

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN100120\
 Data File : VN063802.D
 Acq On : 2 Oct 2020 4:32
 Operator : JC/MD
 Sample : L4190-16
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 PAV-B18-092920-19-20

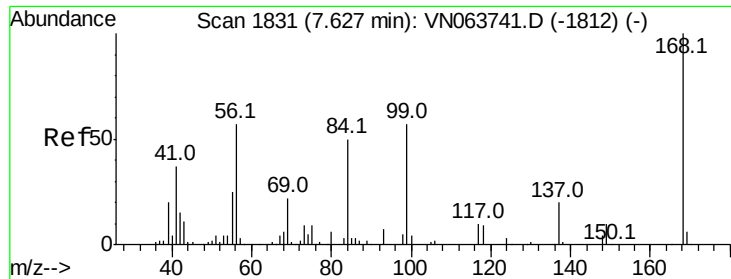
Quant Time: Oct 02 05:46:57 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N093020W.M
 Quant Title : SW846 8260
 QLast Update : Thu Oct 01 01:46:38 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.63	168	204899	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.55	114	393647	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.38	117	411643	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.32	152	167613	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.99	65	185469	54.79	ug/l	0.00
Spiked Amount			Recovery	=	109.58%	
35) Dibromofluoromethane	7.55	113	132485	48.50	ug/l	0.00
Spiked Amount			Recovery	=	97.00%	
50) Toluene-d8	10.06	98	515898	49.82	ug/l	0.00
Spiked Amount			Recovery	=	99.64%	
62) 4-Bromofluorobenzene	12.38	95	199784	51.33	ug/l	0.00
Spiked Amount			Recovery	=	102.66%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.73	59	287	0.768	ug/l #	71
16) Acetone	3.78	43	27505	26.395	ug/l	96
17) Carbon Disulfide	4.01	76	610	0.808	ug/l #	76
18) Methyl Acetate	4.30	43	5444	2.012	ug/l #	70
20) Methylene Chloride	4.50	84	9121	3.912	ug/l	96
25) 2-Butanone	6.79	43	2097	1.419	ug/l	91
29) Tetrahydrofuran	7.15	42	232	0.234	ug/l #	36
31) Cyclohexane	7.63	56	5895	1.500	ug/l #	31
36) 1,1-Dichloropropene	7.62	75	19078	4.784	ug/l #	51
38) Carbon Tetrachloride	7.62	117	24659	5.514	ug/l #	15
43) Isopropyl Acetate	8.13	43	75507	11.554	ug/l	99
45) 1,2-Dichloropropane	9.23	63	1414	0.460	ug/l #	44
48) Methyl methacrylate	9.14	41	4841	1.499	ug/l #	12
51) 4-Methyl-2-Pentanone	9.95	43	10214	2.663	ug/l #	86
54) cis-1,3-Dichloropropene	9.87	75	28185	5.748	ug/l #	69
56) Ethyl methacrylate	10.51	69	1821	0.455	ug/l #	1
57) 1,3-Dichloropropane	10.74	76	4967	1.039	ug/l #	43
59) 2-Hexanone	10.74	43	85622	30.052	ug/l #	54
74) N-amyl acetate	12.01	43	2761	2.680	ug/l #	51
76) 1,2,3-Trichloropropane	12.38	75	115833	31.350	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.38	75	115833	90.292	ug/l #	6
93) 1,2,4-Trichlorobenzene	14.89	180	30	1.746	ug/l #	12
95) Naphthalene	15.12	128	30	1.928	ug/l #	69

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.00 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

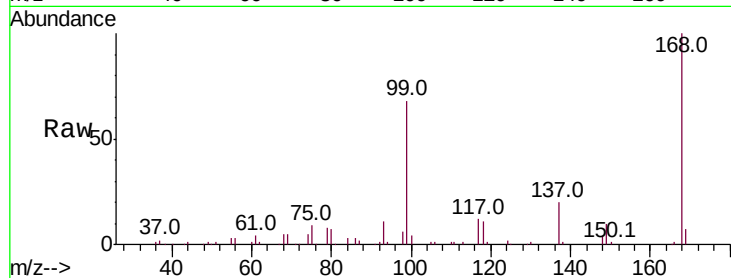
PAV-B18-092920-19-20

Tot Ion:168 Resp: 204899

Ion Ratio Lower Upper

168 100

99 67.5 51.8 77.6



Abundance Ion 167.90 (167.60 to 168.60): VN063741.D (-1812) (-)

Ion 98.90 (98.60 to 99.60): VN063741.D (-1812) (-)

7.63

80000

60000

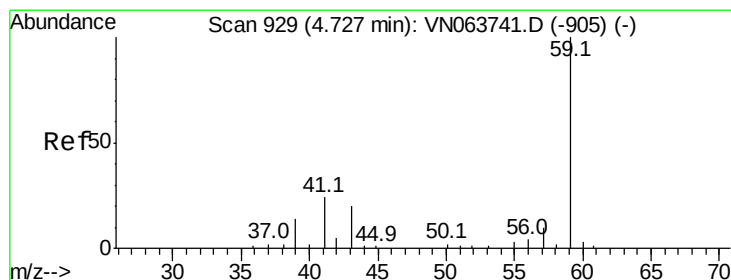
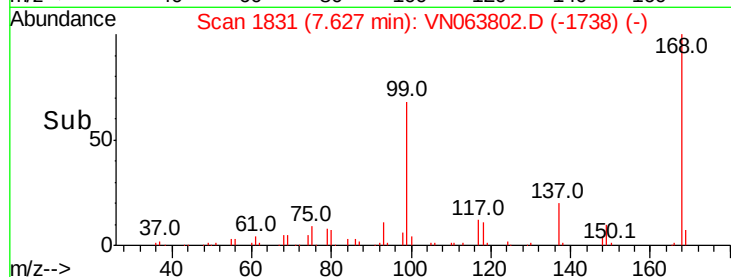
40000

20000

0

7.55 7.60 7.65 7.70

Time-->



#11

Tert butyl alcohol

Concen: 0.768 ug/l

RT: 4.73 min Scan# 930

Delta R.T. 0.00 min

Lab File: VN063802.D

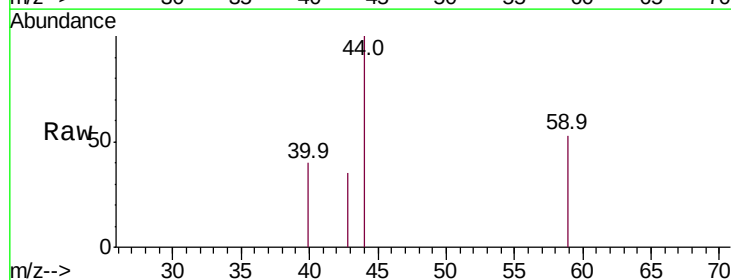
Acq: 2 Oct 2020 4:32

Tgt Ion: 59 Resp: 287

Ion Ratio Lower Upper

59 100

57 0.0 8.7 13.1#



Abundance Ion 59.00 (58.70 to 59.70): VN063741.D (-905) (-)

Ion 57.00 (56.70 to 57.70): VN063741.D (-905) (-)

4.73

250

200

150

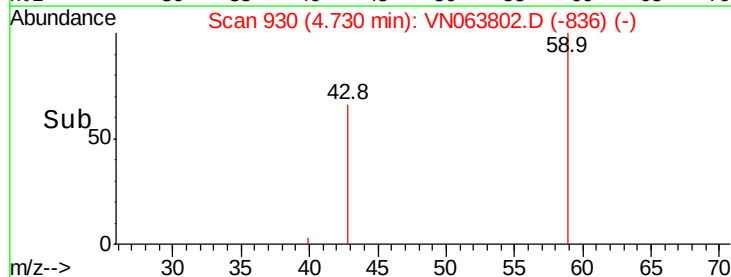
100

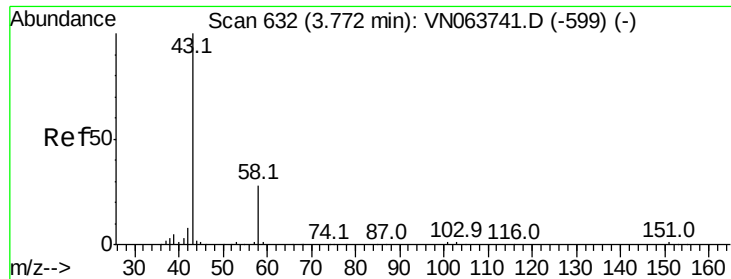
50

0

4.70 4.72 4.74

Time-->





#16

Acetone

Concen: 26.395 ug/l

RT: 3.78 min Scan# 634

Delta R.T. 0.01 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

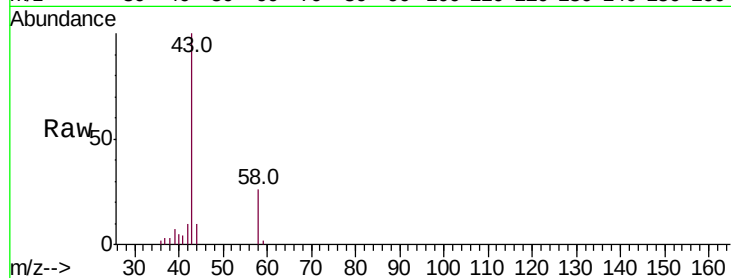
PAV-B18-092920-19-20

Tot Ion: 43 Resp: 27505

Ion Ratio Lower Upper

43 100

58 25.7 22.3 33.5



Abundance Ion 43.00 (42.70 to 43.70): VN063741.D (-599) (-)

Ion 58.00 (57.70 to 58.70): VN063741.D (-599) (-)

3.78

10000

8000

6000

4000

2000

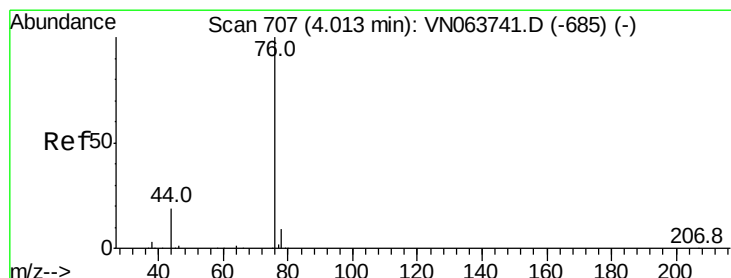
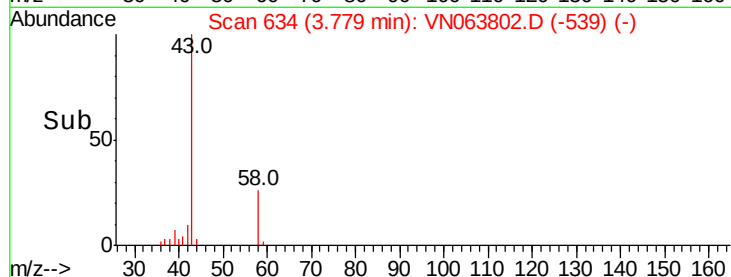
0

Time-->

3.70

3.80

3.90



#17

Carbon Disulfide

Concen: 0.808 ug/l

RT: 4.01 min Scan# 705

Delta R.T. -0.01 min

Lab File: VN063802.D

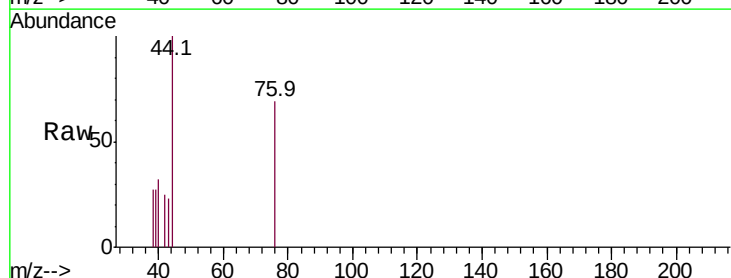
Acq: 2 Oct 2020 4:32

Tgt Ion: 76 Resp: 610

Ion Ratio Lower Upper

76 100

78 0.0 7.0 10.4#



Abundance Ion 75.90 (75.60 to 76.60): VN063741.D (-685) (-)

Ion 77.90 (77.60 to 78.60): VN063741.D (-685) (-)

4.01

500

400

300

200

100

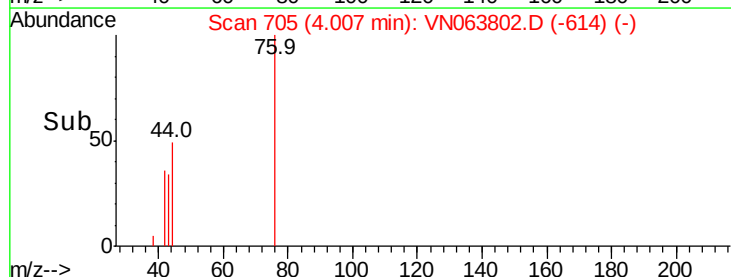
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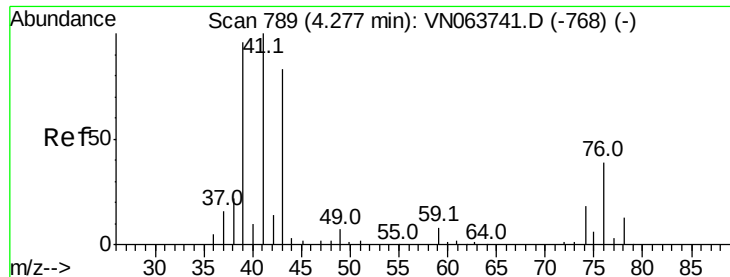
Time-->

3.98

4.00

4.02

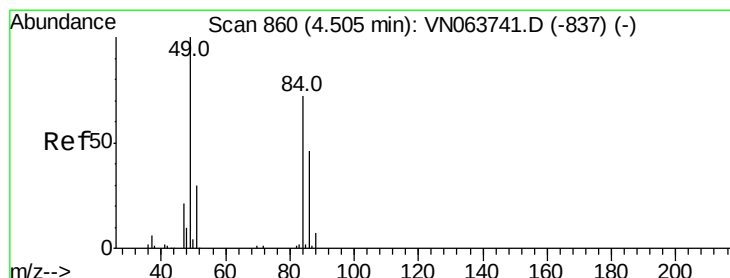
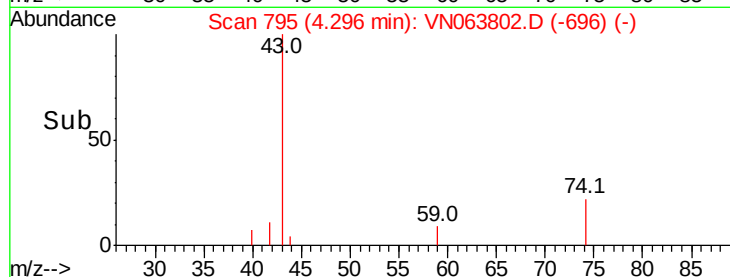
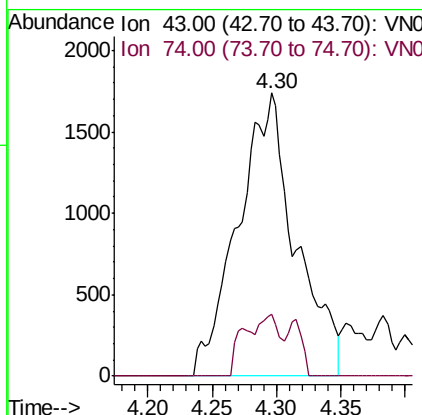
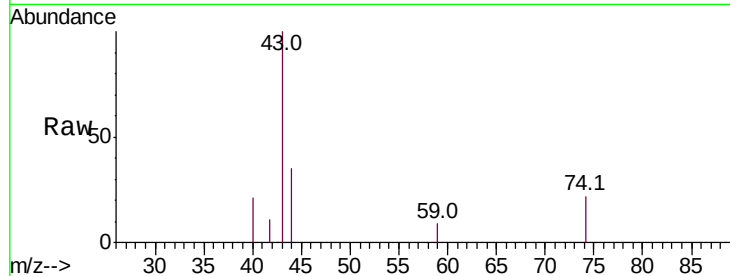




#18
Methyl Acetate
Concen: 2.012 ug/l
RT: 4.30 min Scan# 795
Delta R.T. 0.02 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

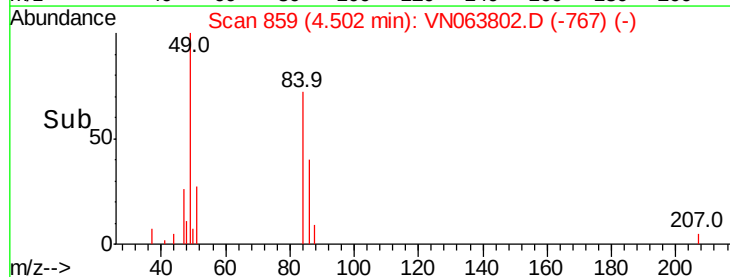
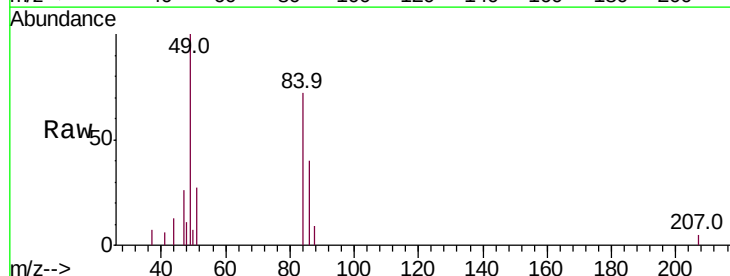
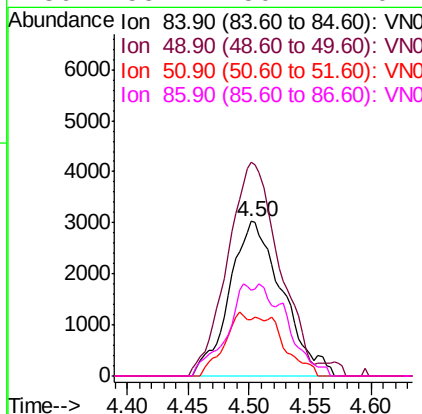
Instrument :
MSVOA_N
ClientSampleId :
PAV-B18-092920-19-20

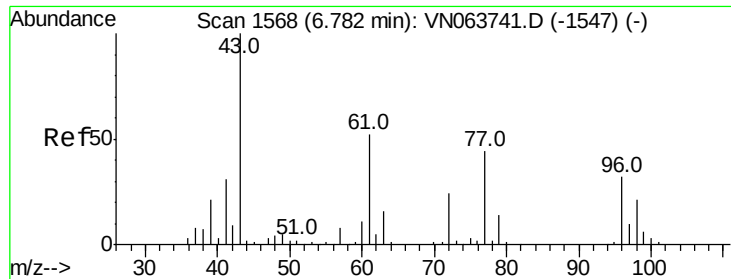
Tot Ion: 43 Resp: 5444
Ion Ratio Lower Upper
43 100
74 7.7 17.4 26.2#



#20
Methylene Chloride
Concen: 3.912 ug/l
RT: 4.50 min Scan# 859
Delta R.T. -0.00 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

Tgt Ion: 84 Resp: 9121
Ion Ratio Lower Upper
84 100
49 138.1 110.4 165.6
51 36.7 33.3 49.9
86 55.1 50.7 76.1





#25

2-Butanone

Concen: 1.419 ug/l

RT: 6.79 min Scan# 1572

Delta R.T. 0.01 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

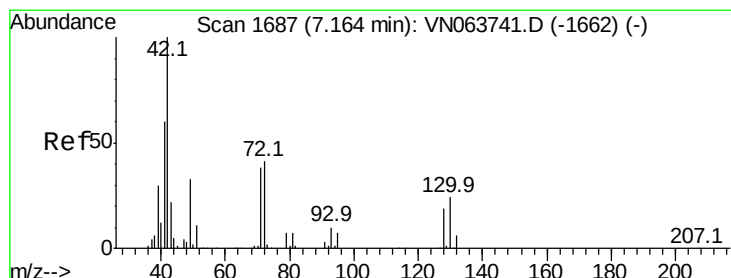
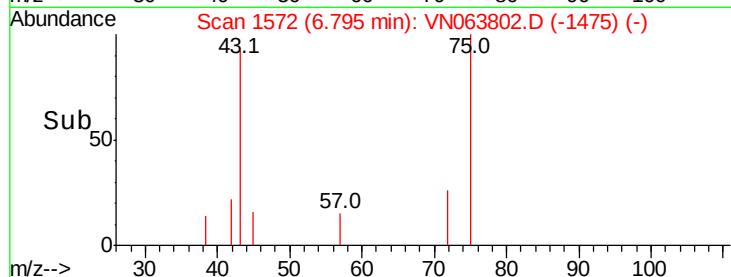
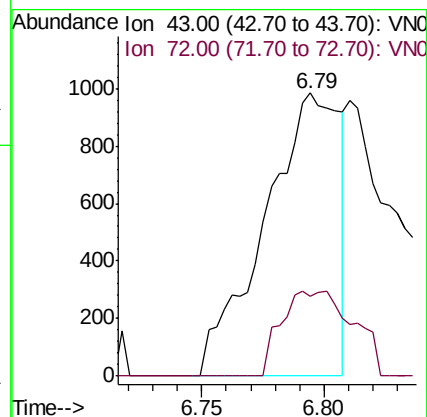
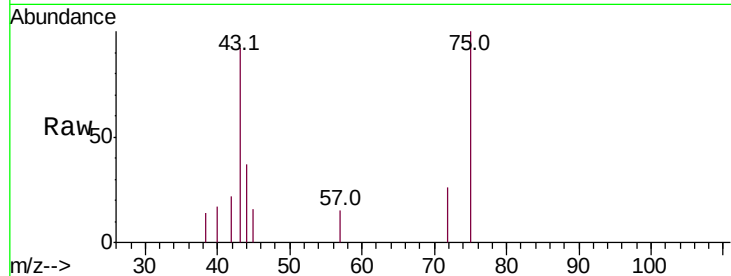
PAV-B18-092920-19-20

Tot Ion: 43 Resp: 2097

Ion Ratio Lower Upper

43 100

72 28.4 19.3 28.9



#29

Tetrahydrofuran

Concen: 0.234 ug/l

RT: 7.15 min Scan# 1684

Delta R.T. -0.01 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

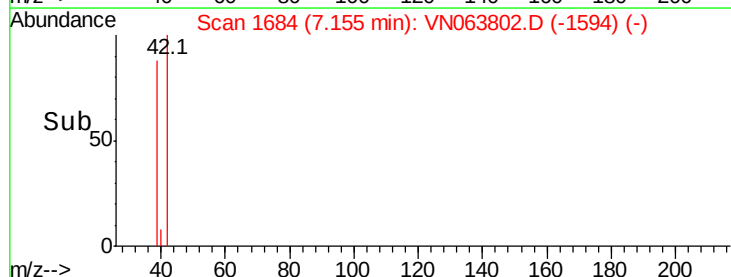
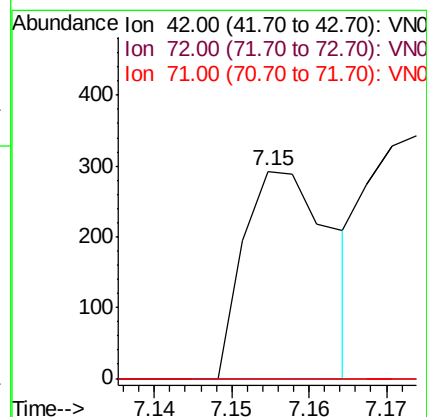
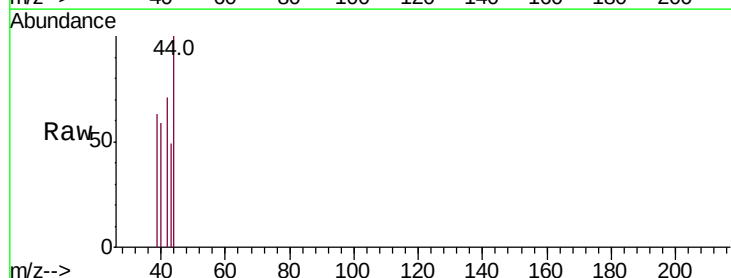
Tgt Ion: 42 Resp: 232

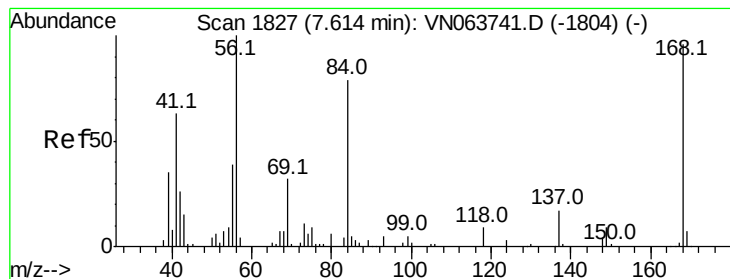
Ion Ratio Lower Upper

42 100

72 0.0 32.8 49.2#

71 0.0 30.6 45.8#





#31

Cyclohexane

Concen: 1.500 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.01 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

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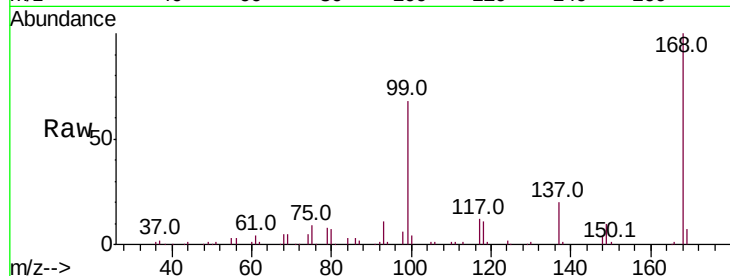
Tot Ion: 56 Resp: 5895

Ion Ratio Lower Upper

56 100

69 146.5 25.4 38.2#

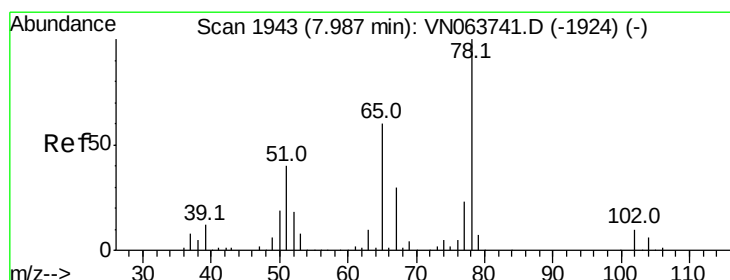
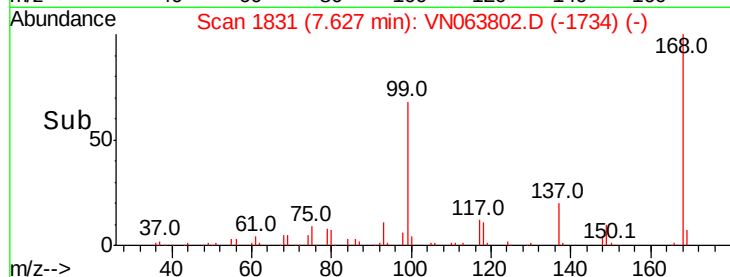
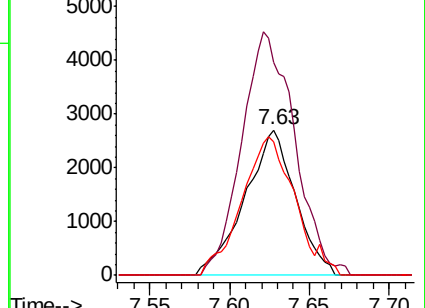
84 91.6 63.3 94.9



Abundance Ion 56.00 (55.70 to 56.70): VN063741.D (-1804) (-)

Ion 69.00 (68.70 to 69.70): VN063741.D (-1804) (-)

Ion 84.00 (83.70 to 84.70): VN063741.D (-1804) (-)



#33

1,2-Dichloroethane-d4

Concen: 54.790 ug/l

RT: 7.99 min Scan# 1943

Delta R.T. 0.00 min

Lab File: VN063802.D

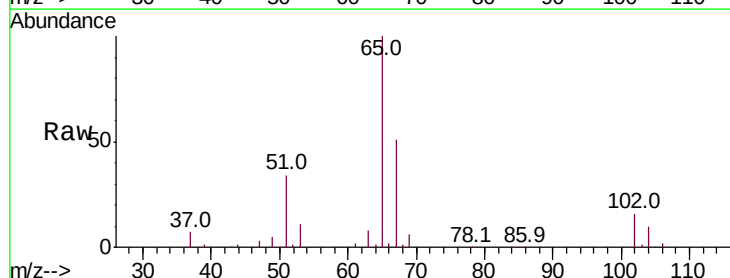
Acq: 2 Oct 2020 4:32

Tgt Ion: 65 Resp: 185469

Ion Ratio Lower Upper

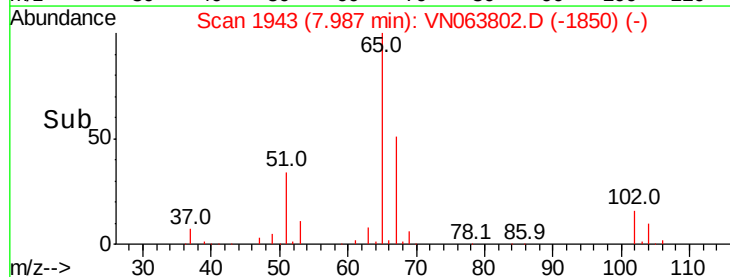
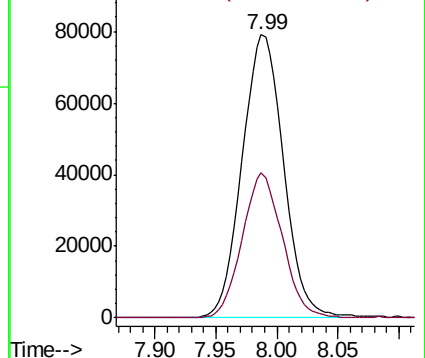
65 100

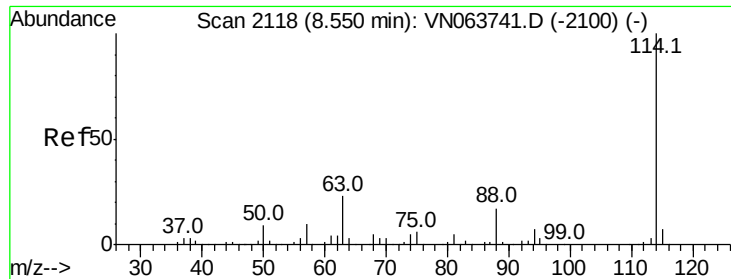
67 49.7 0.0 99.6



Abundance Ion 64.90 (64.60 to 65.60): VN063741.D (-1924) (-)

Ion 66.90 (66.60 to 67.60): VN063741.D (-1924) (-)

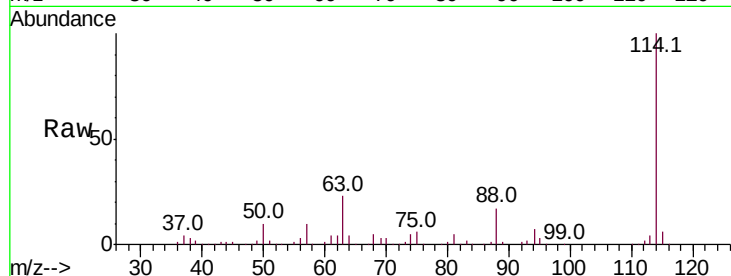




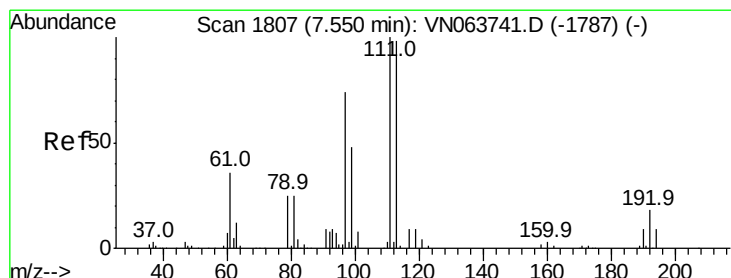
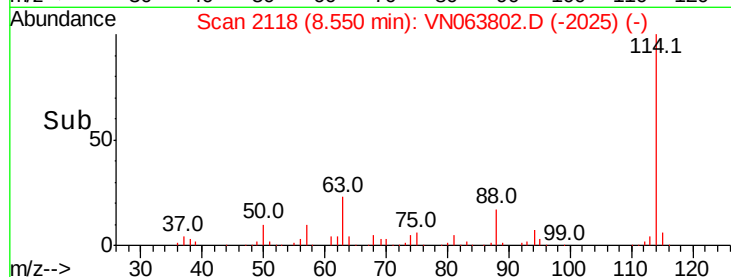
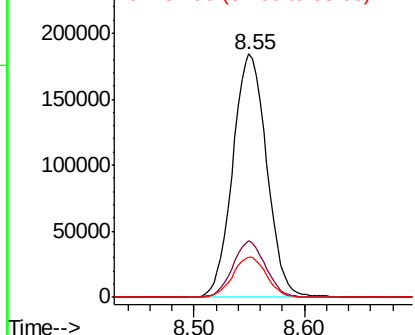
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.55 min Scan# 2118
 Delta R.T. 0.00 min
 Lab File: VN063802.D
 Acq: 2 Oct 2020 4:32

Instrument :
 MSVOA_N
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 PAV-B18-092920-19-20

Tot Ion:	114	Resp:	393647
Ion	Ratio	Lower	Upper
114	100		
63	23.1	0.0	45.0
88	16.7	0.0	34.0

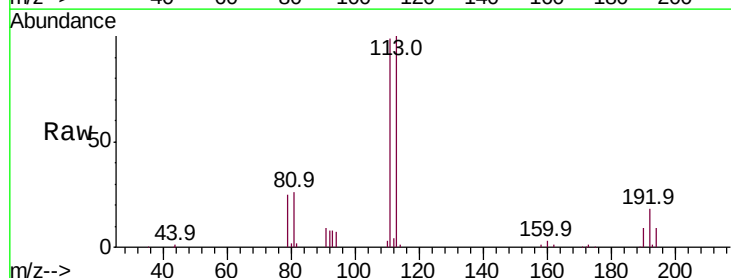


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VN
 Ion 87.90 (87.60 to 88.60): VN

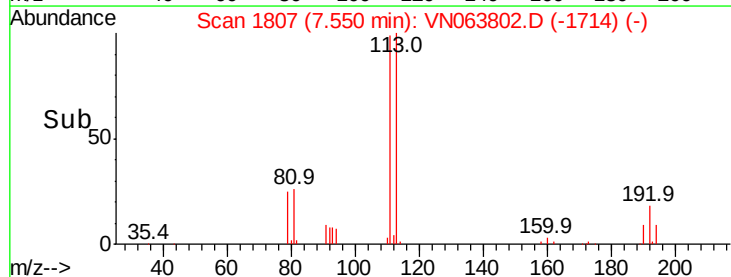
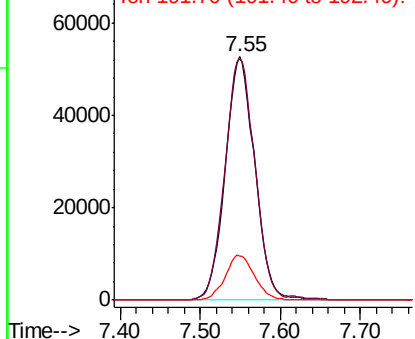


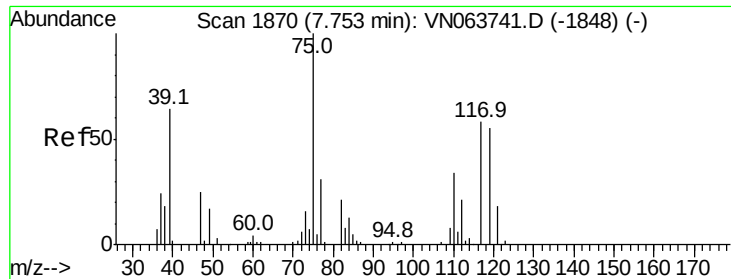
#35
 Dibromofluoromethane
 Concen: 48.504 ug/l
 RT: 7.55 min Scan# 1807
 Delta R.T. 0.00 min
 Lab File: VN063802.D
 Acq: 2 Oct 2020 4:32

Tgt Ion:	113	Resp:	132485
Ion	Ratio	Lower	Upper
113	100		
111	100.5	81.8	122.8
192	18.1	14.2	21.2



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: 4.784 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.13 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

PAV-B18-092920-19-20

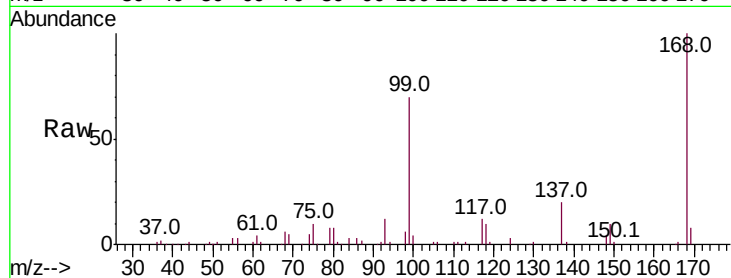
Tot Ion: 75 Resp: 19078

Ion Ratio Lower Upper

75 100

110 9.5 16.9 50.6#

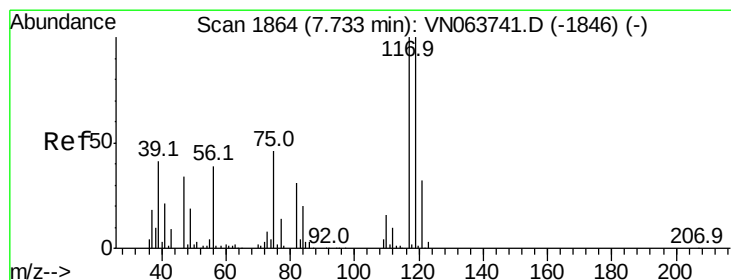
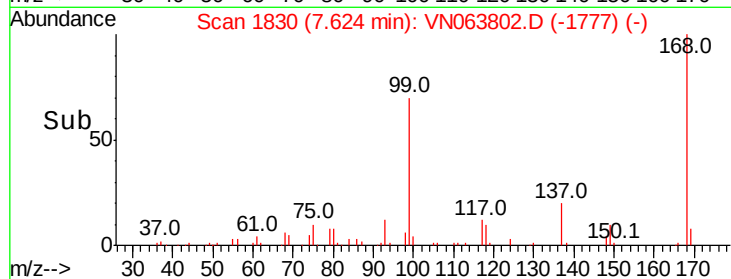
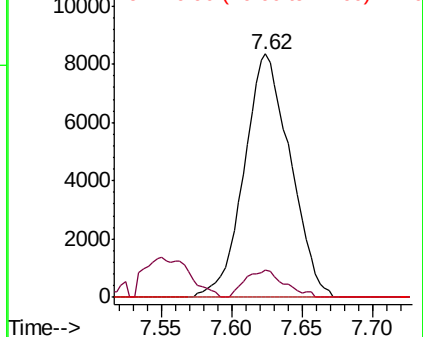
77 0.0 24.5 36.7#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VN0



#38

Carbon Tetrachloride

Concen: 5.514 ug/l

RT: 7.62 min Scan# 1830

Delta R.T. -0.11 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

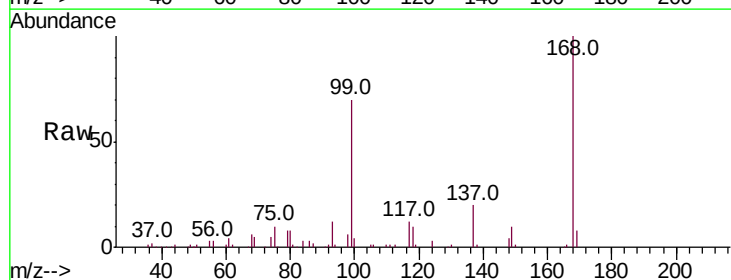
Tgt Ion: 117 Resp: 24659

Ion Ratio Lower Upper

117 100

119 6.8 80.1 120.1#

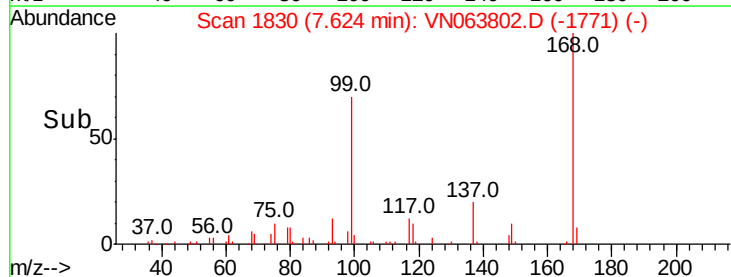
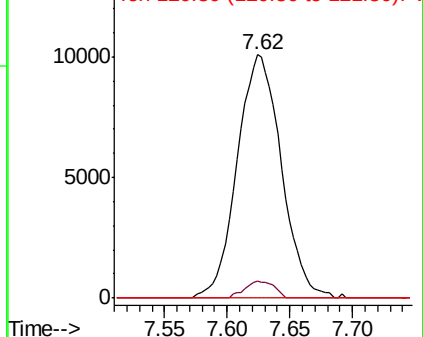
121 0.0 25.7 38.5#

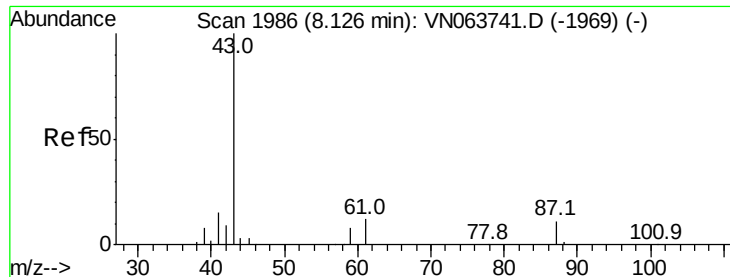


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#43

Isopropyl Acetate

Concen: 11.554 ug/l

RT: 8.13 min Scan# 1987

Delta R.T. 0.00 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

PAV-B18-092920-19-20

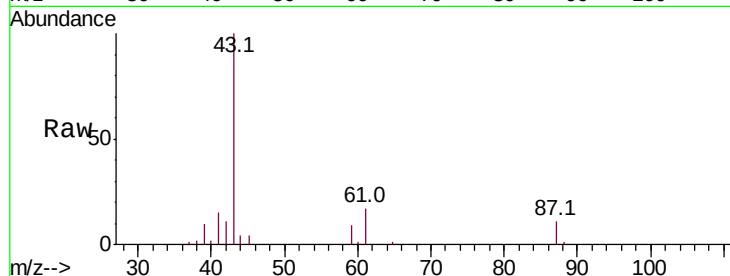
Tot Ion: 43 Resp: 75507

Ion Ratio Lower Upper

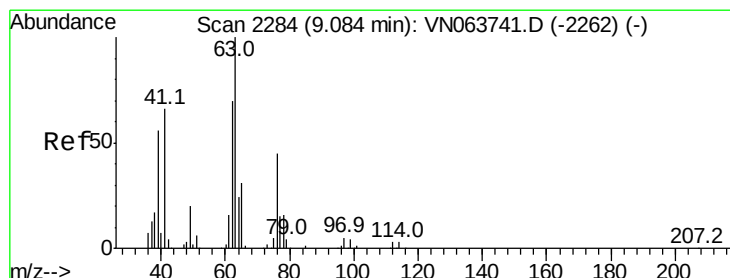
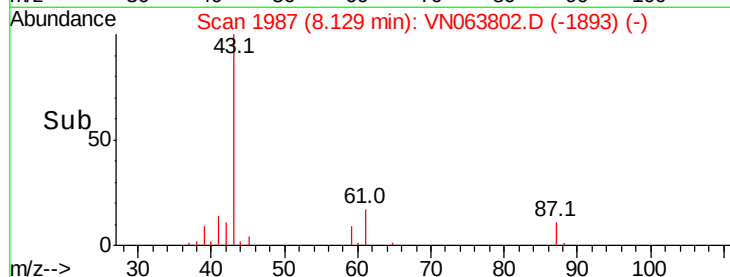
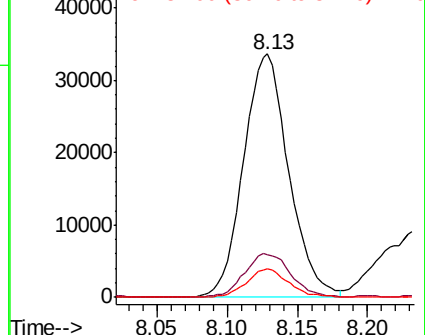
43 100

61 18.3 14.2 21.4

87 10.7 9.0 13.6



Abundance Ion 43.00 (42.70 to 43.70): VNO
Ion 61.00 (60.70 to 61.70): VNO
Ion 87.00 (86.70 to 87.70): VNO



#45

1,2-Dichloropropane

Concen: 0.460 ug/l

RT: 9.23 min Scan# 2328

Delta R.T. 0.14 min

Lab File: VN063802.D

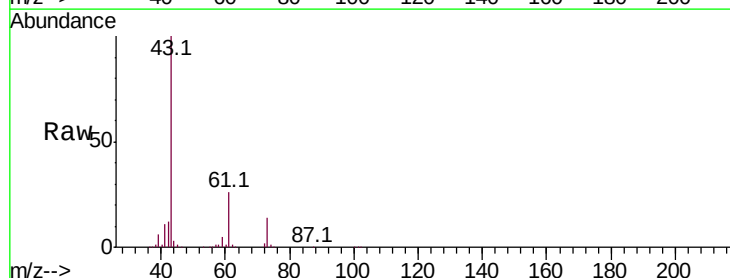
Acq: 2 Oct 2020 4:32

Tgt Ion: 63 Resp: 1414

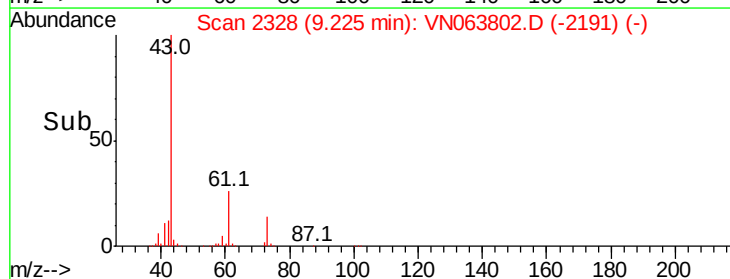
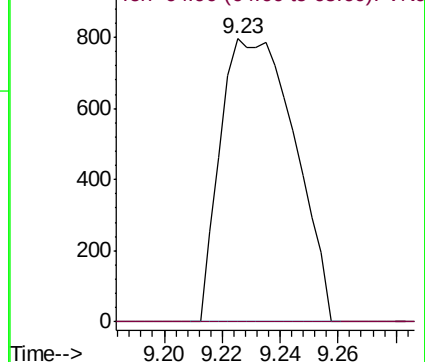
Ion Ratio Lower Upper

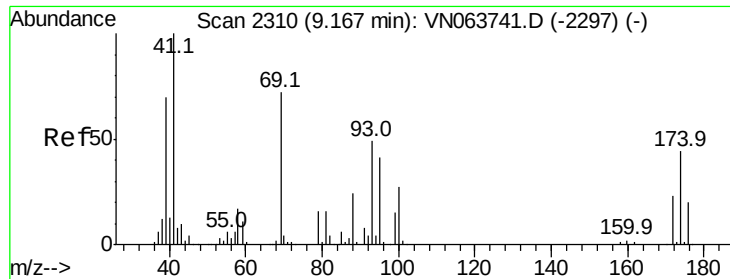
63 100

65 0.0 24.7 37.1#



Abundance Ion 62.90 (62.60 to 63.60): VNO
Ion 64.90 (64.60 to 65.60): VNO

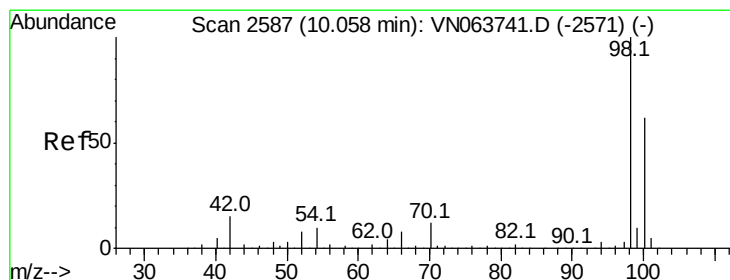
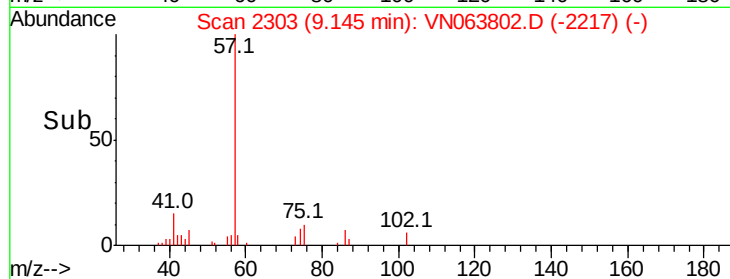
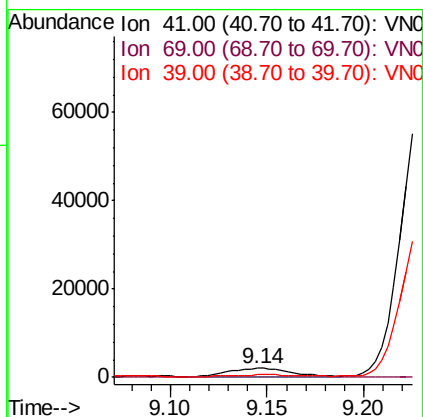
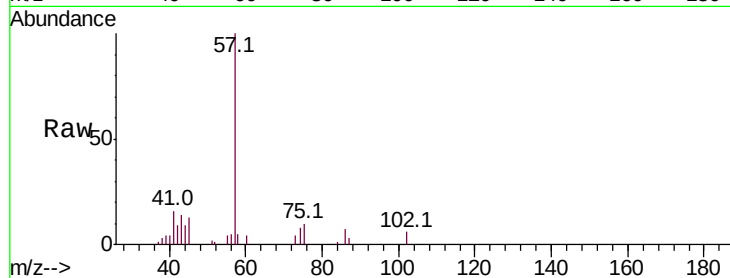




#48
Methvl methacrylate
Concen: 1.499 ug/l
RT: 9.14 min Scan# 2303
Delta R.T. -0.02 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

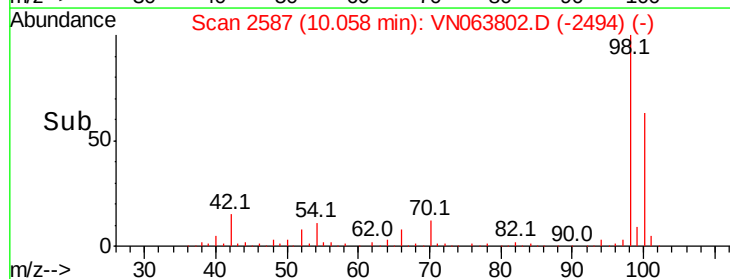
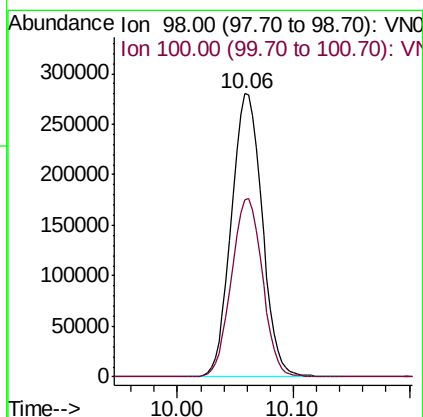
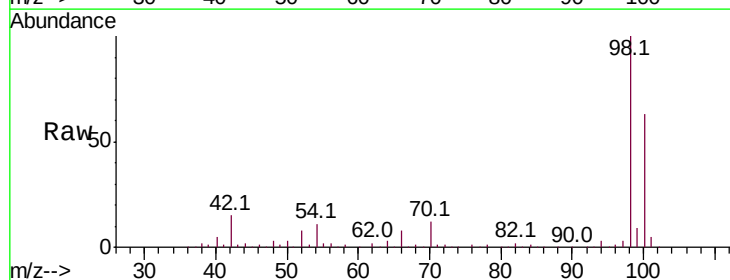
Instrument :
MSVOA_N
ClientSampleId :
PAV-B18-092920-19-20

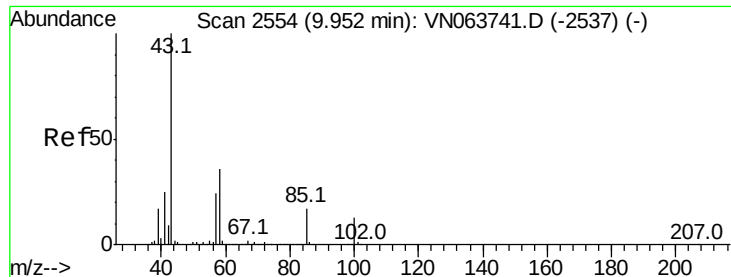
Tot Ion: 41 Resp: 4841
Ion Ratio Lower Upper
41 100
69 0.0 60.9 91.3#
39 0.0 57.5 86.3#



#50
Toluene-d8
Concen: 49.823 ug/l
RT: 10.06 min Scan# 2587
Delta R.T. 0.00 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

Tgt Ion: 98 Resp: 515898
Ion Ratio Lower Upper
98 100
100 63.4 49.8 74.6

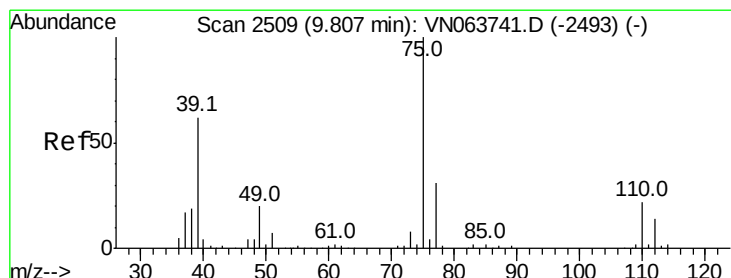
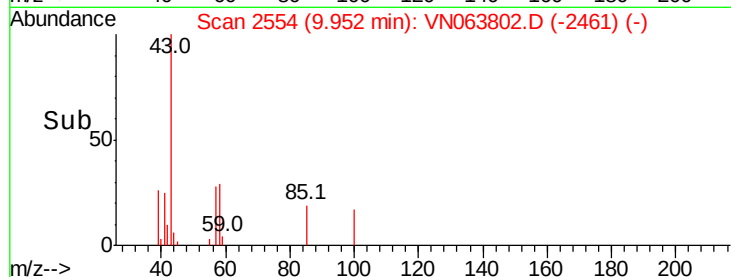
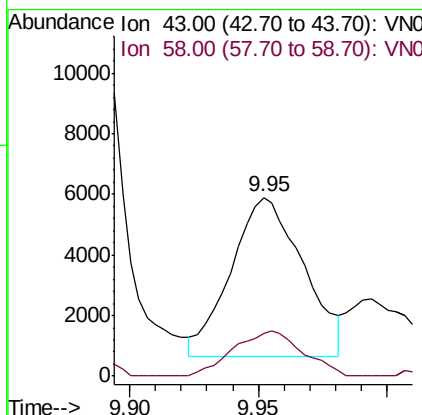
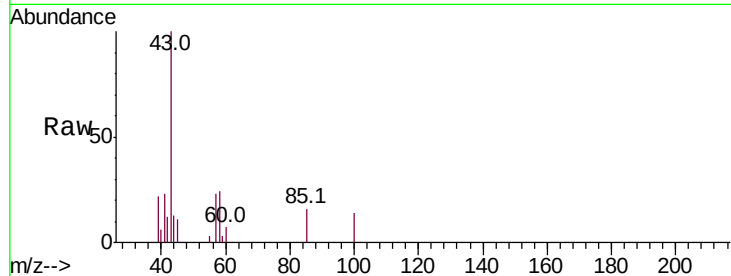




#51
 4-Methyl-2-Pentanone
 Concen: 2.663 ug/l
 RT: 9.95 min Scan# 2554
 Delta R.T. 0.00 min
 Lab File: VN063802.D
 Acq: 2 Oct 2020 4:32

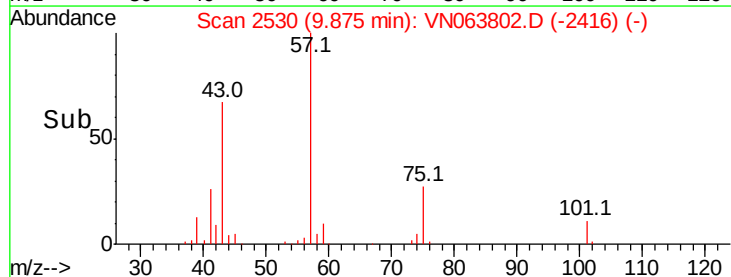
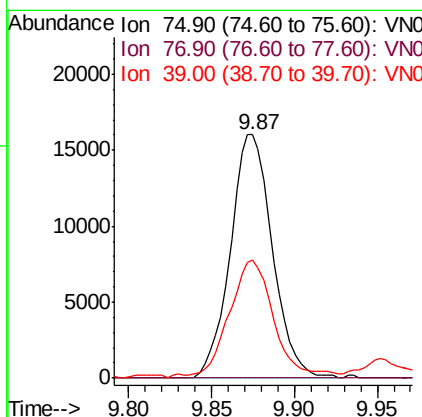
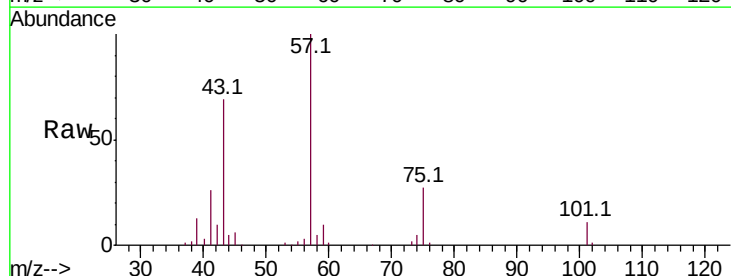
Instrument :
 MSVOA_N
 ClientSampleId :
 PAV-B18-092920-19-20

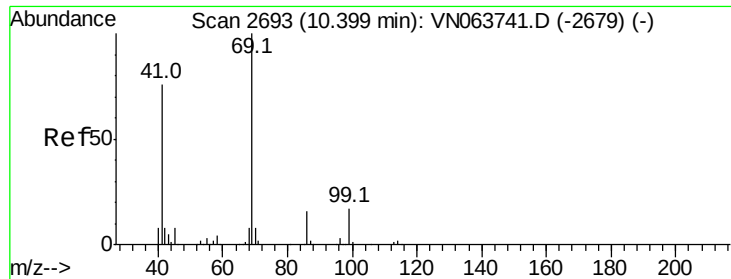
Tot Ion: 43 Resp: 10214
 Ion Ratio Lower Upper
 43 100
 58 27.4 28.4 42.6#



#54
 cis-1,3-Dichloropropene
 Concen: 5.748 ug/l
 RT: 9.87 min Scan# 2530
 Delta R.T. 0.07 min
 Lab File: VN063802.D
 Acq: 2 Oct 2020 4:32

Tgt Ion: 75 Resp: 28185
 Ion Ratio Lower Upper
 75 100
 77 0.0 24.6 36.8#
 39 47.4 49.7 74.5#





#56

Ethyl methacrylate

Concen: 0.455 ug/l

RT: 10.51 min Scan# 2729

Delta R.T. 0.12 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

PAV-B18-092920-19-20

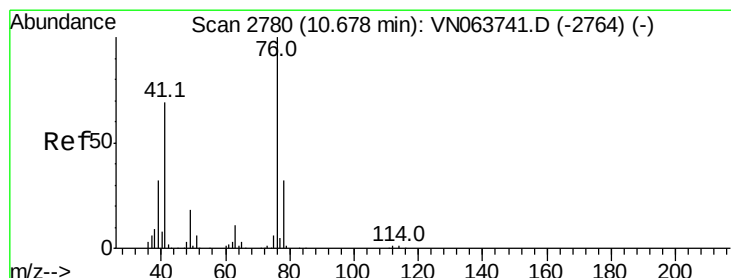
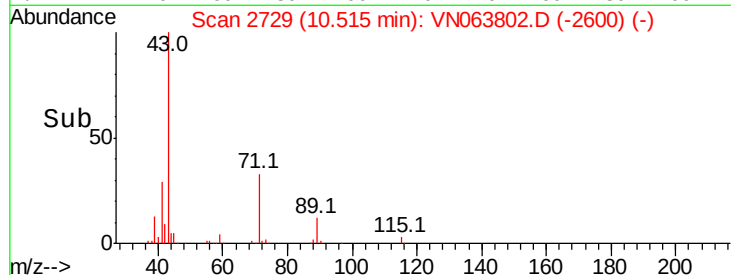
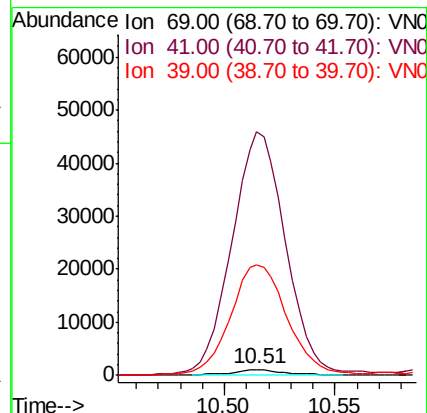
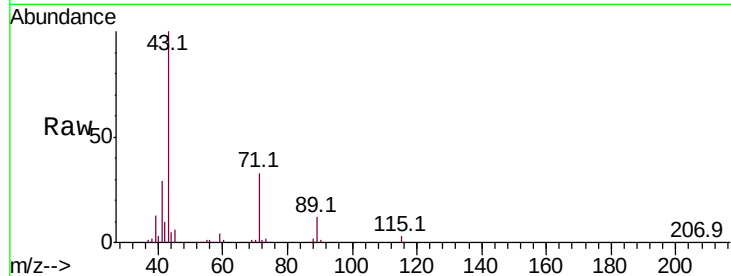
Tot Ion: 69 Resp: 1821

Ion Ratio Lower Upper

69 100

41 4274.0 61.1 91.7#

39 2053.3 42.2 63.4#



#57

1,3-Dichloropropane

Concen: 1.039 ug/l

RT: 10.74 min Scan# 2798

Delta R.T. 0.06 min

Lab File: VN063802.D

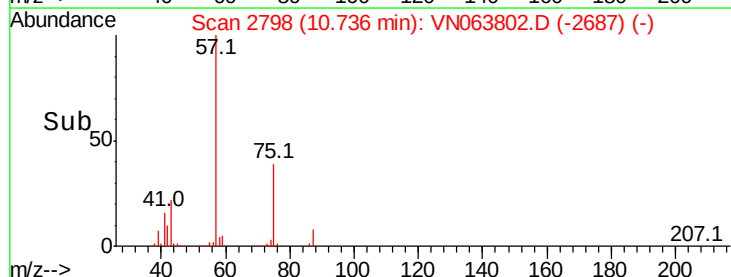
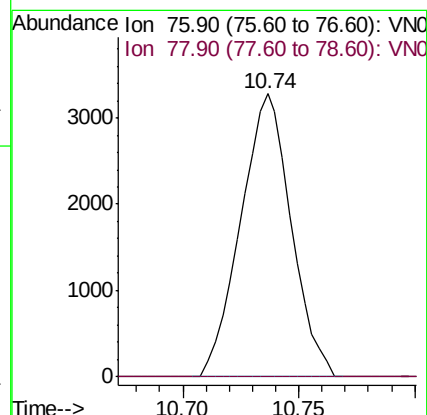
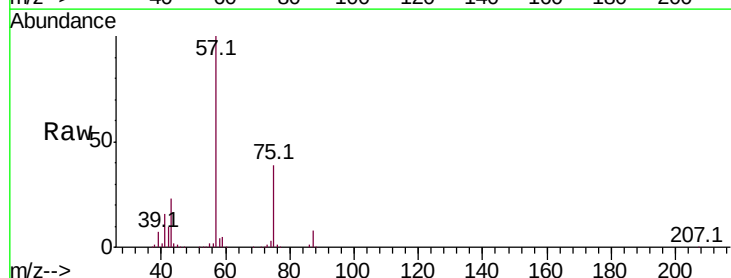
Acq: 2 Oct 2020 4:32

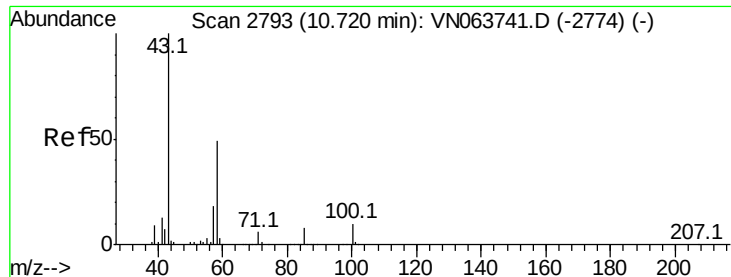
Tgt Ion: 76 Resp: 4967

Ion Ratio Lower Upper

76 100

78 0.0 25.2 37.8#

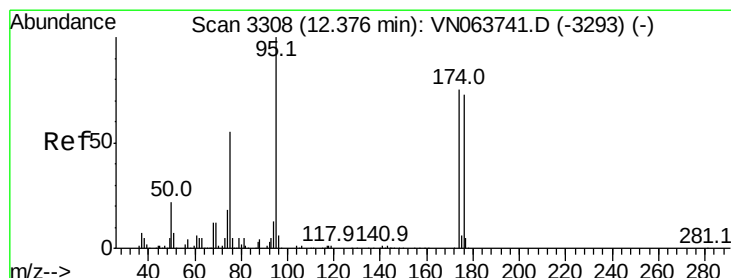
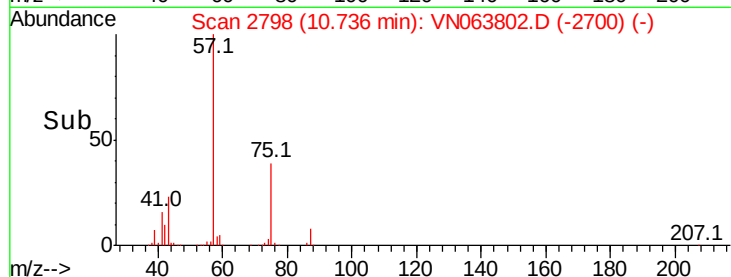
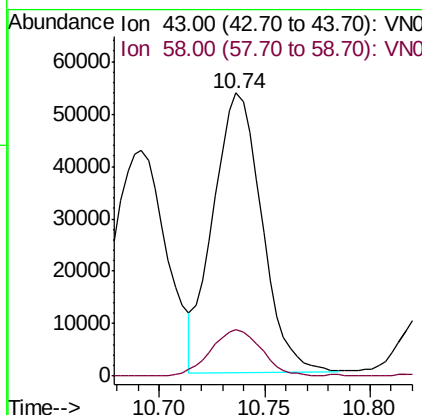
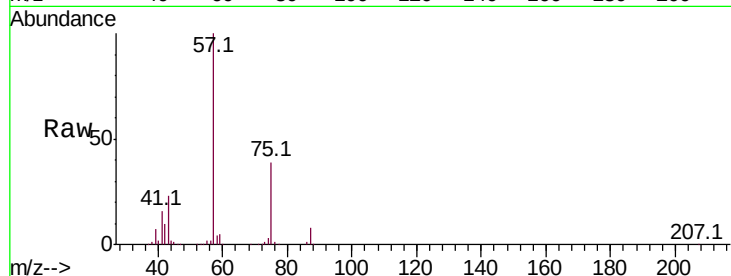




#59
2-Hexanone
Concen: 30.052 ug/l
RT: 10.74 min Scan# 2798
Delta R.T. 0.02 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

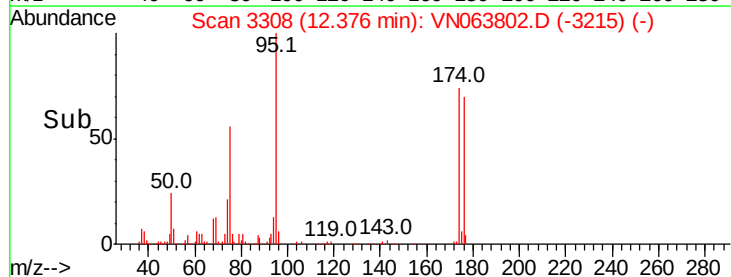
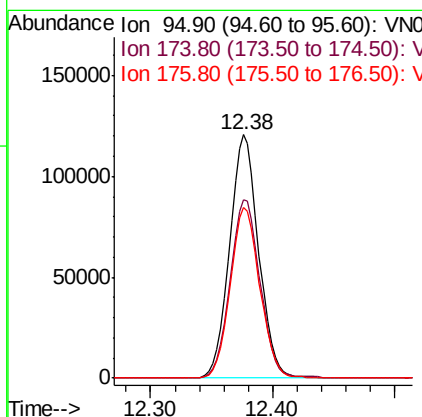
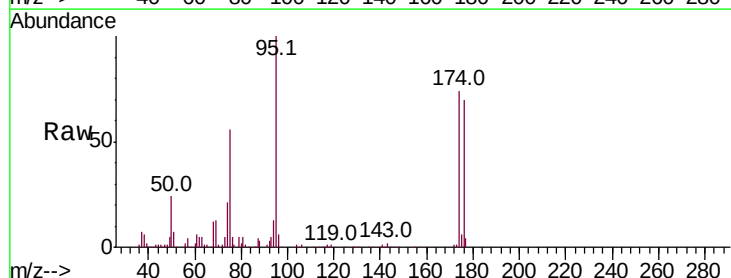
Instrument :
MSVOA_N
ClientSampleId :
PAV-B18-092920-19-20

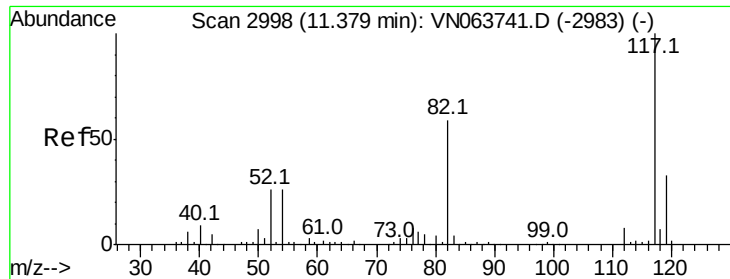
Tot Ion: 43 Resp: 85622
Ion Ratio Lower Upper
43 100
58 17.4 24.6 73.8#



#62
4-Bromofluorobenzene
Concen: 51.327 ug/l
RT: 12.38 min Scan# 3308
Delta R.T. 0.00 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

Tgt Ion: 95 Resp: 199784
Ion Ratio Lower Upper
95 100
174 75.5 0.0 150.6
176 71.4 0.0 145.4





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.38 min Scan# 2998

Delta R.T. 0.00 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

PAV-B18-092920-19-20

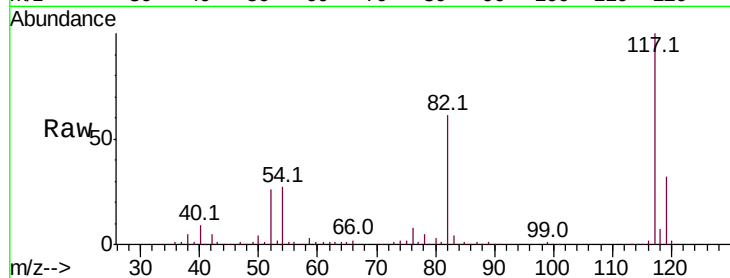
Tot Ion:117 Resp: 411643

Ion Ratio Lower Upper

117 100

82 60.5 47.4 71.2

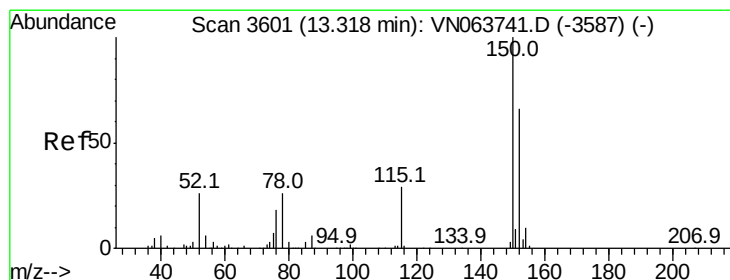
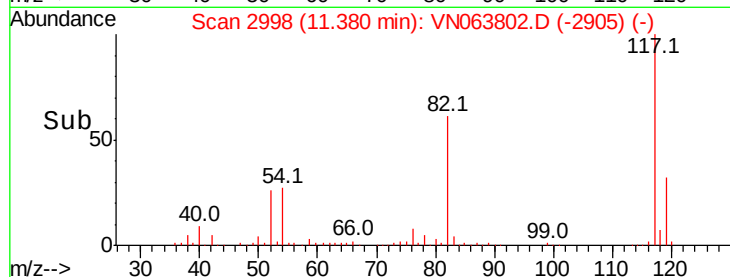
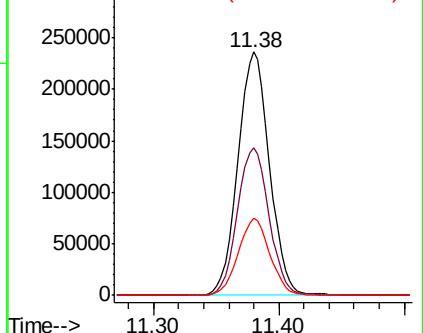
119 31.8 26.4 39.6



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VN

Ion 118.90 (118.60 to 119.60): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

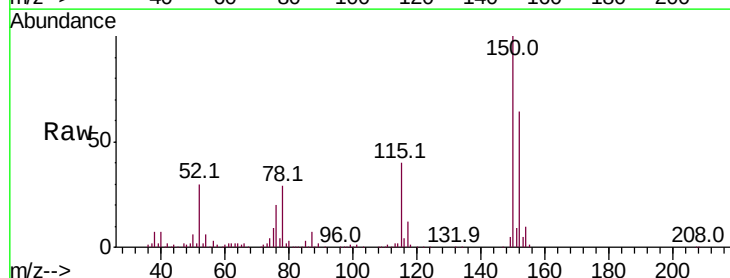
Tgt Ion:152 Resp: 167613

Ion Ratio Lower Upper

152 100

115 62.7 31.3 93.8

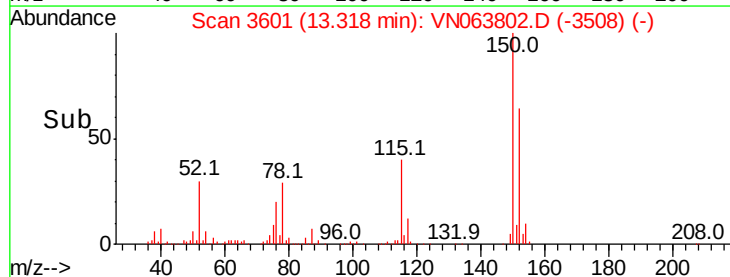
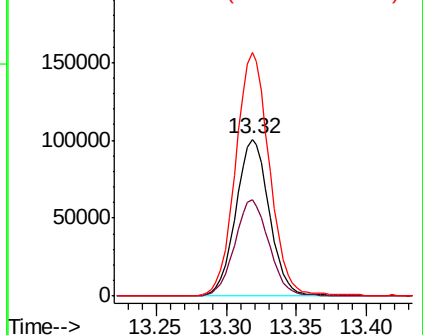
150 157.4 0.0 341.8

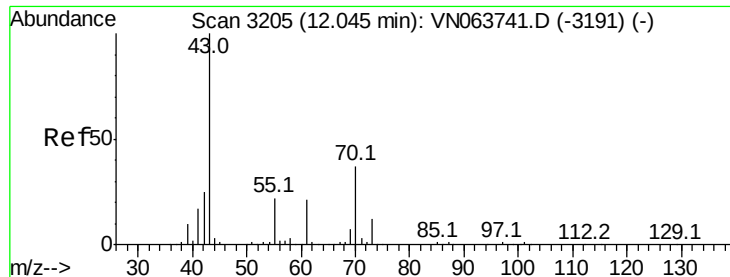


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amyl acetate

Concen: 2.680 ug/l

RT: 12.01 min Scan# 3195

Delta R.T. -0.03 min

Lab File: VN063802.D

Acq: 2 Oct 2020 4:32

Instrument :

MSVOA_N

ClientSampleId :

PAV-B18-092920-19-20

Tot Ion: 43 Resp: 2761

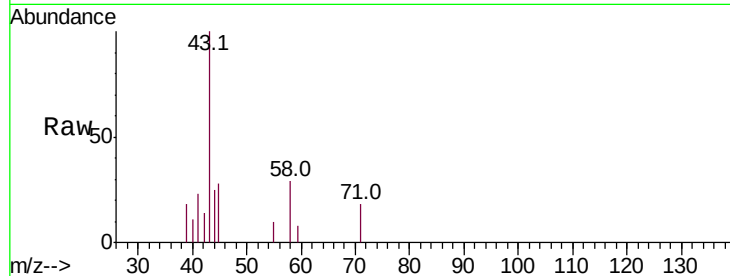
Ion Ratio Lower Upper

43 100

70 0.0 29.8 44.8#

55 7.9 17.9 26.9#

61 0.0 17.0 25.4#

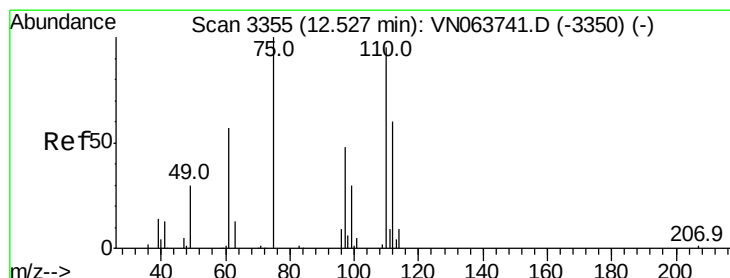
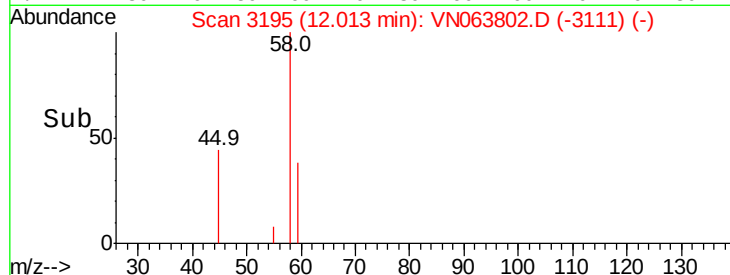
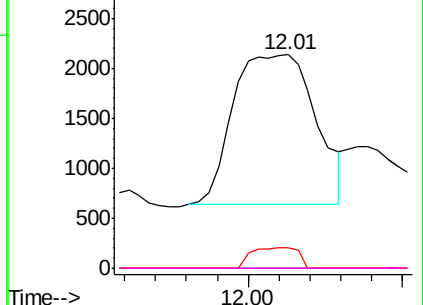


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 70.00 (69.70 to 70.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

Ion 61.00 (60.70 to 61.70): VN0



#76

1,2,3-Trichloropropane

Concen: 31.350 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. -0.15 min

Lab File: VN063802.D

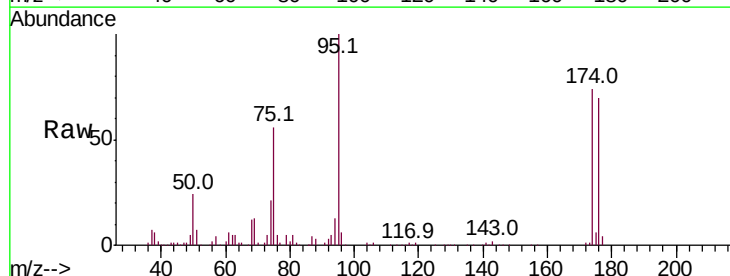
Acq: 2 Oct 2020 4:32

Tgt Ion: 75 Resp: 115833

Ion Ratio Lower Upper

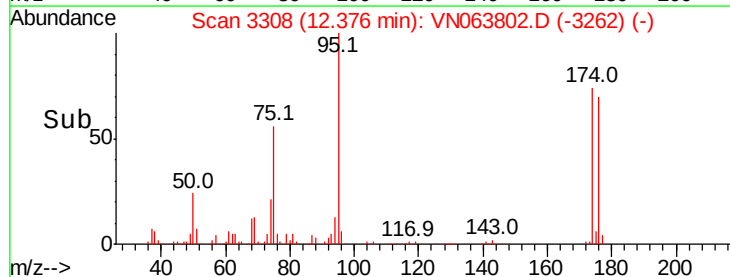
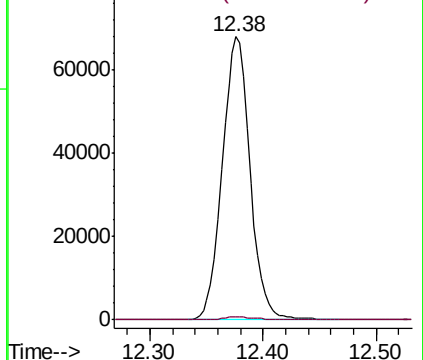
75 100

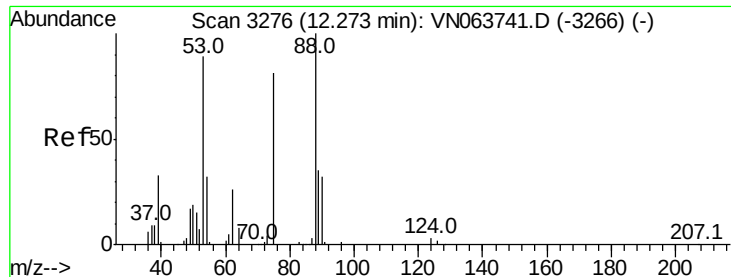
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

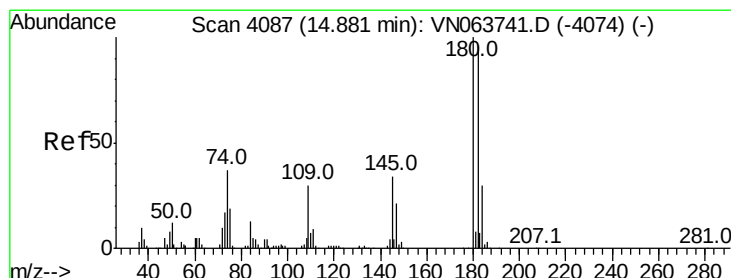
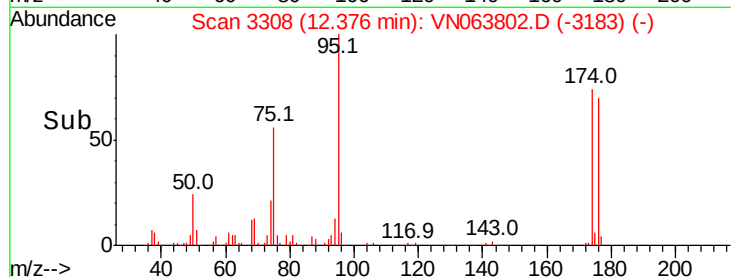
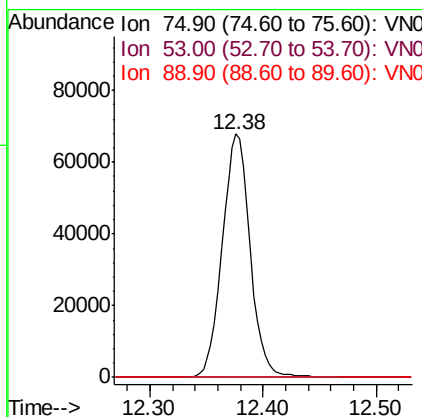
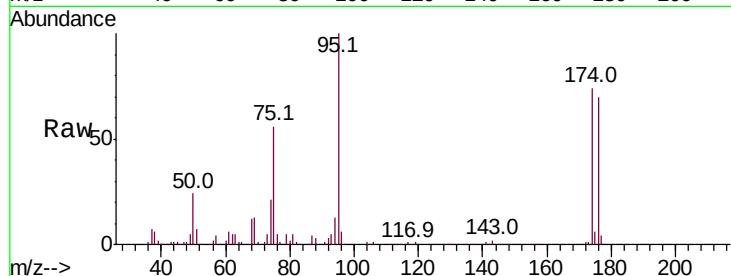




#81
trans-1,4-Dichloro-2-butene
Concen: 90.292 ug/l
RT: 12.38 min Scan# 3308
Delta R.T. 0.10 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

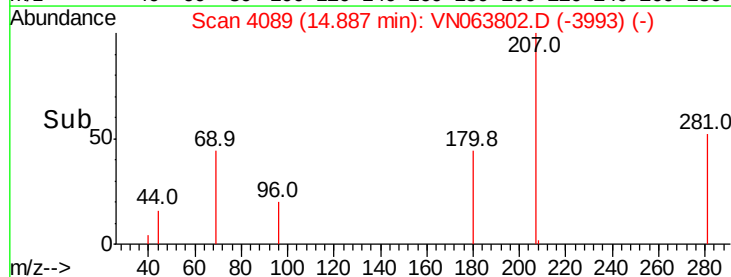
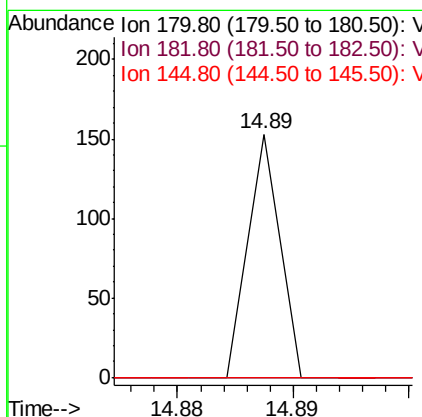
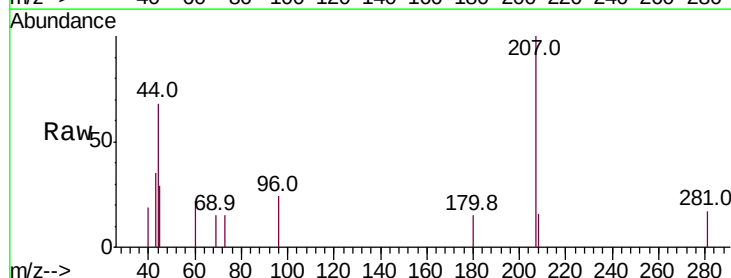
Instrument :
MSVOA_N
ClientSampleId :
PAV-B18-092920-19-20

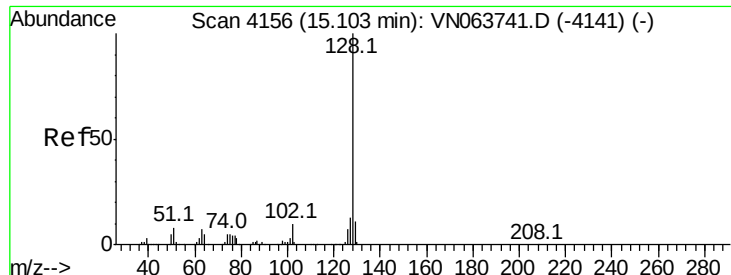
Tot Ion: 75 Resp: 115833
Ion Ratio Lower Upper
75 100
53 0.1 88.2 132.2#
89 0.0 36.0 54.0#



#93
1,2,4-Trichlorobenzene
Concen: 1.746 ug/l
RT: 14.89 min Scan# 4089
Delta R.T. 0.01 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

Tgt Ion: 180 Resp: 30
Ion Ratio Lower Upper
180 100
182 0.0 48.2 144.6#
145 0.0 17.1 51.2#

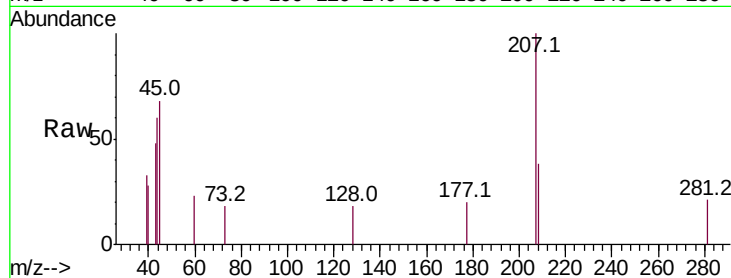




#95
Naphthalene
Concen: 1.928 ug/l
RT: 15.12 min Scan# 4161
Delta R.T. 0.02 min
Lab File: VN063802.D
Acq: 2 Oct 2020 4:32

Instrument :
MSVOA_N
ClientSampleId :
PAV-B18-092920-19-20

Tot Ion	Ratio	Lower	Upper
128	100		
127	0.0	10.5	15.7#
129	0.0	8.7	13.1#



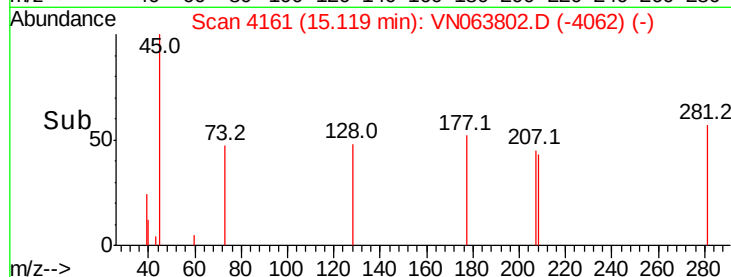
Abundance

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

15.12



Time-->