

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN050624\
 Data File : VN082007.D
 Acq On : 06 May 2024 14:10
 Operator : JC\MD
 Sample : P2382-02
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: May 07 00:28:24 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N042624W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Sat Apr 27 04:37:27 2024
 Response via : Initial Calibration

Compound	R.T. QIon		Response	Conc	Units	Dev(Min)

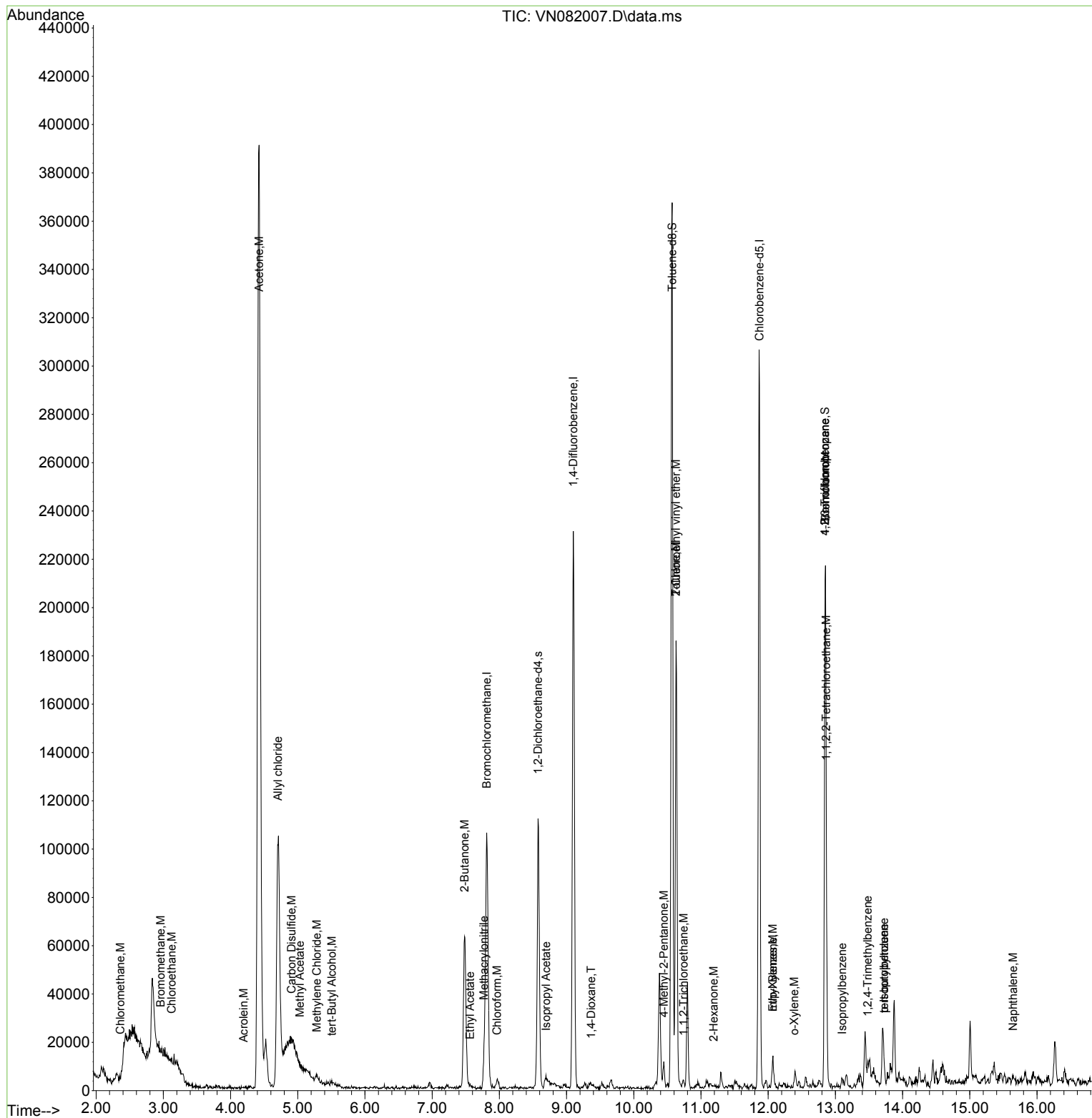
Internal Standards						
1) Bromochloromethane	7.812	128	32305	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.100	114	194201	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.871	117	170012	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.577	65	83820	30.990	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	103.300%
60) 4-Bromofluorobenzene	12.847	95	78171	27.628	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	92.100%
63) Toluene-d8	10.571	98	244812	30.321	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	101.067%
Target Compounds						Qvalue
3) Chloromethane	2.359	50	556	0.261	ug/l #	81
5) Bromomethane	2.959	94	211	0.201	ug/l #	4
6) Chloroethane	3.124	64	1082	0.951	ug/l	89
12) Methyl Acetate	5.030	43	533	0.216	ug/l #	1
13) Acrolein	4.195	56	318	0.606	ug/l #	82
15) Acetone	4.424	58	238273	943.708	ug/l	90
16) Carbon Disulfide	4.906	76	2361	0.432	ug/l	97
17) Allyl chloride	4.706	41	12263	3.543	ug/l	91
18) Methylene Chloride	5.283	84	789	0.352	ug/l #	39
23) tert-Butyl Alcohol	5.506	59	537	1.157	ug/l #	100
25) Chloroform	7.965	83	3216	0.824	ug/l #	69
30) 2-Butanone	7.483	43	101265	67.948	ug/l	95
35) Methacrylonitrile	7.771	41	1507	0.799	ug/l #	46
43) Ethyl Acetate	7.565	43	1055	0.325	ug/l #	89
44) Isopropyl Acetate	8.694	43	2027	0.351	ug/l #	43
45) 1,4-Dioxane	9.365	88	544	11.759	ug/l #	21
50) 1,1,2-Trichloroethane	10.741	97	2112	1.024	ug/l #	16
55) 2-Chloroethyl vinyl ether	10.629	63	8647	4.442	ug/l #	1
56) Bromoform	12.853	173	370	0.271	ug/l #	1
58) 4-Methyl-2-Pentanone	10.447	43	7265	2.201	ug/l #	77
59) 2-Hexanone	11.188	43	551	0.225	ug/l #	38
62) Toluene	10.629	91	135594	14.175	ug/l	97
66) Ethyl Benzene	12.070	91	6881	0.656	ug/l	97
67) m/p-Xylenes	12.070	106	3091	0.795	ug/l	91
68) o-Xylene	12.388	106	1393	0.362	ug/l	68
70) Isopropylbenzene	13.100	105	2813	0.288	ug/l	89
71) 1,1,2,2-Tetrachloroethane	12.865	83	1153	0.410	ug/l #	41
72) 1,2,3-Trichloropropane	12.847	75	42968	16.349	ug/l	1
79) tert-butylbenzene	13.723	119	3341	0.491	ug/l	54
80) 1,2,4-Trimethylbenzene	13.482	105	5184	0.653	ug/l	64
82) p-Isopropyltoluene	13.723	119	3341	0.443	ug/l	93
91) Naphthalene	15.647	128	2080	0.265	ug/l #	77

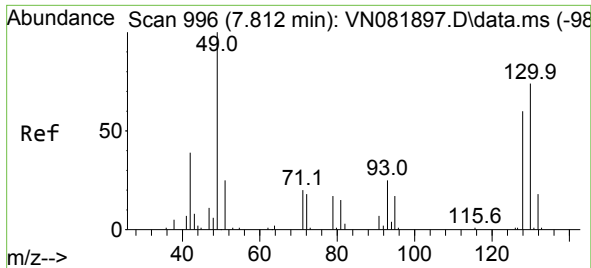
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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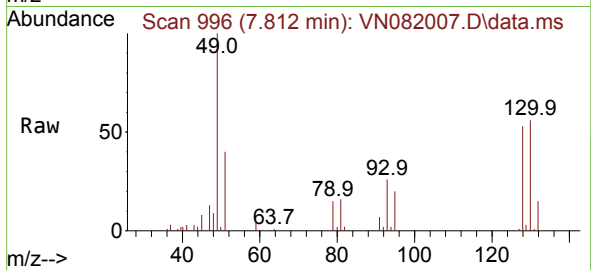
Quant Time: May 07 00:28:24 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N042624W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Sat Apr 27 04:37:27 2024
Response via : Initial Calibration



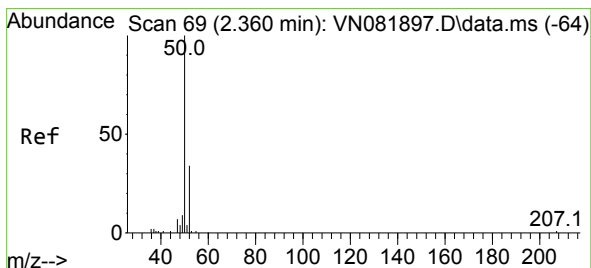
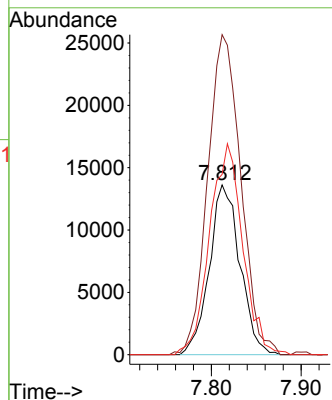
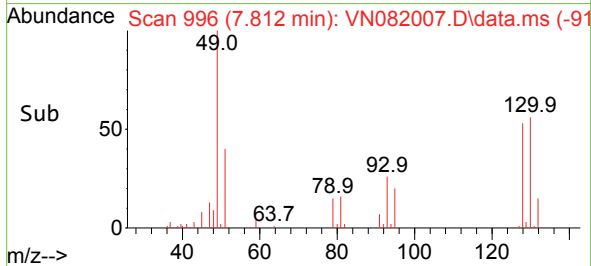


#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.812 min Scan# 996
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Instrument :
MSVOA_N
ClientSampleId :

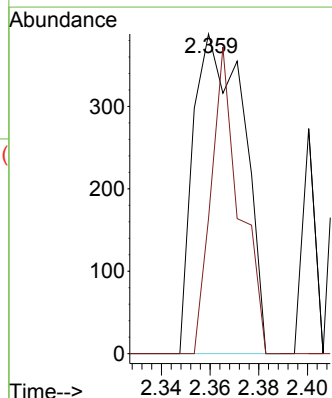
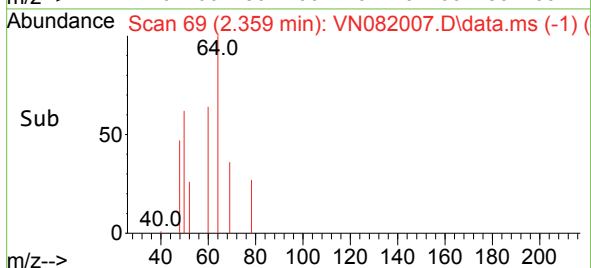
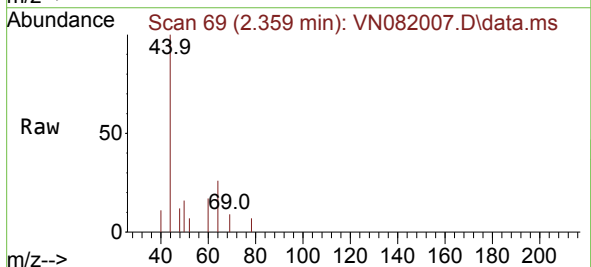


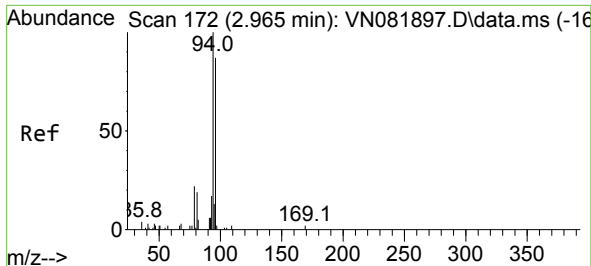
Tgt Ion:128 Resp: 32305
Ion Ratio Lower Upper
128 100
49 203.6 0.0 403.7
130 134.0 0.0 323.3



#3
Chloromethane
Concen: 0.261 ug/l
RT: 2.359 min Scan# 69
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 50 Resp: 556
Ion Ratio Lower Upper
50 100
52 42.3 25.4 38.0#





#5

Bromomethane

Concen: 0.201 ug/l

RT: 2.959 min Scan# 171

Delta R.T. -0.006 min

Lab File: VN082007.D

Acq: 06 May 2024 14:10

Instrument :

MSVOA_N

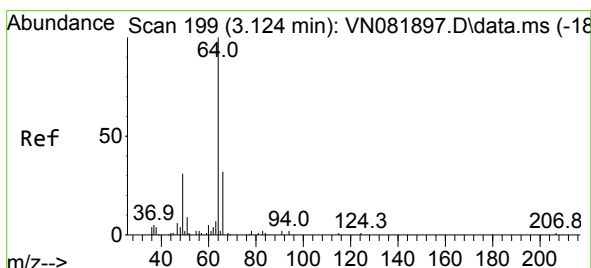
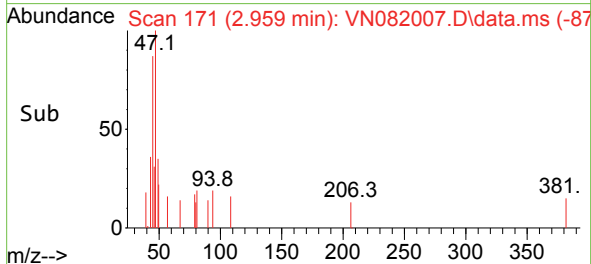
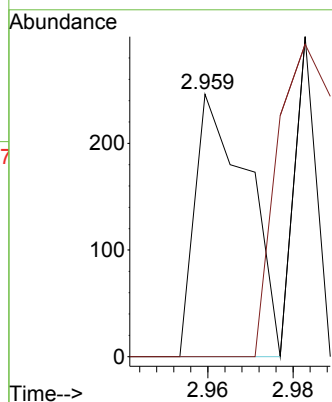
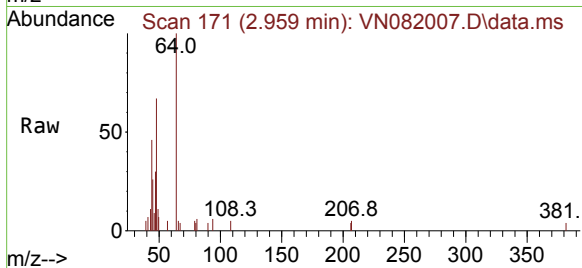
ClientSampleId :

Tgt Ion: 94 Resp: 211

Ion Ratio Lower Upper

94 100

96 0.0 72.8 109.2#



#6

Chloroethane

Concen: 0.951 ug/l

RT: 3.124 min Scan# 199

Delta R.T. -0.000 min

Lab File: VN082007.D

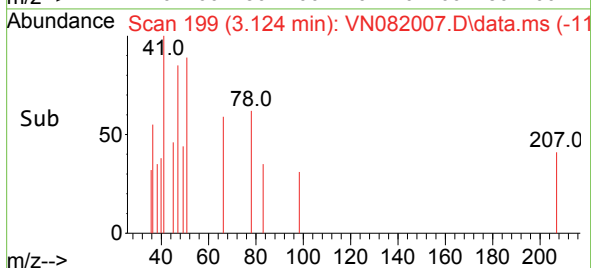
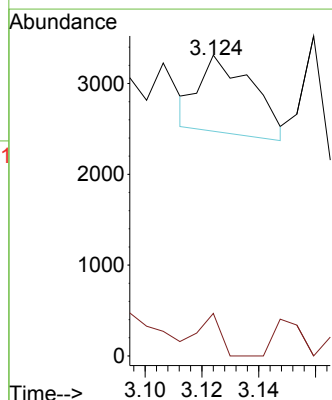
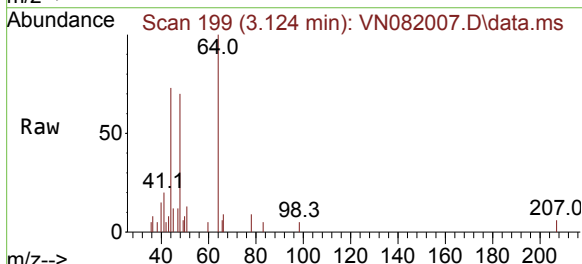
Acq: 06 May 2024 14:10

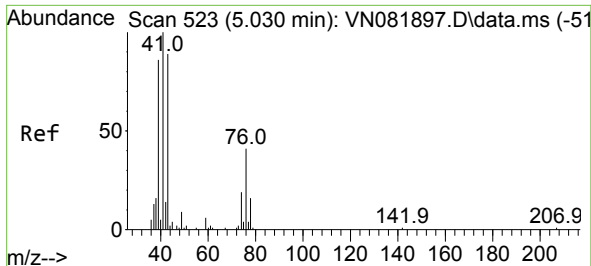
Tgt Ion: 64 Resp: 1082

Ion Ratio Lower Upper

64 100

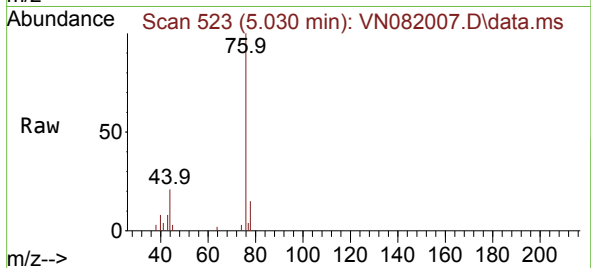
66 39.4 26.7 40.1



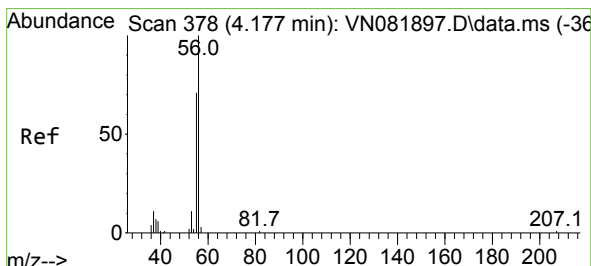
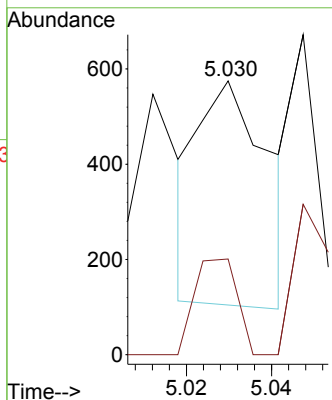
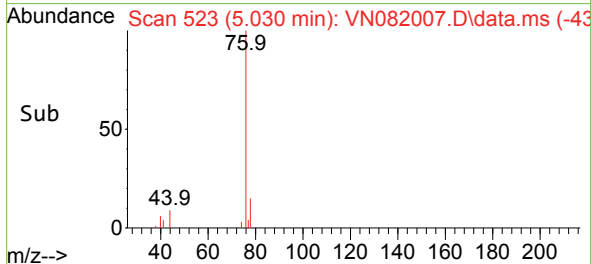


#12
Methyl Acetate
Concen: 0.216 ug/l
RT: 5.030 min Scan# 51
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Instrument :
MSVOA_N
ClientSampleId :

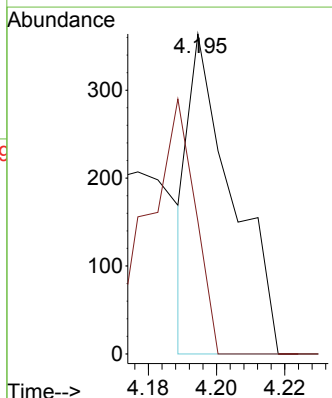
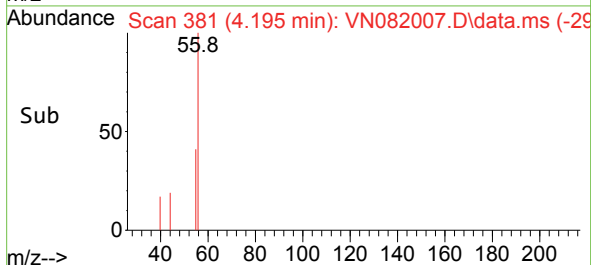
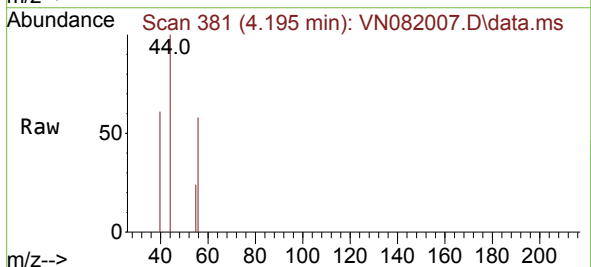


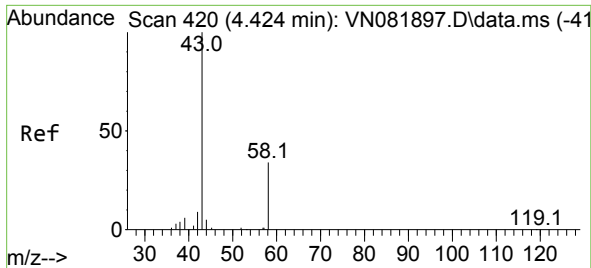
Tgt Ion: 43 Resp: 533
Ion Ratio Lower Upper
43 100
74 125.6 27.7 41.5#



#13
Acrolein
Concen: 0.606 ug/l
RT: 4.195 min Scan# 381
Delta R.T. 0.017 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 56 Resp: 318
Ion Ratio Lower Upper
56 100
55 84.0 55.5 83.3#

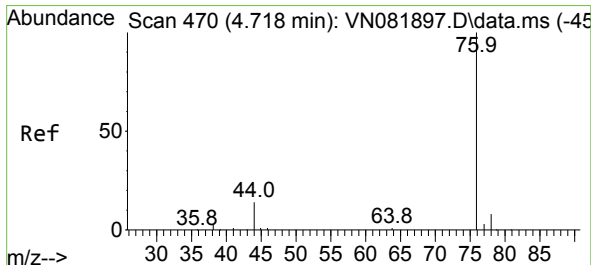
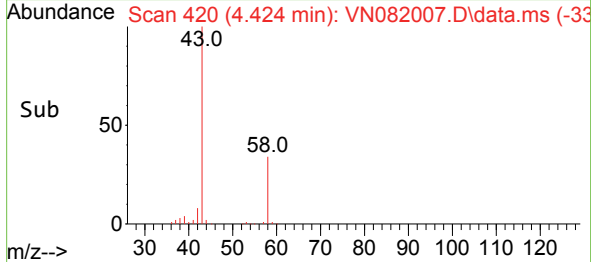
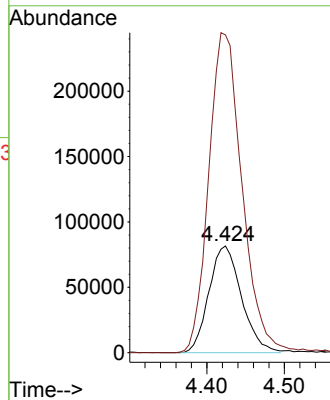
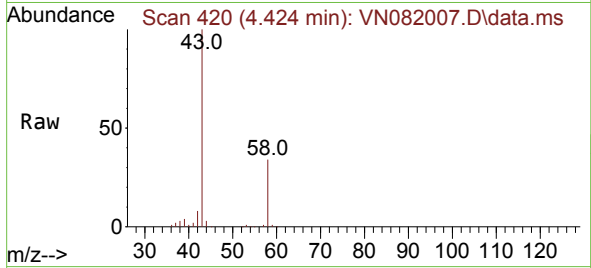




#15
Acetone
Concen: 943.708 ug/l
RT: 4.424 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

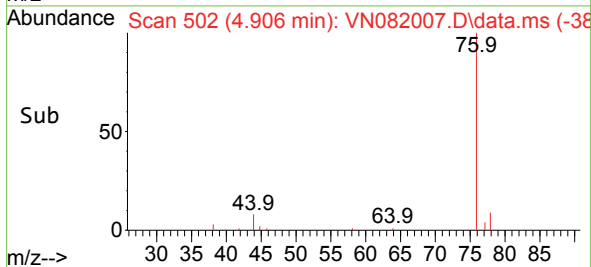
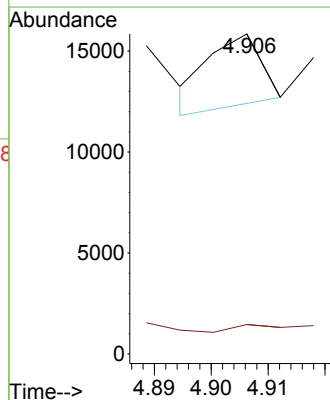
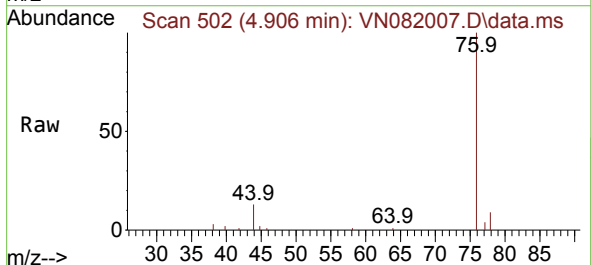
Instrument :
MSVOA_N
ClientSampleId :

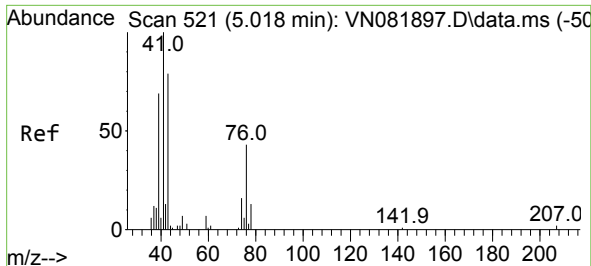
Tgt Ion: 58 Resp: 238273
Ion Ratio Lower Upper
58 100
43 297.0 223.1 334.7



#16
Carbon Disulfide
Concen: 0.432 ug/l
RT: 4.906 min Scan# 502
Delta R.T. 0.188 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 76 Resp: 2361
Ion Ratio Lower Upper
76 100
78 8.8 6.3 9.5





#17

Allyl chloride

Concen: 3.543 ug/l

RT: 4.706 min Scan# 41

Delta R.T. -0.312 min

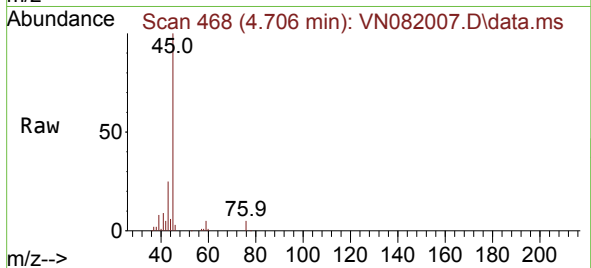
Lab File: VN082007.D

Acq: 06 May 2024 14:10

Instrument :

MSVOA_N

ClientSampleId :



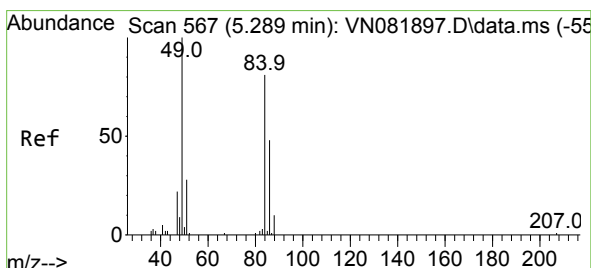
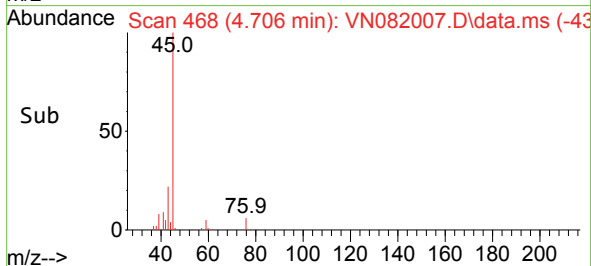
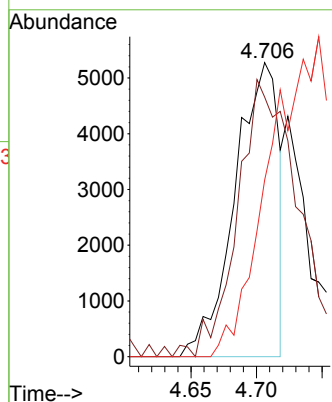
Tgt Ion: 41 Resp: 12263

Ion Ratio Lower Upper

41 100

39 84.4 37.6 112.9

76 60.1 27.8 83.4



#18

Methylene Chloride

Concen: 0.352 ug/l

RT: 5.283 min Scan# 566

Delta R.T. -0.006 min

Lab File: VN082007.D

Acq: 06 May 2024 14:10

Tgt Ion: 84 Resp: 789

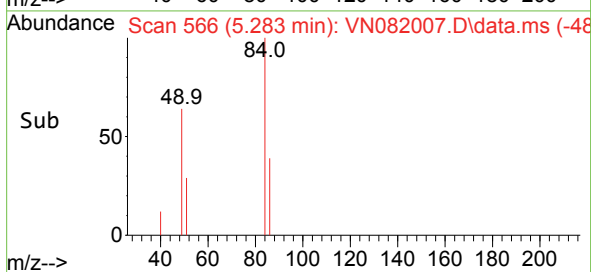
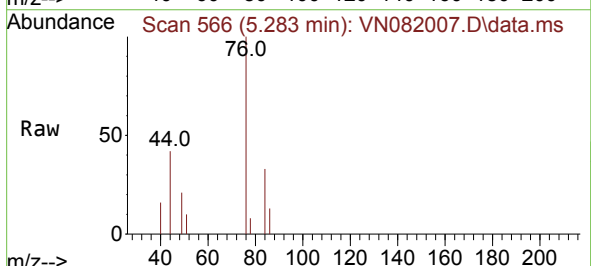
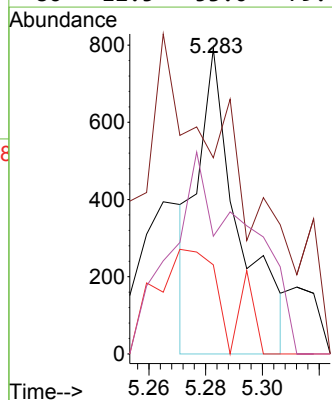
Ion Ratio Lower Upper

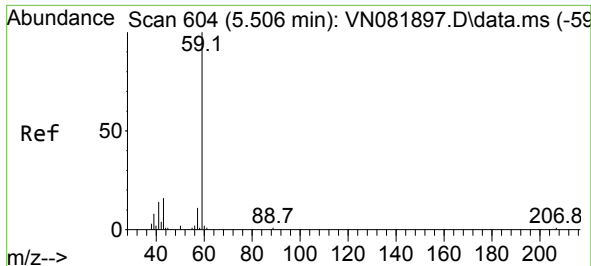
84 100

49 27.3 86.0 129.0#

51 36.4 30.0 45.0

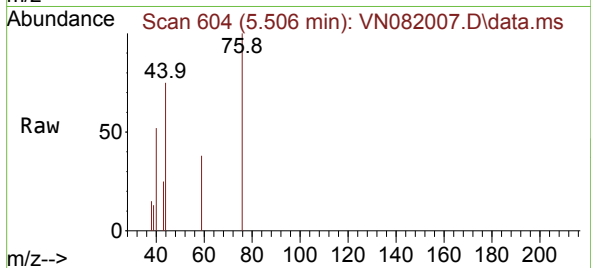
86 12.5 53.0 79.4#



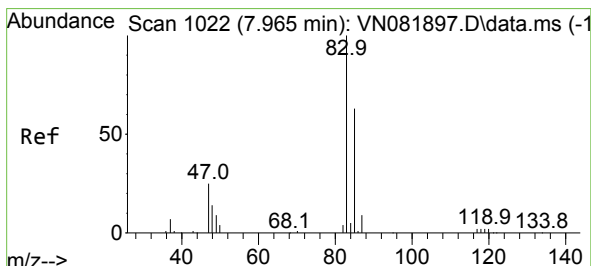
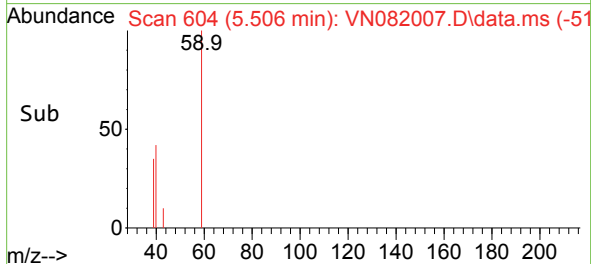
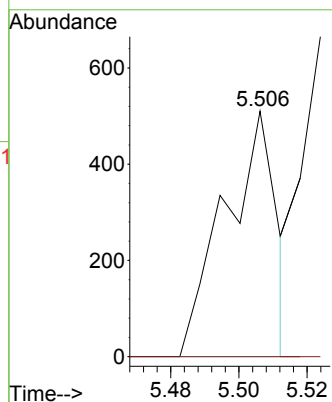


#23
tert-Butyl Alcohol
Concen: 1.157 ug/l
RT: 5.506 min Scan# 604
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

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ClientSampleId :

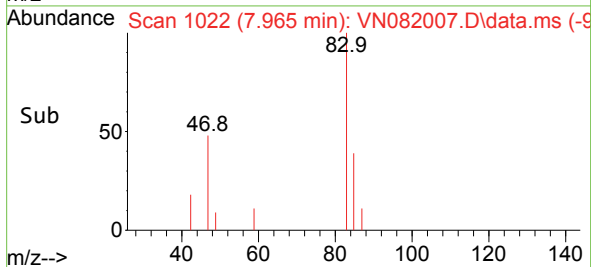
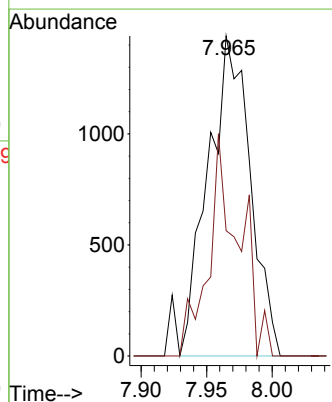
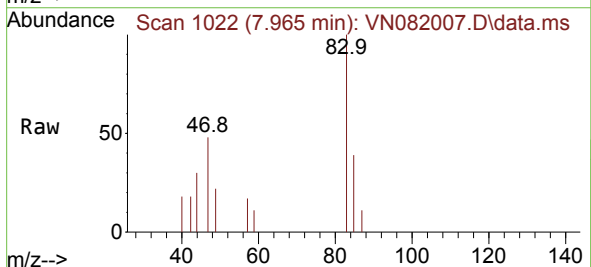


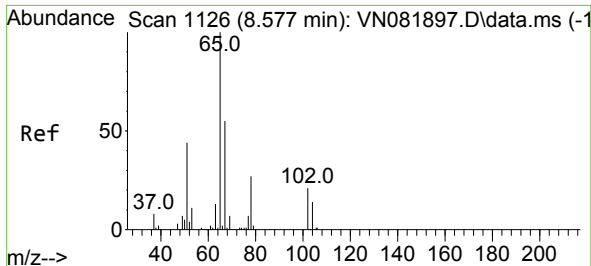
Tgt Ion: 59 Resp: 537
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0



#25
Chloroform
Concen: 0.824 ug/l
RT: 7.965 min Scan# 1022
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 83 Resp: 3216
Ion Ratio Lower Upper
83 100
85 39.1 50.9 76.3#





#27

1,2-Dichloroethane-d4

Concen: 30.990 ug/l

RT: 8.577 min Scan# 1126

Delta R.T. -0.000 min

Lab File: VN082007.D

Acq: 06 May 2024 14:10

Instrument :

MSVOA_N

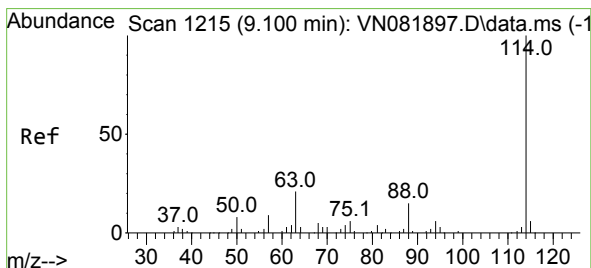
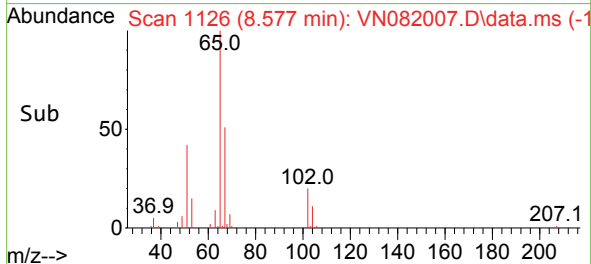
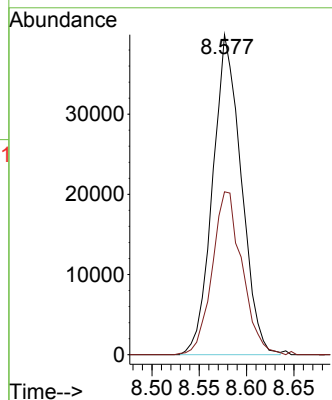
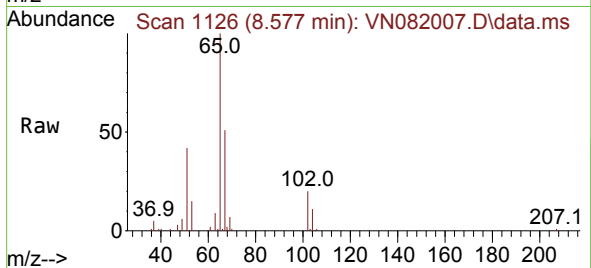
ClientSampleId :

Tgt Ion: 65 Resp: 83820

Ion Ratio Lower Upper

65 100

67 53.2 43.2 64.8



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.100 min Scan# 1215

Delta R.T. -0.000 min

Lab File: VN082007.D

Acq: 06 May 2024 14:10

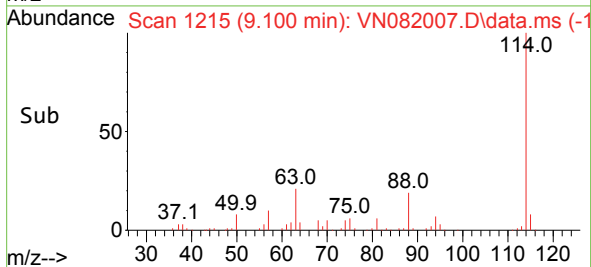
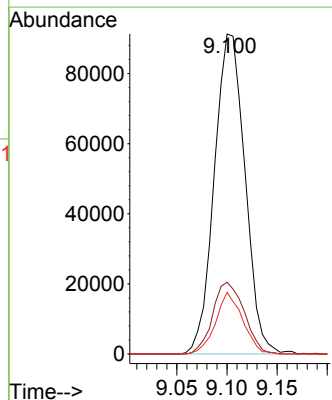
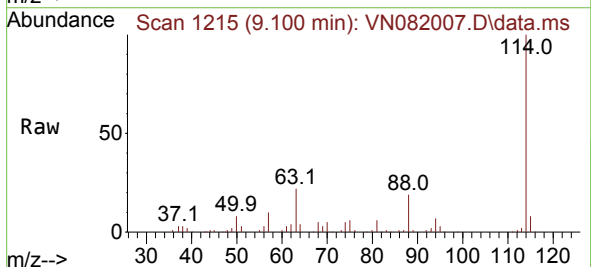
Tgt Ion: 114 Resp: 194201

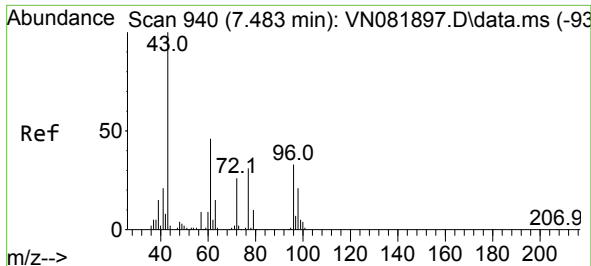
Ion Ratio Lower Upper

114 100

63 23.0 15.9 23.9

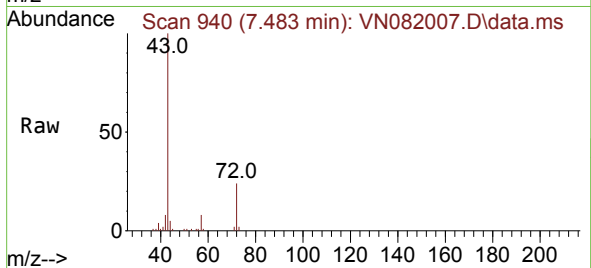
88 17.0 12.7 19.1



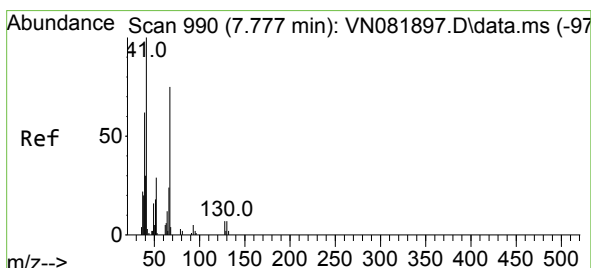
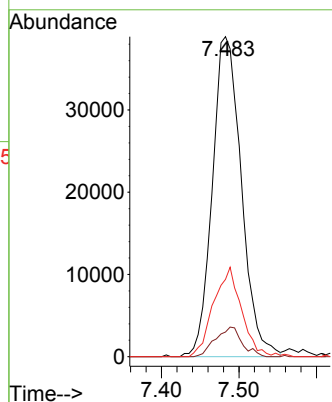
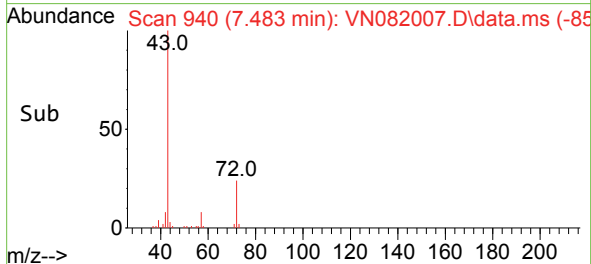


#30
2-Butanone
Concen: 67.948 ug/l
RT: 7.483 min Scan# 940
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Instrument :
MSVOA_N
ClientSampleId :

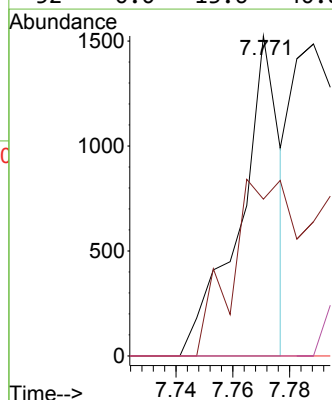
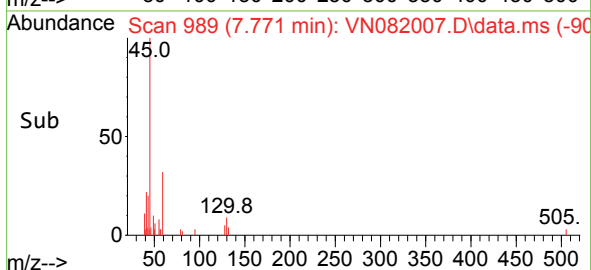
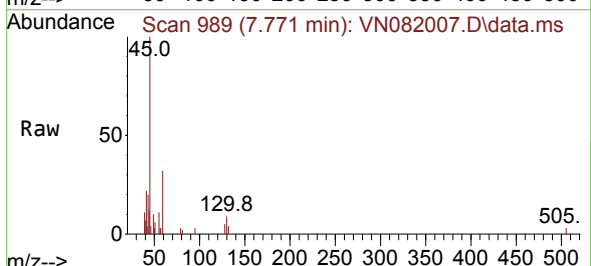


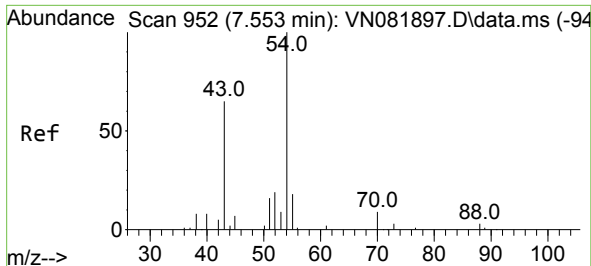
Tgt Ion: 43 Resp: 101265
Ion Ratio Lower Upper
43 100
57 8.5 6.7 10.1
72 26.8 24.0 36.0



#35
Methacrylonitrile
Concen: 0.799 ug/l
RT: 7.771 min Scan# 989
Delta R.T. -0.006 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 41 Resp: 1507
Ion Ratio Lower Upper
41 100
39 49.0 25.3 75.9
67 0.0 38.7 116.1#
52 0.0 13.6 40.8#

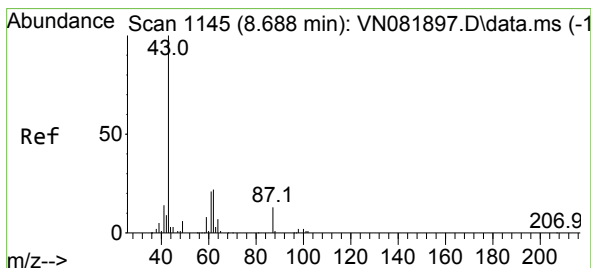
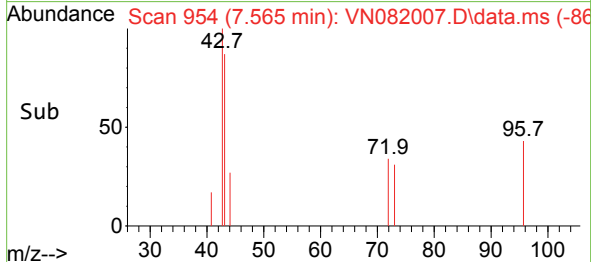
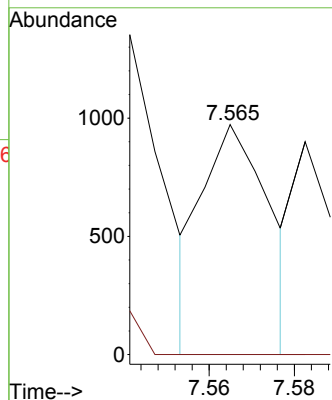
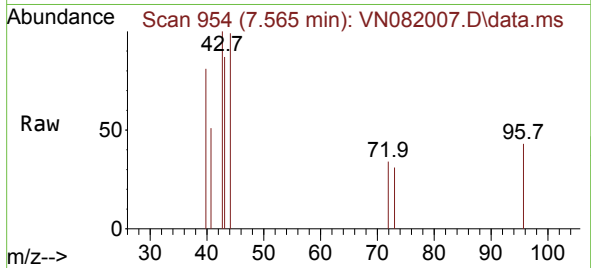




#43
Ethyl Acetate
Concen: 0.325 ug/l
RT: 7.565 min Scan# 91
Delta R.T. 0.012 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

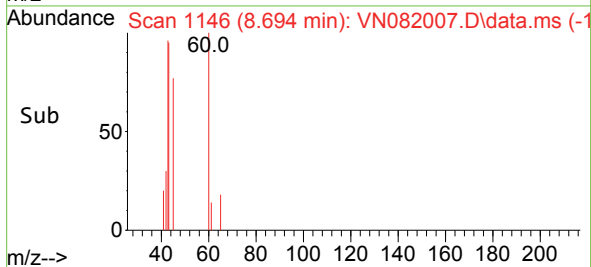
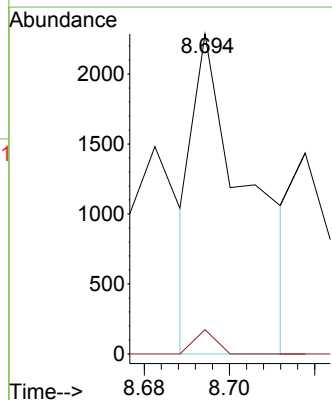
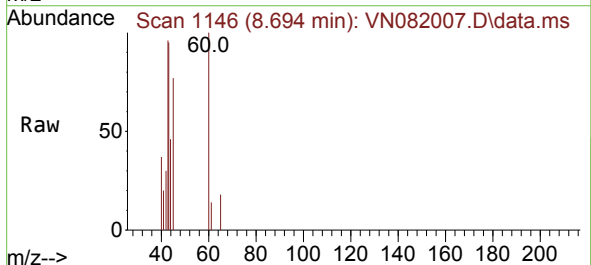
Instrument :
MSVOA_N
ClientSampleId :

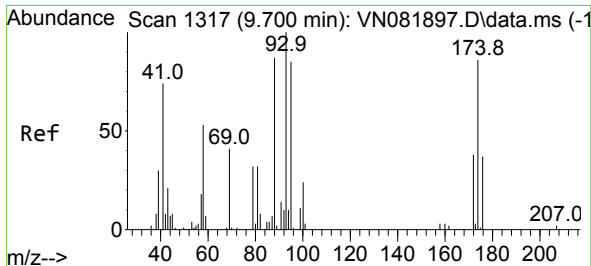
Tgt Ion: 43 Resp: 1055
Ion Ratio Lower Upper
43 100
45 17.5 10.6 15.8#



#44
Isopropyl Acetate
Concen: 0.351 ug/l
RT: 8.694 min Scan# 1146
Delta R.T. 0.006 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

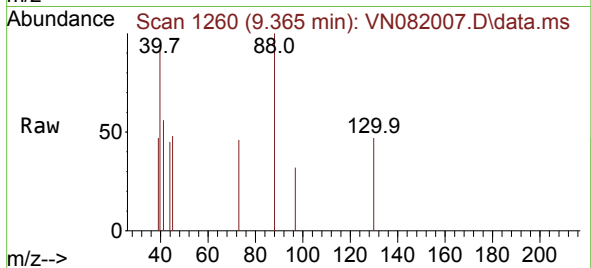
Tgt Ion: 43 Resp: 2027
Ion Ratio Lower Upper
43 100
61 0.0 25.0 37.4#



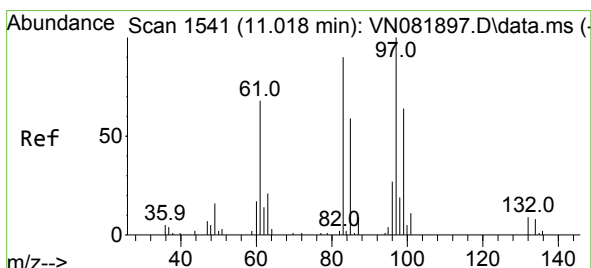
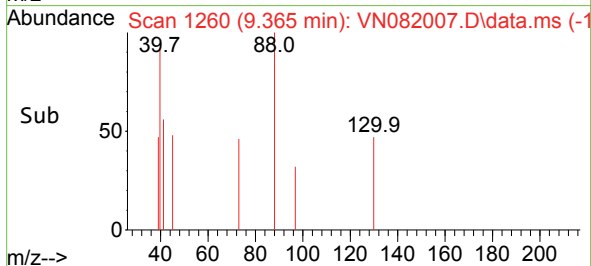
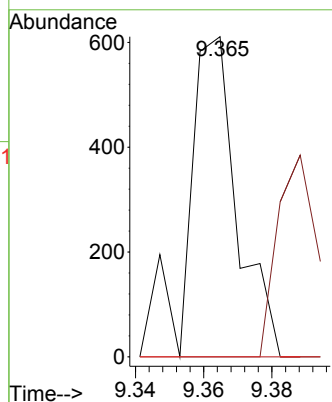


#45
 1,4-Dioxane
 Concen: 11.759 ug/l
 RT: 9.365 min Scan# 11
 Delta R.T. -0.335 min
 Lab File: VN082007.D
 Acq: 06 May 2024 14:10

Instrument :
 MSVOA_N
 ClientSampleId :

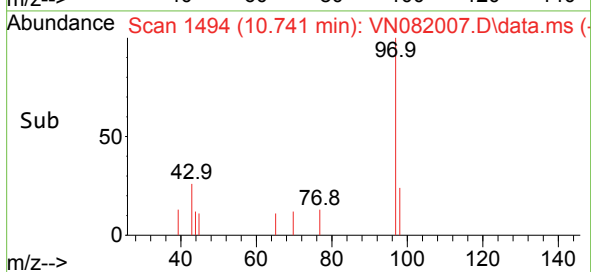
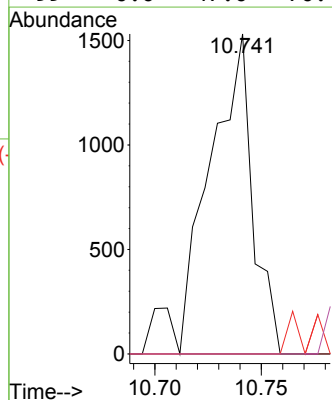
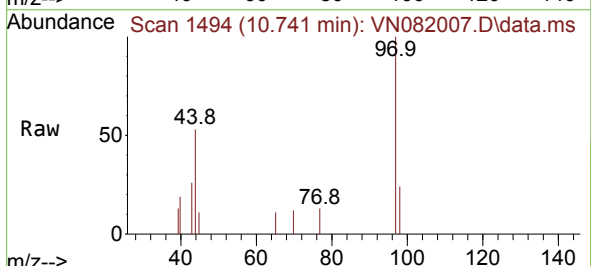


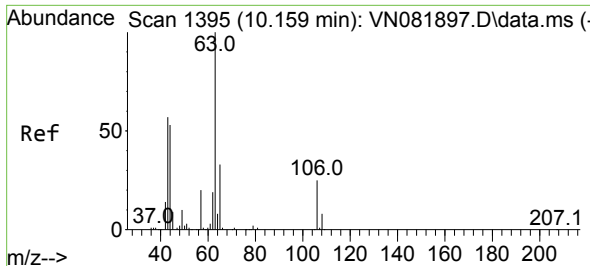
Tgt Ion: 88 Resp: 544
 Ion Ratio Lower Upper
 88 100
 43 56.1 19.8 29.6#
 58 0.0 55.4 83.0#



#50
 1,1,2-Trichloroethane
 Concen: 1.024 ug/l
 RT: 10.741 min Scan# 1494
 Delta R.T. -0.277 min
 Lab File: VN082007.D
 Acq: 06 May 2024 14:10

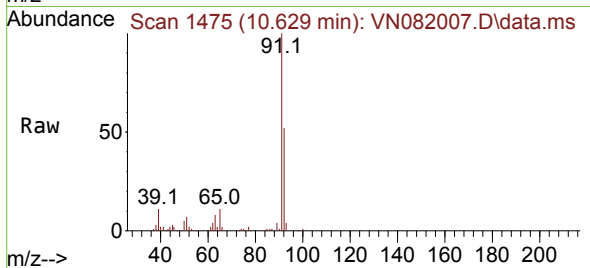
Tgt Ion: 97 Resp: 2112
 Ion Ratio Lower Upper
 97 100
 83 0.0 68.1 102.1#
 85 0.0 41.8 62.6#
 99 0.0 47.0 70.4#



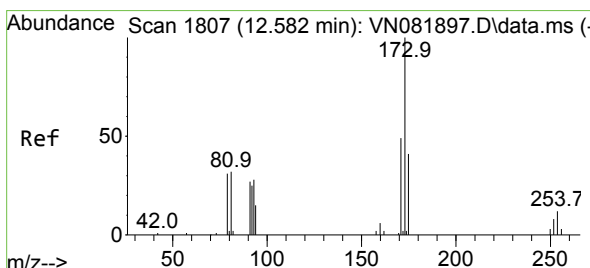
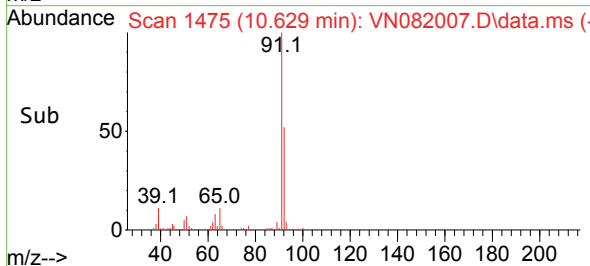
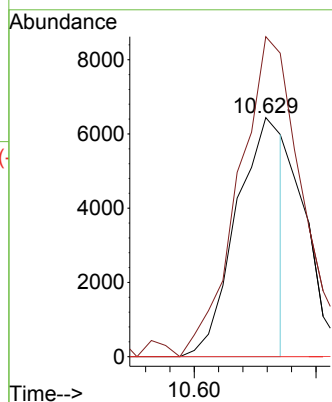


#55
2-Chloroethyl vinyl ether
Concen: 4.442 ug/l
RT: 10.629 min Scan# 14
Delta R.T. 0.470 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Instrument :
MSVOA_N
ClientSampleId :

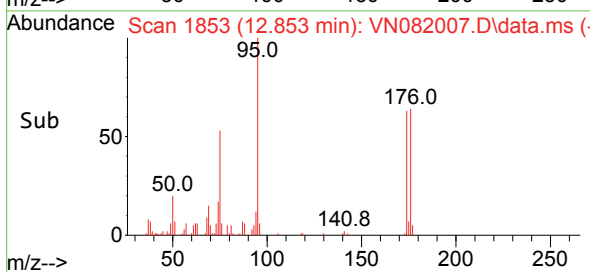
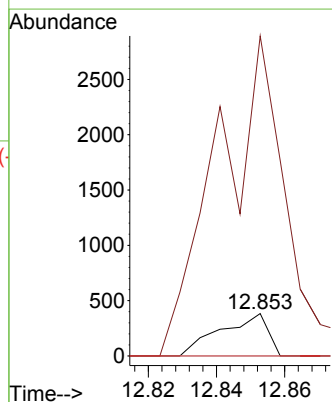
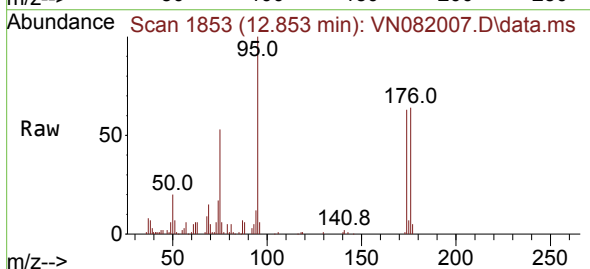


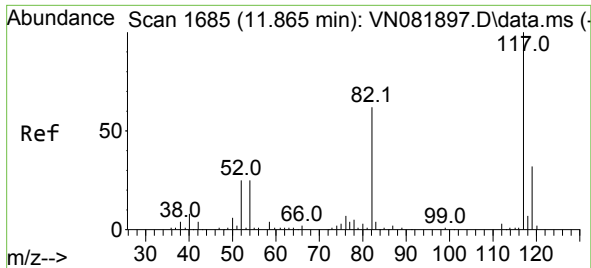
Tgt Ion: 63 Resp: 8647
Ion Ratio Lower Upper
63 100
65 129.4 26.2 39.2#
106 0.0 23.8 35.8#



#56
Bromoform
Concen: 0.271 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.270 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 173 Resp: 370
Ion Ratio Lower Upper
173 100
175 551.6 40.0 60.0#
254 0.0 8.3 12.5#

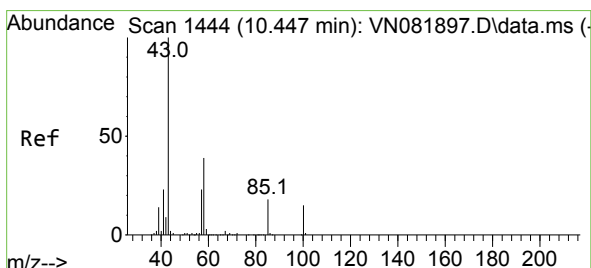
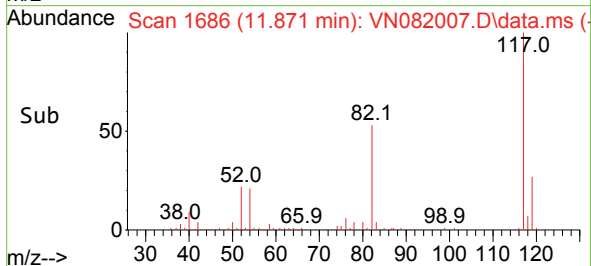
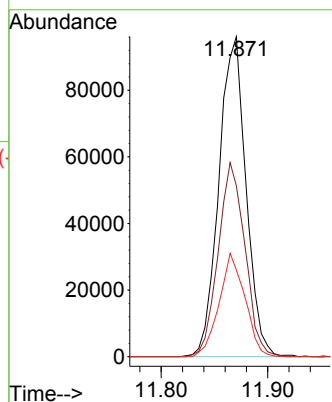
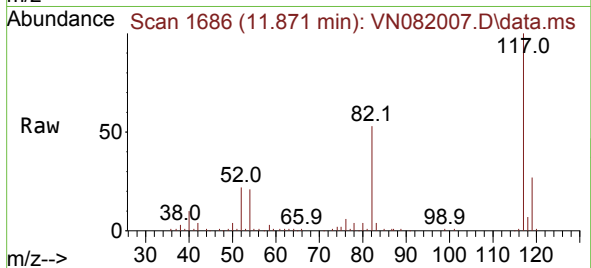




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.871 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

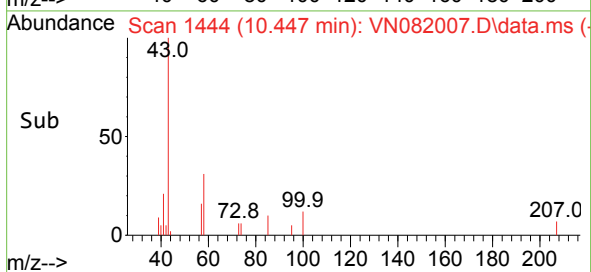
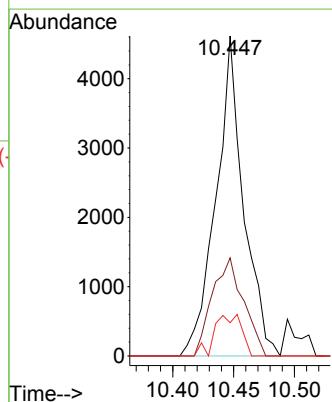
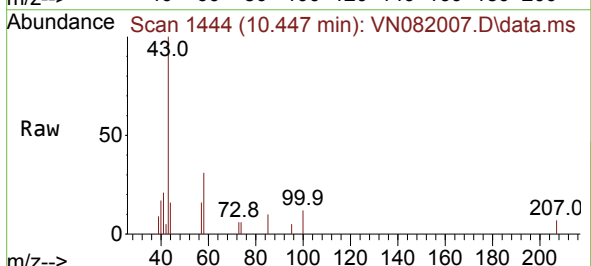
Instrument :
MSVOA_N
ClientSampleId :

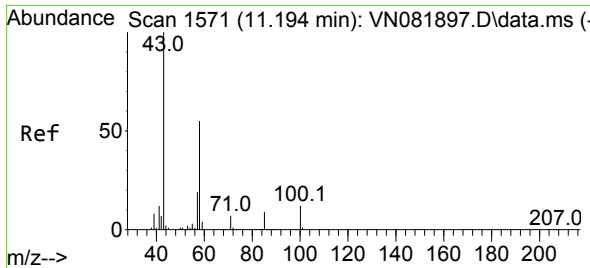
Tgt Ion:117 Resp: 170012
Ion Ratio Lower Upper
117 100
82 59.8 46.6 69.8
119 30.7 25.4 38.2



#58
4-Methyl-2-Pentanone
Concen: 2.201 ug/l
RT: 10.447 min Scan# 1444
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

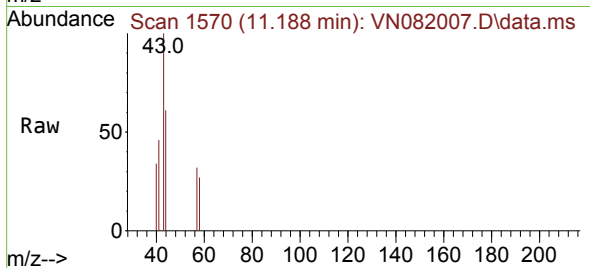
Tgt Ion: 43 Resp: 7265
Ion Ratio Lower Upper
43 100
58 34.8 36.5 54.7#
85 7.4 19.5 29.3#



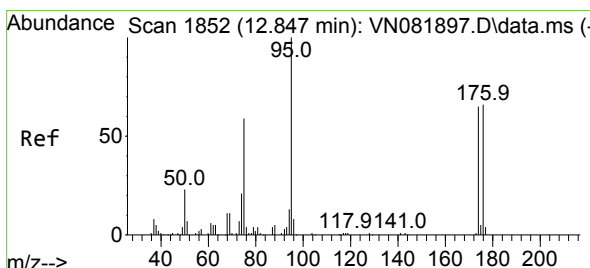
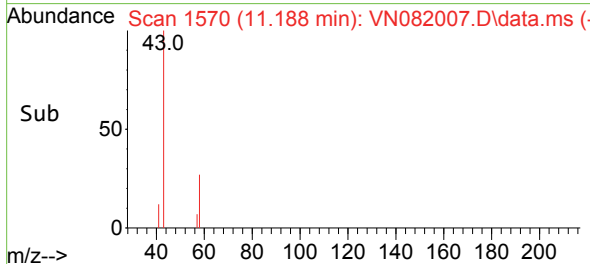
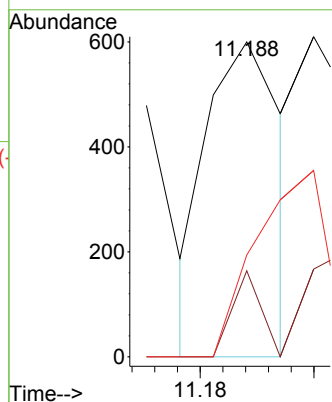


#59
2-Hexanone
Concen: 0.225 ug/l
RT: 11.188 min Scan# 11
Delta R.T. -0.006 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Instrument :
MSVOA_N
ClientSampleId :

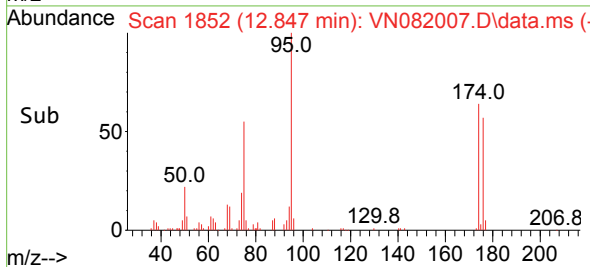
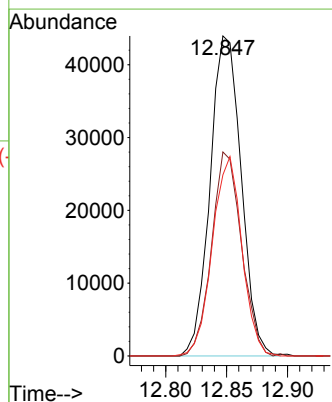
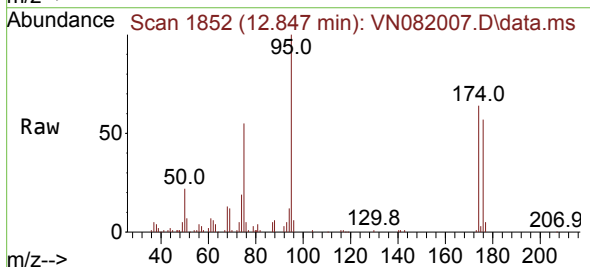


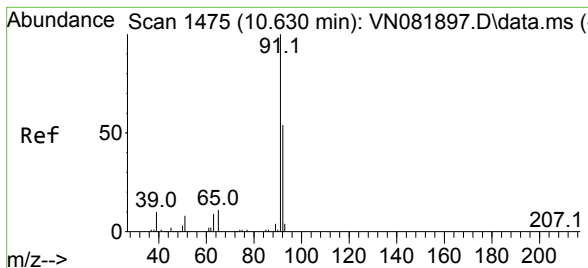
Tgt Ion: 43 Resp: 551
Ion Ratio Lower Upper
43 100
58 10.5 50.4 75.6#
57 0.0 18.6 27.8#



#60
4-Bromofluorobenzene
Concen: 27.628 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 95 Resp: 78171
Ion Ratio Lower Upper
95 100
174 61.2 60.5 90.7
176 59.1 57.8 86.6





#62

Toluene

Concen: 14.175 ug/l

RT: 10.629 min Scan# 1475

Delta R.T. -0.000 min

Lab File: VN082007.D

Acq: 06 May 2024 14:10

Instrument :

MSVOA_N

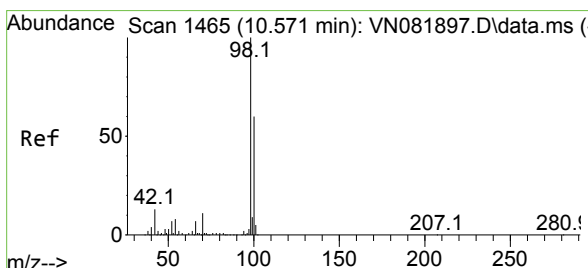
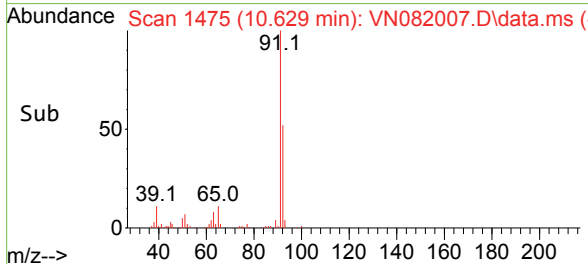
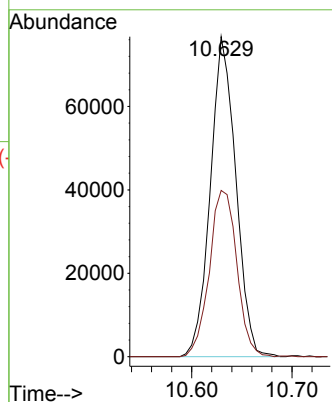
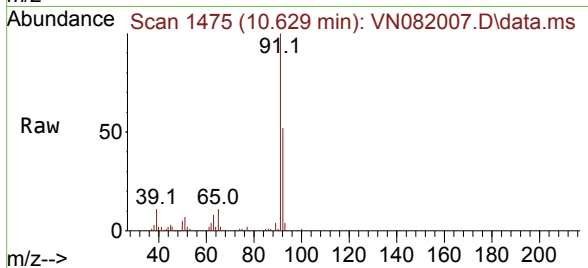
ClientSampleId :

Tgt Ion: 91 Resp: 135594

Ion Ratio Lower Upper

91 100

92 56.0 46.5 69.7



#63

Toluene-d8

Concen: 30.321 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. -0.000 min

Lab File: VN082007.D

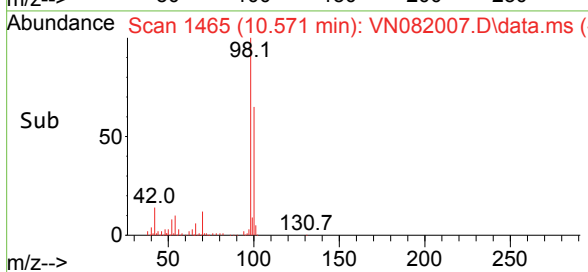
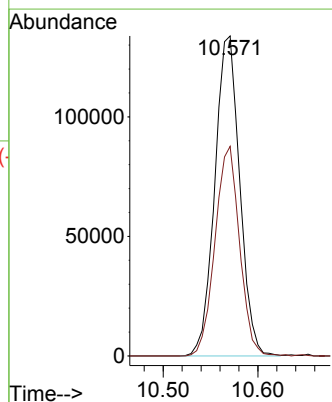
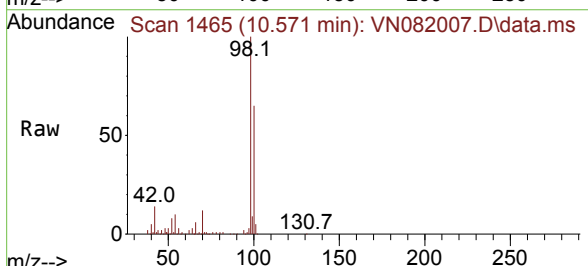
Acq: 06 May 2024 14:10

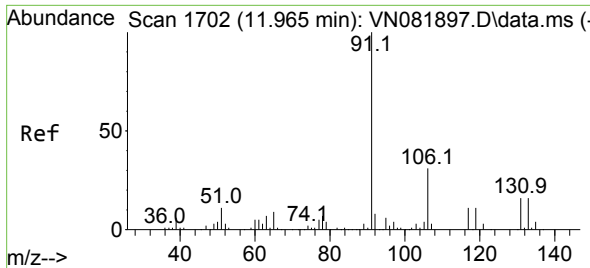
Tgt Ion: 98 Resp: 244812

Ion Ratio Lower Upper

98 100

100 64.4 52.7 79.1

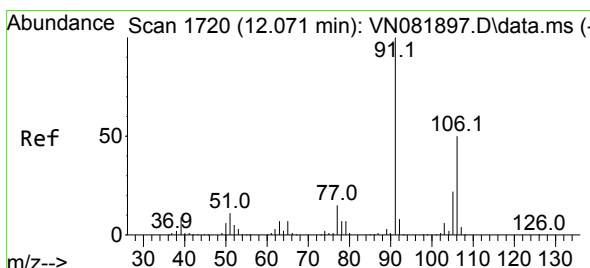
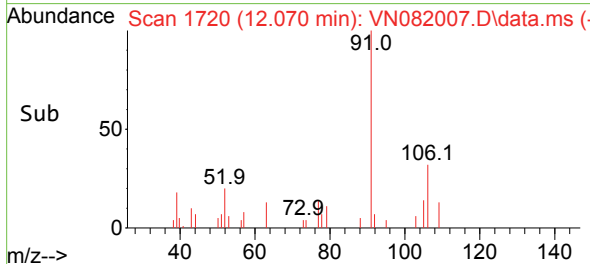
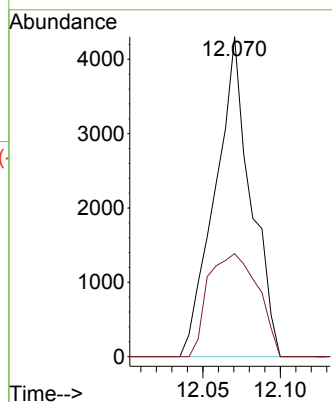
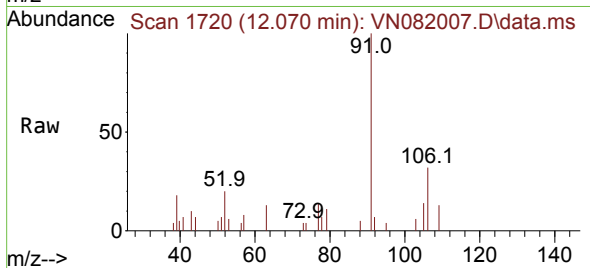




#66
Ethyl Benzene
Concen: 0.656 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. 0.106 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

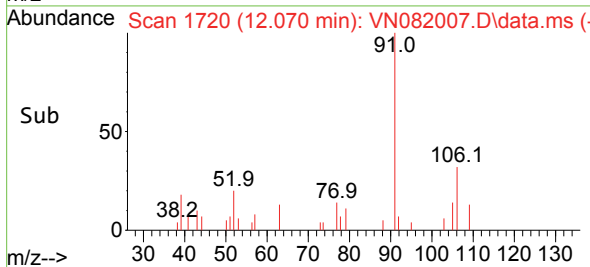
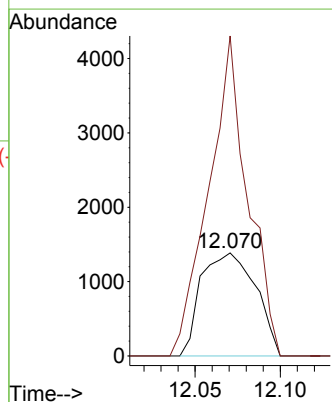
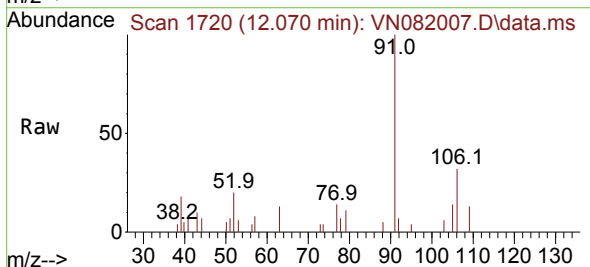
Instrument :
MSVOA_N
ClientSampleId :

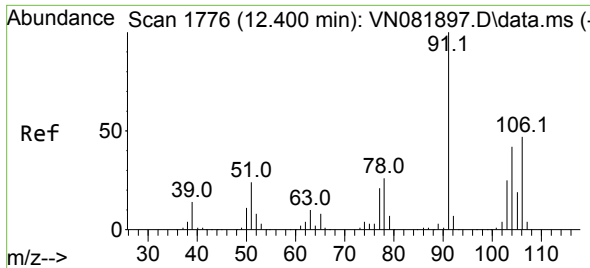
Tgt Ion: 91 Resp: 6881
Ion Ratio Lower Upper
91 100
106 32.2 24.4 36.6



#67
m/p-Xylenes
Concen: 0.795 ug/l
RT: 12.070 min Scan# 1720
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion: 106 Resp: 3091
Ion Ratio Lower Upper
106 100
91 222.6 166.6 249.8

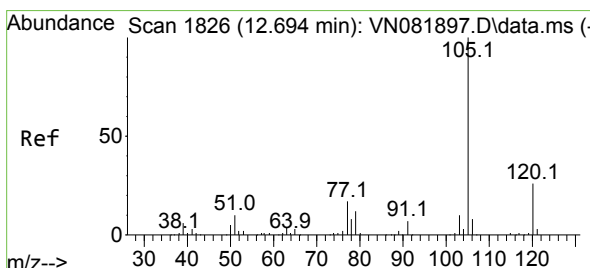
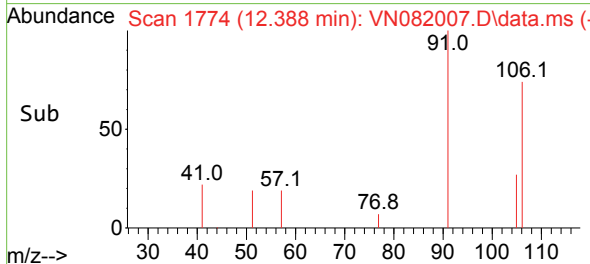
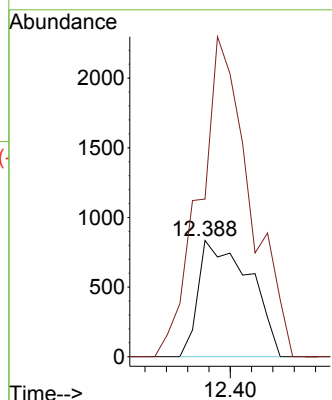
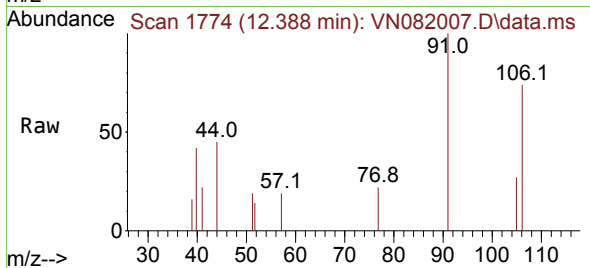




#68
o-Xylene
Concen: 0.362 ug/l
RT: 12.388 min Scan# 11
Delta R.T. -0.012 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

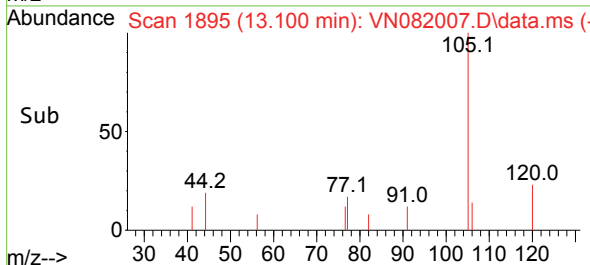
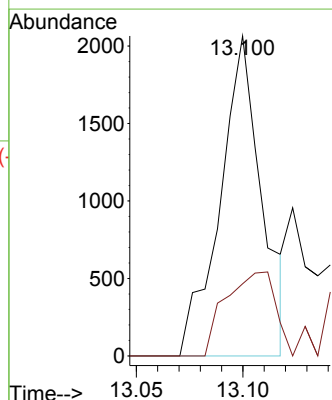
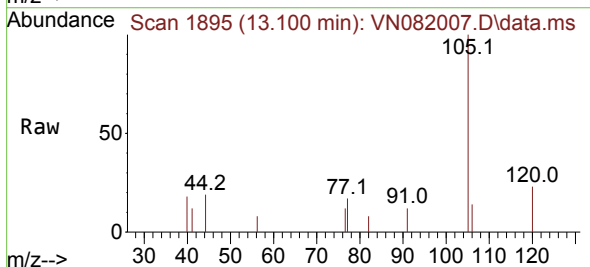
Instrument :
MSVOA_N
ClientSampleId :

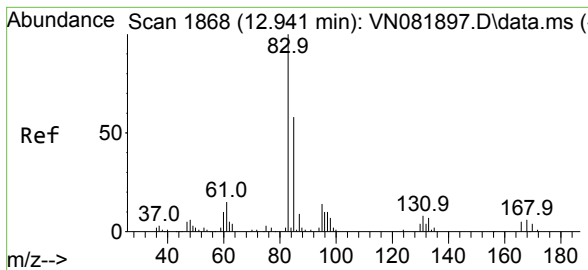
Tgt Ion:106 Resp: 1393
Ion Ratio Lower Upper
106 100
91 271.0 110.0 330.0



#70
Isopropylbenzene
Concen: 0.288 ug/l
RT: 13.100 min Scan# 1895
Delta R.T. 0.406 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion:105 Resp: 2813
Ion Ratio Lower Upper
105 100
120 31.2 17.8 33.1

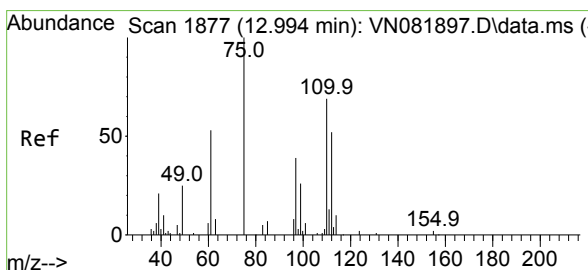
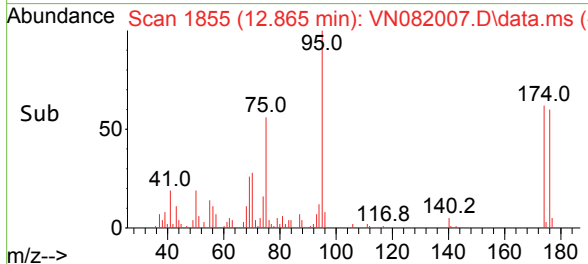
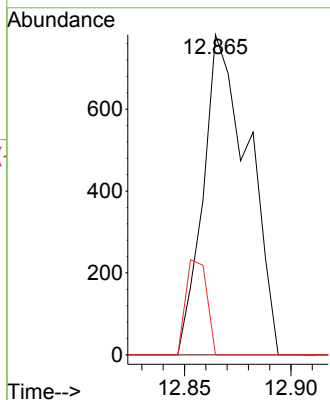
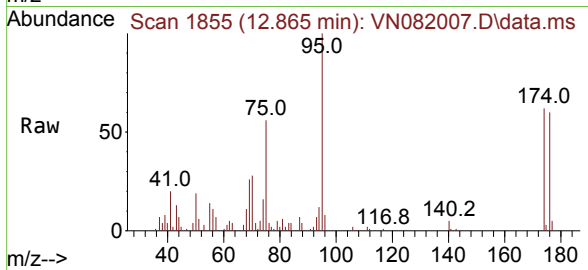




#71
 1,1,2,2-Tetrachloroethane
 Concen: 0.410 ug/l
 RT: 12.865 min Scan# 1855
 Delta R.T. -0.077 min
 Lab File: VN082007.D
 Acq: 06 May 2024 14:10

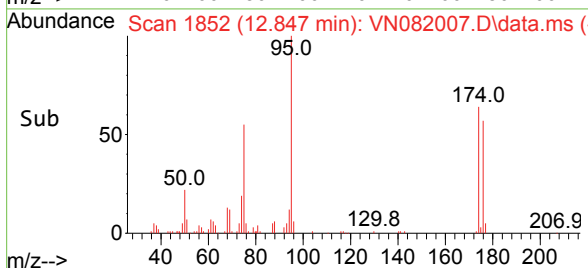
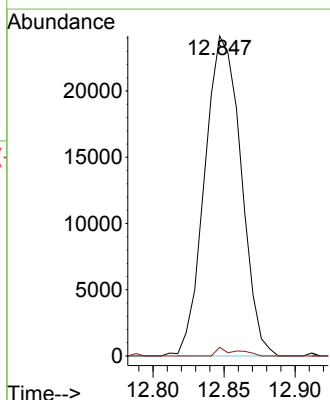
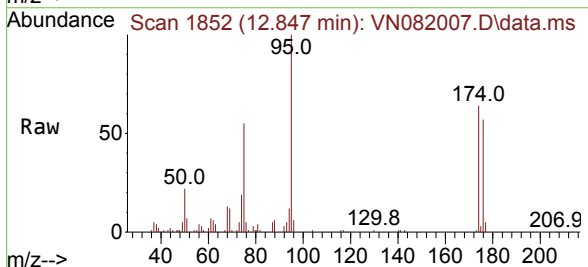
Instrument :
 MSVOA_N
 ClientSampleId :

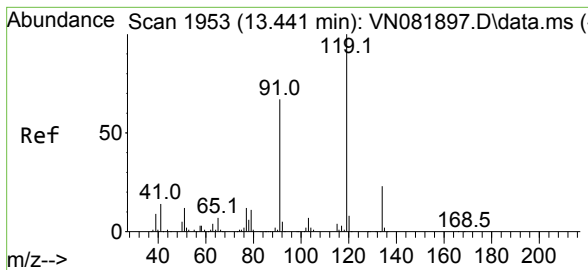
Tgt Ion: 83 Resp: 1153
 Ion Ratio Lower Upper
 83 100
 131 0.0 5.2 15.6#
 85 13.8 32.3 96.8#



#72
 1,2,3-Trichloropropane
 Concen: 16.349 ug/l
 RT: 12.847 min Scan# 1852
 Delta R.T. -0.147 min
 Lab File: VN082007.D
 Acq: 06 May 2024 14:10

Tgt Ion: 75 Resp: 42968
 Ion Ratio Lower Upper
 75 100
 77 0.7 0.0 367.6

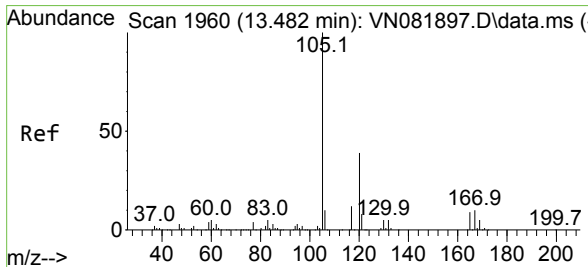
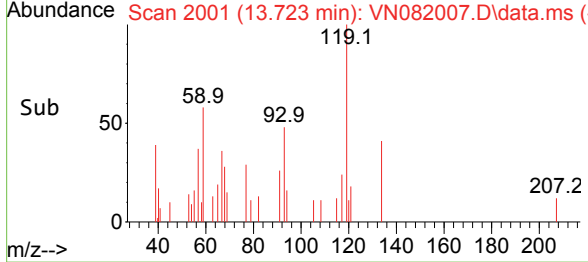
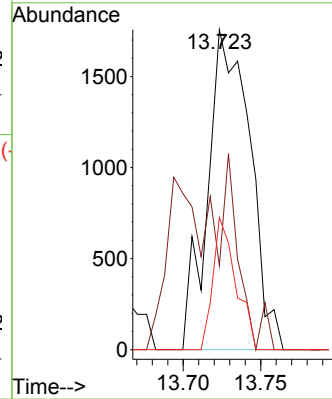
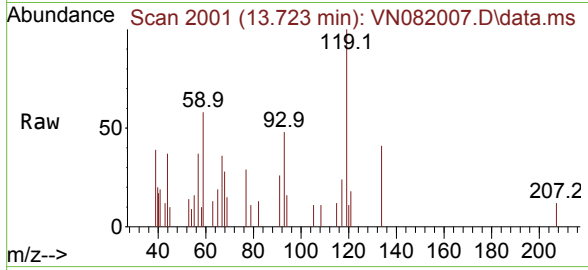




#79
tert-butylbenzene
Concen: 0.491 ug/l
RT: 13.723 min Scan# 2001
Delta R.T. 0.282 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

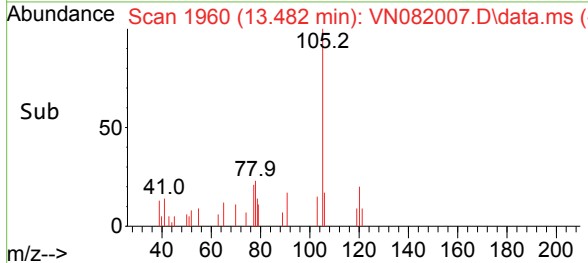
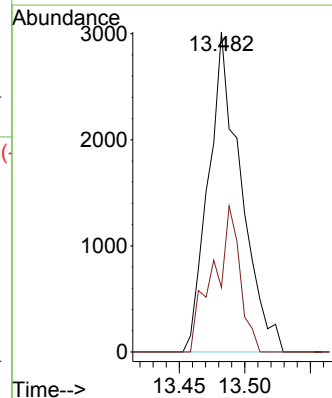
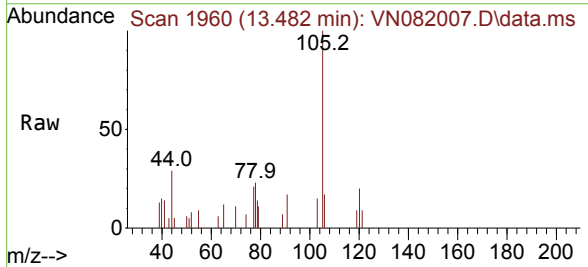
Instrument :
MSVOA_N
ClientSampleId :

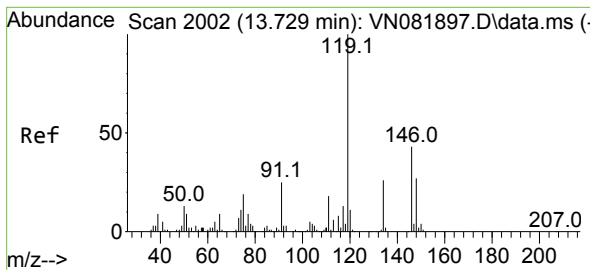
Tgt Ion:119 Resp: 3341
Ion Ratio Lower Upper
119 100
91 19.5 0.0 138.8
134 22.3 0.0 48.6



#80
1,2,4-Trimethylbenzene
Concen: 0.653 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN082007.D
Acq: 06 May 2024 14:10

Tgt Ion:105 Resp: 5184
Ion Ratio Lower Upper
105 100
120 20.2 0.0 86.8





#82

p-Isopropyltoluene

Concen: 0.443 ug/l

RT: 13.723 min Scan# 2002

Delta R.T. -0.006 min

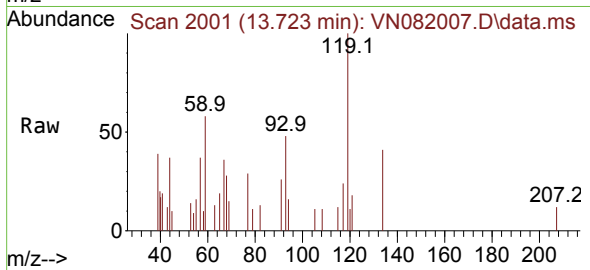
Lab File: VN082007.D

Acq: 06 May 2024 14:10

Instrument :

MSVOA_N

ClientSampleId :



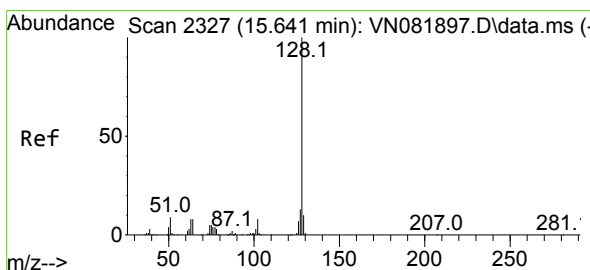
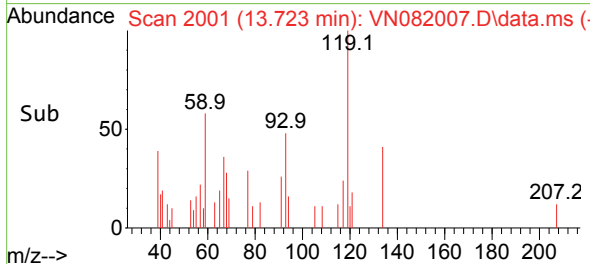
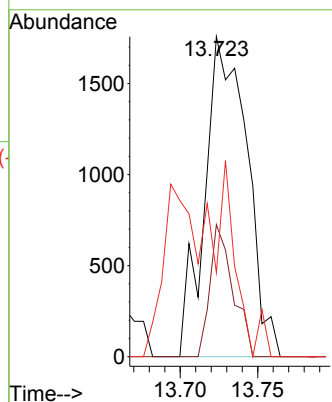
Tgt Ion:119 Resp: 3341

Ion Ratio Lower Upper

119 100

134 22.3 0.0 49.2

91 19.5 0.0 48.8



#91

Naphthalene

Concen: 0.265 ug/l

RT: 15.647 min Scan# 2328

Delta R.T. 0.006 min

Lab File: VN082007.D

Acq: 06 May 2024 14:10

Tgt Ion:128 Resp: 2080

Ion Ratio Lower Upper

128 100

127 6.0 10.6 16.0#

129 0.0 8.6 13.0#

