

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN050721\
 Data File : VN067044.D
 Acq On : 7 May 2021 5:58
 Operator : JC/MD
 Sample : M2313-01
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 49 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 210505078-02-VOA

Manual Integrations
 APPROVED

MMDadoda
 5/7/2021 6:24:35 PM

Quant Time: May 07 07:34:36 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N050721W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri May 07 07:26:20 2021
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	7.115	128	67565	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.520	114	361621	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.352	117	336467	30.00	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	7.954	65	198050	33.45	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	111.50%#		
60) 4-Bromofluorobenzene	12.353	95	166497m	29.74	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	99.13%		
63) Toluene-d8	10.030	98	488668	29.32	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	97.73%		
Target Compounds						Qvalue
8) Diethyl Ether	3.357	74	11027	3.94	ug/l	88
15) Acetone	3.754	58	400254	638.02	ug/l	92
16) Carbon Disulfide	3.985	76	21455	1.69	ug/l	96
17) Allyl chloride	4.191	41	38740	5.16	ug/l #	49
23) tert-Butyl Alcohol	4.706	59	3441160	3997.13	ug/l #	100
24) Methyl tert-Butyl Ether	4.964	73	19651	1.54	ug/l #	66
30) 2-Butanone	6.747	43	2591322	854.50	ug/l	97
34) Benzene	7.970	78	43075	2.10	ug/l #	17
58) 4-Methyl-2-Pentanone	9.928	43	30064m	4.77	ug/l	
62) Toluene	10.097	91	47176	2.27	ug/l	100
64) Chlorobenzene	11.379	112	8202	0.68	ug/l	97
66) Ethyl Benzene	11.457	91	116652	5.54	ug/l	98
67) m/p-Xylenes	11.564	106	48161	6.09	ug/l	81
68) o-Xylene	11.894	106	23257	2.98	ug/l	96
70) Isopropylbenzene	12.200	105	10048	0.50	ug/l #	74
76) 1,3,5-Trimethylbenzene	12.685	105	7687	0.43	ug/l	77
80) 1,2,4-Trimethylbenzene	12.994	105	24479	1.46	ug/l	97
82) p-Isopropyltoluene	13.238	119	29537	1.85	ug/l	84
91) Naphthalene	15.075	128	161748	13.89	ug/l	99

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

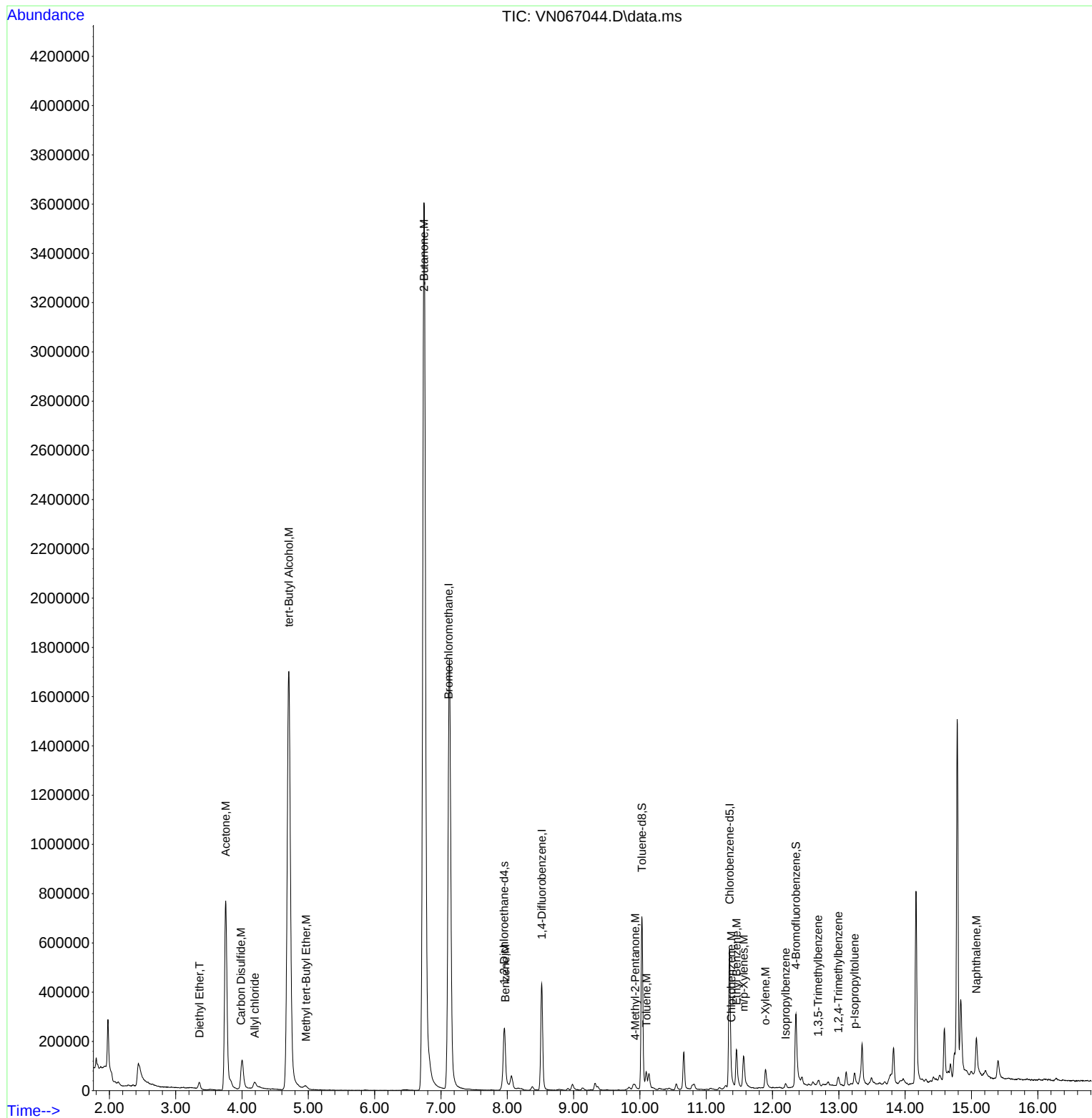
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN050721\
Data File : VN067044.D
Acq On : 7 May 2021 5:58
Operator : JC/MD
Sample : M2313-01
Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 49 Sample Multiplier: 1

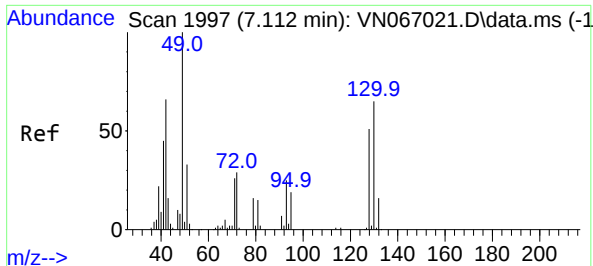
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

Manual Integrations
APPROVED

MMDadoda
5/7/2021 6:24:35 PM

Quant Time: May 07 07:34:36 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N050721W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri May 07 07:26:20 2021
Response via : Initial Calibration





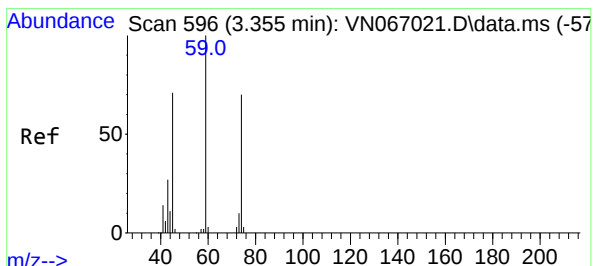
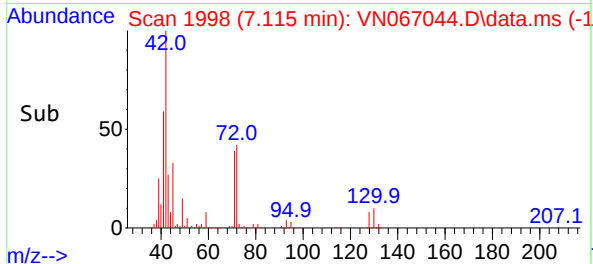
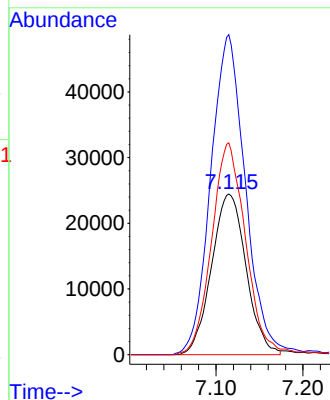
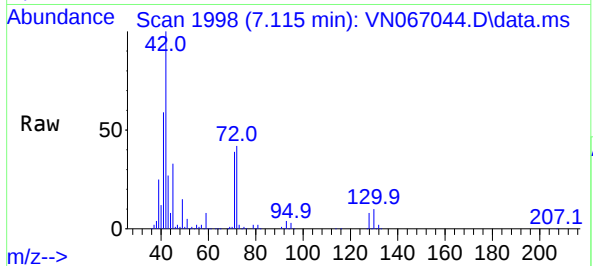
#1
Bromochloromethane
Concen: 30.00 ug/l
RT: 7.115 min Scan# 1998
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion:128 Resp: 67565
Ion Ratio Lower Upper
128 100
49 199.9 0.0 486.3
130 128.5 0.0 326.0

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

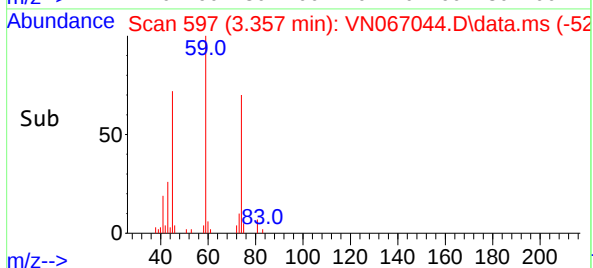
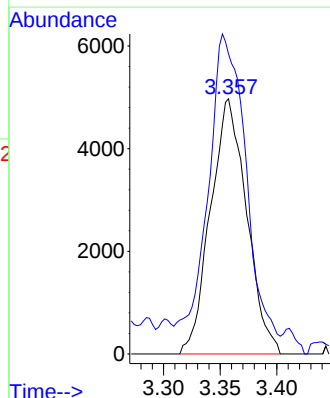
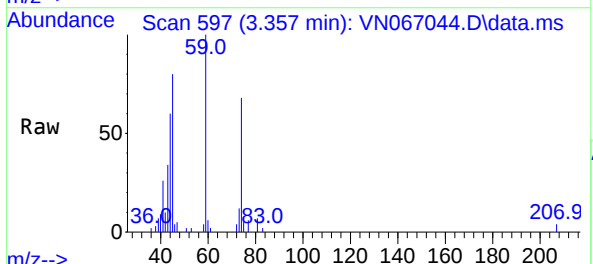
Manual Integrations
APPROVED

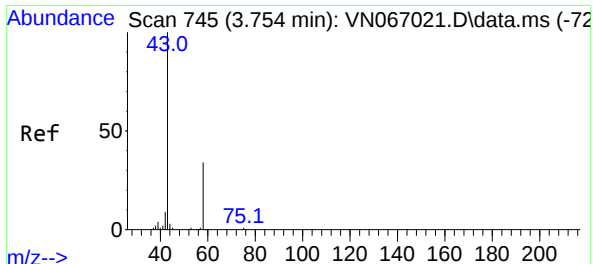
MMDadoda
5/7/2021 6:24:35 PM



#8
Diethyl Ether
Concen: 3.94 ug/l
RT: 3.357 min Scan# 597
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 74 Resp: 11027
Ion Ratio Lower Upper
74 100
45 118.0 21.1 190.3





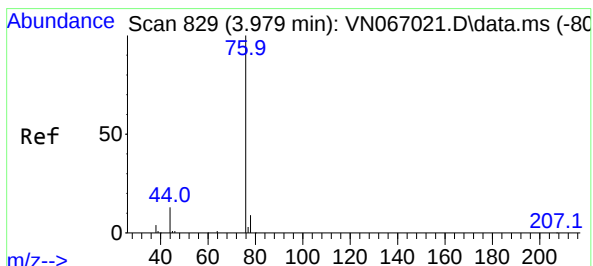
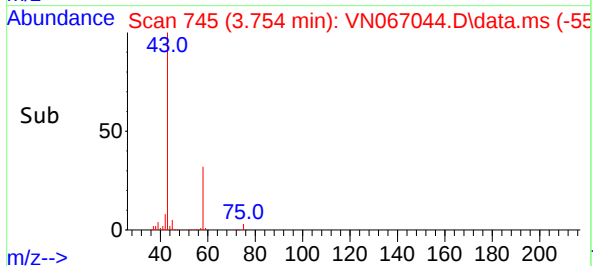
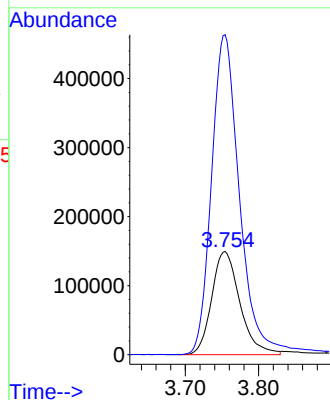
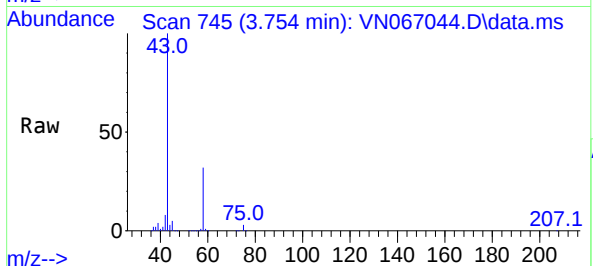
#15
Acetone
Concen: 638.02 ug/l
RT: 3.754 min Scan# 745
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 58 Resp: 400254
Ion Ratio Lower Upper
58 100
43 310.0 235.0 352.6

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

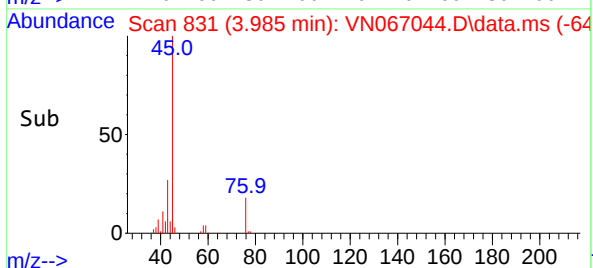
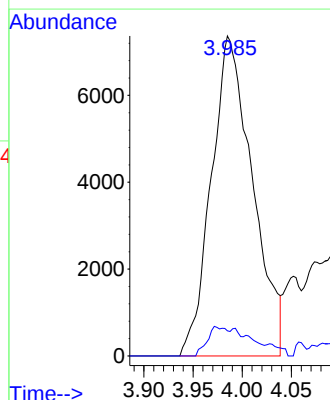
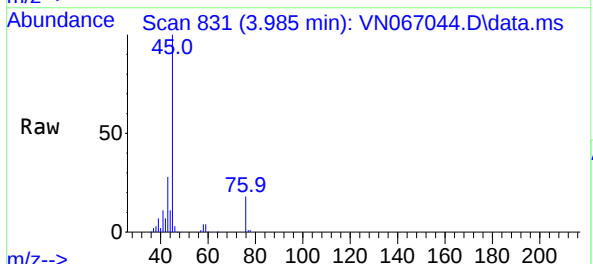
Manual Integrations
APPROVED

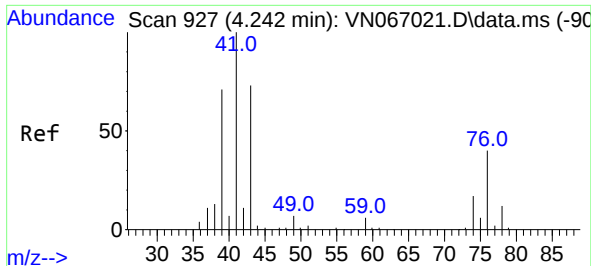
MMDadoda
5/7/2021 6:24:35 PM



#16
Carbon Disulfide
Concen: 1.69 ug/l
RT: 3.985 min Scan# 831
Delta R.T. 0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 76 Resp: 21455
Ion Ratio Lower Upper
76 100
78 7.9 7.5 11.3





#17

Allyl chloride

Concen: 5.16 ug/l

RT: 4.191 min Scan# 908

Delta R.T. -0.051 min

Lab File: VN067044.D

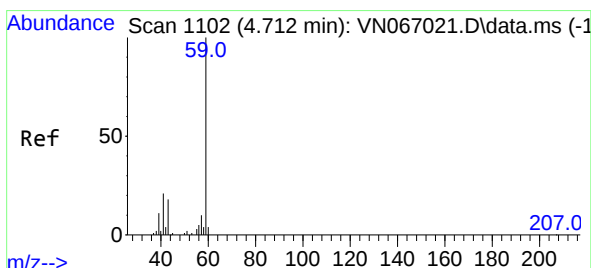
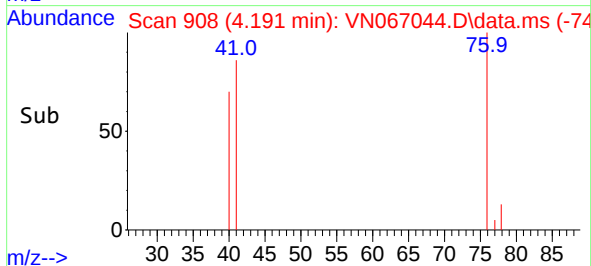
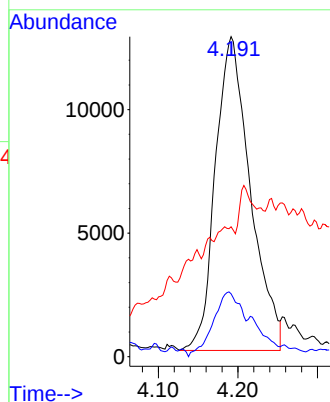
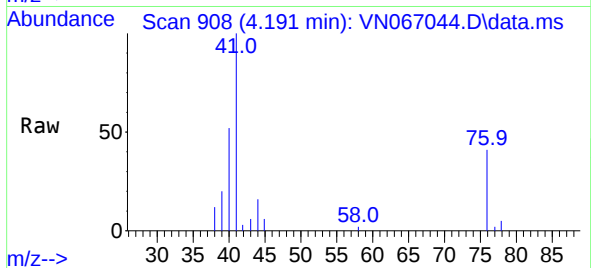
Acq: 7 May 2021 5:58

Tgt Ion:	41	Resp:	38740
Ion	Ratio	Lower	Upper
41	100		
39	17.9	33.1	99.5#
76	16.4	17.9	53.8#

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

Manual Integrations
APPROVED

MMDadoda
5/7/2021 6:24:35 PM



#23

tert-Butyl Alcohol

Concen: 3997.13 ug/l

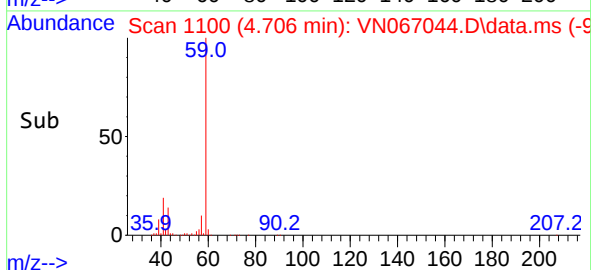
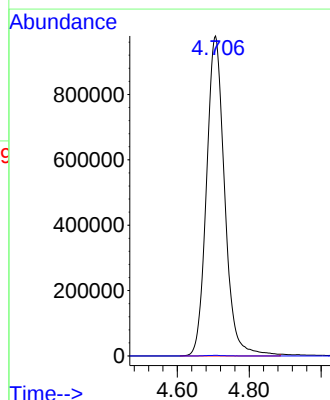
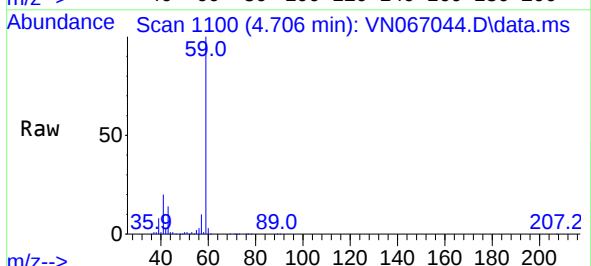
RT: 4.706 min Scan# 1100

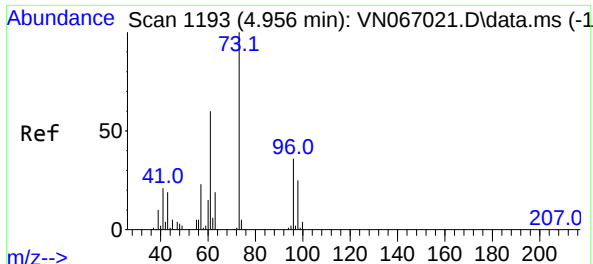
Delta R.T. -0.005 min

Lab File: VN067044.D

Acq: 7 May 2021 5:58

Tgt Ion:	59	Resp:	3441160
Ion	Ratio	Lower	Upper
59	100		
52	0.0	0.0	0.0#





#24

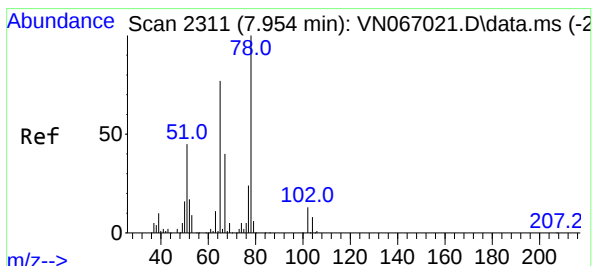
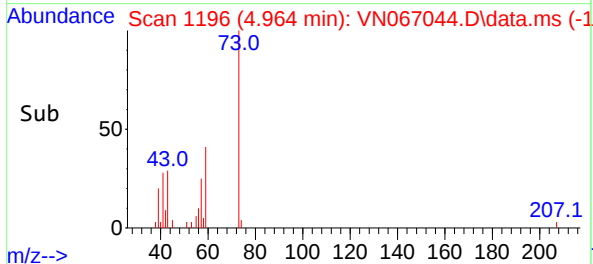
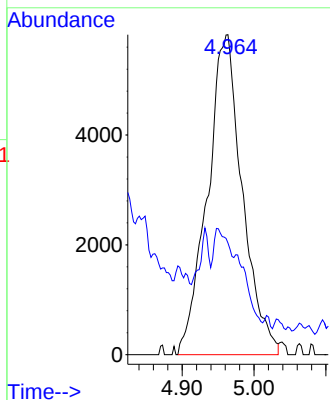
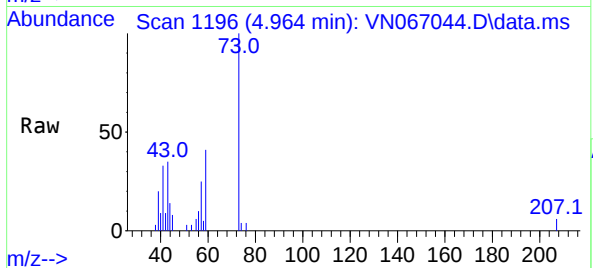
Methyl tert-Butyl Ether
Concen: 1.54 ug/l
RT: 4.964 min Scan# 1196
Delta R.T. 0.008 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

Manual Integrations
APPROVED

MMDadoda
5/7/2021 6:24:35 PM

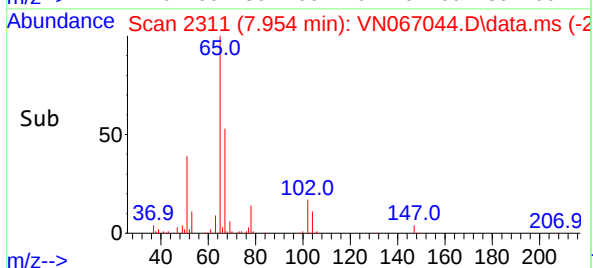
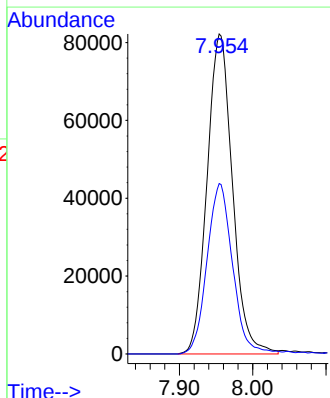
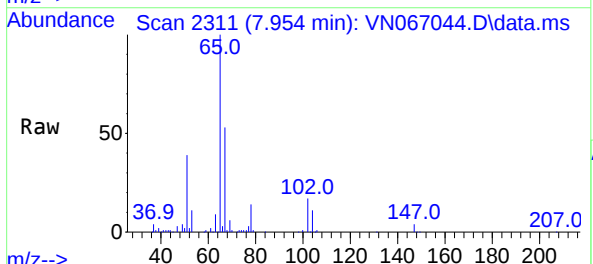
Tgt Ion: 73 Resp: 19651
Ion Ratio Lower Upper
73 100
43 4.5 16.2 24.4#

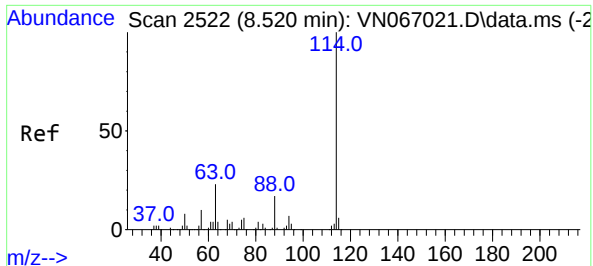


#27

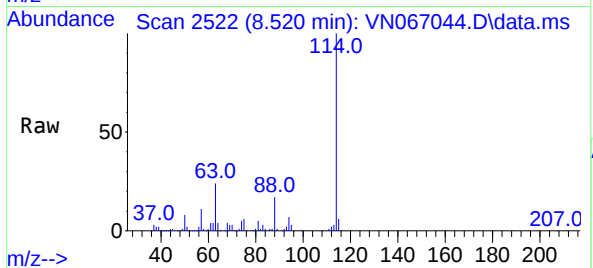
1,2-Dichloroethane-d4
Concen: 33.45 ug/l
RT: 7.954 min Scan# 2311
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 65 Resp: 198050
Ion Ratio Lower Upper
65 100
67 53.2 41.6 62.4

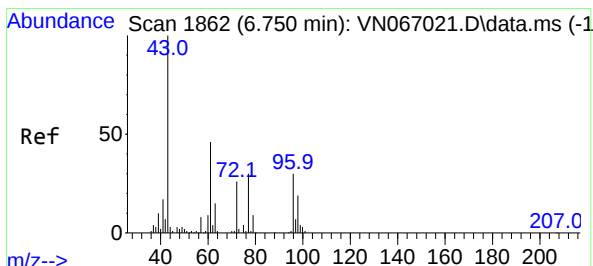
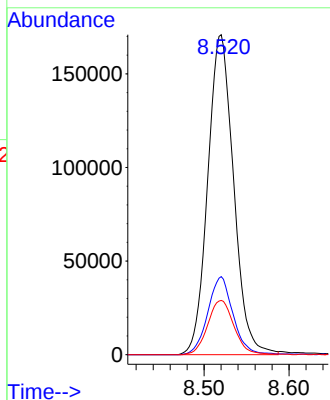
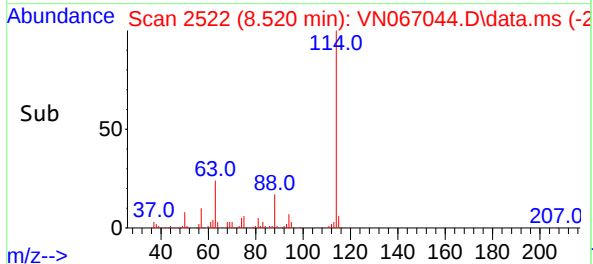




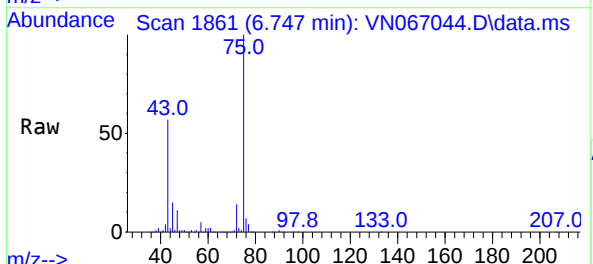
#28
1,4-Difluorobenzene
Concen: 30.00 ug/l
RT: 8.520 min Scan# 2522
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



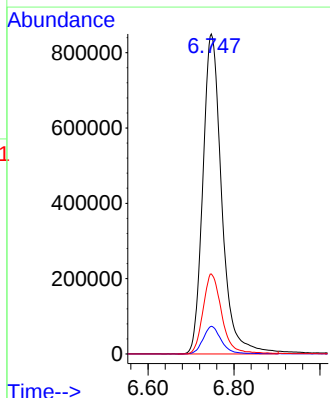
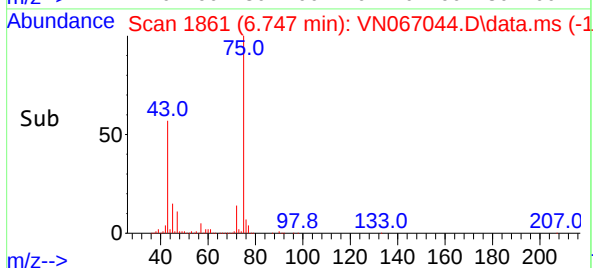
Tgt Ion: 114 Resp: 361621
Ion Ratio Lower Upper
114 100
63 23.9 18.8 28.2
88 17.3 13.8 20.6



#30
2-Butanone
Concen: 854.50 ug/l
RT: 6.747 min Scan# 1861
Delta R.T. -0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



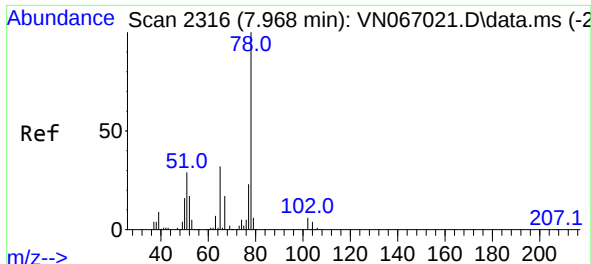
Tgt Ion: 43 Resp: 2591322
Ion Ratio Lower Upper
43 100
57 8.3 6.5 9.7
72 24.4 21.2 31.8



Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

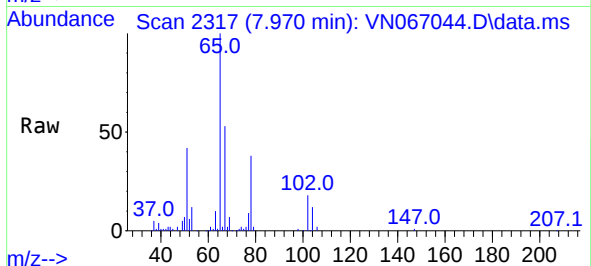
Manual Integrations
APPROVED

MMDadoda
5/7/2021 6:24:35 PM



#34
Benzene
Concen: 2.10 ug/l
RT: 7.970 min Scan# 2317
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

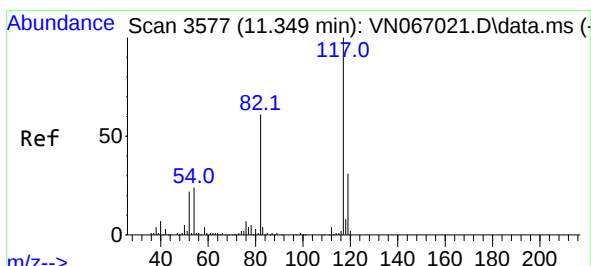
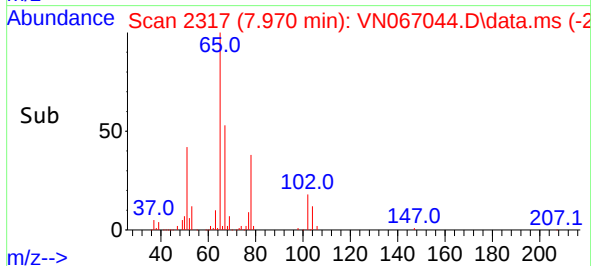
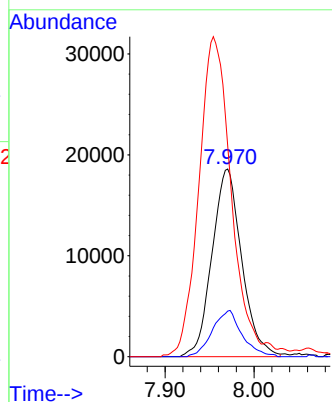
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA



Tgt Ion: 78 Resp: 43075
Ion Ratio Lower Upper
78 100
77 24.3 18.6 27.8
51 107.9 23.4 35.0#

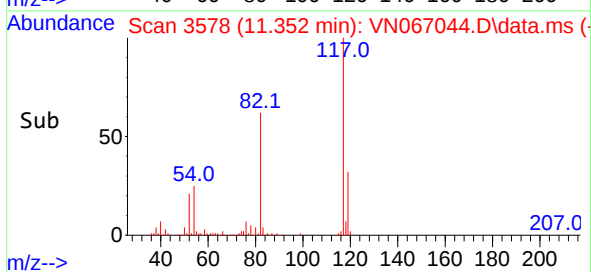
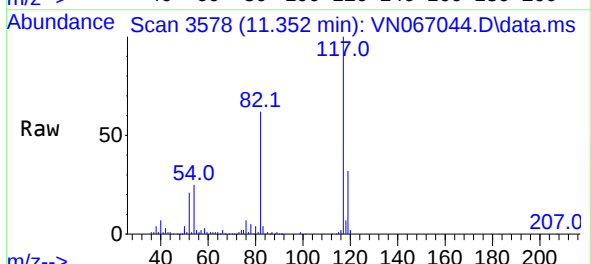
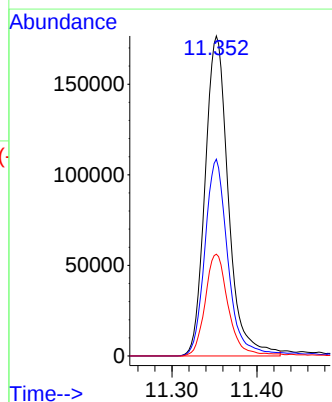
Manual Integrations
APPROVED

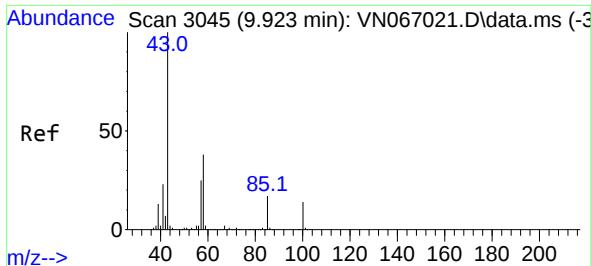
MMDadoda
5/7/2021 6:24:35 PM



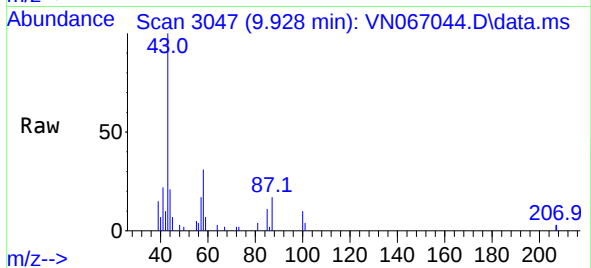
#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 11.352 min Scan# 3578
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 117 Resp: 336467
Ion Ratio Lower Upper
117 100
82 61.2 49.3 73.9
119 31.1 25.5 38.3

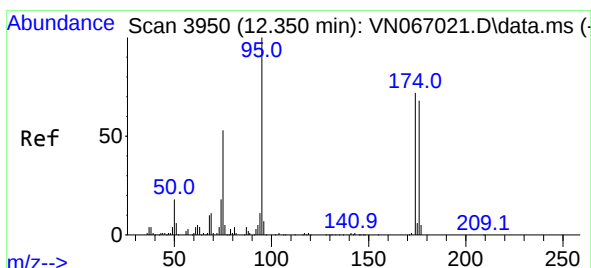
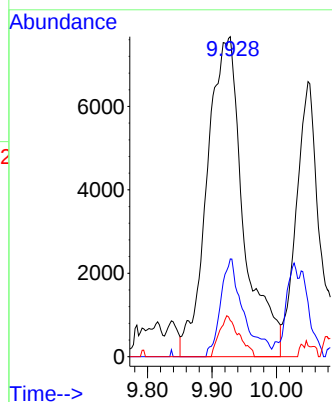
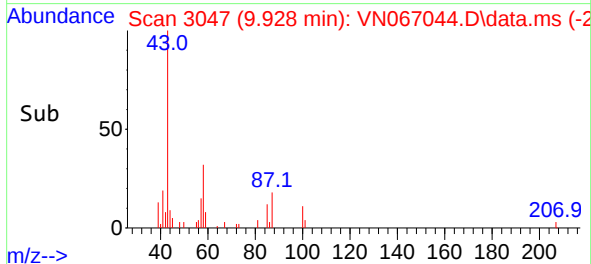




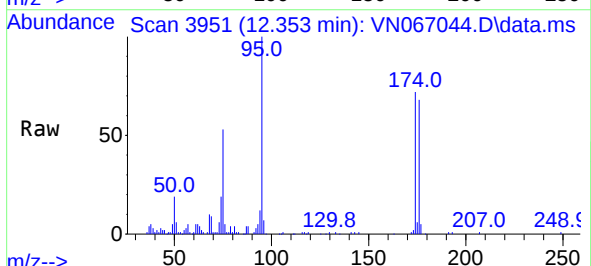
#58
4-Methyl-2-Pentanone
Concen: 4.77 ug/l m
RT: 9.928 min Scan# 3047
Delta R.T. 0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



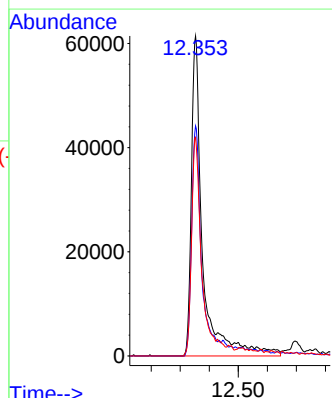
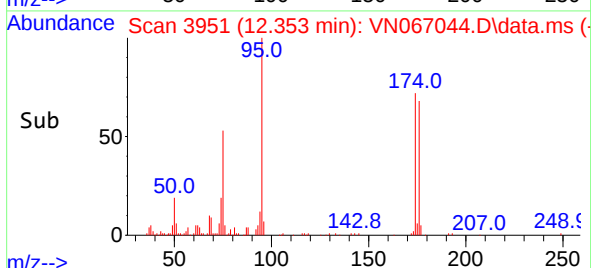
Tgt Ion: 43 Resp: 30064
Ion Ratio Lower Upper
43 100
58 18.3 30.4 45.6#
85 5.3 13.4 20.0#



#60
4-Bromofluorobenzene
Concen: 29.74 ug/l m
RT: 12.353 min Scan# 3951
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



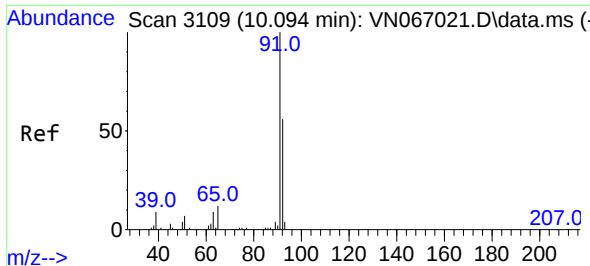
Tgt Ion: 95 Resp: 166497
Ion Ratio Lower Upper
95 100
174 61.2 57.2 85.8
176 58.1 54.5 81.7



Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

Manual Integrations
APPROVED

MMDadoda
5/7/2021 6:24:35 PM



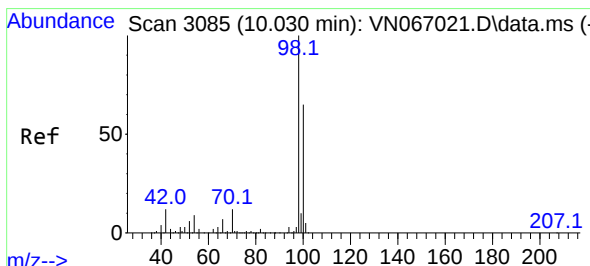
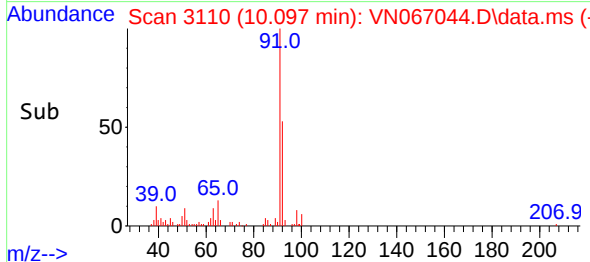
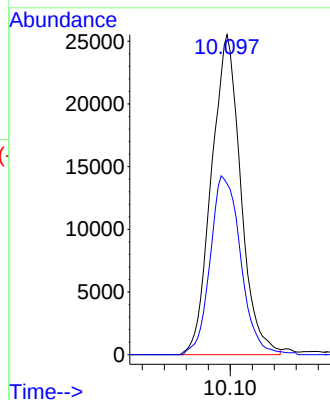
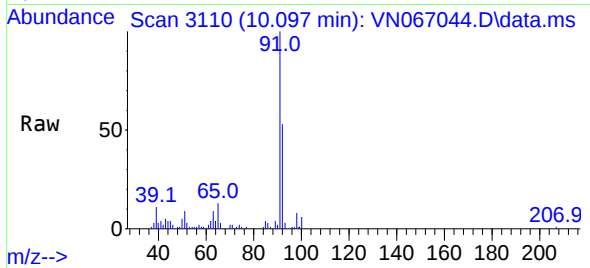
#62
Toluene
Concen: 2.27 ug/l
RT: 10.097 min Scan# 3110
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 91 Resp: 47176
Ion Ratio Lower Upper
91 100
92 58.1 46.2 69.2

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

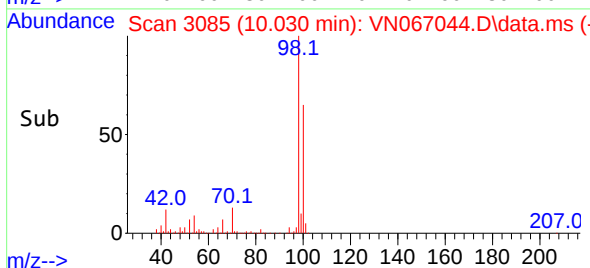
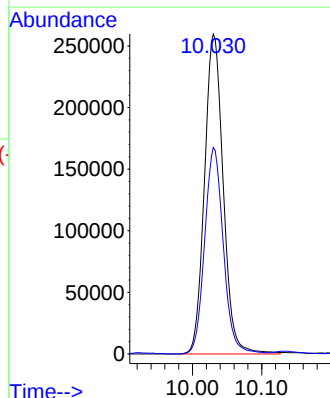
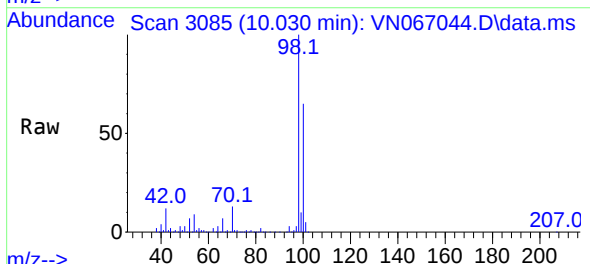
Manual Integrations
APPROVED

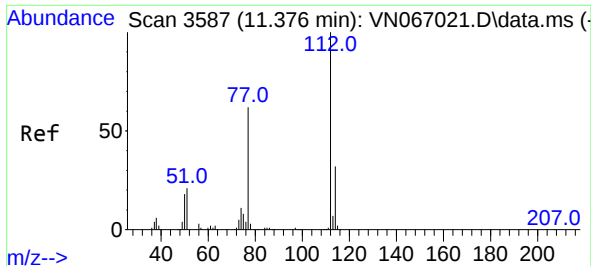
MMDadoda
5/7/2021 6:24:35 PM



#63
Toluene-d8
Concen: 29.32 ug/l
RT: 10.030 min Scan# 3085
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

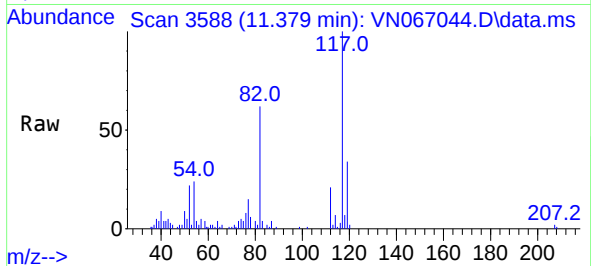
Tgt Ion: 98 Resp: 488668
Ion Ratio Lower Upper
98 100
100 64.3 51.1 76.7





#64
Chlorobenzene
Concen: 0.68 ug/l
RT: 11.379 min Scan# 3588
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

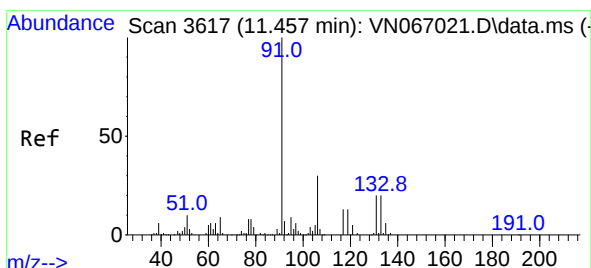
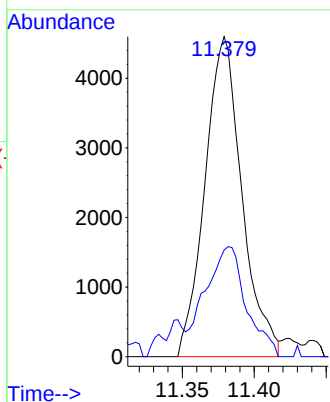
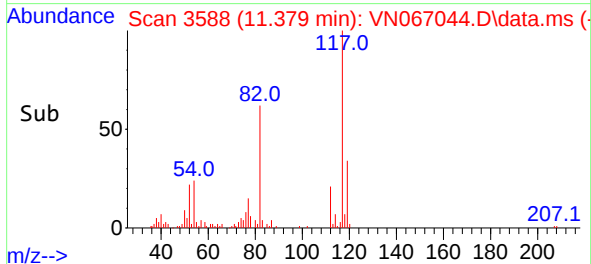
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA



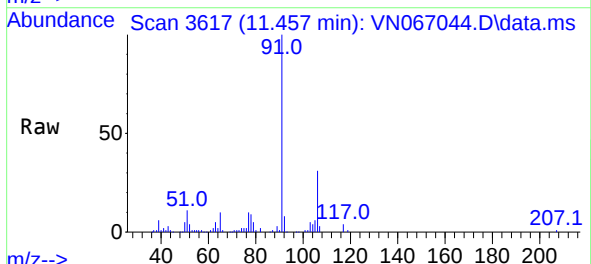
Tgt Ion:112 Resp: 8202
Ion Ratio Lower Upper
112 100
114 33.3 25.2 37.8

Manual Integrations
APPROVED

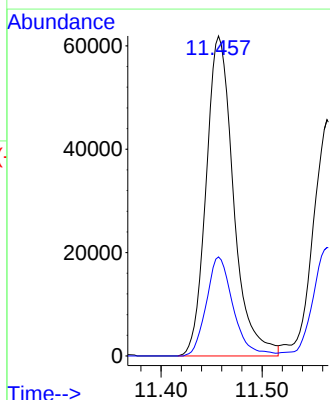
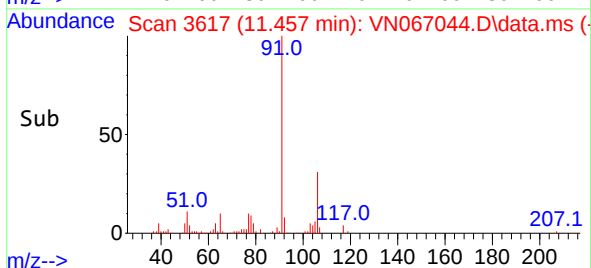
MMDadoda
5/7/2021 6:24:35 PM

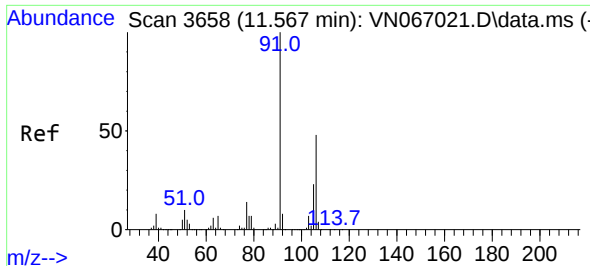


#66
Ethyl Benzene
Concen: 5.54 ug/l
RT: 11.457 min Scan# 3617
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



Tgt Ion: 91 Resp: 116652
Ion Ratio Lower Upper
91 100
106 31.0 24.1 36.1





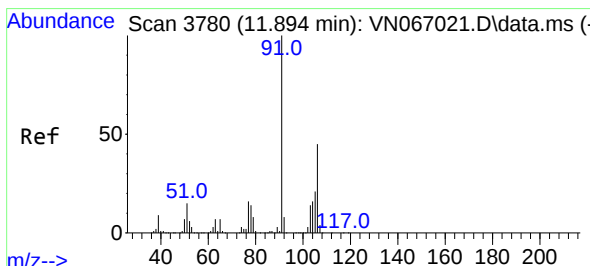
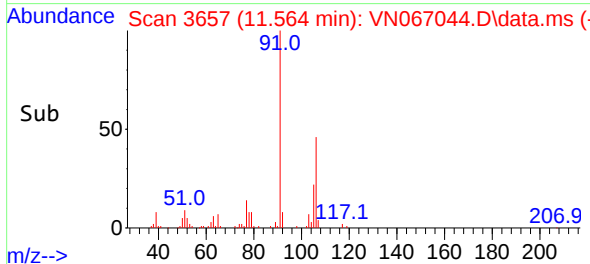
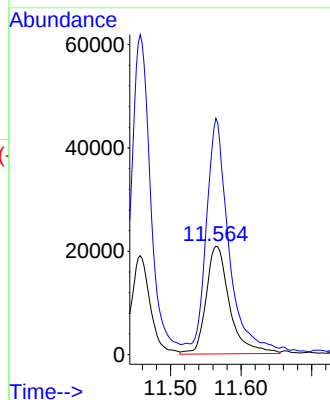
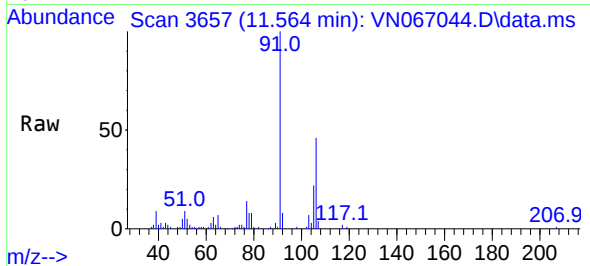
#67
m/p-Xylenes
Concen: 6.09 ug/l
RT: 11.564 min Scan# 3657
Delta R.T. -0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion:106 Resp: 48161
Ion Ratio Lower Upper
106 100
91 185.7 173.2 259.8

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

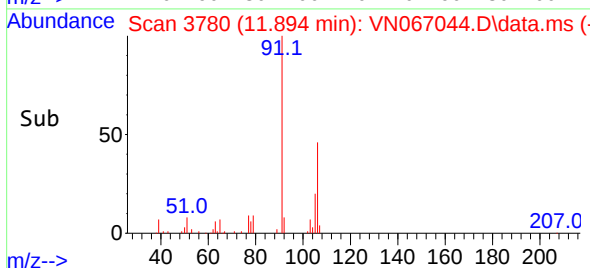
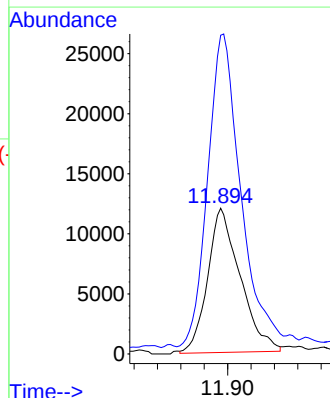
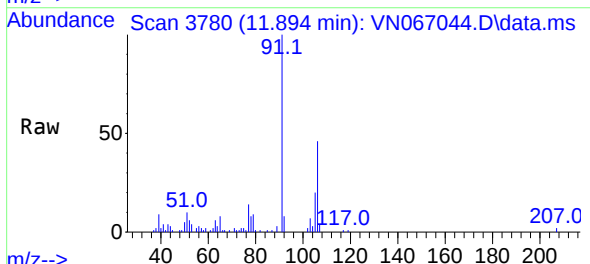
Manual Integrations
APPROVED

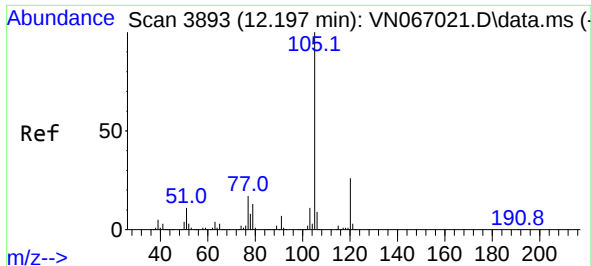
MMDadoda
5/7/2021 6:24:35 PM



#68
o-Xylene
Concen: 2.98 ug/l
RT: 11.894 min Scan# 3780
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

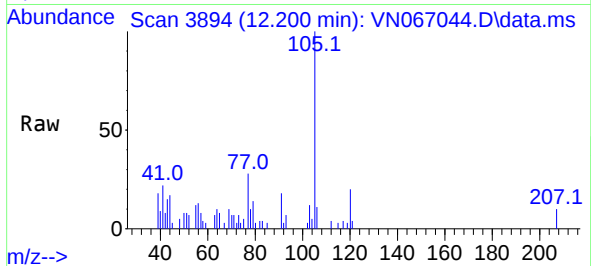
Tgt Ion:106 Resp: 23257
Ion Ratio Lower Upper
106 100
91 219.6 113.3 339.9





#70
Isopropylbenzene
Concen: 0.50 ug/l
RT: 12.200 min Scan# 3894
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

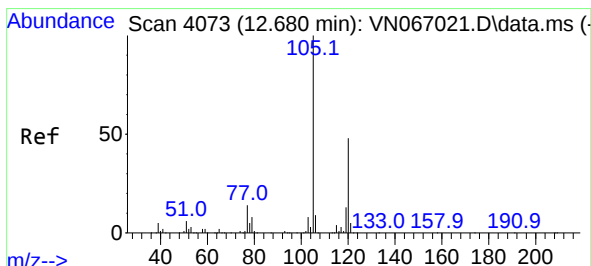
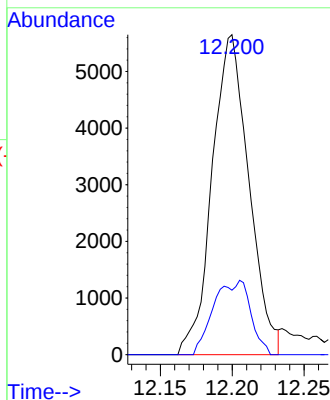
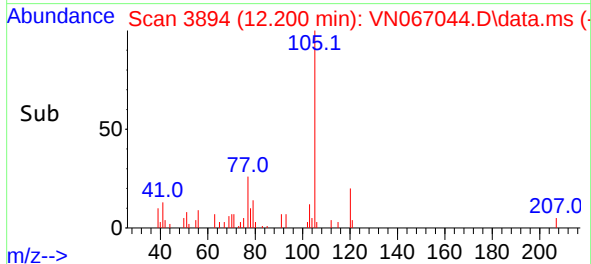
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA



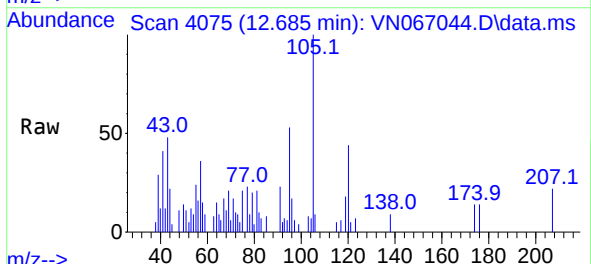
Tgt Ion:105 Resp: 10048
Ion Ratio Lower Upper
105 100
120 12.8 18.2 33.8#

Manual Integrations
APPROVED

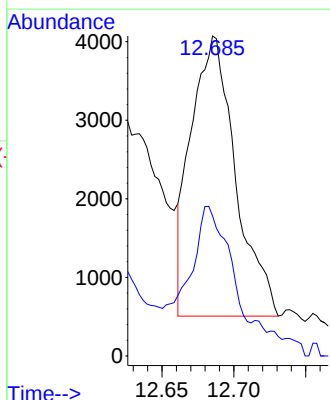
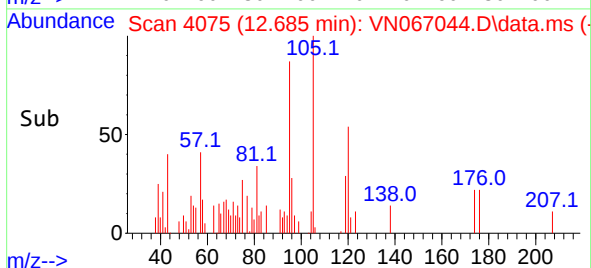
MMDadoda
5/7/2021 6:24:35 PM

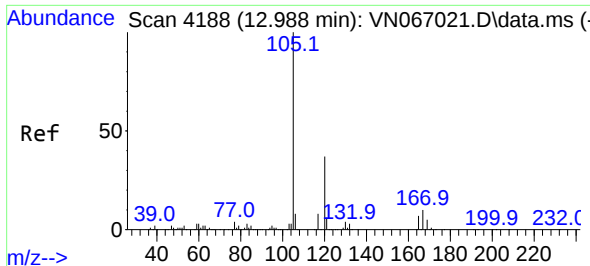


#76
1,3,5-Trimethylbenzene
Concen: 0.43 ug/l
RT: 12.685 min Scan# 4075
Delta R.T. 0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



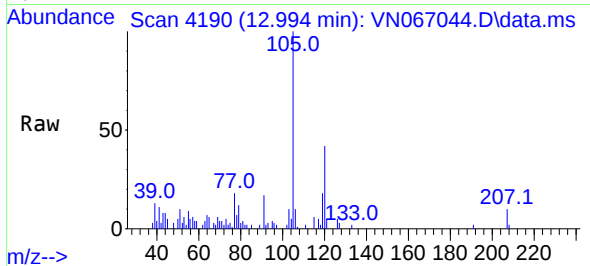
Tgt Ion:105 Resp: 7687
Ion Ratio Lower Upper
105 100
120 31.5 0.0 93.4





#80
1,2,4-Trimethylbenzene
Concen: 1.46 ug/l
RT: 12.994 min Scan# 4190
Delta R.T. 0.006 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

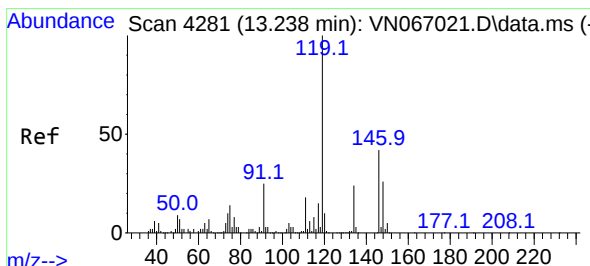
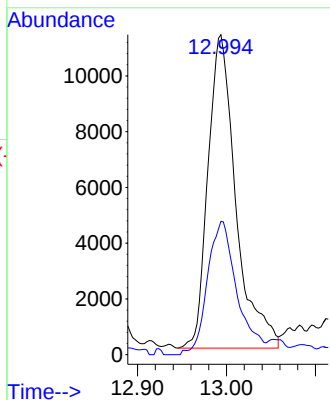
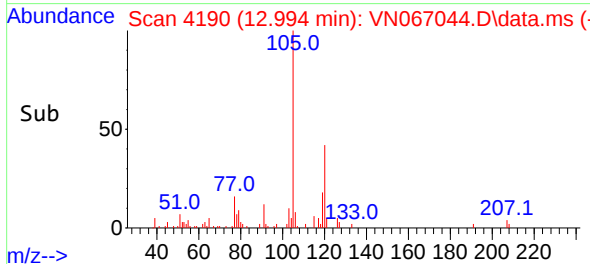
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA



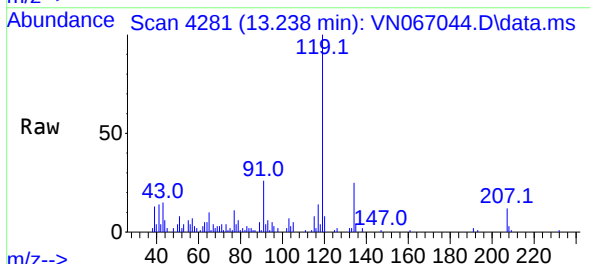
Tgt Ion:105 Resp: 24479
Ion Ratio Lower Upper
105 100
120 42.6 0.0 88.8

Manual Integrations
APPROVED

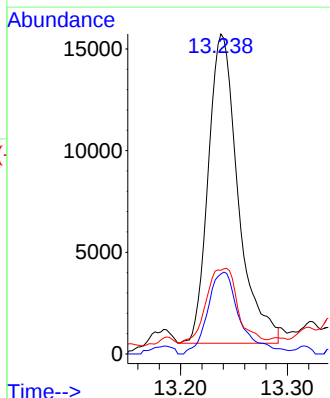
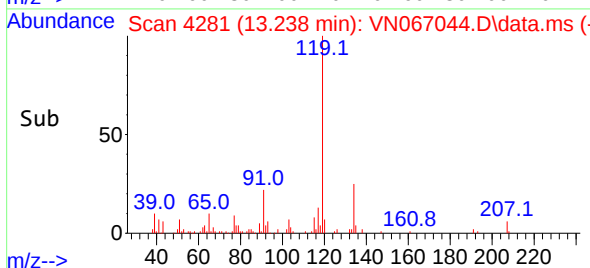
MMDadoda
5/7/2021 6:24:35 PM

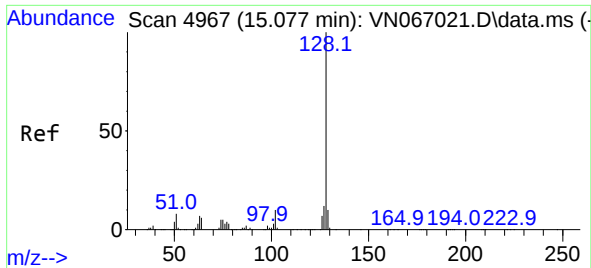


#82
p-Isopropyltoluene
Concen: 1.85 ug/l
RT: 13.238 min Scan# 4281
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58



Tgt Ion:119 Resp: 29537
Ion Ratio Lower Upper
119 100
134 28.6 0.0 49.8
91 12.7 0.0 49.6





#91
Naphthalene
Concen: 13.89 ug/l
RT: 15.075 min Scan# 4966
Delta R.T. -0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion	Ratio	Lower	Upper
128	100		
127	11.8	9.8	14.6
129	10.5	7.8	11.8

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

Manual Integrations
APPROVED

MMDadoda
5/7/2021 6:24:35 PM

