

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN011619\
 Data File : VN053425.D
 Acq On : 16 Jan 2019 15:14
 Operator : JC/SP
 Sample : PB116405ZHE#08
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 14 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampleId :
 PB116405ZHE#08

Quant Time: Jan 17 03:56:40 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N011519W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 16 03:10:53 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	947370	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	1485417	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	1394616	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	588002	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.03	65	492358	52.58	ug/l	0.00
Spiked Amount			Recovery	=	105.16%	
35) Dibromofluoromethane	7.59	113	431005	50.84	ug/l	0.00
Spiked Amount			Recovery	=	101.68%	
50) Toluene-d8	10.09	98	1860853	51.90	ug/l	0.00
Spiked Amount			Recovery	=	103.80%	
62) 4-Bromofluorobenzene	12.40	95	632124	50.28	ug/l	0.00
Spiked Amount			Recovery	=	100.56%	

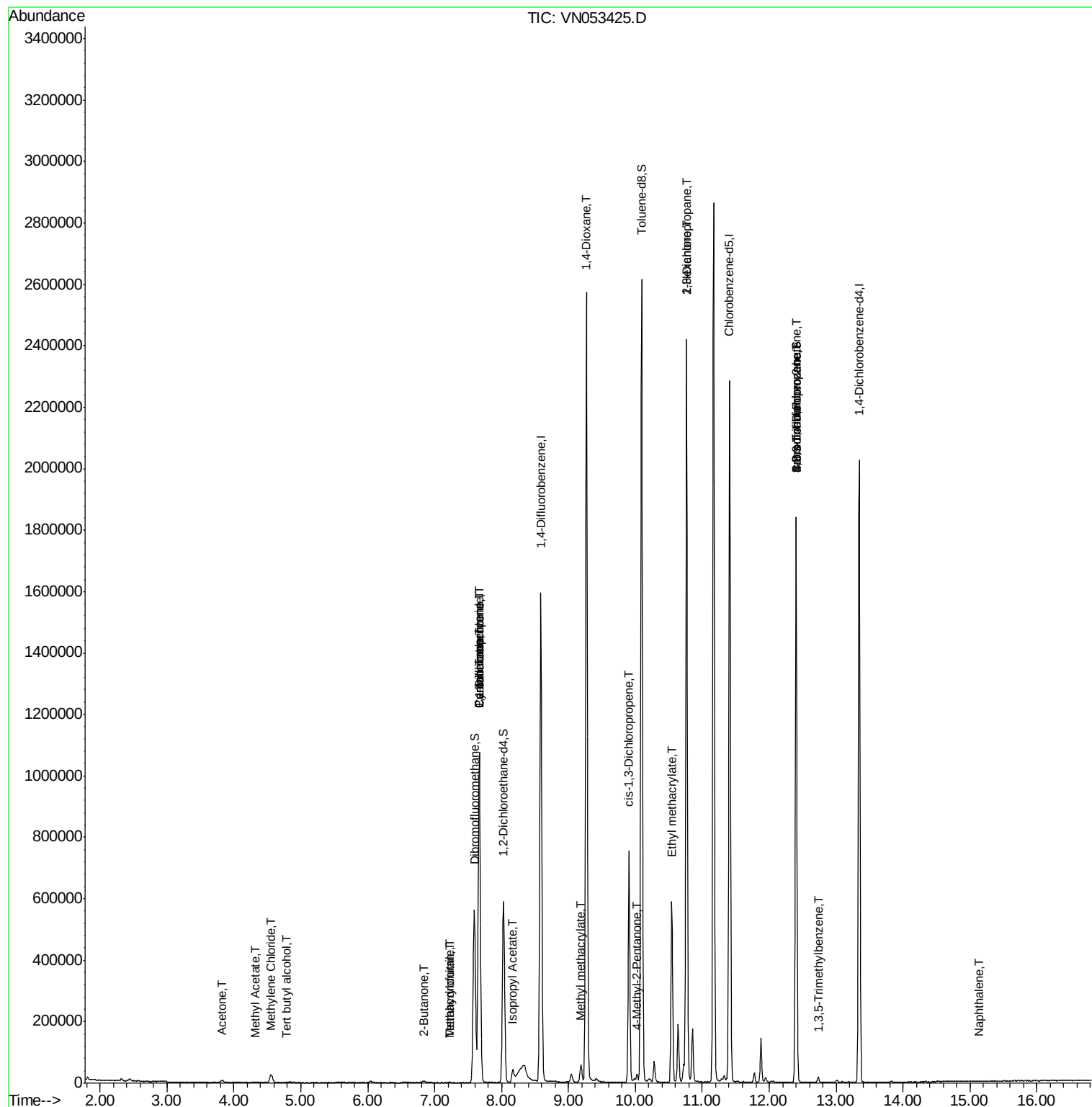
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.77	59	206	0.450	ug/l #	72
16) Acetone	3.82	43	14630	6.659	ug/l	99
18) Methyl Acetate	4.33	43	1521	0.205	ug/l #	90
20) Methylene Chloride	4.55	84	20280	2.022	ug/l	96
25) 2-Butanone	6.84	43	7386	2.182	ug/l #	87
29) Tetrahydrofuran	7.23	42	1590	0.721	ug/l #	53
31) Cyclohexane	7.67	56	14850	0.682	ug/l #	1
36) 1,1-Dichloropropene	7.67	75	61602	4.554	ug/l #	48
38) Carbon Tetrachloride	7.67	117	80552	6.290	ug/l #	16
41) Methacrylonitrile	7.23	41	820	0.842	ug/l #	26
43) Isopropyl Acetate	8.17	43	54592	3.901	ug/l #	85
48) Methyl methacrylate	9.18	41	19962	2.763	ug/l #	21
49) 1,4-Dioxane	9.28	88	236	3.344	ug/l #	1
51) 4-Methyl-2-Pentanone	10.03	43	21233	2.779	ug/l #	34
54) cis-1,3-Dichloropropene	9.90	75	139901	8.950	ug/l #	62
56) Ethyl methacrylate	10.54	69	2158	2.223	ug/l #	1
57) 1,3-Dichloropropane	10.76	76	25880	1.700	ug/l #	43
59) 2-Hexanone	10.76	43	337273	62.890	ug/l #	50
71) Bromoform	12.40	173	3890	0.550	ug/l #	1
76) 1,2,3-Trichloropropane	12.40	75	296108	38.214	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.73	105	8141	0.232	ug/l	96
81) trans-1,4-Dichloro-2-buten	12.40	75	296108	94.343	ug/l #	15
95) Naphthalene	15.14	128	408	3.965	ug/l #	69

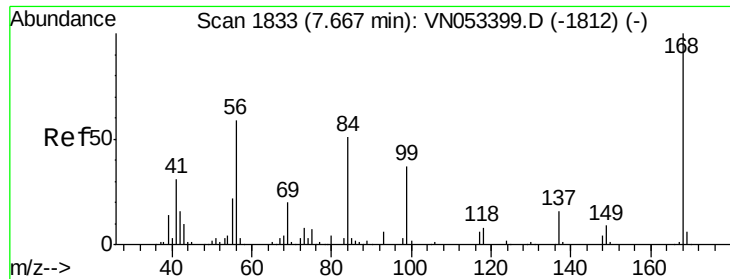
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Wed Jan 16 03:10:53 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

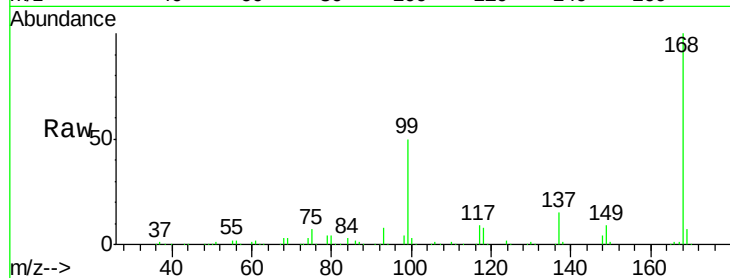
PB116405ZHE#08

Tot Ion:168 Resp: 947370

Ion Ratio Lower Upper

168 100

99 49.6 39.1 58.7



Abundance Ion 167.90 (167.60 to 168.60): VN053399.D (-1812) (-)

Ion 98.90 (98.60 to 99.60): VN053399.D (-1812) (-)

7.67

400000

300000

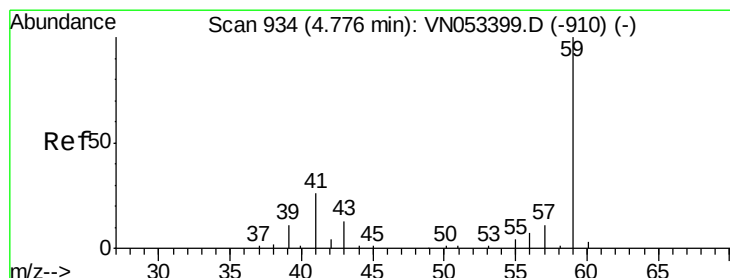
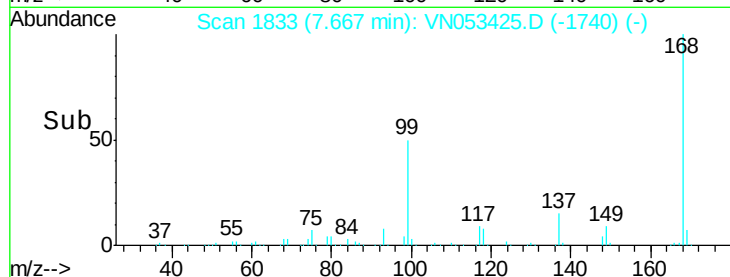
200000

100000

0

Time-->

7.60 7.70 7.80



#11

Tert butyl alcohol

Concen: 0.450 ug/l

RT: 4.77 min Scan# 933

Delta R.T. -0.00 min

Lab File: VN053425.D

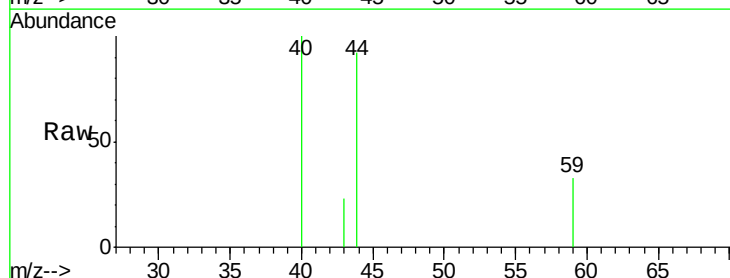
Acq: 16 Jan 2019 15:14

Tgt Ion: 59 Resp: 206

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VN053399.D (-910) (-)

Ion 57.00 (56.70 to 57.70): VN053399.D (-910) (-)

4.77

250

200

150

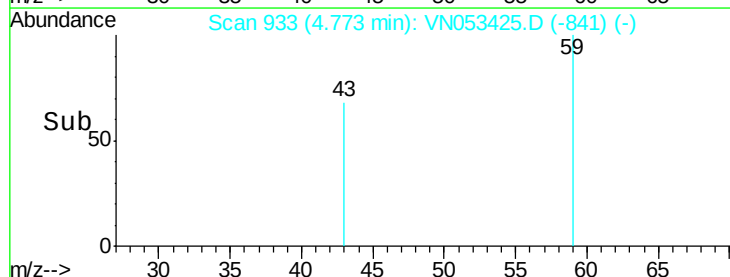
100

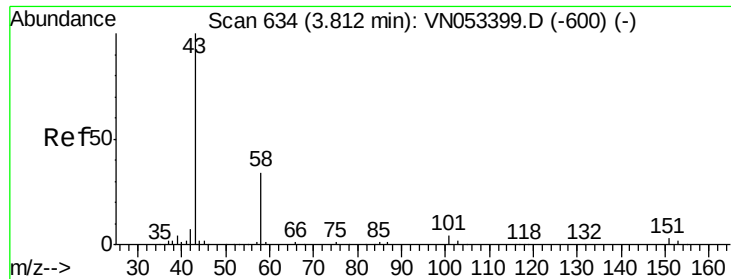
50

0

Time-->

4.76 4.77 4.78





#16

Acetone

Concen: 6.659 ug/l

RT: 3.82 min Scan# 635

Delta R.T. 0.00 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

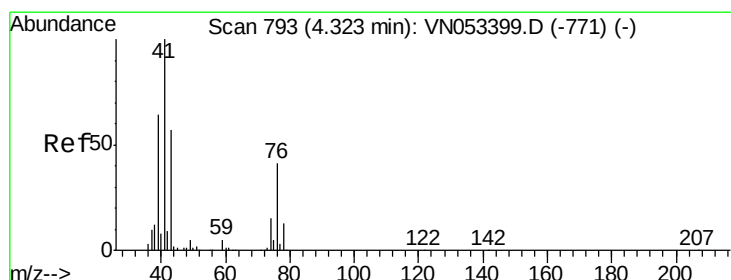
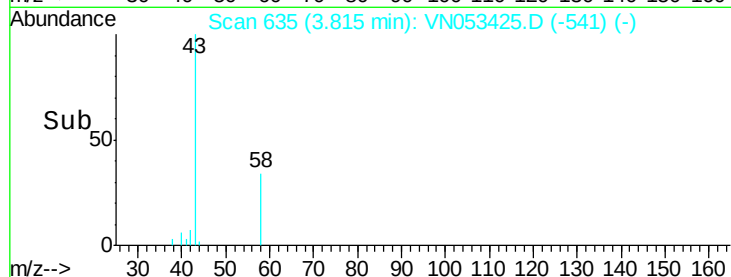
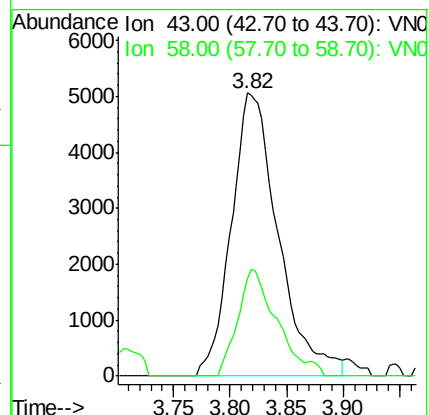
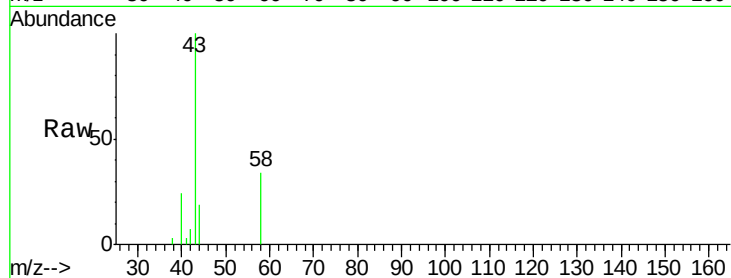
PB116405ZHE#08

Tot Ion: 43 Resp: 14630

Ion Ratio Lower Upper

43 100

58 34.5 27.1 40.7



#18

Methyl Acetate

Concen: 0.205 ug/l

RT: 4.33 min Scan# 794

Delta R.T. 0.00 min

Lab File: VN053425.D

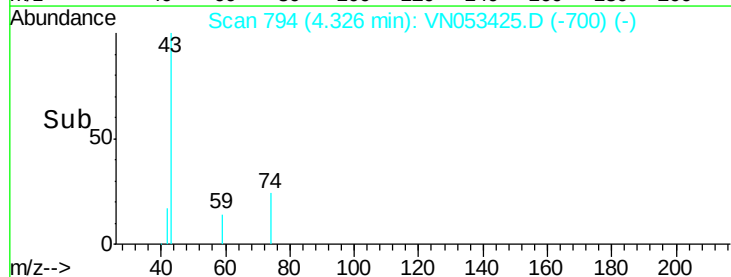
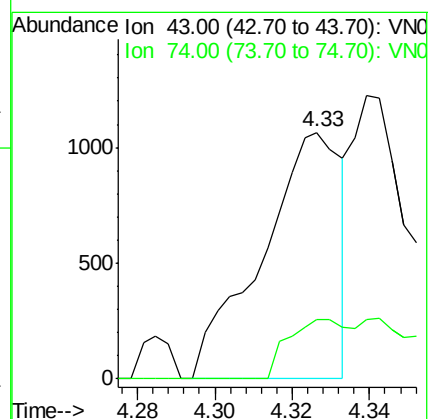
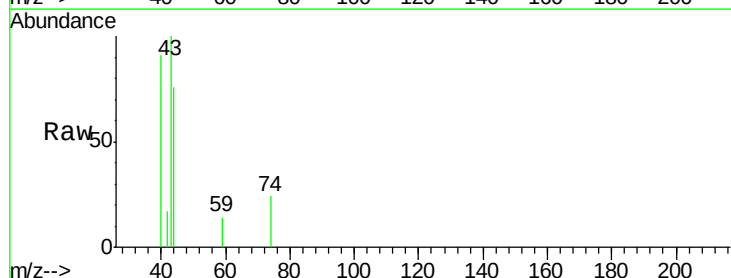
Acq: 16 Jan 2019 15:14

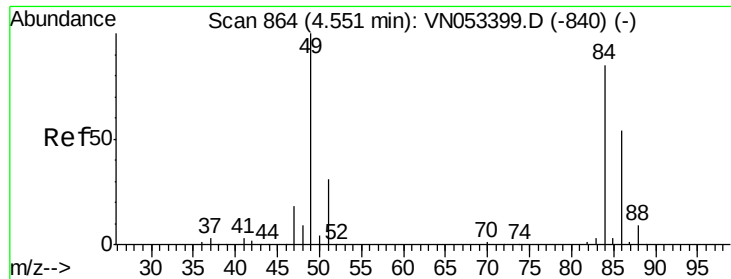
Tgt Ion: 43 Resp: 1521

Ion Ratio Lower Upper

43 100

74 19.3 19.4 29.2#



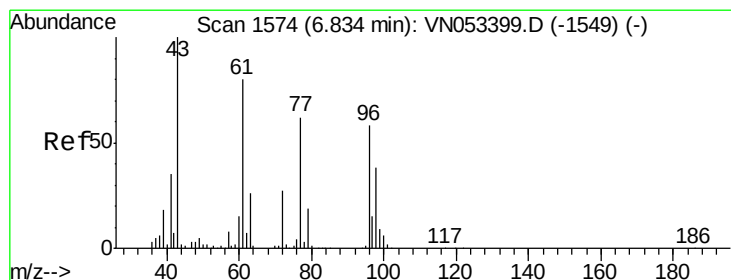
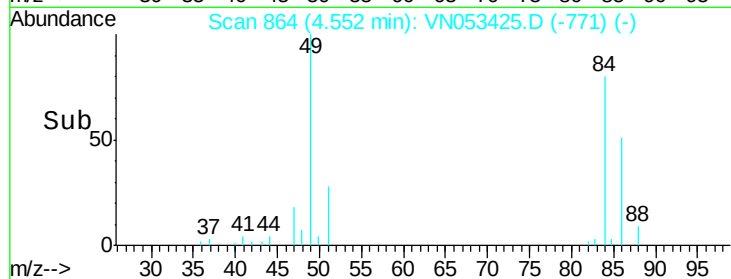
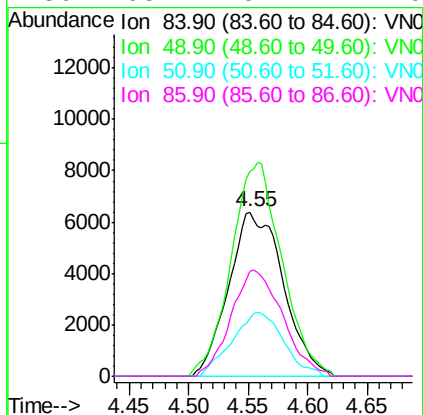
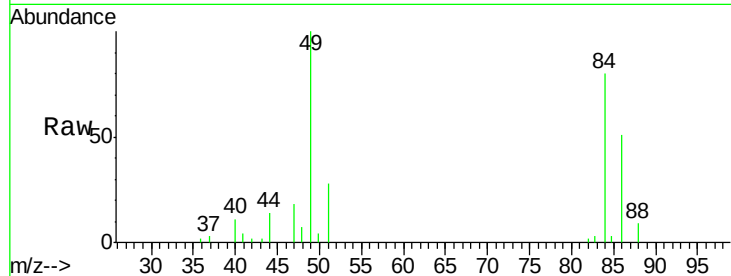


#20
Methvlene Chloride
Concen: 2.022 ug/l
RT: 4.55 min Scan# 864
Delta R.T. 0.00 min
Lab File: VN053425.D
Acq: 16 Jan 2019 15:14

Instrument :
MSVOA_N
ClientSampleId :
PB116405ZHE#08

Tot Ion: 84 Resp: 20280

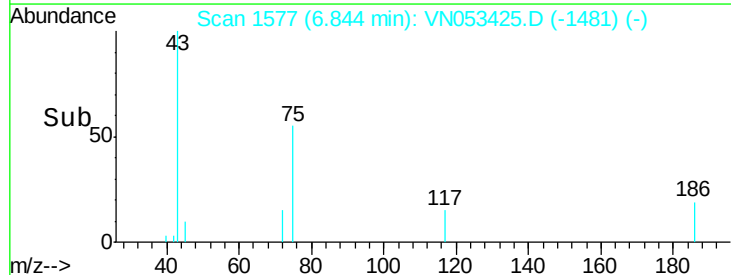
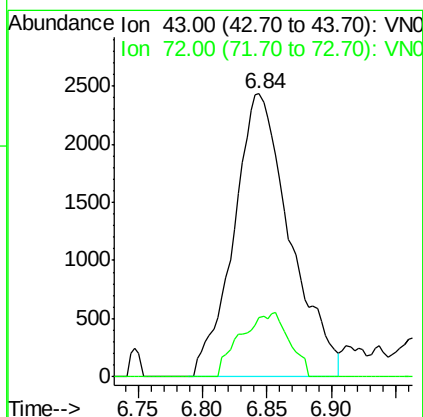
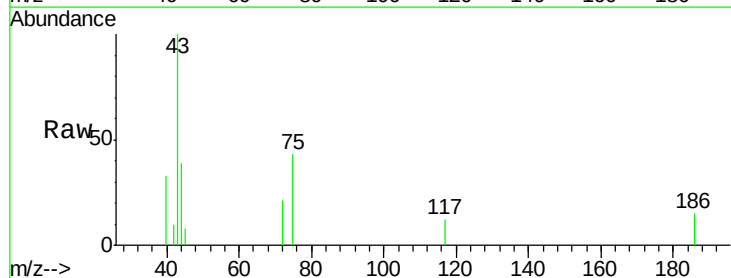
Ion	Ratio	Lower	Upper
84	100		
49	124.7	94.3	141.5
51	34.7	29.4	44.2
86	63.7	51.4	77.0

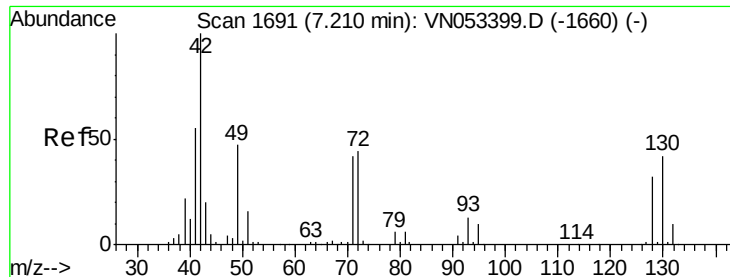


#25
2-Butanone
Concen: 2.182 ug/l
RT: 6.84 min Scan# 1577
Delta R.T. 0.01 min
Lab File: VN053425.D
Acq: 16 Jan 2019 15:14

Tgt Ion: 43 Resp: 7386

Ion	Ratio	Lower	Upper
43	100		
72	21.0	22.0	33.0#





#29

Tetrahydrofuran

Concen: 0.721 ug/l

RT: 7.23 min Scan# 1697

Delta R.T. 0.02 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

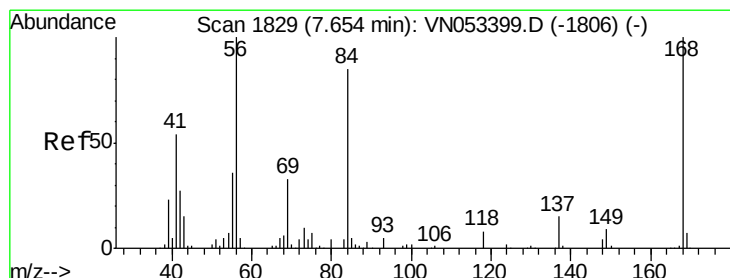
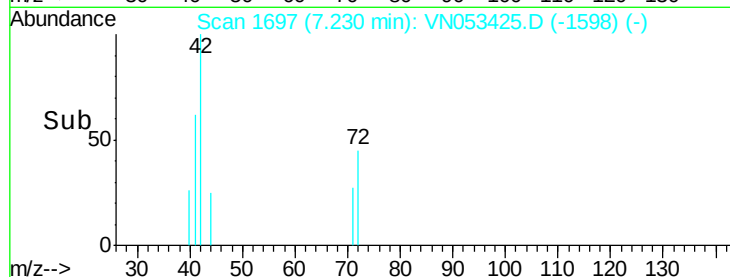
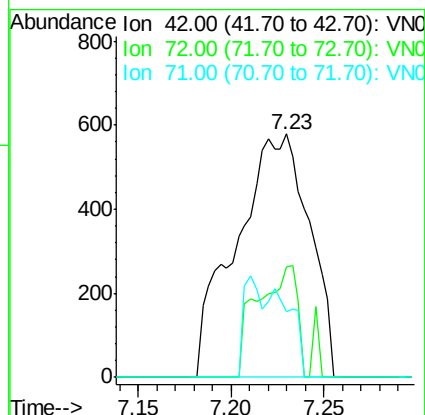
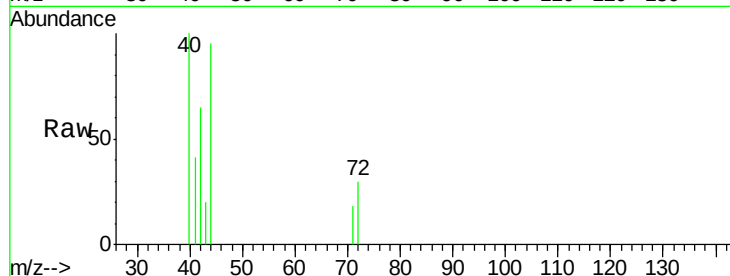
Tot Ion: 42 Resp: 1590

Ion Ratio Lower Upper

42 100

72 25.0 35.2 52.8#

71 0.0 33.0 49.4#



#31

Cyclohexane

Concen: 0.682 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.01 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

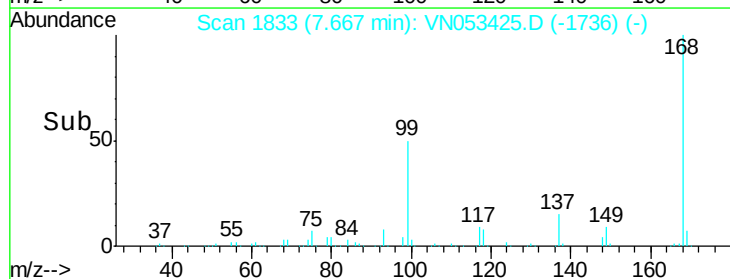
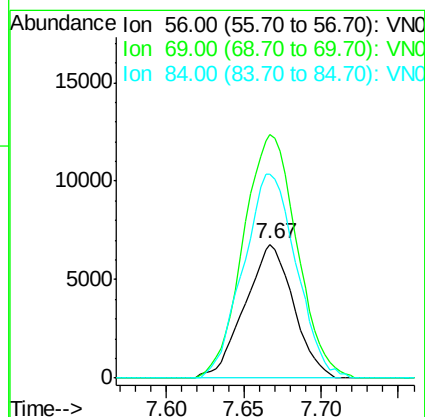
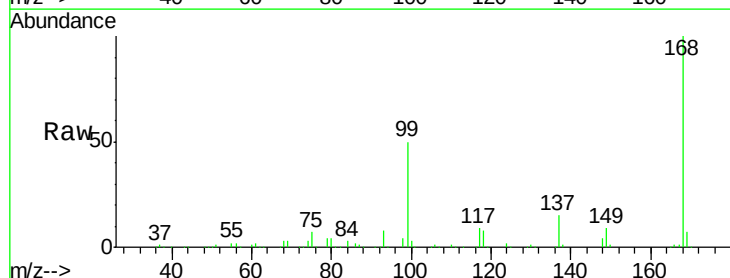
Tgt Ion: 56 Resp: 14850

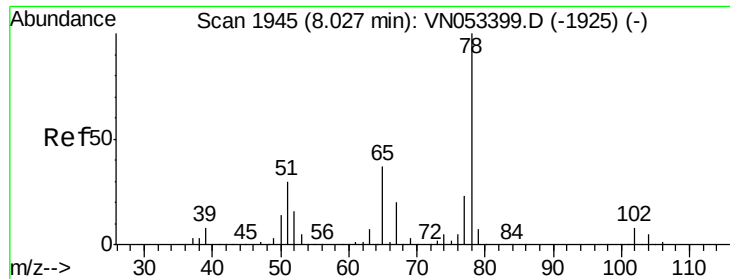
Ion Ratio Lower Upper

56 100

69 181.5 26.4 39.6#

84 152.2 67.9 101.9#

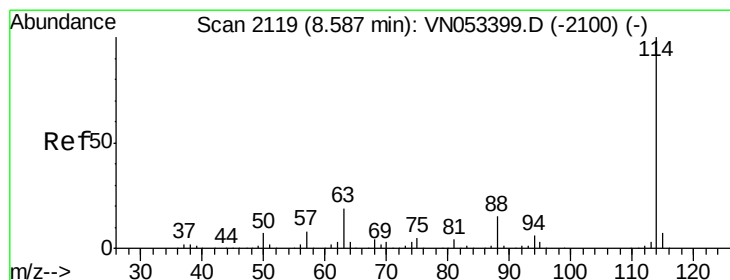
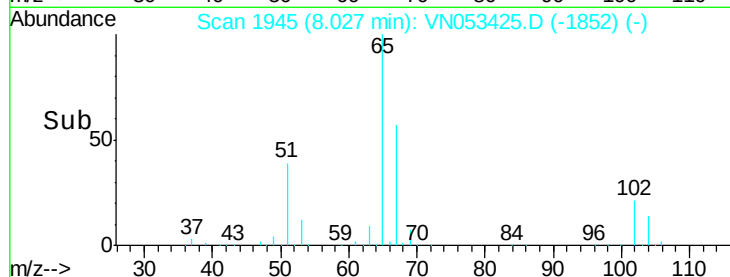
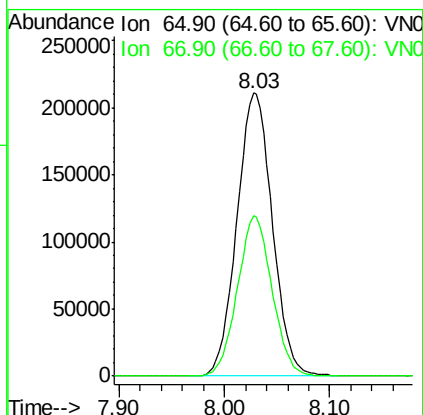
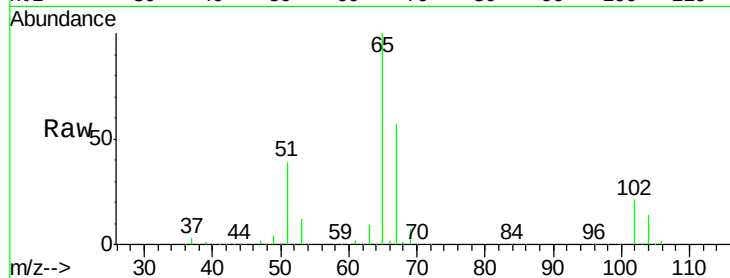




#33
 1,2-Dichloroethane-d4
 Concen: N.D. ug/l
 RT: 8.03 min Scan# 1945
 Delta R.T. 0.00 min
 Lab File: VN053425.D
 Acq: 16 Jan 2019 15:14

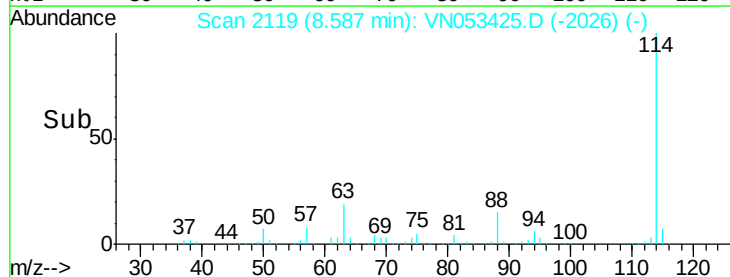
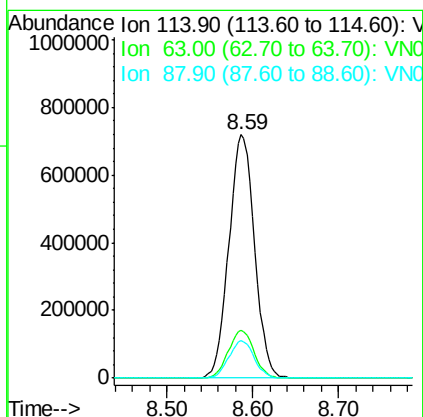
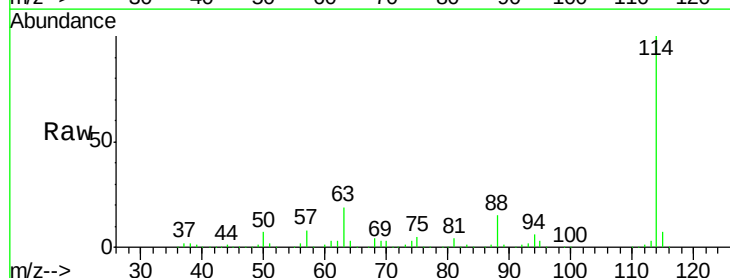
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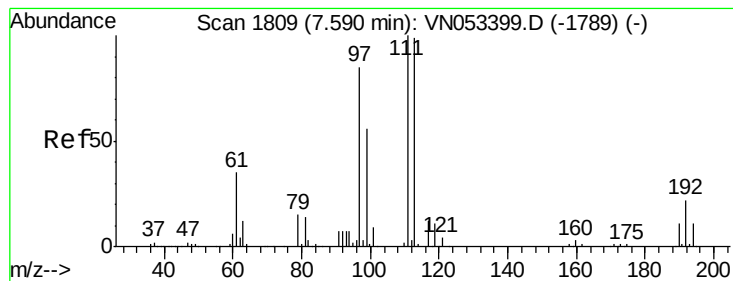
Tot Ion: 65 Resp: 492358
 Ion Ratio Lower Upper
 65 100
 67 55.4 0.0 111.2



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.59 min Scan# 2119
 Delta R.T. 0.00 min
 Lab File: VN053425.D
 Acq: 16 Jan 2019 15:14

Tgt Ion: 114 Resp: 1485417
 Ion Ratio Lower Upper
 114 100
 63 19.4 0.0 38.6
 88 15.2 0.0 30.4





#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

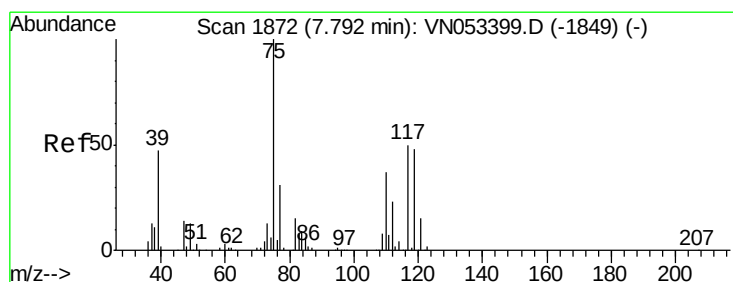
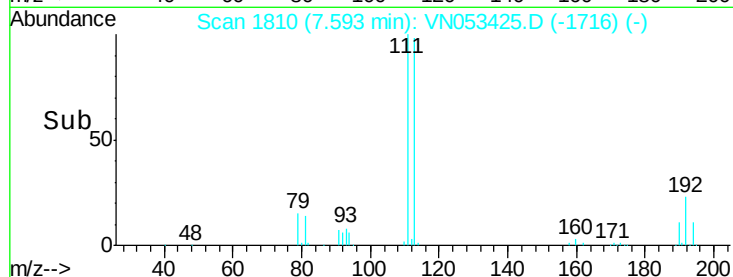
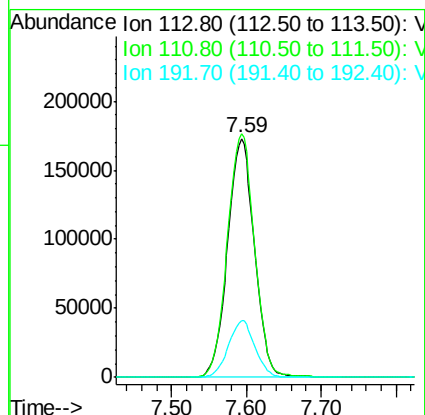
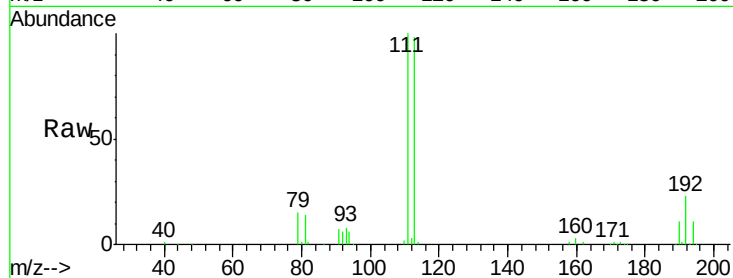
Tot Ion:113 Resp: 431005

Ion Ratio Lower Upper

113 100

111 103.2 81.1 121.7

192 23.3 18.2 27.2



#36

1,1-Dichloropropene

Concen: 4.554 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.13 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

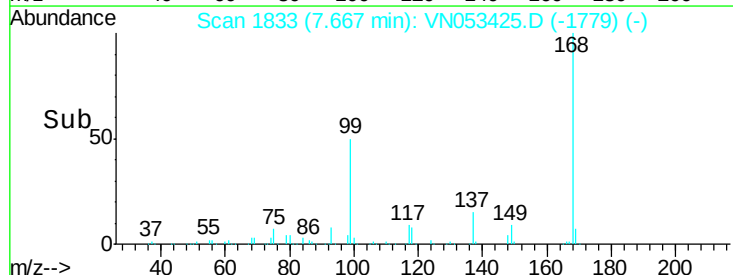
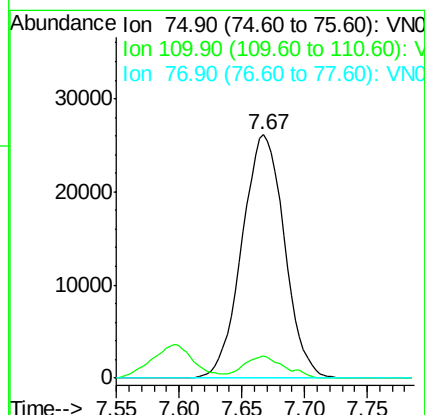
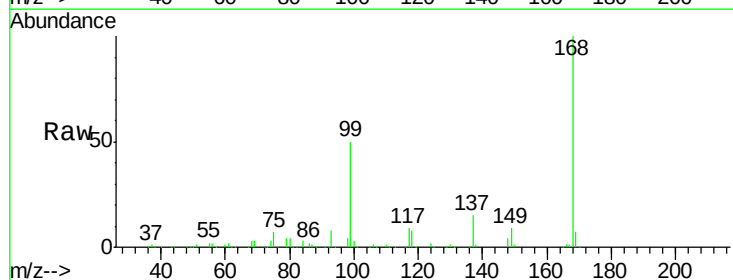
Tgt Ion: 75 Resp: 61602

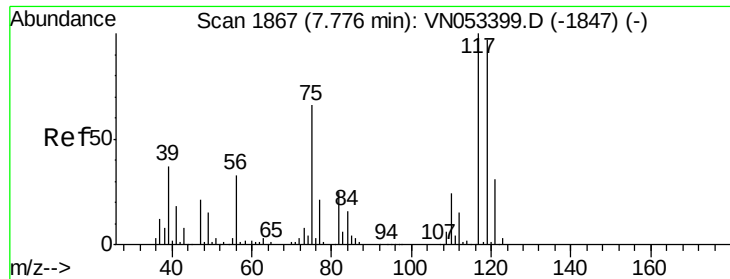
Ion Ratio Lower Upper

75 100

110 8.5 18.1 54.3#

77 0.0 25.1 37.7#





#38

Carbon Tetrachloride

Concen: 6.290 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

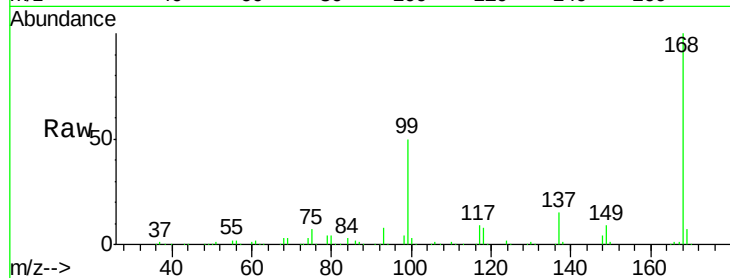
Tot Ion:117 Resp: 80552

Ion Ratio Lower Upper

117 100

119 5.4 77.2 115.8#

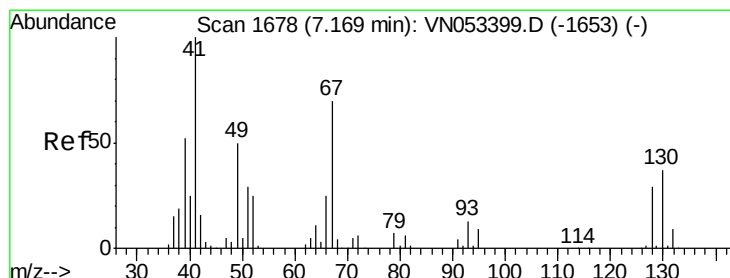
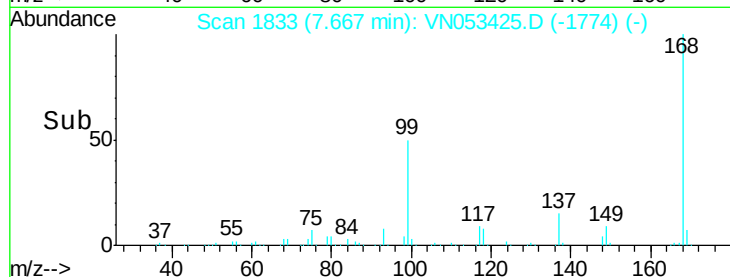
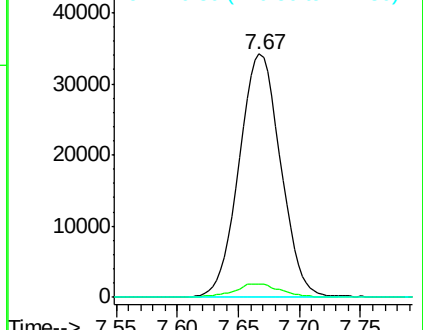
121 0.0 24.6 37.0#



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



#41

Methacrylonitrile

Concen: 0.842 ug/l

RT: 7.23 min Scan# 1696

Delta R.T. 0.06 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Tgt Ion: 41 Resp: 820

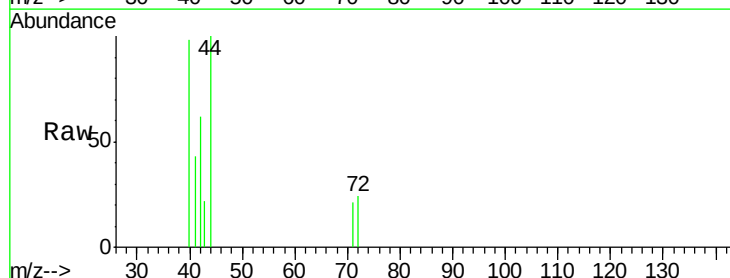
Ion Ratio Lower Upper

41 100

39 13.2 46.8 70.2#

67 0.0 63.0 94.6#

52 0.0 23.8 35.8#

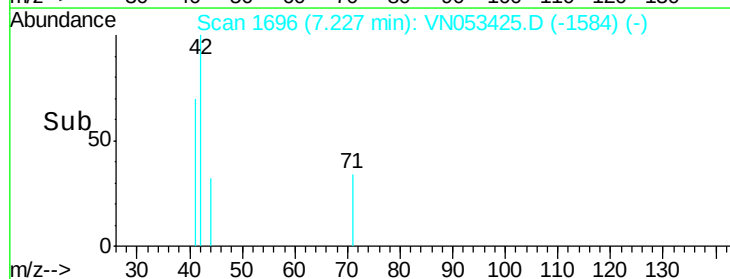
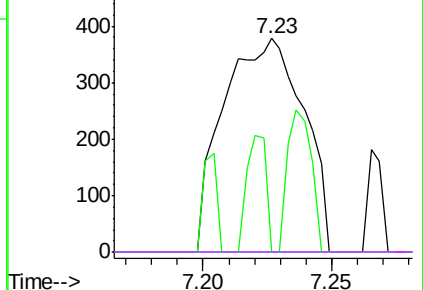


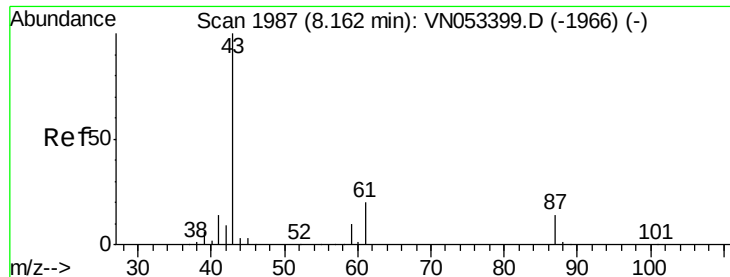
Abundance Ion 41.00 (40.70 to 41.70): VNC

Ion 39.00 (38.70 to 39.70): VNC

Ion 67.00 (66.70 to 67.70): VNC

Ion 52.00 (51.70 to 52.70): VNC





#43

Isopropyl Acetate

Concen: 3.901 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

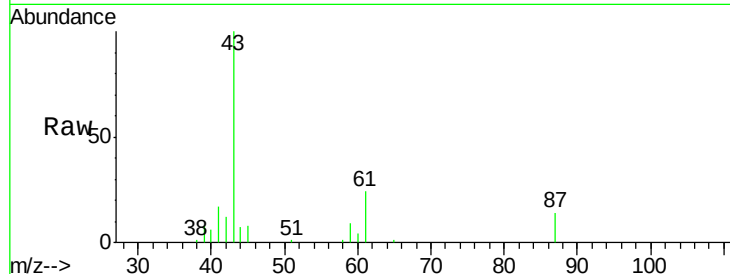
Tot Ion: 43 Resp: 54592

Ion Ratio Lower Upper

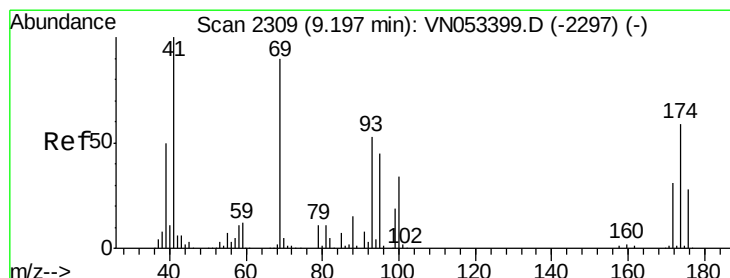
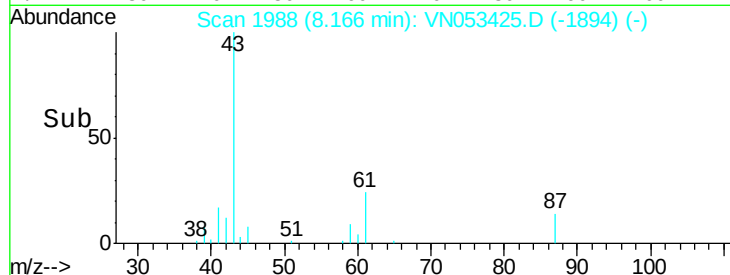
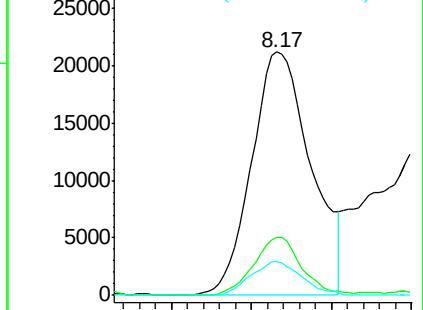
43 100

61 19.1 23.9 35.9#

87 11.7 11.0 16.6



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



#48

Methyl methacrylate

Concen: 2.763 ug/l

RT: 9.18 min Scan# 2303

Delta R.T. -0.02 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

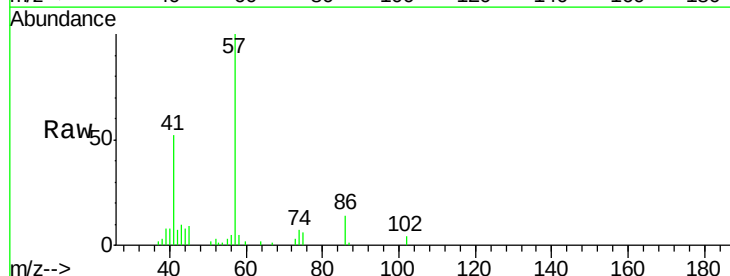
Tgt Ion: 41 Resp: 19962

Ion Ratio Lower Upper

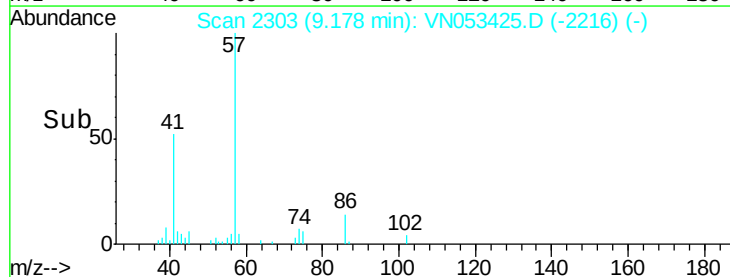
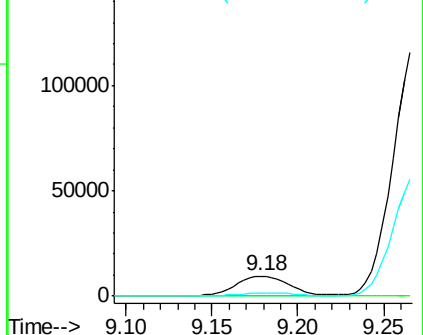
41 100

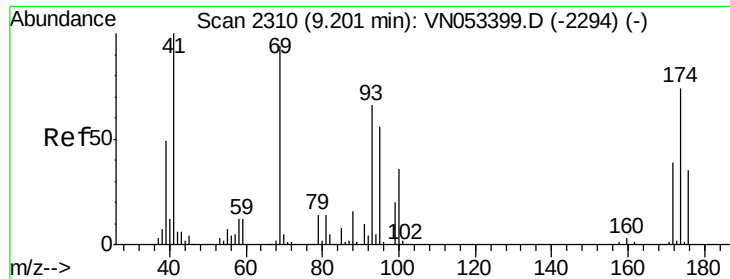
69 0.0 73.8 110.6#

39 18.4 40.0 60.0#



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





#49

1,4-Dioxane

Concen: 3.344 ug/l

RT: 9.28 min Scan# 2335

Delta R.T. 0.08 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

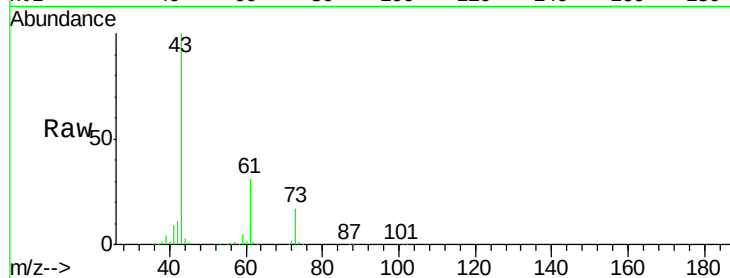
Tot Ion: 88 Resp: 236

Ion Ratio Lower Upper

88 100

43 1058598.7 27.8 41.6#

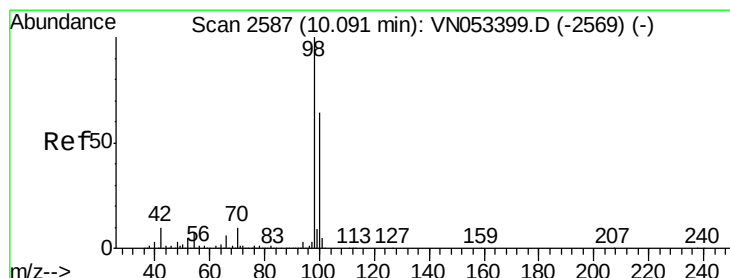
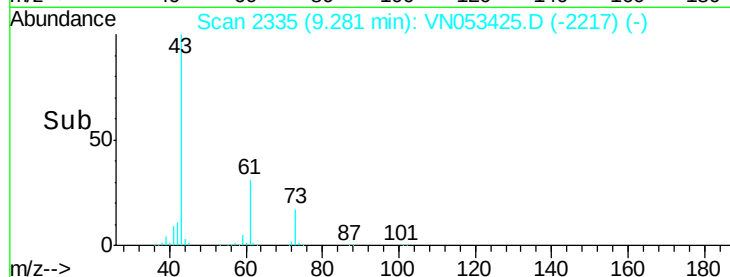
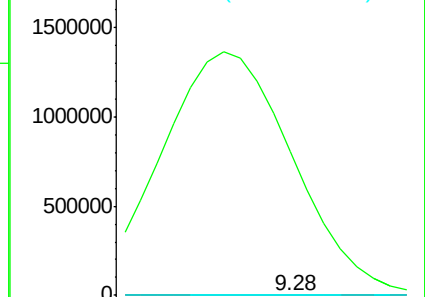
58 4891.9 56.5 84.7#



Abundance Ion 88.00 (87.70 to 88.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#50

Toluene-d8

Concen: 3.344 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN053425.D

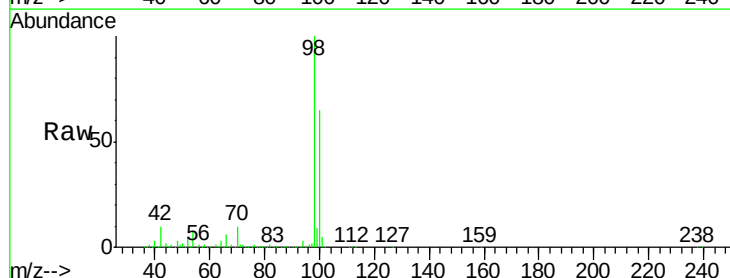
Acq: 16 Jan 2019 15:14

Tgt Ion: 98 Resp: 1860853

Ion Ratio Lower Upper

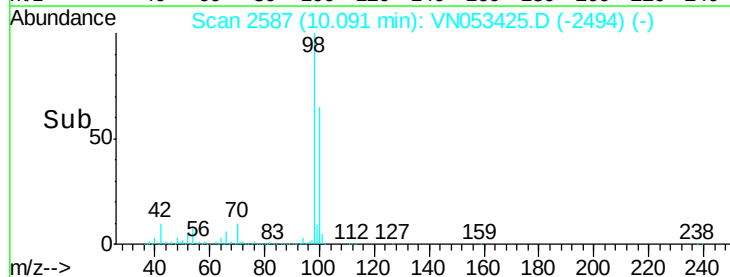
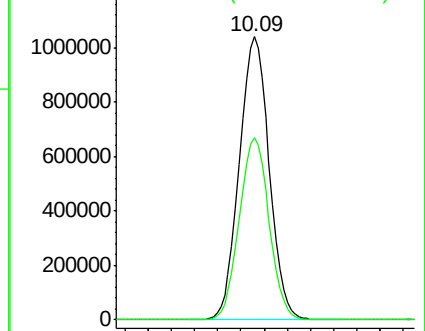
98 100

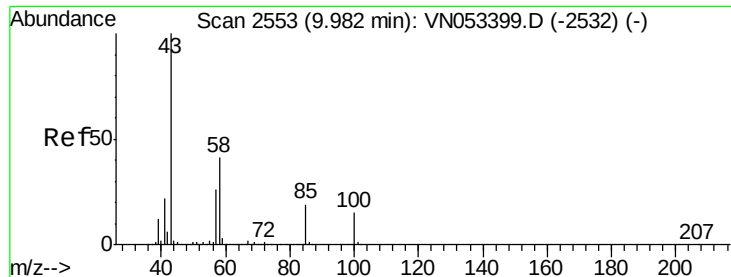
100 64.3 51.4 77.0



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





#51

4-Methyl-2-Pentanone

Concen: 2.779 ug/l

RT: 10.03 min Scan# 2567

Delta R.T. 0.05 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

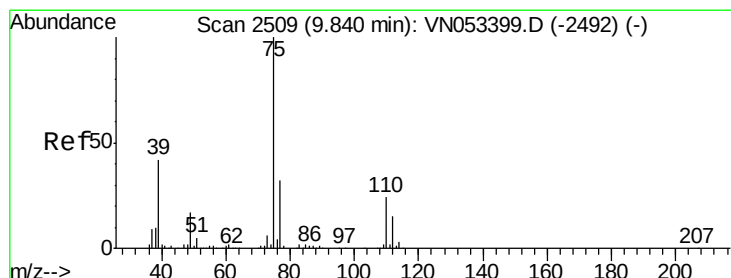
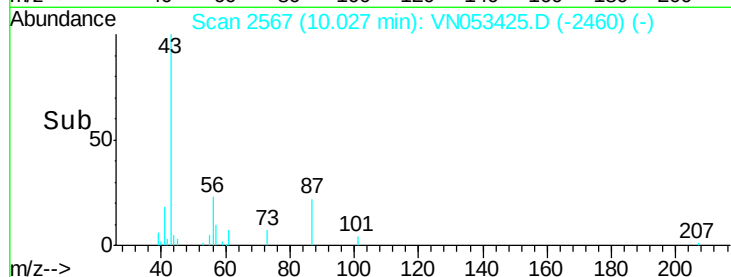
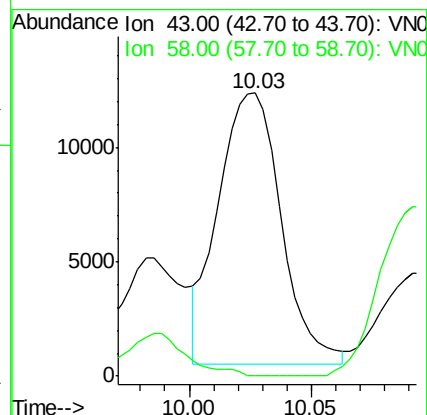
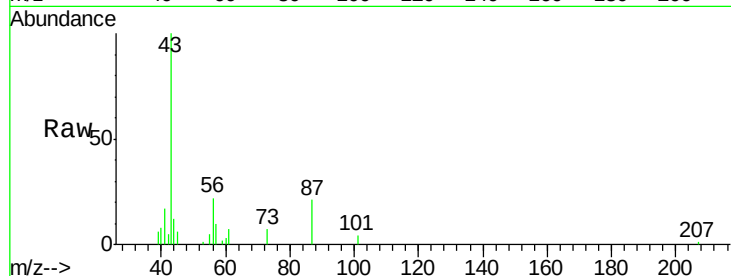
PB116405ZHE#08

Tot Ion: 43 Resp: 21233

Ion Ratio Lower Upper

43 100

58 0.0 32.8 49.2#



#54

cis-1,3-Dichloropropene

Concen: 8.950 ug/l

RT: 9.90 min Scan# 2529

Delta R.T. 0.06 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

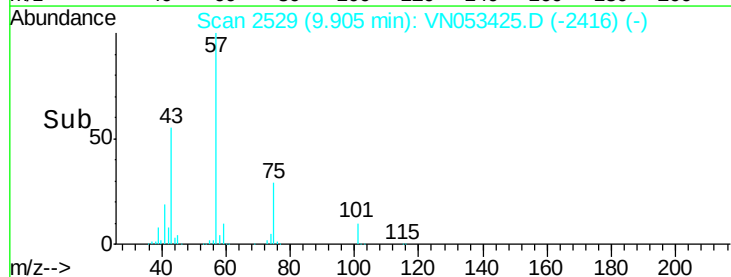
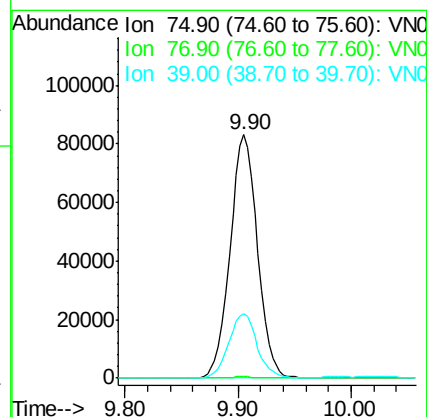
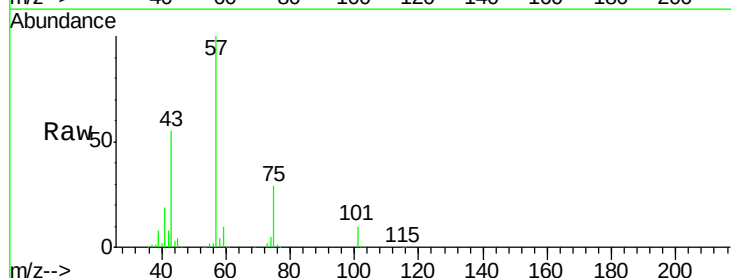
Tgt Ion: 75 Resp: 139901

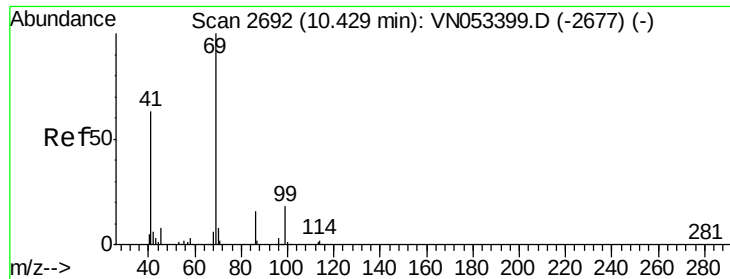
Ion Ratio Lower Upper

75 100

77 0.6 25.8 38.6#

39 26.5 33.4 50.0#





#56

Ethyl methacrylate

Concen: 2.223 ug/l

RT: 10.54 min Scan# 2728

Delta R.T. 0.12 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

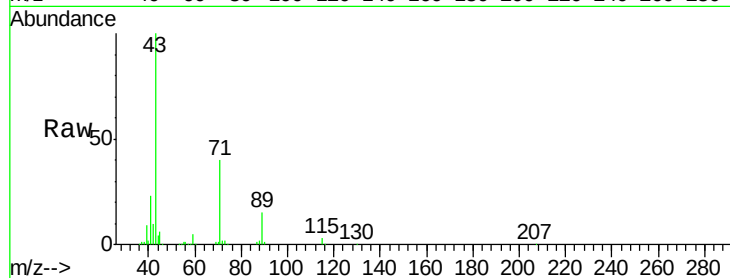
Tot Ion: 69 Resp: 2158

Ion Ratio Lower Upper

69 100

41 4666.2 49.4 74.0#

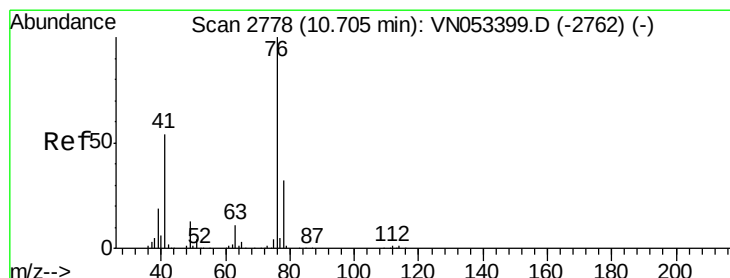
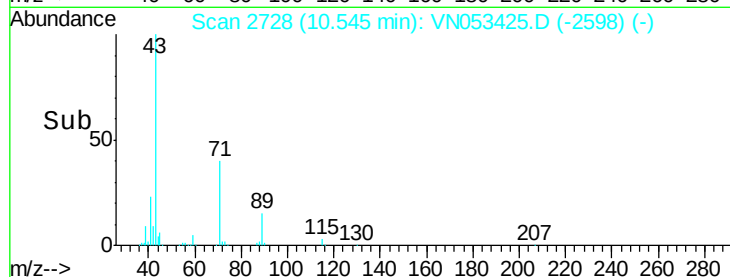
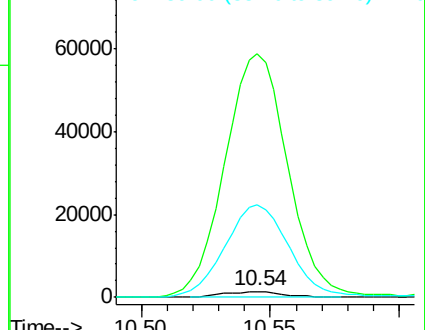
39 1811.7 23.3 34.9#



Abundance Ion 69.00 (68.70 to 69.70): VN0

Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0



#57

1,3-Dichloropropane

Concen: 1.700 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN053425.D

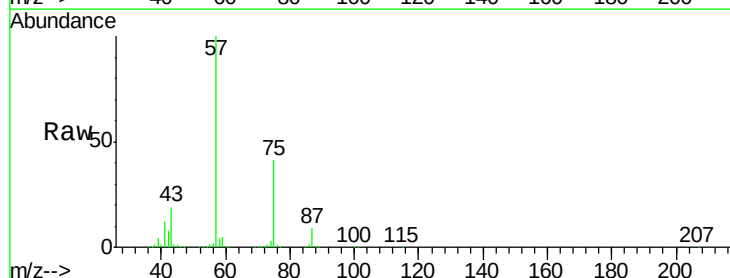
Acq: 16 Jan 2019 15:14

Tgt Ion: 76 Resp: 25880

Ion Ratio Lower Upper

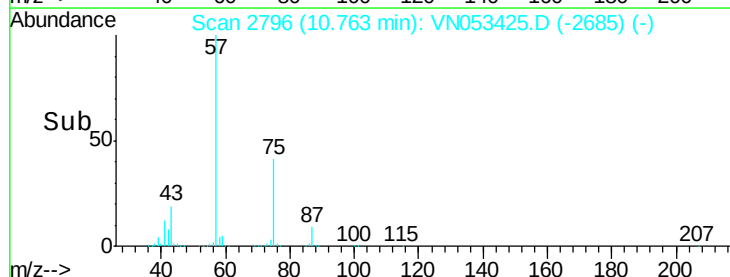
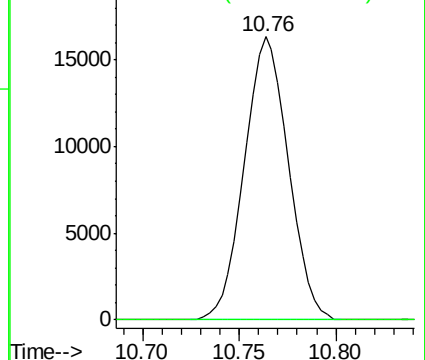
76 100

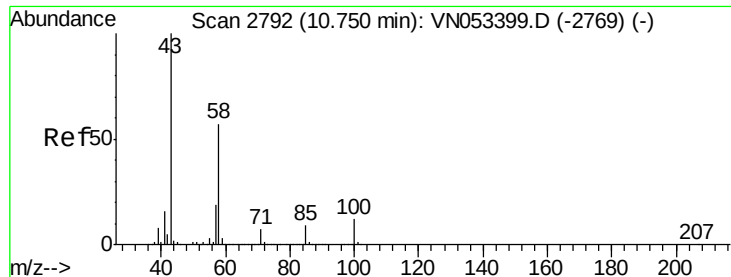
78 0.0 25.6 38.4#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

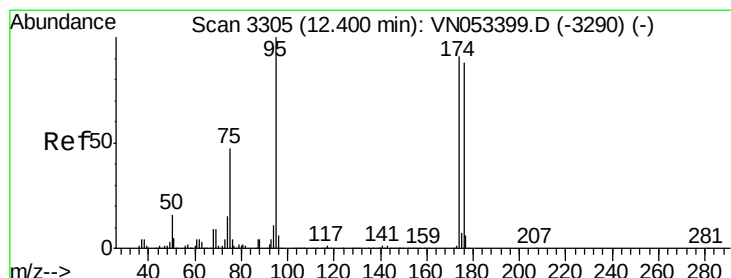
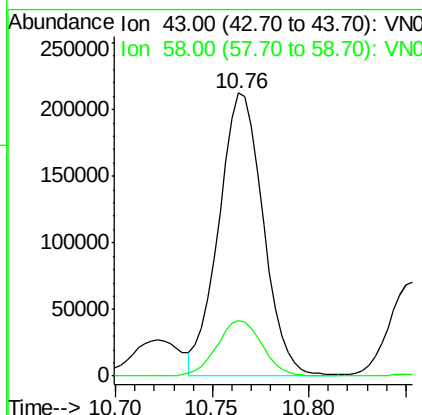
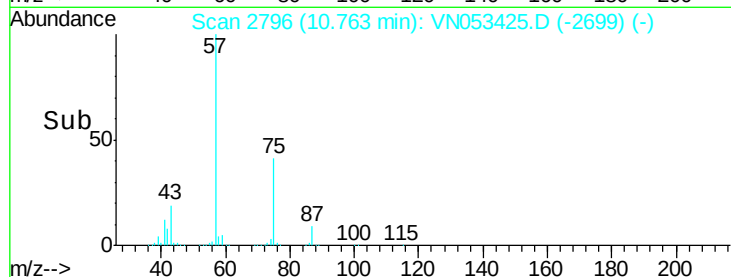
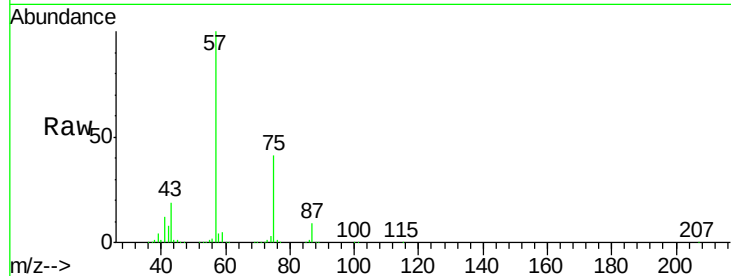




#59
2-Hexanone
Concen: 62.890 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN053425.D
Acq: 16 Jan 2019 15:14

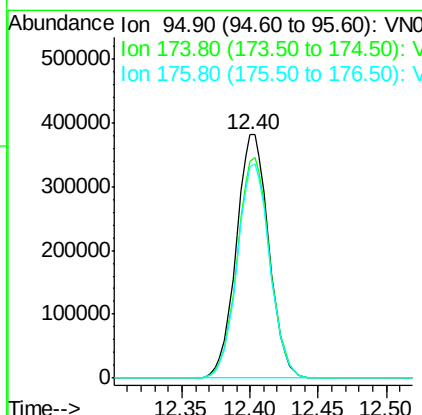
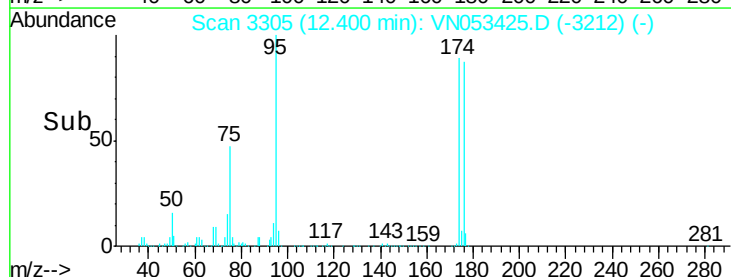
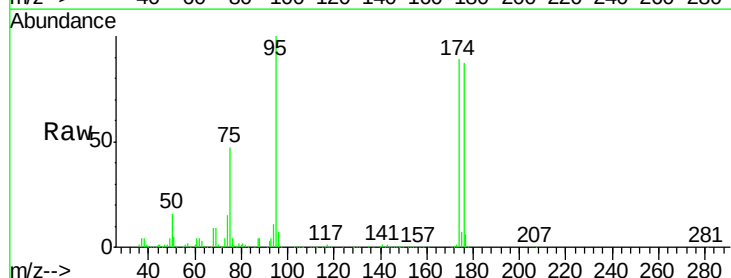
Instrument :
MSVOA_N
ClientSampleId :
PB116405ZHE#08

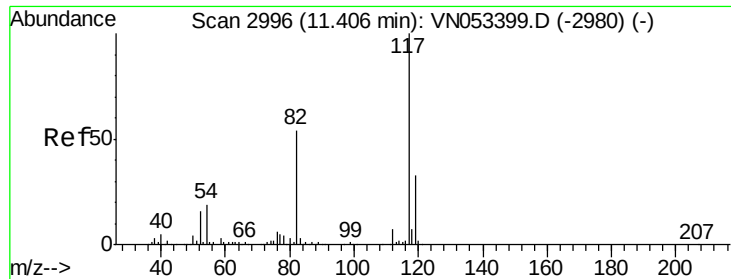
Tot Ion: 43 Resp: 337273
Ion Ratio Lower Upper
43 100
58 20.4 28.6 85.8#



#62
4-Bromofluorobenzene
Concen: N.D. ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.00 min
Lab File: VN053425.D
Acq: 16 Jan 2019 15:14

Tgt Ion: 95 Resp: 632124
Ion Ratio Lower Upper
95 100
174 90.6 0.0 183.2
176 87.6 0.0 177.4

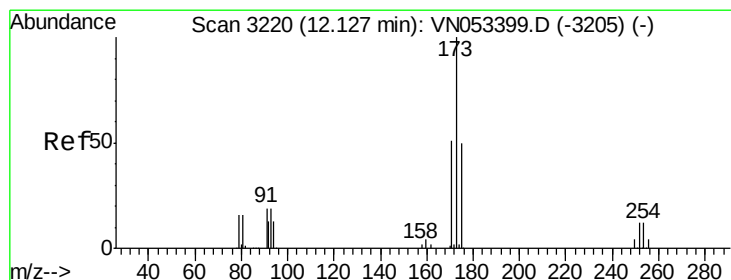
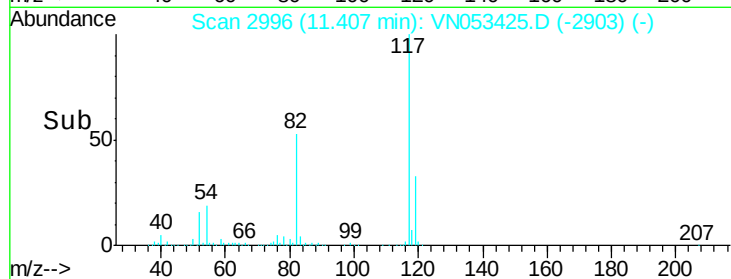
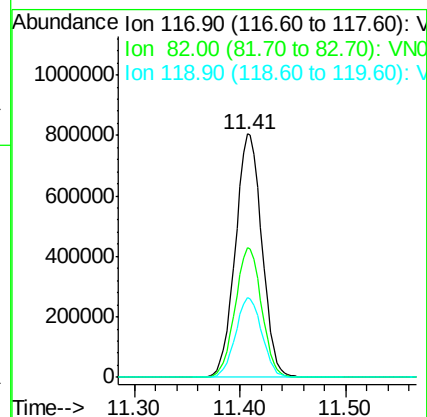
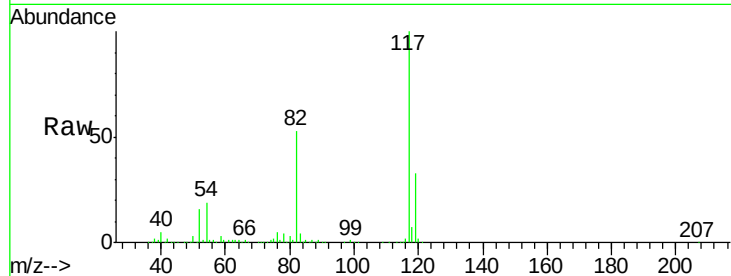




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN053425.D
Acq: 16 Jan 2019 15:14

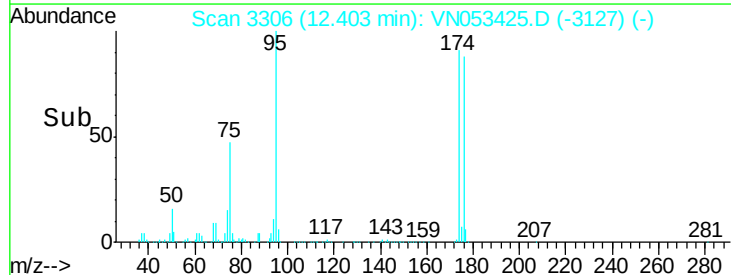
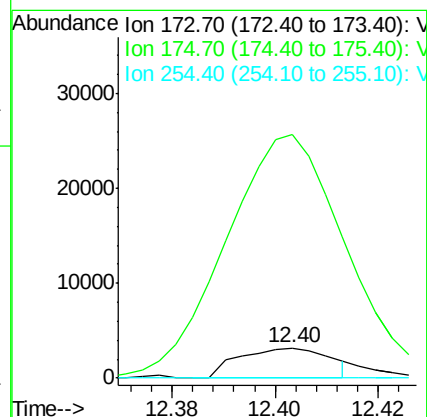
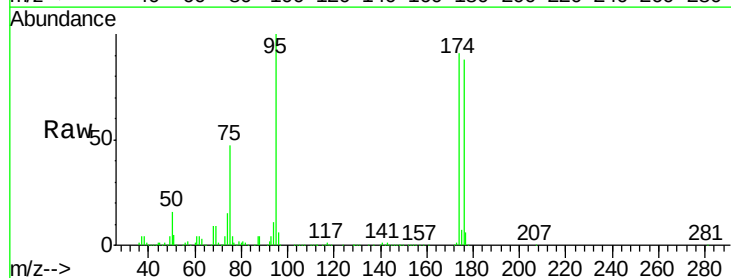
Instrument :
MSVOA_N
ClientSampleId :
PB116405ZHE#08

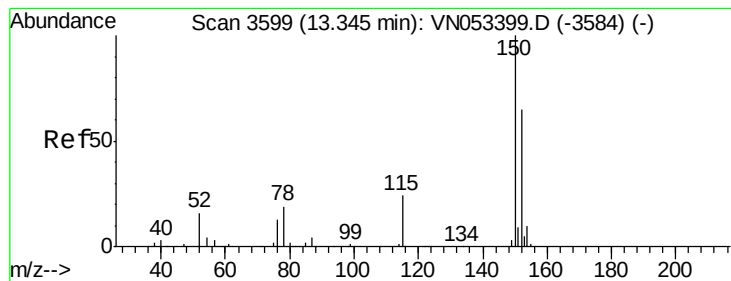
Tot Ion:117 Resp: 1394616
Ion Ratio Lower Upper
117 100
82 53.1 42.9 64.3
119 32.5 26.0 39.0



#71
Bromoform
Concen: 0.550 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.28 min
Lab File: VN053425.D
Acq: 16 Jan 2019 15:14

Tgt Ion:173 Resp: 3890
Ion Ratio Lower Upper
173 100
175 927.4 24.6 74.0#
254 0.0 0.2 0.2#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08

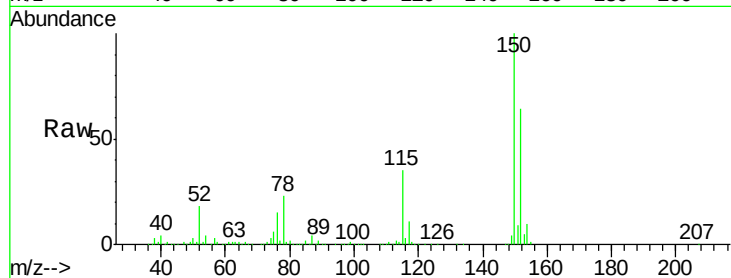
Tot Ion:152 Resp: 588002

Ion Ratio Lower Upper

152 100

115 55.7 27.8 83.4

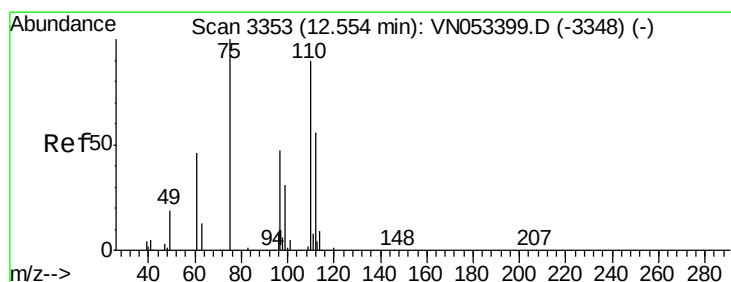
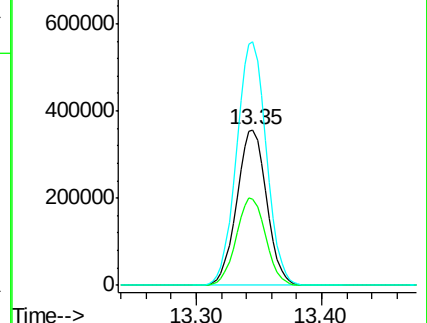
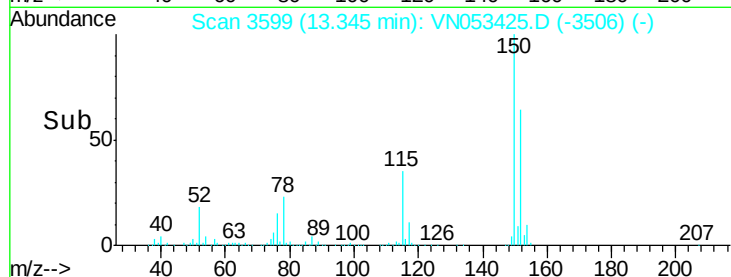
150 156.8 0.0 349.0



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: 38.214 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN053425.D

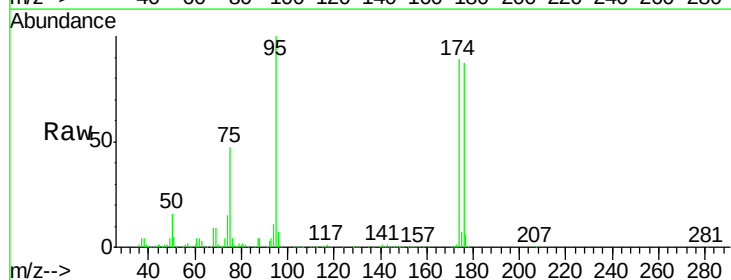
Acq: 16 Jan 2019 15:14

Tgt Ion: 75 Resp: 296108

Ion Ratio Lower Upper

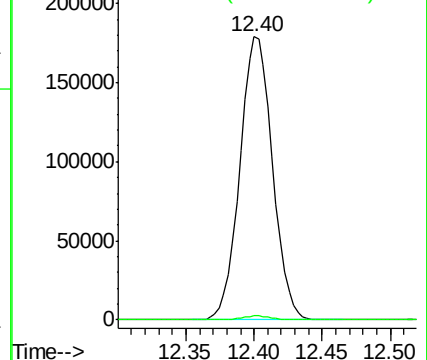
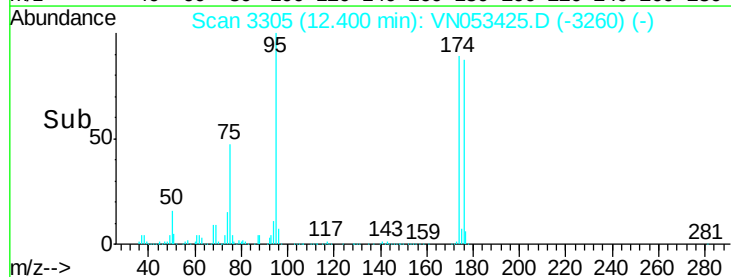
75 100

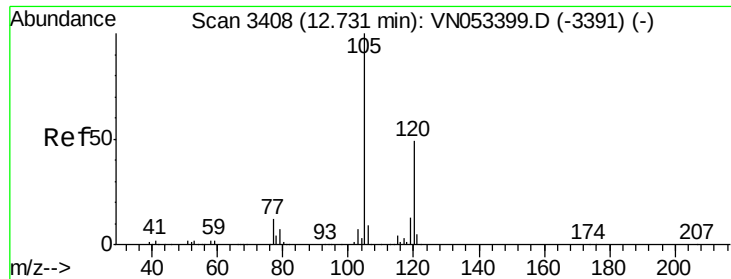
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#80

1,3,5-Trimethylbenzene

Concen: 0.232 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. 0.00 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

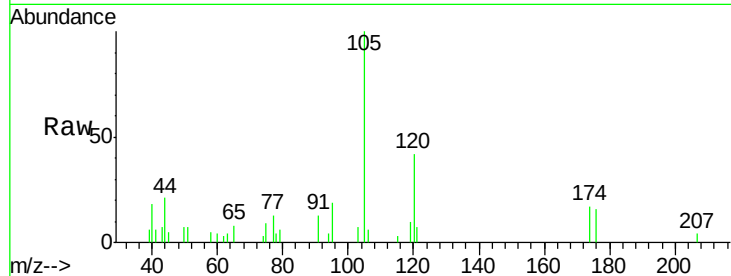
PB116405ZHE#08

Tot Ion:105 Resp: 8141

Ion Ratio Lower Upper

105 100

120 47.2 24.9 74.6



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

12.73

6000

5000

4000

3000

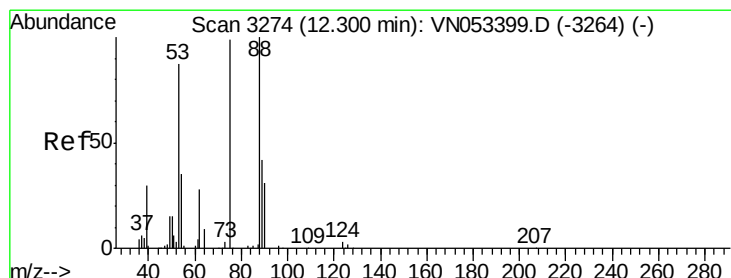
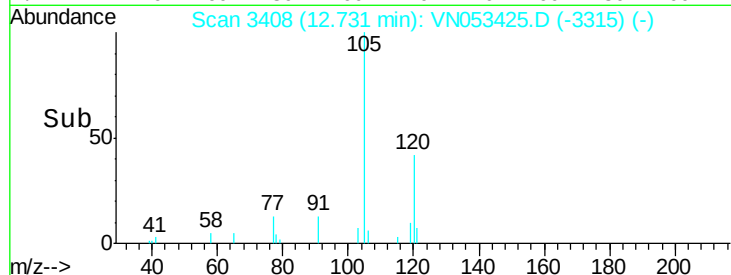
2000

1000

0

Time-->

12.70 12.75



#81

trans-1,4-Dichloro-2-butene

Concen: 94.343 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN053425.D

Acq: 16 Jan 2019 15:14

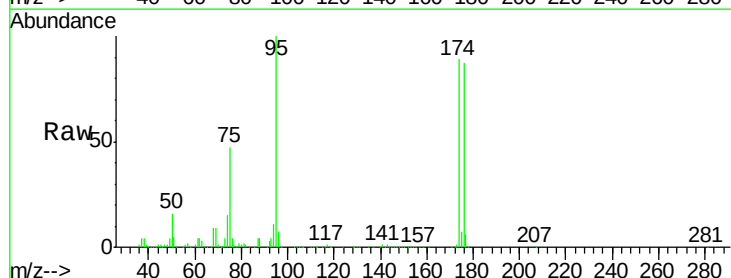
Tgt Ion: 75 Resp: 296108

Ion Ratio Lower Upper

75 100

53 0.0 69.8 104.6#

89 0.0 35.6 53.4#



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

250000

200000

150000

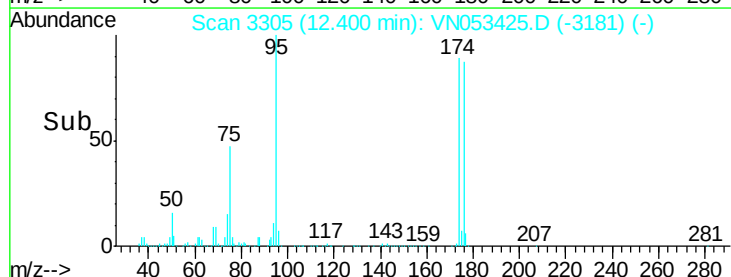
100000

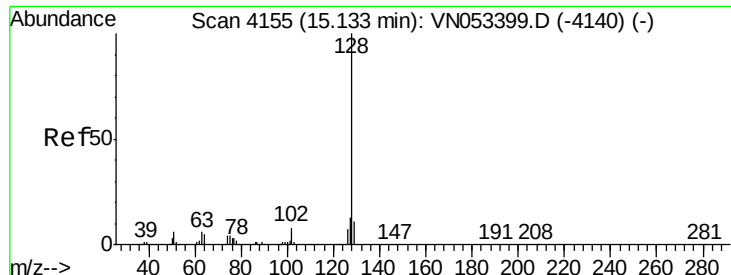
50000

0

Time-->

12.35 12.40 12.45 12.50





#95

Naphthalene

Concen: 3.965 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.00 min

Lab File: VN053425.D

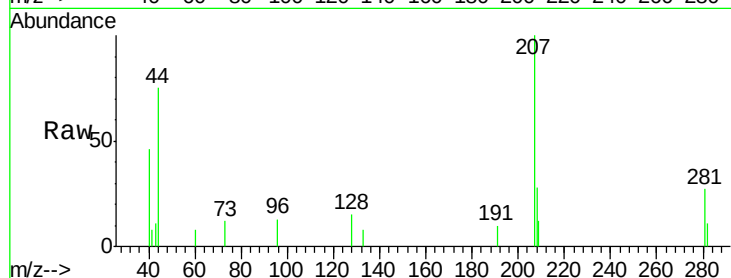
Acq: 16 Jan 2019 15:14

Instrument :

MSVOA_N

ClientSampleId :

PB116405ZHE#08



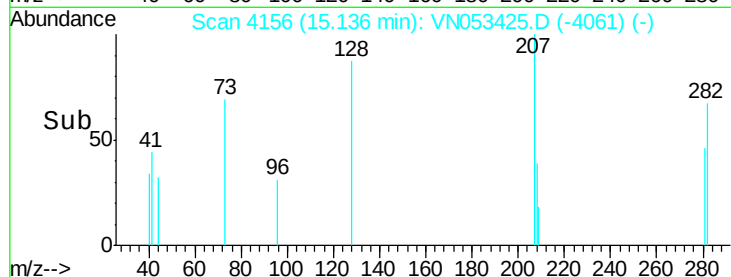
Tot Ion:128 Resp: 408

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

129 0.0 8.6 13.0#



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

Time-->

15.10 15.12 15.14 15.16

15.14