

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091019\
 Data File : VN057822.D
 Acq On : 9 Sep 2019 23:31
 Operator : JC/SP
 Sample : K4603-31
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Sep 10 07:12:30 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091019W.M
 Quant Title : SW846 8260
 QLast Update : Tue Sep 10 03:02:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	306725	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	523378	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	484791	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	248406	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	337380	54.31	ug/l	0.00
Spiked Amount			Recovery	=	108.62%	
35) Dibromofluoromethane	7.58	113	231922	48.01	ug/l	0.00
Spiked Amount			Recovery	=	96.02%	
50) Toluene-d8	10.08	98	957321	51.04	ug/l	0.00
Spiked Amount			Recovery	=	102.08%	
62) 4-Bromofluorobenzene	12.40	95	307895	43.08	ug/l	0.00
Spiked Amount			Recovery	=	86.16%	

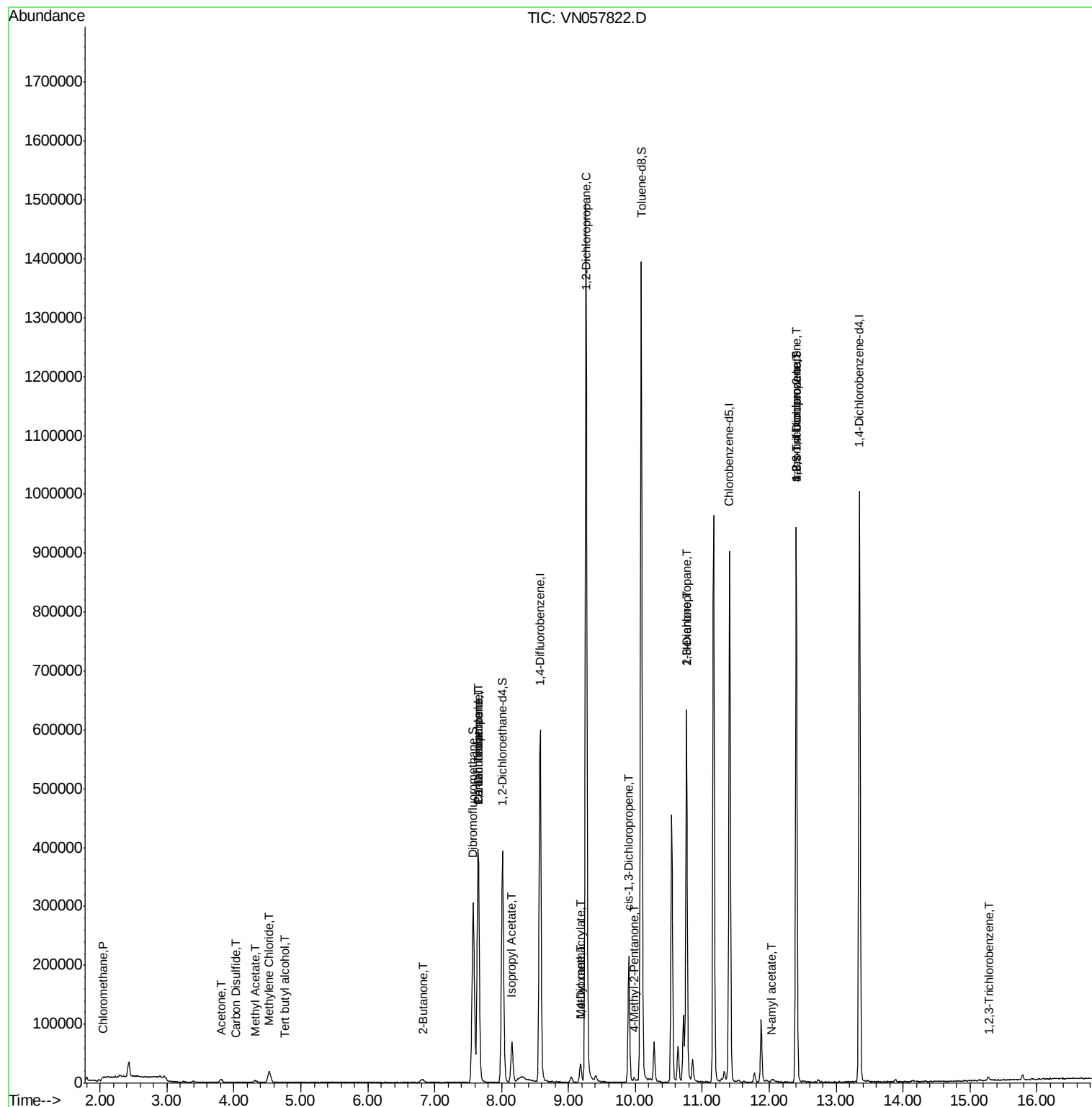
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	2.04	50	896	0.207	ug/l #	43
5) Bromomethane	2.53	94	158	Below Cal	#	2
11) Tert butyl alcohol	4.76	59	175	0.233	ug/l #	72
16) Acetone	3.81	43	8008	3.932	ug/l #	88
17) Carbon Disulfide	4.03	76	367	0.231	ug/l #	75
18) Methyl Acetate	4.31	43	4564	0.841	ug/l #	79
20) Methylene Chloride	4.52	84	7711	0.777	ug/l	93
25) 2-Butanone	6.83	43	1822	0.618	ug/l #	49
31) Cyclohexane	7.66	56	8494	Below Cal	#	33
36) 1,1-Dichloropropene	7.65	75	26971	4.443	ug/l #	50
38) Carbon Tetrachloride	7.65	117	32477	5.860	ug/l #	15
43) Isopropyl Acetate	8.16	43	82768	7.848	ug/l #	91
45) 1,2-Dichloropropane	9.26	63	1886	0.355	ug/l #	44
48) Methyl methacrylate	9.17	41	4745	0.887	ug/l #	13
49) 1,4-Dioxane	9.18	88	97	1.072	ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	3562	0.571	ug/l #	79
54) cis-1,3-Dichloropropene	9.90	75	35944	4.818	ug/l #	67
57) 1,3-Dichloropropane	10.76	76	5915	0.704	ug/l #	43
59) 2-Hexanone	10.76	43	97771	20.901	ug/l #	54
74) N-amyl acetate	12.03	43	2108	0.251	ug/l #	54
76) 1,2,3-Trichloropropane	12.40	75	172833	30.757	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	172833	108.233	ug/l #	6
95) Naphthalene	15.13	128	889	Below Cal	#	85
96) 1,2,3-Trichlorobenzene	15.30	180	353	1.067	ug/l #	51

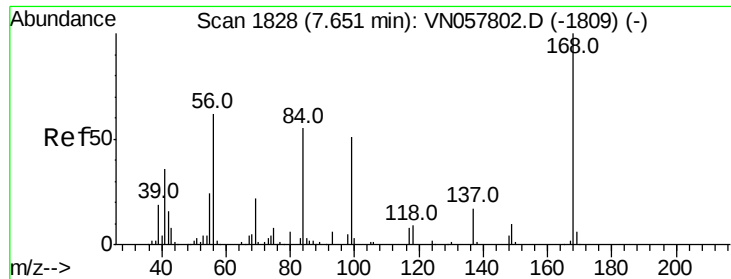
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN091019\
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QLast Update : Tue Sep 10 03:02:13 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

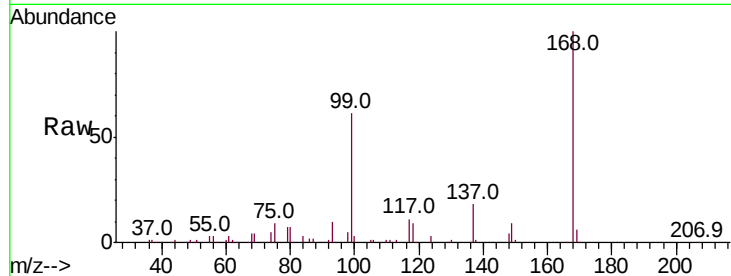
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 306725

Ion Ratio Lower Upper

168 100

99 60.9 48.0 72.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

150000

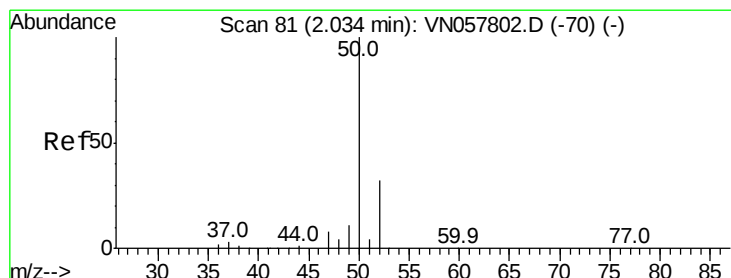
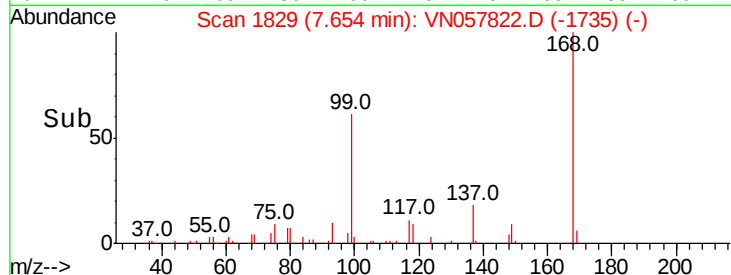
100000

50000

0

Time-->

7.55 7.60 7.65 7.70 7.75



#3

Chloromethane

Concen: 0.207 ug/l

RT: 2.04 min Scan# 82

Delta R.T. 0.00 min

Lab File: VN057822.D

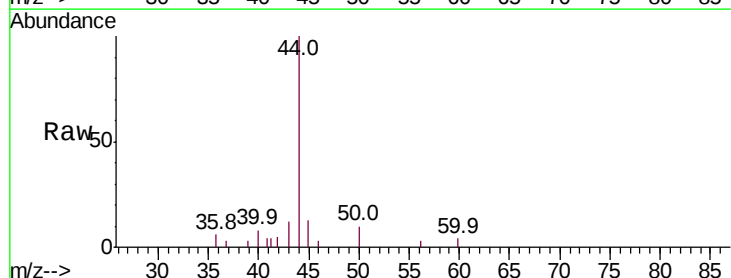
Acq: 9 Sep 2019 23:31

Tgt Ion: 50 Resp: 896

Ion Ratio Lower Upper

50 100

52 0.0 25.5 38.3#



Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO

2.04

600

500

400

300

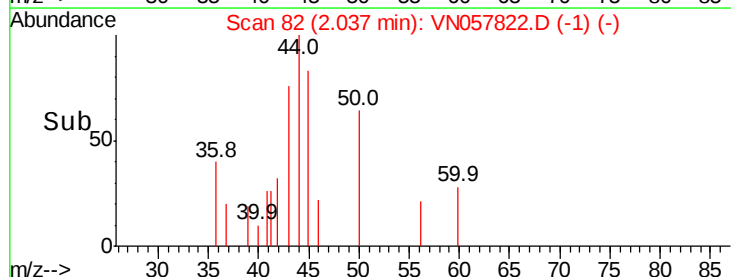
200

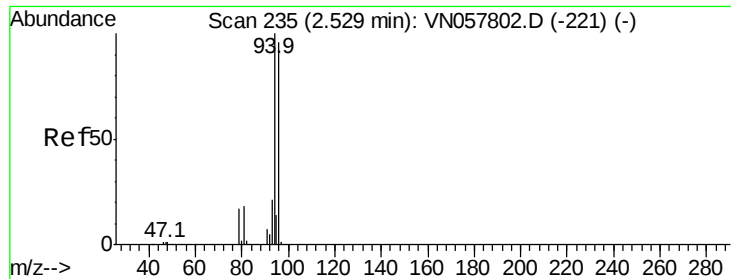
100

0

Time-->

2.00 2.05





#5

Bromomethane

Concen: Below Cal

RT: 2.53 min Scan# 235

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

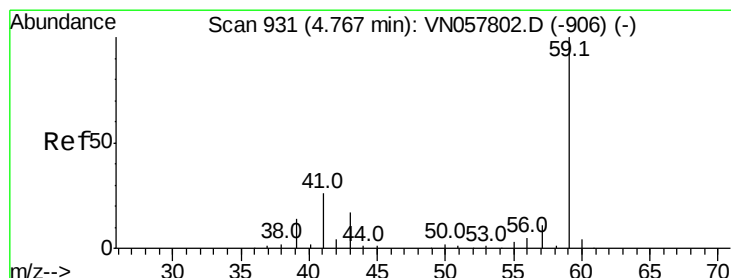
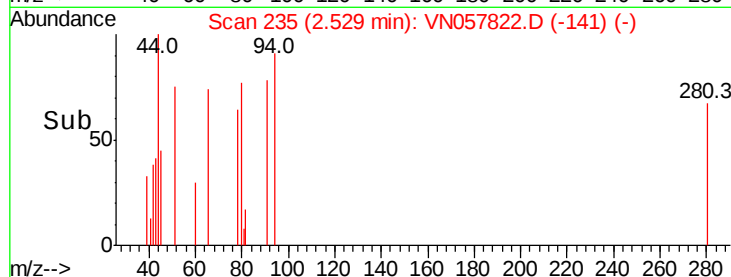
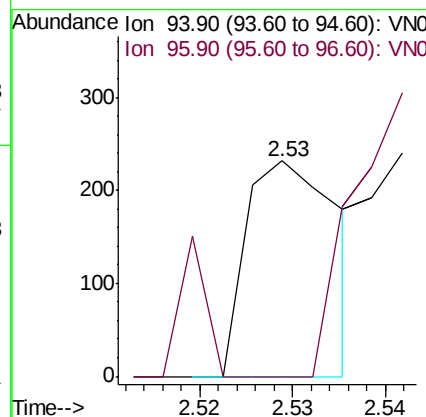
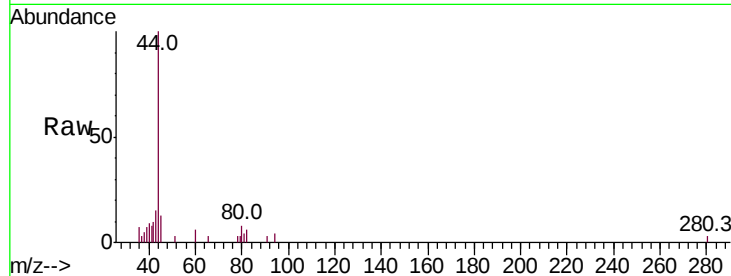
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 94 Resp: 158

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



#11

Tert butyl alcohol

Concen: 0.233 ug/l

RT: 4.76 min Scan# 930

Delta R.T. -0.00 min

Lab File: VN057822.D

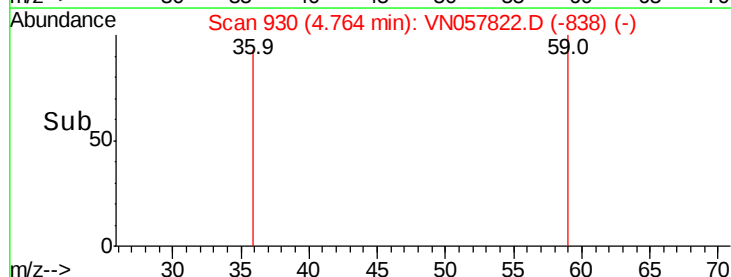
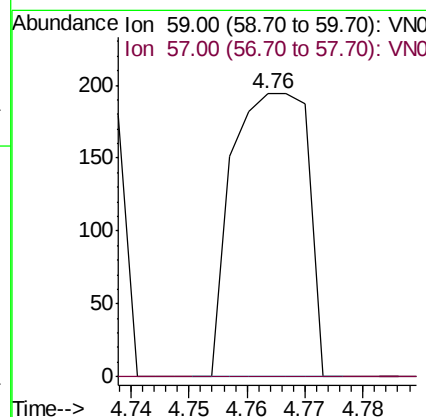
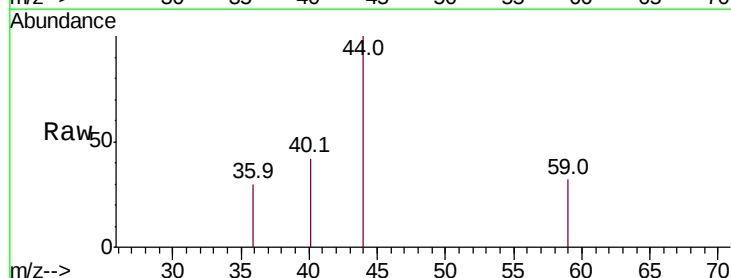
Acq: 9 Sep 2019 23:31

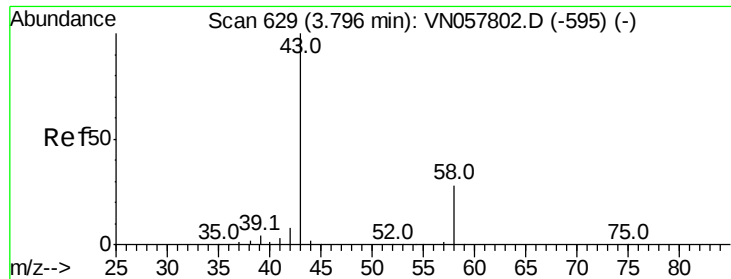
Tgt Ion: 59 Resp: 175

Ion Ratio Lower Upper

59 100

57 0.0 8.4 12.6#





#16

Acetone

Concen: 3.932 ug/l

RT: 3.81 min Scan# 635

Delta R.T. 0.02 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

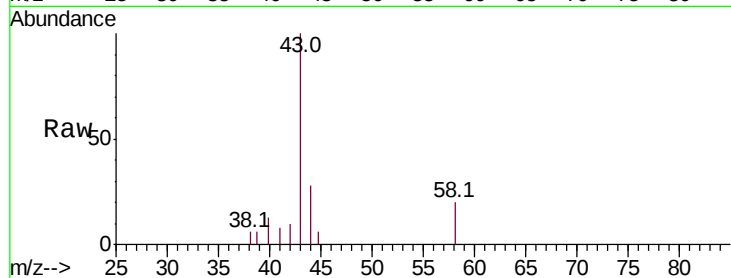
ClientSampled :

Tot Ion: 43 Resp: 8008

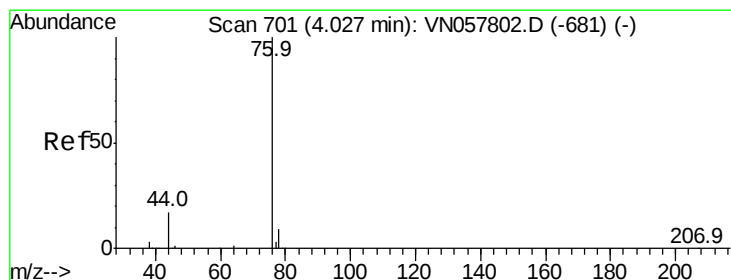
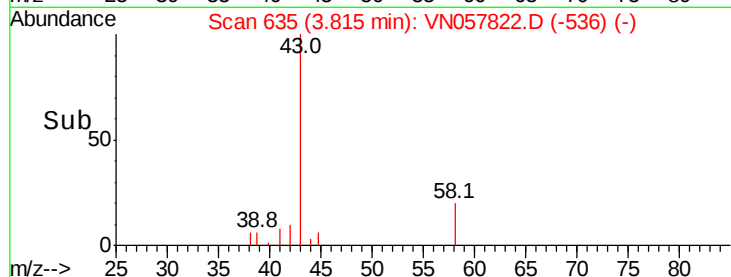
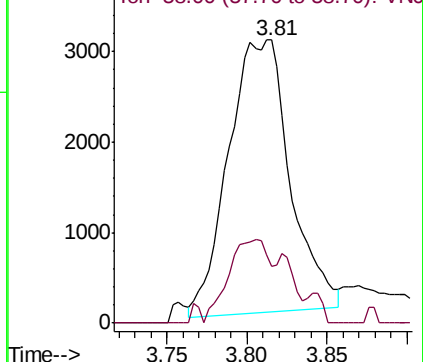
Ion Ratio Lower Upper

43 100

58 21.5 22.2 33.2#



Abundance Ion 43.00 (42.70 to 43.70): VNO
Ion 58.00 (57.70 to 58.70): VNO



#17

Carbon Disulfide

Concen: 0.231 ug/l

RT: 4.03 min Scan# 702

Delta R.T. 0.00 min

Lab File: VN057822.D

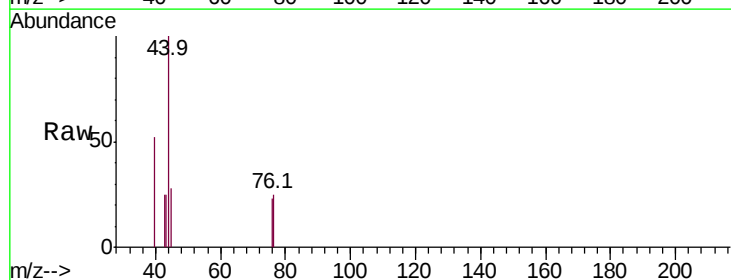
Acq: 9 Sep 2019 23:31

Tgt Ion: 76 Resp: 367

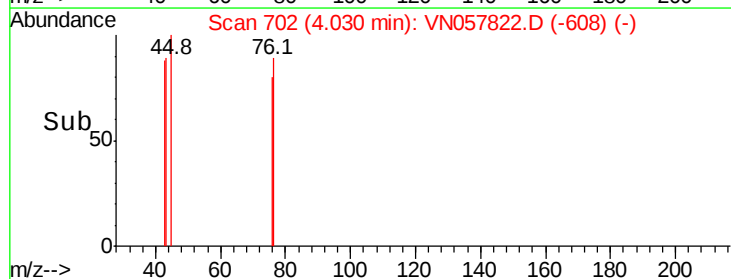
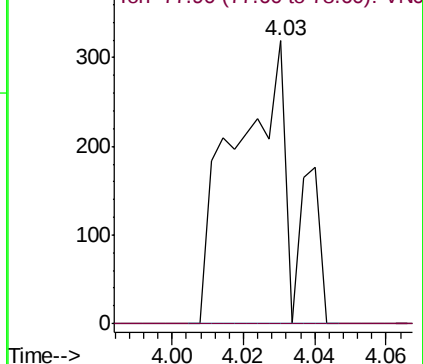
Ion Ratio Lower Upper

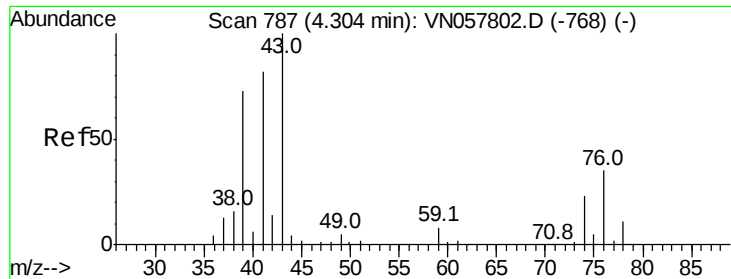
76 100

78 0.0 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VNO
Ion 77.90 (77.60 to 78.60): VNO

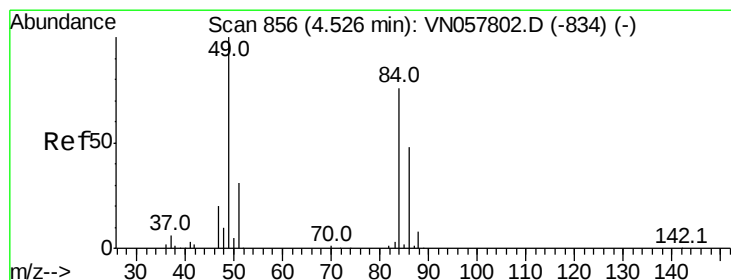
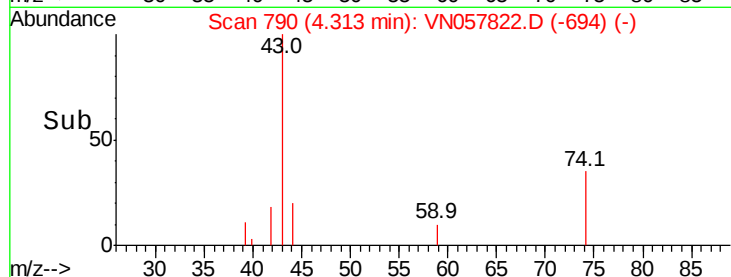
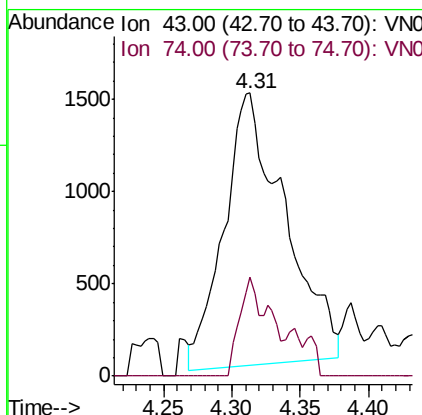
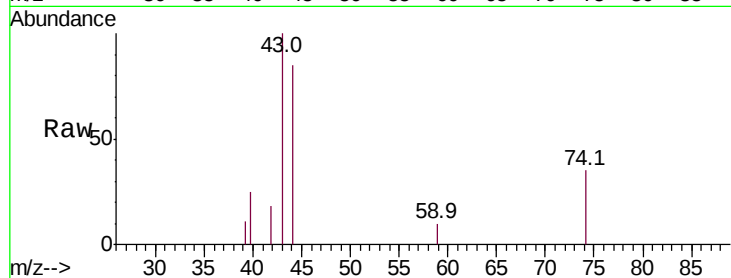




#18
Methvl Acetate
Concen: 0.841 ug/l
RT: 4.31 min Scan# 790
Delta R.T. 0.01 min
Lab File: VN057822.D
Acq: 9 Sep 2019 23:31

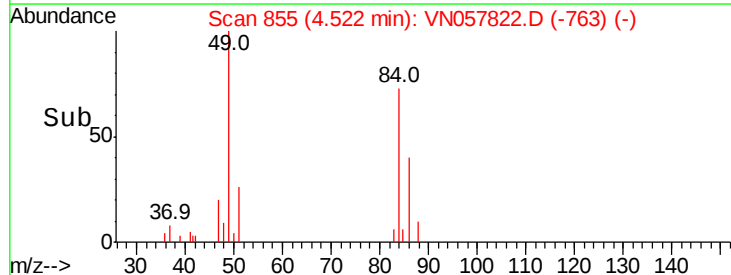
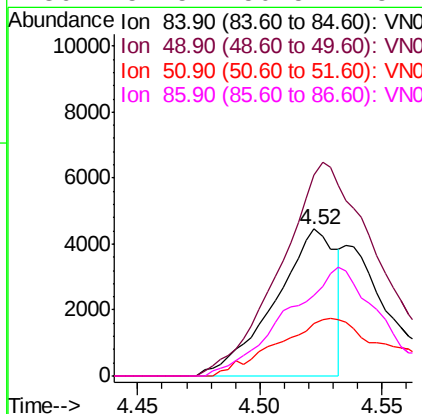
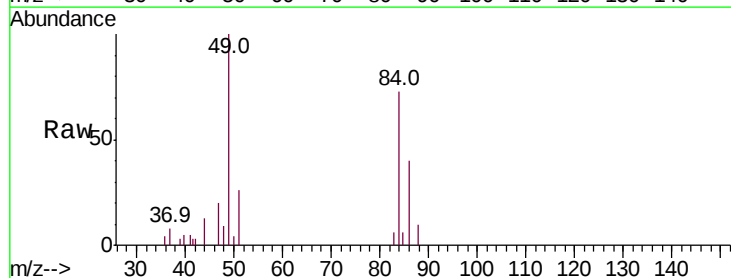
Instrument :
MSVOA_N
ClientSampleId :

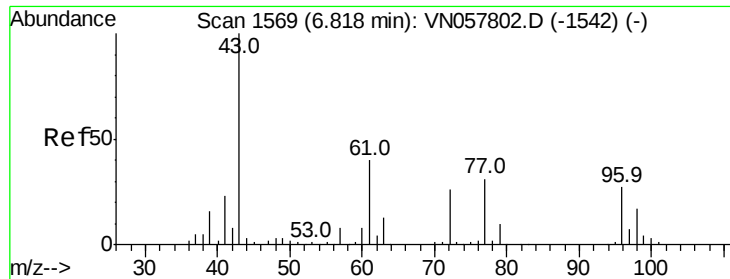
Tot Ion: 43 Resp: 4564
Ion Ratio Lower Upper
43 100
74 12.2 17.9 26.9#



#20
Methylene Chloride
Concen: 0.777 ug/l
RT: 4.52 min Scan# 855
Delta R.T. -0.00 min
Lab File: VN057822.D
Acq: 9 Sep 2019 23:31

Tgt Ion: 84 Resp: 7711
Ion Ratio Lower Upper
84 100
49 136.5 104.8 157.2
51 35.5 33.0 49.4
86 54.5 50.5 75.7





#25

2-Butanone

Concen: 0.618 ug/l

RT: 6.83 min Scan# 1573

Delta R.T. 0.01 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

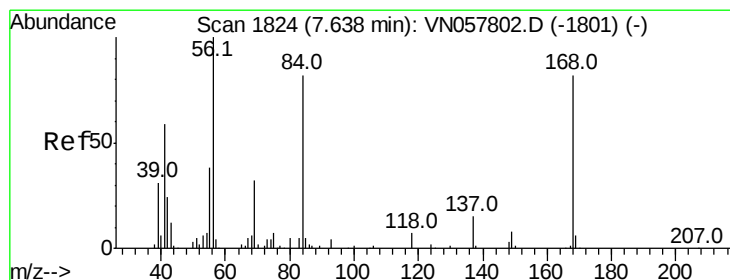
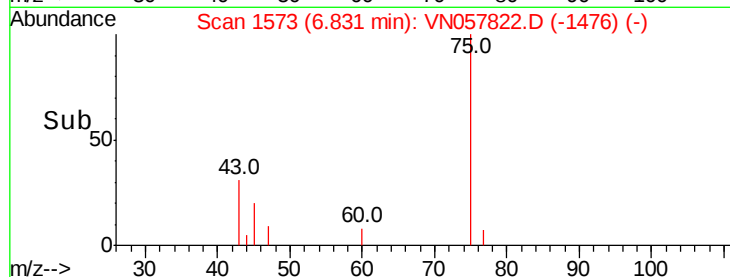
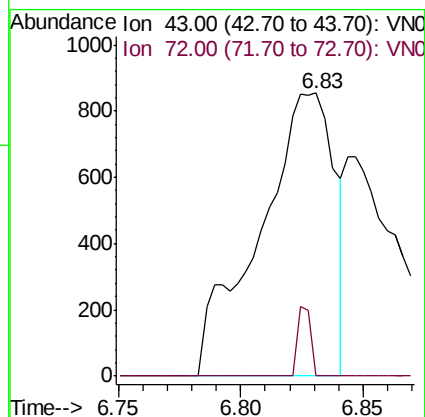
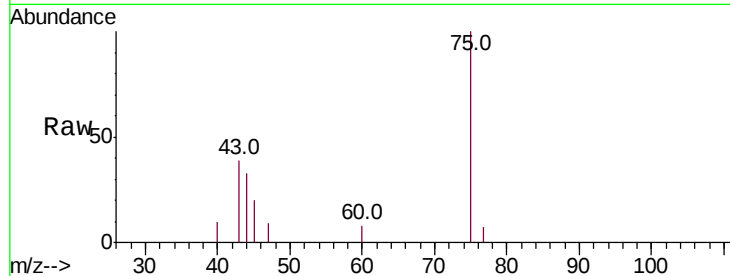
ClientSampled :

Tot Ion: 43 Resp: 1822

Ion Ratio Lower Upper

43 100

72 0.0 20.6 30.8#



#31

Cyclohexane

Concen: Below Cal

RT: 7.66 min Scan# 1830

Delta R.T. 0.02 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

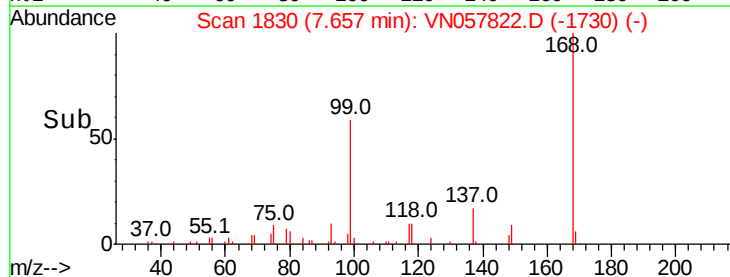
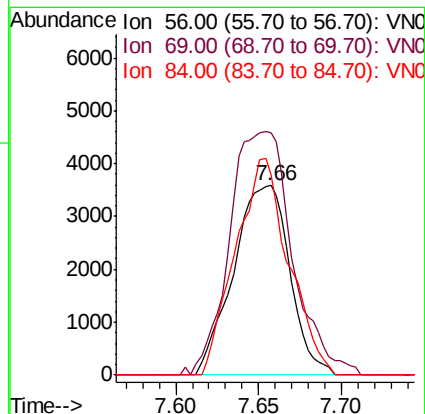
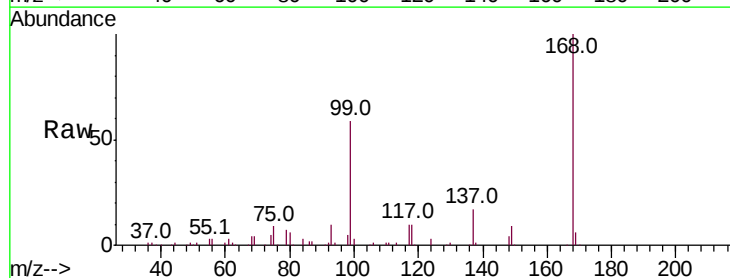
Tgt Ion: 56 Resp: 8494

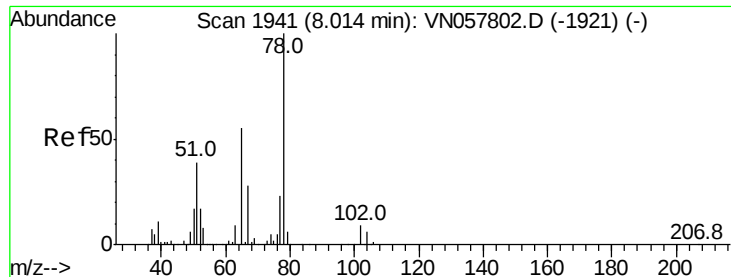
Ion Ratio Lower Upper

56 100

69 128.2 25.9 38.9#

84 105.8 65.6 98.4#

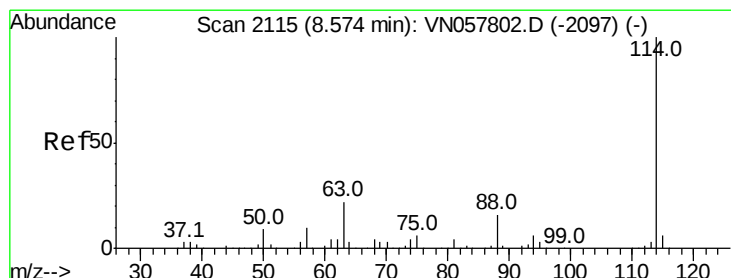
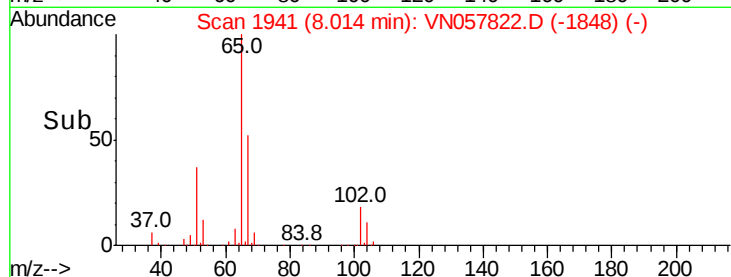
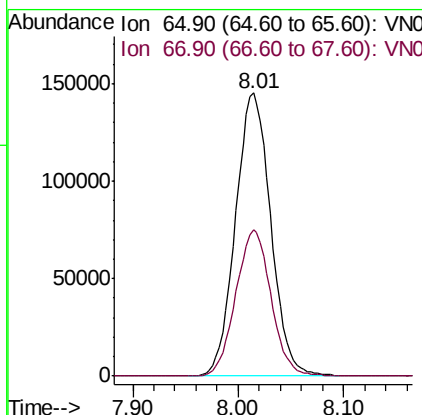
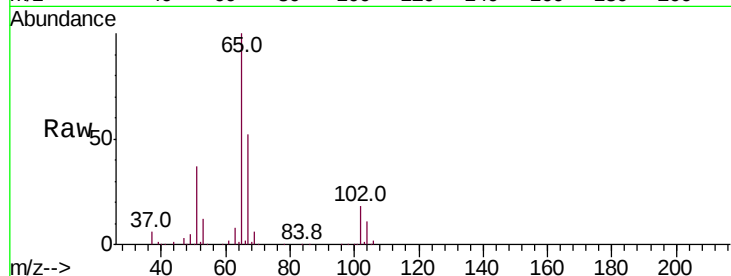




#33
 1,2-Dichloroethane-d4
 Concen: 54.307 ug/l
 RT: 8.01 min Scan# 1941
 Delta R.T. 0.00 min
 Lab File: VN057822.D
 Acq: 9 Sep 2019 23:31

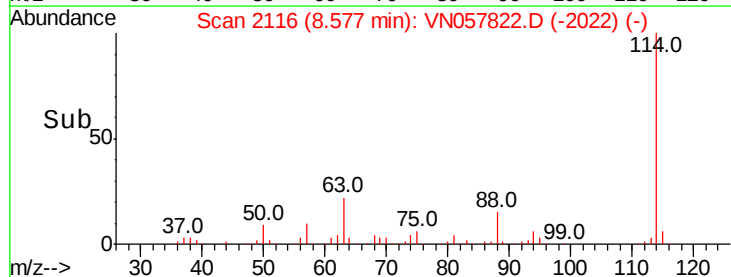
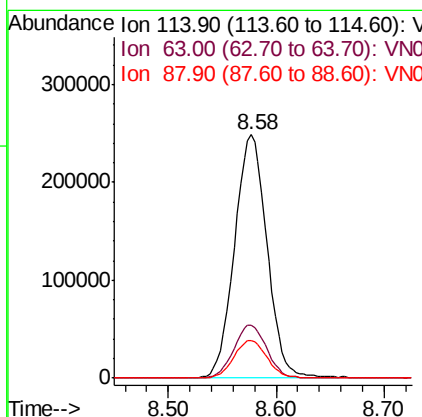
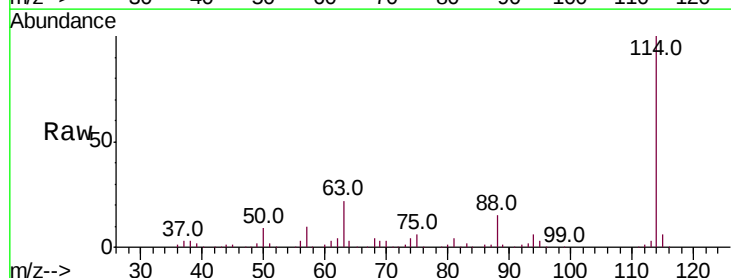
Instrument :
 MSVOA_N
 ClientSampleId :

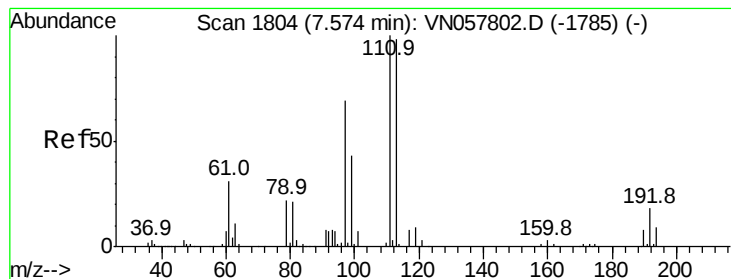
Tot Ion: 65 Resp: 337380
 Ion Ratio Lower Upper
 65 100
 67 51.7 0.0 104.0



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.58 min Scan# 2116
 Delta R.T. 0.00 min
 Lab File: VN057822.D
 Acq: 9 Sep 2019 23:31

Tgt Ion: 114 Resp: 523378
 Ion Ratio Lower Upper
 114 100
 63 21.6 0.0 44.0
 88 15.4 0.0 31.4





#35

Dibromofluoromethane

Concen: 48.011 ug/l

RT: 7.58 min Scan# 1805

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :
MSVOA_N
ClientSampleId :

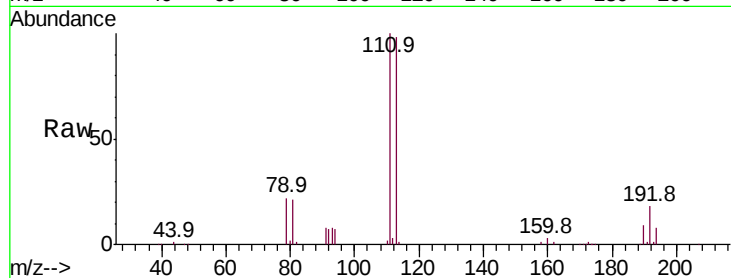
Tot Ion:113 Resp: 231922

Ion Ratio Lower Upper

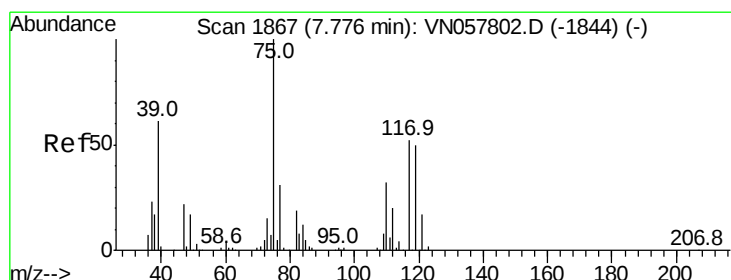
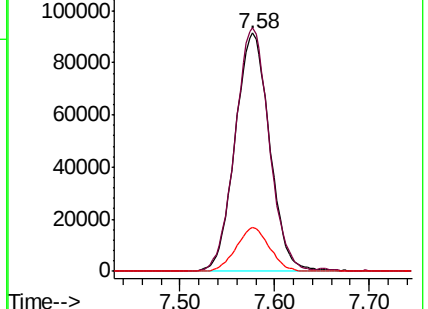
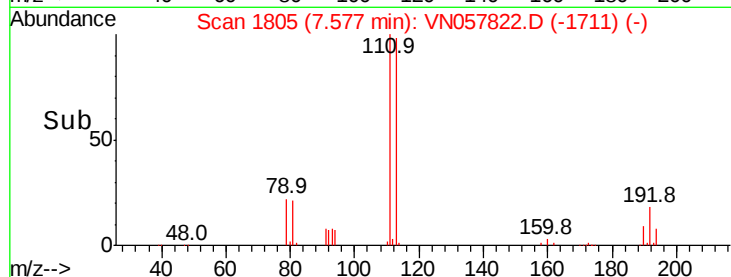
113 100

111 100.8 81.3 121.9

192 17.7 14.6 22.0



Abundance Ion 112.80 (112.50 to 113.50): V
Ion 110.80 (110.50 to 111.50): V
Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.443 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.13 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

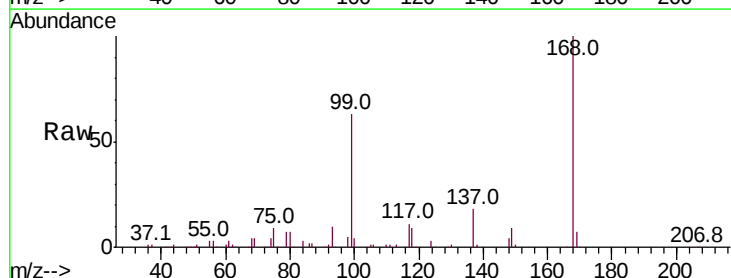
Tgt Ion: 75 Resp: 26971

Ion Ratio Lower Upper

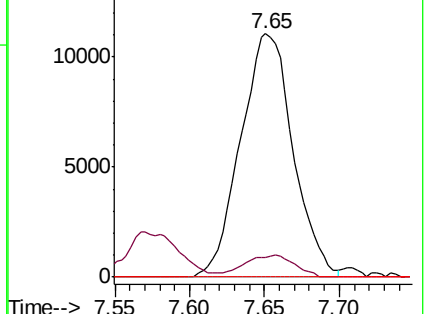
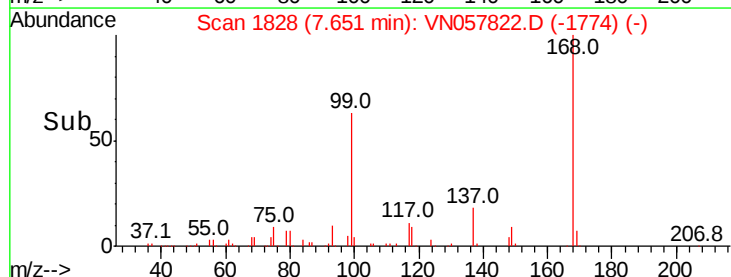
75 100

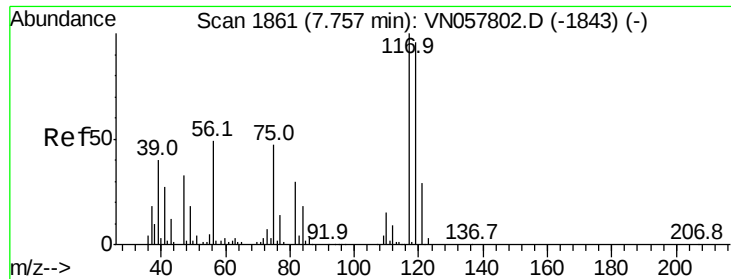
110 8.4 16.3 48.9#

77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): V
Ion 109.90 (109.60 to 110.60): V
Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 5.860 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.11 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

ClientSampleId :

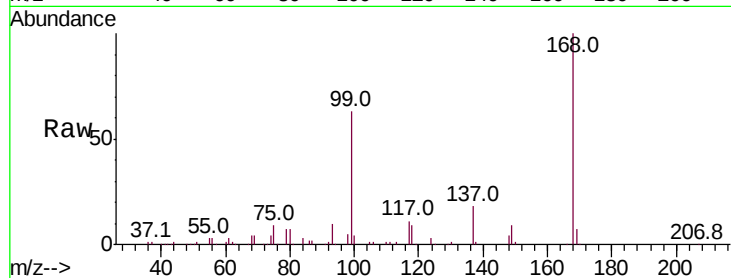
Tot Ion:117 Resp: 32477

Ion Ratio Lower Upper

117 100

119 4.6 76.9 115.3#

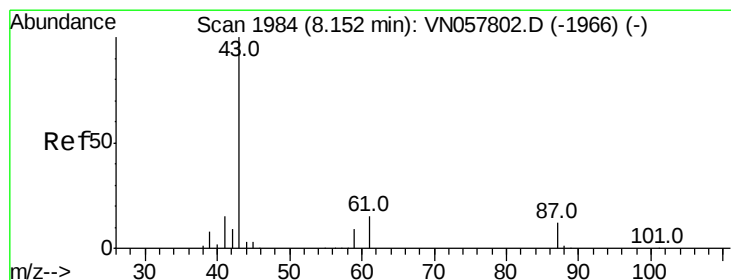
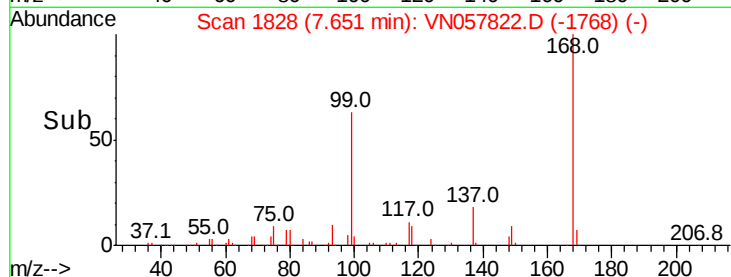
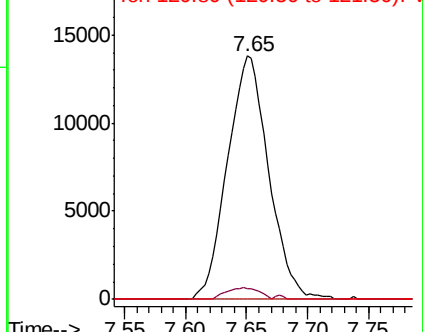
121 0.0 23.4 35.2#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 7.848 ug/l

RT: 8.16 min Scan# 1985

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

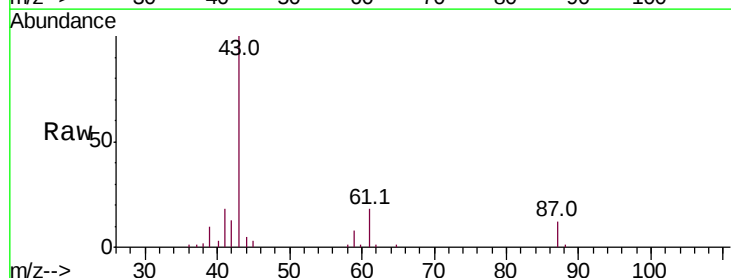
Tgt Ion: 43 Resp: 82768

Ion Ratio Lower Upper

43 100

61 18.4 20.1 30.1#

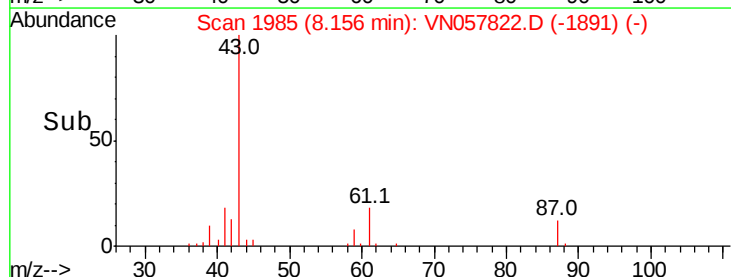
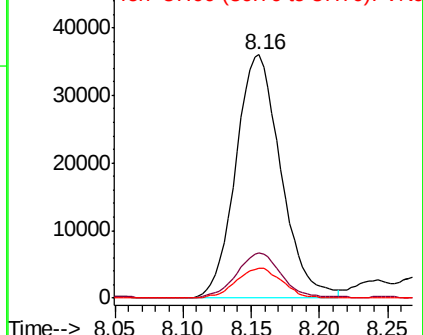
87 12.4 9.5 14.3

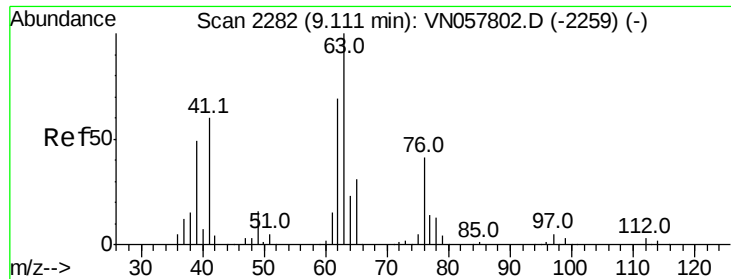


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V

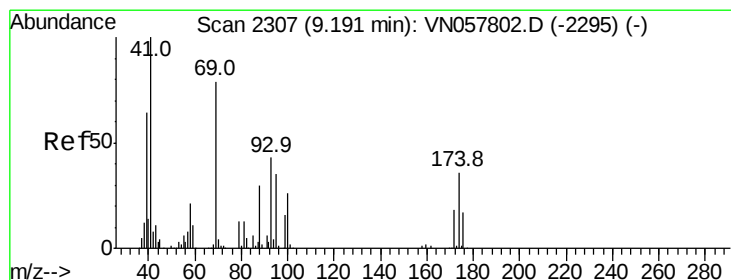
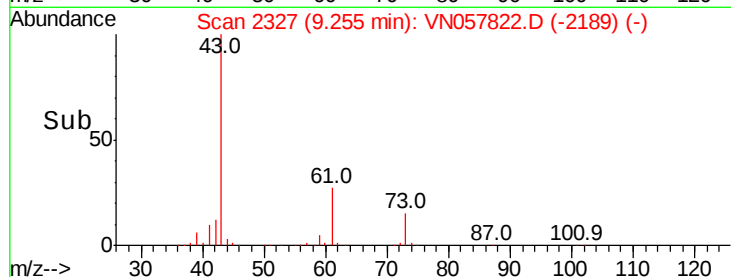
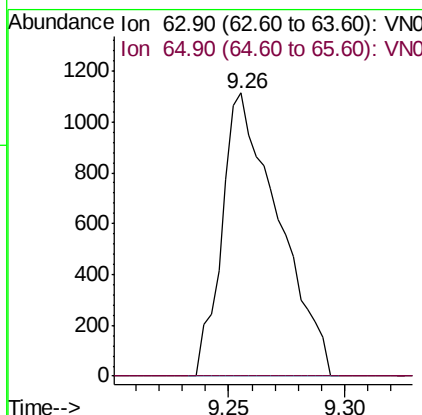
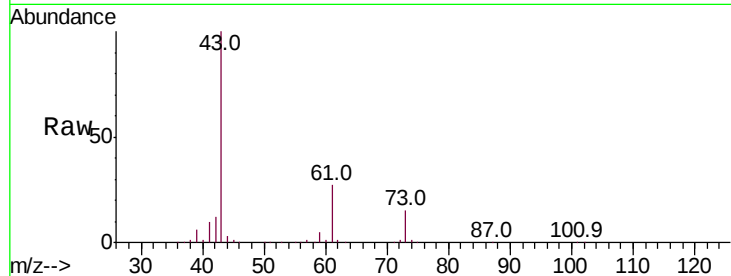




#45
 1,2-Dichloropropane
 Concen: 0.355 ug/l
 RT: 9.26 min Scan# 2327
 Delta R.T. 0.14 min
 Lab File: VN057822.D
 Acq: 9 Sep 2019 23:31

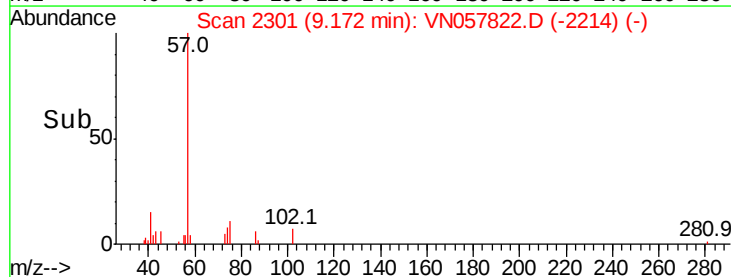
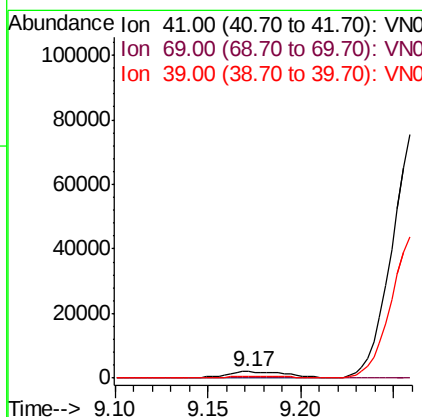
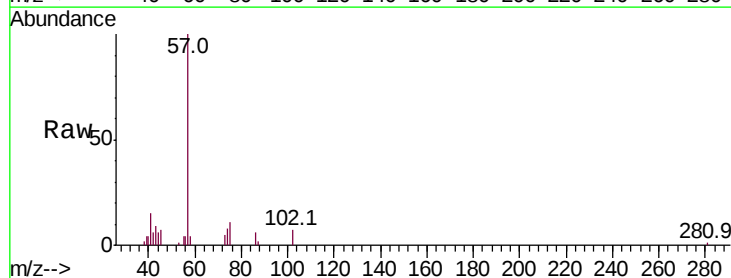
Instrument :
 MSVOA_N
 ClientSampleId :

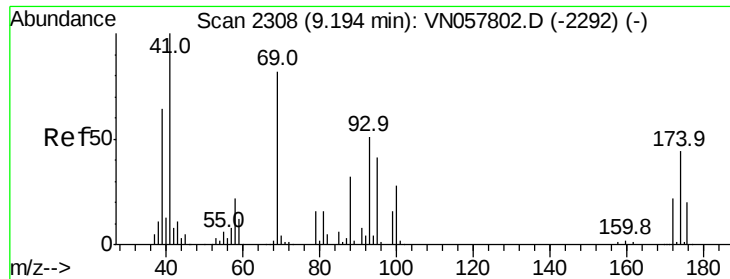
Tot Ion: 63 Resp: 1886
 Ion Ratio Lower Upper
 63 100
 65 0.0 24.8 37.2#



#48
 Methyl methacrylate
 Concen: 0.887 ug/l
 RT: 9.17 min Scan# 2301
 Delta R.T. -0.02 min
 Lab File: VN057822.D
 Acq: 9 Sep 2019 23:31

Tgt Ion: 41 Resp: 4745
 Ion Ratio Lower Upper
 41 100
 69 0.0 62.7 94.1#
 39 0.0 52.7 79.1#

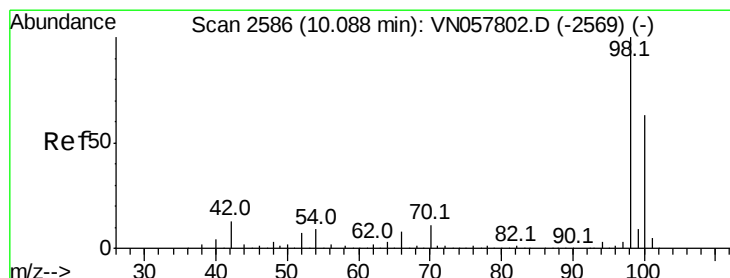
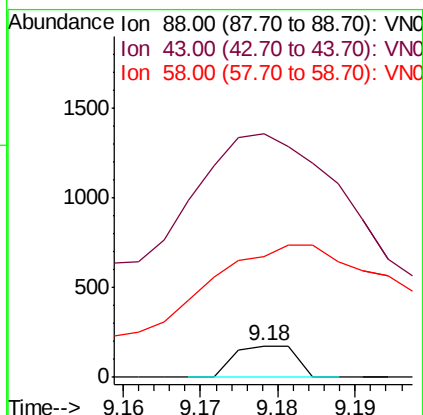
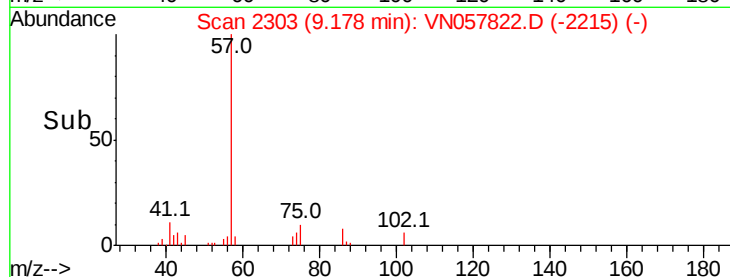
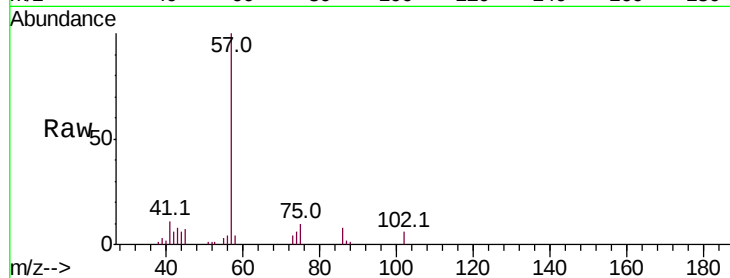




#49
1,4-Dioxane
Concen: 1.072 ug/l
RT: 9.18 min Scan# 2303
Delta R.T. -0.02 min
Lab File: VN057822.D
Acq: 9 Sep 2019 23:31

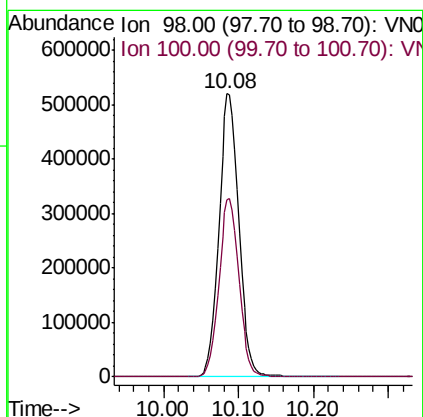
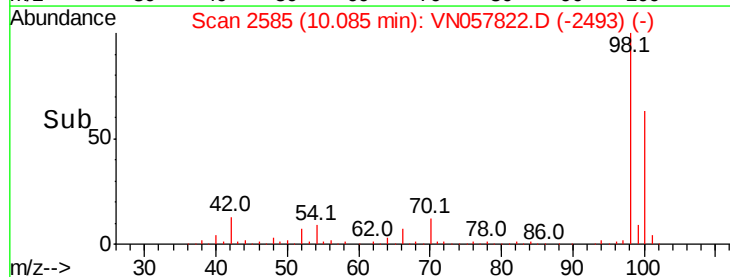
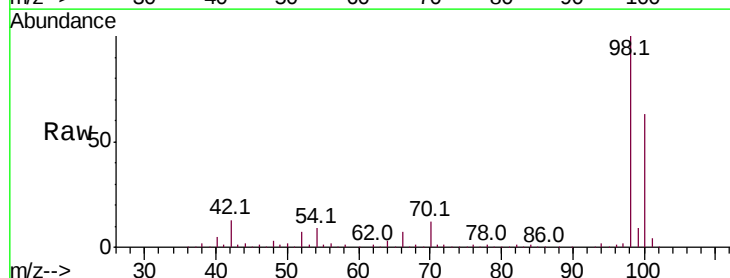
Instrument :
MSVOA_N
ClientSampled :

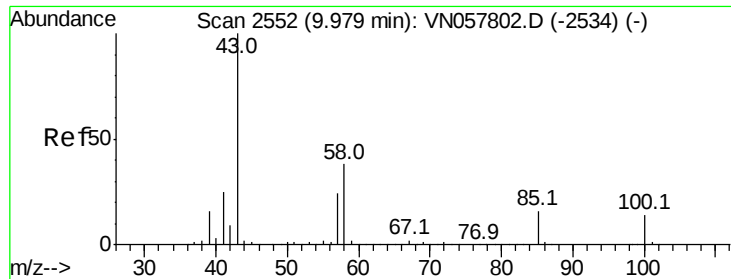
Tot Ion: 88 Resp: 97
Ion Ratio Lower Upper
88 100
43 0.0 28.5 42.7#
58 1634.0 55.8 83.6#



#50
Toluene-d8
Concen: 51.044 ug/l
RT: 10.08 min Scan# 2585
Delta R.T. -0.00 min
Lab File: VN057822.D
Acq: 9 Sep 2019 23:31

Tgt Ion: 98 Resp: 957321
Ion Ratio Lower Upper
98 100
100 63.3 50.3 75.5





#51

4-Methyl-2-Pentanone

Concen: 0.571 ug/l

RT: 9.98 min Scan# 2553

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

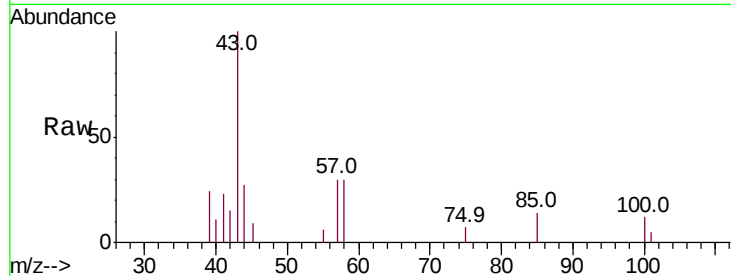
ClientSampleId :

Tot Ion: 43 Resp: 3562

Ion Ratio Lower Upper

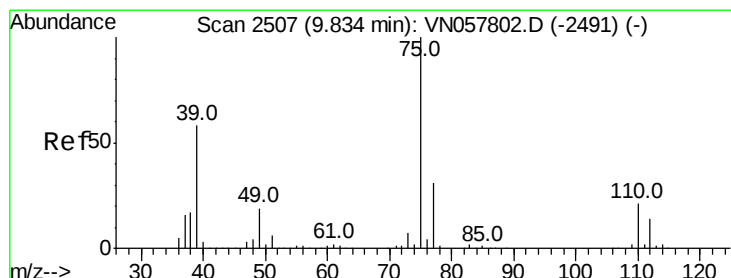
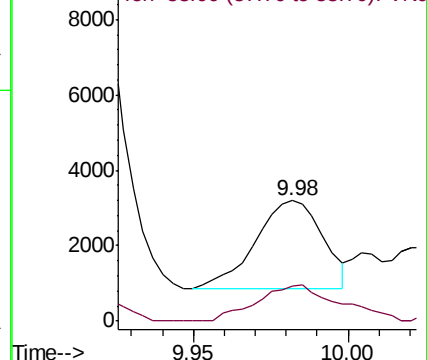
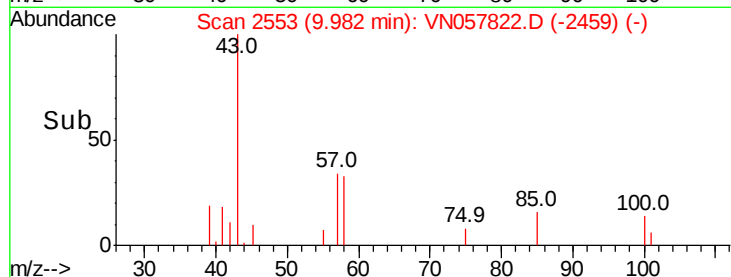
43 100

58 49.9 29.8 44.6#



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

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



#54

cis-1,3-Dichloropropene

Concen: 4.818 ug/l

RT: 9.90 min Scan# 2528

Delta R.T. 0.07 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

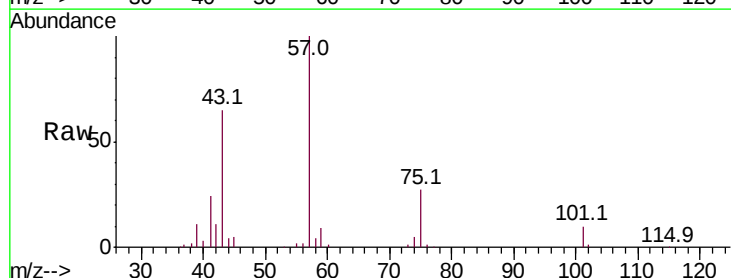
Tgt Ion: 75 Resp: 35944

Ion Ratio Lower Upper

75 100

77 1.0 24.8 37.2#

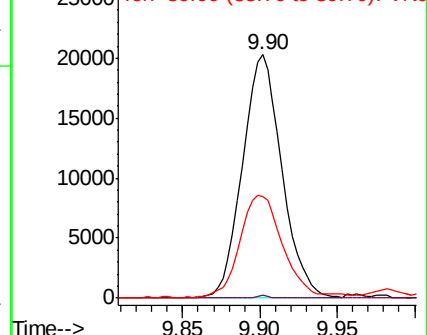
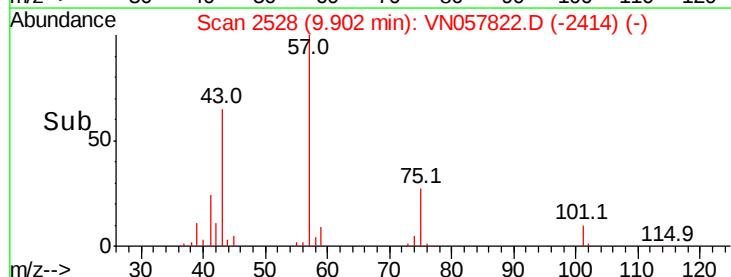
39 41.8 46.2 69.4#

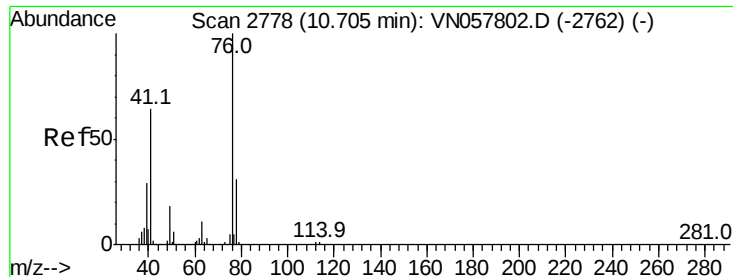


Abundance Ion 74.90 (74.60 to 75.60): VN057802.D (-2491) (-)

Ion 76.90 (76.60 to 77.60): VN057802.D (-2491) (-)

Ion 39.00 (38.70 to 39.70): VN057802.D (-2491) (-)

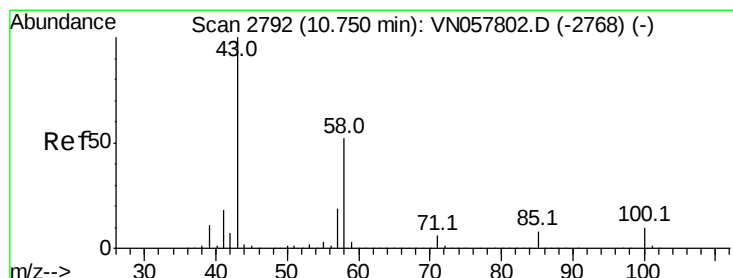
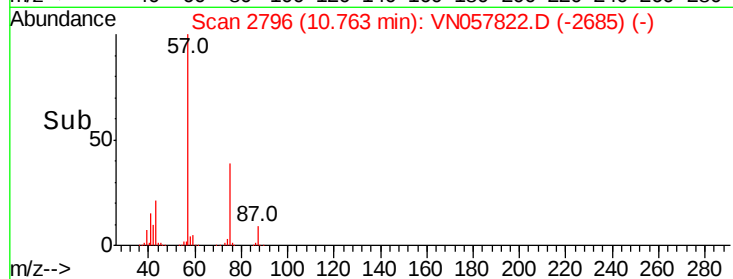
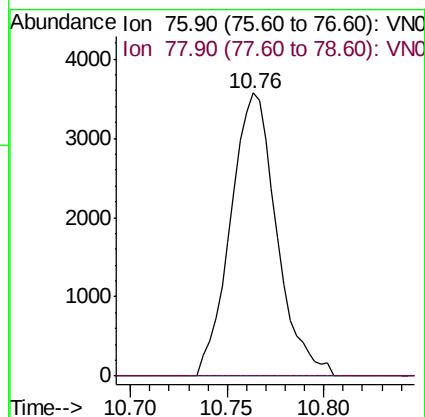
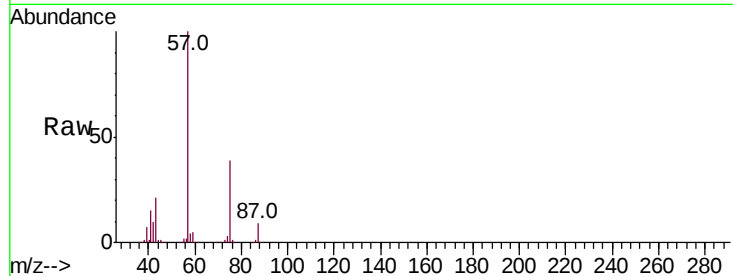




#57
 1,3-Dichloropropane
 Concen: 0.704 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.06 min
 Lab File: VN057822.D
 Acq: 9 Sep 2019 23:31

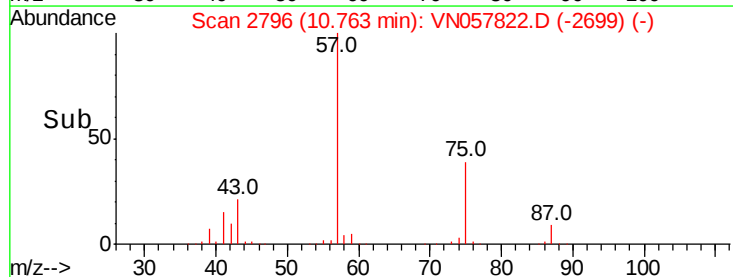
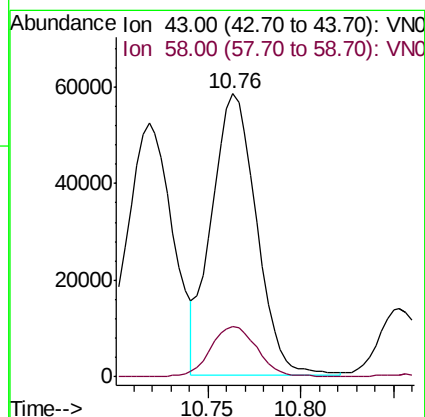
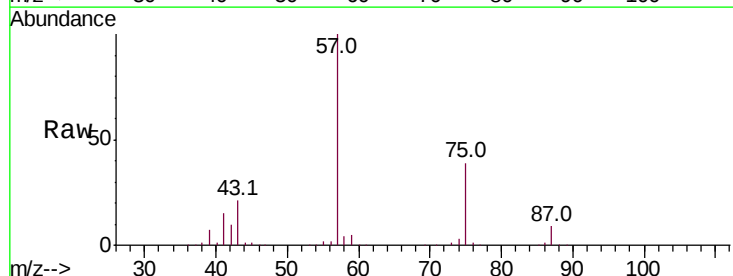
Instrument :
 MSVOA_N
 ClientSampleId :

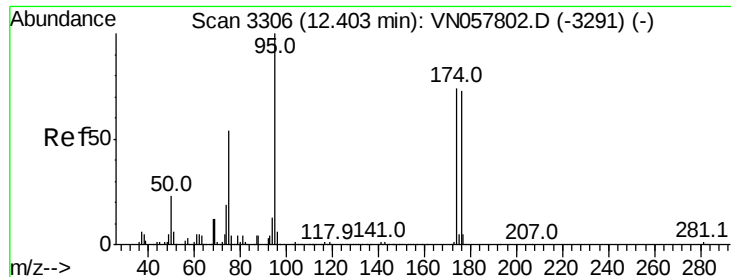
Tot Ion: 76 Resp: 5915
 Ion Ratio Lower Upper
 76 100
 78 0.0 25.4 38.2#



#59
 2-Hexanone
 Concen: 20.901 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.01 min
 Lab File: VN057822.D
 Acq: 9 Sep 2019 23:31

Tgt Ion: 43 Resp: 97771
 Ion Ratio Lower Upper
 43 100
 58 18.9 25.6 76.8#





#62

4-Bromofluorobenzene

Concen: 43.079 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

ClientSampled :

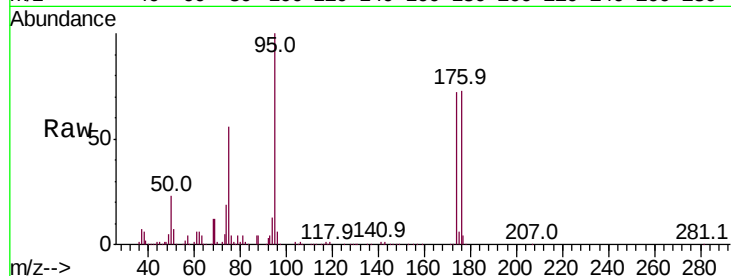
Tot Ion: 95 Resp: 307895

Ion Ratio Lower Upper

95 100

174 74.7 0.0 150.2

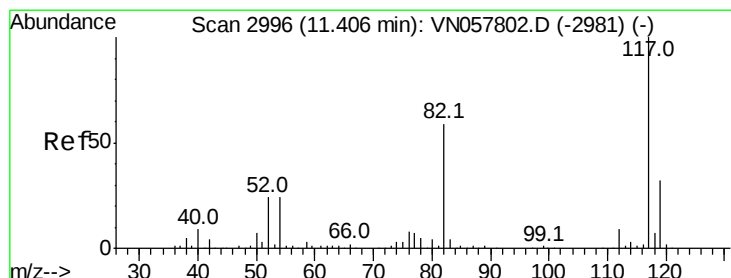
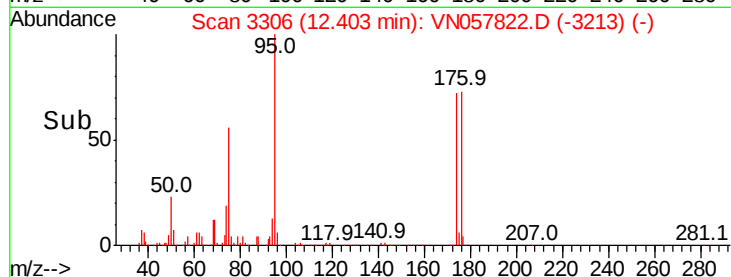
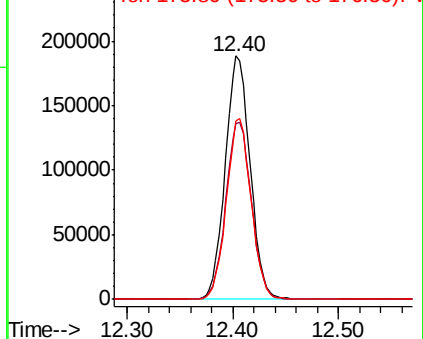
176 73.5 0.0 146.0



Abundance Ion 94.90 (94.60 to 95.60): VN057822.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN057822.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN057822.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

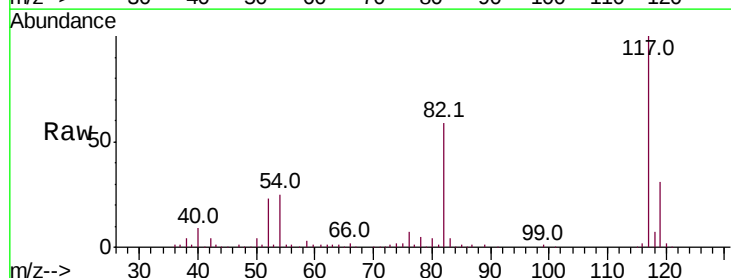
Tgt Ion: 117 Resp: 484791

Ion Ratio Lower Upper

117 100

82 58.6 47.2 70.8

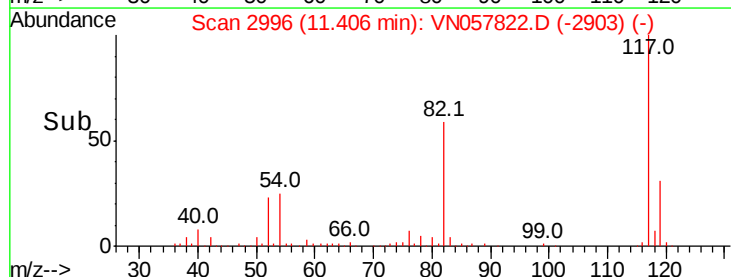
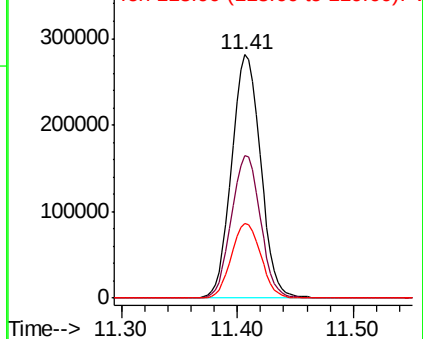
119 30.8 25.3 37.9

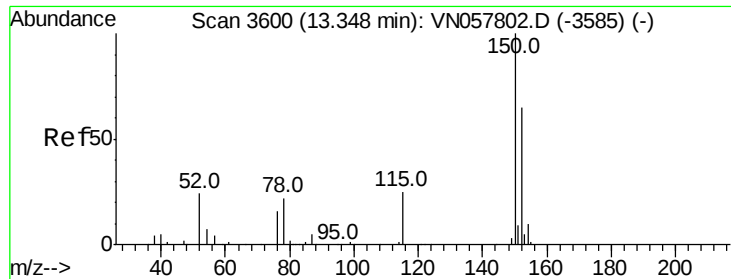


Abundance Ion 116.90 (116.60 to 117.60): VN057822.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN057822.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN057822.D (-2981) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3600

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

ClientSampleId :

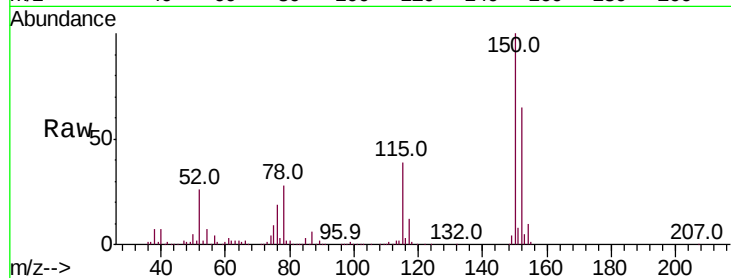
Tot Ion:152 Resp: 248406

Ion Ratio Lower Upper

152 100

115 60.6 30.3 91.0

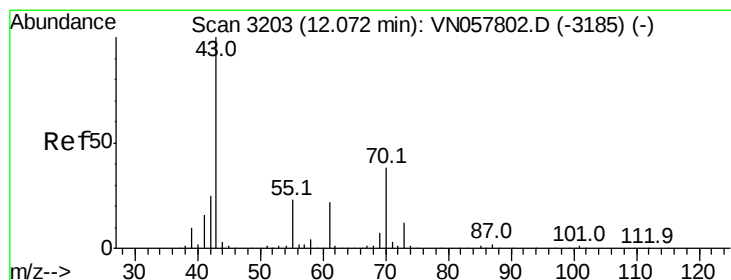
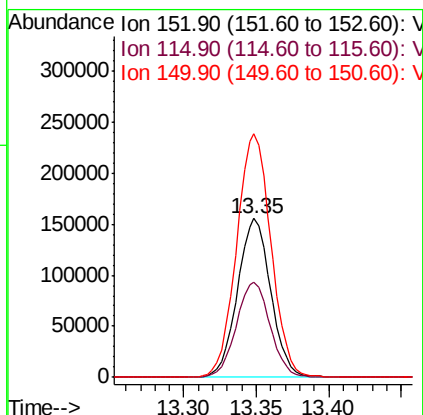
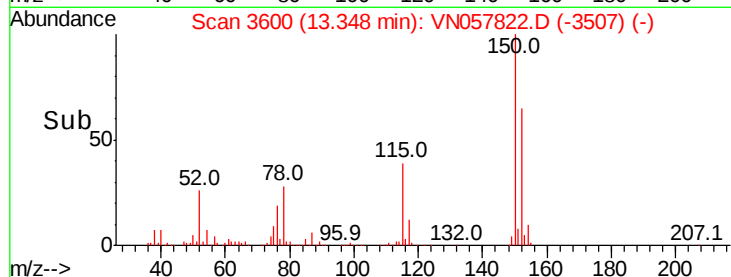
150 158.2 0.0 352.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 0.251 ug/l

RT: 12.03 min Scan# 3191

Delta R.T. -0.04 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Tgt Ion: 43 Resp: 2108

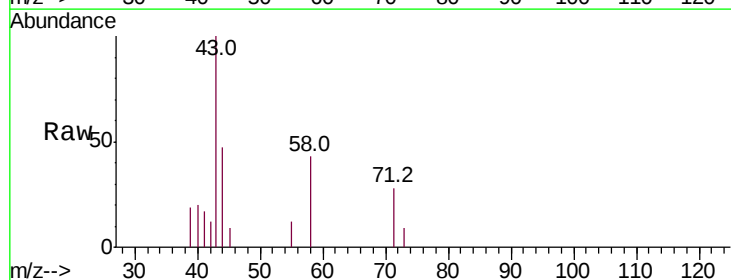
Ion Ratio Lower Upper

43 100

70 0.0 30.6 45.8#

55 14.2 18.6 27.8#

61 0.0 17.4 26.2#

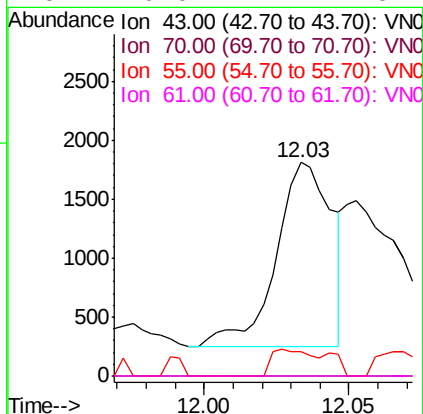
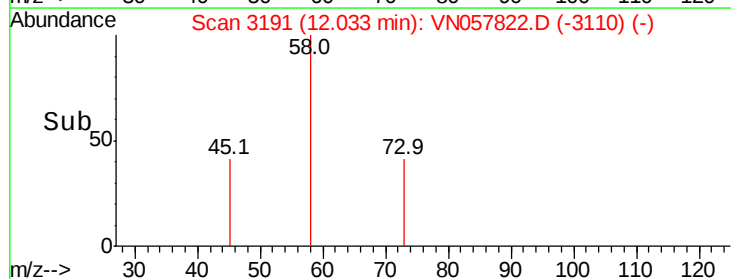


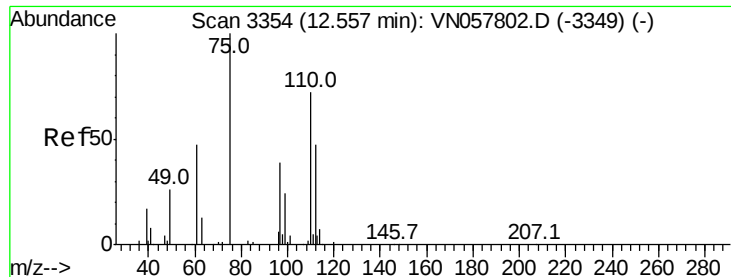
Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 70.00 (69.70 to 70.70): VNO

Ion 55.00 (54.70 to 55.70): VNO

Ion 61.00 (60.70 to 61.70): VNO





#76

1,2,3-Trichloropropane

Concen: 30.757 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

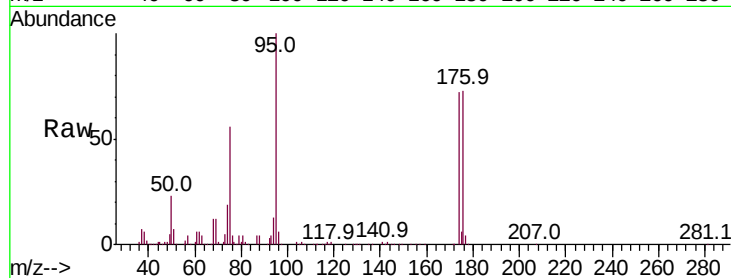
ClientSampleId :

Tot Ion: 75 Resp: 172833

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

120000

100000

80000

60000

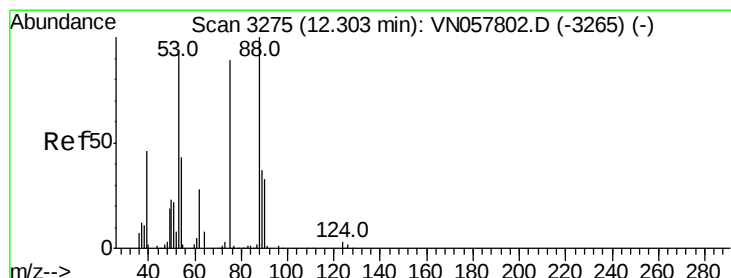
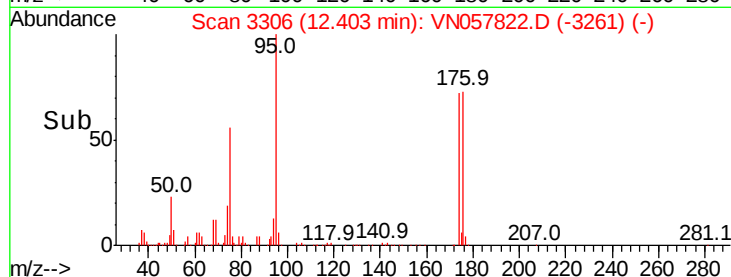
40000

20000

0

12.35 12.40 12.45 12.50

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 108.233 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

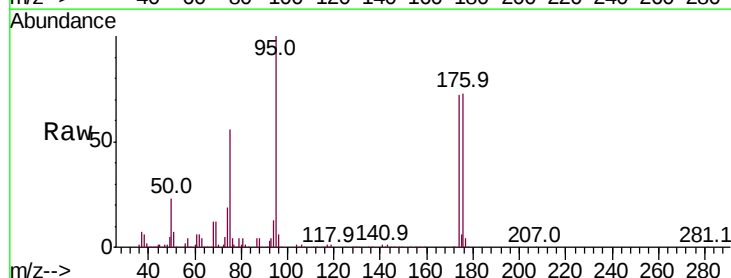
Tgt Ion: 75 Resp: 172833

Ion Ratio Lower Upper

75 100

53 0.0 88.4 132.6#

89 0.0 35.3 52.9#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

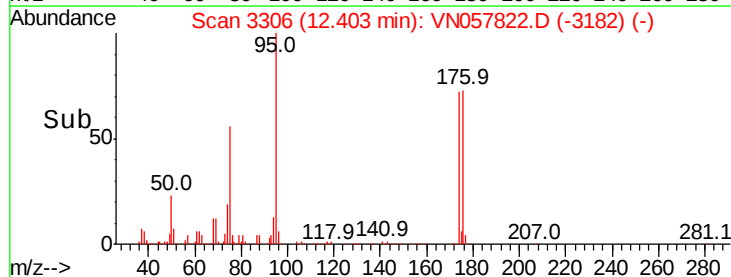
100000

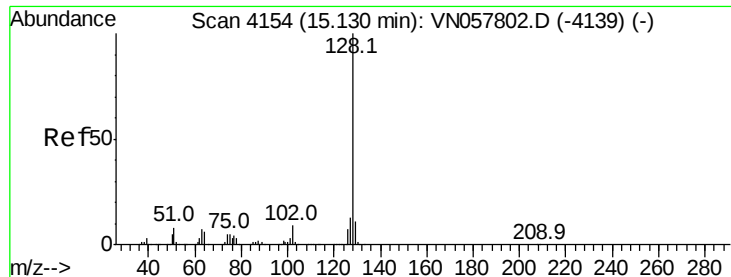
50000

0

12.35 12.40 12.45 12.50

Time-->





#95

Naphthalene

Concen: Below Cal

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

Instrument :

MSVOA_N

ClientSampled :

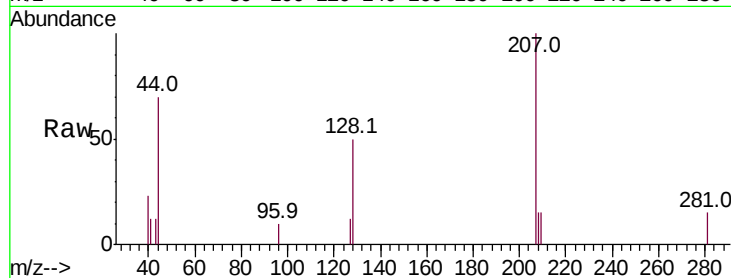
Tot Ion:128 Resp: 889

Ion Ratio Lower Upper

128 100

127 14.7 10.3 15.5

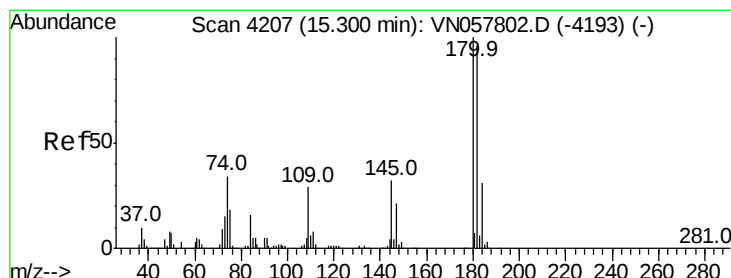
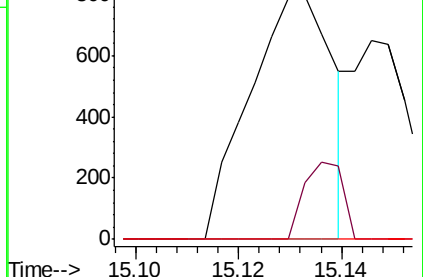
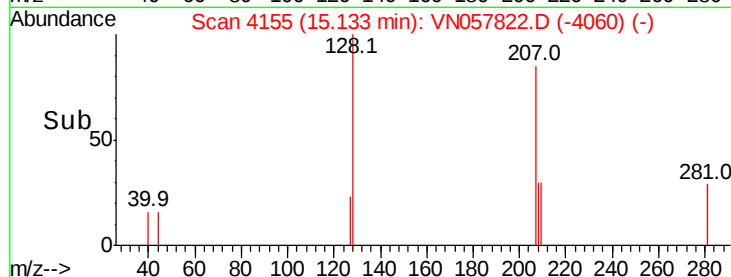
129 0.0 8.6 12.8#



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



#96

1,2,3-Trichlorobenzene

Concen: 1.067 ug/l

RT: 15.30 min Scan# 4206

Delta R.T. -0.00 min

Lab File: VN057822.D

Acq: 9 Sep 2019 23:31

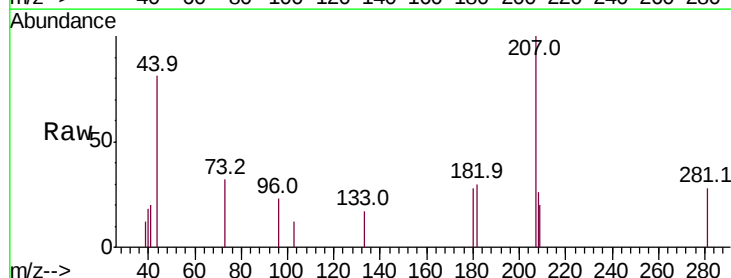
Tgt Ion:180 Resp: 353

Ion Ratio Lower Upper

180 100

182 141.1 48.3 144.8

145 0.0 16.3 48.8#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

