

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN092019\
 Data File : VN058248.D
 Acq On : 20 Sep 2019 14:31
 Operator : JC/SP
 Sample : K4974-12
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 RE109D3-20190917

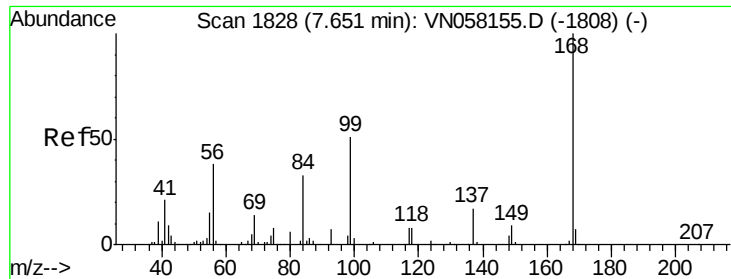
Quant Time: Sep 20 23:49:06 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091819W.M
 Quant Title : SW846 8260
 QLast Update : Thu Sep 19 09:27:53 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	495588	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	809903	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	688524	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	273337	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	355175	51.46	ug/l	0.00
Spiked Amount			Recovery	=	102.92%	
35) Dibromofluoromethane	7.57	113	246016	49.97	ug/l	0.00
Spiked Amount			Recovery	=	99.94%	
50) Toluene-d8	10.08	98	1017186	53.03	ug/l	0.00
Spiked Amount			Recovery	=	106.06%	
62) 4-Bromofluorobenzene	12.41	95	321508	45.12	ug/l	0.00
Spiked Amount			Recovery	=	90.24%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.83	85	1034	0.254	ug/l #	68
3) Chloromethane	2.04	50	1714	Below Cal	#	77
5) Bromomethane	2.56	94	463	0.974	ug/l	88
6) Chloroethane	2.73	64	60	Below Cal	#	44
9) 1,1,2-Trichlorotrifluoroet	3.73	101	10894	2.719	ug/l	98
11) Tert butyl alcohol	4.75	59	244	0.297	ug/l #	71
14) Allyl chloride	4.04	41	7011	1.069	ug/l #	68
16) Acetone	3.80	43	11777	5.026	ug/l	91
17) Carbon Disulfide	4.04	76	350	0.352	ug/l #	74
18) Methyl Acetate	4.33	43	3747	0.608	ug/l #	74
20) Methylene Chloride	4.53	84	230	Below Cal	#	13
27) cis-1,2-Dichloroethene	6.81	96	1928	0.384	ug/l	16
31) Cyclohexane	7.65	56	12881	Below Cal	#	16
36) 1,1-Dichloropropene	7.65	75	44097	7.550	ug/l #	48
38) Carbon Tetrachloride	7.76	117	4204	0.716	ug/l	100
39) Methylcyclohexane	8.83	83	4956	0.947	ug/l #	1
41) Methacrylonitrile	6.89	41	31	0.921	ug/l #	100
43) Isopropyl Acetate	8.25	43	12510	1.105	ug/l #	57
44) Trichloroethene	8.82	130	374656	85.823	ug/l	99
49) 1,4-Dioxane	9.19	88	813	9.634	ug/l #	64
60) Dibromochloromethane	10.63	129	3294	0.690	ug/l #	11
64) Tetrachloroethene	10.63	164	3864	1.151	ug/l	92
71) Bromoform	12.40	173	1709	4.082	ug/l #	1
76) 1,2,3-Trichloropropane	12.40	75	174923	35.758	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	174923	99.902	ug/l #	5

(#) = 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

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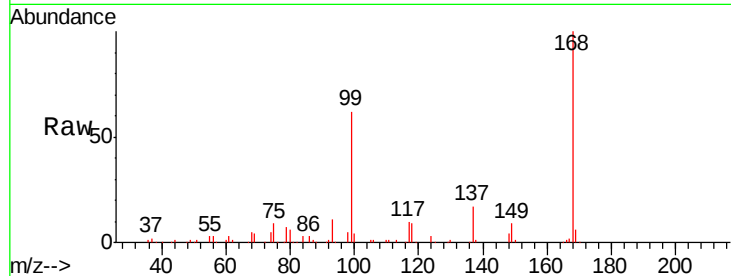
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Tgt Ion:168 Resp: 495588

Ion Ratio Lower Upper

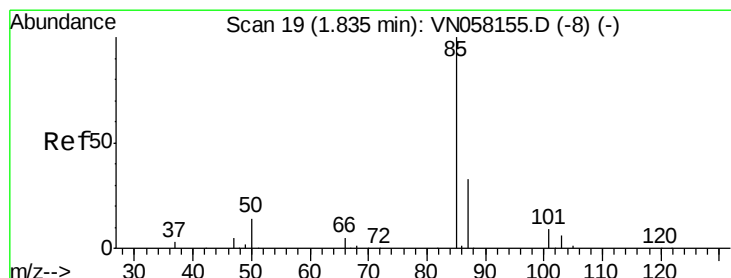
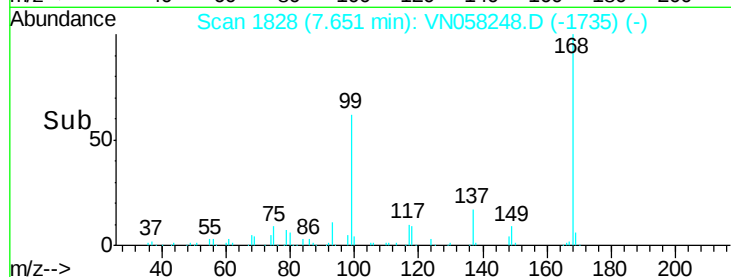
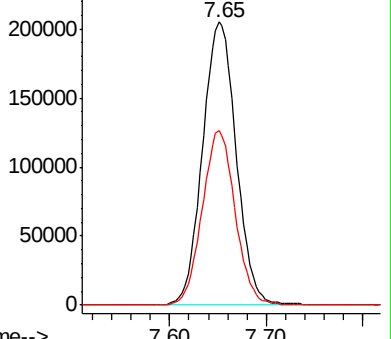
168 100

99 61.4 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN



#2

Dichlorodifluoromethane

Concen: 0.254 ug/l

RT: 1.83 min Scan# 19

Delta R.T. -0.00 min

Lab File: VN058248.D

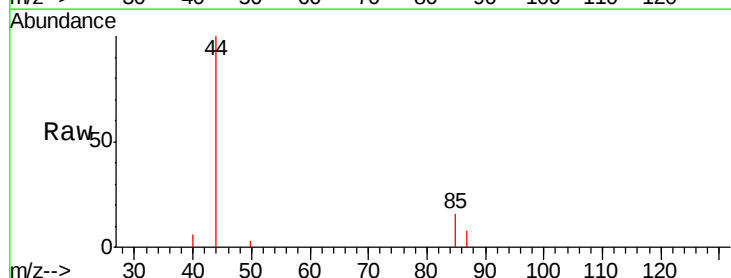
Acq: 20 Sep 2019 14:31

Tgt Ion: 85 Resp: 1034

Ion Ratio Lower Upper

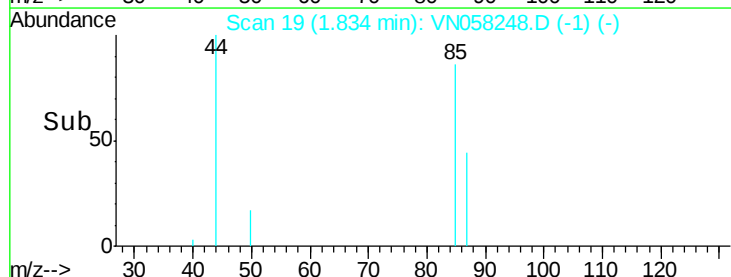
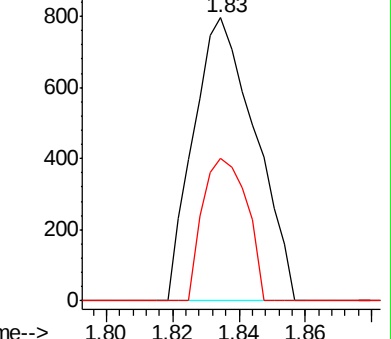
85 100

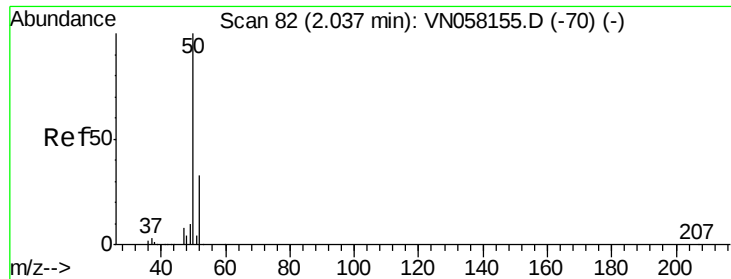
87 50.5 16.3 48.9#



Abundance Ion 84.90 (84.60 to 85.60): VN

Ion 86.90 (86.60 to 87.60): VN





#3

Chloromethane

Concen: Below Cal

RT: 2.04 min Scan# 82

Delta R.T. 0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

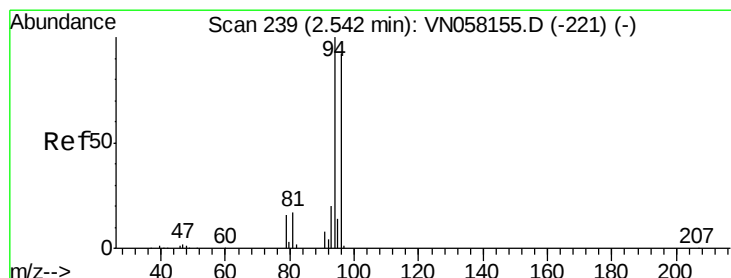
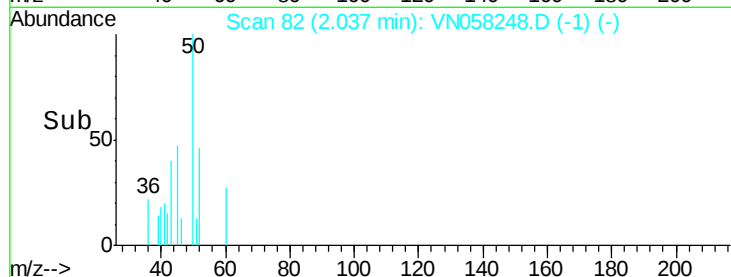
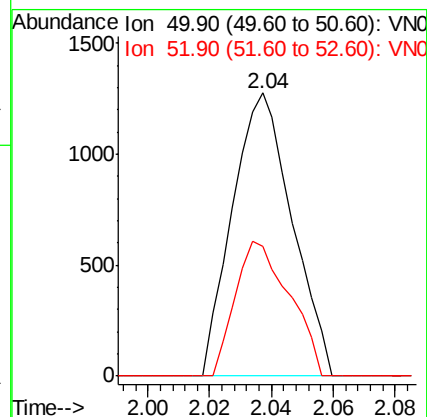
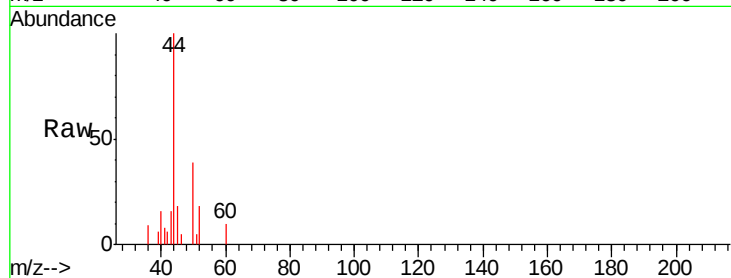
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Tgt Ion: 50 Resp: 1714

Ion Ratio Lower Upper

50 100

52 45.7 26.3 39.5#



#5

Bromomethane

Concen: 0.974 ug/l

RT: 2.56 min Scan# 246

Delta R.T. 0.02 min

Lab File: VN058248.D

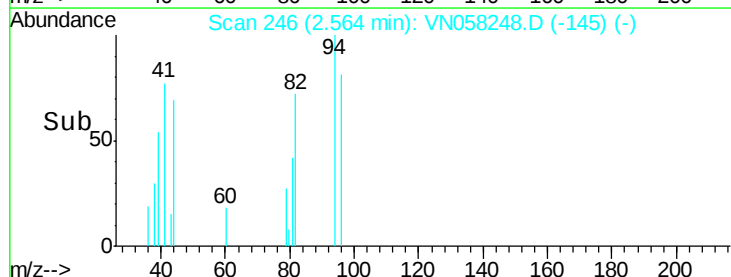
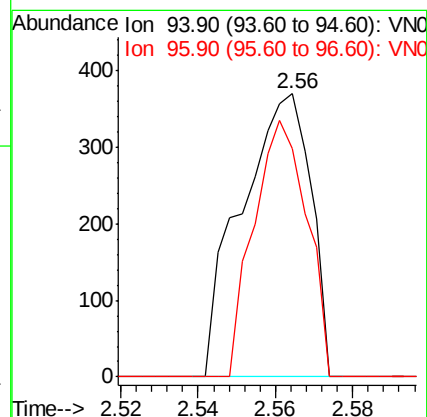
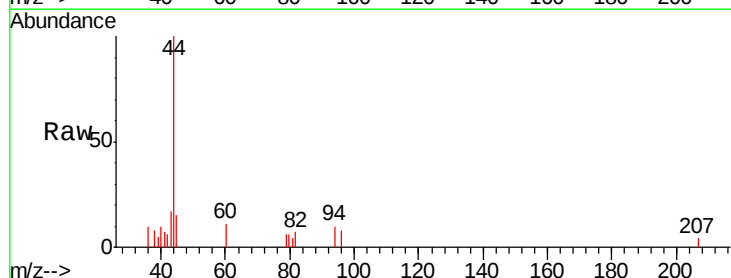
Acq: 20 Sep 2019 14:31

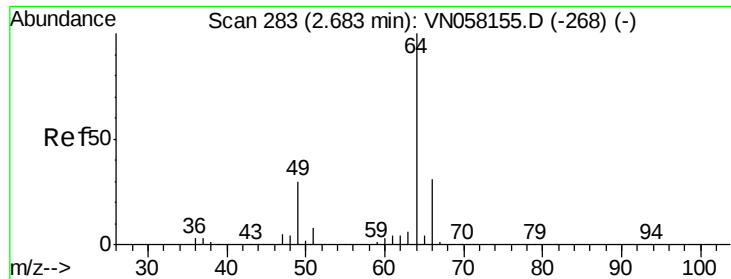
Tgt Ion: 94 Resp: 463

Ion Ratio Lower Upper

94 100

96 80.5 73.3 109.9





#6

Chloroethane

Concen: Below Cal

RT: 2.73 min Scan# 296

Delta R.T. 0.04 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

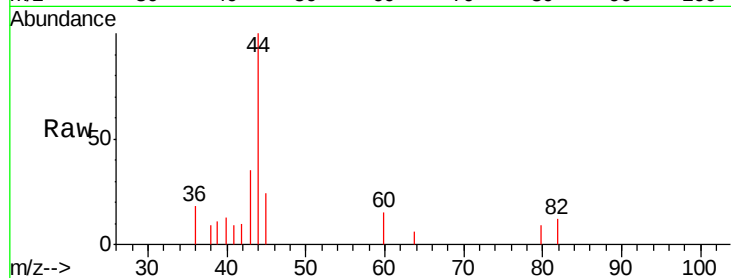
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Tgt Ion: 64 Resp: 60

Ion Ratio Lower Upper

64 100

66 0.0 24.6 37.0#



Abundance Ion 63.90 (63.60 to 64.60): VN0

Ion 65.90 (65.60 to 66.60): VN0

2.73

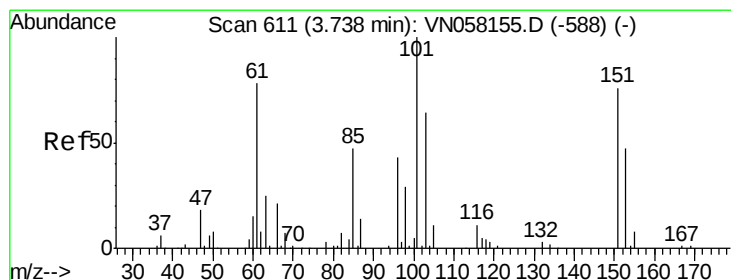
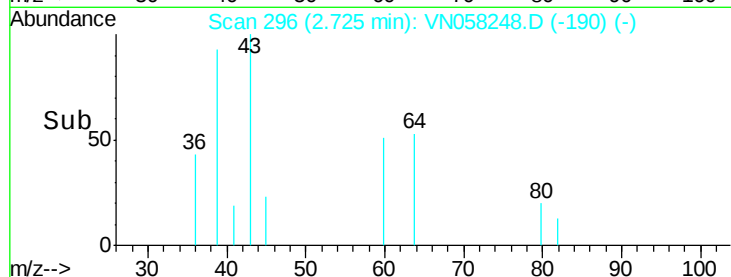
150

100

50

0

Time--> 2.71 2.72 2.73



#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.719 ug/l

RT: 3.73 min Scan# 609

Delta R.T. -0.01 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

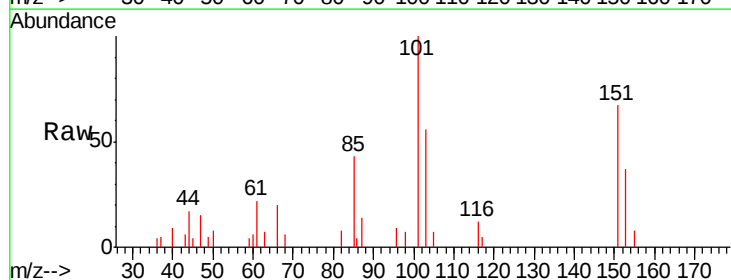
Tgt Ion: 101 Resp: 10894

Ion Ratio Lower Upper

101 100

85 47.9 37.3 55.9

151 72.8 59.6 89.4



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VN0

Ion 150.80 (150.50 to 151.50): V

3.73

4000

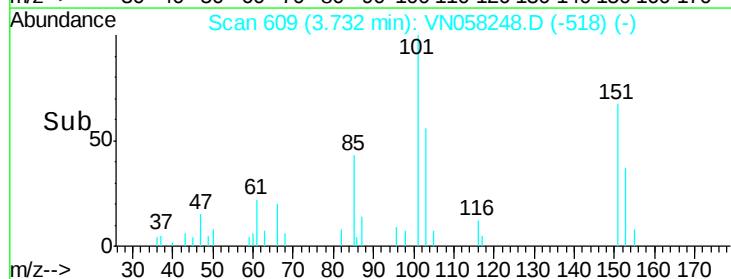
3000

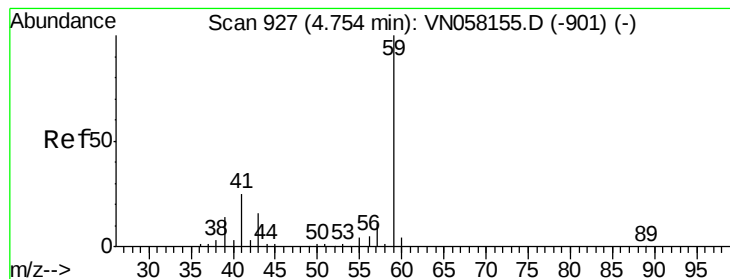
2000

1000

0

Time--> 3.65 3.70 3.75 3.80



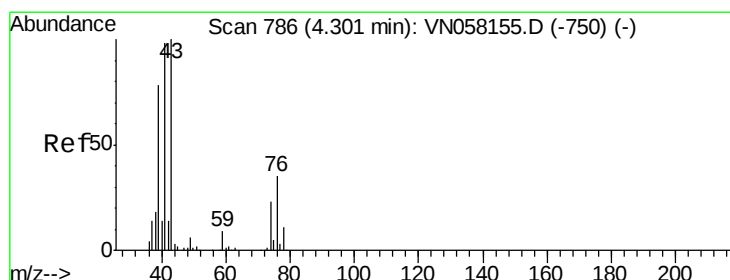
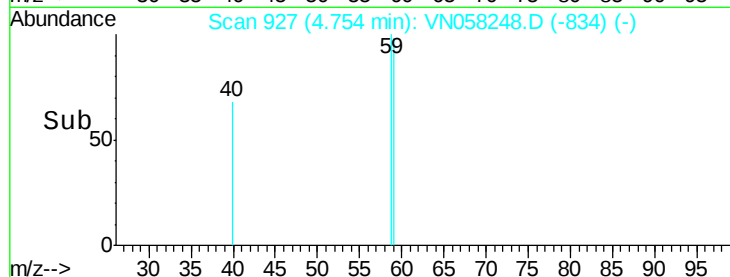
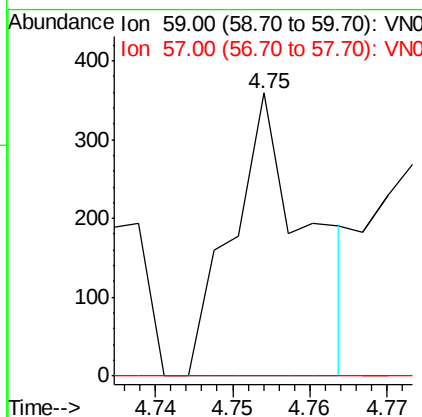
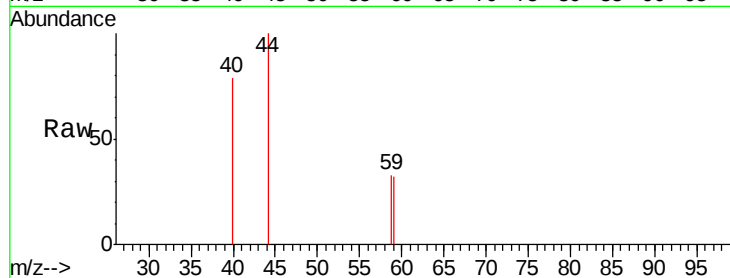


#11

Tert butyl alcohol
 Concen: 0.297 ug/l
 RT: 4.75 min Scan# 927
 Delta R.T. -0.00 min
 Lab File: VN058248.D
 Acq: 20 Sep 2019 14:31

Instrument :
 MSVOA_N
 ClientSampleId :
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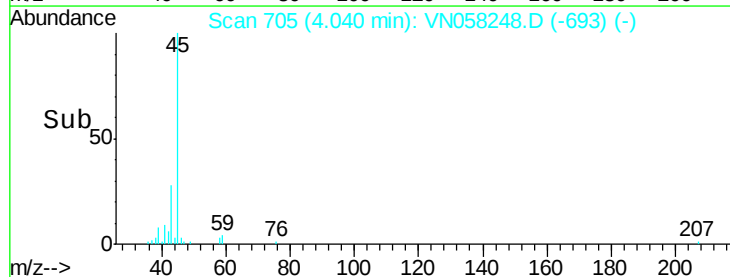
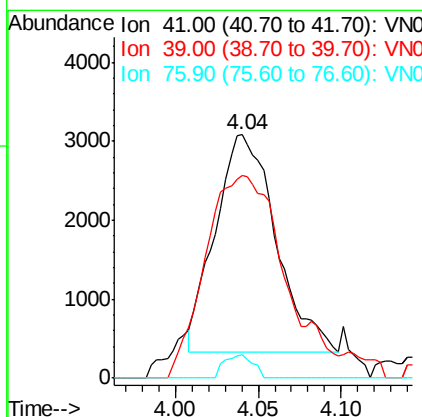
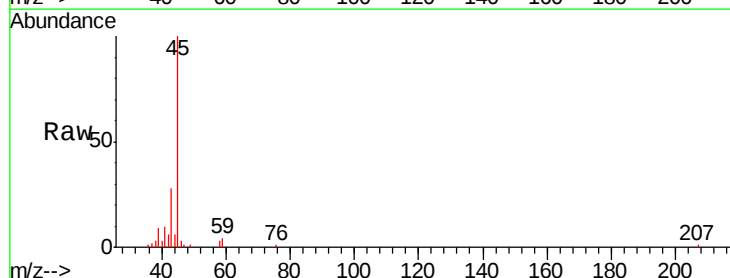
Tgt Ion: 59 Resp: 244
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.6 13.0#

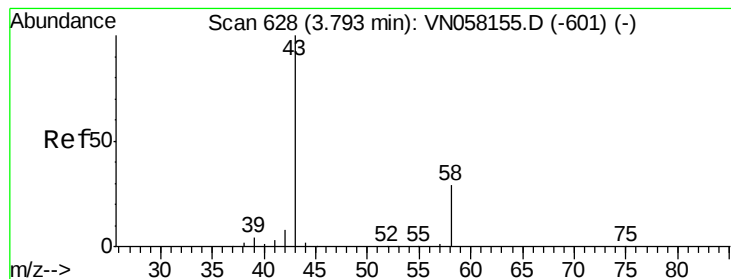


#14

Allyl chloride
 Concen: 1.069 ug/l
 RT: 4.04 min Scan# 705
 Delta R.T. -0.26 min
 Lab File: VN058248.D
 Acq: 20 Sep 2019 14:31

Tgt Ion: 41 Resp: 7011
 Ion Ratio Lower Upper
 41 100
 39 95.5 59.1 88.7#
 76 5.0 25.1 37.7#





#16

Acetone

Concen: 5.026 ug/l

RT: 3.80 min Scan# 630

Delta R.T. 0.01 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

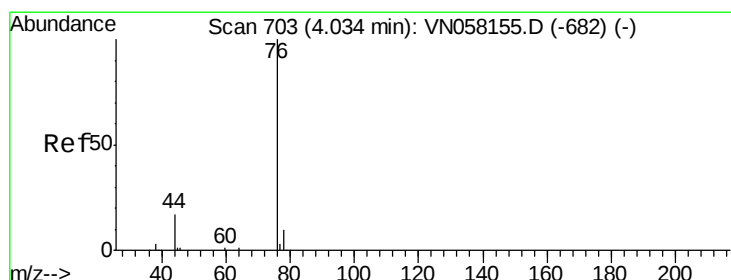
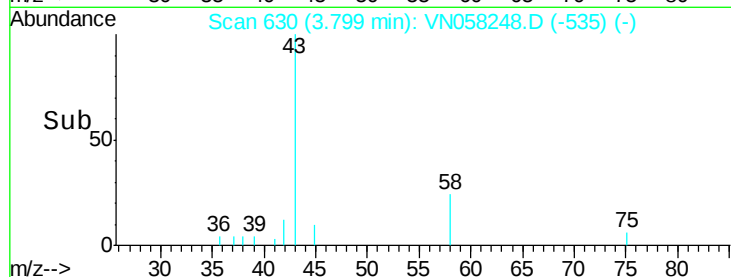
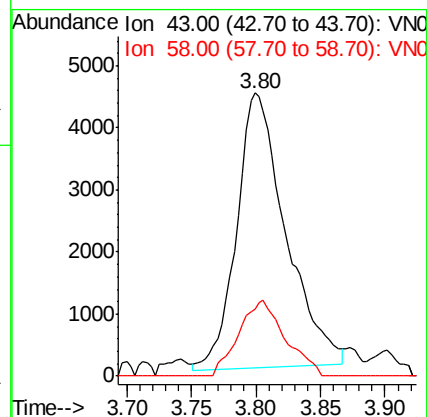
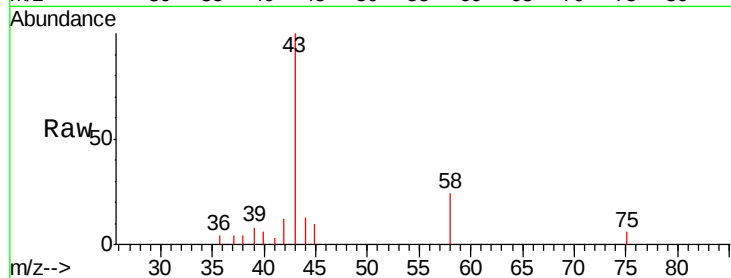
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Tgt Ion: 43 Resp: 11777

Ion Ratio Lower Upper

43 100

58 24.5 23.4 35.2



#17

Carbon Disulfide

Concen: 0.352 ug/l

RT: 4.04 min Scan# 705

Delta R.T. 0.01 min

Lab File: VN058248.D

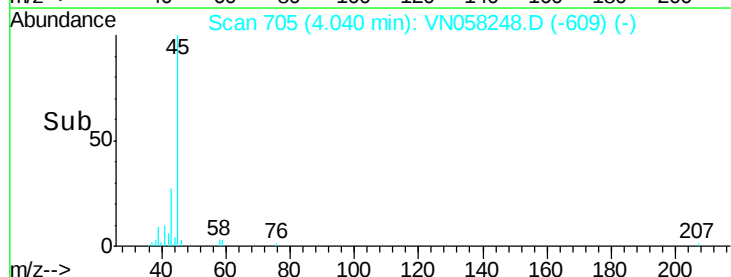
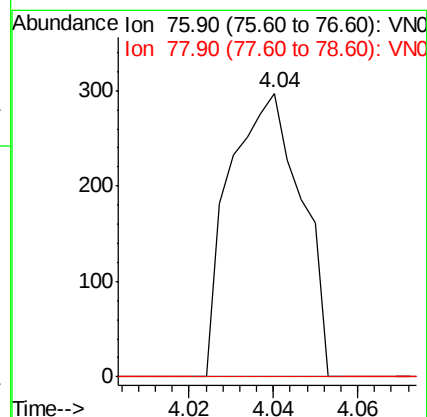
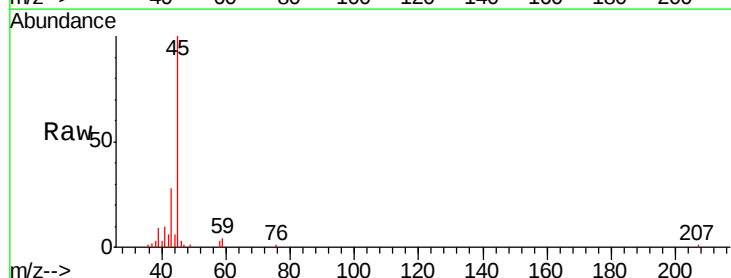
Acq: 20 Sep 2019 14:31

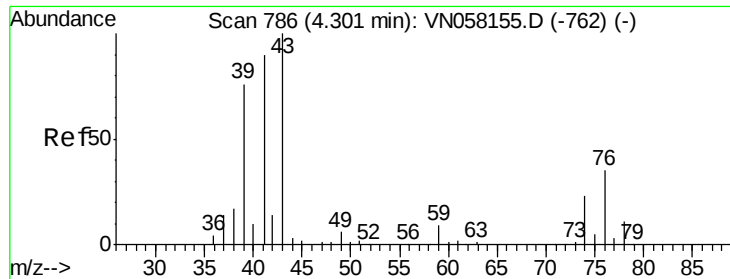
Tgt Ion: 76 Resp: 350

Ion Ratio Lower Upper

76 100

78 0.0 7.7 11.5#

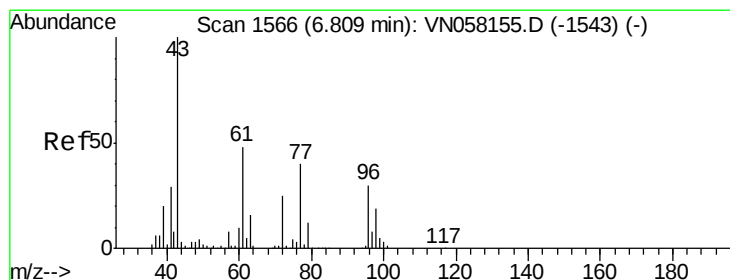
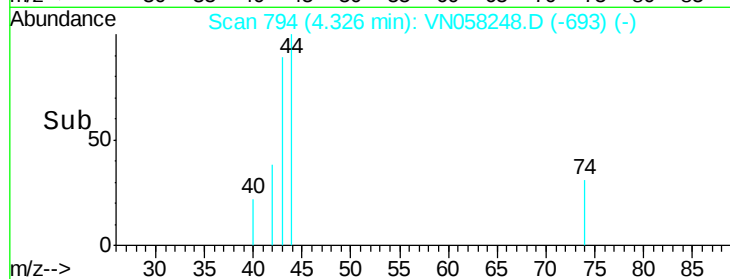
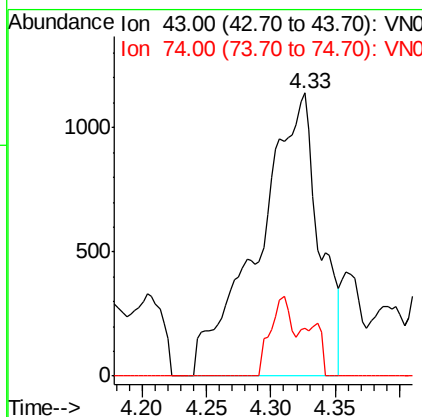
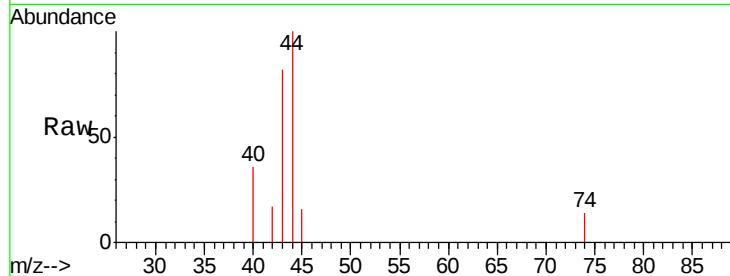




#18
Methyl Acetate
Concen: 0.608 ug/l
RT: 4.33 min Scan# 794
Delta R.T. 0.03 min
Lab File: VN058248.D
Acq: 20 Sep 2019 14:31

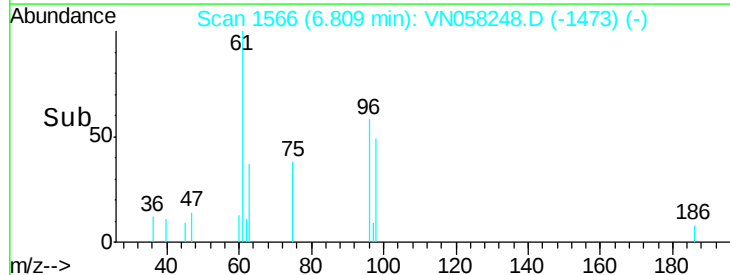
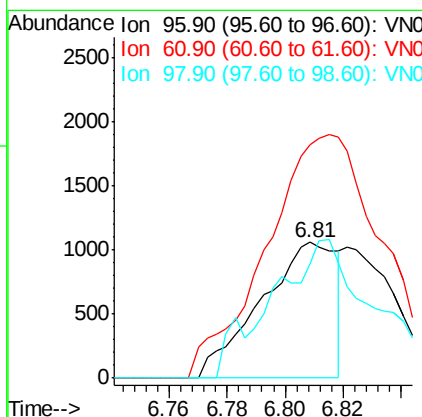
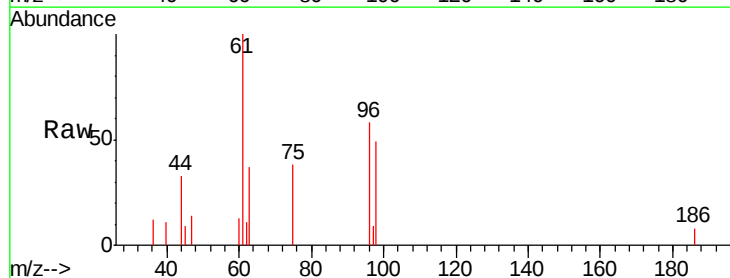
Instrument :
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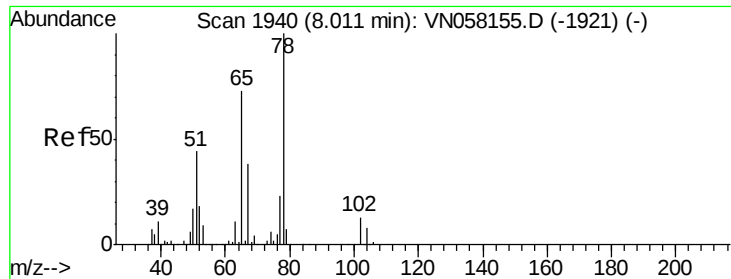
Tgt Ion: 43 Resp: 3747
Ion Ratio Lower Upper
43 100
74 10.1 18.0 27.0#



#27
cis-1,2-Dichloroethene
Concen: 0.384 ug/l
RT: 6.81 min Scan# 1566
Delta R.T. -0.00 min
Lab File: VN058248.D
Acq: 20 Sep 2019 14:31

Tgt Ion: 96 Resp: 1928
Ion Ratio Lower Upper
96 100
61 273.5 0.0 319.0
98 124.6 0.0 126.6





#33

1,2-Dichloroethane-d4

Concen: 51.456 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

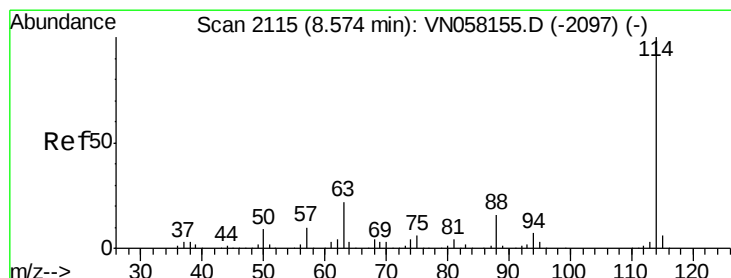
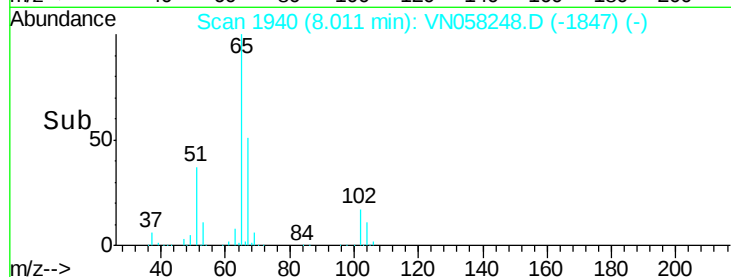
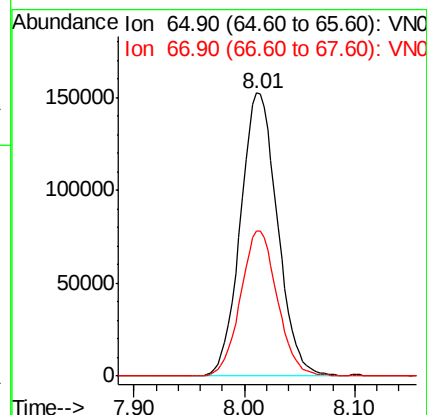
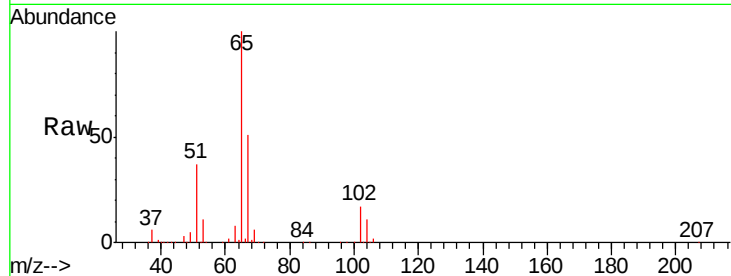
RE109D3-20190917

Tgt Ion: 65 Resp: 355175

Ion Ratio Lower Upper

65 100

67 50.9 0.0 103.4



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2115

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

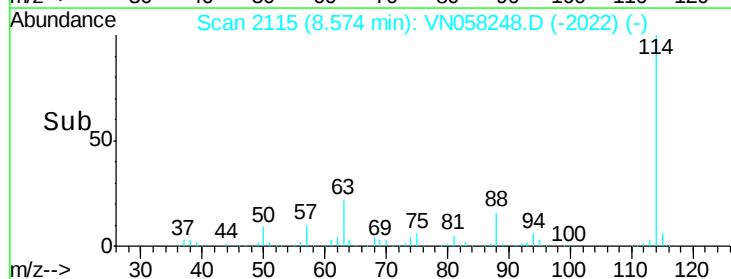
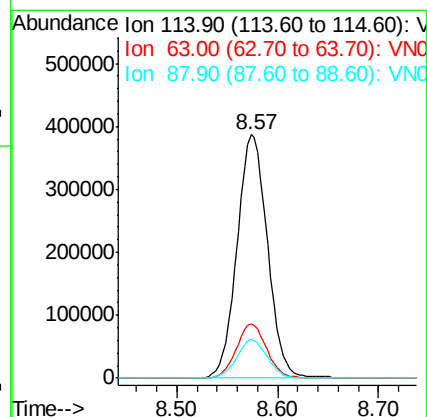
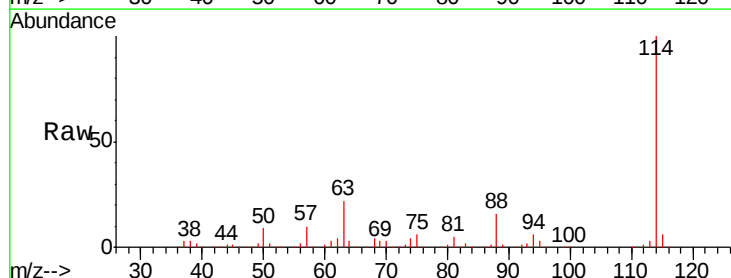
Tgt Ion: 114 Resp: 809903

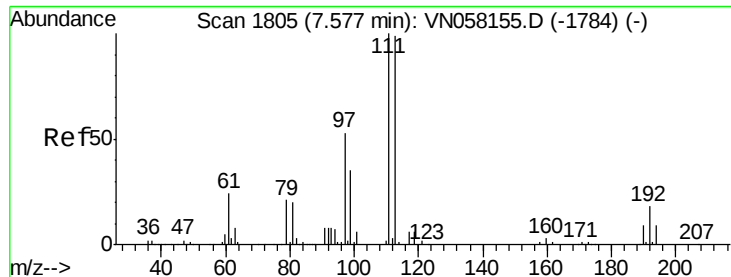
Ion Ratio Lower Upper

114 100

63 22.2 0.0 44.2

88 16.0 0.0 31.6

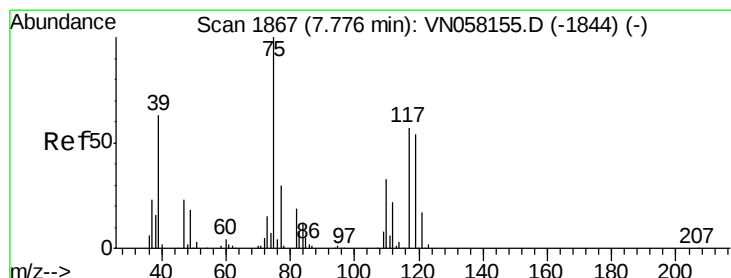
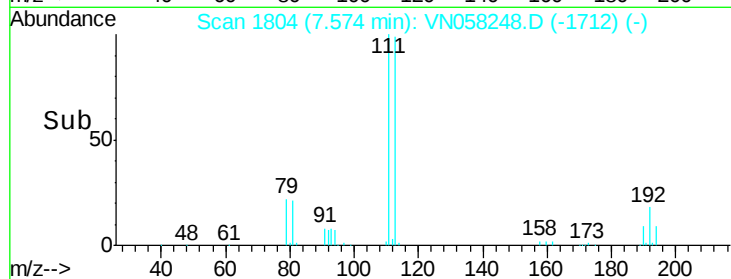
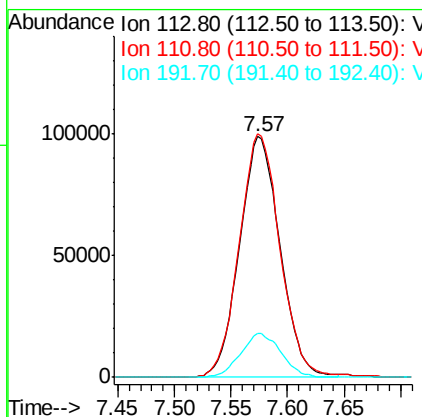
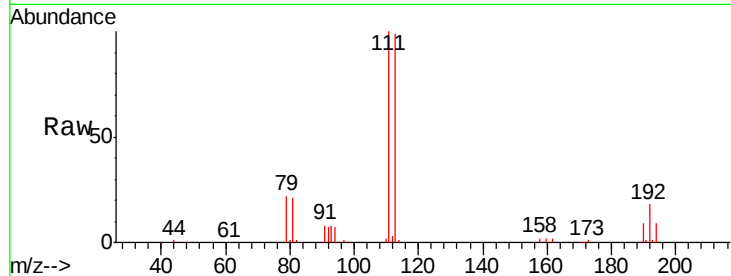




#35
 Dibromofluoromethane
 Concen: 49.967 ug/l
 RT: 7.57 min Scan# 1804
 Delta R.T. -0.00 min
 Lab File: VN058248.D
 Acq: 20 Sep 2019 14:31

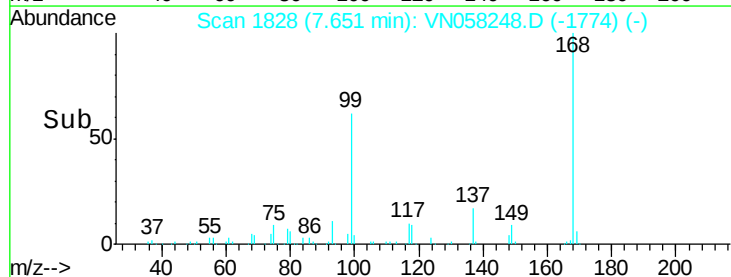
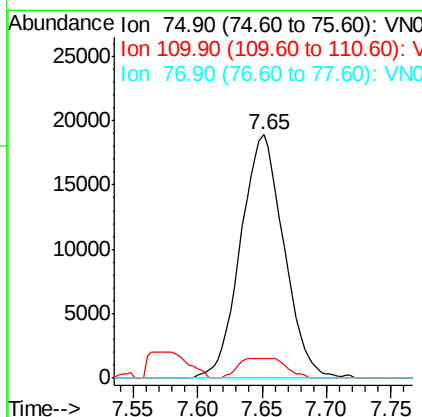
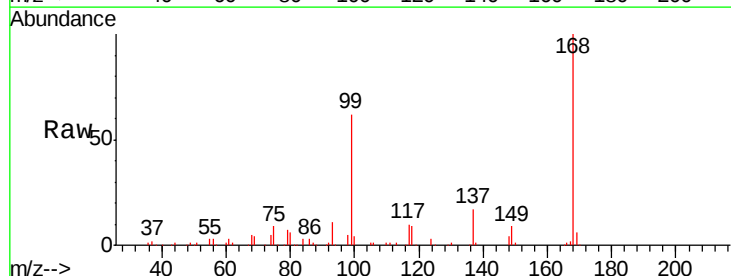
Instrument :
 MSVOA_N
 ClientSampleId :
 RE109D3-20190917

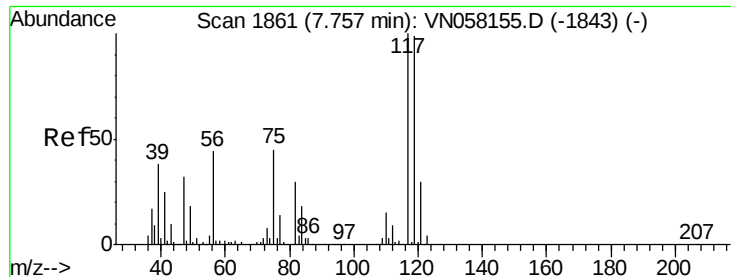
Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.5	81.8	122.6
192	18.2	14.5	21.7



#36
 1,1-Dichloropropene
 Concen: 7.550 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.13 min
 Lab File: VN058248.D
 Acq: 20 Sep 2019 14:31

Tgt Ion	Ratio	Lower	Upper
75	100		
110	5.5	16.6	49.7#
77	0.0	24.3	36.5#

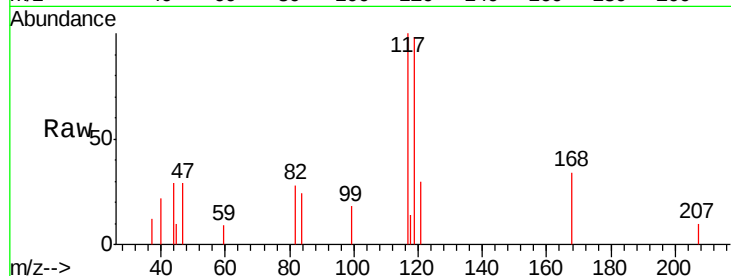




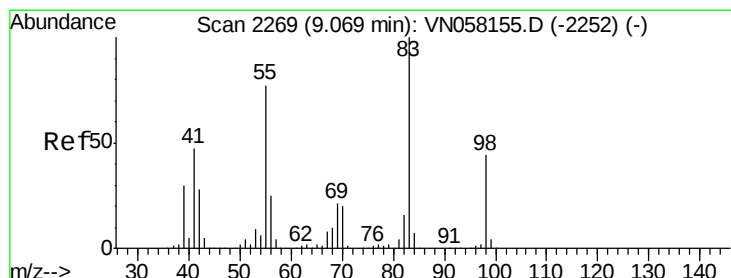
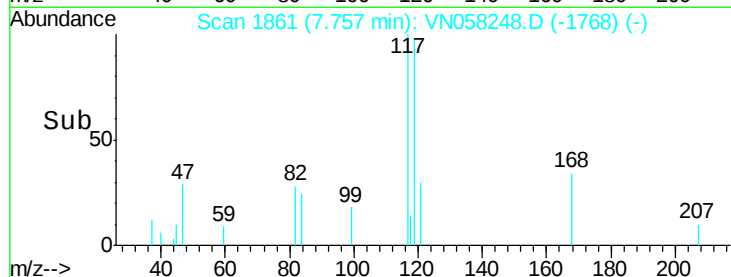
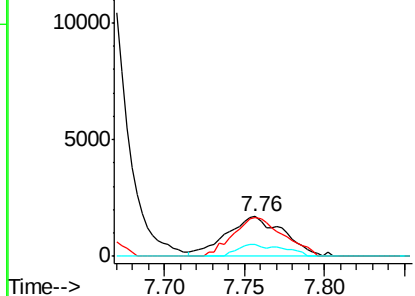
#38
Carbon Tetrachloride
Concen: 0.716 ug/l
RT: 7.76 min Scan# 1861
Delta R.T. -0.00 min
Lab File: VN058248.D
Acq: 20 Sep 2019 14:31

Instrument :
MSVOA_N
ClientSampleId :
RE109D3-20190917

Tgt Ion:117 Resp: 4204
Ion Ratio Lower Upper
117 100
119 97.7 78.6 117.8
121 30.2 24.1 36.1

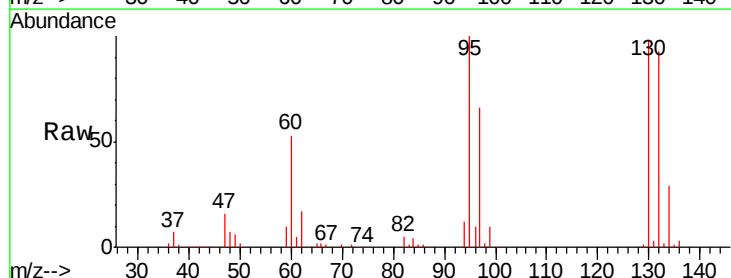


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V

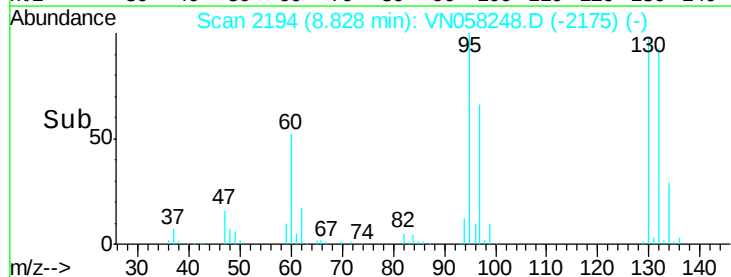
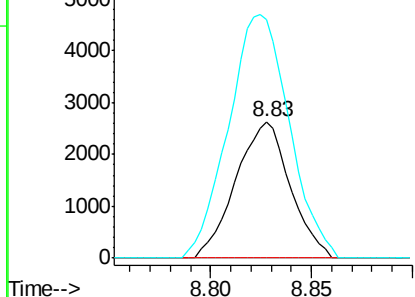


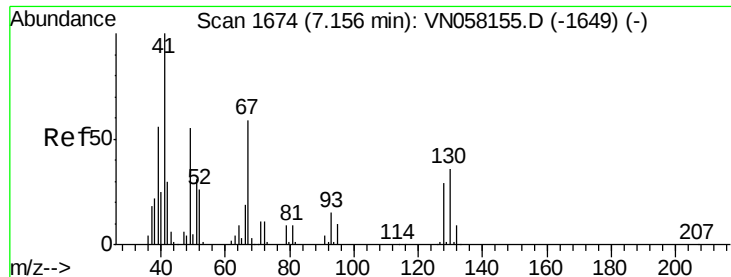
#39
Methylcyclohexane
Concen: 0.947 ug/l
RT: 8.83 min Scan# 2194
Delta R.T. -0.24 min
Lab File: VN058248.D
Acq: 20 Sep 2019 14:31

Tgt Ion: 83 Resp: 4956
Ion Ratio Lower Upper
83 100
55 0.0 61.9 92.9#
98 174.3 35.4 53.2#



Abundance Ion 83.00 (82.70 to 83.70): VNO
Ion 55.00 (54.70 to 55.70): VNO
Ion 98.00 (97.70 to 98.70): VNO

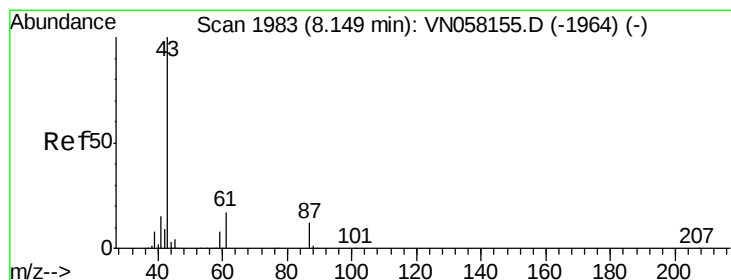
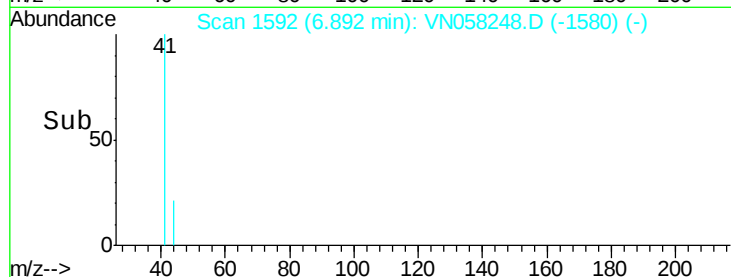
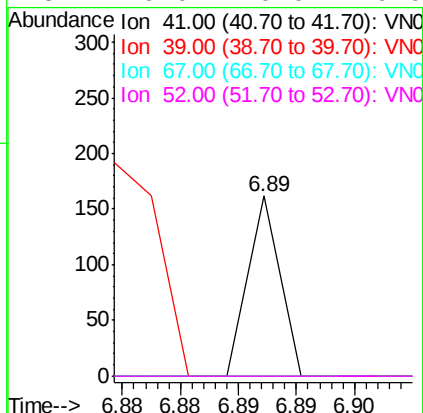
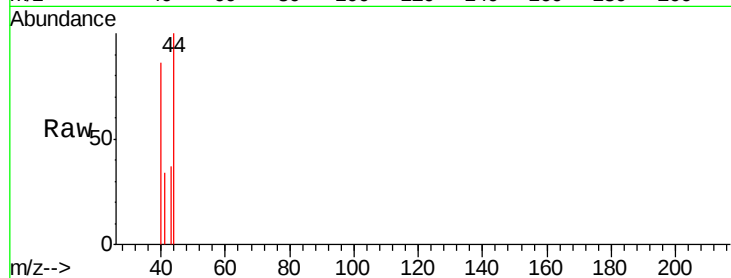




#41
Methacrylonitrile
Concen: 0.921 ug/l
RT: 6.89 min Scan# 1592
Delta R.T. -0.26 min
Lab File: VN058248.D
Acq: 20 Sep 2019 14:31

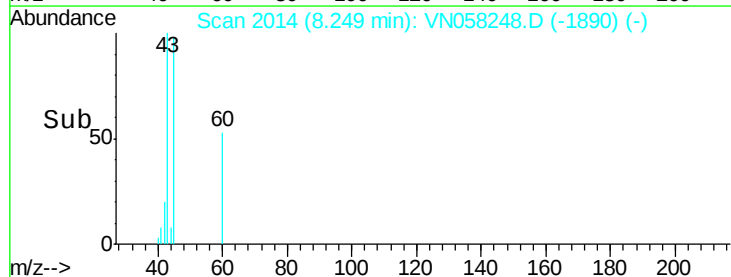
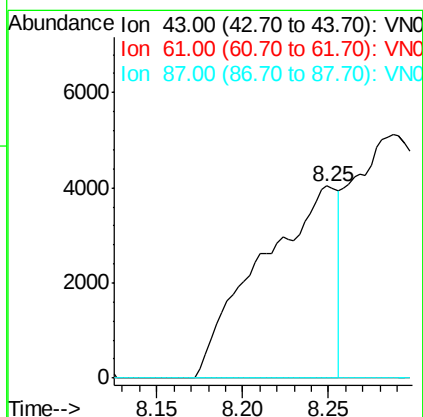
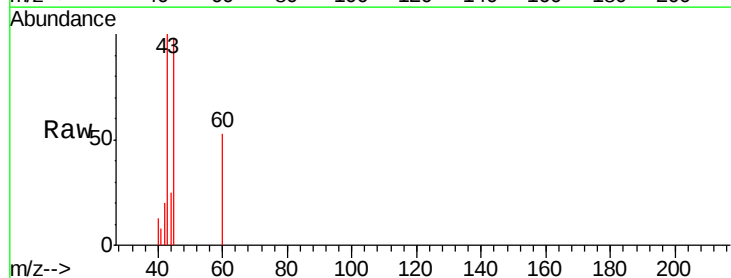
Instrument :
MSVOA_N
ClientSampleId :
RE109D3-20190917

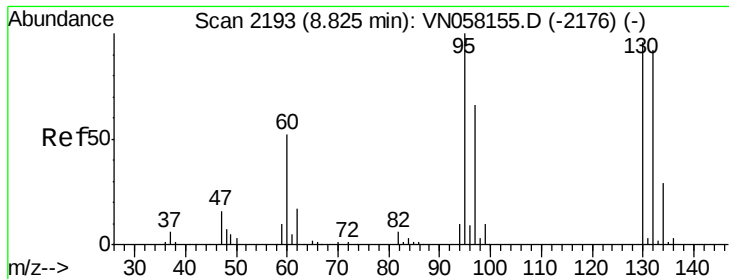
Tgt Ion:	41	Resp:	31
Ion	Ratio	Lower	Upper
41	100		
39	561.3	0.0	0.0#
67	0.0	0.0	0.0
52	0.0	0.0	0.0



#43
Isopropyl Acetate
Concen: 1.105 ug/l
RT: 8.25 min Scan# 2014
Delta R.T. 0.10 min
Lab File: VN058248.D
Acq: 20 Sep 2019 14:31

Tgt Ion:	43	Resp:	12510
Ion	Ratio	Lower	Upper
43	100		
61	0.0	19.7	29.5#
87	0.0	9.4	14.2#





#44

Trichloroethene

Concen: 85.823 ug/l

RT: 8.82 min Scan# 2193

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

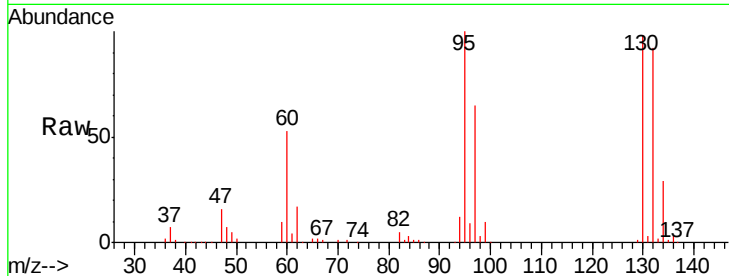
RE109D3-20190917

Tgt Ion:130 Resp: 374656

Ion Ratio Lower Upper

130 100

95 102.6 0.0 207.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VN

8.82

200000

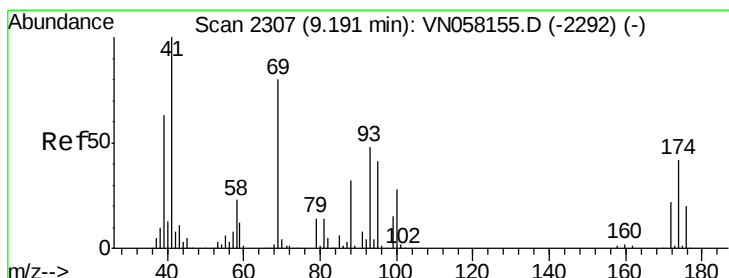
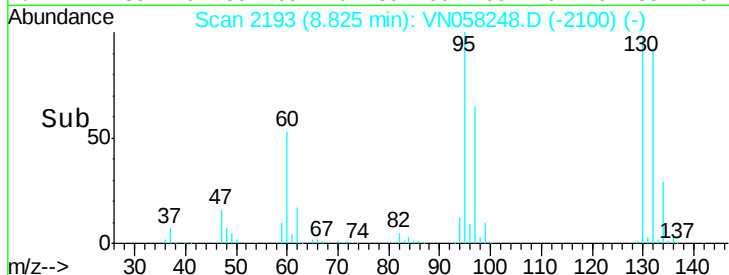
150000

100000

50000

0

Time--> 8.70 8.80 8.90



#49

1,4-Dioxane

Concen: 9.634 ug/l

RT: 9.19 min Scan# 2307

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

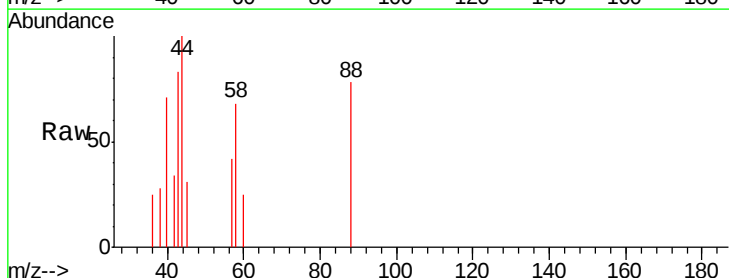
Tgt Ion: 88 Resp: 813

Ion Ratio Lower Upper

88 100

43 23.9 27.8 41.8#

58 105.5 55.0 82.4#



Abundance Ion 88.00 (87.70 to 88.70): VN

Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

9.19

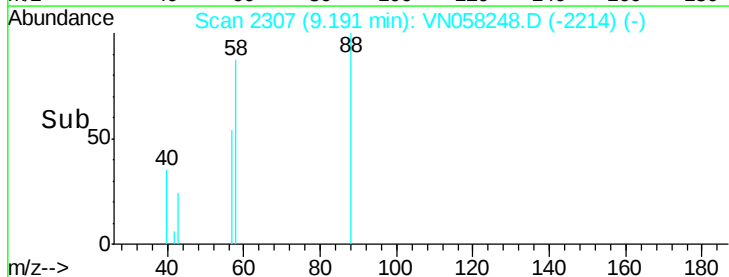
600

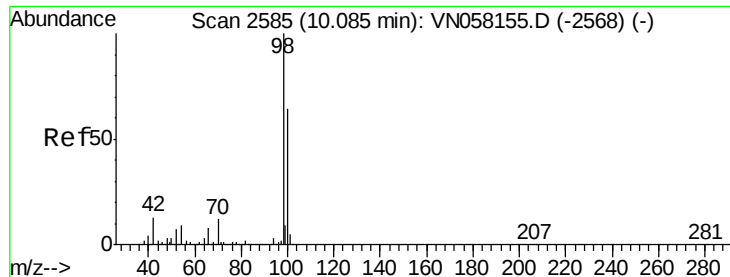
400

200

0

Time--> 9.16 9.18 9.20 9.22





#50

Toluene-d8

Concen: 53.025 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

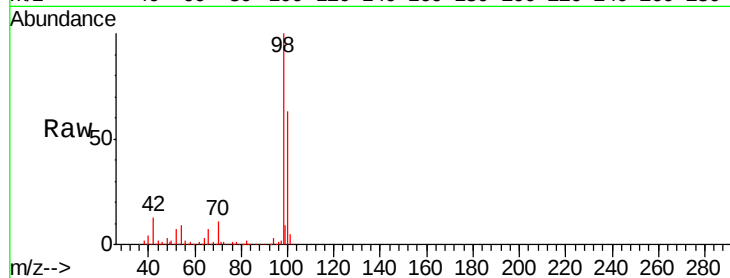
RE109D3-20190917

Tgt Ion: 98 Resp: 1017186

Ion Ratio Lower Upper

98 100

100 63.3 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN058155.D (-2568) (-)

Ion 100.00 (99.70 to 100.70): VN058155.D (-2568) (-)

10.08

600000

500000

400000

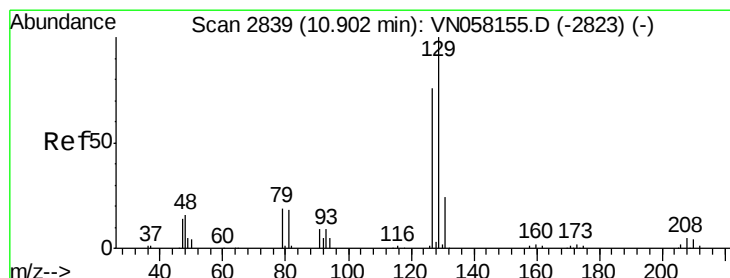
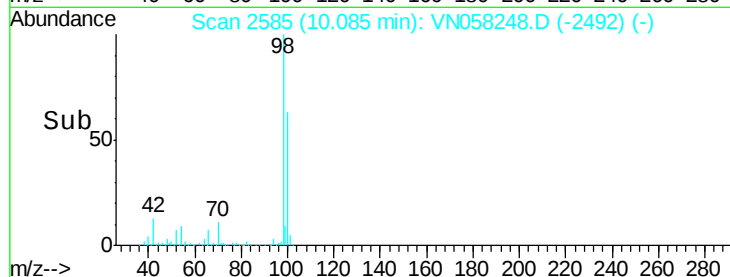
300000

200000

100000

0

Time-->



#60

Dibromochloromethane

Concen: 0.690 ug/l

RT: 10.63 min Scan# 2754

Delta R.T. -0.27 min

Lab File: VN058248.D

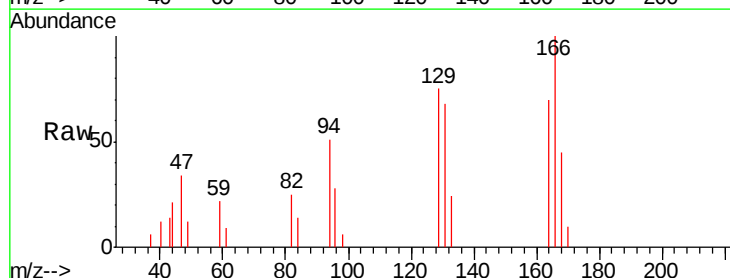
Acq: 20 Sep 2019 14:31

Tgt Ion: 129 Resp: 3294

Ion Ratio Lower Upper

129 100

127 0.0 38.7 116.1#



Abundance Ion 128.80 (128.50 to 129.50): VN058155.D (-2823) (-)

Ion 126.80 (126.50 to 127.50): VN058155.D (-2823) (-)

10.63

2000

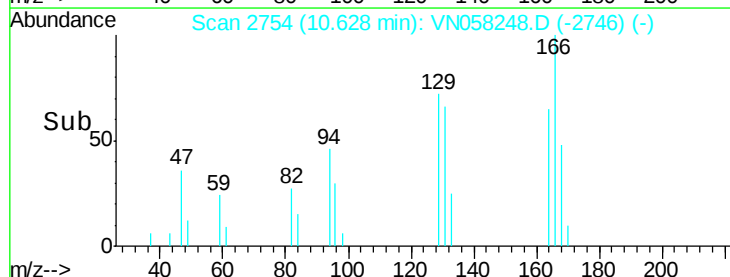
1500

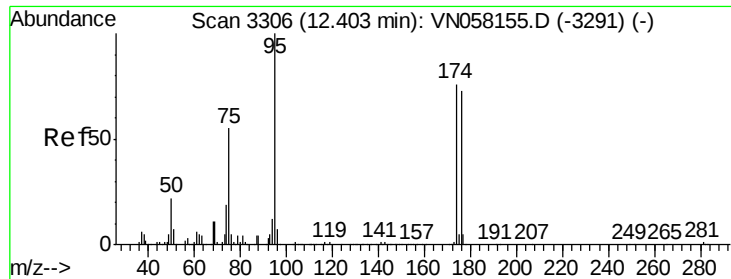
1000

500

0

Time-->





#62

4-Bromofluorobenzene

Concen: 45.119 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

RE109D3-20190917

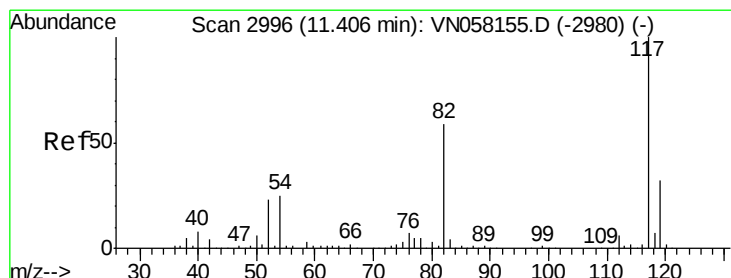
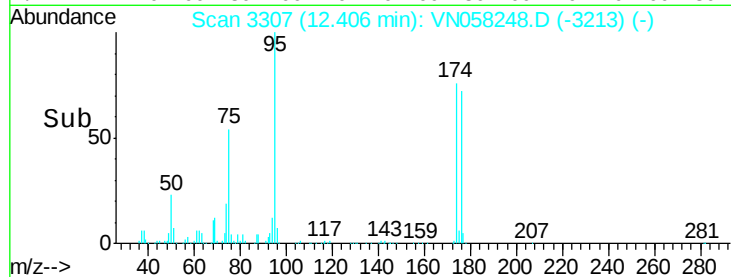
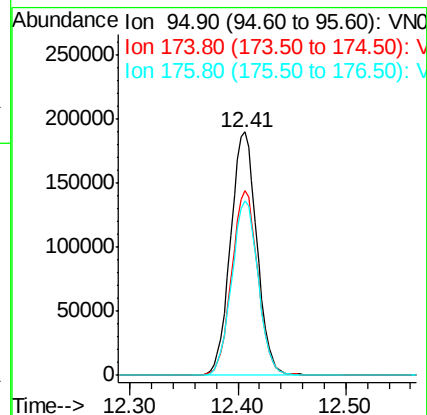
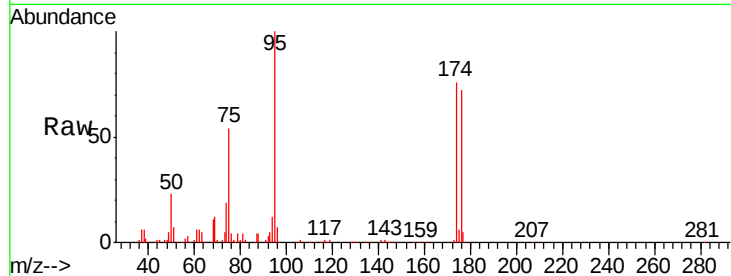
Tgt Ion: 95 Resp: 321508

Ion Ratio Lower Upper

95 100

174 75.2 0.0 152.2

176 72.0 0.0 148.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

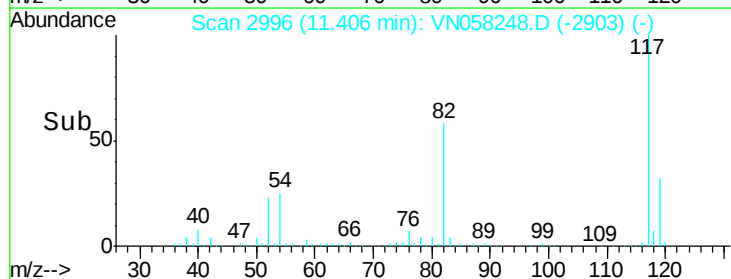
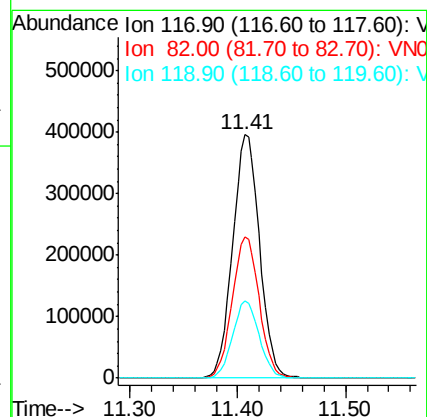
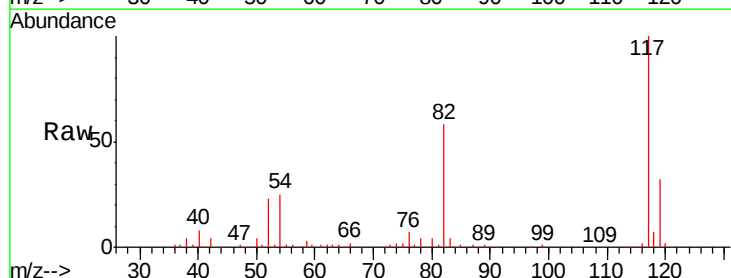
Tgt Ion: 117 Resp: 688524

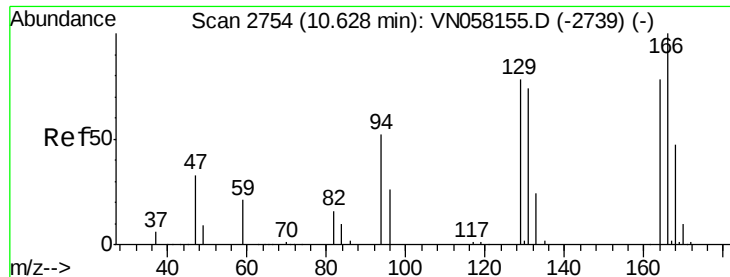
Ion Ratio Lower Upper

117 100

82 57.7 46.9 70.3

119 31.7 25.3 37.9





#64

Tetrachloroethene

Concen: 1.151 ug/l

RT: 10.63 min Scan# 2756

Delta R.T. 0.01 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

RE109D3-20190917

Tgt Ion:164 Resp: 3864

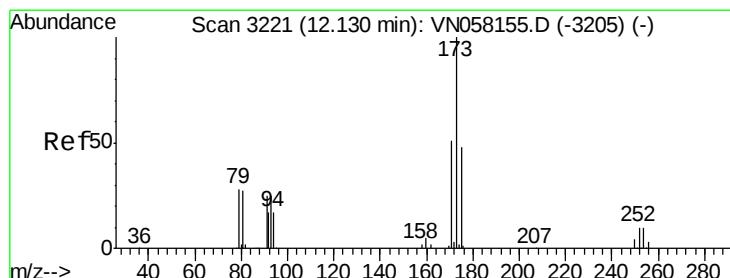
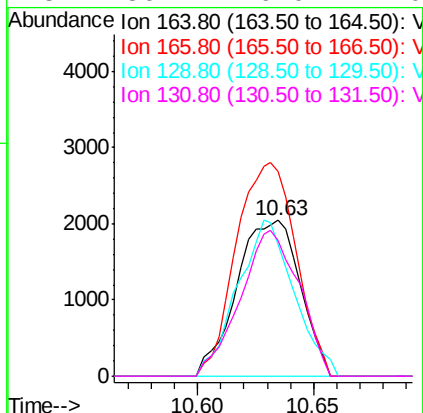
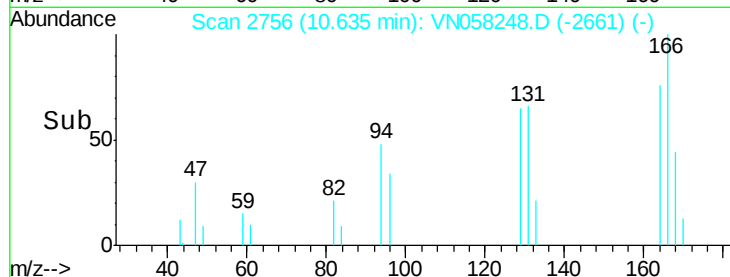
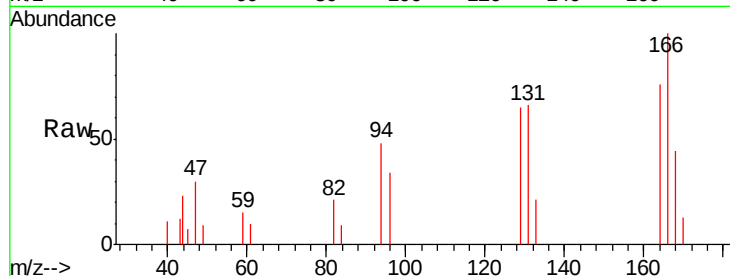
Ion Ratio Lower Upper

164 100

166 131.2 102.2 153.4

129 84.9 79.6 119.4

131 86.7 76.0 114.0



#71

Bromoform

Concen: 4.082 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.27 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

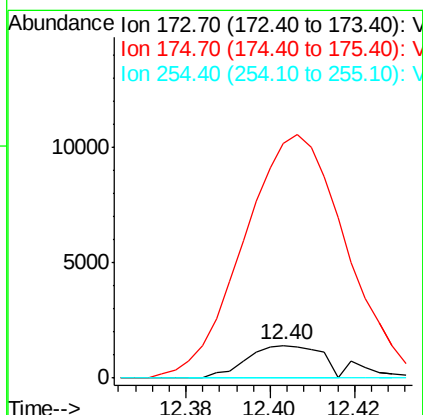
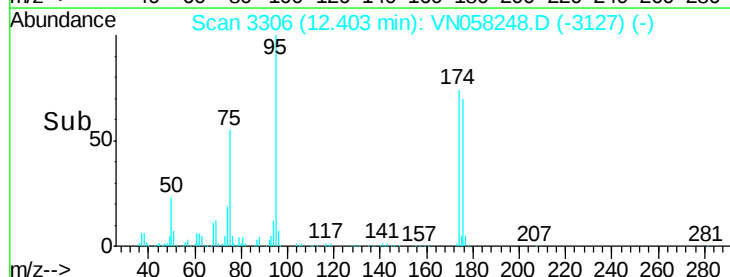
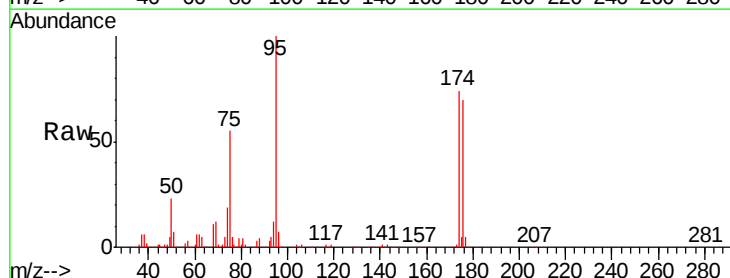
Tgt Ion:173 Resp: 1709

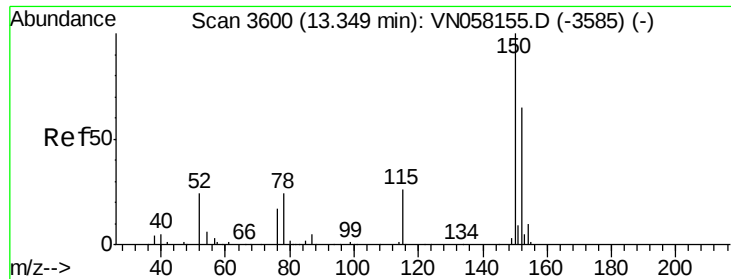
Ion Ratio Lower Upper

173 100

175 885.0 24.2 72.6#

254 0.0 0.1 0.1#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3600

Delta R.T. -0.00 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

RE109D3-20190917

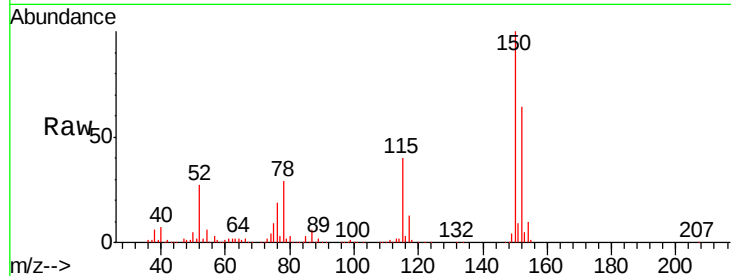
Tgt Ion:152 Resp: 273337

Ion Ratio Lower Upper

152 100

115 61.9 30.1 90.3

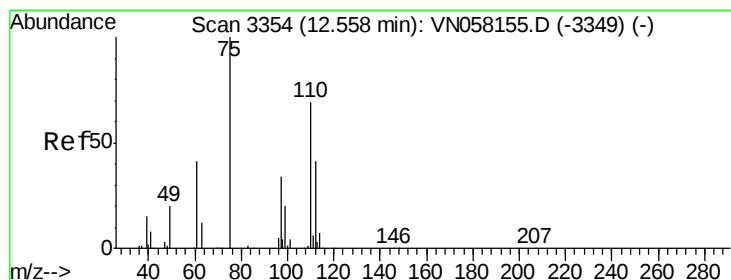
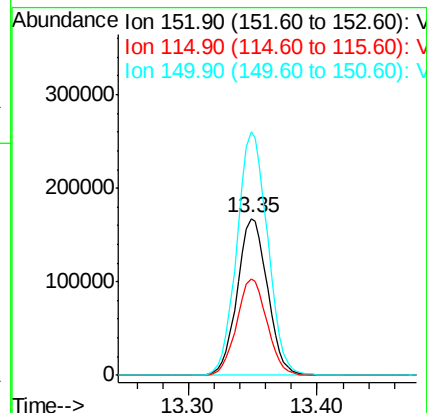
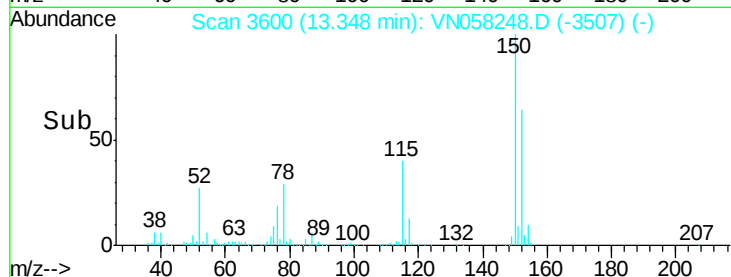
150 157.4 0.0 346.4



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: 35.758 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN058248.D

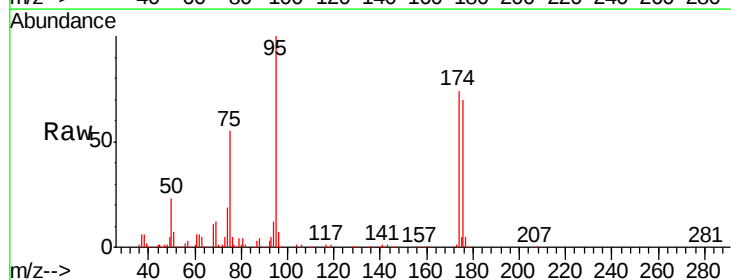
Acq: 20 Sep 2019 14:31

Tgt Ion: 75 Resp: 174923

Ion Ratio Lower Upper

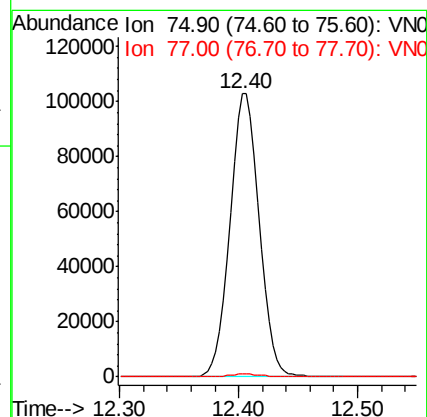
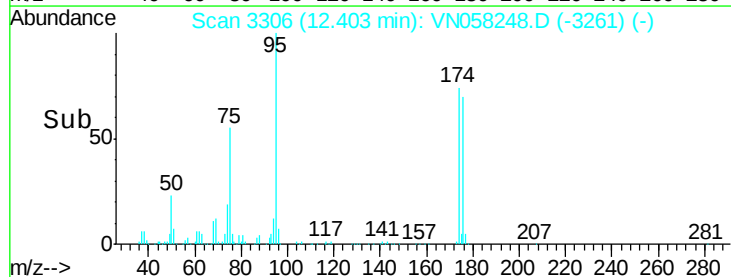
75 100

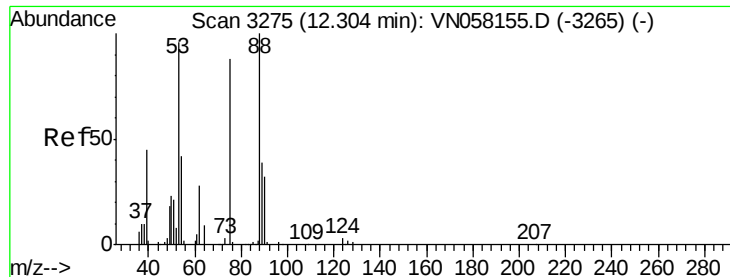
77 1.2 0.0 0.0#



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: 99.902 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN058248.D

Acq: 20 Sep 2019 14:31

Instrument :

MSVOA_N

ClientSampleId :

RE109D3-20190917

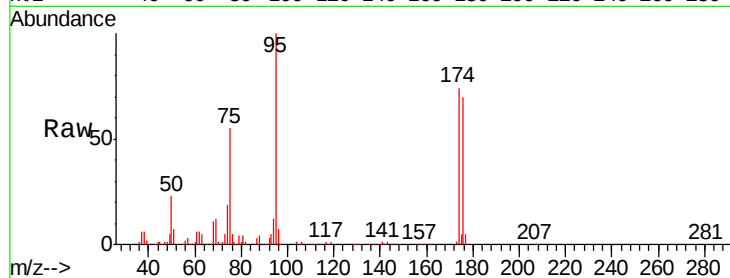
Tgt Ion: 75 Resp: 174923

Ion Ratio Lower Upper

75 100

53 0.0 90.1 135.1#

89 0.0 36.2 54.2#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

