

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN091619\
 Data File : VN058129.D
 Acq On : 16 Sep 2019 19:03
 Operator : JC/SP
 Sample : K4878-29
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 29 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 CSA-2-1

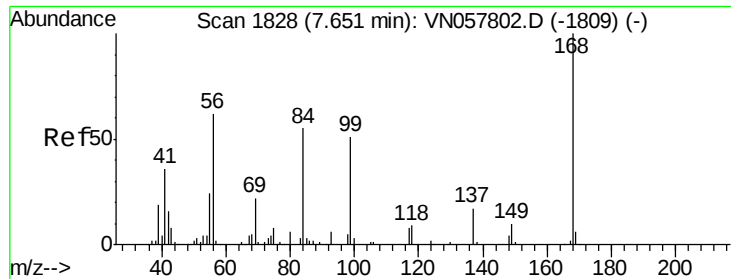
Quant Time: Sep 17 03:54:41 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091019W.M
 Quant Title : SW846 8260
 QLast Update : Tue Sep 10 03:02:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	326604	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	556179	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	499870	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	262999	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.01	65	354744	53.63	ug/l	0.00
Spiked Amount			Recovery	=	107.26%	
35) Dibromofluoromethane	7.58	113	243410	47.42	ug/l	0.00
Spiked Amount			Recovery	=	94.84%	
50) Toluene-d8	10.08	98	908449	45.58	ug/l	0.00
Spiked Amount			Recovery	=	91.16%	
62) 4-Bromofluorobenzene	12.41	95	302311	39.80	ug/l	0.00
Spiked Amount			Recovery	=	79.60%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.56	94	231	Below Cal	#	75
14) Allyl chloride	4.53	41	14527	2.134	ug/l #	23
16) Acetone	3.80	43	14739	6.797	ug/l	100
17) Carbon Disulfide	4.03	76	995	0.342	ug/l #	75
18) Methyl Acetate	4.30	43	2652	0.459	ug/l #	66
20) Methylene Chloride	4.53	84	388219	95.150	ug/l	98
25) 2-Butanone	6.84	43	2262	0.721	ug/l #	79
29) Tetrahydrofuran	7.21	42	1177	0.609	ug/l #	48
31) Cyclohexane	7.65	56	8773	Below Cal	#	31
36) 1,1-Dichloropropene	7.65	75	28420	4.406	ug/l #	52
38) Carbon Tetrachloride	7.65	117	34240	5.814	ug/l #	15
43) Isopropyl Acetate	8.15	43	117076	10.447	ug/l #	84
45) 1,2-Dichloropropane	9.26	63	1498	0.265	ug/l #	44
48) Methyl methacrylate	9.26	41	142303	25.031	ug/l #	47
51) 4-Methyl-2-Pentanone	9.98	43	7089	1.069	ug/l	92
54) cis-1,3-Dichloropropene	9.90	75	35440	4.470	ug/l #	64
56) Ethyl methacrylate	10.54	69	1916	0.246	ug/l #	1
57) 1,3-Dichloropropane	10.76	76	4467	0.500	ug/l #	43
59) 2-Hexanone	10.76	43	71744	14.433	ug/l #	54
76) 1,2,3-Trichloropropane	12.40	75	166951	28.061	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	166951	98.749	ug/l #	6
92) 1,2-Dibromo-3-Chloropropan	14.10	75	290	0.256	ug/l #	24
95) Naphthalene	15.13	128	15607	Below Cal	#	96

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

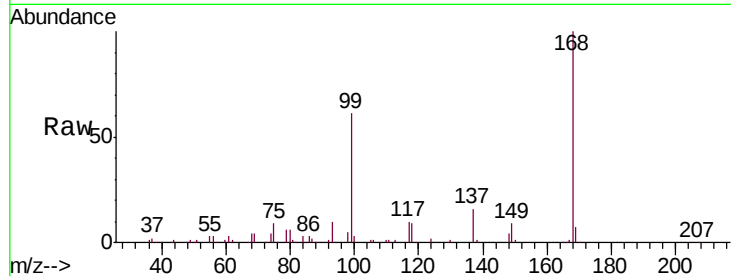
CSA-2-1

Tgt Ion: 168 Resp: 326604

Ion Ratio Lower Upper

168 100

99 61.1 48.0 72.0



Abundance Ion 167.90 (167.60 to 168.60): VN058129.D (-1735) (-)

Ion 98.90 (98.60 to 99.60): VN058129.D (-1735) (-)

7.65

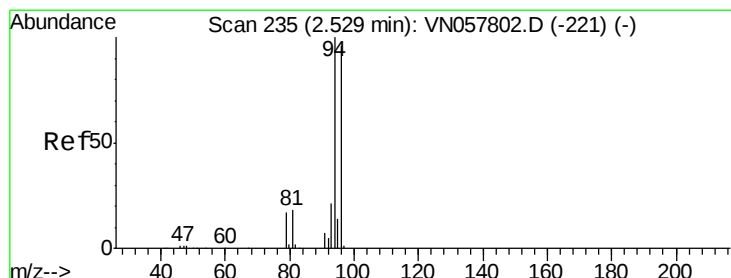
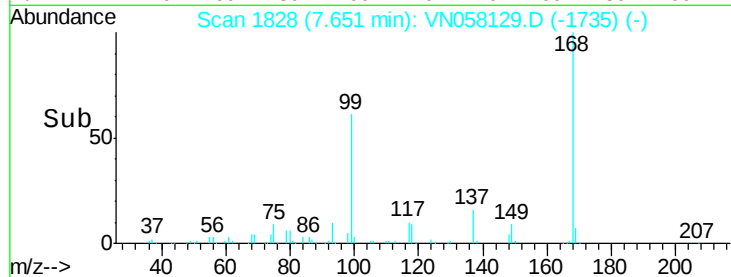
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.56 min Scan# 246

Delta R.T. 0.04 min

Lab File: VN058129.D

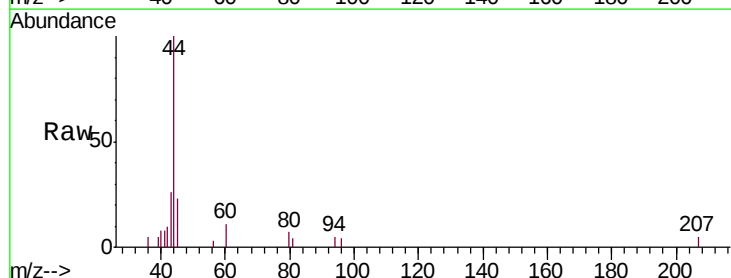
Acq: 16 Sep 2019 19:03

Tgt Ion: 94 Resp: 231

Ion Ratio Lower Upper

94 100

96 72.2 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VN058129.D (-141) (-)

Ion 95.90 (95.60 to 96.60): VN058129.D (-141) (-)

2.56

250

200

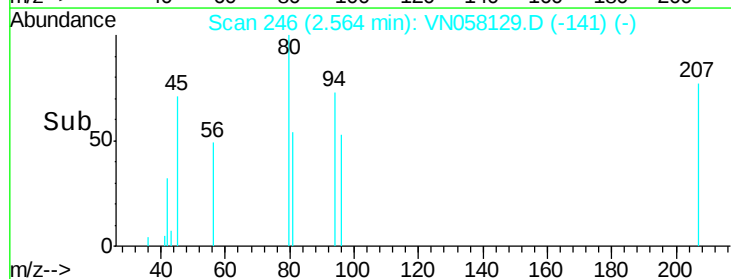
150

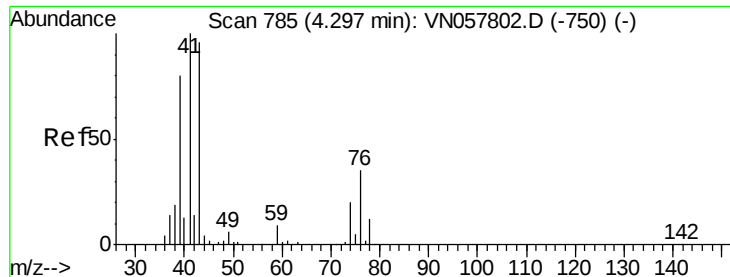
100

50

0

Time-->

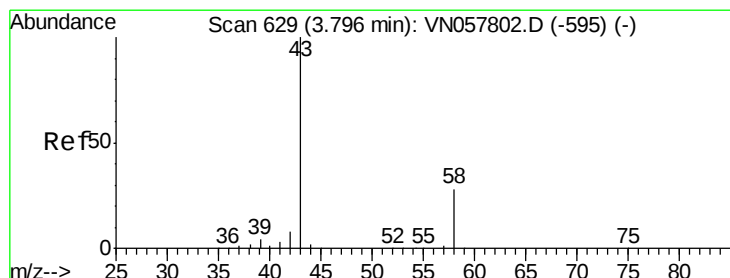
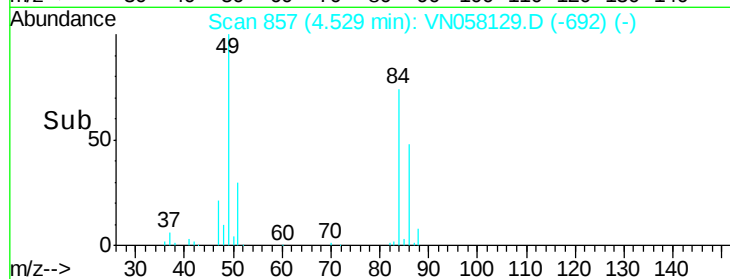
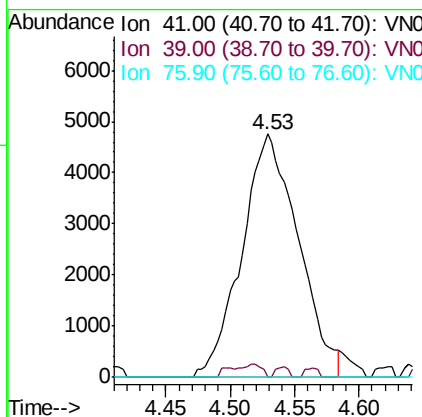
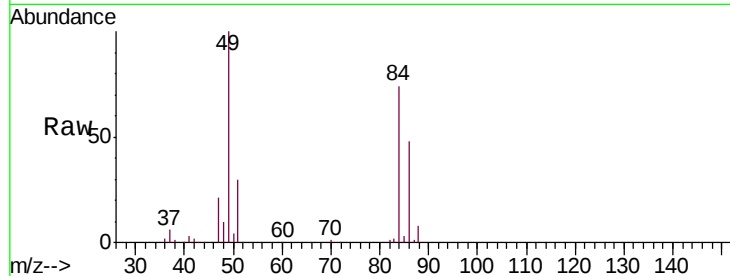




#14
 Allyl chloride
 Concen: 2.134 ug/l
 RT: 4.53 min Scan# 857
 Delta R.T. 0.23 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

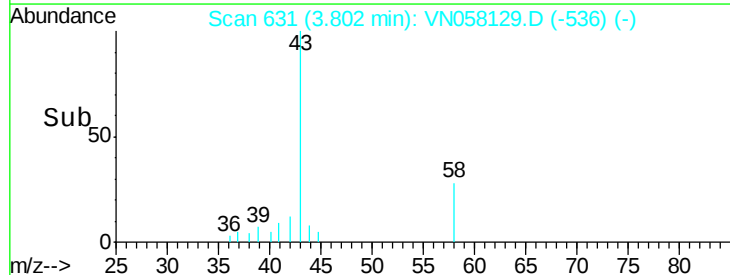
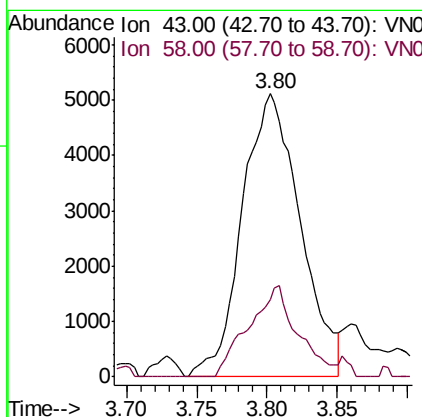
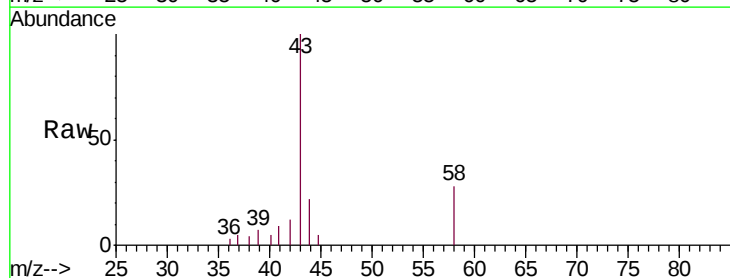
Instrument :
 MSVOA_N
 ClientSampled :
 CSA-2-1

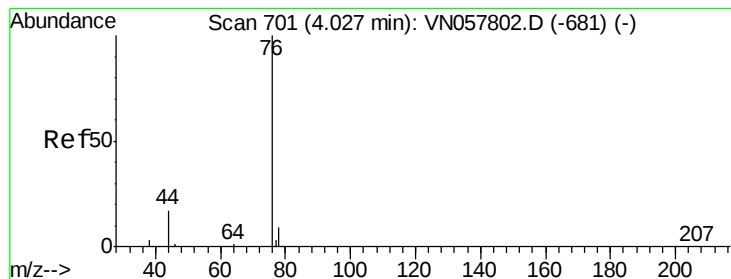
Tgt Ion: 41 Resp: 14527
 Ion Ratio Lower Upper
 41 100
 39 1.7 59.4 89.2#
 76 0.0 26.0 39.0#



#16
 Acetone
 Concen: 6.797 ug/l
 RT: 3.80 min Scan# 631
 Delta R.T. 0.01 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

Tgt Ion: 43 Resp: 14739
 Ion Ratio Lower Upper
 43 100
 58 27.5 22.2 33.2





#17

Carbon Disulfide

Concen: 0.342 ug/l

RT: 4.03 min Scan# 702

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

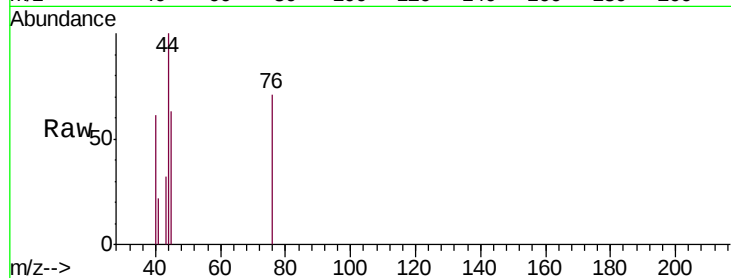
CSA-2-1

Tgt Ion: 76 Resp: 995

Ion Ratio Lower Upper

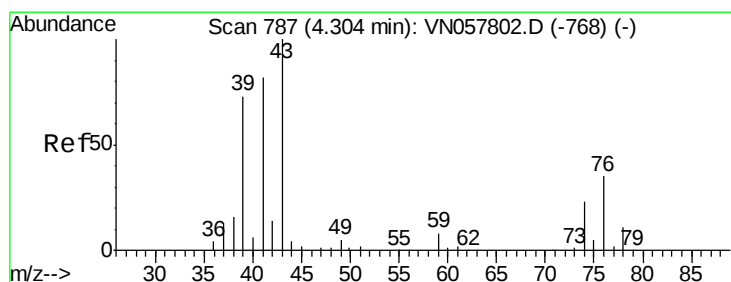
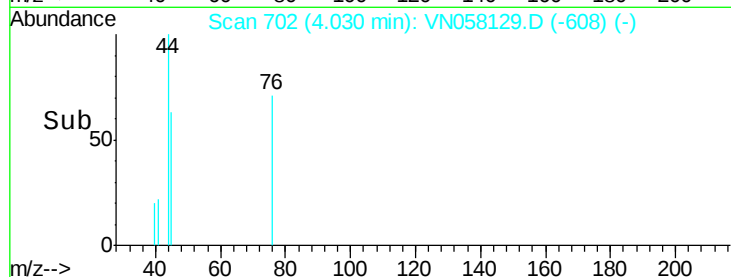
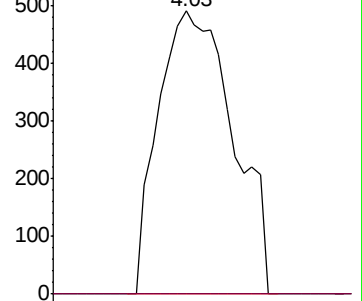
76 100

78 0.0 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#18

Methyl Acetate

Concen: 0.459 ug/l

RT: 4.30 min Scan# 786

Delta R.T. -0.00 min

Lab File: VN058129.D

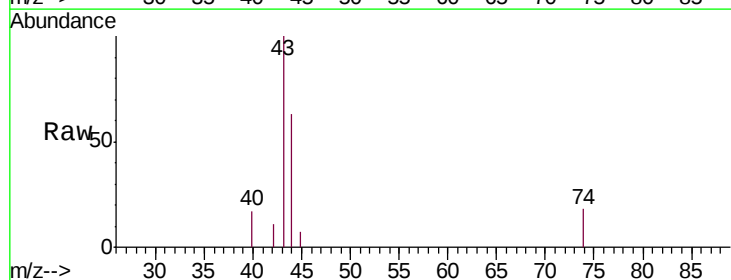
Acq: 16 Sep 2019 19:03

Tgt Ion: 43 Resp: 2652

Ion Ratio Lower Upper

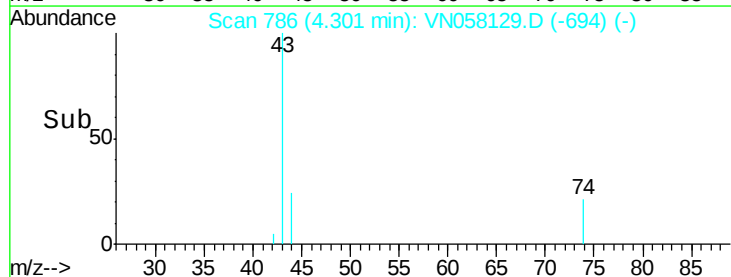
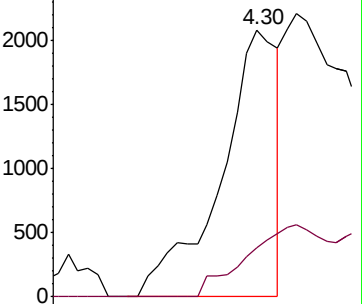
43 100

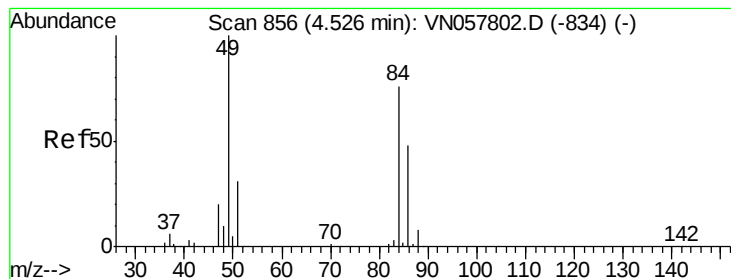
74 38.7 17.9 26.9#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0





#20

Methylene Chloride

Concen: 95.150 ug/l

RT: 4.53 min Scan# 858

Delta R.T. 0.01 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

CSA-2-1

Tgt Ion: 84 Resp: 388219

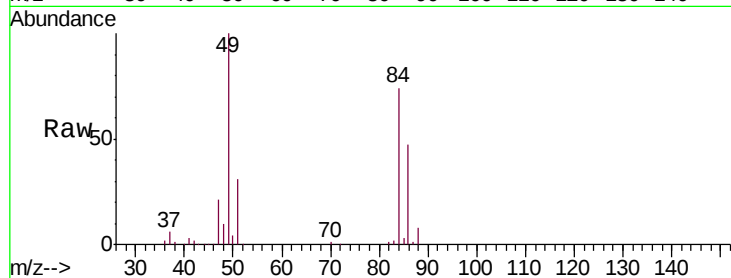
Ion Ratio Lower Upper

84 100

49 135.4 104.8 157.2

51 41.8 33.0 49.4

86 63.5 50.5 75.7

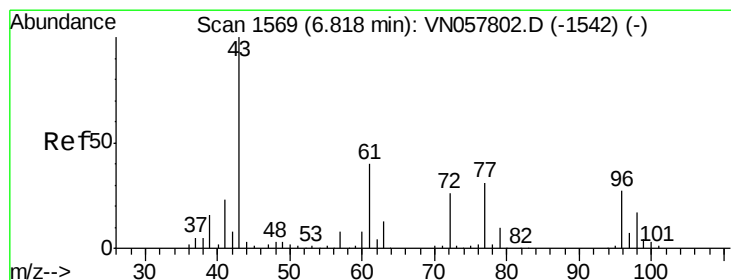
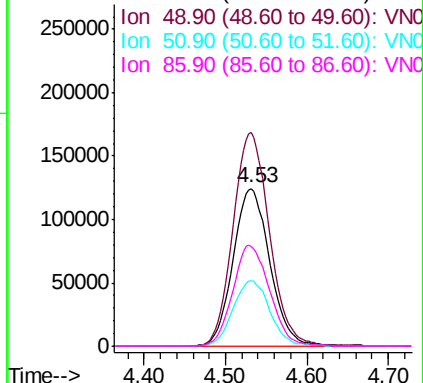
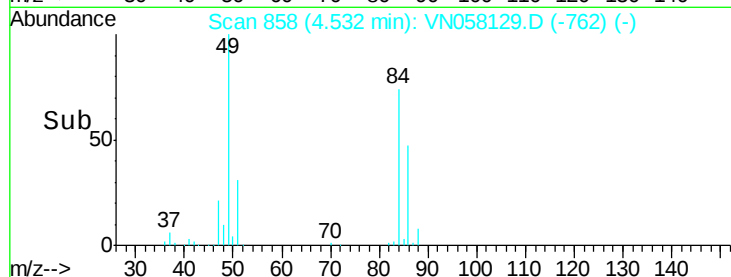


Abundance Ion 83.90 (83.60 to 84.60): VN0

Ion 48.90 (48.60 to 49.60): VN0

Ion 50.90 (50.60 to 51.60): VN0

Ion 85.90 (85.60 to 86.60): VN0



#25

2-Butanone

Concen: 0.721 ug/l

RT: 6.84 min Scan# 1576

Delta R.T. 0.02 min

Lab File: VN058129.D

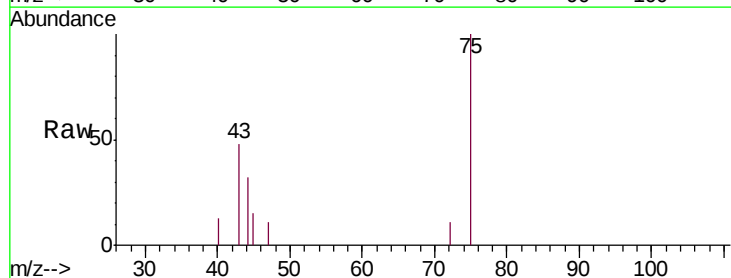
Acq: 16 Sep 2019 19:03

Tgt Ion: 43 Resp: 2262

Ion Ratio Lower Upper

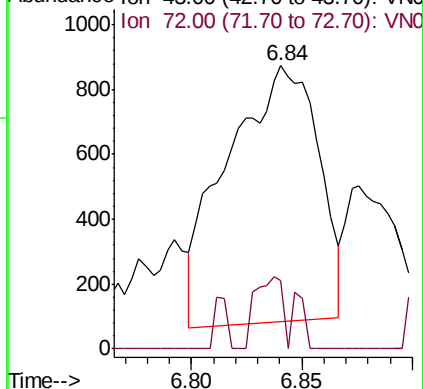
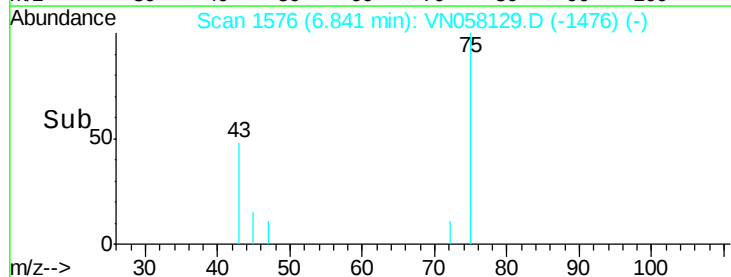
43 100

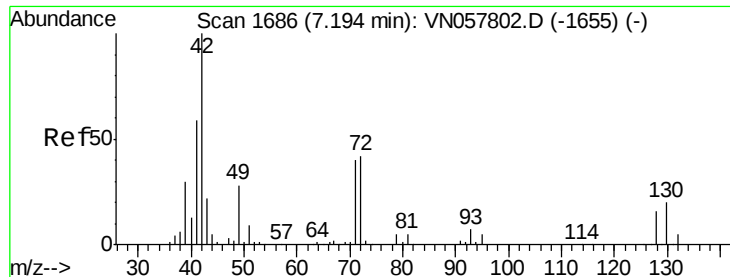
72 36.5 20.6 30.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0





#29

Tetrahydrofuran

Concen: 0.609 ug/l

RT: 7.21 min Scan# 1692

Delta R.T. 0.02 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

CSA-2-1

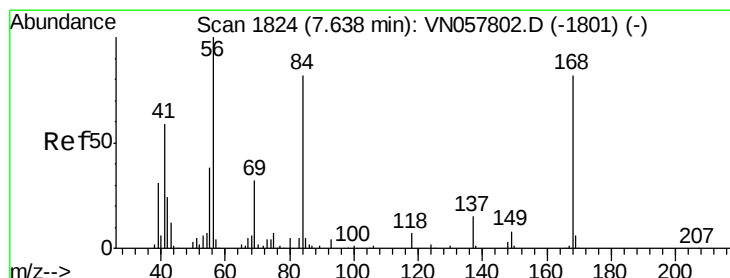
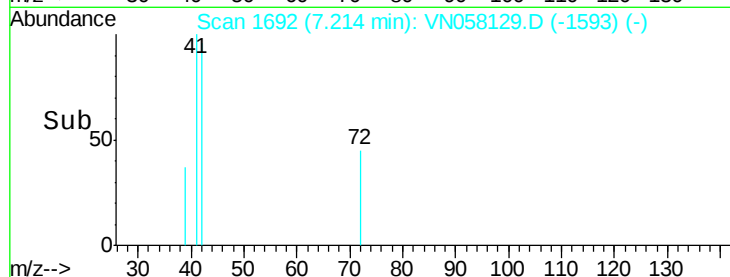
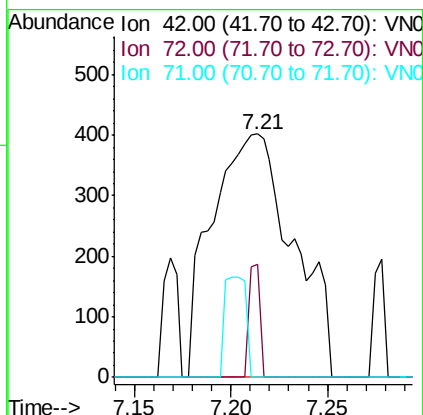
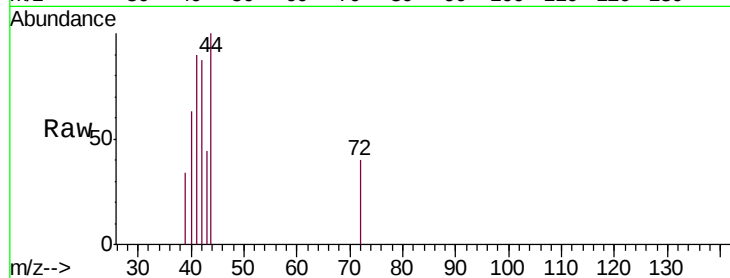
Tgt Ion: 42 Resp: 1177

Ion Ratio Lower Upper

42 100

72 6.0 33.7 50.5#

71 10.7 31.9 47.9#



#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1829

Delta R.T. 0.02 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

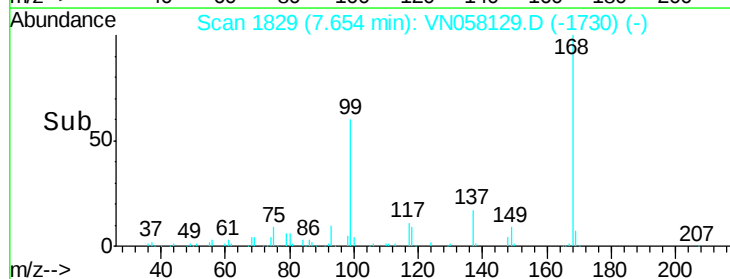
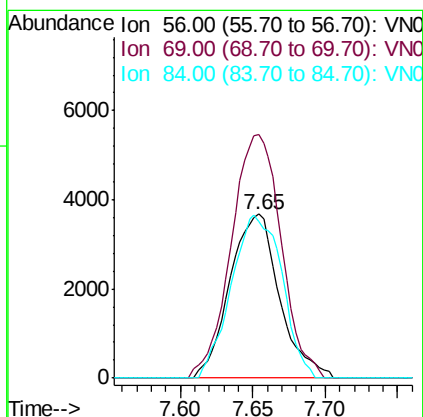
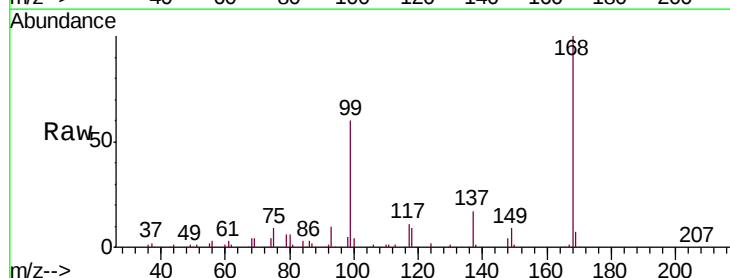
Tgt Ion: 56 Resp: 8773

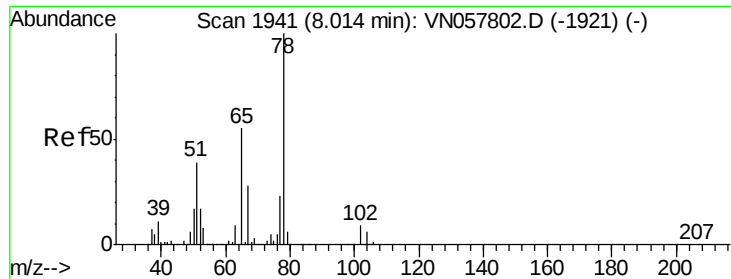
Ion Ratio Lower Upper

56 100

69 148.3 25.9 38.9#

84 95.1 65.6 98.4

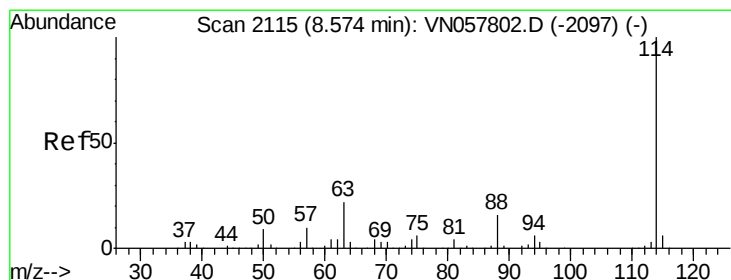
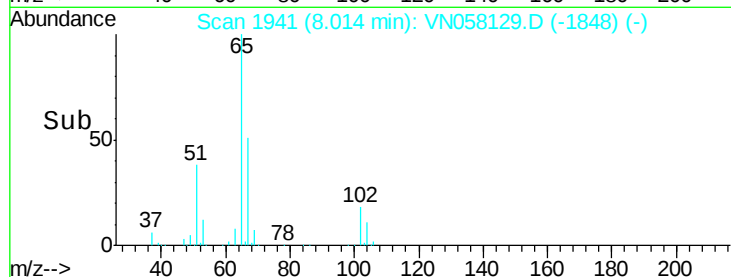
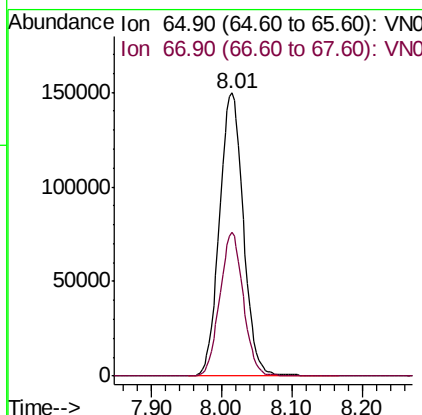
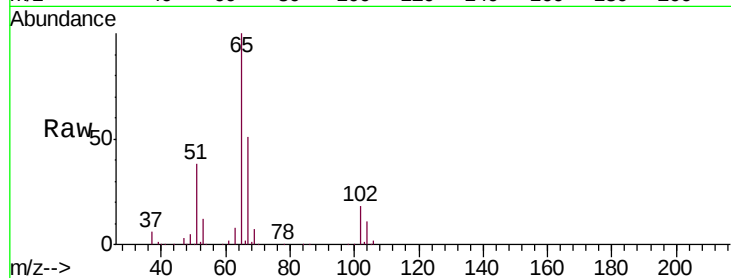




#33
 1,2-Dichloroethane-d4
 Concen: 53.626 ug/l
 RT: 8.01 min Scan# 1941
 Delta R.T. 0.00 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

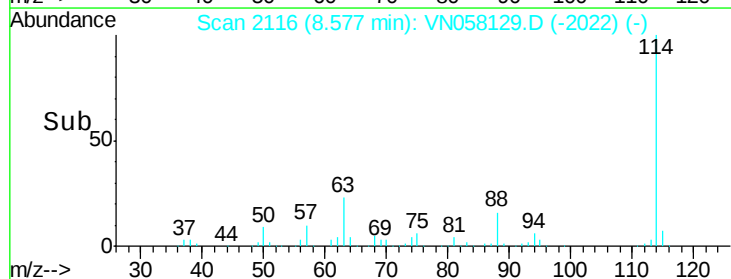
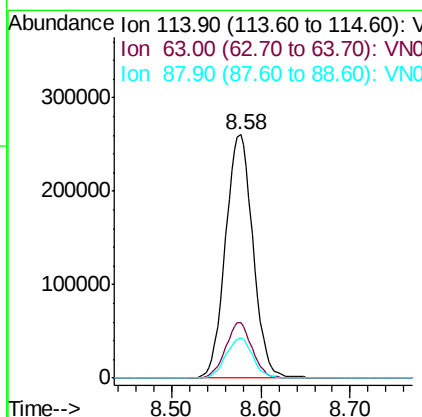
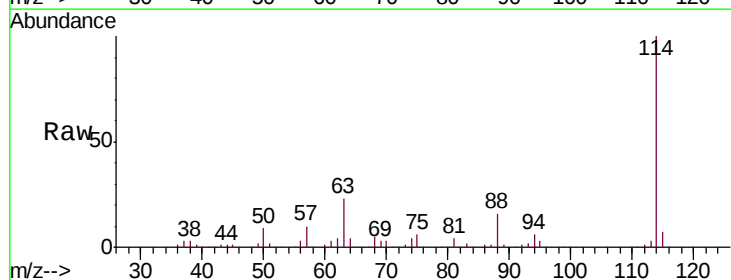
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 CSA-2-1

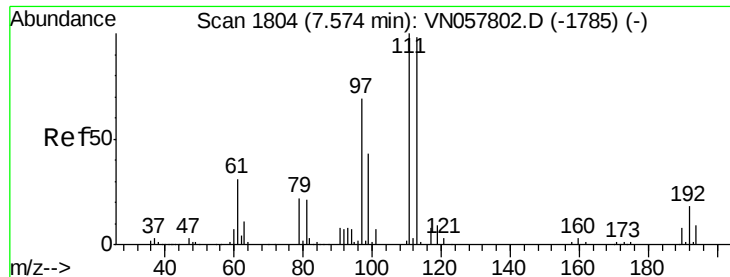
Tgt Ion: 65 Resp: 354744
 Ion Ratio Lower Upper
 65 100
 67 49.6 0.0 104.0



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.58 min Scan# 2116
 Delta R.T. 0.00 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

Tgt Ion: 114 Resp: 556179
 Ion Ratio Lower Upper
 114 100
 63 22.7 0.0 44.0
 88 16.3 0.0 31.4

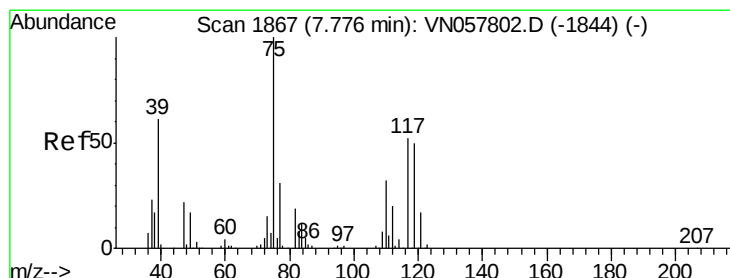
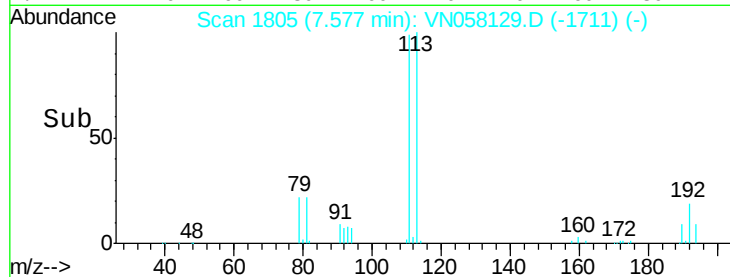
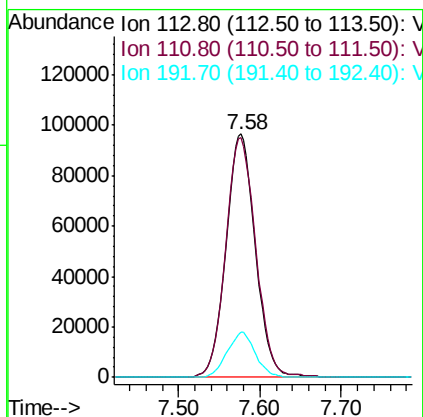
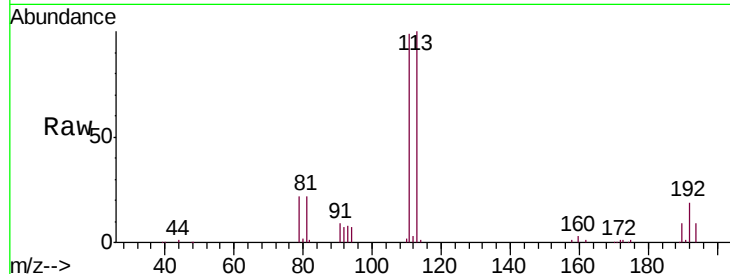




#35
 Dibromofluoromethane
 Concen: 47.418 ug/l
 RT: 7.58 min Scan# 1805
 Delta R.T. 0.00 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

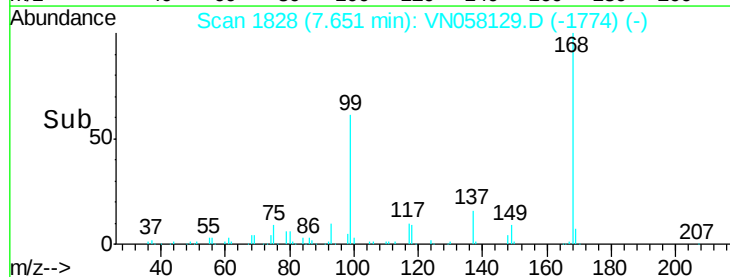
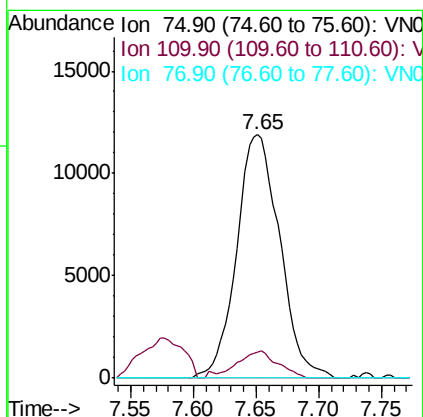
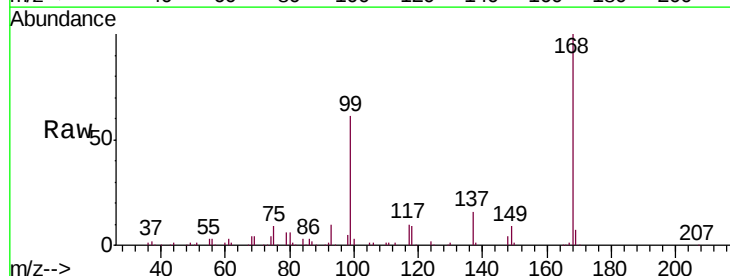
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 ClientSampleId :
 CSA-2-1

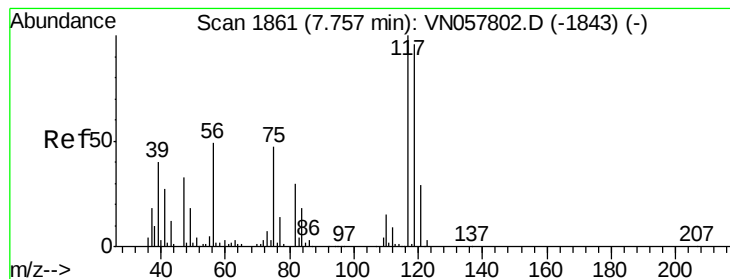
Tgt Ion: 113 Resp: 243410
 Ion Ratio Lower Upper
 113 100
 111 101.2 81.3 121.9
 192 18.0 14.6 22.0



#36
 1,1-Dichloropropene
 Concen: 4.406 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.13 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

Tgt Ion: 75 Resp: 28420
 Ion Ratio Lower Upper
 75 100
 110 10.2 16.3 48.9#
 77 0.0 25.0 37.4#





#38

Carbon Tetrachloride

Concen: 5.814 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. -0.10 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

CSA-2-1

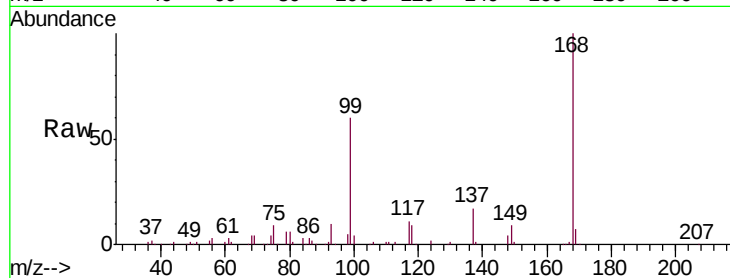
Tgt Ion:117 Resp: 34240

Ion Ratio Lower Upper

117 100

119 4.0 76.9 115.3#

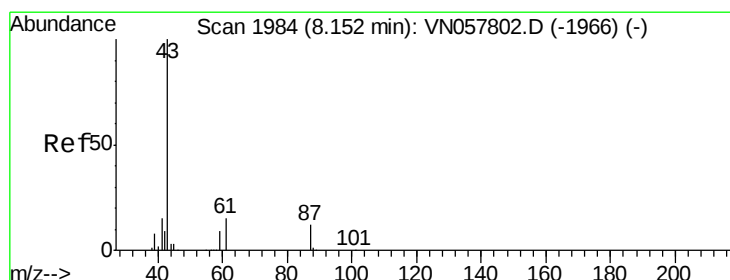
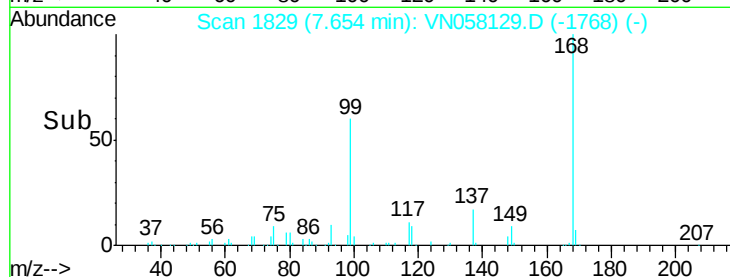
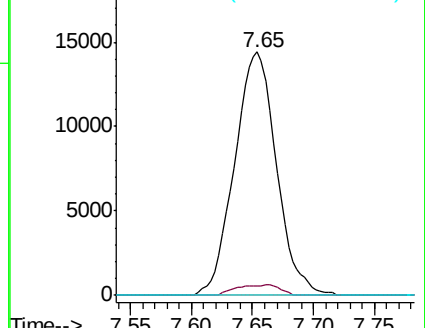
121 0.0 23.4 35.2#



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: 10.447 ug/l

RT: 8.15 min Scan# 1984

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

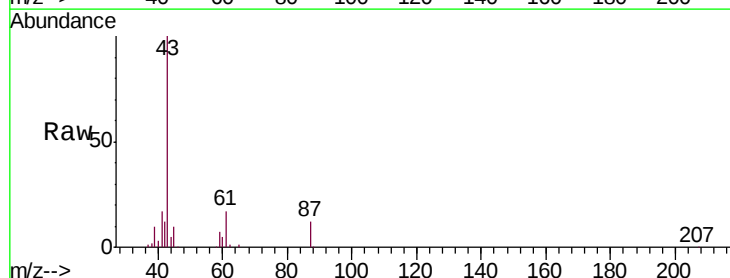
Tgt Ion: 43 Resp: 117076

Ion Ratio Lower Upper

43 100

61 14.4 20.1 30.1#

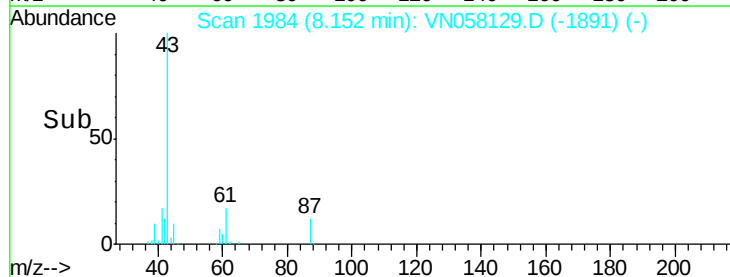
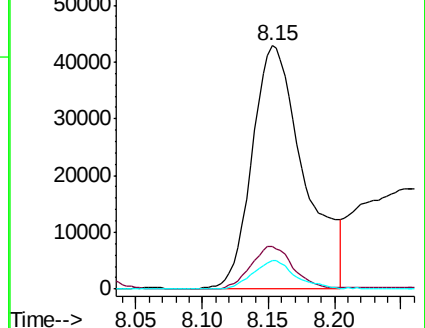
87 9.4 9.5 14.3#

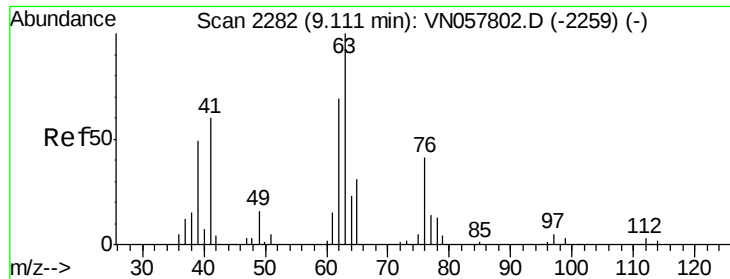


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V

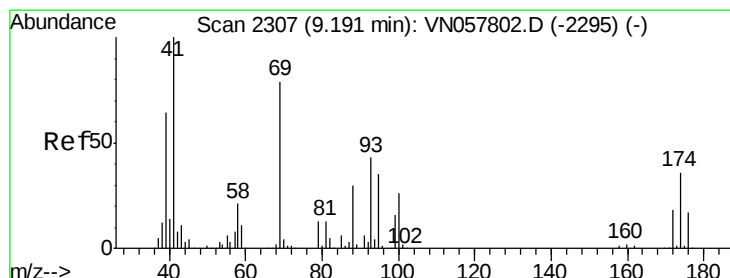
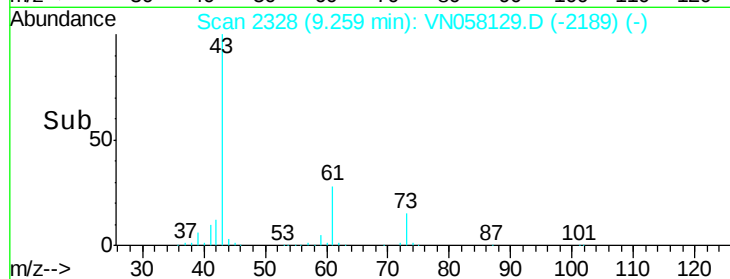
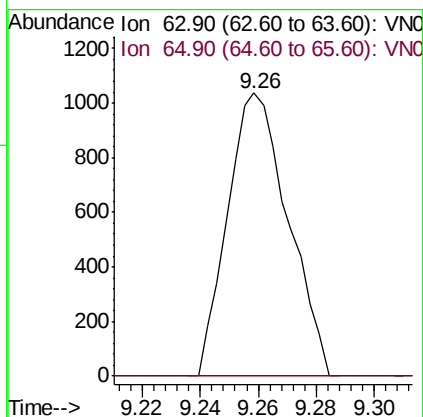
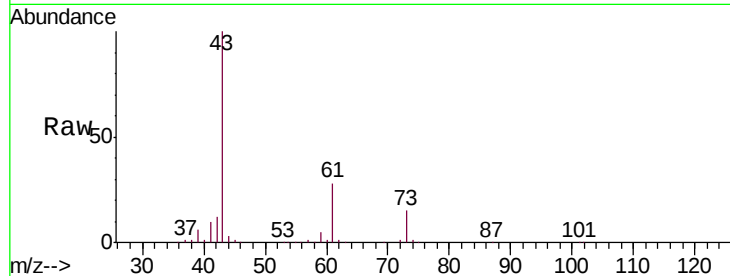




#45
 1,2-Dichloropropane
 Concen: 0.265 ug/l
 RT: 9.26 min Scan# 2328
 Delta R.T. 0.15 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

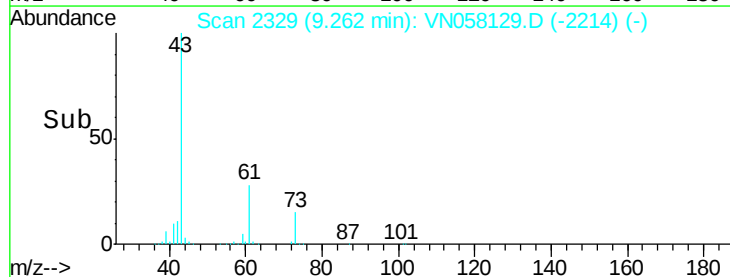
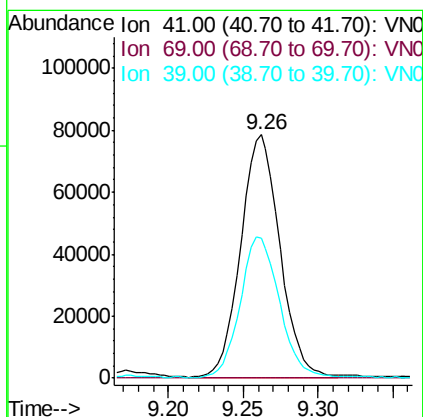
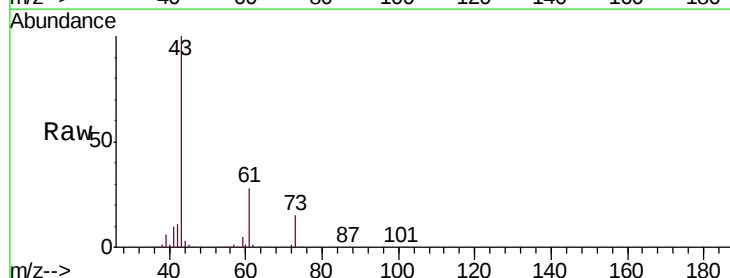
Instrument :
 MSVOA_N
 ClientSampleId :
 CSA-2-1

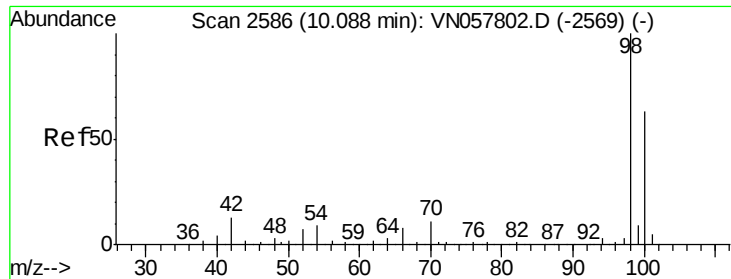
Tgt Ion: 63 Resp: 1498
 Ion Ratio Lower Upper
 63 100
 65 0.0 24.8 37.2#



#48
 Methyl methacrylate
 Concen: 25.031 ug/l
 RT: 9.26 min Scan# 2329
 Delta R.T. 0.07 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

Tgt Ion: 41 Resp: 142303
 Ion Ratio Lower Upper
 41 100
 69 0.1 62.7 94.1#
 39 58.3 52.7 79.1





#50

Toluene-d8

Concen: 45.581 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

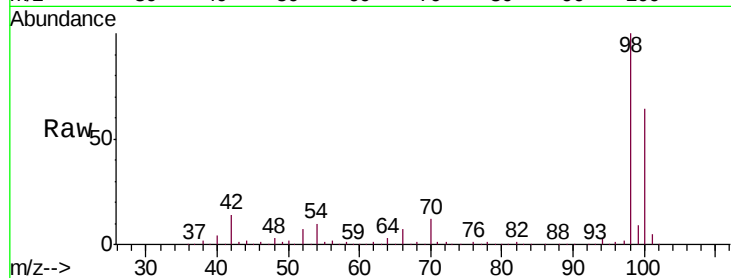
CSA-2-1

Tgt Ion: 98 Resp: 908449

Ion Ratio Lower Upper

98 100

100 63.6 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VN057802.D (-2569) (-)

Ion 100.00 (99.70 to 100.70): VN057802.D (-2569) (-)

10.08

500000

400000

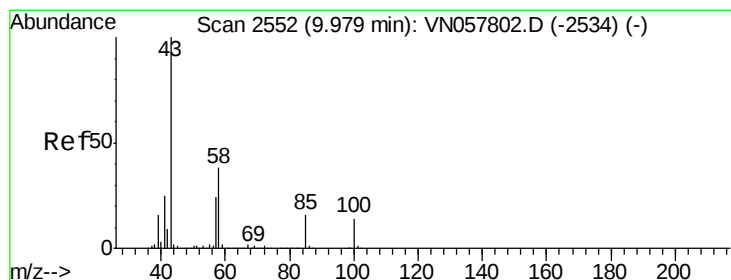
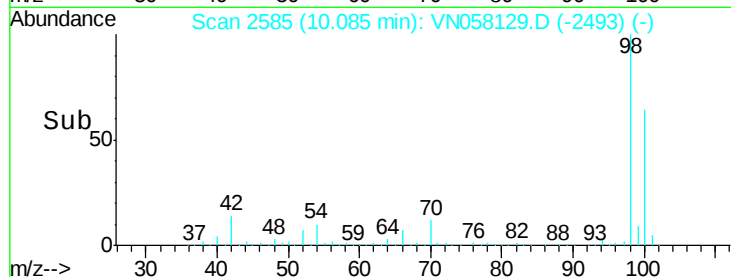
300000

200000

100000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 1.069 ug/l

RT: 9.98 min Scan# 2551

Delta R.T. -0.00 min

Lab File: VN058129.D

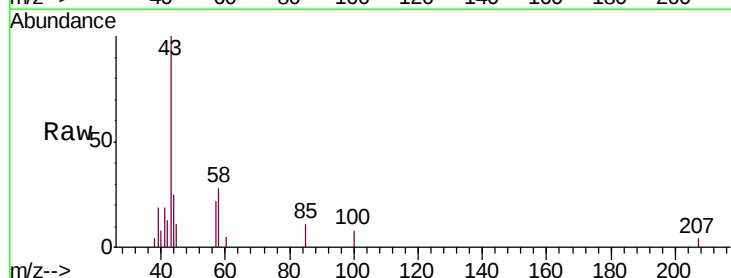
Acq: 16 Sep 2019 19:03

Tgt Ion: 43 Resp: 7089

Ion Ratio Lower Upper

43 100

58 32.7 29.8 44.6



Abundance Ion 43.00 (42.70 to 43.70): VN057802.D (-2534) (-)

Ion 58.00 (57.70 to 58.70): VN057802.D (-2534) (-)

25000

20000

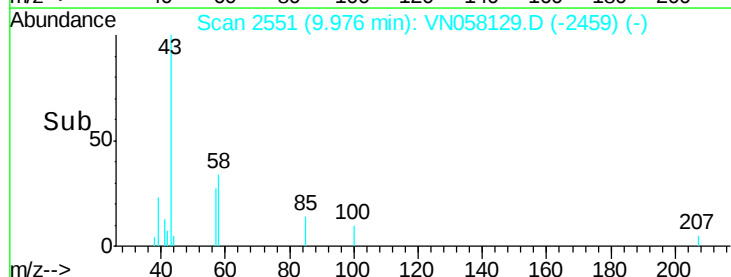
15000

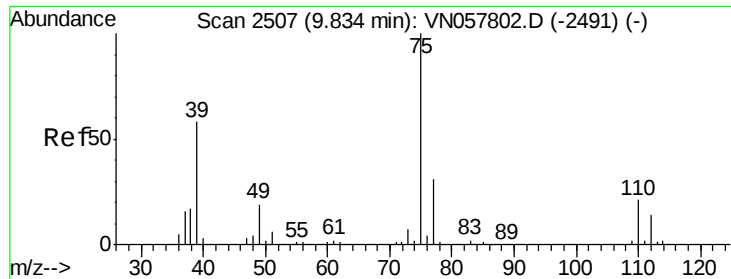
10000

5000

0

Time-->

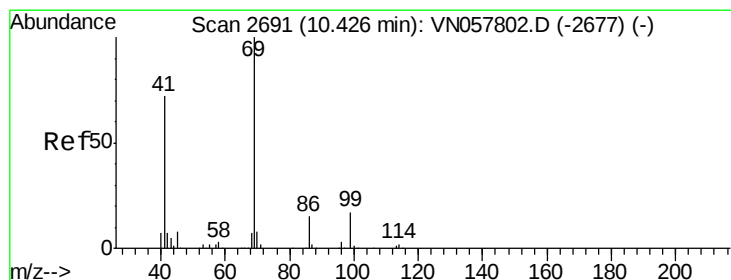
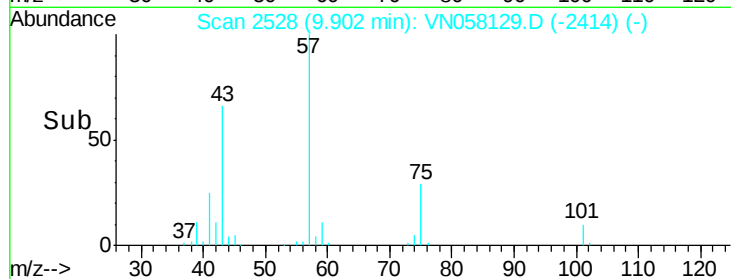
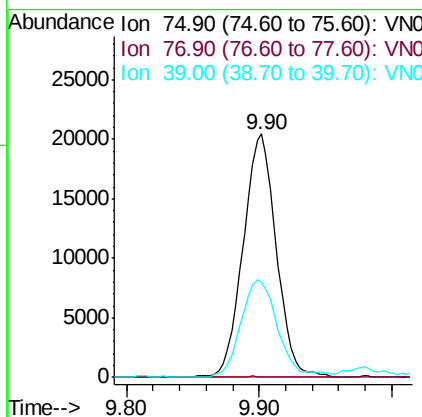
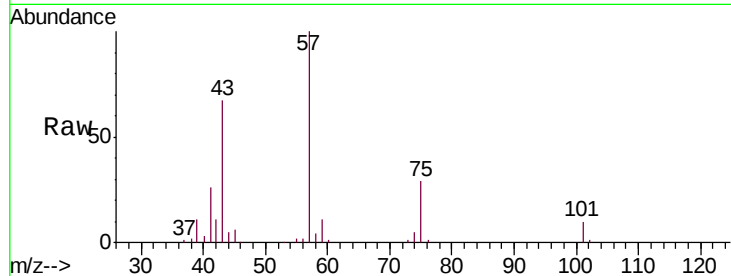




#54
 cis-1,3-Dichloropropene
 Concen: 4.470 ug/l
 RT: 9.90 min Scan# 2528
 Delta R.T. 0.07 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

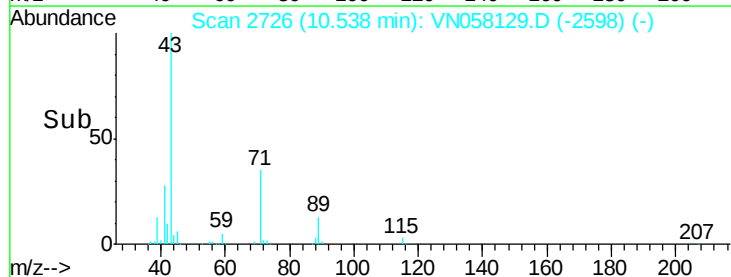
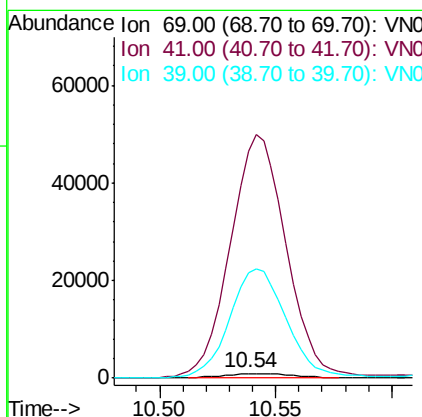
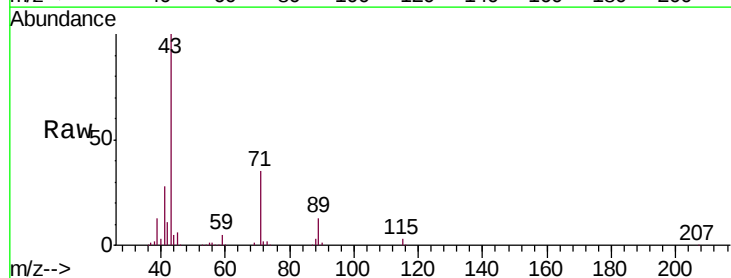
Instrument :
 MSVOA_N
 ClientSampled :
 CSA-2-1

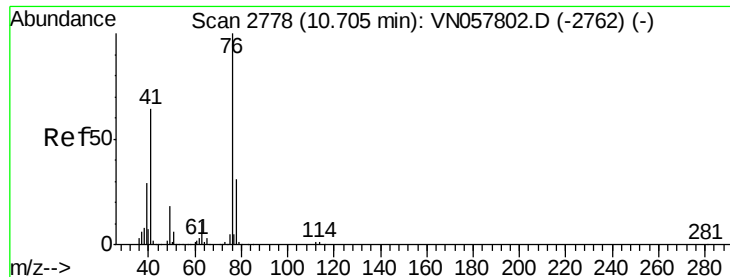
Tgt Ion: 75 Resp: 35440
 Ion Ratio Lower Upper
 75 100
 77 0.0 24.8 37.2#
 39 39.1 46.2 69.4#



#56
 Ethyl methacrylate
 Concen: 0.246 ug/l
 RT: 10.54 min Scan# 2726
 Delta R.T. 0.11 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

Tgt Ion: 69 Resp: 1916
 Ion Ratio Lower Upper
 69 100
 41 4335.2 56.7 85.1#
 39 2006.4 36.3 54.5#

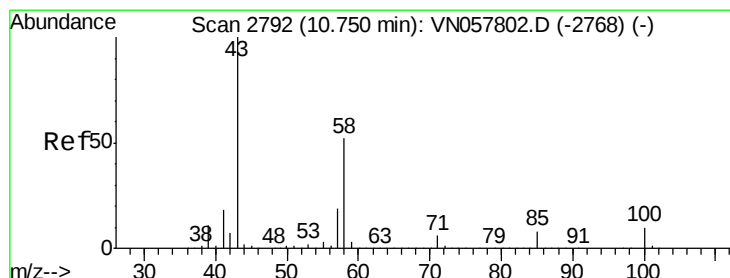
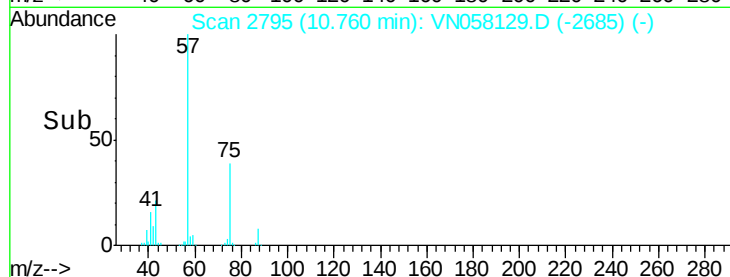
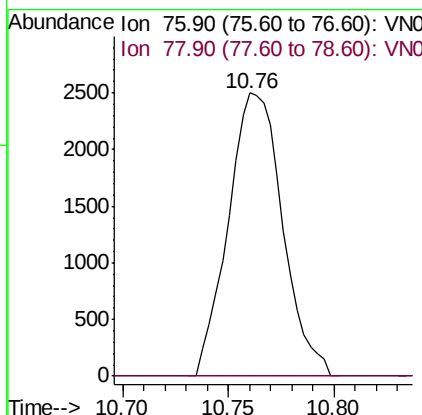
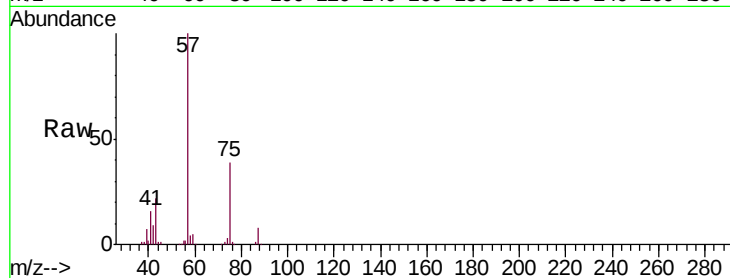




#57
 1,3-Dichloropropane
 Concen: 0.500 ug/l
 RT: 10.76 min Scan# 2795
 Delta R.T. 0.05 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

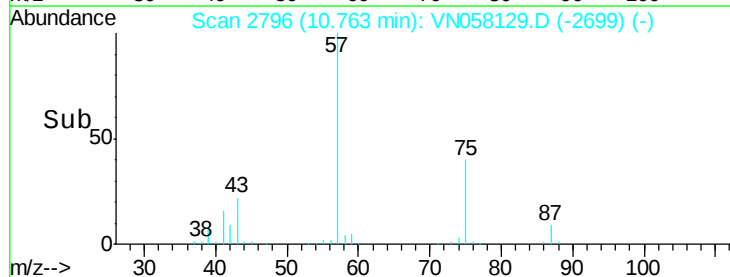
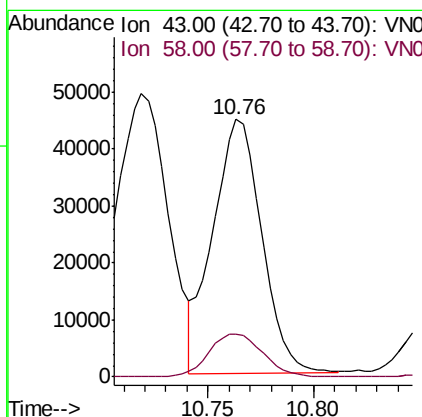
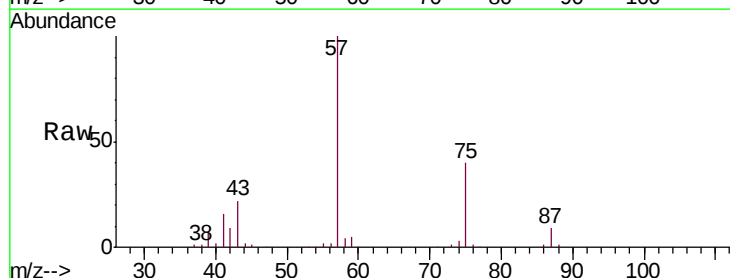
Instrument :
 MSVOA_N
 ClientSampled :
 CSA-2-1

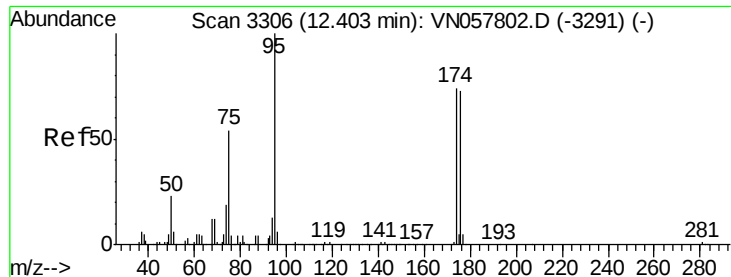
Tgt Ion: 76 Resp: 4467
 Ion Ratio Lower Upper
 76 100
 78 0.0 25.4 38.2#



#59
 2-Hexanone
 Concen: 14.433 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.01 min
 Lab File: VN058129.D
 Acq: 16 Sep 2019 19:03

Tgt Ion: 43 Resp: 71744
 Ion Ratio Lower Upper
 43 100
 58 18.8 25.6 76.8#





#62

4-Bromofluorobenzene

Concen: 39.803 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampleId :

CSA-2-1

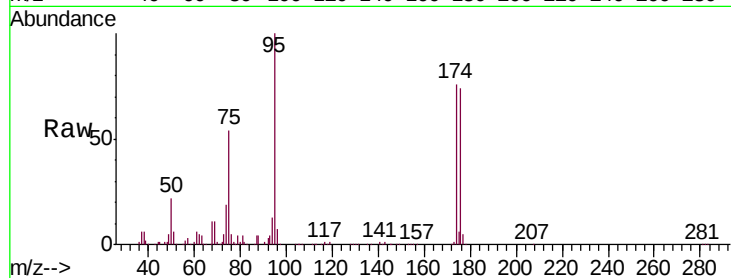
Tgt Ion: 95 Resp: 302311

Ion Ratio Lower Upper

95 100

174 76.4 0.0 150.2

176 73.4 0.0 146.0



Abundance Ion 94.90 (94.60 to 95.60): VN058129.D (-3213) (-)

Ion 173.80 (173.50 to 174.50): VN058129.D (-3213) (-)

Ion 175.80 (175.50 to 176.50): VN058129.D (-3213) (-)

12.41

250000

200000

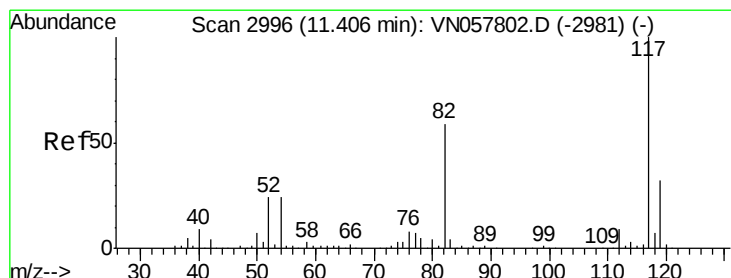
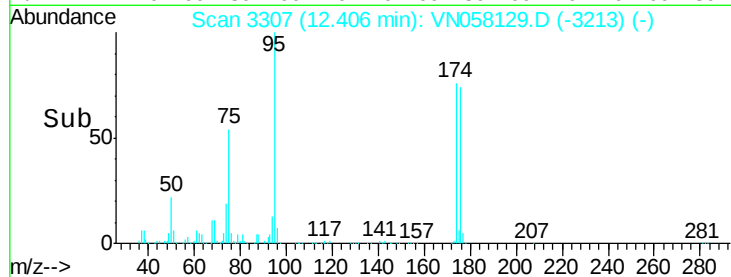
150000

100000

50000

0

Time--> 12.30 12.40 12.50



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

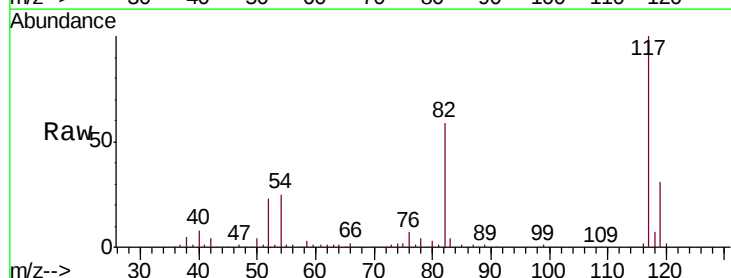
Tgt Ion: 117 Resp: 499870

Ion Ratio Lower Upper

117 100

82 59.2 47.2 70.8

119 31.4 25.3 37.9



Abundance Ion 116.90 (116.60 to 117.60): VN058129.D (-2903) (-)

Ion 82.00 (81.70 to 82.70): VN058129.D (-2903) (-)

Ion 118.90 (118.60 to 119.60): VN058129.D (-2903) (-)

11.41

400000

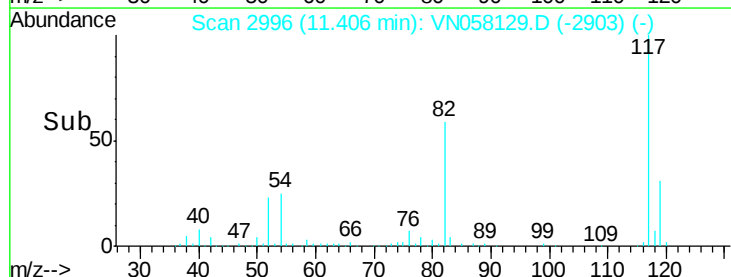
300000

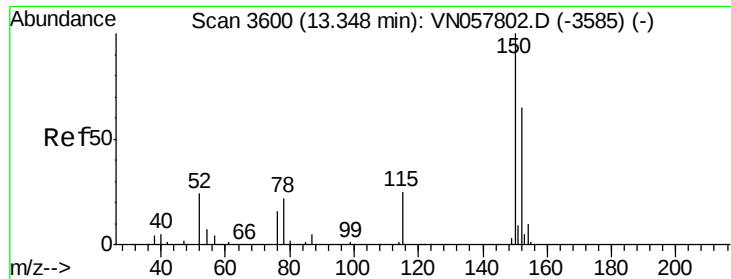
200000

100000

0

Time--> 11.30 11.40 11.50





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3600

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampleId :

CSA-2-1

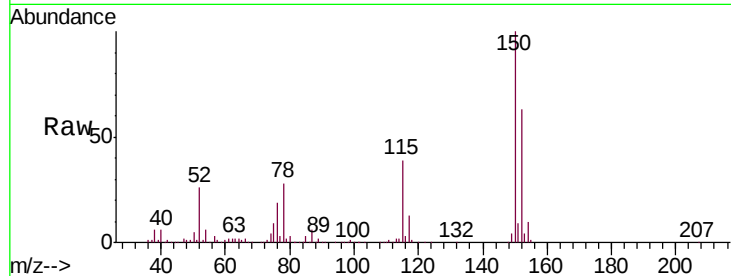
Tgt Ion:152 Resp: 262999

Ion Ratio Lower Upper

152 100

115 60.8 30.3 91.0

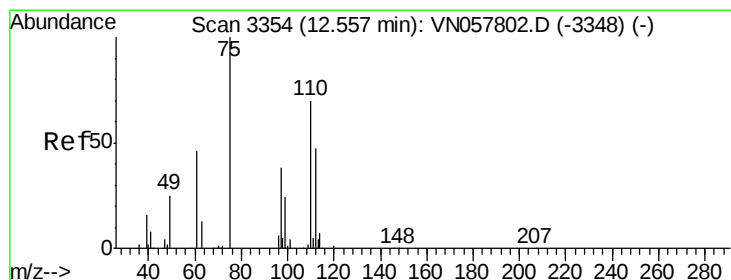
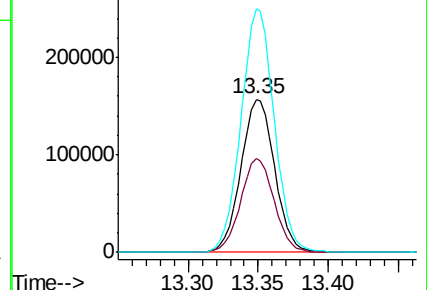
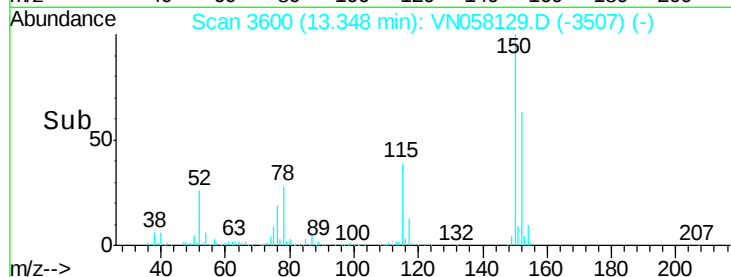
150 157.0 0.0 352.4



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: 28.061 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN058129.D

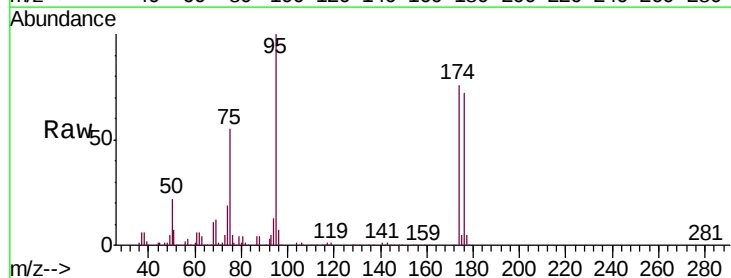
Acq: 16 Sep 2019 19:03

Tgt Ion: 75 Resp: 166951

Ion Ratio Lower Upper

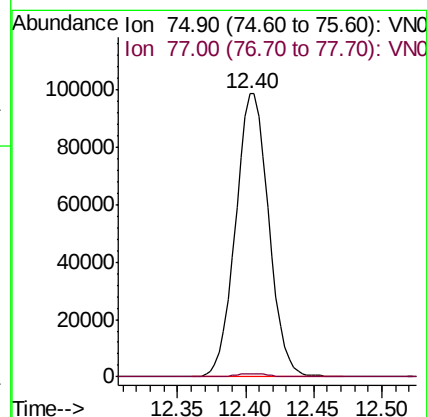
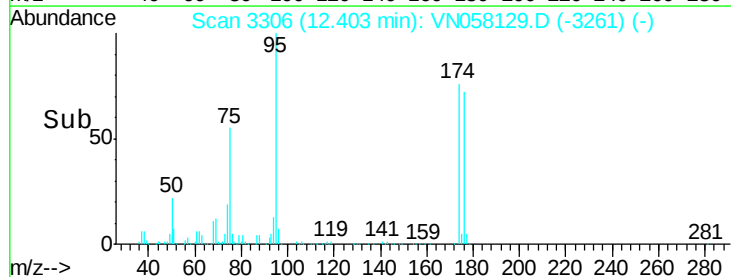
75 100

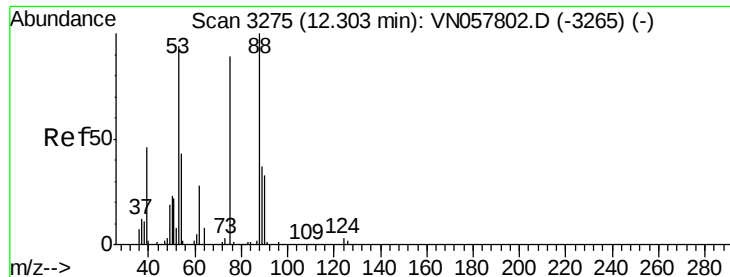
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 98.749 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampled :

CSA-2-1

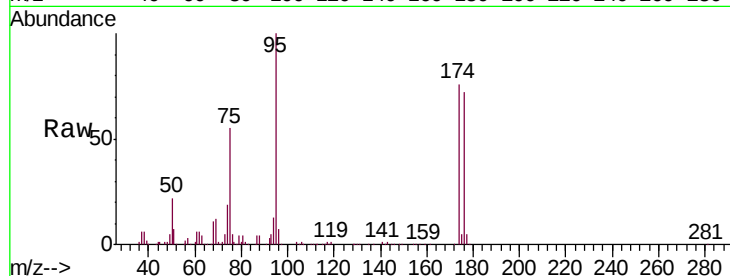
Tgt Ion: 75 Resp: 166951

Ion Ratio Lower Upper

75 100

53 0.0 88.4 132.6#

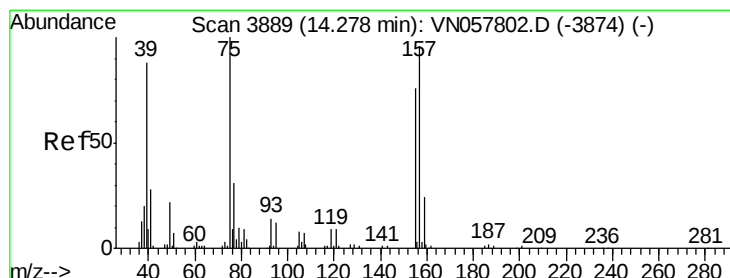
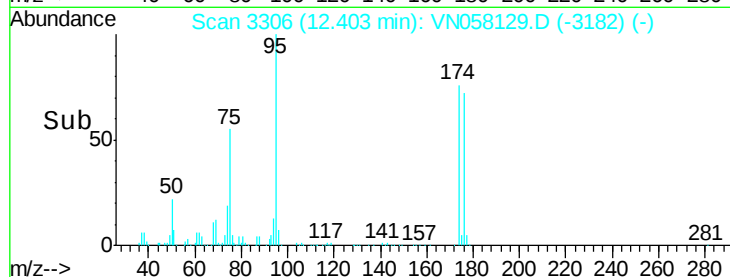
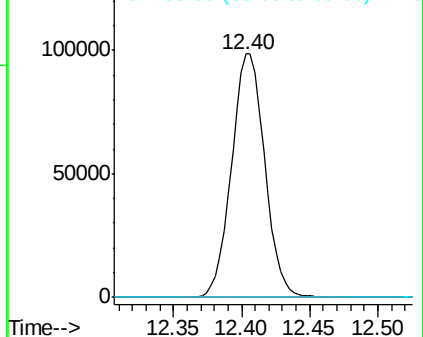
89 0.0 35.3 52.9#



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



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.256 ug/l

RT: 14.10 min Scan# 3833

Delta R.T. -0.18 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

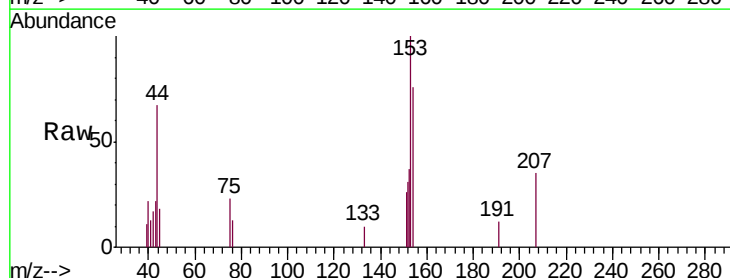
Tgt Ion: 75 Resp: 290

Ion Ratio Lower Upper

75 100

155 33.4 37.3 111.8#

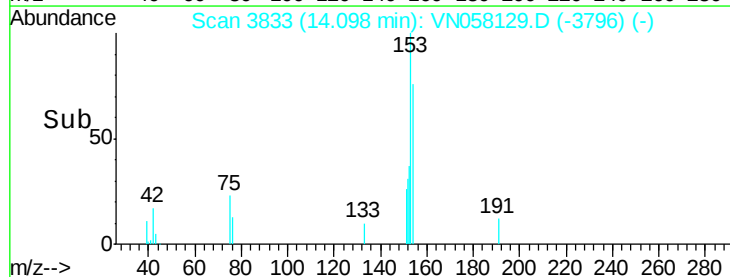
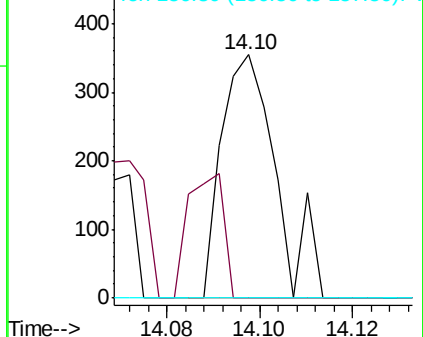
157 0.0 47.9 143.8#

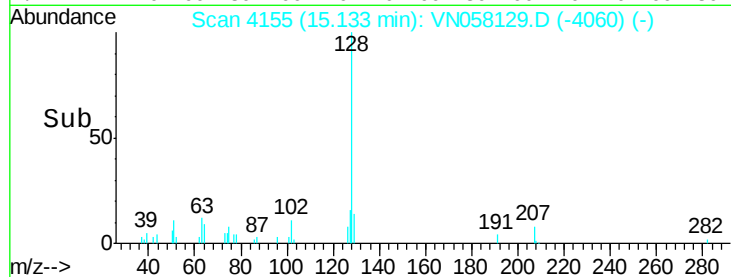
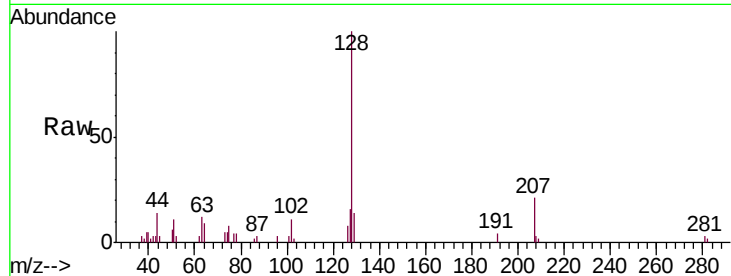
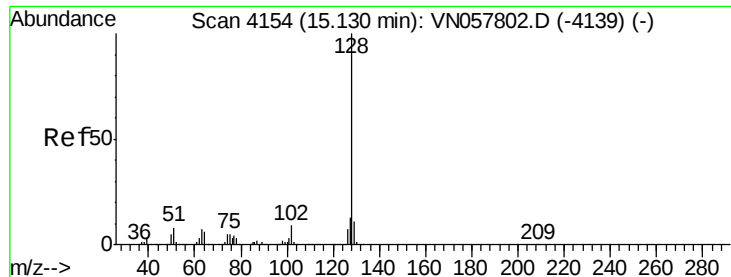


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 154.80 (154.50 to 155.50): V

Ion 156.80 (156.50 to 157.50): V





#95

Naphthalene

Concen: Below Cal

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN058129.D

Acq: 16 Sep 2019 19:03

Instrument :

MSVOA_N

ClientSampleId :

CSA-2-1

Tgt Ion:128 Resp: 15607

Ion Ratio Lower Upper

128 100

127 13.7 10.3 15.5

129 13.2 8.6 12.8#

