

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN042123\
 Data File : VN077423.D
 Acq On : 21 Apr 2023 13:08
 Operator : JC\MD
 Sample : 02429-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 230419084-02-VOA

Manual Integrations
 APPROVED

Reviewed By : John Carlone 04/24/2023
 Supervised By : Mahesh Dadoda 04/24/2023

Quant Time: Apr 22 02:40:05 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N040723W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Apr 07 13:04:49 2023
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	7.825	128	55611	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.107	114	394683	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.872	117	404993	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.584	65	139273	29.530	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.433%		
60) 4-Bromofluorobenzene	12.854	95	193505	27.632	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	92.100%		
63) Toluene-d8	10.572	98	425579	29.892	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.633%		
Target Compounds						
					Qvalue	
8) Diethyl Ether	3.972	74	52718	13.204	ug/l	94
23) tert-Butyl Alcohol	5.525	59	256611m	193.385	ug/l	
24) Methyl tert-Butyl Ether	5.813	73	13671m	0.648	ug/l	
34) Benzene	8.613	78	27373	1.035	ug/l #	80
45) 1,4-Dioxane	9.695	88	22465	159.043	ug/l #	75
62) Toluene	10.636	91	23154	0.819	ug/l	98
64) Chlorobenzene	11.895	112	163762	9.539	ug/l	100
66) Ethyl Benzene	11.966	91	236224	7.546	ug/l	98
67) m/p-Xylenes	12.072	106	60101	4.898	ug/l	99
68) o-Xylene	12.401	106	45796	3.731	ug/l	100
70) Isopropylbenzene	12.701	105	34938	1.121	ug/l	95
74) n-propylbenzene	13.036	91	18813	0.546	ug/l	96
76) 1,3,5-Trimethylbenzene	13.177	105	10543	0.416	ug/l	90
80) 1,2,4-Trimethylbenzene	13.489	105	45511	1.841	ug/l	97
82) p-Isopropyltoluene	13.736	119	13679	0.542	ug/l	93
84) 1,4-Dichlorobenzene	13.813	146	111481	9.575	ug/l	99
87) 1,2-Dichlorobenzene	14.113	146	9009	0.766	ug/l	95
91) Naphthalene	15.589	128	60406	3.418	ug/l	98

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

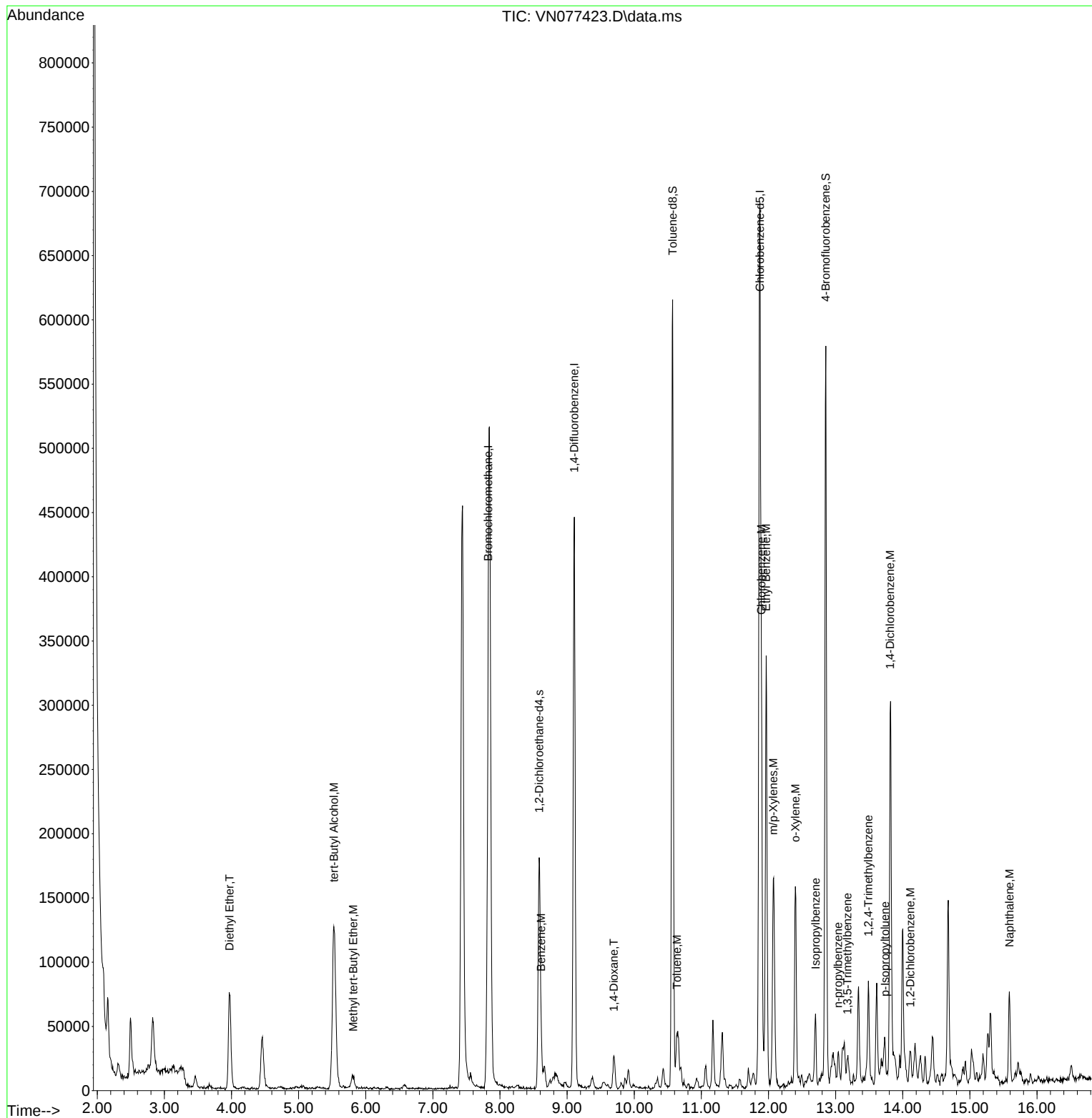
Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN042123\
Data File : VN077423.D
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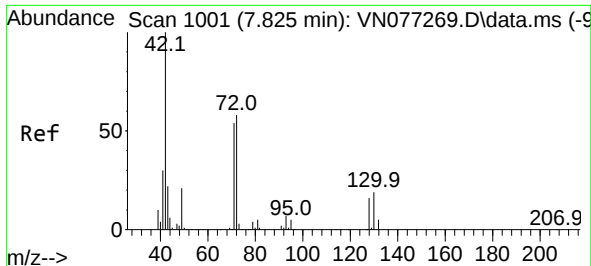
Instrument :
MSVOA_N
ClientSampleId :
230419084-02-VOA

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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N040723W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Apr 07 13:04:49 2023
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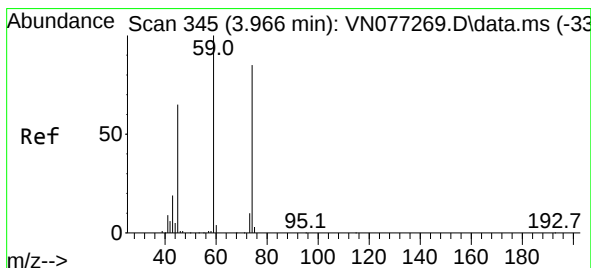
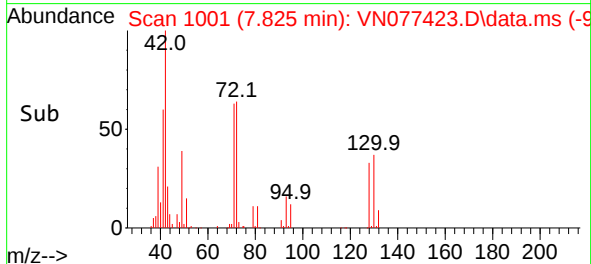
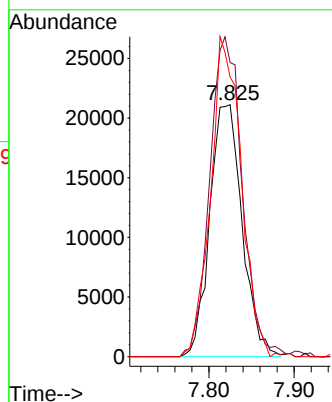
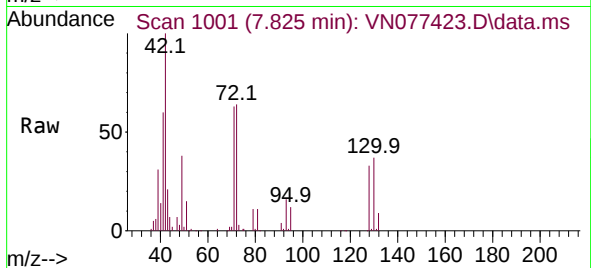
#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.825 min Scan# 1001
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Instrument :
MSVOA_N
ClientSampleId :
230419084-02-VOA

Tgt Ion:128 Resp: 5561
Ion Ratio Lower Upper
128 100
49 126.2 0.0 379.5
130 120.3 0.0 322.8

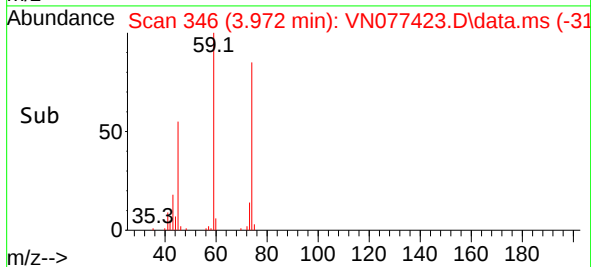
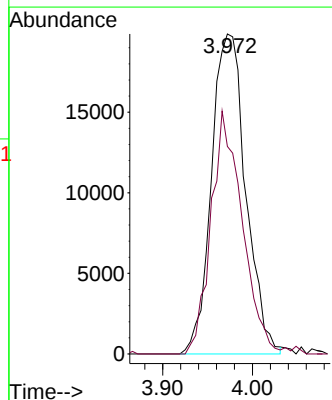
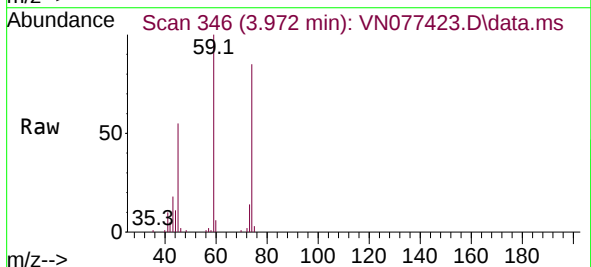
Manual Integrations
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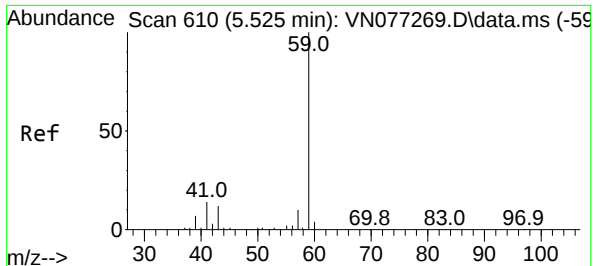
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#8
Diethyl Ether
Concen: 13.204 ug/l
RT: 3.972 min Scan# 346
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Tgt Ion: 74 Resp: 52718
Ion Ratio Lower Upper
74 100
45 69.0 14.8 133.6





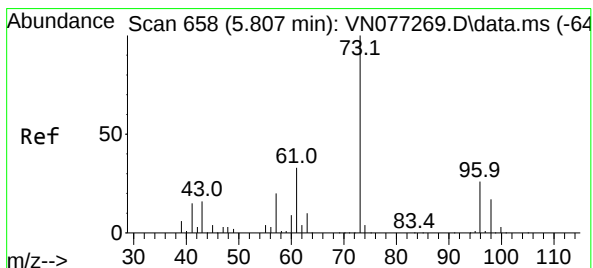
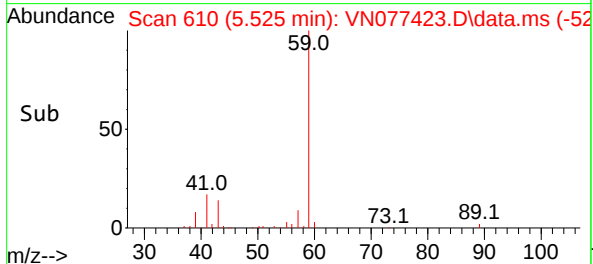
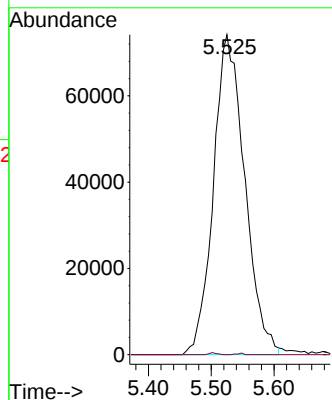
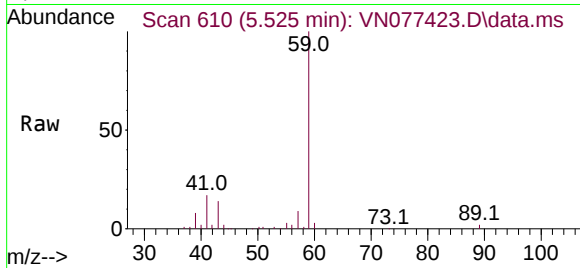
#23
tert-Butyl Alcohol
Concen: 193.385 ug/l m
RT: 5.525 min Scan# 610
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Instrument :
MSVOA_N
ClientSampleId :
230419084-02-VOA

Tgt Ion: 59 Resp: 25661
Ion Ratio Lower Upper
59 100
52 0.0 0.1 0.1

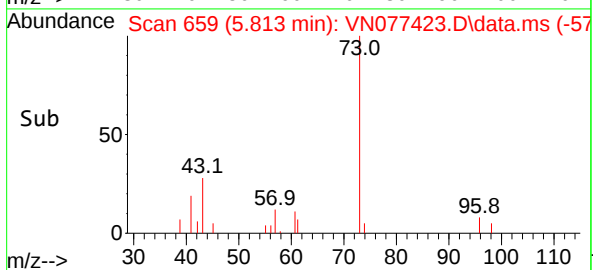
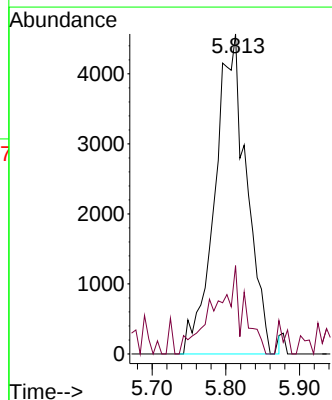
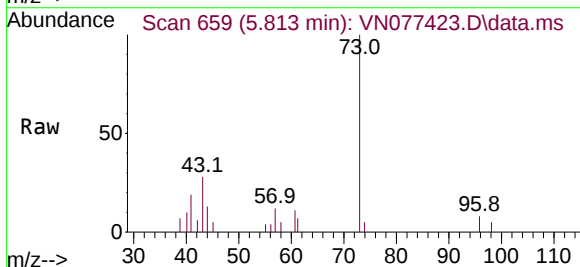
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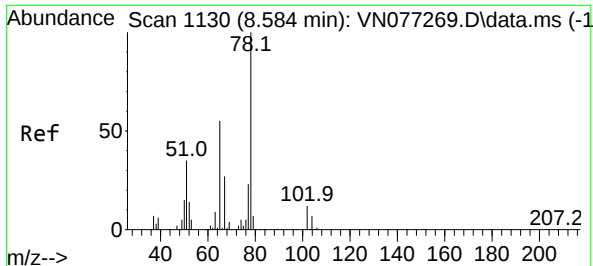
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#24
Methyl tert-Butyl Ether
Concen: 0.648 ug/l m
RT: 5.813 min Scan# 659
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Tgt Ion: 73 Resp: 13671
Ion Ratio Lower Upper
73 100
43 2.6 13.5 20.3





#27

1,2-Dichloroethane-d4

Concen: 29.530 ug/l

RT: 8.584 min Scan# 1130

Delta R.T. -0.000 min

Lab File: VN077423.D

Acq: 21 Apr 2023 13:08

Instrument :

MSVOA_N

ClientSampleId :

230419084-02-VOA

Tgt Ion: 65 Resp: 13927

Ion Ratio Lower Upper

65 100

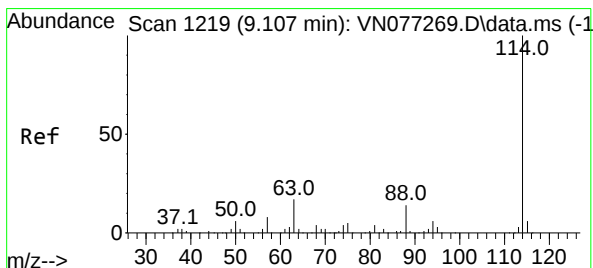
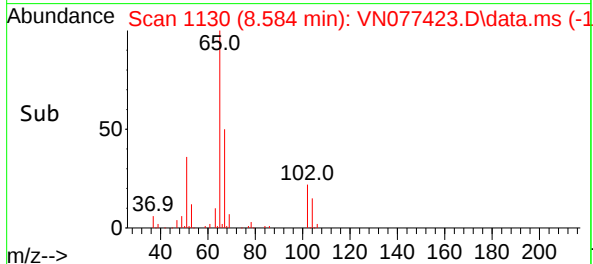
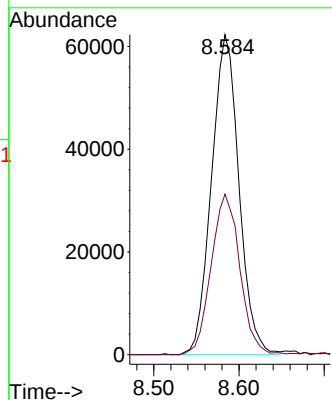
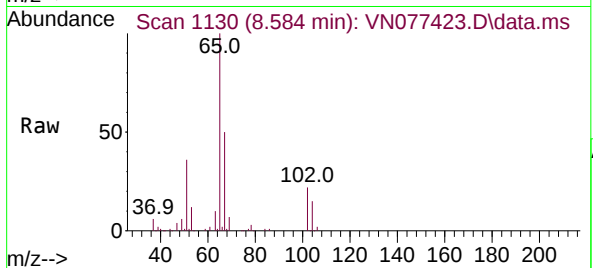
67 52.2 41.8 62.6

Manual Integrations

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Reviewed By :John Carlone 04/24/2023

Supervised By :Mahesh Dadoda 04/24/2023



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 9.107 min Scan# 1219

Delta R.T. 0.000 min

Lab File: VN077423.D

Acq: 21 Apr 2023 13:08

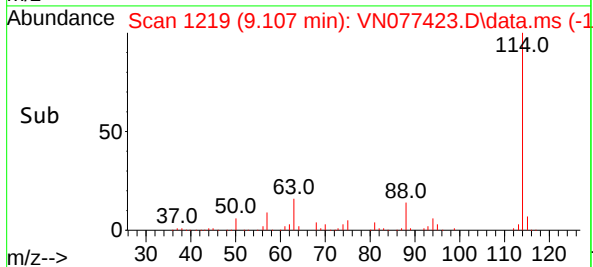
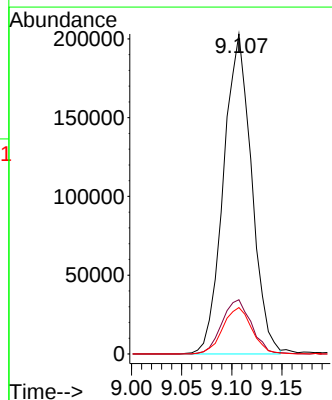
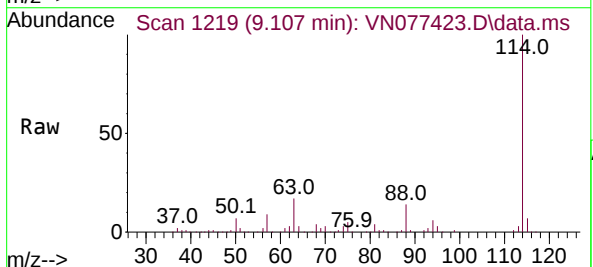
Tgt Ion:114 Resp: 394683

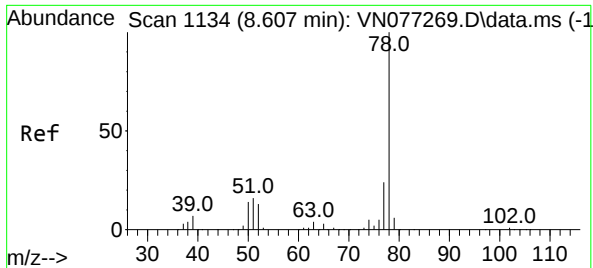
Ion Ratio Lower Upper

114 100

63 17.9 15.0 22.4

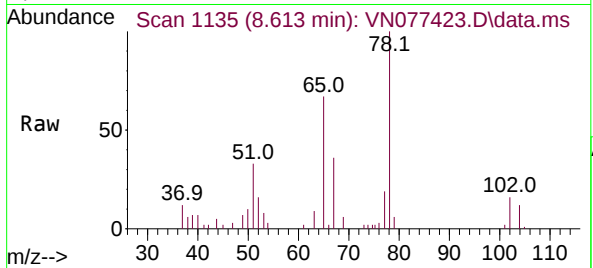
88 15.1 11.9 17.9





#34
Benzene
Concen: 1.035 ug/l
RT: 8.613 min Scan# 1135
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

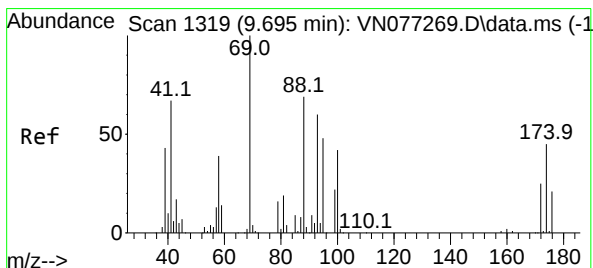
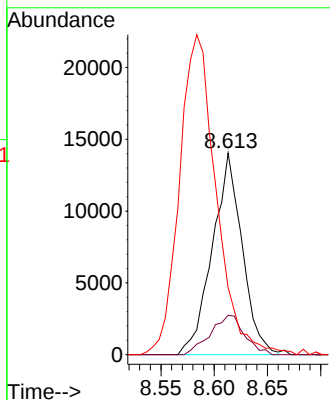
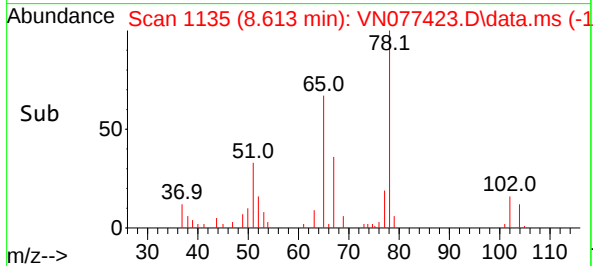
Instrument :
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ClientSampleId :
230419084-02-VOA



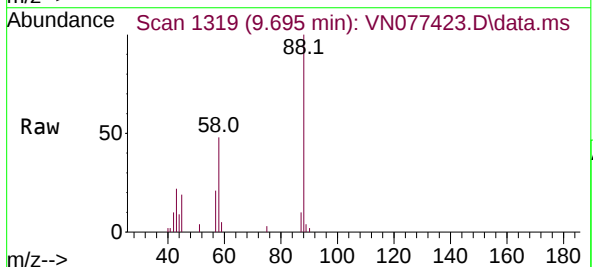
Tgt Ion: 78 Resp: 2737
Ion Ratio Lower Upper
78 100
77 19.5 19.4 29.0
51 31.0 12.6 19.0

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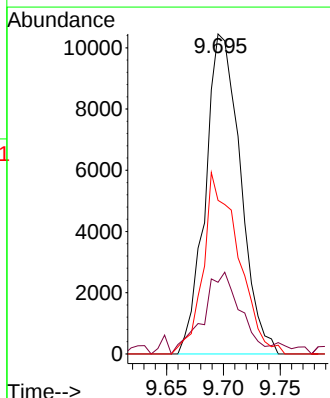
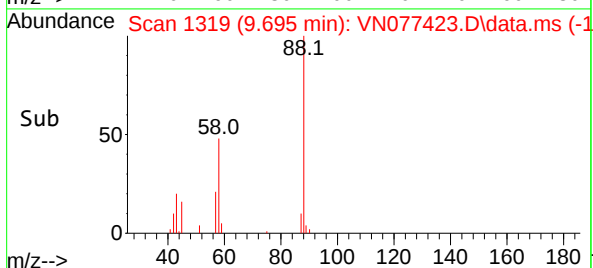
Reviewed By :John Carlone 04/24/2023
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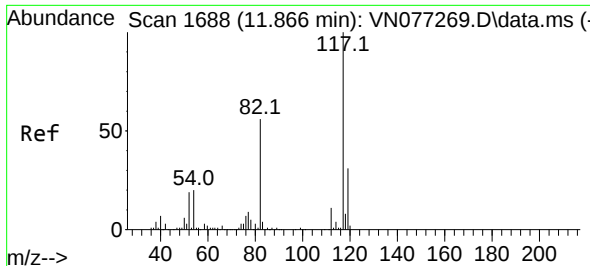


#45
1,4-Dioxane
Concen: 159.043 ug/l
RT: 9.695 min Scan# 1319
Delta R.T. 0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08



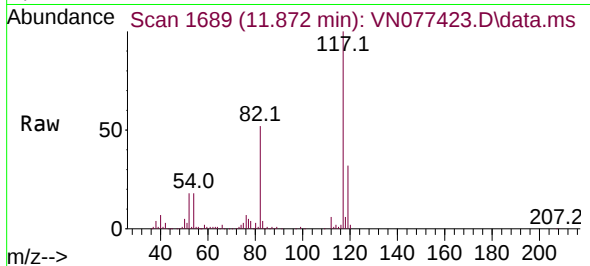
Tgt Ion: 88 Resp: 22465
Ion Ratio Lower Upper
88 100
43 21.5 17.4 26.0
58 34.5 48.2 72.4





#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.872 min Scan# 11872
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

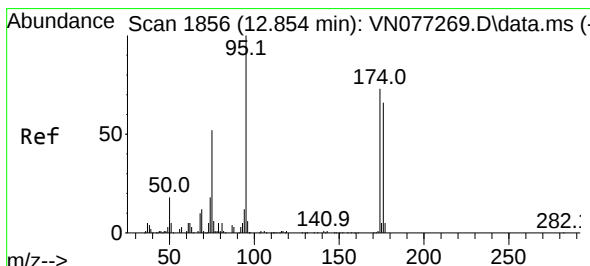
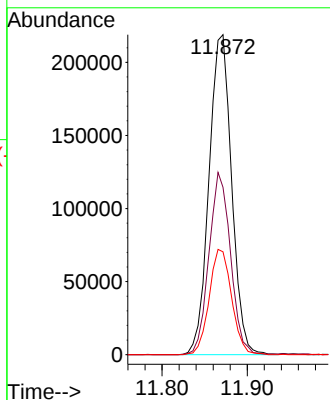
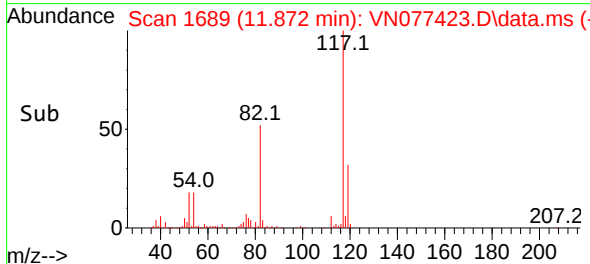
Instrument :
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230419084-02-VOA



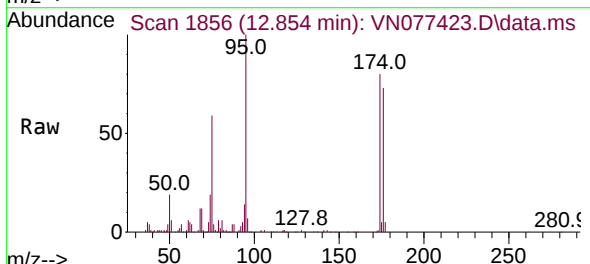
Tgt Ion: 117 Resp: 40499
Ion Ratio Lower Upper
117 100
82 54.3 43.8 65.8
119 32.6 25.4 38.0

Manual Integrations
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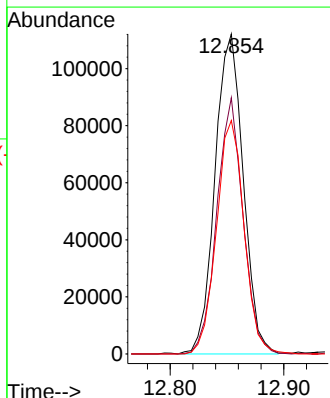
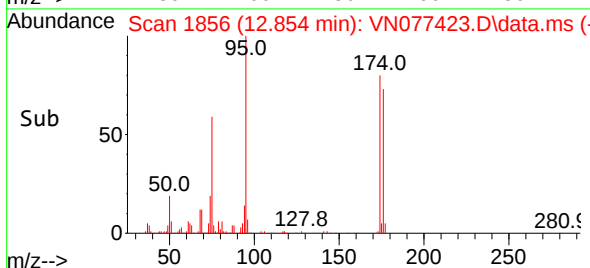
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023

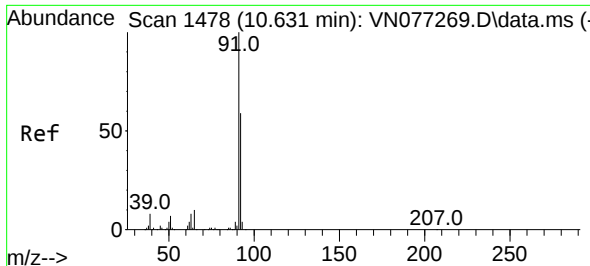


#60
4-Bromofluorobenzene
Concen: 27.632 ug/l
RT: 12.854 min Scan# 1856
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08



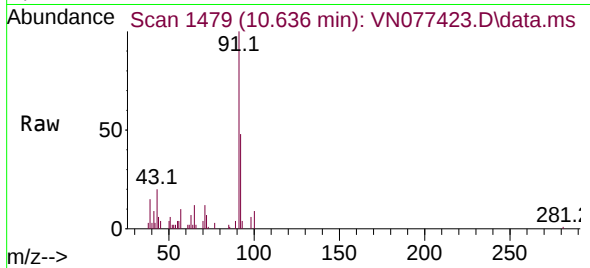
Tgt Ion: 95 Resp: 193505
Ion Ratio Lower Upper
95 100
174 74.5 57.8 86.8
176 71.4 54.6 81.8





#62
Toluene
Concen: 0.819 ug/l
RT: 10.636 min Scan# 1478
Delta R.T. 0.005 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

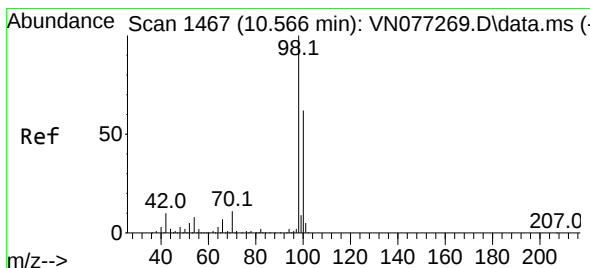
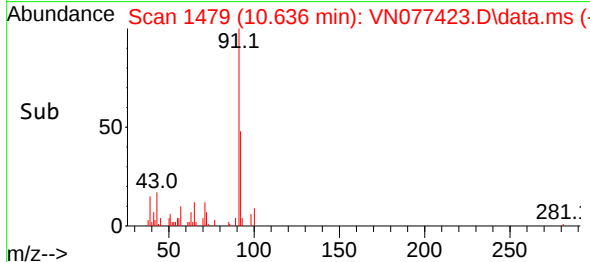
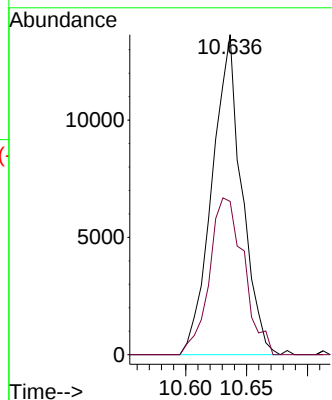
Instrument :
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230419084-02-VOA



Tgt Ion: 91 Resp: 23154
Ion Ratio Lower Upper
91 100
92 56.9 46.6 70.0

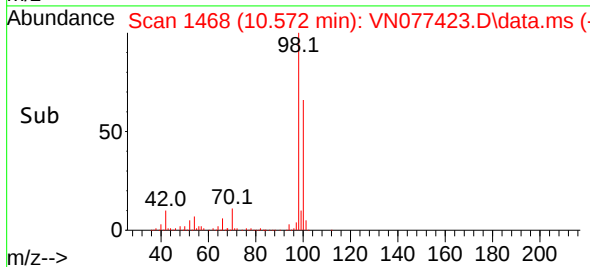
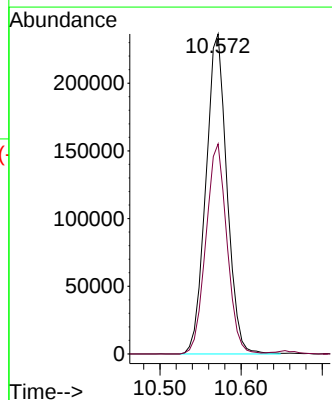
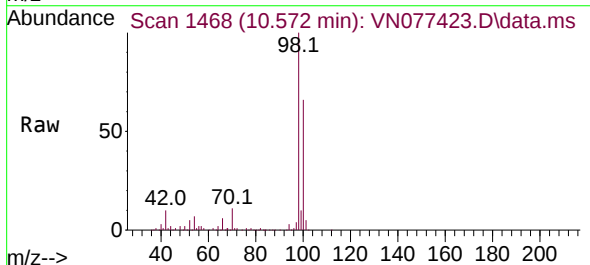
Manual Integrations
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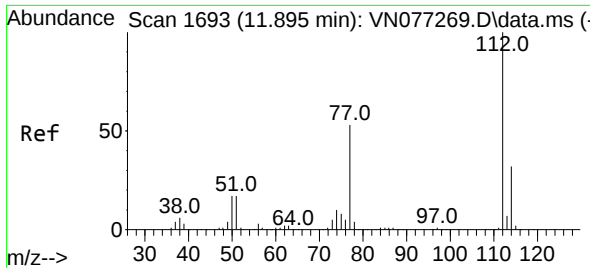
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#63
Toluene-d8
Concen: 29.892 ug/l
RT: 10.572 min Scan# 1468
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

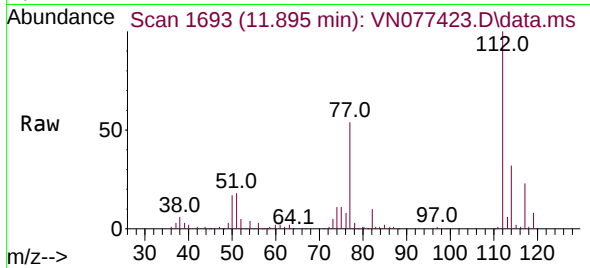
Tgt Ion: 98 Resp: 425579
Ion Ratio Lower Upper
98 100
100 65.6 51.4 77.2





#64
Chlorobenzene
Concen: 9.539 ug/l
RT: 11.895 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

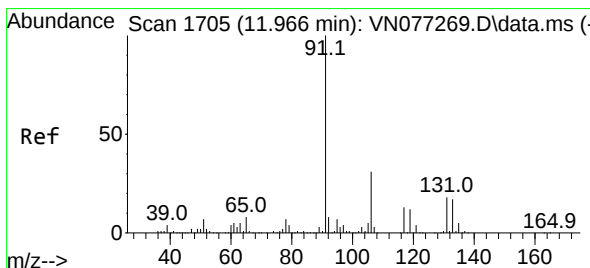
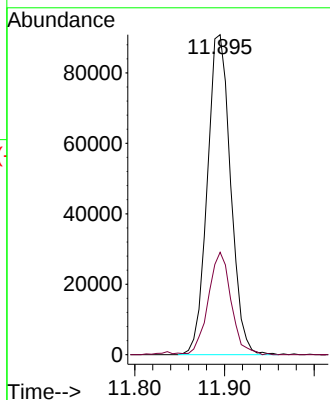
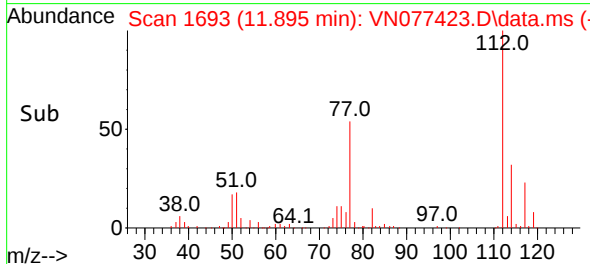
Instrument :
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Tgt Ion:112 Resp: 163762
Ion Ratio Lower Upper
112 100
114 32.0 25.6 38.4

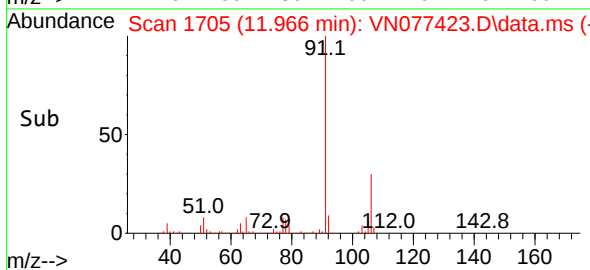
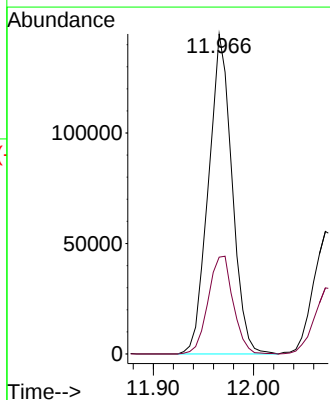
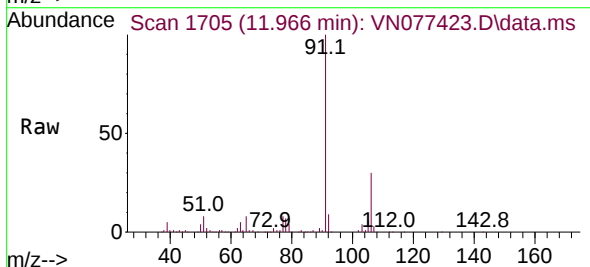
Manual Integrations
APPROVED

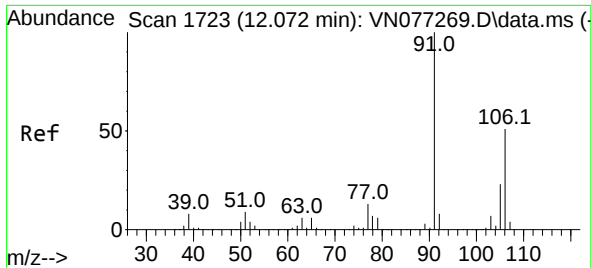
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#66
Ethyl Benzene
Concen: 7.546 ug/l
RT: 11.966 min Scan# 1705
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Tgt Ion: 91 Resp: 236224
Ion Ratio Lower Upper
91 100
106 30.2 25.0 37.6





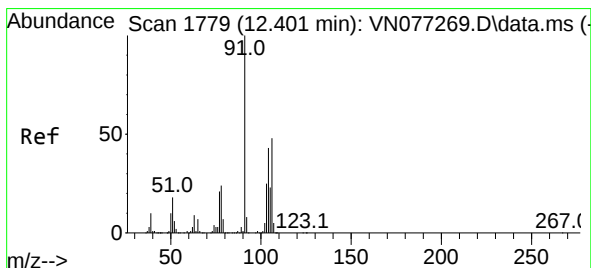
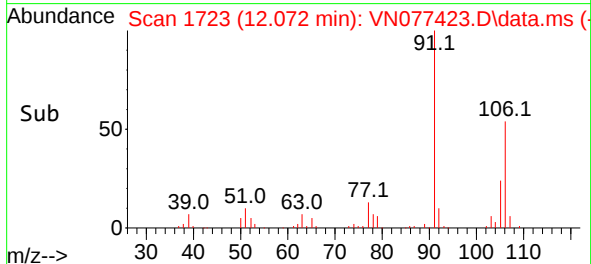
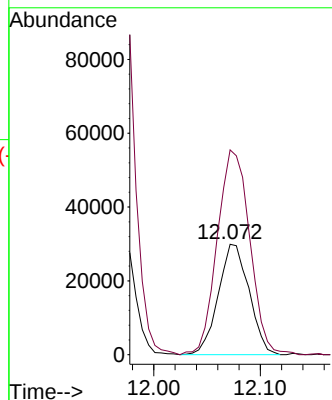
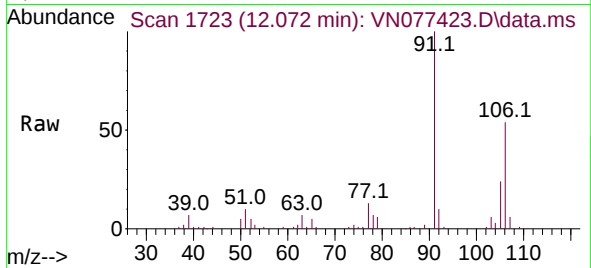
#67
m/p-Xylenes
Concen: 4.898 ug/l
RT: 12.072 min Scan# 1723
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Instrument :
MSVOA_N
ClientSampleId :
230419084-02-VOA

Tgt Ion:106 Resp: 6010
Ion Ratio Lower Upper
106 100
91 195.8 158.0 237.0

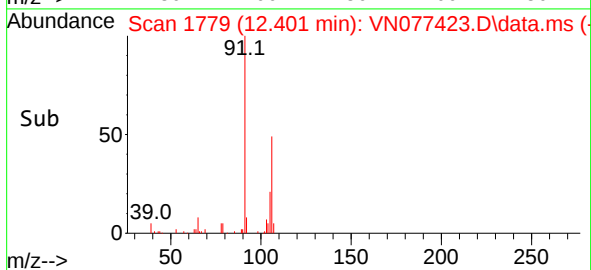
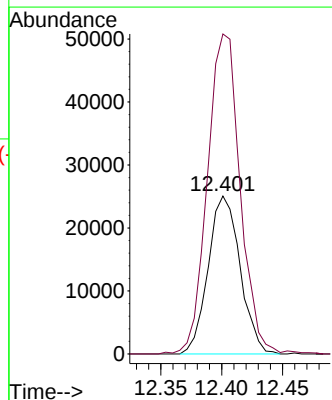
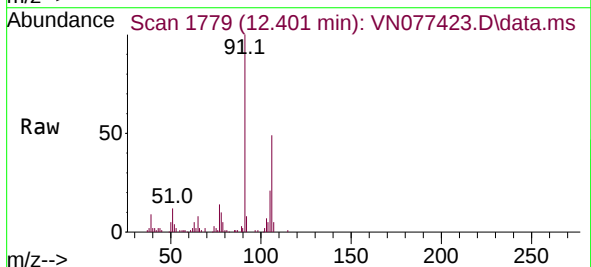
Manual Integrations
APPROVED

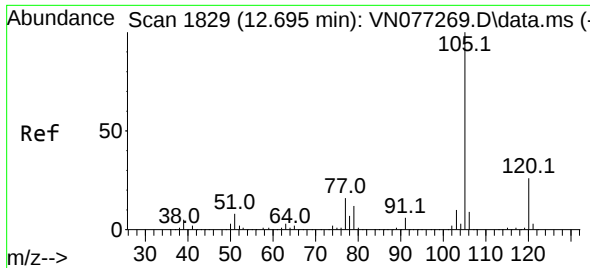
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#68
o-Xylene
Concen: 3.731 ug/l
RT: 12.401 min Scan# 1779
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Tgt Ion:106 Resp: 45796
Ion Ratio Lower Upper
106 100
91 207.0 103.6 310.8





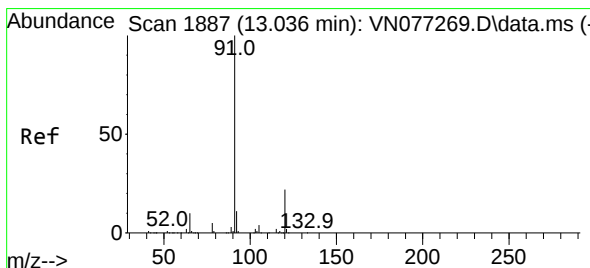
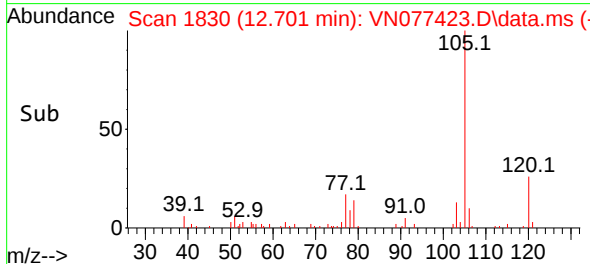
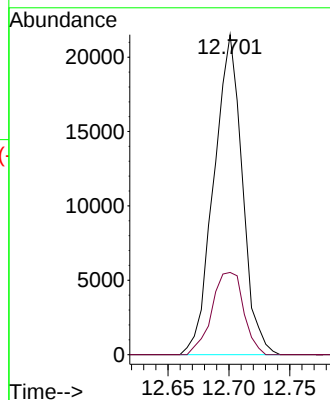
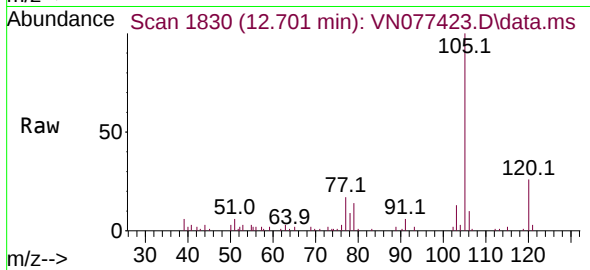
#70
Isopropylbenzene
Concen: 1.121 ug/l
RT: 12.701 min Scan# 1830
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Instrument :
MSVOA_N
ClientSampleId :
230419084-02-VOA

Tgt Ion:105 Resp: 34938
Ion Ratio Lower Upper
105 100
120 28.6 18.3 34.1

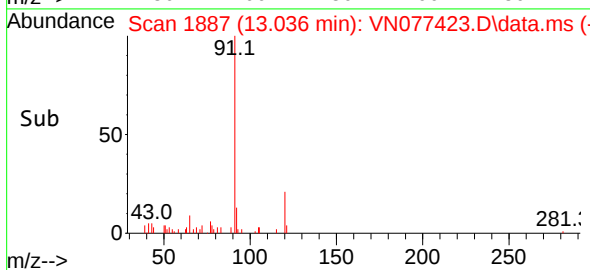
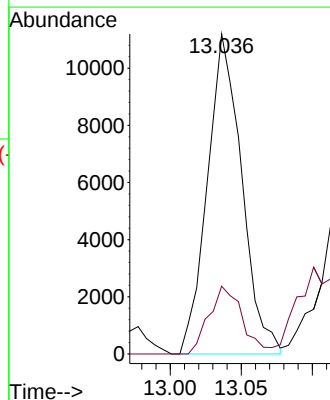
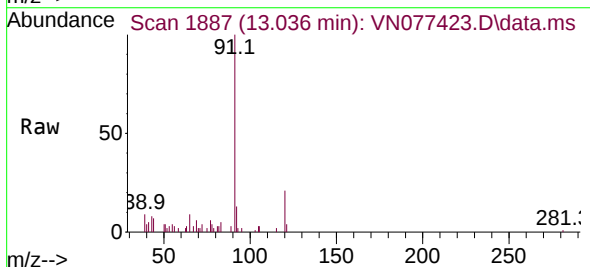
Manual Integrations
APPROVED

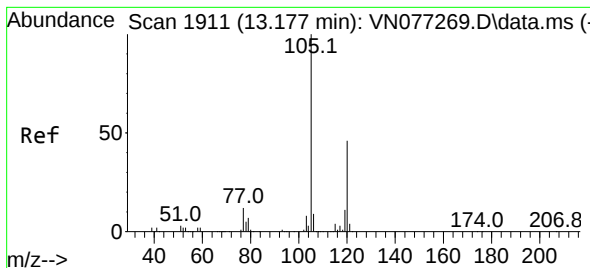
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#74
n-propylbenzene
Concen: 0.546 ug/l
RT: 13.036 min Scan# 1887
Delta R.T. 0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

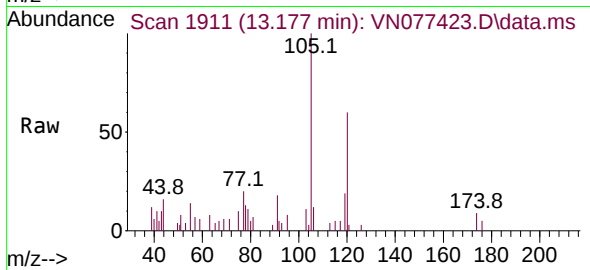
Tgt Ion: 91 Resp: 18813
Ion Ratio Lower Upper
91 100
120 20.6 0.0 45.6





#76
 1,3,5-Trimethylbenzene
 Concen: 0.416 ug/l
 RT: 13.177 min Scan# 1911
 Delta R.T. 0.000 min
 Lab File: VN077423.D
 Acq: 21 Apr 2023 13:08

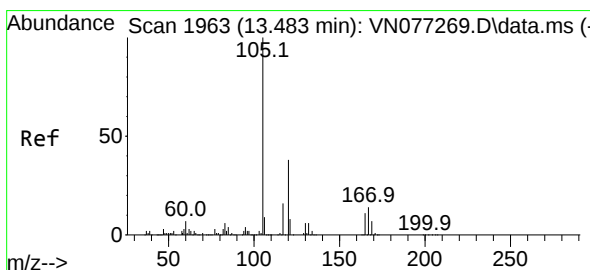
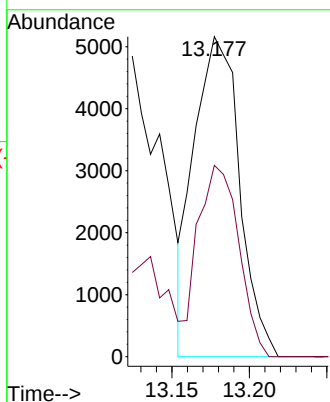
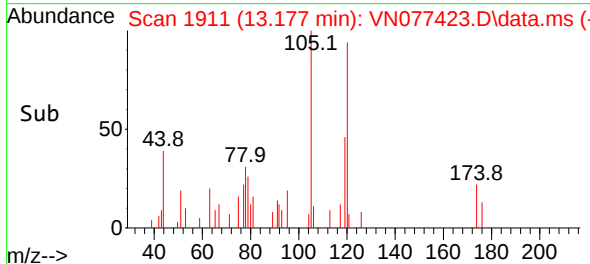
Instrument :
 MSVOA_N
 ClientSampleId :
 230419084-02-VOA



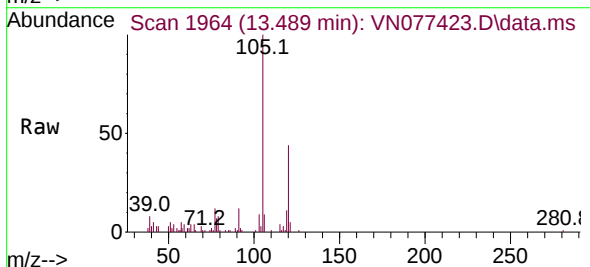
Tgt Ion:105 Resp: 1054
 Ion Ratio Lower Upper
 105 100
 120 54.2 0.0 94.4

Manual Integrations
 APPROVED

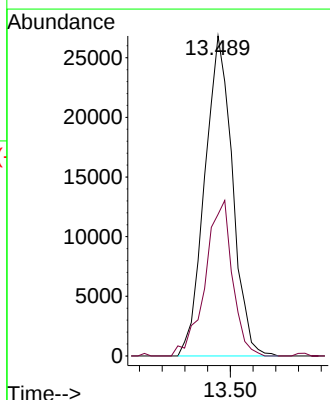
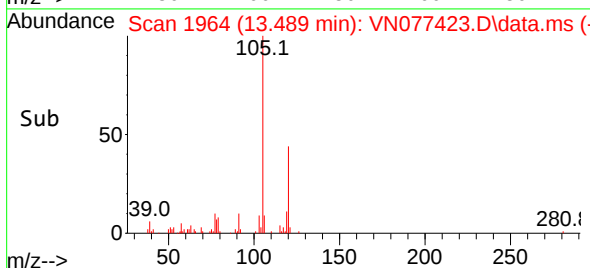
Reviewed By :John Carlone 04/24/2023
 Supervised By :Mahesh Dadoda 04/24/2023

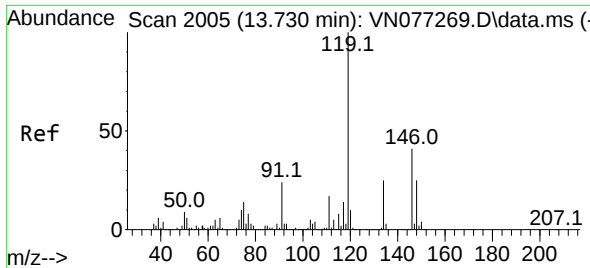


#80
 1,2,4-Trimethylbenzene
 Concen: 1.841 ug/l
 RT: 13.489 min Scan# 1964
 Delta R.T. 0.006 min
 Lab File: VN077423.D
 Acq: 21 Apr 2023 13:08



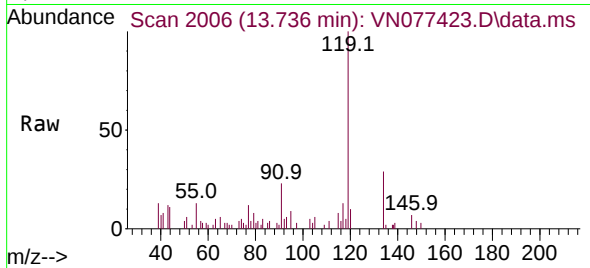
Tgt Ion:105 Resp: 45511
 Ion Ratio Lower Upper
 105 100
 120 47.4 0.0 91.0





#82
p-Isopropyltoluene
Concen: 0.542 ug/l
RT: 13.736 min Scan# 2005
Delta R.T. 0.006 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

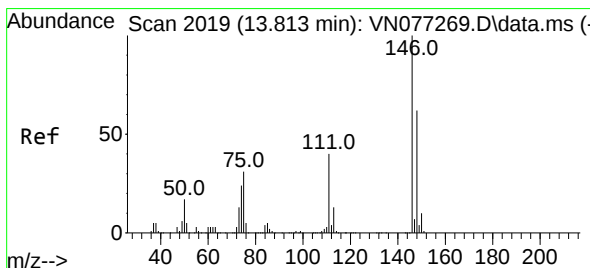
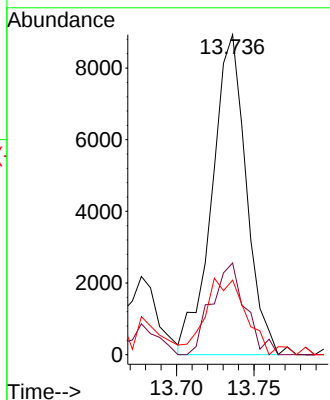
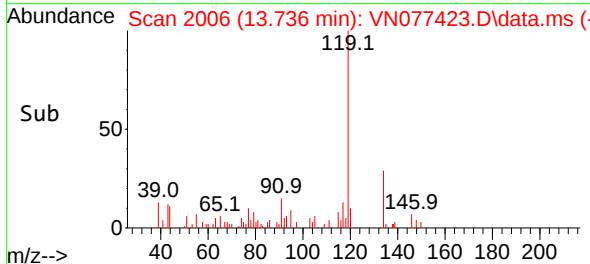
Instrument :
MSVOA_N
ClientSampleId :
230419084-02-VOA



Tgt Ion:119 Resp: 13679
Ion Ratio Lower Upper
119 100
134 28.4 0.0 51.0
91 27.9 0.0 48.0

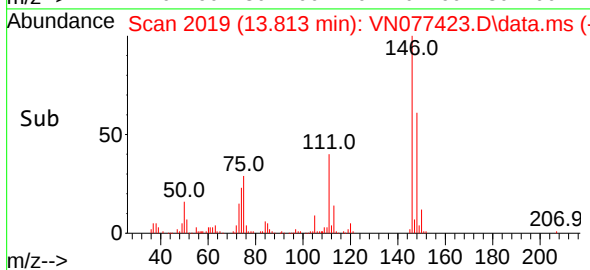
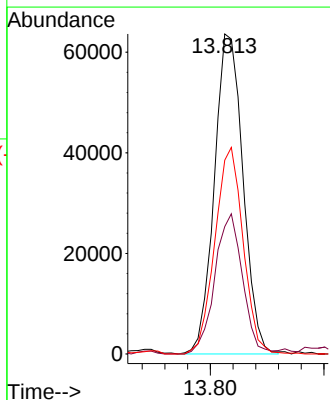
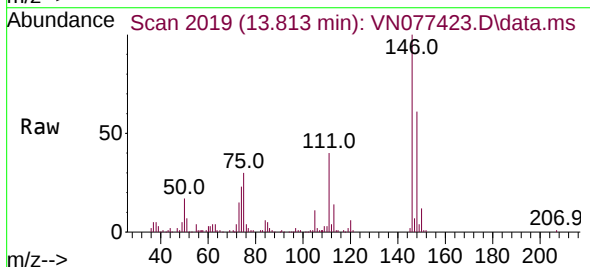
Manual Integrations
APPROVED

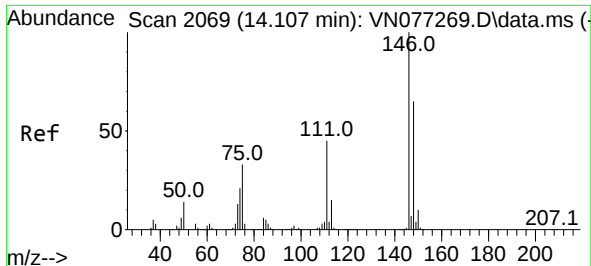
Reviewed By :John Carlone 04/24/2023
Supervised By :Mahesh Dadoda 04/24/2023



#84
1,4-Dichlorobenzene
Concen: 9.575 ug/l
RT: 13.813 min Scan# 2019
Delta R.T. -0.000 min
Lab File: VN077423.D
Acq: 21 Apr 2023 13:08

Tgt Ion:146 Resp: 111481
Ion Ratio Lower Upper
146 100
111 42.2 20.3 61.0
148 63.6 31.6 94.7





#87

1,2-Dichlorobenzene

Concen: 0.766 ug/l

RT: 14.113 min Scan# 2069

Delta R.T. 0.006 min

Lab File: VN077423.D

Acq: 21 Apr 2023 13:08

Instrument :

MSVOA_N

ClientSampleId :

230419084-02-VOA

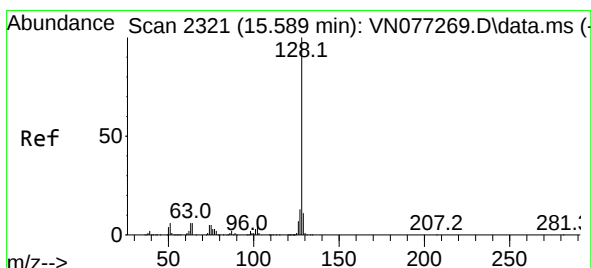
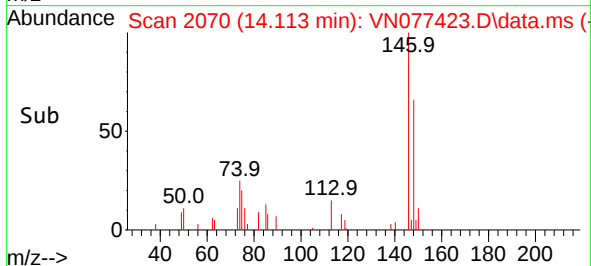
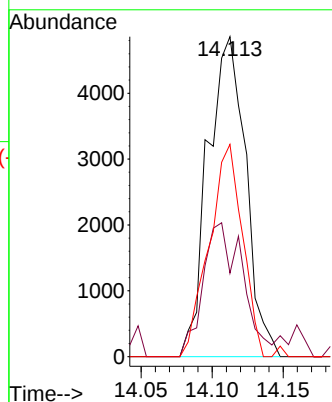
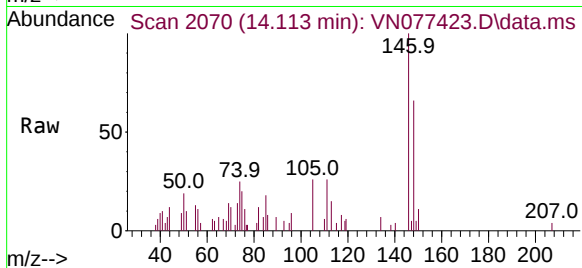
Tgt Ion:	146	Resp:	9009
Ion Ratio	Lower	Upper	
146	100		
111	43.5	22.1	66.5
148	58.3	31.9	95.7

Manual Integrations

APPROVED

Reviewed By :John Carlone 04/24/2023

Supervised By :Mahesh Dadoda 04/24/2023



#91

Naphthalene

Concen: 3.418 ug/l

RT: 15.589 min Scan# 2321

Delta R.T. -0.000 min

Lab File: VN077423.D

Acq: 21 Apr 2023 13:08

Tgt Ion:	128	Resp:	60406
Ion Ratio	Lower	Upper	
128	100		
127	12.2	10.2	15.2
129	11.9	8.9	13.3

