

Data Path : W:\HPCHEM1\MSVOA_N\DATA\VN012418\
 Data File : VN046545.D
 Acq On : 24 Jan 2018 14:17
 Operator : MD\SY
 Sample : J1264-01
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 2-AVE-09

Quant Time: Jan 25 03:09:42 2018
 Quant Method : W:\HPCHEM1\MSVOA_N\METHODS\624N012418W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Jan 24 12:28:49 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.20	128	33848	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.59	114	212912	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	181170	30.00	ug/l	0.00

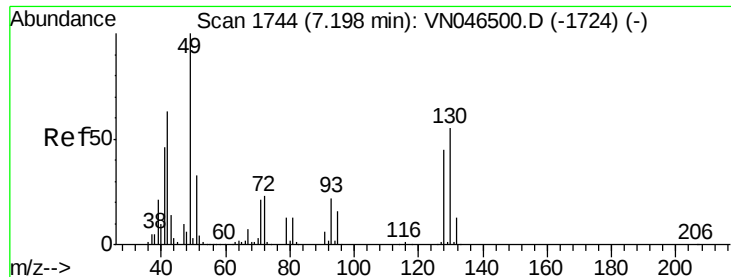
System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	96848	31.57	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	105.23%
60) 4-Bromofluorobenzene	12.41	95	89199	27.50	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	91.67%
63) Toluene-d8	10.09	98	269822	30.85	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	102.83%

Target Compounds

						Qvalue
4) Vinyl Chloride	2.18	62	1352	0.40	ug/l #	86
5) Bromomethane	2.57	94	480	0.26	ug/l #	52
13) Acrolein	3.55	56	216	0.68	ug/l	87
15) Acetone	3.83	58	1188	3.68	ug/l #	47
16) Carbon Disulfide	4.05	76	3521	0.47	ug/l #	93
18) Methylene Chloride	4.55	84	1492	0.56	ug/l	93
22) cis-1,2-Dichloroethene	6.83	96	24321	8.86	ug/l	85
23) tert-Butyl Alcohol	4.81	59	543	2.12	ug/l #	100
30) 2-Butanone	6.84	43	508	0.35	ug/l #	58
37) Trichloroethene	8.83	130	7894	3.12	ug/l	84
53) Dibromochloromethane	10.63	129	25489	10.61	ug/l #	11
58) 4-Methyl-2-Pentanone	9.99	43	1613	0.58	ug/l #	93
59) 2-Hexanone	10.73	43	3581	1.82	ug/l #	40
61) Tetrachloroethene	10.63	164	24279	11.93	ug/l	98
67) m/p-Xylenes	11.63	106	1099	0.25	ug/l	96
68) o-Xylene	11.63	106	1099	0.26	ug/l	96
72) 1,2,3-Trichloropropane	12.41	75	46476	19.38	ug/l	1
77) t-1,4-Dichloro-2-butene	12.41	75	46476	51.16	ug/l #	13
78) 4-Chlorotoluene	12.78	91	1827	0.22	ug/l	81
84) 1,4-Dichlorobenzene	13.37	146	1030	0.24	ug/l	99
85) n-Butylbenzene	13.63	91	2184	0.22	ug/l	91
89) 1,2,4-Trichlorobenzene	14.92	180	511	0.21	ug/l #	84
90) Hexachlorobutadiene	15.02	225	366	0.28	ug/l #	43
91) Naphthalene	15.14	128	1503	0.25	ug/l #	69

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



#1

Bromochloromethane

Concen: 30.00 ug/l

RT: 7.20 min Scan# 1744

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampled :

2-AVE-09

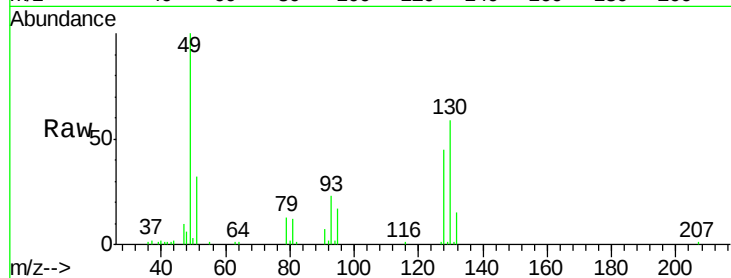
Tgt Ion:128 Resp: 33848

Ion Ratio Lower Upper

128 100

49 222.9 0.0 566.8

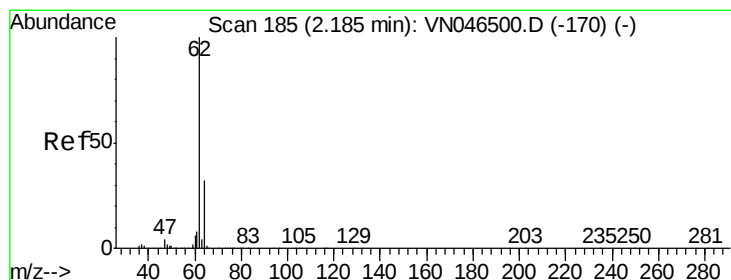
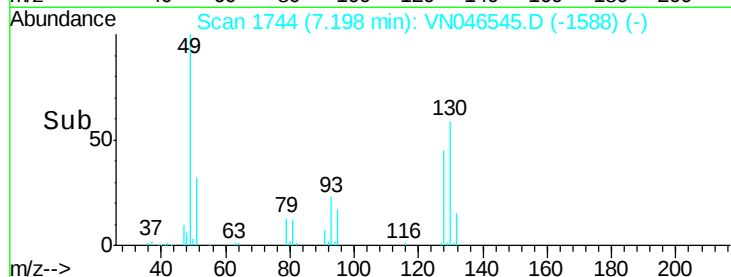
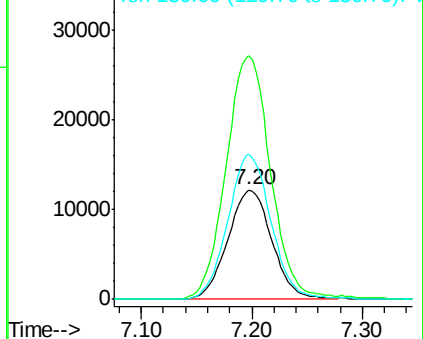
130 129.4 0.0 323.3



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VN0

Ion 130.00 (129.70 to 130.70): V



#4

Vinyl Chloride

Concen: 0.40 ug/l

RT: 2.18 min Scan# 184

Delta R.T. -0.00 min

Lab File: VN046545.D

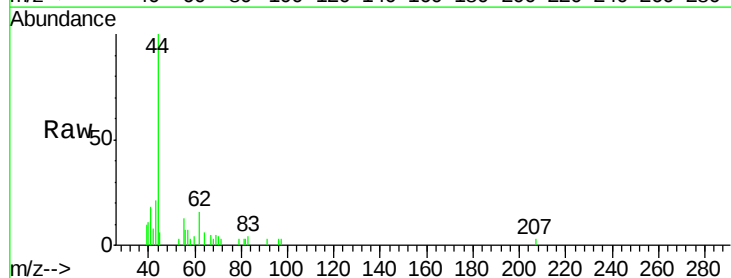
Acq: 24 Jan 2018 14:17

Tgt Ion: 62 Resp: 1352

Ion Ratio Lower Upper

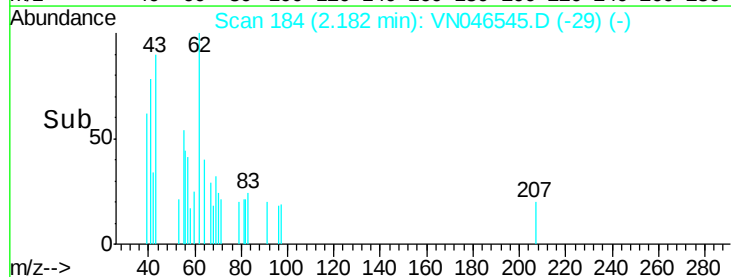
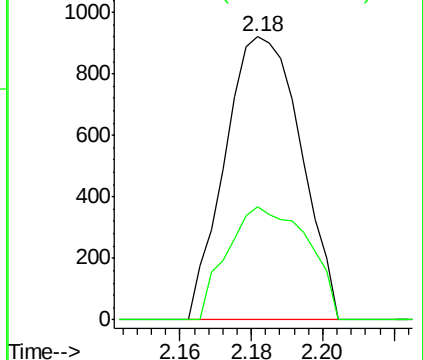
62 100

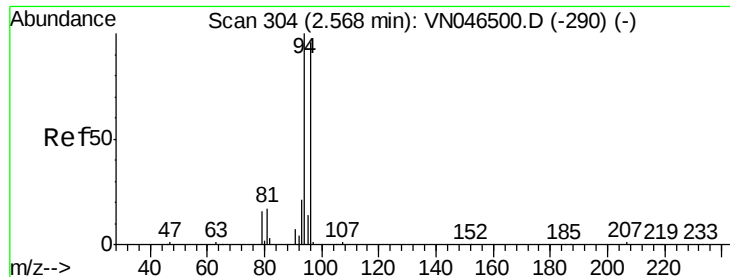
64 39.7 25.5 38.3#



Abundance Ion 62.00 (61.70 to 62.70): VN0

Ion 64.00 (63.70 to 64.70): VN0





#5

Bromomethane

Concen: 0.26 ug/l

RT: 2.57 min Scan# 305

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampleId :

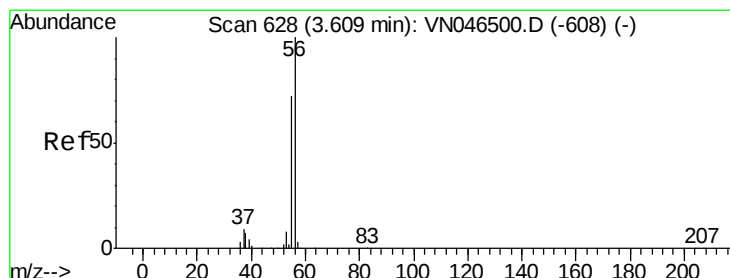
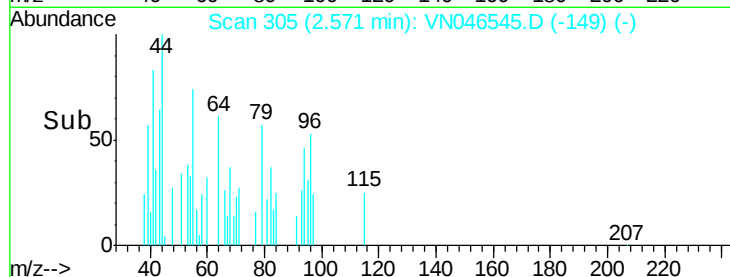
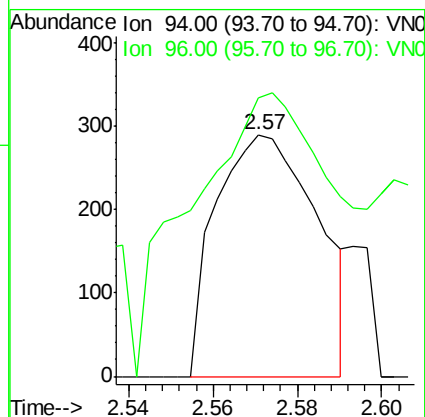
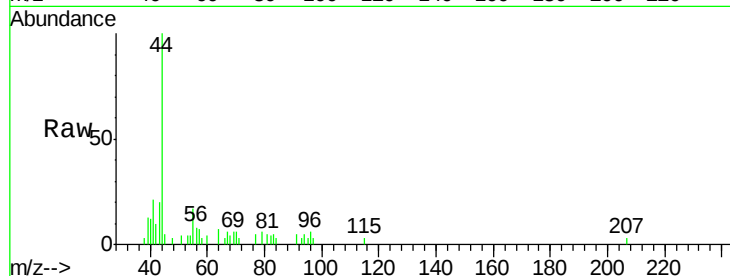
2-AVE-09

Tgt Ion: 94 Resp: 480

Ion Ratio Lower Upper

94 100

96 46.7 74.6 111.8#



#13

Acrolein

Concen: 0.68 ug/l

RT: 3.55 min Scan# 609

Delta R.T. -0.06 min

Lab File: VN046545.D

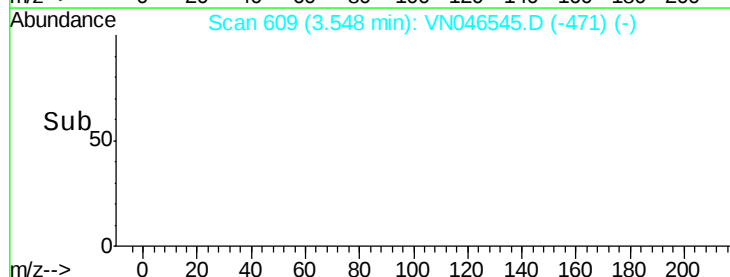
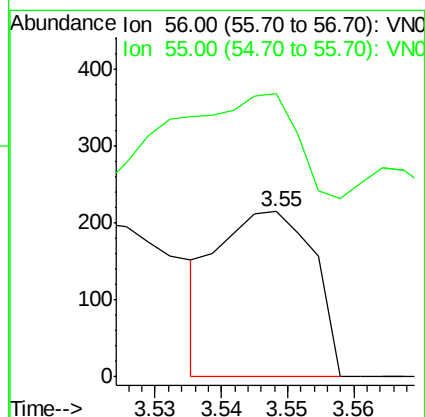
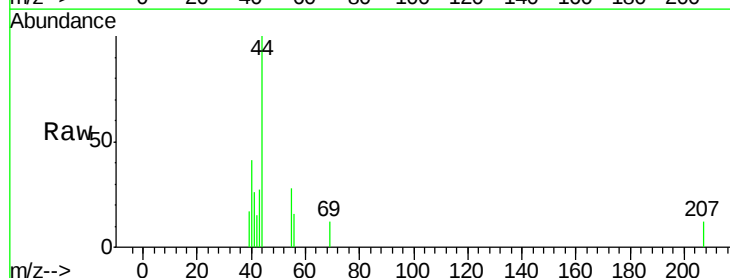
Acq: 24 Jan 2018 14:17

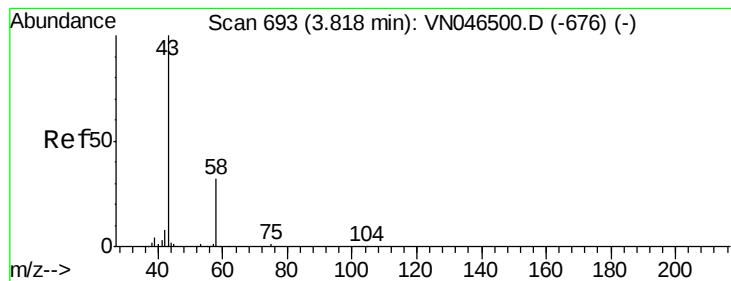
Tgt Ion: 56 Resp: 216

Ion Ratio Lower Upper

56 100

55 84.7 58.9 88.3





#15

Acetone

Concen: 3.68 ug/l

RT: 3.83 min Scan# 696

Delta R.T. 0.01 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampleId :

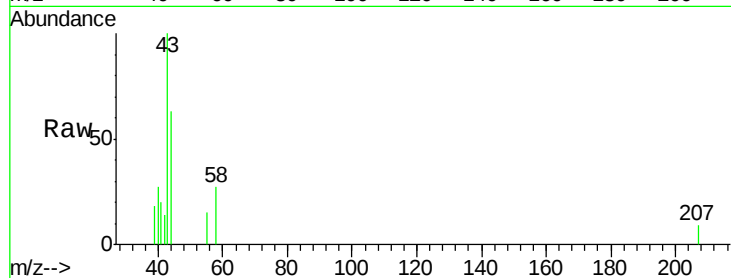
2-AVE-09

Tgt Ion: 58 Resp: 1188

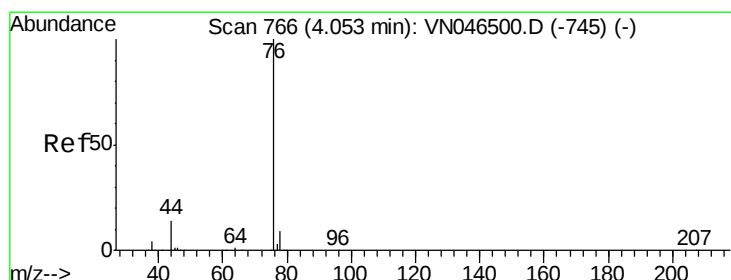
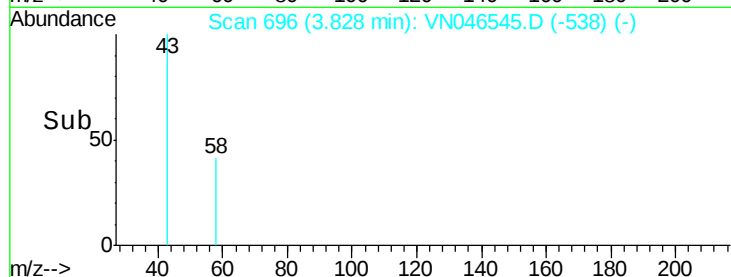
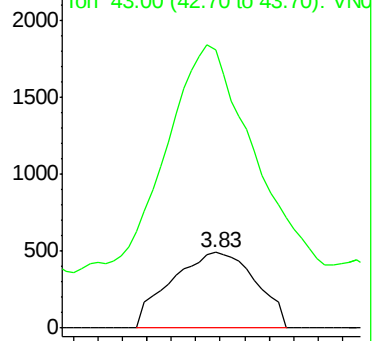
Ion Ratio Lower Upper

58 100

43 239.5 285.3 427.9#



Abundance Ion 58.00 (57.70 to 58.70): VN046545.D (-696) (-)



#16

Carbon Disulfide

Concen: 0.47 ug/l

RT: 4.05 min Scan# 764

Delta R.T. -0.00 min

Lab File: VN046545.D

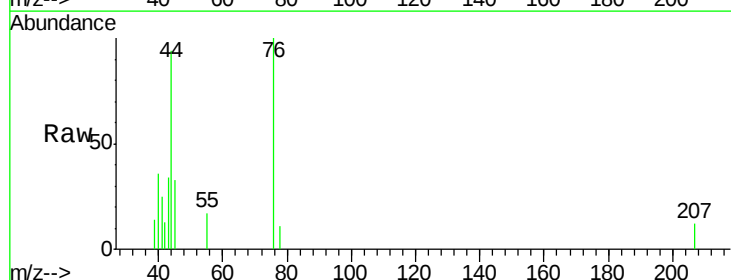
Acq: 24 Jan 2018 14:17

Tgt Ion: 76 Resp: 3521

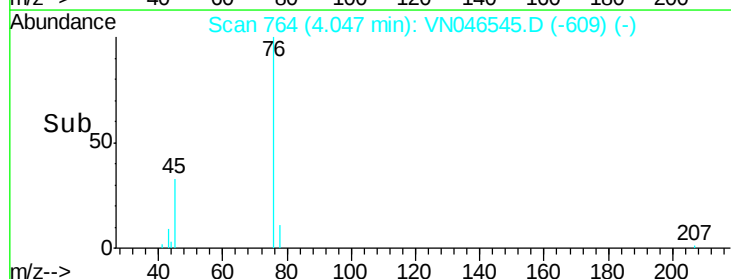
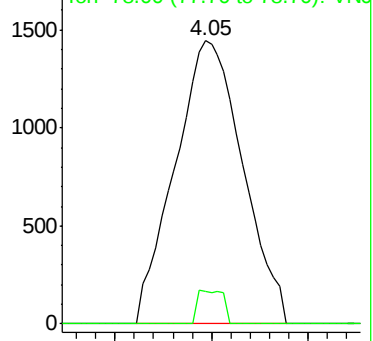
Ion Ratio Lower Upper

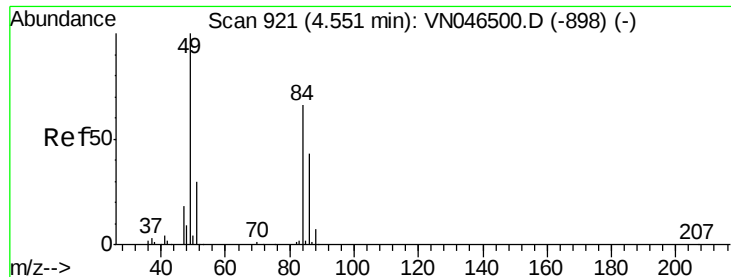
76 100

78 11.5 7.2 10.8#



Abundance Ion 76.00 (75.70 to 76.70): VN046545.D (-764) (-)

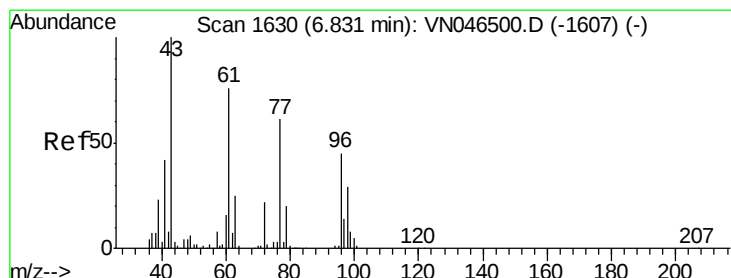
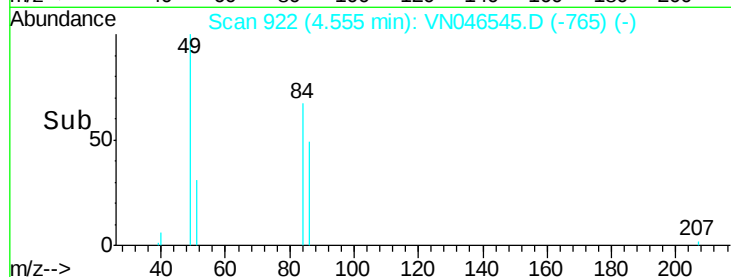
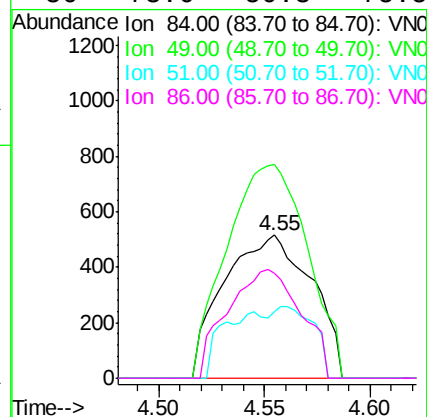
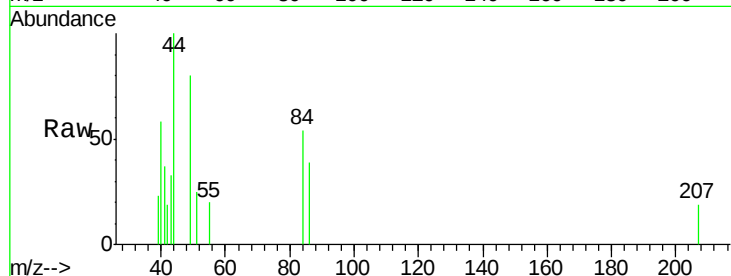




#18
Methylene Chloride
Concen: 0.56 ug/l
RT: 4.55 min Scan# 922
Delta R.T. 0.00 min
Lab File: VN046545.D
Acq: 24 Jan 2018 14:17

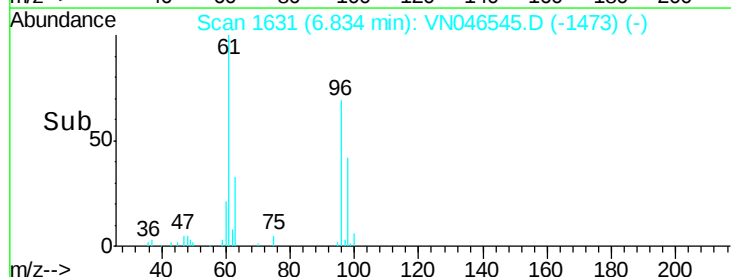
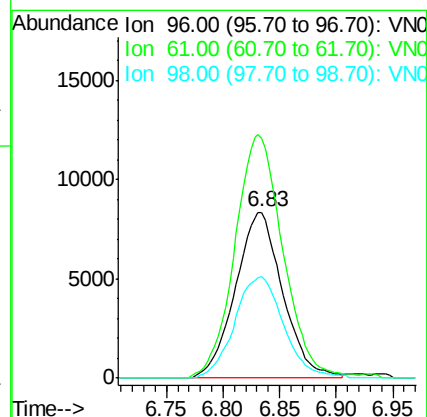
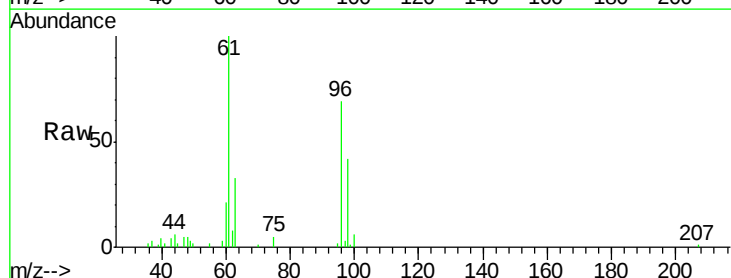
Instrument :
MSVOA_N
ClientSampleId :
2-AVE-09

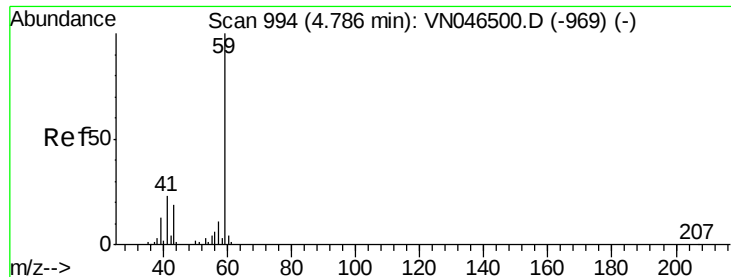
Tgt Ion:	84	Resp:	1492
Ion	Ratio	Lower	Upper
84	100		
49	149.2	113.9	170.9
51	46.9	36.3	54.5
86	73.6	50.3	75.5



#22
cis-1,2-Dichloroethene
Concen: 8.86 ug/l
RT: 6.83 min Scan# 1631
Delta R.T. 0.01 min
Lab File: VN046545.D
Acq: 24 Jan 2018 14:17

Tgt Ion:	96	Resp:	24321
Ion	Ratio	Lower	Upper
96	100		
61	148.9	141.3	211.9
98	63.2	51.0	76.6





#23

tert-Butyl Alcohol

Concen: 2.12 ug/l

RT: 4.81 min Scan# 1001

Delta R.T. 0.01 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampled :

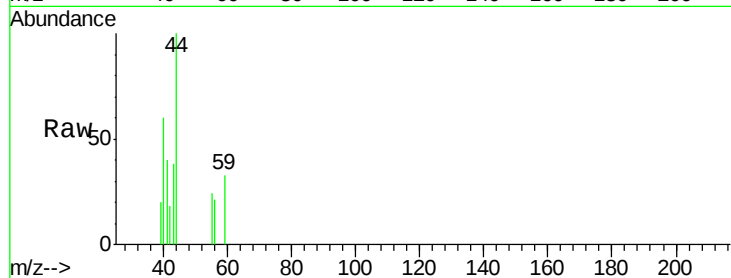
2-AVE-09

Tgt Ion: 59 Resp: 543

Ion Ratio Lower Upper

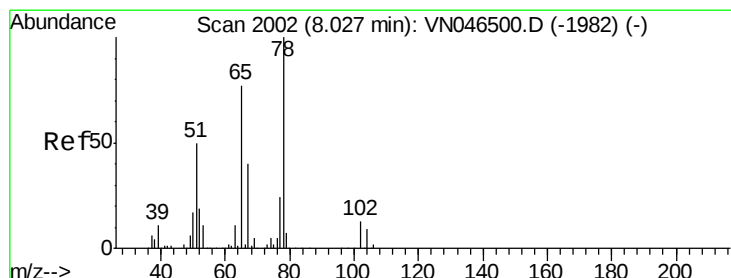
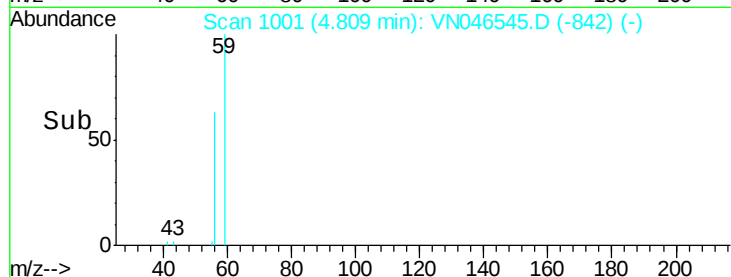
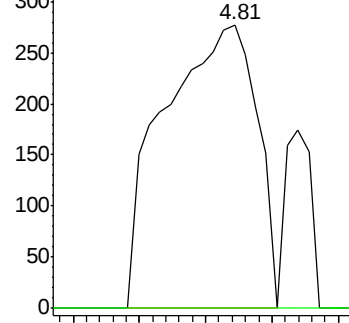
59 100

52 0.0 0.0 0.0



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 52.00 (51.70 to 52.70): VN0



#27

1,2-Dichloroethane-d4

Concen: 31.57 ug/l

RT: 8.03 min Scan# 2002

Delta R.T. 0.00 min

Lab File: VN046545.D

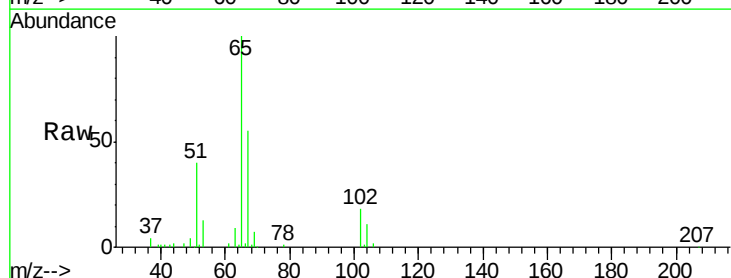
Acq: 24 Jan 2018 14:17

Tgt Ion: 65 Resp: 96848

Ion Ratio Lower Upper

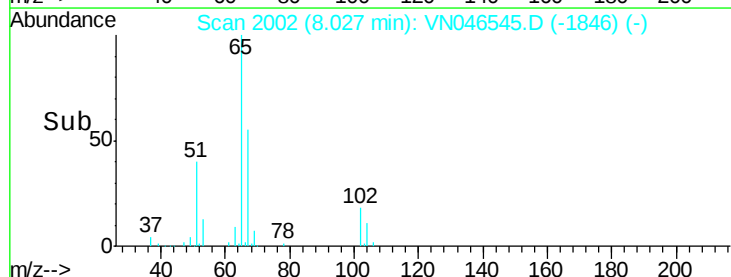
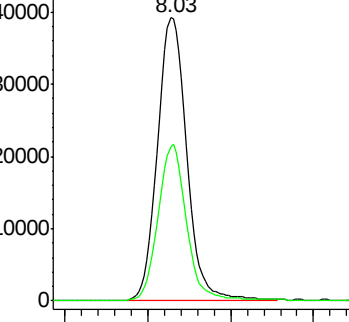
65 100

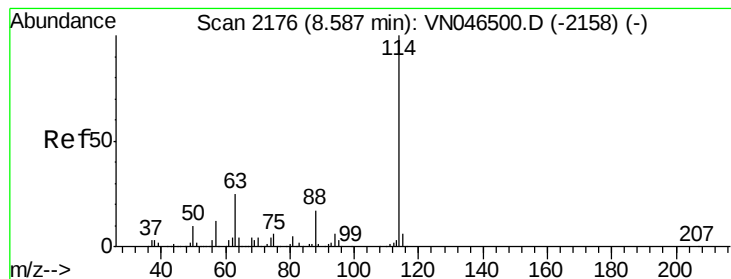
67 53.3 43.4 65.2



Abundance Ion 65.00 (64.70 to 65.70): VN0

Ion 67.00 (66.70 to 67.70): VN0





#28

1,4-Difluorobenzene

Concen: 30.00 ug/l

RT: 8.59 min Scan# 2176

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampled :

2-AVE-09

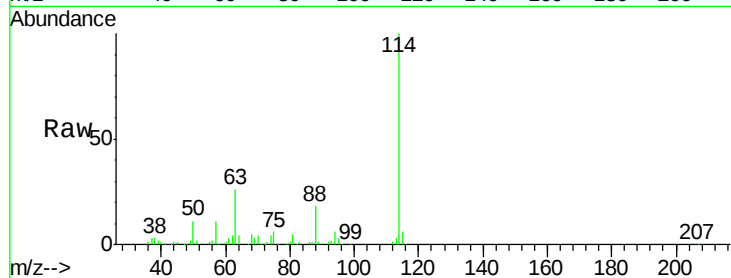
Tgt Ion: 114 Resp: 212912

Ion Ratio Lower Upper

114 100

63 25.9 20.2 30.4

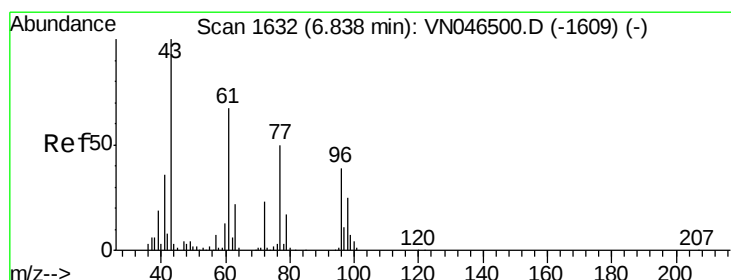
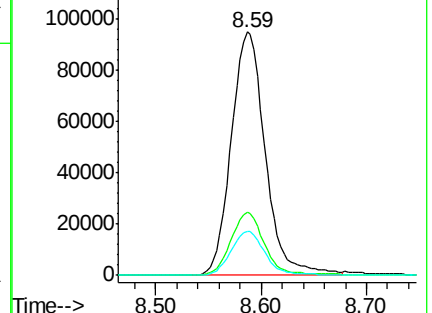
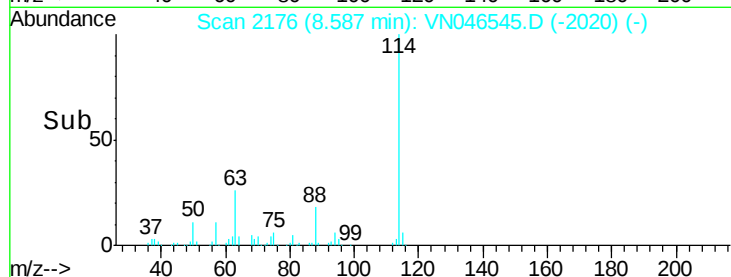
88 17.9 14.2 21.2



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VNO

Ion 88.00 (87.70 to 88.70): VNO



#30

2-Butanone

Concen: 0.35 ug/l

RT: 6.84 min Scan# 1634

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

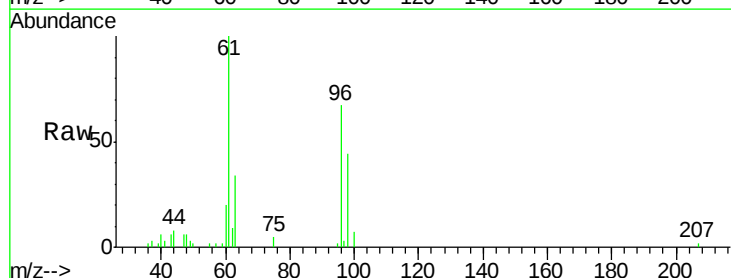
Tgt Ion: 43 Resp: 508

Ion Ratio Lower Upper

43 100

57 0.0 6.8 10.2#

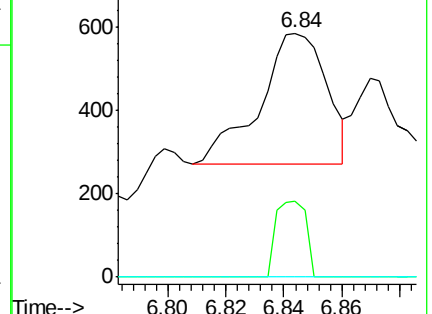
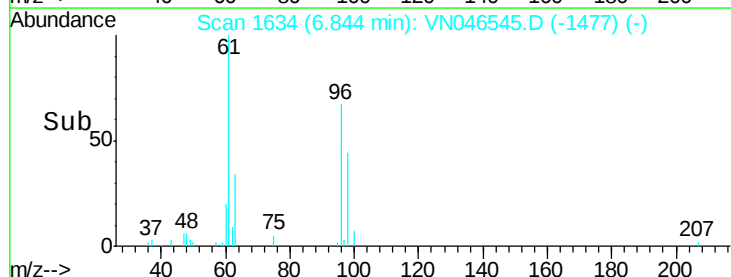
72 0.0 18.9 28.3#

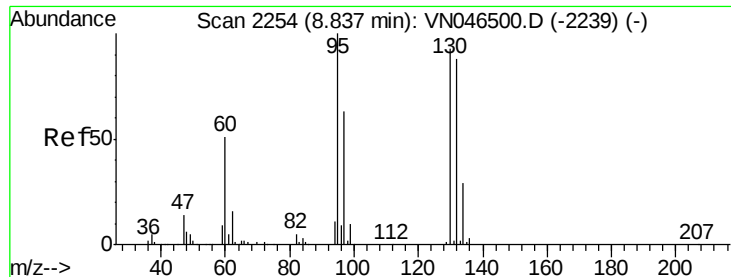


Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 57.00 (56.70 to 57.70): VNO

Ion 72.00 (71.70 to 72.70): VNO





#37

Trichloroethene

Concen: 3.12 ug/l

RT: 8.83 min Scan# 2253

Delta R.T. -0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampled :

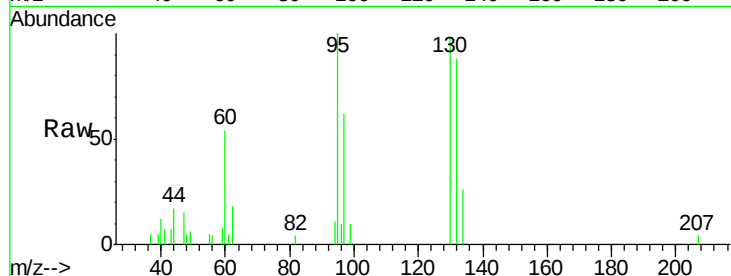
2-AVE-09

Tgt Ion:130 Resp: 7894

Ion Ratio Lower Upper

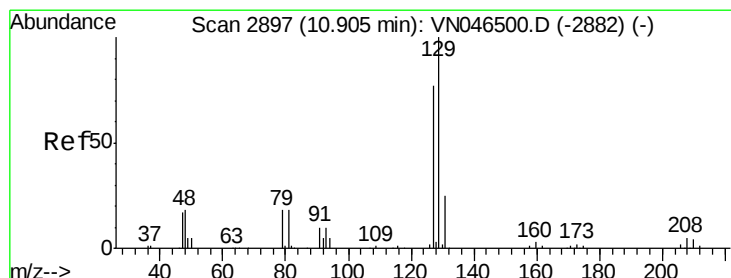
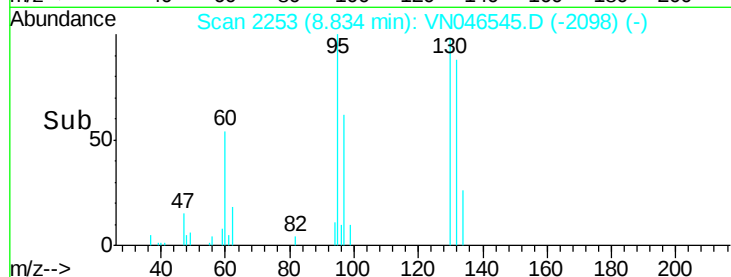
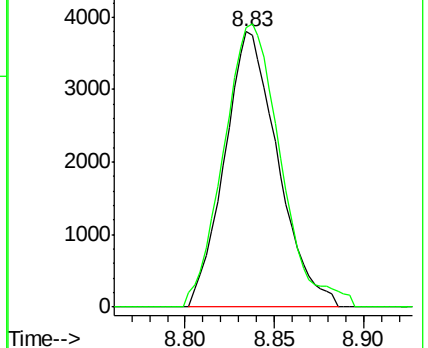
130 100

95 96.2 90.7 136.1



Abundance Ion 129.90 (129.60 to 130.60): V

Ion 94.90 (94.60 to 95.60): VN



#53

Dibromochloromethane

Concen: 10.61 ug/l

RT: 10.63 min Scan# 2813

Delta R.T. -0.27 min

Lab File: VN046545.D

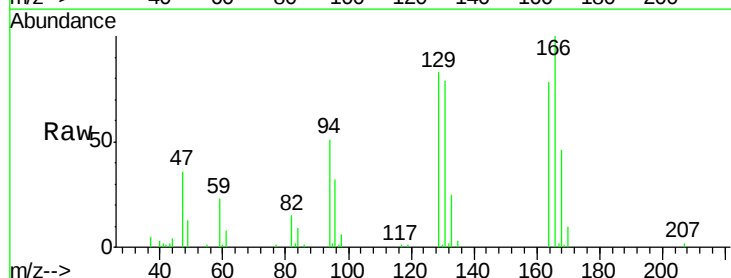
Acq: 24 Jan 2018 14:17

Tgt Ion:129 Resp: 25489

Ion Ratio Lower Upper

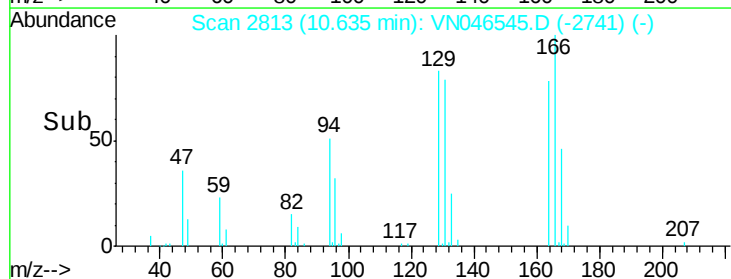
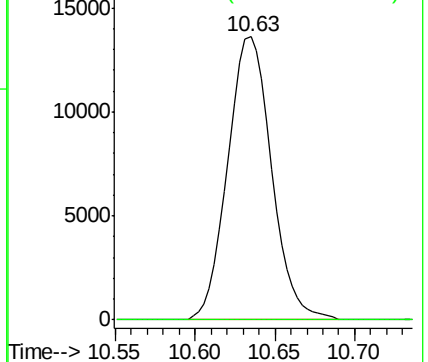
129 100

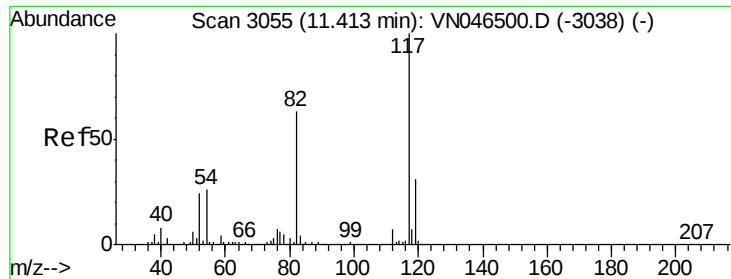
127 0.0 38.6 116.0#



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

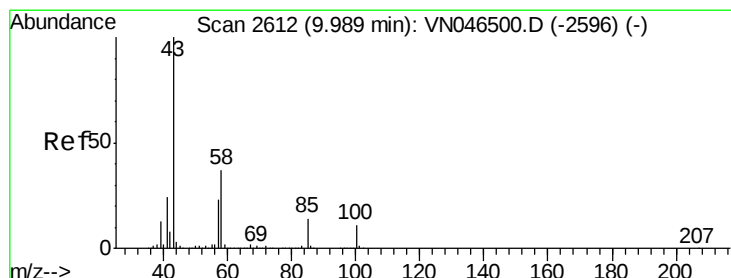
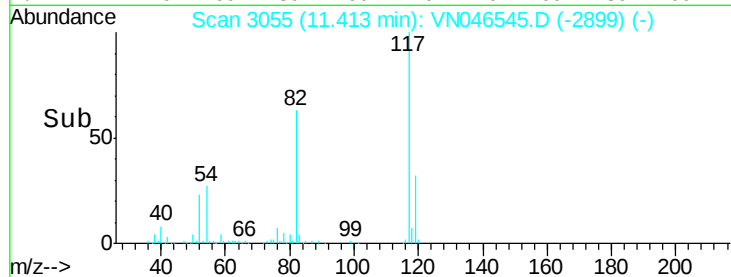
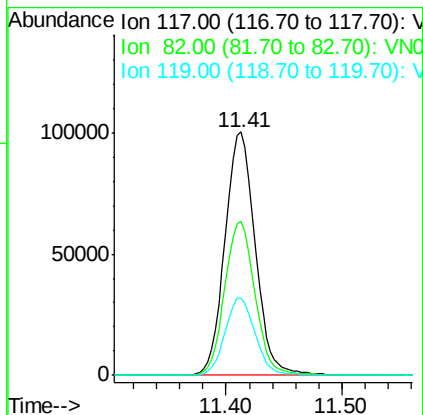
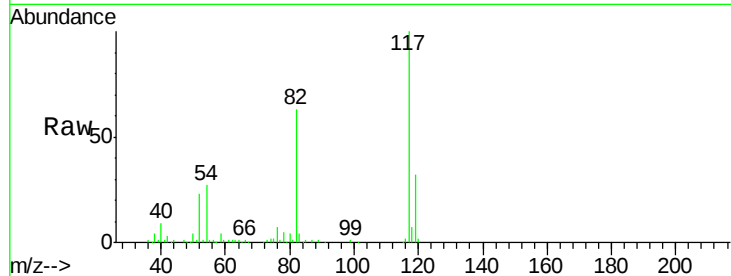




#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 11.41 min Scan# 3055
Delta R.T. 0.00 min
Lab File: VN046545.D
Acq: 24 Jan 2018 14:17

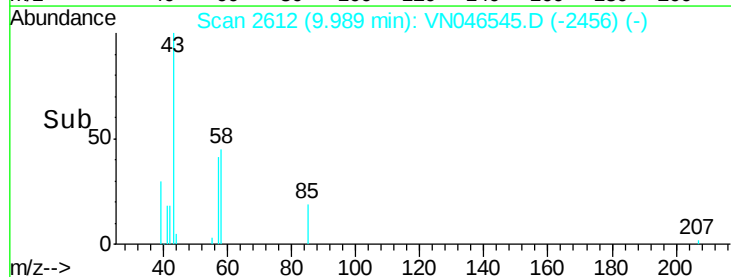
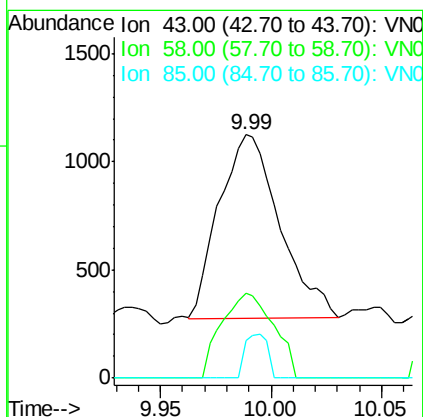
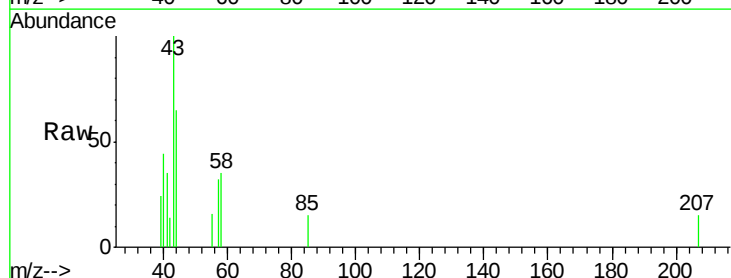
Instrument :
MSVOA_N
ClientSampled :
2-AVE-09

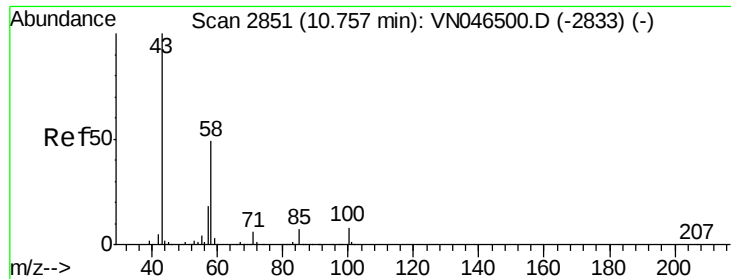
Tgt Ion: 117 Resp: 181170
Ion Ratio Lower Upper
117 100
82 63.3 51.5 77.3
119 31.8 25.4 38.2



#58
4-Methyl-2-Pentanone
Concen: 0.58 ug/l
RT: 9.99 min Scan# 2612
Delta R.T. 0.00 min
Lab File: VN046545.D
Acq: 24 Jan 2018 14:17

Tgt Ion: 43 Resp: 1613
Ion Ratio Lower Upper
43 100
58 39.7 29.4 44.2
85 8.9 11.5 17.3#

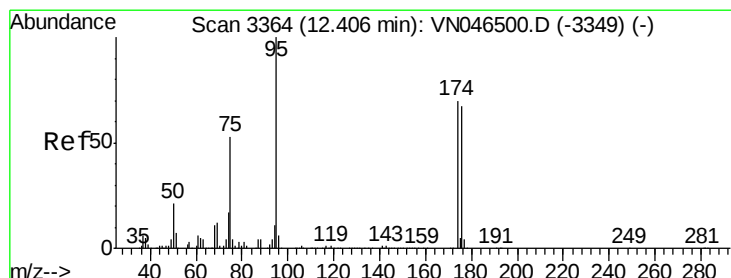
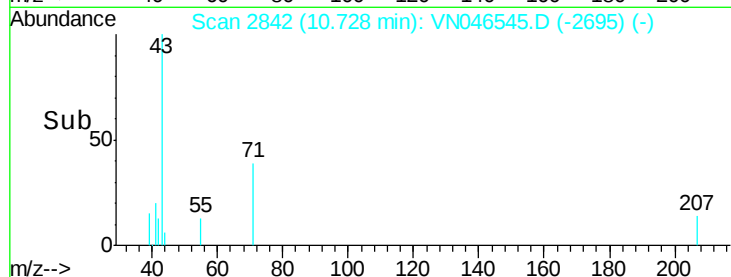
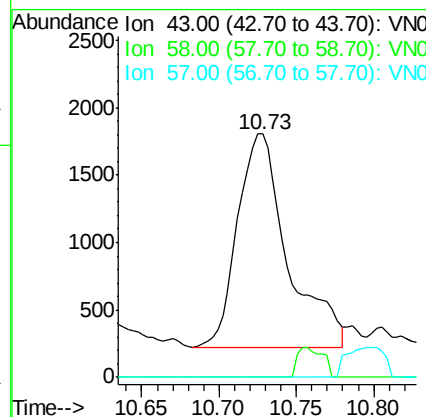
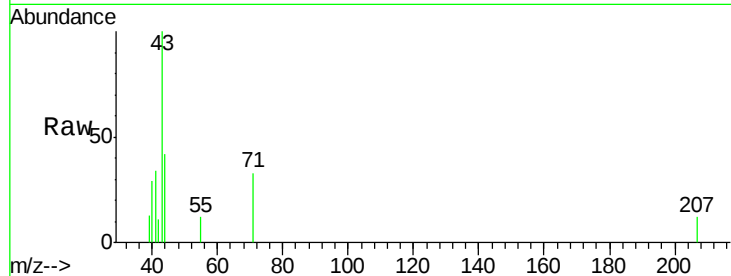




#59
2-Hexanone
Concen: 1.82 ug/l
RT: 10.73 min Scan# 2842
Delta R.T. -0.03 min
Lab File: VN046545.D
Acq: 24 Jan 2018 14:17

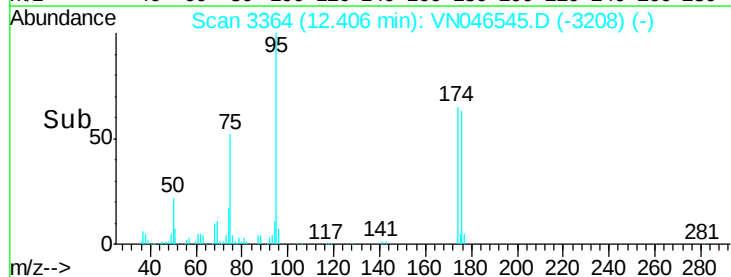
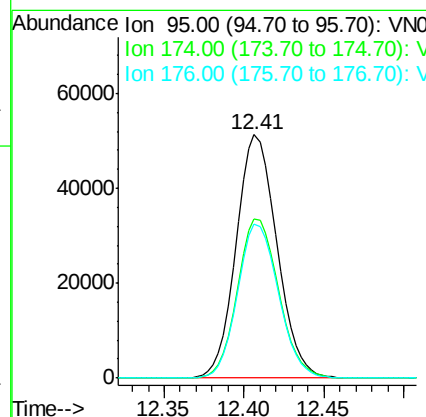
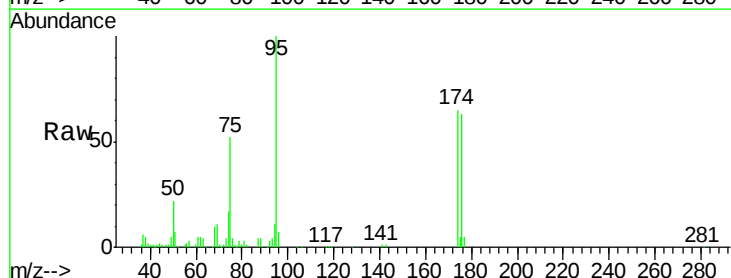
Instrument :
MSVOA_N
ClientSampled :
2-AVE-09

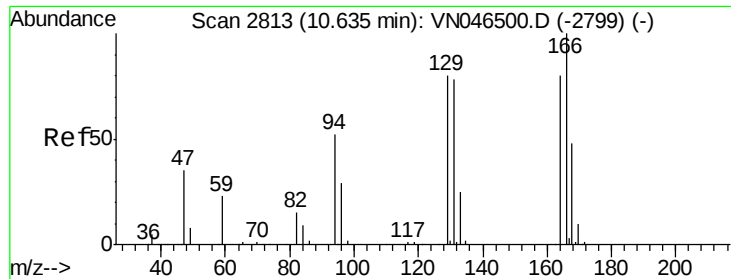
Tgt Ion: 43 Resp: 3581
Ion Ratio Lower Upper
43 100
58 5.2 41.4 62.0#
57 0.0 14.9 22.3#



#60
4-Bromofluorobenzene
Concen: 27.50 ug/l
RT: 12.41 min Scan# 3364
Delta R.T. 0.00 min
Lab File: VN046545.D
Acq: 24 Jan 2018 14:17

Tgt Ion: 95 Resp: 89199
Ion Ratio Lower Upper
95 100
174 66.0 52.5 78.7
176 63.3 50.6 75.8





#61

Tetrachloroethene

Concen: 11.93 ug/l

RT: 10.63 min Scan# 2813

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampled :

2-AVE-09

Tgt Ion:164 Resp: 24279

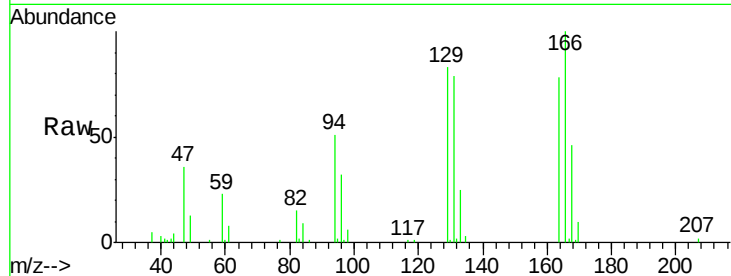
Ion Ratio Lower Upper

164 100

166 128.8 101.6 152.4

129 106.5 83.8 125.6

131 101.4 79.8 119.8

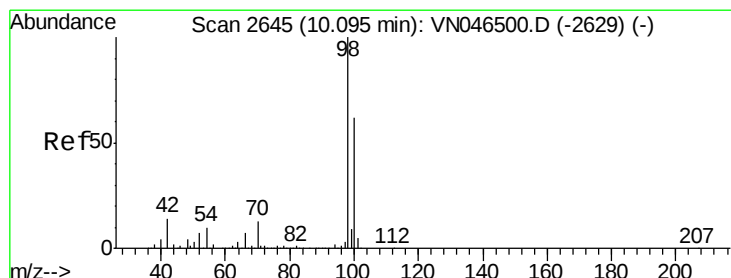
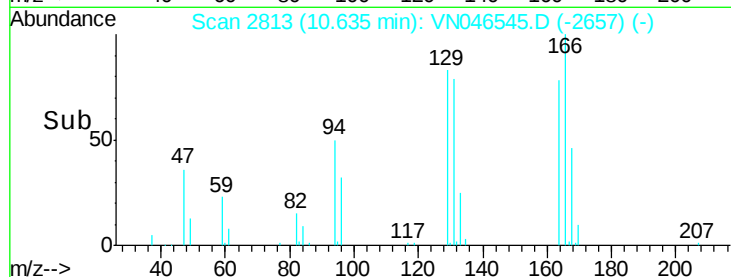
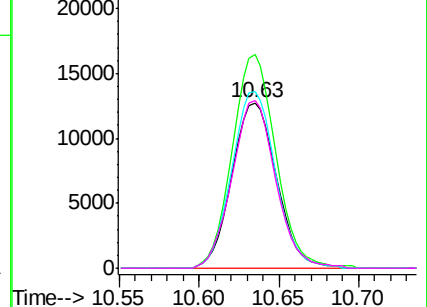


Abundance Ion 163.85 (163.55 to 164.55): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.90 (128.60 to 129.60): V

Ion 130.90 (130.60 to 131.60): V



#63

Toluene-d8

Concen: 30.85 ug/l

RT: 10.09 min Scan# 2645

Delta R.T. 0.00 min

Lab File: VN046545.D

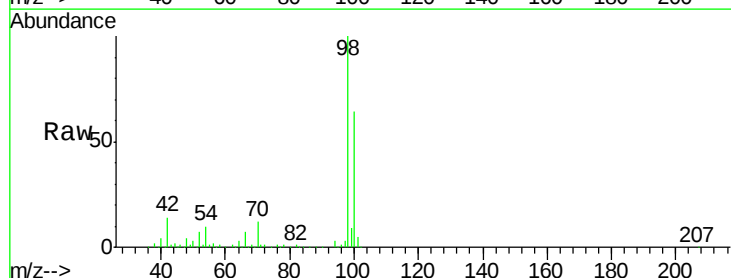
Acq: 24 Jan 2018 14:17

Tgt Ion: 98 Resp: 269822

Ion Ratio Lower Upper

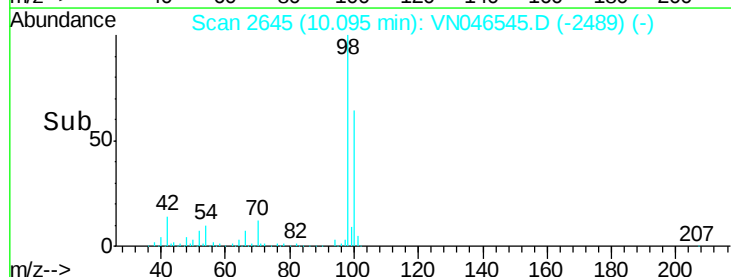
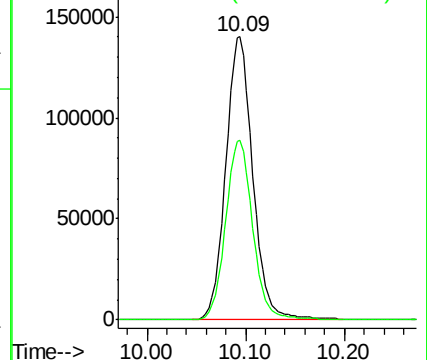
98 100

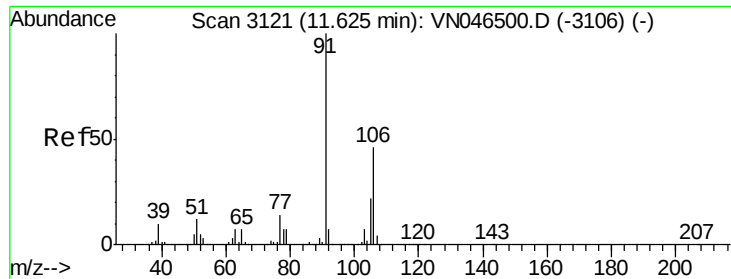
100 63.7 50.8 76.2



Abundance Ion 98.00 (97.70 to 98.70): VN

Ion 100.00 (99.70 to 100.70): VN





#67

m/p-Xylenes

Concen: 0.25 ug/l

RT: 11.63 min Scan# 3122

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampled :

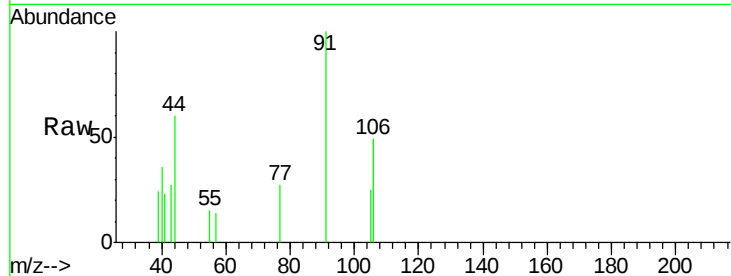
2-AVE-09

Tgt Ion:106 Resp: 1099

Ion Ratio Lower Upper

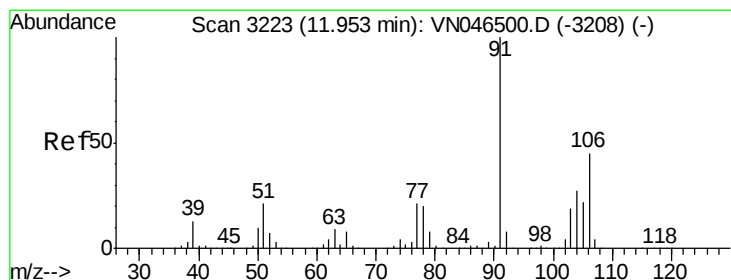
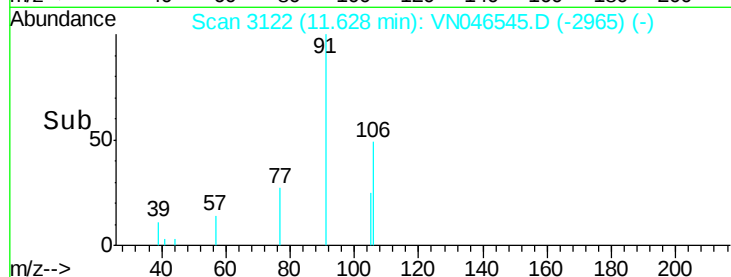
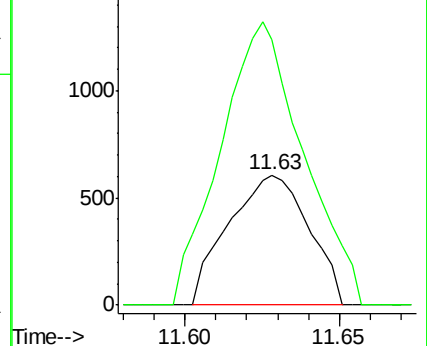
106 100

91 224.5 173.8 260.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN



#68

o-Xylene

Concen: 0.26 ug/l

RT: 11.63 min Scan# 3122

Delta R.T. -0.32 min

Lab File: VN046545.D

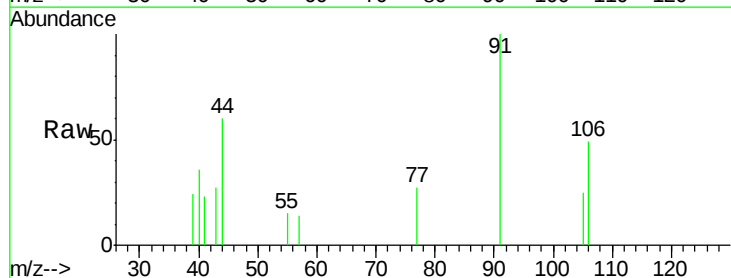
Acq: 24 Jan 2018 14:17

Tgt Ion:106 Resp: 1099

Ion Ratio Lower Upper

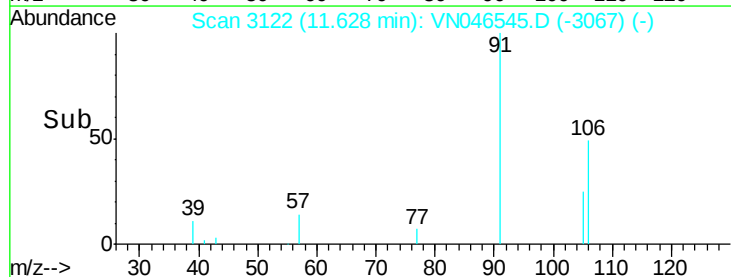
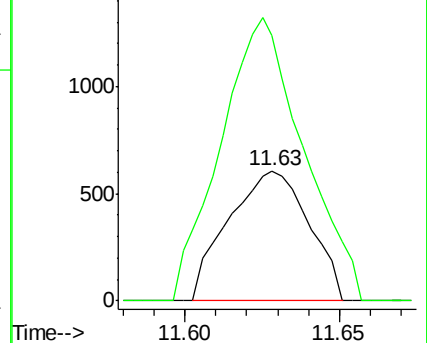
106 100

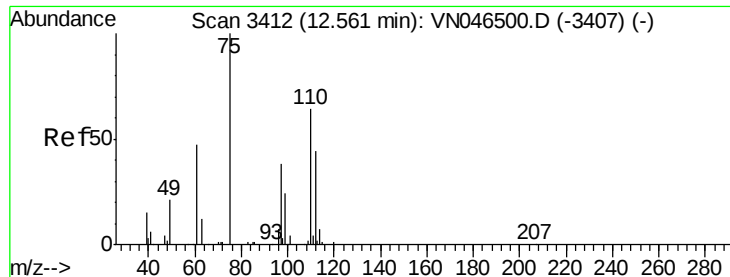
91 224.5 115.7 346.9



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN





#72

1,2,3-Trichloropropane

Concen: 19.38 ug/l

RT: 12.41 min Scan# 3364

Delta R.T. -0.15 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampleId :

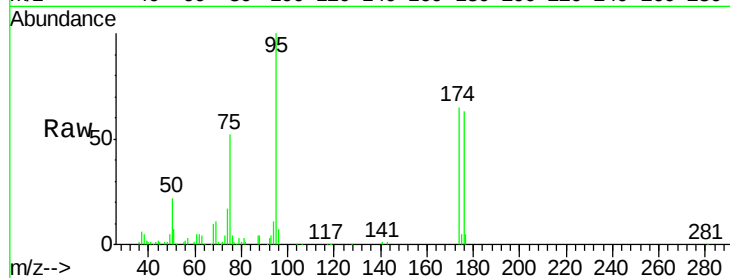
2-AVE-09

Tgt Ion: 75 Resp: 46476

Ion Ratio Lower Upper

75 100

77 1.1 0.0 479.2



Abundance Ion 75.00 (74.70 to 75.70): VN0

Ion 77.00 (76.70 to 77.70): VN0

12.41

30000

25000

20000

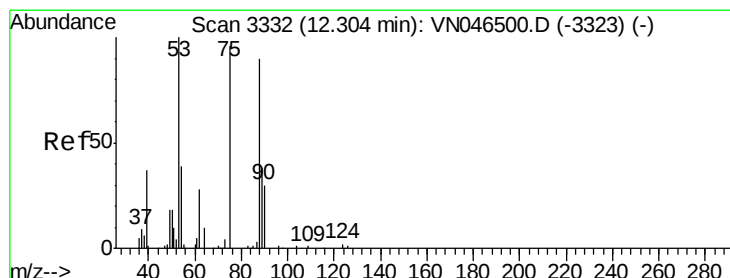
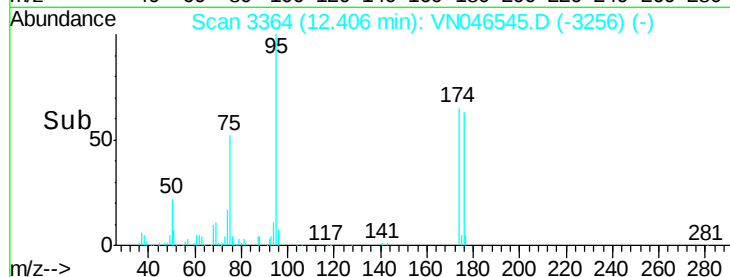
15000

10000

5000

0

Time-->



#77

t-1,4-Dichloro-2-butene

Concen: 51.16 ug/l

RT: 12.41 min Scan# 3364

Delta R.T. 0.10 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

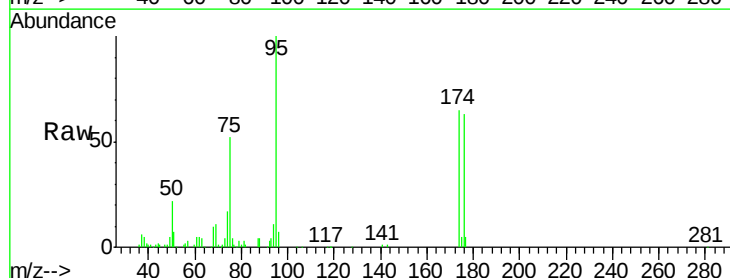
Tgt Ion: 75 Resp: 46476

Ion Ratio Lower Upper

75 100

53 0.0 46.8 140.3#

89 0.0 20.2 60.5#



Abundance Ion 75.00 (74.70 to 75.70): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 89.00 (88.70 to 89.70): VN0

12.41

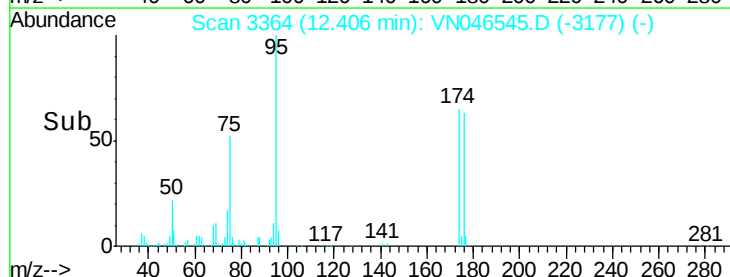
30000

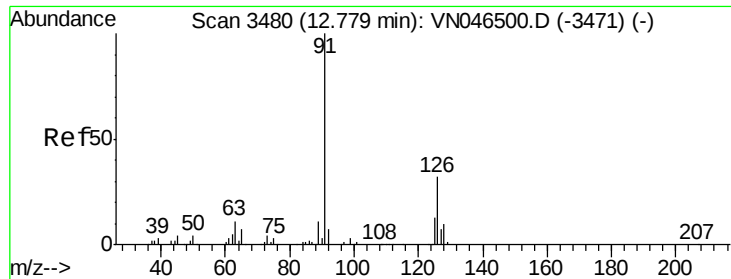
20000

10000

0

Time-->





#78

4-Chlorotoluene

Concen: 0.22 ug/l

RT: 12.78 min Scan# 3481

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampleId :

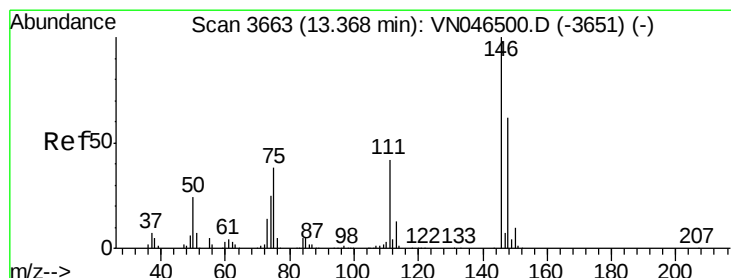
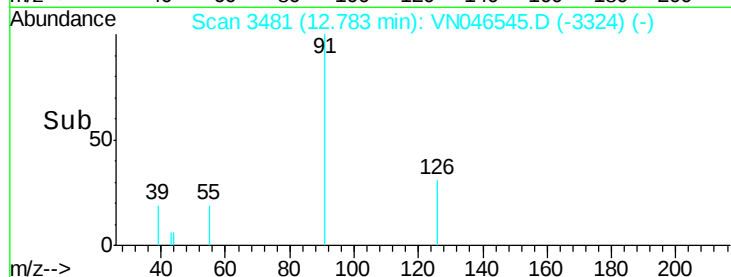
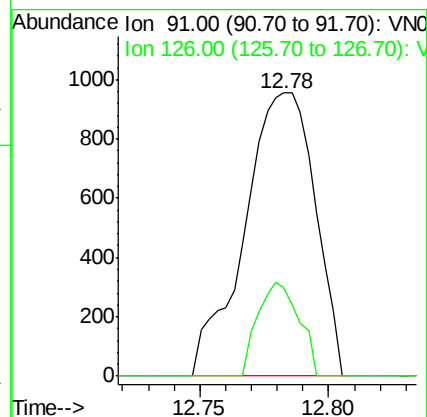
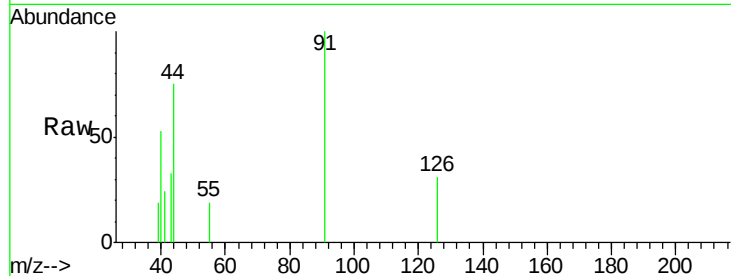
2-AVE-09

Tgt Ion: 91 Resp: 1827

Ion Ratio Lower Upper

91 100

126 19.4 0.0 58.8



#84

1,4-Dichlorobenzene

Concen: 0.24 ug/l

RT: 13.37 min Scan# 3664

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

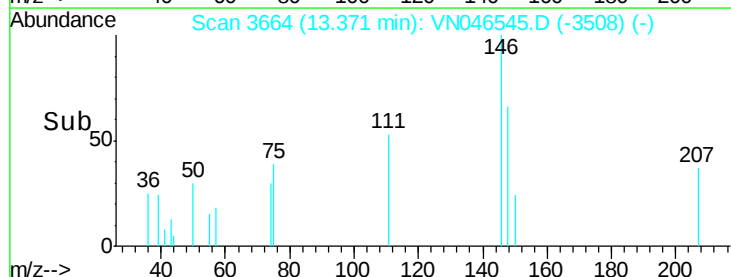
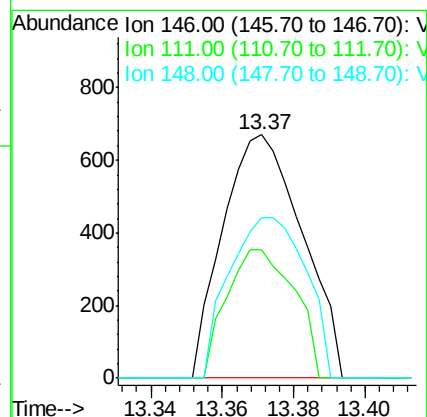
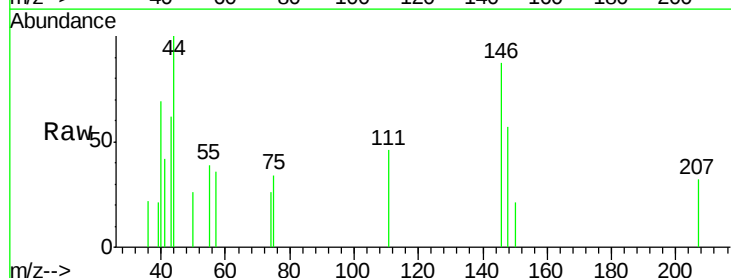
Tgt Ion: 146 Resp: 1030

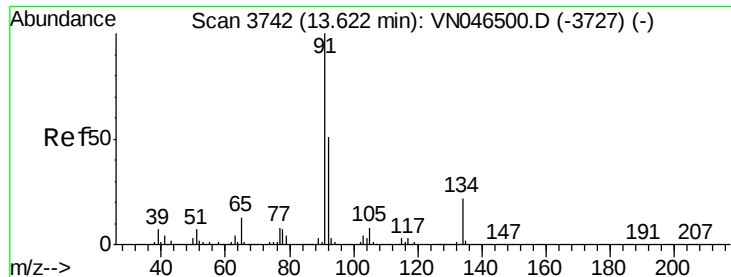
Ion Ratio Lower Upper

146 100

111 45.0 21.6 64.8

148 63.6 31.8 95.3





#85

n-Butylbenzene

Concen: 0.22 ug/l

RT: 13.63 min Scan# 3743

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampleId :

2-AVE-09

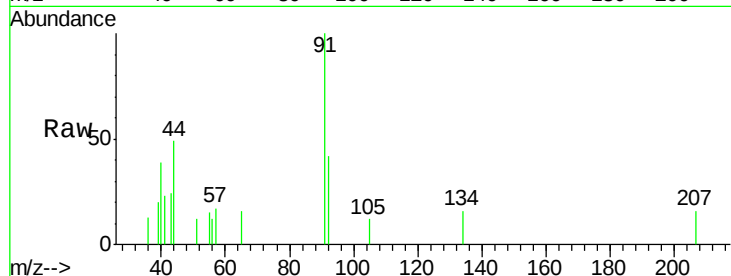
Tgt Ion: 91 Resp: 2184

Ion Ratio Lower Upper

91 100

92 47.7 0.0 105.6

134 15.6 0.0 44.6



Abundance Ion 91.00 (90.70 to 91.70): VN046500.D (-3727) (-)

Ion 92.00 (91.70 to 92.70): VN046500.D (-3727) (-)

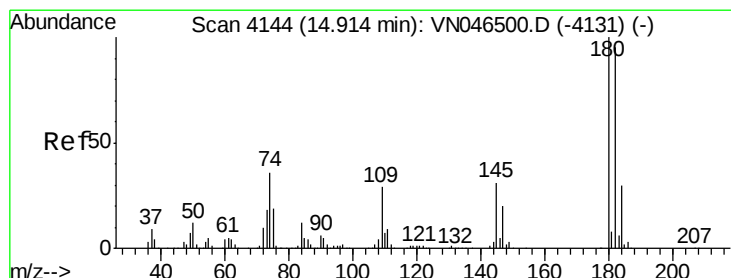
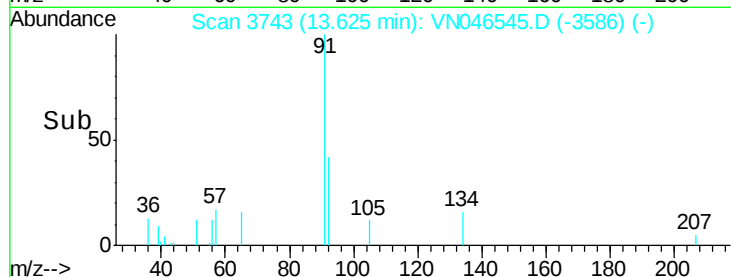
Ion 134.00 (133.70 to 134.70): VN046500.D (-3727) (-)

Time-->

13.63

13.60

13.65



#89

1,2,4-Trichlorobenzene

Concen: 0.21 ug/l

RT: 14.92 min Scan# 4146

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

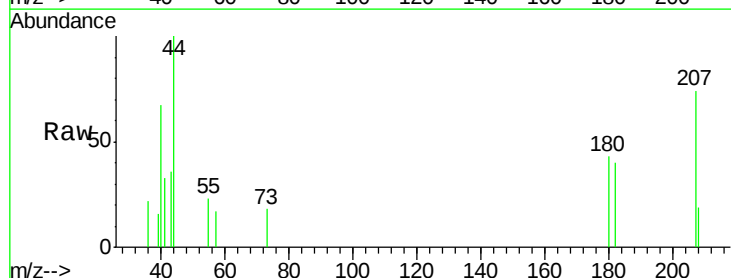
Tgt Ion: 180 Resp: 511

Ion Ratio Lower Upper

180 100

182 96.3 75.7 113.5

145 0.0 25.2 37.8#



Abundance Ion 180.00 (179.70 to 180.70): VN046500.D (-4131) (-)

Ion 182.00 (181.70 to 182.70): VN046500.D (-4131) (-)

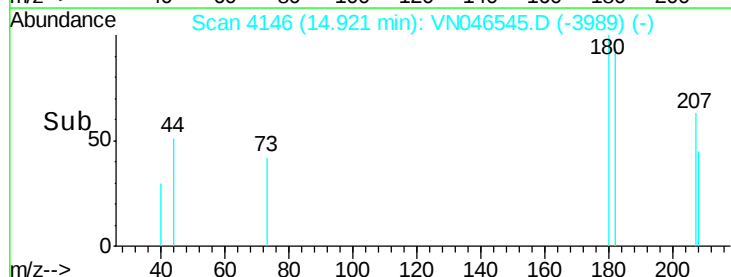
Ion 145.00 (144.70 to 145.70): VN046500.D (-4131) (-)

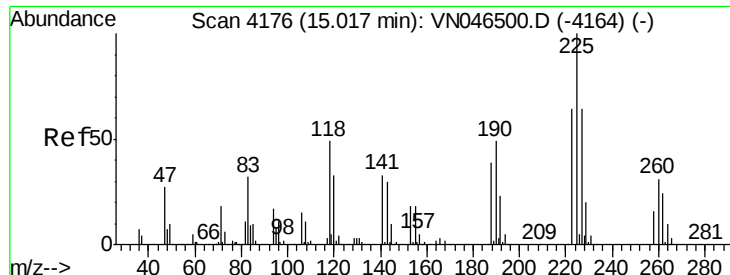
Time-->

14.92

14.90

14.94





#90

Hexachlorobutadiene

Concen: 0.28 ug/l

RT: 15.02 min Scan# 4176

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

Instrument :

MSVOA_N

ClientSampleId :

2-AVE-09

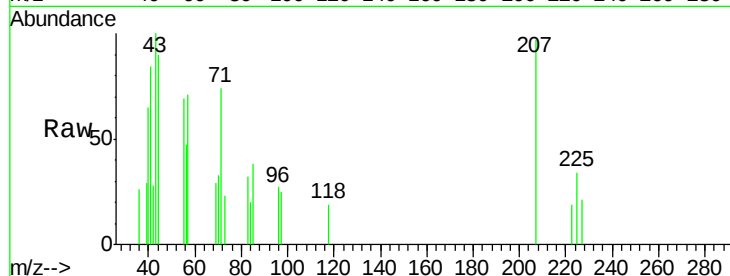
Tgt Ion:225 Resp: 366

Ion Ratio Lower Upper

225 100

223 0.0 0.0 123.6

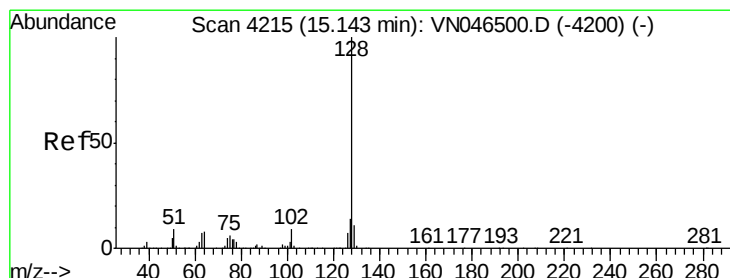
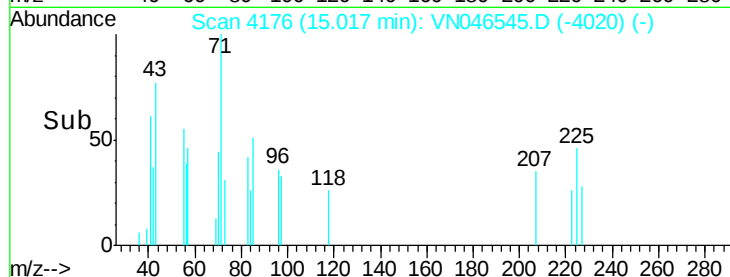
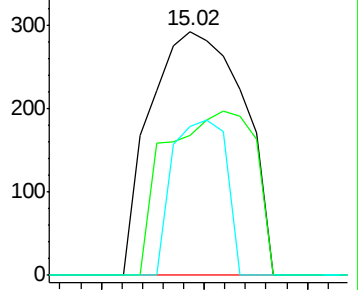
227 36.6 0.0 128.2



Abundance Ion 225.00 (224.70 to 225.70): V

Ion 223.00 (222.70 to 223.70): V

Ion 227.00 (226.70 to 227.70): V



#91

Naphthalene

Concen: 0.25 ug/l

RT: 15.14 min Scan# 4215

Delta R.T. 0.00 min

Lab File: VN046545.D

Acq: 24 Jan 2018 14:17

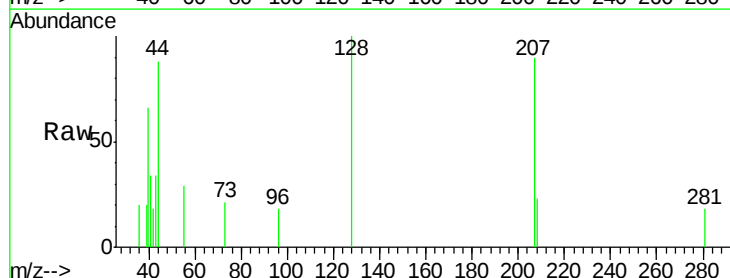
Tgt Ion:128 Resp: 1503

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.2#

129 0.0 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

