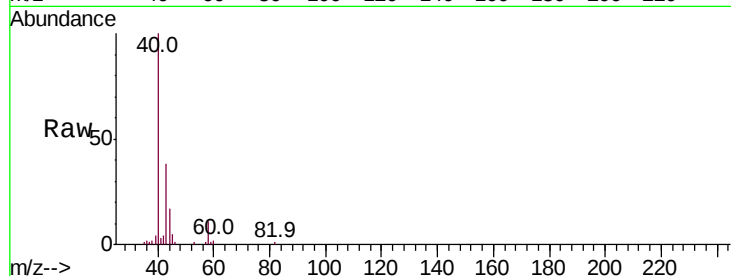




#16
Acetone
Concen: 7.816 ug/l
RT: 3.82 min Scan# 638
Delta R.T. 0.00 min
Lab File: VN054535.D
Acq: 22 Mar 2019 3:11

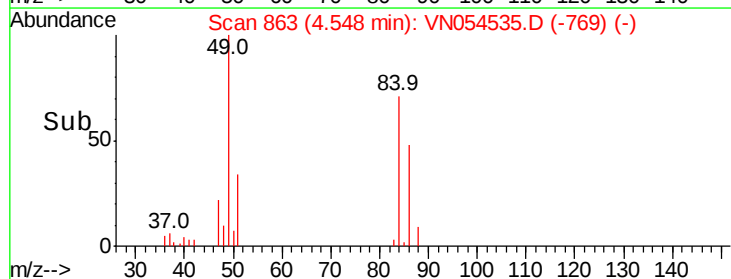
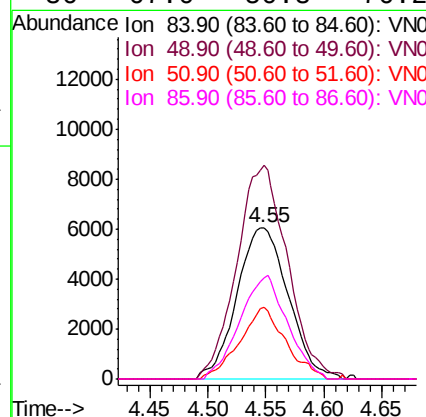
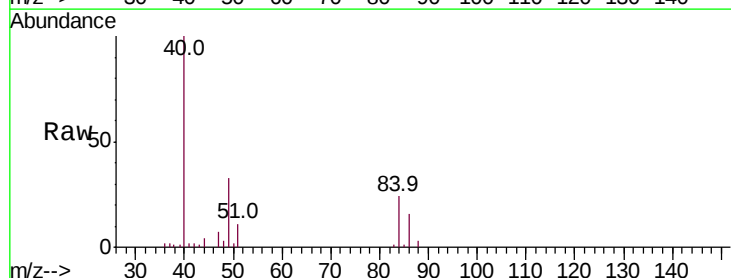
Instrument :
MSVOA_N
ClientSampleId :
EO-02-032019-C

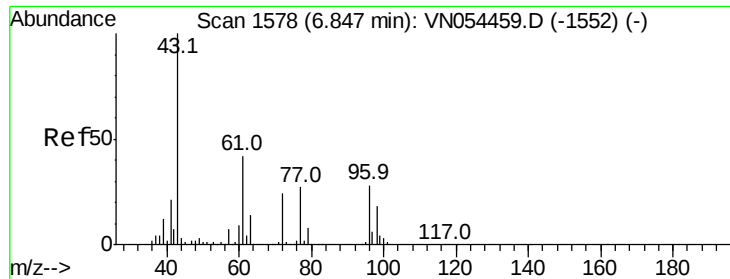
Tot Ion: 43 Resp: 18712
Ion Ratio Lower Upper
43 100
58 32.2 29.9 44.9



#20
Methylene Chloride
Concen: 2.643 ug/l
RT: 4.55 min Scan# 863
Delta R.T. 0.00 min
Lab File: VN054535.D
Acq: 22 Mar 2019 3:11

Tgt Ion: 84 Resp: 18649
Ion Ratio Lower Upper
84 100
49 140.8 89.7 134.5#
51 47.4 28.2 42.4#
86 67.0 50.8 76.2





#25

2-Butanone

Concen: 1.830 ug/l

RT: 6.86 min Scan# 1582

Delta R.T. 0.01 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

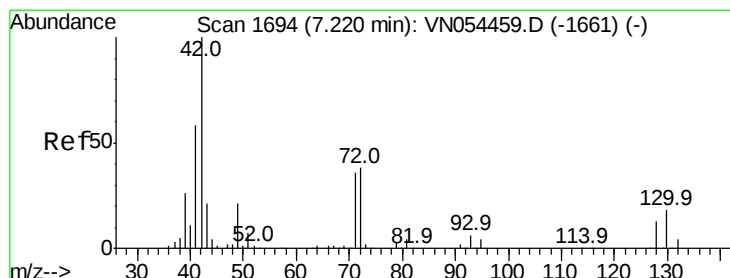
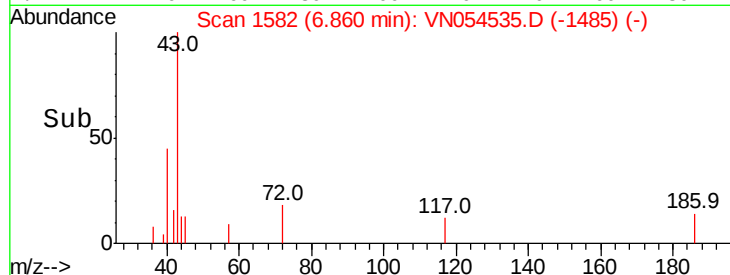
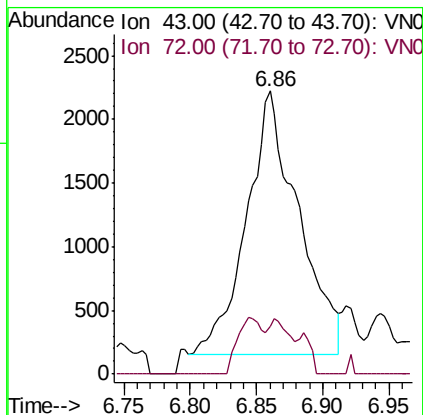
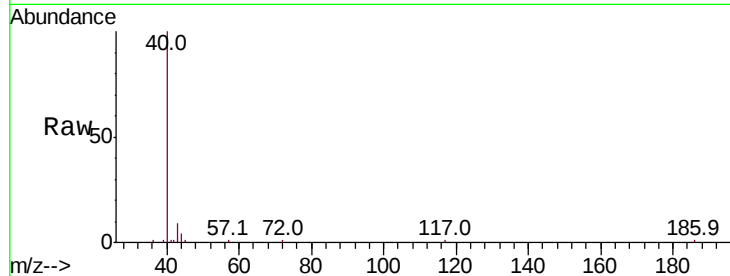
EO-02-032019-C

Tot Ion: 43 Resp: 5612

Ion Ratio Lower Upper

43 100

72 18.2 23.0 34.6#



#29

Tetrahydrofuran

Concen: 0.844 ug/l

RT: 7.23 min Scan# 1696

Delta R.T. 0.01 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

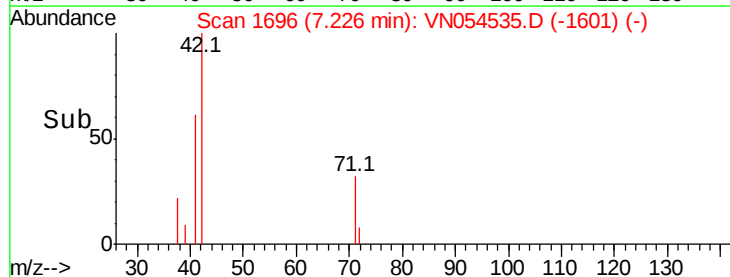
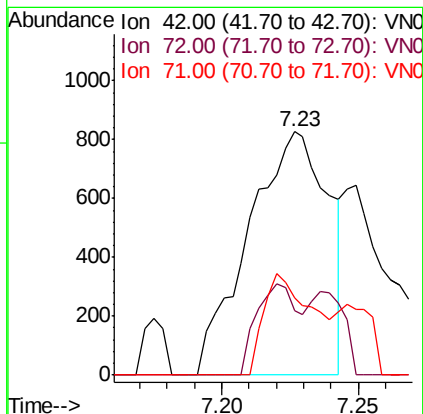
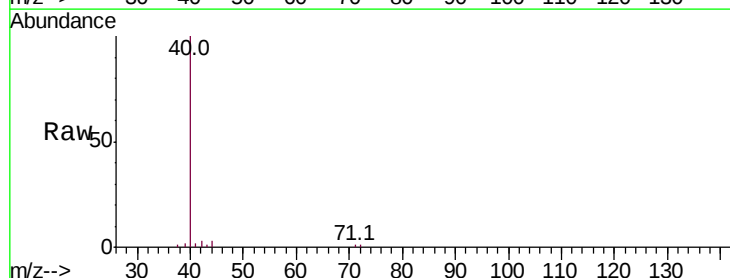
Tgt Ion: 42 Resp: 1680

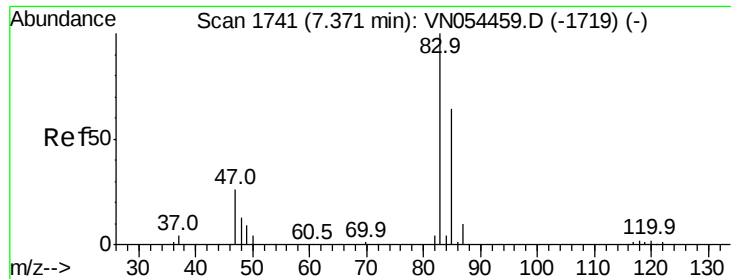
Ion Ratio Lower Upper

42 100

72 19.3 37.8 56.6#

71 25.4 36.2 54.2#





#30

Chloroform

Concen: 0.647 ug/l

RT: 7.38 min Scan# 1744

Delta R.T. 0.01 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

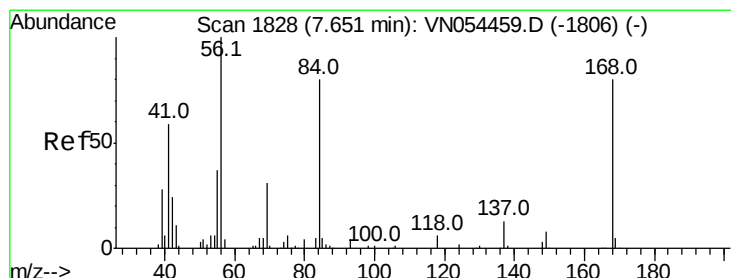
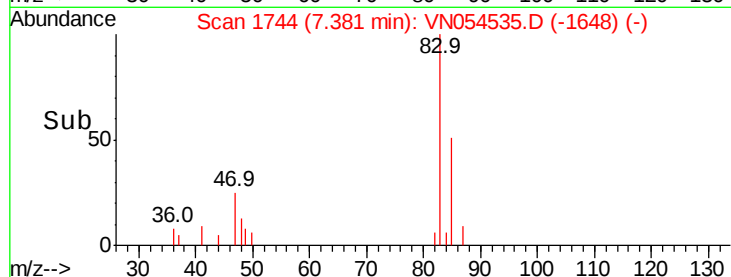
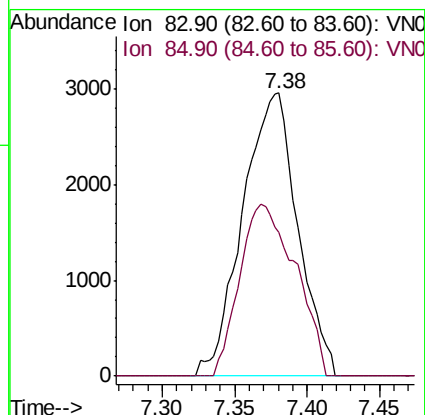
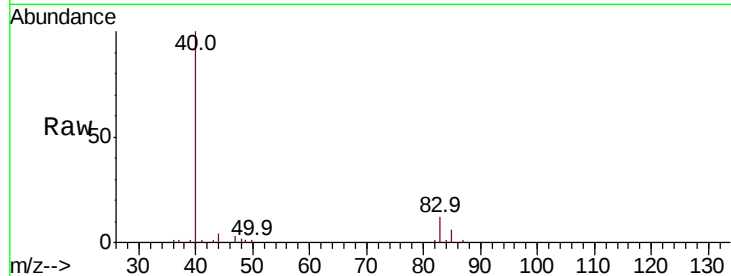
EO-02-032019-C

Tot Ion: 83 Resp: 7802

Ion Ratio Lower Upper

83 100

85 50.6 52.2 78.4#



#31

Cyclohexane

Concen: Below Cal

RT: 7.66 min Scan# 1832

Delta R.T. 0.01 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

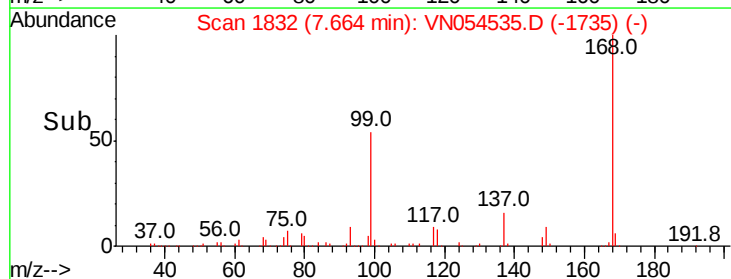
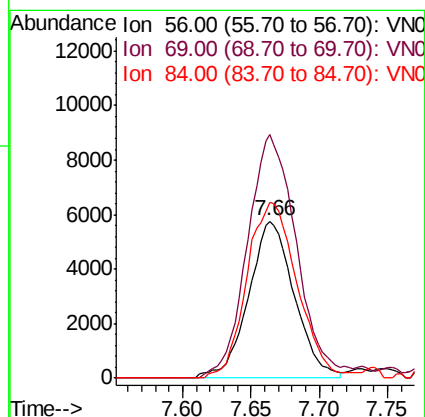
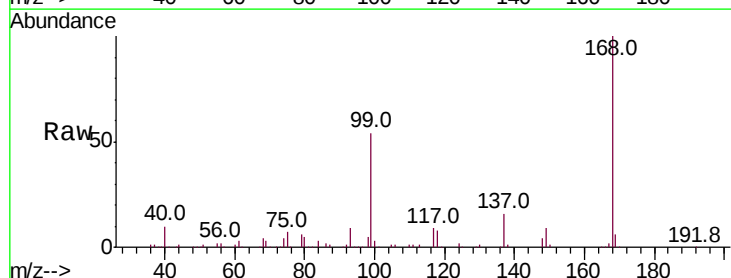
Tgt Ion: 56 Resp: 13403

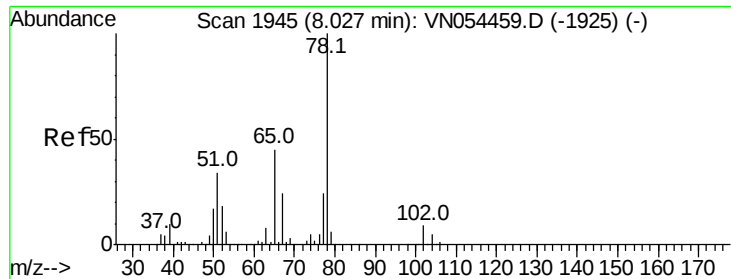
Ion Ratio Lower Upper

56 100

69 155.4 27.8 41.6#

84 112.2 74.6 111.8#





#33

1,2-Dichloroethane-d4

Concen: 51.121 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

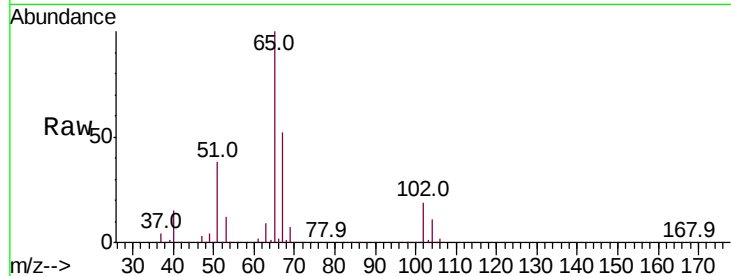
EO-02-032019-C

Tot Ion: 65 Resp: 407079

Ion Ratio Lower Upper

65 100

67 51.8 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

8.03

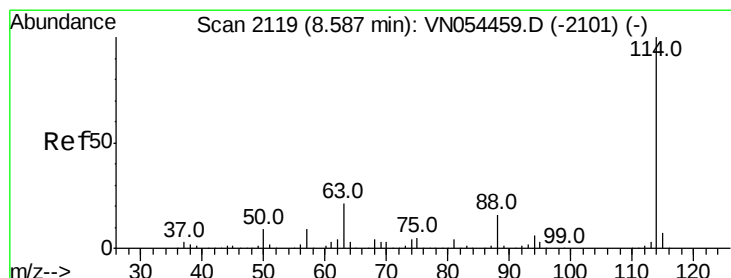
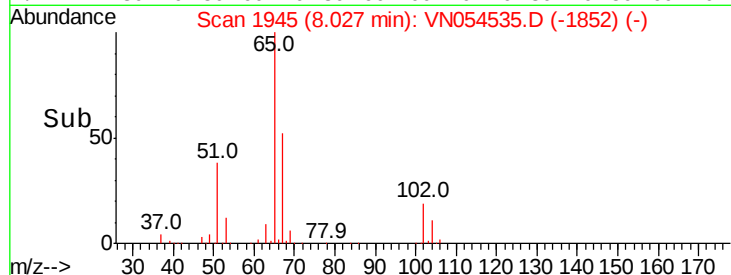
150000

100000

50000

0

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

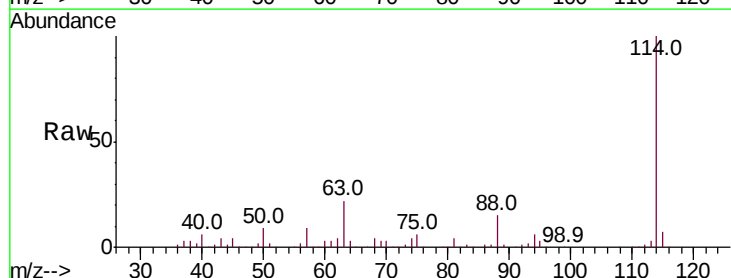
Tgt Ion:114 Resp: 1015067

Ion Ratio Lower Upper

114 100

63 21.6 0.0 35.2

88 15.3 0.0 30.2



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0

8.59

600000

500000

400000

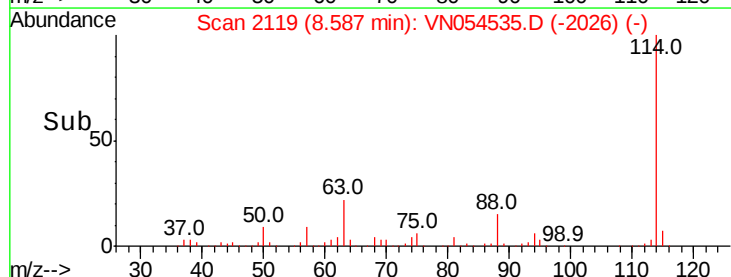
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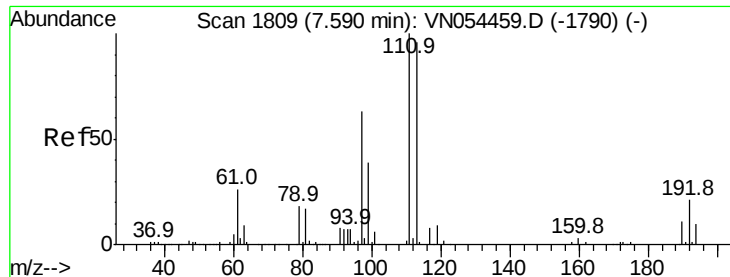
200000

100000

0

Time-->





#35

Dibromofluoromethane

Concen: 48.421 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

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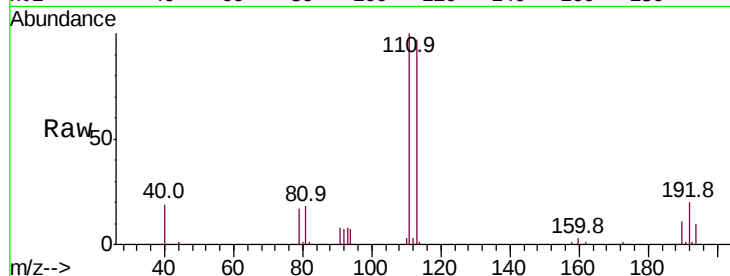
Tot Ion:113 Resp: 316653

Ion Ratio Lower Upper

113 100

111 102.7 82.2 123.4

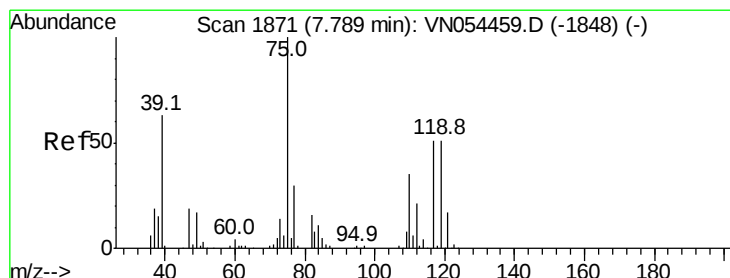
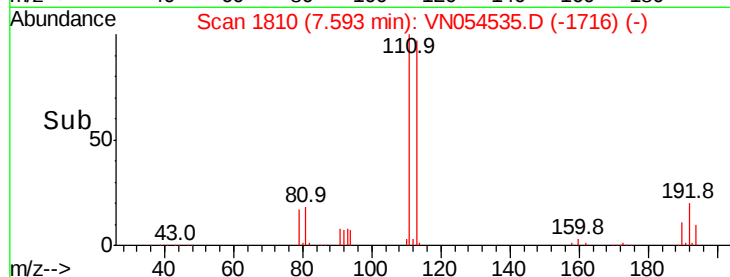
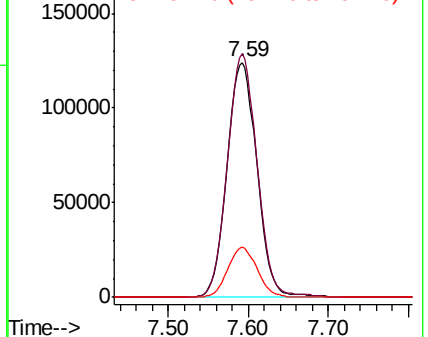
192 21.1 19.2 28.8



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.029 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.12 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

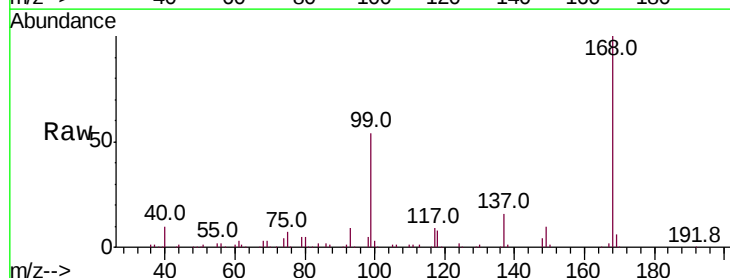
Tgt Ion: 75 Resp: 47734

Ion Ratio Lower Upper

75 100

110 7.6 19.1 57.5#

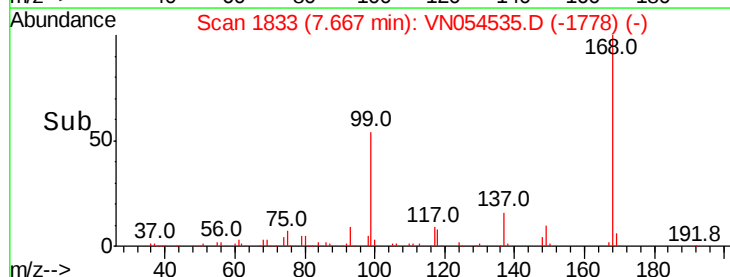
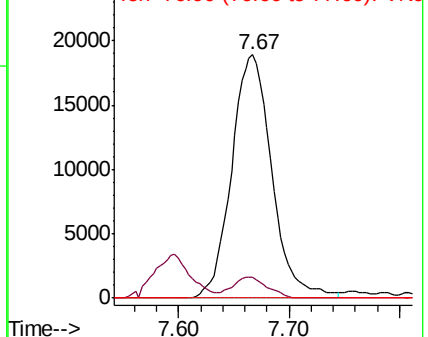
77 0.0 25.0 37.4#

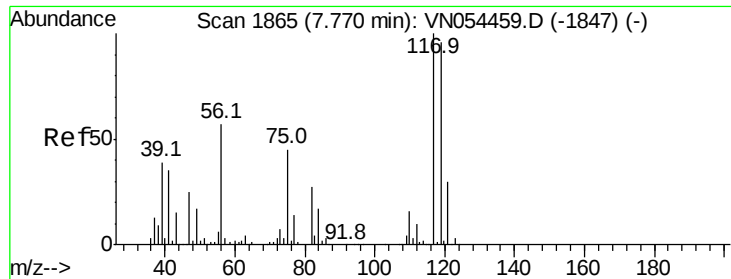


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 6.379 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.10 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

EO-02-032019-C

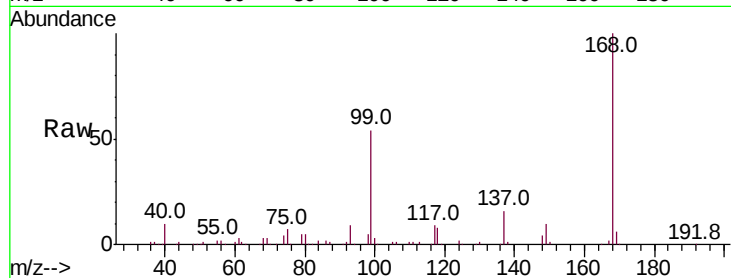
Tot Ion:117 Resp: 58835

Ion Ratio Lower Upper

117 100

119 4.2 76.3 114.5#

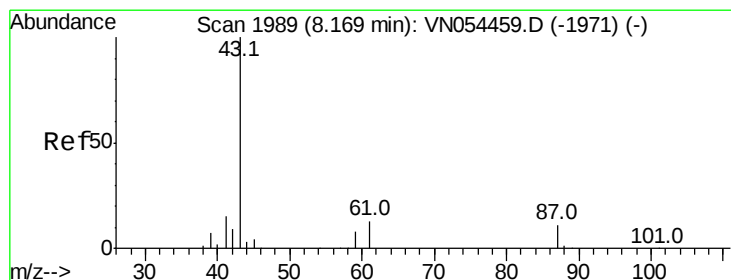
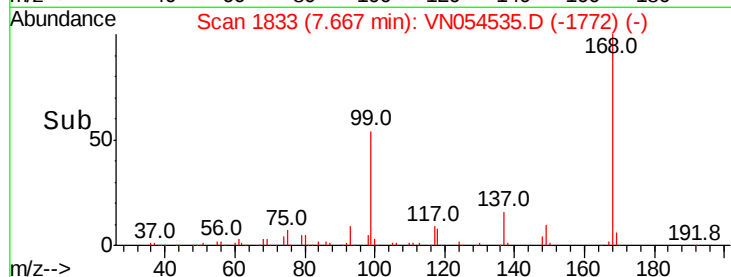
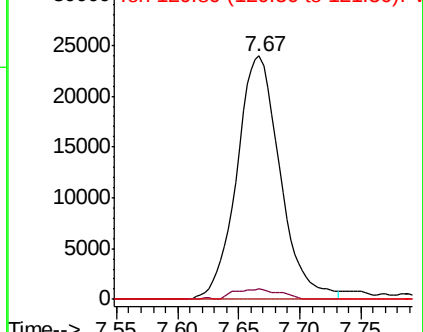
121 0.0 24.6 36.8#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 1.685 ug/l

RT: 8.17 min Scan# 1990

Delta R.T. 0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

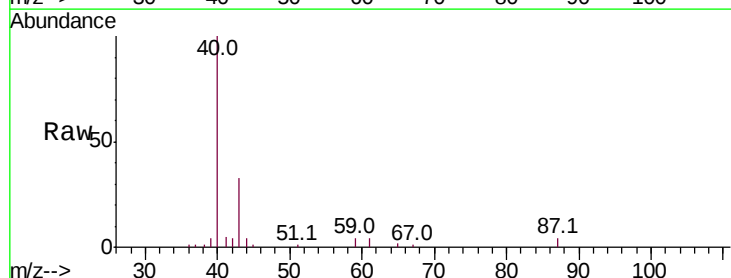
Tgt Ion: 43 Resp: 19209

Ion Ratio Lower Upper

43 100

61 17.1 15.8 23.8

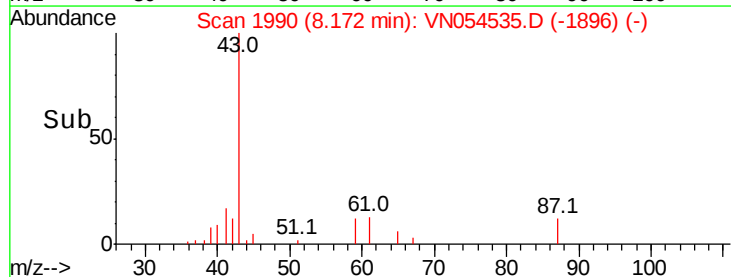
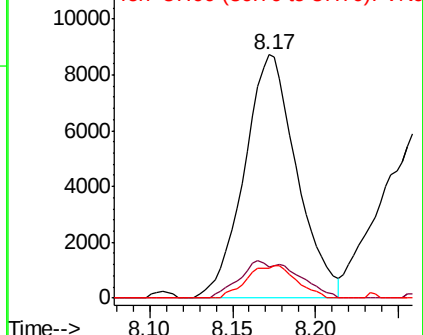
87 12.6 12.0 18.0

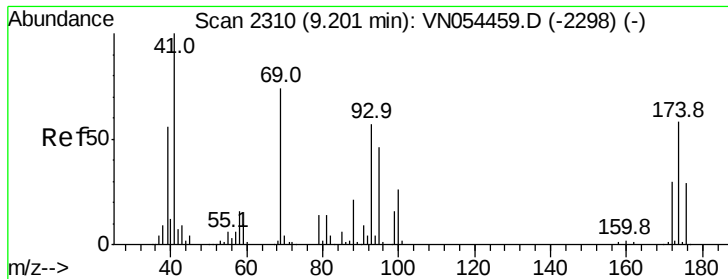


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V

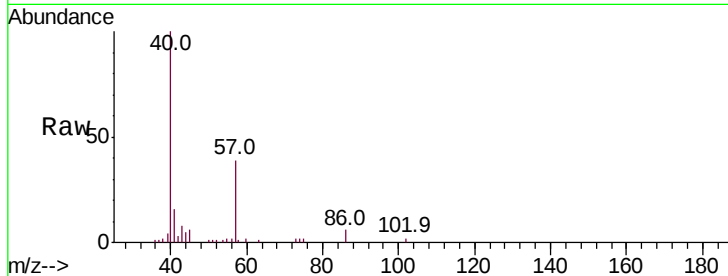




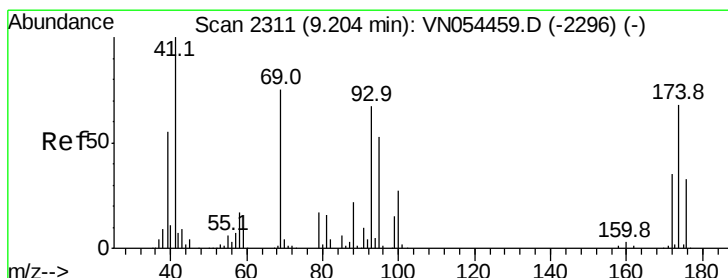
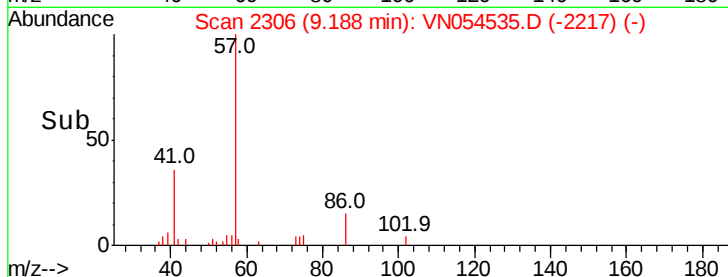
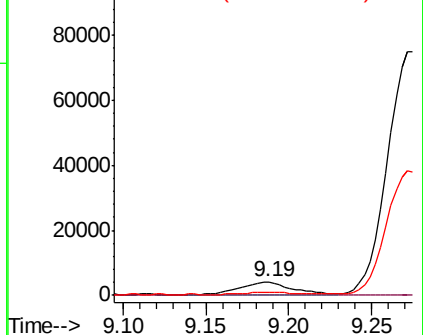
#48
Methvl methacrylate
Concen: 1.347 ug/l
RT: 9.19 min Scan# 2306
Delta R.T. -0.01 min
Lab File: VN054535.D
Acq: 22 Mar 2019 3:11

Instrument :
MSVOA_N
ClientSampleId :
EO-02-032019-C

Tot Ion: 41 Resp: 8334
Ion Ratio Lower Upper
41 100
69 0.0 72.6 108.8#
39 0.0 47.5 71.3#

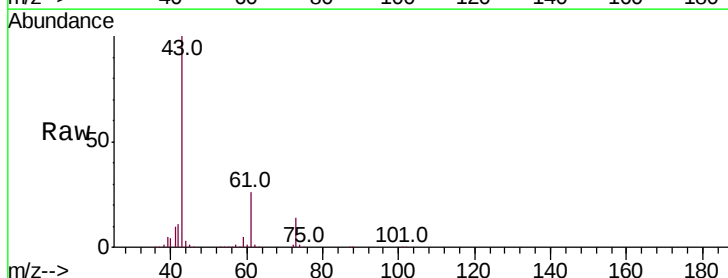


Abundance Ion 41.00 (40.70 to 41.70): VNC
100000 Ion 69.00 (68.70 to 69.70): VNC
Ion 39.00 (38.70 to 39.70): VNC

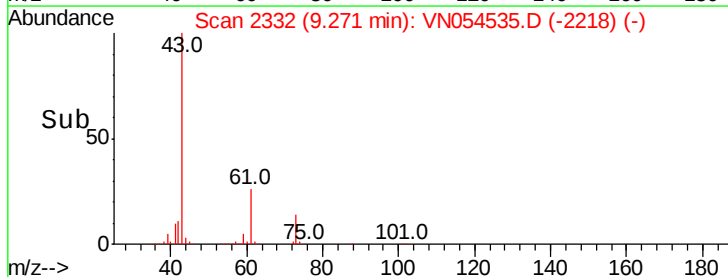
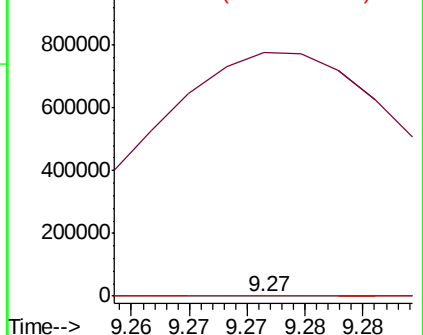


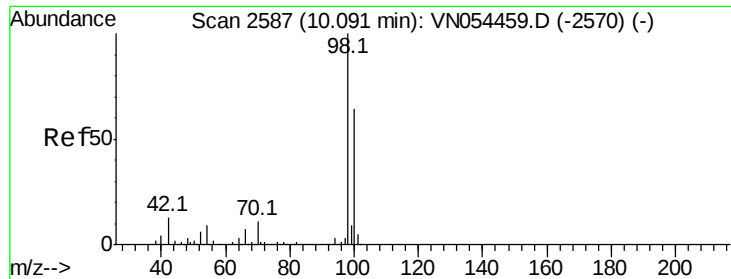
#49
1,4-Dioxane
Concen: 0.911 ug/l
RT: 9.27 min Scan# 2332
Delta R.T. 0.07 min
Lab File: VN054535.D
Acq: 22 Mar 2019 3:11

Tgt Ion: 88 Resp: 63
Ion Ratio Lower Upper
88 100
43 2427904.8 24.1 36.1#
58 9719.0 50.8 76.2#



Abundance Ion 88.00 (87.70 to 88.70): VNC
1000000 Ion 43.00 (42.70 to 43.70): VNC
Ion 58.00 (57.70 to 58.70): VNC





#50

Toluene-d8

Concen: 48.580 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

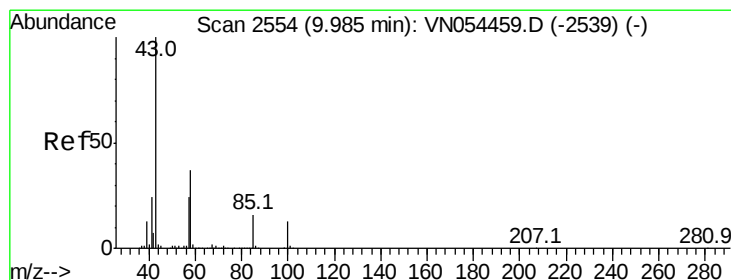
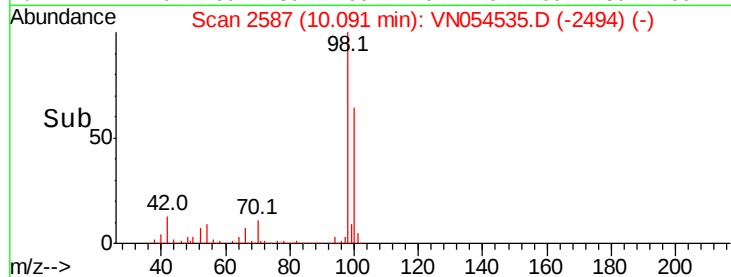
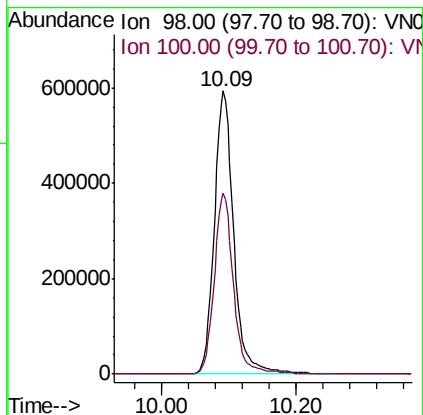
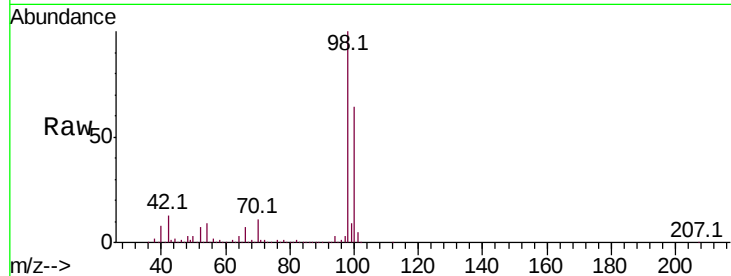
EO-02-032019-C

Tot Ion: 98 Resp: 1194327

Ion Ratio Lower Upper

98 100

100 63.3 51.2 76.8



#51

4-Methyl-2-Pentanone

Concen: 1.357 ug/l

RT: 10.03 min Scan# 2567

Delta R.T. 0.04 min

Lab File: VN054535.D

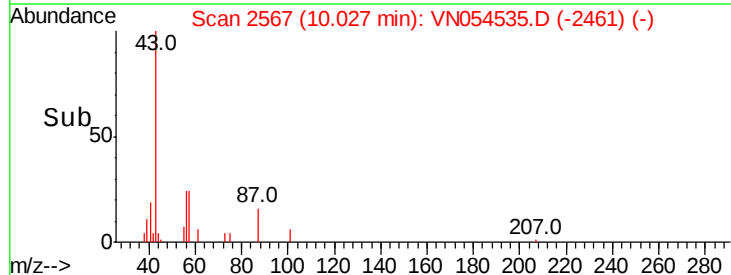
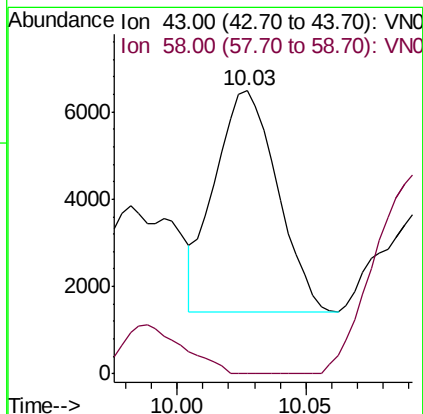
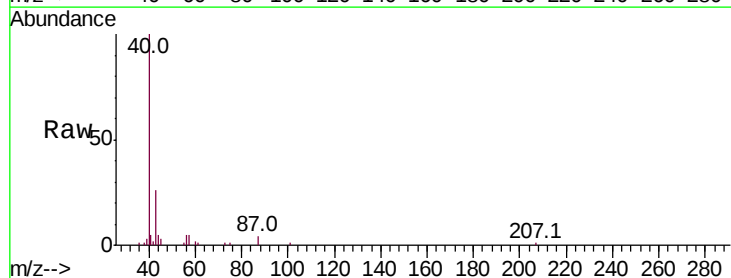
Acq: 22 Mar 2019 3:11

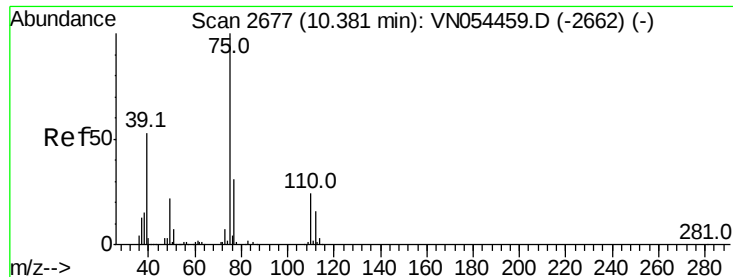
Tgt Ion: 43 Resp: 8573

Ion Ratio Lower Upper

43 100

58 0.0 31.8 47.6#





#53

t-1,3-Dichloropropene

Concen: 2.235 ug/l

RT: 10.30 min Scan# 2653

Delta R.T. -0.08 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

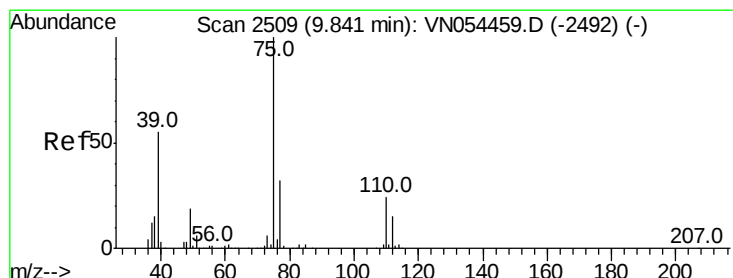
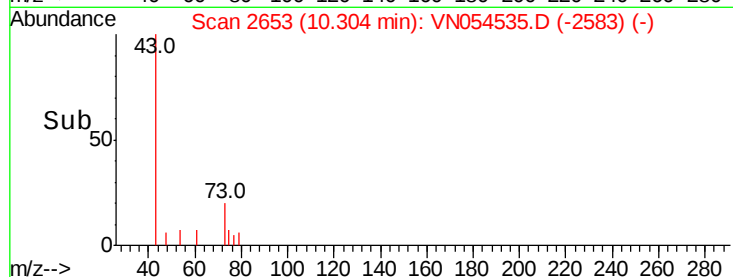
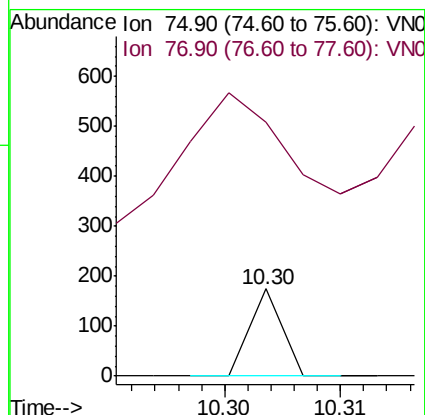
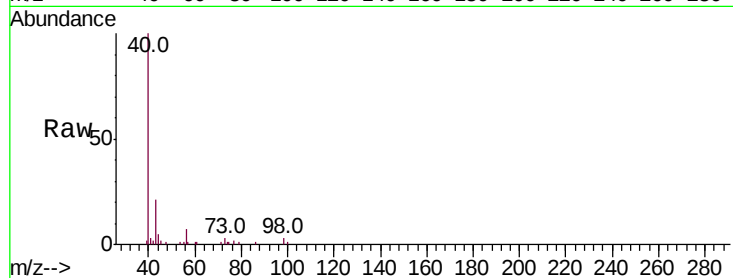
EO-02-032019-C

Tot Ion: 75 Resp: 34

Ion Ratio Lower Upper

75 100

77 83.3 25.8 38.8#



#54

cis-1,3-Dichloropropene

Concen: 5.208 ug/l

RT: 9.91 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

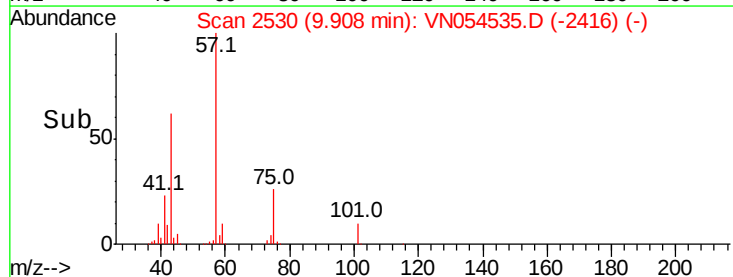
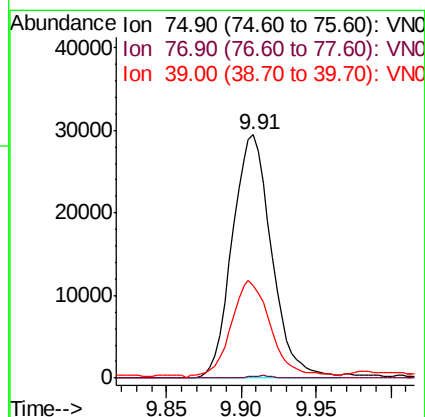
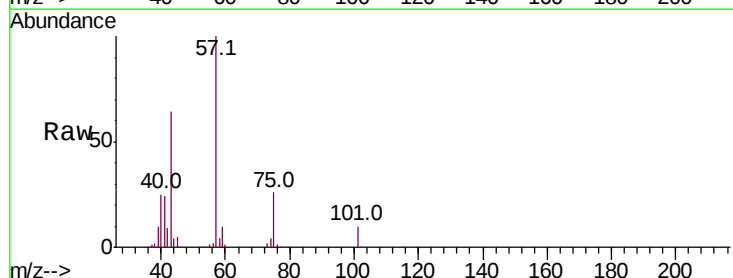
Tgt Ion: 75 Resp: 53878

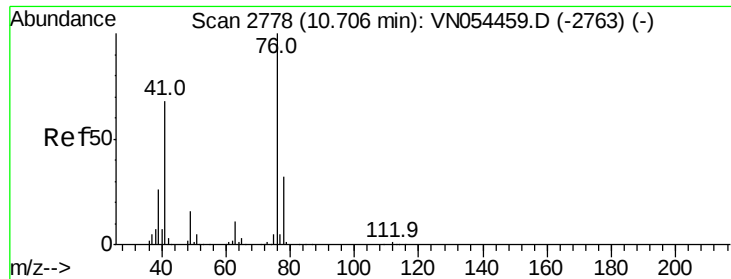
Ion Ratio Lower Upper

75 100

77 0.8 25.4 38.0#

39 36.9 37.2 55.8#





#57

1,3-Dichloropropane

Concen: 1.116 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.06 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

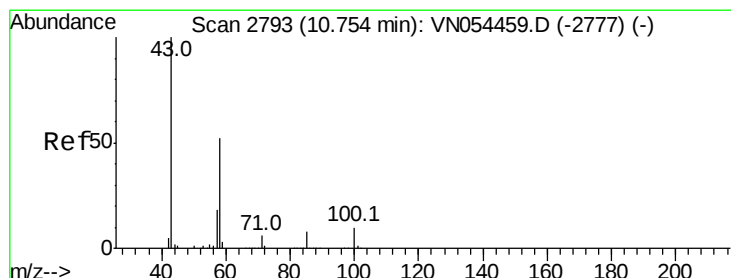
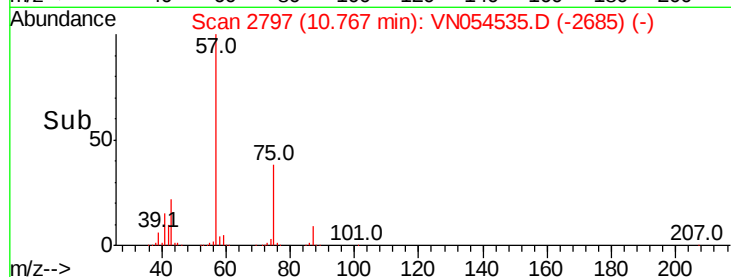
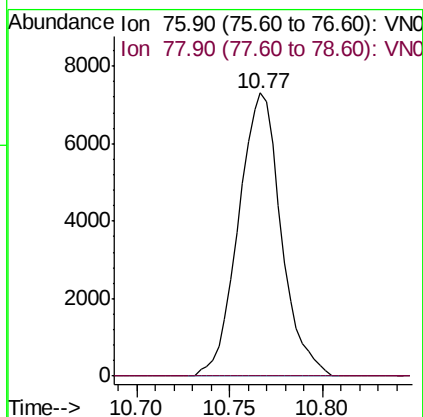
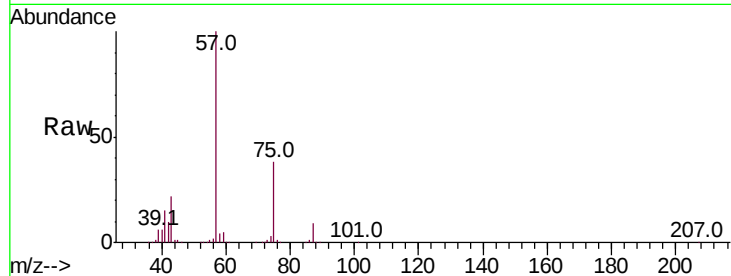
EO-02-032019-C

Tot Ion: 76 Resp: 11642

Ion Ratio Lower Upper

76 100

78 0.0 25.7 38.5#



#59

2-Hexanone

Concen: 44.216 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.01 min

Lab File: VN054535.D

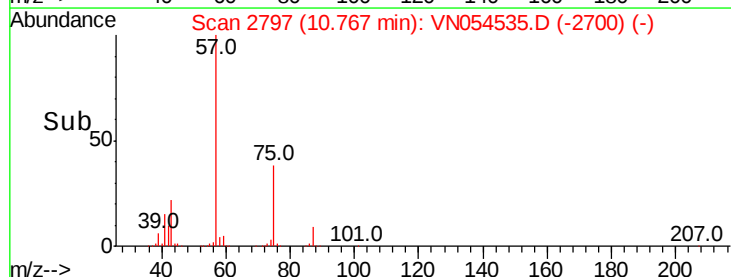
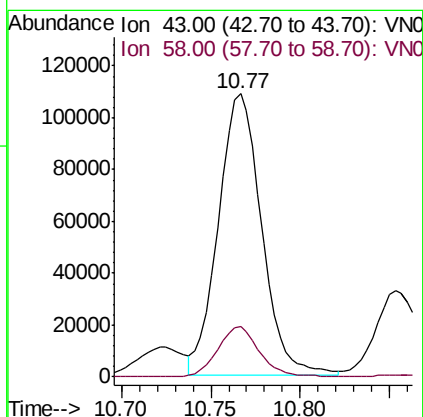
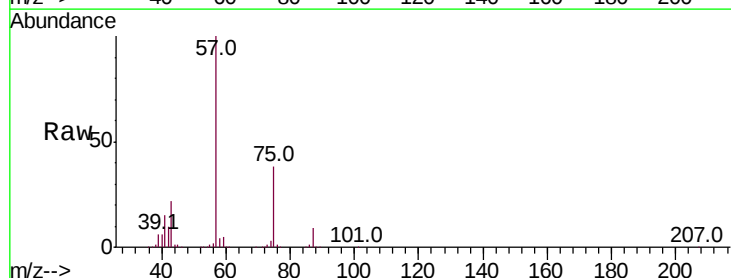
Acq: 22 Mar 2019 3:11

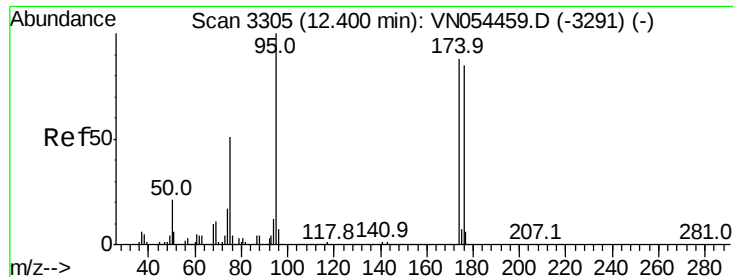
Tgt Ion: 43 Resp: 182475

Ion Ratio Lower Upper

43 100

58 17.6 28.0 83.9#





#62

4-Bromofluorobenzene

Concen: 44.131 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

EO-02-032019-C

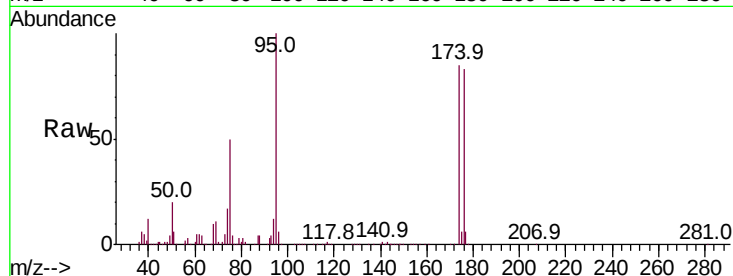
Tot Ion: 95 Resp: 369186

Ion Ratio Lower Upper

95 100

174 84.6 0.0 191.0

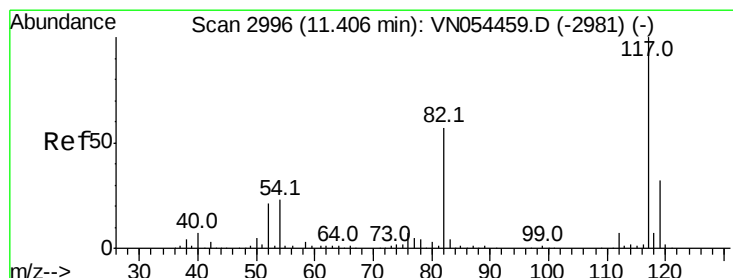
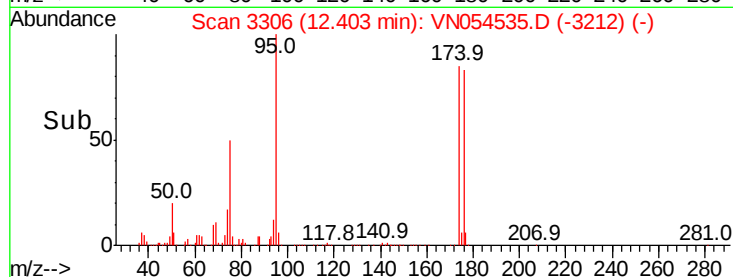
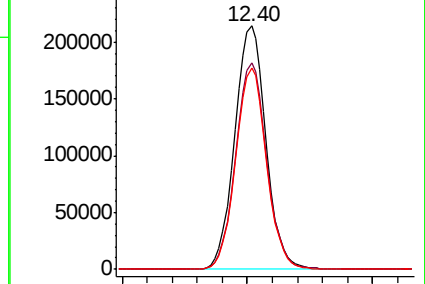
176 82.0 0.0 187.4



Abundance Ion 94.90 (94.60 to 95.60): VN054459.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN054459.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN054459.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

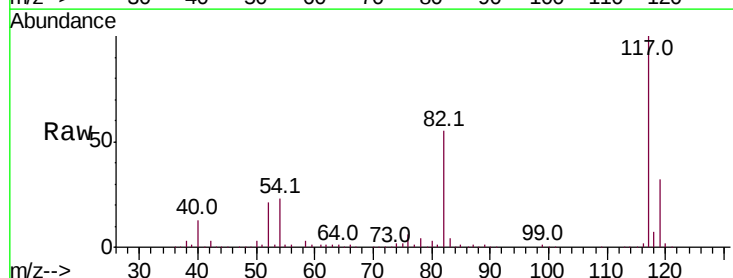
Tgt Ion: 117 Resp: 838390

Ion Ratio Lower Upper

117 100

82 55.3 40.0 60.0

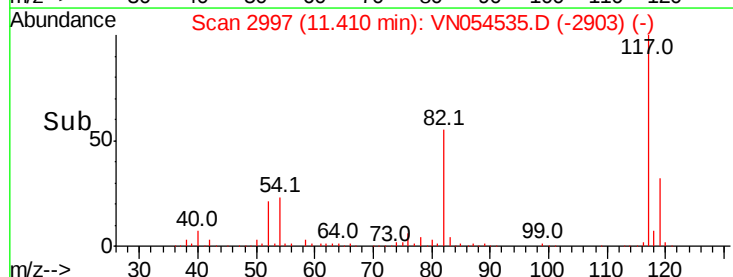
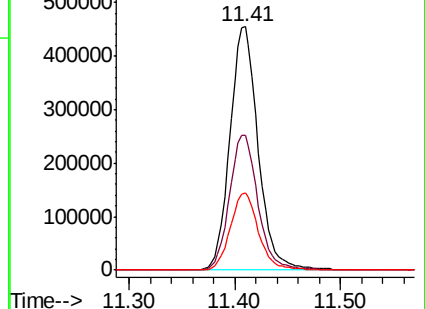
119 31.7 25.8 38.6

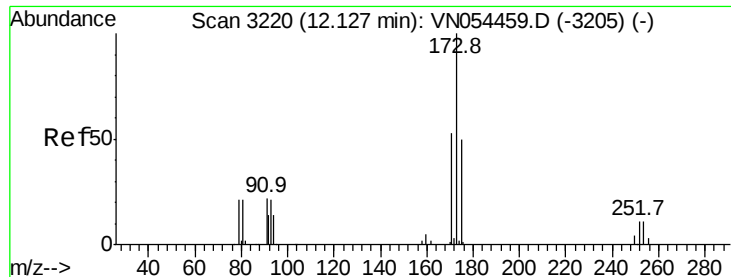


Abundance Ion 116.90 (116.60 to 117.60): VN054459.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN054459.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN054459.D (-2981) (-)





#71

Bromoform

Concen: 2.479 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.27 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

EO-02-032019-C

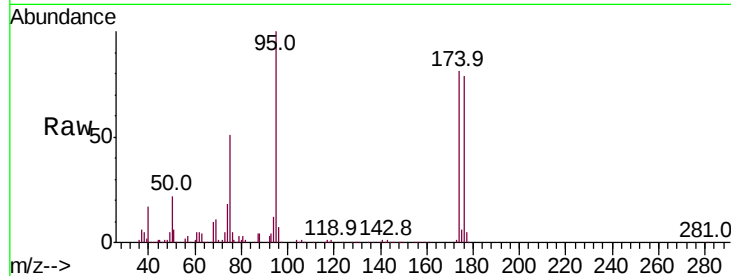
Tot Ion:173 Resp: 1140

Ion Ratio Lower Upper

173 100

175 1750.0 24.4 73.2#

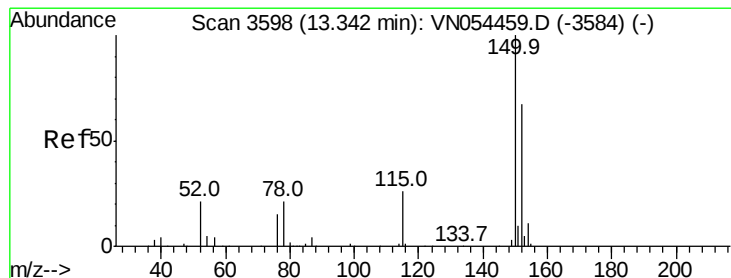
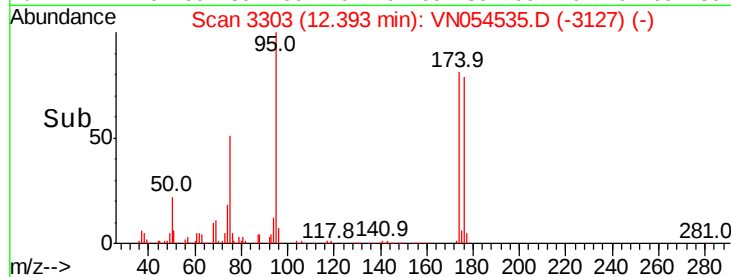
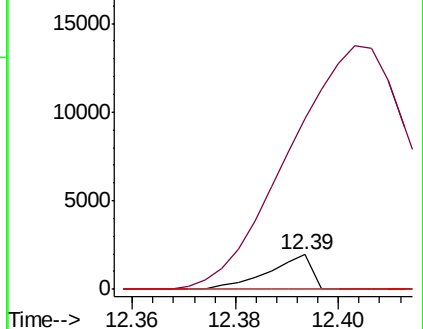
254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

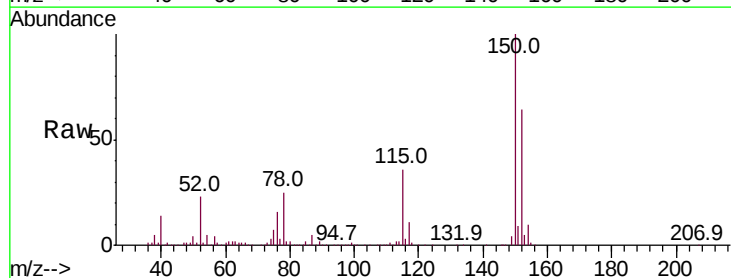
Tgt Ion:152 Resp: 310834

Ion Ratio Lower Upper

152 100

115 57.5 27.2 81.6

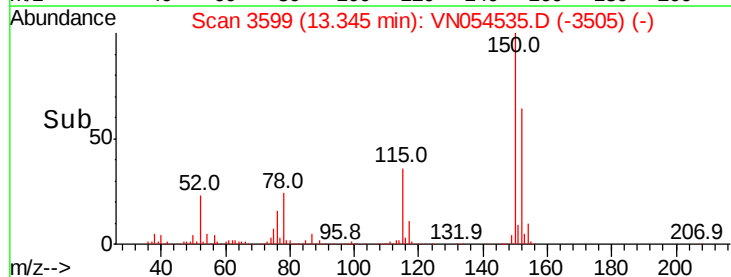
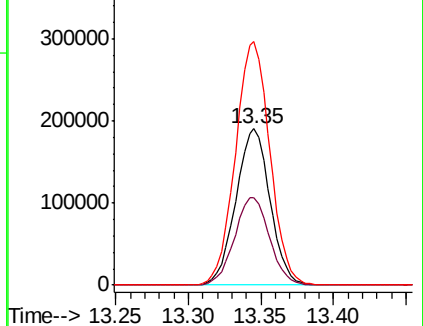
150 157.2 0.0 349.2

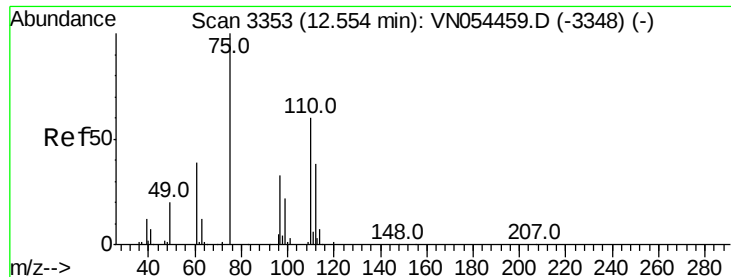


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 37.670 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

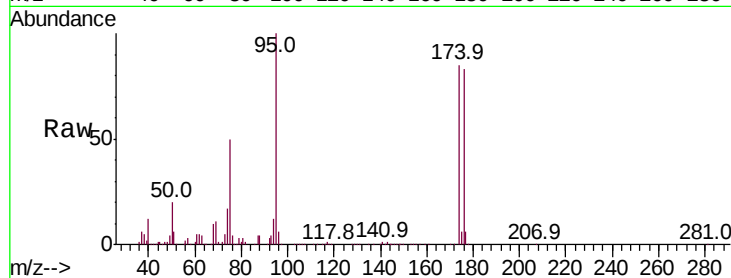
EO-02-032019-C

Tot Ion: 75 Resp: 185808

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

12.40

120000

100000

80000

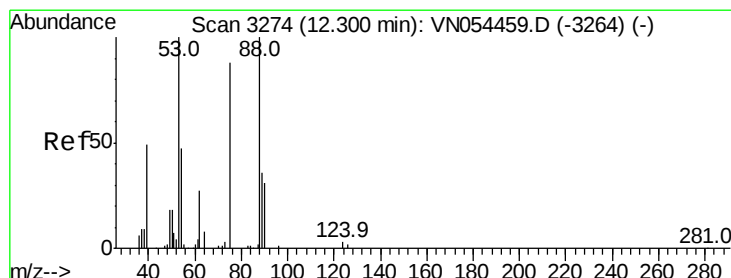
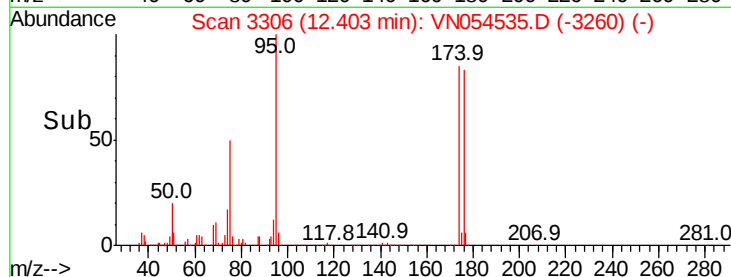
60000

40000

20000

0

Time--> 12.30 12.40 12.50



#81

trans-1,4-Dichloro-2-butene

Concen: 124.797 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

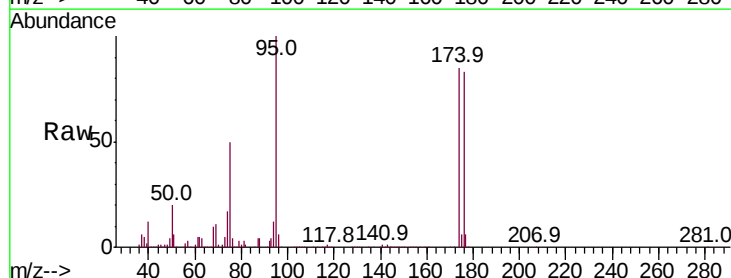
Tgt Ion: 75 Resp: 185808

Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

89 0.0 39.2 58.8#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

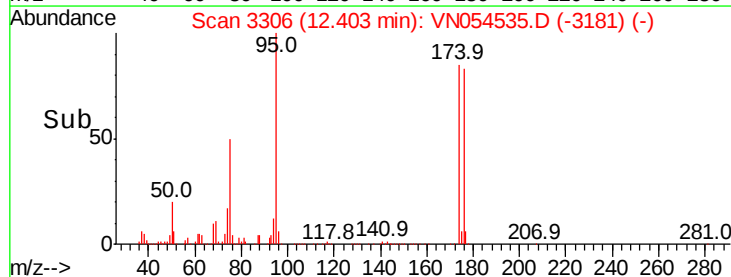
12.40

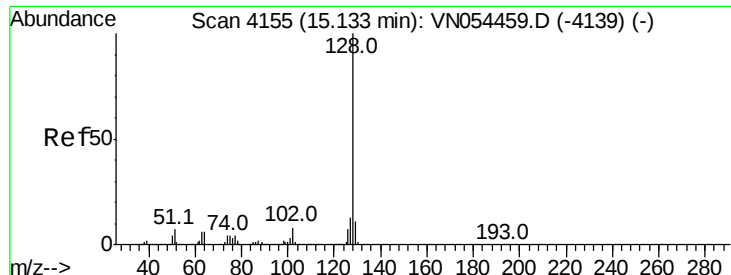
100000

50000

0

Time--> 12.30 12.40 12.50





#95

Naphthalene

Concen: 0.670 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.00 min

Lab File: VN054535.D

Acq: 22 Mar 2019 3:11

Instrument :

MSVOA_N

ClientSampleId :

EO-02-032019-C

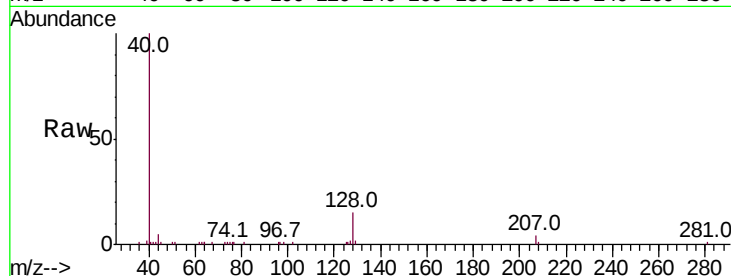
Tot Ion:128 Resp: 7429

Ion Ratio Lower Upper

128 100

127 14.1 10.1 15.1

129 11.9 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

